LONGHORN ARMY AMMUNITION PLANT KARNACK, TEXAS

ADMINISTRATIVE RECORD

Volume 21

2025

Bate Stamp Numbers
01327211 – 01329158

Prepared for

Department of the Army
Longhorn Army Ammunition Plant

1976–2025

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

VOLUME 21

2025

A.	Title:	(Cont'd) Report – Level IV DoD File No. 3 to Final Fourth Annual Remedial Action Operation Report, LHAAP-16 Landfill, Longhorn Army Ammunition Plant (LHAAP), Karnack, Texas, March 2025
	Author(s):	Department of the Army
	Recipient:	Environmental Protection Agency and Texas Commission on Environmental Quality
	Date:	March 19, 2025
	Bate Stamp:	01327211–01329158

Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012520.d Page 9

Date : 25-JAN-2024 17:23

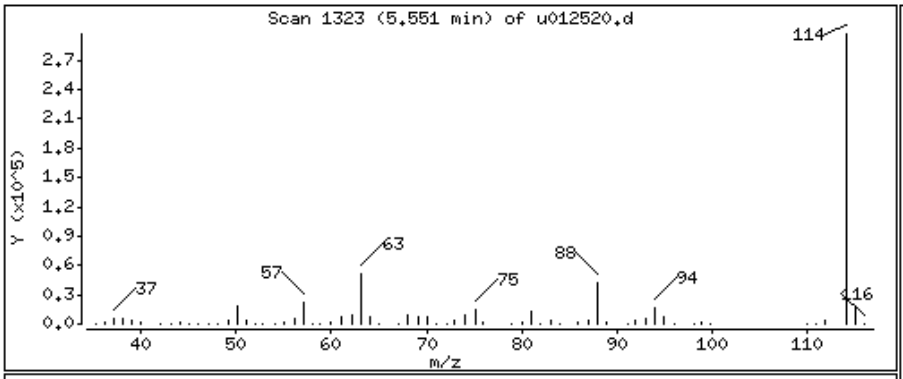
Client ID: HS24011040-02 Instrument: VOA9.i

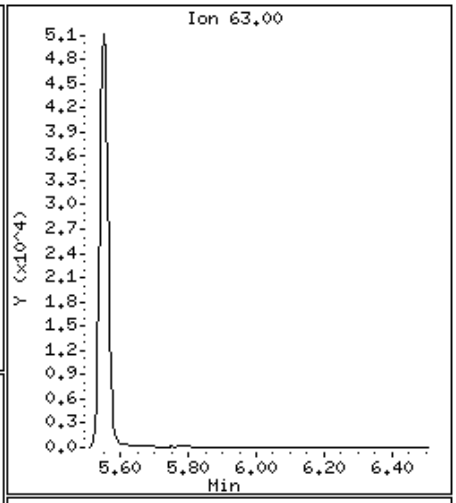
Sample Info: HS24011040-02;HS24011040-02;;;

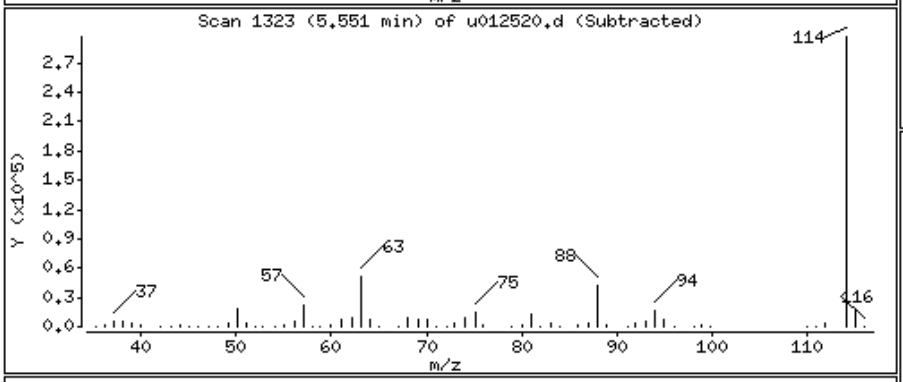
Purge Volume: 5.0 Operator: PC

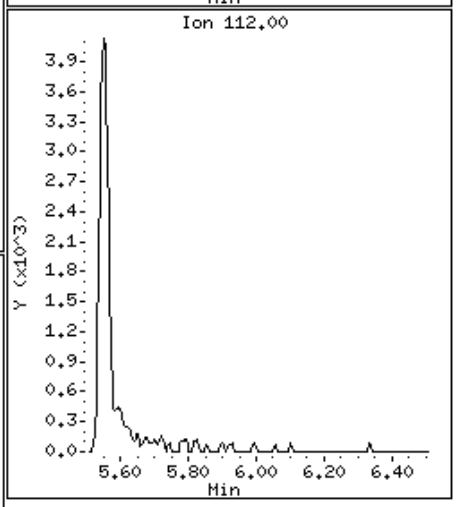
Column phase: DB624 Column diameter: 0.18

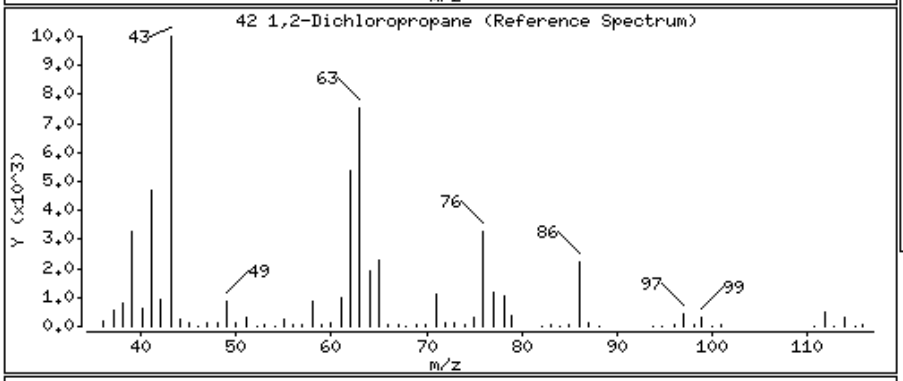
42 1,2-Dichloropropane Concentration: 23617.05 ug/l

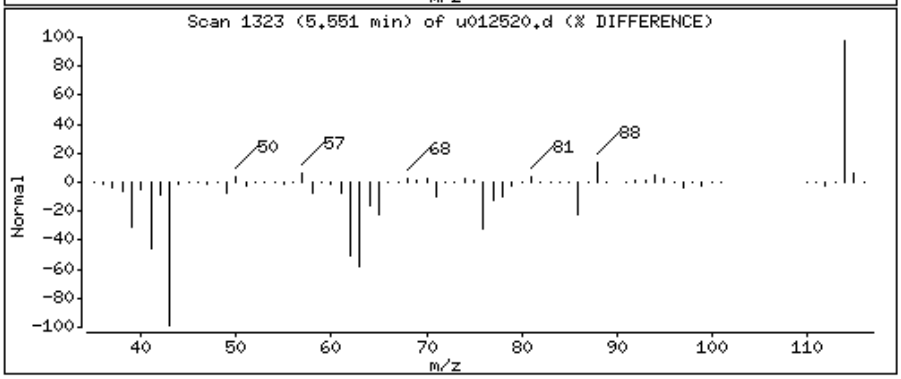












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Date : 25-JAN-2024 17:23

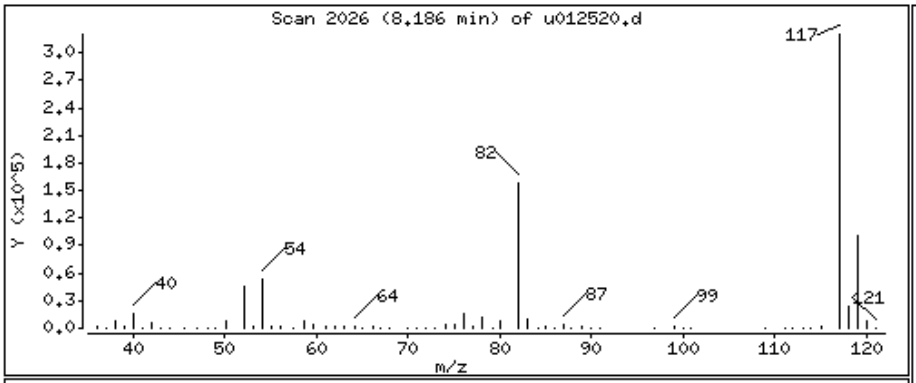
Client ID: HS24011040-02 Instrument: VOA9.i

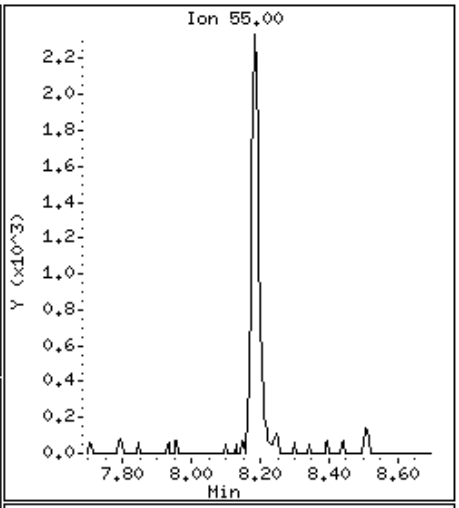
Sample Info: HS24011040-02;HS24011040-02;;;

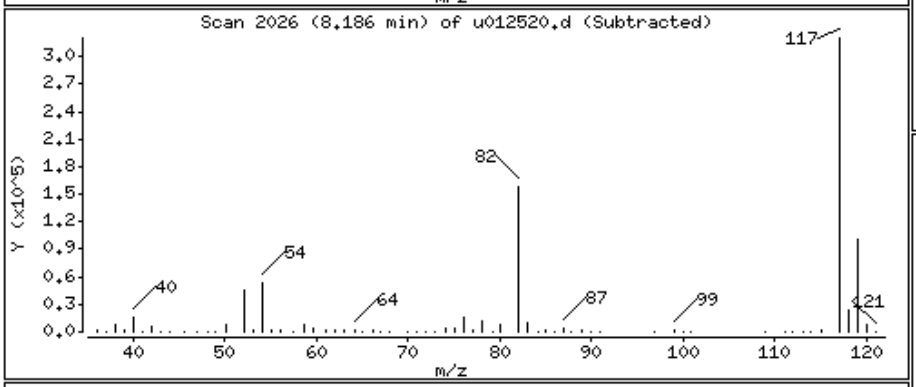
Purge Volume: 5.0 Operator: PC

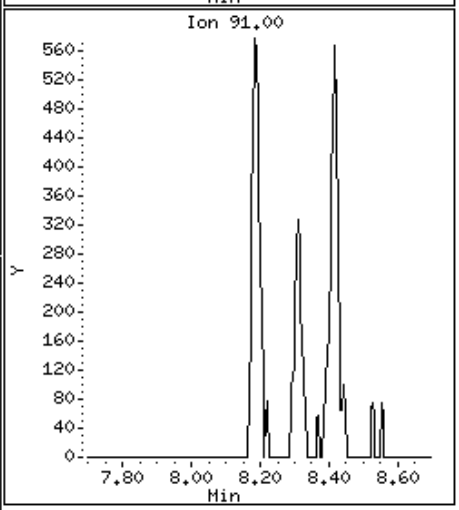
Column phase: DB624 Column diameter: 0.18

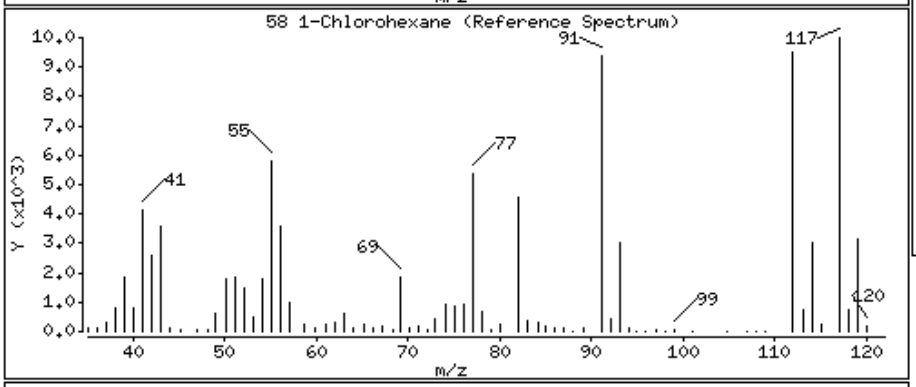
58 1-Chlorohexane Concentration: 1327.23 ug/l

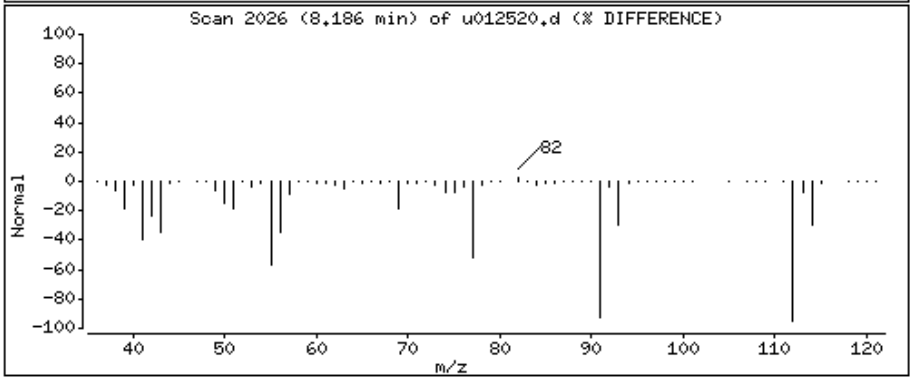












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Date : 25-JAN-2024 17:23

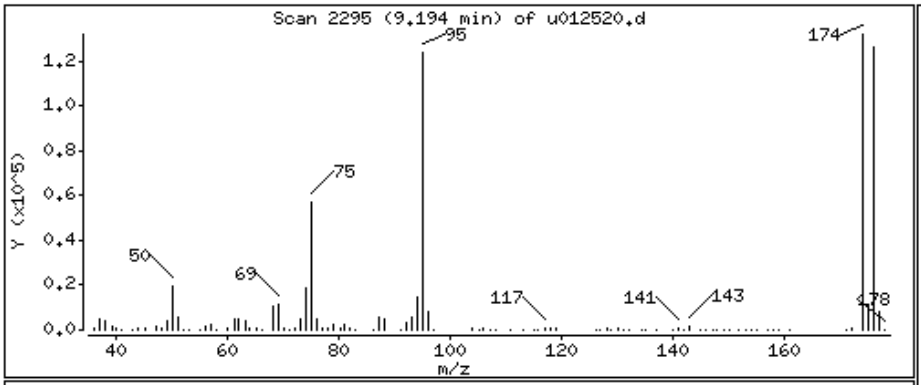
Client ID: HS24011040-02 Instrument: VOA9.i

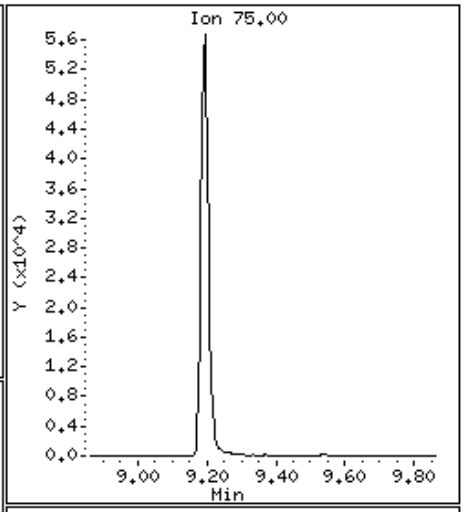
Sample Info: HS24011040-02;HS24011040-02;;;

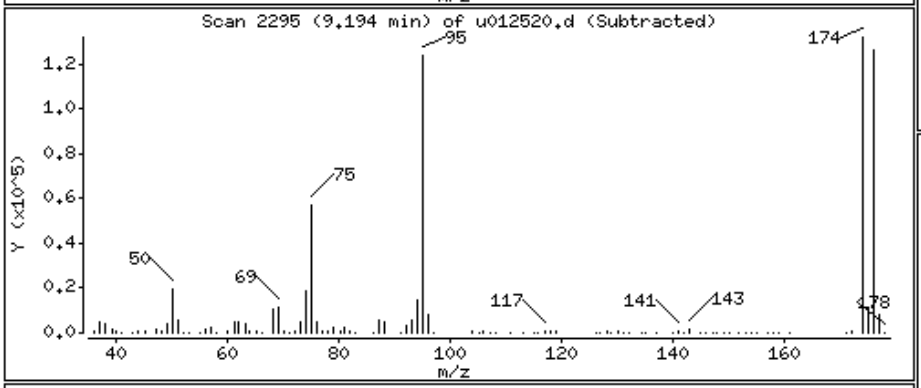
Purge Volume: 5.0 Operator: PC

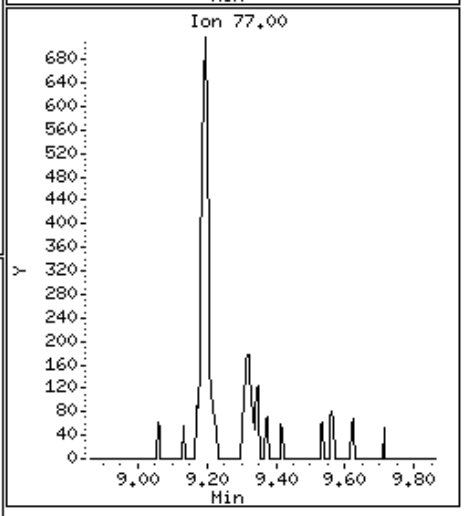
Column phase: DB624 Column diameter: 0.18

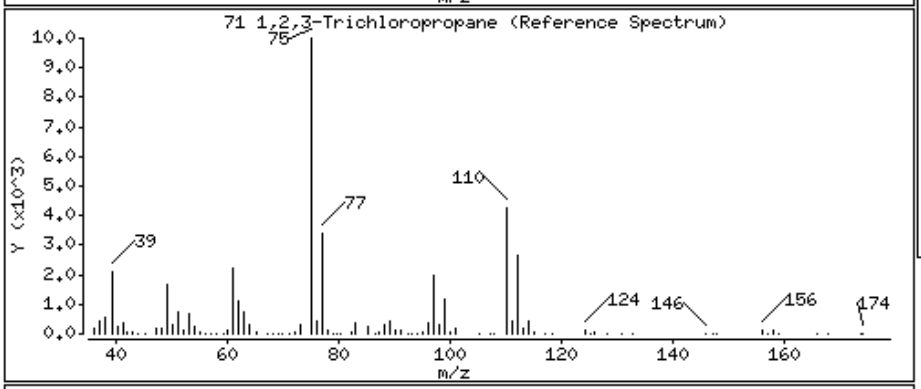
71 1,2,3-Trichloropropane Concentration: 18057.80 ug/l

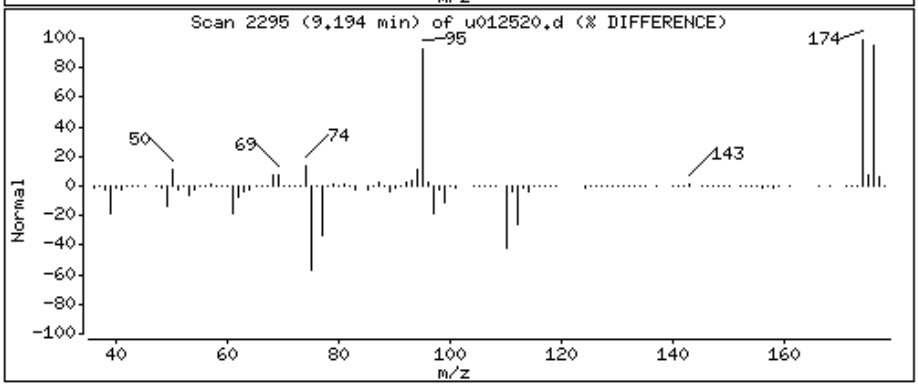












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012520.d Page 12

Date : 25-JAN-2024 17:23

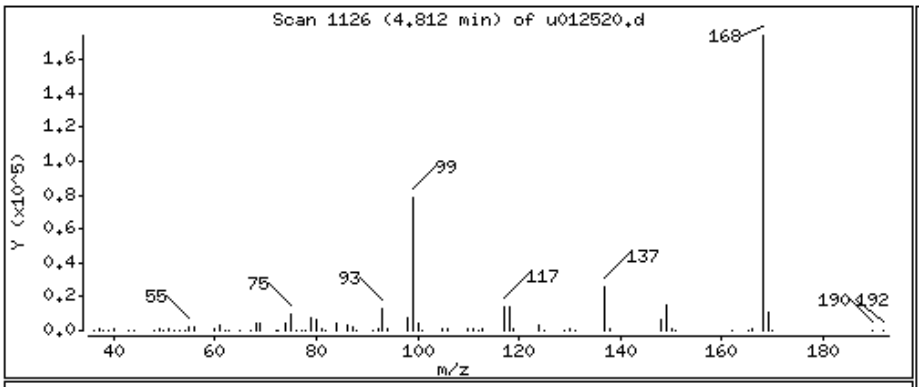
Client ID: HS24011040-02 Instrument: VOA9.i

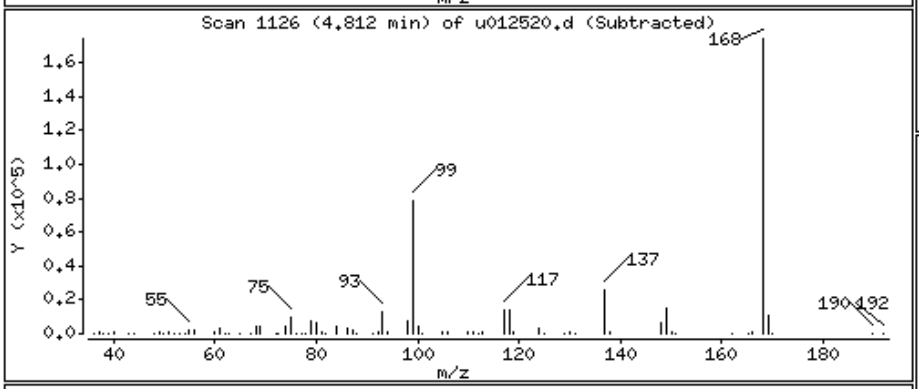
Sample Info: HS24011040-02;HS24011040-02;;;

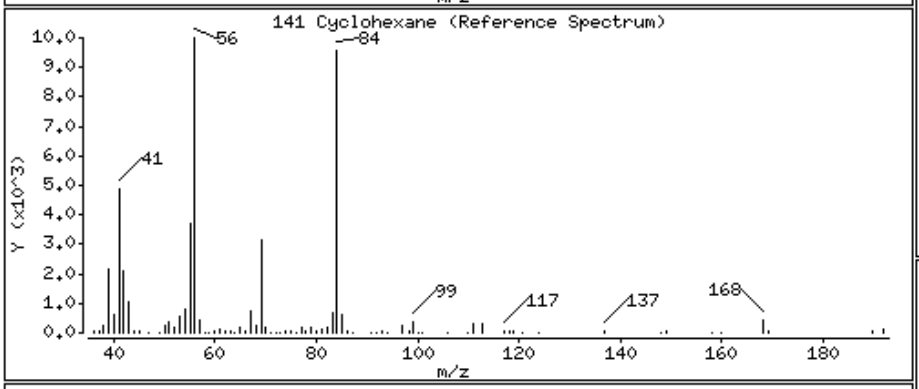
Purge Volume: 5.0 Operator: PC

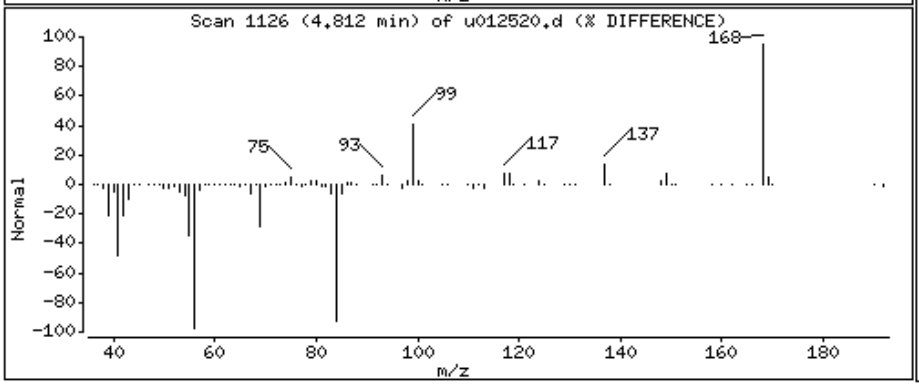
Column phase: DB624 Column diameter: 0.18

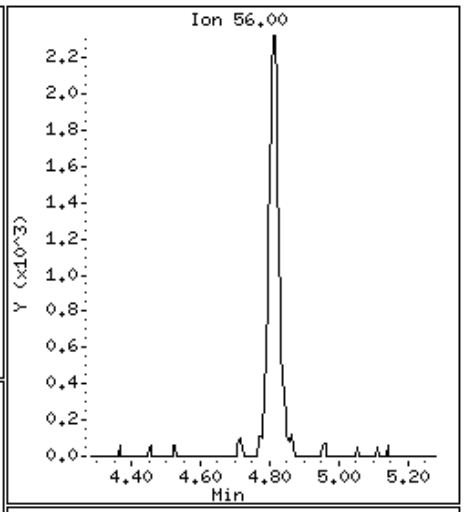
141 Cyclohexane Concentration: 869.66 ug/l

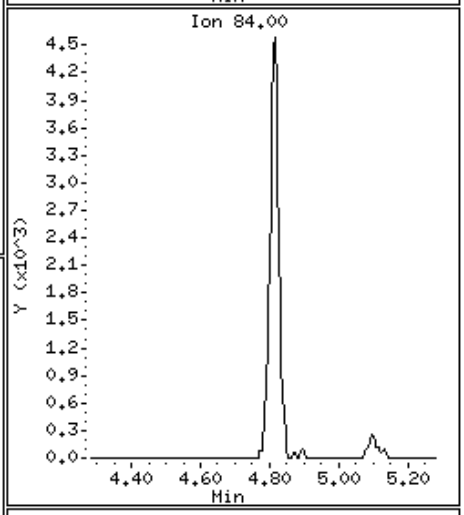


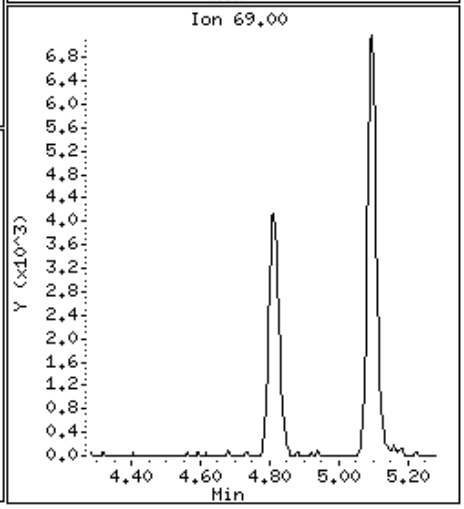












Data File : \\nahstws005\target\chem\voa9.i\u240125.b\u012520.d
Inj Date : 25-JAN-2024 17:23
InstruID : VOA9.i
LabSampID : HS24011040-02

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240125.b\U012521.D Page 1
Report Date: 01-Feb-2024 14:20

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240125.b\U012521.D
Lab Smp Id: HS24011040-06 Client Smp ID: HS24011040-06
Inj Date : 25-JAN-2024 17:45
Operator : PC Inst ID: VOA9.i
Smp Info : HS24011040-06;HS24011040-06;;;
Misc Info : V9;WATER;0;250;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240125.b\8260C.m
Meth Date : 01-Feb-2024 14:20 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 19
Dil Factor: 250.00000
Integrator: HP RTE Compound Sublist: 1040-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7066

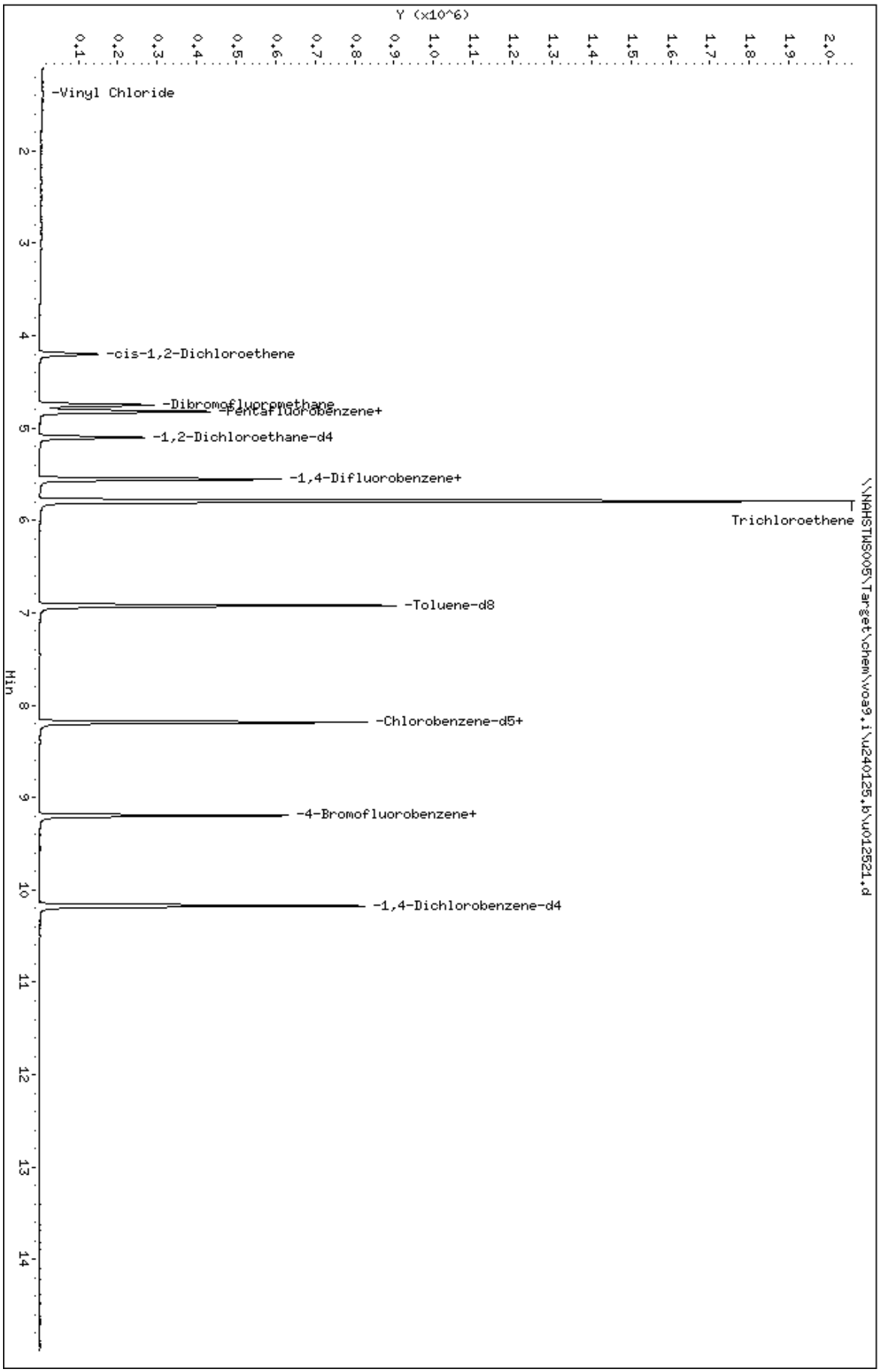
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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	4.819	4.815	(1.000)	326725	50.0000	
	2 Dichlorodifluoromethane	85	1.029	1.164	(0.214)	18227	7.66852	1917.12
	3 Chloromethane	50	0.999	1.303	(0.207)	62573	16.6952	4173.81
	5 Vinyl Chloride	62	1.385	1.378	(0.288)	2125	0.59350	148.37(a)
	27 cis-1,2-Dichloroethene	96	4.200	4.197	(0.872)	78847	19.5385	4884.63
$	30 Dibromofluoromethane	113	4.752	4.748	(0.986)	168636	50.4424	50.44(R)
	34 Carbon Tetrachloride	117	4.819	4.913	(0.868)	27529	6.74569	1686.42
$	35 1,2-Dichloroethane-d4	65	5.100	5.096	(1.058)	174194	45.6680	45.66(R)
*	36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	499385	50.0000	
	38 Trichloroethene	130	5.790	5.790	(1.043)	698118	186.323	46580.72
	42 1,2-Dichloropropane	63	5.554	6.007	(1.000)	84055	22.9656	5741.41
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	474585	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	564299	51.6517	51.65(R)
	58 1-Chlorohexane	55	8.185	8.197	(1.474)	3834	1.36914	342.28(a)
$	69 4-Bromofluorobenzene	95	9.194	9.190	(1.123)	186095	44.8575	44.85(R)
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	238993	50.0000	
	71 1,2,3-Trichloropropane	75	9.194	9.362	(0.904)	83207	18.3402	4585.05
	141 Cyclohexane	56	4.815	4.785	(0.999)	4616	0.98050	245.12(a)
M	94 1,2-Dichloroethylene (total)	96				78847	22.3746	5593.64

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.



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Date : 25-JAN-2024 17:45
Client ID: HS24011040-06
Sample Info: HS24011040-06;HS24011040-06;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9.i
Operator: PC
Column diameter: 0.18

Page 1

Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012521.d Page 2

Date : 25-JAN-2024 17:45

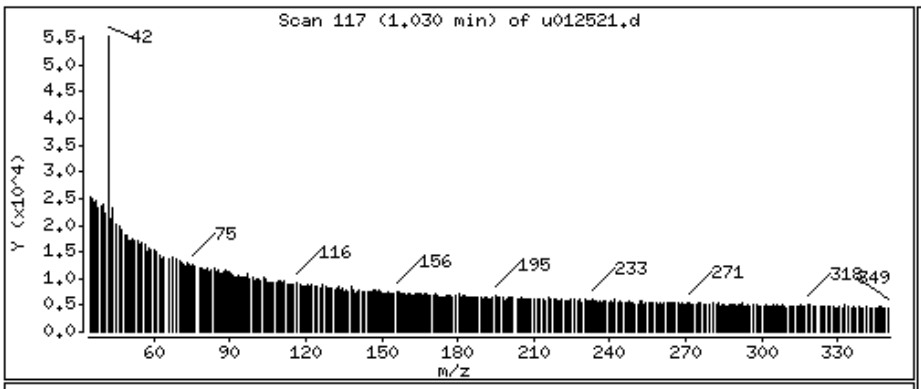
Client ID: HS24011040-06 Instrument: VOA9.i

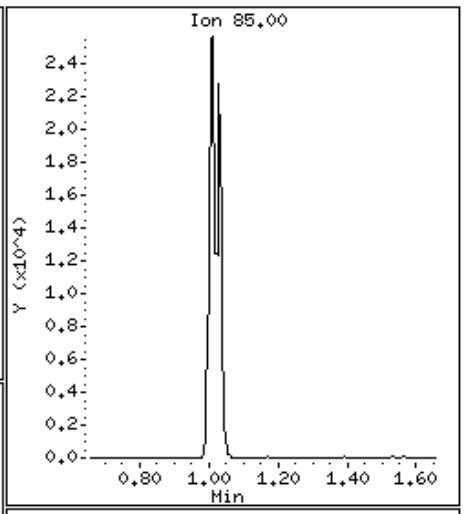
Sample Info: HS24011040-06;HS24011040-06;;;

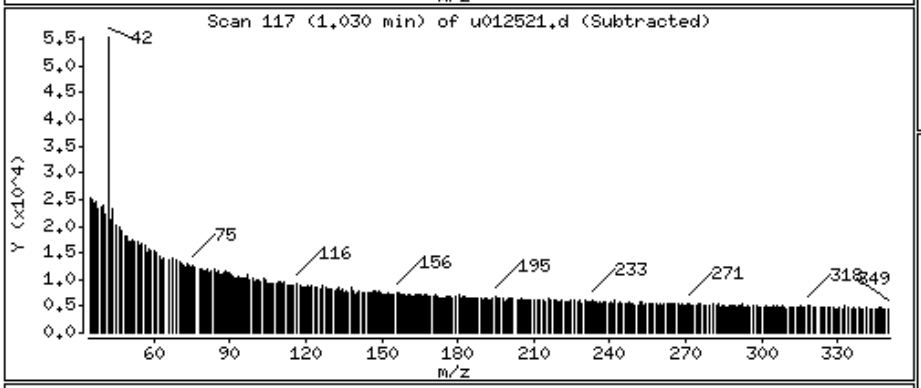
Purge Volume: 5.0 Operator: PC

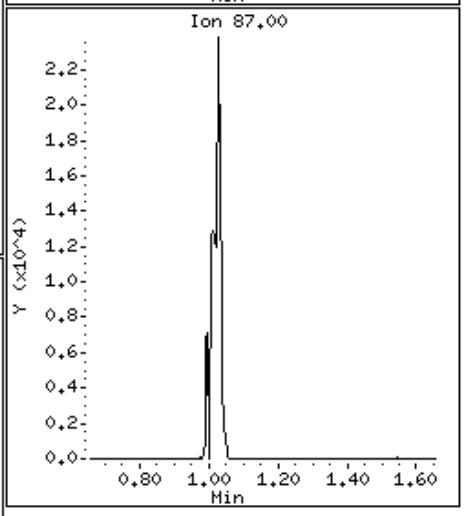
Column phase: DB624 Column diameter: 0.18

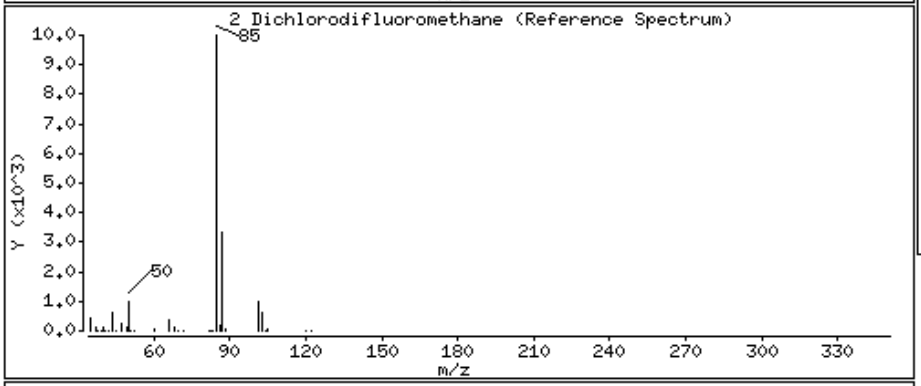
2 Dichlorodifluoromethane Concentration: 1917.12 ug/l

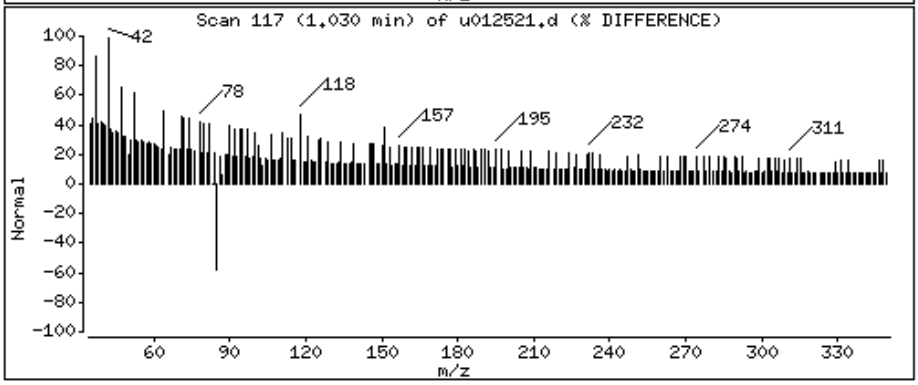












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Date : 25-JAN-2024 17:45

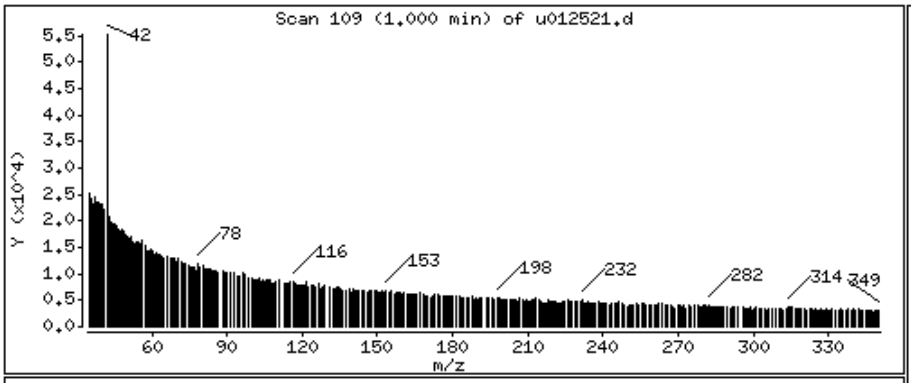
Client ID: HS24011040-06 Instrument: VOA9.i

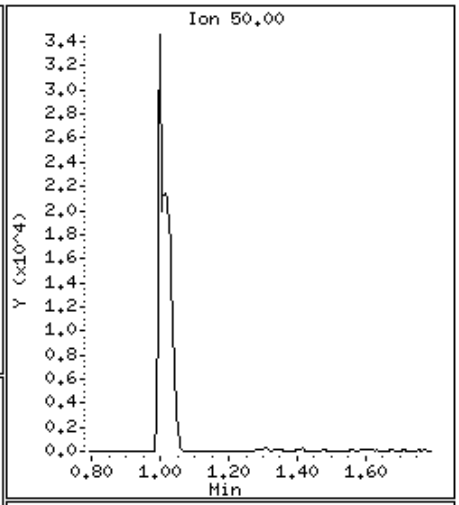
Sample Info: HS24011040-06;HS24011040-06;;;

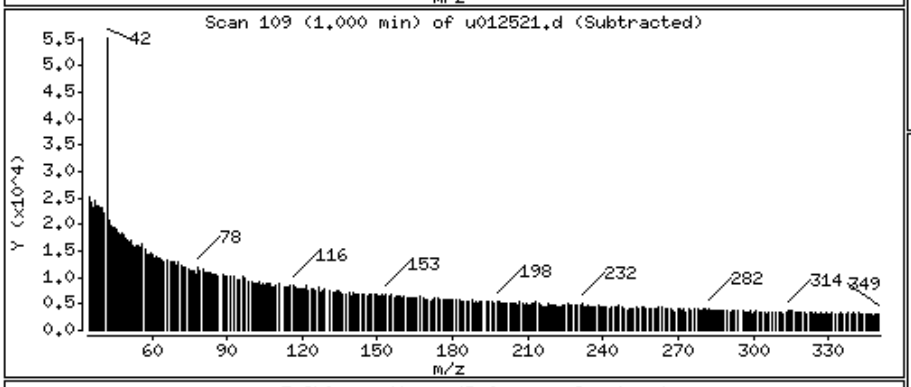
Purge Volume: 5.0 Operator: PC

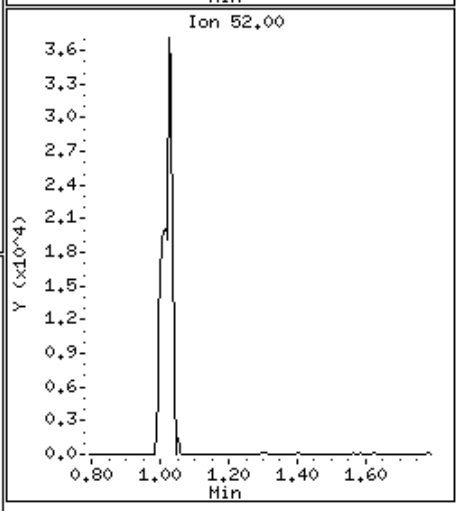
Column phase: DB624 Column diameter: 0.18

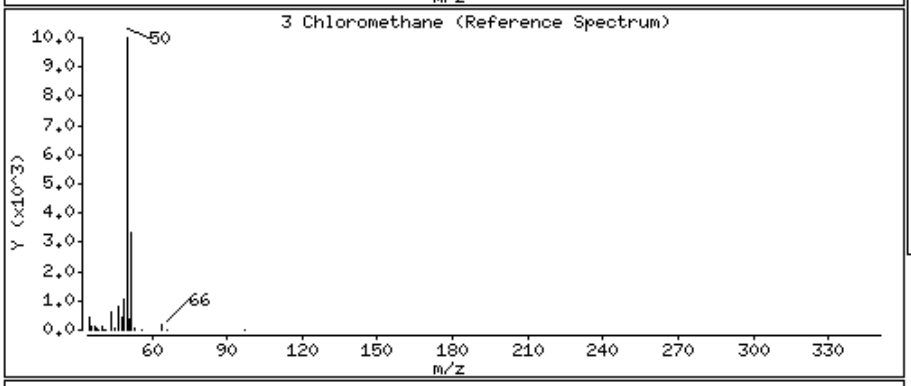
3 Chloromethane Concentration: 4173.81 ug/l

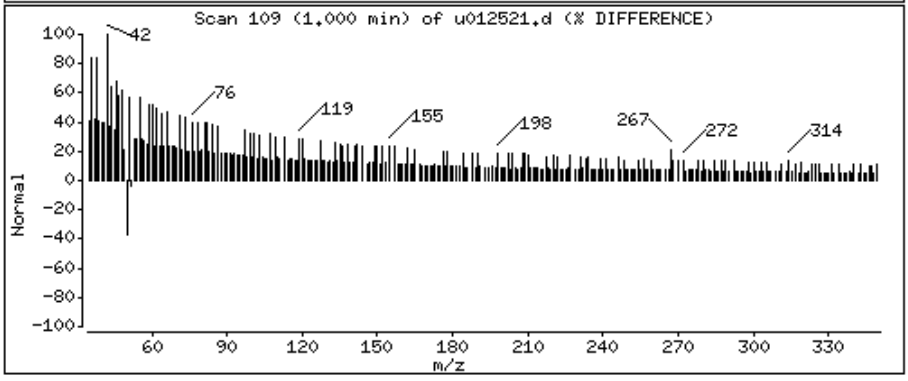












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012521.d Page 4

Date : 25-JAN-2024 17:45

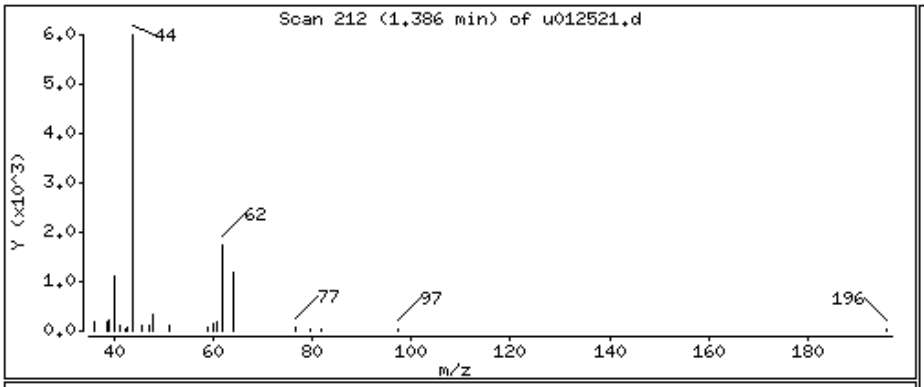
Client ID: HS24011040-06 Instrument: VOA9.i

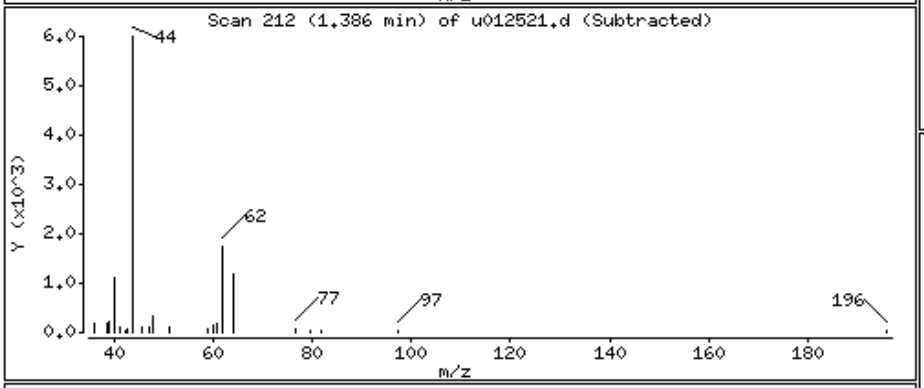
Sample Info: HS24011040-06;HS24011040-06;;;

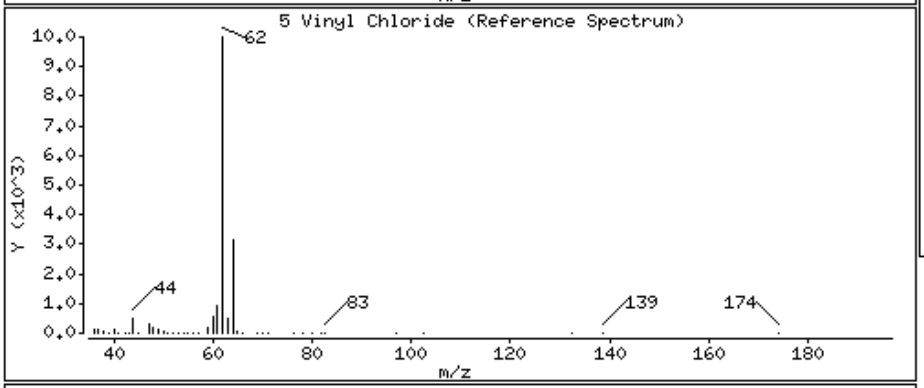
Purge Volume: 5.0 Operator: PC

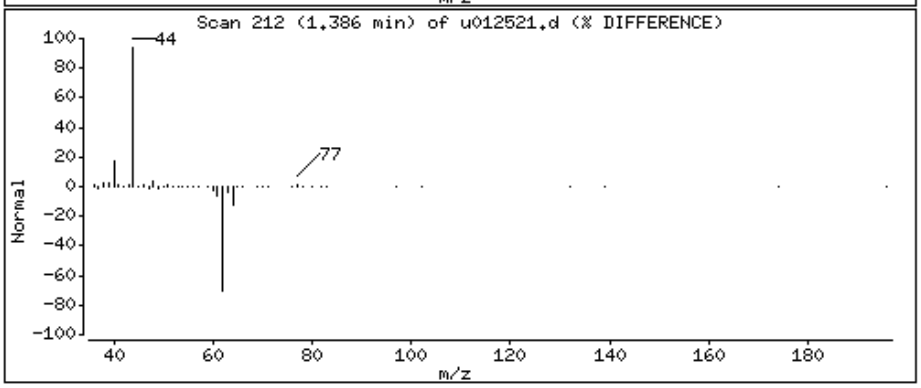
Column phase: DB624 Column diameter: 0.18

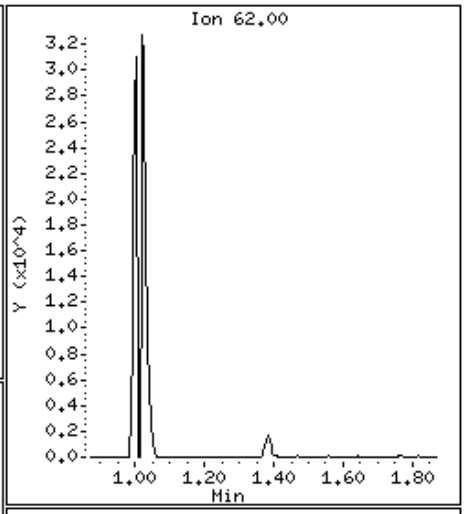
5 Vinyl Chloride Concentration: 148.37 ug/l

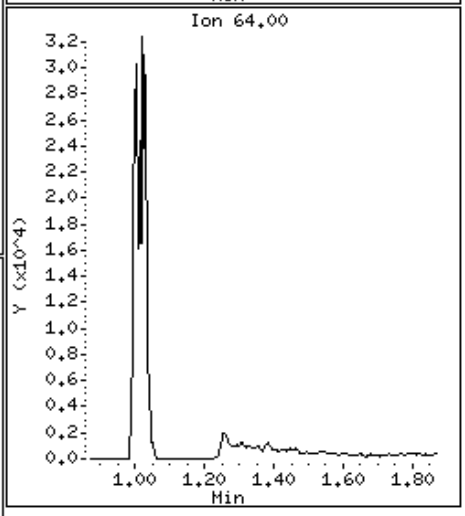












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012521.d Page 5

Date : 25-JAN-2024 17:45

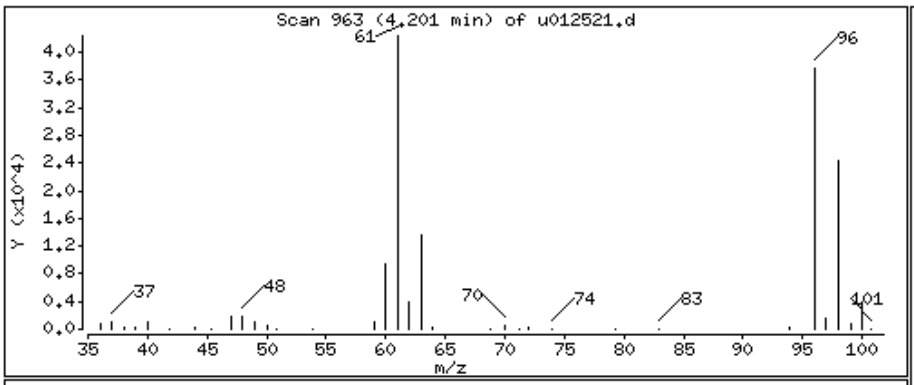
Client ID: HS24011040-06 Instrument: VOA9.i

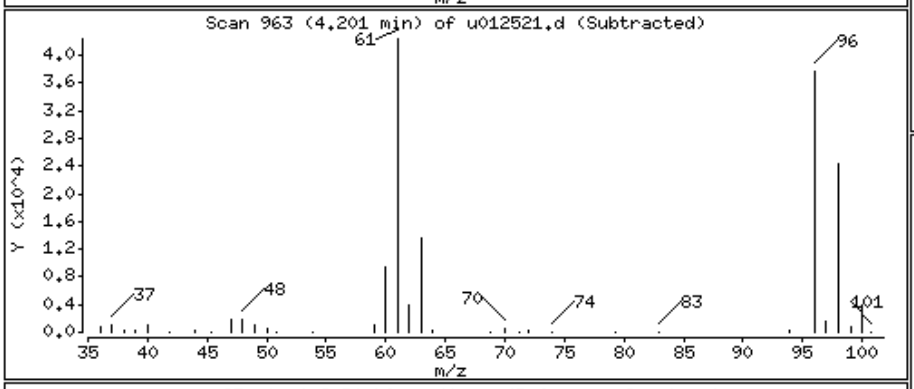
Sample Info: HS24011040-06;HS24011040-06;;;

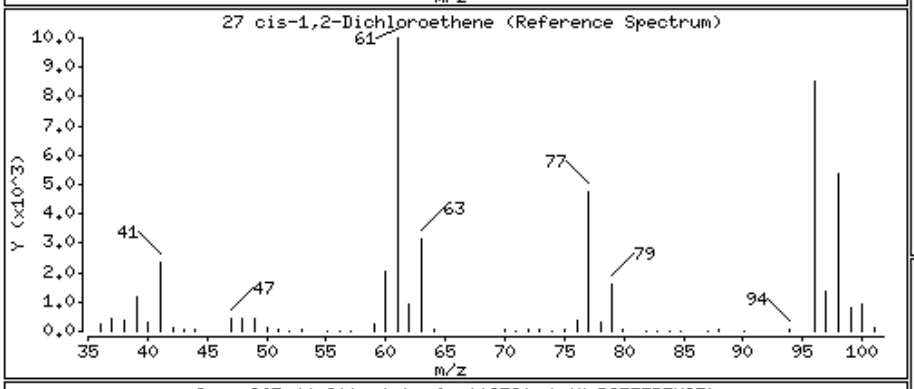
Purge Volume: 5.0 Operator: PC

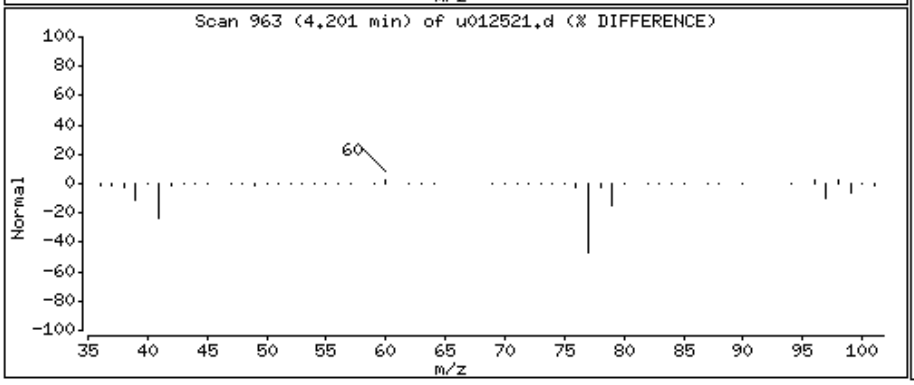
Column phase: DB624 Column diameter: 0.18

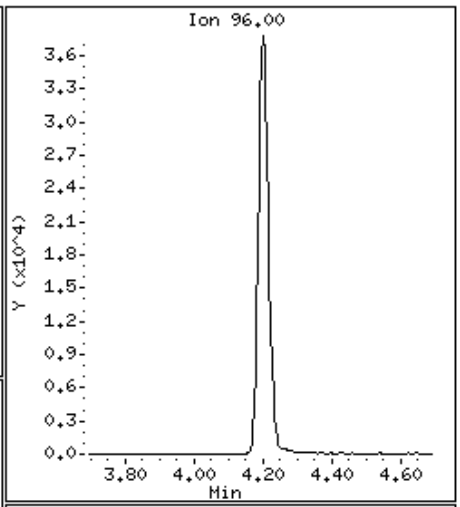
27 cis-1,2-Dichloroethene Concentration: 4884.63 ug/l

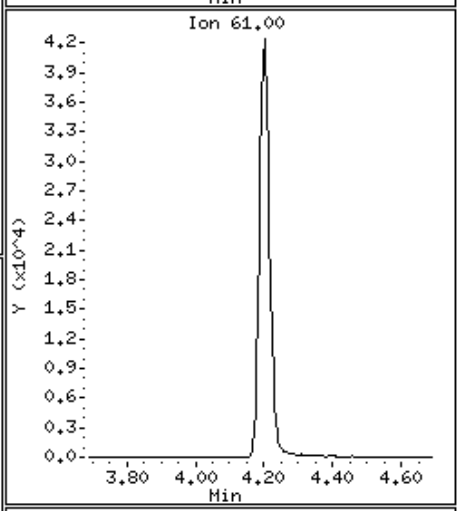


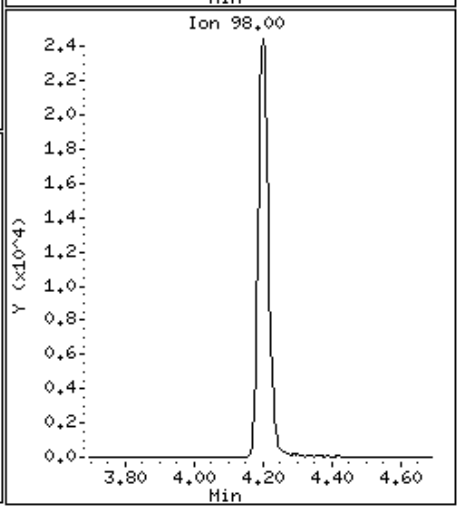












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012521.d Page 6

Date : 25-JAN-2024 17:45

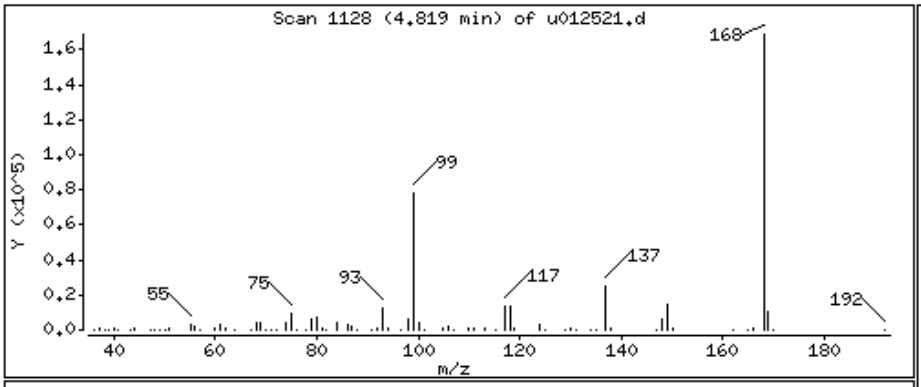
Client ID: HS24011040-06 Instrument: VOA9.i

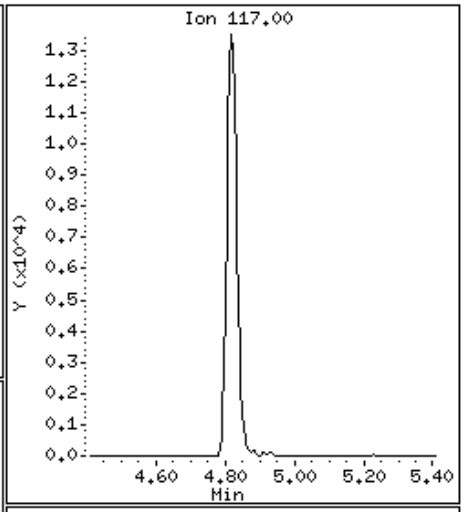
Sample Info: HS24011040-06;HS24011040-06;;;

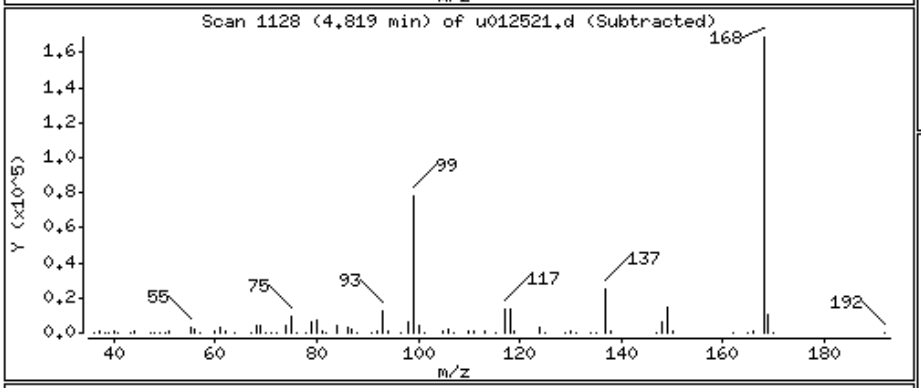
Purge Volume: 5.0 Operator: PC

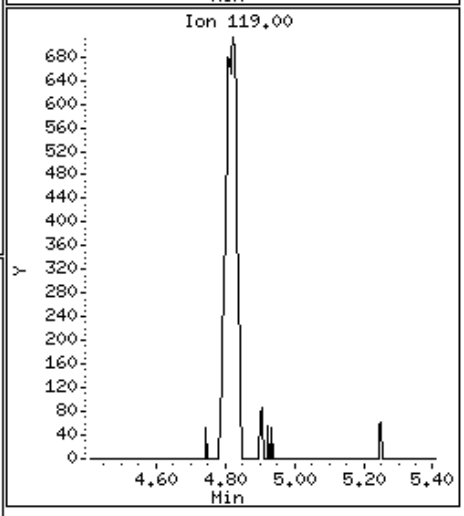
Column phase: DB624 Column diameter: 0.18

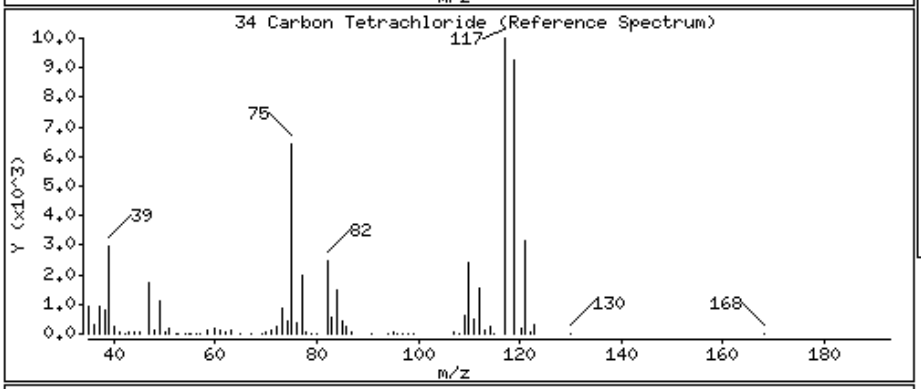
34 Carbon Tetrachloride Concentration: 1686.42 ug/l

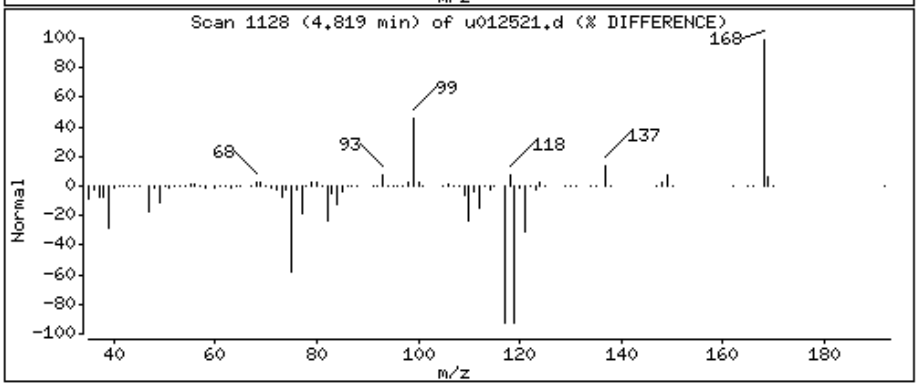












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012521.d Page 7

Date : 25-JAN-2024 17:45

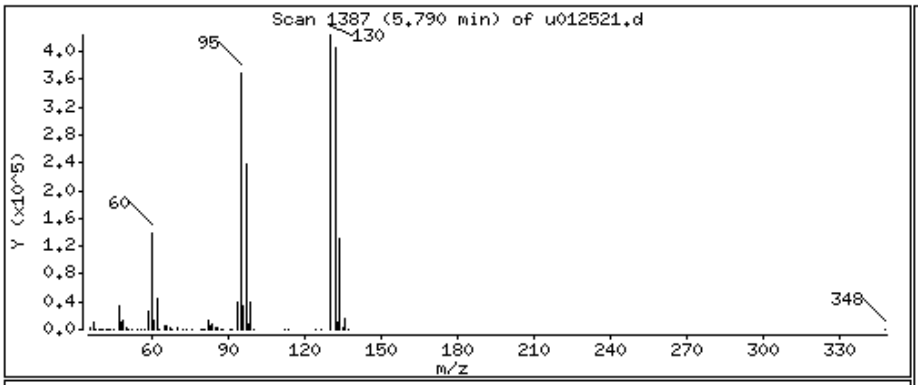
Client ID: HS24011040-06 Instrument: VOA9.i

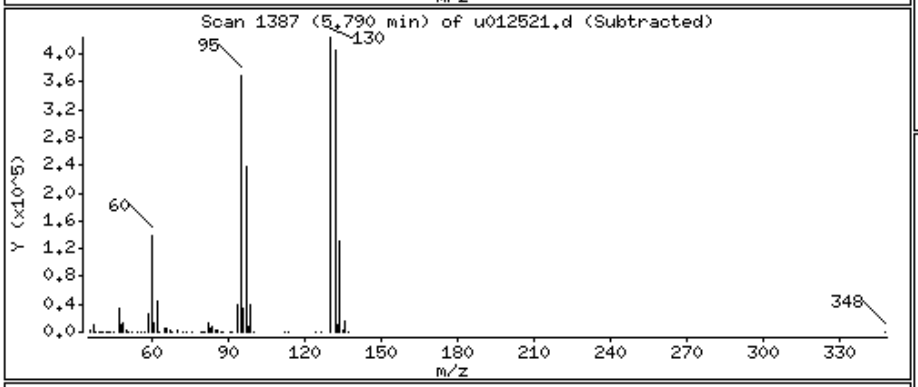
Sample Info: HS24011040-06;HS24011040-06;;;

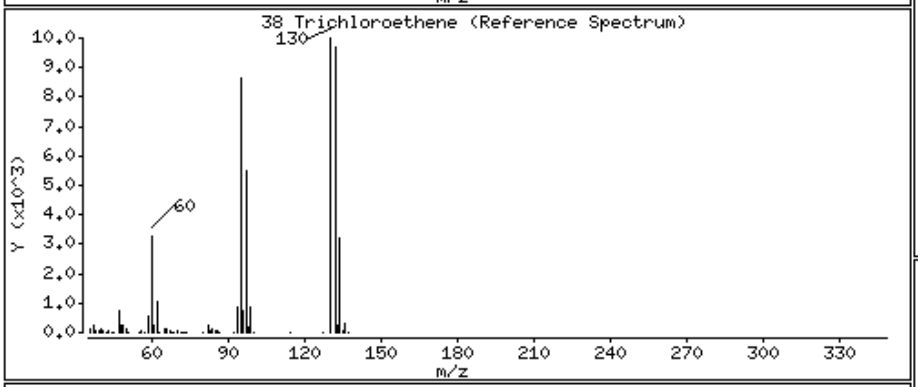
Purge Volume: 5.0 Operator: PC

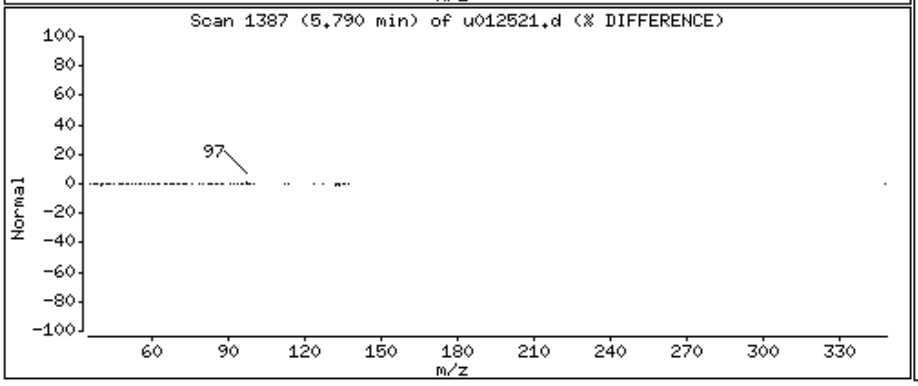
Column phase: DB624 Column diameter: 0.18

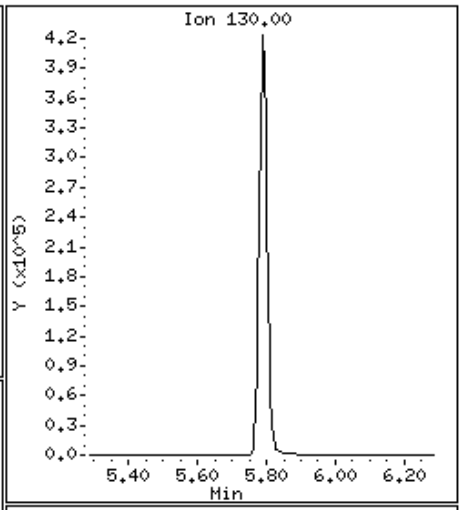
38 Trichloroethene Concentration: 46580.72 ug/l

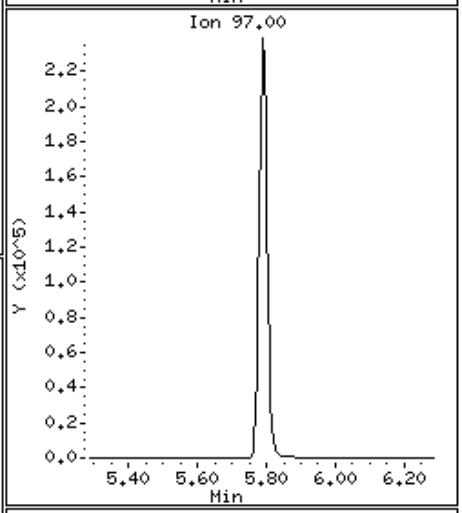


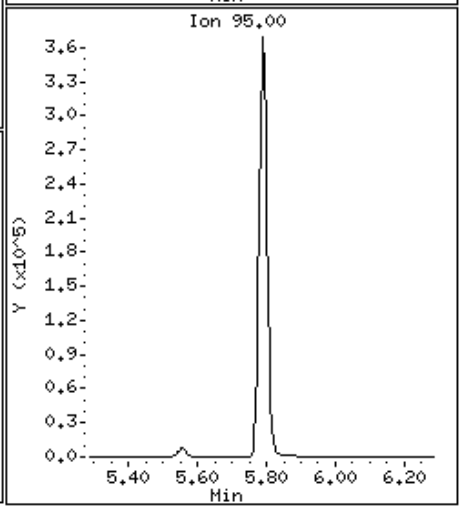












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012521.d Page 8

Date : 25-JAN-2024 17:45

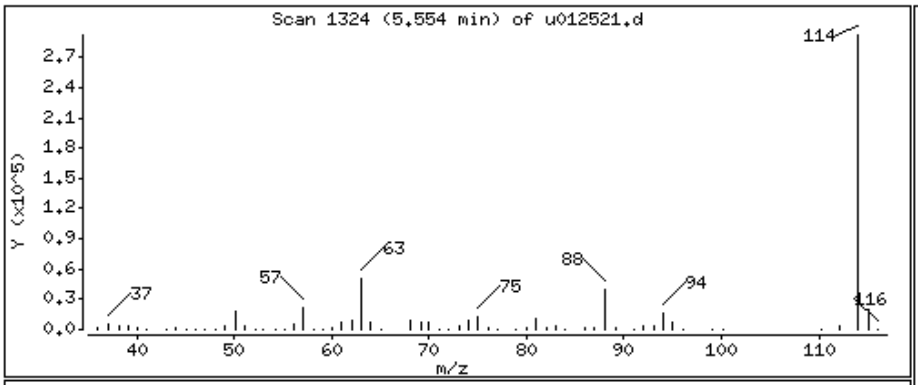
Client ID: HS24011040-06 Instrument: VOA9.i

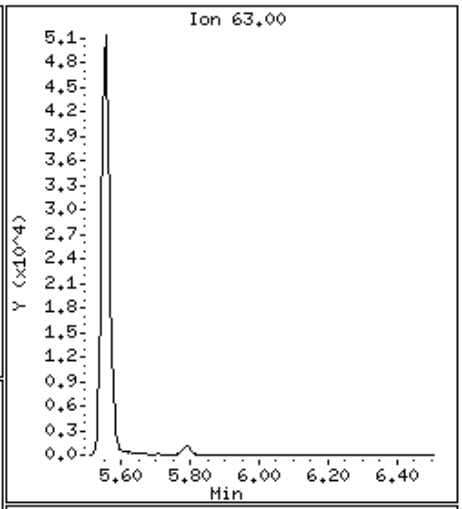
Sample Info: HS24011040-06;HS24011040-06;;;

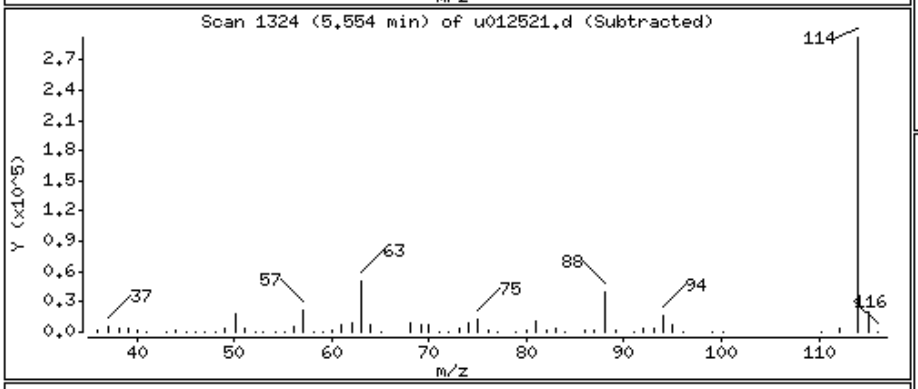
Purge Volume: 5.0 Operator: PC

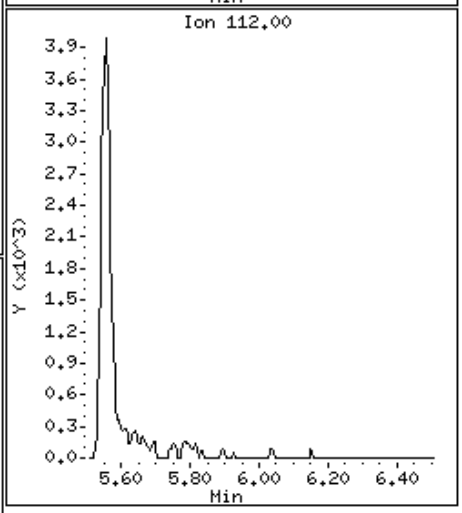
Column phase: DB624 Column diameter: 0.18

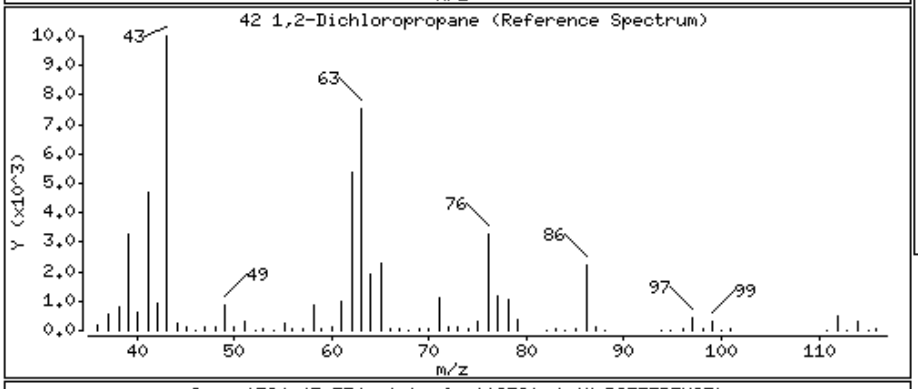
42 1,2-Dichloropropane Concentration: 5741.41 ug/l

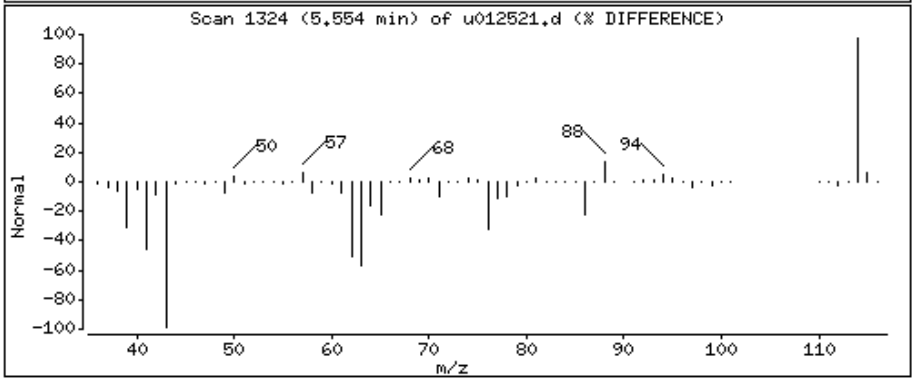












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012521.d Page 9

Date : 25-JAN-2024 17:45

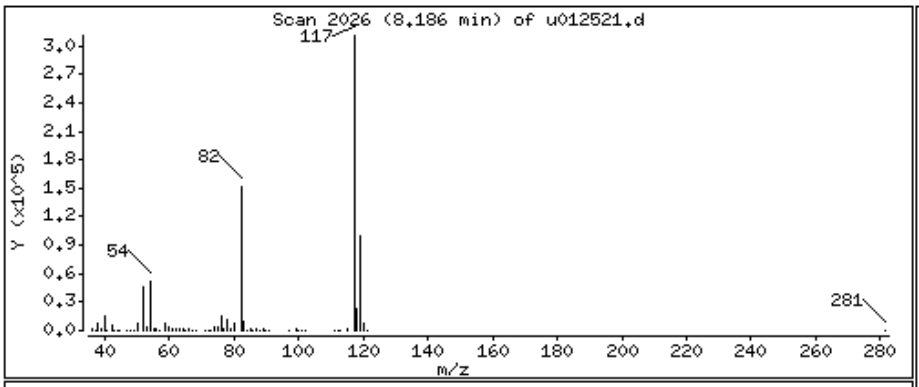
Client ID: HS24011040-06 Instrument: VOA9.i

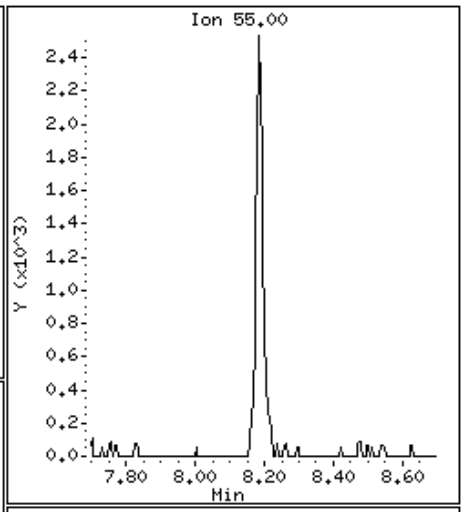
Sample Info: HS24011040-06;HS24011040-06;;;

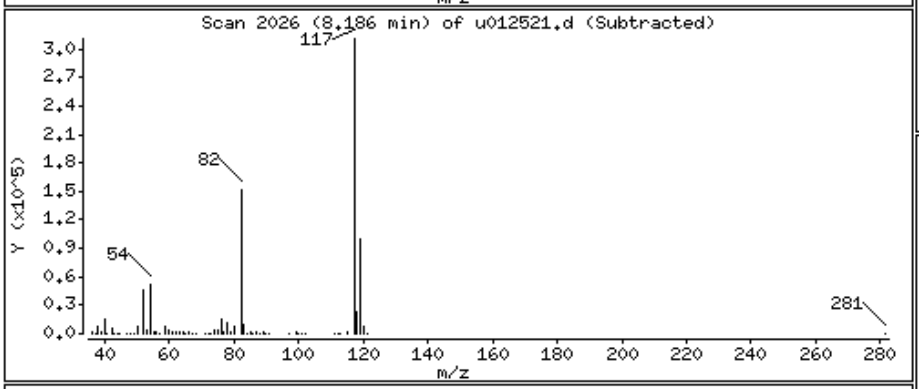
Purge Volume: 5.0 Operator: PC

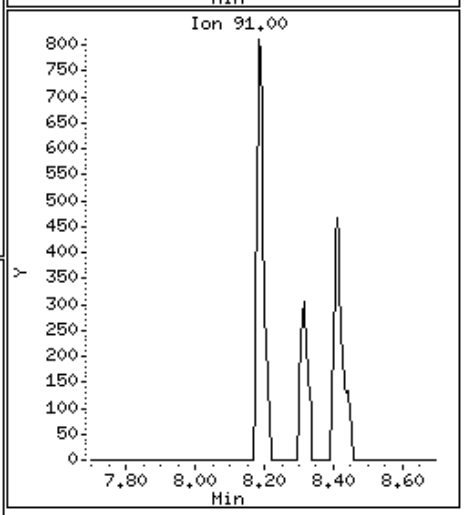
Column phase: DB624 Column diameter: 0.18

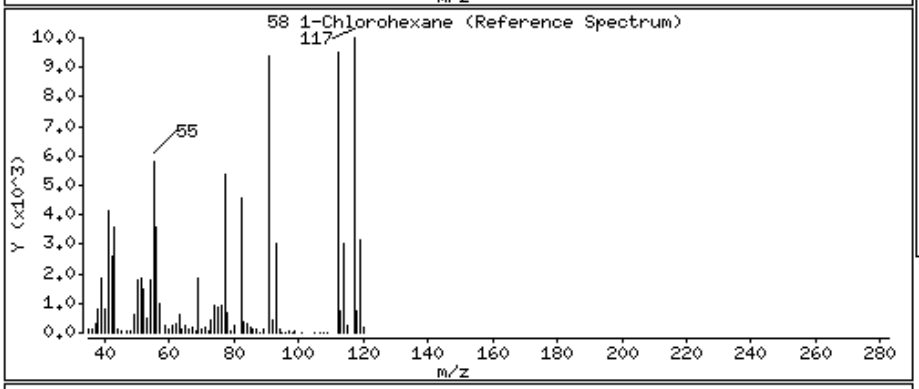
58 1-Chlorohexane Concentration: 342.28 ug/l

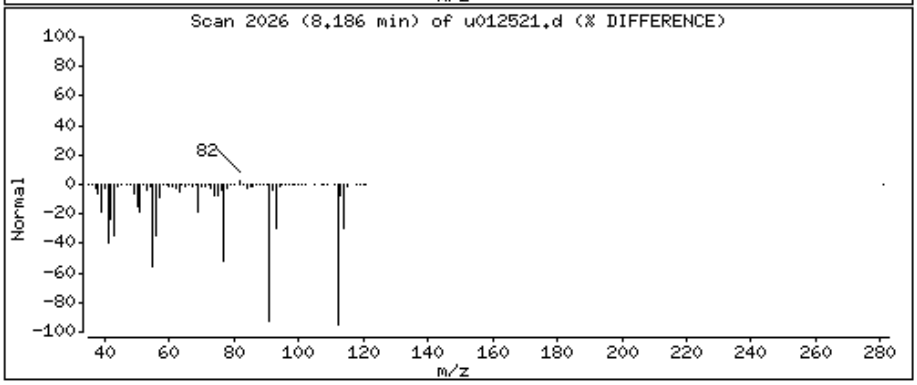












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012521.d Page 10

Date : 25-JAN-2024 17:45

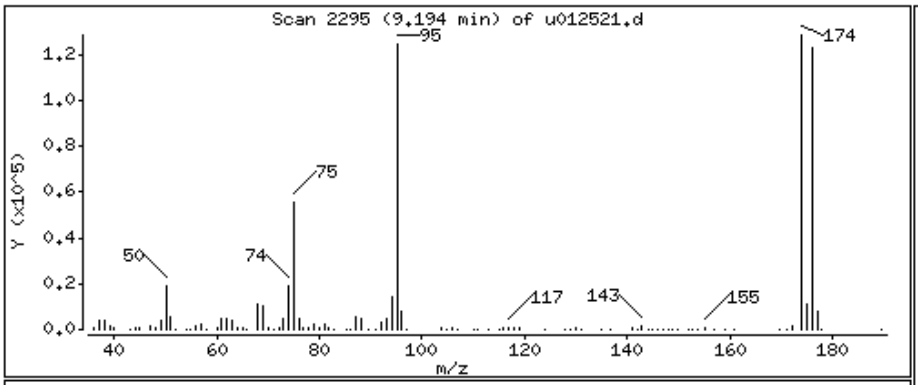
Client ID: HS24011040-06 Instrument: VOA9.i

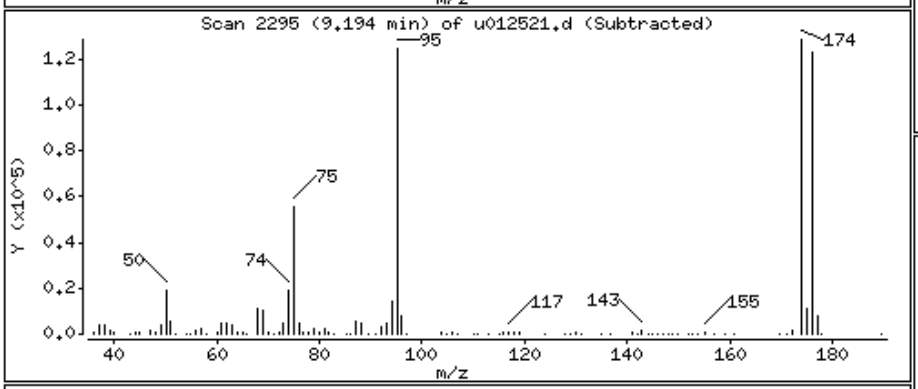
Sample Info: HS24011040-06;HS24011040-06;;;

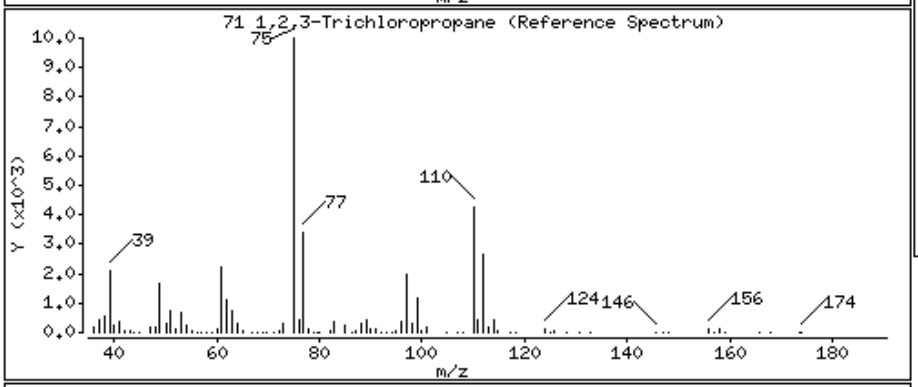
Purge Volume: 5.0 Operator: PC

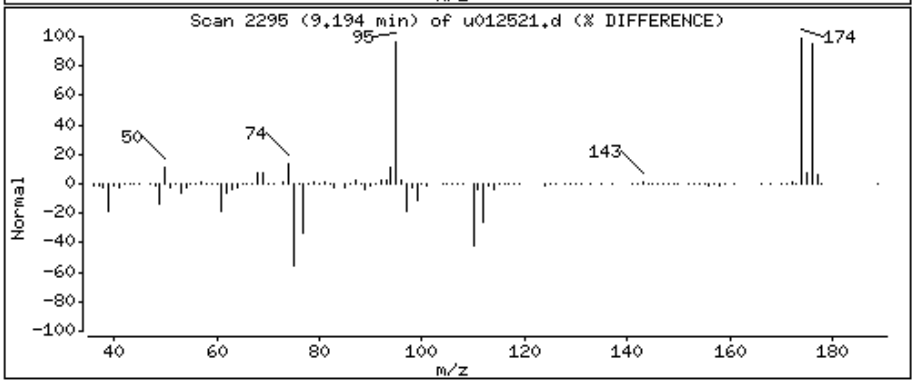
Column phase: DB624 Column diameter: 0.18

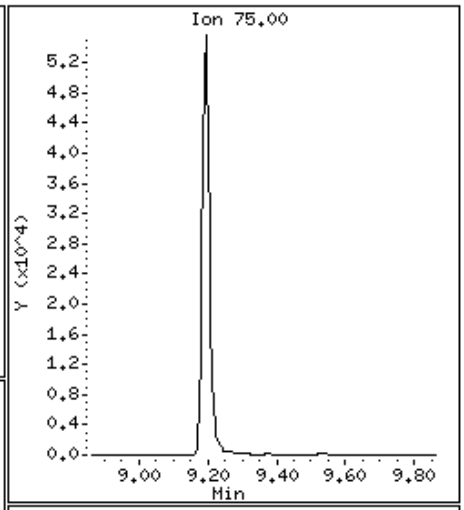
71 1,2,3-Trichloropropane Concentration: 4585.05 ug/l

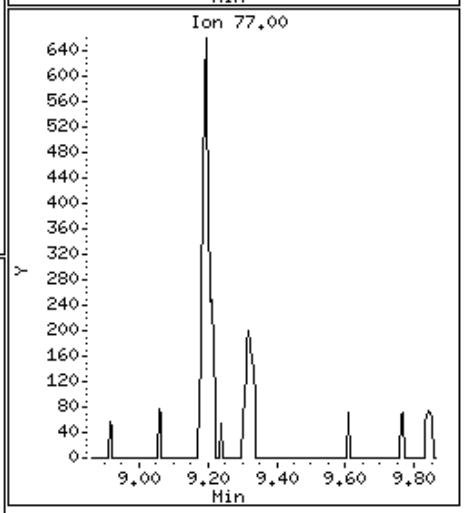












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012521.d Page 11

Date : 25-JAN-2024 17:45

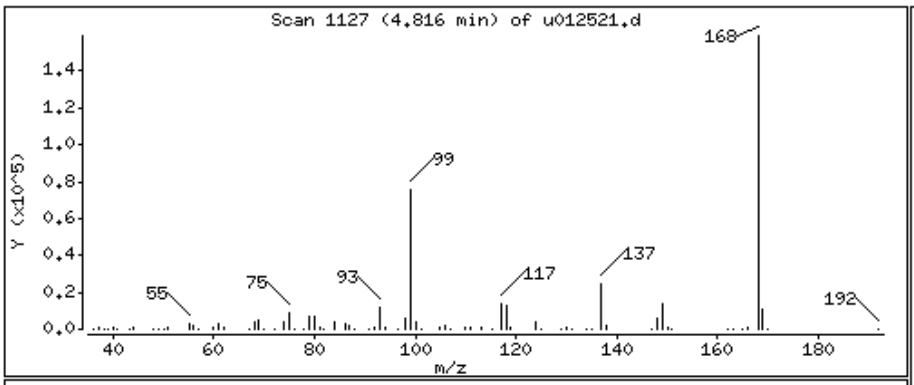
Client ID: HS24011040-06 Instrument: VOA9.i

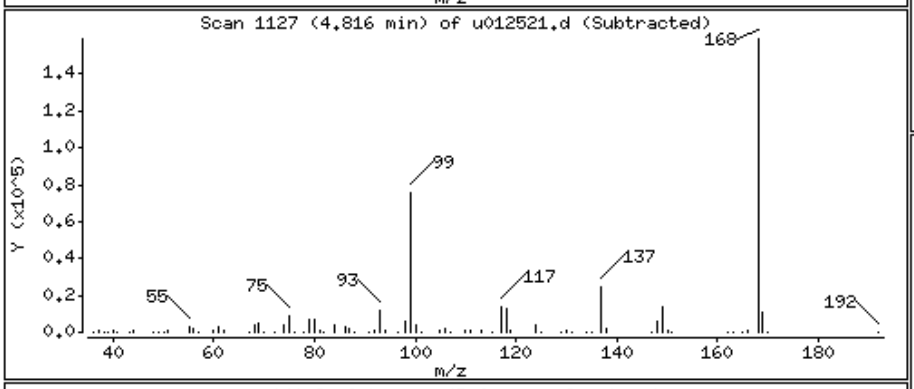
Sample Info: HS24011040-06;HS24011040-06;;;

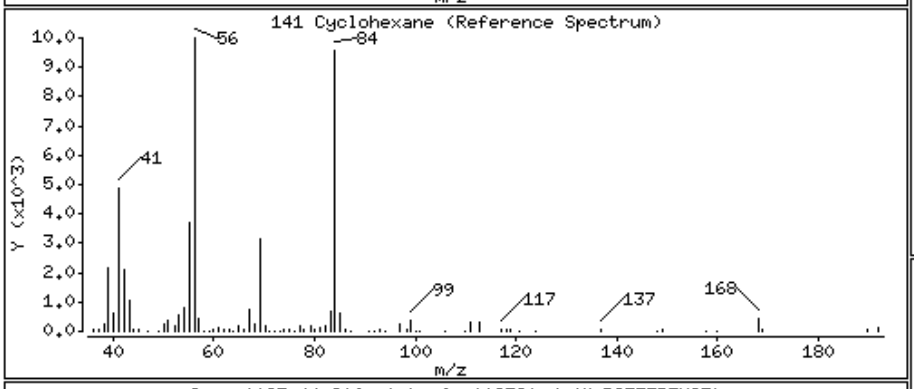
Purge Volume: 5.0 Operator: PC

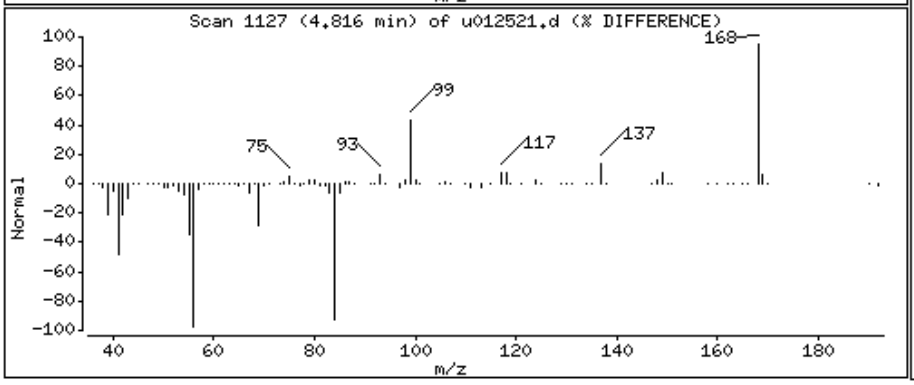
Column phase: DB624 Column diameter: 0.18

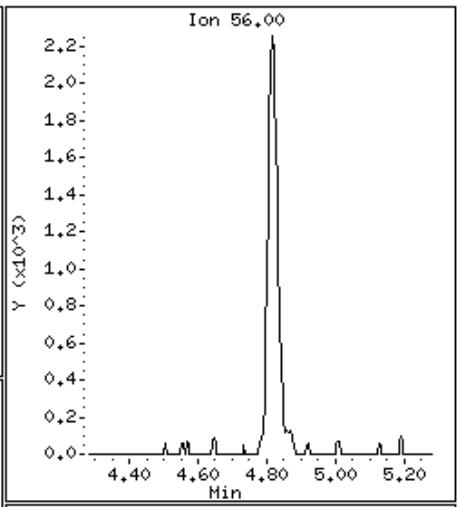
141 Cyclohexane Concentration: 245.12 ug/l

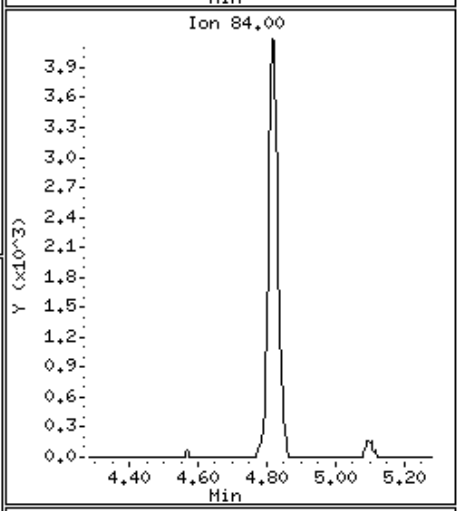


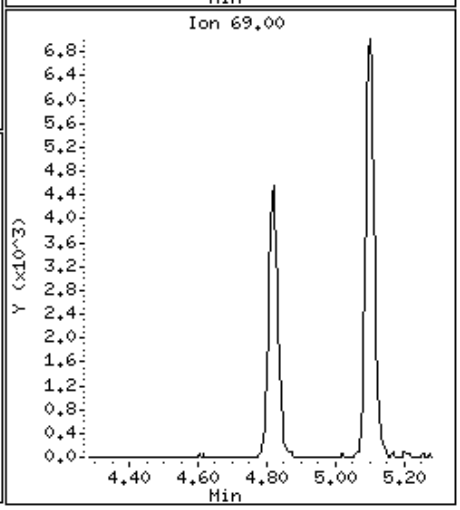












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Inj Date : 25-JAN-2024 17:45
InstruID : VOA9.i
LabSampID : HS24011040-06

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240125.b\U012522.D Page 1
Report Date: 01-Feb-2024 14:20

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240125.b\U012522.D
Lab Smp Id: HS24011040-07 Client Smp ID: HS24011040-07
Inj Date : 25-JAN-2024 18:07
Operator : PC Inst ID: VOA9.i
Smp Info : HS24011040-07;HS24011040-07;;;
Misc Info : V9;WATER;0;50;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240125.b\8260C.m
Meth Date : 01-Feb-2024 14:20 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 20
Dil Factor: 50.00000
Integrator: HP RTE Compound Sublist: 1040-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7066

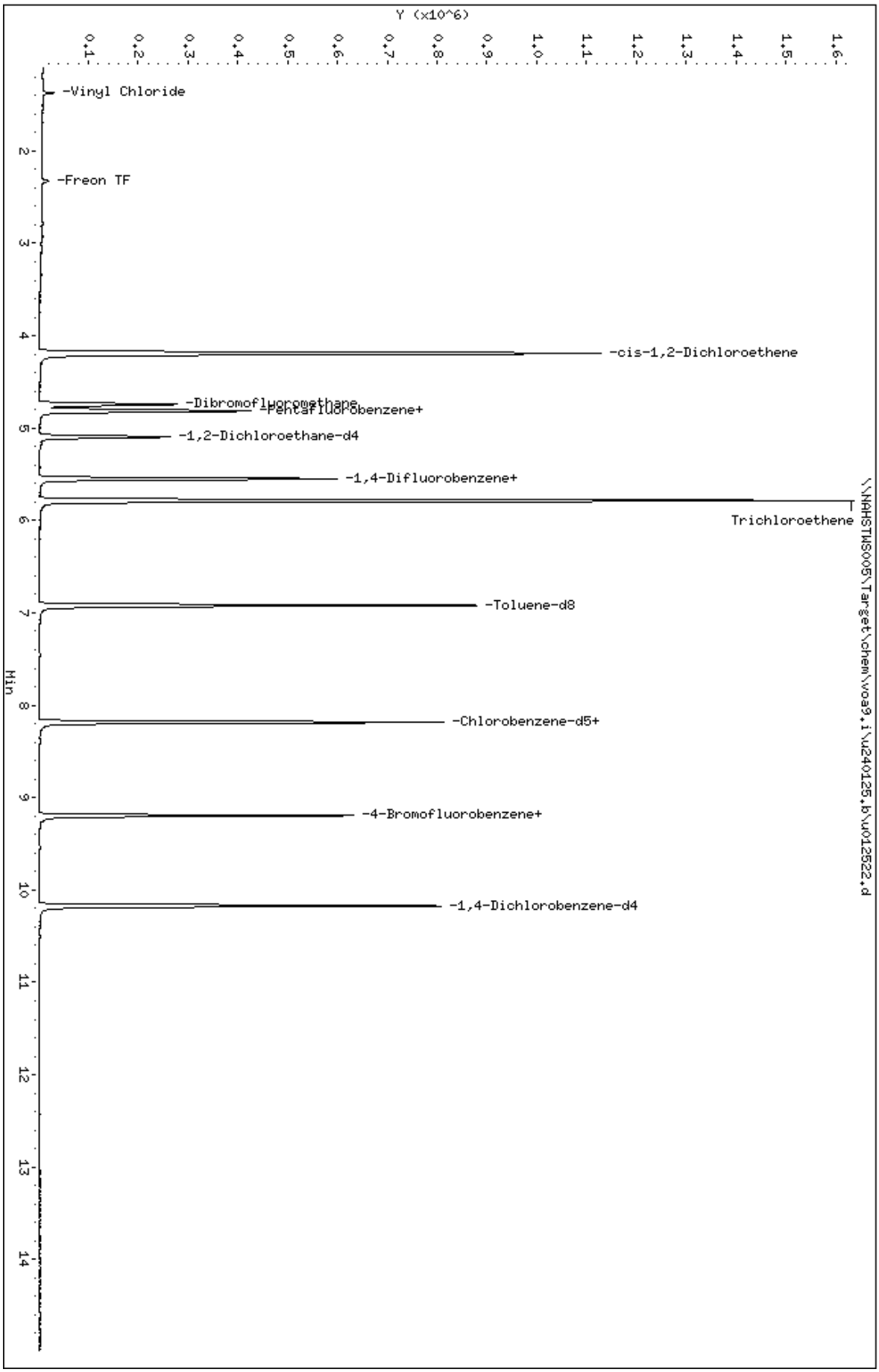
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	50.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
*	1 Pentafluorobenzene	168	4.811	4.815	(1.000)	323950	50.0000	
	2 Dichlorodifluoromethane	85	0.995	1.164	(0.207)	51721	20.3308	1016.54
	3 Chloromethane	50	1.029	1.303	(0.214)	4199	1.12994	56.49(a)
	5 Vinyl Chloride	62	1.370	1.378	(0.285)	14042	3.95545	197.77(a)
	27 cis-1,2-Dichloroethene	96	4.193	4.197	(0.871)	599553	149.844	7492.19
$	30 Dibromofluoromethane	113	4.744	4.748	(0.986)	165043	49.7772	49.77(R)
	34 Carbon Tetrachloride	117	4.811	4.913	(0.867)	25492	6.36893	318.44
$	35 1,2-Dichloroethane-d4	65	5.093	5.096	(1.058)	172745	45.6756	45.67(R)
*	36 1,4-Difluorobenzene	114	5.550	5.554	(1.000)	489789	50.0000	
	38 Trichloroethene	130	5.786	5.790	(1.043)	563744	153.407	7670.36
	42 1,2-Dichloropropane	63	5.550	6.007	(1.000)	81322	22.6542	1132.71
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	470595	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	562498	51.9234	51.92(R)
	58 1-Chlorohexane	55	8.185	8.197	(1.475)	3471	1.26380	63.18(a)
$	69 4-Bromofluorobenzene	95	9.194	9.190	(1.123)	186080	45.2451	45.24(R)
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	235347	50.0000	
	71 1,2,3-Trichloropropane	75	9.194	9.362	(0.904)	83758	18.7477	937.38
	138 Freon TF	101	2.326	2.337	(0.483)	3375	1.44757	72.37(a)
	141 Cyclohexane	56	4.811	4.785	(1.000)	4726	1.01246	50.62(a)
M	94 1,2-Dichloroethylene (total)	96				599553	171.594	8579.68

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.



Data File: \\NAHSTMS005\Target\chem\voa9.i\u240125.b\u012522.d
Date : 25-JAN-2024 18:07
Client ID: HS24011040-07
Sample Info: HS24011040-07;HS24011040-07;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9.i
Operator: PC
Column diameter: 0.18

Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012522.d Page 2

Date : 25-JAN-2024 18:07

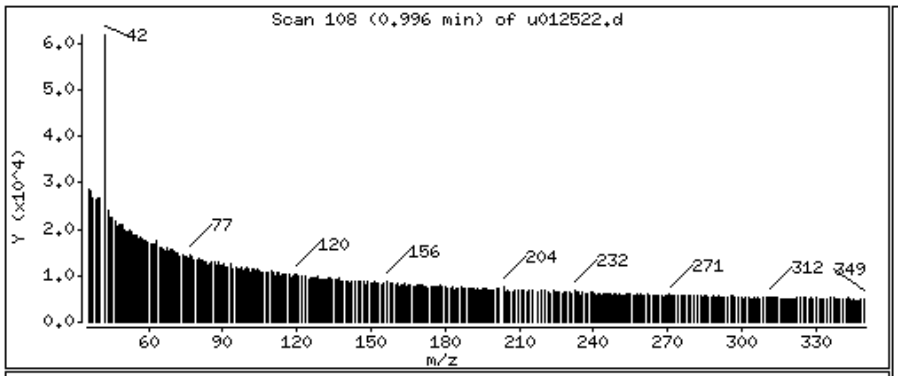
Client ID: HS24011040-07 Instrument: VOA9.i

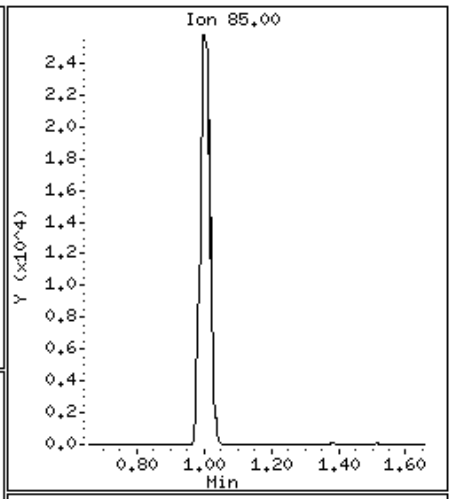
Sample Info: HS24011040-07;HS24011040-07;;;

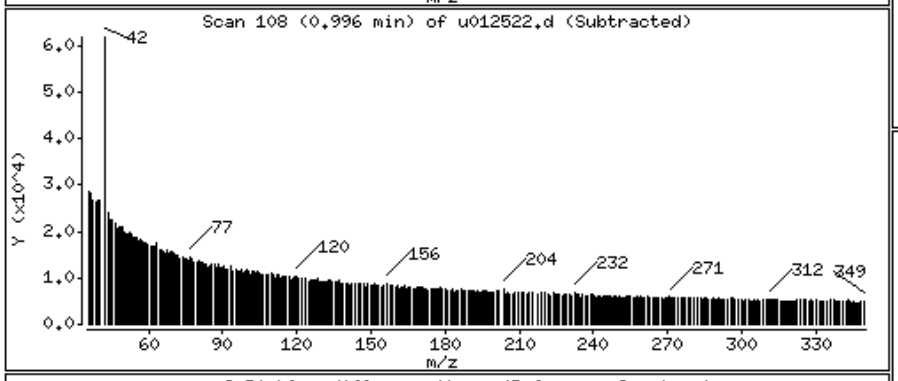
Purge Volume: 5.0 Operator: PC

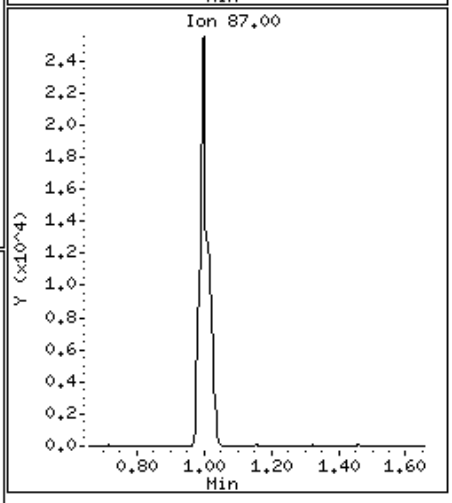
Column phase: DB624 Column diameter: 0.18

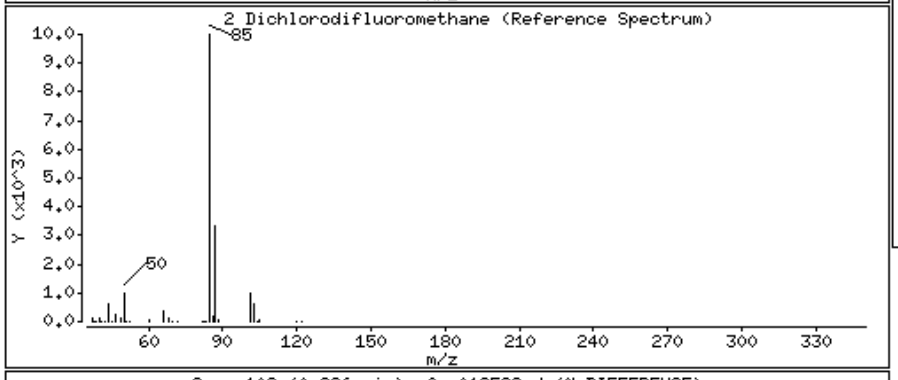
2 Dichlorodifluoromethane Concentration: 1016.54 ug/l

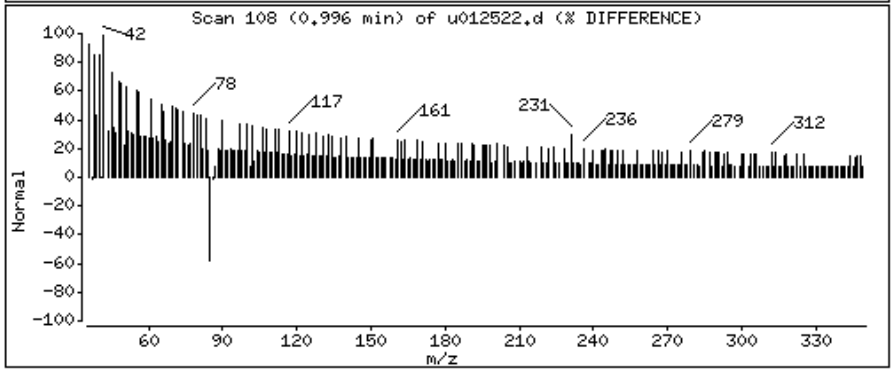












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012522.d Page 3

Date : 25-JAN-2024 18:07

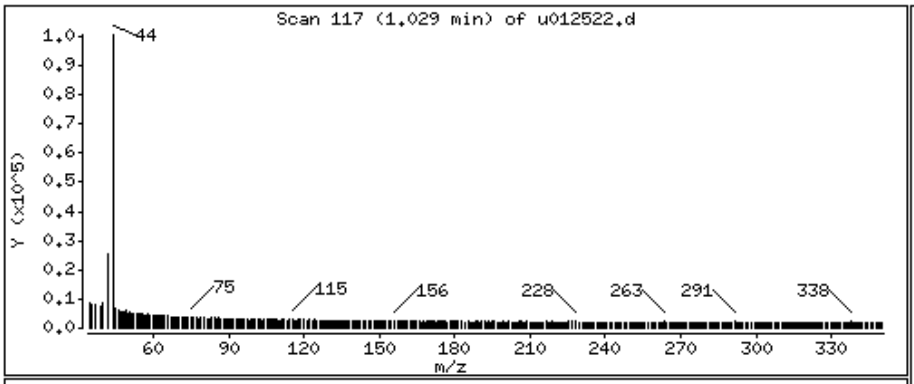
Client ID: HS24011040-07 Instrument: VOA9.i

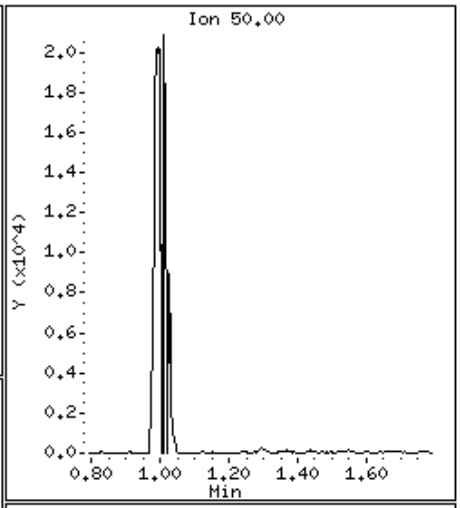
Sample Info: HS24011040-07;HS24011040-07;;;

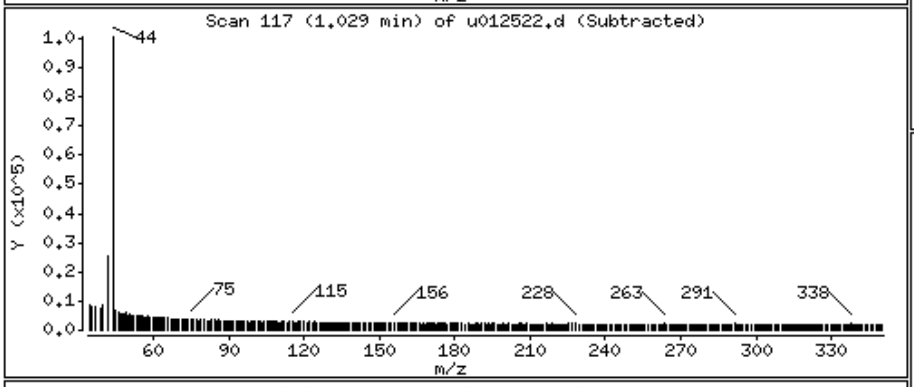
Purge Volume: 5.0 Operator: PC

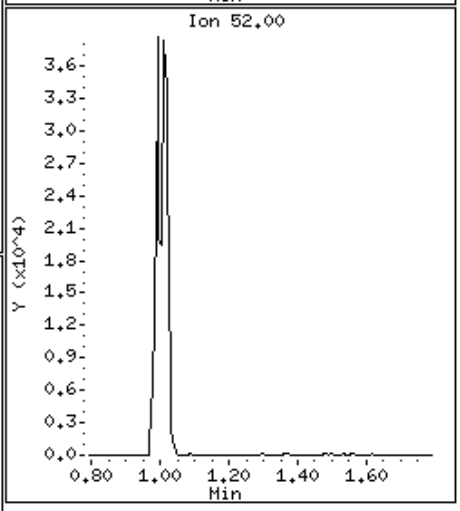
Column phase: DB624 Column diameter: 0.18

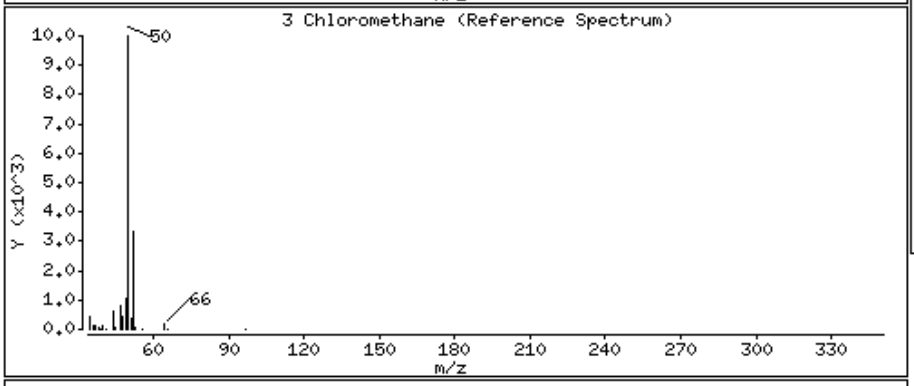
3 Chloromethane Concentration: 56.49 ug/l

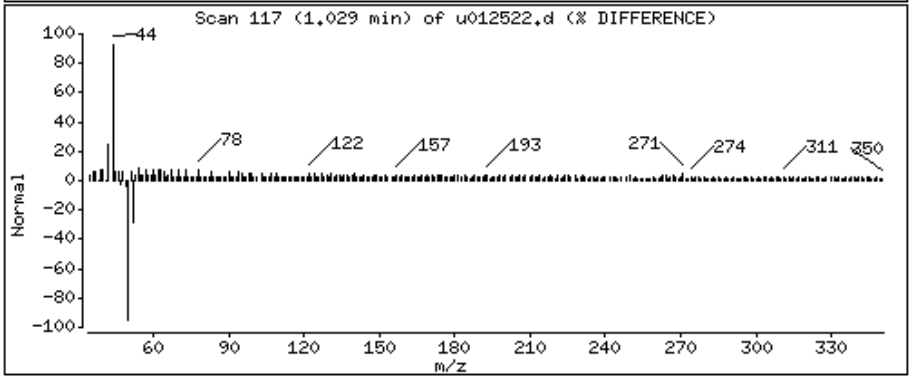












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012522.d Page 4

Date : 25-JAN-2024 18:07

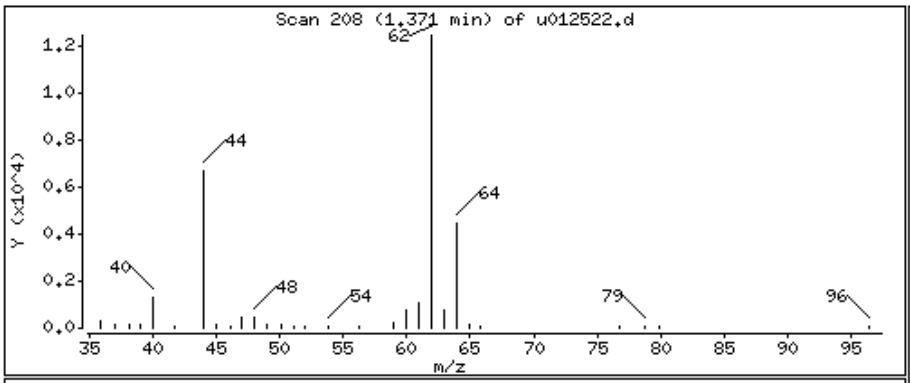
Client ID: HS24011040-07 Instrument: VOA9.i

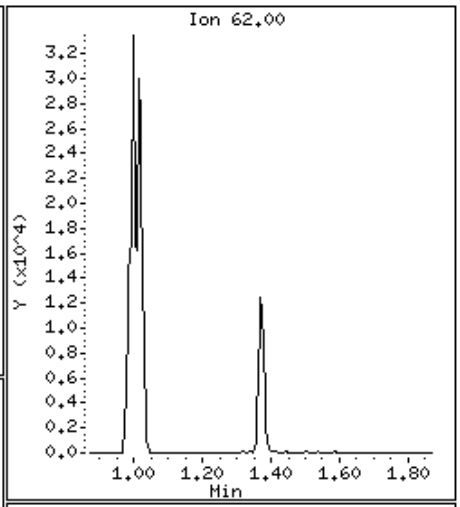
Sample Info: HS24011040-07;HS24011040-07;;;

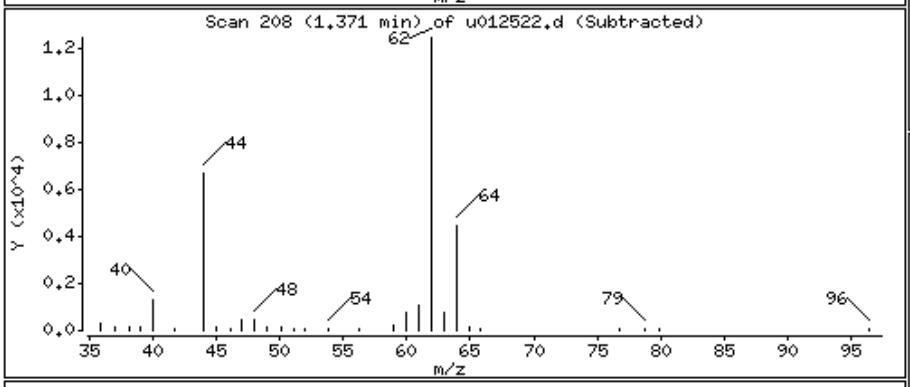
Purge Volume: 5.0 Operator: PC

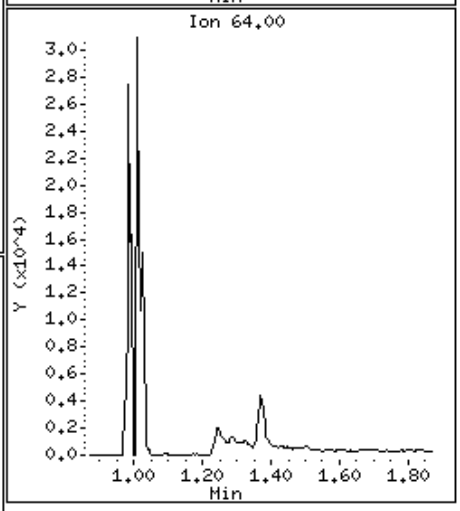
Column phase: DB624 Column diameter: 0.18

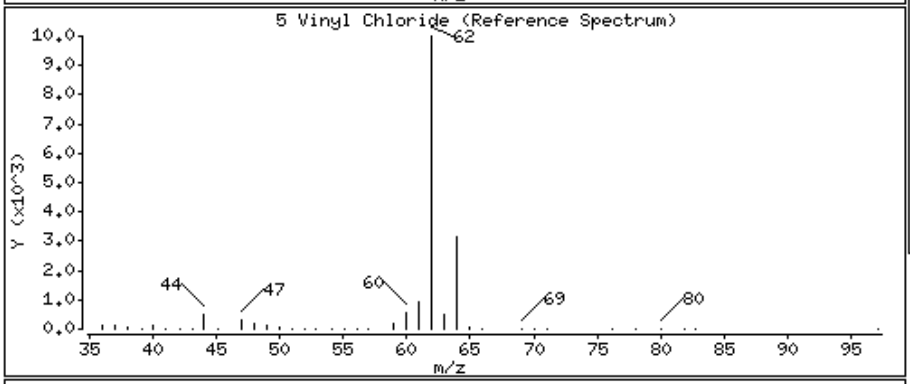
5 Vinyl Chloride Concentration: 197.77 ug/l

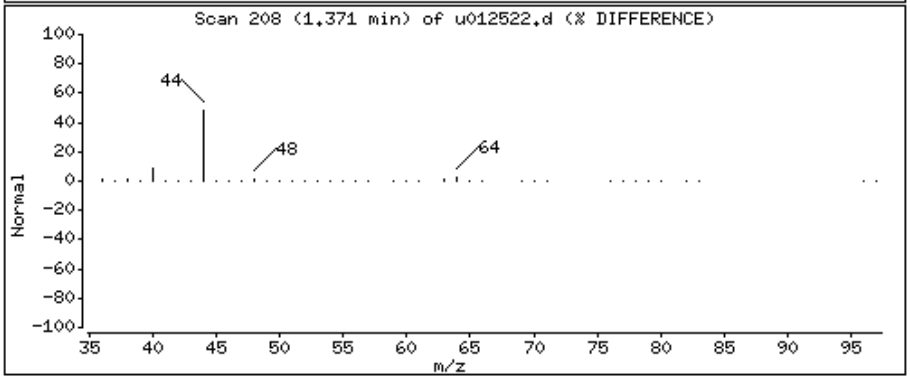












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012522.d Page 5

Date : 25-JAN-2024 18:07

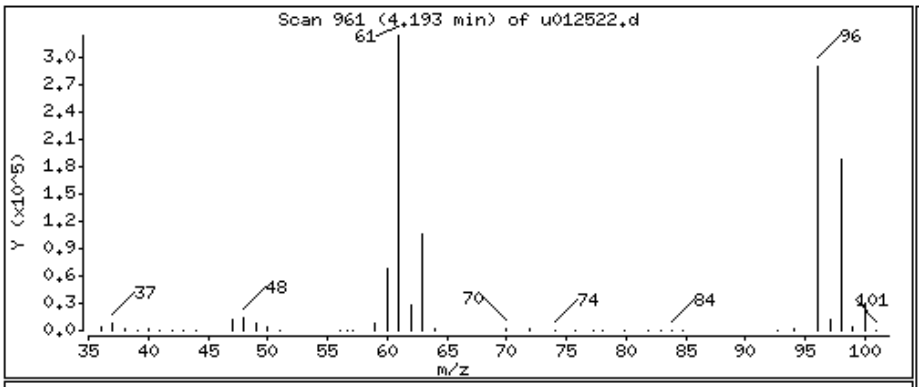
Client ID: HS24011040-07 Instrument: VOA9.i

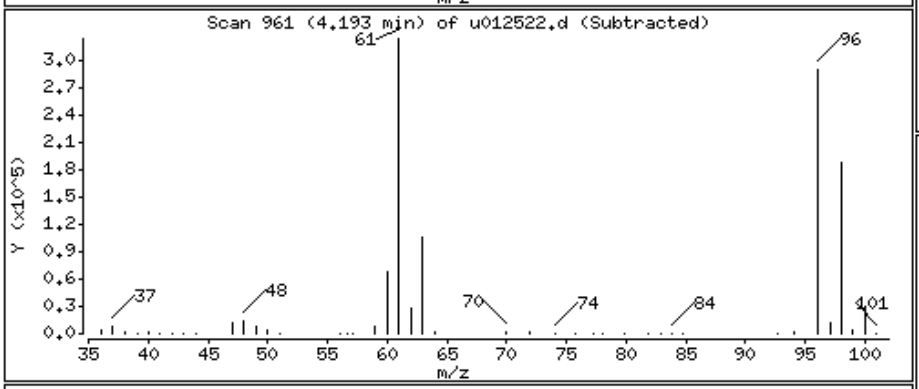
Sample Info: HS24011040-07;HS24011040-07;;;

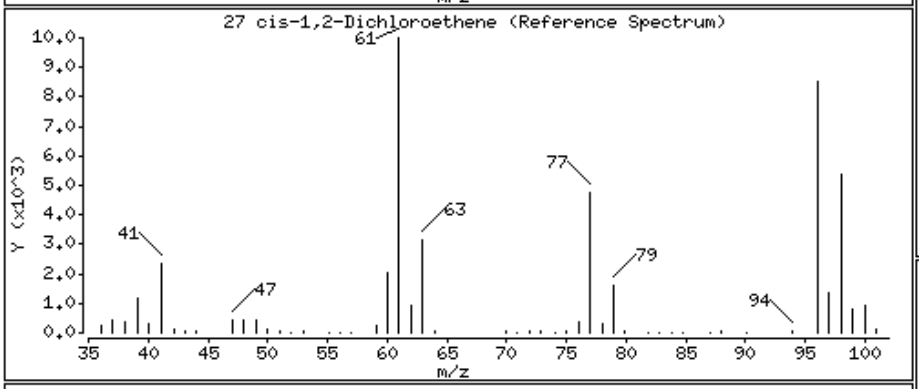
Purge Volume: 5.0 Operator: PC

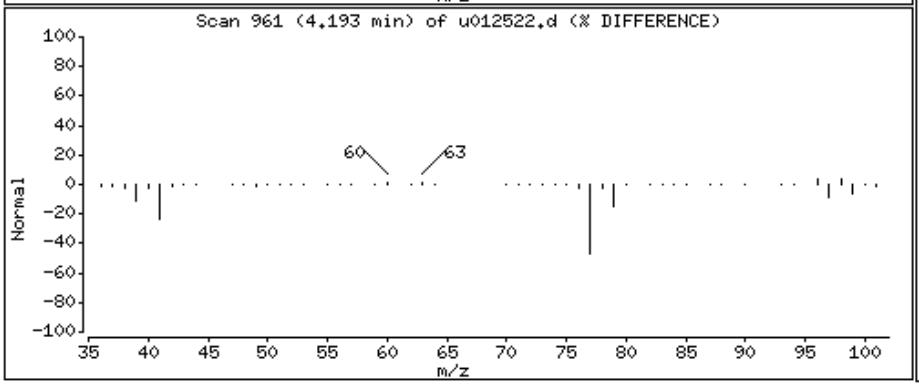
Column phase: DB624 Column diameter: 0.18

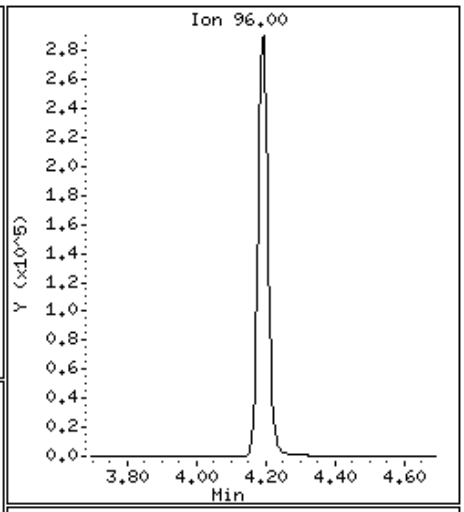
27 cis-1,2-Dichloroethene Concentration: 7492.19 ug/l

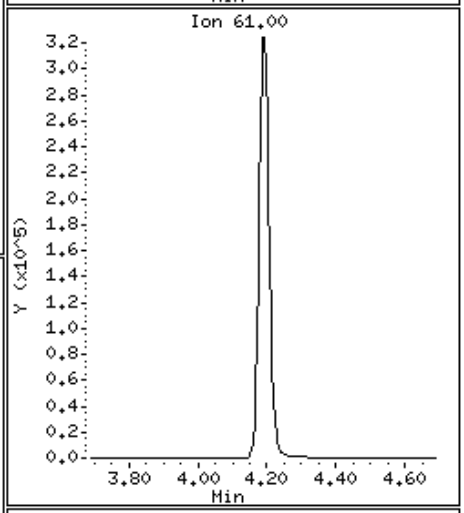


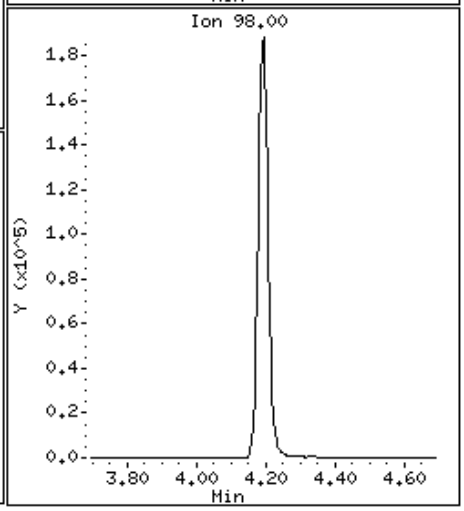












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012522.d Page 6

Date : 25-JAN-2024 18:07

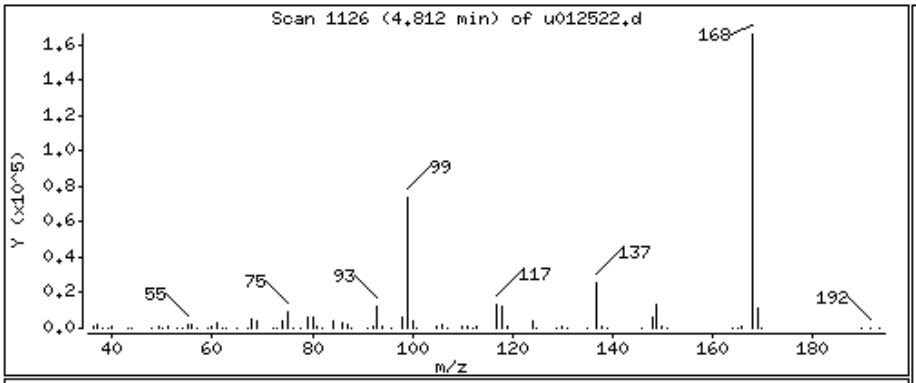
Client ID: HS24011040-07 Instrument: VOA9.i

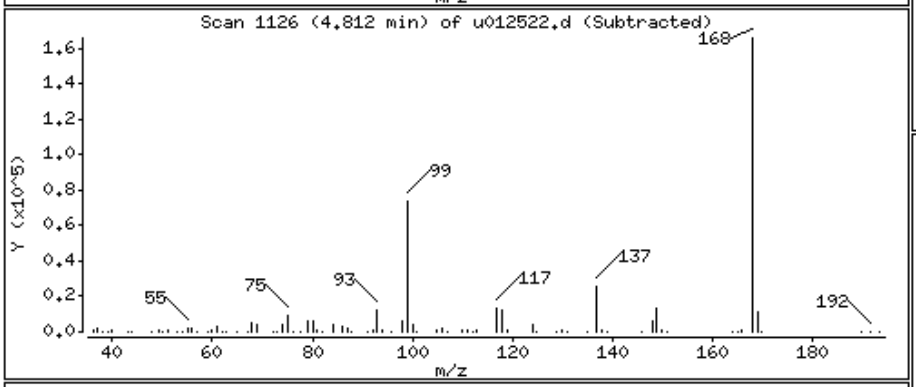
Sample Info: HS24011040-07;HS24011040-07;;;

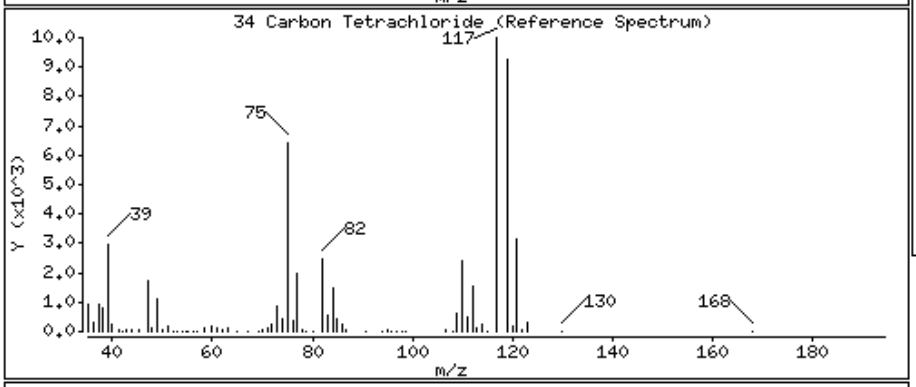
Purge Volume: 5.0 Operator: PC

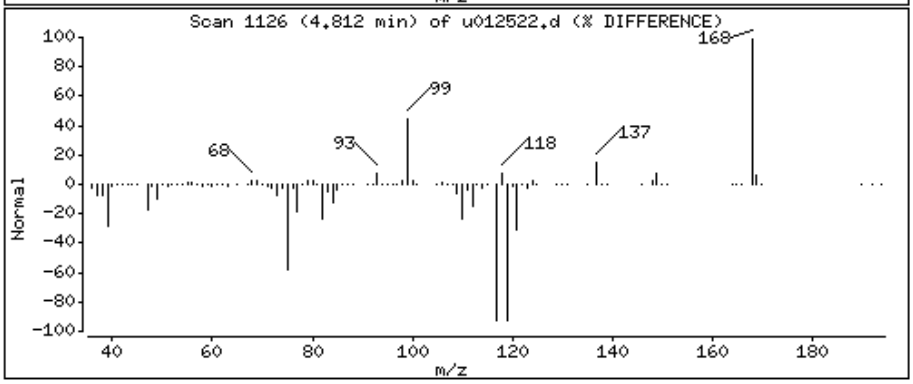
Column phase: DB624 Column diameter: 0.18

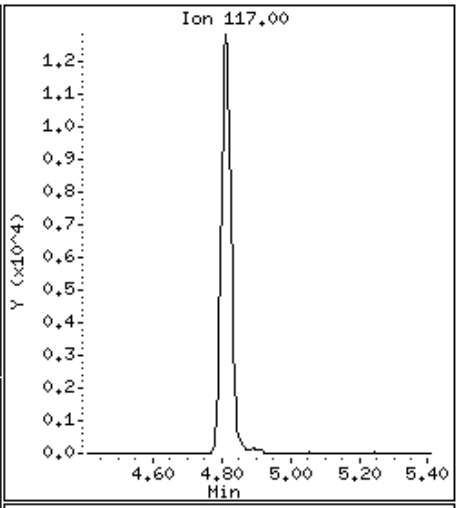
34 Carbon Tetrachloride Concentration: 318.44 ug/l

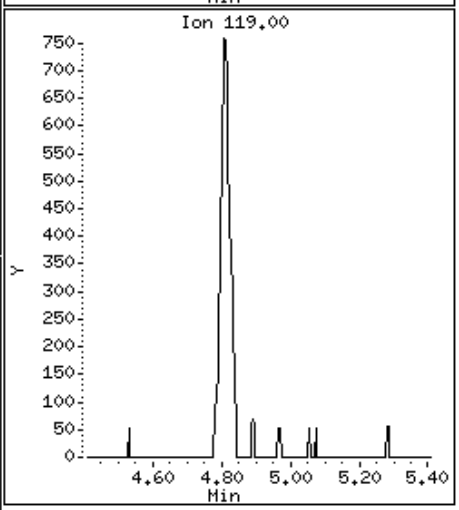












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012522.d Page 7

Date : 25-JAN-2024 18:07

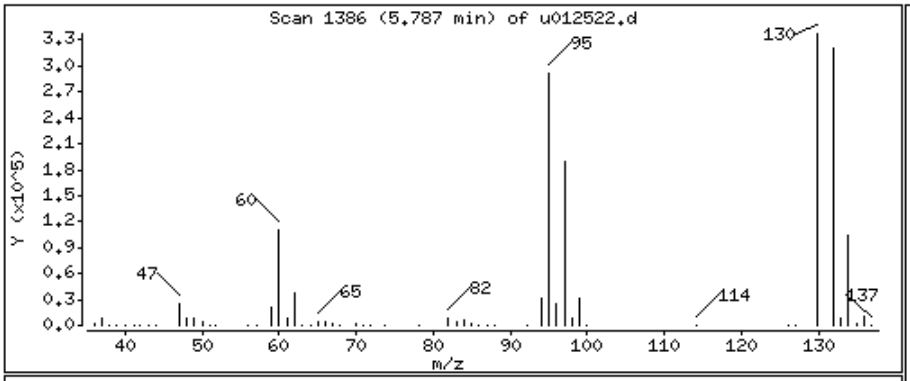
Client ID: HS24011040-07 Instrument: VOA9.i

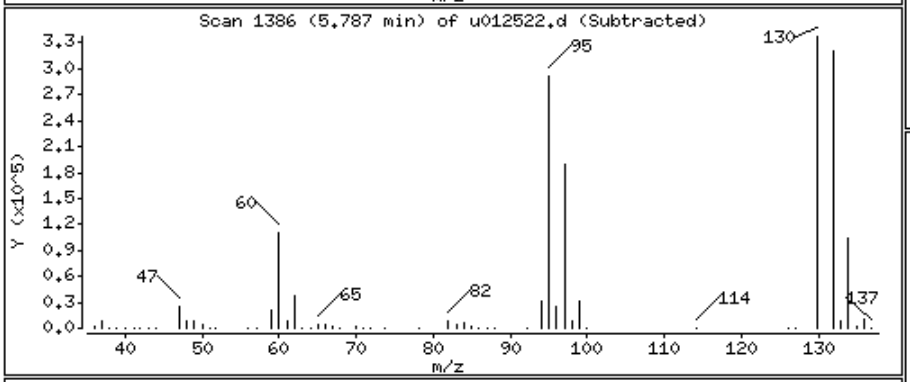
Sample Info: HS24011040-07;HS24011040-07;;;

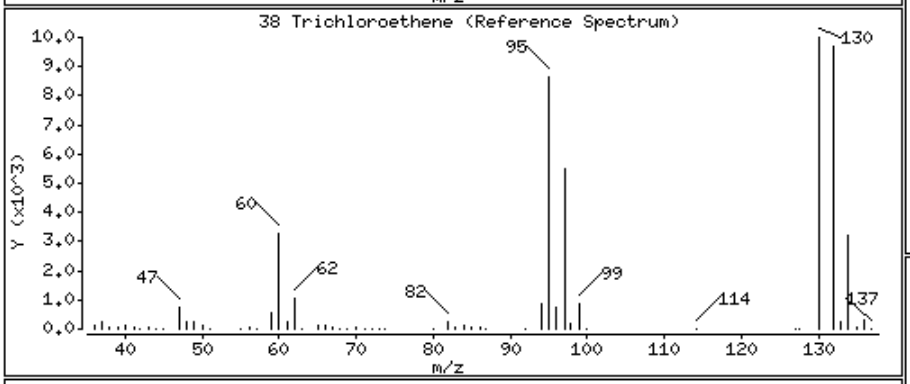
Purge Volume: 5.0 Operator: PC

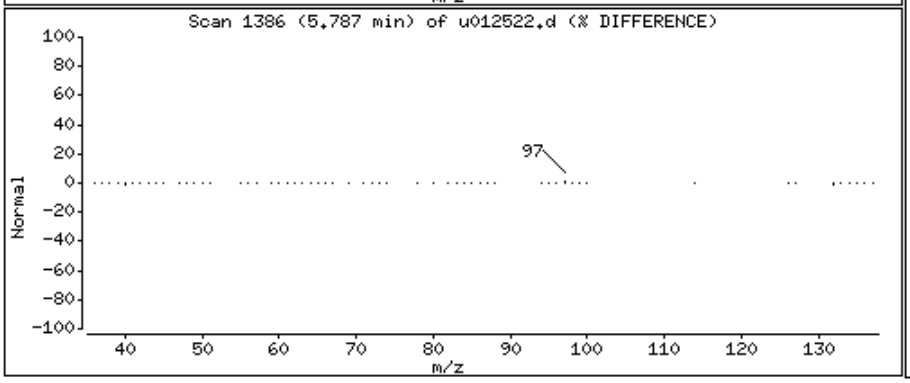
Column phase: DB624 Column diameter: 0.18

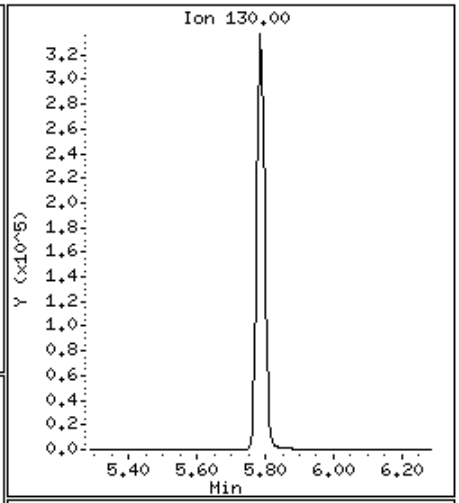
38 Trichloroethene Concentration: 7670.36 ug/l

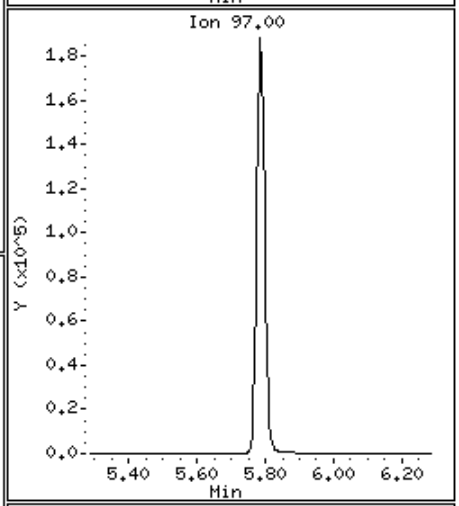


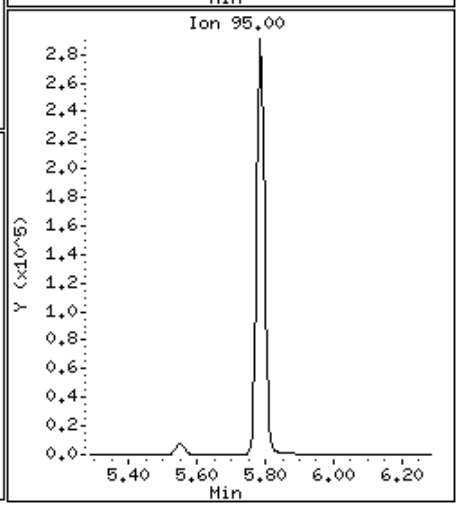












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012522.d Page 8

Date : 25-JAN-2024 18:07

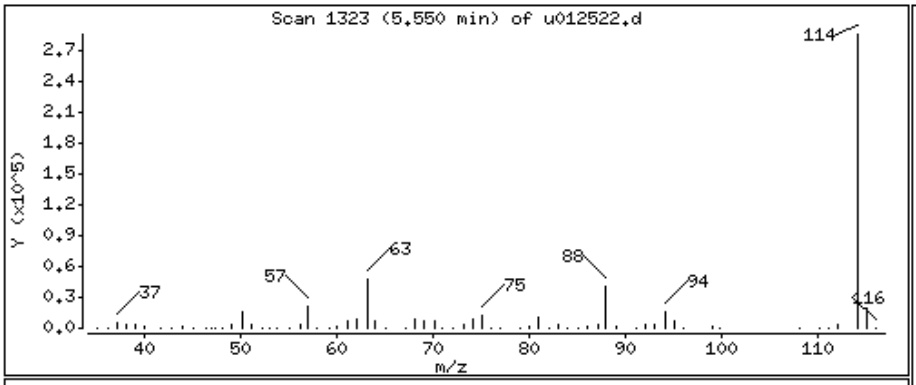
Client ID: HS24011040-07 Instrument: VOA9.i

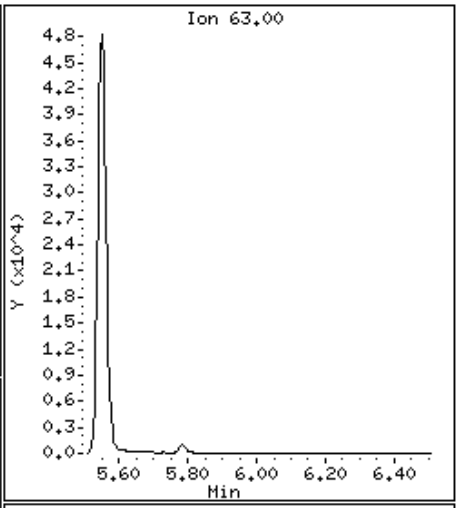
Sample Info: HS24011040-07;HS24011040-07;;;

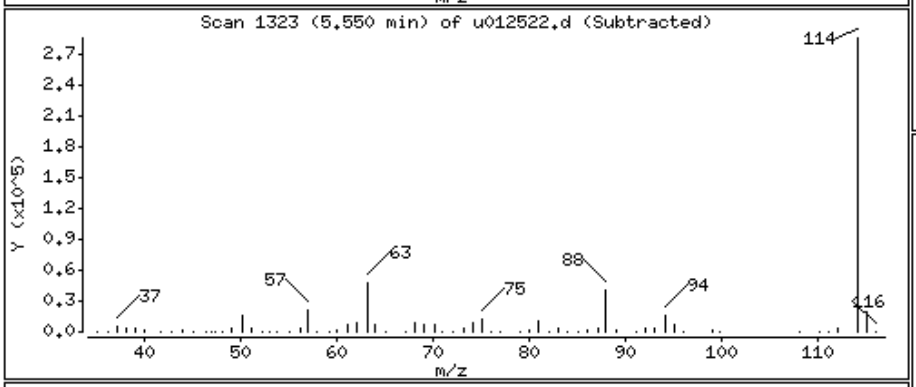
Purge Volume: 5.0 Operator: PC

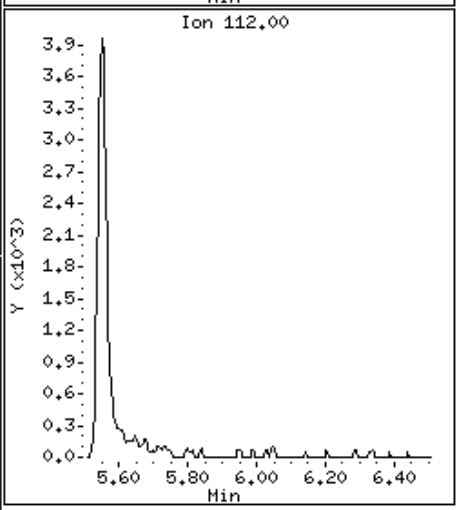
Column phase: DB624 Column diameter: 0.18

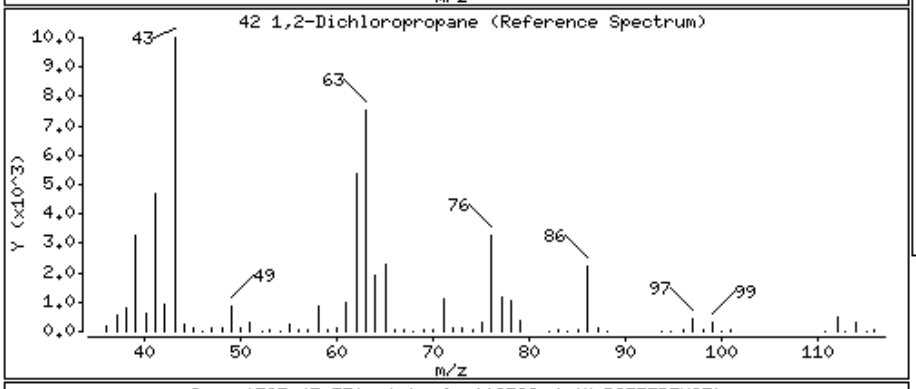
42 1,2-Dichloropropane Concentration: 1132.71 ug/l

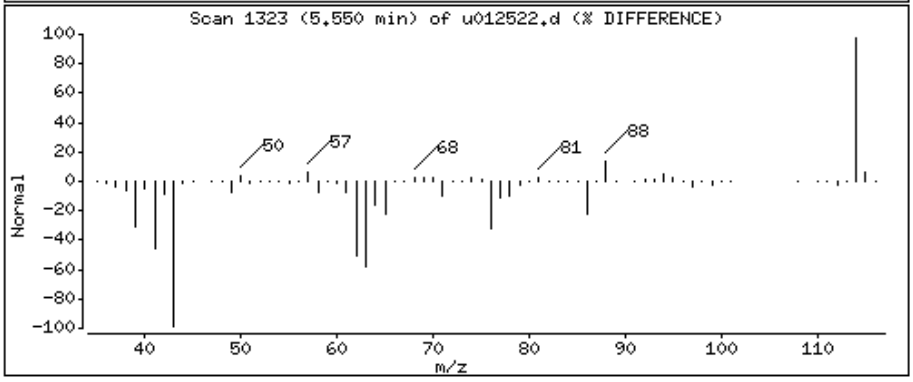












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012522.d Page 9

Date : 25-JAN-2024 18:07

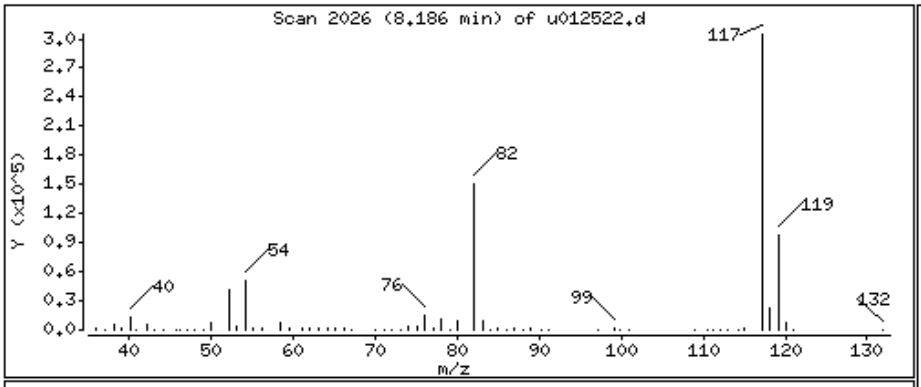
Client ID: HS24011040-07 Instrument: VOA9.i

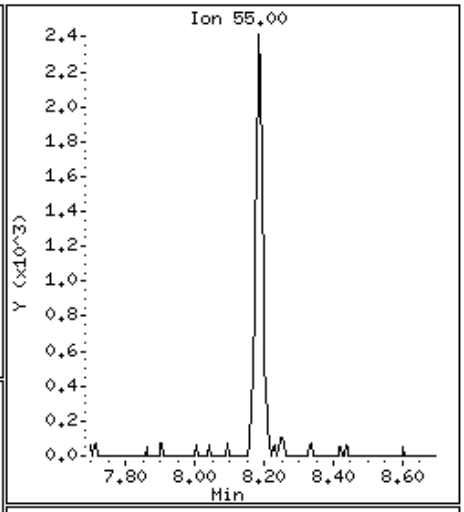
Sample Info: HS24011040-07;HS24011040-07;;;

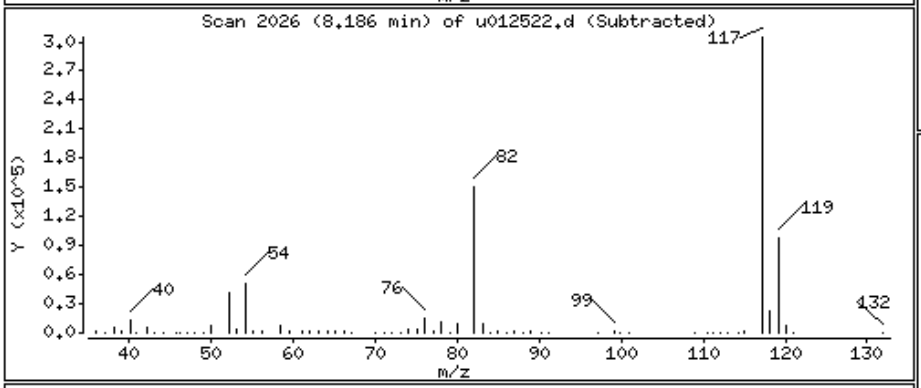
Purge Volume: 5.0 Operator: PC

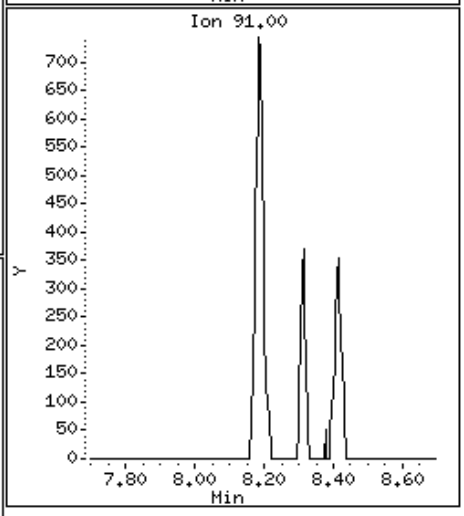
Column phase: DB624 Column diameter: 0.18

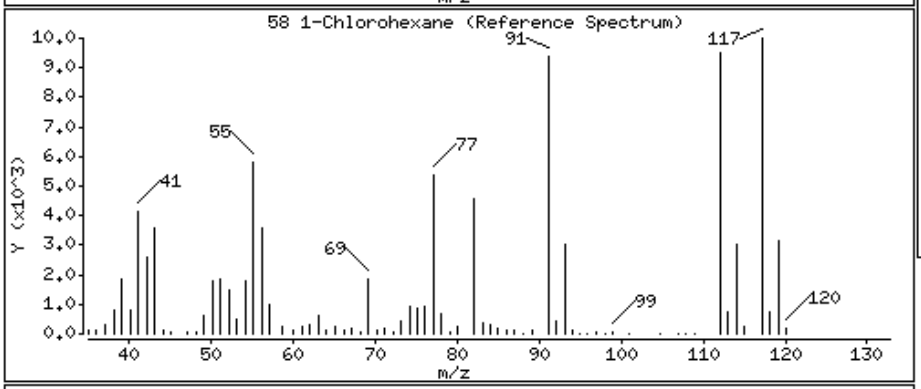
58 1-Chlorohexane Concentration: 63.18 ug/l

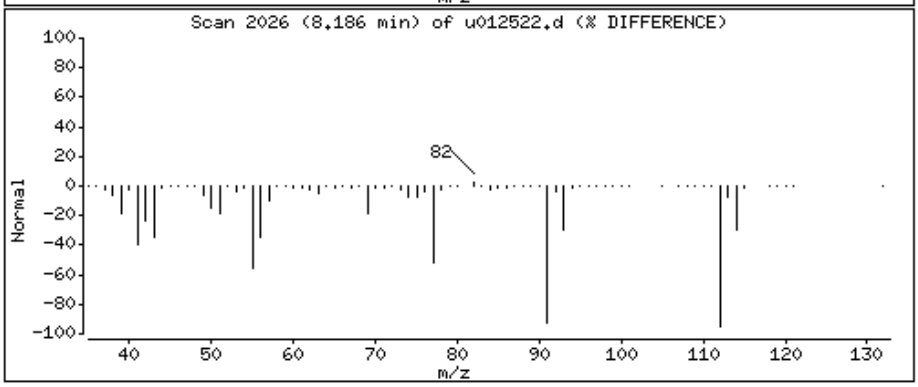












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012522.d Page 10

Date : 25-JAN-2024 18:07

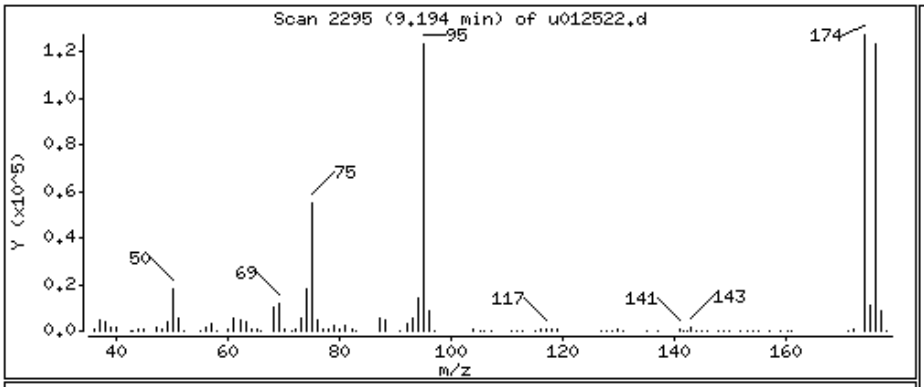
Client ID: HS24011040-07 Instrument: VOA9.i

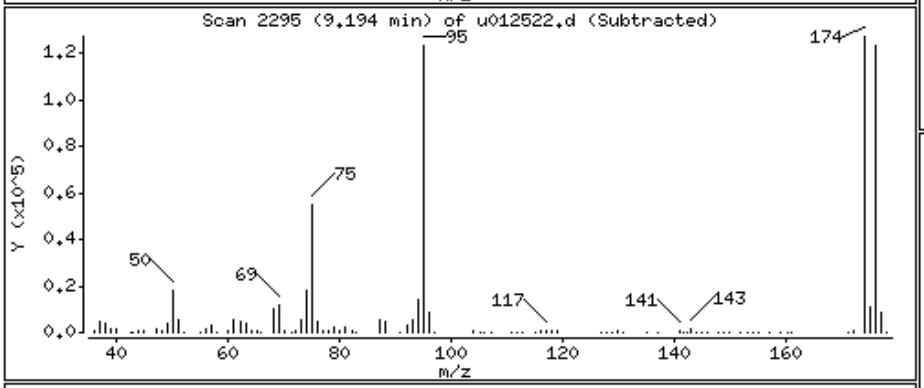
Sample Info: HS24011040-07;HS24011040-07;;;

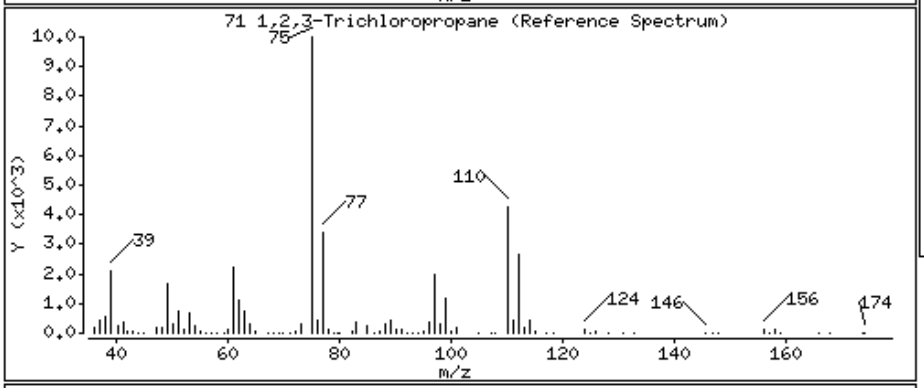
Purge Volume: 5.0 Operator: PC

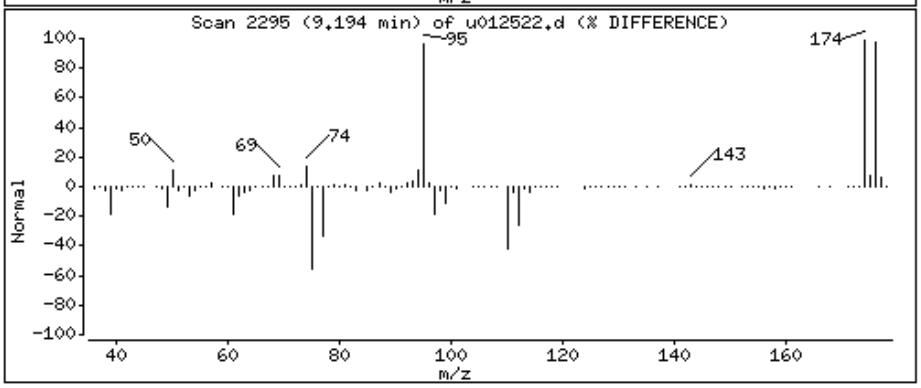
Column phase: DB624 Column diameter: 0.18

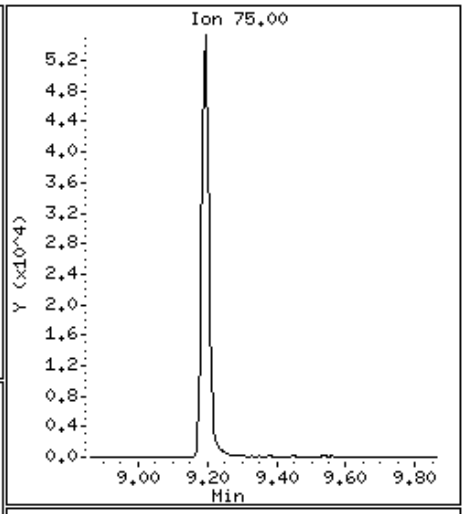
71 1,2,3-Trichloropropane Concentration: 937.38 ug/l

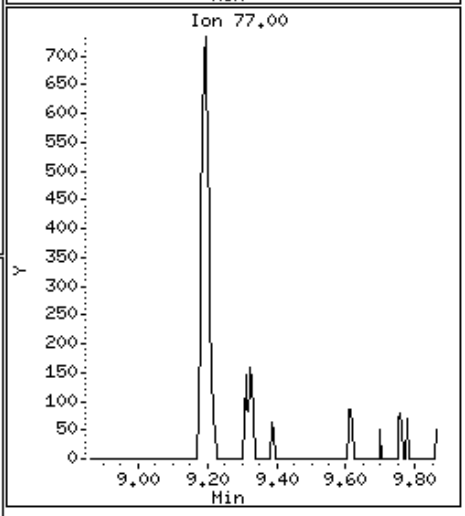












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012522.d Page 11

Date : 25-JAN-2024 18:07

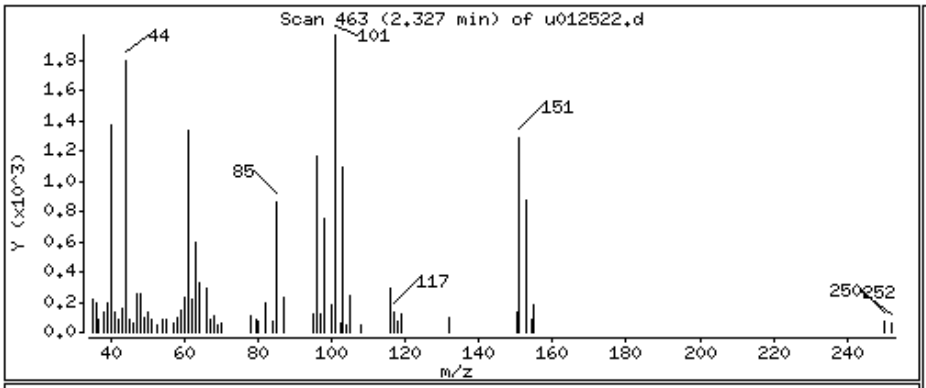
Client ID: HS24011040-07 Instrument: VOA9.i

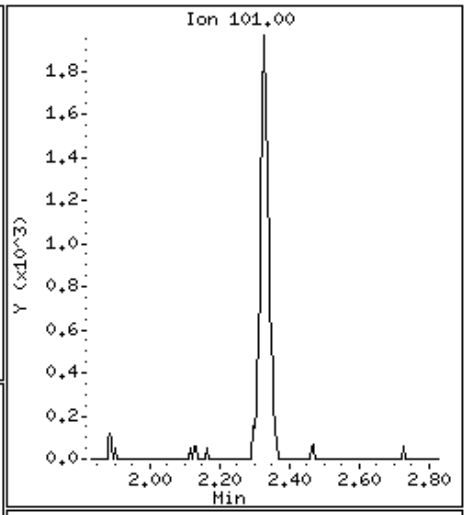
Sample Info: HS24011040-07;HS24011040-07;;;

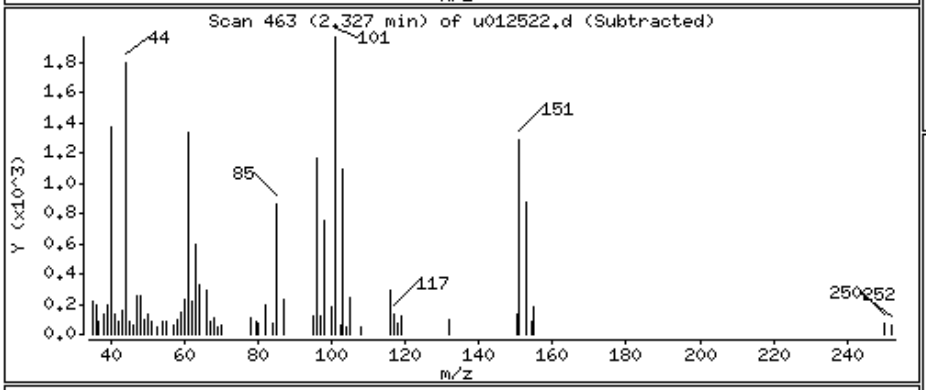
Purge Volume: 5.0 Operator: PC

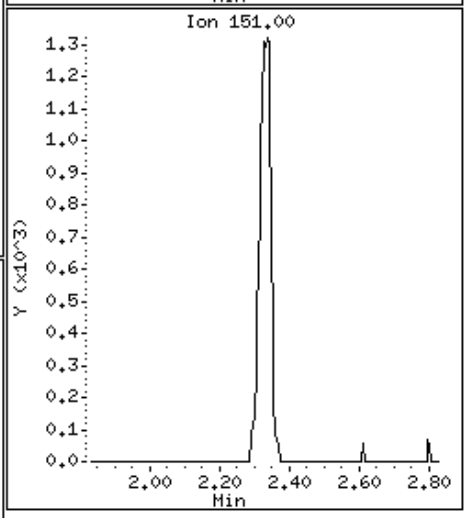
Column phase: DB624 Column diameter: 0.18

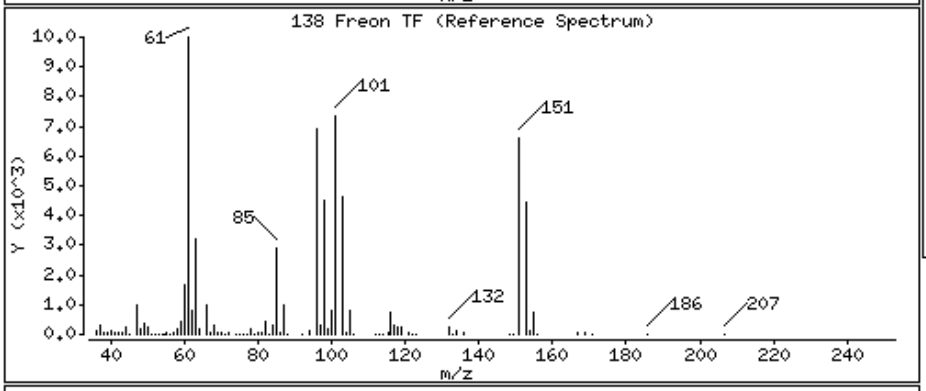
138 Freon TF Concentration: 72.37 ug/l

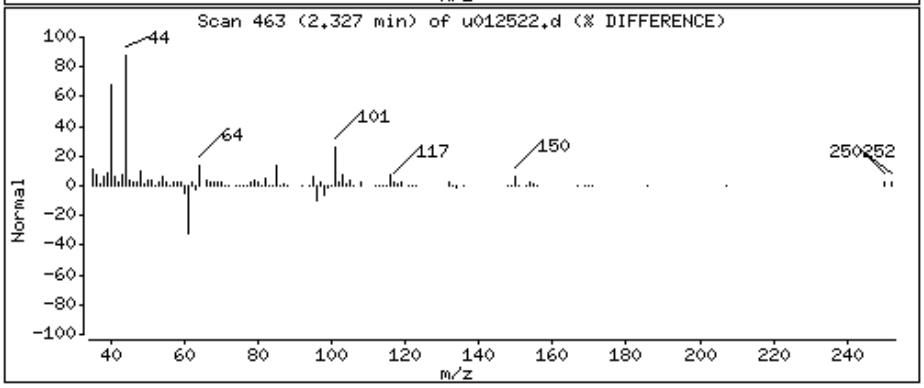












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012522.d Page 12

Date : 25-JAN-2024 18:07

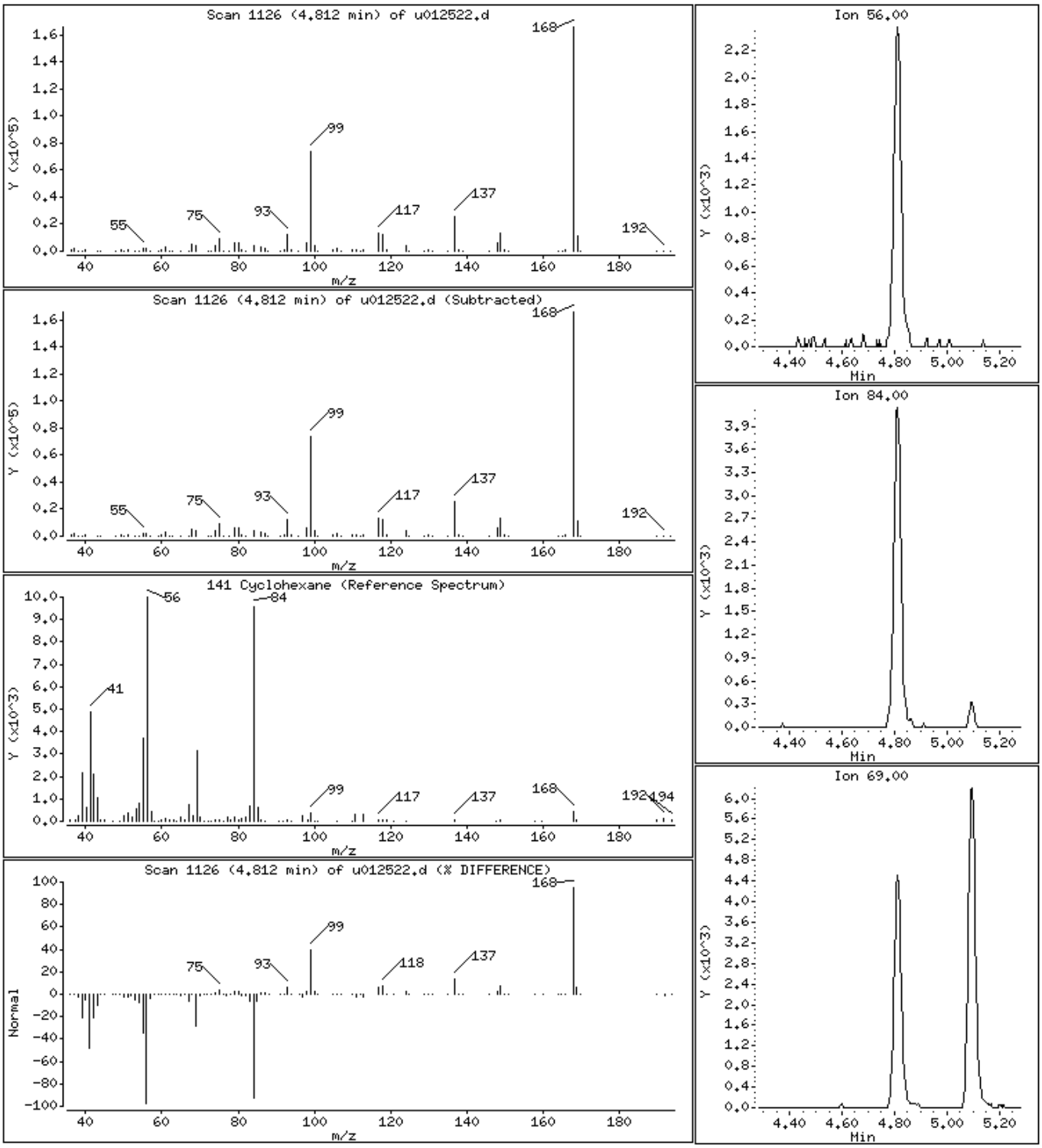
Client ID: HS24011040-07 Instrument: VOA9.i

Sample Info: HS24011040-07;HS24011040-07;;;

Purge Volume: 5.0 Operator: PC

Column phase: DB624 Column diameter: 0.18

141 Cyclohexane Concentration: 50.62 ug/l



Data File : \\nahstws005\target\chem\voa9.i\u240125.b\u012522.d
Inj Date : 25-JAN-2024 18:07
InstruID : VOA9.i
LabSampID : HS24011040-07

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240125.b\U012524.D Page 1
Report Date: 01-Feb-2024 14:20

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240125.b\U012524.D
Lab Smp Id: HS24011040-08 Client Smp ID: HS24011040-08
Inj Date : 25-JAN-2024 18:52
Operator : PC Inst ID: VOA9.i
Smp Info : HS24011040-08;HS24011040-08;;;
Misc Info : V9;WATER;0;50;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240125.b\8260C.m
Meth Date : 01-Feb-2024 14:20 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 22
Dil Factor: 50.00000
Integrator: HP RTE Compound Sublist: 1040-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7066

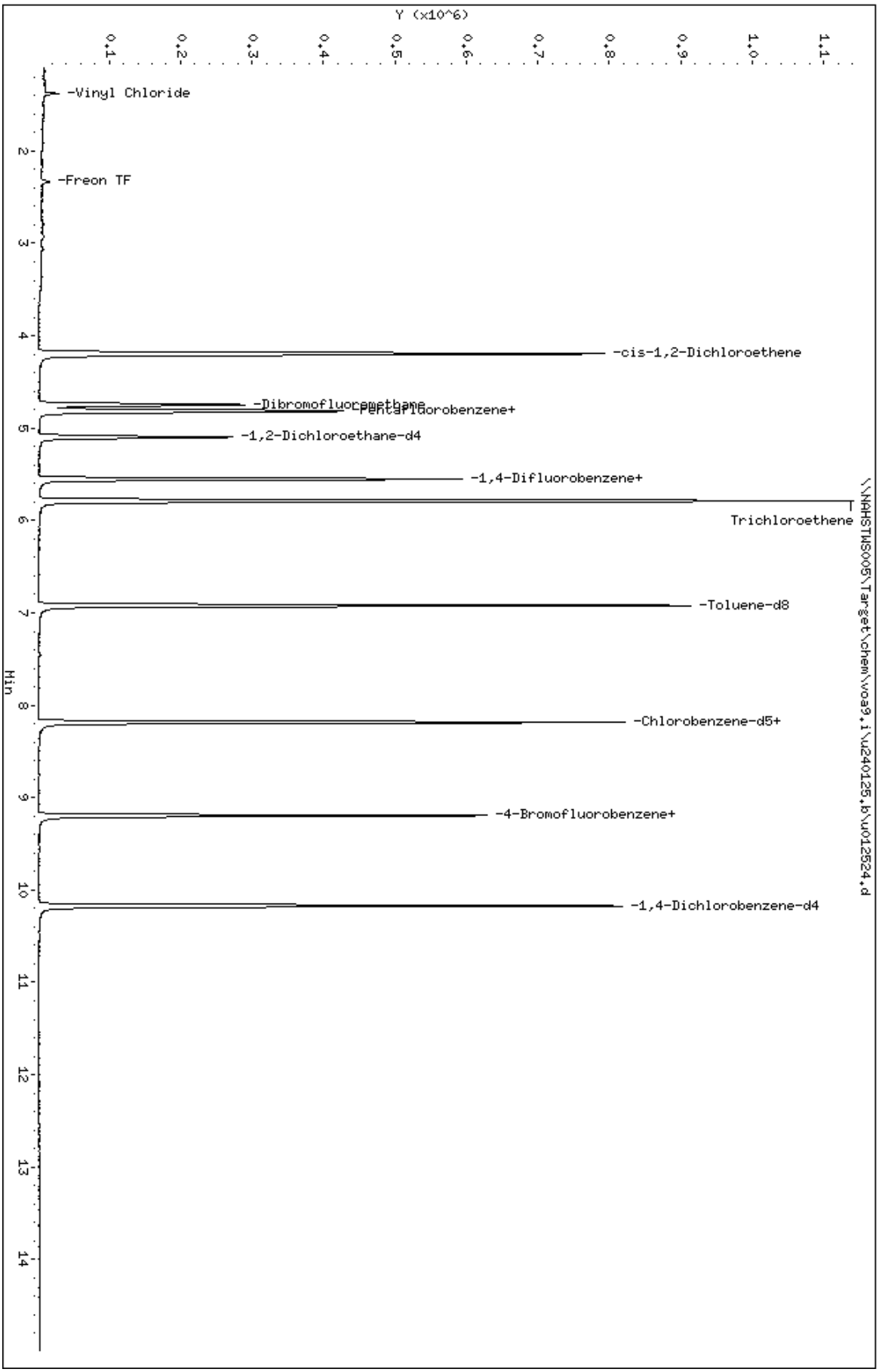
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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

			QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
*	1	Pentafluorobenzene	168	4.815	4.815	(1.000)	323887	50.0000	
	2	Dichlorodifluoromethane	85	1.018	1.164	(0.211)	33295	13.3994	669.97
	3	Chloromethane	50	1.006	1.303	(0.209)	73374	19.7486	987.43
	5	Vinyl Chloride	62	1.377	1.378	(0.286)	13449	3.78915	189.45(a)
	27	cis-1,2-Dichloroethene	96	4.197	4.197	(0.872)	409268	102.307	5115.32
$	30	Dibromofluoromethane	113	4.748	4.748	(0.986)	171015	51.6259	51.62(R)
	34	Carbon Tetrachloride	117	4.815	4.913	(0.867)	27000	6.75941	337.97
$	35	1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	176925	46.7325	46.73(R)
*	36	1,4-Difluorobenzene	114	5.554	5.554	(1.000)	488795	50.0000	
	38	Trichloroethene	130	5.790	5.790	(1.043)	397309	108.336	5416.82
	42	1,2-Dichloropropane	63	5.554	6.007	(1.000)	83248	23.2379	1161.89
*	47	Chlorobenzene-d5	117	8.185	8.185	(1.000)	469844	50.0000	
$	48	Toluene-d8	98	6.922	6.922	(0.846)	570216	52.7199	52.71(R)
	58	1-Chlorohexane	55	8.181	8.197	(1.473)	3682	1.34335	67.16(a)
$	69	4-Bromofluorobenzene	95	9.194	9.190	(1.123)	187430	45.6577	45.65(R)
*	70	1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	237770	50.0000	
	71	1,2,3-Trichloropropane	75	9.194	9.362	(0.904)	84585	18.7399	936.99
	138	Freon TF	101	2.333	2.337	(0.485)	2455	1.05216	52.60(a)
	141	Cyclohexane	56	4.815	4.785	(1.000)	4805	1.02958	51.47(a)
M	94	1,2-Dichloroethylene (total)	96				409268	117.156	5857.81

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.



Data File: \\NAHSTWS005\Target\chem\voa9,i\u240125,b\u012524,d
Date : 25-JAN-2024 18:52
Client ID: HS24011040-08
Sample Info: HS24011040-08;HS24011040-08;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9,i
Operator: PC
Column diameter: 0.18

Page 1

Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012524.d Page 2

Date : 25-JAN-2024 18:52

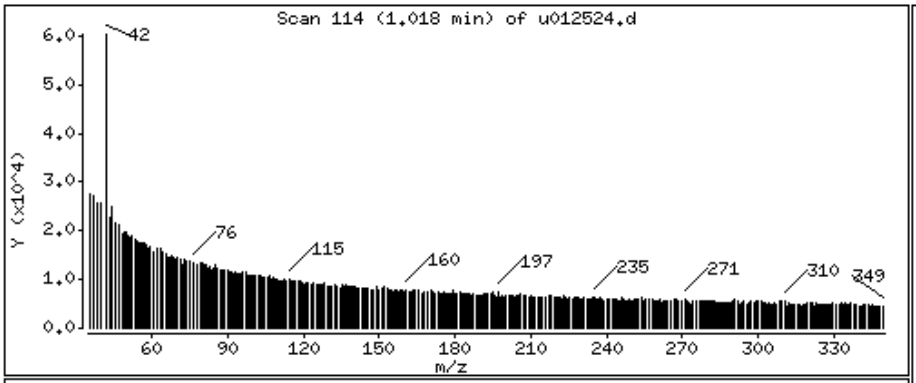
Client ID: HS24011040-08 Instrument: VOA9.i

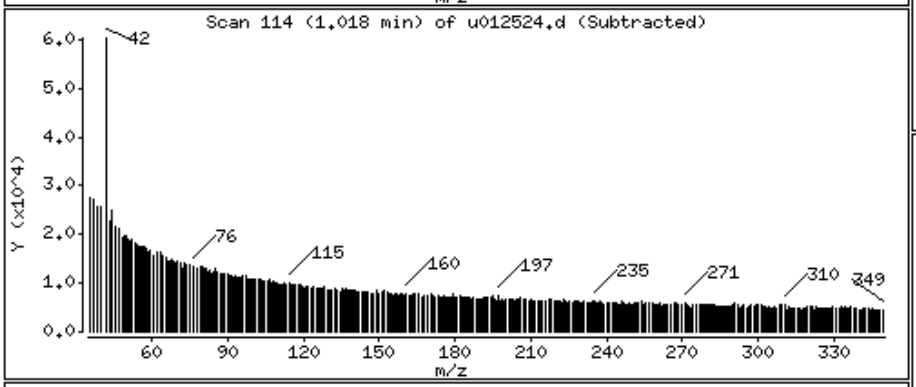
Sample Info: HS24011040-08;HS24011040-08;;;

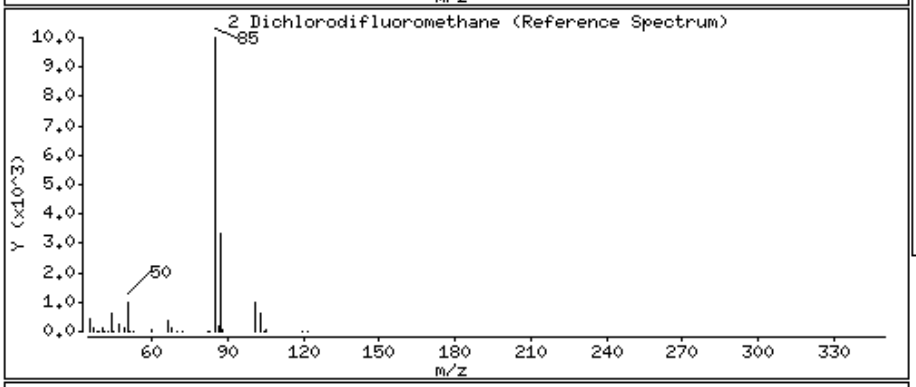
Purge Volume: 5.0 Operator: PC

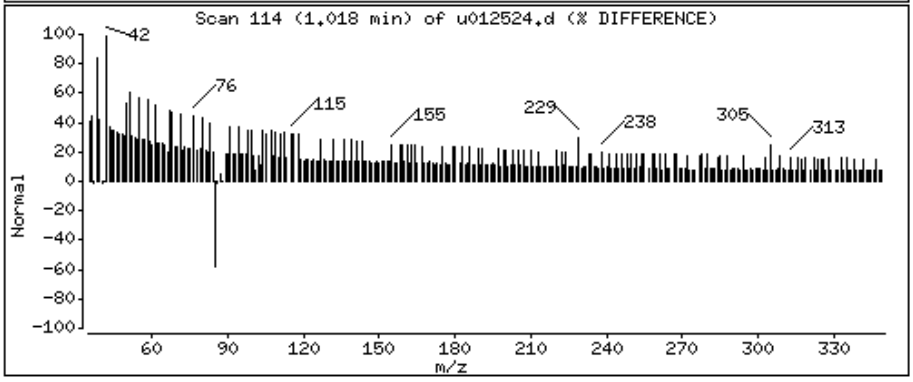
Column phase: DB624 Column diameter: 0.18

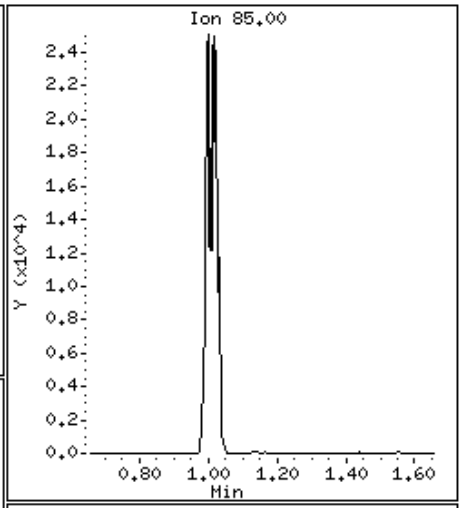
2 Dichlorodifluoromethane Concentration: 669.97 ug/l

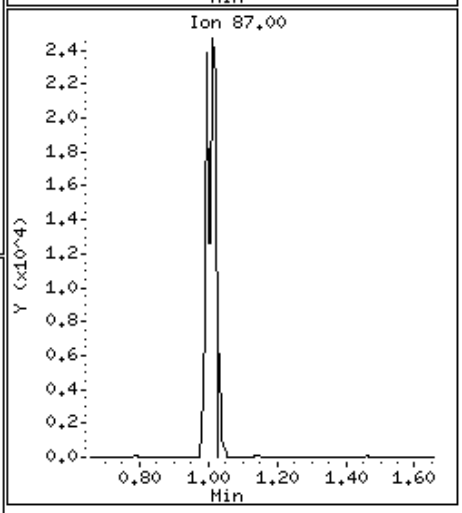












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012524.d Page 3

Date : 25-JAN-2024 18:52

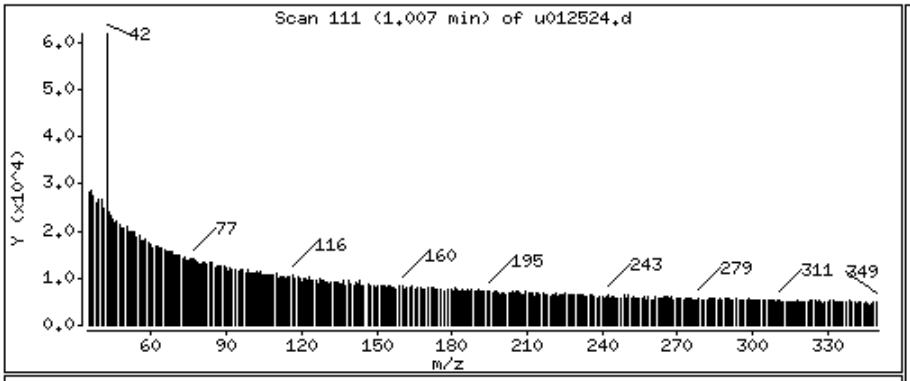
Client ID: HS24011040-08 Instrument: VOA9.i

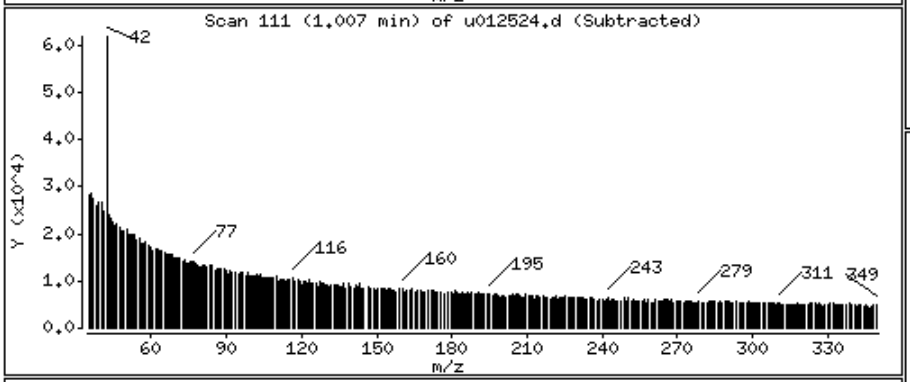
Sample Info: HS24011040-08;HS24011040-08;;;

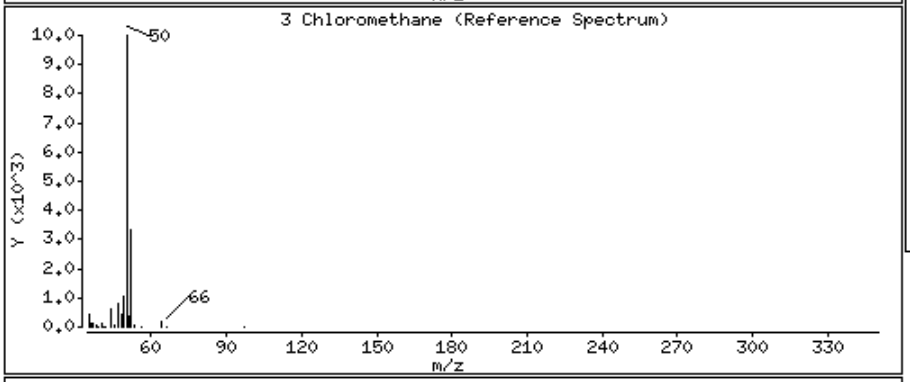
Purge Volume: 5.0 Operator: PC

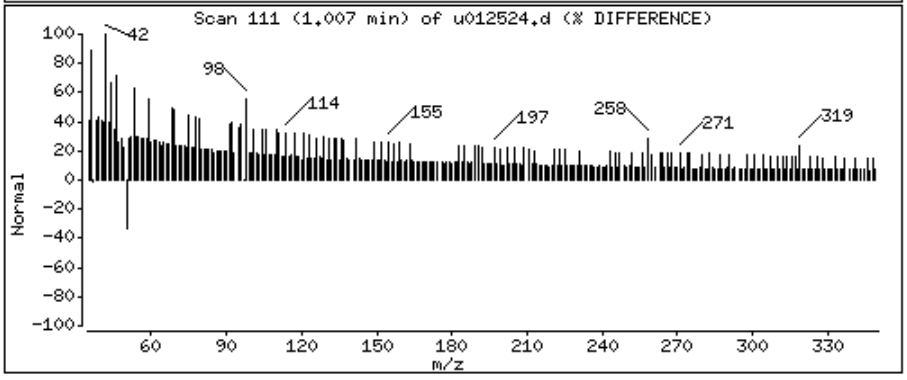
Column phase: DB624 Column diameter: 0.18

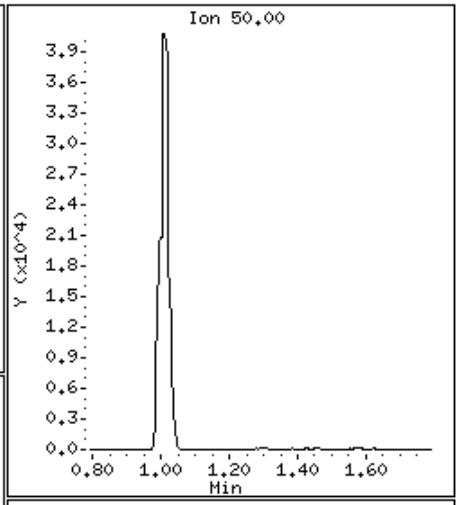
3 Chloromethane Concentration: 987.43 ug/l

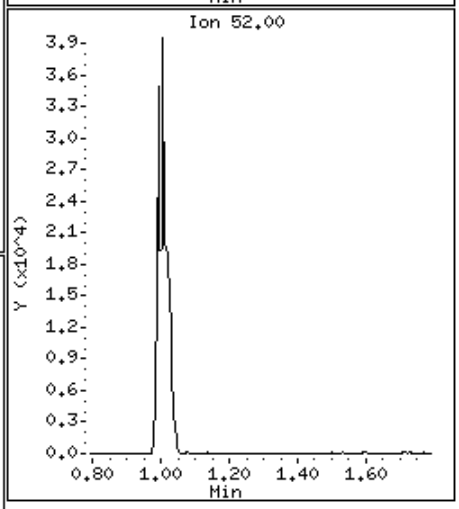












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012524.d Page 4

Date : 25-JAN-2024 18:52

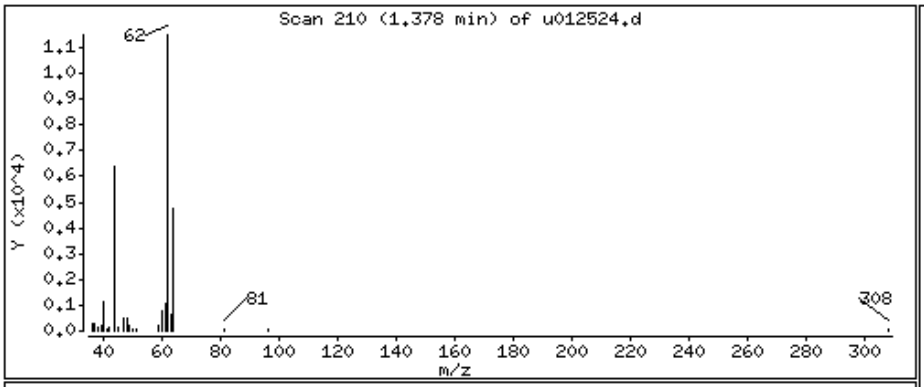
Client ID: HS24011040-08 Instrument: VOA9.i

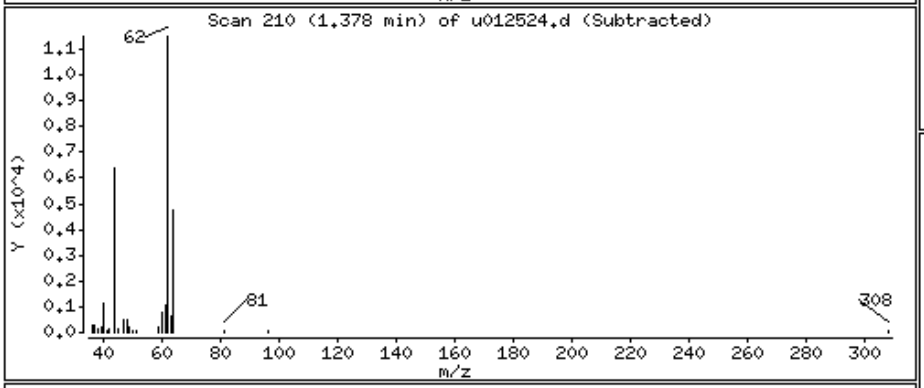
Sample Info: HS24011040-08;HS24011040-08;;;

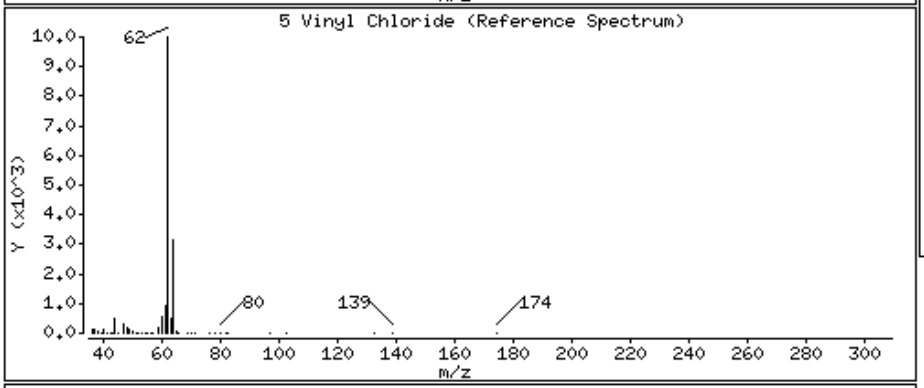
Purge Volume: 5.0 Operator: PC

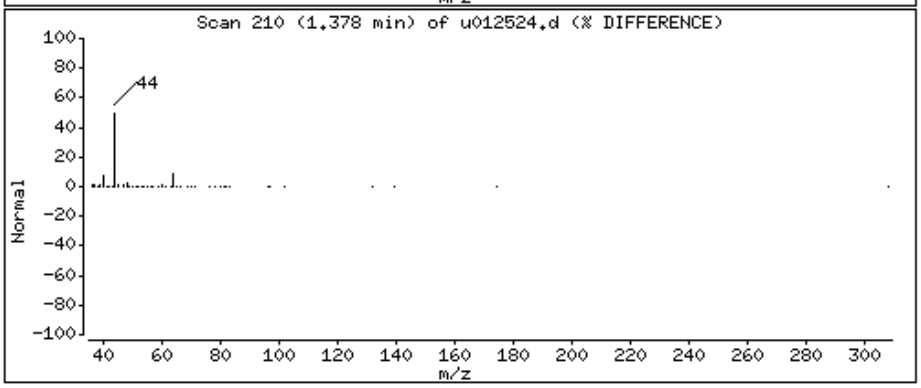
Column phase: DB624 Column diameter: 0.18

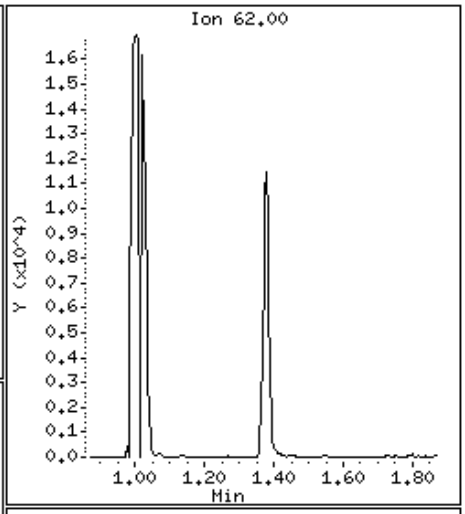
5 Vinyl Chloride Concentration: 189.45 ug/l

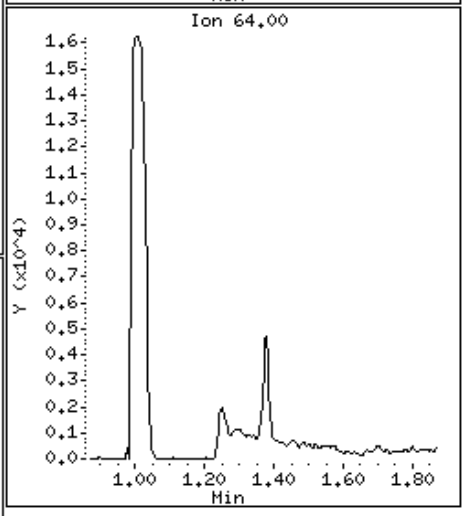












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012524.d Page 5

Date : 25-JAN-2024 18:52

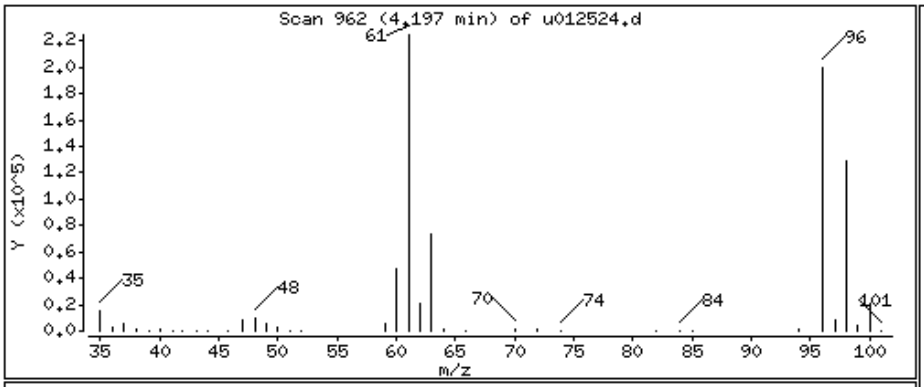
Client ID: HS24011040-08 Instrument: VOA9.i

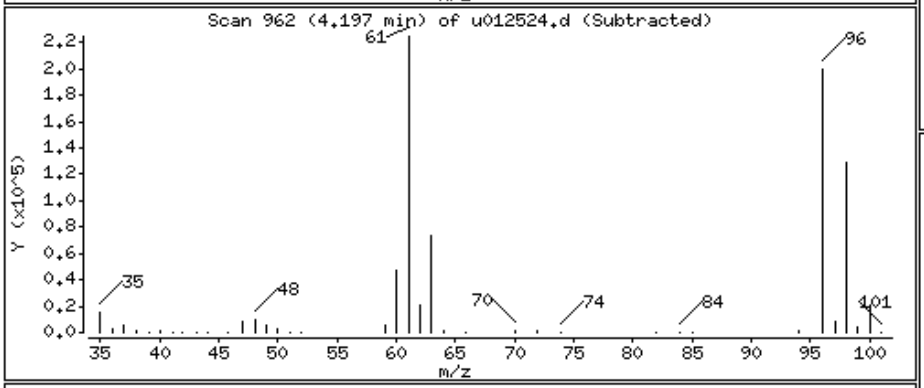
Sample Info: HS24011040-08;HS24011040-08;;;

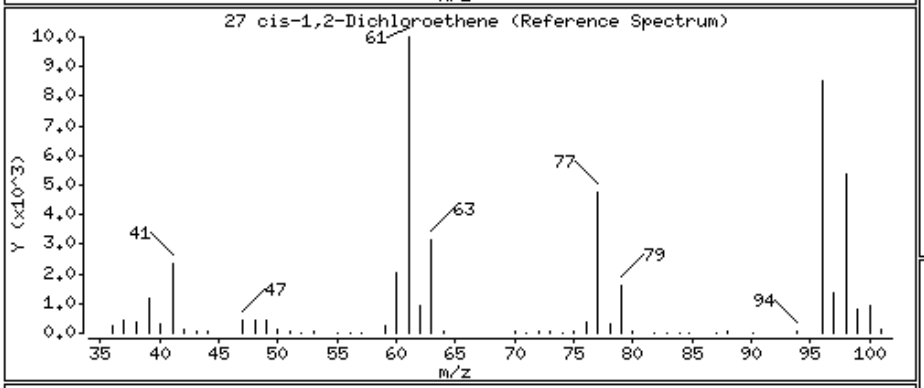
Purge Volume: 5.0 Operator: PC

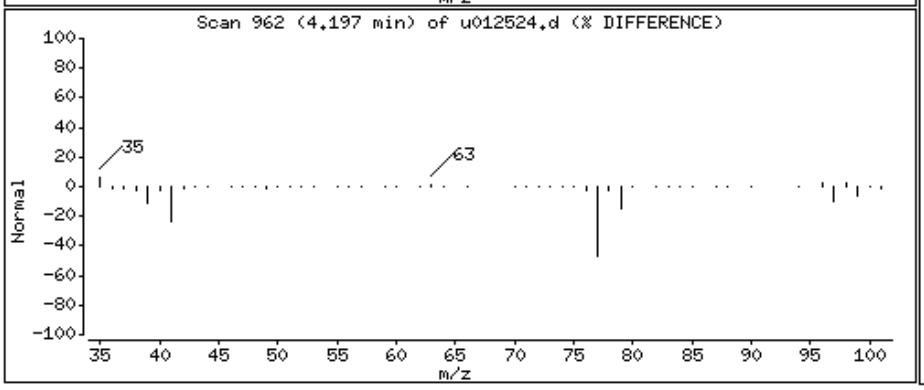
Column phase: DB624 Column diameter: 0.18

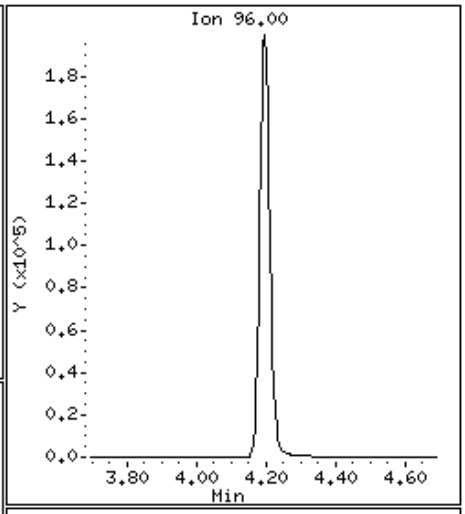
27 cis-1,2-Dichloroethene Concentration: 5115.32 ug/l

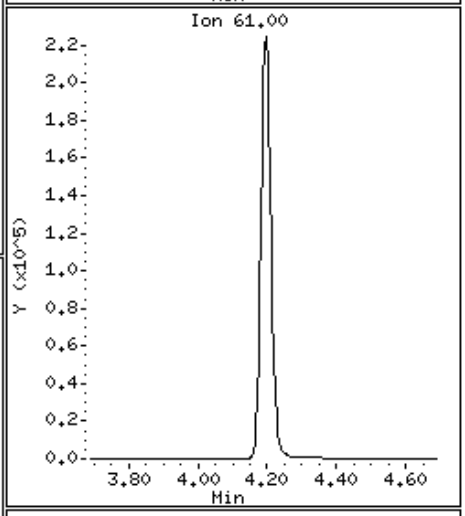


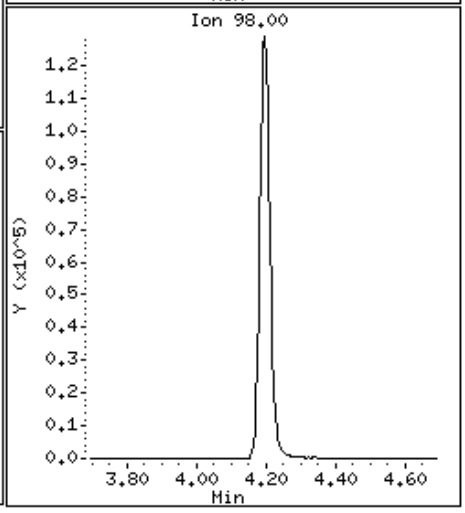












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012524.d Page 6

Date : 25-JAN-2024 18:52

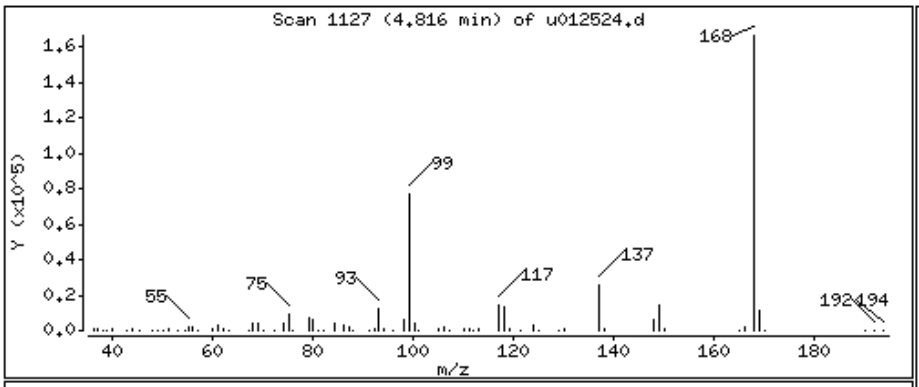
Client ID: HS24011040-08 Instrument: VOA9.i

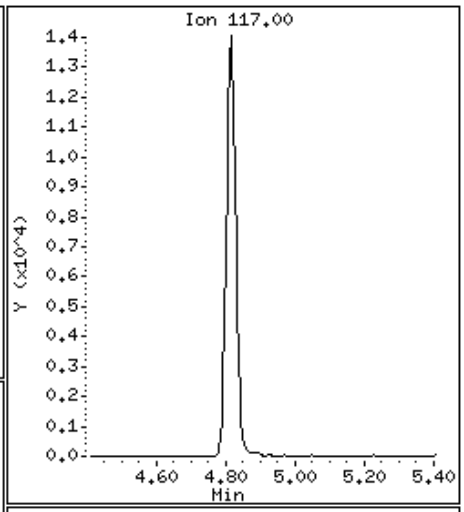
Sample Info: HS24011040-08;HS24011040-08;;;

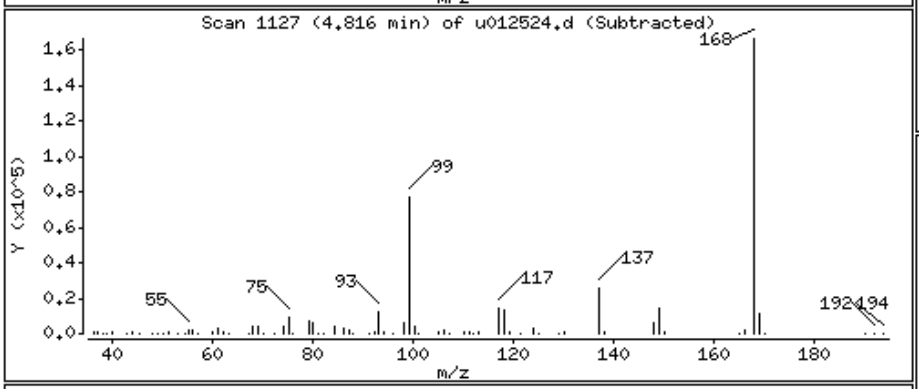
Purge Volume: 5.0 Operator: PC

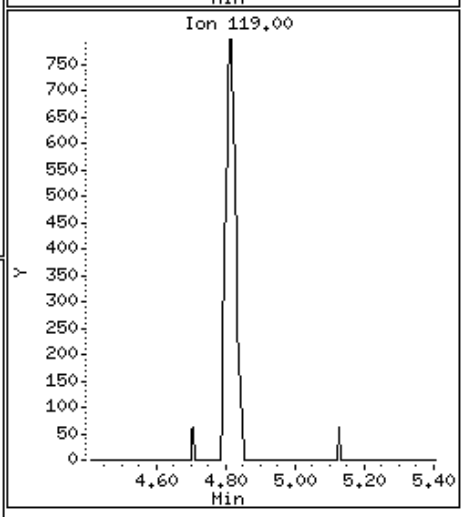
Column phase: DB624 Column diameter: 0.18

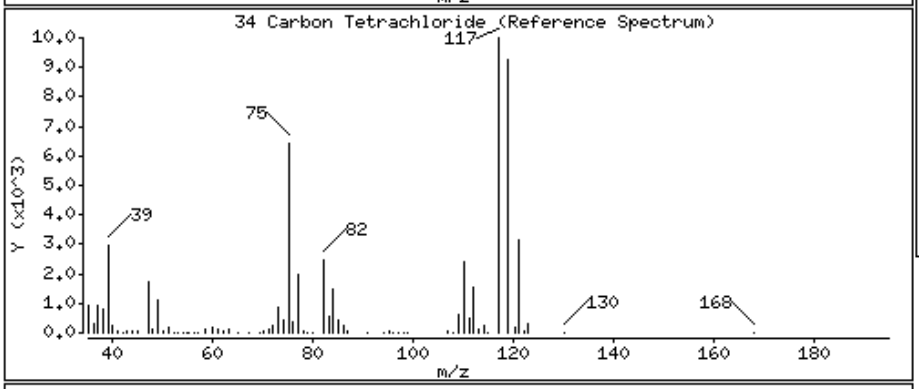
34 Carbon Tetrachloride Concentration: 337.97 ug/l

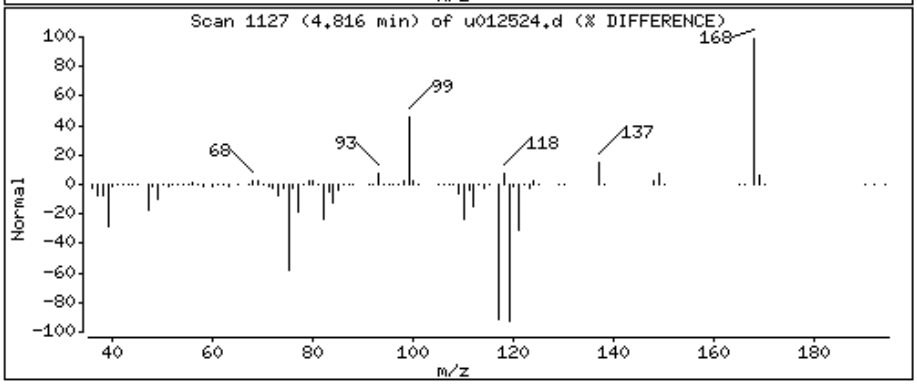












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012524.d Page 7

Date : 25-JAN-2024 18:52

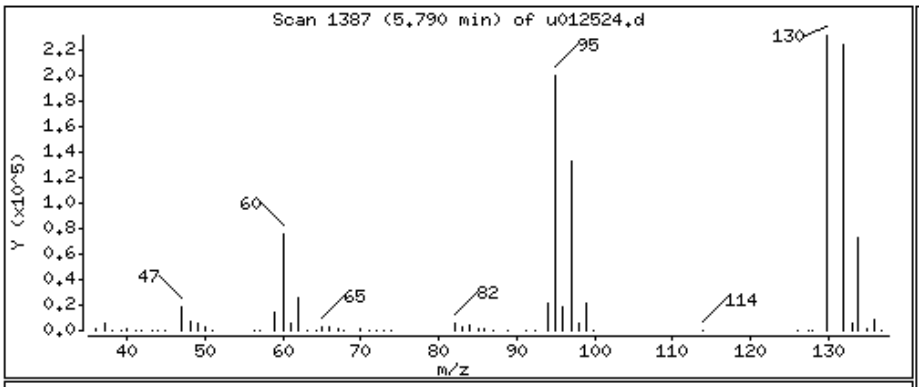
Client ID: HS24011040-08 Instrument: VOA9.i

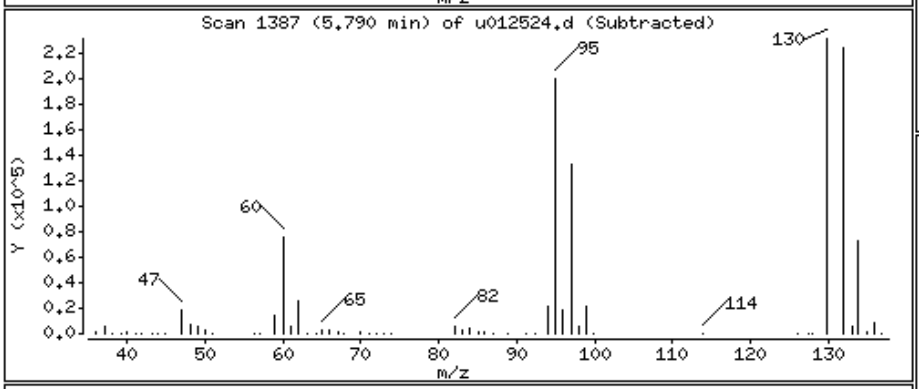
Sample Info: HS24011040-08;HS24011040-08;;;

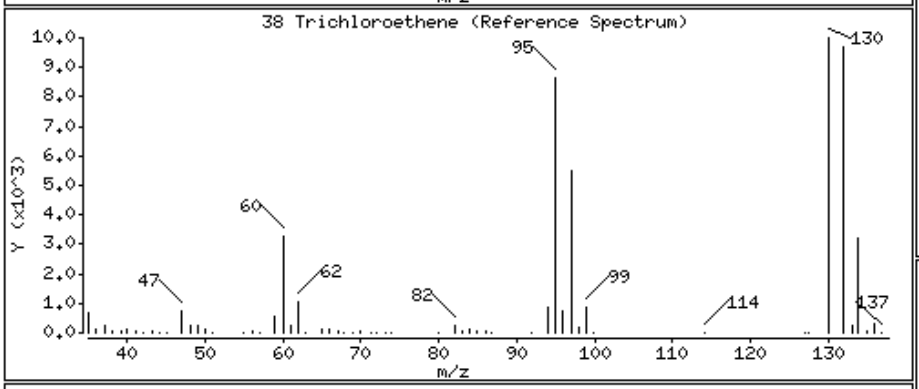
Purge Volume: 5.0 Operator: PC

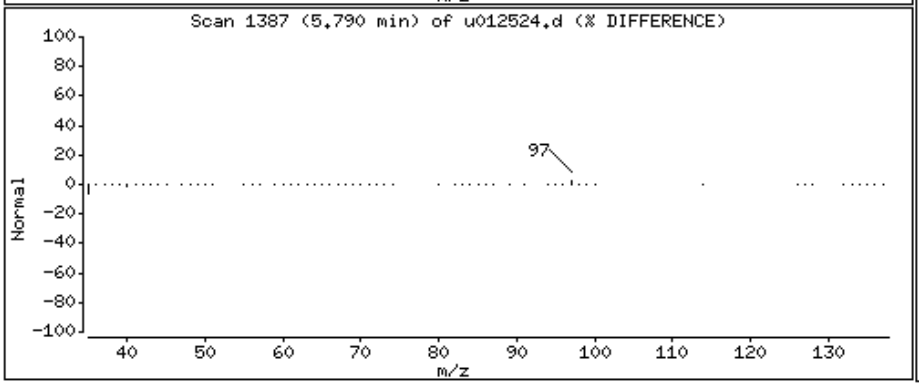
Column phase: DB624 Column diameter: 0.18

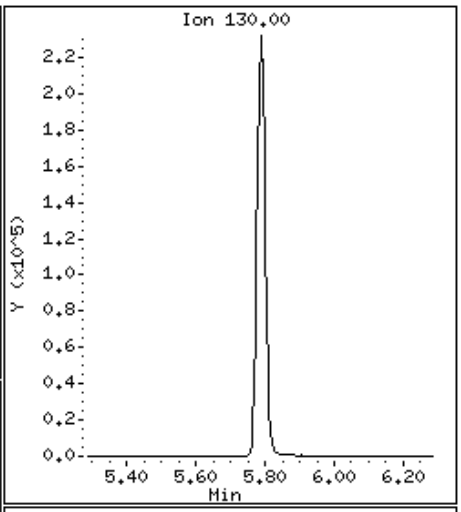
38 Trichloroethene Concentration: 5416.82 ug/l

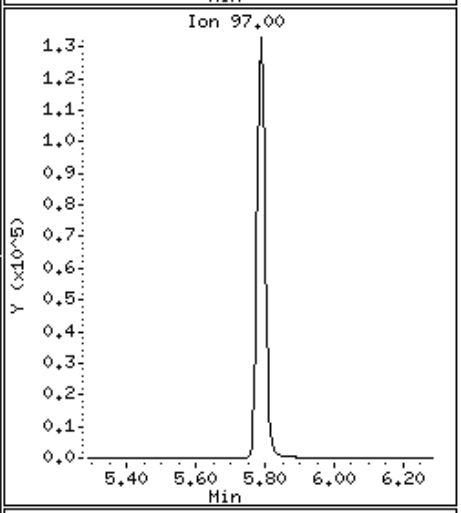


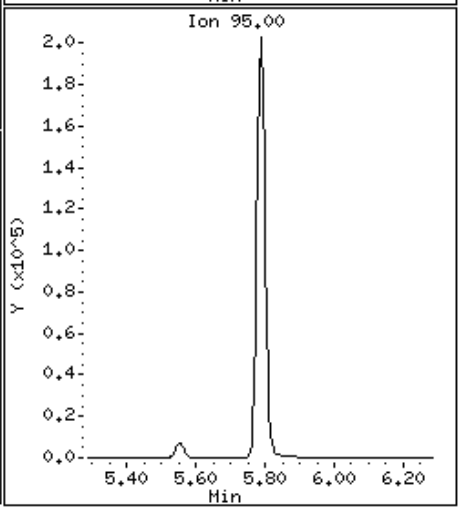












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012524.d Page 8

Date : 25-JAN-2024 18:52

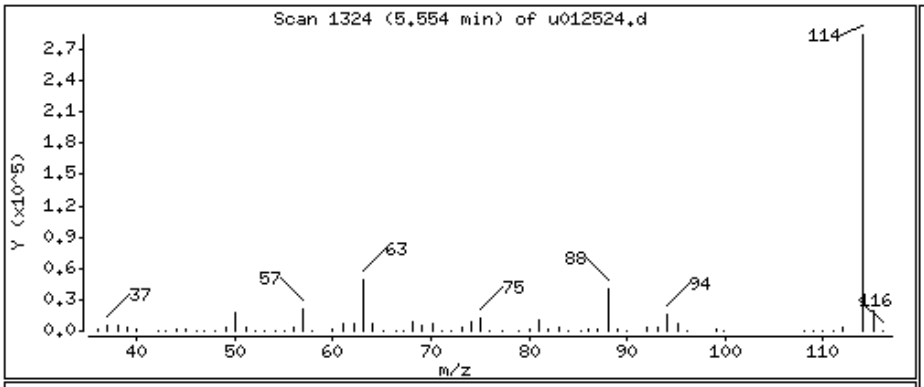
Client ID: HS24011040-08 Instrument: VOA9.i

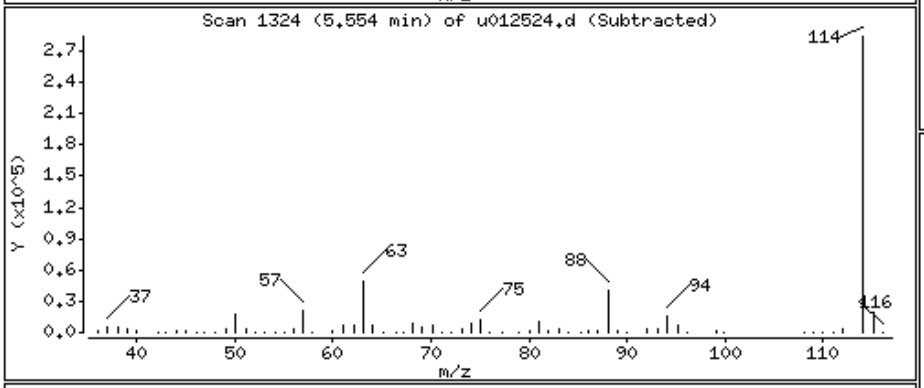
Sample Info: HS24011040-08;HS24011040-08;;;

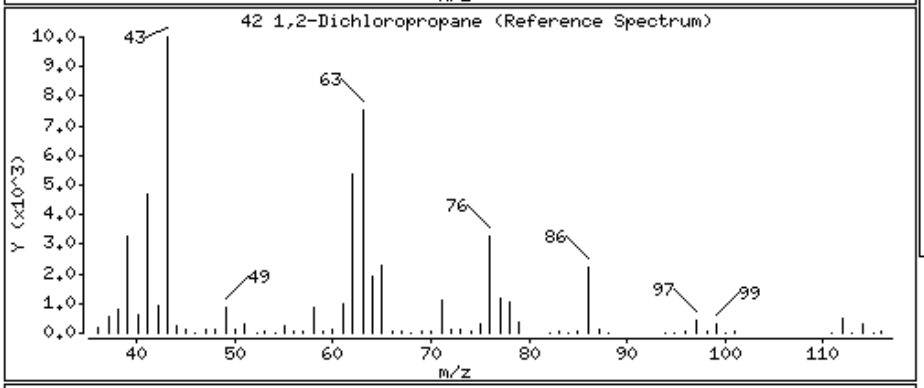
Purge Volume: 5.0 Operator: PC

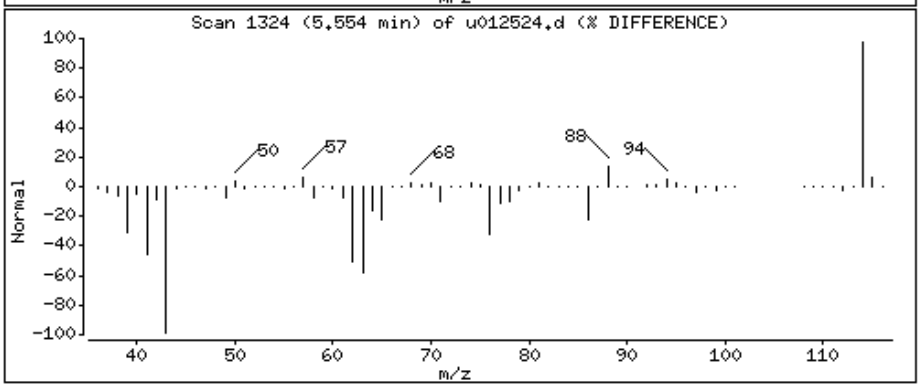
Column phase: DB624 Column diameter: 0.18

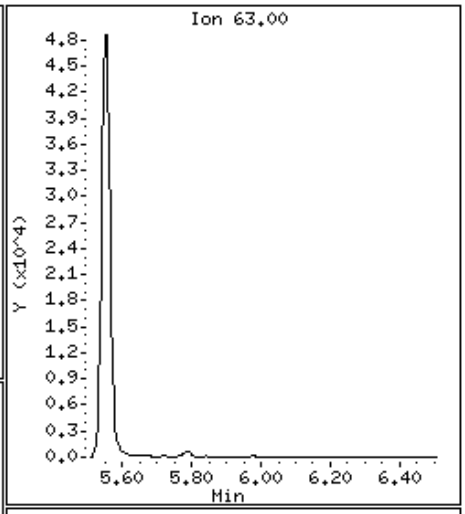
42 1,2-Dichloropropane Concentration: 1161.89 ug/l

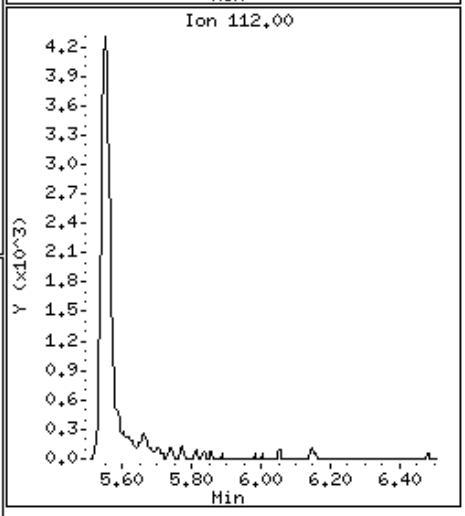












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012524.d Page 9

Date : 25-JAN-2024 18:52

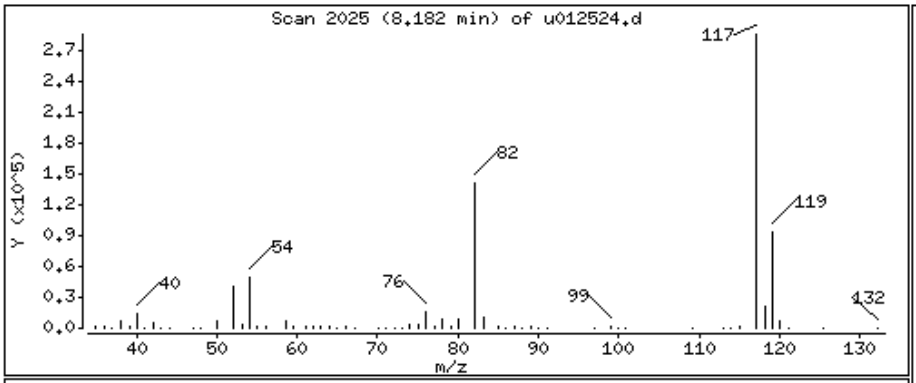
Client ID: HS24011040-08 Instrument: VOA9.i

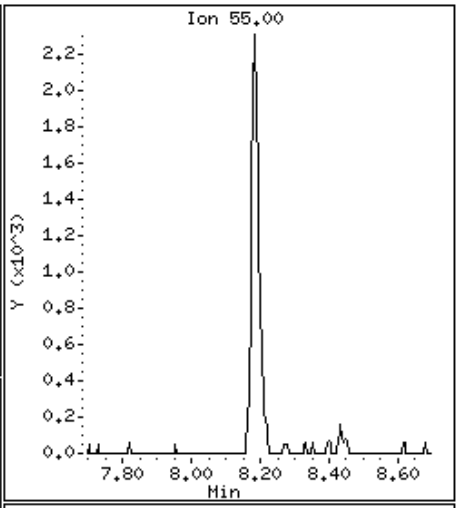
Sample Info: HS24011040-08;HS24011040-08;;;

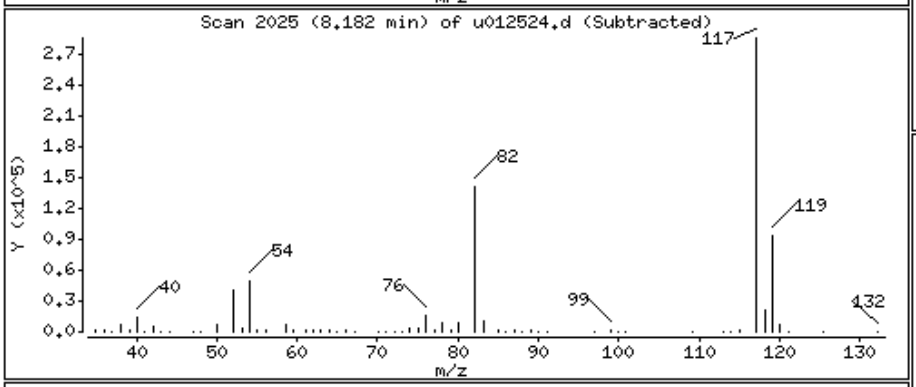
Purge Volume: 5.0 Operator: PC

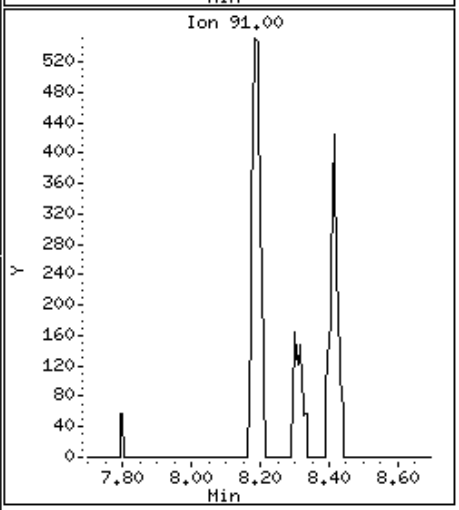
Column phase: DB624 Column diameter: 0.18

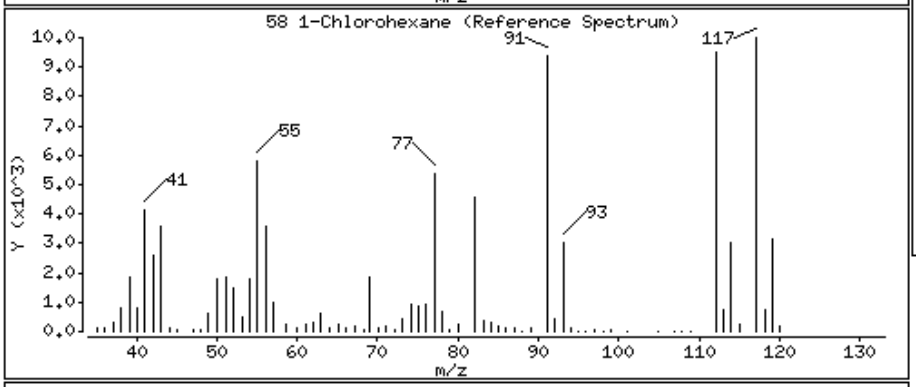
58 1-Chlorohexane Concentration: 67.16 ug/l

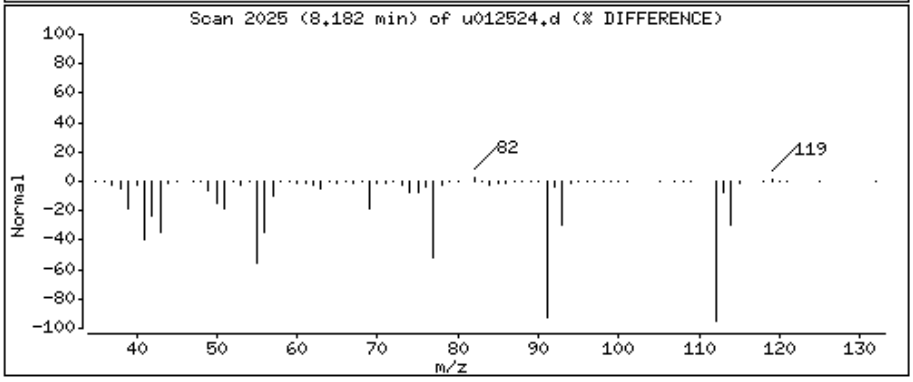












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012524.d Page 10

Date : 25-JAN-2024 18:52

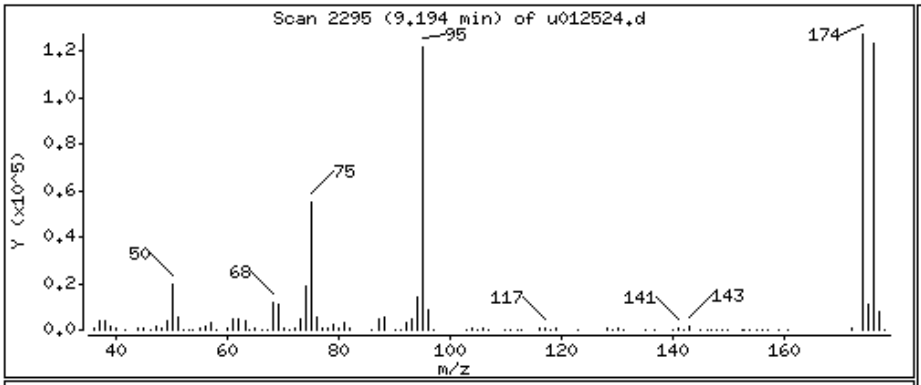
Client ID: HS24011040-08 Instrument: VOA9.i

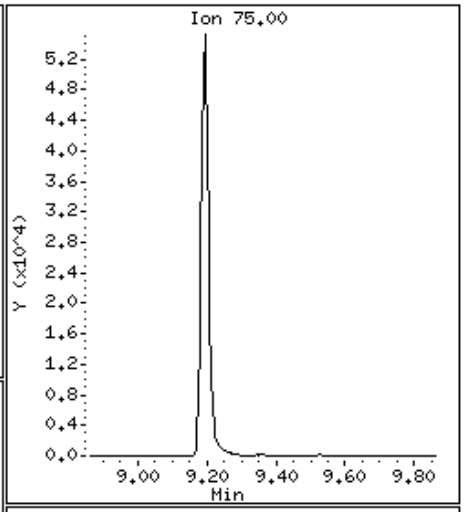
Sample Info: HS24011040-08;HS24011040-08;;;

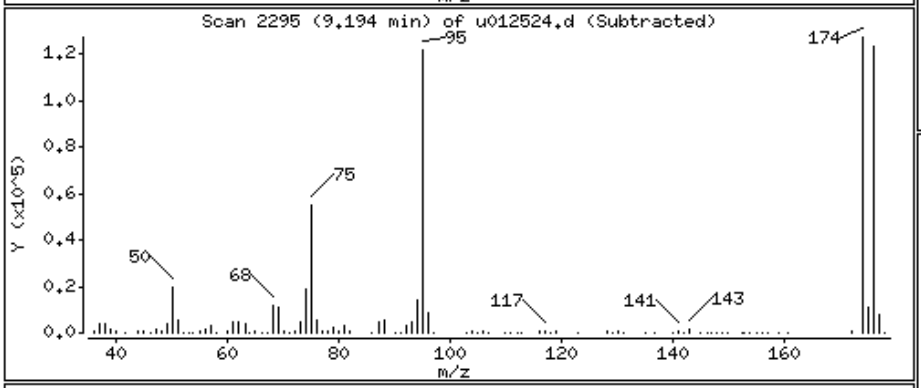
Purge Volume: 5.0 Operator: PC

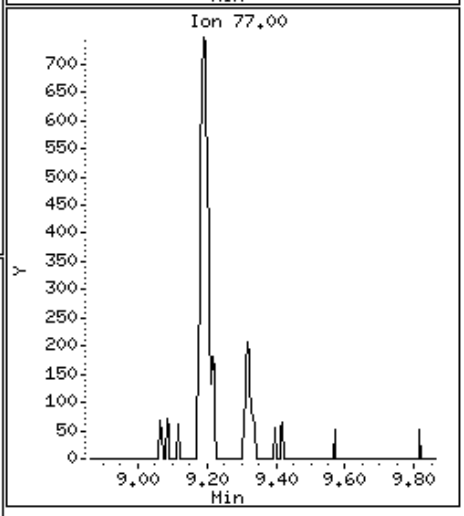
Column phase: DB624 Column diameter: 0.18

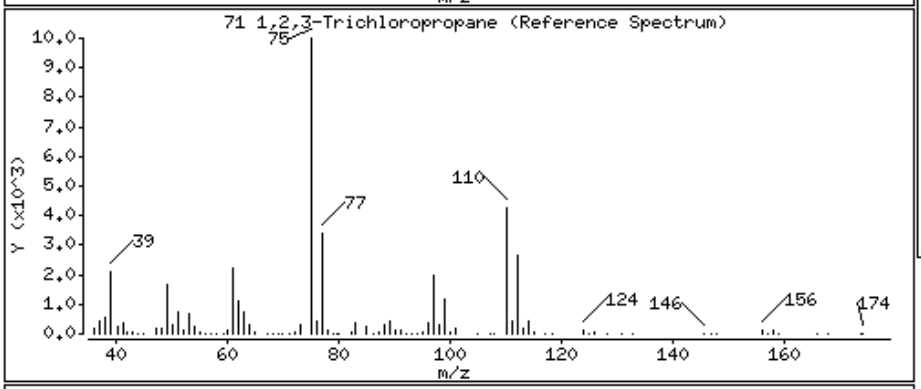
71 1,2,3-Trichloropropane Concentration: 936.99 ug/l

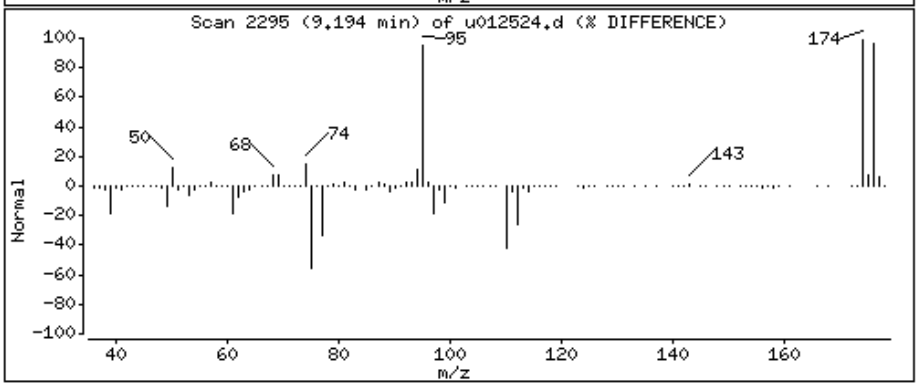












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012524.d Page 11

Date : 25-JAN-2024 18:52

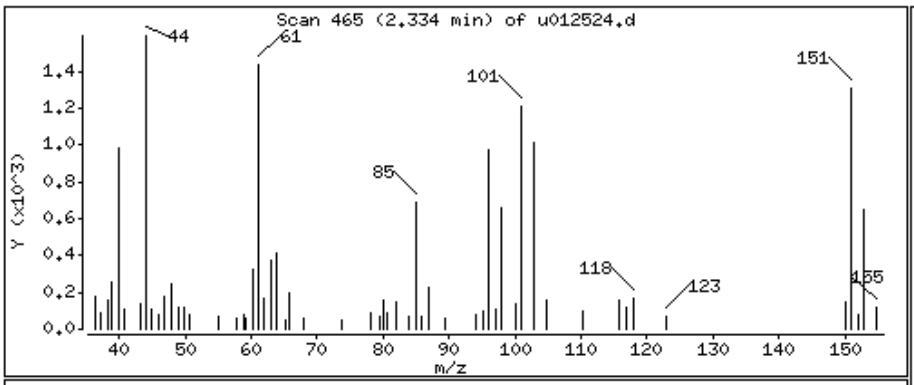
Client ID: HS24011040-08 Instrument: VOA9.i

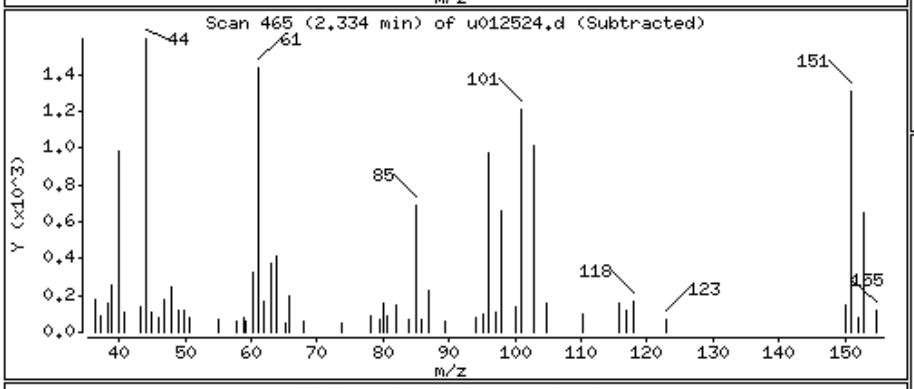
Sample Info: HS24011040-08;HS24011040-08;;;

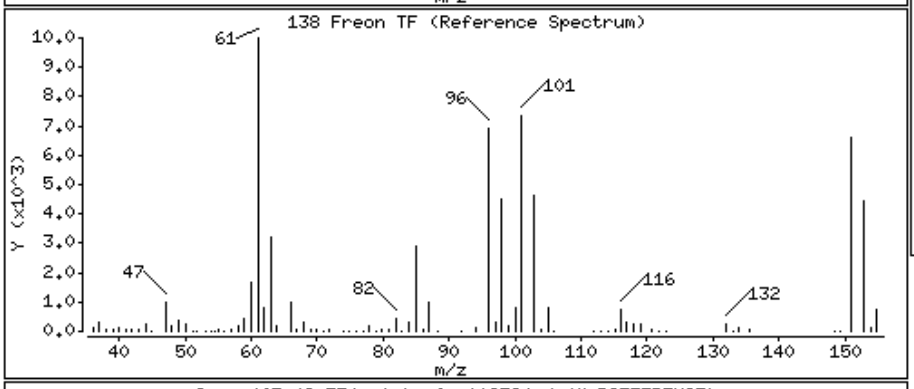
Purge Volume: 5.0 Operator: PC

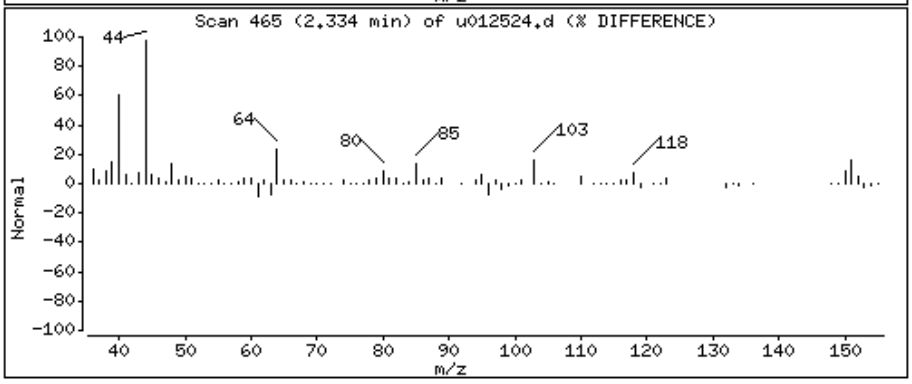
Column phase: DB624 Column diameter: 0.18

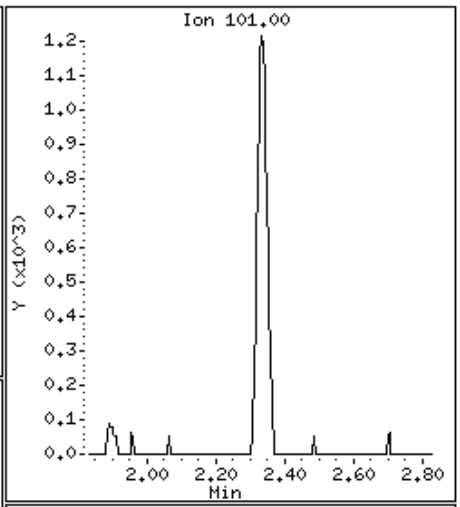
138 Freon TF Concentration: 52.60 ug/l

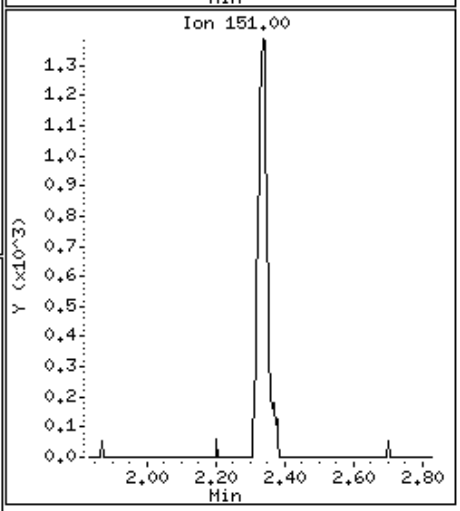












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012524.d Page 12

Date : 25-JAN-2024 18:52

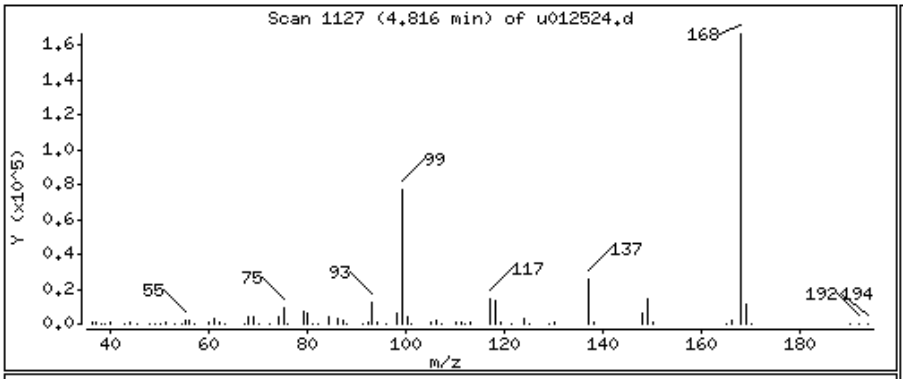
Client ID: HS24011040-08 Instrument: VOA9.i

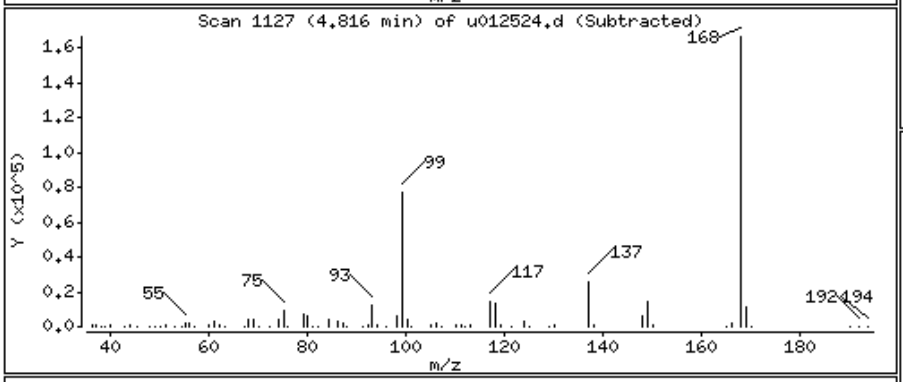
Sample Info: HS24011040-08;HS24011040-08;;;

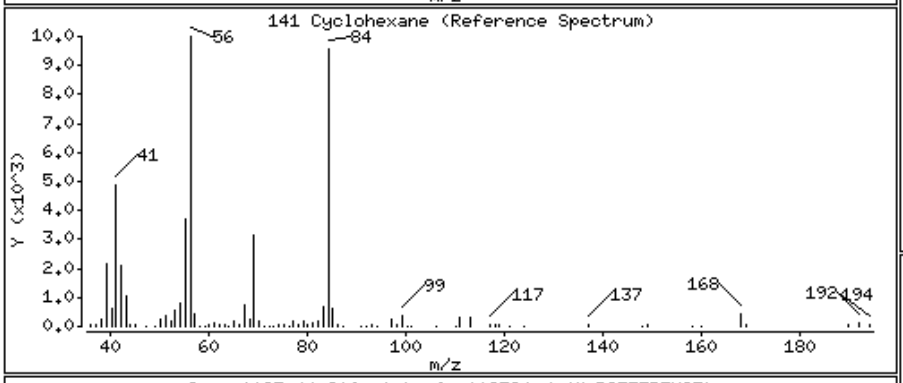
Purge Volume: 5.0 Operator: PC

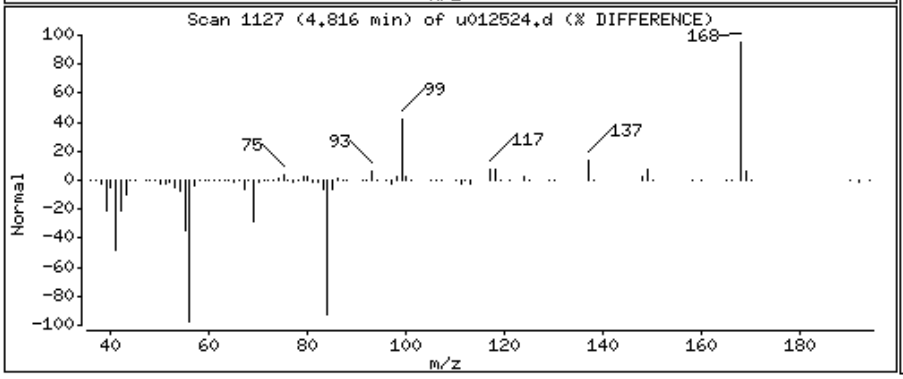
Column phase: DB624 Column diameter: 0.18

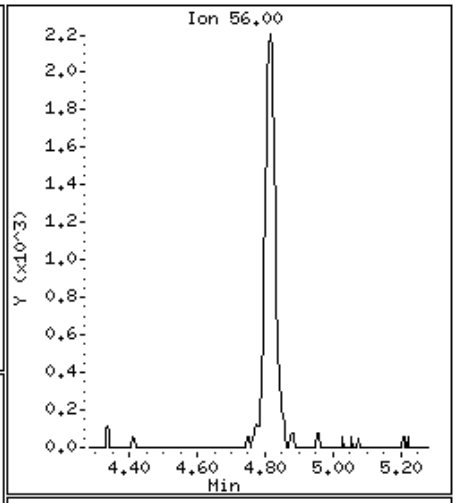
141 Cyclohexane Concentration: 51.47 ug/l

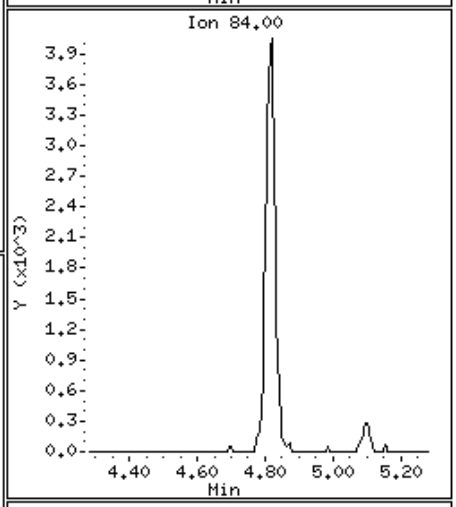


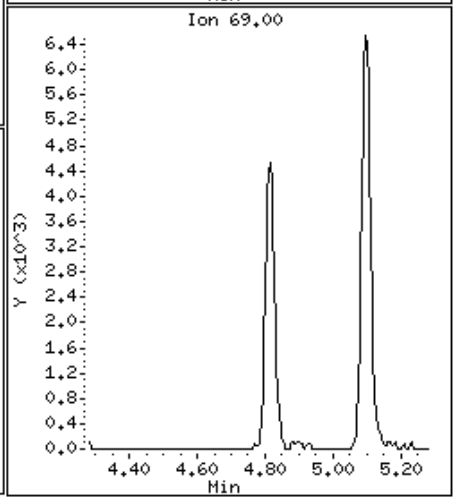












Data File : \\nahstws005\target\chem\voa9.i\u240125.b\u012524.d
Inj Date : 25-JAN-2024 18:52
InstruID : VOA9.i
LabSampID : HS24011040-08

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240125.b\U012525.D Page 1
Report Date: 01-Feb-2024 14:20

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240125.b\U012525.D
Lab Smp Id: HS24011040-09 Client Smp ID: HS24011040-09
Inj Date : 25-JAN-2024 19:14
Operator : PC Inst ID: VOA9.i
Smp Info : HS24011040-09;HS24011040-09;;;
Misc Info : V9;WATER;0;25;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240125.b\8260C.m
Meth Date : 01-Feb-2024 14:20 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 23
Dil Factor: 25.00000
Integrator: HP RTE Compound Sublist: 1040-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7066

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

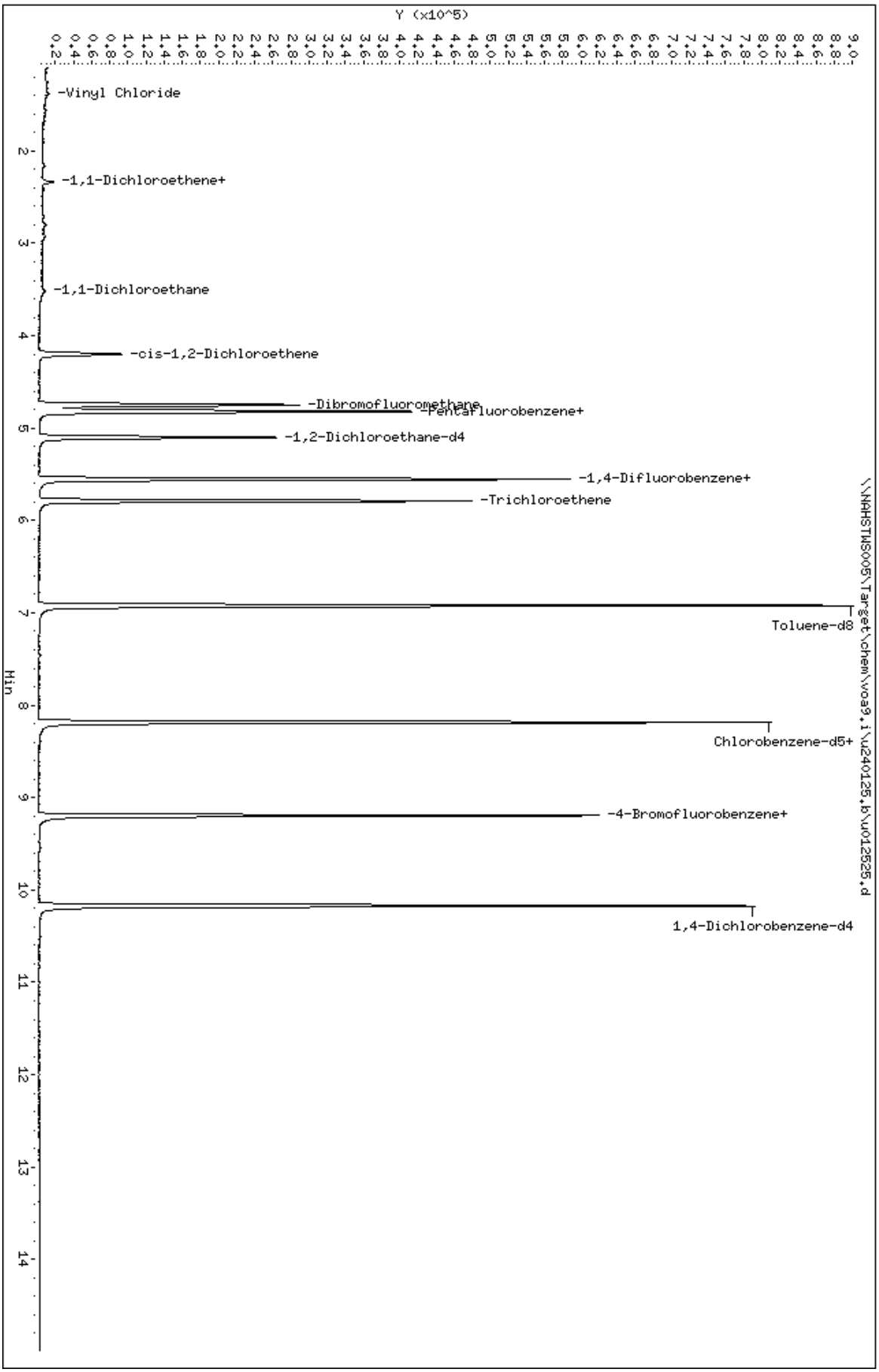
Name	Value	Description
DF	25.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
*	1 Pentafluorobenzene	168	4.819	4.815	(1.000)	316289	50.0000	
	2 Dichlorodifluoromethane	85	1.007	1.164	(0.209)	47389	19.1326	478.31
	3 Chloromethane	50	1.010	1.303	(0.210)	64882	17.8825	447.06
	5 Vinyl Chloride	62	1.381	1.378	(0.287)	1825	0.52653	13.16(a)
	11 1,1-Dichloroethene	96	2.337	2.334	(0.485)	2294	0.94037	23.50(a)
	22 1,1-Dichloroethane	63	3.518	3.514	(0.730)	3416	0.57428	14.35(a)
	27 cis-1,2-Dichloroethene	96	4.200	4.197	(0.872)	49585	12.6927	317.31
$	30 Dibromofluoromethane	113	4.752	4.748	(0.986)	170766	52.8122	52.81(R)
	34 Carbon Tetrachloride	117	4.819	4.913	(0.868)	25753	6.51997	162.99
$	35 1,2-Dichloroethane-d4	65	5.100	5.096	(1.058)	178548	48.2097	48.20(R)
*	36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	483341	50.0000	
	38 Trichloroethene	130	5.790	5.790	(1.043)	166561	45.9296	1148.23
	42 1,2-Dichloropropane	63	5.554	6.007	(1.000)	81550	23.0208	575.52
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	465533	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	565081	52.7290	52.72(R)
	58 1-Chlorohexane	55	8.185	8.197	(1.474)	3864	1.42566	35.64(a)
$	69 4-Bromofluorobenzene	95	9.194	9.190	(1.123)	185754	45.6688	45.66(R)
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	232235	50.0000	
	71 1,2,3-Trichloropropane	75	9.194	9.362	(0.904)	84577	19.1847	479.61
	138 Freon TF	101	2.337	2.337	(0.485)	2356	1.03392	25.84(a)

	141	Cyclohexane	56	4.815	4.785 (0.999)	4280	0.93912	23.47(a)
M	94	1,2-Dichloroethylene (total)	96			49585	14.5351	363.37

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.



Data File: \\NAHSTWS005\Target\chem\voa9,i\u240125,b\u012525.d
Date : 25-JAN-2024 19:14
Client ID: HS24011040-09
Sample Info: HS24011040-09;HS24011040-09;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9,i
Operator: PC
Column diameter: 0.18

Page 1

Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012525.d Page 2

Date : 25-JAN-2024 19:14

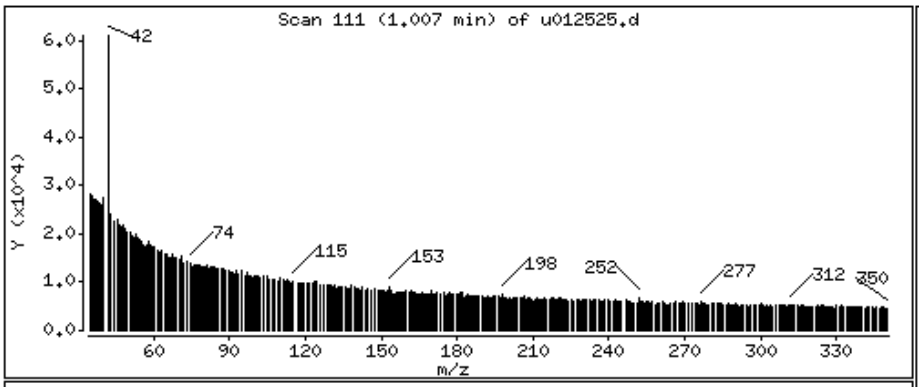
Client ID: HS24011040-09 Instrument: VOA9.i

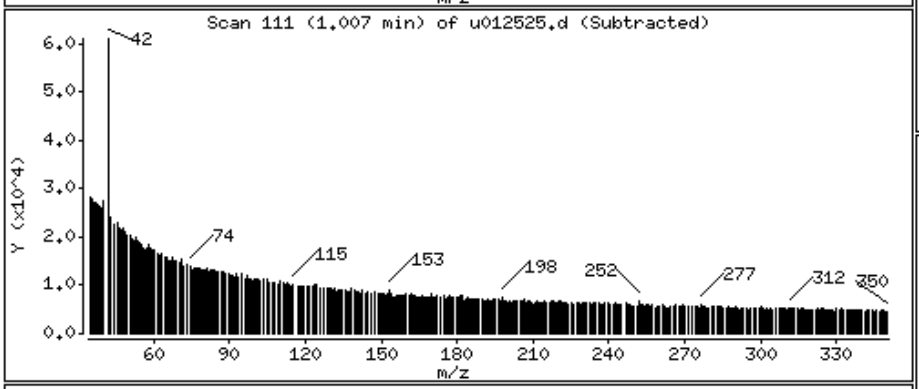
Sample Info: HS24011040-09;HS24011040-09;;;

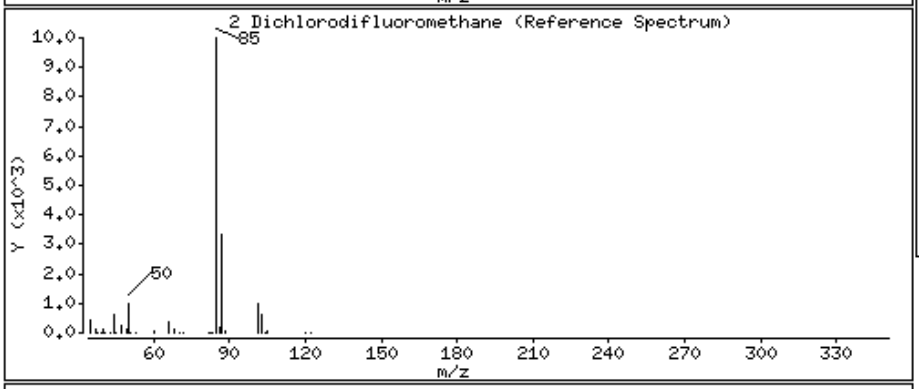
Purge Volume: 5.0 Operator: PC

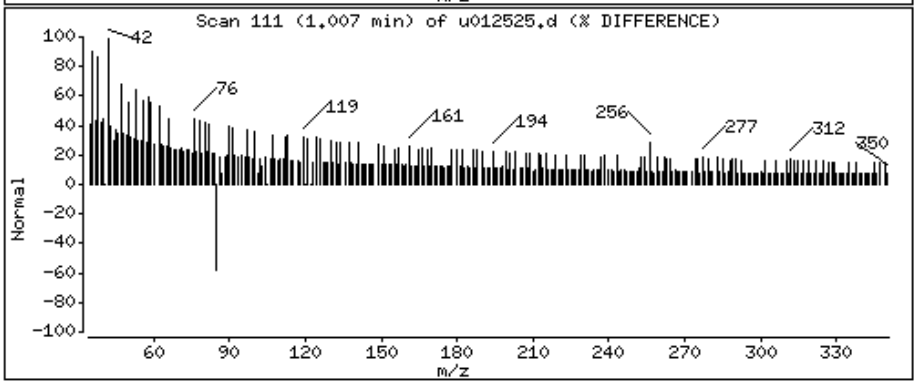
Column phase: DB624 Column diameter: 0.18

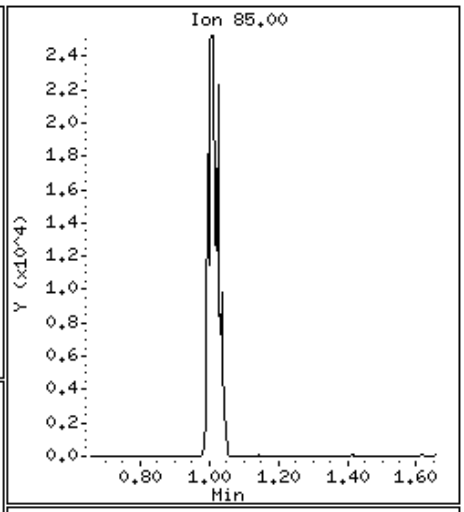
2 Dichlorodifluoromethane Concentration: 478.31 ug/l

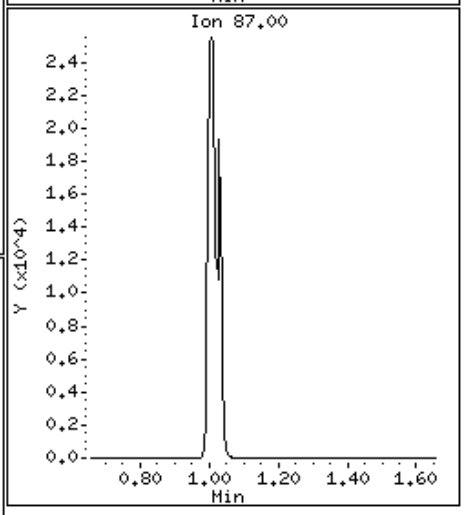












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012525.d Page 3

Date : 25-JAN-2024 19:14

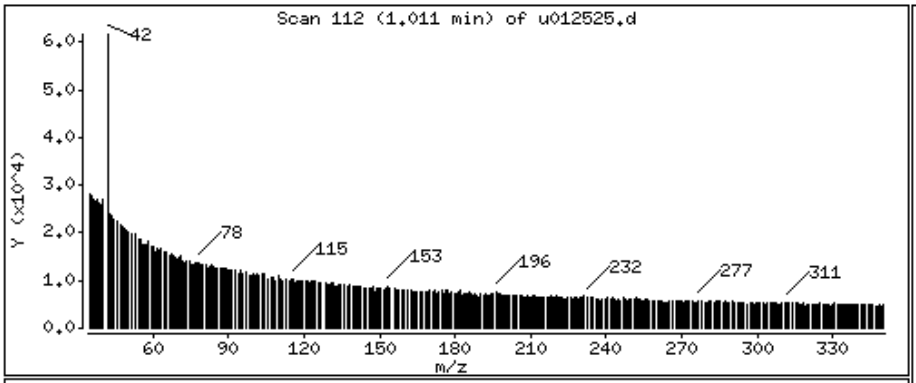
Client ID: HS24011040-09 Instrument: VOA9.i

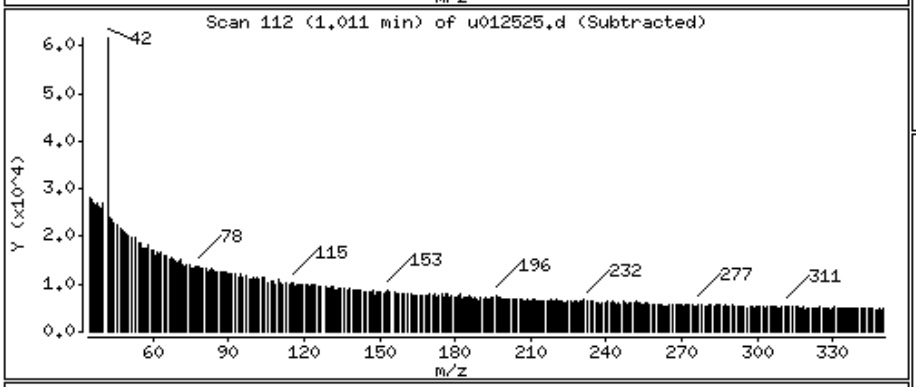
Sample Info: HS24011040-09;HS24011040-09;;;

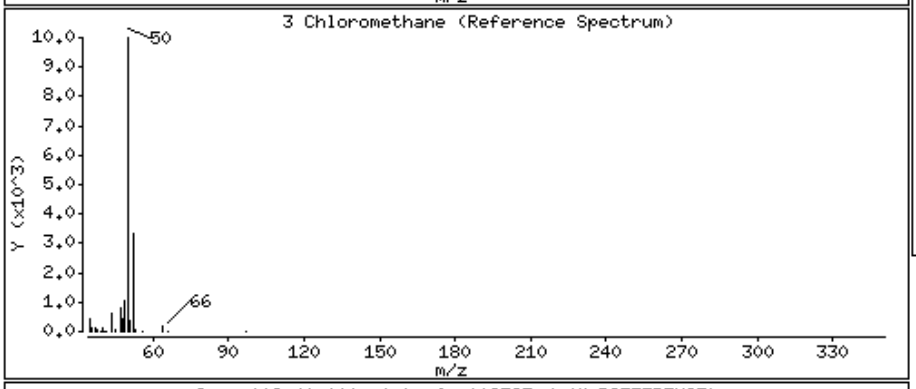
Purge Volume: 5.0 Operator: PC

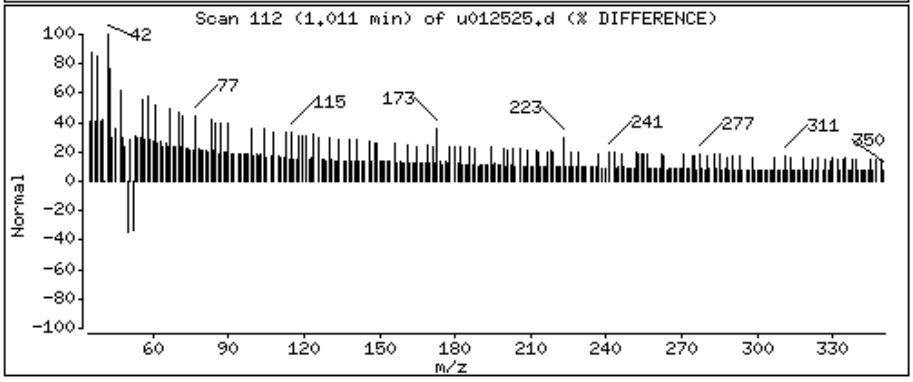
Column phase: DB624 Column diameter: 0.18

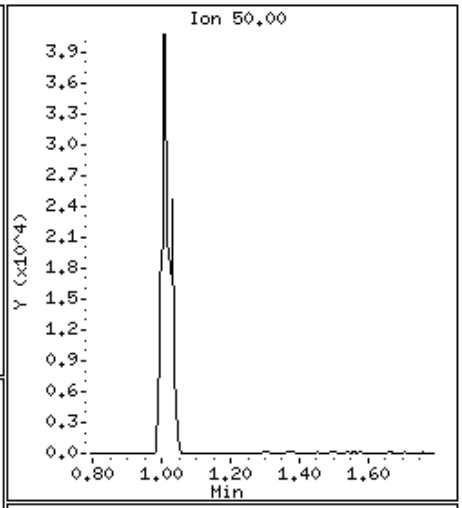
3 Chloromethane Concentration: 447.06 ug/l

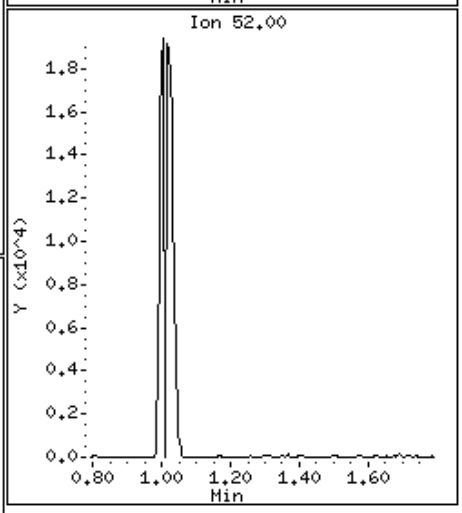












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012525.d Page 4

Date : 25-JAN-2024 19:14

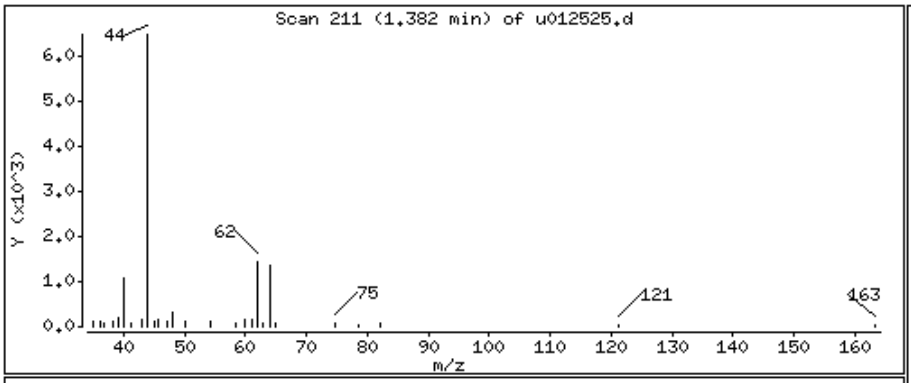
Client ID: HS24011040-09 Instrument: VOA9.i

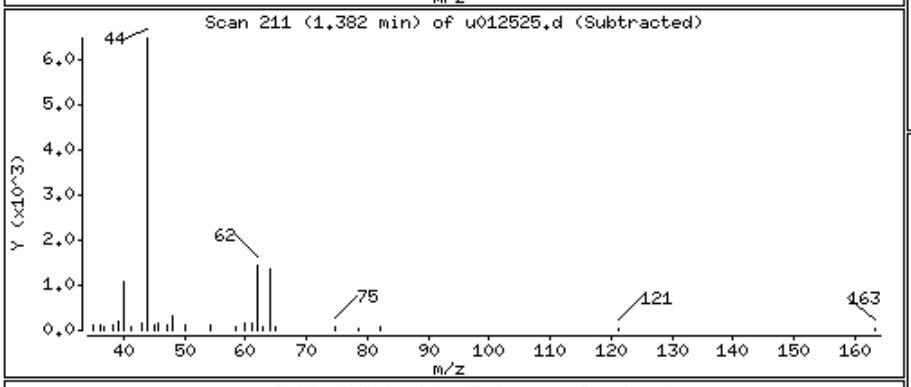
Sample Info: HS24011040-09;HS24011040-09;;;

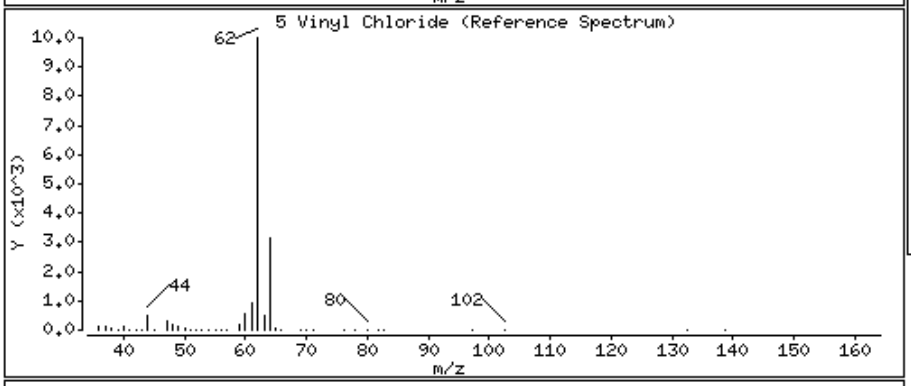
Purge Volume: 5.0 Operator: PC

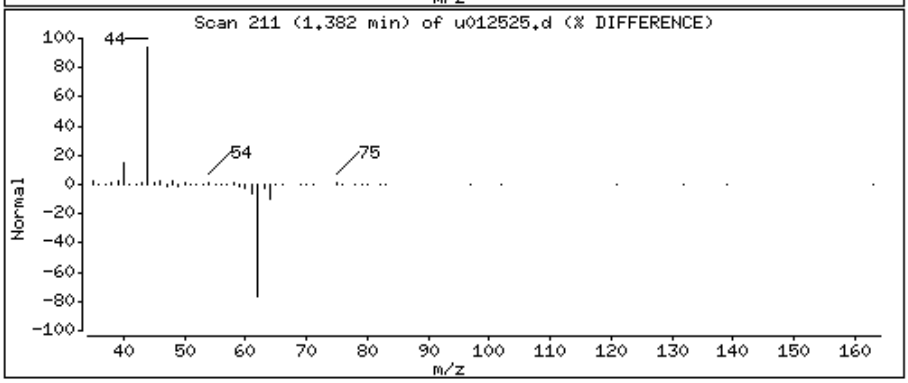
Column phase: DB624 Column diameter: 0.18

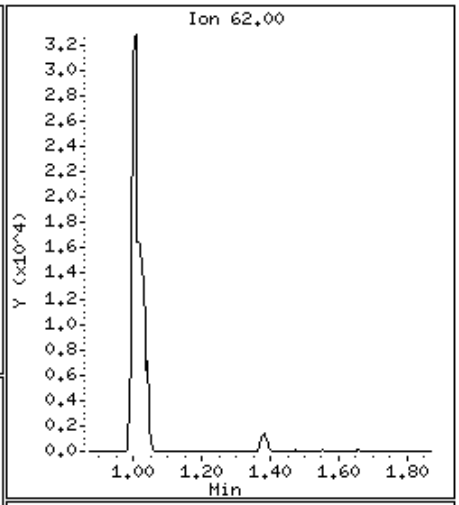
5 Vinyl Chloride Concentration: 13.16 ug/l

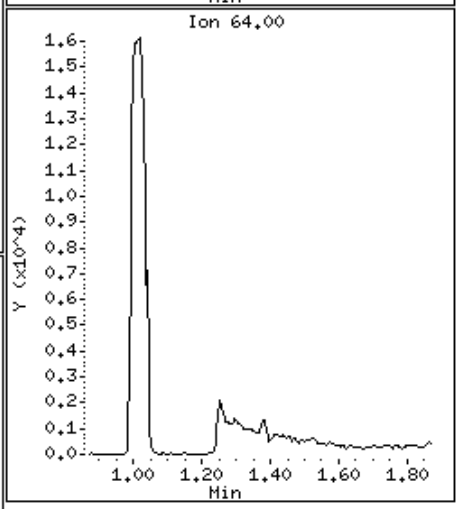












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012525.d Page 5

Date : 25-JAN-2024 19:14

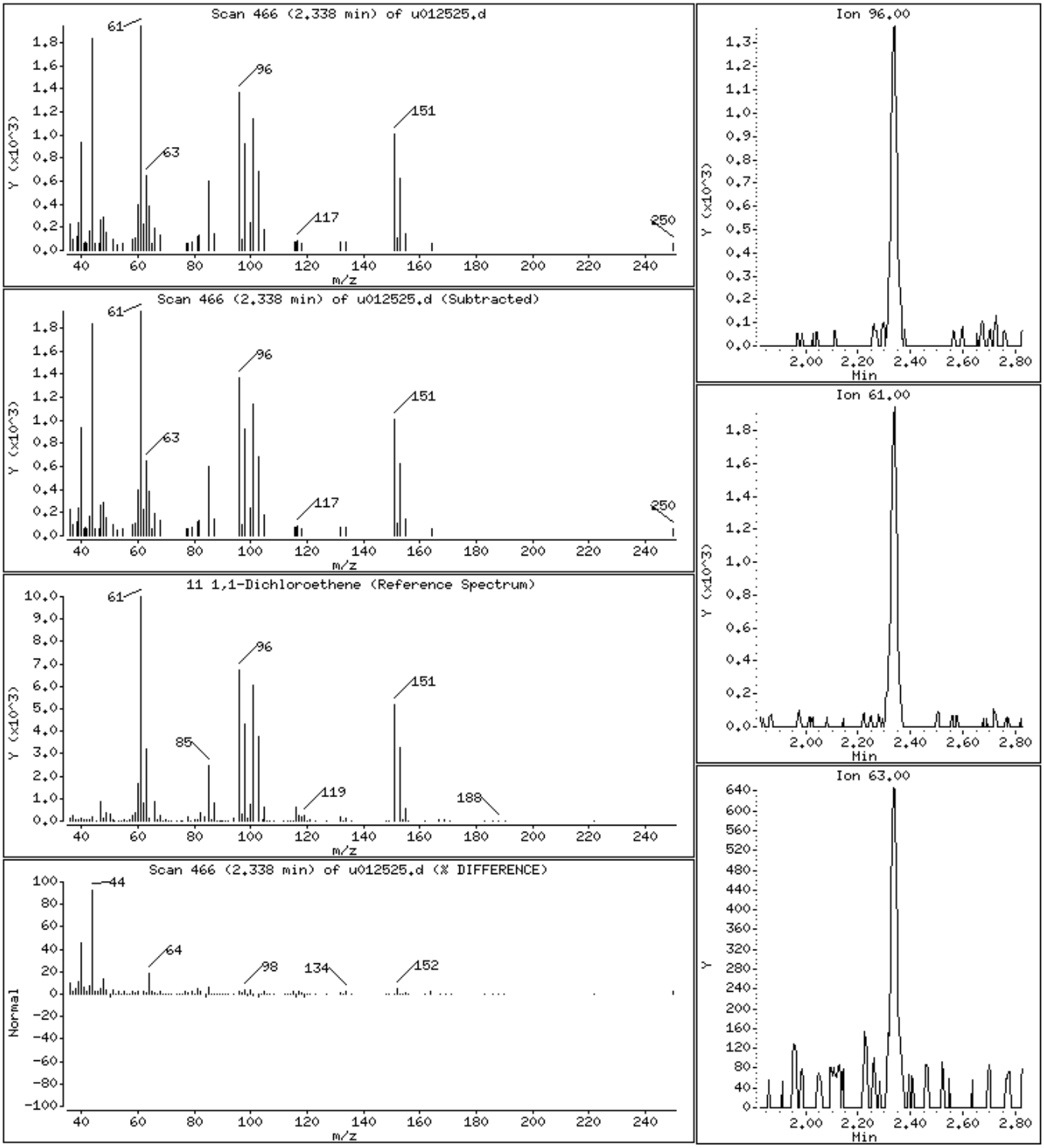
Client ID: HS24011040-09 Instrument: VOA9.i

Sample Info: HS24011040-09;HS24011040-09;;;

Purge Volume: 5.0 Operator: PC

Column phase: DB624 Column diameter: 0.18

11 1,1-Dichloroethene Concentration: 23.50 ug/l



Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012525.d Page 6

Date : 25-JAN-2024 19:14

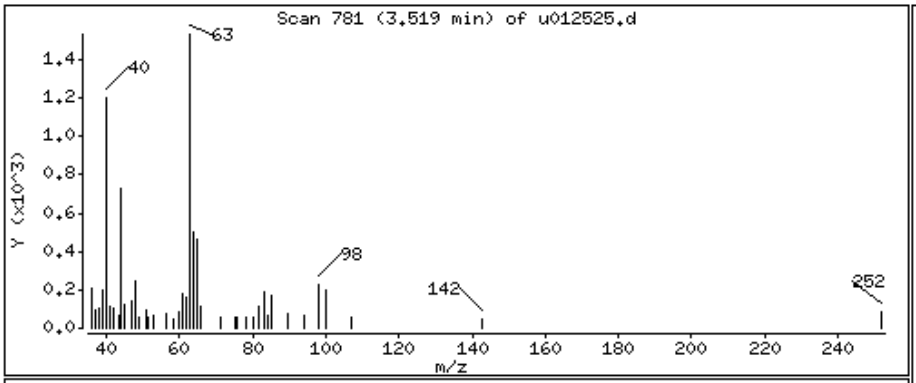
Client ID: HS24011040-09 Instrument: VOA9.i

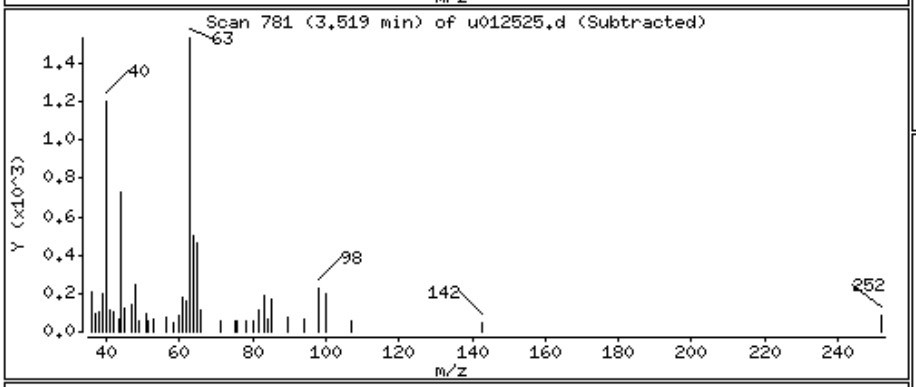
Sample Info: HS24011040-09;HS24011040-09;;;

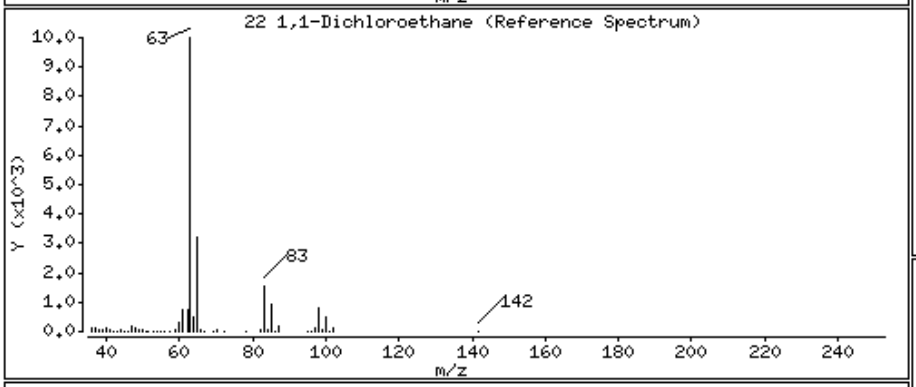
Purge Volume: 5.0 Operator: PC

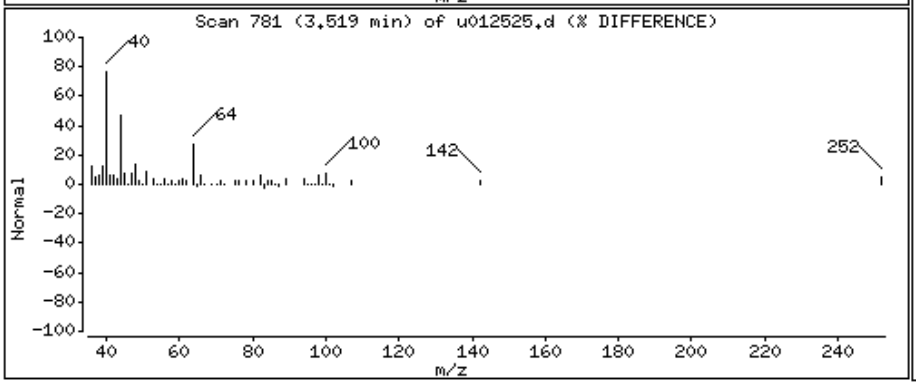
Column phase: DB624 Column diameter: 0.18

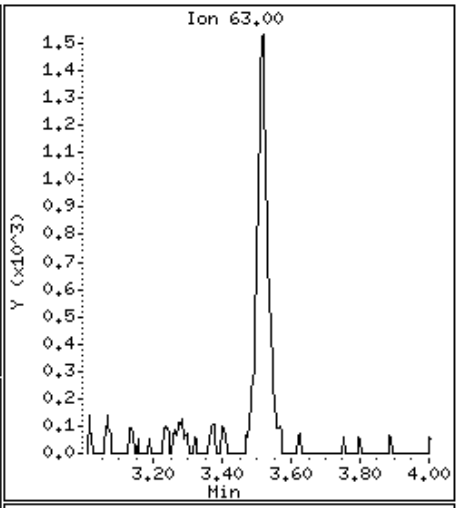
22 1,1-Dichloroethane Concentration: 14.35 ug/l

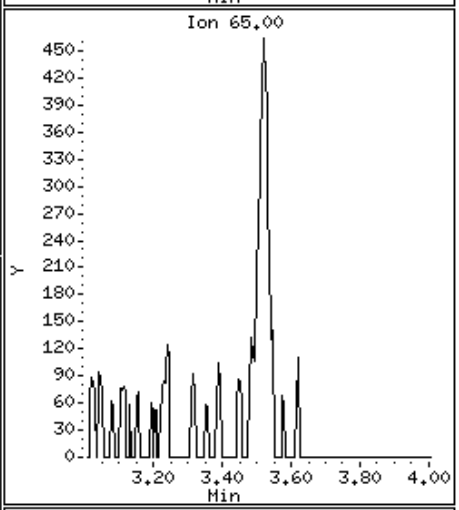


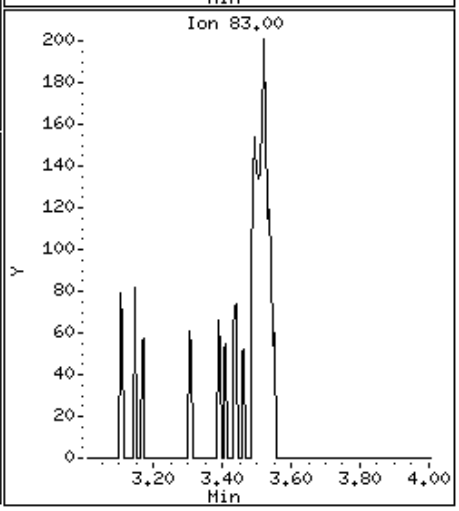












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012525.d Page 7

Date : 25-JAN-2024 19:14

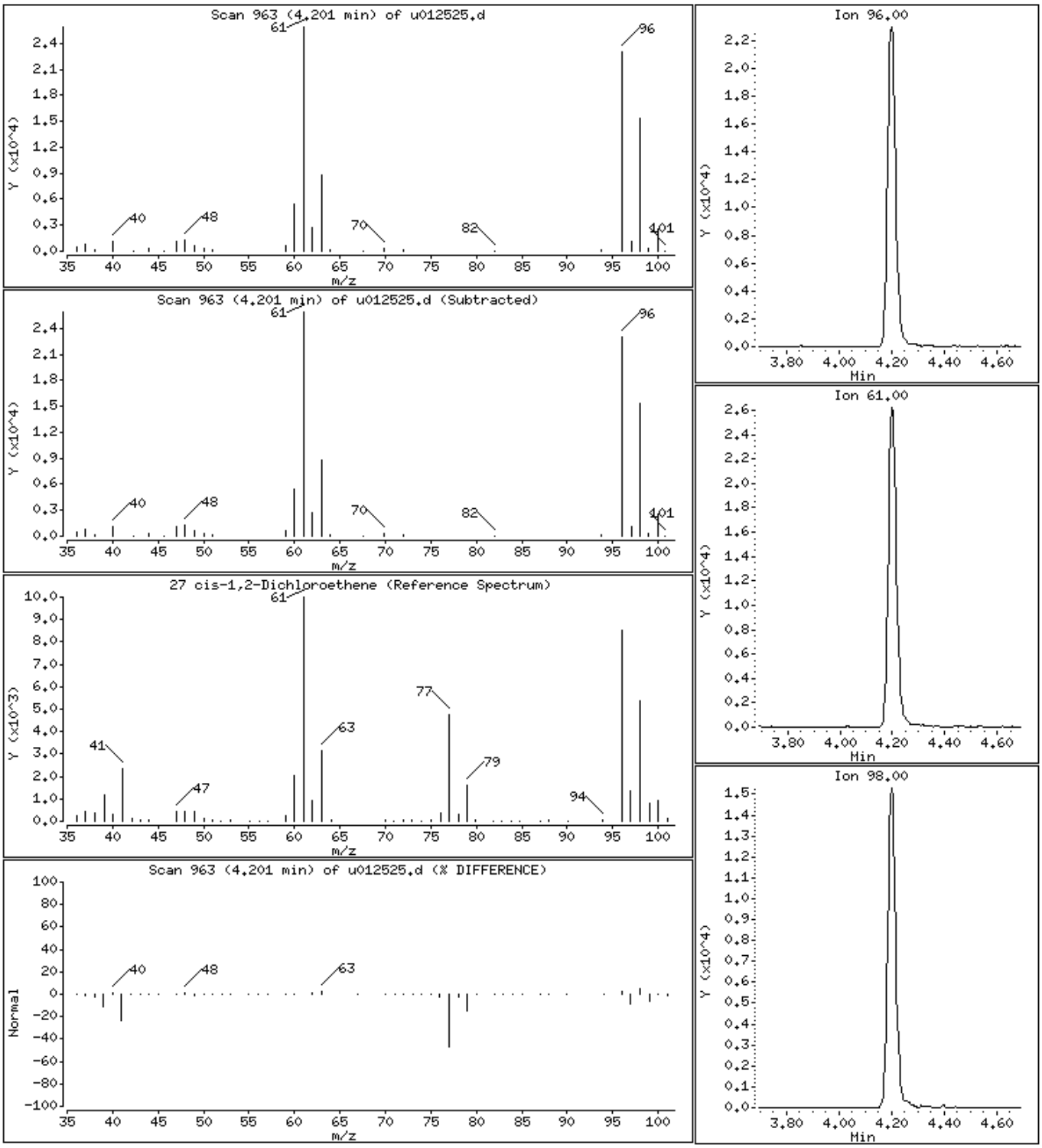
Client ID: HS24011040-09 Instrument: VOA9.i

Sample Info: HS24011040-09;HS24011040-09;;;

Purge Volume: 5.0 Operator: PC

Column phase: DB624 Column diameter: 0.18

27 cis-1,2-Dichloroethene Concentration: 317.31 ug/l



Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012525.d Page 8

Date : 25-JAN-2024 19:14

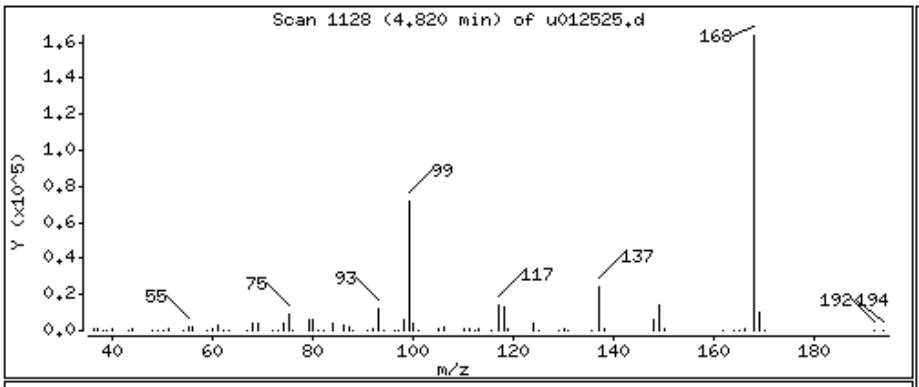
Client ID: HS24011040-09 Instrument: VOA9.i

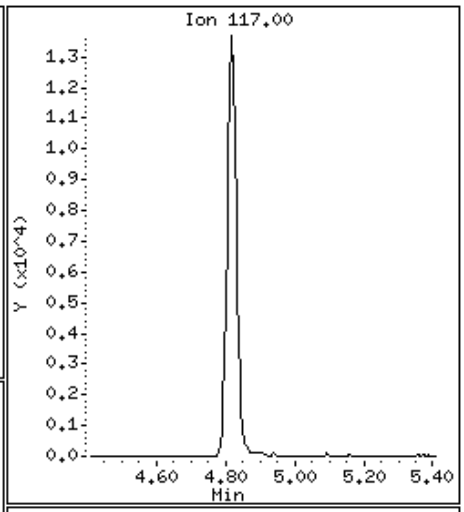
Sample Info: HS24011040-09;HS24011040-09;;;

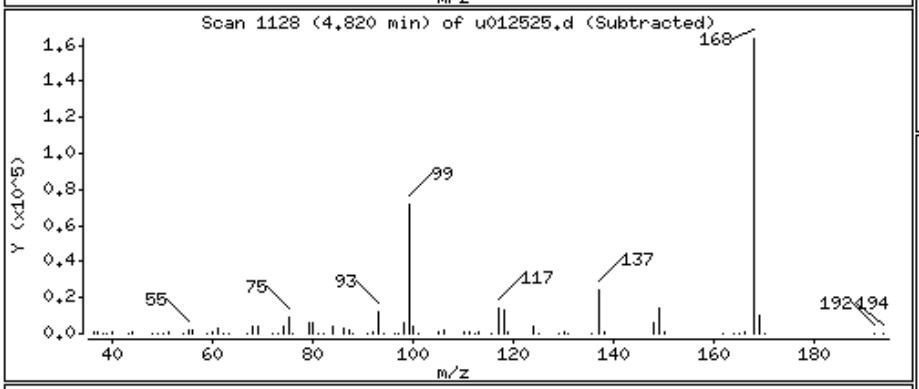
Purge Volume: 5.0 Operator: PC

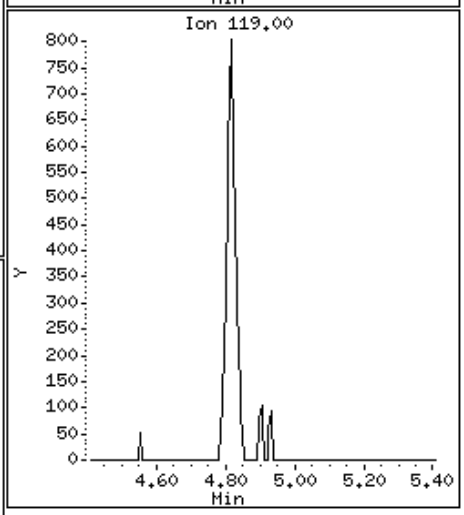
Column phase: DB624 Column diameter: 0.18

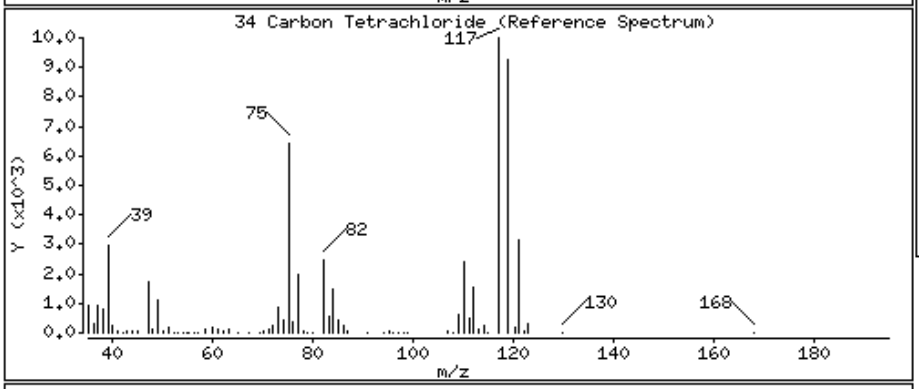
34 Carbon Tetrachloride Concentration: 162.99 ug/l

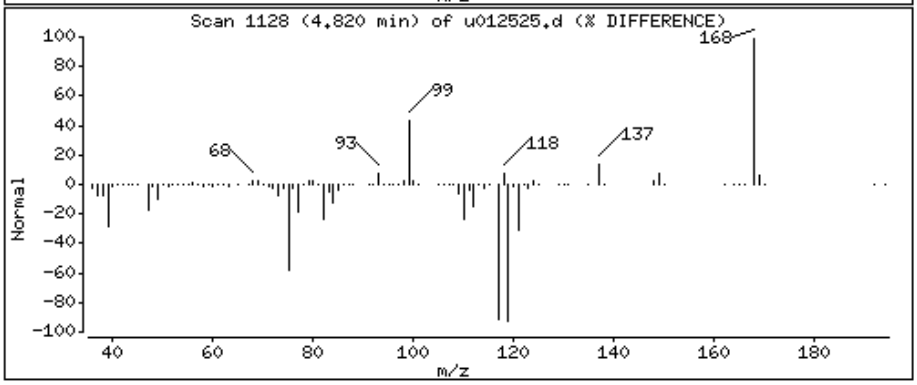












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012525.d Page 9

Date : 25-JAN-2024 19:14

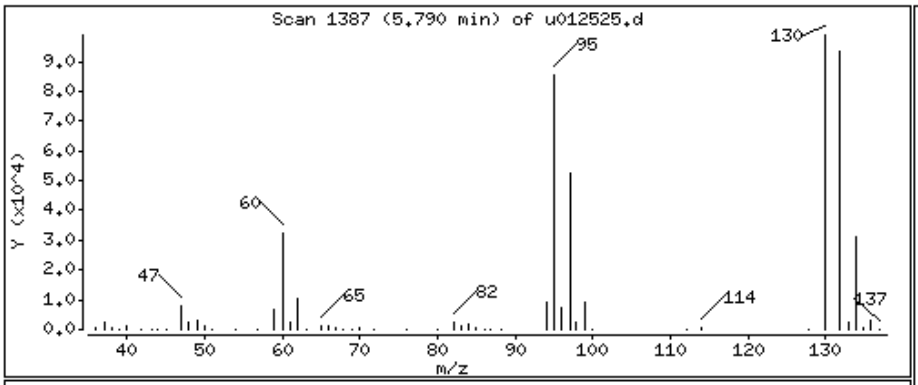
Client ID: HS24011040-09 Instrument: VOA9.i

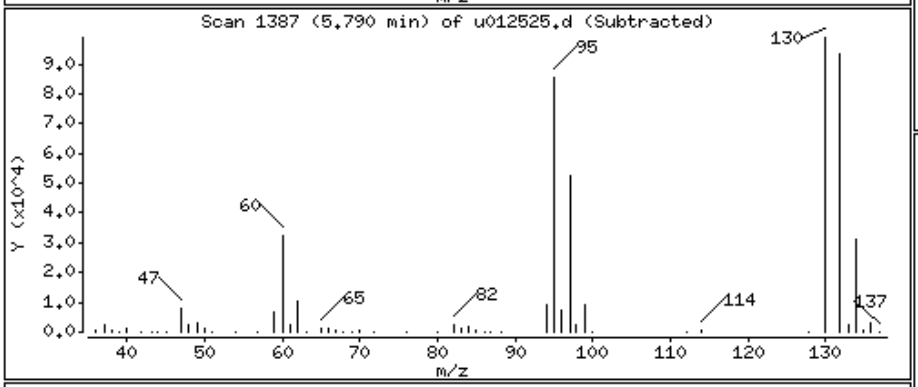
Sample Info: HS24011040-09;HS24011040-09;;;

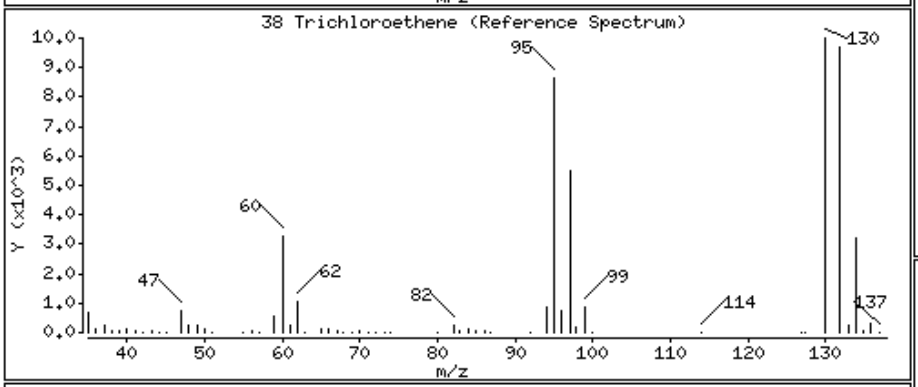
Purge Volume: 5.0 Operator: PC

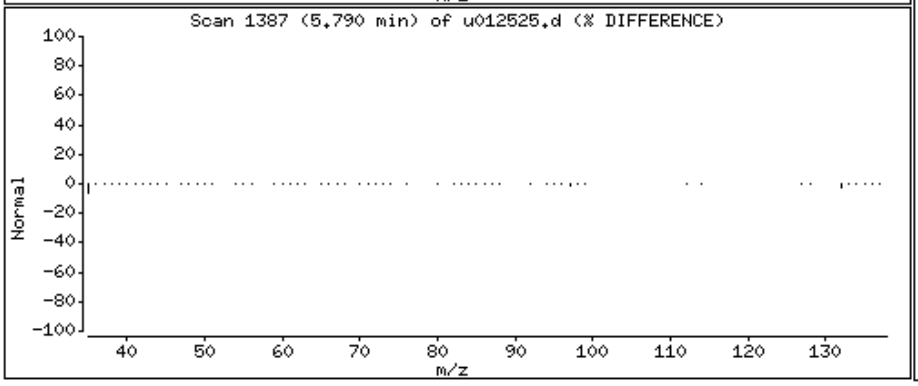
Column phase: DB624 Column diameter: 0.18

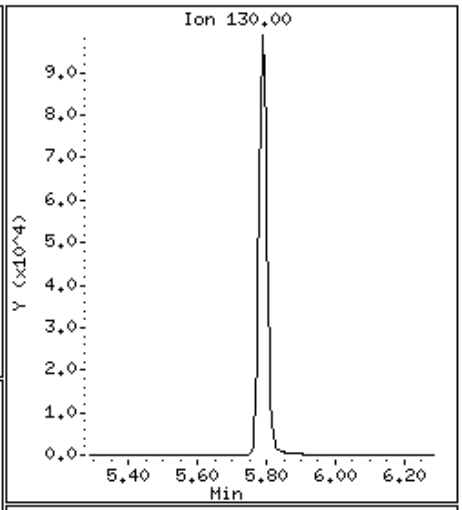
38 Trichloroethene Concentration: 1148.23 ug/l

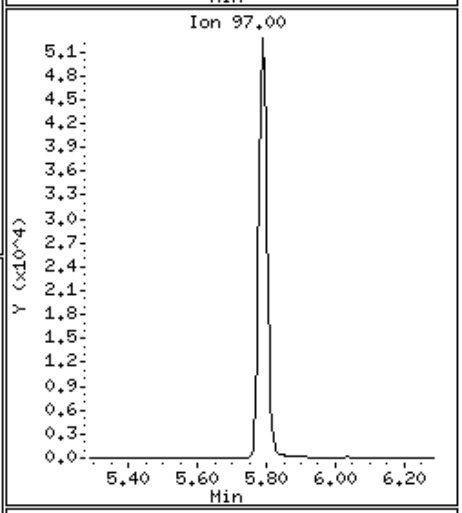


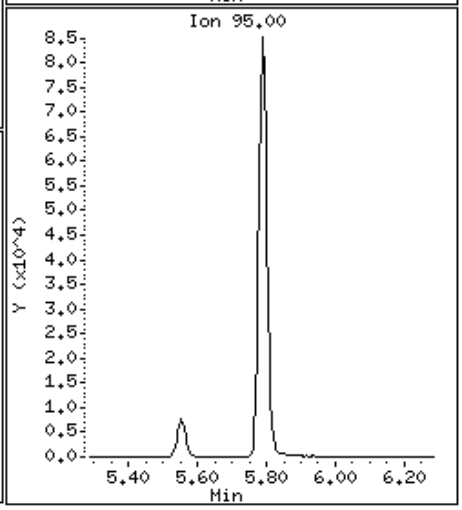












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012525.d Page 10

Date : 25-JAN-2024 19:14

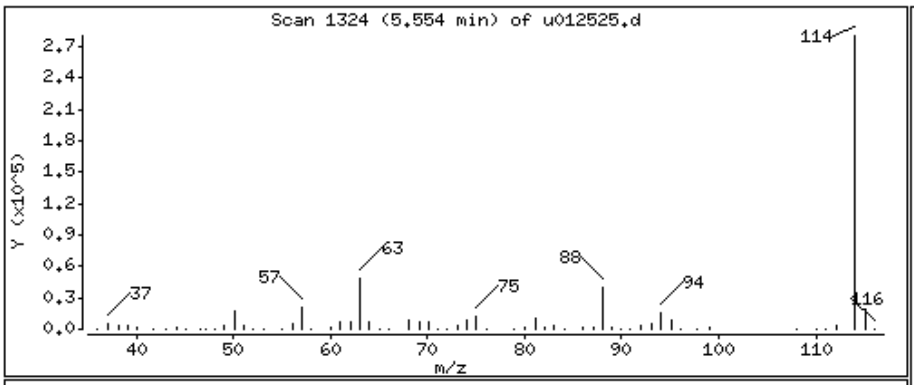
Client ID: HS24011040-09 Instrument: VOA9.i

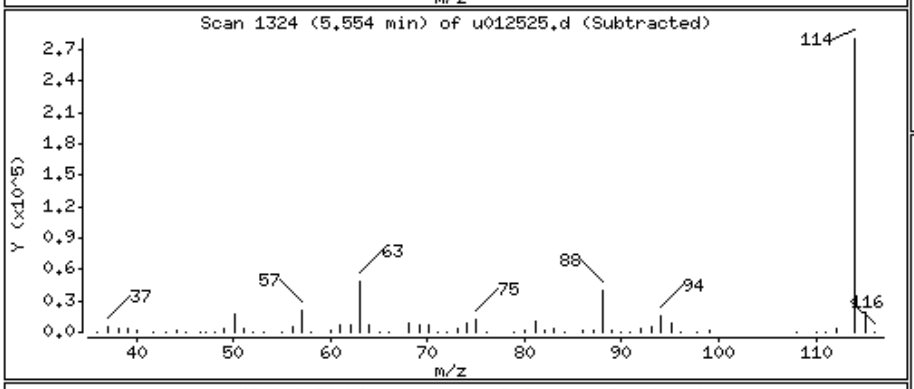
Sample Info: HS24011040-09;HS24011040-09;;;

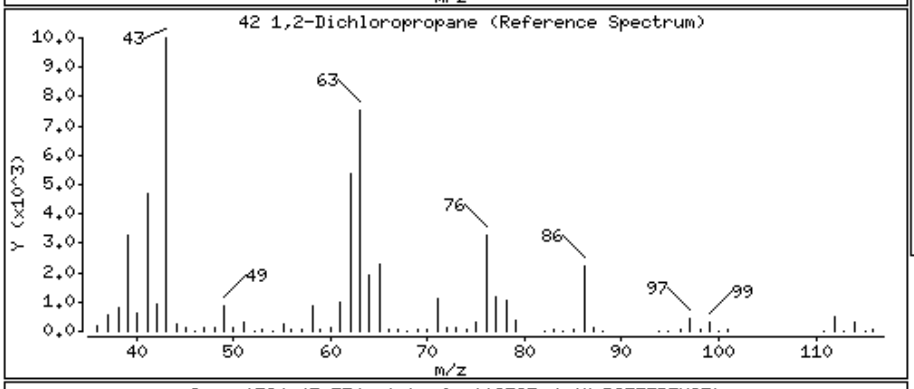
Purge Volume: 5.0 Operator: PC

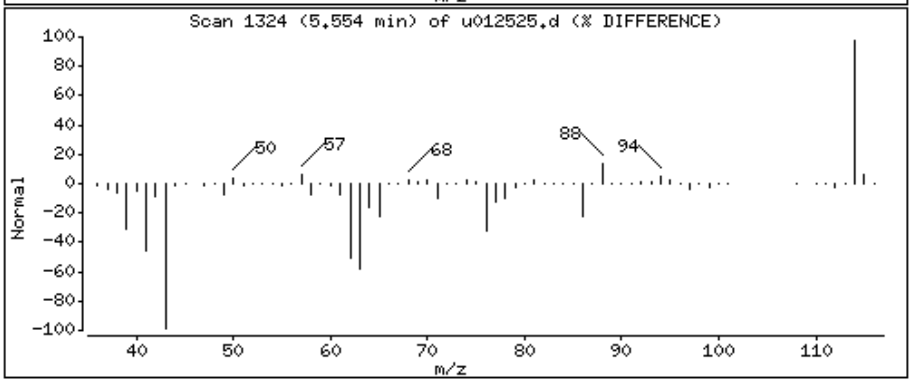
Column phase: DB624 Column diameter: 0.18

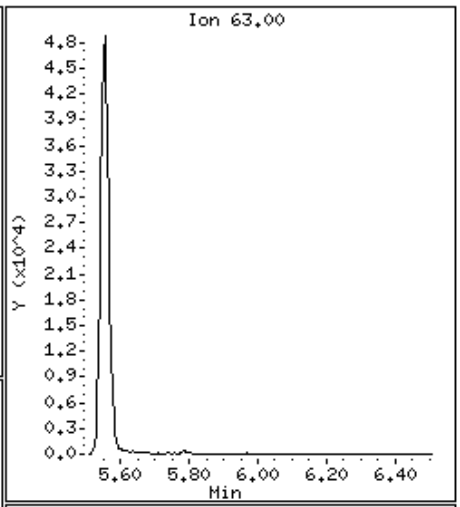
42 1,2-Dichloropropane Concentration: 575.52 ug/l

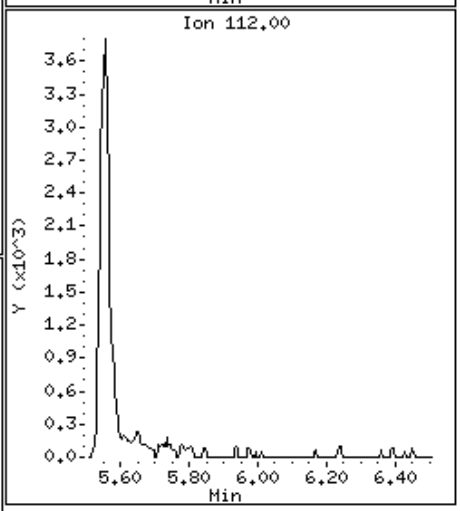












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012525.d Page 11

Date : 25-JAN-2024 19:14

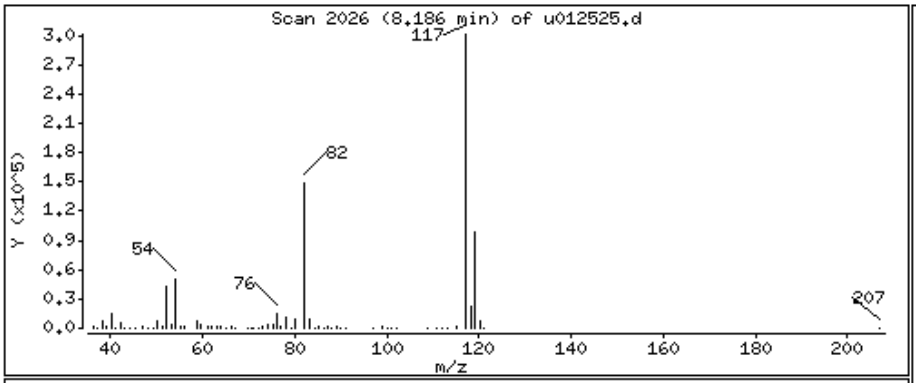
Client ID: HS24011040-09 Instrument: VOA9.i

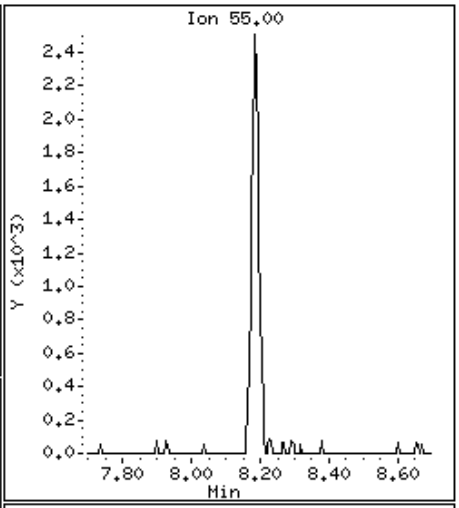
Sample Info: HS24011040-09;HS24011040-09;;;

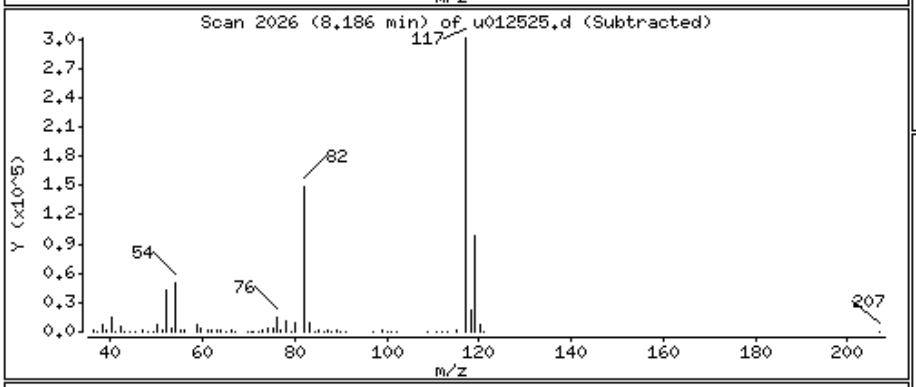
Purge Volume: 5.0 Operator: PC

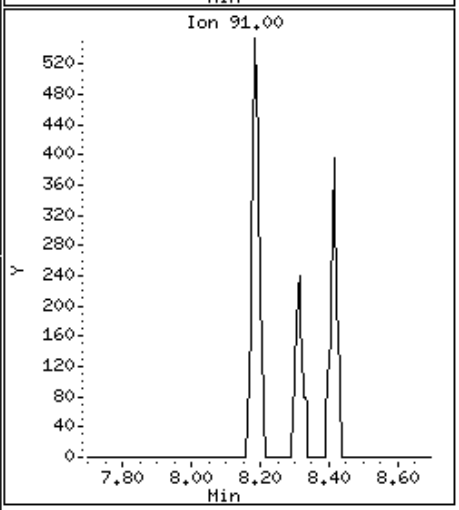
Column phase: DB624 Column diameter: 0.18

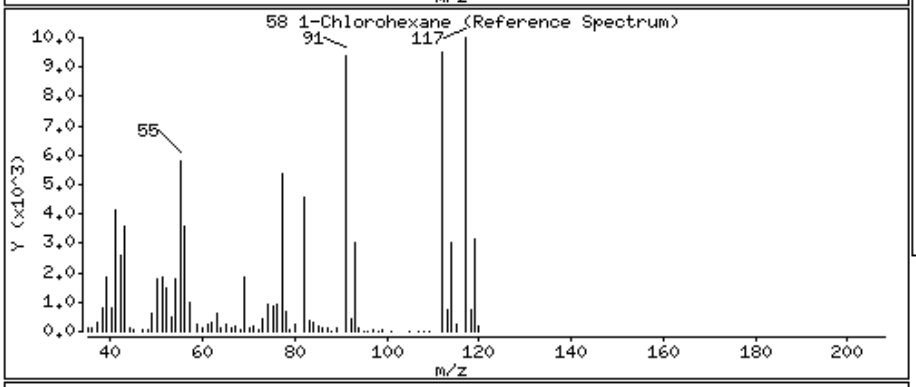
58 1-Chlorohexane Concentration: 35.64 ug/l

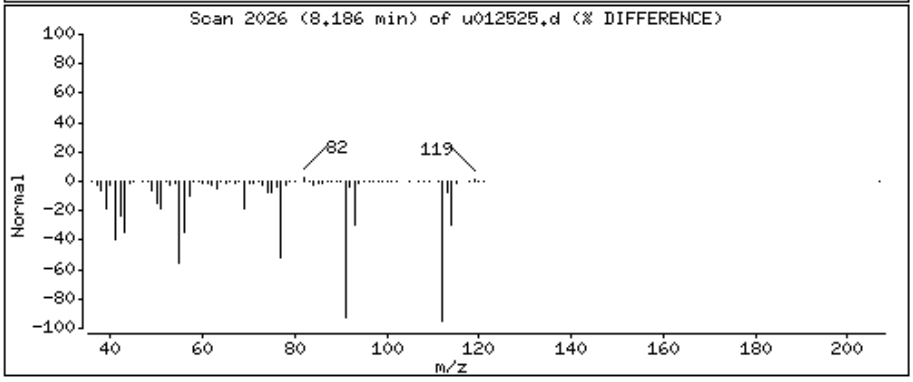












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012525.d Page 12

Date : 25-JAN-2024 19:14

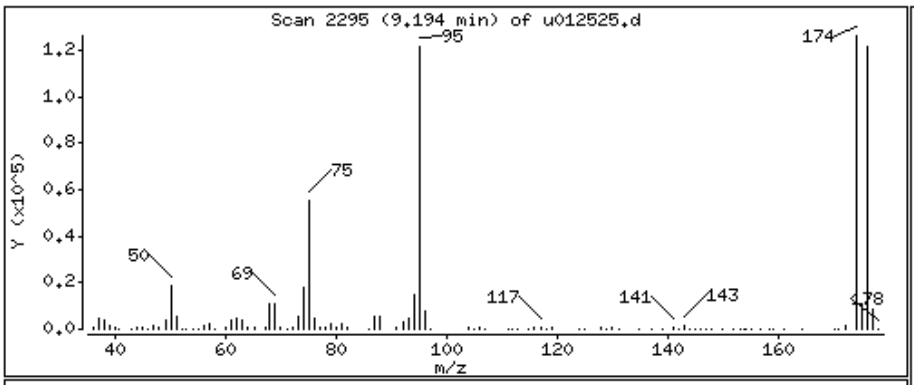
Client ID: HS24011040-09 Instrument: VOA9.i

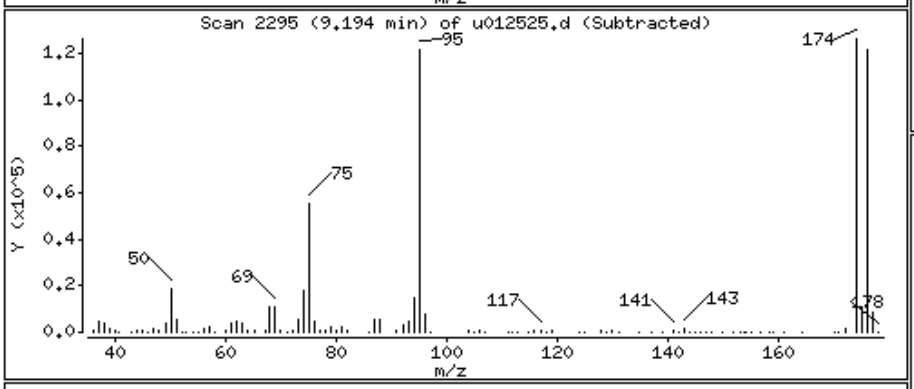
Sample Info: HS24011040-09;HS24011040-09;;;

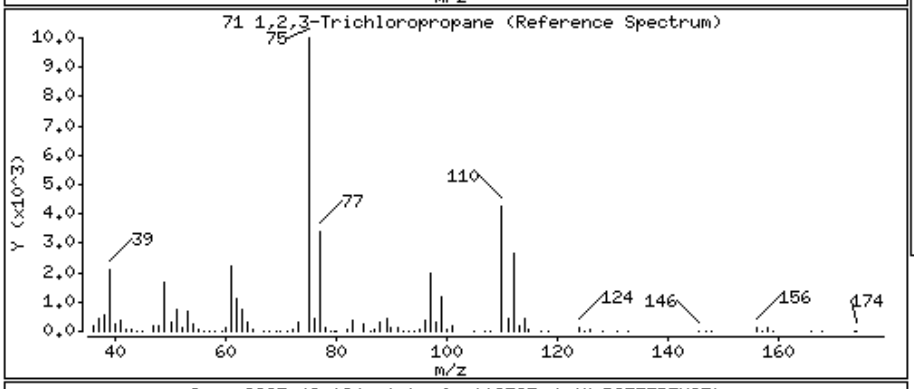
Purge Volume: 5.0 Operator: PC

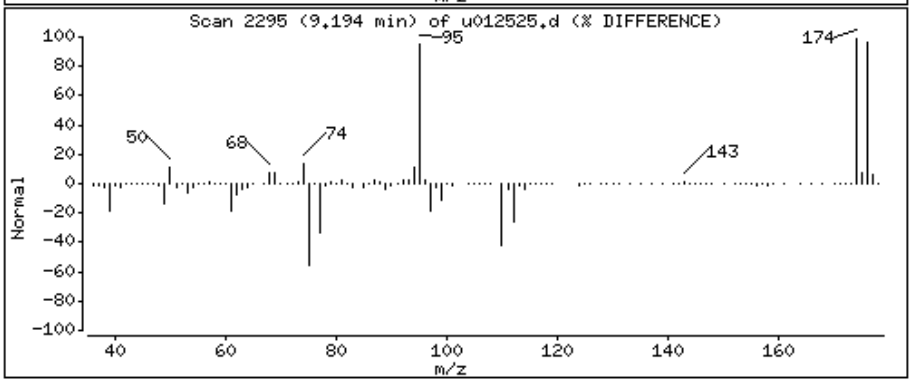
Column phase: DB624 Column diameter: 0.18

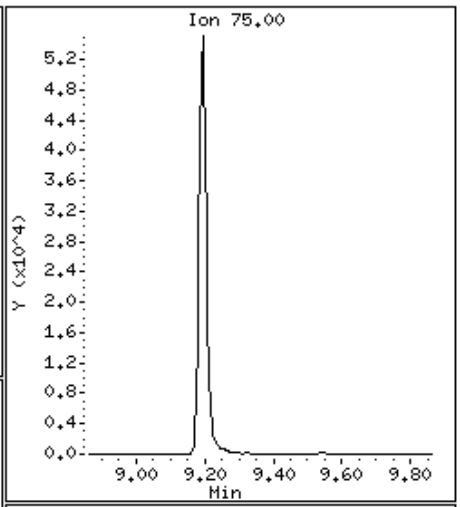
71 1,2,3-Trichloropropane Concentration: 479.61 ug/l

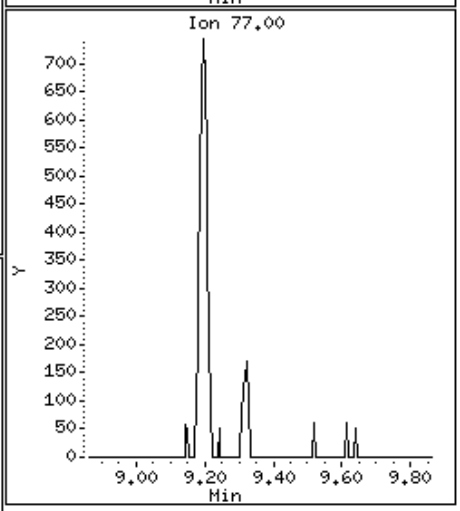












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012525.d Page 13

Date : 25-JAN-2024 19:14

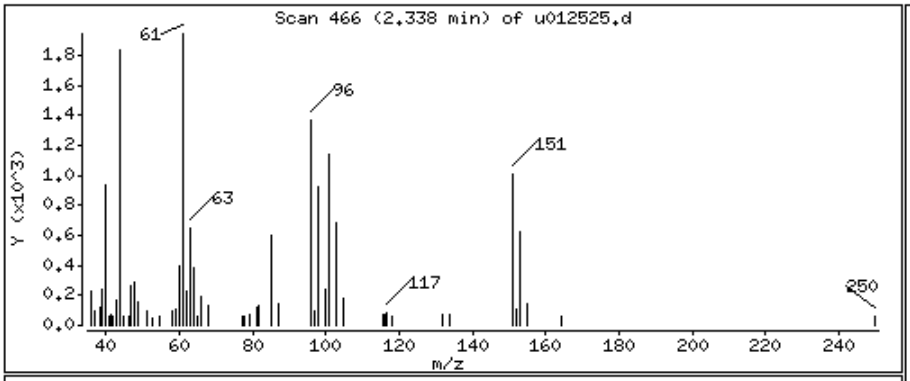
Client ID: HS24011040-09 Instrument: VOA9.i

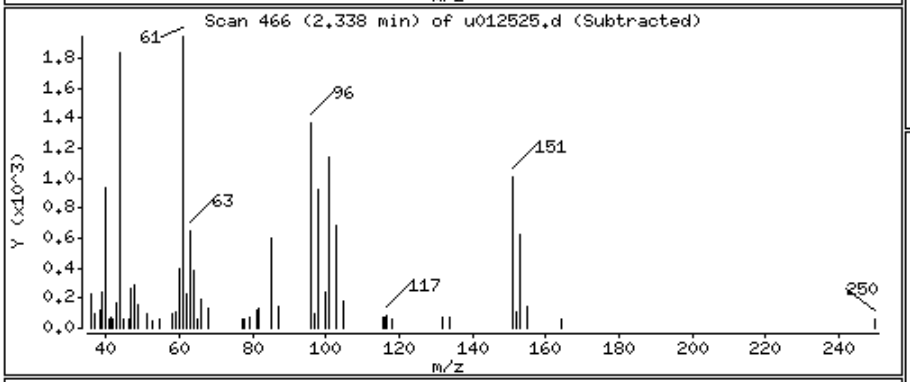
Sample Info: HS24011040-09;HS24011040-09;;;

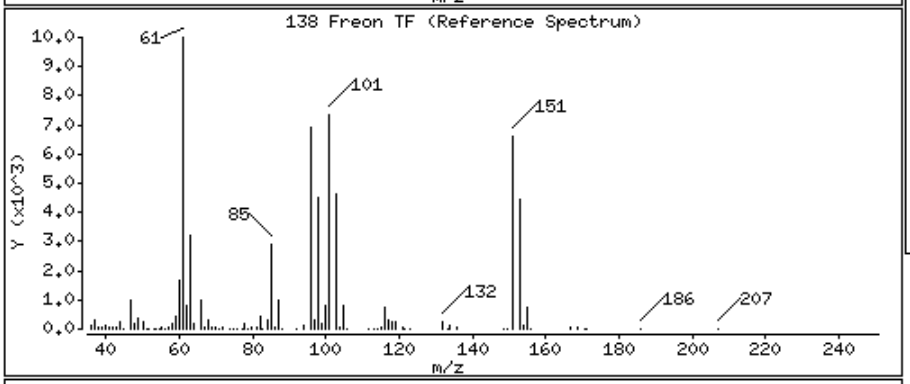
Purge Volume: 5.0 Operator: PC

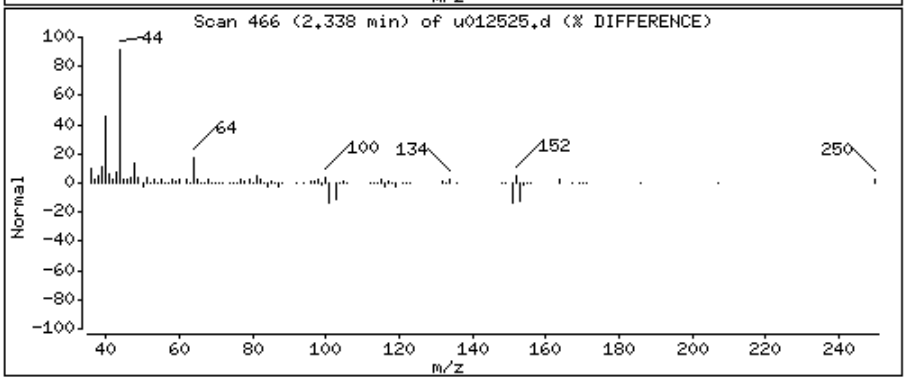
Column phase: DB624 Column diameter: 0.18

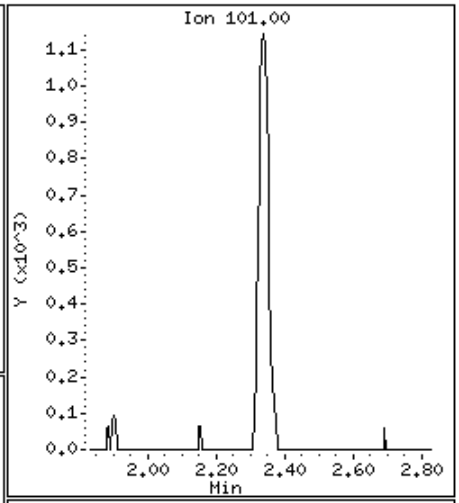
138 Freon TF Concentration: 25.84 ug/l

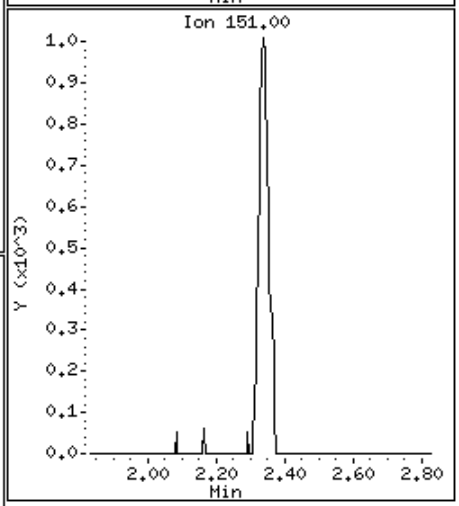












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012525.d Page 14

Date : 25-JAN-2024 19:14

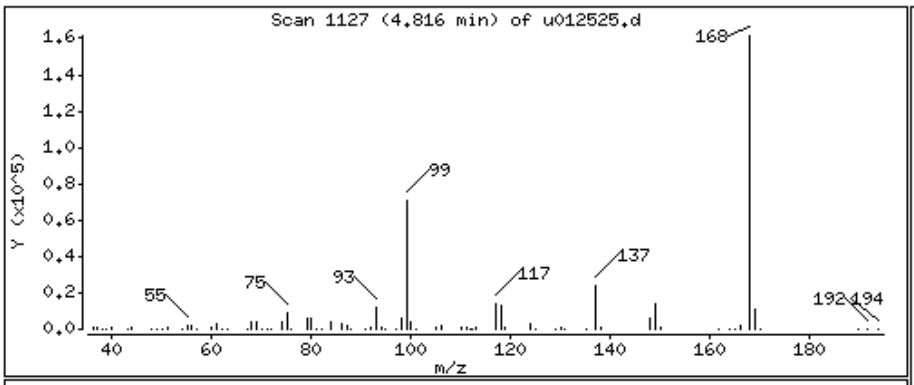
Client ID: HS24011040-09 Instrument: VOA9.i

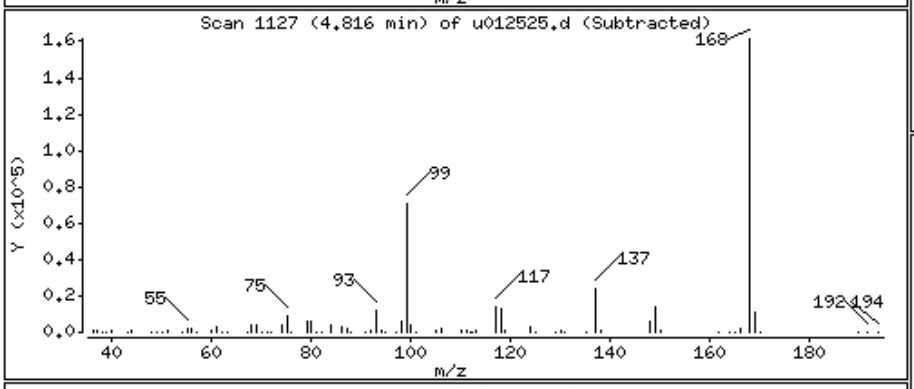
Sample Info: HS24011040-09;HS24011040-09;;;

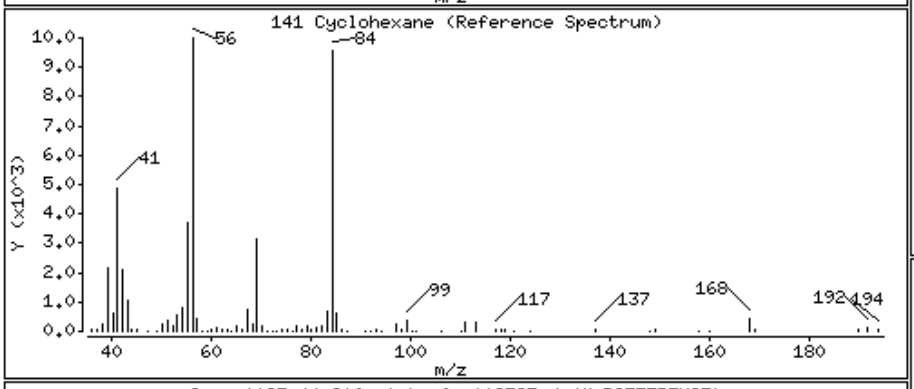
Purge Volume: 5.0 Operator: PC

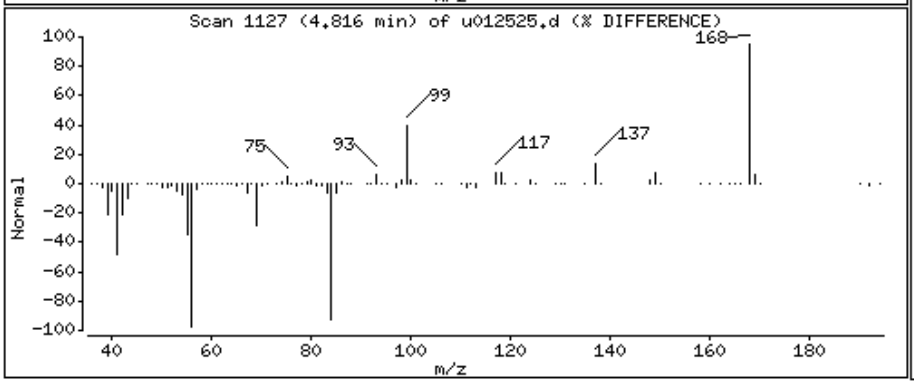
Column phase: DB624 Column diameter: 0.18

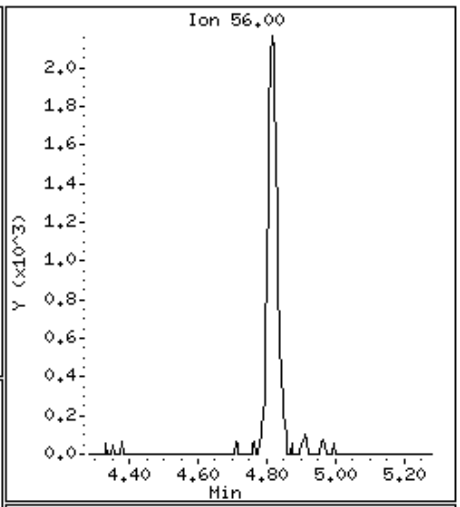
141 Cyclohexane Concentration: 23.47 ug/l

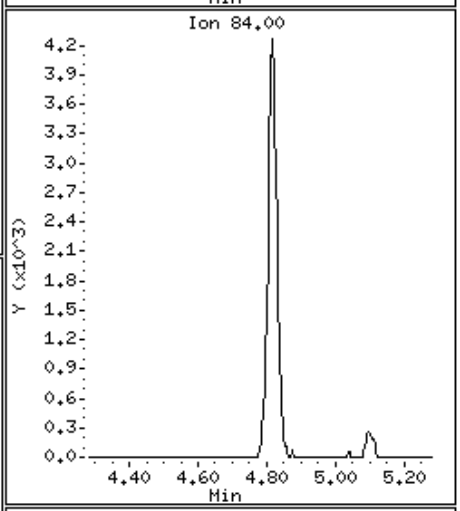


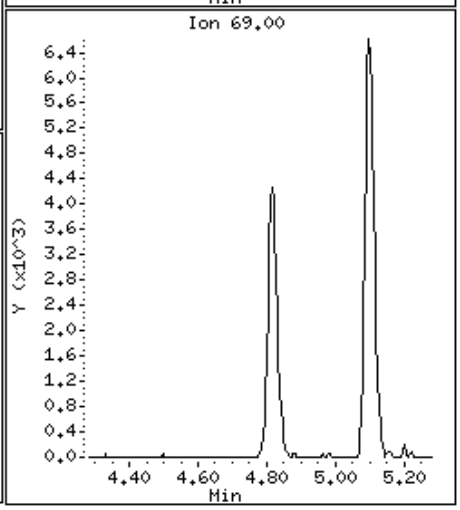












Data File : \\nahstws005\target\chem\voa9.i\u240125.b\u012525.d
Inj Date : 25-JAN-2024 19:14
InstruID : VOA9.i
LabSampID : HS24011040-09

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240125.b\U012526.D Page 1
Report Date: 01-Feb-2024 14:20

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240125.b\U012526.D
Lab Smp Id: HS24011040-11 Client Smp ID: HS24011040-11
Inj Date : 25-JAN-2024 19:36
Operator : PC Inst ID: VOA9.i
Smp Info : HS24011040-11;HS24011040-11;;;
Misc Info : V9;WATER;0;5;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240125.b\8260C.m
Meth Date : 01-Feb-2024 14:20 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 24
Dil Factor: 5.00000
Integrator: HP RTE Compound Sublist: 1040-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7066

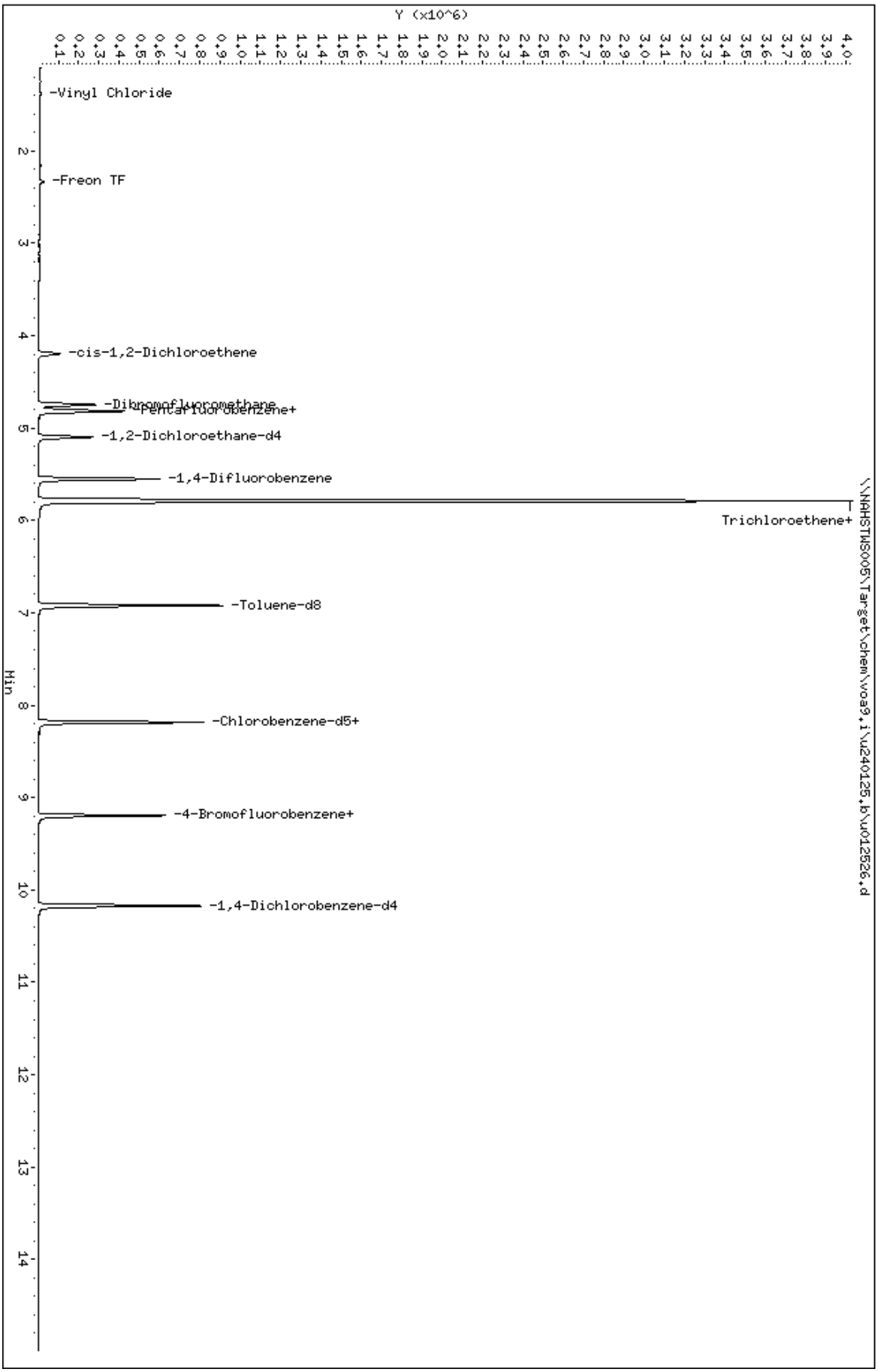
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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	4.815	4.815	(1.000)	324548	50.0000	
	2 Dichlorodifluoromethane	85	1.018	1.164	(0.211)	25430	10.4197	52.09
	3 Chloromethane	50	1.014	1.303	(0.211)	28518	7.65999	38.29
	5 Vinyl Chloride	62	1.378	1.378	(0.286)	1835	0.51594	2.57(a)
	27 cis-1,2-Dichloroethene	96	4.197	4.197	(0.872)	57988	14.4660	72.32
$	30 Dibromofluoromethane	113	4.748	4.748	(0.986)	172196	51.8815	51.88(R)
	34 Carbon Tetrachloride	117	4.815	4.913	(0.867)	26636	6.58305	32.91
$	35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	179236	47.2195	47.21(R)
*	36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	495123	50.0000	
	38 Trichloroethene	130	5.790	5.790	(1.043)	1404044	377.955	1889.77(A)
	42 1,2-Dichloropropane	63	5.786	6.007	(1.042)	3634	1.00143	5.00(a)
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	473903	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	572980	52.5217	52.52(R)
	58 1-Chlorohexane	55	8.185	8.197	(1.474)	3671	1.32222	6.61(a)
$	69 4-Bromofluorobenzene	95	9.194	9.190	(1.123)	188676	45.5650	45.56(R)
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	237617	50.0000	
	71 1,2,3-Trichloropropane	75	9.194	9.362	(0.904)	85175	18.8827	94.41
	138 Freon TF	101	2.334	2.337	(0.485)	7852	3.36420	16.82(a)
	141 Cyclohexane	56	4.811	4.785	(0.999)	4711	1.00739	5.03(a)
M	94 1,2-Dichloroethylene (total)	96				57988	16.5657	82.82

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.



Data File: \\NAHSTWS005\Target\chem\voa9,i\u240125,b\u012526,d
Date : 25-JAN-2024 19:36
Client ID: HS24011040-11
Sample Info: HS24011040-11;HS24011040-11;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9,i
Operator: PC
Column diameter: 0.18

Page 1

Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012526.d Page 2

Date : 25-JAN-2024 19:36

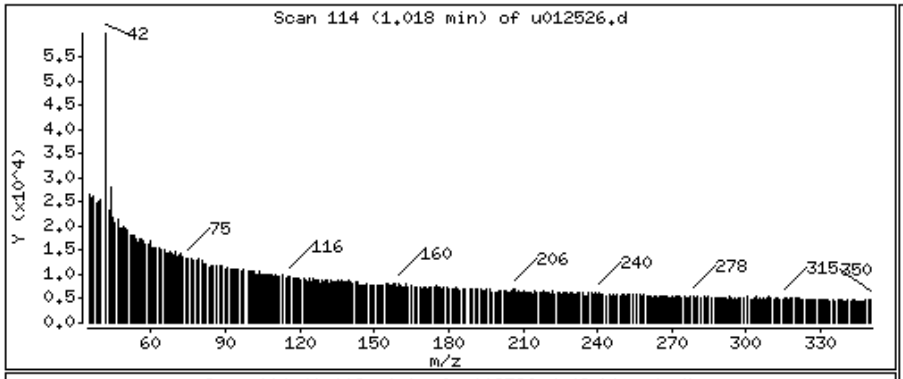
Client ID: HS24011040-11 Instrument: VOA9.i

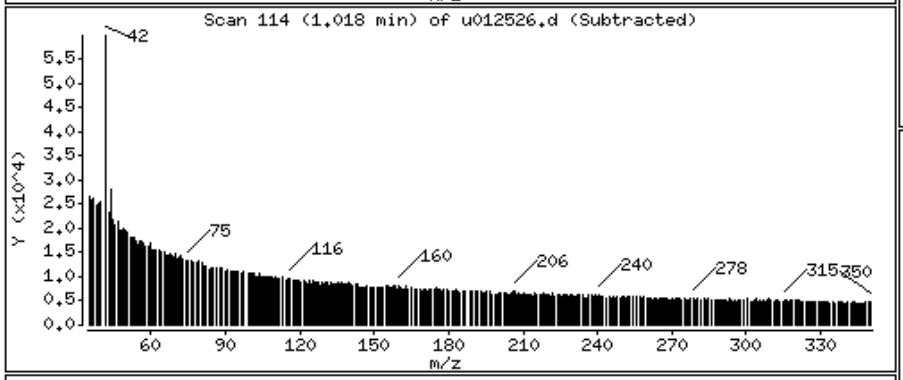
Sample Info: HS24011040-11;HS24011040-11;;;

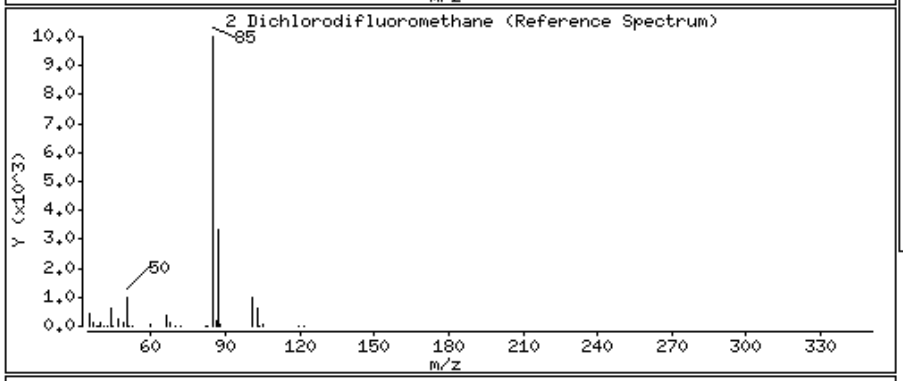
Purge Volume: 5.0 Operator: PC

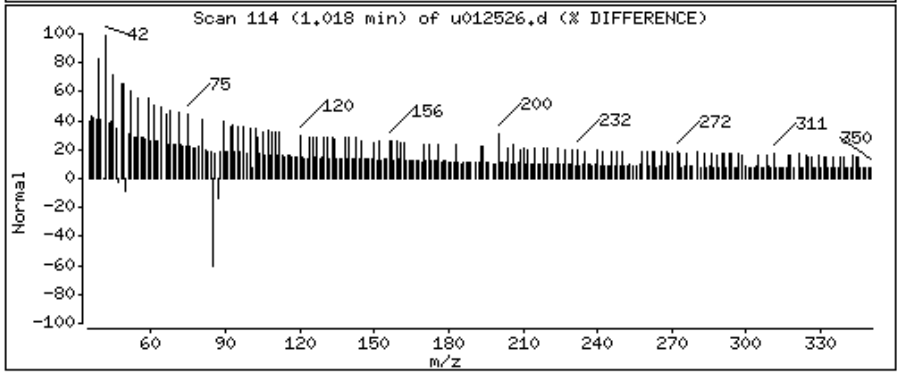
Column phase: DB624 Column diameter: 0.18

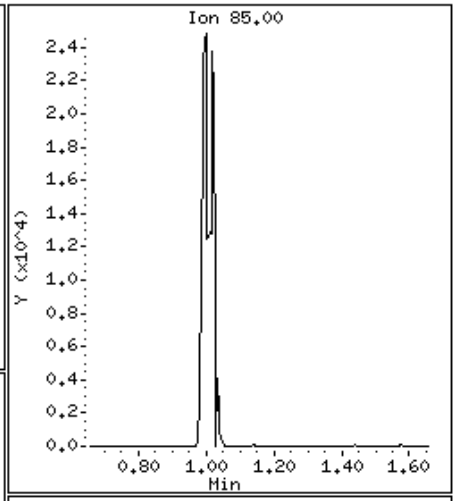
2 Dichlorodifluoromethane Concentration: 52.09 ug/l

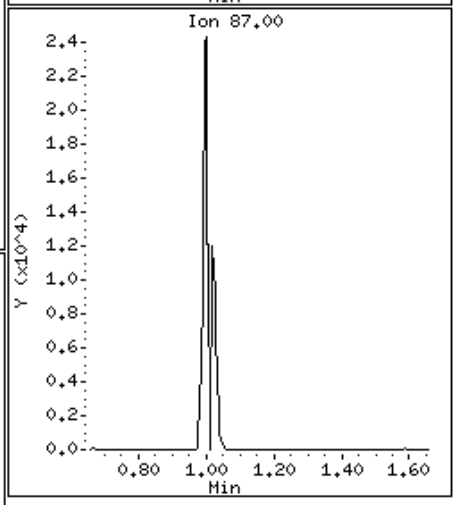












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012526.d Page 3

Date : 25-JAN-2024 19:36

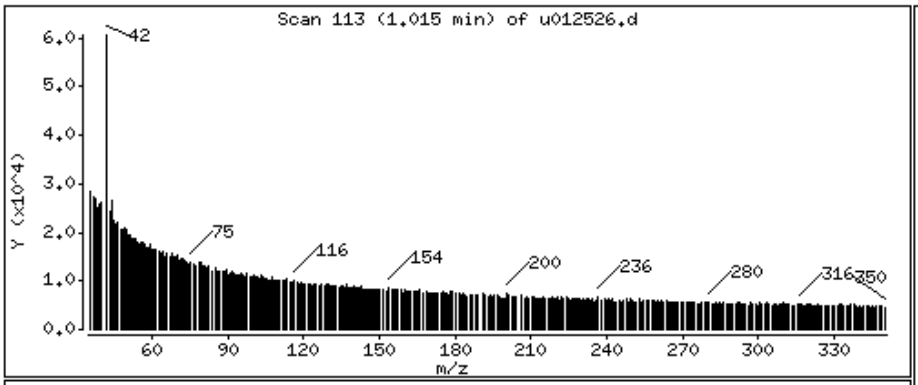
Client ID: HS24011040-11 Instrument: VOA9.i

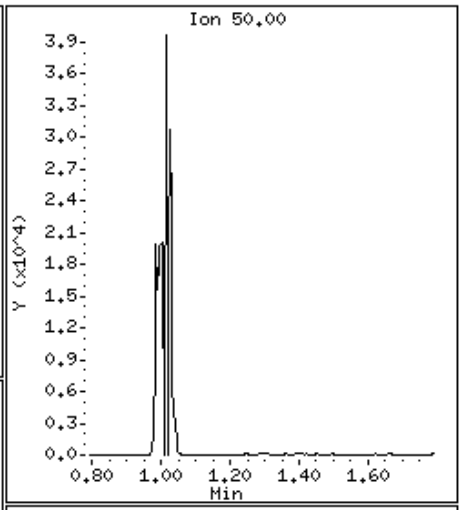
Sample Info: HS24011040-11;HS24011040-11;;;

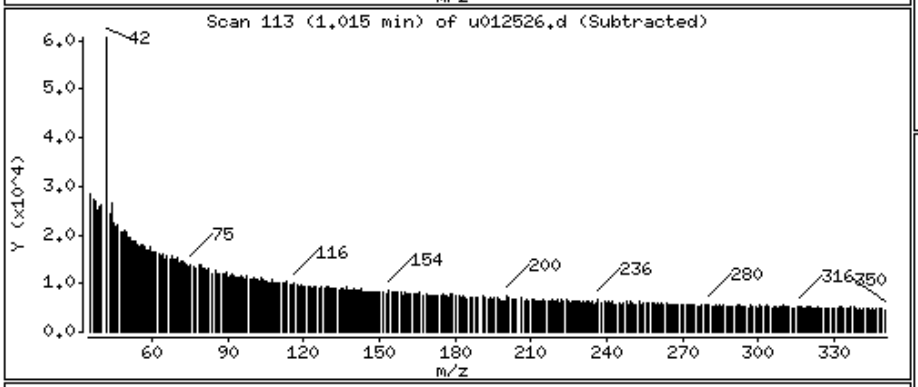
Purge Volume: 5.0 Operator: PC

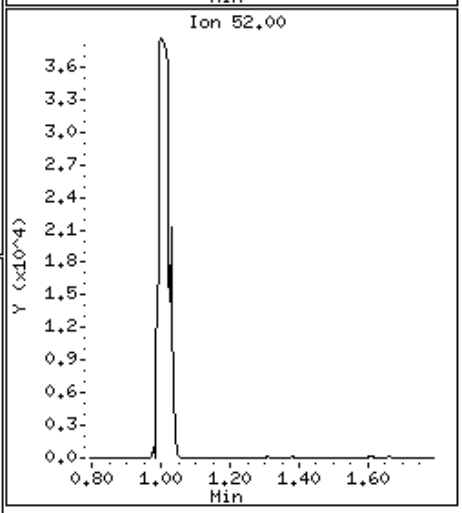
Column phase: DB624 Column diameter: 0.18

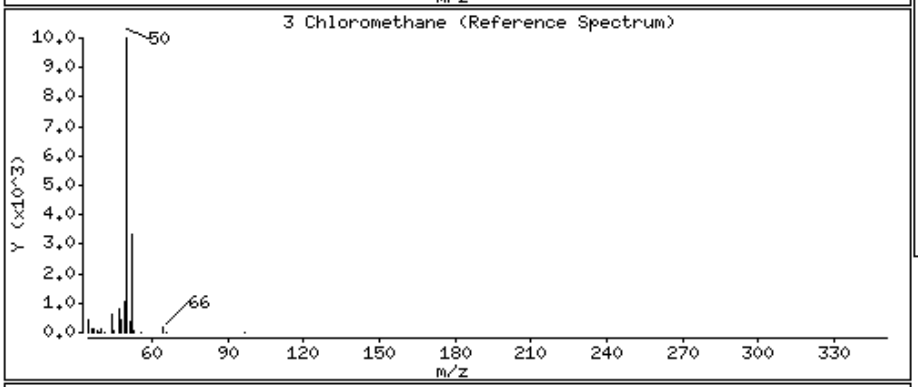
3 Chloromethane Concentration: 38.29 ug/l

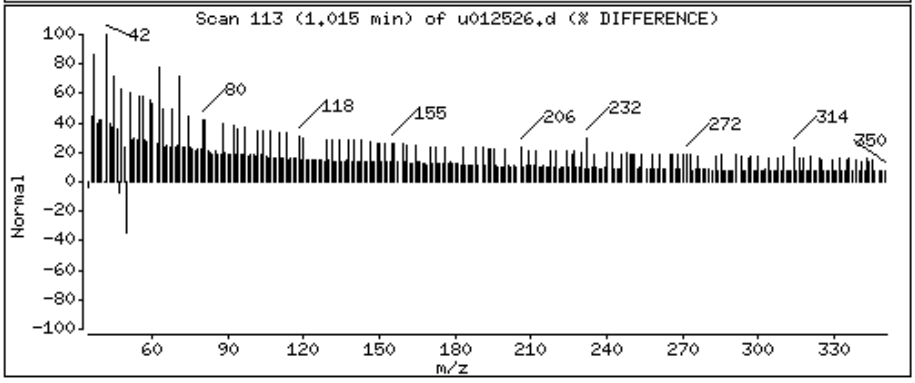












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012526.d Page 4

Date : 25-JAN-2024 19:36

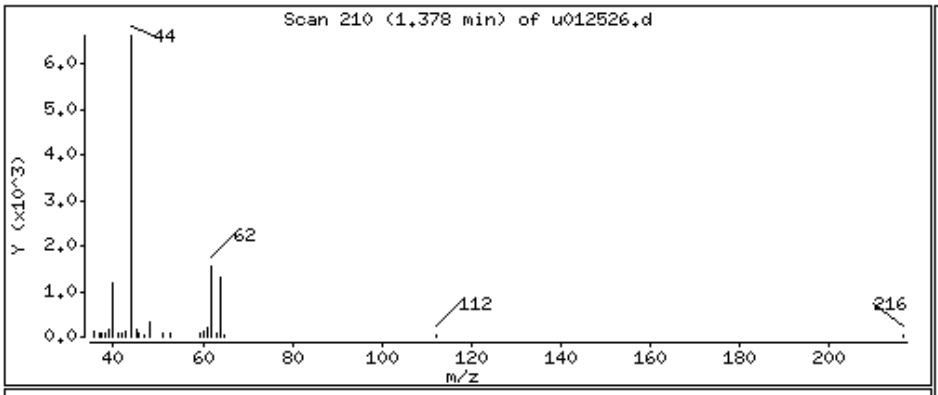
Client ID: HS24011040-11 Instrument: VOA9.i

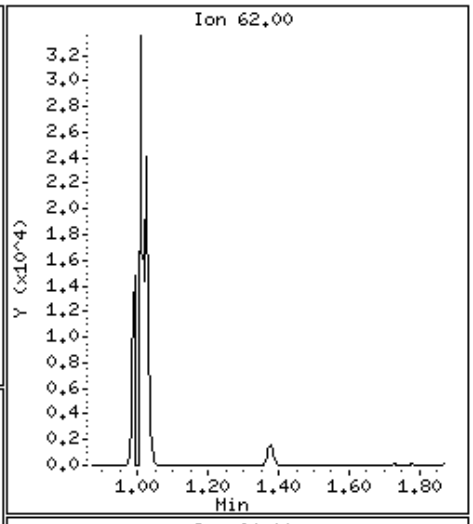
Sample Info: HS24011040-11;HS24011040-11;;;

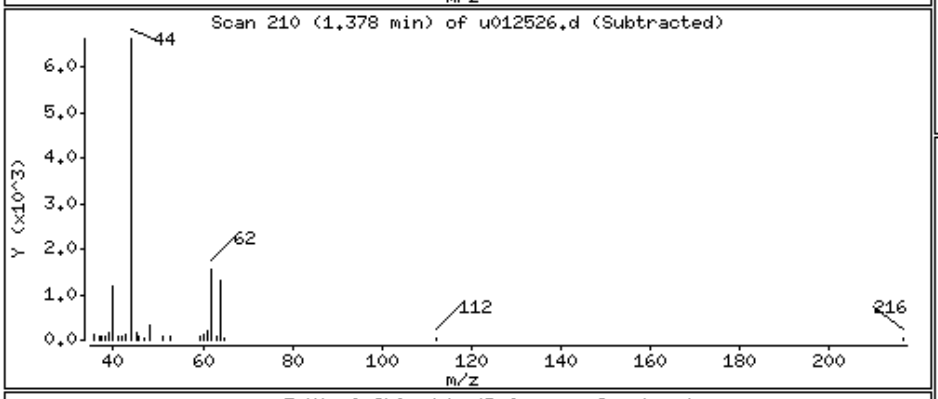
Purge Volume: 5.0 Operator: PC

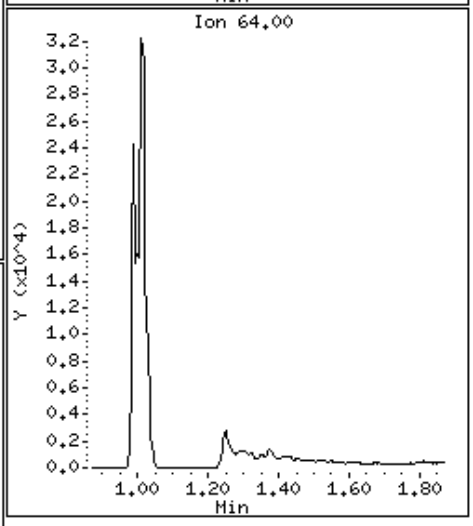
Column phase: DB624 Column diameter: 0.18

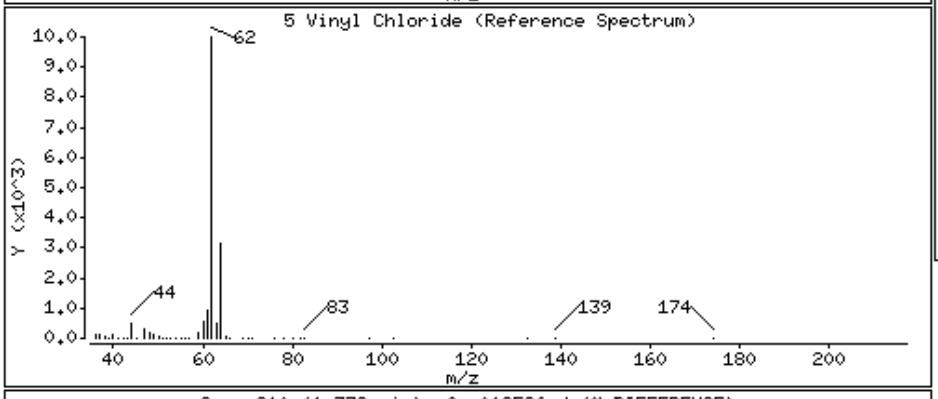
5 Vinyl Chloride Concentration: 2.57 ug/l

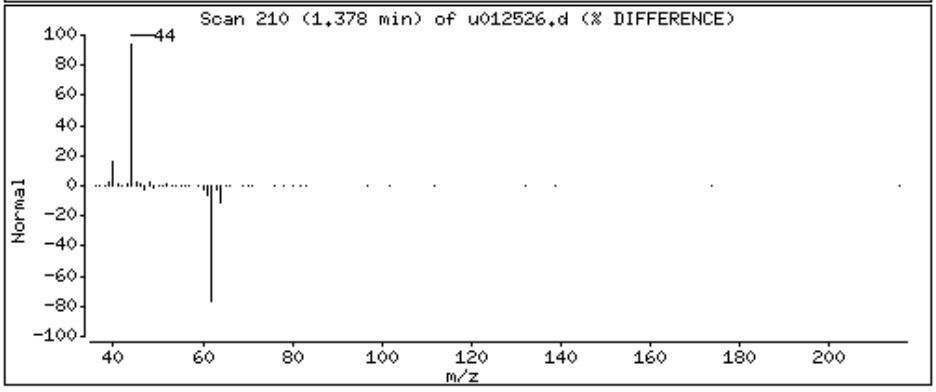












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012526.d Page 5

Date : 25-JAN-2024 19:36

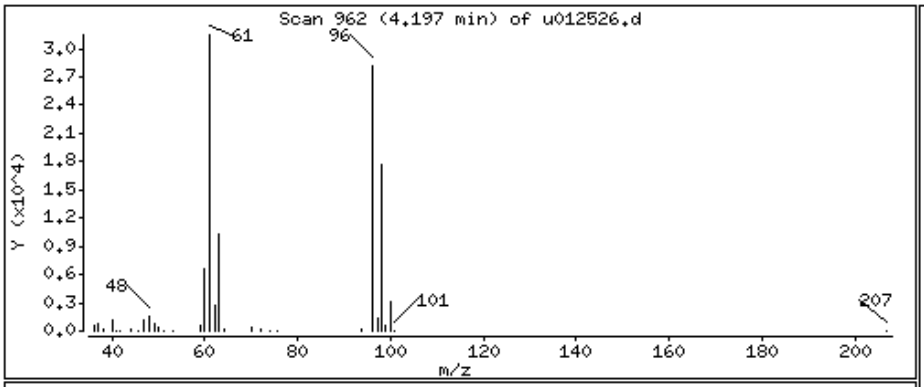
Client ID: HS24011040-11 Instrument: VOA9.i

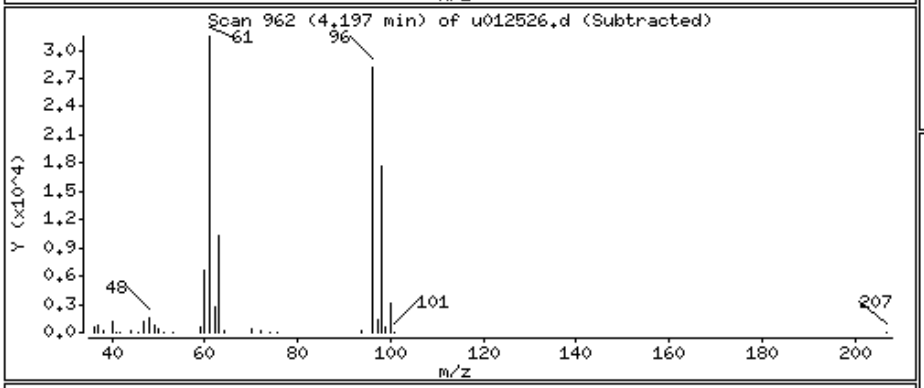
Sample Info: HS24011040-11;HS24011040-11;;;

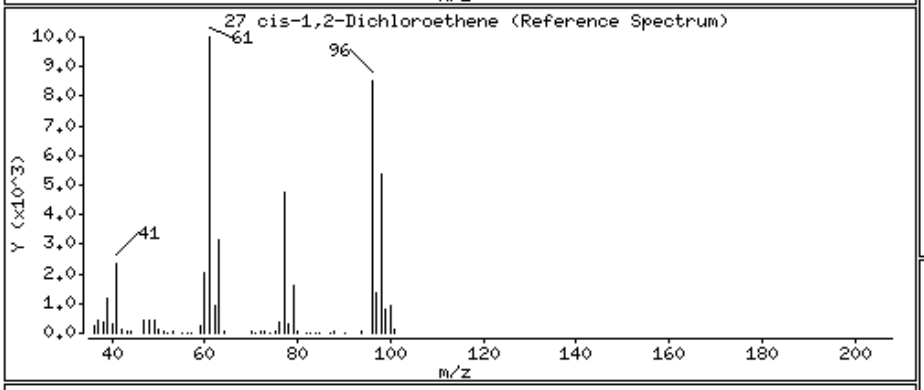
Purge Volume: 5.0 Operator: PC

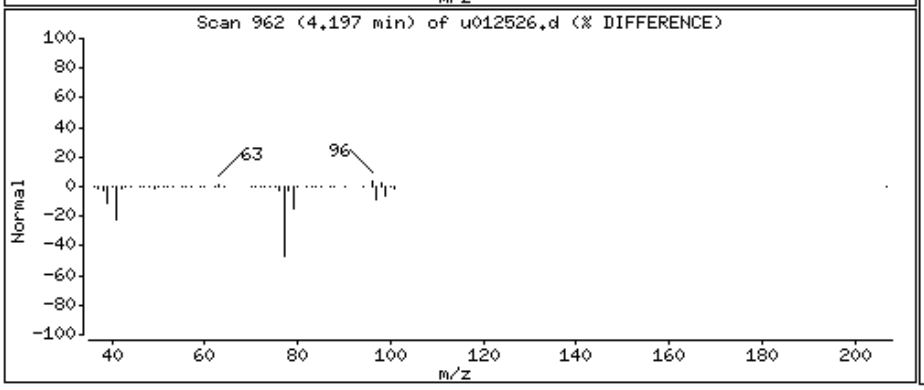
Column phase: DB624 Column diameter: 0.18

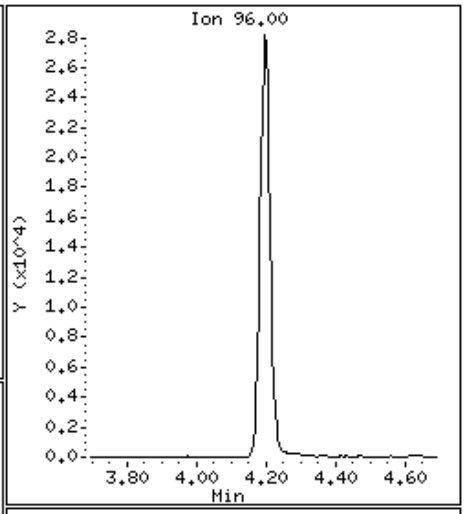
27 cis-1,2-Dichloroethene Concentration: 72.32 ug/l

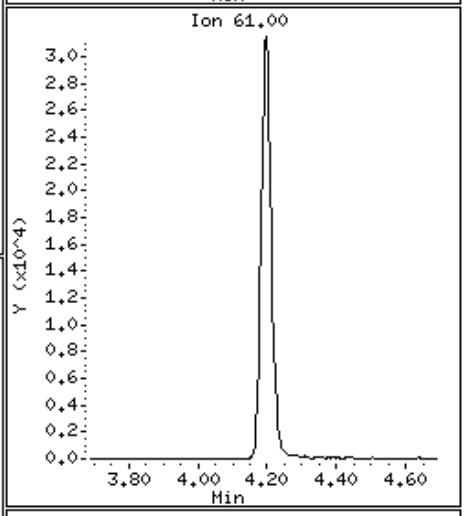


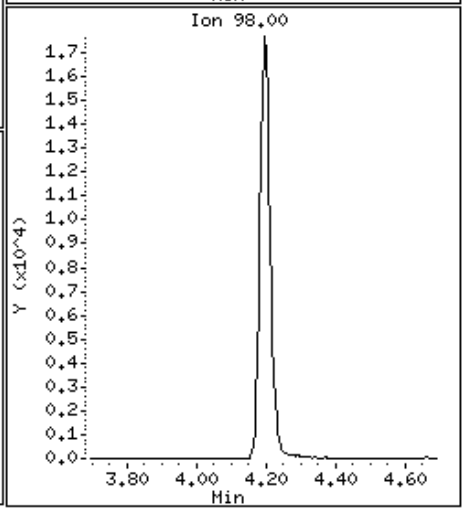












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012526.d Page 6

Date : 25-JAN-2024 19:36

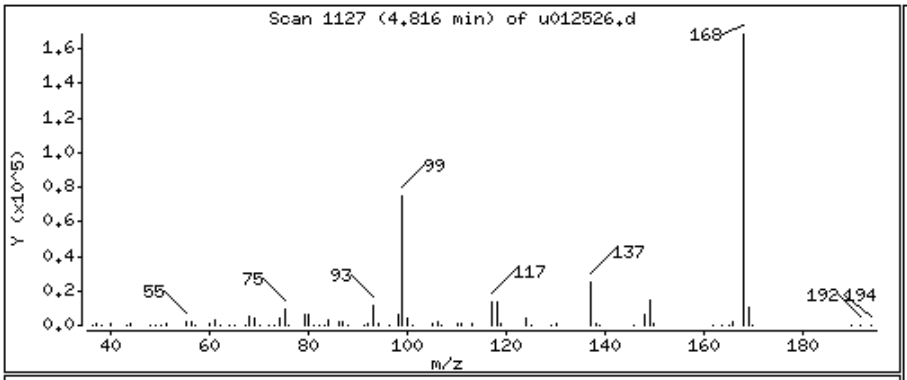
Client ID: HS24011040-11 Instrument: VOA9.i

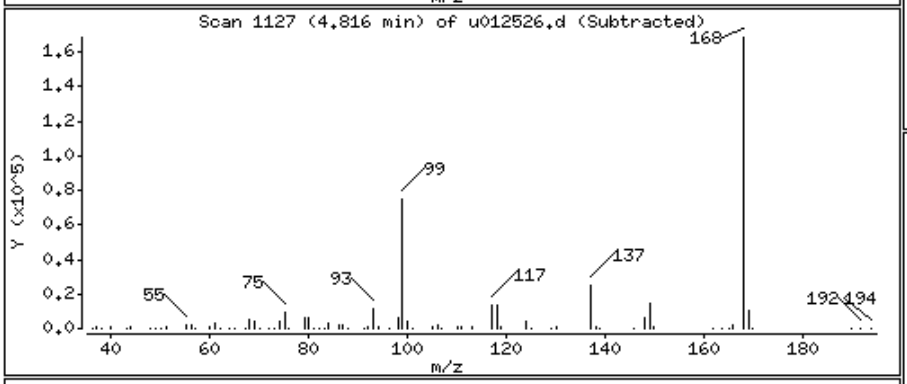
Sample Info: HS24011040-11;HS24011040-11;;;

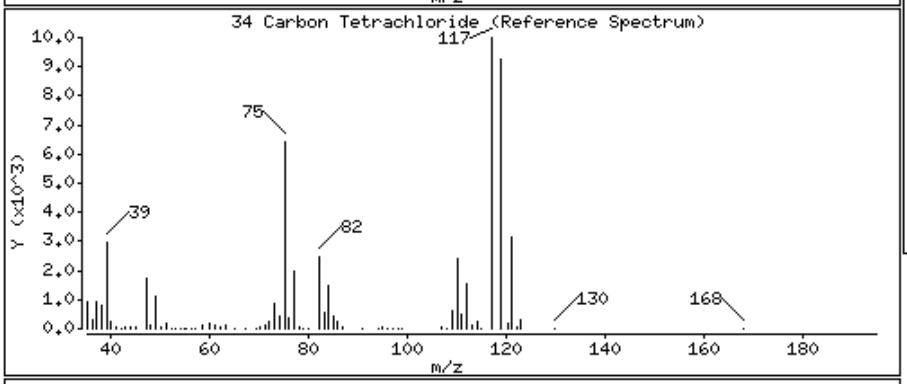
Purge Volume: 5.0 Operator: PC

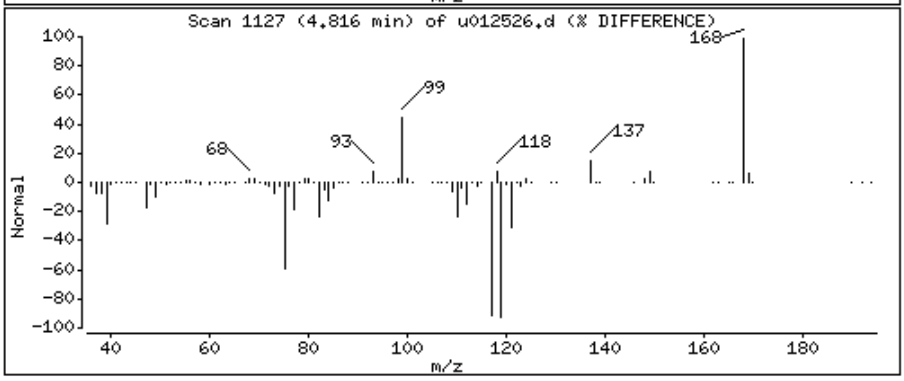
Column phase: DB624 Column diameter: 0.18

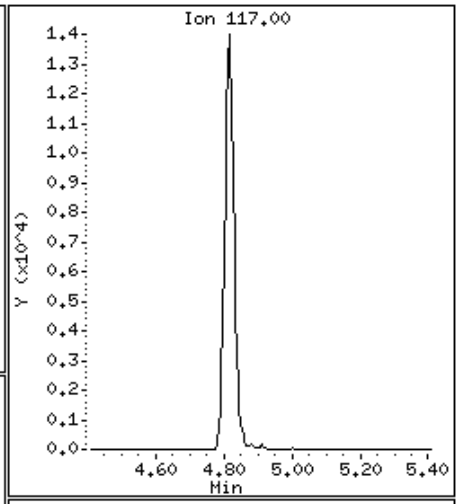
34 Carbon Tetrachloride Concentration: 32.91 ug/l

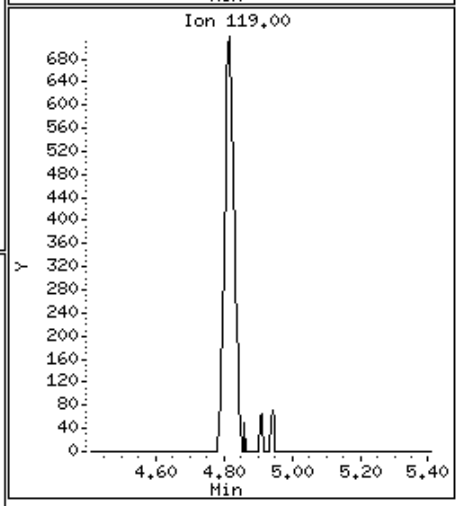












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012526.d Page 7

Date : 25-JAN-2024 19:36

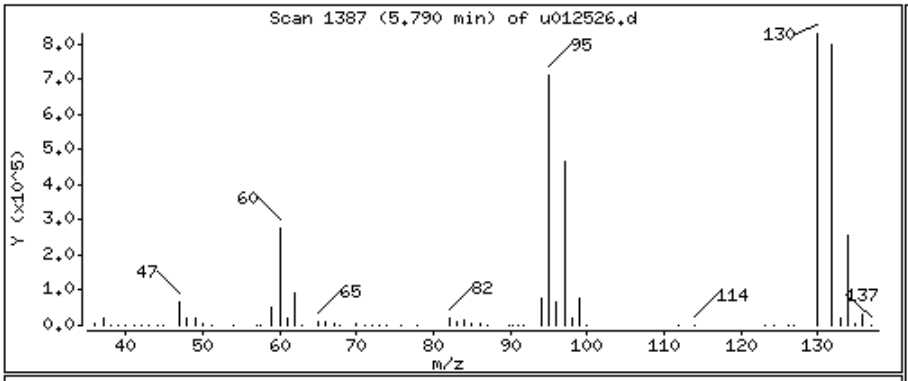
Client ID: HS24011040-11 Instrument: VOA9.i

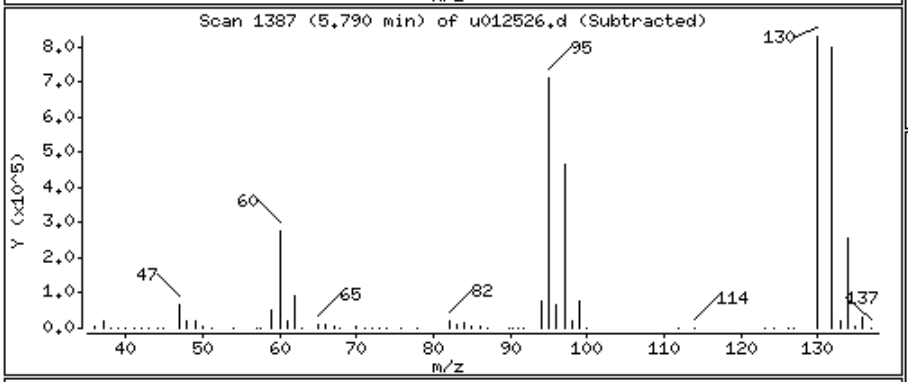
Sample Info: HS24011040-11;HS24011040-11;;;

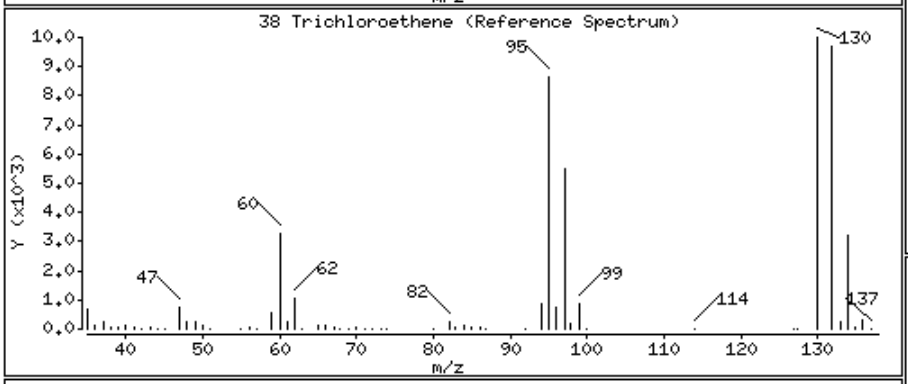
Purge Volume: 5.0 Operator: PC

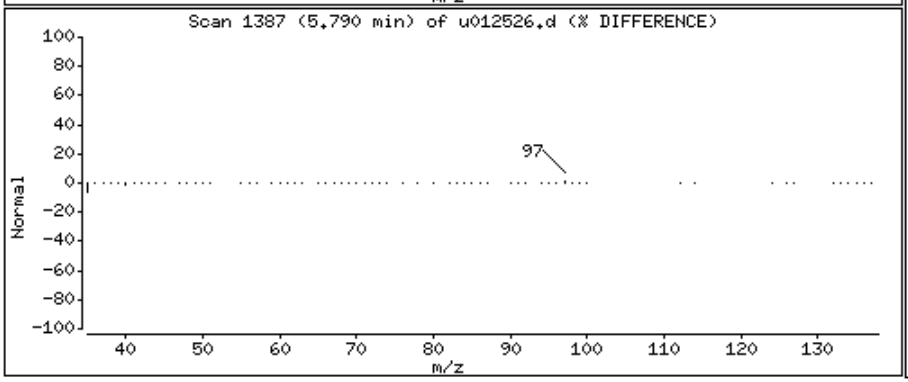
Column phase: DB624 Column diameter: 0.18

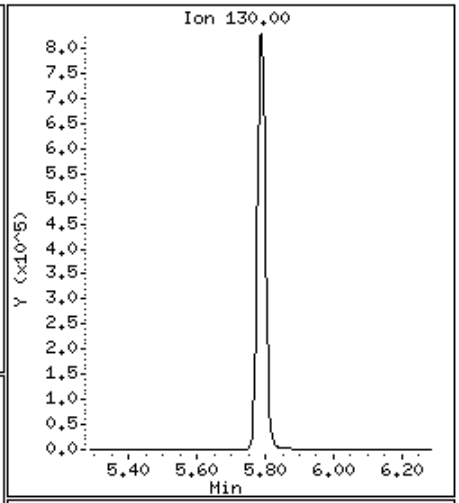
38 Trichloroethene Concentration: 1889.77 ug/l

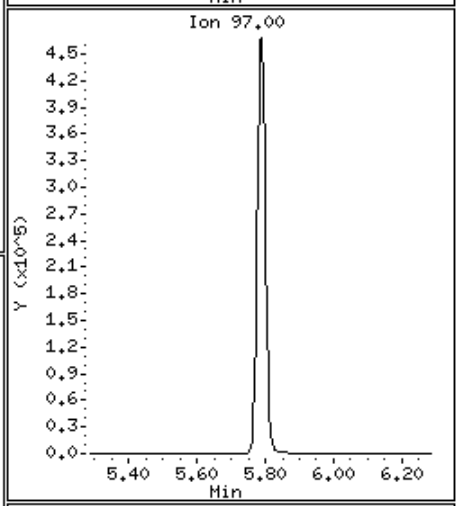


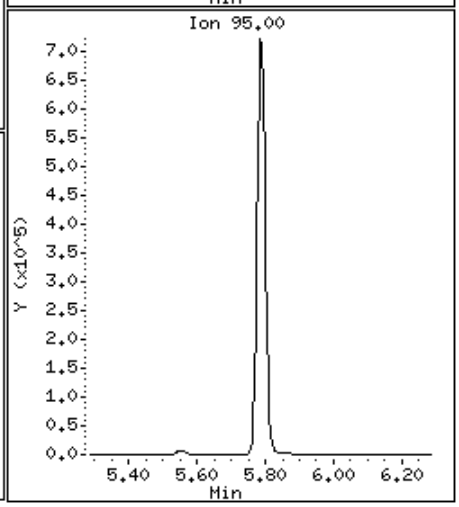












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012526.d Page 8

Date : 25-JAN-2024 19:36

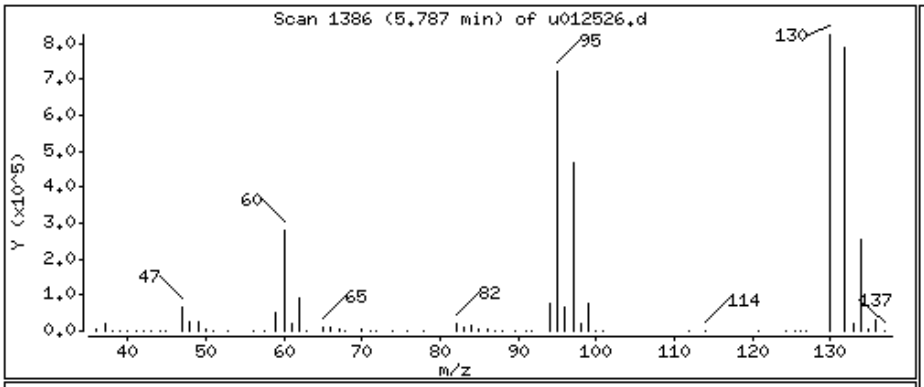
Client ID: HS24011040-11 Instrument: VOA9.i

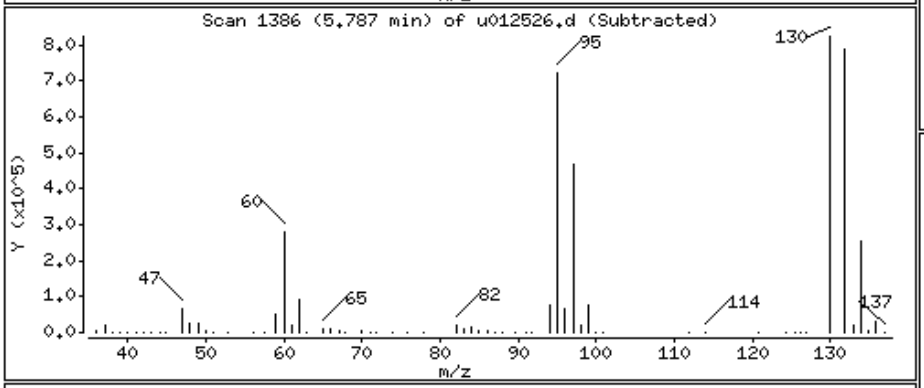
Sample Info: HS24011040-11;HS24011040-11;;;

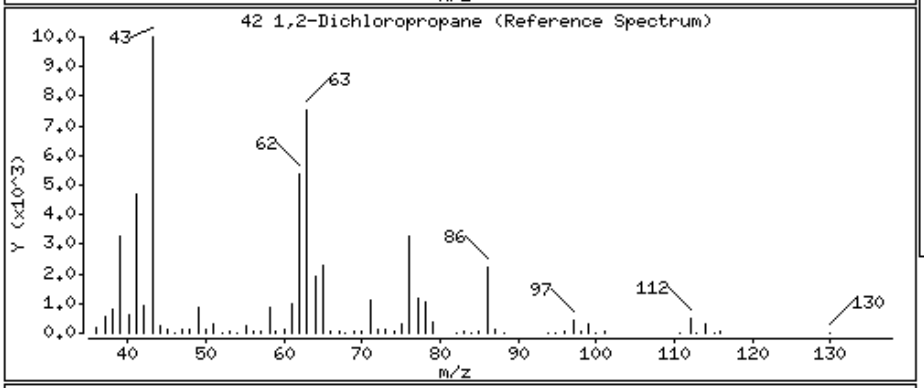
Purge Volume: 5.0 Operator: PC

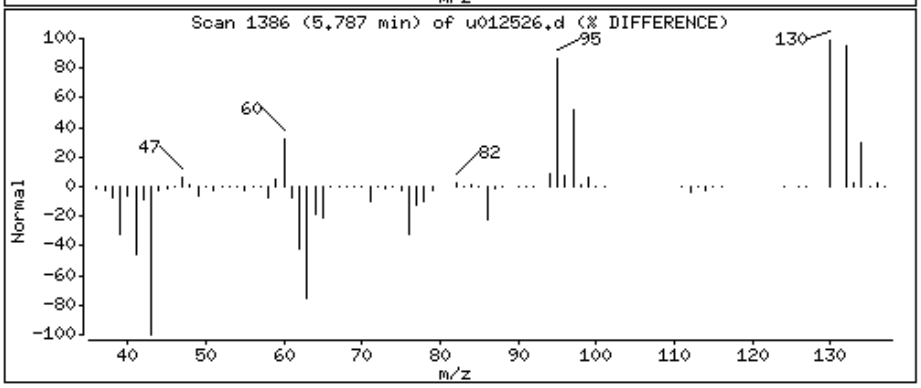
Column phase: DB624 Column diameter: 0.18

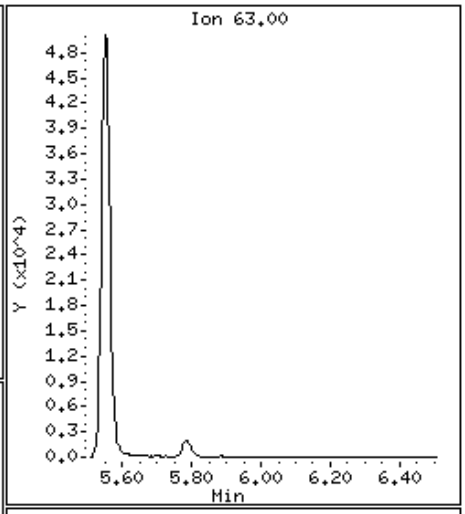
42 1,2-Dichloropropane Concentration: 5.00 ug/l

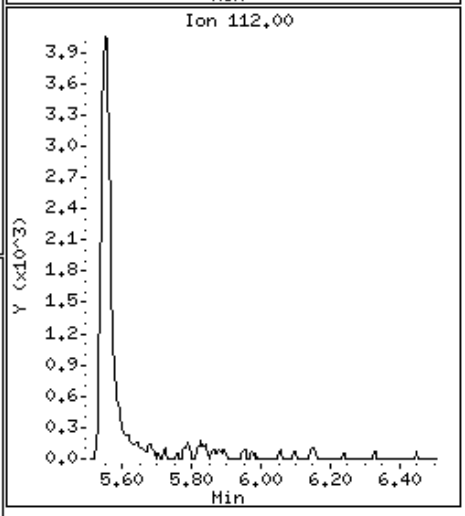












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012526.d Page 9

Date : 25-JAN-2024 19:36

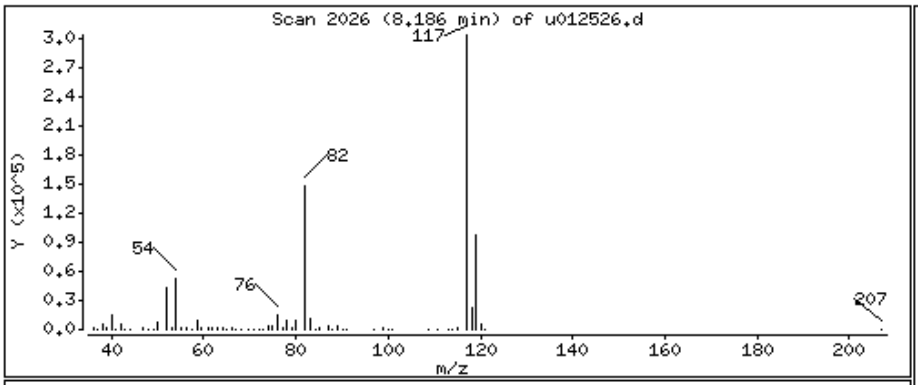
Client ID: HS24011040-11 Instrument: VOA9.i

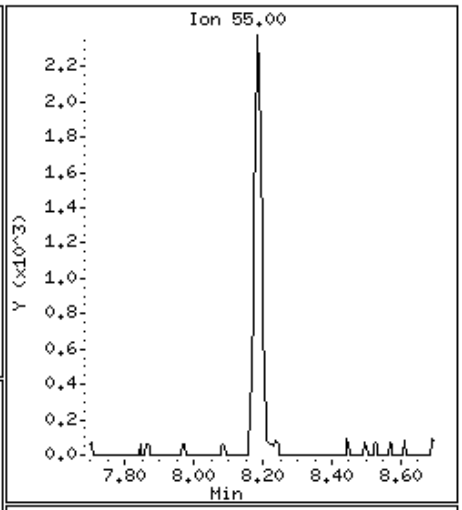
Sample Info: HS24011040-11;HS24011040-11;;;

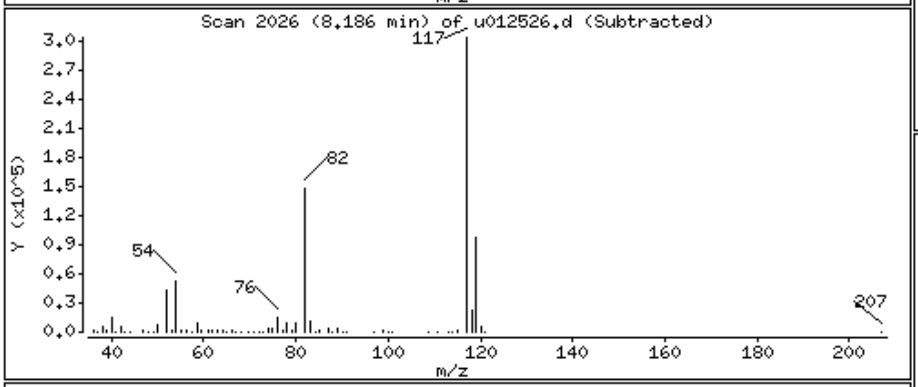
Purge Volume: 5.0 Operator: PC

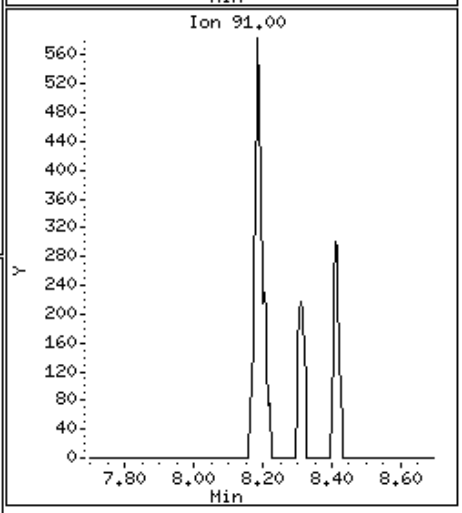
Column phase: DB624 Column diameter: 0.18

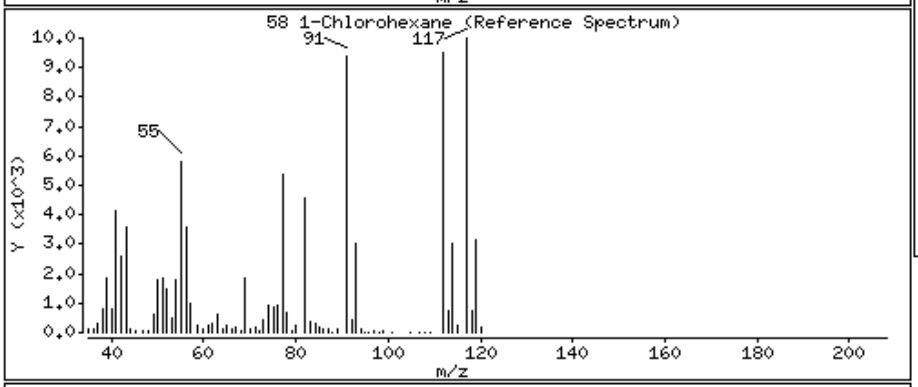
58 1-Chlorohexane Concentration: 6.61 ug/l

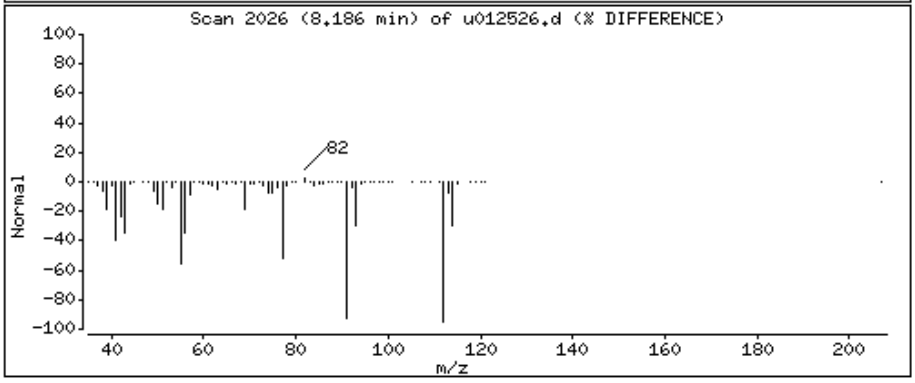












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012526.d Page 10

Date : 25-JAN-2024 19:36

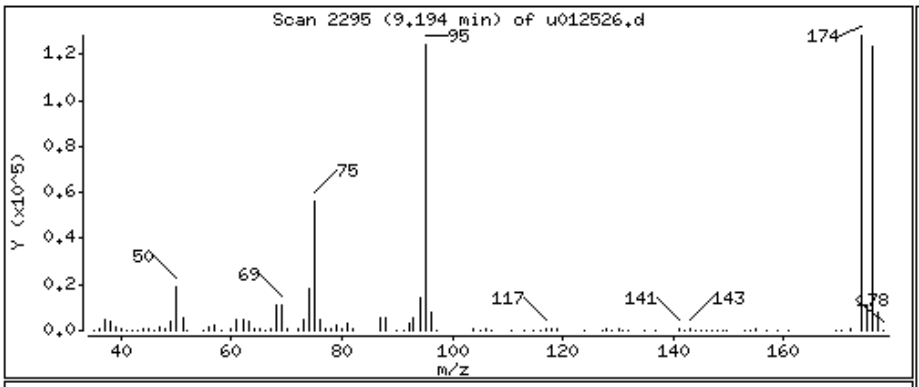
Client ID: HS24011040-11 Instrument: VOA9.i

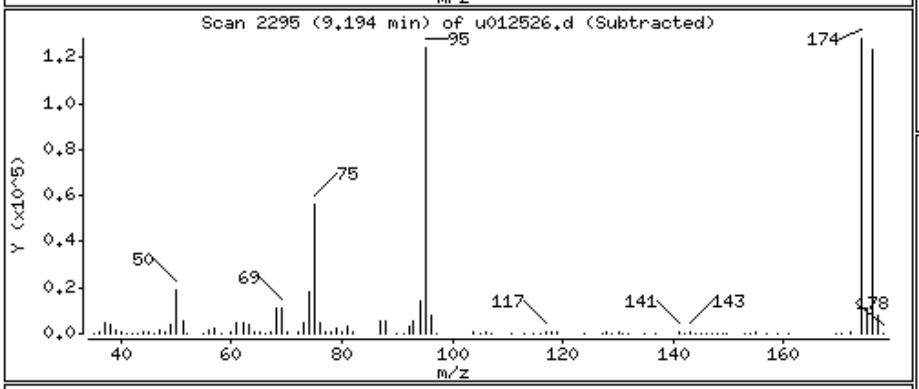
Sample Info: HS24011040-11;HS24011040-11;;;

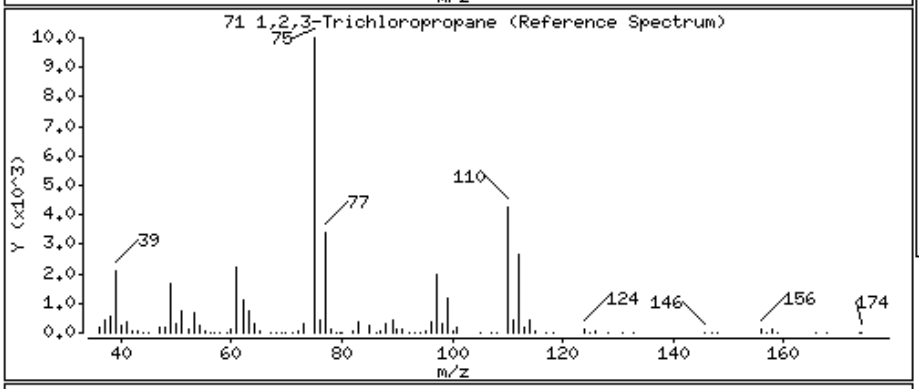
Purge Volume: 5.0 Operator: PC

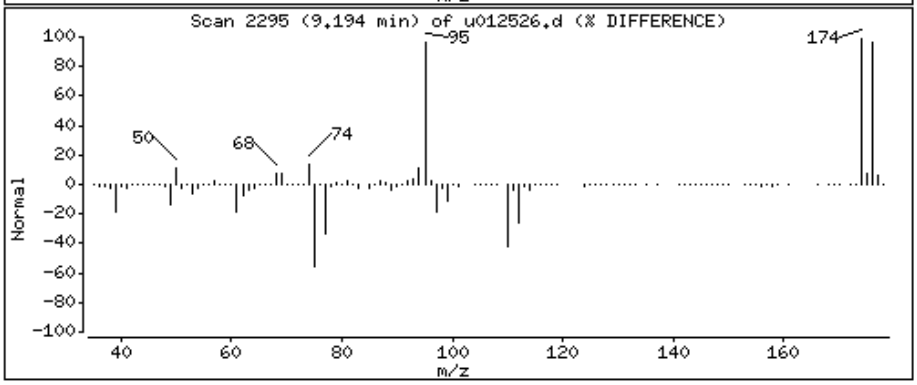
Column phase: DB624 Column diameter: 0.18

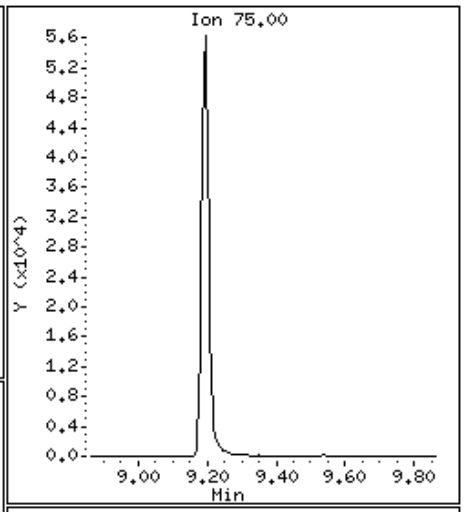
71 1,2,3-Trichloropropane Concentration: 94.41 ug/l

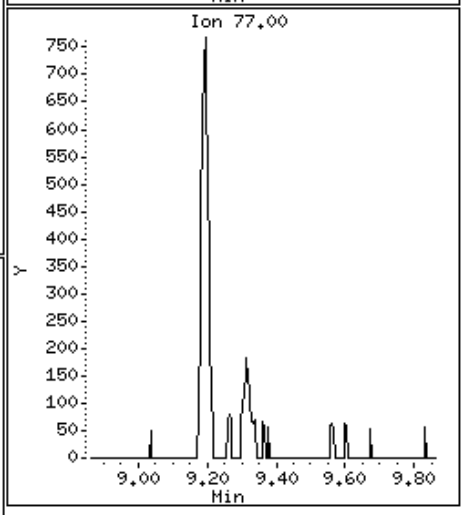












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012526.d Page 11

Date : 25-JAN-2024 19:36

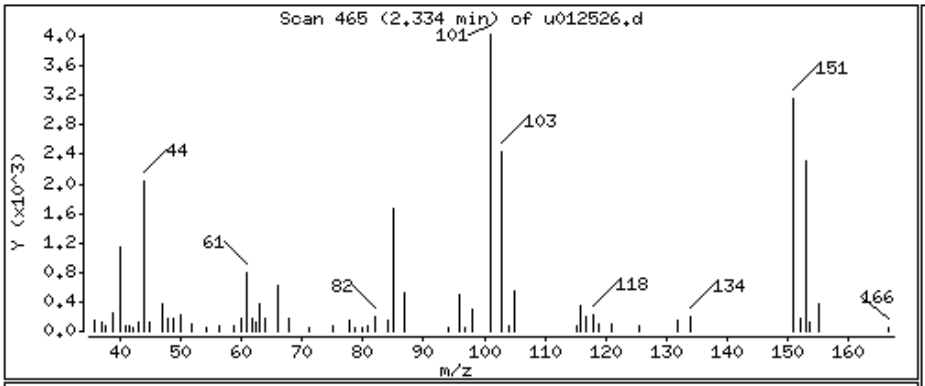
Client ID: HS24011040-11 Instrument: VOA9.i

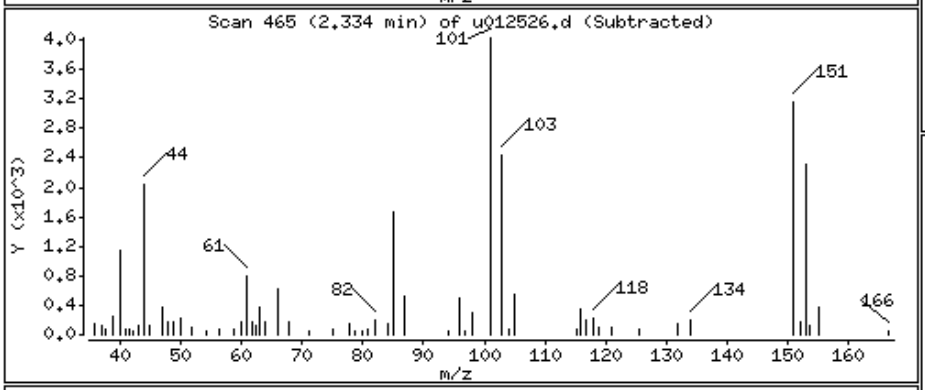
Sample Info: HS24011040-11;HS24011040-11;;;

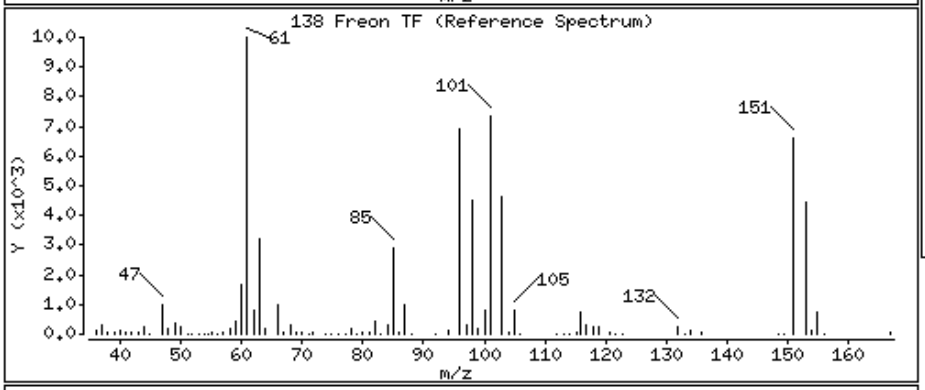
Purge Volume: 5.0 Operator: PC

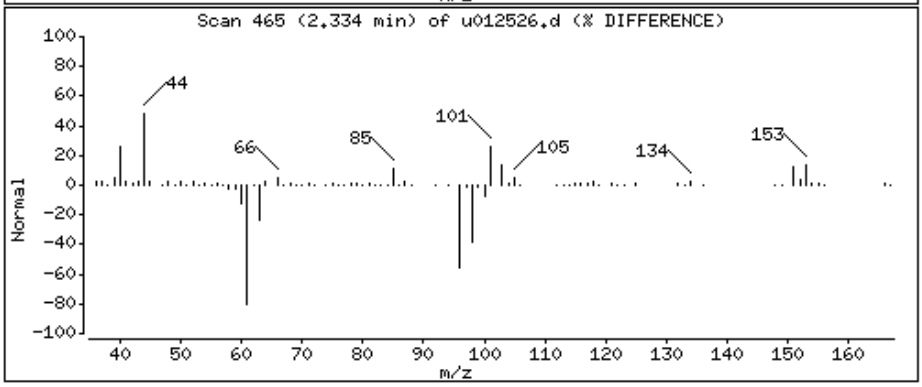
Column phase: DB624 Column diameter: 0.18

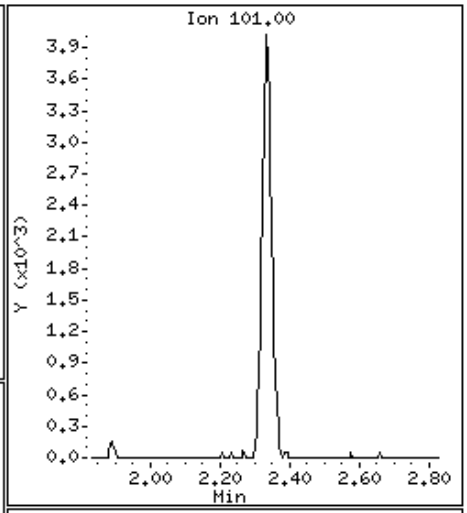
138 Freon TF Concentration: 16.82 ug/l

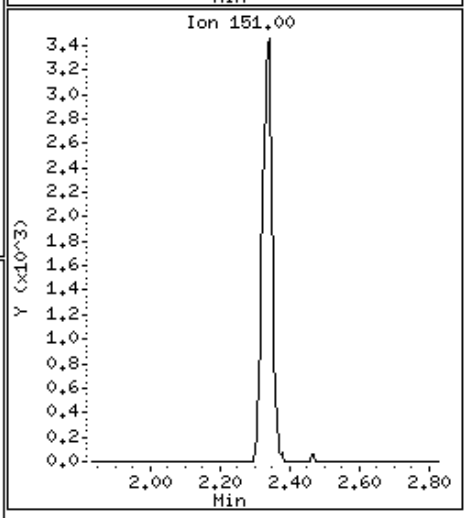












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012526.d Page 12

Date : 25-JAN-2024 19:36

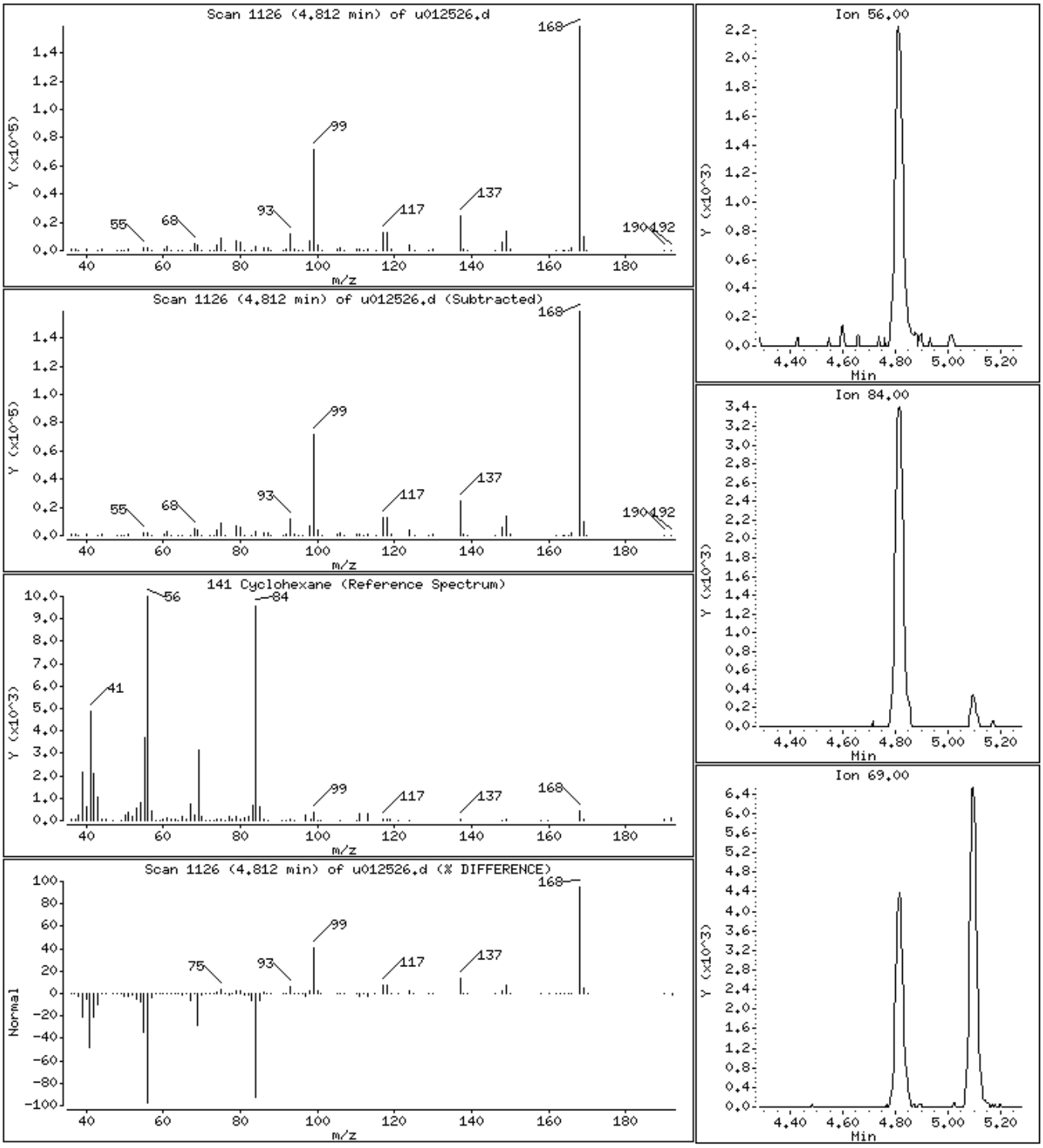
Client ID: HS24011040-11 Instrument: VOA9.i

Sample Info: HS24011040-11;HS24011040-11;;;

Purge Volume: 5.0 Operator: PC

Column phase: DB624 Column diameter: 0.18

141 Cyclohexane Concentration: 5.03 ug/l



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Inj Date : 25-JAN-2024 19:36
InstruID : VOA9.i
LabSampID : HS24011040-11

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240125.b\U012527.D Page 1
Report Date: 01-Feb-2024 14:20

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240125.b\U012527.D
Lab Smp Id: HS24011040-12 Client Smp ID: HS24011040-12
Inj Date : 25-JAN-2024 19:58
Operator : PC Inst ID: VOA9.i
Smp Info : HS24011040-12;HS24011040-12;;;
Misc Info : V9;WATER;0;5;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240125.b\8260C.m
Meth Date : 01-Feb-2024 14:20 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 25
Dil Factor: 5.00000
Integrator: HP RTE Compound Sublist: 1040-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7066

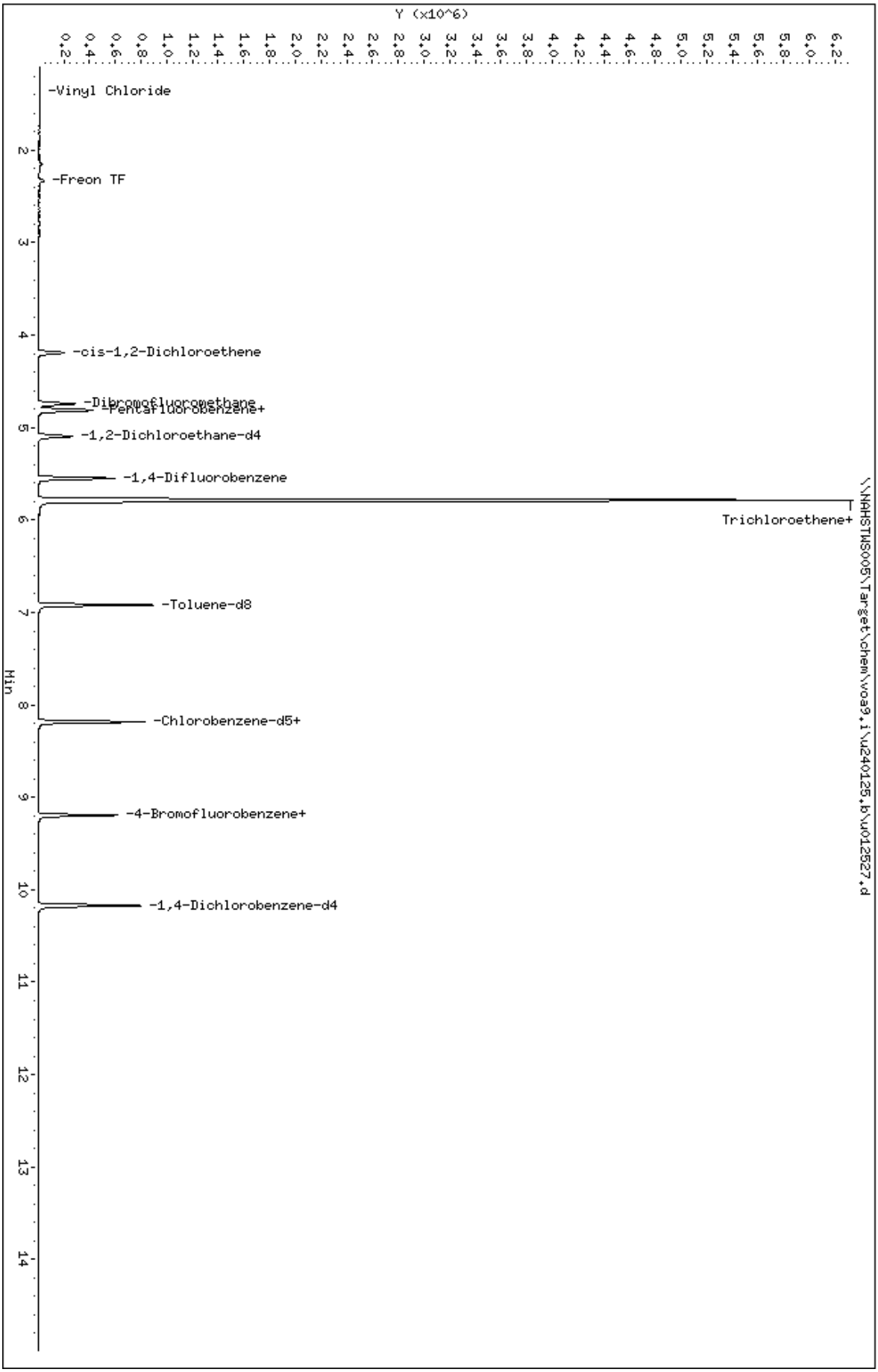
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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

			QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
*	1	Pentafluorobenzene	168	4.811	4.815	(1.000)	322940	50.0000	
	2	Dichlorodifluoromethane	85	1.014	1.164	(0.211)	25566	10.5186	52.59
	3	Chloromethane	50	1.006	1.303	(0.209)	51395	13.8735	69.36
	5	Vinyl Chloride	62	1.370	1.378	(0.285)	4071	1.15033	5.75(a)
	27	cis-1,2-Dichloroethene	96	4.193	4.197	(0.871)	109832	27.5357	137.67
$	30	Dibromofluoromethane	113	4.744	4.748	(0.986)	171223	51.8445	51.84(R)
	34	Carbon Tetrachloride	117	4.811	4.913	(0.867)	26286	6.49852	32.49
$	35	1,2-Dichloroethane-d4	65	5.092	5.096	(1.058)	176796	46.8301	46.83(R)
*	36	1,4-Difluorobenzene	114	5.550	5.554	(1.000)	494973	50.0000	
	38	Trichloroethene	130	5.786	5.790	(1.043)	2121645	571.300	2856.49(A)
	42	1,2-Dichloropropane	63	5.782	6.007	(1.042)	5364	1.47862	7.39(a)
*	47	Chlorobenzene-d5	117	8.185	8.185	(1.000)	475049	50.0000	
$	48	Toluene-d8	98	6.922	6.922	(0.846)	567285	51.8743	51.87(R)
	58	1-Chlorohexane	55	8.181	8.197	(1.474)	3609	1.30028	6.50(a)
$	69	4-Bromofluorobenzene	95	9.194	9.190	(1.123)	180566	43.4425	43.44(R)
*	70	1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	238624	50.0000	
	71	1,2,3-Trichloropropane	75	9.194	9.362	(0.904)	84199	18.5876	92.93
	138	Freon TF	101	2.330	2.337	(0.484)	15555	6.69046	33.45
	141	Cyclohexane	56	4.811	4.785	(1.000)	4241	0.91140	4.55(a)
M	94	1,2-Dichloroethylene (total)	96				109832	31.5325	157.66

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
    exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.



Data File: \\NAHSTWS005\Target\chem\voa9,i\u240125,b\u012527.d
Date : 25-JAN-2024 19:58
Client ID: HS24011040-12
Sample Info: HS24011040-12;HS24011040-12;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9,i
Operator: PC
Column diameter: 0.18

Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012527.d Page 2

Date : 25-JAN-2024 19:58

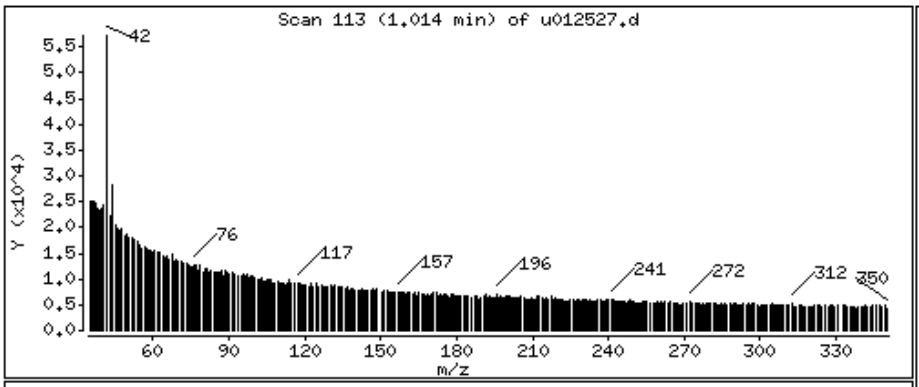
Client ID: HS24011040-12 Instrument: VOA9.i

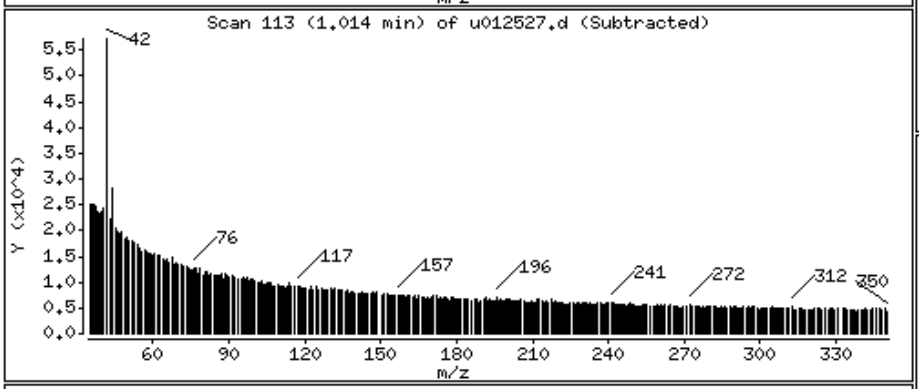
Sample Info: HS24011040-12;HS24011040-12;;;

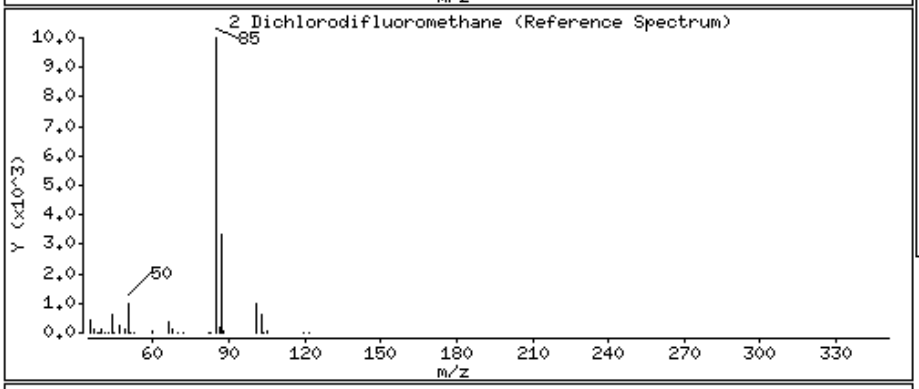
Purge Volume: 5.0 Operator: PC

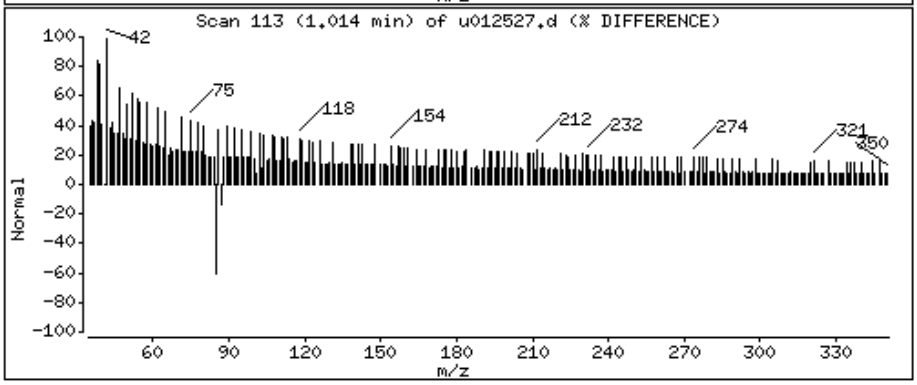
Column phase: DB624 Column diameter: 0.18

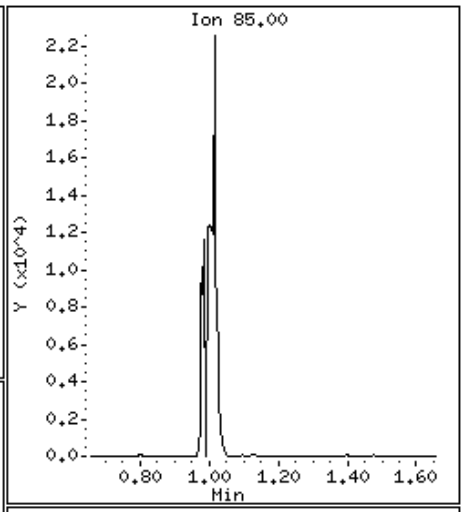
2 Dichlorodifluoromethane Concentration: 52.59 ug/l

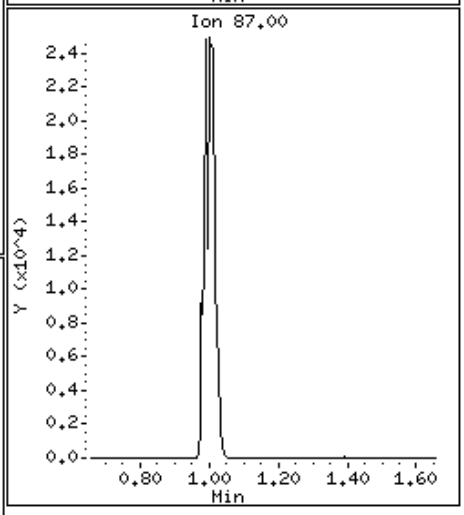












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012527.d Page 3

Date : 25-JAN-2024 19:58

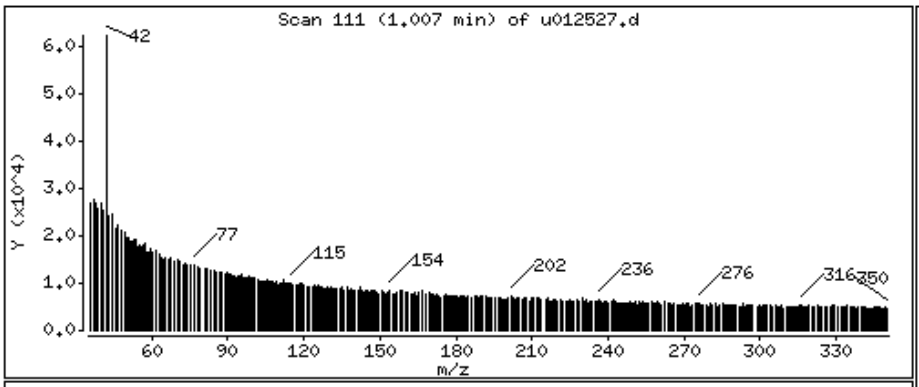
Client ID: HS24011040-12 Instrument: VOA9.i

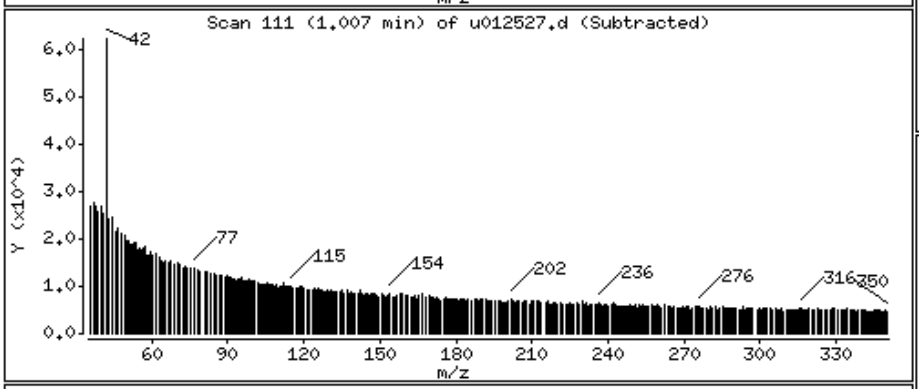
Sample Info: HS24011040-12;HS24011040-12;;;

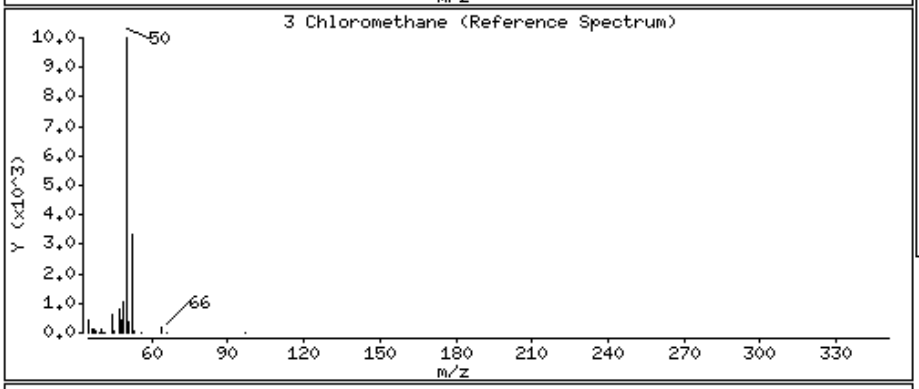
Purge Volume: 5.0 Operator: PC

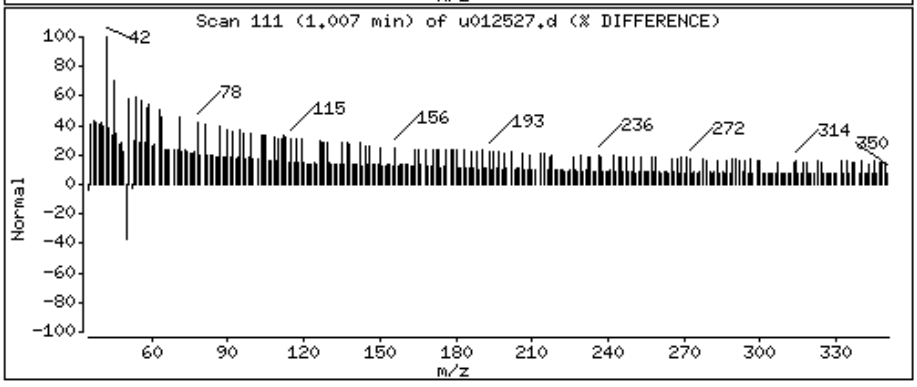
Column phase: DB624 Column diameter: 0.18

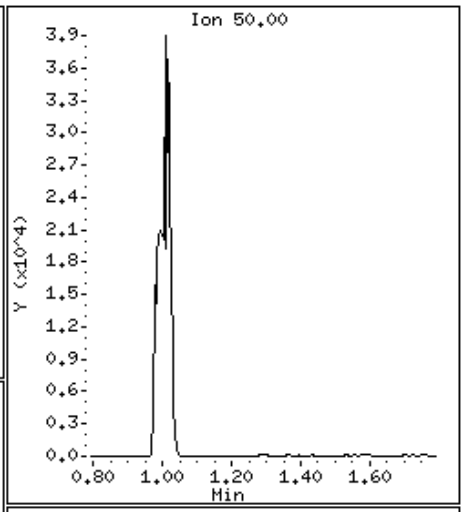
3 Chloromethane Concentration: 69.36 ug/l

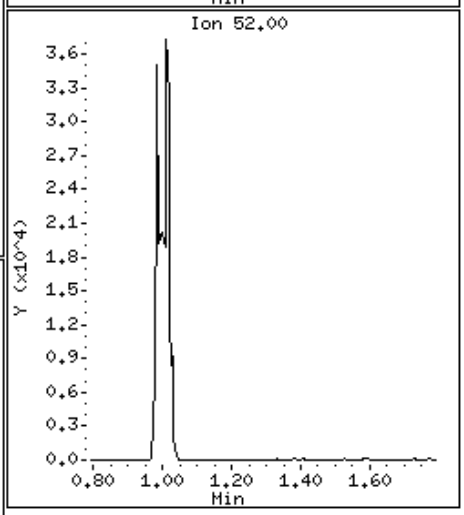












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012527.d Page 4

Date : 25-JAN-2024 19:58

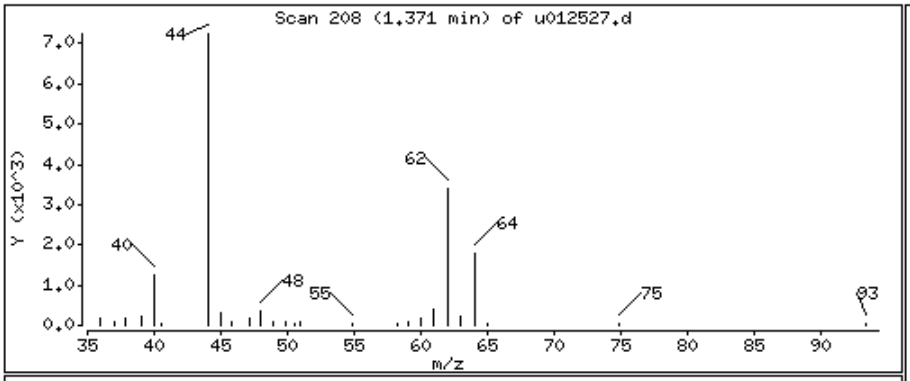
Client ID: HS24011040-12 Instrument: VOA9.i

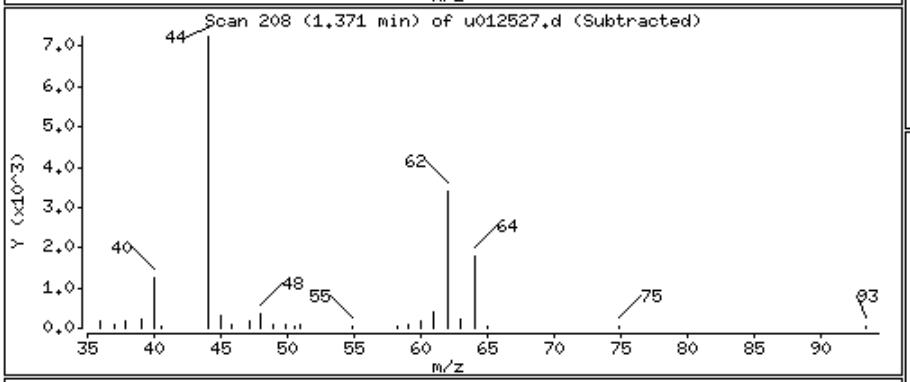
Sample Info: HS24011040-12;HS24011040-12;;;

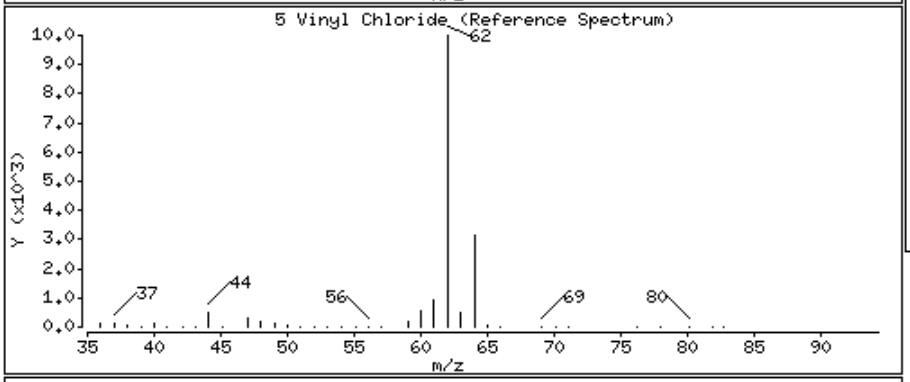
Purge Volume: 5.0 Operator: PC

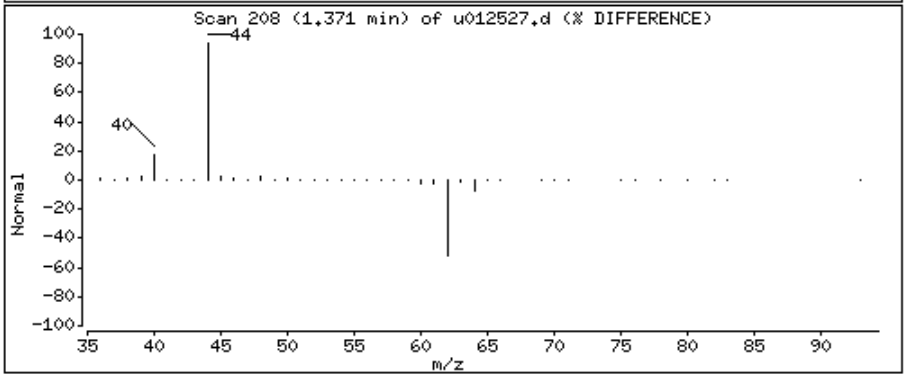
Column phase: DB624 Column diameter: 0.18

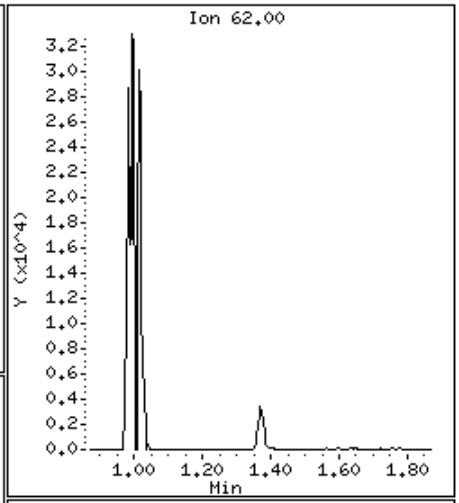
5 Vinyl Chloride Concentration: 5.75 ug/l

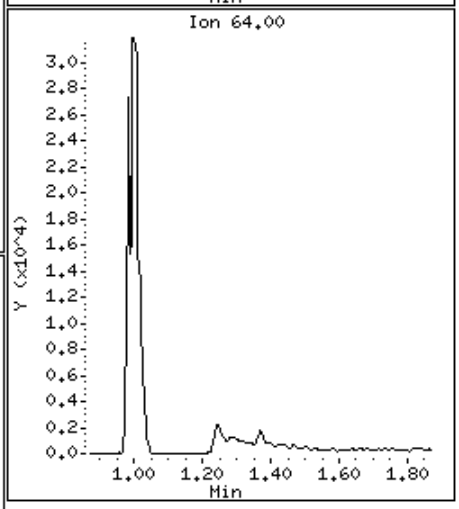












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012527.d Page 5

Date : 25-JAN-2024 19:58

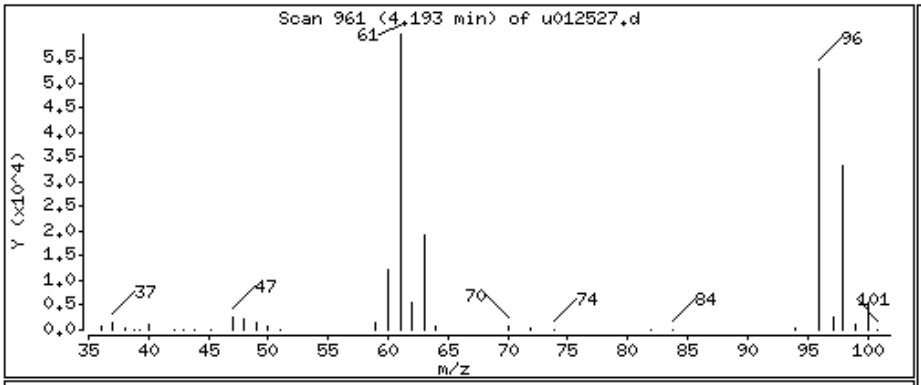
Client ID: HS24011040-12 Instrument: VOA9.i

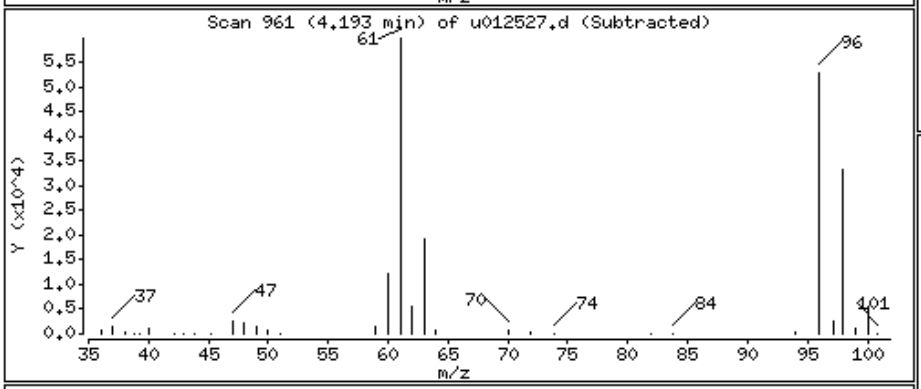
Sample Info: HS24011040-12;HS24011040-12;;;

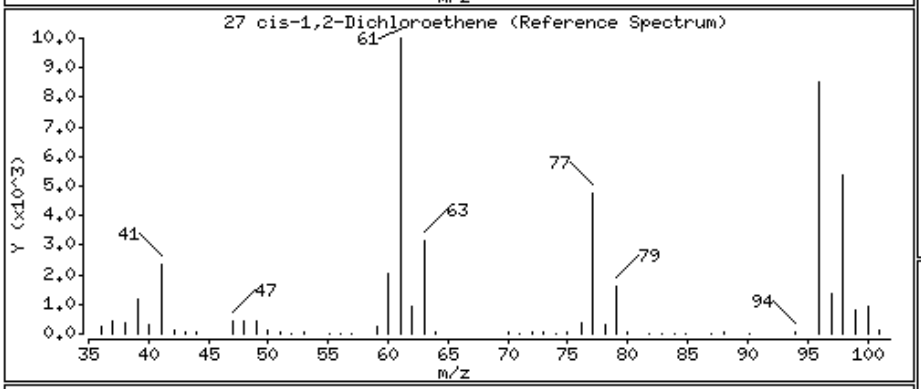
Purge Volume: 5.0 Operator: PC

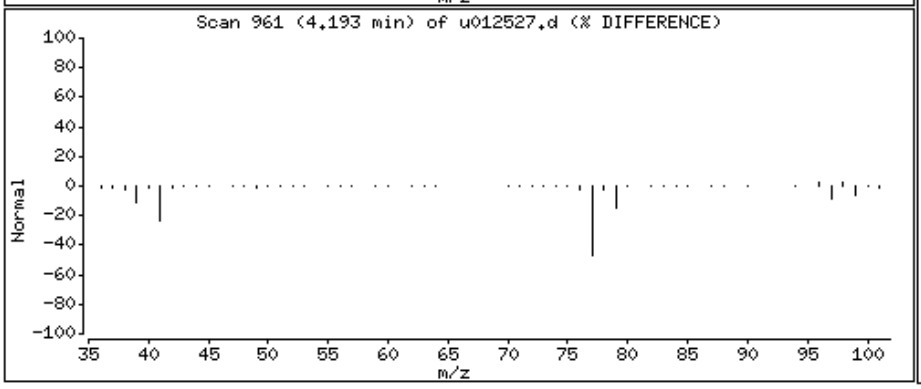
Column phase: DB624 Column diameter: 0.18

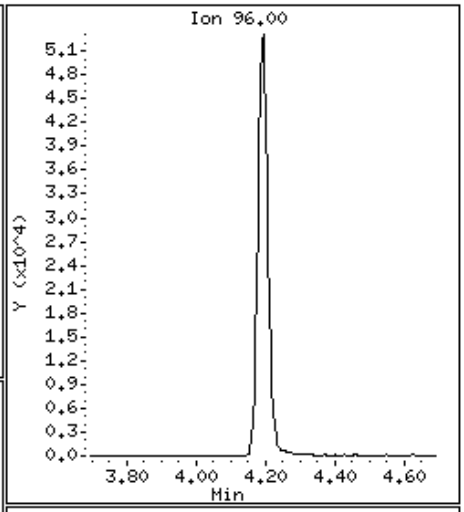
27 cis-1,2-Dichloroethene Concentration: 137.67 ug/l

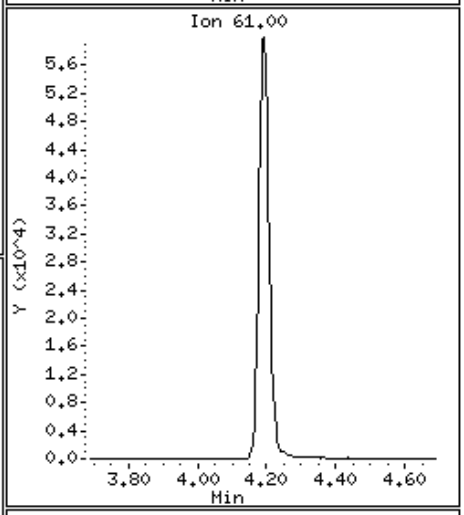


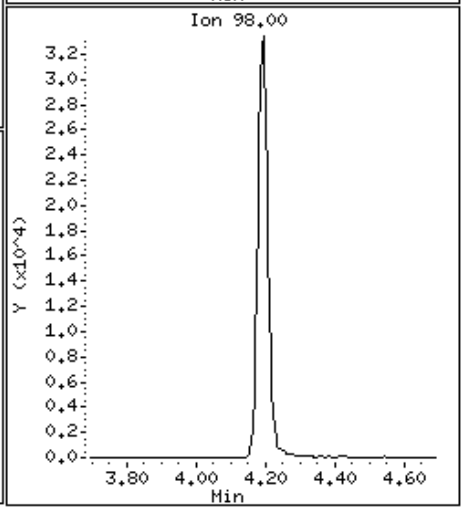












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012527.d Page 6

Date : 25-JAN-2024 19:58

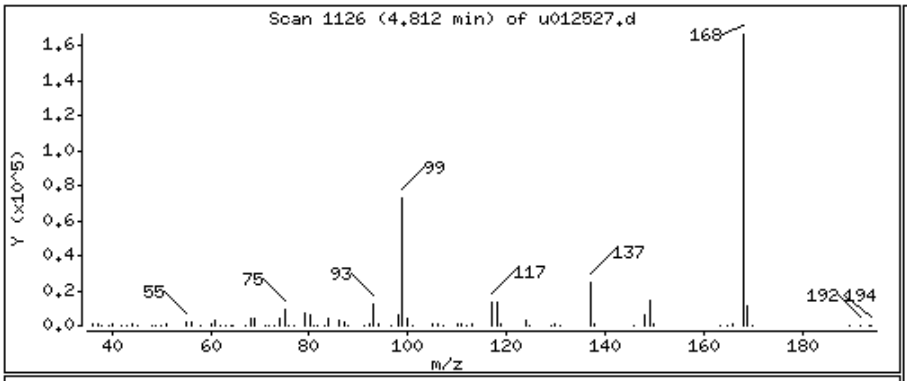
Client ID: HS24011040-12 Instrument: VOA9.i

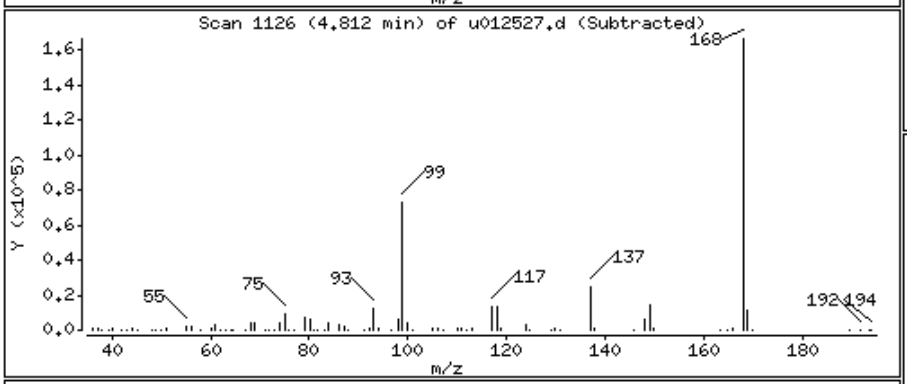
Sample Info: HS24011040-12;HS24011040-12;;;

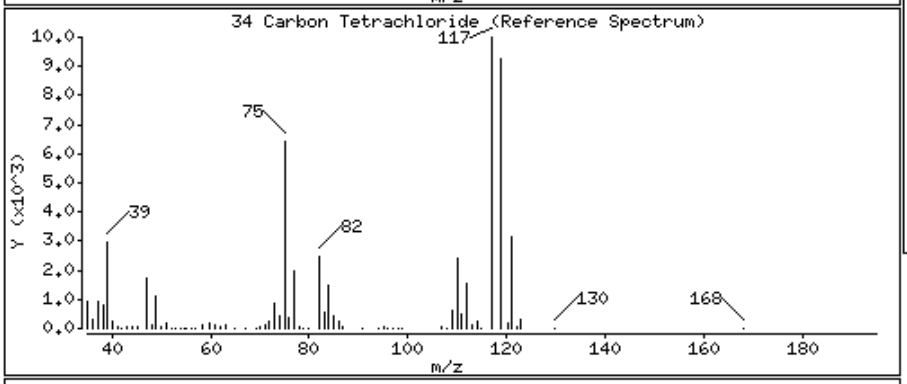
Purge Volume: 5.0 Operator: PC

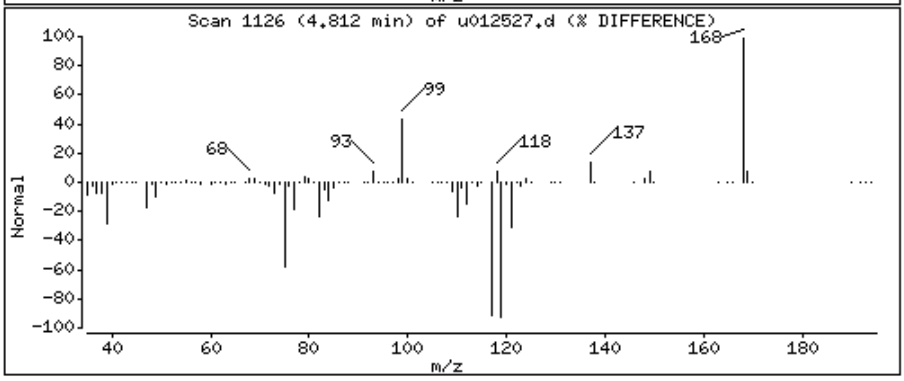
Column phase: DB624 Column diameter: 0.18

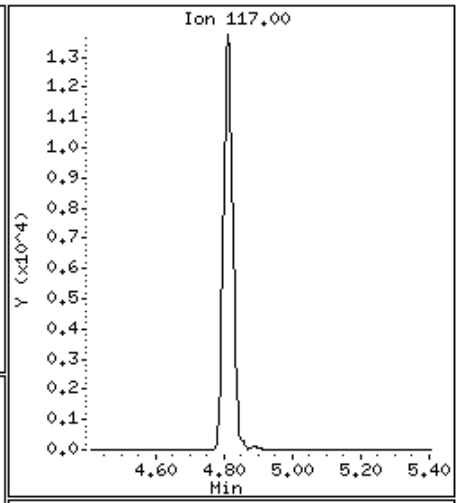
34 Carbon Tetrachloride Concentration: 32.49 ug/l

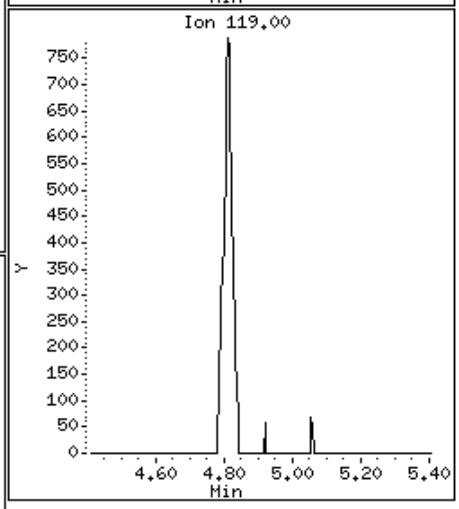












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012527.d Page 7

Date : 25-JAN-2024 19:58

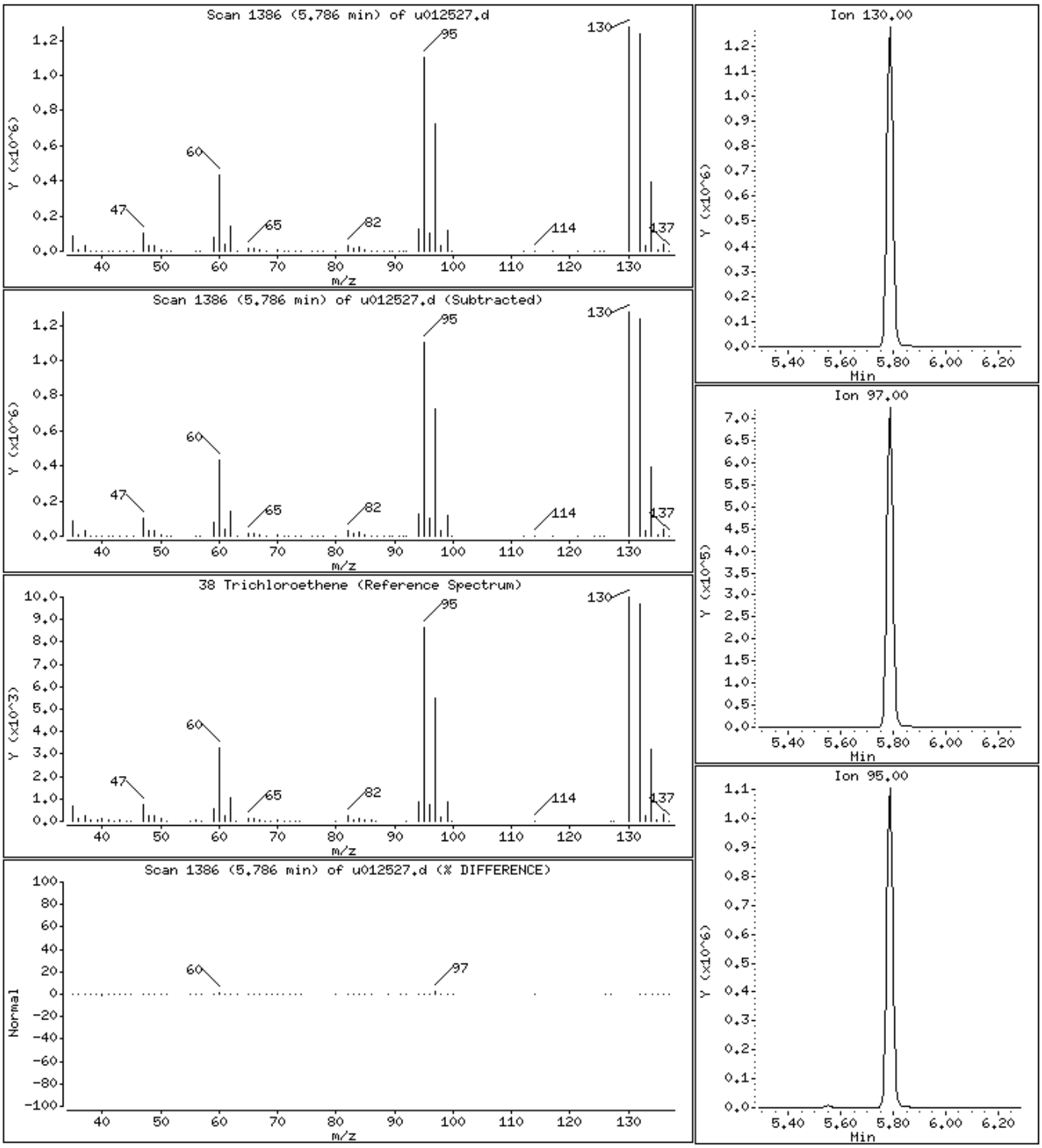
Client ID: HS24011040-12 Instrument: VOA9.i

Sample Info: HS24011040-12;HS24011040-12;;;

Purge Volume: 5.0 Operator: PC

Column phase: DB624 Column diameter: 0.18

38 Trichloroethene Concentration: 2856.49 ug/l



Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012527.d Page 8

Date : 25-JAN-2024 19:58

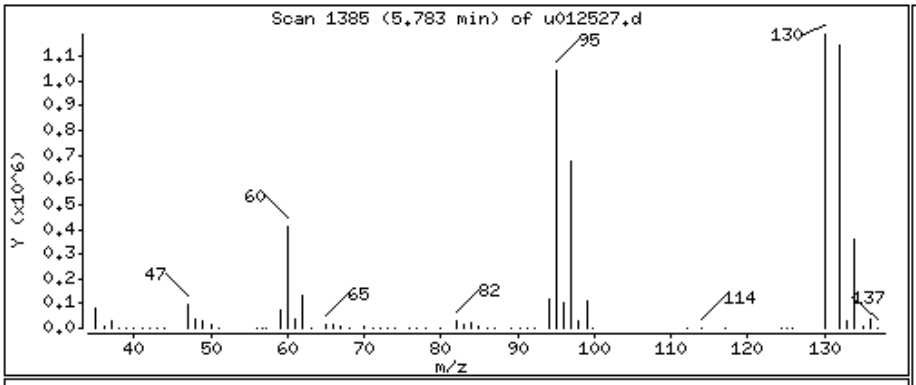
Client ID: HS24011040-12 Instrument: VOA9.i

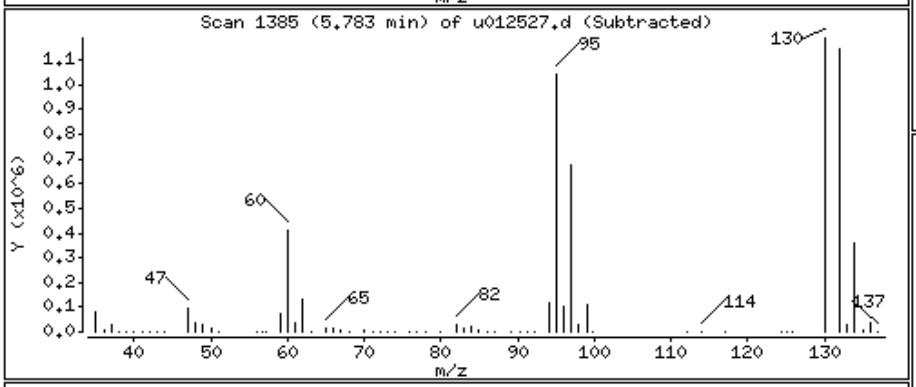
Sample Info: HS24011040-12;HS24011040-12;;;

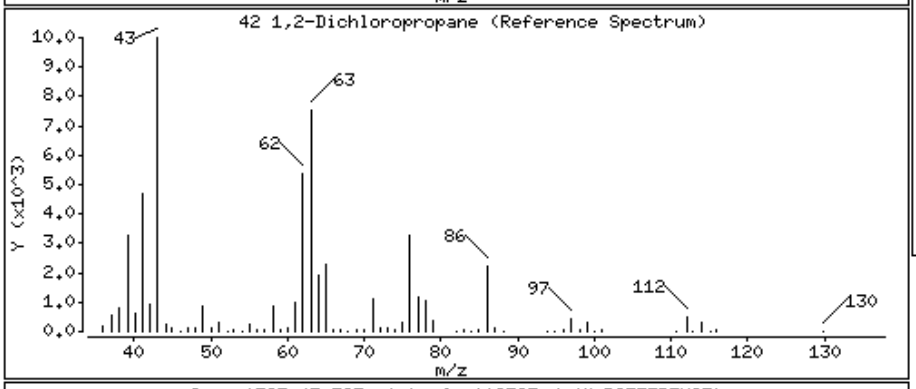
Purge Volume: 5.0 Operator: PC

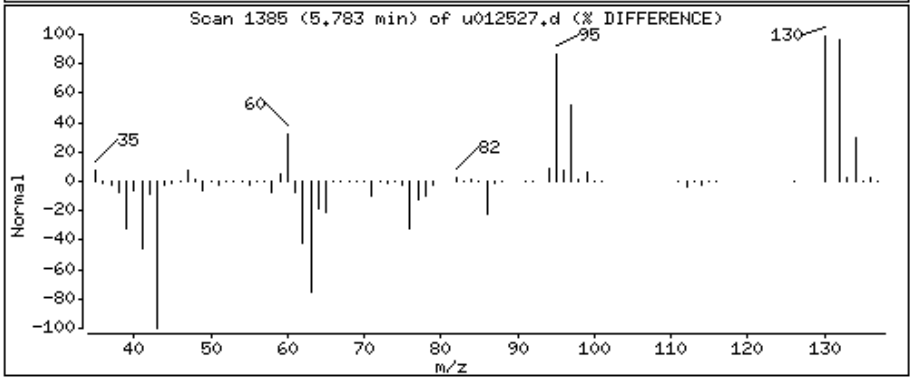
Column phase: DB624 Column diameter: 0.18

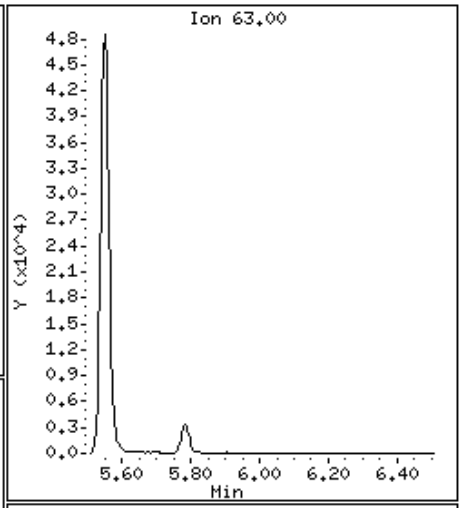
42 1,2-Dichloropropane Concentration: 7.39 ug/l

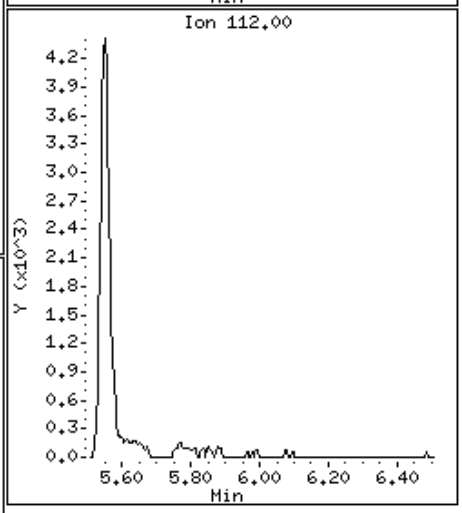












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012527.d Page 9

Date : 25-JAN-2024 19:58

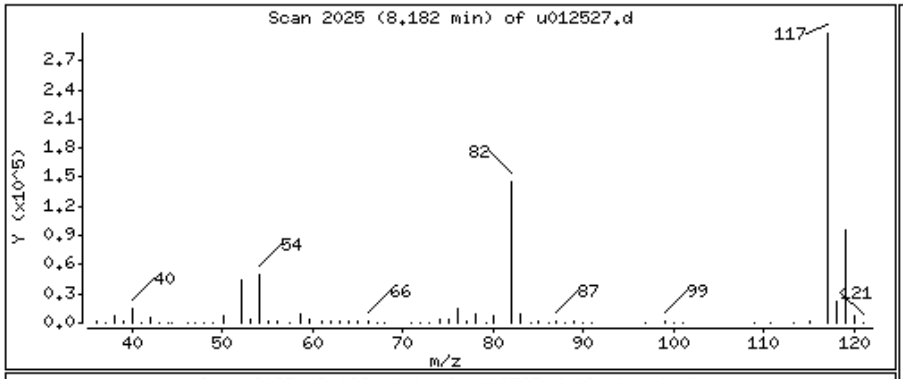
Client ID: HS24011040-12 Instrument: VOA9.i

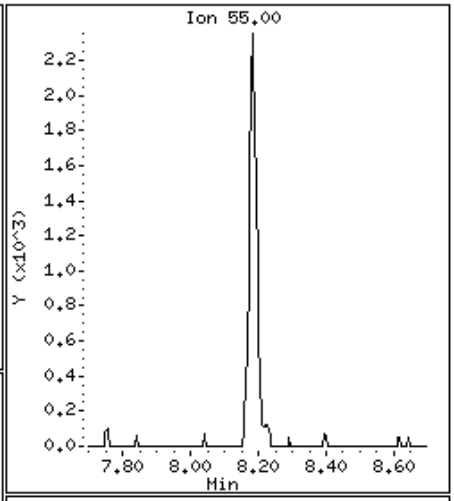
Sample Info: HS24011040-12;HS24011040-12;;;

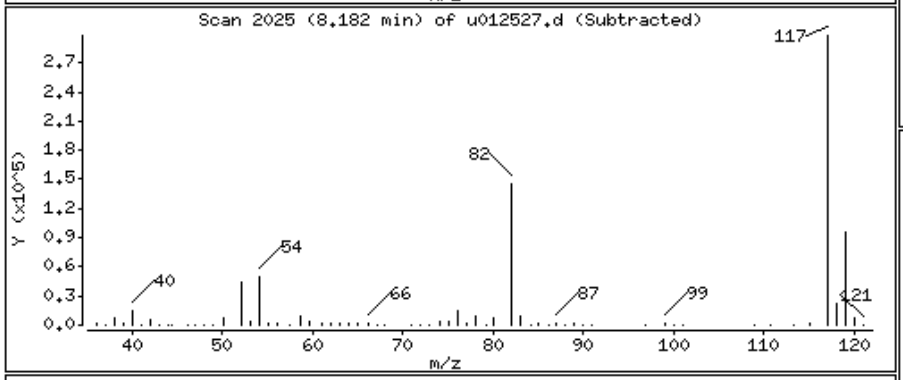
Purge Volume: 5.0 Operator: PC

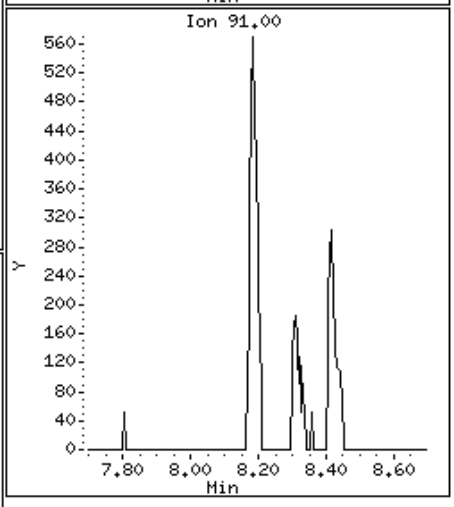
Column phase: DB624 Column diameter: 0.18

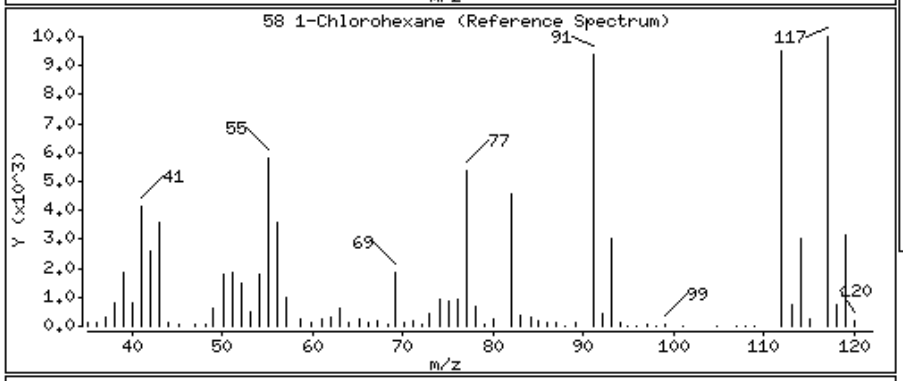
58 1-Chlorohexane Concentration: 6.50 ug/l

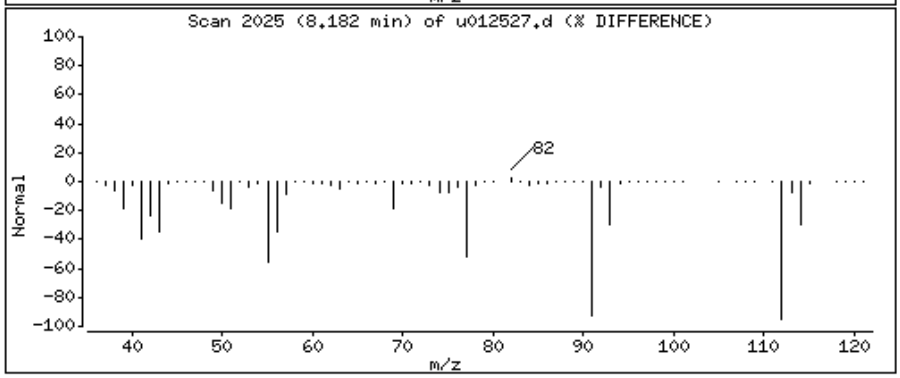












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012527.d Page 10

Date : 25-JAN-2024 19:58

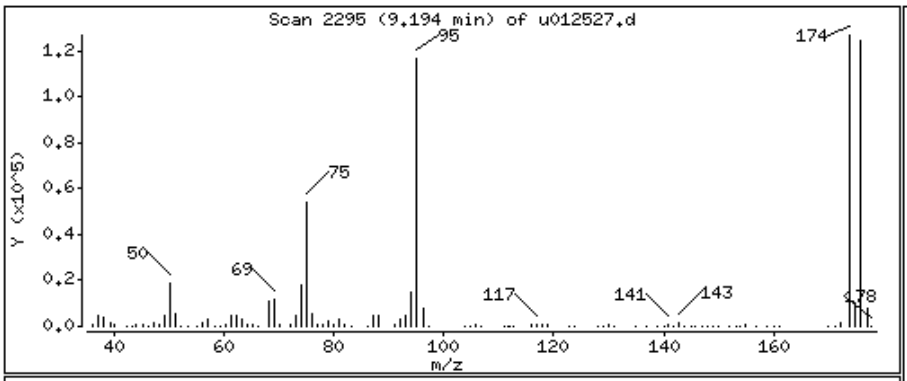
Client ID: HS24011040-12 Instrument: VOA9.i

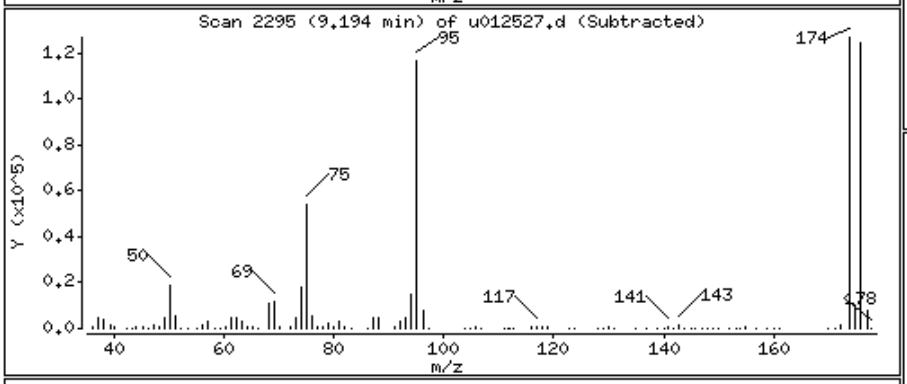
Sample Info: HS24011040-12;HS24011040-12;;;

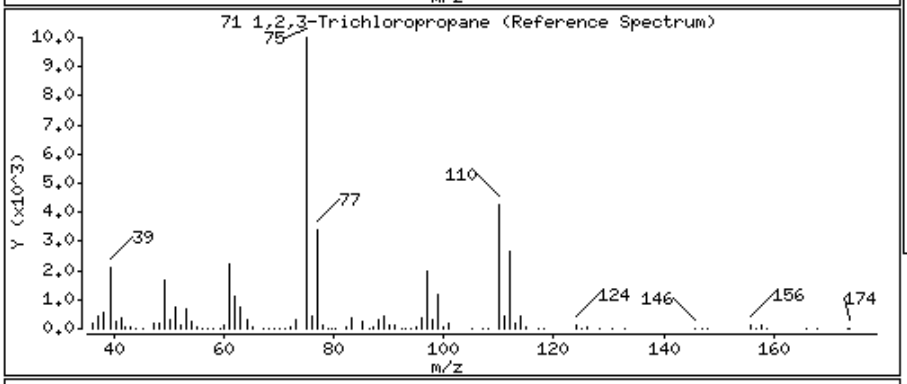
Purge Volume: 5.0 Operator: PC

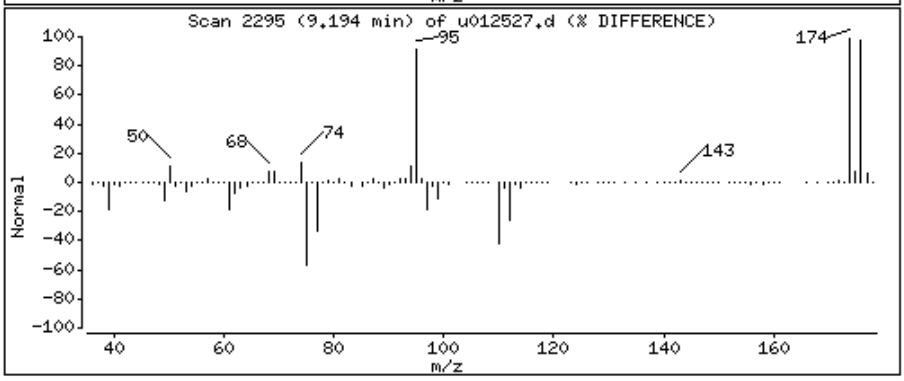
Column phase: DB624 Column diameter: 0.18

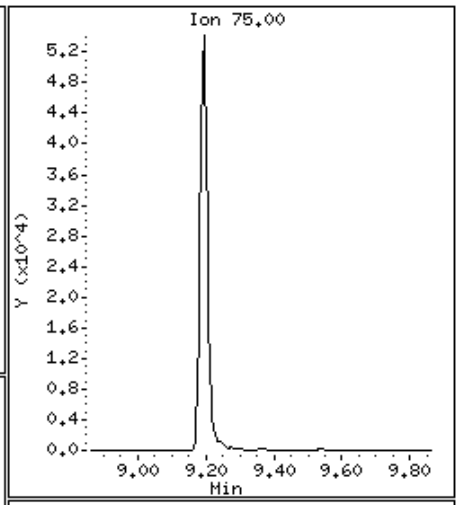
71 1,2,3-Trichloropropane Concentration: 92.93 ug/l

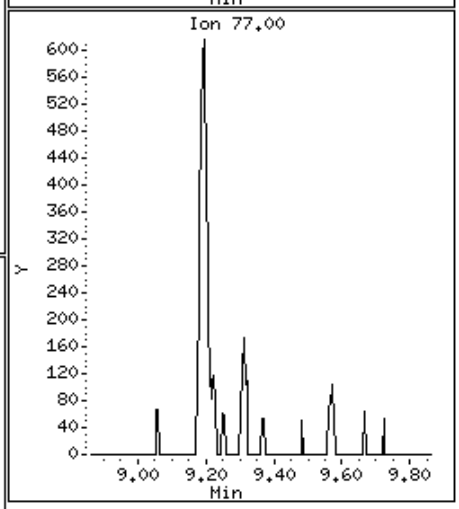












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012527.d Page 11

Date : 25-JAN-2024 19:58

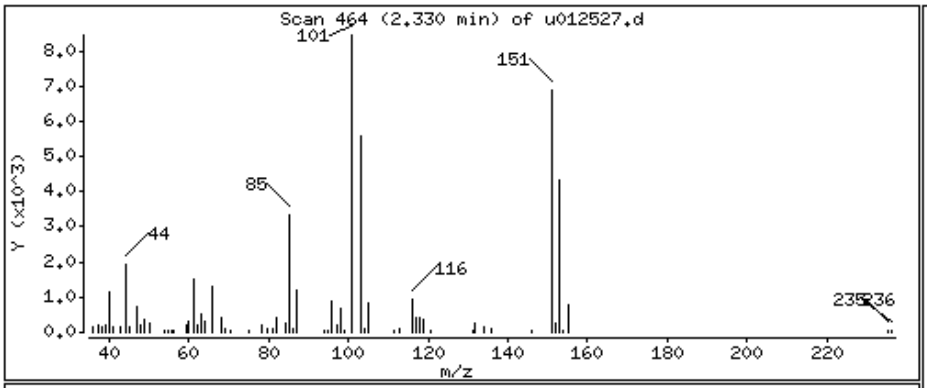
Client ID: HS24011040-12 Instrument: VOA9.i

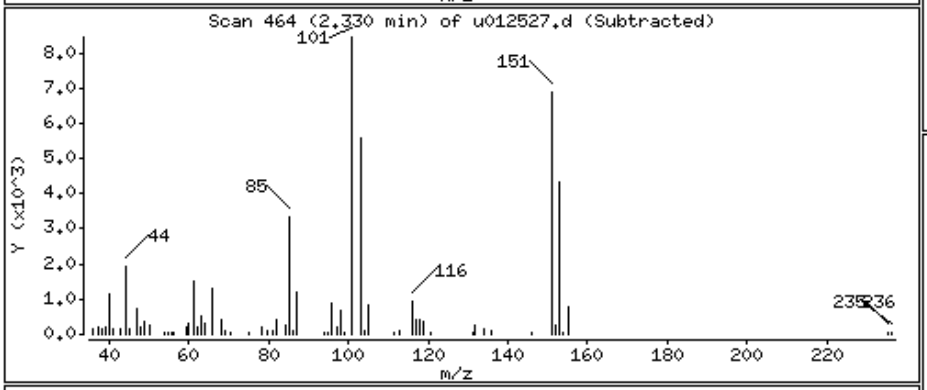
Sample Info: HS24011040-12;HS24011040-12;;;

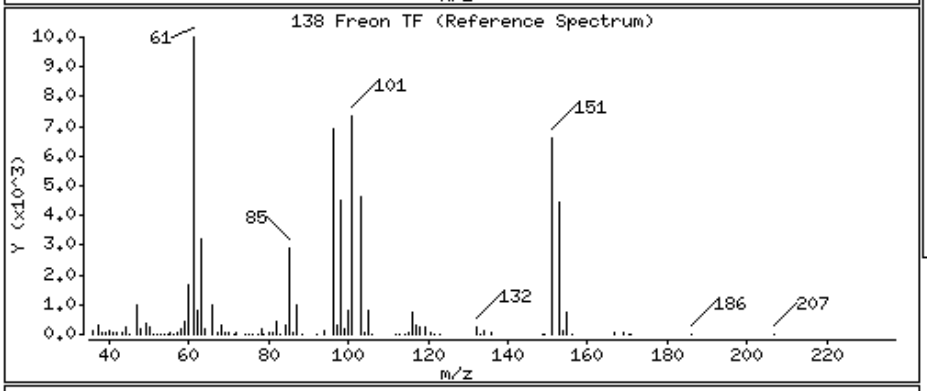
Purge Volume: 5.0 Operator: PC

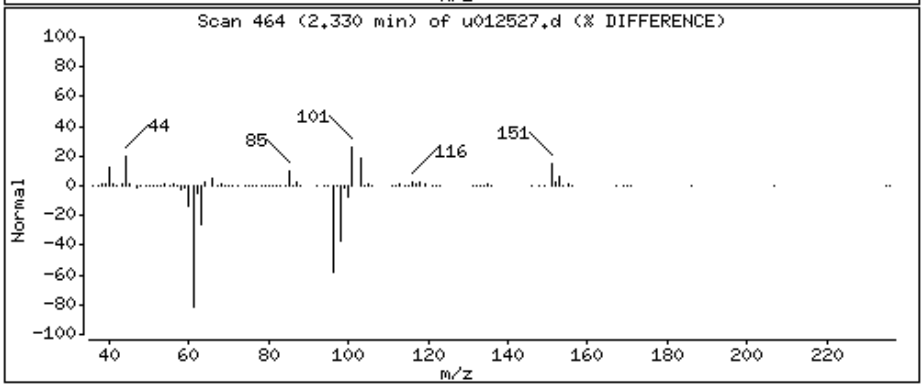
Column phase: DB624 Column diameter: 0.18

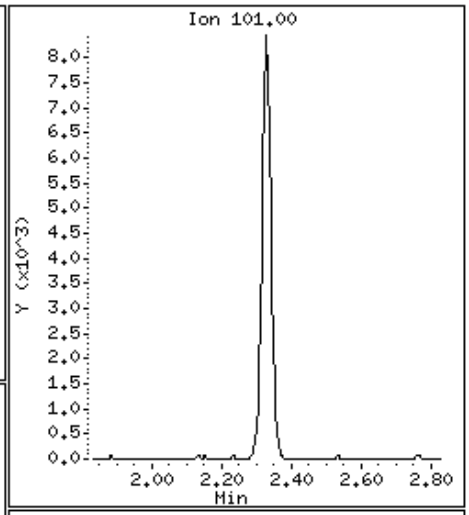
138 Freon TF Concentration: 33.45 ug/l

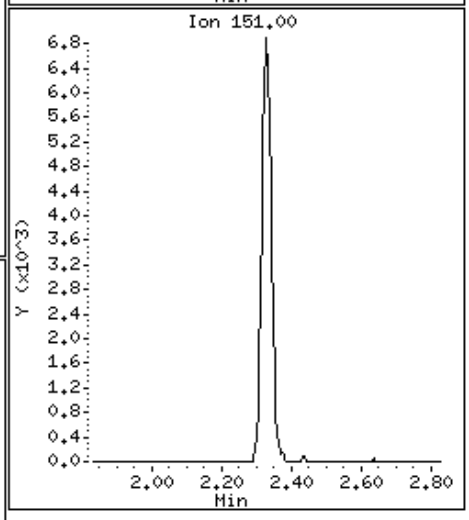












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012527.d Page 12

Date : 25-JAN-2024 19:58

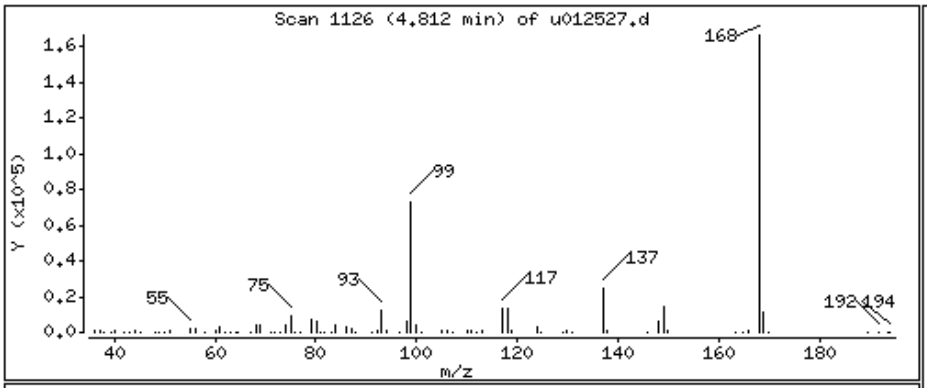
Client ID: HS24011040-12 Instrument: VOA9.i

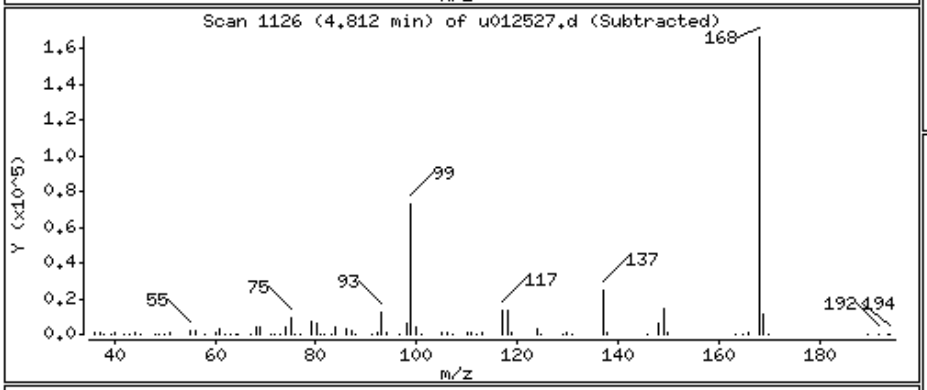
Sample Info: HS24011040-12;HS24011040-12;;;

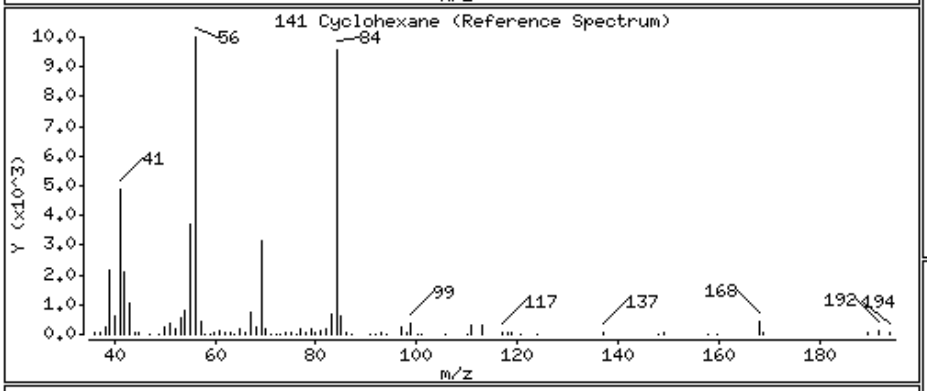
Purge Volume: 5.0 Operator: PC

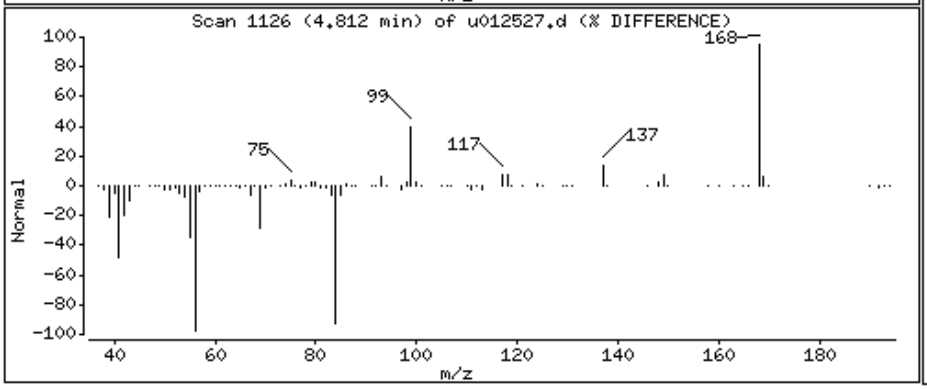
Column phase: DB624 Column diameter: 0.18

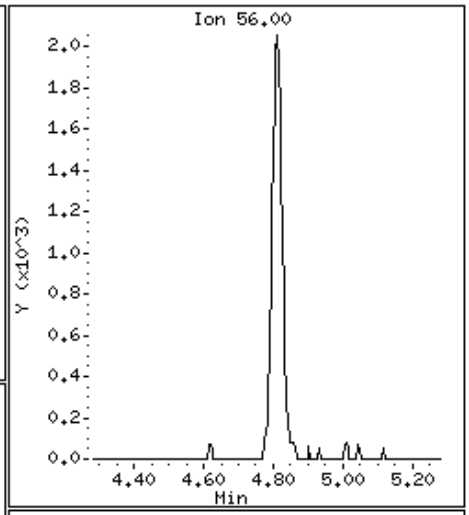
141 Cyclohexane Concentration: 4.55 ug/l

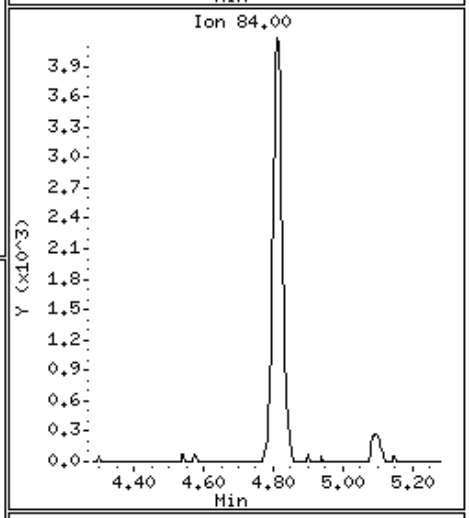


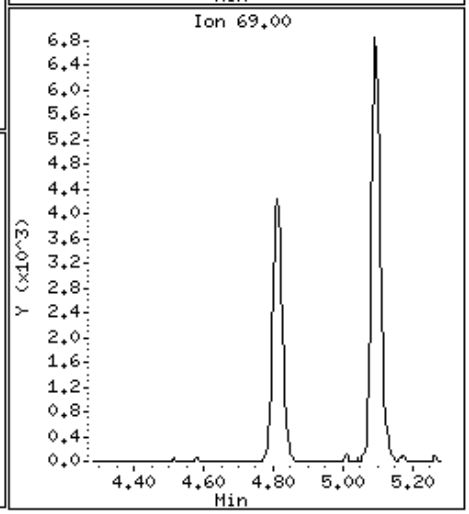












Data File : \\nahstws005\target\chem\voa9.i\u240125.b\u012527.d
Inj Date : 25-JAN-2024 19:58
InstruID : VOA9.i
LabSampID : HS24011040-12

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240125.b\U012528.D Page 1
Report Date: 01-Feb-2024 14:20

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240125.b\U012528.D
Lab Smp Id: HS24011040-10 Client Smp ID: HS24011040-10
Inj Date : 25-JAN-2024 20:20
Operator : PC Inst ID: VOA9.i
Smp Info : HS24011040-10;HS24011040-10;;;
Misc Info : V9;WATER;0;250;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240125.b\8260C.m
Meth Date : 01-Feb-2024 14:20 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 26
Dil Factor: 250.00000
Integrator: HP RTE Compound Sublist: 1040-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7066

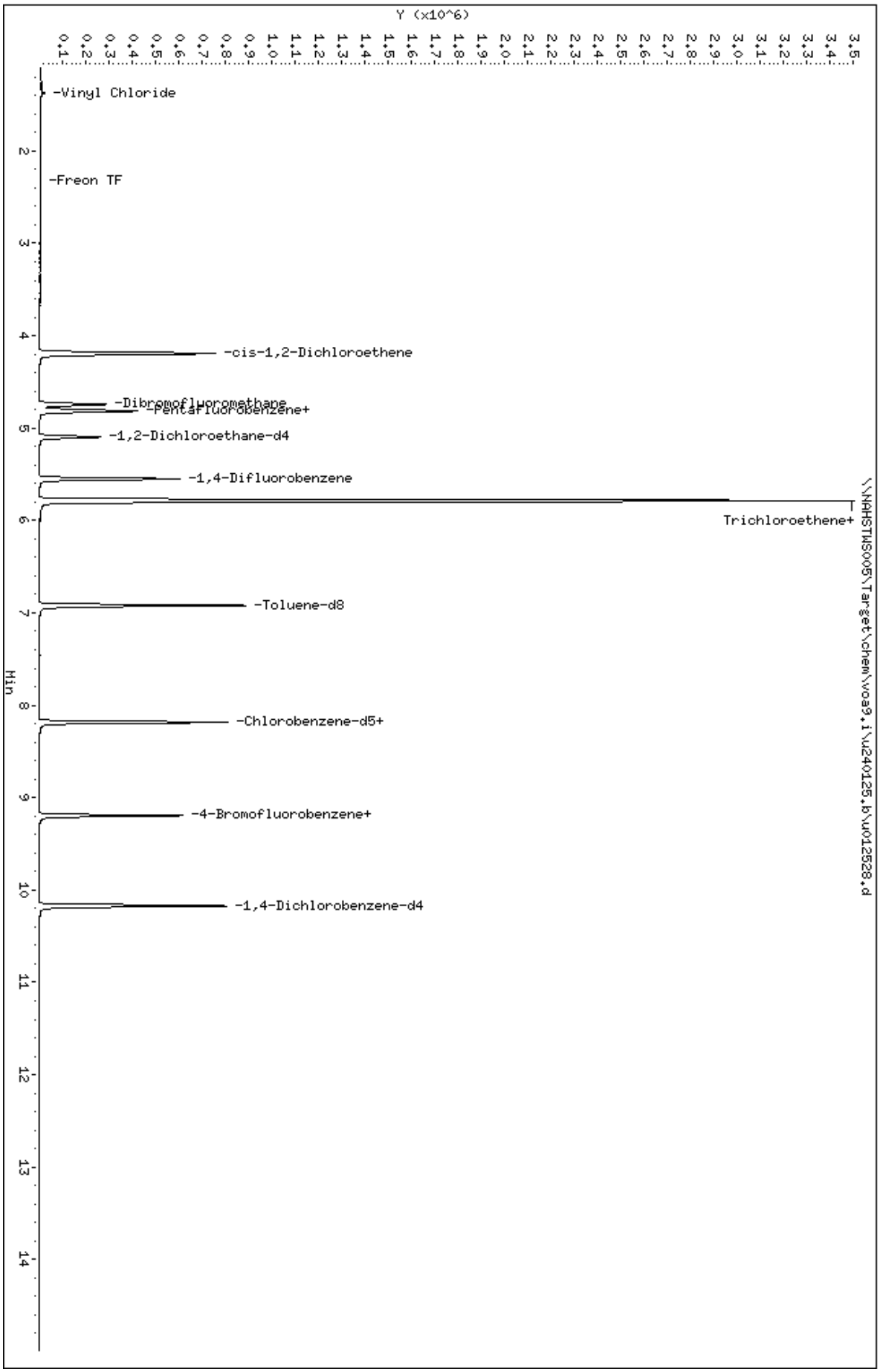
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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	4.815	4.815	(1.000)	323864	50.0000	
	2 Dichlorodifluoromethane	85	1.022	1.164	(0.212)	13467	5.93689	1484.22
	3 Chloromethane	50	1.014	1.303	(0.211)	39066	10.5154	2628.84
	5 Vinyl Chloride	62	1.374	1.378	(0.285)	9564	2.69477	673.69(a)
	27 cis-1,2-Dichloroethene	96	4.193	4.197	(0.871)	392165	98.0382	24509.55
$	30 Dibromofluoromethane	113	4.748	4.748	(0.986)	171102	51.6564	51.65(R)
	34 Carbon Tetrachloride	117	4.811	4.913	(0.867)	26598	6.57492	1643.73
$	35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	175870	46.4714	46.47(R)
*	36 1,4-Difluorobenzene	114	5.550	5.554	(1.000)	495028	50.0000	
	38 Trichloroethene	130	5.786	5.790	(1.043)	1182687	318.429	79607.30(A)
	42 1,2-Dichloropropane	63	5.782	6.007	(1.042)	3081	0.84921	212.30(a)
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	471579	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	562162	51.7841	51.78(R)
	58 1-Chlorohexane	55	8.182	8.197	(1.474)	4053	1.46009	365.02(a)
$	69 4-Bromofluorobenzene	95	9.194	9.190	(1.123)	182034	44.1381	44.13(R)
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	236711	50.0000	
	71 1,2,3-Trichloropropane	75	9.194	9.362	(0.904)	82471	18.3532	4588.31
	138 Freon TF	101	2.326	2.337	(0.483)	682	0.28915	72.28(a)
	141 Cyclohexane	56	4.811	4.785	(0.999)	3905	0.83680	209.19(a)
M	94 1,2-Dichloroethylene (total)	96				392165	112.268	28067.12

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.



Data File: \\NAHSTWS005\Target\chem\voa9,i\u240125,b\u012528,d
Date : 25-JAN-2024 20:20
Client ID: HS24011040-10
Sample Info: HS24011040-10;HS24011040-10;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9,i
Operator: PC
Column diameter: 0.18

Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012528.d Page 2

Date : 25-JAN-2024 20:20

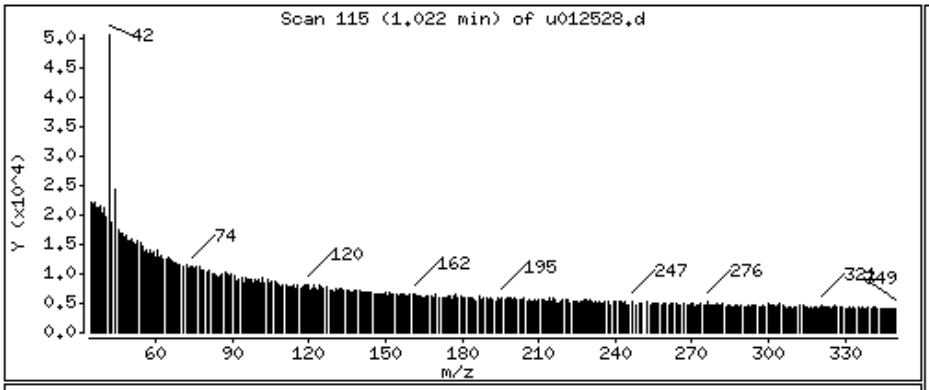
Client ID: HS24011040-10 Instrument: VOA9.i

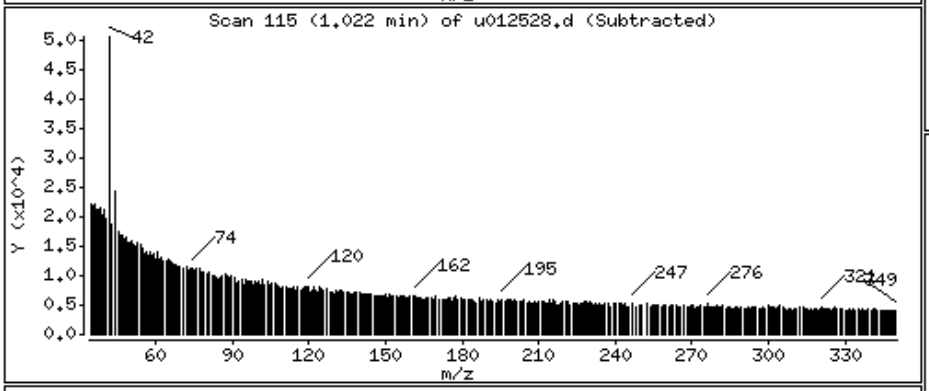
Sample Info: HS24011040-10;HS24011040-10;;;

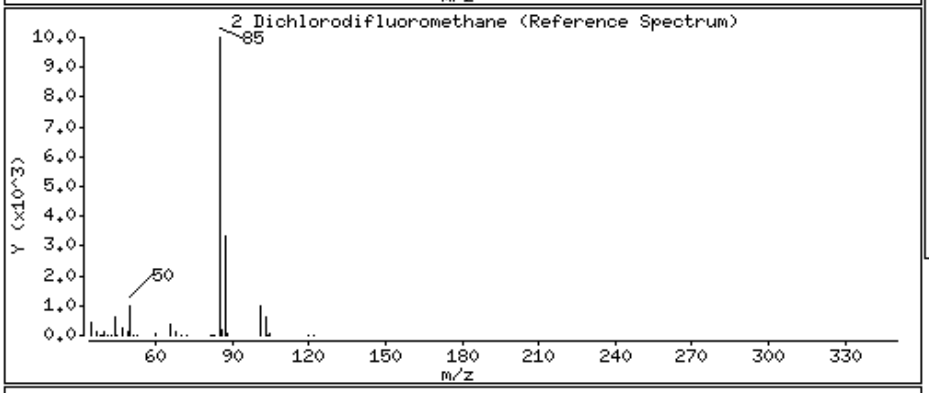
Purge Volume: 5.0 Operator: PC

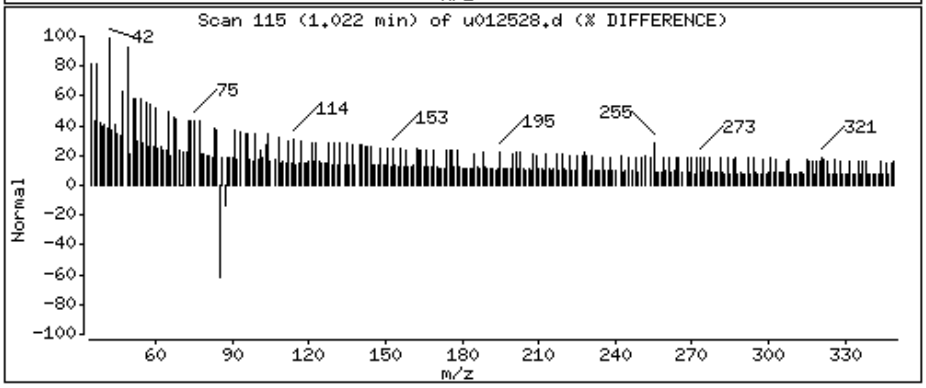
Column phase: DB624 Column diameter: 0.18

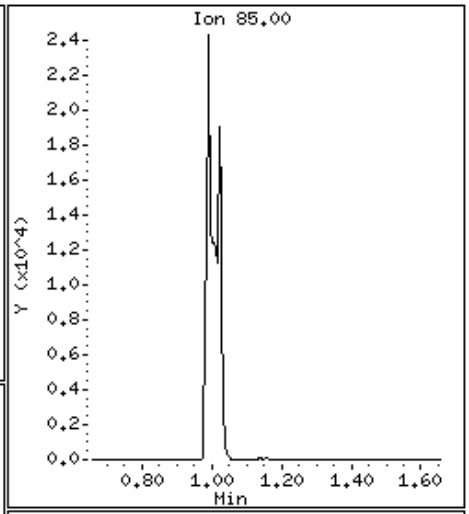
2 Dichlorodifluoromethane Concentration: 1484.22 ug/l

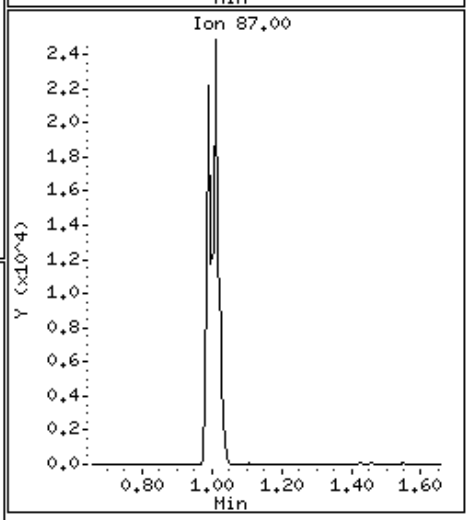












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012528.d Page 3

Date : 25-JAN-2024 20:20

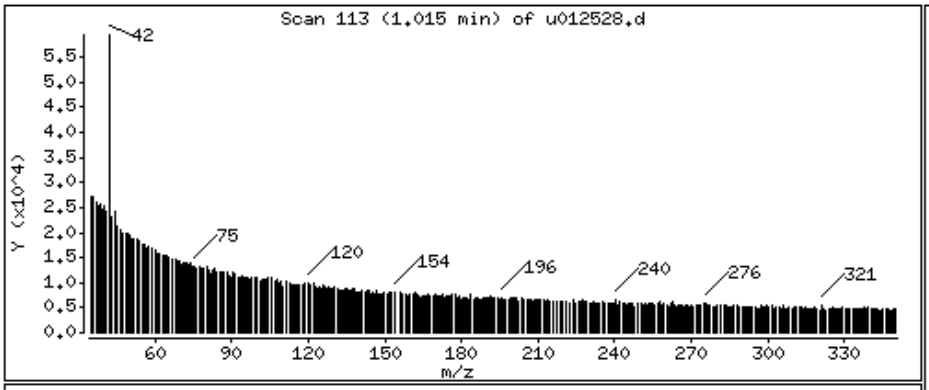
Client ID: HS24011040-10 Instrument: VOA9.i

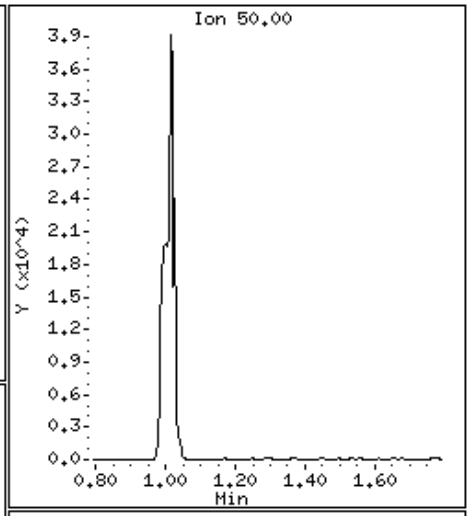
Sample Info: HS24011040-10;HS24011040-10;;;

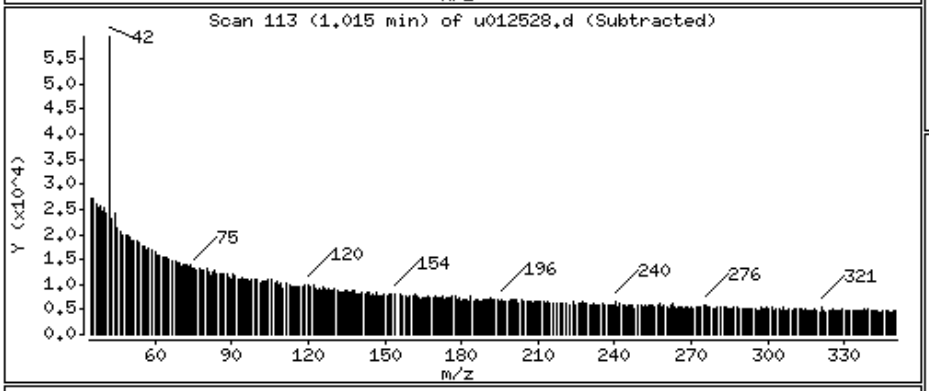
Purge Volume: 5.0 Operator: PC

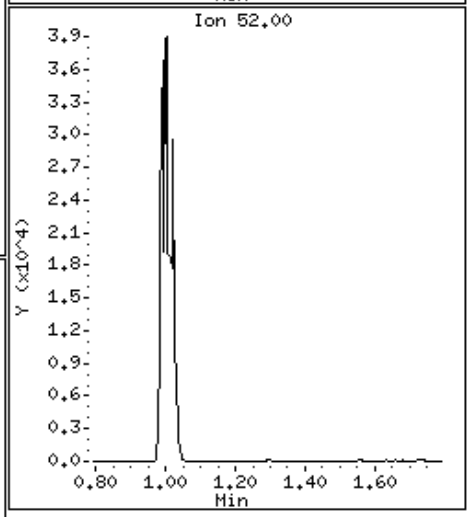
Column phase: DB624 Column diameter: 0.18

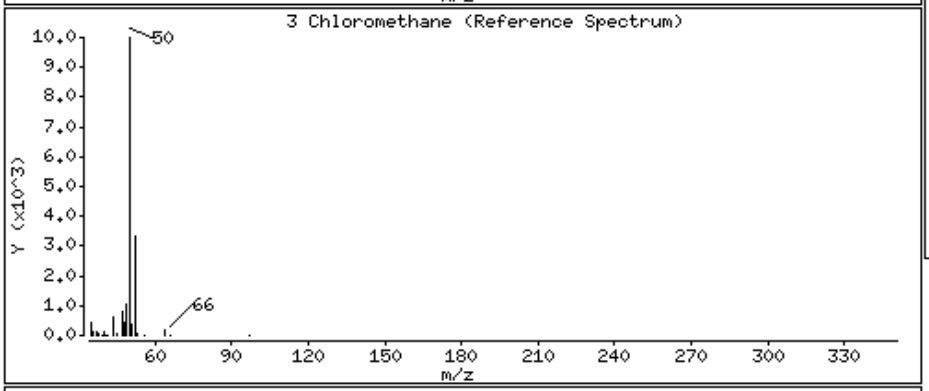
3 Chloromethane Concentration: 2628.84 ug/l

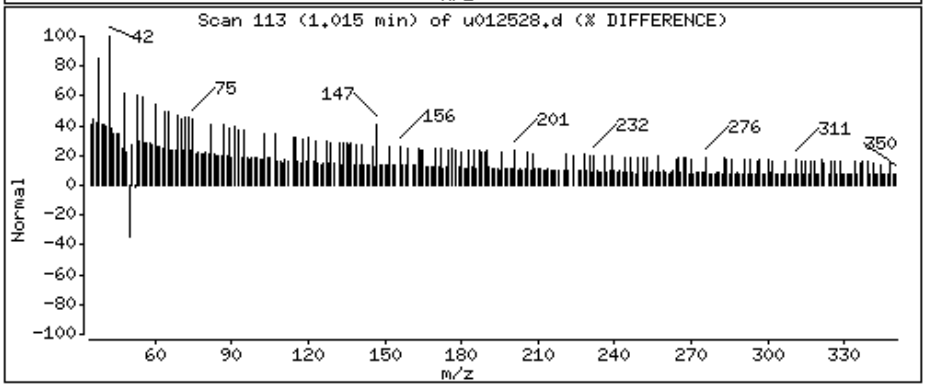












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012528.d Page 4

Date : 25-JAN-2024 20:20

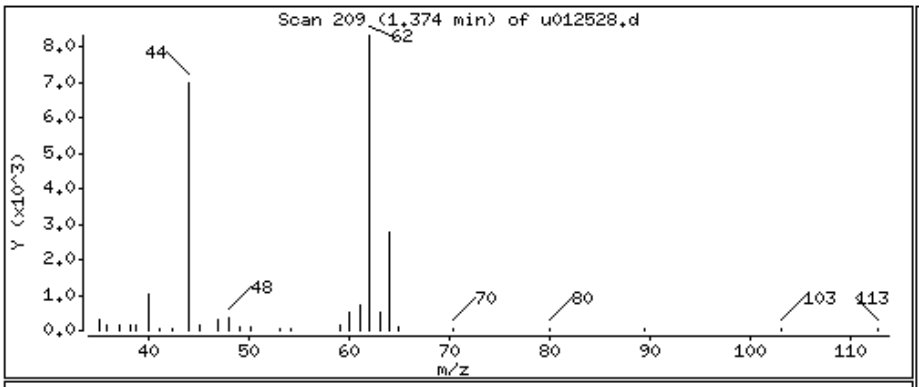
Client ID: HS24011040-10 Instrument: VOA9.i

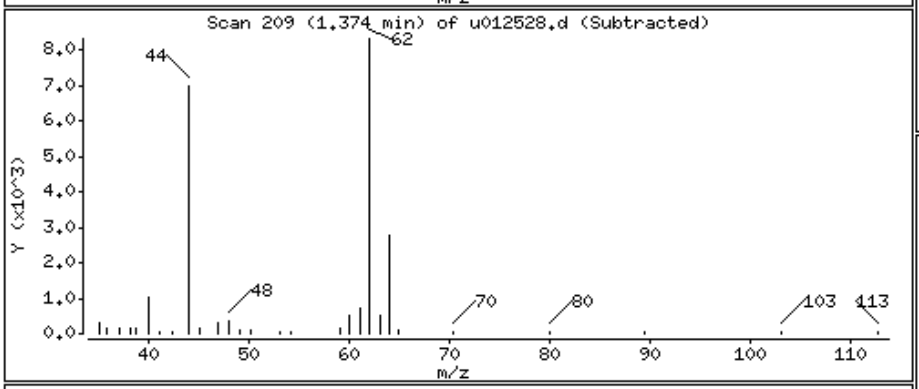
Sample Info: HS24011040-10;HS24011040-10;;;

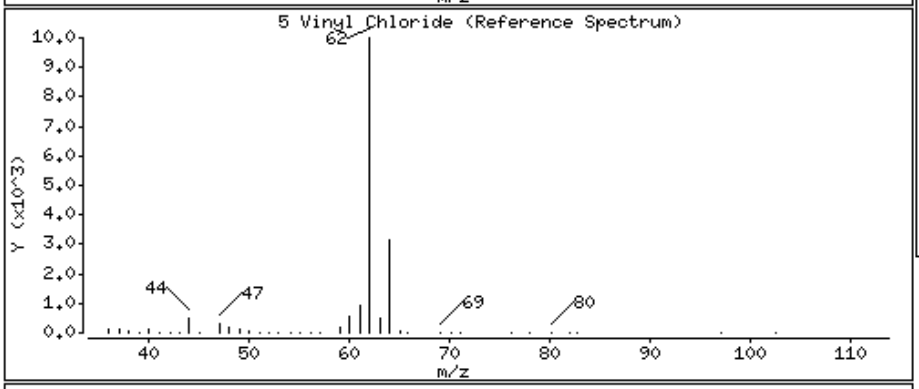
Purge Volume: 5.0 Operator: PC

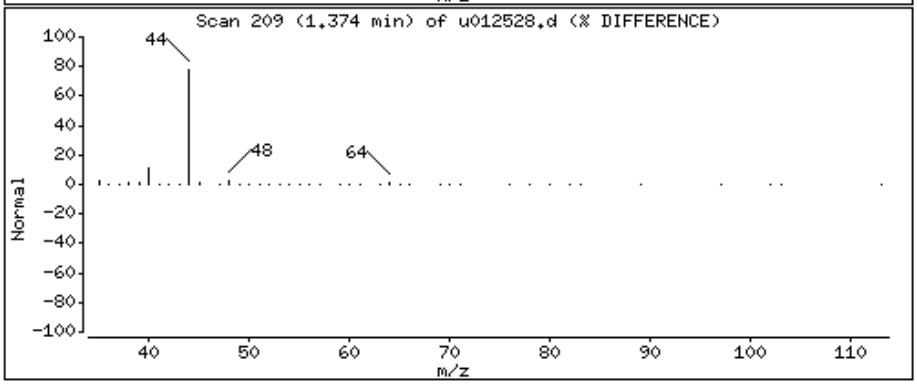
Column phase: DB624 Column diameter: 0.18

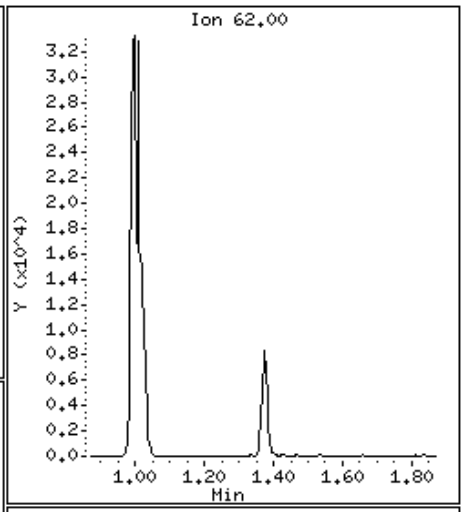
5 Vinyl Chloride Concentration: 673.69 ug/l

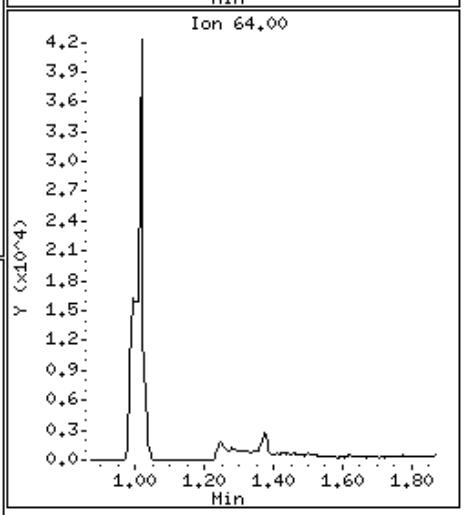












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012528.d Page 5

Date : 25-JAN-2024 20:20

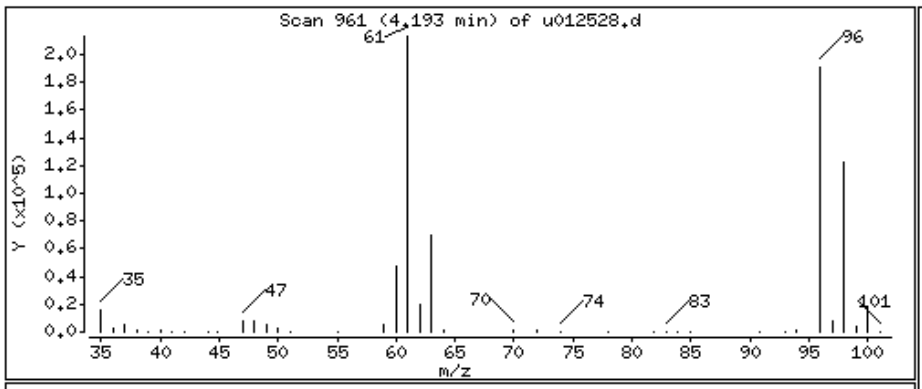
Client ID: HS24011040-10 Instrument: VOA9.i

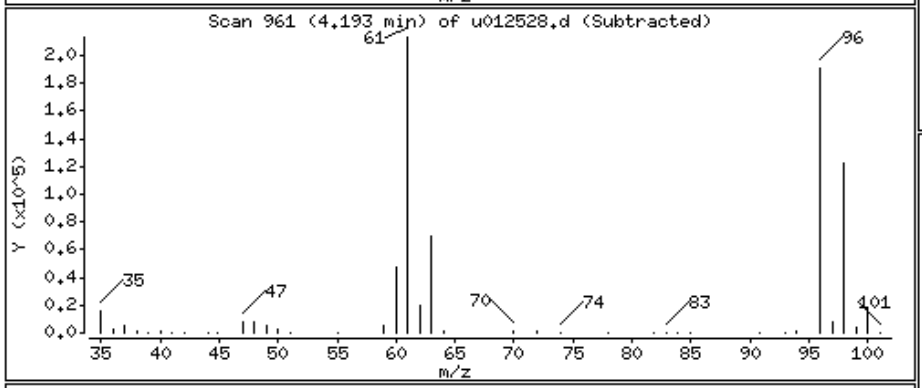
Sample Info: HS24011040-10;HS24011040-10;;;

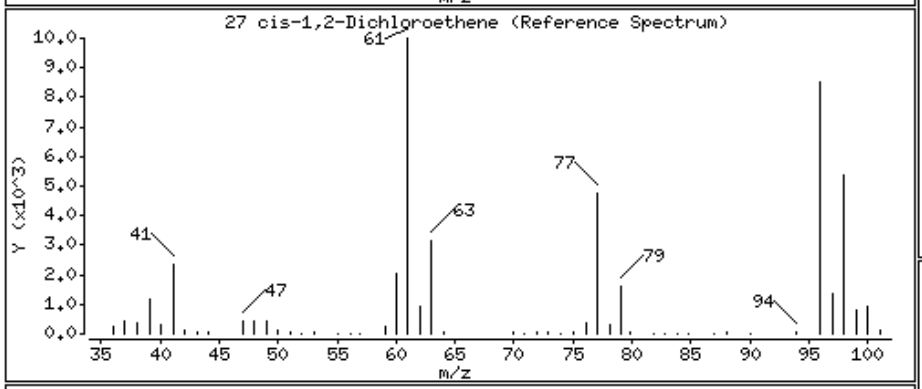
Purge Volume: 5.0 Operator: PC

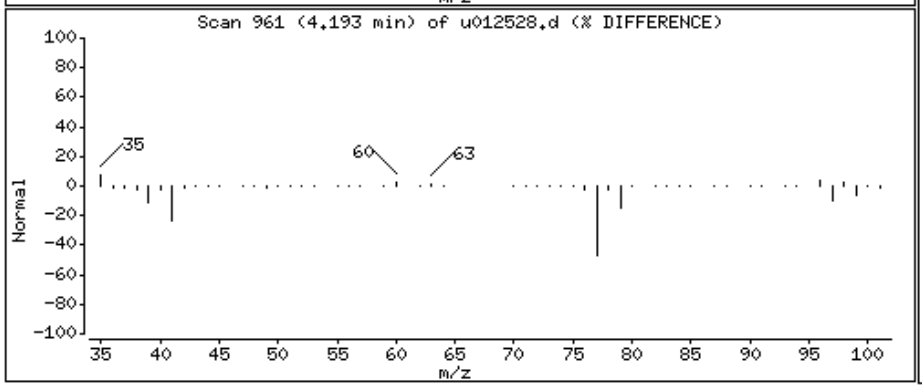
Column phase: DB624 Column diameter: 0.18

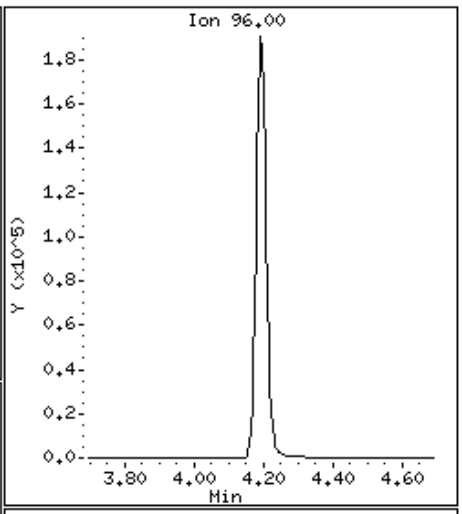
27 cis-1,2-Dichloroethene Concentration: 24509.55 ug/l

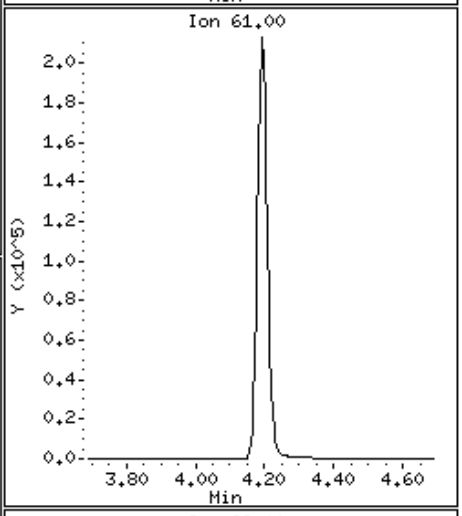


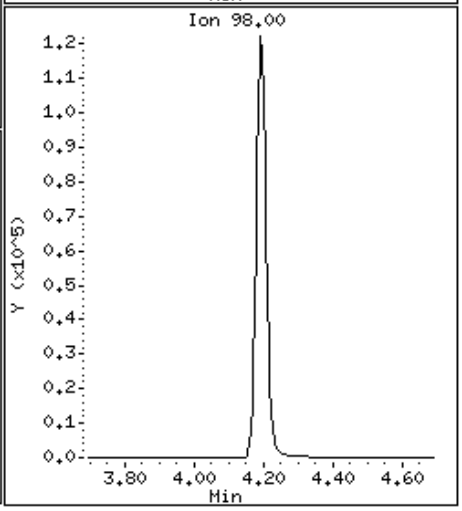












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012528.d Page 6

Date : 25-JAN-2024 20:20

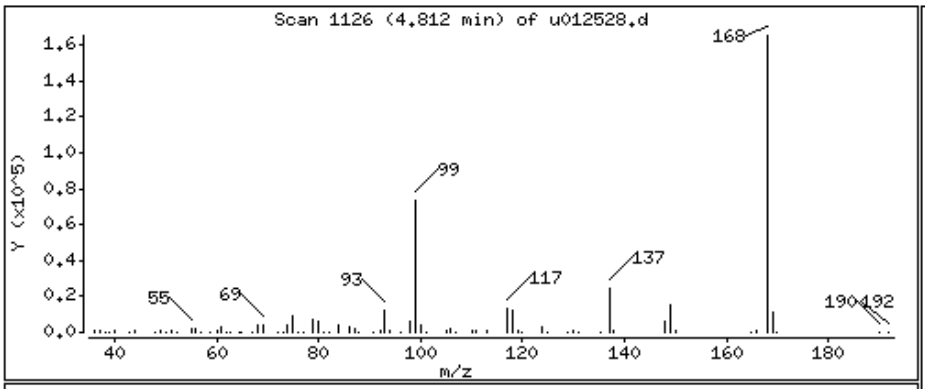
Client ID: HS24011040-10 Instrument: VOA9.i

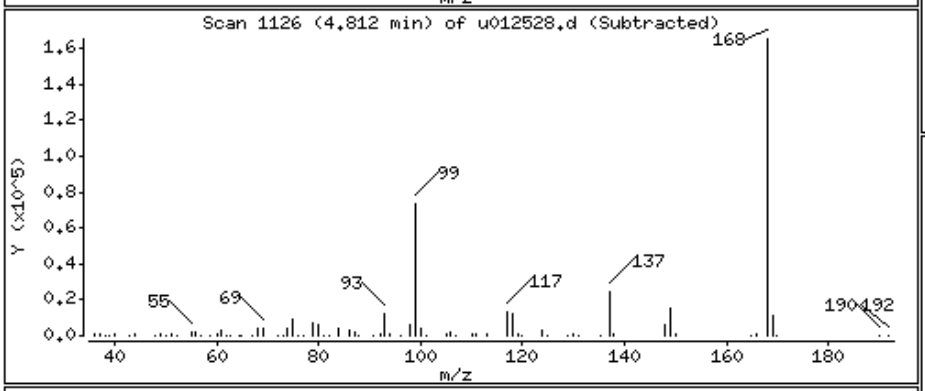
Sample Info: HS24011040-10;HS24011040-10;;;

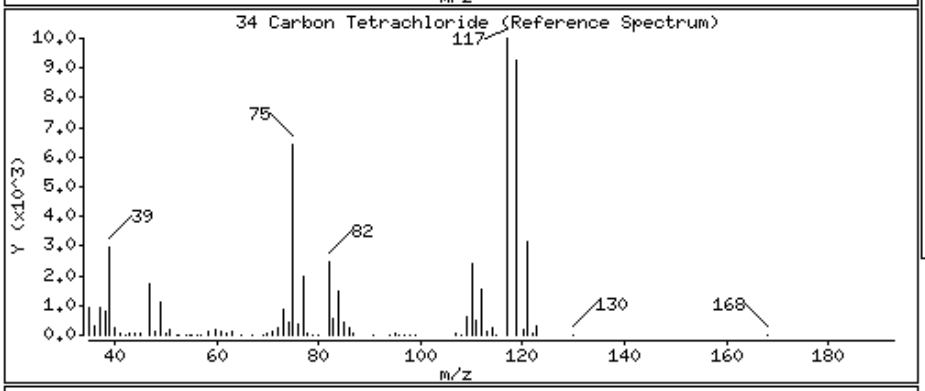
Purge Volume: 5.0 Operator: PC

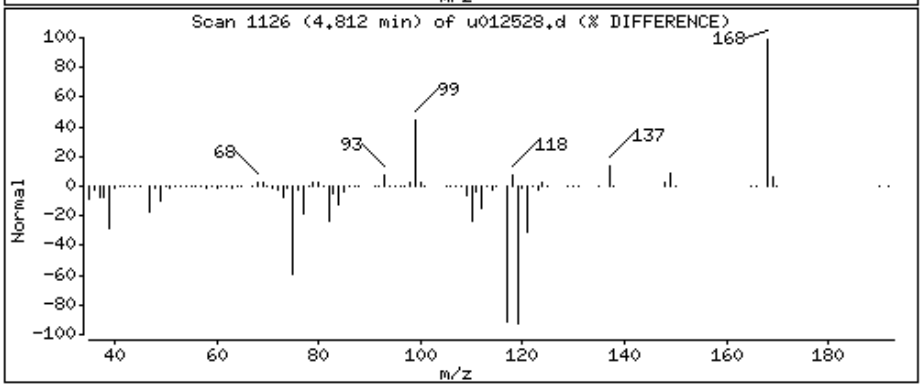
Column phase: DB624 Column diameter: 0.18

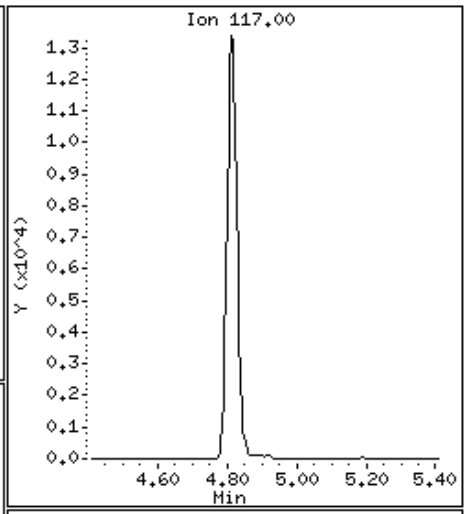
34 Carbon Tetrachloride Concentration: 1643.73 ug/l

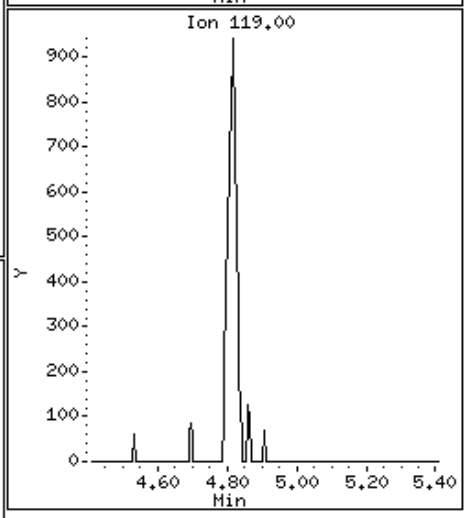












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012528.d Page 7

Date : 25-JAN-2024 20:20

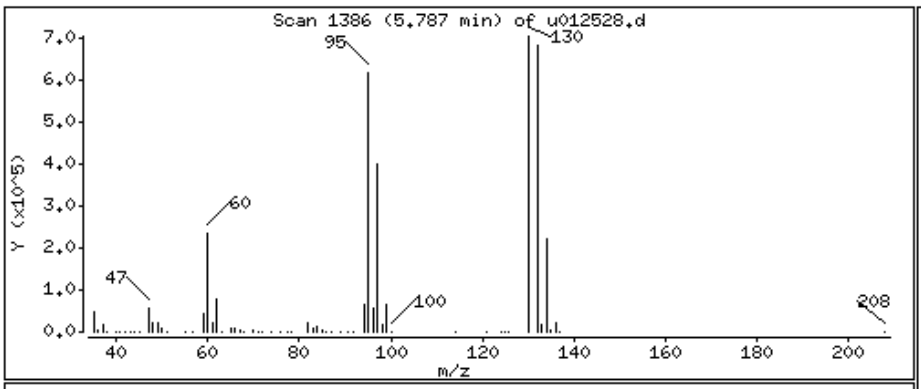
Client ID: HS24011040-10 Instrument: VOA9.i

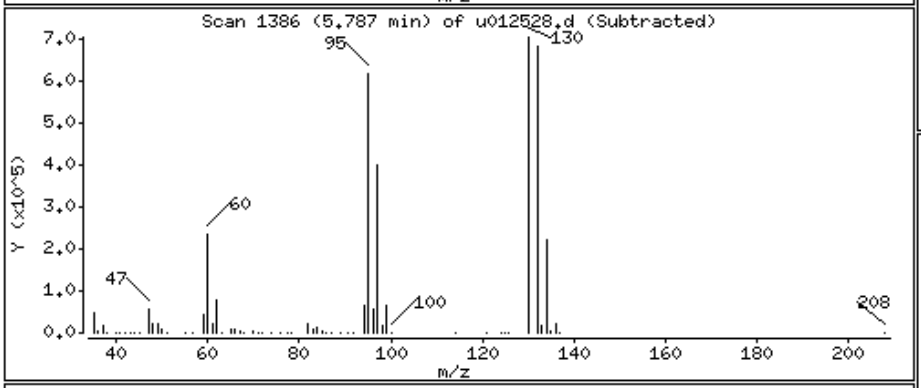
Sample Info: HS24011040-10;HS24011040-10;;;

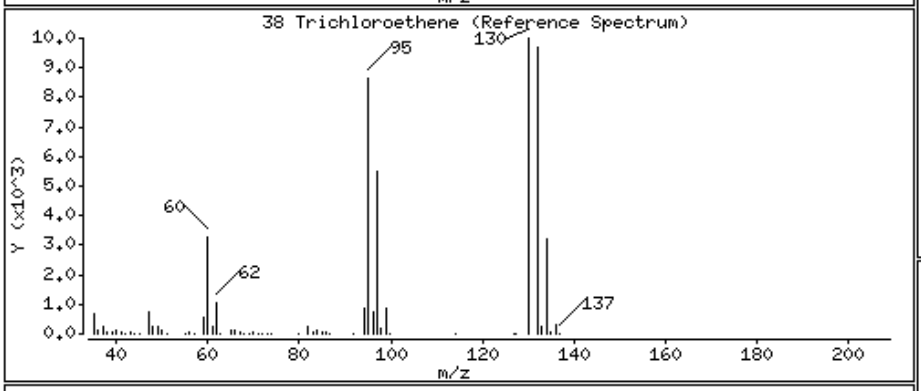
Purge Volume: 5.0 Operator: PC

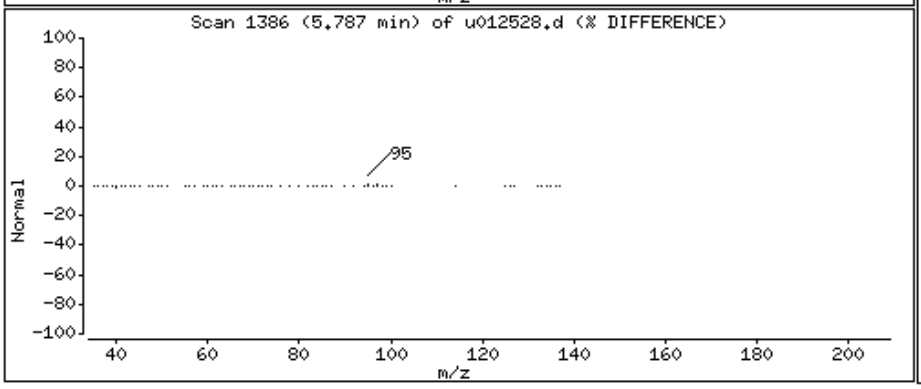
Column phase: DB624 Column diameter: 0.18

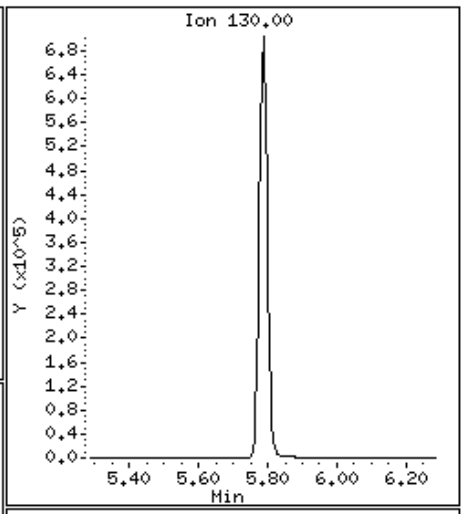
38 Trichloroethene Concentration: 79607.30 ug/l

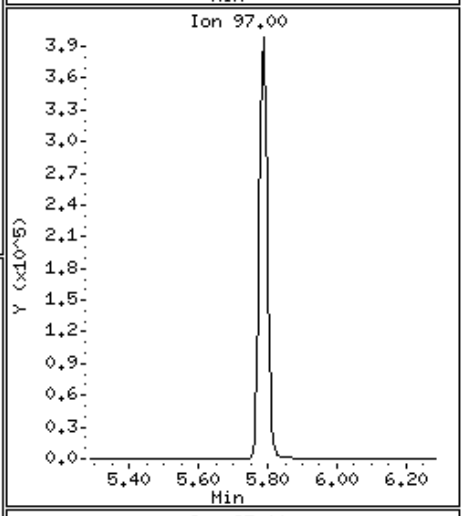


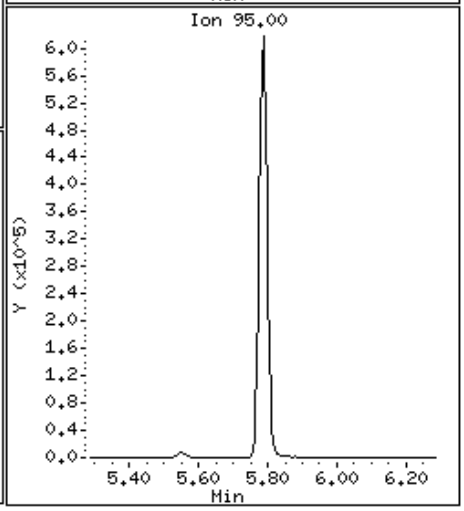












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012528.d Page 8

Date : 25-JAN-2024 20:20

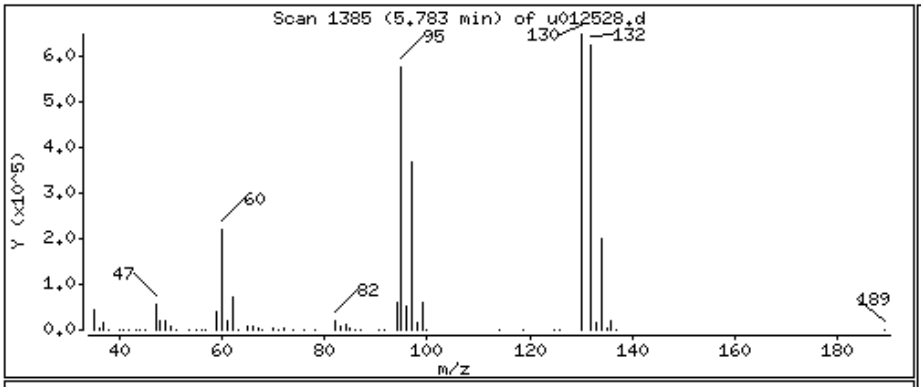
Client ID: HS24011040-10 Instrument: VOA9.i

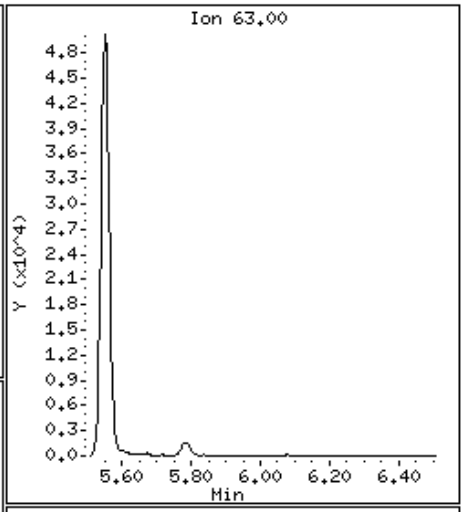
Sample Info: HS24011040-10;HS24011040-10;;;

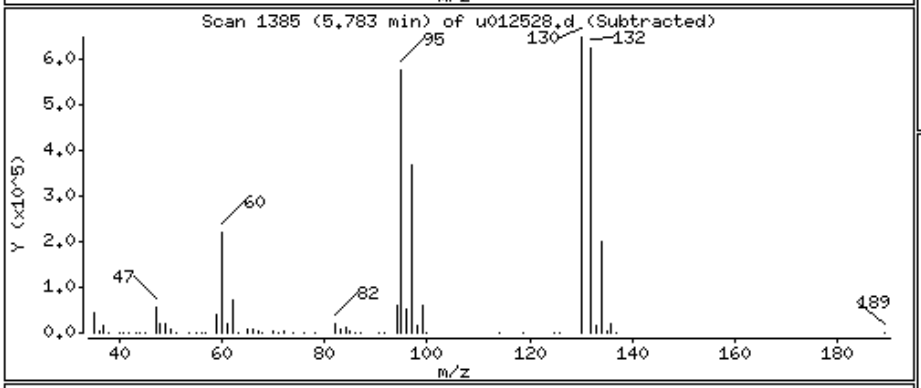
Purge Volume: 5.0 Operator: PC

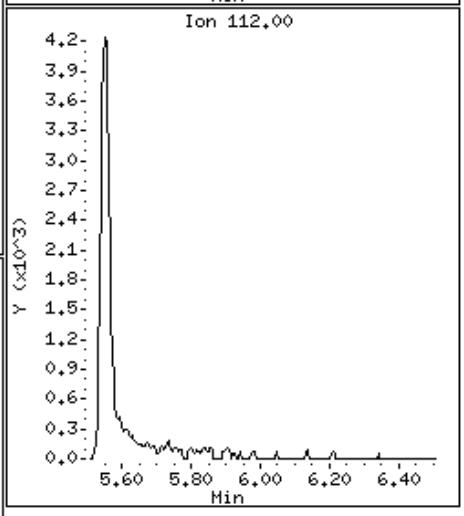
Column phase: DB624 Column diameter: 0.18

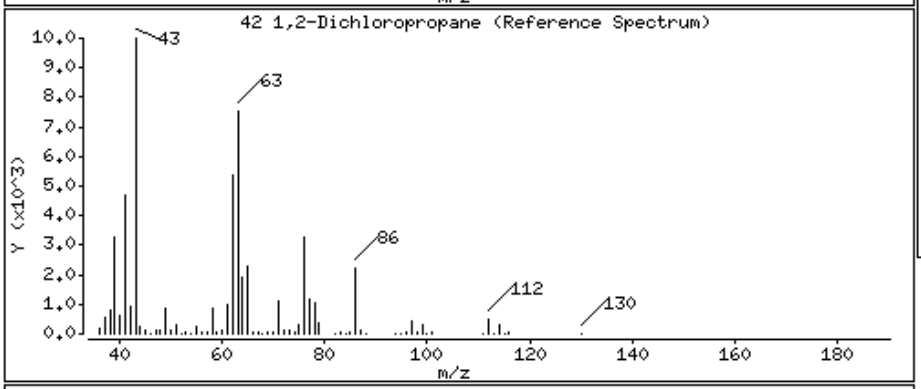
42 1,2-Dichloropropane Concentration: 212.30 ug/l

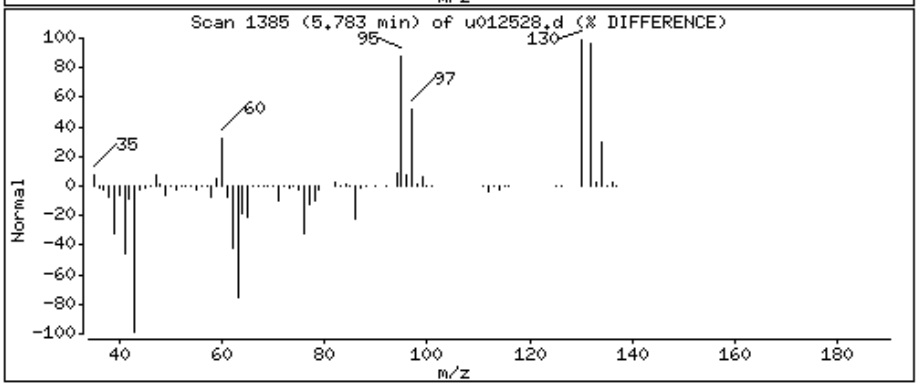












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012528.d Page 9

Date : 25-JAN-2024 20:20

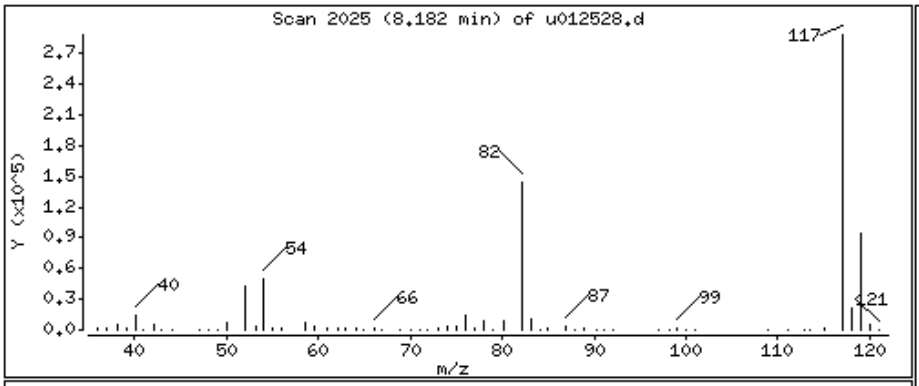
Client ID: HS24011040-10 Instrument: VOA9.i

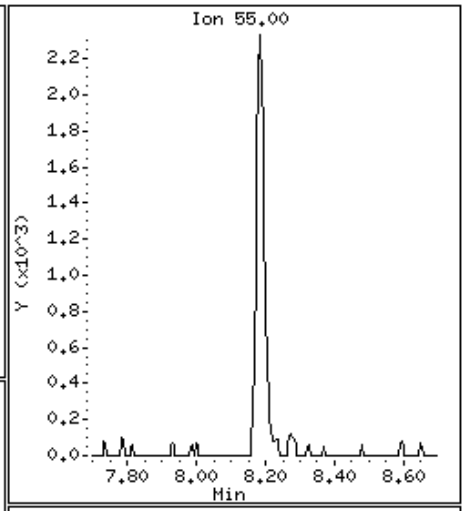
Sample Info: HS24011040-10;HS24011040-10;;;

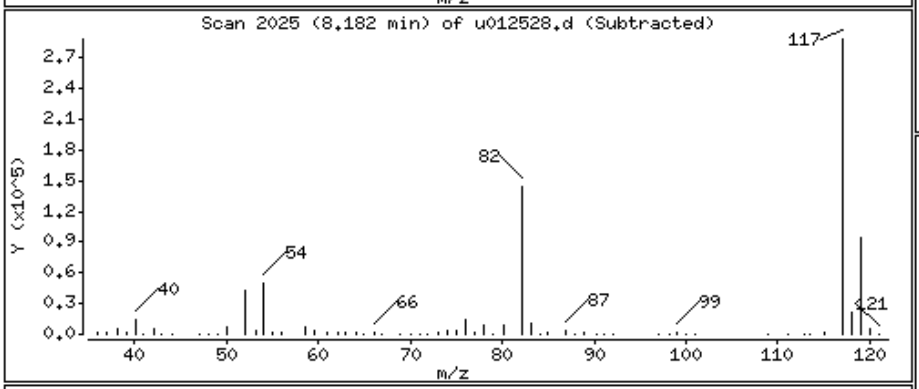
Purge Volume: 5.0 Operator: PC

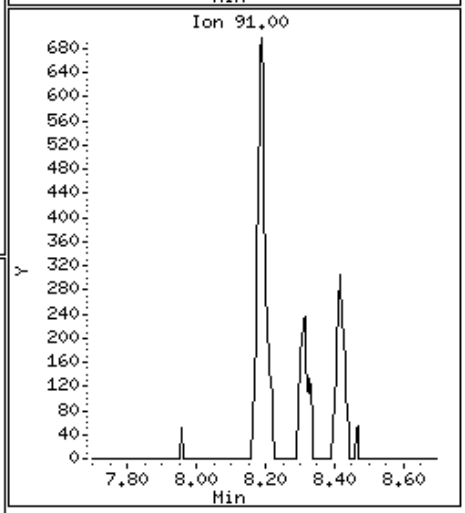
Column phase: DB624 Column diameter: 0.18

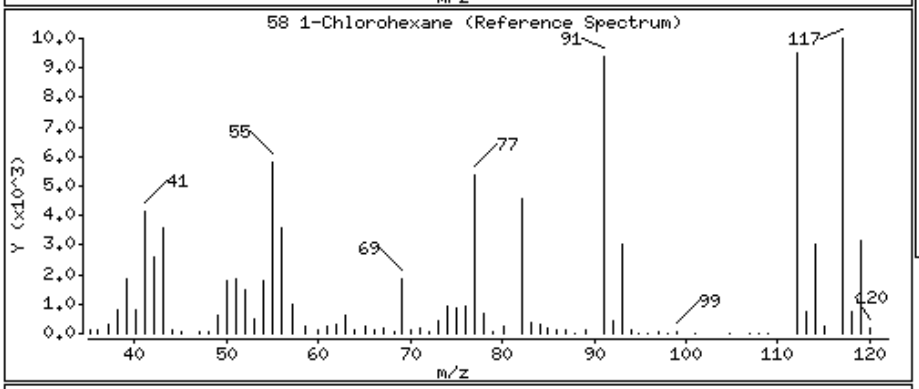
58 1-Chlorohexane Concentration: 365.02 ug/l

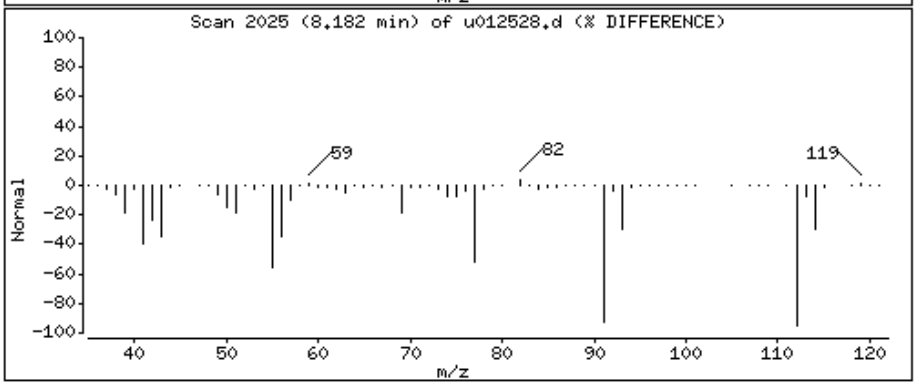












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012528.d Page 10

Date : 25-JAN-2024 20:20

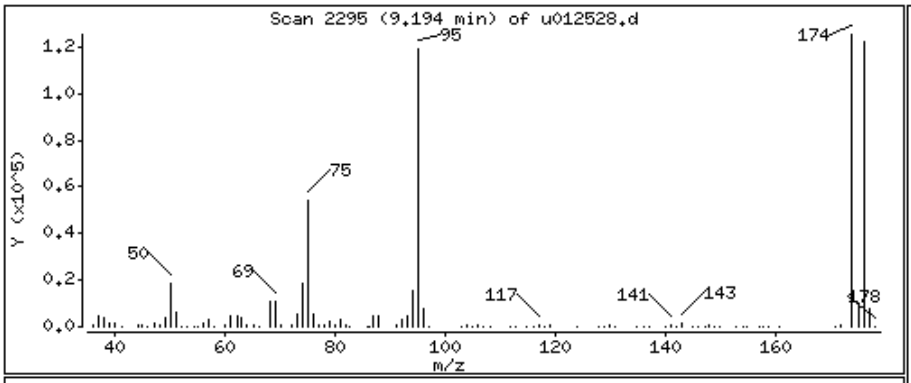
Client ID: HS24011040-10 Instrument: VOA9.i

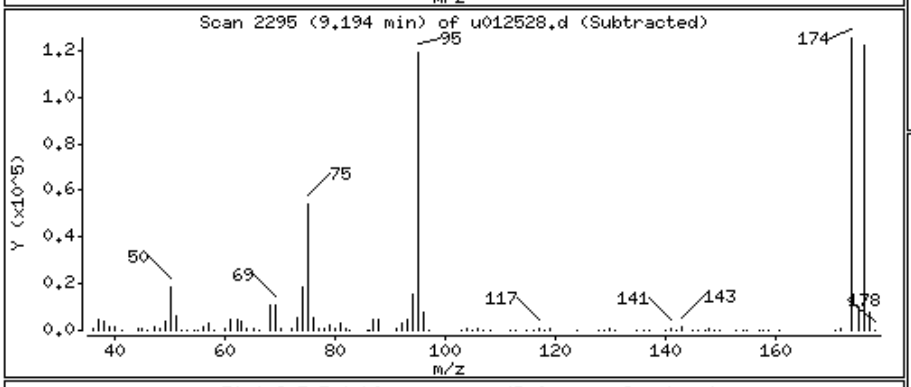
Sample Info: HS24011040-10;HS24011040-10;;;

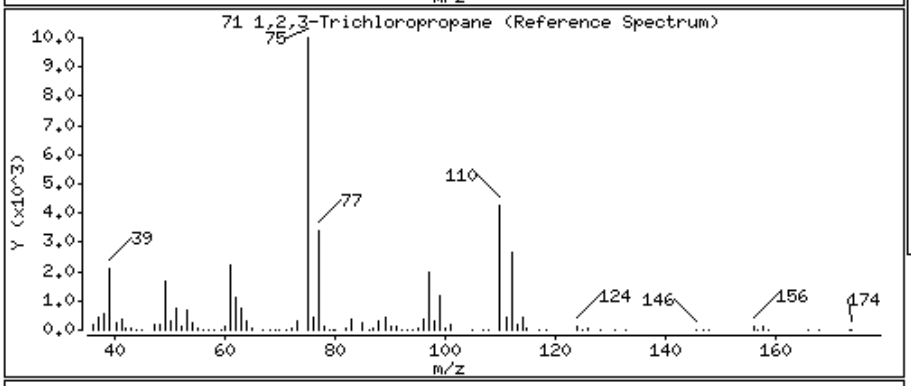
Purge Volume: 5.0 Operator: PC

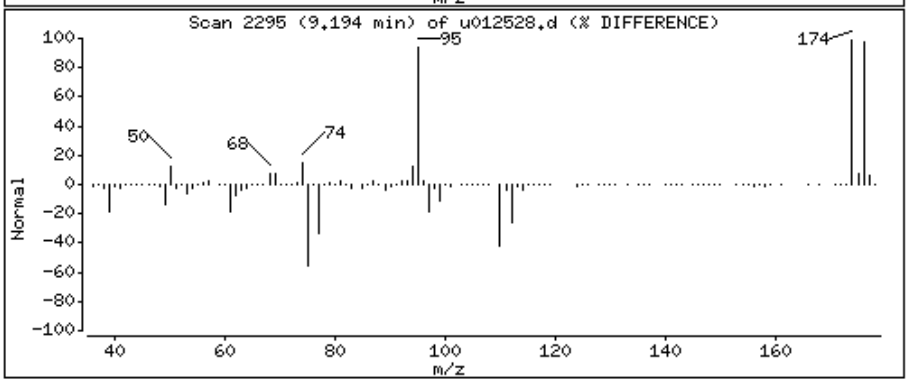
Column phase: DB624 Column diameter: 0.18

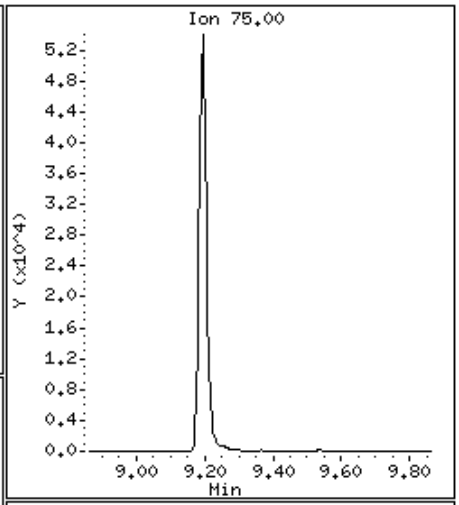
71 1,2,3-Trichloropropane Concentration: 4588.31 ug/l

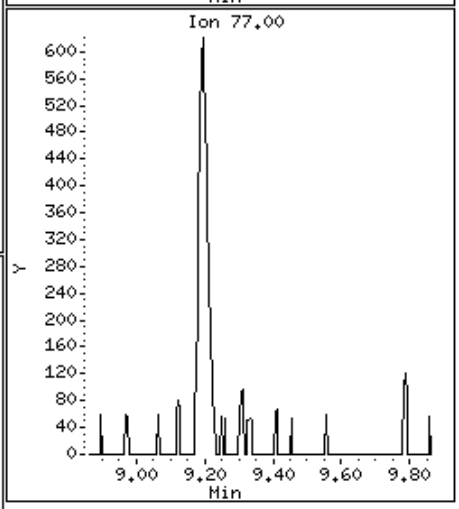












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012528.d Page 11

Date : 25-JAN-2024 20:20

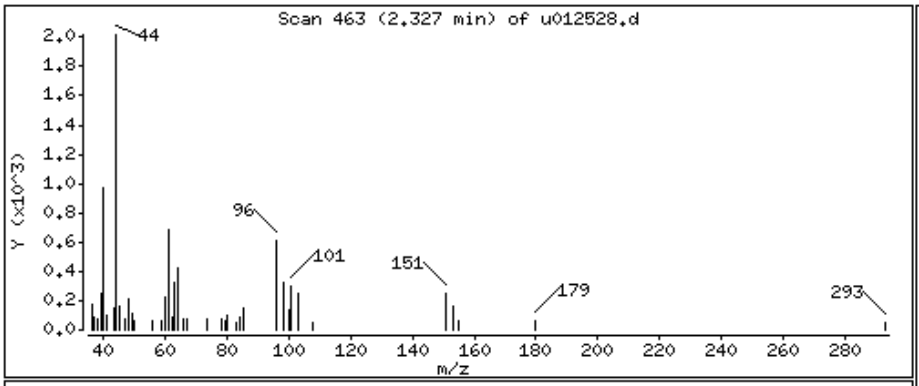
Client ID: HS24011040-10 Instrument: VOA9.i

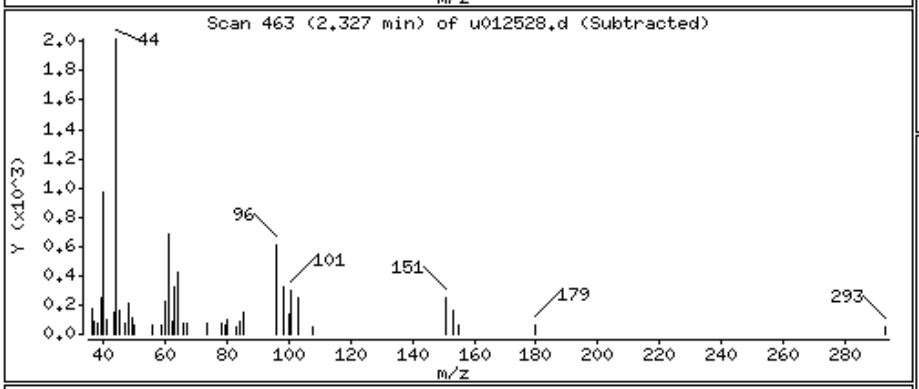
Sample Info: HS24011040-10;HS24011040-10;;;

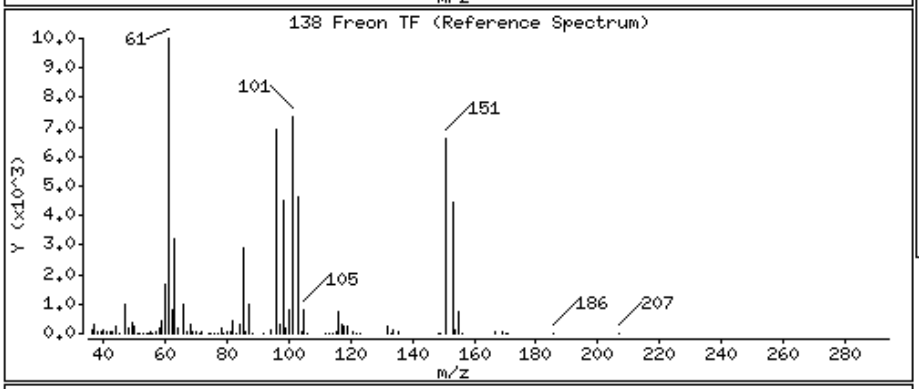
Purge Volume: 5.0 Operator: PC

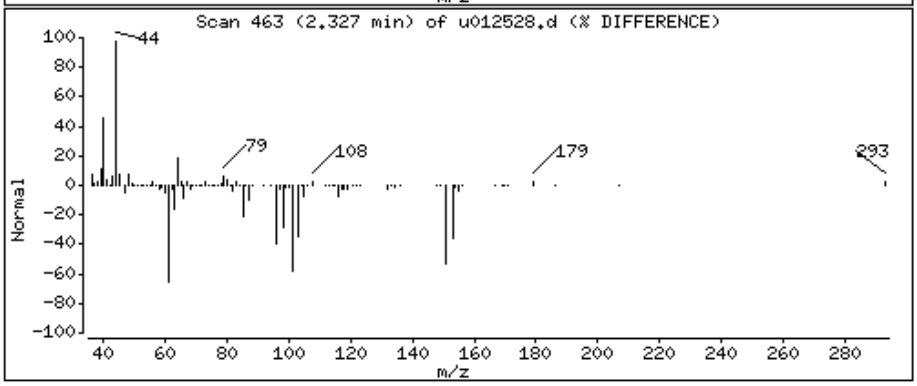
Column phase: DB624 Column diameter: 0.18

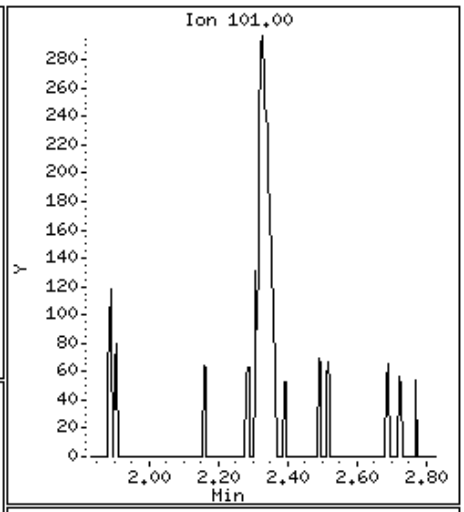
138 Freon TF Concentration: 72.28 ug/l

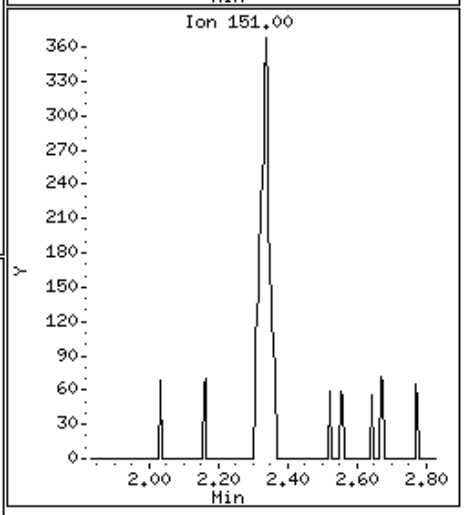












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012528.d Page 12

Date : 25-JAN-2024 20:20

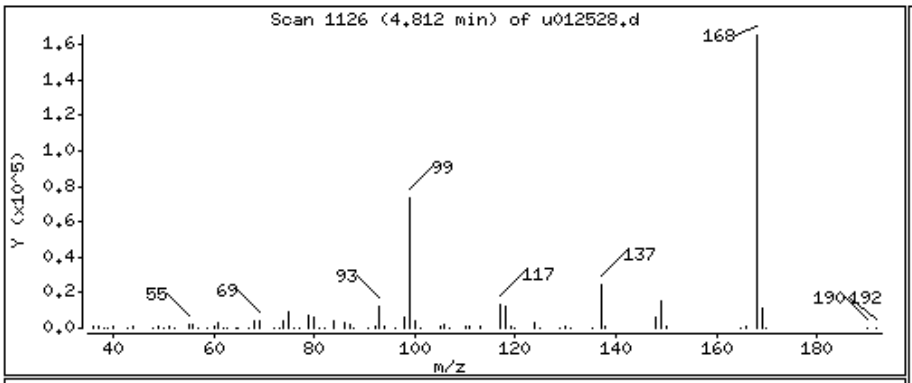
Client ID: HS24011040-10 Instrument: VOA9.i

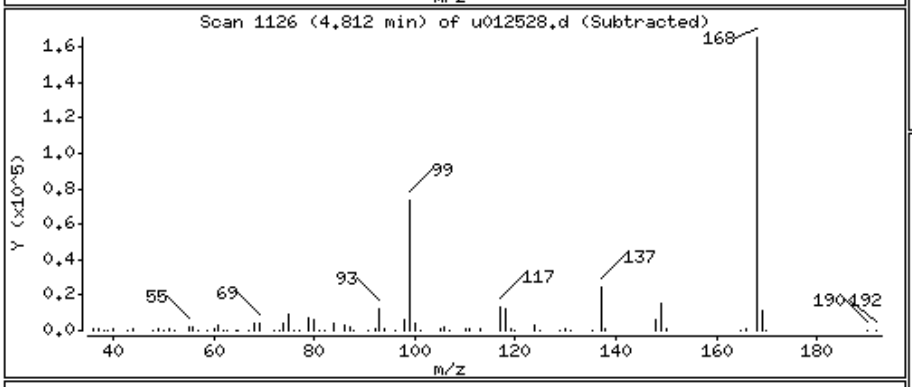
Sample Info: HS24011040-10;HS24011040-10;;;

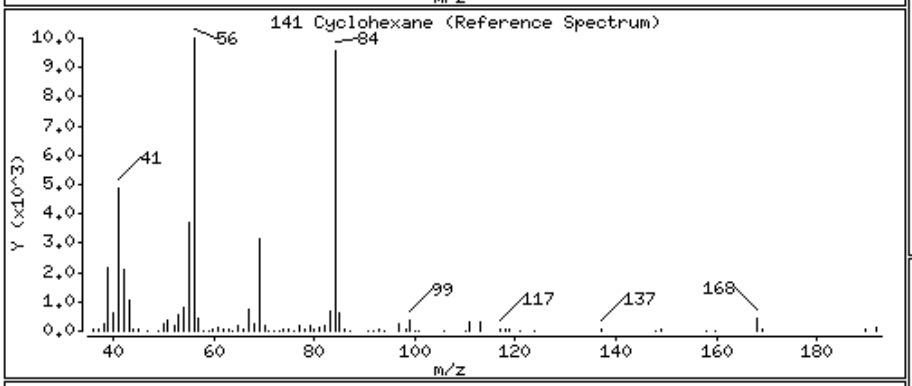
Purge Volume: 5.0 Operator: PC

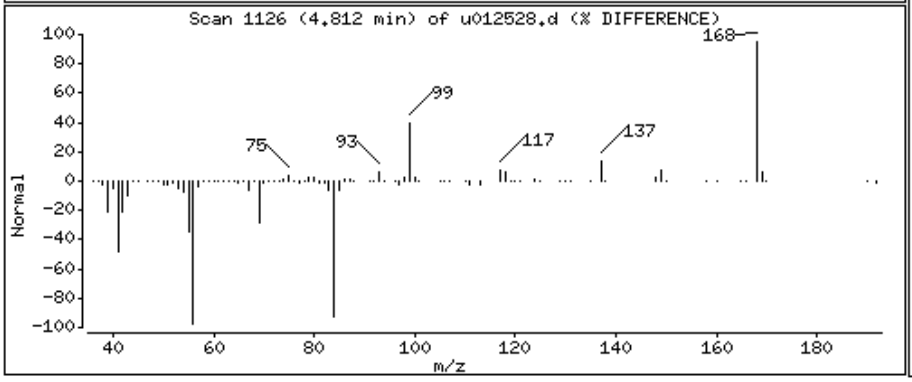
Column phase: DB624 Column diameter: 0.18

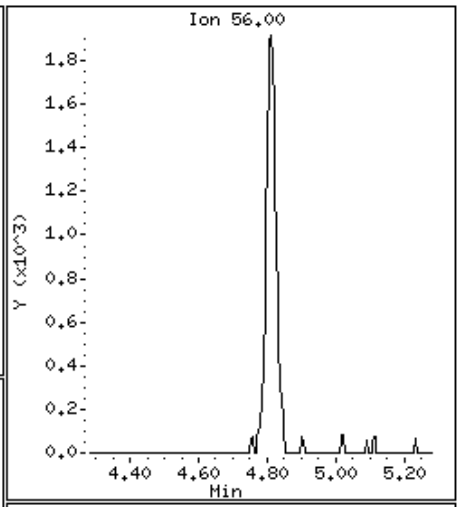
141 Cyclohexane Concentration: 209.19 ug/l

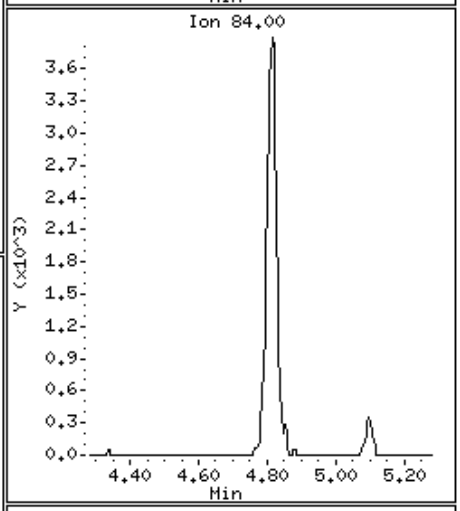


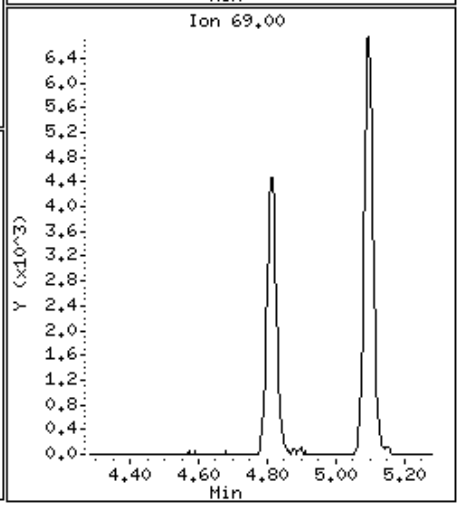












Data File : \\nahstws005\target\chem\voa9.i\u240125.b\u012528.d
Inj Date : 25-JAN-2024 20:20
InstruID : VOA9.i
LabSampID : HS24011040-10

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240125.b\U012529.D Page 1
Report Date: 01-Feb-2024 14:20

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240125.b\U012529.D
Lab Smp Id: HS24011040-10 Client Smp ID: HS24011040-10
Inj Date : 25-JAN-2024 20:42
Operator : PC Inst ID: VOA9.i
Smp Info : HS24011040-10;HS24011040-10;;;
Misc Info : V9;WATER;0;2000;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240125.b\8260C.m
Meth Date : 01-Feb-2024 14:20 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 27
Dil Factor: 2000.00000
Integrator: HP RTE Compound Sublist: 1040-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7066

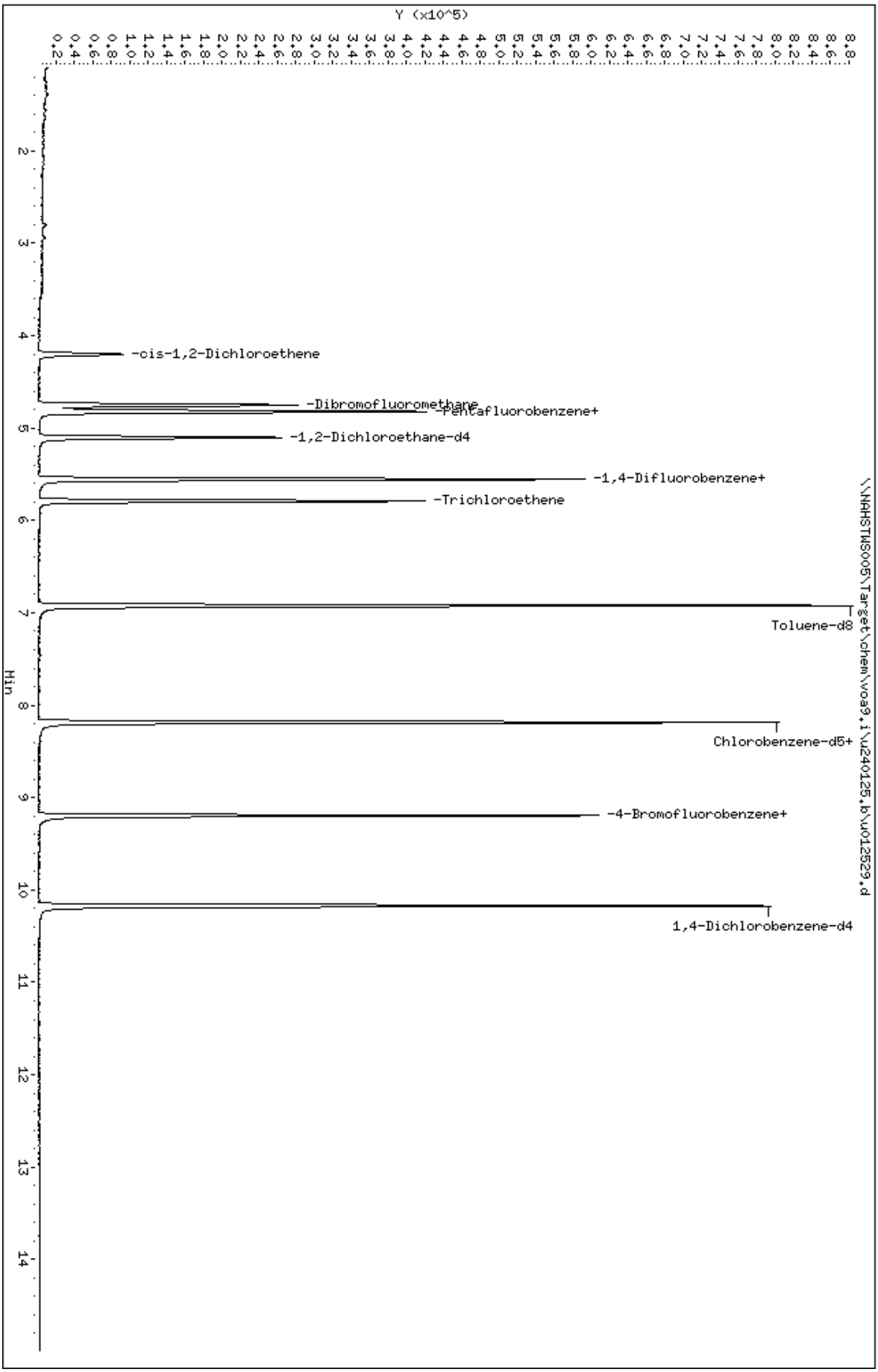
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	2000.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
*	1 Pentafluorobenzene	168	4.819	4.815	(1.000)	314617	50.0000	
	2 Dichlorodifluoromethane	85	1.022	1.164	(0.212)	33609	13.8903	27780.64
	3 Chloromethane	50	1.014	1.303	(0.211)	67514	18.7068	37413.62
	27 cis-1,2-Dichloroethene	96	4.200	4.197	(0.872)	49129	12.6428	25285.69
$	30 Dibromofluoromethane	113	4.751	4.748	(0.986)	165837	51.5360	51.53(R)
	34 Carbon Tetrachloride	117	4.819	4.913	(0.868)	25820	6.53220	13064.40
$	35 1,2-Dichloroethane-d4	65	5.100	5.096	(1.058)	172654	46.9369	46.93(R)
*	36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	483691	50.0000	
	38 Trichloroethene	130	5.790	5.790	(1.043)	144824	39.9067	79813.32
	42 1,2-Dichloropropane	63	5.554	6.007	(1.000)	84267	23.7706	47541.20
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	466125	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	547484	51.0221	51.02(R)
	58 1-Chlorohexane	55	8.185	8.197	(1.474)	3748	1.38186	2763.71(a)
$	69 4-Bromofluorobenzene	95	9.194	9.190	(1.123)	178127	43.6832	43.68(R)
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	237822	50.0000	
	71 1,2,3-Trichloropropane	75	9.194	9.362	(0.904)	81287	18.0053	36010.50
	141 Cyclohexane	56	4.819	4.785	(1.000)	4616	1.01823	2036.46(a)
M	94 1,2-Dichloroethylene (total)	96				49129	14.4780	28955.92

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.



Data File: \\NAHSTWS005\Target\chem\voa9,i\u240125,b\u012529.d
Date : 25-JAN-2024 20:42
Client ID: HS24011040-10
Sample Info: HS24011040-10;HS24011040-10;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9,i
Operator: PC
Column diameter: 0.18

Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012529.d Page 2

Date : 25-JAN-2024 20:42

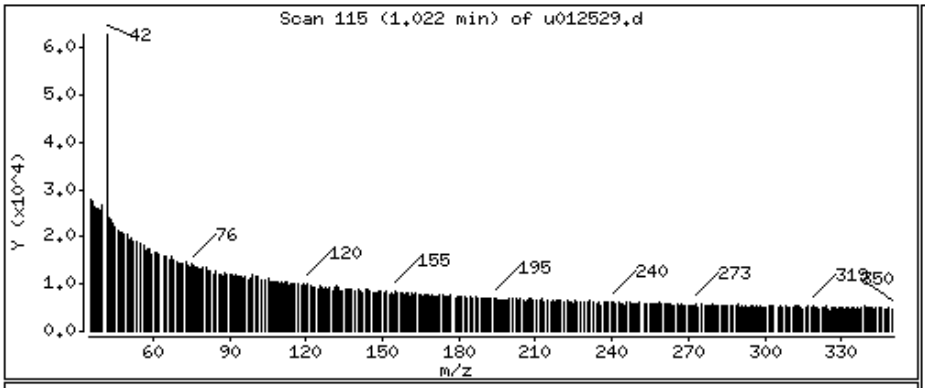
Client ID: HS24011040-10 Instrument: VOA9.i

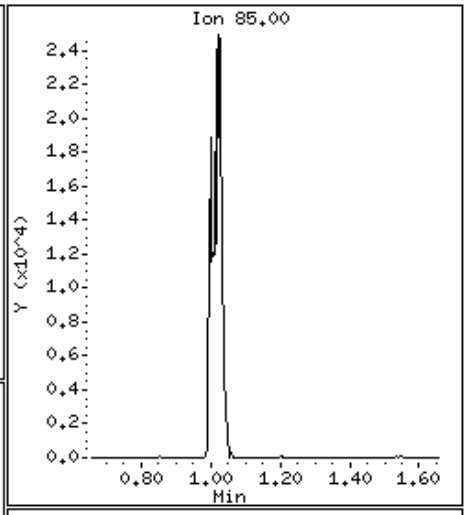
Sample Info: HS24011040-10;HS24011040-10;;;

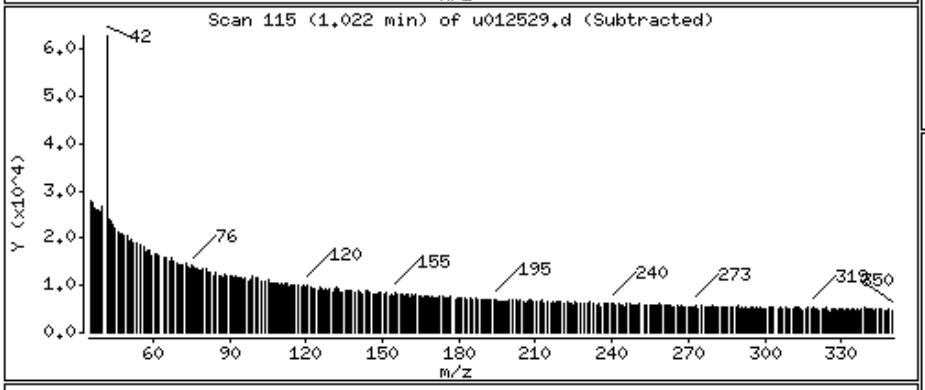
Purge Volume: 5.0 Operator: PC

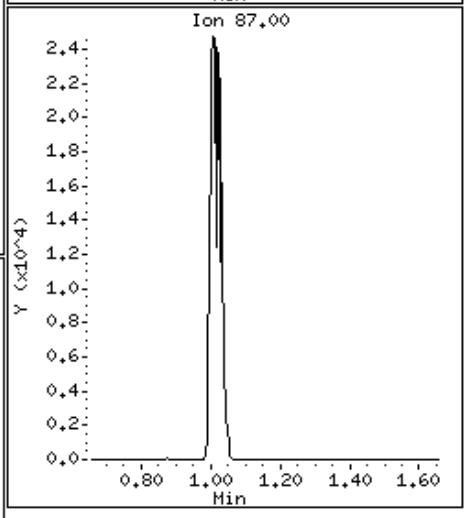
Column phase: DB624 Column diameter: 0.18

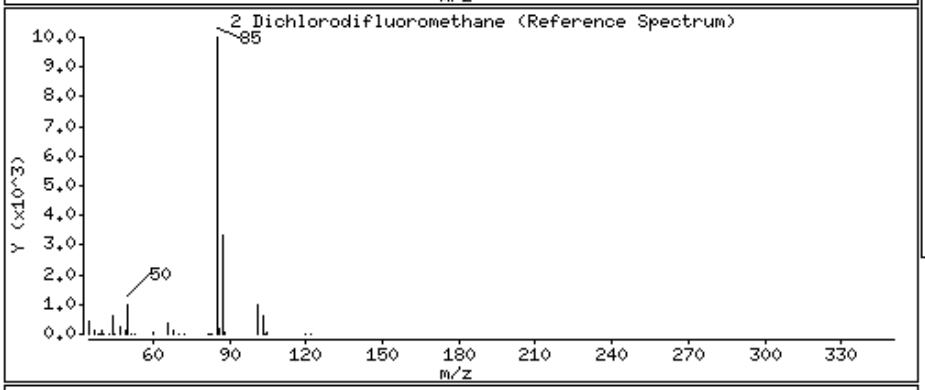
2 Dichlorodifluoromethane Concentration: 27780.64 ug/l

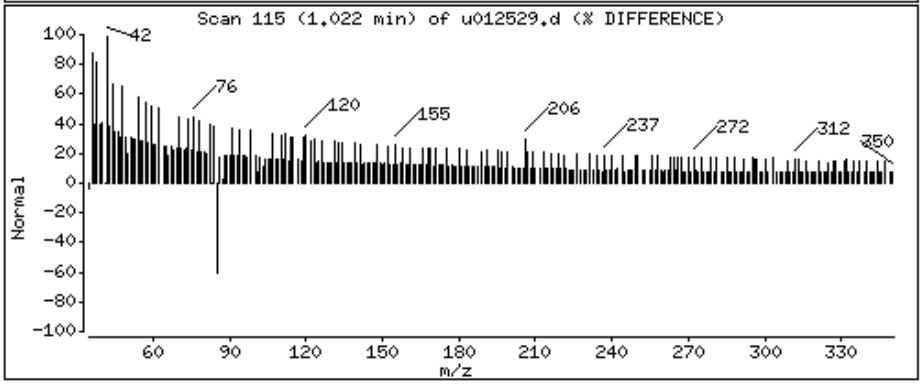












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012529.d Page 3

Date : 25-JAN-2024 20:42

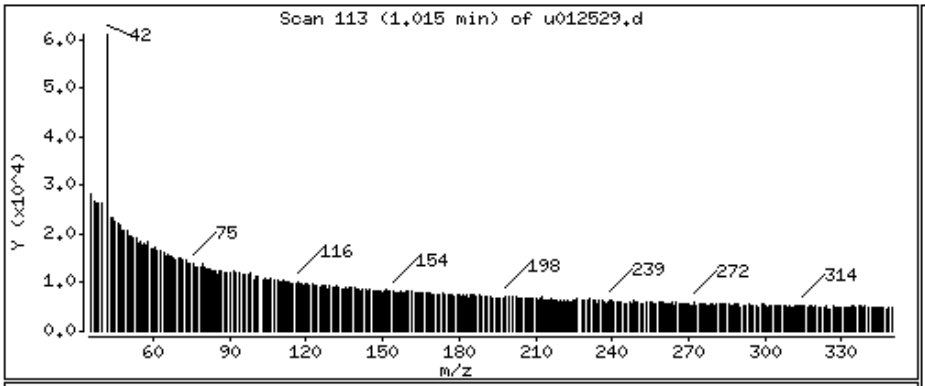
Client ID: HS24011040-10 Instrument: VOA9.i

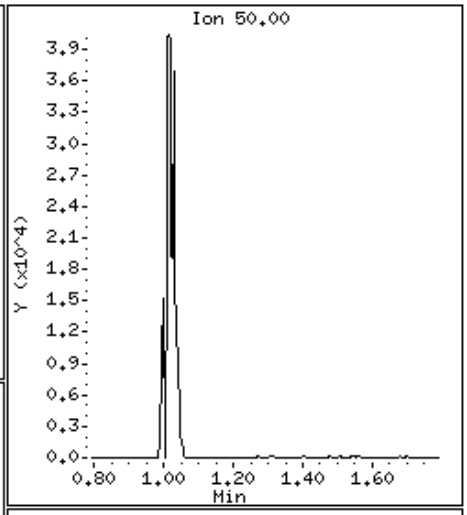
Sample Info: HS24011040-10;HS24011040-10;;;

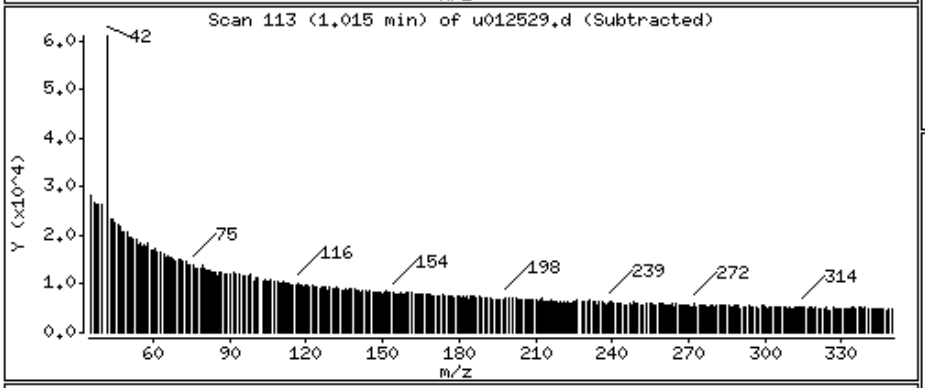
Purge Volume: 5.0 Operator: PC

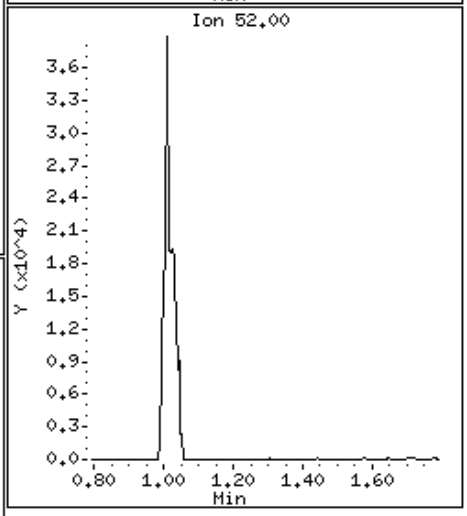
Column phase: DB624 Column diameter: 0.18

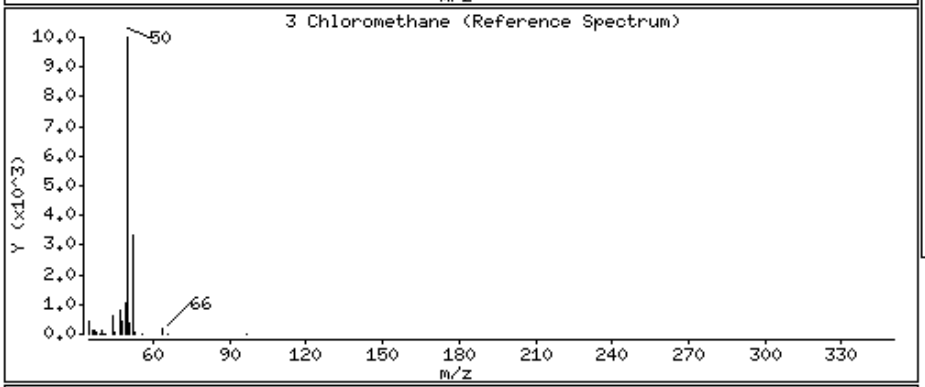
3 Chloromethane Concentration: 37413.62 ug/l

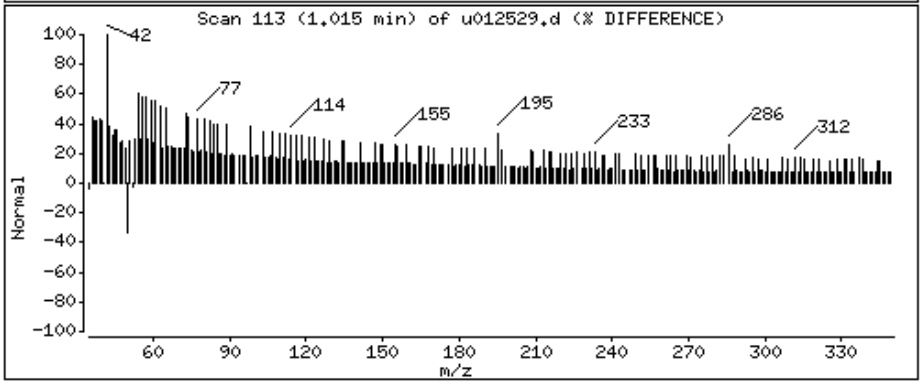












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012529.d Page 4

Date : 25-JAN-2024 20:42

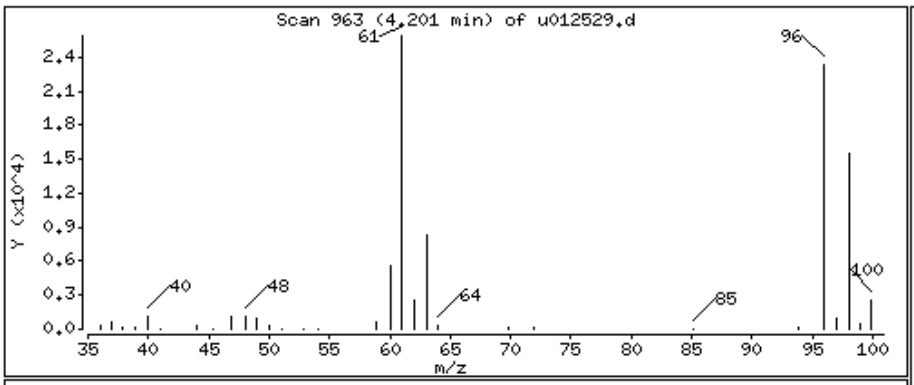
Client ID: HS24011040-10 Instrument: VOA9.i

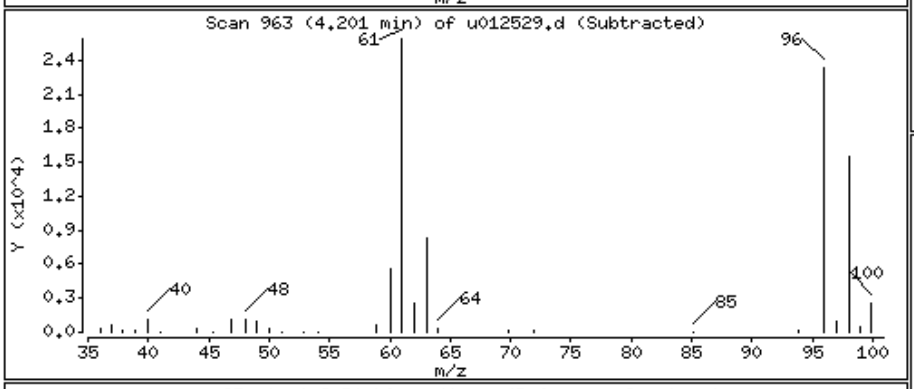
Sample Info: HS24011040-10;HS24011040-10;;;

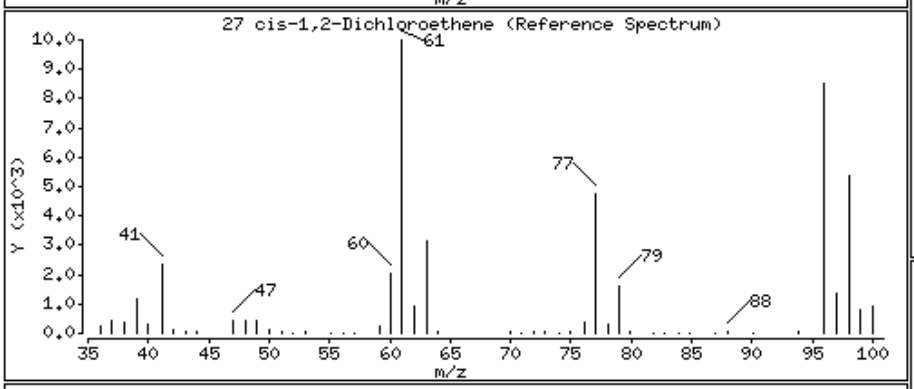
Purge Volume: 5.0 Operator: PC

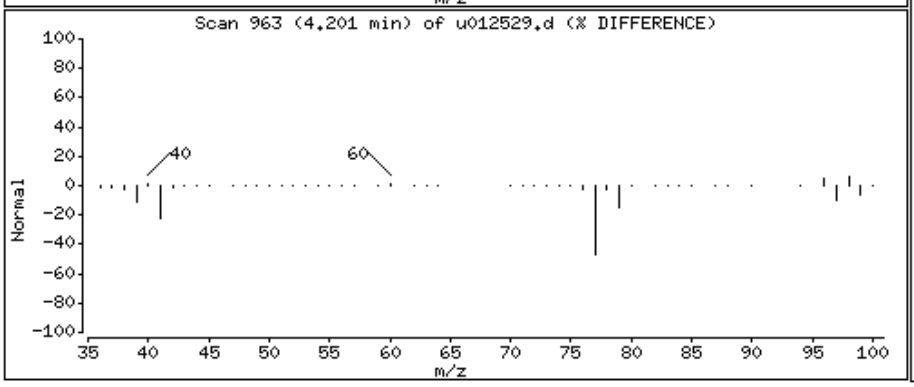
Column phase: DB624 Column diameter: 0.18

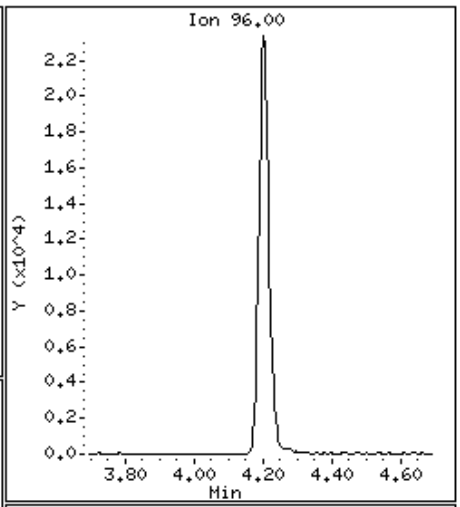
27 cis-1,2-Dichloroethene Concentration: 25285.69 ug/l

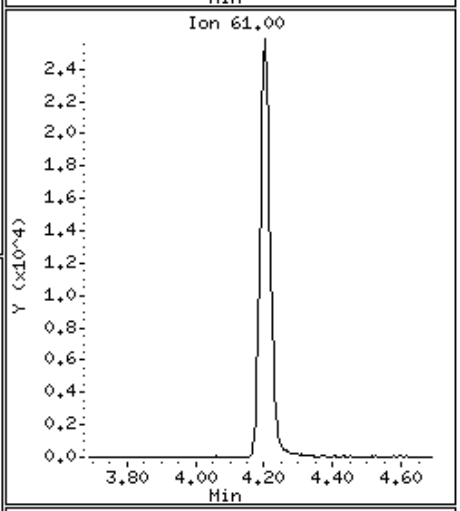


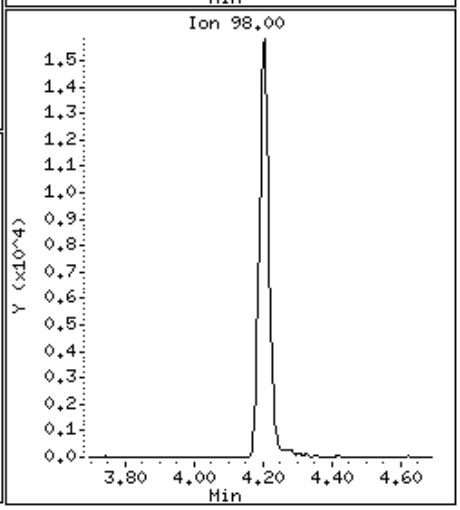












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012529.d Page 5

Date : 25-JAN-2024 20:42

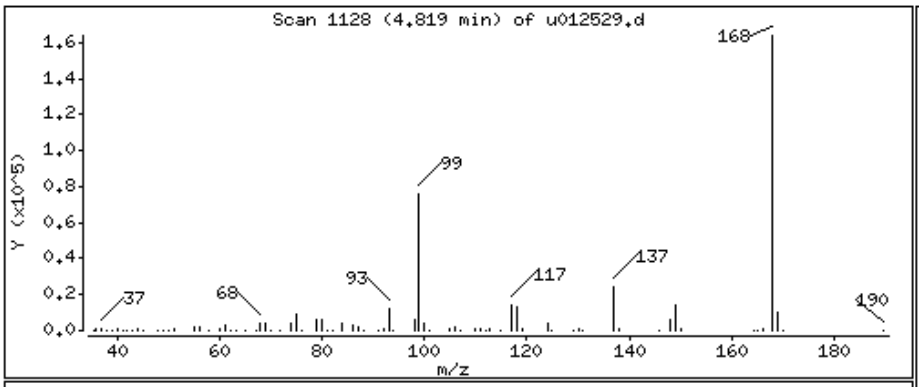
Client ID: HS24011040-10 Instrument: VOA9.i

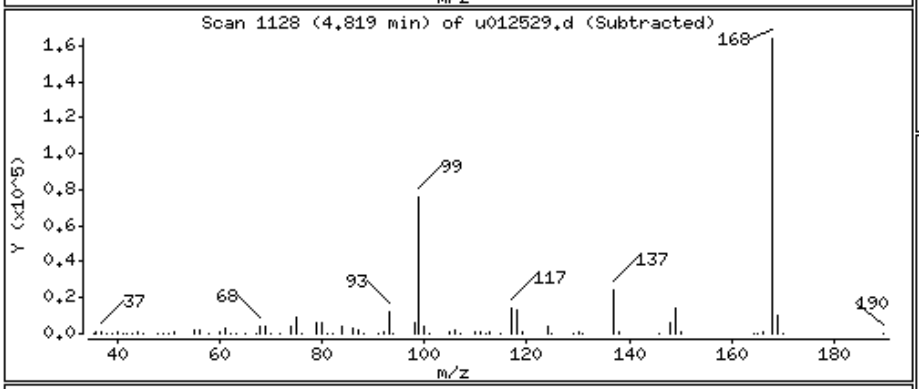
Sample Info: HS24011040-10;HS24011040-10;;;

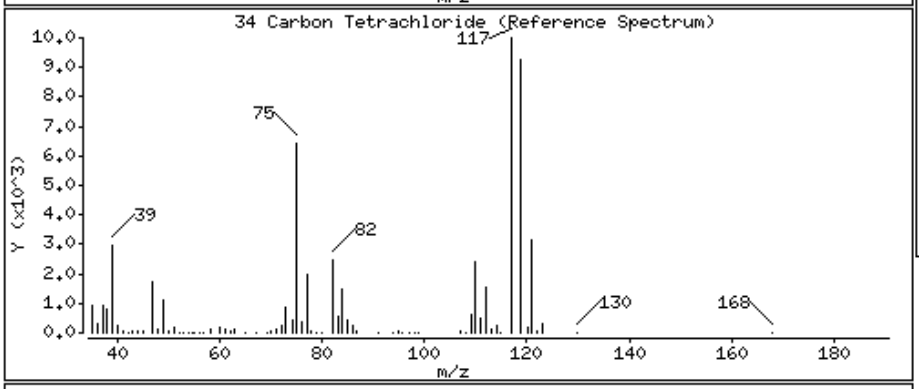
Purge Volume: 5.0 Operator: PC

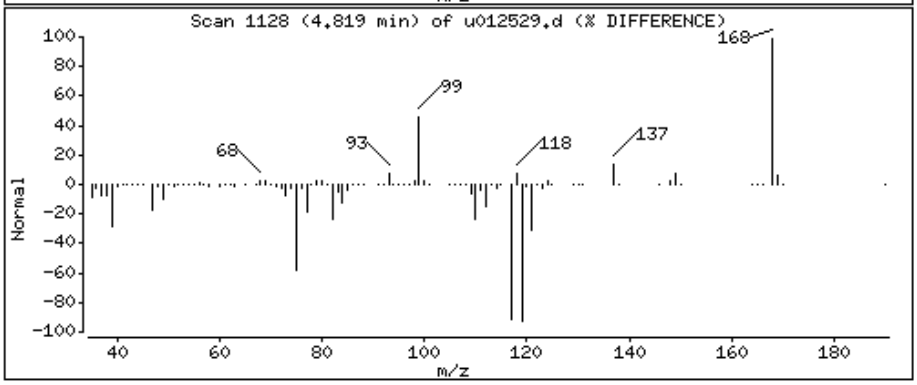
Column phase: DB624 Column diameter: 0.18

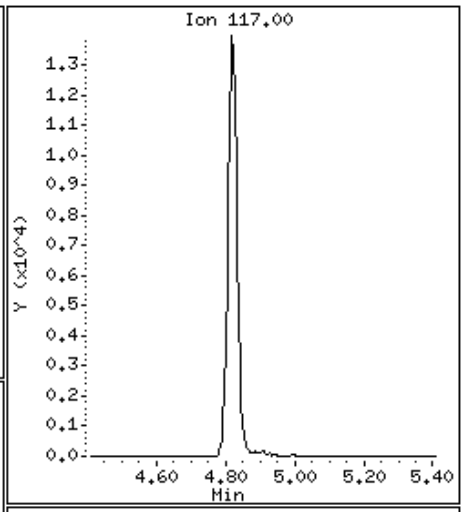
34 Carbon Tetrachloride Concentration: 13064.40 ug/l

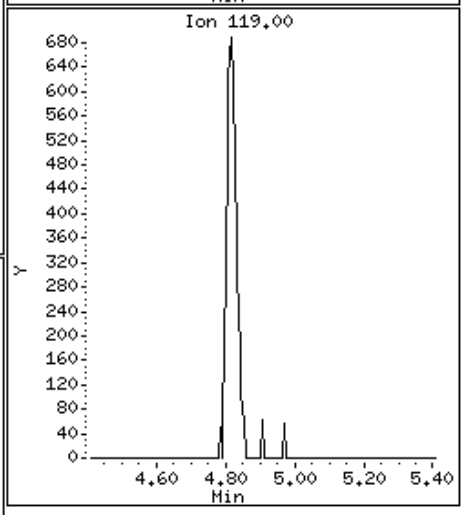












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012529.d Page 6

Date : 25-JAN-2024 20:42

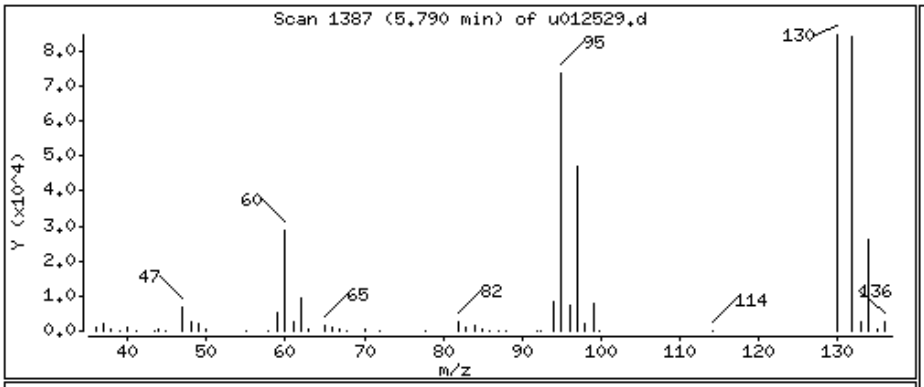
Client ID: HS24011040-10 Instrument: VOA9.i

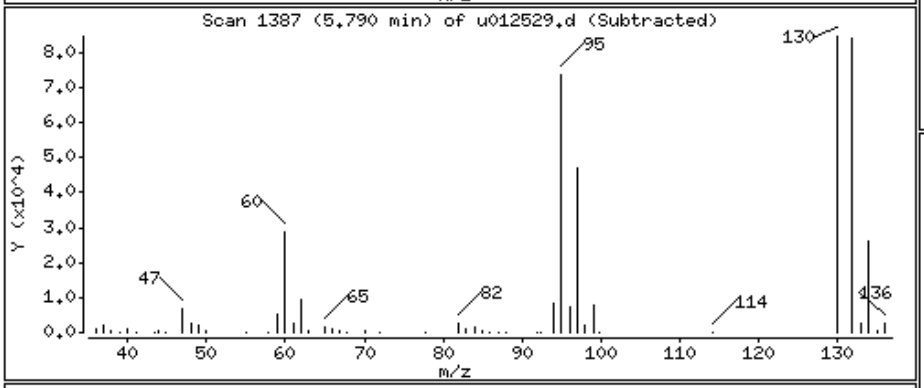
Sample Info: HS24011040-10;HS24011040-10;;;

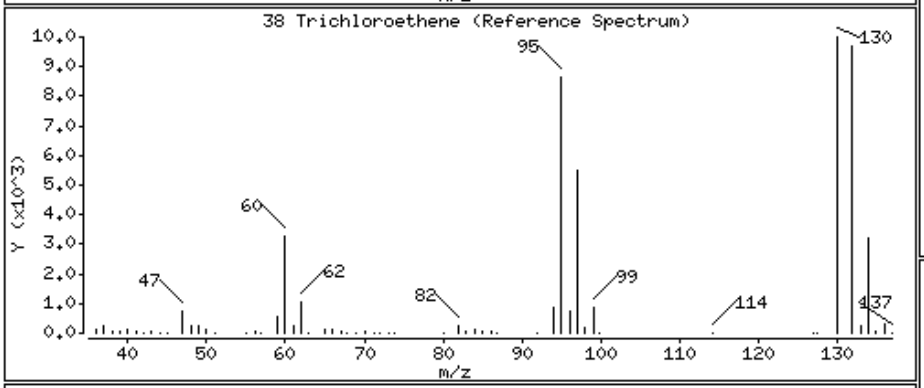
Purge Volume: 5.0 Operator: PC

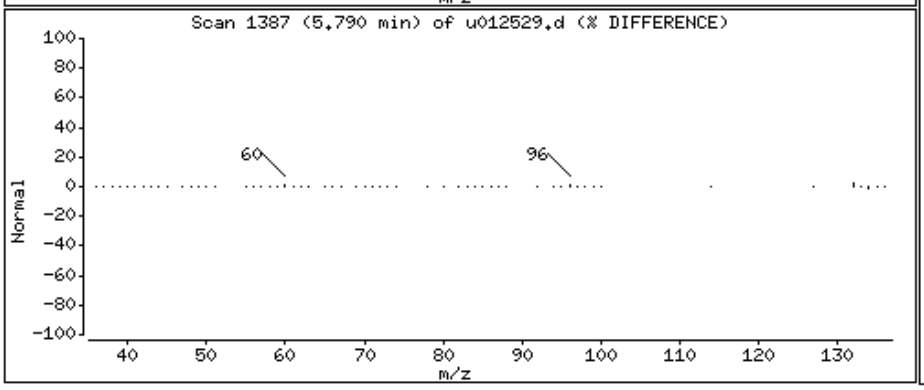
Column phase: DB624 Column diameter: 0.18

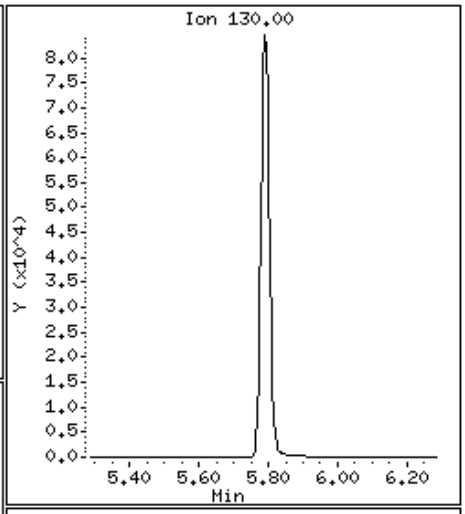
38 Trichloroethene Concentration: 79813.32 ug/l

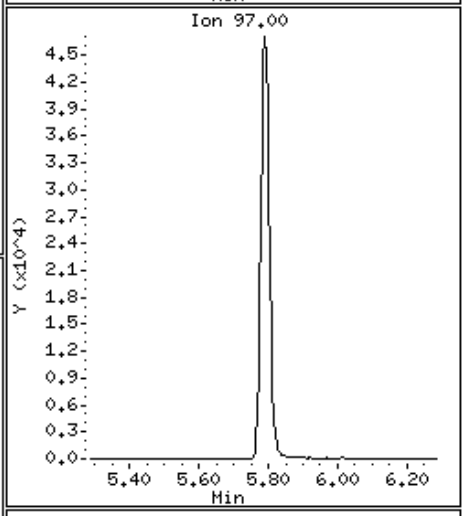


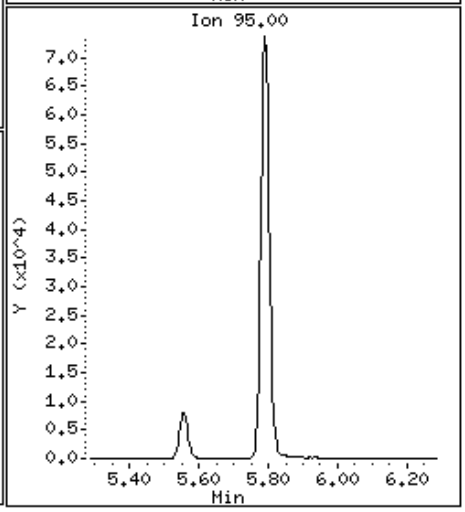












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012529.d Page 7

Date : 25-JAN-2024 20:42

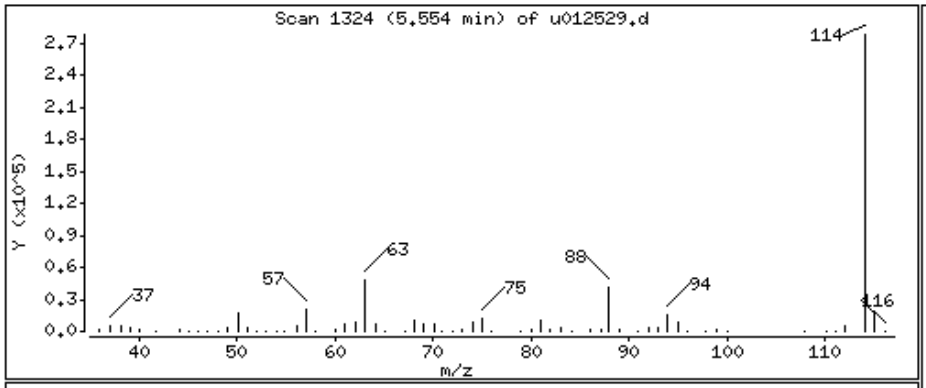
Client ID: HS24011040-10 Instrument: VOA9.i

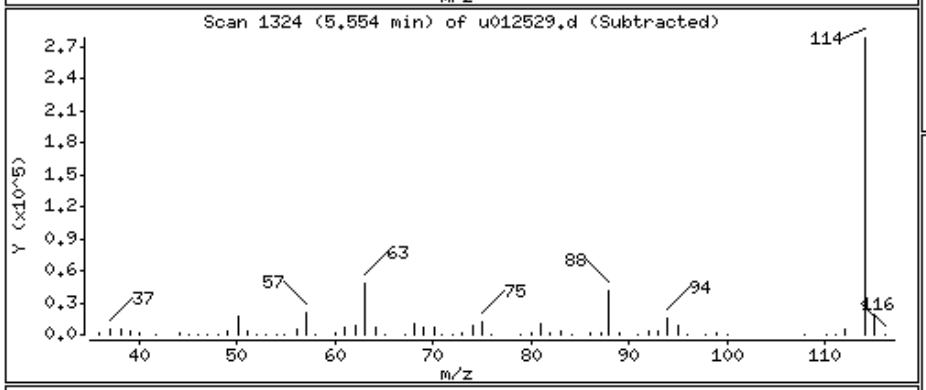
Sample Info: HS24011040-10;HS24011040-10;;;

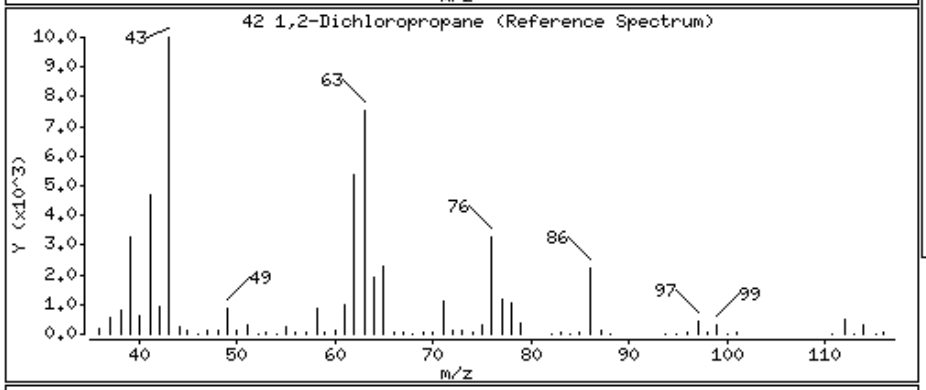
Purge Volume: 5.0 Operator: PC

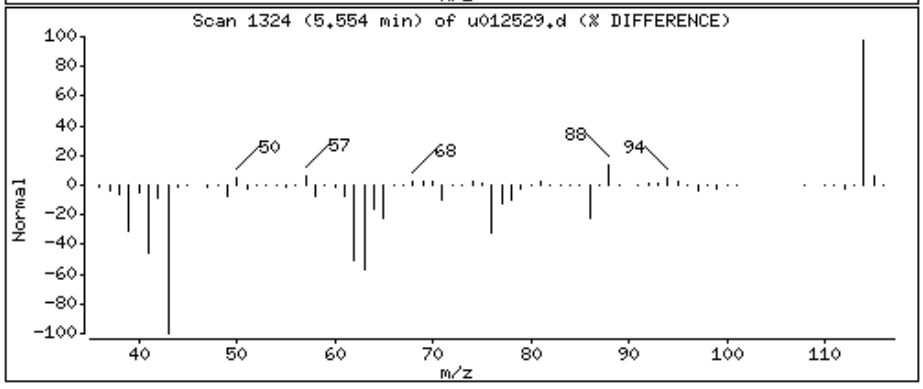
Column phase: DB624 Column diameter: 0.18

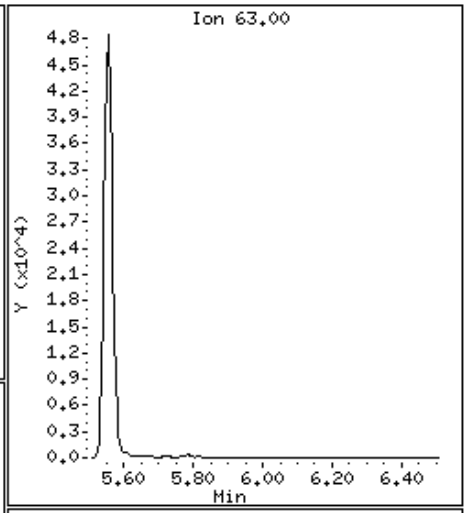
42 1,2-Dichloropropane Concentration: 47541.20 ug/l

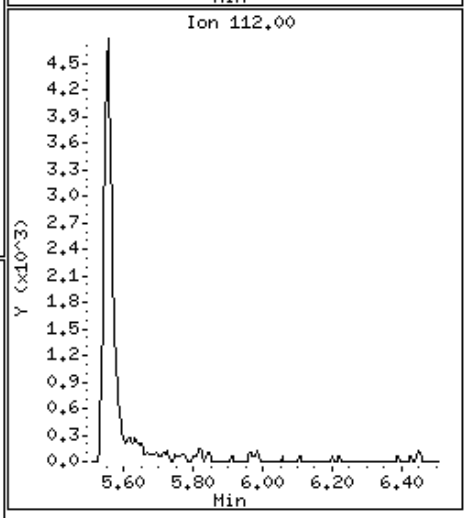












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012529.d Page 8

Date : 25-JAN-2024 20:42

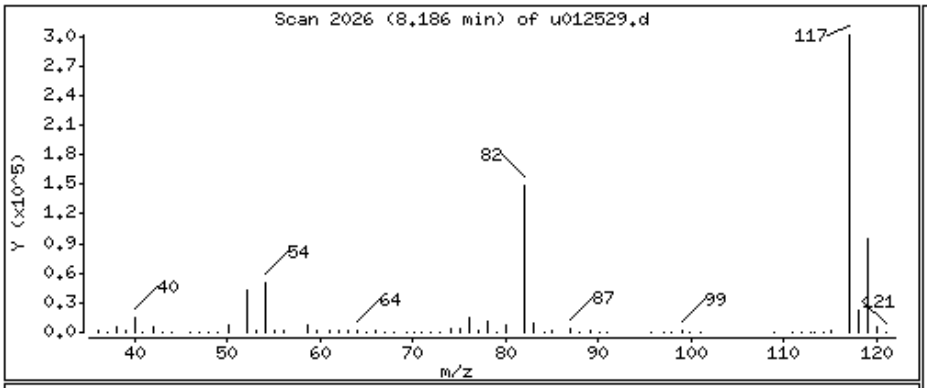
Client ID: HS24011040-10 Instrument: VOA9.i

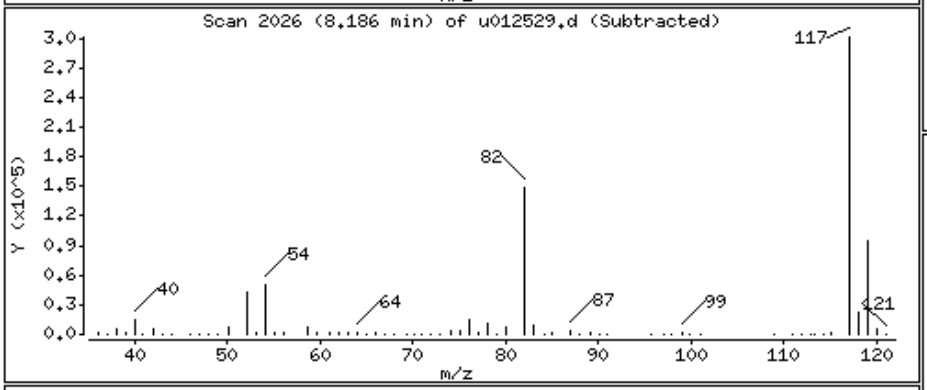
Sample Info: HS24011040-10;HS24011040-10;;;

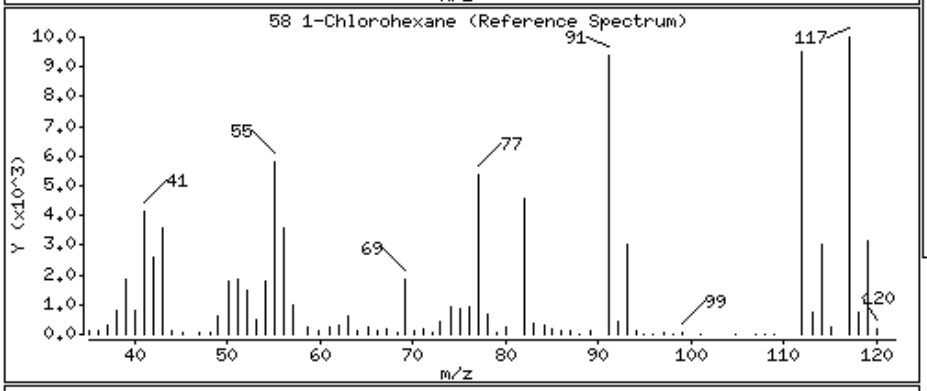
Purge Volume: 5.0 Operator: PC

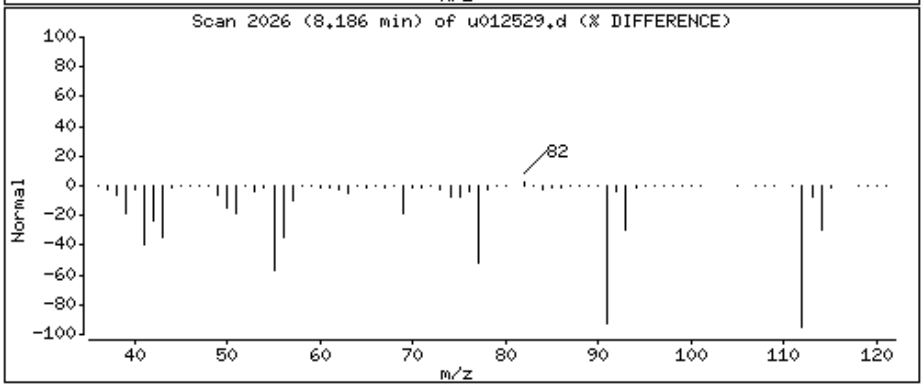
Column phase: DB624 Column diameter: 0.18

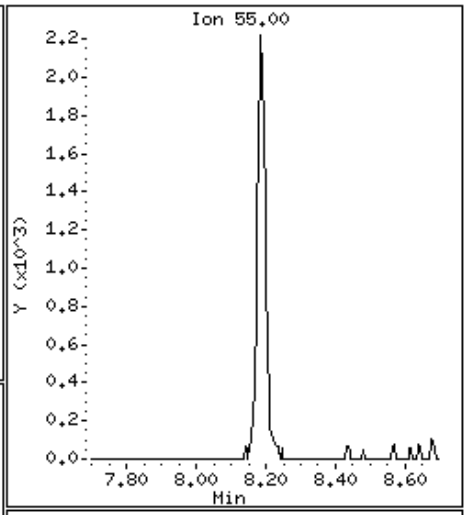
58 1-Chlorohexane Concentration: 2763.71 ug/l

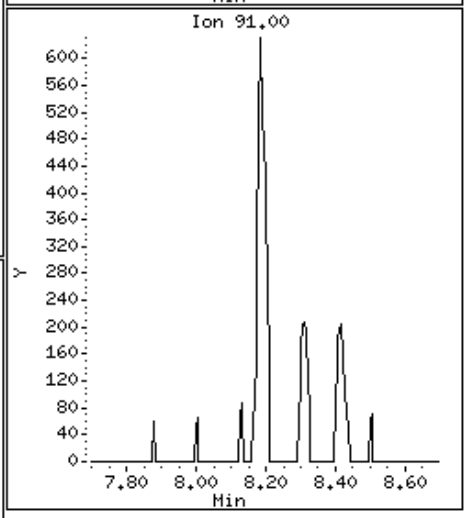












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012529.d Page 9

Date : 25-JAN-2024 20:42

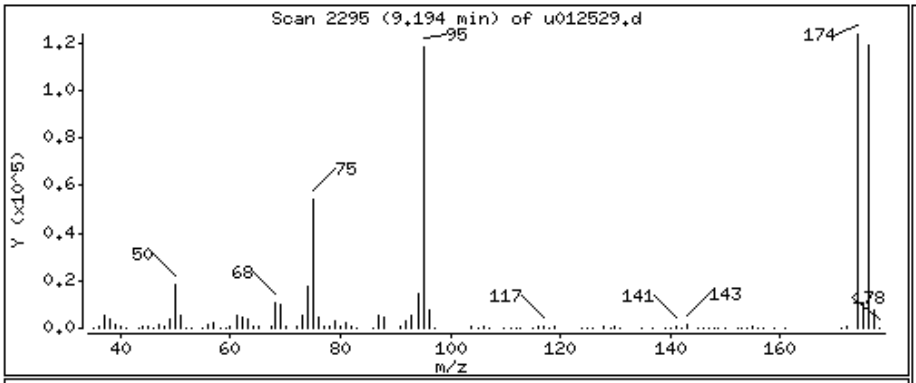
Client ID: HS24011040-10 Instrument: VOA9.i

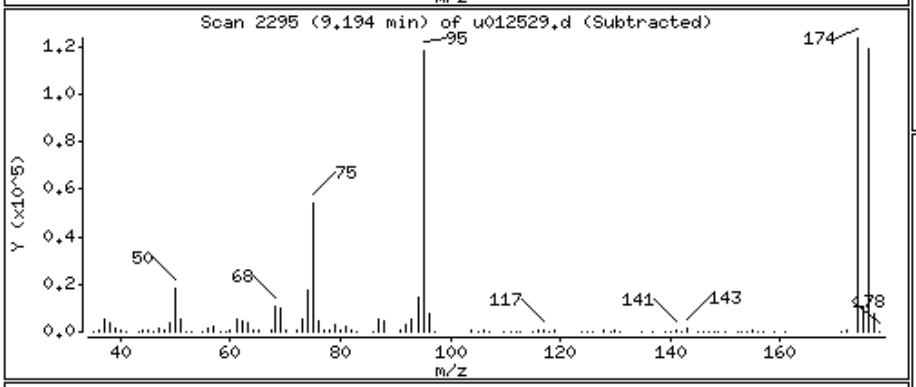
Sample Info: HS24011040-10;HS24011040-10;;;

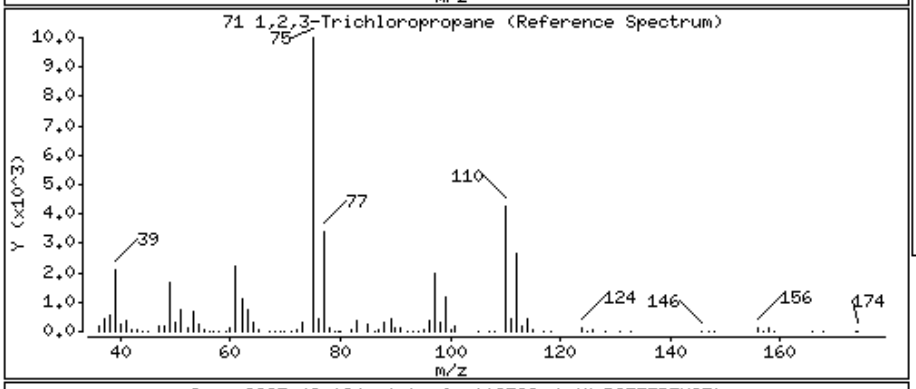
Purge Volume: 5.0 Operator: PC

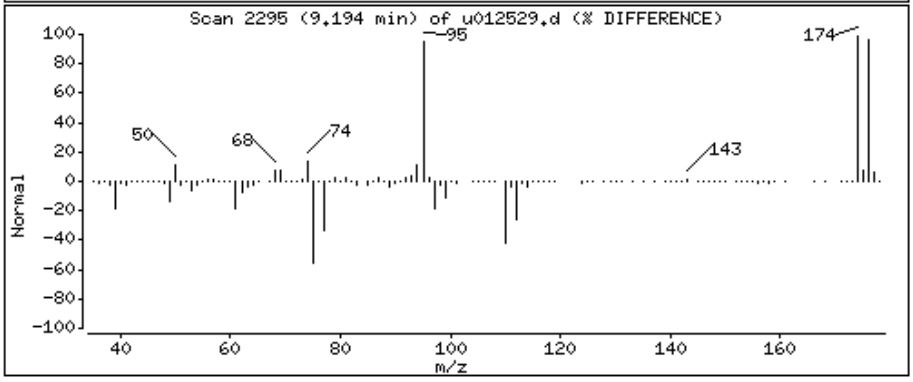
Column phase: DB624 Column diameter: 0.18

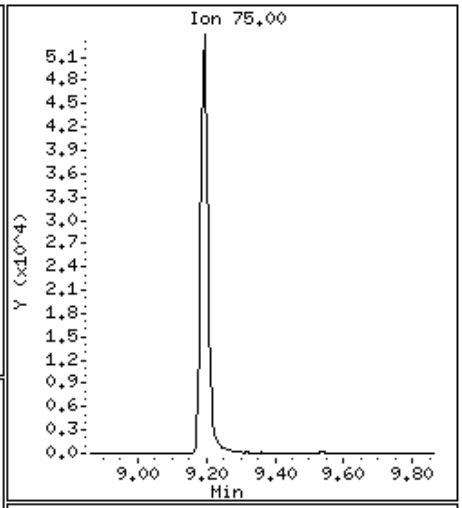
71 1,2,3-Trichloropropane Concentration: 36010.50 ug/l

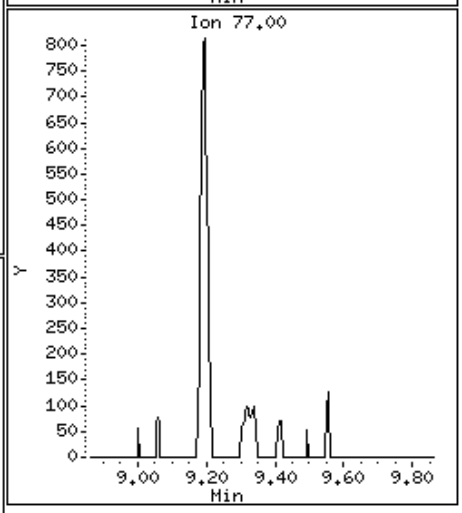












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012529.d Page 10

Date : 25-JAN-2024 20:42

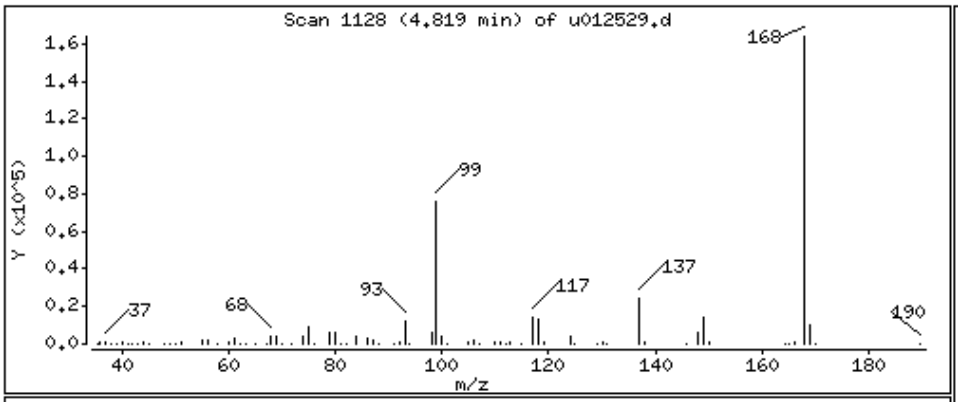
Client ID: HS24011040-10 Instrument: VOA9.i

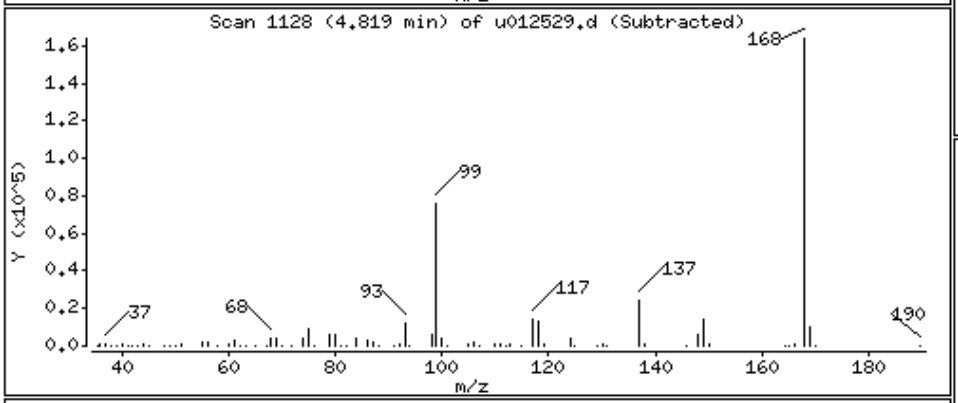
Sample Info: HS24011040-10;HS24011040-10;;;

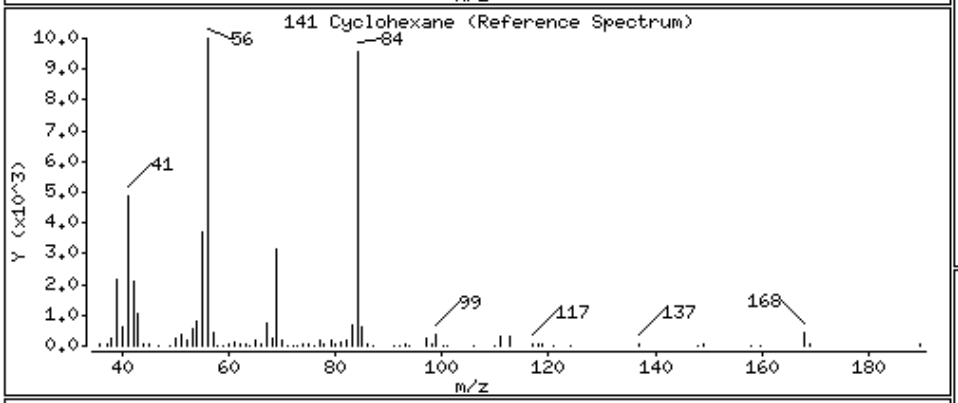
Purge Volume: 5.0 Operator: PC

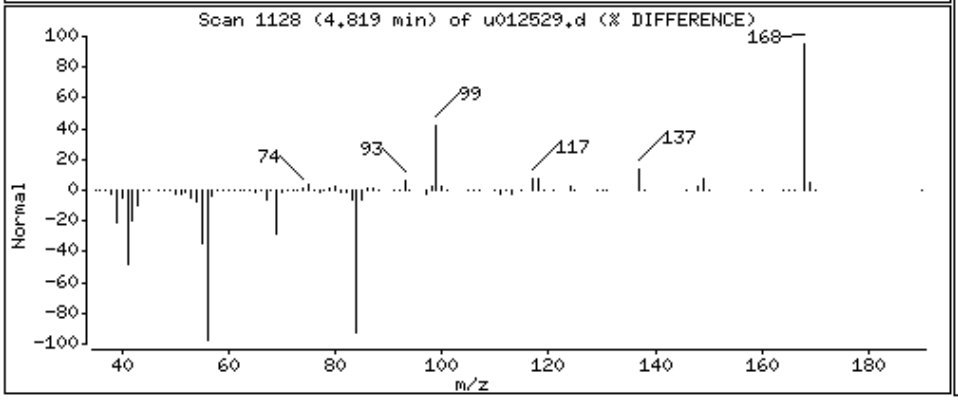
Column phase: DB624 Column diameter: 0.18

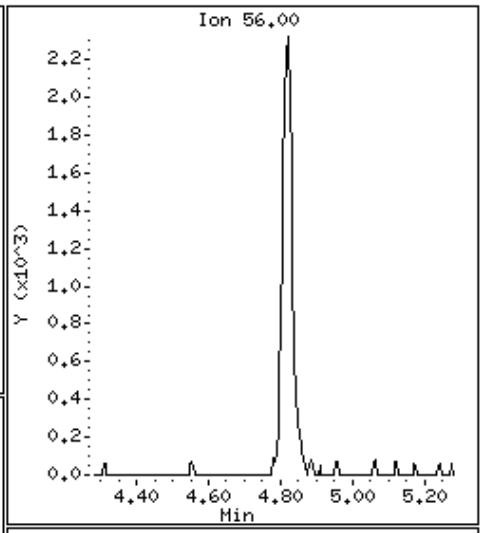
141 Cyclohexane Concentration: 2036.46 ug/l

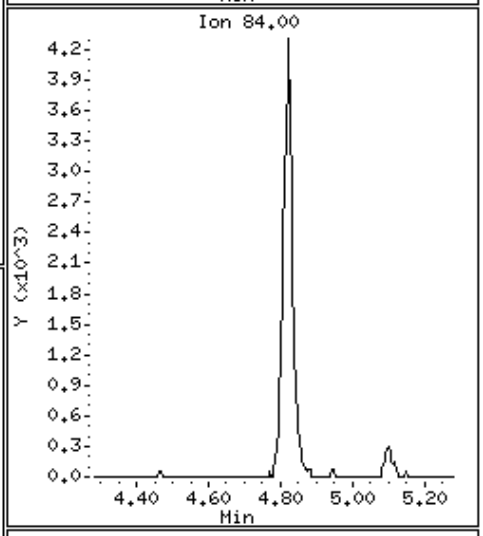


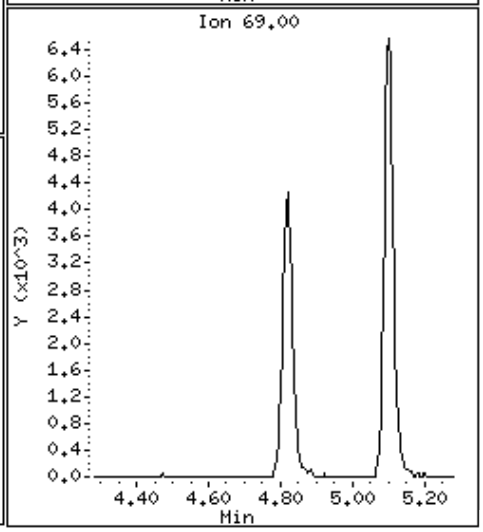












Data File : \\nahstws005\target\chem\voa9.i\u240125.b\u012529.d
Inj Date : 25-JAN-2024 20:42
InstruID : VOA9.i
LabSampID : HS24011040-10

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240125.b\U012530.D Page 1
Report Date: 01-Feb-2024 14:20

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240125.b\U012530.D
Lab Smp Id: CCV-END Client Smp ID: CCV-END
Inj Date : 25-JAN-2024 21:05
Operator : PC Inst ID: VOA9.i
Smp Info : CCV-END;CCV-END;2;;;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240125.b\8260C.m
Meth Date : 01-Feb-2024 14:20 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 28 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1040-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7066

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.811	4.811	(1.000)	285738	50.0000	
2 Dichlorodifluoromethane	85	1.156	1.156	(0.240)	136085	50.0000	58.92
3 Chloromethane	50	1.291	1.291	(0.268)	143939	50.0000	43.91
4 Propionitrile	54	4.328	4.328	(0.900)	177950	500.000	375.60
5 Vinyl Chloride	62	1.370	1.370	(0.285)	165751	50.0000	52.93
6 Bromomethane	94	1.614	1.614	(0.335)	97679	50.0000	60.27
7 Chloroethane	64	1.692	1.692	(0.352)	113676	50.0000	53.91
8 Trichlorofluoromethane	101	1.891	1.891	(0.393)	237705	50.0000	59.88
9 Acrolein	56	2.259	2.259	(0.469)	11511	100.000	70.69
10 Acetone	43	2.401	2.401	(0.499)	77765	100.000	78.72
11 1,1-Dichloroethene	96	2.326	2.326	(0.483)	117997	50.0000	53.54
12 Isobutyl Alcohol	43	5.280	5.280	(1.097)	311692	1000.00	727.33
13 Acetonitrile	39	2.663	2.663	(0.554)	132193	500.000	429.86
14 Allyl Chloride	41	2.667	2.667	(0.554)	293835	50.0000	41.82
15 Iodomethane	142	2.461	2.461	(0.512)	352452	100.000	123.60
16 Acrylonitrile	53	3.057	3.057	(0.635)	95862	100.000	85.52
17 Methylene Chloride	84	2.787	2.787	(0.579)	144353	50.0000	51.91
18 Methyl tert-butyl ether	73	3.072	3.072	(0.639)	362463	50.0000	45.89
19 Carbon Disulfide	76	2.513	2.513	(0.522)	703786	100.000	108.37
20 trans-1,2-Dichloroethene	96	3.053	3.053	(0.635)	140422	50.0000	53.30

21 Vinyl Acetate	43	3.601	3.601 (0.748)	690838	100.000	86.71
22 1,1-Dichloroethane	63	3.507	3.507 (0.729)	247436	50.0000	46.04

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
24	2-Butanone	43	4.257	4.257	(0.885)	98194	100.000	70.15
25	Methacrylonitrile	41	4.489	4.489	(0.933)	124222	50.0000	60.88
26	2,2-Dichloropropane	77	4.178	4.178	(0.868)	164464	50.0000	43.53
27	cis-1,2-Dichloroethene	96	4.193	4.193	(0.871)	161736	50.0000	45.82
28	Chloroform	83	4.568	4.568	(0.949)	264180	50.0000	45.16
29	Bromochloromethane	128	4.463	4.463	(0.928)	91621	50.0000	50.17
$ 30	Dibromofluoromethane	113	4.744	4.744	(0.986)	154431	50.0000	52.86
31	1,1,1-Trichloroethane	97	4.740	4.740	(0.985)	219549	50.0000	49.39
32	1,1-Dichloropropene	75	4.920	4.920	(0.887)	177245	50.0000	49.37
33	1,2-Dichloroethane	62	5.171	5.171	(0.932)	180913	50.0000	43.27
34	Carbon Tetrachloride	117	4.909	4.909	(0.885)	189035	50.0000	53.91
$ 35	1,2-Dichloroethane-d4	65	5.093	5.093	(1.058)	153864	50.0000	46.10
* 36	1,4-Difluorobenzene	114	5.550	5.550	(1.000)	429054	50.0000	
37	Benzene	78	5.134	5.134	(0.925)	546188	50.0000	46.76
38	Trichloroethene	130	5.786	5.786	(1.043)	166493	50.0000	51.71
39	Bromodichloromethane	83	6.273	6.273	(1.130)	188891	50.0000	49.38
40	Methyl Methacrylate	41	6.153	6.153	(1.279)	105879	50.0000	37.54
41	2-Chloroethylvinyl ether	63	6.577	6.577	(1.185)	4541	100.000	121.28
42	1,2-Dichloropropane	63	6.007	6.007	(1.082)	137188	50.0000	43.62
43	2-Nitropropane	43	6.506	6.506	(1.352)	28276	50.0000	38.54
44	Dibromomethane	93	6.116	6.116	(1.102)	95576	50.0000	46.97
45	4-Methyl-2-Pentanone	43	6.851	6.851	(0.837)	242817	100.000	77.21
46	cis-1,3-Dichloropropene	75	6.689	6.689	(1.205)	218182	50.0000	44.43
* 47	Chlorobenzene-d5	117	8.185	8.185	(1.000)	435641	50.0000	
$ 48	Toluene-d8	98	6.922	6.922	(0.846)	526121	50.0000	52.46
49	Ethyl Methacrylate	69	7.289	7.289	(1.313)	187190	50.0000	44.45
50	Toluene	91	6.978	6.978	(0.853)	599464	50.0000	49.35
51	trans-1,3-Dichloropropene	75	7.196	7.196	(1.296)	181420	50.0000	43.94
52	2-Hexanone	43	7.589	7.589	(0.927)	157957	100.000	71.84
53	1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	111033	50.0000	47.73
54	1,3-Dichloropropane	76	7.495	7.495	(0.916)	234922	50.0000	43.55
55	Dibromochloromethane	129	7.690	7.690	(0.940)	163608	50.0000	50.49
56	Tetrachloroethene	164	7.454	7.454	(0.911)	142850	50.0000	54.94
57	1,2-Dibromoethane	107	7.784	7.784	(0.951)	143936	50.0000	47.55
58	1-Chlorohexane	55	8.196	8.196	(1.477)	105303	50.0000	43.76
59	Chlorobenzene	112	8.208	8.208	(1.003)	420216	50.0000	47.48
60	1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	156690	50.0000	50.62
61	Ethylbenzene	106	8.305	8.305	(1.015)	200523	50.0000	48.40
62	m,p-Xylenes	106	8.406	8.406	(1.027)	505647	100.000	101.53
63	o-Xylene	106	8.744	8.744	(1.068)	256899	50.0000	50.15
64	Styrene	104	8.759	8.759	(1.070)	439034	50.0000	51.48
66	Bromoform	173	8.916	8.916	(1.089)	109306	50.0000	49.32
67	Isopropylbenzene	105	9.062	9.062	(1.107)	636159	50.0000	51.35
68	1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	174678	50.0000	43.73
$ 69	4-Bromofluorobenzene	95	9.194	9.194	(1.123)	190536	50.0000	50.18
* 70	1,4-Dichlorobenzene-d4	152	10.168	10.168	(1.000)	244581	50.0000	
71	1,2,3-Trichloropropane	75	9.362	9.362	(0.921)	173735	50.0000	37.41
72	trans-1,4-Dichloro-2-butene	53	9.377	9.377	(1.146)	32023	50.0000	40.84
73	n-Propylbenzene	91	9.411	9.411	(0.926)	670529	50.0000	46.68
74	Bromobenzene	156	9.317	9.317	(0.916)	188627	50.0000	45.92
75	1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	504558	50.0000	49.43
76	2-Chlorotoluene	91	9.482	9.482	(0.933)	435076	50.0000	45.00

77 4-Chlorotoluene	91	9.576	9.576 (0.942)	495083	50.0000	45.16
78 tert-Butylbenzene	119	9.835	9.835 (0.967)	450262	50.0000	49.11

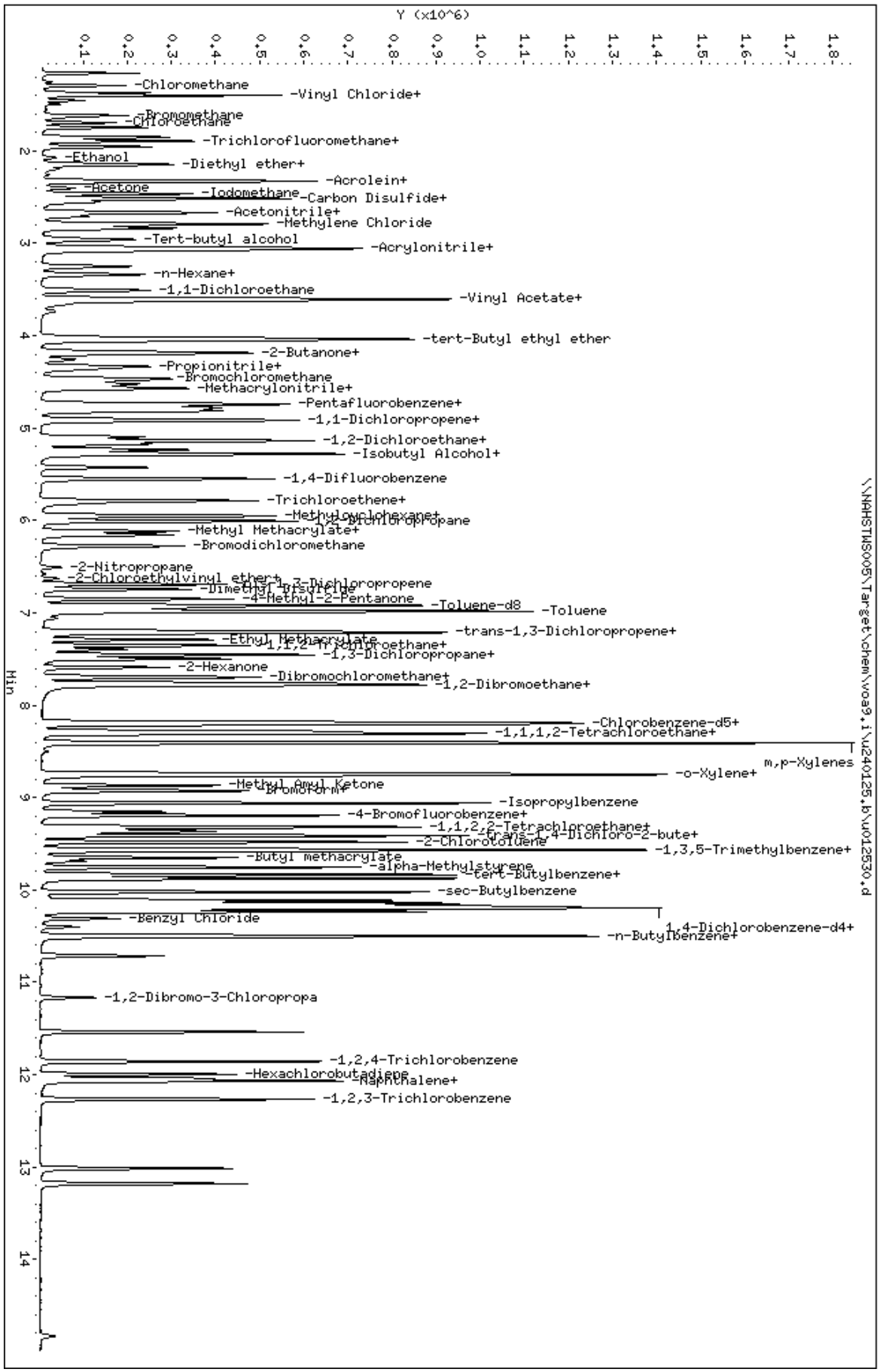
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
79	1,2,4-Trimethylbenzene	105	9.876	9.876	(0.971)	491340	50.0000	48.02
81	sec-Butylbenzene	105	10.022	10.022	(0.986)	570214	50.0000	48.23
82	p-Isopropyltoluene	119	10.146	10.146	(0.998)	516439	50.0000	50.47
83	1,3-Dichlorobenzene	146	10.116	10.116	(0.995)	333400	50.0000	45.80
84	1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	342490	50.0000	44.41
86	Benzyl Chloride	91	10.311	10.311	(1.260)	120428	50.0000	32.37
87	n-Butylbenzene	91	10.491	10.491	(1.032)	398988	50.0000	46.46
88	1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	330756	50.0000	45.17
89	1,2-Dibromo-3-Chloropropane	155	11.165	11.165	(1.098)	30202	50.0000	42.54
90	1,2,4-Trichlorobenzene	180	11.859	11.859	(1.166)	211445	50.0000	46.80
91	Hexachlorobutadiene	225	11.998	11.998	(1.180)	87976	50.0000	48.58
92	Naphthalene	128	12.065	12.065	(1.187)	497549	50.0000	45.67
93	1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	205860	50.0000	45.19
130	Ethyl Acetate	43	4.335	4.335	(0.901)	123189	50.0000	35.49
131	Methyl Acrylate	55	4.362	4.362	(0.907)	145197	50.0000	38.68
132	n-Butanol	56	5.816	5.816	(1.209)	63742	1000.00	686.38
133	Ethyl Acrylate	55	5.943	5.943	(1.235)	278027	50.0000	40.48
134	Cyclohexanone	55	9.152	9.152	(0.900)	108518	1000.00	670.59
135	1,4-Dioxane	88	6.161	6.161	(1.280)	35736	1000.00	788.27
136	n-Hexane	57	3.338	3.338	(0.694)	116578	50.0000	43.89
138	Freon TF	101	2.330	2.330	(0.484)	123927	50.0000	58.57
146	Methyl Acetate	43	2.705	2.705	(0.562)	107884	50.0000	37.93
147	Methylcyclohexane	55	5.943	5.943	(1.071)	278027	50.0000	43.71
149	Isopropyl alcohol	45	2.555	2.555	(0.531)	149715	1000.00	826.60
152	Amyl alcohol	42	7.394	7.394	(0.903)	66465	1000.00	687.84
150	Allyl alcohol	57	3.338	3.338	(0.694)	116745	1000.00	879.07
151	4-Methyl-2-pentanol	45	7.214	7.214	(1.300)	489437	1000.00	717.73
148	Tert-butyl alcohol	59	2.960	2.960	(0.615)	251515	1000.00	786.28
139	Diethyl ether	59	2.139	2.139	(0.445)	99079	50.0000	42.52
140	1,3-Butadiene	54	1.396	1.396	(0.290)	150237	50.0000	52.35
141	Cyclohexane	56	4.781	4.781	(0.994)	181485	50.0000	44.07
142	Tetrahydrofuran	42	4.538	4.538	(0.943)	41778	100.000	68.88
145	alpha-Methylstyrene	118	9.752	9.752	(0.959)	212981	50.0000	43.18
156	Diisopropyl ether	45	3.616	3.616	(0.751)	404795	50.0000	40.66
158	Dichlorofluoromethane	67	1.854	1.854	(0.385)	233737	50.0000	53.66
159	Propylene oxide	43	2.195	2.195	(0.456)	14598	100.000	94.13
162	Butyl acrylate	55	8.733	8.733	(1.067)	200369	50.0000	32.77
163	Butyl methacrylate	41	9.647	9.647	(0.949)	103674	50.0000	31.85
164	Dicyclopentadiene	66	10.198	10.198	(1.003)	557352	50.0000	42.74
166	1,2,3-Trimethylbenzene	105	10.232	10.232	(1.006)	475316	50.0000	47.09
167	Ethanol	45	2.071	2.071	(0.431)	30101	1000.00	840.14
172	tert-Butyl formate	59	5.235	5.235	(1.088)	163793	100.000	75.83
173	3,3-Dimethyl-1-butanol	57	7.777	7.777	(0.950)	263311	1000.00	732.62
174	tert-Amyl methyl ether	73	5.280	5.280	(1.097)	370927	50.0000	41.84
175	tert-Butyl ethyl ether	59	4.043	4.043	(0.840)	386555	50.0000	43.56
176	tert-Amyl alcohol	59	5.235	5.235	(1.088)	163793	1000.00	759.81
182	Epichlorohydrin	57	6.630	6.630	(1.195)	26415	200.000	158.48
185	Isoprene	39	2.150	2.150	(0.447)	27871	50.0000	41.89
187	n-Amyl acetate	43	8.931	8.931	(1.091)	168412	50.0000	30.50
188	Isopropyl acetate	43	5.280	5.280	(0.951)	315704	50.0000	39.88
189	n-Butyl acetate	43	7.705	7.705	(0.941)	175327	50.0000	36.13
195	Methyl Amyl Ketone	43	8.867	8.867	(1.083)	211342	50.0000	31.60

200 Dimethyl Disulfide	94	6.746	6.746 (0.824)	174540	50.0000	45.81
203 2-Ethylhexyl Acrylate	55	12.039	12.039 (1.184)	124029	50.0000	35.12

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	
M 94 1,2-Dichloroethylene (total)	96				302158	100.000		(a)
M 95 Xylenes (total)	106				762546	150.000		(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).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0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8
Min
1 2 3 4 5 6 7 8 9 10 11 12 13 14
-Chloromethane
-Vinyl Chloride+
-Bromomethane
-Chloroethane
-Trichlorofluoromethane+
-Ethanol
-Diethyl ether+
-Acrolein+
-Acetone
-Iodomethane
-Carbon Disulfide+
-Acetonitrile+
-Methylene Chloride
-Tert-butyl alcohol
-Acrylonitrile+
-n-Hexane+
-1,1-Dichloroethane
-Vinyl Acetate+
-tert-Butyl ethyl ether
-2-Butanone+
-Propionitrile+
-Bromochloromethane
-Methacrylonitrile+
-Pentafluorobenzene+
-1,1-Dichloropropene+
-1,2-Dichloroethane+
-Isobutyl Alcohol+
-1,4-Difluorobenzene
-Trichloroethene+
-Methylcyclohexane+
-1,2-Dichloropropane
-Methyl Methacrylate+
-Bromodichloromethane
-2-Nitropropane
-2-Chloroethylvinyl ether+
-1,3-Dichloropropene
-Dimethyl disulfide
-4-Methyl-2-Pentanone
-Toluene-d8
-Toluene
-trans-1,3-Dichloropropene+
-Ethyl Methacrylate
-1,1,2-Trichloroethane+
-1,3-Dichloropropane+
-2-Hexanone
-Dibromochloromethane+
-1,2-Dibromoethane+
-Chlorobenzene-d5+
-1,1,1,2-Tetrachloroethane+
m,p-Xylenes
-o-Xylene+
-Methyl Amyl Ketone
-Bromoform+
-Isopropylbenzene
-4-Bromofluorobenzene+
-1,1,2,2-Tetrachloroethane+
-trans-1,4-Dichloro-2-bute+
-2-Chlorotoluene
-1,3,5-Trimethylbenzene+
-Butyl methacrylate
-alpha-Methylstyrene
-tert-Butylbenzene+
-sec-Butylbenzene
-Benzyl Chloride
1,4-Dichlorobenzene-d4+
-n-Butylbenzene+
-1,2-Dibromo-3-Chloropropa
-1,2,4-Trichlorobenzene
-Hexachlorobutadiene
-Naphthalene+
-1,2,3-Trichlorobenzene
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Date : 25-JAN-2024 21:05
Client ID: CCV-END
Sample Info: CCV-END;CCV-END;2;;;
Purge Volume: 5.0
Column phase: DB624
Instrument: VOA9,i
Operator: PC
Column diameter: 0.18
Page 1

Data File : \\nahstws005\target\chem\voa9.i\u240125.b\u012530.d
Inj Date : 25-JAN-2024 21:05
InstruID : VOA9.i
LabSampID : CCV-END

NO MANUAL INTEGRATIONS

right solutions.
right partner.

RawData

Volatiles by EPA Volatiles Organics by Method 8260C

Workorder

HS24011040

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

02/02/2024

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

Data File: \\nahstws005\Target\chem\voa9.i\U240126.b\U012601.D Page 1
Report Date: 26-Jan-2024 12:01

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240126.b\U012601.D
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 26-JAN-2024 11:12
Operator : PC Inst ID: VOA9.i
Smp Info : BFB;BFB;3;;BFB
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240126.b\bfb.m
Meth Date : 27-Jan-2023 08:08 apoluri Quant Type: ISTD
Cal Date : 30-MAR-2018 18:09 Cal File: U033003.d
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: NAHSTW7066

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	2.000	Injection Volume
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/l)	TARGET RANGE	RATIO
RT	EXP RT	REL RT	MASS	RESPONSE				
1 bfb							CAS #: 460-00-4	
9.194	9.180	(0.000)	95	93816			0.00- 100.00	100.00
9.194	9.180	(0.000)	50	15014			15.00- 40.00	16.00
9.194	9.180	(0.000)	75	42288			30.00- 60.00	45.08
9.194	9.180	(0.000)	96	6192			5.00- 9.00	6.60
9.194	9.180	(0.000)	173	0	0.0	0.0	0.00- 2.00	0.00
9.194	9.180	(0.000)	174	88848			50.00- 0.00	94.70
9.194	9.180	(0.000)	175	7815			5.00- 9.00	8.80
9.194	9.180	(0.000)	176	87424			95.00- 101.00	98.40
9.194	9.180	(0.000)	177	5719			5.00- 9.00	6.54

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	16.00
75	30.00 - 60.00% of mass 95	45.08
96	5.00 - 9.00% of mass 95	6.60
173	Less than 2.00% of mass 174	0.00 (0.00)
174	Greater than 50.00% of mass 95	94.70
175	5.00 - 9.00% of mass 174	8.33 (8.80)
176	95.00 - 101.00% of mass 174	93.19 (98.40)
177	5.00 - 9.00% of mass 176	6.10 (6.54)

Data File: U012601.D
Spectrum: Scan 2293 (9.19)
Location of Maximum: 95.05
Number of points: 93

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.20	87	64.00	458	94.10	10695	140.00	151
36.00	685	65.00	513	95.10	93816	140.90	829
37.10	3805	66.00	83	96.10	6192	143.00	988
38.00	3155	68.00	8527	97.00	240	143.90	90
39.10	1458	69.10	8729	104.00	281	144.90	173
40.00	1200	70.00	777	104.90	139	145.90	118
43.20	136	71.00	136	105.80	259	147.00	71
44.00	499	71.90	411	106.90	145	147.90	283
45.00	738	73.10	3693	109.80	78	149.80	134
46.40	103	74.10	13996	112.80	62	153.70	96
47.00	1112	75.10	42288	114.80	84	155.00	107
48.00	472	76.10	4348	115.90	333	156.90	155
49.00	2926	76.90	610	116.90	633	158.70	83
50.10	15014	78.00	448	117.90	404	160.90	73
51.10	4666	79.00	2157	118.90	481	171.10	112
52.00	284	79.90	697	123.90	55	172.00	1010
55.10	183	80.90	2234	127.90	331	174.00	88848
56.10	895	81.90	494	128.80	148	175.00	7815
57.00	2041	86.20	207	129.80	402	176.00	87424
58.10	174	87.00	3945	130.90	173	177.00	5719
60.00	1012	88.00	3964	133.10	68	177.90	157
61.10	4111	90.80	356	134.90	157		
62.10	3717	92.00	2605	136.10	52		
63.10	2826	93.00	3995	136.80	156		

Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012601.d Page 1

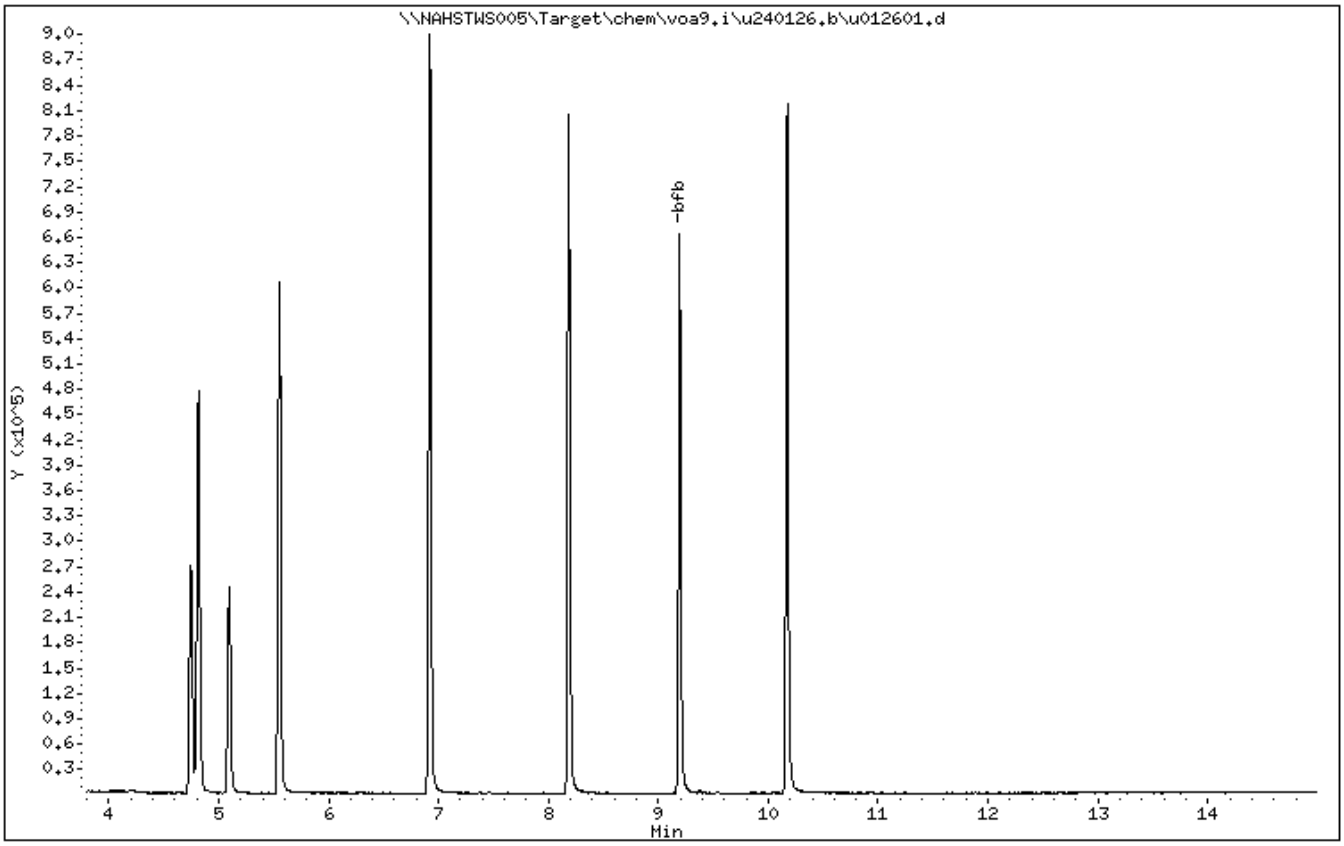
Date : 26-JAN-2024 11:12

Client ID: BFB Instrument: VOA9.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0 Operator: PC

Column phase: DB624 Column diameter: 0.25



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Inj Date : 26-JAN-2024 11:12
InstruID : VOA9.i
LabSampID : BFB

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240126.b\U012602A.D Page 1
Report Date: 26-Jan-2024 13:25

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240126.b\U012602A.D
Lab Smp Id: CCV   Client Smp ID: CCV
Inj Date : 26-JAN-2024 11:56
Operator : PC   Inst ID: VOA9.i
Smp Info : CCV;CCV;2;;;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240126.b\8260C.m
Meth Date : 26-Jan-2024 13:25 firat.tast Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11   Cal File: U120608.D
Als bottle: 2   Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7066

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.819	4.819	(1.000)	247553	50.0000	
2 Dichlorodifluoromethane	85	1.168	1.168	(0.242)	118664	50.0000	59.30
3 Chloromethane	50	1.303	1.303	(0.270)	127688	50.0000	44.96
4 Propionitrile	54	4.335	4.335	(0.900)	160524	500.000	391.09
5 Vinyl Chloride	62	1.381	1.381	(0.287)	149808	50.0000	55.22
6 Bromomethane	94	1.625	1.625	(0.337)	86266	50.0000	61.37
7 Chloroethane	64	1.704	1.704	(0.354)	93538	50.0000	51.21
8 Trichlorofluoromethane	101	1.899	1.899	(0.394)	198932	50.0000	57.85
9 Acrolein	56	2.266	2.266	(0.470)	11656	100.000	82.62
10 Acetone	43	2.408	2.408	(0.500)	86281	100.000	102.52
11 1,1-Dichloroethene	96	2.337	2.337	(0.485)	106603	50.0000	55.83
12 Isobutyl Alcohol	43	5.284	5.284	(1.096)	276394	1000.00	744.45
13 Acetonitrile	39	2.675	2.675	(0.555)	124307	500.000	466.56
14 Allyl Chloride	41	2.675	2.675	(0.555)	273532	50.0000	44.94
15 Iodomethane	142	2.472	2.472	(0.513)	312304	100.000	126.16
16 Acrylonitrile	53	3.065	3.065	(0.636)	94655	100.000	97.47
17 Methylene Chloride	84	2.798	2.798	(0.581)	136107	50.0000	56.52
18 Methyl tert-butyl ether	73	3.079	3.079	(0.639)	350459	50.0000	51.22
19 Carbon Disulfide	76	2.525	2.525	(0.524)	651859	100.000	115.86
20 trans-1,2-Dichloroethene	96	3.061	3.061	(0.635)	131474	50.0000	57.60

21 Vinyl Acetate	43	3.608	3.608 (0.749)	626850	100.000	90.82
22 1,1-Dichloroethane	63	3.514	3.514 (0.729)	211500	50.0000	45.42

Data File: \\nahstws005\Target\chem\voa9.i\U240126.b\U012602A.D Page 2
Report Date: 26-Jan-2024 13:25

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/l)	ON-COL (ug/l)
	24	2-Butanone	43	4.260	4.260	(0.884)	89965	100.000	74.18
	25	Methacrylonitrile	41	4.493	4.493	(0.932)	106702	50.0000	60.36(a)
	26	2,2-Dichloropropane	77	4.185	4.185	(0.869)	163216	50.0000	49.86
	27	cis-1,2-Dichloroethene	96	4.197	4.197	(0.871)	141524	50.0000	46.28
	28	Chloroform	83	4.575	4.575	(0.949)	223851	50.0000	44.17
	29	Bromochloromethane	128	4.470	4.470	(0.928)	76752	50.0000	48.51
$	30	Dibromofluoromethane	113	4.748	4.748	(0.985)	139126	50.0000	55.01
	31	1,1,1-Trichloroethane	97	4.744	4.744	(0.984)	187996	50.0000	48.81
	32	1,1-Dichloropropene	75	4.924	4.924	(0.887)	157663	50.0000	51.69
	33	1,2-Dichloroethane	62	5.175	5.175	(0.932)	157931	50.0000	44.46
	34	Carbon Tetrachloride	117	4.913	4.913	(0.885)	165651	50.0000	55.60
$	35	1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	140608	50.0000	48.49
*	36	1,4-Difluorobenzene	114	5.554	5.554	(1.000)	364543	50.0000	
	37	Benzene	78	5.141	5.141	(0.926)	472185	50.0000	47.58
	38	Trichloroethene	130	5.790	5.790	(1.043)	142722	50.0000	52.18
	39	Bromodichloromethane	83	6.277	6.277	(1.130)	160901	50.0000	49.51
	40	Methyl Methacrylate	41	6.153	6.153	(1.277)	92621	50.0000	37.90
	41	2-Chloroethylvinyl ether	63	6.577	6.577	(1.184)	5082	100.000	156.07
	42	1,2-Dichloropropane	63	6.011	6.011	(1.082)	119928	50.0000	44.88
	43	2-Nitropropane	43	6.510	6.510	(1.351)	24762	50.0000	38.96
	44	Dibromomethane	93	6.120	6.120	(1.102)	82388	50.0000	47.66
	45	4-Methyl-2-Pentanone	43	6.851	6.851	(0.837)	224055	100.000	83.68
	46	cis-1,3-Dichloropropene	75	6.689	6.689	(1.205)	193276	50.0000	46.26
*	47	Chlorobenzene-d5	117	8.185	8.185	(1.000)	371067	50.0000	
$	48	Toluene-d8	98	6.922	6.922	(0.846)	482669	50.0000	56.50
	49	Ethyl Methacrylate	69	7.289	7.289	(1.312)	169061	50.0000	47.25
	50	Toluene	91	6.982	6.982	(0.853)	523100	50.0000	50.55
	51	trans-1,3-Dichloropropene	75	7.196	7.196	(1.296)	162806	50.0000	46.31
	52	2-Hexanone	43	7.589	7.589	(0.927)	151518	100.000	80.91
	53	1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	99572	50.0000	50.32
	54	1,3-Dichloropropane	76	7.499	7.499	(0.916)	201800	50.0000	43.92
	55	Dibromochloromethane	129	7.690	7.690	(0.940)	144551	50.0000	52.37
	56	Tetrachloroethene	164	7.458	7.458	(0.911)	129590	50.0000	58.51
	57	1,2-Dibromoethane	107	7.784	7.784	(0.951)	127422	50.0000	49.42
	58	1-Chlorohexane	55	8.196	8.196	(1.476)	98243	50.0000	48.06
	59	Chlorobenzene	112	8.208	8.208	(1.003)	368265	50.0000	48.86
	60	1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	133634	50.0000	50.68
	61	Ethylbenzene	106	8.305	8.305	(1.015)	176278	50.0000	49.96
	62	m,p-Xylenes	106	8.406	8.406	(1.027)	456519	100.000	107.62
	63	o-Xylene	106	8.748	8.748	(1.069)	227760	50.0000	52.20
	64	Styrene	104	8.759	8.759	(1.070)	386232	50.0000	53.17
	66	Bromoform	173	8.916	8.916	(1.089)	93987	50.0000	49.78
	67	Isopropylbenzene	105	9.062	9.062	(1.107)	566988	50.0000	53.73
	68	1,1,2,2-Tetrachloroethane	83	9.325	9.325	(0.917)	155939	50.0000	45.85
$	69	4-Bromofluorobenzene	95	9.194	9.194	(1.123)	178984	50.0000	55.47
*	70	1,4-Dichlorobenzene-d4	152	10.168	10.168	(1.000)	208427	50.0000	
	71	1,2,3-Trichloropropane	75	9.362	9.362	(0.921)	158366	50.0000	40.02
	72	trans-1,4-Dichloro-2-butene	53	9.377	9.377	(1.146)	29425	50.0000	44.06
	73	n-Propylbenzene	91	9.411	9.411	(0.926)	637947	50.0000	52.12
	74	Bromobenzene	156	9.317	9.317	(0.916)	166770	50.0000	47.64
	75	1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	456070	50.0000	52.43
	76	2-Chlorotoluene	91	9.482	9.482	(0.933)	385287	50.0000	46.77

77 4-Chlorotoluene	91	9.576	9.576 (0.942)	439968	50.0000	47.09
78 tert-Butylbenzene	119	9.835	9.835 (0.967)	401911	50.0000	51.44

Data File: \\nahstws005\Target\chem\voa9.i\U240126.b\U012602A.D Page 3
Report Date: 26-Jan-2024 13:25

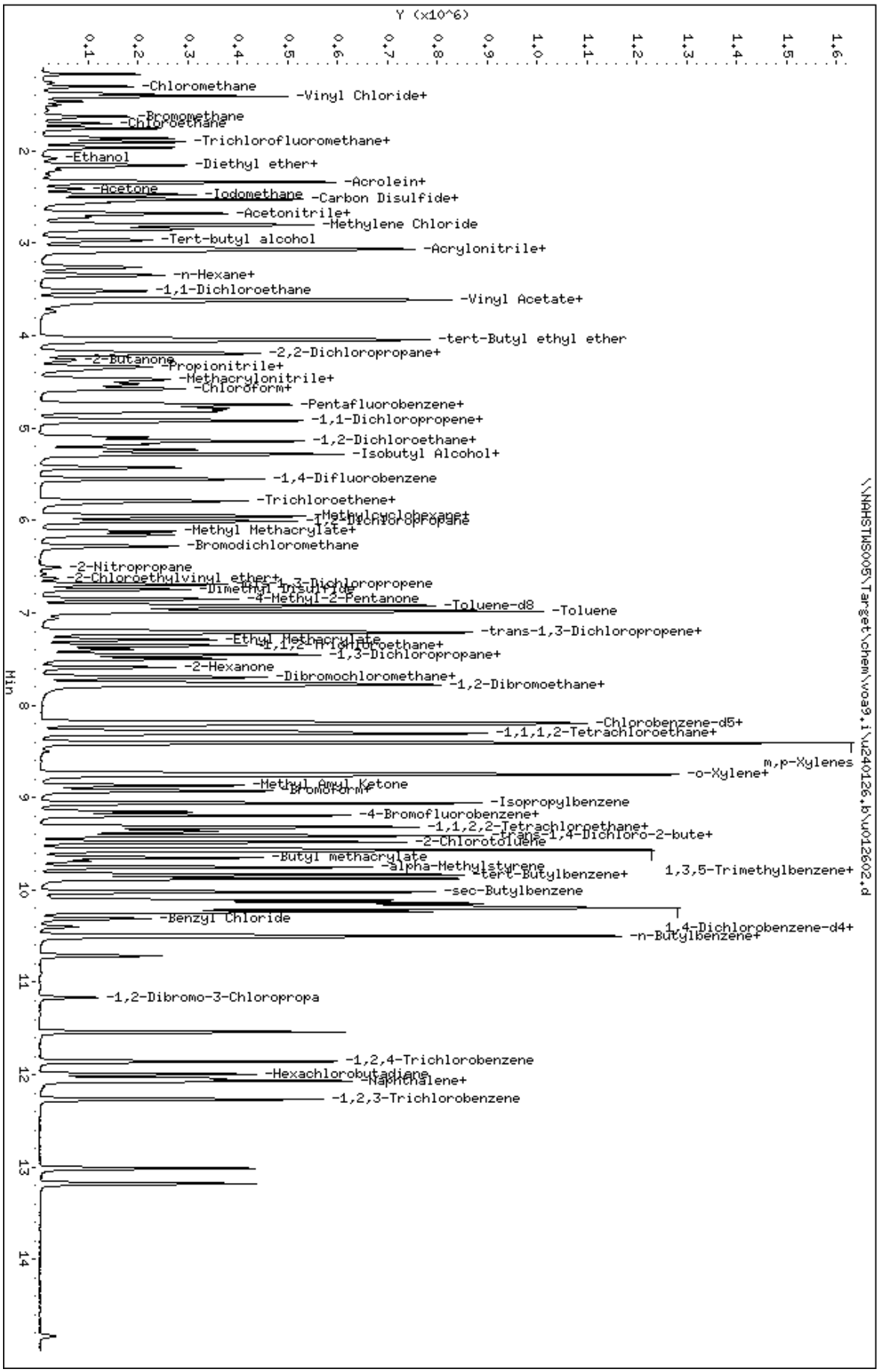
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
79	1,2,4-Trimethylbenzene	105	9.876	9.876	(0.971)	452738	50.0000	51.93
81	sec-Butylbenzene	105	10.022	10.022	(0.986)	528653	50.0000	52.47
82	p-Isopropyltoluene	119	10.146	10.146	(0.998)	485473	50.0000	55.68
83	1,3-Dichlorobenzene	146	10.116	10.116	(0.995)	301471	50.0000	48.60
84	1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	309891	50.0000	47.16
86	Benzyl Chloride	91	10.311	10.311	(1.260)	150505	50.0000	45.93
87	n-Butylbenzene	91	10.491	10.491	(1.032)	386095	50.0000	52.76
88	1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	292260	50.0000	46.83
89	1,2-Dibromo-3-Chloropropane	155	11.165	11.165	(1.098)	28464	50.0000	46.82
90	1,2,4-Trichlorobenzene	180	11.859	11.859	(1.166)	197051	50.0000	51.18
91	Hexachlorobutadiene	225	11.998	11.998	(1.180)	87359	50.0000	56.61
92	Naphthalene	128	12.065	12.065	(1.187)	460784	50.0000	49.63
93	1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	189151	50.0000	48.72
146	Methyl acetate	43	2.716	2.716	(0.564)	97271	50.0000	39.48
138	Freon TF	101	2.341	2.341	(0.486)	121977	50.0000	66.24
141	Cyclohexane	56	4.785	4.785	(0.993)	168605	50.0000	47.26
142	Tetrahydrofuran	42	4.541	4.541	(0.942)	38631	100.000	73.51
147	Methylcyclohexane	55	5.947	5.947	(1.071)	265184	50.0000	49.07
135	1,4-Dioxane	88	6.165	6.165	(1.279)	32643	1000.00	831.11
132	n-Butanol	56	5.816	5.816	(1.207)	65565	1000.00	814.91
136	n-Hexane	57	3.346	3.346	(0.694)	124443	50.0000	54.07
139	Diethyl ether	59	2.146	2.146	(0.445)	96455	50.0000	47.78
148	Tert-butyl alcohol	59	2.963	2.963	(0.615)	257006	1000.00	927.37
149	Isopropyl alcohol	45	2.558	2.558	(0.531)	152908	1000.00	975.79
152	Amyl alcohol	42	7.394	7.394	(0.903)	65055	1000.00	790.41
156	Diisopropyl ether	45	3.623	3.623	(0.752)	357362	50.0000	41.43
162	Butyl acrylate	55	8.733	8.733	(1.067)	196233	50.0000	37.19
187	n-Amyl acetate	43	8.931	8.931	(1.091)	170247	50.0000	36.19
164	Dicyclopentadiene	66	10.198	10.198	(1.003)	503298	50.0000	45.29
166	1,2,3-Trimethylbenzene	105	10.232	10.232	(1.006)	420691	50.0000	48.91
167	Ethanol	45	2.082	2.082	(0.432)	28572	1000.00	920.64
172	tert-Butyl formate	59	5.235	5.235	(1.086)	155378	100.000	82.66
173	3,3-Dimethyl-1-butanol	57	7.777	7.777	(0.950)	253765	1000.00	828.93
174	tert-Amyl methyl ether	73	5.284	5.284	(1.096)	329764	50.0000	42.94
175	tert-Butyl ethyl ether	59	4.050	4.050	(0.841)	329069	50.0000	42.80
176	tert-Amyl alcohol	59	5.235	5.235	(1.086)	155378	1000.00	828.09
151	4-Methyl-2-pentanol	45	7.214	7.214	(1.299)	466224	1000.00	799.13
140	1,3-Butadiene	54	1.408	1.408	(0.292)	139269	50.0000	56.01
158	Dichlorofluoromethane	67	1.861	1.861	(0.386)	206939	50.0000	54.84
182	Epichlorohydrin	57	6.630	6.630	(1.194)	25716	200.000	181.59
M 94	1,2-Dichloroethylene (total)	96				272998	100.000	102.24
M 95	Xylenes (total)	106				684279	150.000	162.22
145	alpha-Methylstyrene	118	9.752	9.752	(0.959)	197934	50.0000	46.95
130	Ethyl Acetate	43	4.339	4.339	(0.900)	112661	50.0000	37.46
131	Methyl Acrylate	55	4.369	4.369	(0.907)	129006	50.0000	39.67
189	n-Butyl acetate	43	7.705	7.705	(0.941)	168009	50.0000	40.64
134	Cyclohexanone	55	9.152	9.152	(0.900)	114735	1000.00	832.00
185	Isoprene	39	2.161	2.161	(0.449)	28841	50.0000	50.04
188	Isopropyl acetate	43	5.284	5.284	(0.951)	276689	50.0000	41.14
150	Allyl alcohol	57	3.346	3.346	(0.694)	124443	1000.00	1081.57
195	Methyl Amyl Ketone	43	8.867	8.867	(1.083)	212569	50.0000	36.94
200	Dimethyl Disulfide	94	6.746	6.746	(0.824)	153924	50.0000	47.26

203 2-Ethylhexyl Acrylate	55	12.039	12.039 (1.184)	121829	50.0000	40.10
133 Ethyl Acrylate	55	5.947	5.947 (1.234)	265184	50.0000	44.56

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
163 Butyl methacrylate	41	9.647	9.647	(0.949)	103148	50.0000	36.73
159 Propylene oxide	43	2.202	2.202	(0.457)	15162	100.000	112.85

QC Flag Legend

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



Data File: \\NAHSTMS005\Target\chem\voa9.i\u240126.b\u012602.d
Date : 26-JAN-2024 11:56
Client ID: CCV
Sample Info: CCV;CCV;2;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9.i
Operator: PC
Column diameter: 0.18

Data File : \\nahstws005\target\chem\voa9.i\u240126.b\u012602.d
Inj Date : 26-JAN-2024 11:56
InstruID : VOA9.i
LabSampID : CCV

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240126.b\U012603.D Page 1
Report Date: 26-Jan-2024 12:35

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240126.b\U012603.D
Lab Smp Id: VLCSW-240126 Client Smp ID: VLCSW-240126
Inj Date : 26-JAN-2024 12:18
Operator : PC Inst ID: VOA9.i
Smp Info : VLCSW-240126;VLCSW-240126;3;;LCS
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240126.b\8260C.m
Meth Date : 26-Jan-2024 12:12 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 3 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 000bhatebtex.sub
Target Version: 4.14
Processing Host: NAHSTWS005

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

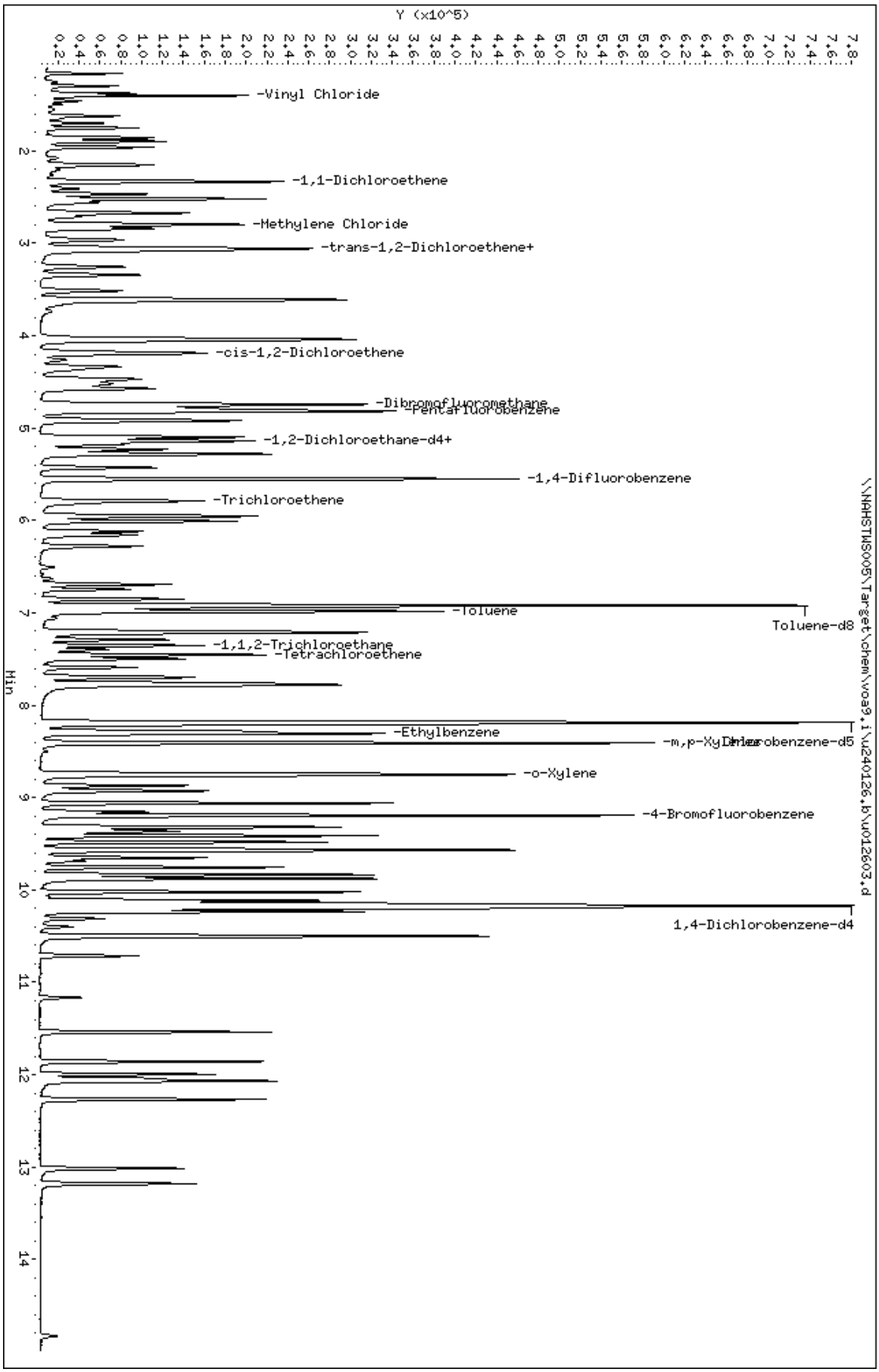
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.815	4.819	(1.000)	250269	50.0000	
$ 30 Dibromofluoromethane	113	4.748	4.748	(0.986)	127264	49.6813	49.68
$ 35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	127755	43.8172	43.81
* 36 1,4-Difluorobenzene	114	5.550	5.554	(1.000)	377862	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	378671	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	453535	52.0281	52.02
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	163596	49.5546	49.55
* 70 1,4-Dichlorobenzene-d4	152	10.168	10.168	(1.000)	213915	50.0000	
5 Vinyl Chloride	62	1.374	1.381	(0.285)	55481	20.2294	20.22
11 1,1-Dichloroethene	96	2.330	2.337	(0.484)	43099	22.3279	22.32
17 Methylene Chloride	84	2.791	2.798	(0.580)	47576	19.3694	19.36
20 trans-1,2-Dichloroethene	96	3.057	3.061	(0.635)	45723	19.8148	19.81
27 cis-1,2-Dichloroethene	96	4.197	4.197	(0.872)	52717	17.0543	17.05
38 Trichloroethene	130	5.790	5.790	(1.043)	55193	19.4681	19.46
53 1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	35444	16.6826	16.68
56 Tetrachloroethene	164	7.454	7.458	(0.911)	50407	22.3039	22.30
18 Methyl tert-butyl ether	73	3.076	3.079	(0.639)	123794	17.8982	17.89
33 1,2-Dichloroethane	62	5.175	5.175	(0.932)	58611	15.9201	15.92
37 Benzene	78	5.138	5.141	(0.926)	177831	17.2883	17.28
50 Toluene	91	6.978	6.982	(0.853)	199200	18.8666	18.86

61 Ethylbenzene	106	8.305	8.305 (1.015)	68699	19.0804	19.08
62 m,p-Xylenes	106	8.410	8.406 (1.027)	171198	39.5484	39.54

Data File: \\nahstws005\Target\chem\voa9.i\U240126.b\U012603.D Page 2
Report Date: 26-Jan-2024 12:35

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
63 o-Xylene	106	8.748	8.748	(1.069)	84026	18.8742	18.87
M 95 Xylenes (total)	106				255224	58.3736	58.37



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Date : 26-JAN-2024 12:18
Client ID: VLCSW-240126
Sample Info: VLCSW-240126;VLCSW-240126;3;;LCS
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9,i
Operator: PC
Column diameter: 0.18

Data File : \\nahstws005\target\chem\voa9.i\u240126.b\u012603.d
Inj Date : 26-JAN-2024 12:18
InstruID : VOA9.i
LabSampID : VLCSW-240126

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240126.b\U012605.D Page 1
Report Date: 29-Jan-2024 09:05

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240126.b\U012605.D
Lab Smp Id: VBLKW-240126 Client Smp ID: VBLKW-240126
Inj Date : 26-JAN-2024 13:03
Operator : PC Inst ID: VOA9.i
Smp Info : VBLKW-240126;VBLKW-240126;3;;BLANK
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240126.b\8260C.m
Meth Date : 27-Jan-2024 00:13 firat.tast Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 5 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 000bhatebtex.sub
Target Version: 4.14
Processing Host: NAHSTWS005

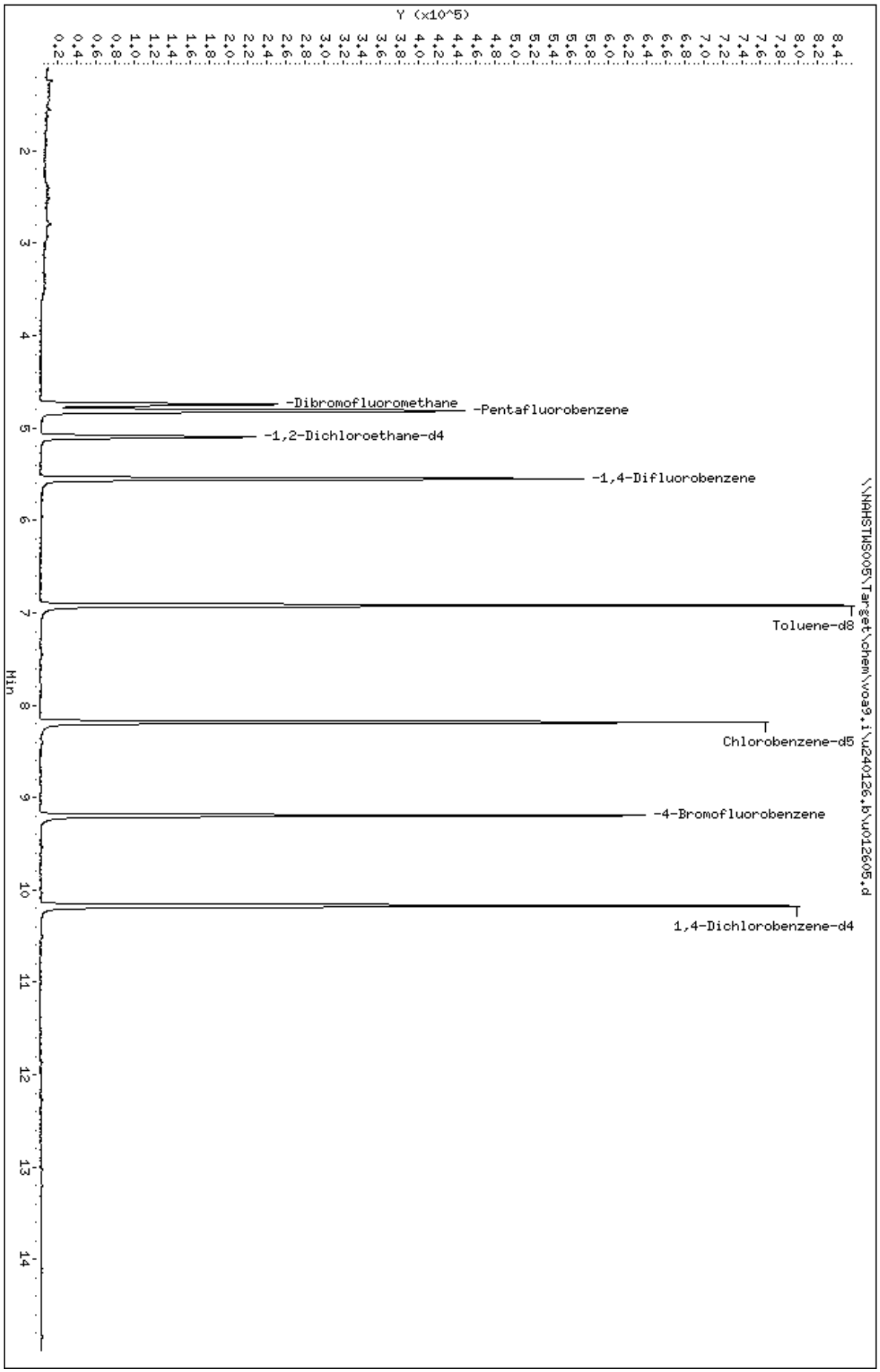
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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	4.811	4.815	(1.000)	342850	50.0000	
$ 30 Dibromofluoromethane	113	4.744	4.748	(0.986)	149621	42.4908	42.49
$ 35 1,2-Dichloroethane-d4	65	5.092	5.096	(1.058)	165356	41.5038	41.50(M)
* 36 1,4-Difluorobenzene	114	5.550	5.554	(1.000)	473196	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	444856	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	536681	52.4066	52.40
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	190847	49.1993	49.19
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	236361	50.0000	

QC Flag Legend

M - Compound response manually integrated.



Data File: \\NAHSTWS005\Target\chem\voa9,i\u240126,b\u012605,d
Date : 26-JAN-2024 13:03
Client ID: VBLKW-240126
Sample Info: VBLKW-240126;VBLKW-240126;3;;BLANK
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9,i
Operator: PC
Column diameter: 0.18

Page 1

Data File : \\nahstws005\target\chem\voa9.i\u240126.b\u012605.d
Inj Date : 26-JAN-2024 13:03
InstruID : VOA9.i
LabSampID : VBLKW-240126

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

Reason Code:

BEFORE

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HEIGHT
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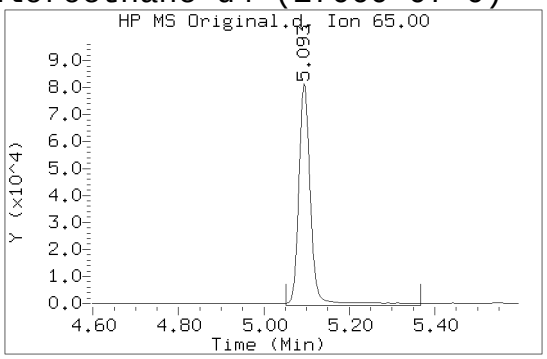
29-Jan-2024
09:05
firat
tastan



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29-Jan-2024
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firat
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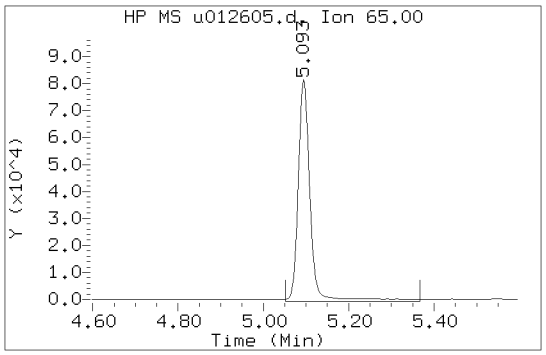

BEFORE

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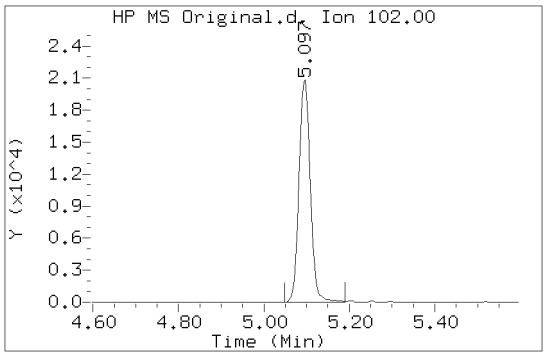

AFTER

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29-Jan-2024
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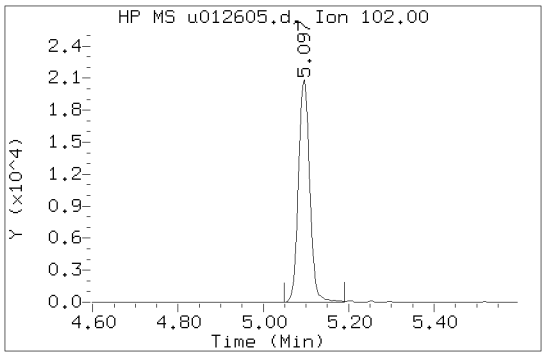


Data File: \\nahstws005\Target\chem\voa9.i\U240126.b\U012607.D Page 1
Report Date: 26-Jan-2024 14:29

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240126.b\U012607.D
Lab Smp Id: HS24011040-04
Inj Date : 26-JAN-2024 13:48
Operator : PC   Inst ID: VOA9.i
Smp Info : HS24011040-04
Misc Info : V9;WATER;0;50;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240126.b\8260C.m
Meth Date : 26-Jan-2024 13:25 firat.tast Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11   Cal File: U120608.D
Als bottle: 7
Dil Factor: 50.00000
Integrator: HP RTE   Compound Sublist: 000bhatebtex.sub
Target Version: 4.14
Processing Host: NAHSTWS005

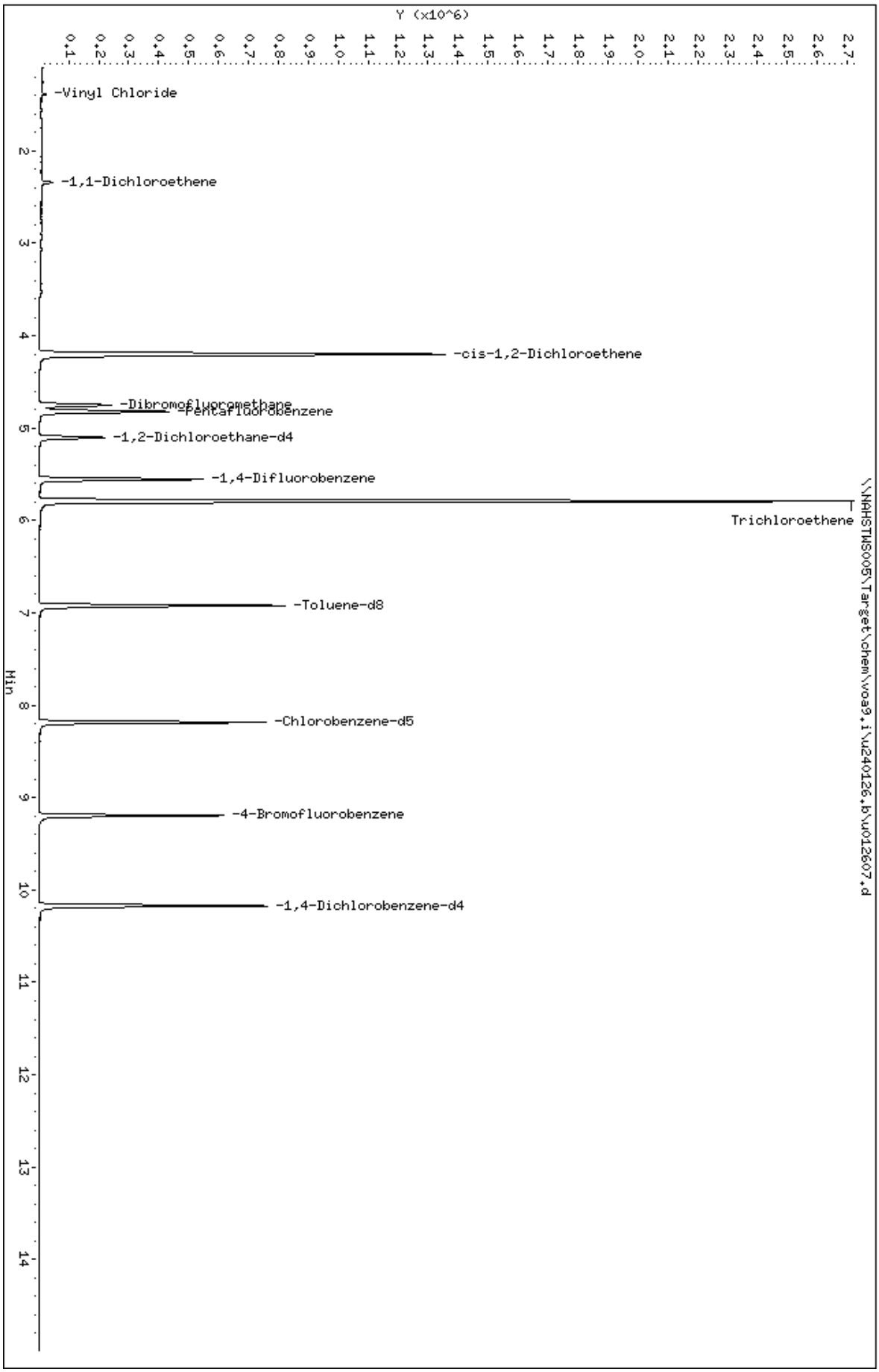
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	50.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.819	4.819	(1.000)	332392	50.0000	
$ 30 Dibromofluoromethane	113	4.752	4.748	(0.986)	145046	42.4875	42.48
$ 35 1,2-Dichloroethane-d4	65	5.100	5.096	(1.058)	142222	36.9894	36.98
* 36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	454961	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	430678	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	524285	52.8815	52.88
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	182486	48.5766	48.57
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	223008	50.0000	
5 Vinyl Chloride	62	1.385	1.381	(0.288)	10969	3.01135	150.56
11 1,1-Dichloroethene	96	2.341	2.337	(0.486)	6939	2.70666	135.33(a)
27 cis-1,2-Dichloroethene	96	4.201	4.197	(0.872)	711038	173.193	8659.67
38 Trichloroethene	130	5.790	5.790	(1.043)	927290	271.653	13582.64(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\voa9.i\u240126.b\u012607.d
Date : 26-JAN-2024 13:48
Client ID:
Sample Info: HS24011040-04
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9.i
Operator: PC
Column diameter: 0.18

Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012607.d Page 2

Date : 26-JAN-2024 13:48

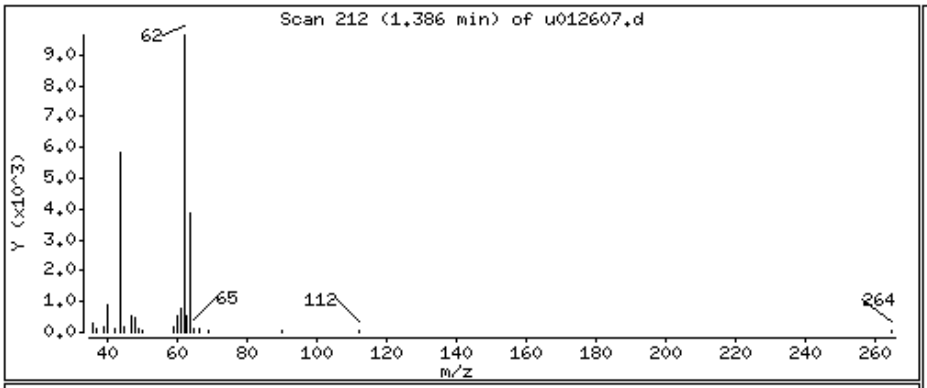
Client ID: Instrument: VOA9.i

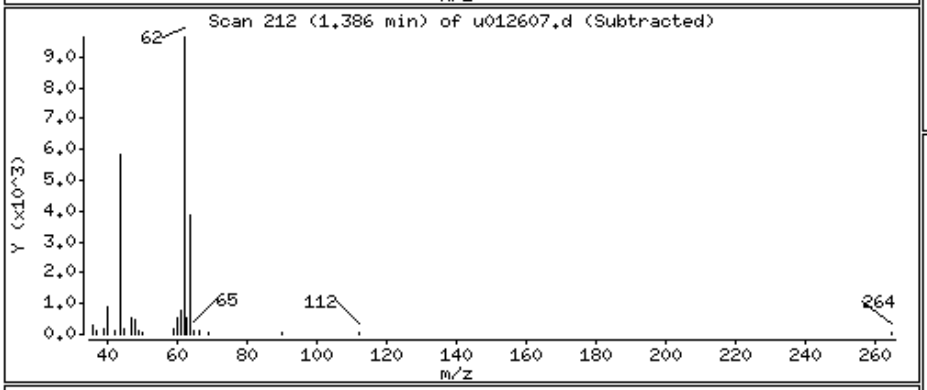
Sample Info: HS24011040-04

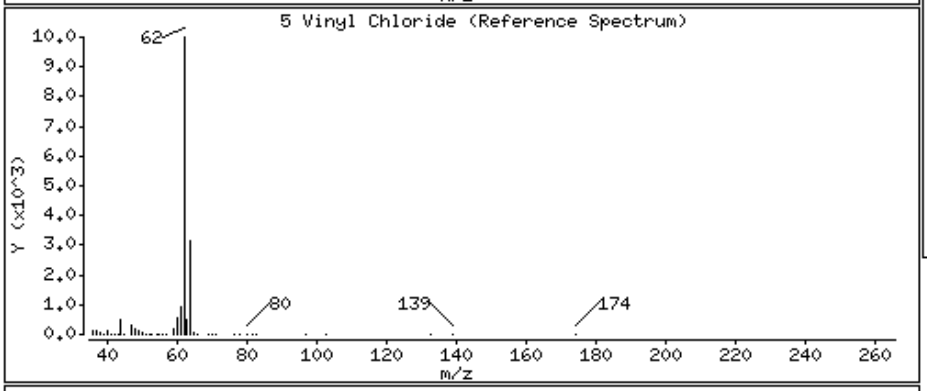
Purge Volume: 5.0 Operator: PC

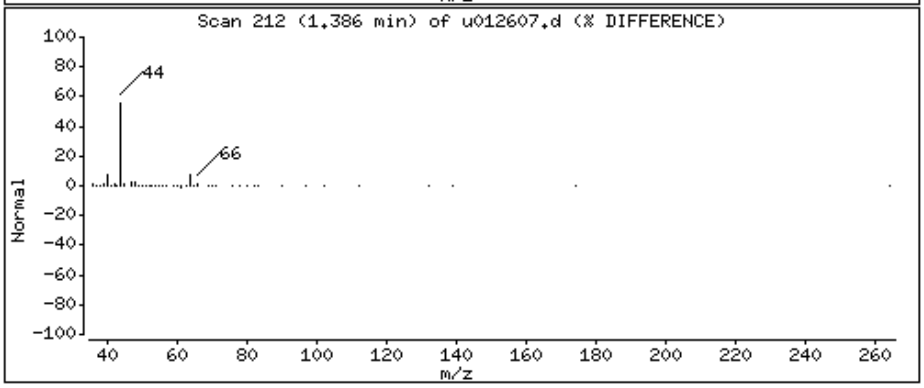
Column phase: DB624 Column diameter: 0.18

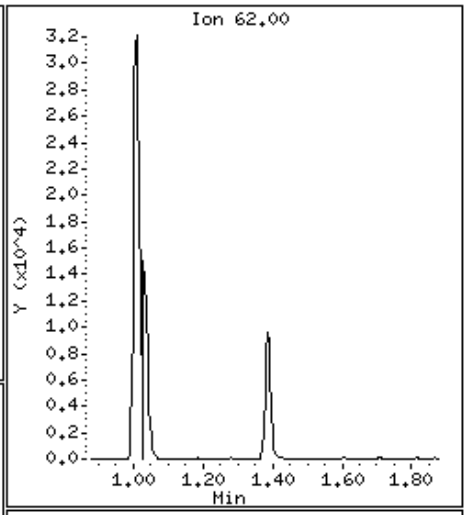
5 Vinyl Chloride Concentration: 150.56 ug/l

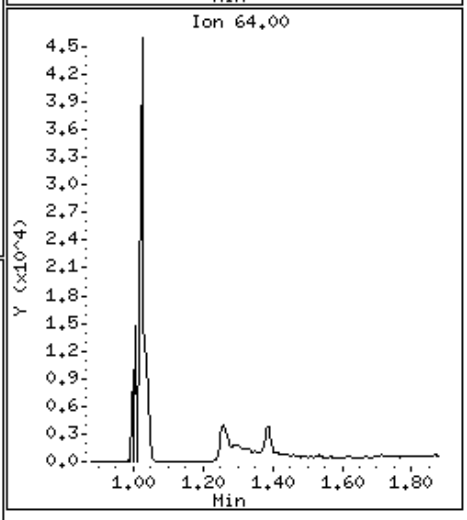












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012607.d Page 3

Date : 26-JAN-2024 13:48

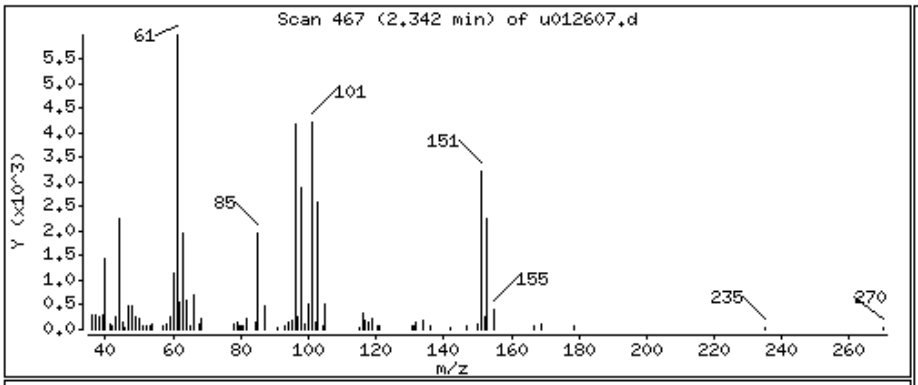
Client ID: Instrument: VOA9.i

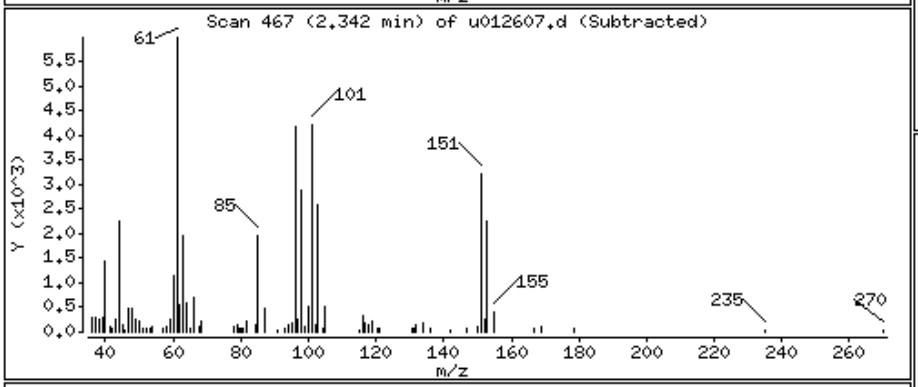
Sample Info: HS24011040-04

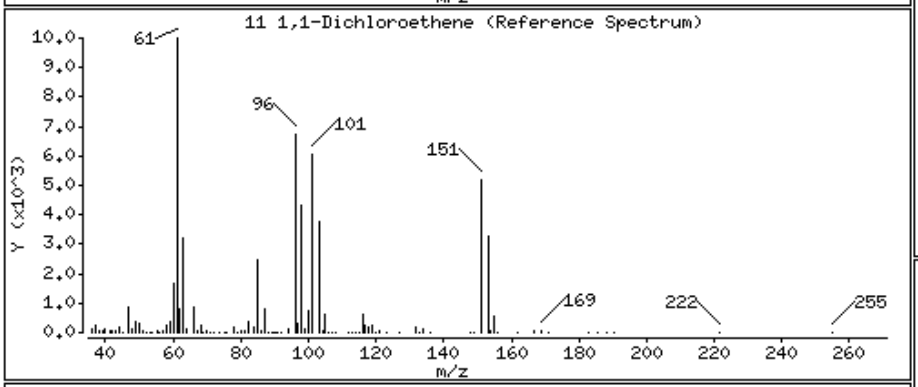
Purge Volume: 5.0 Operator: PC

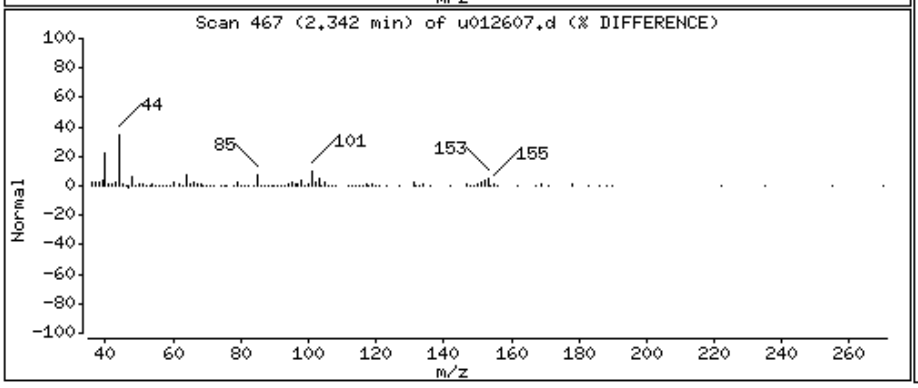
Column phase: DB624 Column diameter: 0.18

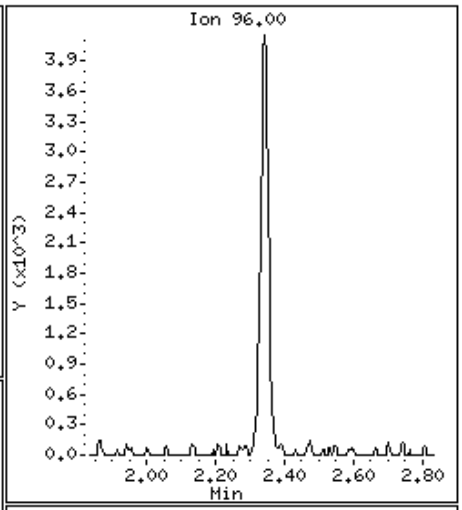
11 1,1-Dichloroethene Concentration: 135.33 ug/l

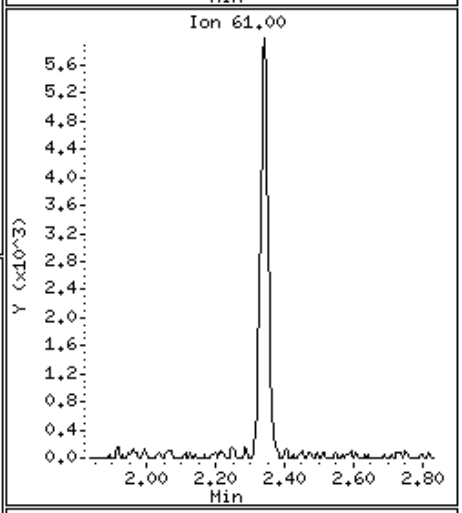


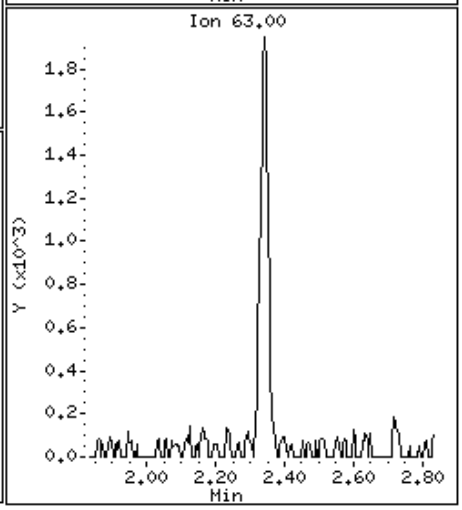












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012607.d Page 4

Date : 26-JAN-2024 13:48

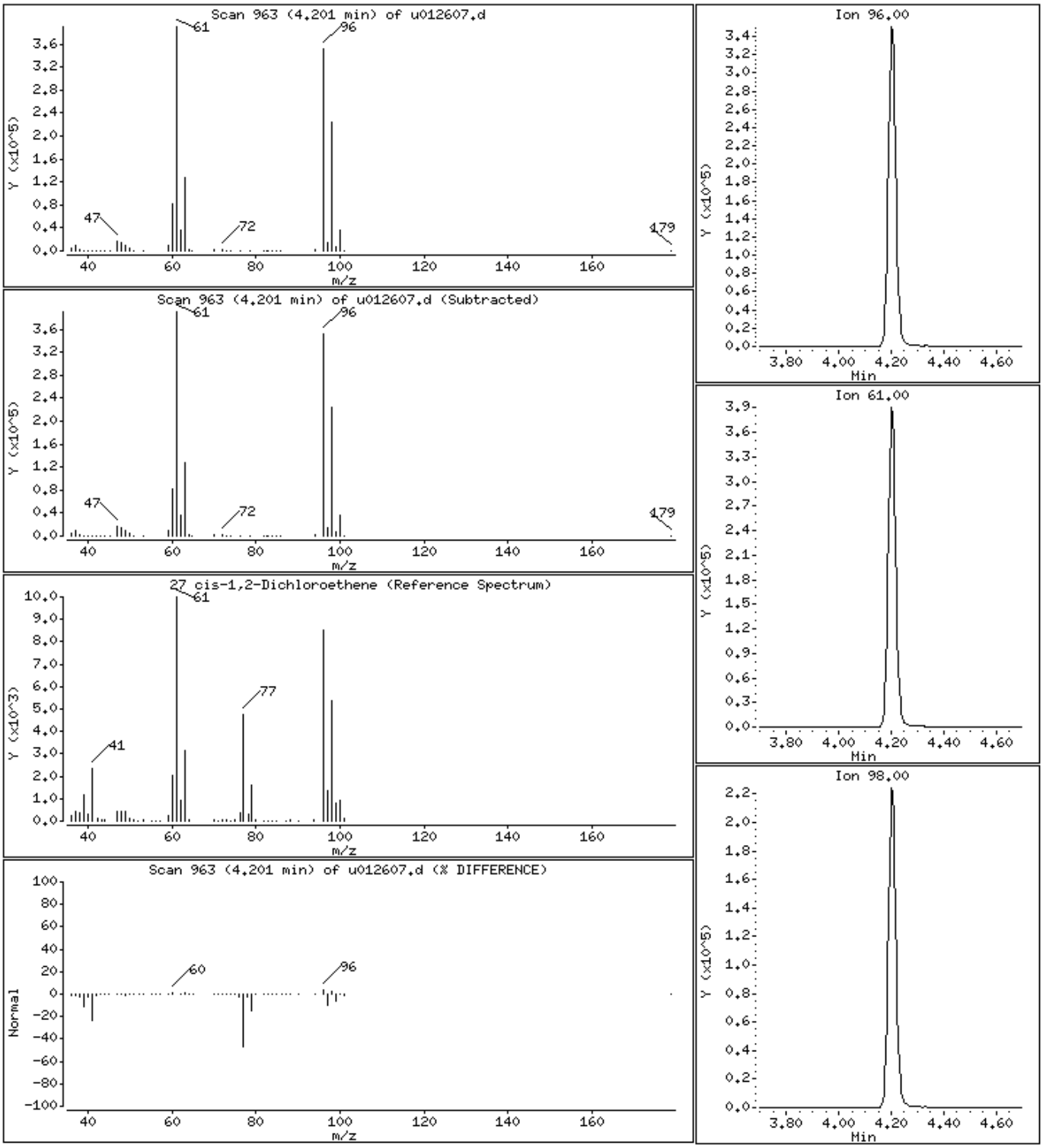
Client ID: Instrument: VOA9.i

Sample Info: HS24011040-04

Purge Volume: 5.0 Operator: PC

Column phase: DB624 Column diameter: 0.18

27 cis-1,2-Dichloroethene Concentration: 8659.67 ug/l



Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012607.d Page 5

Date : 26-JAN-2024 13:48

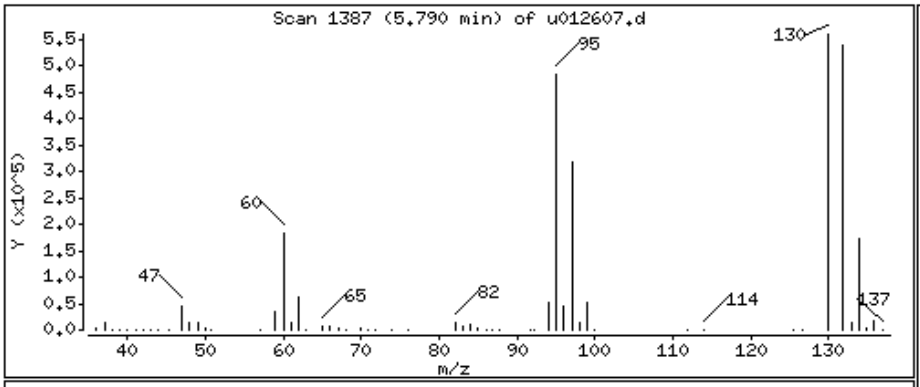
Client ID: Instrument: VOA9.i

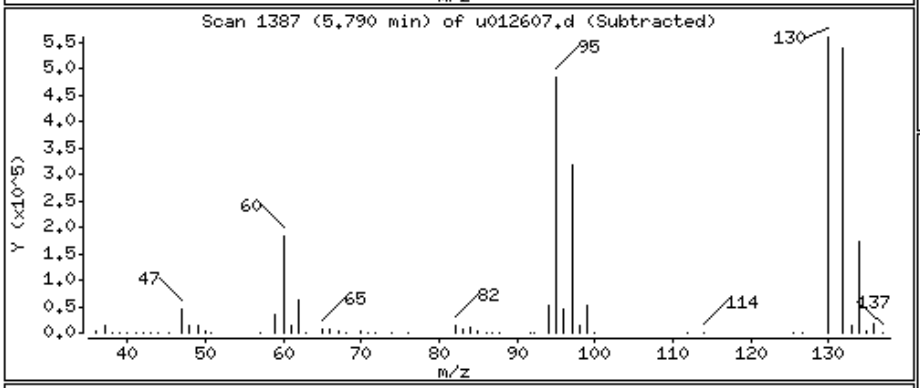
Sample Info: HS24011040-04

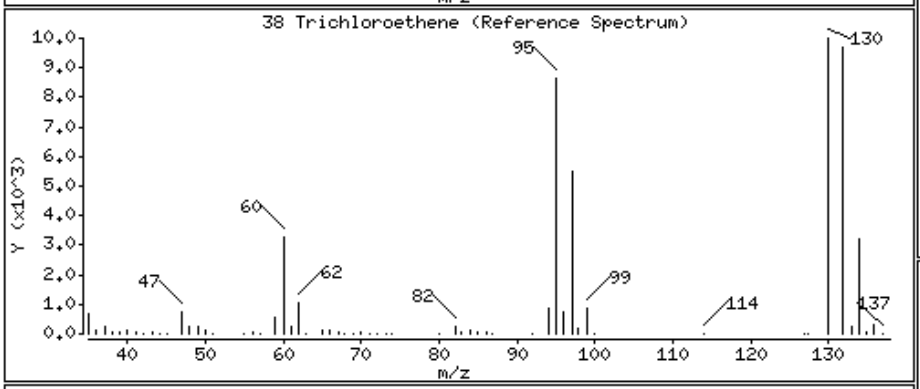
Purge Volume: 5.0 Operator: PC

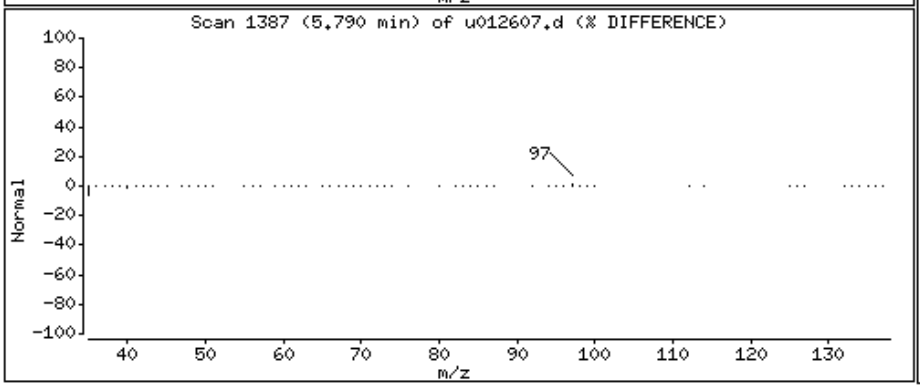
Column phase: DB624 Column diameter: 0.18

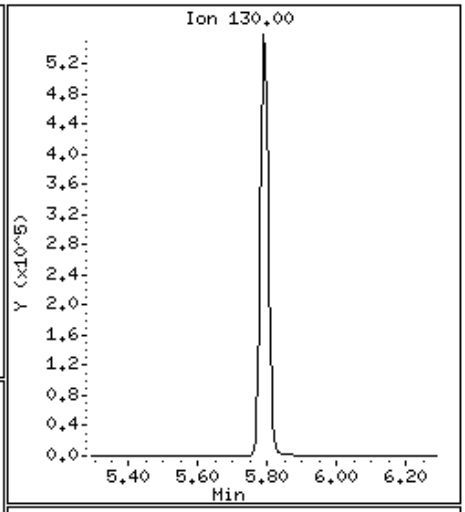
38 Trichloroethene Concentration: 13582.64 ug/l

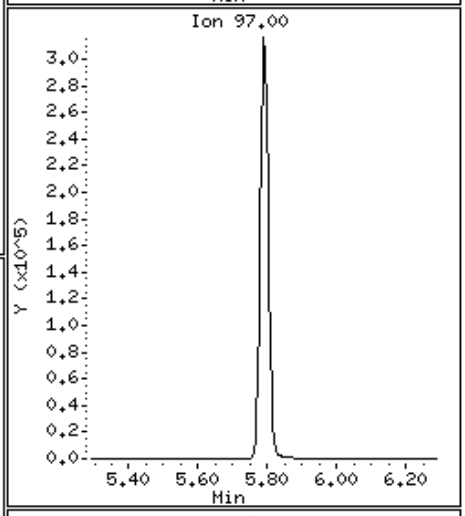


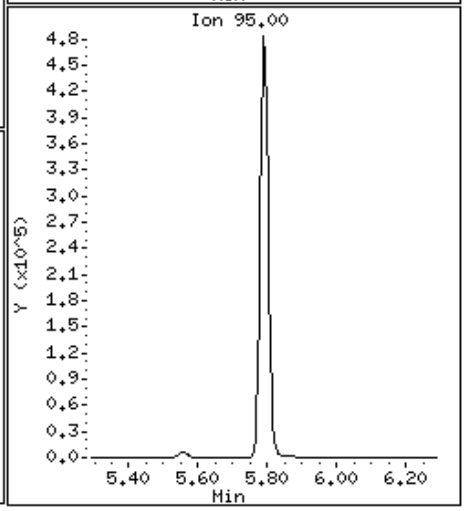












Data File : \\nahstws005\target\chem\voa9.i\u240126.b\u012607.d
Inj Date : 26-JAN-2024 13:48
InstruID : VOA9.i
LabSampID : HS24011040-04

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240126.b\U012608.D Page 1
Report Date: 26-Jan-2024 14:29

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240126.b\U012608.D
Lab Smp Id: HS24011040-05
Inj Date : 26-JAN-2024 14:10
Operator : PC   Inst ID: VOA9.i
Smp Info : HS24011040-05
Misc Info : V9;WATER;0;50;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240126.b\8260C.m
Meth Date : 26-Jan-2024 13:25 firat.tast Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11   Cal File: U120608.D
Als bottle: 8
Dil Factor: 50.00000
Integrator: HP RTE   Compound Sublist: 000bhatebtex.sub
Target Version: 4.14
Processing Host: NAHSTWS005

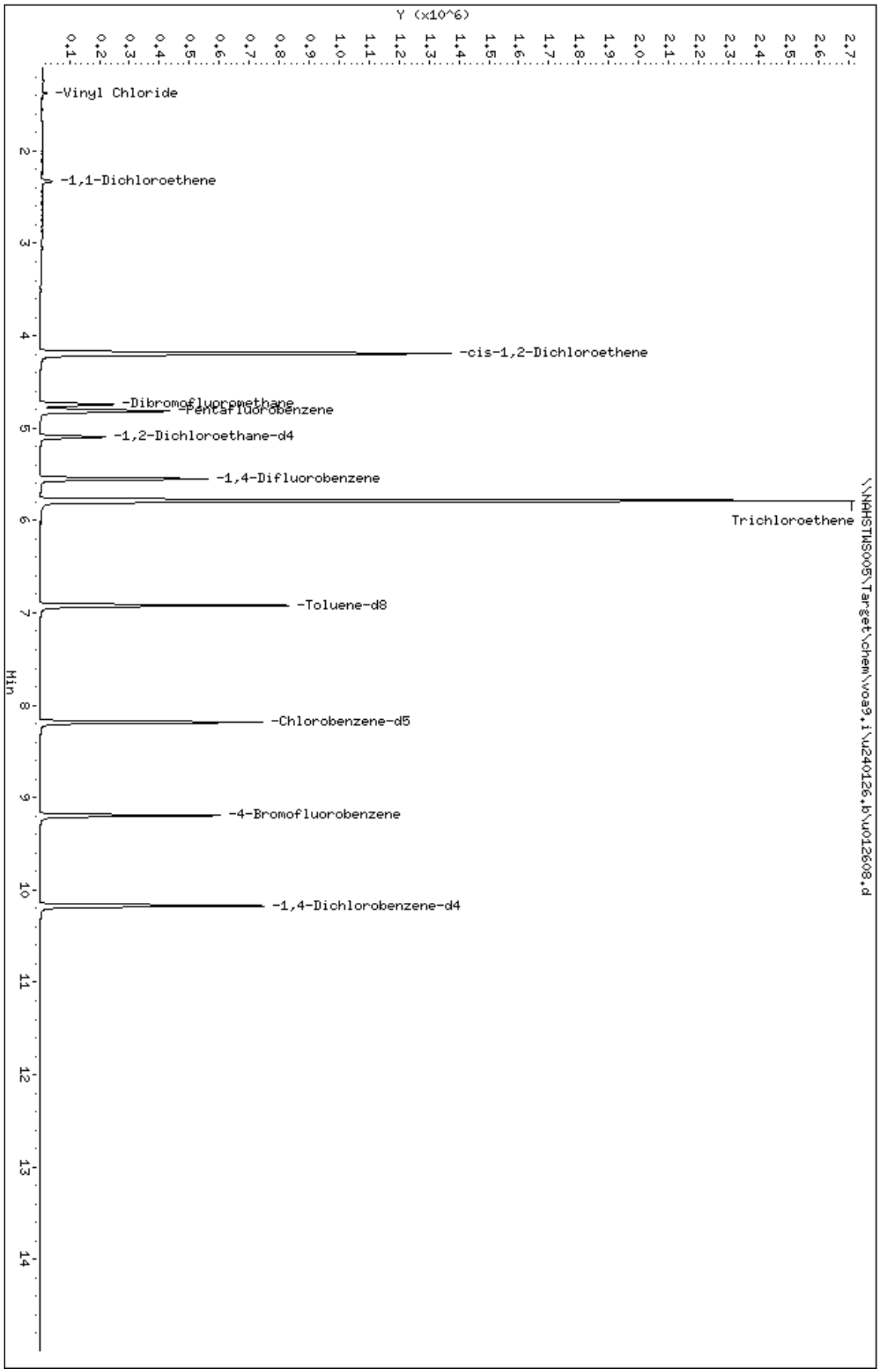
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	50.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.815	4.819	(1.000)	333255	50.0000	
$ 30 Dibromofluoromethane	113	4.744	4.748	(0.985)	145316	42.4556	42.45
$ 35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	143906	37.3187	37.31
* 36 1,4-Difluorobenzene	114	5.550	5.554	(1.000)	459287	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	434145	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	523265	52.3572	52.35
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	179888	47.4740	47.47
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	223245	50.0000	
5 Vinyl Chloride	62	1.374	1.381	(0.285)	10520	2.88061	144.03
11 1,1-Dichloroethene	96	2.330	2.337	(0.484)	6263	2.43665	121.83(a)
27 cis-1,2-Dichloroethene	96	4.193	4.197	(0.871)	707976	172.001	8600.05
38 Trichloroethene	130	5.786	5.790	(1.043)	931073	270.192	13509.59(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\voa9,i\u240126,b\u012608,d
Date : 26-JAN-2024 14:10
Client ID:
Sample Info: HS24011040-05
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9,i
Operator: PC
Column diameter: 0.18

Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012608.d Page 2

Date : 26-JAN-2024 14:10

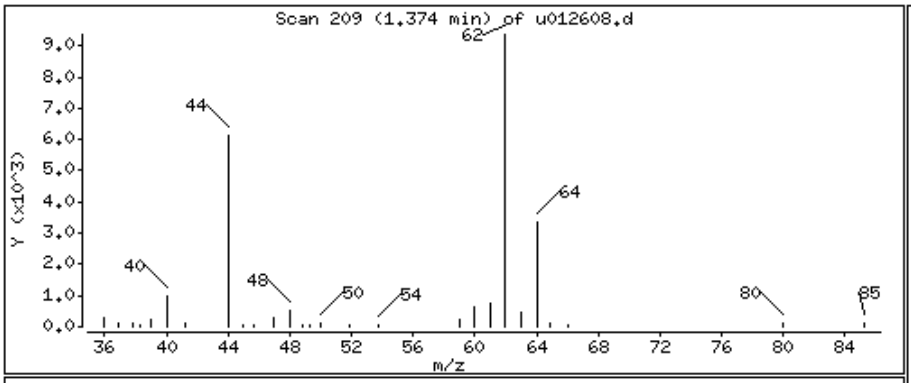
Client ID: Instrument: VOA9.i

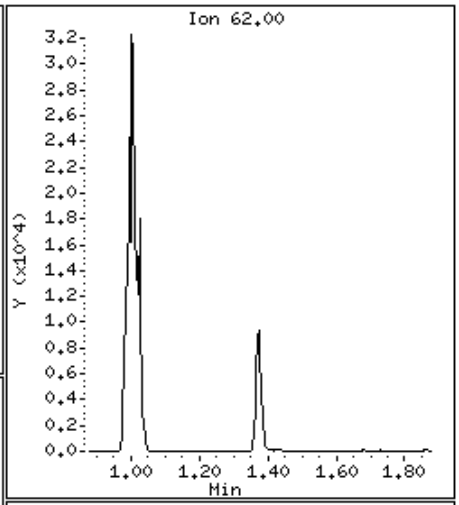
Sample Info: HS24011040-05

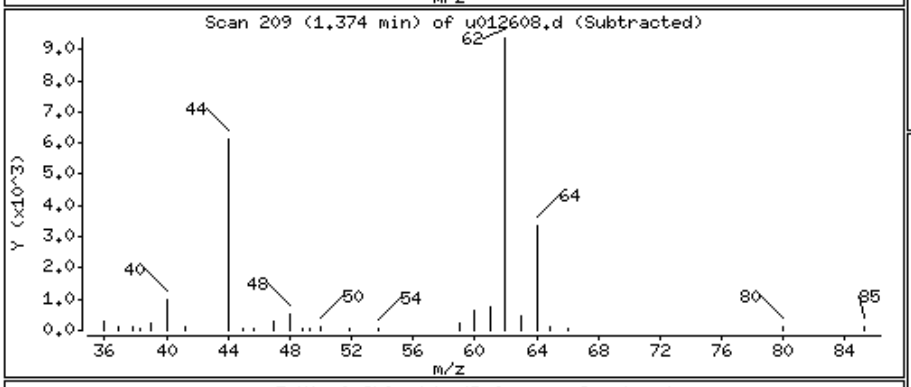
Purge Volume: 5.0 Operator: PC

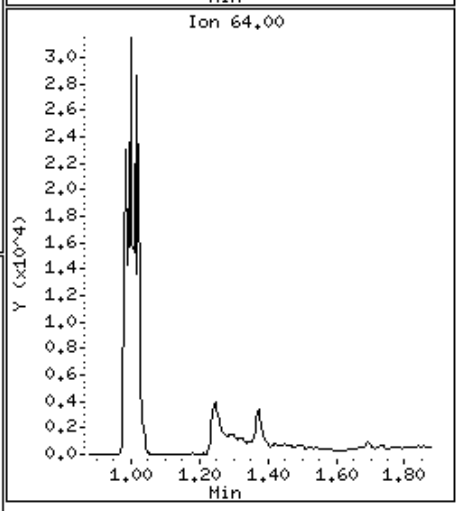
Column phase: DB624 Column diameter: 0.18

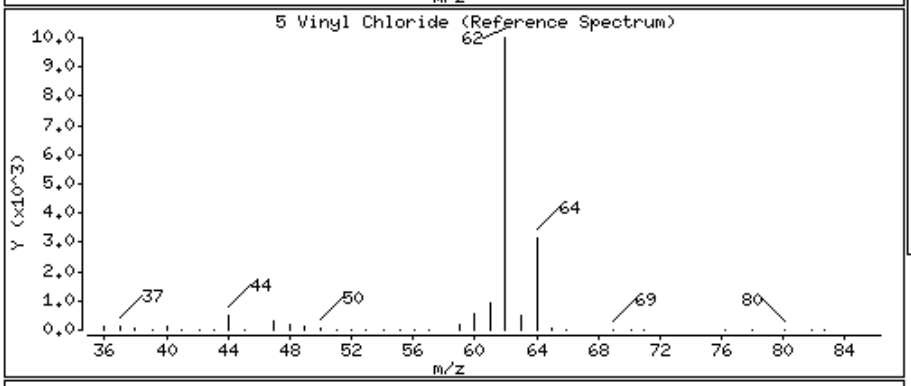
5 Vinyl Chloride Concentration: 144.03 ug/l

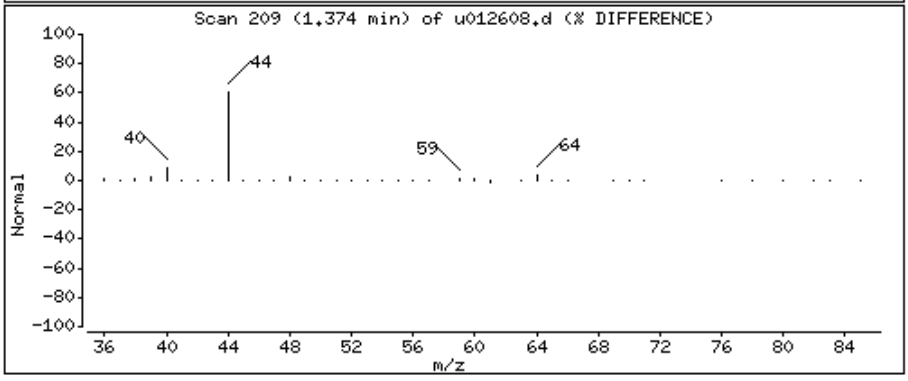












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012608.d Page 3

Date : 26-JAN-2024 14:10

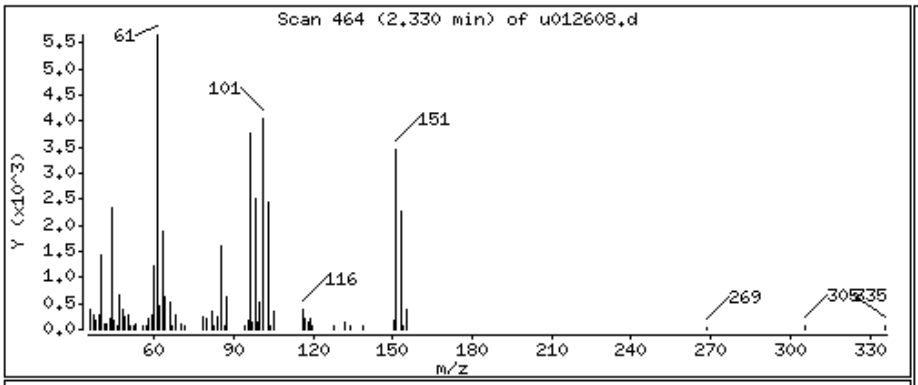
Client ID: Instrument: VOA9.i

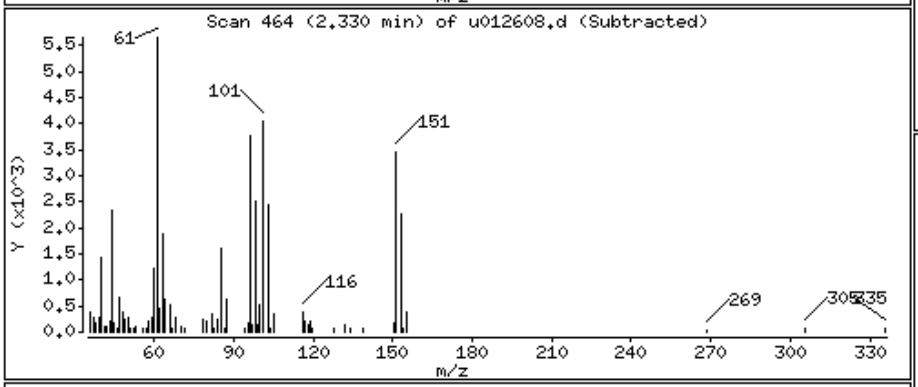
Sample Info: HS24011040-05

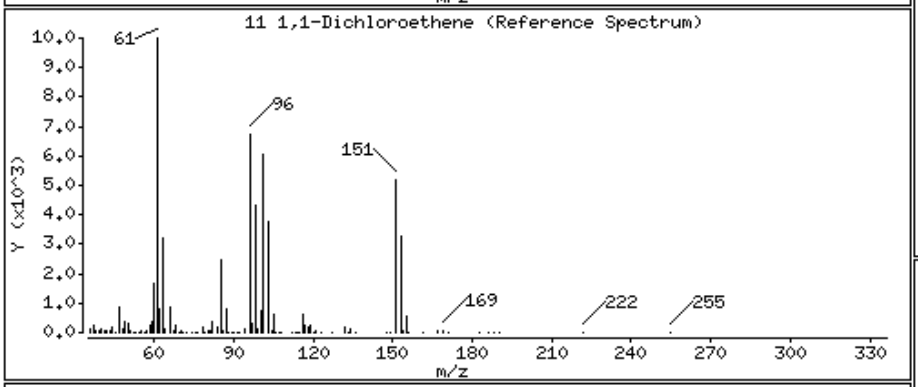
Purge Volume: 5.0 Operator: PC

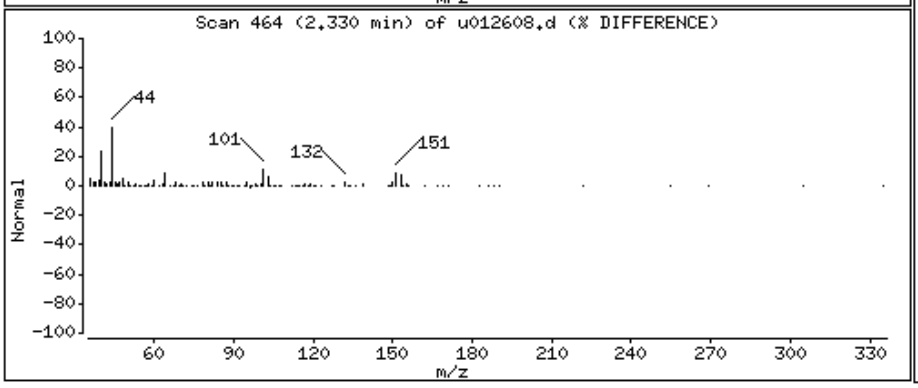
Column phase: DB624 Column diameter: 0.18

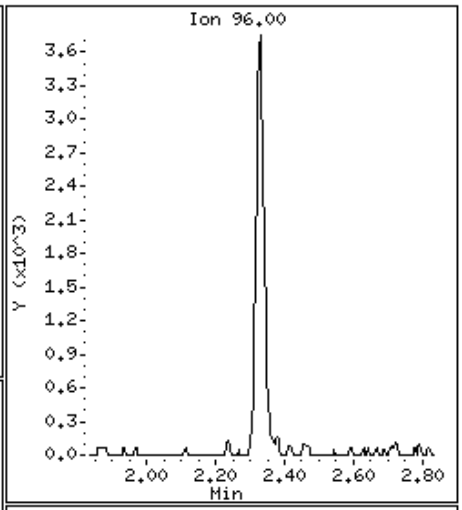
11 1,1-Dichloroethene Concentration: 121.83 ug/l

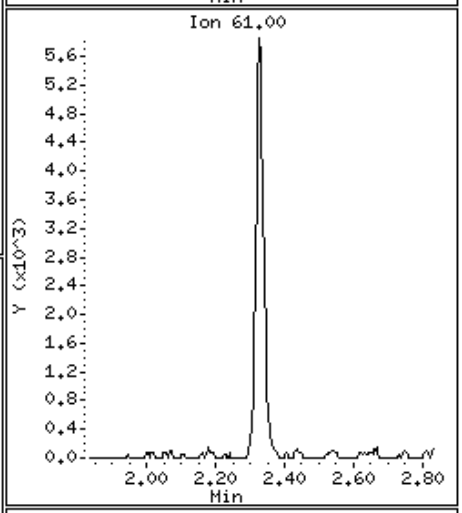


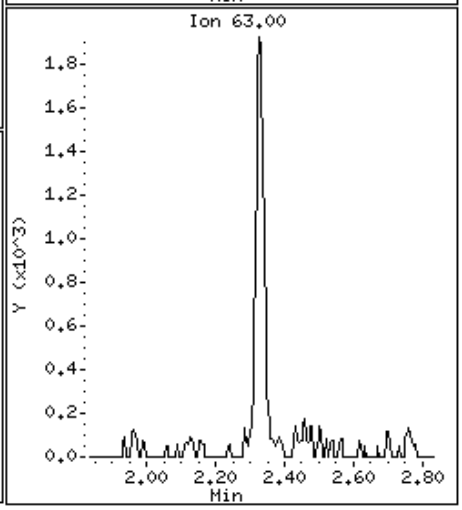












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012608.d Page 4

Date : 26-JAN-2024 14:10

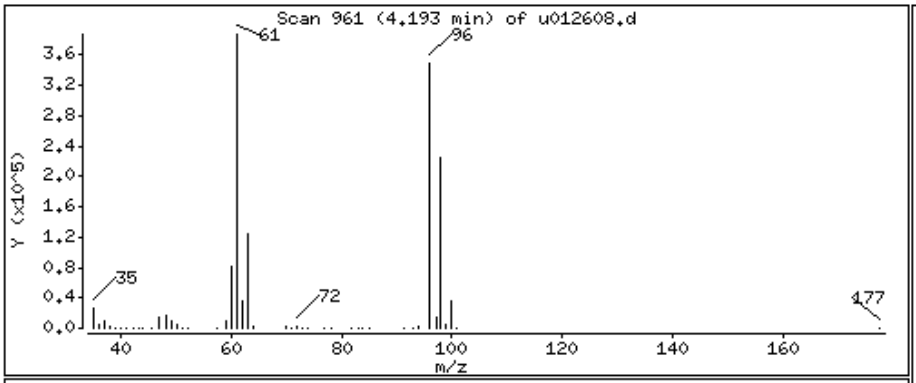
Client ID: Instrument: VOA9.i

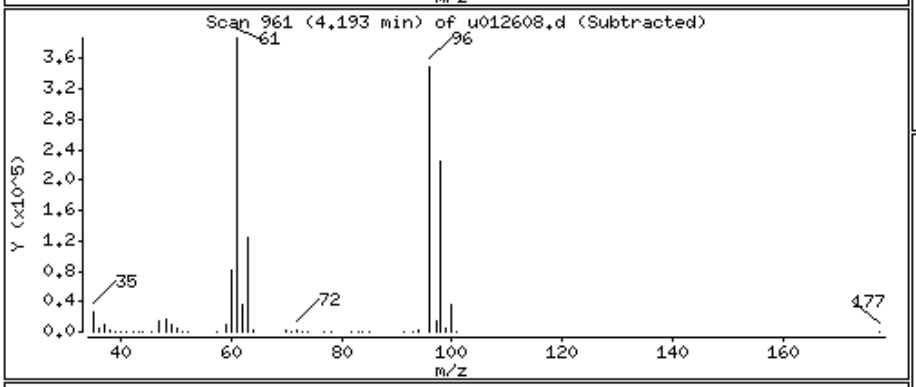
Sample Info: HS24011040-05

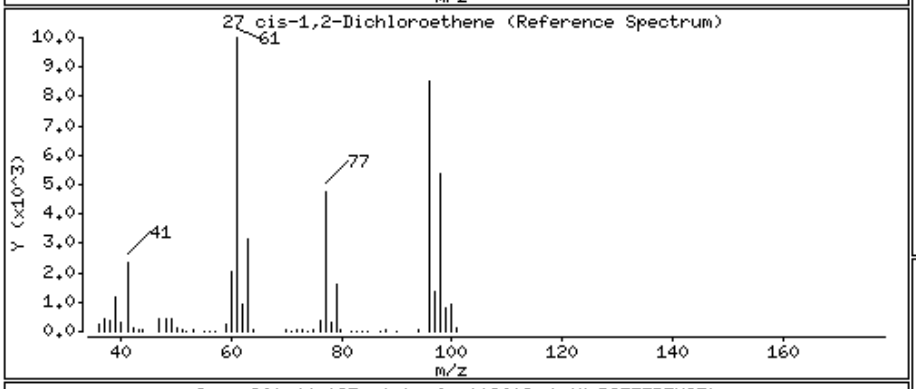
Purge Volume: 5.0 Operator: PC

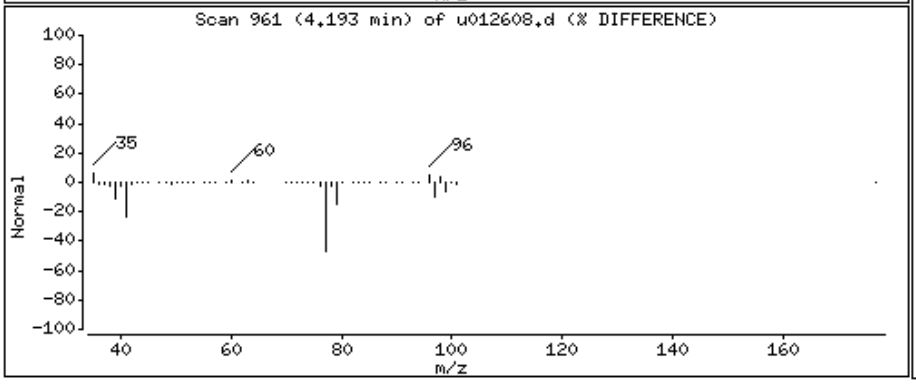
Column phase: DB624 Column diameter: 0.18

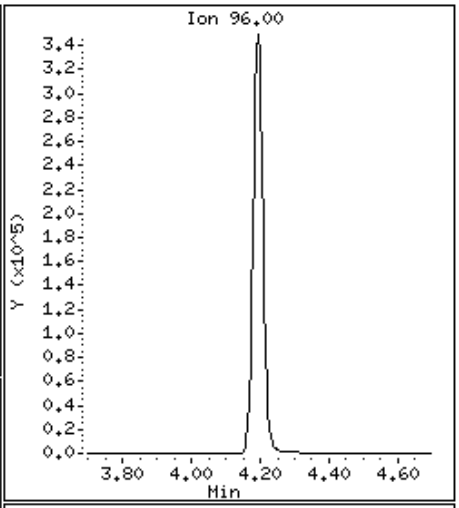
27 cis-1,2-Dichloroethene Concentration: 8600.05 ug/l

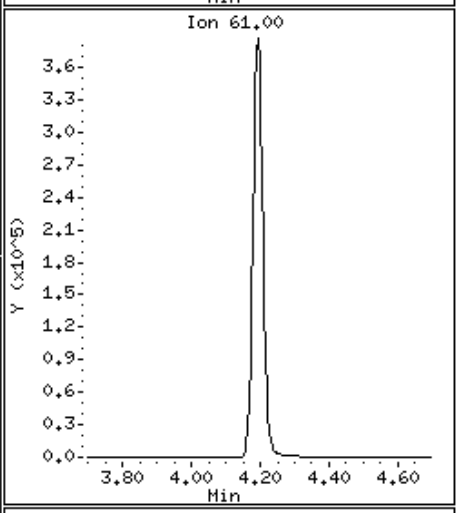


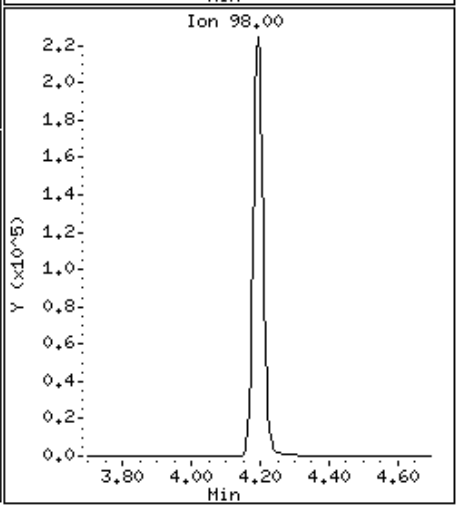












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012608.d Page 5

Date : 26-JAN-2024 14:10

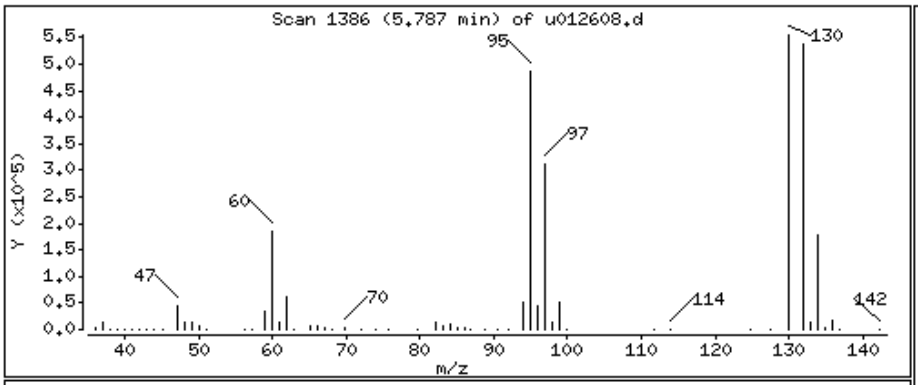
Client ID: Instrument: VOA9.i

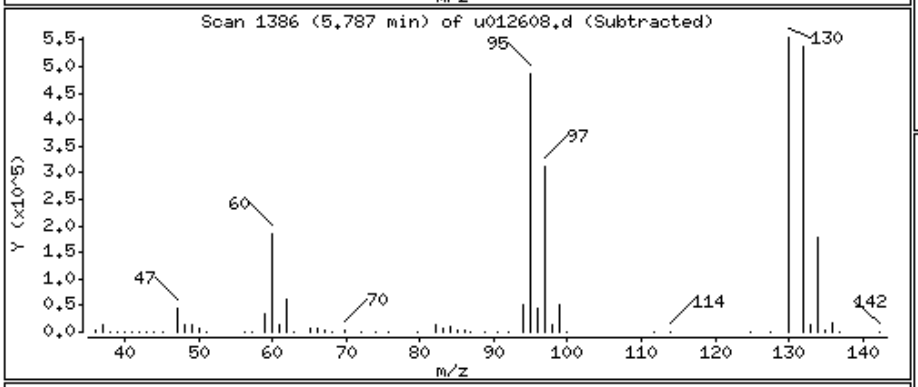
Sample Info: HS24011040-05

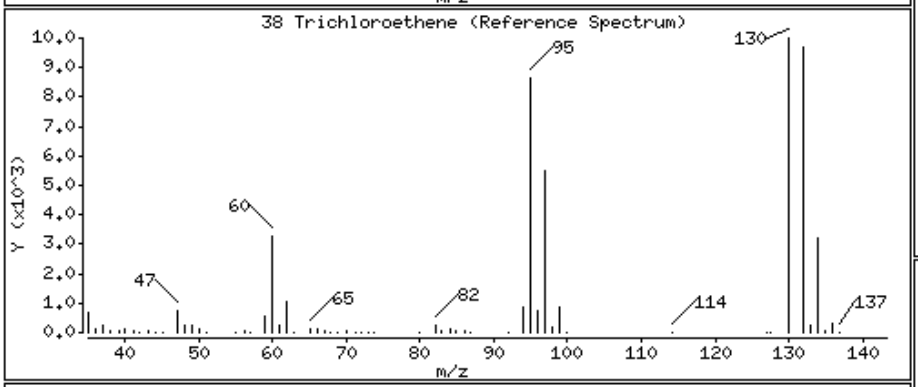
Purge Volume: 5.0 Operator: PC

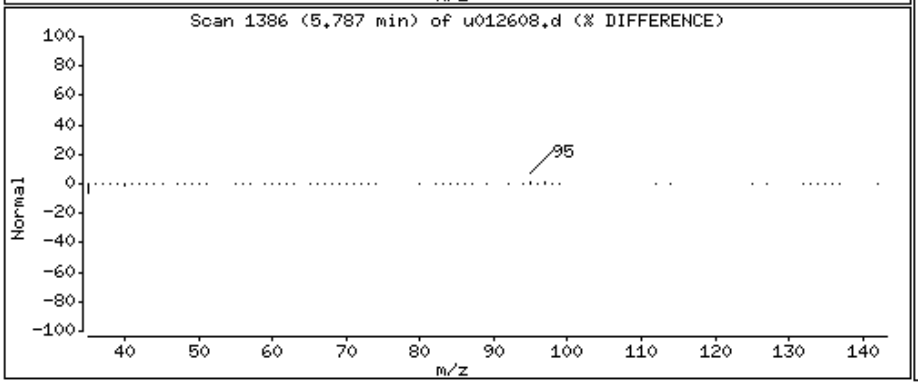
Column phase: DB624 Column diameter: 0.18

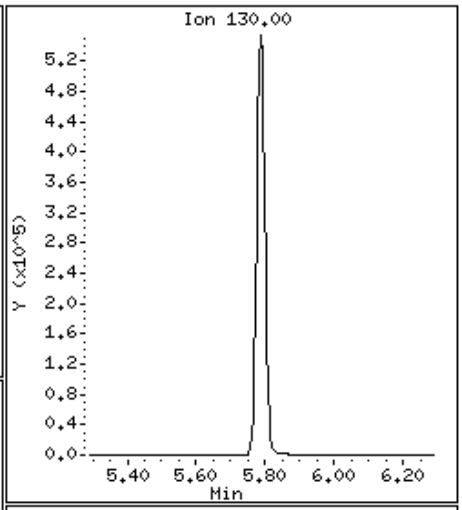
38 Trichloroethene Concentration: 13509.59 ug/l

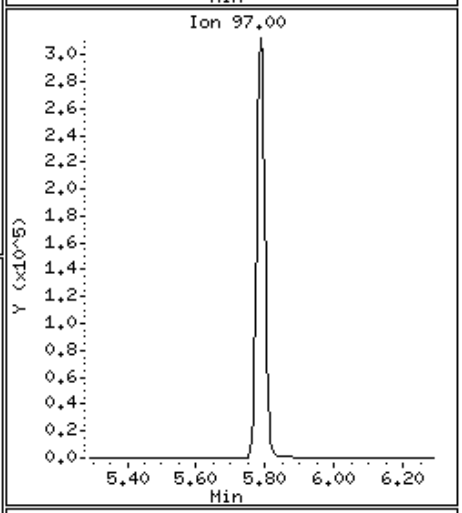


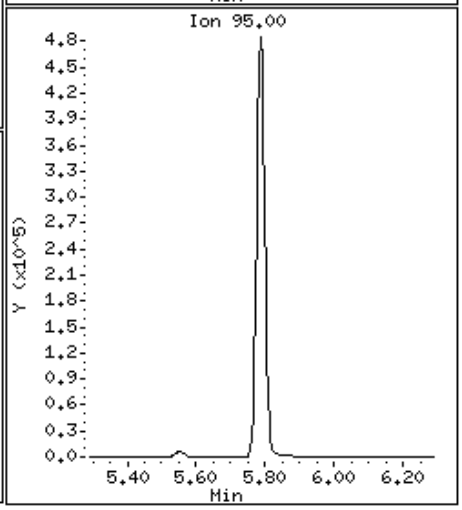












Data File : \\nahstws005\target\chem\voa9.i\u240126.b\u012608.d
Inj Date : 26-JAN-2024 14:10
InstruID : VOA9.i
LabSampID : HS24011040-05

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240126.b\U012609.D Page 1
Report Date: 26-Jan-2024 14:48

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240126.b\U012609.D
Lab Smp Id: HS24011111-14MS Client Smp ID: HS24011111-14MS
Inj Date : 26-JAN-2024 14:33
Operator : PC Inst ID: VOA9.i
Smp Info : HS24011111-14MS;HS24011111-14MS;3;;MS
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240126.b\8260C.m
Meth Date : 26-Jan-2024 13:25 firat.tast Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 9 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 000bhatebtex.sub
Target Version: 4.14
Processing Host: NAHSTWS005

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

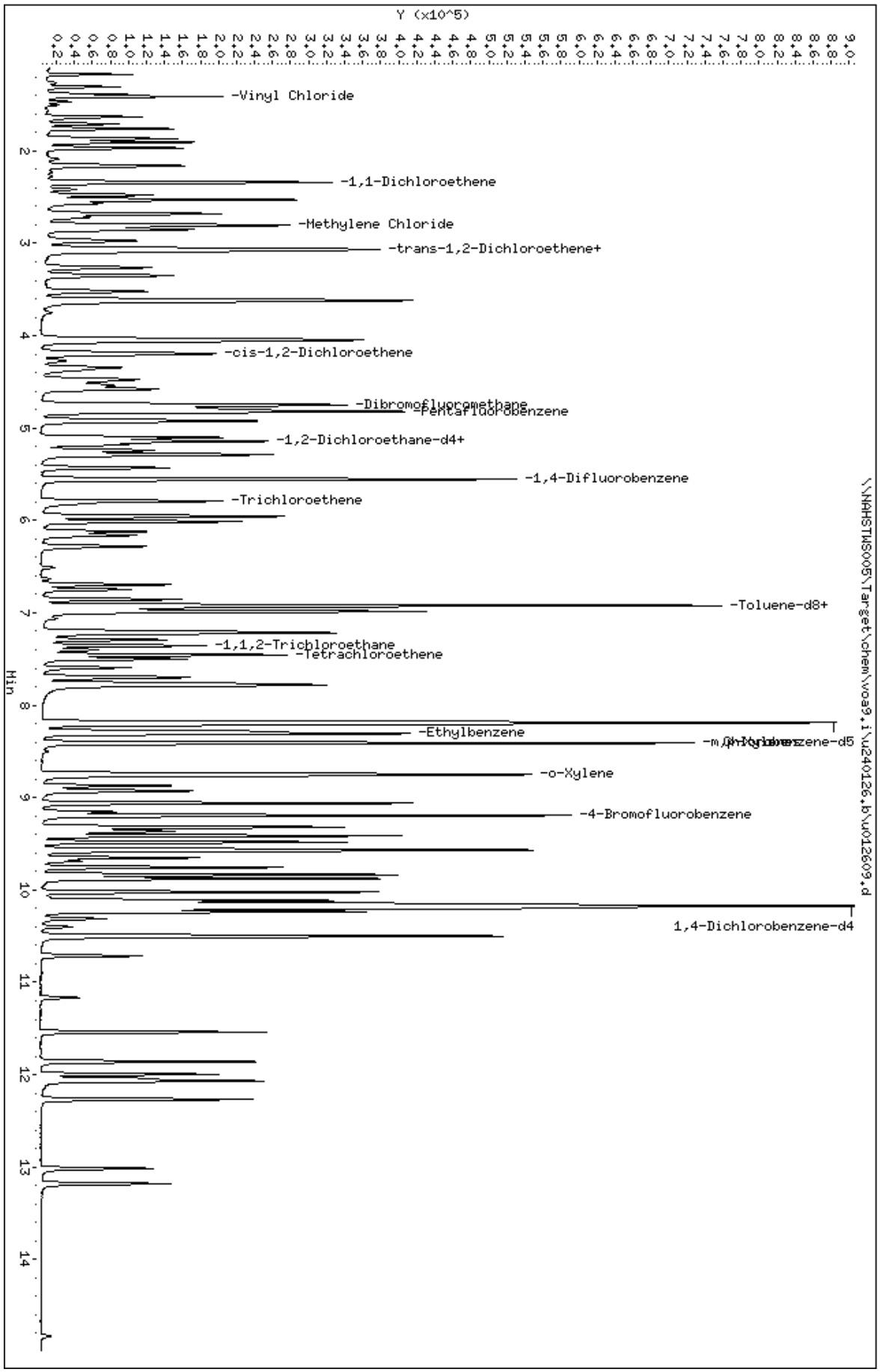
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.819	4.819	(1.000)	296077	50.0000	
$ 30 Dibromofluoromethane	113	4.751	4.748	(0.986)	129273	42.5124	42.51
$ 35 1,2-Dichloroethane-d4	65	5.100	5.096	(1.058)	131120	38.2382	38.23
* 36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	438084	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	427475	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	466534	47.4091	47.40
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	169336	45.3295	45.32
* 70 1,4-Dichlorobenzene-d4	152	10.168	10.168	(1.000)	244054	50.0000	
5 Vinyl Chloride	62	1.385	1.381	(0.288)	61334	18.9035	18.90
11 1,1-Dichloroethene	96	2.341	2.337	(0.486)	57612	25.2288	25.22
17 Methylene Chloride	84	2.802	2.798	(0.582)	63129	21.7573	21.75
20 trans-1,2-Dichloroethene	96	3.065	3.061	(0.636)	65041	23.8256	23.82
27 cis-1,2-Dichloroethene	96	4.200	4.197	(0.872)	65577	17.9323	17.93
38 Trichloroethene	130	5.790	5.790	(1.043)	68565	20.8602	20.86
53 1,1,2-Trichloroethane	83	7.357	7.353	(0.899)	43333	18.1785	18.17
56 Tetrachloroethene	164	7.458	7.458	(0.911)	62279	24.4108	24.41
18 Methyl tert-butyl ether	73	3.087	3.079	(0.641)	164063	20.0503	20.05
33 1,2-Dichloroethane	62	5.179	5.175	(0.933)	69964	16.3914	16.39
37 Benzene	78	5.141	5.141	(0.926)	218978	18.3620	18.36
50 Toluene	91	6.982	6.982	(0.853)	242834	20.3735	20.37

61 Ethylbenzene	106	8.305	8.305 (1.015)	81165	19.9690	19.96
62 m,p-Xylenes	106	8.410	8.406 (1.027)	207946	42.5532	42.55

Data File: \\nahstws005\Target\chem\voa9.i\U240126.b\U012609.D Page 2
Report Date: 26-Jan-2024 14:48

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
63 o-Xylene	106	8.748	8.748	(1.069)	100658	20.0288	20.02
M 95 Xylenes (total)	106				308604	60.8797	60.87



Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012609.d
Date : 26-JAN-2024 14:33
Client ID: HS24011111-14MS
Sample Info: HS24011111-14MS;HS24011111-14MS;3;;MS
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9.i
Operator: PC
Column diameter: 0.18

Data File : \\nahstws005\target\chem\voa9.i\u240126.b\u012609.d
Inj Date : 26-JAN-2024 14:33
InstruID : VOA9.i
LabSampID : HS24011111-14MS

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240126.b\U012610.D Page 1
Report Date: 26-Jan-2024 15:10

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240126.b\U012610.D
Lab Smp Id: HS24011111-14MSD Client Smp ID: HS24011111-14MSD
Inj Date : 26-JAN-2024 14:55
Operator : PC Inst ID: VOA9.i
Smp Info : HS24011111-14MSD;HS24011111-14MSD;3;;MSD
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240126.b\8260C.m
Meth Date : 26-Jan-2024 13:25 firat.tast Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 9 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 000bhatebtex.sub
Target Version: 4.14
Processing Host: NAHSTWS005

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

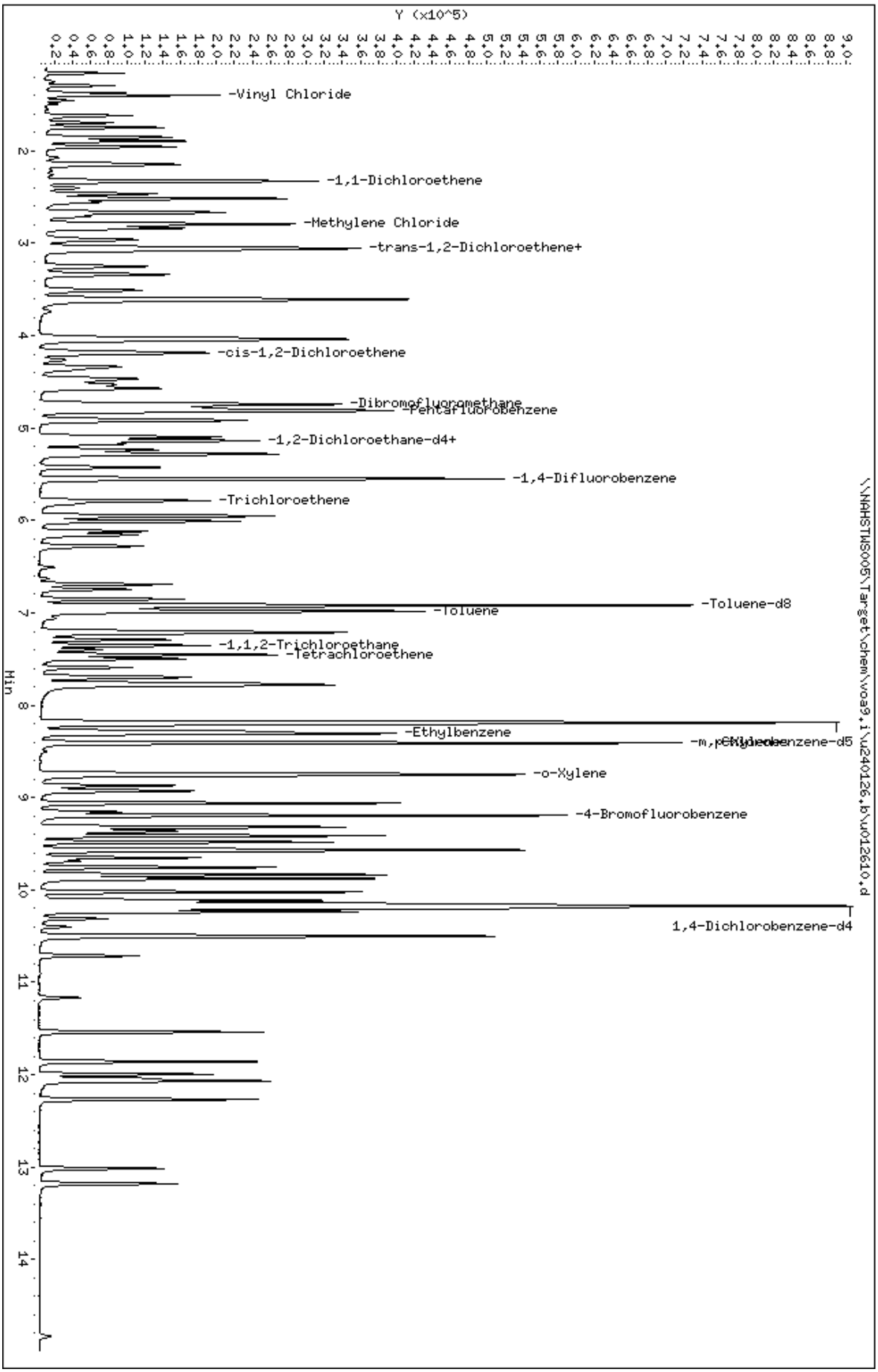
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.811	4.819	(1.000)	287371	50.0000	
$ 30 Dibromofluoromethane	113	4.744	4.748	(0.986)	130944	44.4113	44.41
$ 35 1,2-Dichloroethane-d4	65	5.092	5.096	(1.058)	130212	39.0905	39.09
* 36 1,4-Difluorobenzene	114	5.550	5.554	(1.000)	425372	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	424844	50.0000	
$ 48 Toluene-d8	98	6.918	6.922	(0.845)	458139	46.8443	46.84
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	167830	45.2010	45.20
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	239026	50.0000	
5 Vinyl Chloride	62	1.370	1.381	(0.285)	59960	19.0399	19.03
11 1,1-Dichloroethene	96	2.326	2.337	(0.483)	56066	25.2956	25.29
17 Methylene Chloride	84	2.787	2.798	(0.579)	64884	23.0552	23.05
20 trans-1,2-Dichloroethene	96	3.053	3.061	(0.635)	63372	23.9175	23.91
27 cis-1,2-Dichloroethene	96	4.193	4.197	(0.871)	63697	17.9459	17.94
38 Trichloroethene	130	5.786	5.790	(1.043)	66407	20.8074	20.80
53 1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	44074	18.6352	18.63
56 Tetrachloroethene	164	7.454	7.458	(0.911)	59792	23.5812	23.58
18 Methyl tert-butyl ether	73	3.076	3.079	(0.639)	163634	20.6038	20.60
33 1,2-Dichloroethane	62	5.171	5.175	(0.932)	69972	16.8832	16.88
37 Benzene	78	5.134	5.141	(0.925)	216710	18.7149	18.71
50 Toluene	91	6.978	6.982	(0.853)	239448	20.2138	20.21

61 Ethylbenzene	106	8.305	8.305 (1.015)	81563	20.1912	20.19
62 m,p-Xylenes	106	8.406	8.406 (1.027)	203530	41.9074	41.90

Data File: \\nahstws005\Target\chem\voa9.i\U240126.b\U012610.D Page 2
Report Date: 26-Jan-2024 15:10

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
63 o-Xylene	106	8.747	8.748	(1.069)	101701	20.3617	20.36
M 95 Xylenes (total)	106				305231	62.0138	62.01



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Date : 26-JAN-2024 14:55
Client ID: HS24011111-14HSD
Sample Info: HS24011111-14HSD;HS24011111-14HSD;3;;HSD
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9,i
Operator: PC
Column diameter: 0.18

Data File : \\nahstws005\target\chem\voa9.i\u240126.b\u012610.d
Inj Date : 26-JAN-2024 14:55
InstruID : VOA9.i
LabSampID : HS24011111-14MSD

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240126.b\U012611.D Page 1
Report Date: 26-Jan-2024 15:35

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240126.b\U012611.D
Lab Smp Id: HS24011040-11
Inj Date : 26-JAN-2024 15:17
Operator : PC   Inst ID: VOA9.i
Smp Info : HS24011040-11
Misc Info : V9;WATER;0;50;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240126.b\8260C.m
Meth Date : 26-Jan-2024 13:25 firat.tast Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11   Cal File: U120608.D
Als bottle: 10
Dil Factor: 50.00000
Integrator: HP RTE   Compound Sublist: 000bhatebtex.sub
Target Version: 4.14
Processing Host: NAHSTWS005

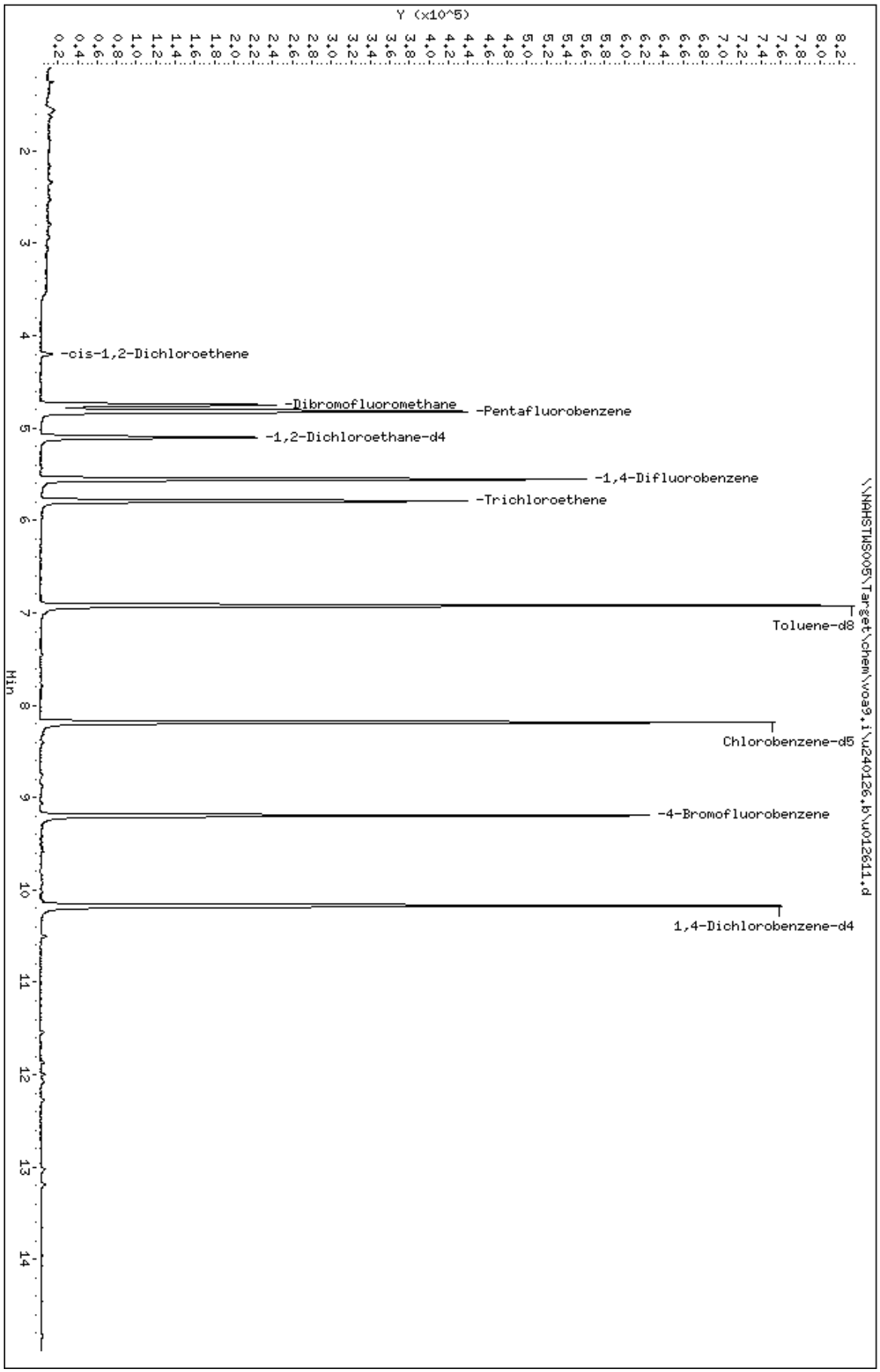
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	50.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.819	4.819	(1.000)	333851	50.0000	
$ 30 Dibromofluoromethane	113	4.751	4.748	(0.986)	146053	42.5981	42.59
$ 35 1,2-Dichloroethane-d4	65	5.100	5.096	(1.058)	146041	37.7875	37.78
* 36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	464219	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	439452	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	528370	52.2295	52.22
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	183753	47.9202	47.92
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	226001	50.0000	
27 cis-1,2-Dichloroethene	96	4.204	4.197	(0.872)	6442	1.56227	78.11(a)
38 Trichloroethene	130	5.790	5.790	(1.043)	153243	43.9978	2199.88

QC Flag Legend

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



Data File: \\NAHSTWS005\Target\chem\voa9,i\u240126,b\u012611,d
Date : 26-JAN-2024 15:17
Client ID:
Sample Info: HS24011040-11
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9,i
Operator: PC
Column diameter: 0.18

Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012611.d Page 2

Date : 26-JAN-2024 15:17

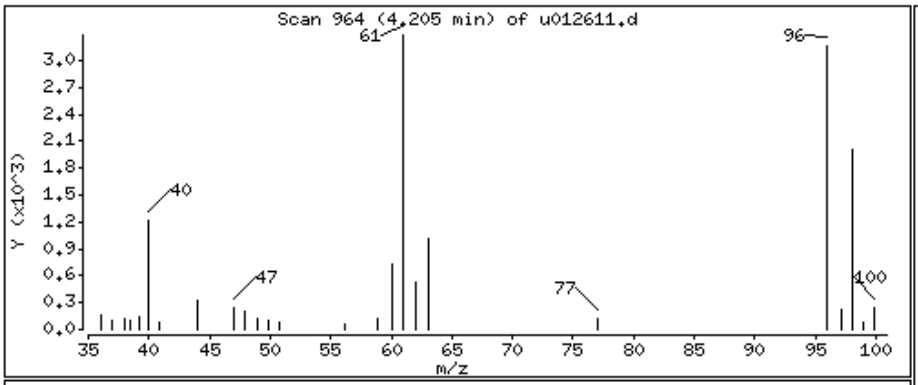
Client ID: Instrument: VOA9.i

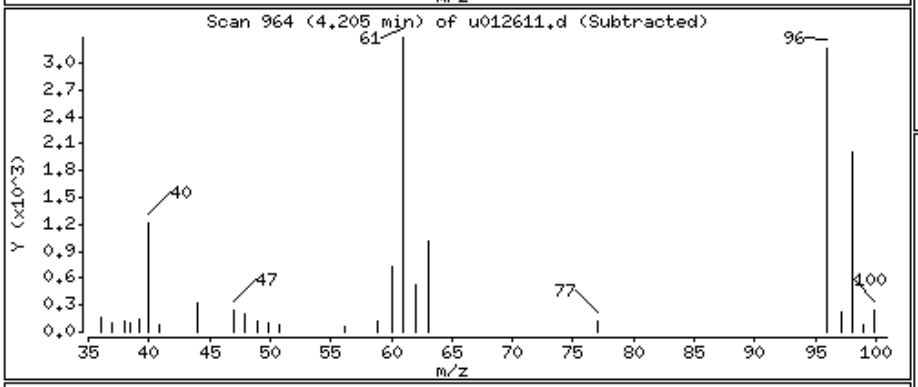
Sample Info: HS24011040-11

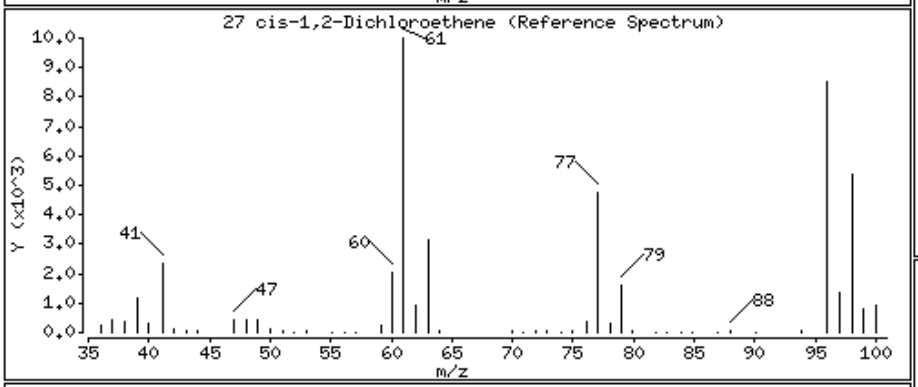
Purge Volume: 5.0 Operator: PC

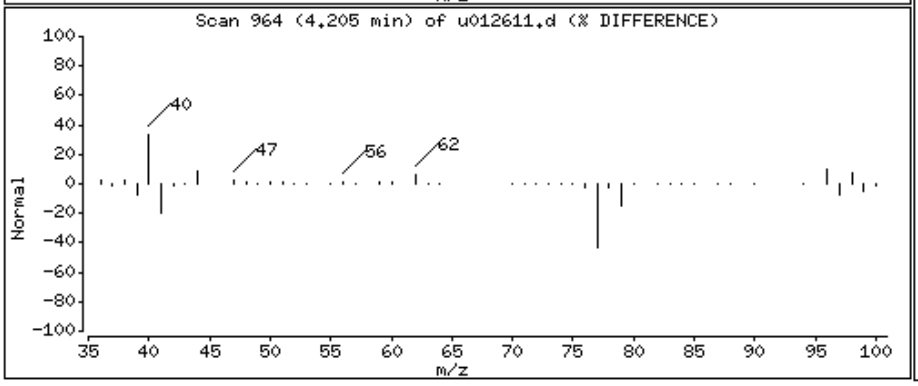
Column phase: DB624 Column diameter: 0.18

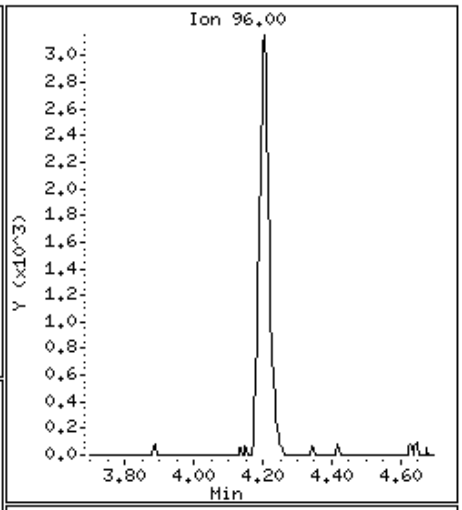
27 cis-1,2-Dichloroethene Concentration: 78.11 ug/l

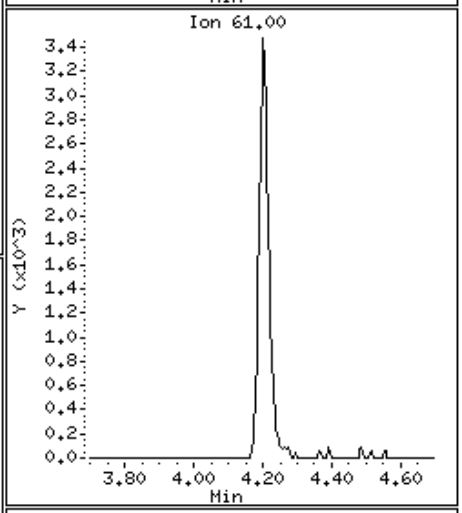


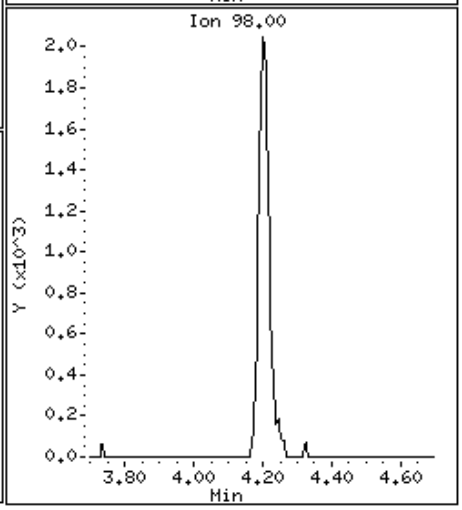












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012611.d Page 3

Date : 26-JAN-2024 15:17

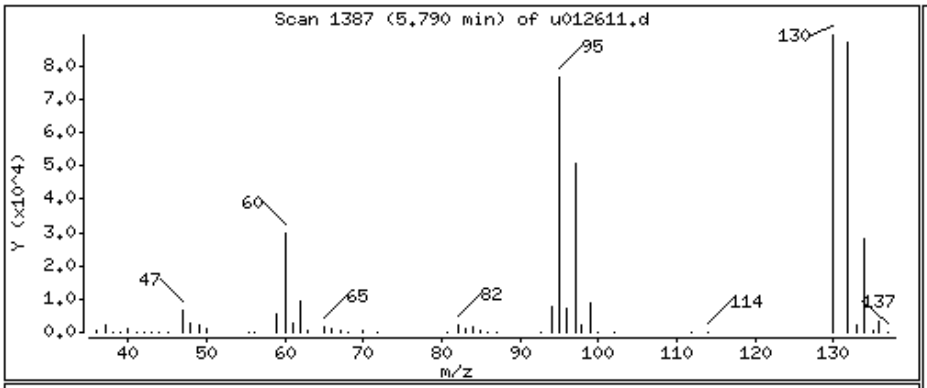
Client ID: Instrument: VOA9.i

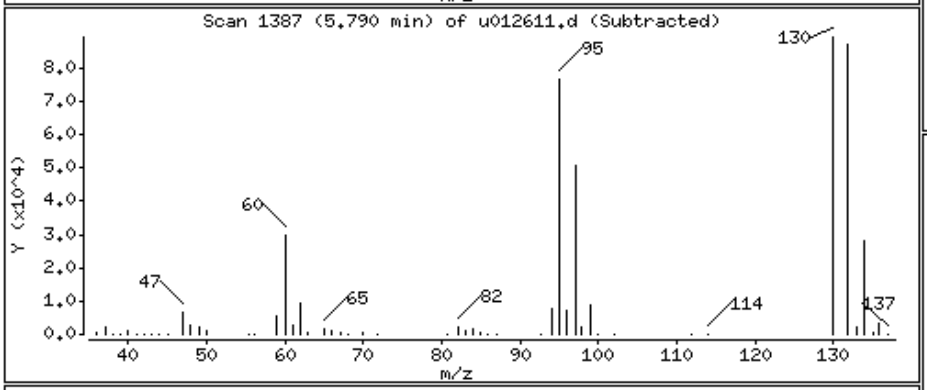
Sample Info: HS24011040-11

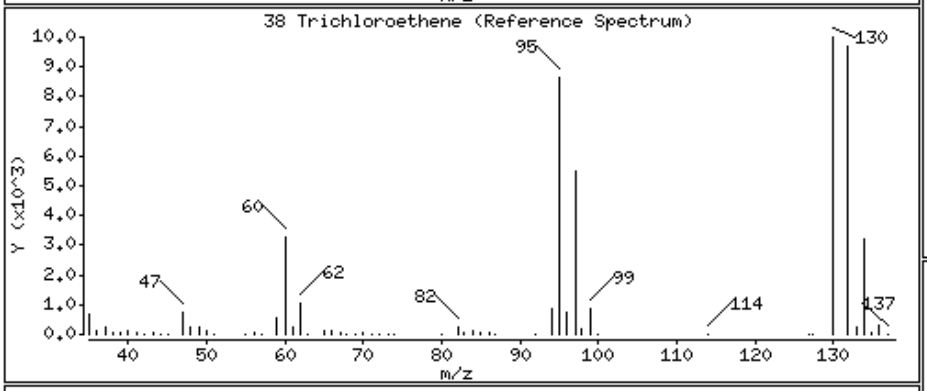
Purge Volume: 5.0 Operator: PC

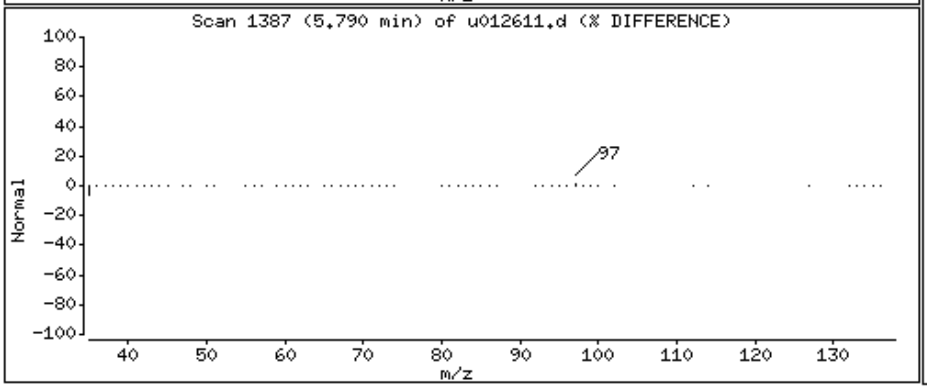
Column phase: DB624 Column diameter: 0.18

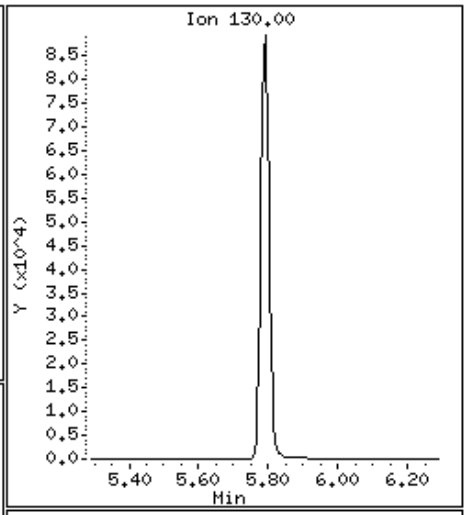
38 Trichloroethene Concentration: 2199.88 ug/l

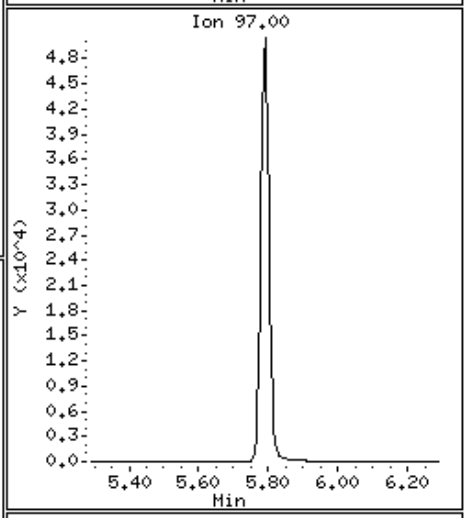


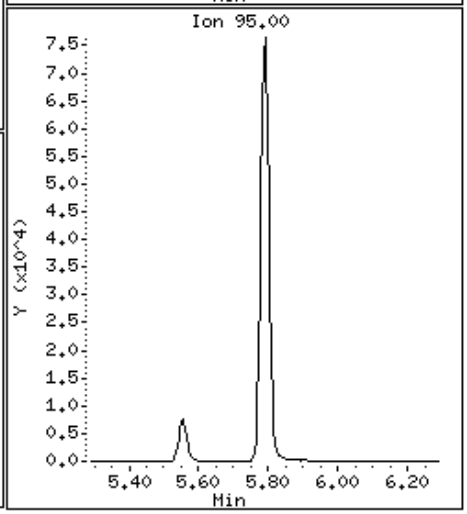












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Inj Date : 26-JAN-2024 15:17
InstruID : VOA9.i
LabSampID : HS24011040-11

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240126.b\U012612.D Page 1
Report Date: 29-Jan-2024 08:19

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240126.b\U012612.D
Lab Smp Id: HS24011040-12
Inj Date : 26-JAN-2024 15:40
Operator : PC   Inst ID: VOA9.i
Smp Info : HS24011040-12
Misc Info : V9;WATER;0;50;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240126.b\8260C.m
Meth Date : 27-Jan-2024 00:13 firat.tast Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11   Cal File: U120608.D
Als bottle: 11
Dil Factor: 50.00000
Integrator: HP RTE   Compound Sublist: 000bhatebtex.sub
Target Version: 4.14
Processing Host: NAHSTWS005

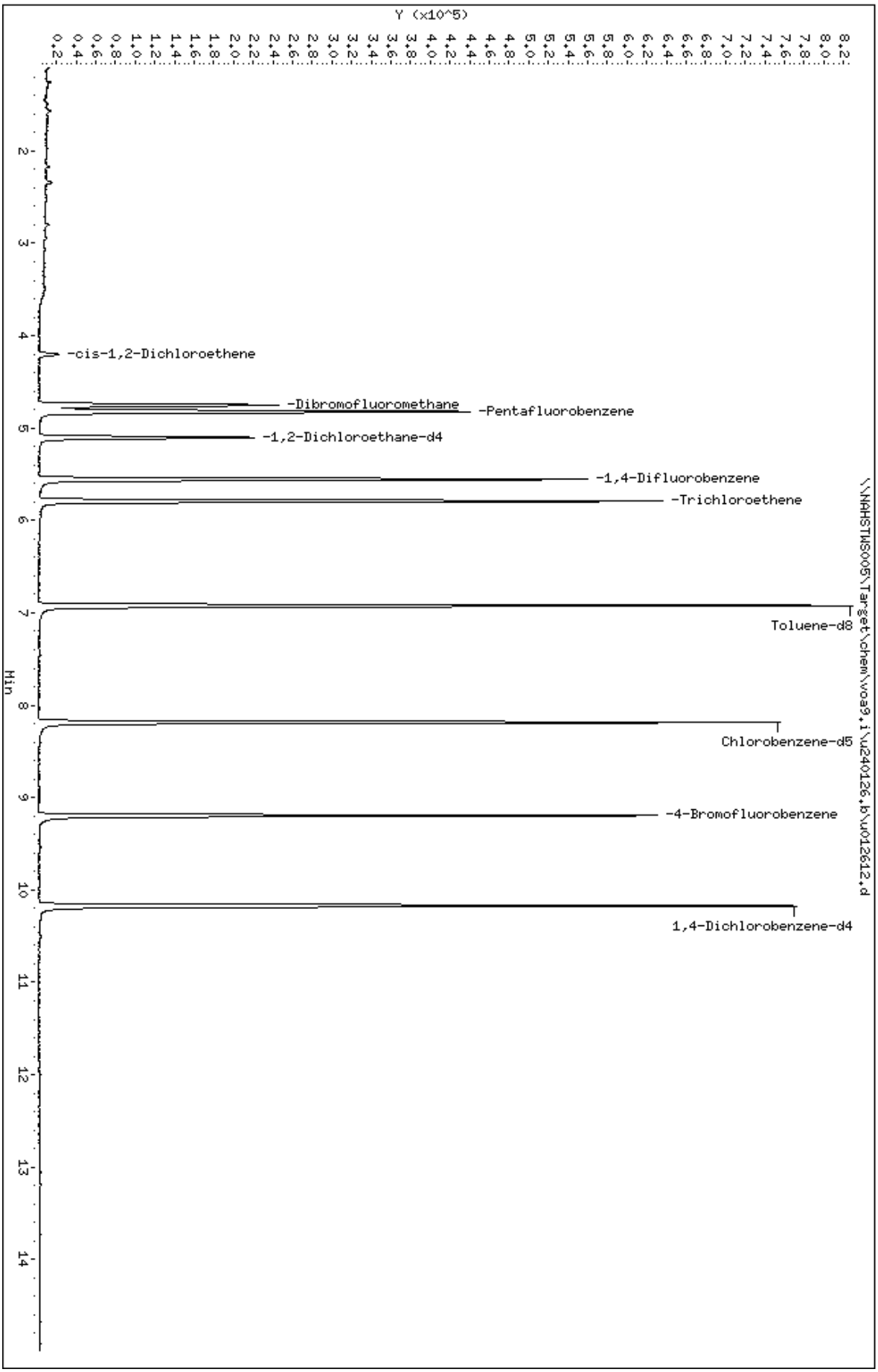
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	50.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.819	4.815	(1.000)	337482	50.0000	
$ 30 Dibromofluoromethane	113	4.752	4.748	(0.986)	144137	41.5626	41.56
$ 35 1,2-Dichloroethane-d4	65	5.100	5.096	(1.058)	145292	37.2101	37.21
* 36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	458652	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	434739	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	522001	52.1593	52.15
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	186645	49.2368	49.23
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	230287	50.0000	
27 cis-1,2-Dichloroethene	96	4.204	4.197	(0.872)	11512	2.76178	138.08(a)
38 Trichloroethene	130	5.790	5.790	(1.043)	219630	63.8236	3191.17

QC Flag Legend

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



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Date : 26-JAN-2024 15:40
Client ID:
Sample Info: HS24011040-12
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9,i
Operator: PC
Column diameter: 0.18

Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012612.d Page 2

Date : 26-JAN-2024 15:40

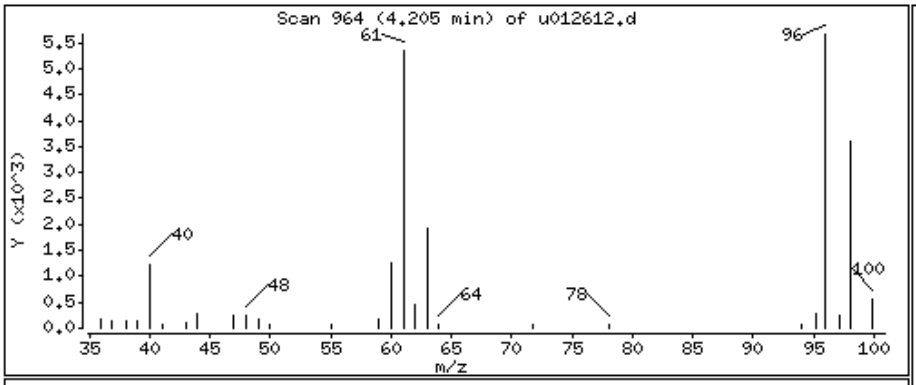
Client ID: Instrument: VOA9.i

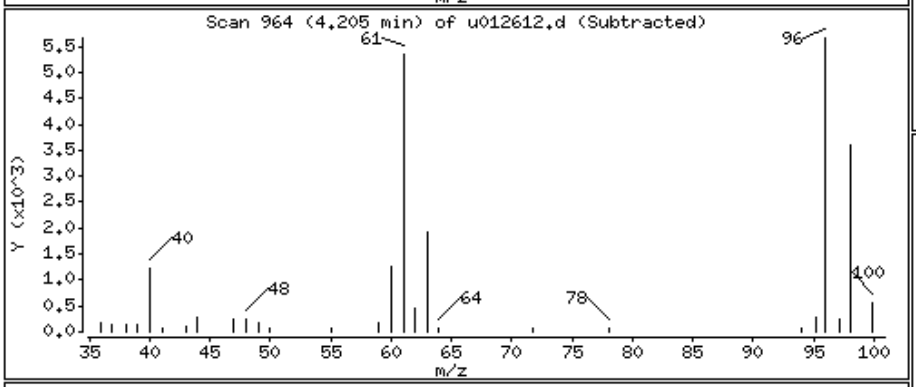
Sample Info: HS24011040-12

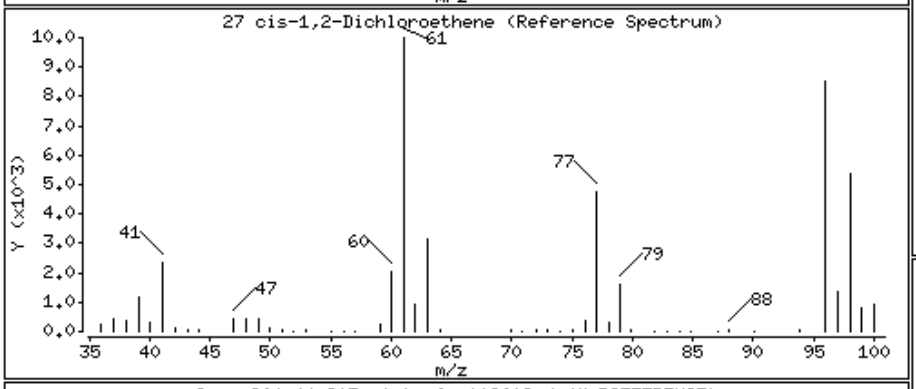
Purge Volume: 5.0 Operator: PC

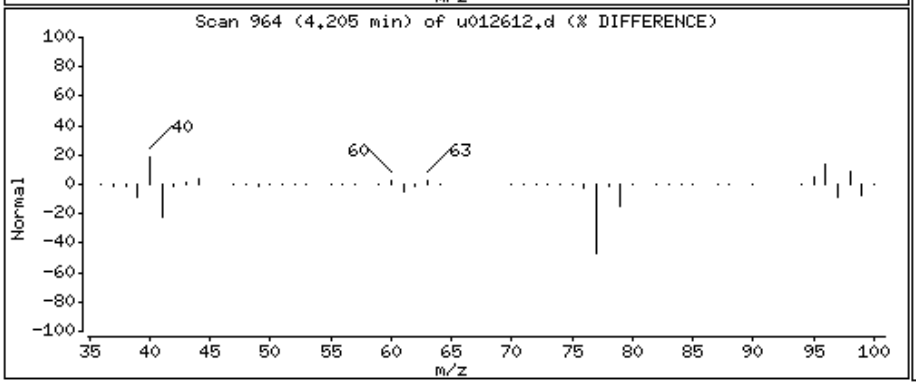
Column phase: DB624 Column diameter: 0.18

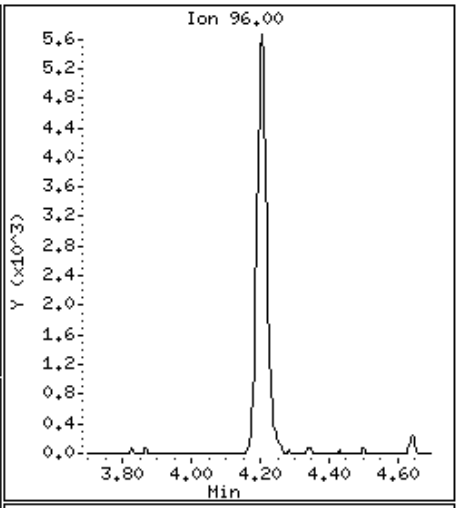
27 cis-1,2-Dichloroethene Concentration: 138.08 ug/l

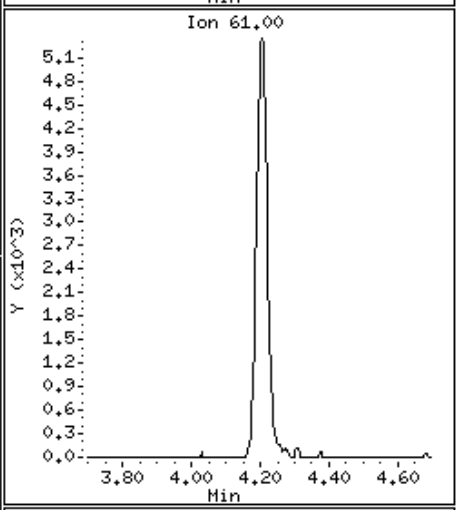


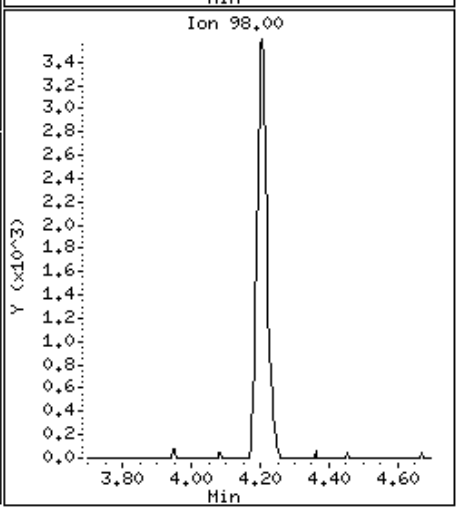












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012612.d Page 3

Date : 26-JAN-2024 15:40

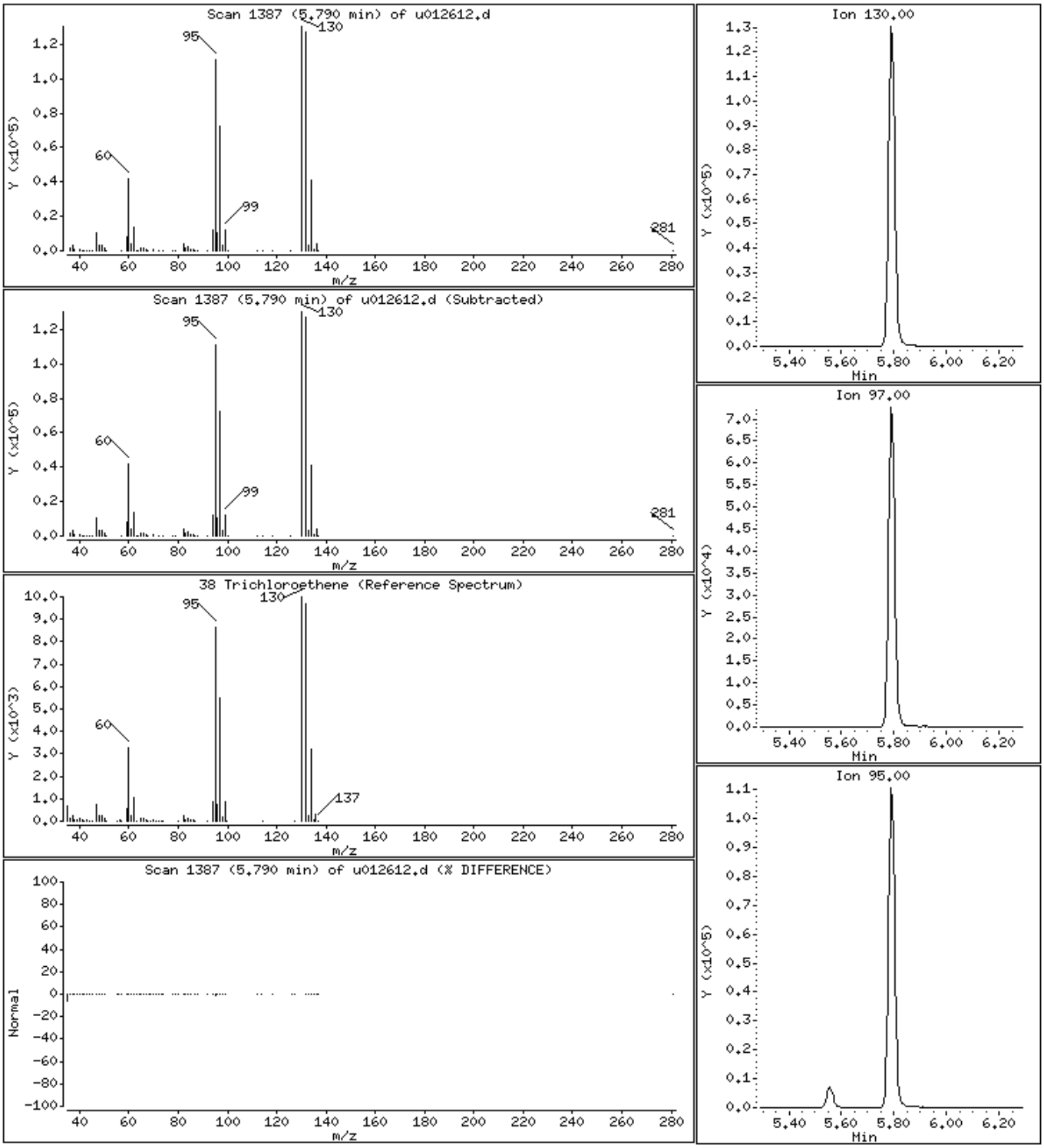
Client ID: Instrument: VOA9.i

Sample Info: HS24011040-12

Purge Volume: 5.0 Operator: PC

Column phase: DB624 Column diameter: 0.18

38 Trichloroethene Concentration: 3191.17 ug/l



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Inj Date : 26-JAN-2024 15:40
InstruID : VOA9.i
LabSampID : HS24011040-12

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240126.b\U012626.D Page 1
Report Date: 29-Jan-2024 08:23

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240126.b\U012626.D
Lab Smp Id: HS24011040-04
Inj Date : 26-JAN-2024 20:55
Operator : PC   Inst ID: VOA9.i
Smp Info : HS24011040-04
Misc Info : V9;WATER;0;250;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240126.b\8260C.m
Meth Date : 27-Jan-2024 00:13 firat.tast Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11   Cal File: U120608.D
Als bottle: 25
Dil Factor: 250.00000
Integrator: HP RTE   Compound Sublist: 000bhatebtex.sub
Target Version: 4.14
Processing Host: NAHSTWS005

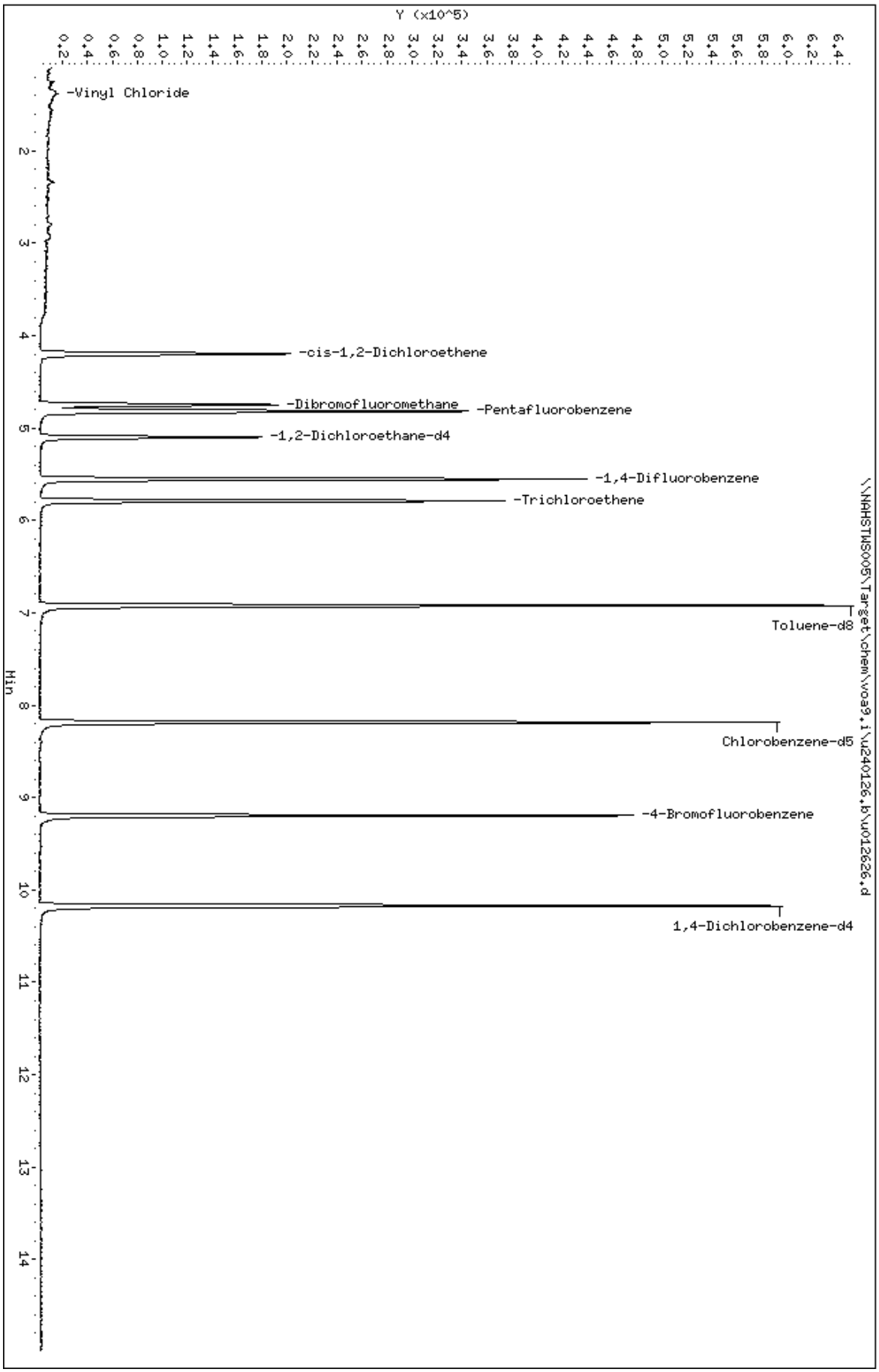
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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	4.815	4.815	(1.000)	266332	50.0000	
$ 30 Dibromofluoromethane	113	4.748	4.748	(0.986)	114703	41.9197	41.91
$ 35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	117548	38.1135	38.11
* 36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	362842	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	346609	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	410352	51.4287	51.42
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	142079	46.9515	46.95
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	179896	50.0000	
5 Vinyl Chloride	62	1.378	1.378	(0.286)	1853	0.63489	158.72(a)
27 cis-1,2-Dichloroethene	96	4.197	4.197	(0.872)	108823	33.0816	8270.40
38 Trichloroethene	130	5.790	5.790	(1.043)	131681	48.3703	12092.56

QC Flag Legend

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



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Date : 26-JAN-2024 20:55
Client ID:
Sample Info: HS24011040-04
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9,i
Operator: PC
Column diameter: 0.18

Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012626.d Page 2

Date : 26-JAN-2024 20:55

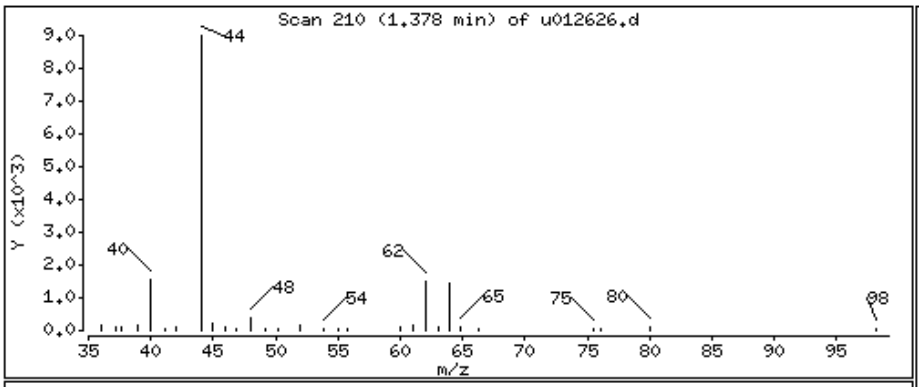
Client ID: Instrument: VOA9.i

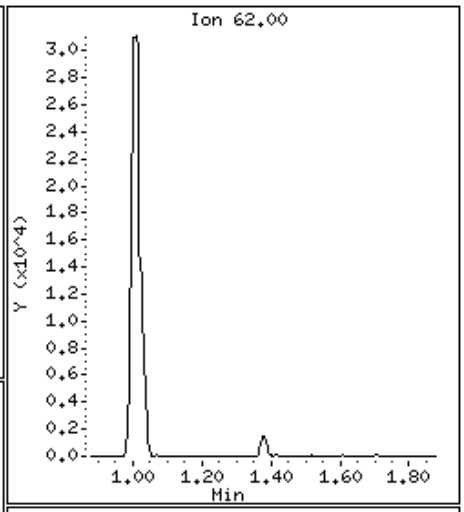
Sample Info: HS24011040-04

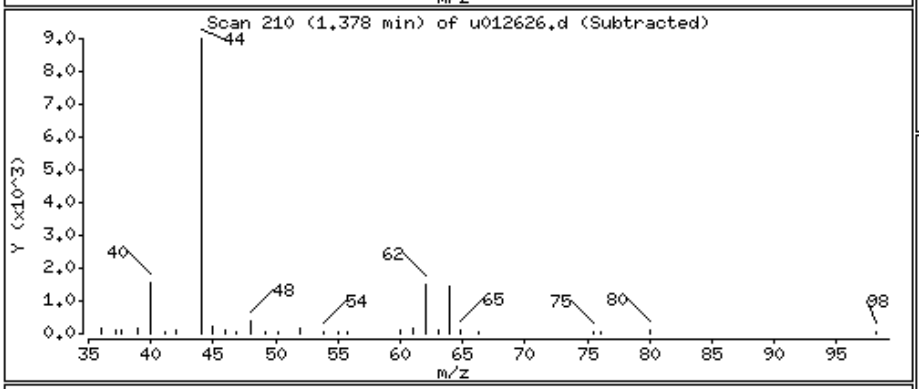
Purge Volume: 5.0 Operator: PC

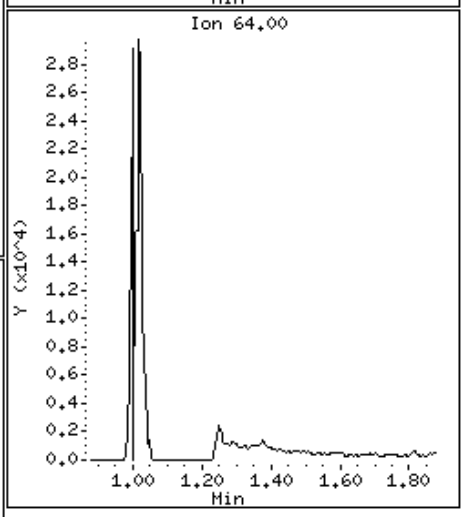
Column phase: DB624 Column diameter: 0.18

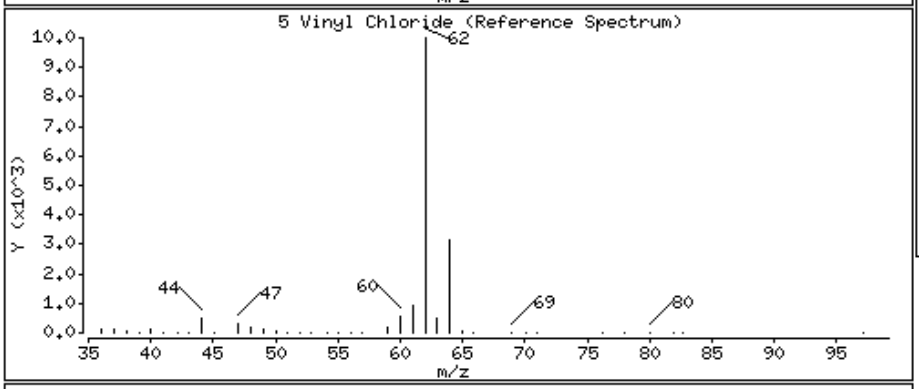
5 Vinyl Chloride Concentration: 158.72 ug/l

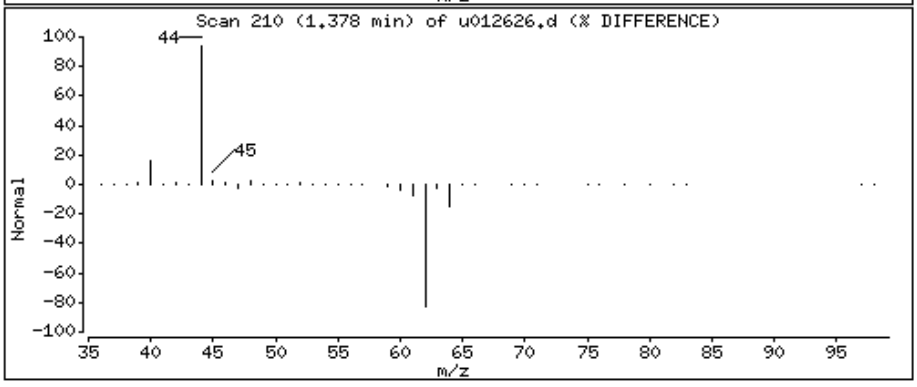












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012626.d Page 3

Date : 26-JAN-2024 20:55

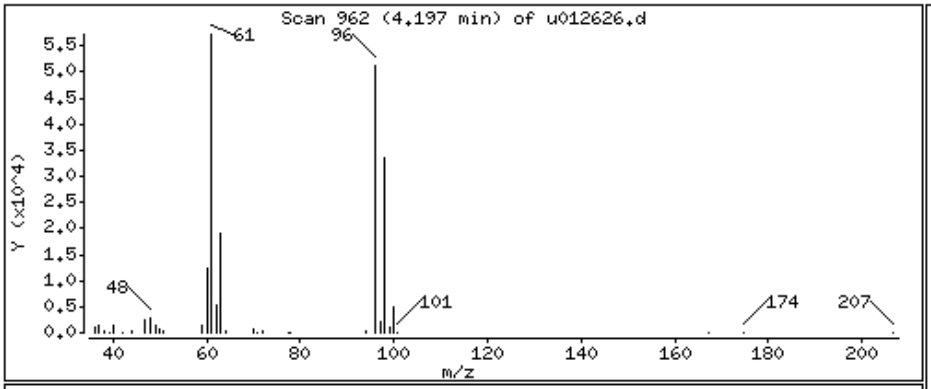
Client ID: Instrument: VOA9.i

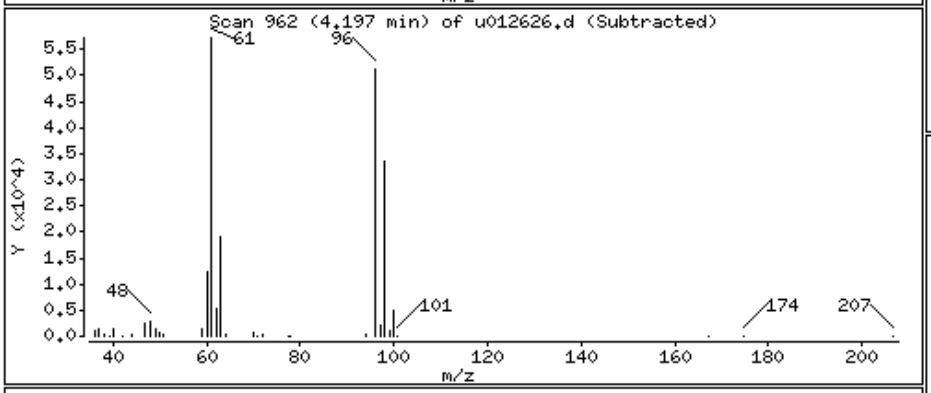
Sample Info: HS24011040-04

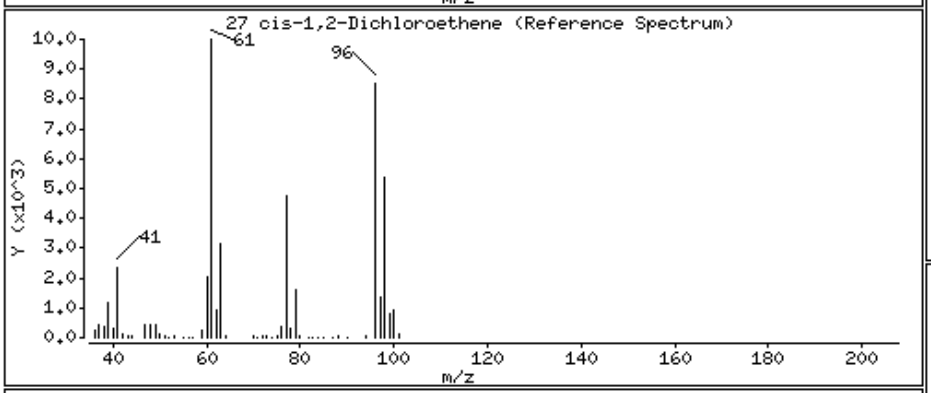
Purge Volume: 5.0 Operator: PC

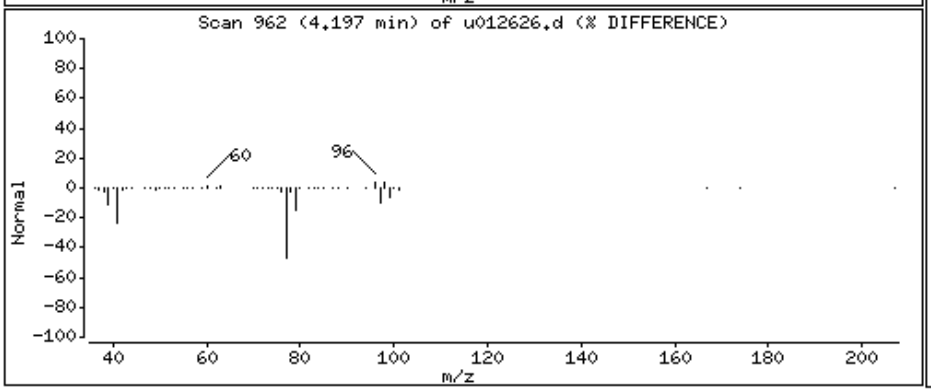
Column phase: DB624 Column diameter: 0.18

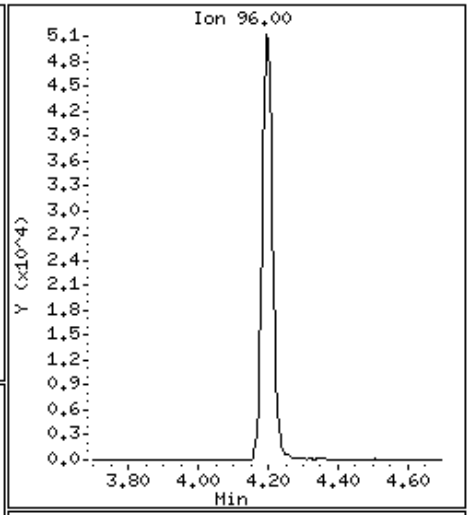
27 cis-1,2-Dichloroethene Concentration: 8270.40 ug/l

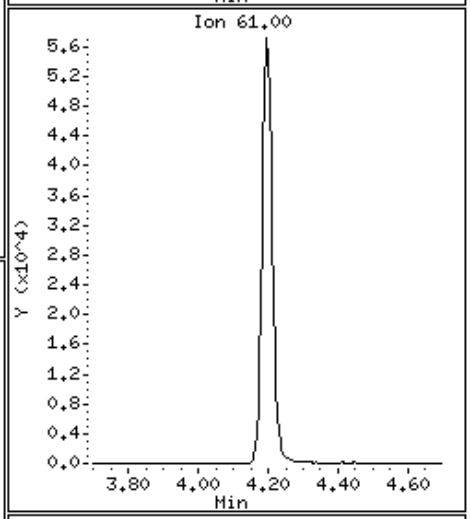


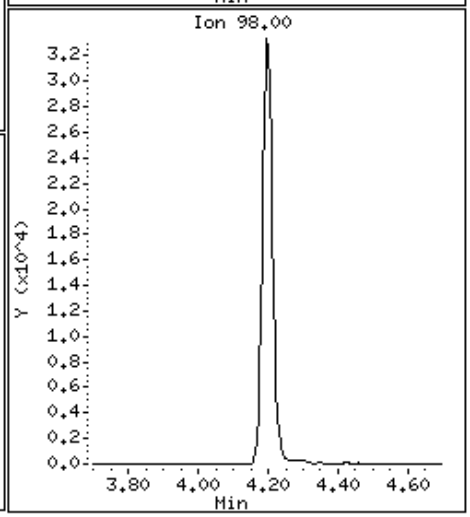












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012626.d Page 4

Date : 26-JAN-2024 20:55

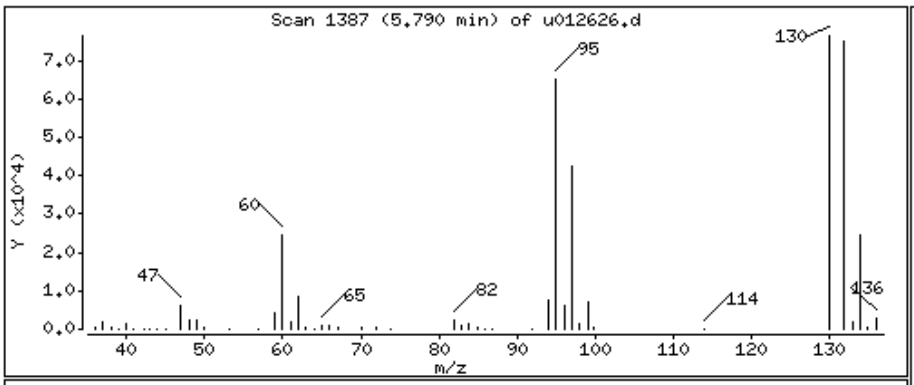
Client ID: Instrument: VOA9.i

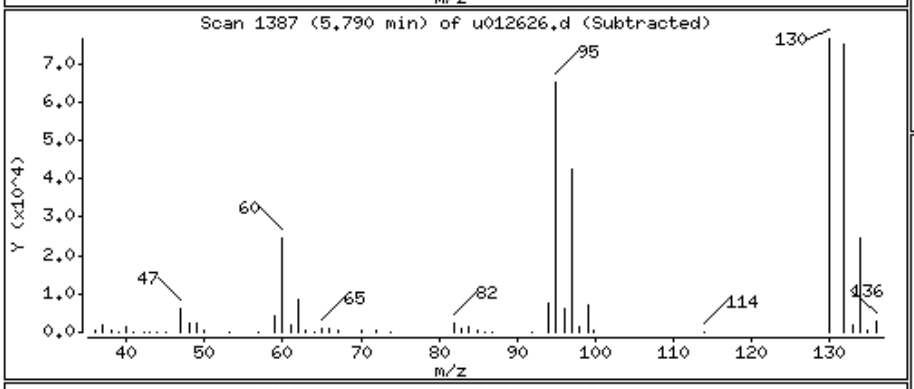
Sample Info: HS24011040-04

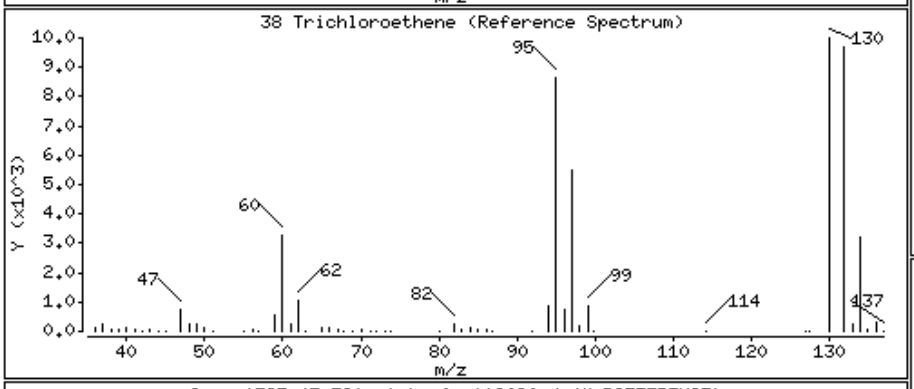
Purge Volume: 5.0 Operator: PC

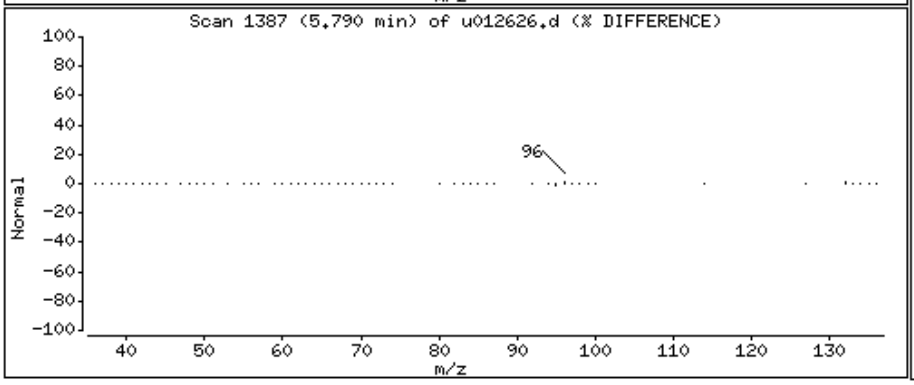
Column phase: DB624 Column diameter: 0.18

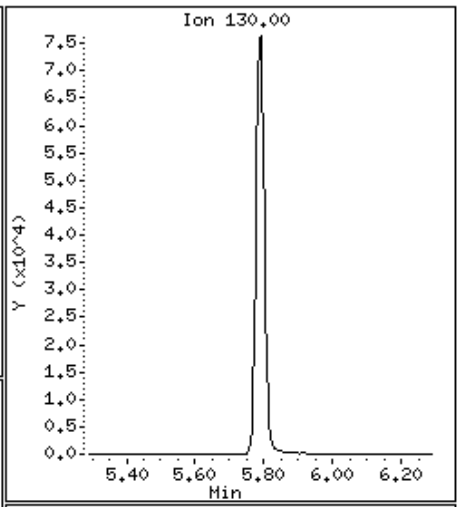
38 Trichloroethene Concentration: 12092.56 ug/l

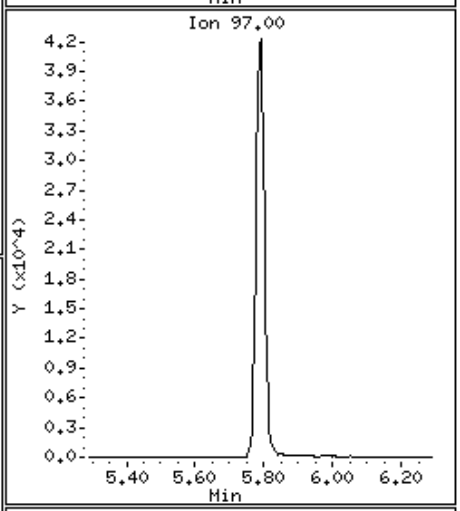


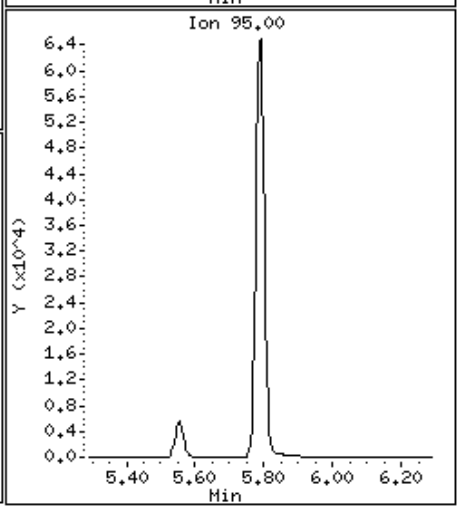












Data File : \\nahstws005\target\chem\voa9.i\u240126.b\u012626.d
Inj Date : 26-JAN-2024 20:55
InstruID : VOA9.i
LabSampID : HS24011040-04

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240126.b\U012627.D Page 1
Report Date: 29-Jan-2024 08:23

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240126.b\U012627.D
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Inj Date : 26-JAN-2024 21:20
Operator : PC   Inst ID: VOA9.i
Smp Info : HS24011040-05
Misc Info : V9;WATER;0;250;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240126.b\8260C.m
Meth Date : 27-Jan-2024 00:13 firat.tast Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11   Cal File: U120608.D
Als bottle: 26
Dil Factor: 250.00000
Integrator: HP RTE   Compound Sublist: 000bhatebtex.sub
Target Version: 4.14
Processing Host: NAHSTWS005

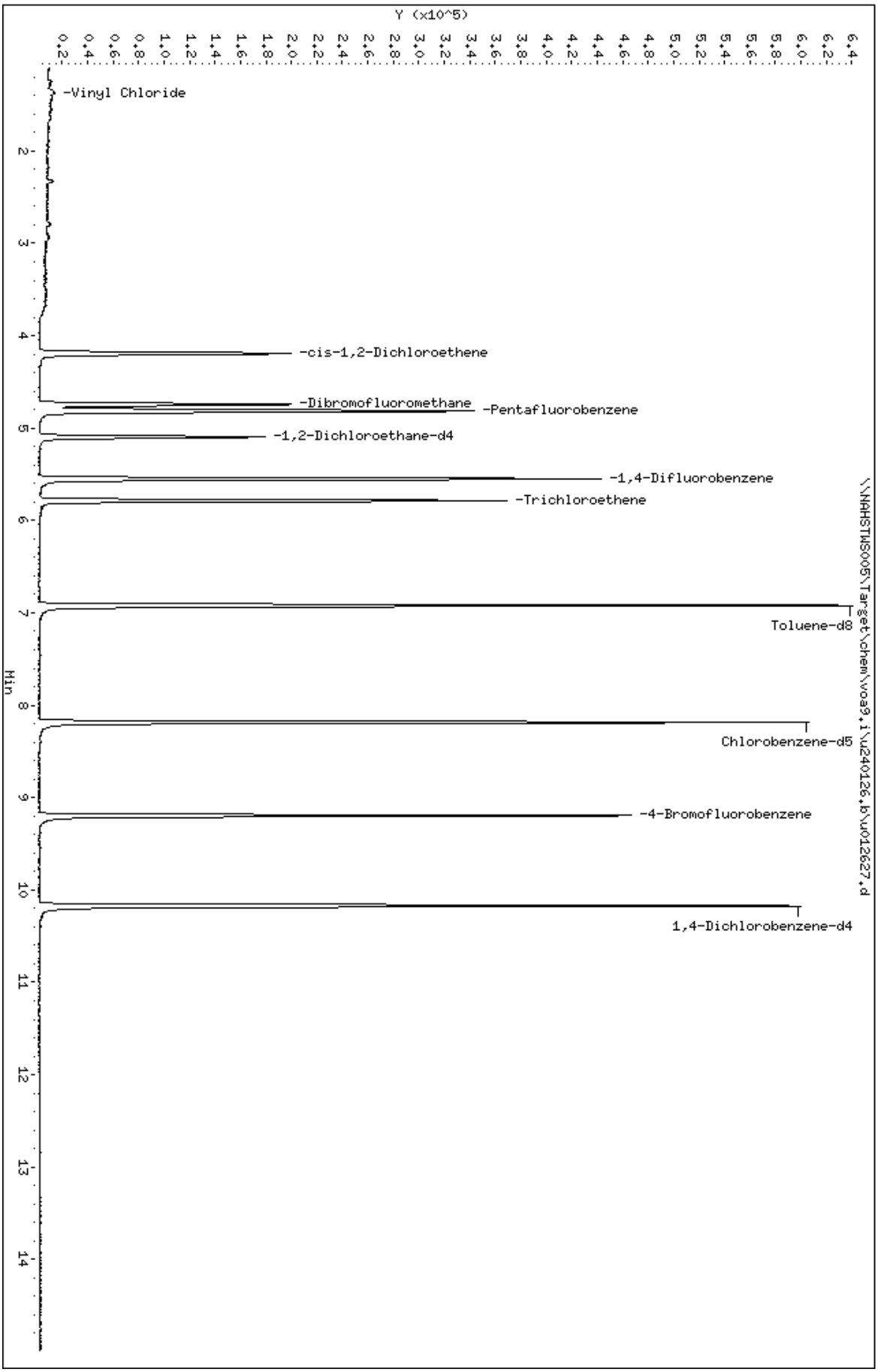
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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	4.812	4.815	(1.000)	264450	50.0000	
$ 30 Dibromofluoromethane	113	4.744	4.748	(0.986)	118311	43.5859	43.58
$ 35 1,2-Dichloroethane-d4	65	5.093	5.096	(1.058)	117876	38.4779	38.47
* 36 1,4-Difluorobenzene	114	5.550	5.554	(1.000)	365662	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	348232	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	411807	51.3706	51.37
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	144439	47.5243	47.52
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	180288	50.0000	
5 Vinyl Chloride	62	1.370	1.378	(0.285)	1744	0.60179	150.44(a)
27 cis-1,2-Dichloroethene	96	4.193	4.197	(0.871)	104949	32.1310	8032.74
38 Trichloroethene	130	5.786	5.790	(1.043)	124178	45.2624	11315.60

QC Flag Legend

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



Data File: \\NAHSTWS005\Target\chem\voa9,i\u240126,b\u012627,d
Date : 26-JAN-2024 21:20
Client ID:
Sample Info: HS24011040-05
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9,i
Operator: PC
Column diameter: 0.18

Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012627.d Page 2

Date : 26-JAN-2024 21:20

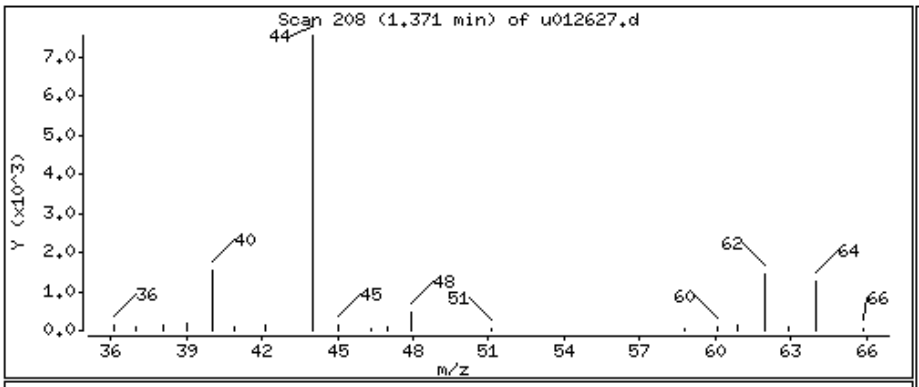
Client ID: Instrument: VOA9.i

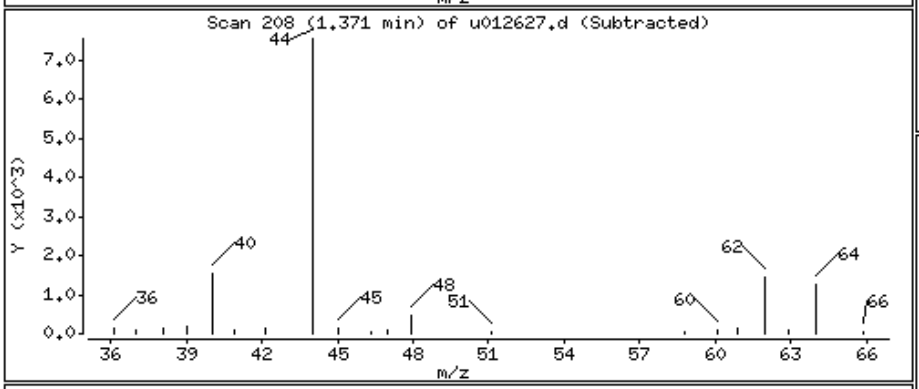
Sample Info: HS24011040-05

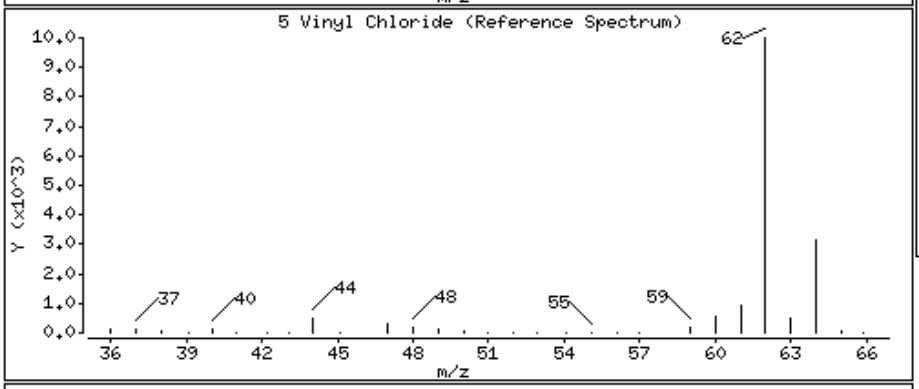
Purge Volume: 5.0 Operator: PC

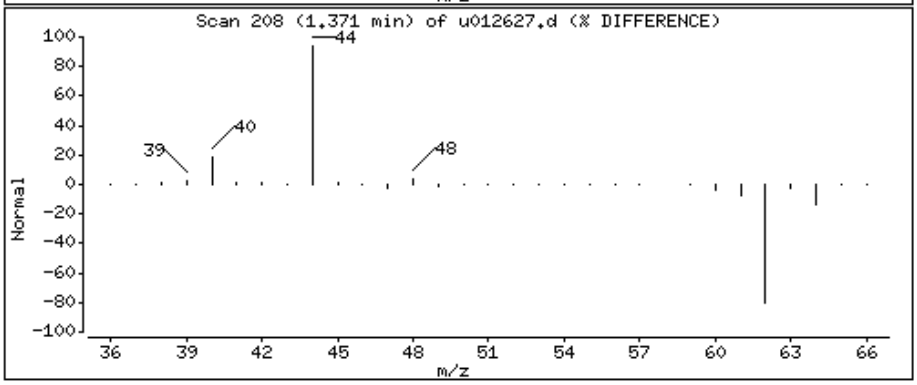
Column phase: DB624 Column diameter: 0.18

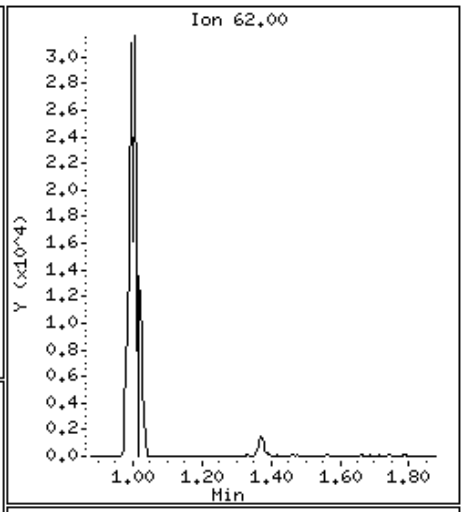
5 Vinyl Chloride Concentration: 150.44 ug/l

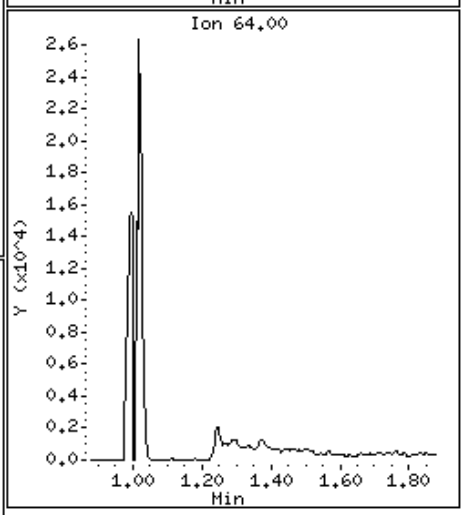












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012627.d Page 3

Date : 26-JAN-2024 21:20

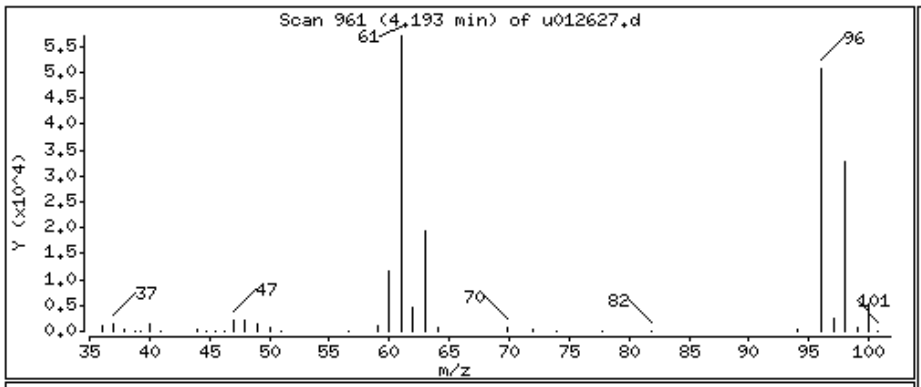
Client ID: Instrument: VOA9.i

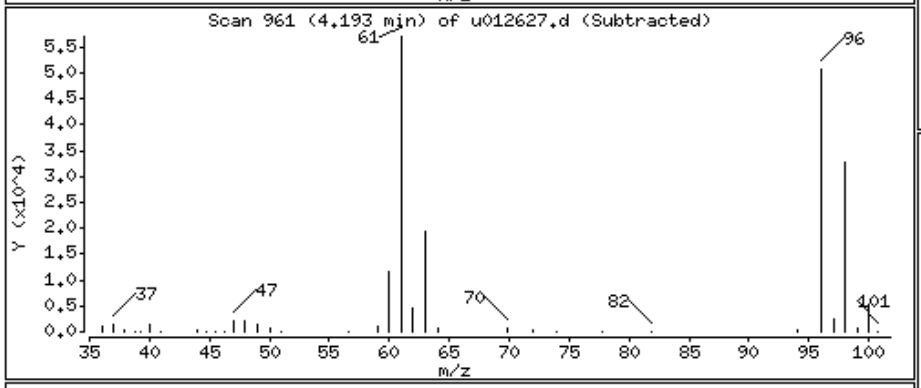
Sample Info: HS24011040-05

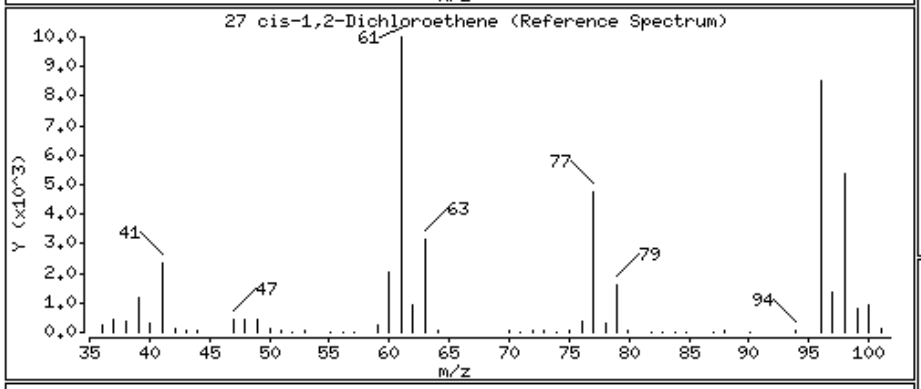
Purge Volume: 5.0 Operator: PC

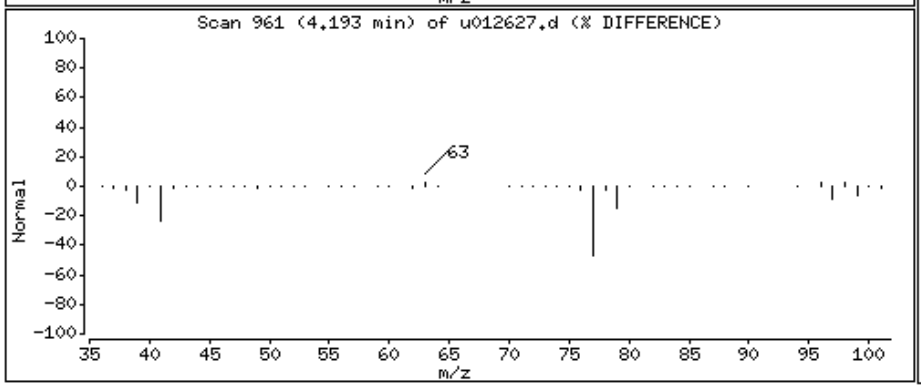
Column phase: DB624 Column diameter: 0.18

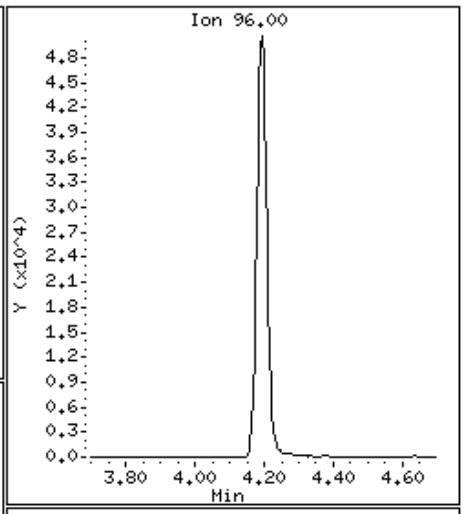
27 cis-1,2-Dichloroethene Concentration: 8032.74 ug/l

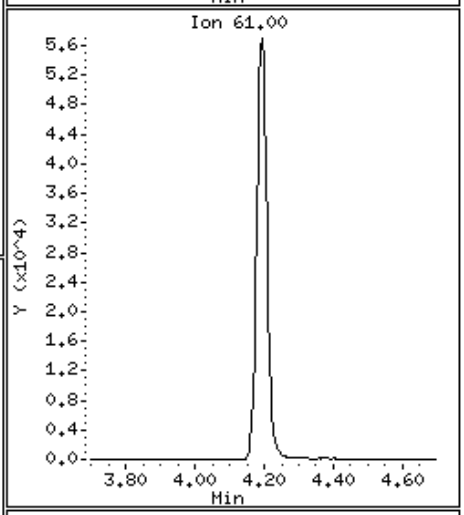


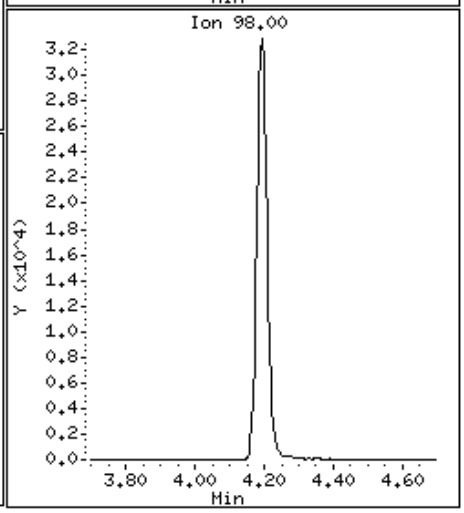












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012627.d Page 4

Date : 26-JAN-2024 21:20

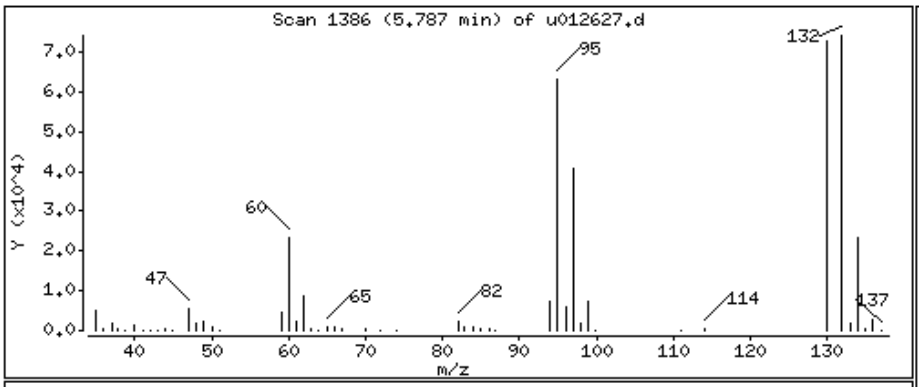
Client ID: Instrument: VOA9.i

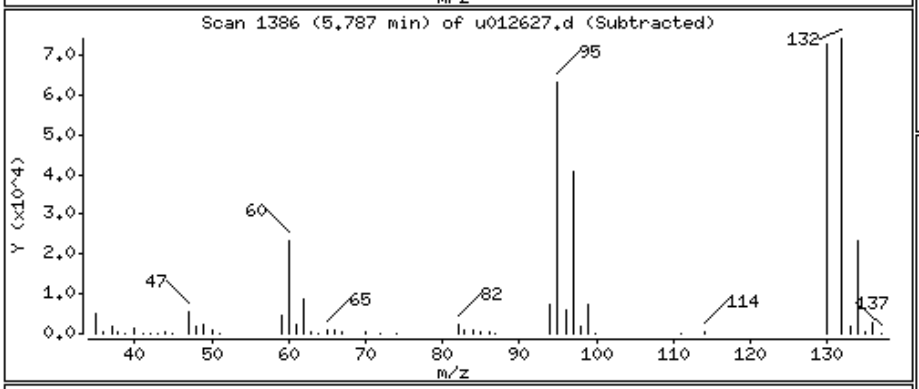
Sample Info: HS24011040-05

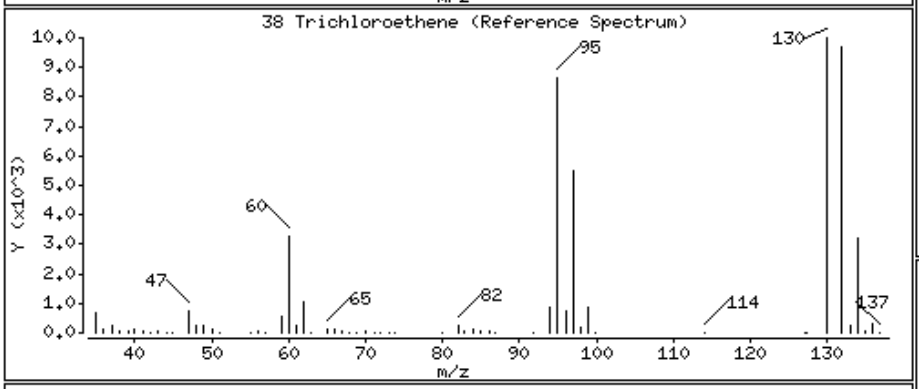
Purge Volume: 5.0 Operator: PC

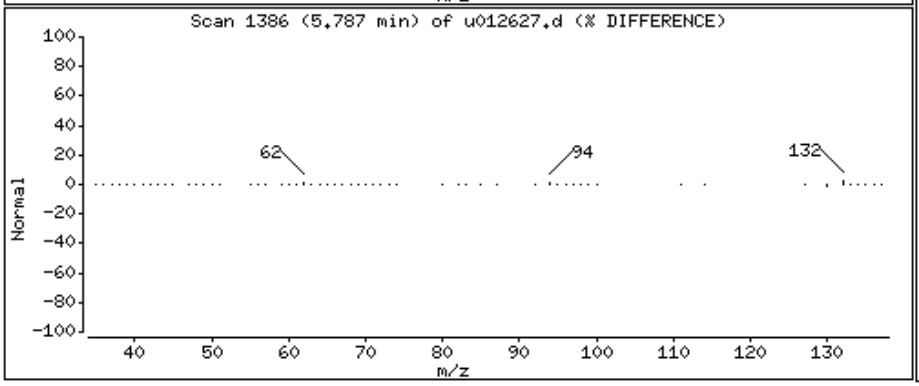
Column phase: DB624 Column diameter: 0.18

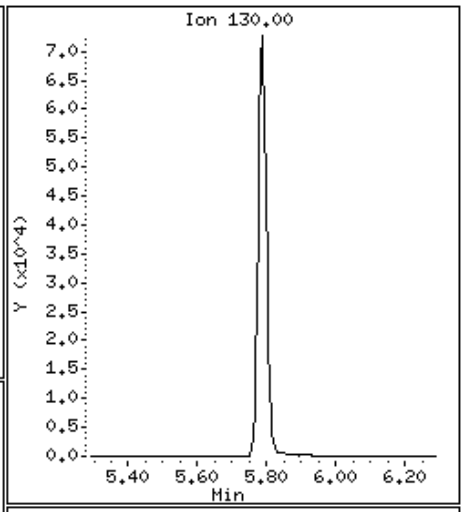
38 Trichloroethene Concentration: 11315.60 ug/l

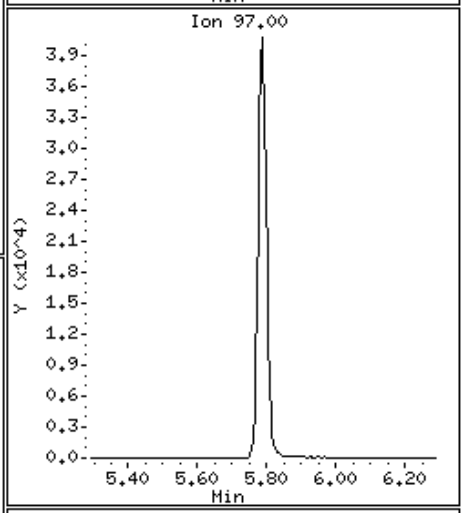


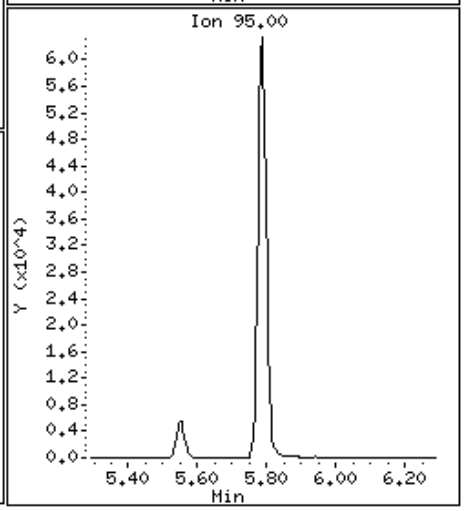












Data File : \\nahstws005\target\chem\voa9.i\u240126.b\u012627.d
Inj Date : 26-JAN-2024 21:20
InstruID : VOA9.i
LabSampID : HS24011040-05

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240126.b\U012628.D Page 1
Report Date: 26-Jan-2024 21:59

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240126.b\U012628.D
Lab Smp Id: CCV-END Client Smp ID: CCV-END
Inj Date : 26-JAN-2024 21:43
Operator : PC Inst ID: VOA9.i
Smp Info : CCV-END;CCV-END;2;;;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240126.b\8260C.m
Meth Date : 26-Jan-2024 21:59 firat.tast Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 27 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 000bhatebtex.sub
Target Version: 4.14
Processing Host: NAHSTWS005

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

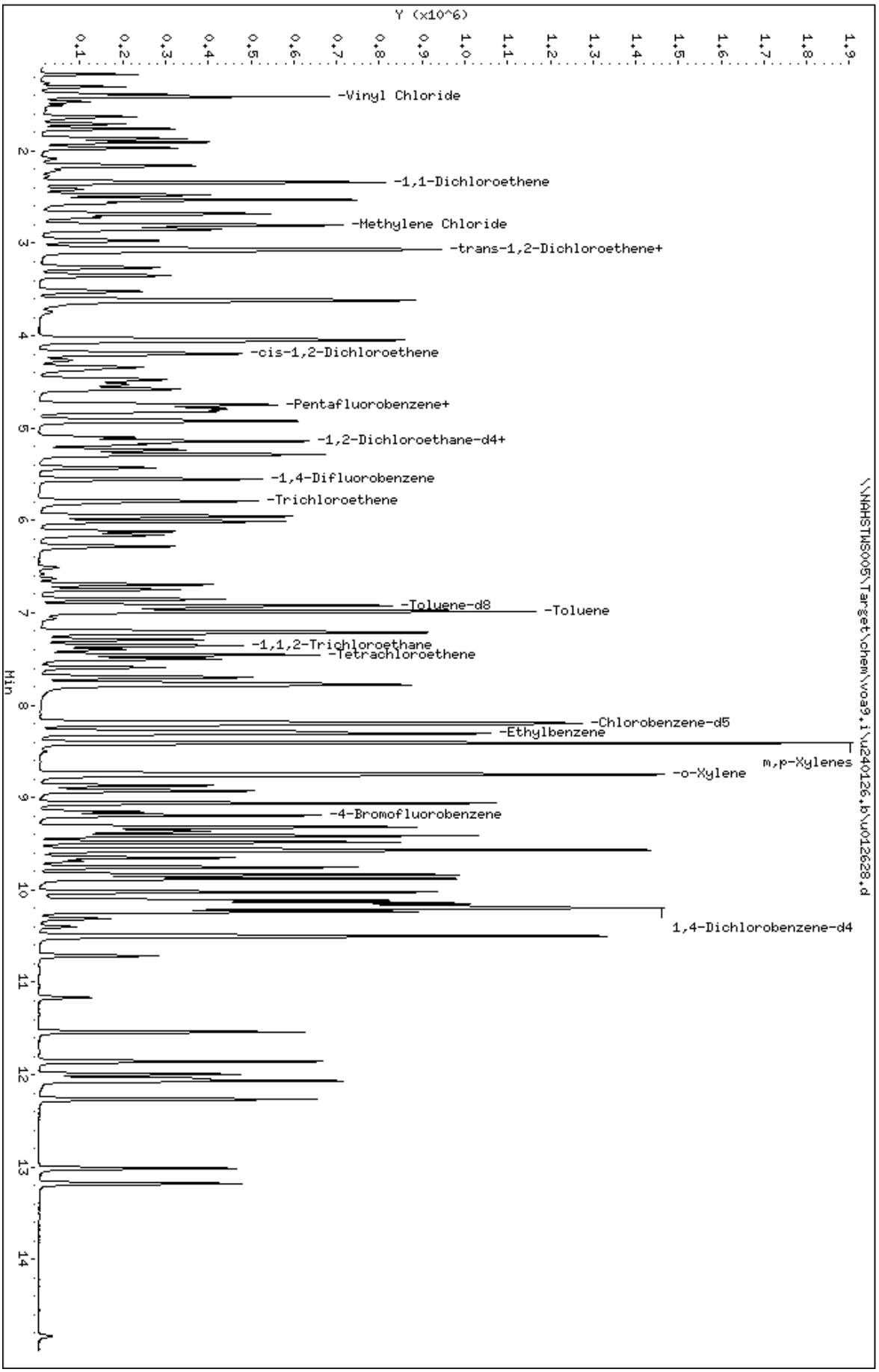
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.819	4.819	(1.000)	284686	50.0000	
$ 30 Dibromofluoromethane	113	4.751	4.751	(0.986)	143837	50.0000	49.35
$ 35 1,2-Dichloroethane-d4	65	5.100	5.100	(1.058)	143426	50.0000	43.27
* 36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	426355	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	430748	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	503298	50.0000	50.75
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	185182	50.0000	49.30
* 70 1,4-Dichlorobenzene-d4	152	10.168	10.168	(1.000)	243581	50.0000	
5 Vinyl Chloride	62	1.385	1.385	(0.288)	201835	50.0000	64.69
11 1,1-Dichloroethene	96	2.341	2.341	(0.486)	147528	50.0000	67.18
17 Methylene Chloride	84	2.798	2.798	(0.581)	179998	50.0000	65.03
20 trans-1,2-Dichloroethene	96	3.065	3.065	(0.636)	168415	50.0000	64.16
27 cis-1,2-Dichloroethene	96	4.200	4.200	(0.872)	163248	50.0000	46.42
38 Trichloroethene	130	5.790	5.790	(1.043)	177236	50.0000	55.40
53 1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	112254	50.0000	48.83
56 Tetrachloroethene	164	7.458	7.458	(0.911)	151920	50.0000	59.09
18 Methyl tert-butyl ether	73	3.087	3.087	(0.641)	422079	50.0000	53.64
33 1,2-Dichloroethane	62	5.179	5.179	(0.933)	181915	50.0000	43.79
37 Benzene	78	5.141	5.141	(0.926)	550358	50.0000	47.41
50 Toluene	91	6.982	6.982	(0.853)	616608	50.0000	51.33

61 Ethylbenzene	106	8.305	8.305 (1.015)	209981	50.0000	51.26
62 m,p-Xylenes	106	8.406	8.406 (1.027)	536037	100.000	108.85

Data File: \\nahstws005\Target\chem\voa9.i\U240126.b\U012628.D Page 2
Report Date: 26-Jan-2024 21:59

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
63 o-Xylene	106	8.748	8.748	(1.069)	266530	50.0000	52.63
M 95 Xylenes (total)	106				802567	150.000	162.68



Data File: \\NAHSTMS005\Target\chem\voa9.i\u240126.b\u012628.d
Date : 26-JAN-2024 21:43
Client ID: CCV-END
Sample Info: CCV-END;CCV-END;2;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9.i
Operator: PC
Column diameter: 0.18

Data File : \\nahstws005\target\chem\voa9.i\u240126.b\u012628.d
Inj Date : 26-JAN-2024 21:43
InstruID : VOA9.i
LabSampID : CCV-END

NO MANUAL INTEGRATIONS

HS24011040-GCSEMI-RSK-175

ALS WO# HS24011040

right solutions.
right partner.

Form 1

Organic Analysis Data Sheet

Dissolved Gasses by Dissolved Gases by RSK-175

Workorder

HS24011040

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/30/2024

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

Form 1 - Organic Analysis Data Sheet

Client	Bhate Environmental Associates, Inc.	Workorder	
Project	LHAAP Site 16	**HS24011040**	

Dissolved Gasses by Dissolved Gases by RSK-175

16WW16-240118	Collected	Received	Matrix	Basis
HS24011040-01	01/18/24 07:10	01/19/24 09:35	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
Ethane	mg/L	0.00770		0.00014	0.00100	0.00100	1	01/23/24 09:37	FID-4_457054	008.D
Ethene	mg/L	0.0172		0.00023	0.00100	0.00100	1	01/23/24 09:37	FID-4_457054	008.D
Methane	mg/L	1.30		0.0107	0.0500	0.0500	100	01/23/24 11:19	FID-4_457054	014.D

Form 1 - Organic Analysis Data Sheet

Client	Bhate Environmental Associates, Inc.	Workorder	
Project	LHAAP Site 16	**HS24011040**	

Dissolved Gasses by Dissolved Gases by RSK-175

16WW16-240118-FD	Collected	Received	Matrix	Basis
HS24011040-02	01/18/24 07:10	01/19/24 09:35	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
Ethane	mg/L	0.00995		0.00014	0.00100	0.00100	1	01/23/24 09:46	FID-4_457054	009.D
Ethene	mg/L	0.0201		0.00023	0.00100	0.00100	1	01/23/24 09:46	FID-4_457054	009.D
Methane	mg/L	1.61		0.0107	0.0500	0.0500	100	01/23/24 11:30	FID-4_457054	015.D

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24011040

Dissolved Gasses by Dissolved Gases by RSK-175

16WW35-240118	Collected	Received	Matrix	Basis
HS24011040-03	01/18/24 08:15	01/19/24 09:35	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
Ethane	mg/L	0.00100	U	0.00014	0.00100	0.00100	1	01/23/24 09:08	FID-4_457054	005.D
Ethene	mg/L	0.0144		0.00023	0.00100	0.00100	1	01/23/24 09:08	FID-4_457054	005.D
Methane	mg/L	0.175		0.00107	0.00500	0.00500	10	01/23/24 11:08	FID-4_457054	013.D

Form 1 - Organic Analysis Data Sheet

Client	Bhate Environmental Associates, Inc.	Workorder	
Project	LHAAP Site 16	**HS24011040**	

Dissolved Gasses by Dissolved Gases by RSK-175

16PM06-240118	Collected	Received	Matrix	Basis
HS24011040-10	01/18/24 12:50	01/19/24 09:35	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
Ethane	mg/L	0.0300	J	0.00720	0.0500	0.0500	50	01/23/24 11:53	FID-4_457054	016.D
Ethene	mg/L	0.192		0.0117	0.0500	0.0500	50	01/23/24 11:53	FID-4_457054	016.D
Methane	mg/L	0.769		0.00535	0.0250	0.0250	50	01/23/24 11:53	FID-4_457054	016.D

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24011040

Dissolved Gasses by Dissolved Gases by RSK-175

16RW04-240118	Collected	Received	Matrix	Basis
HS24011040-12	01/18/24 14:15	01/19/24 09:35	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
Ethane	mg/L	0.00100	U	0.00014	0.00100	0.00100	1	01/23/24 10:58	FID-4_457054	012.D
Ethene	mg/L	0.00423		0.00023	0.00100	0.00100	1	01/23/24 10:58	FID-4_457054	012.D
Methane	mg/L	0.282		0.00107	0.00500	0.00500	10	01/23/24 12:05	FID-4_457054	017.D

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right partner.

Form 3A

Matrix Spike/Spike Duplicate Recovery

Dissolved Gasses by Dissolved Gases by RSK-175

Workorder

HS24011040

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/30/2024

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

Form 3A - Matrix Spike/Spike Duplicate Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder **HS24011040**

SAMPLENUM HS24011040-03MS

Dissolved Gasses by Dissolved Gases by RSK-175

16WW35-240118 (HS24011040-03)				HS24011040-03MS				HS24011040-03MSD						
Spike Matrix Aqueous		Result Units mg/L		Run Date 01/23/24				Run Date 01/23/24						
Instrument ID FID4				Run Time 09:16				Run Time 09:26						
				Data File 006.D				Data File 007.D						
Analyte	%R Limits	DF	Sample Result	MS Result	Spike Added	%R	Q	MSD Result	Spike Added	%R	Q	RPD Limit	RPD	Q
Ethane	75-125	1	0	0.018447	0.0180	102		0.017462	0.0180	97		20	5.49	
Ethene	75-125	1	0.01439	0.024294	0.0168	59		0.024726	0.0168	62		20	1.76	
Methane	75-125	1	0.1721	0.173578	0.0096	16		0.173707	0.0096	17		20	0.0744	

Q - %Recovery / RPD Flag * - %Recovery / RPD Outside Limits OL - Outside Limits %R - %Recovery DF - Dilution Factor Amt - Amount (weight or volume)

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right partner.

Form 3B

Laboratory Control Sample Recovery

Dissolved Gasses by Dissolved Gases by RSK-175

Workorder

HS24011040

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/30/2024

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

Form 3B - Laboratory Control Sample Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24011040

Dissolved Gasses by Dissolved Gases by RSK-175

SAMPLENUM LCS-240123

FID-4_457054			LCS-240123			LCSD-240123					
Spike Matrix Aqueous	Result Units mg/L		Run Date 01/23/24 Run Time 08:26			Run Date 01/23/24 Run Time 08:52					
Analyte	%Recovery Limits	Spike Added	LCS Result	%R	Q	LCSD Result	%R	Q	RPD Limit	RPD	Q
Ethane	75-125	0.01804	0.0196	108		0.0198	110		30	1.17	
Ethene	75-125	0.0168	0.0178	106		0.0177	105		30	0.751	
Methane	75-125	0.009647	0.00817	85		0.00842	87		30	3.01	

right solutions.
right partner.

Form 4

Method Blank Summary

Dissolved Gasses by Dissolved Gases by RSK-175

Workorder

HS24011040

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/30/2024

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

Form 4 - Method Blank Summary

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder **HS24011040**

Dissolved Gasses by Dissolved Gases by RSK-175

METHOD BLANK	Matrix	Analysis Date	Analysis Batch	Inst ID
MBLK-240123	Aqueous	01/23/24 07:52	R457054	FID4

Client Sample ID	Lab Sample ID	Type	Analysis Date	Analysis Batch	Inst ID	FileID
LCS-240123	LCS-240123	LCS	01/23/24 08:26	R457054	FID4	003.D
LCSD-240123	LCSD-240123	LCSD	01/23/24 08:52	R457054	FID4	004.D
16WW35-240118	HS24011040-03	SAMP	01/23/24 09:08	R457054	FID4	005.D
16WW35-240118	HS24011040-03MS	MS	01/23/24 09:16	R457054	FID4	006.D
16WW35-240118	HS24011040-03MSD	MSD	01/23/24 09:26	R457054	FID4	007.D
16WW16-240118	HS24011040-01	SAMP	01/23/24 09:37	R457054	FID4	008.D
16WW16-240118-FD	HS24011040-02	SAMP	01/23/24 09:46	R457054	FID4	009.D
16RW04-240118	HS24011040-12	SAMP	01/23/24 10:58	R457054	FID4	012.D
16WW35-240118	HS24011040-03	SAMP	01/23/24 11:08	R457054	FID4	013.D
16WW16-240118	HS24011040-01	SAMP	01/23/24 11:19	R457054	FID4	014.D
16WW16-240118-FD	HS24011040-02	SAMP	01/23/24 11:30	R457054	FID4	015.D
16PM06-240118	HS24011040-10	SAMP	01/23/24 11:53	R457054	FID4	016.D
16RW04-240118	HS24011040-12	SAMP	01/23/24 12:05	R457054	FID4	017.D

right solutions.
right partner.

Form 6

Initial Calibration Data

Dissolved Gasses by Dissolved Gases by RSK-175

Workorder

HS24011040

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/30/2024

ALS Environmental–Houston Laboratory
10450 Stancliff Road, Suite 210, Houston, TX 77099
Phone (281) 530-5656 Fax (281) 530-5887
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Report Date : 27-Dec-2023 11:57 Page 1

ALS Laboratory Group

INITIAL CALIBRATION DATA

Start Cal Date : 24-JAN-2017 09:06
End Cal Date : 24-JAN-2017 11:13
Quant Method : ESTD
Origin : Included
Target Version : 4.14
Integrator : Falcon
Method file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Last Edit : 04-Oct-2023 12:23 donna.broussard1

Calibration File Names:
Level 1: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\001.D
Level 2: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\002.D
Level 3: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\003.D
Level 4: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\004.D
Level 5: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\005.D
Level 6: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\006.D
Level 7: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\007.D

Compound	10.0000 Level 1	25.0000 Level 2	50.0000 Level 3	100.0000 Level 4	250.0000 Level 5	500.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	1000.0000 Level 7										
1 Methane	969	978	1020	881	961	931					
	1082						AVRG		974		6.55041
2 Ethene	536	567	565	516	665	426					
	829						AVRG		586		21.93197
3 Ethane	602	670	659	597	809	818					
	999						AVRG		736		19.88517
4 Propane	500	1279	2602	4785	18294	38286					
	96509						QUAD	0.97987	0.00153	-4.583e-00	0.99914

ALS Laboratory Group

INITIAL CALIBRATION DATA

Start Cal Date : 24-JAN-2017 09:06
End Cal Date : 24-JAN-2017 11:13
Quant Method : ESTD
Origin : Included
Target Version : 4.14
Integrator : Falcon
Method file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Last Edit : 04-Oct-2023 12:23 donna.broussard1

Compound	10.0000 Level 1	25.0000 Level 2	50.0000 Level 3	100.0000 Level 4	250.0000 Level 5	500.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	1000.0000 Level 7											
5 N-Butane	438 114164	936	2034	3864	18446	42817	QUAD	2.46870	0.00183	-5.537e-00	0.99808	
6 Pentane	115 488	3945	2080	950	501	412	AVRG		1213		112	<-
7 Hexane	+++++ +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	

ALS Laboratory Group

INITIAL CALIBRATION DATA

Start Cal Date : 24-JAN-2017 09:06
End Cal Date : 24-JAN-2017 11:13
Quant Method : ESTD
Origin : Included
Target Version : 4.14
Integrator : Falcon
Method file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Last Edit : 04-Oct-2023 12:23 donna.broussard1

Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Quad	Amt = b + m1*Rsp + m2*Rsp^2	Response

right solutions.
right partner.

Form 6I

Initial Calibration Verification (ICV)

Dissolved Gasses by Dissolved Gases by RSK-175

Workorder

HS24011040

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/30/2024

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 6I Initial Calibration Verification (ICV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24011040

RunID 008.D

Dissolved Gasses by Dissolved Gases by RSK-175

Sample Matrix LIQUID
Lab Smp Id ICV
Data Type GC DATA
File ID 008.D

Fraction GASES
Client Smp ID ICV
SampleType METHSPIKE
Inj Date 24-JAN-2017 1205

Compound	Conc Added	Conc Recovered	% Recovered	Limits	Q
Methane	9.65	9.60	99.5	75-125	
Ethene	16.8	19.1	114	75-125	
Ethane	18.0	19.7	109	75-125	
Propane	26.5	27.2	103	75-125	
N-Butane	35.0	36.0	103	75-125	

right solutions.
right partner.

Form 7

Continuing Calibration Verification (CCV)

Dissolved Gasses by Dissolved Gases by RSK-175

Workorder

HS24011040

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/30/2024

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 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24011040

RunID 001.D

Dissolved Gasses by Dissolved Gases by RSK-175

Instrument ID FID-4.i
Lab File ID 001.D
Analysis Type WATER
Lab Sample ID RSK-CCV

Injection Date 23-JAN-2024 0739
ICAL Date(s) 24-JAN-2017, 24-JAN-2017
ICAL Times 09:06, 11:13
Quant Type ESTD

Compound	RRF / Conc	RF250	CCV RRF250	Min RRF	%D / %DRIFT	Max %D / %DRIFT	CURVE TYPE	Q
Methane	975	793	793	0.010	18.7	20.0	Averaged	
Ethene	586	608	608	0.010	-3.748	20.0	Averaged	
Ethane	719	782	782	0.010	-8.653	20.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24011040

RunID 011.D

Dissolved Gasses by Dissolved Gases by RSK-175

Instrument ID FID-4.i
Lab File ID 011.D
Analysis Type WATER
Lab Sample ID RSK-CCV

Injection Date 23-JAN-2024 1025
ICAL Date(s) 24-JAN-2017, 24-JAN-2017
ICAL Times 09:06, 11:13
Quant Type ESTD

Compound	RRF / Conc	RF250	CCV RRF250	Min RRF	%D / %DRIFT	Max %D / %DRIFT	CURVE TYPE	Q
Methane	975	920	920	0.010	5.59	20.0	Averaged	
Ethene	586	617	617	0.010	-5.339	20.0	Averaged	
Ethane	719	831	831	0.010	-15.562	20.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24011040

RunID 022.D

Dissolved Gasses by Dissolved Gases by RSK-175

Instrument ID FID-4.i
Lab File ID 022.D
Analysis Type WATER
Lab Sample ID RSK-CCV

Injection Date 23-JAN-2024 1405
ICAL Date(s) 24-JAN-2017, 24-JAN-2017
ICAL Times 09:06, 11:13
Quant Type ESTD

Compound	RRF / Conc	RF250	CCV RRF250	Min RRF	%D / %DRIFT	Max %D / %DRIFT	CURVE TYPE	Q
Methane	975	844	844	0.010	13.4	20.0	Averaged	
Ethene	586	611	611	0.010	-4.305	20.0	Averaged	
Ethane	719	785	785	0.010	-9.115	20.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24011040

RunID 027.D

Dissolved Gasses by Dissolved Gases by RSK-175

Instrument ID FID-4.i
Lab File ID 027.D
Analysis Type WATER
Lab Sample ID RSK-CCV

Injection Date 23-JAN-2024 1548
ICAL Date(s) 24-JAN-2017, 24-JAN-2017
ICAL Times 09:06, 11:13
Quant Type ESTD

Compound	RRF / Conc	RF250	CCV RRF250	Min RRF	%D / %DRIFT	Max %D / %DRIFT	CURVE TYPE	Q
Methane	975	854	854	0.010	12.5	20.0	Averaged	
Ethene	586	607	607	0.010	-3.647	20.0	Averaged	
Ethane	719	824	824	0.010	-14.499	20.0	Averaged	

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Analysis Run Log

Dissolved Gasses by Dissolved Gases by RSK-175

Workorder

HS24011040

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/30/2024

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

Form 13 - Analysis Run Log

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder **HS24011040**

Dissolved Gasses by Dissolved Gases by RSK-175

RUNID FID-4-322102

Run ID FID-4_322102 **Start Date** 01/24/17 **EndDate** 01/24/17

Inj. Time	Client Sample ID	Type	Lab Sample ID	File ID	Analysis Date	DF
09:06	ICAL1	ICAL1	ICAL1	001.D	01/24/17	1
09:30	ICAL2	ICAL2	ICAL2	002.D	01/24/17	1
09:59	ICAL3	ICAL3	ICAL3	003.D	01/24/17	1
10:15	ICAL4	ICAL4	ICAL4	004.D	01/24/17	1
10:39	ICAL5	ICAL5	ICAL5	005.D	01/24/17	1
10:57	ICAL6	ICAL6	ICAL6	006.D	01/24/17	1
11:13	ICAL7	ICAL7	ICAL7	007.D	01/24/17	1
12:05	ICV	ICV	ICV	008.D	01/24/17	1

Form 13 - Analysis Run Log

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder **HS24011040**

Dissolved Gasses by Dissolved Gases by RSK-175

RUNID FID-4-457054

Run ID FID-4_457054 **Start Date** 01/23/24 **EndDate** 01/23/24

Inj. Time	Client Sample ID	Type	Lab Sample ID	File ID	Analysis Date	DF
07:39	RSK-CCV	CCV	RSK-CCV	001.D	01/23/24	1
07:52	MBLK-240123	MBLK	MBLK-240123	002.D	01/23/24	1
08:26	LCS-240123	LCS	LCS-240123	003.D	01/23/24	1
08:52	LCSD-240123	LCSD	LCSD-240123	004.D	01/23/24	1
09:08	HS24011040-03	SAMP	16WW35-240118	005.D	01/23/24	1
09:16	HS24011040-03MS	MS	HS24011040-03MS	006.D	01/23/24	1
09:26	HS24011040-03MSD	MSD	HS24011040-03MSD	007.D	01/23/24	1
09:37	HS24011040-01	SAMP	16WW16-240118	008.D	01/23/24	1
09:46	HS24011040-02	SAMP	16WW16-240118-FD	009.D	01/23/24	1
10:12	HS24011040-10	SAMP	16PM06-240118	010.D	01/23/24	1
10:25	RSK-CCV	CCV	RSK-CCV	011.D	01/23/24	1
10:58	HS24011040-12	SAMP	16RW04-240118	012.D	01/23/24	1
11:08	HS24011040-03	SAMP	16WW35-240118	013.D	01/23/24	10
11:19	HS24011040-01	SAMP	16WW16-240118	014.D	01/23/24	100
11:30	HS24011040-02	SAMP	16WW16-240118-FD	015.D	01/23/24	100
11:53	HS24011040-10	SAMP	16PM06-240118	016.D	01/23/24	50
12:05	HS24011040-12	SAMP	16RW04-240118	017.D	01/23/24	10
12:34	HS24010986-08	SAMP	ZZZZZZZZZZ	018.D	01/23/24	1
12:47	HS24011010-03	SAMP	ZZZZZZZZZZ	019.D	01/23/24	1
12:56	HS24011010-04	SAMP	ZZZZZZZZZZ	020.D	01/23/24	1
13:08	HS24011010-05	SAMP	ZZZZZZZZZZ	021.D	01/23/24	1
14:05	RSK-CCV	CCV	RSK-CCV	022.D	01/23/24	1
14:16	HS24011010-06	SAMP	ZZZZZZZZZZ	023.D	01/23/24	1
14:25	HS24011010-07	SAMP	ZZZZZZZZZZ	024.D	01/23/24	1
15:03	HS24011111-07	SAMP	ZZZZZZZZZZ	025.D	01/23/24	1
15:35	HS24011111-07	SAMP	ZZZZZZZZZZ	026.D	01/23/24	200
15:48	RSK-CCV	CCV	RSK-CCV	027.D	01/23/24	1

right solutions.
right partner.

RawData

Dissolved Gasses by Dissolved Gases by RSK-175

Workorder

HS24011040

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/30/2024

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

Data File: \\NAHSTWS005\Target\chem\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)	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

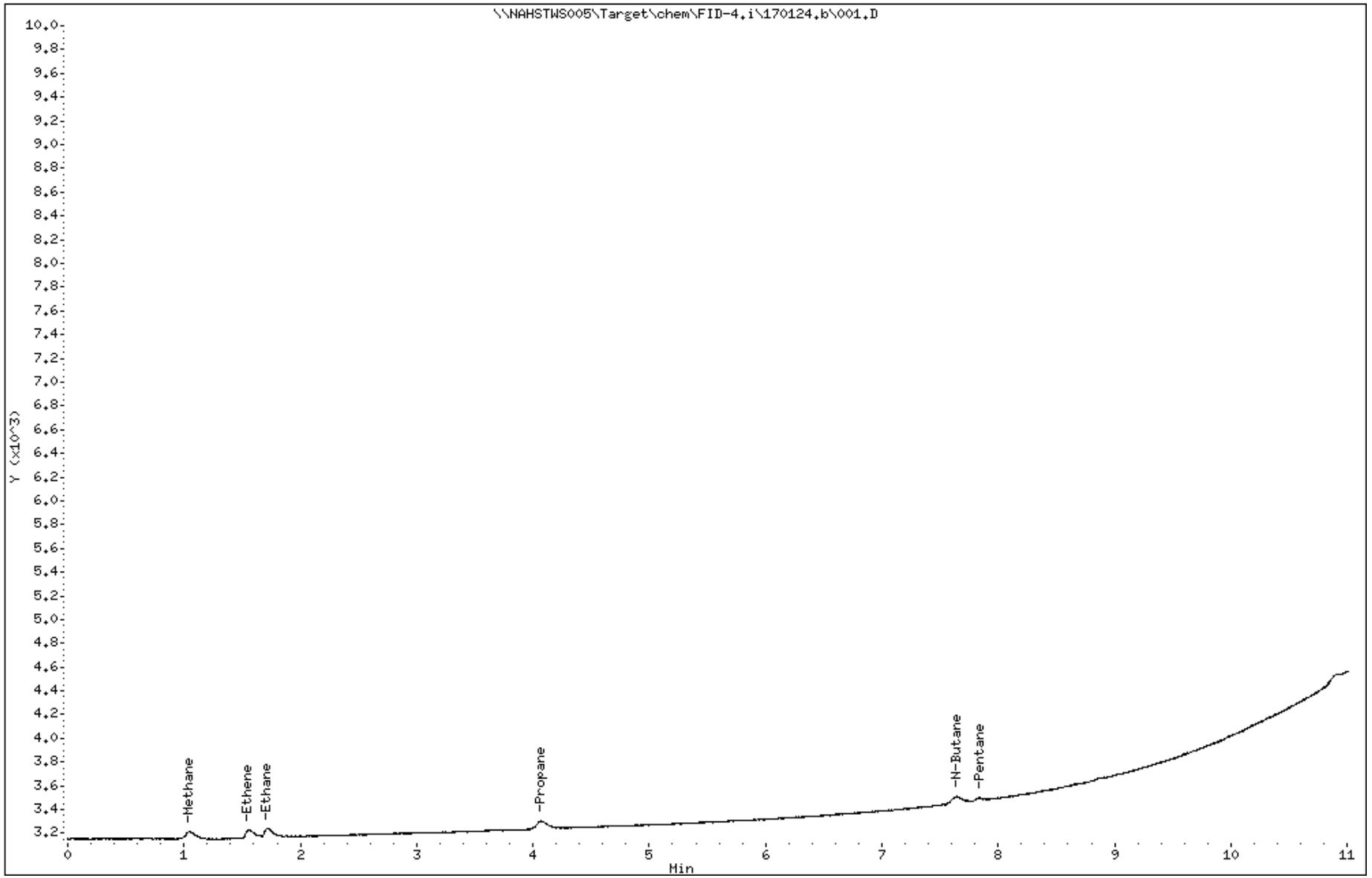
Instrument: FID-4.i

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

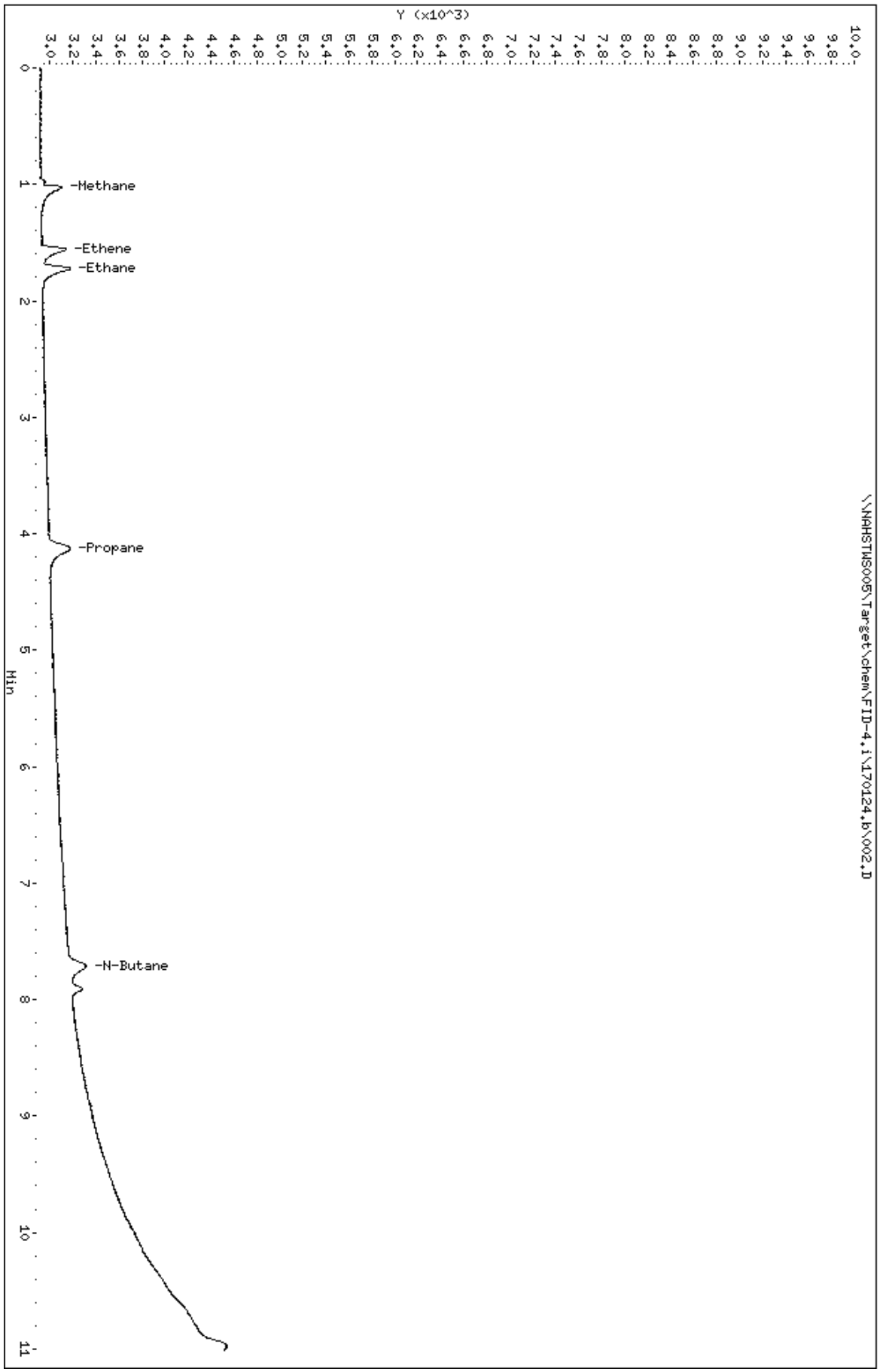
Data file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\002.D
Lab Smp Id: ICAL2 Client Smp ID: ICAL2
Inj Date : 24-JAN-2017 09:30
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL2;ICAL2;;;
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Meth Date : 28-Sep-2022 10:00 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
Sample Info: ICAL2;ICAL2;;;
Column phase: Rtx-PLOT

Instrument: FID-4,i
Operator: MA
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

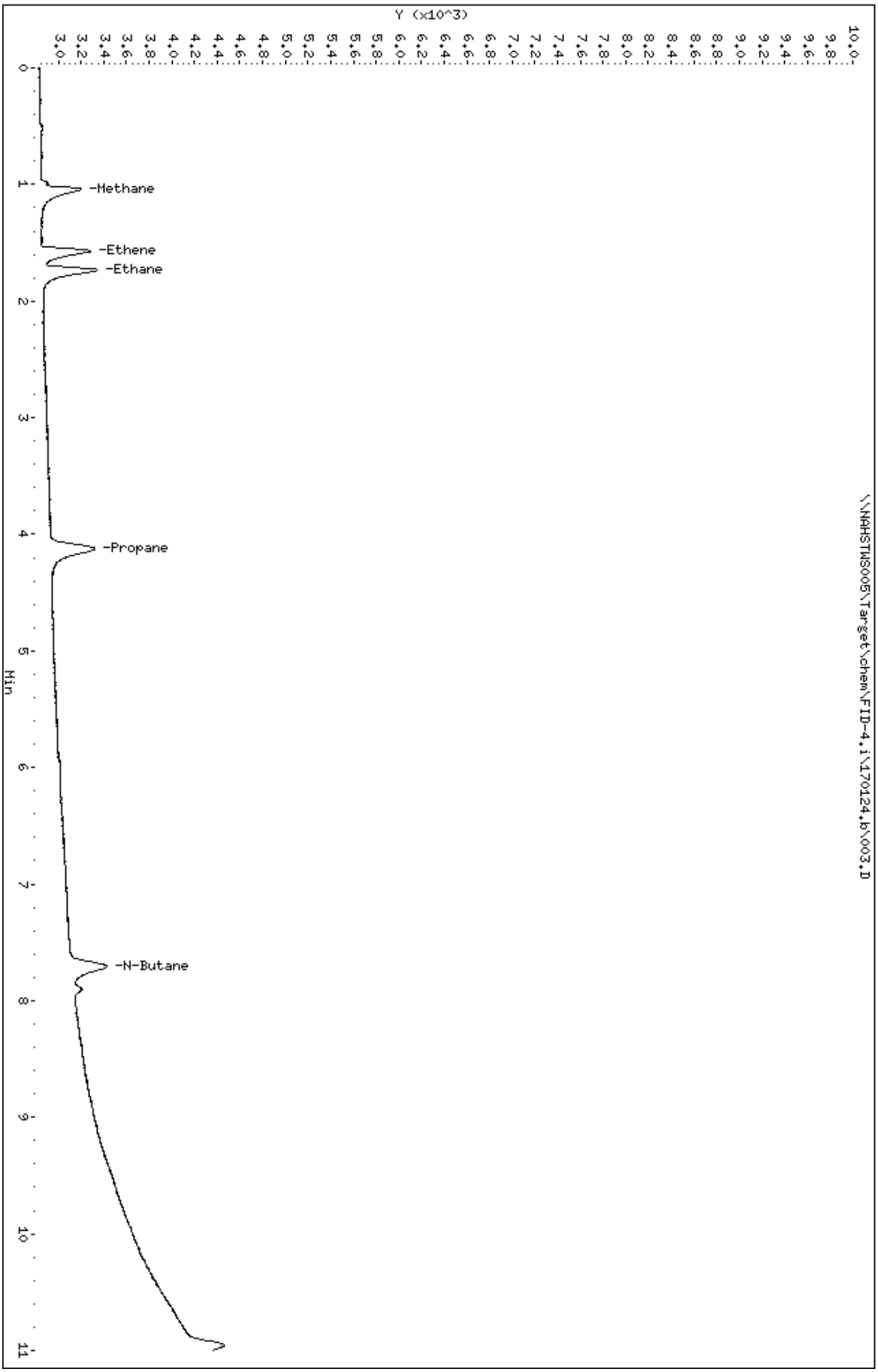
Data file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\003.D
Lab Smp Id: ICAL3 Client Smp ID: ICAL3
Inj Date : 24-JAN-2017 09:59
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL3;ICAL3;;;
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Meth Date : 28-Sep-2022 10:00 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
Sample Info: ICAL3;ICAL3;;;
Column phase: Rtx-PLOT

Instrument: FID-4,i
Operator: MA
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

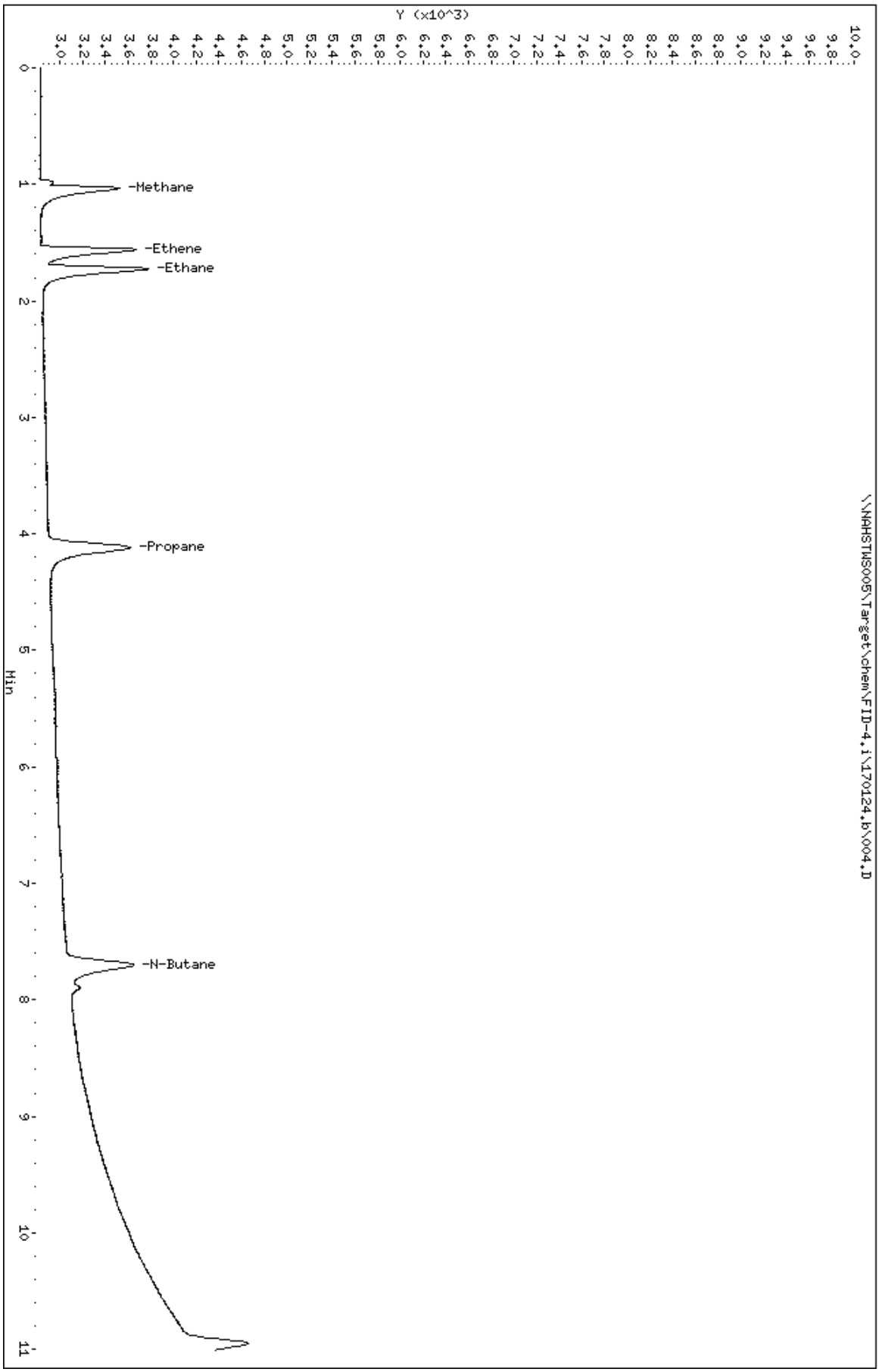
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Methane	1.033	1.033	0.000	3399	3.85900	3.488
2 Ethene	1.563	1.563	0.000	3478	6.74000	5.932
3 Ethane	1.726	1.726	0.000	4310	7.21700	5.853
4 Propane	4.120	4.120	0.000	4785	10.5850	8.190
5 N-Butane	7.703	7.703	0.000	3864	13.9820	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
Sample Info: ICAL4;ICAL4;;;
Column phase: Rtx-PLOT

Instrument: FID-4,i
Operator: MA
Column diameter: 0.53



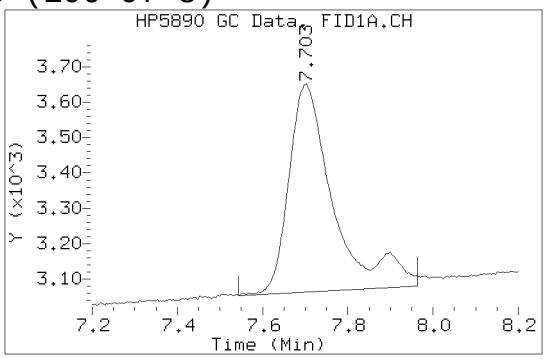
Data File : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\004.D
Inj Date : 24-JAN-2017 10:15
InstruID : FID-4.i
LabSampID : ICAL4

N-Butane (106-97-8)

Reason Code:

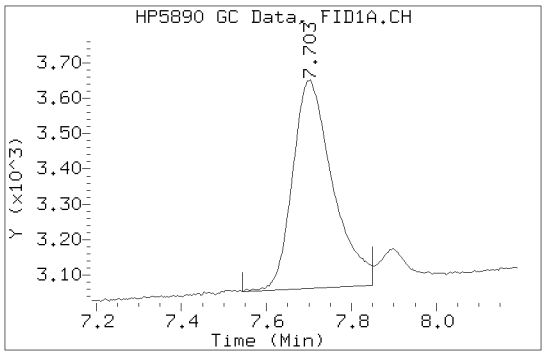
BEFORE

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

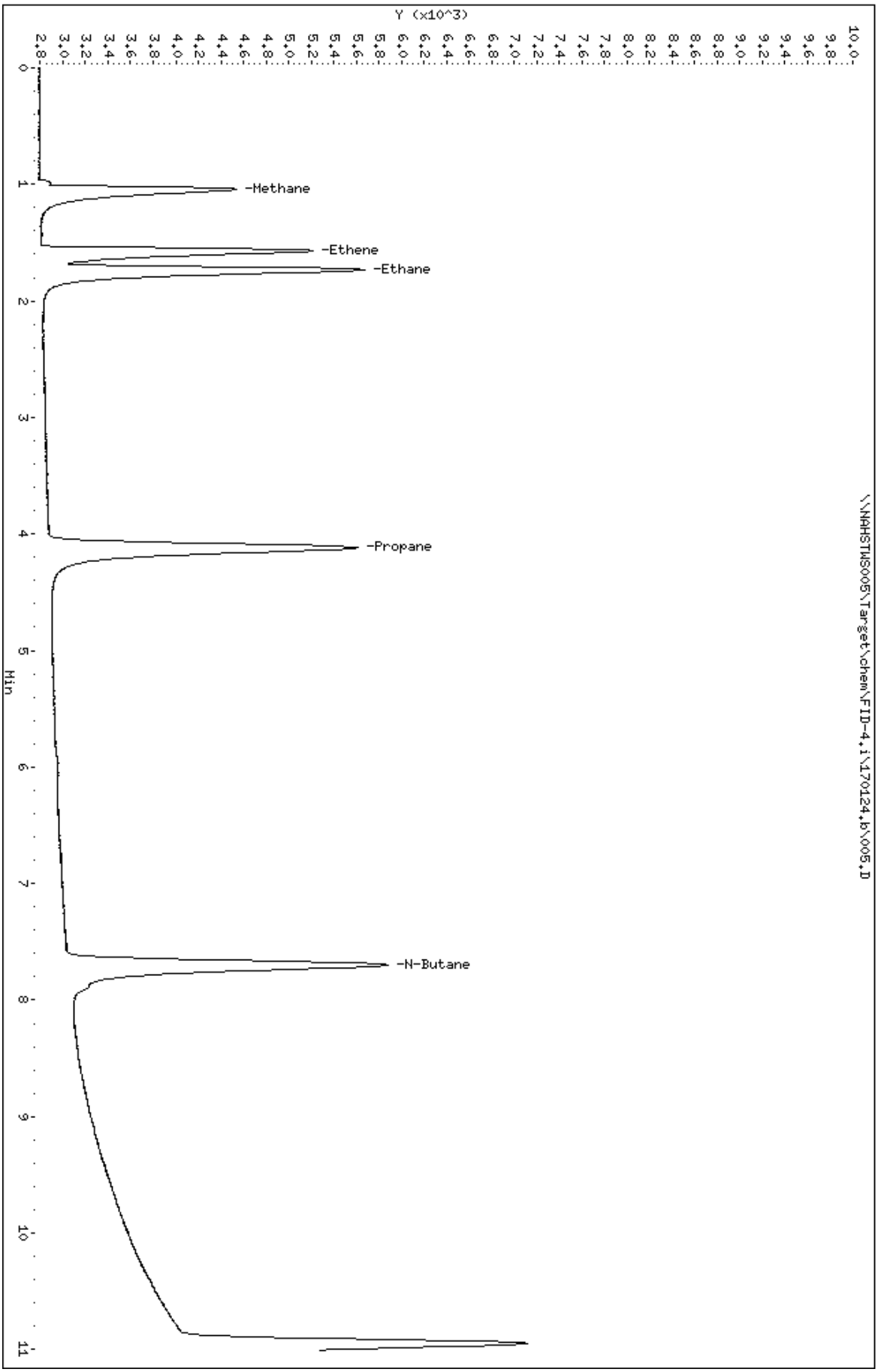
Data file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\005.D
Lab Smp Id: ICAL5 Client Smp ID: ICAL5
Inj Date : 24-JAN-2017 10:39
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL5;ICAL5;;;
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Meth Date : 28-Sep-2022 10:02 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.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Date : 24-JAN-2017 10:39
Client ID: ICAL5
Sample Info: ICAL5;ICAL5;;;
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\005,D

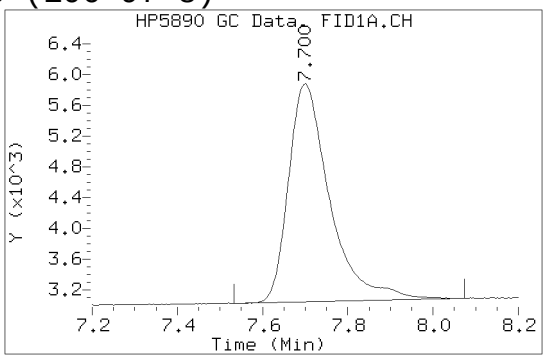
Data File : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\005.D
Inj Date : 24-JAN-2017 10:39
InstruID : FID-4.i
LabSampID : ICAL5

N-Butane (106-97-8)

Reason Code:

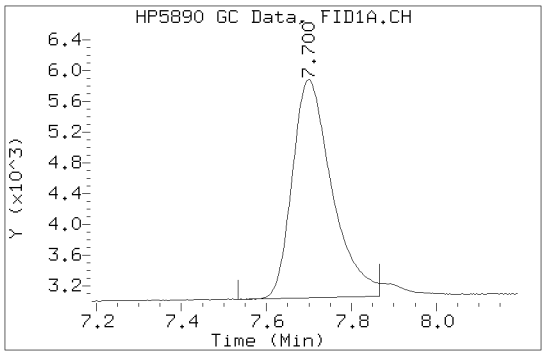
BEFORE

MASS
100
AREA
19142
HEIGHT
2839
28-Sep-2022
10:02
linh
pham



AFTER

MASS
100
AREA
18446
HEIGHT
2838
28-Sep-2022
10:02
linh
pham



Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\006.D Page 1
Report Date: 28-Sep-2022 10:00

ALS Laboratory Group

Dissolved Gases Analysis

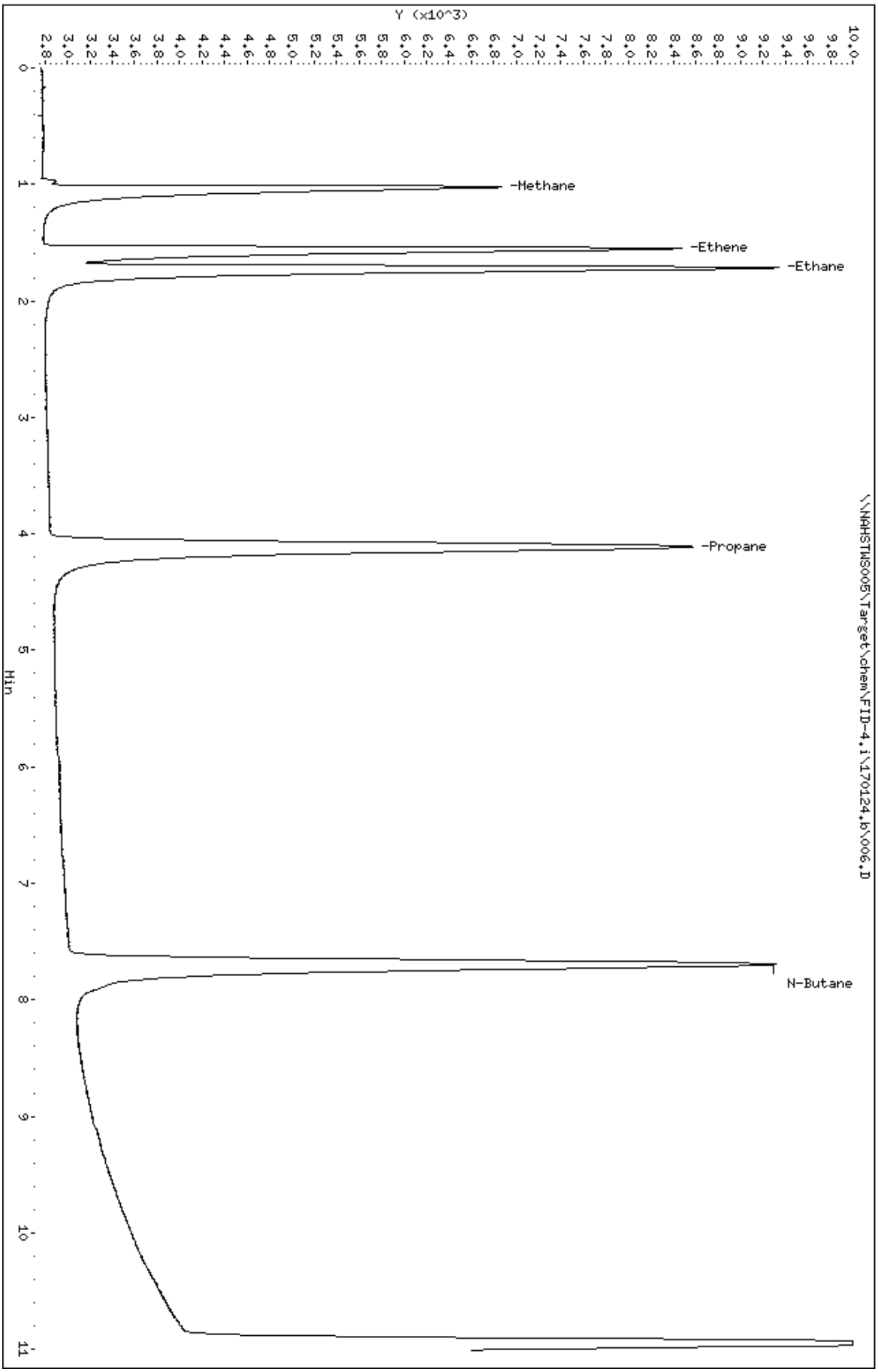
Data file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\006.D
Lab Smp Id: ICAL6 Client Smp ID: ICAL6
Inj Date : 24-JAN-2017 10:57
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL6;ICAL6;;;
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Meth Date : 28-Sep-2022 10:00 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 10:39 Cal File: 005.D
Als bottle: 6 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Methane	1.023	1.023	0.000	17957	19.2940	18.429
2 Ethene	1.550	1.550	0.000	22910	53.8200	39.078
3 Ethane	1.716	1.716	0.000	29505	36.0860	40.070
4 Propane	4.110	4.110	0.000	38286	52.9260	52.796
5 N-Butane	7.696	7.696	0.000	42817	69.9110	70.855

Data File: \\NAHSTWS005\Target\chem\FID-4,i\170124,b\006,D
Date : 24-JAN-2017 10:57
Client ID: ICAL6
Sample Info: ICAL6;ICAL6;;;
Column phase: Rtx-PLOT

Instrument: FID-4,i
Operator: MA
Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\006.D
Inj Date : 24-JAN-2017 10:57
InstruID : FID-4.i
LabSampID : ICAL6

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\007.D Page 1
Report Date: 28-Sep-2022 10:00

ALS Laboratory Group

Dissolved Gases Analysis

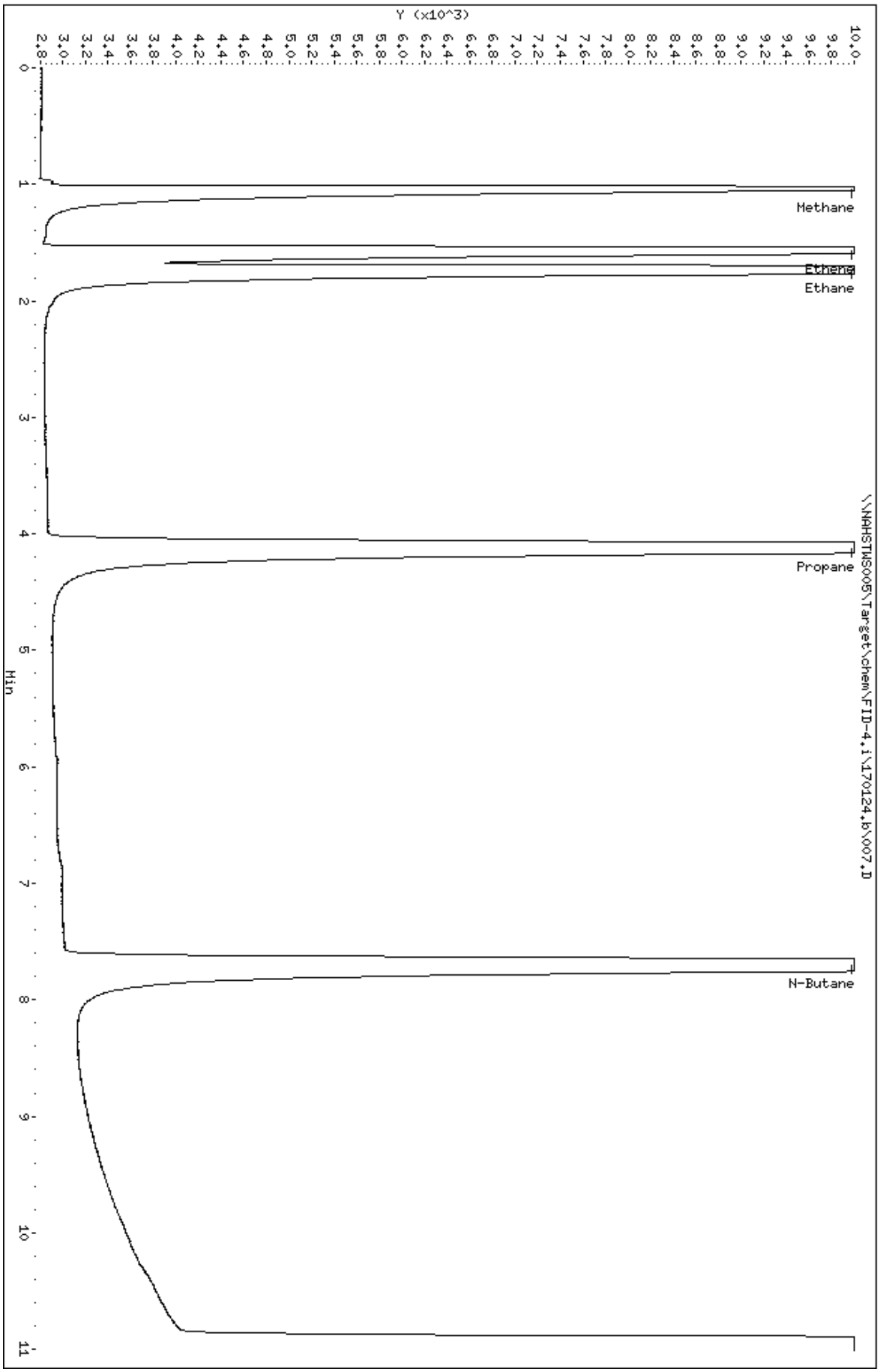
Data file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\007.D
Lab Smp Id: ICAL7 Client Smp ID: ICAL7
Inj Date : 24-JAN-2017 11:13
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL7;ICAL7;;;
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Meth Date : 28-Sep-2022 10:00 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 10:57 Cal File: 006.D
Als bottle: 7 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Methane	1.030	1.030	0.000	41736	38.5880	42.833(A)
2 Ethene	1.556	1.556	0.000	55865	67.4000	95.291(A)
3 Ethane	1.723	1.723	0.000	72124	72.1720	97.951(A)
4 Propane	4.113	4.113	0.000	96509	105.852	105.844
5 N-Butane	7.690	7.690	0.000	114164	139.821	139.707

QC Flag Legend

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


Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\007.D
Date : 24-JAN-2017 11:13
Client ID: ICAL7
Sample Info: ICAL7;ICAL7;;;
Column phase: Rtx-PLOT
Instrument: FID-4.i
Operator: MA
Column diameter: 0.53
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

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

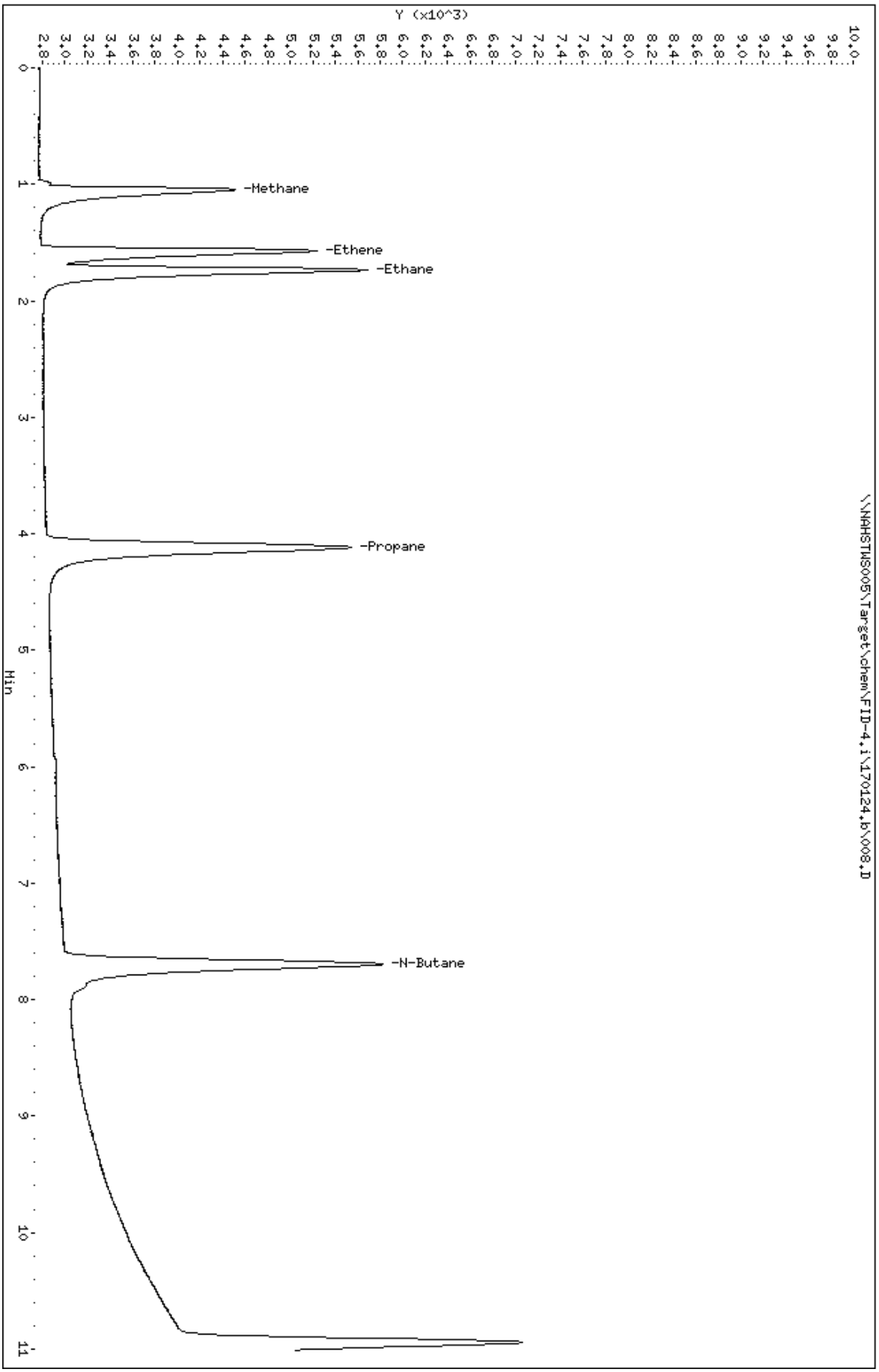
Data file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\008.D
Lab Smp Id: ICV Client Smp ID: ICV
Inj Date : 24-JAN-2017 12:05
Operator : MA Inst ID: FID-4.i
Smp Info : ICV;ICV;;;
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Meth Date : 28-Sep-2022 10:00 FID-4.i 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

					CONCENTRATIONS	
					ON-COLUMN	FINAL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	1.046	1.030	0.016	9352	9.59792	9.597
2 Ethene	1.573	1.556	0.017	11192	19.0906	19.090
3 Ethane	1.736	1.723	0.013	14474	19.6571	19.657
4 Propane	4.116	4.113	0.003	18164	27.2381	27.238
5 N-Butane	7.696	7.690	0.006	19425	36.0103	36.010

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\008.D
Date : 24-JAN-2017 12:05
Client ID: ICV
Sample Info: ICV;ICV;;;
Column phase: Rtx-PLOT

Instrument: FID-4.i
Operator: MA
Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\008.D
Inj Date : 24-JAN-2017 12:05
InstruID : FID-4.i
LabSampID : ICV

NO MANUAL INTEGRATIONS

right solutions.
right partner.

RawData

Dissolved Gasses by Dissolved Gases by RSK-175

Workorder

HS24011040

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/30/2024

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

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240123.b\001.D Page 1
Report Date: 23-Jan-2024 07:50

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\001.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 23-JAN-2024 07:39
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\240123.b\RSKNI3.m
Meth Date : 23-Jan-2024 07:48 elona.hasa 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: NAHSTW7025

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

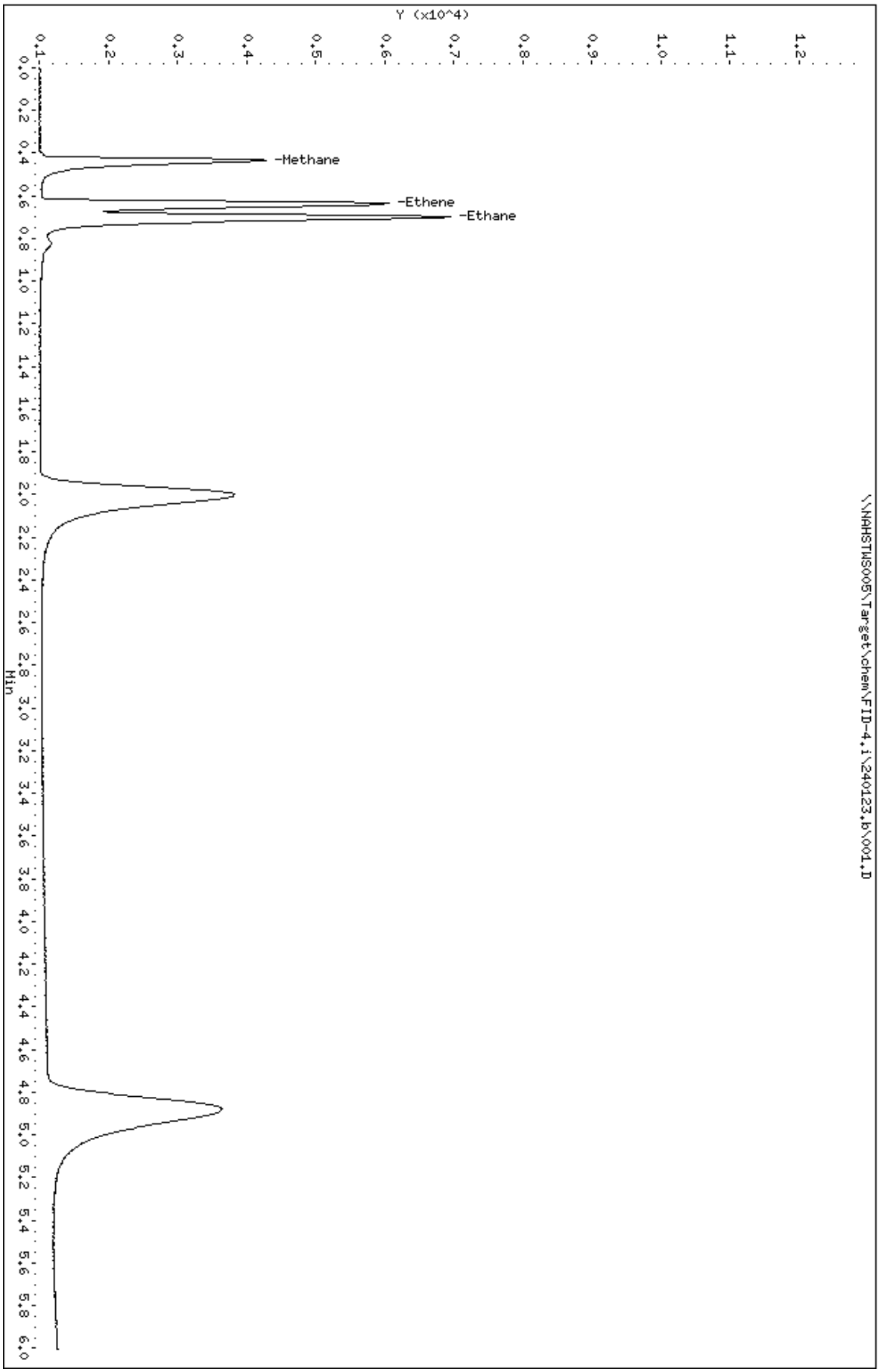
					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	0.433	0.433	0.000	7646	9.64700	7.842
2 Ethene	0.636	0.636	0.000	10240	16.8500	17.481
3 Ethane	0.700	0.700	0.000	14105	18.0430	19.604(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240123.b\001.D
Date : 23-JAN-2024 07:39
Client ID: RSK-CCV
Sample Info: RSK-CCV;RSK-CCV;2;4
Column phase: Rtx-PLOT

Instrument: FID-4.i
Operator: PL
Column diameter: 0.53



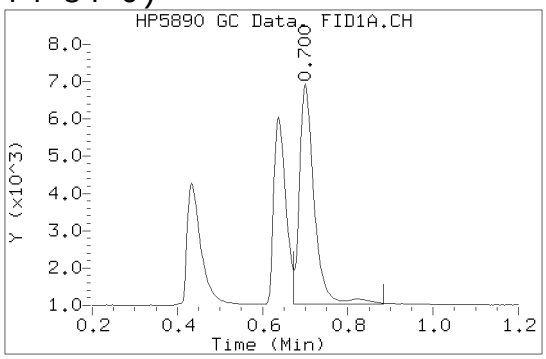
Data File : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\001.D
Inj Date : 23-JAN-2024 07:39
InstruID : FID-4.i
LabSampID : RSK-CCV

Ethane (74-84-0)

Reason Code:

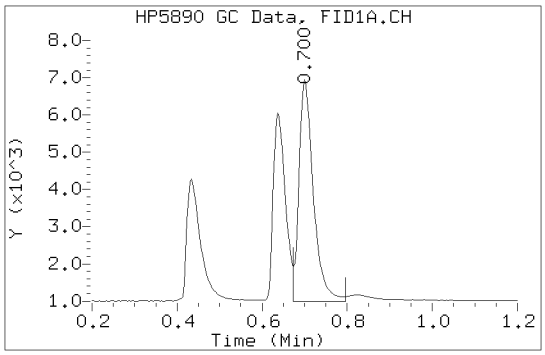
BEFORE

MASS
44
AREA
14254
HEIGHT
5922
23-Jan-2024
07:46
ALSHS
Server



AFTER

MASS
44
AREA
14105
HEIGHT
5953
23-Jan-2024
07:50
ALSHS
Server



Data File: \\NAHSTWS005\Target\chem\FID-4.i\240123.b\002.D Page 1
Report Date: 23-Jan-2024 09:05

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\002.D
Lab Smp Id: MBLK-240123 Client Smp ID: MBLK-240123
Inj Date : 23-JAN-2024 07:52
Operator : PL Inst ID: FID-4.i
Smp Info : MBLK-240123;MBLK-240123;3;;BLANK
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\RSKNI3.m
Meth Date : 23-Jan-2024 07:48 elona.hasa 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: NAHSTW7025

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\240123.b\002.D

Date : 23-JAN-2024 07:52

Client ID: MBLK-240123

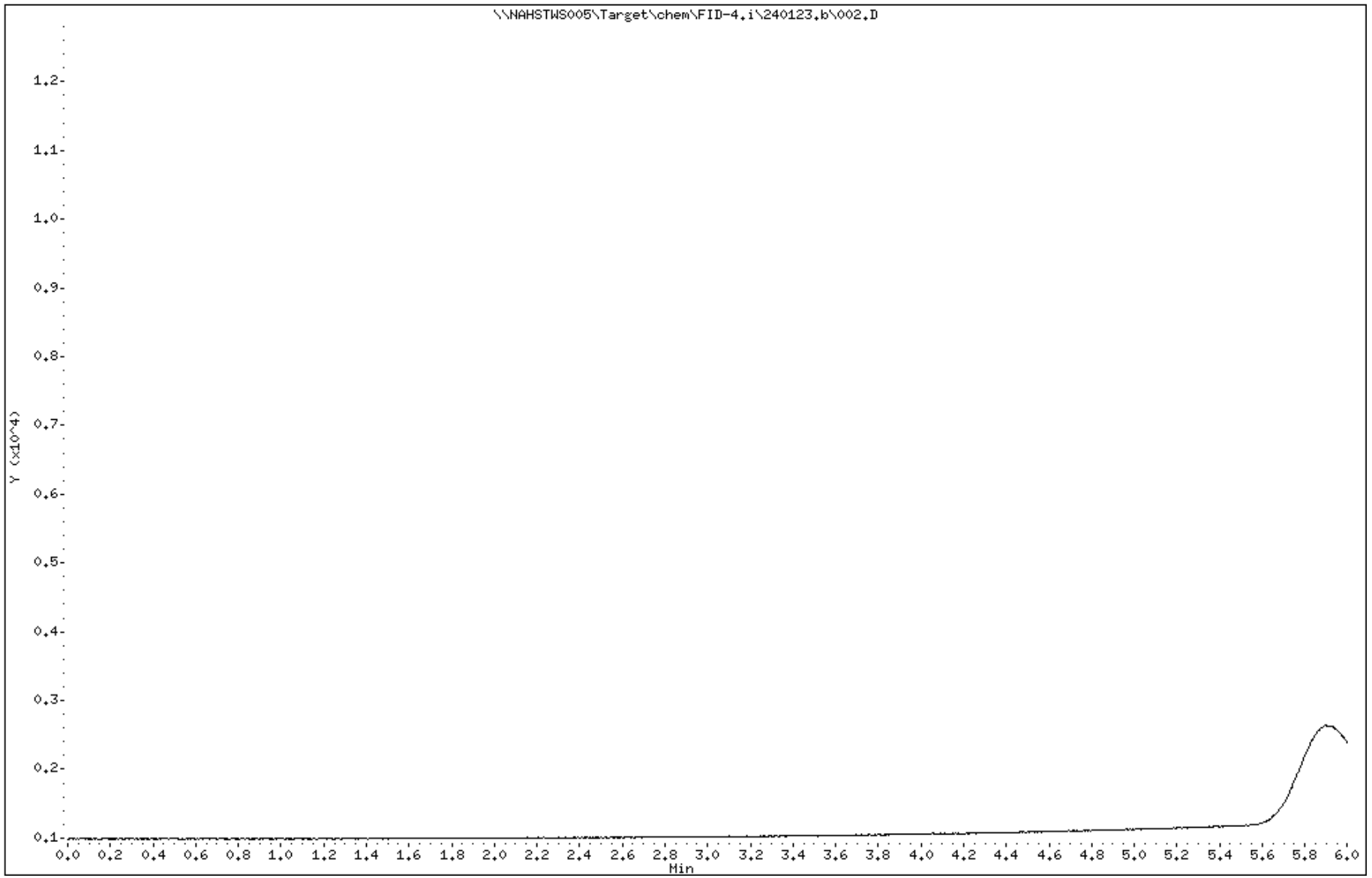
Instrument: FID-4.i

Sample Info: MBLK-240123;MBLK-240123;3;;BLANK

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\002.D
Inj Date : 23-JAN-2024 07:52
InstruID : FID-4.i
LabSampID : MBLK-240123

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240123.b\003.D Page 1
Report Date: 23-Jan-2024 09:06

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\003.D
Lab Smp Id: LCS-240123 Client Smp ID: LCS-240123
Inj Date : 23-JAN-2024 08:26
Operator : PL Inst ID: FID-4.i
Smp Info : LCS-240123;LCS-240123;3;;LCS
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\RSKNI3.m
Meth Date : 23-Jan-2024 07:48 elona.hasa 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: NAHSTW7025

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.433	0.433	0.000	7965	8.16929	8.169(M)
2 Ethene	0.640	0.636	0.004	10425	17.7974	17.797(M)
3 Ethane	0.700	0.700	0.000	14078	19.5666	19.566(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\fid-4.i\240123.b\003.d

Date : 23-JAN-2024 08:26

Client ID: LCS-240123

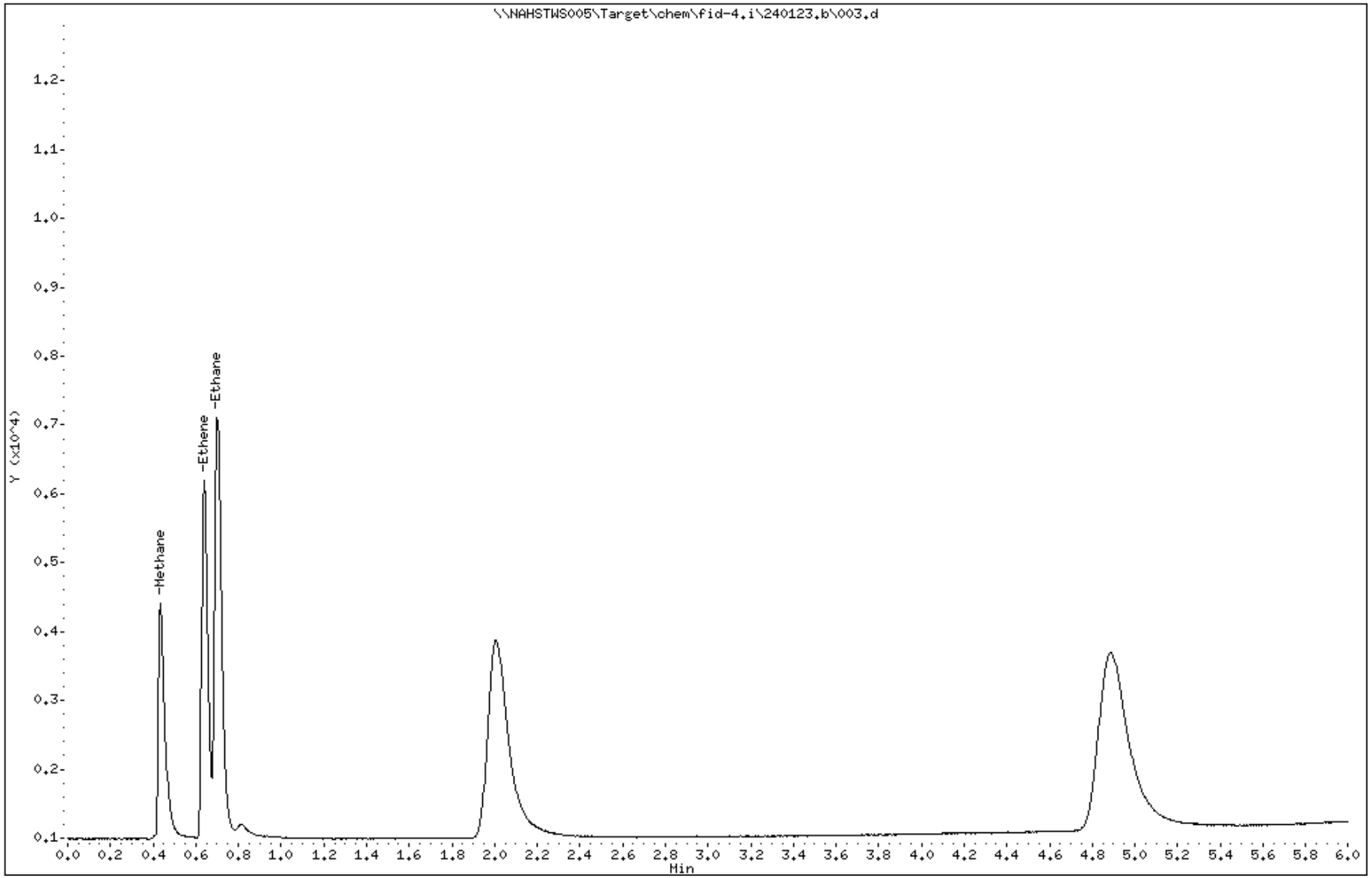
Instrument: FID-4.i

Sample Info: LCS-240123;LCS-240123;3;;LCS

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



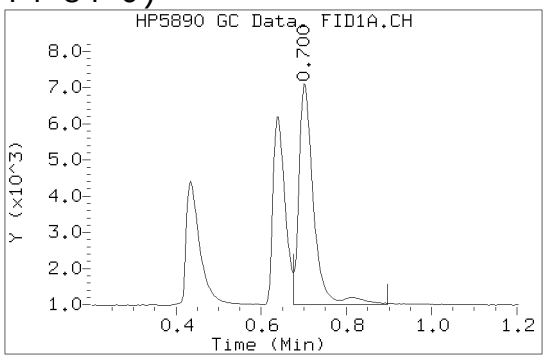
Data File : \\nahstws005\target\chem\fid-4.i\240123.b\003.d
Inj Date : 23-JAN-2024 08:26
InstruID : FID-4.i
LabSampID : LCS-240123

Ethane (74-84-0)

Reason Code:

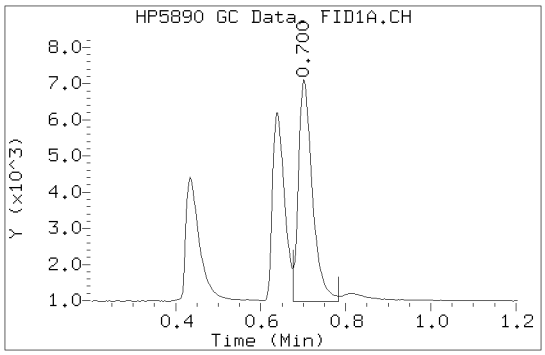
BEFORE

MASS
44
AREA
14604
HEIGHT
6104
23-Jan-2024
08:34
ALSHS
Server



AFTER

MASS
44
AREA
14078
HEIGHT
6126
24-Jan-2024
09:54
ALSHS
Server

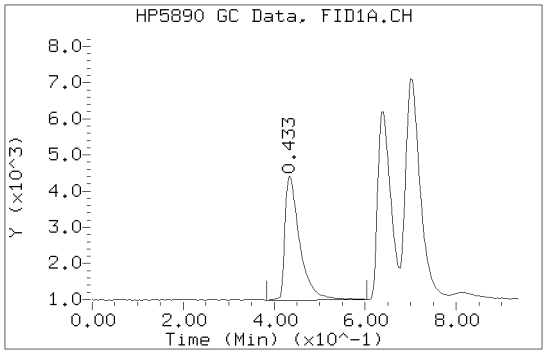


Methane (74-82-8)

Reason Code:

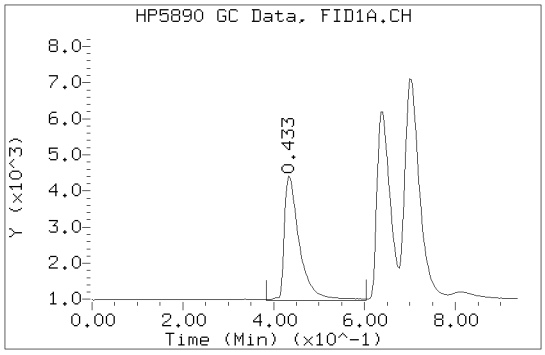
BEFORE

MASS
100
AREA
0
HEIGHT
0
23-Jan-2024
08:34
ALSHS
Server



AFTER

MASS
100
AREA
7965
HEIGHT
3441
24-Jan-2024
09:54
ALSHS
Server

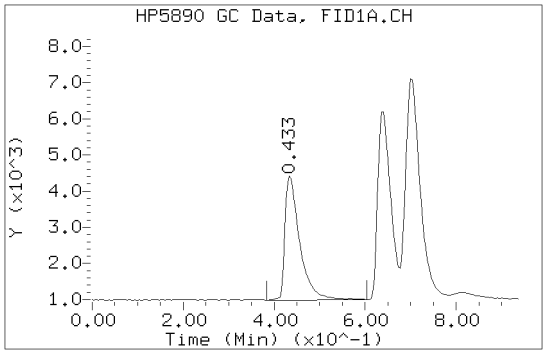


Ethene (74-85-1)

Reason Code:

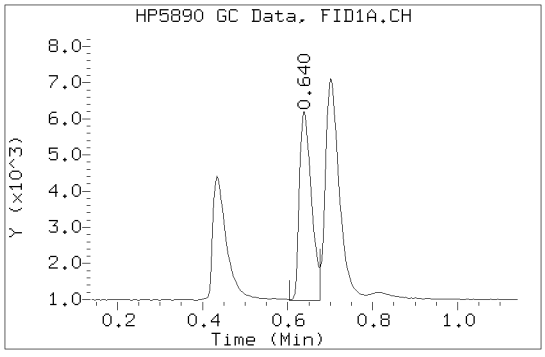
BEFORE

MASS
100
AREA
0
HEIGHT
0
23-Jan-2024
08:34
ALSHS
Server



AFTER

MASS
100
AREA
10425
HEIGHT
5214
24-Jan-2024
09:54
ALSHS
Server



Data File: \\NAHSTWS005\Target\chem\FID-4.i\240123.b\004.D Page 1
Report Date: 23-Jan-2024 09:06

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\004.D
Lab Smp Id: LCSD-240123 Client Smp ID: LCSD-240123
Inj Date : 23-JAN-2024 08:52
Operator : PL Inst ID: FID-4.i
Smp Info : LCSD-240123;LCSD-240123;3;;LCSD
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\RSKNI3.m
Meth Date : 23-Jan-2024 07:48 elona.hasa 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: NAHSTW7025

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.436	0.433	0.003	8208	8.41853	8.418(M)
2 Ethene	0.640	0.636	0.004	10347	17.6642	17.664(M)
3 Ethane	0.703	0.700	0.003	14244	19.7974	19.797(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\fid-4.i\240123.b\004.d

Date : 23-JAN-2024 08:52

Client ID: LCSD-240123

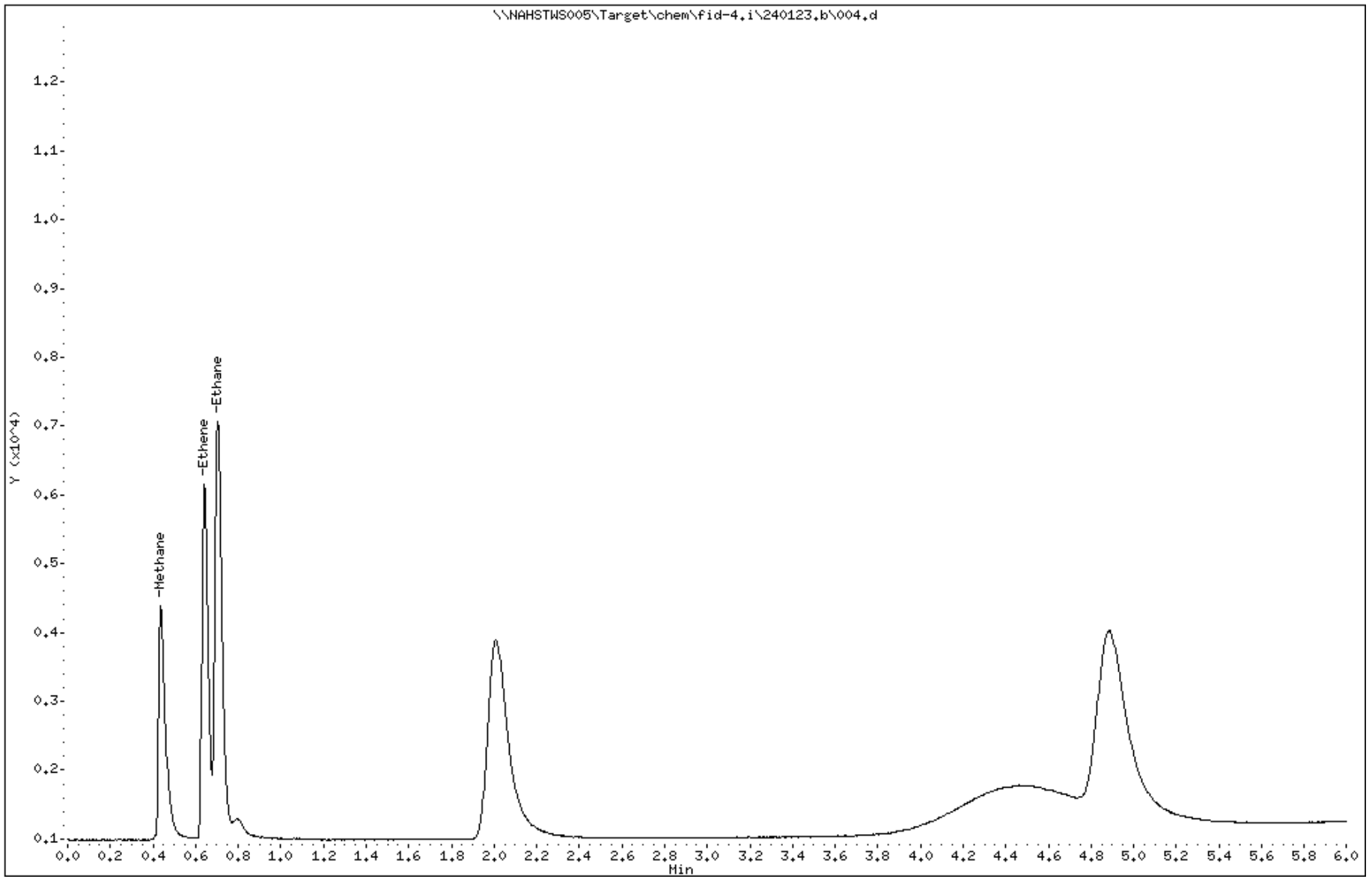
Instrument: FID-4.i

Sample Info: LCSD-240123;LCSD-240123;3;;LCSD

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



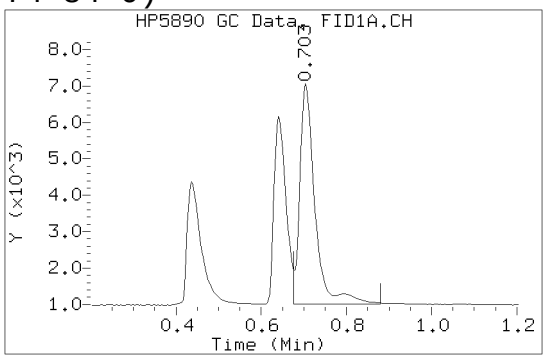
Data File : \\nahstws005\target\chem\fid-4.i\240123.b\004.d
Inj Date : 23-JAN-2024 08:52
InstruID : FID-4.i
LabSampID : LCSD-240123

Ethane (74-84-0)

Reason Code:

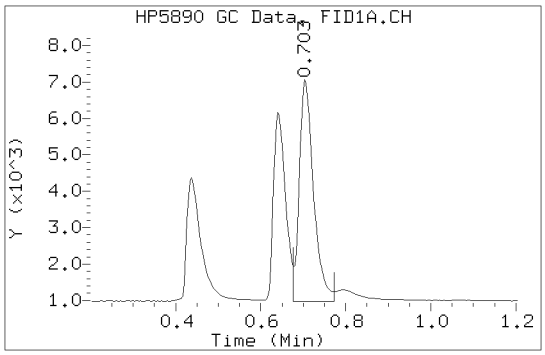
BEFORE

MASS
44
AREA
14929
HEIGHT
6052
23-Jan-2024
09:00
ALSHS
Server



AFTER

MASS
44
AREA
14244
HEIGHT
6084
24-Jan-2024
09:54
ALSHS
Server

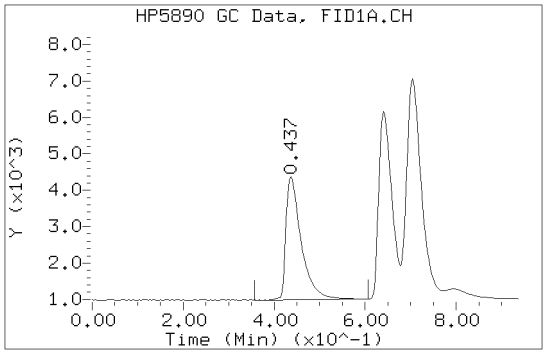


Methane (74-82-8)

Reason Code:

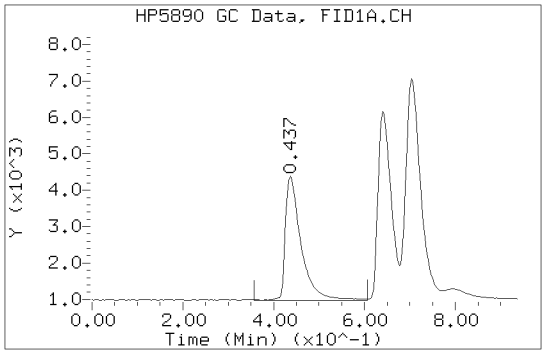
BEFORE

MASS
100
AREA
0
HEIGHT
0
23-Jan-2024
09:00
ALSHS
Server



AFTER

MASS
100
AREA
8208
HEIGHT
3406
24-Jan-2024
09:54
ALSHS
Server

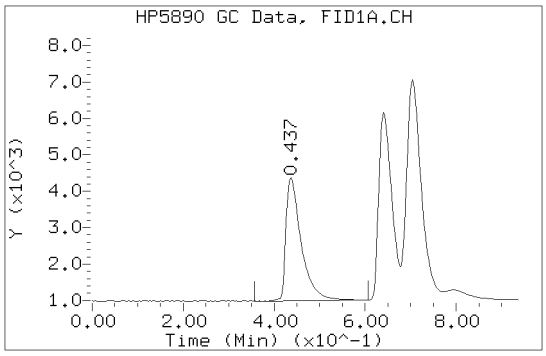


Ethene (74-85-1)

Reason Code:

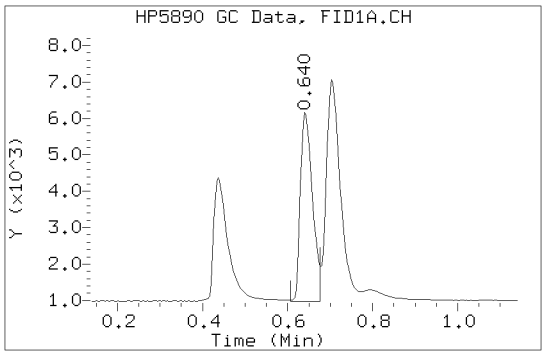
BEFORE

MASS
100
AREA
0
HEIGHT
0
23-Jan-2024
09:00
ALSHS
Server



AFTER

MASS
100
AREA
10347
HEIGHT
5181
24-Jan-2024
09:54
ALSHS
Server



Data File: \\NAHSTWS005\Target\chem\FID-4.i\240123.b\005.D Page 1
Report Date: 24-Jan-2024 09:57

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\005.D
Lab Smp Id: HS24011040-03 Client Smp ID: HS24011040-03
Inj Date : 23-JAN-2024 09:08
Operator : PL Inst ID: FID-4.i
Smp Info : HS24011040-03;HS24011040-03
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\RSKNI3.m
Meth Date : 23-Jan-2024 16:06 elona.hasa 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: NAHSTW7025

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

					CONCENTRATIONS	
					ON-COLUMN	FINAL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	0.436	0.436	0.000	167775	172.078	172.078(AMH)
2 Ethene	0.630	0.640	-0.010	8431	14.3933	14.393(M)

QC Flag Legend

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

Data File: \\NAHSTWS005\Target\chem\fid-4.i\240123.b\005.d

Date : 23-JAN-2024 09:08

Client ID: HS24011040-03

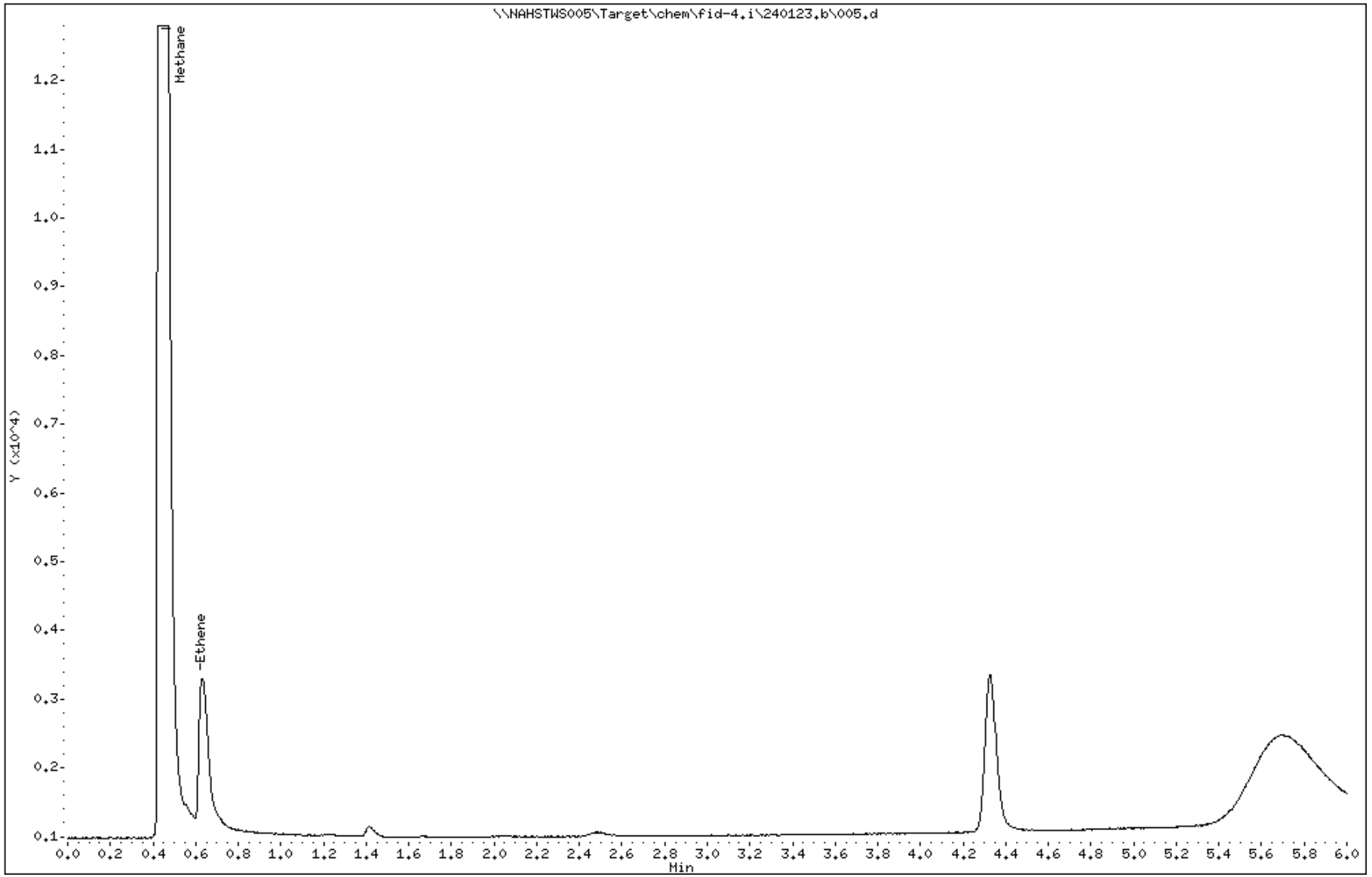
Instrument: FID-4.i

Sample Info: HS24011040-03;HS24011040-03

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



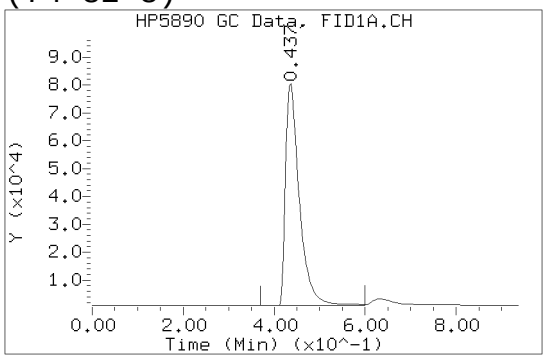
Data File : \\nahstws005\target\chem\fid-4.i\240123.b\005.d
Inj Date : 23-JAN-2024 09:08
InstruID : FID-4.i
LabSampID : HS24011040-03

Methane (74-82-8)

Reason Code:

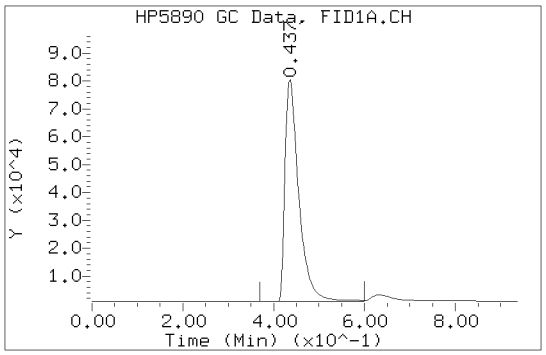
BEFORE

MASS
100
AREA
0
HEIGHT
0
23-Jan-2024
09:16
ALSHS
Server



AFTER

MASS
100
AREA
167775
HEIGHT
79483
24-Jan-2024
09:57
ALSHS
Server

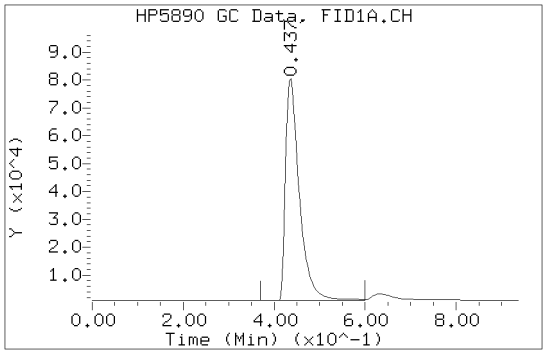


Ethene (74-85-1)

Reason Code:

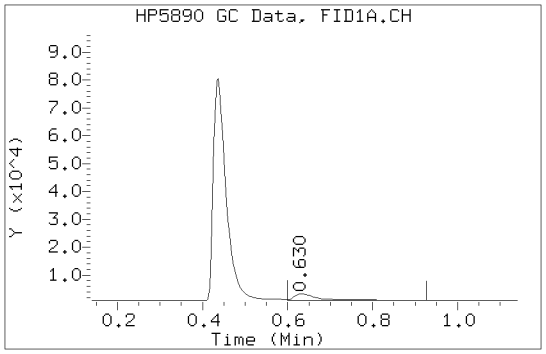
BEFORE

MASS
100
AREA
0
HEIGHT
0
23-Jan-2024
09:16
ALSHS
Server



AFTER

MASS
100
AREA
8431
HEIGHT
2292
24-Jan-2024
09:57
ALSHS
Server



Data File: \\NAHSTWS005\Target\chem\FID-4.i\240123.b\006.D Page 1
Report Date: 23-Jan-2024 16:10

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\006.D
Lab Smp Id: HS24011040-03MS Client Smp ID: HS24011040-03MS
Inj Date : 23-JAN-2024 09:16
Operator : PL Inst ID: FID-4.i
Smp Info : HS24011040-03MS;HS24011040-03MS
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\RSKNI3.m
Meth Date : 23-Jan-2024 16:06 elona.hasa Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 6 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7025

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

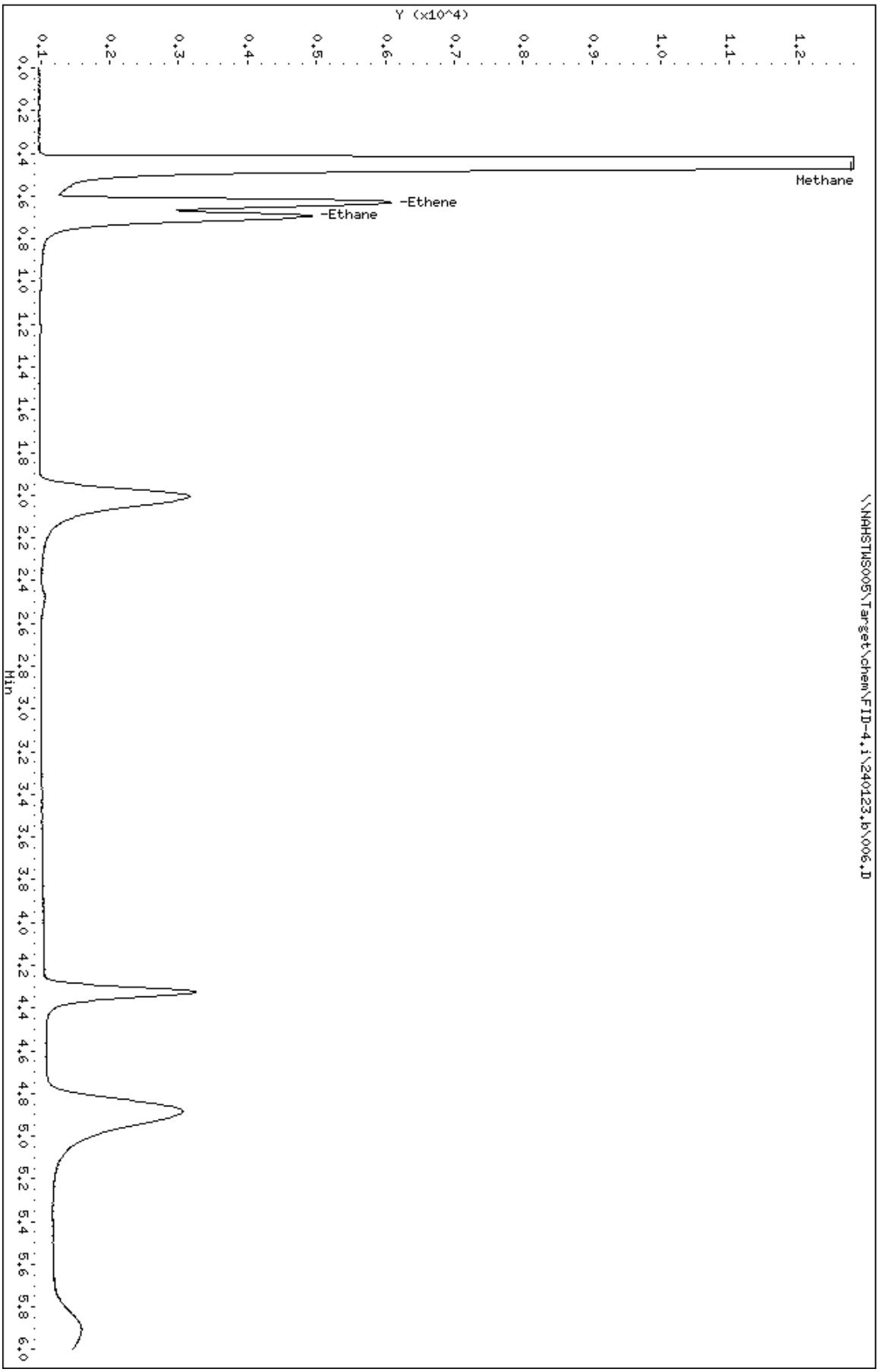
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.433	0.436	-0.003	169039	173.375	173.374(ARM)
2 Ethene	0.630	0.640	-0.010	14093	24.0593	24.059(RM)
3 Ethane	0.693	0.703	-0.010	12997	18.0642	18.064(M)

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\240123,b\006,D
Date : 23-JAN-2024 09:16
Client ID: HS24011040-03HS
Sample Info: HS24011040-03HS;HS24011040-03HS
Column phase: Rtx-PLOT

Instrument: FID-4,i
Operator: PL
Column diameter: 0.53



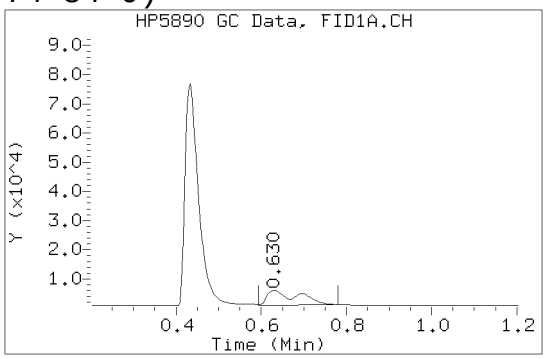
Data File : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\006.D
Inj Date : 23-JAN-2024 09:16
InstruID : FID-4.i
LabSampID : HS24011040-03MS

Ethane (74-84-0)

Reason Code:

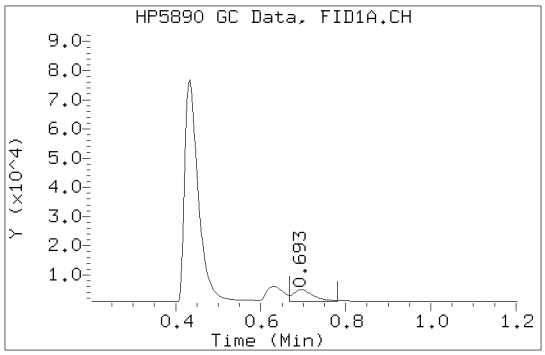
BEFORE

MASS
44
AREA
25724
HEIGHT
5012
23-Jan-2024
09:24
ALSHS
Server



AFTER

MASS
44
AREA
12997
HEIGHT
3938
23-Jan-2024
16:10
ALSHS
Server

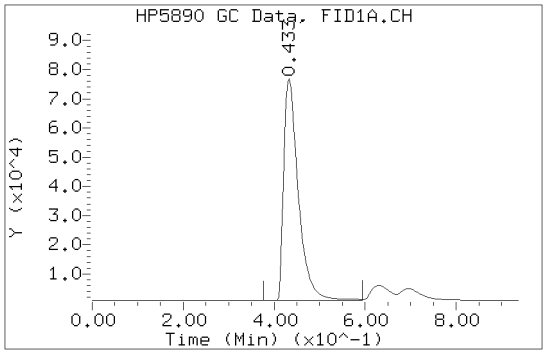


Methane (74-82-8)

Reason Code:

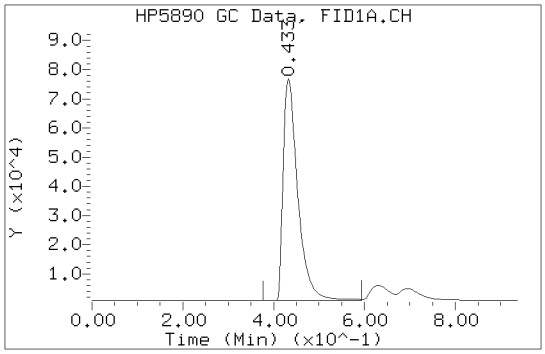
BEFORE

MASS
100
AREA
0
HEIGHT
0
23-Jan-2024
09:24
ALSHS
Server



AFTER

MASS
100
AREA
169039
HEIGHT
75913
23-Jan-2024
16:10
ALSHS
Server

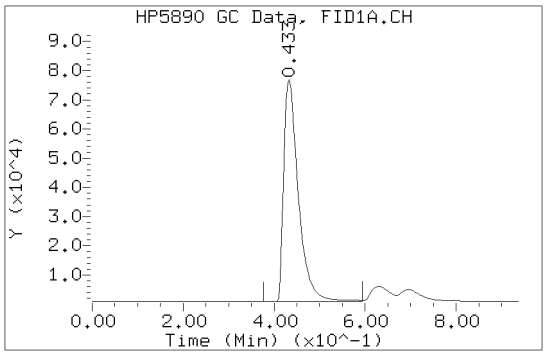


Ethene (74-85-1)

Reason Code:

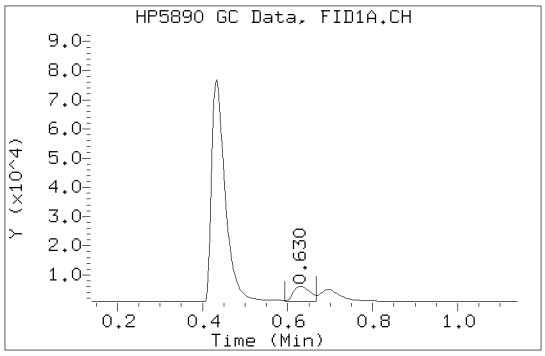
BEFORE

MASS
100
AREA
0
HEIGHT
0
23-Jan-2024
09:24
ALSHS
Server



AFTER

MASS
100
AREA
14093
HEIGHT
5097
23-Jan-2024
16:10
ALSHS
Server



Data File: \\NAHSTWS005\Target\chem\FID-4.i\240123.b\007.D Page 1
Report Date: 24-Jan-2024 09:58

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\007.D
Lab Smp Id: HS24011040-03MSD Client Smp ID: HS24011040-03MSD
Inj Date : 23-JAN-2024 09:26
Operator : PL Inst ID: FID-4.i
Smp Info : HS24011040-03MSD;HS24011040-03MSD
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\RSKNI3.m
Meth Date : 23-Jan-2024 16:06 elona.hasa Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 7 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7025

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

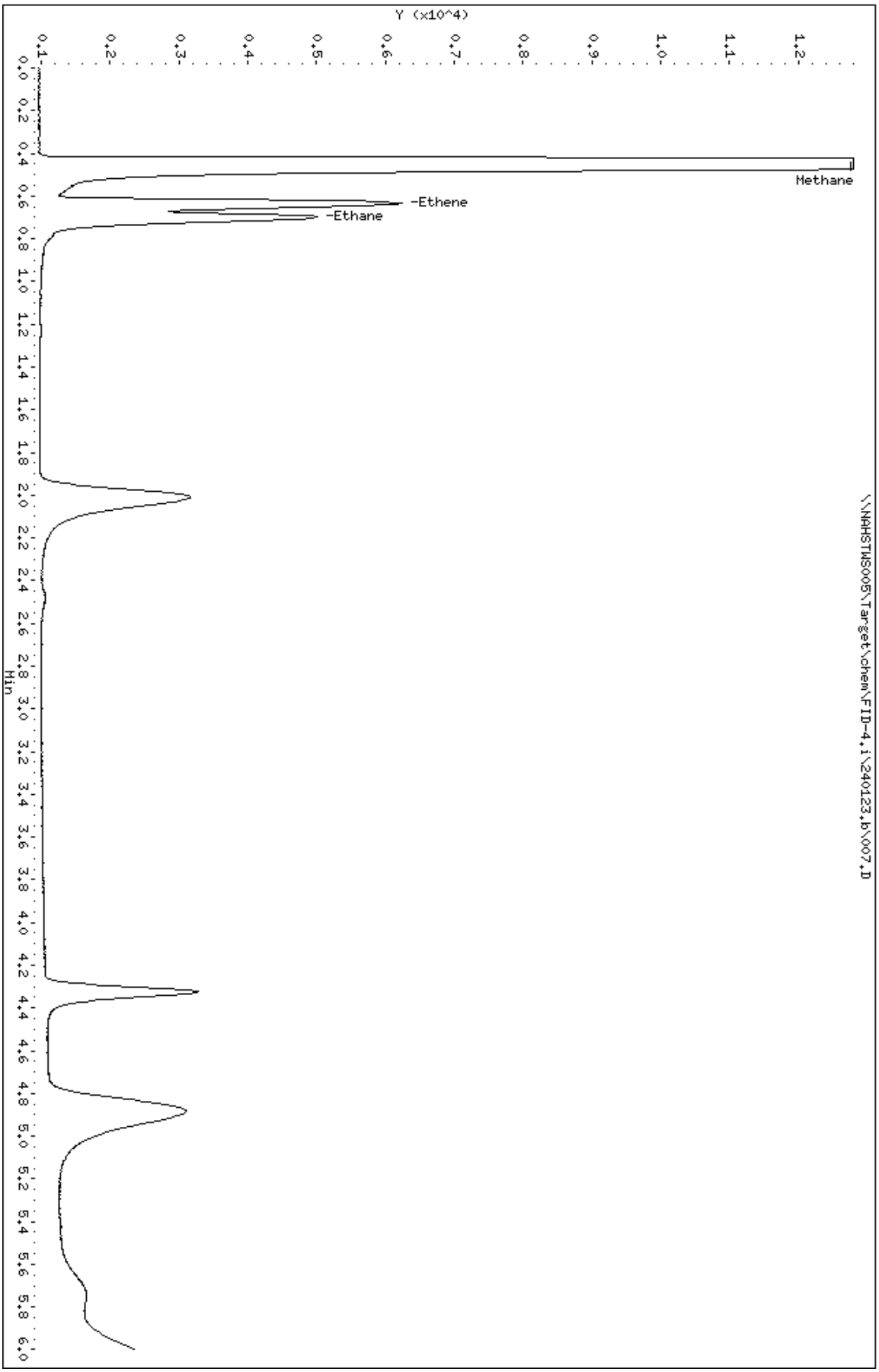
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.436	0.436	0.000	169363	173.707	173.707(ARM)
2 Ethene	0.633	0.640	-0.007	14484	24.7268	24.726(RM)
3 Ethane	0.700	0.703	-0.003	12564	17.4624	17.462(M)

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\240123.b\007.D
Date : 23-JAN-2024 09:26
Client ID: HS24011040-03HSD
Sample Info: HS24011040-03HSD;HS24011040-03HSD
Column phase: Rtx-PLOT

Instrument: FID-4.i
Operator: PL
Column diameter: 0.53



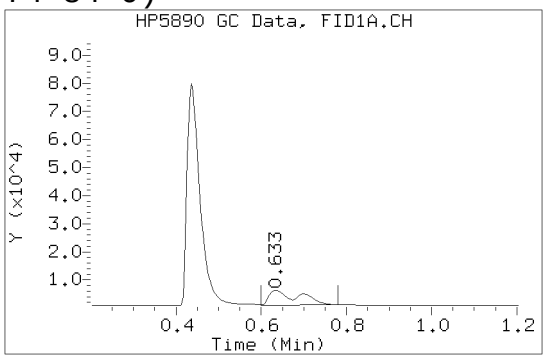
Data File : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\007.D
Inj Date : 23-JAN-2024 09:26
InstruID : FID-4.i
LabSampID : HS24011040-03MSD

Ethane (74-84-0)

Reason Code:

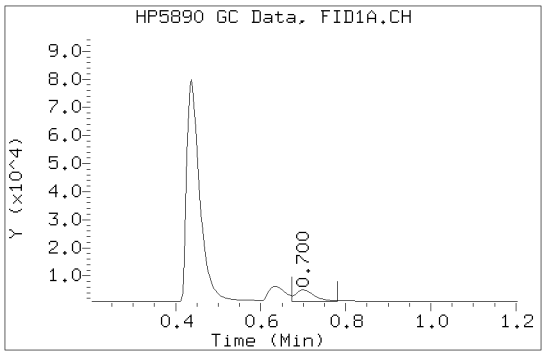
BEFORE

MASS
44
AREA
25414
HEIGHT
5161
23-Jan-2024
09:32
ALSHS
Server



AFTER

MASS
44
AREA
12564
HEIGHT
4055
24-Jan-2024
09:58
ALSHS
Server

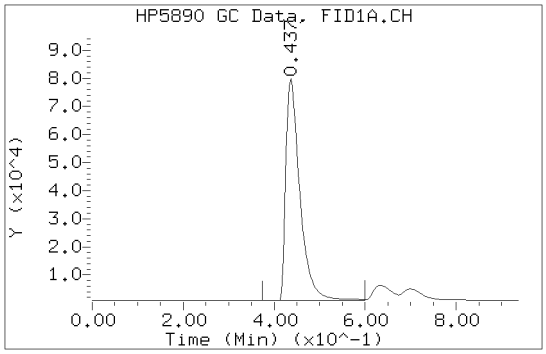


Methane (74-82-8)

Reason Code:

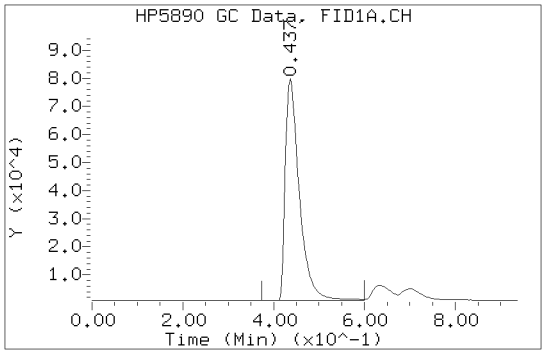
BEFORE

MASS
100
AREA
0
HEIGHT
0
23-Jan-2024
09:32
ALSHS
Server



AFTER

MASS
100
AREA
169363
HEIGHT
78936
24-Jan-2024
09:58
ALSHS
Server

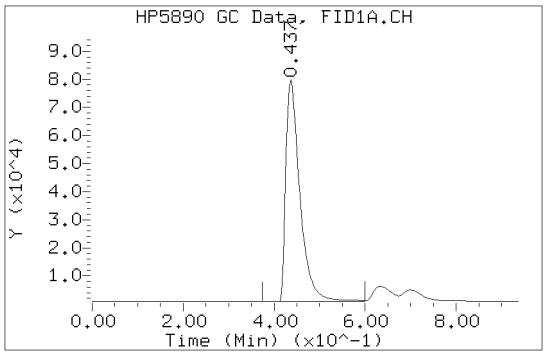


Ethene (74-85-1)

Reason Code:

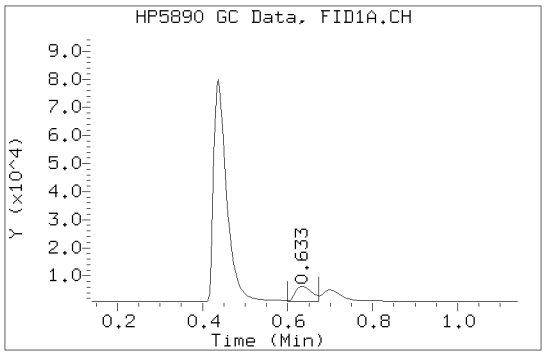
BEFORE

MASS
100
AREA
0
HEIGHT
0
23-Jan-2024
09:32
ALSHS
Server



AFTER

MASS
100
AREA
14484
HEIGHT
5274
24-Jan-2024
09:58
ALSHS
Server



Data File: \\NAHSTWS005\Target\chem\FID-4.i\240123.b\008.D Page 1
Report Date: 24-Jan-2024 09:59

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\008.D
Lab Smp Id: HS24011040-01 Client Smp ID: HS24011040-01
Inj Date : 23-JAN-2024 09:37
Operator : PL Inst ID: FID-4.i
Smp Info : HS24011040-01;HS24011040-01
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\RSKNI3.m
Meth Date : 23-Jan-2024 16:06 elona.hasa Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 8
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7025

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

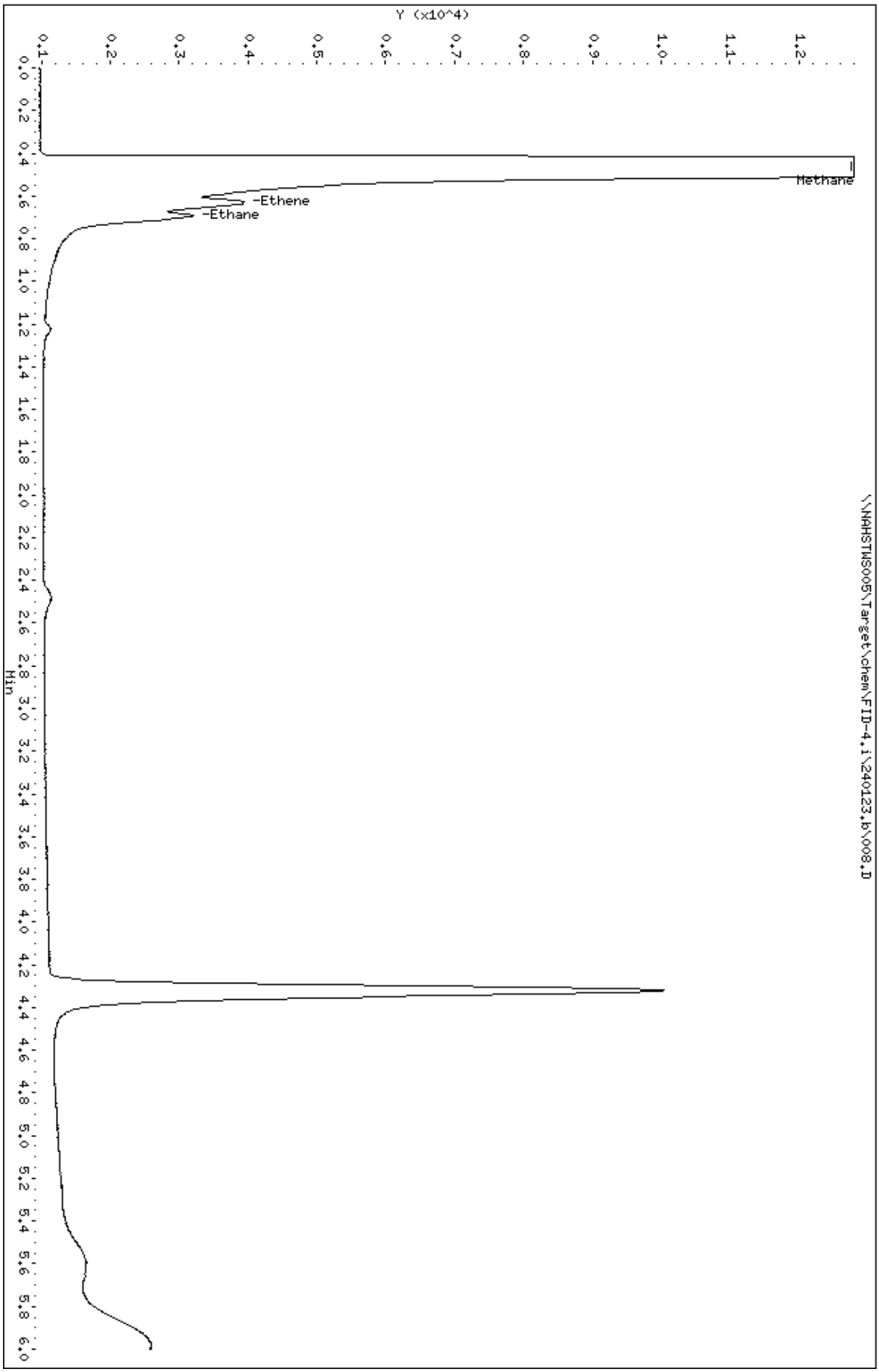
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.433	0.436	-0.003	1583842	1624.47	1624.466(AM)
2 Ethene	0.630	0.640	-0.010	10084	17.2152	17.215(M)
3 Ethane	0.693	0.703	-0.010	5538	7.69712	7.697(M)

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\240123.b\008.D
Date : 23-JAN-2024 09:37
Client ID: HS24011040-01
Sample Info: HS24011040-01;HS24011040-01
Column phase: Rtx-PLOT

Instrument: FID-4.i
Operator: PL
Column diameter: 0.53

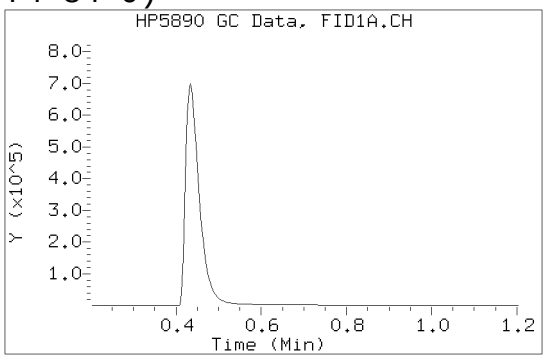


Data File : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\008.D
Inj Date : 23-JAN-2024 09:37
InstruID : FID-4.i
LabSampID : HS24011040-01

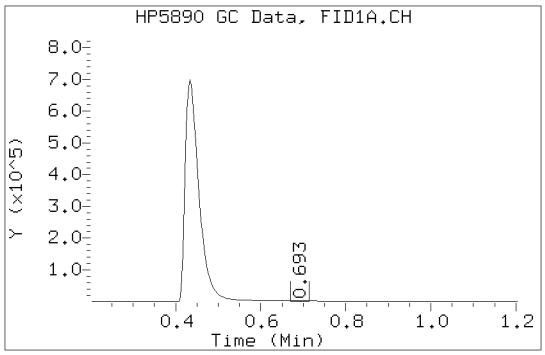
Ethane (74-84-0)

Reason Code:

BEFORE
MASS
44
AREA
0
HEIGHT
0
23-Jan-2024
09:44
ALSHS
Server



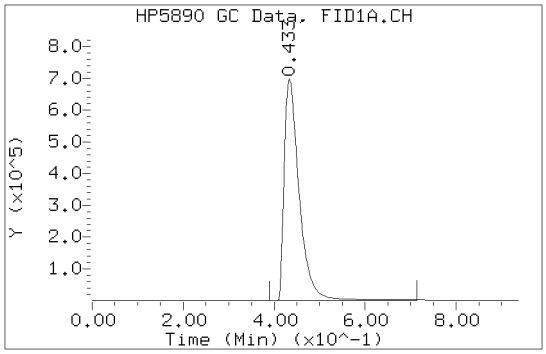
AFTER
MASS
44
AREA
5538
HEIGHT
2193
24-Jan-2024
09:59
ALSHS
Server



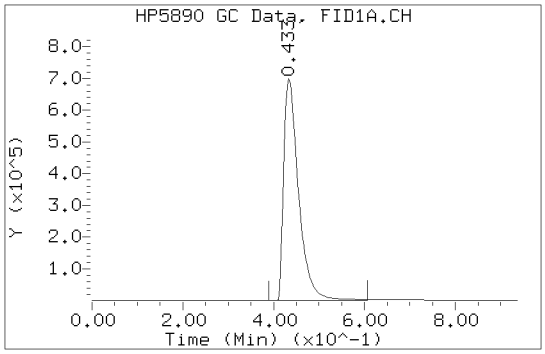
Methane (74-82-8)

Reason Code:

BEFORE
MASS
100
AREA
0
HEIGHT
0
23-Jan-2024
09:44
ALSHS
Server



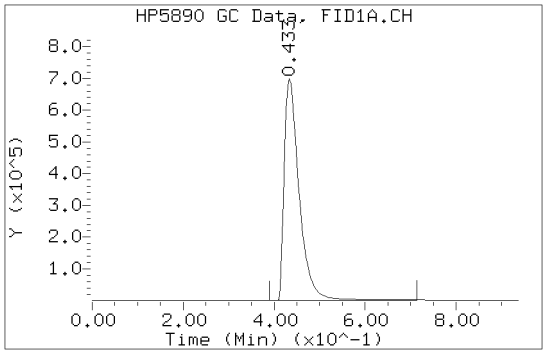
AFTER
MASS
100
AREA
1583842
HEIGHT
698102
24-Jan-2024
09:59
ALSHS
Server



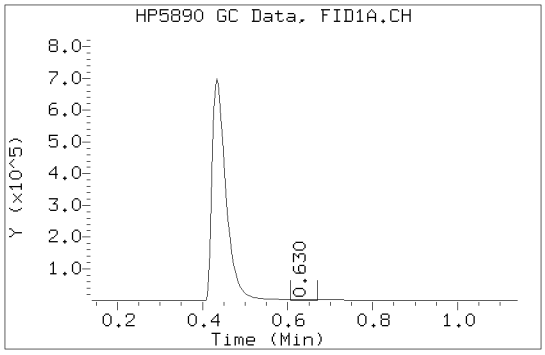
Ethene (74-85-1)

Reason Code:

BEFORE
MASS
100
AREA
0
HEIGHT
0
23-Jan-2024
09:44
ALSHS
Server



AFTER
MASS
100
AREA
10084
HEIGHT
2944
24-Jan-2024
09:59
ALSHS
Server



Data File: \\NAHSTWS005\Target\chem\FID-4.i\240123.b\009.D Page 1
Report Date: 23-Jan-2024 10:56

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\009.D
Lab Smp Id: HS24011040-02 Client Smp ID: HS24011040-02
Inj Date : 23-JAN-2024 09:46
Operator : PL Inst ID: FID-4.i
Smp Info : HS24011040-02;HS24011040-02
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\RSKNI3.m
Meth Date : 23-Jan-2024 10:55 elona.hasa Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 9
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7025

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	0.426	0.433	-0.007	1755164	1800.18	1800.182(A)

QC Flag Legend

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

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240123.b\009.D

Date : 23-JAN-2024 09:46

Client ID: HS24011040-02

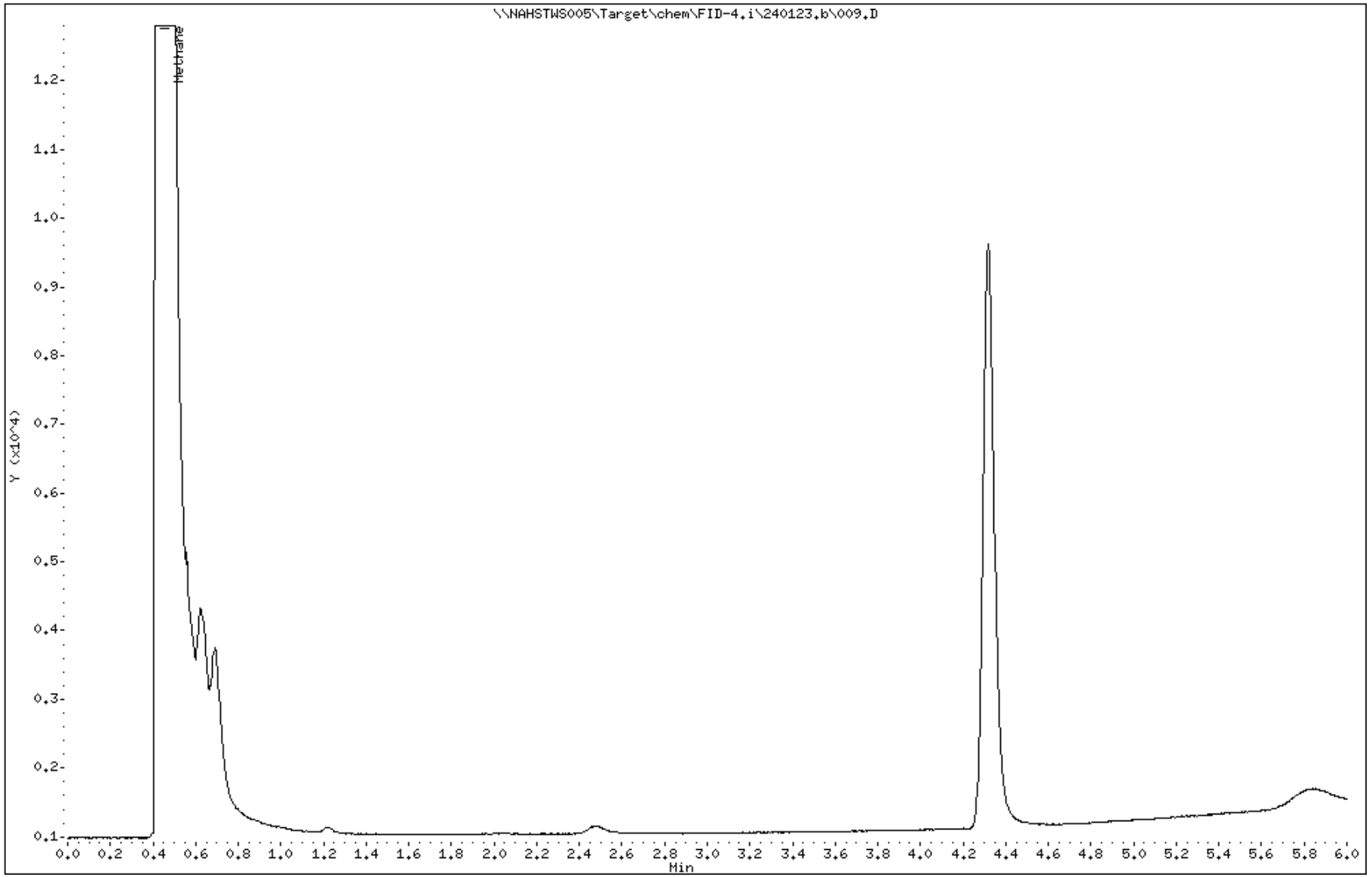
Instrument: FID-4.i

Sample Info: HS24011040-02;HS24011040-02

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\009.D
Inj Date : 23-JAN-2024 09:46
InstruID : FID-4.i
LabSampID : HS24011040-02

NO MANUAL INTEGRATIONS

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\010.D
Lab Smp Id: HS24011040-10 Client Smp ID: HS24011040-10
Inj Date : 23-JAN-2024 10:12
Operator : PL Inst ID: FID-4.i
Smp Info : HS24011040-10;HS24011040-10
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\RSKNI3.m
Meth Date : 23-Jan-2024 10:55 elona.hasa Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 10
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7025

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.436	0.433	0.003	796893	817.333	817.332(A)
2 Ethene	0.633	0.636	-0.003	118446	202.209	202.208(A)

QC Flag Legend

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

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240123.b\010.D

Date : 23-JAN-2024 10:12

Client ID: HS24011040-10

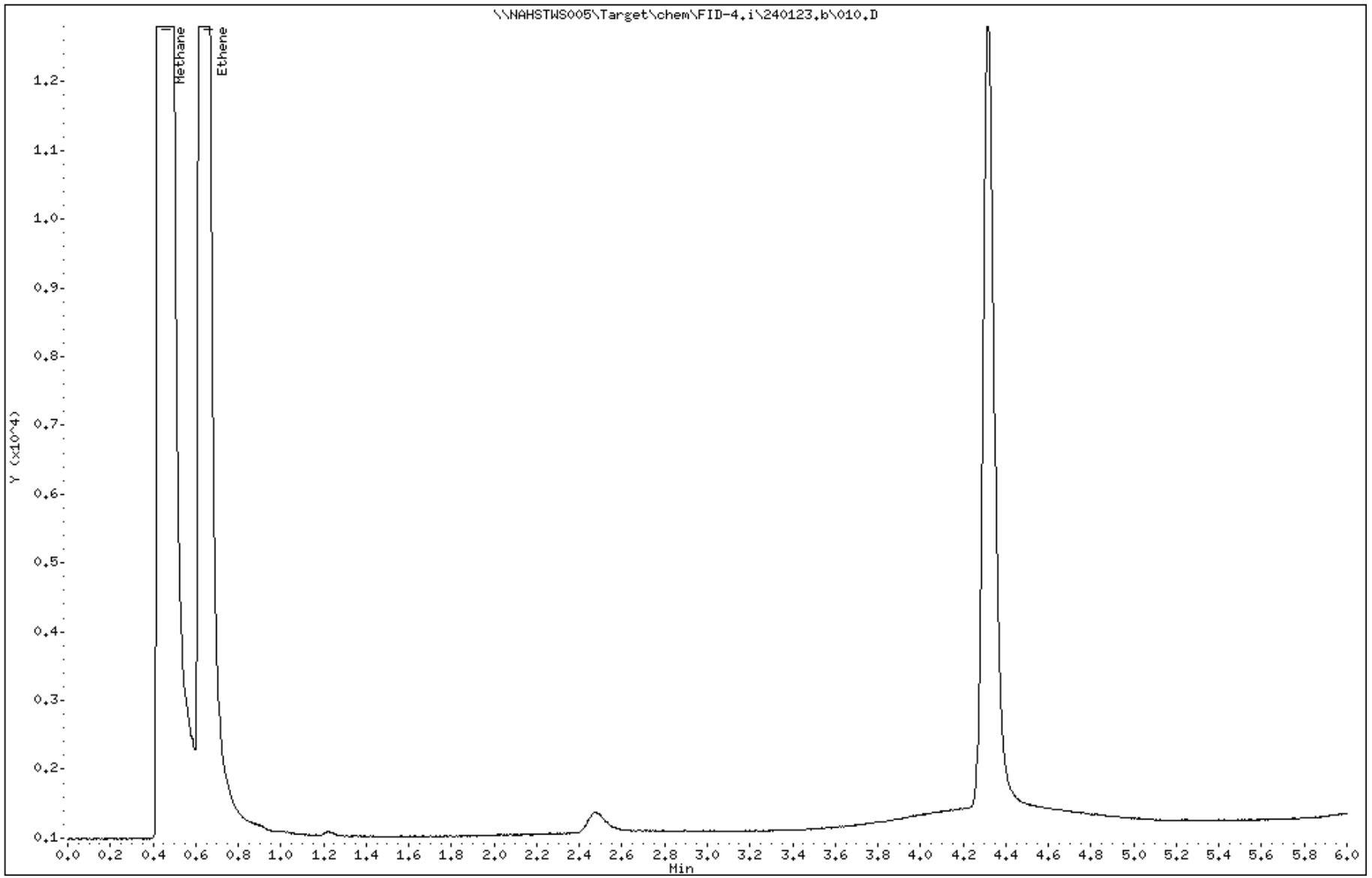
Instrument: FID-4.i

Sample Info: HS24011040-10;HS24011040-10

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\010.D
Inj Date : 23-JAN-2024 10:12
InstruID : FID-4.i
LabSampID : HS24011040-10

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240123.b\011.D Page 1
Report Date: 23-Jan-2024 10:56

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\011.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 23-JAN-2024 10:25
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\240123.b\RSKNI3.m
Meth Date : 23-Jan-2024 10:55 elona.hasa 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: NAHSTW7025

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	8880	9.64700	9.107
2 Ethene	0.636	0.636	0.000	10397	16.8500	17.749
3 Ethane	0.700	0.700	0.000	15002	18.0430	20.850

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240123.b\011.D

Date : 23-JAN-2024 10:25

Client ID: RSK-CCV

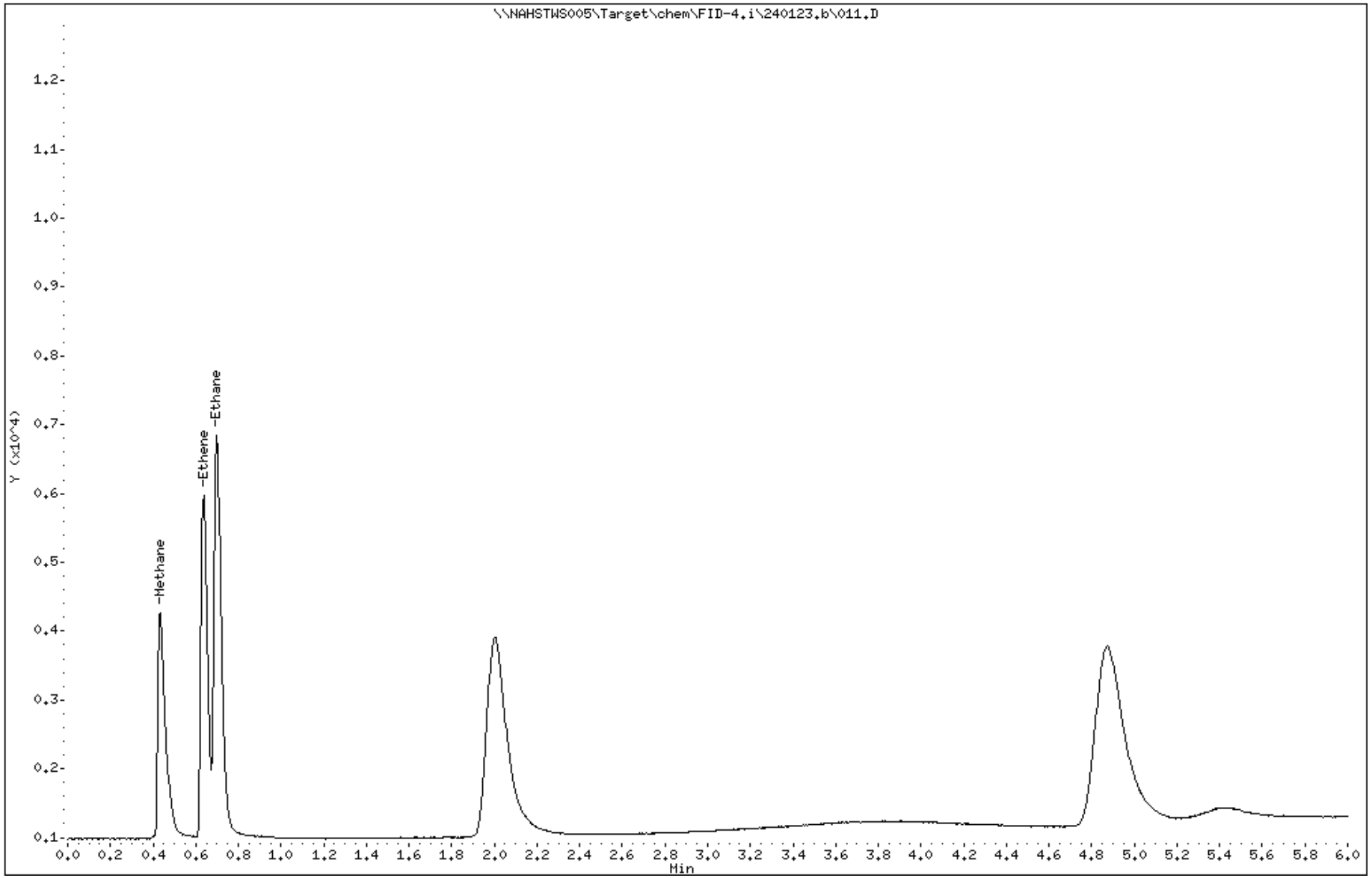
Instrument: FID-4.i

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\240123.b\011.D
Inj Date : 23-JAN-2024 10:25
InstruID : FID-4.i
LabSampID : RSK-CCV

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240123.b\012.D Page 1
Report Date: 23-Jan-2024 16:11

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\012.D
Lab Smp Id: HS24011040-12 Client Smp ID: HS24011040-12
Inj Date : 23-JAN-2024 10:58
Operator : PL Inst ID: FID-4.i
Smp Info : HS24011040-12;HS24011040-12
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\RSKNI3.m
Meth Date : 23-Jan-2024 16:06 elona.hasa Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 12
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7025

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

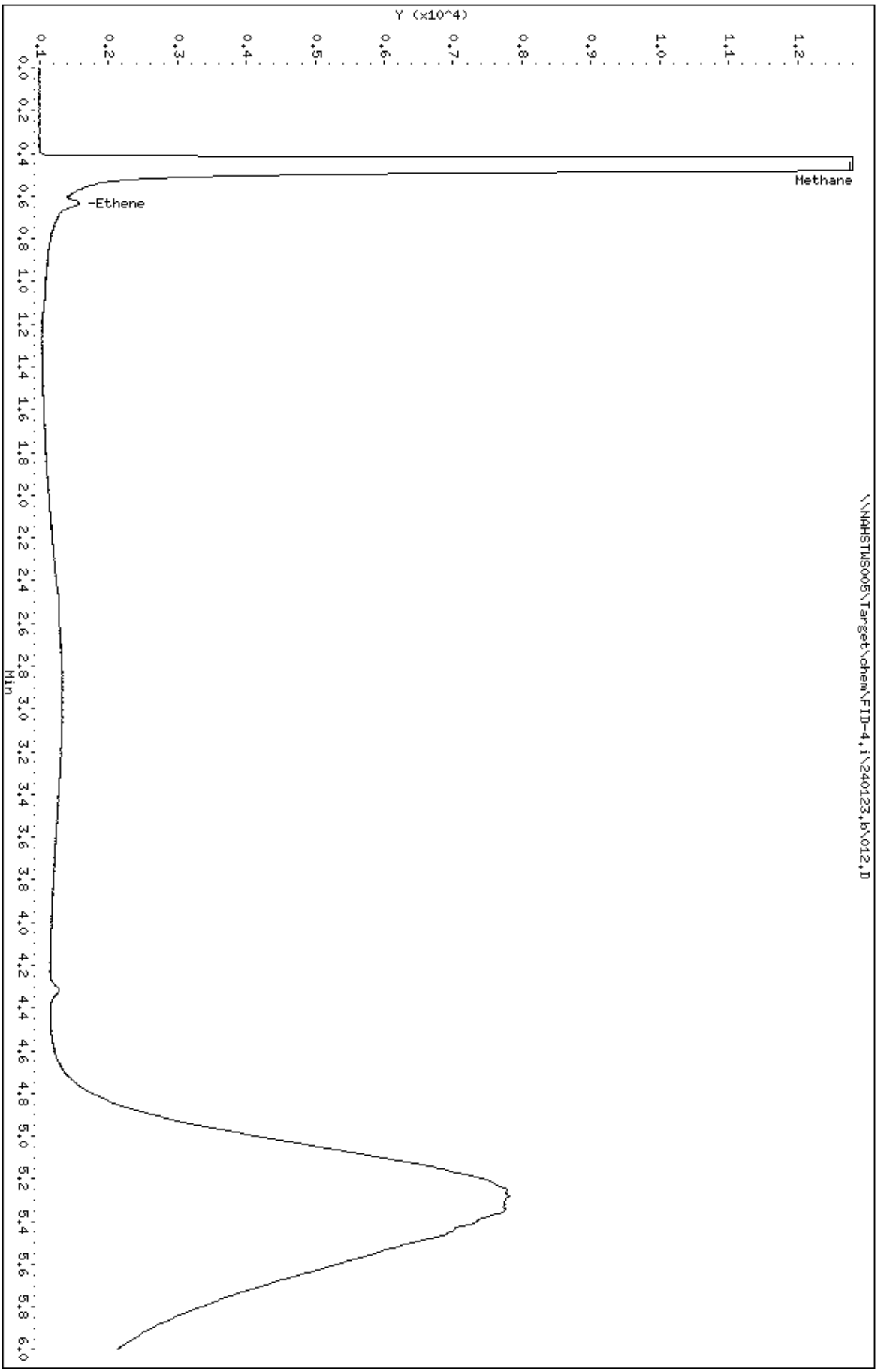
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.433	0.436	-0.003	268399	275.283	275.283(AM)
2 Ethene	0.636	0.640	-0.004	2475	4.22528	4.225(M)

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\240123,b\012,D
Date : 23-JAN-2024 10:58
Client ID: HS24011040-12
Sample Info: HS24011040-12;HS24011040-12
Column phase: Rtx-PLOT

Instrument: FID-4,i
Operator: PL
Column diameter: 0.53

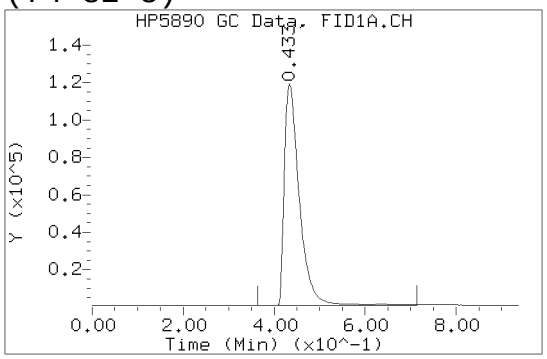


Data File : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\012.D
Inj Date : 23-JAN-2024 10:58
InstruID : FID-4.i
LabSampID : HS24011040-12

Methane (74-82-8)

BEFORE

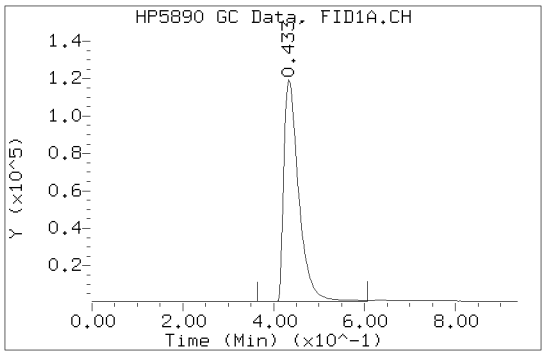
MASS
100
AREA
0
HEIGHT
0
23-Jan-2024
11:07
ALSHS
Server



Reason Code:

AFTER

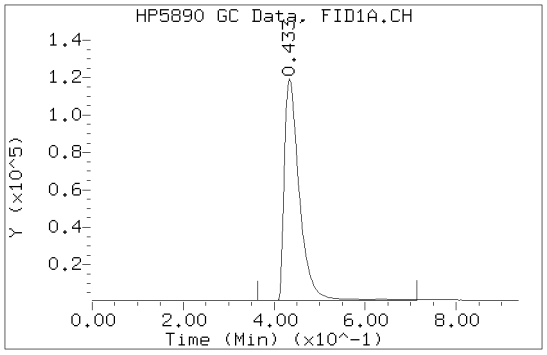
MASS
100
AREA
268399
HEIGHT
118379
23-Jan-2024
16:11
ALSHS
Server



Ethene (74-85-1)

BEFORE

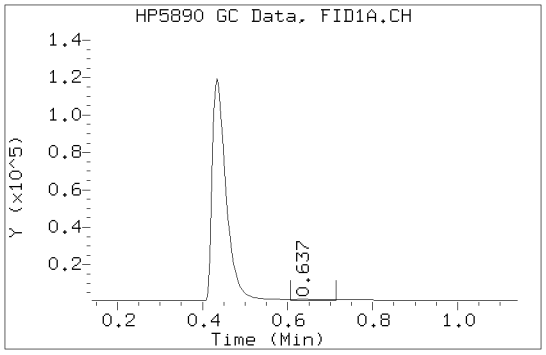
MASS
100
AREA
0
HEIGHT
0
23-Jan-2024
11:07
ALSHS
Server



Reason Code:

AFTER

MASS
100
AREA
2475
HEIGHT
560
23-Jan-2024
16:11
ALSHS
Server



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\013.D
Lab Smp Id: HS24011040-03 Client Smp ID: HS24011040-03
Inj Date : 23-JAN-2024 11:08
Operator : PL Inst ID: FID-4.i
Smp Info : HS24011040-03;HS24011040-03
Misc Info : ;1;0;10
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\RSKNI3.m
Meth Date : 23-Jan-2024 16:06 elona.hasa Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 13
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7025

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

					CONCENTRATIONS	
					ON-COLUMN	FINAL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	0.436	0.436	0.000	17051	17.4883	174.883
2 Ethene	0.640	0.640	0.000	865	1.47671	14.767(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240123.b\013.D

Date : 23-JAN-2024 11:08

Client ID: HS24011040-03

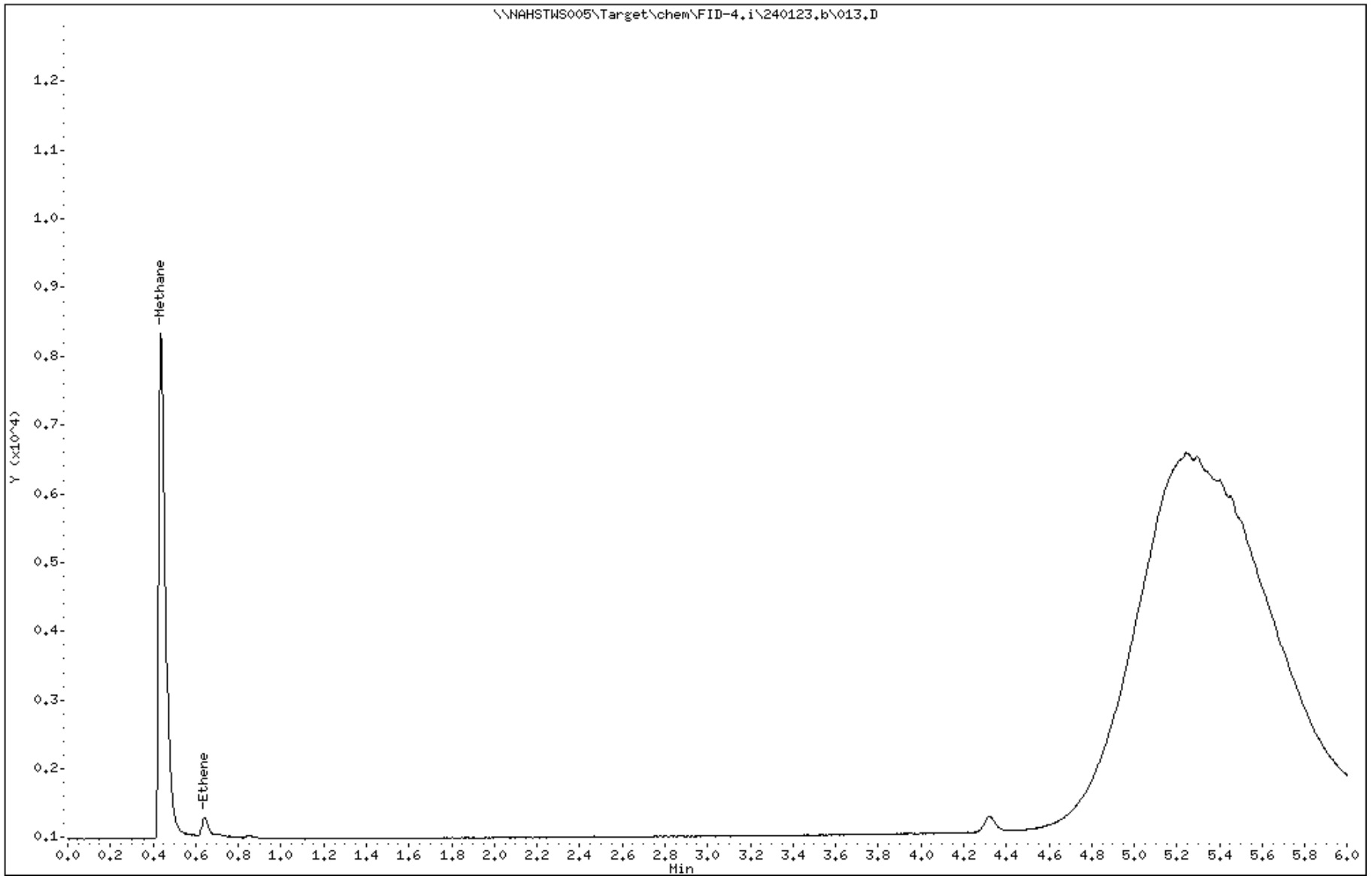
Instrument: FID-4.i

Sample Info: HS24011040-03;HS24011040-03

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



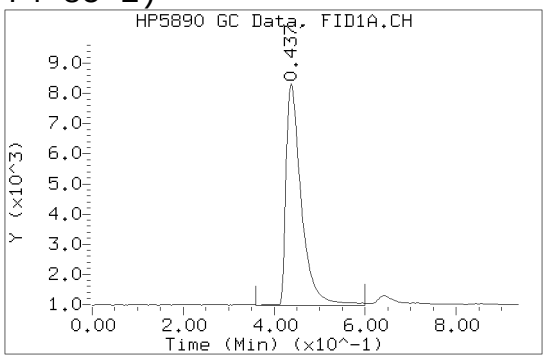
Data File : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\013.D
Inj Date : 23-JAN-2024 11:08
InstruID : FID-4.i
LabSampID : HS24011040-03

Ethene (74-85-1)

Reason Code:

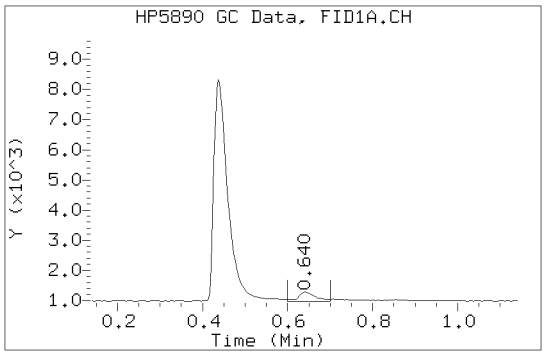
BEFORE

MASS
100
AREA
0
HEIGHT
0
23-Jan-2024
11:16
ALSHS
Server



AFTER

MASS
100
AREA
865
HEIGHT
310
23-Jan-2024
16:12
ALSHS
Server



Data File: \\NAHSTWS005\Target\chem\FID-4.i\240123.b\014.D Page 1
Report Date: 24-Jan-2024 10:01

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\014.D
Lab Smp Id: HS24011040-01 Client Smp ID: HS24011040-01
Inj Date : 23-JAN-2024 11:19
Operator : PL Inst ID: FID-4.i
Smp Info : HS24011040-01;HS24011040-01
Misc Info : ;1;0;100
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\RSKNI3.m
Meth Date : 23-Jan-2024 16:06 elona.hasa Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 14
Dil Factor: 100.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7025

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.443	0.436	0.007	12721	13.0473	1304.728(M)
3 Ethane	0.716	0.703	0.013	599	0.83253	83.253(aM)

QC Flag Legend

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

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240123.b\014.D

Date : 23-JAN-2024 11:19

Client ID: HS24011040-01

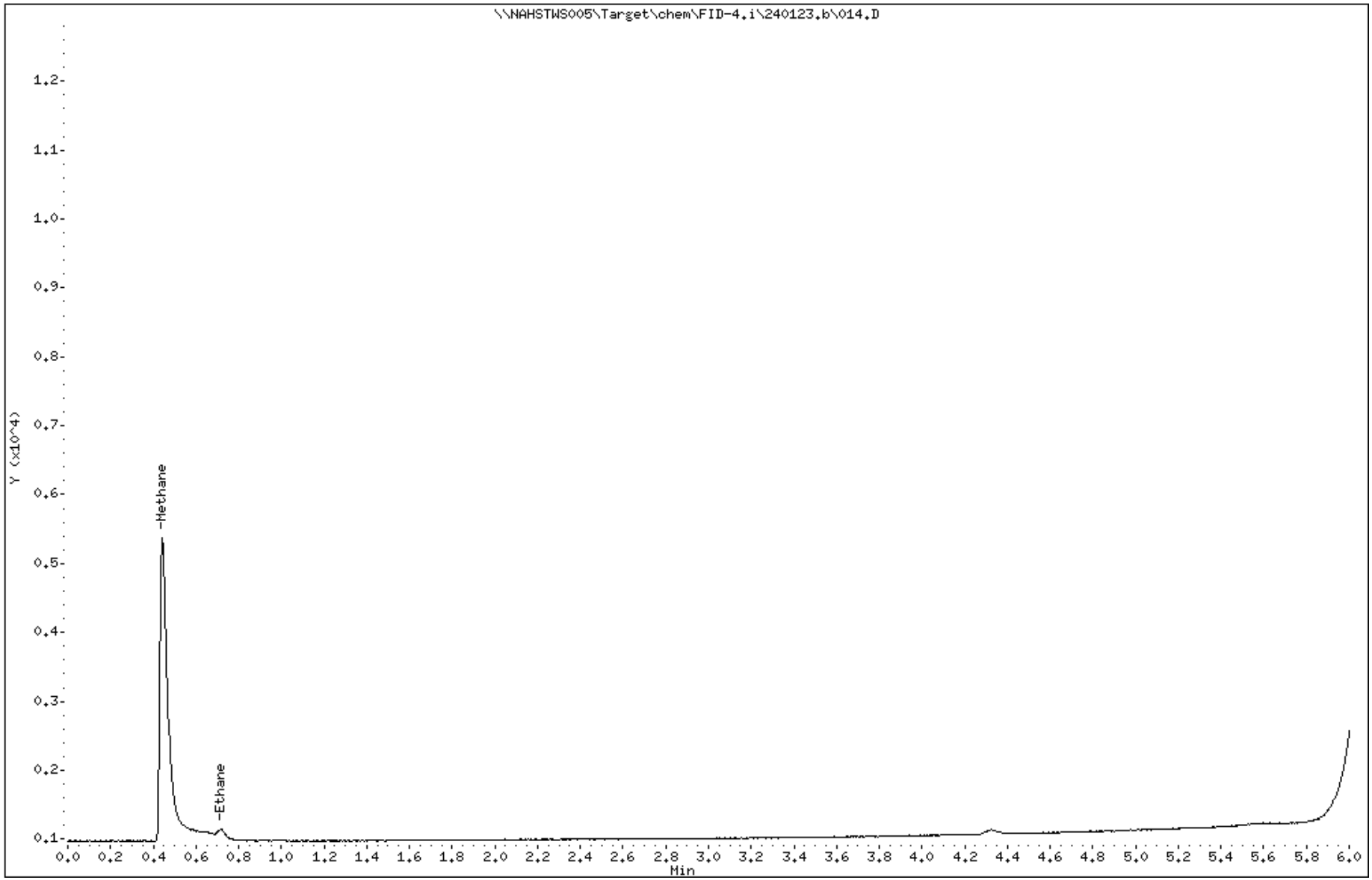
Instrument: FID-4.i

Sample Info: HS24011040-01;HS24011040-01

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53

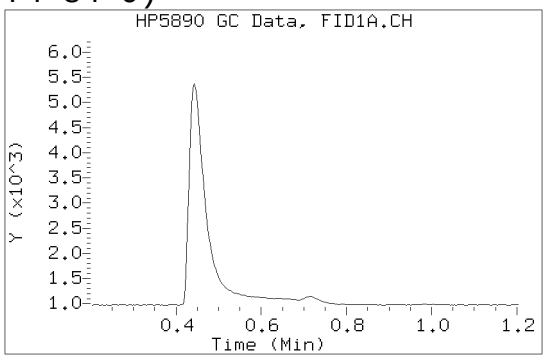


Data File : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\014.D
Inj Date : 23-JAN-2024 11:19
InstruID : FID-4.i
LabSampID : HS24011040-01

Ethane (74-84-0)

BEFORE

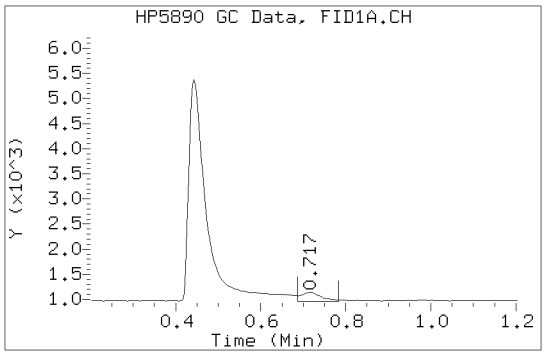
MASS
44
AREA
0
HEIGHT
0
23-Jan-2024
11:26
ALSHS
Server



Reason Code:

AFTER

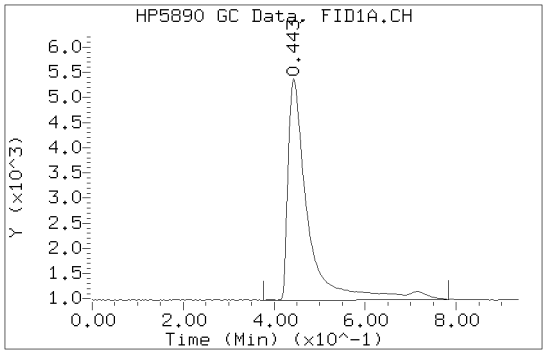
MASS
44
AREA
599
HEIGHT
183
24-Jan-2024
10:01
ALSHS
Server



Methane (74-82-8)

BEFORE

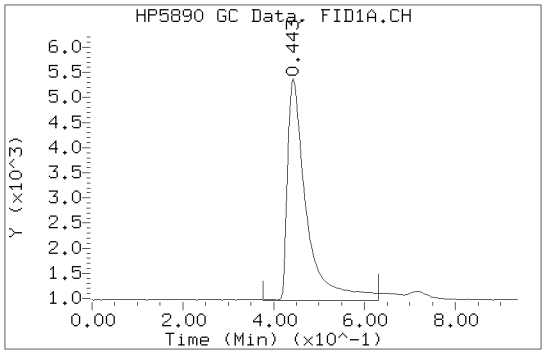
MASS
100
AREA
0
HEIGHT
0
23-Jan-2024
11:26
ALSHS
Server



Reason Code:

AFTER

MASS
100
AREA
12721
HEIGHT
4410
24-Jan-2024
10:01
ALSHS
Server



Data File: \\NAHSTWS005\Target\chem\FID-4.i\240123.b\015.D Page 1
Report Date: 24-Jan-2024 10:04

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\015.D
Lab Smp Id: HS24011040-02 Client Smp ID: HS24011040-02
Inj Date : 23-JAN-2024 11:30
Operator : PL Inst ID: FID-4.i
Smp Info : HS24011040-02;HS24011040-02
Misc Info : ;1;0;100
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\RSKNI3.m
Meth Date : 23-Jan-2024 16:06 elona.hasa Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 15
Dil Factor: 100.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7025

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.443	0.436	0.007	15424	15.8196	1581.961(M)
3 Ethane	0.713	0.703	0.010	721	1.00210	100.209(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\fid-4.i\240123.b\015.d

Page 1

Date : 23-JAN-2024 11:30

Client ID: HS24011040-02

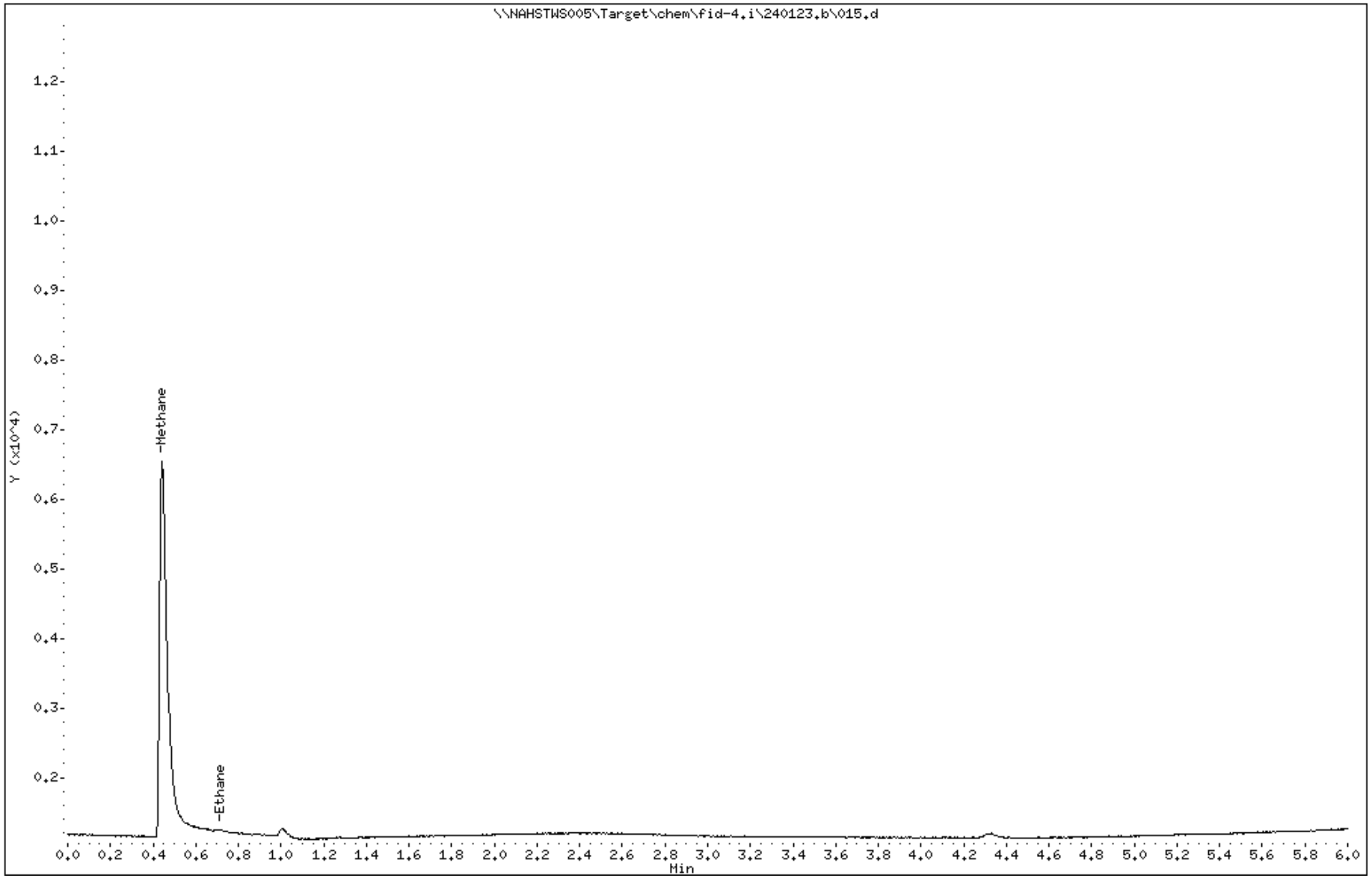
Instrument: FID-4.i

Sample Info: HS24011040-02;HS24011040-02

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



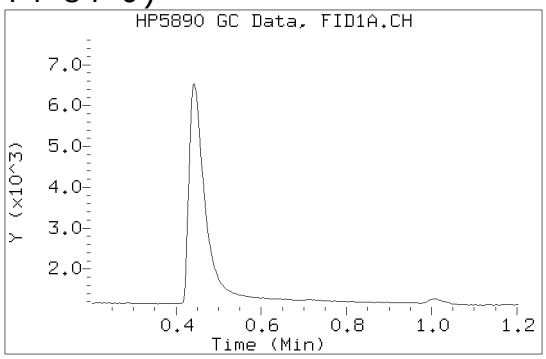
Data File : \\nahstws005\target\chem\fid-4.i\240123.b\015.d
Inj Date : 23-JAN-2024 11:30
InstruID : FID-4.i
LabSampID : HS24011040-02

Ethane (74-84-0)

Reason Code:

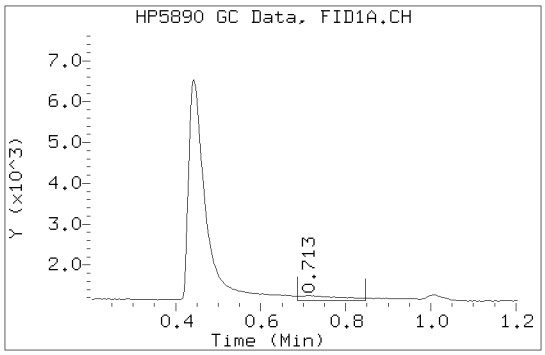
BEFORE

MASS
44
AREA
0
HEIGHT
0
23-Jan-2024
11:36
ALSHS
Server



AFTER

MASS
44
AREA
912
HEIGHT
127
24-Jan-2024
10:12
ALSHS
Server

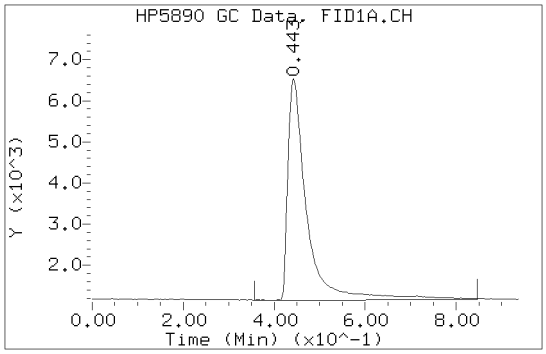


Methane (74-82-8)

Reason Code:

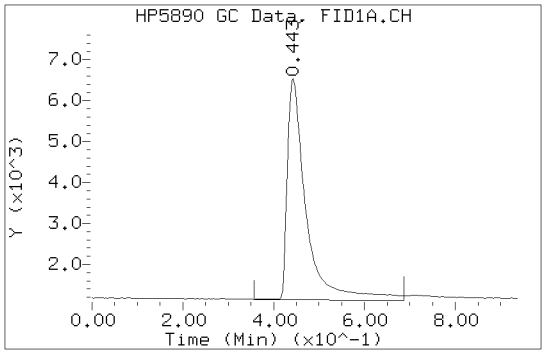
BEFORE

MASS
100
AREA
0
HEIGHT
0
23-Jan-2024
11:36
ALSHS
Server



AFTER

MASS
100
AREA
15674
HEIGHT
5402
24-Jan-2024
10:12
ALSHS
Server



Data File: \\NAHSTWS005\Target\chem\FID-4.i\240123.b\016.D Page 1
Report Date: 24-Jan-2024 10:15

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\016.D
Lab Smp Id: HS24011040-10 Client Smp ID: HS24011040-10
Inj Date : 23-JAN-2024 11:53
Operator : PL Inst ID: FID-4.i
Smp Info : HS24011040-10;HS24011040-10
Misc Info : ;1;0;50
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\RSKNI3.m
Meth Date : 23-Jan-2024 16:06 elona.hasa Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 16
Dil Factor: 50.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7025

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.443	0.436	0.007	15005	15.3899	769.493
2 Ethene	0.646	0.640	0.006	2248	3.83775	191.887(M)
3 Ethane	0.716	0.703	0.013	432	0.60043	30.021(aM)

QC Flag Legend

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

Data File: \\NAHSTWS005\Target\chem\fid-4.i\240123.b\016.d

Date : 23-JAN-2024 11:53

Client ID: HS24011040-10

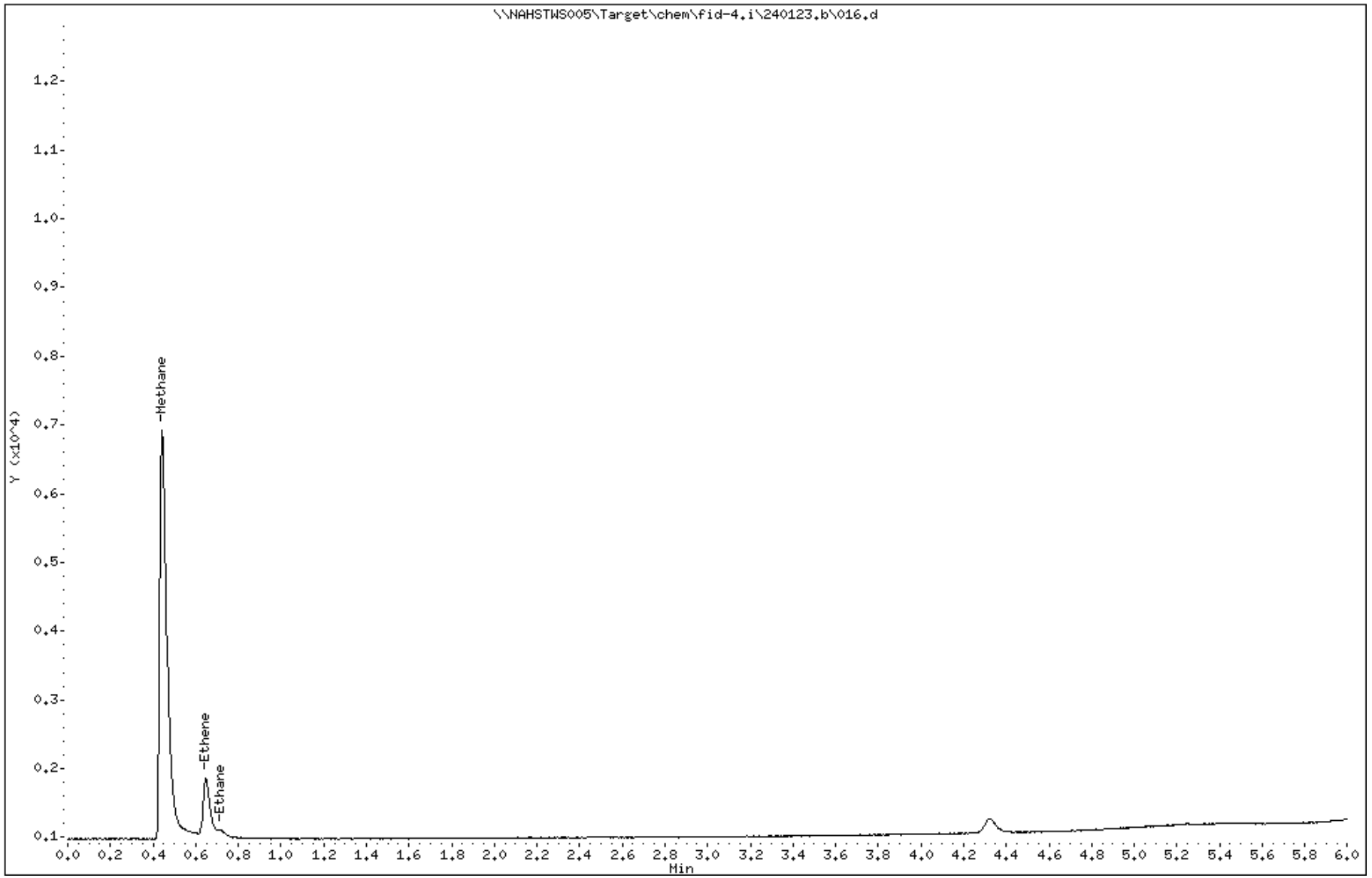
Instrument: FID-4.i

Sample Info: HS24011040-10;HS24011040-10

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



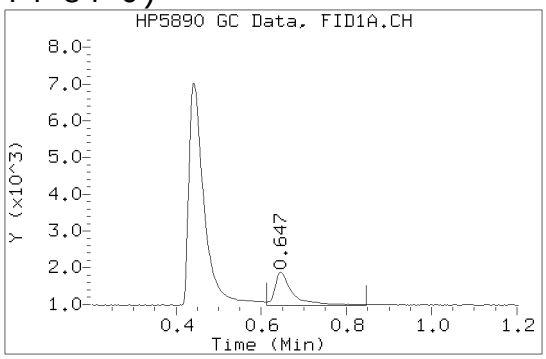
Data File : \\nahstws005\target\chem\fid-4.i\240123.b\016.d
Inj Date : 23-JAN-2024 11:53
InstruID : FID-4.i
LabSampID : HS24011040-10

Ethane (74-84-0)

Reason Code:

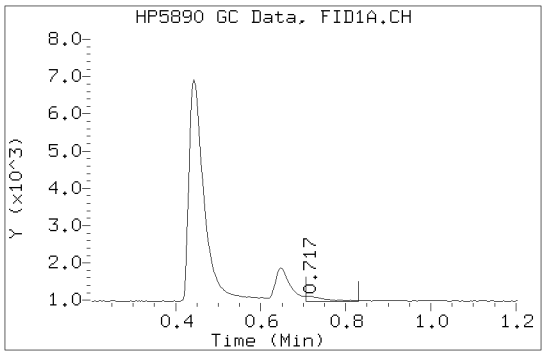
BEFORE

MASS
44
AREA
2521
HEIGHT
892
23-Jan-2024
11:49
ALSHS
Server



AFTER

MASS
44
AREA
432
HEIGHT
137
24-Jan-2024
10:14
ALSHS
Server

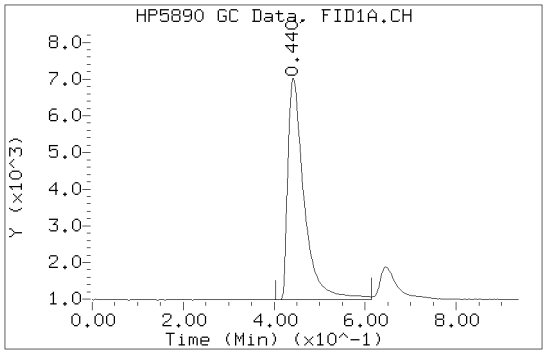


Ethene (74-85-1)

Reason Code:

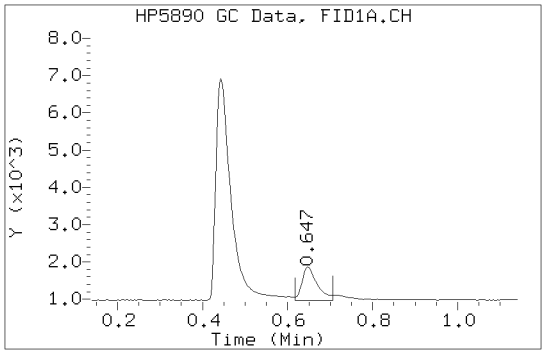
BEFORE

MASS
100
AREA
0
HEIGHT
0
23-Jan-2024
11:49
ALSHS
Server



AFTER

MASS
100
AREA
2248
HEIGHT
889
24-Jan-2024
10:14
ALSHS
Server



Data File: \\NAHSTWS005\Target\chem\FID-4.i\240123.b\017.D Page 1
Report Date: 24-Jan-2024 10:15

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\017.D
Lab Smp Id: HS24011040-12 Client Smp ID: HS24011040-12
Inj Date : 23-JAN-2024 12:05
Operator : PL Inst ID: FID-4.i
Smp Info : HS24011040-12;HS24011040-12
Misc Info : ;1;0;10
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\RSKNI3.m
Meth Date : 23-Jan-2024 16:06 elona.hasa Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 17
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7025

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	0.436	0.004	27540	28.2464	282.463(M)
2 Ethene	0.646	0.640	0.006	320	0.54630	5.462(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240123.b\017.D

Date : 23-JAN-2024 12:05

Client ID: HS24011040-12

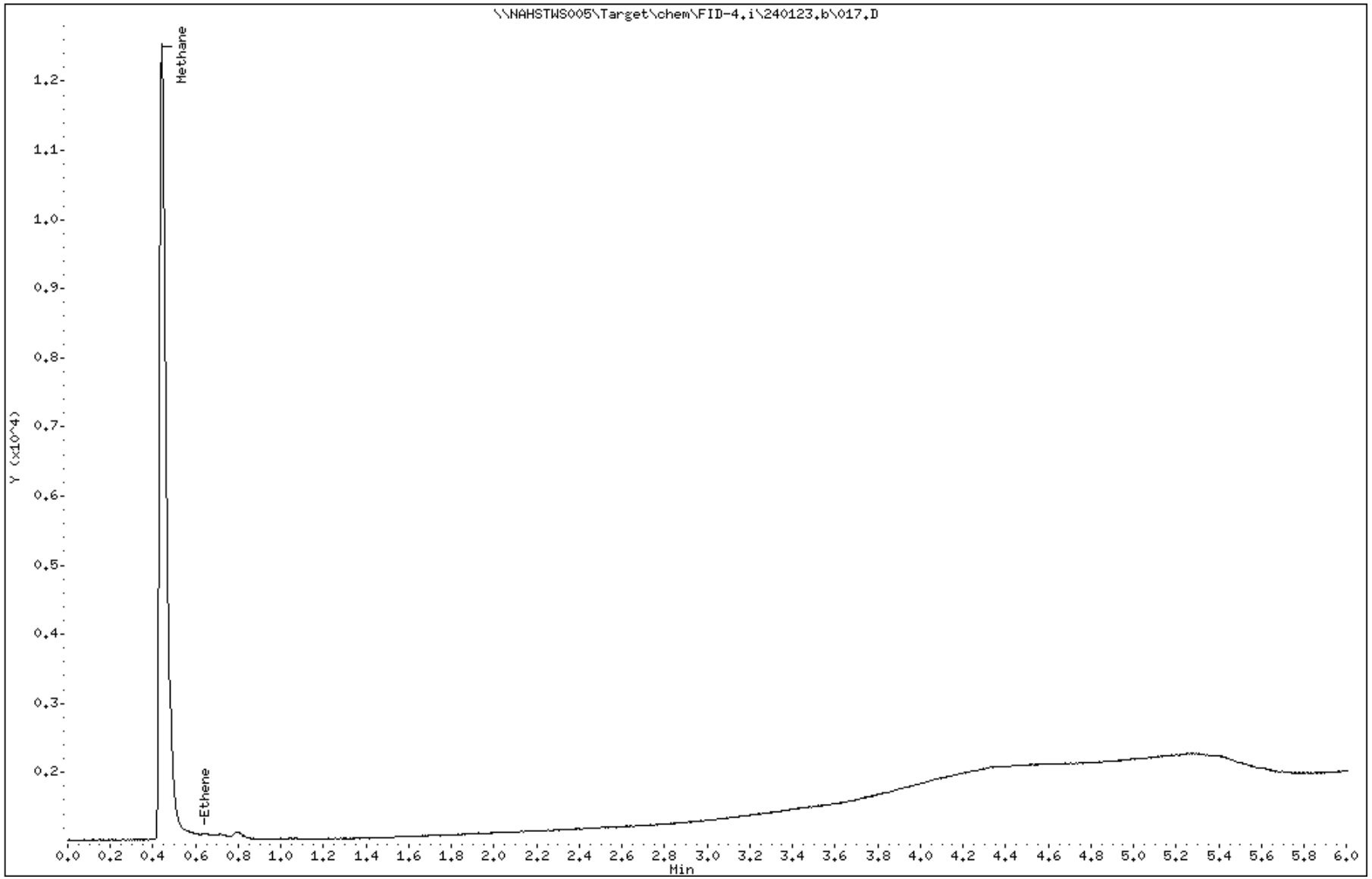
Instrument: FID-4.i

Sample Info: HS24011040-12;HS24011040-12

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53

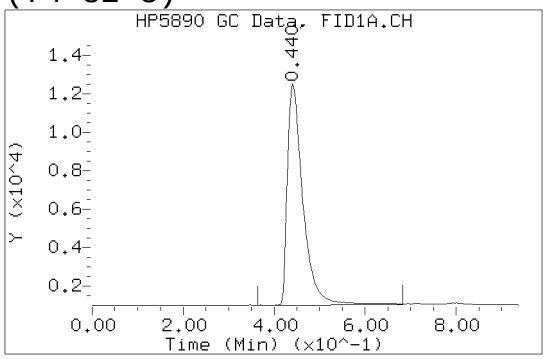


Data File : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\017.D
Inj Date : 23-JAN-2024 12:05
InstruID : FID-4.i
LabSampID : HS24011040-12

Methane (74-82-8)

BEFORE

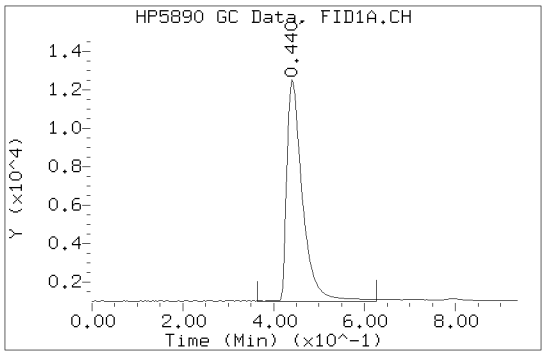
MASS
100
AREA
0
HEIGHT
0
23-Jan-2024
12:12
ALSHS
Server



AFTER

MASS
100
AREA
27540
HEIGHT
11525
24-Jan-2024
10:15
ALSHS
Server

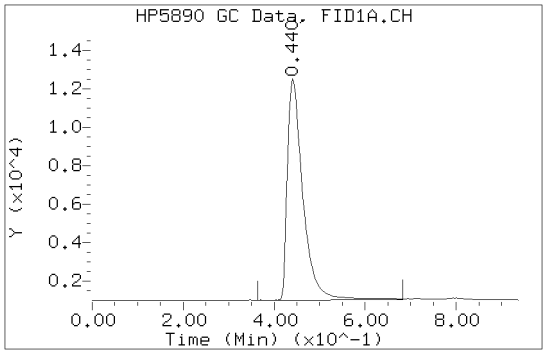
Reason Code:



Ethene (74-85-1)

BEFORE

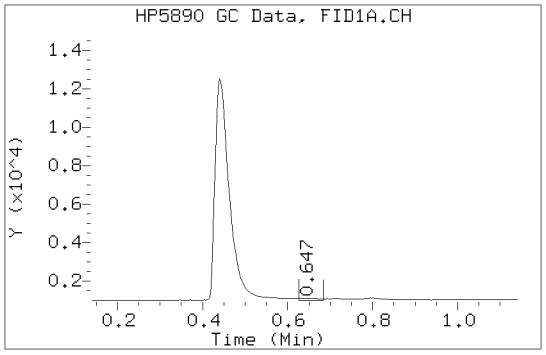
MASS
100
AREA
0
HEIGHT
0
23-Jan-2024
12:12
ALSHS
Server



AFTER

MASS
100
AREA
320
HEIGHT
107
24-Jan-2024
10:15
ALSHS
Server

Reason Code:



Data File: \\NAHSTWS005\Target\chem\FID-4.i\240123.b\022.D Page 1
Report Date: 23-Jan-2024 14:15

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\022.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 23-JAN-2024 14:05
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\240123.b\RSKNI3.m
Meth Date : 23-Jan-2024 14:14 elona.hasa 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: NAHSTW7025

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	8144	9.64700	8.352
2 Ethene	0.633	0.633	0.000	10295	16.8500	17.575(M)
3 Ethane	0.696	0.696	0.000	14165	18.0430	19.687(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240123.b\022.D

Date : 23-JAN-2024 14:05

Client ID: RSK-CCV

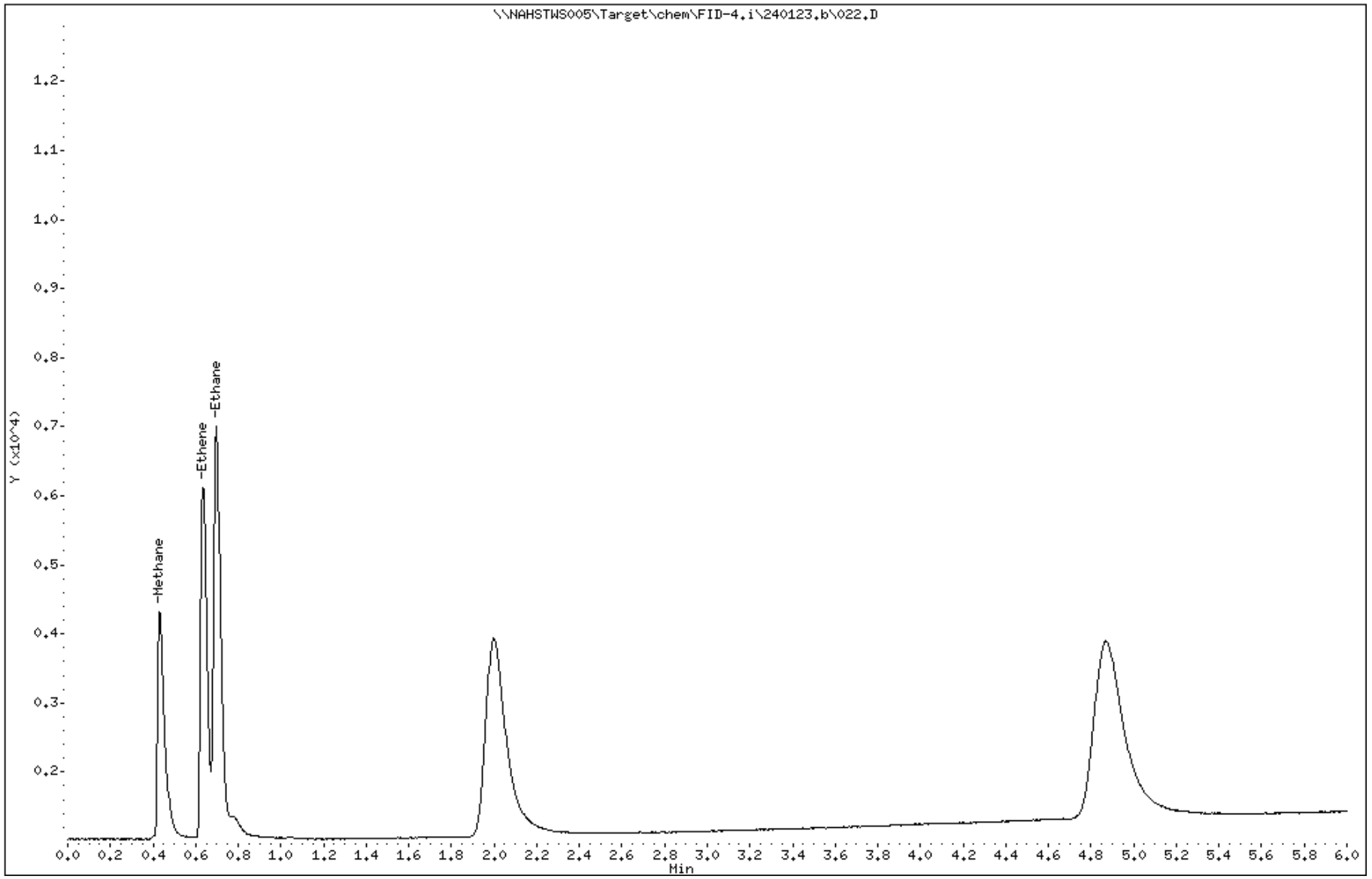
Instrument: FID-4.i

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

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



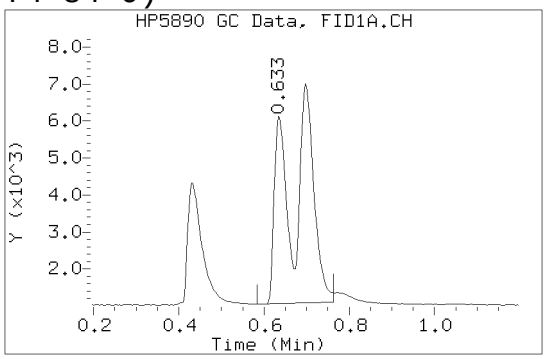
Data File : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\022.D
Inj Date : 23-JAN-2024 14:05
InstruID : FID-4.i
LabSampID : RSK-CCV

Ethane (74-84-0)

Reason Code:

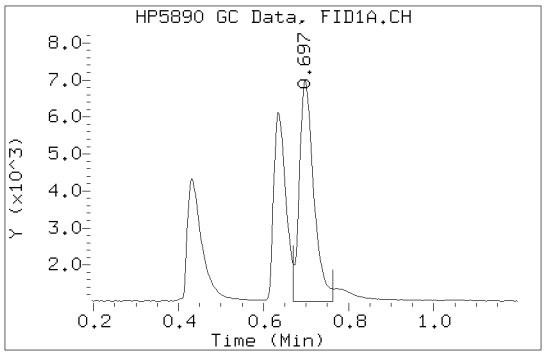
BEFORE

MASS
44
AREA
23624
HEIGHT
5056
23-Jan-2024
14:14
ALSHS
Server



AFTER

MASS
44
AREA
14165
HEIGHT
5987
23-Jan-2024
14:15
ALSHS
Server

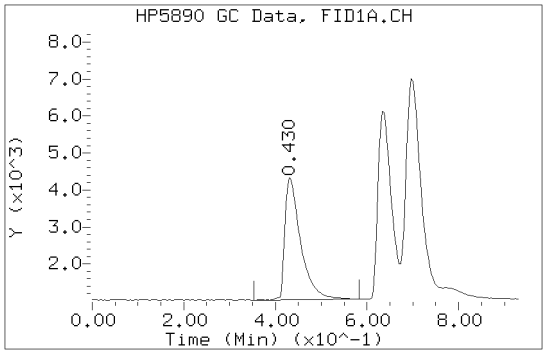


Ethene (74-85-1)

Reason Code:

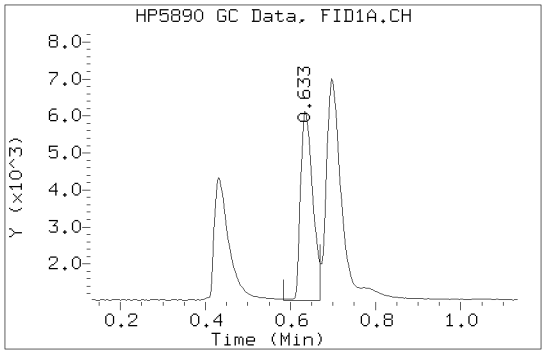
BEFORE

MASS
100
AREA
0
HEIGHT
0
23-Jan-2024
14:14
ALSHS
Server



AFTER

MASS
100
AREA
10295
HEIGHT
5100
23-Jan-2024
14:15
ALSHS
Server



Data File: \\NAHSTWS005\Target\chem\FID-4.i\240123.b\027.D Page 1
Report Date: 23-Jan-2024 16:07

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\027.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 23-JAN-2024 15:48
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\240123.b\RSKNI3.m
Meth Date : 23-Jan-2024 16:06 elona.hasa Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 27 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7025

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	0.436	0.436	0.000	8234	9.64700	8.445
2 Ethene	0.640	0.640	0.000	10230	16.8500	17.464
3 Ethane	0.703	0.703	0.000	14864	18.0430	20.659

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240123.b\027.D

Date : 23-JAN-2024 15:48

Client ID: RSK-CCV

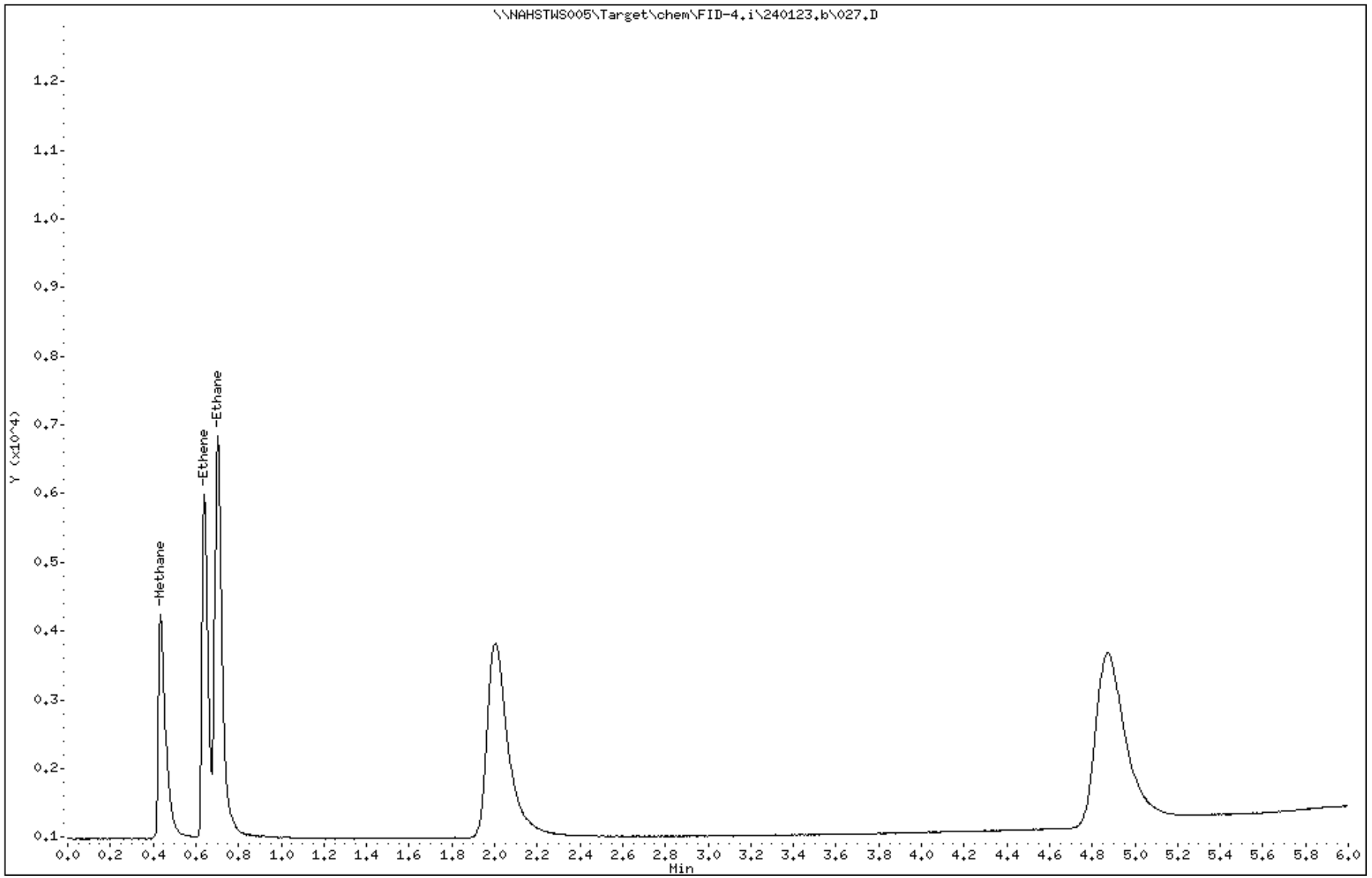
Instrument: FID-4.i

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\240123.b\027.D
Inj Date : 23-JAN-2024 15:48
InstruID : FID-4.i
LabSampID : RSK-CCV

NO MANUAL INTEGRATIONS

HS24011040 Wetchem 9056_W-1

ALS WO# HS24011040

Sequence: 011924
Last Update Operator: alshs.nouser

CD	Name	Comment	Type	Position	Dilution	Level	Instrument Method
	STD1		Calibratio	BB1	1.00	1	Anions Program ISO37mM 150mm short 0.4 Constant current
	STD2		Calibratio	BB2	1.00	2	Anions Program ISO37mM 150mm short 0.4 Constant current
	STD3		Calibratio	BB3	1.00	3	Anions Program ISO37mM 150mm short 0.4 Constant current
	STD4		Calibratio	BB4	1.00	4	Anions Program ISO37mM 150mm short 0.4 Constant current
	STD5		Calibratio	BB5	1.00	5	Anions Program ISO37mM 150mm short 0.4 Constant current
	STD6		Calibratio	BB6	1.00	6	Anions Program ISO37mM 150mm short 0.4 Constant current
	ICV		Unknown	BB7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	ICB		Unknown	BB8	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCV		Unknown	R1	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCB		Unknown	R4	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	MBLK-206036		Unknown	R5	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	LCS-206036		Unknown	R2	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010749-01		Unknown	RA1	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010749-01MS		Unknown	RA2	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010749-01MSD		Unknown	RA3	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010749-02		Unknown	RA4	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010749-03		Unknown	RA5	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010749-04		Unknown	RA6	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010749-05		Unknown	RA7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010749-06		Unknown	RA8	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCV1		Unknown	R3	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCB		Unknown	R7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010749-07		Unknown	RB1	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010749-08		Unknown	RB2	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010749-09		Unknown	RB3	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010749-10		Unknown	RB4	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010749-11		Unknown	RB5	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010749-12		Unknown	RB6	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current

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CD	Name	Comment	Type	Position	Dilution	Level	Instrument Method
	HS24010749-13		Unknown	RB7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010572-06		Unknown	RB8	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCV		Unknown	R1	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCB		Unknown	R4	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	MBLK	9056-W-SH	Unknown	R5	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	LCS		Unknown	R2	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011010-01	9056-W-SH	Unknown	RC1	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011010-01MS		Unknown	RC2	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011010-01MSD		Unknown	RC3	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011010-01DF5	9056-W-SH	Unknown	RC4	5.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011010-02	9056-W-SH	Unknown	RC5	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011010-02DF5	9056-W-SH	Unknown	RC6	5.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011018-01	300-W-SH	Unknown	RE5	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011018-01DF10	300-W-SH	Unknown	RE6	10.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCV1		Unknown	R3	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCB		Unknown	R8	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011010-03	9056-W-SH	Unknown	RC7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011010-03DF10	9056-W-SH	Unknown	RC8	10.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011010-04	9056-W-SH	Unknown	RD1	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011010-04DF10	9056-W-SH	Unknown	RD2	10.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011010-05	9056-W-SH	Unknown	RD3	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011010-05DF10	9056-W-SH	Unknown	RD4	10.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011010-06	9056-W-SH	Unknown	RD5	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011010-06DF10	9056-W-SH	Unknown	RD6	10.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011010-07	9056-W-SH	Unknown	RD7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011010-07DF10	9056-W-SH	Unknown	RD8	10.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCV		Unknown	R1	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCB		Unknown	R6	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current

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	HS24011010-08	9056-W-SH	Unknowr	RE1	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
CD	Name	Comment	Type	Position	Dilution	Level	Instrument Method
	HS24011010-08DF10	9056-W-SH	Unknowr	RE2	10.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011010-09	9056-W-SH	Unknowr	RE3	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011010-09DF5	9056-W-SH	Unknowr	RE4	5.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCV1		Unknowr	R3	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCB		Unknowr	R7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	MBLK	300-W-SH	Unknowr	R5	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	LCS	300-W-SH	Unknowr	R2	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011016-01	300-W-SH	Unknowr	RE7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011016-01DF10	300-W-SH	Unknowr	RE8	10.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011016-03	300-W-SH	Unknowr	GA1	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011016-03DF10	300-W-SH	Unknowr	GA2	10.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010818-01DF50	300-W-SH	Unknowr	GA3	50.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010818-03DF500	300-W-SH	Unknowr	GA4	500.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010818-04DF2	300-W-SH	Unknowr	GA5	2.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010818-06DF500	300-W-SH	Unknowr	GA6	500.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCV		Unknowr	R1	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCB		Unknowr	R6	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010818-07DF10	300-W-SH	Unknowr	GA7	10.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010818-07MSDF1(	300-W-SH	Unknowr	GA8	10.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010818-07MSDDF	300-W-SH	Unknowr	GB1	10.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010818-08DF20	300-W-SH	Unknowr	GB2	20.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010818-09DF500	300-W-SH	Unknowr	GB3	500.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010818-10DF20	300-W-SH	Unknowr	GB4	20.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011034-06	300-W-SH	Unknowr	GB5	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010878-01DF20	300-W-SH	Unknowr	GB6	20.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010878-01MSDF2(	300-W-SH	Unknowr	GB7	20.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010878-01MSDDF	300-W-SH	Unknowr	GB8	20.00		Anions Program ISO37mM 150mm short 0.4 Constant current

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	CCV1		Unknowr	R3	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
CD	**Name**	**Comment**	**Type**	**Position**	**Dilution**	**Level**	**Instrument Method**
	CCB		Unknowr	R7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011040-01	9056-W-SH	Unknowr	GC1	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011040-01DF10	9056-W-SH	Unknowr	GC2	10.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011040-02	9056-W-SH	Unknowr	GC3	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011040-02DF10	9056-W-SH	Unknowr	GC4	10.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011040-03DF10	9056-W-SH	Unknowr	GC5	10.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011040-03MSDF1(	9056-W-SH	Unknowr	GC6	10.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011040-03MSDDF	9056-W-SH	Unknowr	GC7	10.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011040-03DF200	9056-W-SH	Unknowr	GC8	200.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCV		Unknowr	R1	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCB		Unknowr	R6	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCV1		Unknowr	R3	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCB		Unknowr	R7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	LCSD	300-W-SH	Unknowr	R2	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	LOQ	300-W-SH	Unknowr	GD1	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCV		Unknowr	R1	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCB		Unknowr	R6	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCV1		Unknowr	R3	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCB		Unknowr	R8	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	MBLK		Unknowr	R5	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	LCS		Unknowr	R2	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011059-01		Unknowr	RA1	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011059-01DF20		Unknowr	RA2	20.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011052-03		Unknowr	RA3	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011052-10		Unknowr	RA4	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011052-10MS		Unknowr	RA5	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011052-10MSD		Unknowr	RA6	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current

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	RINSE		Unknowr	B7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
CD	**Name**	**Comment**	**Type**	**Position**	**Dilution**	**Level**	**Instrument Method**
	HS24011052-10DF2		Unknowr	RA4	2.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCV		Unknowr	R1	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCB		Unknowr	R4	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	MBLK-206096		Unknowr	R5	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	LCS-206096		Unknowr	R2	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010734-10		Unknowr	RA7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010734-10MS		Unknowr	RA8	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010734-10MSD		Unknowr	RB1	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010734-11		Unknowr	RB2	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010734-12		Unknowr	RB3	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010734-13		Unknowr	RB4	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010734-14		Unknowr	RB5	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010734-15		Unknowr	RB6	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCV1		Unknowr	R3	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCB		Unknowr	R7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010734-16		Unknowr	RB7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010734-17		Unknowr	RB8	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010734-18		Unknowr	RC1	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010865-01		Unknowr	RC2	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010865-02		Unknowr	RC3	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010865-03		Unknowr	RC4	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010865-04		Unknowr	RC5	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010865-05		Unknowr	RC6	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010865-06		Unknowr	RC7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010865-07		Unknowr	RC8	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCV		Unknowr	R1	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCB		Unknowr	R6	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current

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	HS24010865-08		Unknowr	RD1	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
CD	**Name**	**Comment**	**Type**	**Position**	**Dilution**	**Level**	**Instrument Method**
	HS24010865-09		Unknowr	RD2	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010865-10		Unknowr	RD3	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010865-11		Unknowr	RD4	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	MBLK-206154		Unknowr	R5	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	LCS-206154		Unknowr	R2	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS23121859-04		Unknowr	RD5	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS23121859-04MS		Unknowr	RD6	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS23121859-04MSD		Unknowr	RD7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS23121859-08DF2		Unknowr	RD8	2.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCV1		Unknowr	R3	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCB		Unknowr	R7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS23121859-12		Unknowr	RE1	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS23121859-16		Unknowr	RE2	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010865-12		Unknowr	RE3	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010865-13		Unknowr	RE4	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010865-14		Unknowr	RE5	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010865-15		Unknowr	RE6	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010865-16		Unknowr	RE7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010865-17		Unknowr	RE8	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010865-18		Unknowr	GA1	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCV		Unknowr	R1	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCB		Unknowr	R6	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010868-01		Unknowr	GA2	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010868-02		Unknowr	GA3	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010868-03		Unknowr	GA4	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010868-04		Unknowr	GA5	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010868-05DF2		Unknowr	GA6	2.00		Anions Program ISO37mM 150mm short 0.4 Constant current

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CD	Name	Comment	Type	Position	Dilution	Level	Instrument Method
	HS24010868-06		Unknown	GA7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010868-07		Unknown	GA8	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010868-08		Unknown	GB1	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010868-09		Unknown	GB2	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCV1		Unknown	R3	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCB		Unknown	R7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	STD1		Unknown	BA1	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	STD2		Unknown	BA2	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	STD3		Unknown	BA3	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	STD4		Unknown	BA4	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	STD5		Unknown	BA5	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	STD6		Unknown	BA6	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	ICV		Unknown	BA7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	ICV		Unknown	BA8	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	ICB		Unknown	R5	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	ICB		Unknown	R6	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	ICB		Unknown	R7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	ICB		Unknown	R8	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	ICB		Unknown	G7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	ICB		Unknown	G8	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	STD1		Unknown	BA1	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	STD2		Unknown	BA2	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	STD3		Unknown	BA3	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	STD4		Unknown	BA4	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	STD5		Unknown	BA5	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	STD6		Unknown	BA6	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	ICV		Unknown	BA7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	ICV		Unknown	BA8	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current

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	ICB		Unknowr	R4	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
CD	**Name**	**Comment**	**Type**	**Position**	**Dilution**	**Level**	**Instrument Method**
	ICB		Unknowr	R5	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	ICB		Unknowr	R6	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	ICB		Unknowr	R7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	ICB		Unknowr	R8	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	ICB		Unknowr	G7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	ICB		Unknowr	G8	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current

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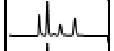
Processing Method	CD	Name	me	Status	Inject Time
Anions Processing Method ISO		STD1	5.0	Finished	1/17/2024 11:06:02 PM -06:00
Anions Processing Method ISO		STD2	5.0	Finished	1/17/2024 11:11:50 PM -06:00
Anions Processing Method ISO		STD3	5.0	Finished	1/17/2024 11:17:39 PM -06:00
Anions Processing Method ISO		STD4	5.0	Finished	1/17/2024 11:23:28 PM -06:00
Anions Processing Method ISO		STD5	5.0	Finished	1/17/2024 11:29:17 PM -06:00
Anions Processing Method ISO		STD6	5.0	Finished	1/17/2024 11:35:06 PM -06:00
Anions Processing Method ISO		ICV	5.0	Finished	1/17/2024 11:40:55 PM -06:00
Anions Processing Method ISO		ICB	5.0	Finished	1/17/2024 11:58:21 PM -06:00
Anions Processing Method ISO		CCV	5.0	Finished	1/19/2024 8:19:11 AM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/19/2024 8:30:52 AM -06:00
Anions Processing Method ISO		MBLK-206036	5.0	Finished	1/19/2024 8:36:43 AM -06:00
Anions Processing Method ISO		LCS-206036	5.0	Finished	1/19/2024 8:42:33 AM -06:00
Anions Processing Method ISO		HS24010749-01	5.0	Finished	1/19/2024 8:54:25 AM -06:00
Anions Processing Method ISO		HS24010749-01MS	5.0	Finished	1/19/2024 9:00:15 AM -06:00
Anions Processing Method ISO		HS24010749-01MSD	5.0	Finished	1/19/2024 9:06:06 AM -06:00
Anions Processing Method ISO		HS24010749-02	5.0	Finished	1/19/2024 9:11:56 AM -06:00
Anions Processing Method ISO		HS24010749-03	5.0	Finished	1/19/2024 9:17:46 AM -06:00
Anions Processing Method ISO		HS24010749-04	5.0	Finished	1/19/2024 9:23:37 AM -06:00
Anions Processing Method ISO		HS24010749-05	5.0	Finished	1/19/2024 9:29:27 AM -06:00
Anions Processing Method ISO		HS24010749-06	5.0	Finished	1/19/2024 9:35:18 AM -06:00
Anions Processing Method ISO		CCV1	5.0	Finished	1/19/2024 9:46:58 AM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/19/2024 9:52:49 AM -06:00
Anions Processing Method ISO		HS24010749-07	5.0	Finished	1/19/2024 10:04:30 AM -06:00
Anions Processing Method ISO		HS24010749-08	5.0	Finished	1/19/2024 10:10:20 AM -06:00
Anions Processing Method ISO		HS24010749-09	5.0	Finished	1/19/2024 10:16:11 AM -06:00
Anions Processing Method ISO		HS24010749-10	5.0	Finished	1/19/2024 10:22:01 AM -06:00
Anions Processing Method ISO		HS24010749-11	5.0	Finished	1/19/2024 10:27:51 AM -06:00
Anions Processing Method ISO		HS24010749-12	5.0	Finished	1/19/2024 10:33:42 AM -06:00

Sequence: 011924
Last Update Operator: alshs.nouser

Processing Method	CD	Name	me	Status	Inject Time
Anions Processing Method ISO		HS24010749-13	5.0	Finished	1/19/2024 10:39:32 AM -06:00
Anions Processing Method ISO		HS24010572-06	5.0	Finished	1/19/2024 10:45:23 AM -06:00
Anions Processing Method ISO		CCV	5.0	Finished	1/19/2024 11:03:05 AM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/19/2024 11:14:46 AM -06:00
Anions Processing Method ISO		MBLK	5.0	Finished	1/19/2024 11:20:36 AM -06:00
Anions Processing Method ISO		LCS	5.0	Finished	1/19/2024 11:32:17 AM -06:00
Anions Processing Method ISO		HS24011010-01	5.0	Finished	1/19/2024 12:39:33 PM -06:00
Anions Processing Method ISO		HS24011010-01MS	5.0	Finished	1/19/2024 12:45:35 PM -06:00
Anions Processing Method ISO		HS24011010-01MSD	5.0	Finished	1/19/2024 12:51:26 PM -06:00
Anions Processing Method ISO		HS24011010-01DF5	5.0	Finished	1/19/2024 12:57:16 PM -06:00
Anions Processing Method ISO		HS24011010-02	5.0	Finished	1/19/2024 1:03:07 PM -06:00
Anions Processing Method ISO		HS24011010-02DF5	5.0	Finished	1/19/2024 1:08:57 PM -06:00
Anions Processing Method ISO		HS24011018-01	5.0	Finished	1/19/2024 1:14:48 PM -06:00
Anions Processing Method ISO		HS24011018-01DF10	5.0	Finished	1/19/2024 1:20:38 PM -06:00
Anions Processing Method ISO		CCV1	5.0	Finished	1/19/2024 1:38:21 PM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/19/2024 1:50:02 PM -06:00
Anions Processing Method ISO		HS24011010-03	5.0	Finished	1/19/2024 1:55:53 PM -06:00
Anions Processing Method ISO		HS24011010-03DF10	5.0	Finished	1/19/2024 2:01:43 PM -06:00
Anions Processing Method ISO		HS24011010-04	5.0	Finished	1/19/2024 2:07:34 PM -06:00
Anions Processing Method ISO		HS24011010-04DF10	5.0	Finished	1/19/2024 2:13:24 PM -06:00
Anions Processing Method ISO		HS24011010-05	5.0	Finished	1/19/2024 2:19:15 PM -06:00
Anions Processing Method ISO		HS24011010-05DF10	5.0	Finished	1/19/2024 2:25:05 PM -06:00
Anions Processing Method ISO		HS24011010-06	5.0	Finished	1/19/2024 2:30:56 PM -06:00
Anions Processing Method ISO		HS24011010-06DF10	5.0	Finished	1/19/2024 2:36:46 PM -06:00
Anions Processing Method ISO		HS24011010-07	5.0	Finished	1/19/2024 2:42:37 PM -06:00
Anions Processing Method ISO		HS24011010-07DF10	5.0	Finished	1/19/2024 2:48:27 PM -06:00
Anions Processing Method ISO		CCV	5.0	Finished	1/19/2024 3:05:59 PM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/19/2024 3:11:50 PM -06:00

Sequence: 011924
Last Update Operator: alshs.nouser

Processing Method	CD	Name	Volume	Status	Inject Time
Anions Processing Method ISO		HS24011010-08	5.0	Finished	1/19/2024 3:23:31 PM -06:00
Anions Processing Method ISO		HS24011010-08DF10	5.0	Finished	1/19/2024 3:29:33 PM -06:00
Anions Processing Method ISO		HS24011010-09	5.0	Finished	1/19/2024 3:35:24 PM -06:00
Anions Processing Method ISO		HS24011010-09DF5	5.0	Finished	1/19/2024 3:41:14 PM -06:00
Anions Processing Method ISO		CCV1	5.0	Finished	1/19/2024 4:04:37 PM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/19/2024 4:10:28 PM -06:00
Anions Processing Method ISO		MBLK	5.0	Finished	1/19/2024 4:31:12 PM -06:00
Anions Processing Method ISO		LCS	5.0	Finished	1/19/2024 5:00:37 PM -06:00
Anions Processing Method ISO		HS24011016-01	5.0	Finished	1/19/2024 5:06:27 PM -06:00
Anions Processing Method ISO		HS24011016-01DF10	5.0	Finished	1/19/2024 5:12:18 PM -06:00
Anions Processing Method ISO		HS24011016-03	5.0	Finished	1/19/2024 5:18:20 PM -06:00
Anions Processing Method ISO		HS24011016-03DF10	5.0	Finished	1/19/2024 5:24:10 PM -06:00
Anions Processing Method ISO		HS24010818-01DF50	5.0	Finished	1/19/2024 5:30:01 PM -06:00
Anions Processing Method ISO		HS24010818-03DF500	5.0	Finished	1/19/2024 5:35:52 PM -06:00
Anions Processing Method ISO		HS24010818-04DF2	5.0	Finished	1/19/2024 5:41:54 PM -06:00
Anions Processing Method ISO		HS24010818-06DF500	5.0	Finished	1/19/2024 5:47:56 PM -06:00
Anions Processing Method ISO		CCV	5.0	Finished	1/19/2024 6:11:19 PM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/19/2024 6:17:10 PM -06:00
Anions Processing Method ISO		HS24010818-07DF10	5.0	Finished	1/19/2024 6:28:51 PM -06:00
Anions Processing Method ISO		HS24010818-07MSDF10	5.0	Finished	1/19/2024 6:34:41 PM -06:00
Anions Processing Method ISO		HS24010818-07MSDDF	5.0	Finished	1/19/2024 6:40:32 PM -06:00
Anions Processing Method ISO		HS24010818-08DF20	5.0	Finished	1/19/2024 6:46:23 PM -06:00
Anions Processing Method ISO		HS24010818-09DF500	5.0	Finished	1/19/2024 6:52:13 PM -06:00
Anions Processing Method ISO		HS24010818-10DF20	5.0	Finished	1/19/2024 6:58:04 PM -06:00
Anions Processing Method ISO		HS24011034-06	5.0	Finished	1/19/2024 7:03:54 PM -06:00
Anions Processing Method ISO		HS24010878-01DF20	5.0	Finished	1/19/2024 7:09:45 PM -06:00
Anions Processing Method ISO		HS24010878-01MSDF20	5.0	Finished	1/19/2024 7:15:35 PM -06:00
Anions Processing Method ISO		HS24010878-01MSDDF	5.0	Finished	1/19/2024 7:21:26 PM -06:00

Sequence: 011924
Last Update Operator: alshs.nouser

Anions Processing Method ISO		CCV1	5.0	Finished	1/19/2024 7:39:09 PM -06:00
Processing Method	**CD**	**Name**	**me**	**Status**	**Inject Time**
Anions Processing Method ISO		CCB	5.0	Finished	1/19/2024 7:44:59 PM -06:00
Anions Processing Method ISO		HS24011040-01	5.0	Finished	1/19/2024 7:56:40 PM -06:00
Anions Processing Method ISO		HS24011040-01DF10	5.0	Finished	1/19/2024 8:02:31 PM -06:00
Anions Processing Method ISO		HS24011040-02	5.0	Finished	1/19/2024 8:08:21 PM -06:00
Anions Processing Method ISO		HS24011040-02DF10	5.0	Finished	1/19/2024 8:14:12 PM -06:00
Anions Processing Method ISO		HS24011040-03DF10	5.0	Finished	1/19/2024 8:20:02 PM -06:00
Anions Processing Method ISO		HS24011040-03MSDF1(	5.0	Finished	1/19/2024 8:25:52 PM -06:00
Anions Processing Method ISO		HS24011040-03MSDDF	5.0	Finished	1/19/2024 8:31:43 PM -06:00
Anions Processing Method ISO		HS24011040-03DF200	5.0	Finished	1/19/2024 8:37:33 PM -06:00
Anions Processing Method ISO		CCV	5.0	Finished	1/19/2024 9:12:36 PM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/19/2024 9:18:26 PM -06:00
Anions Processing Method ISO		CCV1	5.0	Finished	1/20/2024 7:55:06 AM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/20/2024 8:00:55 AM -06:00
Anions Processing Method ISO		LCSD	5.0	Finished	1/20/2024 8:24:13 AM -06:00
Anions Processing Method ISO		LOQ	5.0	Finished	1/20/2024 8:30:03 AM -06:00
Anions Processing Method ISO		CCV	5.0	Finished	1/20/2024 8:47:31 AM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/20/2024 9:05:00 AM -06:00
Anions Processing Method ISO		CCV1	5.0	Finished	1/20/2024 11:42:27 AM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/20/2024 11:54:06 AM -06:00
Anions Processing Method ISO		MBLK	5.0	Finished	1/20/2024 11:59:56 AM -06:00
Anions Processing Method ISO		LCS	5.0	Finished	1/20/2024 12:17:35 PM -06:00
Anions Processing Method ISO		HS24011059-01	5.0	Finished	1/20/2024 12:29:26 PM -06:00
Anions Processing Method ISO		HS24011059-01DF20	5.0	Finished	1/20/2024 12:35:15 PM -06:00
Anions Processing Method ISO		HS24011052-03	5.0	Finished	1/20/2024 12:41:16 PM -06:00
Anions Processing Method ISO		HS24011052-10	5.0	Finished	1/20/2024 12:47:17 PM -06:00
Anions Processing Method ISO		HS24011052-10MS	5.0	Finished	1/20/2024 12:53:07 PM -06:00
Anions Processing Method ISO		HS24011052-10MSD	5.0	Finished	1/20/2024 12:58:56 PM -06:00

Sequence: 011924
Last Update Operator: alshs.nouser

Anions Processing Method ISO		RINSE	5.0	Finished	1/20/2024 1:04:57 PM -06:00
Processing Method	**CD**	**Name**	**me**	**Status**	**Inject Time**
Anions Processing Method ISO		HS24011052-10DF2	5.0	Finished	1/20/2024 1:10:46 PM -06:00
Anions Processing Method ISO		CCV	5.0	Finished	1/20/2024 1:34:04 PM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/20/2024 1:45:44 PM -06:00
Anions Processing Method ISO		MBLK-206096	5.0	Finished	1/20/2024 1:57:23 PM -06:00
Anions Processing Method ISO		LCS-206096	5.0	Finished	1/20/2024 2:09:02 PM -06:00
Anions Processing Method ISO		HS24010734-10	5.0	Finished	1/20/2024 2:14:51 PM -06:00
Anions Processing Method ISO		HS24010734-10MS	5.0	Finished	1/20/2024 2:20:41 PM -06:00
Anions Processing Method ISO		HS24010734-10MSD	5.0	Finished	1/20/2024 2:26:31 PM -06:00
Anions Processing Method ISO		HS24010734-11	5.0	Finished	1/20/2024 2:32:20 PM -06:00
Anions Processing Method ISO		HS24010734-12	5.0	Finished	1/20/2024 2:38:10 PM -06:00
Anions Processing Method ISO		HS24010734-13	5.0	Finished	1/20/2024 2:43:59 PM -06:00
Anions Processing Method ISO		HS24010734-14	5.0	Finished	1/20/2024 2:49:49 PM -06:00
Anions Processing Method ISO		HS24010734-15	5.0	Finished	1/20/2024 2:55:39 PM -06:00
Anions Processing Method ISO		CCV1	5.0	Finished	1/20/2024 3:07:18 PM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/20/2024 3:13:07 PM -06:00
Anions Processing Method ISO		HS24010734-16	5.0	Finished	1/20/2024 3:24:47 PM -06:00
Anions Processing Method ISO		HS24010734-17	5.0	Finished	1/20/2024 3:30:36 PM -06:00
Anions Processing Method ISO		HS24010734-18	5.0	Finished	1/20/2024 3:36:26 PM -06:00
Anions Processing Method ISO		HS24010865-01	5.0	Finished	1/20/2024 3:42:15 PM -06:00
Anions Processing Method ISO		HS24010865-02	5.0	Finished	1/20/2024 3:48:03 PM -06:00
Anions Processing Method ISO		HS24010865-03	5.0	Finished	1/20/2024 3:53:54 PM -06:00
Anions Processing Method ISO		HS24010865-04	5.0	Finished	1/20/2024 3:59:53 PM -06:00
Anions Processing Method ISO		HS24010865-05	5.0	Finished	1/20/2024 4:05:42 PM -06:00
Anions Processing Method ISO		HS24010865-06	5.0	Finished	1/20/2024 4:11:32 PM -06:00
Anions Processing Method ISO		HS24010865-07	5.0	Finished	1/20/2024 4:17:22 PM -06:00
Anions Processing Method ISO		CCV	5.0	Finished	1/20/2024 4:29:01 PM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/20/2024 4:40:40 PM -06:00

Sequence: 011924
Last Update Operator: alshs.nouser

Anions Processing Method ISO		HS24010865-08	5.0	Finished	1/20/2024 4:52:20 PM -06:00
Processing Method	**CD**	**Name**	**me**	**Status**	**Inject Time**
Anions Processing Method ISO		HS24010865-09	5.0	Finished	1/20/2024 4:58:09 PM -06:00
Anions Processing Method ISO		HS24010865-10	5.0	Finished	1/20/2024 5:03:59 PM -06:00
Anions Processing Method ISO		HS24010865-11	5.0	Finished	1/20/2024 5:09:49 PM -06:00
Anions Processing Method ISO		MBLK-206154	5.0	Finished	1/20/2024 5:27:28 PM -06:00
Anions Processing Method ISO		LCS-206154	5.0	Finished	1/20/2024 5:45:23 PM -06:00
Anions Processing Method ISO		HS23121859-04	5.0	Finished	1/20/2024 5:51:22 PM -06:00
Anions Processing Method ISO		HS23121859-04MS	5.0	Finished	1/20/2024 5:57:11 PM -06:00
Anions Processing Method ISO		HS23121859-04MSD	5.0	Finished	1/20/2024 6:02:59 PM -06:00
Anions Processing Method ISO		HS23121859-08DF2	5.0	Finished	1/20/2024 6:08:48 PM -06:00
Anions Processing Method ISO		CCV1	5.0	Finished	1/20/2024 6:26:17 PM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/20/2024 6:32:06 PM -06:00
Anions Processing Method ISO		HS23121859-12	5.0	Finished	1/20/2024 6:43:51 PM -06:00
Anions Processing Method ISO		HS23121859-16	5.0	Finished	1/20/2024 6:49:41 PM -06:00
Anions Processing Method ISO		HS24010865-12	5.0	Finished	1/20/2024 6:55:30 PM -06:00
Anions Processing Method ISO		HS24010865-13	5.0	Finished	1/20/2024 7:01:20 PM -06:00
Anions Processing Method ISO		HS24010865-14	5.0	Finished	1/20/2024 7:07:10 PM -06:00
Anions Processing Method ISO		HS24010865-15	5.0	Finished	1/20/2024 7:13:00 PM -06:00
Anions Processing Method ISO		HS24010865-16	5.0	Finished	1/20/2024 7:18:49 PM -06:00
Anions Processing Method ISO		HS24010865-17	5.0	Finished	1/20/2024 7:24:39 PM -06:00
Anions Processing Method ISO		HS24010865-18	5.0	Finished	1/20/2024 7:30:40 PM -06:00
Anions Processing Method ISO		CCV	5.0	Finished	1/20/2024 7:48:09 PM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/20/2024 7:53:59 PM -06:00
Anions Processing Method ISO		HS24010868-01	5.0	Finished	1/20/2024 8:05:38 PM -06:00
Anions Processing Method ISO		HS24010868-02	5.0	Finished	1/20/2024 8:11:28 PM -06:00
Anions Processing Method ISO		HS24010868-03	5.0	Finished	1/20/2024 8:17:18 PM -06:00
Anions Processing Method ISO		HS24010868-04	5.0	Finished	1/20/2024 8:23:07 PM -06:00
Anions Processing Method ISO		HS24010868-05DF2	5.0	Finished	1/20/2024 8:28:57 PM -06:00

Sequence: 011924
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Anions Processing Method ISO		HS24010868-06	5.0	Finished	1/20/2024 8:34:47 PM -06:00
Processing Method	**CD**	**Name**	**me**	**Status**	**Inject Time**
Anions Processing Method ISO		HS24010868-07	5.0	Finished	1/20/2024 8:40:36 PM -06:00
Anions Processing Method ISO		HS24010868-08	5.0	Finished	1/20/2024 8:46:26 PM -06:00
Anions Processing Method ISO		HS24010868-09	5.0	Finished	1/20/2024 8:52:16 PM -06:00
Anions Processing Method ISO		CCV1	5.0	Finished	1/20/2024 9:10:02 PM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/20/2024 9:27:31 PM -06:00
Anions Processing Method ISO		STD1	5.0	Finished	1/20/2024 10:32:06 PM -06:00
Anions Processing Method ISO		STD2	5.0	Finished	1/20/2024 10:37:56 PM -06:00
Anions Processing Method ISO		STD3	5.0	Finished	1/20/2024 10:43:46 PM -06:00
Anions Processing Method ISO		STD4	5.0	Finished	1/20/2024 10:49:36 PM -06:00
Anions Processing Method ISO		STD5	5.0	Finished	1/20/2024 10:55:25 PM -06:00
Anions Processing Method ISO		STD6	5.0	Finished	1/20/2024 11:01:15 PM -06:00
Anions Processing Method ISO		ICV	5.0	Finished	1/20/2024 11:07:05 PM -06:00
Anions Processing Method ISO		ICV	5.0	Finished	1/20/2024 11:12:54 PM -06:00
Anions Processing Method ISO		ICB	5.0	Finished	1/20/2024 11:18:44 PM -06:00
Anions Processing Method ISO		ICB	5.0	Finished	1/20/2024 11:24:34 PM -06:00
Anions Processing Method ISO		ICB	5.0	Finished	1/20/2024 11:30:24 PM -06:00
Anions Processing Method ISO		ICB	5.0	Finished	1/20/2024 11:36:13 PM -06:00
Anions Processing Method ISO		ICB	5.0	Finished	1/20/2024 11:42:03 PM -06:00
Anions Processing Method ISO		ICB	5.0	Finished	1/20/2024 11:47:53 PM -06:00
Anions Processing Method ISO		STD1	5.0	Finished	1/20/2024 11:53:48 PM -06:00
Anions Processing Method ISO		STD2	5.0	Finished	1/20/2024 11:59:47 PM -06:00
Anions Processing Method ISO		STD3	5.0	Finished	1/21/2024 12:05:37 AM -06:00
Anions Processing Method ISO		STD4	5.0	Finished	1/21/2024 12:11:26 AM -06:00
Anions Processing Method ISO		STD5	5.0	Finished	1/21/2024 12:17:16 AM -06:00
Anions Processing Method ISO		STD6	5.0	Finished	1/21/2024 12:23:05 AM -06:00
Anions Processing Method ISO		ICV	5.0	Finished	1/21/2024 12:28:55 AM -06:00
Anions Processing Method ISO		ICV	5.0	Finished	1/21/2024 12:34:45 AM -06:00

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Anions Processing Method ISO		ICB	5.0	Finished	1/21/2024 12:40:34 AM -06:00
Processing Method	**CD**	**Name**	**me**	**Status**	**Inject Time**
Anions Processing Method ISO		ICB	5.0	Finished	1/21/2024 12:46:24 AM -06:00
Anions Processing Method ISO		ICB	5.0	Finished	1/21/2024 12:52:14 AM -06:00
Anions Processing Method ISO		ICB	5.0	Finished	1/21/2024 12:58:03 AM -06:00
Anions Processing Method ISO		ICB	5.0	Finished	1/21/2024 1:03:53 AM -06:00
Anions Processing Method ISO		ICB	5.0	Finished	1/21/2024 1:09:54 AM -06:00
Anions Processing Method ISO		ICB	5.0	Finished	1/21/2024 1:15:44 AM -06:00

Sequence: 011924
Injection #6: STD6

Calibration

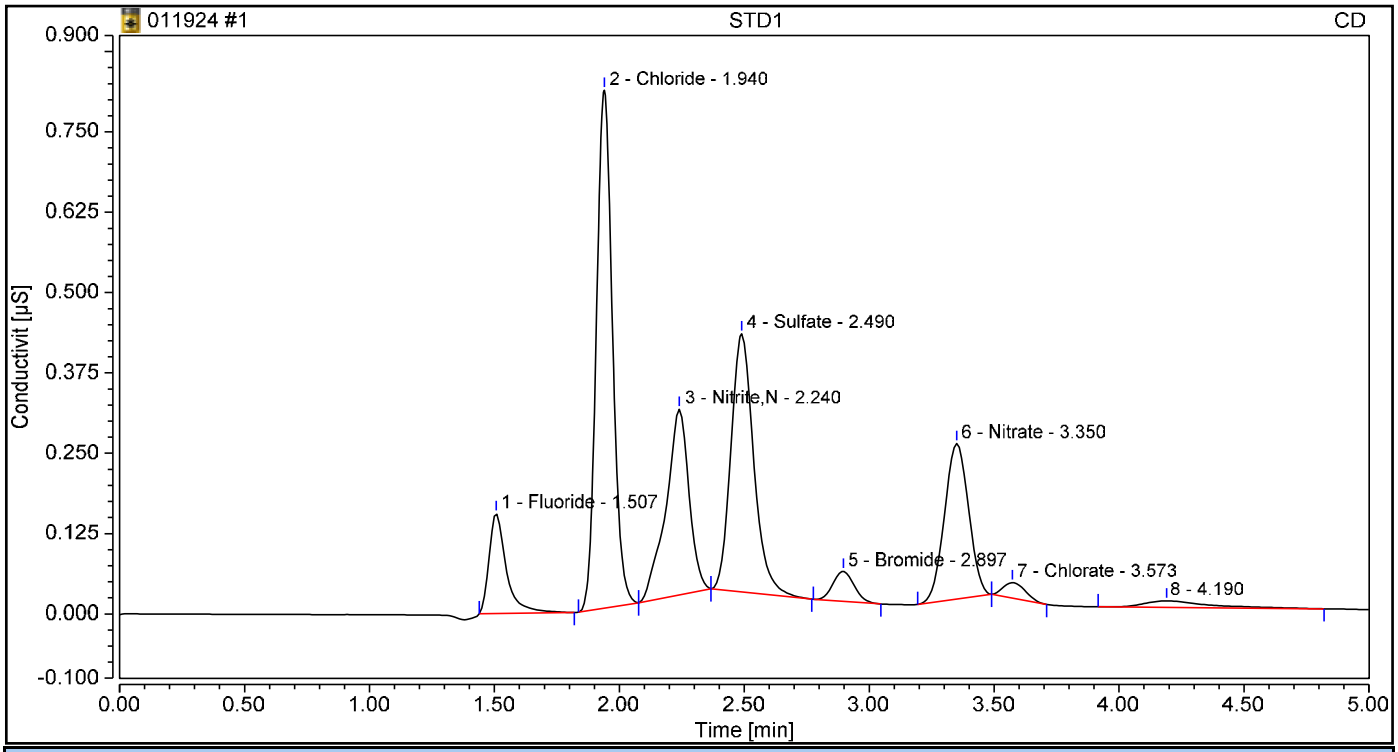
Peak No.	Peak Name	Cal.Type	Eval.Type	Number of Points	Rel.Std.Dev. %	Coeff.of Determination	C0 (Offset)	C1 (Slope)	C2 (Curve)
1	***Fluoride***	***Lin, WithOffset, 1/A***	***Area***	***6***	***12.3496***	***0.99937***	***-0.0109***	***0.2095***	***0.0000***
2	Chloride	Lin, WithOffset, 1/A	Area	6	3.6912	0.99994	-0.0182	0.1489	0.0000
3	Nitrite,N	Quad, WithOffset, 1/A	Area	6	5.0176	0.99987	0.0005	0.2946	-0.0039
4	Sulfate	Quad, WithOffset, 1/A	Area	6	2.4290	0.99998	-0.0099	0.1035	-0.0001
5	Bromide	Quad, WithOffset, 1/A	Area	6	5.9092	0.99988	-0.0021	0.0617	0.0001
6	Nitrate	Lin, WithOffset, 1/A	Area	6	3.5857	0.99994	-0.0065	0.3329	0.0000
7	Chlorate	Quad, WithOffset, 1/A	Area	6	8.0958	0.99975	-0.0012	0.0341	-0.0003
n.a.	Phosphate	Lin, WithOffset, 1/A	Area	0	n.a.	n.a.	n.a.	n.a.	n.a.
Maximum					**12.3496**	0.99998			
Minimum					2.4290	**0.99937**			

Chromatogram and Results

Injection Details

Injection Name:	**STD1**	*Run Time (min):*	**5.00**
Vial Number:	**BB1**	*Injection Volume:*	**5.00**
Injection Type:	**Calibration Standard**	*Channel:*	**CD**
Calibration Level:	**1**	*Wavelength:*	**n.a.**
Instrument Method:	**Anions Program ISO37mM 150mm short 0.4 Const**	*Bandwidth:*	**n.a.**
Processing Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**17/Jan/24 23:06**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

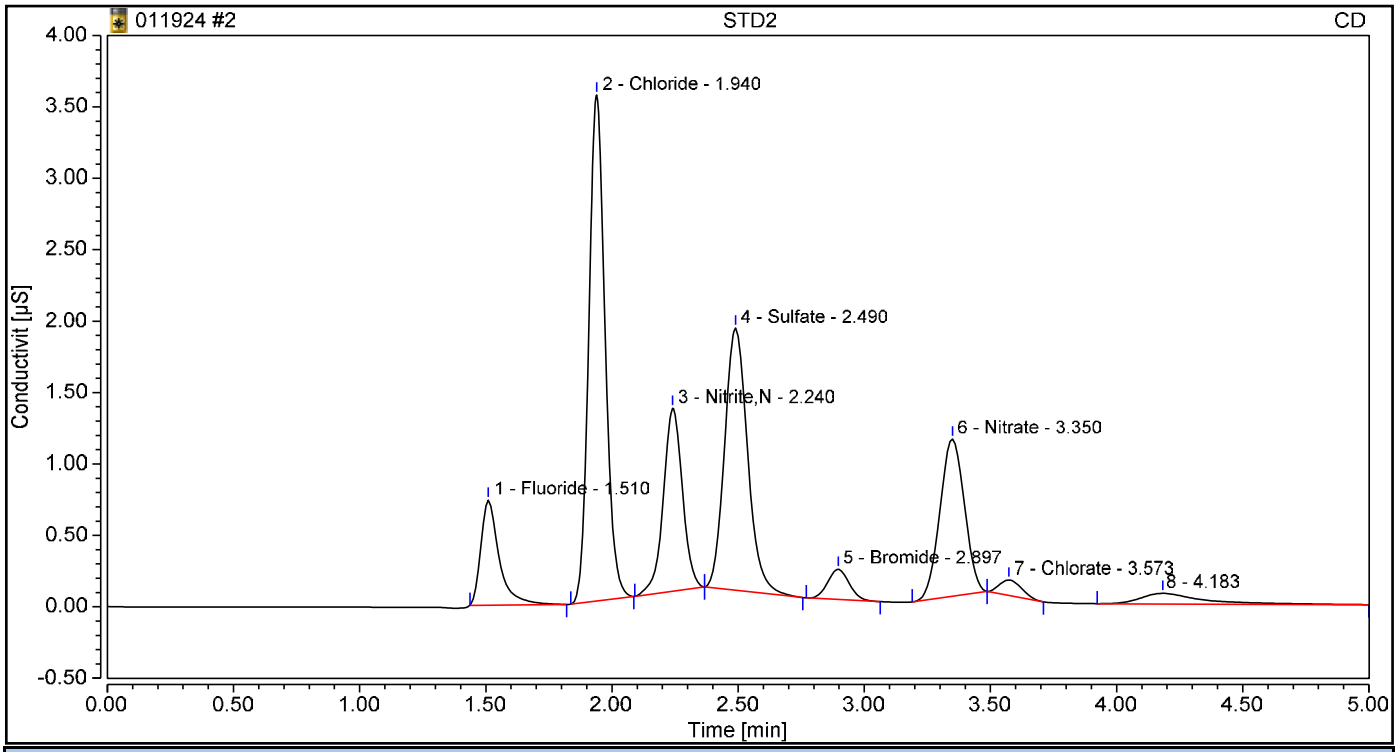
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.507	0.012	0.156	6.82	7.88	0.1119
2	Chloride	1.940	0.060	0.806	32.72	40.80	0.5247
3	Nitrite,N	2.240	0.031	0.289	16.88	14.62	0.1032
4	Sulfate	2.490	0.042	0.402	23.21	20.34	0.5063
5	Bromide	2.897	0.005	0.047	2.51	2.37	0.1076
6	Nitrate	3.350	0.027	0.242	14.81	12.25	0.1009
7	Chlorate	3.573	0.003	0.024	1.38	1.22	0.1100
8		4.190	0.003	0.010	1.68	0.51	n.a.
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.183**	**1.975**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**STD2**	*Run Time (min):*	**5.00**
Vial Number:	**BB2**	*Injection Volume:*	**5.00**
Injection Type:	**Calibration Standard**	*Channel:*	**CD**
Calibration Level:	**2**	*Wavelength:*	**n.a.**
Instrument Method:	**Anions Program ISO37mM 150mm short 0.4 Const**	*Bandwidth:*	**n.a.**
Processing Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**17/Jan/24 23:11**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

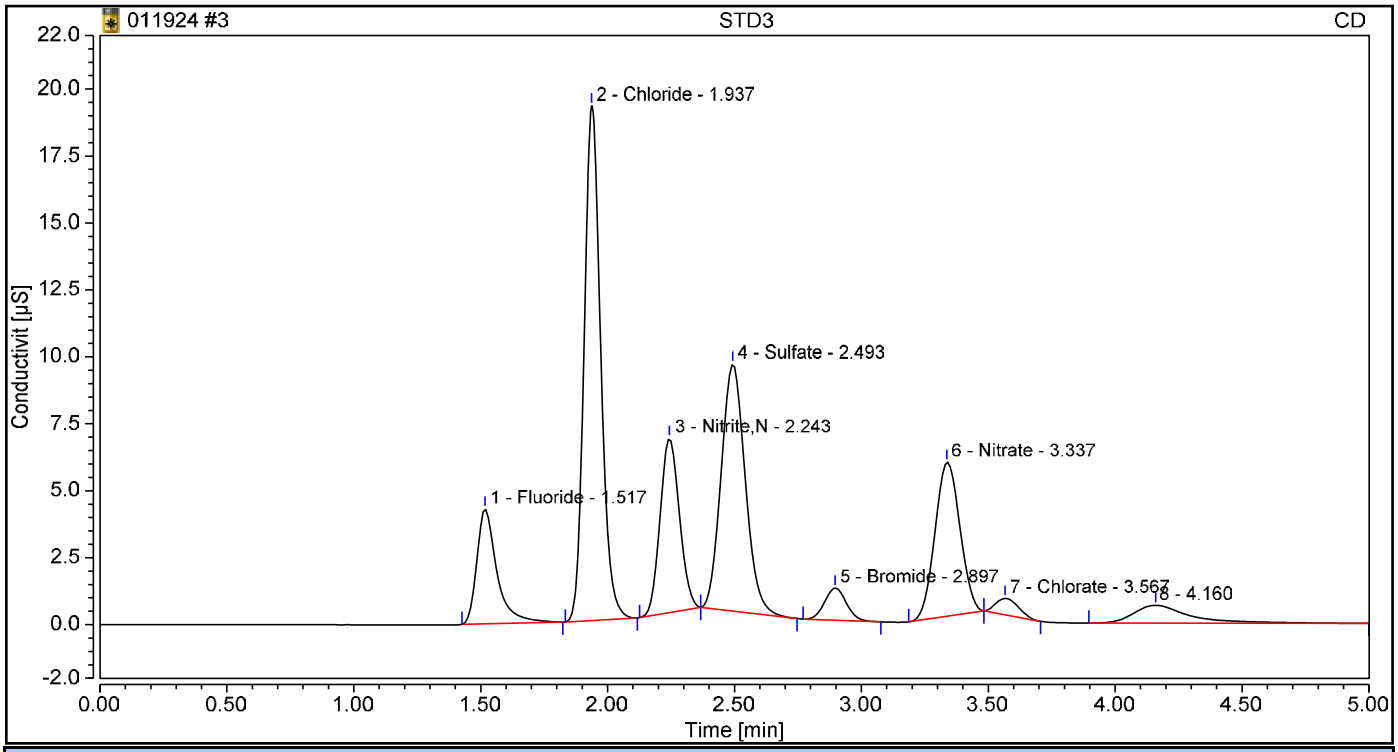
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.510	0.062	0.737	7.70	8.29	0.3498
2	Chloride	1.940	0.264	3.542	32.64	39.84	1.8984
3	Nitrite,N	2.240	0.112	1.280	13.87	14.40	0.3814
4	Sulfate	2.490	0.194	1.836	23.91	20.65	1.9689
5	Bromide	2.897	0.021	0.212	2.58	2.39	0.3720
6	Nitrate	3.350	0.124	1.101	15.31	12.38	0.3921
7	Chlorate	3.573	0.011	0.109	1.38	1.22	0.3643
8		4.183	0.021	0.074	2.61	0.84	n.a.
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.810**	**8.890**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**STD3**	*Run Time (min):*	**5.00**
Vial Number:	**BB3**	*Injection Volume:*	**5.00**
Injection Type:	**Calibration Standard**	*Channel:*	**CD**
Calibration Level:	**3**	*Wavelength:*	**n.a.**
Instrument Method:	**Anions Program ISO37mM 150mm short 0.4 Const**	*Bandwidth:*	**n.a.**
Processing Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**17/Jan/24 23:17**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

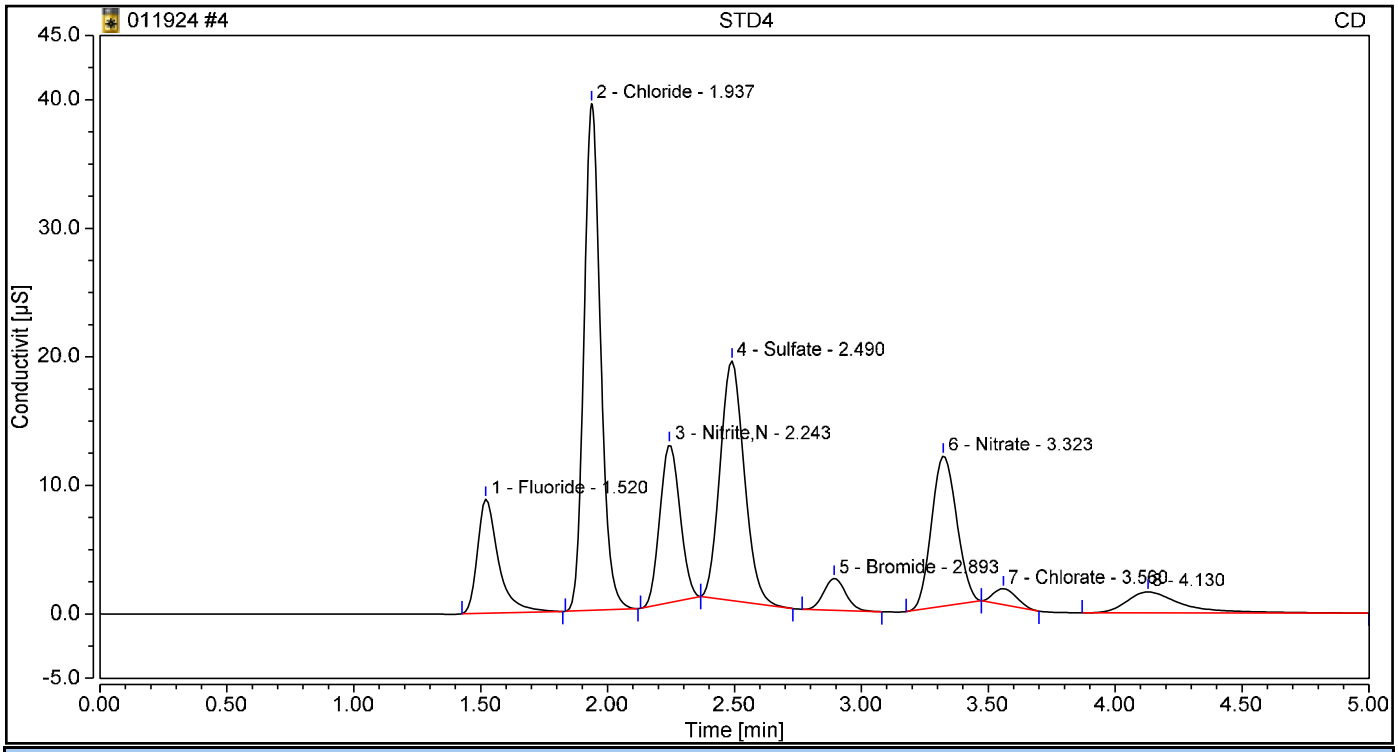
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.517	0.394	4.286	8.85	9.03	1.9350
2	Chloride	1.937	1.455	19.215	32.66	40.49	9.8961
3	Nitrite,N	2.243	0.577	6.506	12.96	13.71	2.0112
4	Sulfate	2.493	1.016	9.223	22.80	19.43	9.9638
5	Bromide	2.897	0.119	1.200	2.68	2.53	1.9592
6	Nitrate	3.337	0.656	5.750	14.72	12.11	1.9890
7	Chlorate	3.567	0.064	0.613	1.44	1.29	1.9453
8		4.160	0.173	0.668	3.88	1.41	n.a.
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**4.454**	**47.460**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**STD4**	*Run Time (min):*	**5.00**
Vial Number:	**BB4**	*Injection Volume:*	**5.00**
Injection Type:	**Calibration Standard**	*Channel:*	**CD**
Calibration Level:	**4**	*Wavelength:*	**n.a.**
Instrument Method:	**Anions Program ISO37mM 150mm short 0.4 Const**	*Bandwidth:*	**n.a.**
Processing Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**17/Jan/24 23:23**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

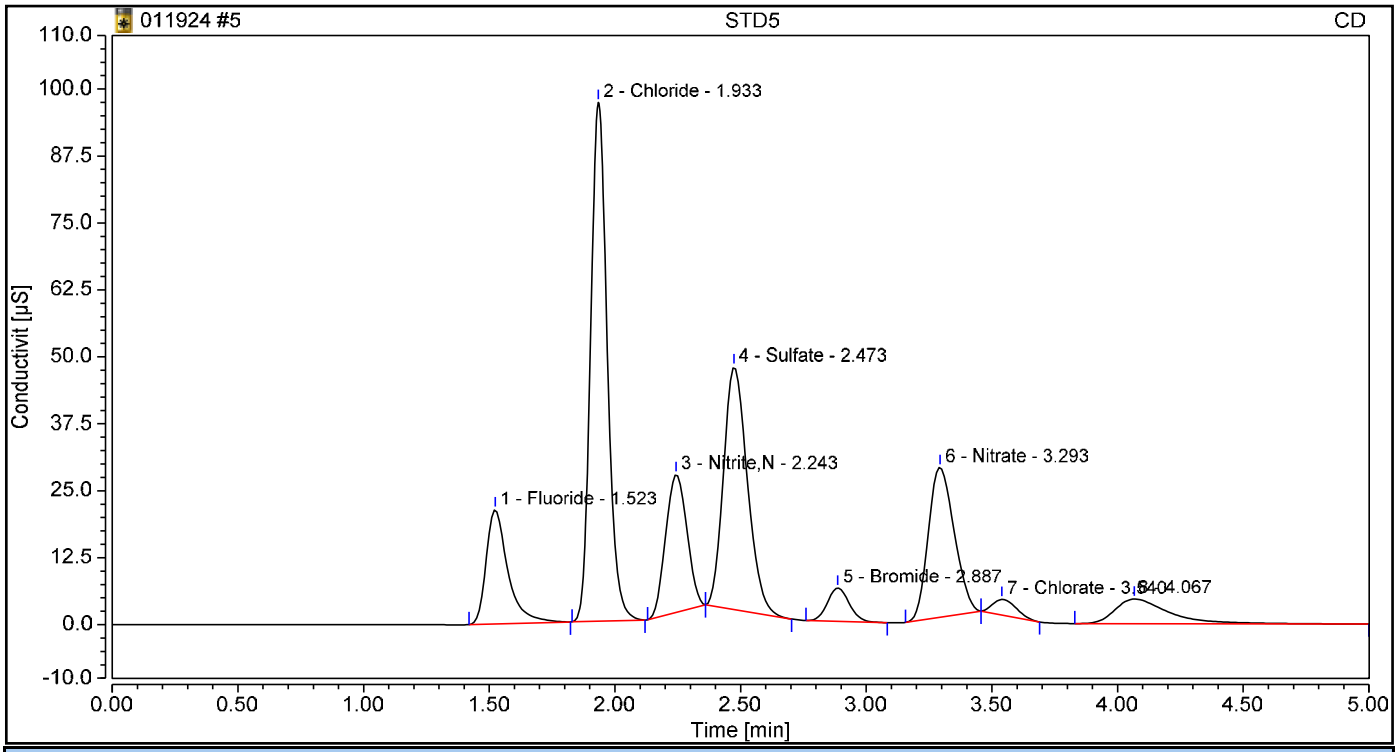
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.520	0.850	8.873	9.27	9.21	4.1121
2	Chloride	1.937	2.998	39.422	32.66	40.94	20.2599
3	Nitrite,N	2.243	1.135	12.302	12.37	12.78	4.0709
4	Sulfate	2.490	2.057	18.638	22.41	19.35	20.2019
5	Bromide	2.893	0.249	2.489	2.71	2.58	4.0442
6	Nitrate	3.323	1.346	11.697	14.67	12.15	4.0641
7	Chlorate	3.560	0.133	1.251	1.44	1.30	4.0410
8		4.130	0.410	1.625	4.47	1.69	n.a.
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**9.178**	**96.299**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**STD5**	*Run Time (min):*	**5.00**
Vial Number:	**BB5**	*Injection Volume:*	**5.00**
Injection Type:	**Calibration Standard**	*Channel:*	**CD**
Calibration Level:	**5**	*Wavelength:*	**n.a.**
Instrument Method:	**Anions Program ISO37mM 150mm short 0.4 Const**	*Bandwidth:*	**n.a.**
Processing Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**17/Jan/24 23:29**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

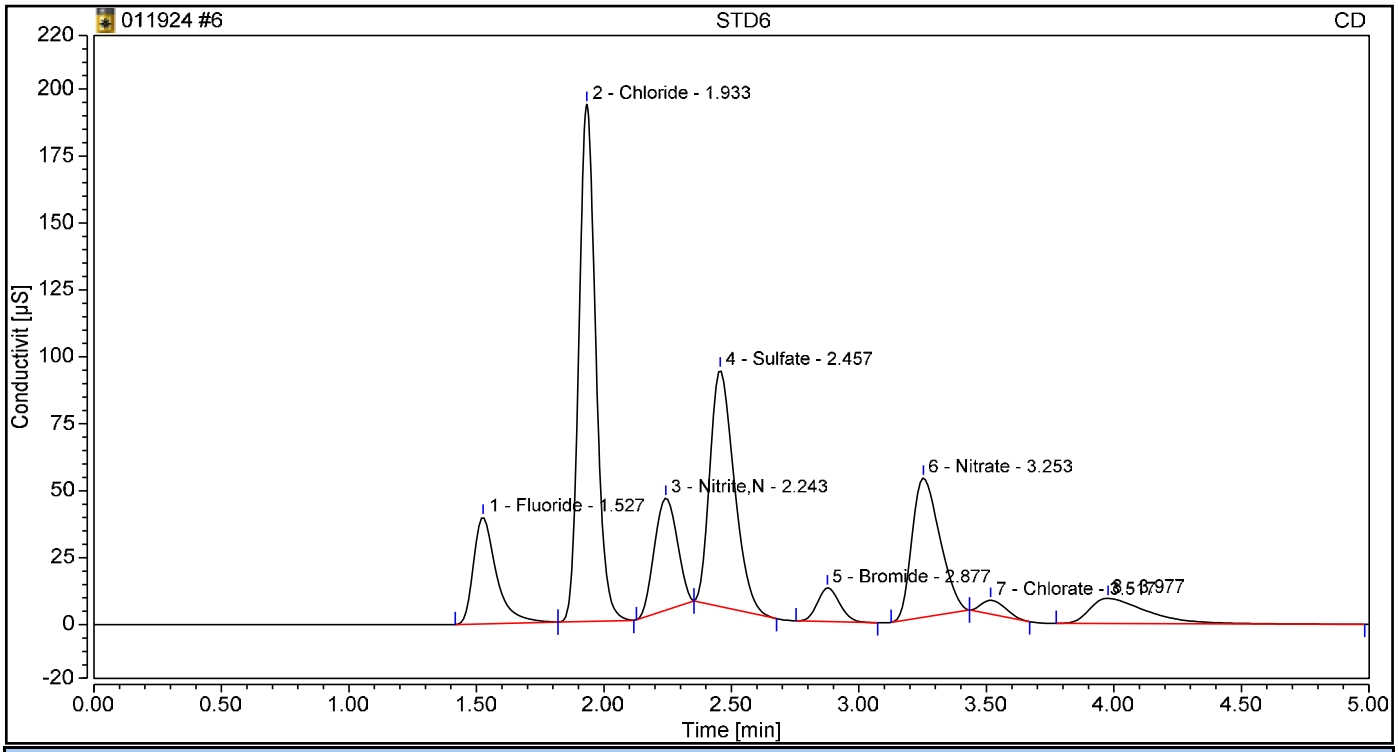
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.523	2.133	21.298	9.48	9.22	10.2330
2	Chloride	1.933	7.417	96.870	32.95	41.95	49.9472
3	Nitrite,N	2.243	2.529	25.737	11.24	11.14	9.8768
4	Sulfate	2.473	4.993	45.328	22.19	19.63	49.7845
5	Bromide	2.887	0.627	6.225	2.78	2.70	10.0407
6	Nitrate	3.293	3.341	27.969	14.84	12.11	10.0570
7	Chlorate	3.540	0.318	2.902	1.41	1.26	10.0986
8		4.067	1.150	4.600	5.11	1.99	n.a.
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**22.507**	**230.928**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**STD6**	*Run Time (min):*	**5.00**
Vial Number:	**BB6**	*Injection Volume:*	**5.00**
Injection Type:	**Calibration Standard**	*Channel:*	**CD**
Calibration Level:	**6**	*Wavelength:*	**n.a.**
Instrument Method:	**Anions Program ISO37mM 150mm short 0.4 Const**	*Bandwidth:*	**n.a.**
Processing Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**17/Jan/24 23:35**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

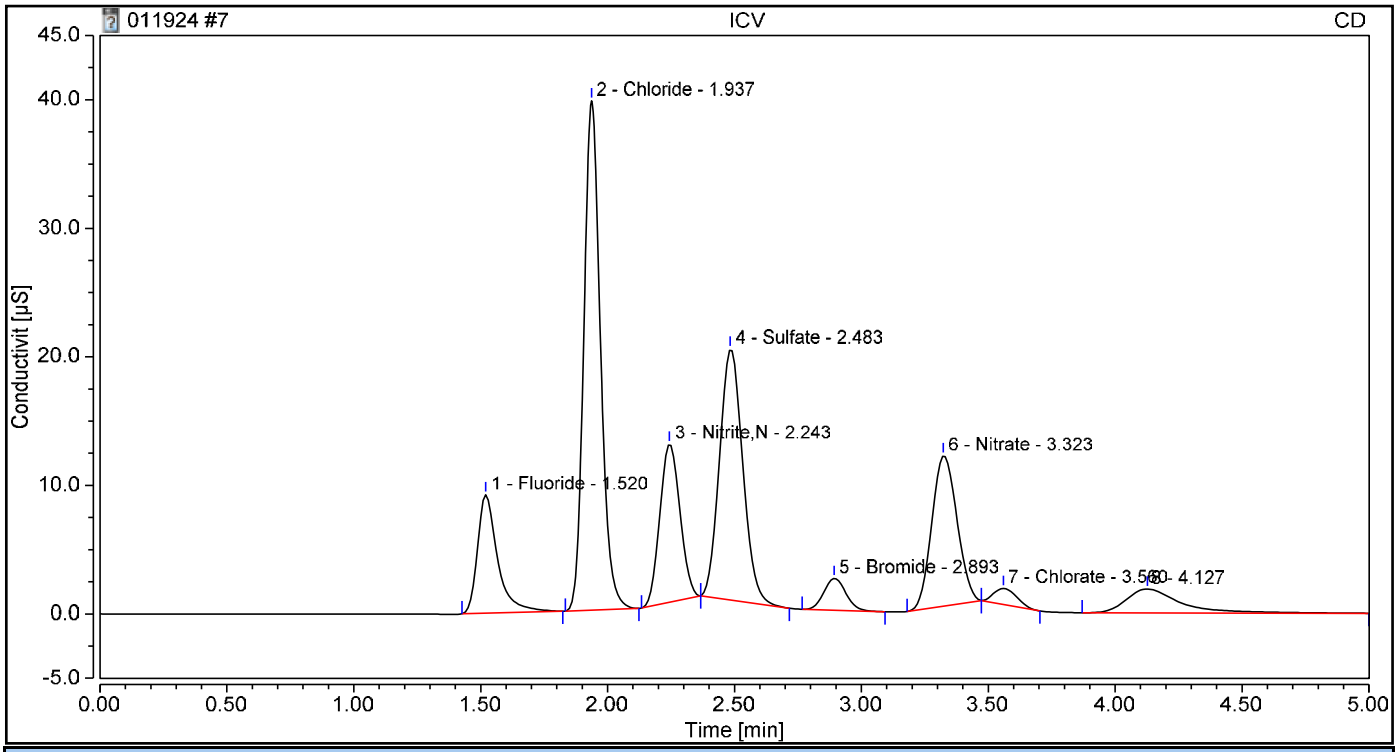
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.527	4.128	39.852	9.38	9.01	19.7582
2	Chloride	1.933	14.863	193.143	33.78	43.67	99.9735
3	Nitrite,N	2.243	4.339	41.797	9.86	9.45	20.0683
4	Sulfate	2.457	9.739	88.320	22.13	19.97	100.0750
5	Bromide	2.877	1.267	12.577	2.88	2.84	19.9761
6	Nitrate	3.253	6.616	51.972	15.04	11.75	19.8969
7	Chlorate	3.517	0.578	5.173	1.31	1.17	19.9379
8		3.977	2.471	9.446	5.61	2.14	n.a.
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**44.001**	**442.281**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**ICV**	*Run Time (min):*	**5.00**
Vial Number:	**BB7**	*Injection Volume:*	**5.00**
Injection Type:	**Unknown**	*Channel:*	**CD**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**Anions Program ISO37mM 150mm short 0.4 Const**	*Bandwidth:*	**n.a.**
Processing Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**17/Jan/24 23:40**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

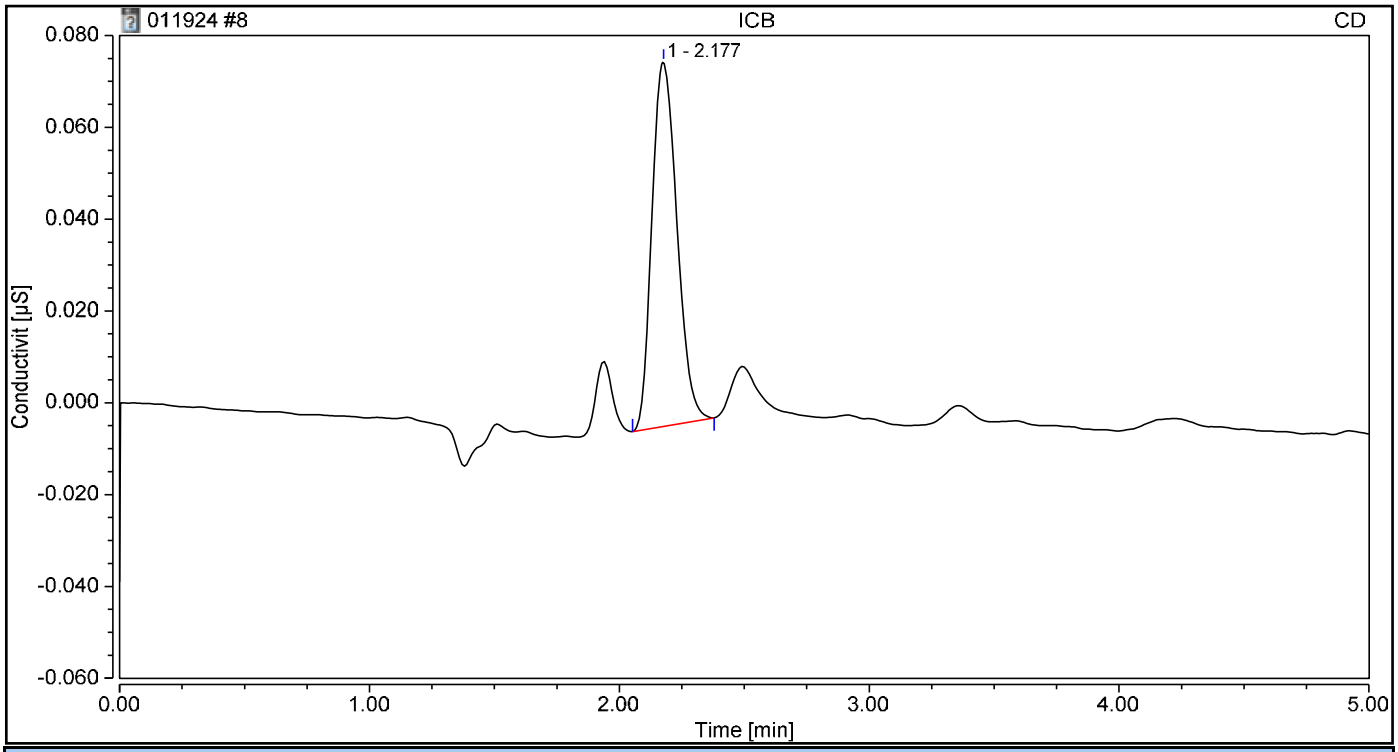
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.520	0.850	9.209	9.18	9.40	4.1110
2	Chloride	1.937	3.010	39.612	32.51	40.45	20.3419
3	Nitrite,N	2.243	1.135	12.312	12.26	12.57	4.0719
4	Sulfate	2.483	2.077	19.523	22.44	19.93	20.4054
5	Bromide	2.893	0.250	2.481	2.70	2.53	4.0530
6	Nitrate	3.323	1.344	11.699	14.52	11.95	4.0572
7	Chlorate	3.560	0.133	1.246	1.43	1.27	4.0490
8		4.127	0.458	1.855	4.95	1.89	n.a.
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**9.257**	**97.936**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**ICB**	*Run Time (min):*	**5.00**
Vial Number:	**BB8**	*Injection Volume:*	**5.00**
Injection Type:	**Unknown**	*Channel:*	**CD**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**Anions Program ISO37mM 150mm short 0.4 Const**	*Bandwidth:*	**n.a.**
Processing Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**17/Jan/24 23:58**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

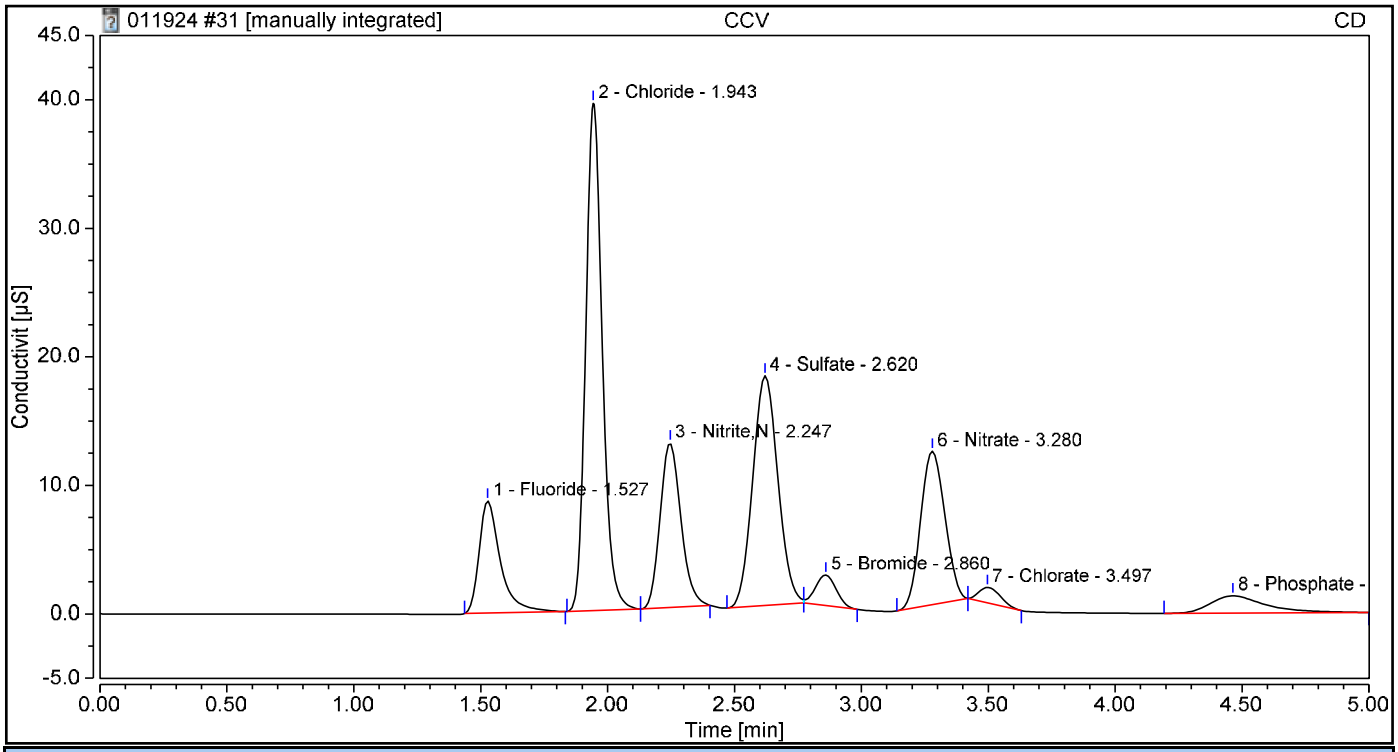
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1		2.177	0.009	0.079	100.00	100.00	n.a.
n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.009**	**0.079**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**5.00**
Vial Number:	**R1**	*Injection Volume:*	**5.00**
Injection Type:	**Unknown**	*Channel:*	**CD**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**Anions Program ISO37mM 150mm short 0.4 Const**	*Bandwidth:*	**n.a.**
Processing Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**19/Jan/24 11:03**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

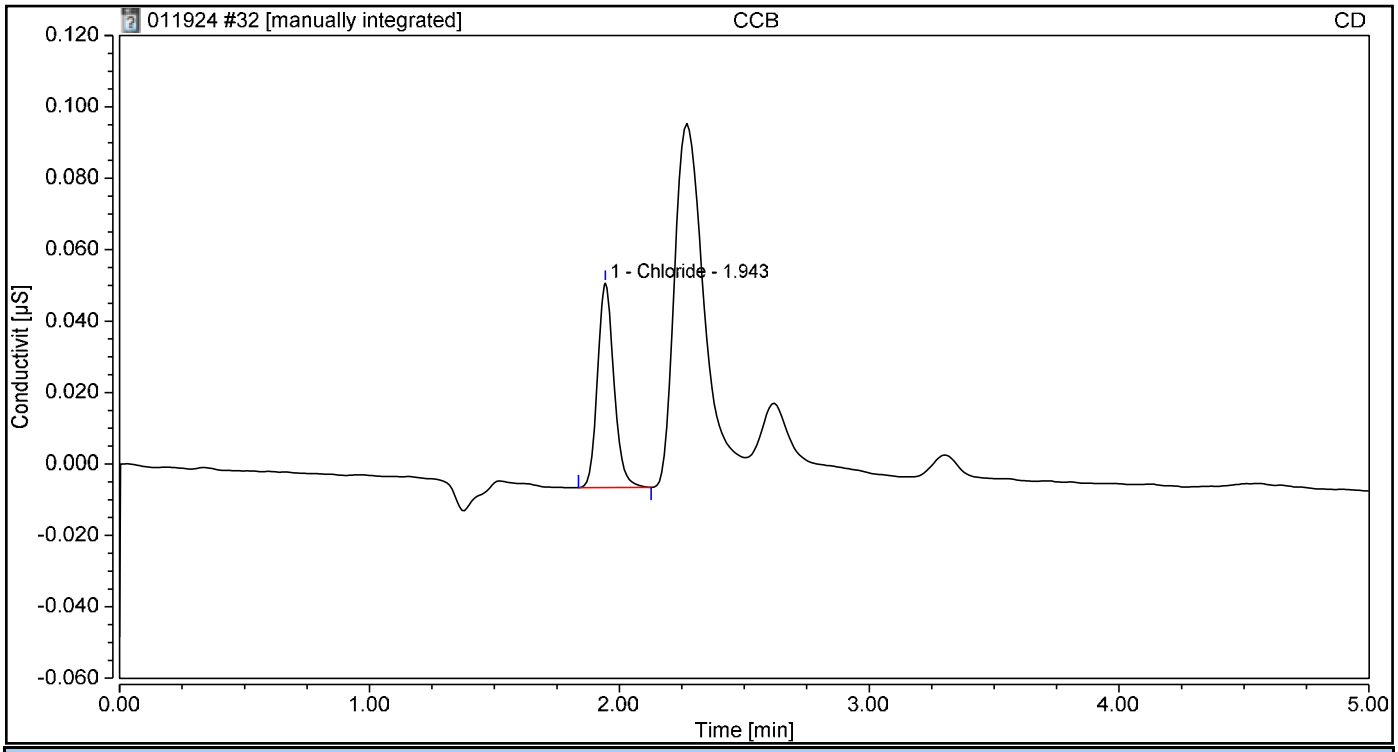
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.527	0.846	8.706	9.29	9.10	4.0900
2	Chloride	1.943	2.981	39.458	32.73	41.23	20.1467
3	Nitrite,N	2.247	1.220	12.789	13.40	13.36	4.3956
4	Sulfate	2.620	2.053	17.871	22.54	18.67	20.1612
5	Bromide	2.860	0.225	2.395	2.47	2.50	3.6578
6	Nitrate	3.280	1.320	11.940	14.50	12.48	3.9858
7	Chlorate	3.497	0.121	1.209	1.33	1.26	3.6848
8	Phosphate	4.463	0.340	1.343	3.74	1.40	n.a.
Total:			**9.106**	**95.712**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**5.00**
Vial Number:	**R4**	*Injection Volume:*	**5.00**
Injection Type:	**Unknown**	*Channel:*	**CD**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**Anions Program ISO37mM 150mm short 0.4 Const**	*Bandwidth:*	**n.a.**
Processing Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**19/Jan/24 11:14**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

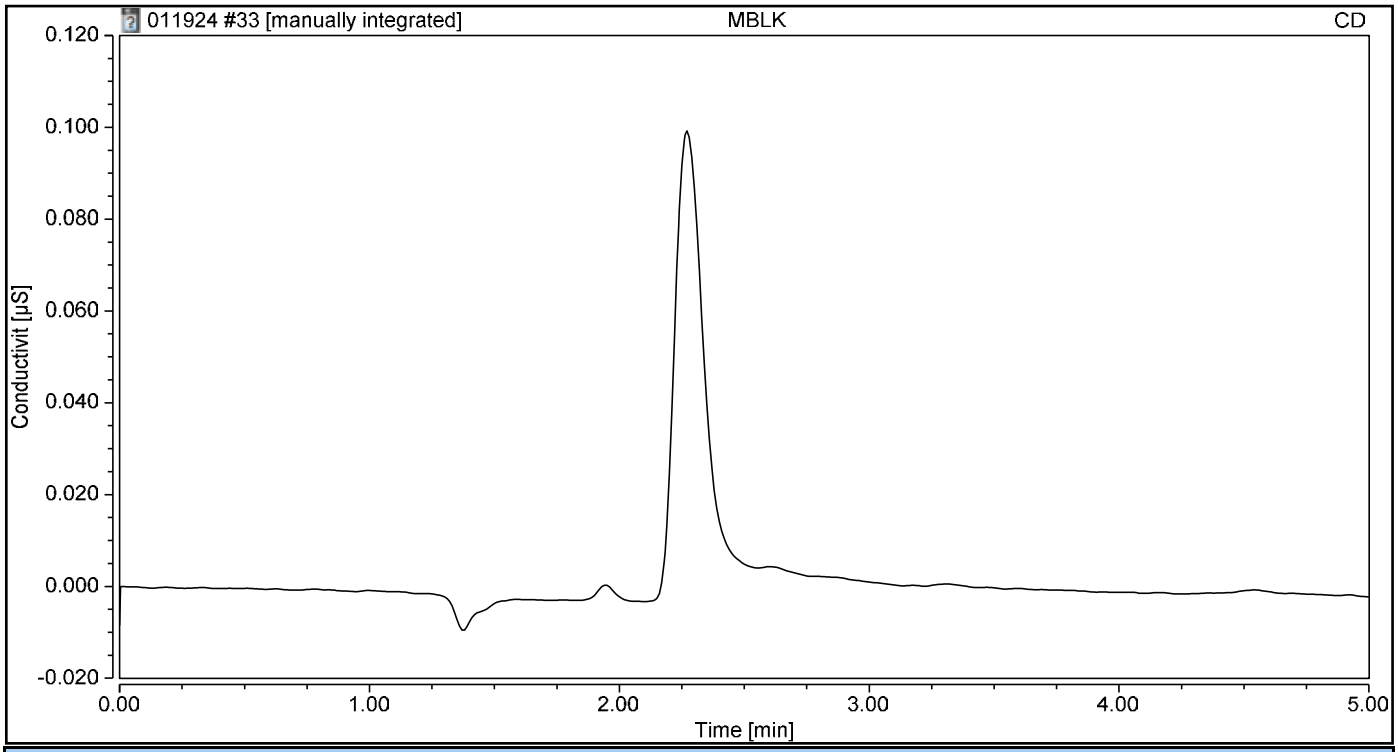
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	Chloride	1.943	0.004	0.057	100.00	100.00	0.1517
n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.004**	**0.057**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**MBLK**	*Run Time (min):*	**5.00**
Vial Number:	**R5**	*Injection Volume:*	**5.00**
Injection Type:	**Unknown**	*Channel:*	**CD**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**Anions Program ISO37mM 150mm short 0.4 Const**	*Bandwidth:*	**n.a.**
Processing Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**19/Jan/24 11:20**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

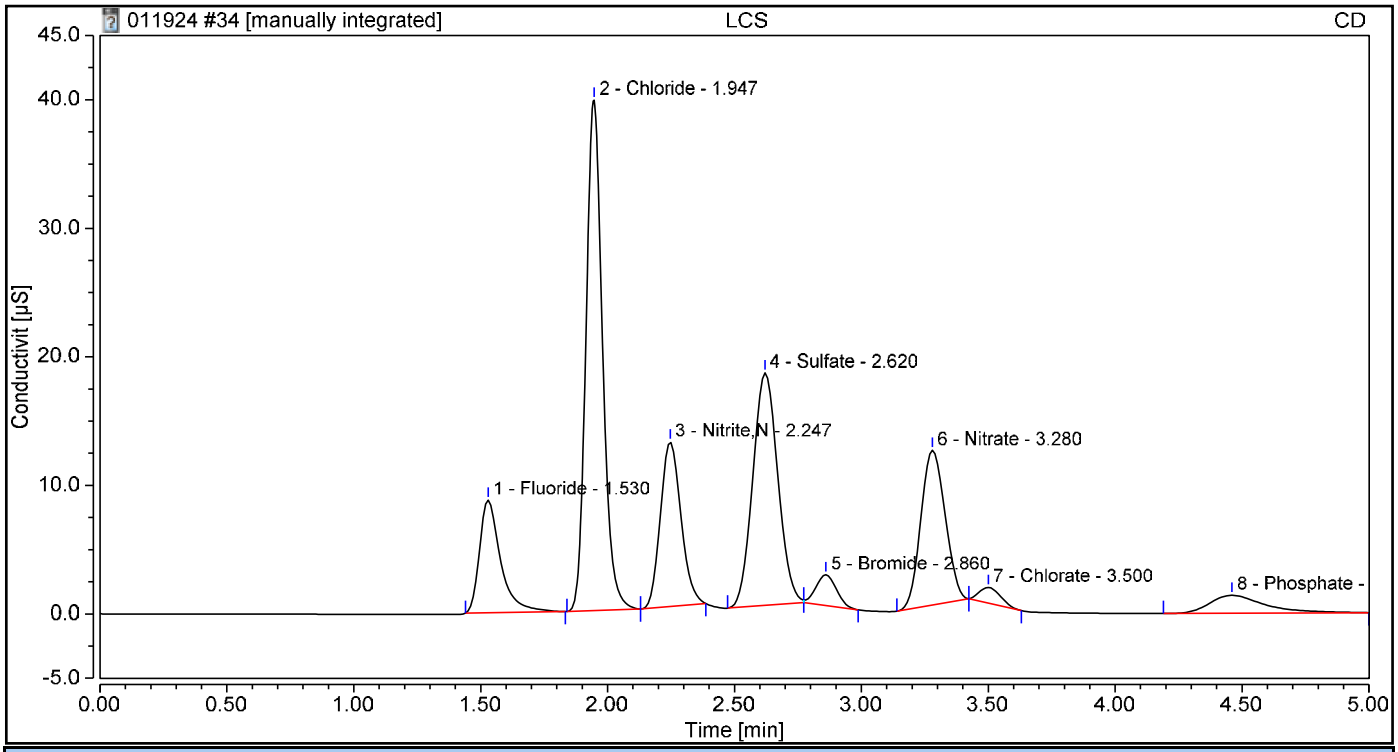
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.000**	**0.000**	**0.00**	**0.00**	

Chromatogram and Results

Injection Details

Injection Name:	**LCS**	*Run Time (min):*	**5.00**
Vial Number:	**R2**	*Injection Volume:*	**5.00**
Injection Type:	**Unknown**	*Channel:*	**CD**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**Anions Program ISO37mM 150mm short 0.4 Const**	*Bandwidth:*	**n.a.**
Processing Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**19/Jan/24 11:32**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

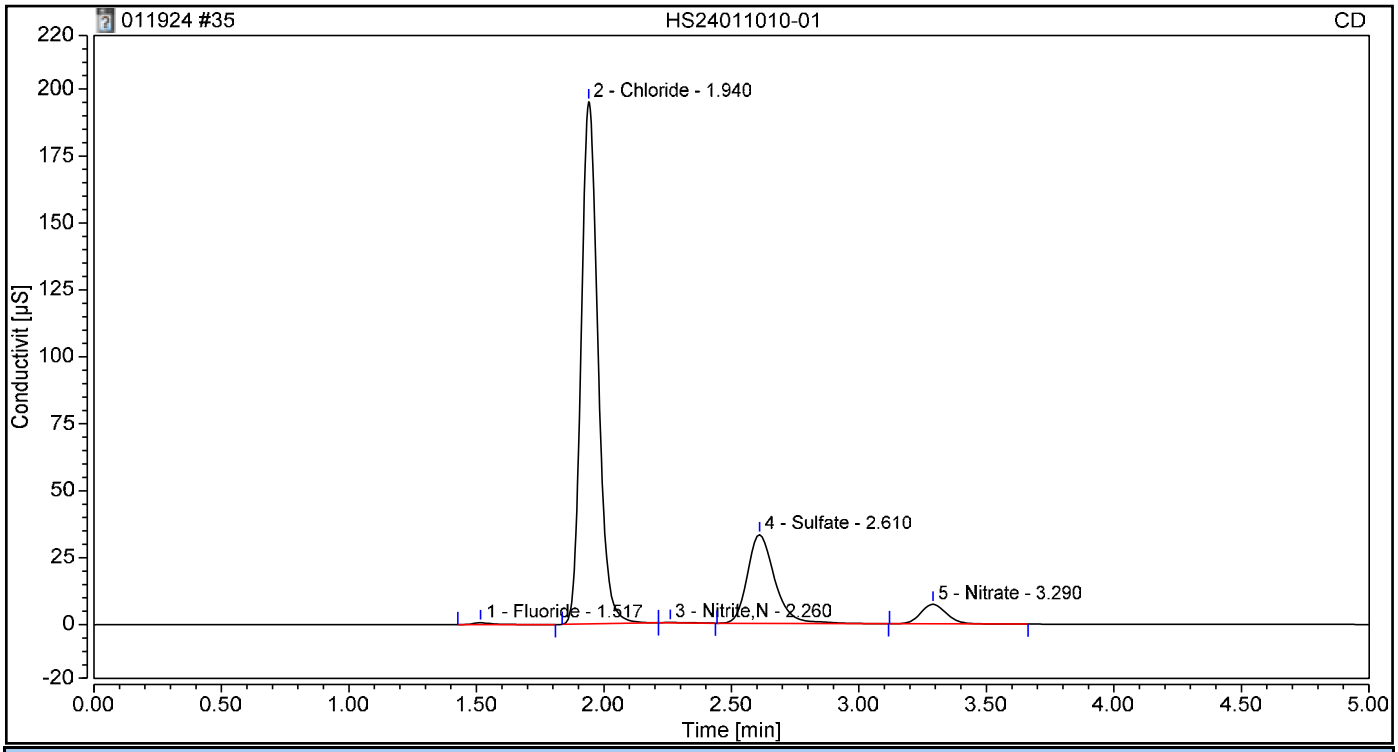
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.530	0.849	8.774	9.28	9.10	4.1035
2	Chloride	1.947	3.001	39.719	32.80	41.19	20.2815
3	Nitrite,N	2.247	1.206	12.807	13.18	13.28	4.3405
4	Sulfate	2.620	2.065	18.087	22.57	18.76	20.2778
5	Bromide	2.860	0.222	2.386	2.43	2.47	3.6125
6	Nitrate	3.280	1.333	12.035	14.57	12.48	4.0226
7	Chlorate	3.500	0.121	1.219	1.32	1.26	3.6671
8	Phosphate	4.460	0.354	1.397	3.87	1.45	n.a.
Total:			**9.149**	**96.424**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**HS24011010-01**	*Run Time (min):*	**5.00**
Vial Number:	**RC1**	*Injection Volume:*	**5.00**
Injection Type:	**Unknown**	*Channel:*	**CD**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**Anions Program ISO37mM 150mm short 0.4 Const**	*Bandwidth:*	**n.a.**
Processing Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**19/Jan/24 12:39**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

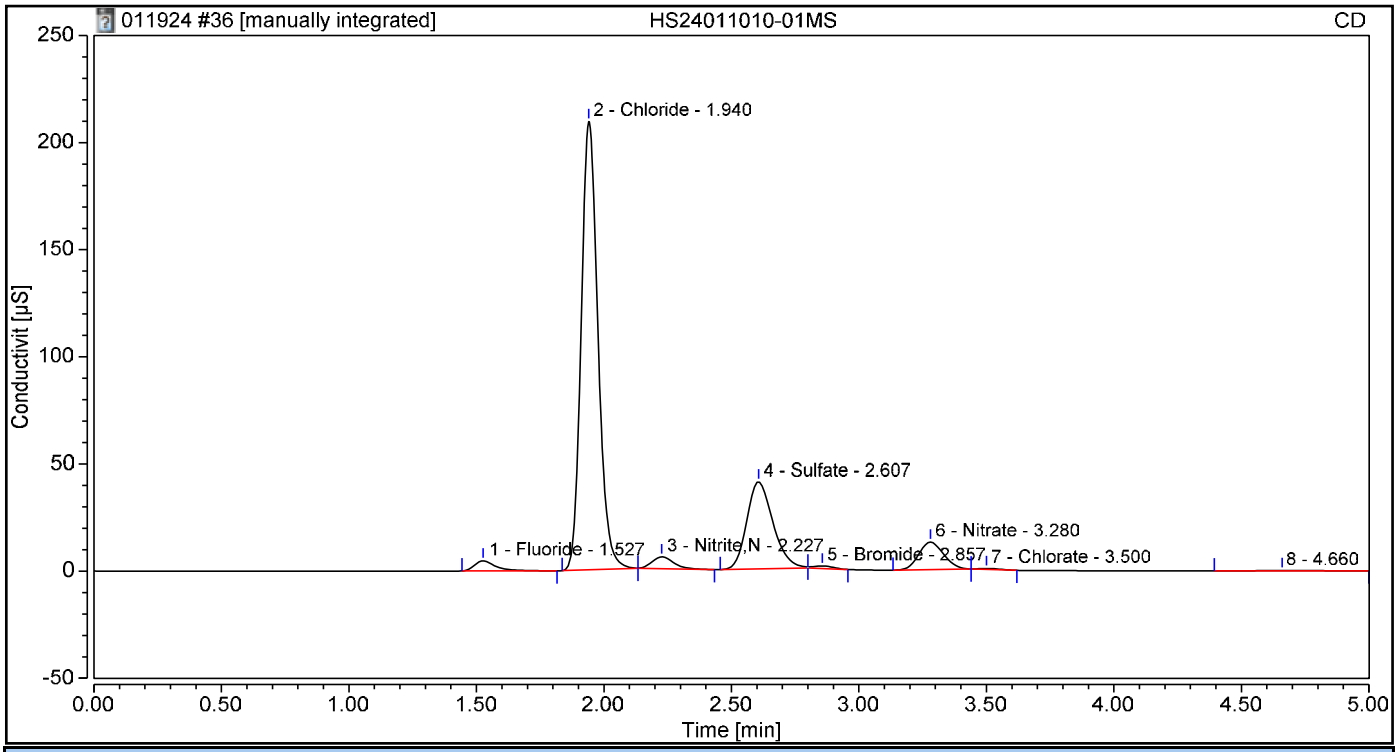
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.517	0.064	0.690	0.32	0.29	0.3583
2	Chloride	1.940	14.894	194.897	74.67	82.54	100.1822
3	Nitrite,N	2.260	0.012	0.071	0.06	0.03	0.0376
4	Sulfate	2.610	4.118	33.142	20.64	14.04	40.8486
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	Nitrate	3.290	0.860	7.332	4.31	3.10	2.6024
n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**19.947**	**236.132**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**HS24011010-01MS**	*Run Time (min):*	**5.00**
Vial Number:	**RC2**	*Injection Volume:*	**5.00**
Injection Type:	**Unknown**	*Channel:*	**CD**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**Anions Program ISO37mM 150mm short 0.4 Const**	*Bandwidth:*	**n.a.**
Processing Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**19/Jan/24 12:45**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

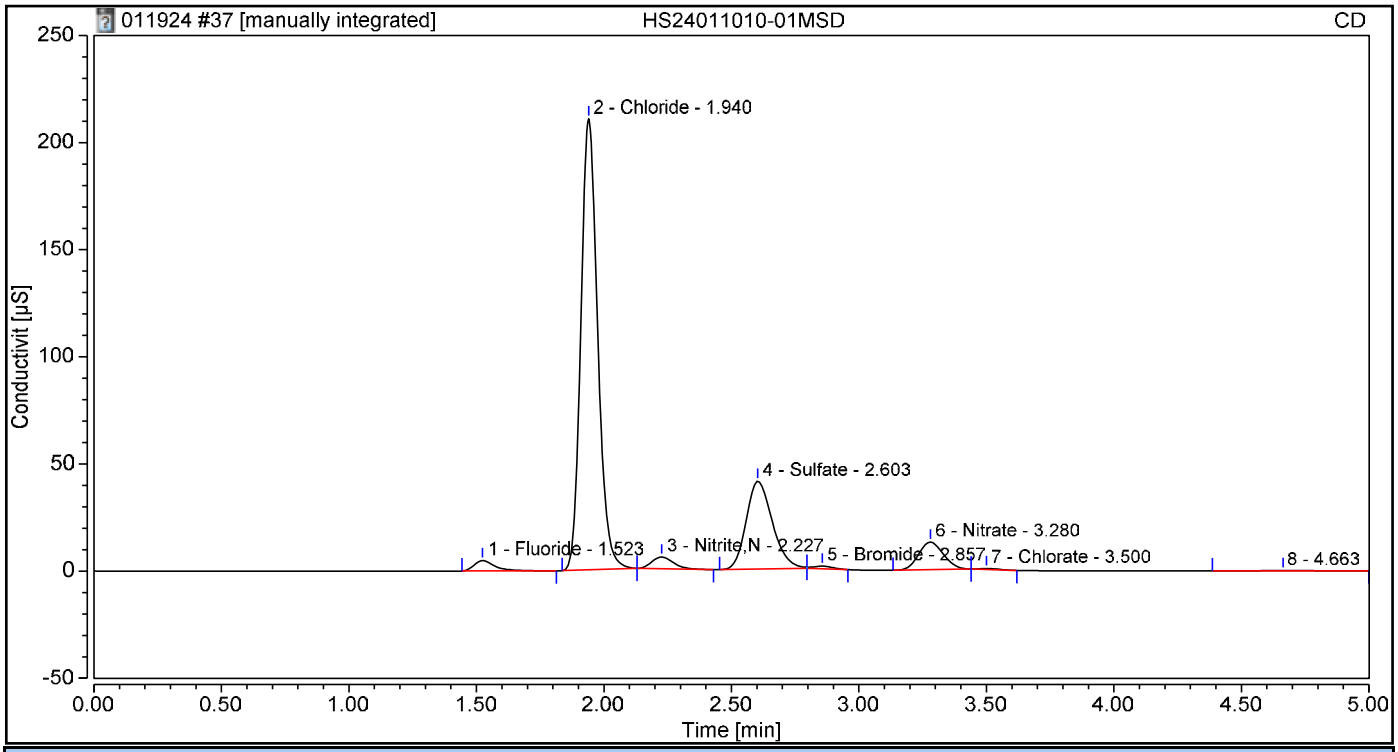
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.527	0.454	4.691	1.94	1.71	2.2193
2	Chloride	1.940	15.925	209.219	68.06	76.19	107.1034
3	Nitrite,N	2.227	0.539	5.500	2.31	2.00	1.8757
4	Sulfate	2.607	4.846	40.648	20.71	14.80	48.2711
5	Bromide	2.857	0.107	1.194	0.46	0.43	1.7598
6	Nitrate	3.280	1.453	12.812	6.21	4.67	4.3848
7	Chlorate	3.500	0.040	0.433	0.17	0.16	1.2122
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
8		4.660	0.035	0.116	0.15	0.04	n.a.
Total:			**23.398**	**274.614**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**HS24011010-01MSD**	*Run Time (min):*	**5.00**
Vial Number:	**RC3**	*Injection Volume:*	**5.00**
Injection Type:	**Unknown**	*Channel:*	**CD**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**Anions Program ISO37mM 150mm short 0.4 Const**	*Bandwidth:*	**n.a.**
Processing Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**19/Jan/24 12:51**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

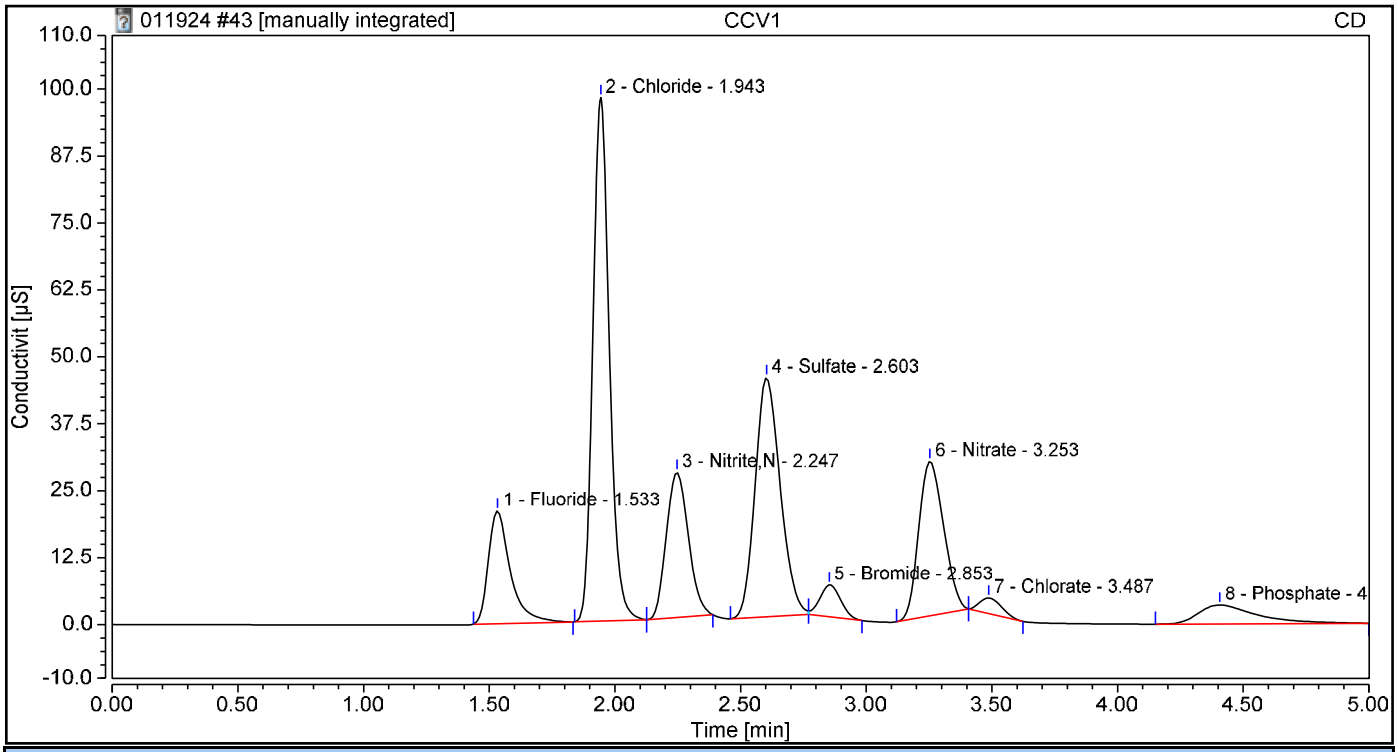
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.523	0.460	4.835	1.95	1.75	2.2473
2	Chloride	1.940	16.018	210.515	68.00	76.11	107.7306
3	Nitrite,N	2.227	0.543	5.528	2.30	2.00	1.8880
4	Sulfate	2.603	4.882	41.018	20.72	14.83	48.6408
5	Bromide	2.857	0.109	1.218	0.46	0.44	1.7974
6	Nitrate	3.280	1.462	12.891	6.21	4.66	4.4111
7	Chlorate	3.500	0.040	0.440	0.17	0.16	1.2202
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
8		4.663	0.043	0.144	0.18	0.05	n.a.
Total:			**23.556**	**276.588**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**CCV1**	*Run Time (min):*	**5.00**
Vial Number:	**R3**	*Injection Volume:*	**5.00**
Injection Type:	**Unknown**	*Channel:*	**CD**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**Anions Program ISO37mM 150mm short 0.4 Const**	*Bandwidth:*	**n.a.**
Processing Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**19/Jan/24 13:38**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

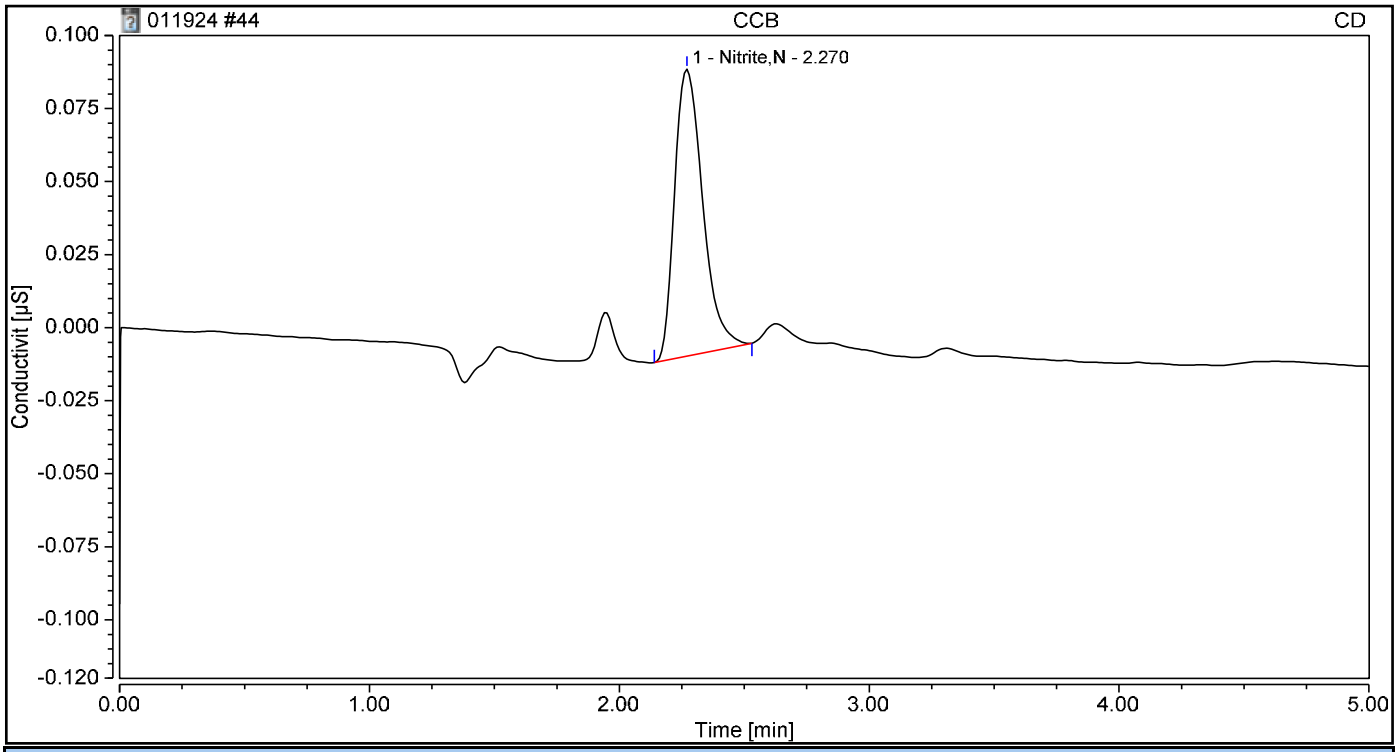
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.533	2.133	21.009	9.44	9.07	10.2340
2	Chloride	1.943	7.415	97.721	32.83	42.19	49.9352
3	Nitrite,N	2.247	2.762	27.090	12.23	11.70	10.9712
4	Sulfate	2.603	5.158	44.623	22.84	19.27	51.4767
5	Bromide	2.853	0.567	5.960	2.51	2.57	9.0958
6	Nitrate	3.253	3.300	28.797	14.61	12.43	9.9322
7	Chlorate	3.487	0.295	2.877	1.30	1.24	9.3146
8	Phosphate	4.407	0.954	3.528	4.23	1.52	n.a.
Total:			**22.583**	**231.604**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**5.00**
Vial Number:	**R8**	*Injection Volume:*	**5.00**
Injection Type:	**Unknown**	*Channel:*	**CD**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**Anions Program ISO37mM 150mm short 0.4 Const**	*Bandwidth:*	**n.a.**
Processing Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**19/Jan/24 13:50**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

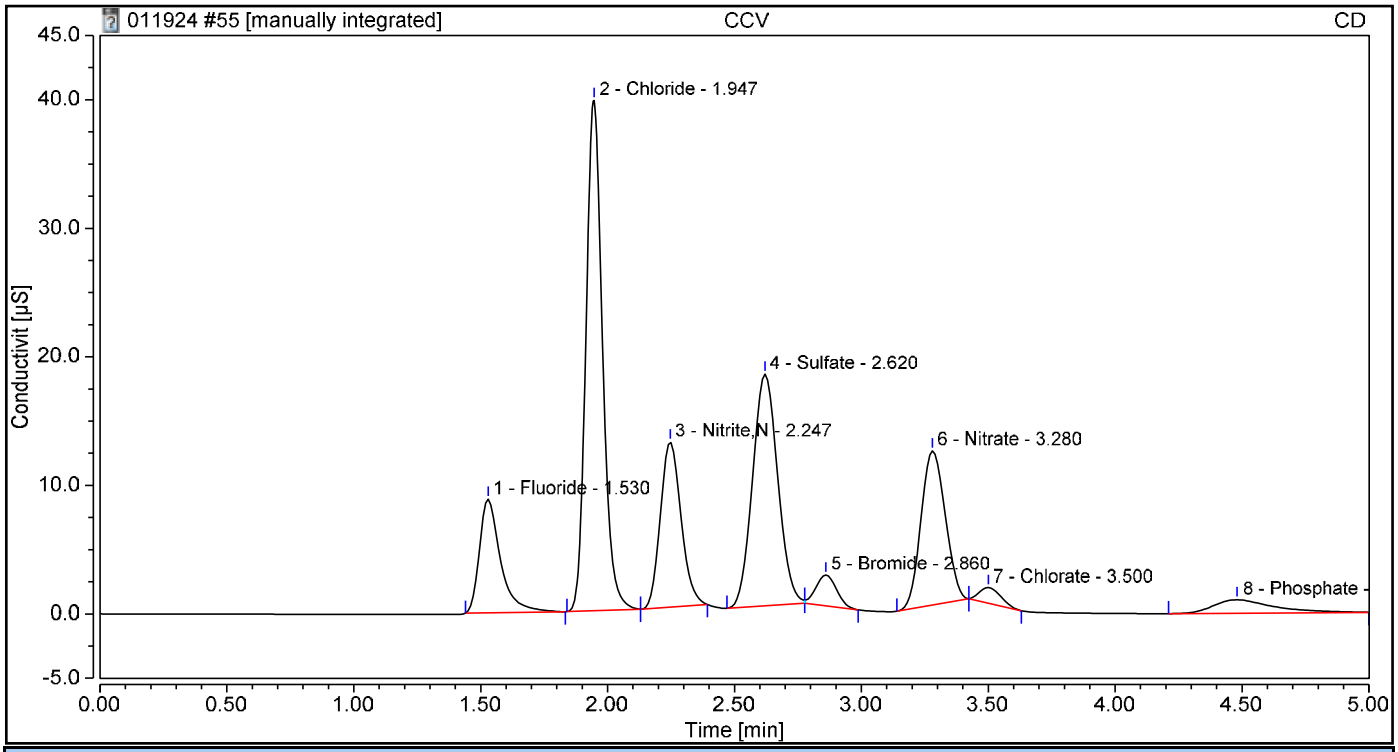
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	Nitrite,N	2.270	0.013	0.098	100.00	100.00	0.0418
n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.013**	**0.098**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**5.00**
Vial Number:	**R1**	*Injection Volume:*	**5.00**
Injection Type:	**Unknown**	*Channel:*	**CD**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**Anions Program ISO37mM 150mm short 0.4 Const**	*Bandwidth:*	**n.a.**
Processing Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**19/Jan/24 15:05**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

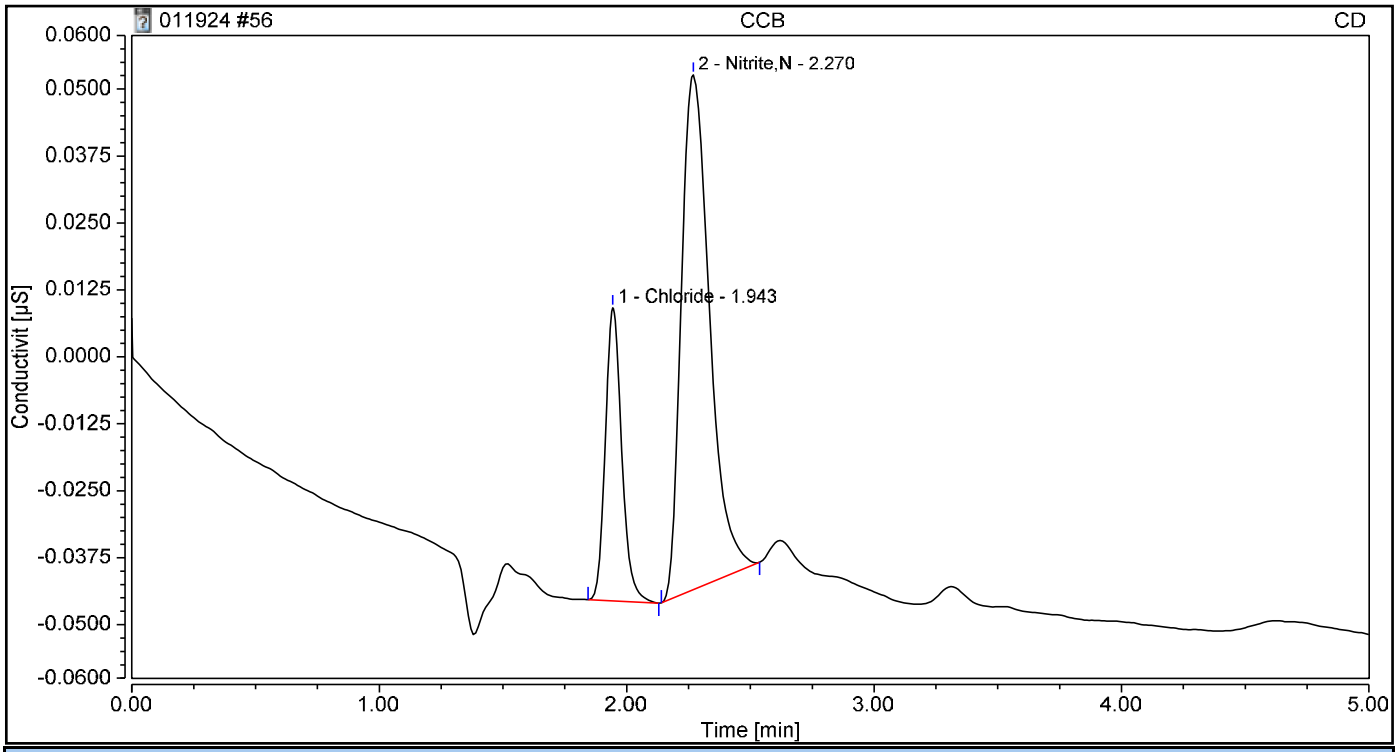
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.530	0.855	8.837	9.38	9.20	4.1317
2	Chloride	1.947	3.002	39.693	32.96	41.32	20.2876
3	Nitrite,N	2.247	1.216	12.847	13.35	13.37	4.3805
4	Sulfate	2.620	2.072	18.019	22.75	18.76	20.3467
5	Bromide	2.860	0.225	2.405	2.47	2.50	3.6595
6	Nitrate	3.280	1.329	12.008	14.59	12.50	4.0118
7	Chlorate	3.500	0.121	1.218	1.33	1.27	3.6770
8	Phosphate	4.480	0.289	1.044	3.17	1.09	n.a.
Total:			**9.107**	**96.072**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**5.00**
Vial Number:	**R6**	*Injection Volume:*	**5.00**
Injection Type:	**Unknown**	*Channel:*	**CD**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**Anions Program ISO37mM 150mm short 0.4 Const**	*Bandwidth:*	**n.a.**
Processing Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**19/Jan/24 15:11**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

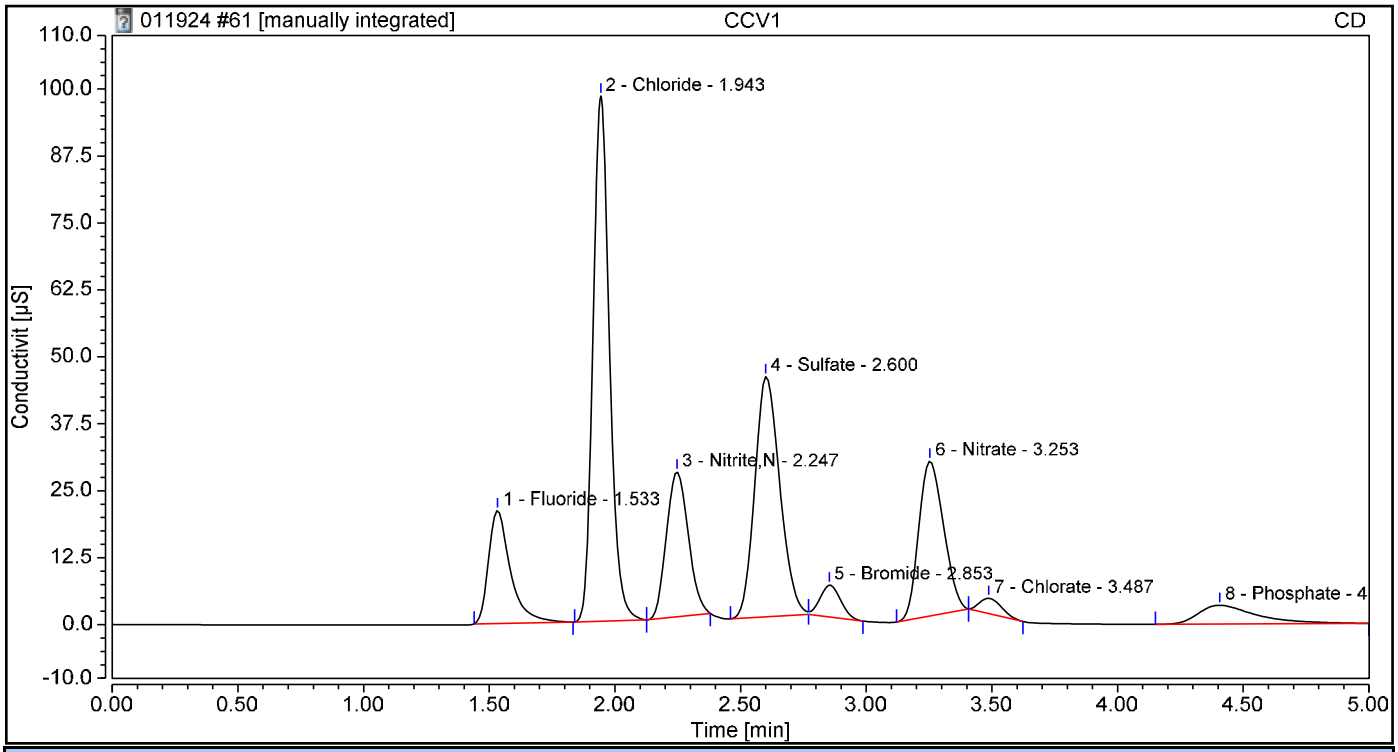
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	Chloride	1.943	0.004	0.055	24.74	36.28	0.1506
2	Nitrite,N	2.270	0.013	0.096	75.26	63.72	0.0414
n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.017**	**0.151**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**CCV1**	*Run Time (min):*	**5.00**
Vial Number:	**R3**	*Injection Volume:*	**5.00**
Injection Type:	**Unknown**	*Channel:*	**CD**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**Anions Program ISO37mM 150mm short 0.4 Const**	*Bandwidth:*	**n.a.**
Processing Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**19/Jan/24 16:04**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

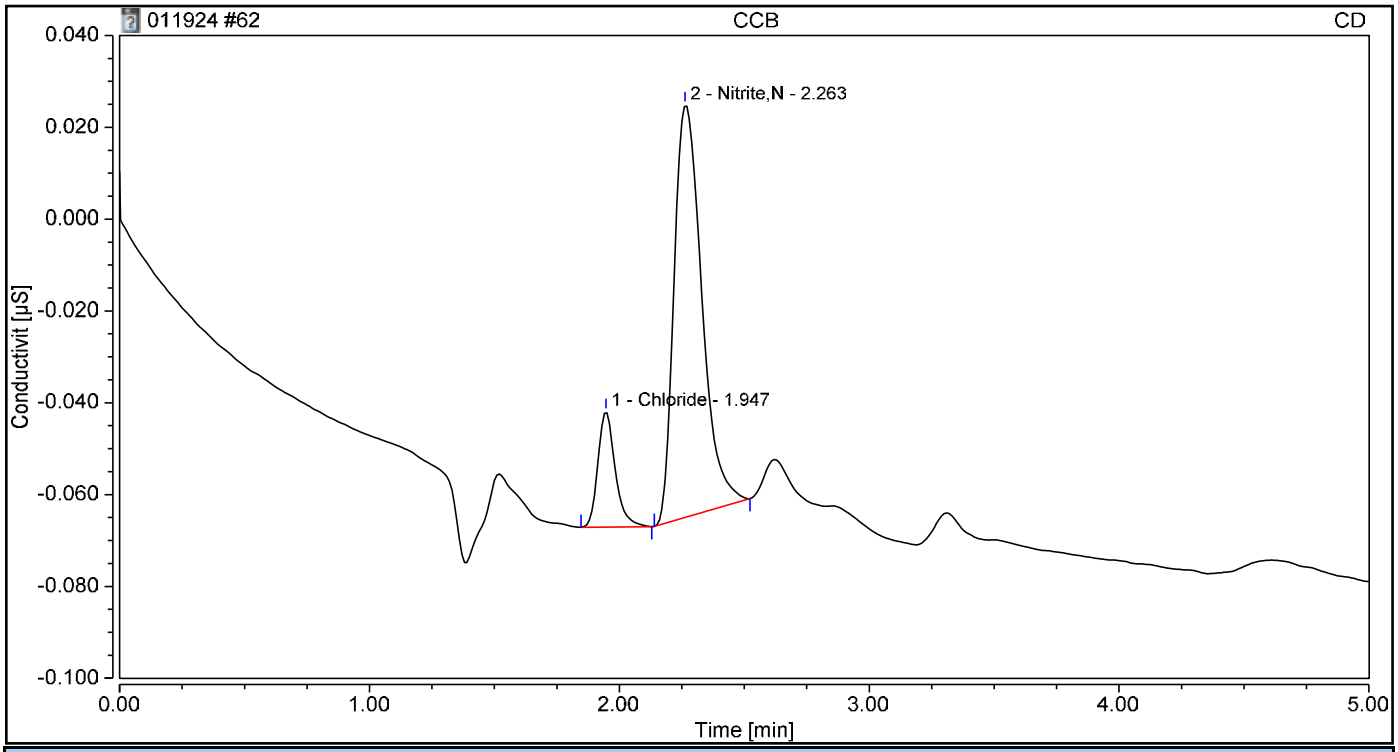
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.533	2.130	21.082	9.43	9.07	10.2219
2	Chloride	1.943	7.445	98.052	32.94	42.20	50.1380
3	Nitrite,N	2.247	2.733	27.072	12.09	11.65	10.8305
4	Sulfate	2.600	5.172	44.882	22.89	19.32	51.6235
5	Bromide	2.853	0.561	5.956	2.48	2.56	9.0103
6	Nitrate	3.253	3.314	28.900	14.66	12.44	9.9745
7	Chlorate	3.487	0.295	2.880	1.30	1.24	9.3157
8	Phosphate	4.407	0.951	3.508	4.21	1.51	n.a.
Total:			**22.601**	**232.331**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**5.00**
Vial Number:	**R7**	*Injection Volume:*	**5.00**
Injection Type:	**Unknown**	*Channel:*	**CD**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**Anions Program ISO37mM 150mm short 0.4 Const**	*Bandwidth:*	**n.a.**
Processing Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**19/Jan/24 16:10**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

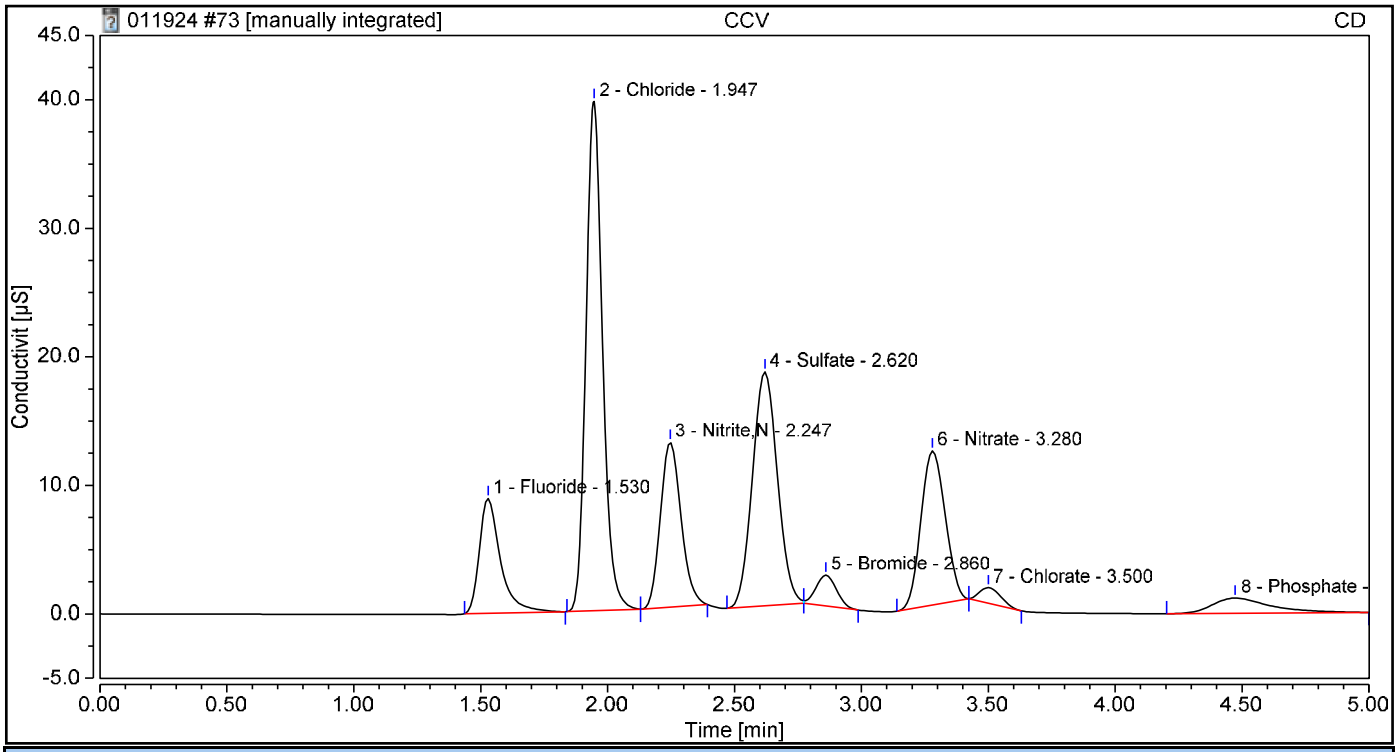
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	Chloride	1.947	0.002	0.025	14.84	21.87	0.1360
2	Nitrite,N	2.263	0.012	0.090	85.16	78.13	0.0375
n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.014**	**0.115**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**5.00**
Vial Number:	**R1**	*Injection Volume:*	**5.00**
Injection Type:	**Unknown**	*Channel:*	**CD**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**Anions Program ISO37mM 150mm short 0.4 Const**	*Bandwidth:*	**n.a.**
Processing Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**19/Jan/24 18:11**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

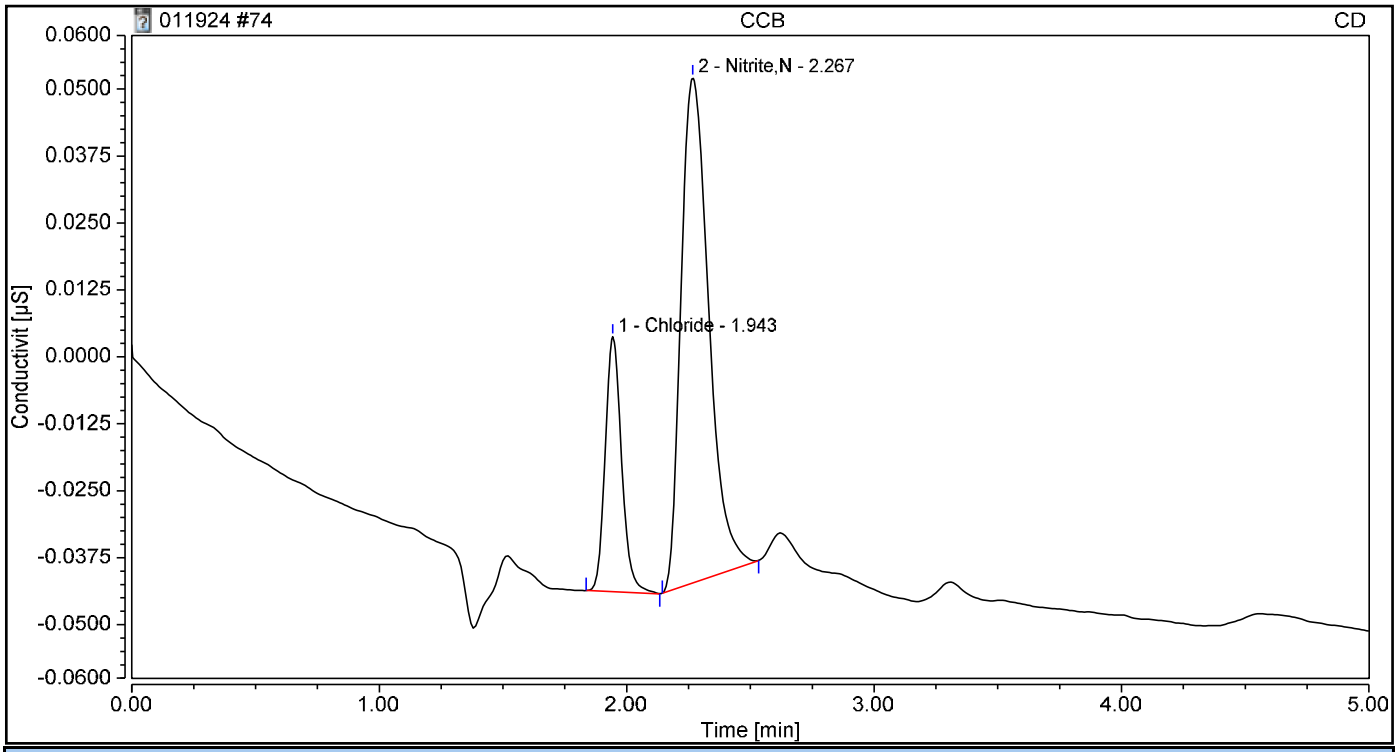
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.530	0.861	8.935	9.42	9.27	4.1618
2	Chloride	1.947	2.996	39.623	32.79	41.10	20.2486
3	Nitrite,N	2.247	1.215	12.843	13.30	13.32	4.3769
4	Sulfate	2.620	2.076	18.202	22.72	18.88	20.3889
5	Bromide	2.860	0.224	2.399	2.45	2.49	3.6427
6	Nitrate	3.280	1.328	12.001	14.54	12.45	4.0103
7	Chlorate	3.500	0.120	1.215	1.32	1.26	3.6645
8	Phosphate	4.473	0.317	1.185	3.47	1.23	n.a.
Total:			**9.138**	**96.403**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**5.00**
Vial Number:	**R6**	*Injection Volume:*	**5.00**
Injection Type:	**Unknown**	*Channel:*	**CD**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**Anions Program ISO37mM 150mm short 0.4 Const**	*Bandwidth:*	**n.a.**
Processing Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**19/Jan/24 18:17**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

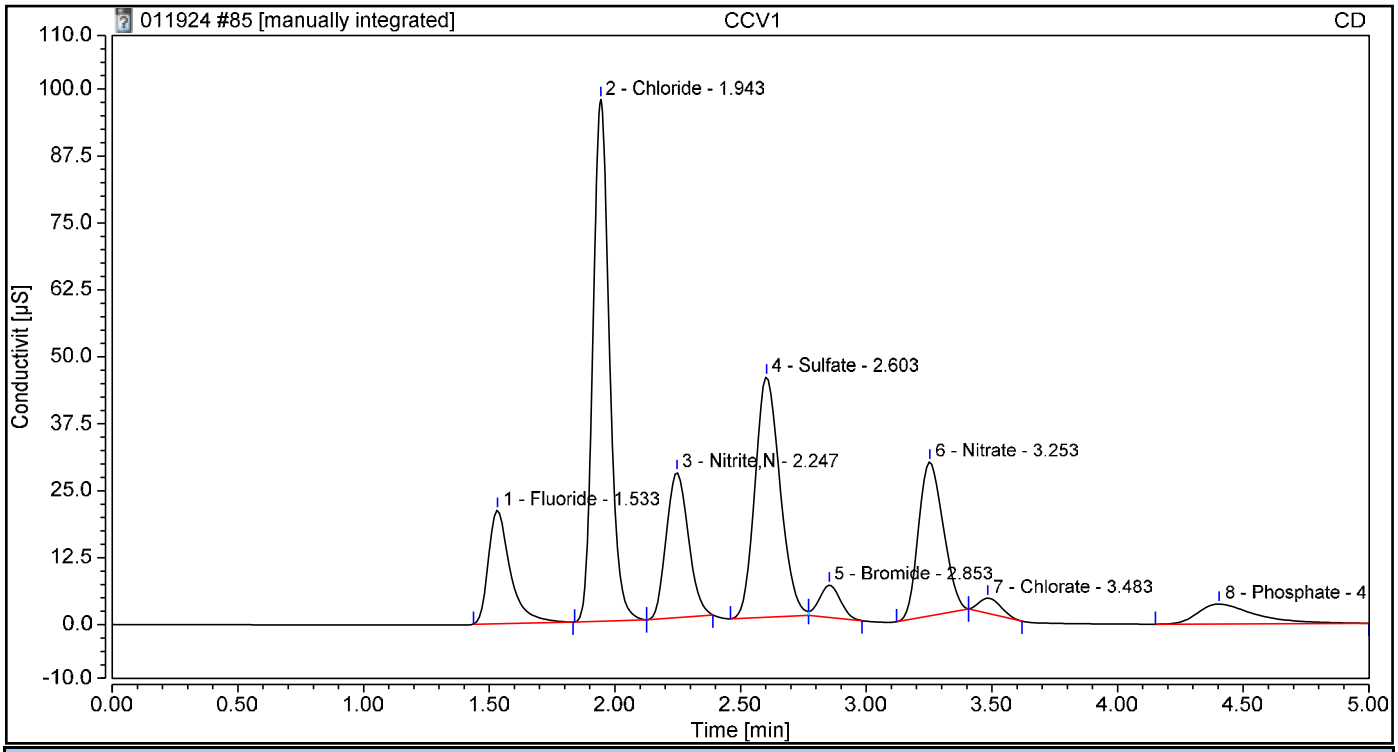
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	Chloride	1.943	0.004	0.048	22.90	33.53	0.1470
2	Nitrite,N	2.267	0.012	0.094	77.10	66.47	0.0399
n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.016**	**0.142**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**CCV1**	*Run Time (min):*	**5.00**
Vial Number:	**R3**	*Injection Volume:*	**5.00**
Injection Type:	**Unknown**	*Channel:*	**CD**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**Anions Program ISO37mM 150mm short 0.4 Const**	*Bandwidth:*	**n.a.**
Processing Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**19/Jan/24 19:39**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

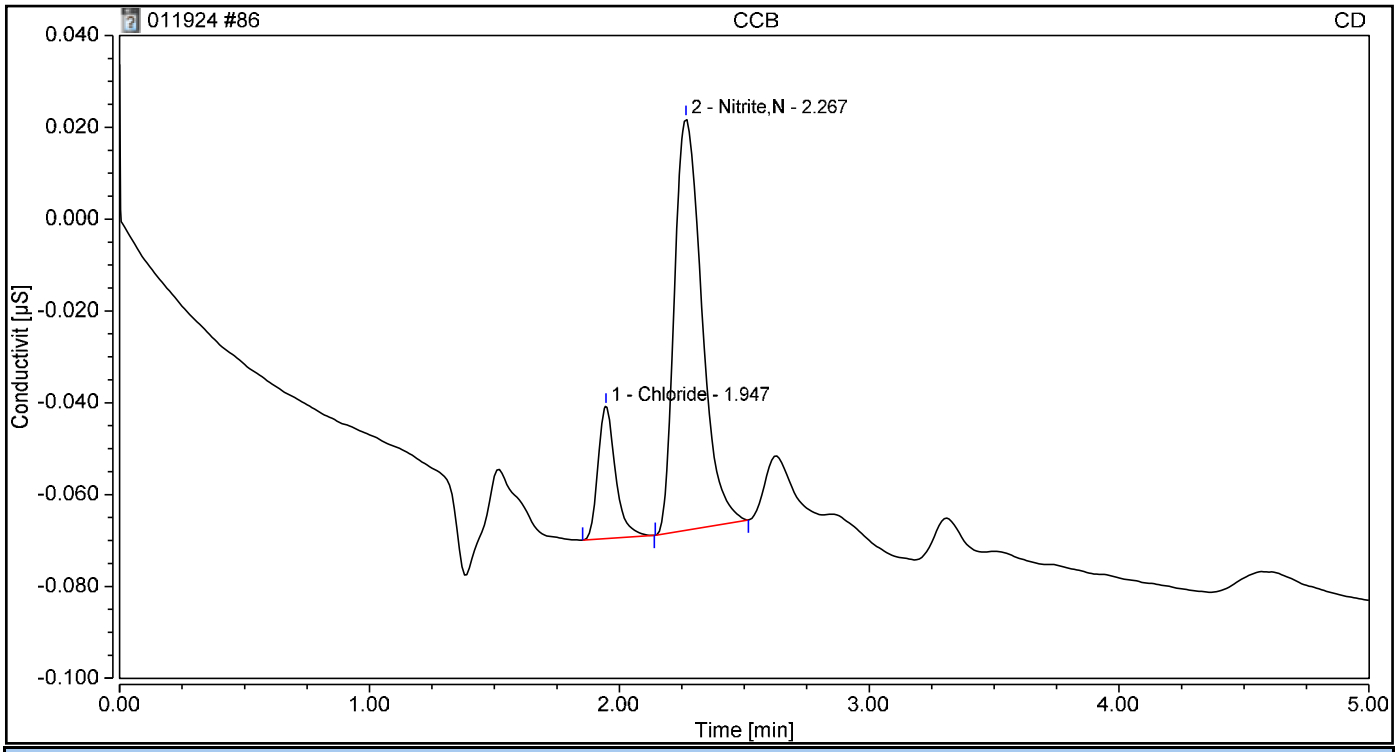
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.533	2.133	21.144	9.43	9.12	10.2346
2	Chloride	1.943	7.391	97.388	32.68	42.01	49.7780
3	Nitrite,N	2.247	2.762	27.104	12.21	11.69	10.9709
4	Sulfate	2.603	5.182	44.883	22.91	19.36	51.7218
5	Bromide	2.853	0.579	6.054	2.56	2.61	9.2866
6	Nitrate	3.253	3.292	28.716	14.56	12.39	9.9107
7	Chlorate	3.483	0.292	2.845	1.29	1.23	9.2294
8	Phosphate	4.403	0.985	3.707	4.35	1.60	n.a.
Total:			**22.617**	**231.841**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**5.00**
Vial Number:	**R7**	*Injection Volume:*	**5.00**
Injection Type:	**Unknown**	*Channel:*	**CD**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**Anions Program ISO37mM 150mm short 0.4 Const**	*Bandwidth:*	**n.a.**
Processing Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**19/Jan/24 19:44**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

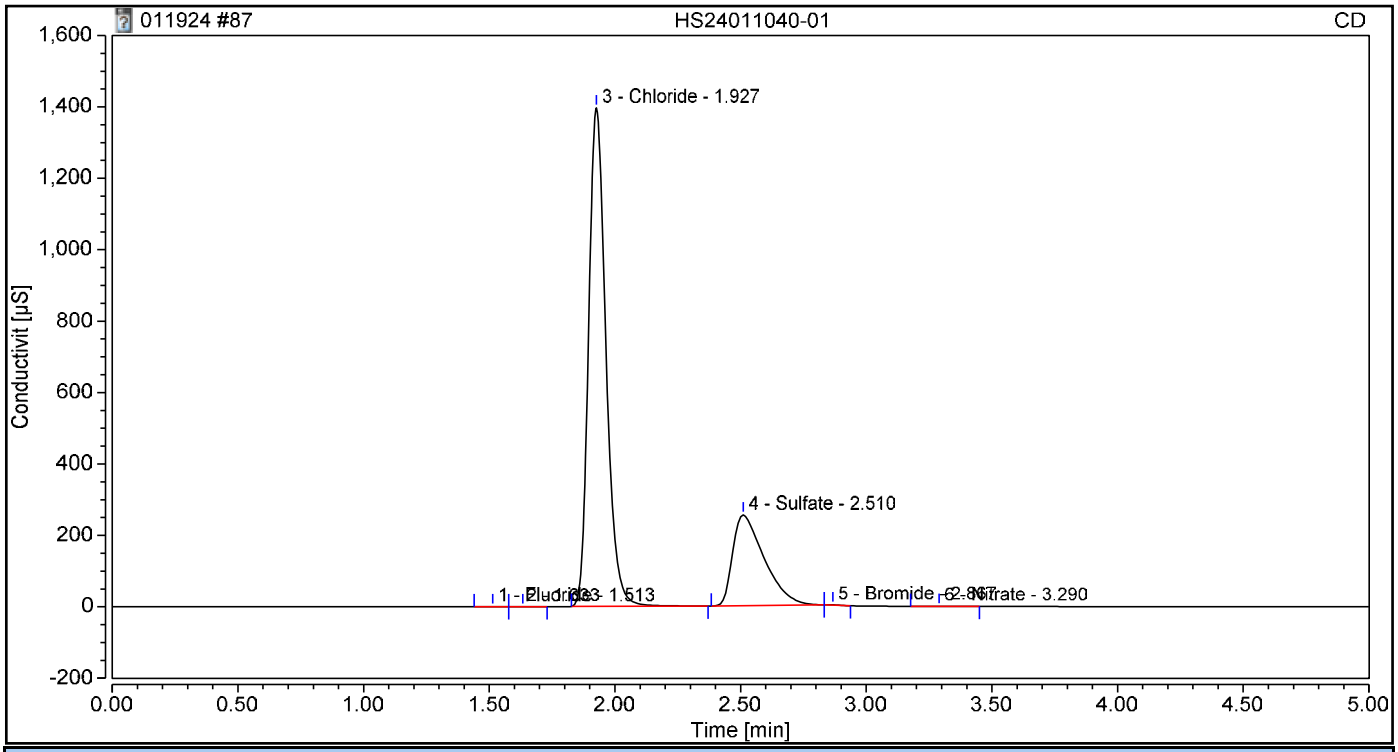
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	Chloride	1.947	0.002	0.029	16.96	24.34	0.1381
2	Nitrite,N	2.267	0.011	0.090	83.04	75.66	0.0370
n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.014**	**0.119**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**HS24011040-01**	*Run Time (min):*	**5.00**
Vial Number:	**GC1**	*Injection Volume:*	**5.00**
Injection Type:	**Unknown**	*Channel:*	**CD**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**Anions Program ISO37mM 150mm short 0.4 Const**	*Bandwidth:*	**n.a.**
Processing Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**19/Jan/24 19:56**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

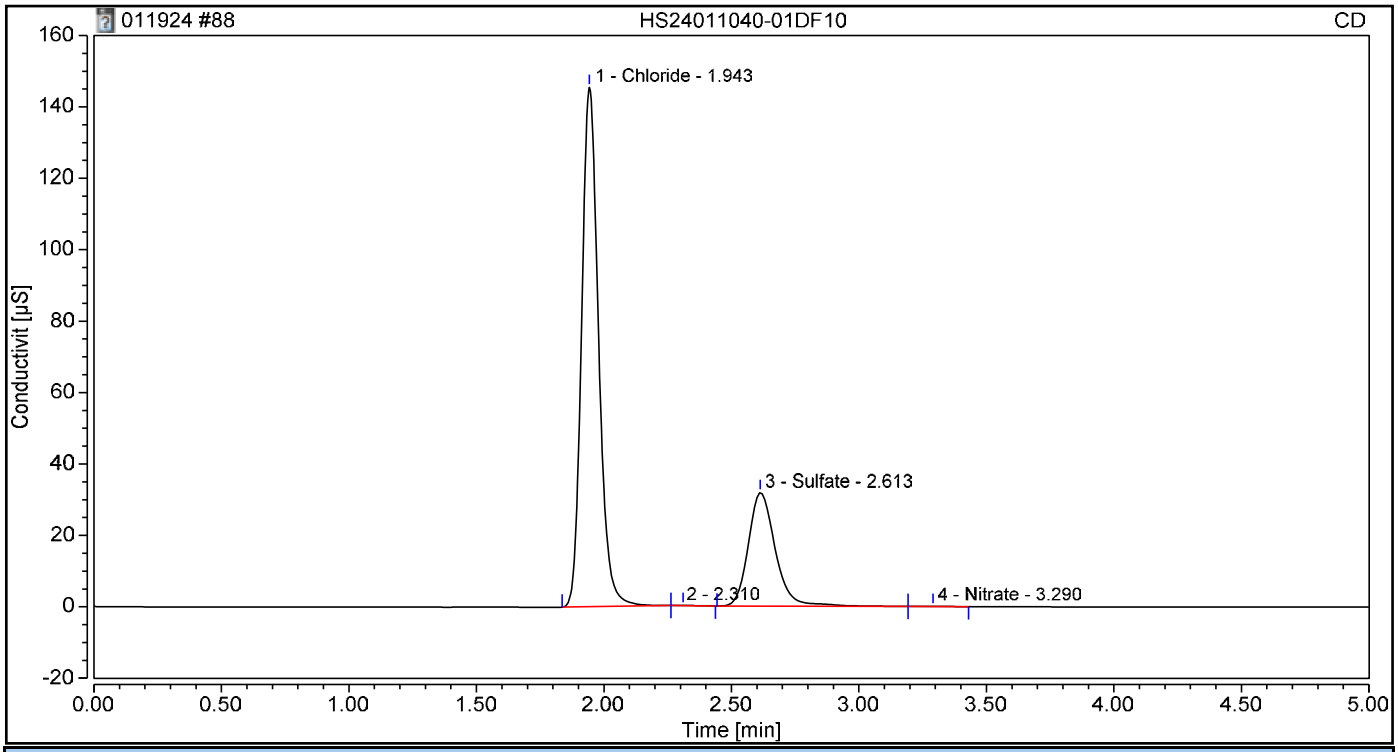
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.513	0.012	0.186	0.01	0.01	0.1095
2		1.633	0.012	0.190	0.01	0.01	n.a.
3	Chloride	1.927	111.185	1395.943	75.09	84.51	747.0658
n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	Sulfate	2.510	36.798	254.502	24.85	15.41	508.2466
5	Bromide	2.867	0.029	0.573	0.02	0.03	0.5109
6	Nitrate	3.290	0.036	0.324	0.02	0.02	0.1277
n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**148.073**	**1651.718**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**HS24011040-01DF10**	*Run Time (min):*	**5.00**
Vial Number:	**GC2**	*Injection Volume:*	**5.00**
Injection Type:	**Unknown**	*Channel:*	**CD**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**Anions Program ISO37mM 150mm short 0.4 Const**	*Bandwidth:*	**n.a.**
Processing Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**10.0000**
Injection Date/Time:	**19/Jan/24 20:02**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

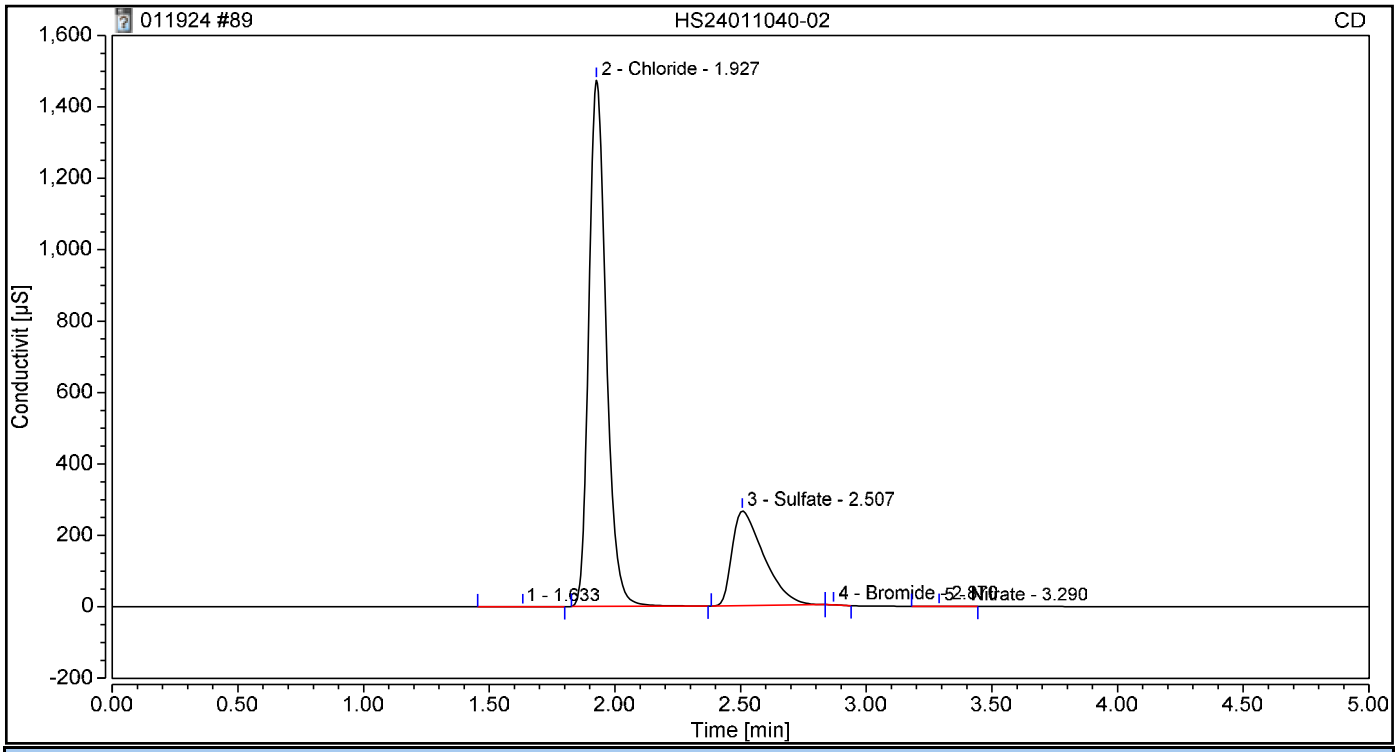
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	Chloride	1.943	11.179	145.462	74.15	82.02	752.1991
n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2		2.310	0.005	0.041	0.03	0.02	n.a.
3	Sulfate	2.613	3.886	31.798	25.78	17.93	385.0177
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	Nitrate	3.290	0.005	0.047	0.03	0.03	0.3449
n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**15.075**	**177.348**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**HS24011040-02**	*Run Time (min):*	**5.00**
Vial Number:	**GC3**	*Injection Volume:*	**5.00**
Injection Type:	**Unknown**	*Channel:*	**CD**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**Anions Program ISO37mM 150mm short 0.4 Const**	*Bandwidth:*	**n.a.**
Processing Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**19/Jan/24 20:08**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

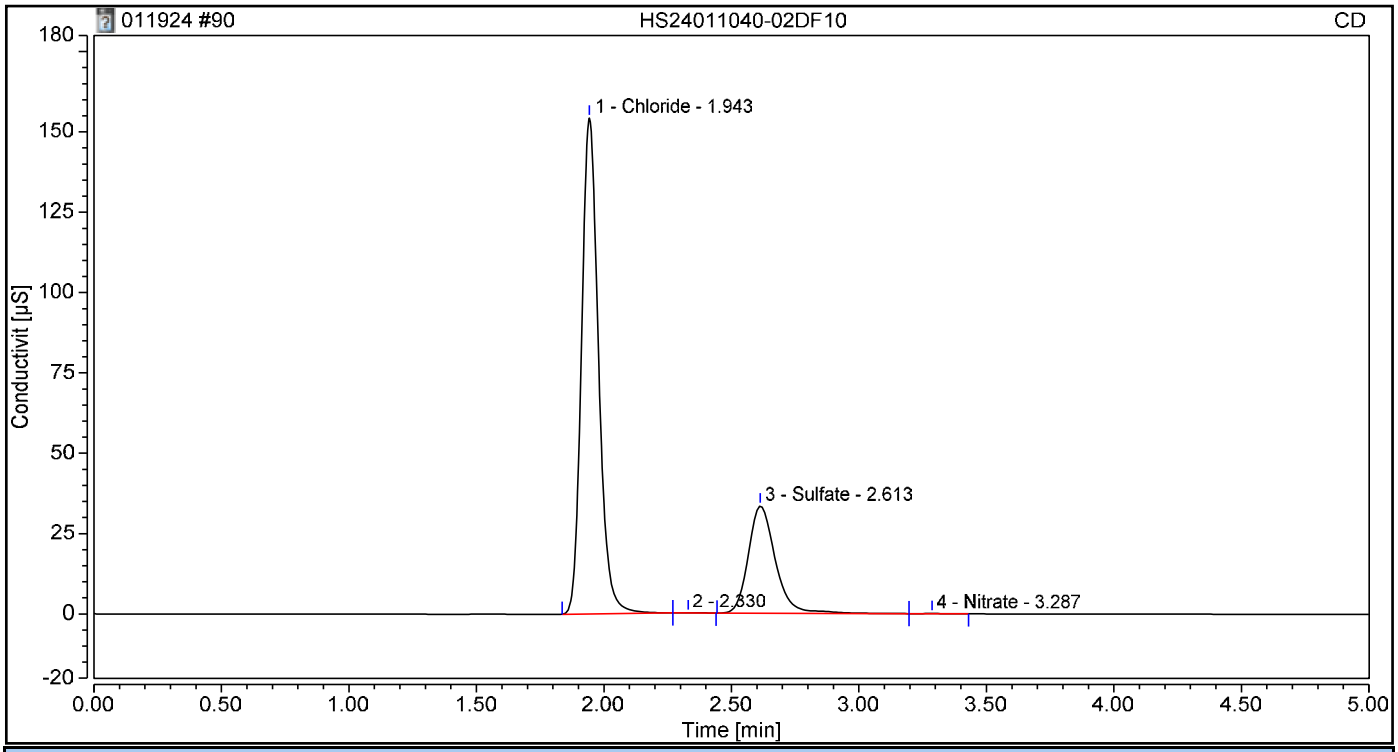
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1		1.633	0.042	0.295	0.03	0.02	n.a.
2	Chloride	1.927	117.462	1473.583	75.12	84.69	789.2292
n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	Sulfate	2.507	38.797	265.361	24.81	15.25	560.7336
4	Bromide	2.870	0.028	0.566	0.02	0.03	0.4858
5	Nitrate	3.290	0.030	0.267	0.02	0.02	0.1085
n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**156.358**	**1740.072**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**HS24011040-02DF10**	*Run Time (min):*	**5.00**
Vial Number:	**GC4**	*Injection Volume:*	**5.00**
Injection Type:	**Unknown**	*Channel:*	**CD**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**Anions Program ISO37mM 150mm short 0.4 Const**	*Bandwidth:*	**n.a.**
Processing Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**10.0000**
Injection Date/Time:	**19/Jan/24 20:14**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

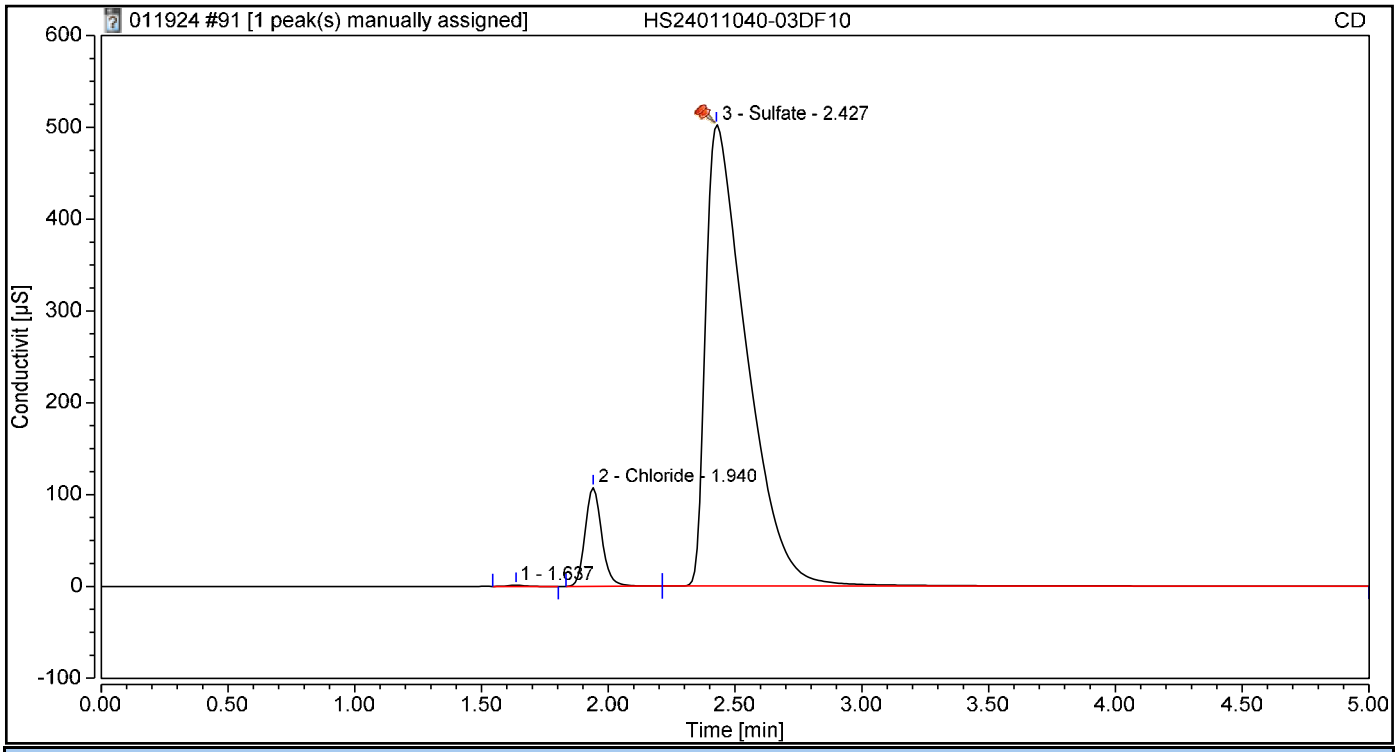
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	Chloride	1.943	11.890	154.291	74.32	82.15	799.9696
n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2		2.330	0.007	0.067	0.04	0.04	n.a.
3	Sulfate	2.613	4.098	33.411	25.61	17.79	406.4872
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	Nitrate	3.287	0.004	0.040	0.03	0.02	0.3230
n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**15.999**	**187.808**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**HS24011040-03DF10**	*Run Time (min):*	**5.00**
Vial Number:	**GC5**	*Injection Volume:*	**5.00**
Injection Type:	**Unknown**	*Channel:*	**CD**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**Anions Program ISO37mM 150mm short 0.4 Const**	*Bandwidth:*	**n.a.**
Processing Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**10.0000**
Injection Date/Time:	**19/Jan/24 20:20**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

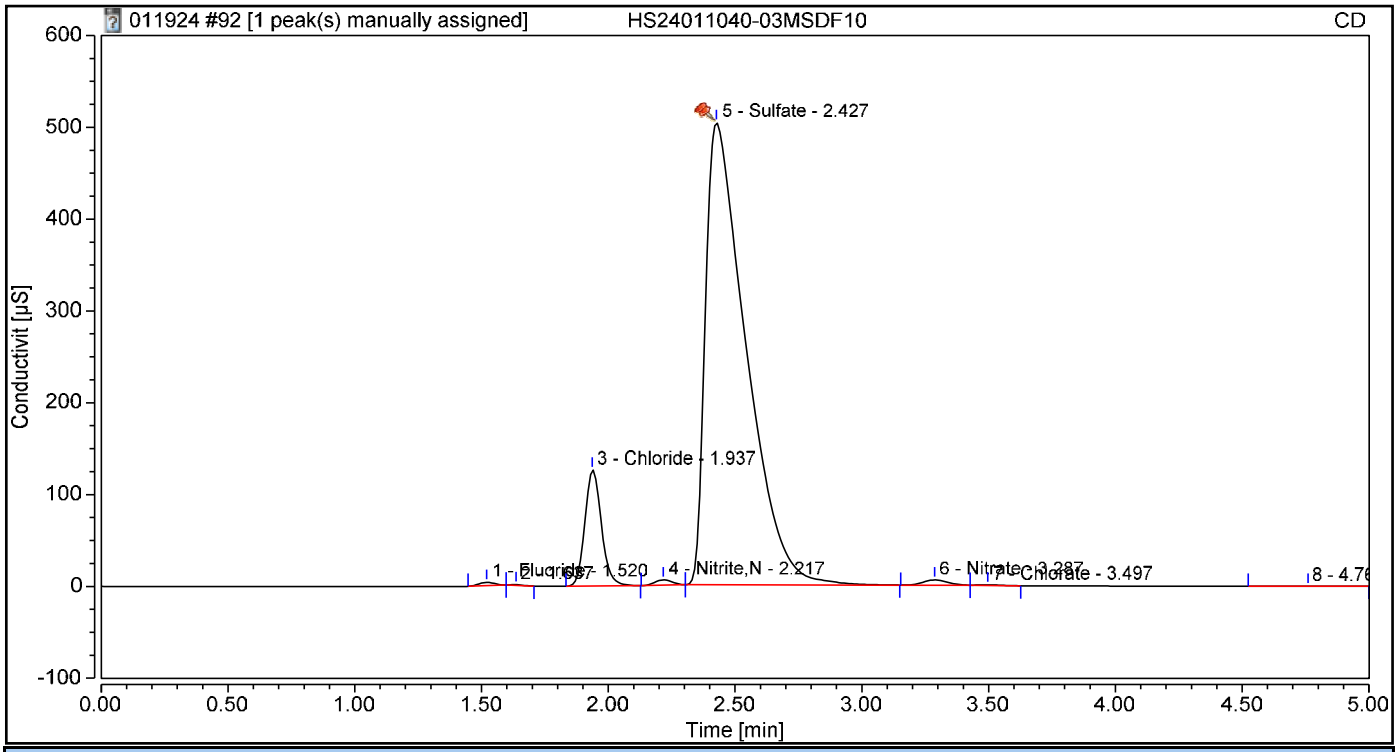
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1		1.637	0.094	1.313	0.09	0.21	n.a.
2	Chloride	1.940	8.154	107.578	7.99	17.60	549.0287
n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	Sulfate	2.427	93.748	502.495	91.91	82.19	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**101.996**	**611.387**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**HS24011040-03MSDF10**	*Run Time (min):*	**5.00**
Vial Number:	**GC6**	*Injection Volume:*	**5.00**
Injection Type:	**Unknown**	*Channel:*	**CD**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**Anions Program ISO37mM 150mm short 0.4 Const**	*Bandwidth:*	**n.a.**
Processing Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**10.0000**
Injection Date/Time:	**19/Jan/24 20:25**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

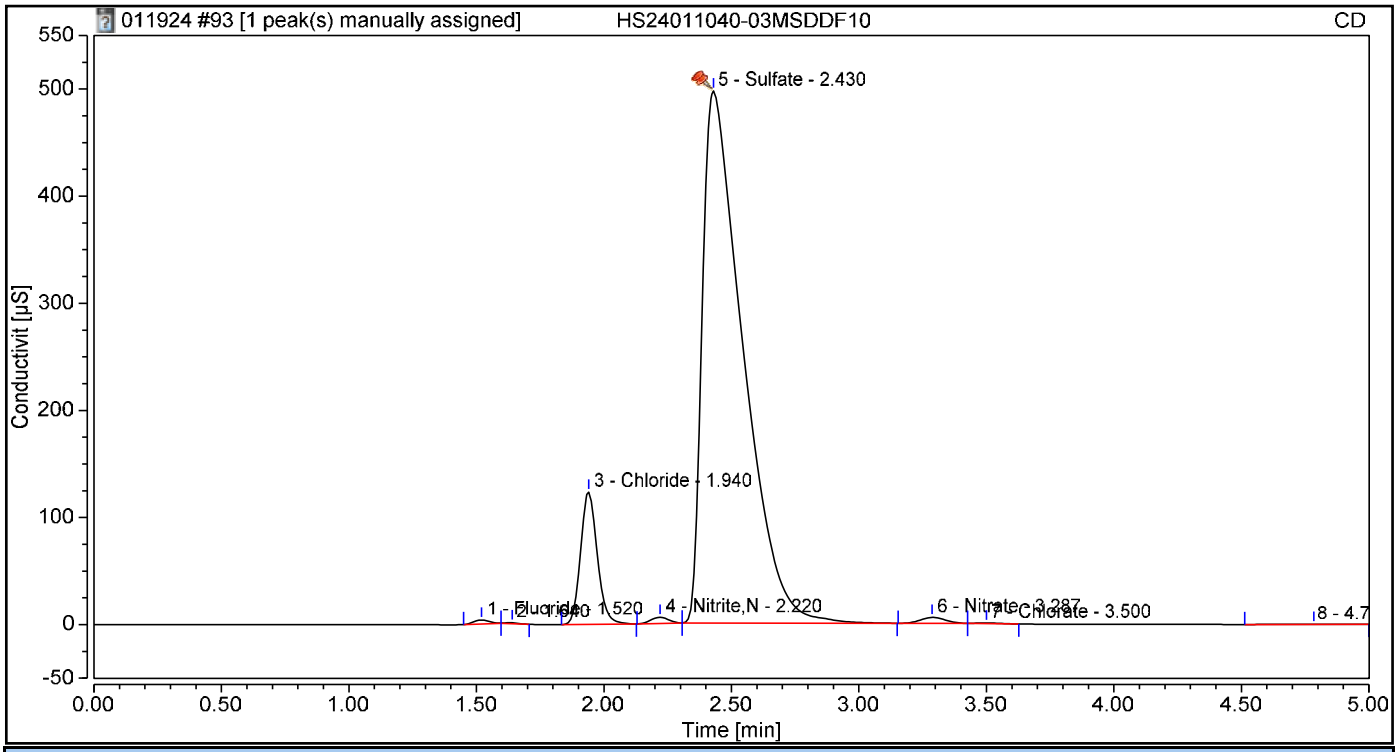
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.520	0.258	3.642	0.25	0.56	12.8178
2		1.637	0.042	0.797	0.04	0.12	n.a.
3	Chloride	1.937	9.569	126.355	9.21	19.55	644.0666
4	Nitrite,N	2.217	0.463	5.799	0.45	0.90	16.0289
5	Sulfate	2.427	92.892	503.483	89.39	77.90	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6	Nitrate	3.287	0.630	5.627	0.61	0.87	19.1203
7	Chlorate	3.497	0.053	0.534	0.05	0.08	16.1249
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
8		4.760	0.012	0.044	0.01	0.01	n.a.
Total:			**103.918**	**646.281**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**HS24011040-03MSDDF10**	*Run Time (min):*	**5.00**
Vial Number:	**GC7**	*Injection Volume:*	**5.00**
Injection Type:	**Unknown**	*Channel:*	**CD**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**Anions Program ISO37mM 150mm short 0.4 Const**	*Bandwidth:*	**n.a.**
Processing Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**10.0000**
Injection Date/Time:	**19/Jan/24 20:31**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

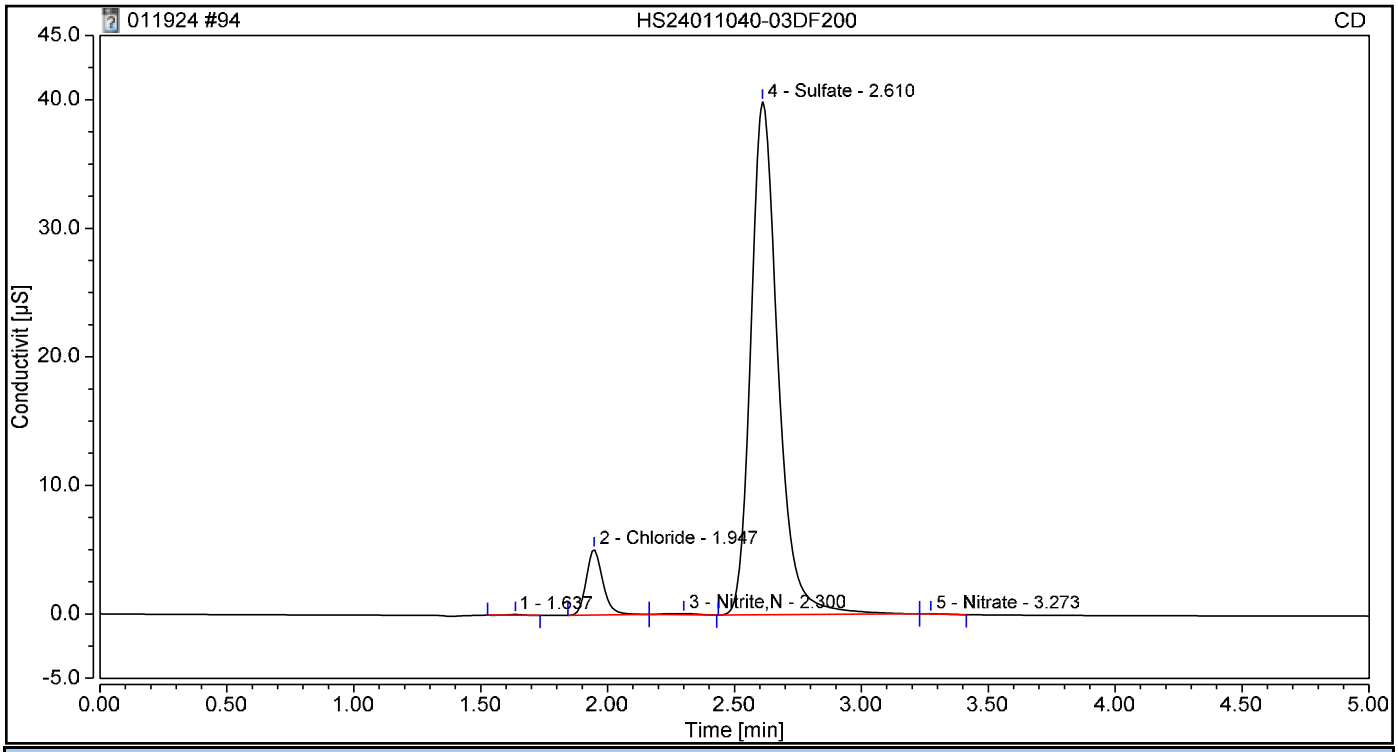
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.520	0.255	3.638	0.25	0.57	12.6887
2		1.640	0.042	0.796	0.04	0.13	n.a.
3	Chloride	1.940	9.341	123.538	9.17	19.41	628.7404
4	Nitrite,N	2.220	0.456	5.696	0.45	0.89	15.8059
5	Sulfate	2.430	91.121	496.654	89.42	78.04	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6	Nitrate	3.287	0.616	5.524	0.60	0.87	18.6886
7	Chlorate	3.500	0.053	0.543	0.05	0.09	16.1297
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
8		4.783	0.017	0.057	0.02	0.01	n.a.
Total:			**101.901**	**636.446**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**HS24011040-03DF200**	*Run Time (min):*	**5.00**
Vial Number:	**GC8**	*Injection Volume:*	**5.00**
Injection Type:	**Unknown**	*Channel:*	**CD**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**Anions Program ISO37mM 150mm short 0.4 Const**	*Bandwidth:*	**n.a.**
Processing Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**200.0000**
Injection Date/Time:	**19/Jan/24 20:37**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

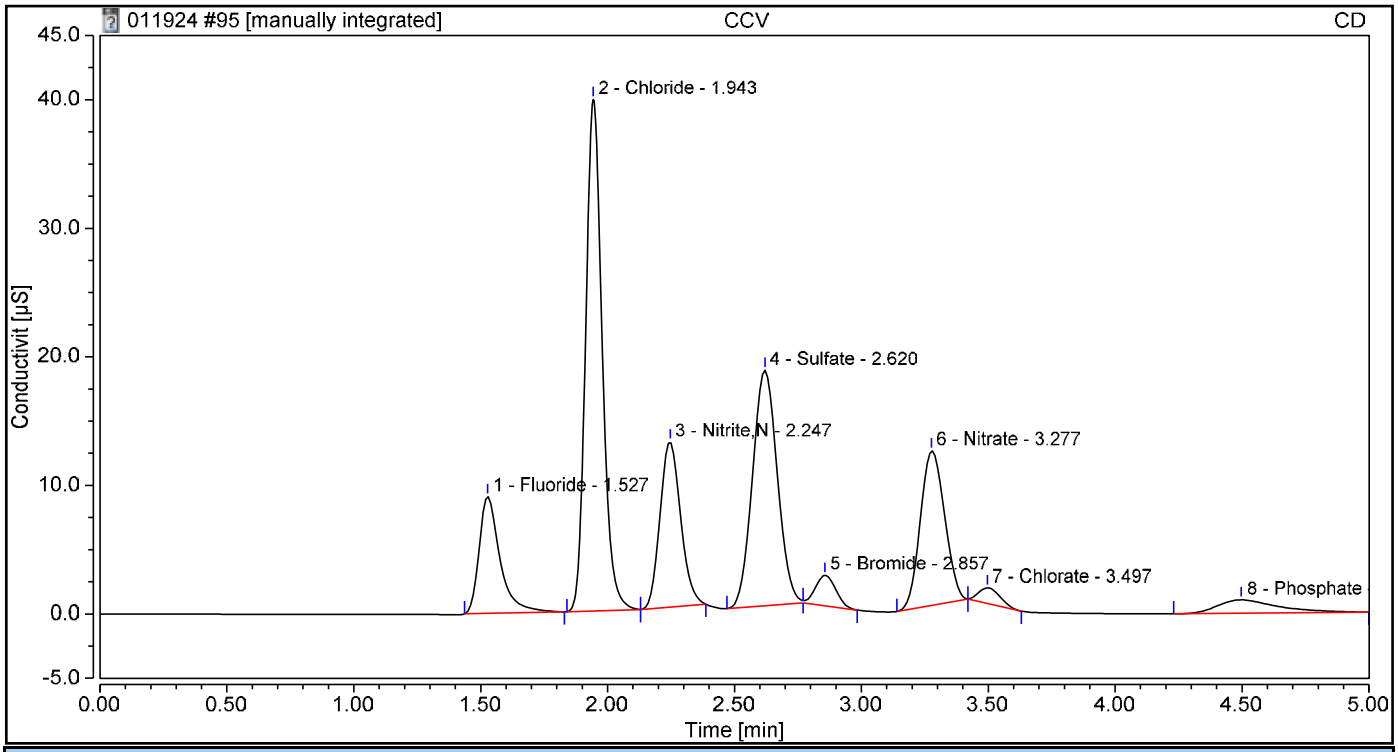
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1		1.637	0.005	0.066	0.08	0.15	n.a.
2	Chloride	1.947	0.388	5.088	7.25	11.27	545.9065
3	Nitrite,N	2.300	0.013	0.093	0.25	0.21	8.6265
4	Sulfate	2.610	4.943	39.888	92.38	88.35	9853.5049
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	Nitrate	3.273	0.002	0.015	0.03	0.03	4.9928
n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**5.351**	**45.150**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**5.00**
Vial Number:	**R1**	*Injection Volume:*	**5.00**
Injection Type:	**Unknown**	*Channel:*	**CD**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**Anions Program ISO37mM 150mm short 0.4 Const**	*Bandwidth:*	**n.a.**
Processing Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**19/Jan/24 21:12**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

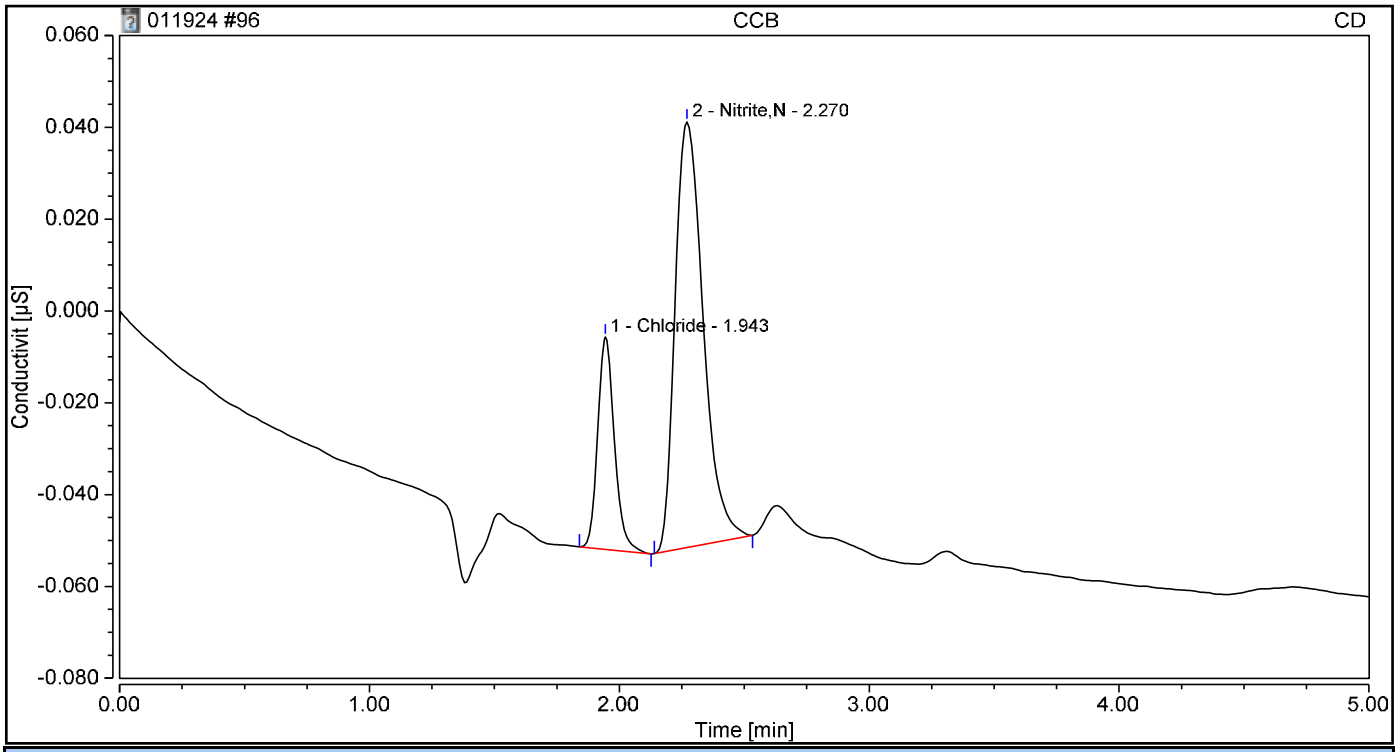
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.527	0.868	9.085	9.51	9.39	4.1937
2	Chloride	1.943	3.003	39.788	32.91	41.13	20.2977
3	Nitrite,N	2.247	1.213	12.862	13.29	13.30	4.3690
4	Sulfate	2.620	2.075	18.325	22.74	18.94	20.3806
5	Bromide	2.857	0.222	2.385	2.43	2.46	3.6058
6	Nitrate	3.277	1.330	12.026	14.57	12.43	4.0148
7	Chlorate	3.497	0.121	1.217	1.33	1.26	3.6862
8	Phosphate	4.497	0.294	1.051	3.22	1.09	n.a.
Total:			**9.125**	**96.738**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**5.00**
Vial Number:	**R6**	*Injection Volume:*	**5.00**
Injection Type:	**Unknown**	*Channel:*	**CD**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**Anions Program ISO37mM 150mm short 0.4 Const**	*Bandwidth:*	**n.a.**
Processing Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**19/Jan/24 21:18**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	Chloride	1.943	0.004	0.046	22.77	33.28	0.1465
2	Nitrite,N	2.270	0.012	0.093	77.23	66.72	0.0393
n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.016**	**0.139**	**100.00**	**100.00**	

HS24011040 Wetchem 9056_W-2

ALS WO# HS24011040

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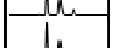
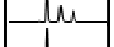
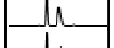
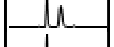
CD	Name	Comment	Type	Position	Dilution	Level	Instrument Method
	STD1		Calibratio	BA1	1.00	1	Anions Program ISO37mM 150mm short 0.4 Constant current
	STD2		Calibratio	BA2	1.00	2	Anions Program ISO37mM 150mm short 0.4 Constant current
	STD3		Calibratio	BA3	1.00	3	Anions Program ISO37mM 150mm short 0.4 Constant current
	STD4		Calibratio	BA4	1.00	4	Anions Program ISO37mM 150mm short 0.4 Constant current
	STD5		Calibratio	BA5	1.00	5	Anions Program ISO37mM 150mm short 0.4 Constant current
	STD6		Calibratio	BA6	1.00	6	Anions Program ISO37mM 150mm short 0.4 Constant current
	ICV		Unknown	BA7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	ICB		Unknown	BA8	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCV		Unknown	R1	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCB		Unknown	R6	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	MBLK	300-W	Unknown	R5	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	LCS		Unknown	R2	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010545-01		Unknown	RA1	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010545-01MS		Unknown	RA2	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010545-01MSD		Unknown	RA3	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010545-01DF5		Unknown	RA4	5.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010545-02		Unknown	RA5	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010545-02DF5		Unknown	RA6	5.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010545-03		Unknown	RA7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010545-03DF5		Unknown	RA8	5.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCV1		Unknown	R3	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCB		Unknown	R7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010545-04		Unknown	RB1	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010545-04DF10		Unknown	RB2	10.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010545-05		Unknown	RB3	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010545-05DF10		Unknown	RB4	10.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010545-06		Unknown	RB5	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010545-06DF10		Unknown	RB6	10.00		Anions Program ISO37mM 150mm short 0.4 Constant current

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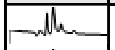
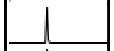
CD	Name	Comment	Type	Position	Dilution	Level	Instrument Method
	HS24010545-07		Unknown	RB7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010545-07DF5		Unknown	RB8	5.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010977-01DF50		Unknown	RC1	50.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010977-02DF20		Unknown	RC2	20.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCV		Unknown	R1	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCB		Unknown	R4	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010977-03DF10		Unknown	RC3	10.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010977-03MSDF1(		Unknown	RC4	10.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010977-03MSDDF		Unknown	RC5	10.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010977-04DF20		Unknown	RC6	20.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010692-01		Unknown	RC7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010692-02		Unknown	RC8	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010692-03		Unknown	RD1	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010692-04		Unknown	RD2	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010692-05		Unknown	RD3	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010692-06		Unknown	RD4	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCV1		Unknown	R3	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCB		Unknown	R7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010692-07		Unknown	RD5	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010692-08		Unknown	RD6	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010692-09		Unknown	RD7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010692-01DF10		Unknown	RD8	10.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010692-03DF10		Unknown	RE1	10.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010692-06DF10		Unknown	RE2	10.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010692-07DF10		Unknown	RE3	10.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010692-08DF10		Unknown	RE4	10.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCV		Unknown	R1	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCB		Unknown	R6	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current

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	MBLK	300-W-SH	Unknown	R5	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
CD	**Name**	**Comment**	**Type**	**Position**	**Dilution**	**Level**	**Instrument Method**
	LCS		Unknown	R2	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011031-01		Unknown	RE5	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011031-01MS		Unknown	RE6	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011031-01MSD		Unknown	RE7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011031-02		Unknown	RE8	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011031-02DF20		Unknown	GA1	20.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011031-03DF10		Unknown	GA2	10.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011031-03DF200		Unknown	GA3	200.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCV1		Unknown	R3	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCB		Unknown	R7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011031-04DF10		Unknown	GA4	10.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011031-04DF200		Unknown	GA5	200.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011031-05DF20		Unknown	GA6	20.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011031-05DF500		Unknown	GA7	500.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011031-06		Unknown	GA8	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011031-06DF10		Unknown	GB1	10.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011031-07DF10		Unknown	GB2	10.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011031-07DF200		Unknown	GB3	200.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011031-08DF20		Unknown	GB4	20.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011031-08DF400		Unknown	GB5	400.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCV		Unknown	R1	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCB		Unknown	R4	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011031-09DF10		Unknown	GB6	10.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011031-09DF200		Unknown	GB7	200.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011103-01	300-W-SH	Unknown	GB8	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	MBLK	9056-W-SO4	Unknown	R5	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	LCS		Unknown	R2	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current

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	HS24011040-03DF200		Unknowr	GC1	200.00		Anions Program ISO37mM 150mm short 0.4 Constant current

CD	Name	Comment	Type	Position	Dilution	Level	Instrument Method
	HS24011040-03MSDF2(		Unknowr	GC2	200.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011040-03MSDDF		Unknowr	GC3	200.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCV1		Unknowr	R3	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCB		Unknowr	R7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	MBLK-206244	300-S	Unknowr	R5	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	LCS-206244		Unknowr	R2	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011052-01		Unknowr	GC4	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011052-01MS		Unknowr	GC5	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011052-01MSD		Unknowr	GC6	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011052-04		Unknowr	GC7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011052-06		Unknowr	GC8	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011052-08		Unknowr	GD1	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011052-11		Unknowr	GD2	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011052-13		Unknowr	GD3	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCV		Unknowr	R1	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCB		Unknowr	R4	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011017-01		Unknowr	GD4	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011017-02		Unknowr	GD5	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24011017-03		Unknowr	GD6	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCV1		Unknowr	R3	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCB		Unknowr	R8	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current

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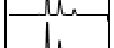
Processing Method	CD	Name	me	Status	Inject Time
Anions Processing Method ISO		STD1	5.0	Finished	1/20/2024 10:32:06 PM -06:00
Anions Processing Method ISO		STD2	5.0	Finished	1/20/2024 10:37:56 PM -06:00
Anions Processing Method ISO		STD3	5.0	Finished	1/20/2024 10:43:46 PM -06:00
Anions Processing Method ISO		STD4	5.0	Finished	1/20/2024 10:49:36 PM -06:00
Anions Processing Method ISO		STD5	5.0	Finished	1/20/2024 10:55:25 PM -06:00
Anions Processing Method ISO		STD6	5.0	Finished	1/20/2024 11:01:15 PM -06:00
Anions Processing Method ISO		ICV	5.0	Finished	1/20/2024 11:07:05 PM -06:00
Anions Processing Method ISO		ICB	5.0	Finished	1/20/2024 11:18:44 PM -06:00
Anions Processing Method ISO		CCV	5.0	Finished	1/22/2024 11:04:35 AM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/22/2024 11:10:25 AM -06:00
Anions Processing Method ISO		MBLK	5.0	Finished	1/22/2024 11:22:05 AM -06:00
Anions Processing Method ISO		LCS	5.0	Finished	1/22/2024 11:33:45 AM -06:00
Anions Processing Method ISO		HS24010545-01	5.0	Finished	1/22/2024 11:39:35 AM -06:00
Anions Processing Method ISO		HS24010545-01MS	5.0	Finished	1/22/2024 11:45:25 AM -06:00
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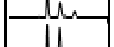
Anions Processing Method ISO		HS24010545-01DF5	5.0	Finished	1/22/2024 11:57:05 AM -06:00
Anions Processing Method ISO		HS24010545-02	5.0	Finished	1/22/2024 12:03:07 PM -06:00
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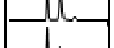
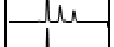
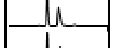
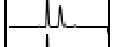
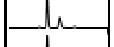
Anions Processing Method ISO		HS24010545-03	5.0	Finished	1/22/2024 12:14:47 PM -06:00
Anions Processing Method ISO		HS24010545-03DF5	5.0	Finished	1/22/2024 12:20:37 PM -06:00
Anions Processing Method ISO		CCV1	5.0	Finished	1/22/2024 12:38:08 PM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/22/2024 12:43:58 PM -06:00
Anions Processing Method ISO		HS24010545-04	5.0	Finished	1/22/2024 12:55:39 PM -06:00
Anions Processing Method ISO		HS24010545-04DF10	5.0	Finished	1/22/2024 1:01:29 PM -06:00
Anions Processing Method ISO		HS24010545-05	5.0	Finished	1/22/2024 1:07:19 PM -06:00
Anions Processing Method ISO		HS24010545-05DF10	5.0	Finished	1/22/2024 1:13:09 PM -06:00
Anions Processing Method ISO		HS24010545-06	5.0	Finished	1/22/2024 1:19:00 PM -06:00
Anions Processing Method ISO		HS24010545-06DF10	5.0	Finished	1/22/2024 1:24:50 PM -06:00

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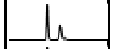
Processing Method	CD	Name	me	Status	Inject Time
Anions Processing Method ISO		HS24010545-07	5.0	Finished	1/22/2024 1:30:40 PM -06:00
Anions Processing Method ISO		HS24010545-07DF5	5.0	Finished	1/22/2024 1:36:30 PM -06:00
Anions Processing Method ISO		HS24010977-01DF50	5.0	Finished	1/22/2024 1:42:20 PM -06:00
Anions Processing Method ISO		HS24010977-02DF20	5.0	Finished	1/22/2024 1:48:10 PM -06:00
Anions Processing Method ISO		CCV	5.0	Finished	1/22/2024 1:59:51 PM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/22/2024 2:05:41 PM -06:00
Anions Processing Method ISO		HS24010977-03DF10	5.0	Finished	1/22/2024 2:17:21 PM -06:00
Anions Processing Method ISO		HS24010977-03MSDF10	5.0	Finished	1/22/2024 2:23:12 PM -06:00
Anions Processing Method ISO		HS24010977-03MSDDF	5.0	Finished	1/22/2024 2:29:02 PM -06:00
Anions Processing Method ISO		HS24010977-04DF20	5.0	Finished	1/22/2024 2:34:52 PM -06:00
Anions Processing Method ISO		HS24010692-01	5.0	Finished	1/22/2024 2:40:42 PM -06:00
Anions Processing Method ISO		HS24010692-02	5.0	Finished	1/22/2024 2:46:32 PM -06:00
Anions Processing Method ISO		HS24010692-03	5.0	Finished	1/22/2024 2:52:22 PM -06:00
Anions Processing Method ISO		HS24010692-04	5.0	Finished	1/22/2024 2:58:12 PM -06:00
Anions Processing Method ISO		HS24010692-05	5.0	Finished	1/22/2024 3:04:14 PM -06:00
Anions Processing Method ISO		HS24010692-06	5.0	Finished	1/22/2024 3:10:04 PM -06:00
Anions Processing Method ISO		CCV1	5.0	Finished	1/22/2024 3:27:34 PM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/22/2024 3:33:24 PM -06:00
Anions Processing Method ISO		HS24010692-07	5.0	Finished	1/22/2024 3:39:14 PM -06:00
Anions Processing Method ISO		HS24010692-08	5.0	Finished	1/22/2024 3:45:04 PM -06:00
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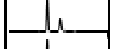
Anions Processing Method ISO		HS24010692-01DF10	5.0	Finished	1/22/2024 3:56:44 PM -06:00
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Anions Processing Method ISO		HS24010692-07DF10	5.0	Finished	1/22/2024 4:14:37 PM -06:00
Anions Processing Method ISO		HS24010692-08DF10	5.0	Finished	1/22/2024 4:20:28 PM -06:00
Anions Processing Method ISO		CCV	5.0	Finished	1/22/2024 4:38:09 PM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/22/2024 4:43:59 PM -06:00

Sequence: 012224
Last Update Operator: alshs.nouser

Anions Processing Method ISO		MBLK	5.0	Finished	1/22/2024 4:55:39 PM -06:00
Processing Method	**CD**	**Name**	**me**	**Status**	**Inject Time**
Anions Processing Method ISO		LCS	5.0	Finished	1/22/2024 5:07:19 PM -06:00
Anions Processing Method ISO		HS24011031-01	5.0	Finished	1/22/2024 5:13:09 PM -06:00
Anions Processing Method ISO		HS24011031-01MS	5.0	Finished	1/22/2024 5:18:59 PM -06:00
Anions Processing Method ISO		HS24011031-01MSD	5.0	Finished	1/22/2024 5:24:49 PM -06:00
Anions Processing Method ISO		HS24011031-02	5.0	Finished	1/22/2024 5:30:40 PM -06:00
Anions Processing Method ISO		HS24011031-02DF20	5.0	Finished	1/22/2024 5:36:41 PM -06:00
Anions Processing Method ISO		HS24011031-03DF10	5.0	Finished	1/22/2024 5:42:31 PM -06:00
Anions Processing Method ISO		HS24011031-03DF200	5.0	Finished	1/22/2024 5:48:21 PM -06:00
Anions Processing Method ISO		CCV1	5.0	Finished	1/22/2024 6:05:51 PM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/22/2024 6:11:41 PM -06:00
Anions Processing Method ISO		HS24011031-04DF10	5.0	Finished	1/22/2024 6:23:21 PM -06:00
Anions Processing Method ISO		HS24011031-04DF200	5.0	Finished	1/22/2024 6:29:11 PM -06:00
Anions Processing Method ISO		HS24011031-05DF20	5.0	Finished	1/22/2024 6:35:01 PM -06:00
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Anions Processing Method ISO		HS24011031-07DF200	5.0	Finished	1/22/2024 7:04:11 PM -06:00
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Anions Processing Method ISO		CCV	5.0	Finished	1/22/2024 7:39:11 PM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/22/2024 7:45:01 PM -06:00
Anions Processing Method ISO		HS24011031-09DF10	5.0	Finished	1/22/2024 7:56:41 PM -06:00
Anions Processing Method ISO		HS24011031-09DF200	5.0	Finished	1/22/2024 8:02:31 PM -06:00
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Anions Processing Method ISO		LCS	5.0	Finished	1/22/2024 8:43:32 PM -06:00

Sequence: 012224
Last Update Operator: alshs.nouser

Processing Method	CD	Name	me	Status	Inject Time
Anions Processing Method ISO		HS24011040-03DF200	5.0	Finished	1/22/2024 8:49:22 PM -06:00
Anions Processing Method ISO		HS24011040-03MSDF20	5.0	Finished	1/22/2024 8:55:12 PM -06:00
Anions Processing Method ISO		HS24011040-03MSDDF	5.0	Finished	1/22/2024 9:01:02 PM -06:00
Anions Processing Method ISO		CCV1	5.0	Finished	1/22/2024 9:24:22 PM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/22/2024 9:30:12 PM -06:00
Anions Processing Method ISO		MBLK-206244	5.0	Finished	1/22/2024 9:41:52 PM -06:00
Anions Processing Method ISO		LCS-206244	5.0	Finished	1/22/2024 9:47:42 PM -06:00
Anions Processing Method ISO		HS24011052-01	5.0	Finished	1/22/2024 9:59:21 PM -06:00
Anions Processing Method ISO		HS24011052-01MS	5.0	Finished	1/22/2024 10:05:11 PM -06:00
Anions Processing Method ISO		HS24011052-01MSD	5.0	Finished	1/22/2024 10:11:01 PM -06:00
Anions Processing Method ISO		HS24011052-04	5.0	Finished	1/22/2024 10:16:51 PM -06:00
Anions Processing Method ISO		HS24011052-06	5.0	Finished	1/22/2024 10:22:41 PM -06:00
Anions Processing Method ISO		HS24011052-08	5.0	Finished	1/22/2024 10:28:31 PM -06:00
Anions Processing Method ISO		HS24011052-11	5.0	Finished	1/22/2024 10:34:21 PM -06:00
Anions Processing Method ISO		HS24011052-13	5.0	Finished	1/22/2024 10:40:11 PM -06:00
Anions Processing Method ISO		CCV	5.0	Finished	1/22/2024 10:57:41 PM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/22/2024 11:03:30 PM -06:00
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Anions Processing Method ISO		HS24011017-02	5.0	Finished	1/22/2024 11:21:00 PM -06:00
Anions Processing Method ISO		HS24011017-03	5.0	Finished	1/22/2024 11:26:50 PM -06:00
Anions Processing Method ISO		CCV1	5.0	Finished	1/22/2024 11:50:10 PM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/23/2024 12:54:18 AM -06:00

Sequence: 012224
Injection #6: STD6

Calibration

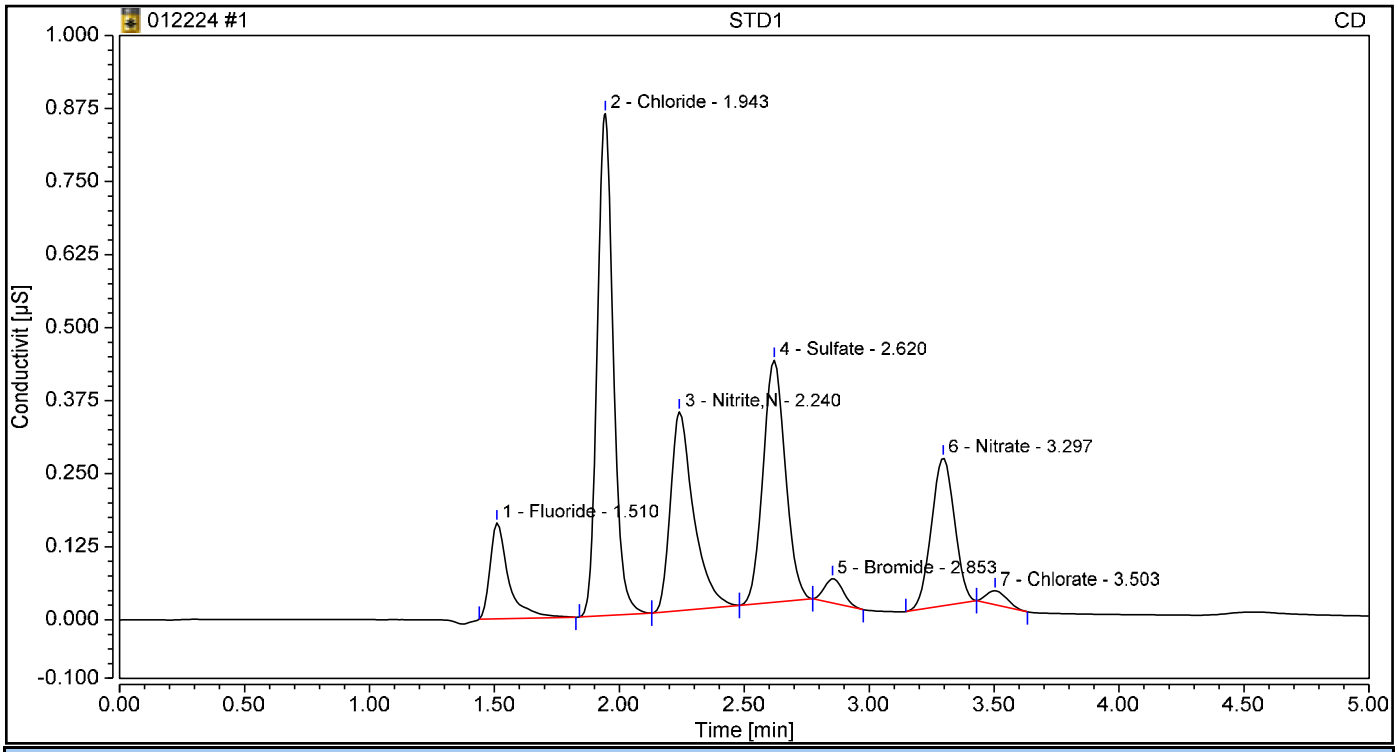
Peak No.	Peak Name	Cal.Type	Eval.Type	Number of Points	Rel.Std.Dev. %	Coeff.of Determination	C0 (Offset)	C1 (Slope)	C2 (Curve)
1	Fluoride	Lin, WithOffset, 1/A	Area	6	13.4909	0.99920	-0.0085	0.2120	0.0000
2	Chloride	Lin, WithOffset, 1/A	Area	6	3.2950	0.99995	-0.0125	0.1484	0.0000
3	***Nitrite,N***	***Quad, WithOffset, 1/A***	***Area***	***6***	***4.4704***	***0.99990***	***0.0033***	***0.3254***	***-0.0033***
4	Sulfate	Quad, WithOffset, 1/A	Area	6	3.0094	0.99997	-0.0087	0.1009	0.0000
5	Bromide	Quad, WithOffset, 1/A	Area	6	4.8723	0.99992	-0.0014	0.0482	0.0001
6	Nitrate	Lin, WithOffset, 1/A	Area	6	2.9409	0.99996	-0.0059	0.3285	0.0000
n.a.	Chlorate	Quad, WithOffset, 1/A	Area	5	9.5520	0.99960	-0.0009	0.0299	0.0000
n.a.	Phosphate	Lin, WithOffset, 1/A	Area	0	n.a.	n.a.	n.a.	n.a.	n.a.
Maximum					**13.4909**	0.99997			
Minimum					2.9409	**0.99920**			

Chromatogram and Results

Injection Details

Injection Name:	**STD1**	*Run Time (min):*	**5.00**
Vial Number:	**BA1**	*Injection Volume:*	**5.00**
Injection Type:	**Calibration Standard**	*Channel:*	**CD**
Calibration Level:	**1**	*Wavelength:*	**n.a.**
Instrument Method:	**Anions Program ISO37mM 150mm short 0.4 Const**	*Bandwidth:*	**n.a.**
Processing Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**20/Jan/24 22:32**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

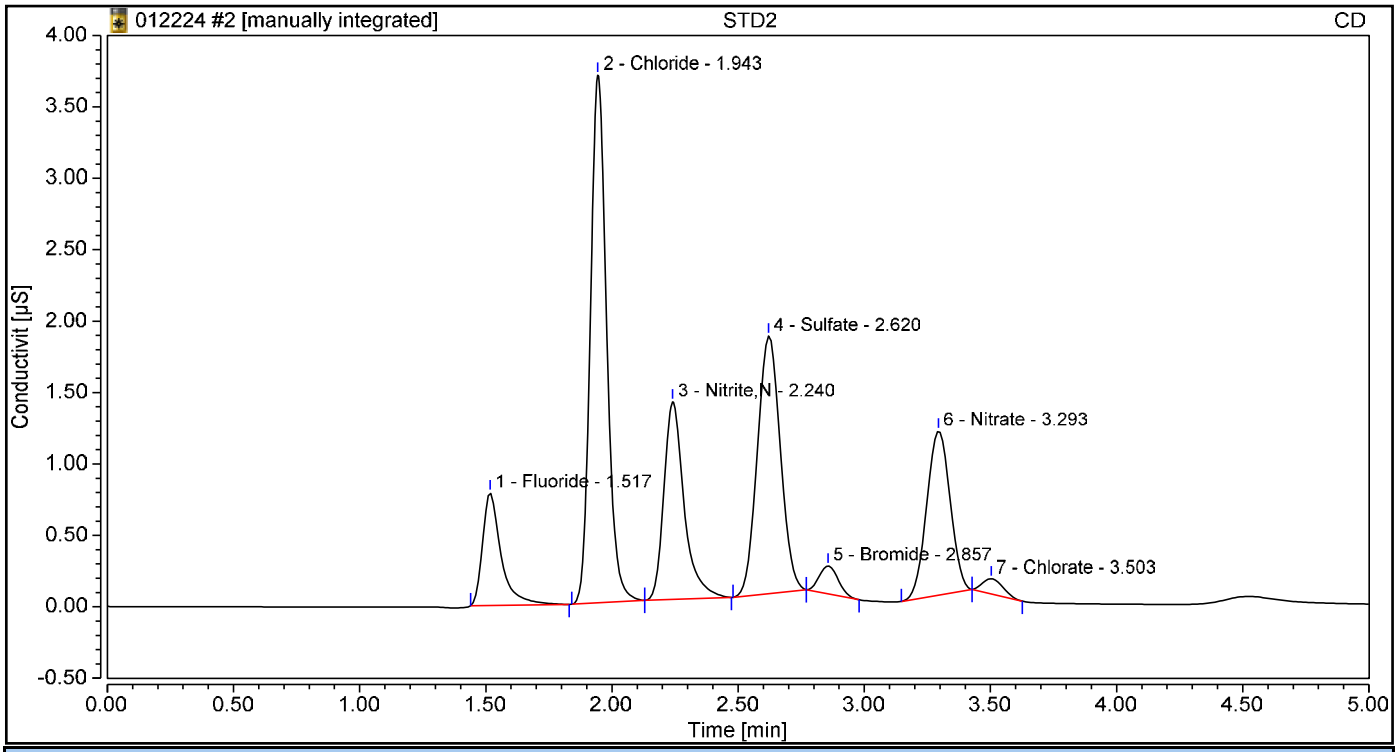
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.510	0.014	0.164	7.41	7.83	0.1068
2	Chloride	1.943	0.064	0.859	33.45	40.99	0.5130
3	Nitrite,N	2.240	0.037	0.340	19.25	16.23	0.1025
4	Sulfate	2.620	0.043	0.414	22.52	19.76	0.5106
5	Bromide	2.853	0.004	0.042	1.91	1.99	0.1052
6	Nitrate	3.297	0.027	0.253	14.27	12.07	0.1006
7	Chlorate	3.503	0.002	0.024	1.19	1.13	0.1076
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.190**	**2.096**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**STD2**	*Run Time (min):*	**5.00**
Vial Number:	**BA2**	*Injection Volume:*	**5.00**
Injection Type:	**Calibration Standard**	*Channel:*	**CD**
Calibration Level:	**2**	*Wavelength:*	**n.a.**
Instrument Method:	**Anions Program ISO37mM 150mm short 0.4 Const**	*Bandwidth:*	**n.a.**
Processing Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**20/Jan/24 22:37**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

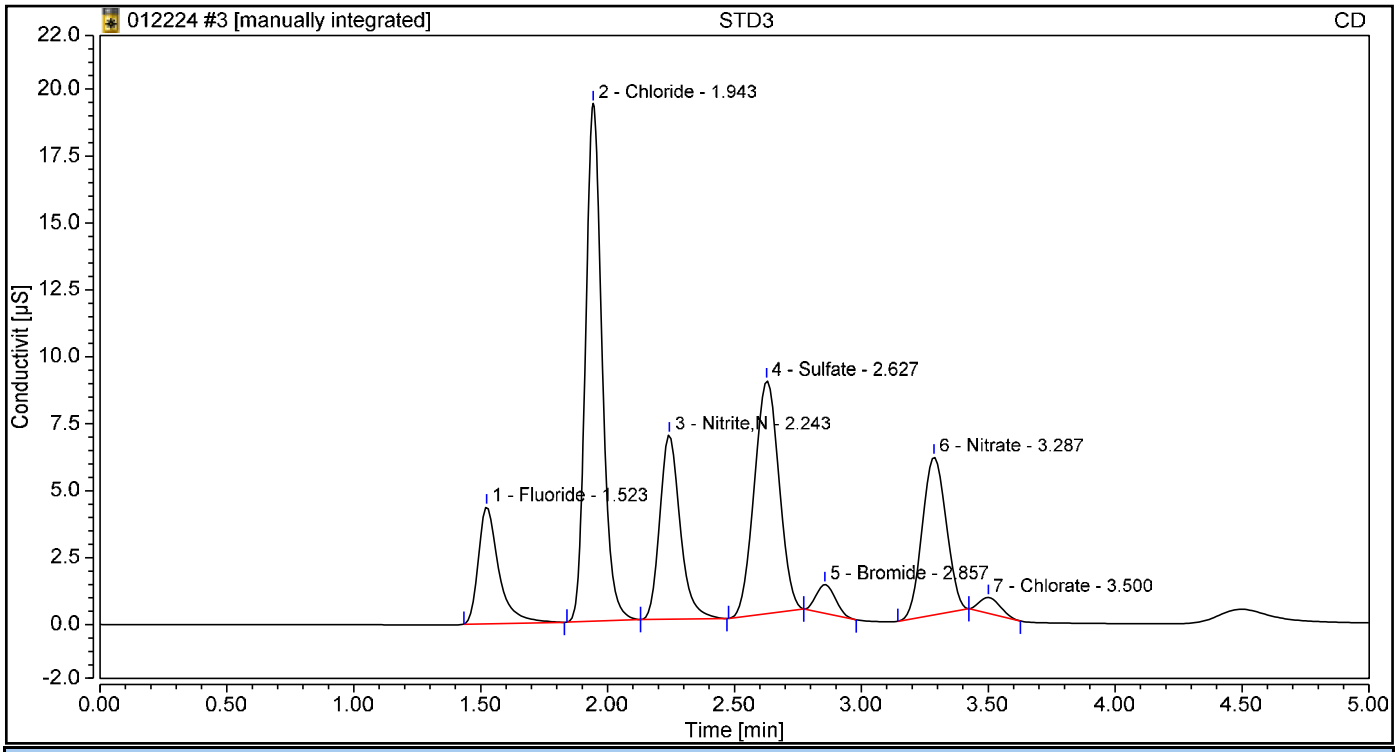
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.517	0.067	0.789	8.30	8.65	0.3583
2	Chloride	1.943	0.276	3.695	33.93	40.51	1.9409
3	Nitrite,N	2.240	0.128	1.384	15.78	15.17	0.3852
4	Sulfate	2.620	0.190	1.803	23.42	19.77	1.9711
5	Bromide	2.857	0.017	0.195	2.08	2.14	0.3807
6	Nitrate	3.293	0.124	1.150	15.24	12.60	0.3947
7	Chlorate	3.503	0.010	0.106	1.24	1.17	0.3697
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.812**	**9.121**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**STD3**	*Run Time (min):*	**5.00**
Vial Number:	**BA3**	*Injection Volume:*	**5.00**
Injection Type:	**Calibration Standard**	*Channel:*	**CD**
Calibration Level:	**3**	*Wavelength:*	**n.a.**
Instrument Method:	**Anions Program ISO37mM 150mm short 0.4 Const**	*Bandwidth:*	**n.a.**
Processing Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**20/Jan/24 22:43**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

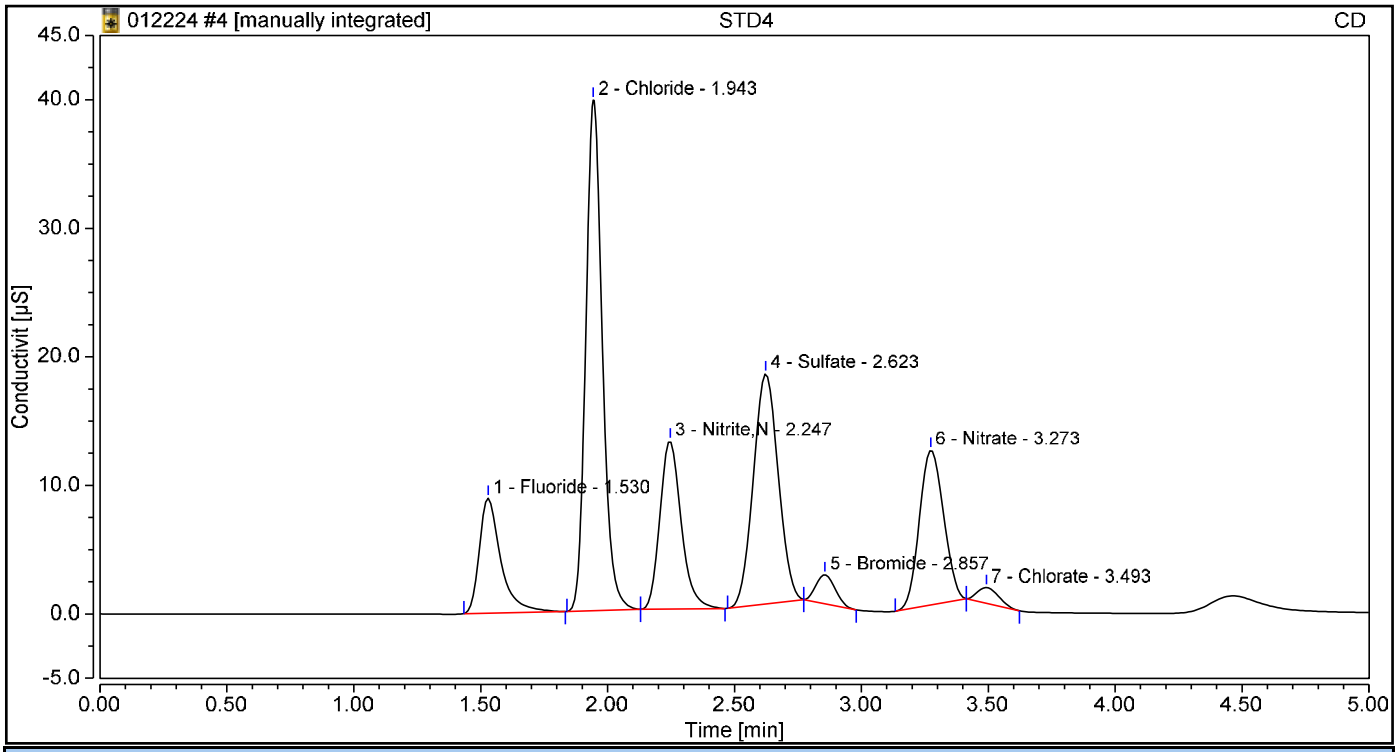
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.523	0.409	4.368	9.54	9.32	1.9690
2	Chloride	1.943	1.455	19.331	33.93	41.26	9.8861
3	Nitrite,N	2.243	0.643	6.884	15.00	14.69	2.0066
4	Sulfate	2.627	0.984	8.697	22.94	18.57	9.8310
5	Bromide	2.857	0.094	1.075	2.18	2.29	1.9628
6	Nitrate	3.287	0.646	5.898	15.07	12.59	1.9848
7	Chlorate	3.500	0.057	0.595	1.34	1.27	1.9604
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**4.288**	**46.847**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**STD4**	*Run Time (min):*	**5.00**
Vial Number:	**BA4**	*Injection Volume:*	**5.00**
Injection Type:	**Calibration Standard**	*Channel:*	**CD**
Calibration Level:	**4**	*Wavelength:*	**n.a.**
Instrument Method:	**Anions Program ISO37mM 150mm short 0.4 Const**	*Bandwidth:*	**n.a.**
Processing Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**20/Jan/24 22:49**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

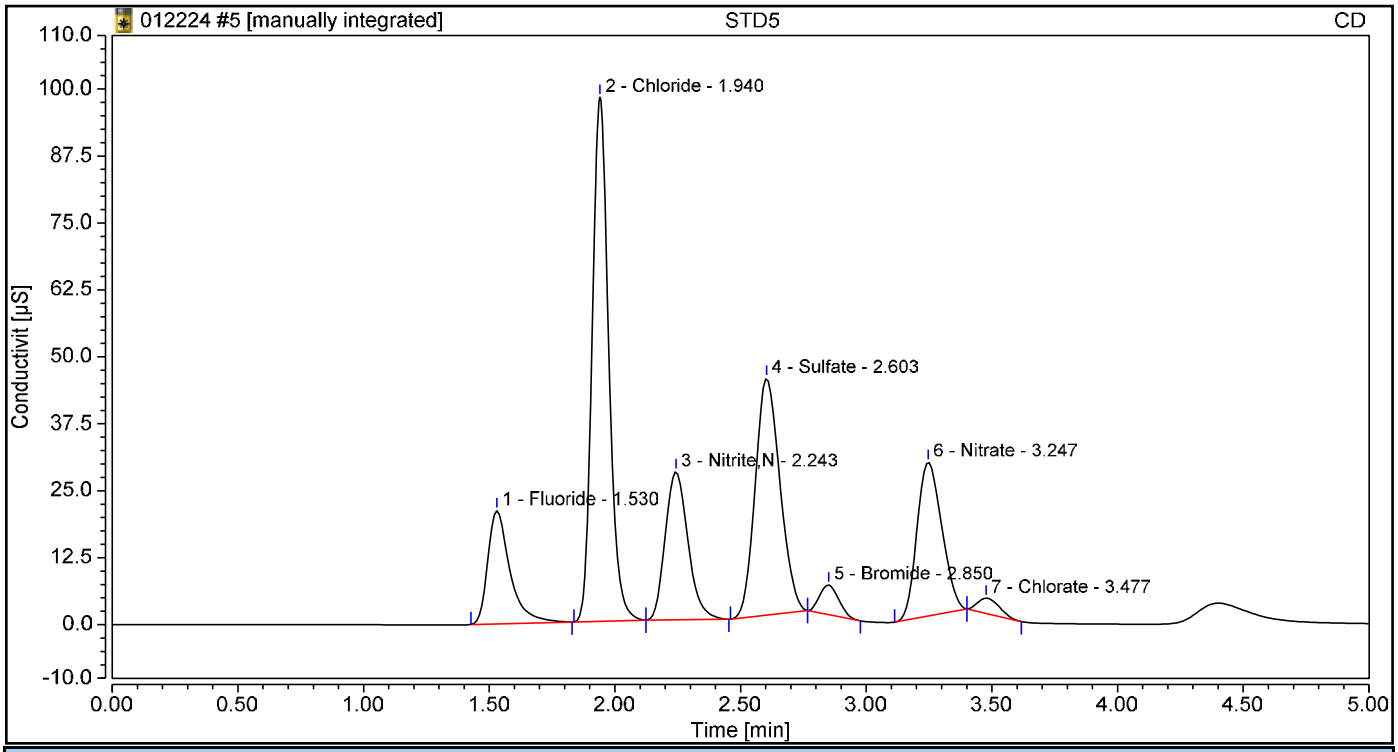
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.530	0.877	8.935	9.93	9.39	4.1783
2	Chloride	1.943	3.002	39.720	34.01	41.74	20.3105
3	Nitrite,N	2.247	1.273	13.078	14.42	13.74	4.0692
4	Sulfate	2.623	2.032	17.911	23.01	18.82	20.2058
5	Bromide	2.857	0.196	2.242	2.22	2.36	4.0599
6	Nitrate	3.273	1.328	12.049	15.04	12.66	4.0613
7	Chlorate	3.493	0.121	1.224	1.37	1.29	4.0895
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**8.829**	**95.159**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**STD5**	*Run Time (min):*	**5.00**
Vial Number:	**BA5**	*Injection Volume:*	**5.00**
Injection Type:	**Calibration Standard**	*Channel:*	**CD**
Calibration Level:	**5**	*Wavelength:*	**n.a.**
Instrument Method:	**Anions Program ISO37mM 150mm short 0.4 Const**	*Bandwidth:*	**n.a.**
Processing Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**20/Jan/24 22:55**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

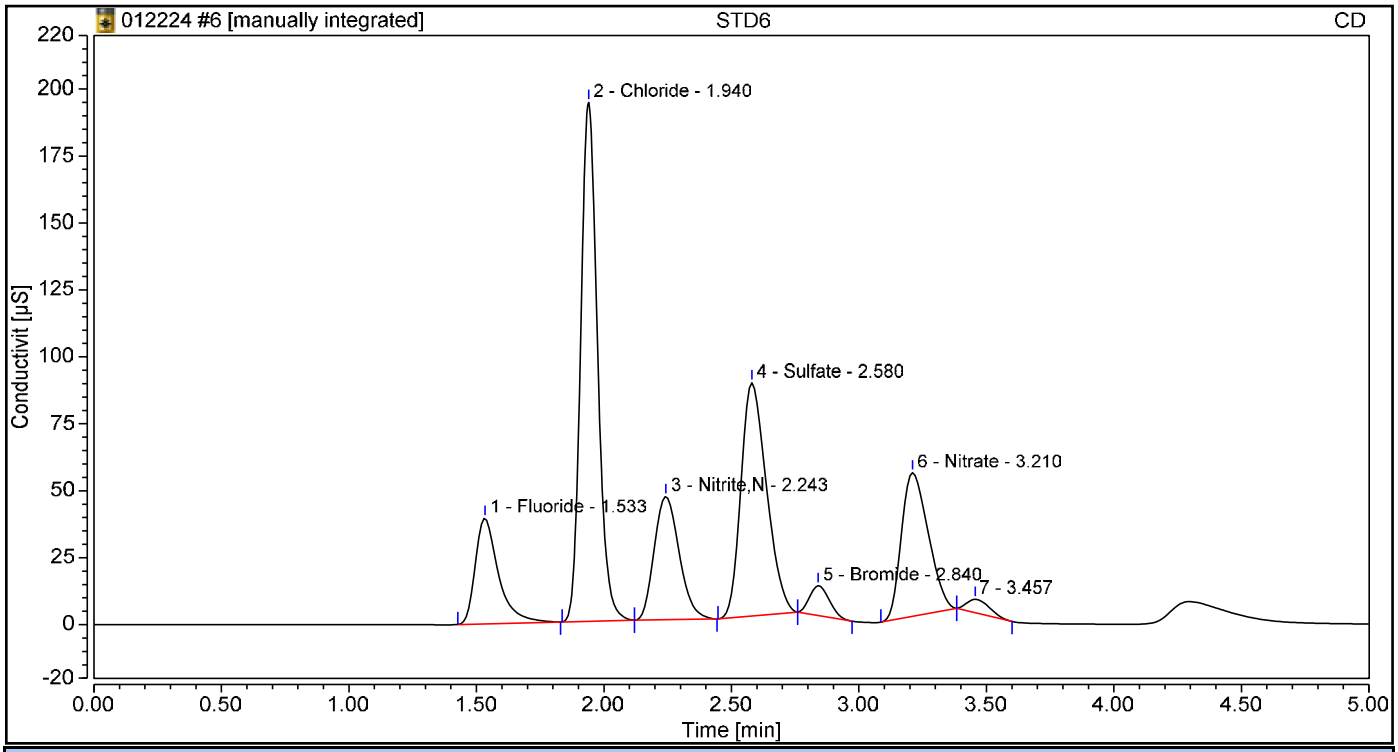
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.530	2.166	21.162	10.03	9.28	10.2609
2	Chloride	1.940	7.424	97.815	34.36	42.91	50.0974
3	Nitrite,N	2.243	2.901	27.648	13.43	12.13	9.8882
4	Sulfate	2.603	5.047	44.247	23.36	19.41	50.0104
5	Bromide	2.850	0.489	5.546	2.26	2.43	9.9977
6	Nitrate	3.247	3.287	28.710	15.21	12.59	10.0262
7	Chlorate	3.477	0.293	2.852	1.35	1.25	9.9728
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**21.608**	**227.980**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**STD6**	*Run Time (min):*	**5.00**
Vial Number:	**BA6**	*Injection Volume:*	**5.00**
Injection Type:	**Calibration Standard**	*Channel:*	**CD**
Calibration Level:	**6**	*Wavelength:*	**n.a.**
Instrument Method:	**Anions Program ISO37mM 150mm short 0.4 Const**	*Bandwidth:*	**n.a.**
Processing Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**20/Jan/24 23:01**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

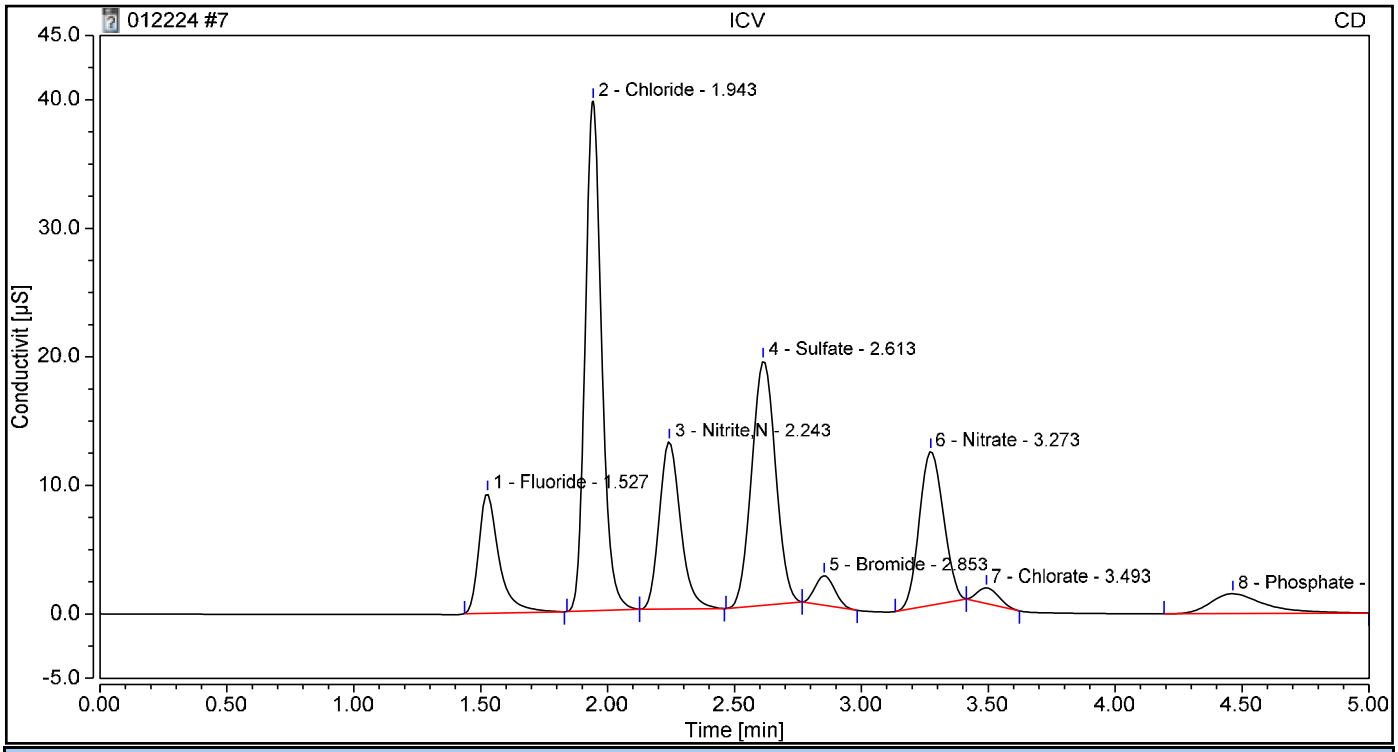
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.533	4.152	39.415	9.80	9.04	19.6267
2	Chloride	1.940	14.794	193.793	34.94	44.44	99.7521
3	Nitrite,N	2.243	5.214	46.000	12.31	10.55	20.0530
4	Sulfate	2.580	10.120	87.110	23.90	19.97	99.9713
5	Bromide	2.840	0.996	11.135	2.35	2.55	19.9936
6	Nitrate	3.210	6.541	53.629	15.45	12.30	19.9324
7		3.457	0.527	5.019	1.25	1.15	n.a.
n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**42.344**	**436.100**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**ICV**	*Run Time (min):*	**5.00**
Vial Number:	**BA7**	*Injection Volume:*	**5.00**
Injection Type:	**Unknown**	*Channel:*	**CD**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**Anions Program ISO37mM 150mm short 0.4 Const**	*Bandwidth:*	**n.a.**
Processing Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**20/Jan/24 23:07**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

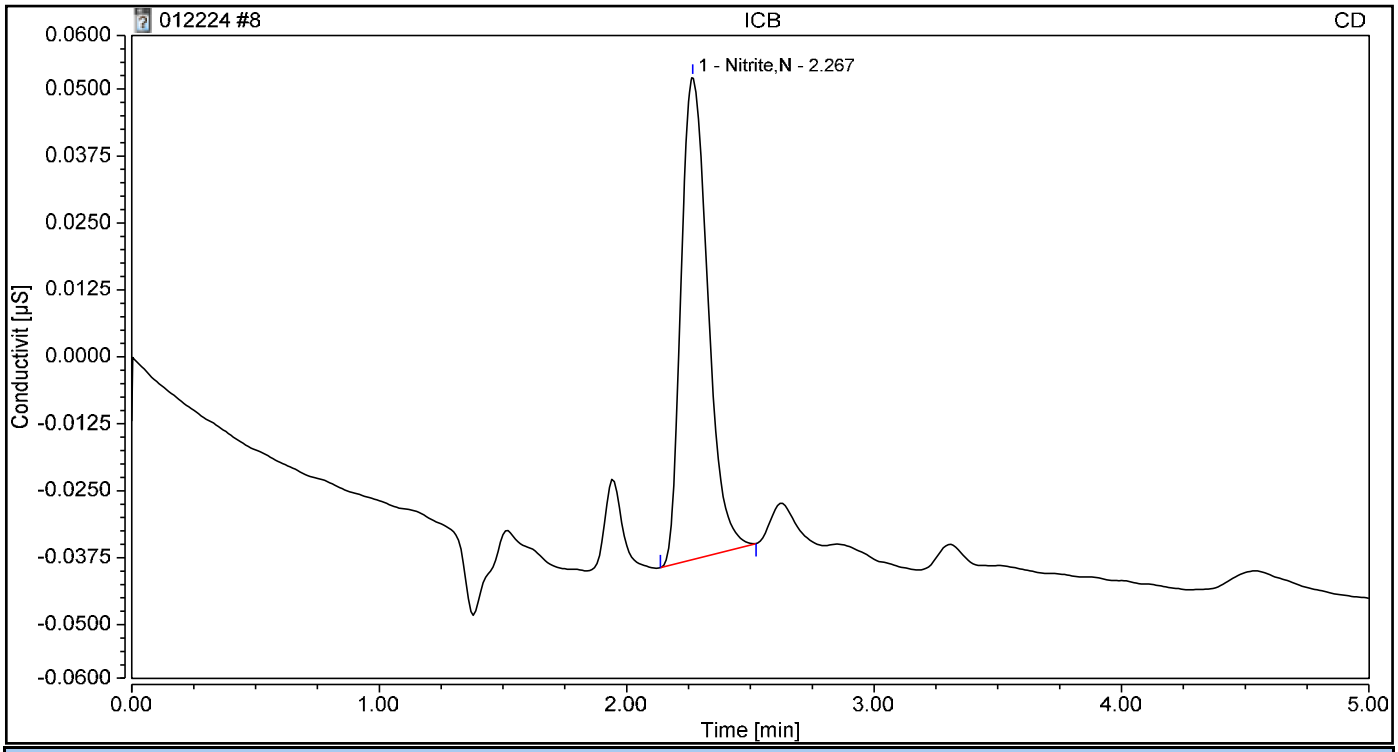
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.527	0.861	9.310	9.34	9.50	4.1012
2	Chloride	1.943	2.985	39.642	32.40	40.43	20.1932
3	Nitrite,N	2.243	1.266	13.021	13.74	13.28	4.0442
4	Sulfate	2.613	2.070	19.033	22.48	19.41	20.5900
5	Bromide	2.853	0.206	2.299	2.23	2.34	4.2620
6	Nitrate	3.273	1.320	11.977	14.33	12.22	4.0364
7	Chlorate	3.493	0.120	1.216	1.31	1.24	4.0801
8	Phosphate	4.463	0.384	1.545	4.17	1.58	n.a.
Total:			**9.212**	**98.043**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**ICB**	*Run Time (min):*	**5.00**
Vial Number:	**BA8**	*Injection Volume:*	**5.00**
Injection Type:	**Unknown**	*Channel:*	**CD**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**Anions Program ISO37mM 150mm short 0.4 Const**	*Bandwidth:*	**n.a.**
Processing Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**20/Jan/24 23:18**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

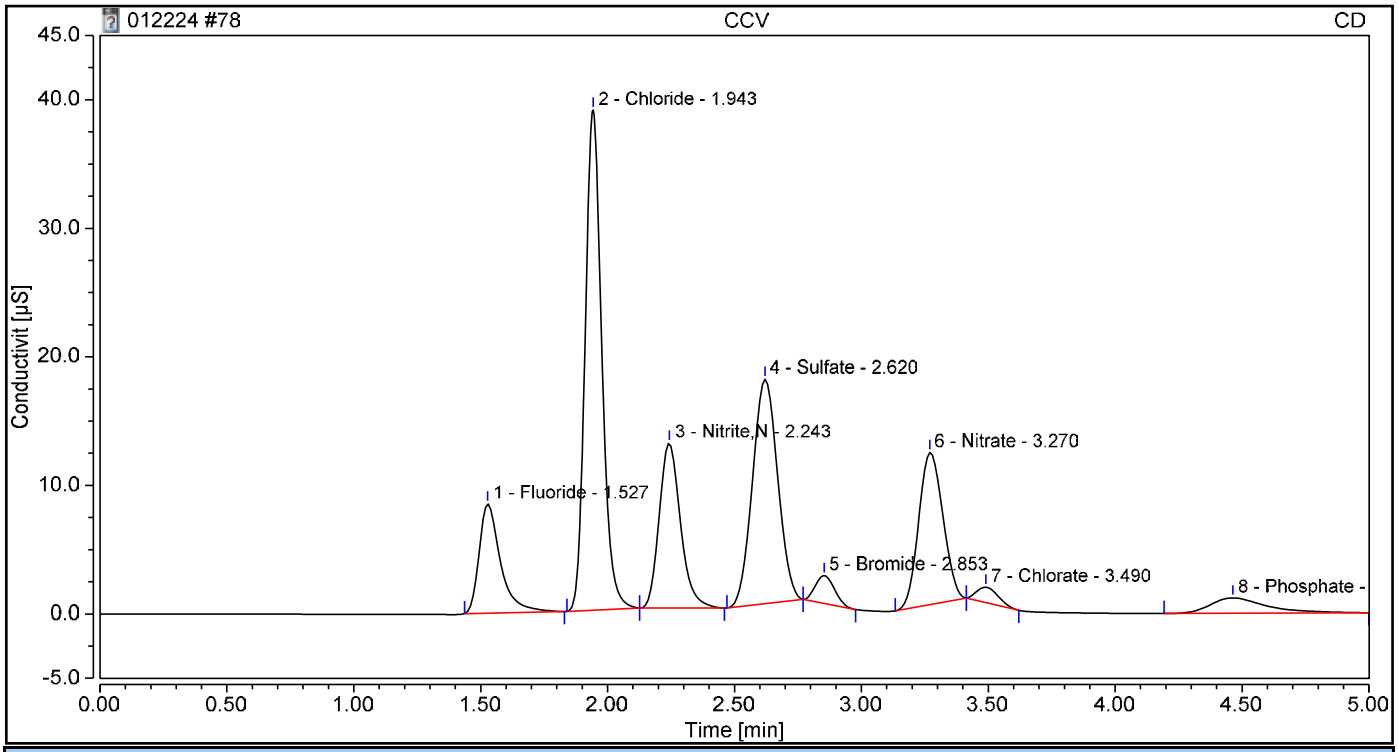
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	Nitrite,N	2.267	0.011	0.090	100.00	100.00	0.0247
n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.011**	**0.090**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**CCV**	*Run Time (min):*	**5.00**
Vial Number:	**R1**	*Injection Volume:*	**5.00**
Injection Type:	**Unknown**	*Channel:*	**CD**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**Anions Program ISO37mM 150mm short 0.4 Const**	*Bandwidth:*	**n.a.**
Processing Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**22/Jan/24 19:39**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

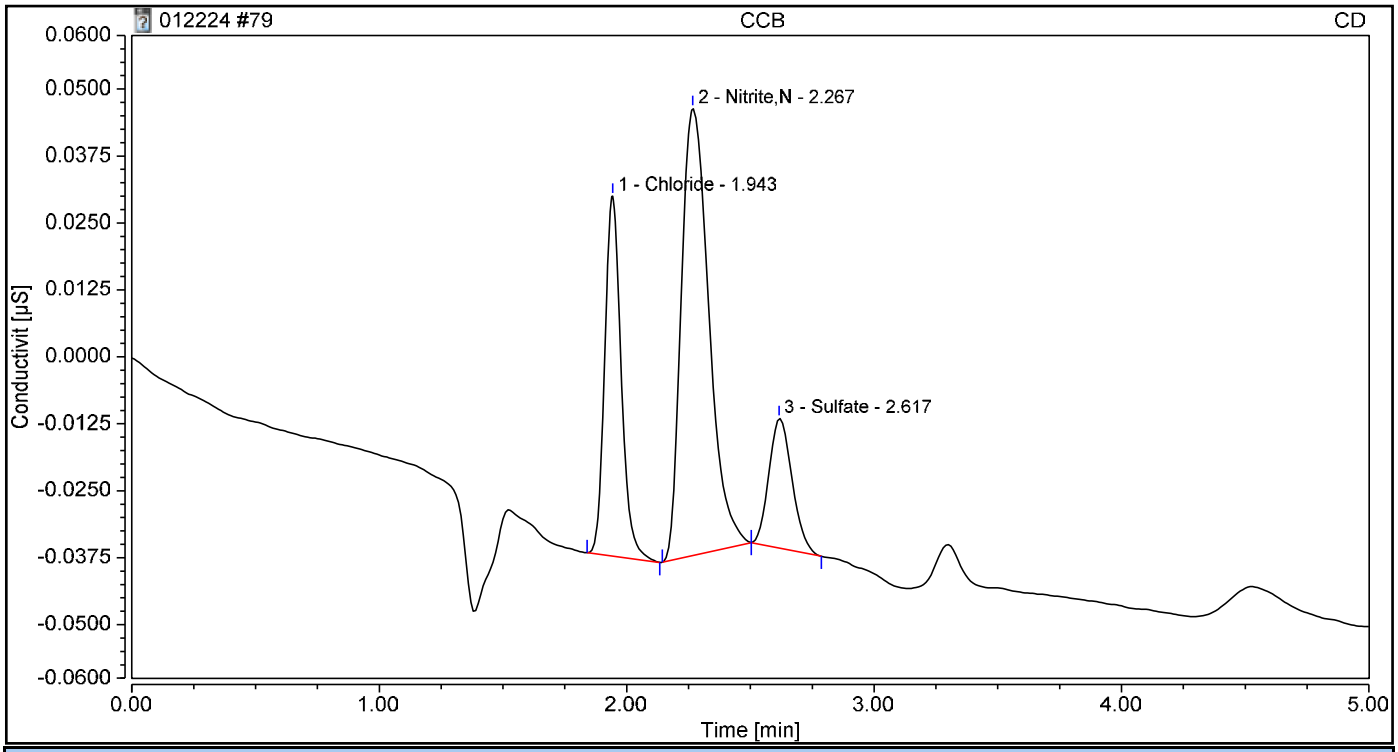
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.527	0.835	8.491	9.30	9.03	3.9777
2	Chloride	1.943	2.957	38.900	32.96	41.35	20.0086
3	Nitrite,N	2.243	1.251	12.825	13.94	13.63	3.9949
4	Sulfate	2.620	2.005	17.468	22.35	18.57	19.9470
5	Bromide	2.853	0.190	2.168	2.11	2.30	3.9341
6	Nitrate	3.270	1.306	11.831	14.56	12.58	3.9951
7	Chlorate	3.490	0.118	1.198	1.31	1.27	4.0001
8	Phosphate	4.463	0.310	1.198	3.45	1.27	n.a.
Total:			**8.972**	**94.081**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**5.00**
Vial Number:	**R4**	*Injection Volume:*	**5.00**
Injection Type:	**Unknown**	*Channel:*	**CD**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**Anions Program ISO37mM 150mm short 0.4 Const**	*Bandwidth:*	**n.a.**
Processing Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**22/Jan/24 19:45**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

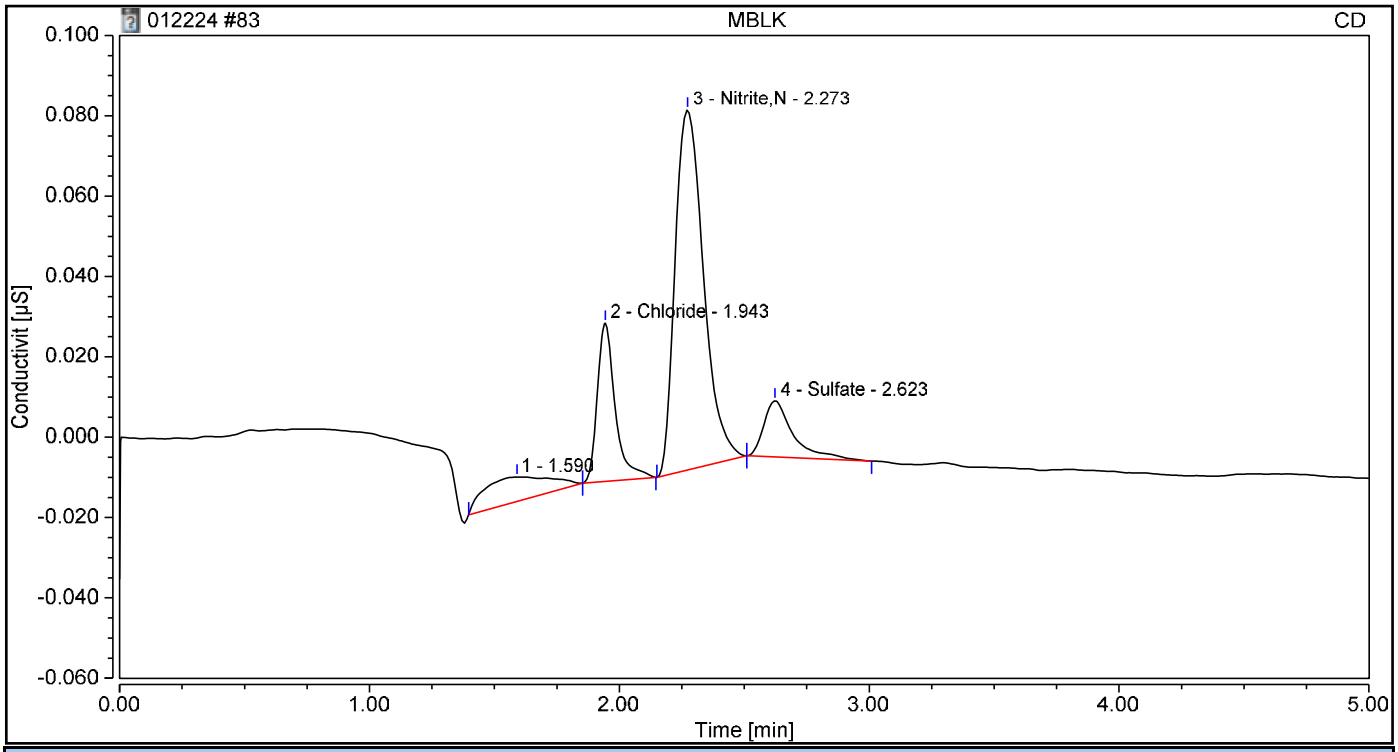
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	Chloride	1.943	0.005	0.067	27.77	38.45	0.1190
2	Nitrite,N	2.267	0.011	0.083	58.13	47.72	0.0231
3	Sulfate	2.617	0.003	0.024	14.10	13.83	0.1119
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.019**	**0.175**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**MBLK**	*Run Time (min):*	**5.00**
Vial Number:	**R5**	*Injection Volume:*	**5.00**
Injection Type:	**Unknown**	*Channel:*	**CD**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**Anions Program ISO37mM 150mm short 0.4 Const**	*Bandwidth:*	**n.a.**
Processing Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**22/Jan/24 20:26**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

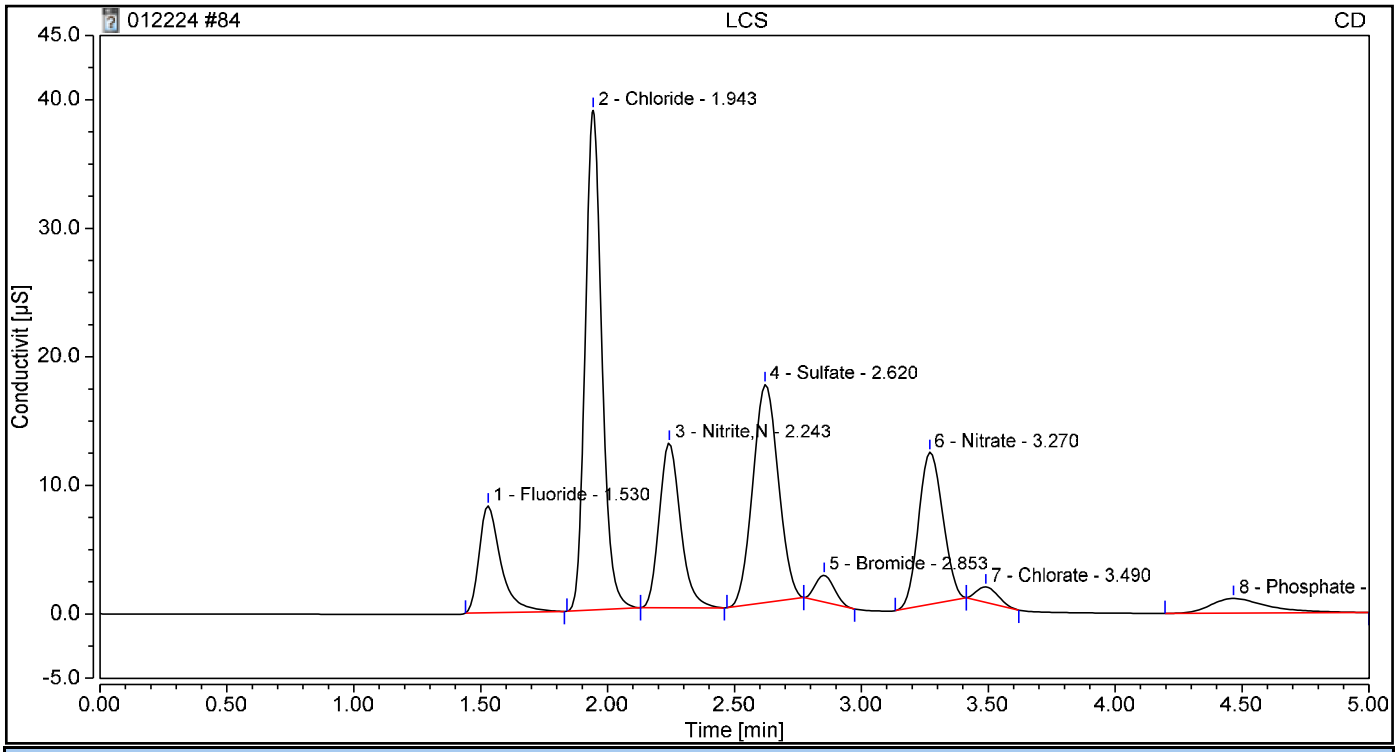
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1		1.590	0.002	0.006	9.99	4.05	n.a.
2	Chloride	1.943	0.003	0.039	17.25	26.43	0.1061
3	Nitrite,N	2.273	0.012	0.090	62.67	60.13	0.0262
4	Sulfate	2.623	0.002	0.014	10.08	9.39	0.1047
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.019**	**0.149**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**LCS**	*Run Time (min):*	**5.00**
Vial Number:	**R2**	*Injection Volume:*	**5.00**
Injection Type:	**Unknown**	*Channel:*	**CD**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**Anions Program ISO37mM 150mm short 0.4 Const**	*Bandwidth:*	**n.a.**
Processing Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**22/Jan/24 20:43**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

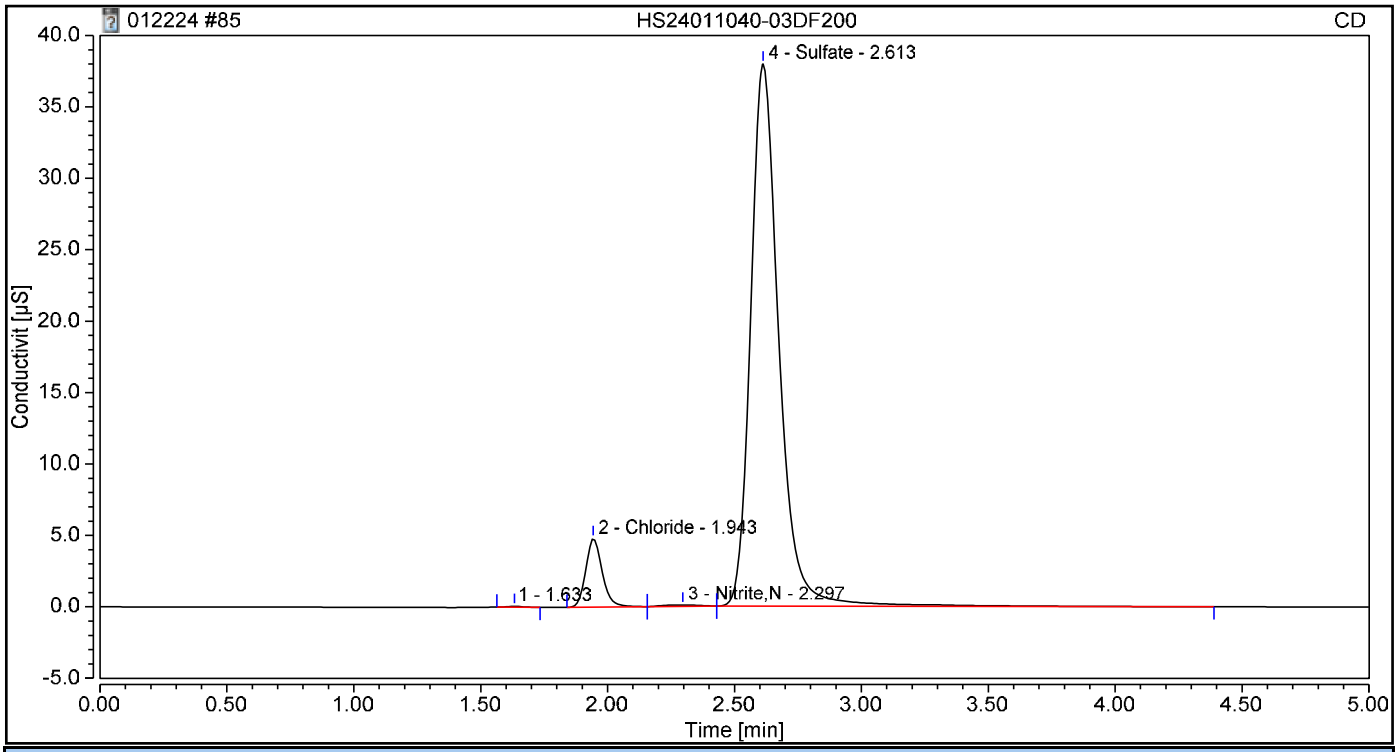
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.530	0.827	8.315	9.27	8.92	3.9406
2	Chloride	1.943	2.960	38.858	33.20	41.69	20.0257
3	Nitrite,N	2.243	1.248	12.816	14.00	13.75	3.9860
4	Sulfate	2.620	1.976	16.965	22.16	18.20	19.6546
5	Bromide	2.853	0.180	2.094	2.02	2.25	3.7434
6	Nitrate	3.270	1.308	11.822	14.67	12.68	3.9991
7	Chlorate	3.490	0.118	1.198	1.32	1.28	4.0051
8	Phosphate	4.467	0.300	1.138	3.36	1.22	n.a.
Total:			**8.917**	**93.207**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**HS24011040-03DF200**	*Run Time (min):*	**5.00**
Vial Number:	**GC1**	*Injection Volume:*	**5.00**
Injection Type:	**Unknown**	*Channel:*	**CD**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**Anions Program ISO37mM 150mm short 0.4 Const**	*Bandwidth:*	**n.a.**
Processing Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**200.0000**
Injection Date/Time:	**22/Jan/24 20:49**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

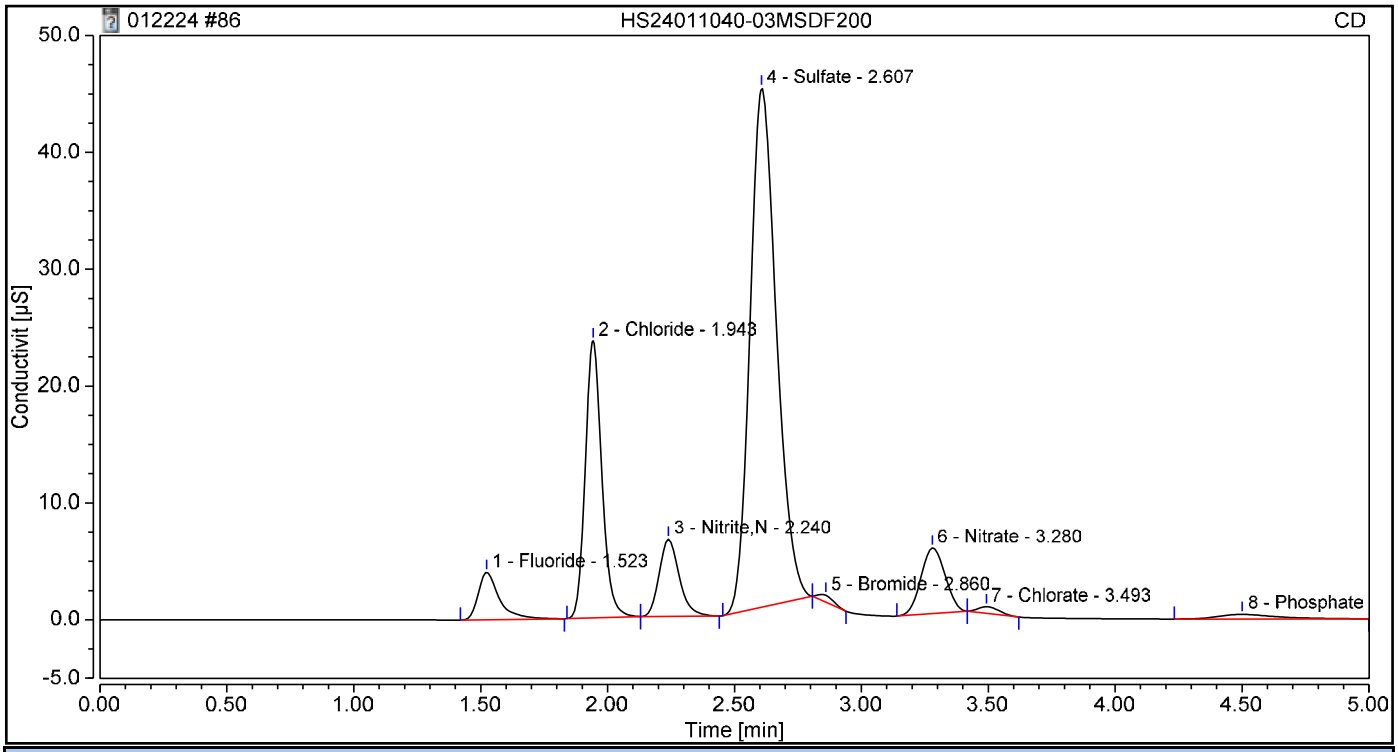
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1		1.633	0.004	0.055	0.07	0.13	n.a.
2	Chloride	1.943	0.361	4.792	6.85	11.17	503.8412
3	Nitrite,N	2.297	0.015	0.092	0.28	0.21	7.1211
4	Sulfate	2.613	4.898	37.966	92.80	88.49	9706.3201
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**5.278**	**42.905**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**HS24011040-03MSDF200**	*Run Time (min):*	**5.00**
Vial Number:	**GC2**	*Injection Volume:*	**5.00**
Injection Type:	**Unknown**	*Channel:*	**CD**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**Anions Program ISO37mM 150mm short 0.4 Const**	*Bandwidth:*	**n.a.**
Processing Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**200.0000**
Injection Date/Time:	**22/Jan/24 20:55**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

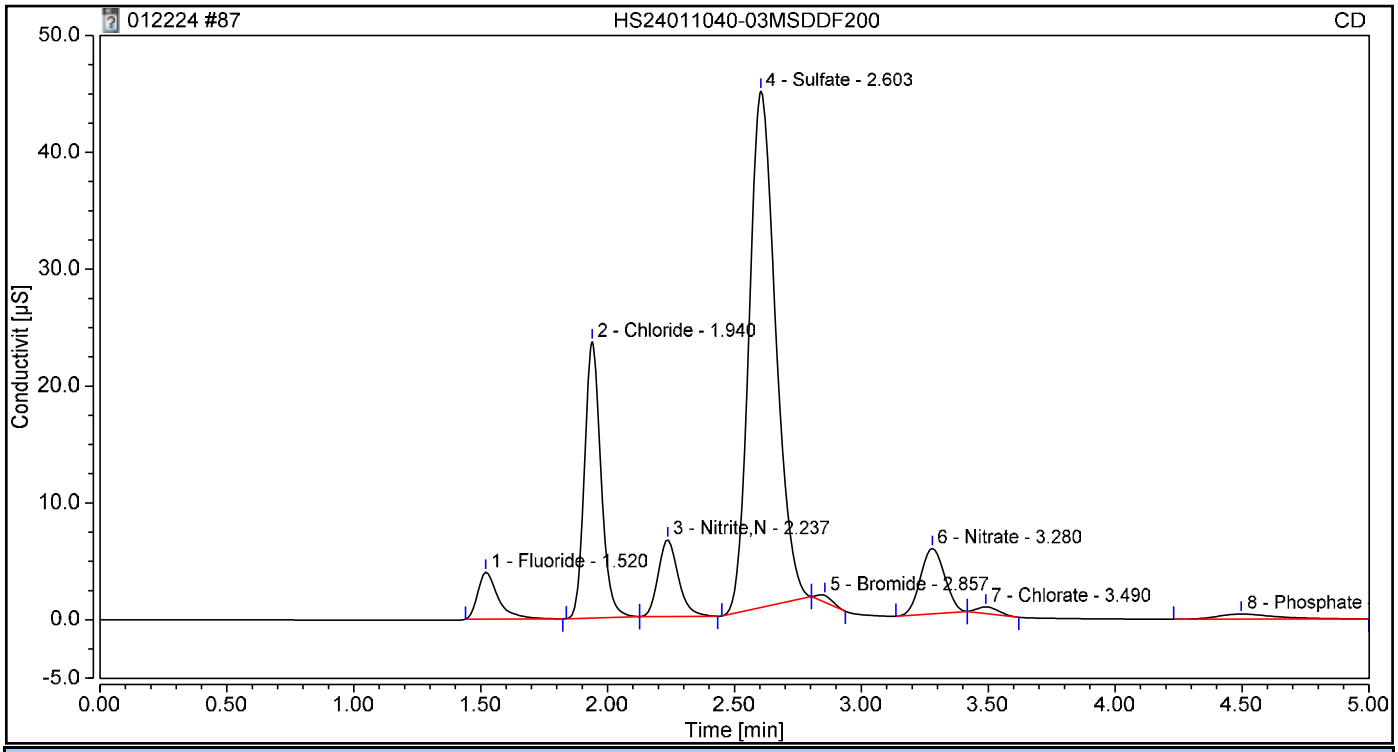
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.523	0.392	4.056	4.38	4.72	378.1769
2	Chloride	1.943	1.797	23.709	20.05	27.59	2438.5247
3	Nitrite,N	2.240	0.609	6.596	6.80	7.68	379.6126
4	Sulfate	2.607	5.345	44.416	59.64	51.69	10590.1052
5	Bromide	2.860	0.039	0.578	0.43	0.67	166.1179
6	Nitrate	3.280	0.618	5.616	6.89	6.53	379.7241
7	Chlorate	3.493	0.056	0.569	0.62	0.66	379.9477
8	Phosphate	4.500	0.106	0.395	1.19	0.46	n.a.
Total:			**8.963**	**85.935**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**HS24011040-03MSDDF200**	*Run Time (min):*	**5.00**
Vial Number:	**GC3**	*Injection Volume:*	**5.00**
Injection Type:	**Unknown**	*Channel:*	**CD**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**Anions Program ISO37mM 150mm short 0.4 Const**	*Bandwidth:*	**n.a.**
Processing Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**200.0000**
Injection Date/Time:	**22/Jan/24 21:01**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

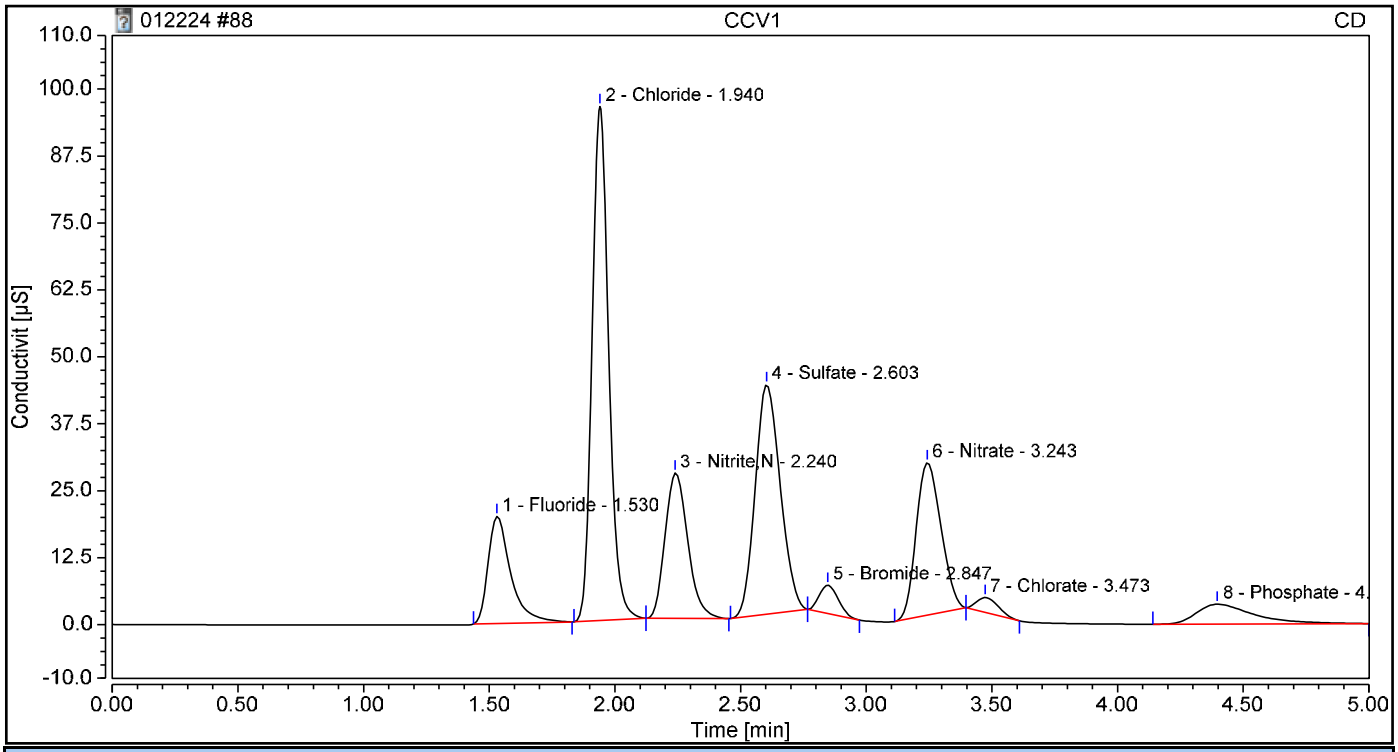
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.520	0.378	4.016	4.24	4.69	365.1580
2	Chloride	1.940	1.790	23.627	20.03	27.61	2428.5818
3	Nitrite,N	2.237	0.606	6.562	6.78	7.67	377.5162
4	Sulfate	2.603	5.336	44.176	59.70	51.63	10570.6969
5	Bromide	2.857	0.040	0.588	0.44	0.69	170.1660
6	Nitrate	3.280	0.615	5.593	6.89	6.54	378.2380
7	Chlorate	3.490	0.055	0.564	0.62	0.66	376.2894
8	Phosphate	4.497	0.117	0.433	1.31	0.51	n.a.
Total:			**8.937**	**85.561**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**CCV1**	*Run Time (min):*	**5.00**
Vial Number:	**R3**	*Injection Volume:*	**5.00**
Injection Type:	**Unknown**	*Channel:*	**CD**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**Anions Program ISO37mM 150mm short 0.4 Const**	*Bandwidth:*	**n.a.**
Processing Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**22/Jan/24 21:24**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

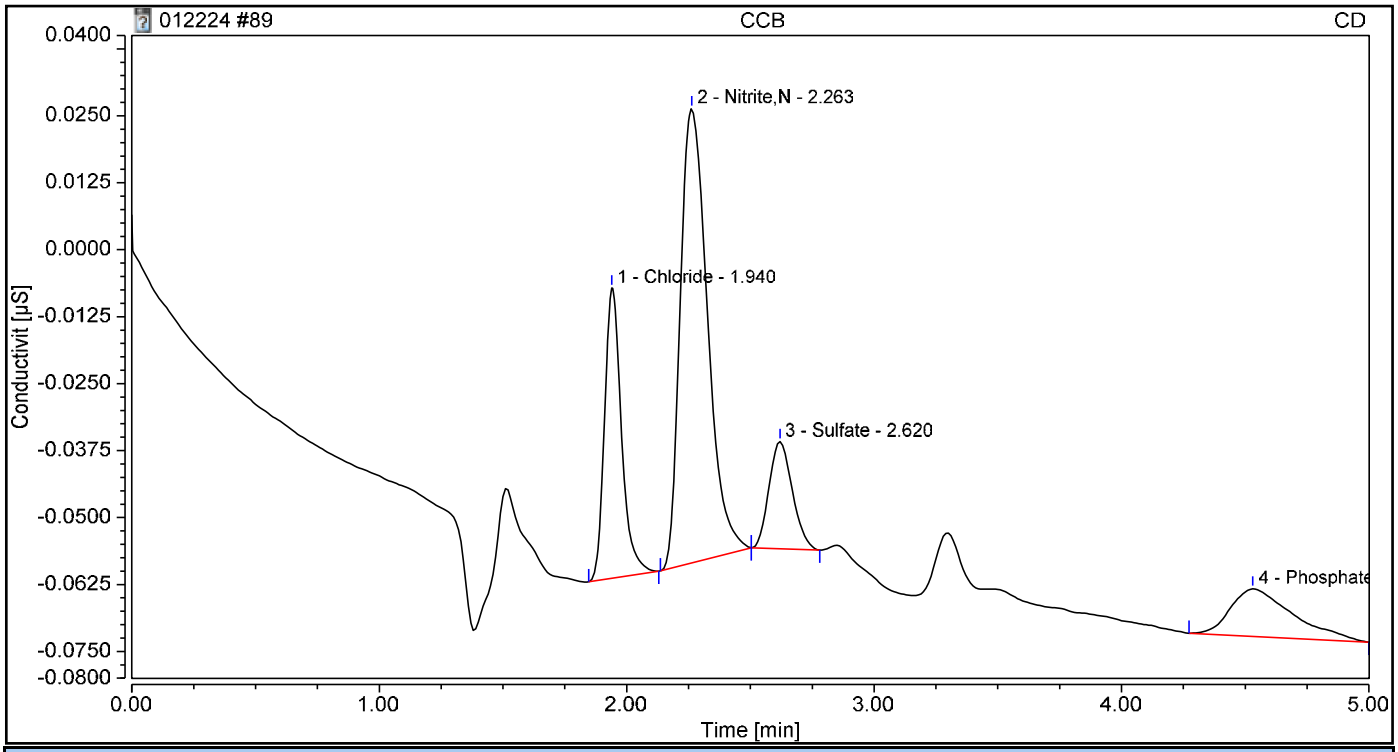
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.530	2.085	20.017	9.38	8.85	9.8753
2	Chloride	1.940	7.347	95.974	33.06	42.41	49.5794
3	Nitrite,N	2.240	2.853	27.176	12.84	12.01	9.7025
4	Sulfate	2.603	4.955	42.888	22.30	18.95	49.1011
5	Bromide	2.847	0.465	5.284	2.09	2.33	9.5081
6	Nitrate	3.243	3.256	28.461	14.65	12.58	9.9292
7	Chlorate	3.473	0.285	2.789	1.28	1.23	9.6928
8	Phosphate	4.397	0.981	3.703	4.41	1.64	n.a.
Total:			**22.225**	**226.292**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**CCB**	*Run Time (min):*	**5.00**
Vial Number:	**R7**	*Injection Volume:*	**5.00**
Injection Type:	**Unknown**	*Channel:*	**CD**
Calibration Level:		*Wavelength:*	**n.a.**
Instrument Method:	**Anions Program ISO37mM 150mm short 0.4 Const**	*Bandwidth:*	**n.a.**
Processing Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Injection Date/Time:	**22/Jan/24 21:30**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	Chloride	1.940	0.004	0.054	21.58	32.28	0.1131
2	Nitrite,N	2.263	0.011	0.085	54.42	50.53	0.0231
3	Sulfate	2.620	0.002	0.020	10.99	11.92	0.1075
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	Phosphate	4.530	0.003	0.009	13.01	5.27	n.a.
Total:			**0.020**	**0.168**	**100.00**	**100.00**	

HS24011040 Wetchem TOC_W 5310B

ALS WO# HS24011040

C:\TOC-L\Data\2024_01_03_001.tlx

	Analysis	Sample Nam	Sample ID	Origin	Result	Status	Date / Time	Vial
1	NPOC	CAL	3100607917	01.03.2024.		Completed	1/3/2024 12:51:	1, 2, 3, 4, 5,
2	NPOC	ICV	3100607901	01.03.2024.	NPOC:9.85	Completed	1/3/2024 1:06:0	8
3	NPOC	ICB		01.03.2024.	NPOC:0.02	Completed	1/3/2024 1:18:2	9

TOC-Control L Report

2024_01_03_001.tlx

Instr.Information

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

Cal. Curve

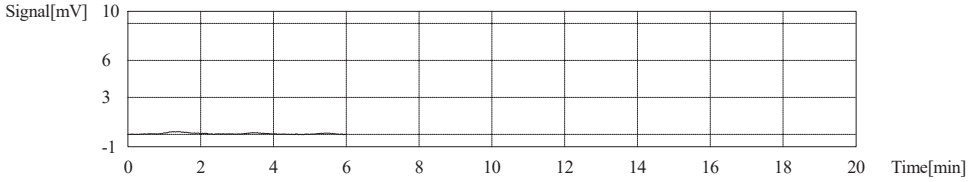
Sample Name:	CAL
Sample ID:	3100607917
Cal. Curve:	01.03.2024.2024_01_03_11_09_20.cal
Status	Completed

Type	Anal.
Standard	NPOC

Conc: 0.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	0.6144	50uL	1.000	*******		1/3/2024 11:17:40 AM
2	0.2411	50uL	1.000	*******		1/3/2024 11:19:49 AM
3	0.1701	50uL	1.000	*******		1/3/2024 11:21:56 AM

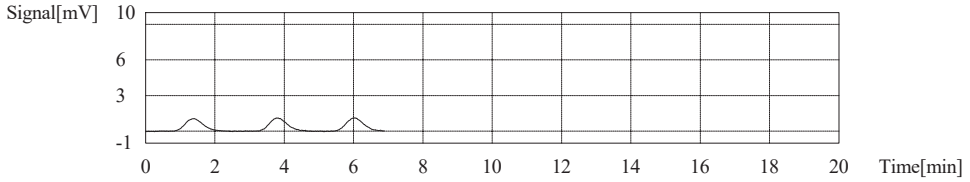
Acid Add.	1.500%
Sparge Gas Flow	80mL/min
Sp. Time	90.00sec
Mean Area	0.3419



Conc: 1.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	3.920	50uL	1.000	*******		1/3/2024 11:30:37 AM
2	3.717	50uL	1.000	*******		1/3/2024 11:33:01 AM
3	3.946	50uL	1.000	*******		1/3/2024 11:35:32 AM

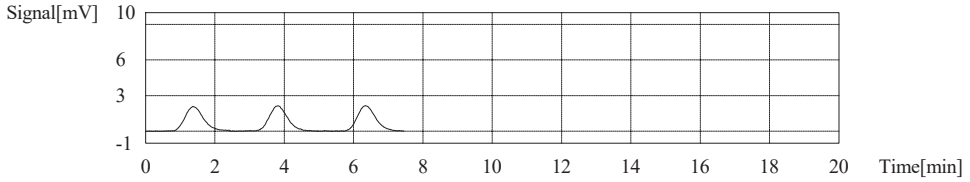
Acid Add.	1.500%
Sparge Gas Flow	80mL/min
Sp. Time	90.00sec
Mean Area	3.861



Conc: 2.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	7.396	50uL	1.000	*******		1/3/2024 11:44:12 AM
2	7.846	50uL	1.000	*******		1/3/2024 11:47:00 AM
3	8.019	50uL	1.000	*******		1/3/2024 11:49:42 AM

Acid Add.	1.500%
Sparge Gas Flow	80mL/min
Sp. Time	90.00sec
Mean Area	7.754



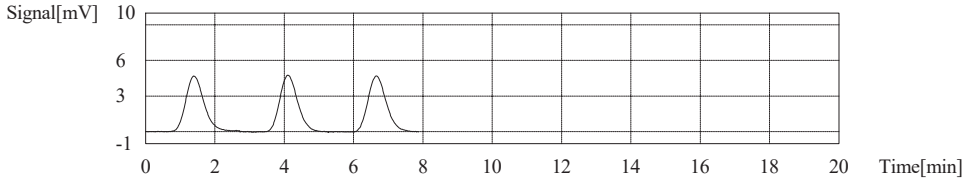
TOC-Control L Report

2024_01_03_001.tlx

Conc: 5.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	16.93	50uL	1.000	*******		1/3/2024 11:58:40 AM
2	17.38	50uL	1.000	*******		1/3/2024 12:01:28 PM
3	17.53	50uL	1.000	*******		1/3/2024 12:04:17 PM

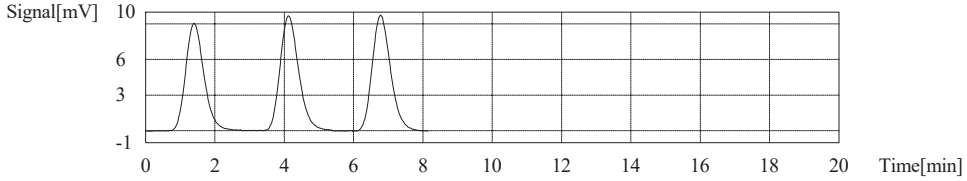
Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 90.00sec
Mean Area 17.28



Conc: 10.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	33.38	50uL	1.000	*******		1/3/2024 12:13:18 PM
2	36.15	50uL	1.000	*******		1/3/2024 12:16:09 PM
3	36.41	50uL	1.000	*******		1/3/2024 12:19:09 PM

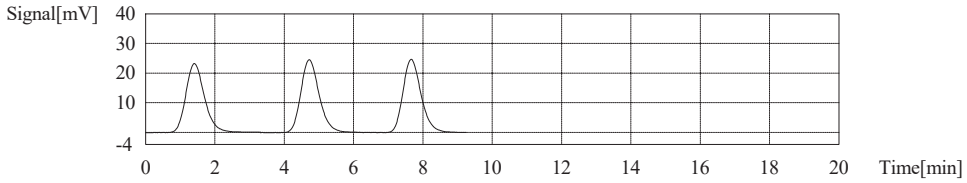
Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 90.00sec
Mean Area 35.31



Conc: 25.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	87.77	50uL	1.000	*******		1/3/2024 12:28:43 PM
2	91.20	50uL	1.000	*******		1/3/2024 12:31:56 PM
3	90.77	50uL	1.000	*******		1/3/2024 12:35:10 PM

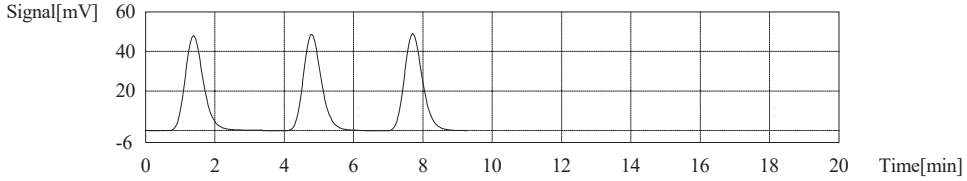
Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 90.00sec
Mean Area 89.91



Conc: 50.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	177.2	50uL	1.000	*******		1/3/2024 12:44:48 PM
2	177.8	50uL	1.000	*******		1/3/2024 12:47:59 PM
3	181.4	50uL	1.000	*******		1/3/2024 12:51:11 PM

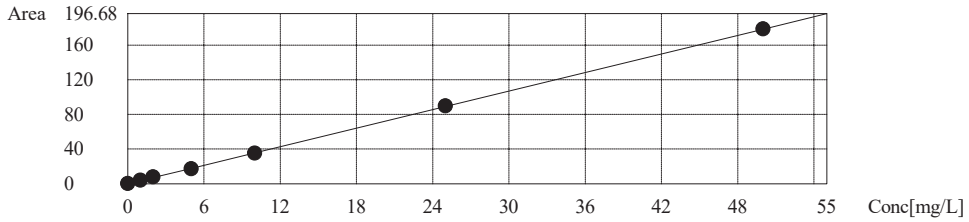
Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 90.00sec
Mean Area 178.8



TOC-Control L Report

2024_01_03_001.tlx

Slope:	3.575
Intercept	0.000
r^2	0.9999
r	1.0000
RSE(%)	N/A
Zero Shift	Yes



Sample

Sample Name:	ICV
Sample ID:	3100607901
Origin:	01.03.2024.cal
Status	Completed
Chk. Result	

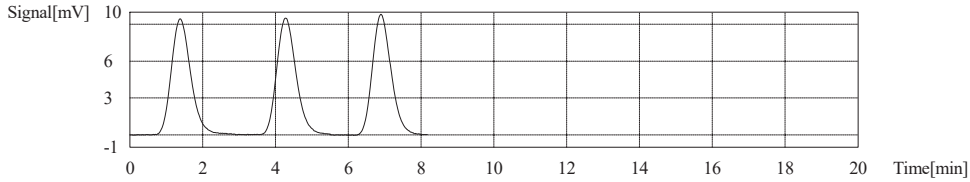
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.858mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	35.20	9.847mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/3/2024 1:00:20 PM
2	34.96	9.780mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/3/2024 1:03:11 PM
3	35.56	9.947mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/3/2024 1:06:04 PM

Mean Area	35.24
Mean Conc.	9.858mg/L



Sample

Sample Name:	ICB
Sample ID:	
Origin:	01.03.2024.cal
Status	Completed
Chk. Result	

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.02773mg/L

1. Det

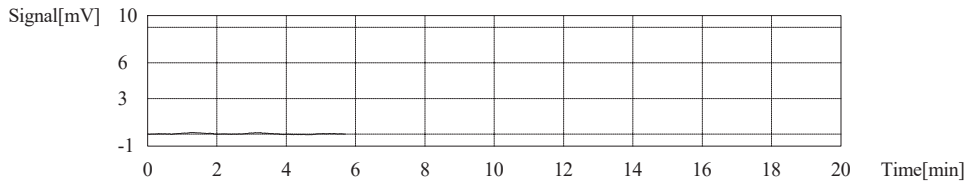
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.000	0.000mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/3/2024 1:14:13 PM
2	0.1391	0.03891mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/3/2024 1:16:21 PM
3	0.1583	0.04428mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/3/2024 1:18:28 PM

TOC-Control L Report

2024_01_03_001.tlx

Mean Area	0.09913
Mean Conc.	0.02773mg/L



C:\TOC-L\Data\2024_01_23_001.tlx

	Sample Name	Sample ID	Origin	Result	Status	Date / Time	Vial
1	CCV	324065402	01.03.2024.	NPOC:26.3	Completed	1/23/2024 11:22	1
2	CCB		01.03.2024.	NPOC:0.04	Completed	1/23/2024 11:34	2
3	MBLK-01232024		01.03.2024.	NPOC:0.04	Completed	1/23/2024 11:47	3
4	LCS-01232024	3100607917	01.03.2024.	NPOC:9.42	Completed	1/23/2024 12:02	4
5	LCSD-01232024		01.03.2024.	NPOC:9.42	Completed	1/23/2024 12:18	5
6	HS24010666-03	TOC_W 5310B	01.03.2024.	NPOC:2.85	Completed	1/23/2024 12:32	6
7	HS24010666-06		01.03.2024.	NPOC:2.54	Completed	1/23/2024 12:48	7
8	HS24010666-09		01.03.2024.	NPOC:2.46	Completed	1/23/2024 1:02:	8
9	HS24010674-01		01.03.2024.	NPOC:2.20	Completed	1/23/2024 1:16:	9
10	HS24010674-02		01.03.2024.	NPOC:2.09	Completed	1/23/2024 1:30:	10
11	HS24010674-03		01.03.2024.	NPOC:2.15	Completed	1/23/2024 1:44:	11
12	HS24010674-04		01.03.2024.	NPOC:0.13	Completed	1/23/2024 1:56:	12
13	CCV	324065402	01.03.2024.	NPOC:25.7	Completed	1/23/2024 2:12:	1
14	CCB		01.03.2024.	NPOC:0.09	Completed	1/23/2024 2:25:	2
15	HS24010674-05		01.03.2024.	NPOC:0.13	Completed	1/23/2024 2:37:	13
16	HS24010527-01		01.03.2024.	NPOC:11.6	Aborted	1/23/2024 2:47:	14
17	HS24010839-01		01.03.2024.	NPOC:8.28	Completed	1/23/2024 3:03:	15
18	HS24010839-01MS		01.03.2024.	NPOC:18.8	Completed	1/23/2024 3:19:	16
19	CCV	324065402	01.03.2024.	NPOC:24.7	Completed	1/23/2024 3:36:	1
20	CCB		01.03.2024.	NPOC:0.12	Completed	1/23/2024 3:49:	2
21	MBLK-01232024		01.03.2024.	NPOC:0.07	Completed	1/23/2024 4:05:	3
22	LCS-01232024	3100607917	01.03.2024.	NPOC:8.83	Completed	1/23/2024 4:20:	4
23	LCSD-01232024		01.03.2024.	NPOC:8.92	Completed	1/23/2024 4:36:	5
24	HS24010769-01	TOC_W 5310B	01.03.2024.	NPOC:3.96	Completed	1/23/2024 4:51:	17
25	HS24010971-01		01.03.2024.	NPOC:3.52	Completed	1/23/2024 5:05:	18
26	HS24010972-01		01.03.2024.	NPOC:6.94	Completed	1/23/2024 5:20:	19
27	HS24010972-02		01.03.2024.	NPOC:6.51	Completed	1/23/2024 5:34:	20
28	HS24010973-01		01.03.2024.	NPOC:0.52	Completed	1/23/2024 5:47:	21
29	HS24010976-01		01.03.2024.	NPOC:0.45	Completed	1/23/2024 6:00:	22
30	HS24010976-02		01.03.2024.	NPOC:0.57	Completed	1/23/2024 6:14:	23
31	CCV	324065402	01.03.2024.	NPOC:25.7	Completed	1/23/2024 6:30:	48
32	CCB		01.03.2024.	NPOC:0.00	Completed	1/23/2024 6:43:	49
33	HS24010976-03		01.03.2024.	NPOC:0.72	Completed	1/24/2024 8:27:	24
34	HS24010976-04		01.03.2024.	NPOC:0.68	Completed	1/24/2024 8:40:	25
35	HS24011020-01		01.03.2024.	NPOC:8.75	Completed	1/24/2024 8:56:	26
36	HS24011020-01MS		01.03.2024.	NPOC:18.7	Completed	1/24/2024 9:11:	27
37	CCV	324065402	01.03.2024.	NPOC:25.6	Completed	1/24/2024 9:28:	48
38	CCB		01.03.2024.	NPOC:0.19	Completed	1/24/2024 9:41:	49
39	CCV	324065402	TOC_W 906	NPOC:25.3	Completed	1/24/2024 10:18	53
40	CCB		TOC_W 906	NPOC:0.06	Completed	1/24/2024 10:33	54
41	MBLK-01232024		TOC_W 906	NPOC:0.12	Completed	1/24/2024 10:49	50
42	LCS-01232024	3100607917	TOC_W 906	NPOC:10.7	Completed	1/24/2024 11:09	51
43	LCSD-01232024		TOC_W 906	NPOC:10.6	Completed	1/24/2024 11:28	52
44	HS24010405-01	TOC 9060	TOC_W 906	NPOC:6.99	Completed	1/24/2024 11:47	46
45	HS24010405-01MS		TOC_W 906	NPOC:17.2	Completed	1/24/2024 12:06	47
46	CCV	324065402	TOC_W 906	NPOC:25.4	Completed	1/24/2024 12:26	53
47	CCB		TOC_W 906	NPOC:0.13	Completed	1/24/2024 12:41	54
48	MBLK-01232024		01.03.2024.	NPOC:0.21	Aborted	1/24/2024 9:52:	3
49	LCS-01232024	3100607917	01.03.2024.	NPOC:9.25	Completed	1/24/2024 12:57	4
50	LCSD-01232024		01.03.2024.	NPOC:9.30	Completed	1/24/2024 1:17:	5
51	HS24011031-01	TOC_W 5310B	01.03.2024.	NPOC:7.08	Completed	1/24/2024 1:32:	28
52	HS24011031-01MS		01.03.2024.	NPOC:17.5	Completed	1/24/2024 1:48:	29
53	HS24011031-02DF10		01.03.2024.	NPOC:5.47	Completed	1/24/2024 2:42:	30

C:\TOC-L\Data\2024_01_23_001.tlx

	Sample Name	Sample ID	Origin	Result	Status	Date / Time	Vial
54	HS24011031-03DF100		01.03.2024.	NPOC:7.79	Completed	1/24/2024 3:01:	31
55	HS24011031-04DF10		01.03.2024.	NPOC:28.5	Completed	1/24/2024 3:18:	32
56	HS24011031-05DF20		01.03.2024.	NPOC:6.11	Completed	1/24/2024 3:33:	33
57	HS24011031-06		01.03.2024.	NPOC:17.8	Completed	1/24/2024 3:49:	34
58	CCV	324065402	01.03.2024.	NPOC:25.2	Completed	1/24/2024 4:07:	48
59	CCB		01.03.2024.	NPOC:0.14	Completed	1/24/2024 4:19:	49
60	HS24011031-07DF10		01.03.2024.	NPOC:207.	Completed	1/24/2024 4:37:	35
61	HS24011031-08DF10		01.03.2024.	NPOC:167.	Completed	1/24/2024 4:56:	36
62	HS24011031-09DF10		01.03.2024.	NPOC:6.85	Completed	1/24/2024 5:12:	37
63	HS24011040-01		01.03.2024.	NPOC:5.25	Completed	1/24/2024 5:27:	38
64	CCV	324065402	01.03.2024.	NPOC:25.9	Completed	1/24/2024 5:44:	48
65	CCB		01.03.2024.	NPOC:0.18	Completed	1/24/2024 5:57:	49
66	MBLK-01232024		01.03.2024.	NPOC:0.10	Completed	1/24/2024 6:09:	50
67	LCS-01232024	3100607917	01.03.2024.	NPOC:10.2	Completed	1/24/2024 6:25:	51
68	LCSD-01232024		01.03.2024.	NPOC:10.5	Completed	1/24/2024 6:41:	52
69	HS24011040-02	TOC_W 5310B	01.03.2024.	NPOC:4.63	Completed	1/24/2024 6:56:	39
70	HS24011040-03DF10		01.03.2024.	NPOC:6.30	Completed	1/24/2024 7:11:	40
71	HS24011040-03MSDF10		01.03.2024.	NPOC:15.7	Completed	1/24/2024 7:26:	41
72	HS24011040-04		01.03.2024.	NPOC:17.9	Completed	1/24/2024 7:42:	42
73	HS24011040-05		01.03.2024.	NPOC:18.0	Completed	1/24/2024 7:57:	43
74	HS24011083-01		01.03.2024.	NPOC:14.7	Completed	1/24/2024 8:13:	44
75	HS24011112-02		01.03.2024.	NPOC:9.30	Completed	1/24/2024 8:28:	45
76	CCV	324065402	01.03.2024.	NPOC:25.1	Completed	1/24/2024 8:45:	53
77	CCB		01.03.2024.	NPOC:0.11	Completed	1/24/2024 8:57:	54

TOC-Control L Report

2024_01_23_001.tlx

Instr.Information

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

Sample

Sample Name: CCV
Sample ID: 324065402
Origin: TOC_W 9060.met
Status Completed
Chk. Result

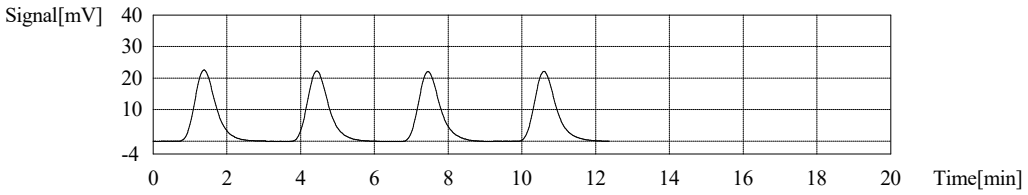
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.43mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	90.36	25.28mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 12:16:15 PM
2	90.71	25.37mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 12:19:31 PM
3	91.51	25.60mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 12:22:55 PM
4	91.05	25.47mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 12:26:20 PM

Mean Area 90.91
Mean Conc. 25.43mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: TOC_W 9060.met
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1306mg/L

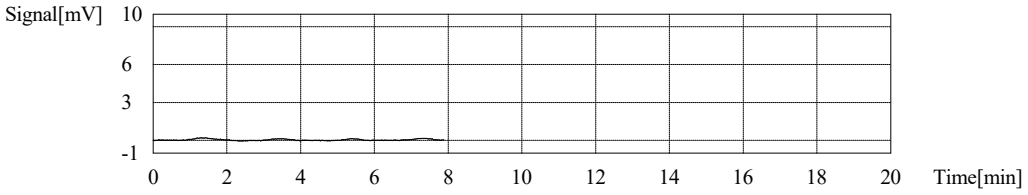
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.7380	0.2064mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 12:35:12 PM
2	0.4618	0.1292mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 12:37:22 PM
3	0.2973	0.08317mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 12:39:30 PM
4	0.3711	0.1038mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 12:41:40 PM

TOC-Control L Report

Mean Area 0.4671
Mean Conc. 0.1306mg/L



Sample

Sample Name: MBLK-01232024
Sample ID:
Origin: 01.03.2024.cal
Status Aborted
Chk. Result

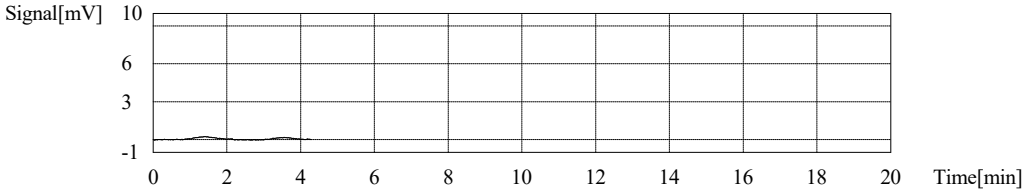
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2148mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.8199	0.2294mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 9:49:43 AM
2	0.7158	0.2002mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 9:52:07 AM

Mean Area 0.7679
Mean Conc. 0.2148mg/L



Sample

Sample Name: LCS-01232024
Sample ID: 3100607917
Origin: 01.03.2024.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.251mg/L

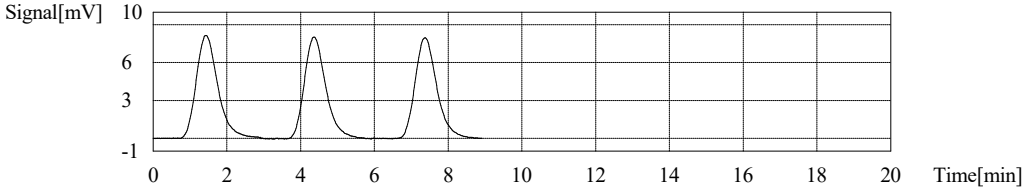
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	33.26	9.304mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 12:51:01 PM
2	33.02	9.237mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 12:54:16 PM
3	32.93	9.212mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 12:57:29 PM

TOC-Control L Report

Mean Area 33.07
Mean Conc. 9.251mg/L



Sample

Sample Name: LCSD-01232024
Sample ID:
Origin: 01.03.2024.cal
Status Completed
Chk. Result

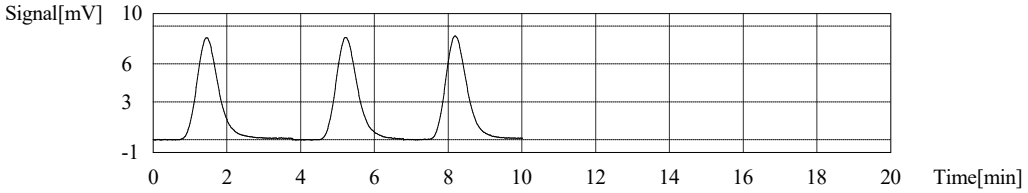
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.301mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	33.42	9.349mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 1:10:24 PM
2	33.05	9.245mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 1:13:39 PM
3	33.28	9.310mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 1:17:08 PM

Mean Area 33.25
Mean Conc. 9.301mg/L



Sample

Sample Name: HS24011031-01
Sample ID: TOC_W 5310B
Origin: 01.03.2024.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:7.084mg/L

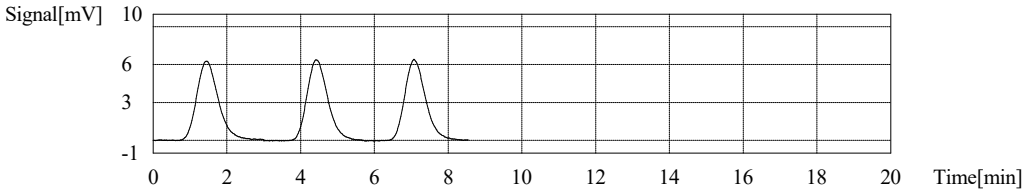
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	25.62	7.167mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 1:26:38 PM
2	25.16	7.038mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 1:29:34 PM
3	25.19	7.047mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 1:32:43 PM

TOC-Control L Report

Mean Area 25.32
Mean Conc. 7.084mg/L



Sample

Sample Name: HS24011031-01MS
Sample ID:
Origin: 01.03.2024.cal
Status Completed
Chk. Result

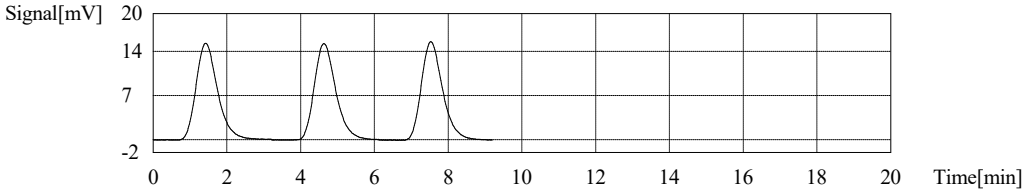
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:17.54mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	62.81	17.57mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 1:42:12 PM
2	62.09	17.37mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 1:45:21 PM
3	63.25	17.69mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 1:48:39 PM

Mean Area 62.72
Mean Conc. 17.54mg/L



Sample

Sample Name: CCV
Sample ID: 324065402
Origin: 01.03.2024.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.26mg/L

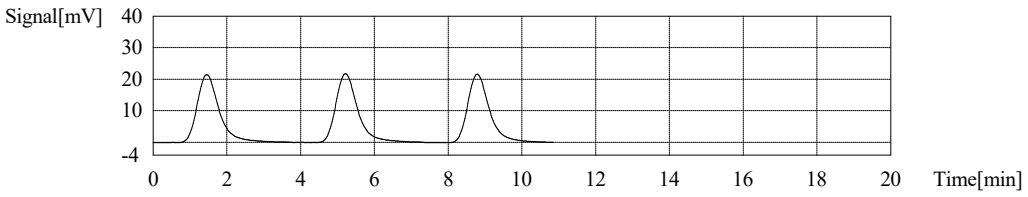
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	90.30	25.26mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 3:59:41 PM
2	90.68	25.37mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 4:03:31 PM
3	89.88	25.14mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 4:07:15 PM

TOC-Control L Report

Mean Area 90.29
Mean Conc. 25.26mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: 01.03.2024.cal
Status Completed
Chk. Result

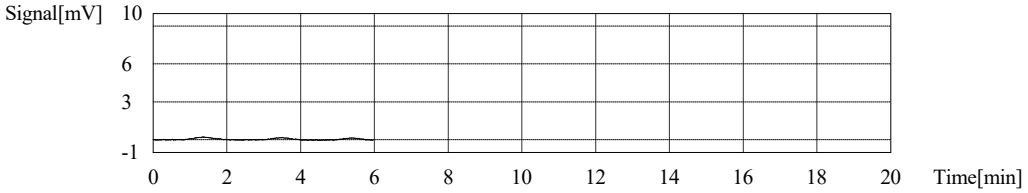
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1466mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.6834	0.1912mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 4:15:36 PM
2	0.3896	0.1090mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 4:17:44 PM
3	0.4987	0.1395mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 4:19:56 PM

Mean Area 0.5239
Mean Conc. 0.1466mg/L



Sample

Sample Name: HS24011040-01
Sample ID:
Origin: 01.03.2024.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.255mg/L

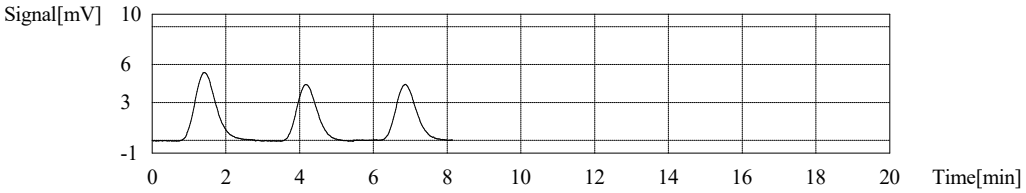
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	21.64	6.053mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 5:21:36 PM
2	17.49	4.893mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 5:24:32 PM
3	17.23	4.820mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 5:27:28 PM

TOC-Control L Report

Mean Area 18.79
Mean Conc. 5.255mg/L



Sample

Sample Name: CCV
Sample ID: 324065402
Origin: 01.03.2024.cal
Status Completed
Chk. Result

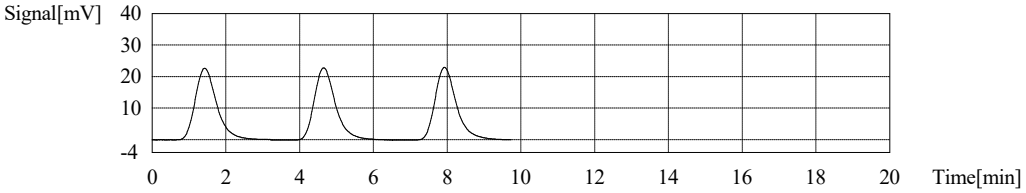
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.93mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	92.33	25.83mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 5:37:05 PM
2	92.15	25.78mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 5:40:37 PM
3	93.65	26.20mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 5:44:04 PM

Mean Area 92.71
Mean Conc. 25.93mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: 01.03.2024.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1802mg/L

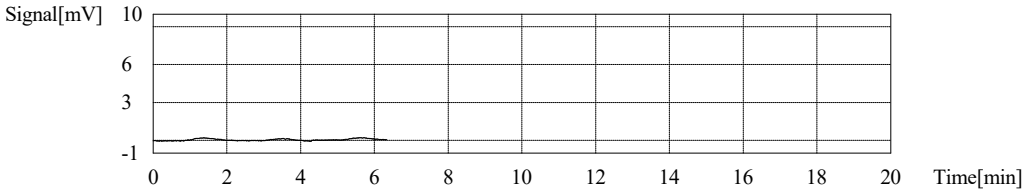
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.7419	0.2075mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 5:52:29 PM
2	0.6008	0.1681mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 5:54:51 PM
3	0.5899	0.1650mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 5:57:09 PM

TOC-Control L Report

Mean Area 0.6442
Mean Conc. 0.1802mg/L



Sample

Sample Name: MBLK-01232024
Sample ID:
Origin: 01.03.2024.cal
Status Completed
Chk. Result

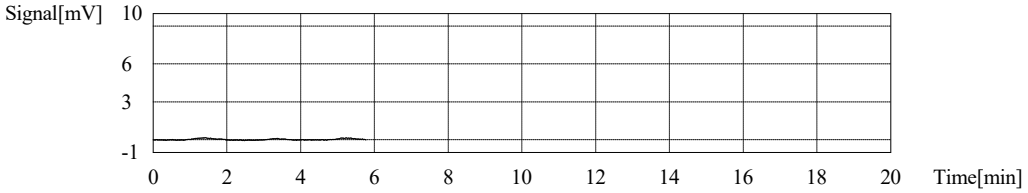
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1093mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.5389	0.1507mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 6:05:24 PM
2	0.2794	0.07816mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 6:07:31 PM
3	0.3543	0.09911mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 6:09:38 PM

Mean Area 0.3909
Mean Conc. 0.1093mg/L



Sample

Sample Name: LCS-01232024
Sample ID: 3100607917
Origin: 01.03.2024.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:10.24mg/L

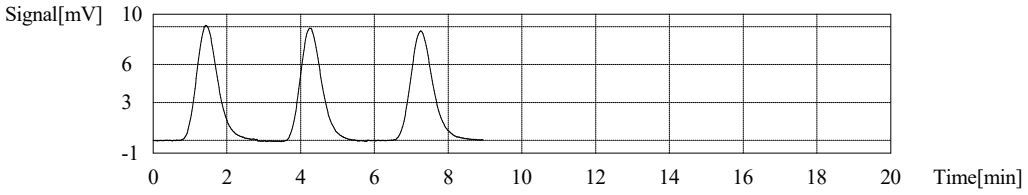
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	36.44	10.19mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 6:18:44 PM
2	36.86	10.31mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 6:21:57 PM
3	36.48	10.20mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 6:25:21 PM

TOC-Control L Report

Mean Area 36.59
Mean Conc. 10.24mg/L



Sample

Sample Name: LCSD-01232024
Sample ID:
Origin: 01.03.2024.cal
Status Completed
Chk. Result

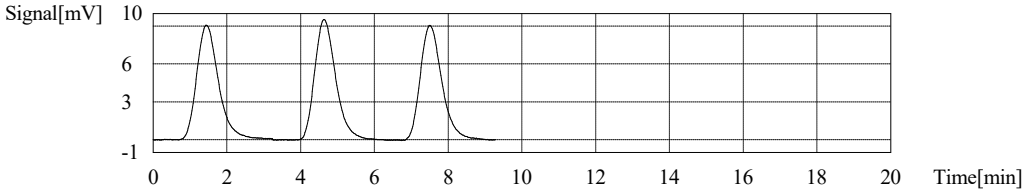
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:10.53mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	37.41	10.46mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 6:34:52 PM
2	38.01	10.63mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 6:37:58 PM
3	37.46	10.48mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 6:41:26 PM

Mean Area 37.63
Mean Conc. 10.53mg/L



Sample

Sample Name: HS24011040-02
Sample ID: TOC_W 5310B
Origin: 01.03.2024.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.631mg/L

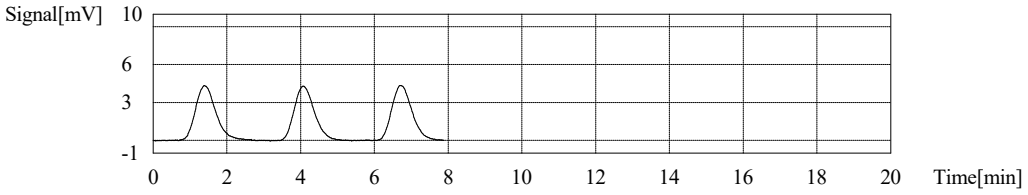
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	16.44	4.599mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 6:50:25 PM
2	16.50	4.616mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 6:53:19 PM
3	16.73	4.680mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 6:56:06 PM

TOC-Control L Report

Mean Area 16.56
Mean Conc. 4.631mg/L



Sample

Sample Name: HS24011040-03DF10
Sample ID:
Origin: 01.03.2024.cal
Status Completed
Chk. Result

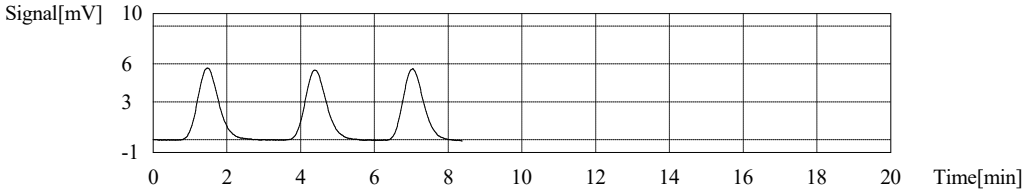
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:6.306mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	22.98	6.428mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 7:05:18 PM
2	22.19	6.207mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 7:08:11 PM
3	22.46	6.283mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 7:11:11 PM

Mean Area 22.54
Mean Conc. 6.306mg/L



Sample

Sample Name: HS24011040-03MSDF10
Sample ID:
Origin: 01.03.2024.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:15.79mg/L

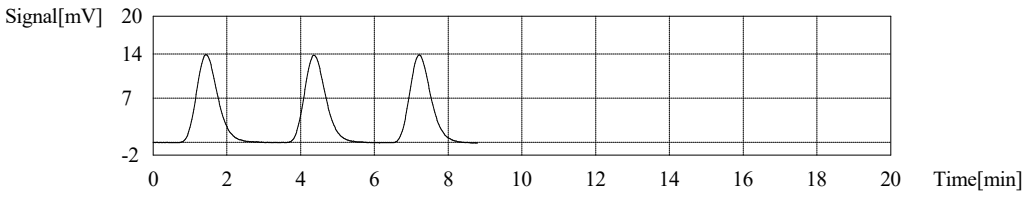
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	56.66	15.85mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 7:20:23 PM
2	56.05	15.68mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 7:23:29 PM
3	56.65	15.85mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 7:26:43 PM

TOC-Control L Report

Mean Area 56.45
Mean Conc. 15.79mg/L



Sample

Sample Name: HS24011040-04
Sample ID:
Origin: 01.03.2024.cal
Status Completed
Chk. Result

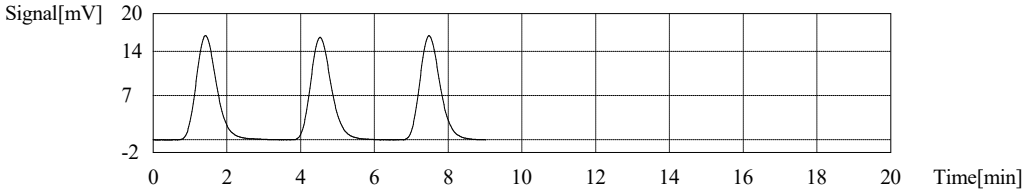
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:17.90mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	64.38	18.01mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 7:36:05 PM
2	63.77	17.84mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 7:39:17 PM
3	63.79	17.84mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 7:42:27 PM

Mean Area 63.98
Mean Conc. 17.90mg/L



Sample

Sample Name: HS24011040-05
Sample ID:
Origin: 01.03.2024.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:18.03mg/L

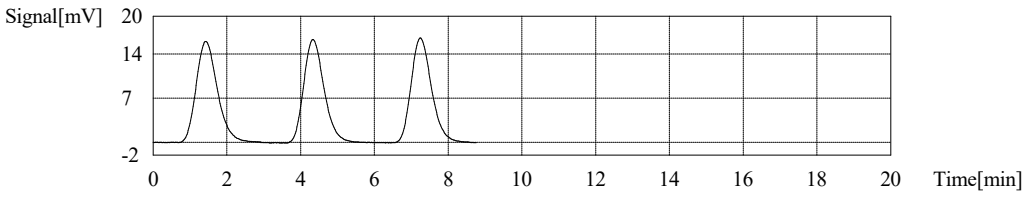
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	64.81	18.13mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 7:51:38 PM
2	63.77	17.84mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 7:54:47 PM
3	64.81	18.13mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 7:57:57 PM

TOC-Control L Report

Mean Area 64.46
Mean Conc. 18.03mg/L



Sample

Sample Name: CCV
Sample ID: 324065402
Origin: 01.03.2024.cal
Status Completed
Chk. Result

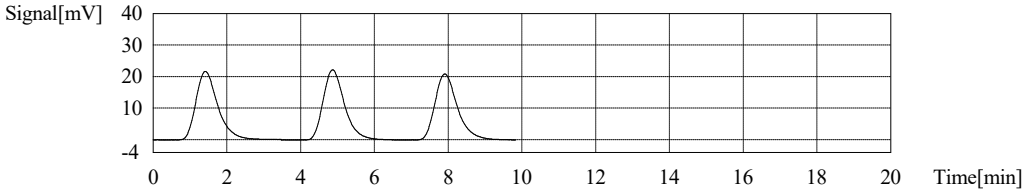
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.11mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	89.98	25.17mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 8:38:30 PM
2	89.88	25.14mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 8:41:45 PM
3	89.48	25.03mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 8:45:21 PM

Mean Area 89.78
Mean Conc. 25.11mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: 01.03.2024.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1181mg/L

1. Det

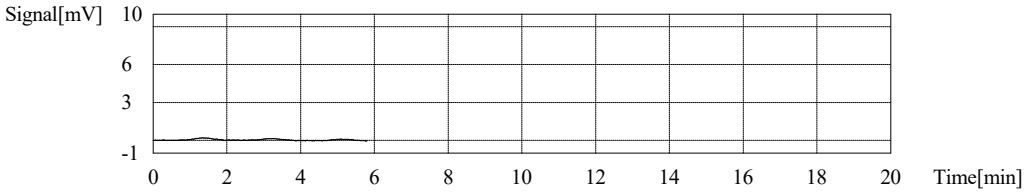
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.4652	0.1301mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 8:53:31 PM
2	0.5130	0.1435mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 8:55:38 PM
3	0.2881	0.08059mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/24/2024 8:57:52 PM

TOC-Control L Report

2024_01_23_001.tlx

Mean Area	0.4221
Mean Conc.	0.1181mg/L



HS24011040 E2400067 Perch Level IV Report Rev 01

ALS WO# HS24011040

January 30, 2024 Service Request No:E2400067

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

Laboratory Results for: HS24011040

Dear James,

Enclosed are the results of the sample(s) submitted to our laboratory January 19, 2024
For your reference, these analyses have been assigned our service request number **E2400067.**

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

Please contact me if you have any questions. My extension is 2190. You may also contact me via email at hussam.kelany@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

HKelany

Hussam Kelany
Project Manager

ADDRESS 10450 Stancliff Rd., Suite 210, Houston, TX 77099
PHONE +1 281 530 5656 | FAX +1 281 530 5887
ALS Group USA, Corp.
dba ALS Environmental

Certificate of Analysis

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

Client:	ALS Environmental - US	**Service Request No.:**	E2400067
Project:	HS24011040	**Date Received:**	01/19/24
Sample Matrix:	Water		

CASE NARRATIVE

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

Sample Receipt

Twelve samples were received for analysis at ALS Environmental in Houston on 01/19/24.

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

Data Validation Notes and Discussion

Precision and Accuracy:

EQ2400040: 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 batch precision (MS/DMS) measurements were determined on an unrelated sample in the extraction batch. The MS/DMS results are not included in this report.

Due to the parent sample E2400067-003 has a concentration high than 5 times of spike level,

The Matrix Spike (MS) and Duplicate (DMS)

EQ2400040-04 MS/ EQ2400040-05 DMS

recovery exceeding the limits of DOD/DOE QSM 5.3 Appendix C 2019 84%-121% still can be report with a qualifier that the background level too high for accurate recovery determination.

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:**E2400067
Project: HS24011040

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
E2400067-001	16WW16-240118	1/18/2024	0710
E2400067-002	16WW16-240118-FD	1/18/2024	0710
E2400067-003	16WW35-240118	1/18/2024	0710
E2400067-004	16WW36-240118	1/18/2024	0815
E2400067-005	16WW36-240118-FD	1/18/2024	0915
E2400067-006	16PM02-240118	1/18/2024	0915
E2400067-007	16PM03-240118	1/18/2024	1005
E2400067-008	16PM14-240118	1/18/2024	1045
E2400067-009	16PM09-240118	1/18/2024	1130
E2400067-010	16PM06-240118	1/18/2024	1210
E2400067-011	16RW01-240118	1/18/2024	1250
E2400067-012	16RW04-240118	1/18/2024	1415

Service Request Summary

Folder #: **E2400067**
Client Name: ALS Environmental - US
Project Name: HS24011040
Project Number:

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

Project Chemist: Hussam Kelany
Originating Lab: HOUSTON
Logged By: JCORONADO2
Date Received: 01/19/24
Internal Due Date: 1/26/2024
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number:
EDD: BASIC_WQC_CASNo, EQUIS APTIM LONGHORN EFWEDD

14 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-WIC 5B
Pressure Gas:

Lab Samp No.	Client Samp No	Matrix	Collected	HOUSTON ClO4 DOD/6850
E2400067-001	16WW16-240118	Water	01/18/24 0710	**IV**
E2400067-002	16WW16-240118-FD	Water	01/18/24 0710	**IV**
E2400067-003	16WW35-240118	Water	01/18/24 0710	**IV**
E2400067-004	16WW36-240118	Water	01/18/24 0815	**IV**
E2400067-005	16WW36-240118-FD	Water	01/18/24 0915	**IV**
E2400067-006	16PM02-240118	Water	01/18/24 0915	**IV**
E2400067-007	16PM03-240118	Water	01/18/24 1005	**IV**
E2400067-008	16PM14-240118	Water	01/18/24 1045	**IV**
E2400067-009	16PM09-240118	Water	01/18/24 1130	**IV**
E2400067-010	16PM06-240118	Water	01/18/24 1210	**IV**
E2400067-011	16RW01-240118	Water	01/18/24 1250	**IV**
E2400067-012	16RW04-240118	Water	01/18/24 1415	**IV**

Service Request Summary

Folder #: **E2400067**
Client Name: ALS Environmental - US
Project Name: HS24011040
Project Number:

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

Project Chemist: Hussam Kelany
Originating Lab: HOUSTON
Logged By: JCORONADO2
Date Received: 01/19/24
Internal Due Date: 1/26/2024
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number:
EDD: BASIC_WQC_CASNo, EQUIS APTIM LONGHORN EFWEDD

14 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-WIC 5B
Pressure Gas:

Data Qualifiers

Lab Standard

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

Data Qualifiers

Lab Standard

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

ALS Laboratory Group

Acronyms

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

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

ALS Environmental

State Certifications, Accreditations, and Licenses

Agency	Number	Expire Date
Arizona Department of Health Services	AZ0793_2024	5/27/2024
Arkansas Department of Environmental Quality	88-00356	3/27/2024
California State Environmental Laboratory Accreditation Program	2919	4/30/2024
Department of Defense	L22-90	3/31/2024
Department of Defense	L23-358	5/31/2025
Florida Department of Health	E87611-38	6/30/2024
Illinois Environmental Protection Agency	2000322023-11	6/30/2024
Kansas Department of Health and Environment	E-10352 2023-2024	7/31/2024
Louisiana Department of Environmental Quality	03087-2023	6/30/2024
Louisiana Department of Health and Hospitals	LA028-2024	12/31/2024
Maine Department of Health and Human Services	2022017	6/5/2024
Maryland Department of the Environment	343-2023	6/30/2024
Michigan Depratment of Environmental Quality	9971-2023	4/30/2024
Minnesota Department of Health	2645386	12/31/2024
Nebraska Department of Health and Human Services	NE-OS-25-13	4/30/2024
Nevada Division of Environmental Protection	TX026932024-1	7/31/2024
New Hampshire Environmental Laboratory Accreditation Program	209423	4/24/2024
New Jersey Department of Environmental Protection	TX008-2024	6/30/2024
New York Department of Health	11707	3/31/2024
Oklahoma Department of Environmental Quality	2023-140	8/31/2024
Oregon Environmental Laboratory Accreditation Program	TX200002-011	5/15/2024
Pennsylvania Department of Environmental Protection	68-03441-017	6/30/2024
Perry Johnson Laboratory Accreditation	L22-91	3/31/2024
Tennessee Department of Environment and Concervation	TN04016-2023	4/30/2024
Texas Commision on Environmental Quality	T104704231-23-30	4/30/2024
Utah Department of Health Environmental Laboratory Certification	TX026932023-14	7/31/2024
Washington Department of Ecology	C819-23	11/14/2024

Chain of Custody

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

E2400067 5
ALS Group USA, Corp.
HS24011040

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:** **24509**

SUBCONTRACT TO:

ALS Environmental
10450 Stancliff RoadSuite 210
Houston, TX 77084

Phone: +1 281 530 5656

CUSTOMER INFORMATION:

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

INVOICE INFORMATION:

Company:	ALS Houston
Contact:	Accounts Payable
Address:	10450 Stancliff Rd, Ste 210
Phone:	+1 281 530 5656
Reference:	HS24011040
TSR:	Sonia West

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	**HS24011040-01**	**16WW16_240118**	**Groundwater**	**18 Jan 2024 07:10**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			30 Jan 2024
2.	**HS24011040-02**	**16WW16_240118-FD**	**Groundwater**	**18 Jan 2024 07:10**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			30 Jan 2024
3.	**HS24011040-03**	**16WW35_240118**	**Groundwater**	**18 Jan 2024 08:15**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			30 Jan 2024
4.	**HS24011040-04**	**16WW36-240118**	**Groundwater**	**18 Jan 2024 09:15**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			30 Jan 2024
5.	**HS24011040-05**	**16WW36-240118-FD**	**Groundwater**	**18 Jan 2024 09:15**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			30 Jan 2024
6.	**HS24011040-06**	**16PM02-240118**	**Groundwater**	**18 Jan 2024 10:05**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			30 Jan 2024
7.	**HS24011040-07**	**16PM03-240118**	**Groundwater**	**18 Jan 2024 10:45**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			30 Jan 2024
8.	**HS24011040-08**	**16PM14-240118**	**Groundwater**	**18 Jan 2024 11:30**

Subcontract Chain of Custody

SAMPLING STATE: **Dept of Defense** **COC ID: 24509**

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			30 Jan 2024
9.	**HS24011040-09**	**16PM09-240118**	**Groundwater**	**18 Jan 2024 12:10**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			30 Jan 2024
10.	**HS24011040-10**	**16PM06-240118**	**Groundwater**	**18 Jan 2024 12:50**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			30 Jan 2024
11.	**HS24011040-11**	**16RW01-240118**	**Groundwater**	**18 Jan 2024 13:35**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			30 Jan 2024
12.	**HS24011040-12**	**16RW04-240118**	**Groundwater**	**18 Jan 2024 14:15**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			30 Jan 2024

Comments: Please analyze for the analysis listed above.
Send report to the emails shown above.
HS24011040-03 = MS/MSD

QC Level: DOD IV (DoD Data Package)

Relinquished By: _____ Date/Time: _____

Received By: TC Date/Time: 1/19/24 1655

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

E2400067 5
ALS Group USA, Corp.
HS24011040

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

Sample Receipt Checklist

Work Order ID: HS24011040 **Date/Time received:** 19 Jan 2024 09:35

Client name: Bhate Environmental Associates, Inc. **Received by:** Jacob Coronado

Completed/By: 19 Jan 2024 16:55 Paresh M. Giga (Date/Time / eSignature) **Reviewed/By:** _____ (Date/Time / eSignature)

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

Shipping container/cooler in good condition?	☑ Yes	☐ No	☐ Not Present	
Custody seals intact on shipping container/cooler?	☑ Yes	☐ No	☐ Not Present	
Custody seals intact on Sample bottles?	☐ Yes	☐ No	☑ Not Present	
VOA/TX1005/TX1006 Solids in hermetically sealed vials?	☐ Yes	☐ No	☑ Not Present	
Chain of custody present?	☑ Yes	☐ No	2 Page(s)	
Chain of custody signed when relinquished and received?	☑ Yes	☐ No	COC ID(s): none	
Samplers name present on COC?	☑ Yes	☐ No		
Chain of custody agrees with sample labels?	☑ Yes	☐ No		
Samples in proper container/bottle?	☑ Yes	☐ No		
Sample containers intact?	☑ Yes	☐ No		
Sufficient sample volume for indicated test?	☑ Yes	☐ No		
All samples received within holding time?	☑ Yes	☐ No		
Container/Temp Blank temperature in compliance?	☑ Yes	☐ No		

Temperature(s)/Thermometer(s): 2.4C/2.3C U/C IR31

Cooler Information: 1 Cooler(s), Blue

Date/Time sample(s) sent to storage: 1/18/24 17:15

Water - VOA vials have zero headspace?	☑ Yes	☐ No	☐ No VOA vials submitted
Water - pH acceptable upon receipt?	☐ Yes	☐ No	☑ Not Applicable
pH adjusted?	☐ Yes	☐ No	☑ Not Applicable

pH adjusted by: _____

Login notes: _____

Client contacted: _____ **Date contacted:** _____ **Person contacted:** _____

Contacted by: _____ **Regarding:** _____

Comments: _____

Corrective action: _____

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

SAMPLE ACCEPTANCE POLICY

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

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

- ✓ Intact on outside of cooler, signed and dated

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

The following is required on each COC:

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

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

Sample Integrity (mandatory):

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

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

Temperature Requirement (varies by sample matrix):

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

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

Preparation Information Benchsheets

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

Preparation Information Benchsheet

Prep Run#: 432986 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 1/23/24 15:53

#	Lab Code	Client ID	B#	Method /Test	pH	Cl	Matrix	Amt. Ext.	Sample Description
1	E2400062-001	CTC-24_0124	.01	6850/ClO4 DOD			Water	10mL	
2	E2400062-002	CTC-25_0124	.01	6850/ClO4 DOD			Water	10mL	
3	E2400062-003	CTC-48_0124	.01	6850/ClO4 DOD			Water	10mL	
4	E2400062-004	EA-12_0124	.01	6850/ClO4 DOD			Water	10mL	
5	E2400062-005	EA-34_0124	.01	6850/ClO4 DOD			Water	10mL	
6	E2400062-006	GUKOMELIK#2_012R	.01	6850/ClO4 DOD			Water	10mL	
7	E2400062-007	CTC-51_0124	.01	6850/ClO4 DOD			Water	10mL	
8	E2400062-008	EA-36_0124	.01	6850/ClO4 DOD			Water	10mL	
9	E2400067-001	16WW16-240118	.01	6850/ClO4 DOD			Water	10mL	
10	E2400067-002	16WW16-240118-FD	.01	6850/ClO4 DOD			Water	10mL	
11	E2400067-003	16WW35-240118	.02	6850/ClO4 DOD			Water	10mL	
12	E2400067-004	16WW36-240118	.01	6850/ClO4 DOD			Water	10mL	
13	E2400067-005	16WW36-240118-FD	.01	6850/ClO4 DOD			Water	10mL	
14	E2400067-006	16PM02-240118	.01	6850/ClO4 DOD			Water	10mL	
15	E2400067-007	16PM03-240118	.01	6850/ClO4 DOD			Water	10mL	
16	E2400067-008	16PM14-240118	.01	6850/ClO4 DOD			Water	10mL	
17	E2400067-009	16PM09-240118	.01	6850/ClO4 DOD			Water	10mL	
18	E2400067-010	16PM06-240118	.01	6850/ClO4 DOD			Water	10mL	
19	E2400067-011	16RW01-240118	.01	6850/ClO4 DOD			Water	10mL	
20	E2400067-012	16RW04-240118	.01	6850/ClO4 DOD			Water	10mL	
21	EQ2400040-01	MB		6850/ClO4 DOD			Liquid	10mL	
22	EQ2400040-02	LCS		6850/ClO4 DOD			Liquid	10mL	
23	EQ2400040-03	DLCS		6850/ClO4 DOD			Liquid	10mL	
24	EQ2400040-04	16WW35-240118 MS	.02	6850/ClO4 DOD			Liquid	10mL	
25	EQ2400040-05	16WW35-240118 DMS	.02	6850/ClO4 DOD			Liquid	10mL	
26	EQ2400040-06	ICS		6850/ClO4 DOD			Liquid	10mL	

Spiking Solutions

Name: Perchlorate Intermediate Stock 2 Inventory ID 230345 Logbook Ref: Perchlorate INT. Stock2 Expires On: 03/07/2024

EQ2400040-02 10.00µL EQ2400040-03 10.00µL EQ2400040-04 10.00µL EQ2400040-05 10.00µL EQ2400040-06 10.00µL

Name: Perchlorate Internal Standard 1ug/mL Inventory ID 232015 Logbook Ref: Perchlorate Internal Standard Expires On: 04/30/2024

E2400062-001 100.00µL E2400062-002 100.00µL E2400062-003 100.00µL E2400062-004 100.00µL E2400062-005 100.00µL E2400062-006 100.00µL

Preparation Information Benchsheet

Prep Run#: 432986 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 1/23/24 15:53

E2400062-007	100.00µL	E2400062-008	100.00µL	E2400067-001	100.00µL	E2400067-002	100.00µL	E2400067-003	100.00µL	E2400067-004	100.00µL
E2400067-005	100.00µL	E2400067-006	100.00µL	E2400067-007	100.00µL	E2400067-008	100.00µL	E2400067-009	100.00µL	E2400067-010	100.00µL
E2400067-011	100.00µL	E2400067-012	100.00µL	EQ2400040-01	100.00µL	EQ2400040-02	100.00µL	EQ2400040-03	100.00µL	EQ2400040-04	100.00µL
EQ2400040-05	100.00µL	EQ2400040-06	100.00µL								

Name: Perchlorate Anion Spiking Soln. 25,000 ppm Inventory ID 233096 Logbook Ref: Expires On: 02/04/2024

EQ2400040-06 20.00µL

Preparation Materials

Water HPLC Grade	HPLC water 083124 (233144)	6850 Amber Glass screw vial	2mL Screw Top Vial (221894)	6850 0.45um syringe filters	6850 0.45 SYRING FILTER (229979)
6850 Luer-Lok Syringes	Luer Lok Syringes (231696)				

Preparation Steps

Step: Preparation
Started: 1/23/24 15:53
Finished: 1/24/24 08:34
By: XMI
Comments

Comments: _____

Reviewed By: _____ Date: _____

Chain of Custody

Relinquished By: _____ Date: _____ Extracts Examined

Received By: _____ Date: _____ Yes No

Preparation Information Benchsheet

Prep Run#: 433151 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/JOSEL.JUAREZ **Prep Method:** Method **Prep Date/Time:** 1/26/24 14:57

#	Lab Code	Client ID	B#	Method /Test	pH	Cl	Matrix	Amt. Ext.	Sample Description
1	E2400070-001	CTC-37-0124	.01	6850/ClO4 DOD			Water	10mL	
2	E2400070-002	CTC-27-0124	.01	6850/ClO4 DOD			Water	10mL	
3	E2400070-003	EA-52-0124	.01	6850/ClO4 DOD			Water	10mL	
4	E2400070-004	CTC-15-0124	.01	6850/ClO4 DOD			Water	10mL	
5	E2400070-005	CTC-14-0124	.01	6850/ClO4 DOD			Water	10mL	
6	E2400070-006	900-1-0124	.01	6850/ClO4 DOD			Water	10mL	
7	E2400070-007	CTC-1-0124	.01	6850/ClO4 DOD			Water	10mL	
8	E2400070-008	EA-22-0124	.01	6850/ClO4 DOD			Water	10mL	
9	E2400070-009	EA-50-0124	.01	6850/ClO4 DOD			Water	10mL	
10	E2400070-010	CTC-17-0124	.01	6850/ClO4 DOD			Water	10mL	
11	E2400072-001	AAR3358	.01	6850/ClO4 DOD			Water	10mL	
12	E2400072-002	AAR3359	.01	6850/ClO4 DOD			Water	10mL	
13	E2400072-003	AAR3360	.01	6850/ClO4 DOD			Water	10mL	
14	E2400072-004	AAR3364	.01	6850/ClO4 DOD			Water	10mL	
15	E2400072-005	AAR3365	.01	6850/ClO4 DOD			Water	10mL	
16	E2400072-006	AAR3368	.01	6850/ClO4 DOD			Water	10mL	
17	E2400072-007	AAR3373	.01	6850/ClO4 DOD			Water	10mL	
18	E2400072-008	AAR3377	.02	6850/ClO4 DOD			Water	10mL	
19	E2400072-009	AAR3378	.01	6850/ClO4 DOD			Water	10mL	
20	EQ2400048-01	CCV		6850/ClO4 DOD			Liquid	10mL	
21	EQ2400049-01	MB		6850/ClO4 DOD			Liquid	10mL	
22	EQ2400049-02	LCS		6850/ClO4 DOD			Liquid	10mL	
23	EQ2400049-03	DLCS		6850/ClO4 DOD			Liquid	10mL	
24	EQ2400049-04	AAR3377 MS	.02	6850/ClO4 DOD			Liquid	10mL	
25	EQ2400049-05	AAR3377 DMS	.02	6850/ClO4 DOD			Liquid	10mL	

Spiking Solutions

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

EQ2400048-01 100.00µL

Name: Perchlorate Intermediate Stock 2 Inventory ID 230345 Logbook Ref: Perchlorate INT. Stock2 Expires On: 03/07/2024

EQ2400049-02 10.00µL EQ2400049-03 10.00µL EQ2400049-04 10.00µL EQ2400049-05 10.00µL

Preparation Information Benchsheet

Prep Run#: 433151 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/JOSEL.JUAREZ **Prep Method:** Method **Prep Date/Time:** 1/26/24 14:57

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

E2400070-001	100.00µL	E2400070-002	100.00µL	E2400070-003	100.00µL	E2400070-004	100.00µL	E2400070-005	100.00µL	E2400070-006	100.00µL
E2400070-007	100.00µL	E2400070-008	100.00µL	E2400070-009	100.00µL	E2400070-010	100.00µL				

Name:	Perchlorate Internal Standard 1ug/mL	Inventory ID	232015	Logbook Ref:	Perchlorate Internal Standard	Expires On:	04/30/2024

E2400072-001	100.00µL	E2400072-002	100.00µL	E2400072-003	100.00µL	E2400072-004	100.00µL	E2400072-005	100.00µL	E2400072-006	100.00µL
E2400072-007	100.00µL	E2400072-008	100.00µL	E2400072-009	100.00µL	EQ2400048-01	100.00µL	EQ2400049-01	100.00µL	EQ2400049-02	100.00µL
EQ2400049-03	100.00µL	EQ2400049-04	100.00µL	EQ2400049-05	100.00µL						

Preparation Materials

Water HPLC Grade	HPLC water 083124 (233144)	6850 Amber Glass screw vial	2mL Screw Top Vial (221894)	6850 Luer-Lok Syringes	Luer Lok Syringes (231696)
6850 0.45um syringe filters	6850 0.45 SYRING FILTER (229979)				

Preparation Steps

Step: Preparation
Started: 1/26/24 14:57
Finished: 1/26/24 16:00
By: XMI
Comments

Comments: _____

Reviewed By: _____ Date: _____

Chain of Custody

Relinquished By: _____ Date: _____ Extracts Examined

Received By: _____ Date: _____ Yes No

Analytical Results

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

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400067
Project:	HS24011040	**Date Collected:**	1/18/24 0710
Sample Matrix:	Water	**Date Received:**	1/19/24
Sample Name:	16WW16-240118	**Units:**	µg/L
Lab Code:	E2400067-001	**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	**731**		5.00	2.50	1.25	50	1/23/24	1/26/24 11:10	432986	830662	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400067
Project:	HS24011040	**Date Collected:**	1/18/24 0710
Sample Matrix:	Water	**Date Received:**	1/19/24
Sample Name:	16WW16-240118-FD	**Units:**	µg/L
Lab Code:	E2400067-002	**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	**752**		5.00	2.50	1.25	50	1/23/24	1/26/24 11:16	432986	830662	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400067
Project:	HS24011040	**Date Collected:**	1/18/24 0710
Sample Matrix:	Water	**Date Received:**	1/19/24
Sample Name:	16WW35-240118	**Units:**	µg/L
Lab Code:	E2400067-003	**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	**511**		5.00	2.50	1.25	50	1/23/24	1/26/24 11:21	432986	830662	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400067
Project:	HS24011040	**Date Collected:**	1/18/24 0815
Sample Matrix:	Water	**Date Received:**	1/19/24
Sample Name:	16WW36-240118	**Units:**	µg/L
Lab Code:	E2400067-004	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.136**		0.100	0.0500	0.0250	1	1/23/24	1/26/24 11:27	432986	830662	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400067
Project:	HS24011040	**Date Collected:**	1/18/24 0915
Sample Matrix:	Water	**Date Received:**	1/19/24
Sample Name:	16WW36-240118-FD	**Units:**	µg/L
Lab Code:	E2400067-005	**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	**0.104**		0.100	0.0500	0.0250	1	1/23/24	1/26/24 11:32	432986	830662	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400067
Project:	HS24011040	**Date Collected:**	1/18/24 0915
Sample Matrix:	Water	**Date Received:**	1/19/24
Sample Name:	16PM02-240118	**Units:**	µg/L
Lab Code:	E2400067-006	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.0791**	J	0.100	0.0500	0.0250	1	1/23/24	1/26/24 12:28	432986	830662	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400067
Project:	HS24011040	**Date Collected:**	1/18/24 1005
Sample Matrix:	Water	**Date Received:**	1/19/24
Sample Name:	16PM03-240118	**Units:**	µg/L
Lab Code:	E2400067-007	**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	**324**		2.00	1.00	0.500	20	1/23/24	1/26/24 11:55	432986	830662	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400067
Project:	HS24011040	**Date Collected:**	1/18/24 1045
Sample Matrix:	Water	**Date Received:**	1/19/24
Sample Name:	16PM14-240118	**Units:**	µg/L
Lab Code:	E2400067-008	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.149**		0.100	0.0500	0.0250	1	1/23/24	1/26/24 12:00	432986	830662	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400067
Project:	HS24011040	**Date Collected:**	1/18/24 1130
Sample Matrix:	Water	**Date Received:**	1/19/24
Sample Name:	16PM09-240118	**Units:**	µg/L
Lab Code:	E2400067-009	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.0854**	J	0.100	0.0500	0.0250	1	1/23/24	1/26/24 12:06	432986	830662	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400067
Project:	HS24011040	**Date Collected:**	1/18/24 1210
Sample Matrix:	Water	**Date Received:**	1/19/24
Sample Name:	16PM06-240118	**Units:**	µg/L
Lab Code:	E2400067-010	**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	**0.0558**	J	0.100	0.0500	0.0250	1	1/23/24	1/26/24 12:11	432986	830662	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400067
Project:	HS24011040	**Date Collected:**	1/18/24 1250
Sample Matrix:	Water	**Date Received:**	1/19/24
Sample Name:	16RW01-240118	**Units:**	µg/L
Lab Code:	E2400067-011	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.0812**	J	0.100	0.0500	0.0250	1	1/23/24	1/26/24 12:17	432986	830662	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400067
Project:	HS24011040	**Date Collected:**	1/18/24 1415
Sample Matrix:	Water	**Date Received:**	1/19/24
Sample Name:	16RW04-240118	**Units:**	µg/L
Lab Code:	E2400067-012	**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	1/23/24	1/26/24 12:22	432986	830662	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400067
Project:	HS24011040	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	EQ2400040-01	**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	1/23/24	1/26/24 10:43	432986	830662	

Accuracy & Precision

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

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS24011040
Sample Matrix: Water

Service Request: E2400067
Date Analyzed: 1/26/24

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

Analytical Method: 6850
Prep Method: Method

Units: µg/L
Basis: NA

Extraction Lot: 432986

	Lab Control Sample EQ2400040-02			Duplicate Lab Control Sample EQ2400040-03					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	0.101	0.100	101	0.0892	0.100	89	84 - 119	12	15

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

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

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400067
Project:	HS24011040	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2400040-02	**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	**0.101**		0.100	0.0500	0.0250	1	1/23/24	1/26/24 10:48	432986	830662	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400067
Project:	HS24011040	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2400040-03	**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	**0.0892**	J	0.100	0.0500	0.0250	1	1/23/24	1/26/24 10:54	432986	830662	

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2400067
Project:	HS24011040	**Date Collected:**	1/18/24
Sample Matrix:	Water	**Date Received:**	1/19/24
		Date Analyzed:	1/26/24

Matrix Spike Summary

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

Sample Name:	16WW35-240118	**Units:**	µg/L
Lab Code:	E2400067-003	**Basis:**	NA

Analytical Method: 6850
Prep Method: Method

		16WW35_240118MS				16WW35_240118DMS					
		Matrix Spike				**Duplicate Matrix Spike**					
		EQ2400040-04				EQ2400040-05					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	511	648	0.100	137503 #	639	0.100	127954 #	84 - 119	1	15

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

Results flagged with a pound (#) indicate the control criteria is not applicable.

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

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400067
Project:	HS24011040	**Date Collected:**	1/18/24 0710
Sample Matrix:	Water	**Date Received:**	1/19/24
Sample Name:	16WW35-240118	**Units:**	µg/L
Lab Code:	EQ2400040-04	**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	**648**	E	0.100	0.0500	0.0250	1	1/23/24	1/26/24 12:33	432986	830662	*

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400067
Project:	HS24011040	**Date Collected:**	1/18/24 0710
Sample Matrix:	Water	**Date Received:**	1/19/24
Sample Name:	16WW35-240118	**Units:**	µg/L
Lab Code:	EQ2400040-05 Duplicate	**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	**639**	E	0.100	0.0500	0.0250	1	1/23/24	1/26/24 12:39	432986	830662	*

Initial Calibration

ALS Environmental - Houston HRMS
10450 Stancliff Rd., Suite 210, Houston, TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

20230802

Injection Log

LCMS01 -Shimadzu 8050

1st Review: XM
2nd Review: KN

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

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

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

Initial Calibration - Detailed Report

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

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

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

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

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

Analyte

Perchlorate RSE = 2.09

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

Initial Calibration Verification Summary Report

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

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

Insight Report

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

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

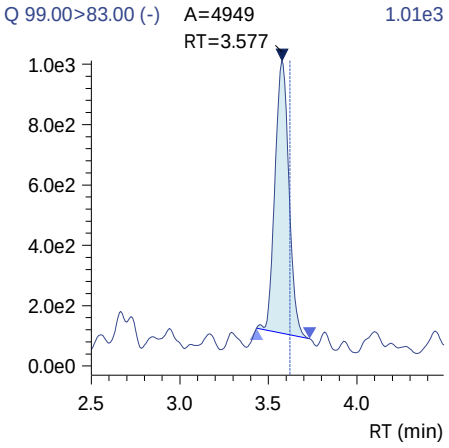
Perchlorate ICAL 1

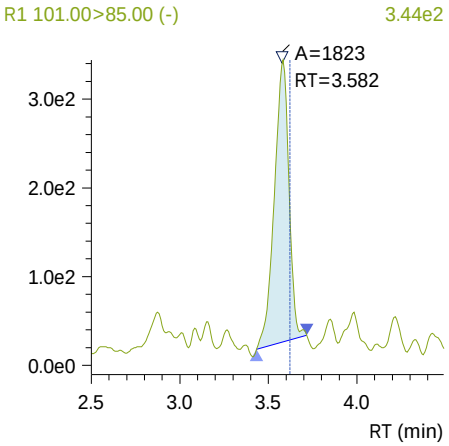
Sample ID: Perchlorate ICAL 1
Date Acquired: 8/2/2023 1:17:39 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-003.lcd
Vial: 1 | Inj. Volume: 10.0000uL | Tray: 1

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

Perchlorate

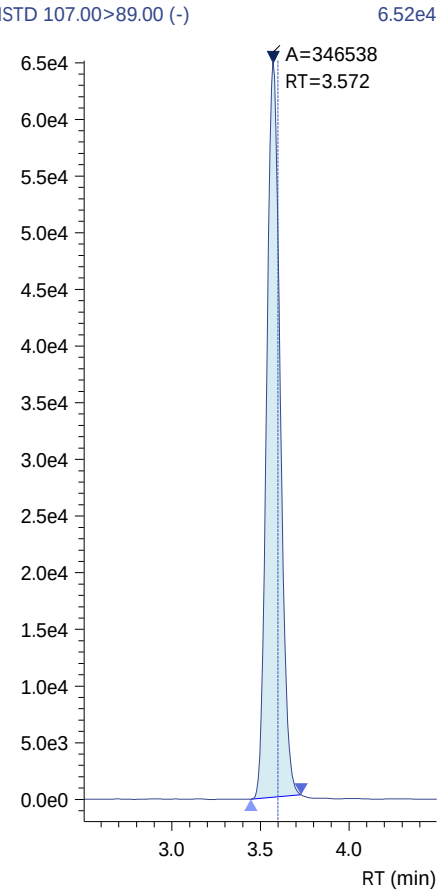
Conc 0.0968
R#1 36.83 (30.41)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

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

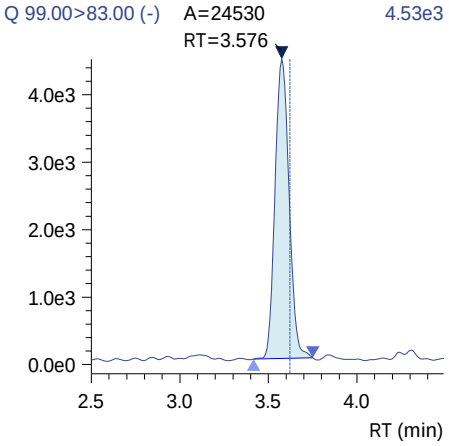
Perchlorate ICAL 2

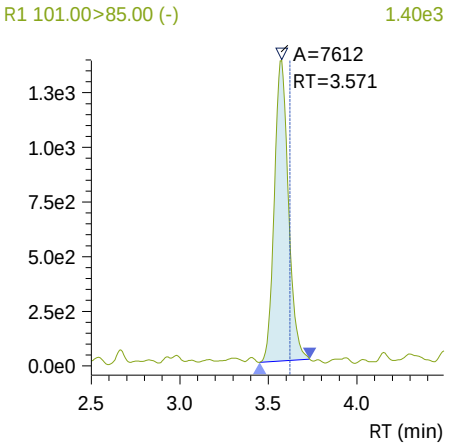
Sample ID: Perchlorate ICAL 2
Date Acquired: 8/2/2023 1:23:13 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-004.lcd
Vial: 2 | Inj. Volume: 10.0000uL | Tray: 1

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

Perchlorate

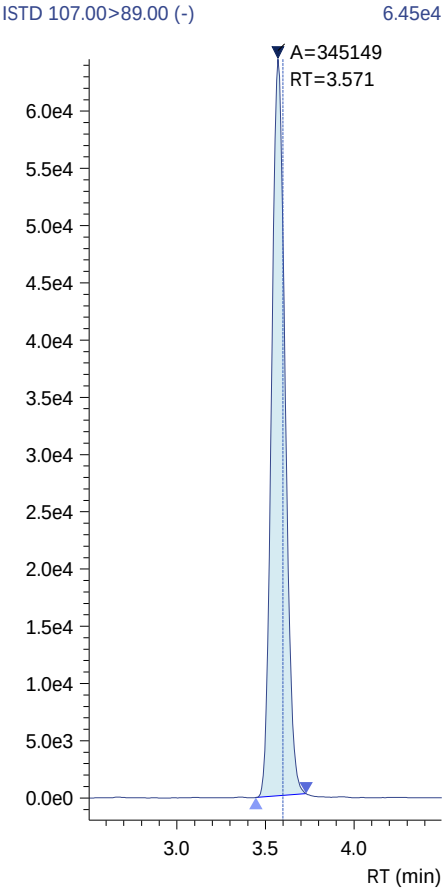
Conc 0.4820
R#1 31.03 (30.41)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

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

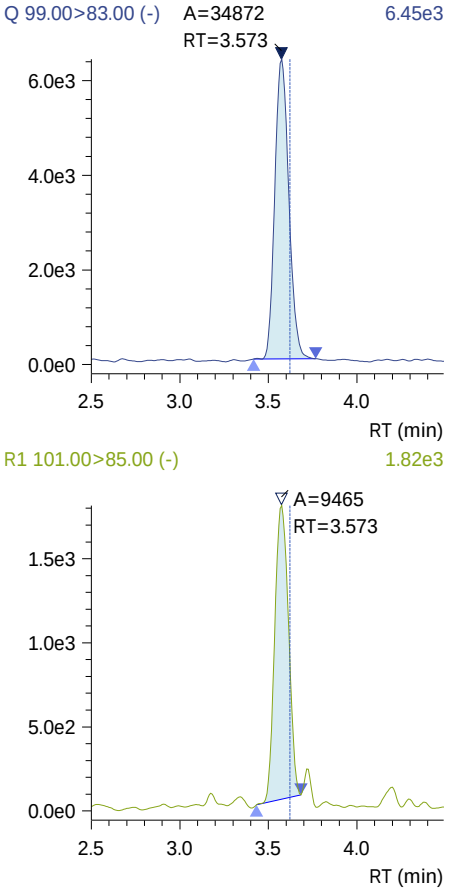
Perchlorate ICAL 3

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

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

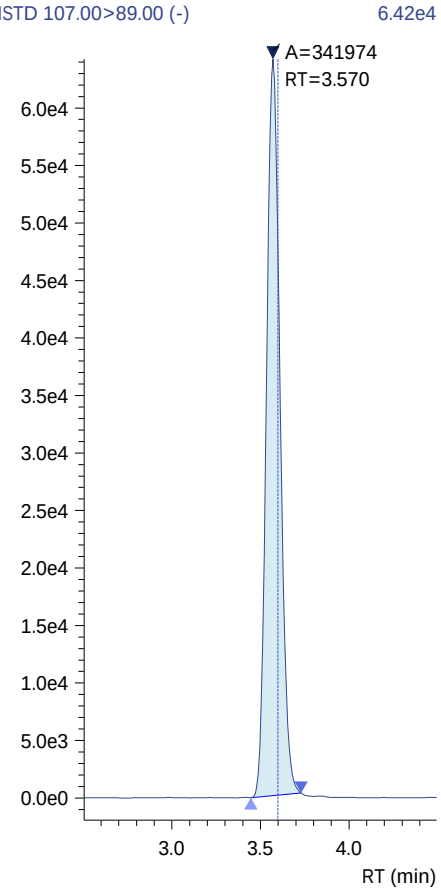
Perchlorate

Conc 0.6915
R#1 27.14 (30.41)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

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

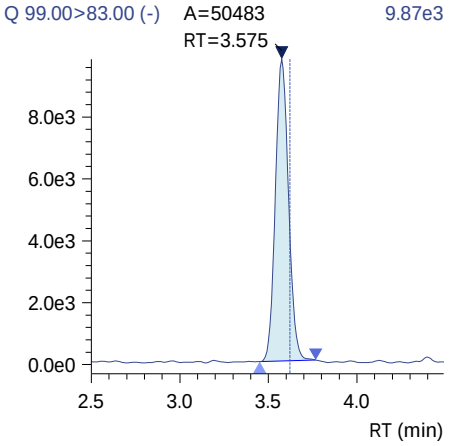
Perchlorate ICAL 4

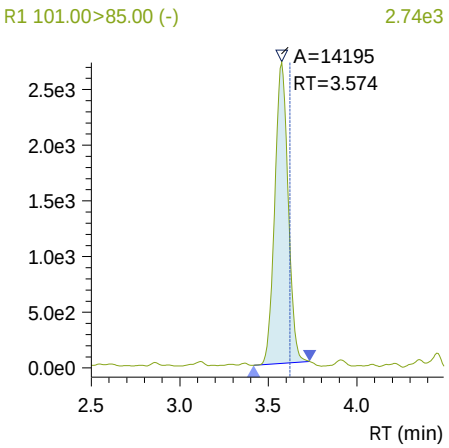
Sample ID: Perchlorate ICAL 4
Date Acquired: 8/2/2023 1:34:20 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-006.lcd
Vial: 4 | Inj. Volume: 10.0000uL | Tray: 1

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

Perchlorate

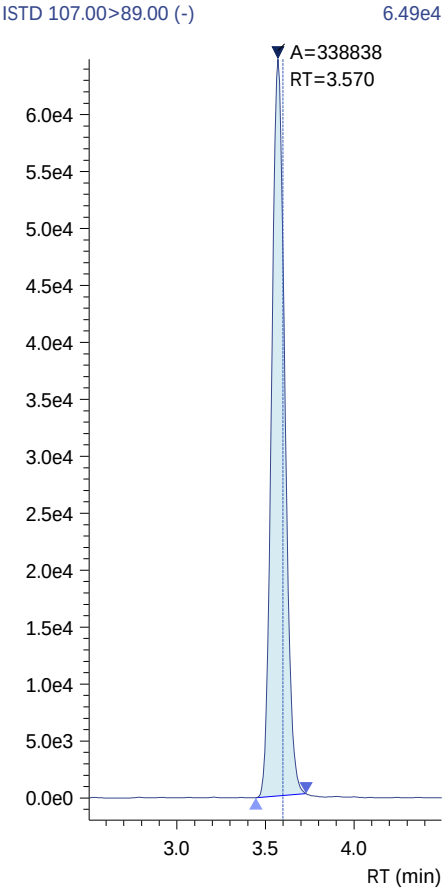
Conc 1.0104
R#1 28.12 (30.41)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

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

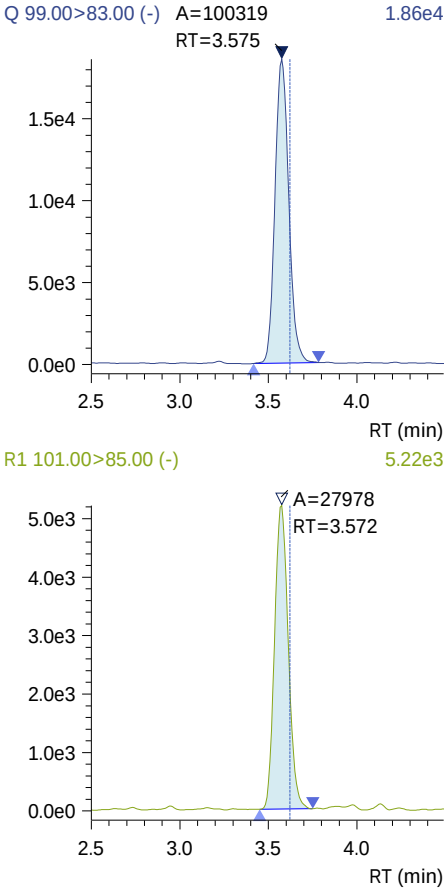
Perchlorate ICAL 5

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

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

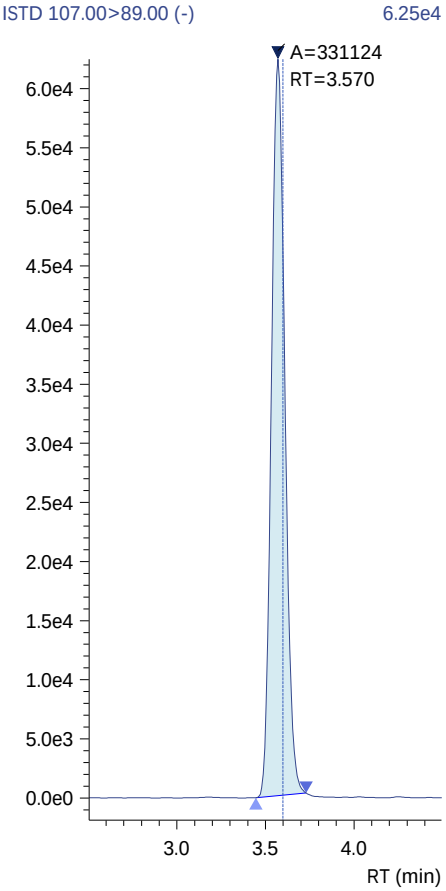
Perchlorate

Conc 2.0545
R#1 27.89 (30.41)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

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

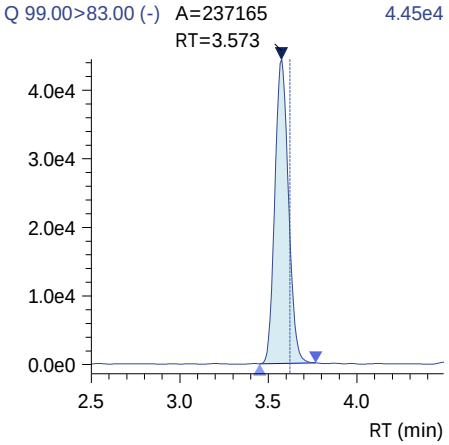
Perchlorate ICAL 6

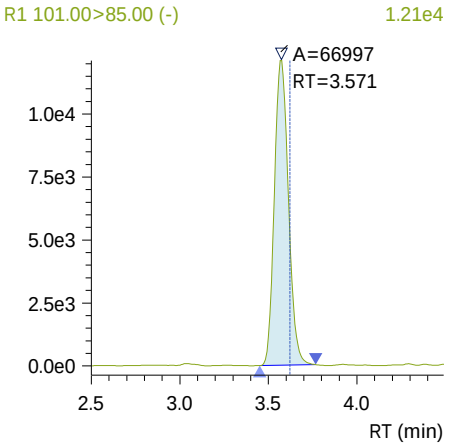
Sample ID: Perchlorate ICAL 6
Date Acquired: 8/2/2023 1:45:24 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-008.lcd
Vial: 6 | Inj. Volume: 10.0000uL | Tray: 1

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

Perchlorate

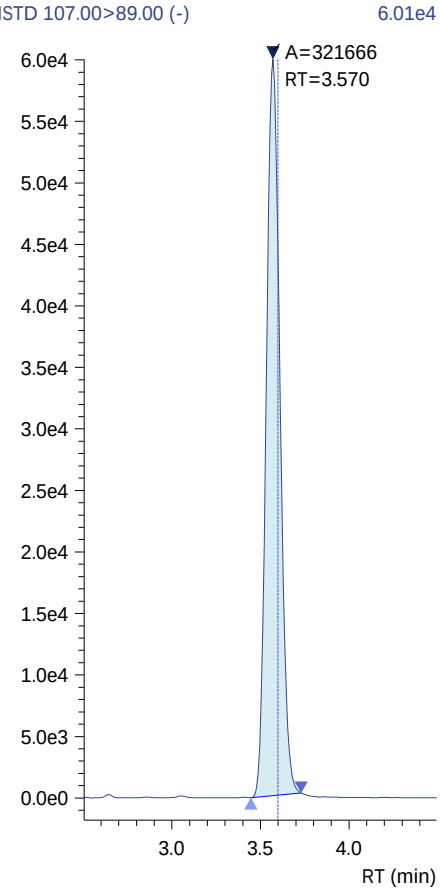
Conc 5.0000
R#1 28.25 (30.41)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

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

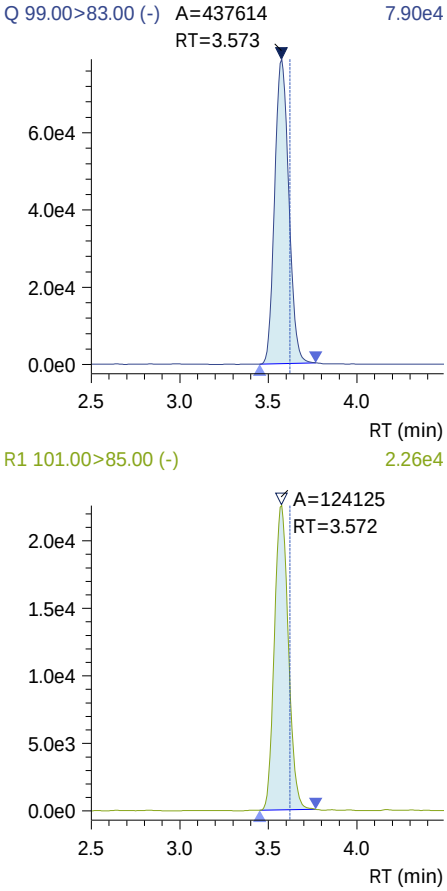
Perchlorate ICAL 7

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

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

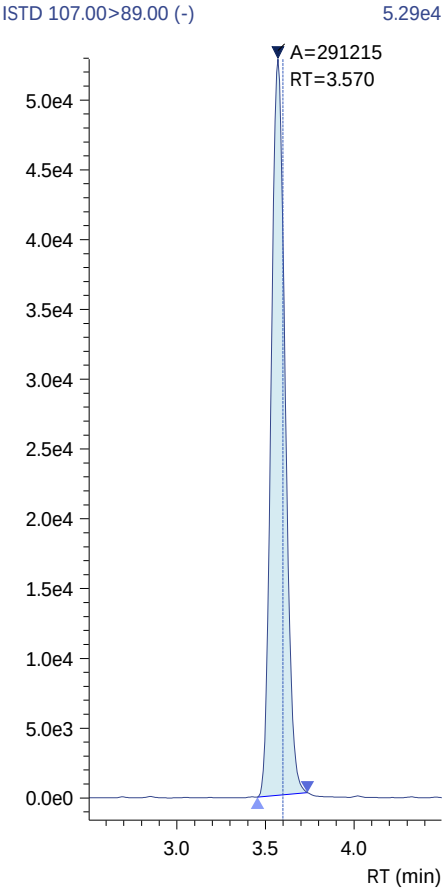
Perchlorate

Conc 10.1905
R#1 28.36 (30.41)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

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

Perchlorate ICAL 8

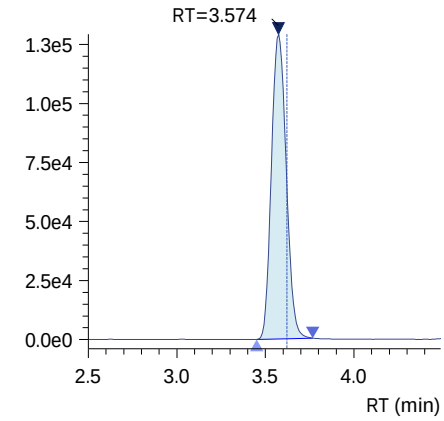
Sample ID: Perchlorate ICAL 8
Date Acquired: 8/2/2023 1:56:33 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-010.lcd
Vial: 8 | Inj. Volume: 10.0000uL | Tray: 1

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

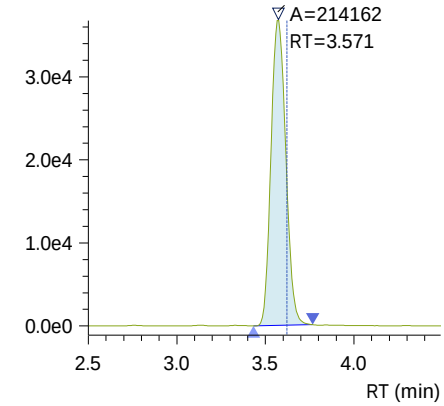
Perchlorate

Conc 20.0336
R#1 28.56 (30.41)

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



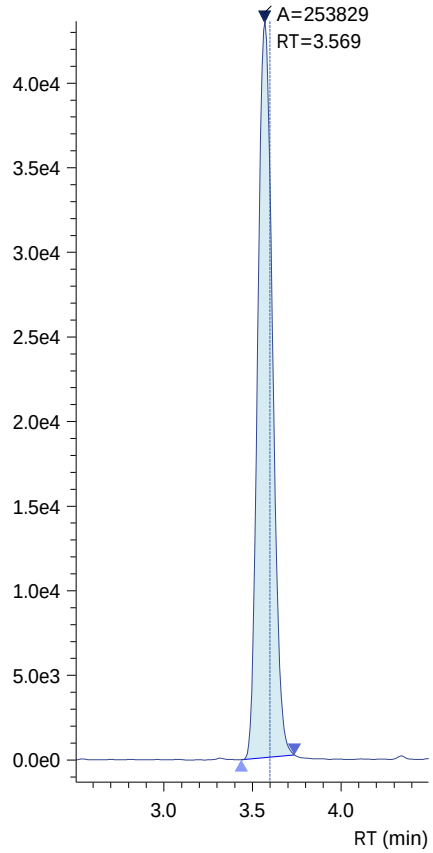
R1 101.00>85.00 (-) 3.68e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 4.37e4



Insight Report

Perchlorate ICAL 9

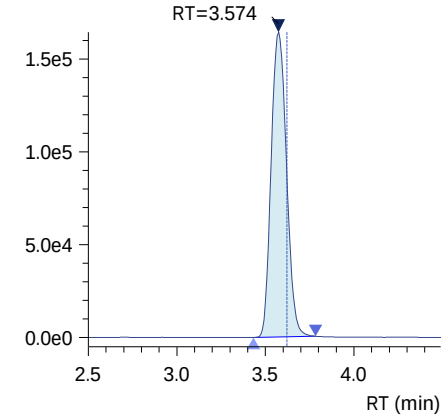
Sample ID: Perchlorate ICAL 9
Date Acquired: 8/2/2023 2:02:07 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-011.lcd
Vial: 9 | Inj. Volume: 10.0000uL | Tray: 1

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

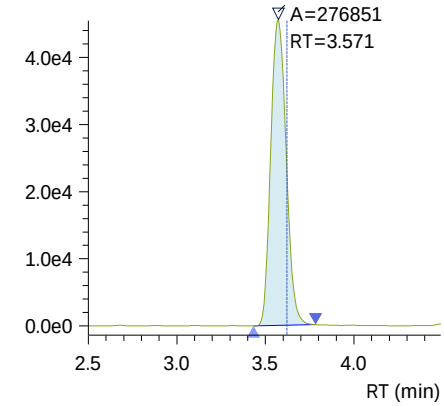
Perchlorate

Conc 30.2105
R#1 27.95 (30.41)

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



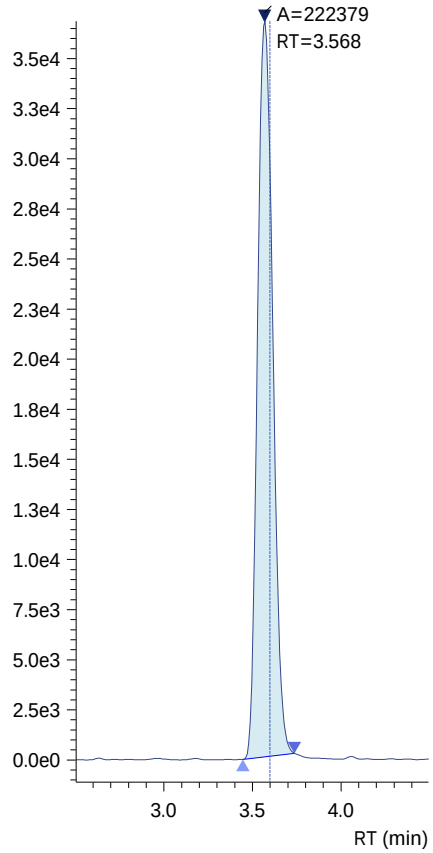
R1 101.00>85.00 (-) 4.55e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 3.69e4



Insight Report

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

Perchlorate ICAL 10

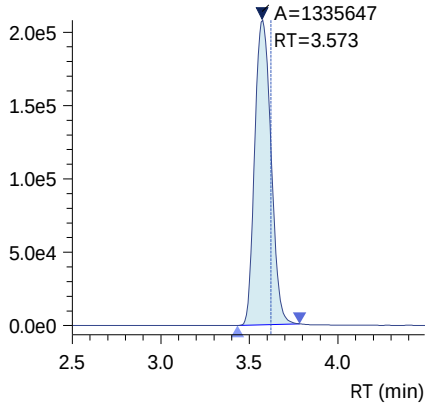
Sample ID: Perchlorate ICAL 10
Date Acquired: 8/2/2023 2:07:39 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-012.lcd
Vial: 10 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.573	1335647	178573	50.72 20	ng/mL	101.00 >85.00	28.04	21.29-39.54
Sodium Perchlorate-18O4 _IS	Auto	3.567	178573	178573	1.0000	ng/mL	----	----	

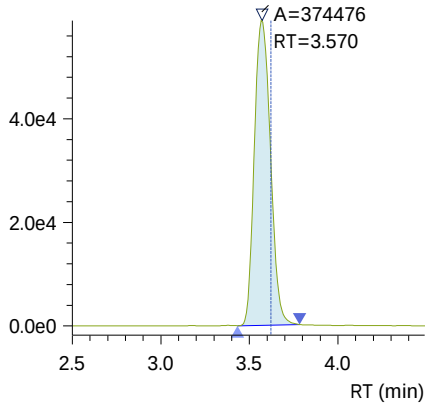
Perchlorate

Conc 50.7220
R#1 28.04 (30.41)

Q 99.00>83.00 (-) 2.08e5



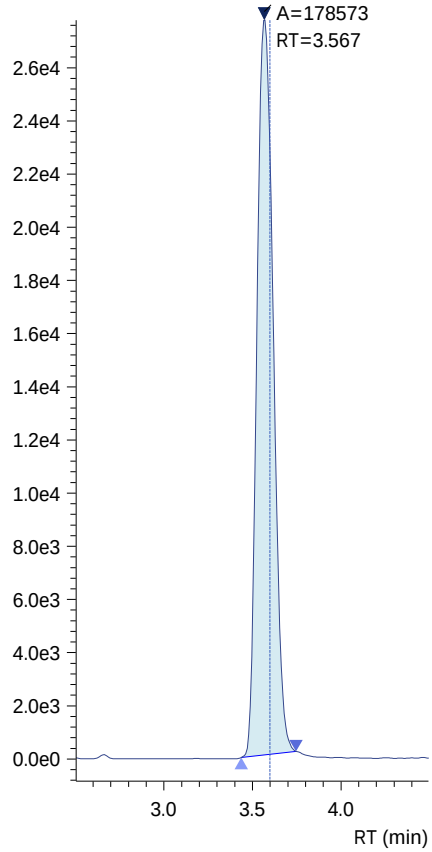
R1 101.00>85.00 (-) 5.90e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 2.78e4



Insight Report

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

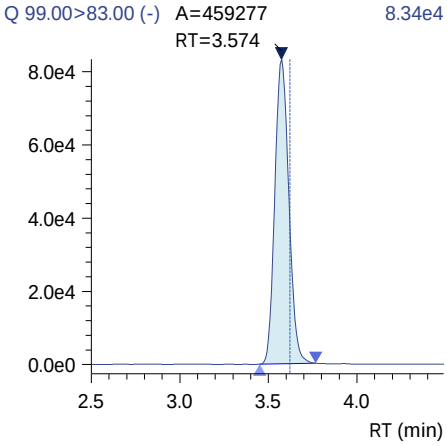
PerchlorateICV

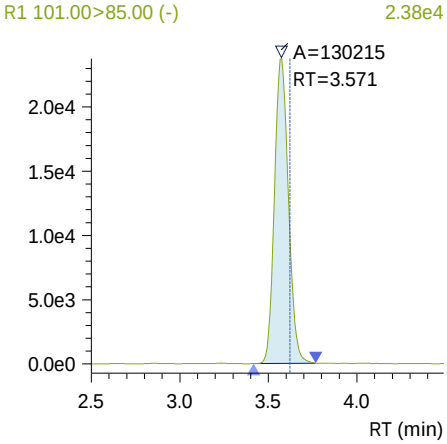
Sample ID: PerchlorateICV
Date Acquired: 8/2/2023 2:19:46 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-013.lcd
Vial: 11 | Inj. Volume: 10.0000uL | Tray: 1

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

Perchlorate

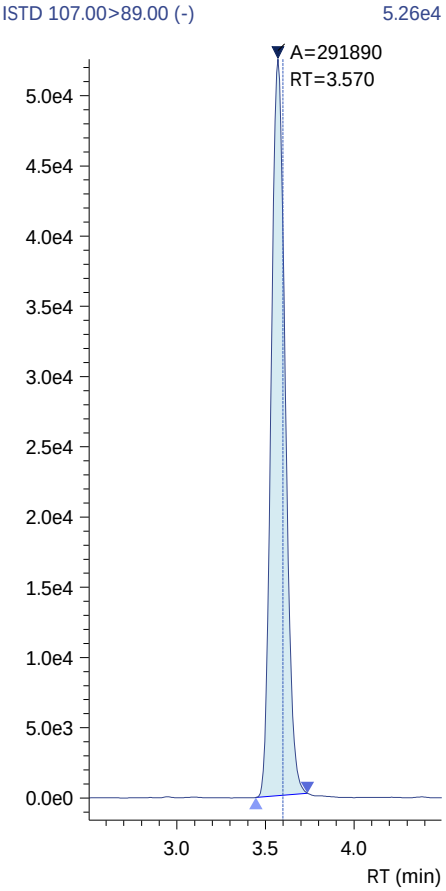
Conc 10.6703
R#1 28.35 (30.41)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Chromatograms and Selected Ion Monitoring

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

20240126-830662

Injection Log

LCMS01 -Shimadzu 8050

1st Review: XM
2nd Review: GG

ICAL Date: 8/2/2023
Cal. Std. xp: 02/02/2024
ICAL ID: EC2300012

Mobile Phases : A:20mM ammonium acetate in water 233412 **B:**Acetonitrile 229152
LODV: 230386 **CCV:**230380

	File Name	Sample Name	Acquisition Method	Dilution	Comments	Date/Time
1	20240126-001	IB	Perchlorate6850c.lcm	1x		1/26/2024 10:19
2	20240126-002	LODV	Perchlorate6850c.lcm	1x		1/26/2024 10:24
3	20240126-003	CCV	Perchlorate6850c.lcm	1x		1/26/2024 10:32
4	20240126-004	IB	Perchlorate6850c.lcm	1x		1/26/2024 10:37
5	20240126-005	EQ2400040-01 MB	Perchlorate6850c.lcm	1x		1/26/2024 10:43
6	20240126-006	EQ2400040-02 LCS	Perchlorate6850c.lcm	1x		1/26/2024 10:48
7	20240126-007	EQ2400040-03 DLCS	Perchlorate6850c.lcm	1x		1/26/2024 10:54
8	20240126-008	EQ2400040-06 ICS	Perchlorate6850c.lcm	1x		1/26/2024 10:59
9	20240126-009	E2400055-003	Perchlorate6850c.lcm	1x		1/26/2024 11:05
10	20240126-010	E2400067-001X50	Perchlorate6850c.lcm	50x		1/26/2024 11:10
11	20240126-011	E2400067-002X50	Perchlorate6850c.lcm	50x		1/26/2024 11:16
12	20240126-012	E2400067-003X50	Perchlorate6850c.lcm	50x		1/26/2024 11:21
13	20240126-013	E2400067-004	Perchlorate6850c.lcm	1x		1/26/2024 11:27
14	20240126-014	E2400067-005	Perchlorate6850c.lcm	1x		1/26/2024 11:32
15	20240126-015	CCV	Perchlorate6850c.lcm	1x		1/26/2024 11:38
16	20240126-016	IB	Perchlorate6850c.lcm	1x		1/26/2024 11:44
17	20240126-017	E2400067-006	Perchlorate6850c.lcm	1x	DNU-IR	1/26/2024 11:49
18	20240126-018	E2400067-007X20	Perchlorate6850c.lcm	20x		1/26/2024 11:55
19	20240126-019	E2400067-008	Perchlorate6850c.lcm	1x		1/26/2024 12:00
20	20240126-020	E2400067-009	Perchlorate6850c.lcm	1x		1/26/2024 12:06
21	20240126-021	E2400067-010	Perchlorate6850c.lcm	1x		1/26/2024 12:11
22	20240126-022	E2400067-011	Perchlorate6850c.lcm	1x		1/26/2024 12:17
23	20240126-023	E2400067-012	Perchlorate6850c.lcm	1x		1/26/2024 12:22
24	20240126-024	E2400067-006RI	Perchlorate6850c.lcm	1x		1/26/2024 12:28
25	20240126-025	EQ2400040-04 MS	Perchlorate6850c.lcm	1x		1/26/2024 12:33
26	20240126-026	EQ2400040-05 DMS	Perchlorate6850c.lcm	1x		1/26/2024 12:39
27	20240126-027	CCV	Perchlorate6850c.lcm	1x		1/26/2024 12:44
28	20240126-028	IB	Perchlorate6850c.lcm	1x		1/26/2024 12:50
29	20240126-029	E2400067-008	Perchlorate6850c.lcm	1x	DNU-DUP	1/26/2024 12:55
30	20240126-030	E2400062-001X10	Perchlorate6850c.lcm	10x		1/26/2024 13:01
31	20240126-031	E2400062-002	Perchlorate6850c.lcm	1x		1/26/2024 13:06
32	20240126-032	E2400062-003	Perchlorate6850c.lcm	1x		1/26/2024 13:12
33	20240126-033	E2400062-004	Perchlorate6850c.lcm	1x		1/26/2024 13:18
34	20240126-034	E2400062-005	Perchlorate6850c.lcm	1x		1/26/2024 13:23
35	20240126-035	E2400062-006X5	Perchlorate6850c.lcm	5x		1/26/2024 13:29
36	20240126-036	E2400062-007	Perchlorate6850c.lcm	1x		1/26/2024 13:34
37	20240126-037	E2400062-008	Perchlorate6850c.lcm	1x		1/26/2024 13:46
38	20240126-038	IB	Perchlorate6850c.lcm	1x		1/26/2024 13:52

20240126-830662

Injection Log

LCMS01 -Shimadzu 8050

1st Review: XM
2nd Review: GG

ICAL Date: 8/2/2023
Cal. Std. xp: 02/02/2024
ICAL ID: EC2300012

Mobile Phases : A:20mM ammonium acetate in water 233412 **B:**Acetonitrile 229152
LODV: 230386 **CCV:**230380

	File Name	Sample Name	Acquisition Method	Dilution	Comments	Date/Time
39	20240126-039	CCV	Perchlorate6850c.lcm	1x		1/26/2024 13:59
40	20240126-040	IB	Perchlorate6850c.lcm	1x		1/26/2024 14:04
41	20240126-041	E2400072-001	Perchlorate6850c.lcm	1x		1/26/2024 16:06
42	20240126-042	E2400072-002	Perchlorate6850c.lcm	1x		1/26/2024 16:11
43	20240126-043	E2400072-003	Perchlorate6850c.lcm	1x		1/26/2024 16:17
44	20240126-044	E2400072-004x10	Perchlorate6850c.lcm	10x		1/26/2024 17:07
45	20240126-045	E2400072-005x10	Perchlorate6850c.lcm	10x		1/26/2024 17:13
46	20240126-046	E2400072-006	Perchlorate6850c.lcm	1x		1/26/2024 17:18
47	20240126-047	E2400072-007x500	Perchlorate6850c.lcm	500x		1/26/2024 17:24
48	20240126-048	E2400072-008x100	Perchlorate6850c.lcm	100x		1/26/2024 17:29
49	20240126-049	E2400072-009x100	Perchlorate6850c.lcm	100x		1/26/2024 17:35
50	20240126-050	CCV	Perchlorate6850c.lcm	1x		1/26/2024 17:40
51	20240126-051	IB	Perchlorate6850c.lcm	1x		1/26/2024 17:46
52	20240126-052	EQ2400049-01 MB	Perchlorate6850c.lcm	1x		1/26/2024 17:52
53	20240126-053	EQ2400049-02 LCS	Perchlorate6850c.lcm	1x		1/26/2024 17:57
54	20240126-054	EQ2400049-03 DLCS	Perchlorate6850c.lcm	1x		1/26/2024 18:03
55	20240126-055	EQ2400049-04 MS	Perchlorate6850c.lcm	1x		1/26/2024 18:08
56	20240126-056	EQ2400049-05 DMS	Perchlorate6850c.lcm	1x		1/26/2024 18:14
57	20240126-057	IB	Perchlorate6850c.lcm	1x		1/26/2024 18:23
58	20240126-058	EQ2400041-01 MB	Perchlorate6850c.lcm	1x		1/26/2024 18:28
59	20240126-059	EQ2400041-02 LCS	Perchlorate6850c.lcm	1x		1/26/2024 18:34
60	20240126-060	EQ2400041-03 DLCS	Perchlorate6850c.lcm	1x	DNU-RI	1/26/2024 18:39
61	20240126-061	E2400068-014	Perchlorate6850c.lcm	1x		1/26/2024 18:45
62	20240126-062	CCV	Perchlorate6850c.lcm	1x		1/26/2024 18:50
63	20240126-063	IB	Perchlorate6850c.lcm	1x		1/26/2024 18:56
64	20240126-064	EQ2400041-04 MS	Perchlorate6850c.lcm	1x	DNU-RI	1/26/2024 19:01
65	20240126-065	EQ2400041-05 DMS	Perchlorate6850c.lcm	1x	DNU-RI	1/26/2024 19:07
66	20240126-066	EQ2400041-06 ICS	Perchlorate6850c.lcm	1x		1/26/2024 19:12
67	20240126-067	EQ2400041-03 DLCS	Perchlorate6850c.lcm	1x		1/26/2024 19:18
68	20240126-068	E2400066-001x1k	Perchlorate6850c.lcm	1000x		1/26/2024 19:29
69	20240126-069	E2400066-002x1k	Perchlorate6850c.lcm	1000x		1/26/2024 19:34
70	20240126-070	E2400066-003	Perchlorate6850c.lcm	1x		1/26/2024 19:40
71	20240126-071	E2400066-004	Perchlorate6850c.lcm	1x		1/26/2024 19:45
72	20240126-072	E2400066-005	Perchlorate6850c.lcm	1x		1/26/2024 19:51
73	20240126-073	E2400066-006	Perchlorate6850c.lcm	1x		1/26/2024 19:56
74	20240126-074	CCV	Perchlorate6850c.lcm	1x		1/26/2024 20:02
75	20240126-075	IB	Perchlorate6850c.lcm	1x		1/26/2024 20:07
76	20240126-076	E2400066-007	Perchlorate6850c.lcm	1x		1/26/2024 20:13

20240126-830662

Injection Log

LCMS01 -Shimadzu 8050

1st Review: XM
2nd Review: GG

ICAL Date: 8/2/2023
Cal. Std. xp: 02/02/2024
ICAL ID: EC2300012

Mobile Phases : A:20mM ammonium acetate in water 233412 **B:**Acetonitrile 229152
LODV: 230386 **CCV:**230380

	File Name	Sample Name	Acquisition Method	Dilution	Comments	Date/Time
77	20240126-077	E2400068-001	Perchlorate6850c.lcm	1x		1/26/2024 20:18
78	20240126-078	E2400068-002x5	Perchlorate6850c.lcm	5x		1/26/2024 20:24
79	20240126-079	E2400068-003	Perchlorate6850c.lcm	1x		1/26/2024 20:29
80	20240126-080	E2400068-004	Perchlorate6850c.lcm	1x		1/26/2024 20:35
81	20240126-081	E2400068-005	Perchlorate6850c.lcm	1x		1/26/2024 20:40
82	20240126-082	E2400068-006	Perchlorate6850c.lcm	1x		1/26/2024 20:46
83	20240126-083	E2400068-007	Perchlorate6850c.lcm	1x		1/26/2024 20:51
84	20240126-084	E2400068-008	Perchlorate6850c.lcm	1x		1/26/2024 20:57
85	20240126-085	E2400068-009	Perchlorate6850c.lcm	1x		1/26/2024 21:02
86	20240126-086	CCV	Perchlorate6850c.lcm	1x		1/26/2024 21:08
87	20240126-087	IB	Perchlorate6850c.lcm	1x		1/26/2024 21:13
88	20240126-088	E2400068-010	Perchlorate6850c.lcm	1x		1/26/2024 21:19
89	20240126-089	E2400068-011	Perchlorate6850c.lcm	1x		1/26/2024 21:25
90	20240126-090	E2400068-012	Perchlorate6850c.lcm	1x		1/26/2024 21:30
91	20240126-091	E2400068-013	Perchlorate6850c.lcm	1x	DNU-IR	1/26/2024 21:36
92	20240126-092	IB	Perchlorate6850c.lcm	1x		1/26/2024 21:41
93	20240126-093	EQ2400042-01	Perchlorate6850c.lcm	1x		1/26/2024 21:47
94	20240126-094	EQ2400042-02	Perchlorate6850c.lcm	1x		1/26/2024 21:52
95	20240126-095	EQ2400042-03	Perchlorate6850c.lcm	1x		1/26/2024 21:58
96	20240126-096	E2400065-001X5	Perchlorate6850c.lcm	5x		1/26/2024 22:03
97	20240126-097	E2400065-002X5	Perchlorate6850c.lcm	5x		1/26/2024 22:09
98	20240126-098	CCV	Perchlorate6850c.lcm	1x		1/26/2024 22:14
99	20240126-099	IB	Perchlorate6850c.lcm	1x		1/26/2024 22:20
100	20240126-100	EQ2400042-04 ICS	Perchlorate6850c.lcm	1x		1/26/2024 22:31
101	20240126-101	E2400065-003	Perchlorate6850c.lcm	1x		1/26/2024 22:37
102	20240126-102	E2400065-004X5	Perchlorate6850c.lcm	5x		1/26/2024 22:42
103	20240126-103	E2400065-005	Perchlorate6850c.lcm	1x		1/26/2024 22:48
104	20240126-104	E2400065-006	Perchlorate6850c.lcm	1x		1/26/2024 22:53
105	20240126-105	E2400065-007X10	Perchlorate6850c.lcm	10x		1/26/2024 22:59
106	20240126-106	E2400065-008X5	Perchlorate6850c.lcm	5x		1/26/2024 23:04
107	20240126-107	E2400065-009X10	Perchlorate6850c.lcm	10x		1/26/2024 23:10
108	20240126-108	E2400065-010	Perchlorate6850c.lcm	1x		1/26/2024 23:16
109	20240126-109	E2400065-011	Perchlorate6850c.lcm	1x		1/26/2024 23:21
110	20240126-110	CCV	Perchlorate6850c.lcm	1x		1/26/2024 23:27
111	20240126-111	IB	Perchlorate6850c.lcm	1x		1/26/2024 23:32
112	20240126-112	E2400065-012	Perchlorate6850c.lcm	1x		1/26/2024 23:38
113	20240126-113	E2400065-013	Perchlorate6850c.lcm	1x		1/26/2024 23:43
114	20240126-114	E2400065-014X10	Perchlorate6850c.lcm	10x		1/26/2024 23:49

20240126-830662

Injection Log

LCMS01 -Shimadzu 8050

1st Review: XM
2nd Review: GG

ICAL Date: 8/2/2023
Cal. Std. xp: 02/02/2024
ICAL ID: EC2300012

Mobile Phases : A:20mM ammonium acetate in water 233412 **B:**Acetonitrile 229152
LODV: 230386 **CCV:**230380

	File Name	Sample Name	Acquisition Method	Dilution	Comments	Date/Time
115	20240126-115	E2400065-015	Perchlorate6850c.lcm	1x		1/26/2024 23:54
116	20240126-116	E2400065-016X5	Perchlorate6850c.lcm	5x		1/27/2024 0:00
117	20240126-117	E2400068-013	Perchlorate6850c.lcm	1x		1/27/2024 0:05
118	20240126-118	PT-2	Perchlorate6850c.lcm	1x		1/27/2024 0:11
119	20240126-119	CCV	Perchlorate6850c.lcm	1x		1/27/2024 0:16
120	20240126-120	IB	Perchlorate6850c.lcm	1x		1/27/2024 0:22

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS24011040

Service Request: E2400067
Date Analyzed: 1/26/24 10:32

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

File ID: I:\LCMS01\DATA\20240126\20240126-003
Instrument ID: E-LCMS-01
Analytical Method: 6850

Lab Code: EQ2400048-01
Analysis Lot: 830662
Signal ID: 1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	297,129	3.57
	Upper Limit ==>	445,694	5.57
	Lower Limit ==>	148,565	1.57
Associated Analyses			
Continuing Calibration Verification	EQ2400048-01	264,304	3.56
Method Blank	EQ2400040-01	266,151	3.56
Lab Control Sample	EQ2400040-02	255,840	3.56
Duplicate Lab Control Sample	EQ2400040-03	248,190	3.56
16WW16-240118	E2400067-001	274,464	3.56
16WW16-240118-FD	E2400067-002	274,004	3.56
16WW35-240118	E2400067-003	279,844	3.56
16WW36-240118	E2400067-004	261,618	3.56
16WW36-240118-FD	E2400067-005	275,223	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
Project: HS24011040

Service Request: E2400067
Date Analyzed: 1/26/24 11:38

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

File ID: I:\LCMS01\DATA\20240126\20240126-015
Instrument ID: E-LCMS-01
Analytical Method: 6850

Lab Code: EQ2400048-02
Analysis Lot: 830662
Signal ID: 1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	297,129	3.57
	Upper Limit ==>	445,694	5.57
	Lower Limit ==>	148,565	1.57
Associated Analyses			
Continuing Calibration Verification	EQ2400048-02	252,580	3.56
16PM03-240118	E2400067-007	281,533	3.56
16PM14-240118	E2400067-008	256,664	3.56
16PM09-240118	E2400067-009	225,394	3.56
16PM06-240118	E2400067-010	238,417	3.56
16RW01-240118	E2400067-011	219,116	3.56
16RW04-240118	E2400067-012	290,858	3.56
16PM02-240118	E2400067-006	228,839	3.56
16WW35_240118MS	EQ2400040-04	54,274*	3.54
16WW35_240118DMS	EQ2400040-05	55,928*	3.54

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:**	E2400067
Project:	HS24011040	**Date Analyzed:**	1/26/24 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\20240126\20240126-027	**Lab Code:**	EQ2400048-03
Instrument ID:	E-LCMS-01	**Analysis Lot:**	830662
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	297,129	3.57
	Upper Limit ==>	445,694	5.57
	Lower Limit ==>	148,565	1.57
Associated Analyses			
Continuing Calibration Verification	EQ2400048-03	235,649	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:**	E2400067
Project:	HS24011040	**Date Analyzed:**	1/26/24 13:59

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20240126\20240126-039	**Lab Code:**	EQ2400048-04
Instrument ID:	E-LCMS-01	**Analysis Lot:**	830662
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	297,129	3.57
	Upper Limit ==>	445,694	5.57
	Lower Limit ==>	148,565	1.57
Associated Analyses			
Continuing Calibration Verification	EQ2400048-04	241,298	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
Project: HS24011040

Service Request: E2400067
Date Analyzed: 1/26/24 17:40

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

File ID: I:\LCMS01\DATA\20240126\20240126-050
Instrument ID: E-LCMS-01
Analytical Method: 6850

Lab Code: EQ2400048-05
Analysis Lot: 830662
Signal ID: 1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	297,129	3.57
	Upper Limit ==>	445,694	5.57
	Lower Limit ==>	148,565	1.57
Associated Analyses			
Continuing Calibration Verification	EQ2400048-05	280,156	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
Project: HS24011040

Service Request: E2400067
Date Analyzed: 1/26/24 18:50

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

File ID: I:\LCMS01\DATA\20240126\20240126-062
Instrument ID: E-LCMS-01
Analytical Method: 6850

Lab Code: EQ2400048-06
Analysis Lot: 830662
Signal ID: 1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	297,129	3.57
	Upper Limit ==>	445,694	5.57
	Lower Limit ==>	148,565	1.57
Associated Analyses			
Continuing Calibration Verification	EQ2400048-06	274,383	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:**	E2400067
Project:	HS24011040	**Date Analyzed:**	1/26/24 20:02

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20240126\20240126-074	**Lab Code:**	EQ2400048-07
Instrument ID:	E-LCMS-01	**Analysis Lot:**	830662
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	297,129	3.57
	Upper Limit ==>	445,694	5.57
	Lower Limit ==>	148,565	1.57
Associated Analyses			
Continuing Calibration Verification	EQ2400048-07	266,806	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
Project: HS24011040

Service Request: E2400067
Date Analyzed: 1/26/24 21:08

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

File ID: I:\LCMS01\DATA\20240126\20240126-086
Instrument ID: E-LCMS-01
Analytical Method: 6850

Lab Code: EQ2400048-08
Analysis Lot: 830662
Signal ID: 1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	297,129	3.57
	Upper Limit ==>	445,694	5.57
	Lower Limit ==>	148,565	1.57
Associated Analyses			
Continuing Calibration Verification	EQ2400048-08	255,861	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:**	E2400067
Project:	HS24011040	**Date Analyzed:**	1/26/24 22:14

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20240126\20240126-098	**Lab Code:**	EQ2400048-09
Instrument ID:	E-LCMS-01	**Analysis Lot:**	830662
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	297,129	3.57
	Upper Limit ==>	445,694	5.57
	Lower Limit ==>	148,565	1.57
Associated Analyses			
Continuing Calibration Verification	EQ2400048-09	252,116	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
Project: HS24011040

Service Request: E2400067
Date Analyzed: 1/26/24 23:27

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

File ID: I:\LCMS01\DATA\20240126\20240126-110
Instrument ID: E-LCMS-01
Analytical Method: 6850

Lab Code: EQ2400048-10
Analysis Lot: 830662
Signal ID: 1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	297,129	3.57
	Upper Limit ==>	445,694	5.57
	Lower Limit ==>	148,565	1.57
Associated Analyses			
Continuing Calibration Verification	EQ2400048-10	246,409	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:**	E2400067
Project:	HS24011040	**Date Analyzed:**	1/27/24 00:16

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20240126\20240126-119	**Lab Code:**	EQ2400048-11
Instrument ID:	E-LCMS-01	**Analysis Lot:**	830662
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	297,129	3.57
	Upper Limit ==>	445,694	5.57
	Lower Limit ==>	148,565	1.57
Associated Analyses			
Continuing Calibration Verification	EQ2400048-11	247,822	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:**	E2400067
Project:	HS24011040	**Date Analyzed:**	1/26/24

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

Analytical Method:	6850	**Calibration Date:**	8/2/23
File ID:	I:\LCMS01\DATA\20240126\20240126-003	**Calibration ID:**	EC2300012
		Analysis Lot:	830662
		Units:	ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.99	0.1475	0.1474	-0.1	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS24011040

Service Request: E2400067
Date Analyzed: 1/26/24

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\20240126\20240126-015

Calibration Date: 8/2/23
Calibration ID: EC2300012
Analysis Lot: 830662
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.4	0.1475	0.1538	4.3	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS24011040

Service Request: E2400067
Date Analyzed: 1/26/24

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\20240126\20240126-027

Calibration Date: 8/2/23
Calibration ID: EC2300012
Analysis Lot: 830662
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.6	0.1475	0.1567	6.3	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS24011040

Service Request: E2400067
Date Analyzed: 1/26/24

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\20240126\20240126-039

Calibration Date: 8/2/23
Calibration ID: EC2300012
Analysis Lot: 830662
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.3	0.1475	0.1521	3.1	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS24011040

Service Request: E2400067
Date Analyzed: 1/26/24

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\20240126\20240126-050

Calibration Date: 8/2/23
Calibration ID: EC2300012
Analysis Lot: 830662
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.2	0.1475	0.1503	1.9	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS24011040

Service Request: E2400067
Date Analyzed: 1/26/24

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\20240126\20240126-062

Calibration Date: 8/2/23
Calibration ID: EC2300012
Analysis Lot: 830662
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.7	0.1475	0.1575	6.8	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS24011040

Service Request: E2400067
Date Analyzed: 1/26/24

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\20240126\20240126-074

Calibration Date: 8/2/23
Calibration ID: EC2300012
Analysis Lot: 830662
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.3	0.1475	0.1522	3.2	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS24011040

Service Request: E2400067
Date Analyzed: 1/26/24

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\20240126\20240126-086

Calibration Date: 8/2/23
Calibration ID: EC2300012
Analysis Lot: 830662
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.5	0.1475	0.1551	5.2	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS24011040

Service Request: E2400067
Date Analyzed: 1/26/24

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\20240126\20240126-098

Calibration Date: 8/2/23
Calibration ID: EC2300012
Analysis Lot: 830662
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.7	0.1475	0.1573	6.7	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2400067
Project:	HS24011040	**Date Analyzed:**	1/26/24

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

Analytical Method:	6850	**Calibration Date:**	8/2/23
File ID:	I:\LCMS01\DATA\20240126\20240126-110	**Calibration ID:**	EC2300012
		Analysis Lot:	830662
		Units:	ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.4	0.1475	0.1531	3.8	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS24011040

Service Request: E2400067
Date Analyzed: 1/27/24

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\20240126\20240126-119

Calibration Date: 8/2/23
Calibration ID: EC2300012
Analysis Lot: 830662
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.6	0.1475	0.1563	6.0	NA	± 15 %	Average RF

Insight Report

Printed at 1/29/2024 2:34:44 PM

Method File: I:\LCMS01\DATA\20240126\20240126.lcm
Project File: I:\LCMS01\DATA\20240126\20240126.damlp

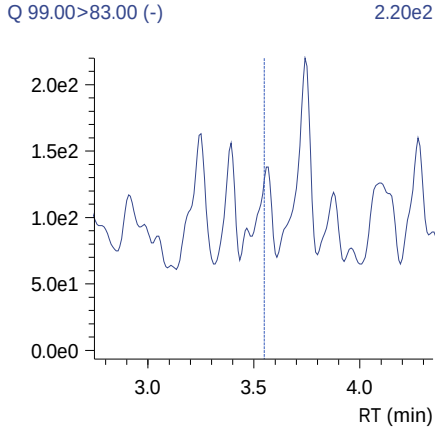
IB

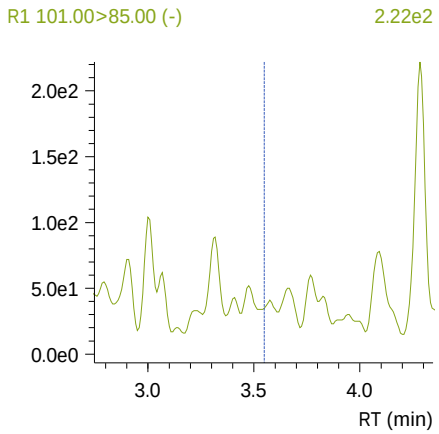
Sample ID: IB
Date Acquired: 1/26/2024 10:19:08 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-001.lcd
Vial: 1 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	288322	----	ng/mL	101.00 >85.00	0.00	23.01 -42.74
Sodium Perchlorate-18O4_IS	Auto	3.558	288322	288322	1.0000	ng/mL	----	----	

Perchlorate

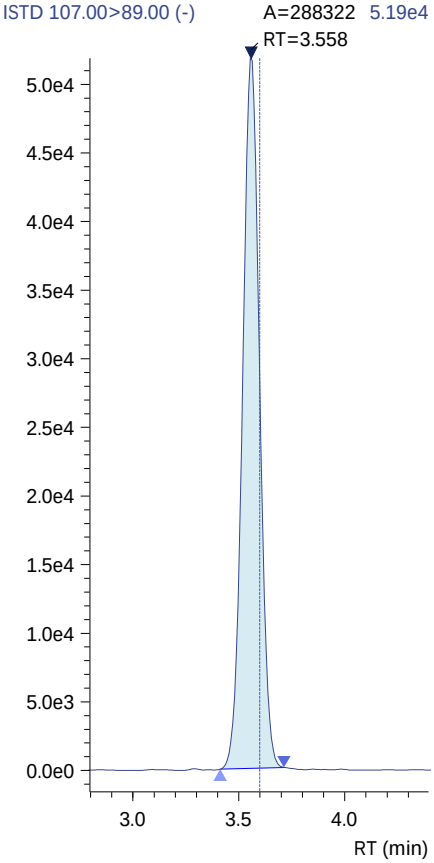
Conc ----
R#1 0.00 (32.88)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/29/2024 2:34:44 PM

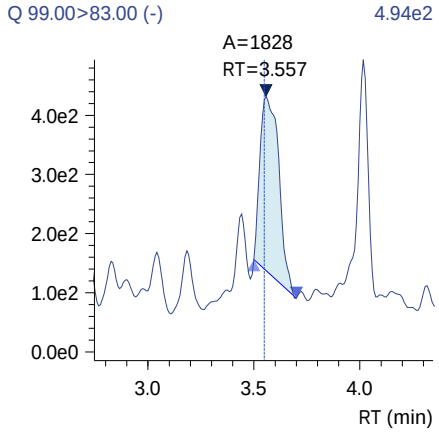
LODV

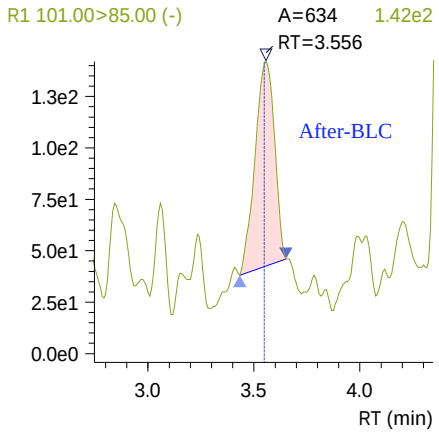
Sample ID: LODV
Date Acquired: 1/26/2024 10:24:37 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-002.lcd
Vial: 2 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	MI R1	3.557	1828	266783	0.0465	ng/mL	101.00 >85.00	34.65	23.01 -42.74
Sodium Perchlorate -18O4_IS	Auto	3.559	266783	266783	1.0000	ng/mL	----	----	

Perchlorate

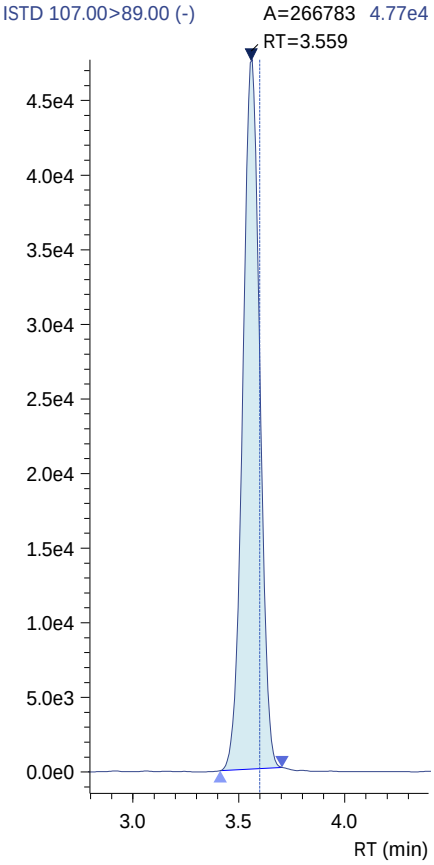
Conc 0.0465
R#1 34.65 (32.88)





Sodium Perchlorate-18O4_IS

Conc 1.0000



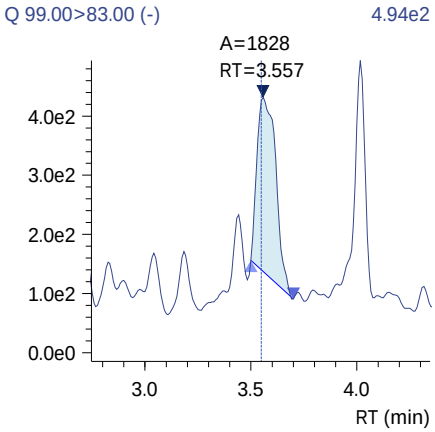
Insight Report

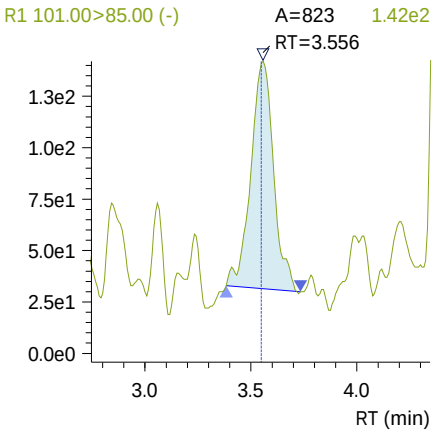
LODV

Sample ID: LODV
Date Acquired: 1/26/2024 10:24:37 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-002.lcd
Vial: 2 | Inj. Volume: 10.0000uL | Tray: 0

Perchlorate

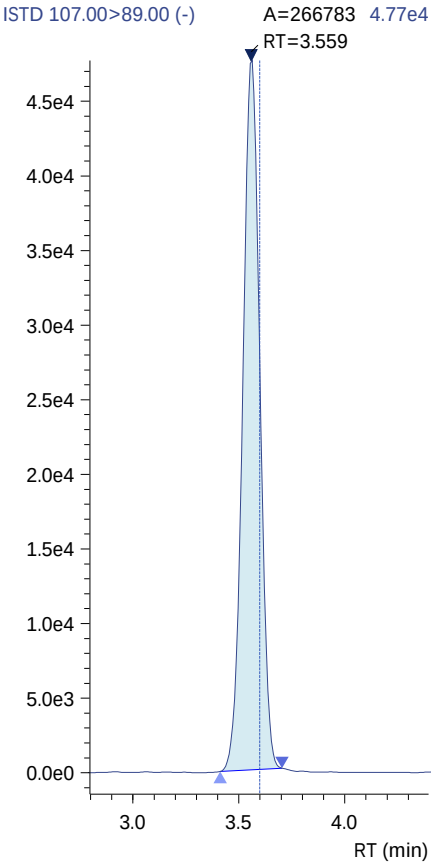
Conc 0.0465
R#1 45.03 (32.88)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/29/2024 2:34:44 PM

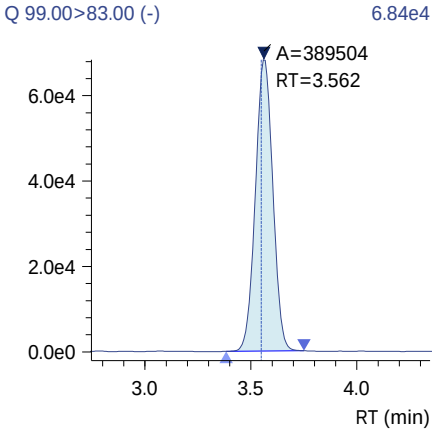
CCV

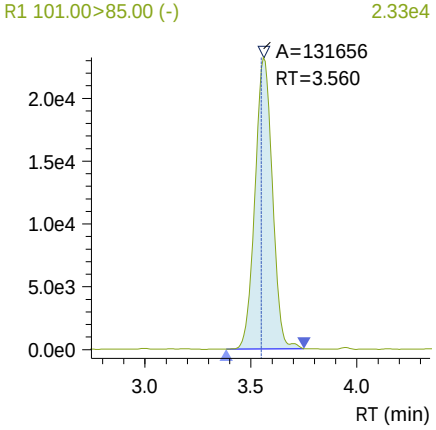
Sample ID: CCV
Date Acquired: 1/26/2024 10:32:07 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-003.lcd
Vial: 7 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.562	389504	264304	9.9938	ng/mL	101.00 >85.00	33.80	23.01 -42.74
Sodium Perchlorate -18O4_IS	Auto	3.559	264304	264304	1.0000	ng/mL	----	----	

Perchlorate

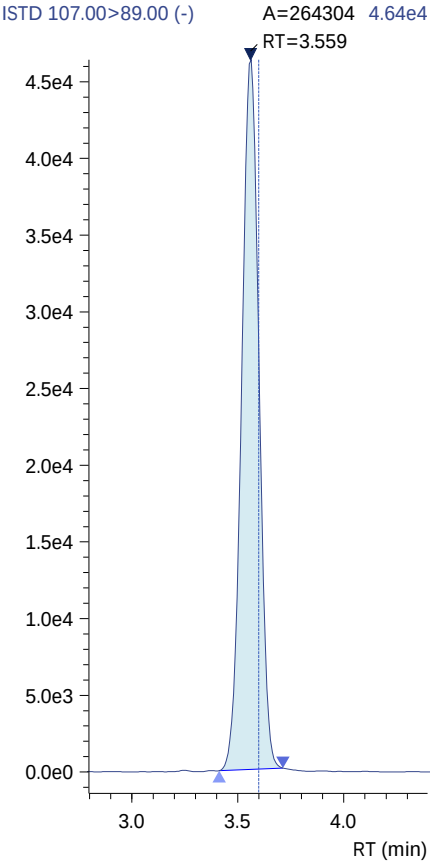
Conc 9.9938
R#1 33.80 (32.88)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/29/2024 2:34:44 PM

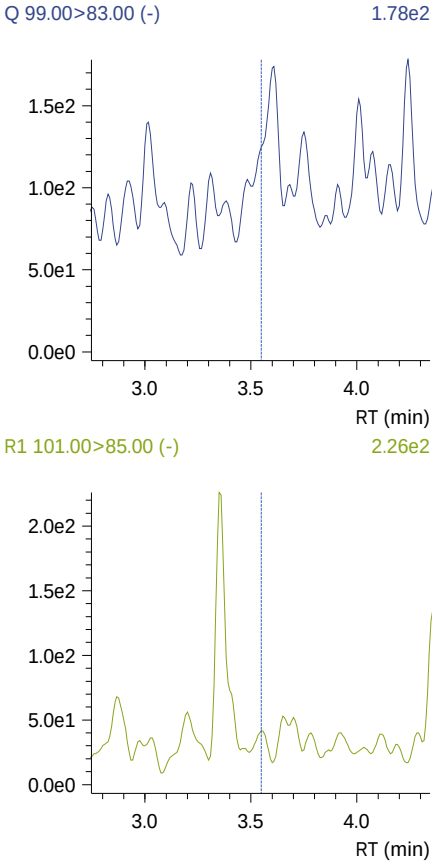
IB

Sample ID: IB
Date Acquired: 1/26/2024 10:37:40 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-004.lcd
Vial: 1 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	278385	----	ng/mL	101.00 >85.00	0.00	23.01 -42.74
Sodium Perchlorate-18O4_IS	Auto	3.557	278385	278385	1.0000	ng/mL	----	----	

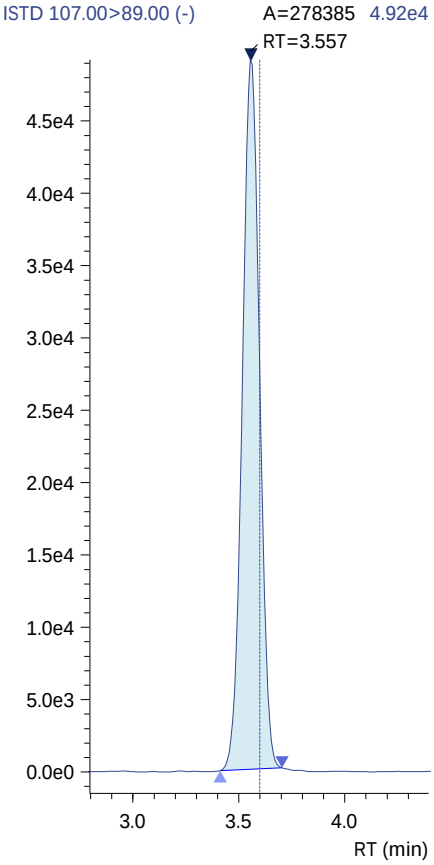
Perchlorate

Conc ----
R#1 0.00 (32.88)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/29/2024 2:34:44 PM

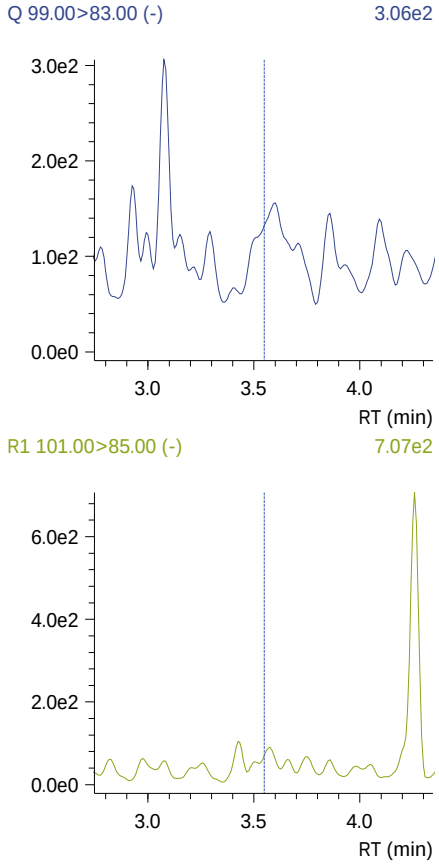
EQ2400040-01 MB

Sample ID: EQ2400040-01
Date Acquired: 1/26/2024 10:43:09 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-005.lcd
Vial: 1 | Inj. Volume: 10.0000uL | 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)	----	----	266151	----	ng/mL	101.00 >85.00	0.00	23.01 -42.74
Sodium Perchlorate-18O4_IS	Auto	3.557	266151	266151	1.0000	ng/mL	----	----	

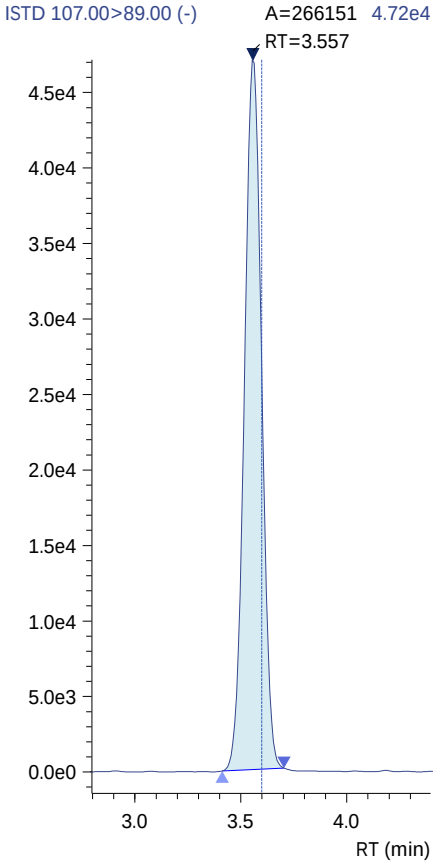
Perchlorate

Conc ----
R#1 0.00 (32.88)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/29/2024 2:34:44 PM

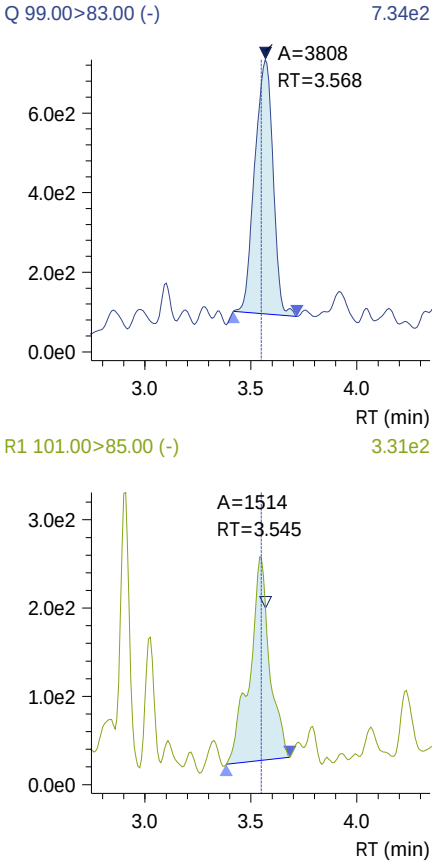
EQ2400040-02 LCS

Sample ID: EQ2400040-02
Date Acquired: 1/26/2024 10:48:39 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-006.lcd
Vial: 2 | Inj. Volume: 10.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.568	3808	255840	0.1009	ng/mL	101.00 >85.00	39.76	23.01 -42.74
Sodium Perchlorate -18O4_IS	Auto	3.558	255840	255840	1.0000	ng/mL	----	----	

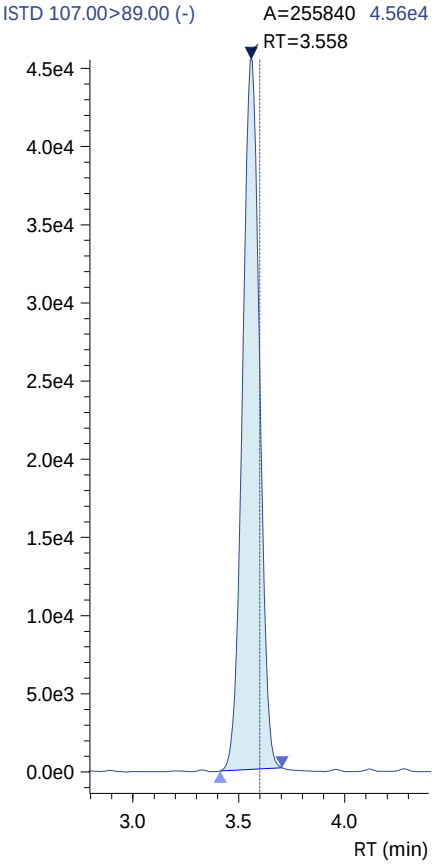
Perchlorate

Conc 0.1009
R#1 39.76 (32.88)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/29/2024 2:34:44 PM

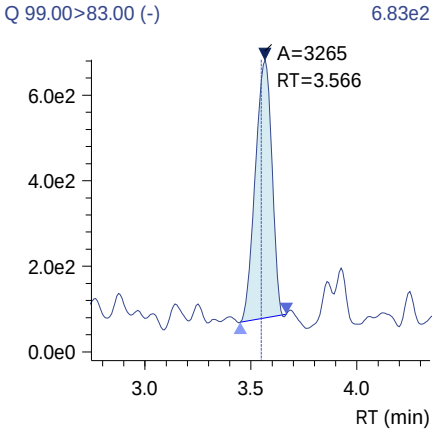
EQ2400040-03 DLCS

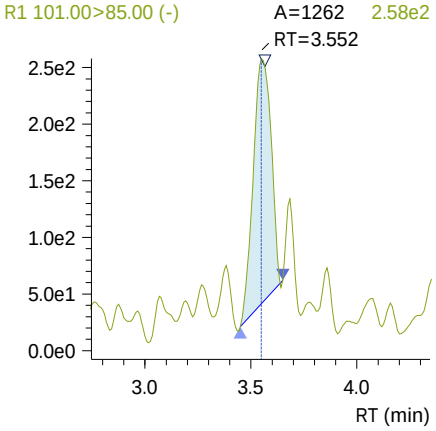
Sample ID: EQ2400040-03
Date Acquired: 1/26/2024 10:54:13 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-007.lcd
Vial: 3 | Inj. Volume: 10.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.566	3265	248190	0.0892	ng/mL	101.00 >85.00	38.66	23.01 -42.74
Sodium Perchlorate -18O4_IS	Auto	3.558	248190	248190	1.0000	ng/mL	----	----	

Perchlorate

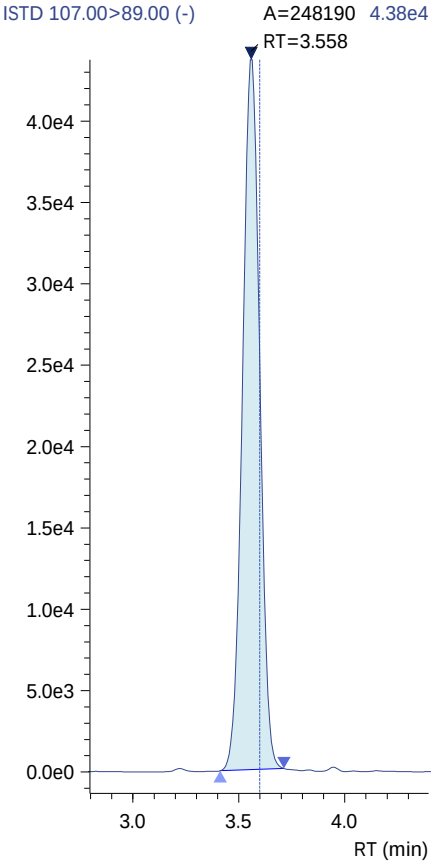
Conc 0.0892
R#1 38.66 (32.88)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/29/2024 2:34:44 PM

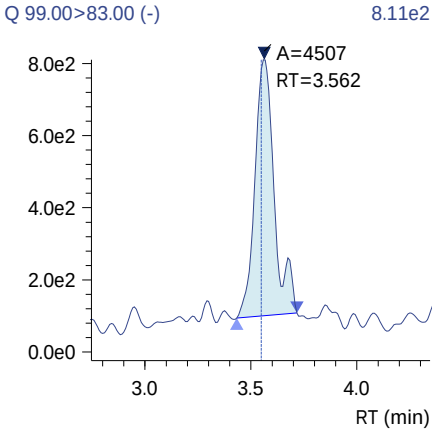
EQ2400040-06 ICS

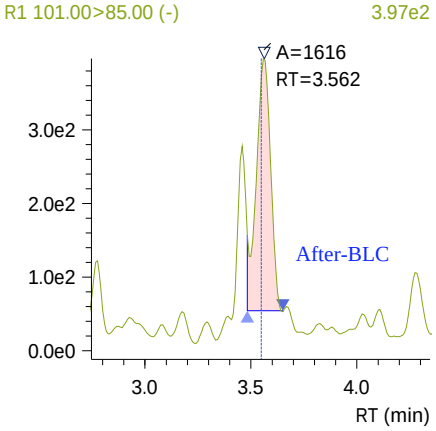
Sample ID: EQ2400040-06
Date Acquired: 1/26/2024 10:59:45 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-008.lcd
Vial: 4 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	MI R1	3.562	4507	290677	0.1051	ng/mL	101.00 >85.00	35.84	23.01 -42.74
Sodium Perchlorate -18O4_IS	Auto	3.558	290677	290677	1.0000	ng/mL	----	----	

Perchlorate

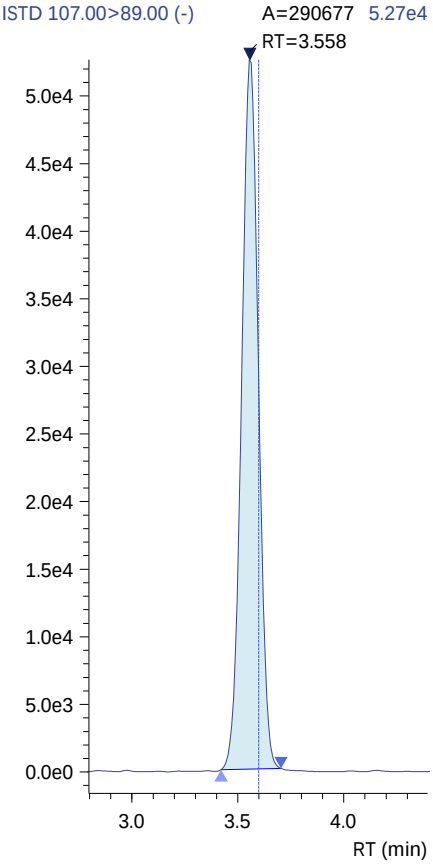
Conc 0.1051
R#1 35.84 (32.88)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

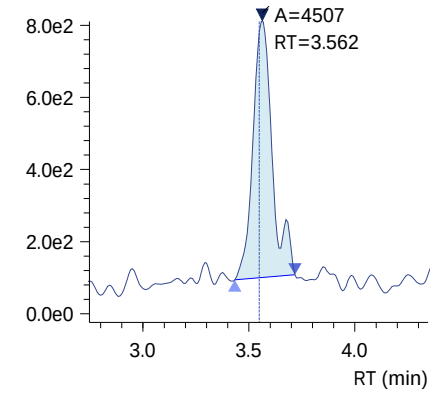
EQ2400040-06 ICS

Sample ID: EQ2400040-06
Date Acquired: 1/26/2024 10:59:45 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-008.lcd
Vial: 4 | Inj. Volume: 10.0000uL | Tray: 0

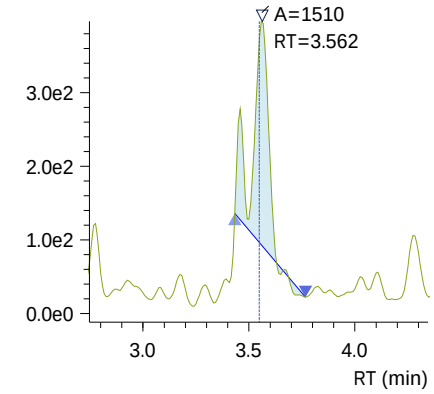
Perchlorate

Conc 0.1051
R#1 33.50 (32.88)

Q 99.00>83.00 (-) 8.11e2



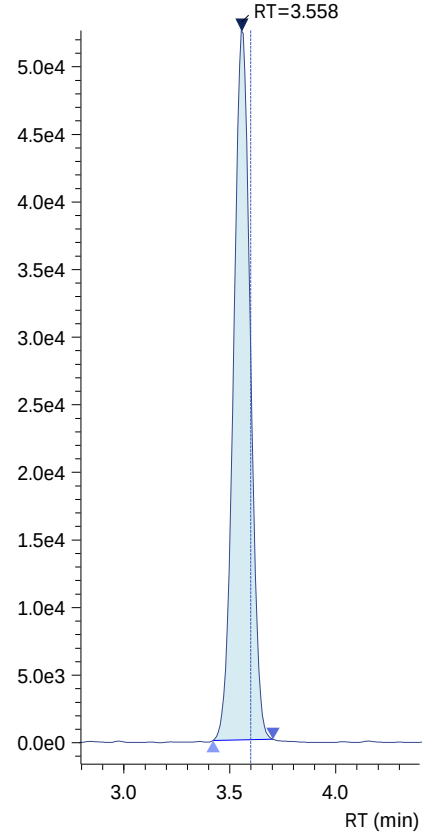
R1 101.00>85.00 (-) 3.97e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=290677 5.27e4



Insight Report

Printed at 1/29/2024 2:34:44 PM

E2400067-001X50

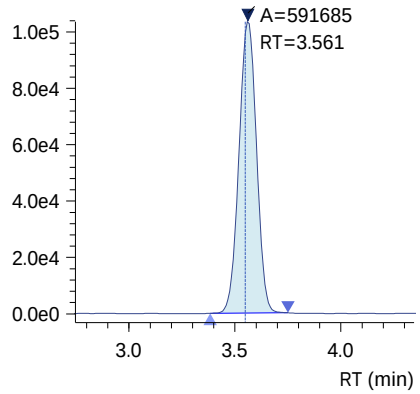
Sample ID: E2400067-001
Date Acquired: 1/26/2024 11:10:50 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-010.lcd
Vial: 6 | Inj. Volume: 10.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.561	591685	274464	14.6193	ng/mL	101.00 >85.00	33.06	23.01 -42.74
Sodium Perchlorate -18O4_IS	Auto	3.558	274464	274464	1.0000	ng/mL	----	----	

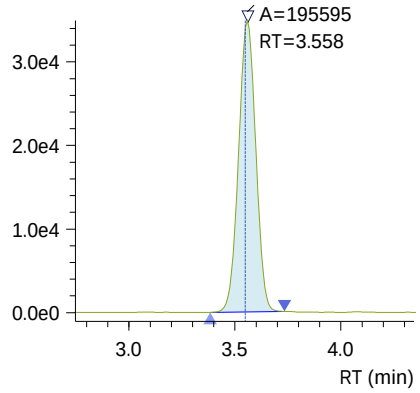
Perchlorate

Conc 14.6193
R#1 33.06 (32.88)

Q 99.00>83.00 (-) 1.04e5



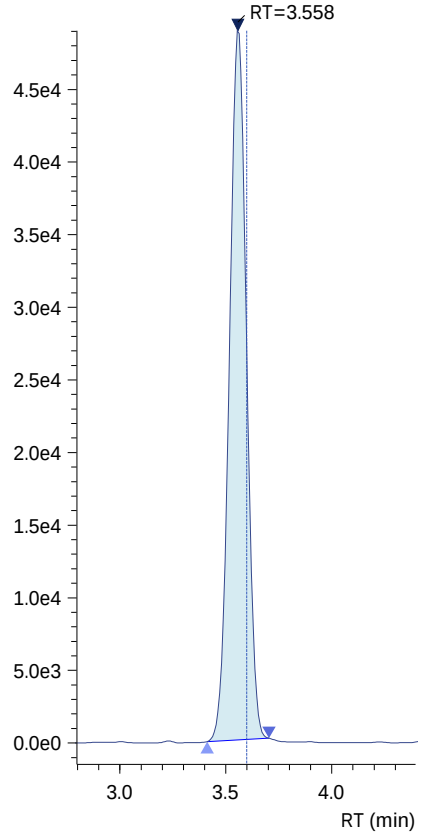
R1 101.00>85.00 (-) 3.50e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=274464 4.90e4



Insight Report

Printed at 1/29/2024 2:34:44 PM

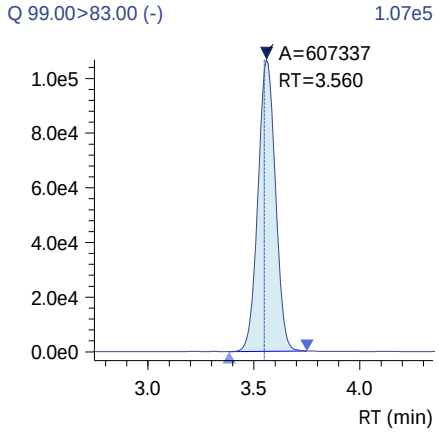
E2400067-002X50

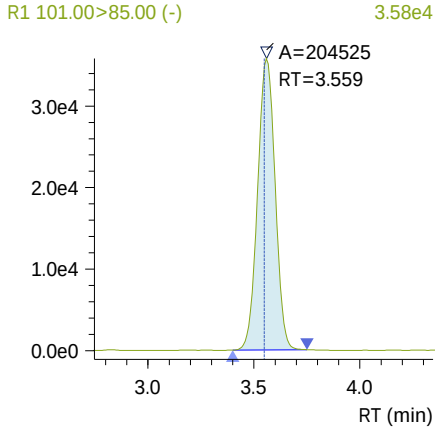
Sample ID: E2400067-002
Date Acquired: 1/26/2024 11:16:20 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-011.lcd
Vial: 7 | Inj. Volume: 10.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.560	607337	274004	15.0312	ng/mL	101.00 >85.00	33.68	23.01 -42.74
Sodium Perchlorate -18O4_IS	Auto	3.558	274004	274004	1.0000	ng/mL	----	----	

Perchlorate

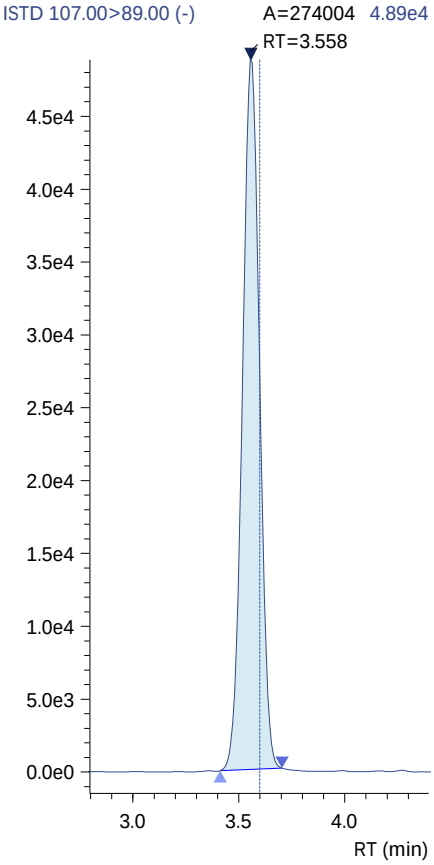
Conc 15.0312
R#1 33.68 (32.88)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/29/2024 2:34:44 PM

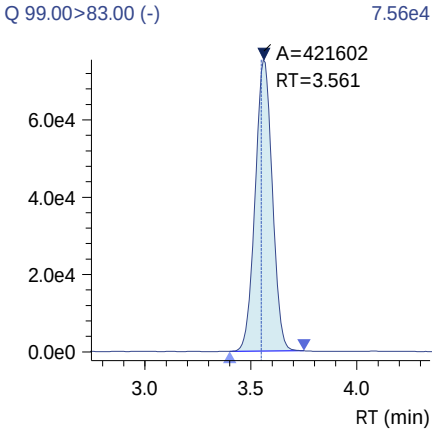
E2400067-003X50

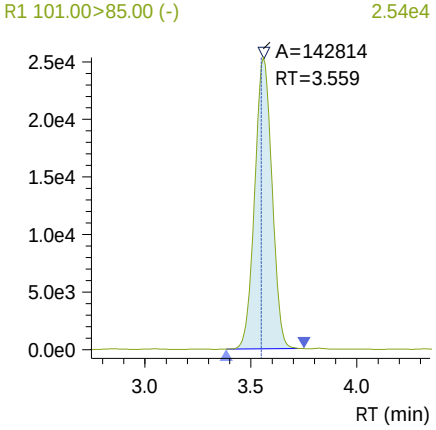
Sample ID: E2400067-003
Date Acquired: 1/26/2024 11:21:51 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-012.lcd
Vial: 8 | Inj. Volume: 10.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.561	421602	279844	10.2166	ng/mL	101.00 >85.00	33.87	23.01 -42.74
Sodium Perchlorate -18O4_IS	Auto	3.557	279844	279844	1.0000	ng/mL	----	----	

Perchlorate

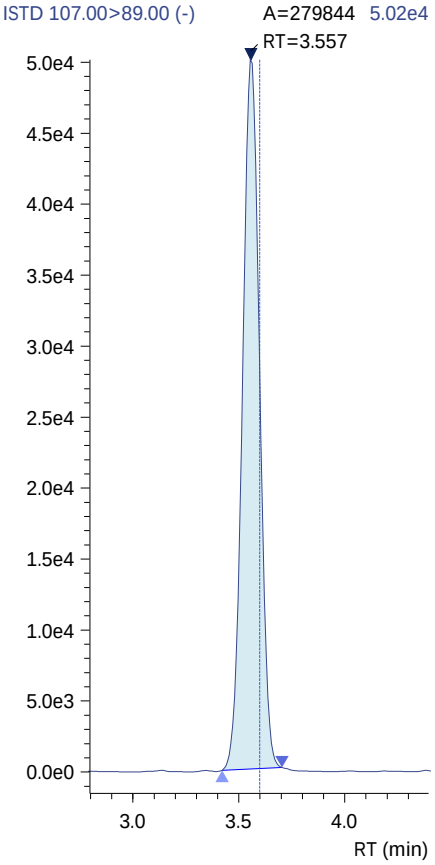
Conc 10.2166
R#1 33.87 (32.88)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/29/2024 2:34:44 PM

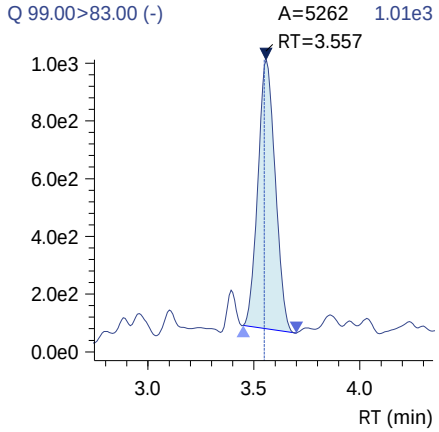
E2400067-004

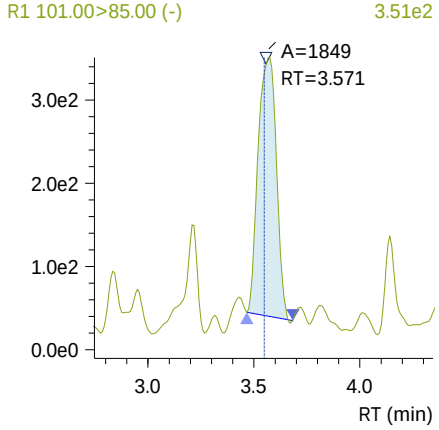
Sample ID: E2400067-004
Date Acquired: 1/26/2024 11:27:23 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-013.lcd
Vial: 9 | Inj. Volume: 10.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.557	5262	261618	0.1364	ng/mL	101.00 >85.00	35.13	23.01 -42.74
Sodium Perchlorate -18O4_IS	Auto	3.559	261618	261618	1.0000	ng/mL	----	----	

Perchlorate

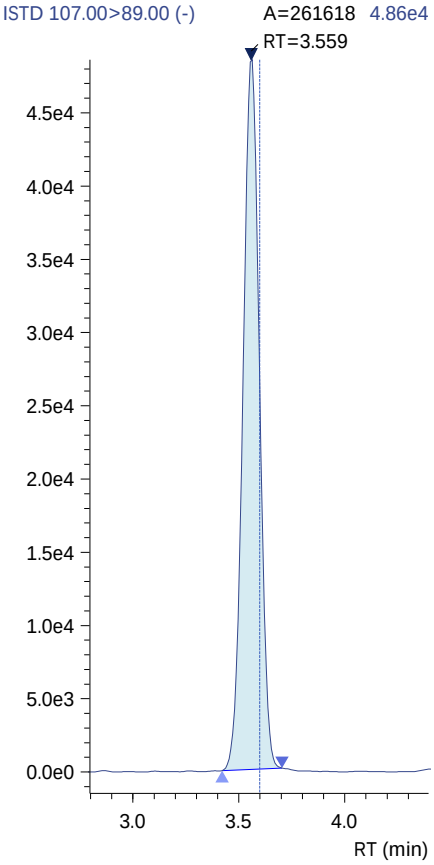
Conc 0.1364
R#1 35.13 (32.88)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/29/2024 2:34:44 PM

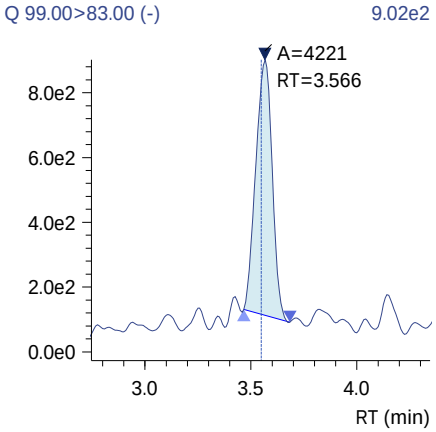
E2400067-005

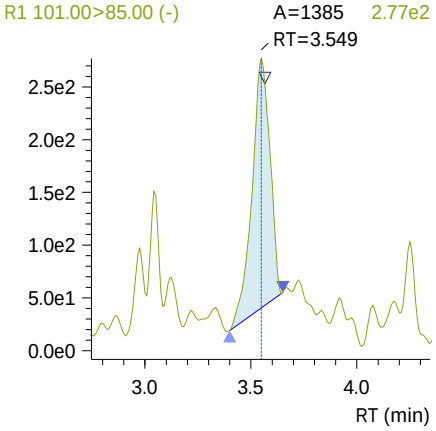
Sample ID: E2400067-005
Date Acquired: 1/26/2024 11:32:55 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-014.lcd
Vial: 10 | Inj. Volume: 10.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.566	4221	275223	0.1040	ng/mL	101.00 >85.00	32.80	23.01 -42.74
Sodium Perchlorate -18O4_IS	Auto	3.558	275223	275223	1.0000	ng/mL	----	----	

Perchlorate

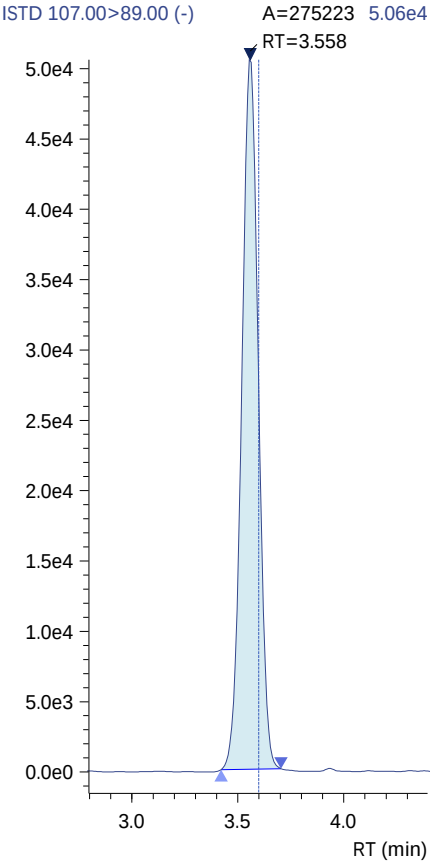
Conc 0.1040
R#1 32.80 (32.88)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/29/2024 2:34:44 PM

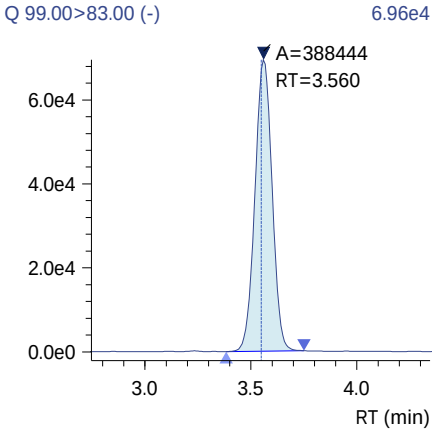
CCV

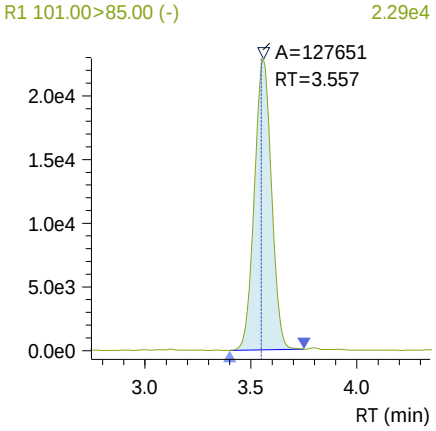
Sample ID: CCV
Date Acquired: 1/26/2024 11:38:31 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-015.lcd
Vial: 7 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.560	388444	252580	10.4292	ng/mL	101.00 >85.00	32.86	23.01 -42.74
Sodium Perchlorate -18O4_IS	Auto	3.556	252580	252580	1.0000	ng/mL	----	----	

Perchlorate

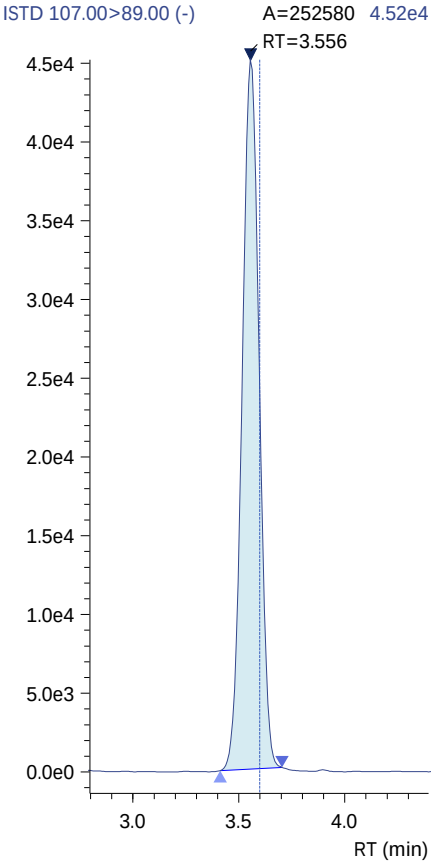
Conc 10.4292
R#1 32.86 (32.88)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/29/2024 2:34:44 PM

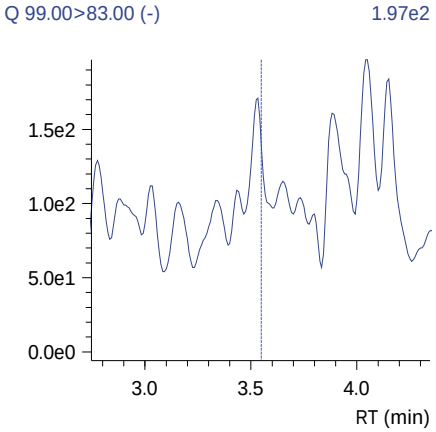
IB

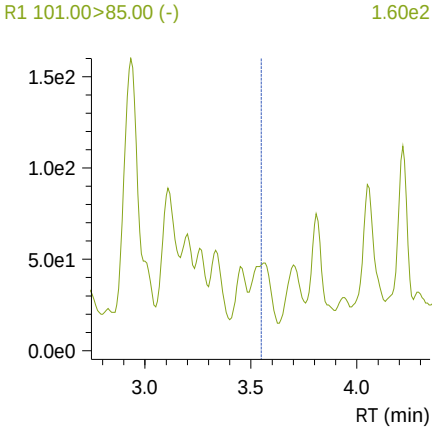
Sample ID: IB
Date Acquired: 1/26/2024 11:44:00 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-016.lcd
Vial: 1 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	271377	----	ng/mL	101.00 >85.00	0.00	23.01 -42.74
Sodium Perchlorate-18O4_IS	Auto	3.554	271377	271377	1.0000	ng/mL	----	----	

Perchlorate

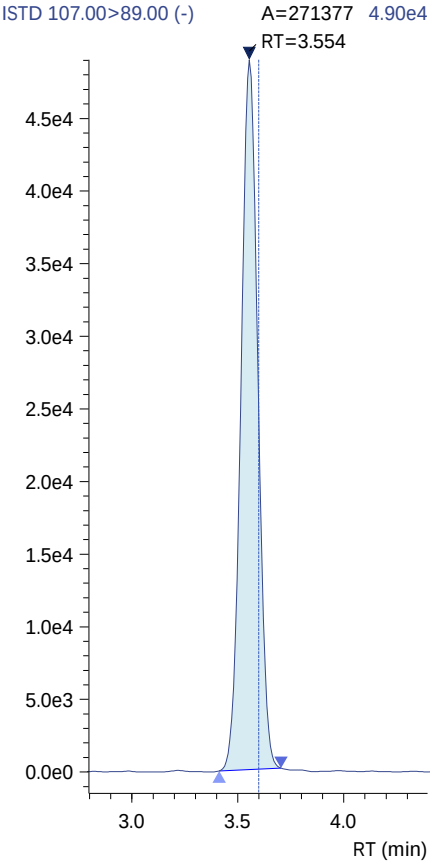
Conc ----
R#1 0.00 (32.88)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/29/2024 2:34:44 PM

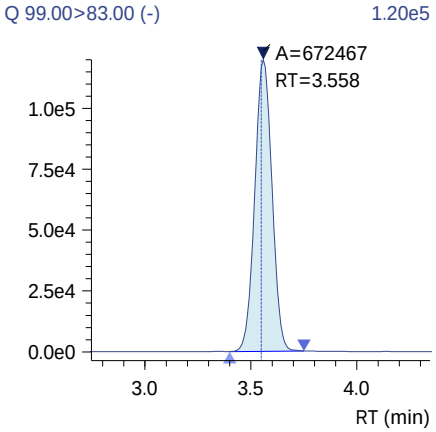
E2400067-007X20

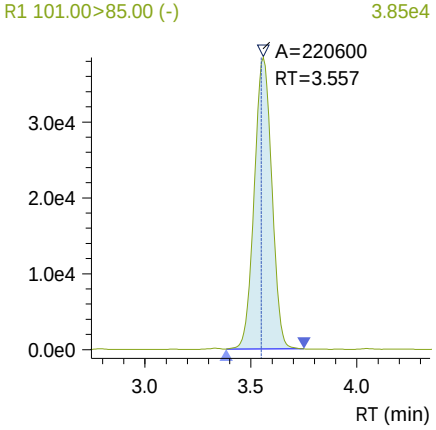
Sample ID: E2400067-007
Date Acquired: 1/26/2024 11:55:00 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-018.lcd
Vial: 12 | Inj. Volume: 10.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.558	672467	281533	16.1981	ng/mL	101.00 >85.00	32.81	23.01 -42.74
Sodium Perchlorate -18O4_IS	Auto	3.556	281533	281533	1.0000	ng/mL	----	----	

Perchlorate

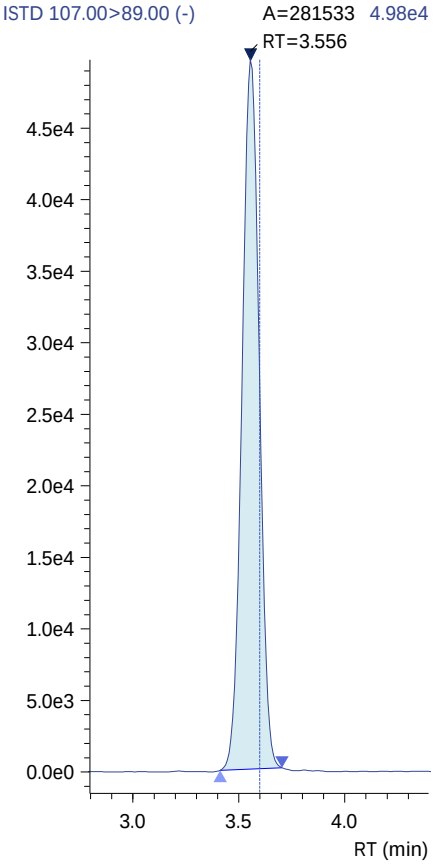
Conc 16.1981
R#1 32.81 (32.88)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/29/2024 2:34:44 PM

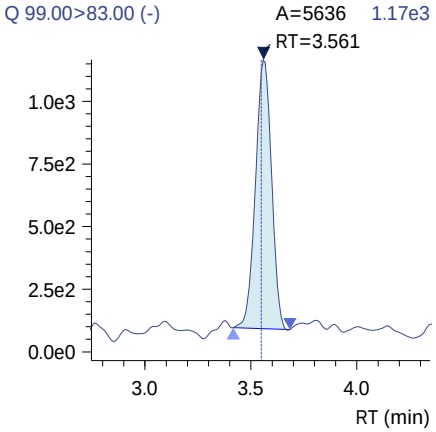
E2400067-008

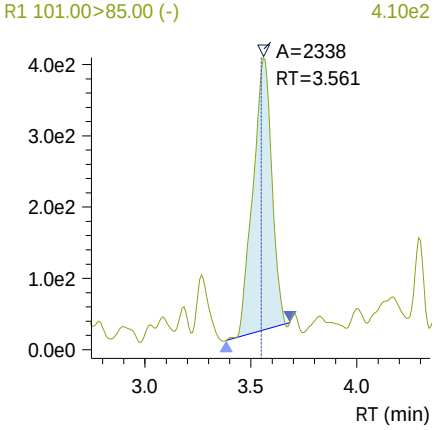
Sample ID: E2400067-008
Date Acquired: 1/26/2024 12:00:30 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-019.lcd
Vial: 13 | Inj. Volume: 10.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.561	5636	256664	0.1489	ng/mL	101.00 >85.00	41.48	23.01 -42.74
Sodium Perchlorate -18O4_IS	Auto	3.557	256664	256664	1.0000	ng/mL	----	----	

Perchlorate

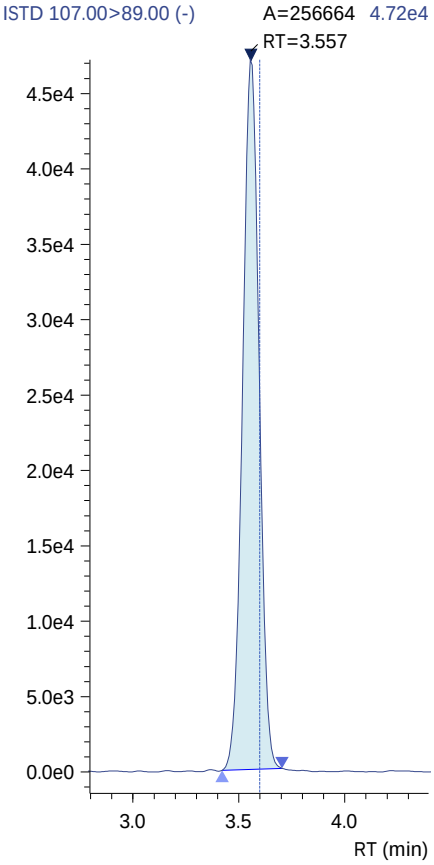
Conc 0.1489
R#1 41.48 (32.88)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/29/2024 2:34:44 PM

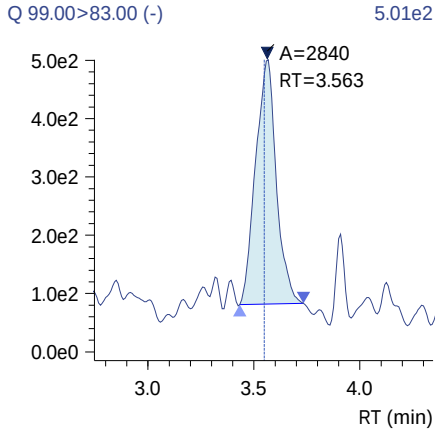
E2400067-009

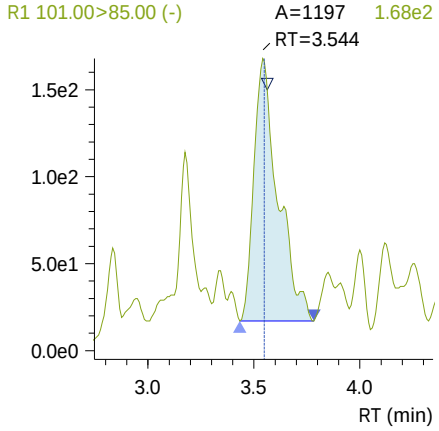
Sample ID: E2400067-009
Date Acquired: 1/26/2024 12:06:04 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-020.lcd
Vial: 14 | Inj. Volume: 10.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.563	2840	225394	0.0854	ng/mL	101.00 >85.00	42.14	23.01 -42.74
Sodium Perchlorate -18O4_IS	Auto	3.556	225394	225394	1.0000	ng/mL	----	----	

Perchlorate

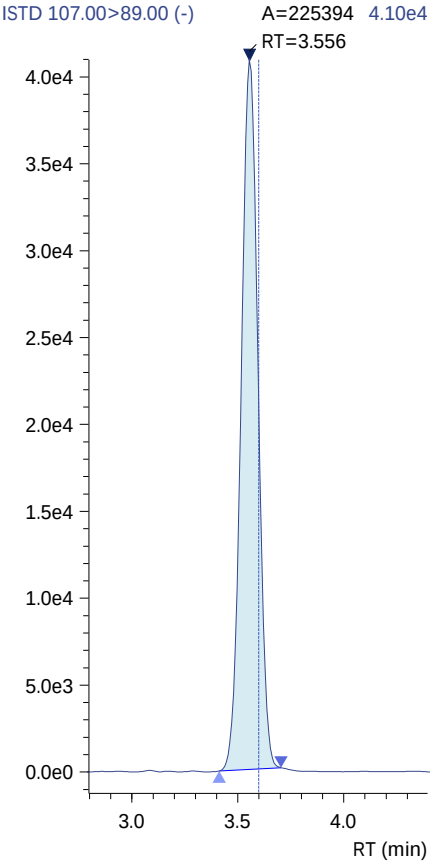
Conc 0.0854
R#1 42.14 (32.88)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/29/2024 2:34:44 PM

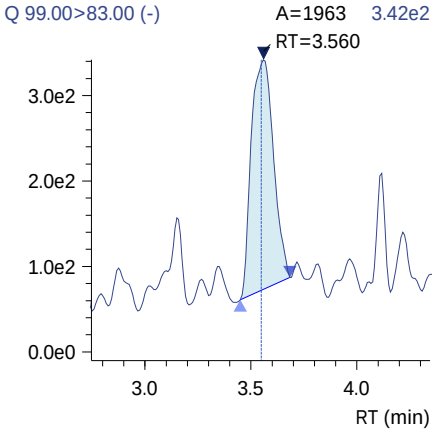
E2400067-010

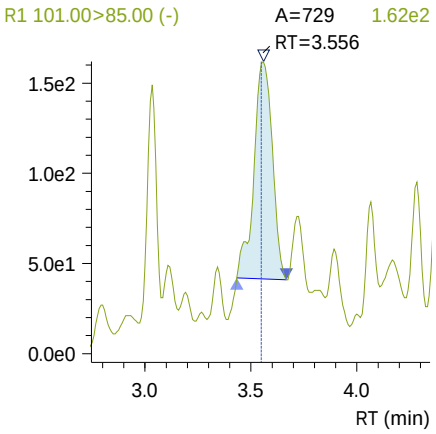
Sample ID: E2400067-010
Date Acquired: 1/26/2024 12:11:38 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-021.lcd
Vial: 15 | Inj. Volume: 10.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.560	1963	238417	0.0558	ng/mL	101.00 >85.00	37.15	23.01 -42.74
Sodium Perchlorate -18O4_IS	Auto	3.556	238417	238417	1.0000	ng/mL	----	----	

Perchlorate

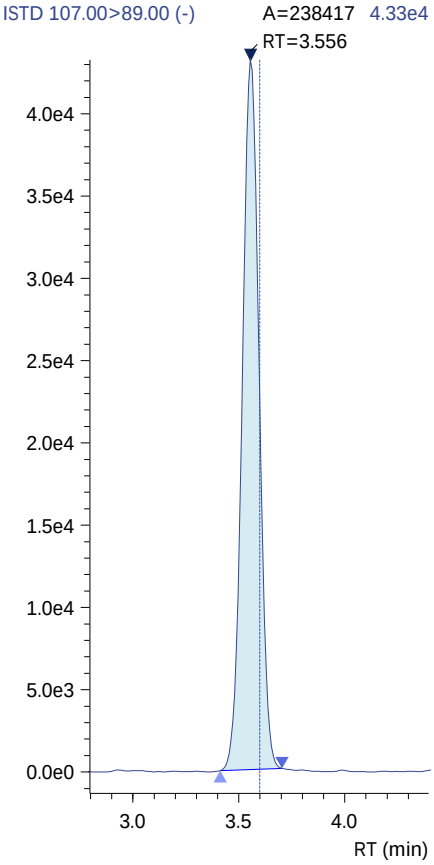
Conc 0.0558
R#1 37.15 (32.88)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/29/2024 2:34:44 PM

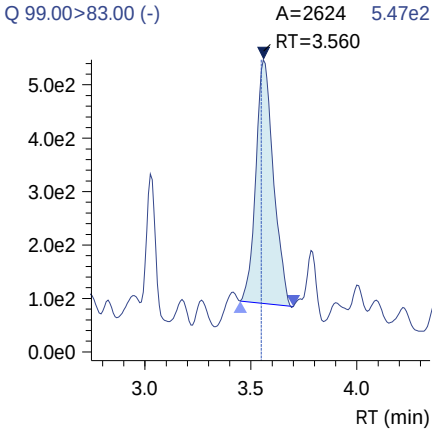
E2400067-011

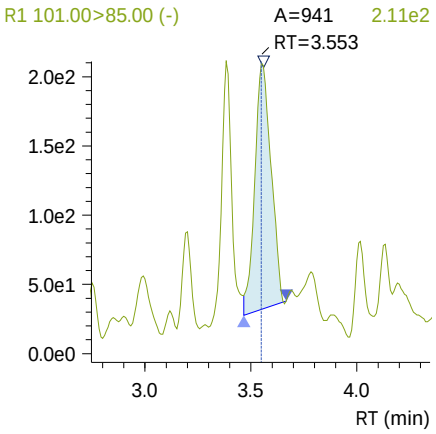
Sample ID: E2400067-011
Date Acquired: 1/26/2024 12:17:09 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-022.lcd
Vial: 16 | Inj. Volume: 10.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.560	2624	219116	0.0812	ng/mL	101.00 >85.00	35.85	23.01 -42.74
Sodium Perchlorate -18O4_IS	Auto	3.555	219116	219116	1.0000	ng/mL	----	----	

Perchlorate

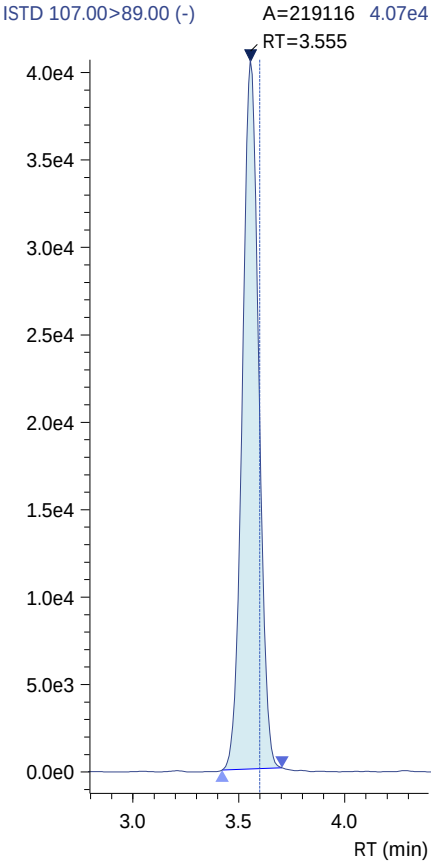
Conc 0.0812
R#1 35.85 (32.88)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/29/2024 2:34:44 PM

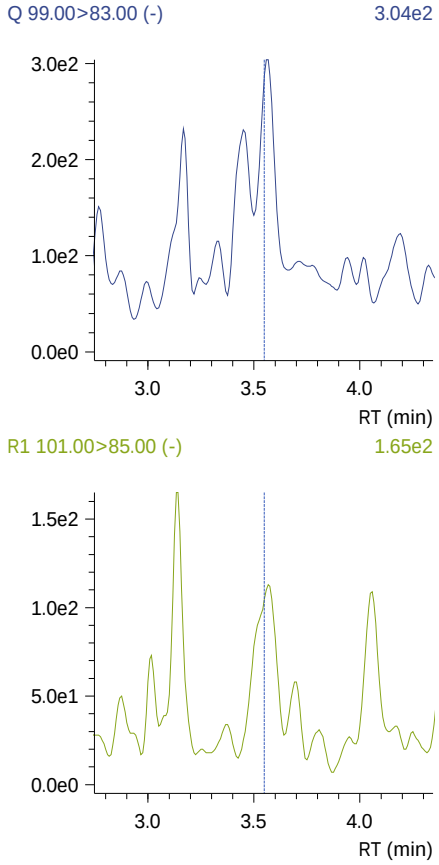
E2400067-012

Sample ID: E2400067-012
Date Acquired: 1/26/2024 12:22:40 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-023.lcd
Vial: 17 | Inj. Volume: 10.0000uL | 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)	----	----	290858	----	ng/mL	101.00 >85.00	0.00	23.01 -42.74
Sodium Perchlorate-18O4_IS	Auto	3.556	290858	290858	1.0000	ng/mL	----	----	

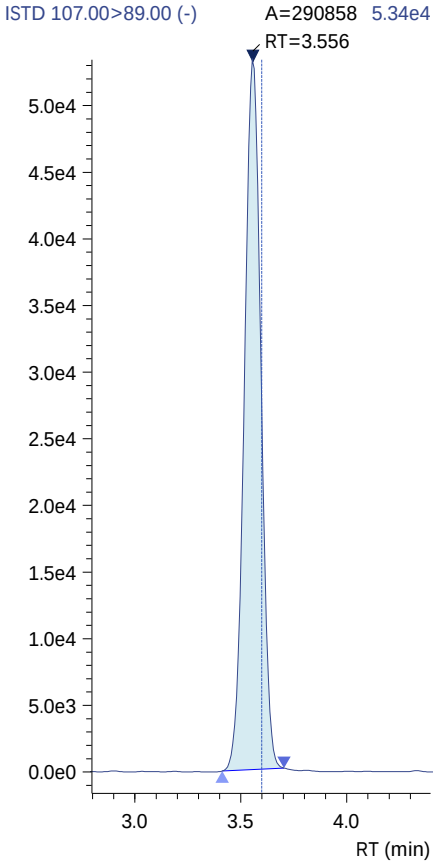
Perchlorate

Conc ----
R#1 0.00 (32.88)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/29/2024 2:34:44 PM

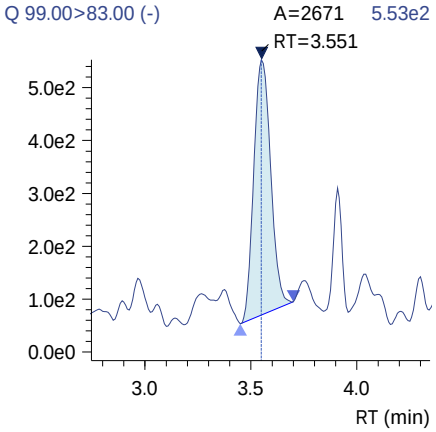
E2400067-006RI

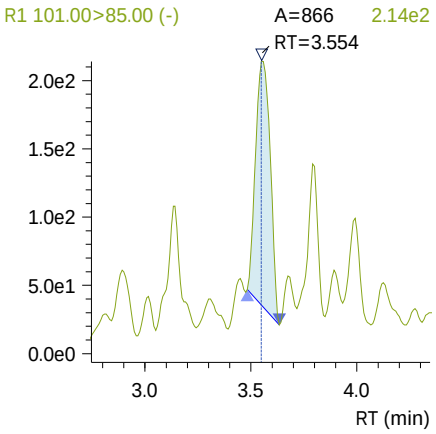
Sample ID: E2400067-006
Date Acquired: 1/26/2024 12:28:11 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-024.lcd
Vial: 11 | Inj. Volume: 10.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.551	2671	228839	0.0791	ng/mL	101.00 >85.00	32.41	23.01 -42.74
Sodium Perchlorate -18O4_IS	Auto	3.555	228839	228839	1.0000	ng/mL	----	----	

Perchlorate

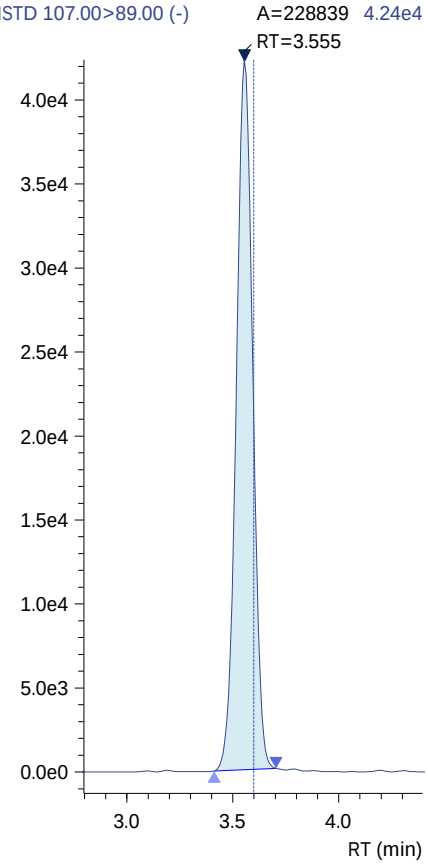
Conc 0.0791
R#1 32.41 (32.88)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/29/2024 2:34:44 PM

EQ2400040-04 MS

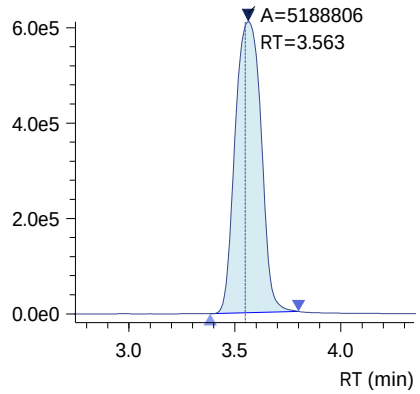
Sample ID: EQ2400040-04
Date Acquired: 1/26/2024 12:33:51 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-025.lcd
Vial: 4 | Inj. Volume: 10.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.563	5188806	54274	648.3333	ng/mL	101.00 >85.00	32.68	23.01 -42.74
Sodium Perchlorate-18O4_IS	Auto	3.542	54274	54274	1.0000	ng/mL	----	----	

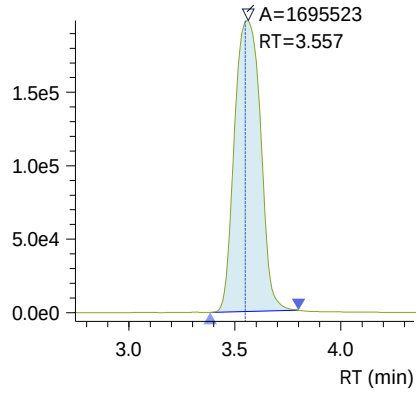
Perchlorate

Conc 648.3333
R#1 32.68 (32.88)

Q 99.00>83.00 (-) 6.12e5



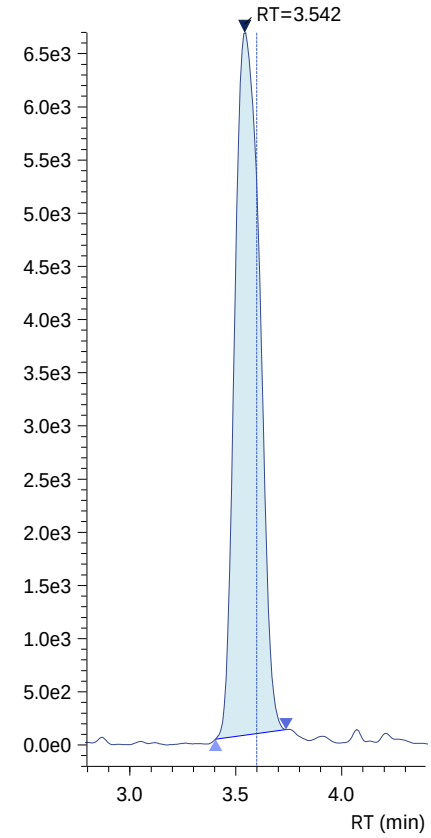
R1 101.00>85.00 (-) 1.99e5



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=54274 6.70e3



Insight Report

Printed at 1/29/2024 2:34:44 PM

EQ2400040-05 DMS

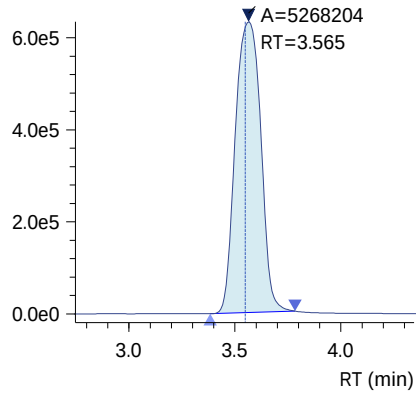
Sample ID: EQ2400040-05
Date Acquired: 1/26/2024 12:39:23 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-026.lcd
Vial: 5 | Inj. Volume: 10.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.565	5268204	55928	638.7840	ng/mL	101.00 >85.00	32.60	23.01 -42.74
Sodium Perchlorate-18O4_IS	Auto	3.543	55928	55928	1.0000	ng/mL	----	----	

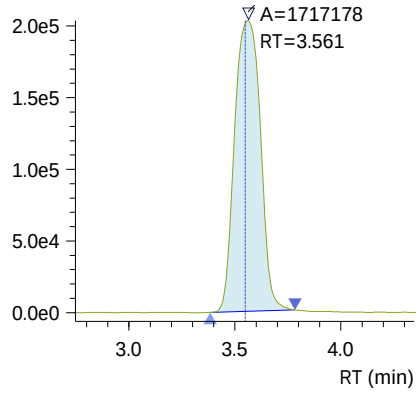
Perchlorate

Conc 638.7840
R#1 32.60 (32.88)

Q 99.00>83.00 (-) 6.35e5



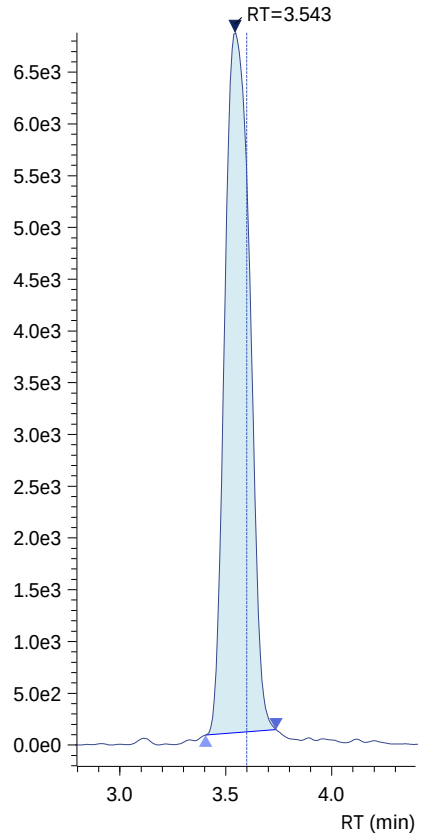
R1 101.00>85.00 (-) 2.04e5



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=55928 6.88e3



Insight Report

Printed at 1/29/2024 2:34:44 PM

CCV

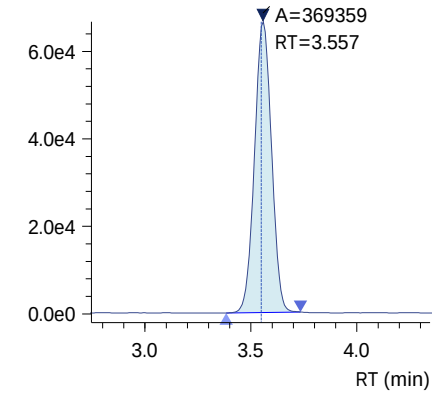
Sample ID: CCV
Date Acquired: 1/26/2024 12:44:53 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-027.lcd
Vial: 7 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.557	369359	235649	10.6293	ng/mL	101.00 >85.00	32.89	23.01 -42.74
Sodium Perchlorate -18O4_IS	Auto	3.554	235649	235649	1.0000	ng/mL	----	----	

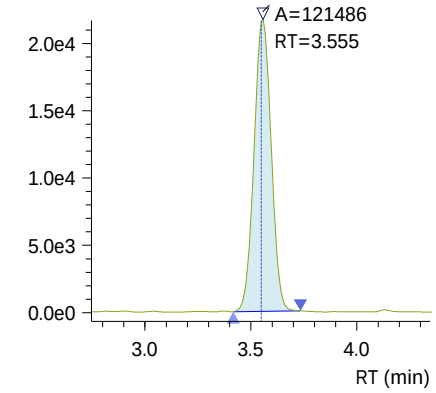
Perchlorate

Conc 10.6293
R#1 32.89 (32.88)

Q 99.00>83.00 (-) 6.68e4



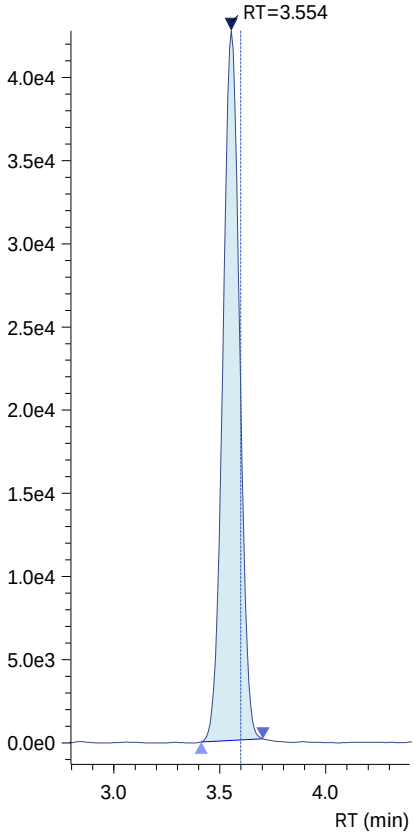
R1 101.00>85.00 (-) 2.17e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=235649 4.28e4



Insight Report

Printed at 1/29/2024 2:34:44 PM

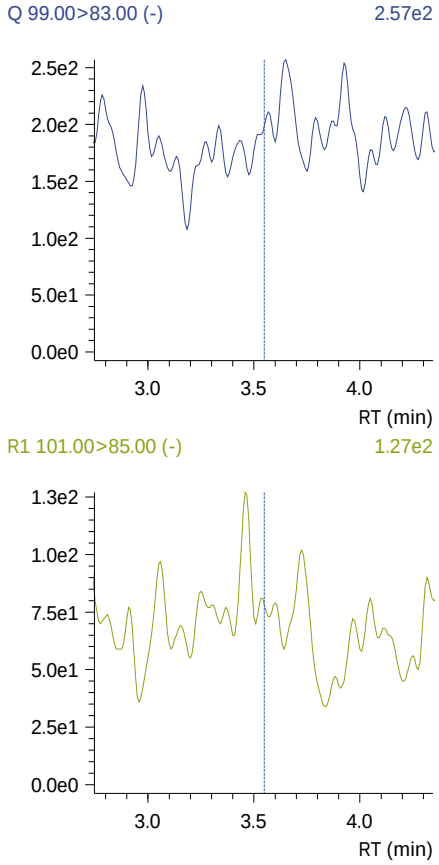
IB

Sample ID: IB
Date Acquired: 1/26/2024 12:50:25 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-028.lcd
Vial: 1 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	251820	----	ng/mL	101.00 >85.00	0.00	23.01 -42.74
Sodium Perchlorate-18O4_IS	Auto	3.554	251820	251820	1.0000	ng/mL	----	----	

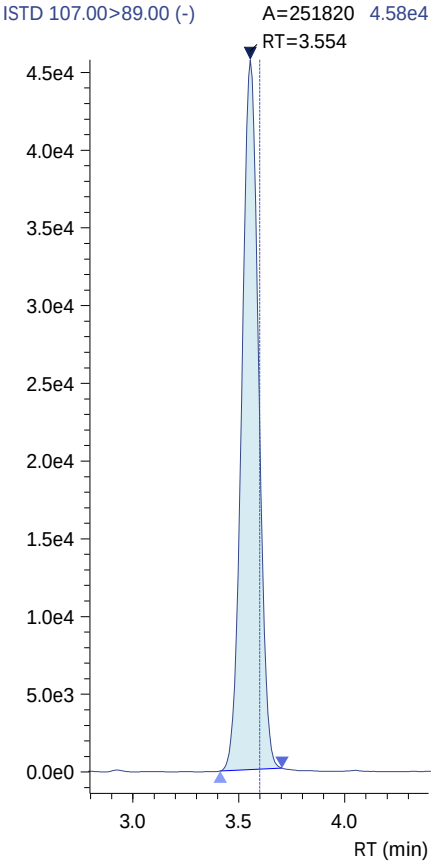
Perchlorate

Conc ----
R#1 0.00 (32.88)



Sodium Perchlorate-18O4_IS

Conc 1.0000



HS24011040 Eurofins Lab J158327-1 Std_Tal_L4 Final Report 02152024

ALS WO# HS24011040

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ANALYTICAL REPORT

PREPARED FOR

Attn: Jumoke Lawal
ALS Group USA, Corp
10450 Stancliff Rd.
Suite 210
Houston TX 77099

Generated 02/12/2024

JOB DESCRIPTION

HS24011040

JOB NUMBER

410-158327-1

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

See page two for job notes and contact information.

myEOL

Eurofins Lancaster Laboratories Environment Testing, LLC

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

Authorization

Generated
02/12/2024

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

Eurofins Lancaster Laboratories Environment Testing, LLC

Compliance Statement

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

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

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

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Definitions/Glossary

Client: ALS Group USA, Corp
Job ID: 410-158327-1
Project/Site: HS24011040

Qualifiers

GC VOA

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

Glossary

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

Job Narrative
410-158327-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 1/24/2024 8:50 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.2°C

GC VOA
Method RSK_175_CO2_D5: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 410-466624 and analytical batch 410-466611 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) was within acceptance limits. The MS/MSD were re-analyzed and recoveries were outside control limits. Results are reported from the initial analysis. 16WW35-240118 (410-158327-3[MS]) and 16WW35-240118 (410-158327-3[MSD])

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

Detection Summary

Client: ALS Group USA, Corp
Project/Site: HS24011040

Job ID: 410-158327-1

Client Sample ID: 16WW16-240118 — Lab Sample ID: 410-158327-1

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	160000		12000		5600	ug/L	1		RSK-175	Total/NA

Client Sample ID: 16WW16-240118-FD — Lab Sample ID: 410-158327-2

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	150000		12000		5600	ug/L	1		RSK-175	Total/NA

Client Sample ID: 16WW35-240118 — Lab Sample ID: 410-158327-3

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	200000	M J1	12000		5600	ug/L	1		RSK-175	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: ALS Group USA, Corp
Project/Site: HS24011040

Job ID: 410-158327-1

Client Sample ID: 16WW16-240118
Lab Sample ID: 410-158327-1
Date Collected: 01/18/24 07:10
Matrix: Water
Date Received: 01/24/24 08:50

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Carbon dioxide	160000		12000		5600	ug/L		01/25/24 11:13	1

Client Sample ID: 16WW16-240118-FD
Lab Sample ID: 410-158327-2
Date Collected: 01/18/24 07:10
Matrix: Water
Date Received: 01/24/24 08:50

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Carbon dioxide	150000		12000		5600	ug/L		01/25/24 11:21	1

Client Sample ID: 16WW35-240118
Lab Sample ID: 410-158327-3
Date Collected: 01/18/24 08:15
Matrix: Water
Date Received: 01/24/24 08:50

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Carbon dioxide	200000	M J1	12000		5600	ug/L		01/25/24 11:28	1

Default Detection Limits

Client: ALS Group USA, Corp
Project/Site: HS24011040

Job ID: 410-158327-1

Method: RSK-175 - Dissolved Gases (GC)

Prep: RSK-175

Analyte	LOQ	DL	Units
Carbon dioxide	12000	5600	ug/L

QC Sample Results

Client: ALS Group USA, Corp
Project/Site: HS24011040

Job ID: 410-158327-1

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 410-466624/1-A
Matrix: Water
Analysis Batch: 466611

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 466624

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Carbon dioxide	5600	U	12000		5600	ug/L		01/25/24 10:35	1

Lab Sample ID: LCS 410-466624/2-A
Matrix: Water
Analysis Batch: 466611

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 466624

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Carbon dioxide			35800	38300		ug/L		107	80 - 122		

Lab Sample ID: 410-158327-3 MS
Matrix: Water
Analysis Batch: 466611

Client Sample ID: 16WW35-240118
Prep Type: Total/NA
Prep Batch: 466624

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Carbon dioxide	200000	M J1	35800	212000	M 4 cn	ug/L		40	80 - 122		

Lab Sample ID: 410-158327-3 MSD
Matrix: Water
Analysis Batch: 466611

Client Sample ID: 16WW35-240118
Prep Type: Total/NA
Prep Batch: 466624

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Carbon dioxide	200000	M J1	35800	211000	M 4 cn	ug/L		35	80 - 122	1	20

QC Association Summary

Client: ALS Group USA, Corp
Project/Site: HS24011040

Job ID: 410-158327-1

GC VOA

Analysis Batch: 466611

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-158327-1	16WW16-240118	Total/NA	Water	RSK-175	466624
410-158327-2	16WW16-240118-FD	Total/NA	Water	RSK-175	466624
410-158327-3	16WW35-240118	Total/NA	Water	RSK-175	466624
MB 410-466624/1-A	Method Blank	Total/NA	Water	RSK-175	466624
LCS 410-466624/2-A	Lab Control Sample	Total/NA	Water	RSK-175	466624
410-158327-3 MS	16WW35-240118	Total/NA	Water	RSK-175	466624
410-158327-3 MSD	16WW35-240118	Total/NA	Water	RSK-175	466624

Prep Batch: 466624

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-158327-1	16WW16-240118	Total/NA	Water	RSK-175	
410-158327-2	16WW16-240118-FD	Total/NA	Water	RSK-175	
410-158327-3	16WW35-240118	Total/NA	Water	RSK-175	
MB 410-466624/1-A	Method Blank	Total/NA	Water	RSK-175	
LCS 410-466624/2-A	Lab Control Sample	Total/NA	Water	RSK-175	
410-158327-3 MS	16WW35-240118	Total/NA	Water	RSK-175	
410-158327-3 MSD	16WW35-240118	Total/NA	Water	RSK-175	

Lab Chronicle

Client: ALS Group USA, Corp
Project/Site: HS24011040

Job ID: 410-158327-1

Client Sample ID: 16WW16-240118
Date Collected: 01/18/24 07:10
Date Received: 01/24/24 08:50

Lab Sample ID: 410-158327-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	RSK-175			466624	HQR6	ELLE	01/25/24 10:08
Total/NA	Analysis	RSK-175		1	466611	LXF2	ELLE	01/25/24 11:13

Client Sample ID: 16WW16-240118-FD
Date Collected: 01/18/24 07:10
Date Received: 01/24/24 08:50

Lab Sample ID: 410-158327-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	RSK-175			466624	HQR6	ELLE	01/25/24 10:08
Total/NA	Analysis	RSK-175		1	466611	LXF2	ELLE	01/25/24 11:21

Client Sample ID: 16WW35-240118
Date Collected: 01/18/24 08:15
Date Received: 01/24/24 08:50

Lab Sample ID: 410-158327-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	RSK-175			466624	HQR6	ELLE	01/25/24 10:08
Total/NA	Analysis	RSK-175		1	466611	LXF2	ELLE	01/25/24 11:28

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

Accreditation/Certification Summary

Client: ALS Group USA, Corp
Job ID: 410-158327-1
Project/Site: HS24011040

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

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

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

Method Summary

Client: ALS Group USA, Corp
Project/Site: HS24011040

Job ID: 410-158327-1

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

Protocol References:

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

Laboratory References:

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

Sample Summary

Client: ALS Group USA, Corp
Project/Site: HS24011040

Job ID: 410-158327-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
410-158327-1	16WW16-240118	Water	01/18/24 07:10	01/24/24 08:50
410-158327-2	16WW16-240118-FD	Water	01/18/24 07:10	01/24/24 08:50
410-158327-3	16WW35-240118	Water	01/18/24 08:15	01/24/24 08:50

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-158327-1

SDG No.:

Instrument ID: 19506-B Analysis Batch Number: 369251

Lab Sample ID: IC 410-369251/5 Client Sample ID:

Date Analyzed: 04/27/23 09:59 Lab File ID: 312023_04_27BB.0005.d GC Column: HP Plot ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon dioxide	2.06	Baseline Smoothing	WN7O	04/28/23 07:18

Lab Sample ID: IC 410-369251/10 Client Sample ID:

Date Analyzed: 04/27/23 10:37 Lab File ID: 312023_04_27BB.0010.d GC Column: HP Plot ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon dioxide	1.98	Baseline Smoothing	WN7O	04/28/23 07:17

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-158327-1

SDG No.:

Instrument ID: 19506-B Analysis Batch Number: 466611

Lab Sample ID: 410-158327-3 Client Sample ID: 16WW35-240118

Date Analyzed: 01/25/24 11:28 Lab File ID: 312024_1_25BB.0010.d GC Column: HP Plot ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon dioxide	2.04	Peak assignment corrected	LXF2	01/26/24 03:35

Lab Sample ID: 410-158327-3 MS Client Sample ID: 16WW35-240118 MS

Date Analyzed: 01/25/24 11:36 Lab File ID: 312024_1_25BB.0011.d GC Column: HP Plot ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon dioxide	2.04	Peak assignment corrected	LXF2	01/26/24 03:35

Lab Sample ID: 410-158327-3 MSD Client Sample ID: 16WW35-240118 MSD

Date Analyzed: 01/25/24 11:44 Lab File ID: 312024_1_25BB.0012.d GC Column: HP Plot ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon dioxide	2.04	Peak assignment corrected	LXF2	01/26/24 03:35

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-158327-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
EPH_CO2ICV_00002	09/29/23	09/29/22	DI Water, Lot In House	1 mL	EPH_CO2XX_00002	0.0018 g	Carbon dioxide	547000 ppb
.EPH_CO2XX_00002	09/29/23	Air Products, Lot A214157			(Purchased Reagent)		Carbon dioxide	30.3889 %
EPH_CO2MS_00004	07/16/23	07/18/22	DI Water, Lot In House	1 g	EPH_CO2CRV_00002	0.0018 g	Carbon dioxide	1791000 ppb
.EPH_CO2CRV_00002	07/16/23	Praxair, Lot 4-11-18			(Purchased Reagent)		Carbon dioxide	99.5 %
EPH_CO2MS_00006	07/18/24	07/18/23	DI Water, Lot In House	1 g	EPH_CO2CRV_00003	0.0018 g	Carbon dioxide	1791000 ppb
.EPH_CO2CRV_00003	07/18/24	Praxair, Lot 4-11-18			(Purchased Reagent)		Carbon dioxide	99.5 %

Method RSK-175 CO2 DOD

Dissolved Gases (GC) by Method RSK_175_CO2 DOD

FORM III
GC VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-158327-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 312024_1_25BB.0004.d

Lab ID: LCS 410-466624/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Carbon dioxide	35800	38300	107	80-122	

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA MATRIX SPIKE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-158327-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 312024_1_25BB.0011.d

Lab ID: 410-158327-3 MS Client ID: 16WW35-240118 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Carbon dioxide	35800	200000	212000	40	80-122	M 4 cn

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-158327-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 312024_1_25BB.0012.d

Lab ID: 410-158327-3 MSD Client ID: 16WW35-240118 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Carbon dioxide	35800	211000	35	1	20	80-122	M 4 cn

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM IV
GC VOA METHOD BLANK SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-158327-1

SDG No.:

Lab File ID: 312024_1_25BB.0003.d Lab Sample ID: MB 410-466624/1-A

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: 19506-B Date Analyzed: 01/25/2024 10:35

GC Column: HP Plot ID: 0.53(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 410-466624/2-A	312024_1_25 BB.0004.d	01/25/2024 10:42
16WW16-240118	410-158327-1	312024_1_25 BB.0008.d	01/25/2024 11:13
16WW16-240118-FD	410-158327-2	312024_1_25 BB.0009.d	01/25/2024 11:21
16WW35-240118	410-158327-3	312024_1_25 BB.0010.d	01/25/2024 11:28
16WW35-240118 MS	410-158327-3 MS	312024_1_25 BB.0011.d	01/25/2024 11:36
16WW35-240118 MSD	410-158327-3 MSD	312024_1_25 BB.0012.d	01/25/2024 11:44

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-158327-1

SDG No.:

Client Sample ID: 16WW16-240118 Lab Sample ID: 410-158327-1

Matrix: Water Lab File ID: 312024_1_25BB.0008.d

Analysis Method: RSK-175 Date Collected: 01/18/2024 07:10

Sample wt/vol: 5(mL) Date Analyzed: 01/25/2024 11:13

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP Plot ID: 0.53(mm)

Purge Volume: Heated Purge: (Y/N) N pH: 7.0

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 466611 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	DL
124-38-9	Carbon dioxide	160000		12000	5600

Report Date: 26-Jan-2024 03:35:56 Chrom Revision: 2.3 24-Jan-2024 12:19:54

Eurofins Lancaster Laboratories Environment Testing, LLC

Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20240125-104811.b\312024_1_25BB.0008.d				
Lims ID:	410-158327-A-1-A				
Client ID:	16WW16_240118				
Sample Type:	Client				
Inject. Date:	25-Jan-2024 11:13:00	ALS Bottle#:	0	Worklist Smp#:	8
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	410-0104811-008				
Operator ID:		Instrument ID:	19506-B		
Method:	\\chromfs\Lancaster\ChromData\19506-B\20240125-104811.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	26-Jan-2024 03:35:54	Calib Date:	27-Apr-2023 10:37:00		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19506-B\20230427-82537.b\312023_04_27BB.0010.d				
Column 1 :	HP Plot (0.00 mm)		Det: 0FIDA		
Process Host:	CTX1645				

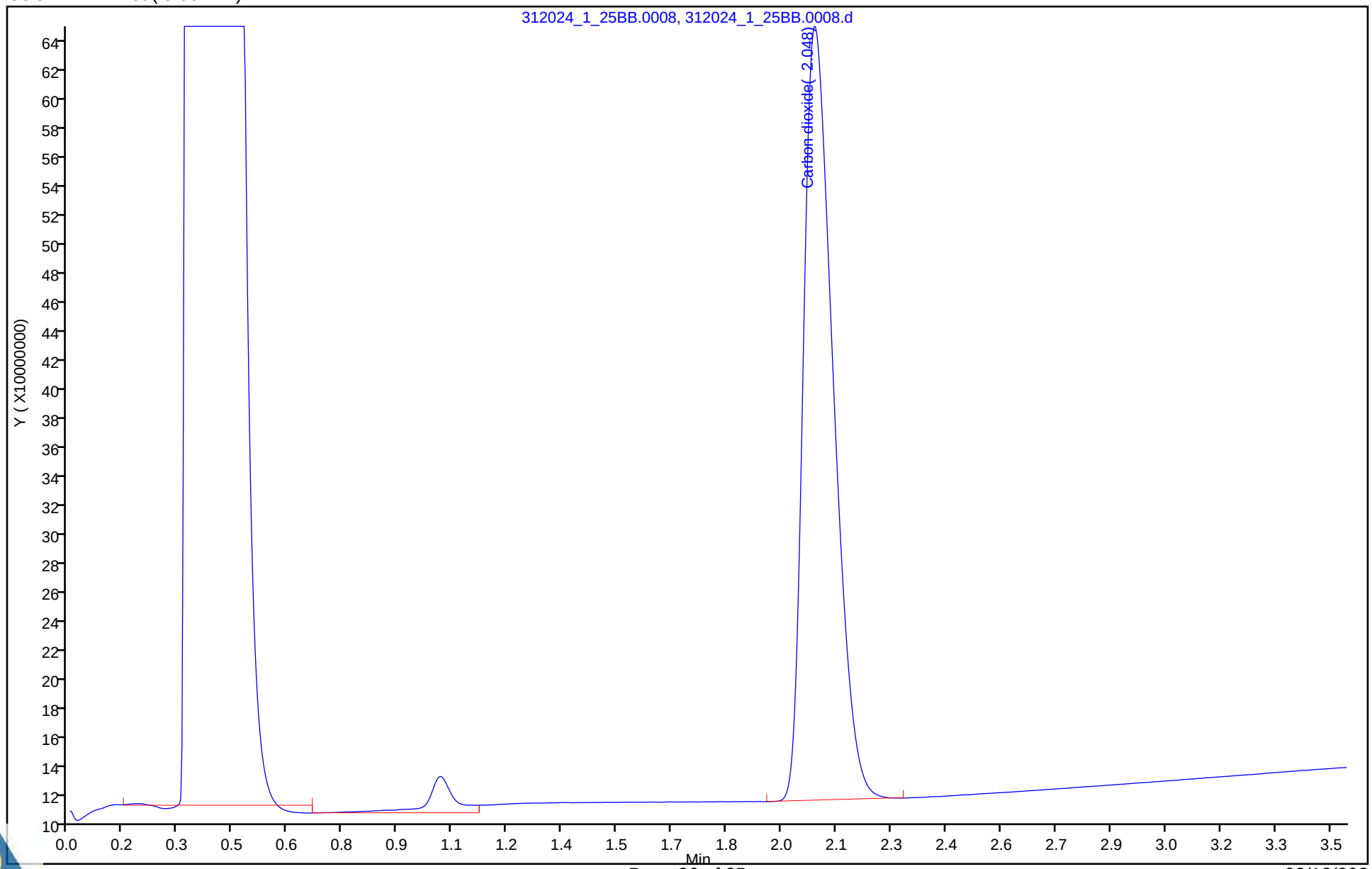
Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
1 Carbon dioxide	2.048	2.075	-0.027	519404630	157868	H

Report Date: 26-Jan-2024 03:35:56 Chrom Revision: 2.3 24-Jan-2024 12:19:54

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20240125-104811.b\312024_1_25BB.0008.d				
Injection Date:	25-Jan-2024 11:13:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	410-158327-A-1-A	Lab Sample ID:	410-158327-1	Worklist Smp#:	8
Client ID:	16WW16_240118				
Purge Vol:	1.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2		

Column: HP Plot (0.00 mm)



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-158327-1

SDG No.:

Client Sample ID: 16WW16-240118-FD Lab Sample ID: 410-158327-2

Matrix: Water Lab File ID: 312024_1_25BB.0009.d

Analysis Method: RSK-175 Date Collected: 01/18/2024 07:10

Sample wt/vol: 5(mL) Date Analyzed: 01/25/2024 11:21

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP Plot ID: 0.53(mm)

Purge Volume: Heated Purge: (Y/N) N pH: 7.0

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 466611 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	DL
124-38-9	Carbon dioxide	150000		12000	5600

Report Date: 26-Jan-2024 03:35:56 Chrom Revision: 2.3 24-Jan-2024 12:19:54

Eurofins Lancaster Laboratories Environment Testing, LLC

Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20240125-104811.b\312024_1_25BB.0009.d				
Lims ID:	410-158327-A-2-A				
Client ID:	16WW16_240118-FD				
Sample Type:	Client				
Inject. Date:	25-Jan-2024 11:21:00	ALS Bottle#:	0	Worklist Smp#:	9
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	410-0104811-009				
Operator ID:		Instrument ID:	19506-B		
Method:	\\chromfs\Lancaster\ChromData\19506-B\20240125-104811.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	26-Jan-2024 03:35:54	Calib Date:	27-Apr-2023 10:37:00		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19506-B\20230427-82537.b\312023_04_27BB.0010.d				
Column 1 :	HP Plot (0.00 mm)		Det: 0FIDA		
Process Host:	CTX1645				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
1 Carbon dioxide	2.052	2.075	-0.023	477338040	H 145082	

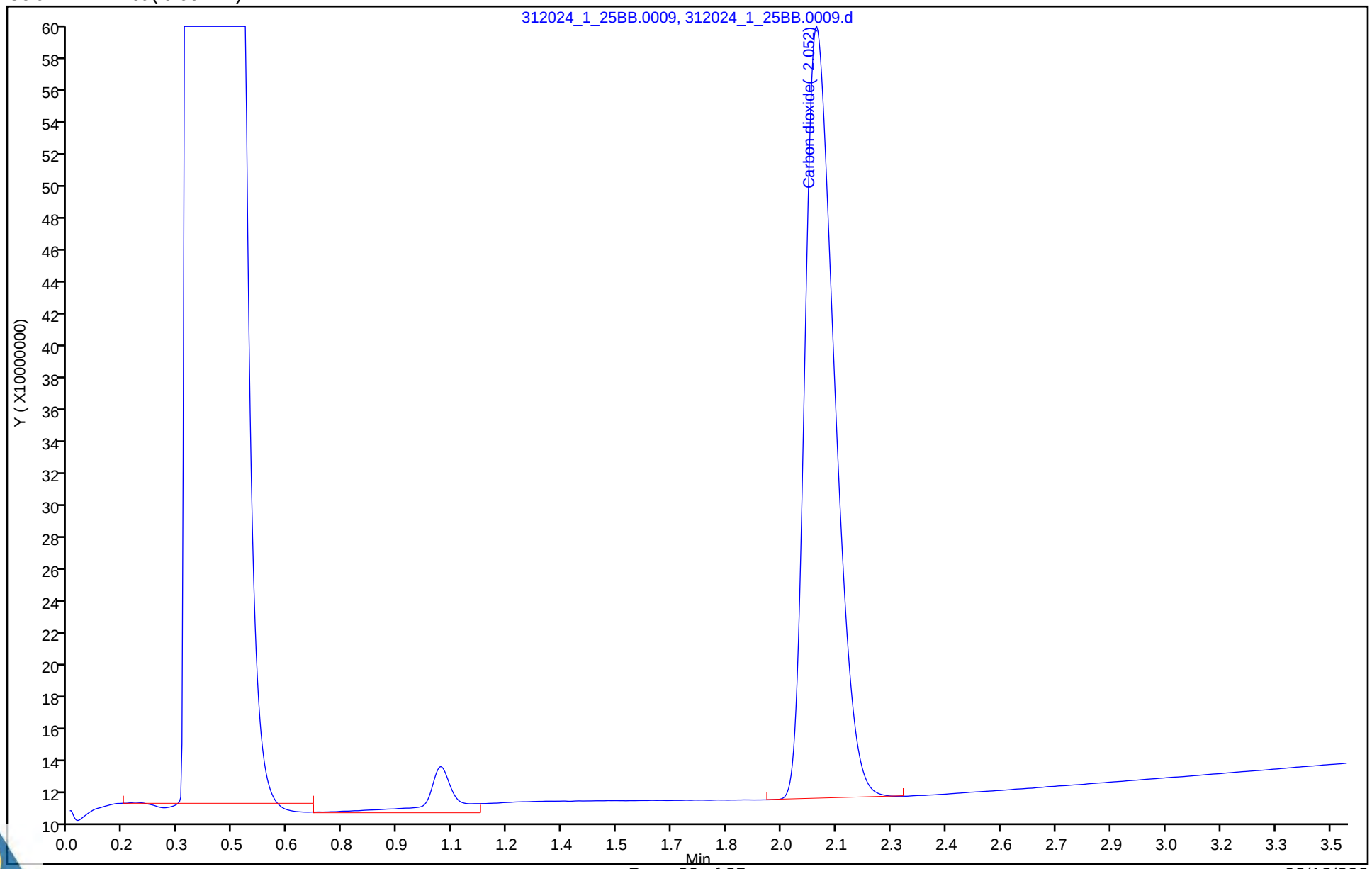
Report Date: 26-Jan-2024 03:35:56 Chrom Revision: 2.3 24-Jan-2024 12:19:54

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20240125-104811.b\312024_1_25BB.0009.d

Injection Date:	25-Jan-2024 11:21:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	410-158327-A-2-A	Lab Sample ID:	410-158327-2	Worklist Smp#:	9
Client ID:	16WW16_240118-FD				
Purge Vol:	1.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2		

Column: HP Plot (0.00 mm)



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-158327-1

SDG No.:

Client Sample ID: 16WW35-240118 Lab Sample ID: 410-158327-3

Matrix: Water Lab File ID: 312024_1_25BB.0010.d

Analysis Method: RSK-175 Date Collected: 01/18/2024 08:15

Sample wt/vol: 5(mL) Date Analyzed: 01/25/2024 11:28

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP Plot ID: 0.53(mm)

Purge Volume: Heated Purge: (Y/N) N pH: 7.0

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 466611 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	DL
124-38-9	Carbon dioxide	200000	M J1	12000	5600

Report Date: 26-Jan-2024 03:35:56 Chrom Revision: 2.3 24-Jan-2024 12:19:54

Eurofins Lancaster Laboratories Environment Testing, LLC

Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20240125-104811.b\312024_1_25BB.0010.d				
Lims ID:	410-158327-A-3-A				
Client ID:	16WW35_240118				
Sample Type:	Client				
Inject. Date:	25-Jan-2024 11:28:00	ALS Bottle#:	0	Worklist Smp#:	10
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	410-0104811-010				
Operator ID:		Instrument ID:	19506-B		
Method:	\\chromfs\Lancaster\ChromData\19506-B\20240125-104811.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	26-Jan-2024 03:35:54	Calib Date:	27-Apr-2023 10:37:00		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19506-B\20230427-82537.b\312023_04_27BB.0010.d				
Column 1 :	HP Plot (0.00 mm)		Det: 0FIDA		
Process Host:	CTX1645				
First Level Reviewer: LXF2		Date:	26-Jan-2024 03:35:36		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
1 Carbon dioxide	2.040	2.075	-0.035	650968488H	197855	a

QC Flag Legend

Processing Flags

H - Response Measured by Height

Review Flags

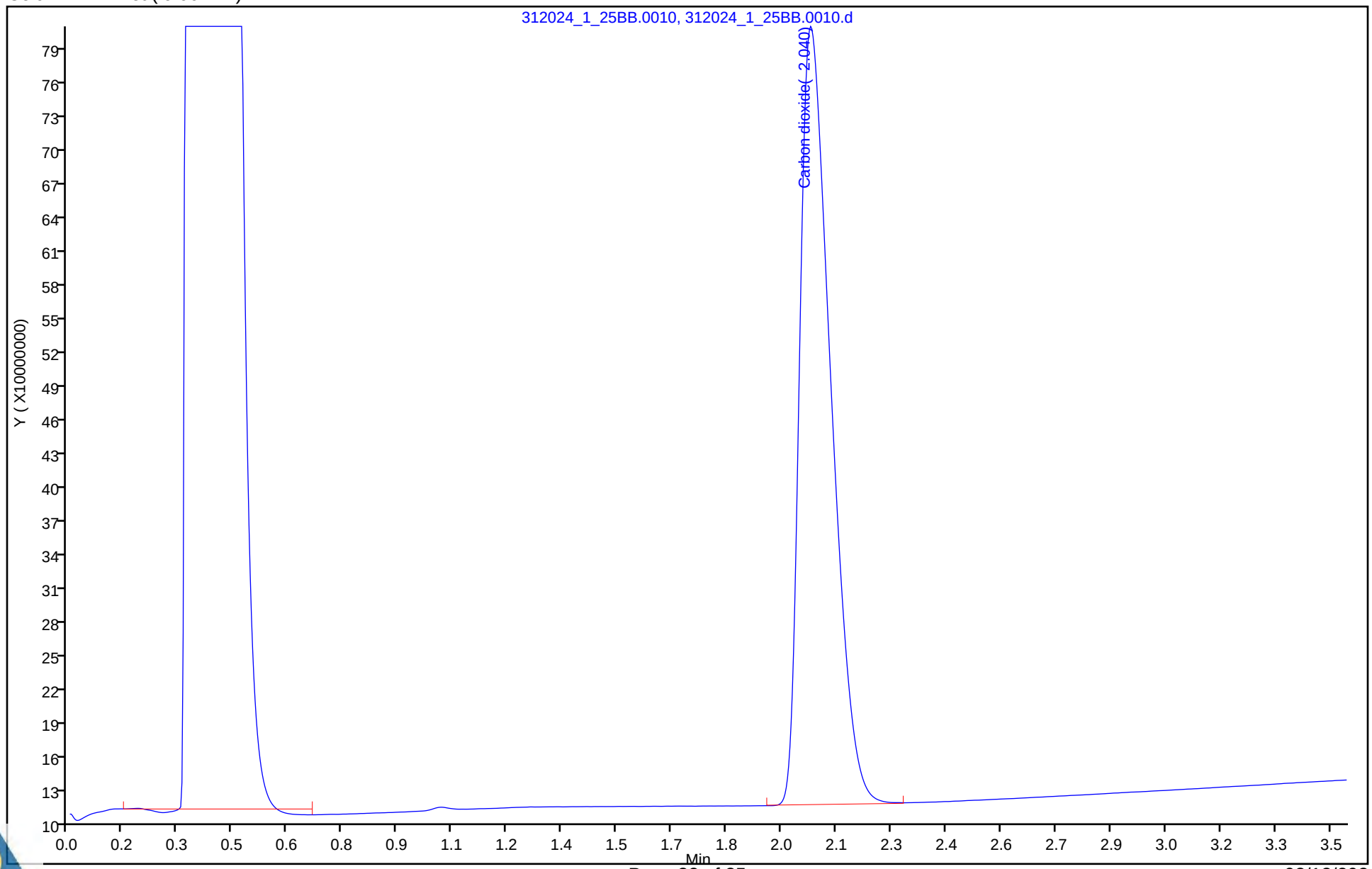
a - User Assigned ID

Report Date: 26-Jan-2024 03:35:56 Chrom Revision: 2.3 24-Jan-2024 12:19:54

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20240125-104811.b\312024_1_25BB.0010.d				
Injection Date:	25-Jan-2024 11:28:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	410-158327-A-3-A	Lab Sample ID:	410-158327-3	Worklist Smp#:	10
Client ID:	16WW35_240118				
Purge Vol:	1.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2		

Column: HP Plot (0.00 mm)



Report Date: 26-Jan-2024 03:35:56

Chrom Revision: 2.3 24-Jan-2024 12:19:54 Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

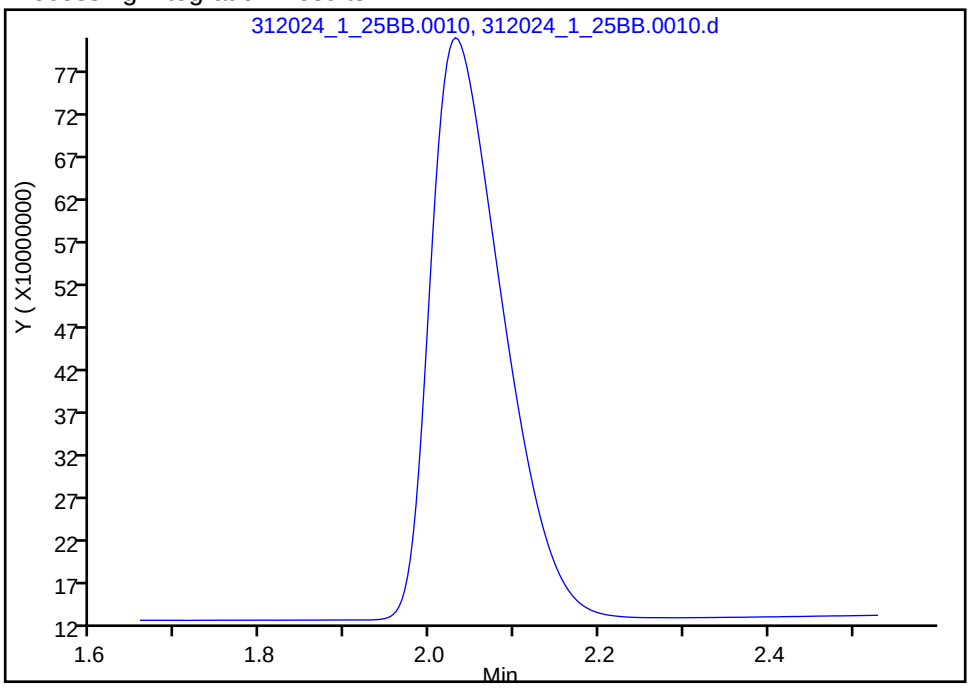
Data File:	\\chromfs\Lancaster\ChromData\19506-B\20240125-104811.b\312024_1_25BB.0010.d		
Injection Date:	25-Jan-2024 11:28:00	Instrument ID:	19506-B
Lims ID:	410-158327-A-3-A	Lab Sample ID:	410-158327-3
Client ID:	16WW35_240118		
Operator ID:		ALS Bottle#:	0 Worklist Smp#: 10
Purge Vol:	1.000 mL	Dil. Factor:	1.0000
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2
Column:	HP Plot (0.00 mm)	Detector	0FIDA

1 Carbon dioxide, CAS: 124-38-9

Signal: 1

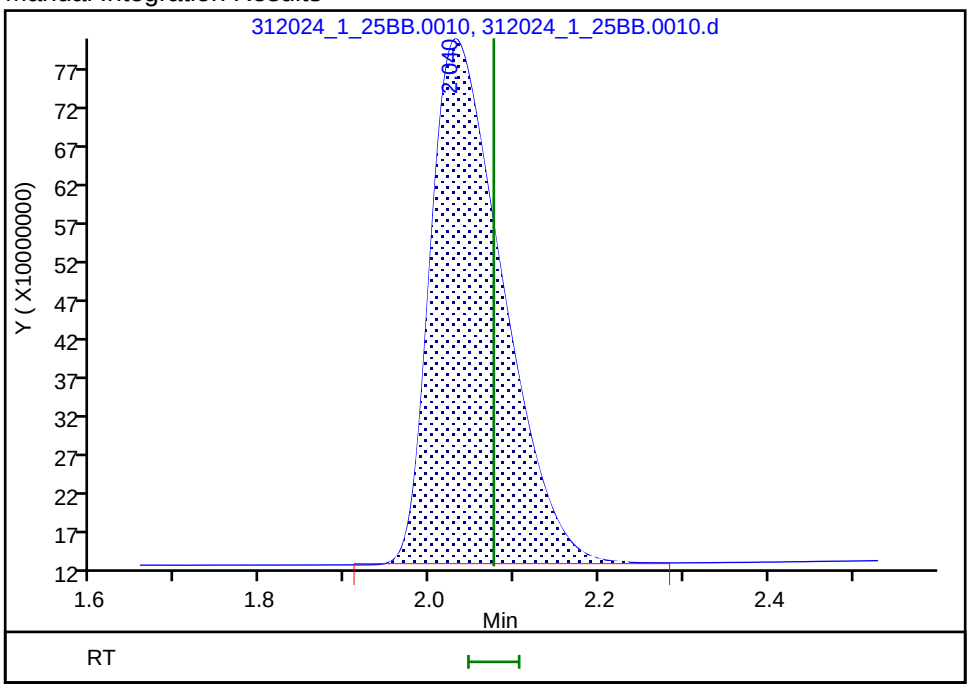
Not Detected
Expected RT: 2.08

Processing Integration Results



Manual Integration Results

RT: 2.04
Height: 650968488
Amount: 197855
Amount Units: ug/l



Reviewer: LXF2, 26-Jan-2024 03:35:35 -05:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-158327-1 Analy Batch No.: 369251

SDG No.:

Instrument ID: 19506-B GC Column: HP Plot ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/27/2023 09:59 Calibration End Date: 04/27/2023 10:37 Calibration ID: 49603

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-369251/5	312023_04_27BB.0005.d
Level 2	IC 410-369251/6	312023_04_27BB.0006.d
Level 3	ICRT 410-369251/7	312023_04_27BB.0007.d
Level 4	IC 410-369251/8	312023_04_27BB.0008.d
Level 5	IC 410-369251/9	312023_04_27BB.0009.d
Level 6	IC 410-369251/10	312023_04_27BB.0010.d

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
Carbon dioxide	2.060	2.059	2.054	2.043	2.024	1.983					2.024 - 2.084	2.037

FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-158327-1 Analy Batch No.: 369251

SDG No.:

Instrument ID: 19506-B GC Column: HP Plot ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/27/2023 09:59 Calibration End Date: 04/27/2023 10:37 Calibration ID: 49603

Calibration Files

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-369251/5	312023_04_27BB.0005.d
Level 2	IC 410-369251/6	312023_04_27BB.0006.d
Level 3	ICRT 410-369251/7	312023_04_27BB.0007.d
Level 4	IC 410-369251/8	312023_04_27BB.0008.d
Level 5	IC 410-369251/9	312023_04_27BB.0009.d
Level 6	IC 410-369251/10	312023_04_27BB.0010.d

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD /RSE	#	MAX %RSD /RSE	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
Carbon dioxide	3853.7 3132.6	3271.4 2761.6	3403.0	3318.5	Ave		3290.12214				10.8		20.0			

Note: The M1 coefficient is the same as Ave CF for an Ave curve type. RSD is calculated for Ave curve types. RSE is used for all other types.

FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-158327-1 Analy Batch No.: 369251

SDG No.:

Instrument ID: 19506-B GC Column: HP Plot ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/27/2023 09:59 Calibration End Date: 04/27/2023 10:37 Calibration ID: 49603

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 410-369251/5	312023_04_27BB.0005.d
Level 2	IC 410-369251/6	312023_04_27BB.0006.d
Level 3	ICRT 410-369251/7	312023_04_27BB.0007.d
Level 4	IC 410-369251/8	312023_04_27BB.0008.d
Level 5	IC 410-369251/9	312023_04_27BB.0009.d
Level 6	IC 410-369251/10	312023_04_27BB.0010.d

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
		LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Carbon dioxide	Ave	41411686 989211697	70308888	121893696	297170647	561047460	10746 358200	21492	35820	89550	179100

Curve Type Legend:
Ave = Average by Height

Report Date: 28-Apr-2023 07:19:05 Chrom Revision: 2.3 20-Apr-2023 08:27:48

Eurofins Lancaster Laboratories Environment Testing, LLC

Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19506-B\20230427-82537.b\312023_04_27BB.0005.d
Lims ID: ic
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 27-Apr-2023 09:59:00 ALS Bottle#: 0 Worklist Smp#: 5
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info:
Misc. Info.: 410-0082537-005
Operator ID: Instrument ID: 19506-B
Sublist: chrom-RSK_CO2_19506B*sub1

Method: \\chromfs\Lancaster\ChromData\19506-B\20230427-82537.b\RSK_CO2_19506B.m
Limit Group: GCV - RSK175 CO2
Last Update: 28-Apr-2023 07:19:05 Calib Date: 27-Apr-2023 10:37:00
Integrator: Genie
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\chromfs\Lancaster\ChromData\19506-B\20230427-82537.b\312023_04_27BB.0010.d

Column 1 : HP Plot (0.00 mm) Det: 0FIDA
Process Host: CTX1628

First Level Reviewer: WN7O Date: 28-Apr-2023 07:18:31

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Carbon dioxide	2.060	2.054	0.006	41411686H	10746	12587	M

QC Flag Legend

Processing Flags
H - Response Measured by Height
Review Flags
M - Manually Integrated

Reagents:

EPH_CO2MS_00004 Amount Added: 30.00 Units: uL

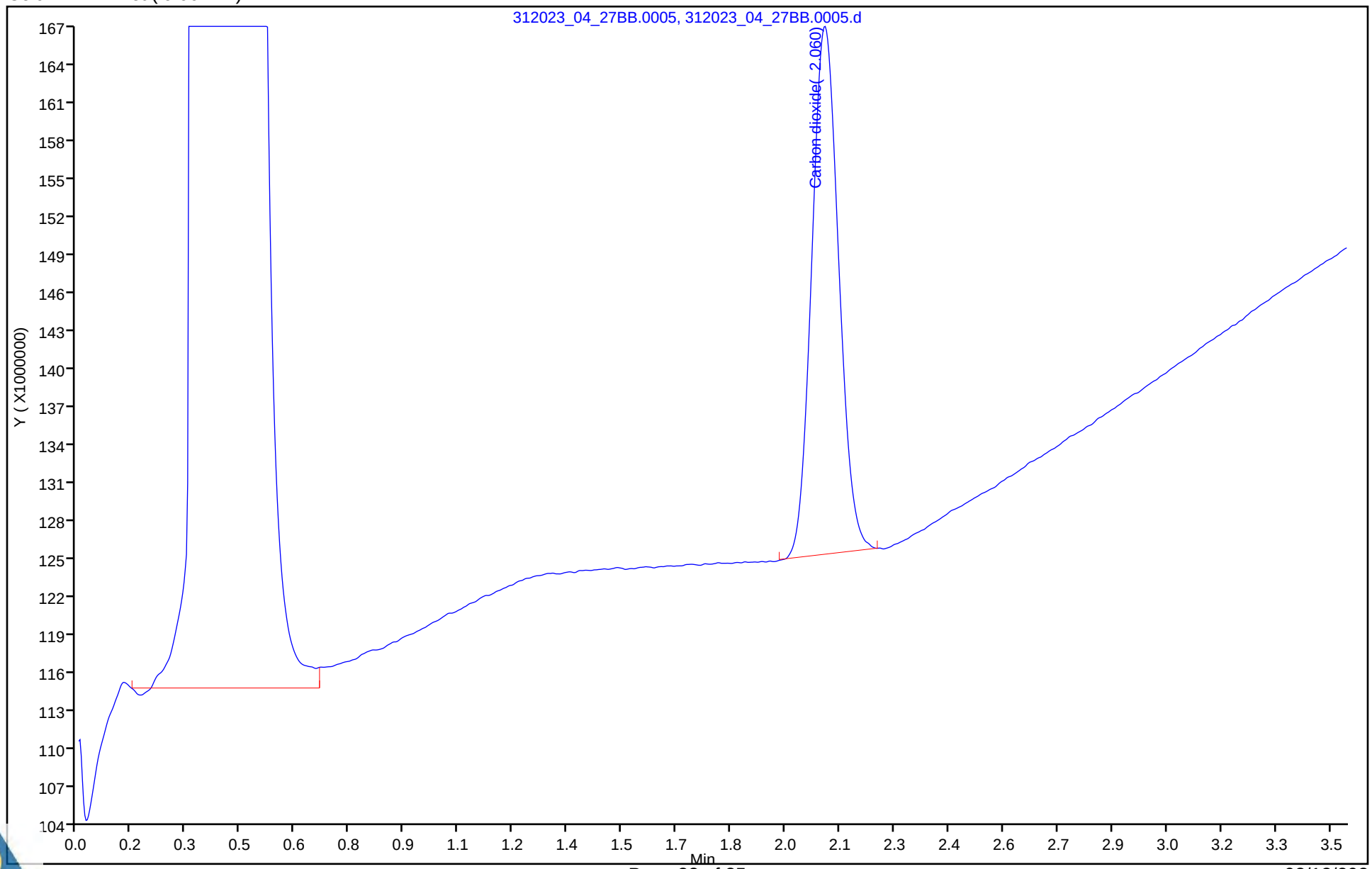
Report Date: 28-Apr-2023 07:19:05 Chrom Revision: 2.3 20-Apr-2023 08:27:48

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20230427-82537.b\312023_04_27BB.0005.d

Injection Date:	27-Apr-2023 09:59:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	ic			Worklist Smp#:	5
Client ID:					
Purge Vol:	1.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2		

Column: HP Plot (0.00 mm)



Report Date: 28-Apr-2023 07:19:05 Chrom Revision: 2.3 20-Apr-2023 08:27:48 Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

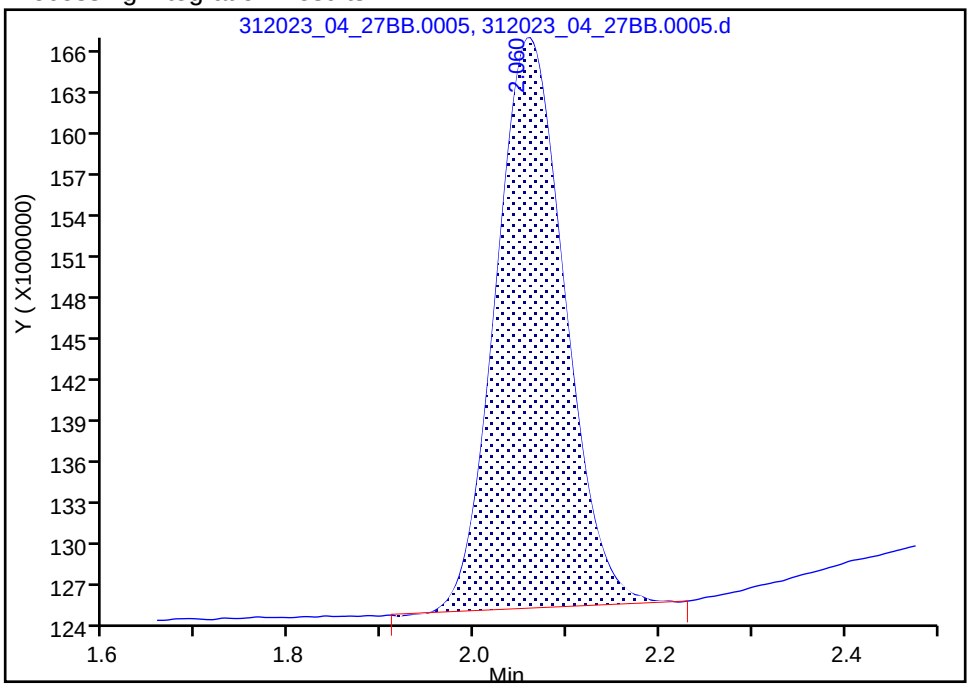
Data File: \\chromfs\Lancaster\ChromData\19506-B\20230427-82537.b\312023_04_27BB.0005.d
Injection Date: 27-Apr-2023 09:59:00 Instrument ID: 19506-B
Lims ID: ic
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 5
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Method: RSK_CO2_19506B Limit Group: GCV - RSK175 CO2
Column: HP Plot (0.00 mm) Detector 0FIDA

1 Carbon dioxide, CAS: 124-38-9

Signal: 1

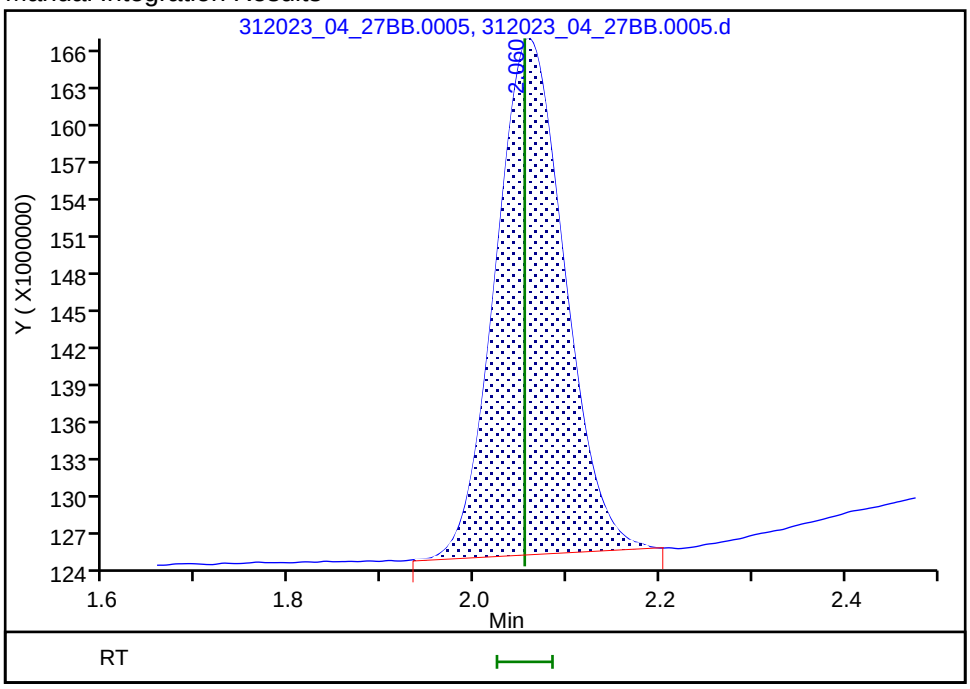
Processing Integration Results

RT: 2.06
Height: 40493056
Amount: 12361
Amount Units: ug/l



Manual Integration Results

RT: 2.06
Height: 41411686
Amount: 12587
Amount Units: ug/l



Reviewer: WN7O, 28-Apr-2023 07:18:28
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Report Date: 28-Apr-2023 07:19:06 Chrom Revision: 2.3 20-Apr-2023 08:27:48

Eurofins Lancaster Laboratories Environment Testing, LLC

Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20230427-82537.b\312023_04_27BB.0006.d				
Lims ID:	ic				
Client ID:					
Sample Type:	IC	Calib Level:	2		
Inject. Date:	27-Apr-2023 10:06:00	ALS Bottle#:	0	Worklist Smp#:	6
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	410-0082537-006				
Operator ID:		Instrument ID:	19506-B		
Sublist:	chrom-RSK_CO2_19506B*sub1				
Method:	\\chromfs\Lancaster\ChromData\19506-B\20230427-82537.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	28-Apr-2023 07:19:06	Calib Date:	27-Apr-2023 10:37:00		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19506-B\20230427-82537.b\312023_04_27BB.0010.d				
Column 1 :	HP Plot (0.00 mm)		Det: 0FIDA		
Process Host:	CTX1628				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Carbon dioxide	2.059	2.054	0.005	70308888H	21492	21370	

Reagents:

EPH_CO2MS_00004 Amount Added: 60.00 Units: uL

Report Date: 28-Apr-2023 07:19:06 Chrom Revision: 2.3 20-Apr-2023 08:27:48

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20230427-82537.b\312023_04_27BB.0006.d

Injection Date: 27-Apr-2023 10:06:00 Instrument ID: 19506-B Operator ID:

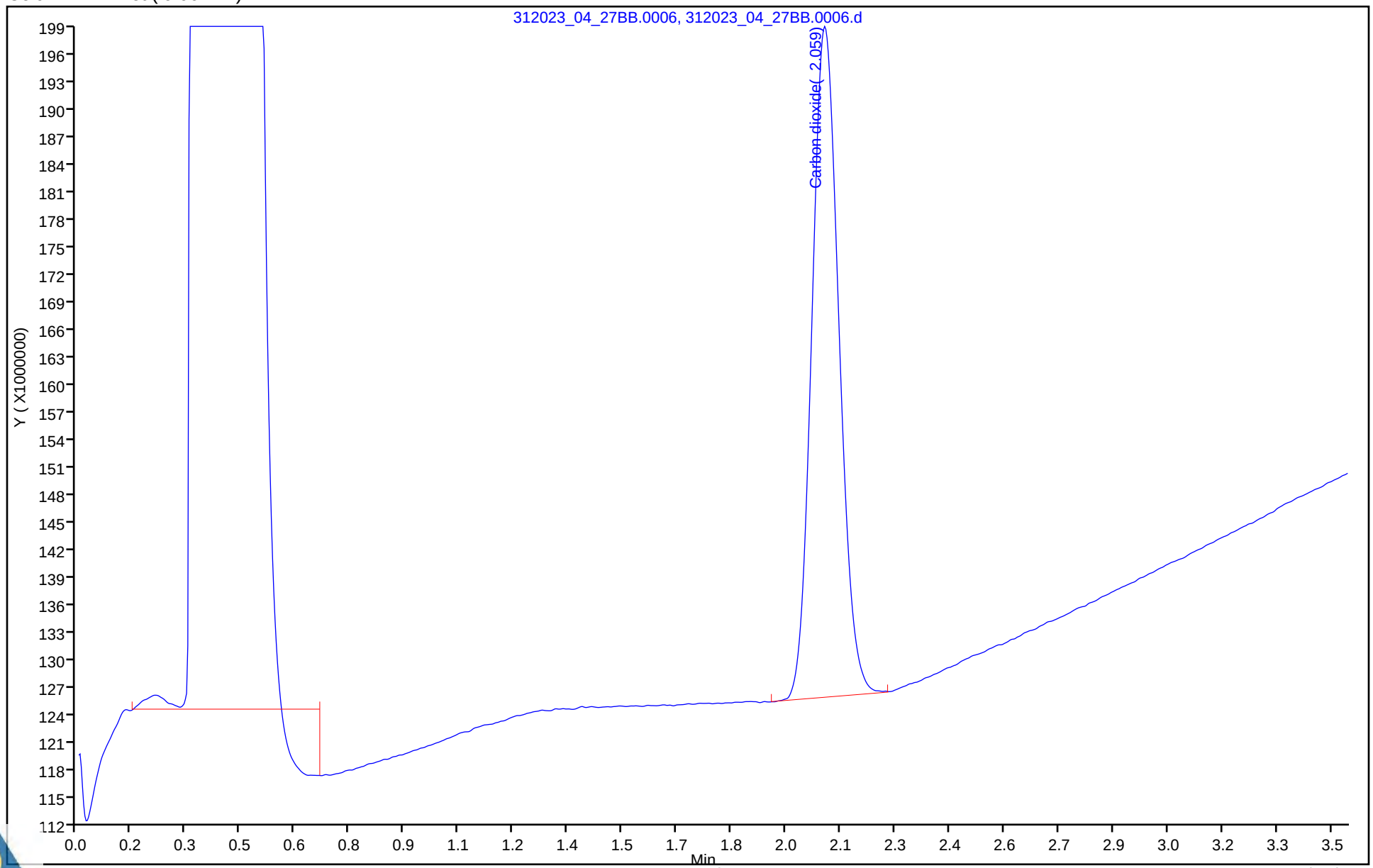
Lims ID: ic Worklist Smp#: 6

Client ID:

Purge Vol: 1.000 mL Dil. Factor: 1.0000 ALS Bottle#: 0

Method: RSK_CO2_19506B Limit Group: GCV - RSK175 CO2

Column: HP Plot (0.00 mm)



Report Date: 28-Apr-2023 07:19:08 Chrom Revision: 2.3 20-Apr-2023 08:27:48

Eurofins Lancaster Laboratories Environment Testing, LLC

Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20230427-82537.b\312023_04_27BB.0007.d				
Lims ID:	icrt				
Client ID:					
Sample Type:	ICRT	Calib Level:	3		
Inject. Date:	27-Apr-2023 10:14:00	ALS Bottle#:	0	Worklist Smp#:	7
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	410-0082537-007				
Operator ID:		Instrument ID:	19506-B		
Sublist:	chrom-RSK_CO2_19506B*sub1				
Method:	\\chromfs\Lancaster\ChromData\19506-B\20230427-82537.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	28-Apr-2023 07:19:08	Calib Date:	27-Apr-2023 10:37:00		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19506-B\20230427-82537.b\312023_04_27BB.0010.d				
Column 1 :	HP Plot (0.00 mm)		Det: 0FIDA		
Process Host:	CTX1628				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Carbon dioxide	2.054	2.054	0.000	121893696	H 35820	37048	

Reagents:

EPH_CO2MS_00004 Amount Added: 100.00 Units: uL

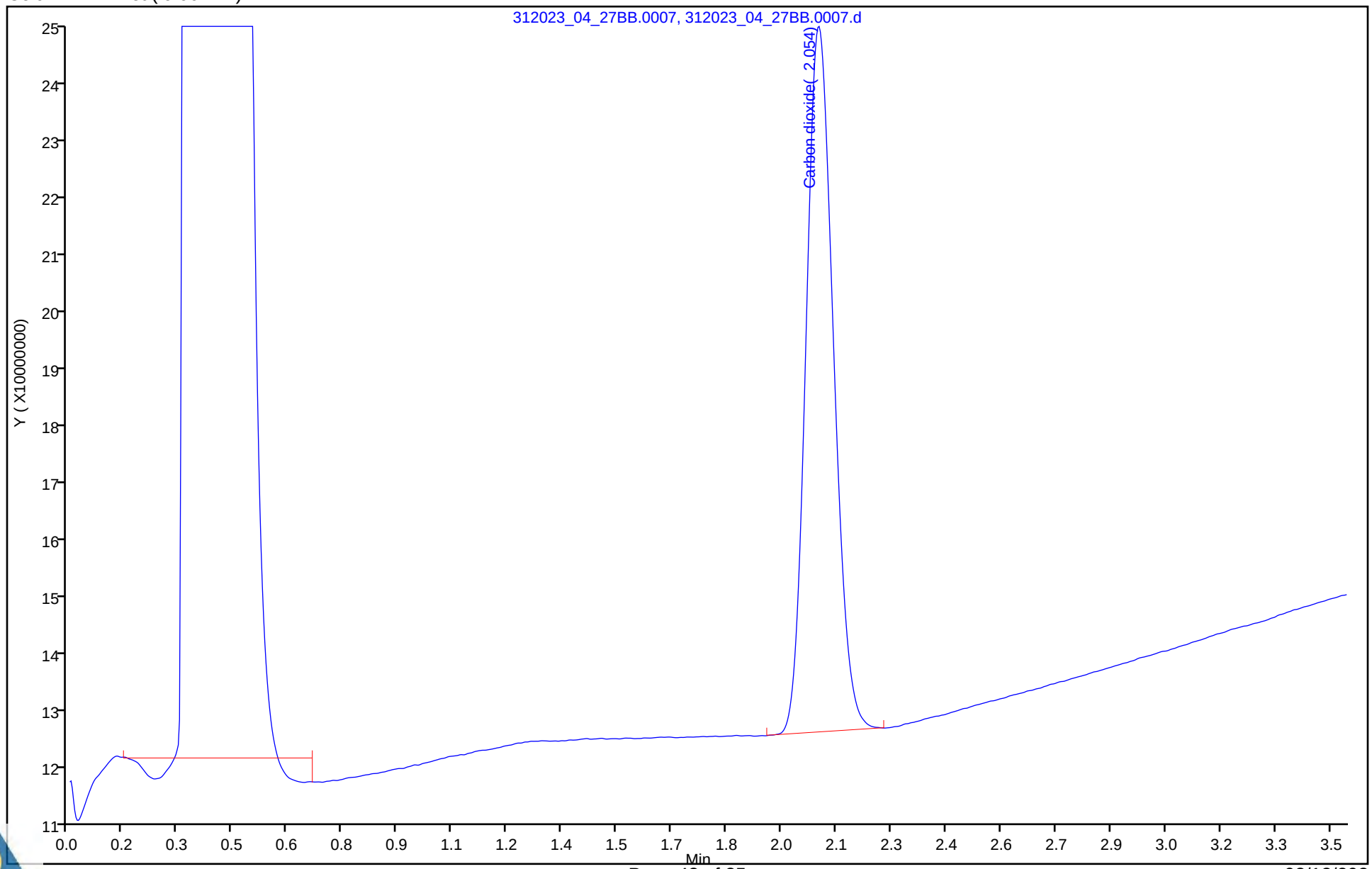
Report Date: 28-Apr-2023 07:19:08 Chrom Revision: 2.3 20-Apr-2023 08:27:48

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20230427-82537.b\312023_04_27BB.0007.d

Injection Date:	27-Apr-2023 10:14:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	icrt			Worklist Smp#:	7
Client ID:					
Purge Vol:	1.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2		

Column: HP Plot (0.00 mm)



Report Date: 28-Apr-2023 07:19:09 Chrom Revision: 2.3 20-Apr-2023 08:27:48

Eurofins Lancaster Laboratories Environment Testing, LLC

Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20230427-82537.b\312023_04_27BB.0008.d				
Lims ID:	ic				
Client ID:					
Sample Type:	IC	Calib Level:	4		
Inject. Date:	27-Apr-2023 10:22:00	ALS Bottle#:	0	Worklist Smp#:	8
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	410-0082537-008				
Operator ID:		Instrument ID:	19506-B		
Sublist:	chrom-RSK_CO2_19506B*sub1				
Method:	\\chromfs\Lancaster\ChromData\19506-B\20230427-82537.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	28-Apr-2023 07:19:09	Calib Date:	27-Apr-2023 10:37:00		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19506-B\20230427-82537.b\312023_04_27BB.0010.d				
Column 1 :	HP Plot (0.00 mm)		Det: 0FIDA		
Process Host:	CTX1628				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Carbon dioxide	2.043	2.054	-0.011	297170647	H 89550	90322	

Reagents:

EPH_CO2MS_00004 Amount Added: 250.00 Units: uL

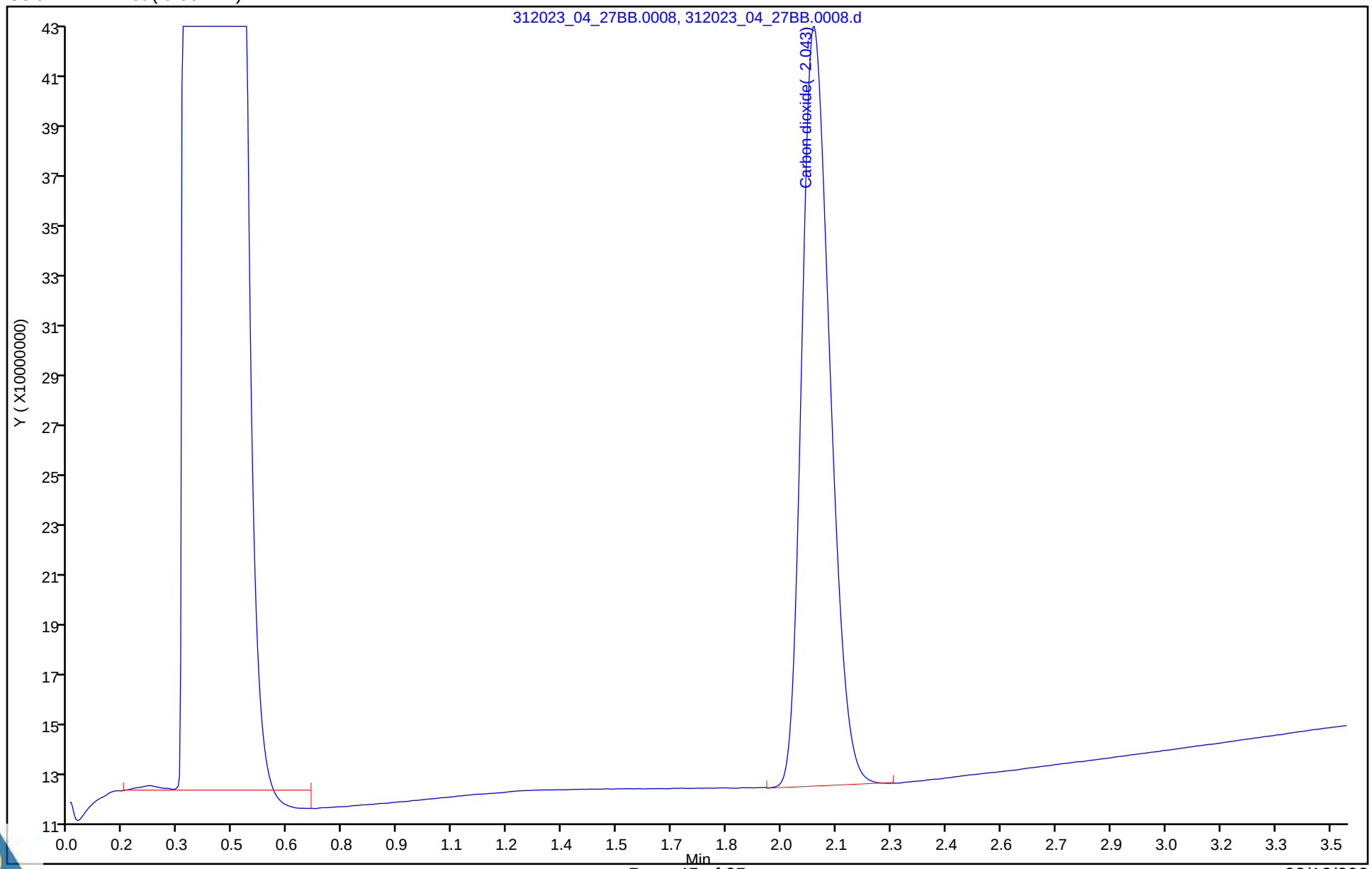
Report Date: 28-Apr-2023 07:19:09 Chrom Revision: 2.3 20-Apr-2023 08:27:48

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20230427-82537.b\312023_04_27BB.0008.d

Injection Date:	27-Apr-2023 10:22:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	ic			Worklist Smp#:	8
Client ID:					
Purge Vol:	1.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2		

Column: HP Plot (0.00 mm)



Report Date: 28-Apr-2023 07:19:10 Chrom Revision: 2.3 20-Apr-2023 08:27:48

Eurofins Lancaster Laboratories Environment Testing, LLC

Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20230427-82537.b\312023_04_27BB.0009.d				
Lims ID:	ic				
Client ID:					
Sample Type:	IC	Calib Level:	5		
Inject. Date:	27-Apr-2023 10:30:00	ALS Bottle#:	0	Worklist Smp#:	9
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	410-0082537-009				
Operator ID:		Instrument ID:	19506-B		
Sublist:	chrom-RSK_CO2_19506B*sub1				
Method:	\\chromfs\Lancaster\ChromData\19506-B\20230427-82537.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	28-Apr-2023 07:19:10	Calib Date:	27-Apr-2023 10:37:00		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19506-B\20230427-82537.b\312023_04_27BB.0010.d				
Column 1 :	HP Plot (0.00 mm)		Det: 0FIDA		
Process Host:	CTX1628				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Carbon dioxide	2.024	2.054	-0.030	561047460	H 179100	170525	

Reagents:

EPH_CO2MS_00004 Amount Added: 500.00 Units: uL

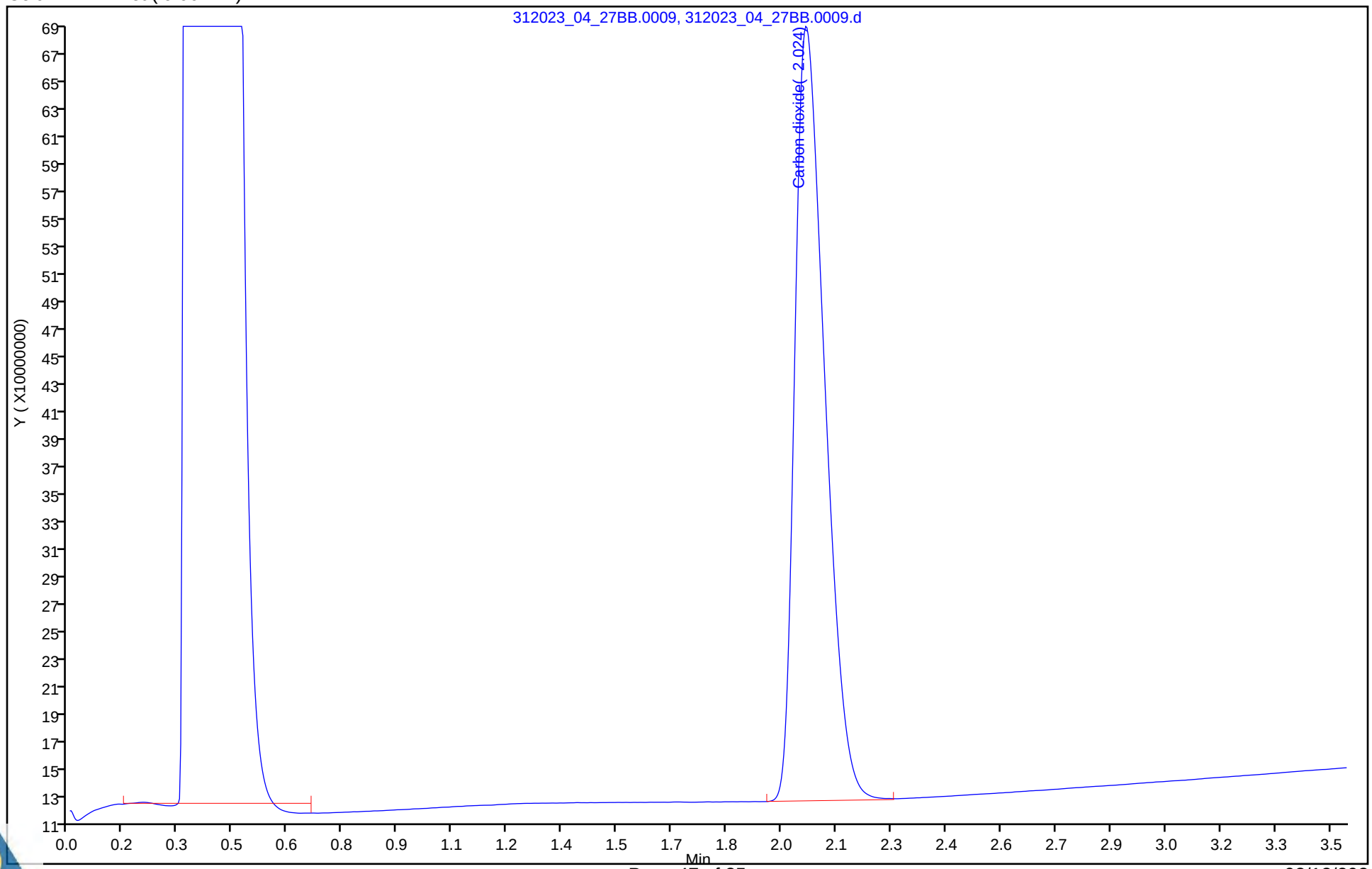
Report Date: 28-Apr-2023 07:19:10 Chrom Revision: 2.3 20-Apr-2023 08:27:48

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20230427-82537.b\312023_04_27BB.0009.d

Injection Date:	27-Apr-2023 10:30:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	ic			Worklist Smp#:	9
Client ID:					
Purge Vol:	1.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2		

Column: HP Plot (0.00 mm)



Report Date: 28-Apr-2023 07:19:12 Chrom Revision: 2.3 20-Apr-2023 08:27:48

Eurofins Lancaster Laboratories Environment Testing, LLC

Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20230427-82537.b\312023_04_27BB.0010.d				
Lims ID:	ic				
Client ID:					
Sample Type:	IC	Calib Level:	6		
Inject. Date:	27-Apr-2023 10:37:00	ALS Bottle#:	0	Worklist Smp#:	10
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	410-0082537-010				
Operator ID:		Instrument ID:	19506-B		
Sublist:	chrom-RSK_CO2_19506B*sub1				
Method:	\\chromfs\Lancaster\ChromData\19506-B\20230427-82537.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	28-Apr-2023 07:19:11	Calib Date:	27-Apr-2023 10:37:00		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19506-B\20230427-82537.b\312023_04_27BB.0010.d				
Column 1 :	HP Plot (0.00 mm)		Det: 0FIDA		
Process Host:	CTX1628				
First Level Reviewer: WN7O		Date:	28-Apr-2023 07:17:52		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Carbon dioxide	1.983	2.054	-0.071	989211697H	358200	300661	Ma

QC Flag Legend

Processing Flags

H - Response Measured by Height

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

EPH_CO2MS_00004 Amount Added: 1000.00 Units: uL

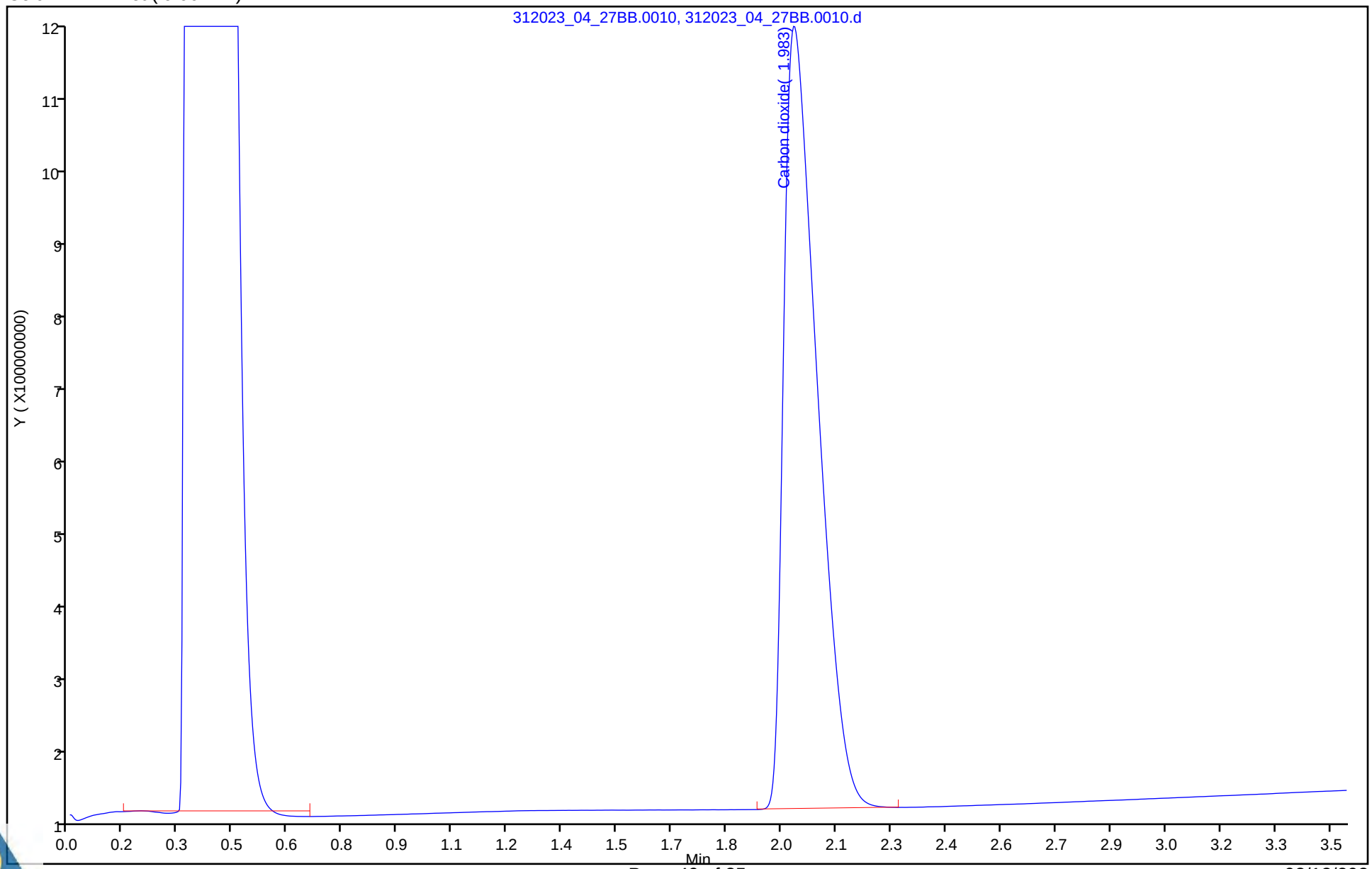
Report Date: 28-Apr-2023 07:19:12 Chrom Revision: 2.3 20-Apr-2023 08:27:48

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20230427-82537.b\312023_04_27BB.0010.d

Injection Date:	27-Apr-2023 10:37:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	ic			Worklist Smp#:	10
Client ID:					
Purge Vol:	1.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2		

Column: HP Plot (0.00 mm)



Report Date: 28-Apr-2023 07:19:12 Chrom Revision: 2.3 20-Apr-2023 08:27:48 Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

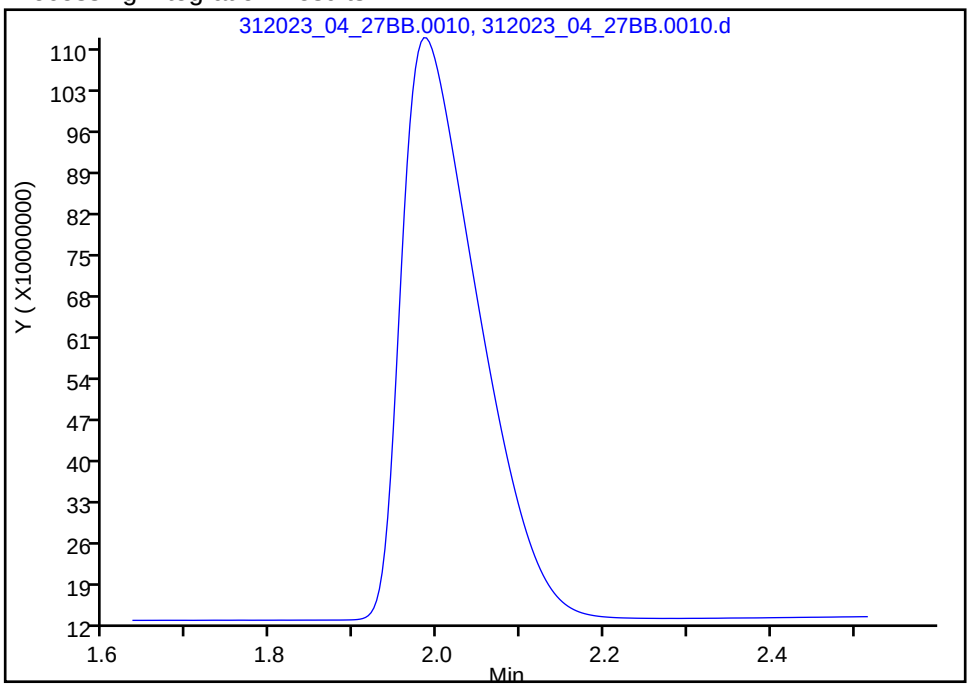
Data File:	\\chromfs\Lancaster\ChromData\19506-B\20230427-82537.b\312023_04_27BB.0010.d		
Injection Date:	27-Apr-2023 10:37:00	Instrument ID:	19506-B
Lims ID:	ic		
Client ID:			
Operator ID:		ALS Bottle#:	0 Worklist Smp#: 10
Purge Vol:	1.000 mL	Dil. Factor:	1.0000
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2
Column:	HP Plot (0.00 mm)	Detector	0FIDA

1 Carbon dioxide, CAS: 124-38-9

Signal: 1

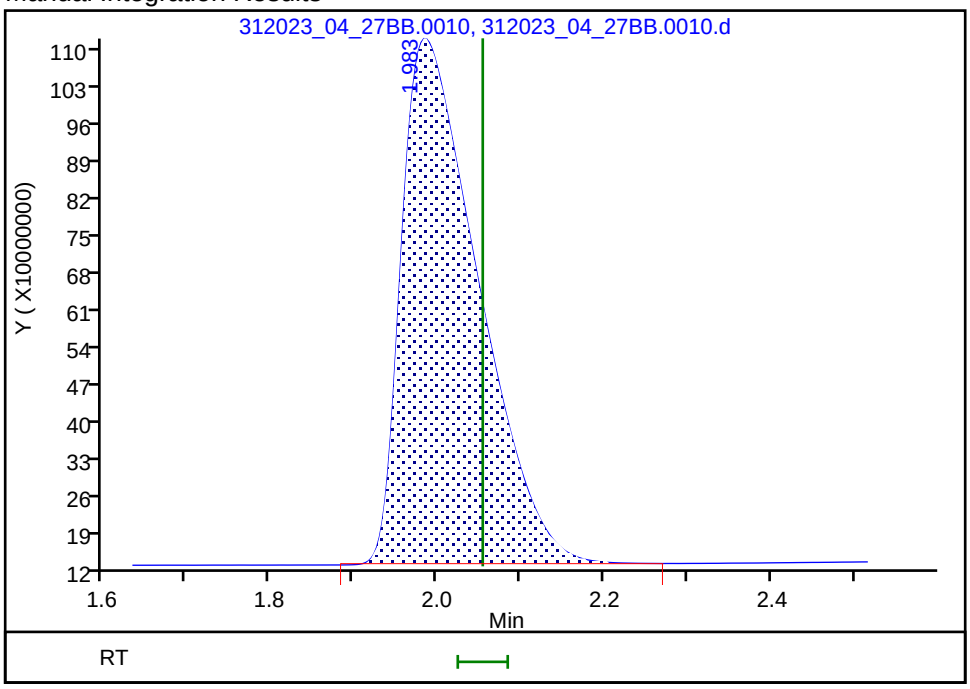
Not Detected
Expected RT: 2.05

Processing Integration Results



Manual Integration Results

RT: 1.98
Height: 989211697
Amount: 300661
Amount Units: ug/l



Reviewer: WN7O, 28-Apr-2023 07:17:41
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

Calibration / Carbon dioxide

Curve Type:	Average
Weighting:	Conc_Sq
Origin:	Force
Dependency:	Response
Calib Mode:	ESTD
Response Base:	HEIGHT
RF Rounding:	0

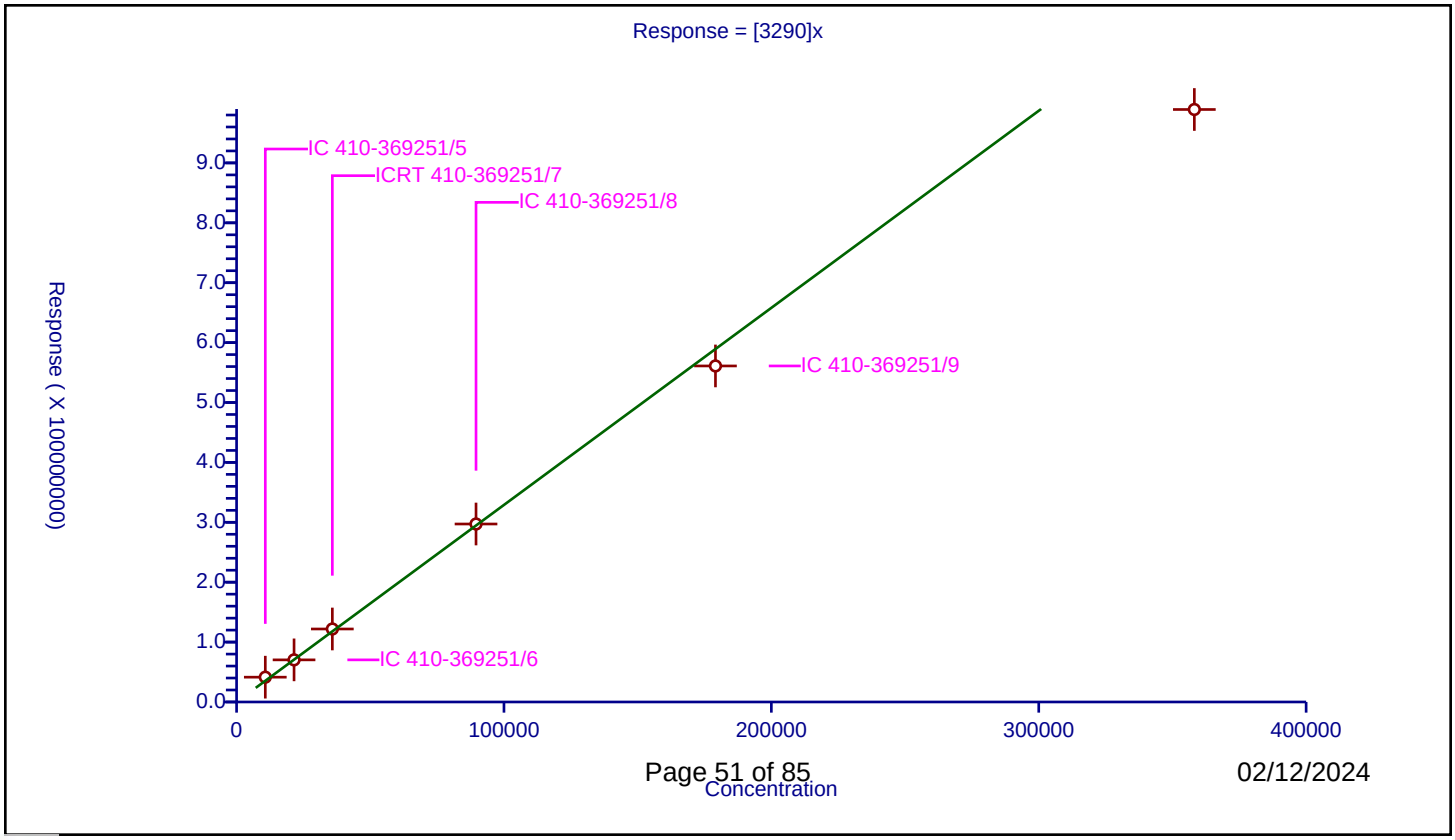
Curve Coefficients

Intercept:	0
Slope:	3290

Error Coefficients

Standard Error:	85700000
Relative Standard Error:	10.8
Correlation Coefficient:	0.995
Coefficient of Determination (Adjusted):	0.977

ID	Level	Concentration	Response	IS Amount	IS Response	RF	Used
1	IC 410-369251/5	10746.0	41411686.0			3853.683789	Y
2	IC 410-369251/6	21492.0	70308888.0			3271.398102	Y
3	ICRT 410-369251/7	35820.0	121893696.0			3402.950754	Y
4	IC 410-369251/8	89550.0	297170647.0			3318.48852	Y
5	IC 410-369251/9	179100.0	561047460.0			3132.5933	Y
6	IC 410-369251/10	358200.0	989211697.0			2761.618361	Y



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-158327-1

SDG No.:

Lab Sample ID: ICV 410-369251/13 Calibration Date: 04/27/2023 11:01

Instrument ID: 19506-B Calib Start Date: 04/27/2023 09:59

GC Column: HP Plot ID: 0.53(mm) Calib End Date: 04/27/2023 10:37

Lab File ID: 312023_04_27BB.0013.d Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Carbon dioxide	Ave	3290	3122		33200	35000	-5.1	15.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-158327-1

SDG No.:

Lab Sample ID: ICV 410-369251/13 Calibration Date: 04/27/2023 11:01

Instrument ID: 19506-B Calib Start Date: 04/27/2023 09:59

GC Column: HP Plot ID: 0.53(mm) Calib End Date: 04/27/2023 10:37

Lab File ID: 312023_04_27BB.0013.d Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Carbon dioxide	2.06	2.02	2.08

Report Date: 28-Apr-2023 08:51:00 Chrom Revision: 2.3 20-Apr-2023 08:27:48

Eurofins Lancaster Laboratories Environment Testing, LLC

Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20230427-82537.b\312023_04_27BB.0013.d				
Lims ID:	icv				
Client ID:					
Sample Type:	ICV				
Inject. Date:	27-Apr-2023 11:01:00	ALS Bottle#:	0	Worklist Smp#:	13
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	410-0082537-013				
Operator ID:		Instrument ID:	19506-B		
Sublist:					
Method:	\\chromfs\Lancaster\ChromData\19506-B\20230427-82537.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	28-Apr-2023 08:50:24	Calib Date:	27-Apr-2023 10:37:00		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19506-B\20230427-82537.b\312023_04_27BB.0010.d				
Column 1 :	HP Plot (0.00 mm)		Det: 0FIDA		
Process Host:	CTX1654				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Carbon dioxide	2.057	2.054	0.003	109307674	H 35008	33223	

Reagents:

EPH_CO2ICV_00002 Amount Added: 320.00 Units: uL

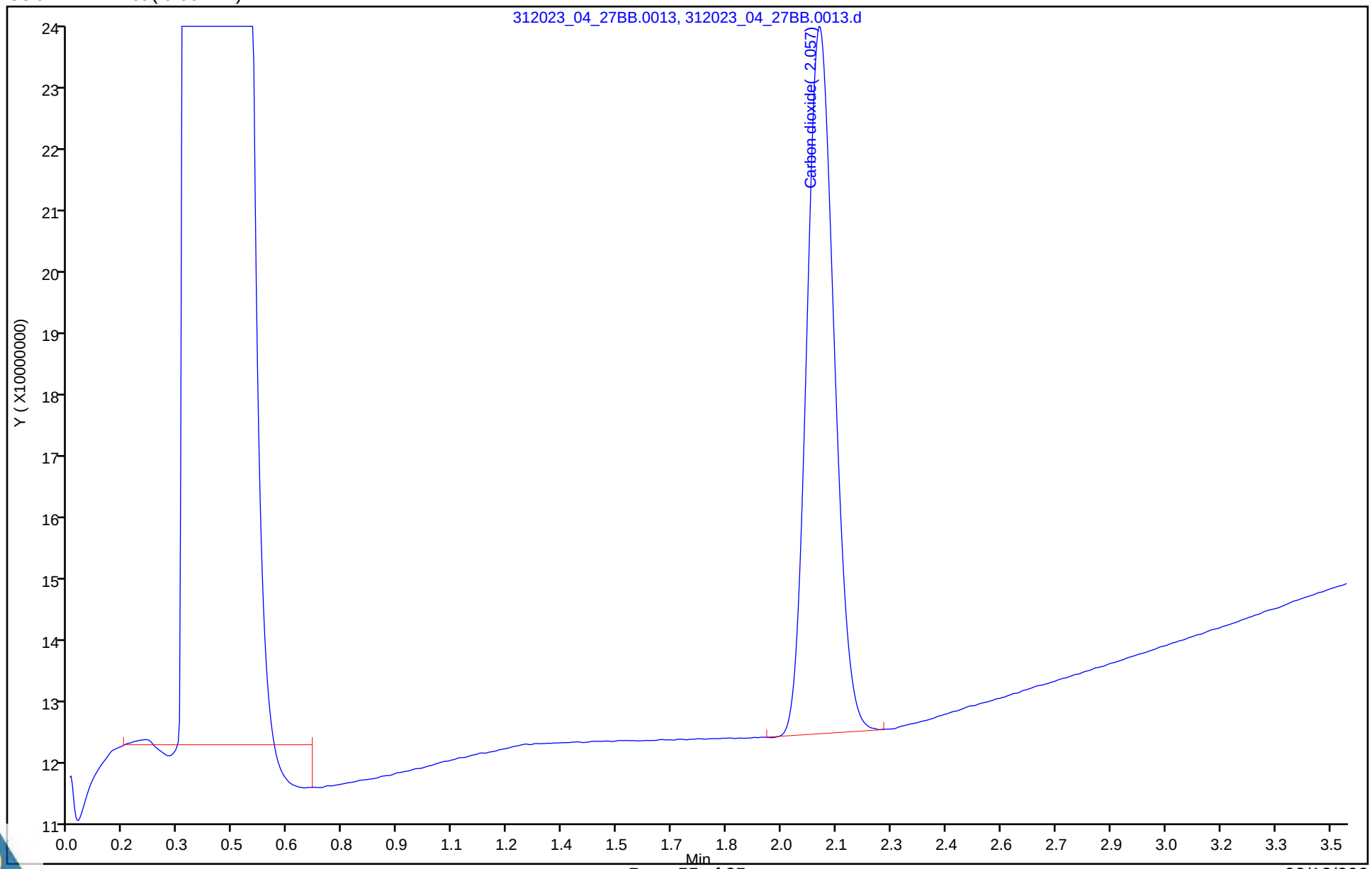
Report Date: 28-Apr-2023 08:51:00 Chrom Revision: 2.3 20-Apr-2023 08:27:48

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20230427-82537.b\312023_04_27BB.0013.d

Injection Date:	27-Apr-2023 11:01:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	icv			Worklist Smp#:	13
Client ID:					
Purge Vol:	1.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2		

Column: HP Plot (0.00 mm)



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-158327-1

SDG No.:

Lab Sample ID: CCVRT 410-466611/2 Calibration Date: 01/25/2024 10:15

Instrument ID: 19506-B Calib Start Date: 04/27/2023 09:59

GC Column: HP Plot ID: 0.53(mm) Calib End Date: 04/27/2023 10:37

Lab File ID: 312024_1_25BB.0002.d Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Carbon dioxide	Ave	3290	3663		39900	35800	11.3	15.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-158327-1

SDG No.:

Lab Sample ID: CCVRT 410-466611/2 Calibration Date: 01/25/2024 10:15

Instrument ID: 19506-B Calib Start Date: 04/27/2023 09:59

GC Column: HP Plot ID: 0.53(mm) Calib End Date: 04/27/2023 10:37

Lab File ID: 312024_1_25BB.0002.d Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Carbon dioxide	2.08	2.05	2.11

Report Date: 26-Jan-2024 03:35:54 Chrom Revision: 2.3 24-Jan-2024 12:19:54

Eurofins Lancaster Laboratories Environment Testing, LLC

Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20240125-104811.b\312024_1_25BB.0002.d				
Lims ID:	ccvrt				
Client ID:					
Sample Type:	CCVRT				
Inject. Date:	25-Jan-2024 10:15:00	ALS Bottle#:	0	Worklist Smp#:	2
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:	ccvrt				
Misc. Info.:	410-0104811-002				
Operator ID:		Instrument ID:	19506-B		
Sublist:	chrom-RSK_CO2_19506B*sub1				
Method:	\\chromfs\Lancaster\ChromData\19506-B\20240125-104811.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	26-Jan-2024 03:35:54	Calib Date:	27-Apr-2023 10:37:00		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19506-B\20230427-82537.b\312023_04_27BB.0010.d				
Column 1 :	HP Plot (0.00 mm)		Det: 0FIDA		
Process Host:	CTX1645				
First Level Reviewer: HQR6		Date:	25-Jan-2024 10:49:48		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Carbon dioxide	2.075	2.075	0.000	131211668	H 35820	39880	

QC Flag Legend

Processing Flags

H - Response Measured by Height

Reagents:

EPH_CO2MS_00006 Amount Added: 100.00 Units: uL

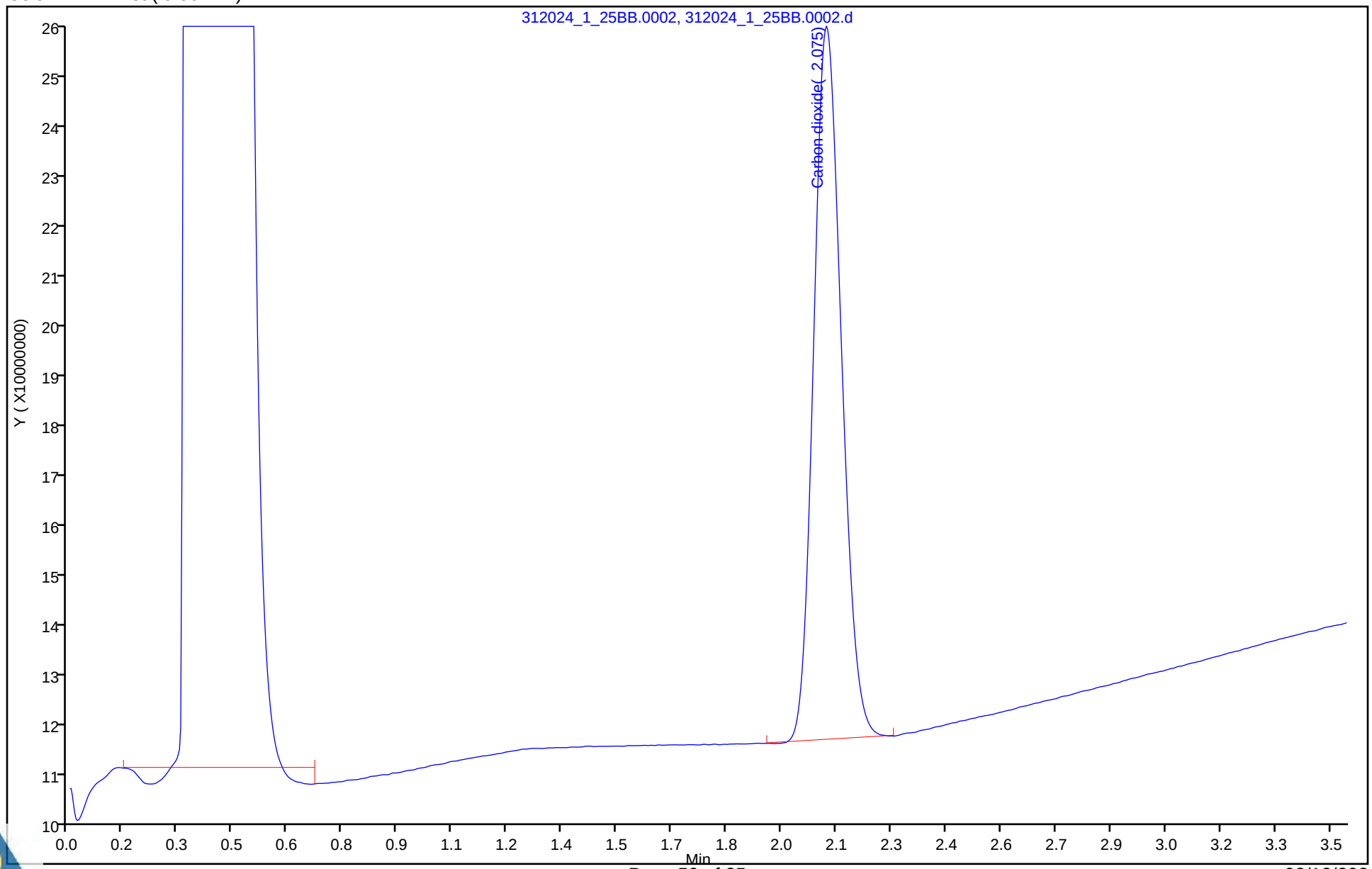
Report Date: 26-Jan-2024 03:35:54 Chrom Revision: 2.3 24-Jan-2024 12:19:54

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20240125-104811.b\312024_1_25BB.0002.d

Injection Date:	25-Jan-2024 10:15:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	ccvrt			Worklist Smp#:	2
Client ID:					
Purge Vol:	1.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2		

Column: HP Plot (0.00 mm)



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-158327-1

SDG No.:

Lab Sample ID: CCV 410-466611/13 Calibration Date: 01/25/2024 11:51

Instrument ID: 19506-B Calib Start Date: 04/27/2023 09:59

GC Column: HP Plot ID: 0.53(mm) Calib End Date: 04/27/2023 10:37

Lab File ID: 312024_1_25BB.0013.d Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Carbon dioxide	Ave	3290	3513		38200	35800	6.8	15.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-158327-1

SDG No.:

Lab Sample ID: CCV 410-466611/13
Calibration Date: 01/25/2024 11:51

Instrument ID: 19506-B
Calib Start Date: 04/27/2023 09:59

GC Column: HP Plot ID: 0.53(mm)
Calib End Date: 04/27/2023 10:37

Lab File ID: 312024_1_25BB.0013.d
Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Carbon dioxide	2.08	2.05	2.11

Report Date: 26-Jan-2024 03:35:57 Chrom Revision: 2.3 24-Jan-2024 12:19:54

Eurofins Lancaster Laboratories Environment Testing, LLC

Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20240125-104811.b\312024_1_25BB.0013.d				
Lims ID:	ccv				
Client ID:					
Sample Type:	CCV				
Inject. Date:	25-Jan-2024 11:51:00	ALS Bottle#:	0	Worklist Smp#:	13
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	410-0104811-013				
Operator ID:		Instrument ID:	19506-B		
Sublist:	chrom-RSK_CO2_19506B*sub1				
Method:	\\chromfs\Lancaster\ChromData\19506-B\20240125-104811.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	26-Jan-2024 03:35:57	Calib Date:	27-Apr-2023 10:37:00		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19506-B\20230427-82537.b\312023_04_27BB.0010.d				
Column 1 :	HP Plot (0.00 mm)		Det: 0FIDA		
Process Host:	CTX1645				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Carbon dioxide	2.077	2.075	0.002	125827924	H 35820	38244	

Reagents:

EPH_CO2MS_00006 Amount Added: 100.00 Units: uL

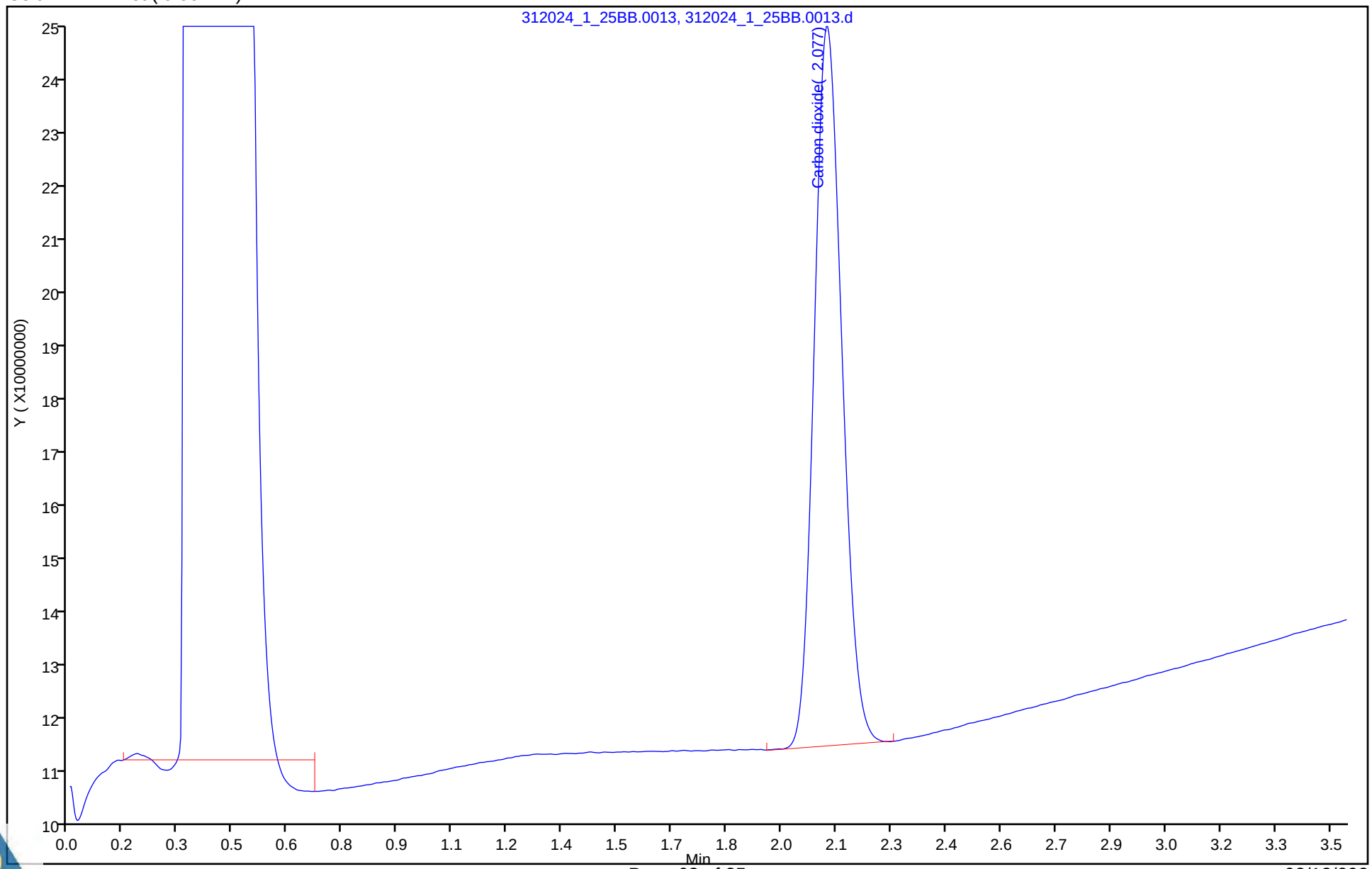
Report Date: 26-Jan-2024 03:35:57 Chrom Revision: 2.3 24-Jan-2024 12:19:54

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20240125-104811.b\312024_1_25BB.0013.d

Injection Date:	25-Jan-2024 11:51:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	ccv			Worklist Smp#:	13
Client ID:					
Purge Vol:	1.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2		

Column: HP Plot (0.00 mm)



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-158327-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 410-466624/1-A

Matrix: Water Lab File ID: 312024_1_25BB.0003.d

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 01/25/2024 10:35

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP Plot ID: 0.53(mm)

Purge Volume: Heated Purge: (Y/N) N pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 466611 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	DL
124-38-9	Carbon dioxide	5600	U	12000	5600

Report Date: 26-Jan-2024 03:35:54 Chrom Revision: 2.3 24-Jan-2024 12:19:54

Eurofins Lancaster Laboratories Environment Testing, LLC

Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20240125-104811.b\312024_1_25BB.0003.d				
Lims ID:	MB 410-466624/1-A				
Client ID:					
Sample Type:	MB				
Inject. Date:	25-Jan-2024 10:35:00	ALS Bottle#:	0	Worklist Smp#:	3
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	410-0104811-003				
Operator ID:		Instrument ID:	19506-B		
Method:	\\chromfs\Lancaster\ChromData\19506-B\20240125-104811.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	26-Jan-2024 03:35:54	Calib Date:	27-Apr-2023 10:37:00		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19506-B\20230427-82537.b\312023_04_27BB.0010.d				
Column 1 :	HP Plot (0.00 mm)		Det: 0FIDA		
Process Host:	CTX1645				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Carbon dioxide	2.087	2.075	0.012	3129997	H	951.3	

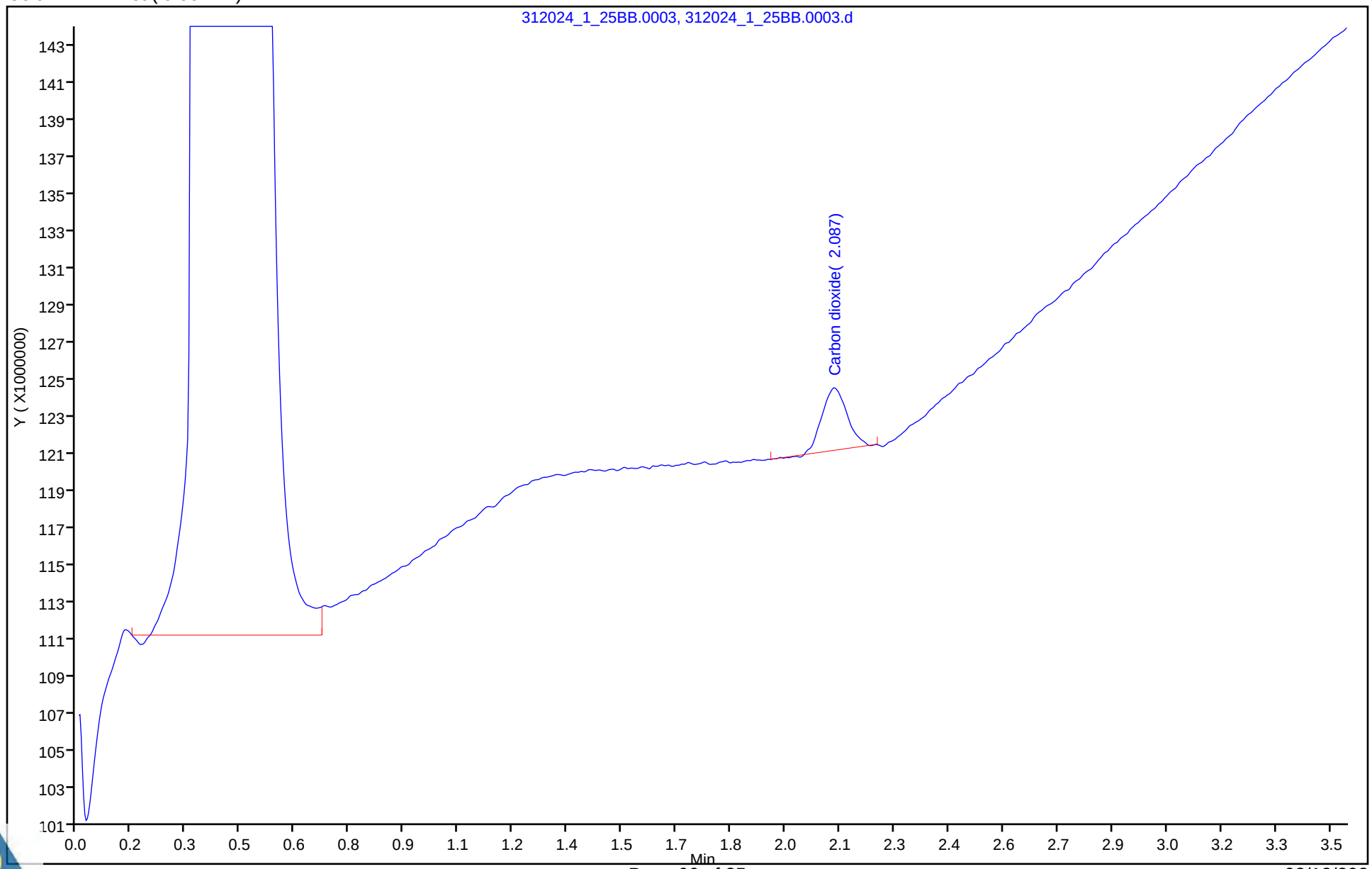
Report Date: 26-Jan-2024 03:35:54 Chrom Revision: 2.3 24-Jan-2024 12:19:54

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20240125-104811.b\312024_1_25BB.0003.d

Injection Date:	25-Jan-2024 10:35:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	MB 410-466624/1-A			Worklist Smp#:	3
Client ID:					
Purge Vol:	1.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2		

Column: HP Plot (0.00 mm)



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-158327-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 410-466624/2-A

Matrix: Water Lab File ID: 312024_1_25BB.0004.d

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 01/25/2024 10:42

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP Plot ID: 0.53(mm)

Purge Volume: Heated Purge: (Y/N) N pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 466611 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	DL
124-38-9	Carbon dioxide	38300		12000	5600

Report Date: 26-Jan-2024 03:35:54 Chrom Revision: 2.3 24-Jan-2024 12:19:54

Eurofins Lancaster Laboratories Environment Testing, LLC

Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20240125-104811.b\312024_1_25BB.0004.d				
Lims ID:	LCS 410-466624/2-A				
Client ID:					
Sample Type:	LCS				
Inject. Date:	25-Jan-2024 10:42:00	ALS Bottle#:	0	Worklist Smp#:	4
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	410-0104811-004				
Operator ID:		Instrument ID:	19506-B		
Method:	\\chromfs\Lancaster\ChromData\19506-B\20240125-104811.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	26-Jan-2024 03:35:54	Calib Date:	27-Apr-2023 10:37:00		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19506-B\20230427-82537.b\312023_04_27BB.0010.d				
Column 1 :	HP Plot (0.00 mm)		Det: 0FIDA		
Process Host:	CTX1645				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Carbon dioxide	2.076	2.075	0.001	126066385	H 35820	38317	

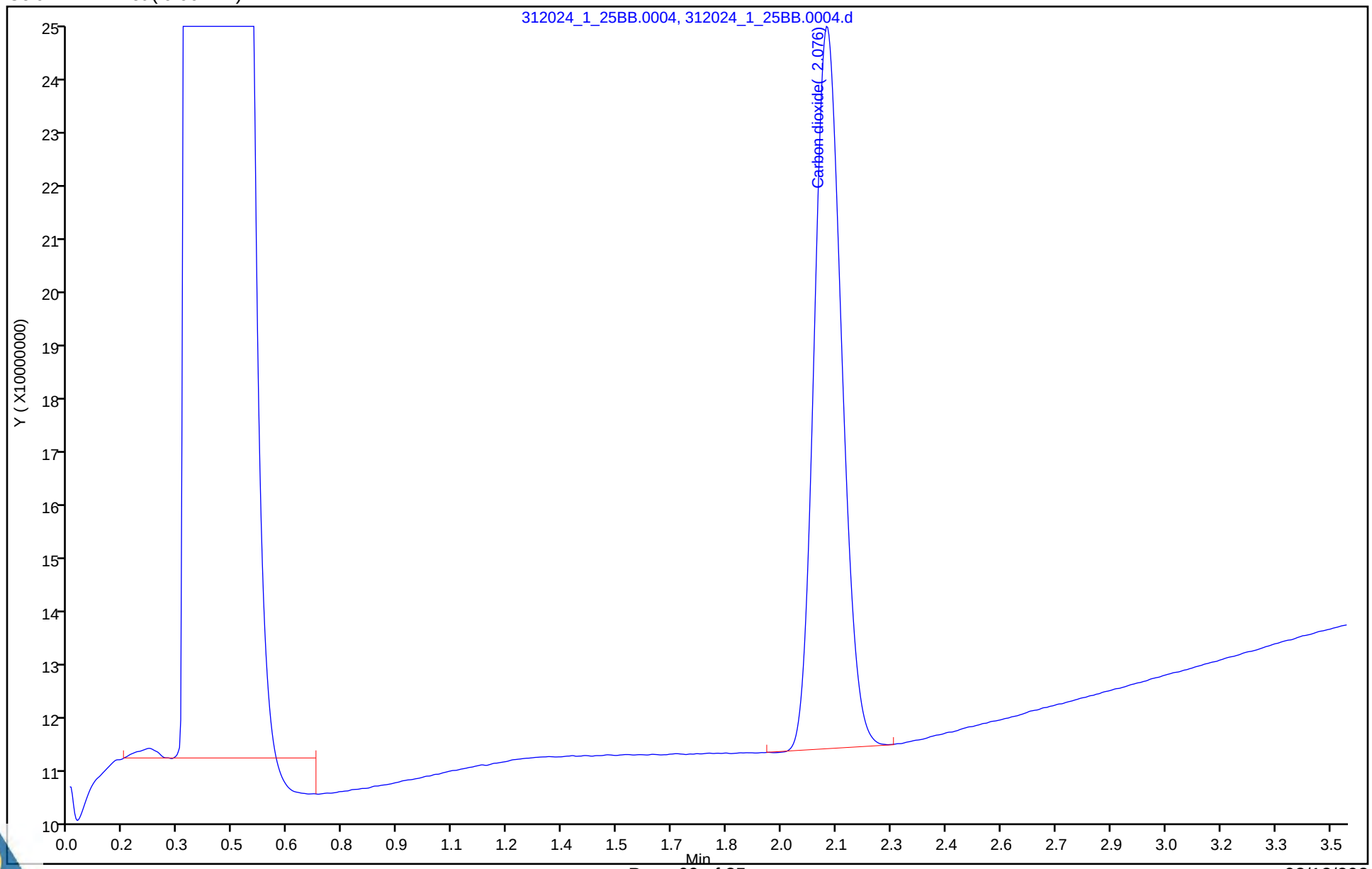
Report Date: 26-Jan-2024 03:35:54 Chrom Revision: 2.3 24-Jan-2024 12:19:54

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20240125-104811.b\312024_1_25BB.0004.d

Injection Date:	25-Jan-2024 10:42:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	LCS 410-466624/2-A			Worklist Smp#:	4
Client ID:					
Purge Vol:	1.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2		

Column: HP Plot (0.00 mm)



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-158327-1

SDG No.:

Client Sample ID: 16WW35-240118 MS Lab Sample ID: 410-158327-3 MS

Matrix: Water Lab File ID: 312024_1_25BB.0011.d

Analysis Method: RSK-175 Date Collected: 01/18/2024 08:15

Sample wt/vol: 5(mL) Date Analyzed: 01/25/2024 11:36

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP Plot ID: 0.53(mm)

Purge Volume: Heated Purge: (Y/N) N pH: 7.0

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 466611 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	DL
124-38-9	Carbon dioxide	212000	M 4 cn	12000	5600

Report Date: 26-Jan-2024 03:35:57 Chrom Revision: 2.3 24-Jan-2024 12:19:54

Eurofins Lancaster Laboratories Environment Testing, LLC

Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20240125-104811.b\312024_1_25BB.0011.d				
Lims ID:	410-158327-A-3-B MS				
Client ID:	16WW35_240118				
Sample Type:	MS				
Inject. Date:	25-Jan-2024 11:36:00	ALS Bottle#:	0	Worklist Smp#:	11
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	410-0104811-011				
Operator ID:		Instrument ID:	19506-B		
Method:	\\chromfs\Lancaster\ChromData\19506-B\20240125-104811.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	26-Jan-2024 03:35:54	Calib Date:	27-Apr-2023 10:37:00		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19506-B\20230427-82537.b\312023_04_27BB.0010.d				
Column 1 :	HP Plot (0.00 mm)		Det: 0FIDA		
Process Host:	CTX1645				
First Level Reviewer: LXF2		Date:	26-Jan-2024 03:35:40		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Carbon dioxide	2.035	2.075	-0.040	698141637H	35820	212193	a

QC Flag Legend

Processing Flags

H - Response Measured by Height

Review Flags

a - User Assigned ID

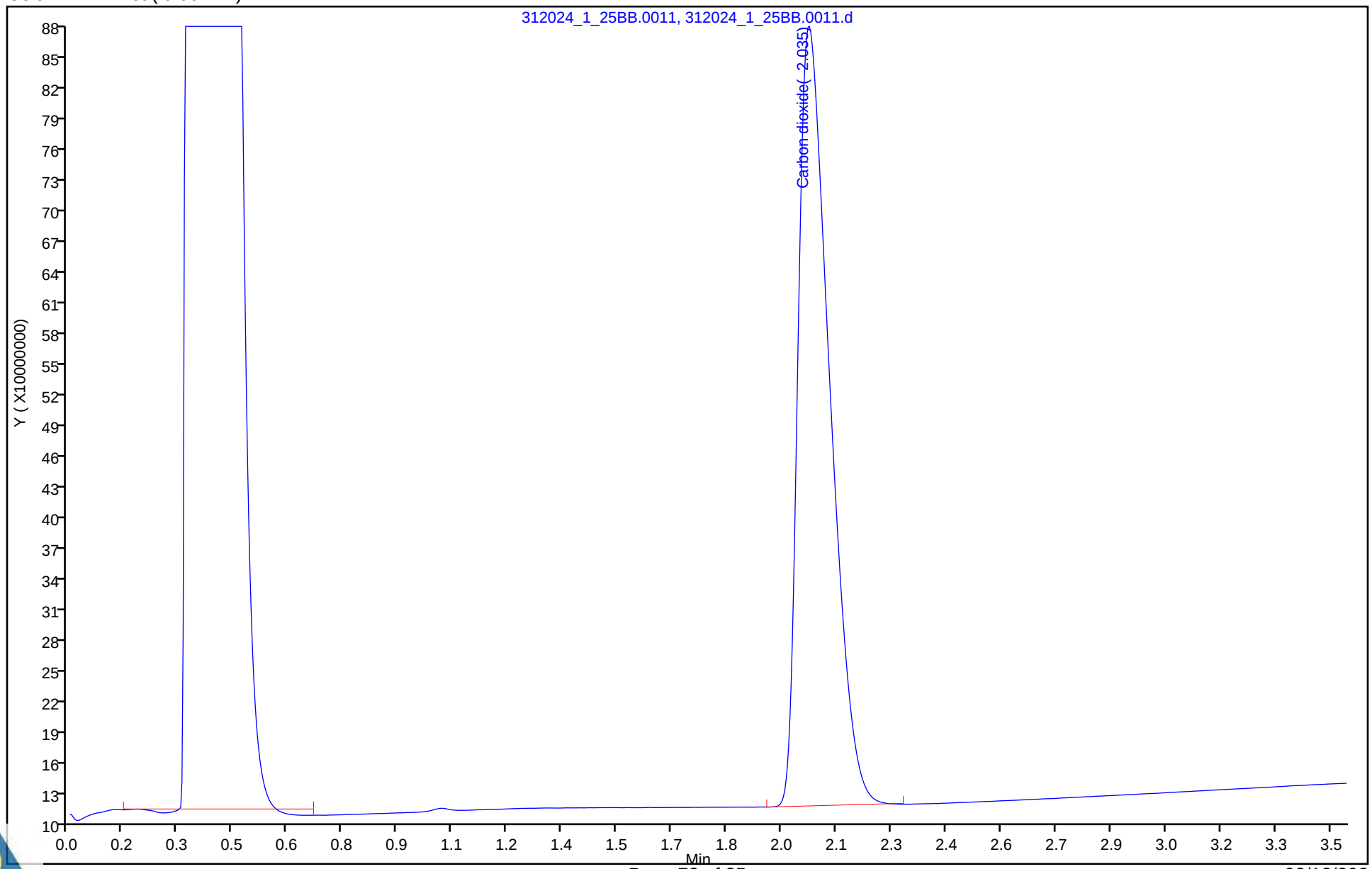
Report Date: 26-Jan-2024 03:35:57 Chrom Revision: 2.3 24-Jan-2024 12:19:54

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20240125-104811.b\312024_1_25BB.0011.d

Injection Date:	25-Jan-2024 11:36:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	410-158327-A-3-B MS			Worklist Smp#:	11
Client ID:	16WW35_240118				
Purge Vol:	1.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2		

Column: HP Plot (0.00 mm)



Report Date: 26-Jan-2024 03:35:57 Chrom Revision: 2.3 24-Jan-2024 12:19:54 Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

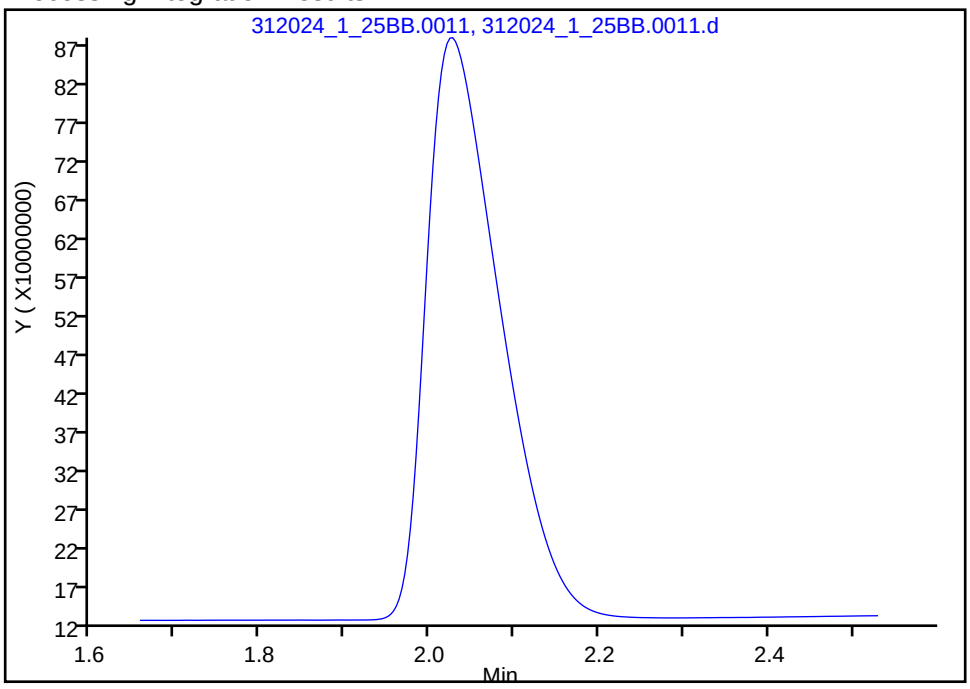
Data File:	\\chromfs\Lancaster\ChromData\19506-B\20240125-104811.b\312024_1_25BB.0011.d		
Injection Date:	25-Jan-2024 11:36:00	Instrument ID:	19506-B
Lims ID:	410-158327-A-3-B MS		
Client ID:	16WW35_240118		
Operator ID:		ALS Bottle#:	0 Worklist Smp#: 11
Purge Vol:	1.000 mL	Dil. Factor:	1.0000
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2
Column:	HP Plot (0.00 mm)	Detector	0FIDA

1 Carbon dioxide, CAS: 124-38-9

Signal: 1

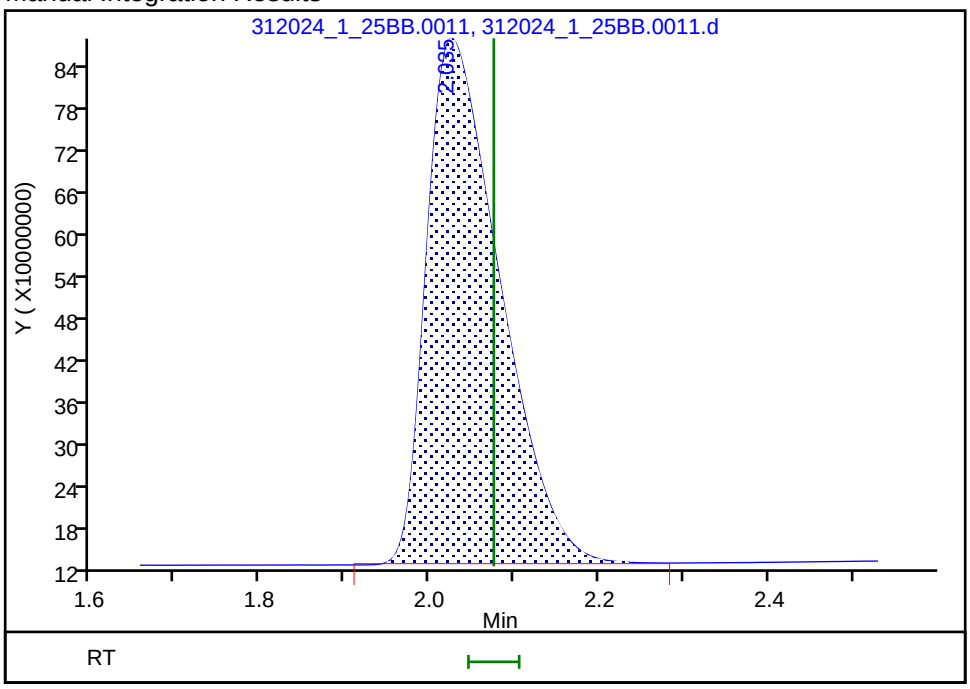
Not Detected
Expected RT: 2.08

Processing Integration Results



Manual Integration Results

RT: 2.04
Height: 698141637
Amount: 212193
Amount Units: ug/l



Reviewer: LXF2, 26-Jan-2024 03:35:39 -05:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-158327-1

SDG No.:

Client Sample ID: 16WW35-240118 MSD Lab Sample ID: 410-158327-3 MSD

Matrix: Water Lab File ID: 312024_1_25BB.0012.d

Analysis Method: RSK-175 Date Collected: 01/18/2024 08:15

Sample wt/vol: 5(mL) Date Analyzed: 01/25/2024 11:44

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP Plot ID: 0.53(mm)

Purge Volume: Heated Purge: (Y/N) N pH: 7.0

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 466611 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	DL
124-38-9	Carbon dioxide	211000	M 4 cn	12000	5600

Report Date: 26-Jan-2024 03:35:57 Chrom Revision: 2.3 24-Jan-2024 12:19:54

Eurofins Lancaster Laboratories Environment Testing, LLC

Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20240125-104811.b\312024_1_25BB.0012.d				
Lims ID:	410-158327-A-3-C MSD				
Client ID:	16WW35_240118				
Sample Type:	MSD				
Inject. Date:	25-Jan-2024 11:44:00	ALS Bottle#:	0	Worklist Smp#:	12
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	410-0104811-012				
Operator ID:		Instrument ID:	19506-B		
Method:	\\chromfs\Lancaster\ChromData\19506-B\20240125-104811.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	26-Jan-2024 03:35:54	Calib Date:	27-Apr-2023 10:37:00		
Integrator:	Genie				
Quant Method:	External Standard	Quant By:	Initial Calibration		
Last ICal File:	\\chromfs\Lancaster\ChromData\19506-B\20230427-82537.b\312023_04_27BB.0010.d				
Column 1 :	HP Plot (0.00 mm)		Det: 0FIDA		
Process Host:	CTX1645				
First Level Reviewer: LXF2		Date:	26-Jan-2024 03:35:44		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Carbon dioxide	2.037	2.075	-0.038	692736038H	35820	210550	a

QC Flag Legend

Processing Flags

H - Response Measured by Height

Review Flags

a - User Assigned ID

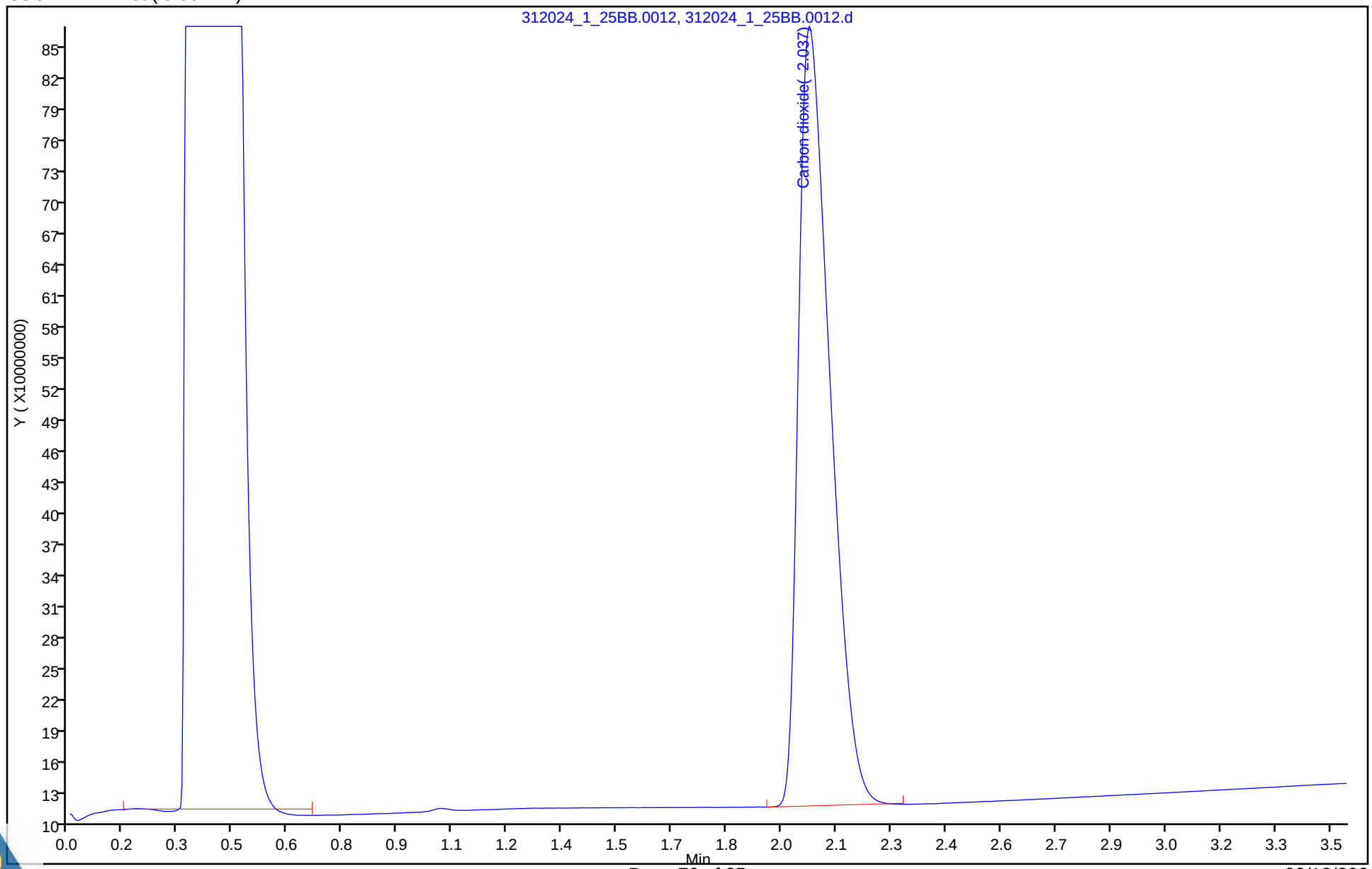
Report Date: 26-Jan-2024 03:35:57 Chrom Revision: 2.3 24-Jan-2024 12:19:54

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20240125-104811.b\312024_1_25BB.0012.d

Injection Date:	25-Jan-2024 11:44:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	410-158327-A-3-C MSD			Worklist Smp#:	12
Client ID:	16WW35_240118				
Purge Vol:	1.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2		

Column: HP Plot (0.00 mm)



Report Date: 26-Jan-2024 03:35:57

Chrom Revision: 2.3 24-Jan-2024 12:19:54 Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

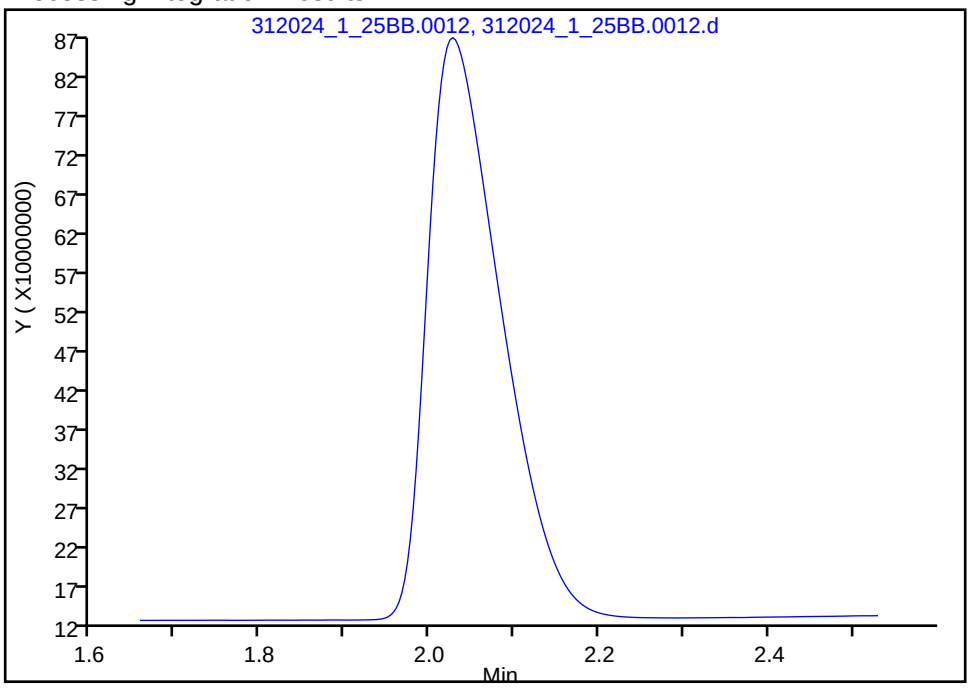
Data File:	\\chromfs\Lancaster\ChromData\19506-B\20240125-104811.b\312024_1_25BB.0012.d				
Injection Date:	25-Jan-2024 11:44:00	Instrument ID:	19506-B		
Lims ID:	410-158327-A-3-C MSD				
Client ID:	16WW35_240118				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	12
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2		
Column:	HP Plot (0.00 mm)	Detector	0FIDA		

1 Carbon dioxide, CAS: 124-38-9

Signal: 1

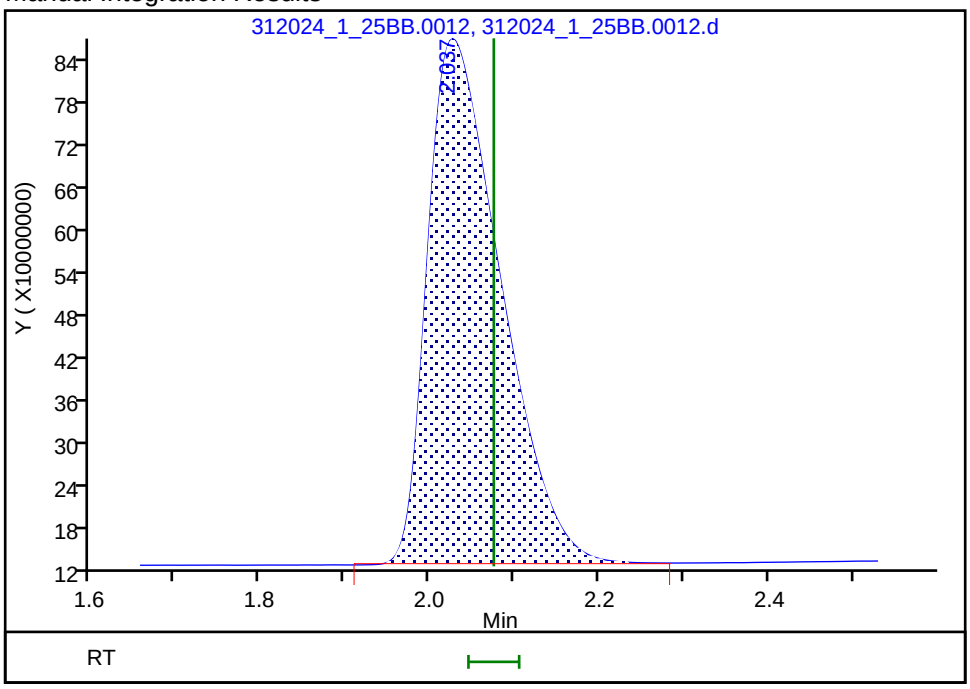
Not Detected
Expected RT: 2.08

Processing Integration Results



Manual Integration Results

RT: 2.04
Height: 692736038
Amount: 210550
Amount Units: ug/l



Reviewer: LXF2, 26-Jan-2024 03:35:43 -05:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC

Job No.: 410-158327-1

SDG No.:

Instrument ID: 19506-B

Start Date: 04/27/2023 09:16

Analysis Batch Number: 369251

End Date: 04/27/2023 17:34

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
PIBLK 410-369251/3		04/27/2023 09:16	1		HP Plot 0.53(mm)
IC 410-369251/5		04/27/2023 09:59	1	312023_04_27BB.0005.d	HP Plot 0.53(mm)
IC 410-369251/6		04/27/2023 10:06	1	312023_04_27BB.0006.d	HP Plot 0.53(mm)
ICRT 410-369251/7		04/27/2023 10:14	1	312023_04_27BB.0007.d	HP Plot 0.53(mm)
IC 410-369251/8		04/27/2023 10:22	1	312023_04_27BB.0008.d	HP Plot 0.53(mm)
IC 410-369251/9		04/27/2023 10:30	1	312023_04_27BB.0009.d	HP Plot 0.53(mm)
IC 410-369251/10		04/27/2023 10:37	1	312023_04_27BB.0010.d	HP Plot 0.53(mm)
PIBLK 410-369251/11		04/27/2023 10:45	1		HP Plot 0.53(mm)
ICVL 410-369251/12		04/27/2023 10:53	1		HP Plot 0.53(mm)
ICV 410-369251/13		04/27/2023 11:01	1	312023_04_27BB.0013.d	HP Plot 0.53(mm)
ZZZZZ		04/27/2023 11:45	1		HP Plot 0.53(mm)
ZZZZZ		04/27/2023 11:52	1		HP Plot 0.53(mm)
ZZZZZ		04/27/2023 12:01	1		HP Plot 0.53(mm)
ZZZZZ		04/27/2023 12:08	1		HP Plot 0.53(mm)
ZZZZZ		04/27/2023 12:16	1		HP Plot 0.53(mm)
ZZZZZ		04/27/2023 12:24	1		HP Plot 0.53(mm)
CCV 410-369251/20		04/27/2023 12:31	1		HP Plot 0.53(mm)
ZZZZZ		04/27/2023 13:03	1		HP Plot 0.53(mm)
ZZZZZ		04/27/2023 13:10	1		HP Plot 0.53(mm)
ZZZZZ		04/27/2023 13:18	1		HP Plot 0.53(mm)
ZZZZZ		04/27/2023 13:26	1		HP Plot 0.53(mm)
ZZZZZ		04/27/2023 13:33	1		HP Plot 0.53(mm)
ZZZZZ		04/27/2023 13:41	1		HP Plot 0.53(mm)
ZZZZZ		04/27/2023 13:49	1		HP Plot 0.53(mm)
ZZZZZ		04/27/2023 13:57	1		HP Plot 0.53(mm)
ZZZZZ		04/27/2023 14:04	1		HP Plot 0.53(mm)
ZZZZZ		04/27/2023 14:12	1		HP Plot 0.53(mm)
CCV 410-369251/31		04/27/2023 14:20	1		HP Plot 0.53(mm)
ZZZZZ		04/27/2023 14:38	1		HP Plot 0.53(mm)
ZZZZZ		04/27/2023 14:50	1		HP Plot 0.53(mm)
ZZZZZ		04/27/2023 14:58	1		HP Plot 0.53(mm)
ZZZZZ		04/27/2023 15:06	1		HP Plot 0.53(mm)
ZZZZZ		04/27/2023 15:15	1		HP Plot 0.53(mm)
ZZZZZ		04/27/2023 15:23	1		HP Plot 0.53(mm)
ZZZZZ		04/27/2023 15:31	1		HP Plot 0.53(mm)
ZZZZZ		04/27/2023 15:39	1		HP Plot 0.53(mm)
ZZZZZ		04/27/2023 15:47	1		HP Plot 0.53(mm)
ZZZZZ		04/27/2023 15:56	1		HP Plot 0.53(mm)
CCV 410-369251/42		04/27/2023 16:04	1		HP Plot 0.53(mm)
ZZZZZ		04/27/2023 16:12	1		HP Plot 0.53(mm)
ZZZZZ		04/27/2023 16:20	1		HP Plot 0.53(mm)

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC

Job No.: 410-158327-1

SDG No.:

Instrument ID: 19506-B

Start Date: 04/27/2023 09:16

Analysis Batch Number: 369251

End Date: 04/27/2023 17:34

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		04/27/2023 16:28	1		HP Plot 0.53(mm)
ZZZZZ		04/27/2023 16:37	1		HP Plot 0.53(mm)
ZZZZZ		04/27/2023 16:45	1		HP Plot 0.53(mm)
ZZZZZ		04/27/2023 16:53	1		HP Plot 0.53(mm)
ZZZZZ		04/27/2023 17:01	1		HP Plot 0.53(mm)
ZZZZZ		04/27/2023 17:09	1		HP Plot 0.53(mm)
ZZZZZ		04/27/2023 17:18	1		HP Plot 0.53(mm)
ZZZZZ		04/27/2023 17:26	1		HP Plot 0.53(mm)
CCV 410-369251/53		04/27/2023 17:34	1		HP Plot 0.53(mm)

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC

Job No.: 410-158327-1

SDG No.:

Instrument ID: 19506-B

Start Date: 01/25/2024 10:15

Analysis Batch Number: 466611

End Date: 01/25/2024 11:51

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVRT 410-466611/2		01/25/2024 10:15	1	312024_1_25BB.0002.d	HP Plot 0.53(mm)
MB 410-466624/1-A		01/25/2024 10:35	1	312024_1_25BB.0003.d	HP Plot 0.53(mm)
LCS 410-466624/2-A		01/25/2024 10:42	1	312024_1_25BB.0004.d	HP Plot 0.53(mm)
ZZZZZ		01/25/2024 10:50	1		HP Plot 0.53(mm)
ZZZZZ		01/25/2024 10:58	1		HP Plot 0.53(mm)
ZZZZZ		01/25/2024 11:05	1		HP Plot 0.53(mm)
410-158327-1	16WW16-240118	01/25/2024 11:13	1	312024_1_25BB.0008.d	HP Plot 0.53(mm)
410-158327-2	16WW16-240118-FD	01/25/2024 11:21	1	312024_1_25BB.0009.d	HP Plot 0.53(mm)
410-158327-3	16WW35-240118	01/25/2024 11:28	1	312024_1_25BB.0010.d	HP Plot 0.53(mm)
410-158327-3 MS	16WW35-240118 MS	01/25/2024 11:36	1	312024_1_25BB.0011.d	HP Plot 0.53(mm)
410-158327-3 MSD	16WW35-240118 MSD	01/25/2024 11:44	1	312024_1_25BB.0012.d	HP Plot 0.53(mm)
CCV 410-466611/13		01/25/2024 11:51	1	312024_1_25BB.0013.d	HP Plot 0.53(mm)

GC VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-158327-1

SDG No.:

Batch Number: 369251 Batch Start Date: 04/27/23 09:16 Batch Analyst: Kennedy, Johanna C

Batch Method: RSK-175 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	EPH_CO2ICV 00002	EPH_CO2MS 00004		
IC 410-369251/5		RSK-175		5 mL	5 mL		30 uL		
IC 410-369251/6		RSK-175		5 mL	5 mL		60 uL		
ICRT 410-369251/7		RSK-175		5 mL	5 mL		100 uL		
IC 410-369251/8		RSK-175		5 mL	5 mL		250 uL		
IC 410-369251/9		RSK-175		5 mL	5 mL		500 uL		
IC 410-369251/10		RSK-175		5 mL	5 mL		1000 uL		
ICV 410-369251/13		RSK-175		5 mL	5 mL	320 uL			

Batch Notes	

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GC VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-158327-1

SDG No.:

Batch Number: 466624 Batch Start Date: 01/25/24 10:08 Batch Analyst: Omorogbe, Malachi

Batch Method: RSK-175 Batch End Date: 01/25/24 10:27

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	Headspace	EPH_CO2MS 00006	AnalysisComment
MB 410-466624/1		RSK-175, RSK-175			5 mL	5 mL			
LCS 410-466624/2		RSK-175, RSK-175			5 mL	5 mL		0.1 mL	
410-158327-A-1	16WW16-240118	RSK-175, RSK-175	T	7 SU	5 mL	5 mL	No		
410-158327-A-2	16WW16-240118-FD	RSK-175, RSK-175	T	7 SU	5 mL	5 mL	No		
410-158327-A-3	16WW35-240118	RSK-175, RSK-175	T	7 SU	5 mL	5 mL	No		Gold tint.
410-158327-A-3 MS	16WW35-240118	RSK-175, RSK-175	T	7 SU	5 mL	5 mL	No	0.1 mL	Gold tint.
410-158327-A-3 MSD	16WW35-240118	RSK-175, RSK-175	T	7 SU	5 mL	5 mL	No	0.1 mL	Gold tint.

Batch Notes	
Pipette/Syringe/Dispenser ID	7105
pH Indicator ID	10BDH3131

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

410-158327 Chain of Custody

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

Subcontract Chain of Custody

SAMPLING STATE: **Dept of Defense** **COC ID:** **24508**

SUBCONTRACT TO:

Eurofins Lancaster Laboratories Envt Testing
2425 New Holland Pike
Lancaster, PA 17601 **Phone:** +1 717 656 2300

CUSTOMER INFORMATION:

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

INVOICE INFORMATION:

Company:	ALS Houston
Contact:	Accounts Payable
Address:	10450 Stancliff Rd, Ste 210
Phone:	+1 281 530 5656
Reference:	HS24011040
TSR:	Sonia West

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	**HS24011040-01**	**16WW16_240118**	**Groundwater**	**18 Jan 2024 07:10**
	RSK-CO2; Level II & IV, DoD, Equ_APTIM_GISKey (Aptim)			30 Jan 2024
2.	**HS24011040-02**	**16WW16_240118-FD**	**Groundwater**	**18 Jan 2024 07:10**
	RSK-CO2; Level II & IV, DoD, Equ_APTIM_GISKey (Aptim)			30 Jan 2024
3.	**HS24011040-03**	**16WW35_240118**	**Groundwater**	**18 Jan 2024 08:15**
	RSK-CO2; Level II & IV, DoD, Equ_APTIM_GISKey (Aptim)			30 Jan 2024

Comments: Please analyze for the analysis listed above.
Send report to the emails shown above.
HS24011040-03 = MS/MSD

QC Level: DOD IV (DoD Data Package)

Relinquished By: _____ Date/Time: 1/22/24 1800

Received By: _____ Date/Time: 1/24/24 0850

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

R: 1.2
C: 1.5

CB

Login Sample Receipt Checklist

Client: ALS Group USA, Corp

Job Number: 410-158327-1

Login Number: 158327
List Number: 1
Creator: Arroyo, Haley

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

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

HS24011111 LHAAP Site 16 Cover Page

ALS WO# HS24011111

ALS Environmental
ALS Group USA, Corp
10450 Stancliff Road, Suite 210
Houston, TX 77099
T : +1 281 530 5656
F : +1 281 530 5887
www.alsglobal.com

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Form 1 - Sample Results
Form 2 - Surrogates
Form 3A - MS/MSD
Form 3B - LCS/LCSD
Form 4 - MB Assoc
Form 5 - Tune
Form 6 - ICAL
Form 6I - ICV
Form 7 - CCV
Form 8 - ISTD
Run Log
Raw Data VOA9_453430 U231206
Raw Data VOA9_457250 U240125
Raw Data VOA9_457361 U240126
Raw Data VOA9_457422 U240129
HS24011111-GCSEMI-RSK-175
Form 1 - Sample Results
Form 3A - MS/MSD
Form 3B - LCS/LCSD
Form 4 - MB Assoc
Form 6 - ICAL
Form 6I - ICV
Form 7 - CCV
Run Log
Raw Data FID_4_322102 170124
Raw Data FID_4_457054 240123
HS24011111 - ME - ICP_W_DOD

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

WorkOrder: HS24011111

LHAAP Site 16

Bhate Environmental Associates, Inc.

Marcia Olive
445 Union Blvd Ste 129
Lakewood CO 80228

31-Jan-2024

HS24011111 LHAAP Site 16 Final REV02

ALS WO# HS24011111

10450 Stancliff Rd. Suite 210
Houston, TX 77099
T: +1 281 530 5656
F: +1 281 530 5887

February 28, 2024

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

Work Order: **HS24011111**

Laboratory Results for: **LHAAP Site 16**

Dear Marcia Olive,

ALS Environmental received 15 sample(s) on Jan 20, 2024 for the analysis presented in the following report.

This is a REVISED REPORT. Please see the Case Narrative for discussion concerning this revision.

Regards,

Generated By: JUMOKE.LAWAL
James Guin

ALS Houston, US Date: 28-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Work Order: HS24011111

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS24011111-01	16WW44-240119	Groundwater		19-Jan-2024 07:00	20-Jan-2024 10:20	☐
HS24011111-02	16WW37-240119	Groundwater		19-Jan-2024 07:45	20-Jan-2024 10:20	☐
HS24011111-03	16WW38-240119	Groundwater		19-Jan-2024 08:30	20-Jan-2024 10:20	☐
HS24011111-04	16WW38-240119-FD	Groundwater		19-Jan-2024 08:30	20-Jan-2024 10:20	☐
HS24011111-05	16WW13-240119	Groundwater		19-Jan-2024 09:15	20-Jan-2024 10:20	☐
HS24011111-06	16WW42-240119	Groundwater		19-Jan-2024 09:55	20-Jan-2024 10:20	☐
HS24011111-07	16RW05-240119	Groundwater		19-Jan-2024 10:40	20-Jan-2024 10:20	☐
HS24011111-08	16WW51-240119	Groundwater		19-Jan-2024 11:25	20-Jan-2024 10:20	☐
HS24011111-09	16WW30-240119	Groundwater		19-Jan-2024 12:10	20-Jan-2024 10:20	☐
HS24011111-10	16WW29-240119	Groundwater		19-Jan-2024 12:50	20-Jan-2024 10:20	☐
HS24011111-11	16SW01-240119	Groundwater		19-Jan-2024 13:00	20-Jan-2024 10:20	☐
HS24011111-12	16SW02-240119	Groundwater		19-Jan-2024 13:15	20-Jan-2024 10:20	☐
HS24011111-13	16SW02-240119-FD	Groundwater		19-Jan-2024 13:15	20-Jan-2024 10:20	☐
HS24011111-14	16SW03-240119	Groundwater		19-Jan-2024 13:30	20-Jan-2024 10:20	☐
HS24011111-15	Trip Blank-240119	Water	CG-111123-353	19-Jan-2024 00:00	20-Jan-2024 10:20	☐

Revision:2

ALS Houston, US Date: 28-Feb-24

Client: Bhate Environmental Associates, Inc. **CASE NARRATIVE**
Project: LHAAP Site 16
Work Order: HS24011111

Work Order Comments

- This report was revised 02/28/24 to include the LOD for Manganese.

Work Order Comments

- This report was revised 02/09/24 to include the following narrative:
  ALS-Houston has recently discovered that an instrument calibration used for organic volatile analysis by SW8260C, EPA 624, and EPA 624.1 was quantified in error using a data point from a previous calibration. This error impacted samples run between January 22nd to 25th, 2024.
  While samples analyzed during this period will require revision in results, the expected difference in result is minimal. We have reprocessed the data against the correct calibration. Attached is the revised report.

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

GC Semivolatiles by Method RSK-175

Batch ID: R457054

Sample ID: HS24011040-03MS

- MS and MSD are for an unrelated sample

ALS Houston, US Date: 28-Feb-24

Client: Bhate Environmental Associates, Inc. **CASE NARRATIVE**
Project: LHAAP Site 16
Work Order: HS24011111

GCMS Volatiles by Method SW8260

Batch ID: R457422

Sample ID: 16RW05-240119 (HS24011111-07)

• Surrogate failed outside control limits low. This was confirmed by reanalysis.

Sample ID: 16SW01-240119 (HS24011111-11)

• Surrogate failed outside control limits low. This was confirmed by reanalysis.

Sample ID: 16SW02-240119 (HS24011111-12)

• Surrogate failed outside control limits low. This was confirmed by reanalysis.

Sample ID: 16SW02-240119-FD (HS24011111-13)

• Surrogate failed outside control limits low. This was confirmed by reanalysis.

Sample ID: 16WW13-240119 (HS24011111-05)

• Surrogate failed outside control limits low. This was confirmed by reanalysis.

Sample ID: 16WW29-240119 (HS24011111-10)

• Surrogate failed outside control limits low. This was confirmed by reanalysis.

Sample ID: 16WW30-240119 (HS24011111-09)

• Surrogate failed outside control limits low. This was confirmed by reanalysis.

Sample ID: 16WW37-240119 (HS24011111-02)

• Surrogate failed outside control limits low. This was confirmed by reanalysis.

Sample ID: 16WW38-240119 (HS24011111-03)

• Surrogate failed outside control limits low. This was confirmed by reanalysis.

Sample ID: 16WW38-240119-FD (HS24011111-04)

• Surrogate failed outside control limits low. This was confirmed by reanalysis.

Sample ID: 16WW51-240119 (HS24011111-08)

• Surrogate failed outside control limits low. This was confirmed by reanalysis.

Sample ID: 16WW51-240119 (HS24011111-08MS)

• MS/MSD failed QC limits for some few compounds

Sample ID: CCV

• 1,1-Dichloroethene, Methylene Chloride and Vinyl Chloride failed outside control limits high. Associated samples are ND.

Sample ID: VLCSW-240126

• 1,1-Dichloroethene, Methylene Chloride failed outside control limits high. Associated samples are ND.

ALS Houston, US Date: 28-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Work Order: HS24011111

CASE NARRATIVE

GCMS Volatiles by Method SW8260

Batch ID: R457361

Sample ID: 16RW05-240119 (HS24011111-07)

• Surrogate failed outside control limits low. This was confirmed by reanalysis.

Sample ID: 16SW01-240119 (HS24011111-11)

• Surrogate failed outside control limits low. This was confirmed by reanalysis.

Sample ID: 16SW02-240119 (HS24011111-12)

• Surrogate failed outside control limits low. This was confirmed by reanalysis.

Sample ID: 16SW02-240119-FD (HS24011111-13)

• Surrogate failed outside control limits low. This was confirmed by reanalysis.

Sample ID: 16SW03-240119 (HS24011111-14)

• Surrogate failed outside control limits low. This was confirmed by reanalysis.

Sample ID: 16WW13-240119 (HS24011111-05)

• Surrogate failed outside control limits low. This was confirmed by reanalysis.

Sample ID: 16WW30-240119 (HS24011111-09)

• Surrogate failed outside control limits low. This was confirmed by reanalysis.

Sample ID: 16WW37-240119 (HS24011111-02)

• Surrogate failed outside control limits low. This was confirmed by reanalysis.

Sample ID: 16WW38-240119 (HS24011111-03)

• Surrogate failed outside control limits low. This was confirmed by reanalysis.

Sample ID: 16WW38-240119-FD (HS24011111-04)

• Surrogate failed outside control limits low. This was confirmed by reanalysis.

Sample ID: 16WW42-240119 (HS24011111-06)

• Surrogate failed outside control limits low. This was confirmed by reanalysis.

Sample ID: 16WW44-240119 (HS24011111-01)

• Surrogate failed outside control limits low. This was confirmed by reanalysis.

Sample ID: 16WW51-240119 (HS24011111-08)

• Surrogate failed outside control limits low. This was confirmed by reanalysis.

Sample ID: 16SW03-240119 (HS24011111-14MS)

• Surrogate failed outside control limits low on MS/MSD . This was confirmed by reanalysis.

ALS Houston, US Date: 28-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Work Order: HS24011111

CASE NARRATIVE

GCMS Volatiles by Method SW8260

Batch ID: R457250

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

Metals by Method SW6020A

Batch ID: 206338

Sample ID: 16SW03-240119 (HS24011111-14MSD)

- Manganese failed for MSD but passed on MS and PDS

ALS Houston, US Date: 28-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Sample ID: 16WW44-240119
Collection Date: 19-Jan-2024 07:00

ANALYTICAL REPORT
WorkOrder:HS24011111
Lab ID:HS24011111-01
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: FT
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	26-Jan-2024 16:02
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	26-Jan-2024 16:02
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	26-Jan-2024 16:02
cis-1,2-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	26-Jan-2024 16:02
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	26-Jan-2024 16:02
Trichloroethene	**1.5**		**0.20**	**1.0**	**1.0**	**ug/L**	1	26-Jan-2024 16:02
Vinyl chloride	1.0	U	0.20	1.0	1.0	ug/L	1	26-Jan-2024 16:02
Surr: 1,2-Dichloroethane-d4	*76.2*	*S*		**0**	*81-118*	*%REC*	*1*	*26-Jan-2024 16:02*
Surr: 4-Bromofluorobenzene	*96.4*			**0**	*85-114*	*%REC*	*1*	*26-Jan-2024 16:02*
Surr: Dibromofluoromethane	*86.7*			**0**	*80-119*	*%REC*	*1*	*26-Jan-2024 16:02*
Surr: Toluene-d8	*106*			**0**	*89-112*	*%REC*	*1*	*26-Jan-2024 16:02*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	30-Jan-2024 11:54

Note: See Qualifiers Page for a list of qualifiers and their explanation. **Revision:** 2

ALS Houston, US Date: 28-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Sample ID: 16WW37-240119
Collection Date: 19-Jan-2024 07:45

ANALYTICAL REPORT
WorkOrder:HS24011111
Lab ID:HS24011111-02
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: FT
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	26-Jan-2024 16:24
1,1-Dichloroethene	**2.3**		**0.20**	**1.0**	**1.0**	**ug/L**	1	26-Jan-2024 16:24
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	26-Jan-2024 16:24
cis-1,2-Dichloroethene	**12**		**0.20**	**1.0**	**1.0**	**ug/L**	1	26-Jan-2024 16:24
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	26-Jan-2024 16:24
Trichloroethene	**220**		**2.0**	**10**	**10**	**ug/L**	10	29-Jan-2024 12:53
Vinyl chloride	**6.2**		**0.20**	**1.0**	**1.0**	**ug/L**	1	26-Jan-2024 16:24
Surr: 1,2-Dichloroethane-d4	*76.9*	*S*		**0**	*81-118*	*%REC*	*1*	*26-Jan-2024 16:24*
Surr: 1,2-Dichloroethane-d4	*76.4*	*S*		**0**	*81-118*	*%REC*	*10*	*29-Jan-2024 12:53*
Surr: 4-Bromofluorobenzene	*95.4*			**0**	*85-114*	*%REC*	*1*	*26-Jan-2024 16:24*
Surr: 4-Bromofluorobenzene	*92.8*			**0**	*85-114*	*%REC*	*10*	*29-Jan-2024 12:53*
Surr: Dibromofluoromethane	*85.3*			**0**	*80-119*	*%REC*	*1*	*26-Jan-2024 16:24*
Surr: Dibromofluoromethane	*85.8*			**0**	*80-119*	*%REC*	*10*	*29-Jan-2024 12:53*
Surr: Toluene-d8	*104*			**0**	*89-112*	*%REC*	*1*	*26-Jan-2024 16:24*
Surr: Toluene-d8	*105*			**0**	*89-112*	*%REC*	*10*	*29-Jan-2024 12:53*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	30-Jan-2024 11:54

Note: See Qualifiers Page for a list of qualifiers and their explanation. **Revision:** 2

ALS Houston, US Date: 28-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Sample ID: 16WW38-240119
Collection Date: 19-Jan-2024 08:30

ANALYTICAL REPORT
WorkOrder:HS24011111
Lab ID:HS24011111-03
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: FT
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	26-Jan-2024 16:47
1,1-Dichloroethene	**24**		**0.20**	**1.0**	**1.0**	**ug/L**	1	26-Jan-2024 16:47
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	26-Jan-2024 16:47
cis-1,2-Dichloroethene	**350**		**10**	**50**	**50**	**ug/L**	50	29-Jan-2024 13:16
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	26-Jan-2024 16:47
Trichloroethene	**3,600**		**10**	**50**	**50**	**ug/L**	50	29-Jan-2024 13:16
Vinyl chloride	**100**		**0.20**	**1.0**	**1.0**	**ug/L**	1	26-Jan-2024 16:47
Surr: 1,2-Dichloroethane-d4	*74.8*	*S*		**0**	*81-118*	*%REC*	*1*	*26-Jan-2024 16:47*
Surr: 1,2-Dichloroethane-d4	*75.3*	*S*		**0**	*81-118*	*%REC*	*50*	*29-Jan-2024 13:16*
Surr: 4-Bromofluorobenzene	*95.8*			**0**	*85-114*	*%REC*	*1*	*26-Jan-2024 16:47*
Surr: 4-Bromofluorobenzene	*96.2*			**0**	*85-114*	*%REC*	*50*	*29-Jan-2024 13:16*
Surr: Dibromofluoromethane	*84.6*			**0**	*80-119*	*%REC*	*1*	*26-Jan-2024 16:47*
Surr: Dibromofluoromethane	*85.5*			**0**	*80-119*	*%REC*	*50*	*29-Jan-2024 13:16*
Surr: Toluene-d8	*103*			**0**	*89-112*	*%REC*	*1*	*26-Jan-2024 16:47*
Surr: Toluene-d8	*105*			**0**	*89-112*	*%REC*	*50*	*29-Jan-2024 13:16*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	30-Jan-2024 11:54

Note: See Qualifiers Page for a list of qualifiers and their explanation. **Revision:** 2

ALS Houston, US Date: 28-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Sample ID: 16WW38-240119-FD
Collection Date: 19-Jan-2024 08:30

ANALYTICAL REPORT
WorkOrder:HS24011111
Lab ID:HS24011111-04
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: FT
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	26-Jan-2024 17:09
1,1-Dichloroethene	**24**		**0.20**	**1.0**	**1.0**	**ug/L**	1	26-Jan-2024 17:09
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	26-Jan-2024 17:09
cis-1,2-Dichloroethene	**330**		**10**	**50**	**50**	**ug/L**	50	29-Jan-2024 13:38
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	26-Jan-2024 17:09
Trichloroethene	**3,600**		**10**	**50**	**50**	**ug/L**	50	29-Jan-2024 13:38
Vinyl chloride	**100**		**0.20**	**1.0**	**1.0**	**ug/L**	1	26-Jan-2024 17:09
Surr: 1,2-Dichloroethane-d4	*73.7*	*S*		**0**	*81-118*	*%REC*	*1*	*26-Jan-2024 17:09*
Surr: 1,2-Dichloroethane-d4	*76.0*	*S*		**0**	*81-118*	*%REC*	*50*	*29-Jan-2024 13:38*
Surr: 4-Bromofluorobenzene	*96.4*			**0**	*85-114*	*%REC*	*1*	*26-Jan-2024 17:09*
Surr: 4-Bromofluorobenzene	*96.9*			**0**	*85-114*	*%REC*	*50*	*29-Jan-2024 13:38*
Surr: Dibromofluoromethane	*83.8*			**0**	*80-119*	*%REC*	*1*	*26-Jan-2024 17:09*
Surr: Dibromofluoromethane	*87.8*			**0**	*80-119*	*%REC*	*50*	*29-Jan-2024 13:38*
Surr: Toluene-d8	*104*			**0**	*89-112*	*%REC*	*1*	*26-Jan-2024 17:09*
Surr: Toluene-d8	*107*			**0**	*89-112*	*%REC*	*50*	*29-Jan-2024 13:38*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	30-Jan-2024 11:54

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

Revision: 2

ALS Houston, US Date: 28-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Sample ID: 16WW13-240119
Collection Date: 19-Jan-2024 09:15

ANALYTICAL REPORT
WorkOrder:HS24011111
Lab ID:HS24011111-05
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: FT
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	26-Jan-2024 17:31
1,1-Dichloroethene	**0.60**	J	**0.20**	**1.0**	**1.0**	**ug/L**	1	26-Jan-2024 17:31
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	26-Jan-2024 17:31
cis-1,2-Dichloroethene	**240**		**2.0**	**10**	**10**	**ug/L**	10	29-Jan-2024 14:01
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	26-Jan-2024 17:31
Trichloroethene	**97**		**0.20**	**1.0**	**1.0**	**ug/L**	1	26-Jan-2024 17:31
Vinyl chloride	**1.8**		**0.20**	**1.0**	**1.0**	**ug/L**	1	26-Jan-2024 17:31
Surr: 1,2-Dichloroethane-d4	*76.9*	*S*		**0**	*81-118*	*%REC*	*1*	*26-Jan-2024 17:31*
Surr: 1,2-Dichloroethane-d4	*77.3*	*S*		**0**	*81-118*	*%REC*	*10*	*29-Jan-2024 14:01*
Surr: 4-Bromofluorobenzene	*94.8*			**0**	*85-114*	*%REC*	*1*	*26-Jan-2024 17:31*
Surr: 4-Bromofluorobenzene	*96.9*			**0**	*85-114*	*%REC*	*10*	*29-Jan-2024 14:01*
Surr: Dibromofluoromethane	*85.1*			**0**	*80-119*	*%REC*	*1*	*26-Jan-2024 17:31*
Surr: Dibromofluoromethane	*86.3*			**0**	*80-119*	*%REC*	*10*	*29-Jan-2024 14:01*
Surr: Toluene-d8	*104*			**0**	*89-112*	*%REC*	*1*	*26-Jan-2024 17:31*
Surr: Toluene-d8	*103*			**0**	*89-112*	*%REC*	*10*	*29-Jan-2024 14:01*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	30-Jan-2024 11:54

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

Revision: 2

ALS Houston, US Date: 28-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Sample ID: 16WW42-240119
Collection Date: 19-Jan-2024 09:55

ANALYTICAL REPORT
WorkOrder:HS24011111
Lab ID:HS24011111-06
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: FT
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	26-Jan-2024 17:54
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	26-Jan-2024 17:54
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	26-Jan-2024 17:54
cis-1,2-Dichloroethene	**34**		**0.20**	**1.0**	**1.0**	**ug/L**	1	26-Jan-2024 17:54
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	26-Jan-2024 17:54
Trichloroethene	**19**		**0.20**	**1.0**	**1.0**	**ug/L**	1	26-Jan-2024 17:54
Vinyl chloride	1.0	U	0.20	1.0	1.0	ug/L	1	26-Jan-2024 17:54
Surr: 1,2-Dichloroethane-d4	*75.3*	*S*		**0**	*81-118*	*%REC*	*1*	*26-Jan-2024 17:54*
Surr: 4-Bromofluorobenzene	*97.1*			**0**	*85-114*	*%REC*	*1*	*26-Jan-2024 17:54*
Surr: Dibromofluoromethane	*85.5*			**0**	*80-119*	*%REC*	*1*	*26-Jan-2024 17:54*
Surr: Toluene-d8	*105*			**0**	*89-112*	*%REC*	*1*	*26-Jan-2024 17:54*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	30-Jan-2024 11:54

Note: See Qualifiers Page for a list of qualifiers and their explanation. **Revision:** 2

ALS Houston, US Date: 28-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Sample ID: 16RW05-240119
Collection Date: 19-Jan-2024 10:40

ANALYTICAL REPORT
WorkOrder:HS24011111
Lab ID:HS24011111-07
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: FT
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	26-Jan-2024 18:16
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	26-Jan-2024 18:16
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	26-Jan-2024 18:16
cis-1,2-Dichloroethene	**1.3**		**0.20**	**1.0**	**1.0**	**ug/L**	1	29-Jan-2024 11:02
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	26-Jan-2024 18:16
Trichloroethene	**0.87**	J	**0.20**	**1.0**	**1.0**	**ug/L**	1	29-Jan-2024 11:02
Vinyl chloride	1.0	U	0.20	1.0	1.0	ug/L	1	26-Jan-2024 18:16
Surr: 1,2-Dichloroethane-d4	*76.6*	*S*		**0**	*81-118*	*%REC*	*1*	*26-Jan-2024 18:16*
Surr: 1,2-Dichloroethane-d4	*75.4*	*S*		**0**	*81-118*	*%REC*	*1*	*29-Jan-2024 11:02*
Surr: 4-Bromofluorobenzene	*95.1*			**0**	*85-114*	*%REC*	*1*	*26-Jan-2024 18:16*
Surr: 4-Bromofluorobenzene	*96.7*			**0**	*85-114*	*%REC*	*1*	*29-Jan-2024 11:02*
Surr: Dibromofluoromethane	*86.5*			**0**	*80-119*	*%REC*	*1*	*26-Jan-2024 18:16*
Surr: Dibromofluoromethane	*85.1*			**0**	*80-119*	*%REC*	*1*	*29-Jan-2024 11:02*
Surr: Toluene-d8	*104*			**0**	*89-112*	*%REC*	*1*	*26-Jan-2024 18:16*
Surr: Toluene-d8	*103*			**0**	*89-112*	*%REC*	*1*	*29-Jan-2024 11:02*
DISSOLVED GASES BY RSK-175		**Method:RSK-175**						Analyst: E.H.
Ethane	0.000500	U	0.000144	0.000500	0.00100	mg/L	1	23-Jan-2024 15:03
Ethene	0.000500	U	0.000234	0.000500	0.00100	mg/L	1	23-Jan-2024 15:03
Methane	**3.89**		**0.0214**	**0.100**	**0.100**	**mg/L**	200	23-Jan-2024 15:35
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	30-Jan-2024 11:54

Note: See Qualifiers Page for a list of qualifiers and their explanation. **Revision:** 2

ALS Houston, US Date: 28-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Sample ID: 16WW51-240119
Collection Date: 19-Jan-2024 11:25

ANALYTICAL REPORT
WorkOrder:HS24011111
Lab ID:HS24011111-08
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: FT
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	26-Jan-2024 18:39
1,1-Dichloroethene	**26**		**0.20**	**1.0**	**1.0**	**ug/L**	1	26-Jan-2024 18:39
1,2-Dichloroethane	**2.3**		**0.20**	**1.0**	**1.0**	**ug/L**	1	26-Jan-2024 18:39
cis-1,2-Dichloroethene	**2,400**		**20**	**100**	**100**	**ug/L**	100	29-Jan-2024 14:23
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	26-Jan-2024 18:39
Trichloroethene	**9,700**		**20**	**100**	**100**	**ug/L**	100	29-Jan-2024 14:23
Vinyl chloride	**58**		**0.20**	**1.0**	**1.0**	**ug/L**	1	26-Jan-2024 18:39
Surr: 1,2-Dichloroethane-d4	*75.5*	*S*		**0**	*81-118*	*%REC*	*1*	*26-Jan-2024 18:39*
Surr: 1,2-Dichloroethane-d4	*75.9*	*S*		**0**	*81-118*	*%REC*	*100*	*29-Jan-2024 14:23*
Surr: 4-Bromofluorobenzene	*97.2*			**0**	*85-114*	*%REC*	*1*	*26-Jan-2024 18:39*
Surr: 4-Bromofluorobenzene	*94.5*			**0**	*85-114*	*%REC*	*100*	*29-Jan-2024 14:23*
Surr: Dibromofluoromethane	*85.2*			**0**	*80-119*	*%REC*	*1*	*26-Jan-2024 18:39*
Surr: Dibromofluoromethane	*86.2*			**0**	*80-119*	*%REC*	*100*	*29-Jan-2024 14:23*
Surr: Toluene-d8	*103*			**0**	*89-112*	*%REC*	*1*	*26-Jan-2024 18:39*
Surr: Toluene-d8	*104*			**0**	*89-112*	*%REC*	*100*	*29-Jan-2024 14:23*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	30-Jan-2024 11:54

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

Revision: 2

ALS Houston, US Date: 28-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Sample ID: 16WW30-240119
Collection Date: 19-Jan-2024 12:10

ANALYTICAL REPORT
WorkOrder:HS24011111
Lab ID:HS24011111-09
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: FT
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	26-Jan-2024 19:01
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	26-Jan-2024 19:01
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	26-Jan-2024 19:01
cis-1,2-Dichloroethene	**6.2**		**0.20**	**1.0**	**1.0**	**ug/L**	1	29-Jan-2024 11:24
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	26-Jan-2024 19:01
Trichloroethene	**35**		**0.20**	**1.0**	**1.0**	**ug/L**	1	29-Jan-2024 11:24
Vinyl chloride	1.0	U	0.20	1.0	1.0	ug/L	1	26-Jan-2024 19:01
Surr: 1,2-Dichloroethane-d4	*76.0*	*S*		**0**	*81-118*	*%REC*	*1*	*26-Jan-2024 19:01*
Surr: 1,2-Dichloroethane-d4	*75.9*	*S*		**0**	*81-118*	*%REC*	*1*	*29-Jan-2024 11:24*
Surr: 4-Bromofluorobenzene	*96.0*			**0**	*85-114*	*%REC*	*1*	*26-Jan-2024 19:01*
Surr: 4-Bromofluorobenzene	*94.8*			**0**	*85-114*	*%REC*	*1*	*29-Jan-2024 11:24*
Surr: Dibromofluoromethane	*84.8*			**0**	*80-119*	*%REC*	*1*	*26-Jan-2024 19:01*
Surr: Dibromofluoromethane	*86.3*			**0**	*80-119*	*%REC*	*1*	*29-Jan-2024 11:24*
Surr: Toluene-d8	*103*			**0**	*89-112*	*%REC*	*1*	*26-Jan-2024 19:01*
Surr: Toluene-d8	*104*			**0**	*89-112*	*%REC*	*1*	*29-Jan-2024 11:24*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	30-Jan-2024 11:54

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

Revision: 2

ALS Houston, US Date: 28-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Sample ID: 16WW29-240119
Collection Date: 19-Jan-2024 12:50

ANALYTICAL REPORT
WorkOrder:HS24011111
Lab ID:HS24011111-10
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: FT
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	29-Jan-2024 10:39
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	29-Jan-2024 10:39
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	29-Jan-2024 10:39
cis-1,2-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	29-Jan-2024 10:39
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	29-Jan-2024 10:39
Trichloroethene	**0.88**	J	**0.20**	**1.0**	**1.0**	**ug/L**	1	29-Jan-2024 10:39
Vinyl chloride	1.0	U	0.20	1.0	1.0	ug/L	1	29-Jan-2024 10:39
Surr: 1,2-Dichloroethane-d4	*76.0*	*S*		**0**	*81-118*	*%REC*	*1*	*29-Jan-2024 10:39*
Surr: 4-Bromofluorobenzene	*98.9*			**0**	*85-114*	*%REC*	*1*	*29-Jan-2024 10:39*
Surr: Dibromofluoromethane	*85.2*			**0**	*80-119*	*%REC*	*1*	*29-Jan-2024 10:39*
Surr: Toluene-d8	*105*			**0**	*89-112*	*%REC*	*1*	*29-Jan-2024 10:39*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	30-Jan-2024 11:54

Note: See Qualifiers Page for a list of qualifiers and their explanation. **Revision:** 2

ALS Houston, US Date: 28-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Sample ID: 16SW01-240119
Collection Date: 19-Jan-2024 13:00

ANALYTICAL REPORT
WorkOrder:HS24011111
Lab ID:HS24011111-11
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: FT
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	26-Jan-2024 19:46
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	26-Jan-2024 19:46
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	26-Jan-2024 19:46
cis-1,2-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	29-Jan-2024 11:46
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	26-Jan-2024 19:46
Trichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	29-Jan-2024 11:46
Vinyl chloride	1.0	U	0.20	1.0	1.0	ug/L	1	26-Jan-2024 19:46
Surr: 1,2-Dichloroethane-d4	*76.8*	*S*		**0**	*81-118*	*%REC*	*1*	*26-Jan-2024 19:46*
Surr: 1,2-Dichloroethane-d4	*75.7*	*S*		**0**	*81-118*	*%REC*	*1*	*29-Jan-2024 11:46*
Surr: 4-Bromofluorobenzene	*95.7*			**0**	*85-114*	*%REC*	*1*	*26-Jan-2024 19:46*
Surr: 4-Bromofluorobenzene	*94.3*			**0**	*85-114*	*%REC*	*1*	*29-Jan-2024 11:46*
Surr: Dibromofluoromethane	*85.8*			**0**	*80-119*	*%REC*	*1*	*26-Jan-2024 19:46*
Surr: Dibromofluoromethane	*85.0*			**0**	*80-119*	*%REC*	*1*	*29-Jan-2024 11:46*
Surr: Toluene-d8	*103*			**0**	*89-112*	*%REC*	*1*	*26-Jan-2024 19:46*
Surr: Toluene-d8	*103*			**0**	*89-112*	*%REC*	*1*	*29-Jan-2024 11:46*
METALS BY ICPMS BY SW6020A		**Method:SW6020A**				Prep:SW3010A / 23-Jan-2024		Analyst: MSC
Arsenic	**0.000744**	J	**0.000400**	**0.00125**	**0.00500**	**mg/L**	1	26-Jan-2024 12:18
Chromium	**0.000642**	J	**0.000400**	**0.00125**	**0.00500**	**mg/L**	1	26-Jan-2024 12:18
Manganese	**0.0387**		**0.000700**	**0.00250**	**0.00500**	**mg/L**	1	26-Jan-2024 12:18
Nickel	**0.00254**	J	**0.000600**	**0.00125**	**0.00500**	**mg/L**	1	26-Jan-2024 12:18
Thallium	0.000500	U	0.000200	0.000500	0.00200	mg/L	1	26-Jan-2024 12:18
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	30-Jan-2024 11:54

Note: See Qualifiers Page for a list of qualifiers and their explanation. **Revision:** 2

ALS Houston, US Date: 28-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Sample ID: 16SW02-240119
Collection Date: 19-Jan-2024 13:15

ANALYTICAL REPORT
WorkOrder:HS24011111
Lab ID:HS24011111-12
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: FT
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	26-Jan-2024 20:08
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	26-Jan-2024 20:08
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	26-Jan-2024 20:08
cis-1,2-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	29-Jan-2024 12:09
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	26-Jan-2024 20:08
Trichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	29-Jan-2024 12:09
Vinyl chloride	1.0	U	0.20	1.0	1.0	ug/L	1	26-Jan-2024 20:08
Surr: 1,2-Dichloroethane-d4	*75.8*	*S*		**0**	*81-118*	*%REC*	*1*	*26-Jan-2024 20:08*
Surr: 1,2-Dichloroethane-d4	*76.2*	*S*		**0**	*81-118*	*%REC*	*1*	*29-Jan-2024 12:09*
Surr: 4-Bromofluorobenzene	*96.6*			**0**	*85-114*	*%REC*	*1*	*26-Jan-2024 20:08*
Surr: 4-Bromofluorobenzene	*97.5*			**0**	*85-114*	*%REC*	*1*	*29-Jan-2024 12:09*
Surr: Dibromofluoromethane	*85.6*			**0**	*80-119*	*%REC*	*1*	*26-Jan-2024 20:08*
Surr: Dibromofluoromethane	*85.4*			**0**	*80-119*	*%REC*	*1*	*29-Jan-2024 12:09*
Surr: Toluene-d8	*104*			**0**	*89-112*	*%REC*	*1*	*26-Jan-2024 20:08*
Surr: Toluene-d8	*103*			**0**	*89-112*	*%REC*	*1*	*29-Jan-2024 12:09*
METALS BY ICPMS BY SW6020A		**Method:SW6020A**				Prep:SW3010A / 23-Jan-2024		Analyst: MSC
Arsenic	**0.000671**	J	**0.000400**	**0.00125**	**0.00500**	**mg/L**	1	26-Jan-2024 12:20
Chromium	**0.000496**	J	**0.000400**	**0.00125**	**0.00500**	**mg/L**	1	26-Jan-2024 12:20
Manganese	**0.0332**		**0.000700**	**0.00250**	**0.00500**	**mg/L**	1	26-Jan-2024 12:20
Nickel	**0.00230**	J	**0.000600**	**0.00125**	**0.00500**	**mg/L**	1	26-Jan-2024 12:20
Thallium	0.000500	U	0.000200	0.000500	0.00200	mg/L	1	26-Jan-2024 12:20
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	30-Jan-2024 11:54

Note: See Qualifiers Page for a list of qualifiers and their explanation. **Revision:** 2

ALS Houston, US Date: 28-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Sample ID: 16SW02-240119-FD
Collection Date: 19-Jan-2024 13:15

ANALYTICAL REPORT
WorkOrder:HS24011111
Lab ID:HS24011111-13
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: FT
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	26-Jan-2024 20:31
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	26-Jan-2024 20:31
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	26-Jan-2024 20:31
cis-1,2-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	26-Jan-2024 20:31
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	26-Jan-2024 20:31
Trichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	29-Jan-2024 12:31
Vinyl chloride	1.0	U	0.20	1.0	1.0	ug/L	1	26-Jan-2024 20:31
Surr: 1,2-Dichloroethane-d4	*76.1*	*S*		**0**	*81-118*	*%REC*	*1*	*26-Jan-2024 20:31*
Surr: 1,2-Dichloroethane-d4	*76.3*	*S*		**0**	*81-118*	*%REC*	*1*	*29-Jan-2024 12:31*
Surr: 4-Bromofluorobenzene	*94.8*			**0**	*85-114*	*%REC*	*1*	*26-Jan-2024 20:31*
Surr: 4-Bromofluorobenzene	*95.0*			**0**	*85-114*	*%REC*	*1*	*29-Jan-2024 12:31*
Surr: Dibromofluoromethane	*86.3*			**0**	*80-119*	*%REC*	*1*	*26-Jan-2024 20:31*
Surr: Dibromofluoromethane	*86.0*			**0**	*80-119*	*%REC*	*1*	*29-Jan-2024 12:31*
Surr: Toluene-d8	*105*			**0**	*89-112*	*%REC*	*1*	*26-Jan-2024 20:31*
Surr: Toluene-d8	*104*			**0**	*89-112*	*%REC*	*1*	*29-Jan-2024 12:31*
METALS BY ICPMS BY SW6020A		**Method:SW6020A**				Prep:SW3010A / 23-Jan-2024		Analyst: MSC
Arsenic	**0.000716**	J	**0.000400**	**0.00125**	**0.00500**	**mg/L**	1	26-Jan-2024 12:23
Chromium	**0.000588**	J	**0.000400**	**0.00125**	**0.00500**	**mg/L**	1	26-Jan-2024 12:23
Manganese	**0.0410**		**0.000700**	**0.00250**	**0.00500**	**mg/L**	1	26-Jan-2024 12:23
Nickel	**0.00251**	J	**0.000600**	**0.00125**	**0.00500**	**mg/L**	1	26-Jan-2024 12:23
Thallium	0.000500	U	0.000200	0.000500	0.00200	mg/L	1	26-Jan-2024 12:23
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	30-Jan-2024 11:54

Note: See Qualifiers Page for a list of qualifiers and their explanation. **Revision:** 2

ALS Houston, US Date: 28-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Sample ID: 16SW03-240119
Collection Date: 19-Jan-2024 13:30

ANALYTICAL REPORT
WorkOrder:HS24011111
Lab ID:HS24011111-14
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: FT
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	26-Jan-2024 13:26
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	26-Jan-2024 13:26
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	26-Jan-2024 13:26
cis-1,2-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	26-Jan-2024 13:26
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	26-Jan-2024 13:26
Trichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	26-Jan-2024 13:26
Vinyl chloride	1.0	U	0.20	1.0	1.0	ug/L	1	26-Jan-2024 13:26
Surr: 1,2-Dichloroethane-d4	*75.4*	*S*		**0**	*81-118*	*%REC*	*1*	*26-Jan-2024 13:26*
Surr: 4-Bromofluorobenzene	*97.2*			**0**	*85-114*	*%REC*	*1*	*26-Jan-2024 13:26*
Surr: Dibromofluoromethane	*83.2*			**0**	*80-119*	*%REC*	*1*	*26-Jan-2024 13:26*
Surr: Toluene-d8	*105*			**0**	*89-112*	*%REC*	*1*	*26-Jan-2024 13:26*
METALS BY ICPMS BY SW6020A		**Method:SW6020A**				Prep:SW3010A / 23-Jan-2024		Analyst: MSC
Arsenic	**0.000695**	J	**0.000400**	**0.00125**	**0.00500**	**mg/L**	1	26-Jan-2024 12:08
Chromium	**0.000811**	J	**0.000400**	**0.00125**	**0.00500**	**mg/L**	1	26-Jan-2024 12:08
Manganese	**0.0381**		**0.000700**	**0.00250**	**0.00500**	**mg/L**	1	26-Jan-2024 12:08
Nickel	**0.00290**	J	**0.000600**	**0.00125**	**0.00500**	**mg/L**	1	26-Jan-2024 12:08
Thallium	0.000500	U	0.000200	0.000500	0.00200	mg/L	1	26-Jan-2024 12:08
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	30-Jan-2024 11:54

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

Revision: 2

ALS Houston, US Date: 28-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Sample ID: Trip Blank-240119
Collection Date: 19-Jan-2024 00:00

ANALYTICAL REPORT
WorkOrder:HS24011111
Lab ID:HS24011111-15
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C	**Method:SW8260**							Analyst: PC
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	25-Jan-2024 14:47
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	25-Jan-2024 14:47
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	25-Jan-2024 14:47
cis-1,2-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	25-Jan-2024 14:47
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	25-Jan-2024 14:47
Trichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	25-Jan-2024 14:47
Vinyl chloride	1.0	U	0.20	1.0	1.0	ug/L	1	25-Jan-2024 14:47
Surr: 1,2-Dichloroethane-d4	*84.5*			**0**	*81-118*	*%REC*	*1*	*25-Jan-2024 14:47*
Surr: 4-Bromofluorobenzene	*87.6*			**0**	*85-114*	*%REC*	*1*	*25-Jan-2024 14:47*
Surr: Dibromofluoromethane	*97.3*			**0**	*80-119*	*%REC*	*1*	*25-Jan-2024 14:47*
Surr: Toluene-d8	*99.7*			**0**	*89-112*	*%REC*	*1*	*25-Jan-2024 14:47*

Note: See Qualifiers Page for a list of qualifiers and their explanation. **Revision:** 2

ALS Houston, US Date: 28-Feb-24

Weight / Prep Log

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24011111

Batch ID: 206338 **Start Date:** 23 Jan 2024 14:00 **End Date:** 23 Jan 2024 14:00
Method: WATER - SW3010A **Prep Code:** 3010A

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS24011111-11		10 (mL)	10 (mL)	1	120 plastic HNO3
HS24011111-12		10 (mL)	10 (mL)	1	120 plastic HNO3
HS24011111-13		10 (mL)	10 (mL)	1	120 plastic HNO3
HS24011111-14		10 (mL)	10 (mL)	1	120 plastic HNO3

Revision: 2

ALS Houston, US Date: 28-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24011111

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: 206338 (0)	**Test Name :** METALS BY ICPMS BY SW6020A				**Matrix:** Groundwater	
HS24011111-11	16SW01-240119	19 Jan 2024 13:00		23 Jan 2024 14:00	26 Jan 2024 12:18	1
HS24011111-12	16SW02-240119	19 Jan 2024 13:15		23 Jan 2024 14:00	26 Jan 2024 12:20	1
HS24011111-13	16SW02-240119-FD	19 Jan 2024 13:15		23 Jan 2024 14:00	26 Jan 2024 12:23	1
HS24011111-14	16SW03-240119	19 Jan 2024 13:30		23 Jan 2024 14:00	26 Jan 2024 12:08	1
Batch ID: R457054 (0)	**Test Name :** DISSOLVED GASES BY RSK-175				**Matrix:** Groundwater	
HS24011111-07	16RW05-240119	19 Jan 2024 10:40			23 Jan 2024 15:35	200
HS24011111-07	16RW05-240119	19 Jan 2024 10:40			23 Jan 2024 15:03	1
Batch ID: R457250 (0)	**Test Name :** VOLATILES ORGANICS BY METHOD 8260C				**Matrix:** Water	
HS24011111-15	Trip Blank-240119	19 Jan 2024 00:00			25 Jan 2024 14:47	1
Batch ID: R457361 (0)	**Test Name :** VOLATILES ORGANICS BY METHOD 8260C				**Matrix:** Groundwater	
HS24011111-01	16WW44-240119	19 Jan 2024 07:00			26 Jan 2024 16:02	1
HS24011111-02	16WW37-240119	19 Jan 2024 07:45			26 Jan 2024 16:24	1
HS24011111-03	16WW38-240119	19 Jan 2024 08:30			26 Jan 2024 16:47	1
HS24011111-04	16WW38-240119-FD	19 Jan 2024 08:30			26 Jan 2024 17:09	1
HS24011111-05	16WW13-240119	19 Jan 2024 09:15			26 Jan 2024 17:31	1
HS24011111-06	16WW42-240119	19 Jan 2024 09:55			26 Jan 2024 17:54	1
HS24011111-07	16RW05-240119	19 Jan 2024 10:40			26 Jan 2024 18:16	1
HS24011111-08	16WW51-240119	19 Jan 2024 11:25			26 Jan 2024 18:39	1
HS24011111-09	16WW30-240119	19 Jan 2024 12:10			26 Jan 2024 19:01	1
HS24011111-11	16SW01-240119	19 Jan 2024 13:00			26 Jan 2024 19:46	1
HS24011111-12	16SW02-240119	19 Jan 2024 13:15			26 Jan 2024 20:08	1
HS24011111-13	16SW02-240119-FD	19 Jan 2024 13:15			26 Jan 2024 20:31	1
HS24011111-14	16SW03-240119	19 Jan 2024 13:30			26 Jan 2024 13:26	1
Batch ID: R457422 (0)	**Test Name :** VOLATILES ORGANICS BY METHOD 8260C				**Matrix:** Groundwater	
HS24011111-02	16WW37-240119	19 Jan 2024 07:45			29 Jan 2024 12:53	10
HS24011111-03	16WW38-240119	19 Jan 2024 08:30			29 Jan 2024 13:16	50
HS24011111-04	16WW38-240119-FD	19 Jan 2024 08:30			29 Jan 2024 13:38	50
HS24011111-05	16WW13-240119	19 Jan 2024 09:15			29 Jan 2024 14:01	10
HS24011111-07	16RW05-240119	19 Jan 2024 10:40			29 Jan 2024 11:02	1
HS24011111-08	16WW51-240119	19 Jan 2024 11:25			29 Jan 2024 14:23	100
HS24011111-09	16WW30-240119	19 Jan 2024 12:10			29 Jan 2024 11:24	1
HS24011111-10	16WW29-240119	19 Jan 2024 12:50			29 Jan 2024 10:39	1
HS24011111-11	16SW01-240119	19 Jan 2024 13:00			29 Jan 2024 11:46	1
HS24011111-12	16SW02-240119	19 Jan 2024 13:15			29 Jan 2024 12:09	1
HS24011111-13	16SW02-240119-FD	19 Jan 2024 13:15			29 Jan 2024 12:31	1

Revision: 2

ALS Houston, US Date: 28-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24011111

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: R457489 (0)	**Test Name :** SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)				**Matrix:** Groundwater	
HS24011111-01	16WW44-240119	19 Jan 2024 07:00			30 Jan 2024 11:54	1
HS24011111-02	16WW37-240119	19 Jan 2024 07:45			30 Jan 2024 11:54	1
HS24011111-03	16WW38-240119	19 Jan 2024 08:30			30 Jan 2024 11:54	1
HS24011111-04	16WW38-240119-FD	19 Jan 2024 08:30			30 Jan 2024 11:54	1
HS24011111-05	16WW13-240119	19 Jan 2024 09:15			30 Jan 2024 11:54	1
HS24011111-06	16WW42-240119	19 Jan 2024 09:55			30 Jan 2024 11:54	1
HS24011111-07	16RW05-240119	19 Jan 2024 10:40			30 Jan 2024 11:54	1
HS24011111-08	16WW51-240119	19 Jan 2024 11:25			30 Jan 2024 11:54	1
HS24011111-09	16WW30-240119	19 Jan 2024 12:10			30 Jan 2024 11:54	1
HS24011111-10	16WW29-240119	19 Jan 2024 12:50			30 Jan 2024 11:54	1
HS24011111-11	16SW01-240119	19 Jan 2024 13:00			30 Jan 2024 11:54	1
HS24011111-12	16SW02-240119	19 Jan 2024 13:15			30 Jan 2024 11:54	1
HS24011111-13	16SW02-240119-FD	19 Jan 2024 13:15			30 Jan 2024 11:54	1
HS24011111-14	16SW03-240119	19 Jan 2024 13:30			30 Jan 2024 11:54	1

Revision: 2

ALS Houston, US Date: 28-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24011111

QC BATCH REPORT

Batch ID: R457054 (0) **Instrument:** FID-4 **Method:** DISSOLVED GASES BY RSK-175

MBLK Sample ID: **MBLK-240123** Units: **mg/L** Analysis Date: **23-Jan-2024 07:52**
Client ID: Run ID: **FID-4_457054** SeqNo: **7793043** 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-240123** Units: **mg/L** Analysis Date: **23-Jan-2024 08:26**
Client ID: Run ID: **FID-4_457054** SeqNo: **7793044** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	0.0196	0.00100	0.01804	0	108	75 - 125				
Ethene	0.0178	0.00100	0.0168	0	106	75 - 125				
Methane	0.00817	0.000500	0.009647	0	84.7	75 - 125				

LCSD Sample ID: **LCSD-240123** Units: **mg/L** Analysis Date: **23-Jan-2024 08:52**
Client ID: Run ID: **FID-4_457054** SeqNo: **7793045** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	0.0198	0.00100	0.01804	0	110	75 - 125	0.01957	1.17	30	
Ethene	0.0177	0.00100	0.0168	0	105	75 - 125	0.01780	0.751	30	
Methane	0.00842	0.000500	0.009647	0	87.3	75 - 125	0.008169	3.01	30	

MS Sample ID: **HS24011040-03MS** Units: **mg/L** Analysis Date: **23-Jan-2024 09:16**
Client ID: Run ID: **FID-4_457054** SeqNo: **7793047** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	0.0184	0.00100	0.01804	0	102	75 - 125				
Ethene	0.0243	0.00100	0.0168	0.01439	58.9	75 - 125				S
Methane	0.174	0.000500	0.009647	0.1721	15.5	75 - 125				SEO

Revision: 2

ALS Houston, US Date: 28-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24011111

QC BATCH REPORT

Batch ID: R457054 (0) **Instrument:** FID-4 **Method:** DISSOLVED GASES BY RSK-175

MSD Sample ID: **HS24011040-03MSD** Units: **mg/L** Analysis Date: **23-Jan-2024 09:26**
Client ID: Run ID: **FID-4_457054** SeqNo: **7793048** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	0.0175	0.00100	0.01804	0	96.8	75 - 125	0.01845	5.49	30	
Ethene	0.0247	0.00100	0.0168	0.01439	61.5	75 - 125	0.02429	1.76	30	S
Methane	0.174	0.000500	0.009647	0.1721	16.9	75 - 125	0.1736	0.0744	30	SEO

The following samples were analyzed in this batch: HS24011111-07

Revision: 2

ALS Houston, US Date: 28-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24011111

QC BATCH REPORT

Batch ID: 206338 (0) **Instrument: ICPMS07** **Method: METALS BY ICPMS BY SW6020A**

MBLK Sample ID: **MBLK-206338** Units: **mg/L** Analysis Date: **26-Jan-2024 12:04**
Client ID: Run ID: **ICPMS07_457269** SeqNo: **7797743** PrepDate: **23-Jan-2024** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.00125	0.00500								U
Chromium	0.00125	0.00500								U
Manganese	0.00250	0.00500								U
Nickel	0.00125	0.00500								U
Thallium	0.000500	0.00200								U

LCS Sample ID: **LCS-206338** Units: **mg/L** Analysis Date: **26-Jan-2024 12:06**
Client ID: Run ID: **ICPMS07_457269** SeqNo: **7797744** PrepDate: **23-Jan-2024** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.04678	0.00500	0.05	0	93.6	84 - 116				
Chromium	0.04536	0.00500	0.05	0	90.7	85 - 116				
Manganese	0.04699	0.00500	0.05	0	94.0	87 - 115				
Nickel	0.04725	0.00500	0.05	0	94.5	85 - 117				
Thallium	0.04597	0.00200	0.05	0	91.9	82 - 116				

MS Sample ID: **HS24011111-14MS** Units: **mg/L** Analysis Date: **26-Jan-2024 12:11**
Client ID: **16SW03-240119** Run ID: **ICPMS07_457269** SeqNo: **7797746** PrepDate: **23-Jan-2024** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.04712	0.00500	0.05	0.000643	92.9	84 - 116				
Chromium	0.0507	0.00500	0.05	0.000526	100	85 - 116				
Manganese	0.09009	0.00500	0.05	0.03808	104	87 - 115				
Nickel	0.05183	0.00500	0.05	0.002316	99.0	85 - 117				
Thallium	0.0468	0.00200	0.05	0.000005	93.6	82 - 116				

Revision: 2

ALS Houston, US Date: 28-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24011111

QC BATCH REPORT

Batch ID: 206338 (0) **Instrument:** ICPMS07 **Method:** METALS BY ICPMS BY SW6020A

MSD Sample ID: **HS24011111-14MSD** Units: **mg/L** Analysis Date: **26-Jan-2024 12:13**
Client ID: **16SW03-240119** Run ID: **ICPMS07_457269** SeqNo: **7797747** PrepDate: **23-Jan-2024** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.04729	0.00500	0.05	0.000643	93.3	84 - 116	0.04469	5.67	20	
Chromium	0.0453	0.00500	0.05	0.000526	89.5	85 - 116	0.04674	3.13	20	
Manganese	0.08101	0.00500	0.05	0.03808	85.8	87 - 115	0.08525	5.11	20	S
Nickel	0.04969	0.00500	0.05	0.002316	94.7	85 - 117	0.04901	1.37	20	
Thallium	0.04742	0.00200	0.05	0.000005	94.8	82 - 116	0.04327	9.17	20	

PDS Sample ID: **HS24011111-14PDS** Units: **mg/L** Analysis Date: **26-Jan-2024 12:16**
Client ID: **16SW03-240119** Run ID: **ICPMS07_457269** SeqNo: **7797749** PrepDate: **23-Jan-2024** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.1034	0.00500	0.1	0.000643	103	80 - 120				
Chromium	0.1038	0.00500	0.1	0.000526	103	80 - 120				
Manganese	0.142	0.00500	0.1	0.03808	104	80 - 120				
Nickel	0.102	0.00500	0.1	0.002316	99.7	80 - 120				
Thallium	0.1163	0.00200	0.1	0.000005	116	80 - 120				

SD Sample ID: **HS24011111-14SD** Units: **mg/L** Analysis Date: **26-Jan-2024 11:40**
Client ID: **16SW03-240119** Run ID: **ICPMS07_457269** SeqNo: **7797727** PrepDate: **23-Jan-2024** DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%D	%D Limit	Qual
Arsenic	0.00625	0.0250					0.000643	0	10	U
Manganese	0.04004	0.0250					0.03808	5.14	10	
Thallium	0.00250	0.0100					0.000005	0	10	U

The following samples were analyzed in this batch: HS24011111-11 HS24011111-12 HS24011111-13 HS24011111-14

Revision: 2

ALS Houston, US Date: 28-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24011111

QC BATCH REPORT

Batch ID: R457250 (0) **Instrument:** VOA9 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MBLK Sample ID: **VBLKW-240125** Units: **ug/L** Analysis Date: **25-Jan-2024 12:33**
Client ID: Run ID: **VOA9_457250** SeqNo: **7809107** 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	*43.58*	*35*	*50*	*0*	*87.2*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*45.31*	*35*	*50*	*0*	*90.6*	*85 - 114*				
Surr: Dibromofluoromethane	*48.56*	*35*	*50*	*0*	*97.1*	*80 - 119*				
Surr: Toluene-d8	*51.4*	*35*	*50*	*0*	*103*	*89 - 112*				

LCS Sample ID: **VLCSW-240125** Units: **ug/L** Analysis Date: **25-Jan-2024 11:49**
Client ID: Run ID: **VOA9_457250** SeqNo: **7809106** 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	20.11	1.0	20	0	101	80 - 119				
1,1-Dichloroethene	23.94	1.0	20	0	120	71 - 131				
1,2-Dichloroethane	19.35	1.0	20	0	96.7	73 - 128				
cis-1,2-Dichloroethene	20.72	1.0	20	0	104	78 - 123				
Methylene chloride	23.25	2.0	20	0	116	74 - 124				
Trichloroethene	22.08	1.0	20	0	110	79 - 123				
Vinyl chloride	22.54	1.0	20	0	113	58 - 137				
Surr: 1,2-Dichloroethane-d4	*47.07*	*35*	*50*	*0*	*94.1*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*49.3*	*35*	*50*	*0*	*98.6*	*85 - 114*				
Surr: Dibromofluoromethane	*52.13*	*35*	*50*	*0*	*104*	*80 - 119*				
Surr: Toluene-d8	*51.11*	*35*	*50*	*0*	*102*	*89 - 112*				

Revision: 2

ALS Houston, US Date: 28-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24011111

QC BATCH REPORT

Batch ID: R457250 (0) **Instrument:** VOA9 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MS Sample ID: **HS24011040-03MS** Units: **ug/L** Analysis Date: **25-Jan-2024 16:16**
Client ID: Run ID: **VOA9_457250** SeqNo: **7809113** PrepDate: DF: **100**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	1760	100	2000	0	88.0	80 - 119				
1,1-Dichloroethene	2337	100	2000	132.9	110	71 - 131				
1,2-Dichloroethane	1653	100	2000	0	82.7	73 - 128				
cis-1,2-Dichloroethene	3089	100	2000	1329	88.0	78 - 123				
Methylene chloride	1958	200	2000	0	97.9	74 - 124				
Trichloroethene	12000	100	2000	10220	88.6	79 - 123				O
Vinyl chloride	1853	100	2000	106.3	87.3	58 - 137				
Surr: 1,2-Dichloroethane-d4	*4334*	*3500*	*5000*	*0*	*86.7*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*4928*	*3500*	*5000*	*0*	*98.6*	*85 - 114*				
Surr: Dibromofluoromethane	*4922*	*3500*	*5000*	*0*	*98.4*	*80 - 119*				
Surr: Toluene-d8	*5334*	*3500*	*5000*	*0*	*107*	*89 - 112*				

MSD Sample ID: **HS24011040-03MSD** Units: **ug/L** Analysis Date: **25-Jan-2024 16:38**
Client ID: Run ID: **VOA9_457250** SeqNo: **7809114** PrepDate: DF: **100**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	1847	100	2000	0	92.3	80 - 119	1760	4.84	20	
1,1-Dichloroethene	2237	100	2000	132.9	105	71 - 131	2337	4.4	20	
1,2-Dichloroethane	1713	100	2000	0	85.7	73 - 128	1653	3.57	20	
cis-1,2-Dichloroethene	3041	100	2000	1329	85.6	78 - 123	3089	1.58	20	
Methylene chloride	2089	200	2000	0	104	74 - 124	1958	6.43	20	
Trichloroethene	12170	100	2000	10220	97.2	79 - 123	12000	1.42	20	O
Vinyl chloride	1777	100	2000	106.3	83.5	58 - 137	1853	4.2	20	
Surr: 1,2-Dichloroethane-d4	*4508*	*3500*	*5000*	*0*	*90.2*	*81 - 118*	*4334*	*3.93*	*20*	
Surr: 4-Bromofluorobenzene	*4913*	*3500*	*5000*	*0*	*98.3*	*85 - 114*	*4928*	*0.312*	*20*	
Surr: Dibromofluoromethane	*4920*	*3500*	*5000*	*0*	*98.4*	*80 - 119*	*4922*	*0.0514*	*20*	
Surr: Toluene-d8	*5269*	*3500*	*5000*	*0*	*105*	*89 - 112*	*5334*	*1.24*	*20*	

The following samples were analyzed in this batch: HS24011111-15

Revision: 2

ALS Houston, US Date: 28-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24011111

QC BATCH REPORT

Batch ID: R457361 (0) **Instrument:** VOA9 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MBLK Sample ID: **VBLKW-240126** Units: **ug/L** Analysis Date: **26-Jan-2024 13:03**
Client ID: Run ID: **VOA9_457361** SeqNo: **7799317** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	1.0	1.0								U
1,1-Dichloroethene	1.0	1.0								U
1,2-Dichloroethane	1.0	1.0								U
cis-1,2-Dichloroethene	1.0	1.0								U
Methylene chloride	1.0	2.0								U
Trichloroethene	1.0	1.0								U
Vinyl chloride	1.0	1.0								U
Surr: 1,2-Dichloroethane-d4	*41.5*	*35*	*50*	*0*	*83.0*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*49.2*	*35*	*50*	*0*	*98.4*	*85 - 114*				
Surr: Dibromofluoromethane	*42.49*	*35*	*50*	*0*	*85.0*	*80 - 119*				
Surr: Toluene-d8	*52.41*	*35*	*50*	*0*	*105*	*89 - 112*				

LCS Sample ID: **VLCSW-240126** Units: **ug/L** Analysis Date: **26-Jan-2024 12:18**
Client ID: Run ID: **VOA9_457361** SeqNo: **7799316** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	16.68	1.0	20	0	83.4	80 - 119				
1,1-Dichloroethene	22.33	1.0	20	0	112	71 - 131				
1,2-Dichloroethane	15.92	1.0	20	0	79.6	73 - 128				
cis-1,2-Dichloroethene	17.05	1.0	20	0	85.3	78 - 123				
Methylene chloride	19.37	2.0	20	0	96.8	74 - 124				
Trichloroethene	19.47	1.0	20	0	97.3	79 - 123				
Vinyl chloride	20.23	1.0	20	0	101	58 - 137				
Surr: 1,2-Dichloroethane-d4	*43.82*	*35*	*50*	*0*	*87.6*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*49.55*	*35*	*50*	*0*	*99.1*	*85 - 114*				
Surr: Dibromofluoromethane	*49.68*	*35*	*50*	*0*	*99.4*	*80 - 119*				
Surr: Toluene-d8	*52.03*	*35*	*50*	*0*	*104*	*89 - 112*				

Revision: 2

ALS Houston, US Date: 28-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24011111

QC BATCH REPORT

Batch ID: R457361 (0) **Instrument:** VOA9 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MS Sample ID: **HS24011111-14MS** Units: **ug/L** Analysis Date: **26-Jan-2024 14:33**
Client ID: **16SW03-240119** Run ID: **VOA9_457361** SeqNo: **7799321** 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	18.18	1.0	20	0	90.9	80 - 119				
1,1-Dichloroethene	25.23	1.0	20	0	126	71 - 131				
1,2-Dichloroethane	16.39	1.0	20	0	82.0	73 - 128				
cis-1,2-Dichloroethene	17.93	1.0	20	0	89.7	78 - 123				
Methylene chloride	21.76	2.0	20	0	109	74 - 124				
Trichloroethene	20.86	1.0	20	0	104	79 - 123				
Vinyl chloride	18.9	1.0	20	0	94.5	58 - 137				
Surr: 1,2-Dichloroethane-d4	*38.24*	*35*	*50*	*0*	*76.5*	*81 - 118*				S
Surr: 4-Bromofluorobenzene	*45.33*	*35*	*50*	*0*	*90.7*	*85 - 114*				
Surr: Dibromofluoromethane	*42.51*	*35*	*50*	*0*	*85.0*	*80 - 119*				
Surr: Toluene-d8	*47.41*	*35*	*50*	*0*	*94.8*	*89 - 112*				

MSD Sample ID: **HS24011111-14MSD** Units: **ug/L** Analysis Date: **26-Jan-2024 14:55**
Client ID: **16SW03-240119** Run ID: **VOA9_457361** SeqNo: **7799322** 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	18.64	1.0	20	0	93.2	80 - 119	18.18	2.48	20	
1,1-Dichloroethene	25.3	1.0	20	0	126	71 - 131	25.23	0.264	20	
1,2-Dichloroethane	16.88	1.0	20	0	84.4	73 - 128	16.39	2.96	20	
cis-1,2-Dichloroethene	17.95	1.0	20	0	89.7	78 - 123	17.93	0.0758	20	
Methylene chloride	23.06	2.0	20	0	115	74 - 124	21.76	5.79	20	
Trichloroethene	20.81	1.0	20	0	104	79 - 123	20.86	0.253	20	
Vinyl chloride	19.04	1.0	20	0	95.2	58 - 137	18.9	0.719	20	
Surr: 1,2-Dichloroethane-d4	*39.09*	*35*	*50*	*0*	*78.2*	*81 - 118*	*38.24*	*2.2*	*20*	S
Surr: 4-Bromofluorobenzene	*45.2*	*35*	*50*	*0*	*90.4*	*85 - 114*	*45.33*	*0.284*	*20*	
Surr: Dibromofluoromethane	*44.41*	*35*	*50*	*0*	*88.8*	*80 - 119*	*42.51*	*4.37*	*20*	
Surr: Toluene-d8	*46.84*	*35*	*50*	*0*	*93.7*	*89 - 112*	*47.41*	*1.2*	*20*	

The following samples were analyzed in this batch:

HS24011111-01	HS24011111-02	HS24011111-03	HS24011111-04
HS24011111-05	HS24011111-06	HS24011111-07	HS24011111-08
HS24011111-09	HS24011111-11	HS24011111-12	HS24011111-13
HS24011111-14			

Revision: 2

ALS Houston, US Date: 28-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24011111

QC BATCH REPORT

Batch ID: R457422 (0) **Instrument:** VOA9 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MBLK Sample ID: **VBLKW-240126** Units: **ug/L** Analysis Date: **29-Jan-2024 10:17**
Client ID: Run ID: **VOA9_457422** SeqNo: **7800256** 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	*40.84*	*35*	*50*	*0*	*81.7*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*48.98*	*35*	*50*	*0*	*98.0*	*85 - 114*				
Surr: Dibromofluoromethane	*45.48*	*35*	*50*	*0*	*91.0*	*80 - 119*				
Surr: Toluene-d8	*52.86*	*35*	*50*	*0*	*106*	*89 - 112*				

LCS Sample ID: **VLCSW-240126** Units: **ug/L** Analysis Date: **29-Jan-2024 09:32**
Client ID: Run ID: **VOA9_457422** SeqNo: **7800255** 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	20.41	1.0	20	0	102	80 - 119				
1,1-Dichloroethene	29.34	1.0	20	0	147	71 - 131				S
1,2-Dichloroethane	19.39	1.0	20	0	97.0	73 - 128				
cis-1,2-Dichloroethene	20.1	1.0	20	0	100	78 - 123				
Methylene chloride	27.69	2.0	20	0	138	74 - 124				S
Trichloroethene	23.94	1.0	20	0	120	79 - 123				
Vinyl chloride	27.11	1.0	20	0	136	58 - 137				
Surr: 1,2-Dichloroethane-d4	*45.37*	*35*	*50*	*0*	*90.7*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*52.98*	*35*	*50*	*0*	*106*	*85 - 114*				
Surr: Dibromofluoromethane	*51.55*	*35*	*50*	*0*	*103*	*80 - 119*				
Surr: Toluene-d8	*55.07*	*35*	*50*	*0*	*110*	*89 - 112*				

Revision: 2

ALS Houston, US Date: 28-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24011111

QC BATCH REPORT

Batch ID: R457422 (0) **Instrument:** VOA9 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MS Sample ID: **HS24011111-08MS** Units: **ug/L** Analysis Date: **29-Jan-2024 14:45**
Client ID: **16WW51-240119** Run ID: **VOA9_457422** SeqNo: **7801005** PrepDate: DF: **100**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	1787	100	2000	0	89.3	80 - 119				
1,1-Dichloroethene	2690	100	2000	0	135	71 - 131				S
1,2-Dichloroethane	1757	100	2000	0	87.8	73 - 128				
cis-1,2-Dichloroethene	4444	100	2000	2397	102	78 - 123				
Methylene chloride	2500	200	2000	0	125	74 - 124				S
Trichloroethene	11920	100	2000	9670	113	79 - 123				O
Vinyl chloride	2590	100	2000	0	129	58 - 137				
Surr: 1,2-Dichloroethane-d4	*4364*	*3500*	*5000*	*0*	*87.3*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*4926*	*3500*	*5000*	*0*	*98.5*	*85 - 114*				
Surr: Dibromofluoromethane	*4909*	*3500*	*5000*	*0*	*98.2*	*80 - 119*				
Surr: Toluene-d8	*5154*	*3500*	*5000*	*0*	*103*	*89 - 112*				

MSD Sample ID: **HS24011111-08MSD** Units: **ug/L** Analysis Date: **29-Jan-2024 15:07**
Client ID: **16WW51-240119** Run ID: **VOA9_457422** SeqNo: **7801006** PrepDate: DF: **100**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	1943	100	2000	0	97.2	80 - 119	1787	8.4	20	
1,1-Dichloroethene	2711	100	2000	0	136	71 - 131	2690	0.749	20	S
1,2-Dichloroethane	1787	100	2000	0	89.4	73 - 128	1757	1.71	20	
cis-1,2-Dichloroethene	4536	100	2000	2397	107	78 - 123	4444	2.06	20	
Methylene chloride	2734	200	2000	0	137	74 - 124	2500	8.93	20	S
Trichloroethene	11750	100	2000	9670	104	79 - 123	11920	1.42	20	O
Vinyl chloride	2683	100	2000	0	134	58 - 137	2590	3.53	20	
Surr: 1,2-Dichloroethane-d4	*4486*	*3500*	*5000*	*0*	*89.7*	*81 - 118*	*4364*	*2.77*	*20*	
Surr: 4-Bromofluorobenzene	*5089*	*3500*	*5000*	*0*	*102*	*85 - 114*	*4926*	*3.26*	*20*	
Surr: Dibromofluoromethane	*5074*	*3500*	*5000*	*0*	*101*	*80 - 119*	*4909*	*3.31*	*20*	
Surr: Toluene-d8	*5307*	*3500*	*5000*	*0*	*106*	*89 - 112*	*5154*	*2.91*	*20*	

The following samples were analyzed in this batch:

HS24011111-02	HS24011111-03	HS24011111-04	HS24011111-05
HS24011111-07	HS24011111-08	HS24011111-09	HS24011111-10
HS24011111-11	HS24011111-12	HS24011111-13	

Revision: 2

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: **HS24011111**

QUALIFIERS, ACRONYMS, UNITS

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

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

Unit Reported	Description
mg/L	Milligrams per Liter

CERTIFICATIONS,ACCREDITATIONS & LICENSES

Agency	Number	Expire Date
Arkansas	88-00356	27-Mar-2024
California	2919; 2024	30-Apr-2024
Dept of Defense	L22-90-R2	31-Mar-2024
Florida	E87611-38	30-Jun-2024
Illinois	2000322023-11	30-Jun-2024
Kansas	E-10352 2023-2024	31-Jul-2024
Louisiana	03087 2023-2024	30-Jun-2024
Maryland	343; 2023-2024	30-Jun-2024
North Carolina	624 - 2024	31-Dec-2024
North Dakota	R-193 2023-2024	30-Apr-2024
Oklahoma	2023-140	31-Aug-2024
Texas	T104704231-23-32	30-Apr-2024
Utah	TX026932023-14	31-Jul-2024

ALS Houston, US Date: 28-Feb-24

Sample Receipt Checklist

Work Order ID: HS24011111 **Date/Time Received:** 20-Jan-2024 10:20

Client Name: Bhate Environmental **Received by:** Si Ma

Completed By:	/S/ Paresh M. Giga	22-Jan-2024 14:48	**Reviewed by:**	/S/ James Guin	23-Jan-2024 08:07
	eSignature	Date/Time		eSignature	Date/Time

Matrices: **GW/Watwer** 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/1.9C U/C	IR31
Cooler(s)/Kit(s):	43986	
Date/Time sample(s) sent to storage:	1/20/24 15:00	

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:

bhate

Page: ____ of ____

Project/Phase

No: JVPCIBH.0001

1608 13th Avenue South, Suite 300
Birmingham Alabama 35205

COC Number(1):

Chain of Custody and Analytical Request

LIMS Number: ____

Facility/Base I.D.: LHAAP / **BILL to PCI**

Project/Site Name: LHAAP / Site 16

Client Name:

Collected by: Scott Beesinger

Sample Analysis Requested [3] | Quality Assurance Samples [6]

Field Sample ID (30 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code [2]	Sample Number [3]	Sample Matrix [4]	Number of containers	VOC	Dissolved Gases	TOC	Carbon Dioxide	Anions	Perchlorate	TOTAL HARDNESS				Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
16WW44_240119	19 Jan 2024	0700	-	N		WG	4	X					X								
16WW37_240119	19 Jan 2024	0745	-	N		WG	4	X					X								
16WW38_240119	19 Jan 2024	0830	-	N		WG	4	X					X								
16WW38_240119_FD	19 Jan 2024	0830		FD		WG	4	X					X								
16WW13_240119	19 Jan 2024	0915		N		WG	4	X					X								
16WW42_240119	19 Jan 2024	0955	-	N		WG	4	X					X								
16RW05_240119	19 Jan 2024	1040	-	N		WG	7	X	X				X								
16WW51_240119	19 Jan 2024	1125	-	N		WG	4	X					X								
16WW30_240119	19 Jan 2024	1210	-	N		WG	4	X					X								
16WW29_240119	19 Jan 2024	1250	-	N		WG	4	X					X								
16SW01_240119	19 Jan 2024	1300	-	N		WG	5	X					X	X							

COMMENTS: STANDARD TAT Coolant 43986 temp 1.2 °C cuf-c 1

Bhate Environmental Associates, Inc.
LHAAP Site 16

HS24011111

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. Scott Beesinger	1/19/24	1430	1.		
2.			2.		
3.			3. [illegible]	01/20/24	10:20

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab: ____ Shipped ____ No.:

Method of Shipment: ____

____ Fed Ex ____ Airbill Number: ____

Analytical Lab: ALS 10450 Stancliff Rd. Suite 210 Houston, TX 77099 (281) 530-5656

ATTN Dane Wagasey Lab Recipient: Delivery Date/Time:

1.) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)

2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)

4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks

5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control

bhate

Page: ____ of ____

Project/Phase

No: JVPCIBH.0001

1608 13th Avenue South, Suite 300
Birmingham Alabama 35205

COC Number(1):

Chain of Custody and Analytical Request

LIMS Number:

Facility/Base I.D.: LHAAP / BILL to PCI

Project/Site Name: LHAAP / Site 16

Client Name:

Collected by: Scott Beesinger

Field Sample ID (30 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Sample Analysis Requested (5): Number of containers	VOC	Dissolved Gases	TOC	Carbon Dioxide	Anions	Perchlorate	Total Metals				Quality Assurance Samples (6): Ambient Blank Lot Control Number	Equipment Blank Lot Control Number
16SW02_240119	19JAN2024	1315	-	N		WG	5	X					X	X					
16SW02_240119_FD	19JAN2024	1315	-	FD		WG	5	X					X	X					
16SW03_240119	19JAN2024	1330	-	N		WG	5	X					X	X					
16SW03_240119_MS	19JAN2024	1330		MS		WG	5	X					X	X					
16SW03_240119_MSD	19JAN2024	1330		SD		WG	5	X					X	X					
TRIP BLANK_240119	19JAN2024		-	TB		WG	2	X											
			-																
			-																
			-																
			-																
			-																

COMMENTS: STANDARD TAT Coolers 13986 Temp °C/C 8.0w 3.1 2.9 CUE-0011

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. Scott Beesinger	1/4/24	1430	1.		
2.			2.		
3.			3.	1/5/24	10:20

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab: ____ Shipped ____ No.:

Method of Shipment: ____

____ Fed Ex ____ Airbill Number:

____ Analytical Lab: ALS 10450 Stanhoff Rd. Suite 210 Houston, TX 77099 (281) 530-5656

ATTN Dane Wiesner Lab Recipient: Delivery Date/Time:

1.) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)

2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)

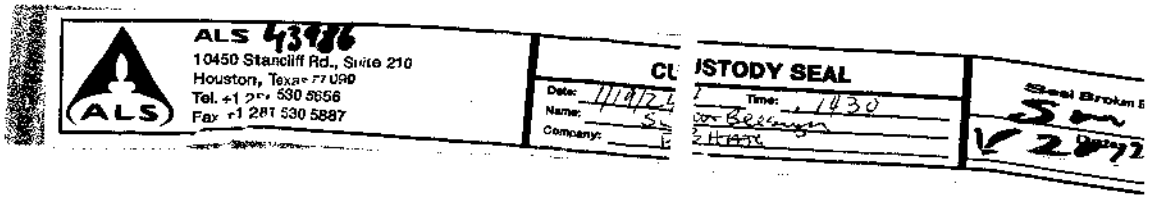
4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks

5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control

Bhate Environmental Associates, Inc.
LHAAP Site 16

HS24011111


ALS 43986
10450 Stancliff Rd., Suite 210
Houston, Texas 77099
Tel. +1 281 530 5656
Fax +1 281 530 5887
CUSTODY SEAL
Time: 1430
Seal Broken
5m
V 2877

FedEx
TRK# 0221 6862 6800 5418
SATURDAY 12:00P
PRIORITY OVERNIGHT
43986
X0 SGRA
77099
TX-US
IAH

January 30, 2024 Service Request No:E2400068

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

Laboratory Results for: HS24011111

Dear James,

Enclosed are the results of the sample(s) submitted to our laboratory January 22, 2024
For your reference, these analyses have been assigned our service request number **E2400068.**

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

Please contact me if you have any questions. My extension is 2190. You may also contact me via email at hussam.kelany@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Hussam Kelany
Project Manager

ADDRESS 10450 Stancliff Rd., Suite 210, Houston, TX 77099
PHONE +1 281 530 5656 | FAX +1 281 530 5887
ALS Group USA, Corp.
dba ALS Environmental

Certificate of Analysis

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

Client:	ALS Environmental - US	**Service Request No.:**	E2400068
Project:	HS24011111	**Date Received:**	01/22/24
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

Fourteen samples were received for analysis at ALS Environmental in Houston on 01/22/24.

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

Data Validation Notes and Discussion

Precision and Accuracy:

EQ2400041: 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 batch precision (MS/DMS) measurements were determined on an unrelated sample in the extraction batch. The MS/DMS results are not included in this report.

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

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

Client: ALS Environmental - US **Service Request:**E2400068
Project: HS24011111

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
E2400068-001	16WW44-240119	1/19/2024	0700
E2400068-002	16WW37-240119	1/19/2024	0745
E2400068-003	16WW38-240119	1/19/2024	0830
E2400068-004	16WW38-240119-FD	1/19/2024	0830
E2400068-005	16WW13-240119	1/19/2024	0915
E2400068-006	16WW42-240119	1/19/2024	0955
E2400068-007	16RW05-240119	1/19/2024	1040
E2400068-008	16WW51-240119	1/19/2024	1125
E2400068-009	16WW30-240119	1/19/2024	1210
E2400068-010	16WW29-240119	1/19/2024	1250
E2400068-011	16SW01-240119	1/19/2024	1300
E2400068-012	16SW02-240119	1/19/2024	1315
E2400068-013	16SW02-240119-FD	1/19/2024	1315
E2400068-014	16SW03-240119	1/19/2024	1330

Service Request Summary

Folder #: **E2400068**
Client Name: ALS Environmental - US
Project Name: HS24011111
Project Number:

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

Project Chemist: Hussam Kelany
Originating Lab: HOUSTON
Logged By: JCORONADO2
Date Received: 01/22/24
Internal Due Date: 1/29/2024
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number:
EDD: BASIC_WQC_CASNo, EQUIS APTIM LONGHORN EFWEDD

16 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-WIC 5C
Pressure Gas:

Lab Samp No.	Client Samp No	Matrix	Collected	HOUSTON ClO4 DOD/6850
E2400068-001	16WW44-240119	Ground Water	01/19/24 0700	**IV**
E2400068-002	16WW37-240119	Ground Water	01/19/24 0745	**IV**
E2400068-003	16WW38-240119	Ground Water	01/19/24 0830	**IV**
E2400068-004	16WW38-240119-FD	Ground Water	01/19/24 0830	**IV**
E2400068-005	16WW13-240119	Ground Water	01/19/24 0915	**IV**
E2400068-006	16WW42-240119	Ground Water	01/19/24 0955	**IV**
E2400068-007	16RW05-240119	Ground Water	01/19/24 1040	**IV**
E2400068-008	16WW51-240119	Ground Water	01/19/24 1125	**IV**
E2400068-009	16WW30-240119	Ground Water	01/19/24 1210	**IV**
E2400068-010	16WW29-240119	Ground Water	01/19/24 1250	**IV**
E2400068-011	16SW01-240119	Ground Water	01/19/24 1300	**IV**
E2400068-012	16SW02-240119	Ground Water	01/19/24 1315	**IV**
E2400068-013	16SW02-240119-FD	Ground Water	01/19/24 1315	**IV**
E2400068-014	16SW03-240119	Ground Water	01/19/24 1330	**IV**

Service Request Summary

Folder #: **E2400068**
Client Name: ALS Environmental - US
Project Name: HS24011111
Project Number:

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

Project Chemist: Hussam Kelany
Originating Lab: HOUSTON
Logged By: JCORONADO2
Date Received: 01/22/24
Internal Due Date: 1/29/2024
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number:
EDD: BASIC_WQC_CASNo, EQUIS APTIM LONGHORN EFWEDD

16 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-WIC 5C
Pressure Gas:

Lab Samp No.	Client Samp No	Matrix	Collected	HOUSTON ClO4 DOD/6850
E2400068-001	16WW44-240119	Ground Water	01/19/24 0700	**IV**
E2400068-002	16WW37-240119	Ground Water	01/19/24 0745	**IV**
E2400068-003	16WW38-240119	Ground Water	01/19/24 0830	**IV**
E2400068-004	16WW38-240119-FD	Ground Water	01/19/24 0830	**IV**
E2400068-005	16WW13-240119	Ground Water	01/19/24 0915	**IV**
E2400068-006	16WW42-240119	Ground Water	01/19/24 0955	**IV**
E2400068-007	16RW05-240119	Ground Water	01/19/24 1040	**IV**
E2400068-008	16WW51-240119	Ground Water	01/19/24 1125	**IV**
E2400068-009	16WW30-240119	Ground Water	01/19/24 1210	**IV**
E2400068-010	16WW29-240119	Ground Water	01/19/24 1250	**IV**
E2400068-011	16SW01-240119	Ground Water	01/19/24 1300	**IV**
E2400068-012	16SW02-240119	Ground Water	01/19/24 1315	**IV**
E2400068-013	16SW02-240119-FD	Ground Water	01/19/24 1315	**IV**
E2400068-014	16SW03-240119	Ground Water	01/19/24 1330	**IV**

Service Request Summary

Folder #: **E2400068**
Client Name: ALS Environmental - US
Project Name: HS24011111
Project Number:

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

Project Chemist: Hussam Kelany
Originating Lab: HOUSTON
Logged By: JCORONADO2
Date Received: 01/22/24
Internal Due Date: 1/29/2024
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number:
EDD: BASIC_WQC_CASNo, EQUIS APTIM LONGHORN EFWEDD

16 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-WIC 5C
Pressure Gas:

Data Qualifiers

Lab Standard

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

Data Qualifiers

Lab Standard

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

ALS Laboratory Group

Acronyms

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

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

ALS Environmental

State Certifications, Accreditations, and Licenses

Agency	Number	Expire Date
Arizona Department of Health Services	AZ0793_2024	5/27/2024
Arkansas Department of Environmental Quality	88-00356	3/27/2024
California State Environmental Laboratory Accreditation Program	2919	4/30/2024
Department of Defense	L22-90	3/31/2024
Department of Defense	L23-358	5/31/2025
Florida Department of Health	E87611-38	6/30/2024
Illinois Environmental Protection Agency	2000322023-11	6/30/2024
Kansas Department of Health and Environment	E-10352 2023-2024	7/31/2024
Louisiana Department of Environmental Quality	03087-2023	6/30/2024
Louisiana Department of Health and Hospitals	LA028-2024	12/31/2024
Maine Department of Health and Human Services	2022017	6/5/2024
Maryland Department of the Environment	343-2023	6/30/2024
Michigan Depratment of Environmental Quality	9971-2023	4/30/2024
Minnesota Department of Health	2645386	12/31/2024
Nebraska Department of Health and Human Services	NE-OS-25-13	4/30/2024
Nevada Division of Environmental Protection	TX026932024-1	7/31/2024
New Hampshire Environmental Laboratory Accreditation Program	209423	4/24/2024
New Jersey Department of Environmental Protection	TX008-2024	6/30/2024
New York Department of Health	11707	3/31/2024
Oklahoma Department of Environmental Quality	2023-140	8/31/2024
Oregon Environmental Laboratory Accreditation Program	TX200002-011	5/15/2024
Pennsylvania Department of Environmental Protection	68-03441-017	6/30/2024
Perry Johnson Laboratory Accreditation	L22-91	3/31/2024
Tennessee Department of Environment and Concervation	TN04016-2023	4/30/2024
Texas Commision on Environmental Quality	T104704231-23-30	4/30/2024
Utah Department of Health Environmental Laboratory Certification	TX026932023-14	7/31/2024
Washington Department of Ecology	C819-23	11/14/2024

Chain of Custody

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

E2400068 5
ALS Group USA, Corp.
HS24011111

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:** **24518**

SUBCONTRACT TO:

ALS Environmental
10450 Stancliff RoadSuite 210
Houston, TX 77084

Phone: +1 281 530 5656

CUSTOMER INFORMATION:

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

INVOICE INFORMATION:

Company:	ALS Houston
Contact:	Accounts Payable
Address:	10450 Stancliff Rd, Ste 210
Phone:	+1 281 530 5656
Reference:	HS24011111
TSR:	Sonia West

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	**HS24011111-01**	**16WW44-240119**	**Groundwater**	**19 Jan 2024 07:00**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			31 Jan 2024
2.	**HS24011111-02**	**16WW37-240119**	**Groundwater**	**19 Jan 2024 07:45**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			31 Jan 2024
3.	**HS24011111-03**	**16WW38-240119**	**Groundwater**	**19 Jan 2024 08:30**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			31 Jan 2024
4.	**HS24011111-04**	**16WW38-240119-FD**	**Groundwater**	**19 Jan 2024 08:30**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			31 Jan 2024
5.	**HS24011111-05**	**16WW13-240119**	**Groundwater**	**19 Jan 2024 09:15**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			31 Jan 2024
6.	**HS24011111-06**	**16WW42-240119**	**Groundwater**	**19 Jan 2024 09:55**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			31 Jan 2024
7.	**HS24011111-07**	**16RW05-240119**	**Groundwater**	**19 Jan 2024 10:40**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			31 Jan 2024
8.	**HS24011111-08**	**16WW51-240119**	**Groundwater**	**19 Jan 2024 11:25**

Subcontract Chain of Custody

SAMPLING STATE: **Dept of Defense** **COC ID: 24518**

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			31 Jan 2024
9.	HS24011111-09	16WW30-240119	Groundwater	19 Jan 2024 12:10
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			31 Jan 2024
10.	HS24011111-10	16WW29-240119	Groundwater	19 Jan 2024 12:50
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			31 Jan 2024
11.	HS24011111-11	16SW01-240119	Groundwater	19 Jan 2024 13:00
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			31 Jan 2024
12.	HS24011111-12	16SW02-240119	Groundwater	19 Jan 2024 13:15
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			31 Jan 2024
13.	HS24011111-13	16SW02-240119-FD	Groundwater	19 Jan 2024 13:15
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			31 Jan 2024
14.	HS24011111-14	16SW03-240119	Groundwater	19 Jan 2024 13:30
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			31 Jan 2024

Comments: Please analyze for the analysis listed above.
Send report to the emails shown above.
HS24011111-14 = MS/MSD

QC Level: DOD IV (DoD Data Package)

Relinquished By: _____ Date/Time: _____

Received By: JC Date/Time: 1/22/24 14:48

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

E2400068
ALS Group USA, Corp.
HS24011111

5

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

Sample Receipt Checklist

Work Order ID: HS24011111 **Date/Time received:** 20 Jan 2024 10:20

Client name: Bhate Environmental Associates, Inc. **Received by:** Si Ma

Completed/By: 22 Jan 2024 14:48 Paresh M. Giga **Reviewed/By:**
Date/Time eSignature Date/Time eSignature

Matrices: GW/Watwer **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 ID(s): none	
Samplers name present on COC?	☑ Yes	☐ No		
Chain of custody agrees with sample labels?	☑ Yes	☐ No		
Samples in proper container/bottle?	☑ Yes	☐ No		
Sample containers intact?	☑ Yes	☐ No		
Sufficient sample volume for indicated test?	☑ Yes	☐ No		
All samples received within holding time?	☑ Yes	☐ No		
Container/Temp Blank temperature in compliance?	☑ Yes	☐ No		

Temperature(s)/Thermometer(s): 2.0C/1.9C U/C IR31

Cooler Information: 1 Cooler(s), 43986

Date/Time sample(s) sent to storage: 1/20/24 15:00

Water - VOA vials have zero headspace?	☑ Yes	☐ No	☐ No VOA vials submitted
Water - pH acceptable upon receipt?	☑ Yes	☐ No	☐ Not Applicable
pH adjusted?	☐ Yes	☑ No	☐ Not Applicable

pH adjusted by:

Login notes:

Client contacted: **Date contacted:** **Person contacted:**

Contacted by: **Regarding:**

Comments:

Corrective action:

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

SAMPLE ACCEPTANCE POLICY

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

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

- ✓ Intact on outside of cooler, signed and dated

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

The following is required on each COC:

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

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

Sample Integrity (mandatory):

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

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

Temperature Requirement (varies by sample matrix):

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

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

Preparation Information Benchsheets

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

Preparation Information Benchsheet

Prep Run#: 432987 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 1/23/24 15:58

#	Lab Code	Client ID	B#	Method /Test	pH	Cl	Matrix	Amt. Ext.	Sample Description
1	E2400066-001	OxideShaft@1100_0124	.01	6850/ClO4 DOD			Water	10mL	
2	E2400066-002	OxideShaft @900_0124	.01	6850/ClO4 DOD			Water	10mL	
3	E2400066-003	VentShaft1@950_0124	.01	6850/ClO4 DOD			Water	10mL	
4	E2400066-004	VentShaft1@500_0124	.01	6850/ClO4 DOD			Water	10mL	
5	E2400066-005	VentShaft5@500_0124	.01	6850/ClO4 DOD			Water	10mL	
6	E2400066-006	Borehole10@250_0124	.01	6850/ClO4 DOD			Water	10mL	
7	E2400068-001	16WW44-240119	.01	6850/ClO4 DOD			Ground Water	10mL	
8	E2400068-002	16WW37-240119	.01	6850/ClO4 DOD			Ground Water	10mL	
9	E2400068-003	16WW38-240119	.01	6850/ClO4 DOD			Ground Water	10mL	
10	E2400068-004	16WW38-240119-FD	.01	6850/ClO4 DOD			Ground Water	10mL	
11	E2400068-005	16WW13-240119	.01	6850/ClO4 DOD			Ground Water	10mL	
12	E2400068-006	16WW42-240119	.01	6850/ClO4 DOD			Ground Water	10mL	
13	E2400068-007	16RW05-240119	.01	6850/ClO4 DOD			Ground Water	10mL	
14	E2400068-008	16WW51-240119	.01	6850/ClO4 DOD			Ground Water	10mL	
15	E2400068-009	16WW30-240119	.01	6850/ClO4 DOD			Ground Water	10mL	
16	E2400068-010	16WW29-240119	.01	6850/ClO4 DOD			Ground Water	10mL	
17	E2400068-011	16SW01-240119	.01	6850/ClO4 DOD			Ground Water	10mL	
18	E2400068-012	16SW02-240119	.01	6850/ClO4 DOD			Ground Water	10mL	
19	E2400068-013	16SW02-240119-FD	.01	6850/ClO4 DOD			Ground Water	10mL	
20	E2400068-014	16SW03-240119	.02	6850/ClO4 DOD			Ground Water	10mL	
21	EQ2400041-01	MB		6850/ClO4 DOD			Liquid	10mL	
22	EQ2400041-02	LCS		6850/ClO4 DOD			Liquid	10mL	
23	EQ2400041-03	DLCS		6850/ClO4 DOD			Liquid	10mL	
24	EQ2400041-04	16SW03-240119 MS	.02	6850/ClO4 DOD			Liquid	10mL	
25	EQ2400041-05	16SW03-240119 DMS	.02	6850/ClO4 DOD			Liquid	10mL	
26	EQ2400041-06	ICS		6850/ClO4 DOD			Liquid	10mL	

Spiking Solutions

Name: Perchlorate Intermediate Stock 2 Inventory ID 230345 Logbook Ref: Perchlorate INT. Stock2 Expires On: 03/07/2024

EQ2400041-02 10.00µL EQ2400041-03 10.00µL EQ2400041-04 10.00µL EQ2400041-05 10.00µL EQ2400041-06 10.00µL

Name: Perchlorate Internal Standard 1ug/mL Inventory ID 232015 Logbook Ref: Perchlorate Internal Standard Expires On: 04/30/2024

E2400066-001 100.00µL E2400066-002 100.00µL E2400066-003 100.00µL E2400066-004 100.00µL E2400066-005 100.00µL E2400066-006 100.00µL

Preparation Information Benchsheet

Prep Run#: 432987 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 1/23/24 15:58

E2400068-001	100.00µL	E2400068-002	100.00µL	E2400068-003	100.00µL	E2400068-004	100.00µL	E2400068-005	100.00µL	E2400068-006	100.00µL
E2400068-007	100.00µL	E2400068-008	100.00µL	E2400068-009	100.00µL	E2400068-010	100.00µL	E2400068-011	100.00µL	E2400068-012	100.00µL
E2400068-013	100.00µL	E2400068-014	100.00µL	EQ2400041-01	100.00µL	EQ2400041-02	100.00µL	EQ2400041-03	100.00µL	EQ2400041-04	100.00µL
EQ2400041-05	100.00µL	EQ2400041-06	100.00µL								

Name: Perchlorate Anion Spiking Soln. 25,000 ppm Inventory ID 233096 Logbook Ref: Expires On: 02/04/2024

EQ2400041-06 20.00µL

Preparation Materials

Water HPLC Grade	HPLC water 083124 (233144)	6850 Amber Glass screw vial	2mL Screw Top Vial (221894)	6850 0.45um syringe filters	6850 0.45 SYRING FILTER (229979)
6850 Luer-Lok Syringes	Luer Lok Syringes (231696)				

Preparation Steps

Step: Preparation
Started: 1/23/24 15:58
Finished: 1/24/24 08:33
By: XMI
Comments

Comments: _____

Reviewed By: _____ Date: _____

Chain of Custody

Relinquished By: _____ Date: _____ Extracts Examined

Received By: _____ Date: _____ Yes No

Analytical Results

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

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400068
Project:	HS24011111	**Date Collected:**	1/19/24 0700
Sample Matrix:	Ground Water	**Date Received:**	1/22/24
Sample Name:	16WW44-240119	**Units:**	µg/L
Lab Code:	E2400068-001	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	1/23/24	1/26/24 20:18	432987	830662	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400068
Project:	HS24011111	**Date Collected:**	1/19/24 0745
Sample Matrix:	Ground Water	**Date Received:**	1/22/24
Sample Name:	16WW37-240119	**Units:**	µg/L
Lab Code:	E2400068-002	**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	**75.4**		0.500	0.250	0.125	5	1/23/24	1/26/24 20:24	432987	830662	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400068
Project:	HS24011111	**Date Collected:**	1/19/24 0830
Sample Matrix:	Ground Water	**Date Received:**	1/22/24
Sample Name:	16WW38-240119	**Units:**	µg/L
Lab Code:	E2400068-003	**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	1/23/24	1/26/24 20:29	432987	830662	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400068
Project:	HS24011111	**Date Collected:**	1/19/24 0830
Sample Matrix:	Ground Water	**Date Received:**	1/22/24
Sample Name:	16WW38-240119-FD	**Units:**	µg/L
Lab Code:	E2400068-004	**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	1/23/24	1/26/24 20:35	432987	830662	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400068
Project:	HS24011111	**Date Collected:**	1/19/24 0915
Sample Matrix:	Ground Water	**Date Received:**	1/22/24
Sample Name:	16WW13-240119	**Units:**	µg/L
Lab Code:	E2400068-005	**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	**0.0674**	J	0.100	0.0500	0.0250	1	1/23/24	1/26/24 20:40	432987	830662	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400068
Project:	HS24011111	**Date Collected:**	1/19/24 0955
Sample Matrix:	Ground Water	**Date Received:**	1/22/24
Sample Name:	16WW42-240119	**Units:**	µg/L
Lab Code:	E2400068-006	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.155**		0.100	0.0500	0.0250	1	1/23/24	1/26/24 20:46	432987	830662	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400068
Project:	HS24011111	**Date Collected:**	1/19/24 1040
Sample Matrix:	Ground Water	**Date Received:**	1/22/24
Sample Name:	16RW05-240119	**Units:**	µg/L
Lab Code:	E2400068-007	**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	1/23/24	1/26/24 20:51	432987	830662	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400068
Project:	HS24011111	**Date Collected:**	1/19/24 1125
Sample Matrix:	Ground Water	**Date Received:**	1/22/24
Sample Name:	16WW51-240119	**Units:**	µg/L
Lab Code:	E2400068-008	**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	1/23/24	1/26/24 20:57	432987	830662	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400068
Project:	HS24011111	**Date Collected:**	1/19/24 1210
Sample Matrix:	Ground Water	**Date Received:**	1/22/24
Sample Name:	16WW30-240119	**Units:**	µg/L
Lab Code:	E2400068-009	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.0524**	J	0.100	0.0500	0.0250	1	1/23/24	1/26/24 21:02	432987	830662	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400068
Project:	HS24011111	**Date Collected:**	1/19/24 1250
Sample Matrix:	Ground Water	**Date Received:**	1/22/24
Sample Name:	16WW29-240119	**Units:**	µg/L
Lab Code:	E2400068-010	**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	1/23/24	1/26/24 21:19	432987	830662	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400068
Project:	HS24011111	**Date Collected:**	1/19/24 1300
Sample Matrix:	Ground Water	**Date Received:**	1/22/24
Sample Name:	16SW01-240119	**Units:**	µg/L
Lab Code:	E2400068-011	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.0691**	J	0.100	0.0500	0.0250	1	1/23/24	1/26/24 21:25	432987	830662	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400068
Project:	HS24011111	**Date Collected:**	1/19/24 1315
Sample Matrix:	Ground Water	**Date Received:**	1/22/24
Sample Name:	16SW02-240119	**Units:**	µg/L
Lab Code:	E2400068-012	**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	**0.0813**	J	0.100	0.0500	0.0250	1	1/23/24	1/26/24 21:30	432987	830662	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400068
Project:	HS24011111	**Date Collected:**	1/19/24 1315
Sample Matrix:	Ground Water	**Date Received:**	1/22/24
Sample Name:	16SW02-240119-FD	**Units:**	µg/L
Lab Code:	E2400068-013	**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	**0.0628**	J	0.100	0.0500	0.0250	1	1/23/24	1/27/24 00:05	432987	830662	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400068
Project:	HS24011111	**Date Collected:**	1/19/24 1330
Sample Matrix:	Ground Water	**Date Received:**	1/22/24
Sample Name:	16SW03-240119	**Units:**	µg/L
Lab Code:	E2400068-014	**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	**0.0677**	J	0.100	0.0500	0.0250	1	1/23/24	1/26/24 18:45	432987	830662	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400068
Project:	HS24011111	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	EQ2400041-01	**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	1/23/24	1/26/24 18:28	432987	830662	

Accuracy & Precision

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

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS24011111
Sample Matrix: Ground Water

Service Request: E2400068
Date Analyzed: 1/26/24

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

Analytical Method: 6850
Prep Method: Method

Units: µg/L
Basis: NA

Extraction Lot: 432987

	Lab Control Sample EQ2400041-02			Duplicate Lab Control Sample EQ2400041-03					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	0.104	0.100	104	0.115	0.100	115	84 - 119	10	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:**	E2400068
Project:	HS24011111	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2400041-02	**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	**0.104**		0.100	0.0500	0.0250	1	1/23/24	1/26/24 18:34	432987	830662	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400068
Project:	HS24011111	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2400041-03	**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	**0.115**		0.100	0.0500	0.0250	1	1/23/24	1/26/24 19:18	432987	830662	

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2400068
Project:	HS24011111	**Date Collected:**	1/19/24
Sample Matrix:	Ground Water	**Date Received:**	1/22/24
		Date Analyzed:	1/29/24

Matrix Spike Summary

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

Sample Name:	16SW03-240119	**Units:**	µg/L
Lab Code:	E2400068-014	**Basis:**	NA

Analytical Method: 6850
Prep Method: Method

		16SW03-240119MS				16SW03-240119DMS					
		Matrix Spike				**Duplicate Matrix Spike**					
		EQ2400041-04				EQ2400041-05					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	0.0677	0.155	0.100	87	0.158	0.100	90	84 - 119	2	15

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

Results flagged with a pound (#) indicate the control criteria is not applicable.

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

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400068
Project:	HS24011111	**Date Collected:**	1/19/24 1330
Sample Matrix:	Ground Water	**Date Received:**	1/22/24
Sample Name:	16SW03-240119	**Units:**	µg/L
Lab Code:	EQ2400041-04	**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	**0.155**		0.100	0.0500	0.0250	1	1/23/24	1/29/24 09:20	432987	830812	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400068
Project:	HS24011111	**Date Collected:**	1/19/24 1330
Sample Matrix:	Ground Water	**Date Received:**	1/22/24
Sample Name:	16SW03-240119	**Units:**	µg/L
Lab Code:	EQ2400041-05	**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	**0.158**		0.100	0.0500	0.0250	1	1/23/24	1/29/24 09:25	432987	830812	

HS24011111-MSVOA-SW8260

ALS WO# HS24011111

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Form 1

Organic Analysis Data Sheet

Volatiles by EPA Volatiles Organics by Method 8260C

Workorder

HS24011111

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

02/02/2024

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

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24011111

Volatiles by EPA Volatiles Organics by Method 8260C

16WW44-240119	Collected	Received	Matrix	Basis
HS24011111-01	01/19/24 07:00	01/20/24 10:20	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	01/26/24 16:02	VOA9_457361	U012613.D
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/26/24 16:02	VOA9_457361	U012613.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	01/26/24 16:02	VOA9_457361	U012613.D
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/26/24 16:02	VOA9_457361	U012613.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	01/26/24 16:02	VOA9_457361	U012613.D
Trichloroethene	ug/L	1.5		0.20	1.0	1.0	1	01/26/24 16:02	VOA9_457361	U012613.D
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	01/26/24 16:02	VOA9_457361	U012613.D

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24011111

Volatiles by EPA Volatiles Organics by Method 8260C

16WW37-240119	Collected	Received	Matrix	Basis
HS24011111-02	01/19/24 07:45	01/20/24 10:20	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	01/26/24 16:24	VOA9_457361	U012614.D
1,1-Dichloroethene	ug/L	2.3		0.20	1.0	1.0	1	01/26/24 16:24	VOA9_457361	U012614.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	01/26/24 16:24	VOA9_457361	U012614.D
cis-1,2-Dichloroethene	ug/L	12		0.20	1.0	1.0	1	01/26/24 16:24	VOA9_457361	U012614.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	01/26/24 16:24	VOA9_457361	U012614.D
Trichloroethene	ug/L	220		2.0	10	10	10	01/29/24 12:53	VOA9_457422	U012912.D
Vinyl chloride	ug/L	6.2		0.20	1.0	1.0	1	01/26/24 16:24	VOA9_457361	U012614.D

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24011111

Volatiles by EPA Volatiles Organics by Method 8260C

16WW38-240119	Collected	Received	Matrix	Basis
HS24011111-03	01/19/24 08:30	01/20/24 10:20	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	01/26/24 16:47	VOA9_457361	U012615.D
1,1-Dichloroethene	ug/L	24		0.20	1.0	1.0	1	01/26/24 16:47	VOA9_457361	U012615.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	01/26/24 16:47	VOA9_457361	U012615.D
cis-1,2-Dichloroethene	ug/L	350		10	50	50	50	01/29/24 13:16	VOA9_457422	U012913.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	01/26/24 16:47	VOA9_457361	U012615.D
Trichloroethene	ug/L	3,600		10	50	50	50	01/29/24 13:16	VOA9_457422	U012913.D
Vinyl chloride	ug/L	100		0.20	1.0	1.0	1	01/26/24 16:47	VOA9_457361	U012615.D

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24011111

Volatiles by EPA Volatiles Organics by Method 8260C

16WW38-240119-FD

	Collected	Received	Matrix	Basis
HS24011111-04	01/19/24 08:30	01/20/24 10:20	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	01/26/24 17:09	VOA9_457361	U012616.D
1,1-Dichloroethene	ug/L	24		0.20	1.0	1.0	1	01/26/24 17:09	VOA9_457361	U012616.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	01/26/24 17:09	VOA9_457361	U012616.D
cis-1,2-Dichloroethene	ug/L	330		10	50	50	50	01/29/24 13:38	VOA9_457422	U012914.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	01/26/24 17:09	VOA9_457361	U012616.D
Trichloroethene	ug/L	3,600		10	50	50	50	01/29/24 13:38	VOA9_457422	U012914.D
Vinyl chloride	ug/L	100		0.20	1.0	1.0	1	01/26/24 17:09	VOA9_457361	U012616.D

Form 1 - Organic Analysis Data Sheet

Client	Bhate Environmental Associates, Inc.	Workorder	
Project	LHAAP Site 16	**HS24011111**	

Volatiles by EPA Volatiles Organics by Method 8260C

16WW13-240119	Collected	Received	Matrix	Basis
HS24011111-05	01/19/24 09:15	01/20/24 10:20	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	01/26/24 17:31	VOA9_457361	U012617.D
1,1-Dichloroethene	ug/L	0.60	J	0.20	1.0	1.0	1	01/26/24 17:31	VOA9_457361	U012617.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	01/26/24 17:31	VOA9_457361	U012617.D
cis-1,2-Dichloroethene	ug/L	240		2.0	10	10	10	01/29/24 14:01	VOA9_457422	U012915.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	01/26/24 17:31	VOA9_457361	U012617.D
Trichloroethene	ug/L	97		0.20	1.0	1.0	1	01/26/24 17:31	VOA9_457361	U012617.D
Vinyl chloride	ug/L	1.8		0.20	1.0	1.0	1	01/26/24 17:31	VOA9_457361	U012617.D

Form 1 - Organic Analysis Data Sheet

Client	Bhate Environmental Associates, Inc.	Workorder	
Project	LHAAP Site 16	**HS24011111**	

Volatiles by EPA Volatiles Organics by Method 8260C

16WW42-240119	Collected	Received	Matrix	Basis
HS24011111-06	01/19/24 09:55	01/20/24 10:20	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	01/26/24 17:54	VOA9_457361	U012618.D
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/26/24 17:54	VOA9_457361	U012618.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	01/26/24 17:54	VOA9_457361	U012618.D
cis-1,2-Dichloroethene	ug/L	34		0.20	1.0	1.0	1	01/26/24 17:54	VOA9_457361	U012618.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	01/26/24 17:54	VOA9_457361	U012618.D
Trichloroethene	ug/L	19		0.20	1.0	1.0	1	01/26/24 17:54	VOA9_457361	U012618.D
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	01/26/24 17:54	VOA9_457361	U012618.D

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24011111

Volatiles by EPA Volatiles Organics by Method 8260C

16RW05-240119	Collected	Received	Matrix	Basis
HS24011111-07	01/19/24 10:40	01/20/24 10:20	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	01/26/24 18:16	VOA9_457361	U012619.D
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/26/24 18:16	VOA9_457361	U012619.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	01/26/24 18:16	VOA9_457361	U012619.D
cis-1,2-Dichloroethene	ug/L	1.3		0.20	1.0	1.0	1	01/29/24 11:02	VOA9_457422	U012907.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	01/26/24 18:16	VOA9_457361	U012619.D
Trichloroethene	ug/L	0.87	J	0.20	1.0	1.0	1	01/29/24 11:02	VOA9_457422	U012907.D
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	01/26/24 18:16	VOA9_457361	U012619.D

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Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24011111

Volatiles by EPA Volatiles Organics by Method 8260C

16WW51-240119	Collected	Received	Matrix	Basis
HS24011111-08	01/19/24 11:25	01/20/24 10:20	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	01/26/24 18:39	VOA9_457361	U012620.D
1,1-Dichloroethene	ug/L	26		0.20	1.0	1.0	1	01/26/24 18:39	VOA9_457361	U012620.D
1,2-Dichloroethane	ug/L	2.3		0.20	1.0	1.0	1	01/26/24 18:39	VOA9_457361	U012620.D
cis-1,2-Dichloroethene	ug/L	2,400		20	100	100	100	01/29/24 14:23	VOA9_457422	U012916.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	01/26/24 18:39	VOA9_457361	U012620.D
Trichloroethene	ug/L	9,700		20	100	100	100	01/29/24 14:23	VOA9_457422	U012916.D
Vinyl chloride	ug/L	58		0.20	1.0	1.0	1	01/26/24 18:39	VOA9_457361	U012620.D

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24011111

Volatiles by EPA Volatiles Organics by Method 8260C

16WW30-240119	Collected	Received	Matrix	Basis
HS24011111-09	01/19/24 12:10	01/20/24 10:20	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	01/26/24 19:01	VOA9_457361	U012621.D
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/26/24 19:01	VOA9_457361	U012621.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	01/26/24 19:01	VOA9_457361	U012621.D
cis-1,2-Dichloroethene	ug/L	6.2		0.20	1.0	1.0	1	01/29/24 11:24	VOA9_457422	U012908.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	01/26/24 19:01	VOA9_457361	U012621.D
Trichloroethene	ug/L	35		0.20	1.0	1.0	1	01/29/24 11:24	VOA9_457422	U012908.D
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	01/26/24 19:01	VOA9_457361	U012621.D

Form 1 - Organic Analysis Data Sheet

Client	Bhate Environmental Associates, Inc.	Workorder	
Project	LHAAP Site 16	**HS24011111**	

Volatiles by EPA Volatiles Organics by Method 8260C

16WW29-240119	Collected	Received	Matrix	Basis
HS24011111-10	01/19/24 12:50	01/20/24 10:20	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	01/29/24 10:39	VOA9_457422	U012906.D
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/29/24 10:39	VOA9_457422	U012906.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	01/29/24 10:39	VOA9_457422	U012906.D
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/29/24 10:39	VOA9_457422	U012906.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	01/29/24 10:39	VOA9_457422	U012906.D
Trichloroethene	ug/L	0.88	J	0.20	1.0	1.0	1	01/29/24 10:39	VOA9_457422	U012906.D
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	01/29/24 10:39	VOA9_457422	U012906.D

Form 1 - Organic Analysis Data Sheet

Client	Bhate Environmental Associates, Inc.	Workorder	
Project	LHAAP Site 16	**HS24011111**	

Volatiles by EPA Volatiles Organics by Method 8260C

16SW01-240119	Collected	Received	Matrix	Basis
HS24011111-11	01/19/24 13:00	01/20/24 10:20	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	01/26/24 19:46	VOA9_457361	U012623.D
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/26/24 19:46	VOA9_457361	U012623.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	01/26/24 19:46	VOA9_457361	U012623.D
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/29/24 11:46	VOA9_457422	U012909.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	01/26/24 19:46	VOA9_457361	U012623.D
Trichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/29/24 11:46	VOA9_457422	U012909.D
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	01/26/24 19:46	VOA9_457361	U012623.D

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24011111

Volatiles by EPA Volatiles Organics by Method 8260C

16SW02-240119	Collected	Received	Matrix	Basis
HS24011111-12	01/19/24 13:15	01/20/24 10:20	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	01/26/24 20:08	VOA9_457361	U012624.D
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/26/24 20:08	VOA9_457361	U012624.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	01/26/24 20:08	VOA9_457361	U012624.D
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/29/24 12:09	VOA9_457422	U012910.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	01/26/24 20:08	VOA9_457361	U012624.D
Trichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/29/24 12:09	VOA9_457422	U012910.D
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	01/26/24 20:08	VOA9_457361	U012624.D

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24011111

Volatiles by EPA Volatiles Organics by Method 8260C

16SW02-240119-FD	Collected	Received	Matrix	Basis
HS24011111-13	01/19/24 13:15	01/20/24 10:20	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	01/26/24 20:31	VOA9_457361	U012625.D
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/26/24 20:31	VOA9_457361	U012625.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	01/26/24 20:31	VOA9_457361	U012625.D
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/26/24 20:31	VOA9_457361	U012625.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	01/26/24 20:31	VOA9_457361	U012625.D
Trichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/29/24 12:31	VOA9_457422	U012911.D
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	01/26/24 20:31	VOA9_457361	U012625.D

Form 1 - Organic Analysis Data Sheet

Client	Bhate Environmental Associates, Inc.	Workorder	
Project	LHAAP Site 16	**HS24011111**	

Volatiles by EPA Volatiles Organics by Method 8260C

16SW03-240119	Collected	Received	Matrix	Basis
HS24011111-14	01/19/24 13:30	01/20/24 10:20	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	01/26/24 13:26	VOA9_457361	U012606.D
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/26/24 13:26	VOA9_457361	U012606.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	01/26/24 13:26	VOA9_457361	U012606.D
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/26/24 13:26	VOA9_457361	U012606.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	01/26/24 13:26	VOA9_457361	U012606.D
Trichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/26/24 13:26	VOA9_457361	U012606.D
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	01/26/24 13:26	VOA9_457361	U012606.D

Form 1 - Organic Analysis Data Sheet

Client	Bhate Environmental Associates, Inc.	Workorder	
Project	LHAAP Site 16	HS24011111	

Volatiles by EPA Volatiles Organics by Method 8260C

Trip Blank-240119

	Collected	Received	Matrix	Basis
HS24011111-15	01/19/24 00:00	01/20/24 10:20	Water	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	01/25/24 14:47	VOA9_457250	U012513.D
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/25/24 14:47	VOA9_457250	U012513.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	01/25/24 14:47	VOA9_457250	U012513.D
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/25/24 14:47	VOA9_457250	U012513.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	01/25/24 14:47	VOA9_457250	U012513.D
Trichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/25/24 14:47	VOA9_457250	U012513.D
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	01/25/24 14:47	VOA9_457250	U012513.D

right solutions.
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Form 2

System Monitoring Compound Recovery

Volatiles by EPA Volatiles Organics by Method 8260C

Workorder

HS24011111

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

02/02/2024

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

Form 2 - System Monitoring Compound Recovery

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Workorder: HS24011111

Volatiles by EPA Volatiles Organics by Method 8260C

RUNID: VOA9-457250

CCV

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	CCV U012503.D	Aqueous	01/25/24 11:04	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012503.D	47.31	50	94.6		80-120
4-Bromofluorobenzene	U012503.D	48.7	50	97.4		80-120
Dibromofluoromethane	U012503.D	52.79	50	106		80-120
Toluene-d8	U012503.D	50.71	50	101		80-120

BatchQC

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24011040-03MS	Aqueous	01/25/24 16:16	%REC	100
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012517.D	4334	5000	86.7		81-118
4-Bromofluorobenzene	U012517.D	4928	5000	98.6		85-114
Dibromofluoromethane	U012517.D	4922	5000	98.4		80-119
Toluene-d8	U012517.D	5334	5000	107		89-112

BatchQC

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24011040-03MSD	Aqueous	01/25/24 16:38	%REC	100
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012518.D	4508	5000	90.2		81-118
4-Bromofluorobenzene	U012518.D	4913	5000	98.3		85-114
Dibromofluoromethane	U012518.D	4920	5000	98.4		80-119
Toluene-d8	U012518.D	5269	5000	105		89-112

Form 2 - System Monitoring Compound Recovery

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Workorder: HS24011111

Volatiles by EPA Volatiles Organics by Method 8260C

RUNID: VOA9-457250

Trip Blank-240119

Lab Sample ID	Instrument ID	Matrix	Analysis Date	Conc Units	Dilution
HS24011111-15	VOA9	Water	01/25/24 14:47	%REC	1

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012513.D	42	50	84.5		81-118
4-Bromofluorobenzene	U012513.D	44	50	87.6		85-114
Dibromofluoromethane	U012513.D	49	50	97.3		80-119
Toluene-d8	U012513.D	50	50	99.7		89-112

VBLKW-240125

Lab Sample ID	Instrument ID	Matrix	Analysis Date	Conc Units	Dilution
VBLKW-240125	VOA9	Aqueous	01/25/24 12:33	%REC	1

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012507.D	43.58	50	87.2		81-118
4-Bromofluorobenzene	U012507.D	45.31	50	90.6		85-114
Dibromofluoromethane	U012507.D	48.56	50	97.1		80-119
Toluene-d8	U012507.D	51.4	50	103		89-112

VLCSW-240125

Lab Sample ID	Instrument ID	Matrix	Analysis Date	Conc Units	Dilution
VLCSW-240125	VOA9	Aqueous	01/25/24 11:49	%REC	1

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012505.D	47.07	50	94.1		81-118
4-Bromofluorobenzene	U012505.D	49.3	50	98.6		85-114
Dibromofluoromethane	U012505.D	52.13	50	104		80-119
Toluene-d8	U012505.D	51.11	50	102		89-112

Form 2 - System Monitoring Compound Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder **HS24011111**

Volatiles by EPA Volatiles Organics by Method 8260C

RUNID VOA9-457361

CCV

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	CCV U012602.D	Aqueous	01/26/24 11:56	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012602.D	48.49	50	97.0		80-120
4-Bromofluorobenzene	U012602.D	55.48	50	111		80-120
Dibromofluoromethane	U012602.D	55.02	50	110		80-120
Toluene-d8	U012602.D	56.5	50	113		80-120

16WW44-240119

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24011111-01	Groundwater	01/26/24 16:02	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012613.D	38	50	76.2		81-118
4-Bromofluorobenzene	U012613.D	48	50	96.4		85-114
Dibromofluoromethane	U012613.D	43	50	86.7		80-119
Toluene-d8	U012613.D	53	50	106		89-112

16WW37-240119

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24011111-02	Groundwater	01/26/24 16:24	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012614.D	38	50	76.9		81-118
4-Bromofluorobenzene	U012614.D	48	50	95.4		85-114
Dibromofluoromethane	U012614.D	43	50	85.3		80-119
Toluene-d8	U012614.D	52	50	104		89-112

Form 2 - System Monitoring Compound Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder **HS24011111**

Volatiles by EPA Volatiles Organics by Method 8260C

RUNID VOA9-457361

16WW38-240119

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24011111-03	Groundwater	01/26/24 16:47	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012615.D	37	50	74.8		81-118
4-Bromofluorobenzene	U012615.D	48	50	95.8		85-114
Dibromofluoromethane	U012615.D	42	50	84.6		80-119
Toluene-d8	U012615.D	51	50	103		89-112

16WW38-240119-FD

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24011111-04	Groundwater	01/26/24 17:09	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012616.D	37	50	73.7		81-118
4-Bromofluorobenzene	U012616.D	48	50	96.4		85-114
Dibromofluoromethane	U012616.D	42	50	83.8		80-119
Toluene-d8	U012616.D	52	50	104		89-112

16WW13-240119

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24011111-05	Groundwater	01/26/24 17:31	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012617.D	38	50	76.9		81-118
4-Bromofluorobenzene	U012617.D	47	50	94.8		85-114
Dibromofluoromethane	U012617.D	43	50	85.1		80-119
Toluene-d8	U012617.D	52	50	104		89-112

Form 2 - System Monitoring Compound Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24011111

Volatiles by EPA Volatiles Organics by Method 8260C

RUNID VOA9-457361

16WW42-240119

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24011111-06	Groundwater	01/26/24 17:54	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012618.D	38	50	75.3		81-118
4-Bromofluorobenzene	U012618.D	49	50	97.1		85-114
Dibromofluoromethane	U012618.D	43	50	85.5		80-119
Toluene-d8	U012618.D	52	50	105		89-112

16RW05-240119

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24011111-07	Groundwater	01/26/24 18:16	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012619.D	38	50	76.6		81-118
4-Bromofluorobenzene	U012619.D	48	50	95.1		85-114
Dibromofluoromethane	U012619.D	43	50	86.5		80-119
Toluene-d8	U012619.D	52	50	104		89-112

16WW51-240119

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24011111-08	Groundwater	01/26/24 18:39	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012620.D	38	50	75.5		81-118
4-Bromofluorobenzene	U012620.D	49	50	97.2		85-114
Dibromofluoromethane	U012620.D	43	50	85.2		80-119
Toluene-d8	U012620.D	52	50	103		89-112

Form 2 - System Monitoring Compound Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder **HS24011111**

Volatiles by EPA Volatiles Organics by Method 8260C

RUNID VOA9-457361

16WW30-240119

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24011111-09	Groundwater	01/26/24 19:01	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012621.D	38	50	76.0		81-118
4-Bromofluorobenzene	U012621.D	48	50	96.0		85-114
Dibromofluoromethane	U012621.D	42	50	84.8		80-119
Toluene-d8	U012621.D	51	50	103		89-112

16SW01-240119

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24011111-11	Groundwater	01/26/24 19:46	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012623.D	38	50	76.8		81-118
4-Bromofluorobenzene	U012623.D	48	50	95.7		85-114
Dibromofluoromethane	U012623.D	43	50	85.8		80-119
Toluene-d8	U012623.D	51	50	103		89-112

16SW02-240119

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24011111-12	Groundwater	01/26/24 20:08	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012624.D	38	50	75.8		81-118
4-Bromofluorobenzene	U012624.D	48	50	96.6		85-114
Dibromofluoromethane	U012624.D	43	50	85.6		80-119
Toluene-d8	U012624.D	52	50	104		89-112

Form 2 - System Monitoring Compound Recovery

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Workorder: HS24011111

Volatiles by EPA Volatiles Organics by Method 8260C

RUNID: VOA9-457361

16SW02-240119-FD

Lab Sample ID	Matrix	Analysis Date	Conc Units	Dilution
HS24011111-13	Groundwater	01/26/24 20:31	%REC	1

Instrument ID: VOA9

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012625.D	38	50	76.1		81-118
4-Bromofluorobenzene	U012625.D	47	50	94.8		85-114
Dibromofluoromethane	U012625.D	43	50	86.3		80-119
Toluene-d8	U012625.D	52	50	105		89-112

16SW03-240119

Lab Sample ID	Matrix	Analysis Date	Conc Units	Dilution
HS24011111-14	Groundwater	01/26/24 13:26	%REC	1

Instrument ID: VOA9

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012606.D	38	50	75.4		81-118
4-Bromofluorobenzene	U012606.D	49	50	97.2		85-114
Dibromofluoromethane	U012606.D	42	50	83.2		80-119
Toluene-d8	U012606.D	52	50	105		89-112

16SW03-240119

Lab Sample ID	Matrix	Analysis Date	Conc Units	Dilution
HS24011111-14MS	Aqueous	01/26/24 14:33	%REC	1

Instrument ID: VOA9

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012609.D	38.24	50	76.5		81-118
4-Bromofluorobenzene	U012609.D	45.33	50	90.7		85-114
Dibromofluoromethane	U012609.D	42.51	50	85.0		80-119
Toluene-d8	U012609.D	47.41	50	94.8		89-112

Form 2 - System Monitoring Compound Recovery

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Workorder: HS24011111

Volatiles by EPA Volatiles Organics by Method 8260C

RUNID: VOA9-457361

16SW03-240119

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24011111-14MSD	Aqueous	01/26/24 14:55	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012610.D	39.09	50	78.2		81-118
4-Bromofluorobenzene	U012610.D	45.2	50	90.4		85-114
Dibromofluoromethane	U012610.D	44.41	50	88.8		80-119
Toluene-d8	U012610.D	46.84	50	93.7		89-112

VBLKW-240126

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	VBLKW-240126	Aqueous	01/26/24 13:03	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012605.D	41.5	50	83.0		81-118
4-Bromofluorobenzene	U012605.D	49.2	50	98.4		85-114
Dibromofluoromethane	U012605.D	42.49	50	85.0		80-119
Toluene-d8	U012605.D	52.41	50	105		89-112

VLCSW-240126

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	VLCSW-240126	Aqueous	01/26/24 12:18	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012603.D	43.82	50	87.6		81-118
4-Bromofluorobenzene	U012603.D	49.55	50	99.1		85-114
Dibromofluoromethane	U012603.D	49.68	50	99.4		80-119
Toluene-d8	U012603.D	52.03	50	104		89-112

Form 2 - System Monitoring Compound Recovery

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Workorder: HS24011111

Volatiles by EPA Volatiles Organics by Method 8260C

RUNID: VOA9-457422

CCV

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	CCV U012902.D	Aqueous	01/29/24 09:10	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012902.D	42.73	50	85.5		80-120
4-Bromofluorobenzene	U012902.D	47.87	50	95.7		80-120
Dibromofluoromethane	U012902.D	48.55	50	97.1		80-120
Toluene-d8	U012902.D	49.88	50	99.8		80-120

16WW37-240119

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24011111-02	Groundwater	01/29/24 12:53	%REC	10
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012912.D	380	500	76.4		81-118
4-Bromofluorobenzene	U012912.D	460	500	92.8		85-114
Dibromofluoromethane	U012912.D	430	500	85.8		80-119
Toluene-d8	U012912.D	520	500	105		89-112

16WW38-240119

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24011111-03	Groundwater	01/29/24 13:16	%REC	50
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012913.D	1900	2500	75.3		81-118
4-Bromofluorobenzene	U012913.D	2400	2500	96.2		85-114
Dibromofluoromethane	U012913.D	2100	2500	85.5		80-119
Toluene-d8	U012913.D	2600	2500	105		89-112

Form 2 - System Monitoring Compound Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder **HS24011111**

Volatiles by EPA Volatiles Organics by Method 8260C

RUNID VOA9-457422

16WW38-240119-FD

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24011111-04	Groundwater	01/29/24 13:38	%REC	50
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012914.D	1900	2500	76.0		81-118
4-Bromofluorobenzene	U012914.D	2400	2500	96.9		85-114
Dibromofluoromethane	U012914.D	2200	2500	87.8		80-119
Toluene-d8	U012914.D	2700	2500	107		89-112

16WW13-240119

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24011111-05	Groundwater	01/29/24 14:01	%REC	10
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012915.D	390	500	77.3		81-118
4-Bromofluorobenzene	U012915.D	480	500	96.9		85-114
Dibromofluoromethane	U012915.D	430	500	86.3		80-119
Toluene-d8	U012915.D	520	500	103		89-112

16RW05-240119

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24011111-07	Groundwater	01/29/24 11:02	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012907.D	38	50	75.4		81-118
4-Bromofluorobenzene	U012907.D	48	50	96.7		85-114
Dibromofluoromethane	U012907.D	43	50	85.1		80-119
Toluene-d8	U012907.D	51	50	103		89-112

Form 2 - System Monitoring Compound Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder **HS24011111**

Volatiles by EPA Volatiles Organics by Method 8260C

RUNID VOA9-457422

16WW51-240119

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24011111-08	Groundwater	01/29/24 14:23	%REC	100
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012916.D	3800	5000	75.9		81-118
4-Bromofluorobenzene	U012916.D	4700	5000	94.5		85-114
Dibromofluoromethane	U012916.D	4300	5000	86.2		80-119
Toluene-d8	U012916.D	5200	5000	104		89-112

16WW51-240119

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24011111-08MS	Aqueous	01/29/24 14:45	%REC	100
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012917.D	4364	5000	87.3		81-118
4-Bromofluorobenzene	U012917.D	4926	5000	98.5		85-114
Dibromofluoromethane	U012917.D	4909	5000	98.2		80-119
Toluene-d8	U012917.D	5154	5000	103		89-112

16WW51-240119

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24011111-08MSD	Aqueous	01/29/24 15:07	%REC	100
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012918.D	4486	5000	89.7		81-118
4-Bromofluorobenzene	U012918.D	5089	5000	102		85-114
Dibromofluoromethane	U012918.D	5074	5000	101		80-119
Toluene-d8	U012918.D	5307	5000	106		89-112

Form 2 - System Monitoring Compound Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder **HS24011111**

Volatiles by EPA Volatiles Organics by Method 8260C

RUNID VOA9-457422

16WW30-240119

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24011111-09	Groundwater	01/29/24 11:24	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012908.D	38	50	75.9		81-118
4-Bromofluorobenzene	U012908.D	47	50	94.8		85-114
Dibromofluoromethane	U012908.D	43	50	86.3		80-119
Toluene-d8	U012908.D	52	50	104		89-112

16WW29-240119

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24011111-10	Groundwater	01/29/24 10:39	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012906.D	38	50	76.0		81-118
4-Bromofluorobenzene	U012906.D	49	50	98.9		85-114
Dibromofluoromethane	U012906.D	43	50	85.2		80-119
Toluene-d8	U012906.D	52	50	105		89-112

16SW01-240119

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24011111-11	Groundwater	01/29/24 11:46	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012909.D	38	50	75.7		81-118
4-Bromofluorobenzene	U012909.D	47	50	94.3		85-114
Dibromofluoromethane	U012909.D	43	50	85.0		80-119
Toluene-d8	U012909.D	52	50	103		89-112

Form 2 - System Monitoring Compound Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder **HS24011111**

Volatiles by EPA Volatiles Organics by Method 8260C

RUNID VOA9-457422

16SW02-240119

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24011111-12	Groundwater	01/29/24 12:09	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012910.D	38	50	76.2		81-118
4-Bromofluorobenzene	U012910.D	49	50	97.5		85-114
Dibromofluoromethane	U012910.D	43	50	85.4		80-119
Toluene-d8	U012910.D	51	50	103		89-112

16SW02-240119-FD

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24011111-13	Groundwater	01/29/24 12:31	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012911.D	38	50	76.3		81-118
4-Bromofluorobenzene	U012911.D	48	50	95.0		85-114
Dibromofluoromethane	U012911.D	43	50	86.0		80-119
Toluene-d8	U012911.D	52	50	104		89-112

VBLKW-240126

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	VBLKW-240126	Aqueous	01/29/24 10:17	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012905.D	40.84	50	81.7		81-118
4-Bromofluorobenzene	U012905.D	48.98	50	98.0		85-114
Dibromofluoromethane	U012905.D	45.48	50	91.0		80-119
Toluene-d8	U012905.D	52.86	50	106		89-112

Form 2 - System Monitoring Compound Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24011111

Volatiles by EPA Volatiles Organics by Method 8260C

RUNID VOA9-457422

VLCSW-240126

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	VLCSW-240126	Aqueous	01/29/24 09:32	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012903.D	45.37	50	90.7		81-118
4-Bromofluorobenzene	U012903.D	52.98	50	106		85-114
Dibromofluoromethane	U012903.D	51.55	50	103		80-119
Toluene-d8	U012903.D	55.07	50	110		89-112

right solutions.
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Form 3A

Matrix Spike/Spike Duplicate Recovery

Volatiles by EPA Volatiles Organics by Method 8260C

Workorder

HS24011111

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

02/02/2024

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

Form 3A - Matrix Spike/Spike Duplicate Recovery

Client: Bhate Environmental Associates, Inc.

Project: LHAAP Site 16

Workorder: **HS24011111**

SAMPLENUM: HS24011040-03MS

Volatiles by EPA Volatiles Organics by Method 8260C

BatchQC (HS24011040-03)			HS24011040-03MS		HS24011040-03MSD	
Spike Matrix: Aqueous	Result Units: ug/L		Run Date: 01/25/24		Run Date: 01/25/24	
Instrument ID: VOA9			Run Time: 16:16		Run Time: 16:38	
			Data File: U012517.D		Data File: U012518.D	

Analyte	%R Limits	DF	Sample Result	MS Result	Spike Added	%R	Q	MSD Result	Spike Added	%R	Q	RPD Limit	RPD	Q
1,1,2-Trichloroethane	80-119	100	0	1759.61	2000	88		1846.88	2000	92		20	4.84	
1,1-Dichloroethene	71-131	100	132.9	2337.03	2000	110		2236.53	2000	105		20	4.4	
1,2-Dichloroethane	73-128	100	0	1653.35	2000	83		1713.42	2000	86		20	3.57	
cis-1,2-Dichloroethene	78-123	100	1329	3089.26	2000	88		3040.70	2000	86		20	1.58	
Methylene chloride	74-124	100	0	1958.38	2000	98		2088.51	2000	104		20	6.43	
Trichloroethene	79-123	100	10220	11995.5	2000	89		12166.6	2000	97		20	1.42	
Vinyl chloride	58-137	100	106.3	1853.07	2000	87		1776.84	2000	84		20	4.2	

Q - %Recovery / RPD Flag * - %Recovery / RPD Outside Limits OL - Outside Limits %R - %Recovery DF - Dilution Factor Amt - Amount (weight or volume)

Form 3A - Matrix Spike/Spike Duplicate Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24011111

SAMPLENUM HS24011111-08MS

Volatiles by EPA Volatiles Organics by Method 8260C

16WW51-240119 (HS24011111-08)				HS24011111-08MS				HS24011111-08MSD						
Spike Matrix Aqueous	Result Units ug/L			Run Date 01/29/24				Run Date 01/29/24						
Instrument ID VOA9				Run Time 14:45				Run Time 15:07						
				Data File U012917.D				Data File U012918.D						
Analyte	%R Limits	DF	Sample Result	MS Result	Spike Added	%R	Q	MSD Result	Spike Added	%R	Q	RPD Limit	RPD	Q
1,1,2-Trichloroethane	80-119	100	0	1786.87	2000	89		1943.49	2000	97		20	8.4	
1,1-Dichloroethene	71-131	100	0	2690.40	2000	135		2710.63	2000	136		20	0.749	
1,2-Dichloroethane	73-128	100	0	1756.98	2000	88		1787.27	2000	89		20	1.71	
cis-1,2-Dichloroethene	78-123	100	2397	4443.58	2000	102		4535.85	2000	107		20	2.06	
Methylene chloride	74-124	100	0	2500.46	2000	125		2734.27	2000	137		20	8.93	
Trichloroethene	79-123	100	9670	11921.3	2000	113		11753.8	2000	104		20	1.42	
Vinyl chloride	58-137	100	0	2589.76	2000	129		2682.95	2000	134		20	3.53	

Q - %Recovery / RPD Flag * - %Recovery / RPD Outside Limits OL - Outside Limits %R - %Recovery DF - Dilution Factor Amt - Amount (weight or volume)

Form 3A - Matrix Spike/Spike Duplicate Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24011111

SAMPLENUM HS24011111-14MS

Volatiles by EPA Volatiles Organics by Method 8260C

16SW03-240119 (HS24011111-14)				HS24011111-14MS				HS24011111-14MSD						
Spike Matrix Aqueous		Result Units ug/L		Run Date 01/26/24				Run Date 01/26/24						
Instrument ID VOA9				Run Time 14:33				Run Time 14:55						
				Data File U012609.D				Data File U012610.D						
Analyte	%R Limits	DF	Sample Result	MS Result	Spike Added	%R	Q	MSD Result	Spike Added	%R	Q	RPD Limit	RPD	Q
1,1,2-Trichloroethane	80-119	1	0	18.1785	20	91		18.6352	20	93		20	2.48	
1,1-Dichloroethene	71-131	1	0	25.2288	20	126		25.2956	20	126		20	0.264	
1,2-Dichloroethane	73-128	1	0	16.3914	20	82		16.8832	20	84		20	2.96	
cis-1,2-Dichloroethene	78-123	1	0	17.9323	20	90		17.9459	20	90		20	0.0758	
Methylene chloride	74-124	1	0	21.7573	20	109		23.0552	20	115		20	5.79	
Trichloroethene	79-123	1	0	20.8602	20	104		20.8074	20	104		20	0.253	
Vinyl chloride	58-137	1	0	18.9035	20	94		19.0399	20	95		20	0.719	

Q - %Recovery / RPD Flag * - %Recovery / RPD Outside Limits OL - Outside Limits %R - %Recovery DF - Dilution Factor Amt - Amount (weight or volume)

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Form 3B

Laboratory Control Sample Recovery

Volatiles by EPA Volatiles Organics by Method 8260C

Workorder

HS24011111

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

02/02/2024

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

Form 3B - Laboratory Control Sample Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24011111

Volatiles by EPA Volatiles Organics by Method 8260C

SAMPLENUM VLCSW-240125

VOA9_457250			VLCSW-240125				
Spike Matrix Aqueous	Result Units ug/L		Run Date 01/25/24 Run Time 11:49				
Analyte	%Recovery Limits	Spike Added	LCS Result	%R	Q		
1,1,2-Trichloroethane	80-119	20	20.11	101			
1,1-Dichloroethene	71-131	20	23.94	120			
1,2-Dichloroethane	73-128	20	19.35	96.7			
cis-1,2-Dichloroethene	78-123	20	20.72	104			
Methylene chloride	74-124	20	23.25	116			
Trichloroethene	79-123	20	22.08	110			
Vinyl chloride	58-137	20	22.54	113			

Form 3B - Laboratory Control Sample Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24011111

Volatiles by EPA Volatiles Organics by Method 8260C

SAMPLENUM VLCSW-240126

VOA9_457361			VLCSW-240126				
Spike Matrix Aqueous	Result Units ug/L		Run Date 01/26/24 Run Time 12:18				
Analyte	%Recovery Limits	Spike Added	LCS Result	%R	Q		
1,1,2-Trichloroethane	80-119	20	16.68	83.4			
1,1-Dichloroethene	71-131	20	22.33	112			
1,2-Dichloroethane	73-128	20	15.92	79.6			
cis-1,2-Dichloroethene	78-123	20	17.05	85.3			
Methylene chloride	74-124	20	19.37	96.8			
Trichloroethene	79-123	20	19.47	97.3			
Vinyl chloride	58-137	20	20.23	101			

VOA9_457422			VLCSW-240126				
Spike Matrix Aqueous	Result Units ug/L		Run Date 01/29/24 Run Time 09:32				
Analyte	%Recovery Limits	Spike Added	LCS Result	%R	Q		
1,1,2-Trichloroethane	80-119	20	20.41	102			
1,1-Dichloroethene	71-131	20	29.34	147			
1,2-Dichloroethane	73-128	20	19.39	97.0			
cis-1,2-Dichloroethene	78-123	20	20.1	100			
Methylene chloride	74-124	20	27.69	138			
Trichloroethene	79-123	20	23.94	120			
Vinyl chloride	58-137	20	27.11	136			

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Form 4

Method Blank Summary

Volatiles by EPA Volatiles Organics by Method 8260C

Workorder

HS24011111

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

02/02/2024

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

Form 4 - Method Blank Summary

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24011111

Volatiles by EPA Volatiles Organics by Method 8260C

METHOD BLANK	Matrix	Analysis Date	Analysis Batch	Inst ID
VBLKW-240125	Aqueous	01/25/24 12:33	R457250	VOA9

Client Sample ID	Lab Sample ID	Type	Analysis Date	Analysis Batch	Inst ID	FileID
VLCSW-240125	VLCSW-240125	LCS	01/25/24 11:49	R457250	VOA9	U012505.D
Trip Blank-240119	HS24011111-15	SAMP	01/25/24 14:47	R457250	VOA9	U012513.D
BatchQC	HS24011040-03MS	MS	01/25/24 16:16	R457250	VOA9	U012517.D
BatchQC	HS24011040-03MSD	MSD	01/25/24 16:38	R457250	VOA9	U012518.D

Form 4 - Method Blank Summary

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24011111

Volatiles by EPA Volatiles Organics by Method 8260C

METHOD BLANK	Matrix	Analysis Date	Analysis Batch	Inst ID
VBLKW-240126	Aqueous	01/26/24 13:03	R457361	VOA9

Client Sample ID	Lab Sample ID	Type	Analysis Date	Analysis Batch	Inst ID	FileID
VLCSW-240126	VLCSW-240126	LCS	01/26/24 12:18	R457361	VOA9	U012603.D
16SW03-240119	HS24011111-14	SAMP	01/26/24 13:26	R457361	VOA9	U012606.D
16SW03-240119	HS24011111-14MS	MS	01/26/24 14:33	R457361	VOA9	U012609.D
16SW03-240119	HS24011111-14MSD	MSD	01/26/24 14:55	R457361	VOA9	U012610.D
16WW44-240119	HS24011111-01	SAMP	01/26/24 16:02	R457361	VOA9	U012613.D
16WW37-240119	HS24011111-02	SAMP	01/26/24 16:24	R457361	VOA9	U012614.D
16WW38-240119	HS24011111-03	SAMP	01/26/24 16:47	R457361	VOA9	U012615.D
16WW38-240119-FD	HS24011111-04	SAMP	01/26/24 17:09	R457361	VOA9	U012616.D
16WW13-240119	HS24011111-05	SAMP	01/26/24 17:31	R457361	VOA9	U012617.D
16WW42-240119	HS24011111-06	SAMP	01/26/24 17:54	R457361	VOA9	U012618.D
16RW05-240119	HS24011111-07	SAMP	01/26/24 18:16	R457361	VOA9	U012619.D
16WW51-240119	HS24011111-08	SAMP	01/26/24 18:39	R457361	VOA9	U012620.D
16WW30-240119	HS24011111-09	SAMP	01/26/24 19:01	R457361	VOA9	U012621.D
16SW01-240119	HS24011111-11	SAMP	01/26/24 19:46	R457361	VOA9	U012623.D
16SW02-240119	HS24011111-12	SAMP	01/26/24 20:08	R457361	VOA9	U012624.D
16SW02-240119-FD	HS24011111-13	SAMP	01/26/24 20:31	R457361	VOA9	U012625.D

Form 4 - Method Blank Summary

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24011111

Volatiles by EPA Volatiles Organics by Method 8260C

METHOD BLANK	Matrix	Analysis Date	Analysis Batch	Inst ID
VBLKW-240126	Aqueous	01/29/24 10:17	R457422	VOA9

Client Sample ID	Lab Sample ID	Type	Analysis Date	Analysis Batch	Inst ID	FileID
VLCSW-240126	VLCSW-240126	LCS	01/29/24 09:32	R457422	VOA9	U012903.D
16WW29-240119	HS24011111-10	SAMP	01/29/24 10:39	R457422	VOA9	U012906.D
16RW05-240119	HS24011111-07	SAMP	01/29/24 11:02	R457422	VOA9	U012907.D
16WW30-240119	HS24011111-09	SAMP	01/29/24 11:24	R457422	VOA9	U012908.D
16SW01-240119	HS24011111-11	SAMP	01/29/24 11:46	R457422	VOA9	U012909.D
16SW02-240119	HS24011111-12	SAMP	01/29/24 12:09	R457422	VOA9	U012910.D
16SW02-240119-FD	HS24011111-13	SAMP	01/29/24 12:31	R457422	VOA9	U012911.D
16WW37-240119	HS24011111-02	SAMP	01/29/24 12:53	R457422	VOA9	U012912.D
16WW38-240119	HS24011111-03	SAMP	01/29/24 13:16	R457422	VOA9	U012913.D
16WW38-240119-FD	HS24011111-04	SAMP	01/29/24 13:38	R457422	VOA9	U012914.D
16WW13-240119	HS24011111-05	SAMP	01/29/24 14:01	R457422	VOA9	U012915.D
16WW51-240119	HS24011111-08	SAMP	01/29/24 14:23	R457422	VOA9	U012916.D
16WW51-240119	HS24011111-08MS	MS	01/29/24 14:45	R457422	VOA9	U012917.D
16WW51-240119	HS24011111-08MSD	MSD	01/29/24 15:07	R457422	VOA9	U012918.D

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Form 5

Instrument Performance Check

Volatiles by EPA Volatiles Organics by Method 8260C

Workorder

HS24011111

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

02/02/2024

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

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: V9

Lab File ID: U120601 DFTPP Injection Date: 12/06/23

Instrument ID: VOA9 DFTPP Injection Time: 1114

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	18.3
75	30.0 - 60.0% of mass 95	48.9
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	88.4
175	5.0 - 9.0% of mass 174	7.4 (8.3)1
176	95.0 - 101.0% of mass 174	87.8 (99.3)1
177	5.0 - 9.0% of mass 176	5.6 (6.3)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD000.25	VSTD000.25	U120602	12/06/23	1136
02	VSTD000.5	VSTD000.5	U120603	12/06/23	1158
03	VSTD001	VSTD001	U120604	12/06/23	1243
04	VSTD002	VSTD002	U120605	12/06/23	1305
05	VSTD005	VSTD005	U120606	12/06/23	1327
06	VSTD020	VSTD020	U120607	12/06/23	1349
07	VSTD050	VSTD050	U120608	12/06/23	1411
08	VSTD100	VSTD100	U120609	12/06/23	1434
09	VSTD150	VSTD150	U120610	12/06/23	1456
10	VSTD200	VSTD200	U120611	12/06/23	1518
11	ICV	ICV	U120614	12/06/23	1625
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

Form 5 - Instrument Performance Check

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder **HS24011111**

Volatiles by EPA Volatiles Organics by Method 8260C

RUNID VOA9-457250

Tune File U012501.D 01/25/24 1/25/2024

m / e	Ion Abundance Criterion	%RA
50	15.0 - 40.0% of mass 95	16 (16)
75	30.0 - 60.0% of mass 95	44.7 (44.7)
95	Base peak, 100% RA	100 (100)
96	5.0 - 9.0% of mass 95	6.5 (6.54)
173	Less than 2.0% of mass 174	0 (0) 1
174	greater than 50.0% of mass 95	94.5 (94.5) 1
175	5.0 - 9.0% of mass 174	8.1 (8.62) 1
176	> 95% but < 101% of mass 174	92.7 (98) 1
177	5.0 - 9.0% of mass 176	6 (6.45) 2

%RA - Percent Relative Abundance

This check applies to the following analyses

	Lab Samp ID	Type	Date Analyzed	Lab File ID	Sample ID
1	CCV	CCV	1/25/2024	U012503	CCV
2	VLCSW-	LCS	1/25/2024	U012505	VLCSW-240125
3	VBLKW-	MBLK	1/25/2024	U012507	VBLKW-240125
4	HS24011111-	SAMP	1/25/2024	U012513	Trip Blank-240119
5	HS24011040-	MS	1/25/2024	U012517	ZZZZZZMS
6	HS24011040-	MSD	1/25/2024	U012518	ZZZZZZMSD
7	CCV-END	CCV_EN	1/25/2024	U012530	CCV-END

Form 5 - Instrument Performance Check

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder **HS24011111**

Volatiles by EPA Volatiles Organics by Method 8260C

RUNID VOA9-457361

Tune File U012601.D 01/26/24 1/26/2024

m / e	Ion Abundance Criterion	%RA
50	15.0 - 40.0% of mass 95	16 (16)
75	30.0 - 60.0% of mass 95	45.1 (45.1)
95	Base peak, 100% RA	100 (100)
96	5.0 - 9.0% of mass 95	6.6 (6.6)
173	Less than 2.0% of mass 174	0 (0) 1
174	greater than 50.0% of mass 95	94.7 (94.7) 1
175	5.0 - 9.0% of mass 174	8.3 (8.8) 1
176	> 95% but < 101% of mass 174	93.2 (98.4) 1
177	5.0 - 9.0% of mass 176	6.1 (6.54) 2

%RA - Percent Relative Abundance

This check applies to the following analyses

	Lab Samp ID	Type	Date Analyzed	Lab File ID	Sample ID
1	CCV	CCV	1/26/2024	U012602	CCV
2	VLCSW-	LCS	1/26/2024	U012603	VLCSW-240126
3	VBLKW-	MBLK	1/26/2024	U012605	VBLKW-240126
4	HS24011111-	SAMP	1/26/2024	U012606	16SW03-240119
5	HS24011111-	MS	1/26/2024	U012609	HS24011111-14MS
6	HS24011111-	MSD	1/26/2024	U012610	HS24011111-14MSD
7	HS24011111-	SAMP	1/26/2024	U012613	16WW44-240119
8	HS24011111-	SAMP	1/26/2024	U012614	16WW37-240119
9	HS24011111-	SAMP	1/26/2024	U012615	16WW38-240119
10	HS24011111-	SAMP	1/26/2024	U012616	16WW38-240119-FD
11	HS24011111-	SAMP	1/26/2024	U012617	16WW13-240119
12	HS24011111-	SAMP	1/26/2024	U012618	16WW42-240119
13	HS24011111-	SAMP	1/26/2024	U012619	16RW05-240119
14	HS24011111-	SAMP	1/26/2024	U012620	16WW51-240119
15	HS24011111-	SAMP	1/26/2024	U012621	16WW30-240119
16	HS24011111-	SAMP	1/26/2024	U012623	16SW01-240119
17	HS24011111-	SAMP	1/26/2024	U012624	16SW02-240119
18	HS24011111-	SAMP	1/26/2024	U012625	16SW02-240119-FD
19	CCV-END	CCV_EN	1/26/2024	U012628	CCV-END

Form 5 - Instrument Performance Check

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder **HS24011111**

Volatiles by EPA Volatiles Organics by Method 8260C

RUNID VOA9-457422

Tune File U012901.D 01/29/24 1/29/2024

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	47.5 (47.5)
95	Base peak, 100% RA	100 (100)
96	5.0 - 9.0% of mass 95	6.9 (6.95)
173	Less than 2.0% of mass 174	0 (0) 1
174	greater than 50.0% of mass 95	97.5 (97.5) 1
175	5.0 - 9.0% of mass 174	8.5 (8.72) 1
176	> 95% but < 101% of mass 174	95.2 (97.5) 1
177	5.0 - 9.0% of mass 176	6.8 (7.12) 2

%RA - Percent Relative Abundance

This check applies to the following analyses

	Lab Samp ID	Type	Date Analyzed	Lab File ID	Sample ID
1	CCV	CCV	1/29/2024	U012902	CCV
2	VLCSW-	LCS	1/29/2024	U012903	VLCSW-240126
3	VBLKW-	MBLK	1/29/2024	U012905	VBLKW-240126
4	HS24011111-	SAMP	1/29/2024	U012906	16WW29-240119
5	HS24011111-	SAMP	1/29/2024	U012907	16RW05-240119
6	HS24011111-	SAMP	1/29/2024	U012908	16WW30-240119
7	HS24011111-	SAMP	1/29/2024	U012909	16SW01-240119
8	HS24011111-	SAMP	1/29/2024	U012910	16SW02-240119
9	HS24011111-	SAMP	1/29/2024	U012911	16SW02-240119-FD
10	HS24011111-	SAMP	1/29/2024	U012912	16WW37-240119
11	HS24011111-	SAMP	1/29/2024	U012913	16WW38-240119
12	HS24011111-	SAMP	1/29/2024	U012914	16WW38-240119-FD
13	HS24011111-	SAMP	1/29/2024	U012915	16WW13-240119
14	HS24011111-	SAMP	1/29/2024	U012916	16WW51-240119
15	HS24011111-	MS	1/29/2024	U012917	HS24011111-08MS
16	HS24011111-	MSD	1/29/2024	U012918	HS24011111-08MSD
17	CCV-END	CCV_EN	1/29/2024	U012919	CCV-END

right solutions.
right partner.

Form 6

Initial Calibration Data

Volatiles by EPA Volatiles Organics by Method 8260C

Workorder

HS24011111

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

02/02/2024

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

Report Date : 14-Dec-2023 15:02 Page 1

ALS Laboratory Group

INITIAL CALIBRATION DATA

Start Cal Date : 06-DEC-2023 11:36
End Cal Date : 06-DEC-2023 15:18
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\8260C.m
Last Edit : 12-Dec-2023 09:44 VOA9.i

Calibration File Names:
Level 1: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120602.D
Level 2: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120603A.D
Level 3: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120604.D
Level 4: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120605.D
Level 5: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120606.D
Level 6: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120607.D
Level 7: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120608.D
Level 8: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120609.D
Level 9: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120610.D
Level 10: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120611.D

Compound	0.2500000 Level 1 / 50.0000 Level 7	0.5000000 Level 2 / 100.0000 Level 8	1.0000 Level 3 / 150.0000 Level 9	2.0000 Level 4 / 200.0000 Level 10	5.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
2 Dichlorodifluoromethane	+++++ / 137759	1356 / 297342	2370 / 450623	5944 / 628396	11260	61984	LINR	0.01736	0.41016		0.99952
3 Chloromethane	+++++ / 0.54210	0.60765 / 0.55111	0.67529 / 0.55358	0.58774 / 0.58002	0.51372	0.55086	AVRG		0.57356		8.21079
4 Propionitrile	+++++ / 0.08620	0.08042 / 0.08206	0.08383 / 0.08100	0.08835 / 0.08011	0.08153	0.08261	AVRG		0.08290		3.34979

ALS Laboratory Group

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Compound	0.2500000 Level 1 / 50.0000 Level 7	0.5000000 Level 2 / 100.0000 Level 8	1.0000 Level 3 / 150.0000 Level 9	2.0000 Level 4 / 200.0000 Level 10	5.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
5 Vinyl Chloride	+++++	0.55587	0.61723	0.56266	0.46518	0.53420					
	0.52469	0.55584	0.55083	0.56486			AVRG		0.54793		7.36189
6 Bromomethane	+++++	1430	3158	6114	12339	41799					
	101286	220567	359673	+++++			QUAD	-0.01874	3.83540	-0.74314	0.99990
7 Chloroethane	+++++	0.35816	0.41332	0.39749	0.34723	0.36477					
	0.35630	0.35791	0.36028	0.36484			AVRG		0.36892		5.87872
8 Trichlorofluoromethane	+++++	0.63268	0.75900	0.78293	0.59845	0.71196					
	0.64859	0.70858	0.69884	0.70980			AVRG		0.69454		8.50131
9 Acrolein	+++++	0.03144	0.03185	0.02874	0.03295	0.03051					
	0.02630	0.02379	0.02495	0.02593			AVRG		0.02849		11.76525
10 Acetone	+++++	3182	5741	7963	15039	64015					
	141600	236750	361348	496605			LINR	-0.12178	0.16045		0.99800
11 1,1-Dichloroethene	+++++	0.41876	0.43897	0.39233	0.32202	0.38924					
	0.36693	0.37803	0.37669	0.38779			AVRG		0.38564		8.47183

ALS Laboratory Group

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Compound	0.2500000 Level 1 / 50.0000 Level 7	0.5000000 Level 2 / 100.0000 Level 8	1.0000 Level 3 / 150.0000 Level 9	2.0000 Level 4 / 200.0000 Level 10	5.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
12 Isobutyl Alcohol	+++++	0.06025	0.09256	0.07598	0.06825	0.07045					
	0.07489	0.07672	0.07767	0.07812			AVRG		0.07499		11.67336
13 Acetonitrile	+++++	0.05343	0.05964	0.05843	0.04799	0.05018					
	0.05492	0.05526	0.05365	0.05081			AVRG		0.05381		7.04201
14 Allyl Chloride	+++++	1.37916	1.14075	1.27746	1.18123	1.17505					
	1.24952	1.23822	1.22682	1.19586			AVRG		1.22934		5.71471
15 Iodomethane	+++++	1035	2707	6285	19119	127779					
	363885	780690	+++++	+++++			QUAD	0.04619	2.10790	-0.11445	0.99961
16 Acrylonitrile	+++++	0.21421	0.19581	0.20958	0.18176	0.18548					
	0.19652	0.19516	0.19399	0.19267			AVRG		0.19613		5.24118
17 Methylene Chloride	+++++	2348	5310	9102	16803	72366					
	178723	355722	541571	738924			LINR	-0.00530	0.48410		0.99998
18 Methyl tert-butyl ether	+++++	1.40135	1.40371	1.49933	1.37308	1.28423					
	1.37244	1.36043	1.36592	1.37596			AVRG		1.38183		4.05374

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INITIAL CALIBRATION DATA

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Compound	0.2500000 Level 1 / 50.0000 Level 7	0.5000000 Level 2 / 100.0000 Level 8	1.0000 Level 3 / 150.0000 Level 9	2.0000 Level 4 / 200.0000 Level 10	5.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
19 Carbon Disulfide	+++++ / 1.13229	1.20122 / 1.18462	1.11116 / 1.18369	1.15935 / 1.19921	0.92147	1.13379	AVRG		1.13631		7.62721
20 trans-1,2-Dichloroethene	+++++ / 0.44920	0.55417 / 0.45332	0.48054 / 0.45240	0.47607 / 0.45533	0.38501	0.44304	AVRG		0.46101		9.60667
21 Vinyl Acetate	+++++ / 1.47594	1.25328 / 1.52209	1.34805 / 1.49580	1.39014 / 1.46306	1.24374	1.35438	AVRG		1.39405		7.36501
22 1,1-Dichloroethane	+++++ / 0.84206	1.06054 / 0.96296	1.01956 / 0.95773	0.93556 / 0.94403	0.78304	0.95745	AVRG		0.94033		8.91915
23 Chloroprene	+++++ / 0.15437	0.21279 / 0.16624	0.20645 / 0.16487	0.15987 / 0.17350	0.13265	0.16426	AVRG		0.17056		14.63520
24 2-Butanone	+++++ / 0.24034	0.29856 / 0.23130	0.26092 / 0.23227	0.23769 / 0.23375	0.22713	0.24239	AVRG		0.24493		9.12891
25 Methacrylonitrile	+++++ / 0.36911	0.37978 / 0.37184	0.37485 / 0.36480	0.30519 / 0.35604	0.37643	0.31505	AVRG		0.35701		7.72693

ALS Laboratory Group

INITIAL CALIBRATION DATA

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Compound	0.2500000 Level 1 / 50.0000 Level 7	0.5000000 Level 2 / 100.0000 Level 8	1.0000 Level 3 / 150.0000 Level 9	2.0000 Level 4 / 200.0000 Level 10	5.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
26 2,2-Dichloropropane	+++++	0.75017	0.70489	0.65761	0.53723	0.63563					
	0.63940	0.67045	0.67783	0.67647			AVRG		0.66108		8.77671
27 cis-1,2-Dichloroethene	+++++	0.68190	0.71757	0.62535	0.54538	0.60802					
	0.60755	0.59702	0.58954	0.58574			AVRG		0.61756		8.45747
28 Chloroform	+++++	1.15926	1.14653	1.06171	0.95147	0.99951					
	0.99055	0.98078	0.96783	0.95407			AVRG		1.02352		7.84830
29 Bromochloromethane	+++++	0.33967	0.35061	0.35688	0.30868	0.33246					
	0.32533	0.29495	0.28692	0.28037			AVRG		0.31954		8.77237
31 1,1,1-Trichloroethane	+++++	0.78915	0.84496	0.79505	0.63694	0.78391					
	0.75539	0.80529	0.78969	0.80003			AVRG		0.77782		7.42854
32 1,1-Dichloropropene	+++++	0.44487	0.43049	0.42755	0.34161	0.43259					
	0.40996	0.43410	0.41847	0.42504			AVRG		0.41830		7.26595
33 1,2-Dichloroethane	+++++	0.58135	0.52767	0.51067	0.46133	0.48650					
	0.46886	0.45322	0.45366	0.44116			AVRG		0.48716		9.31080

ALS Laboratory Group

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Compound	0.2500000 Level 1 / 50.0000 Level 7	0.5000000 Level 2 / 100.0000 Level 8	1.0000 Level 3 / 150.0000 Level 9	2.0000 Level 4 / 200.0000 Level 10	5.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
34 Carbon Tetrachloride	+++++	0.39672	0.45767	0.39224	0.33753	0.41734					
	0.39493	0.42983	0.42163	0.42951			AVRG		0.40860		8.29467
37 Benzene	+++++	1.49959	1.51995	1.41790	1.21619	1.36147					
	1.32095	1.32039	1.30062	1.29293			AVRG		1.36111		7.35672
38 Trichloroethene	+++++	0.37972	0.45421	0.40167	0.32349	0.36997					
	0.36192	0.36121	0.36296	0.36115			AVRG		0.37514		9.60373
39 Bromodichloromethane	+++++	0.45336	0.49916	0.43009	0.38071	0.43558					
	0.43840	0.45561	0.46078	0.45784			AVRG		0.44572		7.10034
40 Methyl Methacrylate	+++++	0.52031	0.44827	0.47454	0.44740	0.47358					
	0.52375	0.52048	0.51476	0.51861			AVRG		0.49352		6.55463
41 2-Chloroethylvinyl ether	+++++	81.00000	104	254	541	2163					
	5248	10683	18550	+++++			QUAD	-0.04260	253	-1858	0.99946
42 1,2-Dichloropropane	+++++	0.41867	0.40704	0.40057	0.33347	0.35856					
	0.34891	0.34499	0.34342	0.34246			AVRG		0.36645		8.92774

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ALS Laboratory Group

INITIAL CALIBRATION DATA

Start Cal Date : 06-DEC-2023 11:36
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Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\8260C.m
Last Edit : 12-Dec-2023 09:44 VOA9.i

Compound	0.2500000 Level 1 / 50.0000 Level 7	0.5000000 Level 2 / 100.0000 Level 8	1.0000 Level 3 / 150.0000 Level 9	2.0000 Level 4 / 200.0000 Level 10	5.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
43 2-Nitropropane	+++++	0.14167	0.11626	0.12567	0.10299	0.10058					
	0.13041	0.14058	0.14668	0.15042			AVRG		0.12836		14.37086
44 Dibromomethane	+++++	0.26713	0.26757	0.24110	0.22142	0.23729					
	0.22832	0.22304	0.22591	0.22202			AVRG		0.23709		7.77658
45 4-Methyl-2-Pentanone	+++++	3489	12410	19058	39833	166511					
	421109	859659	1318627	1806407			LINR	-0.00723	0.35923		0.99998
46 cis-1,3-Dichloropropene	+++++	2180	5439	10504	23865	118570					
	322591	679057	1050675	1454685			LINR	0.02964	0.59198		0.99966
49 Ethyl Methacrylate	+++++	0.50010	0.40117	0.44873	0.43130	0.49595					
	0.52014	0.53221	0.54465	0.54247			AVRG		0.49075		10.58856
50 Toluene	+++++	1.38634	1.45148	1.44979	1.23806	1.47768					
	1.41053	1.41726	1.36843	1.34761			AVRG		1.39413		5.16093
51 trans-1,3-Dichloropropene	+++++	2266	4518	8323	17262	97024					
	270774	568417	892559	1229242			LINR	0.03548	0.50131		0.99949

ALS Laboratory Group

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Compound	0.2500000 Level 1 / 50.0000 Level 7	0.5000000 Level 2 / 100.0000 Level 8	1.0000 Level 3 / 150.0000 Level 9	2.0000 Level 4 / 200.0000 Level 10	5.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
52 2-Hexanone	+++++	0.19074	0.33417	0.26694	0.25356	0.23853					
	0.24270	0.24796	0.24725	0.24908			AVRG		0.25232		14.72591
53 1,1,2-Trichloroethane	+++++	2006	4469	8230	16200	66320					
	162935	317502	484173	649485			LINR	-0.02681	0.25967		0.99953
54 1,3-Dichloropropane	+++++	0.66111	0.73799	0.66410	0.60686	0.60856					
	0.59336	0.57967	0.56769	0.55191			AVRG		0.61903		9.48176
55 Dibromochloromethane	+++++	0.33963	0.45232	0.35917	0.31150	0.36231					
	0.37800	0.38087	0.38047	0.38247			AVRG		0.37186		10.29053
56 Tetrachloroethene	+++++	0.29059	0.34342	0.30956	0.27133	0.31315					
	0.28334	0.30241	0.28648	0.28543			AVRG		0.29841		7.22277
57 1,2-Dibromoethane	+++++	0.36208	0.42827	0.34077	0.32354	0.33501					
	0.34185	0.33780	0.33076	0.32649			AVRG		0.34740		9.30532
58 1-Chlorohexane	+++++	0.28855	0.29093	0.26773	0.28175	0.29467					
	0.25374	0.28126	0.27997	0.28476			AVRG		0.28037		4.50058

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INITIAL CALIBRATION DATA

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Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\8260C.m
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Compound	0.2500000 Level 1 / 50.0000 Level 7	0.5000000 Level 2 / 100.0000 Level 8	1.0000 Level 3 / 150.0000 Level 9	2.0000 Level 4 / 200.0000 Level 10	5.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
59 Chlorobenzene	+++++	1.10957	1.22903	1.07699	0.96363	0.98188						
	0.94781	0.96126	0.94213	0.92789			AVRG		1.01558		10.00694	
60 1,1,1,2-Tetrachloroethane	+++++	0.33873	0.44133	0.36066	0.31390	0.34234						
	0.34697	0.35254	0.35322	0.34757			AVRG		0.35525		9.81558	
61 Ethylbenzene	+++++	0.48007	0.54531	0.46591	0.43254	0.47942						
	0.45768	0.48300	0.46636	0.46842			AVRG		0.47541		6.37788	
62 m,p-Xylenes	+++++	0.50154	0.60732	0.58642	0.49297	0.60487						
	0.58273	0.60104	0.58875	0.57858			AVRG		0.57158		7.58280	
63 o-Xylene	+++++	0.59556	0.62855	0.58371	0.51224	0.60261						
	0.59041	0.60351	0.58930	0.58458			AVRG		0.58783		5.35695	
64 Styrene	+++++	0.78935	1.08436	0.90647	0.88164	1.01677						
	1.02881	1.05023	1.03863	1.01139			AVRG		0.97863		9.91987	
65 cis-1,4-Dichloro-2-butene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	<-

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Method file : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\8260C.m
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Compound	0.2500000 Level 1 / 50.0000 Level 7	0.5000000 Level 2 / 100.0000 Level 8	1.0000 Level 3 / 150.0000 Level 9	2.0000 Level 4 / 200.0000 Level 10	5.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
66 Bromoform	+++++	1087	4009	6134	11348	53027					
	142982	300664	473849	654088			LINR	0.02144	0.25997		0.99969
67 Isopropylbenzene	+++++	1.19291	1.55895	1.40871	1.25947	1.50283					
	1.42863	1.51293	1.46161	1.46886			AVRG		1.42166		8.48620
68 1,1,2,2-Tetrachloroethane	+++++	3009	10887	14293	29212	105283					
	257467	527580	793984	1074429			LINR	-0.01327	0.80423		0.99997
71 1,2,3-Trichloropropane	+++++	1.06504	1.23583	1.06778	0.90332	0.80942					
	0.84393	0.85703	0.86699	0.89310			AVRG		0.94916		14.93509
72 trans-1,4-Dichloro-2-butene	+++++	0.09411	0.11284	0.09420	0.07871	0.07378					
	0.08178	0.09027	0.09035	0.09379			AVRG		0.08998		12.60136
73 n-Propylbenzene	+++++	2.44617	3.17741	3.04405	2.48717	3.08001					
	2.97454	3.04690	3.01187	3.15565			AVRG		2.93597		9.32667
74 Bromobenzene	+++++	0.87913	1.10344	0.89377	0.77536	0.79883					
	0.76626	0.77704	0.78092	0.78209			AVRG		0.83965		13.04238

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Compound	0.2500000 Level 1 / 50.0000 Level 7	0.5000000 Level 2 / 100.0000 Level 8	1.0000 Level 3 / 150.0000 Level 9	2.0000 Level 4 / 200.0000 Level 10	5.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
75 1,3,5-Trimethylbenzene	+++++	1.62596	2.31173	1.97542	1.78154	2.18793					
	2.14069	2.24707	2.24730	2.26279			AVRG		2.08671		11.54251
76 2-Chlorotoluene	+++++	2.04577	2.24827	2.09143	1.77115	1.98187					
	1.90659	1.91474	1.91198	1.91322			AVRG		1.97611		6.95069
77 4-Chlorotoluene	+++++	2.05600	2.60285	2.38619	2.04351	2.22527					
	2.17608	2.23431	2.21857	2.22731			AVRG		2.24112		7.57307
78 tert-Butylbenzene	+++++	1.54482	2.24160	1.95673	1.59955	1.94971					
	1.79347	1.92357	1.90181	1.95742			AVRG		1.87430		11.12860
79 1,2,4-Trimethylbenzene	+++++	1.89372	2.20037	1.91031	1.76757	2.16007					
	2.13960	2.25445	2.23745	2.25842			AVRG		2.09133		8.80822
80 Pentachloroethane	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000
81 sec-Butylbenzene	+++++	2.23274	2.53512	2.44268	2.01107	2.51642					
	2.32125	2.57767	2.52711	2.58782			AVRG		2.41688		8.00580

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82 p-Isopropyltoluene	+++++	1.87926	2.15830	1.93821	1.62936	2.18469						
	2.11330	2.31696	2.28462	2.31975			AVRG		2.09160		11.16096	
83 1,3-Dichlorobenzene	+++++	1.43511	2.01188	1.68894	1.34744	1.37432						
	1.35633	1.39171	1.38658	1.39878			AVRG		1.48790		14.93705	
84 1,4-Dichlorobenzene	+++++	1.71098	2.01222	1.83319	1.52092	1.44982						
	1.40118	1.42219	1.41950	1.41709			AVRG		1.57634		14.14203	
85 bis(2-Chloro-isopropyl)ether	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	<-
86 Benzyl Chloride	+++++	2261	5233	7328	16152	72751						
	237947	584421	972103	1459086			QUAD	0.03984	2.26566	-0.24382	0.99891	
87 n-Butylbenzene	+++++	1.43652	1.83912	1.73595	1.39700	1.79287						
	1.74072	1.94638	1.92894	1.98002			AVRG		1.75528		12.02126	
88 1,2-Dichlorobenzene	+++++	1.55329	1.93525	1.69985	1.47123	1.38200						
	1.35094	1.35333	1.36083	1.36534			AVRG		1.49690		13.52933	

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89 1,2-Dibromo-3-Chloropropane	+++++	428	1017	1816	3694	16207					
	43056	92967	145211	206083			LINR	0.04238	0.15275		0.99804
90 1,2,4-Trichlorobenzene	+++++	0.92569	1.08308	0.85656	0.79800	0.86470					
	0.89220	0.96152	0.95503	0.97449			AVRG		0.92347		8.99319
91 Hexachlorobutadiene	+++++	0.34890	0.42882	0.40756	0.30282	0.37226					
	0.32013	0.38729	0.37877	0.38504			AVRG		0.37018		10.85772
92 Naphthalene	+++++	1.86091	2.22757	2.26807	1.96835	2.18835					
	2.26601	2.36539	2.41669	2.48309			AVRG		2.22716		9.06851
93 1,2,3-Trichlorobenzene	+++++	0.97967	1.09694	0.95938	0.83934	0.87236					
	0.87022	0.91485	0.92546	0.92308			AVRG		0.93126		8.19533
130 Ethyl Acetate	+++++	0.62557	0.61371	0.67147	0.56728	0.60482					
	0.60823	0.59929	0.59188	0.58416			AVRG		0.60738		4.84861
131 Methyl Acrylate	+++++	0.73652	0.53324	0.69780	0.60751	0.63203					
	0.68830	0.68196	0.66471	0.66876			AVRG		0.65676		9.03626

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132 n-Butanol	+++++	0.01364	0.01979	0.01808	0.01500	0.01427					
	0.01509	0.01624	0.01690	0.01726			AVRG		0.01625		12.09636
133 Ethyl Acrylate	+++++	1.11772	1.05874	1.09383	1.07275	1.17503					
	1.29451	1.31755	1.32718	1.35926			AVRG		1.20184		10.15103
134 Cyclohexanone	+++++	0.02875	0.03105	0.03362	0.03260	0.03709					
	0.03771	0.03092	0.03209	0.03391			AVRG		0.03308		8.76064
135 1,4-Dioxane	0.00804	0.00898	0.00918	0.00891	0.00796	0.00688					
	0.00745	0.00744	0.00729	0.00721			AVRG		0.00793		10.42422
136 n-Hexane	+++++	0.43383	0.49449	0.50226	0.36293	0.47223					
	0.37581	0.46104	0.52901	0.55140			AVRG		0.46478		13.86740
137 n-Pentane	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000
138 Freon TF	+++++	1239	3267	6155	11826	58269					
	124522	287842	434378	+++++			QUAD	-0.00009	2.78976	-0.20425	0.99882

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146 Methyl Acetate	+++++	0.52117	0.57158	0.57924	0.48951	0.46823					
	0.47002	0.46297	0.46059	0.45532			AVRG		0.49762		9.72555
147 Methylcyclohexane	+++++	0.61021	0.66741	0.68546	0.66253	0.74881					
	0.80628	0.82105	0.82621	0.84188			AVRG		0.74109		11.67899
149 Isopropyl alcohol	+++++	2543	6719	10615	26635	91067					
	232846	469315	695746	961491			LINR	-0.14984	0.03141		0.99991
152 Amyl alcohol	+++++	0.01034	0.01304	0.01216	0.00963	0.01033					
	0.01037	0.01106	0.01137	0.01152			AVRG		0.01109		9.55870
150 Allyl alcohol	+++++	0.02169	0.02472	0.02511	0.01815	0.02361					
	0.01879	0.02305	0.02645	0.02757			AVRG		0.02324		13.86740
151 4-Methyl-2-pentanol	+++++	6106	13189	29170	71142	354355					
	842831	1866546	2986592	4203138			LINR	0.91650	0.08489		0.99821
148 Tert-butyl alcohol	+++++	0.06200	0.07026	0.06171	0.06116	0.04926					
	0.04918	0.04947	0.04996	0.05076			AVRG		0.05597		14.08200

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Compound	0.2500000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	5.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	50.0000 Level 7	100.0000 Level 8	150.0000 Level 9	200.0000 Level 10							
139 Diethyl ether	+++++	0.48276	0.48928	0.41428	0.38267	0.36248					
	0.38572	0.38297	0.38509	0.38402			AVRG		0.40770		11.36338
140 1,3-Butadiene	+++++	0.41221	0.53663	0.52386	0.40076	0.52984					
	0.50196	0.52814	0.53350	0.55265			AVRG		0.50217		11.13281
141 Cyclohexane	+++++	0.79825	0.75111	0.72553	0.61284	0.78917					
	0.62773	0.73383	0.70638	0.73926			AVRG		0.72046		8.86716
142 Tetrahydrofuran	+++++	0.11792	0.11386	0.11240	0.09243	0.10246					
	0.10330	0.10503	0.10453	0.10326			AVRG		0.10613		7.13800
143 1-Chlorobutane	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000
144 Nitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000
145 alpha-Methylstyrene	+++++	1854	5330	9651	22203	117007					
	305757	661584	1011695	1395978			LINR	0.03189	1.04682		0.99950

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153 Tetraethyl lead	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	
154 2,3-Dichlorobutane	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	
155 2-Pentanone	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	
156 Diisopropyl ether	+++++	1.62808	1.86889	1.82207	1.63111	1.70121						
	1.80364	1.77527	1.72880	1.71760			AVRG		1.74185		4.76567	
157 n-Heptane	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	<-
158 Dichlorofluoromethane	+++++	0.71262	0.76027	0.83963	0.70697	0.72365						
	0.77598	0.77716	0.77693	0.78551			AVRG		0.76208		5.52222	
159 Propylene oxide	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	

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Compound	0.2500000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	5.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	50.0000 Level 7	100.0000 Level 8	150.0000 Level 9	200.0000 Level 10								
160 2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	
161 3-Methyl-1-butanol	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	<-
162 Butyl acrylate	+++++	3857	5594	11163	26306	122126						
	370735	863117	1392486	1960531			LINR	0.06515	0.77905		0.99783	
163 Butyl methacrylate	+++++	1360	3261	5931	14661	67770						
	193469	444124	721496	+++++			LINR	0.05411	0.72714		0.99595	
164 Dicyclopentadiene	+++++	2.72946	2.69453	2.56436	2.53492	2.56821						
	2.73472	2.72122	2.68006	2.76120			AVRG		2.66541		3.22053	
165 4-Vinyl-1-cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	
166 1,2,3-Trimethylbenzene	+++++	1.98121	1.76129	1.98244	1.91315	2.06886						
	2.23196	2.19460	2.21027	2.22652			AVRG		2.06337		8.05498	

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167 Ethanol	+++++	607	1513	2381	4835	18524					
	43069	94197	138963	190910			LINR	-0.03562	0.00626		0.99966
168 1-Propanol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000
170 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000
172 tert-Butyl formate	+++++	3000	9583	14033	27533	98771					
	251714	544871	860896	1234680			LINR	0.07759	0.39833		0.99750
173 3,3-Dimethyl-1-butanol	+++++	0.05000	0.04183	0.03818	0.03775	0.04352					
	0.03893	0.03901	0.04057	0.04146			AVRG		0.04125		9.17845
174 tert-Amyl methyl ether	+++++	1.61272	1.51687	1.52629	1.38191	1.41417					
	1.61464	1.57896	1.65588	1.65737			AVRG		1.55098		6.44933
175 tert-Butyl ethyl ether	+++++	1.61386	1.41485	1.54322	1.45188	1.50913					
	1.61704	1.60248	1.60761	1.61532			AVRG		1.55282		5.01161

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176 tert-Amyl alcohol	+++++ / 251714	2851 / 544871	7701 / 860896	13541 / 1234680	26979	98771	LINR	0.81461	0.03986		0.99756	
177 Dimethyl ether	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
178 Ethylene oxide	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	
179 Hexachloroethane	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
180 1-Methylnaphthalene	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	
181 2-Furfural	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++ / +++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	
182 Epichlorohydrin	+++++ / 0.01974	0.01859 / 0.02141	0.01839 / 0.02245	0.01955 / 0.02316	0.01516	0.01638	AVRG		0.01942		13.65916	

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ALS Laboratory Group

INITIAL CALIBRATION DATA

Start Cal Date : 06-DEC-2023 11:36
End Cal Date : 06-DEC-2023 15:18
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\8260C.m
Last Edit : 12-Dec-2023 09:44 VOA9.i

Compound	0.2500000 Level 1 / 50.0000 Level 7	0.5000000 Level 2 / 100.0000 Level 8	1.0000 Level 3 / 150.0000 Level 9	2.0000 Level 4 / 200.0000 Level 10	5.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
183 2-Methylpropane(1)	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	
(2)	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
184 Cyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	
185 Isoprene	+++++	0.13996	0.11386	0.13786	0.08333	0.11191						
	0.10943	0.11738	0.11526	0.11867			AVRG		0.11641		14.21949	
186 Isopentane	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	
187 n-Amyl acetate	+++++	0.64243	0.74648	0.65955	0.60868	0.55039						
	0.56050	0.62075	0.65114	0.66375			AVRG		0.63374		9.29581	
188 Isopropyl acetate	+++++	0.77254	0.98712	0.96350	0.84720	0.91226						
	0.93292	0.95616	0.96722	0.96278			AVRG		0.92241		7.56797	

ALS Laboratory Group

INITIAL CALIBRATION DATA

Start Cal Date : 06-DEC-2023 11:36
End Cal Date : 06-DEC-2023 15:18
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\8260C.m
Last Edit : 12-Dec-2023 09:44 VOA9.i

Compound	0.2500000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	5.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	50.0000 Level 7	100.0000 Level 8	150.0000 Level 9	200.0000 Level 10								
189 n-Butyl acetate	+++++	0.44792	0.68327	0.54490	0.45289	0.50694						
	0.55982	0.58857	0.61312	0.61507			AVRG		0.55694		14.03179	
190 Propanal	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	
191 n-Buteraldehyde	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	
192 Isobuteraldehyde	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	
193 2-Ethyl-1-hexanol	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	<-
194 Acetaldehyde	+++++	+++++	2896	4778	9848	39619						
	100656	193437	282615	374059			LINR	-0.16413	0.06195		0.99880	
195 Methyl Amyl Ketone	+++++	2985	6964	13384	33337	161533						
	428305	919603	1471834	2078117			LINR	0.04093	0.82075		0.99897	

Report Date : 14-Dec-2023 15:02 Page 23

ALS Laboratory Group

INITIAL CALIBRATION DATA

Start Cal Date : 06-DEC-2023 11:36
End Cal Date : 06-DEC-2023 15:18
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\8260C.m
Last Edit : 12-Dec-2023 09:44 VOA9.i

Compound	0.2500000 Level 1 / 50.0000 Level 7	0.5000000 Level 2 / 100.0000 Level 8	1.0000 Level 3 / 150.0000 Level 9	2.0000 Level 4 / 200.0000 Level 10	5.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
196 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	
197 3-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	
198 Methylcyclopentane	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	
199 1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	
200 Dimethyl Disulfide	+++++	1052	2485	4131	12085	62736						
	226129	585738	980385	1440923			QUAD	0.06177	2.22322	-0.22531	0.99800	
201 1-Butene(1)	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	
(2)	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	<-

ALS Laboratory Group

INITIAL CALIBRATION DATA

Start Cal Date : 06-DEC-2023 11:36
End Cal Date : 06-DEC-2023 15:18
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\8260C.m
Last Edit : 12-Dec-2023 09:44 VOA9.i

Compound	0.2500000 Level 1 / 50.0000 Level 7	0.5000000 Level 2 / 100.0000 Level 8	1.0000 Level 3 / 150.0000 Level 9	2.0000 Level 4 / 200.0000 Level 10	5.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
202 Isobutylene	+++++	+++++	0.04566	0.05176	0.04652	0.05009					
	0.04408	0.04670	0.04517	0.06006			AVRG		0.04875		10.74761
203 2-Ethylhexyl Acrylate	+++++	1980	3114	6502	13697	62447					
	216994	503534	747072	1026590			LINR	0.05074	0.77800		0.99868
M 94 1,2-Dichloroethylene (total)	+++++	0.61803	0.59905	0.55071	0.46519	0.52553					
	0.52838	0.52517	0.52097	0.52053			AVRG		0.53928		8.44393
M 95 Xylenes (total)	+++++	0.52524	0.61044	0.58477	0.49867	0.60624					
	0.58168	0.60420	0.60137	0.59436			AVRG		0.57855		6.82802
$ 30 Dibromofluoromethane	+++++	2084	3773	6940	19773	78610					
	189455	396102	564100	753738			LINR	-0.02057	0.50139		0.99878
$ 35 1,2-Dichloroethane-d4	+++++	2783	4689	9346	23056	89394					
	211870	468113	+++++	+++++			QUAD	-0.01166	1.84255	-0.20170	0.99973
$ 48 Toluene-d8	+++++	1.03145	1.17985	1.12144	1.21360	1.21729					
	1.17569	1.22155	1.11180	1.08646			AVRG		1.15101		5.79578

Report Date : 14-Dec-2023 15:02 Page 25

ALS Laboratory Group

INITIAL CALIBRATION DATA

Start Cal Date : 06-DEC-2023 11:36
End Cal Date : 06-DEC-2023 15:18
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\8260C.m
Last Edit : 12-Dec-2023 09:44 VOA9.i

Compound	0.2500000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	5.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	50.0000 Level 7	100.0000 Level 8	150.0000 Level 9	200.0000 Level 10							
$ 69 4-Bromofluorobenzene	+++++ 257187	4583 539241	5567 784122	12602 1059633	28295	106137	LINR	-0.02595	0.42479		0.99901

ALS Laboratory Group

INITIAL CALIBRATION DATA

Start Cal Date : 06-DEC-2023 11:36
End Cal Date : 06-DEC-2023 15:18
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\8260C.m
Last Edit : 12-Dec-2023 09:44 VOA9.i

Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Linear	Amt = b + Rsp/m1	Response
Quad	Amt = b + m1*Rsp + m2*Rsp^2	Response

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Form 6I

Initial Calibration Verification (ICV)

Volatiles by EPA Volatiles Organics by Method 8260C

Workorder

HS24011111

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

02/02/2024

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

Form 6I Initial Calibration Verification (ICV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24011111

RunID U120614.D

Volatiles by EPA Volatiles Organics by Method 8260C

Sample Matrix LIQUID
Lab Smp Id ICV
Data Type MS DATA
File ID U120614.D

Fraction VOA
Client Smp ID ICV
SampleType METHSPIKE
Inj Date 06-DEC-2023 1625

Compound	Conc Added	Conc Recovered	% Recovered	Limits	Q
1,1,1,2-Tetrachloroethane	50.0	48.4	96.7	80-120	
1,1,1-Trichloroethane	50.0	46.7	93.3	80-120	
1,1,2,2-Tetrachloroethane	50.0	49.8	99.5	80-120	
Freon TF	50.0	49.8	99.6	80-120	
Methyl Acetate	50.0	45.8	91.6	80-120	
Cyclohexane	50.0	47.4	94.9	80-120	
Methylcyclohexane	50.0	50.6	101	80-120	
Carbon Disulfide	100	97.7	97.7	80-120	
2-Hexanone	100	96.9	96.9	80-120	
1,1,2-Trichloroethane	50.0	49.7	99.5	80-120	
1,1-Dichloroethane	50.0	47.9	95.9	80-120	
1,1-Dichloroethene	50.0	45.8	91.5	80-120	
1,1-Dichloropropene	50.0	48.3	96.6	80-120	
1,2,3-Trichlorobenzene	50.0	49.4	98.8	80-120	
1,2,3-Trichloropropane	50.0	44.0	87.9	80-120	
1,2,4-Trichlorobenzene	50.0	51.9	104	80-120	
1,2,4-Trimethylbenzene	50.0	52.8	106	80-120	
1,2-Dibromo-3-Chloropropane	50.0	47.5	95.1	80-120	
1,2-Dibromoethane	50.0	48.8	97.6	80-120	
Acrolein	100	85.4	85.4	80-120	
Acrylonitrile	100	94.8	94.8	80-120	
1,2-Dichlorobenzene	50.0	45.1	90.2	80-120	
1,2-Dichloroethane	50.0	44.5	89.0	80-120	
1,2-Dichloropropane	50.0	46.2	92.5	80-120	
1,3,5-Trimethylbenzene	50.0	52.2	104	80-120	
1,3-Dichlorobenzene	50.0	45.8	91.5	80-120	
1,3-Dichloropropane	50.0	46.4	92.8	80-120	
1,4-Dichlorobenzene	50.0	45.2	90.4	80-120	
1-Chlorohexane	50.0	45.9	91.8	80-120	
2,2-Dichloropropane	50.0	49.6	99.2	80-120	
2-Butanone	100	94.4	94.4	80-120	
2-Chloroethylvinyl ether	100	103	103	80-120	
2-Chlorotoluene	50.0	48.0	95.9	80-120	
4-Chlorotoluene	50.0	49.0	98.1	80-120	

Form 6I Initial Calibration Verification (ICV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24011111

RunID U120614.D

Volatiles by EPA Volatiles Organics by Method 8260C

Sample Matrix	LIQUID	**Fraction**	VOA
Lab Smp Id	ICV	**Client Smp ID**	ICV
Data Type	MS DATA	**SampleType**	METHSPIKE
File ID	U120614.D	**Inj Date**	06-DEC-2023 1625

Compound	Conc Added	Conc Recovered	% Recovered	Limits	Q
p-Isopropyltoluene	50.0	53.0	106	80-120	
4-Methyl-2-Pentanone	100	99.2	99.2	80-120	
Acetone	100	107	107	80-120	
Acetonitrile	500	454	90.9	80-120	
Allyl Chloride	50.0	47.1	94.1	80-120	
Benzene	50.0	46.3	92.7	80-120	
Bromobenzene	50.0	46.0	91.9	80-120	
Bromochloromethane	50.0	48.3	96.6	80-120	
Bromodichloromethane	50.0	47.6	95.3	80-120	
Bromoform	50.0	47.7	95.4	80-120	
Bromomethane	50.0	56.4	113	80-120	
Carbon Tetrachloride	50.0	47.3	94.7	80-120	
Chlorobenzene	50.0	45.9	91.8	80-120	
Chloroethane	50.0	44.7	89.5	80-120	
Chloroform	50.0	45.0	90.1	80-120	
Chloromethane	50.0	47.2	94.5	80-120	
Chloroprene	50.0	44.7	89.5	80-120	
cis-1,2-Dichloroethene	50.0	46.1	92.1	80-120	
cis-1,3-Dichloropropene	50.0	47.6	95.3	80-120	
Dibromochloromethane	50.0	49.6	99.3	80-120	
Dibromomethane	50.0	46.1	92.3	80-120	
Dichlorodifluoromethane	50.0	46.8	93.7	80-120	
Ethylbenzene	50.0	48.2	96.4	80-120	
Ethyl Methacrylate	50.0	50.3	101	80-120	
Iodomethane	100	86.0	86.0	80-120	
Isobutyl Alcohol	1000	962	96.2	70-130	
Propionitrile	500	474	94.7	70-130	
Hexachlorobutadiene	50.0	54.5	109	80-120	
Isopropylbenzene	50.0	49.6	99.3	80-120	
m,p-Xylenes	100	102	102	80-120	
Methyl tert-butyl ether	50.0	46.7	93.4	80-120	
Methylene Chloride	50.0	48.4	96.9	80-120	
Methacrylonitrile	50.0	49.0	98.1	80-120	
Methyl Methacrylate	50.0	48.9	97.8	80-120	

Form 6I Initial Calibration Verification (ICV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24011111

RunID U120614.D

Volatiles by EPA Volatiles Organics by Method 8260C

Sample Matrix LIQUID
Lab Smp Id ICV
Data Type MS DATA
File ID U120614.D

Fraction VOA
Client Smp ID ICV
SampleType METHSPIKE
Inj Date 06-DEC-2023 1625

Compound	Conc Added	Conc Recovered	% Recovered	Limits	Q
n-Butylbenzene	50.0	53.6	107	80-120	
n-Propylbenzene	50.0	51.3	103	80-120	
Naphthalene	50.0	53.1	106	80-120	
o-Xylene	50.0	49.2	98.5	80-120	
sec-Butylbenzene	50.0	50.2	101	80-120	
Styrene	50.0	52.5	105	80-120	
tert-Butylbenzene	50.0	48.3	96.6	80-120	
Tetrachloroethene	50.0	48.2	96.5	80-120	
Toluene	50.0	49.2	98.4	80-120	
trans-1,2-Dichloroethene	50.0	47.0	94.0	80-120	
trans-1,3-Dichloropropene	50.0	47.4	94.8	80-120	
trans-1,4-Dichloro-2-butene	50.0	48.5	96.9	80-120	
Trichloroethene	50.0	45.9	91.8	80-120	
Trichlorofluoromethane	50.0	46.1	92.2	80-120	
Vinyl Acetate	100	103	103	80-120	
Vinyl Chloride	50.0	45.9	91.9	80-120	
Methyl Acrylate	50.0	48.6	97.2	80-120	
Ethyl Acrylate	50.0	49.8	99.7	80-120	
Butyl acrylate	50.0	44.8	89.6	80-120	
2-Ethylhexyl Acrylate	50.0	49.2	98.3	80-120	
1,2-Dichloroethylene (total)	100	92.9	92.9	80-120	
Xylenes (total)	150	147	98.0	80-120	
1,4-Dioxane	1000	866	86.6	80-120	
Dibromofluoromethane	50.0	50.8	102	71-125	
1,2-Dichloroethane-d4	50.0	49.0	98.0	70-125	
Toluene-d8	50.0	53.6	107	75-125	
4-Bromofluorobenzene	50.0	52.7	105	72-125	

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Form 7

Continuing Calibration Verification (CCV)

Volatiles by EPA Volatiles Organics by Method 8260C

Workorder

HS24011111

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

02/02/2024

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

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24011111

RunID U012503.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U012503.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date 25-JAN-2024 1104
ICAL Date(s) 06-DEC-2023, 06-DEC-2023
ICAL Times 11:36, 15:18
Quant Type ISTD

Compound	RRF / RRF / Conc	RF50 / RF50	CCV RRF50	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
Dichlorodifluoromethane	50.0	55.3	0.446	0.100	-10.537	20.0	Linear	
Chloromethane	0.574	0.496	0.496	0.100	13.6	20.0	Averaged	
Vinyl Chloride	0.548	0.542	0.542	0.100	1.01	20.0	Averaged	
Bromomethane	50.0	63.7	0.362	0.100	-27.321	20.0	Quadratic	*
Chloroethane	0.369	0.397	0.397	0.100	-7.690	20.0	Averaged	
Trichlorofluoromethane	0.695	0.784	0.784	0.100	-12.854	20.0	Averaged	
Acrolein	0.028	0.026	0.026	0.010	10.4	20.0	Averaged	
Acetone	100	86.9	0.149	0.100	13.1	20.0	Linear	
1,1-Dichloroethene	0.386	0.440	0.440	0.100	-13.991	20.0	Averaged	
Iodomethane	100	120	0.599	0.100	-20.373	20.0	Quadratic	*
Acrylonitrile	0.196	0.180	0.180	0.050	8.29	20.0	Averaged	
Methylene Chloride	50.0	52.1	0.507	0.100	-4.273	20.0	Linear	
Methyl tert-butyl ether	1.38	1.35	1.35	0.100	2.62	20.0	Averaged	
Carbon Disulfide	1.14	1.22	1.22	0.100	-7.346	20.0	Averaged	
trans-1,2-Dichloroethene	0.461	0.484	0.484	0.100	-4.984	20.0	Averaged	
Vinyl Acetate	1.39	1.32	1.32	0.010	5.28	20.0	Averaged	
1,1-Dichloroethane	0.940	0.884	0.884	0.200	6.00	20.0	Averaged	
2-Butanone	0.245	0.199	0.199	0.100	18.6	20.0	Averaged	
2,2-Dichloropropane	0.661	0.669	0.669	0.100	-1.128	20.0	Averaged	
cis-1,2-Dichloroethene	0.618	0.606	0.606	0.100	1.84	20.0	Averaged	
Chloroform	1.02	0.960	0.960	0.200	6.24	20.0	Averaged	
Bromochloromethane	0.320	0.337	0.337	0.100	-5.543	20.0	Averaged	
30 Dibromofluoromethane	50.0	52.8	0.540	0.100	-5.583	20.0	Linear	
1,1,1-Trichloroethane	0.778	0.774	0.774	0.100	0.495	20.0	Averaged	
1,1-Dichloropropene	0.418	0.426	0.426	0.100	-1.723	20.0	Averaged	
1,2-Dichloroethane	0.487	0.448	0.448	0.100	8.01	20.0	Averaged	
Carbon Tetrachloride	0.409	0.443	0.443	0.100	-8.370	20.0	Averaged	
35 1,2-Dichloroethane-d4	50.0	47.3	0.553	0.100	5.38	20.0	Quadratic	
Benzene	1.36	1.31	1.31	0.500	3.91	20.0	Averaged	
Trichloroethene	0.375	0.393	0.393	0.200	-4.867	20.0	Averaged	
Bromodichloromethane	0.446	0.458	0.458	0.200	-2.706	20.0	Averaged	
2-Chloroethylvinyl ether	100	137	0.006	0.001	-37.478	20.0	Quadratic	*
1,2-Dichloropropane	0.366	0.340	0.340	0.100	7.27	20.0	Averaged	
Dibromomethane	0.237	0.233	0.233	0.100	1.79	20.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24011111

RunID U012503.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U012503.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date 25-JAN-2024 1104
ICAL Date(s) 06-DEC-2023, 06-DEC-2023
ICAL Times 11:36, 15:18
Quant Type ISTD

Compound	RRF / RRF / Conc	RF50 / RF50	CCV RRF50	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
4-Methyl-2-Pentanone	100	85.4	0.308	0.100	14.6	20.0	Linear	
cis-1,3-Dichloropropene	50.0	45.6	0.522	0.200	8.83	20.0	Linear	
48 Toluene-d8	1.15	1.17	1.17	0.100	-1.413	20.0	Averaged	
Toluene	1.39	1.41	1.41	0.400	-1.069	20.0	Averaged	
trans-1,3-Dichloropropene	50.0	45.1	0.435	0.100	9.72	20.0	Linear	
2-Hexanone	0.252	0.206	0.206	0.100	18.5	20.0	Averaged	
1,1,2-Trichloroethane	50.0	50.8	0.271	0.100	-1.697	20.0	Linear	
1,3-Dichloropropane	0.619	0.566	0.566	0.100	8.58	20.0	Averaged	
Dibromochloromethane	0.372	0.394	0.394	0.100	-5.961	20.0	Averaged	
Tetrachloroethene	0.298	0.332	0.332	0.200	-11.245	20.0	Averaged	
1,2-Dibromoethane	0.347	0.347	0.347	0.100	0.114	20.0	Averaged	
1-Chlorohexane	0.280	0.246	0.246	0.100	12.3	20.0	Averaged	
Chlorobenzene	1.02	0.980	0.980	0.500	3.49	20.0	Averaged	
1,1,1,2-Tetrachloroethane	0.355	0.365	0.365	0.100	-2.606	20.0	Averaged	
Ethylbenzene	0.475	0.478	0.478	0.100	-0.608	20.0	Averaged	
m,p-Xylenes	0.572	0.605	0.605	0.100	-5.857	20.0	Averaged	
o-Xylene	0.588	0.612	0.612	0.300	-4.125	20.0	Averaged	
Styrene	0.979	1.04	1.04	0.300	-6.100	20.0	Averaged	
Bromoform	50.0	51.8	0.264	0.100	-3.505	20.0	Linear	
Isopropylbenzene	1.42	1.48	1.48	0.100	-4.095	20.0	Averaged	
1,1,2,2-Tetrachloroethane	50.0	45.8	0.747	0.300	8.40	20.0	Linear	
69 4-Bromofluorobenzene	50.0	48.7	0.425	0.100	2.60	20.0	Linear	
1,2,3-Trichloropropane	0.949	0.770	0.770	0.100	18.9	20.0	Averaged	
n-Propylbenzene	2.94	2.93	2.93	0.100	0.192	20.0	Averaged	
Bromobenzene	0.840	0.792	0.792	0.100	5.66	20.0	Averaged	
1,3,5-Trimethylbenzene	2.09	2.12	2.12	0.100	-1.760	20.0	Averaged	
2-Chlorotoluene	1.98	1.82	1.82	0.100	7.82	20.0	Averaged	
4-Chlorotoluene	2.24	2.11	2.11	0.100	5.99	20.0	Averaged	
tert-Butylbenzene	1.87	1.85	1.85	0.100	1.32	20.0	Averaged	
1,2,4-Trimethylbenzene	2.09	2.14	2.14	0.100	-2.383	20.0	Averaged	
sec-Butylbenzene	2.42	2.43	2.43	0.100	-0.428	20.0	Averaged	
p-Isopropyltoluene	2.09	2.23	2.23	0.100	-6.408	20.0	Averaged	
1,3-Dichlorobenzene	1.49	1.41	1.41	0.600	5.36	20.0	Averaged	
1,4-Dichlorobenzene	1.58	1.46	1.46	0.400	7.38	20.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24011111

RunID U012503.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U012503.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date 25-JAN-2024 1104
ICAL Date(s) 06-DEC-2023, 06-DEC-2023
ICAL Times 11:36, 15:18
Quant Type ISTD

Compound	RRF / RRF / Conc	RF50 / RF50	CCV RRF50	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
n-Butylbenzene	1.76	1.78	1.78	0.500	-1.575	20.0	Averaged	
1,2-Dichlorobenzene	1.50	1.39	1.39	0.400	7.07	20.0	Averaged	
1,2-Dibromo-3-Chloropropane	50.0	45.5	0.132	0.050	9.07	20.0	Linear	
1,2,4-Trichlorobenzene	0.923	0.941	0.941	0.200	-1.904	20.0	Averaged	
Hexachlorobutadiene	0.370	0.394	0.394	0.100	-6.302	20.0	Averaged	
Naphthalene	2.23	2.22	2.22	0.200	0.343	20.0	Averaged	
1,2,3-Trichlorobenzene	0.931	0.905	0.905	0.100	2.78	20.0	Averaged	
94 1,2-Dichloroethylene (total	0.539	0.545	0.545	0.200	-1.078	20.0	Averaged	
95 Xylenes (total)	0.579	0.585	0.585	0.100	-1.136	20.0	Averaged	
1,4-Dioxane	0.008	0.007	0.007	0.001	15.1	20.0	Averaged	
Cyclohexane	0.720	0.671	0.671	0.100	6.86	20.0	Averaged	
Freon TF	50.0	64.5	0.479	0.100	-28.983	20.0	Quadratic	*
1,3-Butadiene	0.502	0.509	0.509	0.100	-1.419	20.0	Averaged	
Methylcyclohexane	0.741	0.753	0.753	0.100	-1.587	20.0	Averaged	
Methyl Acetate	0.498	0.409	0.409	0.100	17.9	20.0	Averaged	
Tert-butyl alcohol	0.056	0.050	0.050	0.005	11.2	20.0	Averaged	
Isopropyl alcohol	1000	933	0.030	0.005	6.72	20.0	Linear	
trans-1,4-Dichloro-2-butene	0.090	0.084	0.084	0.050	6.14	20.0	Averaged	
Isobutyl Alcohol	0.075	0.061	0.061	0.005	19.0	20.0	Averaged	
Acetonitrile	0.054	0.050	0.050	0.005	7.17	20.0	Averaged	
Allyl Chloride	1.23	1.10	1.10	0.100	10.1	20.0	Averaged	
Methacrylonitrile	0.357	0.298	0.298	0.100	16.7	20.0	Averaged	
Methyl Methacrylate	0.494	0.413	0.413	0.100	16.3	20.0	Averaged	
2-Nitropropane	0.128	++++	3.590e+65	0.000	++++	20.0	Averaged	*
Propionitrile	0.083	0.069	0.069	0.010	16.4	20.0	Averaged	
n-Hexane	0.465	0.469	0.469	0.100	-0.947	20.0	Averaged	
Acetaldehyde	++++	++++	3.590e+65	0.001	++++	20.0	Linear	*
Methyl Acrylate	0.657	0.574	0.574	0.100	12.6	20.0	Averaged	
Dimethyl Disulfide	++++	++++	3.590e+65	0.020	++++	20.0	Quadratic	*
Chloroprene	0.171	++++	3.590e+65	0.100	++++	20.0	Averaged	*
Ethyl Methacrylate	0.491	0.456	0.456	0.100	7.08	20.0	Averaged	
1,2,3-Trimethylbenzene	2.06	2.02	2.02	0.100	2.07	20.0	Averaged	
Ethanol	++++	++++	3.590e+65	0.001	++++	20.0	Linear	*
Dicyclopentadiene	2.67	++++	3.590e+65	0.100	++++	20.0	Averaged	*

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24011111

RunID U012503.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U012503.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date 25-JAN-2024 1104
ICAL Date(s) 06-DEC-2023, 06-DEC-2023
ICAL Times 11:36, 15:18
Quant Type ISTD

Compound	RRF / RRF / Conc	RF50 / RF50	CCV RRF50	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
alpha-Methylstyrene	++++	++++	3.590e+65	0.100	++++	20.0	Linear	*
Tetrahydrofuran	0.106	++++	3.590e+65	0.001	++++	20.0	Averaged	*
Diisopropyl ether	1.74	1.48	1.48	0.100	14.7	20.0	Averaged	
4-Methyl-2-pentanol	++++	++++	3.590e+65	0.005	++++	20.0	Linear	*
Allyl alcohol	0.023	++++	3.590e+65	0.004	++++	20.0	Averaged	*
Benzyl Chloride	50.0	47.1	0.417	0.010	5.81	20.0	Quadratic	
Butyl acrylate	50.0	37.8	0.539	0.100	24.3	20.0	Linear	*
Diethyl ether	0.408	0.389	0.389	0.100	4.53	20.0	Averaged	
2-Ethylhexyl Acrylate	50.0	40.1	0.585	0.100	19.8	20.0	Linear	
Cyclohexanone	0.033	++++	3.590e+65	0.005	++++	20.0	Averaged	*
Ethyl Acetate	0.607	0.488	0.488	0.100	19.6	20.0	Averaged	
n-Butyl acetate	0.557	++++	3.590e+65	0.100	++++	20.0	Averaged	*
Epichlorohydrin	0.019	0.016	0.016	0.001	15.4	20.0	Averaged	
n-Butanol	0.016	++++	3.590e+65	0.005	++++	20.0	Averaged	*
Ethyl Acrylate	1.20	1.15	1.15	0.100	4.25	20.0	Averaged	
Butyl methacrylate	++++	++++	3.590e+65	0.100	++++	20.0	Linear	*
tert-Amyl methyl ether	1.55	++++	3.590e+65	0.005	++++	20.0	Averaged	*
tert-Butyl ethyl ether	1.55	++++	3.590e+65	0.100	++++	20.0	Averaged	*
n-Amyl acetate	0.634	++++	3.590e+65	0.100	++++	20.0	Averaged	*
Isopropyl acetate	0.922	++++	3.590e+65	0.100	++++	20.0	Averaged	*
Hexachloroethane	++++	++++	3.590e+65	0.001	++++	20.0	Averaged	*
Dichlorofluoromethane	0.762	0.839	0.839	0.100	-10.029	20.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24011111

RunID U012530.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U012530.D
Analysis Type WATER
Lab Sample ID CCV-END

Injection Date 25-JAN-2024 2105
ICAL Date(s) 06-DEC-2023, 06-DEC-2023
ICAL Times 11:36, 15:18
Quant Type ISTD

Compound	RRF / RRF / Conc	RF50 / RF50	CCV RRF50	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
Dichlorodifluoromethane	50.0	58.9	0.476	0.100	-17.852	50.0	Linear	
Chloromethane	0.574	0.504	0.504	0.100	12.2	50.0	Averaged	
Propionitrile	0.083	0.062	0.062	0.010	24.9	50.0	Averaged	
Vinyl Chloride	0.548	0.580	0.580	0.100	-5.868	50.0	Averaged	
Bromomethane	50.0	60.3	0.342	0.100	-20.554	50.0	Quadratic	
Chloroethane	0.369	0.398	0.398	0.100	-7.837	50.0	Averaged	
Trichlorofluoromethane	0.695	0.832	0.832	0.100	-19.777	50.0	Averaged	
Acrolein	0.028	0.020	0.020	0.010	29.3	50.0	Averaged	
Acetone	100	78.7	0.136	0.100	21.3	50.0	Linear	
1,1-Dichloroethene	0.386	0.413	0.413	0.100	-7.083	50.0	Averaged	
Isobutyl Alcohol	0.075	0.055	0.055	0.005	27.3	50.0	Averaged	
Acetonitrile	0.054	0.046	0.046	0.005	14.0	50.0	Averaged	
Allyl Chloride	1.23	1.03	1.03	0.100	16.4	50.0	Averaged	
Iodomethane	100	124	0.617	0.100	-23.605	50.0	Quadratic	
Acrylonitrile	0.196	0.168	0.168	0.050	14.5	50.0	Averaged	
Methylene Chloride	50.0	51.9	0.505	0.100	-3.828	50.0	Linear	
Methyl tert-butyl ether	1.38	1.27	1.27	0.100	8.20	50.0	Averaged	
Carbon Disulfide	1.14	1.23	1.23	0.100	-8.379	50.0	Averaged	
trans-1,2-Dichloroethene	0.461	0.491	0.491	0.100	-6.600	50.0	Averaged	
Vinyl Acetate	1.39	1.21	1.21	0.010	13.3	50.0	Averaged	
1,1-Dichloroethane	0.940	0.866	0.866	0.200	7.91	50.0	Averaged	
Chloroprene	0.171	++++	3.590e+65	0.100	++++	50.0	Averaged	*
2-Butanone	0.245	0.172	0.172	0.100	29.8	50.0	Averaged	
Methacrylonitrile	0.357	0.435	0.435	0.100	-21.773	50.0	Averaged	
2,2-Dichloropropane	0.661	0.576	0.576	0.100	12.9	50.0	Averaged	
cis-1,2-Dichloroethene	0.618	0.566	0.566	0.100	8.34	50.0	Averaged	
Chloroform	1.02	0.925	0.925	0.200	9.67	50.0	Averaged	
Bromochloromethane	0.320	0.321	0.321	0.100	-0.346	50.0	Averaged	
30 Dibromofluoromethane	50.0	52.9	0.540	0.100	-5.736	50.0	Linear	
1,1,1-Trichloroethane	0.778	0.768	0.768	0.100	1.22	50.0	Averaged	
1,1-Dichloropropene	0.418	0.413	0.413	0.100	1.24	50.0	Averaged	
1,2-Dichloroethane	0.487	0.422	0.422	0.100	13.4	50.0	Averaged	
Carbon Tetrachloride	0.409	0.441	0.441	0.100	-7.828	50.0	Averaged	
35 1,2-Dichloroethane-d4	50.0	46.1	0.538	0.100	7.80	50.0	Quadratic	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24011111

RunID U012530.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U012530.D
Analysis Type WATER
Lab Sample ID CCV-END

Injection Date 25-JAN-2024 2105
ICAL Date(s) 06-DEC-2023, 06-DEC-2023
ICAL Times 11:36, 15:18
Quant Type ISTD

Compound	RRF / RRF / Conc	RF50 / RF50	CCV RRF50	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
Benzene	1.36	1.27	1.27	0.500	6.47	50.0	Averaged	
Trichloroethene	0.375	0.388	0.388	0.200	-3.440	50.0	Averaged	
Bromodichloromethane	0.446	0.440	0.440	0.200	1.23	50.0	Averaged	
Methyl Methacrylate	0.494	0.371	0.371	0.100	24.9	50.0	Averaged	
2-Chloroethylvinyl ether	100	121	0.005	0.001	-21.283	50.0	Quadratic	
1,2-Dichloropropane	0.366	0.320	0.320	0.100	12.7	50.0	Averaged	
2-Nitropropane	0.128	0.099	0.099	0.000	22.9	50.0	Averaged	
Dibromomethane	0.237	0.223	0.223	0.100	6.04	50.0	Averaged	
4-Methyl-2-Pentanone	100	77.2	0.279	0.100	22.8	50.0	Linear	
cis-1,3-Dichloropropene	50.0	44.4	0.509	0.200	11.1	50.0	Linear	
48 Toluene-d8	1.15	1.21	1.21	0.100	-4.924	50.0	Averaged	
Ethyl Methacrylate	0.491	0.436	0.436	0.100	11.1	50.0	Averaged	
Toluene	1.39	1.38	1.38	0.400	1.30	50.0	Averaged	
trans-1,3-Dichloropropene	50.0	43.9	0.423	0.100	12.1	50.0	Linear	
2-Hexanone	0.252	0.181	0.181	0.100	28.2	50.0	Averaged	
1,1,2-Trichloroethane	50.0	47.7	0.255	0.100	4.53	50.0	Linear	
1,3-Dichloropropane	0.619	0.539	0.539	0.100	12.9	50.0	Averaged	
Dibromochloromethane	0.372	0.376	0.376	0.100	-0.994	50.0	Averaged	
Tetrachloroethene	0.298	0.328	0.328	0.200	-9.884	50.0	Averaged	
1,2-Dibromoethane	0.347	0.330	0.330	0.100	4.89	50.0	Averaged	
1-Chlorohexane	0.280	0.245	0.245	0.100	12.5	50.0	Averaged	
Chlorobenzene	1.02	0.965	0.965	0.500	5.02	50.0	Averaged	
1,1,1,2-Tetrachloroethane	0.355	0.360	0.360	0.100	-1.246	50.0	Averaged	
Ethylbenzene	0.475	0.460	0.460	0.100	3.18	50.0	Averaged	
m,p-Xylenes	0.572	0.580	0.580	0.100	-1.534	50.0	Averaged	
o-Xylene	0.588	0.590	0.590	0.300	-0.319	50.0	Averaged	
Styrene	0.979	1.01	1.01	0.300	-2.980	50.0	Averaged	
cis-1,4-Dichloro-2-butene	++++	++++	3.590e+65	0.100	++++	50.0	Averaged	*
Bromoform	50.0	49.3	0.251	0.100	1.34	50.0	Linear	
Isopropylbenzene	1.42	1.46	1.46	0.100	-2.717	50.0	Averaged	
1,1,2,2-Tetrachloroethane	50.0	43.7	0.714	0.300	12.5	50.0	Linear	
69 4-Bromofluorobenzene	50.0	50.2	0.437	0.100	-0.367	50.0	Linear	
1,2,3-Trichloropropane	0.949	0.710	0.710	0.100	25.2	50.0	Averaged	
trans-1,4-Dichloro-2-butene	0.090	0.074	0.074	0.050	18.3	50.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24011111

RunID U012530.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U012530.D
Analysis Type WATER
Lab Sample ID CCV-END

Injection Date 25-JAN-2024 2105
ICAL Date(s) 06-DEC-2023, 06-DEC-2023
ICAL Times 11:36, 15:18
Quant Type ISTD

Compound	RRF / RRF / Conc	RF50 / RF50	CCV RRF50	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
n-Propylbenzene	2.94	2.74	2.74	0.100	6.62	50.0	Averaged	
Bromobenzene	0.840	0.771	0.771	0.100	8.15	50.0	Averaged	
1,3,5-Trimethylbenzene	2.09	2.06	2.06	0.100	1.14	50.0	Averaged	
2-Chlorotoluene	1.98	1.78	1.78	0.100	9.98	50.0	Averaged	
4-Chlorotoluene	2.24	2.02	2.02	0.100	9.68	50.0	Averaged	
tert-Butylbenzene	1.87	1.84	1.84	0.100	1.78	50.0	Averaged	
1,2,4-Trimethylbenzene	2.09	2.01	2.01	0.100	3.94	50.0	Averaged	
Pentachloroethane	++++	++++	3.590e+65	0.100	++++	50.0	Averaged	*
sec-Butylbenzene	2.42	2.33	2.33	0.100	3.54	50.0	Averaged	
p-Isopropyltoluene	2.09	2.11	2.11	0.100	-0.952	50.0	Averaged	
1,3-Dichlorobenzene	1.49	1.36	1.36	0.600	8.38	50.0	Averaged	
1,4-Dichlorobenzene	1.58	1.40	1.40	0.400	11.2	50.0	Averaged	
bis(2-Chloro-isopropyl)ethe	++++	++++	3.590e+65	0.100	++++	50.0	Averaged	*
Benzyl Chloride	50.0	32.4	0.276	0.010	35.2	50.0	Quadratic	
n-Butylbenzene	1.76	1.63	1.63	0.500	7.06	50.0	Averaged	
1,2-Dichlorobenzene	1.50	1.35	1.35	0.400	9.66	50.0	Averaged	
1,2-Dibromo-3-Chloropropane	50.0	42.5	0.123	0.050	14.9	50.0	Linear	
1,2,4-Trichlorobenzene	0.923	0.865	0.865	0.200	6.38	50.0	Averaged	
Hexachlorobutadiene	0.370	0.360	0.360	0.100	2.83	50.0	Averaged	
Naphthalene	2.23	2.03	2.03	0.200	8.66	50.0	Averaged	
1,2,3-Trichlorobenzene	0.931	0.842	0.842	0.100	9.62	50.0	Averaged	
Ethyl Acetate	0.607	0.431	0.431	0.100	29.0	50.0	Averaged	
Methyl Acrylate	0.657	0.508	0.508	0.100	22.6	50.0	Averaged	
n-Butanol	0.016	0.011	0.011	0.005	31.4	50.0	Averaged	
Ethyl Acrylate	1.20	0.973	0.973	0.100	19.0	50.0	Averaged	
Cyclohexanone	0.033	0.022	0.022	0.005	32.9	50.0	Averaged	
1,4-Dioxane	0.008	0.006	0.006	0.001	21.2	50.0	Averaged	
n-Hexane	0.465	0.408	0.408	0.100	12.2	50.0	Averaged	
n-Pentane	++++	++++	3.590e+65	0.100	++++	50.0	Averaged	*
Freon TF	50.0	58.6	0.434	0.100	-17.143	50.0	Quadratic	
Methyl Acetate	0.498	0.378	0.378	0.100	24.1	50.0	Averaged	
Methylcyclohexane	0.741	0.648	0.648	0.100	12.6	50.0	Averaged	
Isopropyl alcohol	1000	827	0.026	0.005	17.3	50.0	Linear	
Amyl alcohol	0.011	0.008	0.008	0.005	31.2	50.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24011111

RunID U012530.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U012530.D
Analysis Type WATER
Lab Sample ID CCV-END

Injection Date 25-JAN-2024 2105
ICAL Date(s) 06-DEC-2023, 06-DEC-2023
ICAL Times 11:36, 15:18
Quant Type ISTD

Compound	RRF / RRF / Conc	RF50 / RF50	CCV RRF50	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
Allyl alcohol	0.023	0.020	0.020	0.004	12.1	50.0	Averaged	
4-Methyl-2-pentanol	1000	718	0.057	0.005	28.2	50.0	Linear	
Tert-butyl alcohol	0.056	0.044	0.044	0.005	21.4	50.0	Averaged	
Diethyl ether	0.408	0.347	0.347	0.100	14.9	50.0	Averaged	
1,3-Butadiene	0.502	0.526	0.526	0.100	-4.702	50.0	Averaged	
Cyclohexane	0.720	0.635	0.635	0.100	11.8	50.0	Averaged	
Tetrahydrofuran	0.106	0.073	0.073	0.001	31.1	50.0	Averaged	
1-Chlorobutane	++++	++++	3.590e+65	0.100	++++	50.0	Averaged	*
Nitrobenzene	++++	++++	3.590e+65	0.100	++++	50.0	Averaged	*
alpha-Methylstyrene	50.0	43.2	0.871	0.100	13.6	50.0	Linear	
Tetraethyl lead	++++	++++	3.590e+65	0.100	++++	50.0	Averaged	*
2,3-Dichlorobutane	++++	++++	3.590e+65	0.100	++++	50.0	Averaged	*
2-Pentanone	++++	++++	3.590e+65	0.100	++++	50.0	Averaged	*
Diisopropyl ether	1.74	1.42	1.42	0.100	18.7	50.0	Averaged	
n-Heptane	++++	++++	3.590e+65	0.100	++++	50.0	Averaged	*
Dichlorofluoromethane	0.762	0.818	0.818	0.100	-7.339	50.0	Averaged	
Propylene oxide	0.027	0.026	0.026	0.005	5.86	50.0	Averaged	
2-Methylnaphthalene	++++	++++	3.590e+65	0.100	++++	50.0	Averaged	*
3-Methyl-1-butanol	++++	++++	3.590e+65	0.005	++++	50.0	Averaged	*
Butyl acrylate	50.0	32.8	0.460	0.100	34.4	50.0	Linear	
Butyl methacrylate	50.0	31.9	0.424	0.100	36.3	50.0	Linear	
Dicyclopentadiene	2.67	2.28	2.28	0.100	14.5	50.0	Averaged	
4-Vinyl-1-cyclohexene	++++	++++	3.590e+65	0.100	++++	50.0	Averaged	*
1,2,3-Trimethylbenzene	2.06	1.94	1.94	0.100	5.81	50.0	Averaged	
Ethanol	1000	840	0.005	0.001	16.0	50.0	Linear	
1-Propanol	++++	++++	3.590e+65	0.100	++++	50.0	Averaged	*
1,3,5-Trichlorobenzene	++++	++++	3.590e+65	0.100	++++	50.0	Averaged	*
tert-Butyl formate	100	75.8	0.287	0.100	24.2	50.0	Linear	
3,3-Dimethyl-1-butanol	0.041	0.030	0.030	0.005	26.7	50.0	Averaged	
tert-Amyl methyl ether	1.55	1.30	1.30	0.005	16.3	50.0	Averaged	
tert-Butyl ethyl ether	1.55	1.35	1.35	0.100	12.9	50.0	Averaged	
tert-Amyl alcohol	1000	760	0.029	0.005	24.0	50.0	Linear	
Dimethyl ether	++++	++++	3.590e+65	0.100	++++	50.0	Averaged	*
Ethylene oxide	++++	++++	3.590e+65	0.010	++++	50.0	Averaged	*

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24011111

RunID U012530.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U012530.D
Analysis Type WATER
Lab Sample ID CCV-END

Injection Date 25-JAN-2024 2105
ICAL Date(s) 06-DEC-2023, 06-DEC-2023
ICAL Times 11:36, 15:18
Quant Type ISTD

Compound	RRF / RRF / Conc	RF50 / RF50	CCV RRF50	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
Hexachloroethane	++++	++++	3.590e+65	0.001	++++	50.0	Averaged	*
1-Methylnaphthalene	++++	++++	3.590e+65	0.100	++++	50.0	Averaged	*
2-Furfural	++++	++++	3.590e+65	0.000	++++	50.0	Averaged	*
Epichlorohydrin	0.019	0.015	0.015	0.001	20.8	50.0	Averaged	
2-Methylpropane	++++	++++	3.590e+65	0.100	++++	50.0	Averaged	*
Cyclopentane	++++	++++	3.590e+65	0.100	++++	50.0	Averaged	*
Isoprene	0.116	0.098	0.098	0.010	16.2	50.0	Averaged	
Isopentane	++++	++++	3.590e+65	0.100	++++	50.0	Averaged	*
n-Amyl acetate	0.634	0.387	0.387	0.100	39.0	50.0	Averaged	
Isopropyl acetate	0.922	0.736	0.736	0.100	20.2	50.0	Averaged	
n-Butyl acetate	0.557	0.402	0.402	0.100	27.7	50.0	Averaged	
Propanal	++++	++++	3.590e+65	0.100	++++	50.0	Averaged	*
n-Buteraldehyde	++++	++++	3.590e+65	0.100	++++	50.0	Averaged	*
Isobuteraldehyde	++++	++++	3.590e+65	0.100	++++	50.0	Averaged	*
2-Ethyl-1-hexanol	++++	++++	3.590e+65	0.001	++++	50.0	Averaged	*
Acetaldehyde	++++	++++	3.590e+65	0.001	++++	50.0	Linear	*
Methyl Amyl Ketone	50.0	31.6	0.485	0.100	36.8	50.0	Linear	
2-Methylpentane	++++	++++	3.590e+65	0.100	++++	50.0	Averaged	*
3-Methylpentane	++++	++++	3.590e+65	0.100	++++	50.0	Averaged	*
Methylcyclopentane	++++	++++	3.590e+65	0.100	++++	50.0	Averaged	*
1-Hexene	++++	++++	3.590e+65	0.100	++++	50.0	Averaged	*
Dimethyl Disulfide	50.0	45.8	0.401	0.020	8.37	50.0	Quadratic	
1-Butene	++++	++++	3.590e+65	0.100	++++	50.0	Averaged	*
Isobutylene	0.049	++++	3.590e+65	0.010	++++	50.0	Averaged	*
2-Ethylhexyl Acrylate	50.0	35.1	0.507	0.100	29.7	50.0	Linear	
94 1,2-Dichloroethylene (total	0.539	0.529	0.529	0.200	1.96	50.0	Averaged	
95 Xylenes (total)	0.579	0.592	0.592	0.100	-2.398	50.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24011111

RunID U012602.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U012602A.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date 26-JAN-2024 1156
ICAL Date(s) 06-DEC-2023, 06-DEC-2023
ICAL Times 11:36, 15:18
Quant Type ISTD

Compound	RRF / RRF / Conc	RF50 / RF50	CCV RRF50	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
Dichlorodifluoromethane	50.0	59.3	0.479	0.100	-18.605	20.0	Linear	
Chloromethane	0.574	0.516	0.516	0.100	10.1	20.0	Averaged	
Propionitrile	0.083	0.065	0.065	0.010	21.8	20.0	Averaged	*
Vinyl Chloride	0.548	0.605	0.605	0.100	-10.444	20.0	Averaged	
Bromomethane	50.0	61.4	0.348	0.100	-22.756	20.0	Quadratic	*
Chloroethane	0.369	0.378	0.378	0.100	-2.420	20.0	Averaged	
Trichlorofluoromethane	0.695	0.804	0.804	0.100	-15.702	20.0	Averaged	
Acrolein	0.028	0.024	0.024	0.010	17.4	20.0	Averaged	
Acetone	100	103	0.174	0.100	-2.523	20.0	Linear	
1,1-Dichloroethene	0.386	0.431	0.431	0.100	-11.666	20.0	Averaged	
Isobutyl Alcohol	0.075	0.056	0.056	0.005	25.6	20.0	Averaged	*
Acetonitrile	0.054	0.050	0.050	0.005	6.69	20.0	Averaged	
Allyl Chloride	1.23	1.10	1.10	0.100	10.1	20.0	Averaged	
Iodomethane	100	126	0.631	0.100	-26.164	20.0	Quadratic	*
Acrylonitrile	0.196	0.191	0.191	0.050	2.52	20.0	Averaged	
Methylene Chloride	50.0	56.5	0.550	0.100	-13.044	20.0	Linear	
Methyl tert-butyl ether	1.38	1.42	1.42	0.100	-2.451	20.0	Averaged	
Carbon Disulfide	1.14	1.32	1.32	0.100	-15.867	20.0	Averaged	
trans-1,2-Dichloroethene	0.461	0.531	0.531	0.100	-15.203	20.0	Averaged	
Vinyl Acetate	1.39	1.27	1.27	0.010	9.18	20.0	Averaged	
1,1-Dichloroethane	0.940	0.854	0.854	0.200	9.14	20.0	Averaged	
Chloroprene	0.171	++++	3.590e+65	0.100	++++	20.0	Averaged	*
2-Butanone	0.245	0.182	0.182	0.100	25.8	20.0	Averaged	*
Methacrylonitrile	0.357	0.431	0.431	0.100	-20.732	20.0	Averaged	*
2,2-Dichloropropane	0.661	0.659	0.659	0.100	0.266	20.0	Averaged	
cis-1,2-Dichloroethene	0.618	0.572	0.572	0.100	7.43	20.0	Averaged	
Chloroform	1.02	0.904	0.904	0.200	11.7	20.0	Averaged	
Bromochloromethane	0.320	0.310	0.310	0.100	2.97	20.0	Averaged	
30 Dibromofluoromethane	50.0	55.0	0.562	0.100	-10.032	20.0	Linear	
1,1,1-Trichloroethane	0.778	0.759	0.759	0.100	2.37	20.0	Averaged	
1,1-Dichloropropene	0.418	0.432	0.432	0.100	-3.394	20.0	Averaged	
1,2-Dichloroethane	0.487	0.433	0.433	0.100	11.1	20.0	Averaged	
Carbon Tetrachloride	0.409	0.454	0.454	0.100	-11.211	20.0	Averaged	
35 1,2-Dichloroethane-d4	50.0	48.5	0.568	0.100	3.02	20.0	Quadratic	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24011111

RunID U012602.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U012602A.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date 26-JAN-2024 1156
ICAL Date(s) 06-DEC-2023, 06-DEC-2023
ICAL Times 11:36, 15:18
Quant Type ISTD

Compound	RRF / RRF / Conc	RF50 / RF50	CCV RRF50	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
Benzene	1.36	1.30	1.30	0.500	4.84	20.0	Averaged	
Trichloroethene	0.375	0.392	0.392	0.200	-4.363	20.0	Averaged	
Bromodichloromethane	0.446	0.441	0.441	0.200	0.975	20.0	Averaged	
Methyl Methacrylate	0.494	0.374	0.374	0.100	24.2	20.0	Averaged	*
2-Chloroethylvinyl ether	100	156	0.007	0.001	-56.079	20.0	Quadratic	*
1,2-Dichloropropane	0.366	0.329	0.329	0.100	10.2	20.0	Averaged	
2-Nitropropane	0.128	0.100	0.100	0.000	22.1	20.0	Averaged	*
Dibromomethane	0.237	0.226	0.226	0.100	4.68	20.0	Averaged	
4-Methyl-2-Pentanone	100	83.7	0.302	0.100	16.3	20.0	Linear	
cis-1,3-Dichloropropene	50.0	46.3	0.530	0.200	7.47	20.0	Linear	
48 Toluene-d8	1.15	1.30	1.30	0.100	-13.010	20.0	Averaged	
Ethyl Methacrylate	0.491	0.464	0.464	0.100	5.50	20.0	Averaged	
Toluene	1.39	1.41	1.41	0.400	-1.118	20.0	Averaged	
trans-1,3-Dichloropropene	50.0	46.3	0.447	0.100	7.36	20.0	Linear	
2-Hexanone	0.252	0.204	0.204	0.100	19.1	20.0	Averaged	
1,1,2-Trichloroethane	50.0	50.3	0.268	0.100	-0.658	20.0	Linear	
1,3-Dichloropropane	0.619	0.544	0.544	0.100	12.1	20.0	Averaged	
Dibromochloromethane	0.372	0.390	0.390	0.100	-4.759	20.0	Averaged	
Tetrachloroethene	0.298	0.349	0.349	0.200	-17.031	20.0	Averaged	
1,2-Dibromoethane	0.347	0.343	0.343	0.100	1.15	20.0	Averaged	
1-Chlorohexane	0.280	0.270	0.270	0.100	3.88	20.0	Averaged	
Chlorobenzene	1.02	0.992	0.992	0.500	2.28	20.0	Averaged	
1,1,1,2-Tetrachloroethane	0.355	0.360	0.360	0.100	-1.375	20.0	Averaged	
Ethylbenzene	0.475	0.475	0.475	0.100	0.075	20.0	Averaged	
m,p-Xylenes	0.572	0.615	0.615	0.100	-7.621	20.0	Averaged	
o-Xylene	0.588	0.614	0.614	0.300	-4.417	20.0	Averaged	
Styrene	0.979	1.04	1.04	0.300	-6.360	20.0	Averaged	
Bromoform	50.0	49.8	0.253	0.100	0.428	20.0	Linear	
Isopropylbenzene	1.42	1.53	1.53	0.100	-7.480	20.0	Averaged	
1,1,2,2-Tetrachloroethane	50.0	45.9	0.748	0.300	8.30	20.0	Linear	
69 4-Bromofluorobenzene	50.0	55.5	0.482	0.100	-10.956	20.0	Linear	
1,2,3-Trichloropropane	0.949	0.760	0.760	0.100	19.9	20.0	Averaged	
trans-1,4-Dichloro-2-butene	0.090	0.079	0.079	0.050	11.9	20.0	Averaged	
n-Propylbenzene	2.94	3.06	3.06	0.100	-4.251	20.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24011111

RunID U012602.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U012602A.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date 26-JAN-2024 1156
ICAL Date(s) 06-DEC-2023, 06-DEC-2023
ICAL Times 11:36, 15:18
Quant Type ISTD

Compound	RRF / RRF / Conc	RF50 / RF50	CCV RRF50	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
Bromobenzene	0.840	0.800	0.800	0.100	4.71	20.0	Averaged	
1,3,5-Trimethylbenzene	2.09	2.19	2.19	0.100	-4.861	20.0	Averaged	
2-Chlorotoluene	1.98	1.85	1.85	0.100	6.46	20.0	Averaged	
4-Chlorotoluene	2.24	2.11	2.11	0.100	5.81	20.0	Averaged	
tert-Butylbenzene	1.87	1.93	1.93	0.100	-2.881	20.0	Averaged	
1,2,4-Trimethylbenzene	2.09	2.17	2.17	0.100	-3.865	20.0	Averaged	
sec-Butylbenzene	2.42	2.54	2.54	0.100	-4.945	20.0	Averaged	
p-Isopropyltoluene	2.09	2.33	2.33	0.100	-11.361	20.0	Averaged	
1,3-Dichlorobenzene	1.49	1.45	1.45	0.600	2.79	20.0	Averaged	
1,4-Dichlorobenzene	1.58	1.49	1.49	0.400	5.68	20.0	Averaged	
Benzyl Chloride	50.0	45.9	0.406	0.010	8.13	20.0	Quadratic	
n-Butylbenzene	1.76	1.85	1.85	0.500	-5.534	20.0	Averaged	
1,2-Dichlorobenzene	1.50	1.40	1.40	0.400	6.32	20.0	Averaged	
1,2-Dibromo-3-Chloropropane	50.0	46.8	0.137	0.050	6.36	20.0	Linear	
1,2,4-Trichlorobenzene	0.923	0.945	0.945	0.200	-2.376	20.0	Averaged	
Hexachlorobutadiene	0.370	0.419	0.419	0.100	-13.226	20.0	Averaged	
Naphthalene	2.23	2.21	2.21	0.200	0.736	20.0	Averaged	
1,2,3-Trichlorobenzene	0.931	0.908	0.908	0.100	2.55	20.0	Averaged	
Methyl Acetate	0.498	0.393	0.393	0.100	21.0	20.0	Averaged	*
Freon TF	50.0	66.2	0.493	0.100	-32.492	20.0	Quadratic	*
Cyclohexane	0.720	0.681	0.681	0.100	5.46	20.0	Averaged	
Tetrahydrofuran	0.106	0.078	0.078	0.001	26.5	20.0	Averaged	*
Methylcyclohexane	0.741	0.727	0.727	0.100	1.84	20.0	Averaged	
1,4-Dioxane	0.008	0.007	0.007	0.001	16.9	20.0	Averaged	
n-Butanol	0.016	0.013	0.013	0.005	18.5	20.0	Averaged	
n-Hexane	0.465	0.503	0.503	0.100	-8.158	20.0	Averaged	
Diethyl ether	0.408	0.390	0.390	0.100	4.43	20.0	Averaged	
Tert-butyl alcohol	0.056	0.052	0.052	0.005	7.26	20.0	Averaged	
Isopropyl alcohol	1000	976	0.031	0.005	2.42	20.0	Linear	
Amyl alcohol	0.011	0.009	0.009	0.005	21.0	20.0	Averaged	*
Diisopropyl ether	1.74	1.44	1.44	0.100	17.1	20.0	Averaged	
Butyl acrylate	50.0	37.2	0.529	0.100	25.6	20.0	Linear	*
n-Amyl acetate	0.634	0.459	0.459	0.100	27.6	20.0	Averaged	*
Dicyclopentadiene	2.67	2.41	2.41	0.100	9.40	20.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24011111

RunID U012602.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U012602A.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date 26-JAN-2024 1156
ICAL Date(s) 06-DEC-2023, 06-DEC-2023
ICAL Times 11:36, 15:18
Quant Type ISTD

Compound	RRF / RRF / Conc	RF50 / RF50	CCV RRF50	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
1,2,3-Trimethylbenzene	2.06	2.02	2.02	0.100	2.18	20.0	Averaged	
Ethanol	1000	921	0.006	0.001	7.94	20.0	Linear	
tert-Butyl formate	100	82.7	0.314	0.100	17.3	20.0	Linear	
3,3-Dimethyl-1-butanol	0.041	0.034	0.034	0.005	17.1	20.0	Averaged	
tert-Amyl methyl ether	1.55	1.33	1.33	0.005	14.1	20.0	Averaged	
tert-Butyl ethyl ether	1.55	1.33	1.33	0.100	14.4	20.0	Averaged	
tert-Amyl alcohol	1000	828	0.031	0.005	17.2	20.0	Linear	
4-Methyl-2-pentanol	1000	799	0.064	0.005	20.1	20.0	Linear	*
1,3-Butadiene	0.502	0.563	0.563	0.100	-12.030	20.0	Averaged	
Dichlorofluoromethane	0.762	0.836	0.836	0.100	-9.692	20.0	Averaged	
Epichlorohydrin	0.019	0.018	0.018	0.001	9.20	20.0	Averaged	
94 1,2-Dichloroethylene (total	0.539	0.551	0.551	0.200	-2.245	20.0	Averaged	
95 Xylenes (total)	0.579	0.626	0.626	0.100	-8.149	20.0	Averaged	
alpha-Methylstyrene	50.0	47.0	0.950	0.100	6.09	20.0	Linear	
Ethyl Acetate	0.607	0.455	0.455	0.100	25.1	20.0	Averaged	*
Methyl Acrylate	0.657	0.521	0.521	0.100	20.7	20.0	Averaged	*
n-Butyl acetate	0.557	0.453	0.453	0.100	18.7	20.0	Averaged	
Cyclohexanone	0.033	0.028	0.028	0.005	16.8	20.0	Averaged	
Isoprene	0.116	0.116	0.116	0.010	-0.082	20.0	Averaged	
Isopropyl acetate	0.922	0.759	0.759	0.100	17.7	20.0	Averaged	
Allyl alcohol	0.023	0.025	0.025	0.004	-8.158	20.0	Averaged	
Acetaldehyde	++++	++++	3.590e+65	0.001	++++	20.0	Linear	*
Methyl Amyl Ketone	50.0	36.9	0.573	0.100	26.1	20.0	Linear	*
Dimethyl Disulfide	50.0	47.3	0.415	0.020	5.48	20.0	Quadratic	
Isobutylene	0.049	++++	3.590e+65	0.010	++++	20.0	Averaged	*
2-Ethylhexyl Acrylate	50.0	40.1	0.585	0.100	19.8	20.0	Linear	
Ethyl Acrylate	1.20	1.07	1.07	0.100	10.9	20.0	Averaged	
Butyl methacrylate	50.0	36.7	0.495	0.100	26.5	20.0	Linear	*
Propylene oxide	0.027	0.031	0.031	0.005	-12.858	20.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24011111

RunID U012628.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U012628.D
Analysis Type WATER
Lab Sample ID CCV-END

Injection Date 26-JAN-2024 2143
ICAL Date(s) 06-DEC-2023, 06-DEC-2023
ICAL Times 11:36, 15:18
Quant Type ISTD

Compound	RRF / RRF / Conc	RF50 / RF50	CCV RRF50	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
30 Dibromofluoromethane	50.0	49.4	0.505	0.100	1.29	50.0	Linear	
35 1,2-Dichloroethane-d4	50.0	43.3	0.504	0.100	13.5	50.0	Quadratic	
48 Toluene-d8	1.15	1.17	1.17	0.100	-1.513	50.0	Averaged	
69 4-Bromofluorobenzene	50.0	49.3	0.430	0.100	1.39	50.0	Linear	
Vinyl Chloride	0.548	0.709	0.709	0.100	-29.391	50.0	Averaged	
1,1-Dichloroethene	0.386	0.518	0.518	0.100	-34.377	50.0	Averaged	
Methylene Chloride	50.0	65.0	0.632	0.100	-30.078	50.0	Linear	
trans-1,2-Dichloroethene	0.461	0.592	0.592	0.100	-28.324	50.0	Averaged	
cis-1,2-Dichloroethene	0.618	0.573	0.573	0.100	7.15	50.0	Averaged	
Trichloroethene	0.375	0.416	0.416	0.200	-10.811	50.0	Averaged	
1,1,2-Trichloroethane	50.0	48.8	0.261	0.100	2.32	50.0	Linear	
Tetrachloroethene	0.298	0.353	0.353	0.200	-18.188	50.0	Averaged	
Methyl tert-butyl ether	1.38	1.48	1.48	0.100	-7.294	50.0	Averaged	
1,2-Dichloroethane	0.487	0.427	0.427	0.100	12.4	50.0	Averaged	
Benzene	1.36	1.29	1.29	0.500	5.16	50.0	Averaged	
Toluene	1.39	1.43	1.43	0.400	-2.679	50.0	Averaged	
Ethylbenzene	0.475	0.487	0.487	0.100	-2.538	50.0	Averaged	
m,p-Xylenes	0.572	0.622	0.622	0.100	-8.859	50.0	Averaged	
o-Xylene	0.588	0.619	0.619	0.300	-5.262	50.0	Averaged	
95 Xylenes (total)	0.579	0.627	0.627	0.100	-8.455	50.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24011111

RunID U012902.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U012902A.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date 29-JAN-2024 0910
ICAL Date(s) 06-DEC-2023, 06-DEC-2023
ICAL Times 11:36, 15:18
Quant Type ISTD

Compound	RRF / RRF / Conc	RF50 / RF50	CCV RRF50	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
30 Dibromofluoromethane	50.0	48.6	0.497	0.100	2.89	20.0	Linear	
35 1,2-Dichloroethane-d4	50.0	42.7	0.497	0.100	14.5	20.0	Quadratic	
48 Toluene-d8	1.15	1.15	1.15	0.100	0.249	20.0	Averaged	
69 4-Bromofluorobenzene	50.0	47.9	0.418	0.100	4.26	20.0	Linear	
Vinyl Chloride	0.548	0.716	0.716	0.100	-30.611	20.0	Averaged	*
1,1-Dichloroethene	0.386	0.502	0.502	0.100	-30.296	20.0	Averaged	*
Methylene Chloride	50.0	65.0	0.632	0.100	-30.015	20.0	Linear	*
trans-1,2-Dichloroethene	0.461	0.551	0.551	0.100	-19.552	20.0	Averaged	
2-Butanone	0.245	0.185	0.185	0.100	24.5	20.0	Averaged	*
cis-1,2-Dichloroethene	0.618	0.595	0.595	0.100	3.58	20.0	Averaged	
Trichloroethene	0.375	0.401	0.401	0.200	-6.968	20.0	Averaged	
1,1,2-Trichloroethane	50.0	50.1	0.267	0.100	-0.245	20.0	Linear	
Tetrachloroethene	0.298	0.354	0.354	0.200	-18.501	20.0	Averaged	
Methyl tert-butyl ether	1.38	1.59	1.59	0.100	-15.051	20.0	Averaged	
1,2-Dichloroethane	0.487	0.439	0.439	0.100	9.89	20.0	Averaged	
Benzene	1.36	1.32	1.32	0.500	3.01	20.0	Averaged	
Toluene	1.39	1.42	1.42	0.400	-1.868	20.0	Averaged	
Ethylbenzene	0.475	0.510	0.510	0.100	-7.181	20.0	Averaged	
m,p-Xylenes	0.572	0.645	0.645	0.100	-12.899	20.0	Averaged	
o-Xylene	0.588	0.623	0.623	0.300	-5.904	20.0	Averaged	
Isopropylbenzene	1.42	1.57	1.57	0.100	-10.508	20.0	Averaged	
1,2,4-Trimethylbenzene	2.09	2.26	2.26	0.100	-7.926	20.0	Averaged	
Methyl Acrylate	0.657	0.545	0.545	0.100	17.0	20.0	Averaged	
Cyclohexane	0.720	0.697	0.697	0.100	3.25	20.0	Averaged	
Butyl acrylate	50.0	35.8	0.507	0.100	28.4	20.0	Linear	*
2-Ethylhexyl Acrylate	50.0	41.2	0.601	0.100	17.6	20.0	Linear	
95 Xylenes (total)	0.579	0.655	0.655	0.100	-13.242	20.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24011111

RunID U012919.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U012919.D
Analysis Type WATER
Lab Sample ID CCV-END

Injection Date 29-JAN-2024 1530
ICAL Date(s) 06-DEC-2023, 06-DEC-2023
ICAL Times 11:36, 15:18
Quant Type ISTD

Compound	RRF / RRF / Conc	RF50 / RF50	CCV RRF50	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
30 Dibromofluoromethane	50.0	48.9	0.501	0.100	2.22	50.0	Linear	
35 1,2-Dichloroethane-d4	50.0	42.8	0.498	0.100	14.5	50.0	Quadratic	
48 Toluene-d8	1.15	1.15	1.15	0.100	0.461	50.0	Averaged	
69 4-Bromofluorobenzene	50.0	50.0	0.436	0.100	0.050	50.0	Linear	
Vinyl Chloride	0.548	0.668	0.668	0.100	-21.980	50.0	Averaged	
1,1-Dichloroethene	0.386	0.474	0.474	0.100	-22.930	50.0	Averaged	
Methylene Chloride	50.0	62.6	0.609	0.100	-25.278	50.0	Linear	
trans-1,2-Dichloroethene	0.461	0.568	0.568	0.100	-23.155	50.0	Averaged	
cis-1,2-Dichloroethene	0.618	0.574	0.574	0.100	7.08	50.0	Averaged	
Trichloroethene	0.375	0.392	0.392	0.200	-4.583	50.0	Averaged	
1,1,2-Trichloroethane	50.0	46.4	0.248	0.100	7.28	50.0	Linear	
Tetrachloroethene	0.298	0.339	0.339	0.200	-13.655	50.0	Averaged	
Methyl tert-butyl ether	1.38	1.48	1.48	0.100	-6.951	50.0	Averaged	
1,2-Dichloroethane	0.487	0.415	0.415	0.100	14.9	50.0	Averaged	
Benzene	1.36	1.27	1.27	0.500	6.97	50.0	Averaged	
Toluene	1.39	1.37	1.37	0.400	1.40	50.0	Averaged	
Ethylbenzene	0.475	0.466	0.466	0.100	1.89	50.0	Averaged	
m,p-Xylenes	0.572	0.601	0.601	0.100	-5.193	50.0	Averaged	
o-Xylene	0.588	0.591	0.591	0.300	-0.520	50.0	Averaged	
95 Xylenes (total)	0.579	0.614	0.614	0.100	-6.179	50.0	Averaged	

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Form 8

Internal Standard Area and RT Summary

Volatiles by EPA Volatiles Organics by Method 8260C

Workorder

HS24011111

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

02/02/2024

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

Form 8 - Internal Standard Area and RT Summary

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24011111

EPA SW8260

VOA9_457250		Pentafluorobenzene				1,4 Difluorobenzene				Chlorobenzene d5				1,4-Dichlorobenzene d4			
Sample ID	File ID	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
12-HOUR STD (CCV)	U012503.D	306413	#	4.82	#	468358	#	5.55	#	451184	#	8.19	#	255742	#	10.17	#
HS24011111-15	U012513.D	348072		4.82		495794		5.55		477861		8.19		246946		10.17	
VBLKW-240125	U012507.D	370154		4.82		540982		5.55		515787		8.19		261558		10.17	
VLCSW-240125	U012505.D	306163		4.82		471939		5.55		467300		8.19		258920		10.17	
MS-ZZZZZZMS	U012517.D	341142		4.81		501673		5.55		489287		8.19		272833		10.17	
ZZZZZZMSD	U012518.D	331301		4.82		485985		5.55		478199		8.19		264821		10.17	

AREA UPPER LIMIT = +100% of STD IS Area
AREA LOWER LIMIT = - 50% of STD IS Area
RT - Retention IS - Internal StandardTime

RT UPPER LIMIT = + 0.50 of STD IS RT
RT LOWER LIMIT = - 0.50 of STD IS RT
CCV - Continuing Calibration Verification

- Area or RT Limit Flag
* - Value Outside Area or RT limits
H - Hour STD - Standard

Form 8 - Internal Standard Area and RT Summary

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24011111

EPA SW8260

VOA9_457361		Pentafluorobenzene				1,4 Difluorobenzene				Chlorobenzene d5				1,4-Dichlorobenzene d4			
Sample ID	File ID	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
12-HOUR STD (CCV)	U012602.D	247553	#	4.82	#	364543	#	5.55	#	371067	#	8.19	#	208427	#	10.17	#
HS24011111-01	U012613.D	329263		4.82		462701		5.55		434509		8.19		224224		10.17	
HS24011111-02	U012614.D	325225		4.82		455584		5.55		435335		8.19		225288		10.17	
HS24011111-03	U012615.D	337518		4.82		464056		5.55		439211		8.19		227859		10.17	
HS24011111-04	U012616.D	331381		4.82		452924		5.55		424652		8.19		223416		10.17	
HS24011111-05	U012617.D	331668		4.82		455290		5.55		433694		8.19		225684		10.17	
HS24011111-06	U012618.D	328653		4.81		451968		5.55		425865		8.19		223899		10.17	
HS24011111-07	U012619.D	329564		4.82		455907		5.55		432270		8.19		224928		10.17	
HS24011111-08	U012620.D	325085		4.82		446858		5.55		425118		8.19		225960		10.17	
HS24011111-09	U012621.D	321099		4.81		439659		5.55		420499		8.19		216025		10.17	
HS24011111-11	U012623.D	326833		4.82		447423		5.55		423475		8.19		219554		10.17	
HS24011111-12	U012624.D	327978		4.82		452392		5.55		423424		8.19		220608		10.17	
HS24011111-13	U012625.D	322434		4.82		447214		5.55		417390		8.19		215155		10.17	
HS24011111-14	U012606.D	337407		4.82		467570		5.55		442508		8.19		230638		10.17	
HS24011111-14MS	U012609.D	296077		4.82		438084		5.55		427475		8.19		244054		10.17	
HS24011111-14MSD	U012610.D	287371		4.81		425372		5.55		424844		8.19		239026		10.17	
VBLKW-240126	U012605.D	342850		4.81		473196		5.55		444856		8.19		236361		10.17	
VLCSW-240126	U012603.D	250269		4.82		377862		5.55		378671		8.19		213915		10.17	

AREA UPPER LIMIT = +100% of STD IS Area
AREA LOWER LIMIT = - 50% of STD IS Area
RT - Retention IS - Internal StandardTime

RT UPPER LIMIT = + 0.50 of STD IS RT
RT LOWER LIMIT = - 0.50 of STD IS RT
CCV - Continuing Calibration Verification

- Area or RT Limit Flag
* - Value Outside Area or RT limits
H - Hour STD - Standard

Form 8 - Internal Standard Area and RT Summary

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24011111

EPA SW8260

VOA9_457422		Pentafluorobenzene				1,4 Difluorobenzene				Chlorobenzene d5				1,4-Dichlorobenzene d4			
Sample ID	File ID	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
12-HOUR STD (CCV)	U012902.D	277269	#	4.82	#	410325	#	5.55	#	421551	#	8.19	#	234634	#	10.17	#
HS24011111-02	U012912.D	303446		4.81		422956		5.55		397669		8.19		208959		10.17	
HS24011111-03	U012913.D	302775		4.82		420278		5.55		399463		8.19		208339		10.17	
HS24011111-04	U012914.D	295595		4.82		417740		5.56		393594		8.19		202760		10.17	
HS24011111-05	U012915.D	303313		4.81		419917		5.55		399521		8.19		206887		10.17	
HS24011111-07	U012907.D	312987		4.82		427650		5.55		409454		8.19		210147		10.17	
HS24011111-08	U012916.D	294312		4.82		408950		5.55		389808		8.19		201142		10.17	
HS24011111-08MS	U012917.D	278543		4.82		406962		5.56		423853		8.19		237779		10.17	
HS24011111-08MSD	U012918.D	270576		4.82		405567		5.55		404551		8.19		228921		10.17	
HS24011111-09	U012908.D	303313		4.82		426814		5.55		404309		8.19		210447		10.17	
HS24011111-10	U012906.D	312975		4.82		433417		5.55		403731		8.19		214045		10.17	
HS24011111-11	U012909.D	308346		4.82		427254		5.55		406680		8.19		210537		10.17	
HS24011111-12	U012910.D	306901		4.82		429951		5.55		408377		8.19		211516		10.17	
HS24011111-13	U012911.D	306801		4.82		426779		5.55		400080		8.19		211571		10.17	
VBLKW-240126	U012905.D	619340	#	4.82		898560		5.55	#	861041		8.19	#	458255	#	10.17	
VLCSW-240126	U012903.D	272285		4.82		399465		5.55		407034		8.19		232989		10.17	

AREA UPPER LIMIT = +100% of STD IS Area
AREA LOWER LIMIT = - 50% of STD IS Area
RT - Retention IS - Internal StandardTime

RT UPPER LIMIT = + 0.50 of STD IS RT
RT LOWER LIMIT = - 0.50 of STD IS RT
CCV - Continuing Calibration Verification

- Area or RT Limit Flag
* - Value Outside Area or RT limits
H - Hour STD - Standard

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Analysis Run Log

Volatiles by EPA Volatiles Organics by Method 8260C

Workorder

HS24011111

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

02/02/2024

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

MSVOA09 -Logbook

Batch: 57869 **Analyst:** Presenta Cabascango

Date: 12-06-2023 **Reviewer:**

Method: 8260 **Laboratory:** Houston

Comments:

#	Samp ID	Type	Analyzed	DF	Init Wt/Vol	Final Vol	File ID	Matrix	Status	pH
1	BFB	TUNE	12-06-2023 11:14 am	1.00	50 mL	50 mL	U120601.D	Liquid	Y	NA
2	VSTD000.25	ICAL1	12-06-2023 11:36 am	1.00	50 mL	50 mL	U120602.D	Liquid	Y	NA
3	VSTD000.5	ICAL2	12-06-2023 11:58 am	1.00	50 mL	50 mL	U120603.D	Liquid	Y	NA
4	VSTD001	ICAL3	12-06-2023 12:43 pm	1.00	50 mL	50 mL	U120604.D	Liquid	Y	NA
5	VSTD002	ICAL4	12-06-2023 01:05 pm	1.00	50 mL	50 mL	U120605.D	Liquid	Y	NA
6	VSTD005	ICAL5	12-06-2023 01:27 pm	1.00	50 mL	50 mL	U120606.D	Liquid	Y	NA
7	VSTD020	ICAL6	12-06-2023 01:49 pm	1.00	50 mL	50 mL	U120607.D	Liquid	Y	NA
8	VSTD050	ICAL7	12-06-2023 02:11 pm	1.00	50 mL	50 mL	U120608.D	Liquid	Y	NA
9	VSTD100	ICAL8	12-06-2023 02:34 pm	1.00	50 mL	50 mL	U120609.D	Liquid	Y	NA
10	VSTD150	ICAL9	12-06-2023 02:56 pm	1.00	50 mL	50 mL	U120610.D	Liquid	Y	NA
11	VSTD200	ICAL	12-06-2023 03:18 pm	1.00	50 mL	50 mL	U120611.D	Liquid	Y	NA
12	BLANK	SAMP	12-06-2023 03:40 pm	1.00	50 mL	50 mL	U120612.D	Liquid	Y	NA
13	BLANK	SAMP	12-06-2023 04:03 pm	1.00	50 mL	50 mL	U120613.D	Liquid	Y	NA
14	ICV	ICV	12-06-2023 04:25 pm	1.00	50 mL	50 mL	U120614.D	Liquid	Y	NA
15	CCB	SAMP	12-06-2023 04:47 pm	1.00	50 mL	50 mL	U120615.D	Liquid	Y	NA
16	VLCSW-231206	LCS	12-06-2023 05:10 pm	1.00	50 mL	50 mL	U120616.D	Liquid	Y	NA
17	BLANK	SAMP	12-06-2023 05:32 pm	1.00	50 mL	50 mL	U120617.D	Liquid	Y	NA
18	VBLKW-231206	MBLK	12-06-2023 05:54 pm	1.00	50 mL	50 mL	U120618.D	Liquid	Y	NA
19	HS23111879-07	SAMP	12-06-2023 06:17 pm	25.00	2 mL	50 mL	U120619.D	Liquid	Y	<2
20	HS23111879-08	SAMP	12-06-2023 06:39 pm	5.00	10 mL	50 mL	U120620.D	Liquid	Y	<2
21	HS23111879-08	SAMP	12-06-2023 07:02 pm	25.00	2 mL	50 mL	U120621.D	Liquid	Y	<2
22	HS23111879-09	SAMP	12-06-2023 07:24 pm	10.00	5 mL	50 mL	U120622.D	Liquid	Y	<2
23	HS23111879-09	SAMP	12-06-2023 07:46 pm	50.00	1 mL	50 mL	U120623.D	Liquid	Y	<2
24	HS23111879-12	SAMP	12-06-2023 08:09 pm	25.00	2 mL	50 mL	U120624.D	Liquid	Y	<2
25	HS23111879-12	SAMP	12-06-2023 08:31 pm	100.0(	500 µL	50 mL	U120625.D	Liquid	Y	<2
26	HS23120168-01	SAMP	12-06-2023 08:53 pm	100.0(	500 µL	50 mL	U120626.D	Liquid	Y	<2
27	HS23111879-07MS	MS	12-06-2023 09:16 pm	25.00	2 mL	50 mL	U120627.D	Liquid	Y	<2
28	HS23111879-07MSD	MSD	12-06-2023 09:38 pm	25.00	2 mL	50 mL	U120628.D	Liquid	Y	<2
29	CCV-END	CCV	12-06-2023 10:00 pm	1.00	50 mL	50 mL	U120629.D	Liquid	Y	NA
30	HS23120168-01	SAMP	12-06-2023 10:23 pm	2000.0	25 µL	50 mL	U120630.D	Liquid	Y	<2
31	HS23120230-01	SAMP	12-06-2023 10:45 pm	100.0(	500 µL	50 mL	U120631.D	Liquid	Y	<2
32	HS23120233-01	SAMP	12-06-2023 11:08 pm	100.0(	500 µL	50 mL	U120632.D	Liquid	Y	<2
33	BLANK	SAMP	12-06-2023 11:30 pm	1.00	50 mL	50 mL	U120633.D	Liquid	Y	NA
34	BFB	TUNE	12-06-2023 11:52 pm	1.00	50 mL	50 mL	V120601.D	Liquid	Y	NA
35	CCV	CCV	12-07-2023 12:15 am	1.00	50 mL	50 mL	V120602a.D	Liquid	Y	NA
36	CCV	CCV	12-07-2023 12:37 am	1.00	50 mL	50 mL	V120603.D	Liquid	Y	NA
37	CCB	SAMP	12-07-2023 12:59 am	1.00	50 mL	50 mL	V120604.D	Liquid	Y	NA
38	VLCSW-231206	LCS	12-07-2023 01:21 am	1.00	50 mL	50 mL	V120605.D	Liquid	Y	NA
39	BLANK	SAMP	12-07-2023 01:44 am	1.00	50 mL	50 mL	V120606.D	Liquid	Y	NA
40	VBLKW-231206	MBLK	12-07-2023 02:06 am	1.00	50 mL	50 mL	V120607.D	Liquid	Y	NA
41	HS23111910-01	SAMP	12-07-2023 02:29 am	1.00	50 mL	50 mL	V120608.D	Liquid	Y	<2

MSVOA09 -Logbook

#	Samp ID	Type	Analyzed	DF	Init Wt/Vol	Final Vol	File ID	Matrix	Status	pH
42	HS23111910-02	SAMP	12-07-2023 02:51 am	1.00	50 mL	50 mL	V120609.D	Liquid	Y	<2
43	HS23111910-03	SAMP	12-07-2023 03:14 am	1.00	50 mL	50 mL	V120610.D	Liquid	Y	<2
44	HS23111910-04	SAMP	12-07-2023 03:36 am	1.00	50 mL	50 mL	V120611.D	Liquid	Y	<2
45	HS23111910-16	SAMP	12-07-2023 03:58 am	1.00	50 mL	50 mL	V120612.D	Liquid	Y	<2
46	HS23111910-06	SAMP	12-07-2023 04:21 am	1.00	50 mL	50 mL	V120613.D	Liquid	Y	<2
47	HS23111910-16MS	MS	12-07-2023 04:43 am	1.00	50 mL	50 mL	V120614.D	Liquid	Y	<2
48	HS23111910-16MSD	MSD	12-07-2023 05:06 am	1.00	50 mL	50 mL	V120615.D	Liquid	Y	<2
49	BLANK	SAMP	12-07-2023 05:28 am	1.00	50 mL	50 mL	V120616.D	Liquid	Y	NA
50	HS23111910-05	SAMP	12-07-2023 05:50 am	1.00	50 mL	50 mL	V120617.D	Liquid	Y	<2
51	HS23111910-08	SAMP	12-07-2023 06:13 am	1.00	50 mL	50 mL	V120618.D	Liquid	Y	<2
52	HS23111910-09	SAMP	12-07-2023 06:35 am	1.00	50 mL	50 mL	V120619.D	Liquid	Y	<2
53	HS23111910-10	SAMP	12-07-2023 06:58 am	1.00	50 mL	50 mL	V120620.D	Liquid	Y	<2
54	HS23111910-11	SAMP	12-07-2023 07:20 am	1.00	50 mL	50 mL	V120621.D	Liquid	Y	<2
55	HS23111910-12	SAMP	12-07-2023 07:43 am	1.00	50 mL	50 mL	V120622.D	Liquid	Y	<2
56	HS23111910-20	SAMP	12-07-2023 08:05 am	1.00	50 mL	50 mL	V120623.D	Liquid	Y	<2
57	HS23111910-21	SAMP	12-07-2023 08:27 am	1.00	50 mL	50 mL	V120624.D	Liquid	Y	<2
58	HS23111910-13	SAMP	12-07-2023 08:50 am	1.00	50 mL	50 mL	V120625.D	Liquid	Y	<2
59	HS23111910-17	SAMP	12-07-2023 09:12 am	1.00	50 mL	50 mL	V120626.D	Liquid	Y	<2
60	HS23111910-18	SAMP	12-07-2023 09:34 am	1.00	50 mL	50 mL	V120627.D	Liquid	Y	<2
61	HS23111910-19	SAMP	12-07-2023 09:57 am	1.00	50 mL	50 mL	V120628.D	Liquid	Y	<2
62	HS23111910-07	SAMP	12-07-2023 10:19 am	5.00	10 mL	50 mL	V120629.D	Liquid	Y	<2
63	HS23111910-07	SAMP	12-07-2023 10:42 am	25.00	2 mL	50 mL	V120630.D	Liquid	Y	<2
64	CCV-END	CCV	12-07-2023 11:04 am	1.00	50 mL	50 mL	V120631.D	Liquid	Y	NA

Chemical	Value
pH Paper	634-64-10

MSVOA09 -Logbook

Batch: 58636 **Analyst:** Presenta Cabascango

Date: 01-25-2024 **Reviewer:**

Method: 8260 **Laboratory:** Houston

Comments:

#	Samp ID	Type	Analyzed	DF	Init Wt/Vol	Final Vol	File ID	Matrix	Status	pH
1	BFB	TUNE	01-25-2024 10:20 am	1.00	0.00 mL	0.00 mL	U012501.D	Liquid	Y	NA
2	CCV	CCV	01-25-2024 10:42 am	1.00	5.00 mL	0.00 mL	U012502a.D	Liquid	Y	NA
3	CCV	CCV	01-25-2024 11:04 am	1.00	5.00 mL	0.00 mL	U012503.D	Liquid	Y	NA
4	CCB	SAMP	01-25-2024 11:27 am	1.00	5.00 mL	0.00 mL	U012504.D	Liquid	Y	NA
5	VLCSW-240125	LCS	01-25-2024 11:49 am	1.00	5.00 mL	0.00 mL	U012505.D	Liquid	Y	NA
6	BLANK	SAMP	01-25-2024 12:11 pm	1.00	5.00 mL	0.00 mL	U012506.D	Liquid	Y	NA
7	VBLKW-240125	MBLK	01-25-2024 12:33 pm	1.00	5.00 mL	0.00 mL	U012507.D	Liquid	Y	NA
8	HS24011108-01	SAMP	01-25-2024 12:56 pm	1.00	5.00 mL	0.00 mL	U012508.D	Liquid	Y	NA
9	HS24011108-02	SAMP	01-25-2024 01:18 pm	1.00	5.00 mL	0.00 mL	U012509.D	Liquid	Y	NA
10	HS24011108-03	SAMP	01-25-2024 01:40 pm	1.00	5.00 mL	0.00 mL	U012510.D	Liquid	Y	NA
11	HS24011108-04	SAMP	01-25-2024 02:03 pm	1.00	5.00 mL	0.00 mL	U012511.D	Liquid	Y	NA
12	HS24011040-13	SAMP	01-25-2024 02:25 pm	1.00	5.00 mL	0.00 mL	U012512.D	Liquid	Y	NA
13	HS24011111-15	SAMP	01-25-2024 02:47 pm	1.00	5.00 mL	0.00 mL	U012513.D	Liquid	Y	NA
14	HS24011040-03	SAMP	01-25-2024 03:10 pm	100.0(	5.00 mL	0.00 mL	U012514.D	Liquid	Y	NA
15	HS24011040-01	SAMP	01-25-2024 03:32 pm	100.0(	5.00 mL	0.00 mL	U012515.D	Liquid	Y	NA
16	HS24011040-02	SAMP	01-25-2024 03:54 pm	100.0(	5.00 mL	0.00 mL	U012516.D	Liquid	Y	NA
17	HS24011040-03MS	MS	01-25-2024 04:16 pm	100.0(	5.00 mL	0.00 mL	U012517.D	Liquid	Y	NA
18	HS24011040-03MSD	MSD	01-25-2024 04:38 pm	100.0(	5.00 mL	0.00 mL	U012518.D	Liquid	Y	NA
19	HS24011040-01	SAMP	01-25-2024 05:01 pm	1000.0	5.00 mL	0.00 mL	U012519.D	Liquid	Y	NA
20	HS24011040-02	SAMP	01-25-2024 05:23 pm	1000.0	5.00 mL	0.00 mL	U012520.D	Liquid	Y	NA
21	HS24011040-06	SAMP	01-25-2024 05:45 pm	250.0(	5.00 mL	0.00 mL	U012521.D	Liquid	Y	NA
22	HS24011040-07	SAMP	01-25-2024 06:07 pm	50.00	5.00 mL	0.00 mL	U012522.D	Liquid	Y	NA
23	HS24011040-07n/r	SAMP	01-25-2024 06:29 pm	200.0(	5.00 mL	0.00 mL	U012523.D	Liquid	Y	NA
24	HS24011040-08	SAMP	01-25-2024 06:52 pm	50.00	5.00 mL	0.00 mL	U012524.D	Liquid	Y	NA
25	HS24011040-09	SAMP	01-25-2024 07:14 pm	25.00	5.00 mL	0.00 mL	U012525.D	Liquid	Y	NA
26	HS24011040-11	SAMP	01-25-2024 07:36 pm	5.00	5.00 mL	0.00 mL	U012526.D	Liquid	Y	NA
27	HS24011040-12	SAMP	01-25-2024 07:58 pm	5.00	5.00 mL	0.00 mL	U012527.D	Liquid	Y	NA
28	HS24011040-10	SAMP	01-25-2024 08:20 pm	250.0(	5.00 mL	0.00 mL	U012528.D	Liquid	Y	NA
29	HS24011040-10	SAMP	01-25-2024 08:42 pm	2000.0	5.00 mL	0.00 mL	U012529.D	Liquid	Y	NA
30	CCV-END	CCV	01-25-2024 09:05 pm	1.00	5.00 mL	0.00 mL	U012530.D	Liquid	Y	NA
31	BFB	TUNE	01-25-2024 09:27 pm	1.00	0.00 mL	0.00 mL	V012501.D	Liquid	Y	NA
32	CCV	CCV	01-25-2024 09:49 pm	1.00	5.00 mL	0.00 mL	V012502.D	Liquid	Y	NA
33	CCV	CCV	01-25-2024 10:11 pm	1.00	5.00 mL	0.00 mL	V012503.D	Liquid	Y	NA
34	CCB	SAMP	01-25-2024 10:34 pm	1.00	5.00 mL	0.00 mL	V012504.D	Liquid	Y	NA
35	VLCSW-240125	LCS	01-25-2024 10:56 pm	1.00	5.00 mL	0.00 mL	V012505.D	Liquid	Y	NA
36	BLANK	SAMP	01-25-2024 11:18 pm	1.00	5.00 mL	0.00 mL	V012506.D	Liquid	Y	NA
37	VBLKW-240125	MBLK	01-25-2024 11:41 pm	1.00	5.00 mL	0.00 mL	V012507.D	Liquid	Y	NA
38	HS24010950-09	SAMP	01-26-2024 12:03 am	250.0(	5.00 mL	0.00 mL	V012508.D	Liquid	Y	NA
39	HS24011190-02	SAMP	01-26-2024 12:26 am	1.00	5.00 mL	0.00 mL	V012509.D	Liquid	Y	NA
40	HS24010950-09MS	MS	01-26-2024 12:48 am	250.0(	5.00 mL	0.00 mL	V012510.D	Liquid	Y	NA
41	HS24010950-09MSD	MSD	01-26-2024 01:10 am	250.0(	5.00 mL	0.00 mL	V012511.D	Liquid	Y	NA

MSVOA09 -Logbook

#	Samp ID	Type	Analyzed	DF	Init Wt/Vol	Final Vol	File ID	Matrix	Status	pH
42	HS24011118-01	SAMP	01-26-2024 01:33 am	2000.0	5.00 mL	0.00 mL	V012512.D	Liquid	Y	NA
43	MBLK-206438	MBLK	01-26-2024 01:55 am	20.00	5.00 mL	0.00 mL	V012513.D	Liquid	Y	NA
44	HS24011092-01	SAMP	01-26-2024 02:18 am	20.00	5.00 mL	0.00 mL	V012514.D	Liquid	Y	NA
45	HS24011093-01	SAMP	01-26-2024 02:40 am	100.0(	5.00 mL	0.00 mL	V012515.D	Liquid	Y	NA
46	HS24011094-01	SAMP	01-26-2024 03:02 am	20.00	5.00 mL	0.00 mL	V012516.D	Liquid	Y	NA
47	HS24011382-02	SAMP	01-26-2024 03:25 am	1.00	5.00 mL	0.00 mL	V012517.D	Liquid	Y	NA
48	HS24011316-01	SAMP	01-26-2024 03:47 am	1.00	5.00 mL	0.00 mL	V012518.D	Liquid	Y	NA
49	HS24011382-01	SAMP	01-26-2024 04:10 am	1.00	5.00 mL	0.00 mL	V012519.D	Liquid	Y	NA
50	HS24011325-06	SAMP	01-26-2024 04:32 am	1.00	5.00 mL	0.00 mL	V012520.D	Liquid	Y	NA
51	HS24011176-01	SAMP	01-26-2024 04:54 am	1.00	5.00 mL	0.00 mL	V012521.D	Liquid	Y	NA
52	HS24011176-02	SAMP	01-26-2024 05:17 am	1.00	5.00 mL	0.00 mL	V012522.D	Liquid	Y	NA
53	HS24011176-03	SAMP	01-26-2024 05:39 am	1.00	5.00 mL	0.00 mL	V012523.D	Liquid	Y	NA
54	HS24011177-01	SAMP	01-26-2024 06:02 am	1.00	5.00 mL	0.00 mL	V012524.D	Liquid	Y	NA
55	HS24011177-02	SAMP	01-26-2024 06:24 am	1.00	5.00 mL	0.00 mL	V012525.D	Liquid	Y	NA
56	HS24011177-03	SAMP	01-26-2024 06:46 am	1.00	5.00 mL	0.00 mL	V012526.D	Liquid	Y	NA
57	HS24011178-01	SAMP	01-26-2024 07:09 am	1.00	5.00 mL	0.00 mL	V012527.D	Liquid	Y	NA
58	HS24011178-02	SAMP	01-26-2024 07:31 am	1.00	5.00 mL	0.00 mL	V012528.D	Liquid	Y	NA
59	HS24011276-01	SAMP	01-26-2024 07:53 am	1.00	5.00 mL	0.00 mL	V012529.D	Liquid	Y	NA
60	HS24011175-01	SAMP	01-26-2024 08:16 am	5.00	5.00 mL	0.00 mL	V012530.D	Liquid	Y	NA
61	BLANK	SAMP	01-26-2024 08:38 am	1.00	5.00 mL	0.00 mL	V012531.D	Liquid	Y	NA

MSVOA09 -Logbook

Batch: 58637 **Analyst:** Firat Tastan

Date: 01-26-2024 **Reviewer:**

Method: 8260 **Laboratory:** Houston

Comments:

#	Samp ID	Type	Analyzed	DF	Init Wt/Vol	Final Vol	File ID	Matrix	Status	pH
1	BFB	TUNE	01-26-2024 11:12 am	1.00	0.00 mL	0.00 mL	U012601.D	Liquid	Y	NA
2	CCV	CCV	01-26-2024 11:56 am	1.00	5.00 mL	0.00 mL	U012602.D	Liquid	Y	NA
3	VLCSW-240126	LCS	01-26-2024 12:18 pm	1.00	5.00 mL	0.00 mL	U012603.D	Liquid	Y	NA
4	BLANK	SAMP	01-26-2024 12:41 pm	1.00	5.00 mL	0.00 mL	U012604.D	Liquid	Y	NA
5	VBLKW-240126	MBLK	01-26-2024 01:03 pm	1.00	5.00 mL	0.00 mL	U012605.D	Liquid	Y	NA
6	HS24011111-14	SAMP	01-26-2024 01:26 pm	1.00	5.00 mL	0.00 mL	U012606.D	Liquid	Y	NA
7	HS24011040-04	SAMP	01-26-2024 01:48 pm	50.00	5.00 mL	0.00 mL	U012607.D	Liquid	Y	NA
8	HS24011040-05	SAMP	01-26-2024 02:10 pm	50.00	5.00 mL	0.00 mL	U012608.D	Liquid	Y	NA
9	HS24011111-14MS	MS	01-26-2024 02:33 pm	1.00	5.00 mL	0.00 mL	U012609.D	Liquid	Y	NA
10	HS24011111-14MSD	MSD	01-26-2024 02:55 pm	1.00	5.00 mL	0.00 mL	U012610.D	Liquid	Y	NA
11	HS24011040-11	SAMP	01-26-2024 03:17 pm	50.00	5.00 mL	0.00 mL	U012611.D	Liquid	Y	NA
12	HS24011040-12	SAMP	01-26-2024 03:40 pm	50.00	5.00 mL	0.00 mL	U012612.D	Liquid	Y	NA
13	HS24011111-01	SAMP	01-26-2024 04:02 pm	1.00	5.00 mL	0.00 mL	U012613.D	Liquid	Y	NA
14	HS24011111-02	SAMP	01-26-2024 04:24 pm	1.00	5.00 mL	0.00 mL	U012614.D	Liquid	Y	NA
15	HS24011111-03	SAMP	01-26-2024 04:47 pm	1.00	5.00 mL	0.00 mL	U012615.D	Liquid	Y	NA
16	HS24011111-04	SAMP	01-26-2024 05:09 pm	1.00	5.00 mL	0.00 mL	U012616.D	Liquid	Y	NA
17	HS24011111-05	SAMP	01-26-2024 05:31 pm	1.00	5.00 mL	0.00 mL	U012617.D	Liquid	Y	NA
18	HS24011111-06	SAMP	01-26-2024 05:54 pm	1.00	5.00 mL	0.00 mL	U012618.D	Liquid	Y	NA
19	HS24011111-07	SAMP	01-26-2024 06:16 pm	1.00	5.00 mL	0.00 mL	U012619.D	Liquid	Y	NA
20	HS24011111-08	SAMP	01-26-2024 06:39 pm	1.00	5.00 mL	0.00 mL	U012620.D	Liquid	Y	NA
21	HS24011111-09	SAMP	01-26-2024 07:01 pm	1.00	5.00 mL	0.00 mL	U012621.D	Liquid	Y	NA
22	HS24011111-10	SAMP	01-26-2024 07:23 pm	50.00	5.00 mL	0.00 mL	U012622.D	Liquid	Y	NA
23	HS24011111-11	SAMP	01-26-2024 07:46 pm	1.00	5.00 mL	0.00 mL	U012623.D	Liquid	Y	NA
24	HS24011111-12	SAMP	01-26-2024 08:08 pm	1.00	5.00 mL	0.00 mL	U012624.D	Liquid	Y	NA
25	HS24011111-13	SAMP	01-26-2024 08:31 pm	1.00	5.00 mL	0.00 mL	U012625.D	Liquid	Y	NA
26	HS24011040-04	SAMP	01-26-2024 08:55 pm	250.0(	5.00 mL	0.00 mL	U012626.D	Liquid	Y	NA
27	HS24011040-05	SAMP	01-26-2024 09:20 pm	250.0(	5.00 mL	0.00 mL	U012627.D	Liquid	Y	NA
28	CCV-END	CCV	01-26-2024 09:43 pm	1.00	5.00 mL	0.00 mL	U012628.D	Liquid	Y	NA
29	BFB	TUNE	01-26-2024 11:12 pm	1.00	0.00 mL	0.00 mL	V012601.D	Liquid	Y	NA
30	CCV	CCV	01-26-2024 11:57 pm	1.00	5.00 mL	0.00 mL	V012602.D	Liquid	Y	NA
31	VLCSW-240126	LCS	01-27-2024 12:19 am	1.00	5.00 mL	0.00 mL	V012603.D	Liquid	Y	NA
32	VLCSDW-240126	LCSD	01-27-2024 12:41 am	1.00	5.00 mL	0.00 mL	V012604.D	Liquid	Y	NA
33	BLANK	SAMP	01-27-2024 01:03 am	1.00	5.00 mL	0.00 mL	V012605.D	Liquid	Y	NA
34	VBLKW-240126	MBLK	01-27-2024 01:26 am	1.00	5.00 mL	0.00 mL	V012606.D	Liquid	Y	NA
35	HS24011413-09	SAMP	01-27-2024 01:48 am	1.00	5.00 mL	0.00 mL	V012607.D	Liquid	Y	NA
36	HS24011415-09	SAMP	01-27-2024 02:10 am	1.00	5.00 mL	0.00 mL	V012608.D	Liquid	Y	NA
37	HS24011380-17	SAMP	01-27-2024 02:33 am	1.00	5.00 mL	0.00 mL	V012609.D	Liquid	Y	NA
38	HS24011413-03	SAMP	01-27-2024 02:55 am	1.00	5.00 mL	0.00 mL	V012610.D	Liquid	Y	NA
39	HS24011413-04	SAMP	01-27-2024 03:18 am	1.00	5.00 mL	0.00 mL	V012611.D	Liquid	Y	NA
40	HS24011413-05	SAMP	01-27-2024 03:40 am	1.00	5.00 mL	0.00 mL	V012612.D	Liquid	Y	NA
41	HS24011413-06	SAMP	01-27-2024 04:02 am	1.00	5.00 mL	0.00 mL	V012613.D	Liquid	Y	NA

MSVOA09 -Logbook

#	Samp ID	Type	Analyzed	DF	Init Wt/Vol	Final Vol	File ID	Matrix	Status	pH
42	HS24011413-07	SAMP	01-27-2024 04:25 am	1.00	5.00 mL	0.00 mL	V012614.D	Liquid	Y	NA
43	HS24011413-08	SAMP	01-27-2024 04:47 am	1.00	5.00 mL	0.00 mL	V012615.D	Liquid	Y	NA
44	HS24011413-10	SAMP	01-27-2024 05:10 am	1.00	5.00 mL	0.00 mL	V012616.D	Liquid	Y	NA
45	HS24011413-11	SAMP	01-27-2024 05:32 am	1.00	5.00 mL	0.00 mL	V012617.D	Liquid	Y	NA
46	HS24011413-12	SAMP	01-27-2024 05:54 am	1.00	5.00 mL	0.00 mL	V012618.D	Liquid	Y	NA
47	HS24011415-01	SAMP	01-27-2024 06:17 am	1.00	5.00 mL	0.00 mL	V012619.D	Liquid	Y	NA
48	HS24011415-02	SAMP	01-27-2024 06:39 am	1.00	5.00 mL	0.00 mL	V012620.D	Liquid	Y	NA
49	HS24011415-03	SAMP	01-27-2024 07:02 am	1.00	5.00 mL	0.00 mL	V012621.D	Liquid	Y	NA
50	HS24011415-04	SAMP	01-27-2024 07:24 am	1.00	5.00 mL	0.00 mL	V012622.D	Liquid	Y	NA
51	HS24011415-05	SAMP	01-27-2024 07:46 am	1.00	5.00 mL	0.00 mL	V012623.D	Liquid	Y	NA
52	HS24011415-06	SAMP	01-27-2024 08:09 am	1.00	5.00 mL	0.00 mL	V012624.D	Liquid	Y	NA
53	HS24011415-07	SAMP	01-27-2024 08:31 am	1.00	5.00 mL	0.00 mL	V012625.D	Liquid	Y	NA
54	HS24011415-08	SAMP	01-27-2024 08:53 am	1.00	5.00 mL	0.00 mL	V012626.D	Liquid	Y	NA
55	BLK	SAMP	01-27-2024 09:16 am	1.00	5.00 mL	0.00 mL	V012627.D	Liquid	Y	NA
56	BLK	SAMP	01-27-2024 09:38 am	1.00	5.00 mL	0.00 mL	V012628.D	Liquid	Y	NA

MSVOA09 -Logbook

Batch: 58638 **Analyst:** Firat Tastan

Date: 01-29-2024 **Reviewer:**

Method: 8260 **Laboratory:** Houston

Comments:

#	Samp ID	Type	Analyzed	DF	Init Wt/Vol	Final Vol	File ID	Matrix	Status	pH
1	BFB	TUNE	01-29-2024 08:25 am	1.00	0.00 mL	0.00 mL	U012901.D	Liquid	Y	NA
2	CCV	CCV	01-29-2024 09:10 am	1.00	5.00 mL	0.00 mL	U012902.D	Liquid	Y	NA
3	VLCSW-240126	LCS	01-29-2024 09:32 am	1.00	5.00 mL	0.00 mL	U012903.D	Liquid	Y	NA
4	BLANK	SAMP	01-29-2024 09:54 am	1.00	5.00 mL	0.00 mL	U012904.D	Liquid	Y	NA
5	VBLKW-240126	MBLK	01-29-2024 10:17 am	1.00	5.00 mL	0.00 mL	U012905.D	Liquid	Y	NA
6	HS24011111-10	SAMP	01-29-2024 10:39 am	1.00	5.00 mL	0.00 mL	U012906.D	Liquid	Y	NA
7	HS24011111-07	SAMP	01-29-2024 11:02 am	1.00	5.00 mL	0.00 mL	U012907.D	Liquid	Y	NA
8	HS24011111-09	SAMP	01-29-2024 11:24 am	1.00	5.00 mL	0.00 mL	U012908.D	Liquid	Y	NA
9	HS24011111-11	SAMP	01-29-2024 11:46 am	1.00	5.00 mL	0.00 mL	U012909.D	Liquid	Y	NA
10	HS24011111-12	SAMP	01-29-2024 12:09 pm	1.00	5.00 mL	0.00 mL	U012910.D	Liquid	Y	NA
11	HS24011111-13	SAMP	01-29-2024 12:31 pm	1.00	5.00 mL	0.00 mL	U012911.D	Liquid	Y	NA
12	HS24011111-02	SAMP	01-29-2024 12:53 pm	10.00	5.00 mL	0.00 mL	U012912.D	Liquid	Y	NA
13	HS24011111-03	SAMP	01-29-2024 01:16 pm	50.00	5.00 mL	0.00 mL	U012913.D	Liquid	Y	NA
14	HS24011111-04	SAMP	01-29-2024 01:38 pm	50.00	5.00 mL	0.00 mL	U012914.D	Liquid	Y	NA
15	HS24011111-05	SAMP	01-29-2024 02:01 pm	10.00	5.00 mL	0.00 mL	U012915.D	Liquid	Y	NA
16	HS24011111-08	SAMP	01-29-2024 02:23 pm	100.0(	5.00 mL	0.00 mL	U012916.D	Liquid	Y	NA
17	HS24011111-08MS	MS	01-29-2024 02:45 pm	100.0(	5.00 mL	0.00 mL	U012917.D	Liquid	Y	NA
18	HS24011111-08MSD	MSD	01-29-2024 03:07 pm	100.0(	5.00 mL	0.00 mL	U012918.D	Liquid	Y	NA
19	CCV-END	CCV	01-29-2024 03:30 pm	1.00	5.00 mL	0.00 mL	U012919.D	Liquid	Y	NA
20	HS24011464-05	SAMP	01-29-2024 03:52 pm	1.00	5.00 mL	0.00 mL	U012920.D	Liquid	Y	NA
21	HS24011460-09	SAMP	01-29-2024 04:14 pm	1.00	5.00 mL	0.00 mL	U012921.D	Liquid	Y	NA
22	HS24011413-01	SAMP	01-29-2024 04:37 pm	1.00	5.00 mL	0.00 mL	U012922.D	Liquid	Y	NA
23	HS24011413-02	SAMP	01-29-2024 04:59 pm	1.00	5.00 mL	0.00 mL	U012923.D	Liquid	Y	NA
24	BLK	SAMP	01-29-2024 05:22 pm	1.00	5.00 mL	0.00 mL	U012924.D	Liquid	Y	NA
25	BLK	SAMP	01-29-2024 05:44 pm	1.00	5.00 mL	0.00 mL	U012925.D	Liquid	Y	NA

right solutions.
right partner.

RawData

Volatiles by EPA Volatiles Organics by Method 8260C

Workorder

HS24011111

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

02/02/2024

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

Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120601.D Page 1
Report Date: 07-Dec-2023 10:08

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120601.D
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 06-DEC-2023 11:14
Operator : PC Inst ID: VOA9.i
Smp Info : BFB;BFB;3;;BFB
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\bfb.m
Meth Date : 27-Jan-2023 08:08 apoluri Quant Type: ISTD
Cal Date : 30-MAR-2018 18:09 Cal File: U033003.d
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: NAHSTW7051

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	2.000	Injection Volume
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/l)		
RT	EXP RT	REL RT	MASS	RESPONSE			TARGET RANGE	RATIO
1 bfb							CAS #: 460-00-4	
9.197	9.180	(0.000)	95	70800			0.00- 100.00	100.00
9.197	9.180	(0.000)	50	12933			15.00- 40.00	18.27
9.197	9.180	(0.000)	75	34640			30.00- 60.00	48.93
9.197	9.180	(0.000)	96	4799			5.00- 9.00	6.78
9.197	9.180	(0.000)	173	0	0.0	0.0	0.00- 2.00	0.00
9.197	9.180	(0.000)	174	62608			50.00- 0.00	88.43
9.197	9.180	(0.000)	175	5227			5.00- 9.00	8.35
9.197	9.180	(0.000)	176	62160			95.00- 101.00	99.28
9.197	9.180	(0.000)	177	3938			5.00- 9.00	6.34

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	18.27
75	30.00 - 60.00% of mass 95	48.93
96	5.00 - 9.00% of mass 95	6.78
173	Less than 2.00% of mass 174	0.00 (0.00)
174	Greater than 50.00% of mass 95	88.43
175	5.00 - 9.00% of mass 174	7.38 (8.35)
176	95.00 - 101.00% of mass 174	87.80 (99.28)
177	5.00 - 9.00% of mass 176	5.56 (6.34)

Data File: U120601.D
Spectrum: Scan 2294 (9.19)
Location of Maximum: 95.10
Number of points: 109

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.10	672	64.00	389	95.10	70800	143.00	651
37.10	3196	65.00	563	96.10	4799	143.80	56
38.10	3144	65.90	92	97.00	209	144.90	127
39.10	1362	67.20	312	104.00	312	145.80	165
40.00	711	68.10	6883	104.60	133	147.00	102
41.20	184	69.00	7438	105.90	338	147.90	161
42.00	128	70.00	506	107.00	124	148.90	82
42.80	102	70.90	89	108.00	52	149.90	109
44.00	800	72.00	494	110.30	59	151.90	72
45.10	619	73.10	2968	111.90	52	153.00	96
45.80	184	74.10	12043	113.00	61	153.90	108
47.10	1050	75.10	34640	114.90	108	155.00	258
48.00	459	76.10	3228	116.00	230	158.80	121
49.10	2929	77.10	500	116.90	767	160.70	72
50.10	12933	78.00	528	117.90	289	169.60	61
51.10	3950	79.00	1680	118.90	454	171.00	127
52.10	292	79.90	570	123.90	81	171.90	699
52.80	140	80.90	1880	126.80	90	174.00	62608
53.90	84	81.90	317	127.90	321	175.00	5227
55.10	167	83.30	77	128.90	112	176.00	62160
56.00	930	86.10	145	129.80	309	177.00	3938
57.00	1888	87.00	3421	130.80	118	177.90	135
58.00	106	88.00	2987	132.10	62	218.50	58
58.80	66	90.30	87	134.90	141	262.20	52
60.10	741	91.00	213	136.90	95	328.30	63
61.00	3325	92.10	1915	140.20	85		
62.10	2880	93.00	3307	140.90	647		
63.10	2110	94.10	8223	141.90	133		

Data File: \\NAHSTWS005\Target\chem\voa9.i\u231206.b\u120601.d Page 1

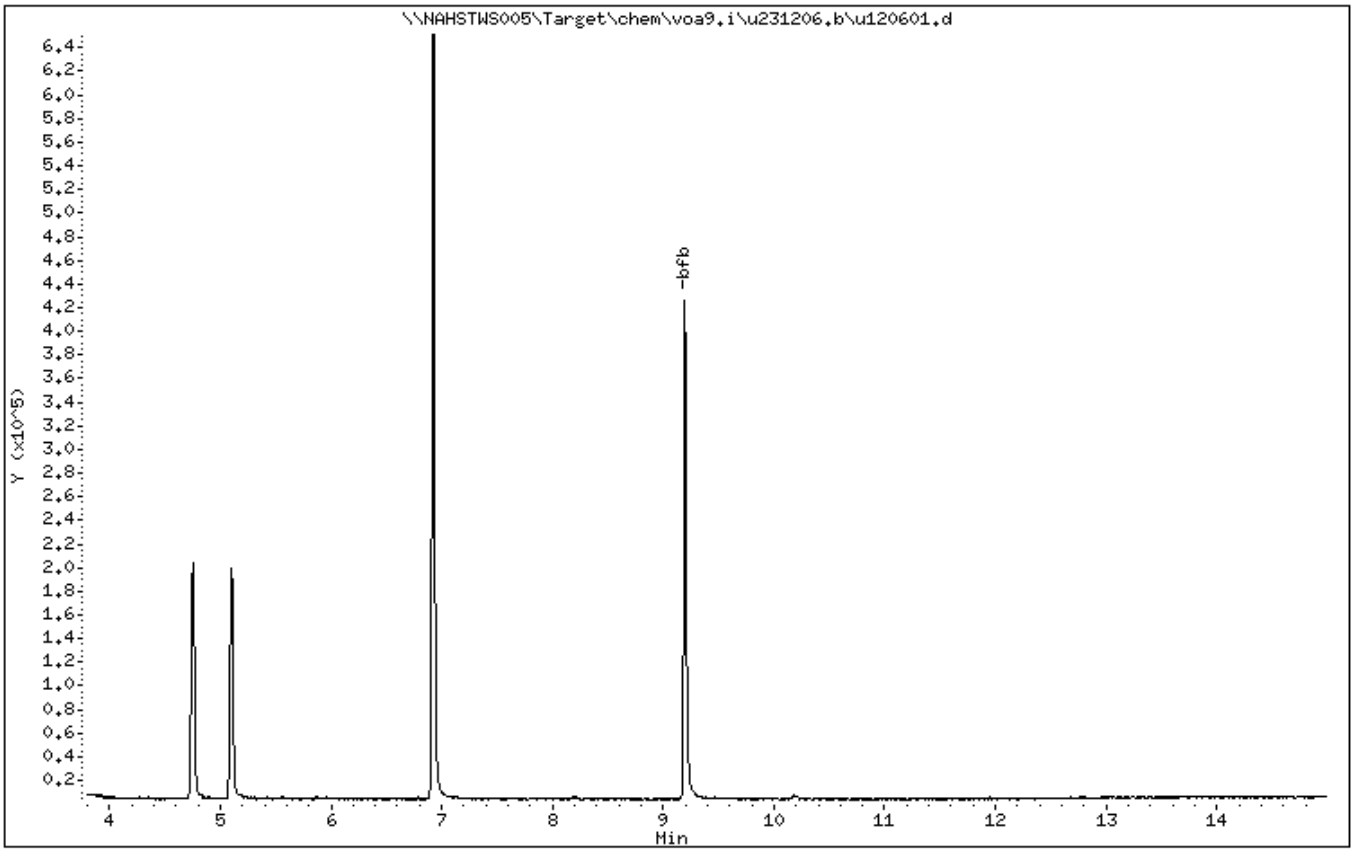
Date : 06-DEC-2023 11:14

Client ID: BFB Instrument: VOA9.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0 Operator: PC

Column phase: DB624 Column diameter: 0.25



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Inj Date : 06-DEC-2023 11:14
InstruID : VOA9.i
LabSampID : BFB

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120602.D Page 1
Report Date: 12-Dec-2023 09:43

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120602.D
Lab Smp Id: VSTD000.25 Client Smp ID: VSTD000.25
Inj Date : 06-DEC-2023 11:36
Operator : PC Inst ID: VOA9.i
Smp Info : VSTD000.25;VSTD000.25;1;1;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\8260C.m
Meth Date : 12-Dec-2023 09:43 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 11:36 Cal File: U120602.D
Als bottle: 2 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V9.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
*	1 Pentafluorobenzene	168	4.815	4.815	(1.000)	385732	50.0000	
	2 Dichlorodifluoromethane	85	1.164	1.164	(0.242)	431	0.25000	1.00(M)
	3 Chloromethane	50	1.303	1.303	(0.271)	2053	0.25000	0.46
	5 Vinyl Chloride	62	1.378	1.378	(0.286)	867	0.25000	0.20
	6 Bromomethane	94	1.625	1.625	(0.338)	1498	0.25000	
	8 Trichlorofluoromethane	101	1.899	1.899	(0.394)	1165	0.25000	0.21
	10 Acetone	43	2.416	2.416	(0.502)	3178	0.50000	
	16 Acrylonitrile	53	3.068	3.068	(0.637)	1135	0.50000	0.75
	17 Methylene Chloride	84	2.799	2.799	(0.581)	2929	0.25000	0.51
	18 Methyl tert-butyl ether	73	3.076	3.076	(0.639)	3667	0.25000	0.34
	19 Carbon Disulfide	76	2.525	2.525	(0.524)	5260	0.50000	0.60
	20 trans-1,2-Dichloroethene	96	3.061	3.061	(0.636)	1120	0.25000	0.31
	24 2-Butanone	43	4.283	4.283	(0.889)	936	0.50000	0.49
	27 cis-1,2-Dichloroethene	96	4.197	4.197	(0.872)	1520	0.25000	0.31
	28 Chloroform	83	4.572	4.572	(0.949)	2329	0.25000	0.29
	29 Bromochloromethane	128	4.474	4.474	(0.929)	609	0.25000	0.24
$	30 Dibromofluoromethane	113	4.748	4.748	(0.986)	1739	0.25000	
	31 1,1,1-Trichloroethane	97	4.748	4.748	(0.986)	1675	0.25000	0.27
	32 1,1-Dichloropropene	75	4.924	4.924	(0.887)	1316	0.25000	0.25
	33 1,2-Dichloroethane	62	5.183	5.183	(0.933)	1828	0.25000	0.30

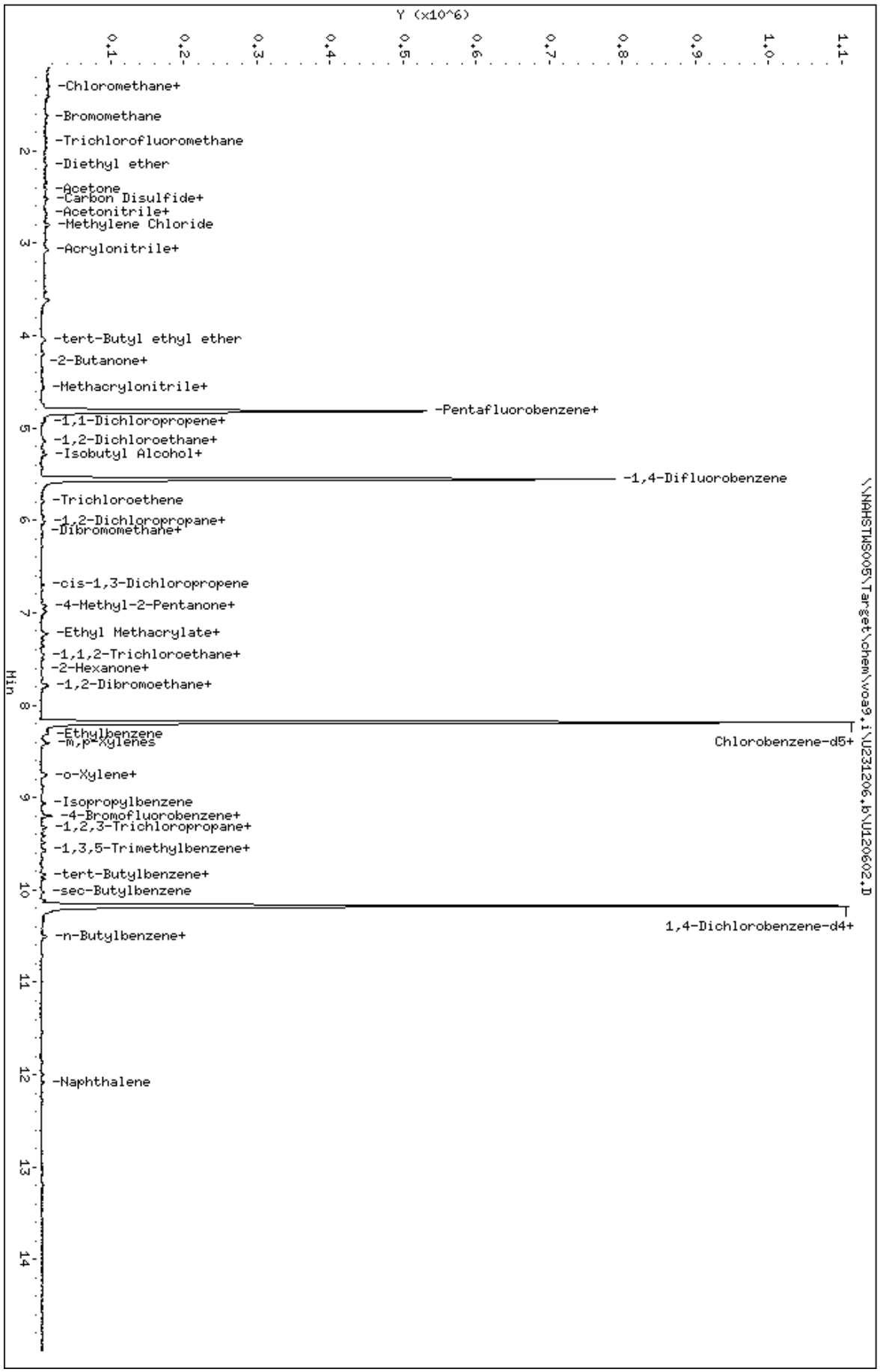
	34	Carbon Tetrachloride	117	4.913	4.913 (0.885)	1572	0.25000	0.31
$	35	1,2-Dichloroethane-d4	65	5.104	5.104 (1.060)	2115	0.25000	(T)

Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120602.D Page 2
Report Date: 12-Dec-2023 09:43

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
*	36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	611357	50.0000	
	37 Benzene	78	5.141	5.141	(0.926)	4276	0.25000	0.25
	38 Trichloroethene	130	5.786	5.786	(1.042)	1217	0.25000	0.26
	42 1,2-Dichloropropane	63	6.011	6.011	(1.082)	1844	0.25000	0.41
	44 Dibromomethane	93	6.120	6.120	(1.102)	775	0.25000	0.26
	45 4-Methyl-2-Pentanone	43	6.858	6.858	(0.838)	2194	0.50000	0.13
	46 cis-1,3-Dichloropropene	75	6.693	6.693	(1.205)	1656	0.25000	1.71
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	612188	50.0000	
$	48 Toluene-d8	98	6.926	6.926	(0.846)	5221	0.25000	0.37
	50 Toluene	91	6.982	6.982	(0.853)	4306	0.25000	0.25
	52 2-Hexanone	43	7.604	7.604	(0.929)	1088	0.50000	0.35
	53 1,1,2-Trichloroethane	83	7.361	7.361	(0.899)	1038	0.25000	
	54 1,3-Dichloropropane	76	7.499	7.499	(0.916)	2254	0.25000	0.29
	55 Dibromochloromethane	129	7.694	7.694	(0.940)	1150	0.25000	0.25
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	1235	0.25000	0.29
	58 1-Chlorohexane	55	8.185	8.185	(1.474)	5798	0.25000	1.69
	59 Chlorobenzene	112	8.212	8.212	(1.003)	3583	0.25000	0.28
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	921	0.25000	0.21
	61 Ethylbenzene	106	8.309	8.309	(1.015)	1260	0.25000	0.21
	62 m,p-Xylenes	106	8.410	8.410	(1.027)	3411	0.50000	0.48
	63 o-Xylene	106	8.748	8.748	(1.069)	1710	0.25000	0.23
	64 Styrene	104	8.763	8.763	(1.071)	2054	0.25000	0.17
	67 Isopropylbenzene	105	9.063	9.063	(1.107)	3678	0.25000	0.21
$	69 4-Bromofluorobenzene	95	9.198	9.198	(1.124)	4792	0.25000	
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	309166	50.0000	
	71 1,2,3-Trichloropropane	75	9.363	9.363	(0.920)	1327	0.25000	0.22
	73 n-Propylbenzene	91	9.415	9.415	(0.926)	3390	0.25000	0.18
	74 Bromobenzene	156	9.321	9.321	(0.916)	1380	0.25000	0.26
	75 1,3,5-Trimethylbenzene	105	9.565	9.565	(0.940)	2587	0.25000	0.20
	76 2-Chlorotoluene	91	9.486	9.486	(0.933)	3123	0.25000	0.25
	77 4-Chlorotoluene	91	9.580	9.580	(0.942)	2503	0.25000	0.18
	78 tert-Butylbenzene	119	9.839	9.839	(0.967)	2572	0.25000	0.22
	79 1,2,4-Trimethylbenzene	105	9.880	9.880	(0.971)	2489	0.25000	0.19
	81 sec-Butylbenzene	105	10.022	10.022	(0.985)	2815	0.25000	0.18
	82 p-Isopropyltoluene	119	10.146	10.146	(0.997)	2942	0.25000	0.22
	83 1,3-Dichlorobenzene	146	10.116	10.116	(0.994)	2076	0.25000	0.22
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	2623	0.25000	0.26
	87 n-Butylbenzene	91	10.495	10.495	(1.032)	2309	0.25000	0.21
	88 1,2-Dichlorobenzene	146	10.510	10.510	(1.033)	2334	0.25000	0.25
	92 Naphthalene	128	12.080	12.080	(1.188)	2335	0.25000	0.16
M	94 1,2-Dichloroethylene (total)	96				2640	0.50000	
M	95 Xylenes (total)	106				5121	0.75000	
	135 1,4-Dioxane	88	6.180	6.180	(1.283)	310	5.00000	5.06(M)
	141 Cyclohexane	56	4.819	4.819	(1.001)	8134	0.25000	1.46
	147 Methylcyclohexane	55	5.955	5.955	(1.072)	1890	0.25000	0.20

QC Flag Legend

T - Target compound detected outside RT window.
M - Compound response manually integrated.



Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120602.D
Date : 06-DEC-2023 11:36
Client ID: VSTD000.25
Sample Info: VSTD000.25;VSTD000.25;1;1;
Purge Volume: 5.0
Column phase: DB624

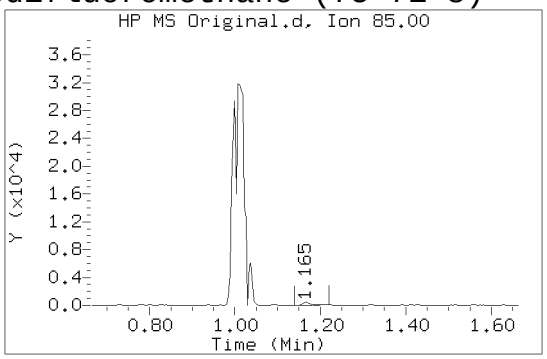
Instrument: VOA9.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120602.D
Inj Date : 06-DEC-2023 11:36
InstruID : VOA9.i
LabSampID : VSTD000.25

Dichlorodifluoromethane (75-71-8)

Reason Code:

BEFORE
MASS
85
AREA
431
HEIGHT
467
11-Dec-2023
17:18
linh
pham



AFTER
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12-Dec-2023
09:43
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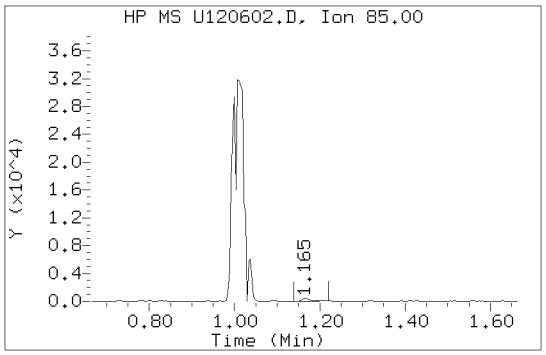
pham



BEFORE
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AREA
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HEIGHT
30487
11-Dec-2023
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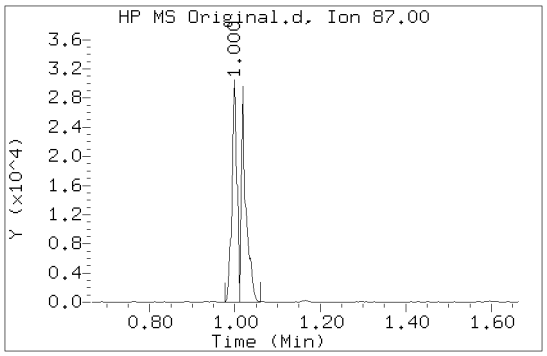

AFTER
MASS
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AREA
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12-Dec-2023
09:43
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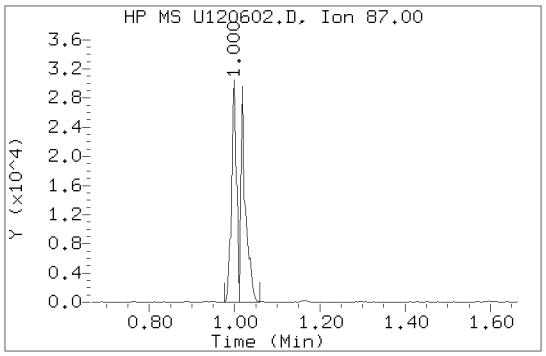
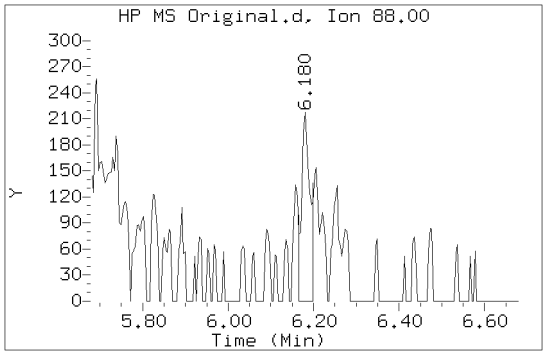


1,4-Dioxane ()

Reason Code:

BEFORE
MASS
88
AREA
310
HEIGHT
218
11-Dec-2023
17:18
linh
pham



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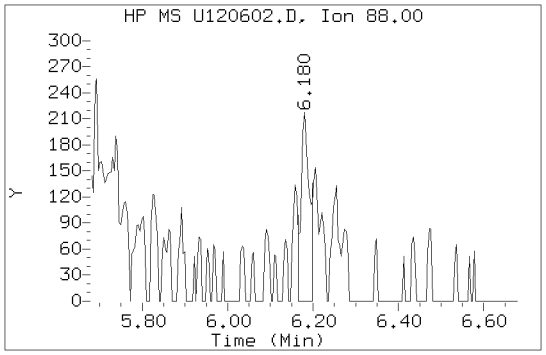

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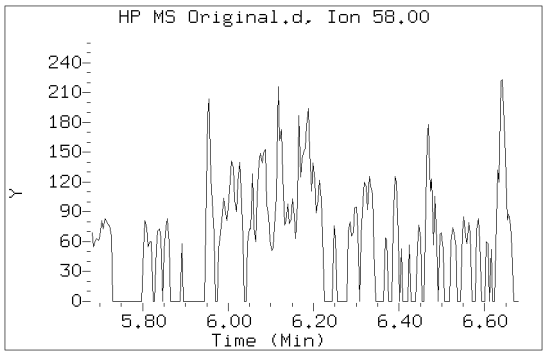

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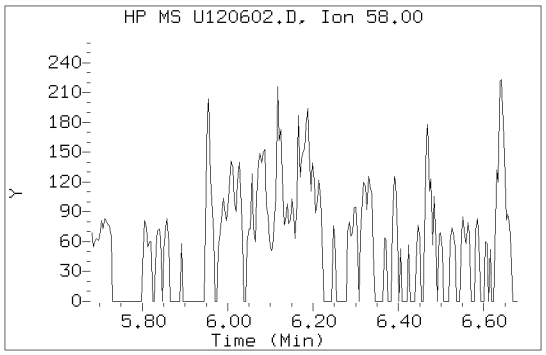

Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120603.D Page 1
Report Date: 12-Dec-2023 09:43

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120603.D
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Inj Date : 06-DEC-2023 11:58
Operator : PC Inst ID: VOA9.i
Smp Info : VSTD000.5;VSTD000.5;1;2;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\8260C.m
Meth Date : 12-Dec-2023 09:43 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 11:36 Cal File: U120602.D
Als bottle: 3 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V9.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1	Pentafluorobenzene	168	4.819	4.819	(1.000)	351518	50.0000	
2	Dichlorodifluoromethane	85	1.164	1.164	(0.242)	1356	0.50000	1.33(M)
3	Chloromethane	50	1.303	1.303	(0.270)	2136	0.50000	0.52(M)
5	Vinyl Chloride	62	1.378	1.378	(0.286)	1954	0.50000	0.50
6	Bromomethane	94	1.625	1.625	(0.337)	1430	0.50000	(M)
7	Chloroethane	64	1.704	1.704	(0.354)	1259	0.50000	0.48(M)
8	Trichlorofluoromethane	101	1.899	1.899	(0.394)	2224	0.50000	0.45
9	Acrolein	56	2.277	2.277	(0.473)	221	1.00000	1.10(M)
10	Acetone	43	2.412	2.412	(0.501)	3182	1.00000	(M)
11	1,1-Dichloroethene	96	2.337	2.337	(0.485)	1472	0.50000	0.54
15	Iodomethane	142	2.472	2.472	(0.513)	1035	1.00000	2.61(T)
16	Acrylonitrile	53	3.072	3.072	(0.638)	1506	1.00000	1.09
17	Methylene Chloride	84	2.798	2.798	(0.581)	2348	0.50000	0.42(M)
18	Methyl tert-butyl ether	73	3.087	3.087	(0.641)	4926	0.50000	0.50
19	Carbon Disulfide	76	2.525	2.525	(0.524)	8445	1.00000	1.05
20	trans-1,2-Dichloroethene	96	3.061	3.061	(0.635)	1948	0.50000	0.60(M)
21	Vinyl Acetate	43	3.616	3.616	(0.750)	8811	1.00000	0.89
22	1,1-Dichloroethane	63	3.522	3.522	(0.731)	3728	0.50000	0.56(TM)
24	2-Butanone	43	4.283	4.283	(0.889)	2099	1.00000	1.21(M)
26	2,2-Dichloropropane	77	4.185	4.185	(0.869)	2637	0.50000	0.56

27 cis-1,2-Dichloroethene	96	4.200	4.200 (0.872)	2397	0.50000	0.55
28 Chloroform	83	4.575	4.575 (0.949)	4075	0.50000	0.56

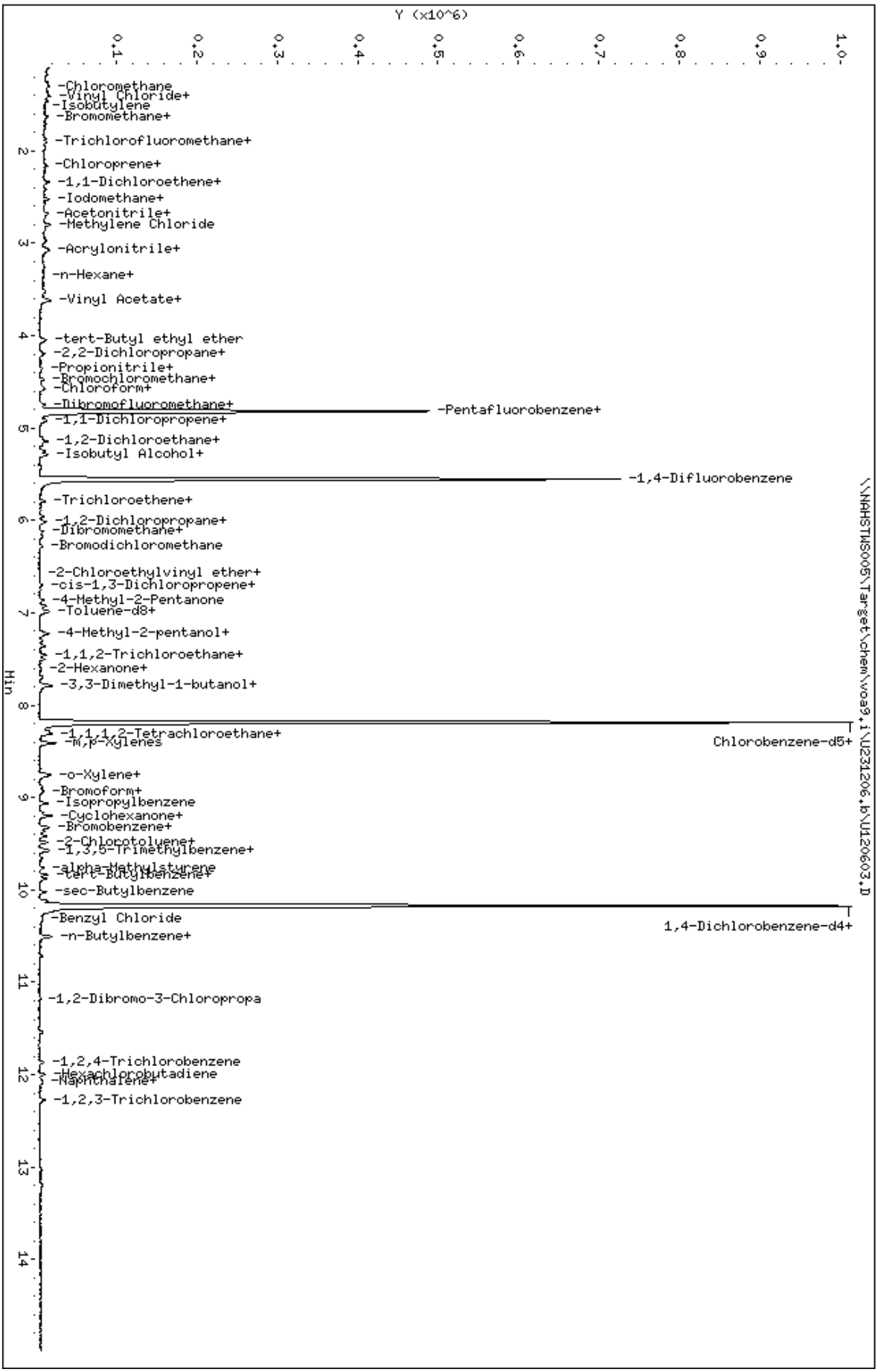
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	29 Bromochloromethane	128	4.470	4.470	(0.928)	1194	0.50000	0.53
$	30 Dibromofluoromethane	113	4.748	4.748	(0.985)	2084	0.50000	
	31 1,1,1-Trichloroethane	97	4.740	4.740	(0.984)	2774	0.50000	0.50
	32 1,1-Dichloropropene	75	4.924	4.924	(0.887)	2513	0.50000	0.53(M)
	33 1,2-Dichloroethane	62	5.179	5.179	(0.933)	3284	0.50000	0.59
	34 Carbon Tetrachloride	117	4.916	4.916	(0.885)	2241	0.50000	0.48(M)
$	35 1,2-Dichloroethane-d4	65	5.108	5.108	(1.060)	2783	0.50000	0.14(M)
*	36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	564889	50.0000	
	37 Benzene	78	5.145	5.145	(0.926)	8471	0.50000	0.55
	38 Trichloroethene	130	5.790	5.790	(1.043)	2145	0.50000	0.50
	39 Bromodichloromethane	83	6.281	6.281	(1.131)	2561	0.50000	0.50(M)
	41 2-Chloroethylvinyl ether	63	6.577	6.577	(1.184)	81	1.00000	(M)
	42 1,2-Dichloropropane	63	6.011	6.011	(1.082)	2365	0.50000	0.57
	44 Dibromomethane	93	6.120	6.120	(1.102)	1509	0.50000	0.56
	45 4-Methyl-2-Pentanone	43	6.858	6.858	(0.838)	3489	1.00000	0.51
	46 cis-1,3-Dichloropropene	75	6.697	6.697	(1.206)	2180	0.50000	1.80
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	556790	50.0000	
$	48 Toluene-d8	98	6.926	6.926	(0.846)	5743	0.50000	0.44
	50 Toluene	91	6.982	6.982	(0.853)	7719	0.50000	0.49
	51 trans-1,3-Dichloropropene	75	7.203	7.203	(1.297)	2266	0.50000	2.17(M)
	52 2-Hexanone	43	7.604	7.604	(0.929)	2124	1.00000	0.75
	53 1,1,2-Trichloroethane	83	7.361	7.361	(0.899)	2006	0.50000	
	54 1,3-Dichloropropane	76	7.499	7.499	(0.916)	3681	0.50000	0.53
	55 Dibromochloromethane	129	7.694	7.694	(0.940)	1891	0.50000	0.45
	56 Tetrachloroethene	164	7.458	7.458	(0.911)	1618	0.50000	0.48
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	2016	0.50000	0.52(M)
	58 1-Chlorohexane	55	8.197	8.197	(1.476)	1630	0.50000	0.51(M)
	59 Chlorobenzene	112	8.212	8.212	(1.003)	6178	0.50000	0.54
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	1886	0.50000	0.47
	61 Ethylbenzene	106	8.309	8.309	(1.015)	2673	0.50000	0.50(M)
	62 m,p-Xylenes	106	8.410	8.410	(1.027)	5585	1.00000	0.87
	63 o-Xylene	106	8.748	8.748	(1.069)	3316	0.50000	0.50
	64 Styrene	104	8.770	8.770	(1.071)	4395	0.50000	0.40(M)
	66 Bromoform	173	8.920	8.920	(1.090)	1087	0.50000	1.44(T)
	67 Isopropylbenzene	105	9.063	9.063	(1.107)	6642	0.50000	0.41
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	3009	0.50000	(M)
$	69 4-Bromofluorobenzene	95	9.197	9.197	(1.124)	4583	0.50000	(M)
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	283463	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.920)	3019	0.50000	0.56(M)
	73 n-Propylbenzene	91	9.415	9.415	(0.926)	6934	0.50000	0.41(M)
	74 Bromobenzene	156	9.321	9.321	(0.916)	2492	0.50000	0.52
	75 1,3,5-Trimethylbenzene	105	9.565	9.565	(0.940)	4609	0.50000	0.38
	76 2-Chlorotoluene	91	9.486	9.486	(0.933)	5799	0.50000	0.51
	77 4-Chlorotoluene	91	9.580	9.580	(0.942)	5828	0.50000	0.45
	78 tert-Butylbenzene	119	9.835	9.835	(0.967)	4379	0.50000	0.41
	79 1,2,4-Trimethylbenzene	105	9.880	9.880	(0.971)	5368	0.50000	0.45(M)
	81 sec-Butylbenzene	105	10.022	10.022	(0.985)	6329	0.50000	0.46(M)
	82 p-Isopropyltoluene	119	10.150	10.150	(0.998)	5327	0.50000	0.44(M)
	83 1,3-Dichlorobenzene	146	10.120	10.120	(0.995)	4068	0.50000	0.48(M)
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	4850	0.50000	0.54
	87 n-Butylbenzene	91	10.498	10.498	(1.032)	4072	0.50000	0.40
	88 1,2-Dichlorobenzene	146	10.510	10.510	(1.033)	4403	0.50000	0.51

89	1,2-Dibromo-3-Chloropropane	155	11.184	11.184 (1.099)	428	0.50000	2.61(M)
90	1,2,4-Trichlorobenzene	180	11.867	11.867 (1.167)	2624	0.50000	0.50

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	91 Hexachlorobutadiene	225	11.994	11.994	(1.179)	989	0.50000	0.47
	92 Naphthalene	128	12.076	12.076	(1.187)	5275	0.50000	0.41(M)
	93 1,2,3-Trichlorobenzene	180	12.271	12.271	(1.206)	2777	0.50000	0.52(M)
M	94 1,2-Dichloroethylene (total)	96				4345	1.00000	
M	95 Xylenes (total)	106				8901	1.50000	
	131 Methyl Acrylate	55	4.407	4.407	(0.914)	2589	0.50000	0.56(aM)
	135 1,4-Dioxane	88	6.176	6.176	(1.282)	631	10.0000	11.31(M)
	141 Cyclohexane	56	4.804	4.804	(0.997)	2806	0.50000	0.55(M)
	138 Freon TF	101	2.341	2.341	(0.486)	1239	0.50000	0.48
	140 1,3-Butadiene	54	1.408	1.408	(0.292)	1449	0.50000	0.41
	147 Methylcyclohexane	55	5.959	5.959	(1.073)	3447	0.50000	0.41
	146 Methyl Acetate	43	2.723	2.723	(0.565)	1832	0.50000	0.52(M)

QC Flag Legend

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



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Client ID: VSTD000,5
Sample Info: VSTD000,5;VSTD000,5;1;2;
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9,i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120603.D
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

Dichlorodifluoromethane (75-71-8)

Reason Code:

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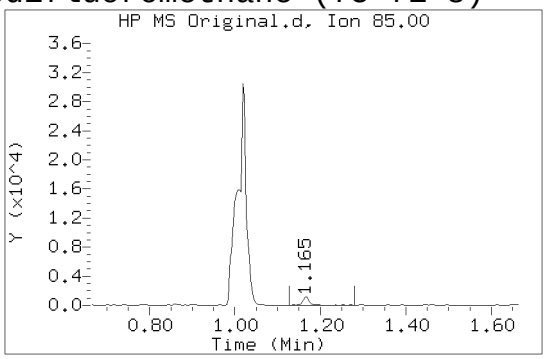
06-Dec-2023
23:21



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HEIGHT
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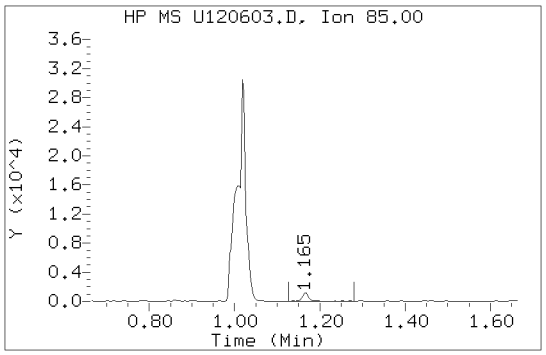
12-Dec-2023
09:43



BEFORE
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HEIGHT
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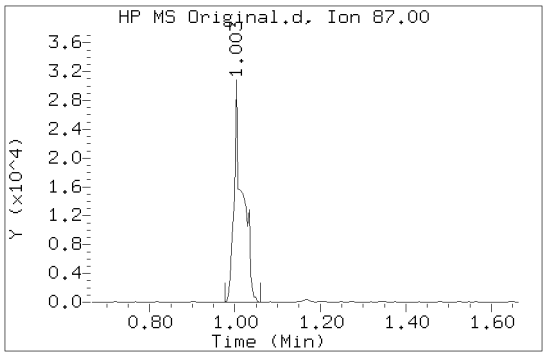
06-Dec-2023
23:21



AFTER
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AREA
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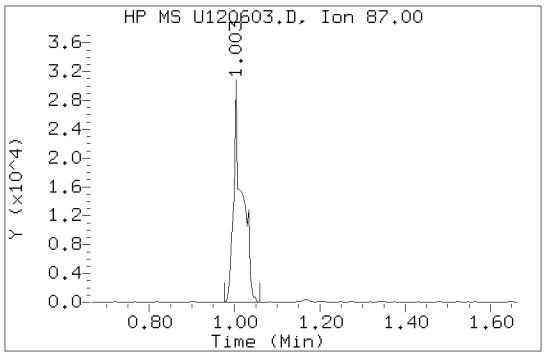
12-Dec-2023
09:43



Chloromethane (74-87-3)

Reason Code:

BEFORE
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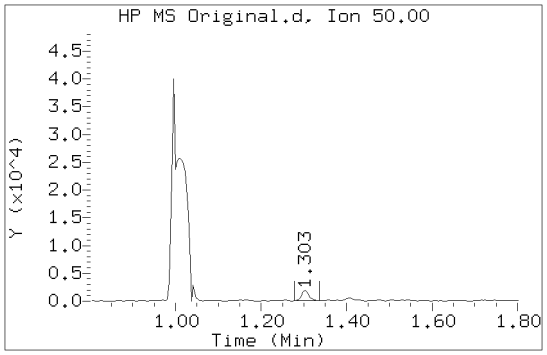
HEIGHT
1441
06-Dec-2023
23:21



AFTER
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AREA
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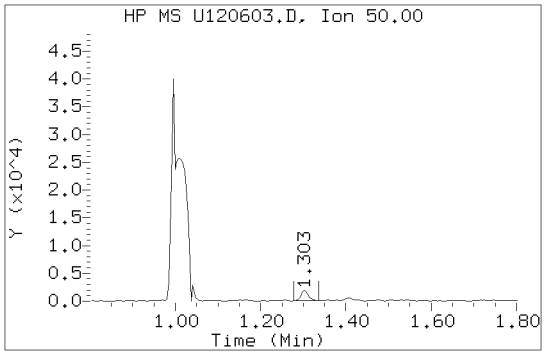
12-Dec-2023
09:43



BEFORE
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AREA
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HEIGHT
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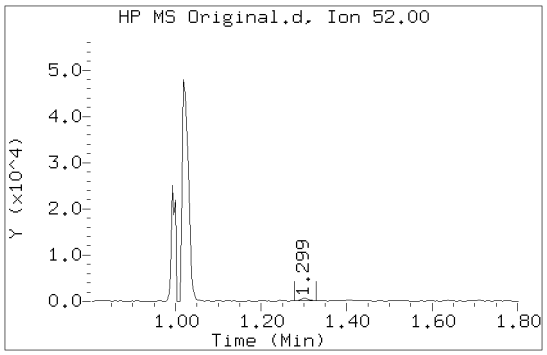
06-Dec-2023
23:21



AFTER
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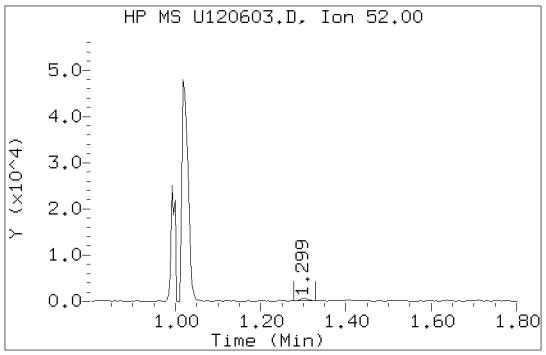
12-Dec-2023
09:43



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InstruID : VOA9.i
LabSampID : VSTD000.5

Bromomethane (74-83-9)

Reason Code:

BEFORE
MASS
101
AREA
2224
HEIGHT
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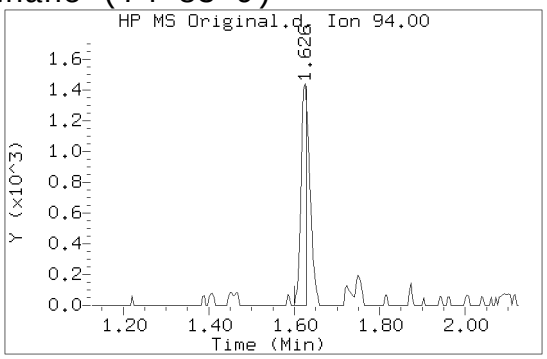
06-Dec-2023
23:21



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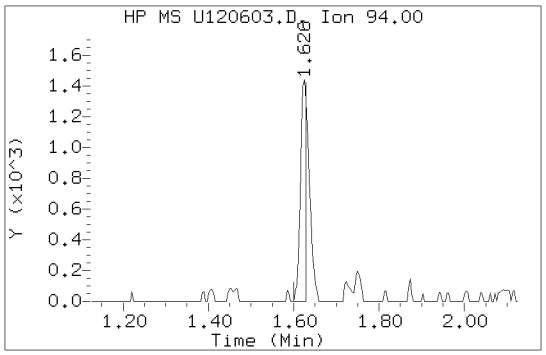

BEFORE
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AREA
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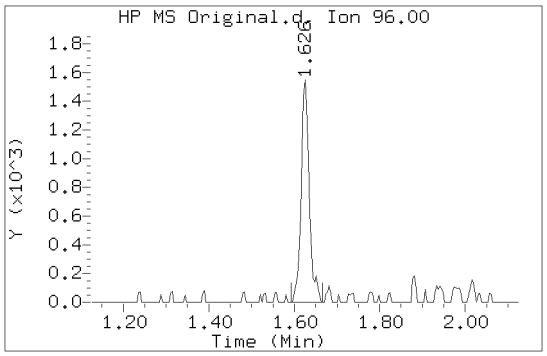
06-Dec-2023
23:21



AFTER
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12-Dec-2023
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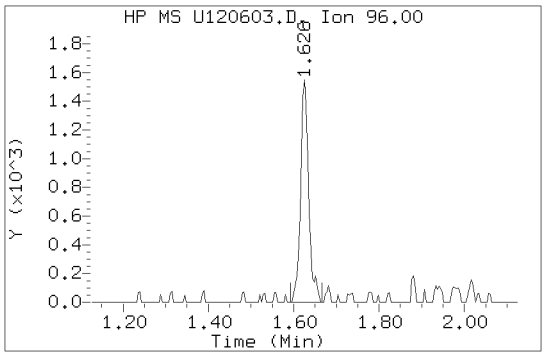

Chloroethane (75-00-3)

Reason Code:

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AREA
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HEIGHT
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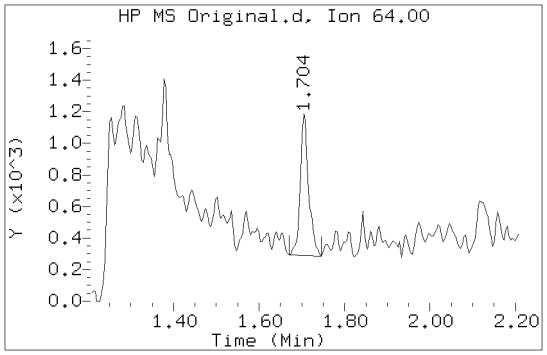
06-Dec-2023
23:21



AFTER
MASS
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AREA
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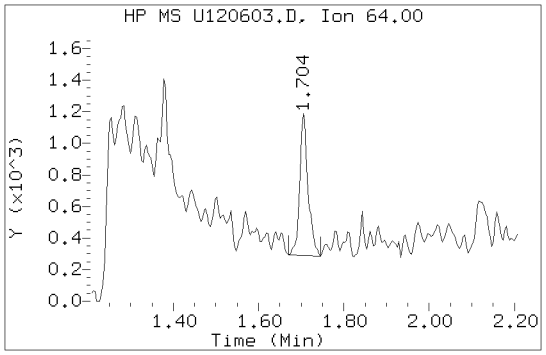
HEIGHT
899
12-Dec-2023
09:43



BEFORE
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AREA
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HEIGHT
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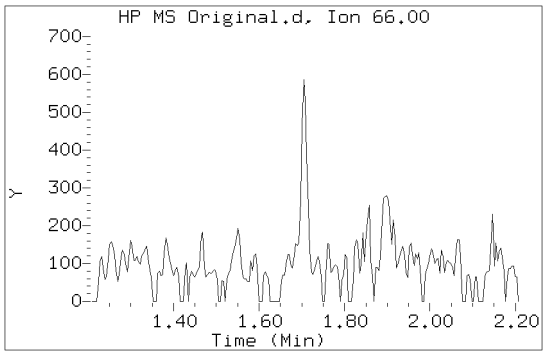
06-Dec-2023
23:21



AFTER
MASS
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AREA
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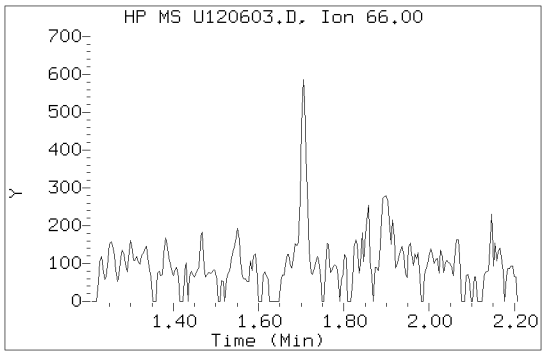
HEIGHT
0
12-Dec-2023
09:43



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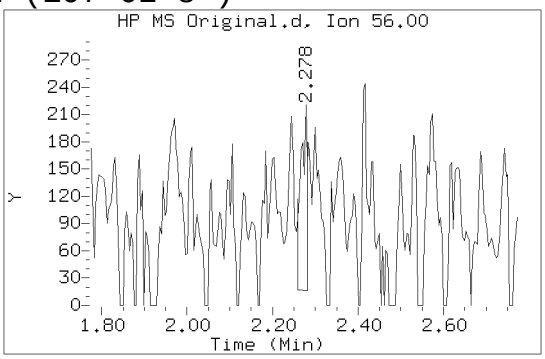
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

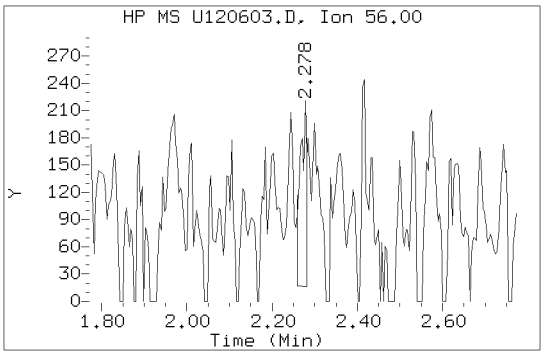
Acrolein (107-02-8)

Reason Code:

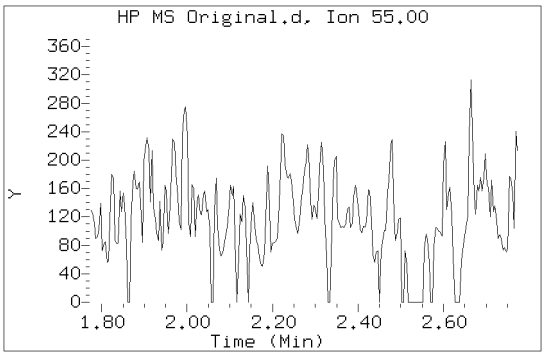
BEFORE
MASS
142
AREA
1035
HEIGHT
550
06-Dec-2023
23:21



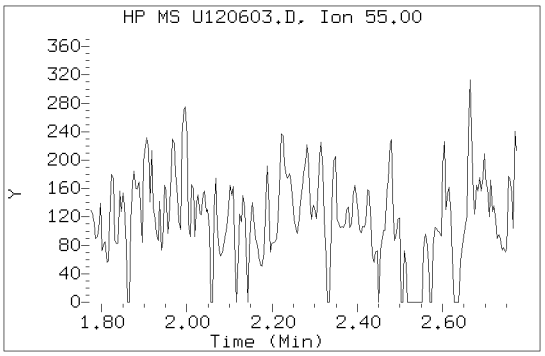
AFTER
MASS
56
AREA
221
HEIGHT
204
12-Dec-2023
09:43



BEFORE
MASS
127
AREA
625
HEIGHT
328
06-Dec-2023
23:21



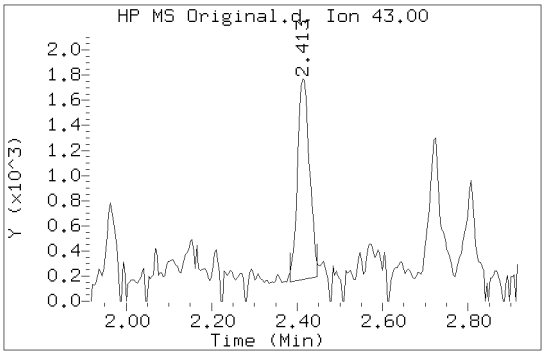
AFTER
MASS
55
AREA
0
HEIGHT
0
12-Dec-2023
09:43



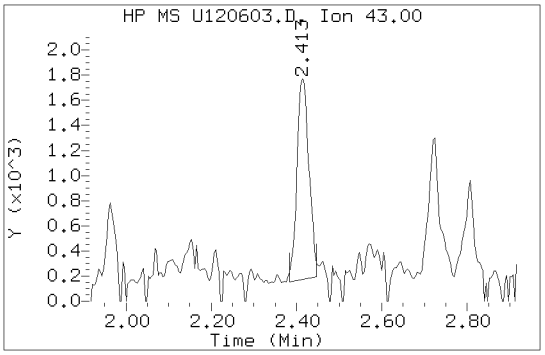
Acetone (67-64-1)

Reason Code:

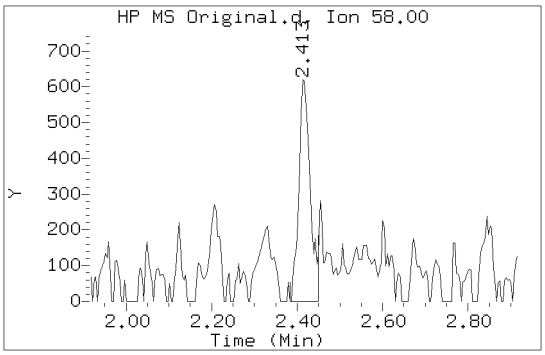
BEFORE
MASS
53
AREA
1506
HEIGHT
573
06-Dec-2023
23:21



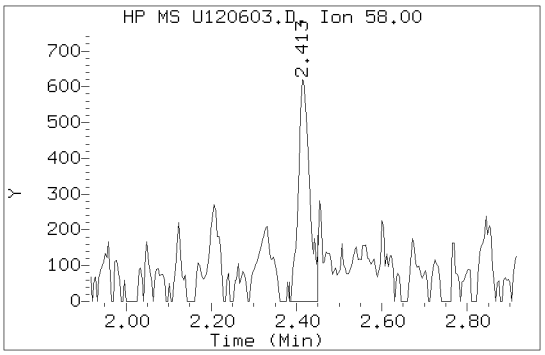
AFTER
MASS
43
AREA
3182
HEIGHT
1596
12-Dec-2023
09:43



BEFORE
MASS
52
AREA
1399
HEIGHT
626
06-Dec-2023
23:21



AFTER
MASS
58
AREA
1171
HEIGHT
620
12-Dec-2023
09:43



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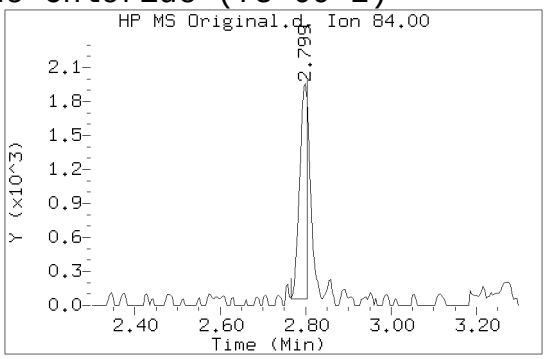
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

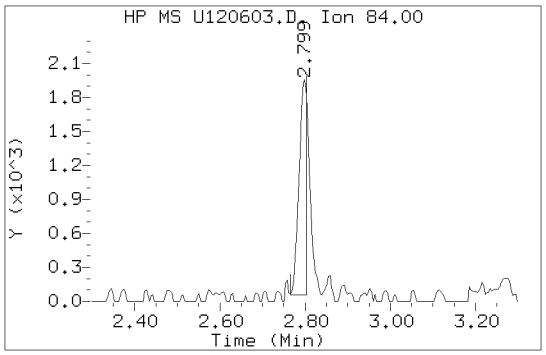
Methylene Chloride (75-09-2)

Reason Code:

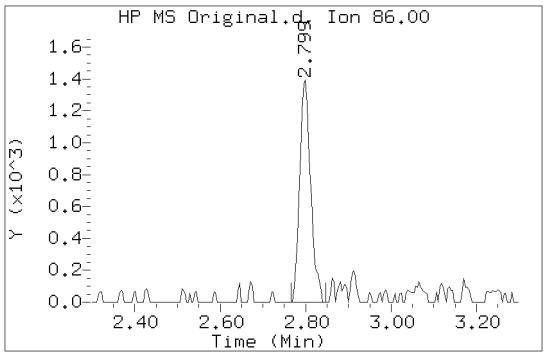
BEFORE
MASS
96
AREA
1948
HEIGHT
1118
06-Dec-2023
23:21



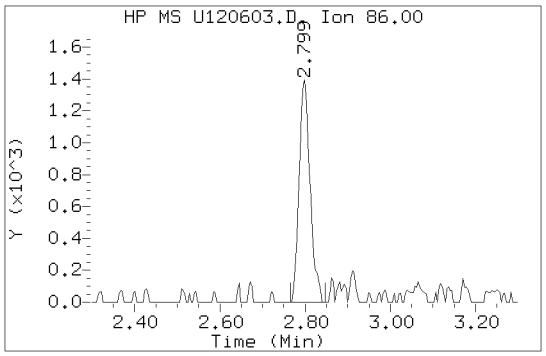
AFTER
MASS
84
AREA
2348
HEIGHT
1904
12-Dec-2023
09:43



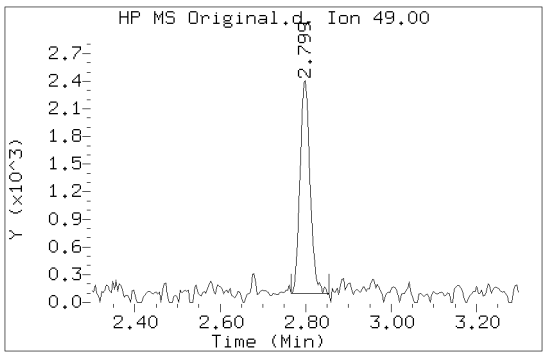
BEFORE
MASS
61
AREA
2182
HEIGHT
1143
06-Dec-2023
23:21



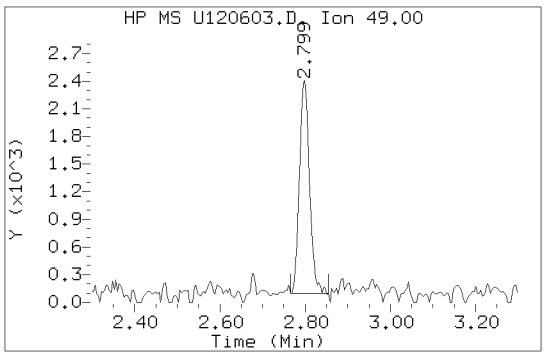
AFTER
MASS
86
AREA
2533
HEIGHT
1394
12-Dec-2023
09:43



BEFORE
MASS
98
AREA
1022
HEIGHT
586
06-Dec-2023
23:21



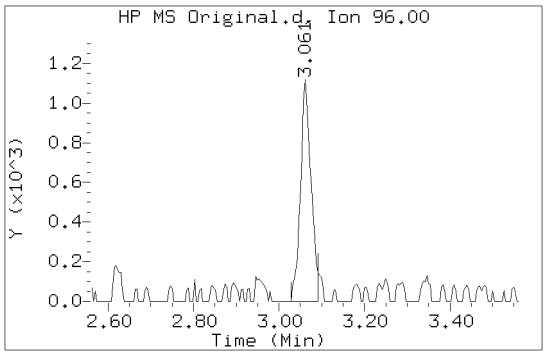
AFTER
MASS
49
AREA
3879
HEIGHT
2311
12-Dec-2023
09:43



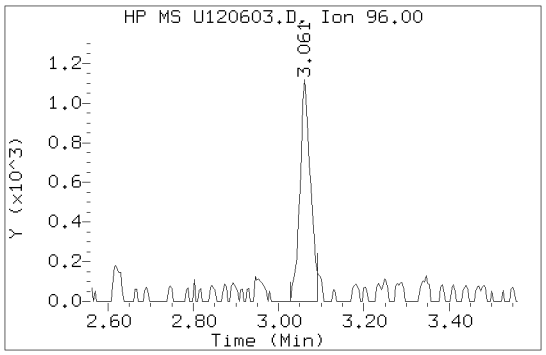
trans-1,2-Dichloroethene (156-60-5)

Reason Code:

BEFORE
MASS
77
AREA
2637
HEIGHT
1068
06-Dec-2023
23:21



AFTER
MASS
96
AREA
1948
HEIGHT
1118
12-Dec-2023
09:43



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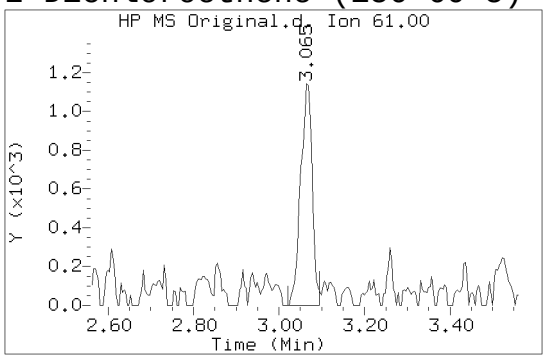
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

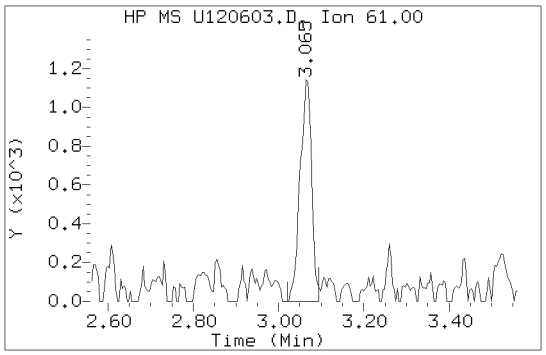
trans-1,2-Dichloroethene (156-60-5)

Reason Code:

BEFORE
MASS
97
AREA
675
HEIGHT
294
06-Dec-2023
23:21



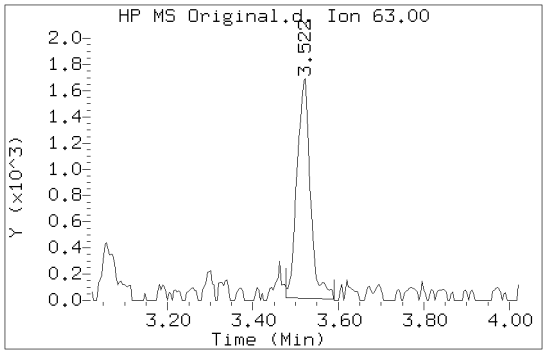
AFTER
MASS
61
AREA
2182
HEIGHT
1143
12-Dec-2023
09:43



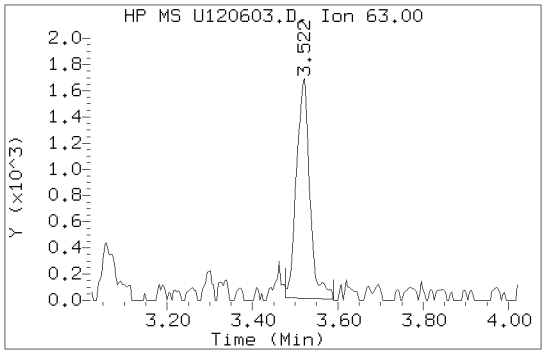
1,1-Dichloroethane (75-34-3)

Reason Code:

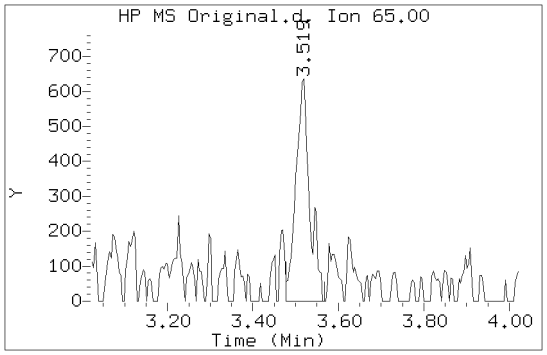
BEFORE
MASS
83
AREA
4075
HEIGHT
1886
06-Dec-2023
23:21



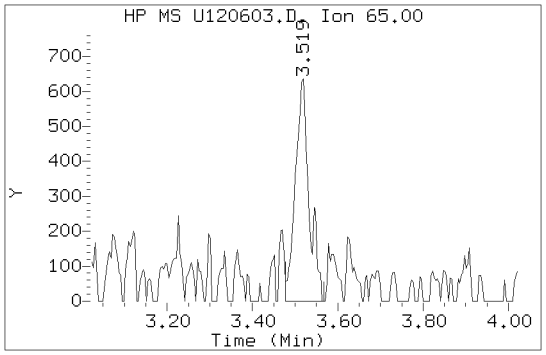
AFTER
MASS
63
AREA
3728
HEIGHT
1675
12-Dec-2023
09:43



BEFORE
MASS
85
AREA
2646
HEIGHT
1265
06-Dec-2023
23:21



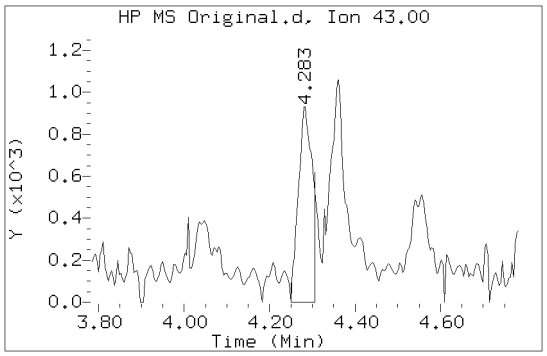
AFTER
MASS
65
AREA
1459
HEIGHT
636
12-Dec-2023
09:43



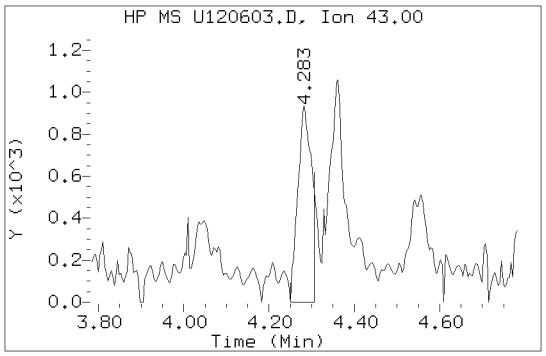
2-Butanone (78-93-3)

Reason Code:

BEFORE
MASS
128
AREA
1194
HEIGHT
533
06-Dec-2023
23:21



AFTER
MASS
43
AREA
2099
HEIGHT
932
12-Dec-2023
09:43



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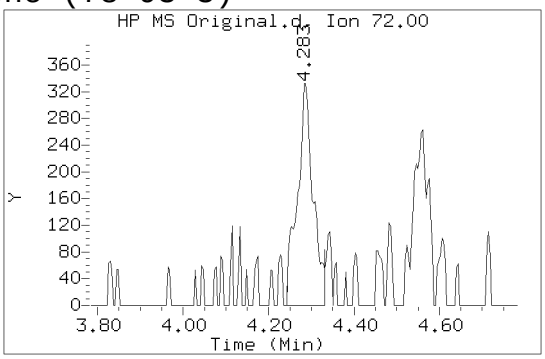
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

2-Butanone (78-93-3)

Reason Code:

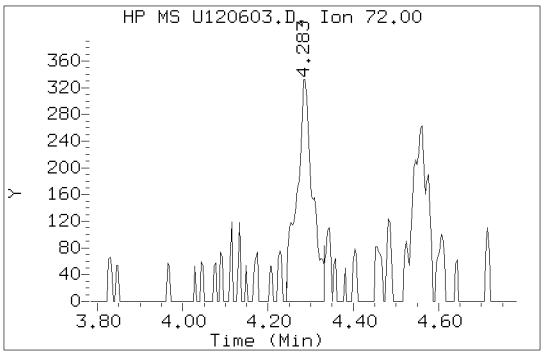
BEFORE

MASS
49
AREA
2419
HEIGHT
1056
06-Dec-2023
23:21



AFTER

MASS
72
AREA
868
HEIGHT
332
12-Dec-2023
09:43

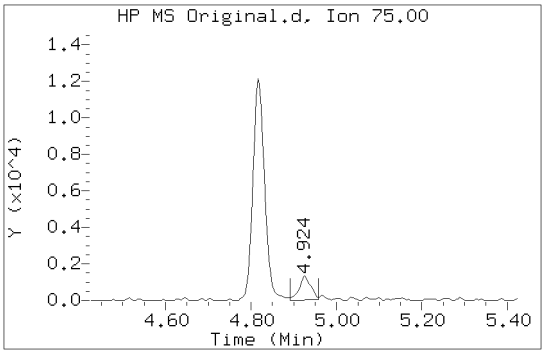


1,1-Dichloropropene (563-58-6)

Reason Code:

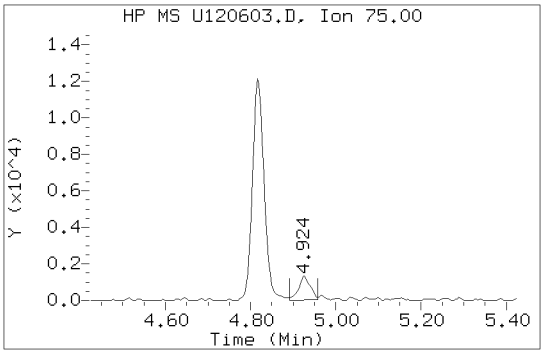
BEFORE

MASS
78
AREA
8471
HEIGHT
4567
06-Dec-2023
23:21



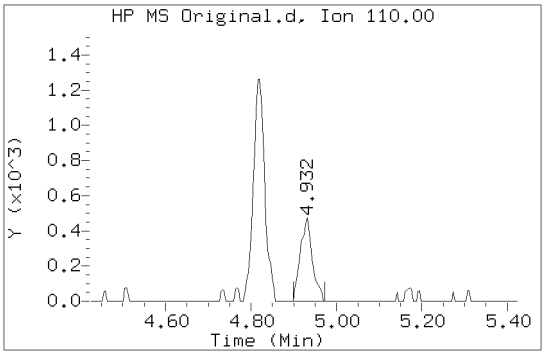
AFTER

MASS
75
AREA
2513
HEIGHT
1297
12-Dec-2023
09:43



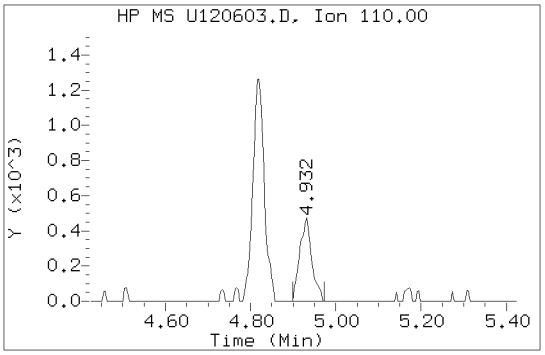
BEFORE

MASS
77
AREA
2577
HEIGHT
1507
06-Dec-2023
23:21



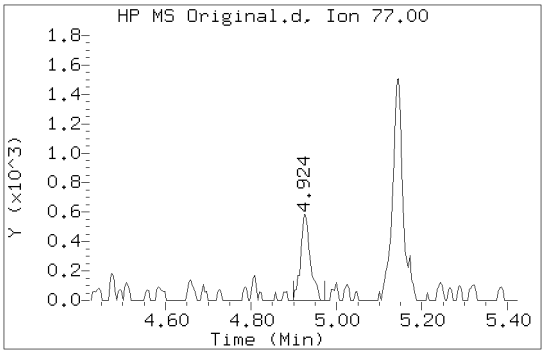
AFTER

MASS
110
AREA
946
HEIGHT
475
12-Dec-2023
09:43



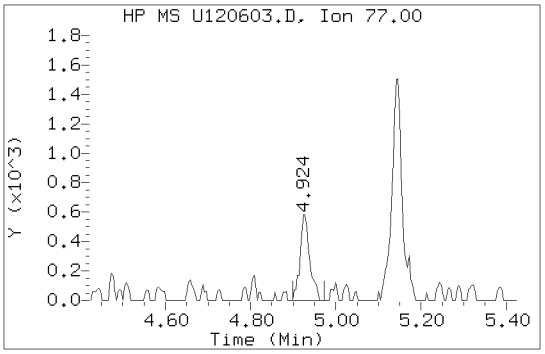
BEFORE

MASS
51
AREA
1201
HEIGHT
702
06-Dec-2023
23:21



AFTER

MASS
77
AREA
945
HEIGHT
584
12-Dec-2023
09:43



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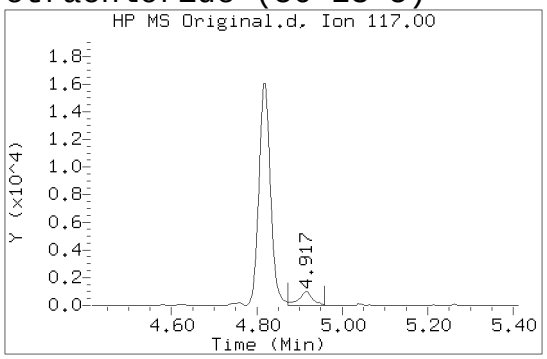
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

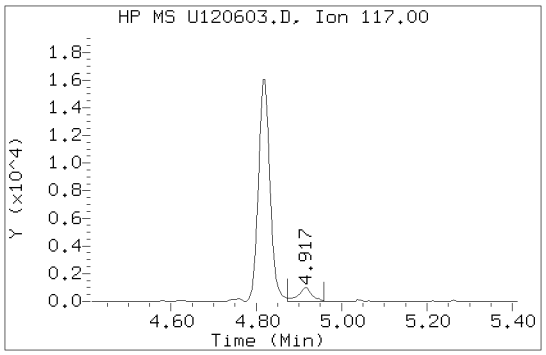
Carbon Tetrachloride (56-23-5)

Reason Code:

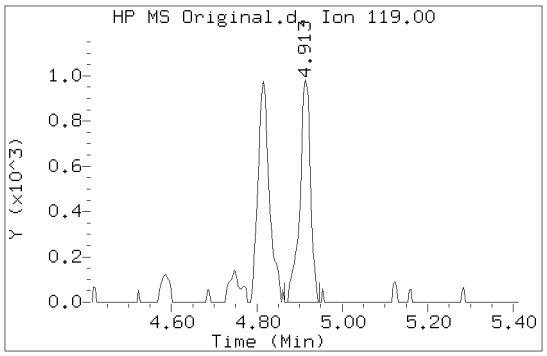
BEFORE
MASS
83
AREA
2561
HEIGHT
1370
06-Dec-2023
23:21



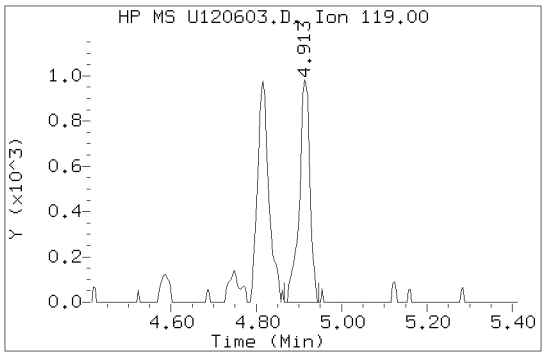
AFTER
MASS
117
AREA
2241
HEIGHT
1012
12-Dec-2023
09:43



BEFORE
MASS
85
AREA
0
HEIGHT
0
06-Dec-2023
23:21



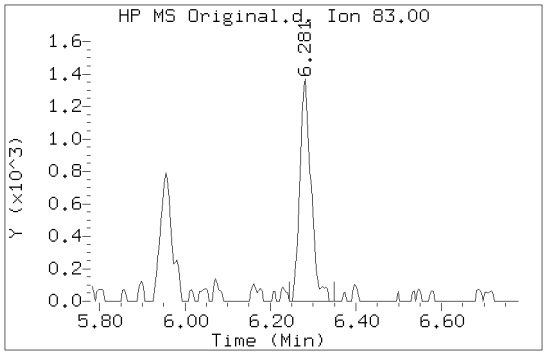
AFTER
MASS
119
AREA
1738
HEIGHT
982
12-Dec-2023
09:43



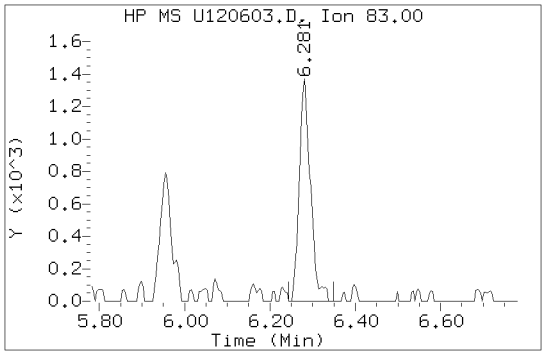
Bromodichloromethane (75-27-4)

Reason Code:

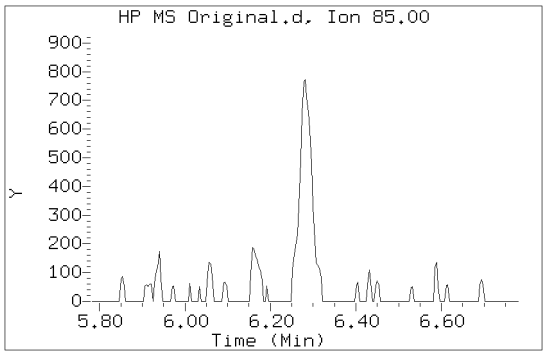
BEFORE
MASS
75
AREA
2180
HEIGHT
1317
06-Dec-2023
23:21



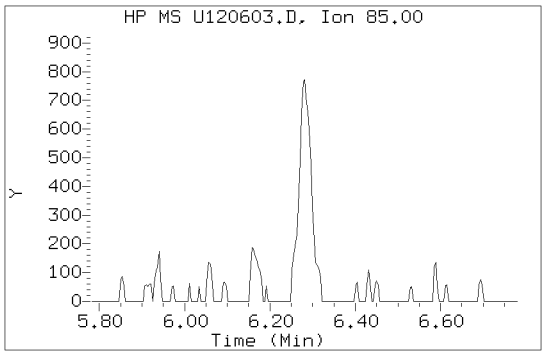
AFTER
MASS
83
AREA
2561
HEIGHT
1370
12-Dec-2023
09:43



BEFORE
MASS
77
AREA
894
HEIGHT
610
06-Dec-2023
23:21



AFTER
MASS
85
AREA
0
HEIGHT
0
12-Dec-2023
09:43



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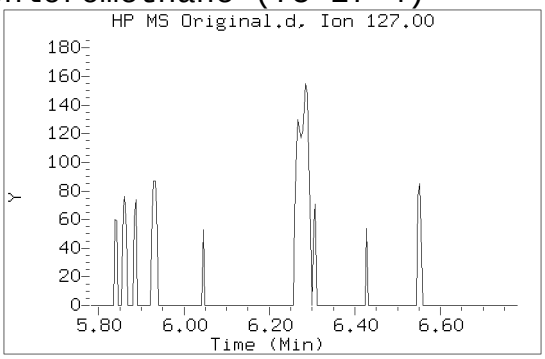
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

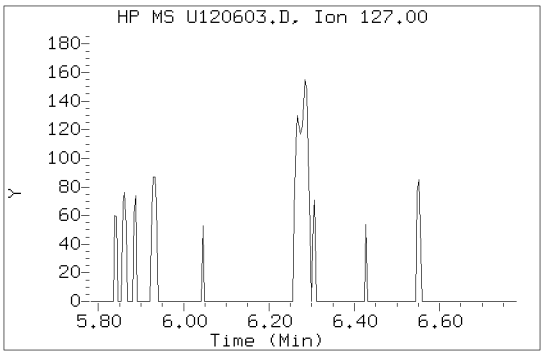
Bromodichloromethane (75-27-4)

Reason Code:

BEFORE
MASS
39
AREA
987
HEIGHT
625
06-Dec-2023
23:21



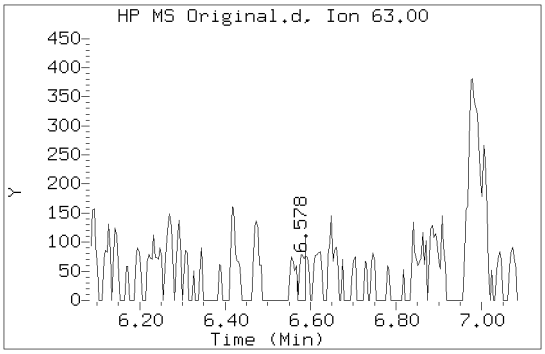
AFTER
MASS
127
AREA
0
HEIGHT
0
12-Dec-2023
09:43



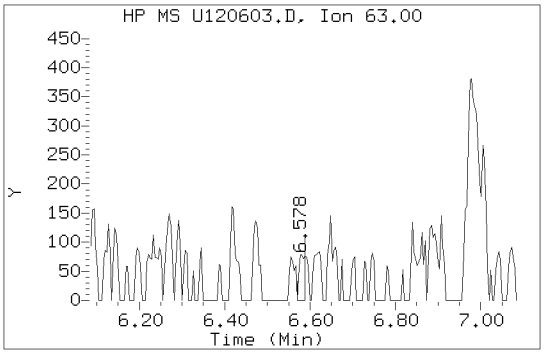
2-Chloroethylvinyl ether (110-75-8)

Reason Code:

BEFORE
MASS
117
AREA
556790
HEIGHT
357308
06-Dec-2023
23:21



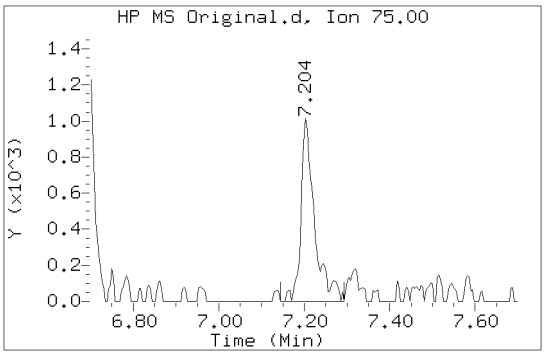
AFTER
MASS
63
AREA
81
HEIGHT
78
12-Dec-2023
09:43



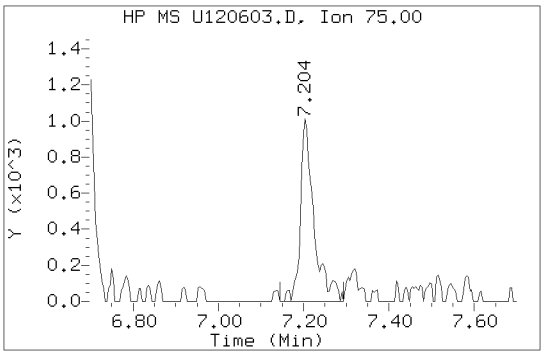
trans-1,3-Dichloropropene (10061-02-6)

Reason Code:

BEFORE
MASS
43
AREA
8811
HEIGHT
3579
06-Dec-2023
23:21



AFTER
MASS
75
AREA
2266
HEIGHT
1013
12-Dec-2023
09:43



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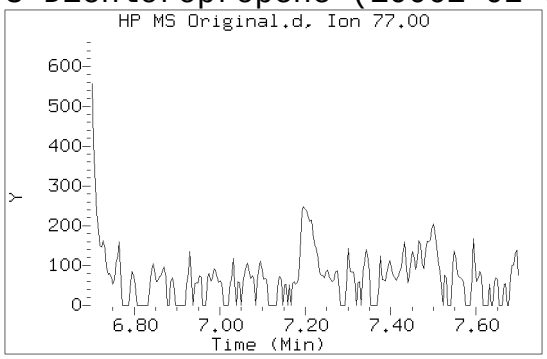
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

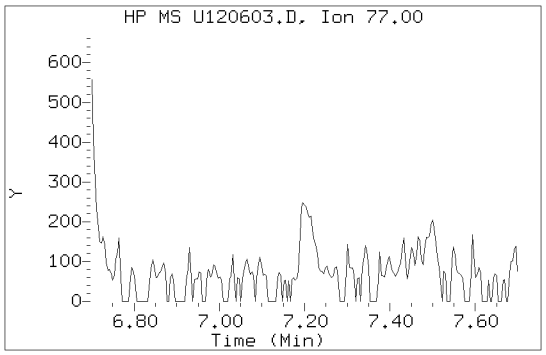
trans-1,3-Dichloropropene (10061-02-6)

Reason Code:

BEFORE
MASS
86
AREA
811
HEIGHT
369
06-Dec-2023
23:21



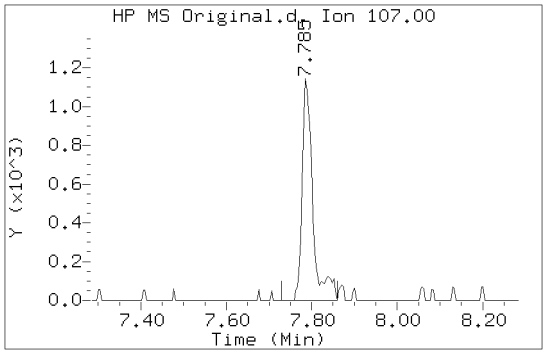
AFTER
MASS
77
AREA
0
HEIGHT
0
12-Dec-2023
09:43



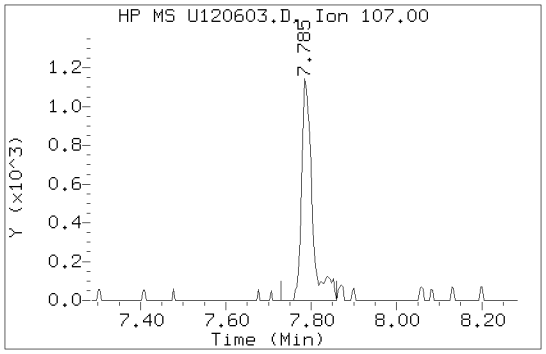
1,2-Dibromoethane (106-93-4)

Reason Code:

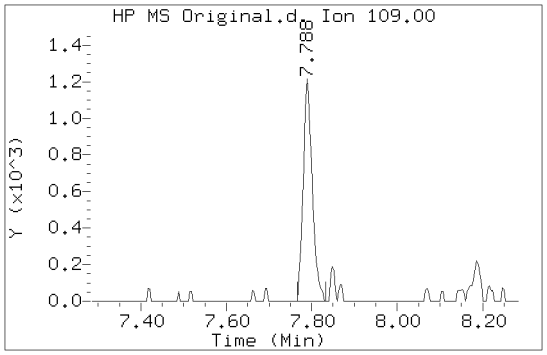
BEFORE
MASS
112
AREA
6178
HEIGHT
3872
06-Dec-2023
23:21



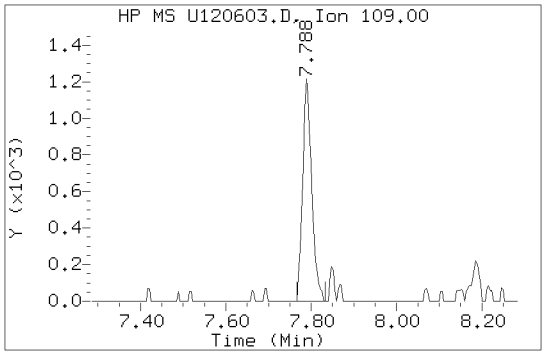
AFTER
MASS
107
AREA
2016
HEIGHT
1144
12-Dec-2023
09:43



BEFORE
MASS
77
AREA
8323
HEIGHT
3106
06-Dec-2023
23:21



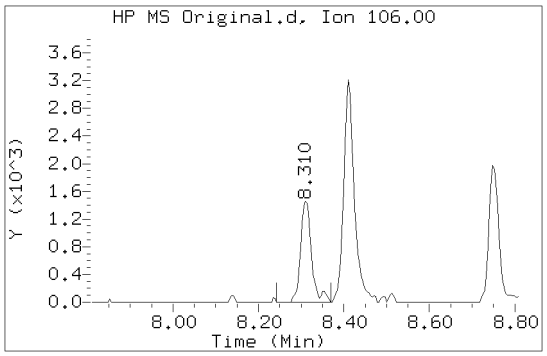
AFTER
MASS
109
AREA
1841
HEIGHT
1216
12-Dec-2023
09:43



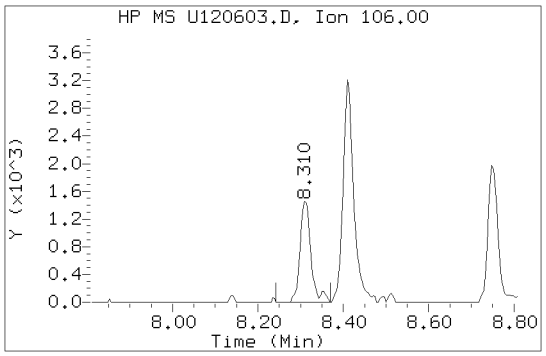
Ethylbenzene (100-41-4)

Reason Code:

BEFORE
MASS
106
AREA
5585
HEIGHT
3210
06-Dec-2023
23:21



AFTER
MASS
106
AREA
2673
HEIGHT
1461
12-Dec-2023
09:43



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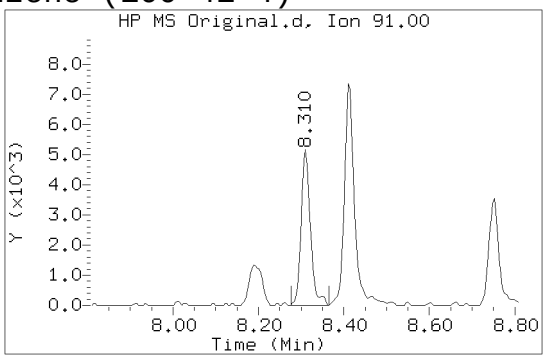
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

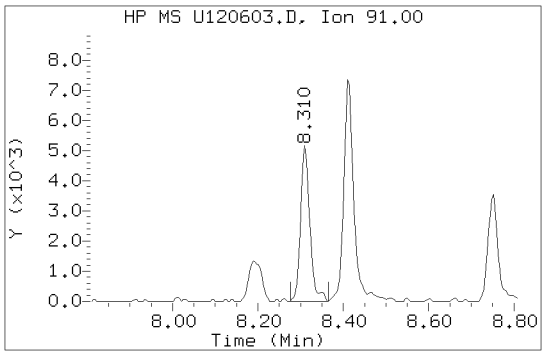
Ethylbenzene (100-41-4)

Reason Code:

BEFORE
MASS
91
AREA
11651
HEIGHT
7349
06-Dec-2023
23:21



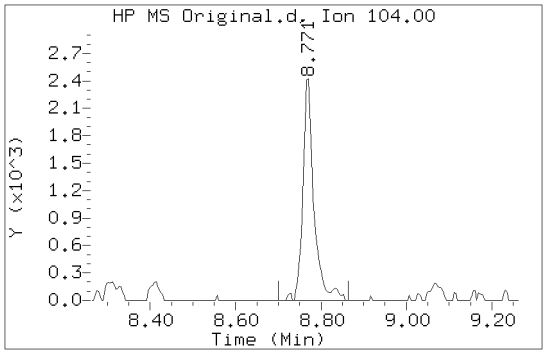
AFTER
MASS
91
AREA
7965
HEIGHT
5156
12-Dec-2023
09:43



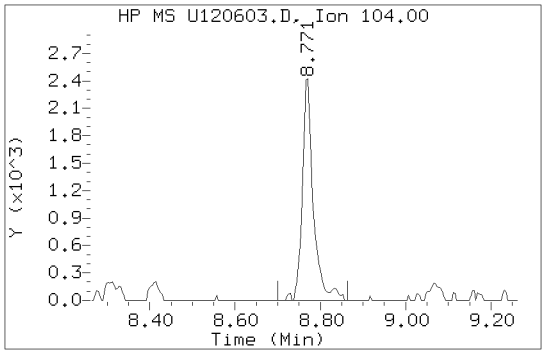
Styrene (100-42-5)

Reason Code:

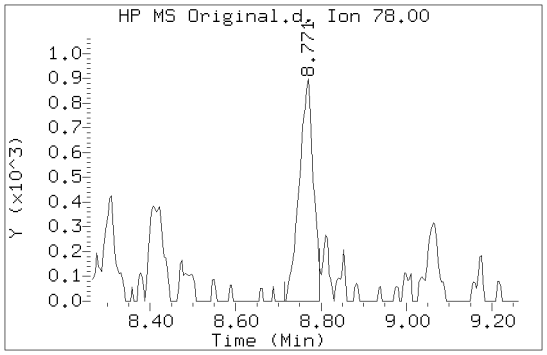
BEFORE
MASS
39
AREA
1878
HEIGHT
895
06-Dec-2023
23:21



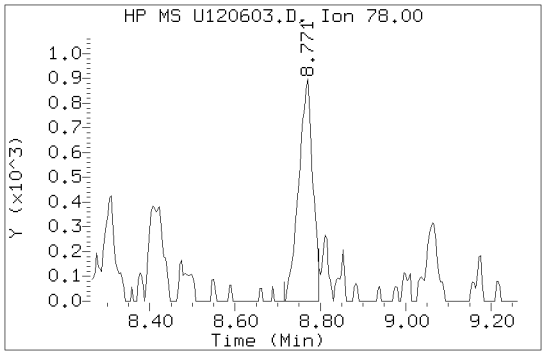
AFTER
MASS
104
AREA
4395
HEIGHT
2424
12-Dec-2023
09:43



BEFORE
MASS
40
AREA
2702
HEIGHT
1000
06-Dec-2023
23:21



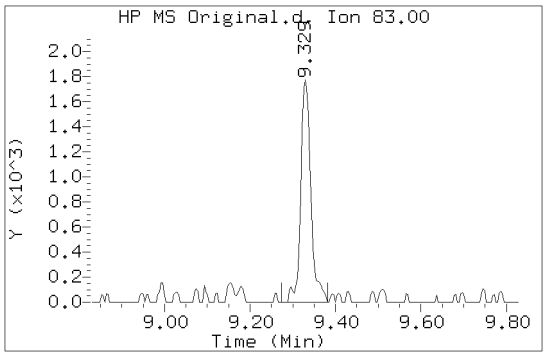
AFTER
MASS
78
AREA
2092
HEIGHT
898
12-Dec-2023
09:43



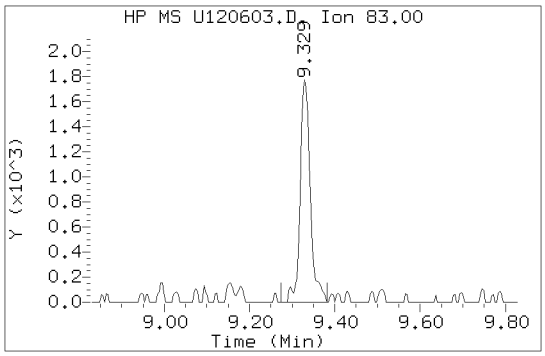
1,1,2,2-Tetrachloroethane (79-34-5)

Reason Code:

BEFORE
MASS
105
AREA
6642
HEIGHT
4223
06-Dec-2023
23:21



AFTER
MASS
83
AREA
3009
HEIGHT
1774
12-Dec-2023
09:43



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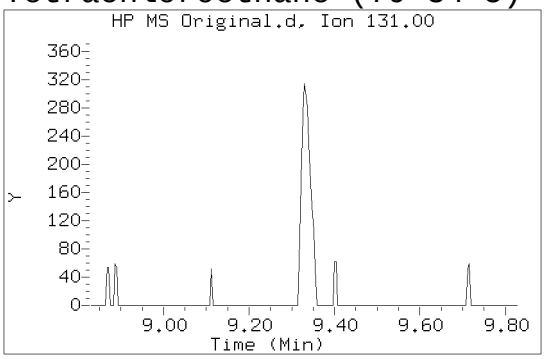
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

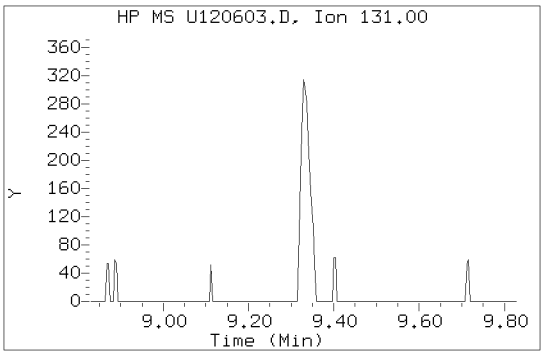
1,1,2,2-Tetrachloroethane (79-34-5)

Reason Code:

BEFORE
MASS
120
AREA
1897
HEIGHT
1147
06-Dec-2023
23:21



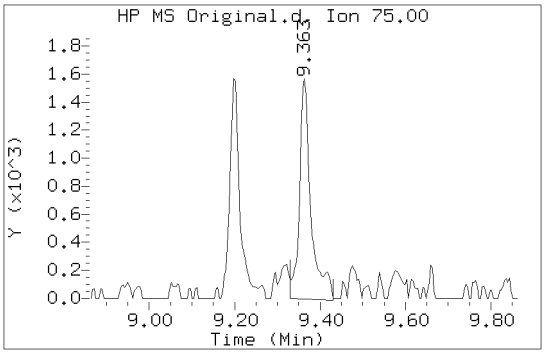
AFTER
MASS
131
AREA
0
HEIGHT
0
12-Dec-2023
09:43



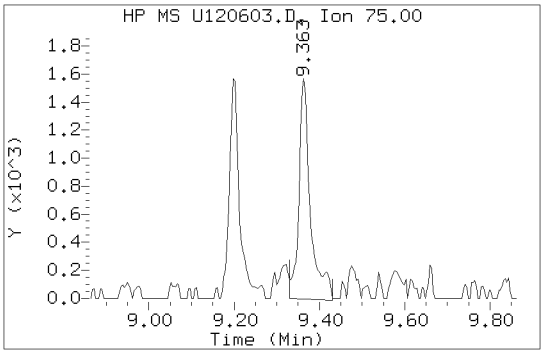
1,2,3-Trichloropropane (96-18-4)

Reason Code:

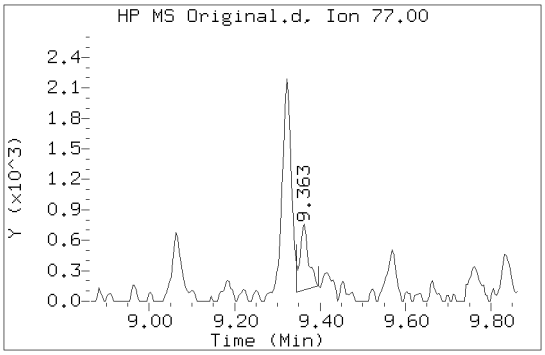
BEFORE
MASS
152
AREA
283463
HEIGHT
182528
06-Dec-2023
23:21



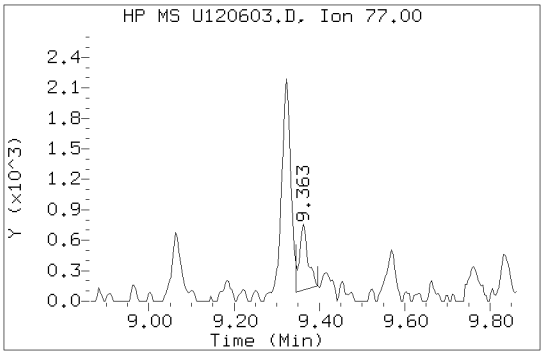
AFTER
MASS
75
AREA
3019
HEIGHT
1574
12-Dec-2023
09:43



BEFORE
MASS
115
AREA
153211
HEIGHT
96264
06-Dec-2023
23:21



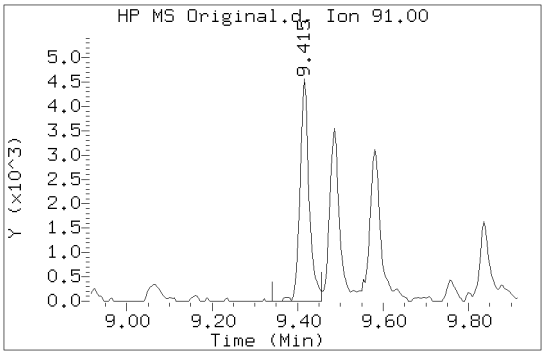
AFTER
MASS
77
AREA
958
HEIGHT
648
12-Dec-2023
09:43



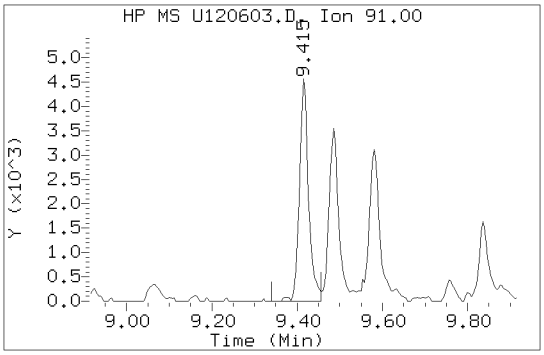
n-Propylbenzene (106-65-1)

Reason Code:

BEFORE
MASS
41
AREA
1335
HEIGHT
556
06-Dec-2023
23:21



AFTER
MASS
91
AREA
6934
HEIGHT
4565
12-Dec-2023
09:43



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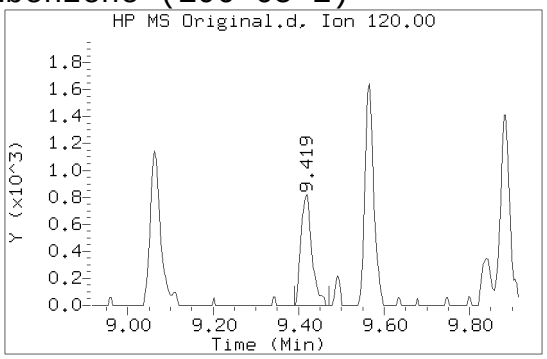
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

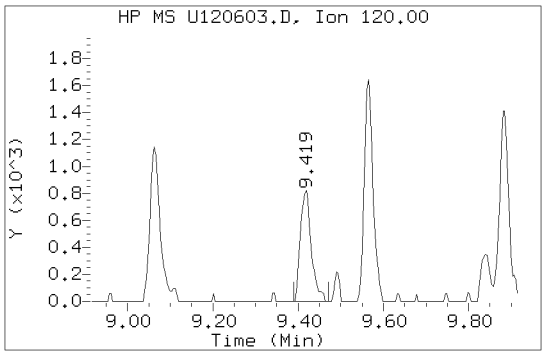
n-Propylbenzene (106-65-1)

Reason Code:

BEFORE
MASS
67
AREA
870
HEIGHT
457
06-Dec-2023
23:21



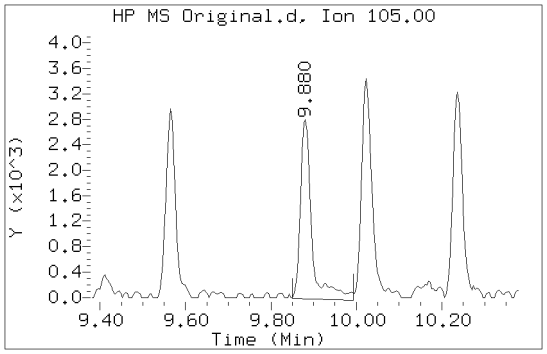
AFTER
MASS
120
AREA
1497
HEIGHT
820
12-Dec-2023
09:43



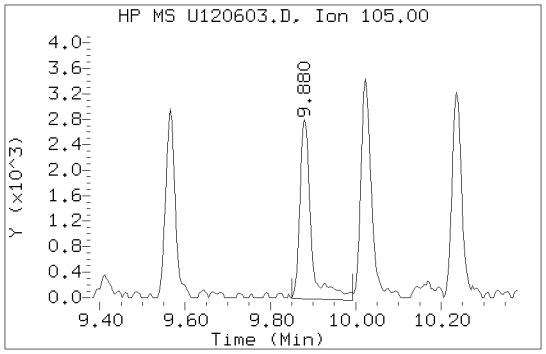
1,2,4-Trimethylbenzene (95-63-6)

Reason Code:

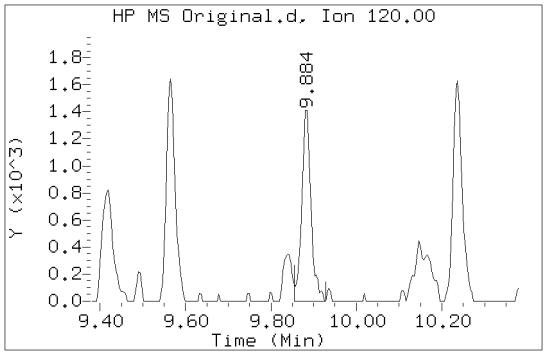
BEFORE
MASS
91
AREA
5799
HEIGHT
3547
06-Dec-2023
23:21



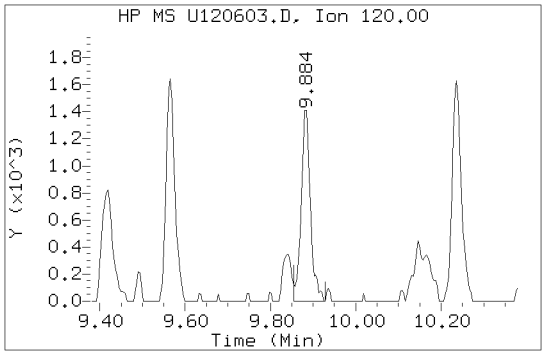
AFTER
MASS
105
AREA
5368
HEIGHT
2820
12-Dec-2023
09:43



BEFORE
MASS
126
AREA
1923
HEIGHT
1114
06-Dec-2023
23:21



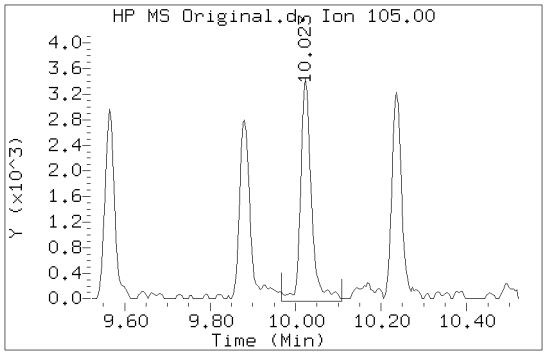
AFTER
MASS
120
AREA
2194
HEIGHT
1412
12-Dec-2023
09:43



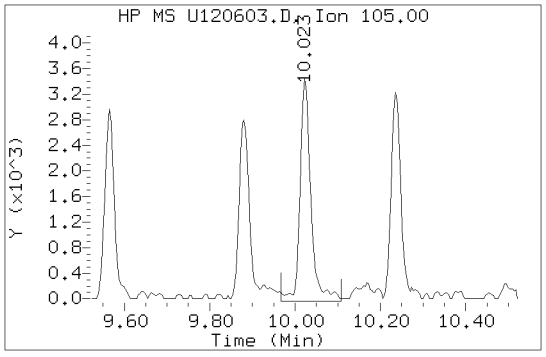
sec-Butylbenzene (135-98-8)

Reason Code:

BEFORE
MASS
91
AREA
5828
HEIGHT
3113
06-Dec-2023
23:21



AFTER
MASS
105
AREA
6329
HEIGHT
3475
12-Dec-2023
09:43



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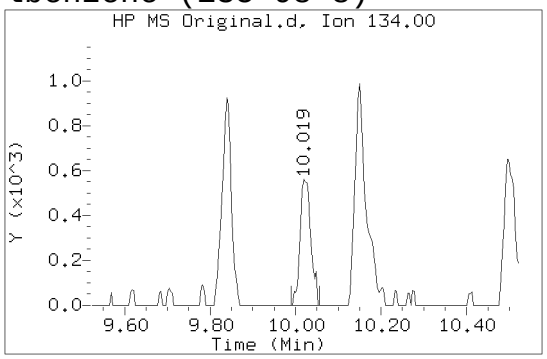
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

sec-Butylbenzene (135-98-8)

Reason Code:

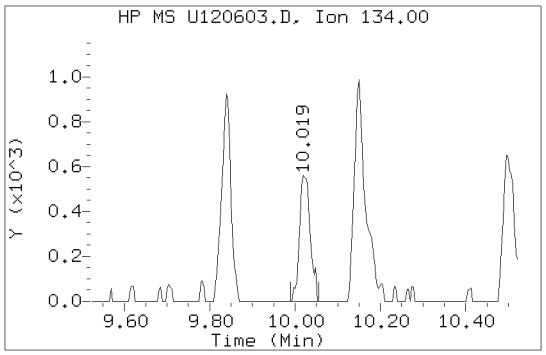
BEFORE

MASS
126
AREA
1785
HEIGHT
845
06-Dec-2023
23:21



AFTER

MASS
134
AREA
1010
HEIGHT
562
12-Dec-2023
09:43

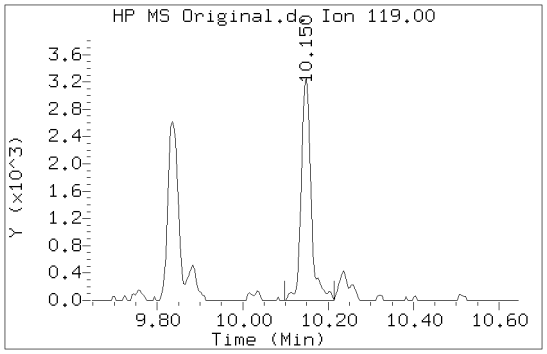


p-Isopropyltoluene (99-87-6)

Reason Code:

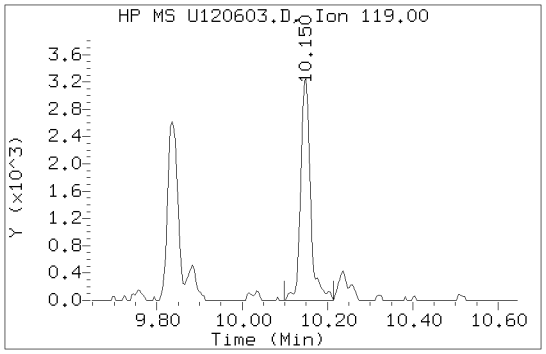
BEFORE

MASS
54
AREA
2827
HEIGHT
1063
06-Dec-2023
23:21



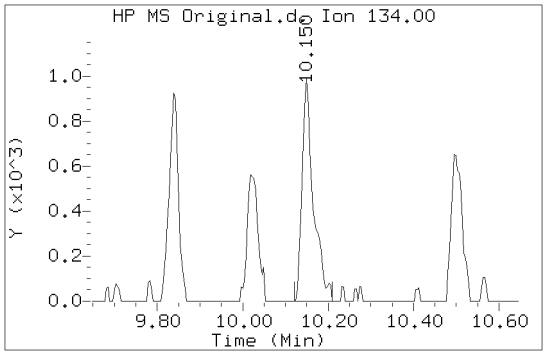
AFTER

MASS
119
AREA
5327
HEIGHT
3247
12-Dec-2023
09:43



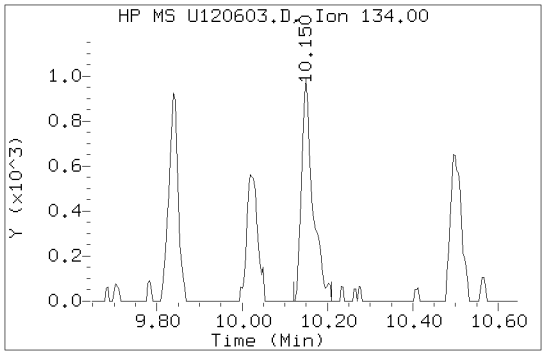
BEFORE

MASS
52
AREA
1029
HEIGHT
355
06-Dec-2023
23:21



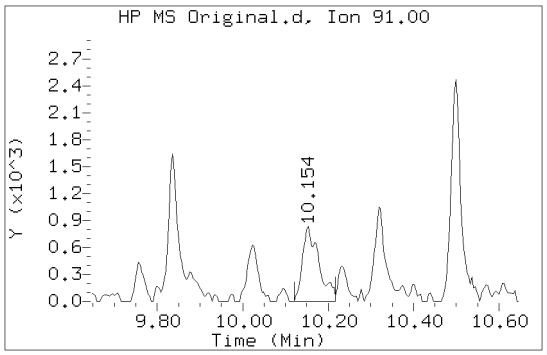
AFTER

MASS
134
AREA
1845
HEIGHT
988
12-Dec-2023
09:43



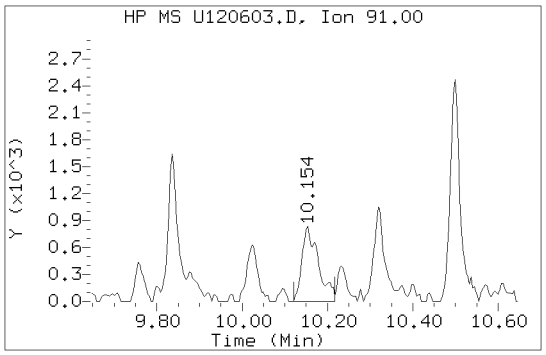
BEFORE

MASS
55
AREA
926
HEIGHT
557
06-Dec-2023
23:21



AFTER

MASS
91
AREA
2242
HEIGHT
834
12-Dec-2023
09:43



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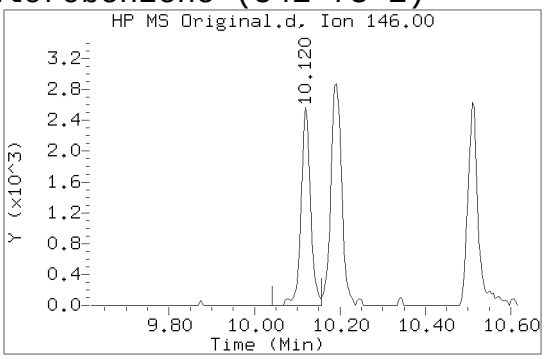
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

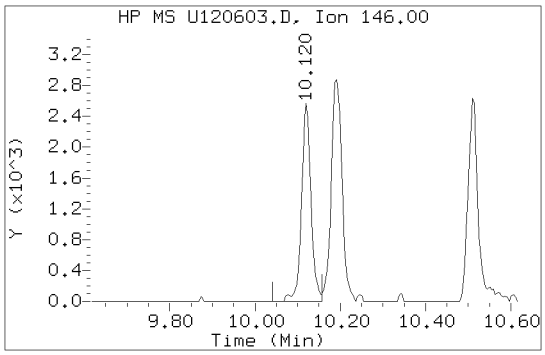
1,3-Dichlorobenzene (541-73-1)

Reason Code:

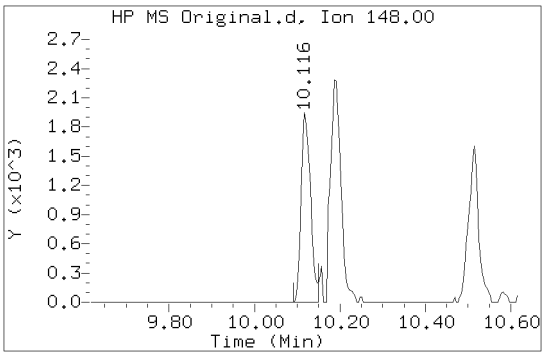
BEFORE
MASS
119
AREA
4379
HEIGHT
2623
06-Dec-2023
23:21



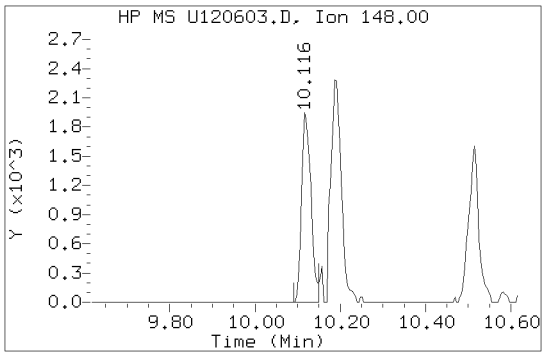
AFTER
MASS
146
AREA
4068
HEIGHT
2569
12-Dec-2023
09:43



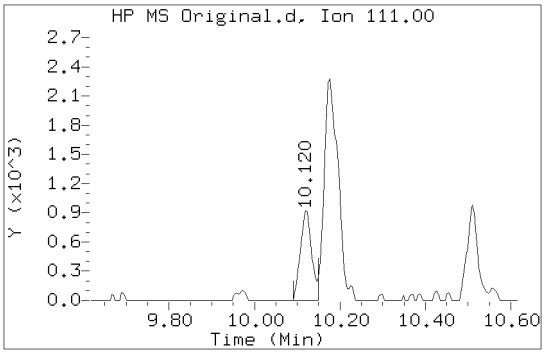
BEFORE
MASS
91
AREA
2568
HEIGHT
1643
06-Dec-2023
23:21



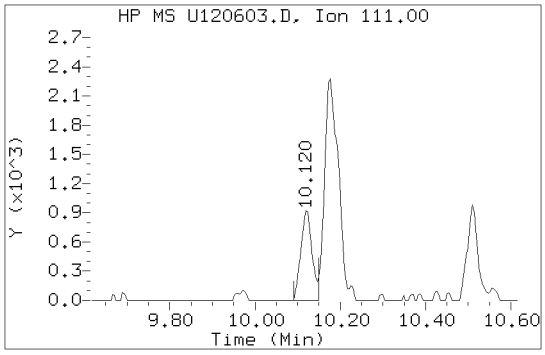
AFTER
MASS
148
AREA
3074
HEIGHT
1946
12-Dec-2023
09:43



BEFORE
MASS
134
AREA
1399
HEIGHT
925
06-Dec-2023
23:21



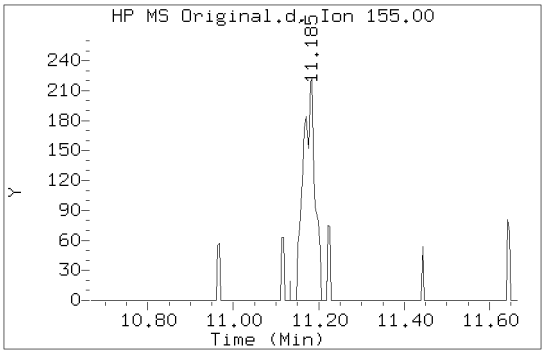
AFTER
MASS
111
AREA
1758
HEIGHT
922
12-Dec-2023
09:43



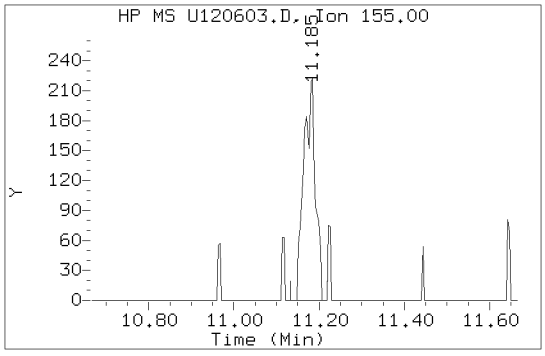
1,2-Dibromo-3-Chloropropane (96-12-8)

Reason Code:

BEFORE
MASS
119
AREA
5327
HEIGHT
3247
06-Dec-2023
23:21



AFTER
MASS
155
AREA
428
HEIGHT
222
12-Dec-2023
09:43



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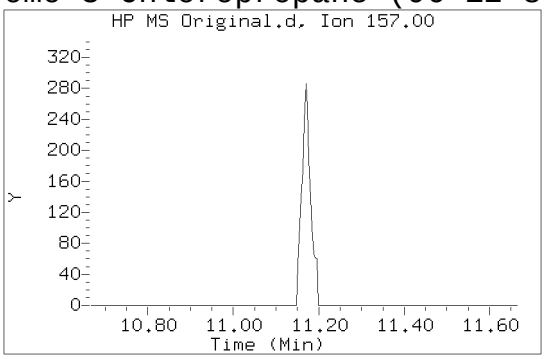
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

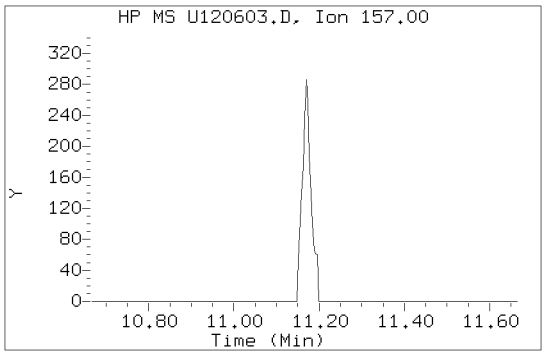
1,2-Dibromo-3-Chloropropane (96-12-8)

Reason Code:

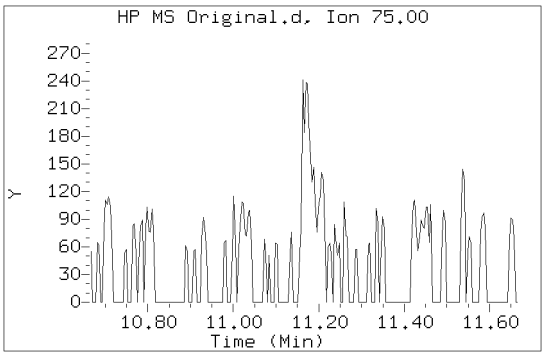
BEFORE
MASS
134
AREA
1845
HEIGHT
988
06-Dec-2023
23:21



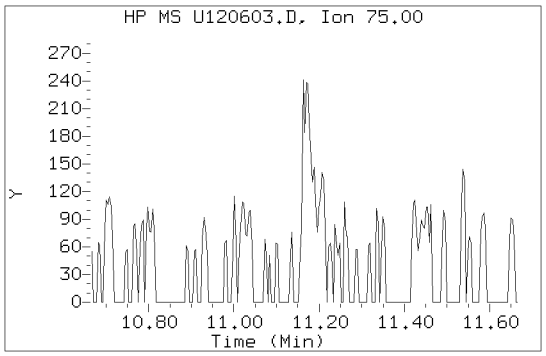
AFTER
MASS
157
AREA
0
HEIGHT
0
12-Dec-2023
09:43



BEFORE
MASS
91
AREA
2242
HEIGHT
834
06-Dec-2023
23:21



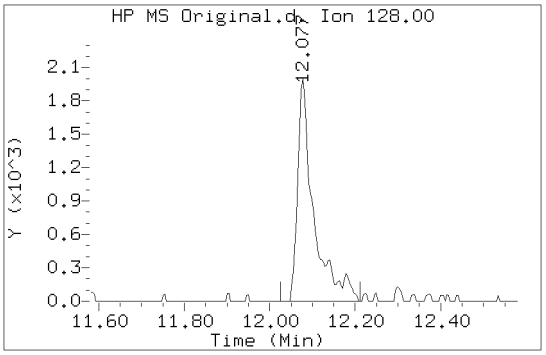
AFTER
MASS
75
AREA
0
HEIGHT
0
12-Dec-2023
09:43



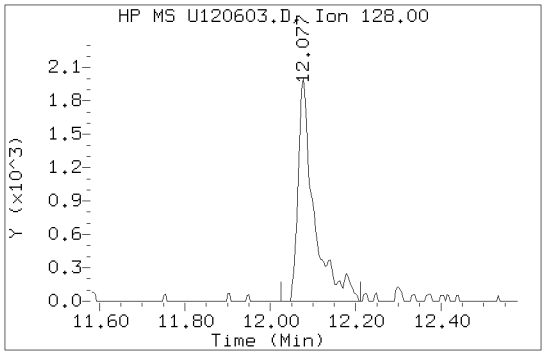
Naphthalene (91-20-3)

Reason Code:

BEFORE
MASS
43
AREA
498
HEIGHT
226
06-Dec-2023
23:21



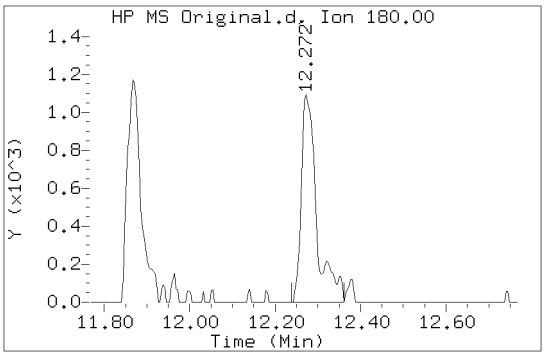
AFTER
MASS
128
AREA
5275
HEIGHT
1997
12-Dec-2023
09:43



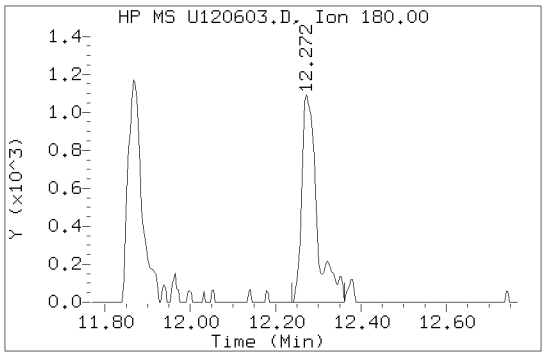
1,2,3-Trichlorobenzene (87-61-6)

Reason Code:

BEFORE
MASS
69
AREA
2825
HEIGHT
1091
06-Dec-2023
23:21



AFTER
MASS
180
AREA
2777
HEIGHT
1094
12-Dec-2023
09:43



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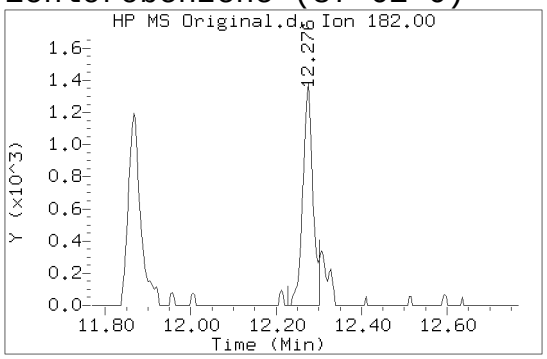
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

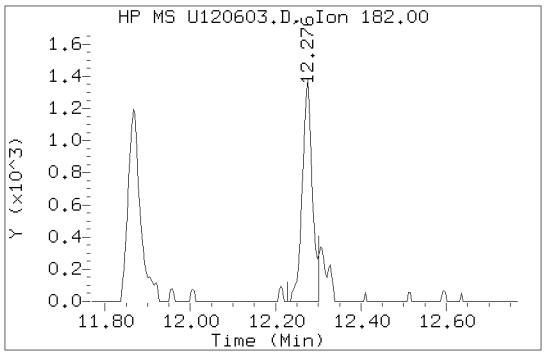
1,2,3-Trichlorobenzene (87-61-6)

Reason Code:

BEFORE
MASS
41
AREA
1454
HEIGHT
807
06-Dec-2023
23:21



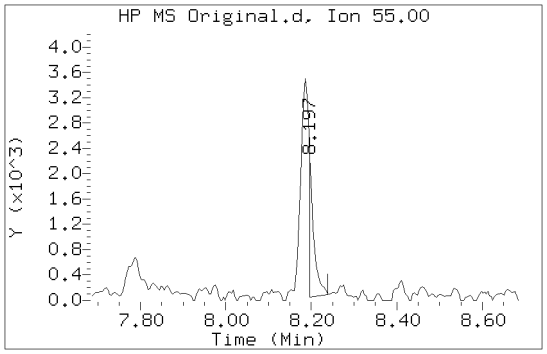
AFTER
MASS
182
AREA
2320
HEIGHT
1379
12-Dec-2023
09:43



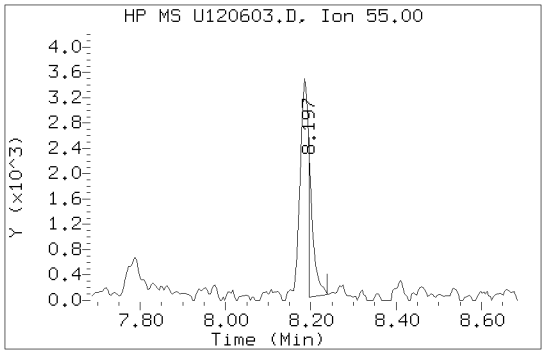
1-Chlorohexane (544-10-5)

Reason Code:

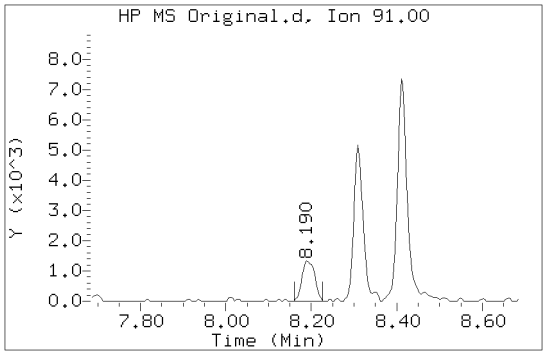
BEFORE
MASS
91
AREA
4072
HEIGHT
2467
06-Dec-2023
23:21



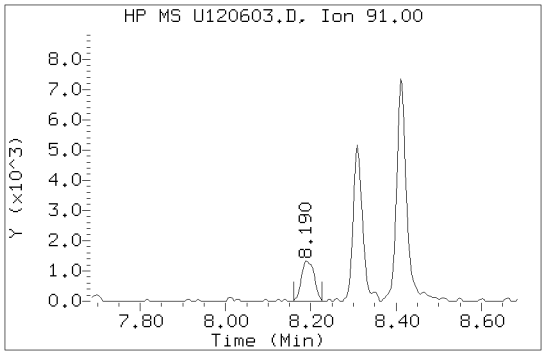
AFTER
MASS
55
AREA
1630
HEIGHT
2213
12-Dec-2023
09:43



BEFORE
MASS
92
AREA
2324
HEIGHT
1337
06-Dec-2023
23:21



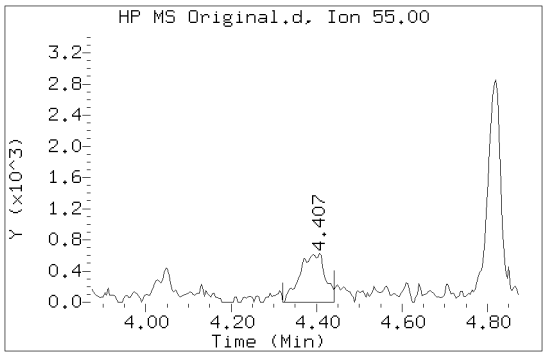
AFTER
MASS
91
AREA
2810
HEIGHT
1343
12-Dec-2023
09:43



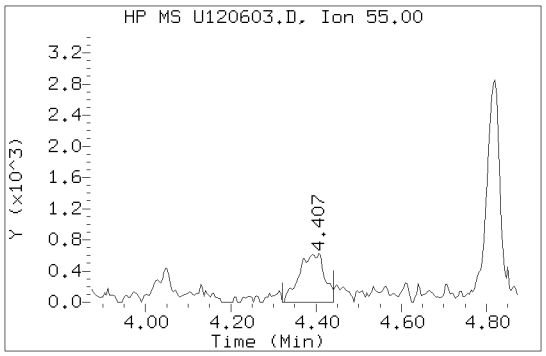
Methyl Acrylate (96-33-3)

Reason Code:

BEFORE
MASS
146
AREA
4403
HEIGHT
2638
06-Dec-2023
23:21



AFTER
MASS
55
AREA
2589
HEIGHT
625
12-Dec-2023
09:43



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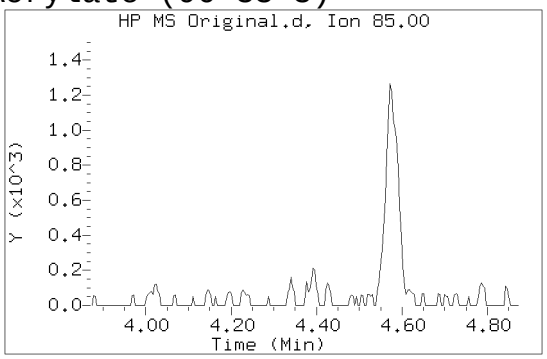
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

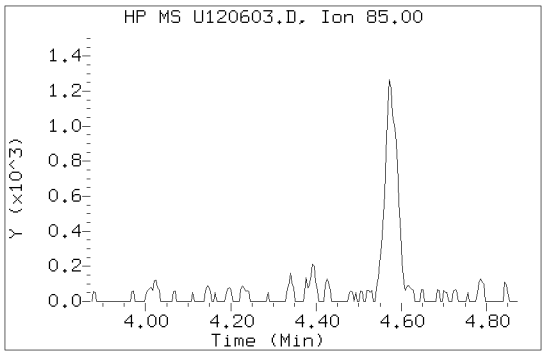
Methyl Acrylate (96-33-3)

Reason Code:

BEFORE
MASS
111
AREA
1683
HEIGHT
980
06-Dec-2023
23:21



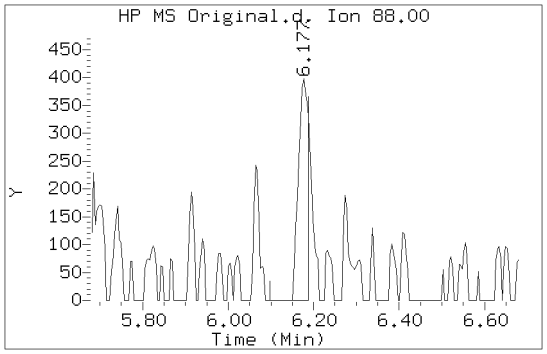
AFTER
MASS
85
AREA
0
HEIGHT
0
12-Dec-2023
09:43



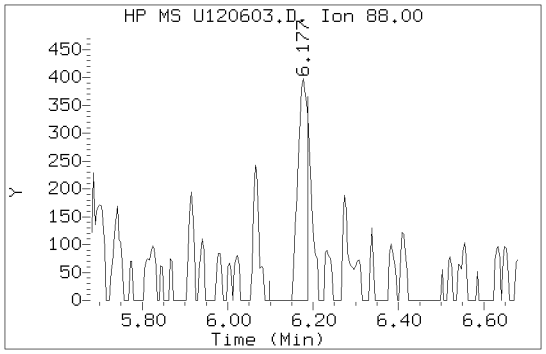
1,4-Dioxane ()

Reason Code:

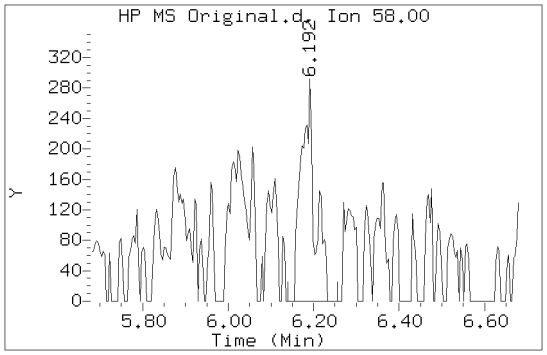
BEFORE
MASS
155
AREA
428
HEIGHT
222
06-Dec-2023
23:21



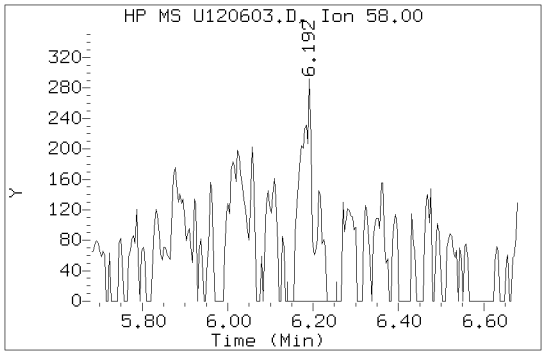
AFTER
MASS
88
AREA
631
HEIGHT
398
12-Dec-2023
09:43



BEFORE
MASS
157
AREA
0
HEIGHT
0
06-Dec-2023
23:21



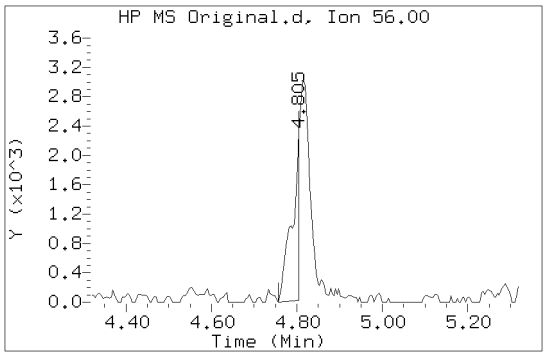
AFTER
MASS
58
AREA
659
HEIGHT
292
12-Dec-2023
09:43



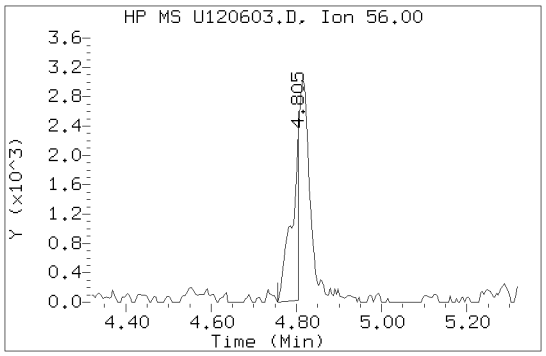
Cyclohexane (110-82-7)

Reason Code:

BEFORE
MASS
225
AREA
989
HEIGHT
632
06-Dec-2023
23:21



AFTER
MASS
56
AREA
2806
HEIGHT
2314
12-Dec-2023
09:43



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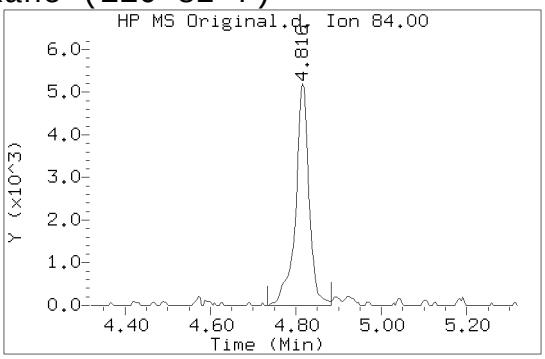
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

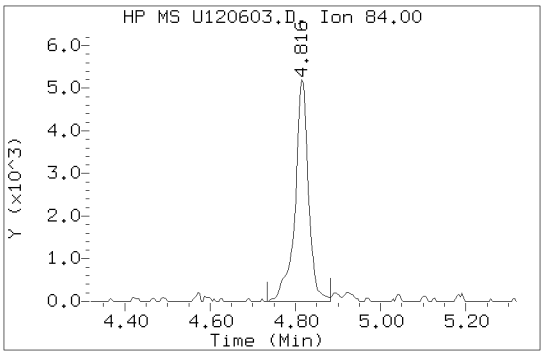
Cyclohexane (110-82-7)

Reason Code:

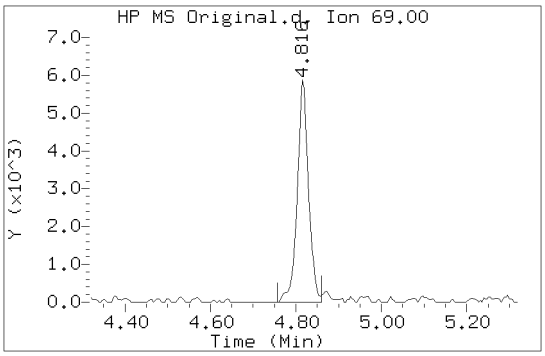
BEFORE
MASS
223
AREA
804
HEIGHT
596
06-Dec-2023
23:21



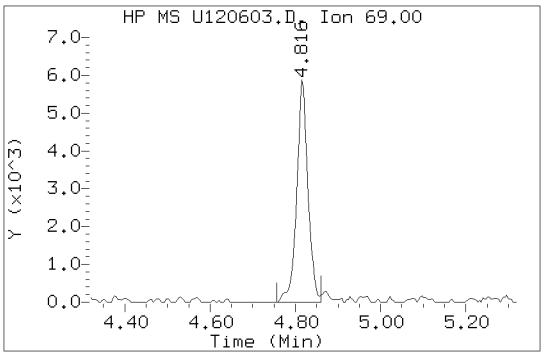
AFTER
MASS
84
AREA
11638
HEIGHT
5200
12-Dec-2023
09:43



BEFORE
MASS
227
AREA
867
HEIGHT
483
06-Dec-2023
23:21



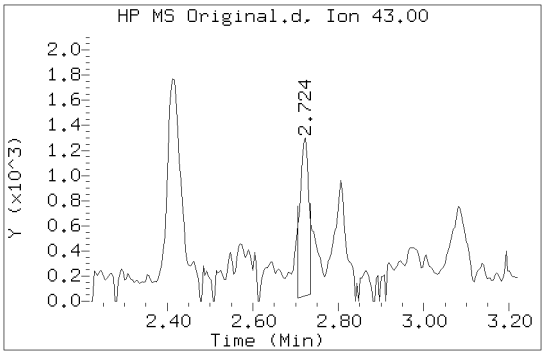
AFTER
MASS
69
AREA
10984
HEIGHT
5878
12-Dec-2023
09:43



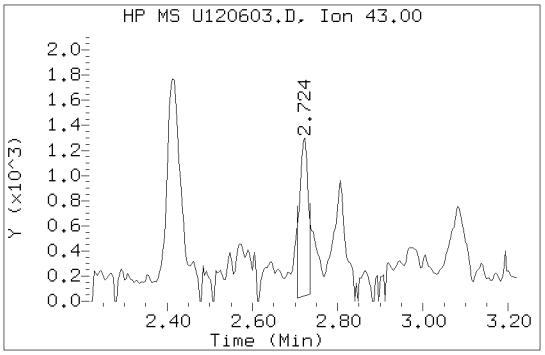
Methyl Acetate (79-20-9)

Reason Code:

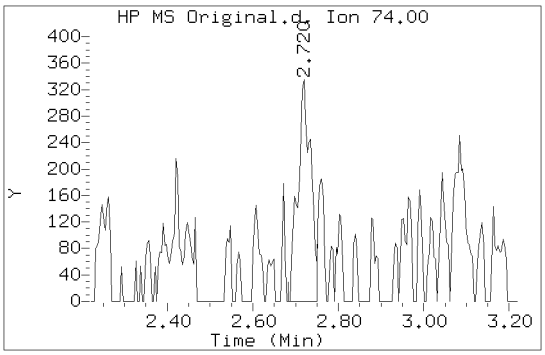
BEFORE
MASS
96
AREA
4345
HEIGHT
2092
06-Dec-2023
23:21



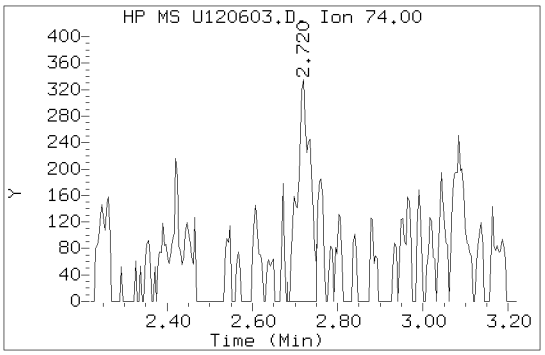
AFTER
MASS
43
AREA
1832
HEIGHT
1256
12-Dec-2023
09:43



BEFORE
MASS
61
AREA
0
HEIGHT
0
06-Dec-2023
23:21



AFTER
MASS
74
AREA
713
HEIGHT
335
12-Dec-2023
09:43



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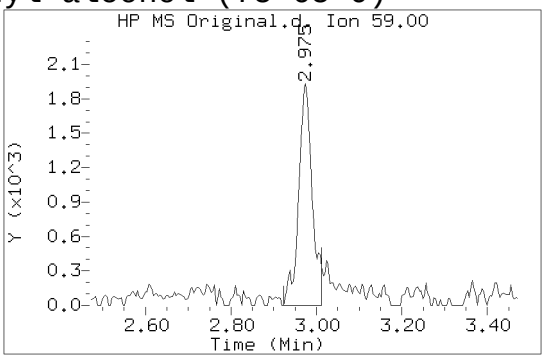
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

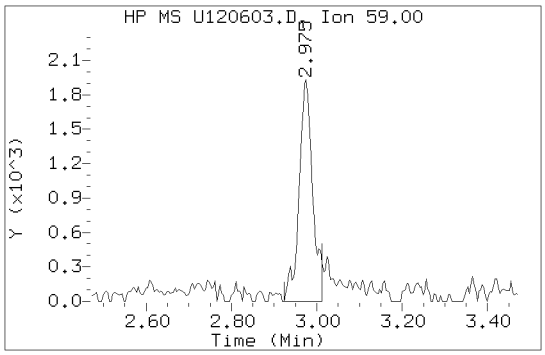
Tert-Butyl alcohol (75-65-0)

BEFORE
MASS
106
AREA
8901
HEIGHT
5189
06-Dec-2023
23:21



Reason Code:

AFTER
MASS
59
AREA
4359
HEIGHT
1932
12-Dec-2023
09:43



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06-Dec-2023
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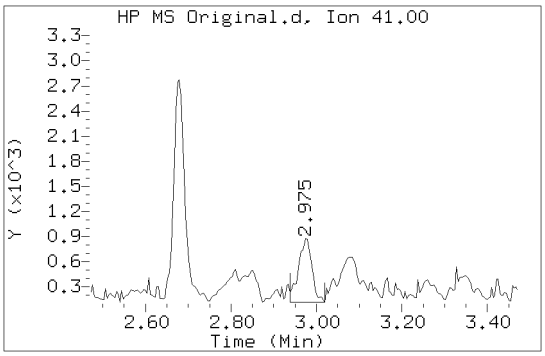

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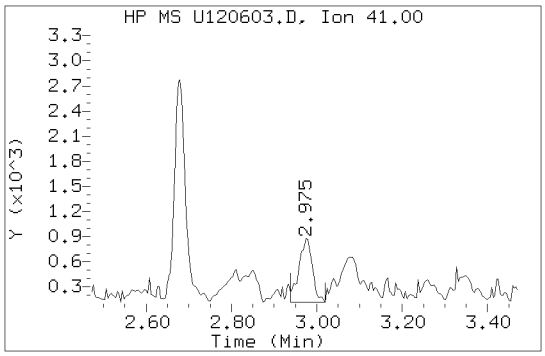

1,2-Dichloroethane-d4 (17060-07-0)

BEFORE
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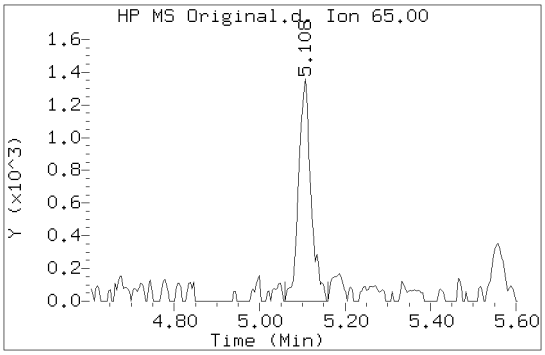
06-Dec-2023
23:21



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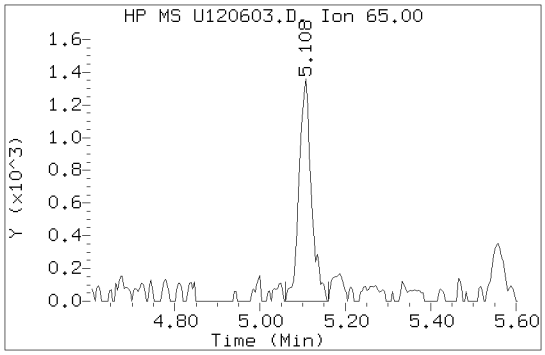
12-Dec-2023
09:43



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06-Dec-2023
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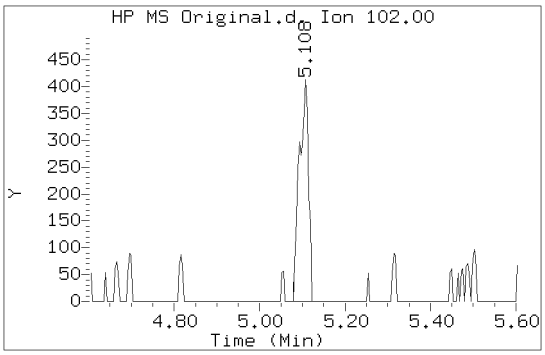

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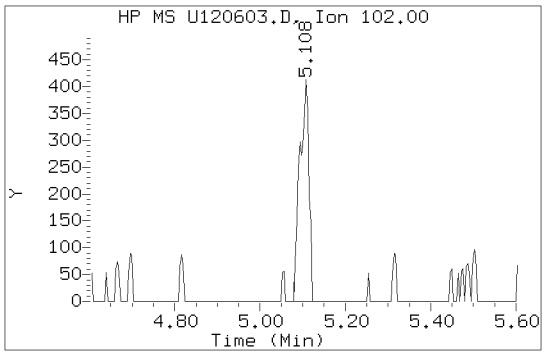
12-Dec-2023
09:43



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Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

4-Bromofluorobenzene (460-00-4)

Reason Code:

BEFORE

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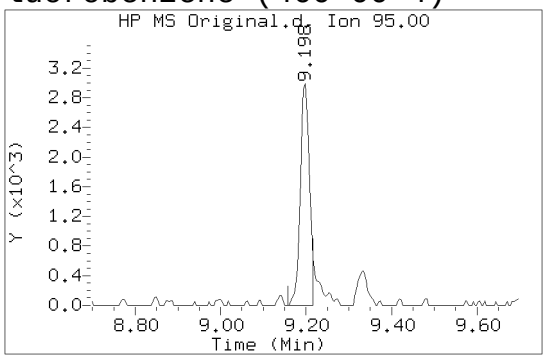
06-Dec-2023
23:21



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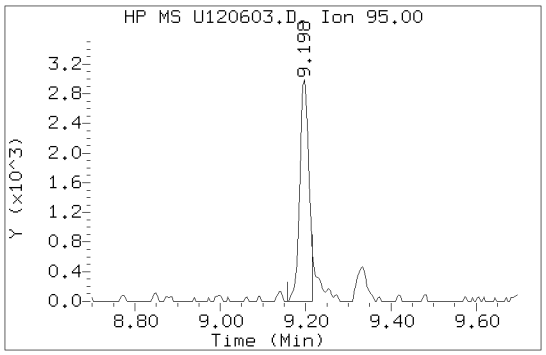
12-Dec-2023
09:43



BEFORE

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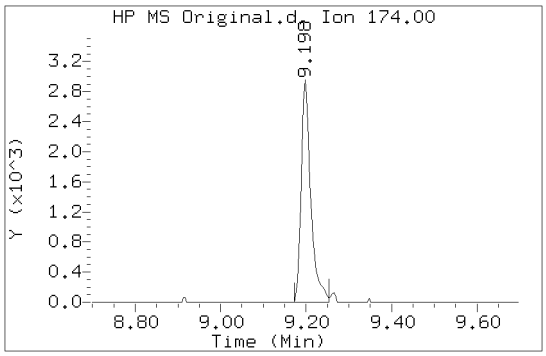
06-Dec-2023
23:21



AFTER

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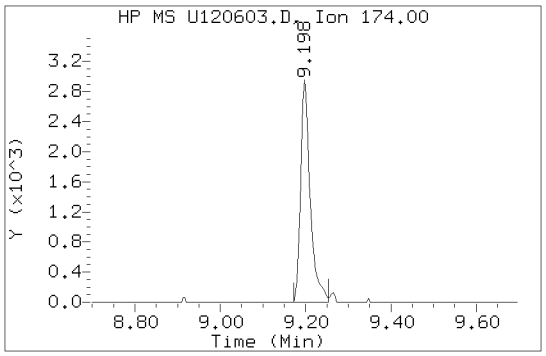
12-Dec-2023
09:43



Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120604.D Page 1
Report Date: 12-Dec-2023 09:43

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120604.D
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Inj Date : 06-DEC-2023 12:43
Operator : PC Inst ID: VOA9.i
Smp Info : VSTD001;VSTD001;1;3;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\8260C.m
Meth Date : 12-Dec-2023 09:43 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 12:20 Cal File: U120603A.D
Als bottle: 5 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V9.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1	Pentafluorobenzene	168	4.823	4.823	(1.000)	354809	50.0000	
2	Dichlorodifluoromethane	85	1.172	1.172	(0.243)	2370	1.00000	1.68(M)
3	Chloromethane	50	1.310	1.310	(0.272)	4792	1.00000	1.17(M)
5	Vinyl Chloride	62	1.385	1.385	(0.287)	4380	1.00000	1.12
6	Bromomethane	94	1.633	1.633	(0.339)	3158	1.00000	0.76(M)
7	Chloroethane	64	1.711	1.711	(0.355)	2933	1.00000	1.12
8	Trichlorofluoromethane	101	1.906	1.906	(0.395)	5386	1.00000	1.09
9	Acrolein	56	2.274	2.274	(0.471)	452	2.00000	2.23(M)
10	Acetone	43	2.420	2.420	(0.502)	5741	2.00000	
11	1,1-Dichloroethene	96	2.341	2.341	(0.485)	3115	1.00000	1.13
15	Iodomethane	142	2.480	2.480	(0.514)	2707	2.00000	3.11(T)
16	Acrylonitrile	53	3.072	3.072	(0.637)	2779	2.00000	1.99
17	Methylene Chloride	84	2.806	2.806	(0.582)	5310	1.00000	1.28(M)
18	Methyl tert-butyl ether	73	3.091	3.091	(0.641)	9961	1.00000	1.01
19	Carbon Disulfide	76	2.532	2.532	(0.525)	15770	2.00000	1.95
20	trans-1,2-Dichloroethene	96	3.072	3.072	(0.637)	3410	1.00000	1.04
21	Vinyl Acetate	43	3.619	3.619	(0.751)	19132	2.00000	1.93
22	1,1-Dichloroethane	63	3.522	3.522	(0.730)	7235	1.00000	1.08
24	2-Butanone	43	4.283	4.283	(0.888)	3703	2.00000	2.13(M)
26	2,2-Dichloropropane	77	4.197	4.197	(0.870)	5002	1.00000	1.06

27 cis-1,2-Dichloroethene	96	4.204	4.204 (0.872)	5092	1.00000	1.16
28 Chloroform	83	4.583	4.583 (0.950)	8136	1.00000	1.12

Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120604.D Page 2
Report Date: 12-Dec-2023 09:43

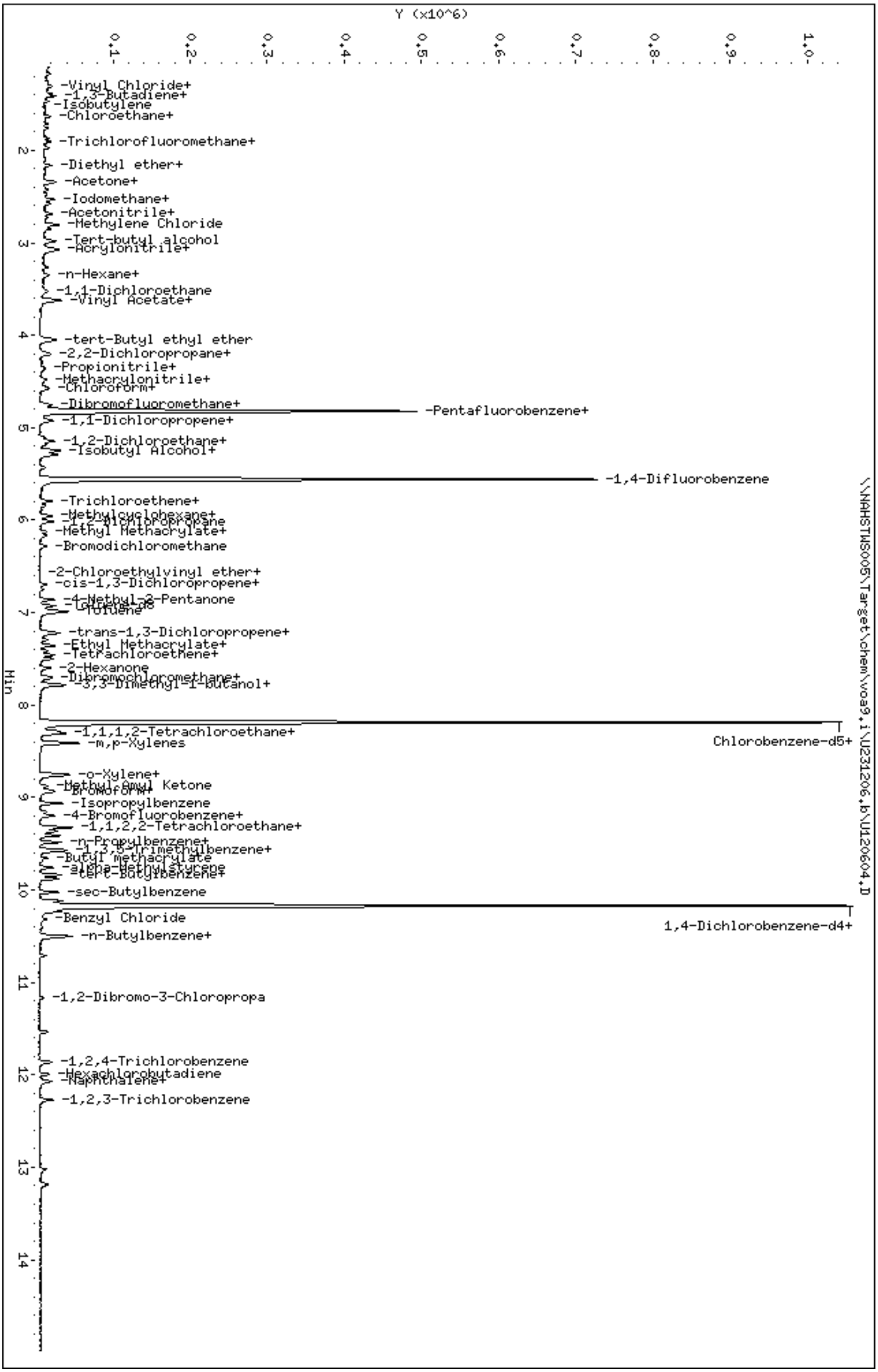
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	29 Bromochloromethane	128	4.474	4.474	(0.928)	2488	1.00000	1.09
$	30 Dibromofluoromethane	113	4.755	4.755	(0.986)	3773	1.00000	0.03
	31 1,1,1-Trichloroethane	97	4.748	4.748	(0.984)	5996	1.00000	1.08
	32 1,1-Dichloropropene	75	4.928	4.928	(0.887)	4846	1.00000	1.02
	33 1,2-Dichloroethane	62	5.183	5.183	(0.933)	5940	1.00000	1.08
	34 Carbon Tetrachloride	117	4.920	4.920	(0.885)	5152	1.00000	1.12
$	35 1,2-Dichloroethane-d4	65	5.104	5.104	(1.058)	4689	1.00000	0.63(M)
*	36 1,4-Difluorobenzene	114	5.558	5.558	(1.000)	562847	50.0000	
	37 Benzene	78	5.145	5.145	(0.926)	17110	1.00000	1.11
	38 Trichloroethene	130	5.797	5.797	(1.043)	5113	1.00000	1.21(M)
	39 Bromodichloromethane	83	6.281	6.281	(1.130)	5619	1.00000	1.11(M)
	41 2-Chloroethylvinyl ether	63	6.573	6.573	(1.183)	104	2.00000	0.20(M)
	42 1,2-Dichloropropane	63	6.015	6.015	(1.082)	4582	1.00000	1.11(M)
	44 Dibromomethane	93	6.127	6.127	(1.103)	3012	1.00000	1.12
	45 4-Methyl-2-Pentanone	43	6.858	6.858	(0.838)	12410	2.00000	2.72(M)
	46 cis-1,3-Dichloropropene	75	6.697	6.697	(1.205)	5439	1.00000	2.29
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	559222	50.0000	
$	48 Toluene-d8	98	6.926	6.926	(0.846)	13196	1.00000	1.02
	50 Toluene	91	6.986	6.986	(0.853)	16234	1.00000	1.04
	51 trans-1,3-Dichloropropene	75	7.203	7.203	(1.296)	4518	1.00000	2.57
	52 2-Hexanone	43	7.601	7.601	(0.929)	7475	2.00000	2.64(M)
	53 1,1,2-Trichloroethane	83	7.357	7.357	(0.899)	4469	1.00000	0.19
	54 1,3-Dichloropropane	76	7.499	7.499	(0.916)	8254	1.00000	1.19(M)
	55 Dibromochloromethane	129	7.694	7.694	(0.940)	5059	1.00000	1.21(M)
	56 Tetrachloroethene	164	7.458	7.458	(0.911)	3841	1.00000	1.15
	57 1,2-Dibromoethane	107	7.788	7.788	(0.951)	4790	1.00000	1.23(M)
	58 1-Chlorohexane	55	8.197	8.197	(1.475)	3275	1.00000	1.03(M)
	59 Chlorobenzene	112	8.212	8.212	(1.003)	13746	1.00000	1.21(M)
	60 1,1,1,2-Tetrachloroethane	131	8.287	8.287	(1.012)	4936	1.00000	1.24
	61 Ethylbenzene	106	8.305	8.305	(1.015)	6099	1.00000	1.14
	62 m,p-Xylenes	106	8.410	8.410	(1.027)	13585	2.00000	2.12
	63 o-Xylene	106	8.748	8.748	(1.069)	7030	1.00000	1.06
	64 Styrene	104	8.766	8.766	(1.071)	12128	1.00000	1.10
	66 Bromoform	173	8.924	8.924	(1.090)	4009	1.00000	2.45(TM)
	67 Isopropylbenzene	105	9.063	9.063	(1.107)	17436	1.00000	1.09
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	10887	1.00000	1.65
$	69 4-Bromofluorobenzene	95	9.198	9.198	(1.124)	5567	1.00000	
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	292314	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.920)	7225	1.00000	1.30(M)
	73 n-Propylbenzene	91	9.415	9.415	(0.926)	18576	1.00000	1.08
	74 Bromobenzene	156	9.321	9.321	(0.916)	6451	1.00000	1.31(M)
	75 1,3,5-Trimethylbenzene	105	9.565	9.565	(0.940)	13515	1.00000	1.10
	76 2-Chlorotoluene	91	9.486	9.486	(0.933)	13144	1.00000	1.13(M)
	77 4-Chlorotoluene	91	9.580	9.580	(0.942)	15217	1.00000	1.16(M)
	78 tert-Butylbenzene	119	9.835	9.835	(0.967)	13105	1.00000	1.19
	79 1,2,4-Trimethylbenzene	105	9.880	9.880	(0.971)	12864	1.00000	1.05
	81 sec-Butylbenzene	105	10.022	10.022	(0.985)	14821	1.00000	1.04
	82 p-Isopropyltoluene	119	10.146	10.146	(0.997)	12618	1.00000	1.03
	83 1,3-Dichlorobenzene	146	10.116	10.116	(0.994)	11762	1.00000	1.35(M)
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	11764	1.00000	1.27(M)
	87 n-Butylbenzene	91	10.495	10.495	(1.032)	10752	1.00000	1.04
	88 1,2-Dichlorobenzene	146	10.510	10.510	(1.033)	11314	1.00000	1.29(M)

89	1,2-Dibromo-3-Chloropropane	155	11.169	11.169 (1.098)	1017	1.00000	3.25(M)
90	1,2,4-Trichlorobenzene	180	11.863	11.863 (1.166)	6332	1.00000	1.17

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/l)	ON-COL (ug/l)
	91 Hexachlorobutadiene	225	11.994	11.994	(1.179)	2507	1.00000	1.15
	92 Naphthalene	128	12.073	12.073	(1.187)	13023	1.00000	1.00(M)
	93 1,2,3-Trichlorobenzene	180	12.271	12.271	(1.206)	6413	1.00000	1.17(M)
M	94 1,2-Dichloroethylene (total)	96				8502	2.00000	
M	95 Xylenes (total)	106				20615	3.00000	
	131 Methyl Acrylate	55	4.388	4.388	(0.910)	3784	1.00000	0.81(a)
	135 1,4-Dioxane	88	6.172	6.172	(1.280)	1303	20.0000	23.14(M)
	141 Cyclohexane	56	4.797	4.797	(0.995)	5330	1.00000	1.04(M)
	138 Freon TF	101	2.345	2.345	(0.486)	3267	1.00000	1.27
	140 1,3-Butadiene	54	1.411	1.411	(0.293)	3808	1.00000	1.06
	147 Methylcyclohexane	55	5.955	5.955	(1.071)	7513	1.00000	0.90
	146 Methyl Acetate	43	2.724	2.724	(0.565)	4056	1.00000	1.14
	148 Tert-Butyl alcohol	59	2.982	2.982	(0.618)	9972	20.0000	25.10(aM)
	149 Isopropyl Alcohol	45	2.577	2.577	(0.534)	6719	20.0000	22.65(M)

QC Flag Legend

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



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Client ID: VSTD001
Sample Info: VSTD001;VSTD001;1;3;
Purge Volume: 5.0
Column phase: DB624

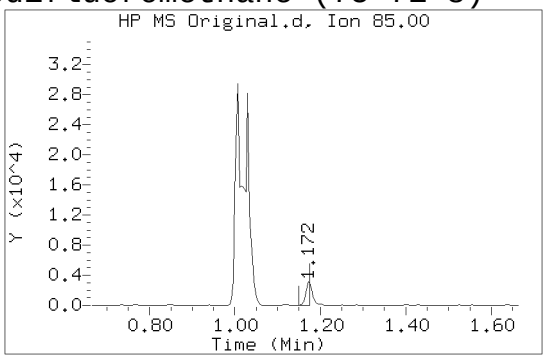
Instrument: VOA9,i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120604.D
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

Dichlorodifluoromethane (75-71-8)

Reason Code:

BEFORE
MASS
62
AREA
4380
HEIGHT
4000
06-Dec-2023
23:21



AFTER
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AREA
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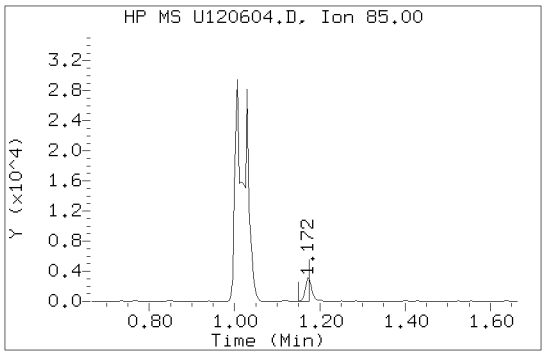
HEIGHT
3168
12-Dec-2023
09:43



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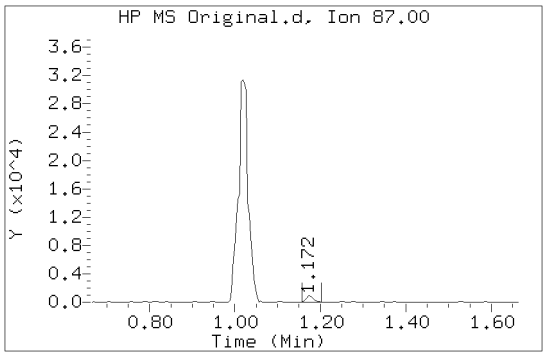
23:21



AFTER
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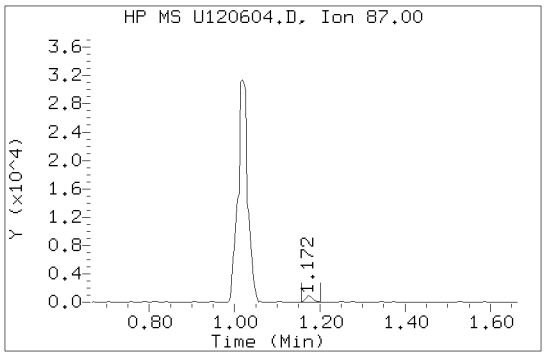
12-Dec-2023
09:43



Chloromethane (74-87-3)

Reason Code:

BEFORE
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AREA
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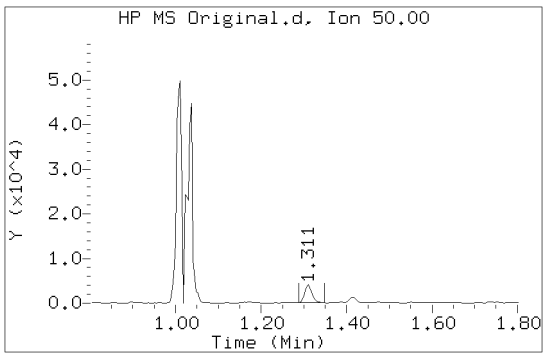
06-Dec-2023
23:21



AFTER
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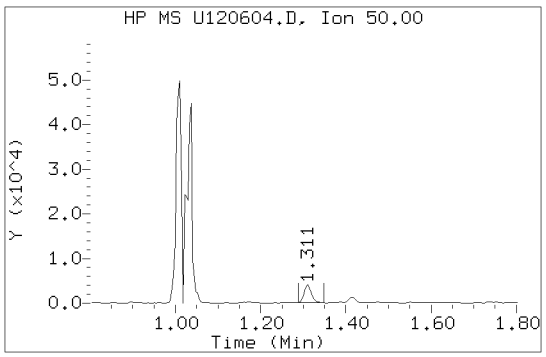
12-Dec-2023
09:43



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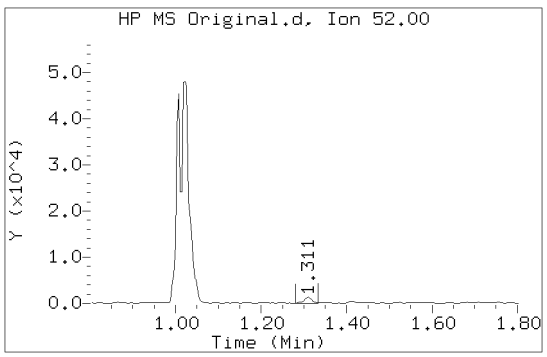
06-Dec-2023
23:21



AFTER
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AREA
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HEIGHT
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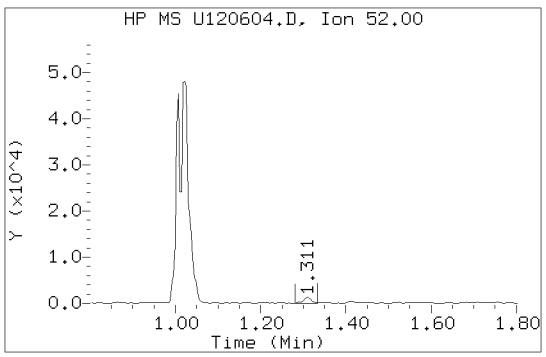
12-Dec-2023
09:43



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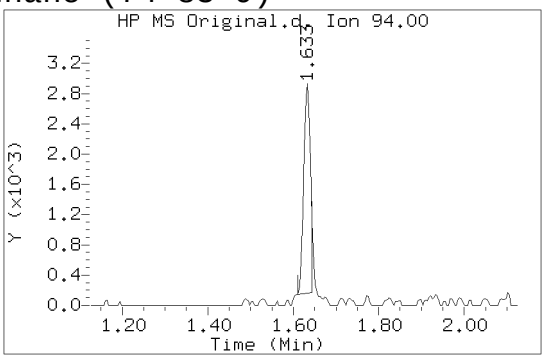
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

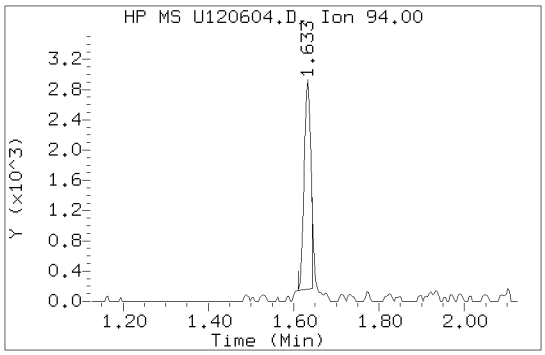
Bromomethane (74-83-9)

Reason Code:

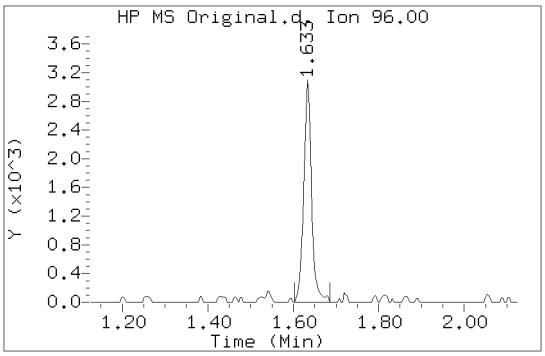
BEFORE
MASS
101
AREA
5386
HEIGHT
3672
06-Dec-2023
23:21



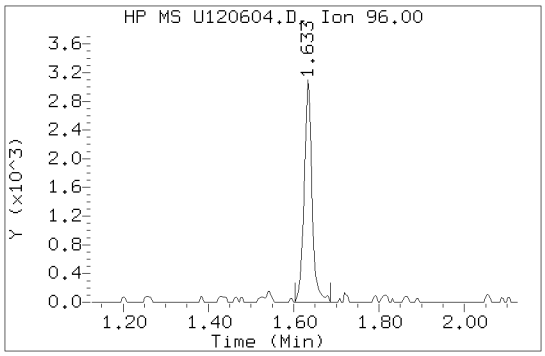
AFTER
MASS
94
AREA
3158
HEIGHT
2771
12-Dec-2023
09:43



BEFORE
MASS
103
AREA
3551
HEIGHT
2271
06-Dec-2023
23:21



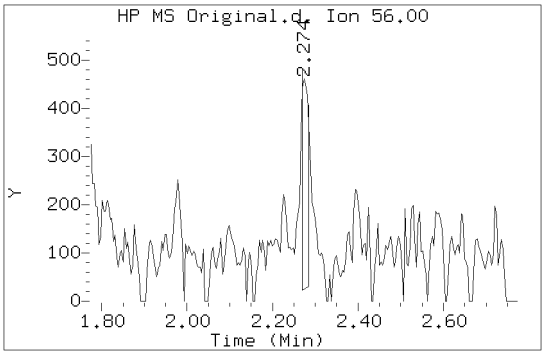
AFTER
MASS
96
AREA
4098
HEIGHT
3099
12-Dec-2023
09:43



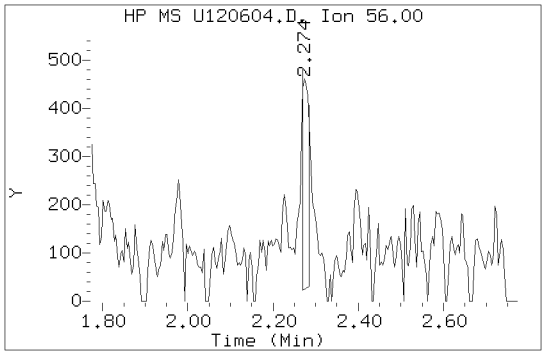
Acrolein (107-02-8)

Reason Code:

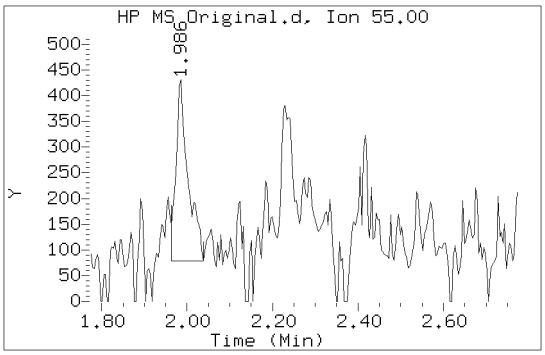
BEFORE
MASS
142
AREA
2707
HEIGHT
1556
06-Dec-2023
23:21



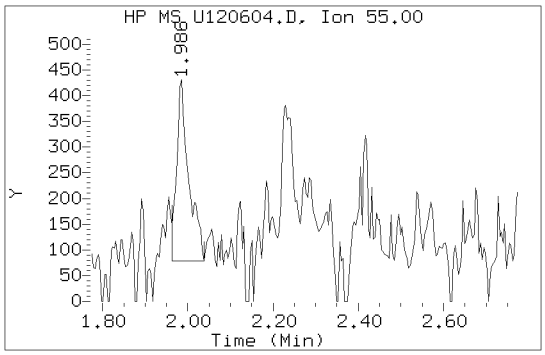
AFTER
MASS
56
AREA
452
HEIGHT
436
12-Dec-2023
09:43



BEFORE
MASS
127
AREA
1345
HEIGHT
757
06-Dec-2023
23:21



AFTER
MASS
55
AREA
701
HEIGHT
352
12-Dec-2023
09:43



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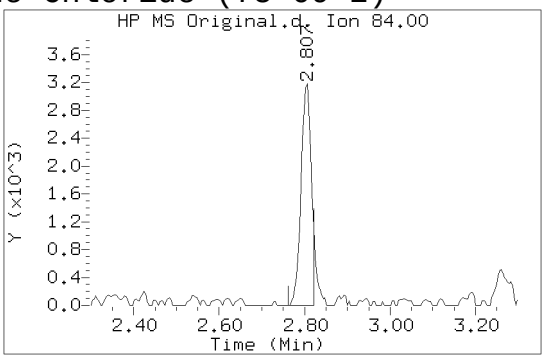
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

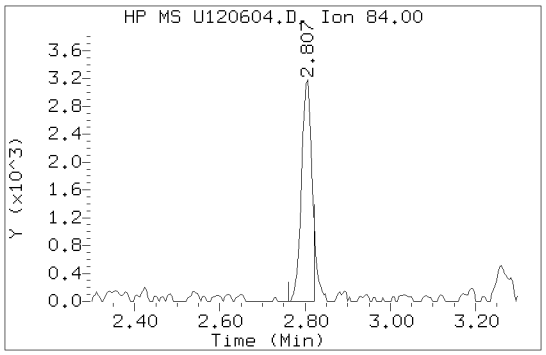
Methylene Chloride (75-09-2)

Reason Code:

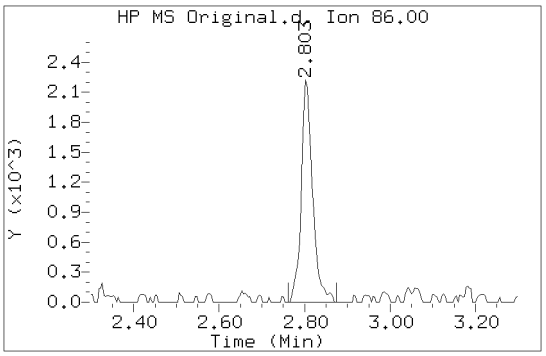
BEFORE
MASS
96
AREA
3410
HEIGHT
1769
06-Dec-2023
23:21



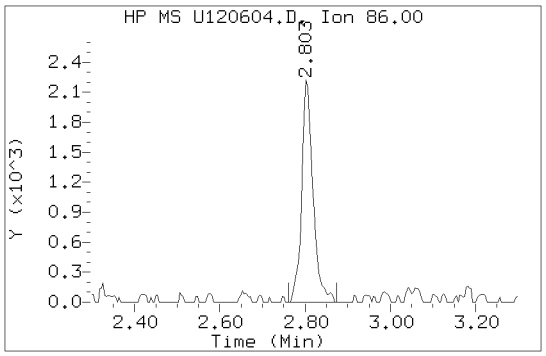
AFTER
MASS
84
AREA
5310
HEIGHT
3183
12-Dec-2023
09:43



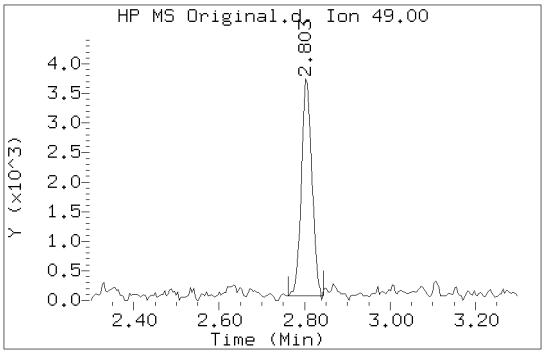
BEFORE
MASS
61
AREA
4667
HEIGHT
2499
06-Dec-2023
23:21



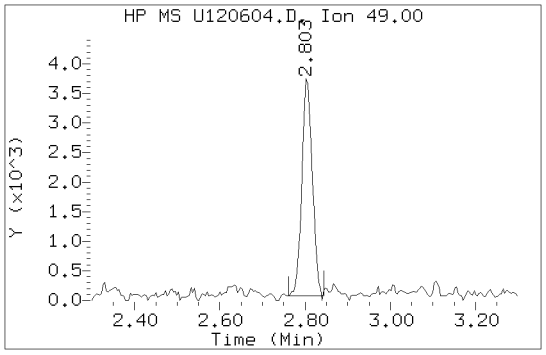
AFTER
MASS
86
AREA
4161
HEIGHT
2223
12-Dec-2023
09:43



BEFORE
MASS
98
AREA
2308
HEIGHT
1305
06-Dec-2023
23:21



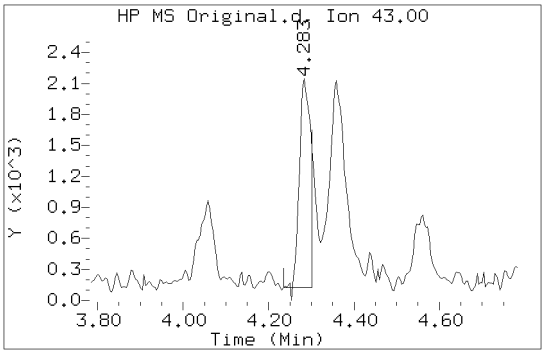
AFTER
MASS
49
AREA
6329
HEIGHT
3671
12-Dec-2023
09:43



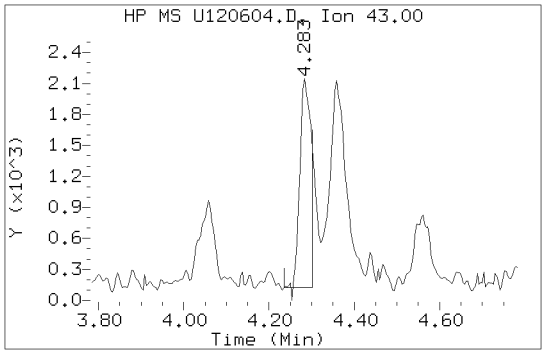
2-Butanone (78-93-3)

Reason Code:

BEFORE
MASS
128
AREA
2488
HEIGHT
1332
06-Dec-2023
23:21



AFTER
MASS
43
AREA
3703
HEIGHT
2024
12-Dec-2023
09:43



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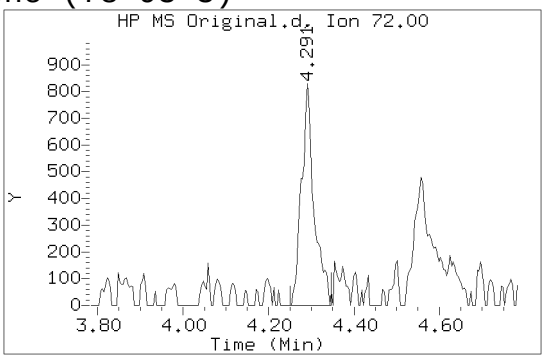
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

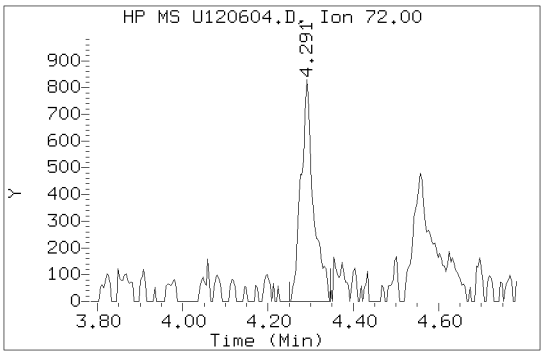
2-Butanone (78-93-3)

Reason Code:

BEFORE
MASS
49
AREA
4566
HEIGHT
2024
06-Dec-2023
23:21



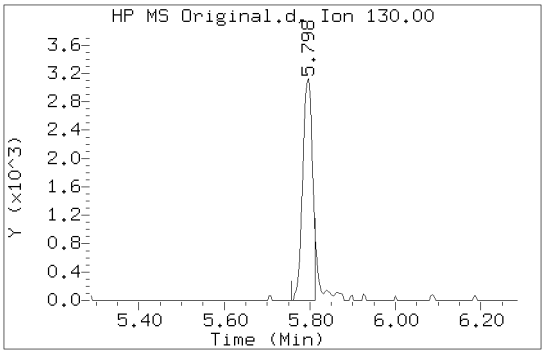
AFTER
MASS
72
AREA
1726
HEIGHT
829
12-Dec-2023
09:43



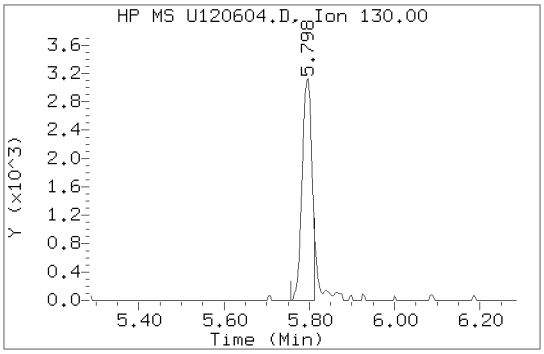
Trichloroethene (79-01-6)

Reason Code:

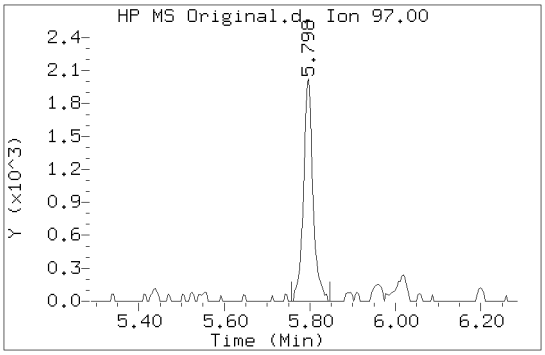
BEFORE
MASS
43
AREA
12410
HEIGHT
7604
06-Dec-2023
23:21



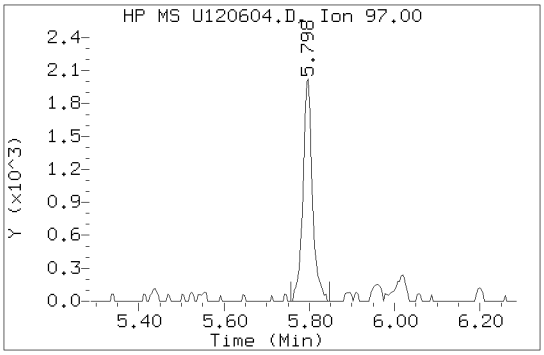
AFTER
MASS
130
AREA
5113
HEIGHT
3126
12-Dec-2023
09:43



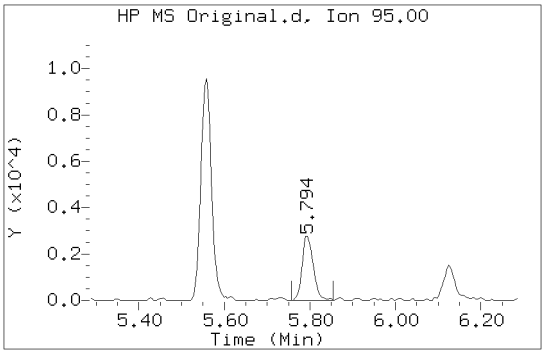
BEFORE
MASS
58
AREA
5581
HEIGHT
2850
06-Dec-2023
23:21



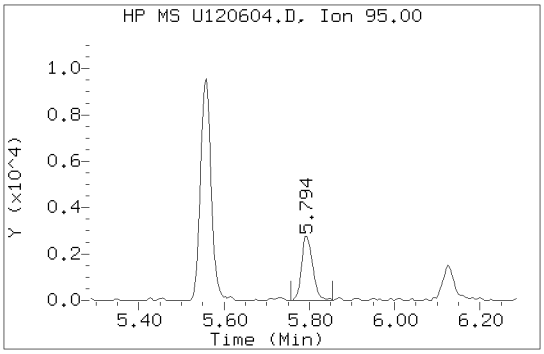
AFTER
MASS
97
AREA
3184
HEIGHT
2024
12-Dec-2023
09:43



BEFORE
MASS
100
AREA
2108
HEIGHT
1166
06-Dec-2023
23:21



AFTER
MASS
95
AREA
5146
HEIGHT
2773
12-Dec-2023
09:43



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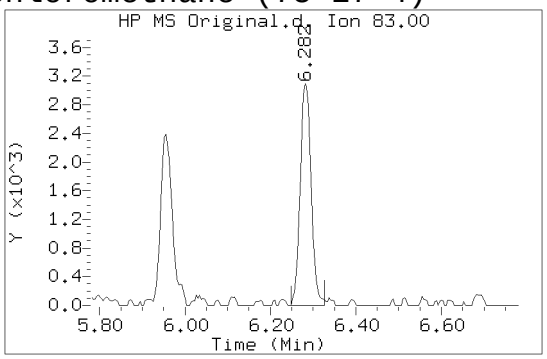
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

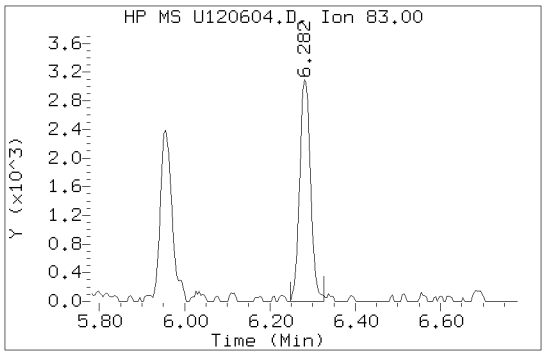
Bromodichloromethane (75-27-4)

Reason Code:

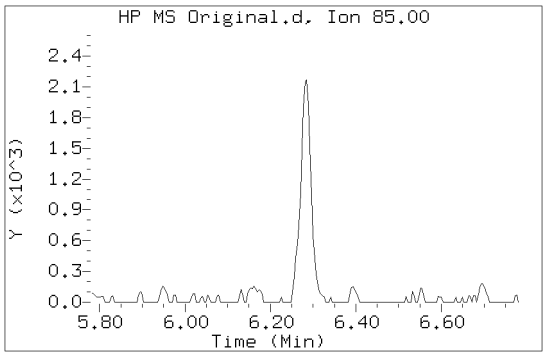
BEFORE
MASS
75
AREA
5439
HEIGHT
2909
06-Dec-2023
23:21



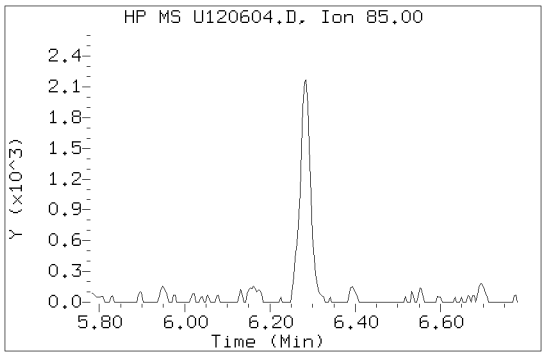
AFTER
MASS
83
AREA
5619
HEIGHT
3095
12-Dec-2023
09:43



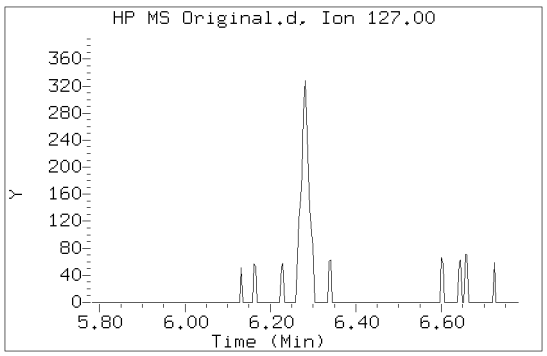
BEFORE
MASS
77
AREA
1996
HEIGHT
1030
06-Dec-2023
23:21



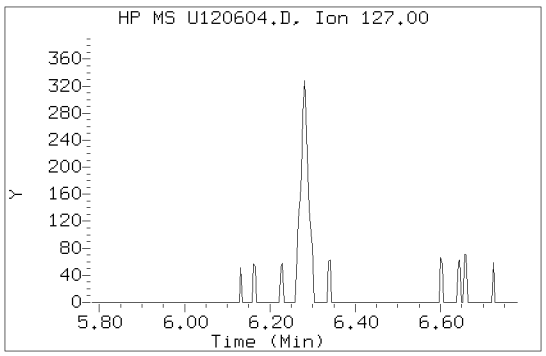
AFTER
MASS
85
AREA
0
HEIGHT
0
12-Dec-2023
09:43



BEFORE
MASS
39
AREA
2491
HEIGHT
1211
06-Dec-2023
23:21



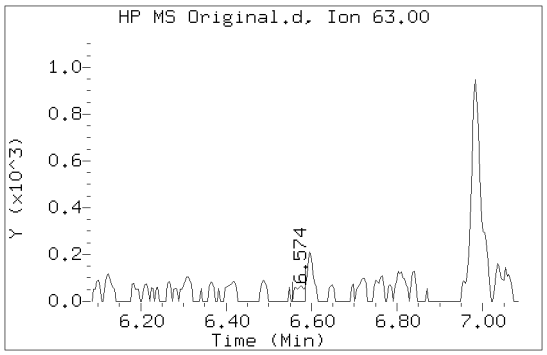
AFTER
MASS
127
AREA
0
HEIGHT
0
12-Dec-2023
09:43



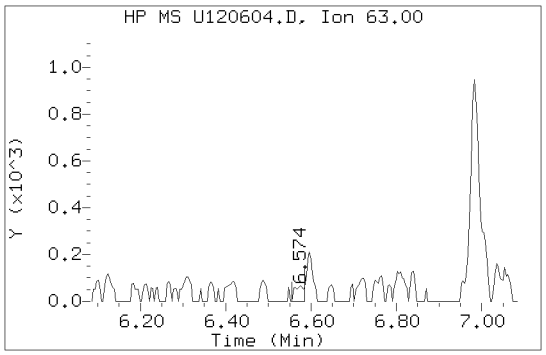
2-Chloroethylvinyl ether (110-75-8)

Reason Code:

BEFORE
MASS
117
AREA
559222
HEIGHT
361794
06-Dec-2023
23:21



AFTER
MASS
63
AREA
104
HEIGHT
66
12-Dec-2023
09:43



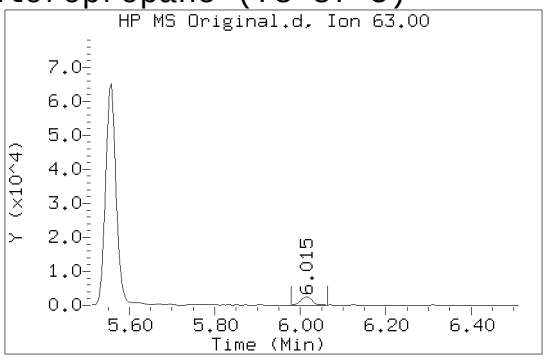
Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120604.D
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

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

Reason Code:

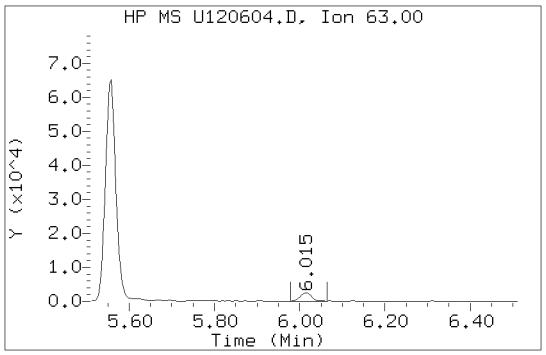
BEFORE

MASS
91
AREA
16234
HEIGHT
9383
06-Dec-2023
23:21



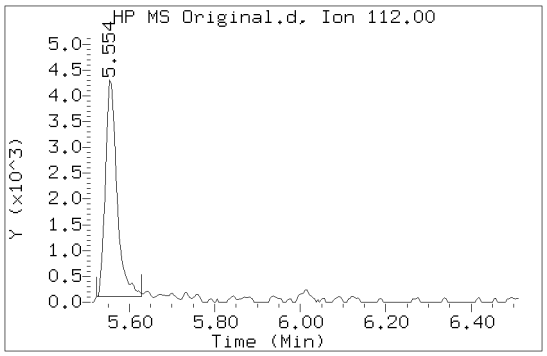
AFTER

MASS
63
AREA
4582
HEIGHT
2449
12-Dec-2023
09:43



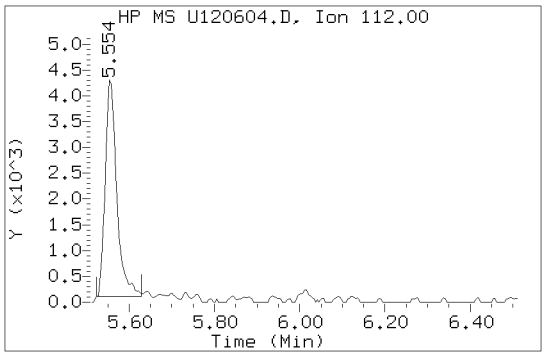
BEFORE

MASS
92
AREA
9713
HEIGHT
5645
06-Dec-2023
23:21



AFTER

MASS
112
AREA
7920
HEIGHT
4197
12-Dec-2023
09:43

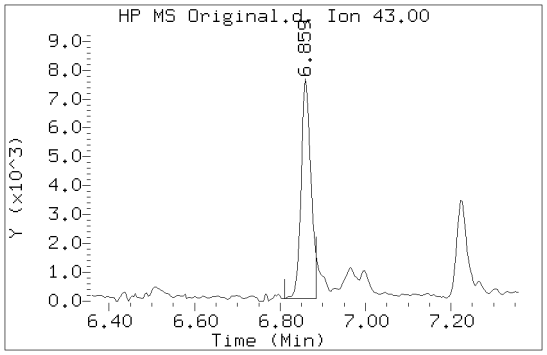


4-Methyl-2-Pentanone (108-10-1)

Reason Code:

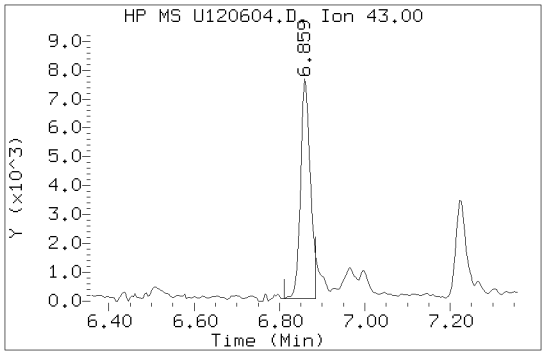
BEFORE

MASS
43
AREA
7475
HEIGHT
5102
06-Dec-2023
23:21



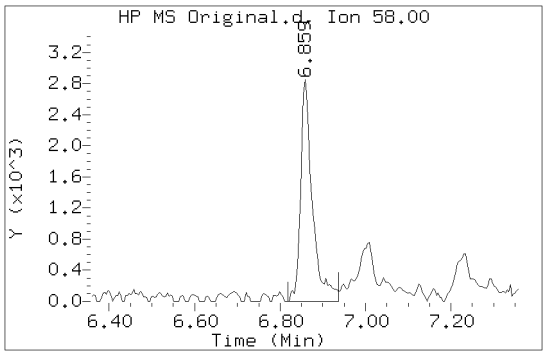
AFTER

MASS
43
AREA
12410
HEIGHT
7604
12-Dec-2023
09:43



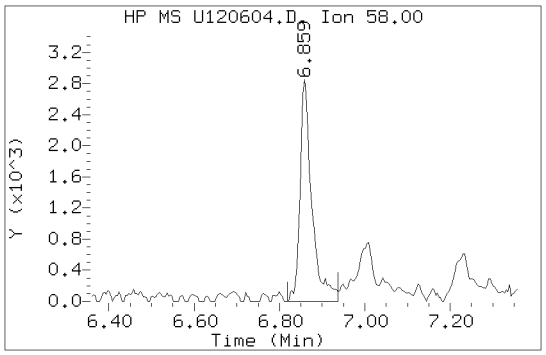
BEFORE

MASS
58
AREA
5297
HEIGHT
2649
06-Dec-2023
23:21



AFTER

MASS
58
AREA
5581
HEIGHT
2850
12-Dec-2023
09:43



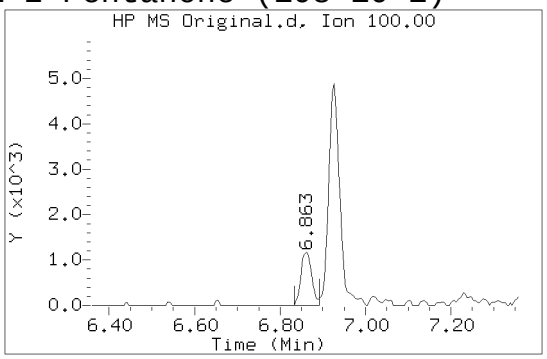
Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120604.D
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

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

Reason Code:

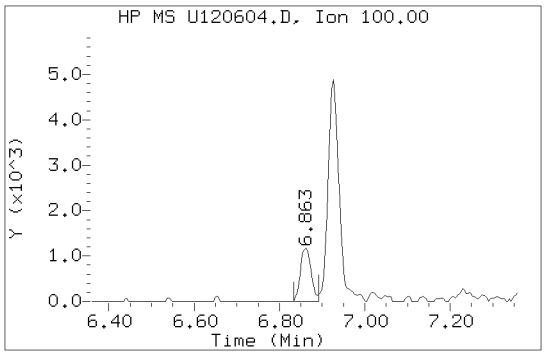
BEFORE

MASS
57
AREA
1979
HEIGHT
942
06-Dec-2023
23:21



AFTER

MASS
100
AREA
2108
HEIGHT
1166
12-Dec-2023
09:43

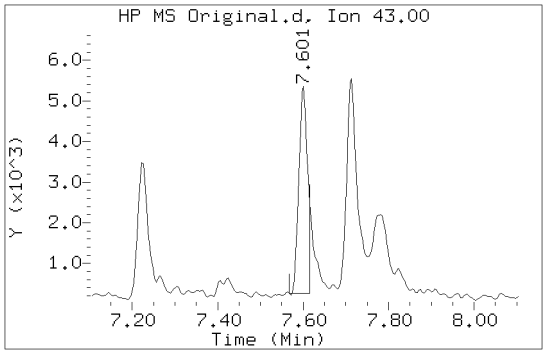


2-Hexanone (591-78-6)

Reason Code:

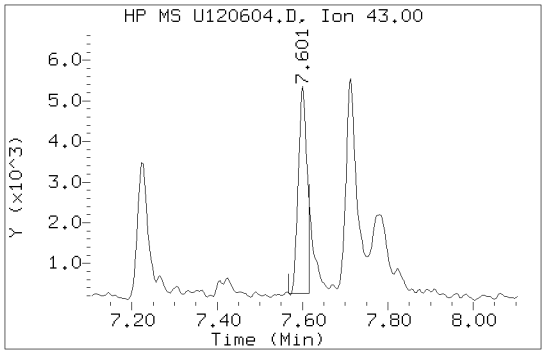
BEFORE

MASS
164
AREA
3841
HEIGHT
2495
06-Dec-2023
23:21



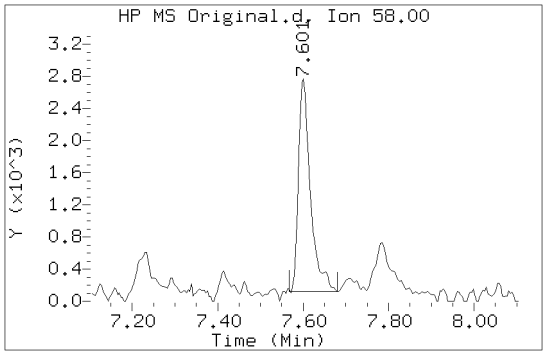
AFTER

MASS
43
AREA
7475
HEIGHT
5102
12-Dec-2023
09:43



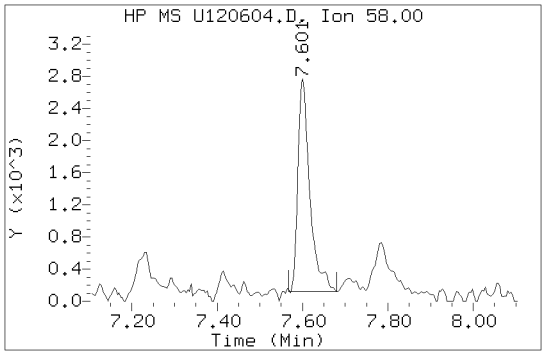
BEFORE

MASS
129
AREA
3164
HEIGHT
2200
06-Dec-2023
23:21



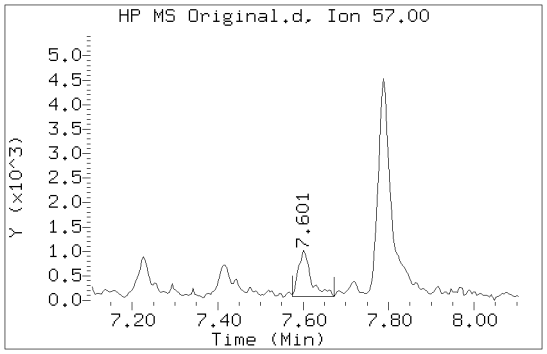
AFTER

MASS
58
AREA
5297
HEIGHT
2649
12-Dec-2023
09:43



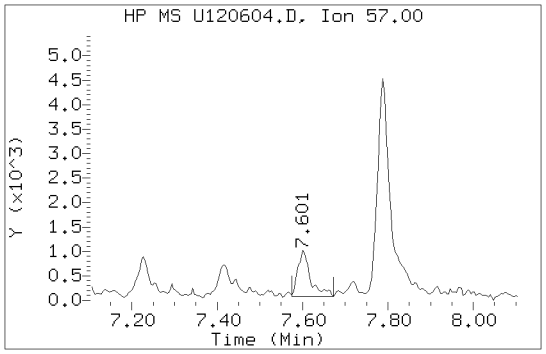
BEFORE

MASS
131
AREA
3251
HEIGHT
2212
06-Dec-2023
23:21



AFTER

MASS
57
AREA
1979
HEIGHT
942
12-Dec-2023
09:43



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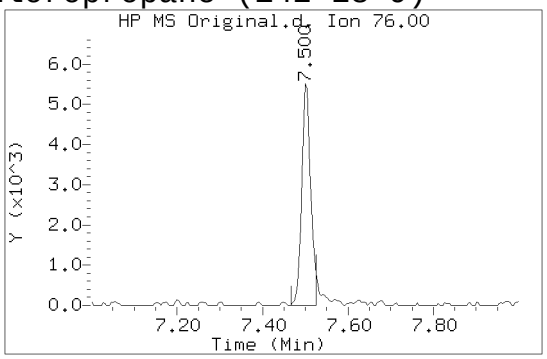
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

1,3-Dichloropropane (142-28-9)

Reason Code:

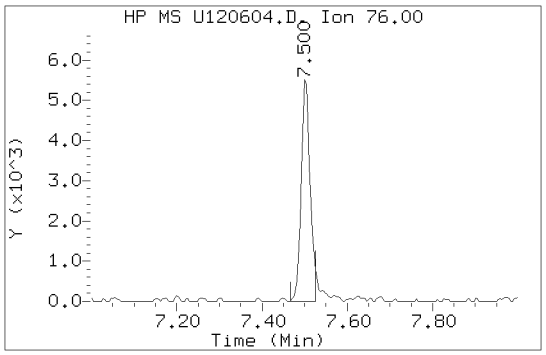
BEFORE

MASS
56
AREA
452
HEIGHT
436
06-Dec-2023
23:21



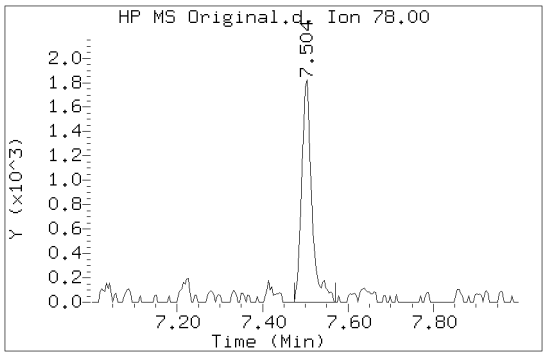
AFTER

MASS
76
AREA
8254
HEIGHT
5512
12-Dec-2023
09:43



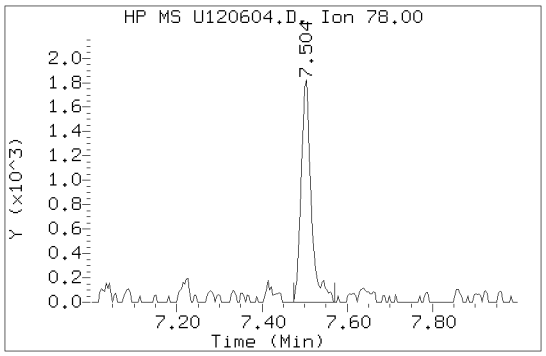
BEFORE

MASS
55
AREA
701
HEIGHT
352
06-Dec-2023
23:21



AFTER

MASS
78
AREA
3088
HEIGHT
1823
12-Dec-2023
09:43

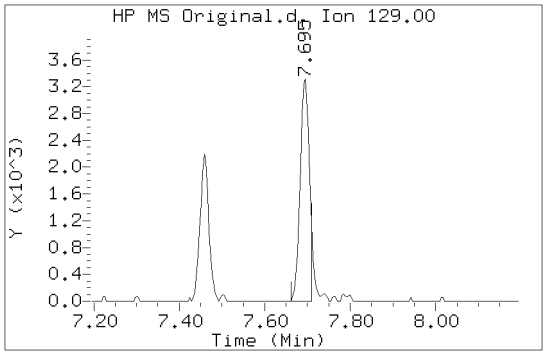


Dibromochloromethane (124-48-1)

Reason Code:

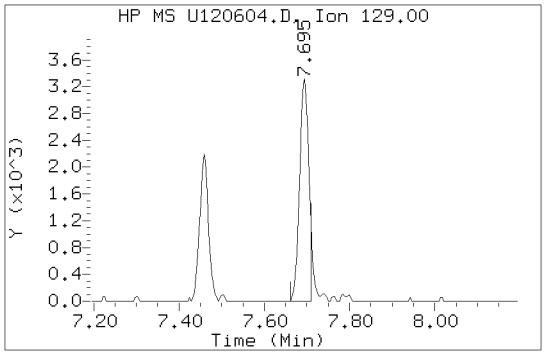
BEFORE

MASS
63
AREA
104
HEIGHT
66
06-Dec-2023
23:21



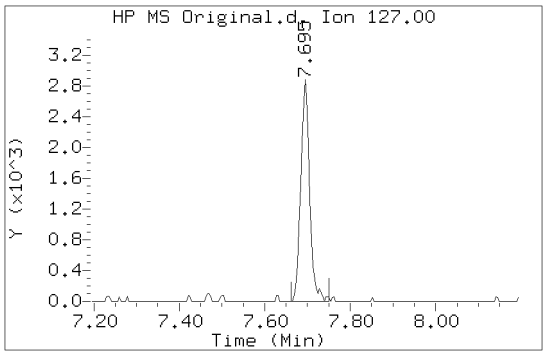
AFTER

MASS
129
AREA
5059
HEIGHT
3317
12-Dec-2023
09:43



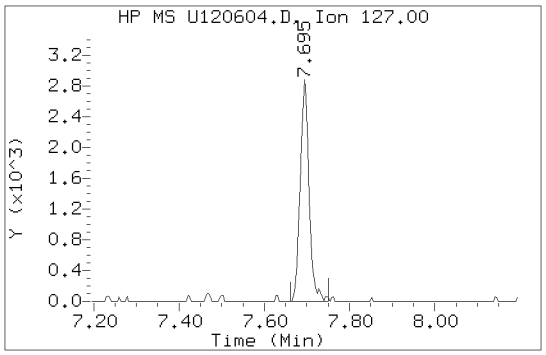
BEFORE

MASS
65
AREA
0
HEIGHT
0
06-Dec-2023
23:21



AFTER

MASS
127
AREA
4291
HEIGHT
2880
12-Dec-2023
09:43



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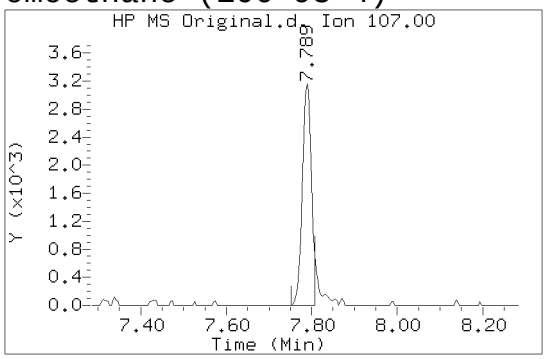
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

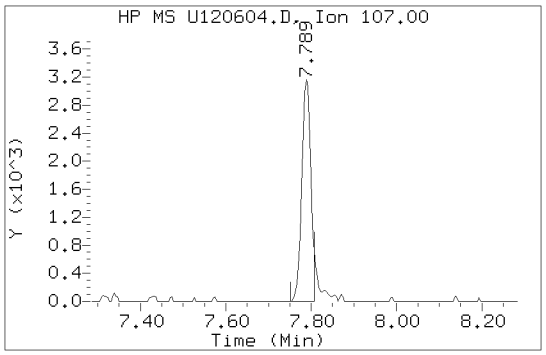
1,2-Dibromoethane (106-93-4)

Reason Code:

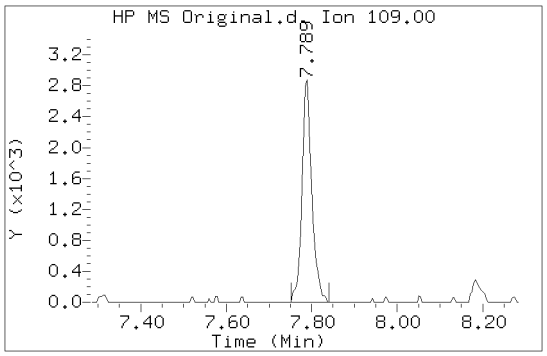
BEFORE
MASS
112
AREA
13746
HEIGHT
9169
06-Dec-2023
23:21



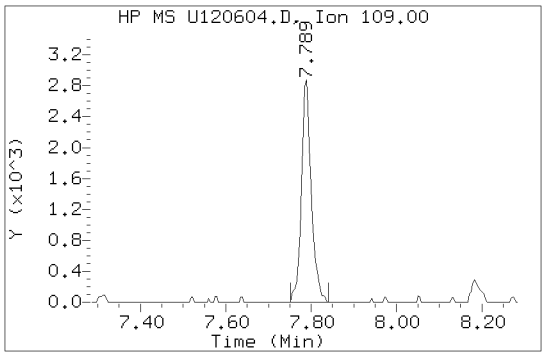
AFTER
MASS
107
AREA
4790
HEIGHT
3163
12-Dec-2023
09:43



BEFORE
MASS
77
AREA
14266
HEIGHT
5843
06-Dec-2023
23:21



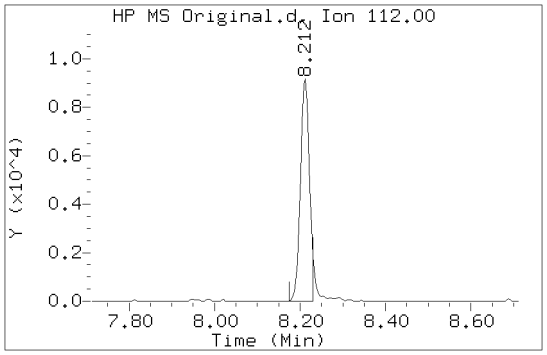
AFTER
MASS
109
AREA
4725
HEIGHT
2876
12-Dec-2023
09:43



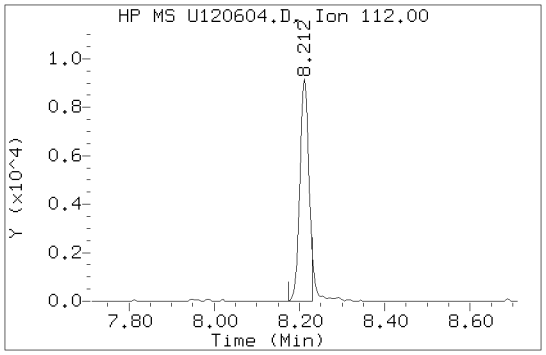
Chlorobenzene (108-90-7)

Reason Code:

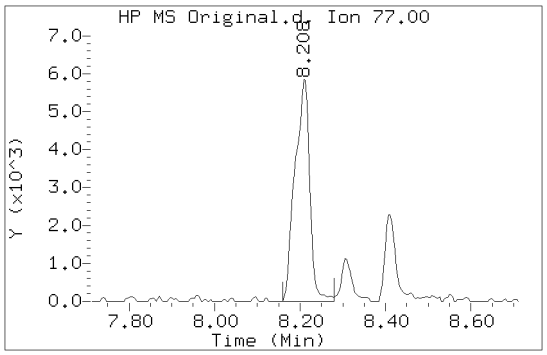
BEFORE
MASS
131
AREA
4936
HEIGHT
3097
06-Dec-2023
23:21



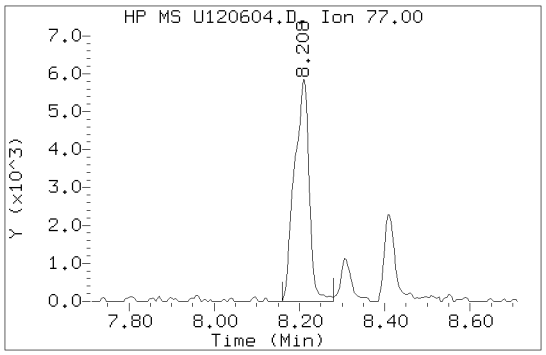
AFTER
MASS
112
AREA
13746
HEIGHT
9169
12-Dec-2023
09:43



BEFORE
MASS
133
AREA
5045
HEIGHT
3220
06-Dec-2023
23:21



AFTER
MASS
77
AREA
14266
HEIGHT
5843
12-Dec-2023
09:43



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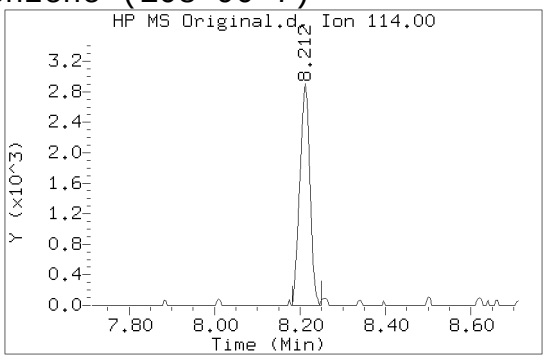
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

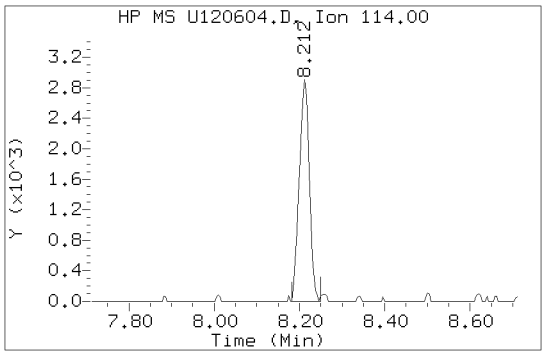
Chlorobenzene (108-90-7)

Reason Code:

BEFORE
MASS
119
AREA
4987
HEIGHT
2688
06-Dec-2023
23:21



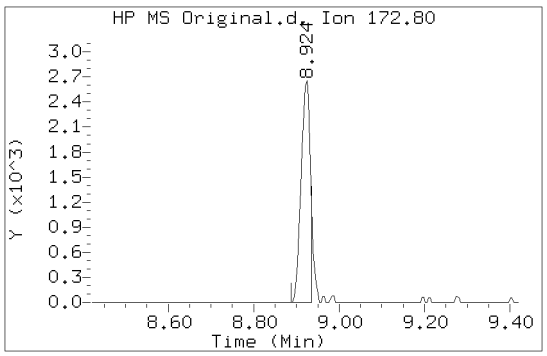
AFTER
MASS
114
AREA
4887
HEIGHT
2906
12-Dec-2023
09:43



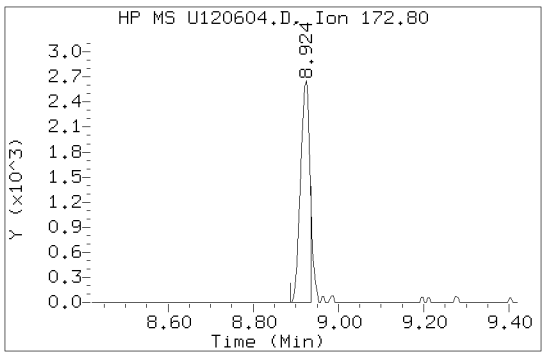
Bromoform (75-25-2)

Reason Code:

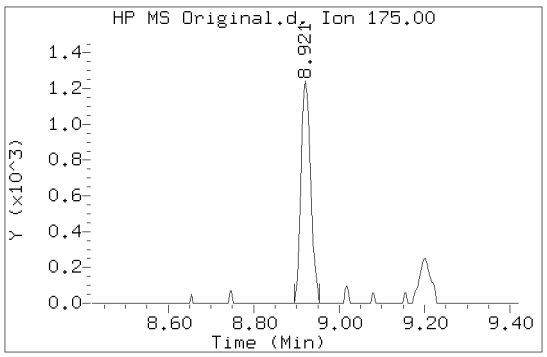
BEFORE
MASS
172.8
AREA
4009
HEIGHT
2655
06-Dec-2023
23:21



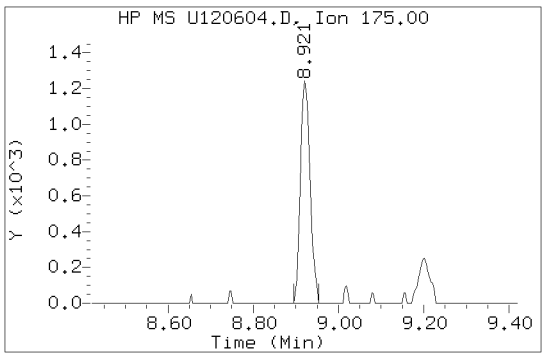
AFTER
MASS
172.8
AREA
4009
HEIGHT
2655
12-Dec-2023
09:43



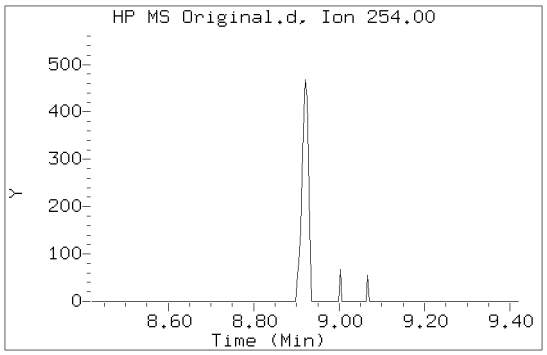
BEFORE
MASS
175
AREA
2010
HEIGHT
1243
06-Dec-2023
23:21



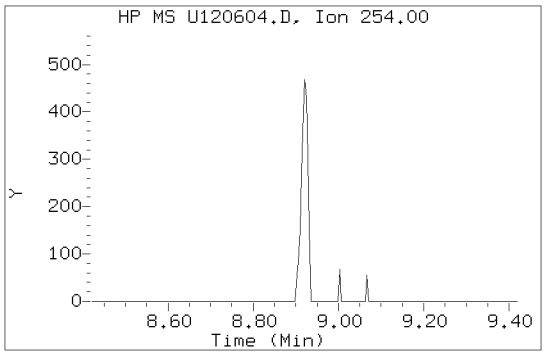
AFTER
MASS
175
AREA
2010
HEIGHT
1243
12-Dec-2023
09:43



BEFORE
MASS
254
AREA
0
HEIGHT
0
06-Dec-2023
23:21



AFTER
MASS
254
AREA
0
HEIGHT
0
12-Dec-2023
09:43



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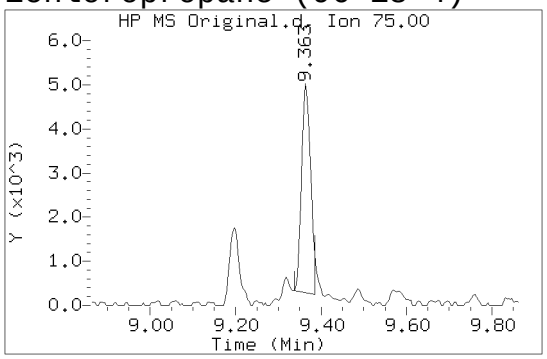
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

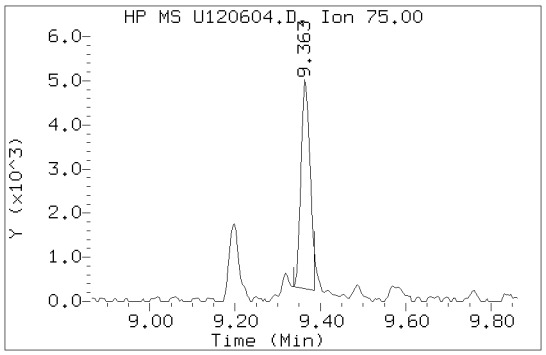
1,2,3-Trichloropropane (96-18-4)

Reason Code:

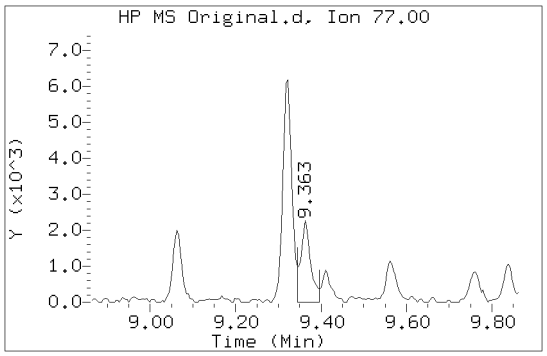
BEFORE
MASS
152
AREA
292314
HEIGHT
188877
06-Dec-2023
23:21



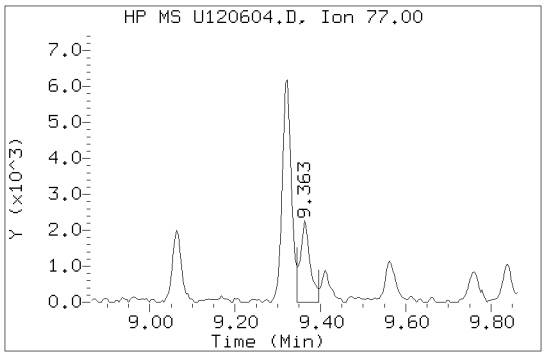
AFTER
MASS
75
AREA
7225
HEIGHT
4742
12-Dec-2023
09:43



BEFORE
MASS
115
AREA
159675
HEIGHT
100656
06-Dec-2023
23:21



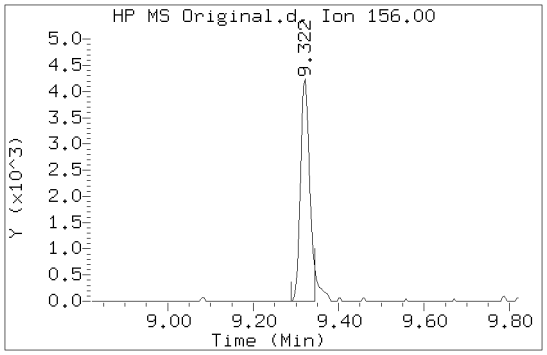
AFTER
MASS
77
AREA
3895
HEIGHT
2276
12-Dec-2023
09:43



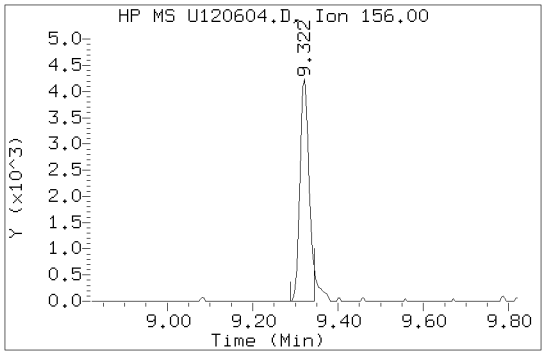
Bromobenzene (108-86-1)

Reason Code:

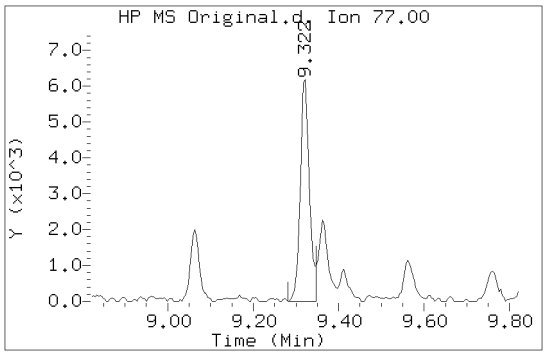
BEFORE
MASS
75
AREA
7225
HEIGHT
4742
06-Dec-2023
23:21



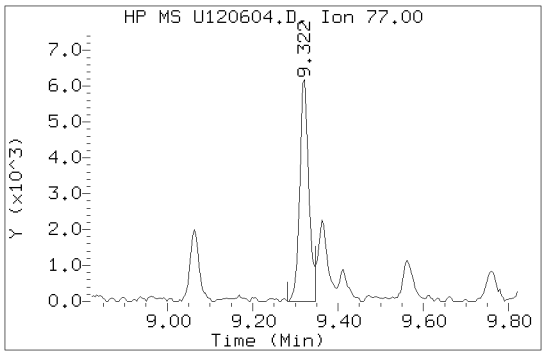
AFTER
MASS
156
AREA
6451
HEIGHT
4241
12-Dec-2023
09:43



BEFORE
MASS
77
AREA
3895
HEIGHT
2276
06-Dec-2023
23:21



AFTER
MASS
77
AREA
9489
HEIGHT
6181
12-Dec-2023
09:43



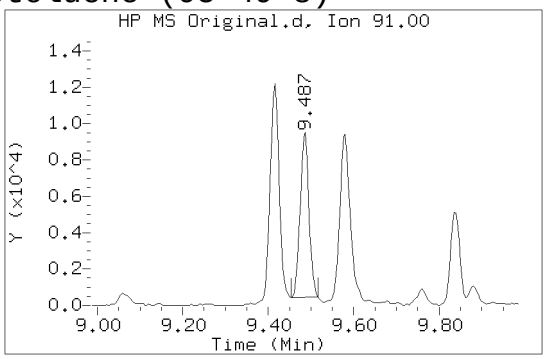
Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120604.D
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

2-Chlorotoluene (95-49-8)

Reason Code:

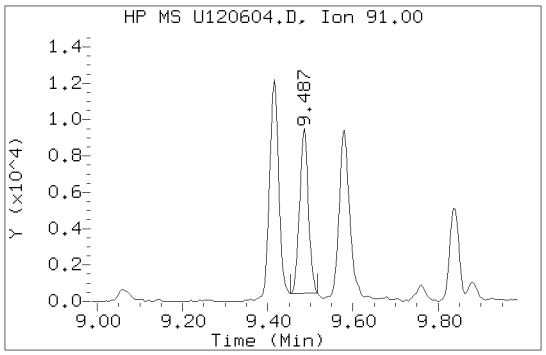
BEFORE

MASS
91
AREA
18576
HEIGHT
12131
06-Dec-2023
23:21



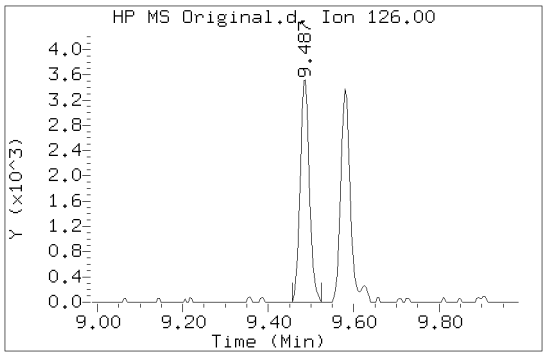
AFTER

MASS
91
AREA
13144
HEIGHT
9069
12-Dec-2023
09:43



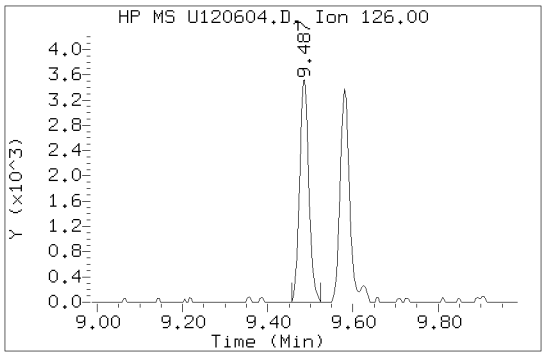
BEFORE

MASS
120
AREA
4175
HEIGHT
2622
06-Dec-2023
23:21



AFTER

MASS
126
AREA
5403
HEIGHT
3519
12-Dec-2023
09:43

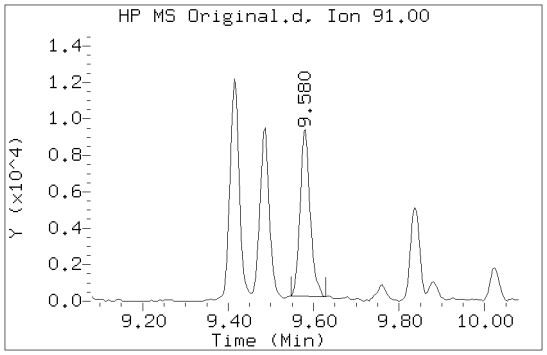


4-Chlorotoluene (106-43-4)

Reason Code:

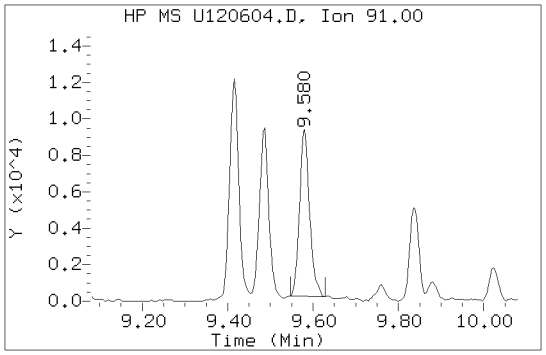
BEFORE

MASS
156
AREA
6451
HEIGHT
4241
06-Dec-2023
23:21



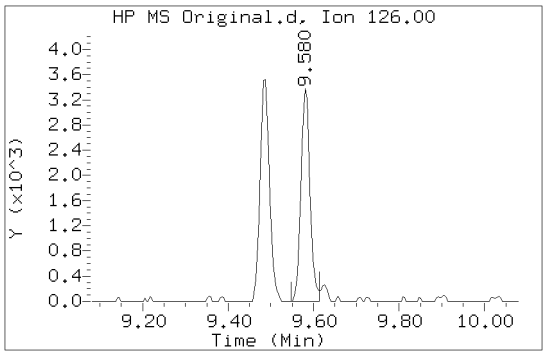
AFTER

MASS
91
AREA
15217
HEIGHT
9149
12-Dec-2023
09:43



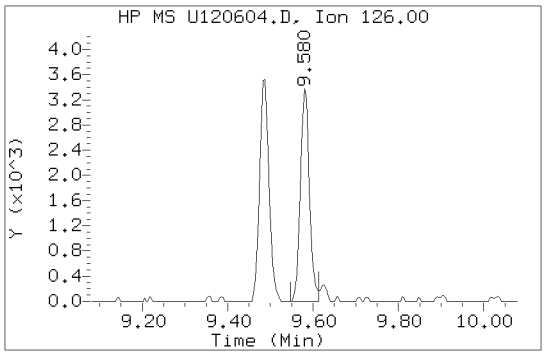
BEFORE

MASS
77
AREA
9489
HEIGHT
6181
06-Dec-2023
23:21



AFTER

MASS
126
AREA
5101
HEIGHT
3378
12-Dec-2023
09:43



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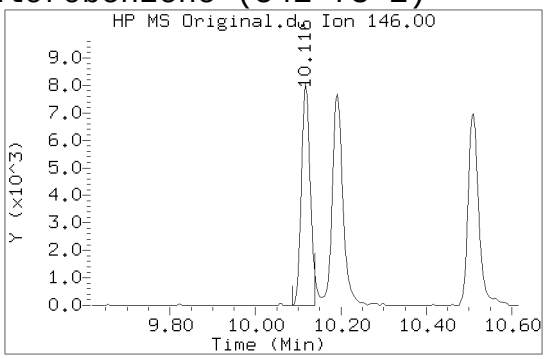
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

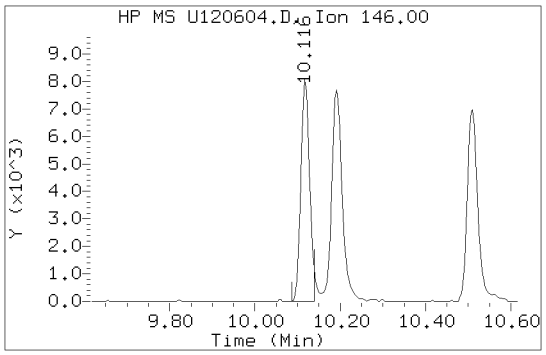
1,3-Dichlorobenzene (541-73-1)

Reason Code:

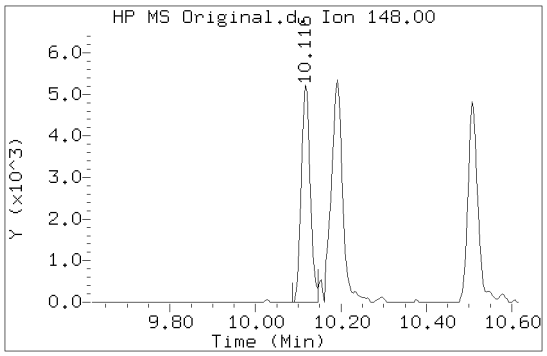
BEFORE
MASS
119
AREA
13105
HEIGHT
8645
06-Dec-2023
23:21



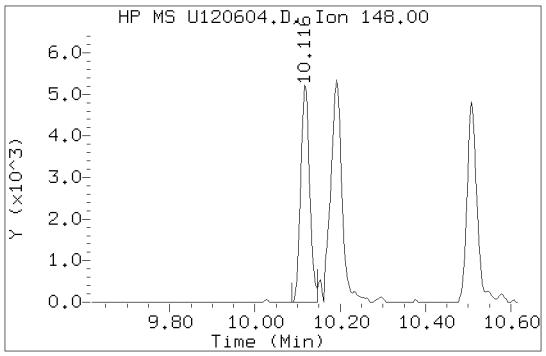
AFTER
MASS
146
AREA
11762
HEIGHT
8063
12-Dec-2023
09:43



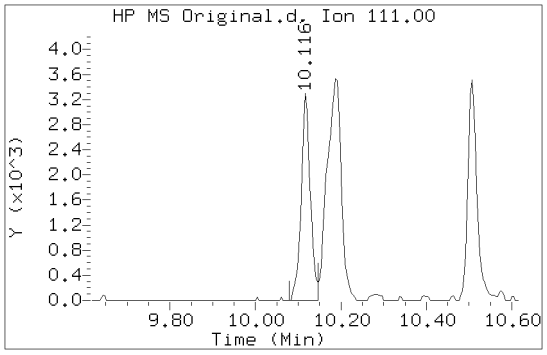
BEFORE
MASS
91
AREA
7970
HEIGHT
5113
06-Dec-2023
23:21



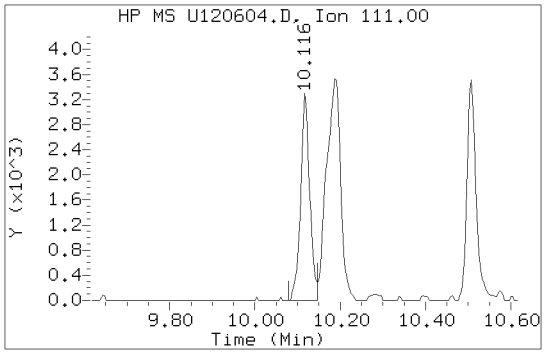
AFTER
MASS
148
AREA
7837
HEIGHT
5232
12-Dec-2023
09:43



BEFORE
MASS
134
AREA
3501
HEIGHT
2543
06-Dec-2023
23:21



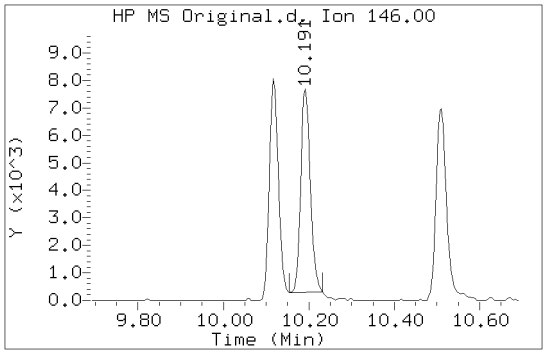
AFTER
MASS
111
AREA
4991
HEIGHT
3301
12-Dec-2023
09:43



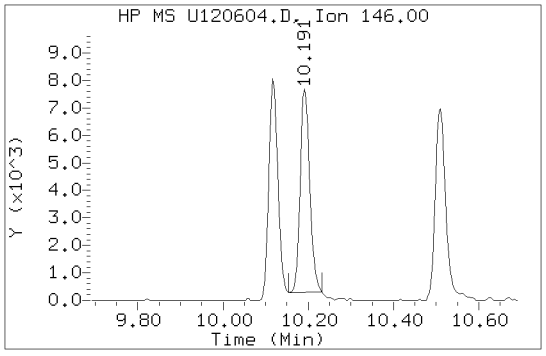
1,4-Dichlorobenzene (106-46-7)

Reason Code:

BEFORE
MASS
105
AREA
12864
HEIGHT
8289
06-Dec-2023
23:21



AFTER
MASS
146
AREA
11764
HEIGHT
7398
12-Dec-2023
09:43



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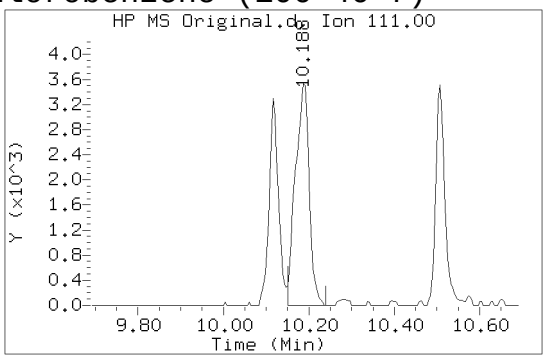
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

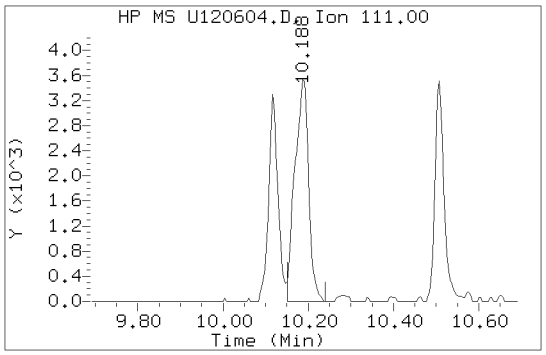
1,4-Dichlorobenzene (106-46-7)

Reason Code:

BEFORE
MASS
120
AREA
6131
HEIGHT
4307
06-Dec-2023
23:21



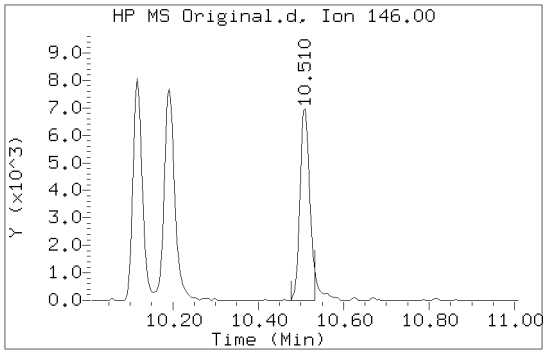
AFTER
MASS
111
AREA
8078
HEIGHT
3533
12-Dec-2023
09:43



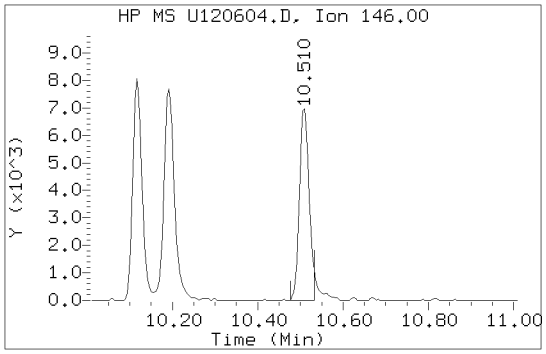
1,2-Dichlorobenzene (95-50-1)

Reason Code:

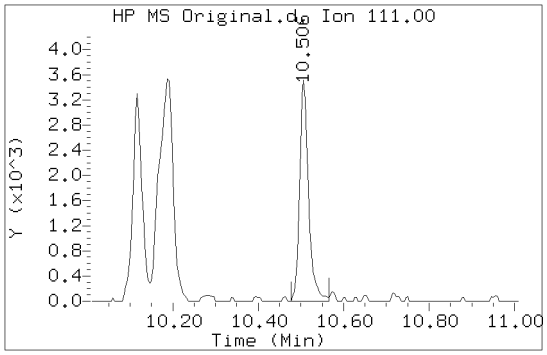
BEFORE
MASS
41
AREA
3181
HEIGHT
1500
06-Dec-2023
23:21



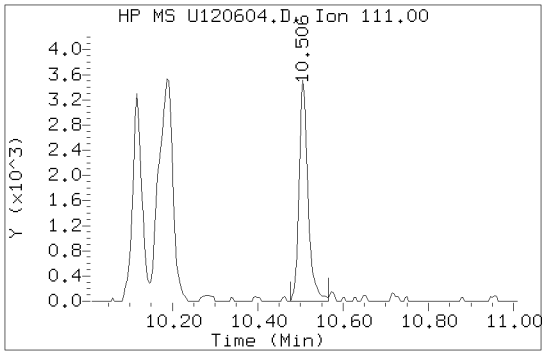
AFTER
MASS
146
AREA
11314
HEIGHT
6978
12-Dec-2023
09:43



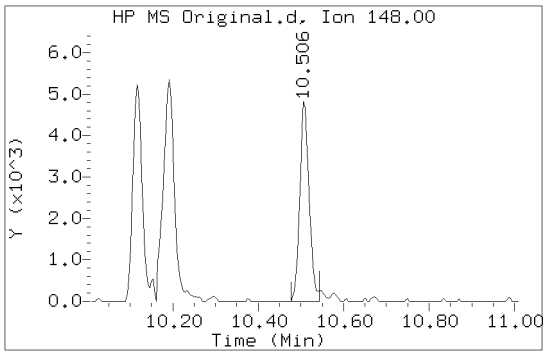
BEFORE
MASS
69
AREA
3138
HEIGHT
1288
06-Dec-2023
23:21



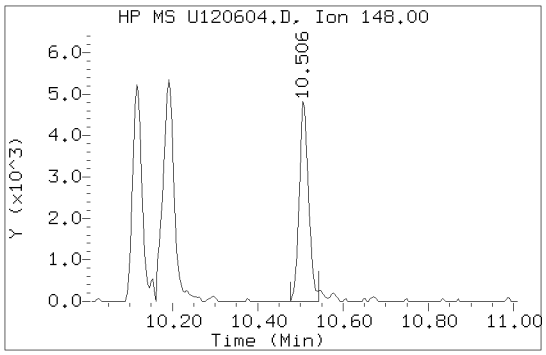
AFTER
MASS
111
AREA
5243
HEIGHT
3519
12-Dec-2023
09:43



BEFORE
MASS
100
AREA
1391
HEIGHT
767
06-Dec-2023
23:21



AFTER
MASS
148
AREA
7512
HEIGHT
4827
12-Dec-2023
09:43



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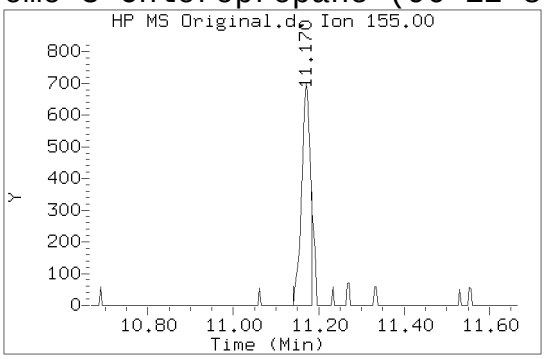
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

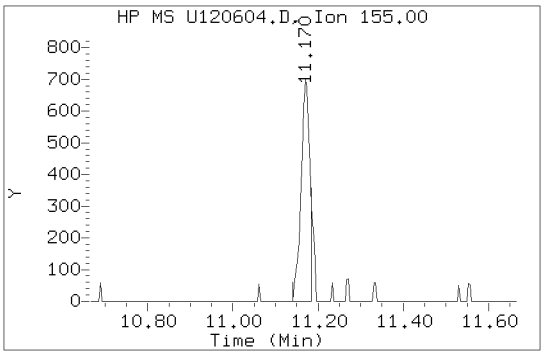
1,2-Dibromo-3-Chloropropane (96-12-8)

Reason Code:

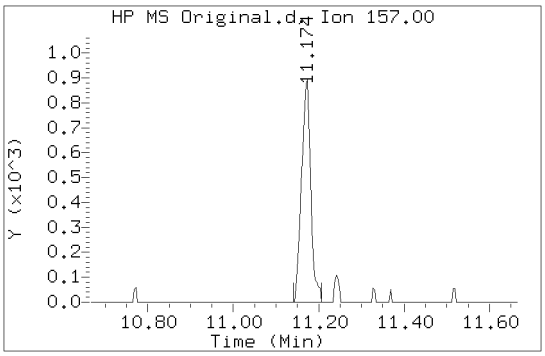
BEFORE
MASS
119
AREA
12618
HEIGHT
8526
06-Dec-2023
23:21



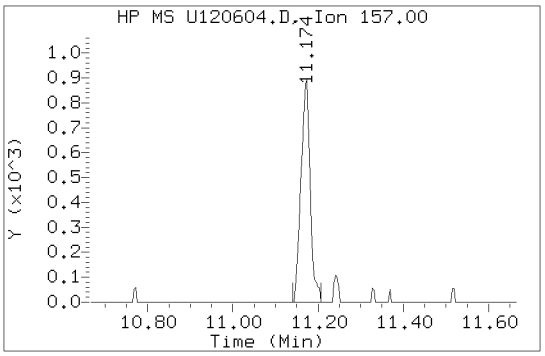
AFTER
MASS
155
AREA
1017
HEIGHT
699
12-Dec-2023
09:43



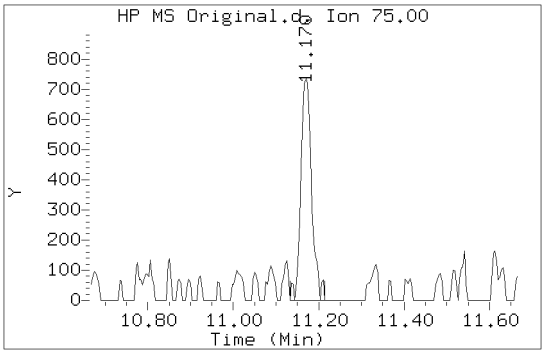
BEFORE
MASS
134
AREA
3443
HEIGHT
2049
06-Dec-2023
23:21



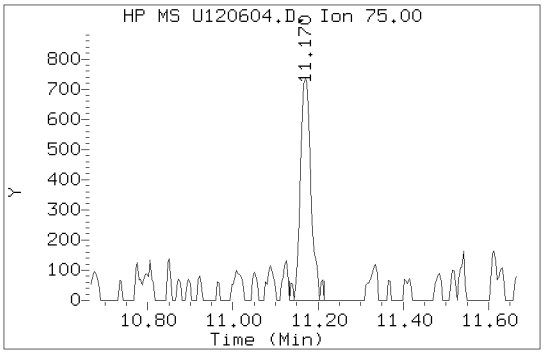
AFTER
MASS
157
AREA
1379
HEIGHT
892
12-Dec-2023
09:43



BEFORE
MASS
91
AREA
3724
HEIGHT
1712
06-Dec-2023
23:21



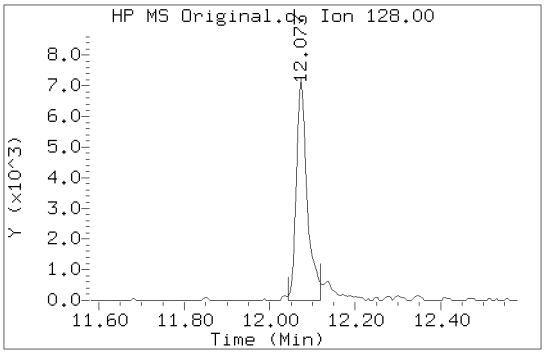
AFTER
MASS
75
AREA
1331
HEIGHT
735
12-Dec-2023
09:43



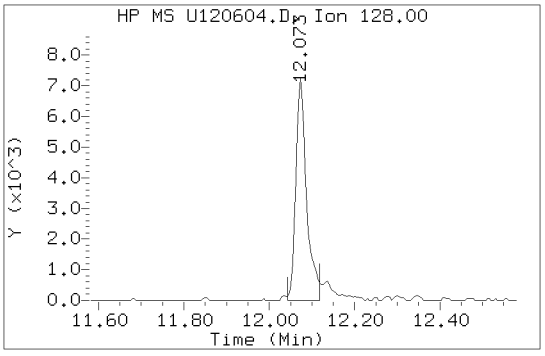
Naphthalene (91-20-3)

Reason Code:

BEFORE
MASS
43
AREA
825
HEIGHT
395
06-Dec-2023
23:21



AFTER
MASS
128
AREA
13023
HEIGHT
7233
12-Dec-2023
09:43



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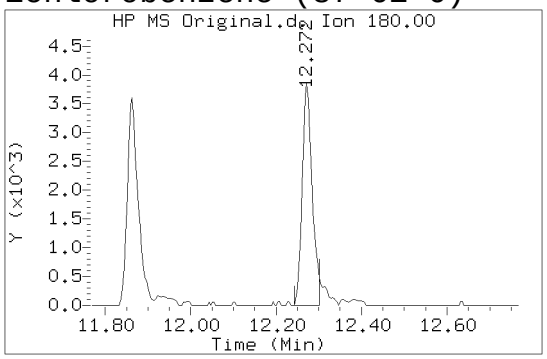
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

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

Reason Code:

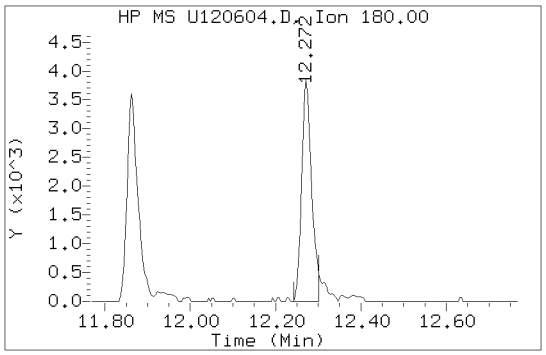
BEFORE

MASS
69
AREA
4516
HEIGHT
2548
06-Dec-2023
23:21



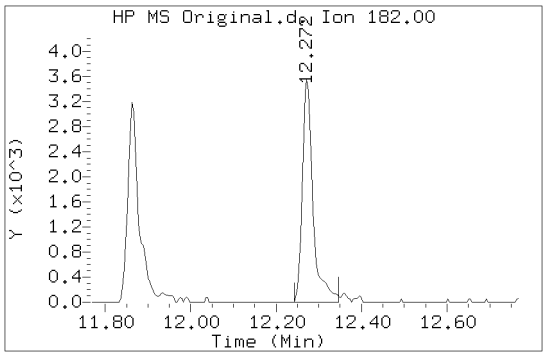
AFTER

MASS
180
AREA
6413
HEIGHT
3848
12-Dec-2023
09:43



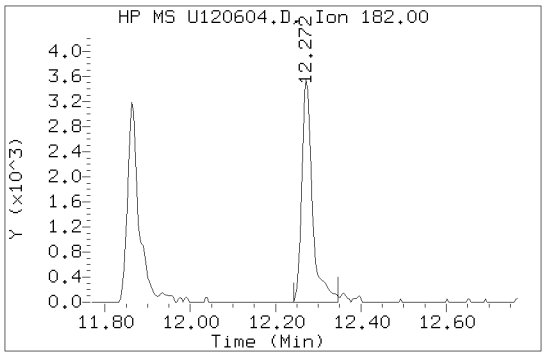
BEFORE

MASS
41
AREA
3380
HEIGHT
1662
06-Dec-2023
23:21



AFTER

MASS
182
AREA
6322
HEIGHT
3544
12-Dec-2023
09:43

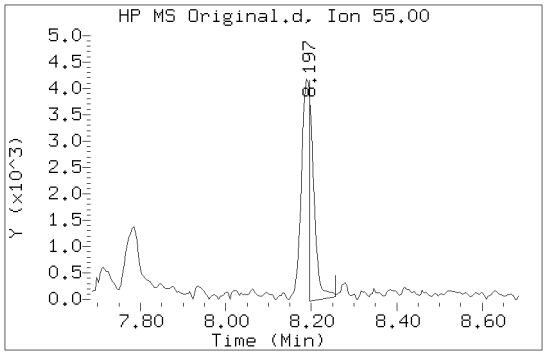


1-Chlorohexane (544-10-5)

Reason Code:

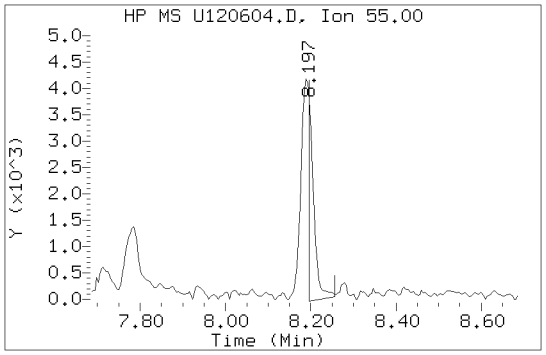
BEFORE

MASS
91
AREA
10752
HEIGHT
5764
06-Dec-2023
23:21



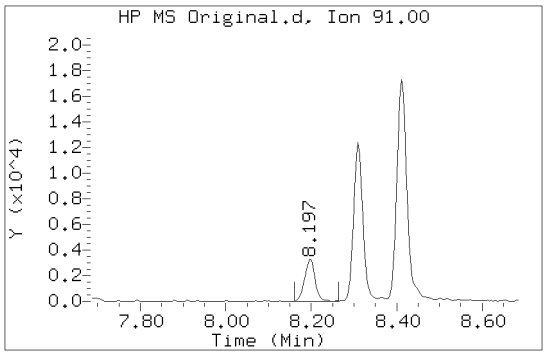
AFTER

MASS
55
AREA
3275
HEIGHT
3828
12-Dec-2023
09:43



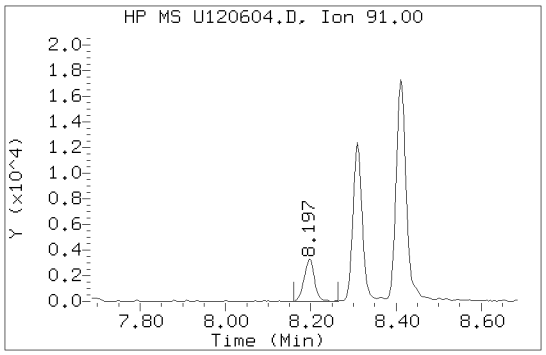
BEFORE

MASS
92
AREA
5866
HEIGHT
3298
06-Dec-2023
23:21



AFTER

MASS
91
AREA
5624
HEIGHT
3288
12-Dec-2023
09:43



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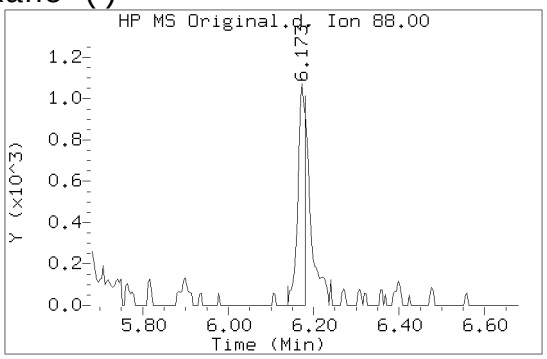
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

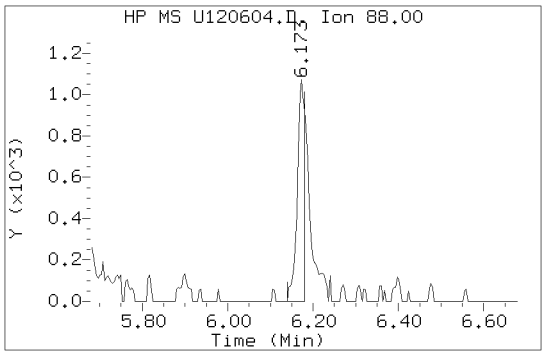
1,4-Dioxane ()

Reason Code:

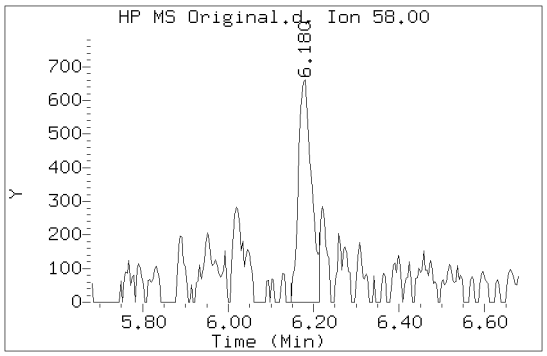
BEFORE
MASS
155
AREA
1017
HEIGHT
699
06-Dec-2023
23:21



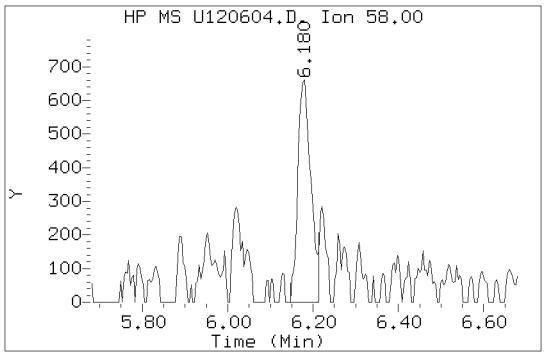
AFTER
MASS
88
AREA
1303
HEIGHT
1072
12-Dec-2023
09:43



BEFORE
MASS
157
AREA
1379
HEIGHT
892
06-Dec-2023
23:21



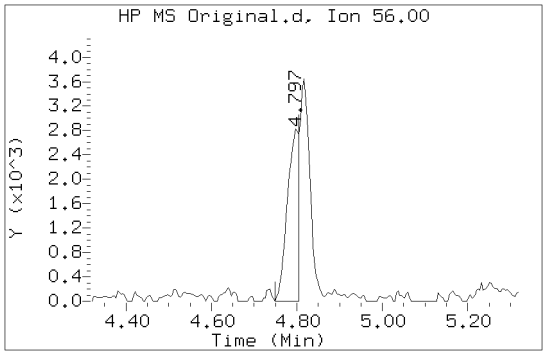
AFTER
MASS
58
AREA
1437
HEIGHT
661
12-Dec-2023
09:43



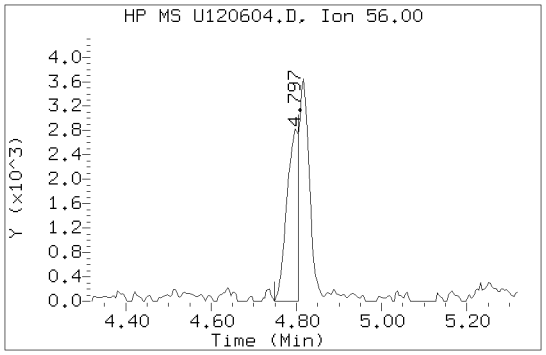
Cyclohexane (110-82-7)

Reason Code:

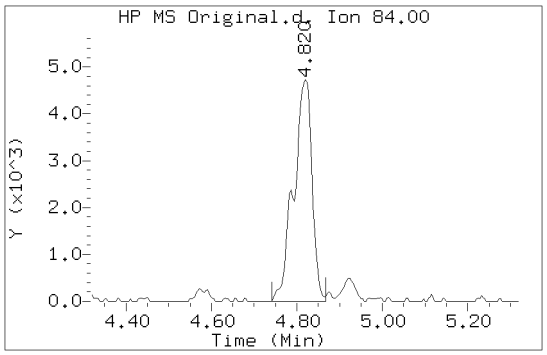
BEFORE
MASS
225
AREA
2507
HEIGHT
1544
06-Dec-2023
23:21



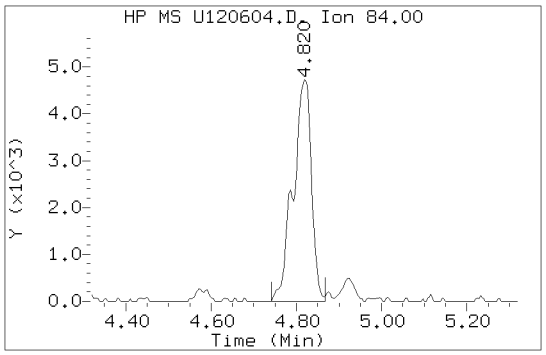
AFTER
MASS
56
AREA
5330
HEIGHT
2825
12-Dec-2023
09:43



BEFORE
MASS
223
AREA
1722
HEIGHT
1179
06-Dec-2023
23:21



AFTER
MASS
84
AREA
14309
HEIGHT
4728
12-Dec-2023
09:43



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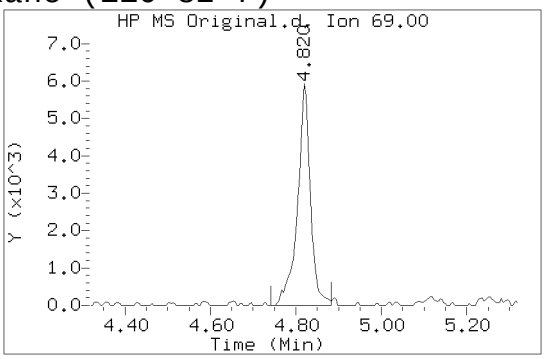
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

Cyclohexane (110-82-7)

Reason Code:

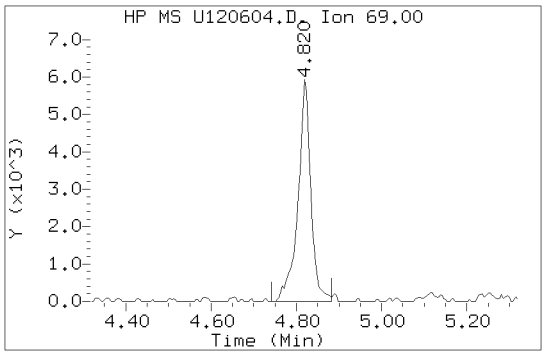
BEFORE

MASS
227
AREA
1694
HEIGHT
927
06-Dec-2023
23:21



AFTER

MASS
69
AREA
12632
HEIGHT
5931
12-Dec-2023
09:43

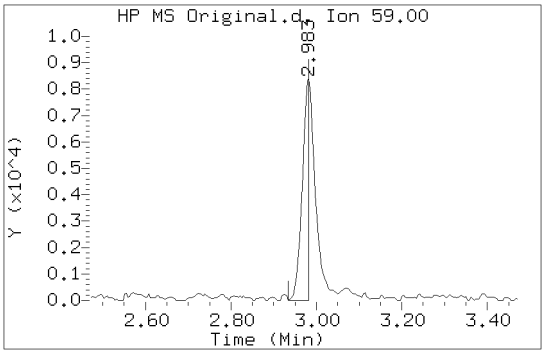


Tert-Butyl alcohol (75-65-0)

Reason Code:

BEFORE

MASS
106
AREA
20615
HEIGHT
12759
06-Dec-2023
23:21



AFTER

MASS
59
AREA
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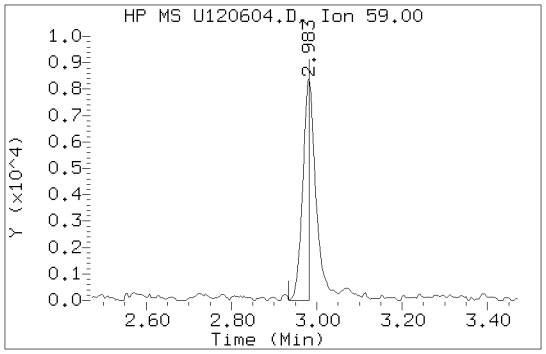
HEIGHT
8396
12-Dec-2023
09:43



BEFORE

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91
AREA
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HEIGHT
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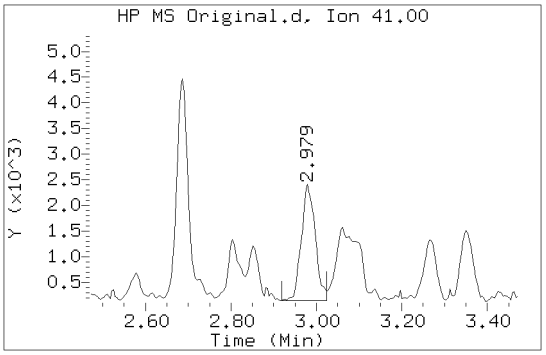
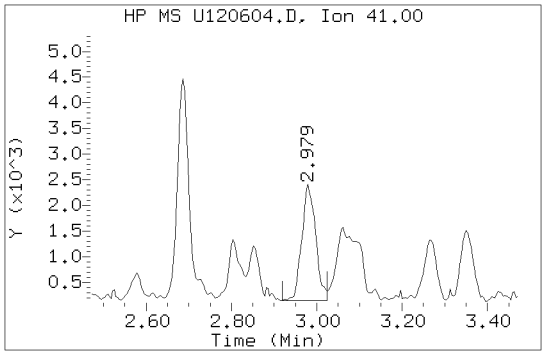
06-Dec-2023
23:21



AFTER

MASS
41
AREA
5197
HEIGHT
2262
12-Dec-2023
09:43

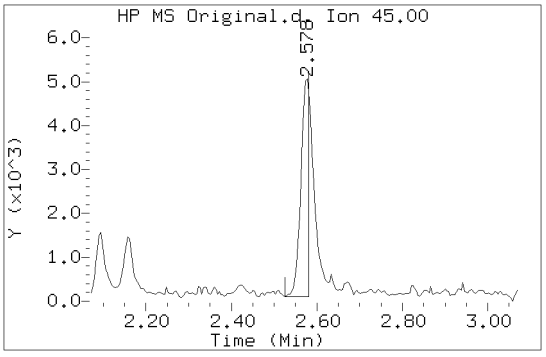


Isopropyl Alcohol (67-63-0)

Reason Code:

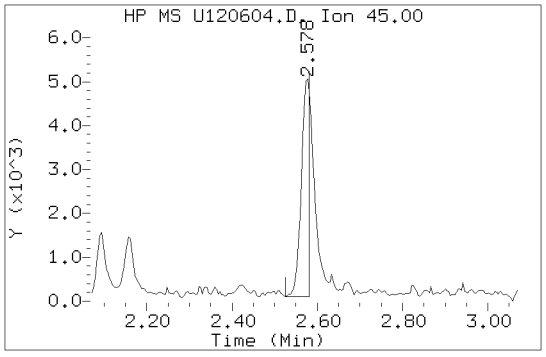
BEFORE

MASS
91
AREA
5233
HEIGHT
3126
06-Dec-2023
23:21



AFTER

MASS
45
AREA
6719
HEIGHT
4957
12-Dec-2023
09:43



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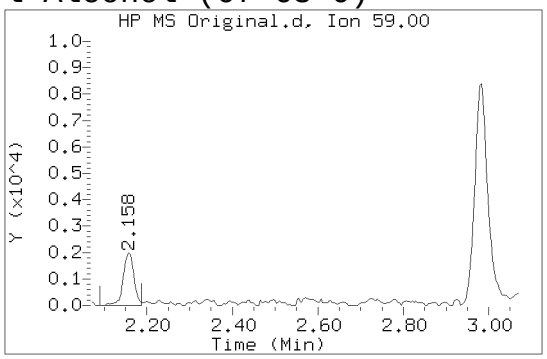
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

Isopropyl Alcohol (67-63-0)

Reason Code:

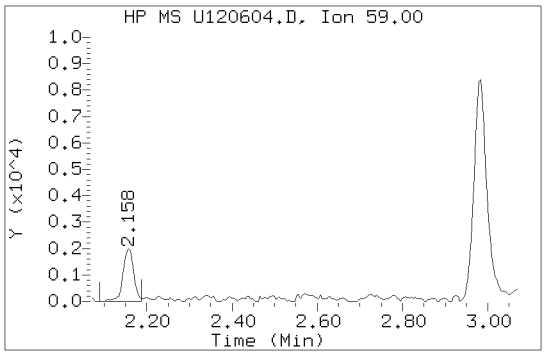
BEFORE

MASS
126
AREA
1016
HEIGHT
673
06-Dec-2023
23:21



AFTER

MASS
59
AREA
3472
HEIGHT
1986
12-Dec-2023
09:43

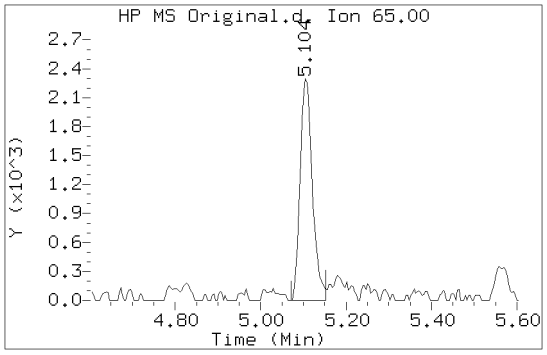


1,2-Dichloroethane-d4 (17060-07-0)

Reason Code:

BEFORE

MASS
53
AREA
1465
HEIGHT
972
06-Dec-2023
23:21



AFTER

MASS
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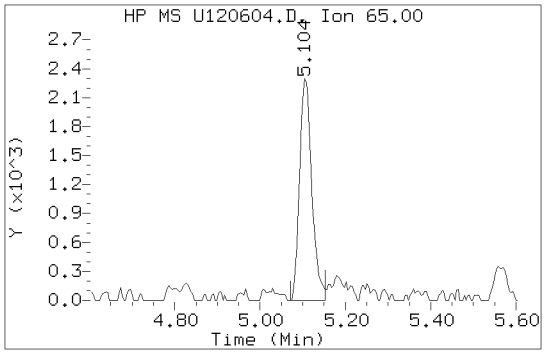
AREA
4689
HEIGHT
2297
12-Dec-2023
09:43



BEFORE

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AREA
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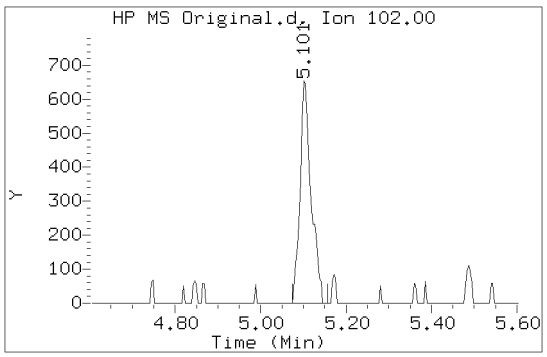
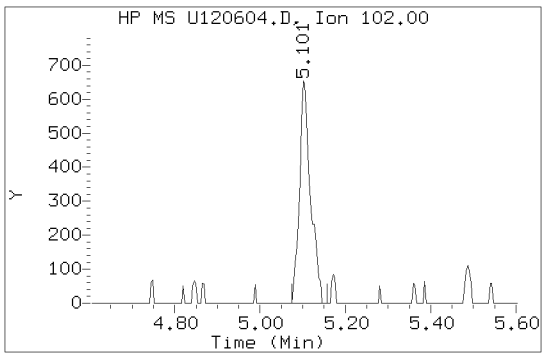
0
06-Dec-2023
23:21



AFTER

MASS
102
AREA
1197
HEIGHT
654
12-Dec-2023
09:43



Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120605.D Page 1
Report Date: 12-Dec-2023 09:43

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120605.D
Lab Smp Id: VSTD002 Client Smp ID: VSTD002
Inj Date : 06-DEC-2023 13:05
Operator : PC Inst ID: VOA9.i
Smp Info : VSTD002;VSTD002;1;4;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\8260C.m
Meth Date : 12-Dec-2023 09:43 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 12:43 Cal File: U120604.D
Als bottle: 6 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V9.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1	Pentafluorobenzene	168	4.815	4.815	(1.000)	358877	50.0000	
2	Dichlorodifluoromethane	85	1.160	1.160	(0.241)	5944	2.00000	2.88
3	Chloromethane	50	1.295	1.295	(0.269)	8437	2.00000	2.04
5	Vinyl Chloride	62	1.374	1.374	(0.285)	8077	2.00000	2.05
6	Bromomethane	94	1.617	1.617	(0.336)	6114	2.00000	2.31(M)
7	Chloroethane	64	1.696	1.696	(0.352)	5706	2.00000	2.15
8	Trichlorofluoromethane	101	1.895	1.895	(0.394)	11239	2.00000	2.25
9	Acrolein	56	2.266	2.266	(0.471)	825	4.00000	4.03(M)
10	Acetone	43	2.408	2.408	(0.500)	7963	4.00000	0.82(M)
11	1,1-Dichloroethene	96	2.326	2.326	(0.483)	5632	2.00000	2.03
15	Iodomethane	142	2.465	2.465	(0.512)	6285	4.00000	4.15
16	Acrylonitrile	53	3.068	3.068	(0.637)	6017	4.00000	4.27
17	Methylene Chloride	84	2.791	2.791	(0.580)	9102	2.00000	2.35
18	Methyl tert-butyl ether	73	3.079	3.079	(0.640)	21523	2.00000	2.17
19	Carbon Disulfide	76	2.517	2.517	(0.523)	33285	4.00000	4.08
20	trans-1,2-Dichloroethene	96	3.057	3.057	(0.635)	6834	2.00000	2.06
21	Vinyl Acetate	43	3.612	3.612	(0.750)	39911	4.00000	3.98
22	1,1-Dichloroethane	63	3.507	3.507	(0.728)	13430	2.00000	1.98
24	2-Butanone	43	4.275	4.275	(0.888)	6824	4.00000	3.88(M)
26	2,2-Dichloropropane	77	4.181	4.181	(0.868)	9440	2.00000	1.98

27 cis-1,2-Dichloroethene	96	4.196	4.196 (0.872)	8977	2.00000	2.02
28 Chloroform	83	4.571	4.571 (0.949)	15241	2.00000	2.07

Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120605.D Page 2
Report Date: 12-Dec-2023 09:43

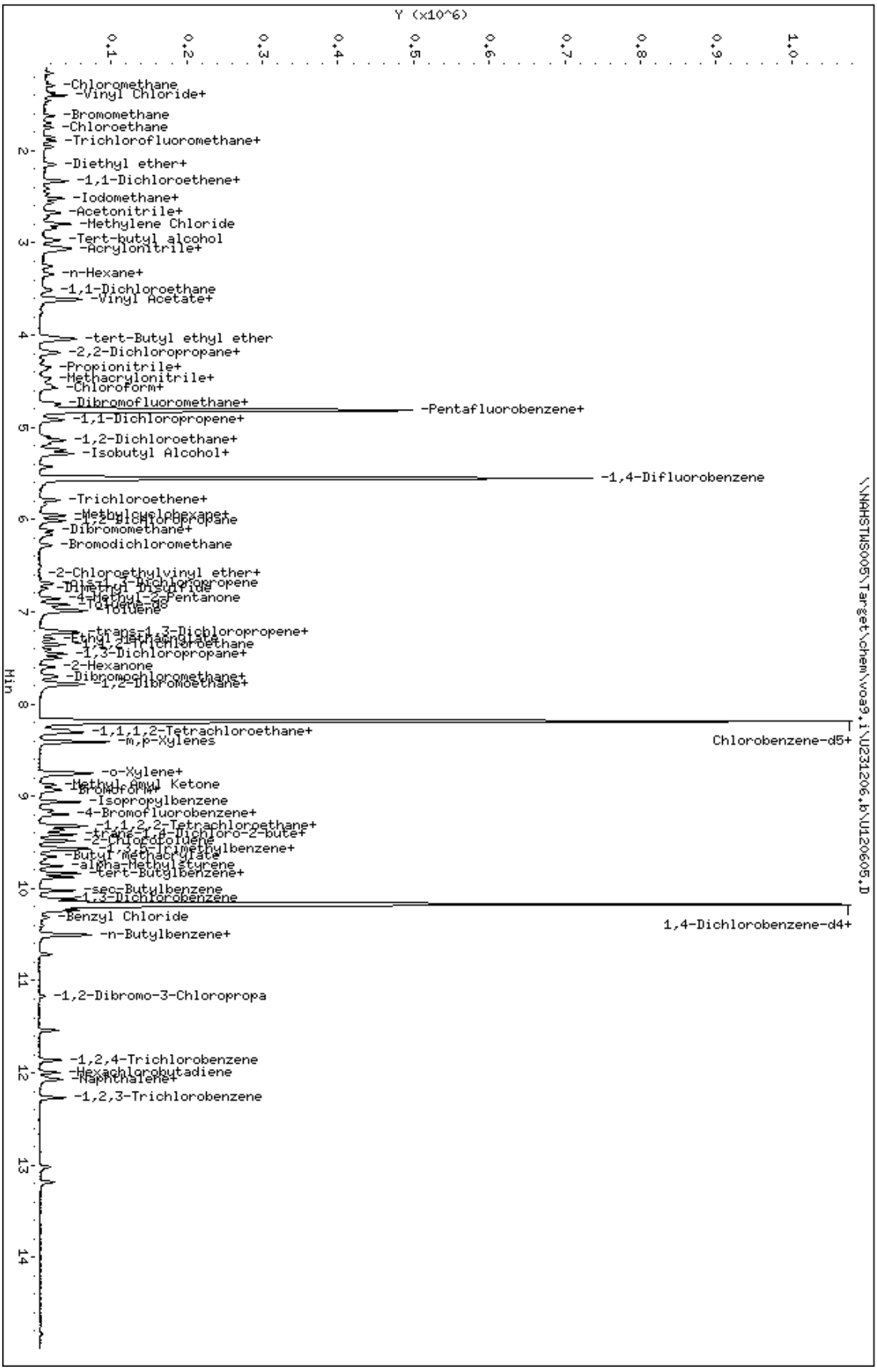
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	29 Bromochloromethane	128	4.466	4.466	(0.928)	5123	2.00000	2.23
$	30 Dibromofluoromethane	113	4.747	4.747	(0.986)	6940	2.00000	0.90
	31 1,1,1-Trichloroethane	97	4.744	4.744	(0.985)	11413	2.00000	2.04
	32 1,1-Dichloropropene	75	4.920	4.920	(0.886)	9794	2.00000	2.04
	33 1,2-Dichloroethane	62	5.179	5.179	(0.933)	11698	2.00000	2.09
	34 Carbon Tetrachloride	117	4.909	4.909	(0.884)	8985	2.00000	1.91
$	35 1,2-Dichloroethane-d4	65	5.100	5.100	(1.059)	9346	2.00000	1.80(M)
*	36 1,4-Difluorobenzene	114	5.553	5.553	(1.000)	572677	50.0000	
	37 Benzene	78	5.137	5.137	(0.925)	32480	2.00000	2.08
	38 Trichloroethene	130	5.790	5.790	(1.043)	9201	2.00000	2.14(M)
	39 Bromodichloromethane	83	6.277	6.277	(1.130)	9852	2.00000	1.92
	41 2-Chloroethylvinyl ether	63	6.584	6.584	(1.186)	254	4.00000	3.45(M)
	42 1,2-Dichloropropane	63	6.011	6.011	(1.082)	9176	2.00000	2.18
	44 Dibromomethane	93	6.119	6.119	(1.102)	5523	2.00000	2.03
	45 4-Methyl-2-Pentanone	43	6.858	6.858	(0.838)	19058	4.00000	4.27
	46 cis-1,3-Dichloropropene	75	6.693	6.693	(1.205)	10504	2.00000	3.03
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	571943	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	25656	2.00000	1.94
	50 Toluene	91	6.982	6.982	(0.853)	33168	2.00000	2.07
	51 trans-1,3-Dichloropropene	75	7.199	7.199	(1.296)	8323	2.00000	3.22
	52 2-Hexanone	43	7.596	7.596	(0.928)	12214	4.00000	4.23(M)
	53 1,1,2-Trichloroethane	83	7.357	7.357	(0.899)	8230	2.00000	1.43
	54 1,3-Dichloropropane	76	7.499	7.499	(0.916)	15193	2.00000	2.14
	55 Dibromochloromethane	129	7.690	7.690	(0.940)	8217	2.00000	1.93
	56 Tetrachloroethene	164	7.458	7.458	(0.911)	7082	2.00000	2.07
	57 1,2-Dibromoethane	107	7.788	7.788	(0.951)	7796	2.00000	1.96
	58 1-Chlorohexane	55	8.193	8.193	(1.475)	6133	2.00000	1.90(M)
	59 Chlorobenzene	112	8.211	8.211	(1.003)	24639	2.00000	2.12
	60 1,1,1,2-Tetrachloroethane	131	8.282	8.282	(1.012)	8251	2.00000	2.03
	61 Ethylbenzene	106	8.309	8.309	(1.015)	10659	2.00000	1.96
	62 m,p-Xylenes	106	8.410	8.410	(1.027)	26832	4.00000	4.10
	63 o-Xylene	106	8.747	8.747	(1.069)	13354	2.00000	1.98
	64 Styrene	104	8.766	8.766	(1.071)	20738	2.00000	1.85
	66 Bromoform	173	8.920	8.920	(1.090)	6134	2.00000	3.13
	67 Isopropylbenzene	105	9.062	9.062	(1.107)	32228	2.00000	1.98
	68 1,1,2,2-Tetrachloroethane	83	9.328	9.328	(0.917)	14293	2.00000	2.34(M)
$	69 4-Bromofluorobenzene	95	9.197	9.197	(1.124)	12602	2.00000	1.29
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	295659	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.920)	12628	2.00000	2.24(M)
	73 n-Propylbenzene	91	9.411	9.411	(0.925)	36000	2.00000	2.07
	74 Bromobenzene	156	9.317	9.317	(0.916)	10570	2.00000	2.12(M)
	75 1,3,5-Trimethylbenzene	105	9.565	9.565	(0.940)	23362	2.00000	1.89
	76 2-Chlorotoluene	91	9.482	9.482	(0.932)	24734	2.00000	2.11
	77 4-Chlorotoluene	91	9.576	9.576	(0.941)	28220	2.00000	2.12
	78 tert-Butylbenzene	119	9.838	9.838	(0.967)	23141	2.00000	2.08
	79 1,2,4-Trimethylbenzene	105	9.879	9.879	(0.971)	22592	2.00000	1.82
	81 sec-Butylbenzene	105	10.022	10.022	(0.985)	28888	2.00000	2.02
	82 p-Isopropyltoluene	119	10.146	10.146	(0.997)	22922	2.00000	1.85
	83 1,3-Dichlorobenzene	146	10.116	10.116	(0.994)	19974	2.00000	2.27
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	21680	2.00000	2.32(M)
	87 n-Butylbenzene	91	10.494	10.494	(1.032)	20530	2.00000	1.97
	88 1,2-Dichlorobenzene	146	10.509	10.509	(1.033)	20103	2.00000	2.27(M)

89	1,2-Dibromo-3-Chloropropane	155	11.169	11.169 (1.098)	1816	2.00000	4.12(M)
90	1,2,4-Trichlorobenzene	180	11.859	11.859 (1.166)	10130	2.00000	1.85

		QUANT SIG					AMOUNTS	
							CAL-AMT	ON-COL
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
	91 Hexachlorobutadiene	225	11.997	11.997	(1.179)	4820	2.00000	2.20
	92 Naphthalene	128	12.072	12.072	(1.187)	26823	2.00000	2.03
	93 1,2,3-Trichlorobenzene	180	12.271	12.271	(1.206)	11346	2.00000	2.06
M	94 1,2-Dichloroethylene (total)	96				15811	4.00000	
M	95 Xylenes (total)	106				40186	6.00000	
	131 Methyl Acrylate	55	4.376	4.376	(0.909)	10017	2.00000	2.12(a)
	135 1,4-Dioxane	88	6.172	6.172	(1.282)	2559	40.0000	44.94(M)
	141 Cyclohexane	56	4.785	4.785	(0.994)	10415	2.00000	2.01(M)
	138 Freon TF	101	2.333	2.333	(0.485)	6155	2.00000	2.38(M)
	140 1,3-Butadiene	54	1.400	1.400	(0.291)	7520	2.00000	2.08
	147 Methylcyclohexane	55	5.951	5.951	(1.072)	15702	2.00000	1.84
	146 Methyl Acetate	43	2.716	2.716	(0.564)	8315	2.00000	2.32
	148 Tert-Butyl alcohol	59	2.971	2.971	(0.617)	17716	40.0000	44.09(aM)
	149 Isopropyl Alcohol	45	2.562	2.562	(0.532)	10615	40.0000	39.59(TM)

QC Flag Legend

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



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

Instrument: VOA9,i
Operator: PC
Column diameter: 0.18

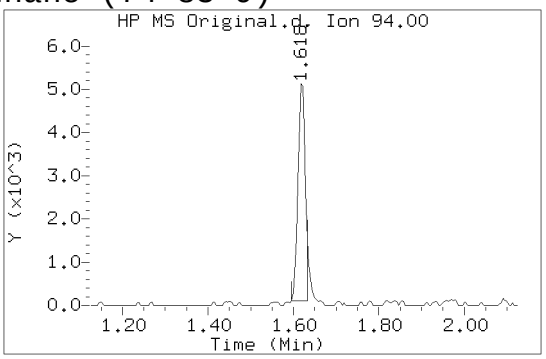
Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120605.D
Inj Date : 06-DEC-2023 13:05
InstruID : VOA9.i
LabSampID : VSTD002

Bromomethane (74-83-9)

Reason Code:

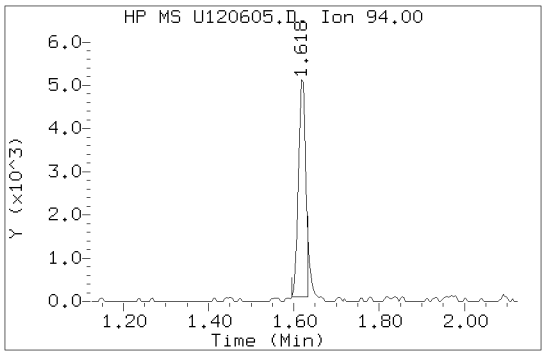
BEFORE

MASS
94
AREA
6114
HEIGHT
5031
11-Dec-2023
17:18
linh
pham



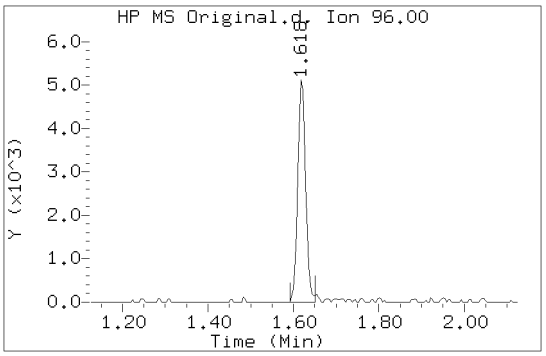
AFTER

MASS
94
AREA
6114
HEIGHT
5031
12-Dec-2023
09:43
linh
pham



BEFORE

MASS
96
AREA
6766
HEIGHT
5123
11-Dec-2023
17:18
linh
pham



AFTER

MASS
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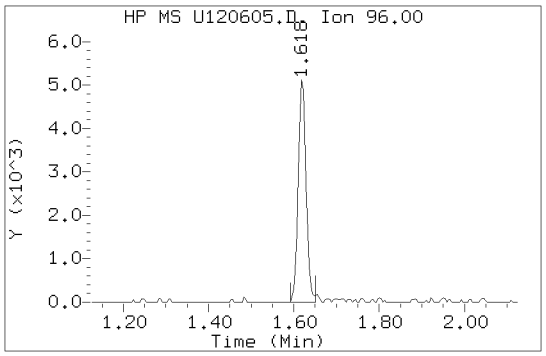
AREA
6766
HEIGHT
5123
12-Dec-2023
09:43
linh
pham

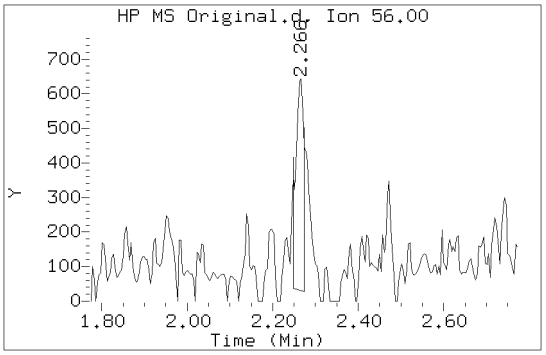


Acrolein (107-02-8)

Reason Code:

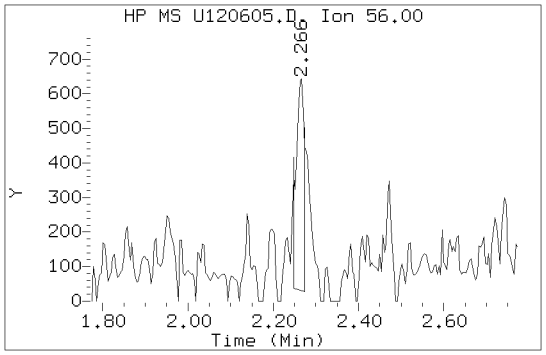
BEFORE

MASS
56
AREA
825
HEIGHT
612
11-Dec-2023
17:18
linh
pham



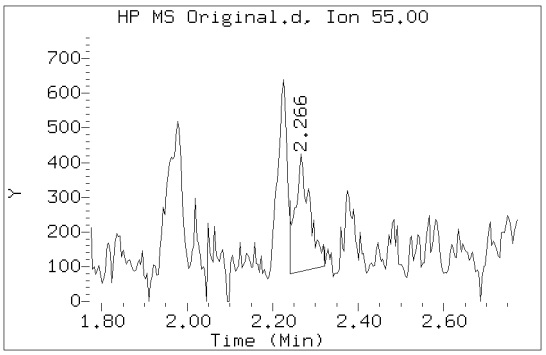
AFTER

MASS
56
AREA
825
HEIGHT
612
12-Dec-2023
09:43
linh
pham



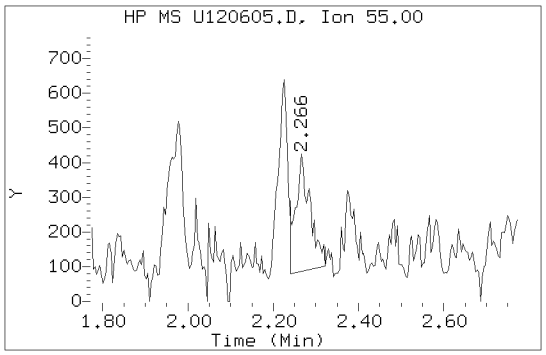
BEFORE

MASS
55
AREA
819
HEIGHT
339
11-Dec-2023
17:18
linh
pham



AFTER

MASS
55
AREA
819
HEIGHT
339
12-Dec-2023
09:43
linh
pham



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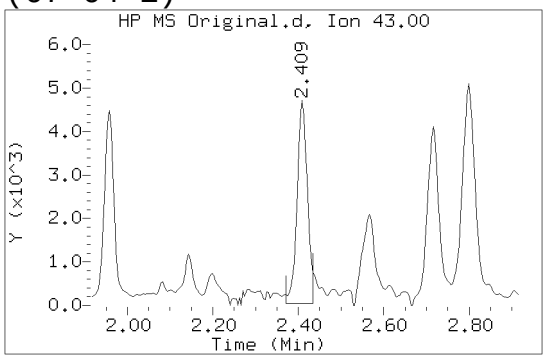
Inj Date : 06-DEC-2023 13:05
InstruID : VOA9.i
LabSampID : VSTD002

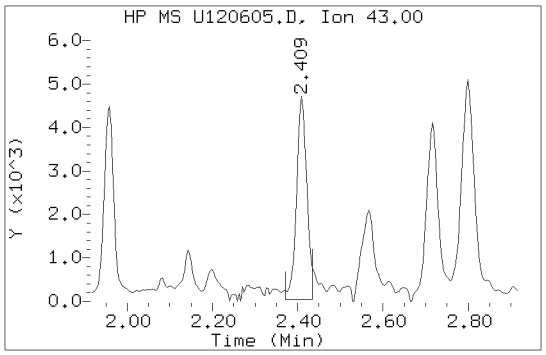
Acetone (67-64-1)

Reason Code:

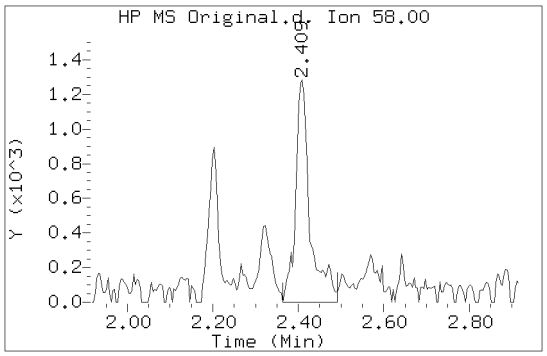
BEFORE
MASS
43
AREA
7963
HEIGHT
4678
11-Dec-2023
17:18
linh
pham



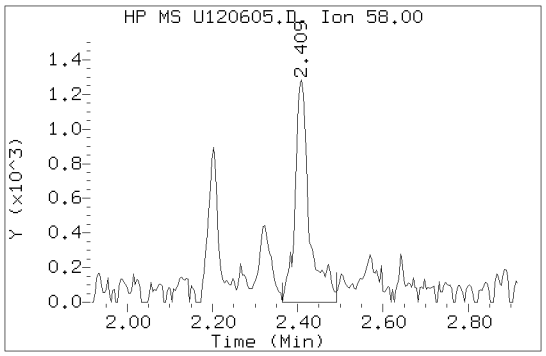
AFTER
MASS
43
AREA
7963
HEIGHT
4678
12-Dec-2023
09:43
linh
pham



BEFORE
MASS
58
AREA
3033
HEIGHT
1284
11-Dec-2023
17:18
linh
pham



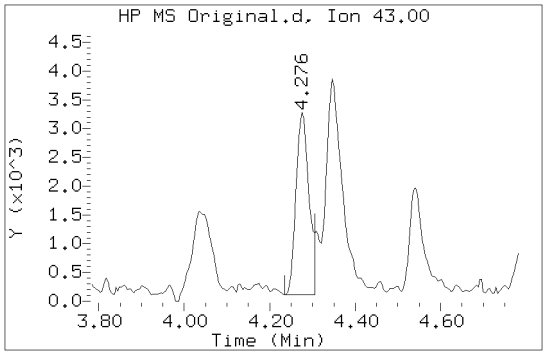
AFTER
MASS
58
AREA
3033
HEIGHT
1284
12-Dec-2023
09:43
linh
pham



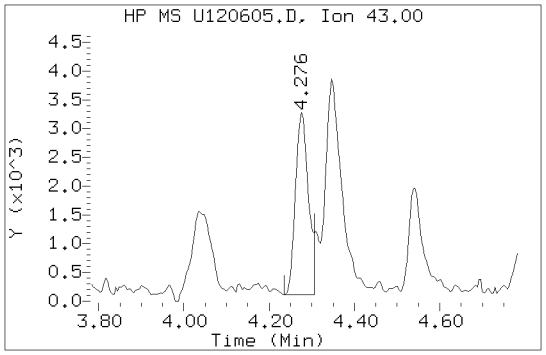
2-Butanone (78-93-3)

Reason Code:

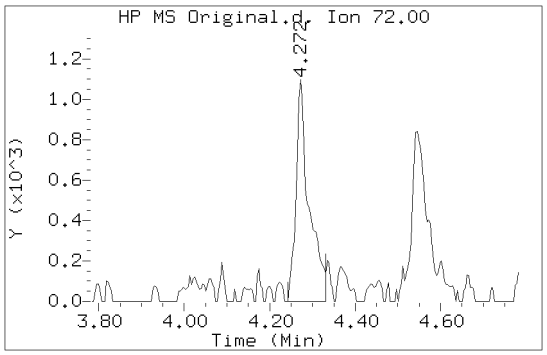
BEFORE
MASS
43
AREA
6824
HEIGHT
3175
11-Dec-2023
17:18
linh
pham



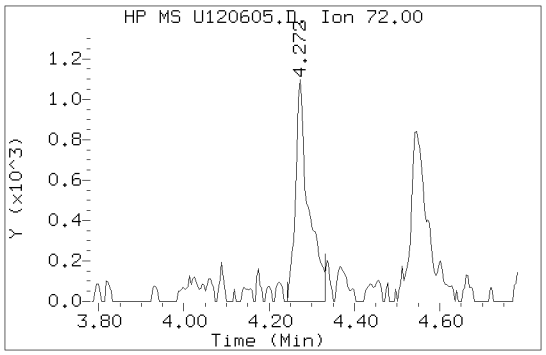
AFTER
MASS
43
AREA
6824
HEIGHT
3175
12-Dec-2023
09:43
linh
pham



BEFORE
MASS
72
AREA
2350
HEIGHT
1097
11-Dec-2023
17:18
linh
pham



AFTER
MASS
72
AREA
2350
HEIGHT
1097
12-Dec-2023
09:43
linh
pham



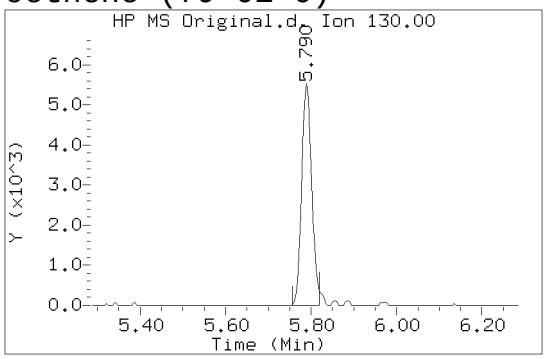
Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120605.D
Inj Date : 06-DEC-2023 13:05
InstruID : VOA9.i
LabSampID : VSTD002

Trichloroethene (79-01-6)

Reason Code:

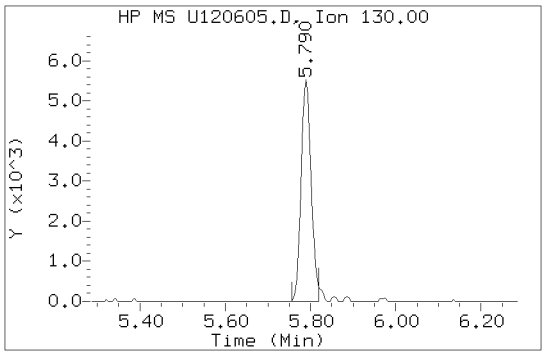
BEFORE

MASS
130
AREA
9201
HEIGHT
5527
11-Dec-2023
17:18
linh
pham



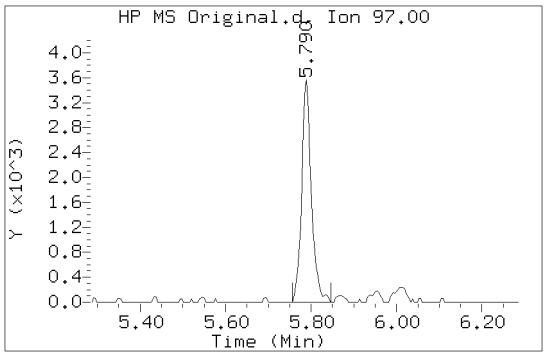
AFTER

MASS
130
AREA
9201
HEIGHT
5527
12-Dec-2023
09:43
linh
pham



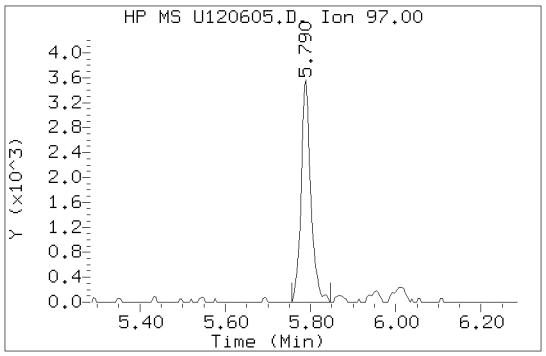
BEFORE

MASS
97
AREA
5731
HEIGHT
3565
11-Dec-2023
17:18
linh
pham



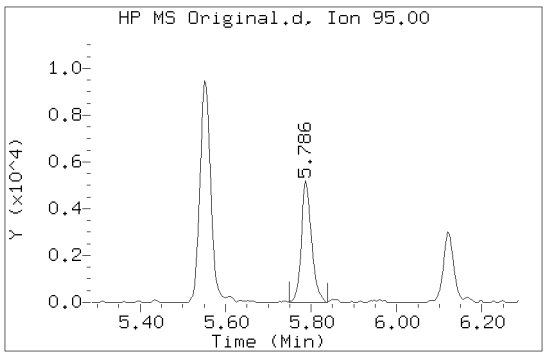
AFTER

MASS
97
AREA
5731
HEIGHT
3565
12-Dec-2023
09:43
linh
pham



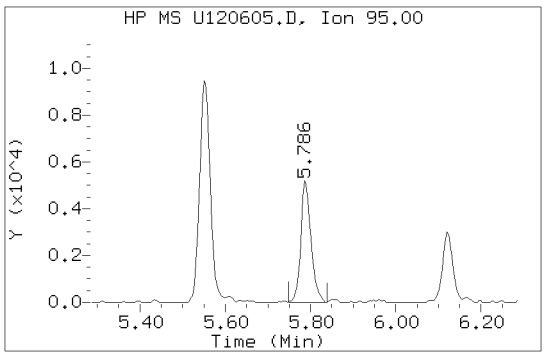
BEFORE

MASS
95
AREA
8757
HEIGHT
5211
11-Dec-2023
17:18
linh
pham



AFTER

MASS
95
AREA
8757
HEIGHT
5211
12-Dec-2023
09:43
linh
pham

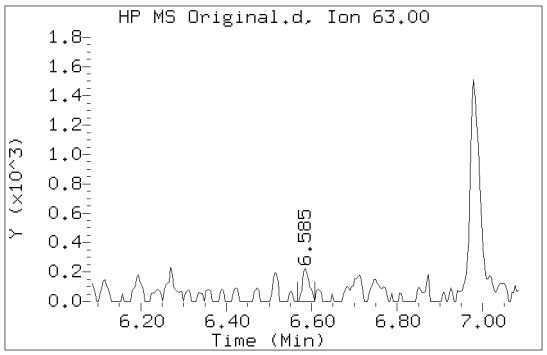


2-Chloroethylvinyl ether (110-75-8)

Reason Code:

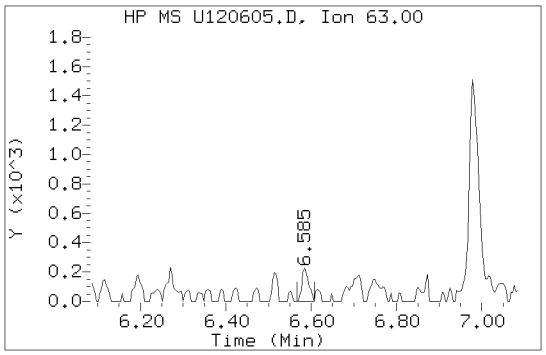
BEFORE

MASS
63
AREA
254
HEIGHT
229
11-Dec-2023
17:18
linh
pham



AFTER

MASS
63
AREA
254
HEIGHT
229
12-Dec-2023
09:43
linh
pham



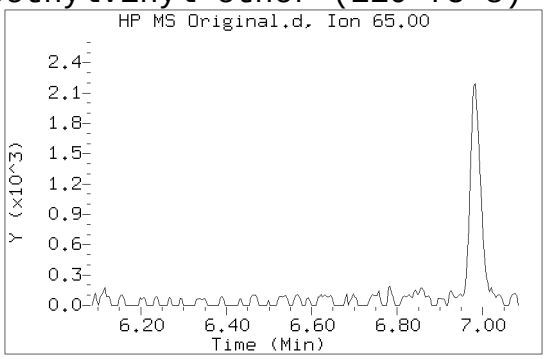
Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120605.D
Inj Date : 06-DEC-2023 13:05
InstruID : VOA9.i
LabSampID : VSTD002

2-Chloroethylvinyl ether (110-75-8)

Reason Code:

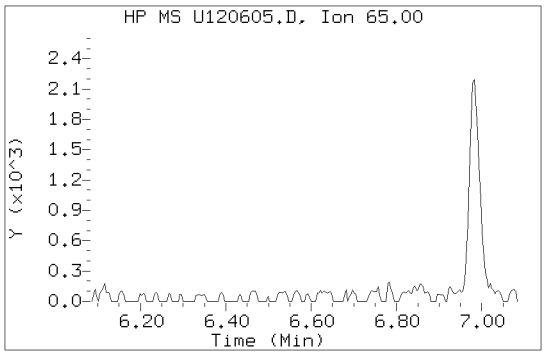
BEFORE

MASS
65
AREA
0
HEIGHT
0
11-Dec-2023
17:18
linh
pham



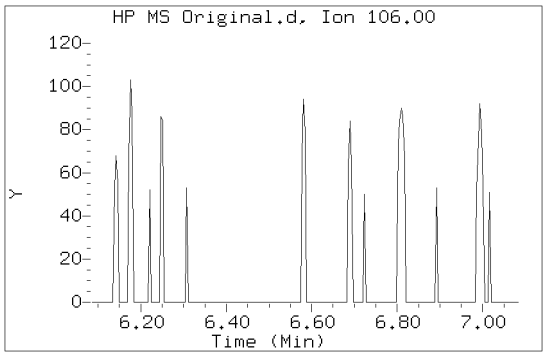
AFTER

MASS
65
AREA
0
HEIGHT
0
12-Dec-2023
09:43
linh
pham



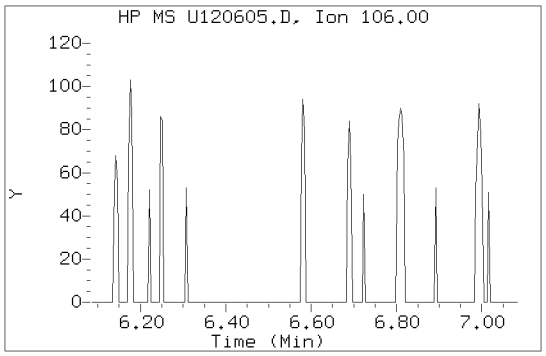
BEFORE

MASS
106
AREA
0
HEIGHT
0
11-Dec-2023
17:18
linh
pham



AFTER

MASS
106
AREA
0
HEIGHT
0
12-Dec-2023
09:43
linh
pham

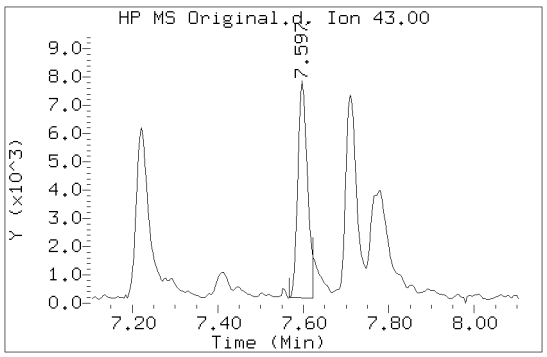


2-Hexanone (591-78-6)

Reason Code:

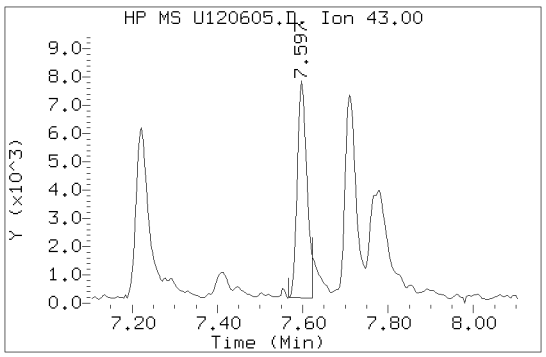
BEFORE

MASS
43
AREA
12214
HEIGHT
7667
11-Dec-2023
17:18
linh
pham



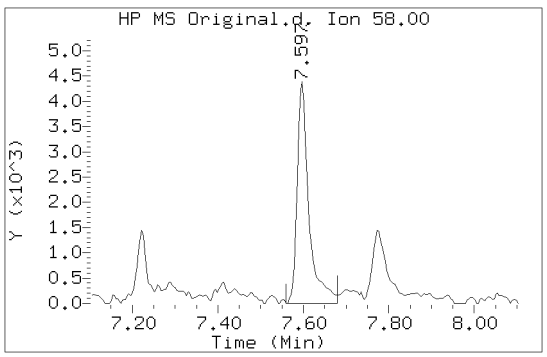
AFTER

MASS
43
AREA
12214
HEIGHT
7667
12-Dec-2023
09:43
linh
pham



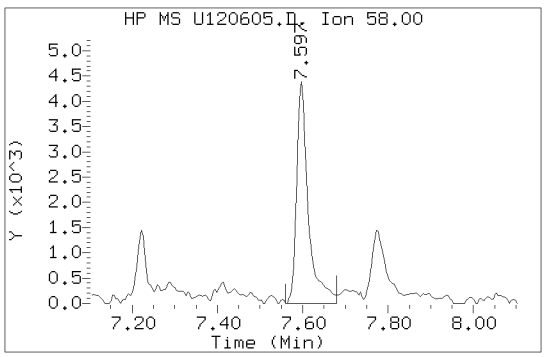
BEFORE

MASS
58
AREA
8438
HEIGHT
4388
11-Dec-2023
17:18
linh
pham



AFTER

MASS
58
AREA
8438
HEIGHT
4388
12-Dec-2023
09:43
linh
pham



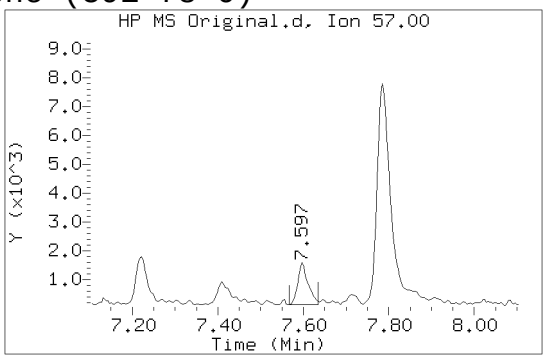
Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120605.D
Inj Date : 06-DEC-2023 13:05
InstruID : VOA9.i
LabSampID : VSTD002

2-Hexanone (591-78-6)

Reason Code:

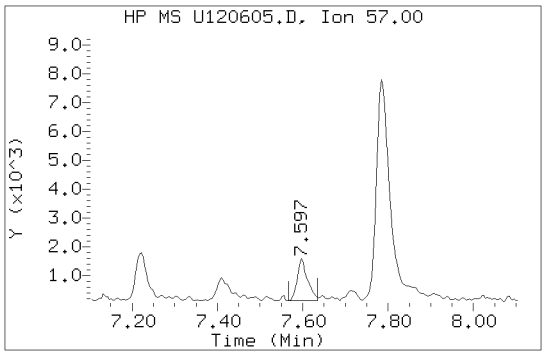
BEFORE

MASS
57
AREA
2459
HEIGHT
1463
11-Dec-2023
17:18
linh
pham



AFTER

MASS
57
AREA
2459
HEIGHT
1463
12-Dec-2023
09:43
linh
pham

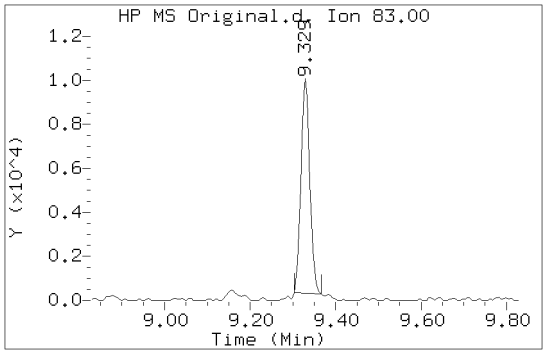


1,1,2,2-Tetrachloroethane (79-34-5)

Reason Code:

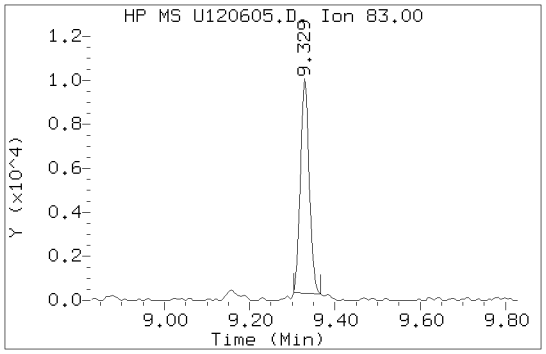
BEFORE

MASS
83
AREA
14293
HEIGHT
9756
11-Dec-2023
17:18
linh
pham



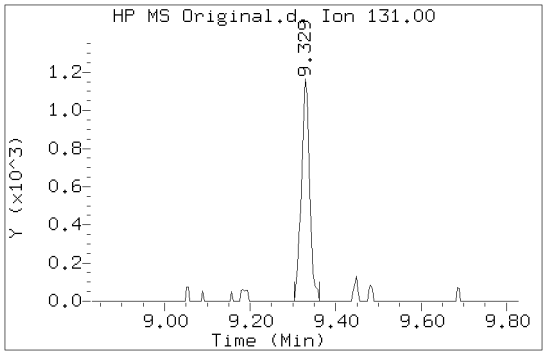
AFTER

MASS
83
AREA
14293
HEIGHT
9756
12-Dec-2023
09:43
linh
pham



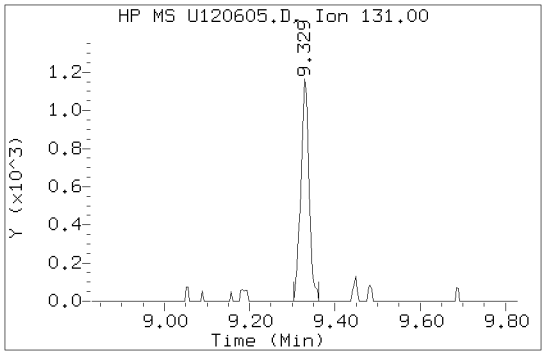
BEFORE

MASS
131
AREA
1599
HEIGHT
1165
11-Dec-2023
17:18
linh
pham



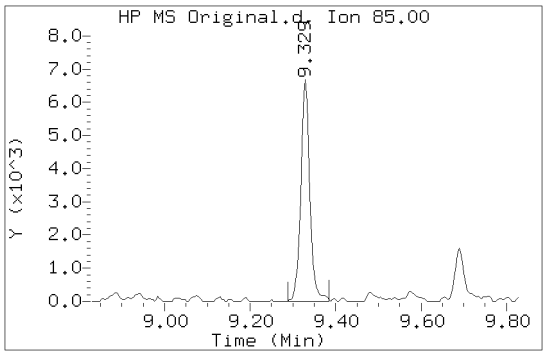
AFTER

MASS
131
AREA
1599
HEIGHT
1165
12-Dec-2023
09:43
linh
pham



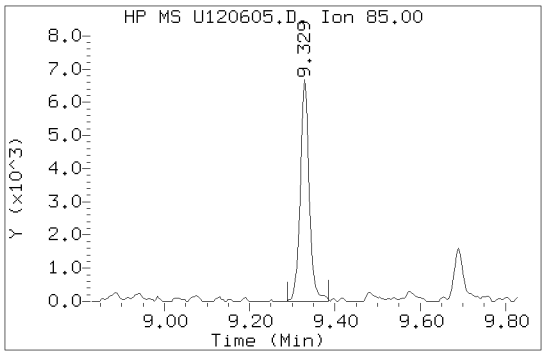
BEFORE

MASS
85
AREA
9975
HEIGHT
6679
11-Dec-2023
17:18
linh
pham



AFTER

MASS
85
AREA
9975
HEIGHT
6679
12-Dec-2023
09:43
linh
pham

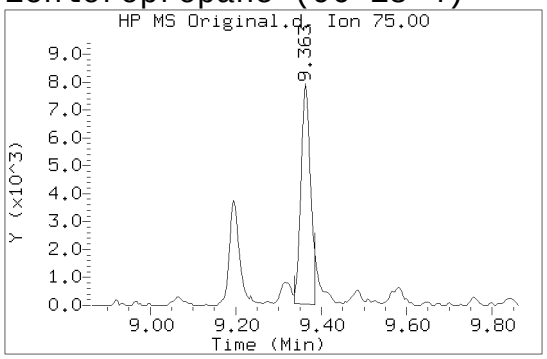


Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120605.D
Inj Date : 06-DEC-2023 13:05
InstruID : VOA9.i
LabSampID : VSTD002

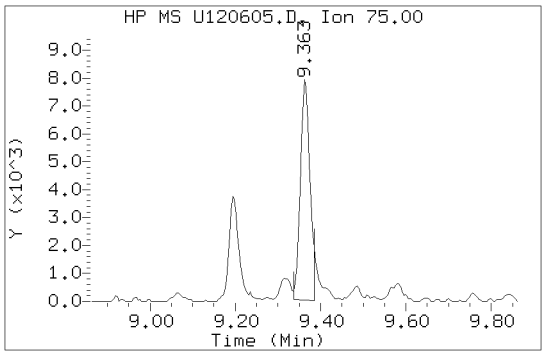
1,2,3-Trichloropropane (96-18-4)

Reason Code:

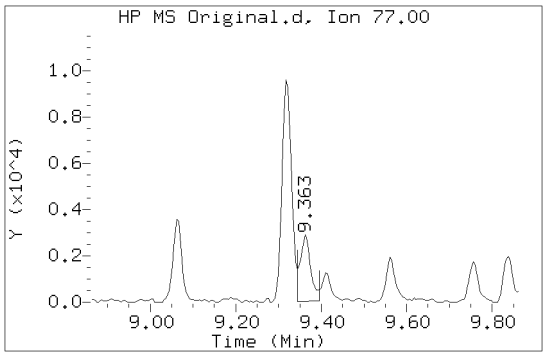
BEFORE
MASS
75
AREA
12628
HEIGHT
7893
11-Dec-2023
17:18
linh
pham



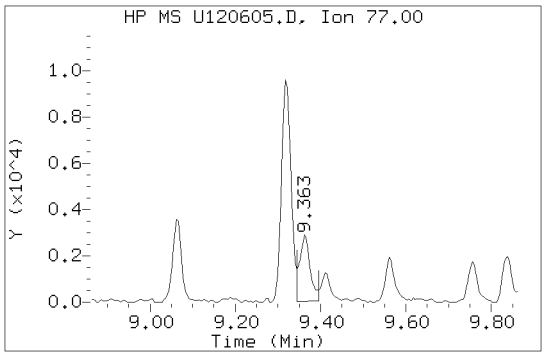
AFTER
MASS
75
AREA
12628
HEIGHT
7893
12-Dec-2023
09:43
linh
pham



BEFORE
MASS
77
AREA
5160
HEIGHT
2862
11-Dec-2023
17:18
linh
pham



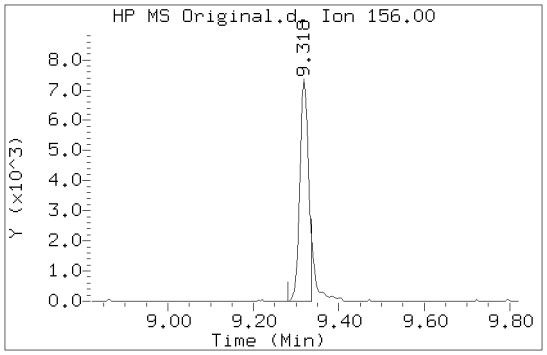
AFTER
MASS
77
AREA
5160
HEIGHT
2862
12-Dec-2023
09:43
linh
pham



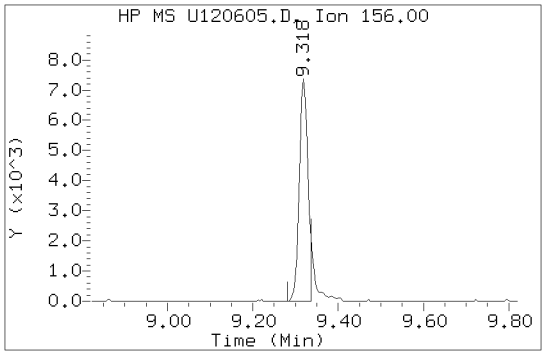
Bromobenzene (108-86-1)

Reason Code:

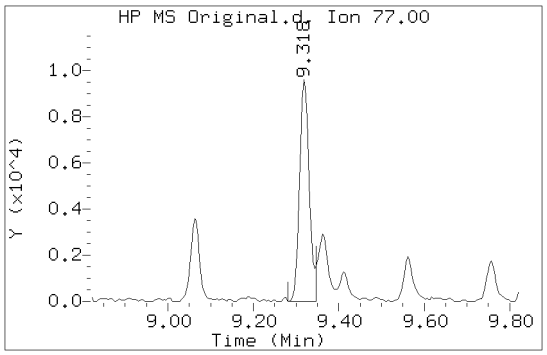
BEFORE
MASS
156
AREA
10570
HEIGHT
7371
11-Dec-2023
17:18
linh
pham



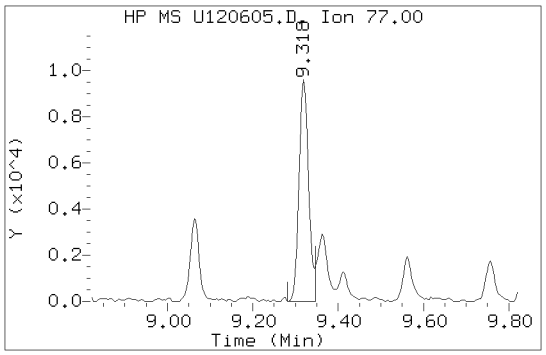
AFTER
MASS
156
AREA
10570
HEIGHT
7371
12-Dec-2023
09:43
linh
pham



BEFORE
MASS
77
AREA
15530
HEIGHT
9603
11-Dec-2023
17:18
linh
pham



AFTER
MASS
77
AREA
15530
HEIGHT
9603
12-Dec-2023
09:43
linh
pham



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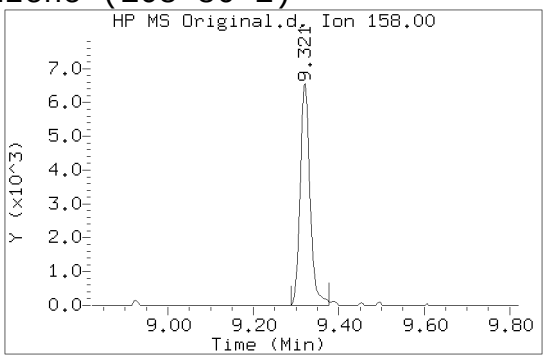
Inj Date : 06-DEC-2023 13:05
InstruID : VOA9.i
LabSampID : VSTD002

Bromobenzene (108-86-1)

Reason Code:

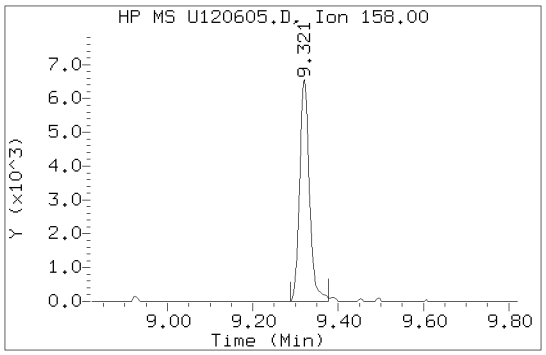
BEFORE

MASS
158
AREA
10716
HEIGHT
6555
11-Dec-2023
17:18
linh
pham



AFTER

MASS
158
AREA
10716
HEIGHT
6555
12-Dec-2023
09:43
linh
pham

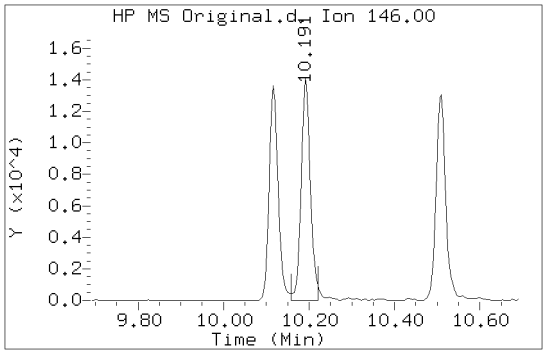


1,4-Dichlorobenzene (106-46-7)

Reason Code:

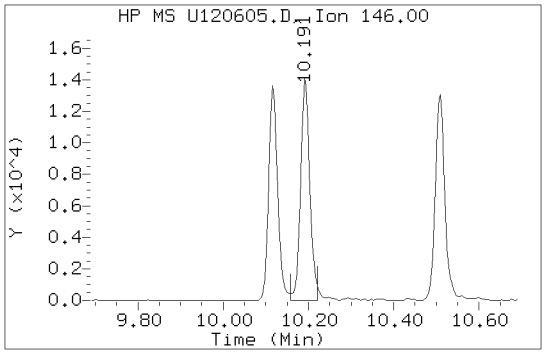
BEFORE

MASS
146
AREA
21680
HEIGHT
14068
11-Dec-2023
17:18
linh
pham



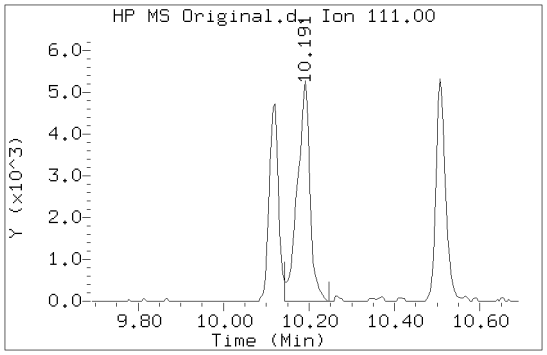
AFTER

MASS
146
AREA
21680
HEIGHT
14068
12-Dec-2023
09:43
linh
pham



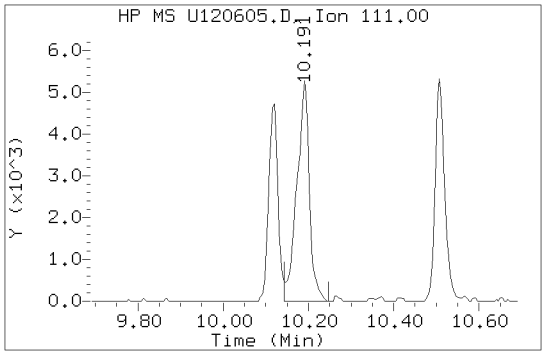
BEFORE

MASS
111
AREA
11017
HEIGHT
5266
11-Dec-2023
17:18
linh
pham



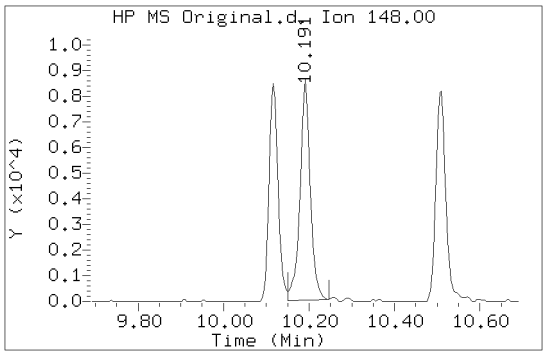
AFTER

MASS
111
AREA
11017
HEIGHT
5266
12-Dec-2023
09:43
linh
pham



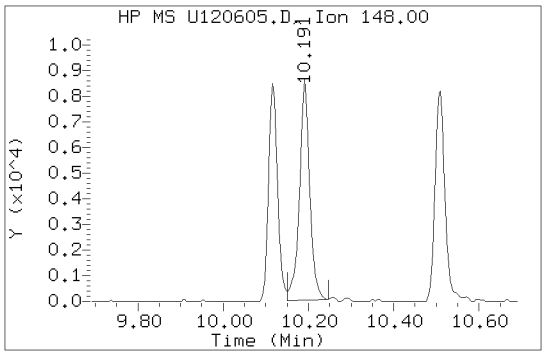
BEFORE

MASS
148
AREA
14680
HEIGHT
8595
11-Dec-2023
17:18
linh
pham



AFTER

MASS
148
AREA
14680
HEIGHT
8595
12-Dec-2023
09:43
linh
pham



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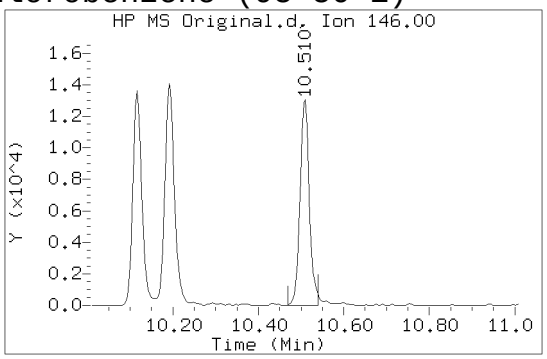
Inj Date : 06-DEC-2023 13:05
InstruID : VOA9.i
LabSampID : VSTD002

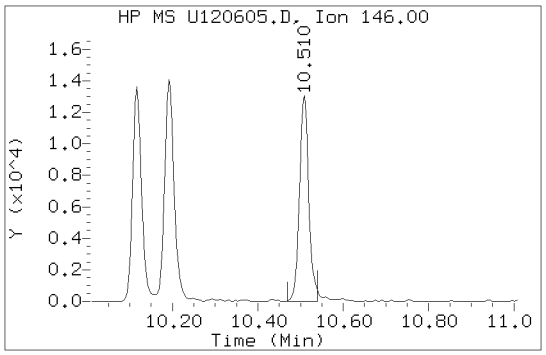
1,2-Dichlorobenzene (95-50-1)

Reason Code:

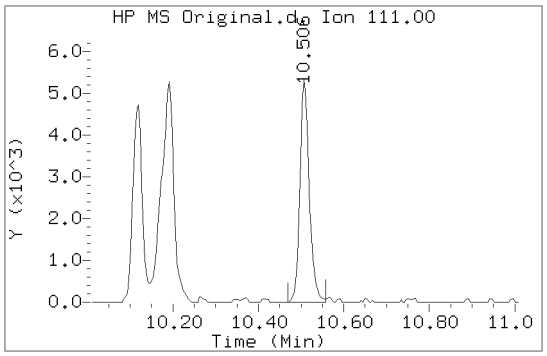
BEFORE
MASS
146
AREA
20103
HEIGHT
13043
11-Dec-2023
17:18
linh
pham



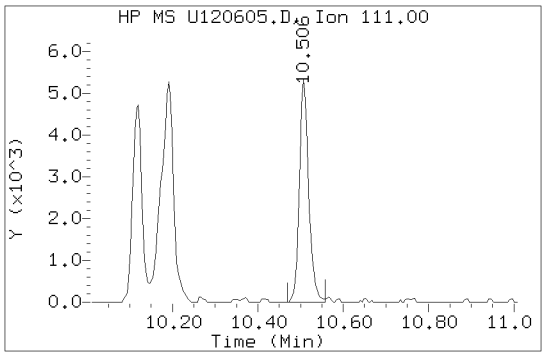
AFTER
MASS
146
AREA
20103
HEIGHT
13043
12-Dec-2023
09:43
linh
pham



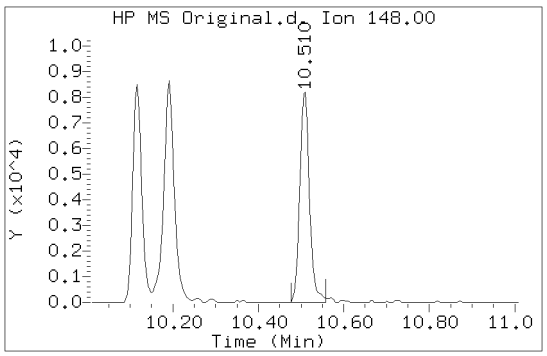
BEFORE
MASS
111
AREA
8235
HEIGHT
5315
11-Dec-2023
17:18
linh
pham



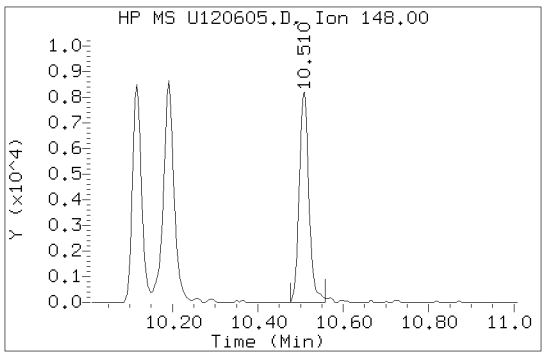
AFTER
MASS
111
AREA
8235
HEIGHT
5315
12-Dec-2023
09:43
linh
pham



BEFORE
MASS
148
AREA
13168
HEIGHT
8208
11-Dec-2023
17:18
linh
pham



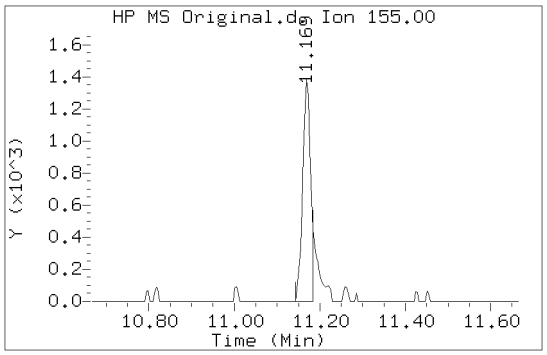
AFTER
MASS
148
AREA
13168
HEIGHT
8208
12-Dec-2023
09:43
linh
pham



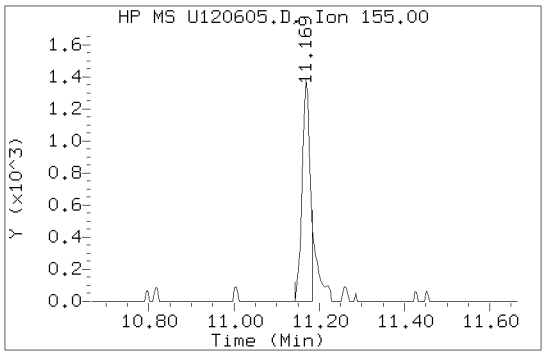
1,2-Dibromo-3-Chloropropane (96-12-8)

Reason Code:

BEFORE
MASS
155
AREA
1816
HEIGHT
1383
11-Dec-2023
17:18
linh
pham



AFTER
MASS
155
AREA
1816
HEIGHT
1383
12-Dec-2023
09:43
linh
pham



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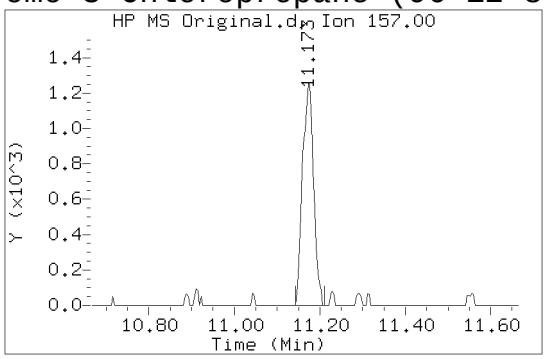
Inj Date : 06-DEC-2023 13:05
InstruID : VOA9.i
LabSampID : VSTD002

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

Reason Code:

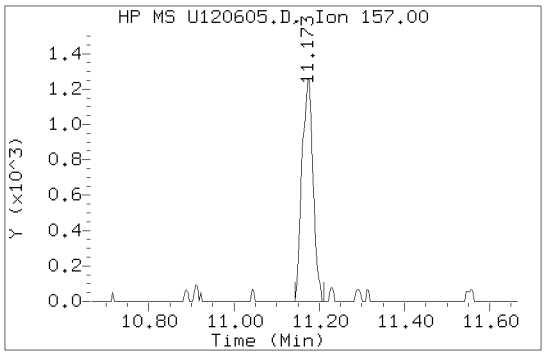
BEFORE

MASS
157
AREA
2298
HEIGHT
1253
11-Dec-2023
17:18
linh
pham



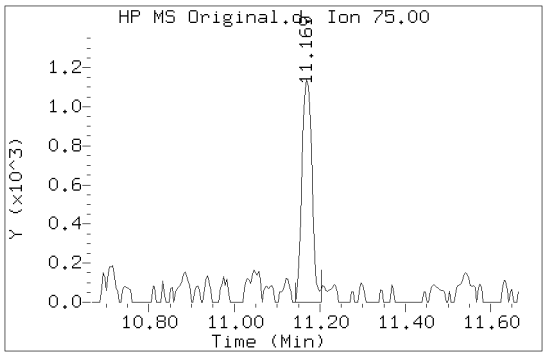
AFTER

MASS
157
AREA
2298
HEIGHT
1253
12-Dec-2023
09:43
linh
pham



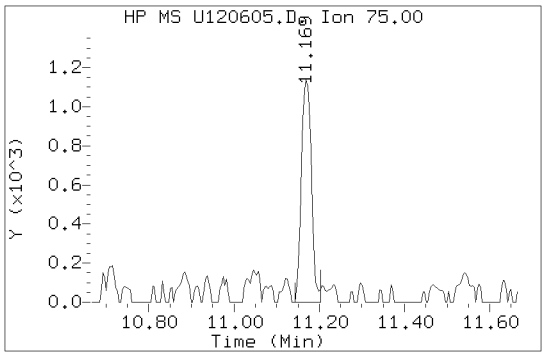
BEFORE

MASS
75
AREA
1901
HEIGHT
1137
11-Dec-2023
17:18
linh
pham



AFTER

MASS
75
AREA
1901
HEIGHT
1137
12-Dec-2023
09:43
linh
pham

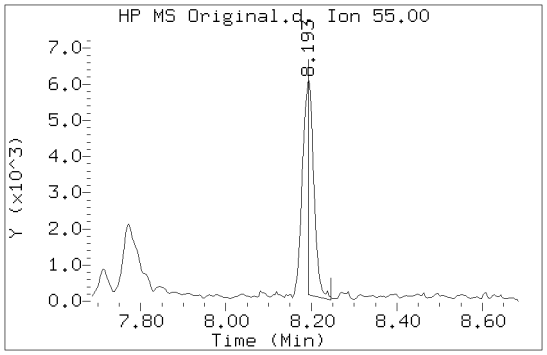


1-Chlorohexane (544-10-5)

Reason Code:

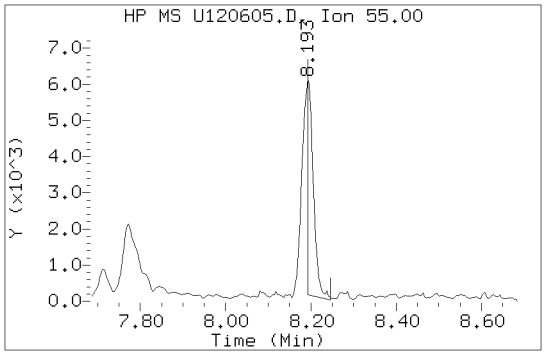
BEFORE

MASS
55
AREA
6133
HEIGHT
5975
11-Dec-2023
17:18
linh
pham



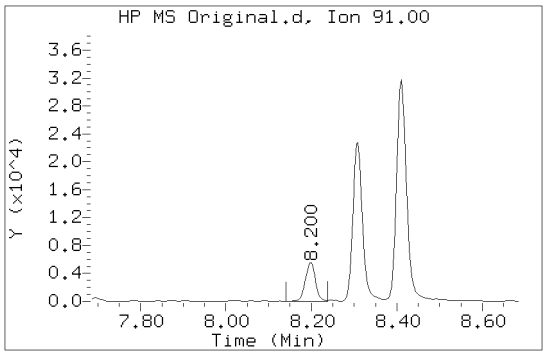
AFTER

MASS
55
AREA
6133
HEIGHT
5975
12-Dec-2023
09:43
linh
pham



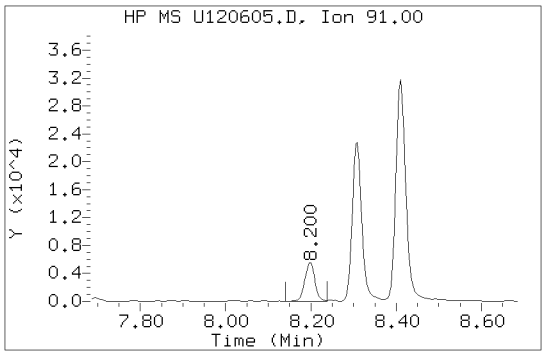
BEFORE

MASS
91
AREA
9348
HEIGHT
5551
11-Dec-2023
17:18
linh
pham



AFTER

MASS
91
AREA
9348
HEIGHT
5551
12-Dec-2023
09:43
linh
pham



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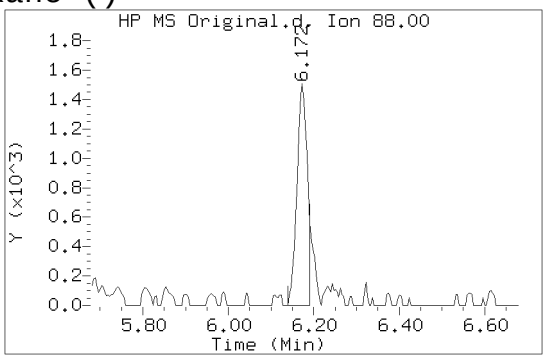
Inj Date : 06-DEC-2023 13:05
InstruID : VOA9.i
LabSampID : VSTD002

1,4-Dioxane ()

Reason Code:

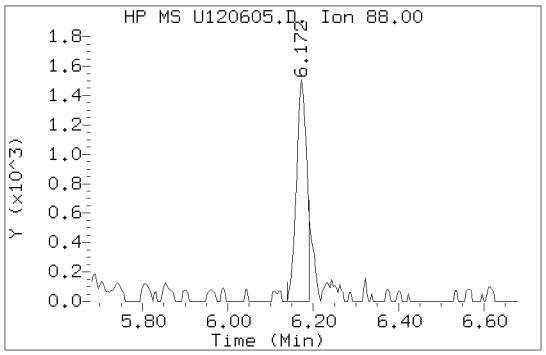
BEFORE

MASS
88
AREA
2559
HEIGHT
1508
11-Dec-2023
17:18
linh
pham



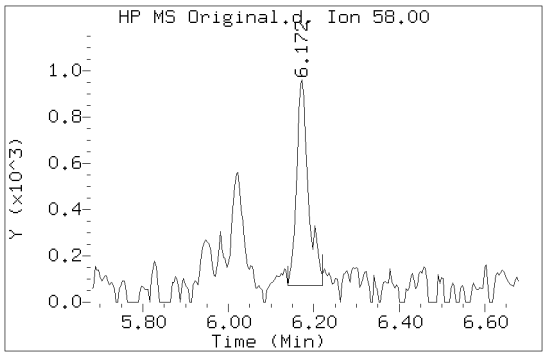
AFTER

MASS
88
AREA
2559
HEIGHT
1508
12-Dec-2023
09:43
linh
pham



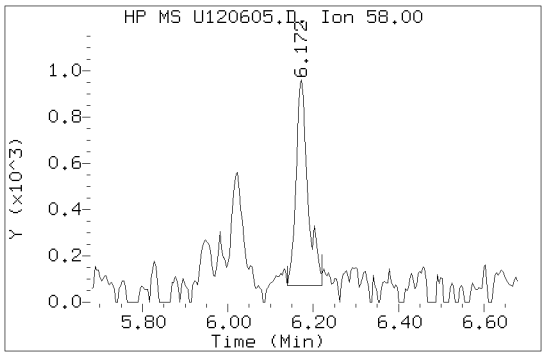
BEFORE

MASS
58
AREA
1738
HEIGHT
890
11-Dec-2023
17:18
linh
pham



AFTER

MASS
58
AREA
1738
HEIGHT
890
12-Dec-2023
09:43
linh
pham

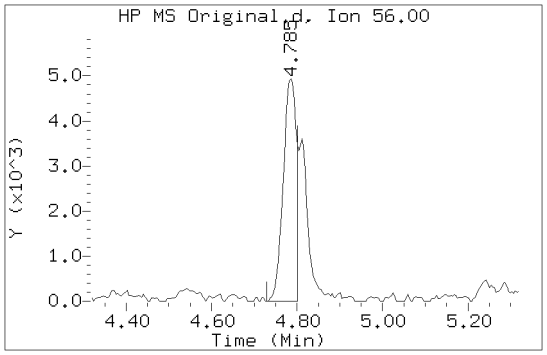


Cyclohexane (110-82-7)

Reason Code:

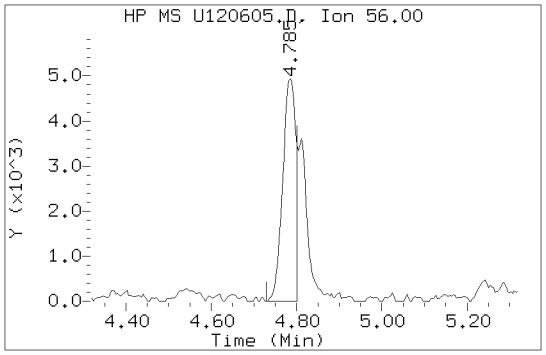
BEFORE

MASS
56
AREA
10415
HEIGHT
4933
11-Dec-2023
17:18
linh
pham



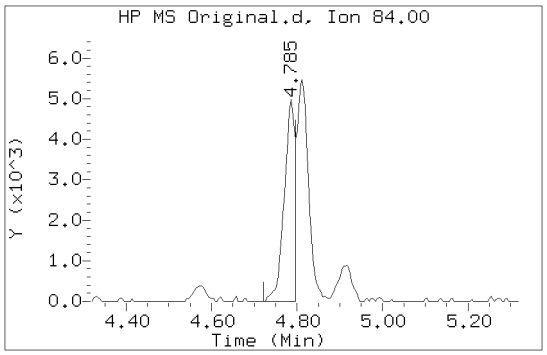
AFTER

MASS
56
AREA
10415
HEIGHT
4933
12-Dec-2023
09:43
linh
pham



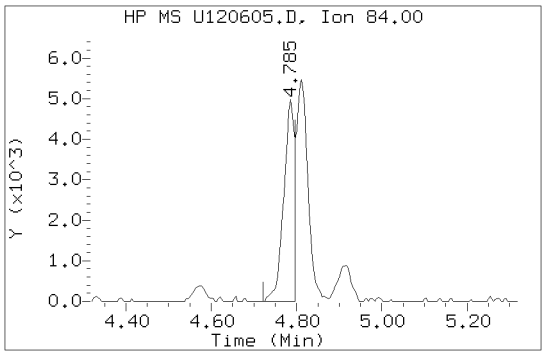
BEFORE

MASS
84
AREA
8874
HEIGHT
4977
11-Dec-2023
17:18
linh
pham



AFTER

MASS
84
AREA
8874
HEIGHT
4977
12-Dec-2023
09:43
linh
pham



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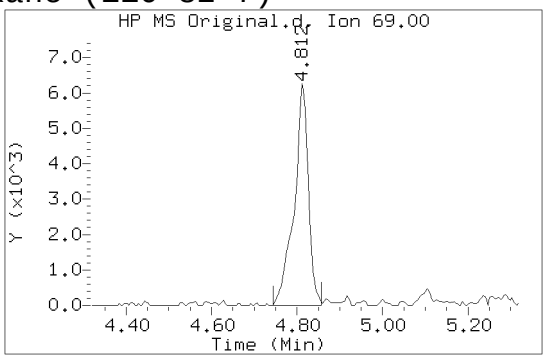
Inj Date : 06-DEC-2023 13:05
InstruID : VOA9.i
LabSampID : VSTD002

Cyclohexane (110-82-7)

BEFORE

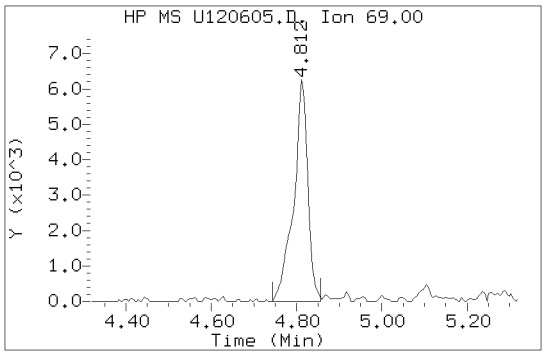
MASS
69
AREA
14726
HEIGHT
6260
11-Dec-2023
17:18
linh
pham



Reason Code:

AFTER

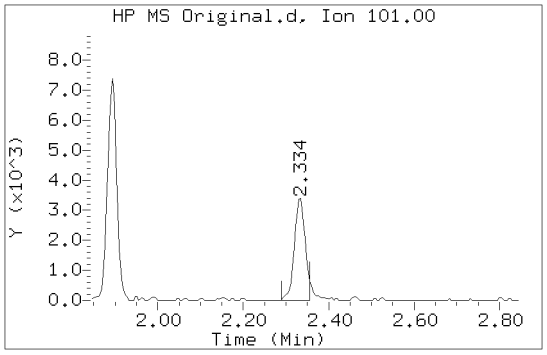
MASS
69
AREA
14726
HEIGHT
6260
12-Dec-2023
09:43
linh
pham



Freon TF (76-13-1)

BEFORE

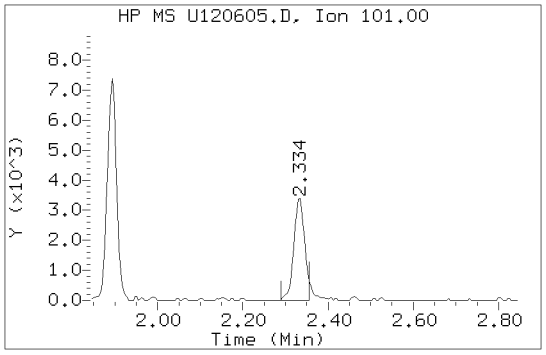
MASS
101
AREA
6155
HEIGHT
3393
11-Dec-2023
17:18
linh
pham



Reason Code:

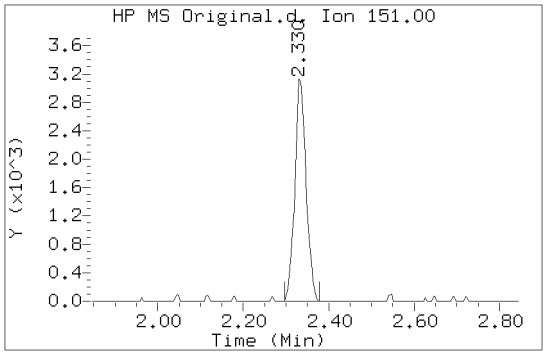
AFTER

MASS
101
AREA
6155
HEIGHT
3393
12-Dec-2023
09:43
linh
pham



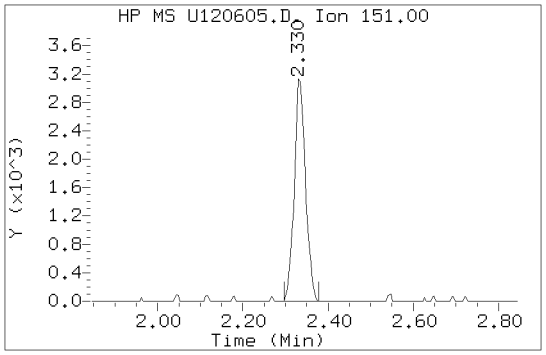
BEFORE

MASS
151
AREA
5851
HEIGHT
3131
11-Dec-2023
17:18
linh
pham



AFTER

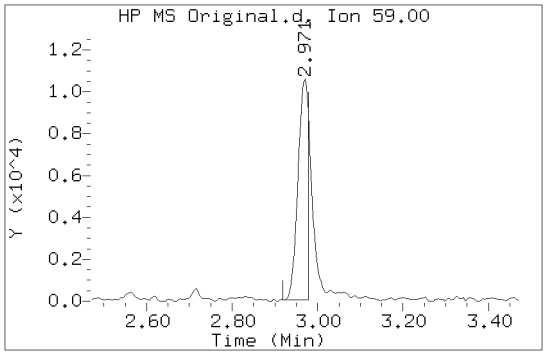
MASS
151
AREA
5851
HEIGHT
3131
12-Dec-2023
09:43
linh
pham



Tert-Butyl alcohol (75-65-0)

BEFORE

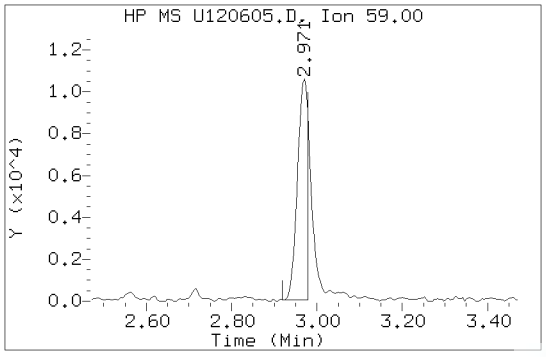
MASS
59
AREA
17716
HEIGHT
10555
11-Dec-2023
17:18
linh
pham



Reason Code:

AFTER

MASS
59
AREA
17716
HEIGHT
10555
12-Dec-2023
09:43
linh
pham



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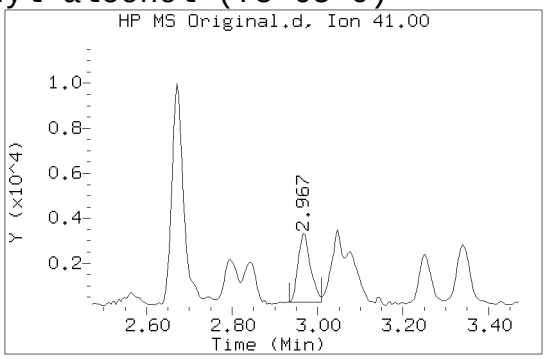
Inj Date : 06-DEC-2023 13:05
InstruID : VOA9.i
LabSampID : VSTD002

Tert-Butyl alcohol (75-65-0)

Reason Code:

BEFORE

MASS
41
AREA
6290
HEIGHT
3044
11-Dec-2023
17:18
linh
pham



AFTER

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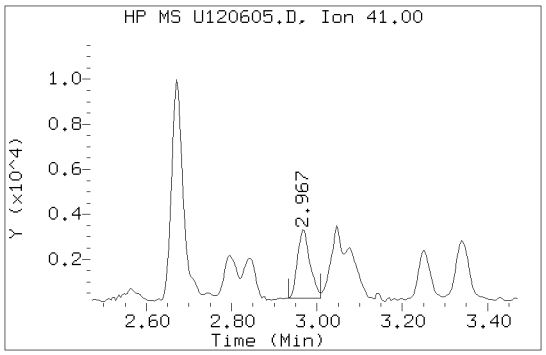

Isopropyl Alcohol (67-63-0)

Reason Code:

BEFORE

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17:18
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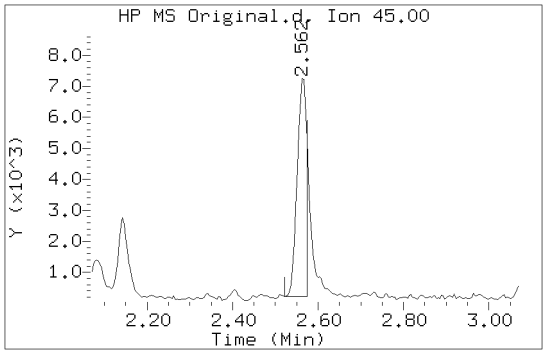

AFTER

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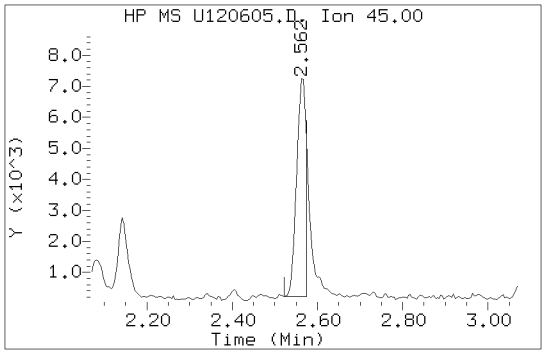

BEFORE

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11-Dec-2023
17:18
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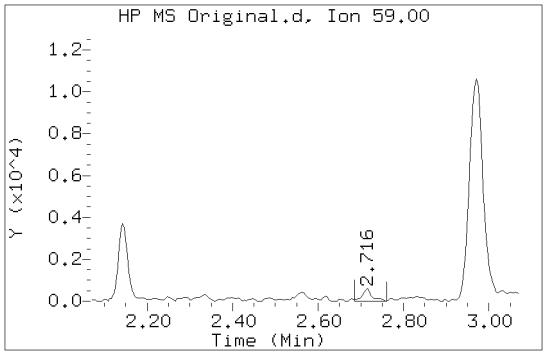

AFTER

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12-Dec-2023
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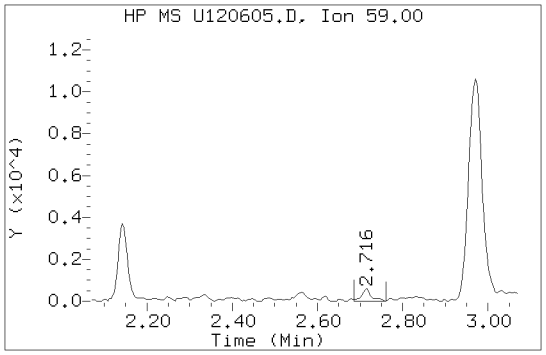

1,2-Dichloroethane-d4 (17060-07-0)

Reason Code:

BEFORE

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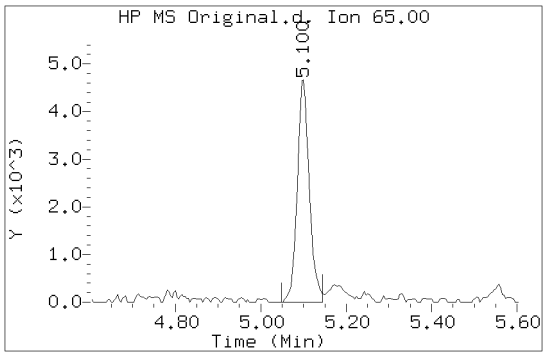

AFTER

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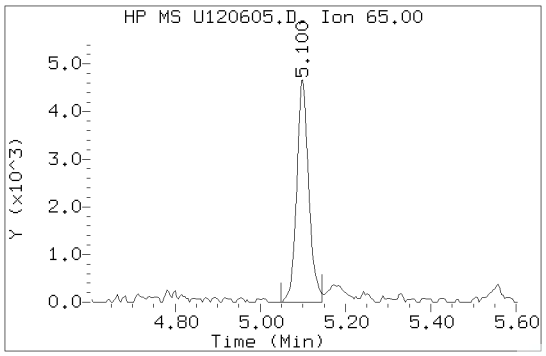

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Inj Date : 06-DEC-2023 13:05
InstruID : VOA9.i
LabSampID : VSTD002

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

Reason Code:

BEFORE

MASS
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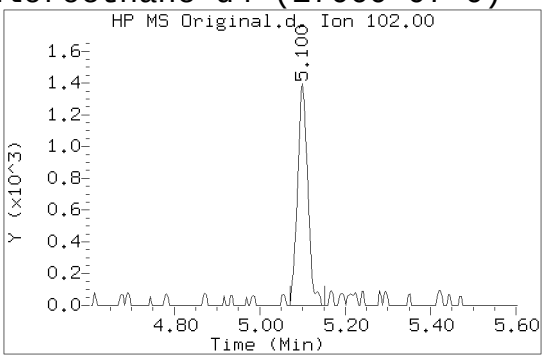
AREA
2382
HEIGHT
1396
11-Dec-2023
17:18
linh
pham



AFTER

MASS
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HEIGHT
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12-Dec-2023
09:43
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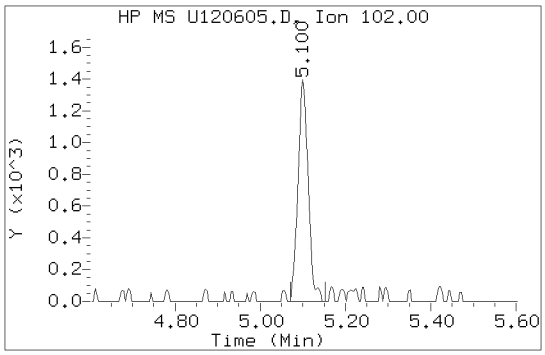


Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120606.D Page 1
Report Date: 12-Dec-2023 09:43

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120606.D
Lab Smp Id: VSTD005 Client Smp ID: VSTD005
Inj Date : 06-DEC-2023 13:27
Operator : PC Inst ID: VOA9.i
Smp Info : VSTD005;VSTD005;1;5;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\8260C.m
Meth Date : 12-Dec-2023 09:43 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 13:05 Cal File: U120605.D
Als bottle: 7 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V9.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1	Pentafluorobenzene	168	4.819	4.819	(1.000)	351006	50.0000	
2	Dichlorodifluoromethane	85	1.171	1.171	(0.243)	11260	5.00000	4.77
3	Chloromethane	50	1.306	1.306	(0.271)	18032	5.00000	4.47
5	Vinyl Chloride	62	1.385	1.385	(0.288)	16328	5.00000	4.24
6	Bromomethane	94	1.629	1.629	(0.338)	12339	5.00000	5.75
7	Chloroethane	64	1.708	1.708	(0.354)	12188	5.00000	4.70
8	Trichlorofluoromethane	101	1.906	1.906	(0.396)	21006	5.00000	4.30
9	Acrolein	56	2.274	2.274	(0.472)	2313	10.0000	11.56(M)
10	Acetone	43	2.420	2.420	(0.502)	15039	10.0000	7.26
11	1,1-Dichloroethene	96	2.341	2.341	(0.486)	11303	5.00000	4.17
15	Iodomethane	142	2.476	2.476	(0.514)	19119	10.0000	8.03
16	Acrylonitrile	53	3.076	3.076	(0.638)	12760	10.0000	9.26
17	Methylene Chloride	84	2.802	2.802	(0.582)	16803	5.00000	4.67
18	Methyl tert-butyl ether	73	3.087	3.087	(0.641)	48196	5.00000	4.96
19	Carbon Disulfide	76	2.528	2.528	(0.525)	64688	10.0000	8.10
20	trans-1,2-Dichloroethene	96	3.068	3.068	(0.637)	13514	5.00000	4.17
21	Vinyl Acetate	43	3.616	3.616	(0.750)	87312	10.0000	8.92
22	1,1-Dichloroethane	63	3.522	3.522	(0.731)	27485	5.00000	4.16
24	2-Butanone	43	4.279	4.279	(0.888)	15945	10.0000	9.27
26	2,2-Dichloropropane	77	4.189	4.189	(0.869)	18857	5.00000	4.06

27 cis-1,2-Dichloroethene	96	4.204	4.204 (0.872)	19143	5.00000	4.41
28 Chloroform	83	4.579	4.579 (0.950)	33397	5.00000	4.64

Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120606.D Page 2
Report Date: 12-Dec-2023 09:43

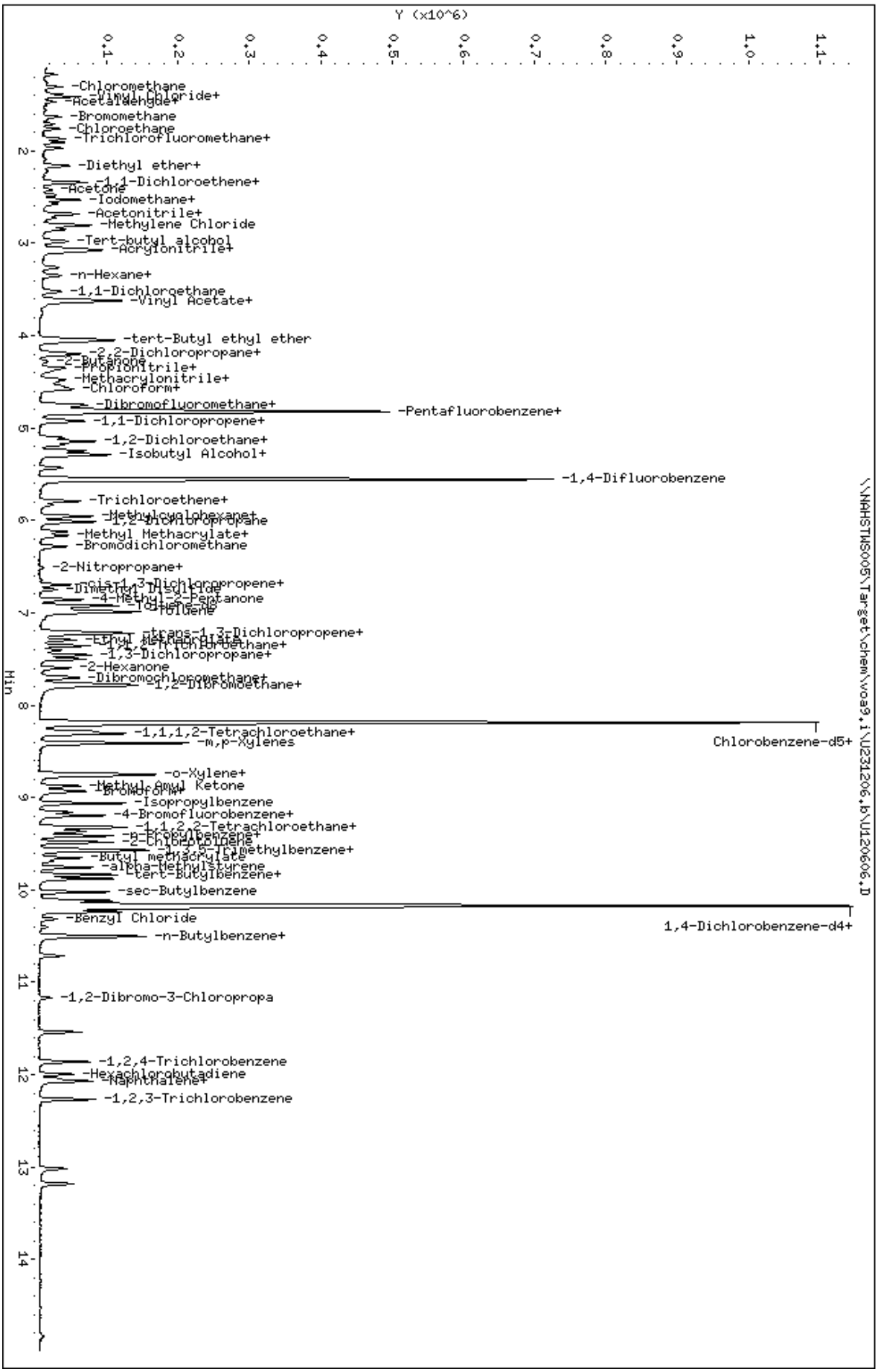
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	29 Bromochloromethane	128	4.478	4.478	(0.929)	10835	5.00000	4.83
$	30 Dibromofluoromethane	113	4.755	4.755	(0.987)	19773	5.00000	4.58
	31 1,1,1-Trichloroethane	97	4.748	4.748	(0.985)	22357	5.00000	4.09
	32 1,1-Dichloropropene	75	4.928	4.928	(0.887)	19415	5.00000	4.08
	33 1,2-Dichloroethane	62	5.183	5.183	(0.933)	26219	5.00000	4.73
	34 Carbon Tetrachloride	117	4.913	4.913	(0.884)	19183	5.00000	4.13
$	35 1,2-Dichloroethane-d4	65	5.104	5.104	(1.059)	23056	5.00000	5.42(M)
*	36 1,4-Difluorobenzene	114	5.557	5.557	(1.000)	568334	50.0000	
	37 Benzene	78	5.141	5.141	(0.925)	69120	5.00000	4.46
	38 Trichloroethene	130	5.794	5.794	(1.042)	18385	5.00000	4.31
	39 Bromodichloromethane	83	6.281	6.281	(1.130)	21637	5.00000	4.27
	41 2-Chloroethylvinyl ether	63	6.581	6.581	(1.184)	541	10.0000	9.82(M)
	42 1,2-Dichloropropane	63	6.015	6.015	(1.082)	18952	5.00000	4.54
	44 Dibromomethane	93	6.123	6.123	(1.102)	12584	5.00000	4.66
	45 4-Methyl-2-Pentanone	43	6.854	6.854	(0.837)	39833	10.0000	9.40
	46 cis-1,3-Dichloropropene	75	6.693	6.693	(1.204)	23865	5.00000	5.02
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	567509	50.0000	
$	48 Toluene-d8	98	6.926	6.926	(0.846)	68873	5.00000	5.27
	50 Toluene	91	6.982	6.982	(0.853)	70261	5.00000	4.44
	51 trans-1,3-Dichloropropene	75	7.199	7.199	(1.295)	17262	5.00000	4.80
	52 2-Hexanone	43	7.597	7.597	(0.928)	28780	10.0000	10.04
	53 1,1,2-Trichloroethane	83	7.357	7.357	(0.899)	16200	5.00000	4.15
	54 1,3-Dichloropropane	76	7.499	7.499	(0.916)	34440	5.00000	4.90
	55 Dibromochloromethane	129	7.690	7.690	(0.940)	17678	5.00000	4.18
	56 Tetrachloroethene	164	7.458	7.458	(0.911)	15398	5.00000	4.54
	57 1,2-Dibromoethane	107	7.788	7.788	(0.951)	18361	5.00000	4.65
	58 1-Chlorohexane	55	8.196	8.196	(1.475)	16013	5.00000	5.02
	59 Chlorobenzene	112	8.211	8.211	(1.003)	54687	5.00000	4.74
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	17814	5.00000	4.41
	61 Ethylbenzene	106	8.309	8.309	(1.015)	24547	5.00000	4.54
	62 m,p-Xylenes	106	8.410	8.410	(1.027)	55953	10.0000	8.62
	63 o-Xylene	106	8.748	8.748	(1.069)	29070	5.00000	4.35
	64 Styrene	104	8.763	8.763	(1.071)	50034	5.00000	4.50
	66 Bromoform	173	8.920	8.920	(1.090)	11348	5.00000	4.91
	67 Isopropylbenzene	105	9.062	9.062	(1.107)	71476	5.00000	4.42
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	29212	5.00000	5.30
$	69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	28295	5.00000	4.57
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	304310	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.920)	27489	5.00000	4.75
	73 n-Propylbenzene	91	9.411	9.411	(0.925)	75687	5.00000	4.23
	74 Bromobenzene	156	9.317	9.317	(0.916)	23595	5.00000	4.61
	75 1,3,5-Trimethylbenzene	105	9.565	9.565	(0.940)	54214	5.00000	4.26
	76 2-Chlorotoluene	91	9.482	9.482	(0.932)	53898	5.00000	4.48
	77 4-Chlorotoluene	91	9.576	9.576	(0.941)	62186	5.00000	4.55
	78 tert-Butylbenzene	119	9.838	9.838	(0.967)	48676	5.00000	4.26
	79 1,2,4-Trimethylbenzene	105	9.880	9.880	(0.971)	53789	5.00000	4.22
	81 sec-Butylbenzene	105	10.022	10.022	(0.985)	61199	5.00000	4.16
	82 p-Isopropyltoluene	119	10.146	10.146	(0.997)	49583	5.00000	3.89
	83 1,3-Dichlorobenzene	146	10.116	10.116	(0.994)	41004	5.00000	4.52
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	46283	5.00000	4.82
	87 n-Butylbenzene	91	10.494	10.494	(1.032)	42512	5.00000	3.97
	88 1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	44771	5.00000	4.91

89	1,2-Dibromo-3-Chloropropane	155	11.169	11.169 (1.098)	3694	5.00000	6.09
90	1,2,4-Trichlorobenzene	180	11.859	11.859 (1.166)	24284	5.00000	4.32

		QUANT SIG					AMOUNTS CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
	91 Hexachlorobutadiene	225	11.998	11.998	(1.179)	9215	5.00000	4.09
	92 Naphthalene	128	12.069	12.069	(1.186)	59899	5.00000	4.41
	93 1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	25542	5.00000	4.50
M	94 1,2-Dichloroethylene (total)	96				32657	10.0000	
M	95 Xylenes (total)	106				85023	15.0000	
	131 Methyl Acrylate	55	4.380	4.380	(0.909)	21324	5.00000	4.62(a)
	135 1,4-Dioxane	88	6.172	6.172	(1.281)	5590	100.000	100.37
	141 Cyclohexane	56	4.789	4.789	(0.994)	21511	5.00000	4.25(M)
	138 Freon TF	101	2.345	2.345	(0.487)	11826	5.00000	4.68
	140 1,3-Butadiene	54	1.411	1.411	(0.293)	14067	5.00000	3.99
	147 Methylcyclohexane	55	5.951	5.951	(1.071)	37654	5.00000	4.46
	146 Methyl Acetate	43	2.723	2.723	(0.565)	17182	5.00000	4.91
	148 Tert-Butyl alcohol	59	2.978	2.978	(0.618)	42933	100.000	109.25
	149 Isopropyl Alcohol	45	2.573	2.573	(0.534)	26635	100.000	113.30(T)

QC Flag Legend

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



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Client ID: VSTD005
Sample Info: VSTD005;VSTD005;1;5;
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9.i
Operator: PC
Column diameter: 0.18

\\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120606.D

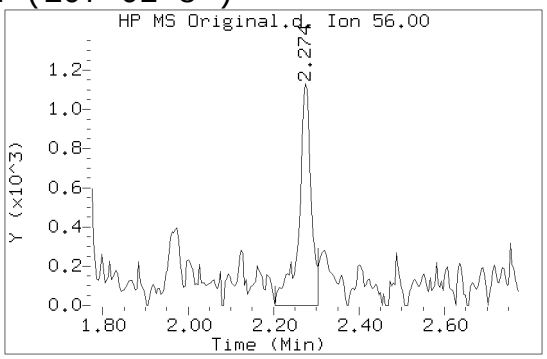
Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120606.D
Inj Date : 06-DEC-2023 13:27
InstruID : VOA9.i
LabSampID : VSTD005

Acrolein (107-02-8)

Reason Code:

BEFORE

MASS
56
AREA
2313
HEIGHT
1131
11-Dec-2023
17:18
linh
pham



AFTER

MASS
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AREA
2313
HEIGHT
1131
12-Dec-2023
09:43
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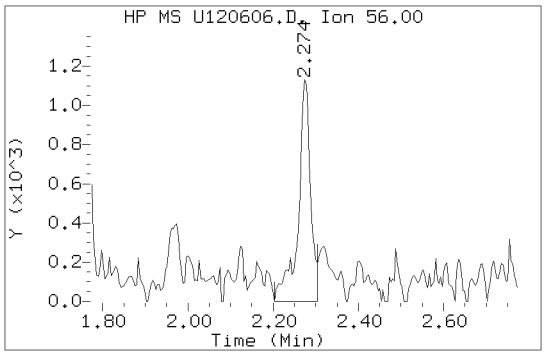
pham



BEFORE

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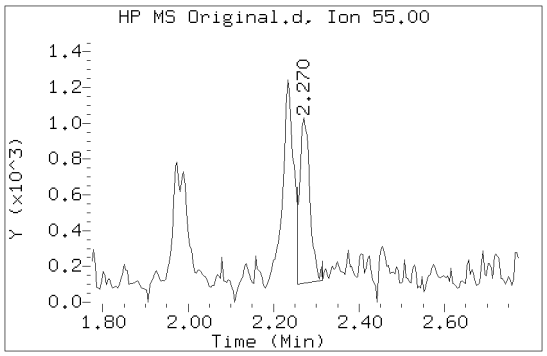
923
11-Dec-2023
17:18
linh
pham



AFTER

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AREA
1601
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923
12-Dec-2023
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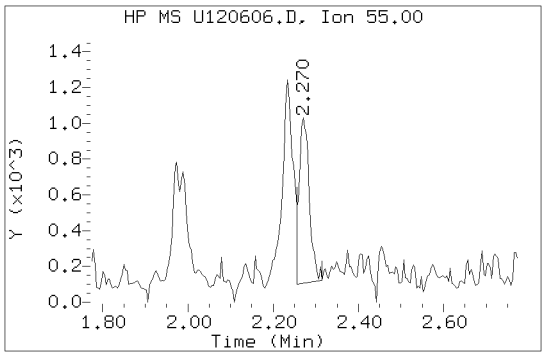
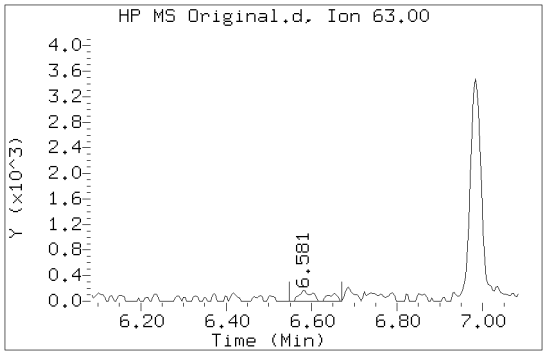


2-Chloroethylvinyl ether (110-75-8)

Reason Code:

BEFORE

MASS
63
AREA
541
HEIGHT
170
11-Dec-2023
17:18
linh
pham



AFTER

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AREA
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HEIGHT
170
12-Dec-2023
09:43
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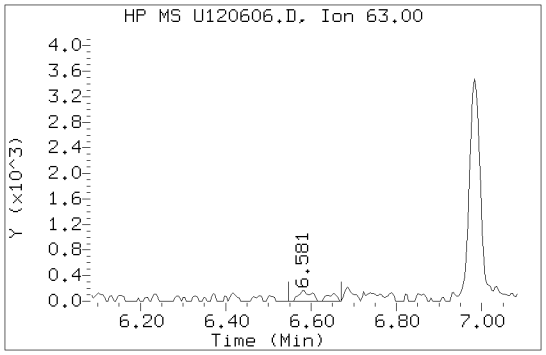

BEFORE

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HEIGHT
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11-Dec-2023
17:18
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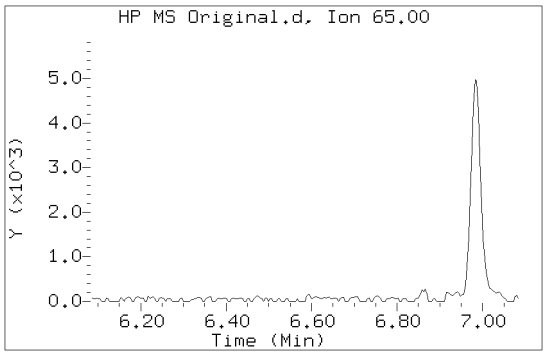

AFTER

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AREA
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HEIGHT
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12-Dec-2023
09:43
linh
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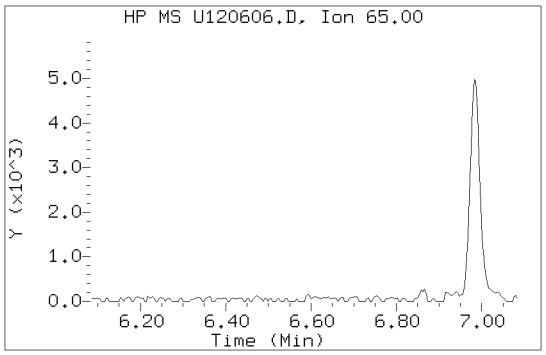

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Inj Date : 06-DEC-2023 13:27
InstruID : VOA9.i
LabSampID : VSTD005

2-Chloroethylvinyl ether (110-75-8)

Reason Code:

BEFORE

MASS
106
AREA
0
HEIGHT
0
11-Dec-2023
17:18
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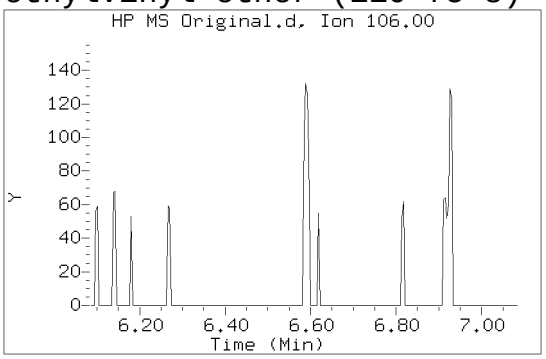
pham



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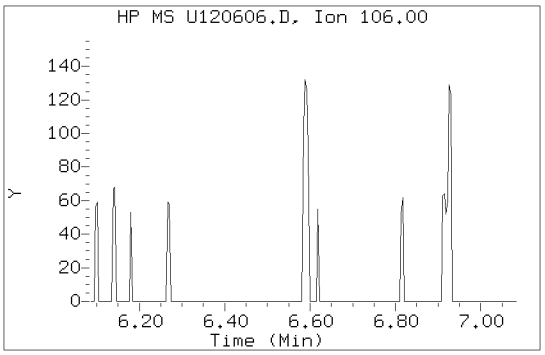

Cyclohexane (110-82-7)

Reason Code:

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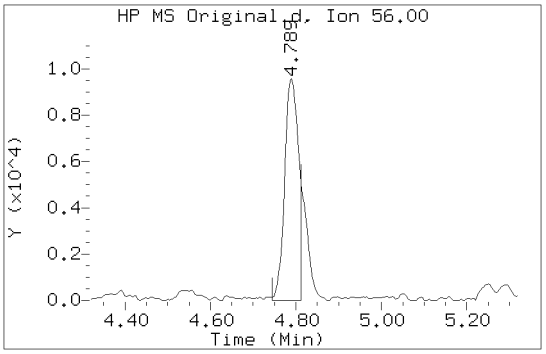

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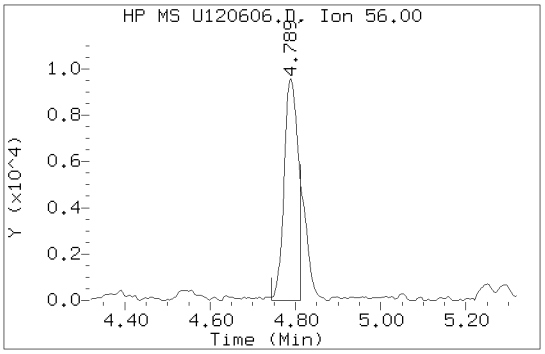

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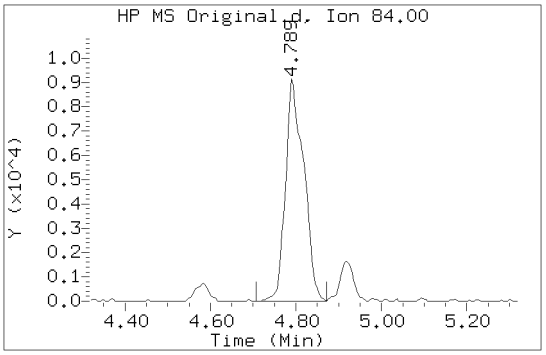

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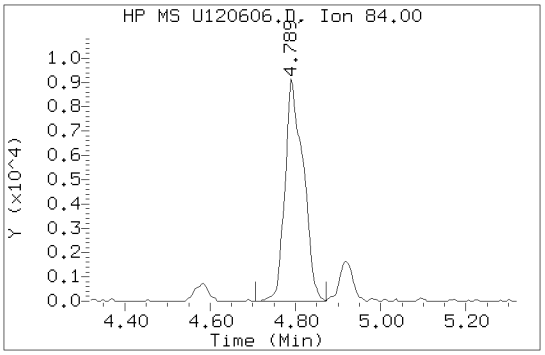

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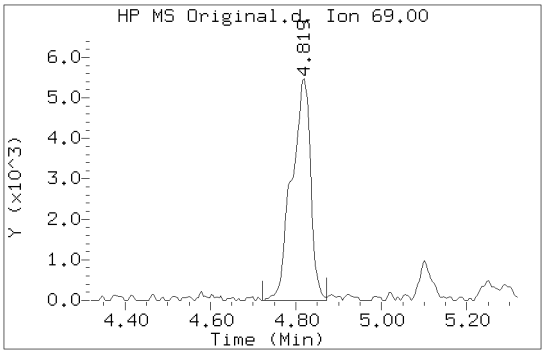

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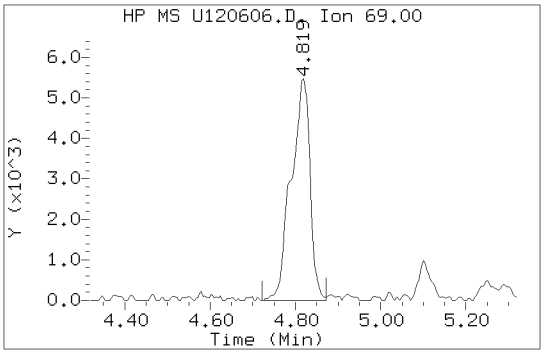

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Inj Date : 06-DEC-2023 13:27
InstruID : VOA9.i
LabSampID : VSTD005

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

Reason Code:

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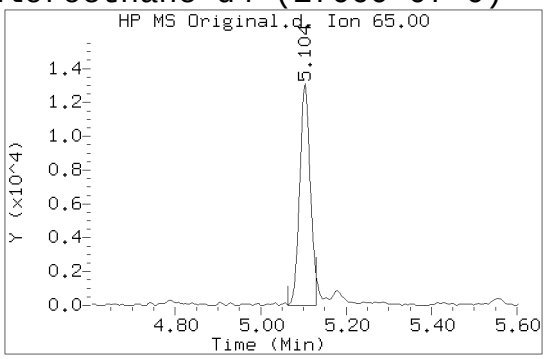

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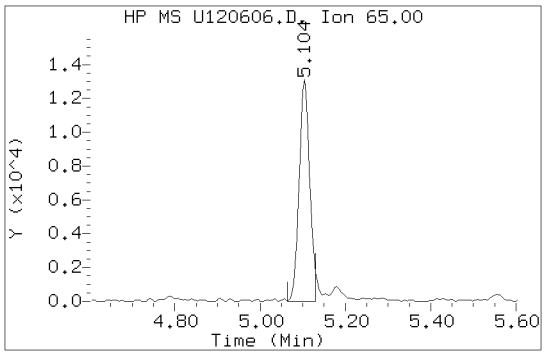

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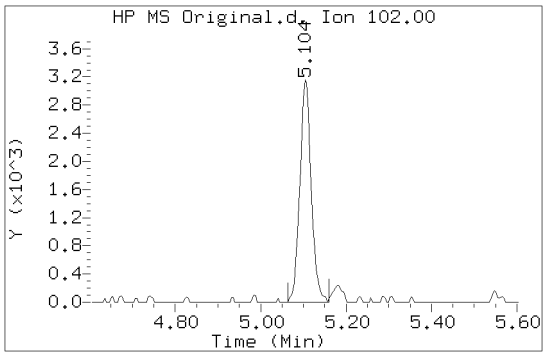

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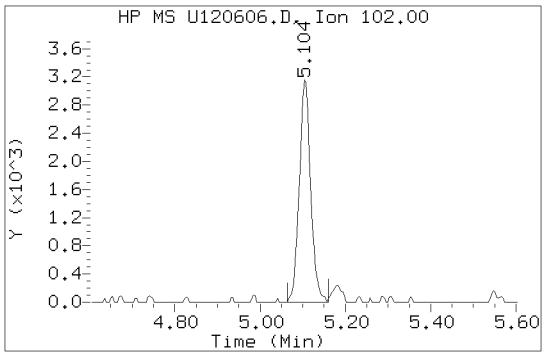

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Report Date: 12-Dec-2023 09:43

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120607.D
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Inj Date : 06-DEC-2023 13:49
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Smp Info : VSTD020;VSTD020;1;6;
Misc Info : V9;WATER;0;1;
Comment   :
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Cal Date : 06-DEC-2023 13:27 Cal File: U120606.D
Als bottle: 8 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V9.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1	Pentafluorobenzene	168	4.819	4.819	(1.000)	369517	50.0000	
2	Dichlorodifluoromethane	85	1.168	1.168	(0.242)	61984	20.0000	21.31
3	Chloromethane	50	1.303	1.303	(0.270)	81421	20.0000	19.20
5	Vinyl Chloride	62	1.378	1.378	(0.286)	78958	20.0000	19.49
6	Bromomethane	94	1.625	1.625	(0.337)	41799	20.0000	20.28
7	Chloroethane	64	1.704	1.704	(0.354)	53915	20.0000	19.77
8	Trichlorofluoromethane	101	1.899	1.899	(0.394)	105233	20.0000	20.50
9	Acrolein	56	2.270	2.270	(0.471)	9018	40.0000	42.82(M)
10	Acetone	43	2.412	2.412	(0.501)	64015	40.0000	47.89
11	1,1-Dichloroethene	96	2.337	2.337	(0.485)	57533	20.0000	20.18
15	Iodomethane	142	2.472	2.472	(0.513)	127779	40.0000	38.07
16	Acrylonitrile	53	3.068	3.068	(0.637)	54831	40.0000	37.82
17	Methylene Chloride	84	2.798	2.798	(0.581)	72366	20.0000	19.96
18	Methyl tert-butyl ether	73	3.083	3.083	(0.640)	189818	20.0000	18.58
19	Carbon Disulfide	76	2.525	2.525	(0.524)	335164	40.0000	39.91
20	trans-1,2-Dichloroethene	96	3.061	3.061	(0.635)	65484	20.0000	19.22
21	Vinyl Acetate	43	3.612	3.612	(0.750)	400374	40.0000	38.86
22	1,1-Dichloroethane	63	3.514	3.514	(0.729)	141518	20.0000	20.36
24	2-Butanone	43	4.268	4.268	(0.886)	71654	40.0000	39.58
26	2,2-Dichloropropane	77	4.185	4.185	(0.869)	93951	20.0000	19.23

27 cis-1,2-Dichloroethene	96	4.200	4.200 (0.872)	89869	20.0000	19.69
28 Chloroform	83	4.575	4.575 (0.949)	147735	20.0000	19.53

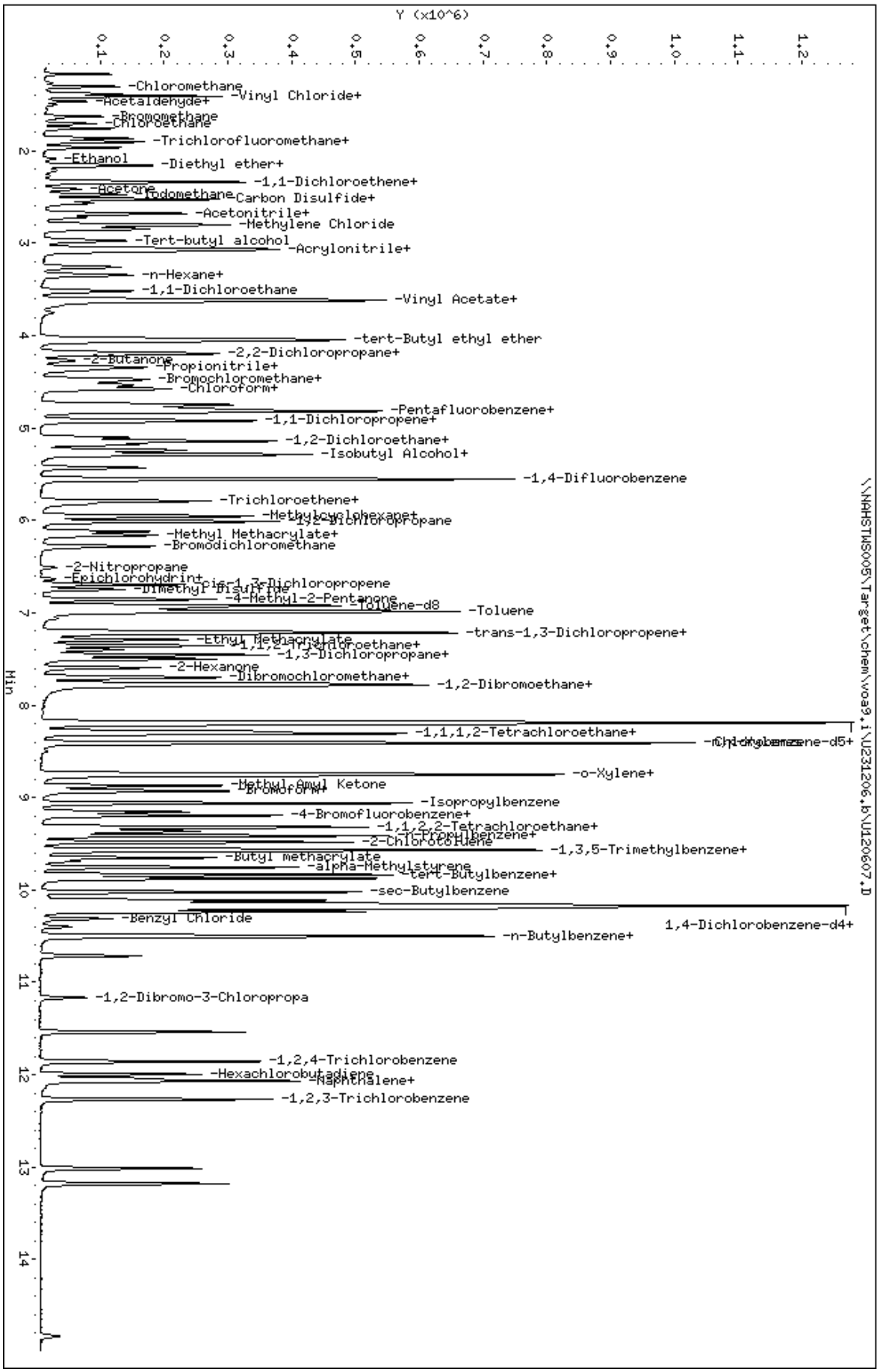
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	29 Bromochloromethane	128	4.470	4.470	(0.928)	49140	20.0000	20.80
$	30 Dibromofluoromethane	113	4.752	4.752	(0.986)	78610	20.0000	20.18
	31 1,1,1-Trichloroethane	97	4.744	4.744	(0.984)	115867	20.0000	20.15
	32 1,1-Dichloropropene	75	4.924	4.924	(0.887)	100335	20.0000	20.68
	33 1,2-Dichloroethane	62	5.179	5.179	(0.933)	112838	20.0000	19.97
	34 Carbon Tetrachloride	117	4.913	4.913	(0.885)	96798	20.0000	20.42
$	35 1,2-Dichloroethane-d4	65	5.100	5.100	(1.058)	89394	20.0000	21.11(M)
*	36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	579849	50.0000	
	37 Benzene	78	5.141	5.141	(0.926)	315779	20.0000	20.00
	38 Trichloroethene	130	5.790	5.790	(1.043)	85810	20.0000	19.72
	39 Bromodichloromethane	83	6.281	6.281	(1.131)	101029	20.0000	19.54
	41 2-Chloroethylvinyl ether	63	6.585	6.585	(1.186)	2163	40.0000	43.74(M)
	42 1,2-Dichloropropane	63	6.011	6.011	(1.082)	83165	20.0000	19.56
	44 Dibromomethane	93	6.120	6.120	(1.102)	55037	20.0000	20.01
	45 4-Methyl-2-Pentanone	43	6.855	6.855	(0.837)	166511	40.0000	39.46
	46 cis-1,3-Dichloropropene	75	6.693	6.693	(1.205)	118570	20.0000	18.75
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	581885	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	283330	20.0000	21.15
	50 Toluene	91	6.982	6.982	(0.853)	343935	20.0000	21.19
	51 trans-1,3-Dichloropropene	75	7.199	7.199	(1.296)	97024	20.0000	18.46
	52 2-Hexanone	43	7.593	7.593	(0.928)	111036	40.0000	37.81
	53 1,1,2-Trichloroethane	83	7.357	7.357	(0.899)	66320	20.0000	20.60
	54 1,3-Dichloropropane	76	7.499	7.499	(0.916)	141645	20.0000	19.66
	55 Dibromochloromethane	129	7.691	7.691	(0.940)	84329	20.0000	19.48
	56 Tetrachloroethene	164	7.458	7.458	(0.911)	72888	20.0000	20.98
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	77975	20.0000	19.28
	58 1-Chlorohexane	55	8.197	8.197	(1.476)	68345	20.0000	21.01
	59 Chlorobenzene	112	8.208	8.208	(1.003)	228536	20.0000	19.33
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	79680	20.0000	19.27
	61 Ethylbenzene	106	8.305	8.305	(1.015)	111588	20.0000	20.16
	62 m,p-Xylenes	106	8.410	8.410	(1.027)	281574	40.0000	42.32
	63 o-Xylene	106	8.748	8.748	(1.069)	140260	20.0000	20.50
	64 Styrene	104	8.763	8.763	(1.071)	236657	20.0000	20.77
	66 Bromoform	173	8.920	8.920	(1.090)	53027	20.0000	18.59
	67 Isopropylbenzene	105	9.063	9.063	(1.107)	349789	20.0000	21.14
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	105283	20.0000	19.75
$	69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	106137	20.0000	20.17
*	70 1,4-Dichlorobenzene-d4	152	10.168	10.168	(1.000)	320589	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.921)	103797	20.0000	17.05
	73 n-Propylbenzene	91	9.411	9.411	(0.926)	394967	20.0000	20.98
	74 Bromobenzene	156	9.317	9.317	(0.916)	102438	20.0000	19.02
	75 1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	280571	20.0000	20.97
	76 2-Chlorotoluene	91	9.482	9.482	(0.933)	254146	20.0000	20.05
	77 4-Chlorotoluene	91	9.576	9.576	(0.942)	285359	20.0000	19.85
	78 tert-Butylbenzene	119	9.835	9.835	(0.967)	250022	20.0000	20.80
	79 1,2,4-Trimethylbenzene	105	9.880	9.880	(0.972)	276998	20.0000	20.65
	81 sec-Butylbenzene	105	10.022	10.022	(0.986)	322694	20.0000	20.82
	82 p-Isopropyltoluene	119	10.146	10.146	(0.998)	280155	20.0000	20.89
	83 1,3-Dichlorobenzene	146	10.116	10.116	(0.995)	176237	20.0000	18.47
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	185919	20.0000	18.39
	87 n-Butylbenzene	91	10.491	10.491	(1.032)	229910	20.0000	20.42
	88 1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	177221	20.0000	18.46

89	1,2-Dibromo-3-Chloropropane	155	11.166	11.166 (1.098)	16207	20.0000	18.66
90	1,2,4-Trichlorobenzene	180	11.855	11.855 (1.166)	110885	20.0000	18.72

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	91 Hexachlorobutadiene	225	11.998	11.998	(1.180)	47737	20.0000	20.11
	92 Naphthalene	128	12.065	12.065	(1.187)	280624	20.0000	19.65
	93 1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	111868	20.0000	18.73
M	94 1,2-Dichloroethylene (total)	96				155353	40.0000	
M	95 Xylenes (total)	106				421834	60.0000	
	131 Methyl Acrylate	55	4.373	4.373	(0.907)	93419	20.0000	19.24
	135 1,4-Dioxane	88	6.169	6.169	(1.280)	20324	400.000	346.66
	141 Cyclohexane	56	4.785	4.785	(0.993)	116645	20.0000	21.90
	138 Freon TF	101	2.337	2.337	(0.485)	58269	20.0000	21.73
	140 1,3-Butadiene	54	1.408	1.408	(0.292)	78314	20.0000	21.10
	147 Methylcyclohexane	55	5.947	5.947	(1.071)	173678	20.0000	20.20
	146 Methyl Acetate	43	2.716	2.716	(0.564)	69207	20.0000	18.81
	148 Tert-Butyl alcohol	59	2.971	2.971	(0.617)	145628	400.000	352.04
	149 Isopropyl Alcohol	45	2.566	2.566	(0.533)	91067	400.000	384.83

QC Flag Legend

M - Compound response manually integrated.



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Instrument: VOA9.i
Operator: PC
Column diameter: 0.18

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Inj Date : 06-DEC-2023 13:49
InstruID : VOA9.i
LabSampID : VSTD020

Acrolein (107-02-8)

Reason Code:

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11-Dec-2023
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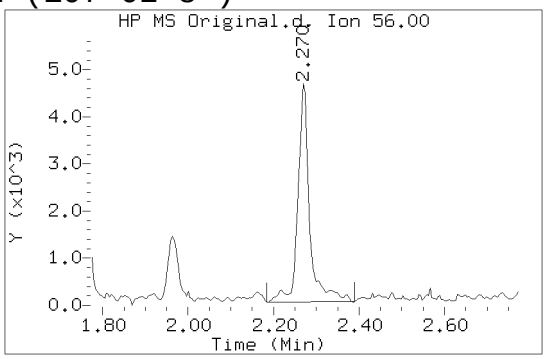

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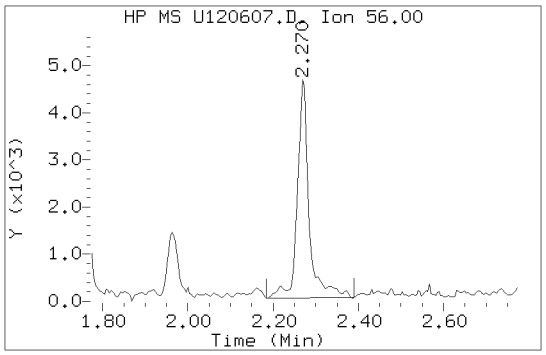

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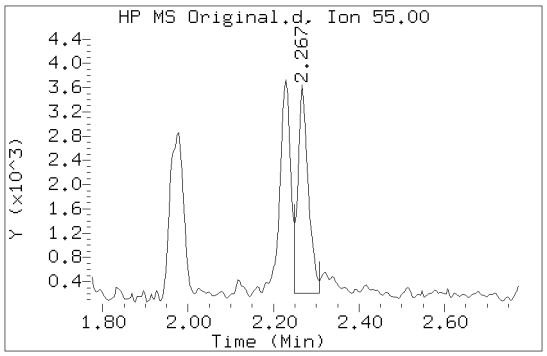

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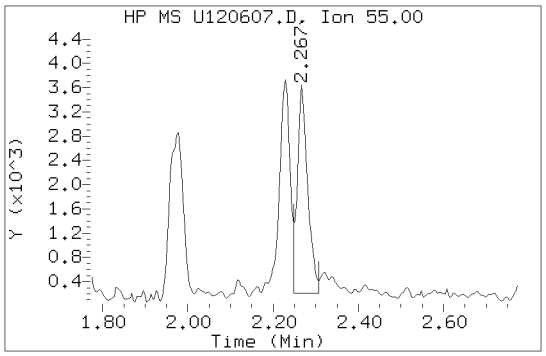

2-Chloroethylvinyl ether (110-75-8)

Reason Code:

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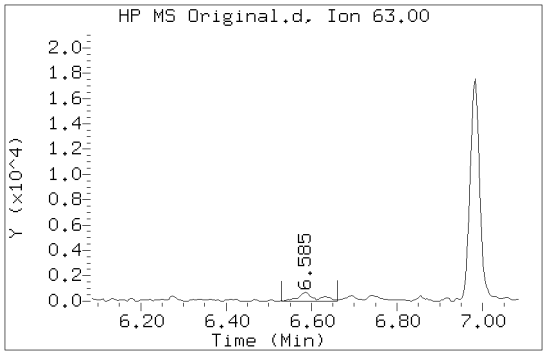

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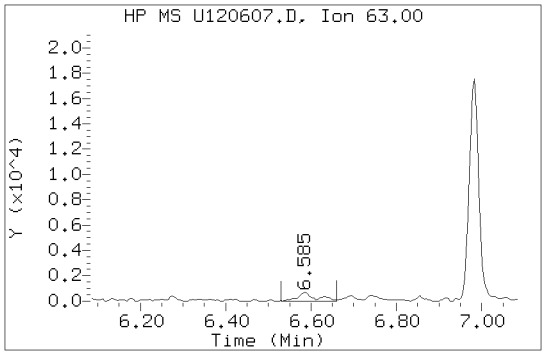

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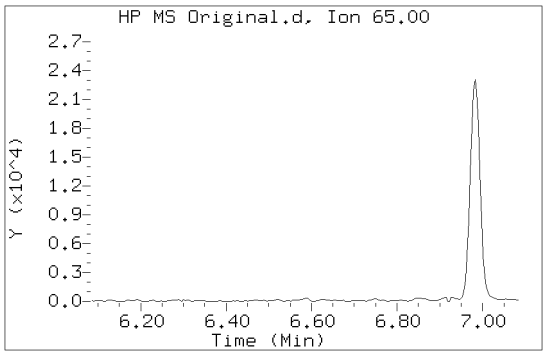

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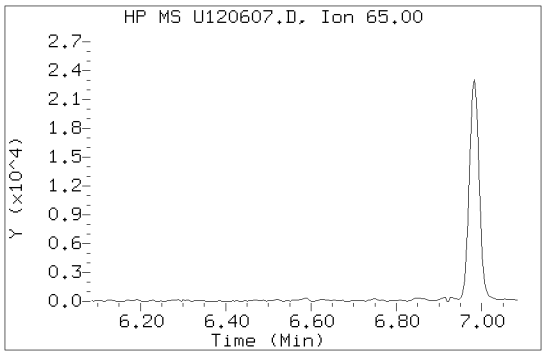

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InstruID : VOA9.i
LabSampID : VSTD020

2-Chloroethylvinyl ether (110-75-8)

Reason Code:

BEFORE

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106
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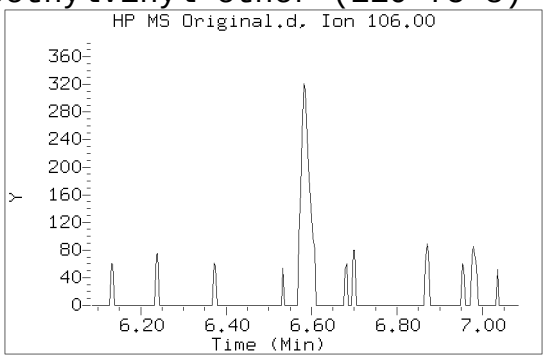
HEIGHT
0
11-Dec-2023
17:18
linh
pham



AFTER

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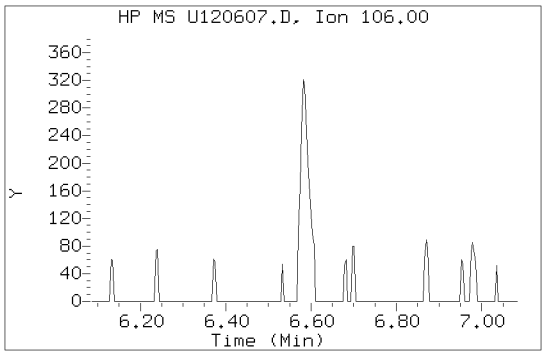

1,2-Dichloroethane-d4 (17060-07-0)

Reason Code:

BEFORE

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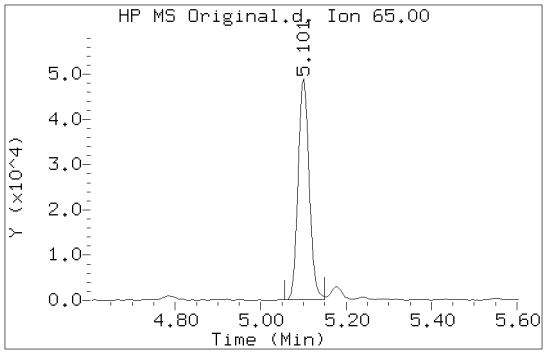

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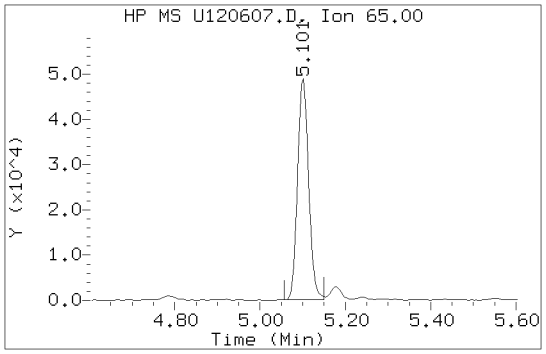

BEFORE

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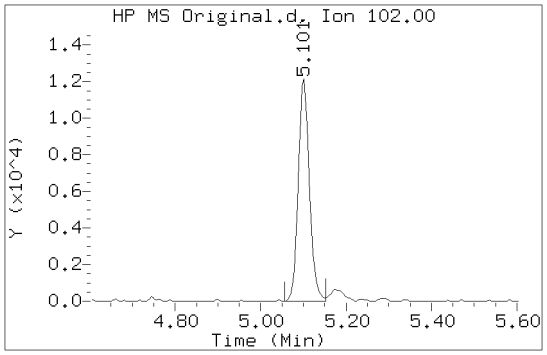

AFTER

MASS
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12-Dec-2023
09:43
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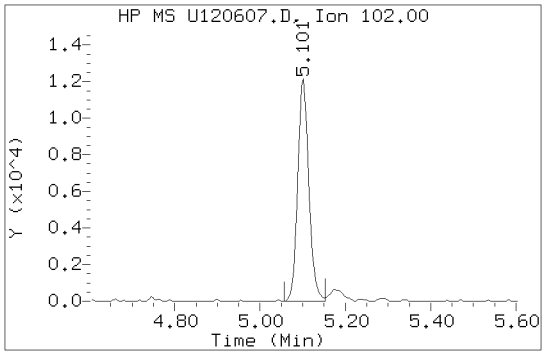


Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120608.D Page 1
Report Date: 12-Dec-2023 09:43

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120608.D
Lab Smp Id: VSTD050 Client Smp ID: VSTD050
Inj Date : 06-DEC-2023 14:11
Operator : PC Inst ID: VOA9.i
Smp Info : VSTD050;VSTD050;1;7;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\8260C.m
Meth Date : 12-Dec-2023 09:43 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 13:49 Cal File: U120607.D
Als bottle: 9 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V9.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1	Pentafluorobenzene	168	4.815	4.815	(1.000)	366831	50.0000	
2	Dichlorodifluoromethane	85	1.160	1.160	(0.241)	137759	50.0000	46.64
3	Chloromethane	50	1.295	1.295	(0.269)	198858	50.0000	47.25
5	Vinyl Chloride	62	1.374	1.374	(0.285)	192474	50.0000	47.87
6	Bromomethane	94	1.617	1.617	(0.336)	101286	50.0000	49.17
7	Chloroethane	64	1.696	1.696	(0.352)	130701	50.0000	48.28
8	Trichlorofluoromethane	101	1.895	1.895	(0.394)	237922	50.0000	46.69
9	Acrolein	56	2.262	2.262	(0.470)	19296	100.000	92.30
10	Acetone	43	2.405	2.405	(0.499)	141600	100.000	114.20
11	1,1-Dichloroethene	96	2.330	2.330	(0.484)	134600	50.0000	47.57
15	Iodomethane	142	2.465	2.465	(0.512)	363885	100.000	101.22
16	Acrylonitrile	53	3.064	3.064	(0.636)	144182	100.000	100.19
17	Methylene Chloride	84	2.791	2.791	(0.580)	178723	50.0000	50.05
18	Methyl tert-butyl ether	73	3.079	3.079	(0.640)	503453	50.0000	49.66
19	Carbon Disulfide	76	2.517	2.517	(0.523)	830715	100.000	99.64
20	trans-1,2-Dichloroethene	96	3.057	3.057	(0.635)	164779	50.0000	48.71
21	Vinyl Acetate	43	3.604	3.604	(0.749)	1082843	100.000	105.87
22	1,1-Dichloroethane	63	3.511	3.511	(0.729)	308894	50.0000	44.77
24	2-Butanone	43	4.260	4.260	(0.885)	176331	100.000	98.12
26	2,2-Dichloropropane	77	4.182	4.182	(0.868)	234552	50.0000	48.36

27 cis-1,2-Dichloroethene	96	4.193	4.193 (0.871)	222870	50.0000	49.18
28 Chloroform	83	4.571	4.571 (0.949)	363364	50.0000	48.38

Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120608.D Page 2
Report Date: 12-Dec-2023 09:43

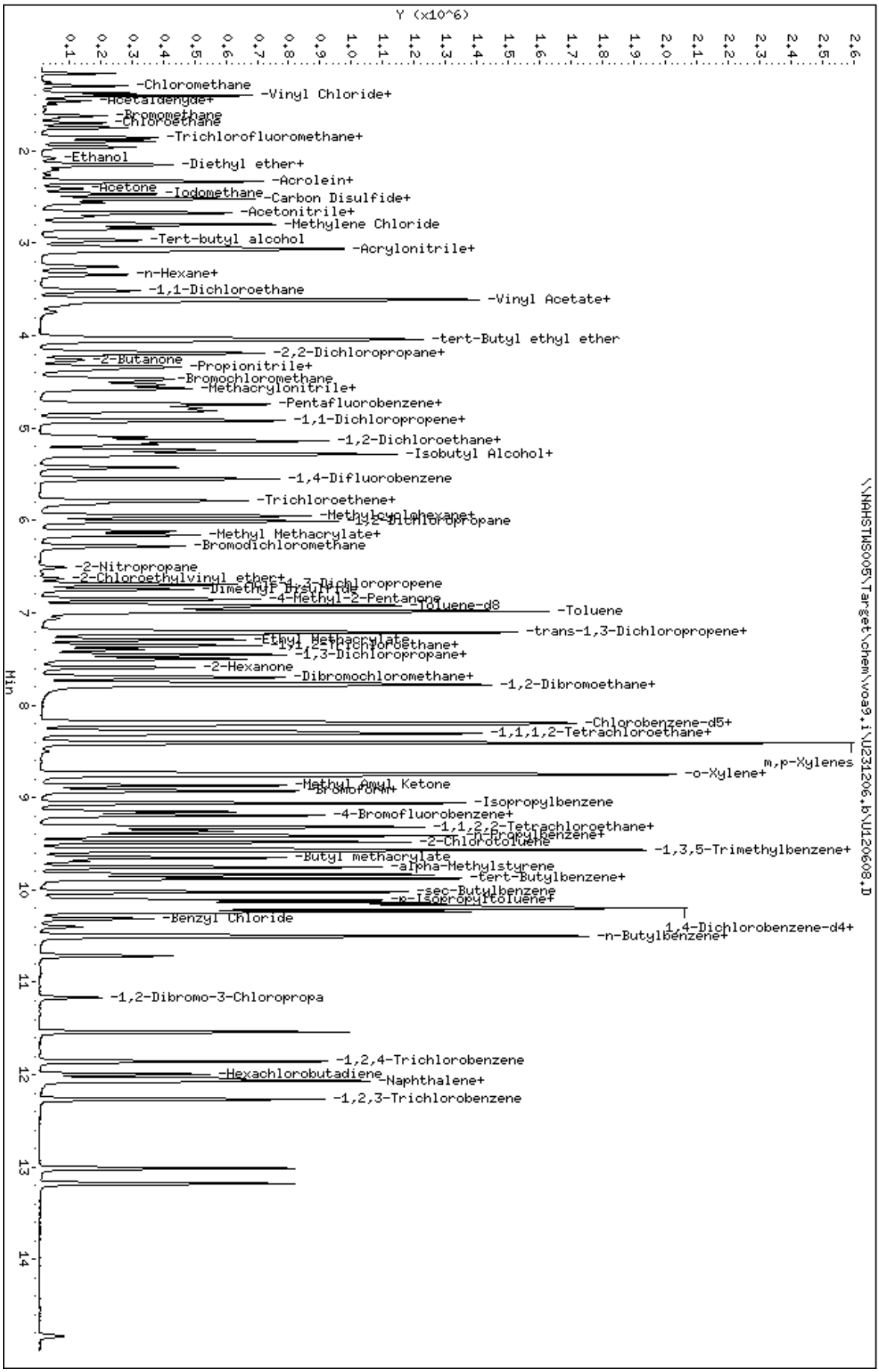
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	29 Bromochloromethane	128	4.467	4.467	(0.928)	119341	50.0000	50.90
$	30 Dibromofluoromethane	113	4.748	4.748	(0.986)	189455	50.0000	50.47
	31 1,1,1-Trichloroethane	97	4.740	4.740	(0.984)	277100	50.0000	48.55
	32 1,1-Dichloropropene	75	4.920	4.920	(0.887)	241449	50.0000	49.00
	33 1,2-Dichloroethane	62	5.175	5.175	(0.932)	276143	50.0000	48.12
	34 Carbon Tetrachloride	117	4.909	4.909	(0.885)	232598	50.0000	48.32
$	35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	211870	50.0000	49.26(M)
*	36 1,4-Difluorobenzene	114	5.550	5.550	(1.000)	588962	50.0000	
	37 Benzene	78	5.138	5.138	(0.926)	777989	50.0000	48.52
	38 Trichloroethene	130	5.786	5.786	(1.043)	213155	50.0000	48.23
	39 Bromodichloromethane	83	6.277	6.277	(1.131)	258199	50.0000	49.17
	41 2-Chloroethylvinyl ether	63	6.581	6.581	(1.186)	5248	100.000	103.15
	42 1,2-Dichloropropane	63	6.007	6.007	(1.082)	205492	50.0000	47.60
	44 Dibromomethane	93	6.120	6.120	(1.103)	134471	50.0000	48.15
	45 4-Methyl-2-Pentanone	43	6.851	6.851	(0.837)	421109	100.000	99.77
	46 cis-1,3-Dichloropropene	75	6.689	6.689	(1.205)	322591	50.0000	47.74
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	585326	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	688161	50.0000	51.07
	50 Toluene	91	6.978	6.978	(0.853)	825618	50.0000	50.58
	51 trans-1,3-Dichloropropene	75	7.196	7.196	(1.296)	270774	50.0000	47.62
	52 2-Hexanone	43	7.589	7.589	(0.927)	284123	100.000	96.18
	53 1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	162935	50.0000	52.25
	54 1,3-Dichloropropane	76	7.499	7.499	(0.916)	347309	50.0000	47.92
	55 Dibromochloromethane	129	7.690	7.690	(0.940)	221256	50.0000	50.82
	56 Tetrachloroethene	164	7.454	7.454	(0.911)	165847	50.0000	47.47
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	200095	50.0000	49.20
	58 1-Chlorohexane	55	8.196	8.196	(1.477)	149444	50.0000	45.25
	59 Chlorobenzene	112	8.208	8.208	(1.003)	554780	50.0000	46.66
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	203091	50.0000	48.83
	61 Ethylbenzene	106	8.305	8.305	(1.015)	267891	50.0000	48.13
	62 m,p-Xylenes	106	8.406	8.406	(1.027)	682174	100.000	101.95
	63 o-Xylene	106	8.748	8.748	(1.069)	345583	50.0000	50.21
	64 Styrene	104	8.759	8.759	(1.070)	602189	50.0000	52.56
	66 Bromoform	173	8.920	8.920	(1.090)	142982	50.0000	48.05
	67 Isopropylbenzene	105	9.062	9.062	(1.107)	836214	50.0000	50.24
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	257467	50.0000	49.42
$	69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	257187	50.0000	50.42
*	70 1,4-Dichlorobenzene-d4	152	10.168	10.168	(1.000)	319548	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.921)	269676	50.0000	44.45
	73 n-Propylbenzene	91	9.411	9.411	(0.926)	950507	50.0000	50.65
	74 Bromobenzene	156	9.317	9.317	(0.916)	244856	50.0000	45.62
	75 1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	684053	50.0000	51.29
	76 2-Chlorotoluene	91	9.482	9.482	(0.933)	609247	50.0000	48.24
	77 4-Chlorotoluene	91	9.576	9.576	(0.942)	695361	50.0000	48.54
	78 tert-Butylbenzene	119	9.835	9.835	(0.967)	573100	50.0000	47.84
	79 1,2,4-Trimethylbenzene	105	9.876	9.876	(0.971)	683706	50.0000	51.15
	81 sec-Butylbenzene	105	10.022	10.022	(0.986)	741751	50.0000	48.02
	82 p-Isopropyltoluene	119	10.146	10.146	(0.998)	675300	50.0000	50.51
	83 1,3-Dichlorobenzene	146	10.116	10.116	(0.995)	433413	50.0000	45.57
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	447745	50.0000	44.44
	87 n-Butylbenzene	91	10.491	10.491	(1.032)	556242	50.0000	49.58
	88 1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	431690	50.0000	45.12

89	1,2-Dibromo-3-Chloropropane	155	11.165	11.165 (1.098)	43056	50.0000	46.22
90	1,2,4-Trichlorobenzene	180	11.855	11.855 (1.166)	285101	50.0000	48.30

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/l)	ON-COL (ug/l)
	91 Hexachlorobutadiene	225	11.998	11.998	(1.180)	102297	50.0000	43.24
	92 Naphthalene	128	12.065	12.065	(1.187)	724100	50.0000	50.87
	93 1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	278076	50.0000	46.72
M	94 1,2-Dichloroethylene (total)	96				387649	100.000	
M	95 Xylenes (total)	106				1027757	150.000	
	131 Methyl Acrylate	55	4.365	4.365	(0.907)	252491	50.0000	52.40
	135 1,4-Dioxane	88	6.165	6.165	(1.280)	54651	1000.00	939.00
	141 Cyclohexane	56	4.785	4.785	(0.994)	230272	50.0000	43.56
	138 Freon TF	101	2.333	2.333	(0.485)	124522	50.0000	46.16
	140 1,3-Butadiene	54	1.400	1.400	(0.291)	184133	50.0000	49.97
	147 Methylcyclohexane	55	5.947	5.947	(1.072)	474867	50.0000	54.39
	146 Methyl Acetate	43	2.712	2.712	(0.563)	172417	50.0000	47.22
	148 Tert-Butyl alcohol	59	2.963	2.963	(0.615)	360815	1000.00	878.61
	149 Isopropyl Alcohol	45	2.558	2.558	(0.531)	232846	1000.00	1002.97

QC Flag Legend

M - Compound response manually integrated.


Y (x10^6)
Min
-Chloromethane
-Vinyl Chloride+
-Acetaldehyde+
-Bromomethane
-Chloroethane
-Trichlorofluoromethane+
-Ethanol
-Diethyl ether+
-Acrolein+
-Acetone
-Iodomethane
-Carbon Disulfide+
-Acetonitrile+
-Methylene Chloride
-Tert-butyl alcohol
-Acrylonitrile+
-n-Hexane+
-1,1-Dichloroethane
-Vinyl Acetate+
-tert-Butyl ethyl ether
-2,2-Dichloropropane+
-2-Butanone
-Propionitrile+
-Bromochloromethane
-Methacrylonitrile+
-Pentafluorobenzene+
-1,1-Dichloropropene+
-1,2-Dichloroethane+
-Isobutyl Alcohol+
-1,4-Difluorobenzene
-Trichloroethene+
-Methylcyclohexane+
-1,2-Dichloropropane
-Methyl Methacrylate+
-Bromodichloromethane
-2-Nitropropane
-2-Chloroethylvinyl ether+
-1,3-Dichloropropene
-Dimethyl Disulfide
-4-Methyl-2-Pentanone
-Toluene-d8
-Toluene
-trans-1,3-Dichloropropene+
-Ethyl Methacrylate
-1,1,2-Trichloroethane+
-1,3-Dichloropropane+
-2-Hexanone
-Dibromochloromethane+
-1,2-Dibromoethane+
-Chlorobenzene-d5+
-1,1,1,2-Tetrachloroethane+
m,p-Xylenes
-o-Xylene+
-Methyl Amyl Ketone
-Bromoform+
-Isopropylbenzene
-4-Bromofluorobenzene+
-1,1,2,2-Tetrachloroethane+
-n-Propylbenzene+
-2-Chlorotoluene
-1,3,5-Trimethylbenzene+
-Butyl methacrylate
-alpha-Methylstyrene
-tert-Butylbenzene+
-sec-Butylbenzene
-p-Isopropyltoluene+
-Benzyl Chloride
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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Data File: \\NAHSTMS005\Target\chem\voa9,i\U231206,b\U120608,D
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Sample Info: VSTD050;VSTD050;1;7;
Purge Volume: 5.0
Column phase: DB624
Instrument: VOA9,i
Operator: PC
Column diameter: 0.18
Page 1

Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120608.D
Inj Date : 06-DEC-2023 14:11
InstruID : VOA9.i
LabSampID : VSTD050

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

Reason Code:

BEFORE

MASS
53
AREA
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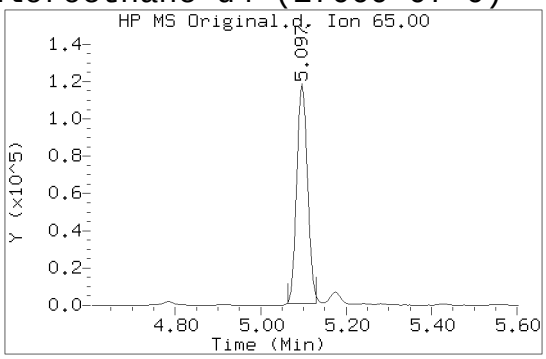
HEIGHT
36364
06-Dec-2023
23:48



AFTER

MASS
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AREA
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HEIGHT
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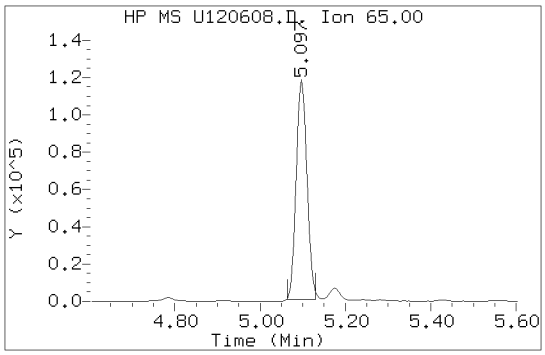
12-Dec-2023
09:43



BEFORE

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AREA
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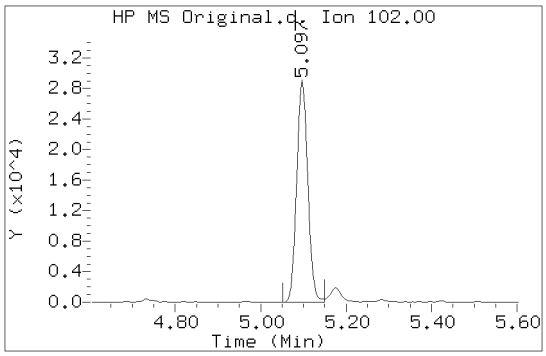
23:48



AFTER

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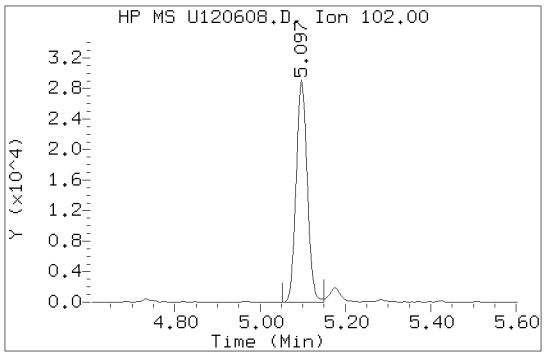
09:43



Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120609.D Page 1
Report Date: 12-Dec-2023 09:44

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120609.D
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Inj Date : 06-DEC-2023 14:34
Operator : PC Inst ID: VOA9.i
Smp Info : VSTD100;VSTD100;1;8;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\8260C.m
Meth Date : 12-Dec-2023 09:44 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 10 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V9.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1	Pentafluorobenzene	168	4.815	4.815	(1.000)	368772	50.0000	
2	Dichlorodifluoromethane	85	1.164	1.164	(0.242)	297342	100.000	99.16
3	Chloromethane	50	1.299	1.299	(0.270)	406471	100.000	96.08
5	Vinyl Chloride	62	1.378	1.378	(0.286)	409953	100.000	101.44
6	Bromomethane	94	1.617	1.617	(0.336)	220567	100.000	100.47
7	Chloroethane	64	1.700	1.700	(0.353)	263977	100.000	97.01
8	Trichlorofluoromethane	101	1.899	1.899	(0.394)	522606	100.000	102.02
9	Acrolein	56	2.266	2.266	(0.471)	35096	200.000	167.00
10	Acetone	43	2.408	2.408	(0.500)	236750	200.000	193.97
11	1,1-Dichloroethene	96	2.333	2.333	(0.485)	278813	100.000	98.02
15	Iodomethane	142	2.468	2.468	(0.513)	780690	200.000	199.78
16	Acrylonitrile	53	3.064	3.064	(0.636)	287882	200.000	199.01
17	Methylene Chloride	84	2.795	2.795	(0.580)	355722	100.000	99.36
18	Methyl tert-butyl ether	73	3.083	3.083	(0.640)	1003375	100.000	98.45
19	Carbon Disulfide	76	2.521	2.521	(0.524)	1747418	200.000	208.50
20	trans-1,2-Dichloroethene	96	3.061	3.061	(0.636)	334344	100.000	98.33
21	Vinyl Acetate	43	3.608	3.608	(0.749)	2245220	200.000	218.36
22	1,1-Dichloroethane	63	3.514	3.514	(0.730)	710227	100.000	102.40
24	2-Butanone	43	4.264	4.264	(0.886)	341195	200.000	188.87
26	2,2-Dichloropropane	77	4.185	4.185	(0.869)	494484	100.000	101.41

27 cis-1,2-Dichloroethene	96	4.197	4.197 (0.872)	440325	100.000	96.67
28 Chloroform	83	4.575	4.575 (0.950)	723369	100.000	95.82

Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120609.D Page 2
Report Date: 12-Dec-2023 09:44

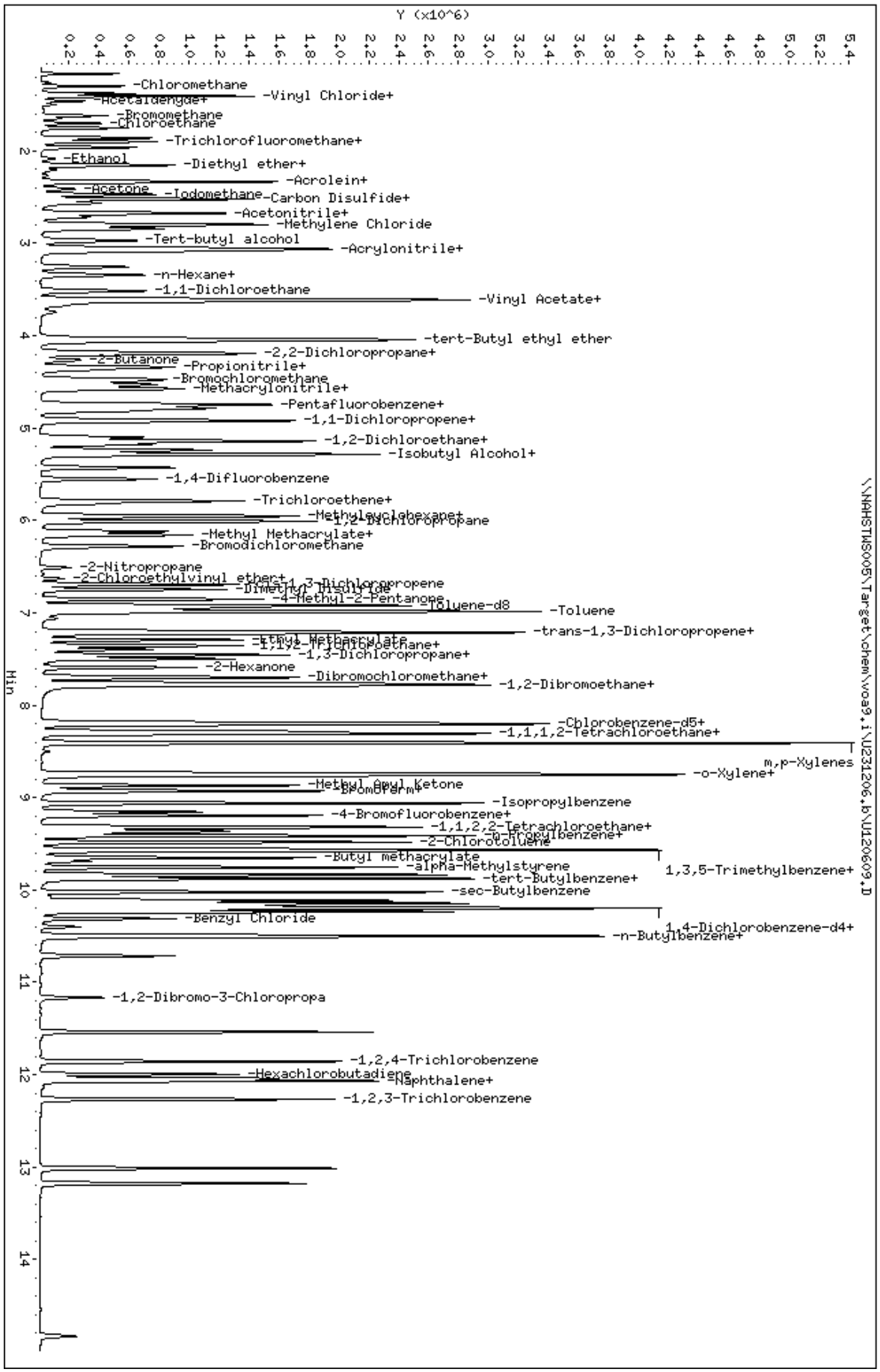
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	29 Bromochloromethane	128	4.470	4.470	(0.928)	217538	100.000	92.30
$	30 Dibromofluoromethane	113	4.748	4.748	(0.986)	396102	100.000	106.08
	31 1,1,1-Trichloroethane	97	4.744	4.744	(0.985)	593935	100.000	103.53
	32 1,1-Dichloropropene	75	4.924	4.924	(0.887)	513783	100.000	103.77
	33 1,2-Dichloroethane	62	5.175	5.175	(0.932)	536406	100.000	93.03
	34 Carbon Tetrachloride	117	4.913	4.913	(0.885)	508728	100.000	105.19
$	35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	468113	100.000	100.11(M)
*	36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	591773	50.0000	
	37 Benzene	78	5.137	5.137	(0.925)	1562743	100.000	97.00
	38 Trichloroethene	130	5.790	5.790	(1.043)	427509	100.000	96.28
	39 Bromodichloromethane	83	6.277	6.277	(1.130)	539233	100.000	102.21
	41 2-Chloroethylvinyl ether	63	6.577	6.577	(1.184)	10683	200.000	195.84
	42 1,2-Dichloropropane	63	6.011	6.011	(1.082)	408313	100.000	94.14
	44 Dibromomethane	93	6.120	6.120	(1.102)	263977	100.000	94.07
	45 4-Methyl-2-Pentanone	43	6.854	6.854	(0.837)	859659	200.000	201.05
	46 cis-1,3-Dichloropropene	75	6.689	6.689	(1.205)	679057	100.000	98.40
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	594065	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	1451360	100.000	106.12
	50 Toluene	91	6.982	6.982	(0.853)	1683894	100.000	101.65
	51 trans-1,3-Dichloropropene	75	7.195	7.195	(1.296)	568417	100.000	97.57
	52 2-Hexanone	43	7.589	7.589	(0.927)	589218	200.000	196.54
	53 1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	317502	100.000	101.57
	54 1,3-Dichloropropane	76	7.499	7.499	(0.916)	688725	100.000	93.64
	55 Dibromochloromethane	129	7.690	7.690	(0.940)	452519	100.000	102.42
	56 Tetrachloroethene	164	7.458	7.458	(0.911)	359308	100.000	101.34
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	401348	100.000	97.23
	58 1-Chlorohexane	55	8.196	8.196	(1.476)	332886	100.000	100.31
	59 Chlorobenzene	112	8.208	8.208	(1.003)	1142106	100.000	94.65
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	418859	100.000	99.23
	61 Ethylbenzene	106	8.305	8.305	(1.015)	573872	100.000	101.59
	62 m,p-Xylenes	106	8.410	8.410	(1.027)	1428236	200.000	210.30
	63 o-Xylene	106	8.747	8.747	(1.069)	717054	100.000	102.66
	64 Styrene	104	8.762	8.762	(1.071)	1247814	100.000	107.31
	66 Bromoform	173	8.920	8.920	(1.090)	300664	100.000	98.41
	67 Isopropylbenzene	105	9.062	9.062	(1.107)	1797558	100.000	106.42
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	527580	100.000	99.75
$	69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	539241	100.000	105.54
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	326639	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.920)	559877	100.000	90.29
	73 n-Propylbenzene	91	9.411	9.411	(0.925)	1990476	100.000	103.77
	74 Bromobenzene	156	9.317	9.317	(0.916)	507624	100.000	92.54
	75 1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	1467962	100.000	107.68
	76 2-Chlorotoluene	91	9.482	9.482	(0.932)	1250856	100.000	96.89
	77 4-Chlorotoluene	91	9.576	9.576	(0.941)	1459624	100.000	99.69
	78 tert-Butylbenzene	119	9.838	9.838	(0.967)	1256628	100.000	102.62
	79 1,2,4-Trimethylbenzene	105	9.880	9.880	(0.971)	1472785	100.000	107.79
	81 sec-Butylbenzene	105	10.022	10.022	(0.985)	1683936	100.000	106.65
	82 p-Isopropyltoluene	119	10.146	10.146	(0.997)	1513618	100.000	110.77
	83 1,3-Dichlorobenzene	146	10.116	10.116	(0.994)	909175	100.000	93.53
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	929084	100.000	90.22
	87 n-Butylbenzene	91	10.491	10.491	(1.031)	1271526	100.000	110.88
	88 1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	884103	100.000	90.40

89	1,2-Dibromo-3-Chloropropane	155	11.165	11.165 (1.098)	92967	100.000	95.28
90	1,2,4-Trichlorobenzene	180	11.855	11.855 (1.165)	628138	100.000	104.11

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	91 Hexachlorobutadiene	225	11.998	11.998	(1.179)	253011	100.000	104.62
	92 Naphthalene	128	12.065	12.065	(1.186)	1545256	100.000	106.20
	93 1,2,3-Trichlorobenzene	180	12.267	12.267	(1.206)	597649	100.000	98.23
M	94 1,2-Dichloroethylene (total)	96				774669	200.000	
M	95 Xylenes (total)	106				2145290	300.000	
	131 Methyl Acrylate	55	4.369	4.369	(0.907)	502976	100.000	103.83
	135 1,4-Dioxane	88	6.165	6.165	(1.280)	109750	2000.00	1875.79
	141 Cyclohexane	56	4.785	4.785	(0.994)	541235	100.000	101.85
	138 Freon TF	101	2.337	2.337	(0.485)	287842	100.000	102.64
	140 1,3-Butadiene	54	1.404	1.404	(0.292)	389528	100.000	105.17
	147 Methylcyclohexane	55	5.943	5.943	(1.070)	971750	100.000	110.78(A)
	146 Methyl Acetate	43	2.716	2.716	(0.564)	341463	100.000	93.03
	148 Tert-Butyl alcohol	59	2.967	2.967	(0.616)	729703	2000.00	1767.54
	149 Isopropyl Alcohol	45	2.566	2.566	(0.533)	469315	2000.00	2018.44

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.



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Sample Info: VSTD100;VSTD100;1;8;
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9.i
Operator: PC
Column diameter: 0.18

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Inj Date : 06-DEC-2023 14:34
InstruID : VOA9.i
LabSampID : VSTD100

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

Reason Code:

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11-Dec-2023
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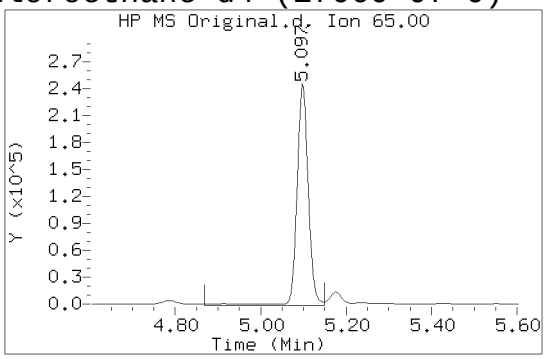

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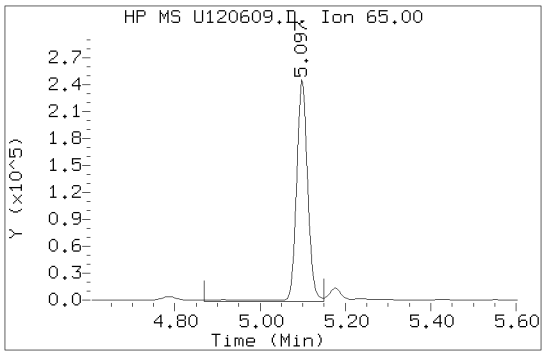

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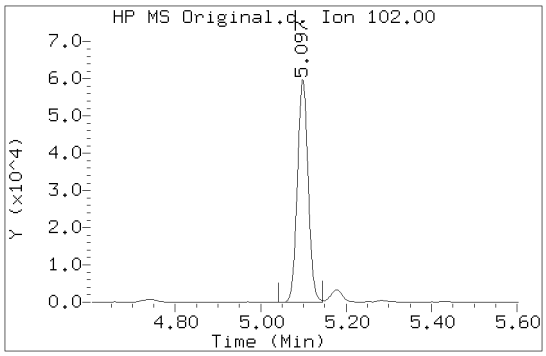

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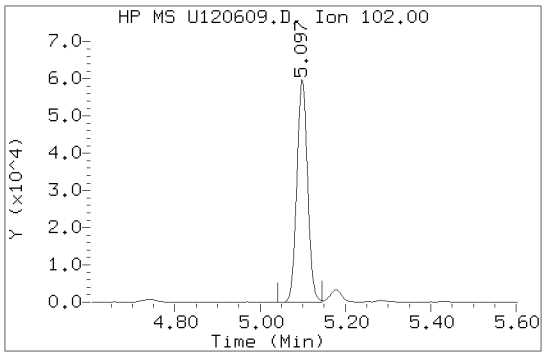

Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120610.D Page 1
Report Date: 12-Dec-2023 09:44

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120610.D
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Inj Date : 06-DEC-2023 14:56
Operator : PC Inst ID: VOA9.i
Smp Info : VSTD150;VSTD150;1;9;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\8260C.m
Meth Date : 12-Dec-2023 09:44 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:34 Cal File: U120609.D
Als bottle: 11 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V9.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1	Pentafluorobenzene	168	4.819	4.819	(1.000)	371554	50.0000	
2	Dichlorodifluoromethane	85	1.168	1.168	(0.242)	450623	150.000	148.71
3	Chloromethane	50	1.303	1.303	(0.270)	617058	150.000	144.77
5	Vinyl Chloride	62	1.378	1.378	(0.286)	613994	150.000	150.79
6	Bromomethane	94	1.618	1.618	(0.336)	359673	150.000	149.88
7	Chloroethane	64	1.700	1.700	(0.353)	401590	150.000	146.48
8	Trichlorofluoromethane	101	1.899	1.899	(0.394)	778971	150.000	150.92
9	Acrolein	56	2.270	2.270	(0.471)	55618	300.000	262.67
10	Acetone	43	2.412	2.412	(0.501)	361348	300.000	296.97(A)
11	1,1-Dichloroethene	96	2.337	2.337	(0.485)	419885	150.000	146.51
15	Iodomethane	142	2.472	2.472	(0.513)	1175487	300.000	278.47
16	Acrylonitrile	53	3.068	3.068	(0.637)	432456	300.000	296.71
17	Methylene Chloride	84	2.798	2.798	(0.581)	541571	150.000	150.28
18	Methyl tert-butyl ether	73	3.083	3.083	(0.640)	1522542	150.000	148.27
19	Carbon Disulfide	76	2.525	2.525	(0.524)	2638818	300.000	312.50
20	trans-1,2-Dichloroethene	96	3.061	3.061	(0.635)	504274	150.000	147.19
21	Vinyl Acetate	43	3.608	3.608	(0.749)	3334632	300.000	321.89
22	1,1-Dichloroethane	63	3.518	3.518	(0.730)	1067547	150.000	152.77
24	2-Butanone	43	4.264	4.264	(0.885)	517812	300.000	284.49
26	2,2-Dichloropropane	77	4.185	4.185	(0.869)	755555	150.000	153.80

27 cis-1,2-Dichloroethene	96	4.200	4.200 (0.872)	657135	150.000	143.19
28 Chloroform	83	4.575	4.575 (0.949)	1078801	150.000	141.83

Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120610.D Page 2
Report Date: 12-Dec-2023 09:44

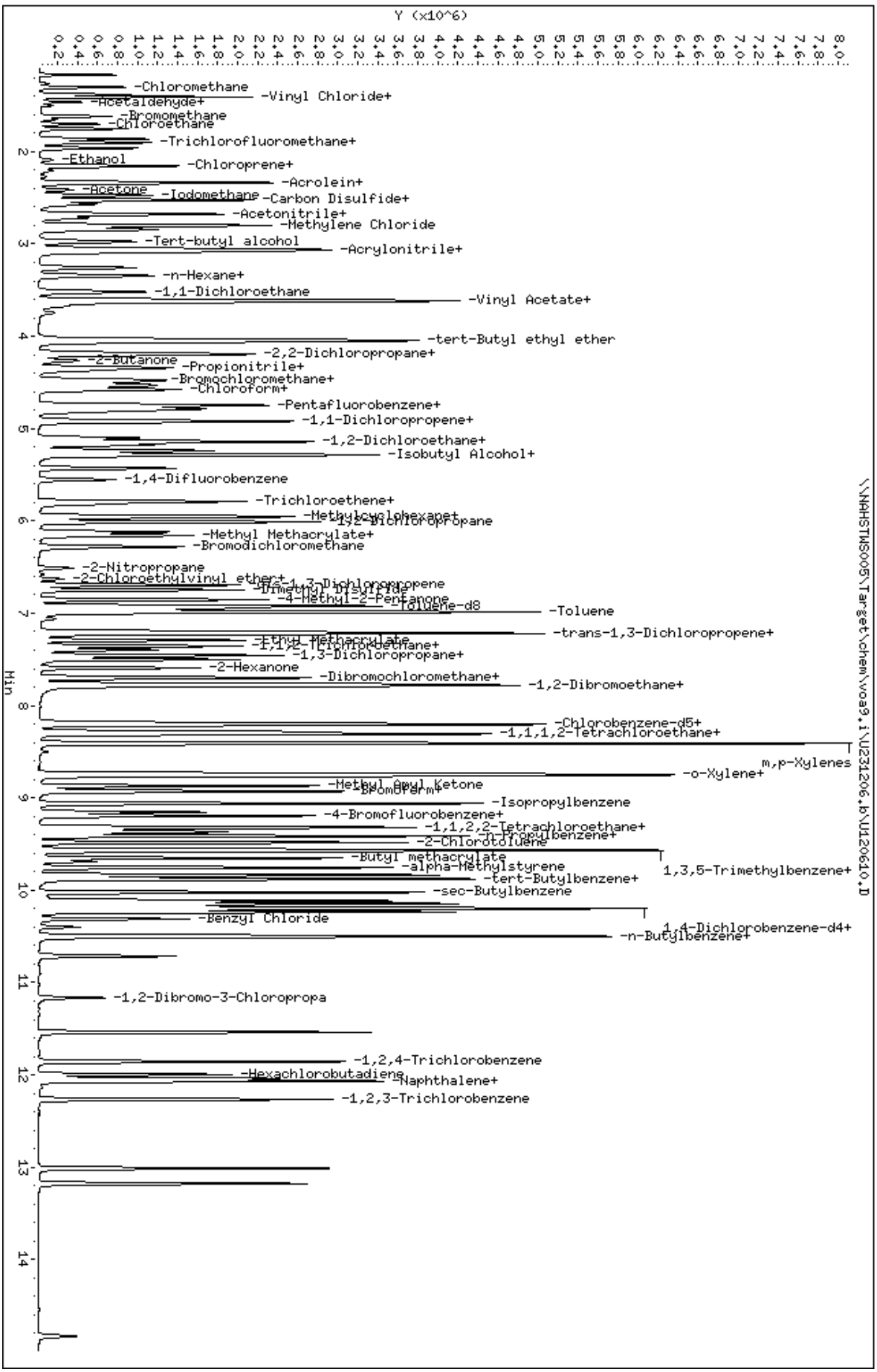
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	29 Bromochloromethane	128	4.474	4.474	(0.928)	319815	150.000	134.68
$	30 Dibromofluoromethane	113	4.752	4.752	(0.986)	564100	150.000	150.37
	31 1,1,1-Trichloroethane	97	4.744	4.744	(0.984)	880243	150.000	152.28
	32 1,1-Dichloropropene	75	4.924	4.924	(0.887)	749286	150.000	150.06
	33 1,2-Dichloroethane	62	5.179	5.179	(0.933)	812291	150.000	139.68
	34 Carbon Tetrachloride	117	4.916	4.916	(0.885)	754939	150.000	154.78
$	35 1,2-Dichloroethane-d4	65	5.100	5.100	(1.058)	659973	150.000	131.23(M)
*	36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	596844	50.0000	
	37 Benzene	78	5.141	5.141	(0.926)	2328803	150.000	143.33
	38 Trichloroethene	130	5.790	5.790	(1.043)	649892	150.000	145.12
	39 Bromodichloromethane	83	6.277	6.277	(1.130)	825035	150.000	155.06
	41 2-Chloroethylvinyl ether	63	6.577	6.577	(1.184)	18550	300.000	301.08
	42 1,2-Dichloropropane	63	6.011	6.011	(1.082)	614902	150.000	140.57
	44 Dibromomethane	93	6.120	6.120	(1.102)	404505	150.000	142.92
	45 4-Methyl-2-Pentanone	43	6.855	6.855	(0.837)	1318627	300.000	300.79
	46 cis-1,3-Dichloropropene	75	6.693	6.693	(1.205)	1050675	150.000	150.16
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	609445	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	2032738	150.000	144.88
	50 Toluene	91	6.982	6.982	(0.853)	2501955	150.000	147.23
	51 trans-1,3-Dichloropropene	75	7.196	7.196	(1.296)	892559	150.000	150.93
	52 2-Hexanone	43	7.593	7.593	(0.928)	904101	300.000	293.96
	53 1,1,2-Trichloroethane	83	7.357	7.357	(0.899)	484173	150.000	151.63
	54 1,3-Dichloropropane	76	7.499	7.499	(0.916)	1037923	150.000	137.55
	55 Dibromochloromethane	129	7.694	7.694	(0.940)	695620	150.000	153.47
	56 Tetrachloroethene	164	7.458	7.458	(0.911)	523779	150.000	144.00
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	604749	150.000	142.81
	58 1-Chlorohexane	55	8.197	8.197	(1.476)	501293	150.000	149.78
	59 Chlorobenzene	112	8.208	8.208	(1.003)	1722533	150.000	139.15
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	645812	150.000	149.14
	61 Ethylbenzene	106	8.305	8.305	(1.015)	852658	150.000	147.14
	62 m,p-Xylenes	106	8.410	8.410	(1.027)	2152882	300.000	309.01
	63 o-Xylene	106	8.748	8.748	(1.069)	1077436	150.000	150.37
	64 Styrene	104	8.763	8.763	(1.071)	1898957	150.000	159.19
	66 Bromoform	173	8.920	8.920	(1.090)	473849	150.000	150.60
	67 Isopropylbenzene	105	9.063	9.063	(1.107)	2672319	150.000	154.21
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	793984	150.000	149.98
$	69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	784122	150.000	150.14
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	327679	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.920)	852287	150.000	137.01
	73 n-Propylbenzene	91	9.411	9.411	(0.925)	2960780	150.000	153.87
	74 Bromobenzene	156	9.317	9.317	(0.916)	767672	150.000	139.50
	75 1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	2209178	150.000	161.54
	76 2-Chlorotoluene	91	9.482	9.482	(0.932)	1879546	150.000	145.13
	77 4-Chlorotoluene	91	9.576	9.576	(0.941)	2180934	150.000	148.49
	78 tert-Butylbenzene	119	9.839	9.839	(0.967)	1869552	150.000	152.20
	79 1,2,4-Trimethylbenzene	105	9.880	9.880	(0.971)	2199500	150.000	160.48
	81 sec-Butylbenzene	105	10.022	10.022	(0.985)	2484245	150.000	156.84
	82 p-Isopropyltoluene	119	10.146	10.146	(0.997)	2245867	150.000	163.84
	83 1,3-Dichlorobenzene	146	10.116	10.116	(0.994)	1363061	150.000	139.78
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	1395425	150.000	135.07
	87 n-Butylbenzene	91	10.491	10.491	(1.031)	1896222	150.000	164.84
	88 1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	1337751	150.000	136.36

89	1,2-Dibromo-3-Chloropropane	155	11.166	11.166 (1.098)	145211	150.000	147.17
90	1,2,4-Trichlorobenzene	180	11.855	11.855 (1.165)	938825	150.000	155.12

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	91 Hexachlorobutadiene	225	11.998	11.998	(1.179)	372344	150.000	153.48
	92 Naphthalene	128	12.065	12.065	(1.186)	2375691	150.000	162.76
	93 1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	909761	150.000	149.06
M	94 1,2-Dichloroethylene (total)	96				1161409	300.000	
M	95 Xylenes (total)	106				3230318	450.000	
	131 Methyl Acrylate	55	4.369	4.369	(0.907)	740924	150.000	151.81
	135 1,4-Dioxane	88	6.165	6.165	(1.279)	162429	3000.00	2755.36
	141 Cyclohexane	56	4.789	4.789	(0.994)	787373	150.000	147.06
	138 Freon TF	101	2.337	2.337	(0.485)	434378	150.000	149.11
	140 1,3-Butadiene	54	1.408	1.408	(0.292)	594677	150.000	159.35
	147 Methylcyclohexane	55	5.944	5.944	(1.070)	1479356	150.000	167.22(A)
	146 Methyl Acetate	43	2.716	2.716	(0.564)	513402	150.000	138.83
	148 Tert-Butyl alcohol	59	2.975	2.975	(0.617)	1113820	3000.00	2677.78
	149 Isopropyl Alcohol	45	2.570	2.570	(0.533)	695746	3000.00	2973.41

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.



Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120610.D
Date : 06-DEC-2023 14:56
Client ID: VSTD150
Sample Info: VSTD150;VSTD150;1;9;
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9.i
Operator: PC
Column diameter: 0.18

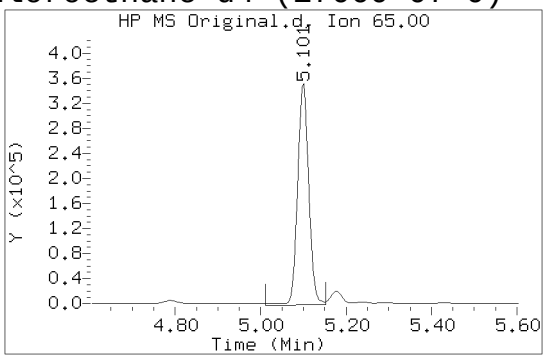
Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120610.D
Inj Date : 06-DEC-2023 14:56
InstruID : VOA9.i
LabSampID : VSTD150

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

Reason Code:

BEFORE

MASS
53
AREA
183770
HEIGHT
118998
06-Dec-2023
23:21



AFTER

MASS
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AREA
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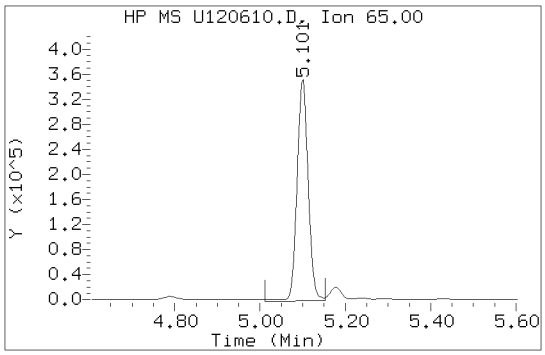
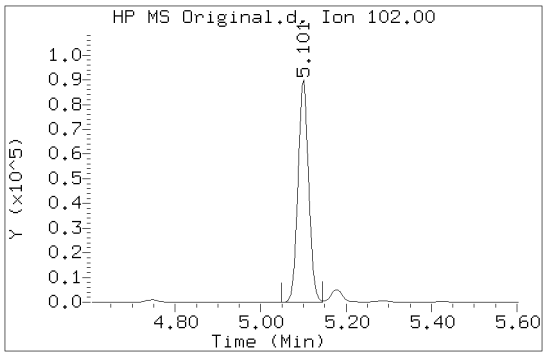
HEIGHT
353763
12-Dec-2023
09:43



BEFORE

MASS
88
AREA
796
HEIGHT
340
06-Dec-2023
23:21



AFTER

MASS
102
AREA
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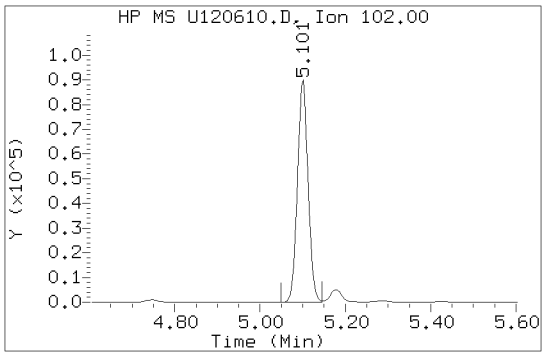
HEIGHT
89984
12-Dec-2023
09:43



Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120611.D Page 1
Report Date: 12-Dec-2023 09:44

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120611.D
Lab Smp Id: VSTD200 Client Smp ID: VSTD200
Inj Date : 06-DEC-2023 15:18
Operator : PC Inst ID: VOA9.i
Smp Info : VSTD200;VSTD200;1;10;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\8260C.m
Meth Date : 12-Dec-2023 09:44 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:56 Cal File: U120610.D
Als bottle: 12 Calibration Sample, Level: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V9.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1	Pentafluorobenzene	168	4.815	4.815	(1.000)	380914	50.0000	
2	Dichlorodifluoromethane	85	1.160	1.160	(0.241)	628396	200.000	201.97(A)
3	Chloromethane	50	1.295	1.295	(0.269)	883747	200.000	202.25(A)
5	Vinyl Chloride	62	1.374	1.374	(0.285)	860659	200.000	206.18(A)
6	Bromomethane	94	1.606	1.606	(0.334)	471847	200.000	179.59
7	Chloroethane	64	1.692	1.692	(0.352)	555887	200.000	197.78
8	Trichlorofluoromethane	101	1.895	1.895	(0.394)	1081489	200.000	204.39(A)
9	Acrolein	56	2.262	2.262	(0.470)	79016	400.000	364.00
10	Acetone	43	2.408	2.408	(0.500)	496605	400.000	400.18(A)
11	1,1-Dichloroethene	96	2.330	2.330	(0.484)	590858	200.000	201.11(A)
15	Iodomethane	142	2.465	2.465	(0.512)	1628376	400.000	348.28
16	Acrylonitrile	53	3.065	3.065	(0.636)	587140	400.000	392.94
17	Methylene Chloride	84	2.791	2.791	(0.580)	738924	200.000	200.09(A)
18	Methyl tert-butyl ether	73	3.080	3.080	(0.640)	2096496	200.000	199.15
19	Carbon Disulfide	76	2.517	2.517	(0.523)	3654371	400.000	422.14(A)
20	trans-1,2-Dichloroethene	96	3.057	3.057	(0.635)	693764	200.000	197.53
21	Vinyl Acetate	43	3.604	3.604	(0.749)	4458413	400.000	419.80(A)
22	1,1-Dichloroethane	63	3.514	3.514	(0.730)	1438381	200.000	200.78(A)
24	2-Butanone	43	4.260	4.260	(0.885)	712304	400.000	381.74
26	2,2-Dichloropropane	77	4.182	4.182	(0.868)	1030705	200.000	204.65(A)

27 cis-1,2-Dichloroethene	96	4.197	4.197 (0.872)	892465	200.000	189.69
28 Chloroform	83	4.571	4.571 (0.949)	1453677	200.000	186.42

Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120611.D Page 2
Report Date: 12-Dec-2023 09:44

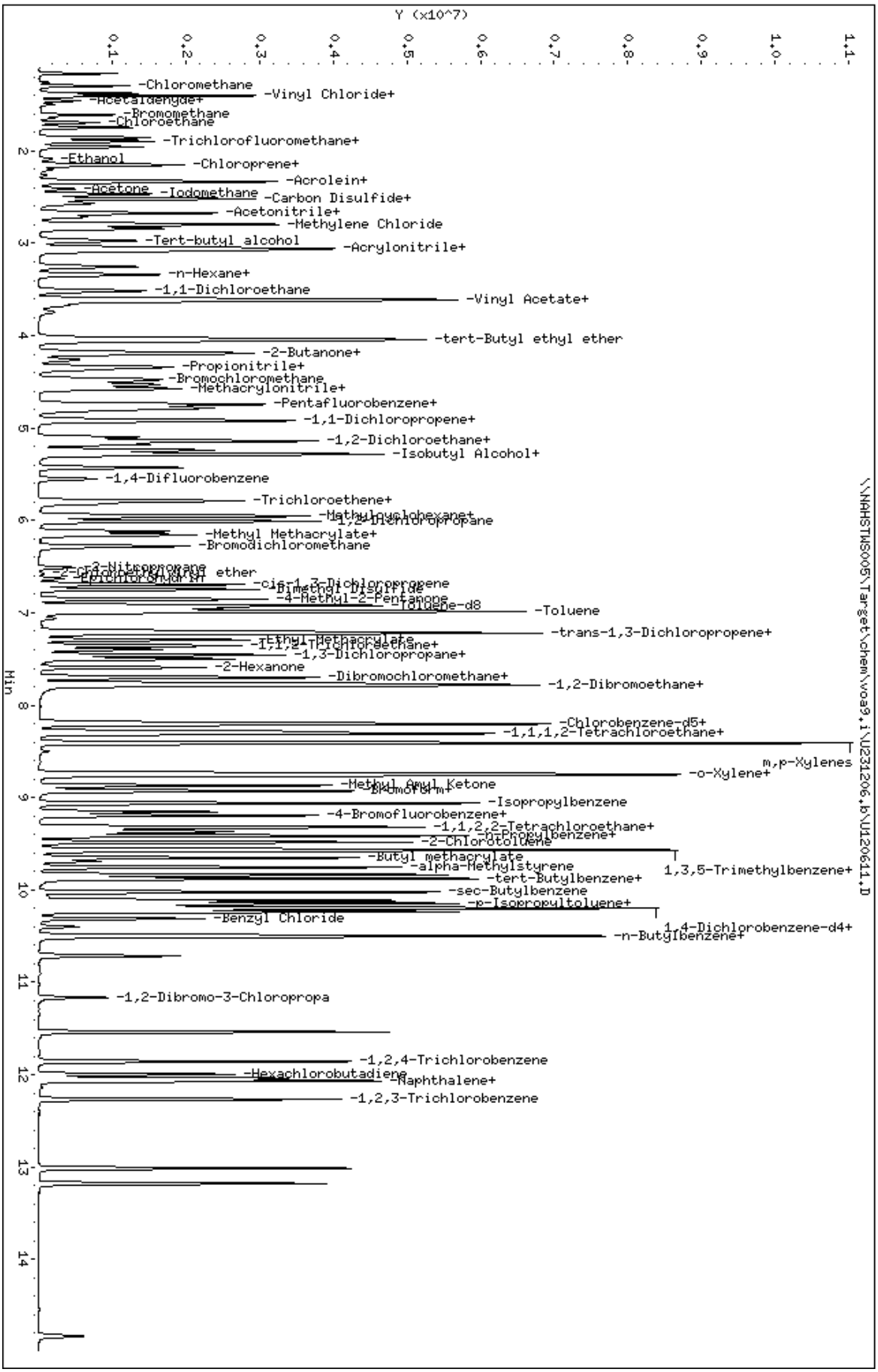
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	29 Bromochloromethane	128	4.470	4.470	(0.928)	427192	200.000	175.48
$	30 Dibromofluoromethane	113	4.748	4.748	(0.986)	753738	200.000	196.29
	31 1,1,1-Trichloroethane	97	4.744	4.744	(0.985)	1218967	200.000	205.70(A)
	32 1,1-Dichloropropene	75	4.924	4.924	(0.887)	1045608	200.000	203.22(A)
	33 1,2-Dichloroethane	62	5.175	5.175	(0.932)	1085267	200.000	181.11
	34 Carbon Tetrachloride	117	4.913	4.913	(0.885)	1056613	200.000	210.23(A)
$	35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	912175	200.000	162.20(M)
*	36 1,4-Difluorobenzene	114	5.550	5.550	(1.000)	615006	50.0000	
	37 Benzene	78	5.138	5.138	(0.926)	3180639	200.000	189.98
	38 Trichloroethene	130	5.786	5.786	(1.043)	888439	200.000	192.54
	39 Bromodichloromethane	83	6.277	6.277	(1.131)	1126302	200.000	205.43(A)
	41 2-Chloroethylvinyl ether	63	6.577	6.577	(1.185)	30429	400.000	395.98
	42 1,2-Dichloropropane	63	6.011	6.011	(1.083)	842465	200.000	186.90
	44 Dibromomethane	93	6.120	6.120	(1.103)	546179	200.000	187.28
	45 4-Methyl-2-Pentanone	43	6.851	6.851	(0.837)	1806407	400.000	398.98
	46 cis-1,3-Dichloropropene	75	6.689	6.689	(1.205)	1454685	200.000	201.26(A)
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	629604	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	2736153	200.000	188.78
	50 Toluene	91	6.982	6.982	(0.853)	3393847	200.000	193.32
	51 trans-1,3-Dichloropropene	75	7.196	7.196	(1.296)	1229242	200.000	201.12(A)
	52 2-Hexanone	43	7.589	7.589	(0.927)	1254549	400.000	394.84
	53 1,1,2-Trichloroethane	83	7.357	7.357	(0.899)	649485	200.000	197.29
	54 1,3-Dichloropropane	76	7.499	7.499	(0.916)	1389929	200.000	178.31
	55 Dibromochloromethane	129	7.690	7.690	(0.940)	963212	200.000	205.70(A)
	56 Tetrachloroethene	164	7.458	7.458	(0.911)	718830	200.000	191.29
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	822228	200.000	187.96
	58 1-Chlorohexane	55	8.196	8.196	(1.477)	700515	200.000	203.12(A)
	59 Chlorobenzene	112	8.208	8.208	(1.003)	2336824	200.000	182.73
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	875335	200.000	195.67
	61 Ethylbenzene	106	8.305	8.305	(1.015)	1179673	200.000	197.05
	62 m,p-Xylenes	106	8.410	8.410	(1.027)	2914224	400.000	404.89(A)
	63 o-Xylene	106	8.748	8.748	(1.069)	1472211	200.000	198.89
	64 Styrene	104	8.763	8.763	(1.071)	2547109	200.000	206.69(A)
	66 Bromoform	173	8.916	8.916	(1.089)	654088	200.000	200.87(A)
	67 Isopropylbenzene	105	9.062	9.062	(1.107)	3699203	200.000	206.64(A)
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	1074429	200.000	200.28(A)
$	69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	1059633	200.000	196.80
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	332422	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.920)	1187540	200.000	188.18
	73 n-Propylbenzene	91	9.411	9.411	(0.925)	4196032	200.000	214.96(A)
	74 Bromobenzene	156	9.317	9.317	(0.916)	1039931	200.000	186.28
	75 1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	3008803	200.000	216.87(A)
	76 2-Chlorotoluene	91	9.482	9.482	(0.932)	2543988	200.000	193.63
	77 4-Chlorotoluene	91	9.576	9.576	(0.941)	2961628	200.000	198.76
	78 tert-Butylbenzene	119	9.838	9.838	(0.967)	2602752	200.000	208.86(A)
	79 1,2,4-Trimethylbenzene	105	9.880	9.880	(0.971)	3002995	200.000	215.97(A)
	81 sec-Butylbenzene	105	10.022	10.022	(0.985)	3440992	200.000	214.14(A)
	82 p-Isopropyltoluene	119	10.146	10.146	(0.997)	3084546	200.000	221.81(A)
	83 1,3-Dichlorobenzene	146	10.116	10.116	(0.994)	1859943	200.000	188.02
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	1884290	200.000	179.79
	87 n-Butylbenzene	91	10.491	10.491	(1.031)	2632815	200.000	225.60(A)
	88 1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	1815480	200.000	182.42

89	1,2-Dibromo-3-Chloropropane	155	11.165	11.165 (1.098)	206083	200.000	205.05(A)
90	1,2,4-Trichlorobenzene	180	11.855	11.855 (1.165)	1295767	200.000	211.04(A)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	91 Hexachlorobutadiene	225	11.998	11.998	(1.179)	511979	200.000	208.02(A)
	92 Naphthalene	128	12.065	12.065	(1.186)	3301739	200.000	222.98(A)
	93 1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	1227408	200.000	198.24
M	94 1,2-Dichloroethylene (total)	96				1586229	400.000	
M	95 Xylenes (total)	106				4386435	600.000	
	131 Methyl Acrylate	55	4.365	4.365	(0.907)	1018956	200.000	203.65(A)
	135 1,4-Dioxane	88	6.165	6.165	(1.280)	219695	4000.00	3635.22
	141 Cyclohexane	56	4.785	4.785	(0.994)	1126383	200.000	205.22(A)
	138 Freon TF	101	2.334	2.334	(0.485)	605416	200.000	195.89
	140 1,3-Butadiene	54	1.400	1.400	(0.291)	842048	200.000	220.10(A)
	147 Methylcyclohexane	55	5.943	5.943	(1.071)	2071040	200.000	227.19(A)
	146 Methyl Acetate	43	2.712	2.712	(0.563)	693752	200.000	182.99
	148 Tert-Butyl alcohol	59	2.971	2.971	(0.617)	1546963	4000.00	3627.73
	149 Isopropyl Alcohol	45	2.566	2.566	(0.533)	961491	4000.00	4010.76(A)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.



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Date : 06-DEC-2023 15:18
Client ID: VSTD200
Sample Info: VSTD200;VSTD200;1;10;
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9,i
Operator: PC
Column diameter: 0.18

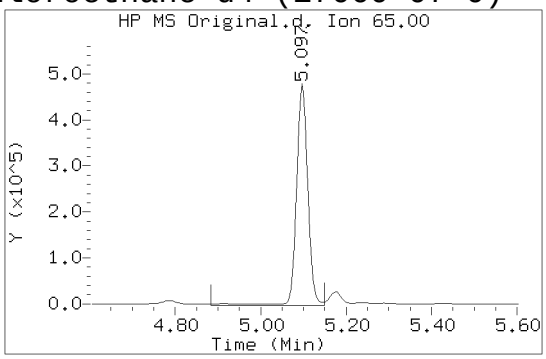
Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120611.D
Inj Date : 06-DEC-2023 15:18
InstruID : VOA9.i
LabSampID : VSTD200

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

Reason Code:

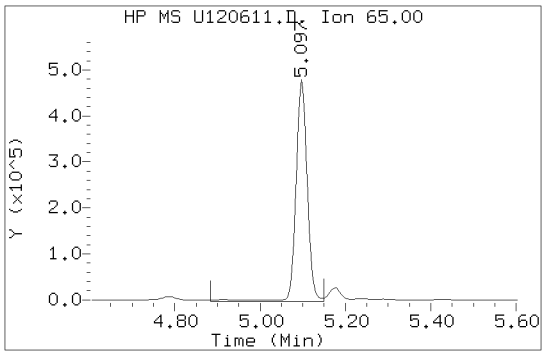
BEFORE

MASS
65
AREA
912175
HEIGHT
481644
11-Dec-2023
17:18
linh
pham



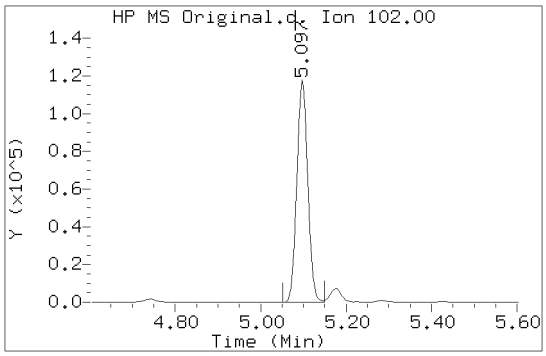
AFTER

MASS
65
AREA
912175
HEIGHT
481644
12-Dec-2023
09:43
linh
pham



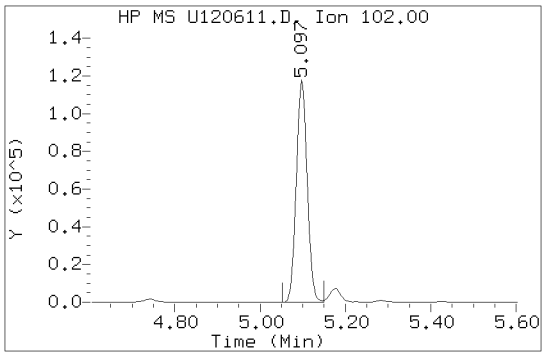
BEFORE

MASS
102
AREA
214069
HEIGHT
117888
11-Dec-2023
17:18
linh
pham



AFTER

MASS
102
AREA
214069
HEIGHT
117888
12-Dec-2023
09:43
linh
pham



Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120614.D Page 1
Report Date: 12-Dec-2023 09:51

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120614.D
Lab Smp Id: ICV Client Smp ID: ICV
Inj Date : 06-DEC-2023 16:25
Operator : PC Inst ID: VOA9.i
Smp Info : CCV;CCV;2;;;ICV
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\8260C.m
Meth Date : 12-Dec-2023 09:44 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 15:18 Cal File: U120611.D
Als bottle: 15 QC Sample: METHSPIKE
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V9.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1	Pentafluorobenzene	168	4.811	4.815	(1.000)	408062	50.0000	
2	Dichlorodifluoromethane	85	1.156	1.160	(0.240)	153882	46.8387	46.83
3	Chloromethane	50	1.291	1.295	(0.268)	221088	47.2310	47.23
5	Vinyl Chloride	62	1.370	1.374	(0.285)	205467	45.9474	45.94
6	Bromomethane	94	1.614	1.606	(0.335)	130015	56.3919	56.39
7	Chloroethane	64	1.693	1.692	(0.352)	134691	44.7351	44.73
8	Trichlorofluoromethane	101	1.891	1.895	(0.393)	261297	46.0981	46.09
9	Acrolein	56	2.259	2.262	(0.469)	19859	85.3986	85.39(M)
10	Acetone	43	2.401	2.408	(0.499)	147958	106.902	106.90
11	1,1-Dichloroethene	96	2.326	2.330	(0.483)	144034	45.7643	45.76
15	Iodomethane	142	2.461	2.465	(0.512)	339458	86.0249	86.02
16	Acrylonitrile	53	3.061	3.065	(0.636)	151744	94.7995	94.79
17	Methylene Chloride	84	2.787	2.791	(0.579)	192401	48.4339	48.43
18	Methyl tert-butyl ether	73	3.076	3.080	(0.639)	526684	46.7025	46.70
19	Carbon Disulfide	76	2.513	2.517	(0.522)	906444	97.7436	97.74
20	trans-1,2-Dichloroethene	96	3.053	3.057	(0.635)	176798	46.9908	46.99
21	Vinyl Acetate	43	3.601	3.604	(0.748)	1168224	102.681	102.68
22	1,1-Dichloroethane	63	3.507	3.514	(0.729)	367877	47.9367	47.93
24	2-Butanone	43	4.257	4.260	(0.885)	188684	94.3930	94.39
26	2,2-Dichloropropane	77	4.178	4.182	(0.868)	267597	49.5991	49.59

27 cis-1,2-Dichloroethene	96	4.193	4.197 (0.871)	232174	46.0656	46.06
28 Chloroform	83	4.568	4.571 (0.949)	376137	45.0290	45.02

Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120614.D Page 2
Report Date: 12-Dec-2023 09:51

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	29 Bromochloromethane	128	4.467	4.470	(0.928)	126029	48.3267	48.32
$	30 Dibromofluoromethane	113	4.744	4.748	(0.986)	212050	50.7925	50.79
	31 1,1,1-Trichloroethane	97	4.740	4.744	(0.985)	296257	46.6693	46.66
	32 1,1-Dichloropropene	75	4.920	4.924	(0.887)	263335	48.3103	48.31
	33 1,2-Dichloroethane	62	5.171	5.175	(0.932)	282600	44.5162	44.51
	34 Carbon Tetrachloride	117	4.909	4.913	(0.885)	252028	47.3333	47.33
$	35 1,2-Dichloroethane-d4	65	5.093	5.096	(1.058)	234260	48.9815	48.98
*	36 1,4-Difluorobenzene	114	5.550	5.550	(1.000)	651558	50.0000	
	37 Benzene	78	5.138	5.138	(0.926)	821891	46.3381	46.33
	38 Trichloroethene	130	5.786	5.786	(1.043)	224485	45.9206	45.92
	39 Bromodichloromethane	83	6.277	6.277	(1.131)	276726	47.6431	47.64
	41 2-Chloroethylvinyl ether	63	6.577	6.577	(1.185)	5811	103.247	103.24
	42 1,2-Dichloropropane	63	6.007	6.011	(1.082)	220882	46.2549	46.25
	44 Dibromomethane	93	6.116	6.120	(1.102)	142540	46.1361	46.13
	45 4-Methyl-2-Pentanone	43	6.851	6.851	(0.837)	452788	99.1894	99.18
	46 cis-1,3-Dichloropropene	75	6.690	6.689	(1.205)	356213	47.6587	47.65
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	633070	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	781172	53.6024	53.60
	50 Toluene	91	6.978	6.982	(0.853)	868457	49.1997	49.19
	51 trans-1,3-Dichloropropene	75	7.196	7.196	(1.296)	297987	47.3890	47.38
	52 2-Hexanone	43	7.589	7.589	(0.927)	309490	96.8734	96.87
	53 1,1,2-Trichloroethane	83	7.353	7.357	(0.898)	167965	49.7473	49.74
	54 1,3-Dichloropropane	76	7.495	7.499	(0.916)	363727	46.4071	46.40
	55 Dibromochloromethane	129	7.690	7.690	(0.940)	233779	49.6529	49.65
	56 Tetrachloroethene	164	7.454	7.458	(0.911)	182310	48.2514	48.25
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	214656	48.8018	48.80
	58 1-Chlorohexane	55	8.196	8.196	(1.477)	167790	45.9245	45.92
	59 Chlorobenzene	112	8.208	8.208	(1.003)	590294	45.9064	45.90
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	217493	48.3537	48.35
	61 Ethylbenzene	106	8.305	8.305	(1.015)	290277	48.2236	48.22
	62 m,p-Xylenes	106	8.406	8.410	(1.027)	741658	102.481	102.48
	63 o-Xylene	106	8.748	8.748	(1.069)	366609	49.2572	49.25
	64 Styrene	104	8.759	8.763	(1.070)	650099	52.4662	52.46
	66 Bromoform	173	8.916	8.916	(1.089)	153541	47.7179	47.71
	67 Isopropylbenzene	105	9.062	9.062	(1.107)	893697	49.6494	49.64
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	277471	49.7603	49.76
$	69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	290567	52.7272	52.72
*	70 1,4-Dichlorobenzene-d4	152	10.168	10.172	(1.000)	342118	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.921)	285518	43.9630	43.96
	73 n-Propylbenzene	91	9.411	9.411	(0.926)	1029983	51.2710	51.27
	74 Bromobenzene	156	9.317	9.317	(0.916)	264090	45.9673	45.96
	75 1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	745042	52.1809	52.18
	76 2-Chlorotoluene	91	9.482	9.482	(0.933)	648634	47.9714	47.97
	77 4-Chlorotoluene	91	9.576	9.576	(0.942)	751896	49.0328	49.03
	78 tert-Butylbenzene	119	9.835	9.838	(0.967)	619611	48.3142	48.31
	79 1,2,4-Trimethylbenzene	105	9.880	9.880	(0.972)	755000	52.7616	52.76
	81 sec-Butylbenzene	105	10.022	10.022	(0.986)	831153	50.2598	50.25
	82 p-Isopropyltoluene	119	10.146	10.146	(0.998)	758796	53.0200	53.01
	83 1,3-Dichlorobenzene	146	10.116	10.116	(0.995)	465795	45.7526	45.75
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	487796	45.2253	45.22
	87 n-Butylbenzene	91	10.491	10.491	(1.032)	643723	53.5978	53.59
	88 1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	462064	45.1133	45.11

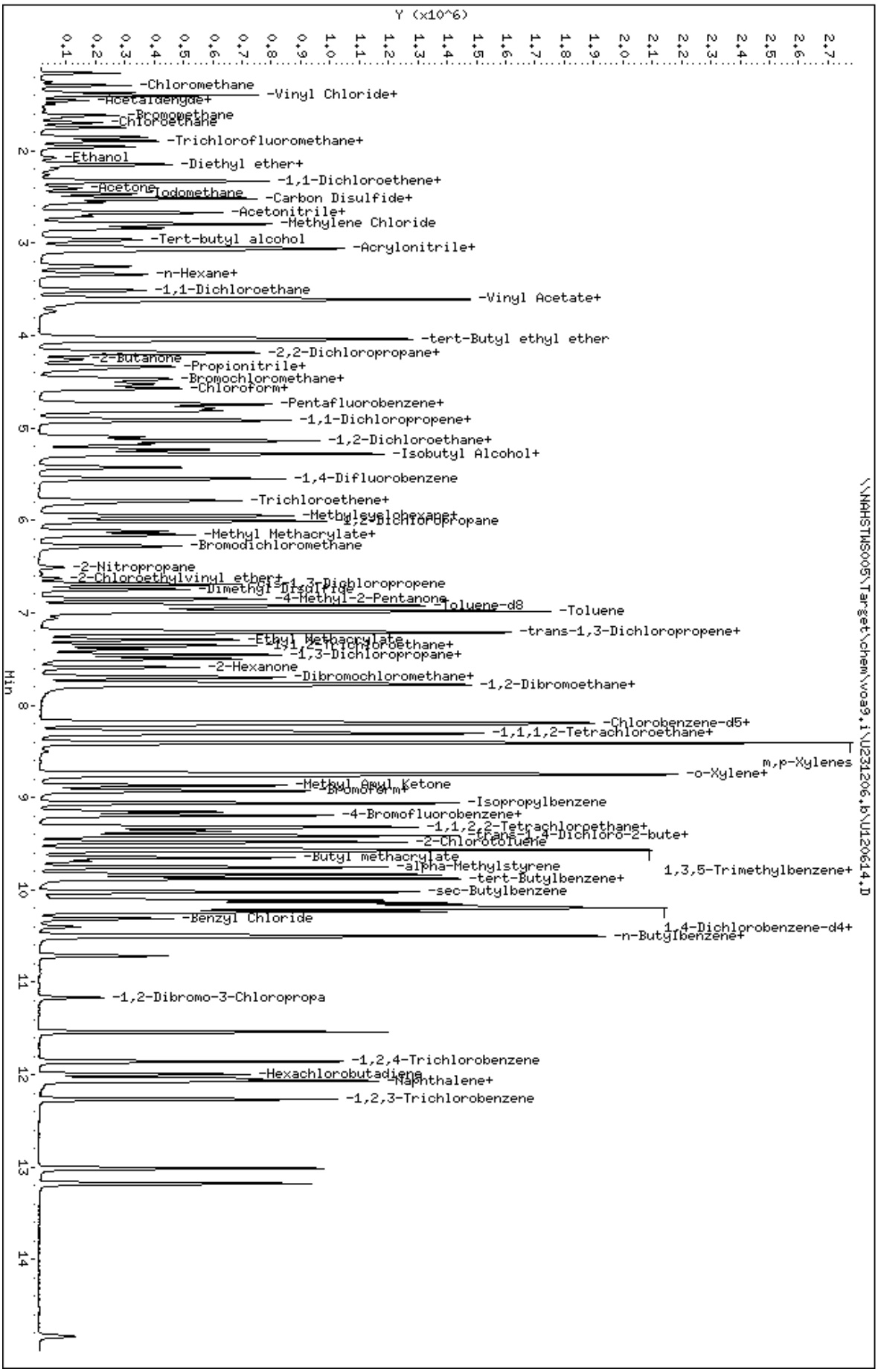
89	1,2-Dibromo-3-Chloropropane	155	11.165	11.165 (1.098)	47469	47.5374	47.53
90	1,2,4-Trichlorobenzene	180	11.859	11.855 (1.166)	327888	51.8913	51.89

Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120614.D Page 3
Report Date: 12-Dec-2023 09:51

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	91 Hexachlorobutadiene	225	11.998	11.998	(1.180)	137978	54.4747	54.47
	92 Naphthalene	128	12.065	12.065	(1.187)	809405	53.1140	53.11
	93 1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	314925	49.4234	49.42
M	94 1,2-Dichloroethylene (total)	96				408972	92.9221	92.92
M	95 Xylenes (total)	106				1108267	147.001	147.00
	131 Methyl Acrylate	55	4.365	4.365	(0.907)	260350	48.5730	48.57
	135 1,4-Dioxane	88	6.161	6.165	(1.280)	56072	866.079	866.07
	141 Cyclohexane	56	4.781	4.785	(0.994)	278993	47.4493	47.44
	138 Freon TF	101	2.330	2.334	(0.484)	149791	49.8225	49.82
	140 1,3-Butadiene	54	1.396	1.400	(0.290)	203286	49.6019	49.60
	147 Methylcyclohexane	55	5.944	5.943	(1.071)	488868	50.6216	50.62
	146 Methyl Acetate	43	2.708	2.712	(0.563)	186103	45.8243	45.82
	148 Tert-Butyl alcohol	59	2.960	2.971	(0.615)	390492	854.807	854.80
	149 Isopropyl Alcohol	45	2.555	2.566	(0.531)	249113	964.336	964.33

QC Flag Legend

M - Compound response manually integrated.



Data File: \\NAHSTMS005\Target\chem\voa9,i\U231206,b\U120614,D
Date : 06-DEC-2023 16:25
Client ID: ICV
Sample Info: CCV;CCV;2;;;ICV
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9,i
Operator: PC
Column diameter: 0.18

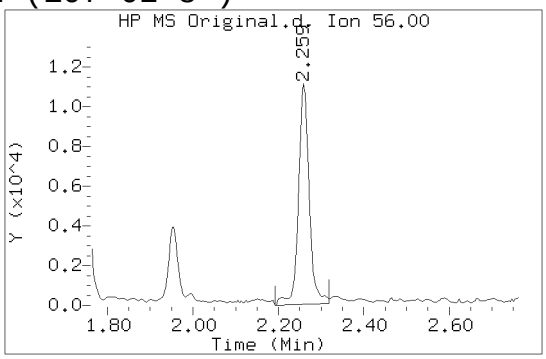
Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120614.D
Inj Date : 06-DEC-2023 16:25
InstruID : VOA9.i
LabSampID : ICV

Acrolein (107-02-8)

Reason Code:

BEFORE

MASS
142
AREA
339458
HEIGHT
190528
06-Dec-2023
23:36



AFTER

MASS
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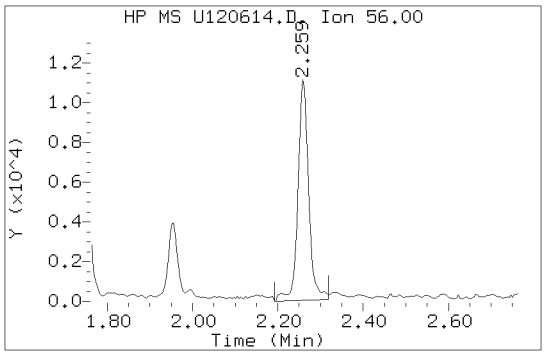
12-Dec-2023
09:51



BEFORE

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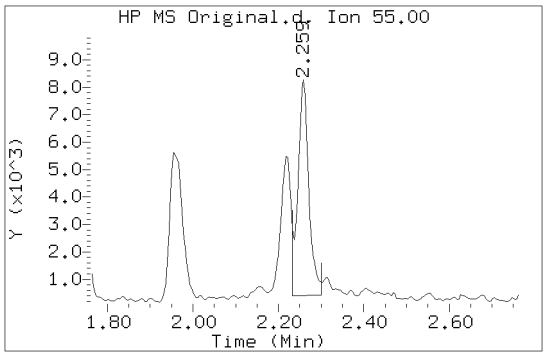
06-Dec-2023
23:36



AFTER

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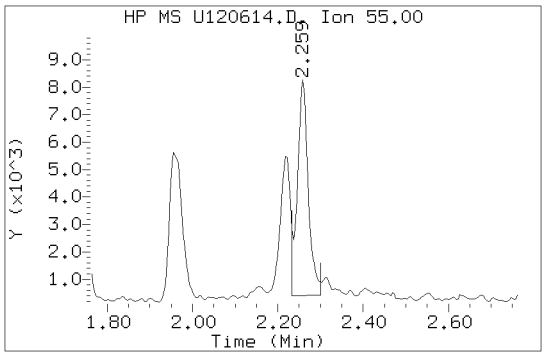
12-Dec-2023
09:51



right solutions.
right partner.

RawData

Volatiles by EPA Volatiles Organics by Method 8260C

Workorder

HS24011111

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

02/02/2024

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

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240125.b\U012501.D Page 1
Report Date: 25-Jan-2024 22:08

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240125.b\U012501.D
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 25-JAN-2024 10:20
Operator : PC Inst ID: VOA9.i
Smp Info : BFB;BFB;3;;BFB
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240125.b\bfb.m
Meth Date : 27-Jan-2023 08:08 apoluri Quant Type: ISTD
Cal Date : 30-MAR-2018 18:09 Cal File: U033003.d
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: NAHSTW7051

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	2.000	Injection Volume
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/l)		
RT	EXP RT	REL RT	MASS	RESPONSE			TARGET RANGE	RATIO
1 bfb							CAS #: 460-00-4	
9.194	9.180	(0.000)	95	56440			0.00- 100.00	100.00
9.194	9.180	(0.000)	50	9038			15.00- 40.00	16.01
9.194	9.180	(0.000)	75	25224			30.00- 60.00	44.69
9.194	9.180	(0.000)	96	3693			5.00- 9.00	6.54
9.194	9.180	(0.000)	173	0	0.0	0.0	0.00- 2.00	0.00
9.194	9.180	(0.000)	174	53360			50.00- 0.00	94.54
9.194	9.180	(0.000)	175	4598			5.00- 9.00	8.62
9.194	9.180	(0.000)	176	52296			95.00- 101.00	98.01
9.194	9.180	(0.000)	177	3372			5.00- 9.00	6.45

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	16.01
75	30.00 - 60.00% of mass 95	44.69
96	5.00 - 9.00% of mass 95	6.54
173	Less than 2.00% of mass 174	0.00 (0.00)
174	Greater than 50.00% of mass 95	94.54
175	5.00 - 9.00% of mass 174	8.15 (8.62)
176	95.00 - 101.00% of mass 174	92.66 (98.01)
177	5.00 - 9.00% of mass 176	5.97 (6.45)

Data File: U012501.D
Spectrum: Scan 2293 (9.19)
Location of Maximum: 95.05
Number of points: 97

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	551	60.10	467	87.00	1879	130.80	102
37.00	2170	61.10	2184	88.00	2325	134.90	113
38.00	2013	62.00	2292	91.00	309	140.80	550
39.10	1580	63.00	1841	92.10	1501	141.90	181
40.00	1419	64.00	163	93.10	2290	143.00	574
41.10	1106	64.90	171	94.10	6769	145.00	111
42.10	1733	66.00	75	95.10	56440	145.90	163
43.00	833	67.00	391	96.10	3693	147.90	226
44.00	558	68.00	5182	97.00	184	149.80	77
45.10	648	69.10	5782	98.10	1268	154.10	74
46.10	100	70.10	1265	99.10	124	155.00	273
47.00	816	71.00	167	103.00	72	157.10	57
48.00	330	72.00	308	103.80	169	159.00	116
49.00	2062	73.00	2080	105.10	152	160.70	63
50.10	9038	74.10	8987	106.00	207	170.90	132
51.10	2320	75.10	25224	106.90	130	172.00	303
52.00	146	76.00	2404	114.80	119	174.00	53360
52.90	141	77.10	416	116.00	196	175.00	4598
53.10	135	77.90	394	116.90	292	176.00	52296
54.00	288	79.00	1318	118.00	159	177.00	3372
55.10	2586	80.00	486	118.90	209	185.00	58
56.00	1161	81.00	1146	126.90	84	185.90	102
57.00	1515	82.00	271	127.80	282		
58.00	216	82.90	281	129.10	130		
59.10	541	86.00	232	129.90	213		

Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012501.d Page 1

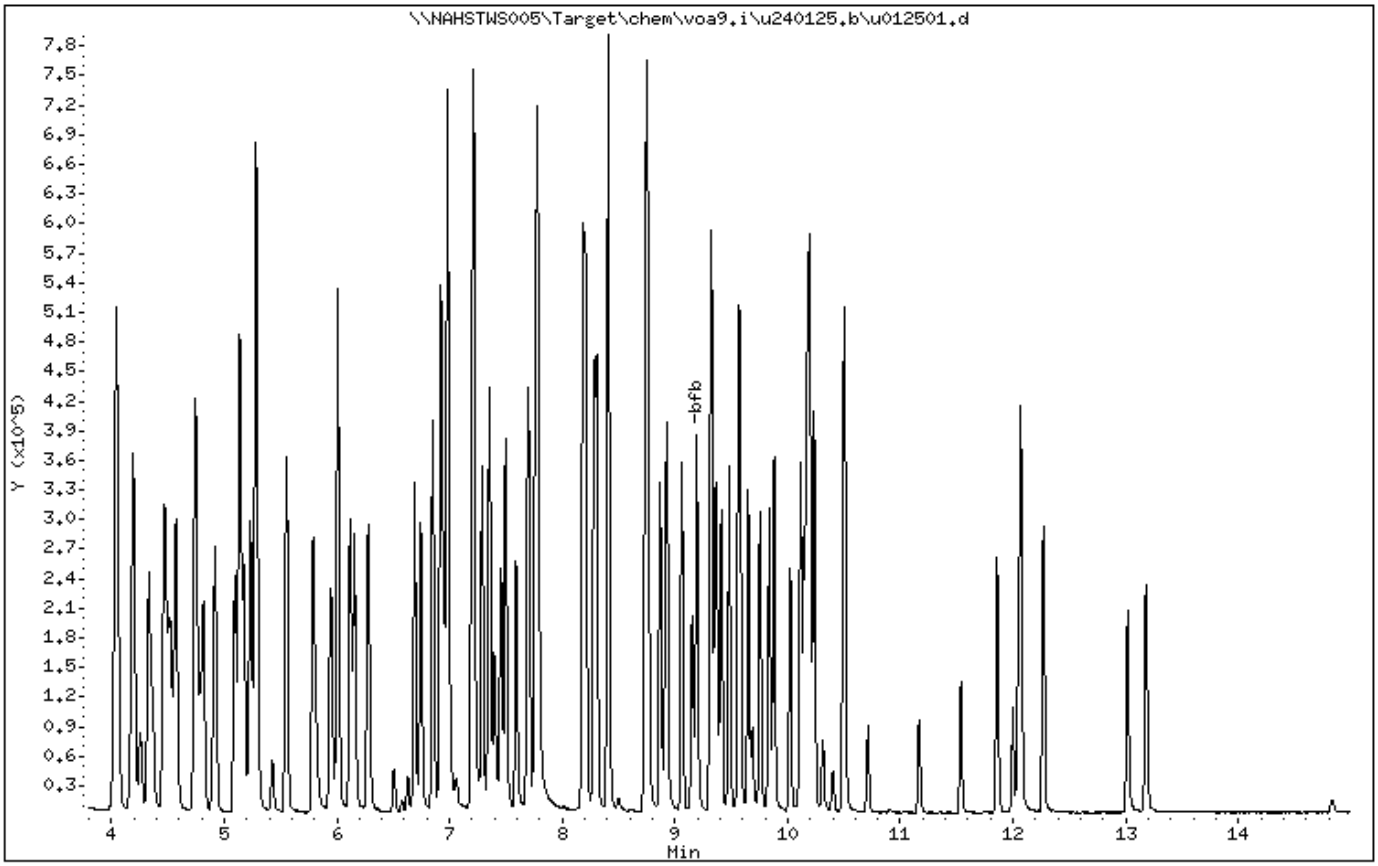
Date : 25-JAN-2024 10:20

Client ID: BFB Instrument: VOA9.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0 Operator: PC

Column phase: DB624 Column diameter: 0.25



Data File : \\nahstws005\target\chem\voa9.i\u240125.b\u012501.d
Inj Date : 25-JAN-2024 10:20
InstruID : VOA9.i
LabSampID : BFB

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240125.b\U012503.D Page 1
Report Date: 01-Feb-2024 14:20

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240125.b\U012503.D
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 25-JAN-2024 11:04
Operator : PC Inst ID: VOA9.i
Smp Info : CCV;CCV;2;;;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240125.b\8260C.m
Meth Date : 01-Feb-2024 14:20 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.sub
Target Version: 4.14
Processing Host: NAHSTW7066

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1	Pentafluorobenzene	168	4.815	4.815	(1.000)	306413	50.0000	
2	Dichlorodifluoromethane	85	1.164	1.164	(0.242)	136738	50.0000	55.26
3	Chloromethane	50	1.303	1.303	(0.271)	151925	50.0000	43.22
5	Vinyl Chloride	62	1.378	1.378	(0.286)	166190	50.0000	49.49
6	Bromomethane	94	1.621	1.621	(0.337)	111007	50.0000	63.66
7	Chloroethane	64	1.700	1.700	(0.353)	121736	50.0000	53.84
8	Trichlorofluoromethane	101	1.899	1.899	(0.394)	240171	50.0000	56.42
9	Acrolein	56	2.266	2.266	(0.471)	15647	100.000	89.60
10	Acetone	43	2.409	2.409	(0.500)	91402	100.000	86.86
11	1,1-Dichloroethene	96	2.334	2.334	(0.485)	134698	50.0000	56.99
15	Iodomethane	142	2.469	2.469	(0.513)	367130	100.000	120.37
16	Acrylonitrile	53	3.065	3.065	(0.636)	110229	100.000	91.70
17	Methylene Chloride	84	2.795	2.795	(0.580)	155458	50.0000	52.13
18	Methyl tert-butyl ether	73	3.080	3.080	(0.640)	412310	50.0000	48.68
19	Carbon Disulfide	76	2.521	2.521	(0.524)	747512	100.000	107.34
20	trans-1,2-Dichloroethene	96	3.061	3.061	(0.636)	148299	50.0000	52.49
21	Vinyl Acetate	43	3.604	3.604	(0.749)	809198	100.000	94.71
22	1,1-Dichloroethane	63	3.514	3.514	(0.730)	270836	50.0000	46.99
24	2-Butanone	43	4.260	4.260	(0.885)	122251	100.000	81.44
26	2,2-Dichloropropane	77	4.182	4.182	(0.868)	204847	50.0000	50.56

27 cis-1,2-Dichloroethene	96	4.197	4.197 (0.872)	185753	50.0000	49.08
28 Chloroform	83	4.572	4.572 (0.949)	294047	50.0000	46.87

Data File: \\nahstws005\Target\chem\voa9.i\U240125.b\U012503.D Page 2
Report Date: 01-Feb-2024 14:20

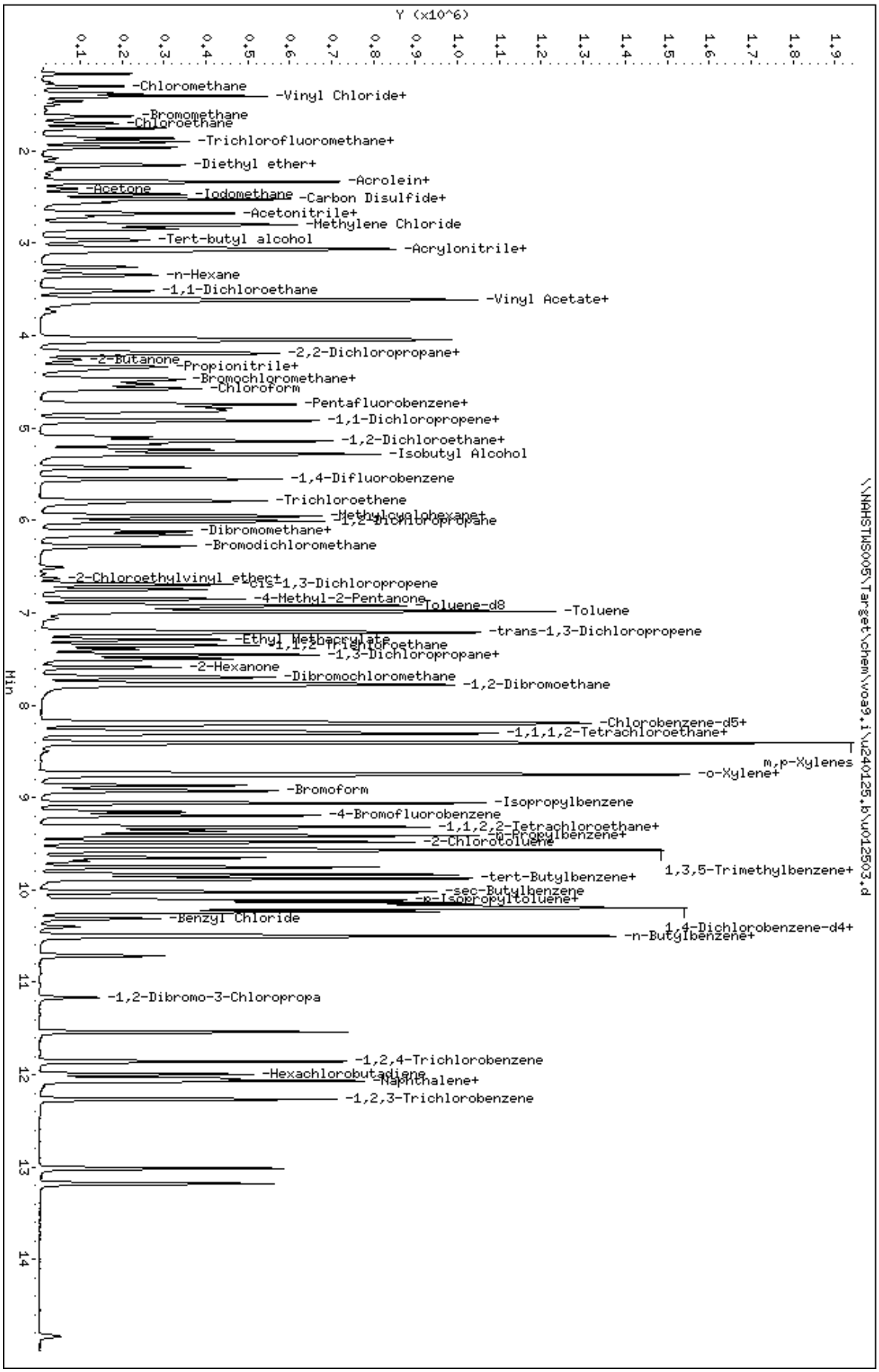
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	29 Bromochloromethane	128	4.470	4.470	(0.928)	103339	50.0000	52.77
$	30 Dibromofluoromethane	113	4.748	4.748	(0.986)	165370	50.0000	52.79
	31 1,1,1-Trichloroethane	97	4.744	4.744	(0.985)	237155	50.0000	49.75
	32 1,1-Dichloropropene	75	4.924	4.924	(0.887)	199289	50.0000	50.86
	33 1,2-Dichloroethane	62	5.175	5.175	(0.932)	209900	50.0000	45.99
	34 Carbon Tetrachloride	117	4.913	4.913	(0.885)	207388	50.0000	54.18
$	35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	169569	50.0000	47.31
*	36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	468358	50.0000	
	37 Benzene	78	5.138	5.138	(0.925)	612573	50.0000	48.04
	38 Trichloroethene	130	5.790	5.790	(1.043)	184252	50.0000	52.43
	39 Bromodichloromethane	83	6.277	6.277	(1.130)	214408	50.0000	51.35
	41 2-Chloroethylvinyl ether	63	6.577	6.577	(1.184)	5677	100.000	137.47
	42 1,2-Dichloropropane	63	6.007	6.007	(1.082)	159159	50.0000	46.36
	44 Dibromomethane	93	6.120	6.120	(1.102)	109053	50.0000	49.10
	45 4-Methyl-2-Pentanone	43	6.851	6.851	(0.837)	277970	100.000	85.39
	46 cis-1,3-Dichloropropene	75	6.690	6.690	(1.205)	244554	50.0000	45.58
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	451184	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	526659	50.0000	50.70
	50 Toluene	91	6.978	6.978	(0.853)	635737	50.0000	50.53
	51 trans-1,3-Dichloropropene	75	7.196	7.196	(1.296)	203649	50.0000	45.14
	52 2-Hexanone	43	7.589	7.589	(0.927)	185665	100.000	81.54
	53 1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	122288	50.0000	50.84
	54 1,3-Dichloropropane	76	7.499	7.499	(0.916)	255325	50.0000	45.70
	55 Dibromochloromethane	129	7.691	7.691	(0.940)	177779	50.0000	52.98
	56 Tetrachloroethene	164	7.458	7.458	(0.911)	149779	50.0000	55.62
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	156561	50.0000	49.94
	58 1-Chlorohexane	55	8.197	8.197	(1.476)	115226	50.0000	43.87
	59 Chlorobenzene	112	8.208	8.208	(1.003)	442232	50.0000	48.25
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	164460	50.0000	51.30
	61 Ethylbenzene	106	8.305	8.305	(1.015)	215802	50.0000	50.30
	62 m,p-Xylenes	106	8.407	8.407	(1.027)	545986	100.000	105.85
	63 o-Xylene	106	8.748	8.748	(1.069)	276159	50.0000	52.06
	64 Styrene	104	8.759	8.759	(1.070)	468477	50.0000	53.05
	66 Bromoform	173	8.916	8.916	(1.089)	118892	50.0000	51.75
	67 Isopropylbenzene	105	9.063	9.063	(1.107)	667694	50.0000	52.04
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	191123	50.0000	45.79
$	69 4-Bromofluorobenzene	95	9.190	9.190	(1.123)	191641	50.0000	48.69
*	70 1,4-Dichlorobenzene-d4	152	10.168	10.168	(1.000)	255742	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.921)	196905	50.0000	40.55
	73 n-Propylbenzene	91	9.411	9.411	(0.926)	749413	50.0000	49.90
	74 Bromobenzene	156	9.317	9.317	(0.916)	202582	50.0000	47.17
	75 1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	543054	50.0000	50.88
	76 2-Chlorotoluene	91	9.482	9.482	(0.933)	465866	50.0000	46.09
	77 4-Chlorotoluene	91	9.576	9.576	(0.942)	538794	50.0000	47.00
	78 tert-Butylbenzene	119	9.835	9.835	(0.967)	473026	50.0000	49.34
	79 1,2,4-Trimethylbenzene	105	9.876	9.876	(0.971)	547586	50.0000	51.19
	81 sec-Butylbenzene	105	10.022	10.022	(0.986)	620743	50.0000	50.21
	82 p-Isopropyltoluene	119	10.146	10.146	(0.998)	569188	50.0000	53.20
	83 1,3-Dichlorobenzene	146	10.112	10.112	(0.994)	360120	50.0000	47.31
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	373381	50.0000	46.30
	87 n-Butylbenzene	91	10.491	10.491	(1.032)	455969	50.0000	50.78
	88 1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	355766	50.0000	46.46

89	1,2-Dibromo-3-Chloropropane	155	11.166	11.166 (1.098)	33865	50.0000	45.46
90	1,2,4-Trichlorobenzene	180	11.855	11.855 (1.166)	240669	50.0000	50.95

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
91	Hexachlorobutadiene	225	11.998	11.998	(1.180)	100636	50.0000	53.15
92	Naphthalene	128	12.065	12.065	(1.187)	567627	50.0000	49.82
93	1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	231537	50.0000	48.60
M 94	1,2-Dichloroethylene (total)	96				334052	100.000	(a)
135	1,4-Dioxane	88	6.161	6.161	(1.279)	41298	1000.00	849.49
141	Cyclohexane	56	4.785	4.785	(0.994)	205604	50.0000	46.56
138	Freon TF	101	2.337	2.337	(0.485)	146830	50.0000	64.49
140	1,3-Butadiene	54	1.404	1.404	(0.292)	156056	50.0000	50.70
147	Methylcyclohexane	55	5.947	5.947	(1.071)	352606	50.0000	50.79
146	Methyl Acetate	43	2.712	2.712	(0.563)	125194	50.0000	41.05(M)
148	Tert-Butyl alcohol	59	2.963	2.963	(0.615)	304586	1000.00	887.94
149	Isopropyl Alcohol	45	2.559	2.559	(0.531)	180998	1000.00	932.84
72	trans-1,4-Dichloro-2-butene	53	9.377	9.377	(1.146)	38103	50.0000	46.92
12	Isobutyl Alcohol	43	5.284	5.284	(1.097)	372369	1000.00	810.29
13	Acetonitrile	39	2.671	2.671	(0.555)	153072	500.000	464.17
14	Allyl Chloride	41	2.675	2.675	(0.556)	338518	50.0000	44.93
25	Methacrylonitrile	41	4.493	4.493	(0.933)	91172	50.0000	41.67(M)
40	Methyl Methacrylate	41	6.154	6.154	(1.278)	126551	50.0000	41.84
4	Propionitrile	54	4.332	4.332	(0.900)	212432	500.000	418.13
136	n-Hexane	57	3.346	3.346	(0.695)	143763	50.0000	50.47
131	Methyl Acrylate	55	4.369	4.369	(0.907)	175855	50.0000	43.69
49	Ethyl Methacrylate	69	7.289	7.289	(1.312)	213565	50.0000	46.45
166	1,2,3-Trimethylbenzene	105	10.232	10.232	(1.006)	516767	50.0000	48.96
156	Diisopropyl ether	45	3.619	3.619	(0.752)	455007	50.0000	42.62
86	Benzyl Chloride	91	10.311	10.311	(1.260)	188068	50.0000	47.09(M)
162	Butyl acrylate	55	8.733	8.733	(1.067)	243097	50.0000	37.83
139	Diethyl ether	59	2.146	2.146	(0.446)	119264	50.0000	47.73
203	2-Ethylhexyl Acrylate	55	12.039	12.039	(1.184)	149525	50.0000	40.11
130	Ethyl Acetate	43	4.339	4.339	(0.901)	149628	50.0000	40.19
182	Epichlorohydrin	57	6.630	6.630	(1.194)	30801	200.000	169.28
133	Ethyl Acrylate	55	5.947	5.947	(1.235)	352606	50.0000	47.87
158	Dichlorofluoromethane	67	1.861	1.861	(0.387)	256931	50.0000	55.01(M)

QC Flag Legend

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



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Date : 25-JAN-2024 11:04
Client ID: CCV
Sample Info: CCV;CCV;2;;;
Purge Volume: 5.0
Column phase: DB624

\\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012503.d

Instrument: VOA9.i
Operator: PC
Column diameter: 0.18

Data File : \\nahstws005\target\chem\voa9.i\u240125.b\u012503.d
Inj Date : 25-JAN-2024 11:04
InstruID : VOA9.i
LabSampID : CCV

Methacrylonitrile (126-98-7)

Reason Code:

BEFORE
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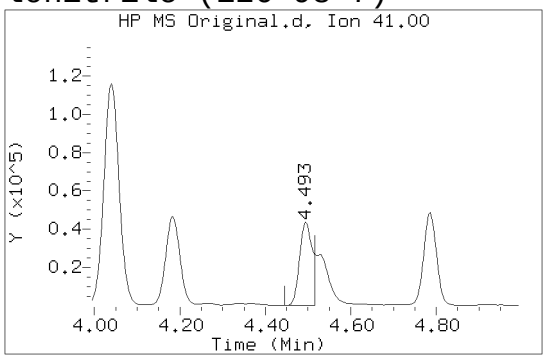
41
AREA
91172
HEIGHT
43590
25-Jan-2024
22:07



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25-Jan-2024
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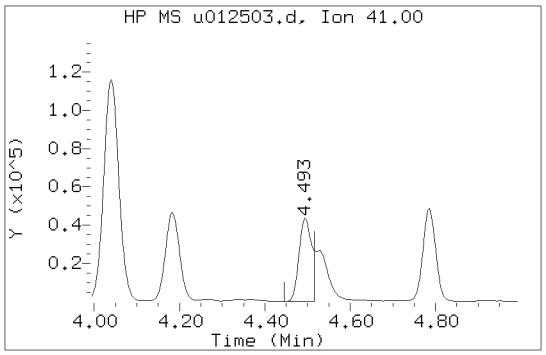

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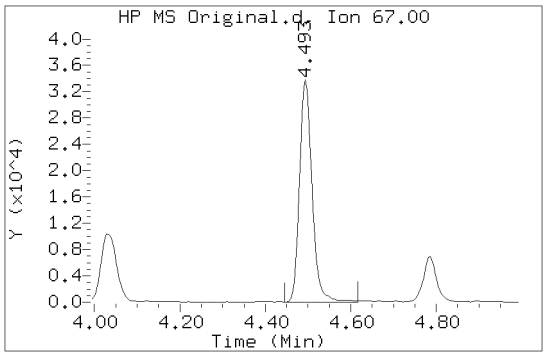
70522
HEIGHT
33784
25-Jan-2024
22:07



AFTER
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25-Jan-2024
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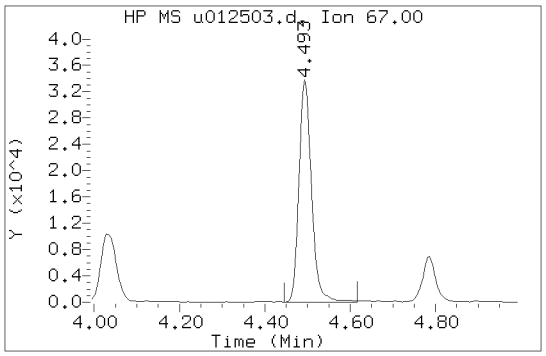

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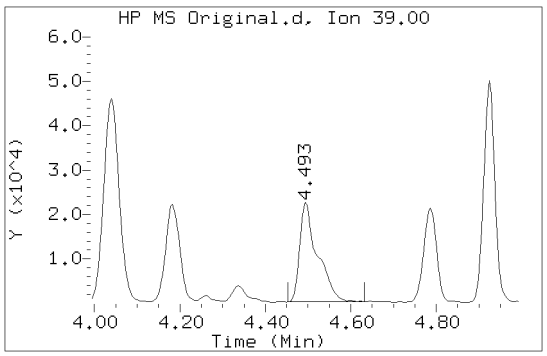
HEIGHT
22364
25-Jan-2024
22:07



AFTER
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AREA
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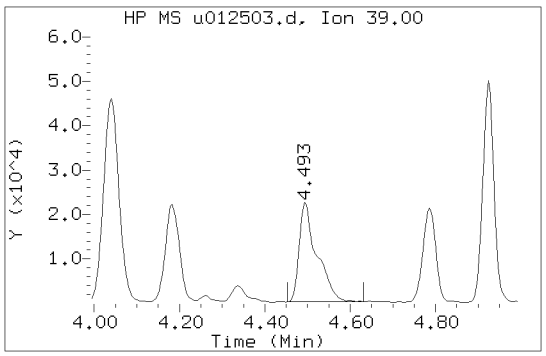
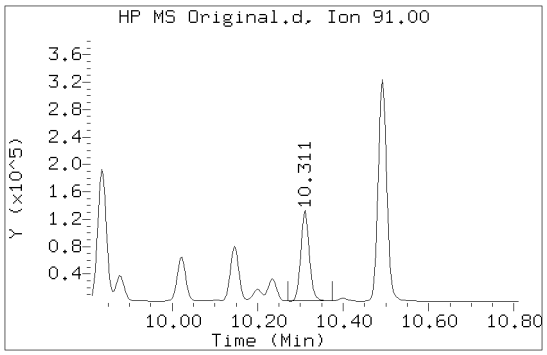
25-Jan-2024
22:07



Benzyl Chloride (100-44-7)

Reason Code:

BEFORE
MASS
91
AREA
188068
HEIGHT
132256
25-Jan-2024
22:07



AFTER
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AREA
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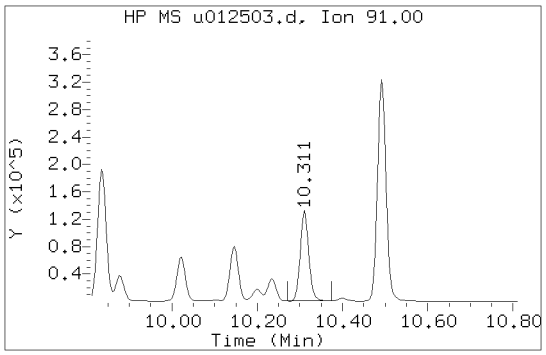
HEIGHT
132256
25-Jan-2024
22:07



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Inj Date : 25-JAN-2024 11:04
InstruID : VOA9.i
LabSampID : CCV

Benzyl Chloride (100-44-7)

Reason Code:

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HEIGHT
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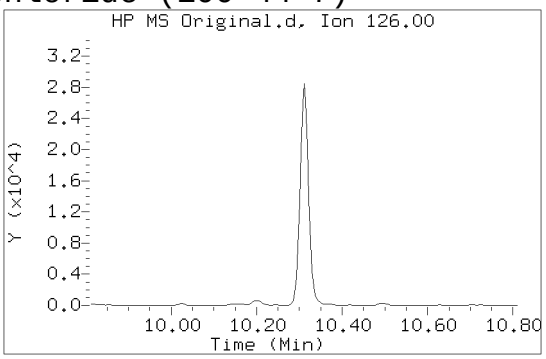
25-Jan-2024
22:07



AFTER
MASS
126
AREA
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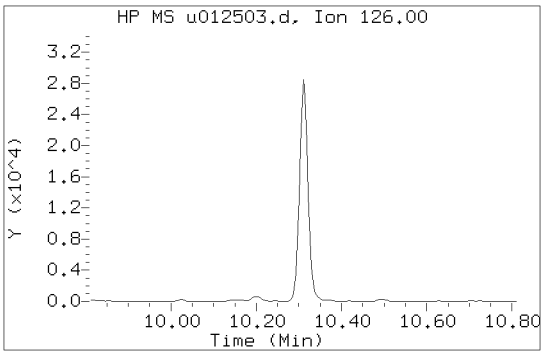
25-Jan-2024
22:07



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MASS
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AREA
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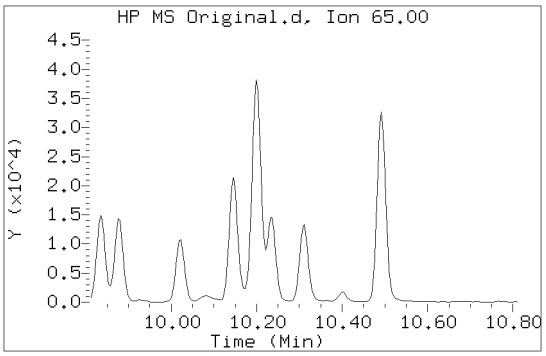
HEIGHT
0
25-Jan-2024
22:07



AFTER
MASS
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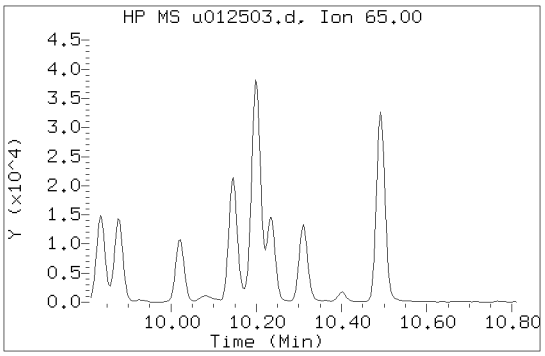
25-Jan-2024
22:07



Methyl Acetate (79-20-9)

Reason Code:

BEFORE
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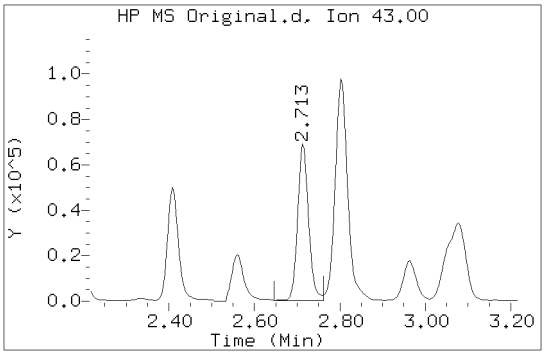
AREA
125194
HEIGHT
68895
25-Jan-2024
22:07



AFTER
MASS
43
AREA
125194
HEIGHT
68895
25-Jan-2024
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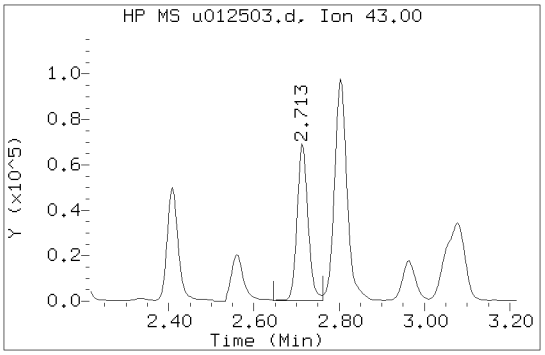

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74
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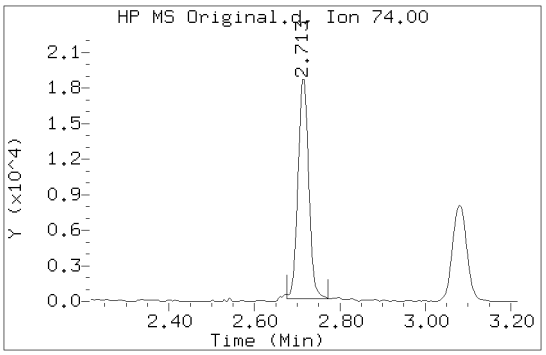
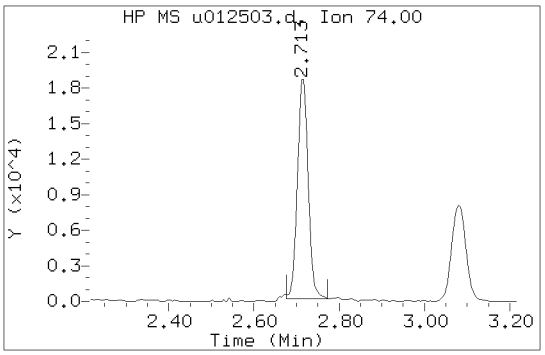
25-Jan-2024
22:07



AFTER
MASS
74
AREA
33360
HEIGHT
18498
25-Jan-2024
22:07



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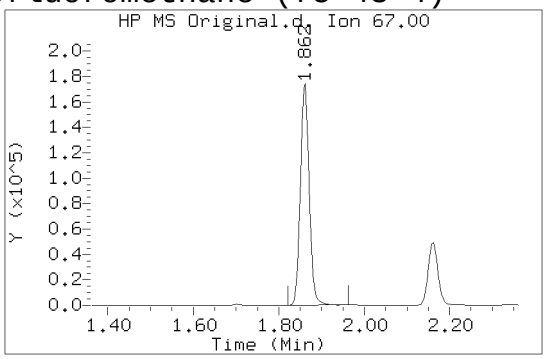
Inj Date : 25-JAN-2024 11:04
InstruID : VOA9.i
LabSampID : CCV

Dichlorofluoromethane (75-43-4)

Reason Code:

BEFORE
MASS
67
AREA
256931
HEIGHT
174241
25-Jan-2024
22:07



AFTER
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HEIGHT
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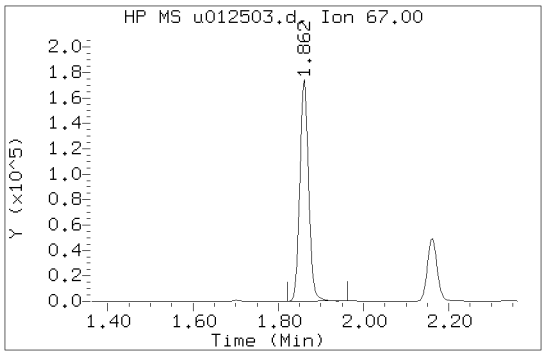
25-Jan-2024
22:07



BEFORE
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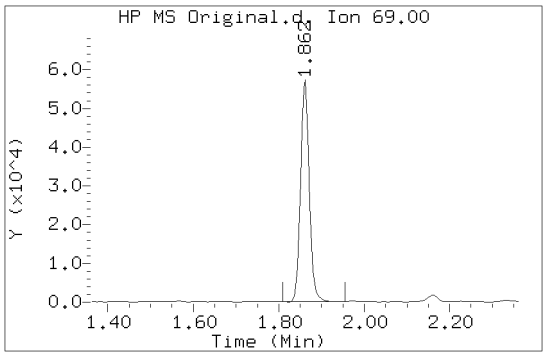
25-Jan-2024
22:07



AFTER
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25-Jan-2024
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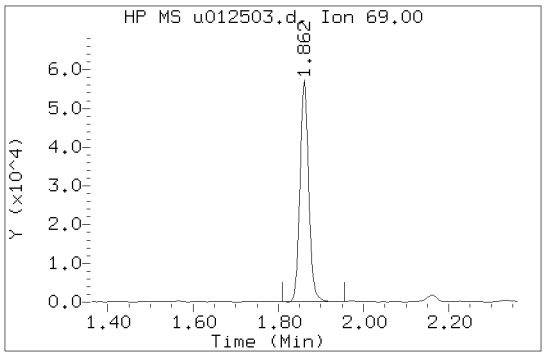

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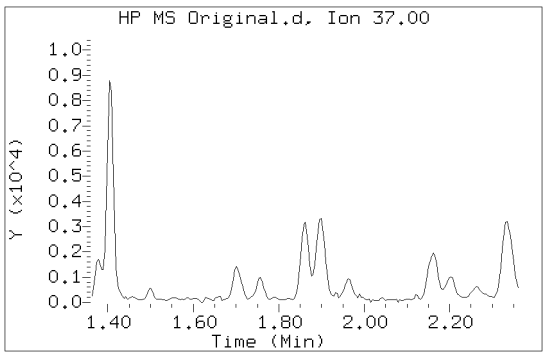
25-Jan-2024
22:07



AFTER
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25-Jan-2024
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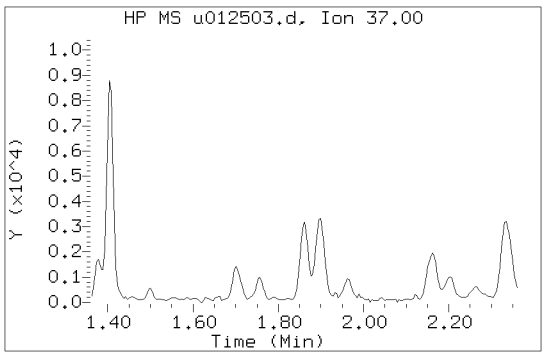
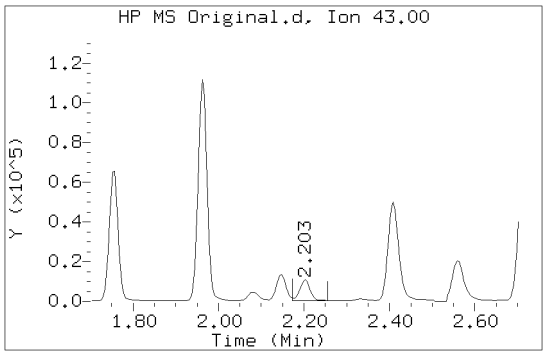


Propylene oxide ()

Reason Code:

BEFORE
MASS
43
AREA
18018
HEIGHT
10651
25-Jan-2024
22:07



AFTER
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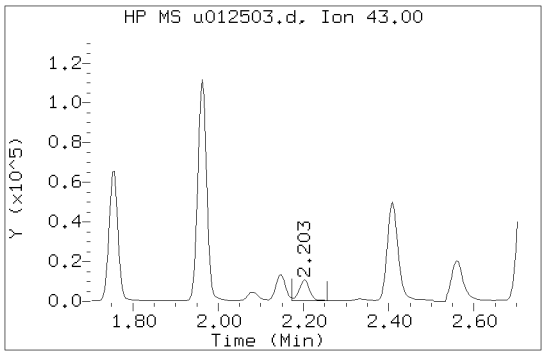
25-Jan-2024
22:07



Data File : \\nahstws005\target\chem\voa9.i\u240125.b\u012503.d
Inj Date : 25-JAN-2024 11:04
InstruID : VOA9.i
LabSampID : CCV

Propylene oxide ()

Reason Code:

BEFORE

MASS
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HEIGHT
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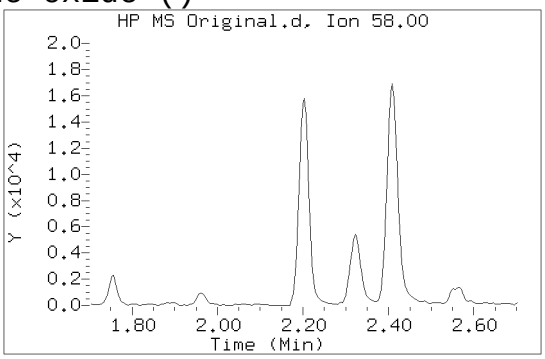
25-Jan-2024
22:07



AFTER

MASS
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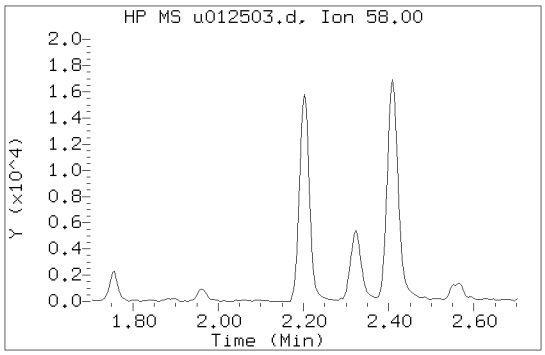
25-Jan-2024
22:07



Data File: \\nahstws005\Target\chem\voa9.i\U240125.b\U012505.D Page 1
Report Date: 01-Feb-2024 14:20

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240125.b\U012505.D
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Inj Date : 25-JAN-2024 11:49
Operator : PC Inst ID: VOA9.i
Smp Info : VLCSW-240125;VLCSW-240125;3;;LCS
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240125.b\8260C.m
Meth Date : 01-Feb-2024 14:20 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 4 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.sub
Target Version: 4.14

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.815	4.811	(1.000)	306163	50.0000	
2 Dichlorodifluoromethane	85	1.164	1.156	(0.242)	62776	25.8633	25.86
3 Chloromethane	50	1.299	1.291	(0.270)	67371	19.1826	19.18
5 Vinyl Chloride	62	1.378	1.370	(0.286)	75637	22.5438	22.54
6 Bromomethane	94	1.621	1.614	(0.337)	54313	31.9134	31.91
7 Chloroethane	64	1.700	1.692	(0.353)	55401	24.5245	24.52
8 Trichlorofluoromethane	101	1.895	1.891	(0.394)	105898	24.9006	24.90
9 Acrolein	56	2.262	2.259	(0.470)	5073	29.0758	29.07
10 Acetone	43	2.405	2.401	(0.499)	44043	38.7395	38.73
11 1,1-Dichloroethene	96	2.334	2.326	(0.485)	56520	23.9352	23.93
15 Iodomethane	142	2.469	2.461	(0.513)	135523	47.8411	47.84
16 Acrylonitrile	53	3.065	3.057	(0.636)	43718	36.4022	36.40
17 Methylene Chloride	84	2.795	2.787	(0.580)	69698	23.2478	23.24
18 Methyl tert-butyl ether	73	3.080	3.072	(0.640)	171217	20.2353	20.23
19 Carbon Disulfide	76	2.521	2.513	(0.524)	334401	48.0605	48.06
20 trans-1,2-Dichloroethene	96	3.057	3.053	(0.635)	68364	24.2179	24.21
21 Vinyl Acetate	43	3.604	3.601	(0.749)	334060	39.1347	39.13
22 1,1-Dichloroethane	63	3.514	3.507	(0.730)	120919	21.0007	21.00
24 2-Butanone	43	4.260	4.257	(0.885)	48556	32.3758	32.37
26 2,2-Dichloropropane	77	4.182	4.178	(0.868)	84908	20.9756	20.97
27 cis-1,2-Dichloroethene	96	4.197	4.193	(0.872)	78334	20.7151	20.71

28	Chloroform	83	4.572	4.568 (0.949)	123901	19.7694	19.76
29	Bromochloromethane	128	4.467	4.463 (0.928)	42328	21.6331	21.63

Data File: \\nahstws005\Target\chem\voa9.i\U240125.b\U012505.D Page 2
Report Date: 01-Feb-2024 14:20

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
$	30 Dibromofluoromethane	113	4.748	4.744	(0.986)	163192	52.1260	52.12
	31 1,1,1-Trichloroethane	97	4.740	4.740	(0.984)	97838	20.5421	20.54
	32 1,1-Dichloropropene	75	4.920	4.920	(0.886)	82154	20.8078	20.80
	33 1,2-Dichloroethane	62	5.175	5.171	(0.932)	88965	19.3478	19.34
	34 Carbon Tetrachloride	117	4.913	4.909	(0.885)	84982	22.0350	22.03
$	35 1,2-Dichloroethane-d4	65	5.096	5.093	(1.058)	168533	47.0741	47.07
*	36 1,4-Difluorobenzene	114	5.554	5.550	(1.000)	471939	50.0000	
	37 Benzene	78	5.138	5.134	(0.925)	259961	20.2348	20.23
	38 Trichloroethene	130	5.786	5.786	(1.042)	78191	22.0823	22.08
	39 Bromodichloromethane	83	6.277	6.273	(1.130)	84198	20.0133	20.01
	42 1,2-Dichloropropane	63	6.007	6.007	(1.082)	64916	18.7679	18.76
	44 Dibromomethane	93	6.120	6.116	(1.102)	44841	20.0377	20.03
	45 4-Methyl-2-Pentanone	43	6.851	6.851	(0.837)	112356	33.1043	33.10
	46 cis-1,3-Dichloropropene	75	6.690	6.689	(1.205)	99360	19.2646	19.26
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	467300	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	549846	51.1134	51.11
	50 Toluene	91	6.978	6.978	(0.853)	276615	21.2298	21.22
	51 trans-1,3-Dichloropropene	75	7.196	7.196	(1.296)	81038	18.9003	18.90
	52 2-Hexanone	43	7.589	7.589	(0.927)	74394	31.5466	31.54
	53 1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	52068	20.1143	20.11
	54 1,3-Dichloropropane	76	7.499	7.495	(0.916)	110531	19.1051	19.10
	55 Dibromochloromethane	129	7.690	7.690	(0.940)	74062	21.3104	21.31
	56 Tetrachloroethene	164	7.458	7.454	(0.911)	67113	24.0637	24.06
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	65239	20.0935	20.09
	58 1-Chlorohexane	55	8.197	8.196	(1.476)	51071	19.2984	19.29
	59 Chlorobenzene	112	8.208	8.208	(1.003)	198721	20.9365	20.93
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	69740	21.0050	21.00
	61 Ethylbenzene	106	8.305	8.305	(1.015)	91255	20.5381	20.53
	62 m,p-Xylenes	106	8.406	8.406	(1.027)	232615	43.5446	43.54
	63 o-Xylene	106	8.748	8.744	(1.069)	114913	20.9166	20.91
	64 Styrene	104	8.759	8.759	(1.070)	199819	21.8471	21.84
	66 Bromoform	173	8.916	8.916	(1.089)	45911	19.9677	19.96
	67 Isopropylbenzene	105	9.062	9.062	(1.107)	287813	21.6616	21.66
	68 1,1,2,2-Tetrachloroethane	83	9.325	9.329	(0.917)	83203	19.3153	19.31
$	69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	200884	49.3022	49.30
*	70 1,4-Dichlorobenzene-d4	152	10.168	10.168	(1.000)	258920	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.921)	77302	15.7273	15.72
	73 n-Propylbenzene	91	9.411	9.411	(0.926)	305673	20.1052	20.10
	74 Bromobenzene	156	9.317	9.317	(0.916)	87050	20.0206	20.02
	75 1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	229647	21.2521	21.25
	76 2-Chlorotoluene	91	9.482	9.482	(0.933)	197159	19.2668	19.26
	77 4-Chlorotoluene	91	9.576	9.576	(0.942)	228568	19.6949	19.69
	78 tert-Butylbenzene	119	9.835	9.835	(0.967)	205916	21.2156	21.21
	79 1,2,4-Trimethylbenzene	105	9.880	9.876	(0.972)	230051	21.2425	21.24
	81 sec-Butylbenzene	105	10.022	10.022	(0.986)	260040	20.7774	20.77
	82 p-Isopropyltoluene	119	10.146	10.146	(0.998)	233981	21.6026	21.60
	83 1,3-Dichlorobenzene	146	10.116	10.116	(0.995)	153726	19.9516	19.95
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	163257	19.9998	19.99
	87 n-Butylbenzene	91	10.491	10.491	(1.032)	182811	20.1122	20.11
	88 1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	152868	19.7210	19.72
	89 1,2-Dibromo-3-Chloropropane	155	11.165	11.165	(1.098)	12590	18.0360	18.03
	90 1,2,4-Trichlorobenzene	180	11.859	11.859	(1.166)	93712	19.5963	19.59

91 Hexachlorobutadiene	225	11.998	11.998 (1.180)	39748	20.7353	20.73
92 Naphthalene	128	12.065	12.065 (1.187)	215068	18.6479	18.64

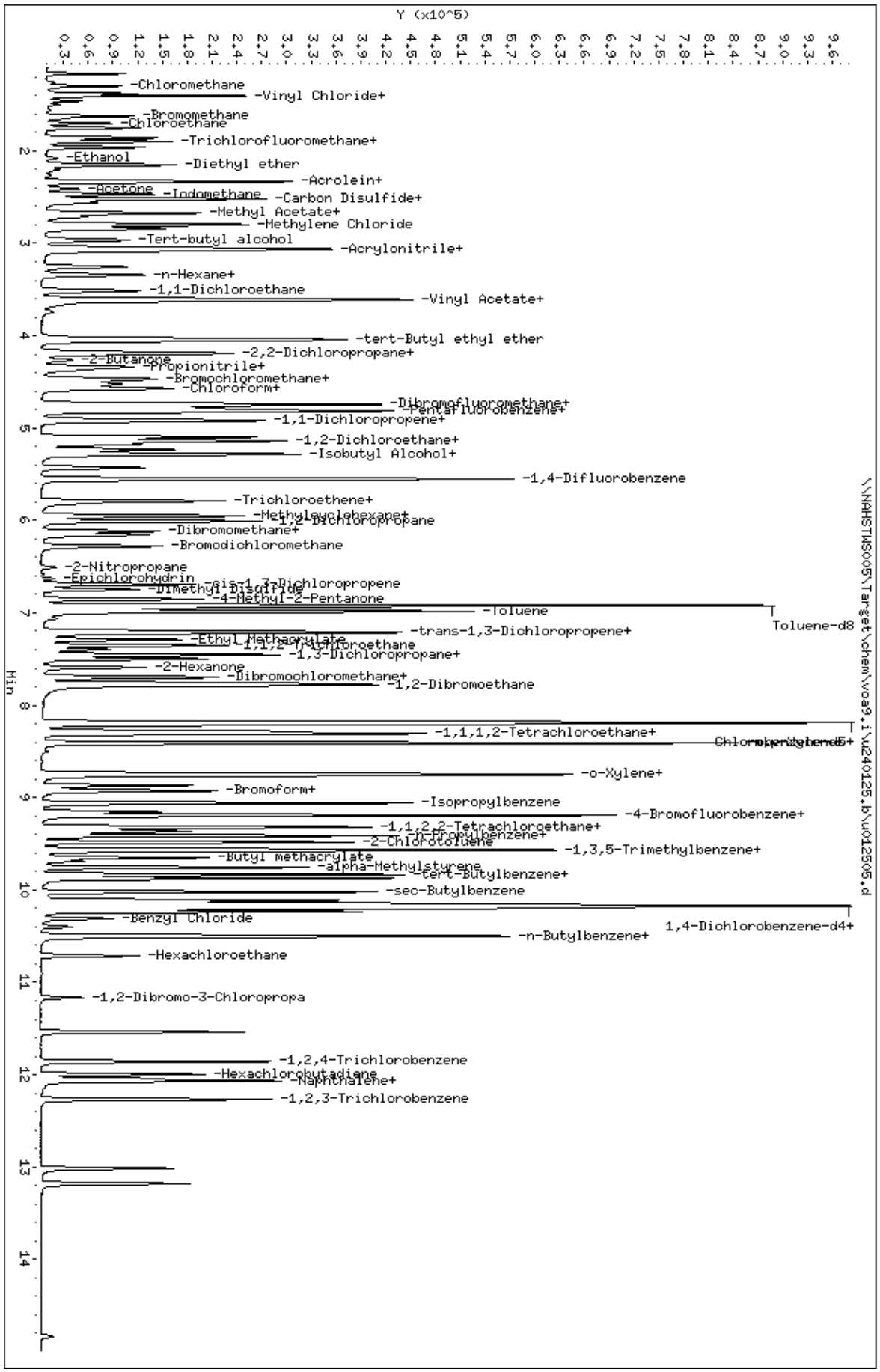
Data File: \\nahstws005\Target\chem\voa9.i\U240125.b\U012505.D Page 3
Report Date: 01-Feb-2024 14:20

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
93	1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	90992	18.8686	18.86
M 94	1,2-Dichloroethylene (total)	96				146698	44.4246	44.42
M 95	Xylenes (total)	106				347528	63.6403	63.64
135	1,4-Dioxane	88	6.165	6.161	(1.280)	14552	299.576	299.57
141	Cyclohexane	56	4.785	4.781	(0.994)	85984	19.4907	19.49
138	Freon TF	101	2.337	2.330	(0.485)	58127	26.1100	26.11
140	1,3-Butadiene	54	1.404	1.396	(0.292)	70579	22.9530	22.95
147	Methylcyclohexane	55	5.947	5.943	(1.071)	124382	17.7815	17.78
146	Methyl Acetate	43	2.712	2.705	(0.563)	53936	17.7009	17.70
148	Tert-Butyl alcohol	59	2.963	2.960	(0.615)	125214	365.328	365.32
149	Isopropyl Alcohol	45	2.558	2.555	(0.531)	72027	367.017	367.01
72	trans-1,4-Dichloro-2-butene	53	9.377	9.377	(1.146)	13616	16.1911	16.19
12	Isobutyl Alcohol	43	5.280	5.280	(1.097)	143517	312.556	312.55
13	Acetonitrile	39	2.671	2.663	(0.555)	61178	185.666	185.66
14	Allyl Chloride	41	2.671	2.667	(0.555)	139779	18.5689	18.56
25	Methacrylonitrile	41	4.493	4.489	(0.933)	54330	24.8528	24.85
40	Methyl Methacrylate	41	6.153	6.153	(1.278)	45634	15.1008	15.10
43	2-Nitropropane	43	6.506	6.506	(1.351)	11209	14.2610	14.26
4	Propionitrile	54	4.332	4.328	(0.900)	81054	159.672	159.67(a)
136	n-Hexane	57	3.342	3.338	(0.694)	63465	22.3001	22.30
131	Methyl Acrylate	55	4.365	4.362	(0.907)	67089	16.6825	16.68
200	Dimethyl Disulfide	94	6.746	6.746	(0.824)	60984	17.4036	17.40
49	Ethyl Methacrylate	69	7.289	7.289	(1.312)	85604	18.4809	18.48
166	1,2,3-Trimethylbenzene	105	10.232	10.232	(1.006)	209345	19.5925	19.59
167	Ethanol	45	2.079	2.071	(0.432)	13721	356.392	356.39
164	Dicyclopentadiene	66	10.198	10.198	(1.003)	245222	17.7664	17.76
145	alpha-Methylstyrene	118	9.752	9.752	(0.959)	96718	19.4361	19.43
142	Tetrahydrofuran	42	4.538	4.538	(0.942)	19813	30.4874	30.48
156	Diisopropyl ether	45	3.619	3.616	(0.752)	186070	17.4455	17.44
151	4-Methyl-2-pentanol	45	7.214	7.214	(1.299)	230258	333.205	333.20
150	Allyl alcohol	57	3.342	3.338	(0.694)	63465	446.002	446.00
86	Benzyl Chloride	91	10.311	10.311	(1.260)	58979	16.0956	16.09
162	Butyl acrylate	55	8.733	8.733	(1.067)	84842	14.9101	14.91
139	Diethyl ether	59	2.142	2.139	(0.445)	51587	20.6643	20.66
203	2-Ethylhexyl Acrylate	55	12.043	12.039	(1.184)	48377	14.5447	14.54
134	Cyclohexanone	55	9.152	9.152	(0.900)	56360	328.994	328.99(a)
130	Ethyl Acetate	43	4.339	4.335	(0.901)	57395	15.4323	15.43
189	n-Butyl acetate	43	7.705	7.705	(0.941)	79459	15.2653	15.26
182	Epichlorohydrin	57	6.630	6.630	(1.194)	10820	59.0178	59.01
132	n-Butanol	56	5.816	5.816	(1.208)	28898	290.419	290.41(a)
133	Ethyl Acrylate	55	5.947	5.943	(1.235)	124382	16.9016	16.90
163	Butyl methacrylate	41	9.651	9.647	(0.949)	48607	15.6144	15.61
174	tert-Amyl methyl ether	73	5.284	5.280	(1.097)	170712	17.9753	17.97
175	tert-Butyl ethyl ether	59	4.047	4.043	(0.840)	169613	17.8384	17.83
187	n-Amyl acetate	43	8.931	8.931	(1.091)	79275	13.3844	13.38
188	Isopropyl acetate	43	5.280	5.280	(0.951)	143496	16.4816	16.48
158	Dichlorofluoromethane	67	1.857	1.854	(0.386)	108769	23.3089	23.30(M)

QC Flag Legend

a - Target compound detected but, quantitated amount

Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.



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Date : 25-JAN-2024 11:49
Client ID: VLCSW-240125
Sample Info: VLCSW-240125;VLCSW-240125;3;;LCS
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9.i
Operator: PC
Column diameter: 0.18

Data File : \\nahstws005\target\chem\voa9.i\u240125.b\u012505.d
Inj Date : 25-JAN-2024 11:49
InstruID : VOA9.i
LabSampID : VLCSW-240125

Dichlorofluoromethane (75-43-4)

Reason Code:

BEFORE

MASS
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109236
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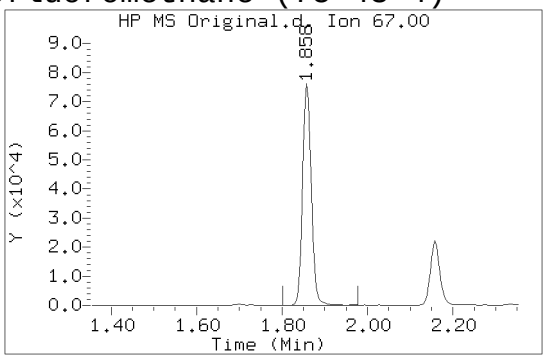
25-Jan-2024
22:07



AFTER

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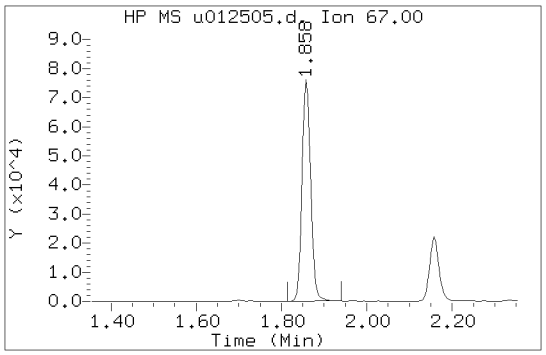

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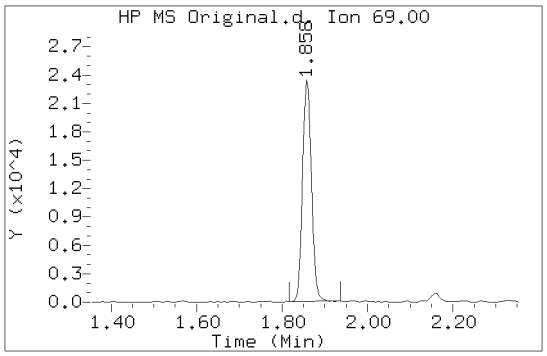
22:07



AFTER

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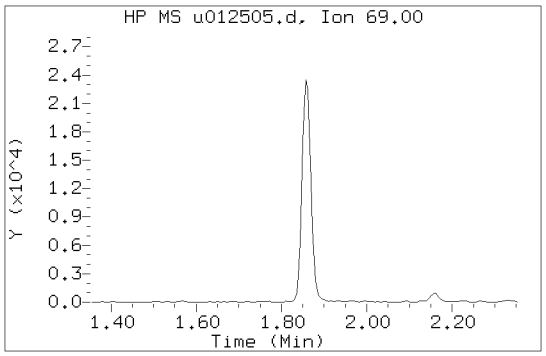
01-Feb-2024
14:20



BEFORE

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25-Jan-2024
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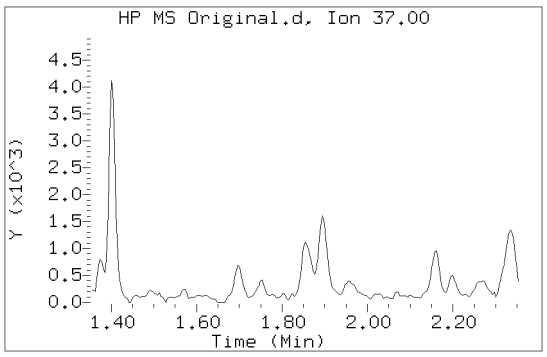

AFTER

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HEIGHT
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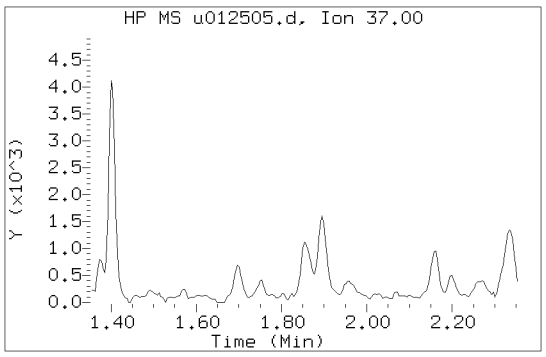
01-Feb-2024
14:20



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Report Date: 01-Feb-2024 14:20

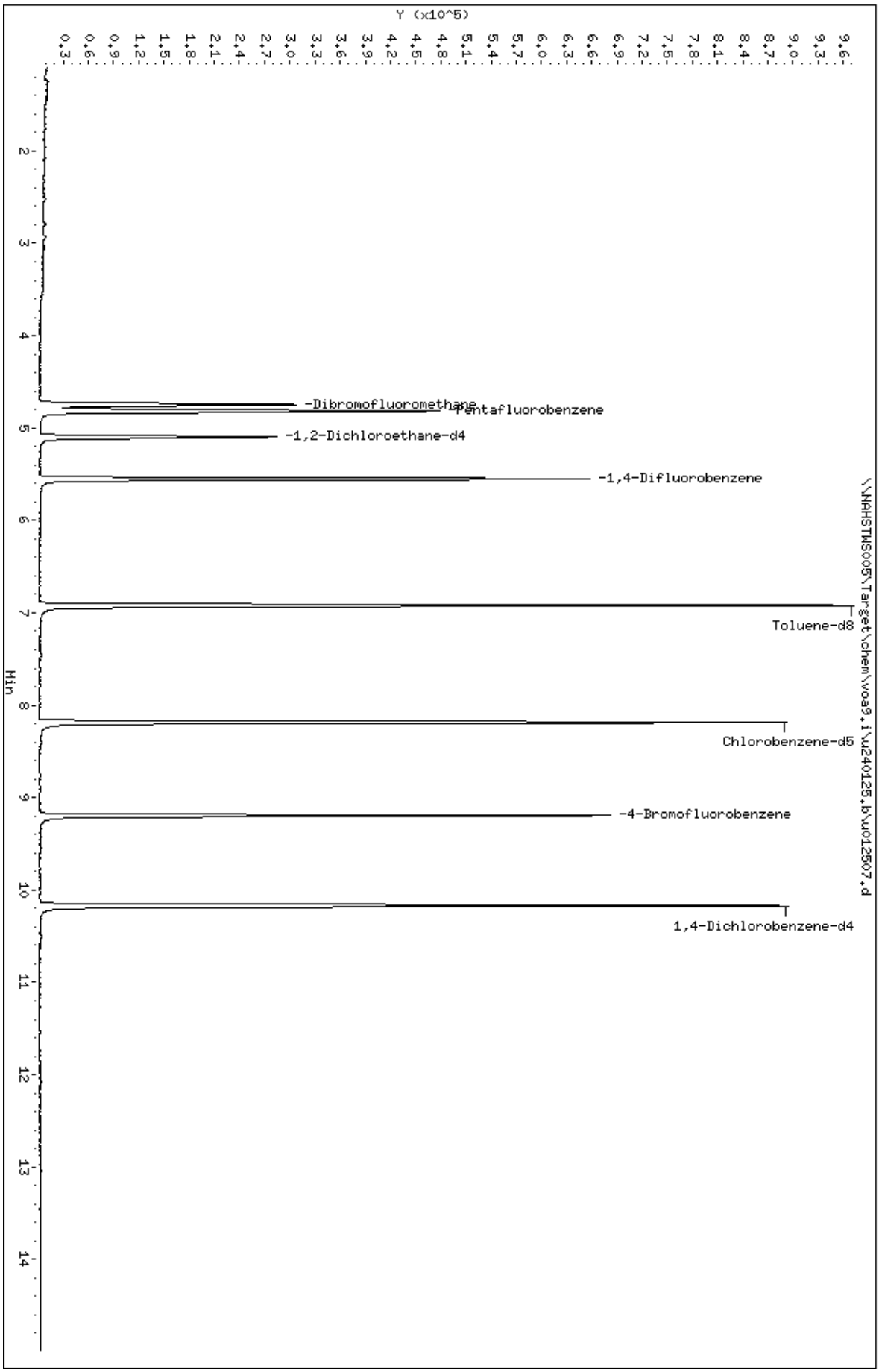
ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240125.b\U012507.D
Lab Smp Id: VBLKW-240125 Client Smp ID: VBLKW-240125
Inj Date : 25-JAN-2024 12:33
Operator : PC Inst ID: VOA9.i
Smp Info : VBLKW-240125;VBLKW-240125;3;;BLANK
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240125.b\8260C.m
Meth Date : 01-Feb-2024 14:20 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.sub
Target Version: 4.14
Processing Host: NAHSTW7066

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.815	4.815	(1.000)	370154	50.0000	
$ 30 Dibromofluoromethane	113	4.748	4.748	(0.986)	184046	48.5551	48.55
$ 35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	187873	43.5784	43.57
* 36 1,4-Difluorobenzene	114	5.550	5.554	(1.000)	540982	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	515787	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	610301	51.4000	51.39
$ 69 4-Bromofluorobenzene	95	9.194	9.190	(1.123)	204212	45.3050	45.30
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	261558	50.0000	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Sample Info: VBLKW-240125;VBLKW-240125;3;;BLANK
Purge Volume: 5.0
Column phase: DB624
Instrument: VOA9.i
Operator: PC
Column diameter: 0.18
Page 1
Y (x10^5)
Min
-Dibromofluoromethane
Pentafluorobenzene
-1,2-Dichloroethane-d4
-1,4-Difluorobenzene
Toluene-d8
Chlorobenzene-d5
-4-Bromofluorobenzene
1,4-Dichlorobenzene-d4
\\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012507.d

Data File : \\nahstws005\target\chem\voa9.i\u240125.b\u012507.d
Inj Date : 25-JAN-2024 12:33
InstruID : VOA9.i
LabSampID : VBLKW-240125

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240125.b\U012513.D Page 1
Report Date: 01-Feb-2024 14:20

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240125.b\U012513.D
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Inj Date : 25-JAN-2024 14:47
Operator : PC Inst ID: VOA9.i
Smp Info : HS24011111-15;HS24011111-15;;;
Misc Info : V9;WATER;0;1;
Comment   :
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Meth Date : 01-Feb-2024 14:20 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1040-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7066

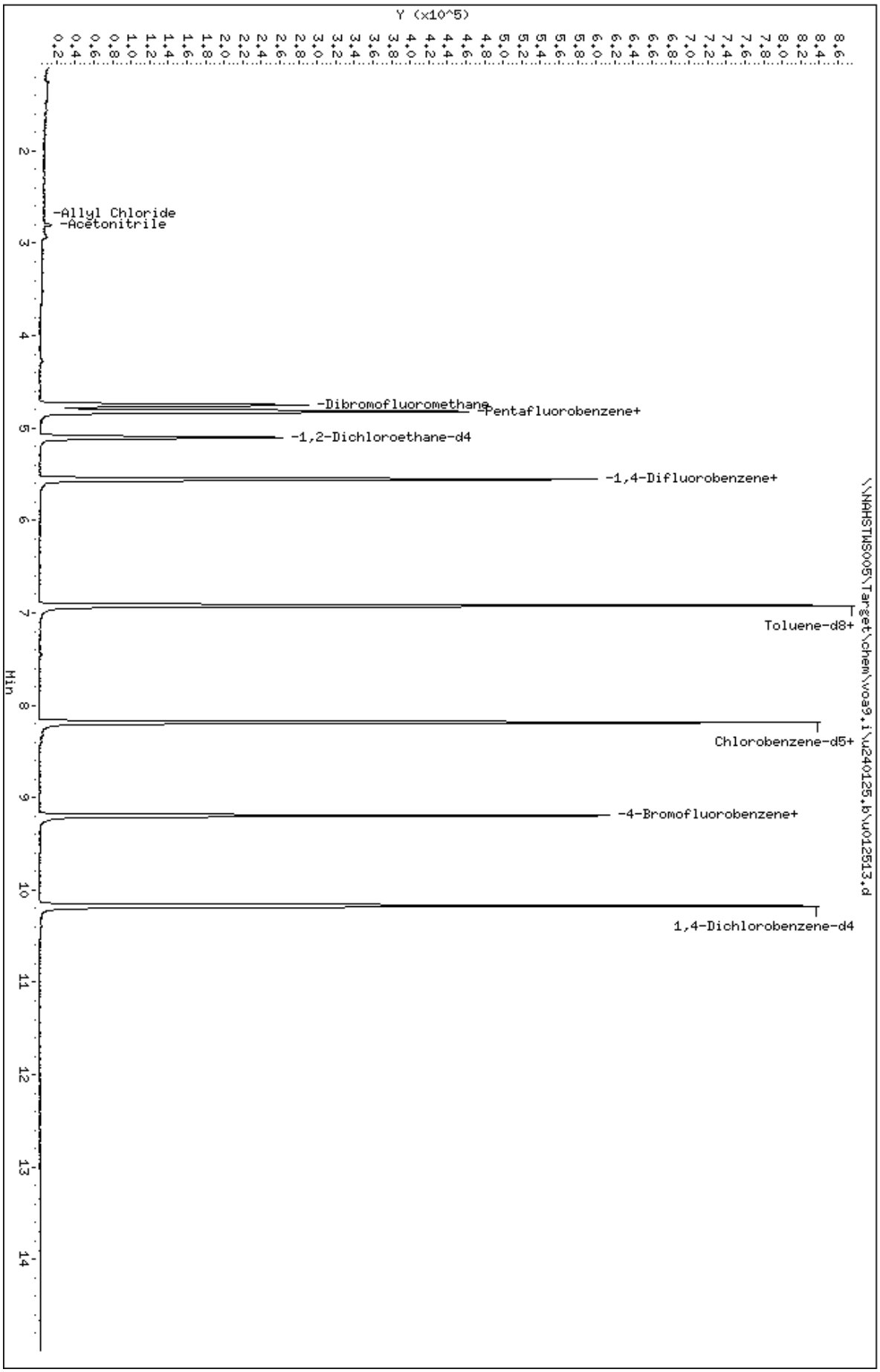
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
*	1 Pentafluorobenzene	168	4.819	4.815	(1.000)	348072	50.0000	
	2 Dichlorodifluoromethane	85	1.014	1.164	(0.210)	28889	10.9856	10.98
	3 Chloromethane	50	1.018	1.303	(0.211)	76513	19.1626	19.16
	13 Acetonitrile	39	2.810	2.671	(0.583)	627	1.67374	1.67(a)
	14 Allyl Chloride	41	2.682	2.675	(0.557)	871	0.10178	0.10(a)
$	30 Dibromofluoromethane	113	4.751	4.748	(0.986)	173336	48.6323	48.63(R)
	34 Carbon Tetrachloride	117	4.819	4.913	(0.868)	29037	7.16675	7.16
$	35 1,2-Dichloroethane-d4	65	5.100	5.096	(1.058)	171112	42.2693	42.26(RM)
*	36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	495794	50.0000	
	42 1,2-Dichloropropane	63	5.554	6.007	(1.000)	85984	23.6628	23.66
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	477861	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	548416	49.8537	49.85(R)
	49 Ethyl Methacrylate	69	6.929	7.289	(1.248)	684	0.14056	0.14(a)
	58 1-Chlorohexane	55	8.181	8.197	(1.473)	4038	1.45244	1.45(a)
$	69 4-Bromofluorobenzene	95	9.194	9.190	(1.123)	182987	43.7756	43.77(R)
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	246946	50.0000	
	71 1,2,3-Trichloropropane	75	9.194	9.362	(0.904)	82554	17.6103	17.61
	141 Cyclohexane	56	4.815	4.785	(0.999)	4635	0.92415	0.92(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.



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Sample Info: HS24011111-15;HS24011111-15;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9,i
Operator: PC
Column diameter: 0.18

Page 1

Data File : \\nahstws005\target\chem\voa9.i\u240125.b\u012513.d
Inj Date : 25-JAN-2024 14:47
InstruID : VOA9.i
LabSampID : HS24011111-15

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

Reason Code:

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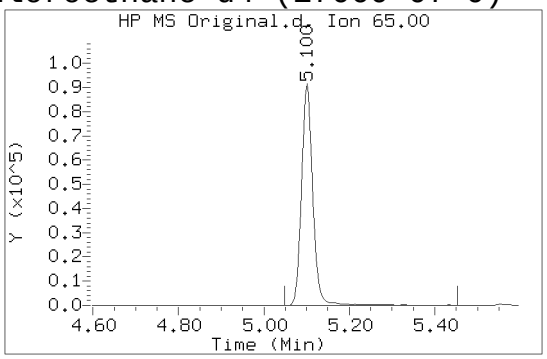
25-Jan-2024
21:52



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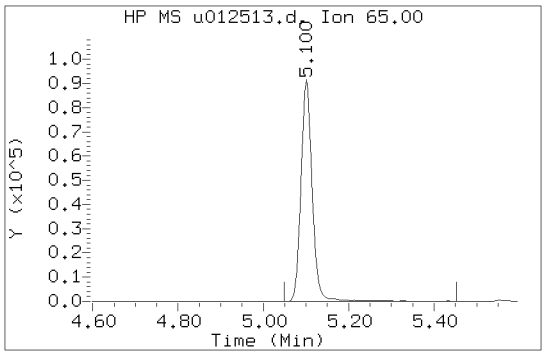

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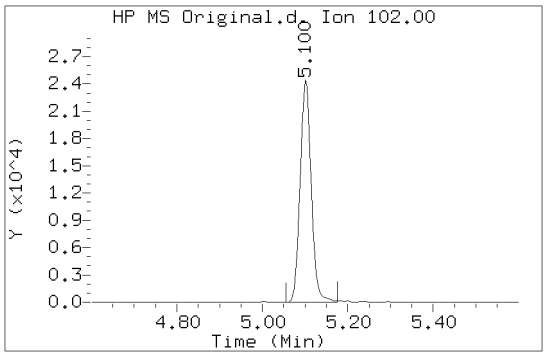

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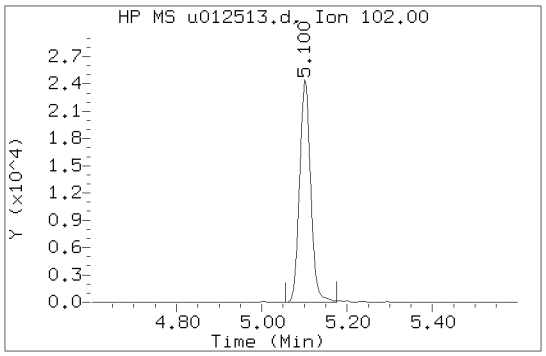

Data File: \\nahstws005\Target\chem\voa9.i\U240125.b\U012517.D Page 1
Report Date: 01-Feb-2024 14:20

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240125.b\U012517.D
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Inj Date : 25-JAN-2024 16:16
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Smp Info : HS24011040-03MS;HS24011040-03MS;3;;MS
Misc Info : V9;WATER;0;100;
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Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 16 QC Sample: MS
Dil Factor: 100.00000
Integrator: HP RTE Compound Sublist: 8260_GB.sub
Target Version: 4.14
Processing Host: NAHSTW7066

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	4.812	4.815	(1.000)	341142	50.0000	
2	Dichlorodifluoromethane	85	1.157	1.164	(0.240)	32907	12.6269	1262.69
3	Chloromethane	50	1.292	1.303	(0.269)	51694	13.2097	1320.97
5	Vinyl Chloride	62	1.370	1.378	(0.285)	69276	18.5307	1853.07
6	Bromomethane	94	1.614	1.621	(0.335)	47096	24.8294	2482.94
7	Chloroethane	64	1.693	1.700	(0.352)	48468	19.2555	1925.55
8	Trichlorofluoromethane	101	1.891	1.899	(0.393)	105828	22.3326	2233.26
9	Acrolein	56	2.259	2.266	(0.469)	4151	21.3519	2135.19
10	Acetone	43	2.401	2.409	(0.499)	34909	25.7994	2579.93
11	1,1-Dichloroethene	96	2.326	2.334	(0.484)	61491	23.3703	2337.03
15	Iodomethane	142	2.461	2.469	(0.512)	138752	44.2297	4422.97
16	Acrylonitrile	53	3.061	3.065	(0.636)	50566	37.7871	3778.71
17	Methylene Chloride	84	2.787	2.795	(0.579)	65559	19.5838	1958.38
18	Methyl tert-butyl ether	73	3.072	3.080	(0.639)	183584	19.4722	1947.22
19	Carbon Disulfide	76	2.514	2.521	(0.522)	353291	45.5691	4556.91
20	trans-1,2-Dichloroethene	96	3.053	3.061	(0.635)	68938	21.9172	2191.72
21	Vinyl Acetate	43	3.601	3.604	(0.748)	290055	30.4955	3049.54
22	1,1-Dichloroethane	63	3.507	3.514	(0.729)	111509	17.3807	1738.06
24	2-Butanone	43	4.261	4.260	(0.885)	38992	23.3330	2333.30
26	2,2-Dichloropropane	77	4.178	4.182	(0.868)	79231	17.5662	1756.62

27 cis-1,2-Dichloroethene	96	4.193	4.197 (0.871)	130167	30.8926	3089.26
28 Chloroform	83	4.568	4.572 (0.949)	118696	16.9970	1699.70

Data File: \\nahstws005\Target\chem\voa9.i\U240125.b\U012517.D Page 2
Report Date: 01-Feb-2024 14:20

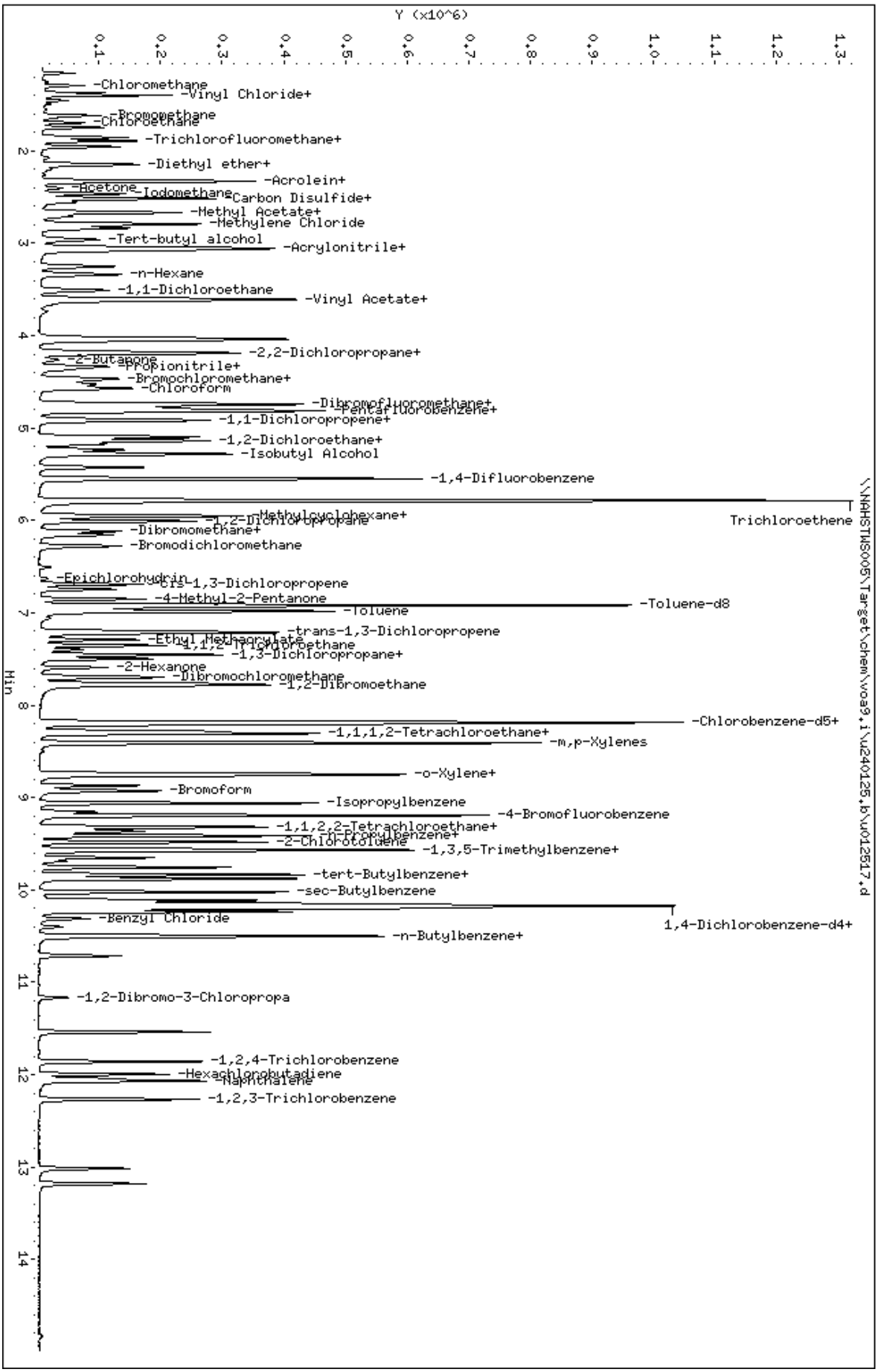
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
29	Bromochloromethane	128	4.467	4.470	(0.928)	39937	18.3182	1831.82
$ 30	Dibromofluoromethane	113	4.744	4.748	(0.986)	171906	49.2231	49.22
31	1,1,1-Trichloroethane	97	4.740	4.744	(0.985)	99691	18.7849	1878.49
32	1,1-Dichloropropene	75	4.920	4.924	(0.887)	83335	19.8559	1985.59
33	1,2-Dichloroethane	62	5.171	5.175	(0.932)	80814	16.5335	1653.35
34	Carbon Tetrachloride	117	4.909	4.913	(0.885)	85893	20.9512	2095.11
$ 35	1,2-Dichloroethane-d4	65	5.093	5.096	(1.058)	172171	43.3438	43.34
* 36	1,4-Difluorobenzene	114	5.550	5.554	(1.000)	501673	50.0000	
37	Benzene	78	5.134	5.138	(0.925)	242256	17.7391	1773.90
38	Trichloroethene	130	5.786	5.790	(1.043)	451509	119.955	11995.50
39	Bromodichloromethane	83	6.277	6.277	(1.131)	80175	17.9276	1792.75
42	1,2-Dichloropropane	63	6.007	6.007	(1.082)	61905	16.8366	1683.66
44	Dibromomethane	93	6.116	6.120	(1.102)	40490	17.0210	1702.09
45	4-Methyl-2-Pentanone	43	6.851	6.851	(0.837)	98390	27.6275	2762.74
46	cis-1,3-Dichloropropene	75	6.690	6.690	(1.205)	89776	16.5971	1659.70
* 47	Chlorobenzene-d5	117	8.185	8.185	(1.000)	489287	50.0000	
$ 48	Toluene-d8	98	6.918	6.922	(0.845)	600819	53.3420	53.34
50	Toluene	91	6.978	6.978	(0.853)	268224	19.6608	1966.07
51	trans-1,3-Dichloropropene	75	7.196	7.196	(1.296)	73244	16.3356	1633.56
52	2-Hexanone	43	7.589	7.589	(0.927)	62807	25.4363	2543.63
53	1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	48119	17.5961	1759.60
54	1,3-Dichloropropane	76	7.496	7.499	(0.916)	99655	16.4511	1645.11
55	Dibromochloromethane	129	7.691	7.691	(0.940)	68967	18.9526	1895.25
56	Tetrachloroethene	164	7.454	7.458	(0.911)	68933	23.6056	2360.56
57	1,2-Dibromoethane	107	7.784	7.784	(0.951)	61156	17.9896	1798.95
58	1-Chlorohexane	55	8.197	8.197	(1.477)	54151	19.2494	1924.94
59	Chlorobenzene	112	8.208	8.208	(1.003)	189239	19.0416	1904.16
60	1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	65512	18.8449	1884.48
61	Ethylbenzene	106	8.305	8.305	(1.015)	90950	19.5496	1954.95
62	m,p-Xylenes	106	8.407	8.407	(1.027)	228148	40.7892	4078.91
63	o-Xylene	106	8.748	8.748	(1.069)	113852	19.7922	1979.22
64	Styrene	104	8.763	8.759	(1.071)	185654	19.3862	1938.62
66	Bromoform	173	8.916	8.916	(1.089)	42226	17.6701	1767.01
67	Isopropylbenzene	105	9.063	9.063	(1.107)	287609	20.6735	2067.35
68	1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	74193	16.2434	1624.33
$ 69	4-Bromofluorobenzene	95	9.194	9.190	(1.123)	210237	49.2784	49.27
* 70	1,4-Dichlorobenzene-d4	152	10.168	10.168	(1.000)	272833	50.0000	
71	1,2,3-Trichloropropane	75	9.362	9.362	(0.921)	73129	14.1196	1411.96
73	n-Propylbenzene	91	9.411	9.411	(0.926)	303063	18.9171	1891.70
74	Bromobenzene	156	9.318	9.317	(0.916)	83452	18.2143	1821.43
75	1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	222024	19.4989	1949.88
76	2-Chlorotoluene	91	9.482	9.482	(0.933)	194916	18.0763	1807.62
77	4-Chlorotoluene	91	9.576	9.576	(0.942)	219819	17.9752	1797.51
78	tert-Butylbenzene	119	9.835	9.835	(0.967)	206633	20.2038	2020.38
79	1,2,4-Trimethylbenzene	105	9.880	9.876	(0.972)	222780	19.5221	1952.20
81	sec-Butylbenzene	105	10.022	10.022	(0.986)	265945	20.1656	2016.55
82	p-Isopropyltoluene	119	10.146	10.146	(0.998)	231476	20.2815	2028.14
83	1,3-Dichlorobenzene	146	10.116	10.112	(0.995)	148573	18.2995	1829.95
84	1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	155660	18.0967	1809.66
87	n-Butylbenzene	91	10.491	10.491	(1.032)	180707	18.8670	1886.69
88	1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	145342	17.7940	1779.39
89	1,2-Dibromo-3-Chloropropane	155	11.166	11.166	(1.098)	11115	15.4546	1545.46

90 1,2,4-Trichlorobenzene	180	11.859	11.855 (1.166)	90686	17.9965	1799.65
91 Hexachlorobutadiene	225	11.998	11.998 (1.180)	43210	21.3918	2139.18

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
	92 Naphthalene	128	12.065	12.065	(1.187)	201477	16.5786	1657.85
	93 1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	87907	17.2993	1729.92
M	94 1,2-Dichloroethylene (total)	96				199105	54.1126	5411.26
M	95 Xylenes (total)	106				342000	58.9161	5891.60
	135 1,4-Dioxane	88	6.165	6.161	(1.281)	13265	245.081	24508.10
	141 Cyclohexane	56	4.782	4.785	(0.994)	88245	17.9522	1795.21
	138 Freon TF	101	2.330	2.337	(0.484)	74332	29.9039	2990.38
	140 1,3-Butadiene	54	1.397	1.404	(0.290)	58624	17.1103	1711.02
	147 Methylcyclohexane	55	5.947	5.947	(1.072)	145676	19.5914	1959.13
	146 Methyl Acetate	43	2.709	2.712	(0.563)	50567	14.8936	1489.36
	148 Tert-Butyl alcohol	59	2.960	2.963	(0.615)	108769	284.808	28480.80
	149 Isopropyl Alcohol	45	2.555	2.559	(0.531)	65644	298.831	29883.05
	72 trans-1,4-Dichloro-2-butene	53	9.377	9.377	(1.146)	14110	16.0245	1602.45
	12 Isobutyl Alcohol	43	5.280	5.284	(1.097)	142031	277.603	27760.34
	13 Acetonitrile	39	2.664	2.671	(0.554)	75837	206.555	20655.48
	14 Allyl Chloride	41	2.667	2.675	(0.554)	162209	19.3392	1933.91
	25 Methacrylonitrile	41	4.489	4.493	(0.933)	29239	12.0037	1200.37(M)
	40 Methyl Methacrylate	41	6.154	6.154	(1.279)	43888	13.0339	1303.38
	4 Propionitrile	54	4.332	4.332	(0.900)	84332	149.095	14909.50(a)
	136 n-Hexane	57	3.338	3.346	(0.694)	65215	20.5654	2056.54
	131 Methyl Acrylate	55	4.365	4.369	(0.907)	63498	14.1706	1417.05
	49 Ethyl Methacrylate	69	7.289	7.289	(1.313)	79395	16.1245	1612.45
	166 1,2,3-Trimethylbenzene	105	10.232	10.232	(1.006)	222271	19.7415	1974.14
	156 Diisopropyl ether	45	3.616	3.619	(0.751)	187311	15.7611	1576.11
	86 Benzyl Chloride	91	10.311	10.311	(1.260)	54629	14.4882	1448.82
	139 Diethyl ether	59	2.139	2.146	(0.445)	48062	17.2782	1727.82
	130 Ethyl Acetate	43	4.336	4.339	(0.901)	56994	13.7532	1375.31
	182 Epichlorohydrin	57	6.630	6.630	(1.195)	10213	52.4052	5240.52
	133 Ethyl Acrylate	55	5.947	5.947	(1.236)	145676	17.7654	1776.54
	158 Dichlorofluoromethane	67	1.854	1.861	(0.385)	113269	21.7844	2178.43(M)

QC Flag Legend

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



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Sample Info: HS24011040-03MS;HS24011040-03MS;3;;MS
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9,i
Operator: PC
Column diameter: 0.18

Data File : \\nahstws005\target\chem\voa9.i\u240125.b\u012517.d
Inj Date : 25-JAN-2024 16:16
InstruID : VOA9.i
LabSampID : HS24011040-03MS

Methacrylonitrile (126-98-7)

Reason Code:

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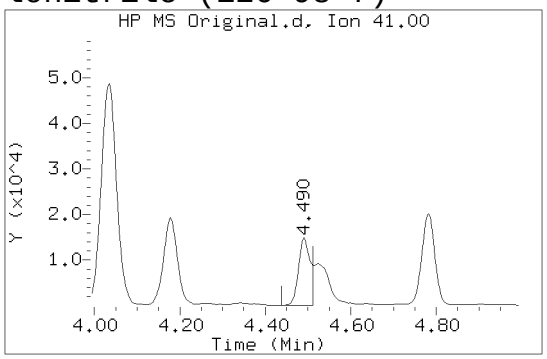
25-Jan-2024
22:08



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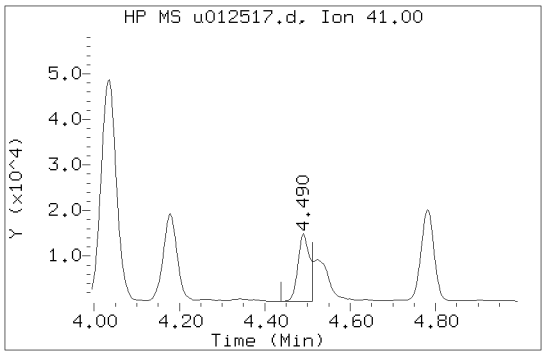

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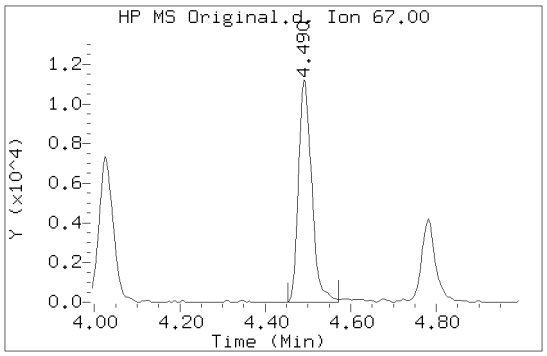

AFTER
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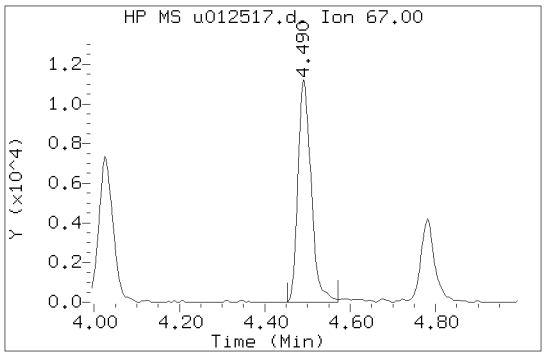

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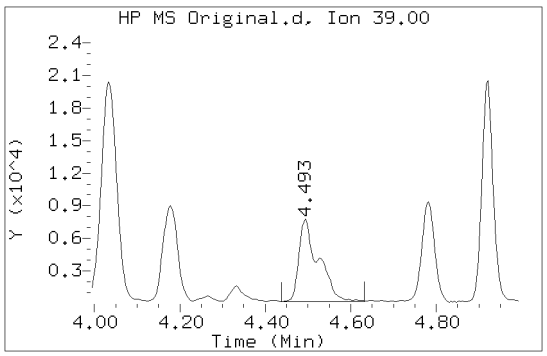

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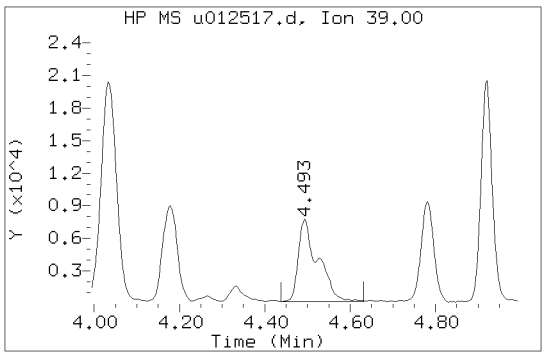

Dichlorofluoromethane (75-43-4)

Reason Code:

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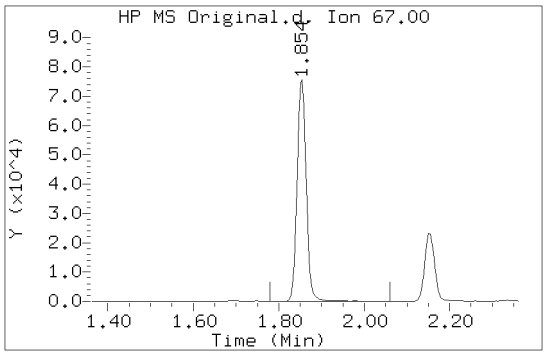
25-Jan-2024
22:08



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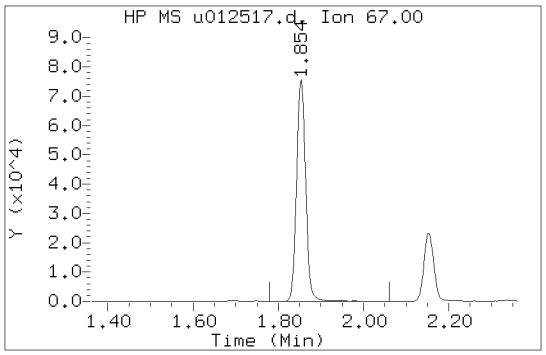

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Inj Date : 25-JAN-2024 16:16
InstruID : VOA9.i
LabSampID : HS24011040-03MS

Dichlorofluoromethane (75-43-4)

Reason Code:

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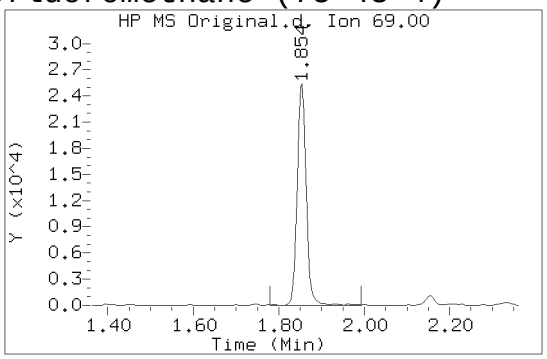
25-Jan-2024
22:08



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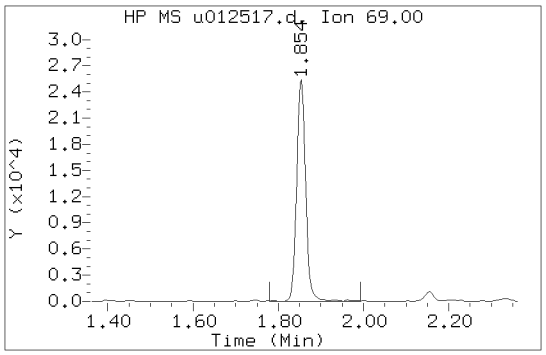

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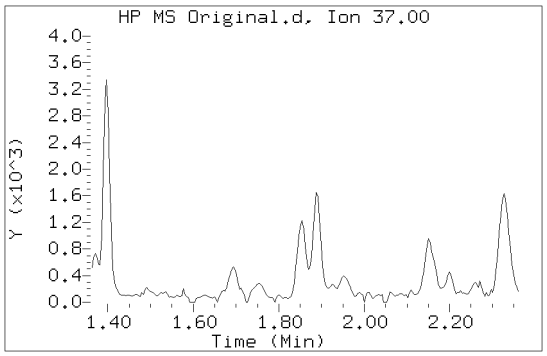

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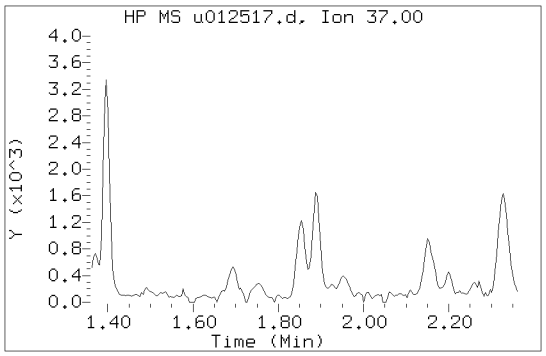

Data File: \\nahstws005\Target\chem\voa9.i\U240125.b\U012518.D Page 1
Report Date: 01-Feb-2024 14:20

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240125.b\U012518.D
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Inj Date : 25-JAN-2024 16:38
Operator : PC Inst ID: VOA9.i
Smp Info : HS24011040-03MSD;HS24011040-03MSD;3;;MSD
Misc Info : V9;WATER;0;100;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240125.b\8260C.m
Meth Date : 01-Feb-2024 14:20 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 16 QC Sample: MSD
Dil Factor: 100.00000
Integrator: HP RTE Compound Sublist: 8260_GB.sub
Target Version: 4.14
Processing Host: NAHSTW7066

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	4.815	4.815	(1.000)	331301	50.0000	
2	Dichlorodifluoromethane	85	1.160	1.164	(0.241)	30887	12.2329	1223.29
3	Chloromethane	50	1.295	1.303	(0.269)	48670	12.8064	1280.63
5	Vinyl Chloride	62	1.374	1.378	(0.285)	64510	17.7684	1776.84
6	Bromomethane	94	1.618	1.621	(0.336)	42439	23.0186	2301.86
7	Chloroethane	64	1.696	1.700	(0.352)	45201	18.4910	1849.10
8	Trichlorofluoromethane	101	1.891	1.899	(0.393)	102638	22.3028	2230.28
9	Acrolein	56	2.259	2.266	(0.469)	4945	26.1916	2619.16
10	Acetone	43	2.405	2.409	(0.499)	35659	27.4520	2745.20
11	1,1-Dichloroethene	96	2.330	2.334	(0.484)	57149	22.3653	2236.52
15	Iodomethane	142	2.465	2.469	(0.512)	136618	44.7977	4479.77
16	Acrylonitrile	53	3.061	3.065	(0.636)	44384	34.1526	3415.26
17	Methylene Chloride	84	2.791	2.795	(0.580)	67842	20.8851	2088.51
18	Methyl tert-butyl ether	73	3.076	3.080	(0.639)	176067	19.2296	1922.96
19	Carbon Disulfide	76	2.517	2.521	(0.523)	329274	43.7329	4373.28
20	trans-1,2-Dichloroethene	96	3.057	3.061	(0.635)	64347	21.0653	2106.52
21	Vinyl Acetate	43	3.604	3.604	(0.749)	304617	32.9778	3297.78
22	1,1-Dichloroethane	63	3.511	3.514	(0.729)	109260	17.5360	1753.59
24	2-Butanone	43	4.260	4.260	(0.885)	41693	25.6904	2569.04
26	2,2-Dichloropropane	77	4.178	4.182	(0.868)	75729	17.2885	1728.85

27 cis-1,2-Dichloroethene	96	4.193	4.197 (0.871)	124425	30.4070	3040.70
28 Chloroform	83	4.572	4.572 (0.949)	115078	16.9684	1696.84

Data File: \\nahstws005\Target\chem\voa9.i\U240125.b\U012518.D Page 2
Report Date: 01-Feb-2024 14:20

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
	29 Bromochloromethane	128	4.467	4.470	(0.928)	39183	18.5062	1850.62
$	30 Dibromofluoromethane	113	4.744	4.748	(0.985)	166863	49.1978	49.19
	31 1,1,1-Trichloroethane	97	4.740	4.744	(0.984)	95985	18.6239	1862.38
	32 1,1-Dichloropropene	75	4.920	4.924	(0.887)	78319	19.2632	1926.31
	33 1,2-Dichloroethane	62	5.175	5.175	(0.932)	81131	17.1342	1713.41
	34 Carbon Tetrachloride	117	4.909	4.913	(0.885)	85552	21.5416	2154.16
$	35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	174244	45.0805	45.08
*	36 1,4-Difluorobenzene	114	5.550	5.554	(1.000)	485985	50.0000	
	37 Benzene	78	5.138	5.138	(0.926)	238156	18.0018	1800.17
	38 Trichloroethene	130	5.786	5.790	(1.043)	443629	121.666	12166.61
	39 Bromodichloromethane	83	6.277	6.277	(1.131)	78307	18.0751	1807.51
	42 1,2-Dichloropropane	63	6.007	6.007	(1.082)	59601	16.7333	1673.32
	44 Dibromomethane	93	6.116	6.120	(1.102)	41339	17.9388	1793.88
	45 4-Methyl-2-Pentanone	43	6.851	6.851	(0.837)	101892	29.2958	2929.57
	46 cis-1,3-Dichloropropene	75	6.690	6.690	(1.205)	87335	16.6608	1666.07
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	478199	50.0000	
$	48 Toluene-d8	98	6.918	6.922	(0.845)	579987	52.6864	52.68
	50 Toluene	91	6.978	6.978	(0.853)	259044	19.4281	1942.81
	51 trans-1,3-Dichloropropene	75	7.196	7.196	(1.296)	73121	16.7805	1678.04
	52 2-Hexanone	43	7.589	7.589	(0.927)	66523	27.5659	2756.59
	53 1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	49196	18.4688	1846.88
	54 1,3-Dichloropropane	76	7.496	7.499	(0.916)	100582	16.9892	1698.91
	55 Dibromochloromethane	129	7.691	7.691	(0.940)	67659	19.0243	1902.42
	56 Tetrachloroethene	164	7.454	7.458	(0.911)	66027	23.1347	2313.47
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	60980	18.3537	1835.37
	58 1-Chlorohexane	55	8.197	8.197	(1.477)	53504	19.6334	1963.33
	59 Chlorobenzene	112	8.208	8.208	(1.003)	182510	18.7903	1879.03
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	66109	19.4575	1945.75
	61 Ethylbenzene	106	8.305	8.305	(1.015)	87378	19.2173	1921.72
	62 m,p-Xylenes	106	8.407	8.407	(1.027)	227686	41.6505	4165.04
	63 o-Xylene	106	8.744	8.748	(1.068)	112401	19.9931	1999.30
	64 Styrene	104	8.759	8.759	(1.070)	184536	19.7163	1971.62
	66 Bromoform	173	8.916	8.916	(1.089)	42897	18.3248	1832.48
	67 Isopropylbenzene	105	9.063	9.063	(1.107)	278762	20.5022	2050.22
	68 1,1,2,2-Tetrachloroethane	83	9.325	9.329	(0.917)	76320	17.2543	1725.42
$	69 4-Bromofluorobenzene	95	9.190	9.190	(1.123)	204850	49.1251	49.12
*	70 1,4-Dichlorobenzene-d4	152	10.168	10.168	(1.000)	264821	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.921)	74201	14.7600	1476.00
	73 n-Propylbenzene	91	9.411	9.411	(0.926)	309371	19.8950	1989.50
	74 Bromobenzene	156	9.317	9.317	(0.916)	80903	18.1922	1819.22
	75 1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	225466	20.4003	2040.02
	76 2-Chlorotoluene	91	9.482	9.482	(0.933)	192982	18.4384	1843.83
	77 4-Chlorotoluene	91	9.576	9.576	(0.942)	217199	18.2983	1829.82
	78 tert-Butylbenzene	119	9.835	9.835	(0.967)	202531	20.4019	2040.18
	79 1,2,4-Trimethylbenzene	105	9.876	9.876	(0.971)	222204	20.0607	2006.07
	81 sec-Butylbenzene	105	10.022	10.022	(0.986)	260622	20.3598	2035.98
	82 p-Isopropyltoluene	119	10.146	10.146	(0.998)	229224	20.6918	2069.17
	83 1,3-Dichlorobenzene	146	10.116	10.112	(0.995)	145740	18.4937	1849.36
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	152187	18.2282	1822.82
	87 n-Butylbenzene	91	10.491	10.491	(1.032)	181778	19.5530	1955.29
	88 1,2-Dichlorobenzene	146	10.502	10.506	(1.033)	145238	18.3192	1831.91
	89 1,2-Dibromo-3-Chloropropane	155	11.166	11.166	(1.098)	12054	17.0188	1701.87

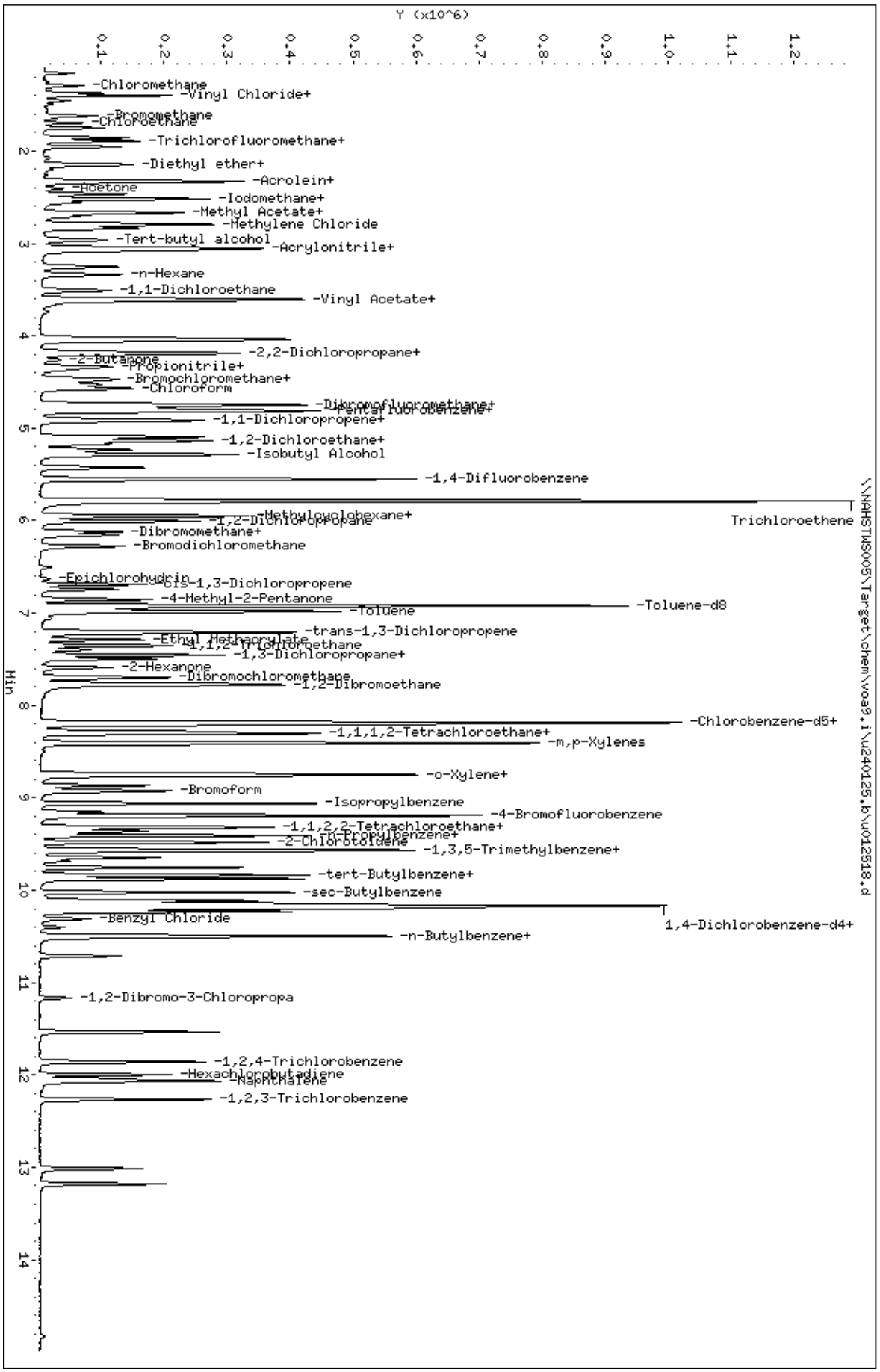
90 1,2,4-Trichlorobenzene	180	11.855	11.855 (1.166)	89393	18.2766	1827.66
91 Hexachlorobutadiene	225	11.998	11.998 (1.180)	41333	21.0817	2108.16

Data File: \\nahstws005\Target\chem\voa9.i\U240125.b\U012518.D Page 3
Report Date: 01-Feb-2024 14:20

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
	92 Naphthalene	128	12.065	12.065	(1.187)	207268	17.5711	1757.10
	93 1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	88994	18.0430	1804.30
M	94 1,2-Dichloroethylene (total)	96				188772	52.8283	5282.82
M	95 Xylenes (total)	106				340087	60.4777	6047.77
	135 1,4-Dioxane	88	6.165	6.161	(1.280)	14812	281.792	28179.20
	141 Cyclohexane	56	4.782	4.785	(0.993)	84129	17.6232	1762.32
	138 Freon TF	101	2.334	2.337	(0.485)	68141	28.2529	2825.29
	140 1,3-Butadiene	54	1.400	1.404	(0.291)	58491	17.5786	1757.85
	147 Methylcyclohexane	55	5.947	5.947	(1.072)	146952	20.4009	2040.09
	146 Methyl Acetate	43	2.709	2.712	(0.563)	57928	17.5685	1756.84
	148 Tert-Butyl alcohol	59	2.963	2.963	(0.615)	118000	318.157	31815.70
	149 Isopropyl Alcohol	45	2.559	2.559	(0.531)	70819	332.796	33279.56
	72 trans-1,4-Dichloro-2-butene	53	9.377	9.377	(1.146)	13965	16.2276	1622.76
	12 Isobutyl Alcohol	43	5.280	5.284	(1.097)	145221	292.270	29226.95
	13 Acetonitrile	39	2.667	2.671	(0.554)	77922	218.538	21853.78
	14 Allyl Chloride	41	2.667	2.675	(0.554)	166024	20.3820	2038.19
	25 Methacrylonitrile	41	4.493	4.493	(0.933)	33956	14.3543	1435.43(M)
	40 Methyl Methacrylate	41	6.154	6.154	(1.278)	44482	13.6027	1360.26
	4 Propionitrile	54	4.332	4.332	(0.900)	84509	153.846	15384.59(a)
	136 n-Hexane	57	3.338	3.346	(0.693)	64175	20.8386	2083.86
	131 Methyl Acrylate	55	4.365	4.369	(0.907)	64660	14.8585	1485.85
	49 Ethyl Methacrylate	69	7.289	7.289	(1.313)	82280	17.2499	1724.98
	166 1,2,3-Trimethylbenzene	105	10.232	10.232	(1.006)	219019	20.0412	2004.11
	156 Diisopropyl ether	45	3.619	3.619	(0.752)	189345	16.4055	1640.55
	86 Benzyl Chloride	91	10.311	10.311	(1.260)	54153	14.6644	1466.43
	139 Diethyl ether	59	2.142	2.146	(0.445)	47271	17.4986	1749.86
	130 Ethyl Acetate	43	4.339	4.339	(0.901)	59028	14.6671	1466.70
	182 Epichlorohydrin	57	6.630	6.630	(1.195)	12381	65.5805	6558.05
	133 Ethyl Acrylate	55	5.947	5.947	(1.235)	146952	18.4534	1845.33
	158 Dichlorofluoromethane	67	1.854	1.861	(0.385)	109243	21.6342	2163.41(M)

QC Flag Legend

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



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Client ID: HS24011040-03MSD
Sample Info: HS24011040-03MSD;HS24011040-03MSD;3;;MSD
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9.i
Operator: PC
Column diameter: 0.18

Page 1

Data File : \\nahstws005\target\chem\voa9.i\u240125.b\u012518.d
Inj Date : 25-JAN-2024 16:38
InstruID : VOA9.i
LabSampID : HS24011040-03MSD

Methacrylonitrile (126-98-7)

Reason Code:

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41
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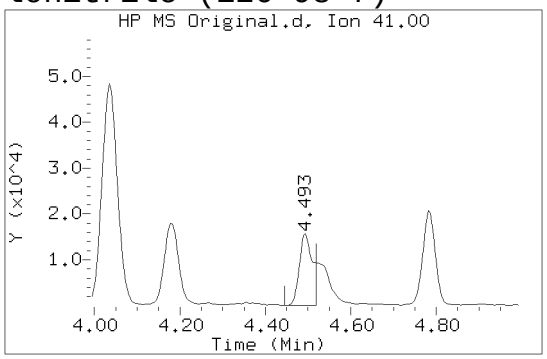
25-Jan-2024
22:09



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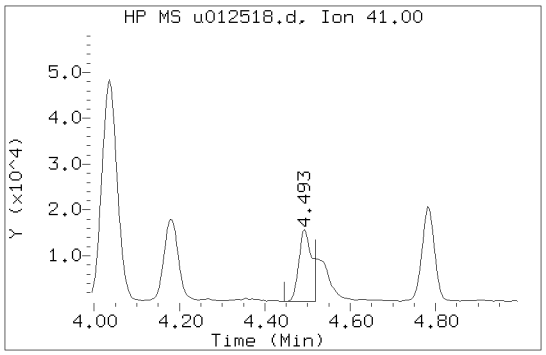

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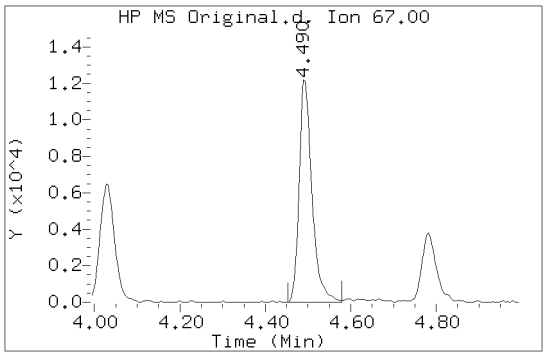

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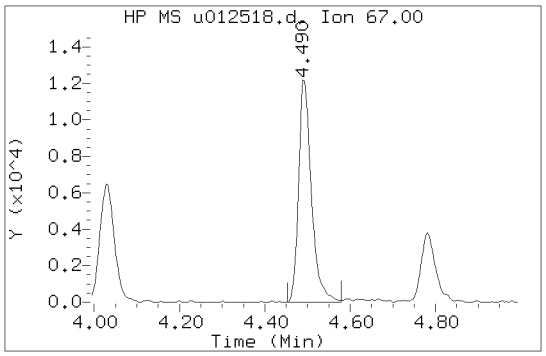

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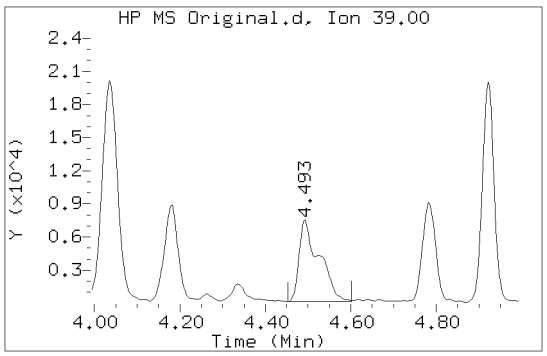
25-Jan-2024
22:09



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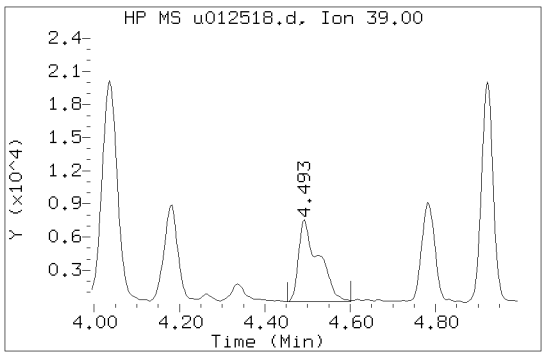
22:09



Dichlorofluoromethane (75-43-4)

Reason Code:

BEFORE
MASS
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AREA
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HEIGHT
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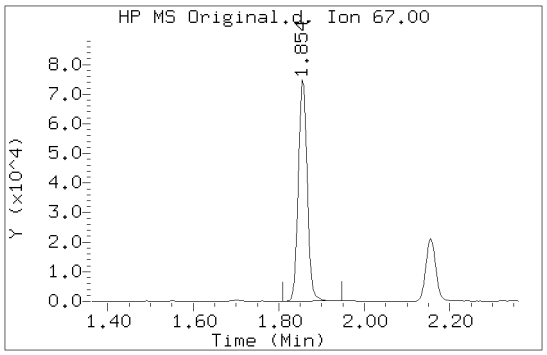
25-Jan-2024
22:09



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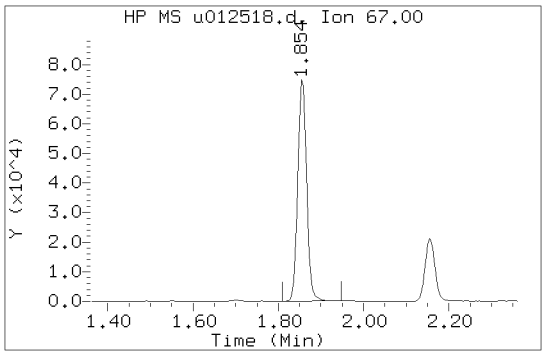

Data File : \\nahstws005\target\chem\voa9.i\u240125.b\u012518.d
Inj Date : 25-JAN-2024 16:38
InstruID : VOA9.i
LabSampID : HS24011040-03MSD

Dichlorofluoromethane (75-43-4)

Reason Code:

BEFORE

MASS
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AREA
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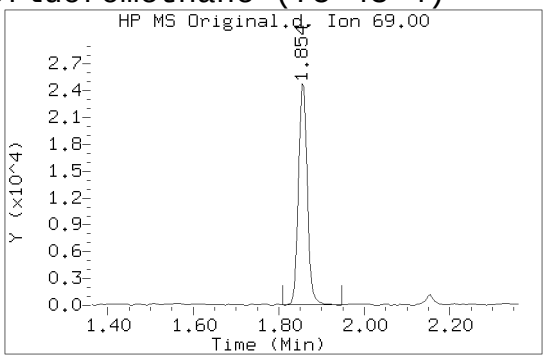
HEIGHT
24727
25-Jan-2024
22:09



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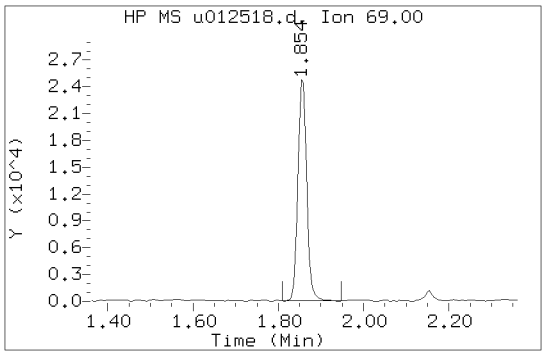

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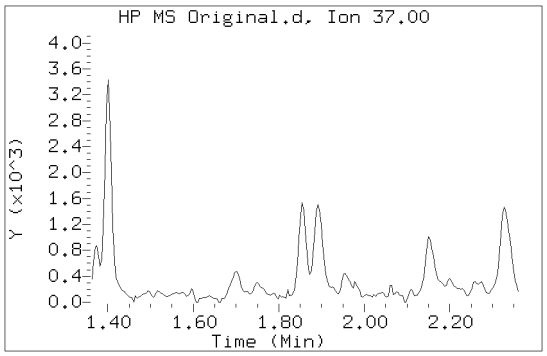

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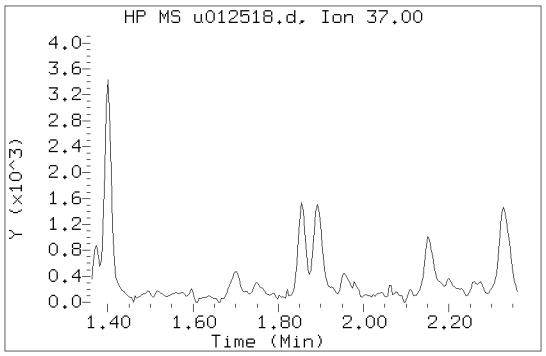


Data File: \\nahstws005\Target\chem\voa9.i\U240125.b\U012530.D Page 1
Report Date: 01-Feb-2024 14:20

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240125.b\U012530.D
Lab Smp Id: CCV-END Client Smp ID: CCV-END
Inj Date : 25-JAN-2024 21:05
Operator : PC Inst ID: VOA9.i
Smp Info : CCV-END;CCV-END;2;;;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240125.b\8260C.m
Meth Date : 01-Feb-2024 14:20 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 28 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 1040-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7066

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1	Pentafluorobenzene	168	4.811	4.811	(1.000)	285738	50.0000	
2	Dichlorodifluoromethane	85	1.156	1.156	(0.240)	136085	50.0000	58.92
3	Chloromethane	50	1.291	1.291	(0.268)	143939	50.0000	43.91
4	Propionitrile	54	4.328	4.328	(0.900)	177950	500.000	375.60
5	Vinyl Chloride	62	1.370	1.370	(0.285)	165751	50.0000	52.93
6	Bromomethane	94	1.614	1.614	(0.335)	97679	50.0000	60.27
7	Chloroethane	64	1.692	1.692	(0.352)	113676	50.0000	53.91
8	Trichlorofluoromethane	101	1.891	1.891	(0.393)	237705	50.0000	59.88
9	Acrolein	56	2.259	2.259	(0.469)	11511	100.000	70.69
10	Acetone	43	2.401	2.401	(0.499)	77765	100.000	78.72
11	1,1-Dichloroethene	96	2.326	2.326	(0.483)	117997	50.0000	53.54
12	Isobutyl Alcohol	43	5.280	5.280	(1.097)	311692	1000.00	727.33
13	Acetonitrile	39	2.663	2.663	(0.554)	132193	500.000	429.86
14	Allyl Chloride	41	2.667	2.667	(0.554)	293835	50.0000	41.82
15	Iodomethane	142	2.461	2.461	(0.512)	352452	100.000	123.60
16	Acrylonitrile	53	3.057	3.057	(0.635)	95862	100.000	85.52
17	Methylene Chloride	84	2.787	2.787	(0.579)	144353	50.0000	51.91
18	Methyl tert-butyl ether	73	3.072	3.072	(0.639)	362463	50.0000	45.89
19	Carbon Disulfide	76	2.513	2.513	(0.522)	703786	100.000	108.37
20	trans-1,2-Dichloroethene	96	3.053	3.053	(0.635)	140422	50.0000	53.30

21 Vinyl Acetate	43	3.601	3.601 (0.748)	690838	100.000	86.71
22 1,1-Dichloroethane	63	3.507	3.507 (0.729)	247436	50.0000	46.04

Data File: \\nahstws005\Target\chem\voa9.i\U240125.b\U012530.D Page 2
Report Date: 01-Feb-2024 14:20

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/l)	ON-COL (ug/l)
	24	2-Butanone	43	4.257	4.257	(0.885)	98194	100.000	70.15
	25	Methacrylonitrile	41	4.489	4.489	(0.933)	124222	50.0000	60.88
	26	2,2-Dichloropropane	77	4.178	4.178	(0.868)	164464	50.0000	43.53
	27	cis-1,2-Dichloroethene	96	4.193	4.193	(0.871)	161736	50.0000	45.82
	28	Chloroform	83	4.568	4.568	(0.949)	264180	50.0000	45.16
	29	Bromochloromethane	128	4.463	4.463	(0.928)	91621	50.0000	50.17
$	30	Dibromofluoromethane	113	4.744	4.744	(0.986)	154431	50.0000	52.86
	31	1,1,1-Trichloroethane	97	4.740	4.740	(0.985)	219549	50.0000	49.39
	32	1,1-Dichloropropene	75	4.920	4.920	(0.887)	177245	50.0000	49.37
	33	1,2-Dichloroethane	62	5.171	5.171	(0.932)	180913	50.0000	43.27
	34	Carbon Tetrachloride	117	4.909	4.909	(0.885)	189035	50.0000	53.91
$	35	1,2-Dichloroethane-d4	65	5.093	5.093	(1.058)	153864	50.0000	46.10
*	36	1,4-Difluorobenzene	114	5.550	5.550	(1.000)	429054	50.0000	
	37	Benzene	78	5.134	5.134	(0.925)	546188	50.0000	46.76
	38	Trichloroethene	130	5.786	5.786	(1.043)	166493	50.0000	51.71
	39	Bromodichloromethane	83	6.273	6.273	(1.130)	188891	50.0000	49.38
	40	Methyl Methacrylate	41	6.153	6.153	(1.279)	105879	50.0000	37.54
	41	2-Chloroethylvinyl ether	63	6.577	6.577	(1.185)	4541	100.000	121.28
	42	1,2-Dichloropropane	63	6.007	6.007	(1.082)	137188	50.0000	43.62
	43	2-Nitropropane	43	6.506	6.506	(1.352)	28276	50.0000	38.54
	44	Dibromomethane	93	6.116	6.116	(1.102)	95576	50.0000	46.97
	45	4-Methyl-2-Pentanone	43	6.851	6.851	(0.837)	242817	100.000	77.21
	46	cis-1,3-Dichloropropene	75	6.689	6.689	(1.205)	218182	50.0000	44.43
*	47	Chlorobenzene-d5	117	8.185	8.185	(1.000)	435641	50.0000	
$	48	Toluene-d8	98	6.922	6.922	(0.846)	526121	50.0000	52.46
	49	Ethyl Methacrylate	69	7.289	7.289	(1.313)	187190	50.0000	44.45
	50	Toluene	91	6.978	6.978	(0.853)	599464	50.0000	49.35
	51	trans-1,3-Dichloropropene	75	7.196	7.196	(1.296)	181420	50.0000	43.94
	52	2-Hexanone	43	7.589	7.589	(0.927)	157957	100.000	71.84
	53	1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	111033	50.0000	47.73
	54	1,3-Dichloropropane	76	7.495	7.495	(0.916)	234922	50.0000	43.55
	55	Dibromochloromethane	129	7.690	7.690	(0.940)	163608	50.0000	50.49
	56	Tetrachloroethene	164	7.454	7.454	(0.911)	142850	50.0000	54.94
	57	1,2-Dibromoethane	107	7.784	7.784	(0.951)	143936	50.0000	47.55
	58	1-Chlorohexane	55	8.196	8.196	(1.477)	105303	50.0000	43.76
	59	Chlorobenzene	112	8.208	8.208	(1.003)	420216	50.0000	47.48
	60	1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	156690	50.0000	50.62
	61	Ethylbenzene	106	8.305	8.305	(1.015)	200523	50.0000	48.40
	62	m,p-Xylenes	106	8.406	8.406	(1.027)	505647	100.000	101.53
	63	o-Xylene	106	8.744	8.744	(1.068)	256899	50.0000	50.15
	64	Styrene	104	8.759	8.759	(1.070)	439034	50.0000	51.48
	66	Bromoform	173	8.916	8.916	(1.089)	109306	50.0000	49.32
	67	Isopropylbenzene	105	9.062	9.062	(1.107)	636159	50.0000	51.35
	68	1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	174678	50.0000	43.73
$	69	4-Bromofluorobenzene	95	9.194	9.194	(1.123)	190536	50.0000	50.18
*	70	1,4-Dichlorobenzene-d4	152	10.168	10.168	(1.000)	244581	50.0000	
	71	1,2,3-Trichloropropane	75	9.362	9.362	(0.921)	173735	50.0000	37.41
	72	trans-1,4-Dichloro-2-butene	53	9.377	9.377	(1.146)	32023	50.0000	40.84
	73	n-Propylbenzene	91	9.411	9.411	(0.926)	670529	50.0000	46.68
	74	Bromobenzene	156	9.317	9.317	(0.916)	188627	50.0000	45.92
	75	1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	504558	50.0000	49.43
	76	2-Chlorotoluene	91	9.482	9.482	(0.933)	435076	50.0000	45.00

77 4-Chlorotoluene	91	9.576	9.576 (0.942)	495083	50.0000	45.16
78 tert-Butylbenzene	119	9.835	9.835 (0.967)	450262	50.0000	49.11

Data File: \\nahstws005\Target\chem\voa9.i\U240125.b\U012530.D Page 3
Report Date: 01-Feb-2024 14:20

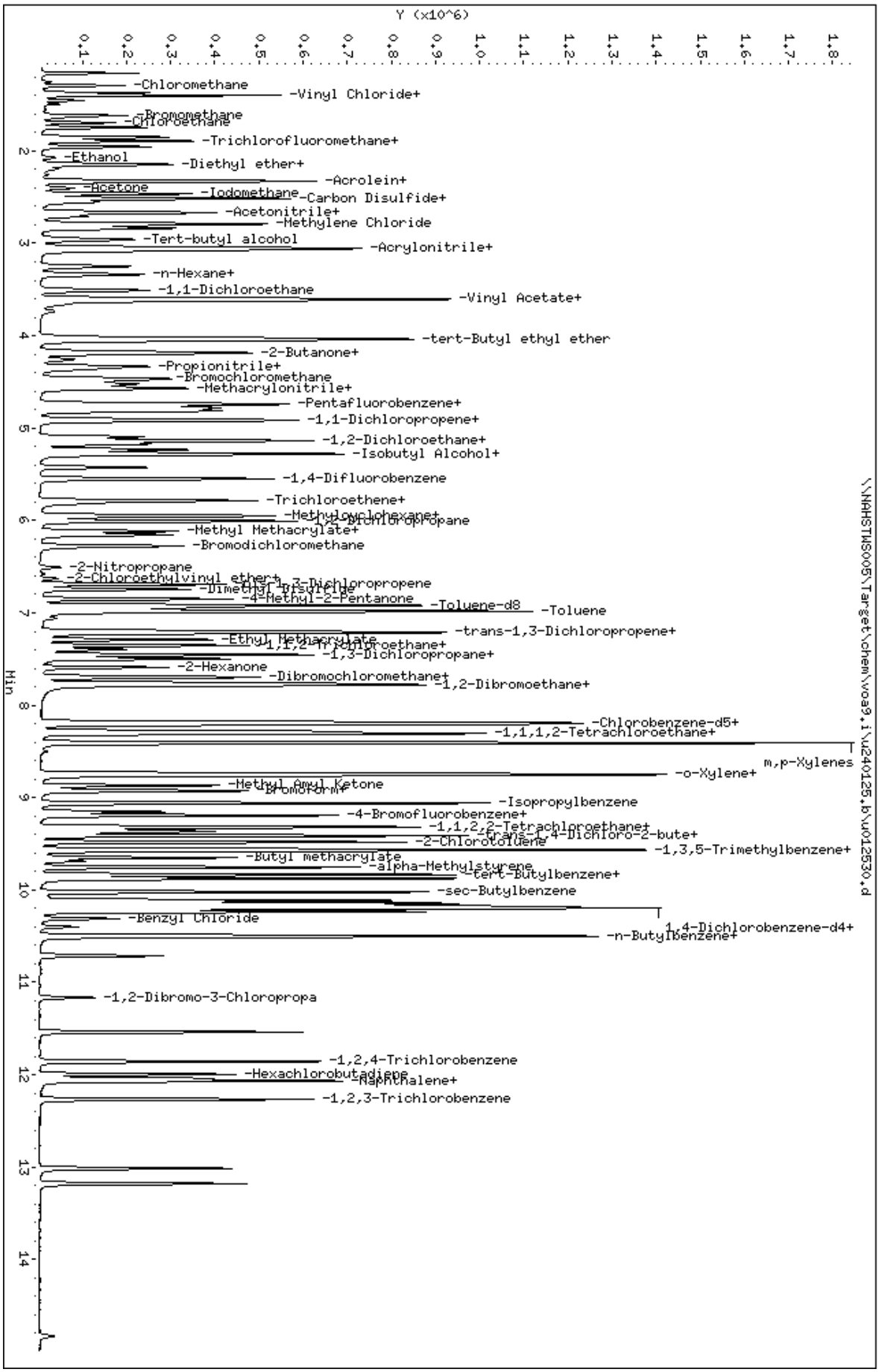
						AMOUNTS	
		QUANT SIG				CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
79	1,2,4-Trimethylbenzene	105	9.876	9.876	(0.971)	491340	50.0000	48.02
81	sec-Butylbenzene	105	10.022	10.022	(0.986)	570214	50.0000	48.23
82	p-Isopropyltoluene	119	10.146	10.146	(0.998)	516439	50.0000	50.47
83	1,3-Dichlorobenzene	146	10.116	10.116	(0.995)	333400	50.0000	45.80
84	1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	342490	50.0000	44.41
86	Benzyl Chloride	91	10.311	10.311	(1.260)	120428	50.0000	32.37
87	n-Butylbenzene	91	10.491	10.491	(1.032)	398988	50.0000	46.46
88	1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	330756	50.0000	45.17
89	1,2-Dibromo-3-Chloropropane	155	11.165	11.165	(1.098)	30202	50.0000	42.54
90	1,2,4-Trichlorobenzene	180	11.859	11.859	(1.166)	211445	50.0000	46.80
91	Hexachlorobutadiene	225	11.998	11.998	(1.180)	87976	50.0000	48.58
92	Naphthalene	128	12.065	12.065	(1.187)	497549	50.0000	45.67
93	1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	205860	50.0000	45.19
130	Ethyl Acetate	43	4.335	4.335	(0.901)	123189	50.0000	35.49
131	Methyl Acrylate	55	4.362	4.362	(0.907)	145197	50.0000	38.68
132	n-Butanol	56	5.816	5.816	(1.209)	63742	1000.00	686.38
133	Ethyl Acrylate	55	5.943	5.943	(1.235)	278027	50.0000	40.48
134	Cyclohexanone	55	9.152	9.152	(0.900)	108518	1000.00	670.59
135	1,4-Dioxane	88	6.161	6.161	(1.280)	35736	1000.00	788.27
136	n-Hexane	57	3.338	3.338	(0.694)	116578	50.0000	43.89
138	Freon TF	101	2.330	2.330	(0.484)	123927	50.0000	58.57
146	Methyl Acetate	43	2.705	2.705	(0.562)	107884	50.0000	37.93
147	Methylcyclohexane	55	5.943	5.943	(1.071)	278027	50.0000	43.71
149	Isopropyl alcohol	45	2.555	2.555	(0.531)	149715	1000.00	826.60
152	Amyl alcohol	42	7.394	7.394	(0.903)	66465	1000.00	687.84
150	Allyl alcohol	57	3.338	3.338	(0.694)	116745	1000.00	879.07
151	4-Methyl-2-pentanol	45	7.214	7.214	(1.300)	489437	1000.00	717.73
148	Tert-butyl alcohol	59	2.960	2.960	(0.615)	251515	1000.00	786.28
139	Diethyl ether	59	2.139	2.139	(0.445)	99079	50.0000	42.52
140	1,3-Butadiene	54	1.396	1.396	(0.290)	150237	50.0000	52.35
141	Cyclohexane	56	4.781	4.781	(0.994)	181485	50.0000	44.07
142	Tetrahydrofuran	42	4.538	4.538	(0.943)	41778	100.000	68.88
145	alpha-Methylstyrene	118	9.752	9.752	(0.959)	212981	50.0000	43.18
156	Diisopropyl ether	45	3.616	3.616	(0.751)	404795	50.0000	40.66
158	Dichlorofluoromethane	67	1.854	1.854	(0.385)	233737	50.0000	53.66
159	Propylene oxide	43	2.195	2.195	(0.456)	14598	100.000	94.13
162	Butyl acrylate	55	8.733	8.733	(1.067)	200369	50.0000	32.77
163	Butyl methacrylate	41	9.647	9.647	(0.949)	103674	50.0000	31.85
164	Dicyclopentadiene	66	10.198	10.198	(1.003)	557352	50.0000	42.74
166	1,2,3-Trimethylbenzene	105	10.232	10.232	(1.006)	475316	50.0000	47.09
167	Ethanol	45	2.071	2.071	(0.431)	30101	1000.00	840.14
172	tert-Butyl formate	59	5.235	5.235	(1.088)	163793	100.000	75.83
173	3,3-Dimethyl-1-butanol	57	7.777	7.777	(0.950)	263311	1000.00	732.62
174	tert-Amyl methyl ether	73	5.280	5.280	(1.097)	370927	50.0000	41.84
175	tert-Butyl ethyl ether	59	4.043	4.043	(0.840)	386555	50.0000	43.56
176	tert-Amyl alcohol	59	5.235	5.235	(1.088)	163793	1000.00	759.81
182	Epichlorohydrin	57	6.630	6.630	(1.195)	26415	200.000	158.48
185	Isoprene	39	2.150	2.150	(0.447)	27871	50.0000	41.89
187	n-Amyl acetate	43	8.931	8.931	(1.091)	168412	50.0000	30.50
188	Isopropyl acetate	43	5.280	5.280	(0.951)	315704	50.0000	39.88
189	n-Butyl acetate	43	7.705	7.705	(0.941)	175327	50.0000	36.13
195	Methyl Amyl Ketone	43	8.867	8.867	(1.083)	211342	50.0000	31.60

200 Dimethyl Disulfide	94	6.746	6.746 (0.824)	174540	50.0000	45.81
203 2-Ethylhexyl Acrylate	55	12.039	12.039 (1.184)	124029	50.0000	35.12

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	
M 94 1,2-Dichloroethylene (total)	96				302158	100.000		(a)
M 95 Xylenes (total)	106				762546	150.000		(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).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0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0 1.1 1.2 1.3 1.4 1.5 1.6 1.7 1.8
Min
1 2 3 4 5 6 7 8 9 10 11 12 13 14
-Chloromethane
-Vinyl Chloride+
-Bromomethane
-Chloroethane
-Trichlorofluoromethane+
-Ethanol
-Diethyl ether+
-Acrolein+
-Acetone
-Iodomethane
-Carbon Disulfide+
-Acetonitrile+
-Methylene Chloride
-Tert-butyl alcohol
-Acrylonitrile+
-n-Hexane+
-1,1-Dichloroethane
-Vinyl Acetate+
-tert-Butyl ethyl ether
-2-Butanone+
-Propionitrile+
-Bromochloromethane
-Methacrylonitrile+
-Pentafluorobenzene+
-1,1-Dichloropropene+
-1,2-Dichloroethane+
-Isobutyl Alcohol+
-1,4-Difluorobenzene
-Trichloroethene+
-Methylcyclohexane+
-1,2-Dichloropropane
-Methyl Methacrylate+
-Bromodichloromethane
-2-Nitropropane
-2-Chloroethylvinyl ether+
-cis-1,3-Dichloropropene
-Dimethyl Disulfide
-4-Methyl-2-Pentanone
-Toluene-d8
-Toluene
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-Ethyl Methacrylate
-1,1,2-Trichloroethane+
-1,3-Dichloropropane+
-2-Hexanone
-Dibromochloromethane+
-1,2-Dibromoethane+
-Chlorobenzene-d5+
-1,1,1,2-Tetrachloroethane+
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-o-Xylene+
-Methyl Amyl Ketone
-Bromoform+
-Isopropylbenzene
-4-Bromofluorobenzene+
-1,1,2,2-Tetrachloroethane+
-trans-1,4-Dichloro-2-bute+
-2-Chlorotoluene
-1,3,5-Trimethylbenzene+
-Butyl methacrylate
-alpha-Methylstyrene
-tert-Butylbenzene+
-sec-Butylbenzene
-Benzyl Chloride
1,4-Dichlorobenzene-d4+
-n-Butylbenzene+
-1,2-Dibromo-3-Chloropropa
-1,2,4-Trichlorobenzene
-Hexachlorobutadiene
-Naphthalene+
-1,2,3-Trichlorobenzene
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Date : 25-JAN-2024 21:05
Client ID: CCV-END
Sample Info: CCV-END;CCV-END;2;;;
Purge Volume: 5.0
Column phase: DB624
Instrument: VOA9.i
Operator: PC
Column diameter: 0.18
Page 1

Data File : \\nahstws005\target\chem\voa9.i\u240125.b\u012530.d
Inj Date : 25-JAN-2024 21:05
InstruID : VOA9.i
LabSampID : CCV-END

NO MANUAL INTEGRATIONS

right solutions.
right partner.

RawData

Volatiles by EPA Volatiles Organics by Method 8260C

Workorder

HS24011111

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

02/02/2024

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

Data File: \\nahstws005\Target\chem\voa9.i\U240126.b\U012601.D Page 1
Report Date: 26-Jan-2024 12:01

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240126.b\U012601.D
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Inj Date : 26-JAN-2024 11:12
Operator : PC Inst ID: VOA9.i
Smp Info : BFB;BFB;3;;BFB
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240126.b\bfb.m
Meth Date : 27-Jan-2023 08:08 apoluri Quant Type: ISTD
Cal Date : 30-MAR-2018 18:09 Cal File: U033003.d
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: NAHSTW7066

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	2.000	Injection Volume
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/l)		
RT	EXP RT	REL RT	MASS	RESPONSE			TARGET RANGE	RATIO
1 bfb							CAS #: 460-00-4	
9.194	9.180	(0.000)	95	93816			0.00- 100.00	100.00
9.194	9.180	(0.000)	50	15014			15.00- 40.00	16.00
9.194	9.180	(0.000)	75	42288			30.00- 60.00	45.08
9.194	9.180	(0.000)	96	6192			5.00- 9.00	6.60
9.194	9.180	(0.000)	173	0	0.0	0.0	0.00- 2.00	0.00
9.194	9.180	(0.000)	174	88848			50.00- 0.00	94.70
9.194	9.180	(0.000)	175	7815			5.00- 9.00	8.80
9.194	9.180	(0.000)	176	87424			95.00- 101.00	98.40
9.194	9.180	(0.000)	177	5719			5.00- 9.00	6.54

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	16.00
75	30.00 - 60.00% of mass 95	45.08
96	5.00 - 9.00% of mass 95	6.60
173	Less than 2.00% of mass 174	0.00 (0.00)
174	Greater than 50.00% of mass 95	94.70
175	5.00 - 9.00% of mass 174	8.33 (8.80)
176	95.00 - 101.00% of mass 174	93.19 (98.40)
177	5.00 - 9.00% of mass 176	6.10 (6.54)

Data File: U012601.D
Spectrum: Scan 2293 (9.19)
Location of Maximum: 95.05
Number of points: 93

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.20	87	64.00	458	94.10	10695	140.00	151
36.00	685	65.00	513	95.10	93816	140.90	829
37.10	3805	66.00	83	96.10	6192	143.00	988
38.00	3155	68.00	8527	97.00	240	143.90	90
39.10	1458	69.10	8729	104.00	281	144.90	173
40.00	1200	70.00	777	104.90	139	145.90	118
43.20	136	71.00	136	105.80	259	147.00	71
44.00	499	71.90	411	106.90	145	147.90	283
45.00	738	73.10	3693	109.80	78	149.80	134
46.40	103	74.10	13996	112.80	62	153.70	96
47.00	1112	75.10	42288	114.80	84	155.00	107
48.00	472	76.10	4348	115.90	333	156.90	155
49.00	2926	76.90	610	116.90	633	158.70	83
50.10	15014	78.00	448	117.90	404	160.90	73
51.10	4666	79.00	2157	118.90	481	171.10	112
52.00	284	79.90	697	123.90	55	172.00	1010
55.10	183	80.90	2234	127.90	331	174.00	88848
56.10	895	81.90	494	128.80	148	175.00	7815
57.00	2041	86.20	207	129.80	402	176.00	87424
58.10	174	87.00	3945	130.90	173	177.00	5719
60.00	1012	88.00	3964	133.10	68	177.90	157
61.10	4111	90.80	356	134.90	157		
62.10	3717	92.00	2605	136.10	52		
63.10	2826	93.00	3995	136.80	156		

Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012601.d Page 1

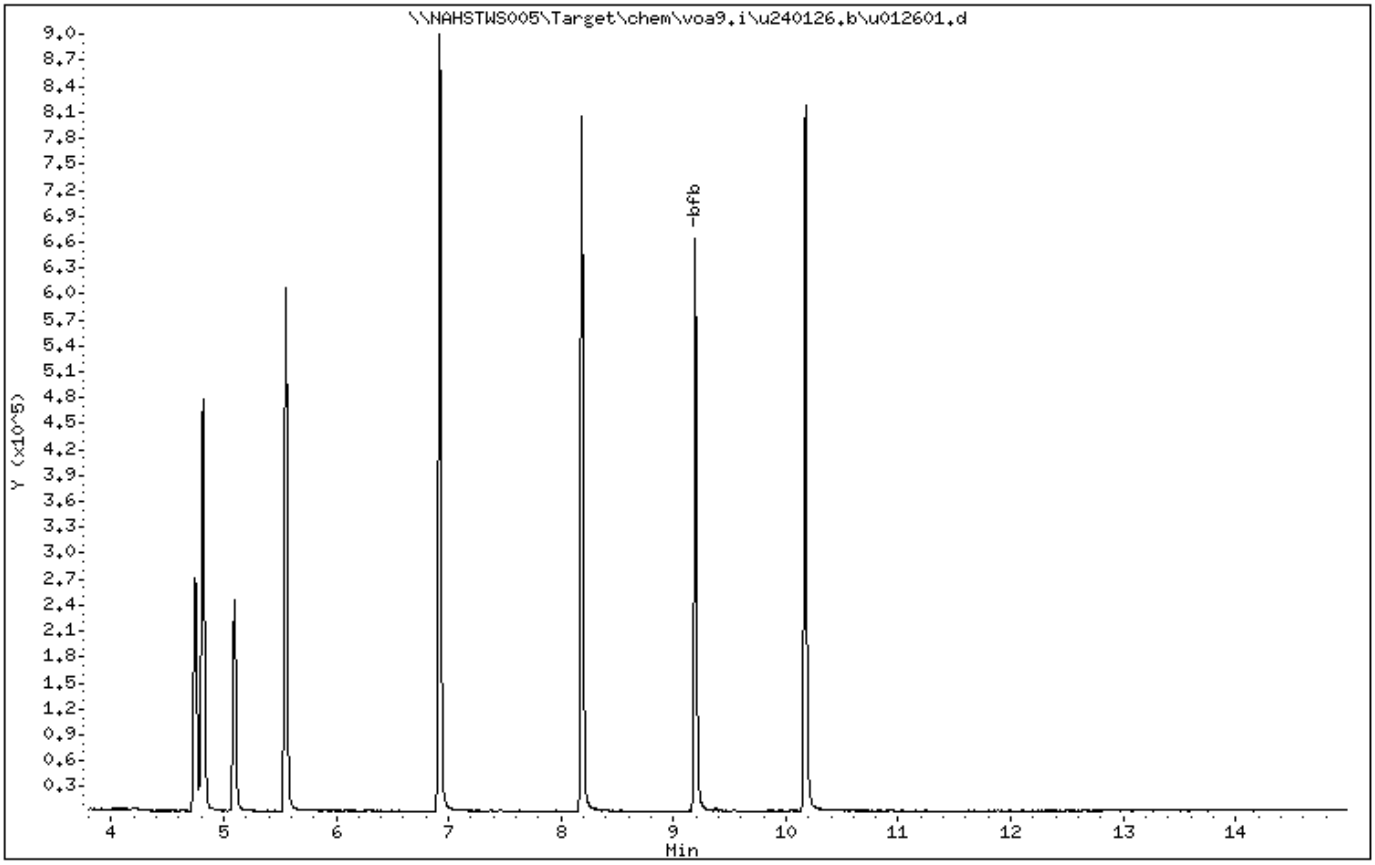
Date : 26-JAN-2024 11:12

Client ID: BFB Instrument: VOA9.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0 Operator: PC

Column phase: DB624 Column diameter: 0.25



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Inj Date : 26-JAN-2024 11:12
InstruID : VOA9.i
LabSampID : BFB

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240126.b\U012602A.D Page 1
Report Date: 26-Jan-2024 13:25

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240126.b\U012602A.D
Lab Smp Id: CCV   Client Smp ID: CCV
Inj Date : 26-JAN-2024 11:56
Operator : PC   Inst ID: VOA9.i
Smp Info : CCV;CCV;2;;;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240126.b\8260C.m
Meth Date : 26-Jan-2024 13:25 firat.tast Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11   Cal File: U120608.D
Als bottle: 2   Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7066

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.819	4.819	(1.000)	247553	50.0000	
2 Dichlorodifluoromethane	85	1.168	1.168	(0.242)	118664	50.0000	59.30
3 Chloromethane	50	1.303	1.303	(0.270)	127688	50.0000	44.96
4 Propionitrile	54	4.335	4.335	(0.900)	160524	500.000	391.09
5 Vinyl Chloride	62	1.381	1.381	(0.287)	149808	50.0000	55.22
6 Bromomethane	94	1.625	1.625	(0.337)	86266	50.0000	61.37
7 Chloroethane	64	1.704	1.704	(0.354)	93538	50.0000	51.21
8 Trichlorofluoromethane	101	1.899	1.899	(0.394)	198932	50.0000	57.85
9 Acrolein	56	2.266	2.266	(0.470)	11656	100.000	82.62
10 Acetone	43	2.408	2.408	(0.500)	86281	100.000	102.52
11 1,1-Dichloroethene	96	2.337	2.337	(0.485)	106603	50.0000	55.83
12 Isobutyl Alcohol	43	5.284	5.284	(1.096)	276394	1000.00	744.45
13 Acetonitrile	39	2.675	2.675	(0.555)	124307	500.000	466.56
14 Allyl Chloride	41	2.675	2.675	(0.555)	273532	50.0000	44.94
15 Iodomethane	142	2.472	2.472	(0.513)	312304	100.000	126.16
16 Acrylonitrile	53	3.065	3.065	(0.636)	94655	100.000	97.47
17 Methylene Chloride	84	2.798	2.798	(0.581)	136107	50.0000	56.52
18 Methyl tert-butyl ether	73	3.079	3.079	(0.639)	350459	50.0000	51.22
19 Carbon Disulfide	76	2.525	2.525	(0.524)	651859	100.000	115.86
20 trans-1,2-Dichloroethene	96	3.061	3.061	(0.635)	131474	50.0000	57.60

21 Vinyl Acetate	43	3.608	3.608 (0.749)	626850	100.000	90.82
22 1,1-Dichloroethane	63	3.514	3.514 (0.729)	211500	50.0000	45.42

Data File: \\nahstws005\Target\chem\voa9.i\U240126.b\U012602A.D Page 2
Report Date: 26-Jan-2024 13:25

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/l)	ON-COL (ug/l)
	24	2-Butanone	43	4.260	4.260	(0.884)	89965	100.000	74.18
	25	Methacrylonitrile	41	4.493	4.493	(0.932)	106702	50.0000	60.36(a)
	26	2,2-Dichloropropane	77	4.185	4.185	(0.869)	163216	50.0000	49.86
	27	cis-1,2-Dichloroethene	96	4.197	4.197	(0.871)	141524	50.0000	46.28
	28	Chloroform	83	4.575	4.575	(0.949)	223851	50.0000	44.17
	29	Bromochloromethane	128	4.470	4.470	(0.928)	76752	50.0000	48.51
$	30	Dibromofluoromethane	113	4.748	4.748	(0.985)	139126	50.0000	55.01
	31	1,1,1-Trichloroethane	97	4.744	4.744	(0.984)	187996	50.0000	48.81
	32	1,1-Dichloropropene	75	4.924	4.924	(0.887)	157663	50.0000	51.69
	33	1,2-Dichloroethane	62	5.175	5.175	(0.932)	157931	50.0000	44.46
	34	Carbon Tetrachloride	117	4.913	4.913	(0.885)	165651	50.0000	55.60
$	35	1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	140608	50.0000	48.49
*	36	1,4-Difluorobenzene	114	5.554	5.554	(1.000)	364543	50.0000	
	37	Benzene	78	5.141	5.141	(0.926)	472185	50.0000	47.58
	38	Trichloroethene	130	5.790	5.790	(1.043)	142722	50.0000	52.18
	39	Bromodichloromethane	83	6.277	6.277	(1.130)	160901	50.0000	49.51
	40	Methyl Methacrylate	41	6.153	6.153	(1.277)	92621	50.0000	37.90
	41	2-Chloroethylvinyl ether	63	6.577	6.577	(1.184)	5082	100.000	156.07
	42	1,2-Dichloropropane	63	6.011	6.011	(1.082)	119928	50.0000	44.88
	43	2-Nitropropane	43	6.510	6.510	(1.351)	24762	50.0000	38.96
	44	Dibromomethane	93	6.120	6.120	(1.102)	82388	50.0000	47.66
	45	4-Methyl-2-Pentanone	43	6.851	6.851	(0.837)	224055	100.000	83.68
	46	cis-1,3-Dichloropropene	75	6.689	6.689	(1.205)	193276	50.0000	46.26
*	47	Chlorobenzene-d5	117	8.185	8.185	(1.000)	371067	50.0000	
$	48	Toluene-d8	98	6.922	6.922	(0.846)	482669	50.0000	56.50
	49	Ethyl Methacrylate	69	7.289	7.289	(1.312)	169061	50.0000	47.25
	50	Toluene	91	6.982	6.982	(0.853)	523100	50.0000	50.55
	51	trans-1,3-Dichloropropene	75	7.196	7.196	(1.296)	162806	50.0000	46.31
	52	2-Hexanone	43	7.589	7.589	(0.927)	151518	100.000	80.91
	53	1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	99572	50.0000	50.32
	54	1,3-Dichloropropane	76	7.499	7.499	(0.916)	201800	50.0000	43.92
	55	Dibromochloromethane	129	7.690	7.690	(0.940)	144551	50.0000	52.37
	56	Tetrachloroethene	164	7.458	7.458	(0.911)	129590	50.0000	58.51
	57	1,2-Dibromoethane	107	7.784	7.784	(0.951)	127422	50.0000	49.42
	58	1-Chlorohexane	55	8.196	8.196	(1.476)	98243	50.0000	48.06
	59	Chlorobenzene	112	8.208	8.208	(1.003)	368265	50.0000	48.86
	60	1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	133634	50.0000	50.68
	61	Ethylbenzene	106	8.305	8.305	(1.015)	176278	50.0000	49.96
	62	m,p-Xylenes	106	8.406	8.406	(1.027)	456519	100.000	107.62
	63	o-Xylene	106	8.748	8.748	(1.069)	227760	50.0000	52.20
	64	Styrene	104	8.759	8.759	(1.070)	386232	50.0000	53.17
	66	Bromoform	173	8.916	8.916	(1.089)	93987	50.0000	49.78
	67	Isopropylbenzene	105	9.062	9.062	(1.107)	566988	50.0000	53.73
	68	1,1,2,2-Tetrachloroethane	83	9.325	9.325	(0.917)	155939	50.0000	45.85
$	69	4-Bromofluorobenzene	95	9.194	9.194	(1.123)	178984	50.0000	55.47
*	70	1,4-Dichlorobenzene-d4	152	10.168	10.168	(1.000)	208427	50.0000	
	71	1,2,3-Trichloropropane	75	9.362	9.362	(0.921)	158366	50.0000	40.02
	72	trans-1,4-Dichloro-2-butene	53	9.377	9.377	(1.146)	29425	50.0000	44.06
	73	n-Propylbenzene	91	9.411	9.411	(0.926)	637947	50.0000	52.12
	74	Bromobenzene	156	9.317	9.317	(0.916)	166770	50.0000	47.64
	75	1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	456070	50.0000	52.43
	76	2-Chlorotoluene	91	9.482	9.482	(0.933)	385287	50.0000	46.77

77 4-Chlorotoluene	91	9.576	9.576 (0.942)	439968	50.0000	47.09
78 tert-Butylbenzene	119	9.835	9.835 (0.967)	401911	50.0000	51.44

Data File: \\nahstws005\Target\chem\voa9.i\U240126.b\U012602A.D Page 3
Report Date: 26-Jan-2024 13:25

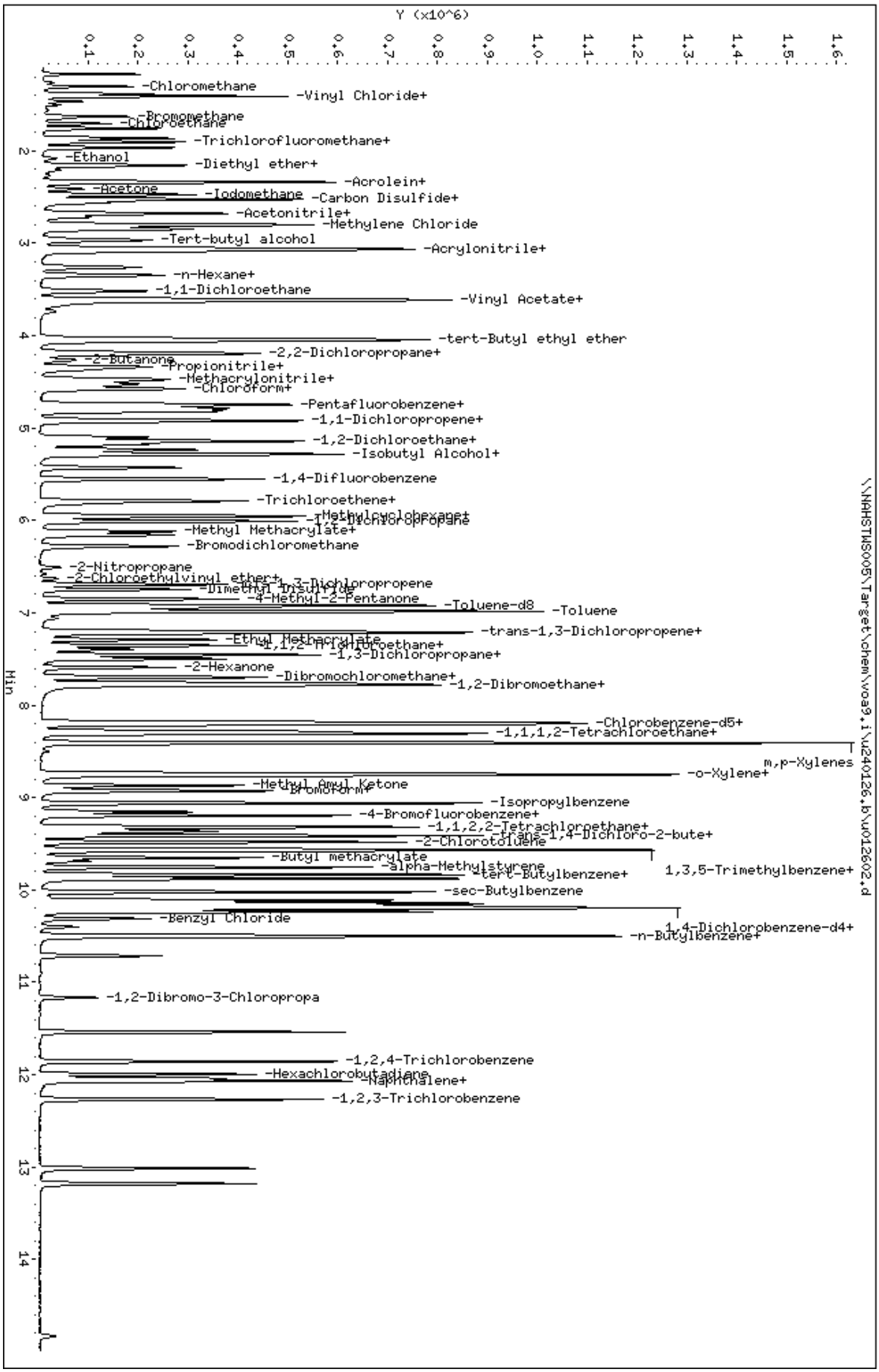
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
79	1,2,4-Trimethylbenzene	105	9.876	9.876	(0.971)	452738	50.0000	51.93
81	sec-Butylbenzene	105	10.022	10.022	(0.986)	528653	50.0000	52.47
82	p-Isopropyltoluene	119	10.146	10.146	(0.998)	485473	50.0000	55.68
83	1,3-Dichlorobenzene	146	10.116	10.116	(0.995)	301471	50.0000	48.60
84	1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	309891	50.0000	47.16
86	Benzyl Chloride	91	10.311	10.311	(1.260)	150505	50.0000	45.93
87	n-Butylbenzene	91	10.491	10.491	(1.032)	386095	50.0000	52.76
88	1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	292260	50.0000	46.83
89	1,2-Dibromo-3-Chloropropane	155	11.165	11.165	(1.098)	28464	50.0000	46.82
90	1,2,4-Trichlorobenzene	180	11.859	11.859	(1.166)	197051	50.0000	51.18
91	Hexachlorobutadiene	225	11.998	11.998	(1.180)	87359	50.0000	56.61
92	Naphthalene	128	12.065	12.065	(1.187)	460784	50.0000	49.63
93	1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	189151	50.0000	48.72
146	Methyl acetate	43	2.716	2.716	(0.564)	97271	50.0000	39.48
138	Freon TF	101	2.341	2.341	(0.486)	121977	50.0000	66.24
141	Cyclohexane	56	4.785	4.785	(0.993)	168605	50.0000	47.26
142	Tetrahydrofuran	42	4.541	4.541	(0.942)	38631	100.000	73.51
147	Methylcyclohexane	55	5.947	5.947	(1.071)	265184	50.0000	49.07
135	1,4-Dioxane	88	6.165	6.165	(1.279)	32643	1000.00	831.11
132	n-Butanol	56	5.816	5.816	(1.207)	65565	1000.00	814.91
136	n-Hexane	57	3.346	3.346	(0.694)	124443	50.0000	54.07
139	Diethyl ether	59	2.146	2.146	(0.445)	96455	50.0000	47.78
148	Tert-butyl alcohol	59	2.963	2.963	(0.615)	257006	1000.00	927.37
149	Isopropyl alcohol	45	2.558	2.558	(0.531)	152908	1000.00	975.79
152	Amyl alcohol	42	7.394	7.394	(0.903)	65055	1000.00	790.41
156	Diisopropyl ether	45	3.623	3.623	(0.752)	357362	50.0000	41.43
162	Butyl acrylate	55	8.733	8.733	(1.067)	196233	50.0000	37.19
187	n-Amyl acetate	43	8.931	8.931	(1.091)	170247	50.0000	36.19
164	Dicyclopentadiene	66	10.198	10.198	(1.003)	503298	50.0000	45.29
166	1,2,3-Trimethylbenzene	105	10.232	10.232	(1.006)	420691	50.0000	48.91
167	Ethanol	45	2.082	2.082	(0.432)	28572	1000.00	920.64
172	tert-Butyl formate	59	5.235	5.235	(1.086)	155378	100.000	82.66
173	3,3-Dimethyl-1-butanol	57	7.777	7.777	(0.950)	253765	1000.00	828.93
174	tert-Amyl methyl ether	73	5.284	5.284	(1.096)	329764	50.0000	42.94
175	tert-Butyl ethyl ether	59	4.050	4.050	(0.841)	329069	50.0000	42.80
176	tert-Amyl alcohol	59	5.235	5.235	(1.086)	155378	1000.00	828.09
151	4-Methyl-2-pentanol	45	7.214	7.214	(1.299)	466224	1000.00	799.13
140	1,3-Butadiene	54	1.408	1.408	(0.292)	139269	50.0000	56.01
158	Dichlorofluoromethane	67	1.861	1.861	(0.386)	206939	50.0000	54.84
182	Epichlorohydrin	57	6.630	6.630	(1.194)	25716	200.000	181.59
M 94	1,2-Dichloroethylene (total)	96				272998	100.000	102.24
M 95	Xylenes (total)	106				684279	150.000	162.22
145	alpha-Methylstyrene	118	9.752	9.752	(0.959)	197934	50.0000	46.95
130	Ethyl Acetate	43	4.339	4.339	(0.900)	112661	50.0000	37.46
131	Methyl Acrylate	55	4.369	4.369	(0.907)	129006	50.0000	39.67
189	n-Butyl acetate	43	7.705	7.705	(0.941)	168009	50.0000	40.64
134	Cyclohexanone	55	9.152	9.152	(0.900)	114735	1000.00	832.00
185	Isoprene	39	2.161	2.161	(0.449)	28841	50.0000	50.04
188	Isopropyl acetate	43	5.284	5.284	(0.951)	276689	50.0000	41.14
150	Allyl alcohol	57	3.346	3.346	(0.694)	124443	1000.00	1081.57
195	Methyl Amyl Ketone	43	8.867	8.867	(1.083)	212569	50.0000	36.94
200	Dimethyl Disulfide	94	6.746	6.746	(0.824)	153924	50.0000	47.26

203 2-Ethylhexyl Acrylate	55	12.039	12.039 (1.184)	121829	50.0000	40.10
133 Ethyl Acrylate	55	5.947	5.947 (1.234)	265184	50.0000	44.56

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
163 Butyl methacrylate	41	9.647	9.647	(0.949)	103148	50.0000	36.73
159 Propylene oxide	43	2.202	2.202	(0.457)	15162	100.000	112.85

QC Flag Legend

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



Data File: \\NAHSTMS005\Target\chem\voa9.i\u240126.b\u012602.d
Date : 26-JAN-2024 11:56
Client ID: CCV
Sample Info: CCV;CCV;2;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9.i
Operator: PC
Column diameter: 0.18

Data File : \\nahstws005\target\chem\voa9.i\u240126.b\u012602.d
Inj Date : 26-JAN-2024 11:56
InstruID : VOA9.i
LabSampID : CCV

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240126.b\U012603.D Page 1
Report Date: 26-Jan-2024 12:35

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240126.b\U012603.D
Lab Smp Id: VLCSW-240126 Client Smp ID: VLCSW-240126
Inj Date : 26-JAN-2024 12:18
Operator : PC Inst ID: VOA9.i
Smp Info : VLCSW-240126;VLCSW-240126;3;;LCS
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240126.b\8260C.m
Meth Date : 26-Jan-2024 12:12 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 3 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 000bhatebtex.sub
Target Version: 4.14
Processing Host: NAHSTWS005

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

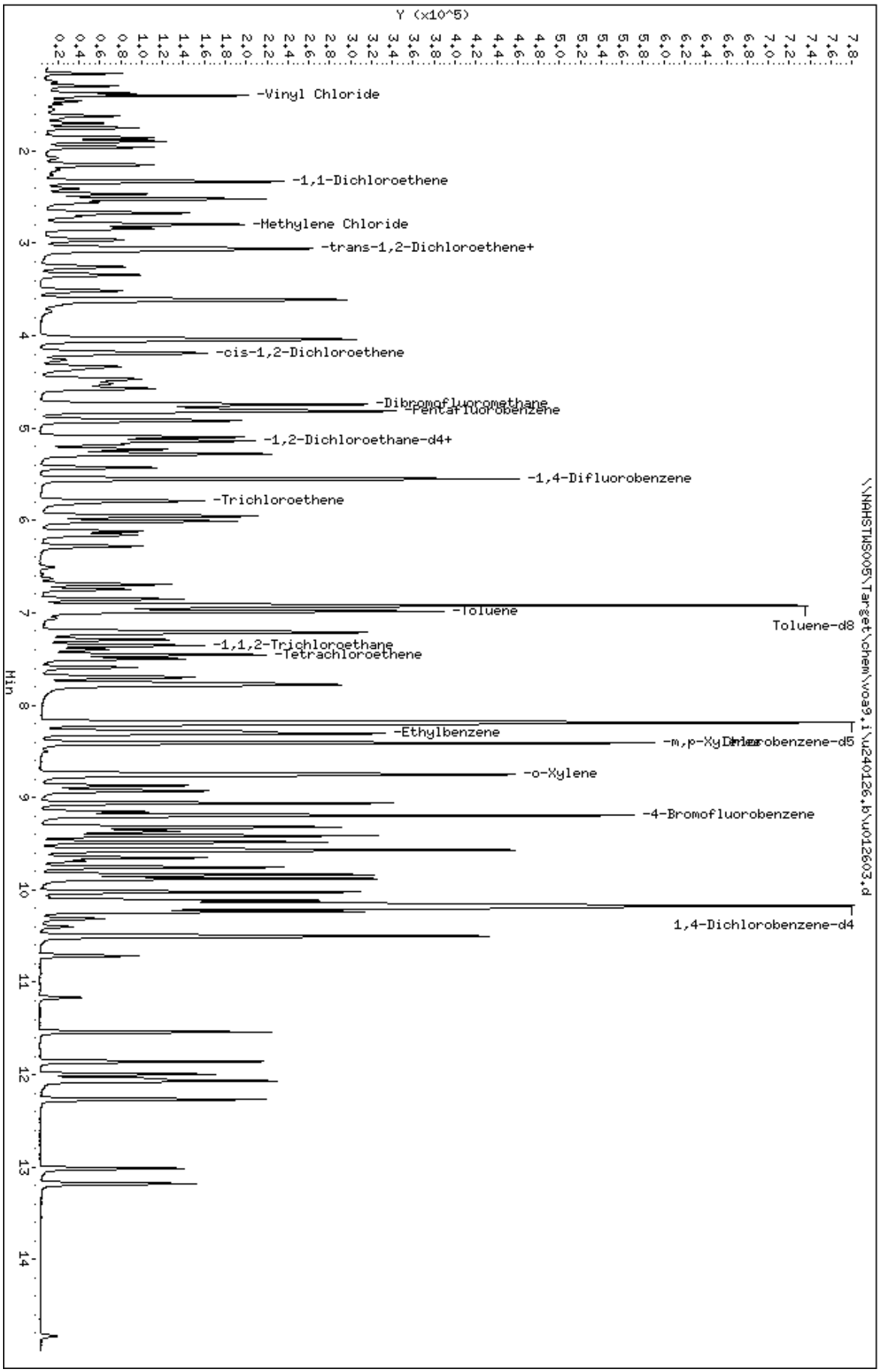
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.815	4.819	(1.000)	250269	50.0000	
$ 30 Dibromofluoromethane	113	4.748	4.748	(0.986)	127264	49.6813	49.68
$ 35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	127755	43.8172	43.81
* 36 1,4-Difluorobenzene	114	5.550	5.554	(1.000)	377862	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	378671	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	453535	52.0281	52.02
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	163596	49.5546	49.55
* 70 1,4-Dichlorobenzene-d4	152	10.168	10.168	(1.000)	213915	50.0000	
5 Vinyl Chloride	62	1.374	1.381	(0.285)	55481	20.2294	20.22
11 1,1-Dichloroethene	96	2.330	2.337	(0.484)	43099	22.3279	22.32
17 Methylene Chloride	84	2.791	2.798	(0.580)	47576	19.3694	19.36
20 trans-1,2-Dichloroethene	96	3.057	3.061	(0.635)	45723	19.8148	19.81
27 cis-1,2-Dichloroethene	96	4.197	4.197	(0.872)	52717	17.0543	17.05
38 Trichloroethene	130	5.790	5.790	(1.043)	55193	19.4681	19.46
53 1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	35444	16.6826	16.68
56 Tetrachloroethene	164	7.454	7.458	(0.911)	50407	22.3039	22.30
18 Methyl tert-butyl ether	73	3.076	3.079	(0.639)	123794	17.8982	17.89
33 1,2-Dichloroethane	62	5.175	5.175	(0.932)	58611	15.9201	15.92
37 Benzene	78	5.138	5.141	(0.926)	177831	17.2883	17.28
50 Toluene	91	6.978	6.982	(0.853)	199200	18.8666	18.86

61 Ethylbenzene	106	8.305	8.305 (1.015)	68699	19.0804	19.08
62 m,p-Xylenes	106	8.410	8.406 (1.027)	171198	39.5484	39.54

Data File: \\nahstws005\Target\chem\voa9.i\U240126.b\U012603.D Page 2
Report Date: 26-Jan-2024 12:35

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
63 o-Xylene	106	8.748	8.748	(1.069)	84026	18.8742	18.87
M 95 Xylenes (total)	106				255224	58.3736	58.37



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Client ID: VLCSW-240126
Sample Info: VLCSW-240126;VLCSW-240126;3;;LCS
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9.i
Operator: PC
Column diameter: 0.18

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Inj Date : 26-JAN-2024 12:18
InstruID : VOA9.i
LabSampID : VLCSW-240126

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240126.b\U012605.D Page 1
Report Date: 29-Jan-2024 09:05

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240126.b\U012605.D
Lab Smp Id: VBLKW-240126 Client Smp ID: VBLKW-240126
Inj Date : 26-JAN-2024 13:03
Operator : PC Inst ID: VOA9.i
Smp Info : VBLKW-240126;VBLKW-240126;3;;BLANK
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240126.b\8260C.m
Meth Date : 27-Jan-2024 00:13 firat.tast Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 5 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 000bhatebtex.sub
Target Version: 4.14
Processing Host: NAHSTWS005

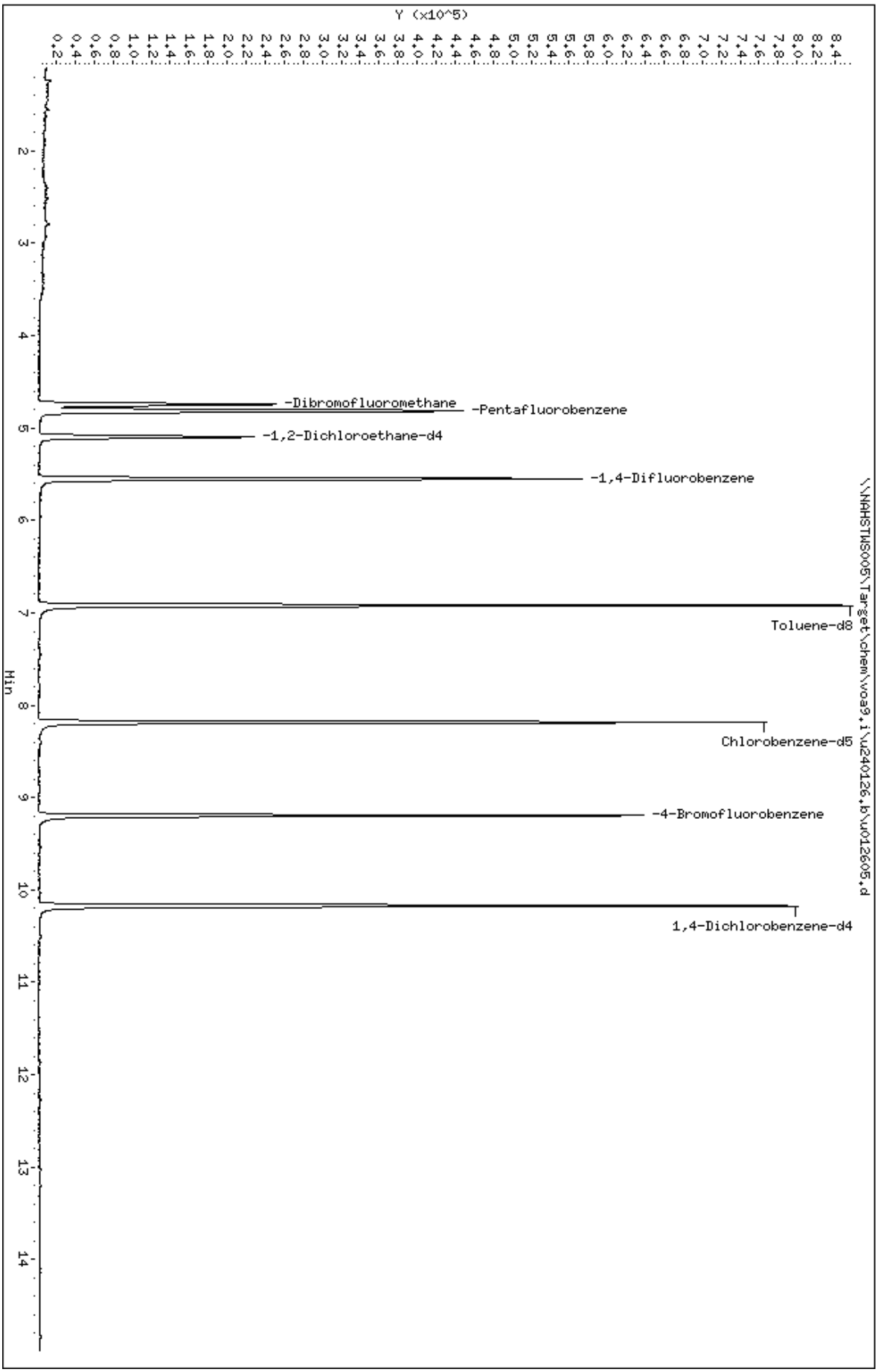
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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	4.811	4.815	(1.000)	342850	50.0000	
$ 30 Dibromofluoromethane	113	4.744	4.748	(0.986)	149621	42.4908	42.49
$ 35 1,2-Dichloroethane-d4	65	5.092	5.096	(1.058)	165356	41.5038	41.50(M)
* 36 1,4-Difluorobenzene	114	5.550	5.554	(1.000)	473196	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	444856	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	536681	52.4066	52.40
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	190847	49.1993	49.19
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	236361	50.0000	

QC Flag Legend

M - Compound response manually integrated.



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Date : 26-JAN-2024 13:03
Client ID: VBLKW-240126
Sample Info: VBLKW-240126;VBLKW-240126;3;;BLANK
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9,i
Operator: PC
Column diameter: 0.18

Data File : \\nahstws005\target\chem\voa9.i\u240126.b\u012605.d
Inj Date : 26-JAN-2024 13:03
InstruID : VOA9.i
LabSampID : VBLKW-240126

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

Reason Code:

BEFORE

MASS
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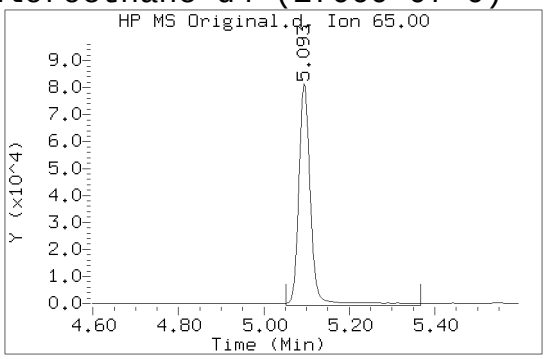
165356
HEIGHT
82136
29-Jan-2024
09:05
firat
tastan



AFTER

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HEIGHT
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29-Jan-2024
09:05
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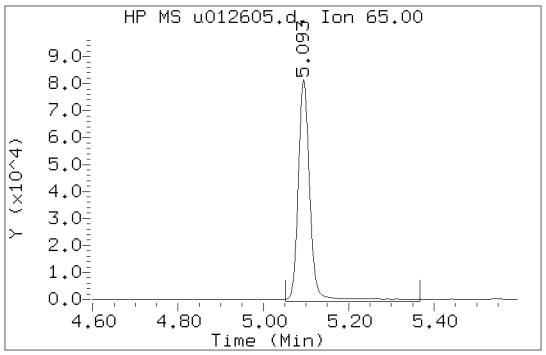

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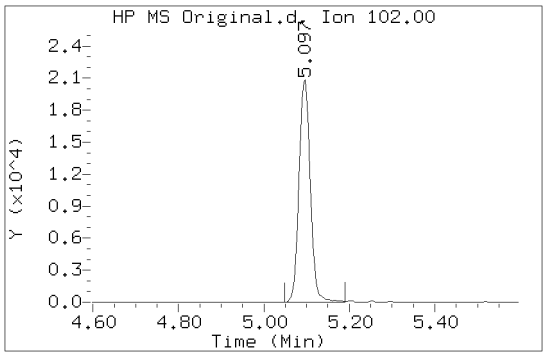

AFTER

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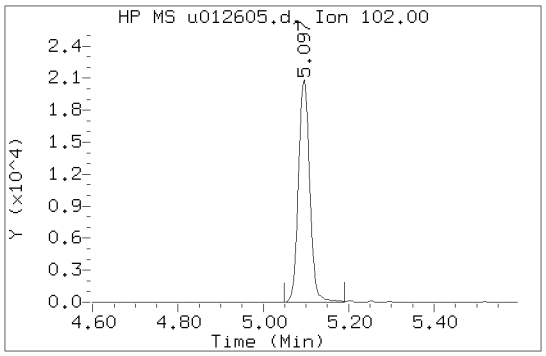


Data File: \\nahstws005\Target\chem\voa9.i\U240126.b\U012606.D Page 1
Report Date: 26-Jan-2024 14:04

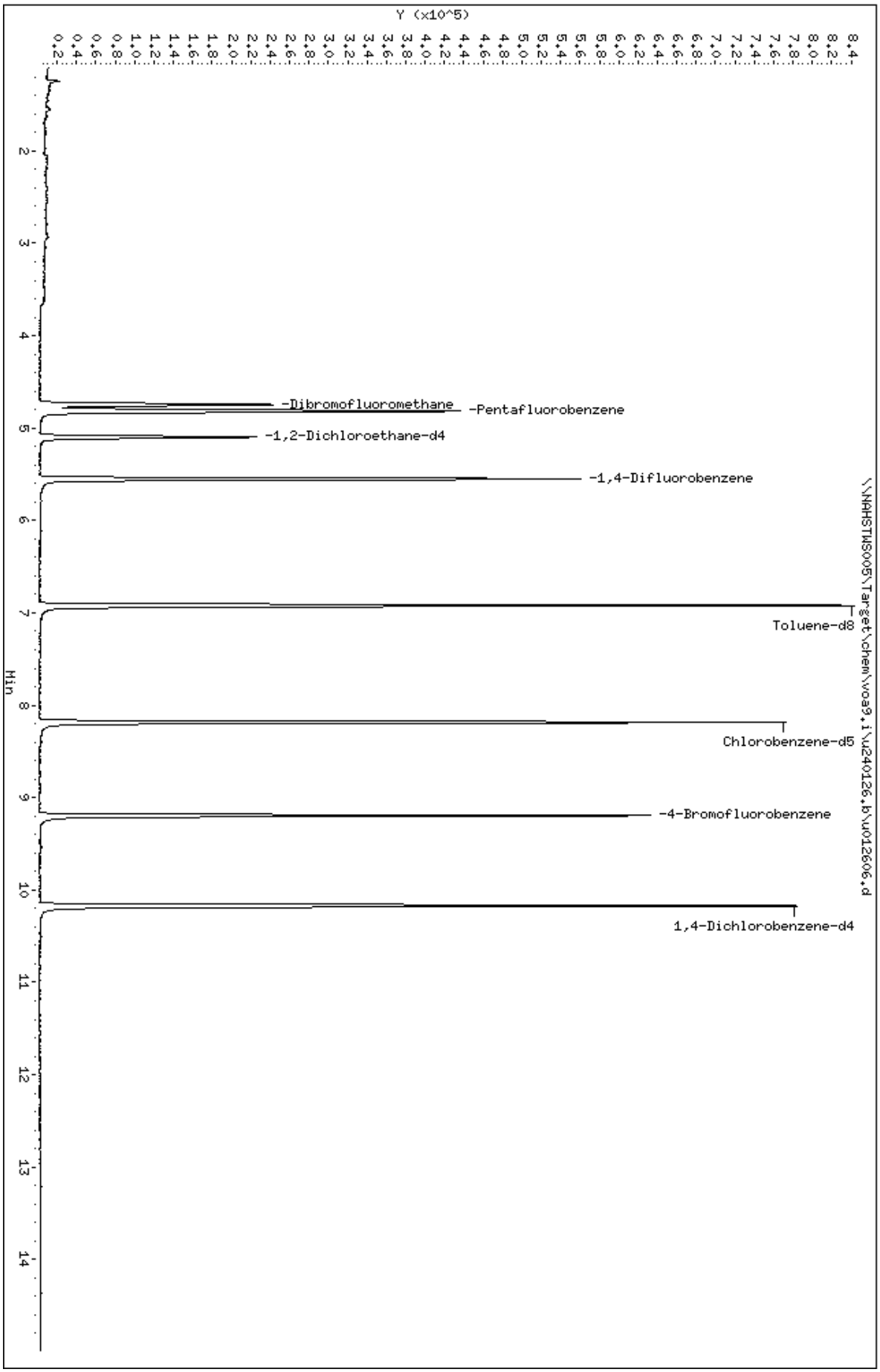
ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240126.b\U012606.D
Lab Smp Id: HS24011111-14
Inj Date : 26-JAN-2024 13:26
Operator : PC   Inst ID: VOA9.i
Smp Info : HS24011111-14
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240126.b\8260C.m
Meth Date : 26-Jan-2024 13:25 firat.tast Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11   Cal File: U120608.D
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: 000bhatebtex.sub
Target Version: 4.14
Processing Host: NAHSTWS005

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.815	4.819	(1.000)	337407	50.0000	
$ 30 Dibromofluoromethane	113	4.748	4.748	(0.986)	144161	41.5792	41.57
$ 35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	147304	37.7153	37.71
* 36 1,4-Difluorobenzene	114	5.550	5.554	(1.000)	467570	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	442508	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	533728	52.3948	52.39
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	187571	48.5959	48.59
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	230638	50.0000	



Data File: \\NAHSTWS005\Target\chem\voa9,i\u240126,b\u012606,d
Date : 26-JAN-2024 13:26
Client ID:
Sample Info: HS24011111-14
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9,i
Operator: PC
Column diameter: 0.18

Data File : \\nahstws005\target\chem\voa9.i\u240126.b\u012606.d
Inj Date : 26-JAN-2024 13:26
InstruID : VOA9.i
LabSampID : HS24011111-14

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240126.b\U012609.D Page 1
Report Date: 26-Jan-2024 14:48

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240126.b\U012609.D
Lab Smp Id: HS24011111-14MS Client Smp ID: HS24011111-14MS
Inj Date : 26-JAN-2024 14:33
Operator : PC Inst ID: VOA9.i
Smp Info : HS24011111-14MS;HS24011111-14MS;3;;MS
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240126.b\8260C.m
Meth Date : 26-Jan-2024 13:25 firat.tast Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 9 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 000bhatebtex.sub
Target Version: 4.14
Processing Host: NAHSTWS005

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

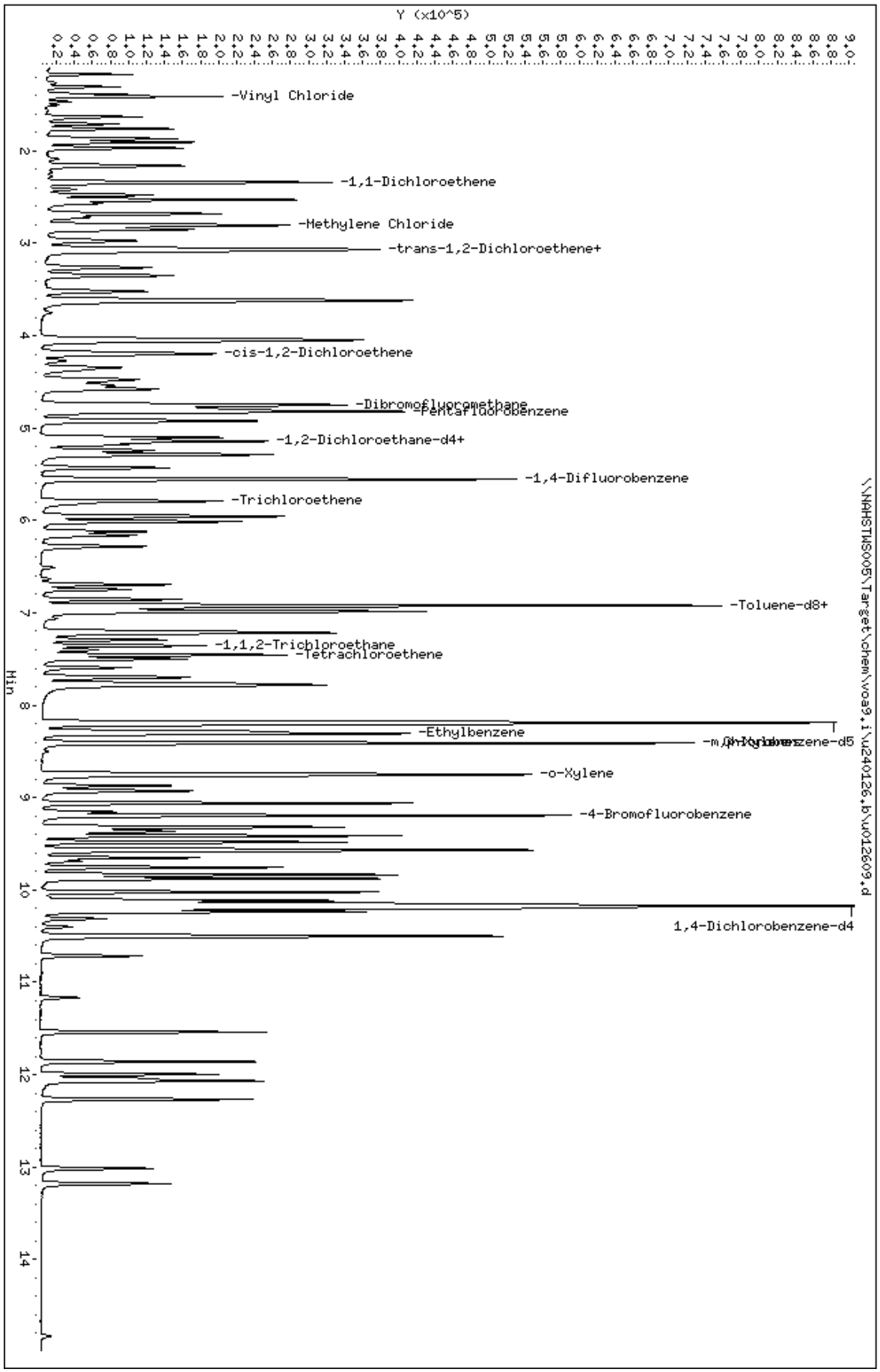
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.819	4.819	(1.000)	296077	50.0000	
$ 30 Dibromofluoromethane	113	4.751	4.748	(0.986)	129273	42.5124	42.51
$ 35 1,2-Dichloroethane-d4	65	5.100	5.096	(1.058)	131120	38.2382	38.23
* 36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	438084	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	427475	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	466534	47.4091	47.40
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	169336	45.3295	45.32
* 70 1,4-Dichlorobenzene-d4	152	10.168	10.168	(1.000)	244054	50.0000	
5 Vinyl Chloride	62	1.385	1.381	(0.288)	61334	18.9035	18.90
11 1,1-Dichloroethene	96	2.341	2.337	(0.486)	57612	25.2288	25.22
17 Methylene Chloride	84	2.802	2.798	(0.582)	63129	21.7573	21.75
20 trans-1,2-Dichloroethene	96	3.065	3.061	(0.636)	65041	23.8256	23.82
27 cis-1,2-Dichloroethene	96	4.200	4.197	(0.872)	65577	17.9323	17.93
38 Trichloroethene	130	5.790	5.790	(1.043)	68565	20.8602	20.86
53 1,1,2-Trichloroethane	83	7.357	7.353	(0.899)	43333	18.1785	18.17
56 Tetrachloroethene	164	7.458	7.458	(0.911)	62279	24.4108	24.41
18 Methyl tert-butyl ether	73	3.087	3.079	(0.641)	164063	20.0503	20.05
33 1,2-Dichloroethane	62	5.179	5.175	(0.933)	69964	16.3914	16.39
37 Benzene	78	5.141	5.141	(0.926)	218978	18.3620	18.36
50 Toluene	91	6.982	6.982	(0.853)	242834	20.3735	20.37

61 Ethylbenzene	106	8.305	8.305 (1.015)	81165	19.9690	19.96
62 m,p-Xylenes	106	8.410	8.406 (1.027)	207946	42.5532	42.55

Data File: \\nahstws005\Target\chem\voa9.i\U240126.b\U012609.D Page 2
Report Date: 26-Jan-2024 14:48

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
63 o-Xylene	106	8.748	8.748	(1.069)	100658	20.0288	20.02
M 95 Xylenes (total)	106				308604	60.8797	60.87



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Sample Info: HS24011111-14MS;HS24011111-14MS;3;;MS
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9.i
Operator: PC
Column diameter: 0.18

Data File : \\nahstws005\target\chem\voa9.i\u240126.b\u012609.d
Inj Date : 26-JAN-2024 14:33
InstruID : VOA9.i
LabSampID : HS24011111-14MS

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240126.b\U012610.D Page 1
Report Date: 26-Jan-2024 15:10

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240126.b\U012610.D
Lab Smp Id: HS24011111-14MSD Client Smp ID: HS24011111-14MSD
Inj Date : 26-JAN-2024 14:55
Operator : PC Inst ID: VOA9.i
Smp Info : HS24011111-14MSD;HS24011111-14MSD;3;;MSD
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240126.b\8260C.m
Meth Date : 26-Jan-2024 13:25 firat.tast Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 9 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 000bhatebtex.sub
Target Version: 4.14
Processing Host: NAHSTWS005

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

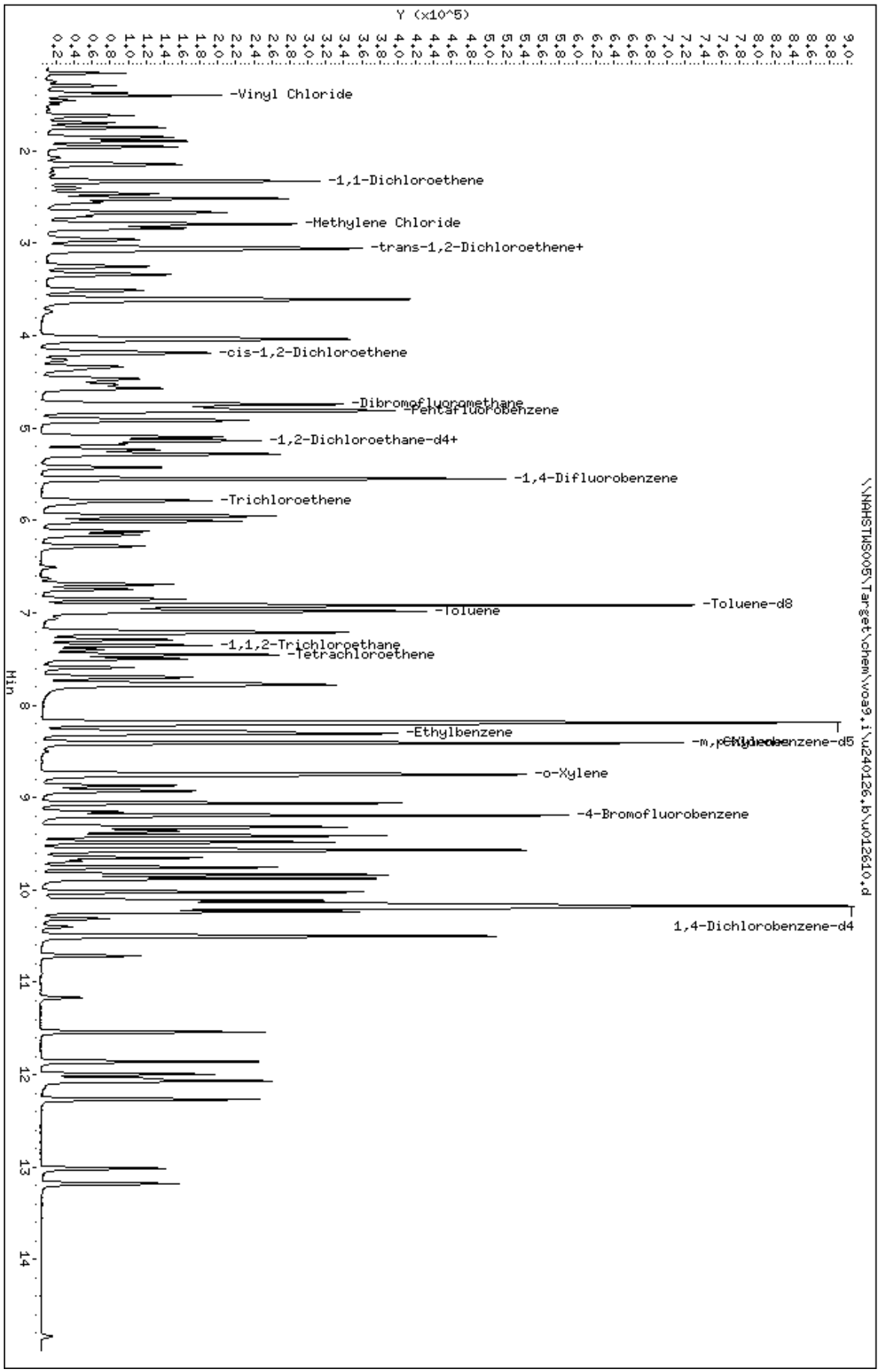
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.811	4.819	(1.000)	287371	50.0000	
$ 30 Dibromofluoromethane	113	4.744	4.748	(0.986)	130944	44.4113	44.41
$ 35 1,2-Dichloroethane-d4	65	5.092	5.096	(1.058)	130212	39.0905	39.09
* 36 1,4-Difluorobenzene	114	5.550	5.554	(1.000)	425372	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	424844	50.0000	
$ 48 Toluene-d8	98	6.918	6.922	(0.845)	458139	46.8443	46.84
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	167830	45.2010	45.20
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	239026	50.0000	
5 Vinyl Chloride	62	1.370	1.381	(0.285)	59960	19.0399	19.03
11 1,1-Dichloroethene	96	2.326	2.337	(0.483)	56066	25.2956	25.29
17 Methylene Chloride	84	2.787	2.798	(0.579)	64884	23.0552	23.05
20 trans-1,2-Dichloroethene	96	3.053	3.061	(0.635)	63372	23.9175	23.91
27 cis-1,2-Dichloroethene	96	4.193	4.197	(0.871)	63697	17.9459	17.94
38 Trichloroethene	130	5.786	5.790	(1.043)	66407	20.8074	20.80
53 1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	44074	18.6352	18.63
56 Tetrachloroethene	164	7.454	7.458	(0.911)	59792	23.5812	23.58
18 Methyl tert-butyl ether	73	3.076	3.079	(0.639)	163634	20.6038	20.60
33 1,2-Dichloroethane	62	5.171	5.175	(0.932)	69972	16.8832	16.88
37 Benzene	78	5.134	5.141	(0.925)	216710	18.7149	18.71
50 Toluene	91	6.978	6.982	(0.853)	239448	20.2138	20.21

61 Ethylbenzene	106	8.305	8.305 (1.015)	81563	20.1912	20.19
62 m,p-Xylenes	106	8.406	8.406 (1.027)	203530	41.9074	41.90

Data File: \\nahstws005\Target\chem\voa9.i\U240126.b\U012610.D Page 2
Report Date: 26-Jan-2024 15:10

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
63 o-Xylene	106	8.747	8.748	(1.069)	101701	20.3617	20.36
M 95 Xylenes (total)	106				305231	62.0138	62.01



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Sample Info: HS24011111-14HSD;HS24011111-14HSD;3;;HSD
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9.i
Operator: PC
Column diameter: 0.18

Data File : \\nahstws005\target\chem\voa9.i\u240126.b\u012610.d
Inj Date : 26-JAN-2024 14:55
InstruID : VOA9.i
LabSampID : HS24011111-14MSD

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240126.b\U012613.D Page 1
Report Date: 26-Jan-2024 16:18

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240126.b\U012613.D
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Inj Date : 26-JAN-2024 16:02
Operator : PC   Inst ID: VOA9.i
Smp Info : HS24011111-01
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240126.b\8260C.m
Meth Date : 26-Jan-2024 13:25 firat.tast Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11   Cal File: U120608.D
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: 000bhatebtex.sub
Target Version: 4.14
Processing Host: NAHSTWS005

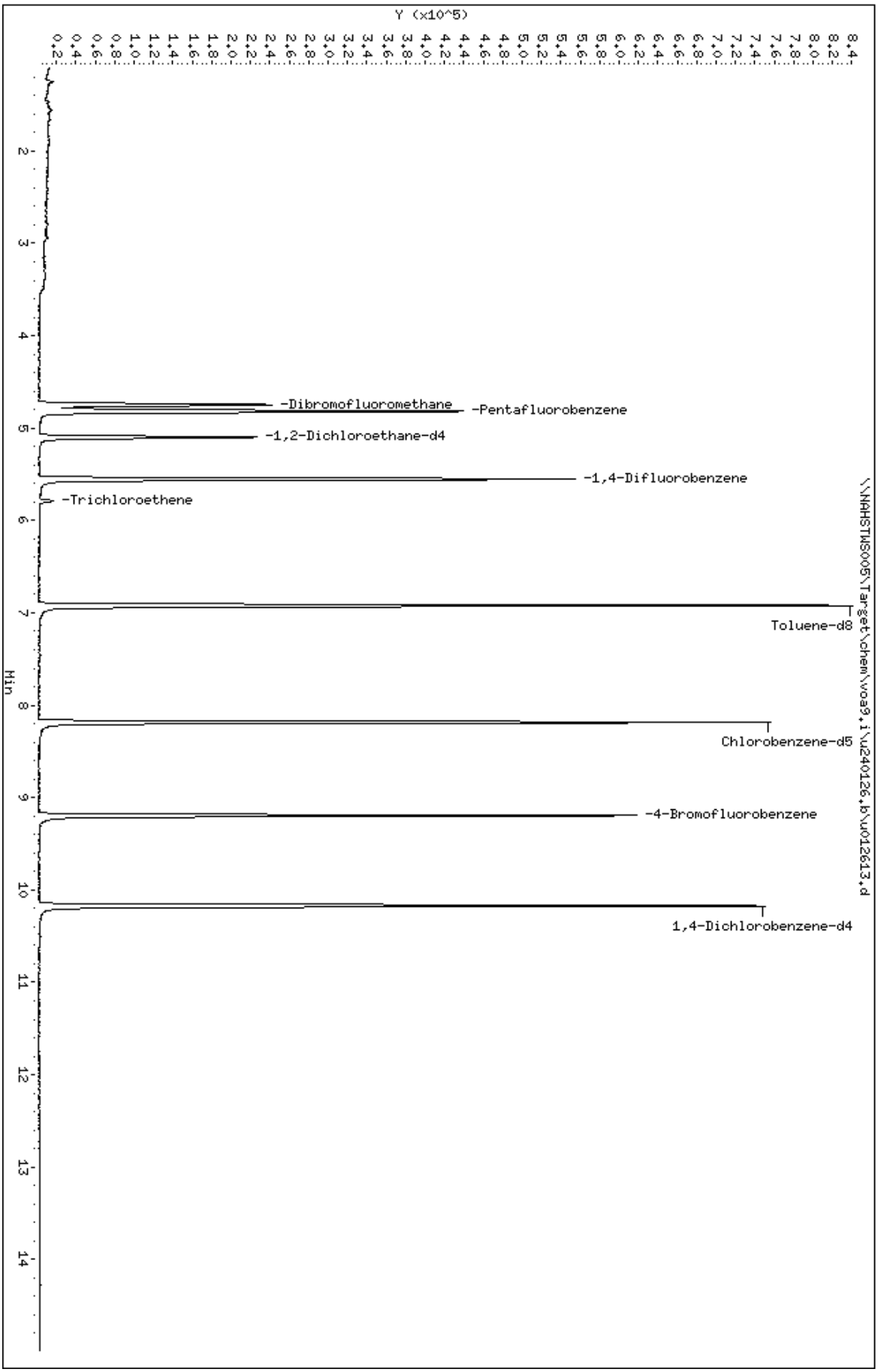
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
*	1 Pentafluorobenzene	168	4.815	4.819	(1.000)	329263	50.0000	
$	30 Dibromofluoromethane	113	4.748	4.748	(0.986)	146521	43.3478	43.34
$	35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	145206	38.0839	38.08
*	36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	462701	50.0000	
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	434509	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	527825	52.7692	52.76
$	69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	182794	48.2203	48.22
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	224224	50.0000	
	5 Vinyl Chloride	62	1.029	1.381	(0.214)	14111	3.91075	3.91
	38 Trichloroethene	130	5.790	5.790	(1.043)	5253	1.51314	1.51(a)
	33 1,2-Dichloroethane	62	5.186	5.175	(0.934)	717	0.15904	0.15(a)

QC Flag Legend

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



Data File: \\NAHSTWS005\Target\chem\voa9,i\u240126,b\u012613,d
Date : 26-JAN-2024 16:02
Client ID:
Sample Info: HS240111111-01
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9,i
Operator: PC
Column diameter: 0.18

Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012613.d Page 2

Date : 26-JAN-2024 16:02

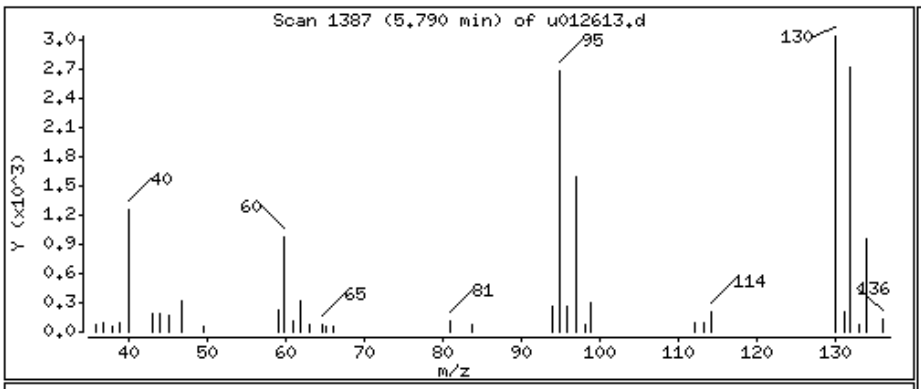
Client ID: Instrument: VOA9.i

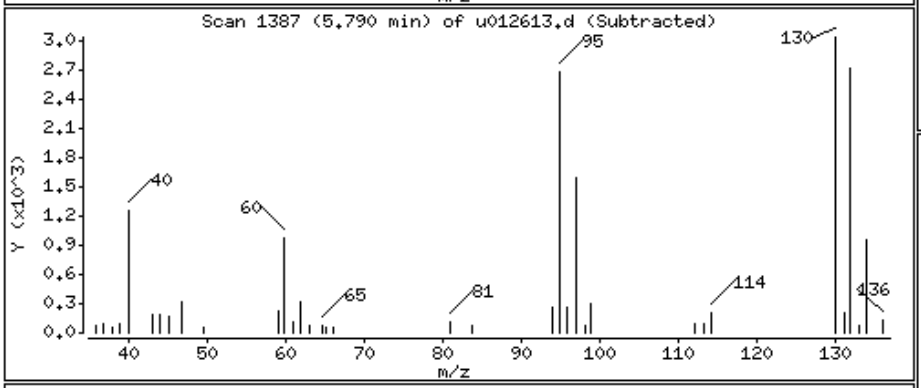
Sample Info: HS24011111-01

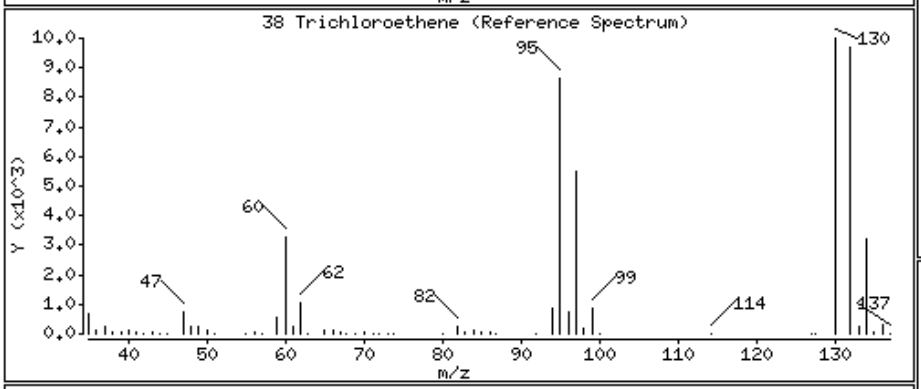
Purge Volume: 5.0 Operator: PC

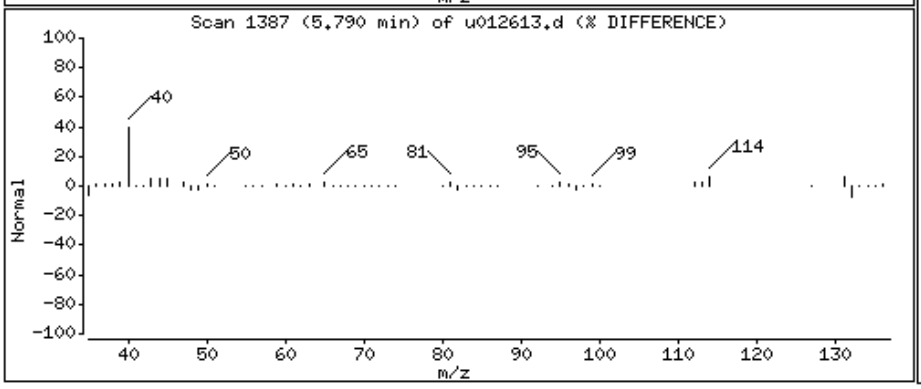
Column phase: DB624 Column diameter: 0.18

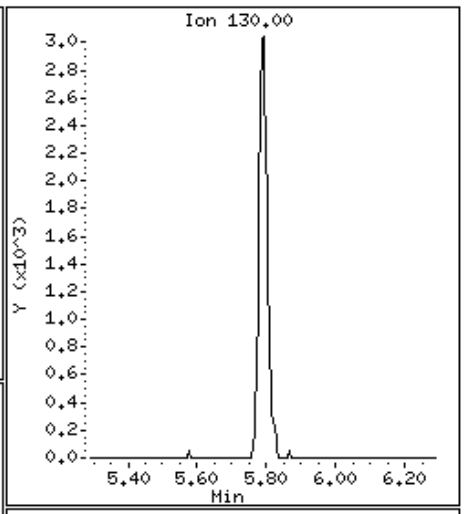
38 Trichloroethene Concentration: 1.51 ug/l

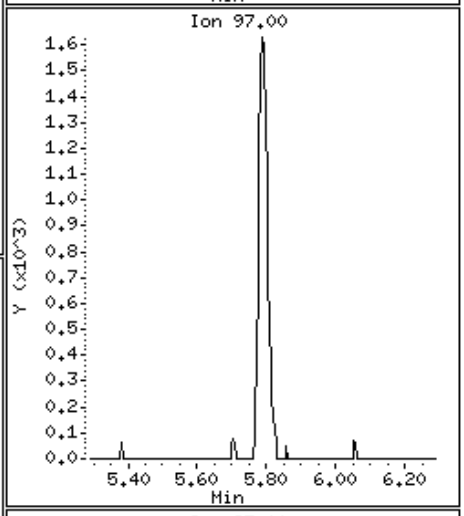


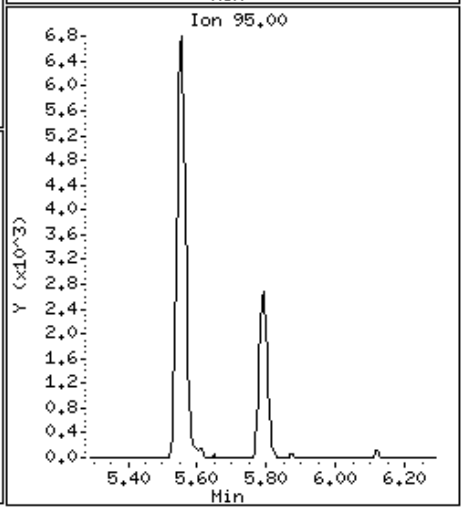












Data File : \\nahstws005\target\chem\voa9.i\u240126.b\u012613.d
Inj Date : 26-JAN-2024 16:02
InstruID : VOA9.i
LabSampID : HS24011111-01

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240126.b\U012614.D Page 1
Report Date: 29-Jan-2024 08:19

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240126.b\U012614.D
Lab Smp Id: HS24011111-02
Inj Date : 26-JAN-2024 16:24
Operator : PC   Inst ID: VOA9.i
Smp Info : HS24011111-02
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240126.b\8260C.m
Meth Date : 27-Jan-2024 00:13 firat.tast Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11   Cal File: U120608.D
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: 000bhatebtex.sub
Target Version: 4.14
Processing Host: NAHSTWS005

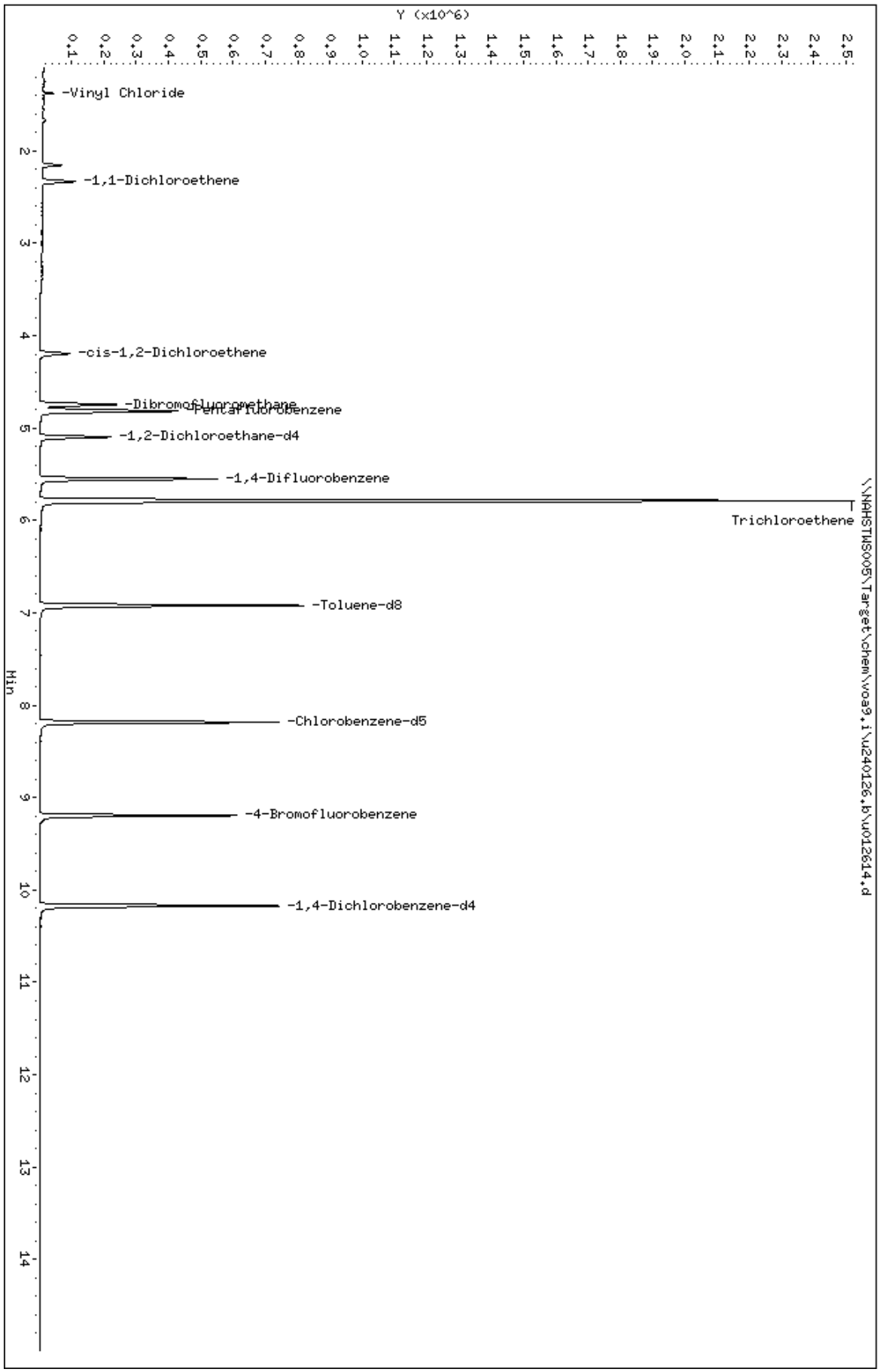
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.815	4.815	(1.000)	325225	50.0000	
$ 30 Dibromofluoromethane	113	4.744	4.748	(0.985)	142385	42.6305	42.63
$ 35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	144859	38.4506	38.45
* 36 1,4-Difluorobenzene	114	5.550	5.554	(1.000)	455584	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	435335	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	519699	51.8582	51.85
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	181277	47.7162	47.71
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	225288	50.0000	
5 Vinyl Chloride	62	1.374	1.378	(0.285)	22229	6.23708	6.23
11 1,1-Dichloroethene	96	2.330	2.334	(0.484)	5721	2.28074	2.28(a)
27 cis-1,2-Dichloroethene	96	4.193	4.197	(0.871)	47988	11.9464	11.94
38 Trichloroethene	130	5.786	5.790	(1.043)	862430	252.306	252.30(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\voa9,i\u240126,b\u012614,d
Date : 26-JAN-2024 16:24
Client ID:
Sample Info: HS24011111-02
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9,i
Operator: PC
Column diameter: 0.18

Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012614.d Page 2

Date : 26-JAN-2024 16:24

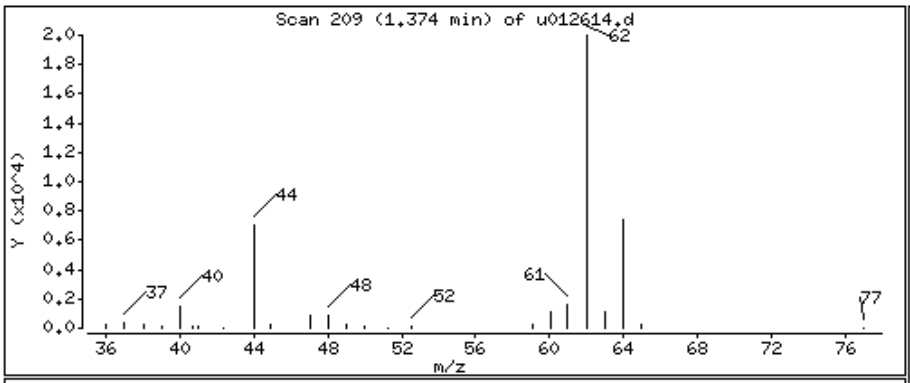
Client ID: Instrument: VOA9.i

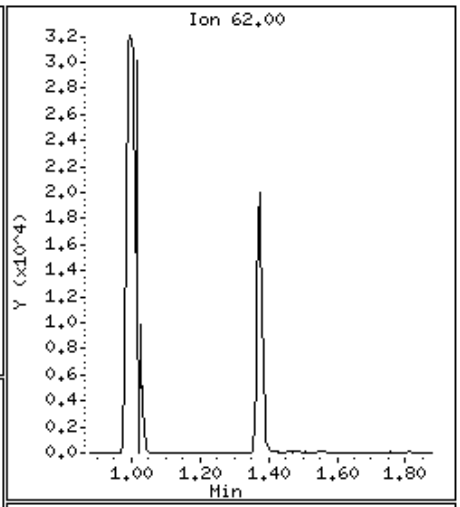
Sample Info: HS24011111-02

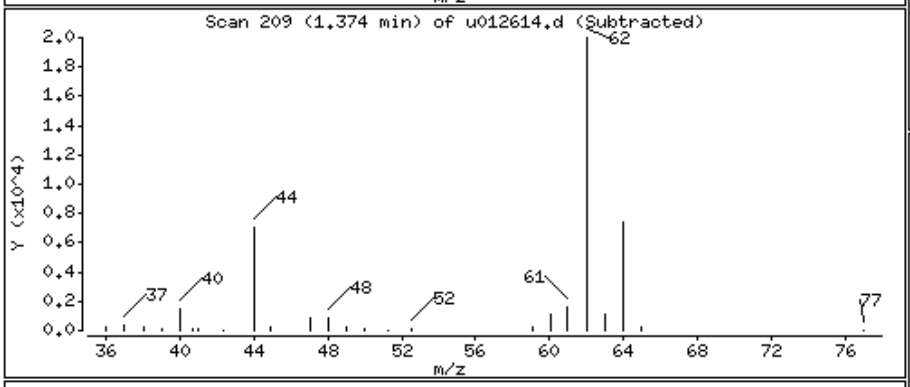
Purge Volume: 5.0 Operator: PC

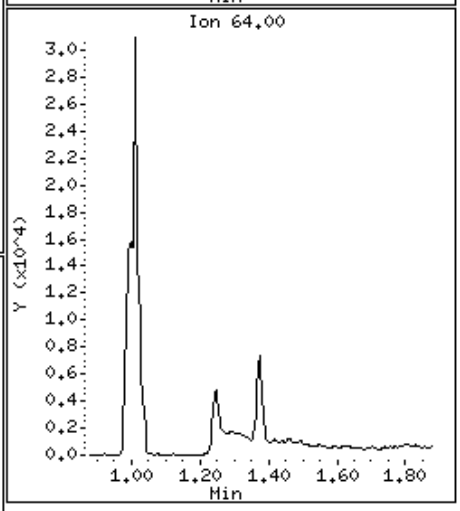
Column phase: DB624 Column diameter: 0.18

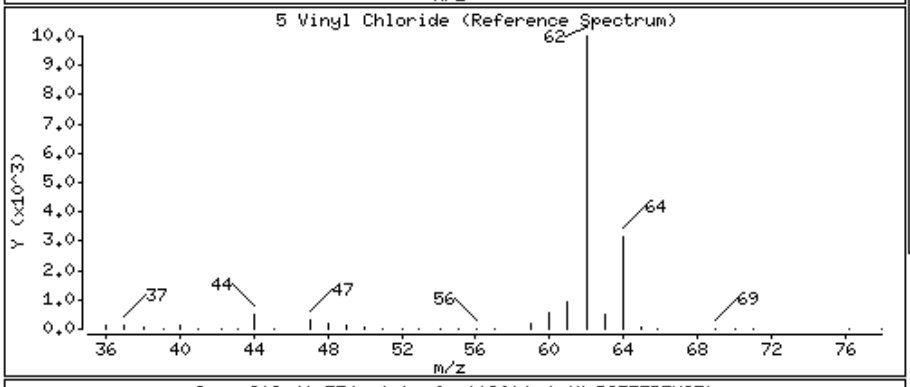
5 Vinyl Chloride Concentration: 6.23 ug/l

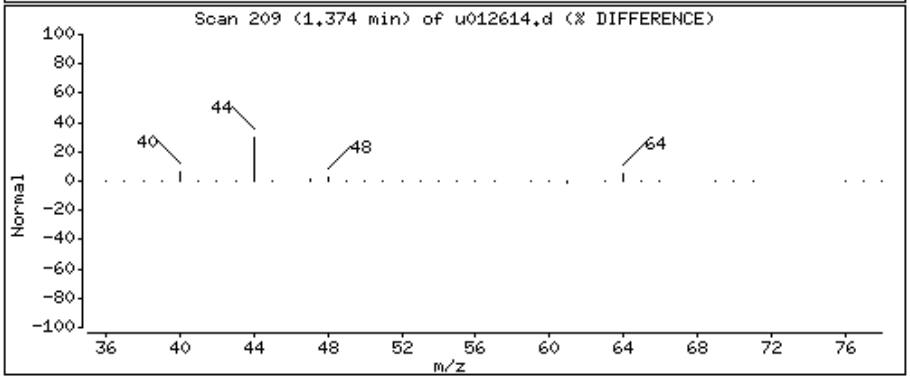












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012614.d Page 3

Date : 26-JAN-2024 16:24

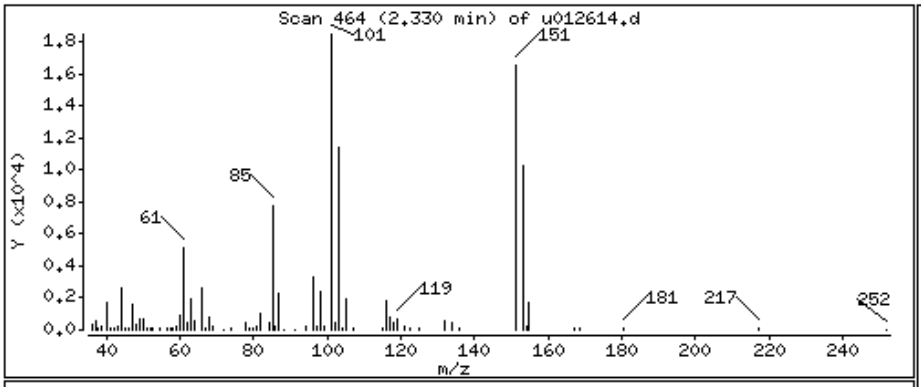
Client ID: Instrument: VOA9.i

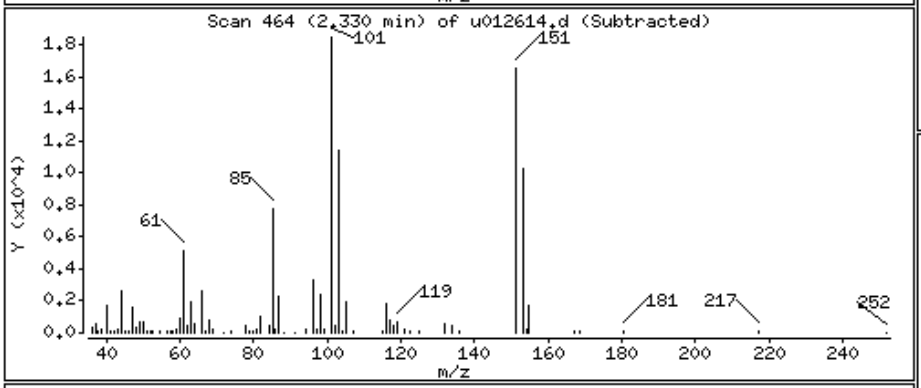
Sample Info: HS24011111-02

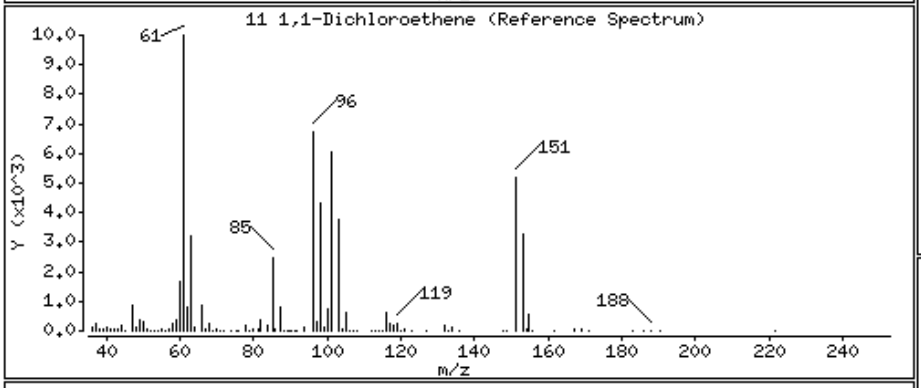
Purge Volume: 5.0 Operator: PC

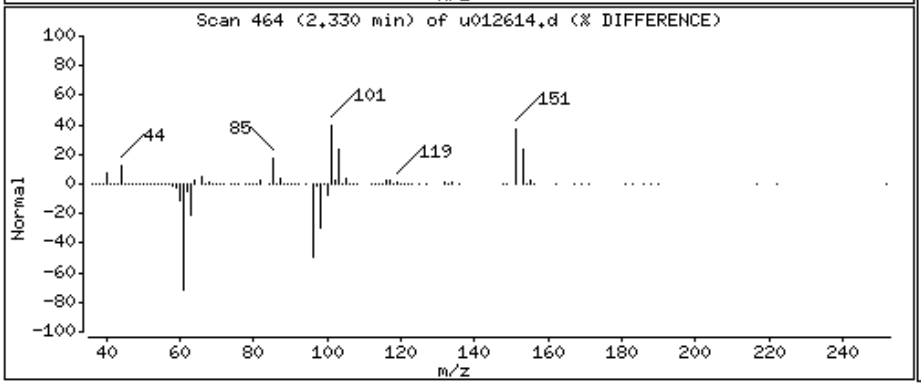
Column phase: DB624 Column diameter: 0.18

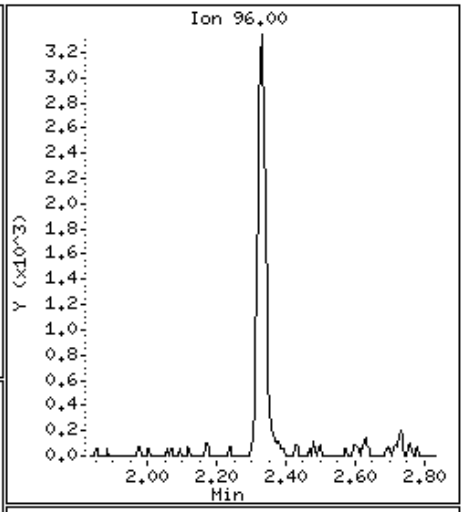
11 1,1-Dichloroethene Concentration: 2.28 ug/l

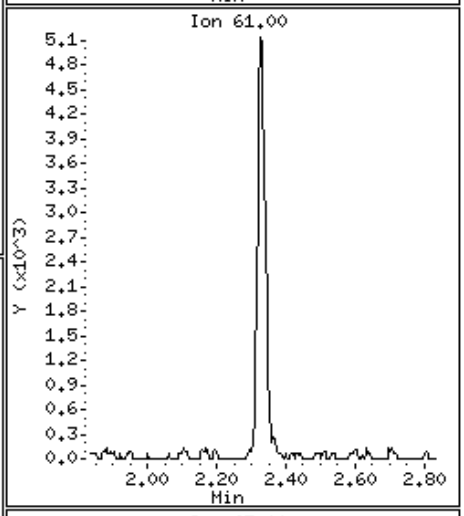


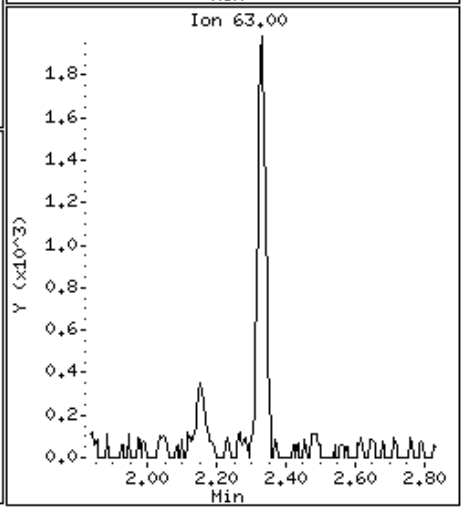












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012614.d Page 4

Date : 26-JAN-2024 16:24

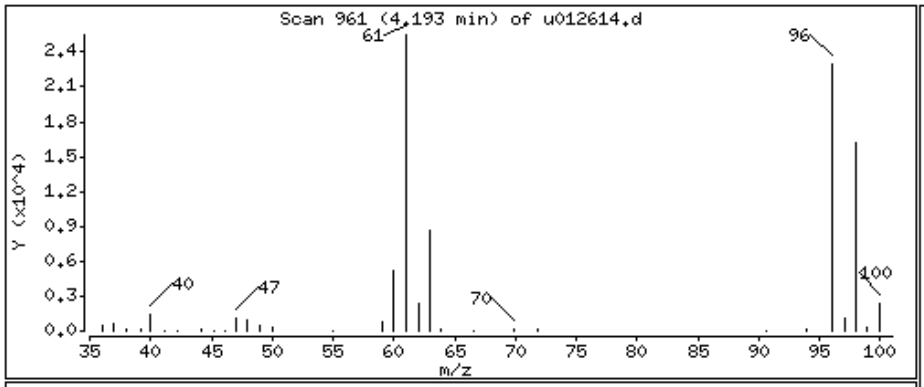
Client ID: Instrument: VOA9.i

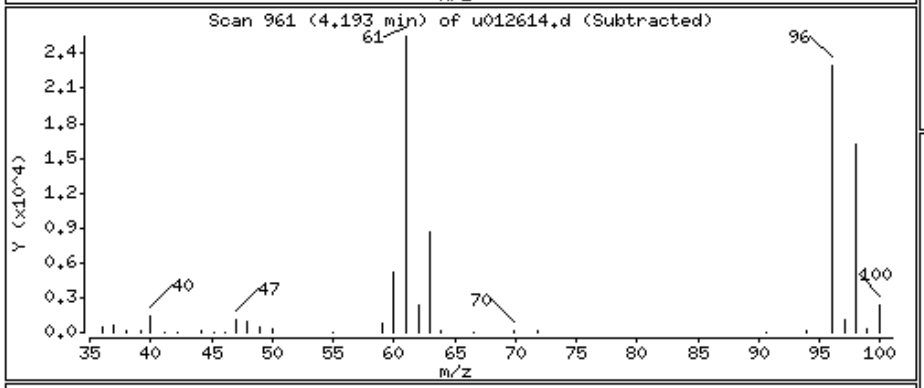
Sample Info: HS24011111-02

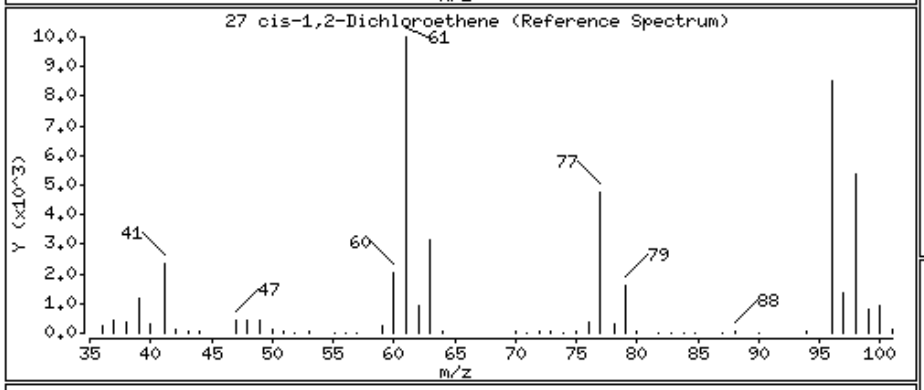
Purge Volume: 5.0 Operator: PC

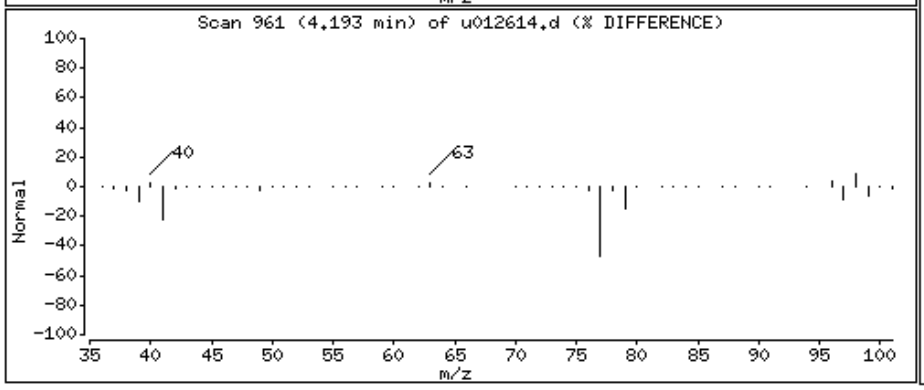
Column phase: DB624 Column diameter: 0.18

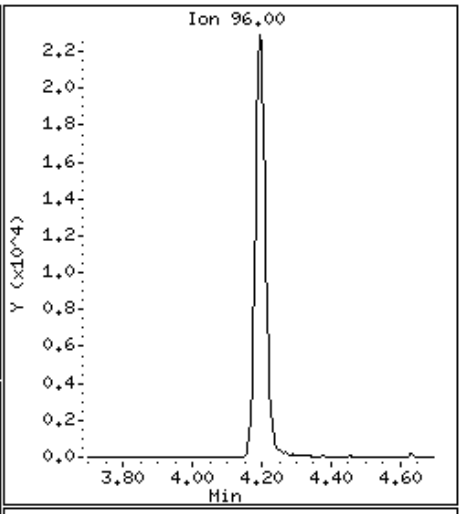
27 cis-1,2-Dichloroethene Concentration: 11.94 ug/l

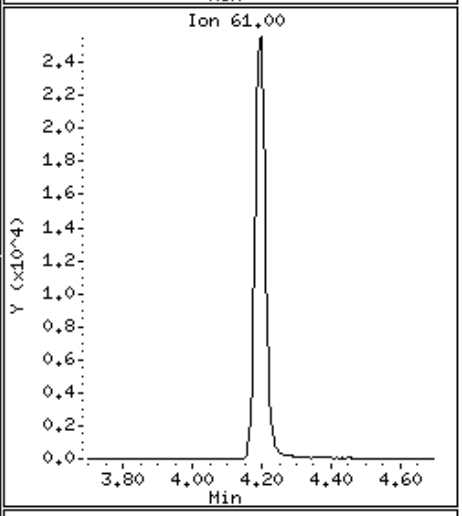


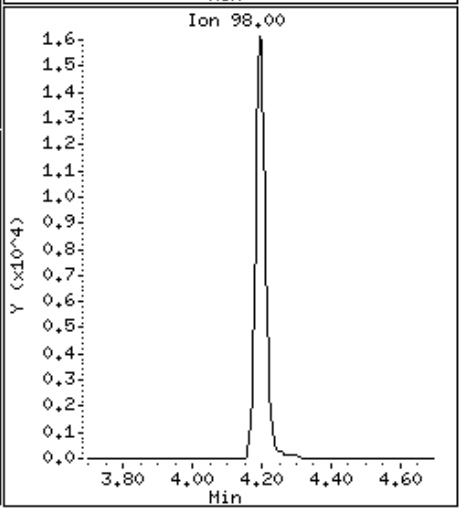












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012614.d Page 5

Date : 26-JAN-2024 16:24

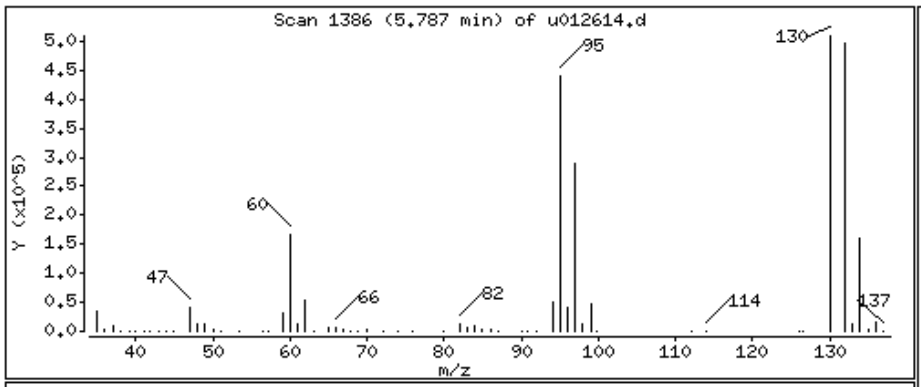
Client ID: Instrument: VOA9.i

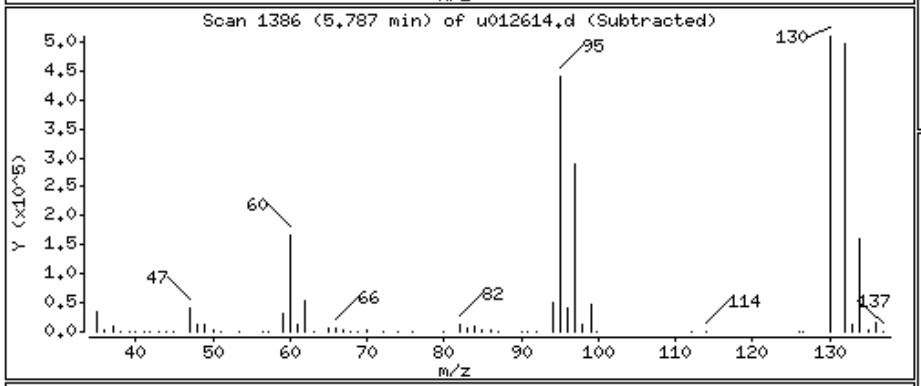
Sample Info: HS24011111-02

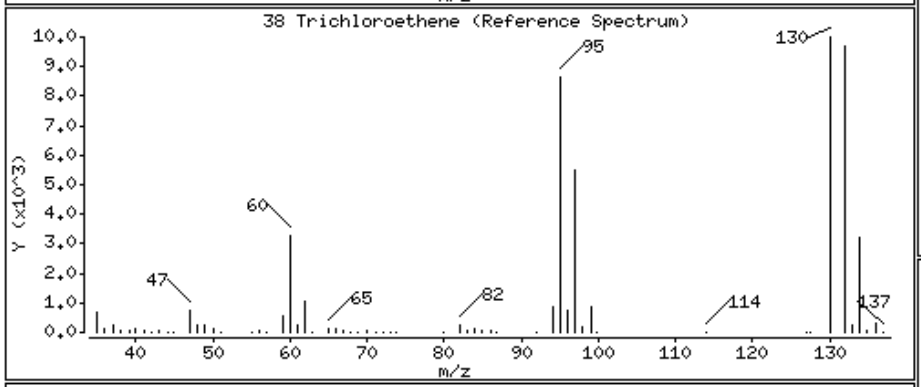
Purge Volume: 5.0 Operator: PC

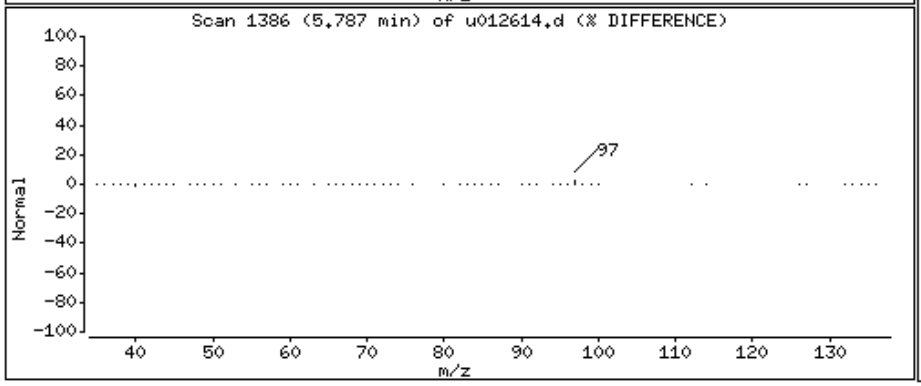
Column phase: DB624 Column diameter: 0.18

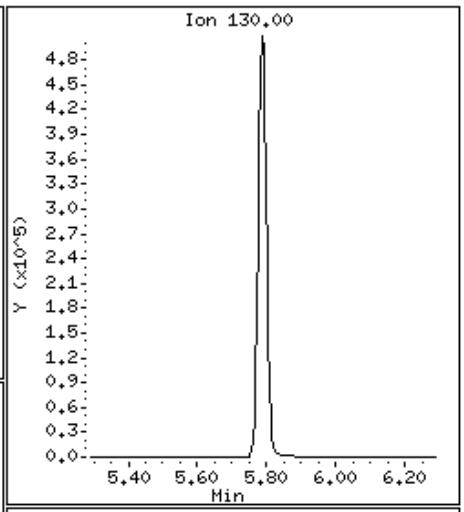
38 Trichloroethene Concentration: 252.30 ug/l

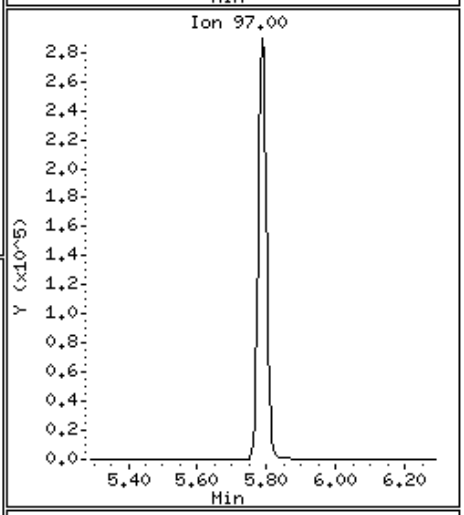


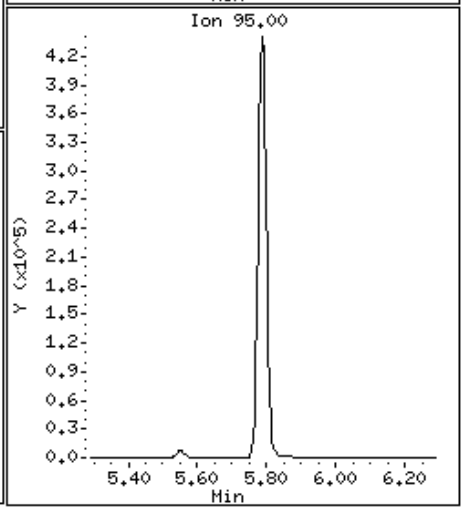












Data File : \\nahstws005\target\chem\voa9.i\u240126.b\u012614.d
Inj Date : 26-JAN-2024 16:24
InstruID : VOA9.i
LabSampID : HS24011111-02

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240126.b\U012615.D Page 1
Report Date: 29-Jan-2024 08:20

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240126.b\U012615.D
Lab Smp Id: HS24011111-03
Inj Date : 26-JAN-2024 16:47
Operator : PC   Inst ID: VOA9.i
Smp Info : HS24011111-03
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240126.b\8260C.m
Meth Date : 27-Jan-2024 00:13 firat.tast Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11   Cal File: U120608.D
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: 000bhatebtex.sub
Target Version: 4.14
Processing Host: NAHSTWS005

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

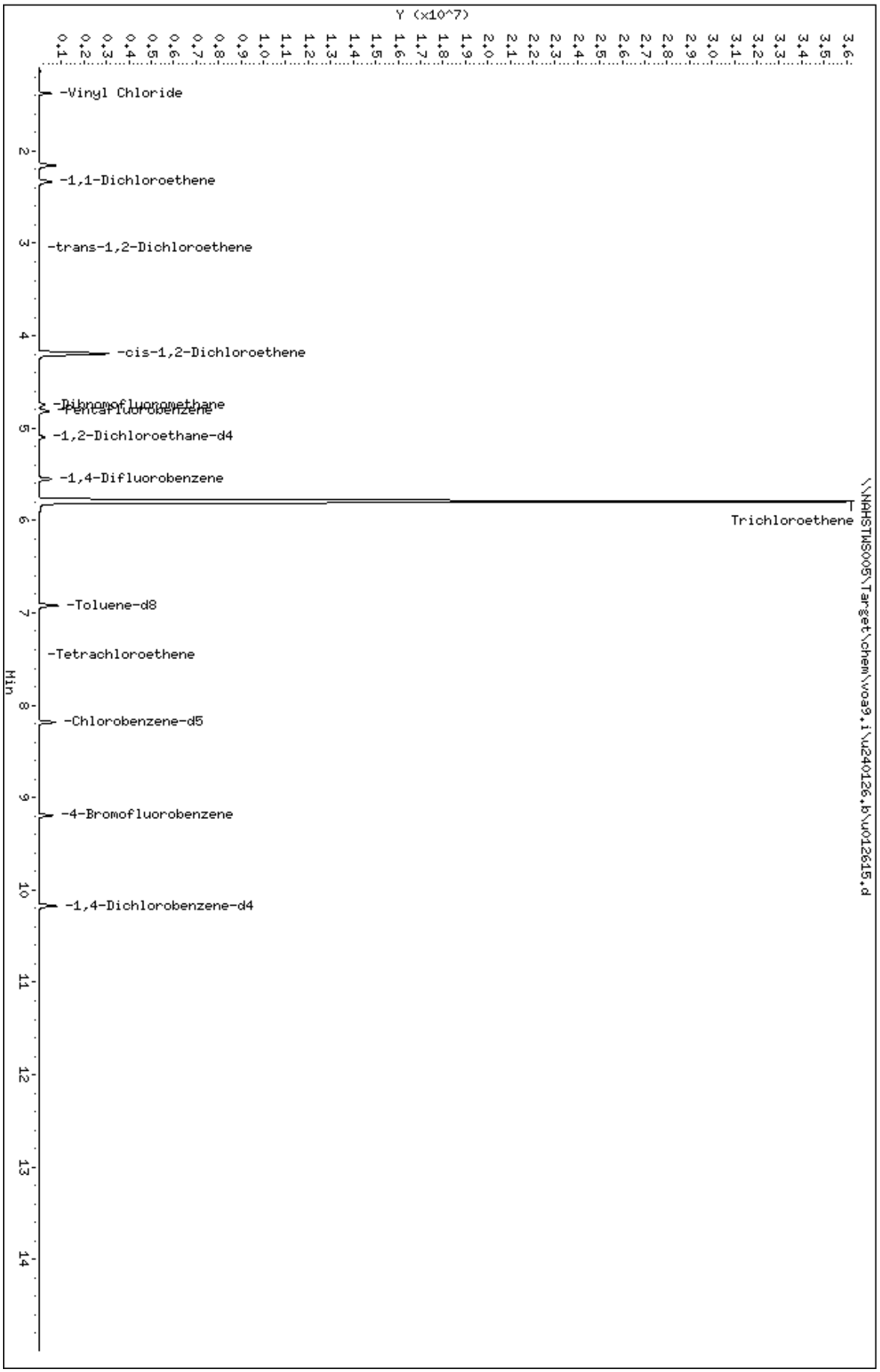
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.815	4.815	(1.000)	337518	50.0000	
$ 30 Dibromofluoromethane	113	4.748	4.748	(0.986)	146565	42.2754	42.27
$ 35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	146108	37.4079	37.40
* 36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	464056	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	439211	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	520234	51.4535	51.45
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	183608	47.9083	47.90
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	227859	50.0000	
5 Vinyl Chloride	62	1.378	1.378	(0.286)	372762	100.781	100.78
11 1,1-Dichloroethene	96	2.330	2.334	(0.484)	61314	23.5532	23.55
20 trans-1,2-Dichloroethene	96	3.057	3.057	(0.635)	3997	1.28440	1.28(a)
27 cis-1,2-Dichloroethene	96	4.193	4.197	(0.871)	1642040	393.891	393.89(A)
38 Trichloroethene	130	5.794	5.790	(1.043)	12562566	3608.12	3608.11(A)
56 Tetrachloroethene	164	7.458	7.458	(0.911)	935	0.35669	0.35(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\voa9.i\u240126.b\u012615.d
Date : 26-JAN-2024 16:47
Client ID:
Sample Info: HS24011111-03
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9.i
Operator: PC
Column diameter: 0.18

Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012615.d Page 2

Date : 26-JAN-2024 16:47

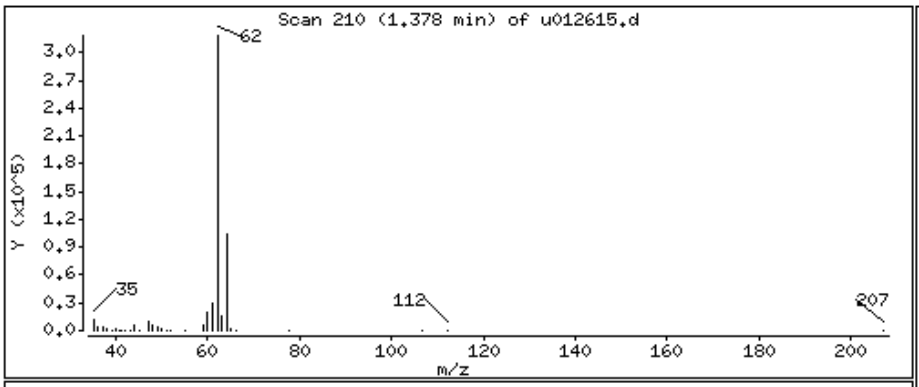
Client ID: Instrument: VOA9.i

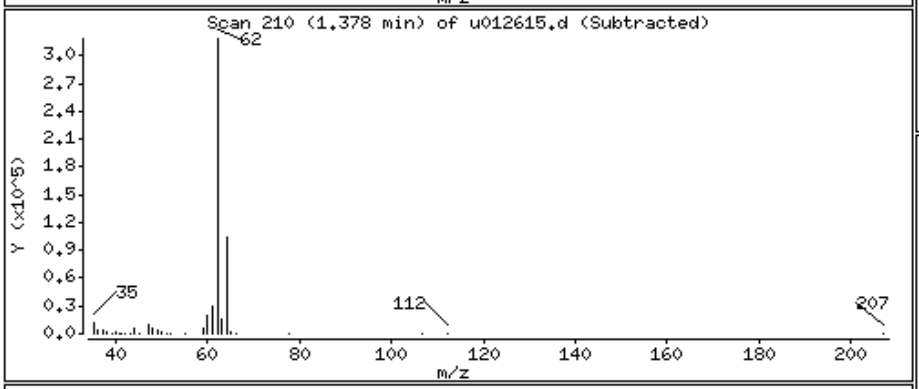
Sample Info: HS24011111-03

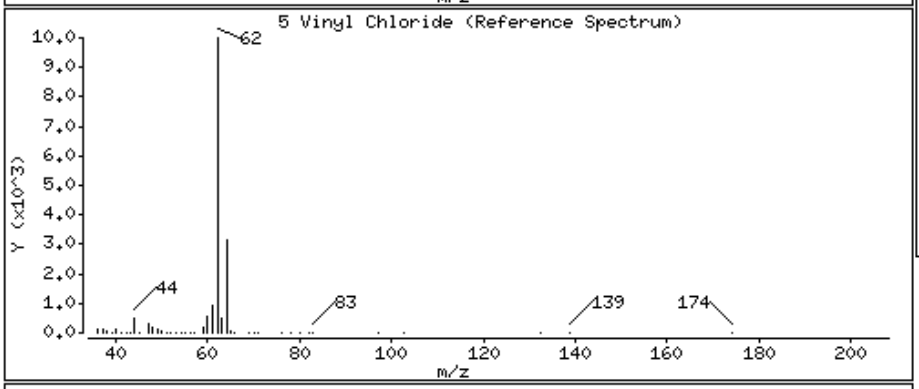
Purge Volume: 5.0 Operator: PC

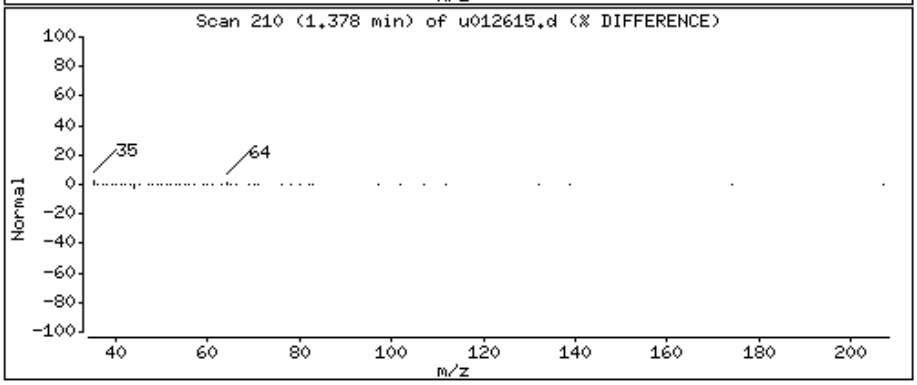
Column phase: DB624 Column diameter: 0.18

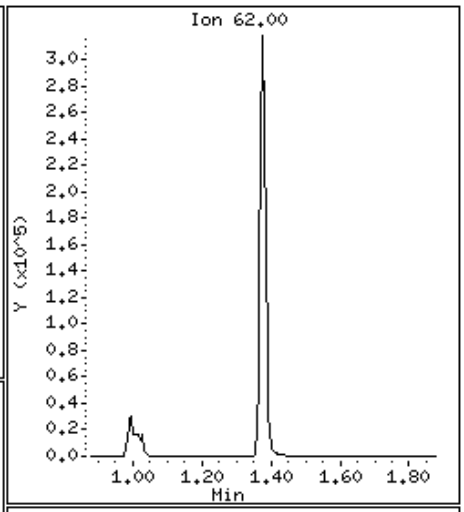
5 Vinyl Chloride Concentration: 100.78 ug/l

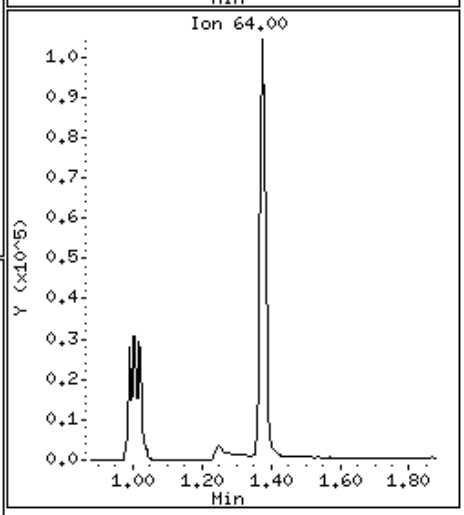












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012615.d Page 3

Date : 26-JAN-2024 16:47

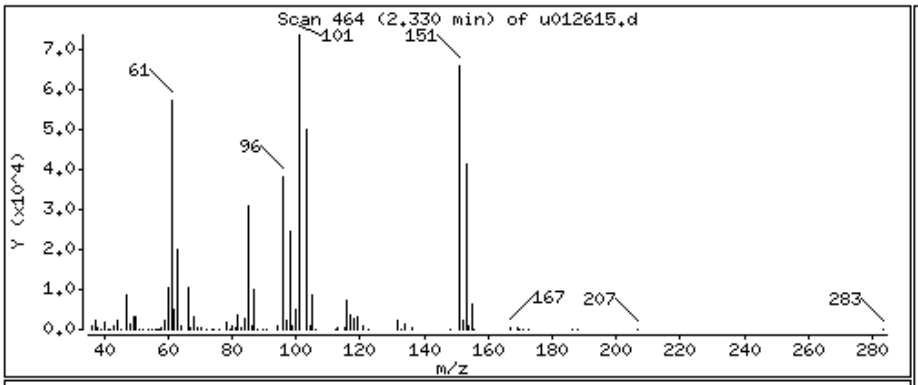
Client ID: Instrument: VOA9.i

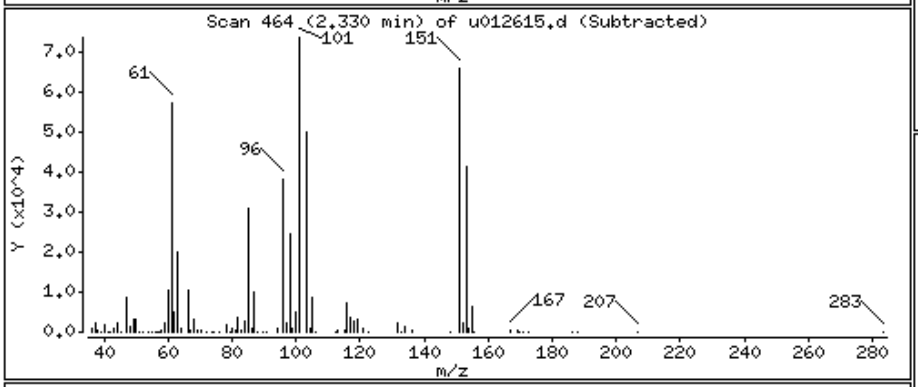
Sample Info: HS24011111-03

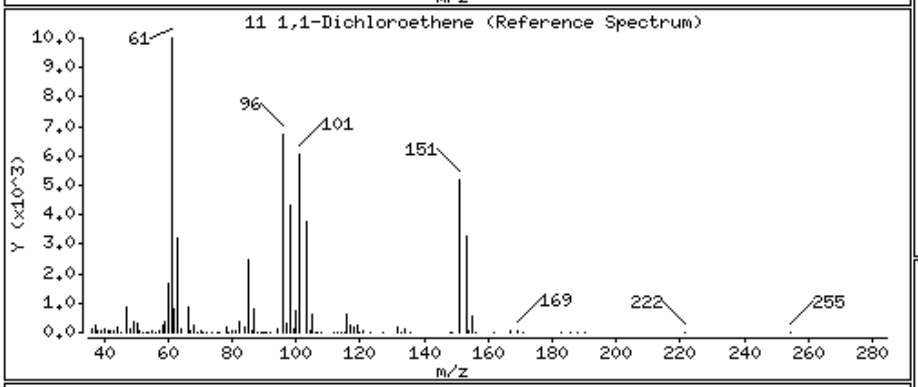
Purge Volume: 5.0 Operator: PC

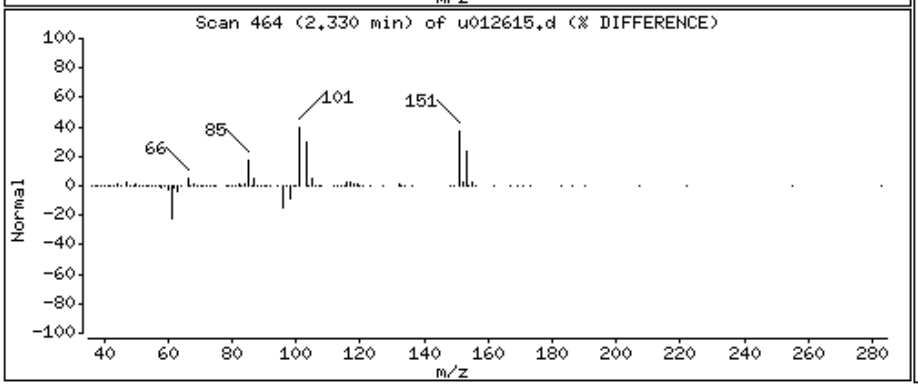
Column phase: DB624 Column diameter: 0.18

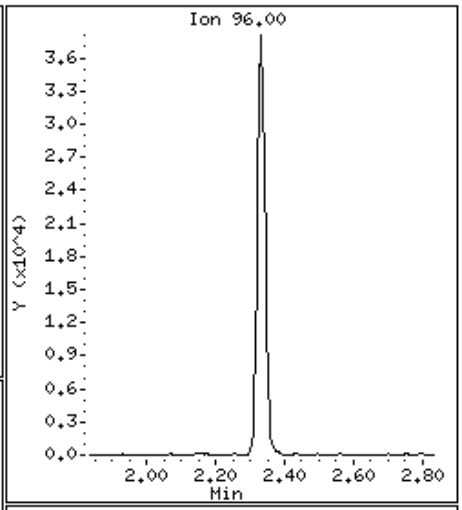
11 1,1-Dichloroethene Concentration: 23.55 ug/l

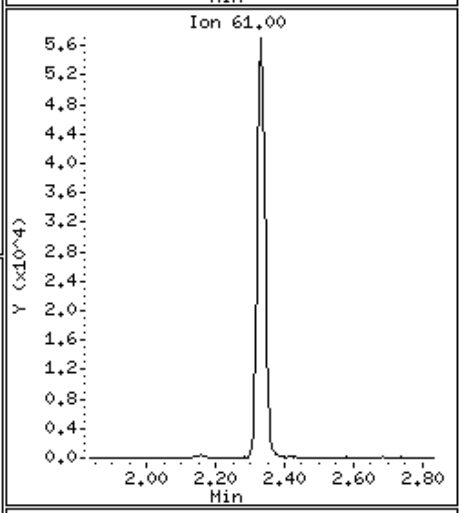


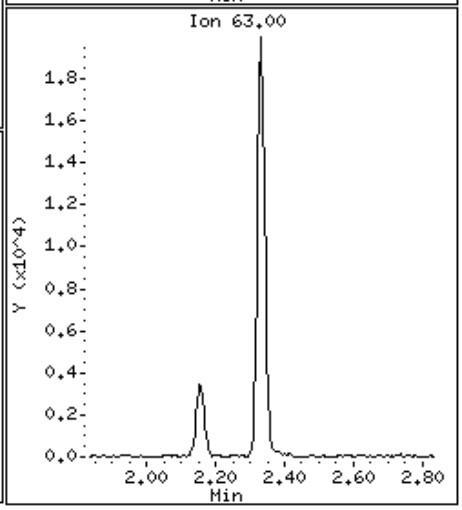












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012615.d Page 4

Date : 26-JAN-2024 16:47

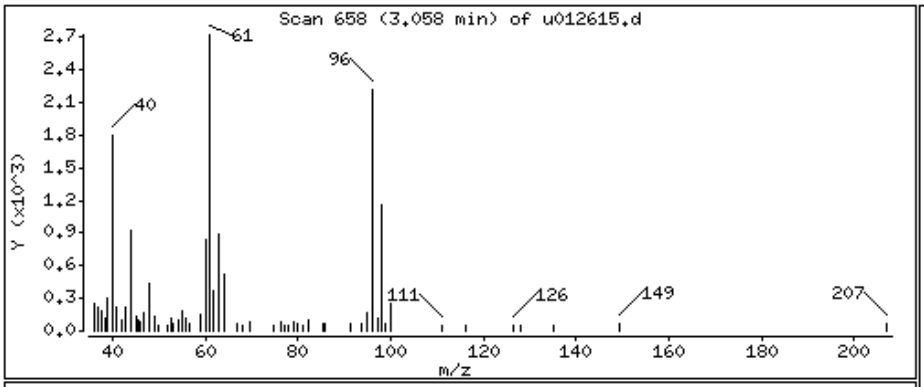
Client ID: Instrument: VOA9.i

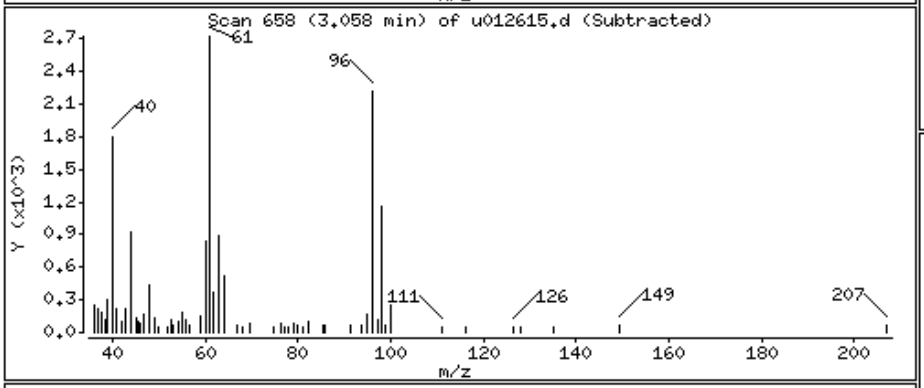
Sample Info: HS24011111-03

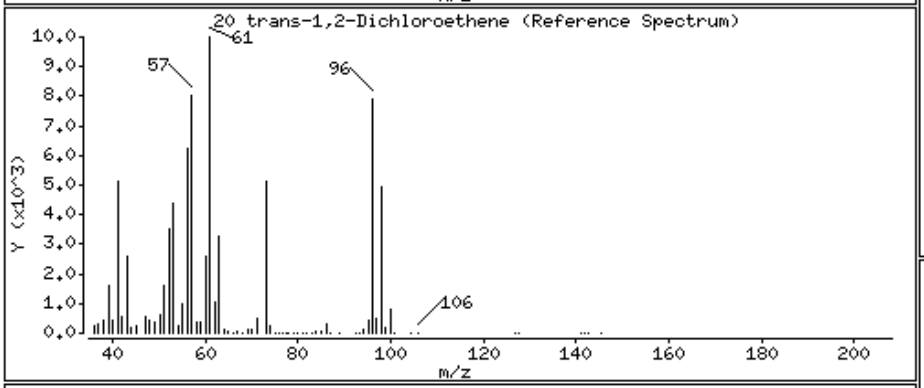
Purge Volume: 5.0 Operator: PC

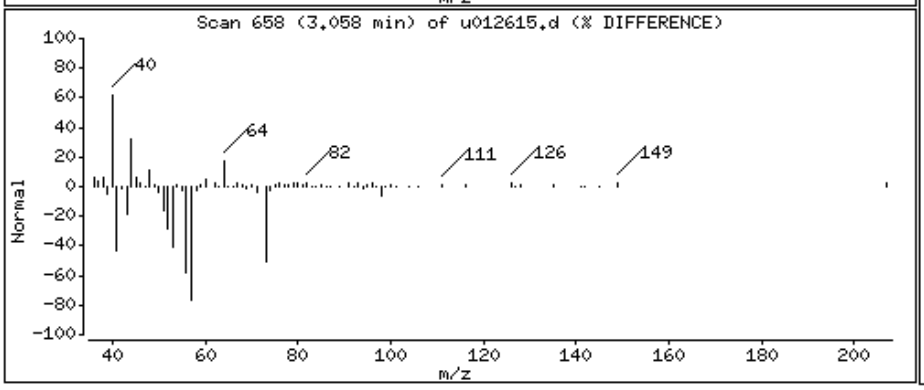
Column phase: DB624 Column diameter: 0.18

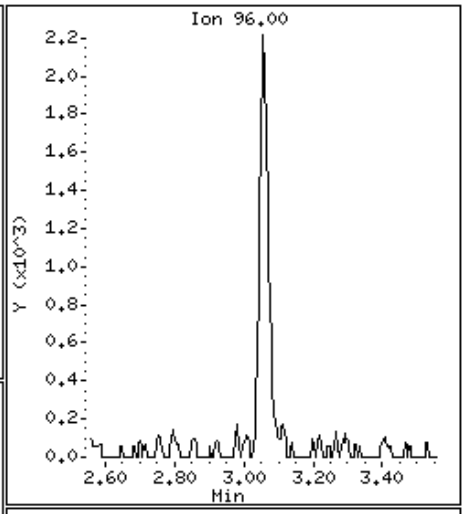
20 trans-1,2-Dichloroethene Concentration: 1.28 ug/l

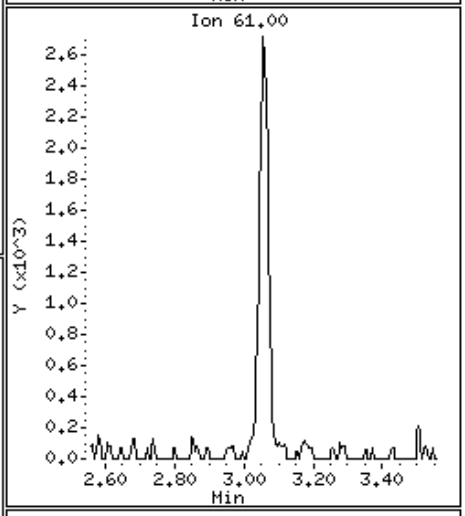


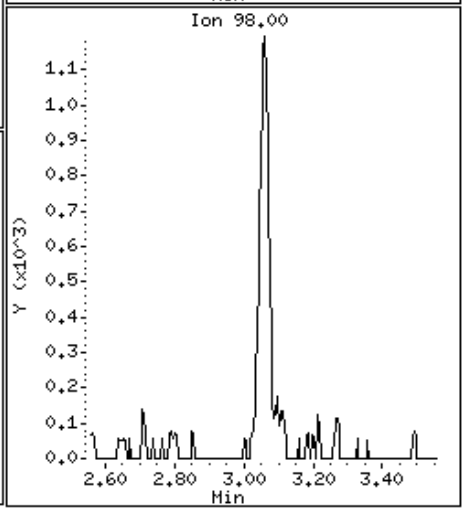












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012615.d Page 5

Date : 26-JAN-2024 16:47

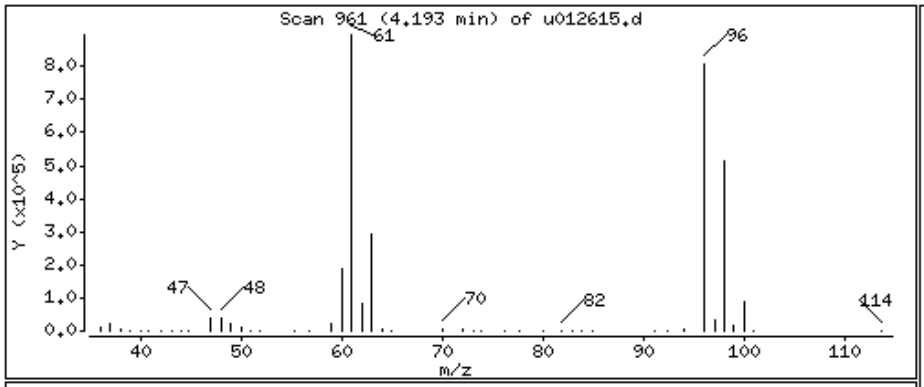
Client ID: Instrument: VOA9.i

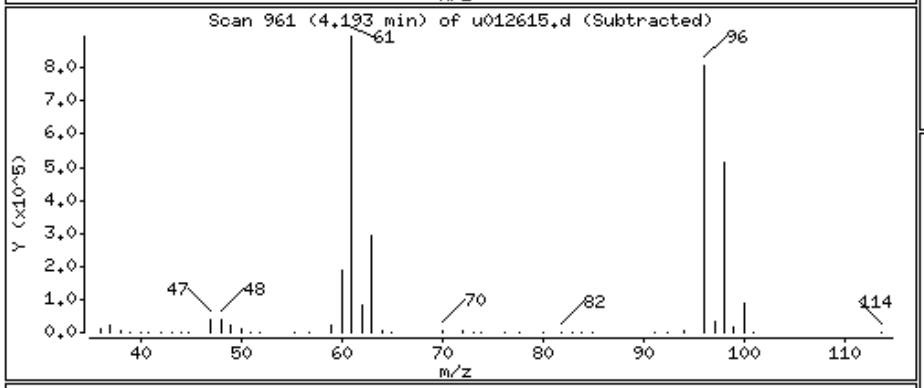
Sample Info: HS24011111-03

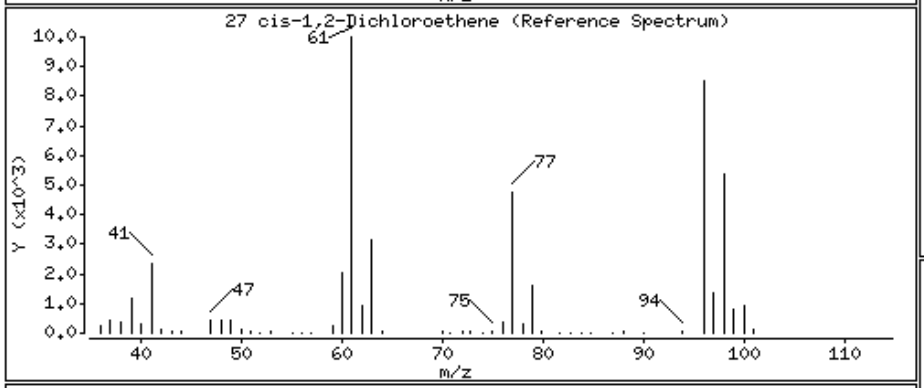
Purge Volume: 5.0 Operator: PC

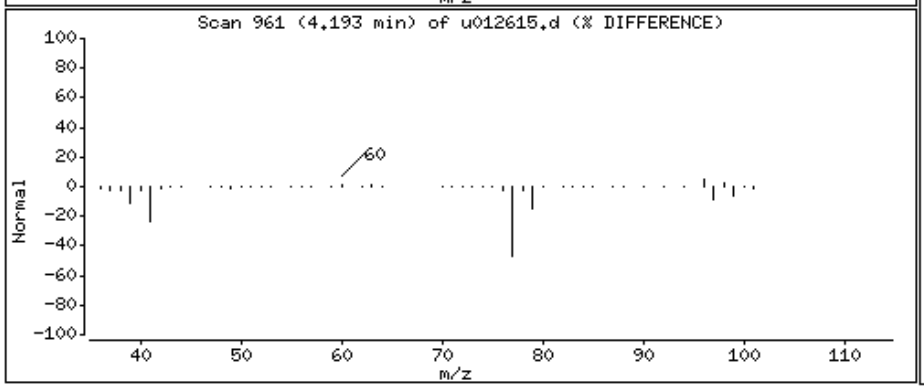
Column phase: DB624 Column diameter: 0.18

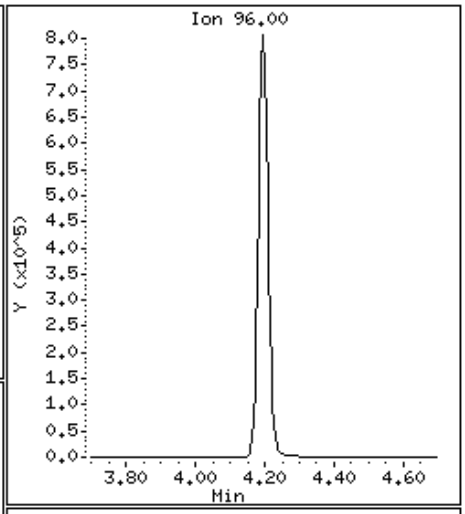
27 cis-1,2-Dichloroethene Concentration: 393.89 ug/l

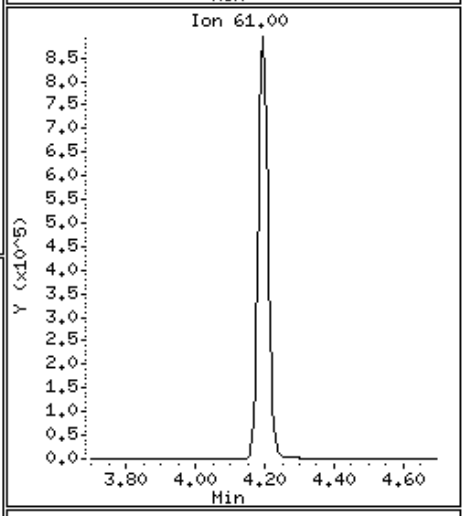


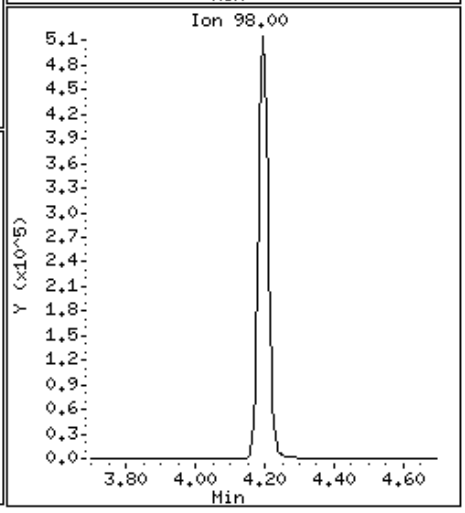












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012615.d Page 6

Date : 26-JAN-2024 16:47

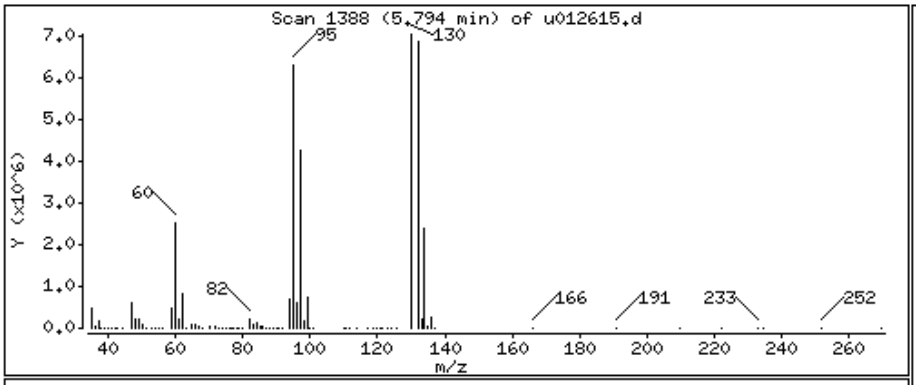
Client ID: Instrument: VOA9.i

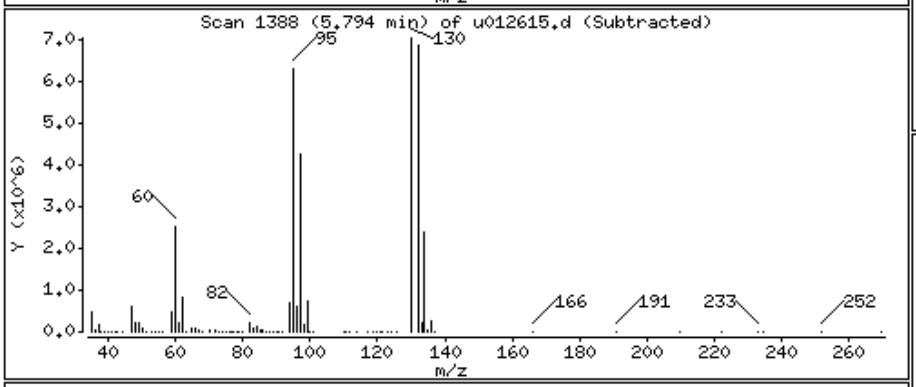
Sample Info: HS24011111-03

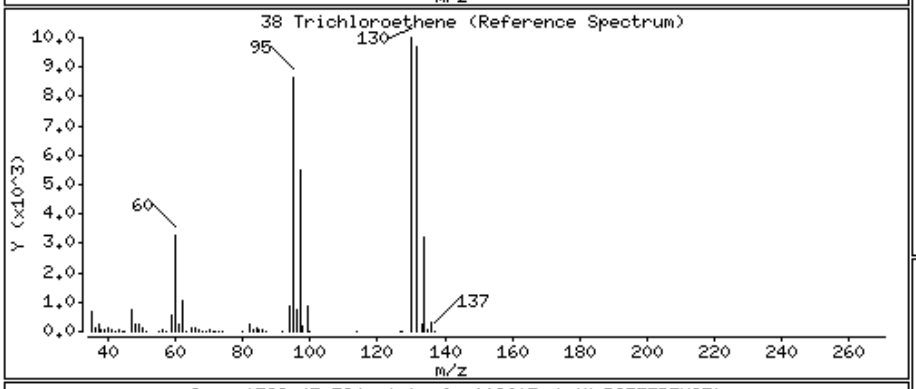
Purge Volume: 5.0 Operator: PC

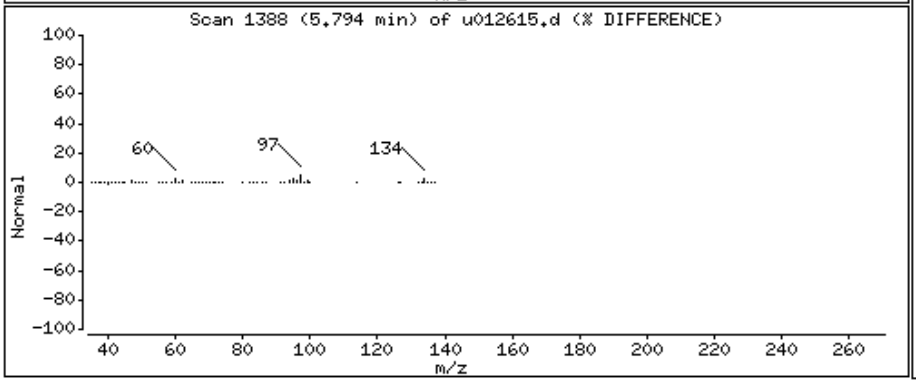
Column phase: DB624 Column diameter: 0.18

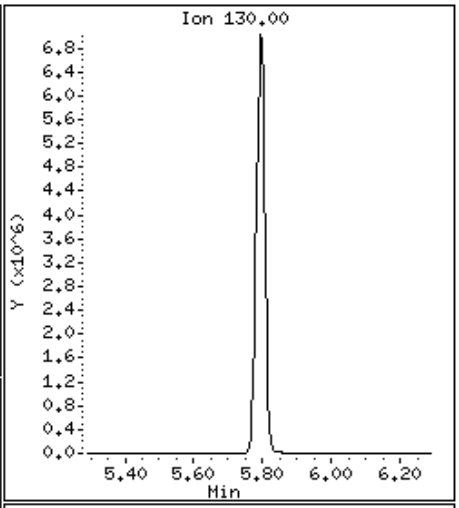
38 Trichloroethene Concentration: 3608.11 ug/l

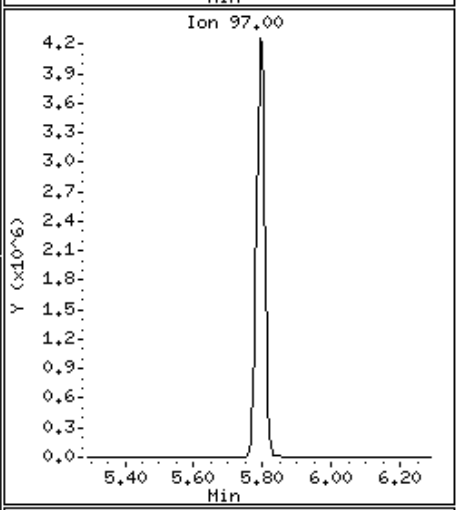


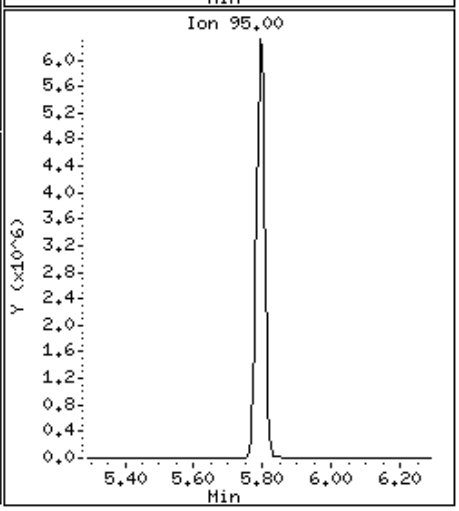












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012615.d Page 7

Date : 26-JAN-2024 16:47

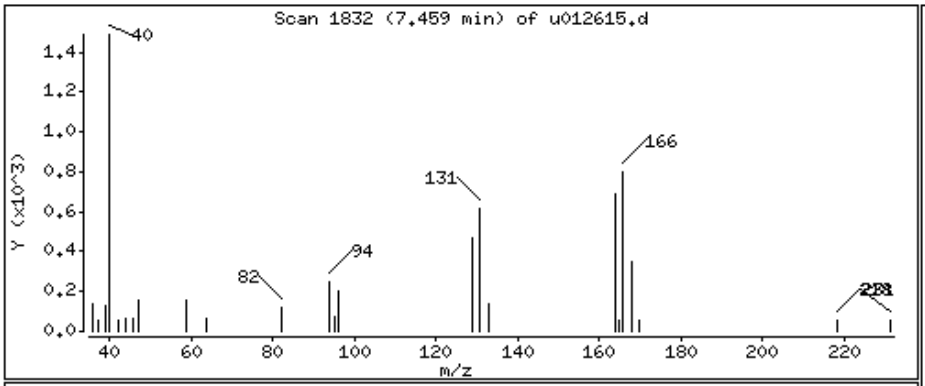
Client ID: Instrument: VOA9.i

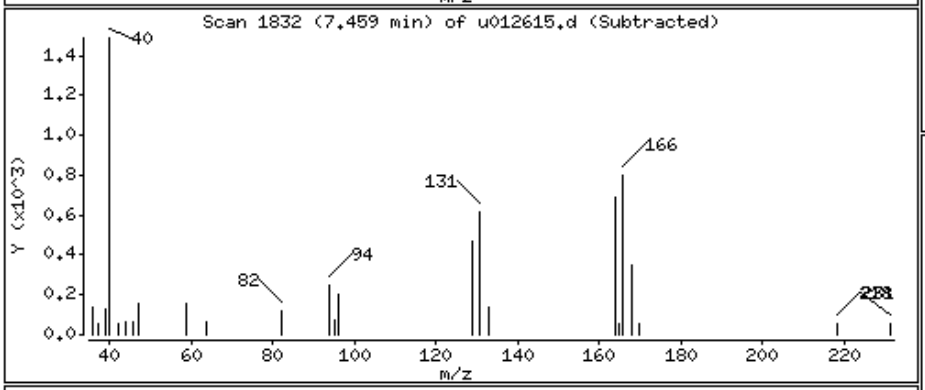
Sample Info: HS24011111-03

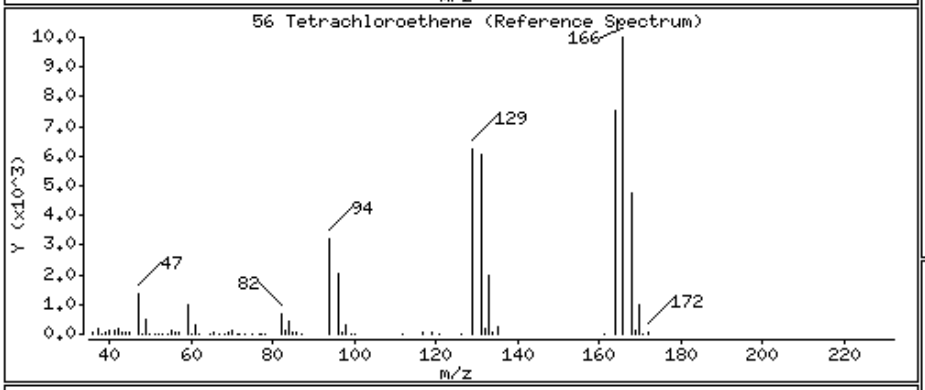
Purge Volume: 5.0 Operator: PC

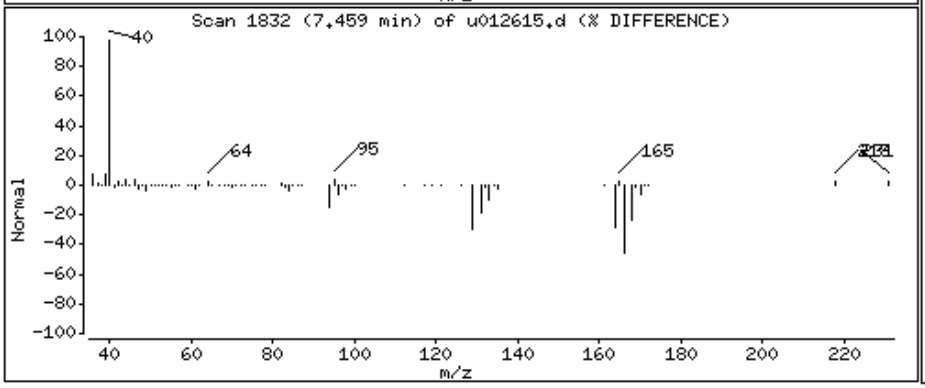
Column phase: DB624 Column diameter: 0.18

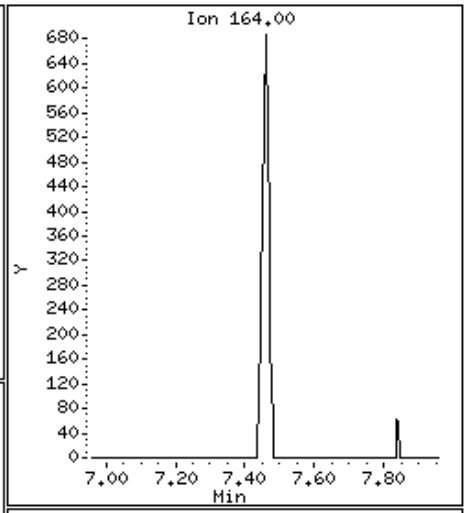
56 Tetrachloroethene Concentration: 0.35 ug/l

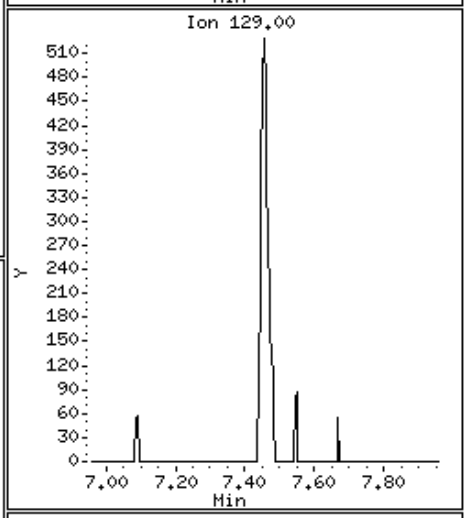


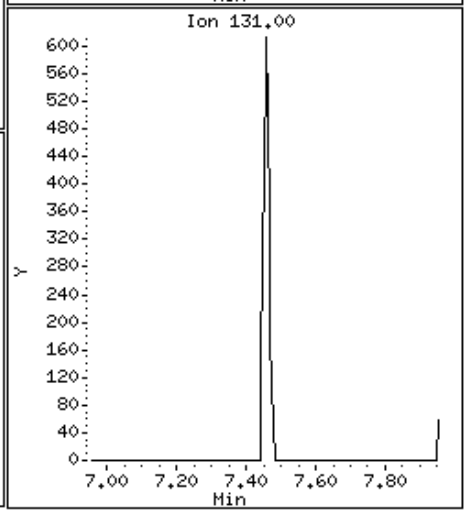












Data File : \\nahstws005\target\chem\voa9.i\u240126.b\u012615.d
Inj Date : 26-JAN-2024 16:47
InstruID : VOA9.i
LabSampID : HS24011111-03

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240126.b\U012616.D Page 1
Report Date: 29-Jan-2024 08:20

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240126.b\U012616.D
Lab Smp Id: HS24011111-04
Inj Date : 26-JAN-2024 17:09
Operator : PC   Inst ID: VOA9.i
Smp Info : HS24011111-04
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240126.b\8260C.m
Meth Date : 27-Jan-2024 00:13 firat.tast Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11   Cal File: U120608.D
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: 000bhatebtex.sub
Target Version: 4.14
Processing Host: NAHSTWS005

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

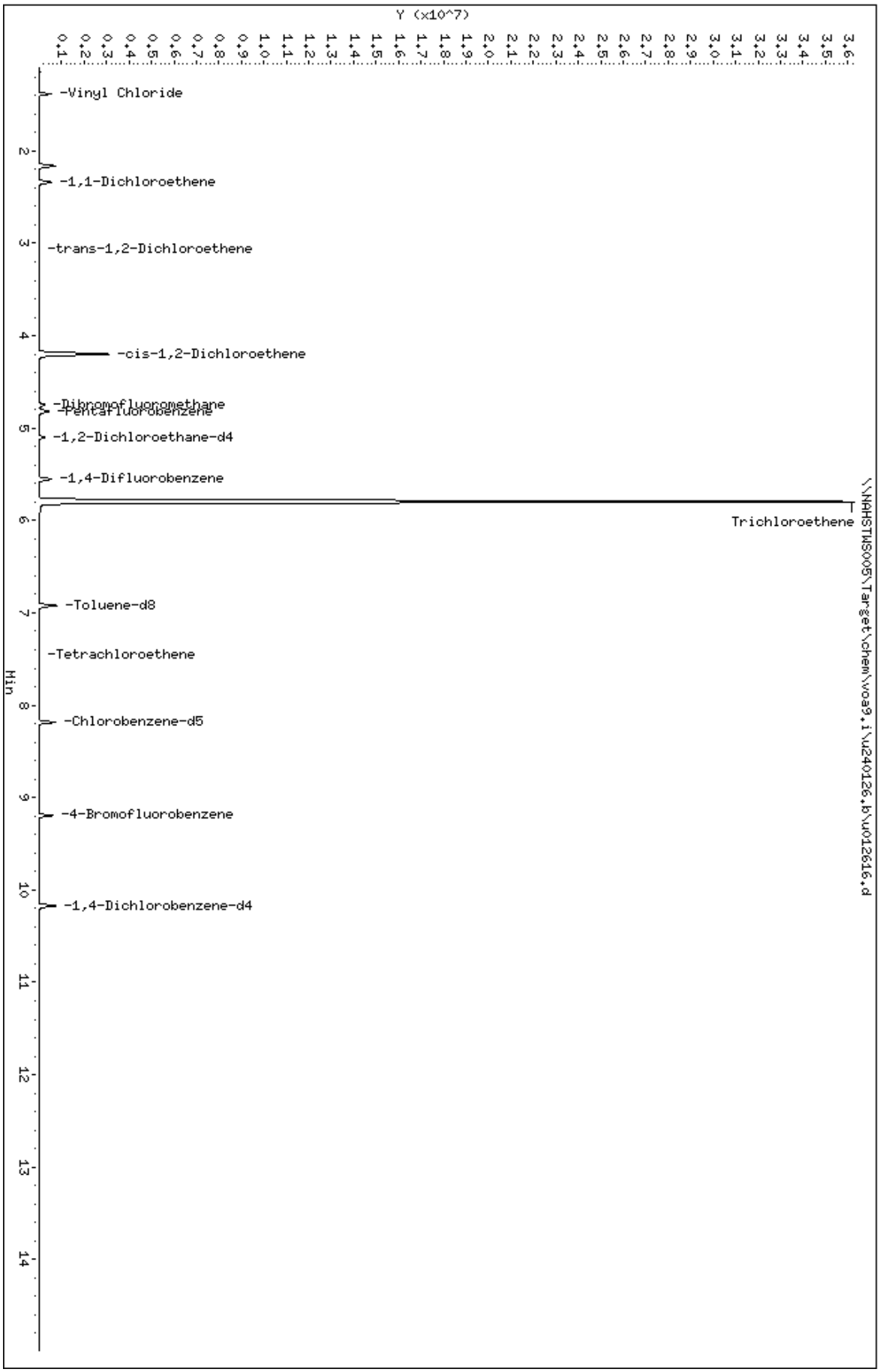
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.819	4.815	(1.000)	331381	50.0000	
$ 30 Dibromofluoromethane	113	4.751	4.748	(0.986)	142650	41.8992	41.89
$ 35 1,2-Dichloroethane-d4	65	5.100	5.096	(1.058)	141247	36.8527	36.85
* 36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	452924	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	424652	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	506212	51.7831	51.78
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	178659	48.2236	48.22
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	223416	50.0000	
5 Vinyl Chloride	62	1.381	1.378	(0.287)	365272	100.585	100.58
11 1,1-Dichloroethene	96	2.337	2.334	(0.485)	60902	23.8282	23.82
20 trans-1,2-Dichloroethene	96	3.061	3.057	(0.635)	3872	1.26727	1.26(a)
27 cis-1,2-Dichloroethene	96	4.197	4.197	(0.871)	1610652	393.517	393.51(A)
38 Trichloroethene	130	5.797	5.790	(1.044)	12555039	3694.58	3694.58(A)
56 Tetrachloroethene	164	7.458	7.458	(0.911)	1112	0.43876	0.43(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\voa9.i\u240126.b\u012616.d
Date : 26-JAN-2024 17:09
Client ID:
Sample Info: HS24011111-04
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9.i
Operator: PC
Column diameter: 0.18

Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012616.d Page 2

Date : 26-JAN-2024 17:09

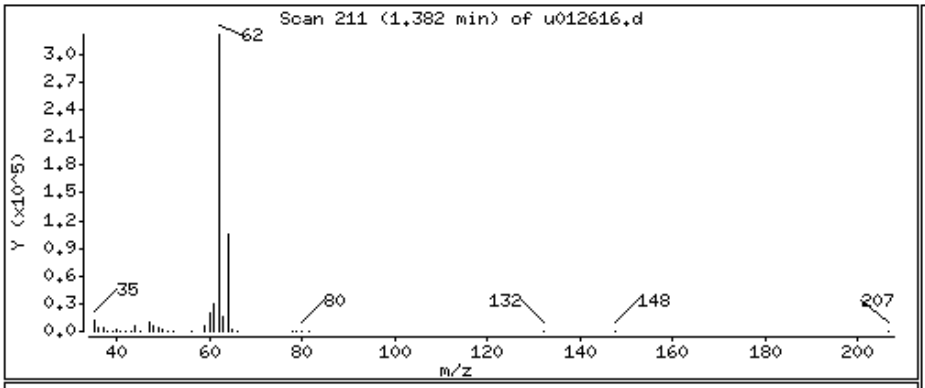
Client ID: Instrument: VOA9.i

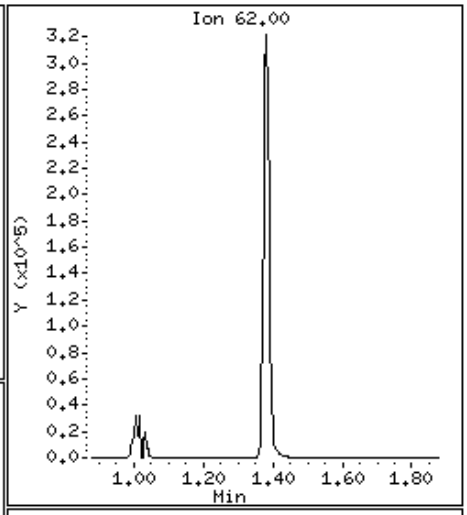
Sample Info: HS24011111-04

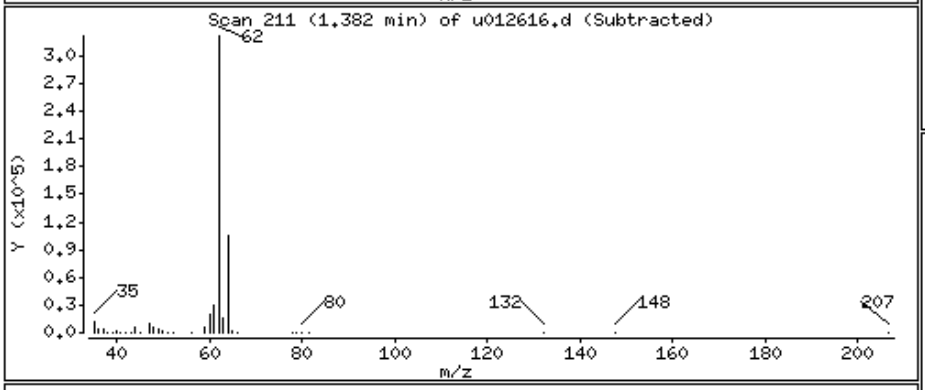
Purge Volume: 5.0 Operator: PC

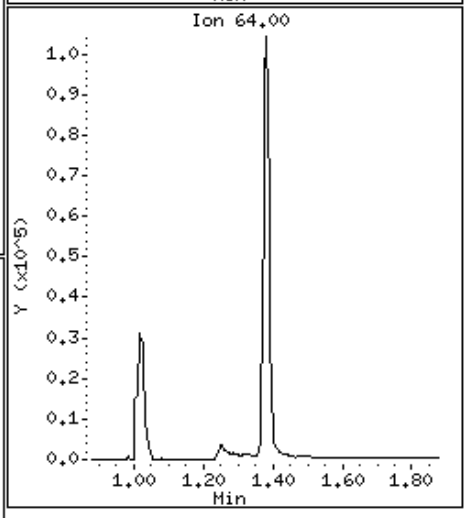
Column phase: DB624 Column diameter: 0.18

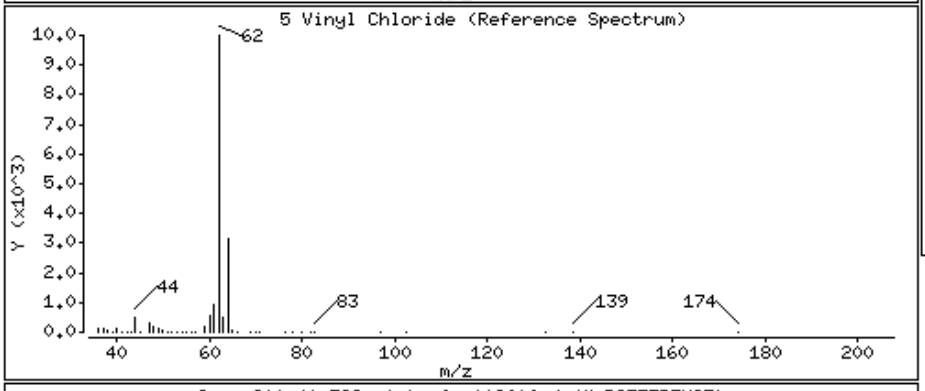
5 Vinyl Chloride Concentration: 100.58 ug/l

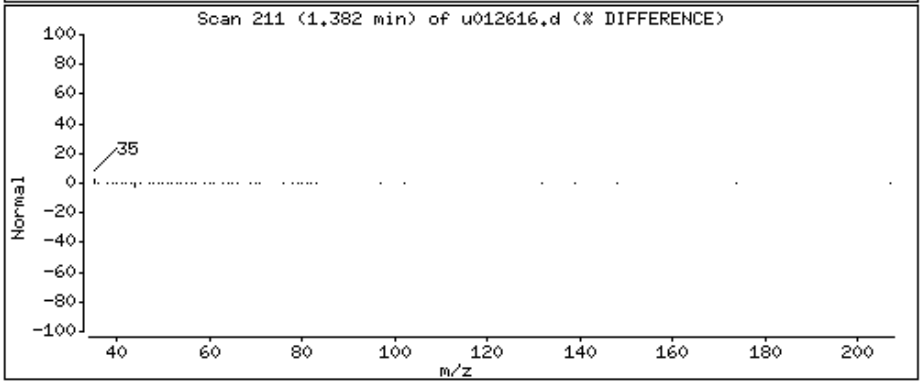












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012616.d Page 3

Date : 26-JAN-2024 17:09

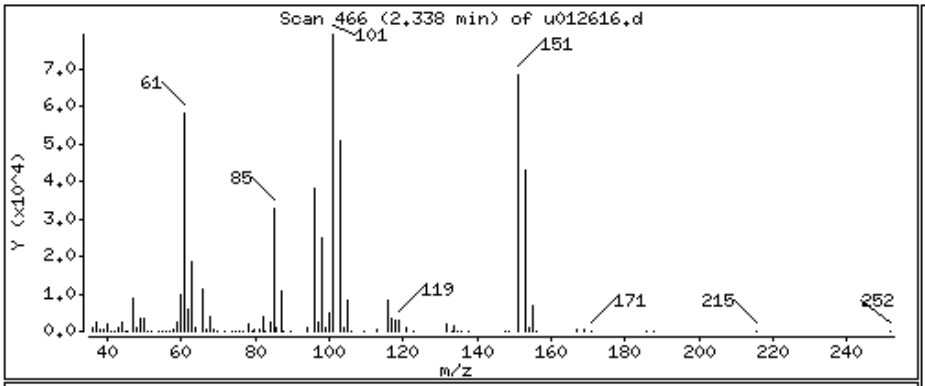
Client ID: Instrument: VOA9.i

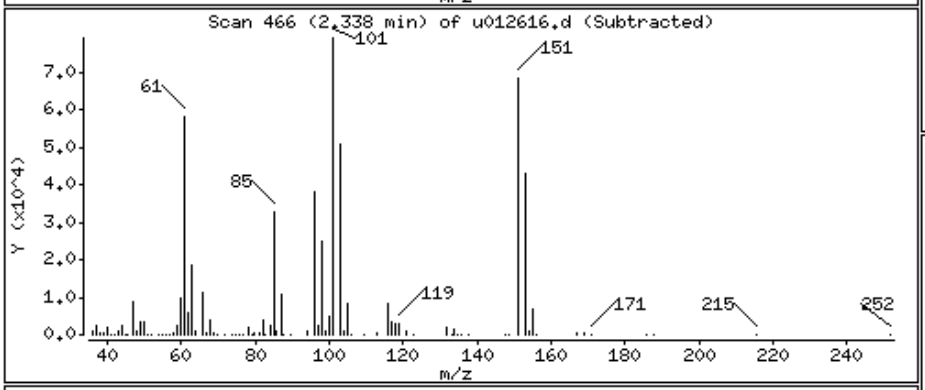
Sample Info: HS24011111-04

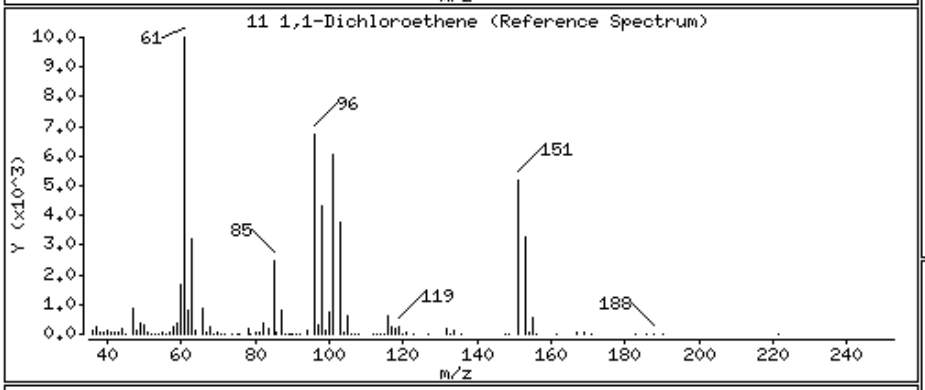
Purge Volume: 5.0 Operator: PC

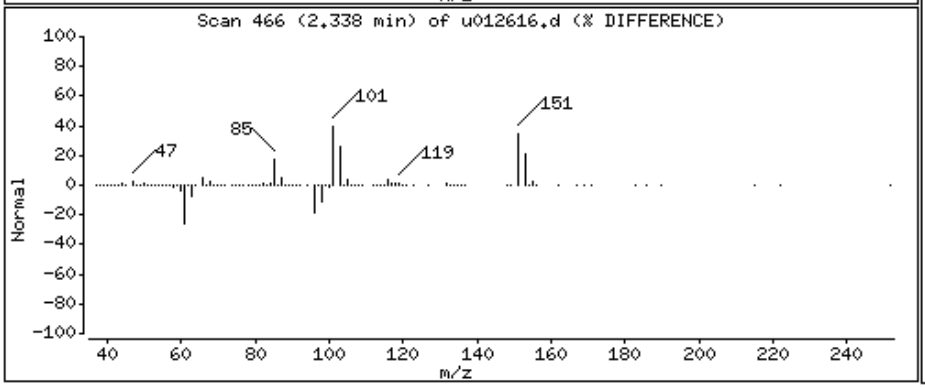
Column phase: DB624 Column diameter: 0.18

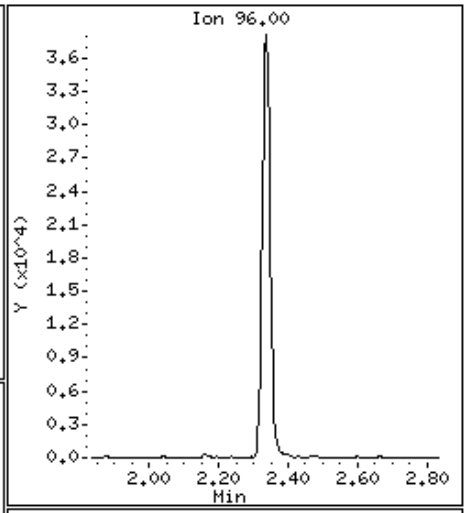
11 1,1-Dichloroethene Concentration: 23.82 ug/l

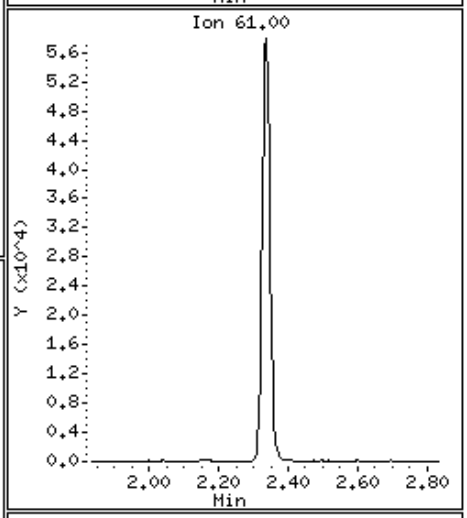


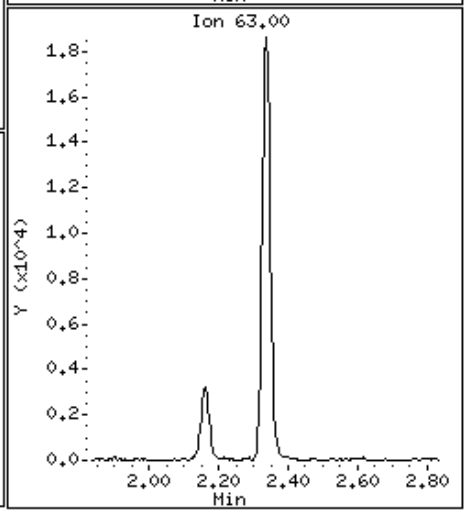












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012616.d Page 4

Date : 26-JAN-2024 17:09

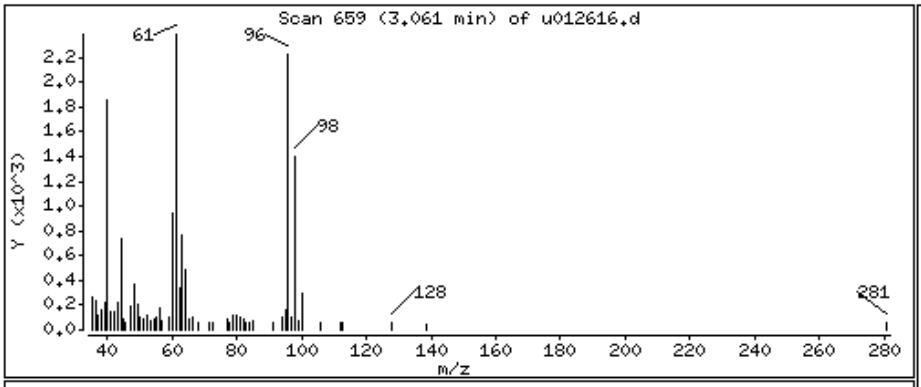
Client ID: Instrument: VOA9.i

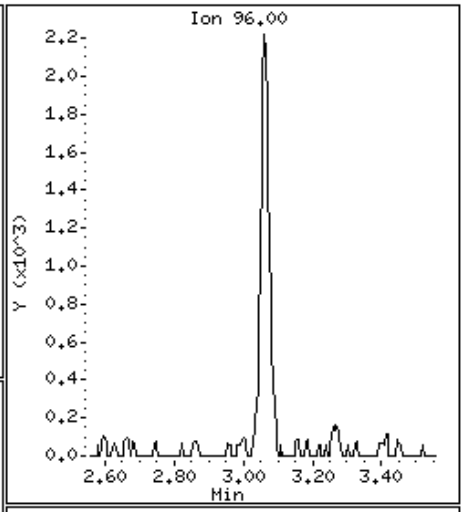
Sample Info: HS24011111-04

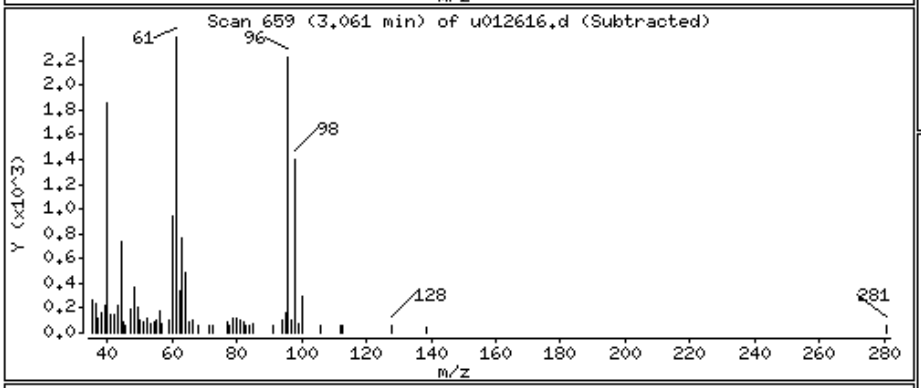
Purge Volume: 5.0 Operator: PC

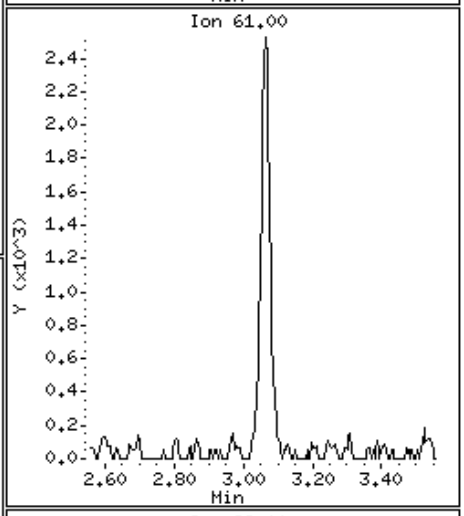
Column phase: DB624 Column diameter: 0.18

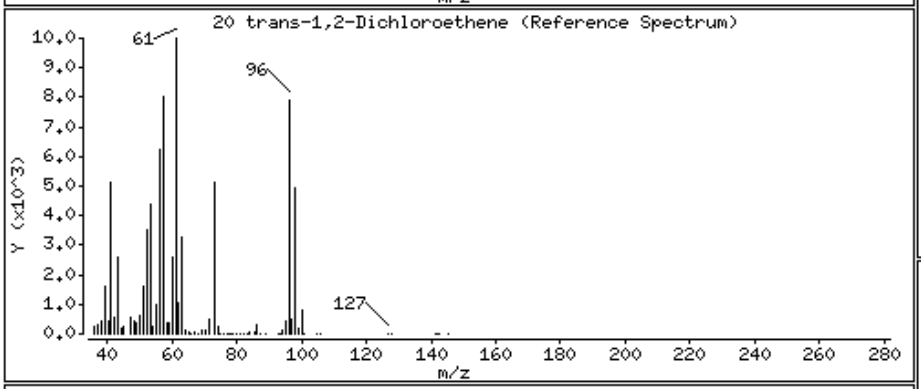
20 trans-1,2-Dichloroethene Concentration: 1.26 ug/l

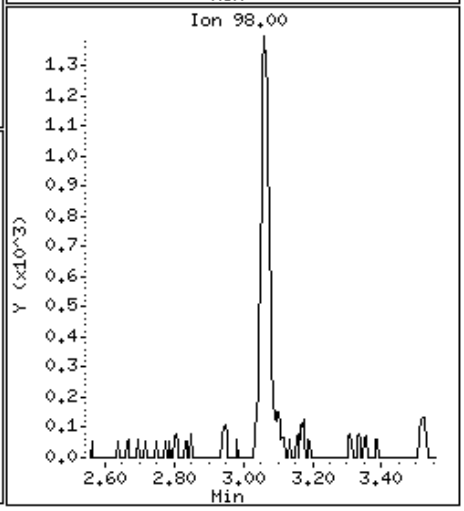


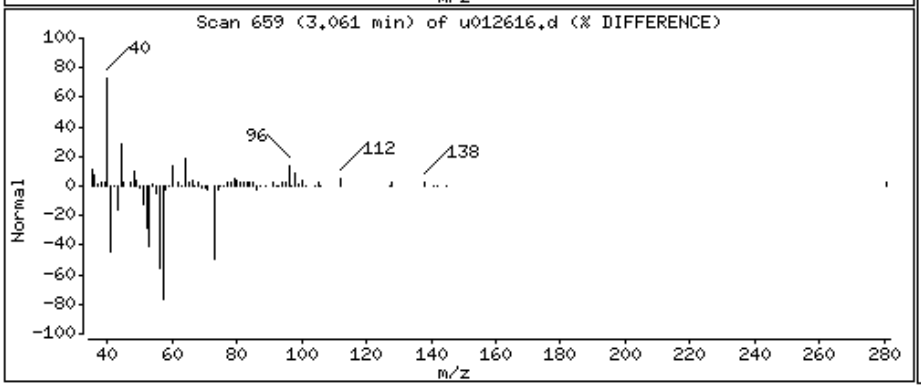












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012616.d Page 5

Date : 26-JAN-2024 17:09

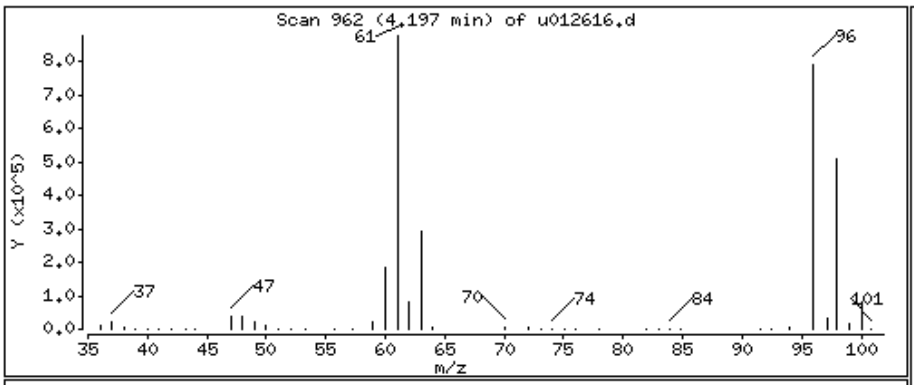
Client ID: Instrument: VOA9.i

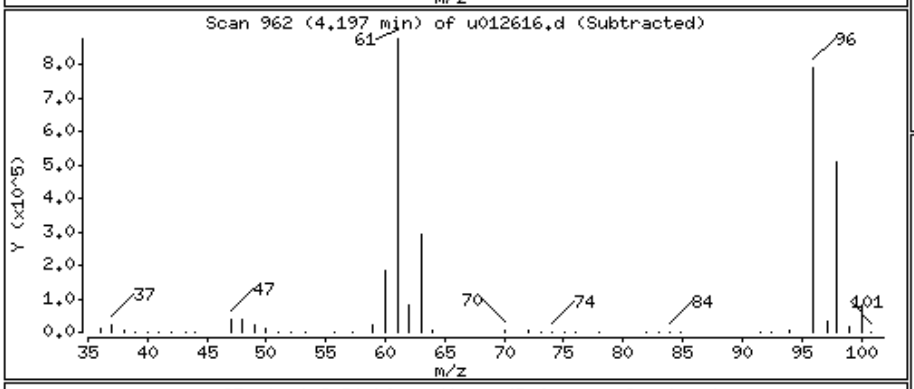
Sample Info: HS24011111-04

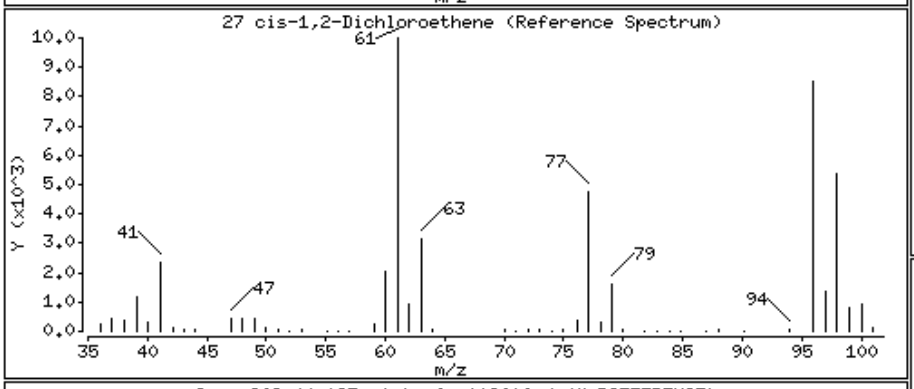
Purge Volume: 5.0 Operator: PC

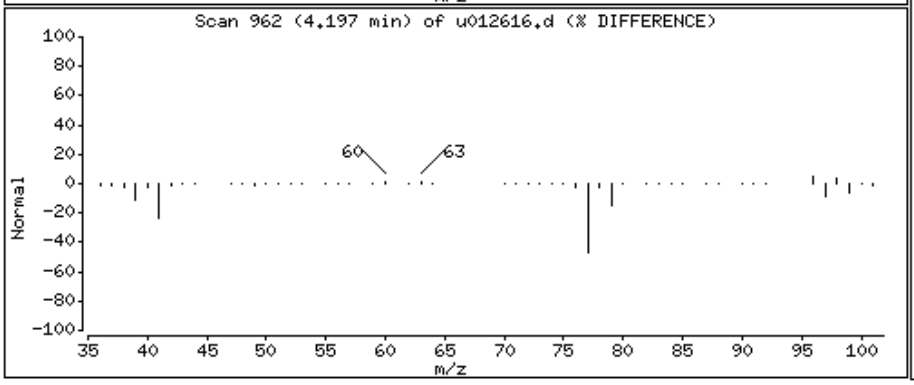
Column phase: DB624 Column diameter: 0.18

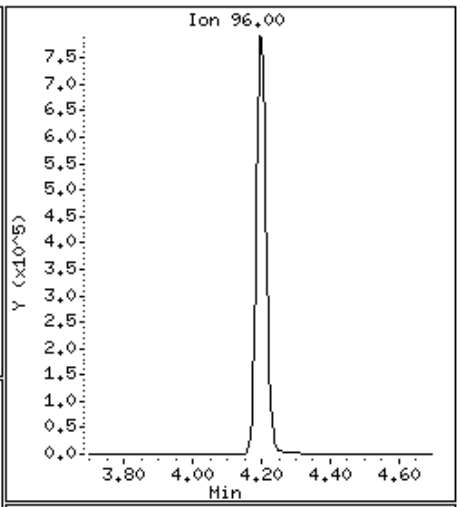
27 cis-1,2-Dichloroethene Concentration: 393.51 ug/l

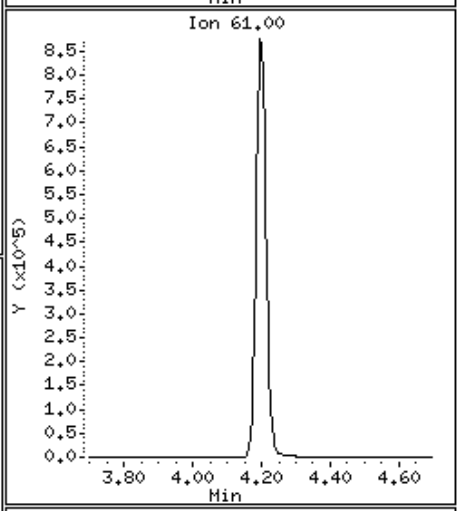


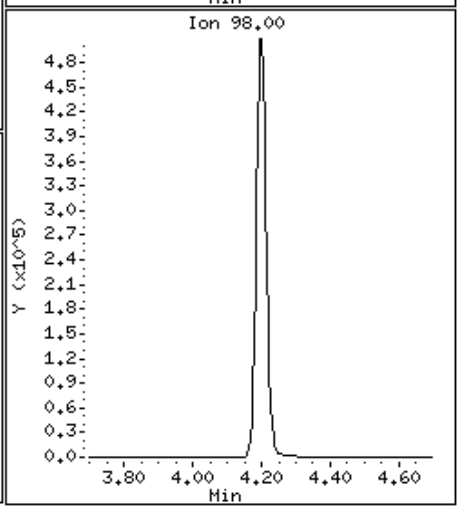












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012616.d Page 6

Date : 26-JAN-2024 17:09

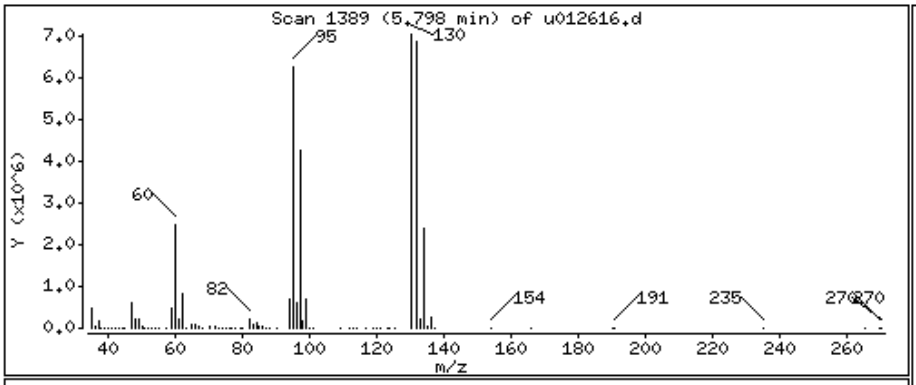
Client ID: Instrument: VOA9.i

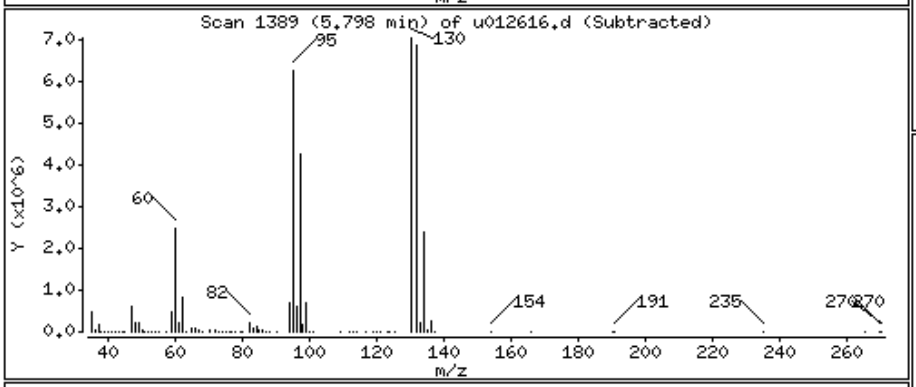
Sample Info: HS24011111-04

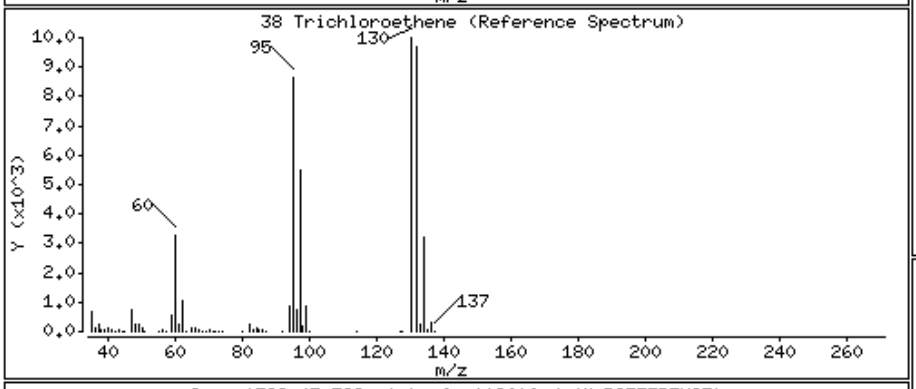
Purge Volume: 5.0 Operator: PC

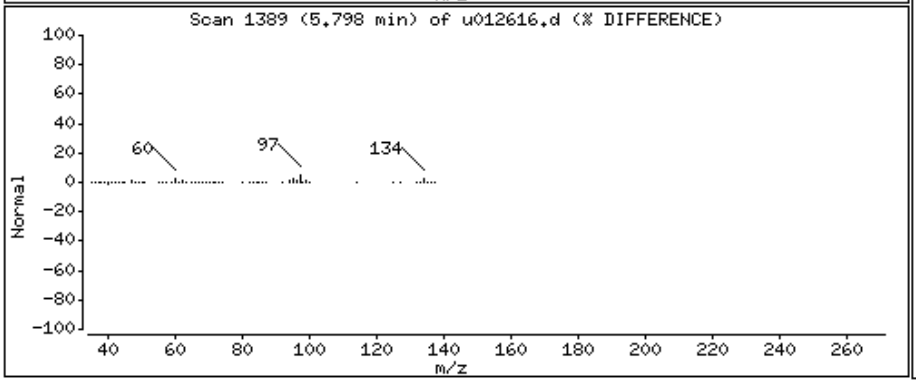
Column phase: DB624 Column diameter: 0.18

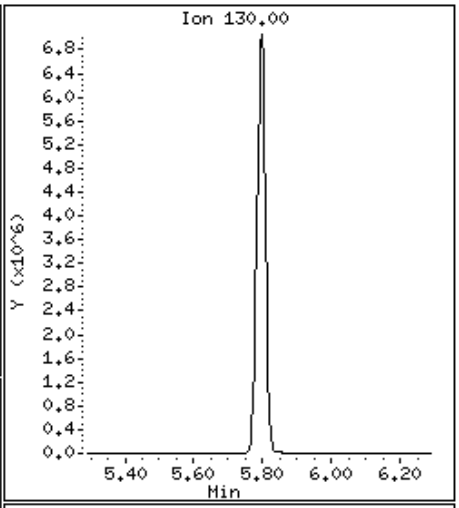
38 Trichloroethene Concentration: 3694.58 ug/l

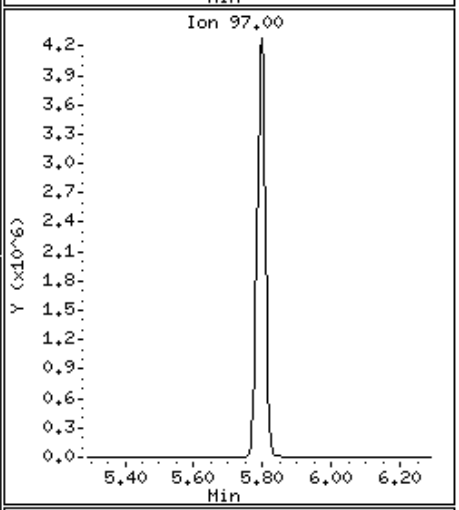


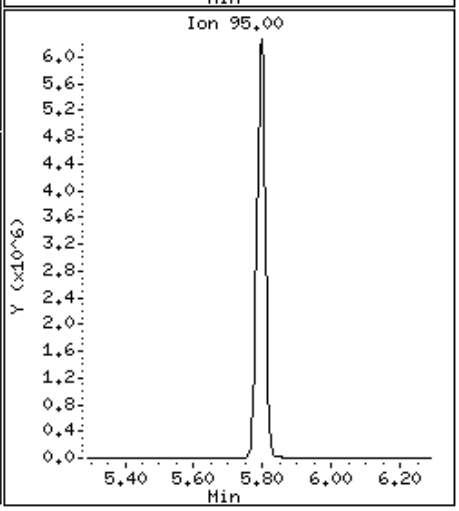












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012616.d Page 7

Date : 26-JAN-2024 17:09

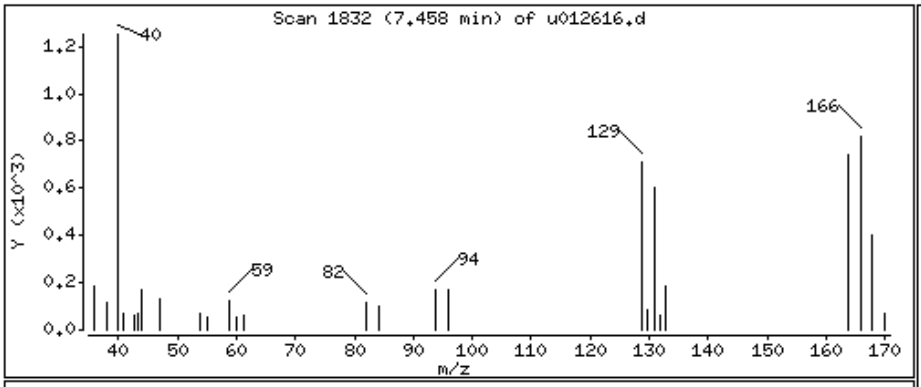
Client ID: Instrument: VOA9.i

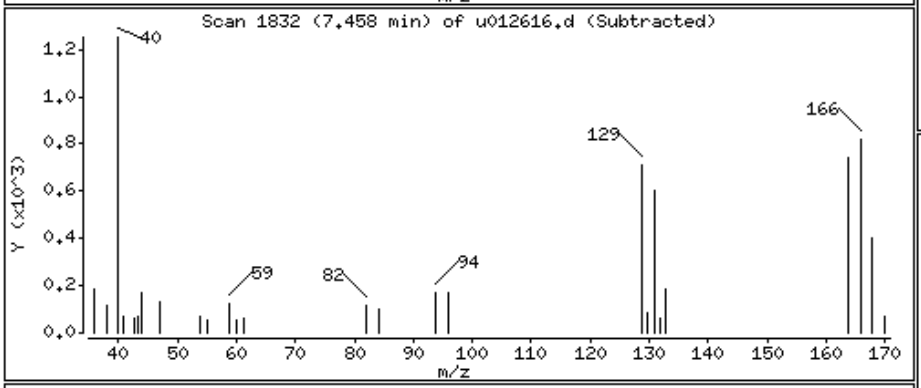
Sample Info: HS24011111-04

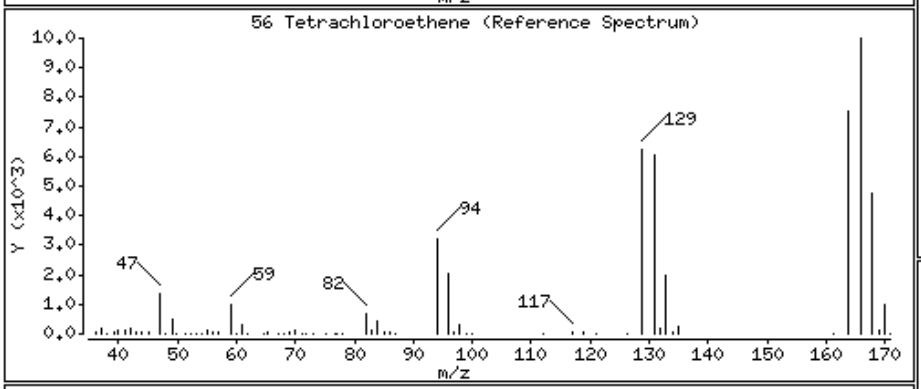
Purge Volume: 5.0 Operator: PC

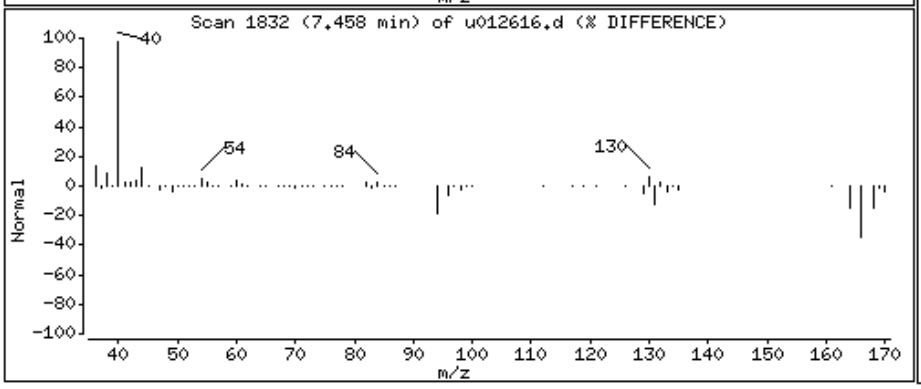
Column phase: DB624 Column diameter: 0.18

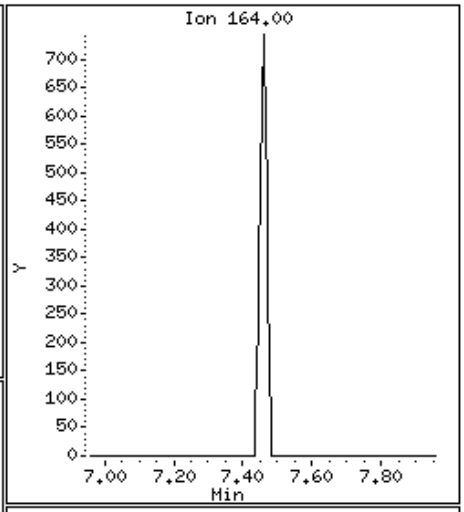
56 Tetrachloroethene Concentration: 0.43 ug/l

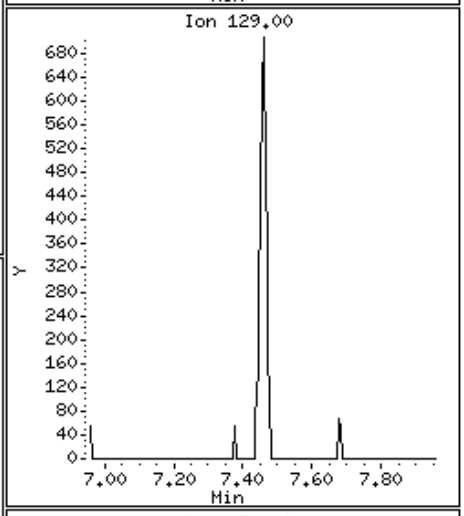


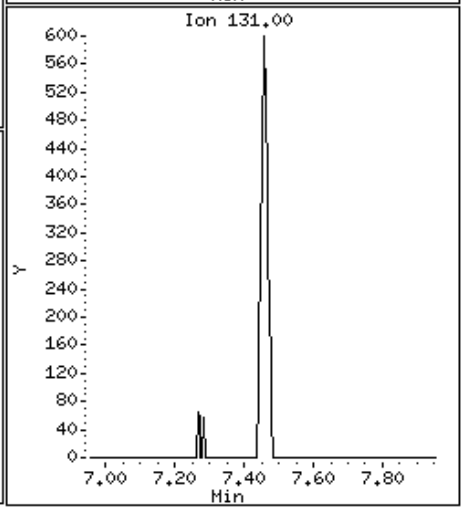












Data File : \\nahstws005\target\chem\voa9.i\u240126.b\u012616.d
Inj Date : 26-JAN-2024 17:09
InstruID : VOA9.i
LabSampID : HS24011111-04

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240126.b\U012617.D Page 1
Report Date: 29-Jan-2024 08:21

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240126.b\U012617.D
Lab Smp Id: HS24011111-05
Inj Date : 26-JAN-2024 17:31
Operator : PC   Inst ID: VOA9.i
Smp Info : HS24011111-05
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240126.b\8260C.m
Meth Date : 27-Jan-2024 00:13 firat.tast Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11   Cal File: U120608.D
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: 000bhatebtex.sub
Target Version: 4.14
Processing Host: NAHSTWS005

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

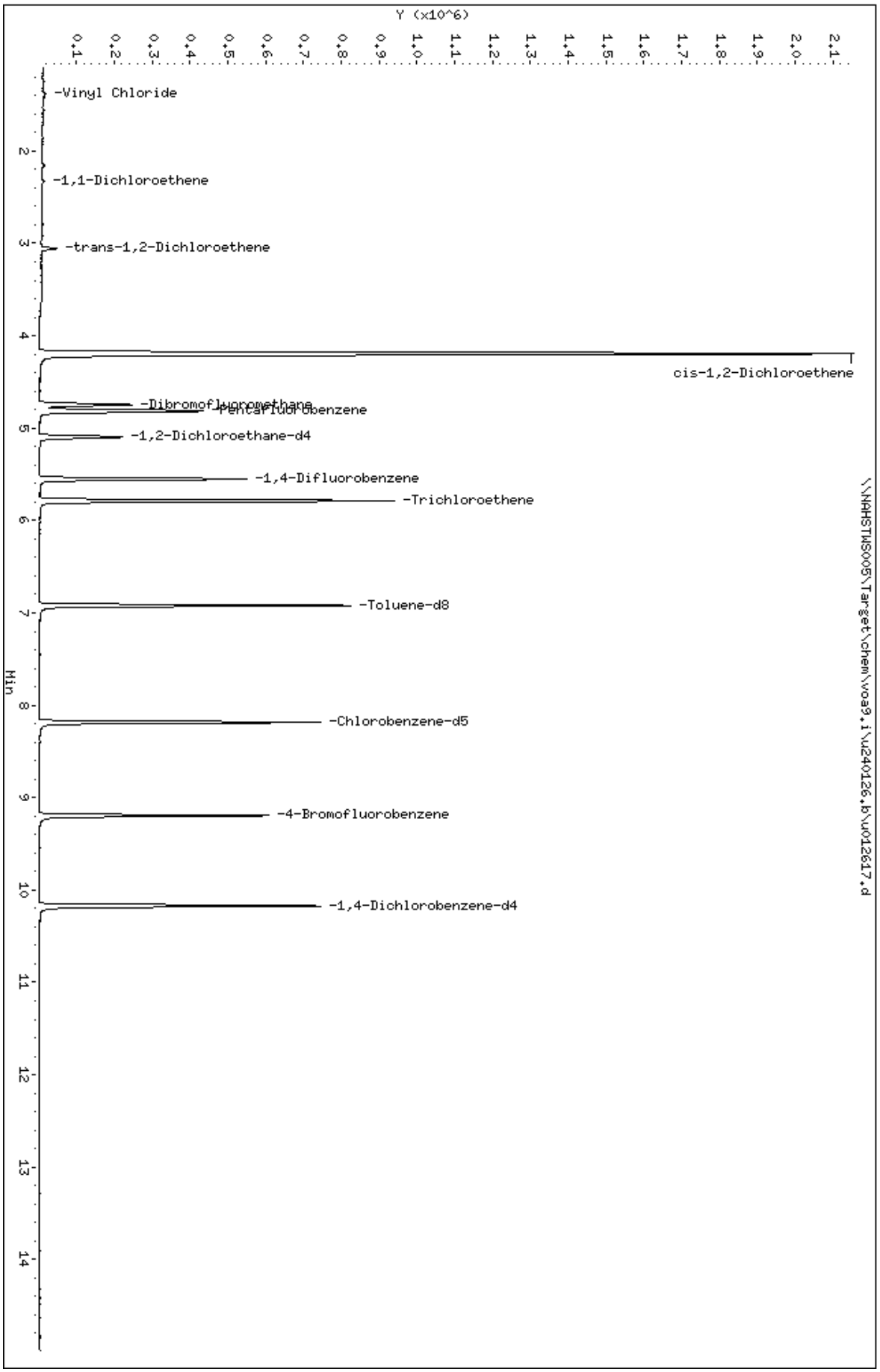
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.815	4.815	(1.000)	331668	50.0000	
$ 30 Dibromofluoromethane	113	4.747	4.748	(0.986)	144860	42.5266	42.52
$ 35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	147707	38.4452	38.44
* 36 1,4-Difluorobenzene	114	5.553	5.554	(1.000)	455290	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	433694	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	518597	51.9440	51.94
$ 69 4-Bromofluorobenzene	95	9.193	9.194	(1.123)	179397	47.3914	47.39
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	225684	50.0000	
5 Vinyl Chloride	62	1.374	1.378	(0.285)	6692	1.84118	1.84(a)
11 1,1-Dichloroethene	96	2.333	2.334	(0.485)	1544	0.60358	0.60(a)
20 trans-1,2-Dichloroethene	96	3.057	3.057	(0.635)	16384	5.35770	5.35
27 cis-1,2-Dichloroethene	96	4.193	4.197	(0.871)	1132570	276.472	276.47(A)
38 Trichloroethene	130	5.786	5.790	(1.042)	331393	97.0126	97.01

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: \\NAHSTMS005\Target\chem\voa9.i\u240126.b\u012617.d
Date : 26-JAN-2024 17:31
Client ID:
Sample Info: HS24011111-05
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9.i
Operator: PC
Column diameter: 0.18

Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012617.d Page 2

Date : 26-JAN-2024 17:31

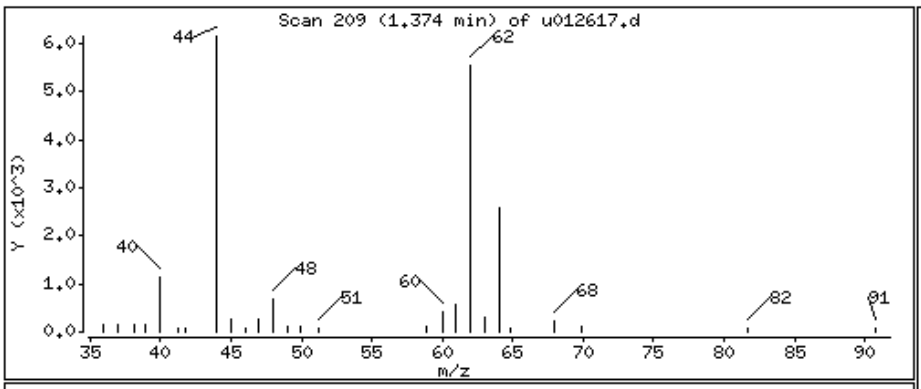
Client ID: Instrument: VOA9.i

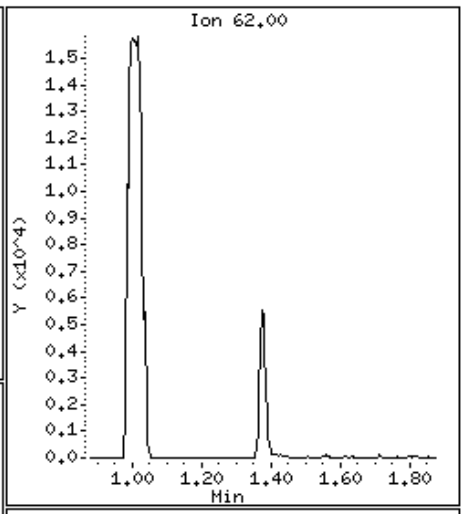
Sample Info: HS24011111-05

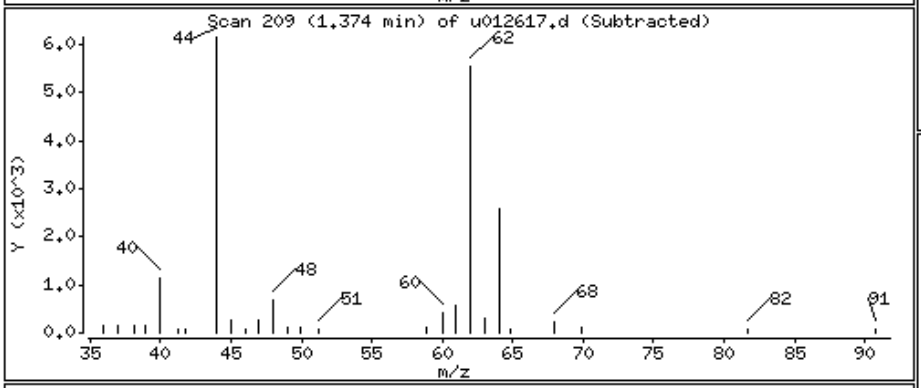
Purge Volume: 5.0 Operator: PC

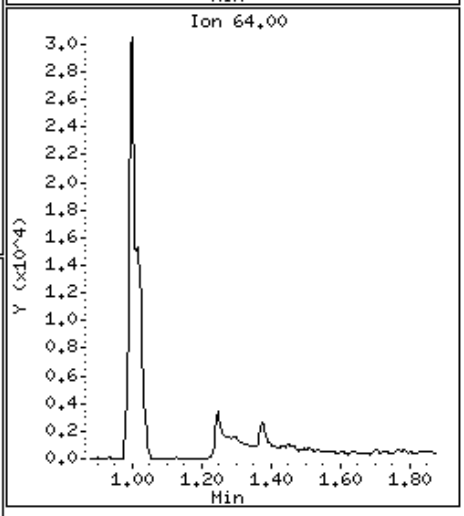
Column phase: DB624 Column diameter: 0.18

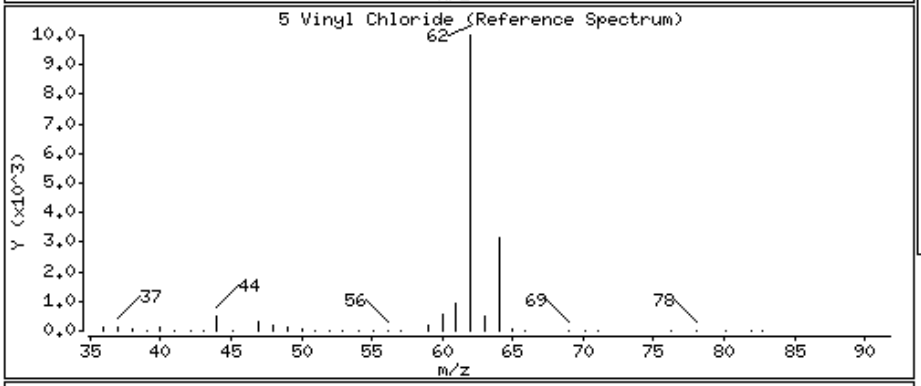
5 Vinyl Chloride Concentration: 1.84 ug/l

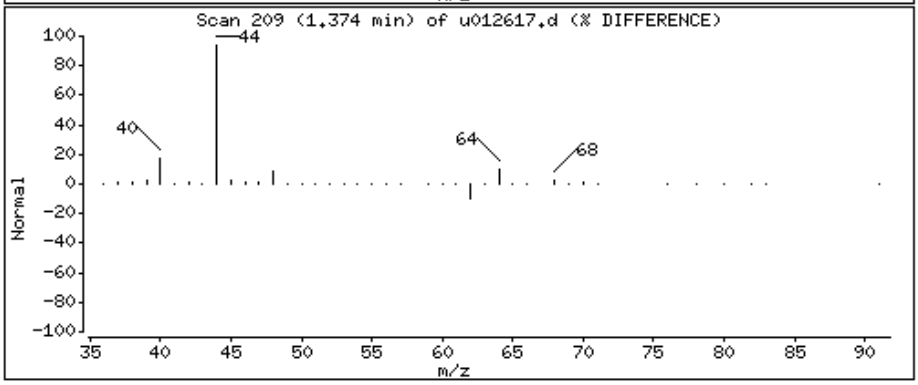












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012617.d Page 3

Date : 26-JAN-2024 17:31

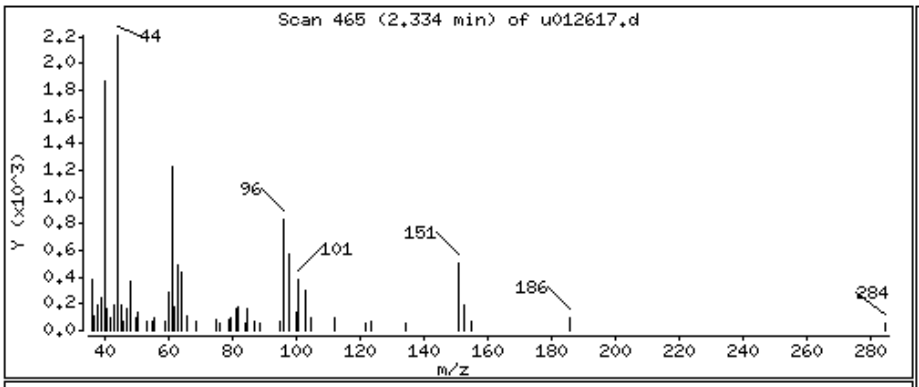
Client ID: Instrument: VOA9.i

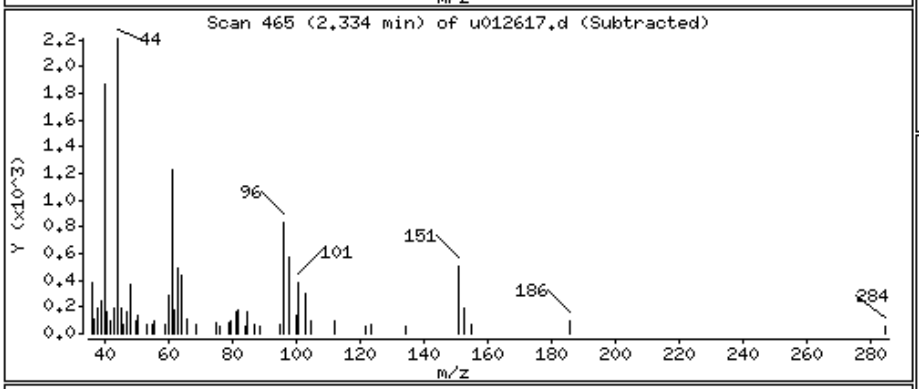
Sample Info: HS24011111-05

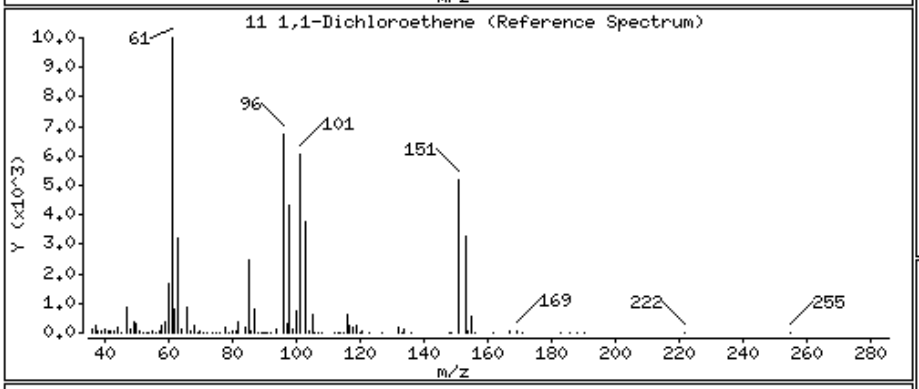
Purge Volume: 5.0 Operator: PC

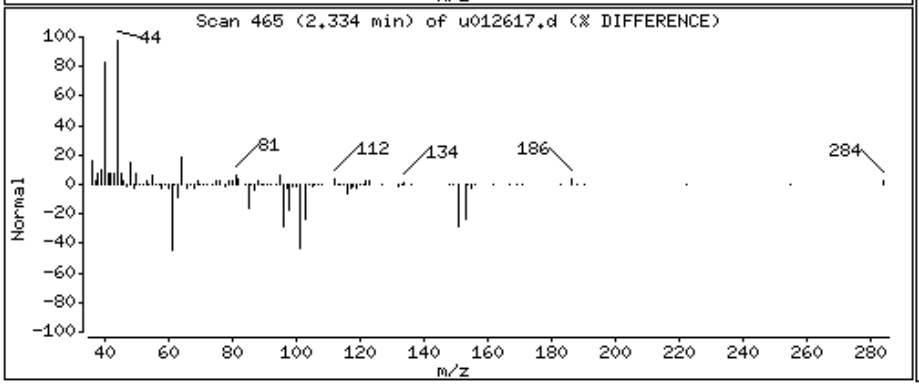
Column phase: DB624 Column diameter: 0.18

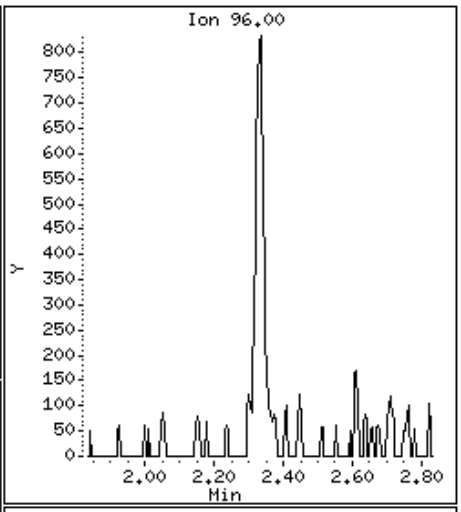
11 1,1-Dichloroethene Concentration: 0.60 ug/l

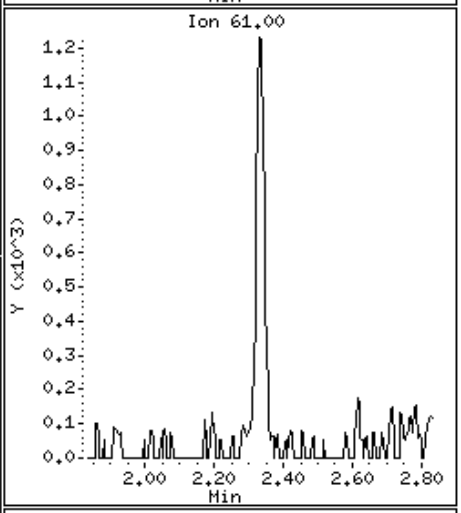


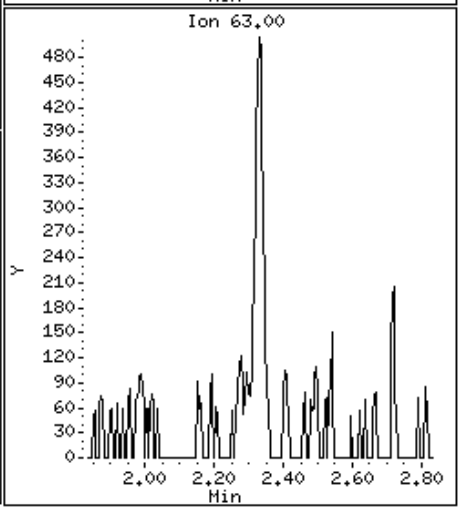












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012617.d Page 4

Date : 26-JAN-2024 17:31

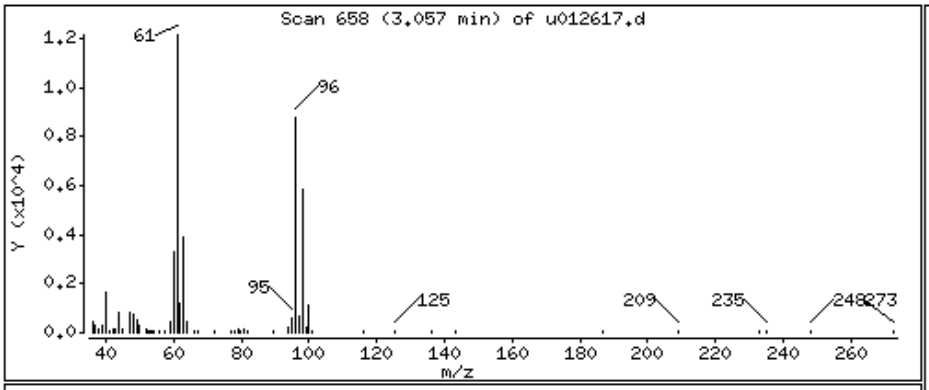
Client ID: Instrument: VOA9.i

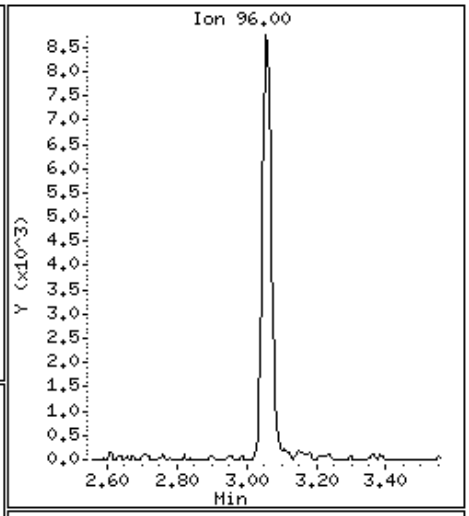
Sample Info: HS24011111-05

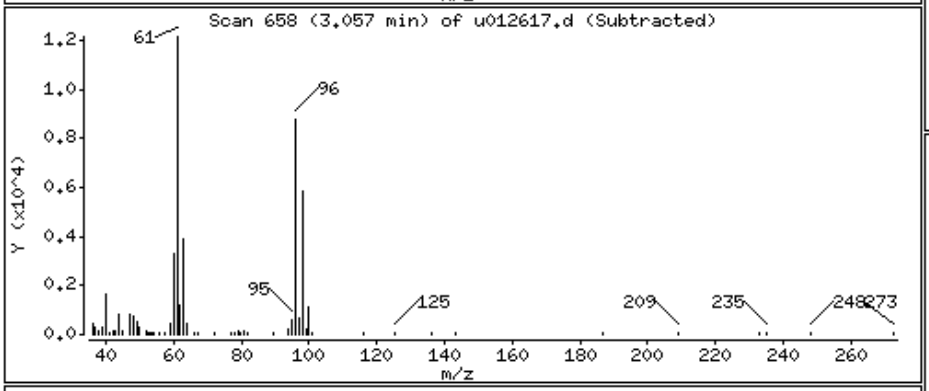
Purge Volume: 5.0 Operator: PC

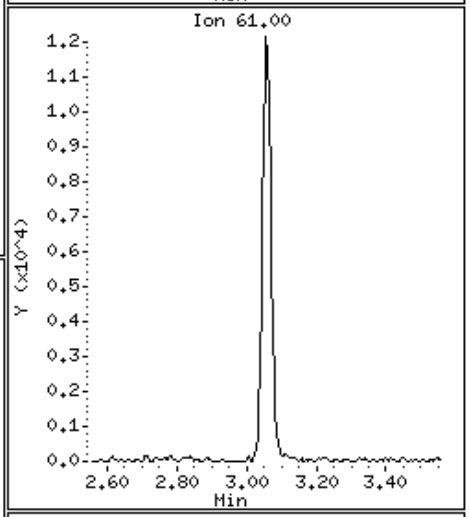
Column phase: DB624 Column diameter: 0.18

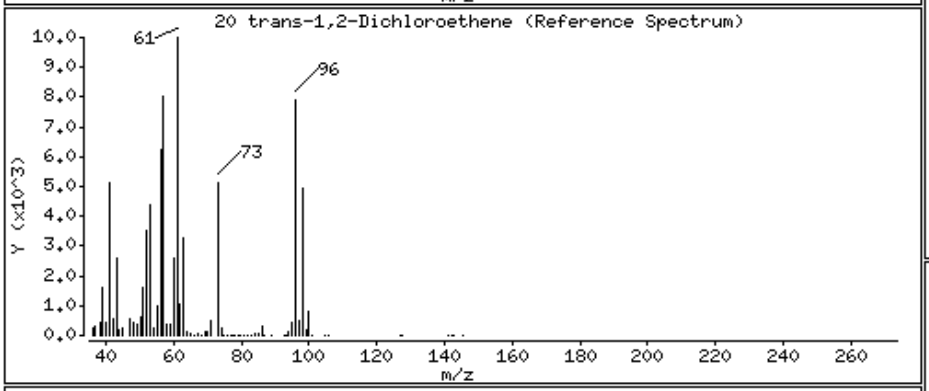
20 trans-1,2-Dichloroethene Concentration: 5.35 ug/l

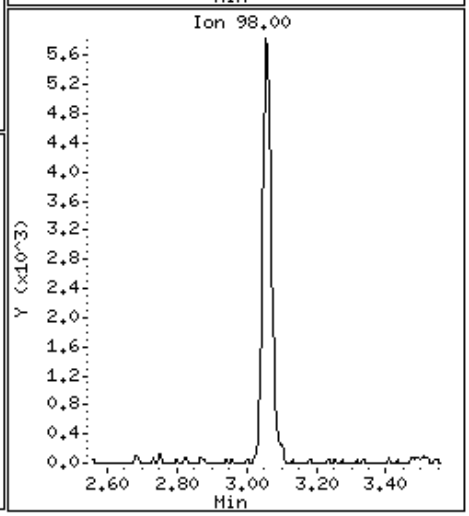


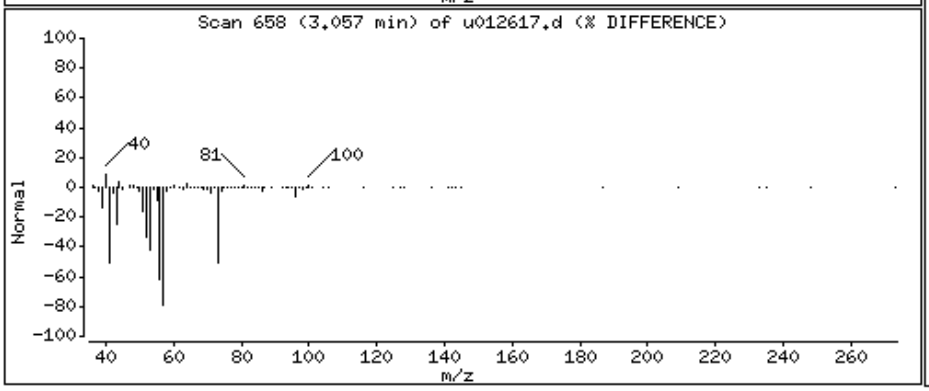












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012617.d Page 5

Date : 26-JAN-2024 17:31

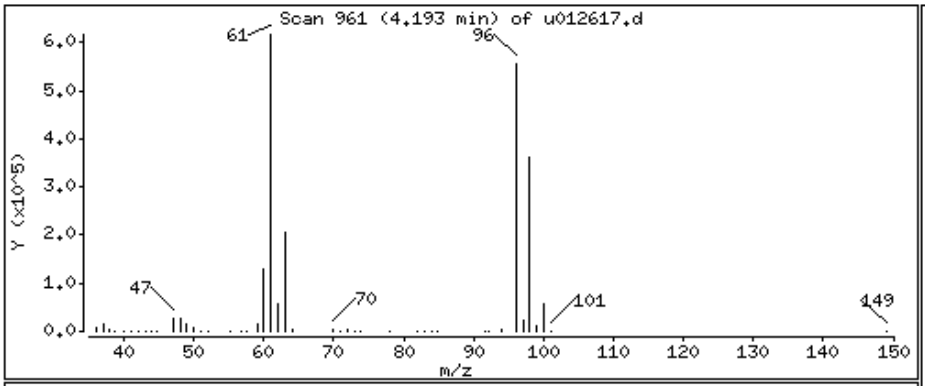
Client ID: Instrument: VOA9.i

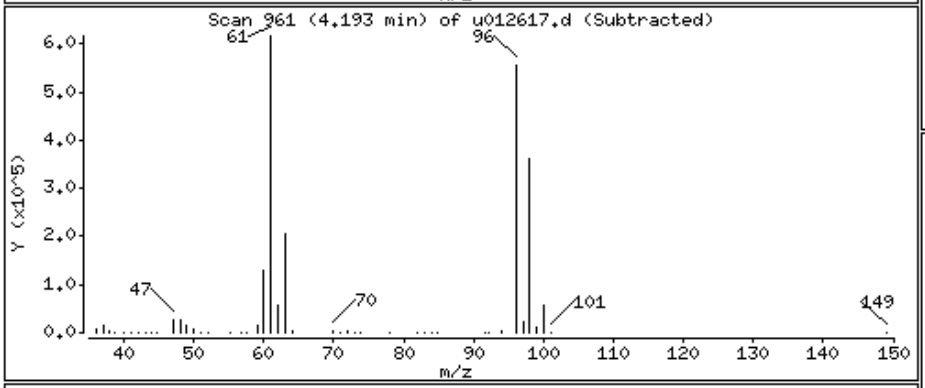
Sample Info: HS24011111-05

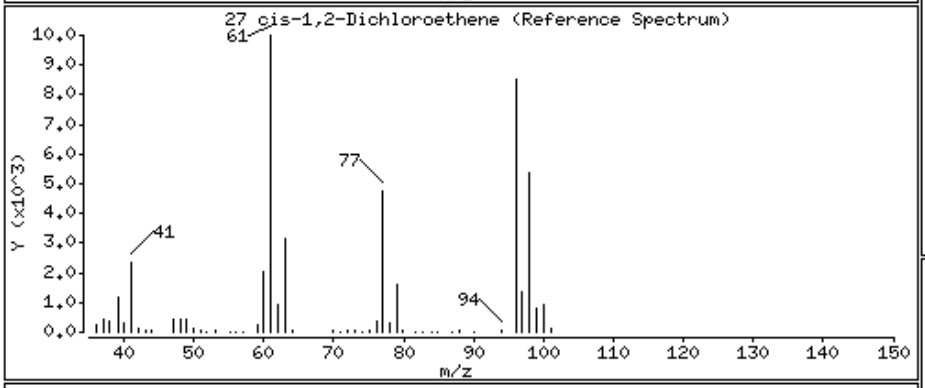
Purge Volume: 5.0 Operator: PC

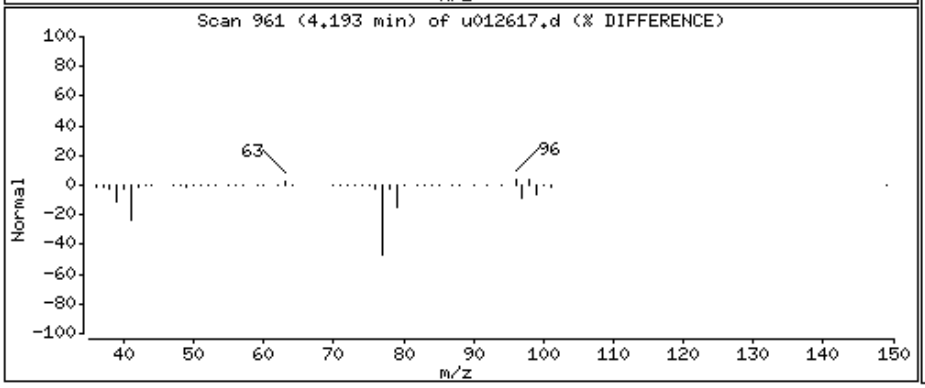
Column phase: DB624 Column diameter: 0.18

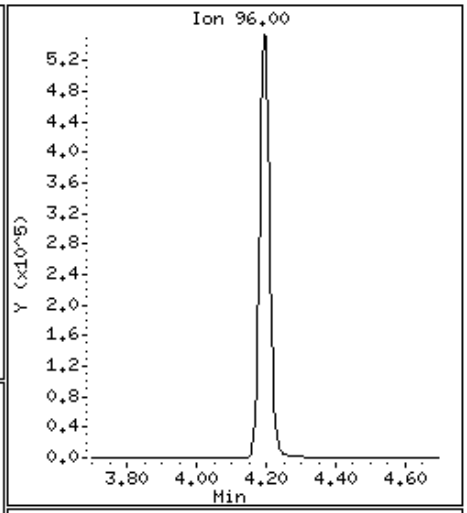
27 cis-1,2-Dichloroethene Concentration: 276.47 ug/l

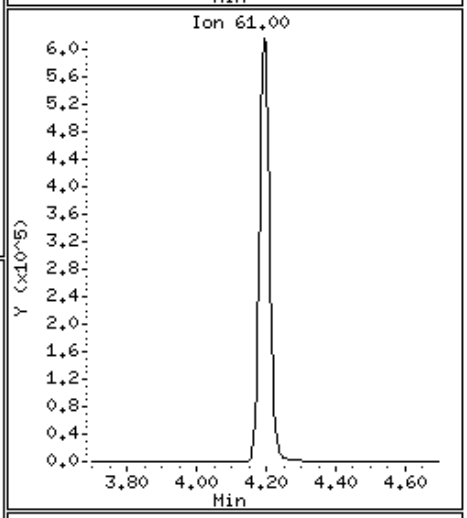


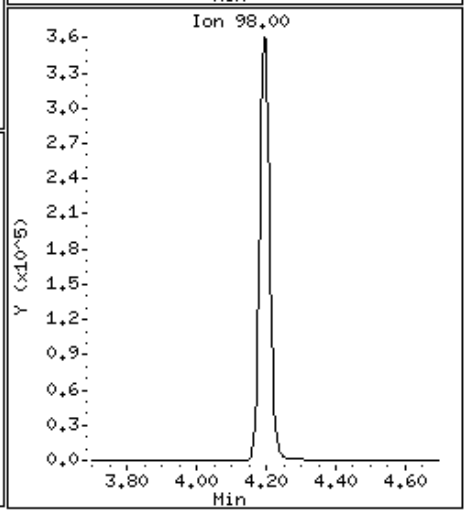












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012617.d Page 6

Date : 26-JAN-2024 17:31

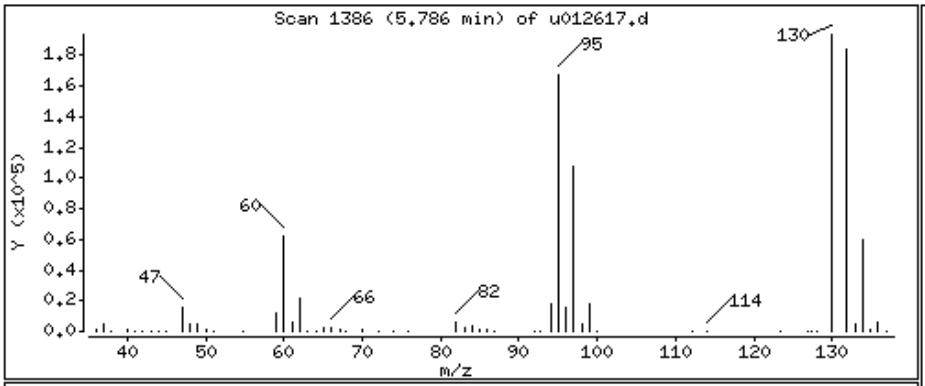
Client ID: Instrument: VOA9.i

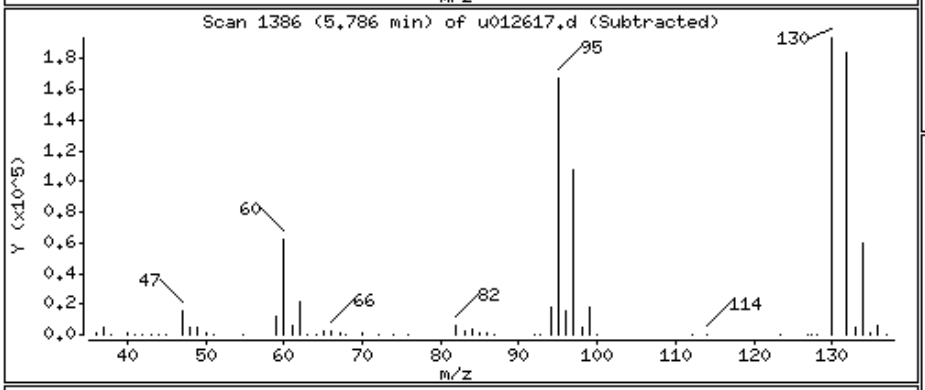
Sample Info: HS24011111-05

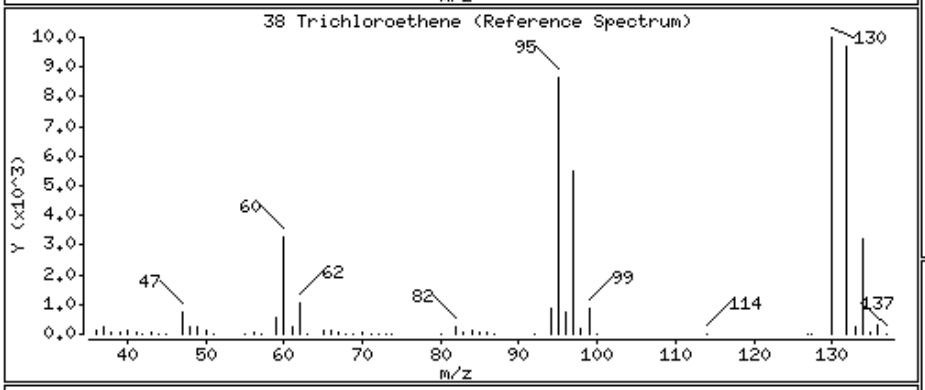
Purge Volume: 5.0 Operator: PC

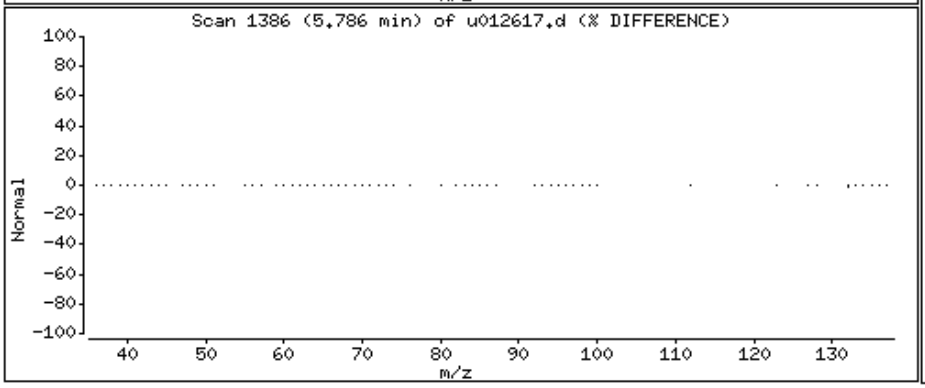
Column phase: DB624 Column diameter: 0.18

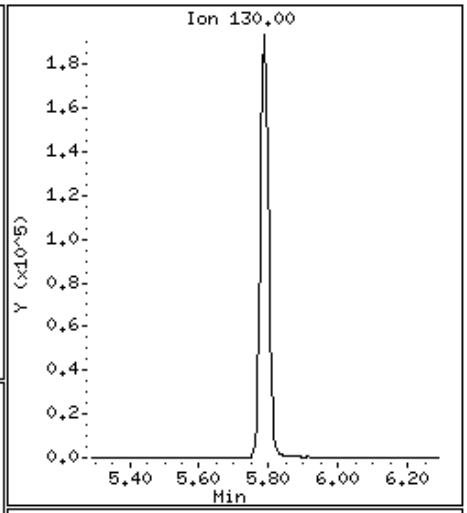
38 Trichloroethene Concentration: 97.01 ug/l

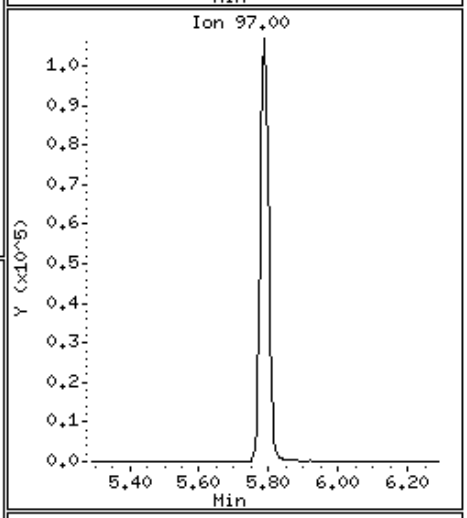


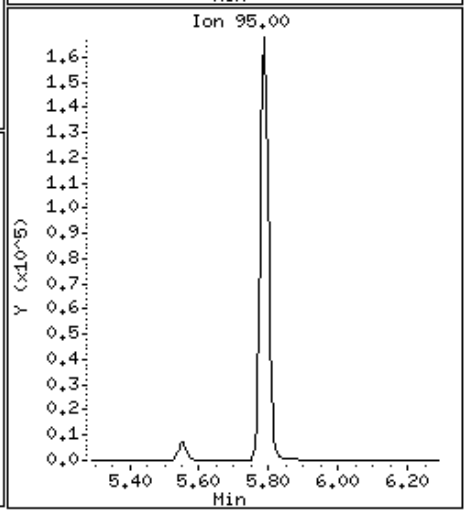












Data File : \\nahstws005\target\chem\voa9.i\u240126.b\u012617.d
Inj Date : 26-JAN-2024 17:31
InstruID : VOA9.i
LabSampID : HS24011111-05

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240126.b\U012618.D Page 1
Report Date: 29-Jan-2024 08:21

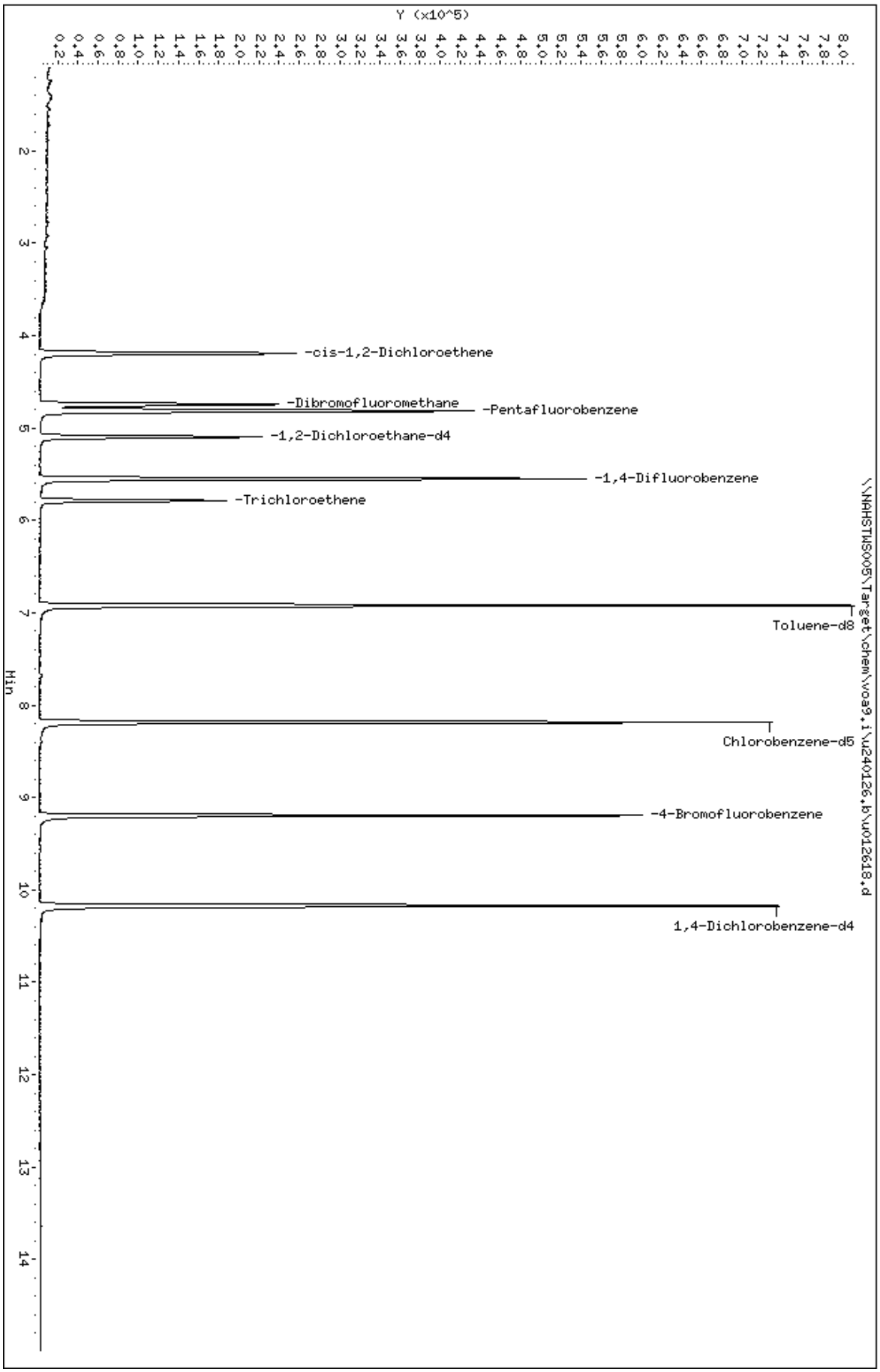
ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240126.b\U012618.D
Lab Smp Id: HS24011111-06
Inj Date : 26-JAN-2024 17:54
Operator : PC   Inst ID: VOA9.i
Smp Info : HS24011111-06
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240126.b\8260C.m
Meth Date : 27-Jan-2024 00:13 firat.tast Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11   Cal File: U120608.D
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: 000bhatebtex.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	4.811	4.815	(1.000)	328653	50.0000	
$ 30 Dibromofluoromethane	113	4.744	4.748	(0.986)	144273	42.7480	42.74
$ 35 1,2-Dichloroethane-d4	65	5.093	5.096	(1.058)	143162	37.6341	37.63
* 36 1,4-Difluorobenzene	114	5.550	5.554	(1.000)	451968	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	425865	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	514095	52.4397	52.43
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	180335	48.5458	48.54
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	223899	50.0000	
27 cis-1,2-Dichloroethene	96	4.193	4.197	(0.871)	136157	33.5422	33.54
38 Trichloroethene	130	5.786	5.790	(1.043)	64868	19.1291	19.12



Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012618.d
Date : 26-JAN-2024 17:54
Client ID:
Sample Info: HS24011111-06
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9.i
Operator: PC
Column diameter: 0.18

Page 1

Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012618.d Page 2

Date : 26-JAN-2024 17:54

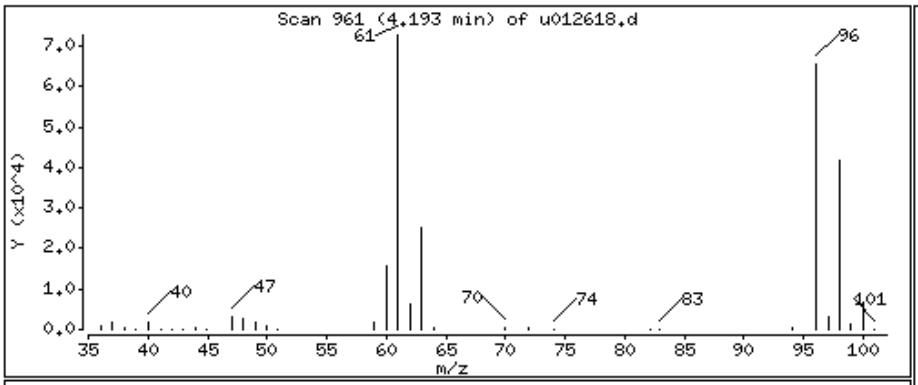
Client ID: Instrument: VOA9.i

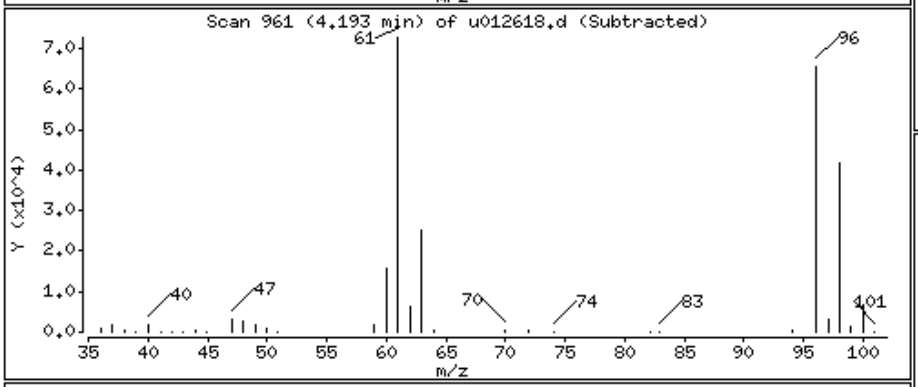
Sample Info: HS24011111-06

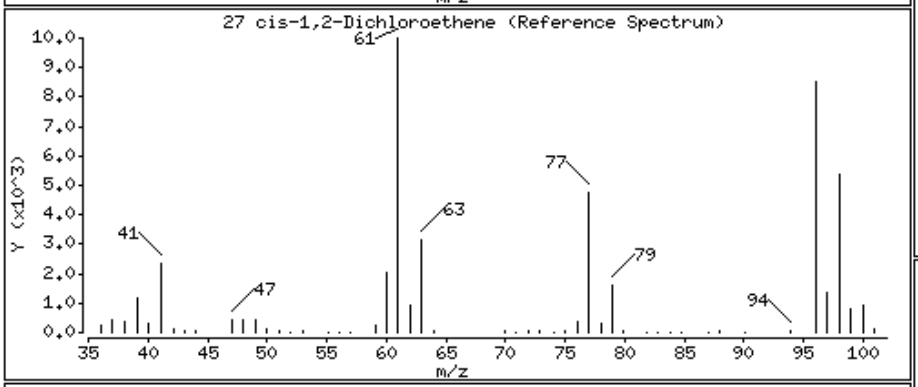
Purge Volume: 5.0 Operator: PC

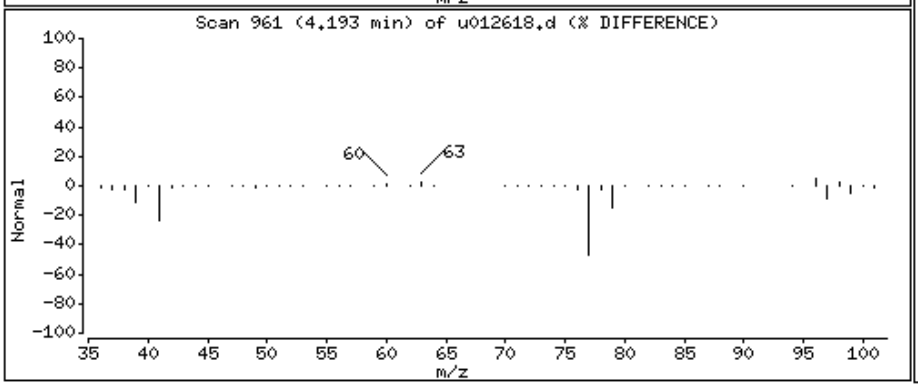
Column phase: DB624 Column diameter: 0.18

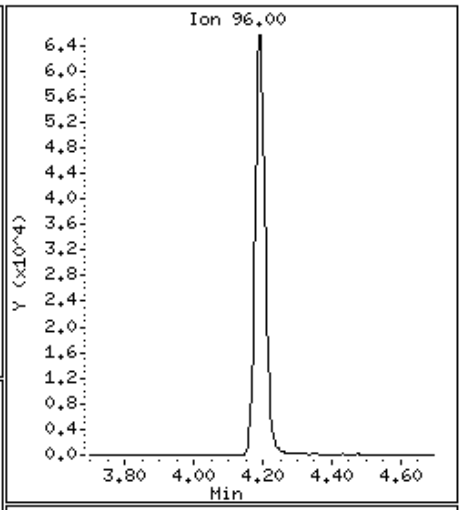
27 cis-1,2-Dichloroethene Concentration: 33.54 ug/l

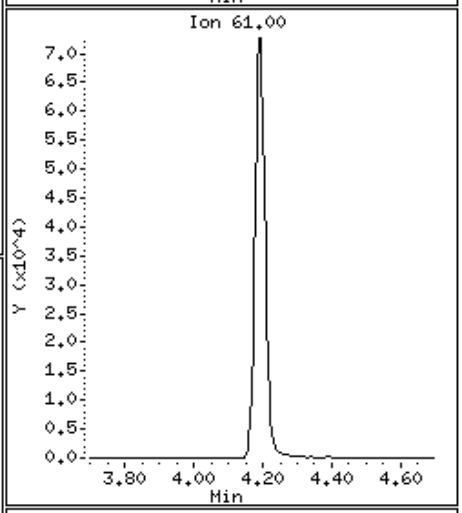


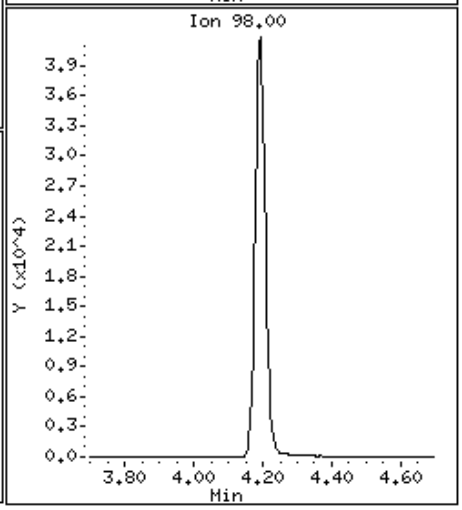












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012618.d Page 3

Date : 26-JAN-2024 17:54

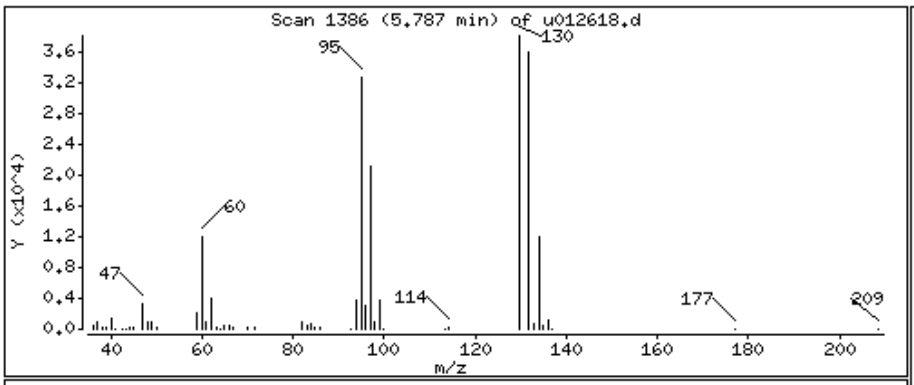
Client ID: Instrument: VOA9.i

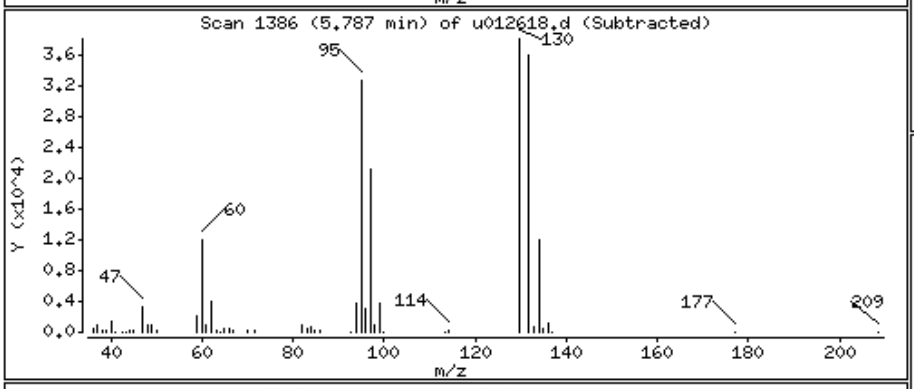
Sample Info: HS24011111-06

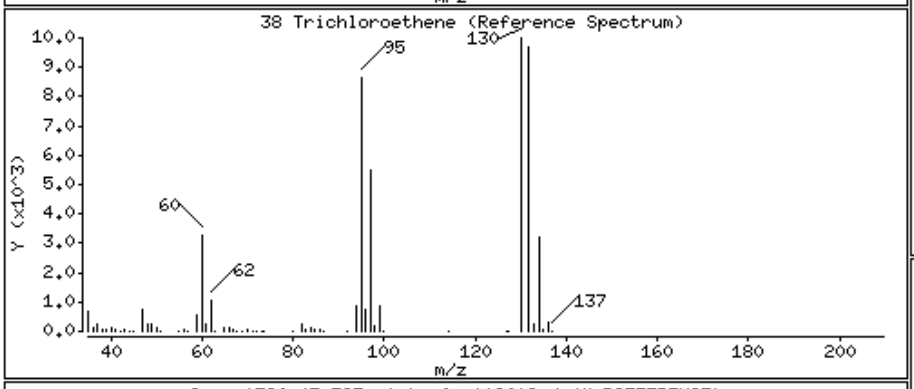
Purge Volume: 5.0 Operator: PC

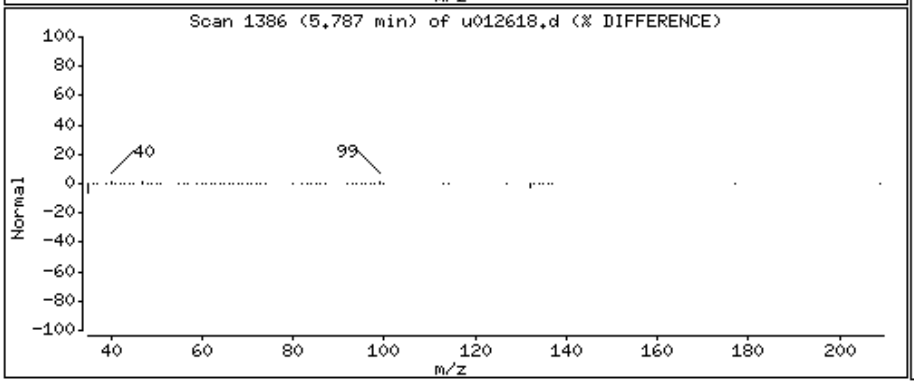
Column phase: DB624 Column diameter: 0.18

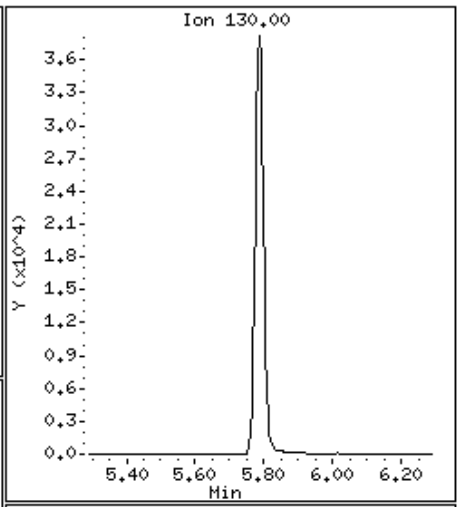
38 Trichloroethene Concentration: 19.12 ug/l

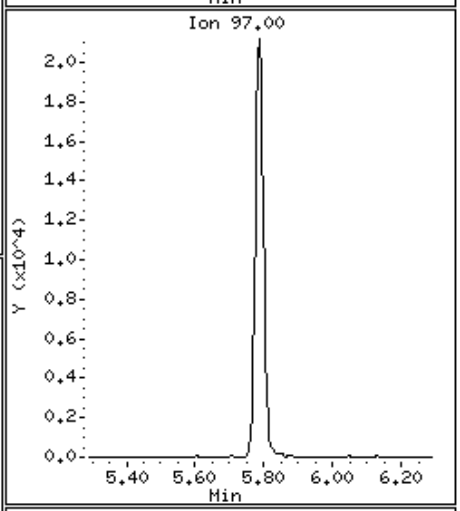


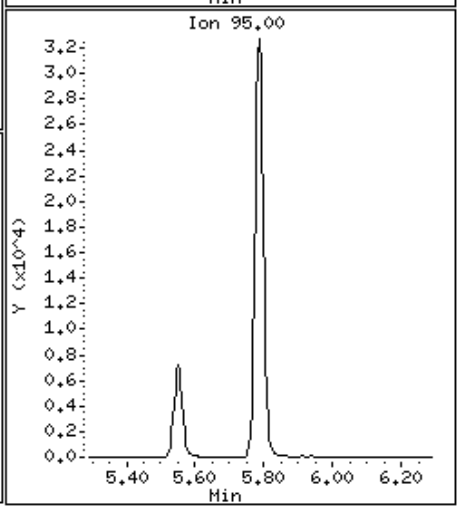












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Inj Date : 26-JAN-2024 17:54
InstruID : VOA9.i
LabSampID : HS24011111-06

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240126.b\U012619.D Page 1
Report Date: 29-Jan-2024 08:21

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240126.b\U012619.D
Lab Smp Id: HS24011111-07
Inj Date : 26-JAN-2024 18:16
Operator : PC   Inst ID: VOA9.i
Smp Info : HS24011111-07
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240126.b\8260C.m
Meth Date : 27-Jan-2024 00:13 firat.tast Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11   Cal File: U120608.D
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: 000bhatebtex.sub
Target Version: 4.14
Processing Host: NAHSTWS005

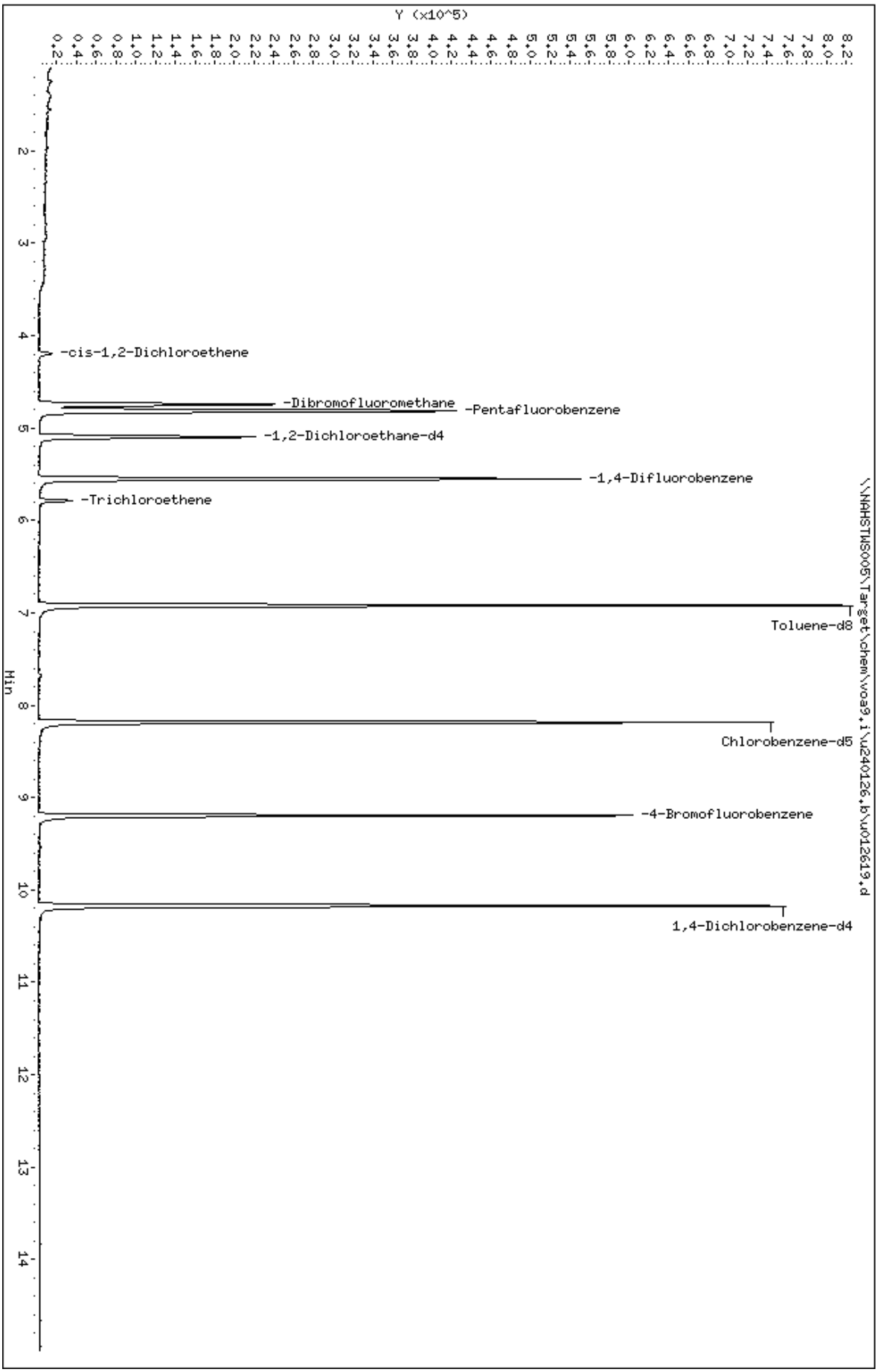
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.815	4.815	(1.000)	329564	50.0000	
$ 30 Dibromofluoromethane	113	4.744	4.748	(0.985)	146336	43.2513	43.25
$ 35 1,2-Dichloroethane-d4	65	5.092	5.096	(1.058)	146228	38.3084	38.30
* 36 1,4-Difluorobenzene	114	5.550	5.554	(1.000)	455907	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	432270	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	516635	51.9180	51.91
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	179383	47.5480	47.54
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	224928	50.0000	
27 cis-1,2-Dichloroethene	96	4.197	4.197	(0.872)	7178	1.76341	1.76(a)
38 Trichloroethene	130	5.790	5.790	(1.043)	12207	3.56866	3.56(a)

QC Flag Legend

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


Data File: \\NAHSTWS005\Target\chem\voa9,i\u240126,b\u012619,d
Date : 26-JAN-2024 18:16
Client ID:
Sample Info: HS24011111-07
Purge Volume: 5.0
Column phase: DB624
Instrument: VOA9,i
Operator: PC
Column diameter: 0.18
Page 1
Y (x10^5)
Min
-cis-1,2-Dichloroethene
-Dibromofluoromethane
-Pentafluorobenzene
-1,2-Dichloroethane-d4
-1,4-Difluorobenzene
-Trichloroethene
Toluene-d8
Chlorobenzene-d5
-4-Bromofluorobenzene
1,4-Dichlorobenzene-d4
\\NAHSTWS005\Target\chem\voa9,i\u240126,b\u012619,d

Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012619.d Page 2

Date : 26-JAN-2024 18:16

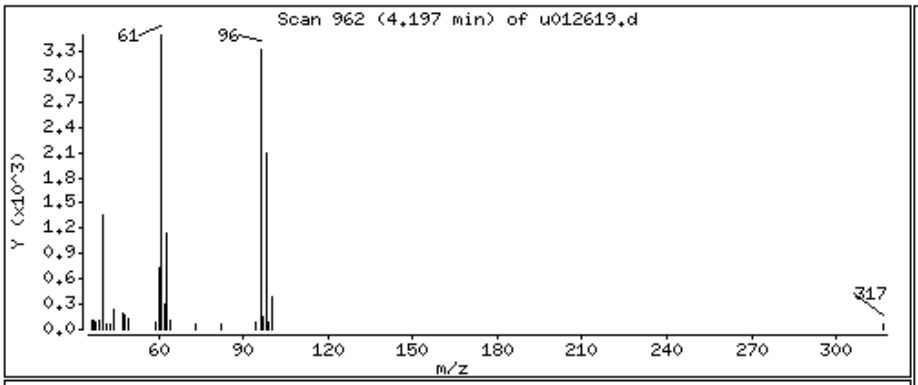
Client ID: Instrument: VOA9.i

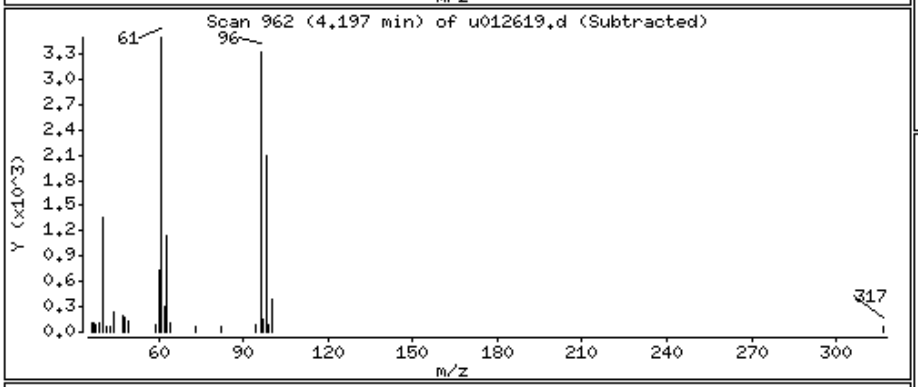
Sample Info: HS24011111-07

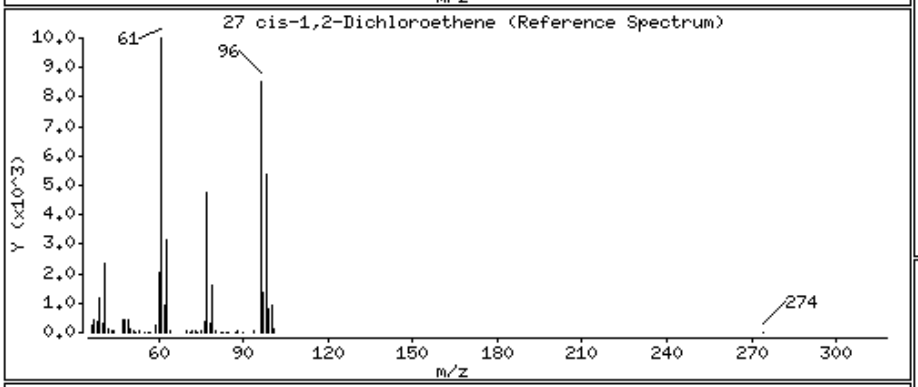
Purge Volume: 5.0 Operator: PC

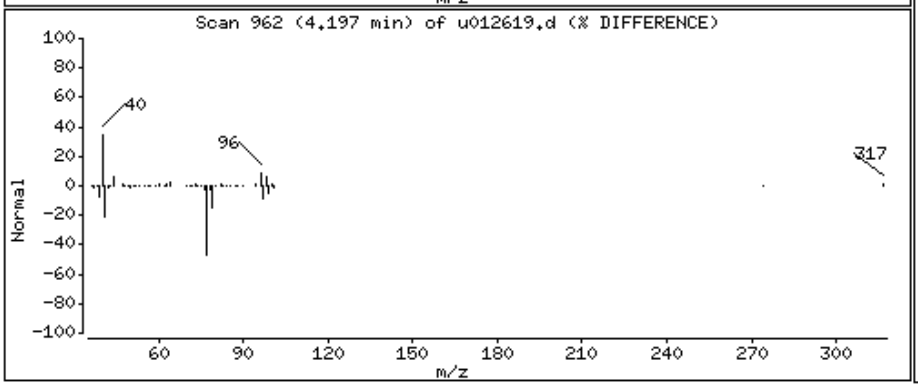
Column phase: DB624 Column diameter: 0.18

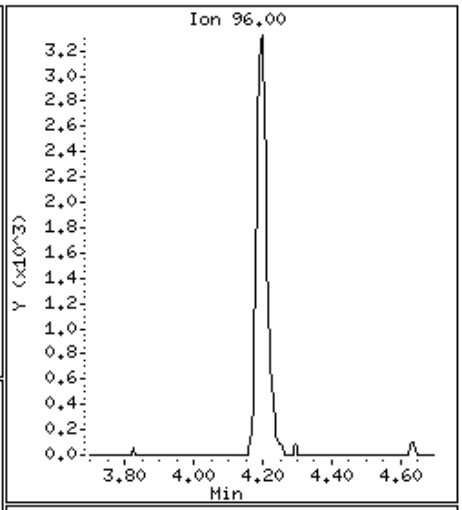
27 cis-1,2-Dichloroethene Concentration: 1.76 ug/l

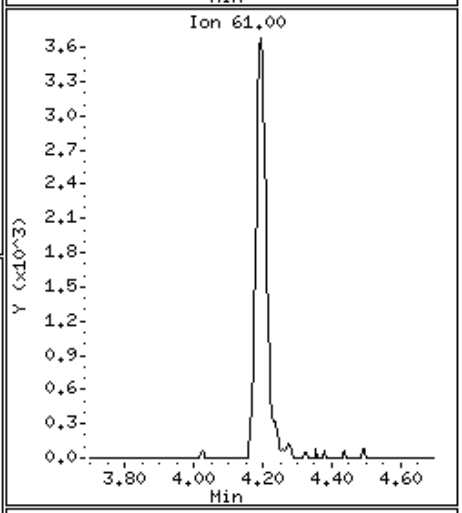


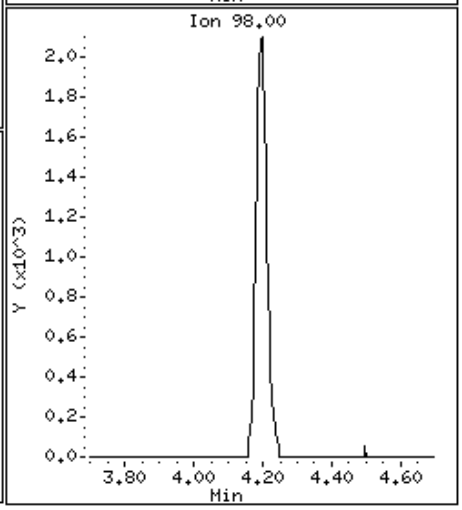












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012619.d Page 3

Date : 26-JAN-2024 18:16

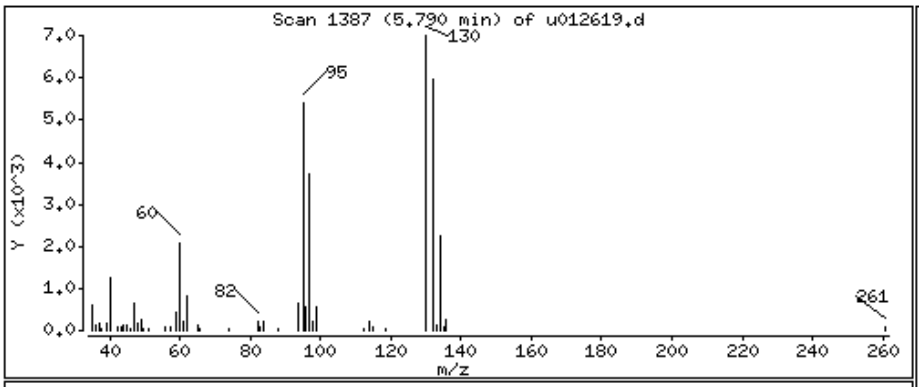
Client ID: Instrument: VOA9.i

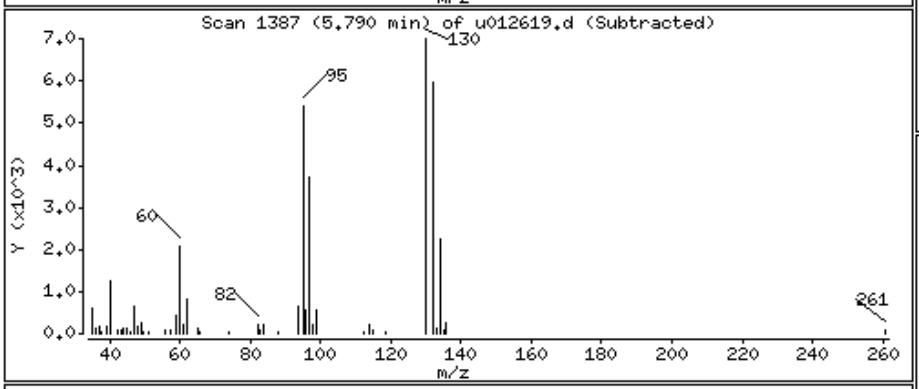
Sample Info: HS24011111-07

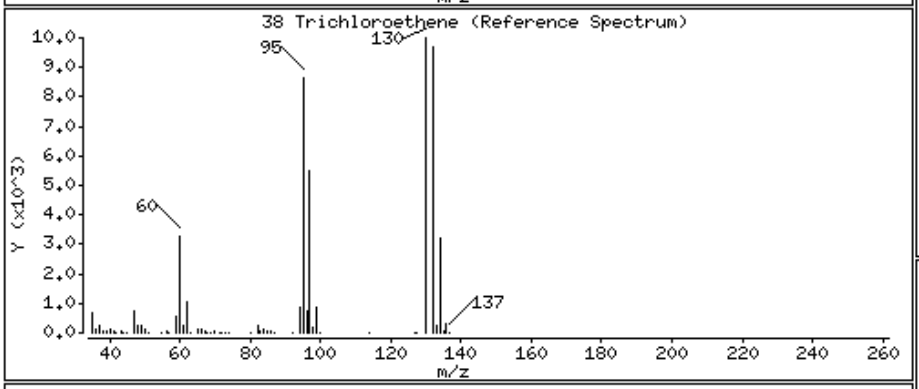
Purge Volume: 5.0 Operator: PC

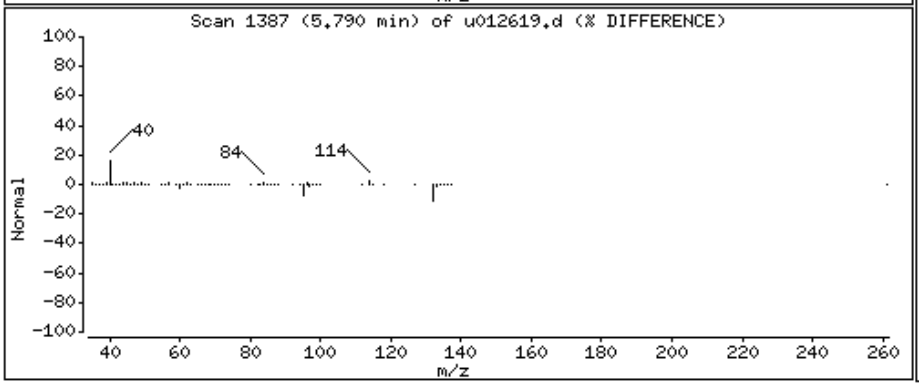
Column phase: DB624 Column diameter: 0.18

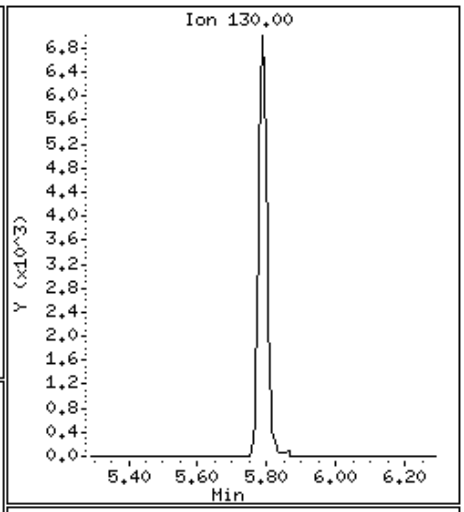
38 Trichloroethene Concentration: 3.56 ug/l

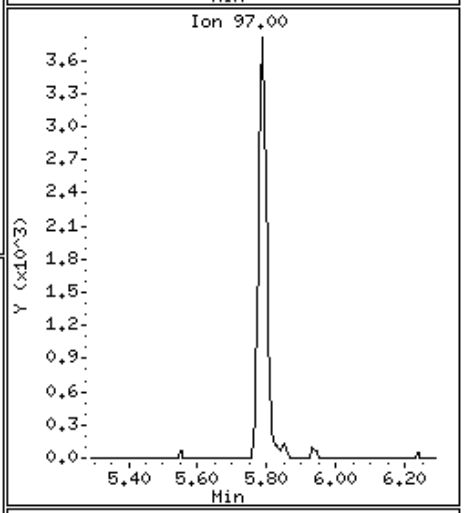


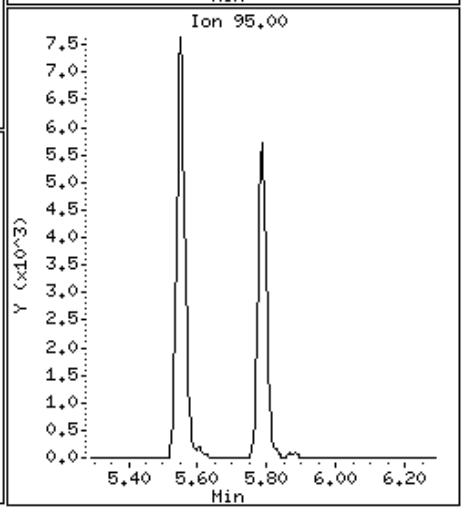












Data File : \\nahstws005\target\chem\voa9.i\u240126.b\u012619.d
Inj Date : 26-JAN-2024 18:16
InstruID : VOA9.i
LabSampID : HS24011111-07

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240126.b\U012620.D Page 1
Report Date: 29-Jan-2024 08:22

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240126.b\U012620.D
Lab Smp Id: HS24011111-08
Inj Date : 26-JAN-2024 18:39
Operator : PC   Inst ID: VOA9.i
Smp Info : HS24011111-08
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240126.b\8260C.m
Meth Date : 27-Jan-2024 00:13 firat.tast Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11   Cal File: U120608.D
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: 000bhatebtex.sub
Target Version: 4.14
Processing Host: NAHSTWS005

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.815	4.815	(1.000)	325085	50.0000	
$ 30 Dibromofluoromethane	113	4.748	4.748	(0.986)	142238	42.6043	42.60
$ 35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	142059	37.7497	37.74
* 36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	446858	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	425118	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	506348	51.7403	51.74
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	180196	48.5949	48.59
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	225960	50.0000	
5 Vinyl Chloride	62	1.378	1.378	(0.286)	206926	58.0849	58.08
11 1,1-Dichloroethene	96	2.334	2.334	(0.485)	65600	26.1635	26.16
20 trans-1,2-Dichloroethene	96	3.061	3.057	(0.636)	26553	8.85888	8.85
27 cis-1,2-Dichloroethene	96	4.197	4.197	(0.872)	10318129	2569.76	2569.76(A)
38 Trichloroethene	130	5.794	5.790	(1.043)	22744618	6783.94	6783.93(A)
56 Tetrachloroethene	164	7.458	7.458	(0.911)	1077	0.42448	0.42(a)
33 1,2-Dichloroethane	62	5.179	5.175	(0.933)	9989	2.29431	2.29(aH)

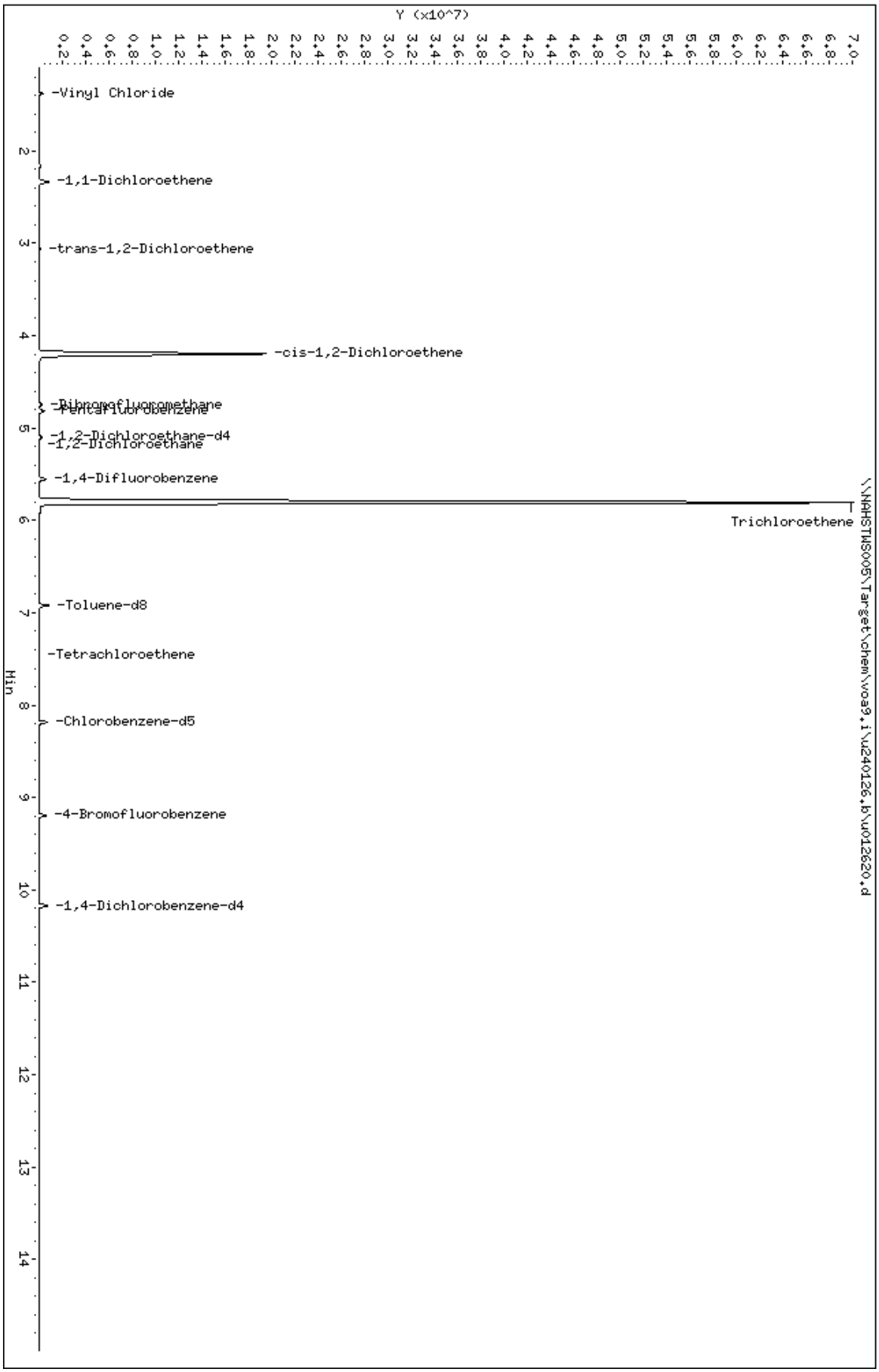
QC Flag Legend

a - Target compound detected but, quantitated amount

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

QC Flag Legend

H - Operator selected an alternate compound hit.



Data File: \\NAHSTWS005\Target\chem\voa9,i\u240126,b\u012620,d
Date : 26-JAN-2024 18:39
Client ID:
Sample Info: HS24011111-08
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9,i
Operator: PC
Column diameter: 0.18

Page 1

Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012620.d Page 2

Date : 26-JAN-2024 18:39

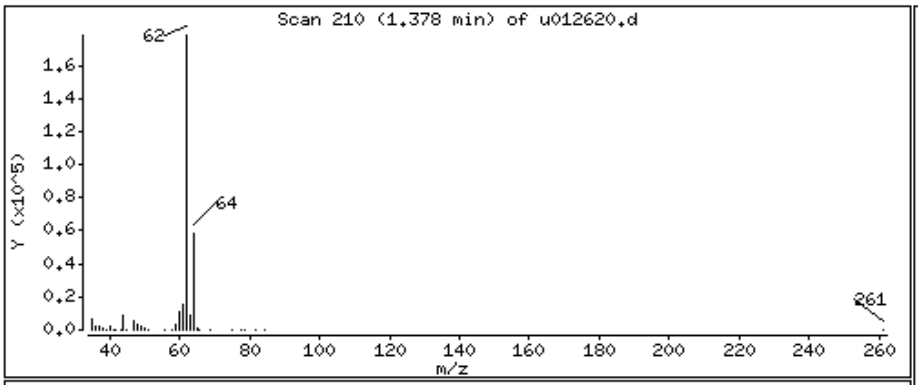
Client ID: Instrument: VOA9.i

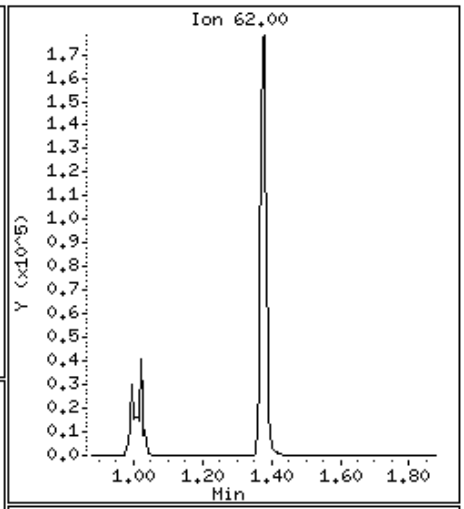
Sample Info: HS24011111-08

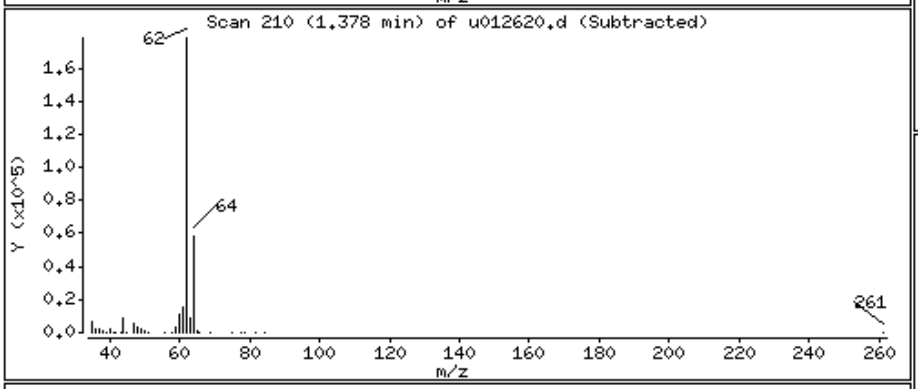
Purge Volume: 5.0 Operator: PC

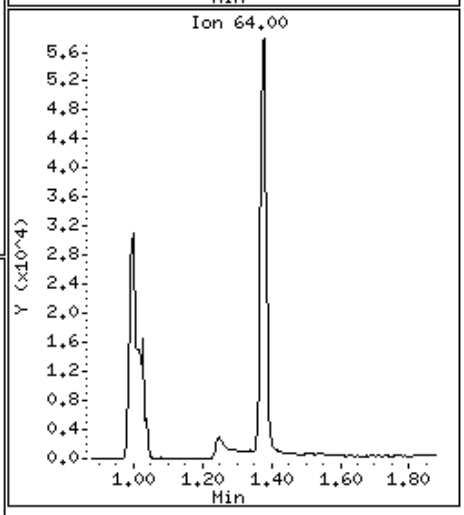
Column phase: DB624 Column diameter: 0.18

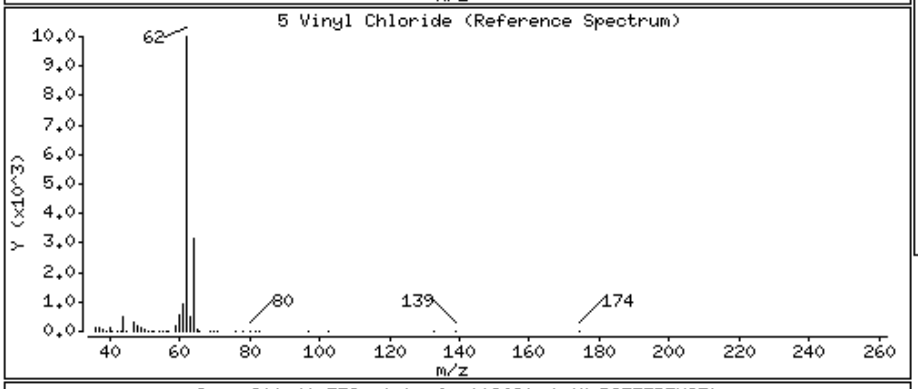
5 Vinyl Chloride Concentration: 58.08 ug/l

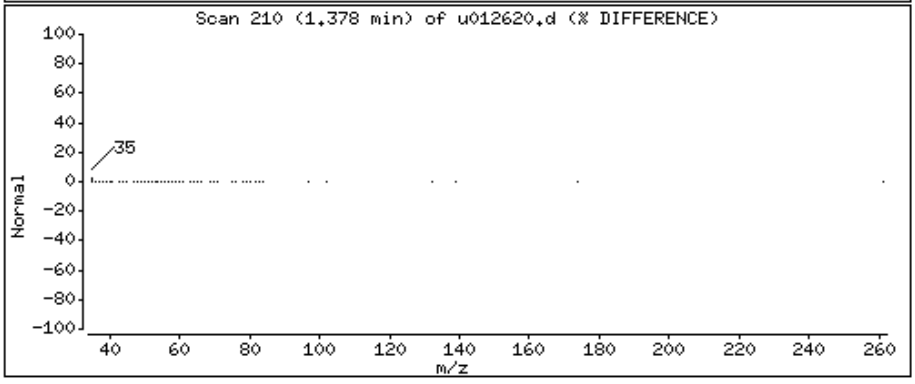












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012620.d Page 3

Date : 26-JAN-2024 18:39

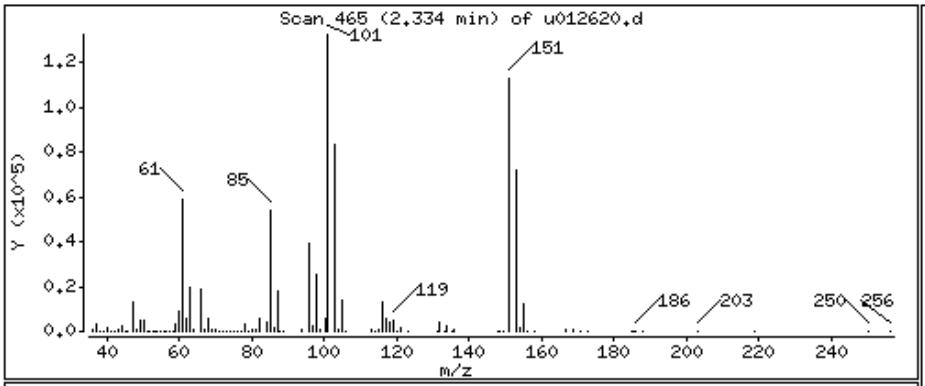
Client ID: Instrument: VOA9.i

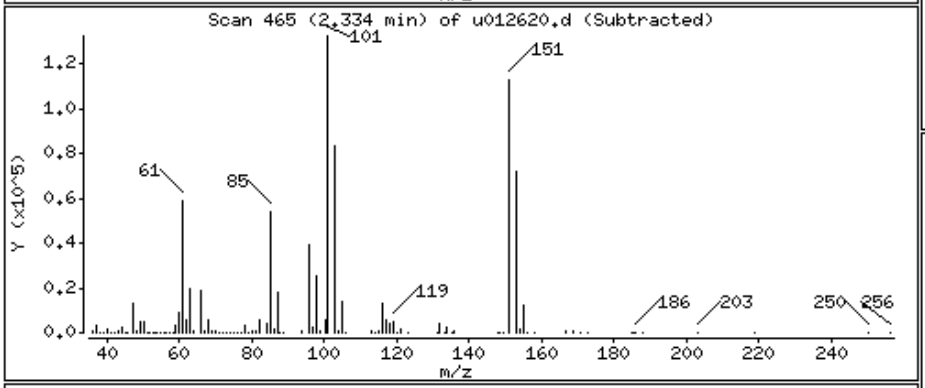
Sample Info: HS24011111-08

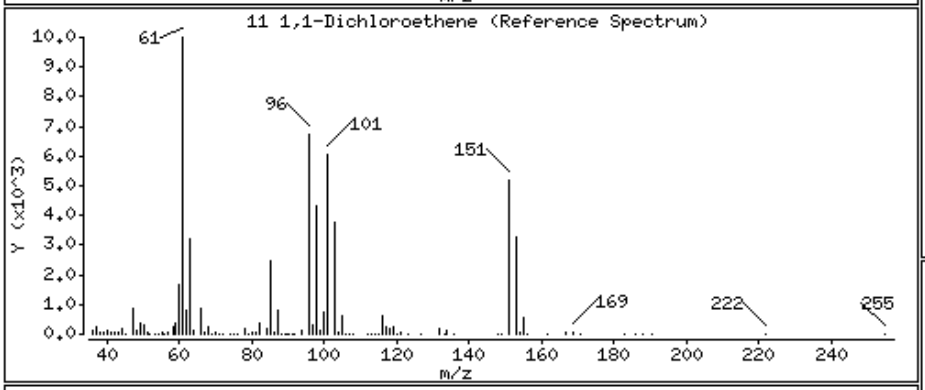
Purge Volume: 5.0 Operator: PC

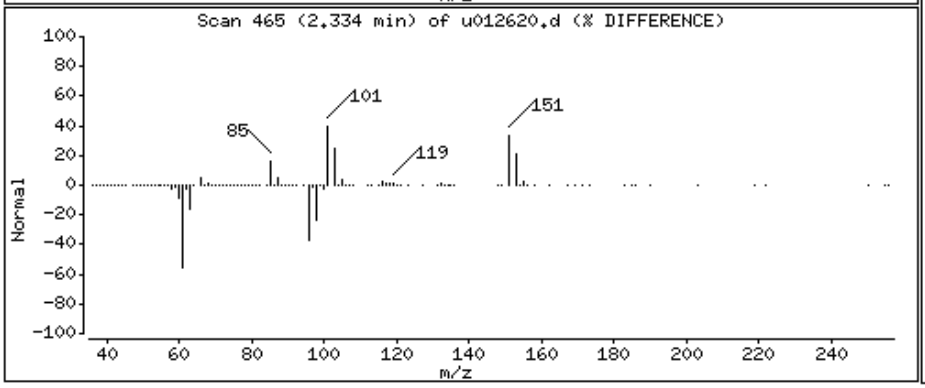
Column phase: DB624 Column diameter: 0.18

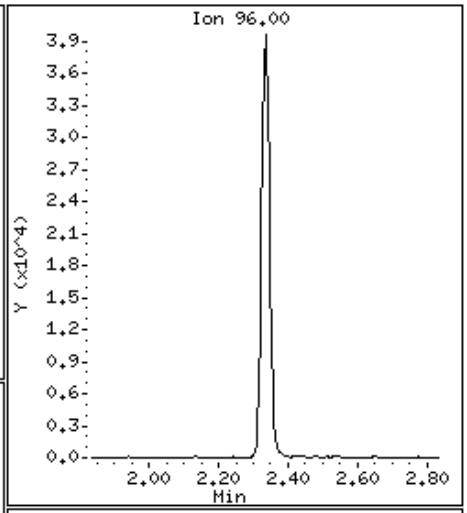
11 1,1-Dichloroethene Concentration: 26.16 ug/l

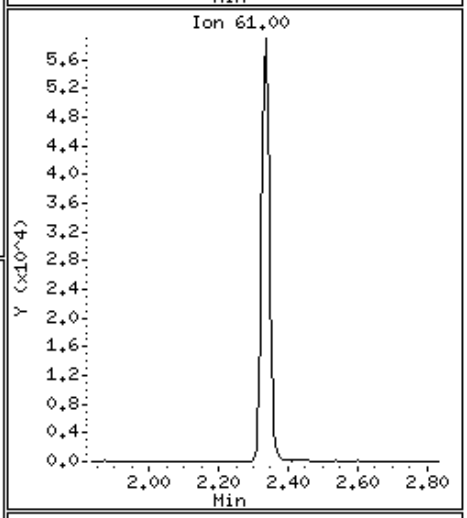


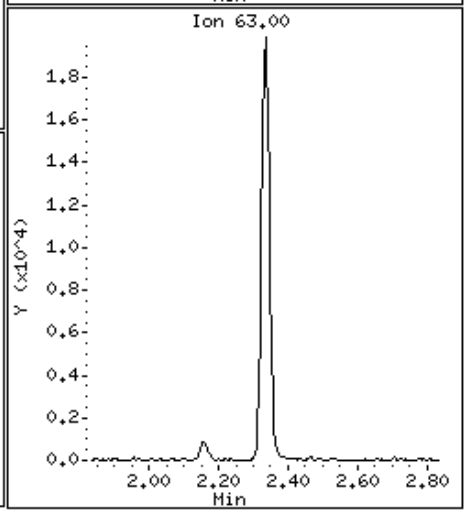












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012620.d Page 4

Date : 26-JAN-2024 18:39

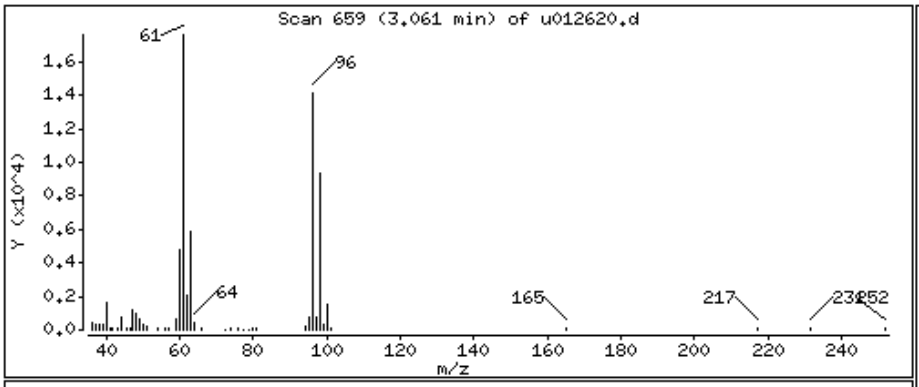
Client ID: Instrument: VOA9.i

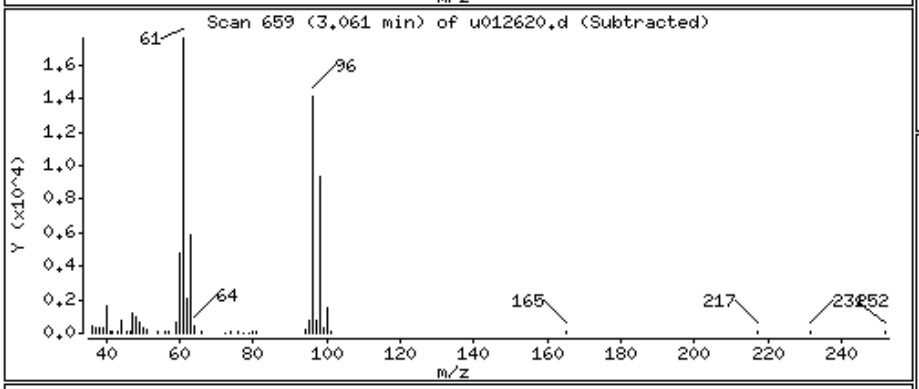
Sample Info: HS24011111-08

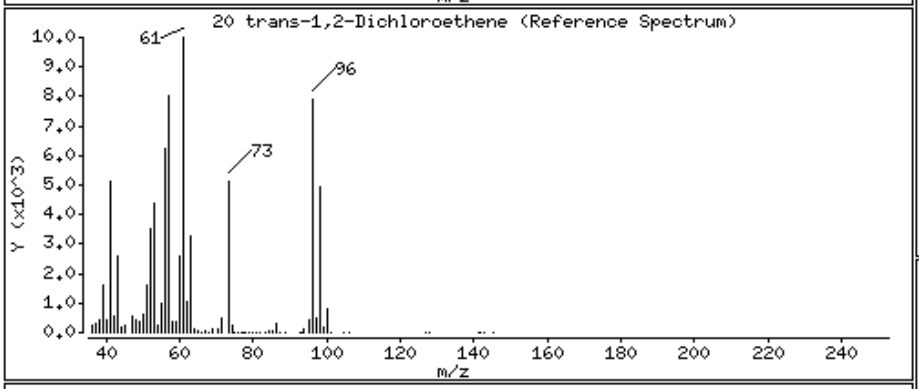
Purge Volume: 5.0 Operator: PC

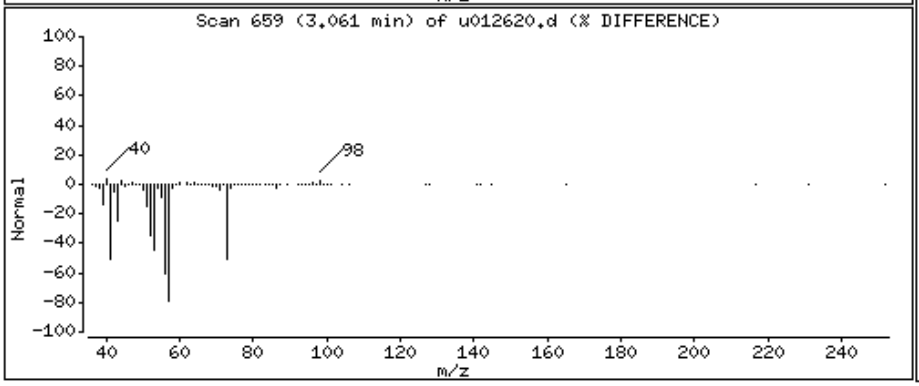
Column phase: DB624 Column diameter: 0.18

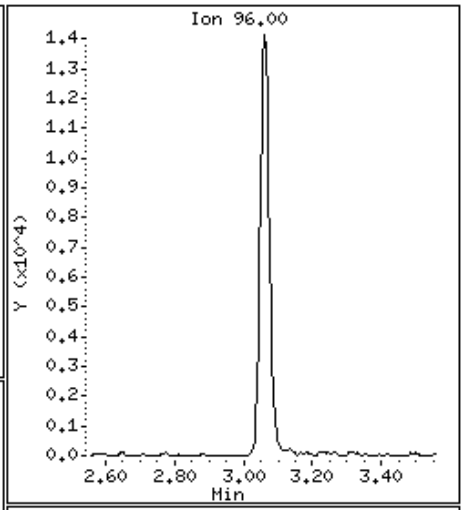
20 trans-1,2-Dichloroethene Concentration: 8.85 ug/l

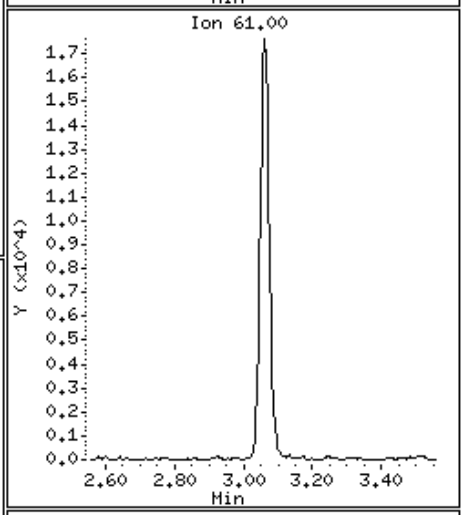


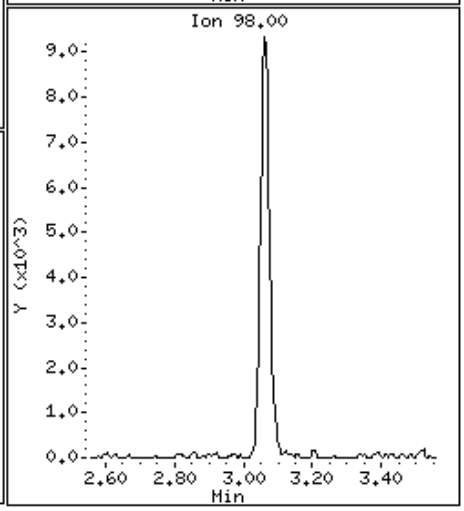












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012620.d Page 5

Date : 26-JAN-2024 18:39

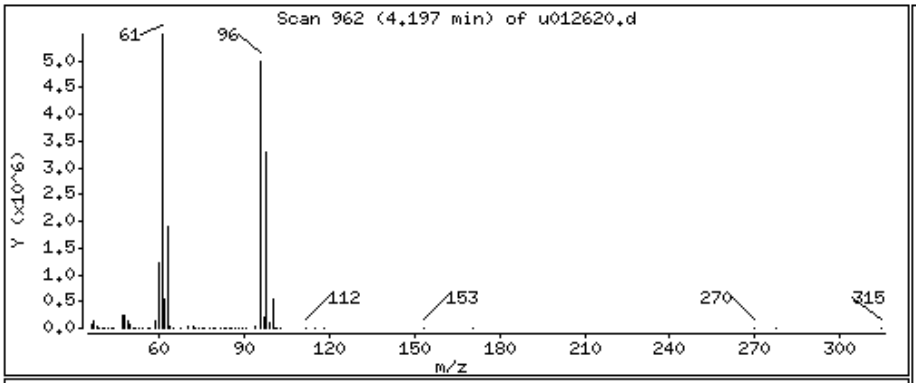
Client ID: Instrument: VOA9.i

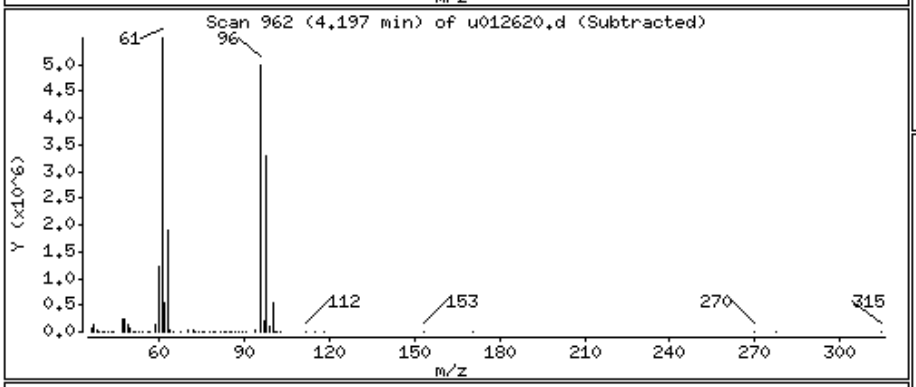
Sample Info: HS24011111-08

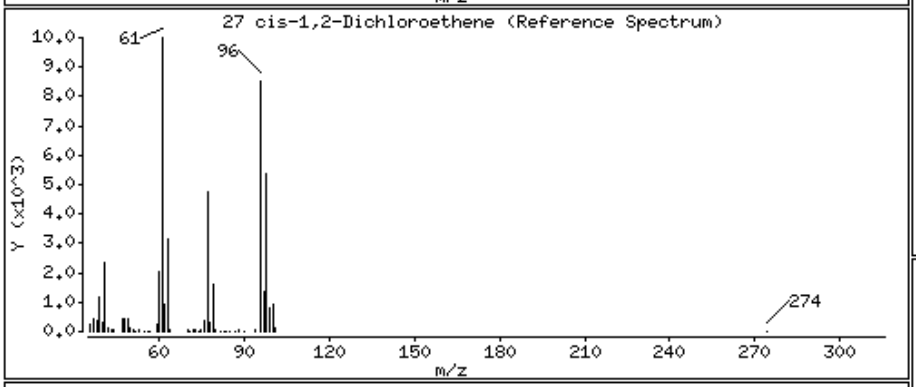
Purge Volume: 5.0 Operator: PC

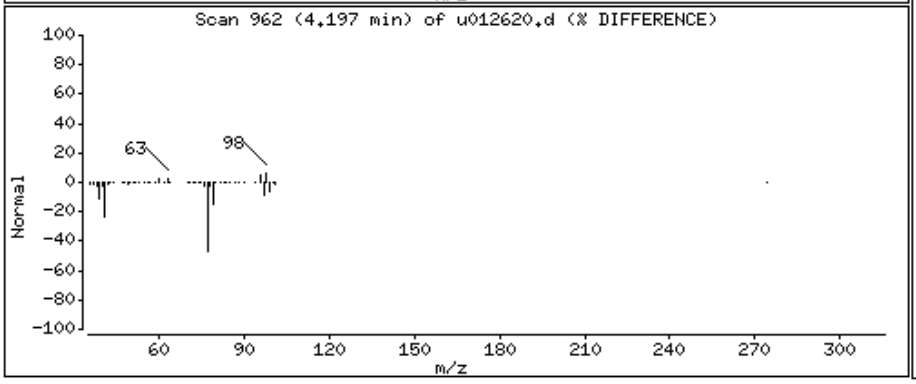
Column phase: DB624 Column diameter: 0.18

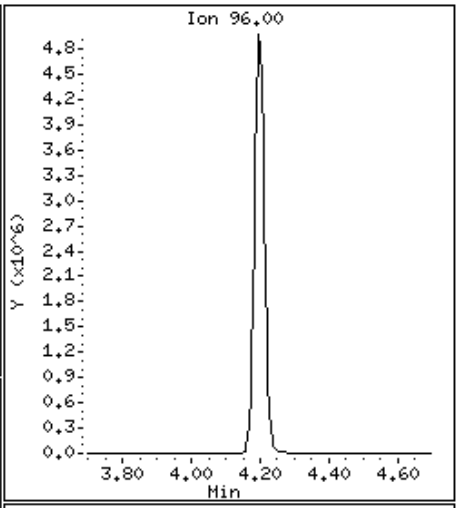
27 cis-1,2-Dichloroethene Concentration: 2569.76 ug/l

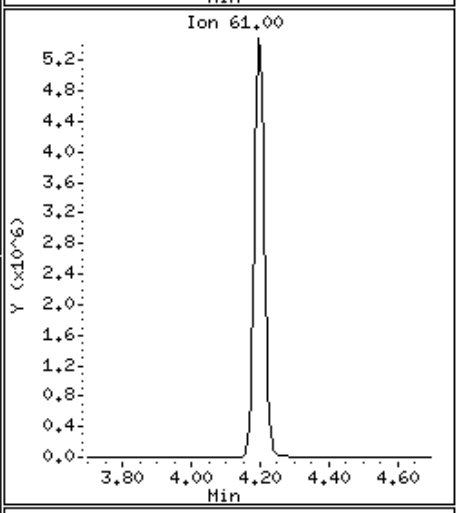


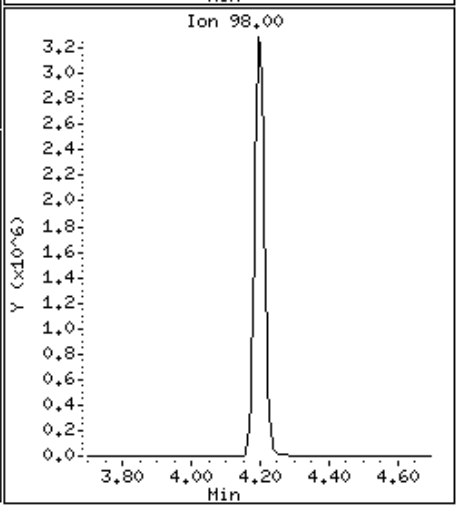












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012620.d Page 6

Date : 26-JAN-2024 18:39

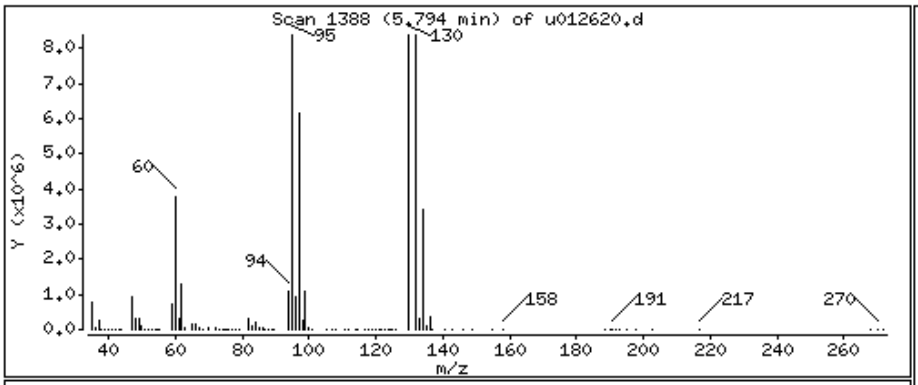
Client ID: Instrument: VOA9.i

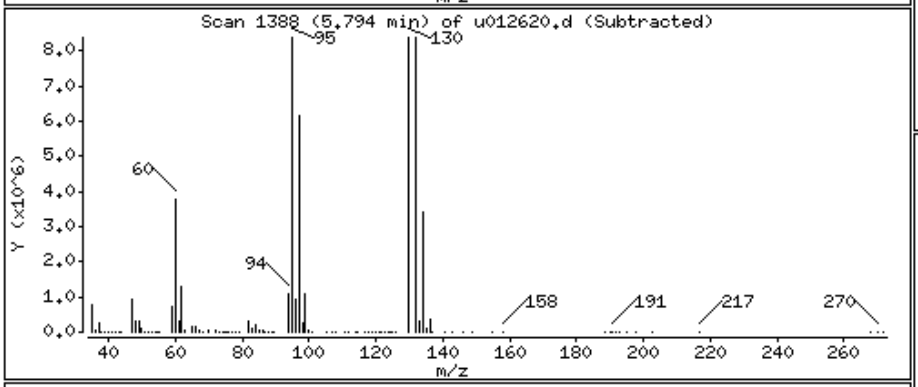
Sample Info: HS24011111-08

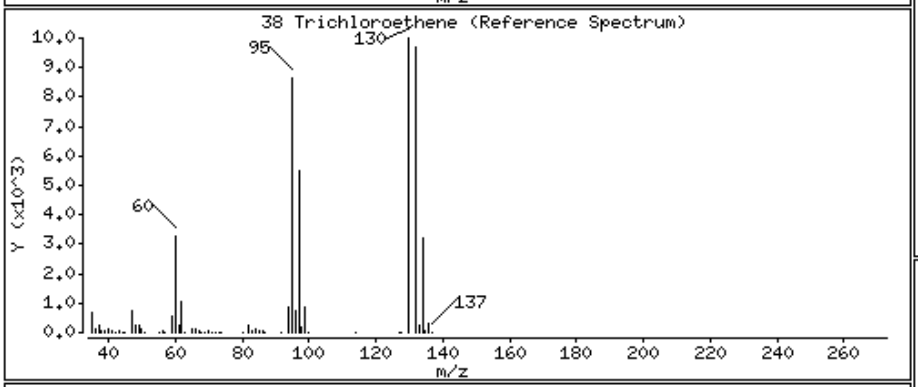
Purge Volume: 5.0 Operator: PC

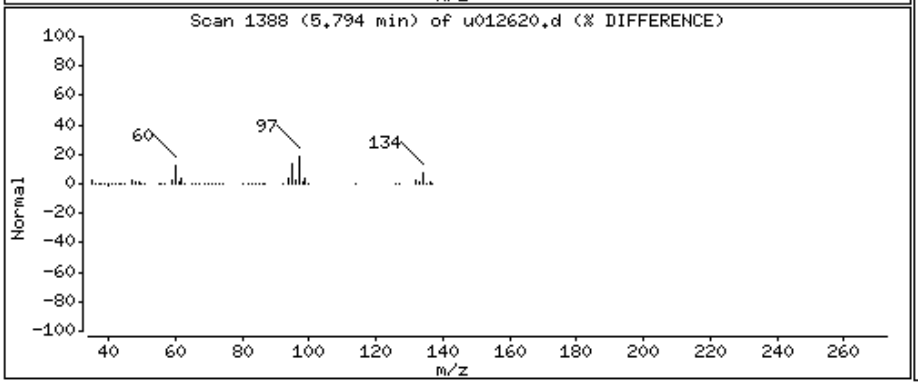
Column phase: DB624 Column diameter: 0.18

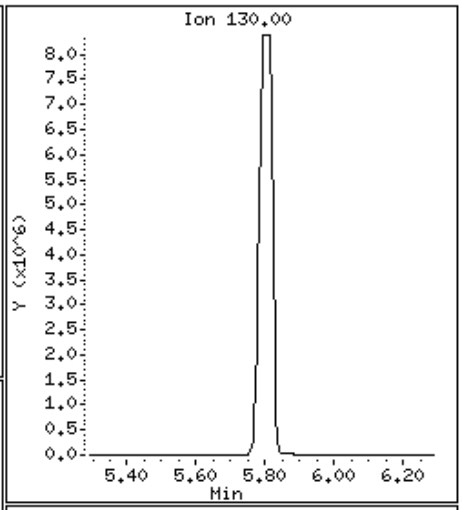
38 Trichloroethene Concentration: 6783.93 ug/l

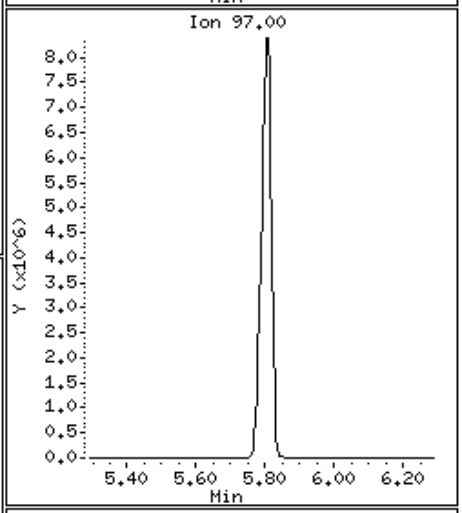


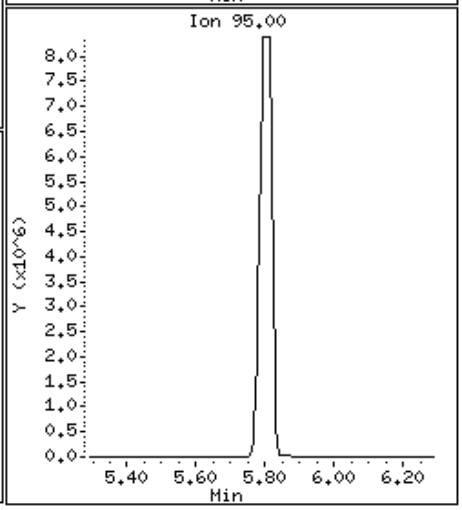












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012620.d Page 7

Date : 26-JAN-2024 18:39

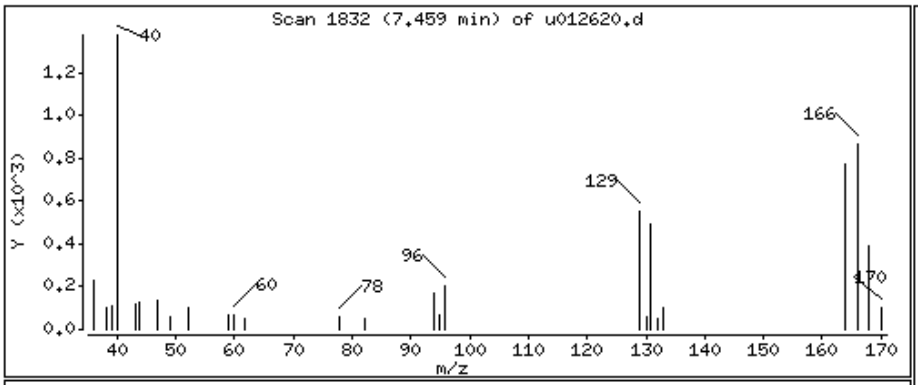
Client ID: Instrument: VOA9.i

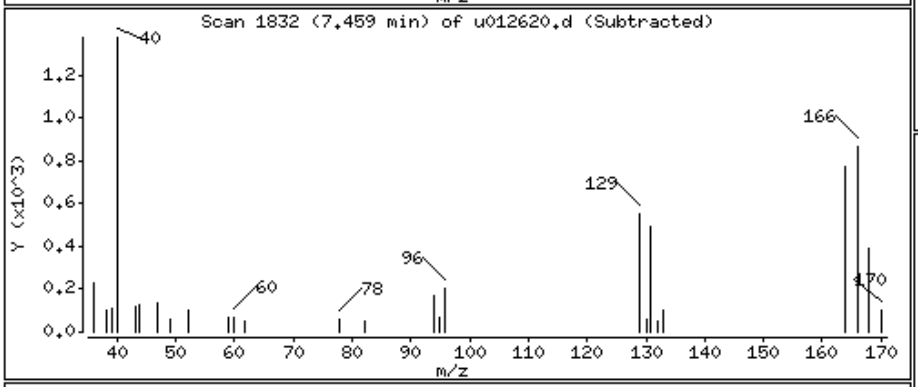
Sample Info: HS24011111-08

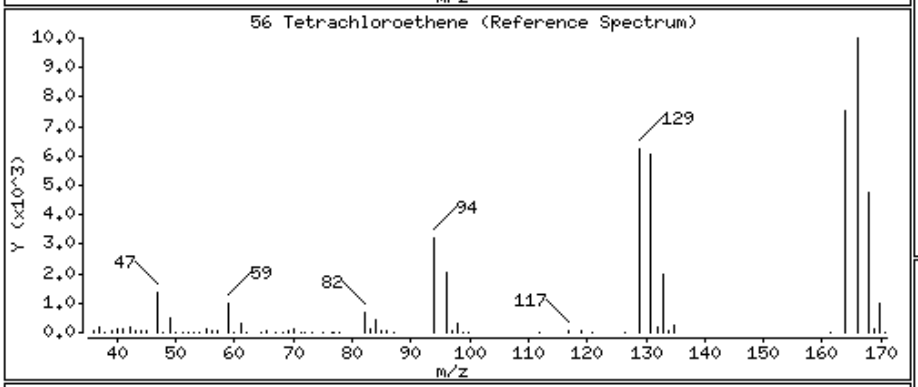
Purge Volume: 5.0 Operator: PC

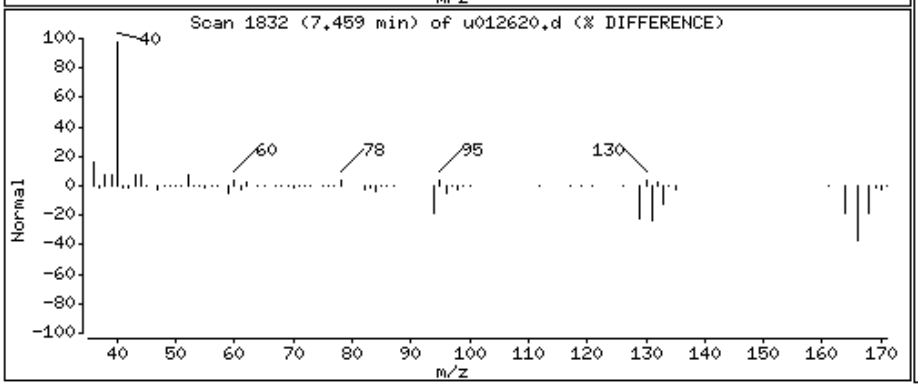
Column phase: DB624 Column diameter: 0.18

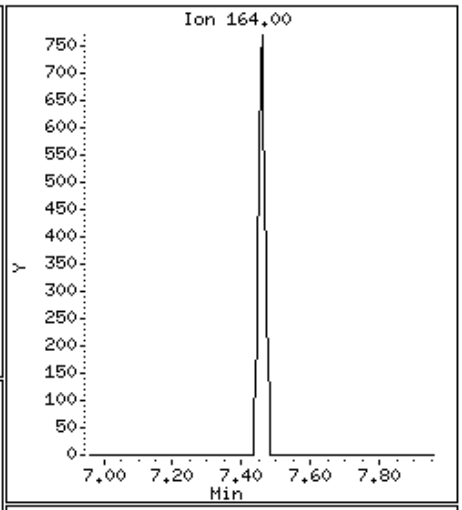
56 Tetrachloroethene Concentration: 0.42 ug/l

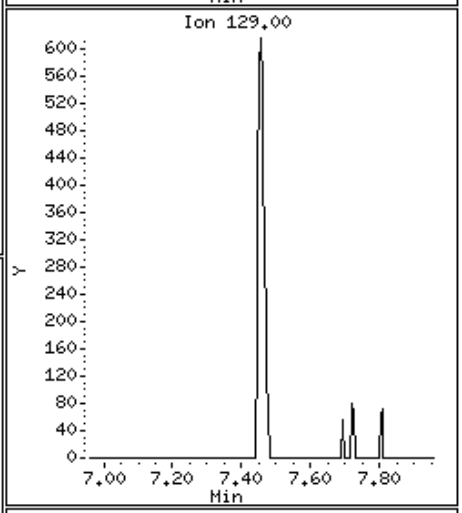


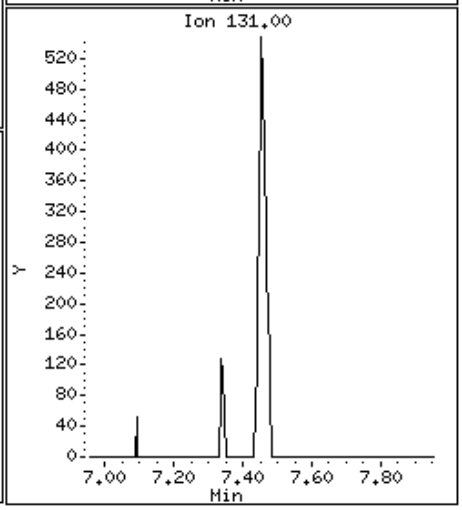












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012620.d Page 8

Date : 26-JAN-2024 18:39

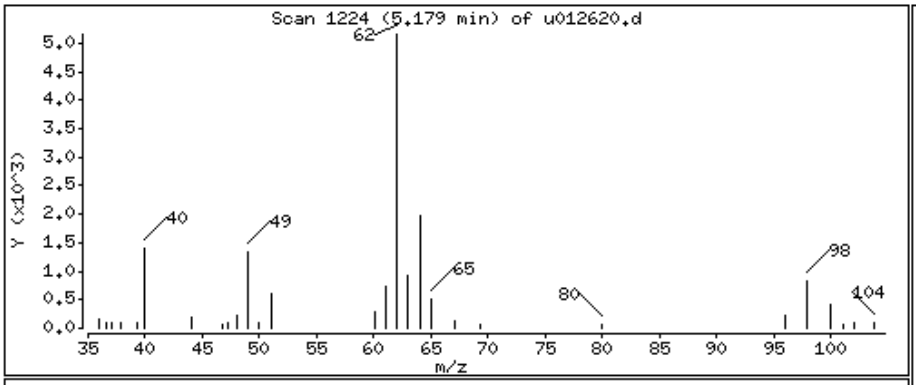
Client ID: Instrument: VOA9.i

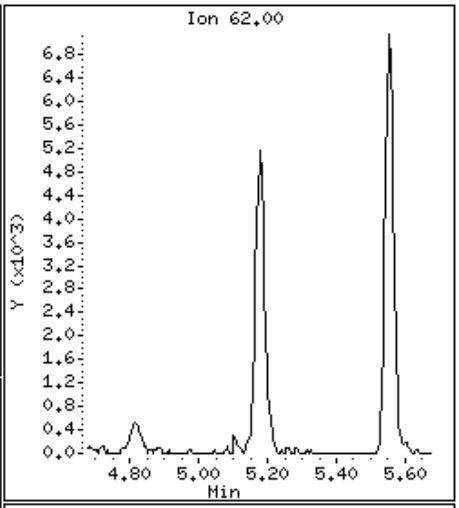
Sample Info: HS24011111-08

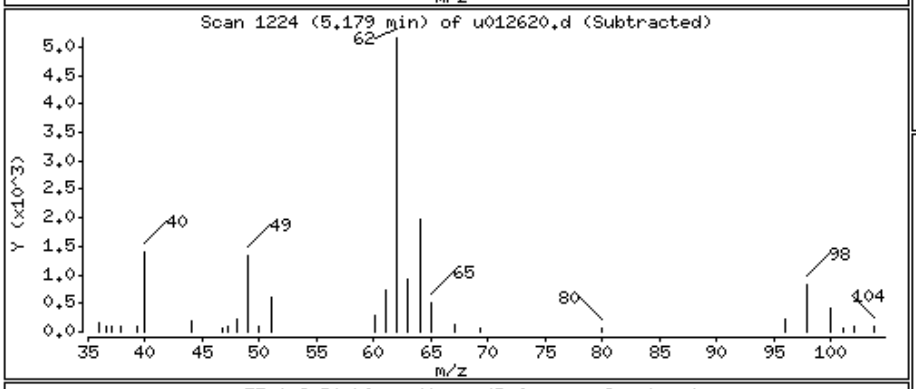
Purge Volume: 5.0 Operator: PC

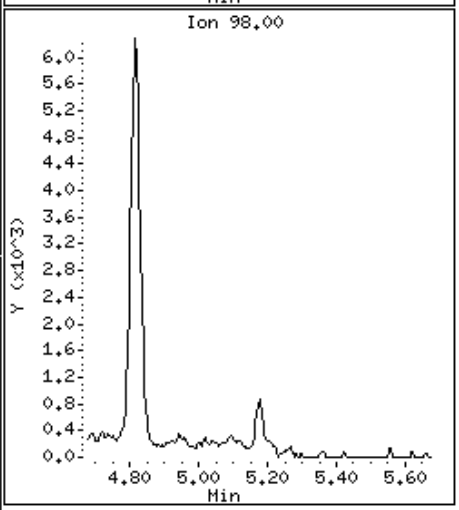
Column phase: DB624 Column diameter: 0.18

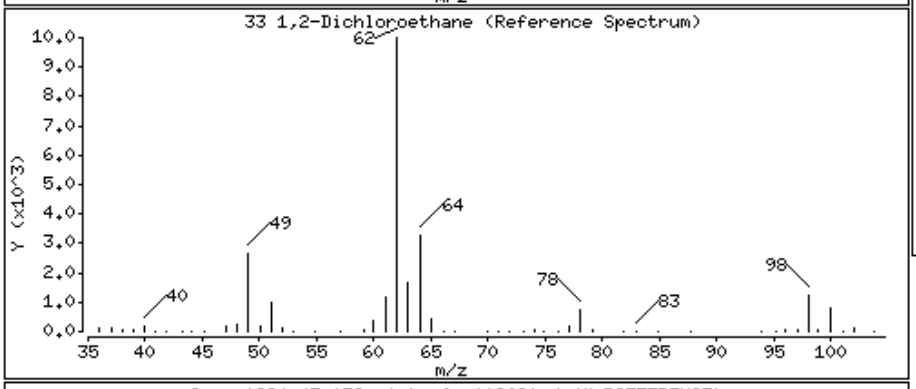
33 1,2-Dichloroethane Concentration: 2.29 ug/l

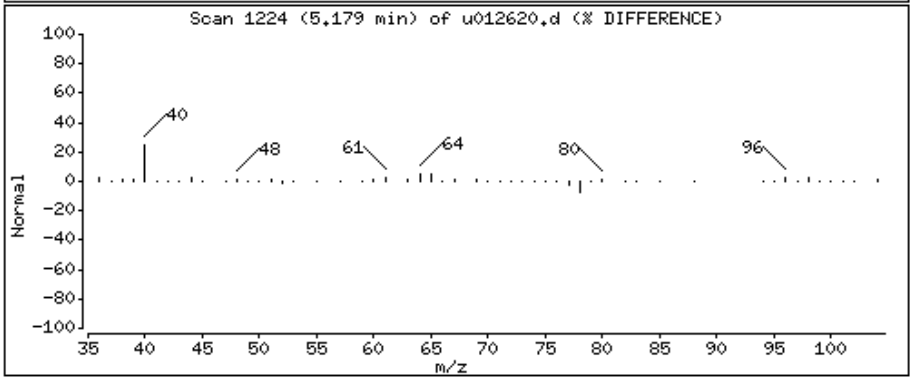












Data File : \\nahstws005\target\chem\voa9.i\u240126.b\u012620.d
Inj Date : 26-JAN-2024 18:39
InstruID : VOA9.i
LabSampID : HS24011111-08

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240126.b\U012621.D Page 1
Report Date: 29-Jan-2024 08:22

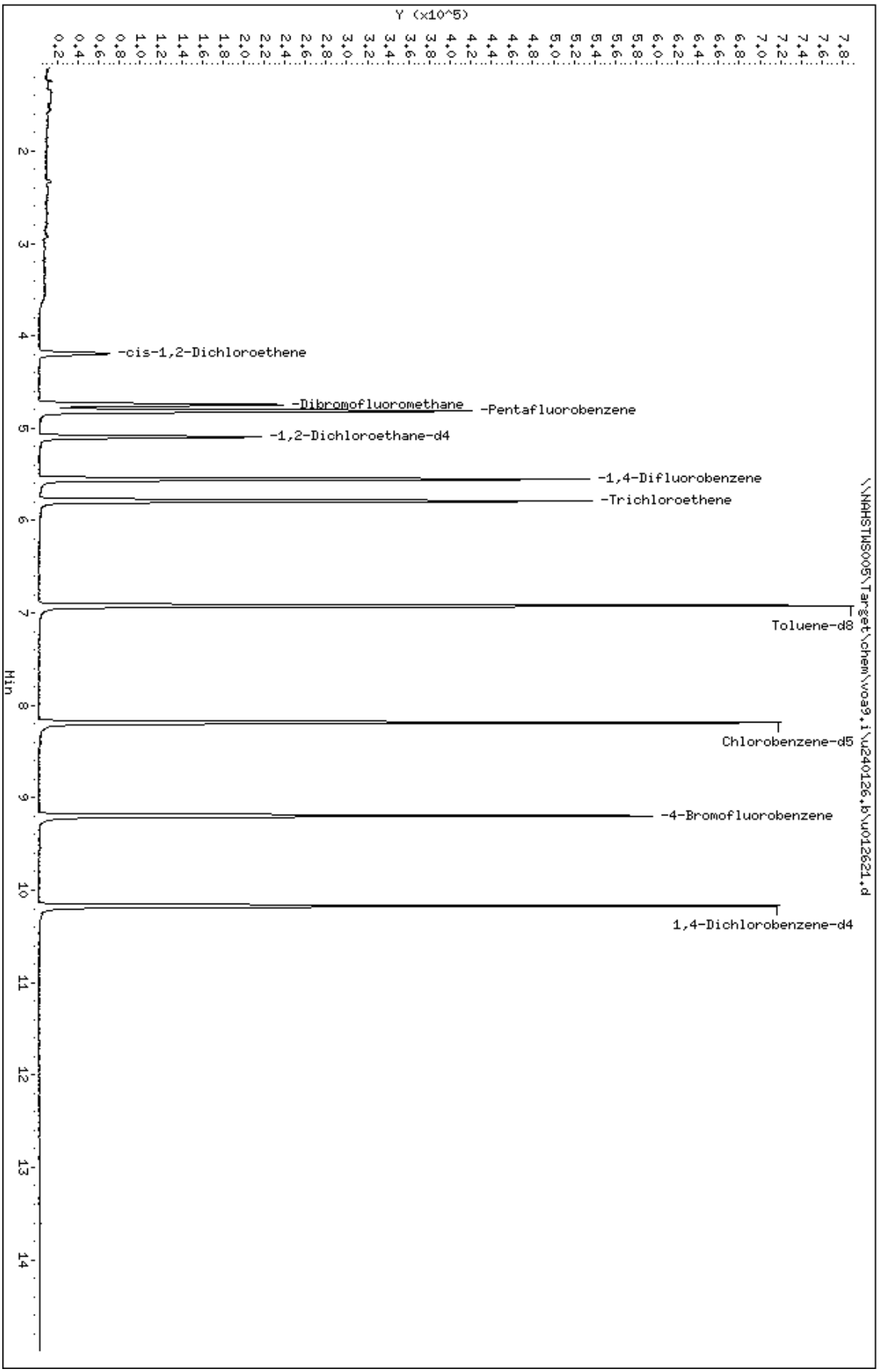
ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240126.b\U012621.D
Lab Smp Id: HS24011111-09
Inj Date : 26-JAN-2024 19:01
Operator : PC   Inst ID: VOA9.i
Smp Info : HS24011111-09
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240126.b\8260C.m
Meth Date : 27-Jan-2024 00:13 firat.tast Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11   Cal File: U120608.D
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: 000bhatebtex.sub
Target Version: 4.14
Processing Host: NAHSTWS005

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.812	4.815	(1.000)	321099	50.0000	
$ 30 Dibromofluoromethane	113	4.744	4.748	(0.986)	139860	42.4074	42.40
$ 35 1,2-Dichloroethane-d4	65	5.093	5.096	(1.058)	141356	38.0192	38.01
* 36 1,4-Difluorobenzene	114	5.550	5.554	(1.000)	439659	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	420499	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	498002	51.4464	51.44
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	176098	47.9958	47.99
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	216025	50.0000	
27 cis-1,2-Dichloroethene	96	4.193	4.197	(0.871)	37399	9.42997	9.42
38 Trichloroethene	130	5.786	5.790	(1.043)	186844	56.6417	56.64



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Date : 26-JAN-2024 19:01
Client ID:
Sample Info: HS24011111-09
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9,i
Operator: PC
Column diameter: 0.18

Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012621.d Page 2

Date : 26-JAN-2024 19:01

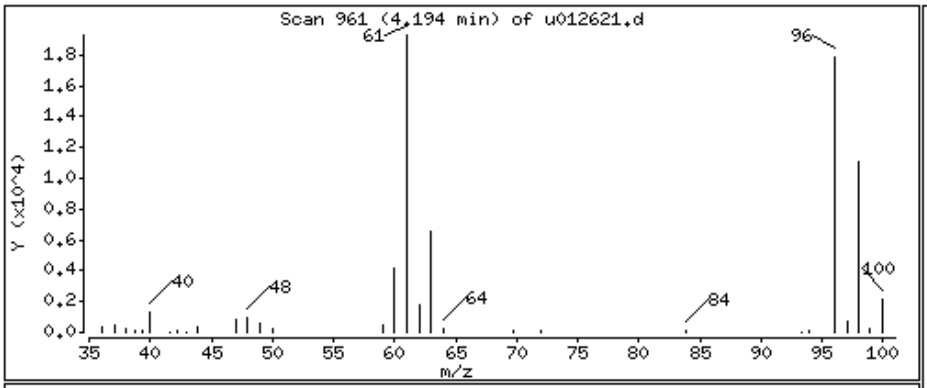
Client ID: Instrument: VOA9.i

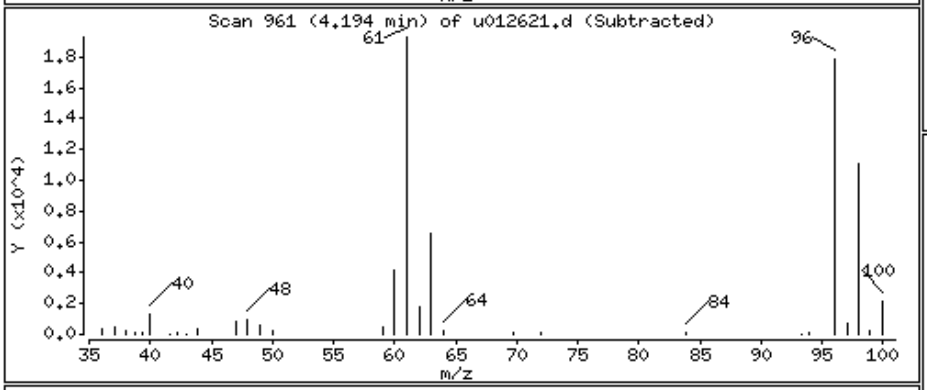
Sample Info: HS24011111-09

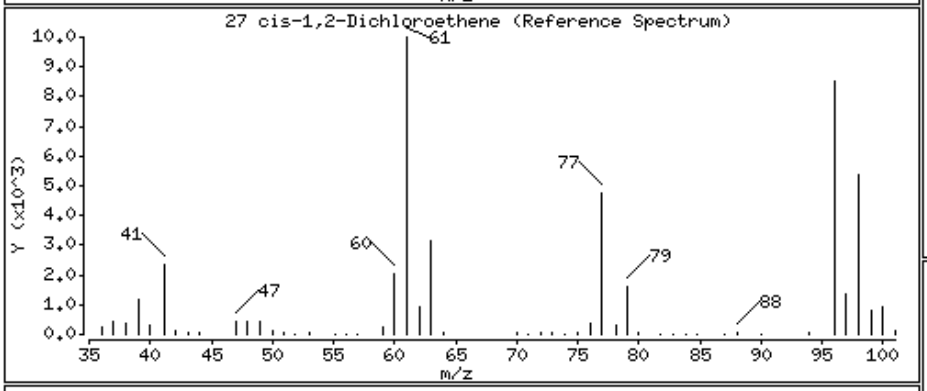
Purge Volume: 5.0 Operator: PC

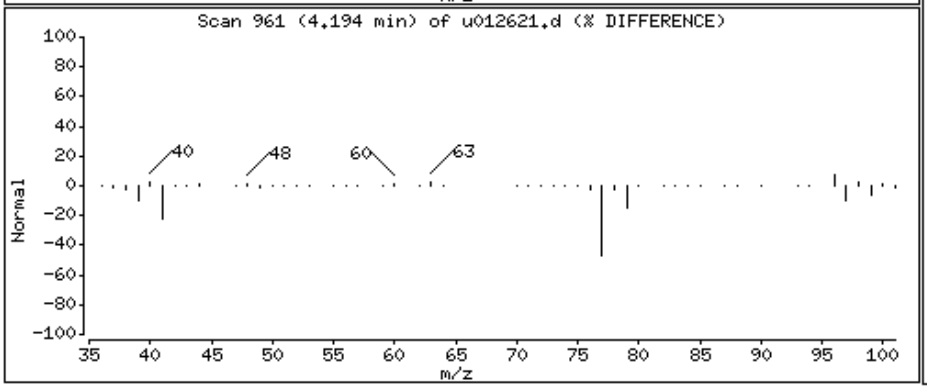
Column phase: DB624 Column diameter: 0.18

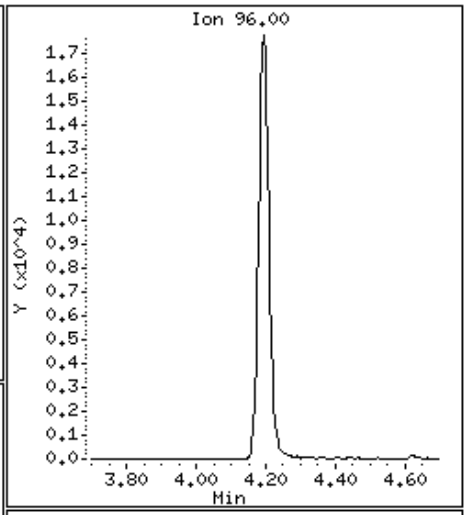
27 cis-1,2-Dichloroethene Concentration: 9.42 ug/l

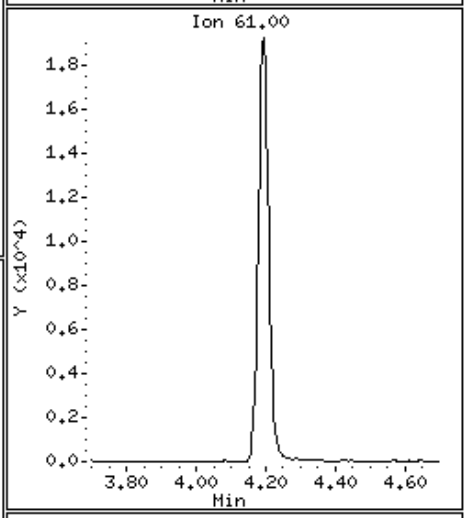


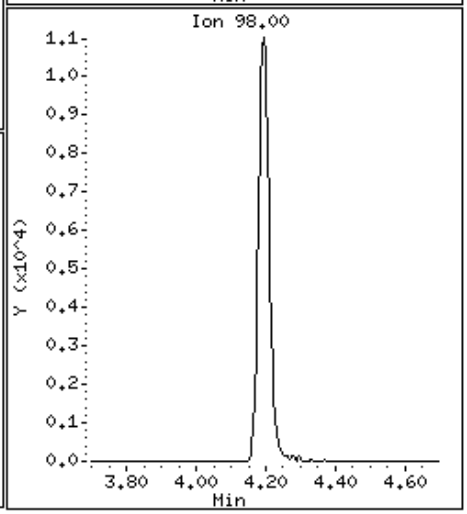












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012621.d Page 3

Date : 26-JAN-2024 19:01

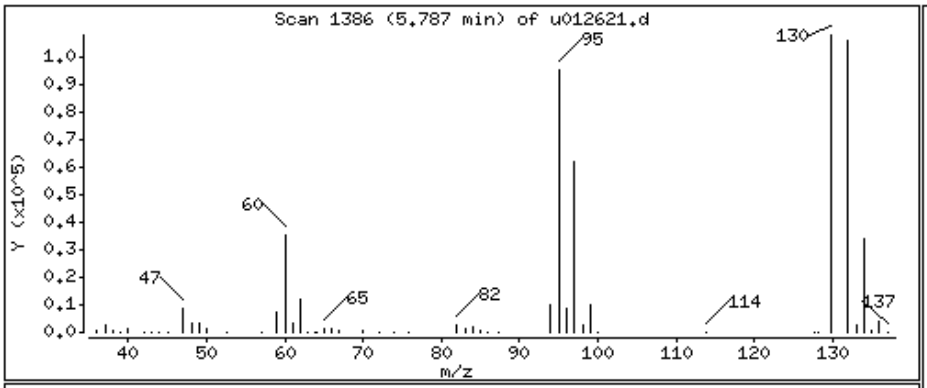
Client ID: Instrument: VOA9.i

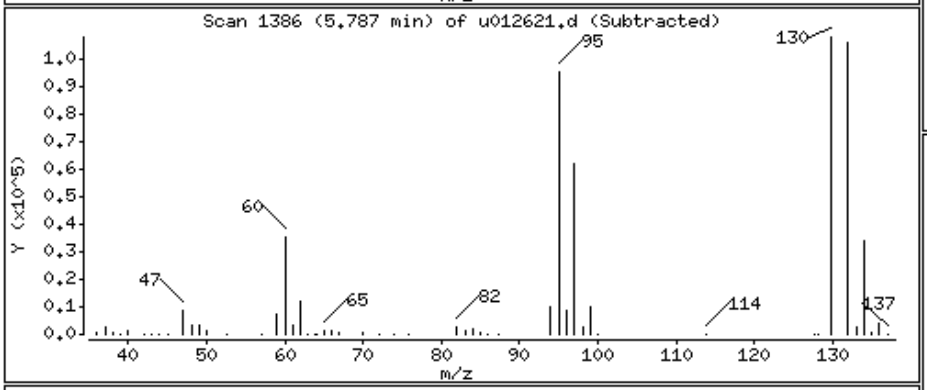
Sample Info: HS24011111-09

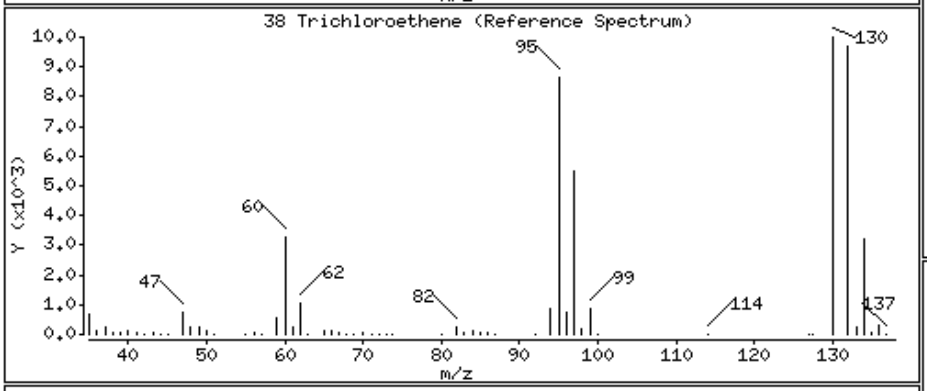
Purge Volume: 5.0 Operator: PC

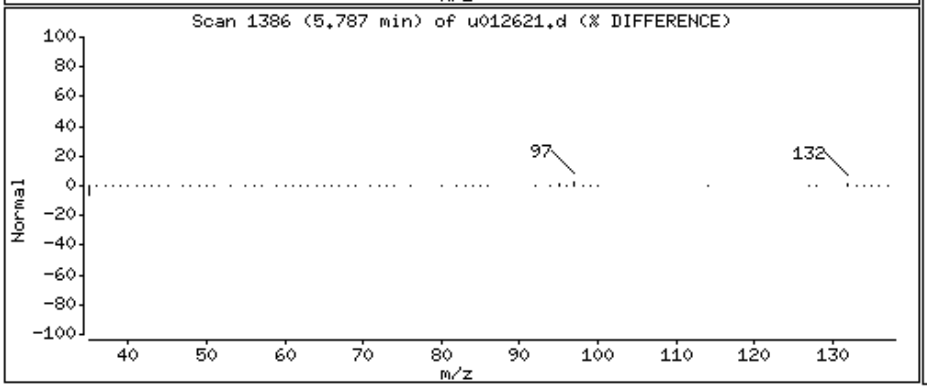
Column phase: DB624 Column diameter: 0.18

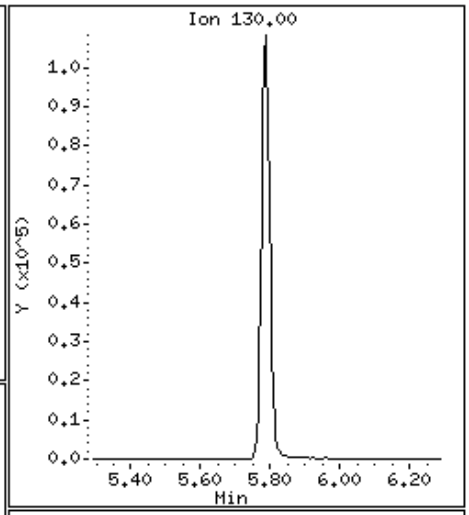
38 Trichloroethene Concentration: 56.64 ug/l

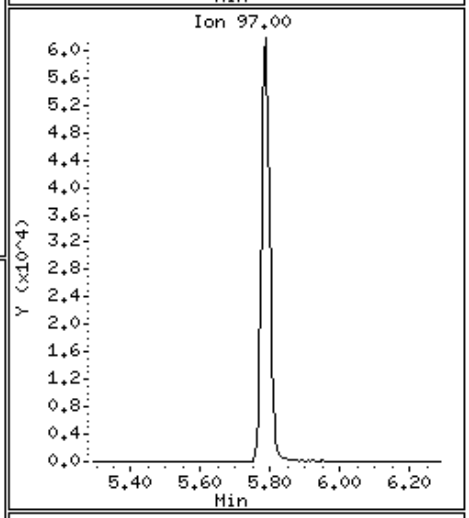


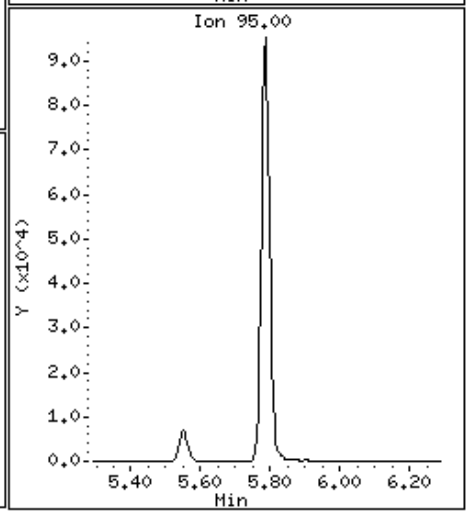












Data File : \\nahstws005\target\chem\voa9.i\u240126.b\u012621.d
Inj Date : 26-JAN-2024 19:01
InstruID : VOA9.i
LabSampID : HS24011111-09

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240126.b\U012623.D Page 1
Report Date: 29-Jan-2024 08:22

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240126.b\U012623.D
Lab Smp Id: HS24011111-11
Inj Date : 26-JAN-2024 19:46
Operator : PC   Inst ID: VOA9.i
Smp Info : HS24011111-11
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240126.b\8260C.m
Meth Date : 27-Jan-2024 00:13 firat.tast Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11   Cal File: U120608.D
Als bottle: 22
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: 000bhatebtex.sub
Target Version: 4.14
Processing Host: NAHSTWS005

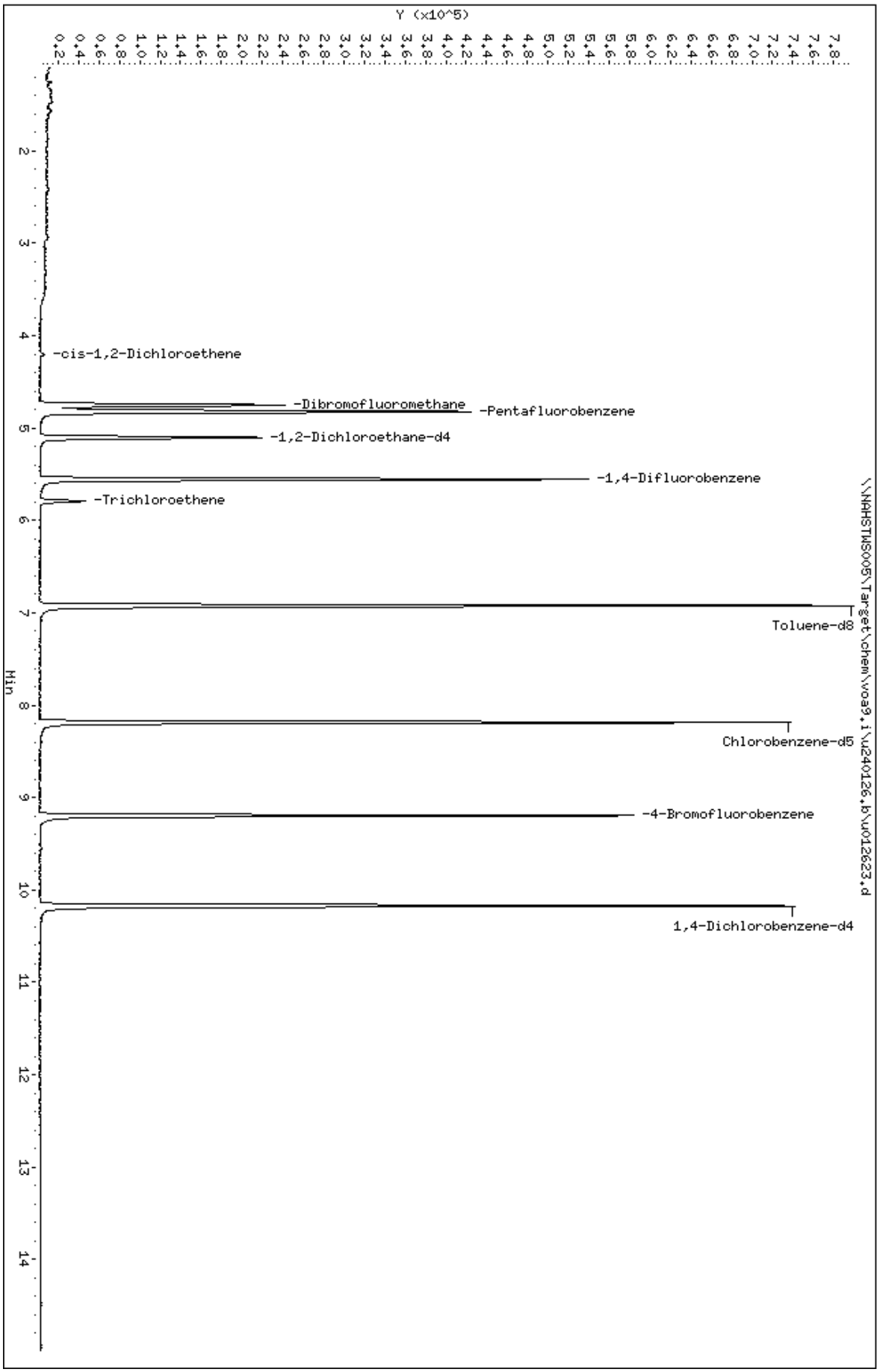
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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	4.819	4.815	(1.000)	326833	50.0000	
$ 30 Dibromofluoromethane	113	4.752	4.748	(0.986)	143977	42.9015	42.90
$ 35 1,2-Dichloroethane-d4	65	5.100	5.096	(1.058)	145444	38.4172	38.41
* 36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	447423	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	423475	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	500678	51.3594	51.35
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	176866	47.8628	47.86
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	219554	50.0000	
27 cis-1,2-Dichloroethene	96	4.204	4.197	(0.872)	2342	0.58016	0.58(a)
38 Trichloroethene	130	5.790	5.790	(1.043)	15411	4.59077	4.59(a)

QC Flag Legend

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



Data File: \\NAHSTMS005\Target\chem\voa9.i\u240126.b\u012623.d
Date : 26-JAN-2024 19:46
Client ID:
Sample Info: HS24011111-11
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9.i
Operator: PC
Column diameter: 0.18

Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012623.d Page 2

Date : 26-JAN-2024 19:46

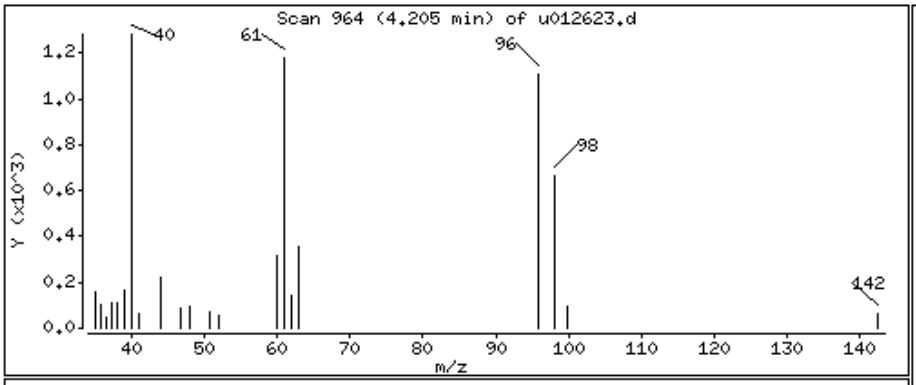
Client ID: Instrument: VOA9.i

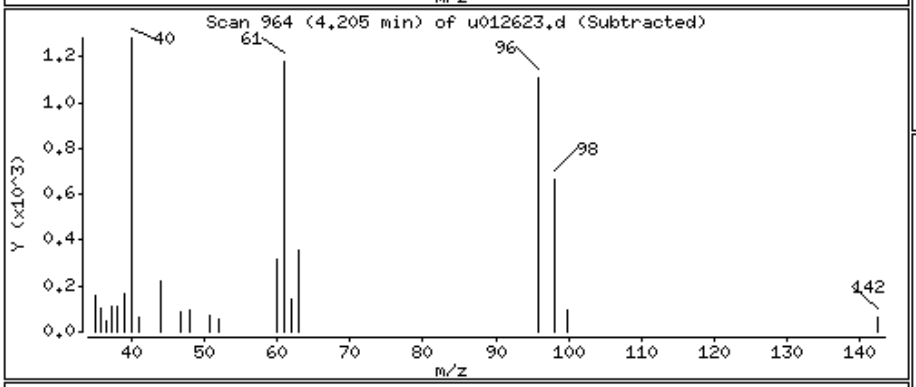
Sample Info: HS24011111-11

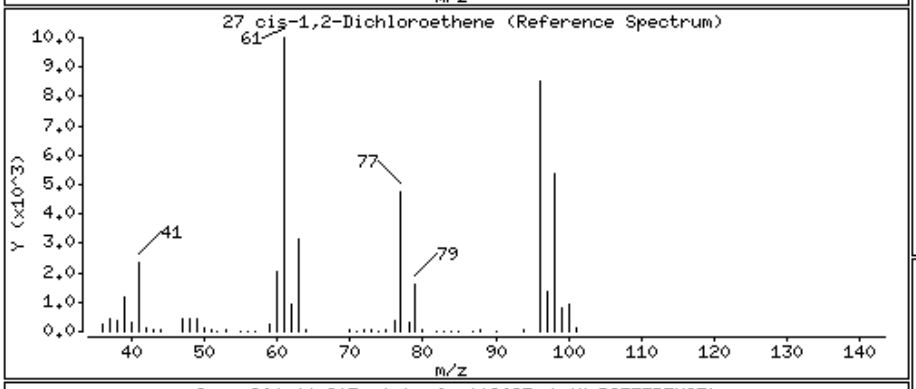
Purge Volume: 5.0 Operator: PC

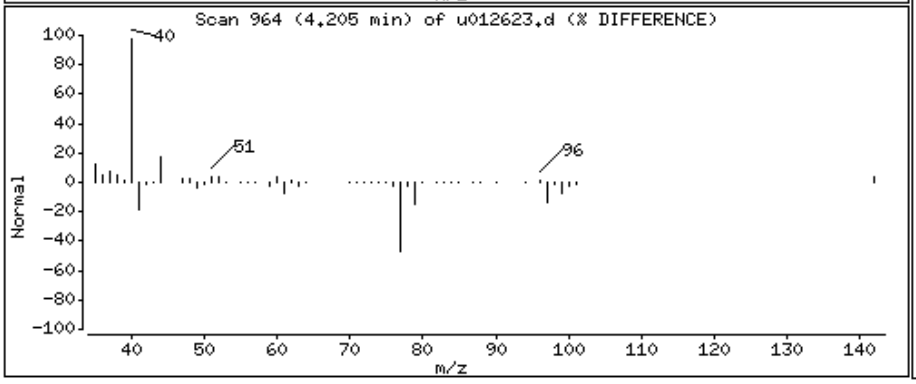
Column phase: DB624 Column diameter: 0.18

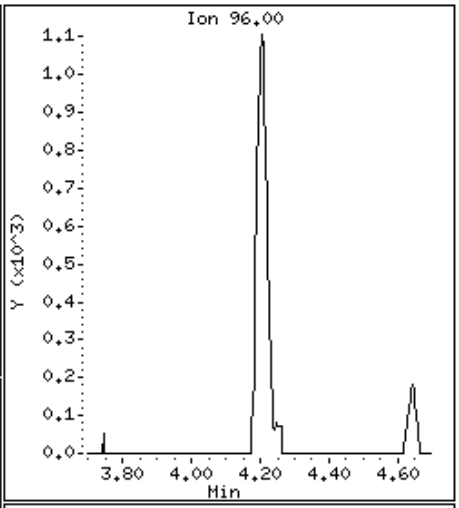
27 cis-1,2-Dichloroethene Concentration: 0.58 ug/l

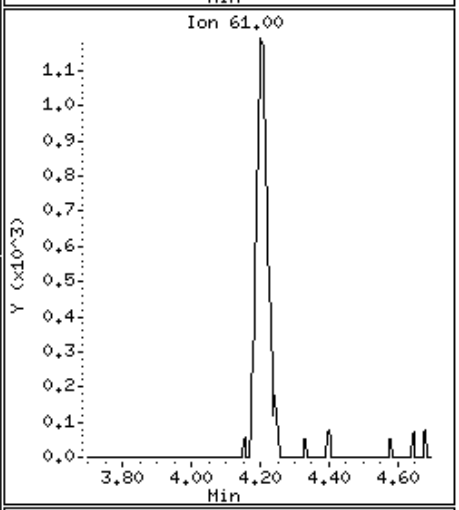


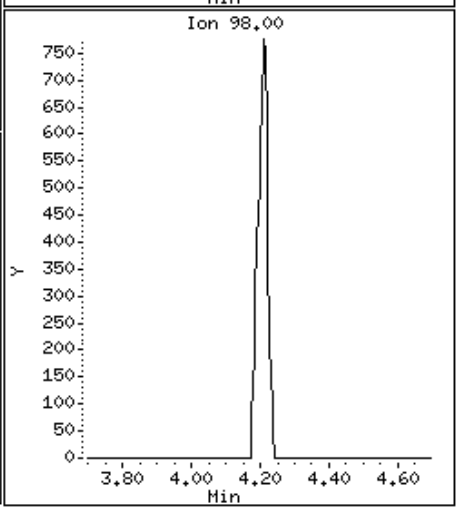












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012623.d Page 3

Date : 26-JAN-2024 19:46

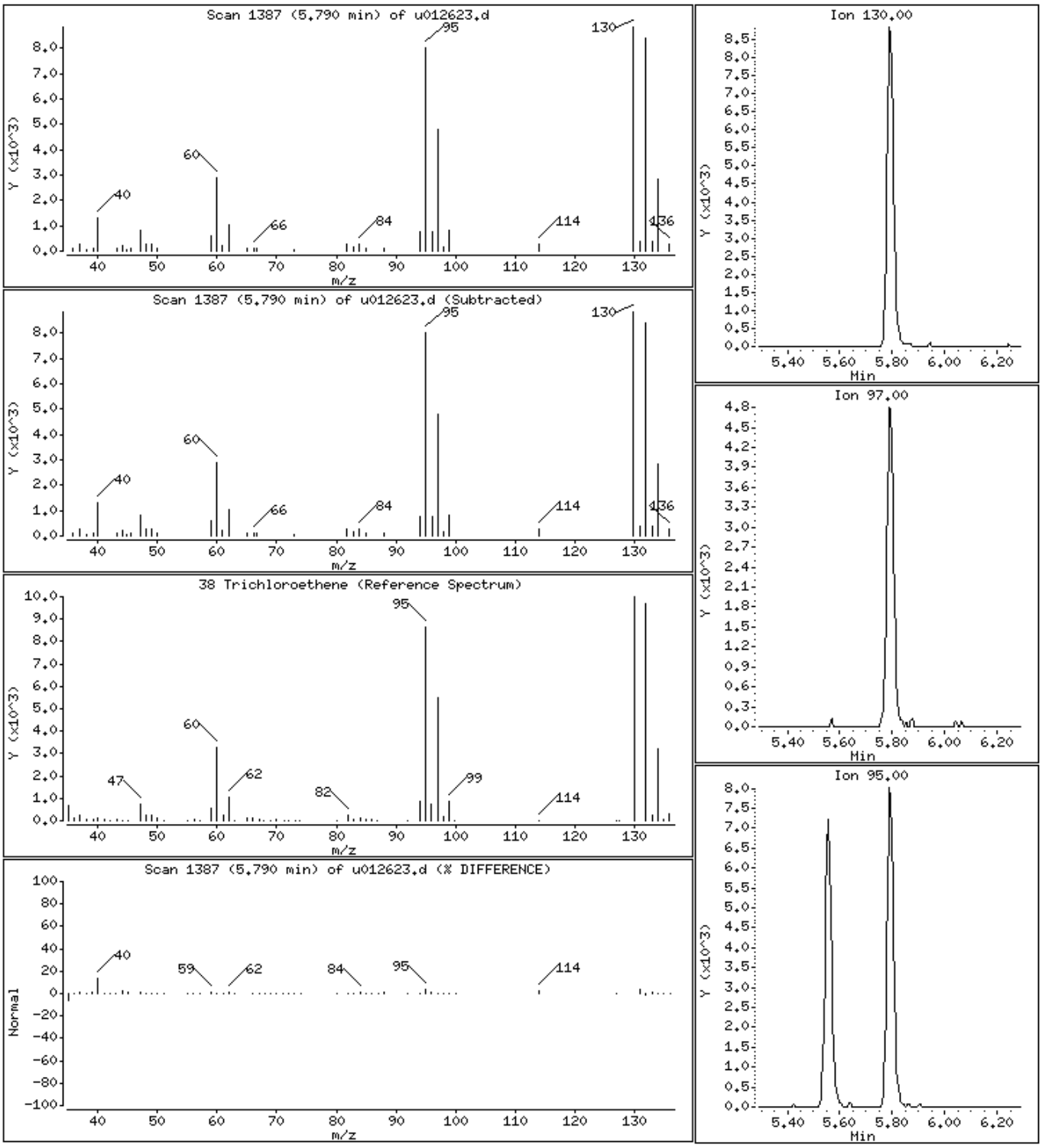
Client ID: Instrument: VOA9.i

Sample Info: HS24011111-11

Purge Volume: 5.0 Operator: PC

Column phase: DB624 Column diameter: 0.18

38 Trichloroethene Concentration: 4.59 ug/l



Data File : \\nahstws005\target\chem\voa9.i\u240126.b\u012623.d
Inj Date : 26-JAN-2024 19:46
InstruID : VOA9.i
LabSampID : HS24011111-11

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240126.b\U012624.D Page 1
Report Date: 29-Jan-2024 08:22

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240126.b\U012624.D
Lab Smp Id: HS24011111-12
Inj Date : 26-JAN-2024 20:08
Operator : PC   Inst ID: VOA9.i
Smp Info : HS24011111-12
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240126.b\8260C.m
Meth Date : 27-Jan-2024 00:13 firat.tast Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11   Cal File: U120608.D
Als bottle: 23
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: 000bhatebtex.sub
Target Version: 4.14
Processing Host: NAHSTWS005

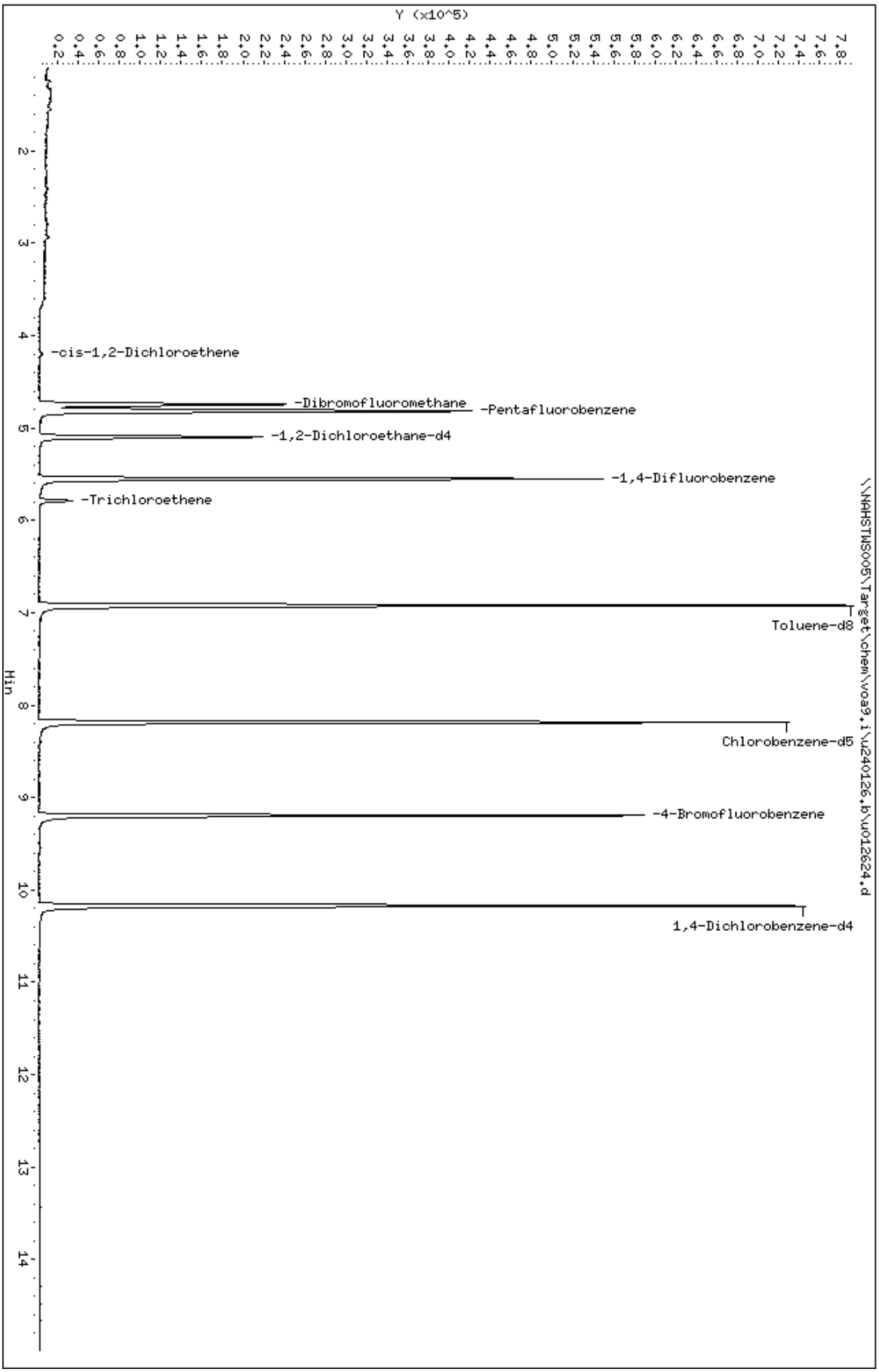
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
*	1 Pentafluorobenzene	168	4.815	4.815	(1.000)	327978	50.0000	
$	30 Dibromofluoromethane	113	4.744	4.748	(0.985)	144146	42.7995	42.79
$	35 1,2-Dichloroethane-d4	65	5.093	5.096	(1.058)	143864	37.8871	37.88
*	36 1,4-Difluorobenzene	114	5.550	5.554	(1.000)	452392	50.0000	
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	423424	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	507235	52.0383	52.03
$	69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	178393	48.2932	48.29
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	220608	50.0000	
	27 cis-1,2-Dichloroethene	96	4.197	4.197	(0.872)	1703	0.42040	0.42(a)
	38 Trichloroethene	130	5.786	5.790	(1.043)	11456	3.37513	3.37(a)

QC Flag Legend

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



Data File: \\NAHSTWS005\Target\chem\voa9,i\u240126,b\u012624,d
Date : 26-JAN-2024 20:08
Client ID:
Sample Info: HS24011111-12
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9,i
Operator: PC
Column diameter: 0.18

Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012624.d Page 2

Date : 26-JAN-2024 20:08

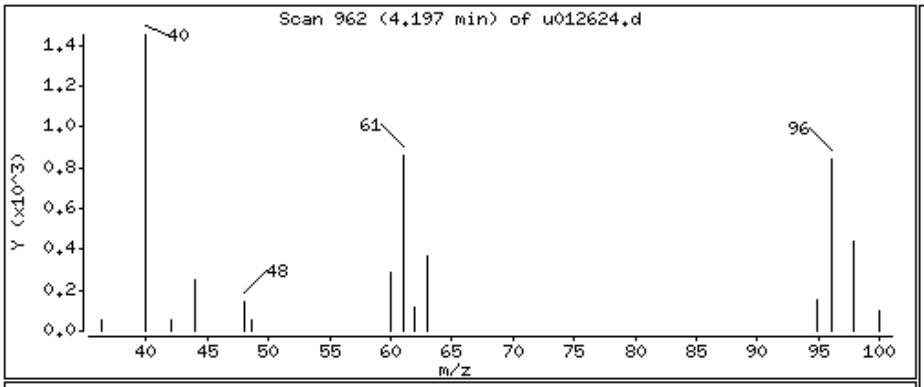
Client ID: Instrument: VOA9.i

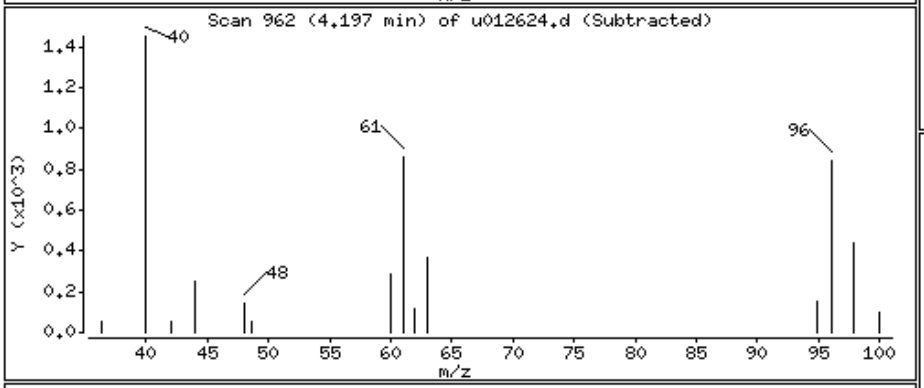
Sample Info: HS24011111-12

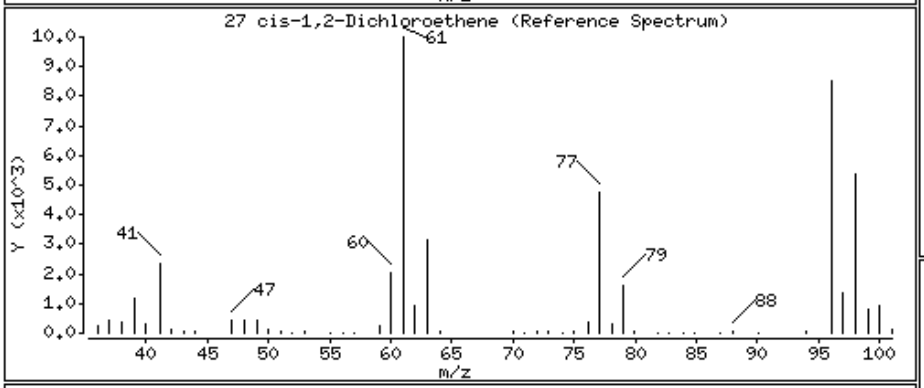
Purge Volume: 5.0 Operator: PC

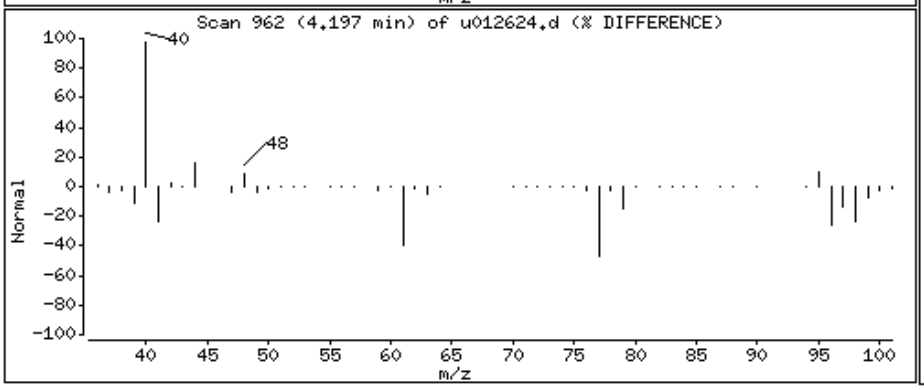
Column phase: DB624 Column diameter: 0.18

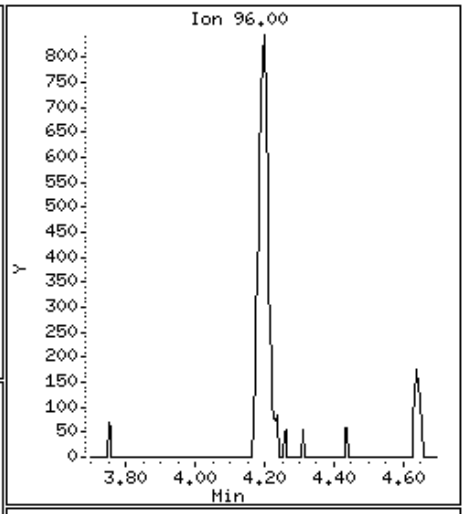
27 cis-1,2-Dichloroethene Concentration: 0.42 ug/l

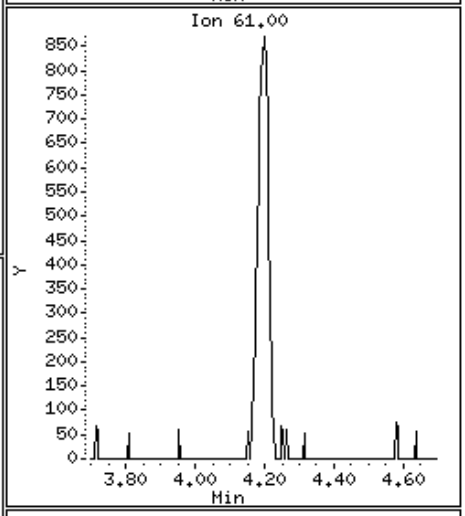


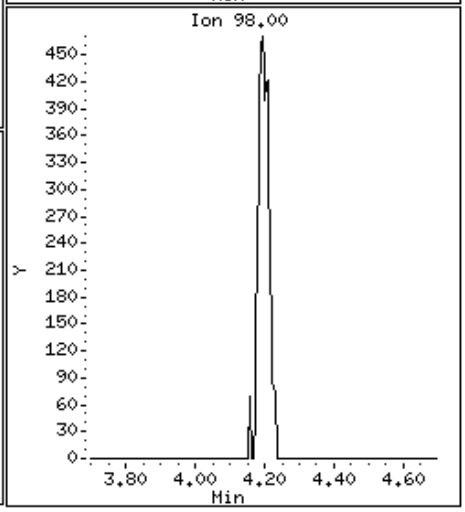












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012624.d Page 3

Date : 26-JAN-2024 20:08

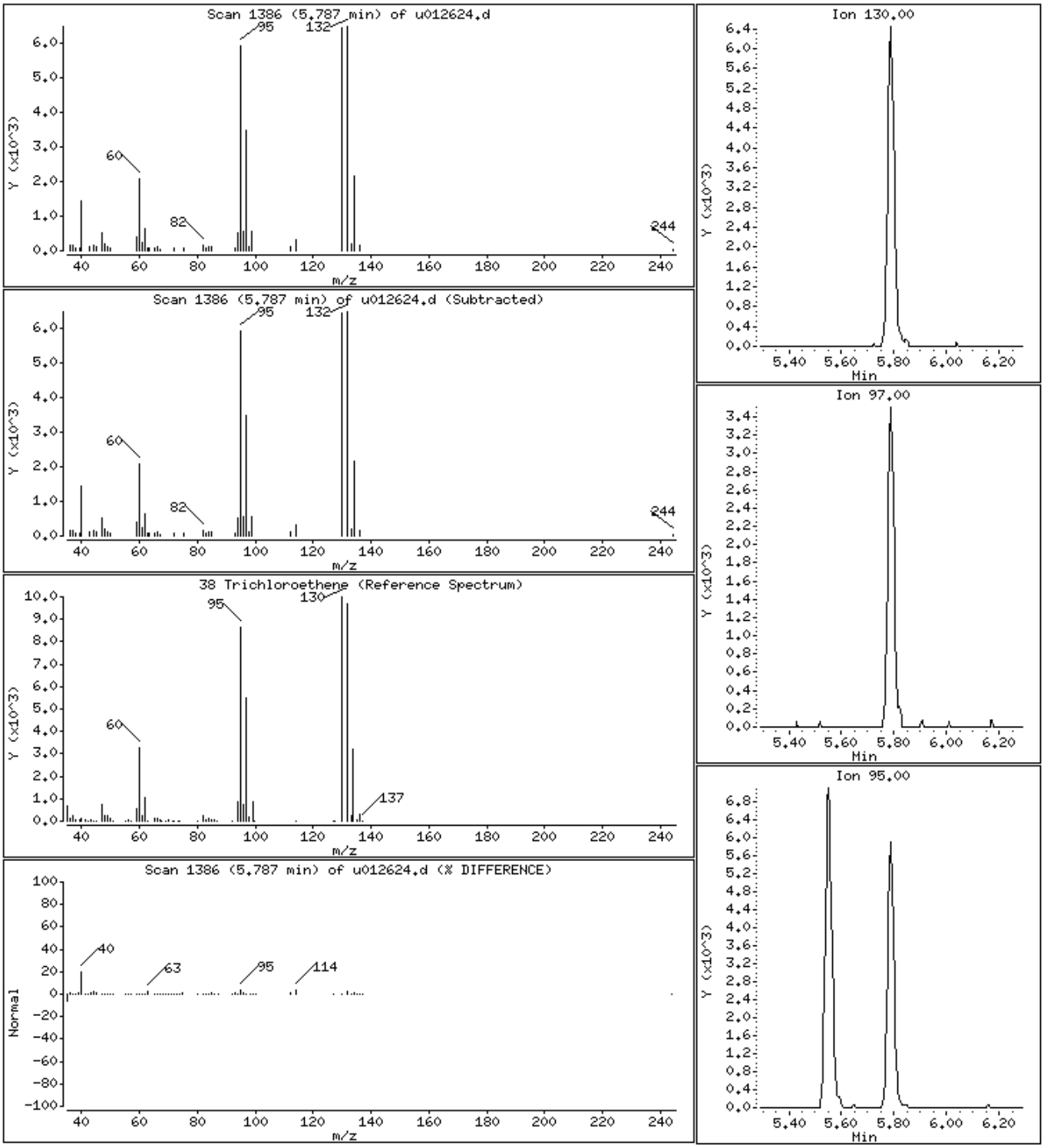
Client ID: Instrument: VOA9.i

Sample Info: HS24011111-12

Purge Volume: 5.0 Operator: PC

Column phase: DB624 Column diameter: 0.18

38 Trichloroethene Concentration: 3.37 ug/l



Data File : \\nahstws005\target\chem\voa9.i\u240126.b\u012624.d
Inj Date : 26-JAN-2024 20:08
InstruID : VOA9.i
LabSampID : HS24011111-12

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240126.b\U012625.D Page 1
Report Date: 29-Jan-2024 08:23

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240126.b\U012625.D
Lab Smp Id: HS24011111-13
Inj Date : 26-JAN-2024 20:31
Operator : PC   Inst ID: VOA9.i
Smp Info : HS24011111-13
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240126.b\8260C.m
Meth Date : 27-Jan-2024 00:13 firat.tast Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11   Cal File: U120608.D
Als bottle: 24
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: 000bhatebtex.sub
Target Version: 4.14
Processing Host: NAHSTWS005

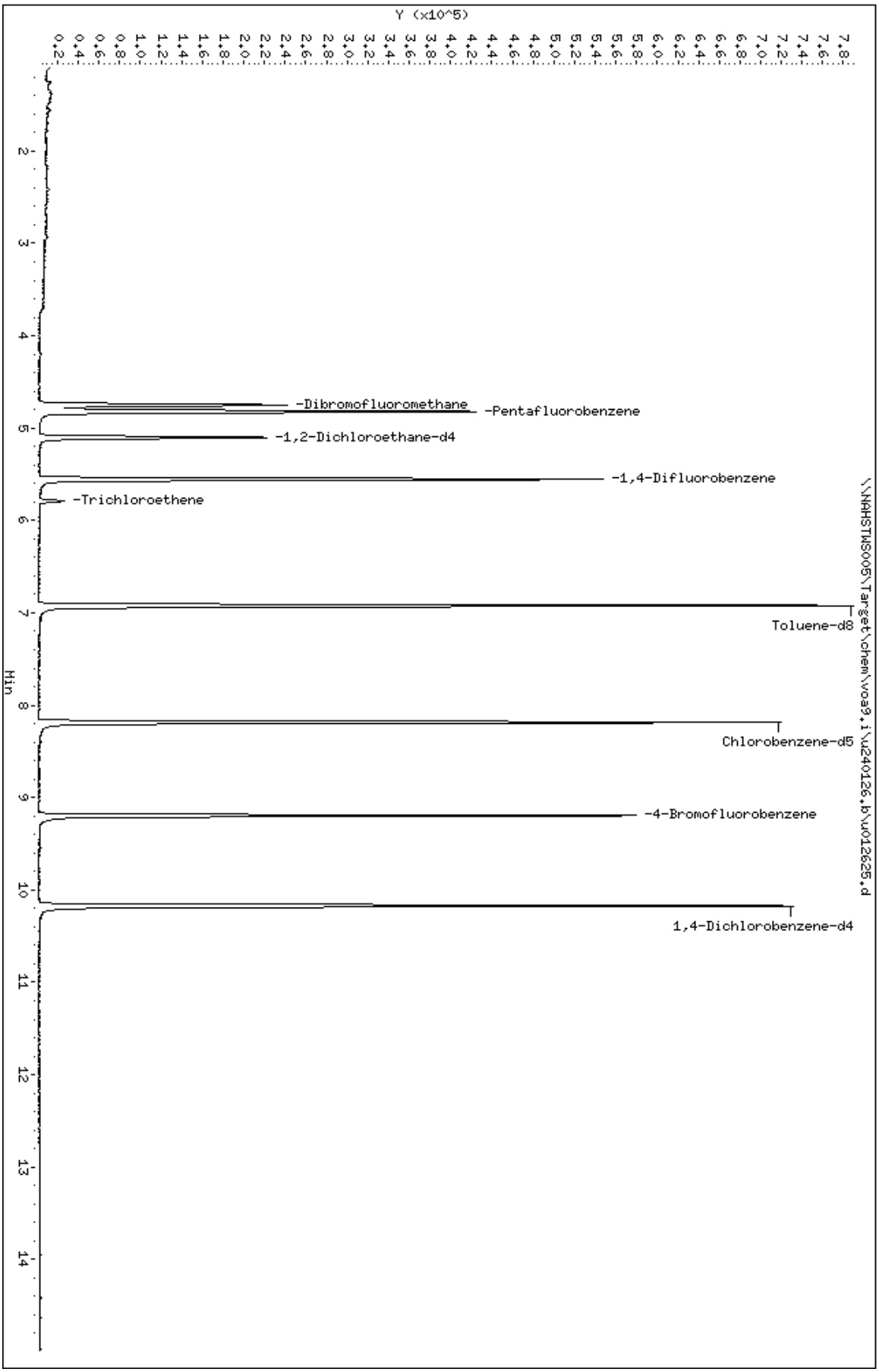
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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	4.819	4.815	(1.000)	322434	50.0000	
$ 30 Dibromofluoromethane	113	4.751	4.748	(0.986)	142857	43.1544	43.15
$ 35 1,2-Dichloroethane-d4	65	5.100	5.096	(1.058)	141998	38.0332	38.03
* 36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	447214	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	417390	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	503002	52.3500	52.35
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	172642	47.3884	47.38
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	215155	50.0000	
38 Trichloroethene	130	5.790	5.790	(1.043)	8240	2.45575	2.45(a)

QC Flag Legend

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



Data File: \\NAHSTWS005\Target\chem\voa9,i\u240126,b\u012625,d
Date : 26-JAN-2024 20:31
Client ID:
Sample Info: HS2401111-13
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9,i
Operator: PC
Column diameter: 0.18

Page 1

Data File: \\NAHSTWS005\Target\chem\voa9.i\u240126.b\u012625.d Page 2

Date : 26-JAN-2024 20:31

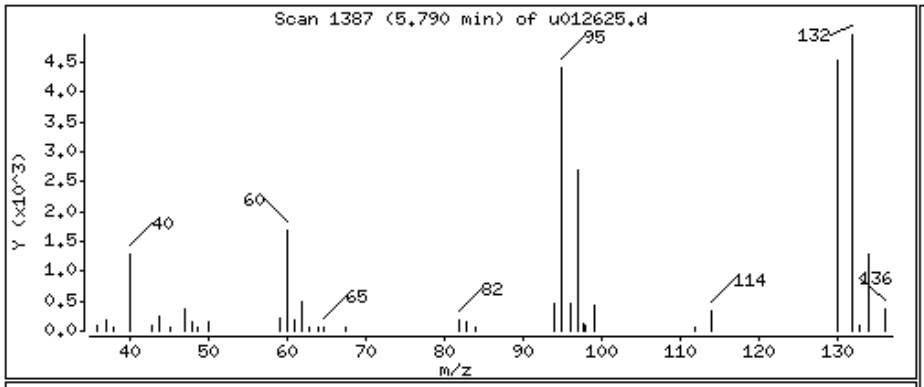
Client ID: Instrument: VOA9.i

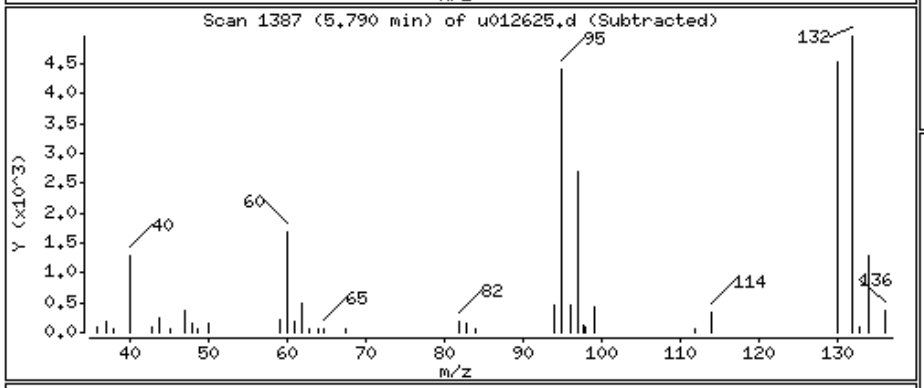
Sample Info: HS24011111-13

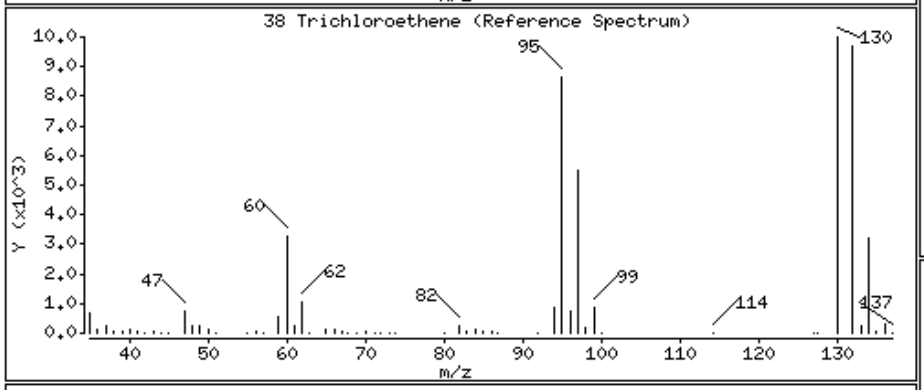
Purge Volume: 5.0 Operator: PC

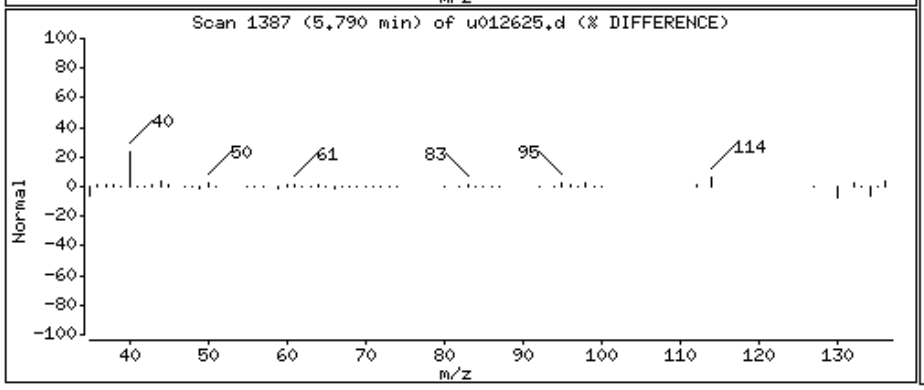
Column phase: DB624 Column diameter: 0.18

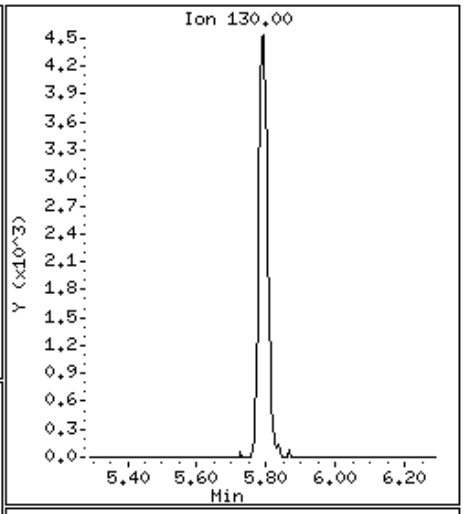
38 Trichloroethene Concentration: 2.45 ug/l

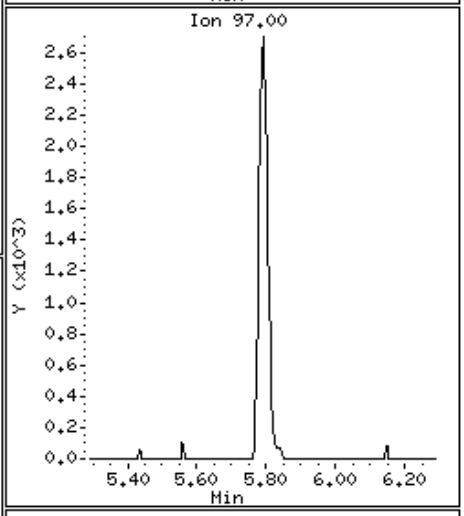


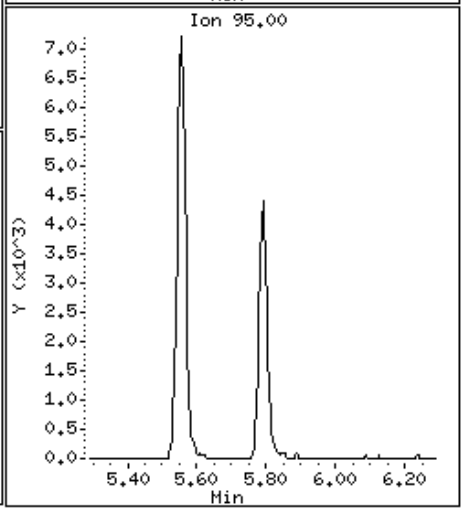












Data File : \\nahstws005\target\chem\voa9.i\u240126.b\u012625.d
Inj Date : 26-JAN-2024 20:31
InstruID : VOA9.i
LabSampID : HS24011111-13

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240126.b\U012628.D Page 1
Report Date: 26-Jan-2024 21:59

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240126.b\U012628.D
Lab Smp Id: CCV-END Client Smp ID: CCV-END
Inj Date : 26-JAN-2024 21:43
Operator : PC Inst ID: VOA9.i
Smp Info : CCV-END;CCV-END;2;;;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240126.b\8260C.m
Meth Date : 26-Jan-2024 21:59 firat.tast Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 27 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 000bhatebtex.sub
Target Version: 4.14
Processing Host: NAHSTWS005

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

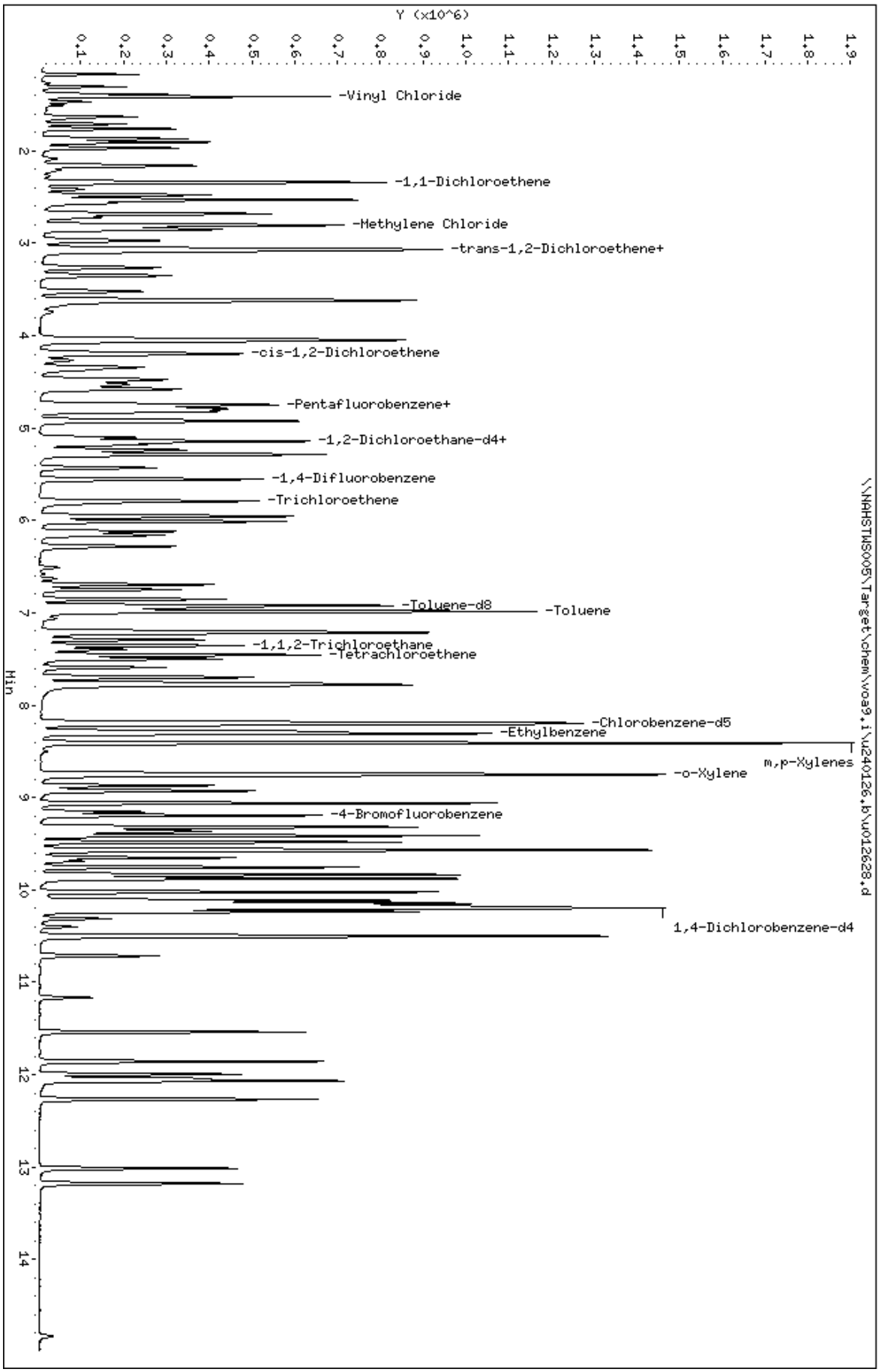
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
*	1 Pentafluorobenzene	168	4.819	4.819	(1.000)	284686	50.0000	
$	30 Dibromofluoromethane	113	4.751	4.751	(0.986)	143837	50.0000	49.35
$	35 1,2-Dichloroethane-d4	65	5.100	5.100	(1.058)	143426	50.0000	43.27
*	36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	426355	50.0000	
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	430748	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	503298	50.0000	50.75
$	69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	185182	50.0000	49.30
*	70 1,4-Dichlorobenzene-d4	152	10.168	10.168	(1.000)	243581	50.0000	
	5 Vinyl Chloride	62	1.385	1.385	(0.288)	201835	50.0000	64.69
	11 1,1-Dichloroethene	96	2.341	2.341	(0.486)	147528	50.0000	67.18
	17 Methylene Chloride	84	2.798	2.798	(0.581)	179998	50.0000	65.03
	20 trans-1,2-Dichloroethene	96	3.065	3.065	(0.636)	168415	50.0000	64.16
	27 cis-1,2-Dichloroethene	96	4.200	4.200	(0.872)	163248	50.0000	46.42
	38 Trichloroethene	130	5.790	5.790	(1.043)	177236	50.0000	55.40
	53 1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	112254	50.0000	48.83
	56 Tetrachloroethene	164	7.458	7.458	(0.911)	151920	50.0000	59.09
	18 Methyl tert-butyl ether	73	3.087	3.087	(0.641)	422079	50.0000	53.64
	33 1,2-Dichloroethane	62	5.179	5.179	(0.933)	181915	50.0000	43.79
	37 Benzene	78	5.141	5.141	(0.926)	550358	50.0000	47.41
	50 Toluene	91	6.982	6.982	(0.853)	616608	50.0000	51.33

61 Ethylbenzene	106	8.305	8.305 (1.015)	209981	50.0000	51.26
62 m,p-Xylenes	106	8.406	8.406 (1.027)	536037	100.000	108.85

Data File: \\nahstws005\Target\chem\voa9.i\U240126.b\U012628.D Page 2
Report Date: 26-Jan-2024 21:59

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
63 o-Xylene	106	8.748	8.748	(1.069)	266530	50.0000	52.63
M 95 Xylenes (total)	106				802567	150.000	162.68



Data File: \\NAHSTWS005\Target\chem\voa9,i\u240126,b\u012628,d
Date : 26-JAN-2024 21:43
Client ID: CCV-END
Sample Info: CCV-END;CCV-END;2;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9,i
Operator: PC
Column diameter: 0.18

Data File : \\nahstws005\target\chem\voa9.i\u240126.b\u012628.d
Inj Date : 26-JAN-2024 21:43
InstruID : VOA9.i
LabSampID : CCV-END

NO MANUAL INTEGRATIONS

right solutions.
right partner.

RawData

Volatiles by EPA Volatiles Organics by Method 8260C

Workorder

HS24011111

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

02/02/2024

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

Data File: \\nahstws005\Target\chem\voa9.i\U240129.b\U012901.D Page 1
Report Date: 29-Jan-2024 10:09

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240129.b\U012901.D
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 29-JAN-2024 08:25
Operator : FT Inst ID: VOA9.i
Smp Info : BFB;BFB;3;;BFB
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240129.b\bfb.m
Meth Date : 27-Jan-2023 08:08 apoluri Quant Type: ISTD
Cal Date : 30-MAR-2018 18:09 Cal File: U033003.d
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: NAHSTW7066

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	2.000	Injection Volume
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/l)		
RT	EXP RT	REL RT	MASS	RESPONSE			TARGET RANGE	RATIO
1 bfb							CAS #: 460-00-4	
9.194	9.180	(0.000)	95	89120			0.00- 100.00	100.00
9.194	9.180	(0.000)	50	15594			15.00- 40.00	17.50
9.194	9.180	(0.000)	75	42288			30.00- 60.00	47.45
9.194	9.180	(0.000)	96	6191			5.00- 9.00	6.95
9.194	9.180	(0.000)	173	0	0.0	0.0	0.00- 2.00	0.00
9.194	9.180	(0.000)	174	86936			50.00- 0.00	97.55
9.194	9.180	(0.000)	175	7585			5.00- 9.00	8.72
9.194	9.180	(0.000)	176	84800			95.00- 101.00	97.54
9.194	9.180	(0.000)	177	6038			5.00- 9.00	7.12

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	17.50
75	30.00 - 60.00% of mass 95	47.45
96	5.00 - 9.00% of mass 95	6.95
173	Less than 2.00% of mass 174	0.00 (0.00)
174	Greater than 50.00% of mass 95	97.55
175	5.00 - 9.00% of mass 174	8.51 (8.72)
176	95.00 - 101.00% of mass 174	95.15 (97.54)
177	5.00 - 9.00% of mass 176	6.78 (7.12)

Data File: U012901.D
Spectrum: Scan 2293 (9.19)
Location of Maximum: 95.05
Number of points: 101

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.10	242	63.00	3425	94.00	10180	142.90	1096
36.00	1943	64.00	359	95.10	89120	143.80	63
37.00	3351	65.00	847	96.10	6191	145.00	170
38.10	3362	65.90	98	97.00	212	145.80	121
39.10	1338	68.00	8257	104.00	284	146.90	87
40.00	1539	69.10	8650	104.90	126	148.00	219
42.30	82	70.10	693	105.90	271	149.10	64
43.20	80	72.00	417	106.80	89	149.70	61
44.00	498	73.00	3666	112.10	90	152.90	62
45.00	691	74.10	13637	112.80	73	153.90	74
46.30	171	75.10	42288	114.90	135	155.10	313
47.10	919	76.00	3780	115.90	318	157.00	157
48.00	475	77.00	544	116.90	594	158.90	91
49.00	3115	77.90	622	117.70	219	161.00	152
50.10	15594	78.90	2043	118.90	500	169.00	53
51.00	4909	80.00	591	122.70	52	171.10	242
52.10	206	80.90	2027	123.90	65	172.00	1229
53.10	98	82.00	502	126.60	70	174.00	86936
54.40	108	82.90	84	127.90	350	175.10	7585
55.10	219	86.20	174	129.00	184	176.00	84800
56.00	1185	87.00	3818	130.00	246	177.00	6038
57.00	1918	88.00	4183	130.90	110	177.90	220
57.90	103	90.20	52	134.90	132	213.30	58
60.00	847	91.00	364	136.80	89		
61.00	3586	92.00	2380	140.90	795		
62.00	3562	93.00	3624	142.00	119		

Data File: \\nahstws005\Target\chem\voa9.i\U240129.b\U012901.D Page 1

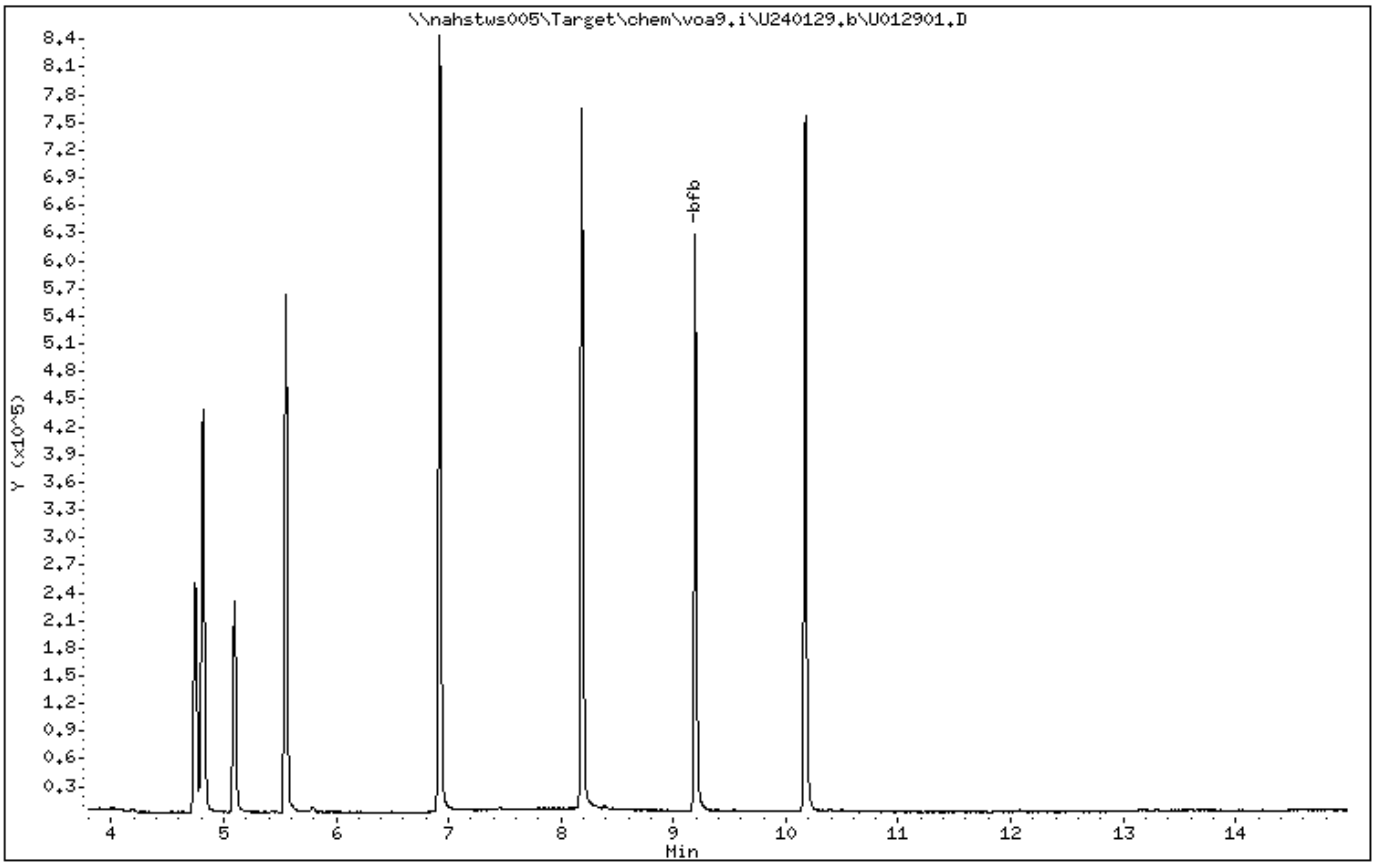
Date : 29-JAN-2024 08:25

Client ID: BFB Instrument: VOA9.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0 Operator: FT

Column phase: DB624 Column diameter: 0.25



Data File: \\nahstws005\Target\chem\voa9.i\U240129.b\U012901.D Page 2

Date : 29-JAN-2024 08:25

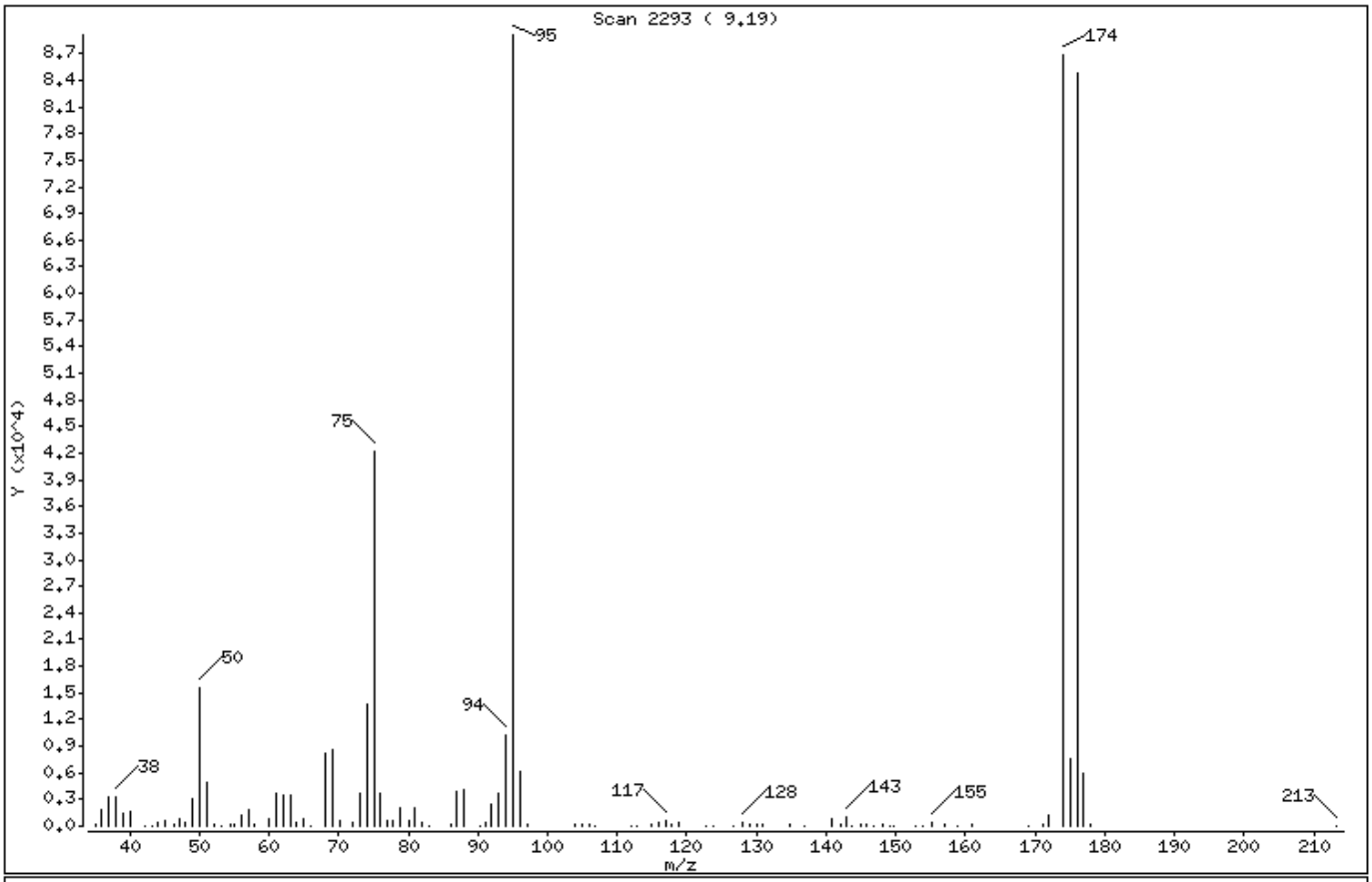
Client ID: BFB Instrument: VOA9.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0 Operator: FT

Column phase: DB624 Column diameter: 0.25

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	17.50
75	30.00 - 60.00% of mass 95	47.45
96	5.00 - 9.00% of mass 95	6.95
173	Less than 2.00% of mass 174	0.00 (0.00)
174	Greater than 50.00% of mass 95	97.55
175	5.00 - 9.00% of mass 174	8.51 (8.72)
176	95.00 - 101.00% of mass 174	95.15 (97.54)
177	5.00 - 9.00% of mass 176	6.78 (7.12)

Data File: \\nahstws005\Target\chem\voa9.i\U240129.b\U012901.D Page 3

Date : 29-JAN-2024 08:25

Client ID: BFB Instrument: VOA9.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0 Operator: FT

Column phase: DB624 Column diameter: 0.25

Data File: U012901.D
Spectrum: Scan 2293 (9.19)
Location of Maximum: 95.05
Number of points: 101

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.10	242	63.00	3425	94.00	10180	142.90	1096
36.00	1943	64.00	359	95.10	89120	143.80	63
37.00	3351	65.00	847	96.10	6191	145.00	170
38.10	3362	65.90	98	97.00	212	145.80	121
39.10	1338	68.00	8257	104.00	284	146.90	87
40.00	1539	69.10	8650	104.90	126	148.00	219
42.30	82	70.10	693	105.90	271	149.10	64
43.20	80	72.00	417	106.80	89	149.70	61
44.00	498	73.00	3666	112.10	90	152.90	62
45.00	691	74.10	13637	112.80	73	153.90	74
46.30	171	75.10	42288	114.90	135	155.10	313
47.10	919	76.00	3780	115.90	318	157.00	157
48.00	475	77.00	544	116.90	594	158.90	91
49.00	3115	77.90	622	117.70	219	161.00	152
50.10	15594	78.90	2043	118.90	500	169.00	53
51.00	4909	80.00	591	122.70	52	171.10	242
52.10	206	80.90	2027	123.90	65	172.00	1229
53.10	98	82.00	502	126.60	70	174.00	86936
54.40	108	82.90	84	127.90	350	175.10	7585
55.10	219	86.20	174	129.00	184	176.00	84800
56.00	1185	87.00	3818	130.00	246	177.00	6038
57.00	1918	88.00	4183	130.90	110	177.90	220
57.90	103	90.20	52	134.90	132	213.30	58
60.00	847	91.00	364	136.80	89		
61.00	3586	92.00	2380	140.90	795		
62.00	3562	93.00	3624	142.00	119		

Data File : \\nahstws005\target\chem\voa9.i\u240129.b\u012901.d
Inj Date : 29-JAN-2024 08:25
InstruID : VOA9.i
LabSampID : BFB

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240129.b\U012902A.D Page 1
Report Date: 29-Jan-2024 10:45

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240129.b\U012902A.D
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 29-JAN-2024 09:10
Operator : FT Inst ID: VOA9.i
Smp Info : CCV;CCV;2;;;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240129.b\8260C.m
Meth Date : 29-Jan-2024 10:45 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 000bhatebtex.sub
Target Version: 4.14
Processing Host: NAHSTW7066

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

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

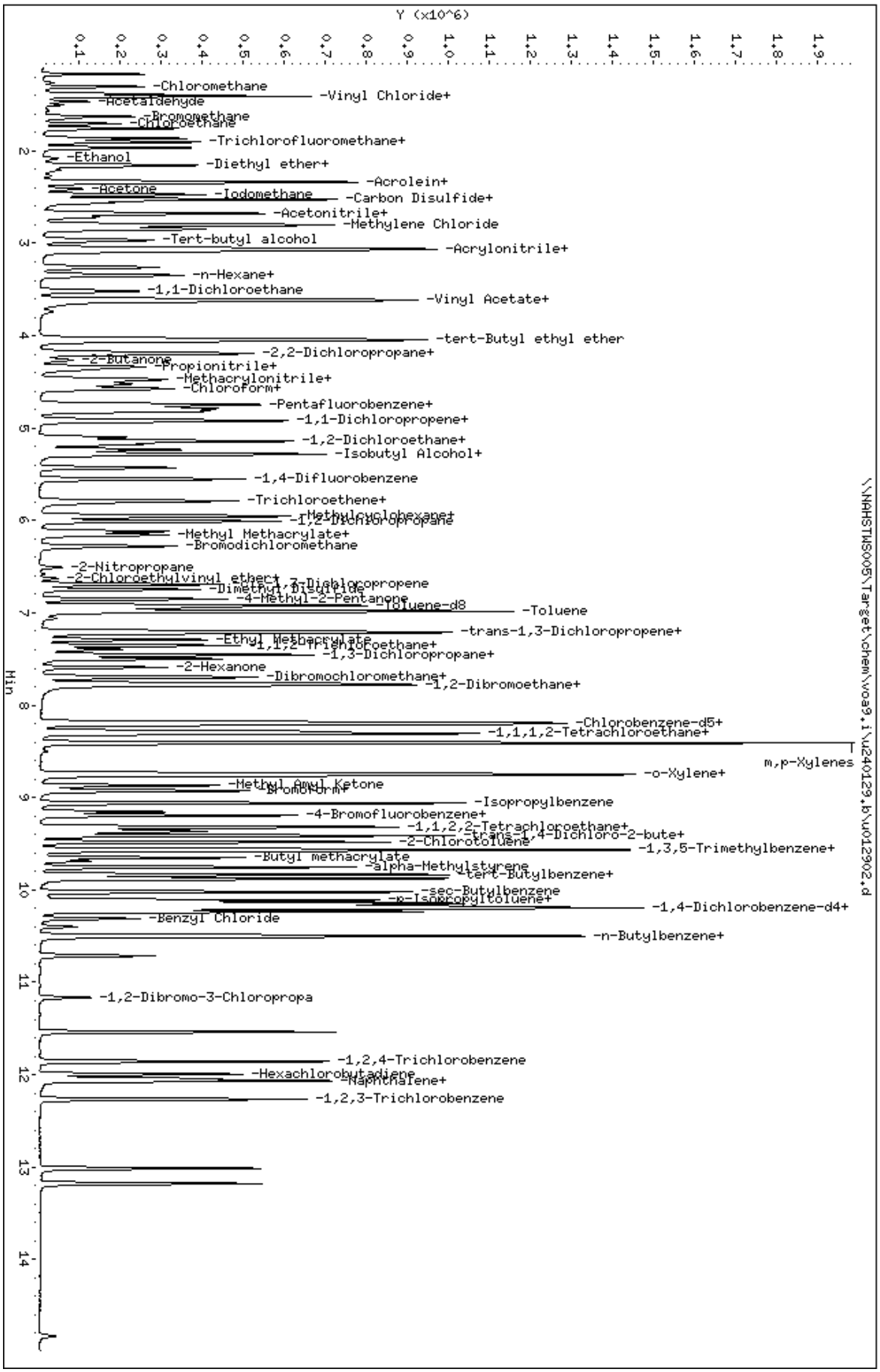
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.815	4.815	(1.000)	277269	50.0000	
$ 30 Dibromofluoromethane	113	4.748	4.748	(0.986)	137859	50.0000	48.55
$ 35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	137858	50.0000	42.72
* 36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	410325	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	421551	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	484005	50.0000	49.87
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	176081	50.0000	47.86
* 70 1,4-Dichlorobenzene-d4	152	10.168	10.168	(1.000)	234634	50.0000	
5 Vinyl Chloride	62	1.382	1.382	(0.287)	198430	50.0000	65.30
11 1,1-Dichloroethene	96	2.337	2.337	(0.485)	139320	50.0000	65.14
17 Methylene Chloride	84	2.799	2.799	(0.581)	175224	50.0000	65.00
20 trans-1,2-Dichloroethene	96	3.061	3.061	(0.636)	152815	50.0000	59.77(M)
24 2-Butanone	43	4.264	4.264	(0.886)	102495	100.000	75.46
27 cis-1,2-Dichloroethene	96	4.197	4.197	(0.872)	165107	50.0000	48.21
38 Trichloroethene	130	5.790	5.790	(1.043)	164656	50.0000	53.48
53 1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	112666	50.0000	50.12
56 Tetrachloroethene	164	7.458	7.458	(0.911)	149070	50.0000	59.25(M)
18 Methyl tert-butyl ether	73	3.083	3.083	(0.640)	440805	50.0000	57.52
33 1,2-Dichloroethane	62	5.175	5.175	(0.932)	180120	50.0000	45.05
37 Benzene	78	5.141	5.141	(0.926)	541700	50.0000	48.49

50 Toluene	91	6.982	6.982 (0.853)	598678	50.0000	50.93
61 Ethylbenzene	106	8.305	8.305 (1.015)	214802	50.0000	53.59

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	
	62 m,p-Xylenes	106	8.407	8.407	(1.027)	544061	100.000	112.89	
	63 o-Xylene	106	8.744	8.744	(1.068)	262431	50.0000	52.95	
	67 Isopropylbenzene	105	9.063	9.063	(1.107)	662277	50.0000	55.25	
	79 1,2,4-Trimethylbenzene	105	9.876	9.876	(0.971)	529592	50.0000	53.96	
	131 Methyl Acrylate	55	4.369	4.369	(0.907)	151064	50.0000	41.47	
	141 Cyclohexane	56	4.789	4.789	(0.995)	193265	50.0000	48.37	
	162 Butyl acrylate	55	8.733	8.733	(1.067)	213689	50.0000	35.79	
	203 2-Ethylhexyl Acrylate	55	12.039	12.039	(1.184)	141123	50.0000	41.19	
M	95 Xylenes (total)	106				806492	150.000		(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.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Min
2
3
4
5
6
7
8
9
10
11
12
13
14
-Chloromethane
-Vinyl Chloride+
-Acetaldehyde
-Bromomethane
-Chloroethane
-Trichlorofluoromethane+
-Ethanol
-Diethyl ether+
-Acrolein+
-Acetone
-Iodomethane
-Carbon Disulfide+
-Acetonitrile+
-Methylene Chloride
-Tert-butyl alcohol
-Acrylonitrile+
-n-Hexane+
-1,1-Dichloroethane
-Vinyl Acetate+
-tert-Butyl ethyl ether
-2,2-Dichloropropane+
-2-Butanone
-Propionitrile+
-Methacrylonitrile+
-Chloroform+
-Pentafluorobenzene+
-1,1-Dichloropropene+
-1,2-Dichloroethane+
-Isobutyl Alcohol+
-1,4-Difluorobenzene
-Trichloroethene+
-Methylcyclohexane+
-1,2-Dichloropropane
-Methyl Methacrylate+
-Bromodichloromethane
-2-Nitropropane
-2-Chloroethylvinyl ether+
-1,3-Dichloropropene
-Dimethyl Disulfide
-4-Methyl-2-Pentanone
-Toluene-d8
-Toluene
-trans-1,3-Dichloropropene+
-Ethyl Methacrylate
-1,1,2-Trichloroethane+
-1,3-Dichloropropane+
-2-Hexanone
-Dibromochloromethane+
-1,2-Dibromoethane+
-Chlorobenzene-d5+
-1,1,1,2-Tetrachloroethane+
m,p-Xylenes
-o-Xylene+
-Methyl Amyl Ketone
-Bromoform+
-Isopropylbenzene
-4-Bromofluorobenzene+
-1,1,2,2-Tetrachloroethane+
-trans-1,4-Dichloro-2-bute+
-2-Chlorotoluene
-1,3,5-Trimethylbenzene+
-Butyl methacrylate
-alpha-Methylstyrene
-tert-Butylbenzene+
-sec-Butylbenzene
-p-Isopropyltoluene+
-1,4-Dichlorobenzene-d4+
-Benzyl Chloride
-n-Butylbenzene+
-1,2-Dibromo-3-Chloropropa
-1,2,4-Trichlorobenzene
-Hexachlorobutadiene
-Naphthalene+
-1,2,3-Trichlorobenzene
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Data File: \\NAHSTWS005\Target\chem\voa9.i\u240129.b\u012902.d
Date : 29-JAN-2024 09:10
Client ID: CCV
Sample Info: CCV;CCV;2;;;
Purge Volume: 5.0
Column phase: DB624
Instrument: VOA9.i
Operator: FT
Column diameter: 0.18
Page 1

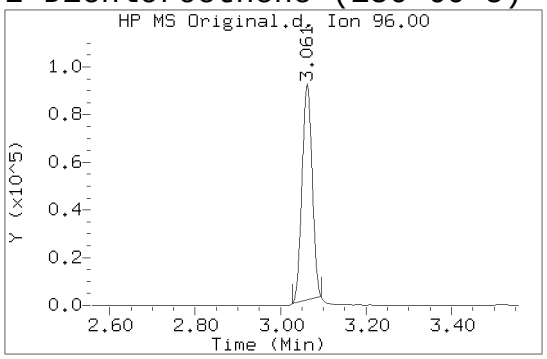
Data File : \\nahstws005\target\chem\voa9.i\u240129.b\u012902.d
Inj Date : 29-JAN-2024 09:10
InstruID : VOA9.i
LabSampID : CCV

trans-1,2-Dichloroethene (156-60-5)

Reason Code:

BEFORE

MASS
96
AREA
152815
HEIGHT
90705
29-Jan-2024
10:45
firat
tastan



AFTER

MASS
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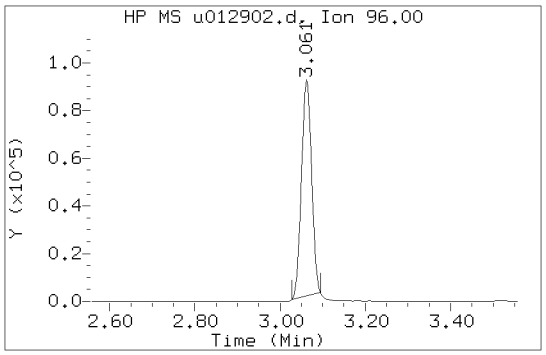
AREA
152815
HEIGHT
90705
29-Jan-2024
10:45
firat
tastan



BEFORE

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HEIGHT
118394
29-Jan-2024
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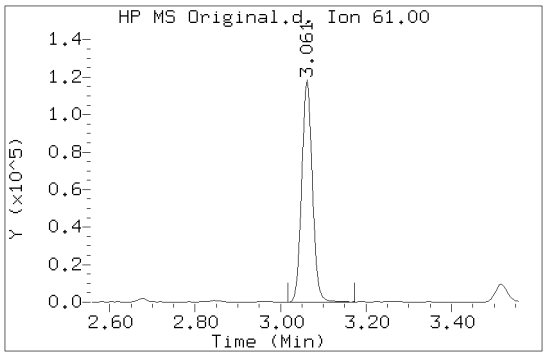
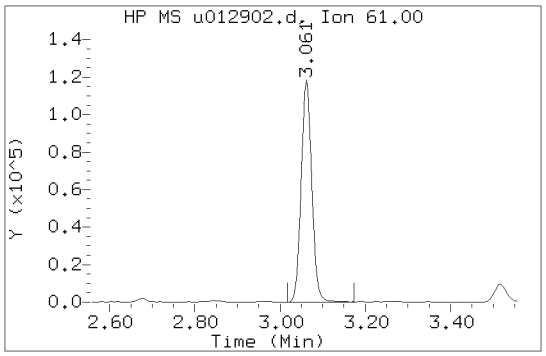
tastan



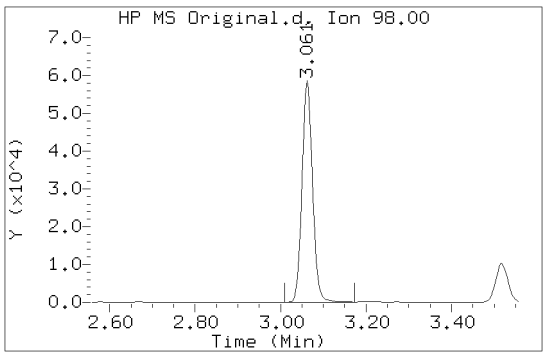
AFTER

MASS
61
AREA
209148
HEIGHT
118394
29-Jan-2024
10:45
firat
tastan



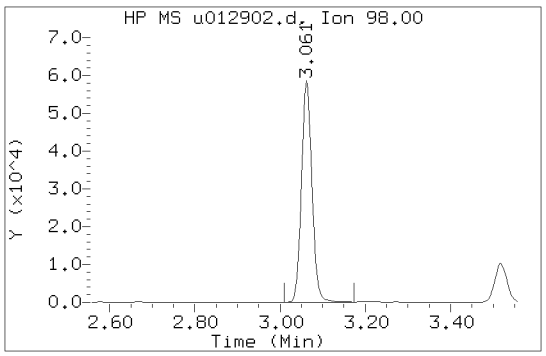
BEFORE

MASS
98
AREA
102824
HEIGHT
58632
29-Jan-2024
10:45
firat
tastan



AFTER

MASS
98
AREA
102824
HEIGHT
58632
29-Jan-2024
10:45
firat
tastan



Tetrachloroethene (127-18-4)

Reason Code:

BEFORE

MASS
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AREA
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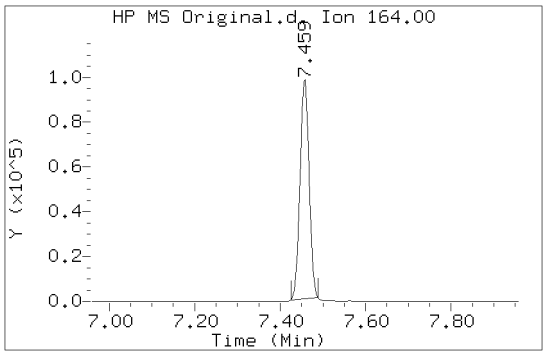
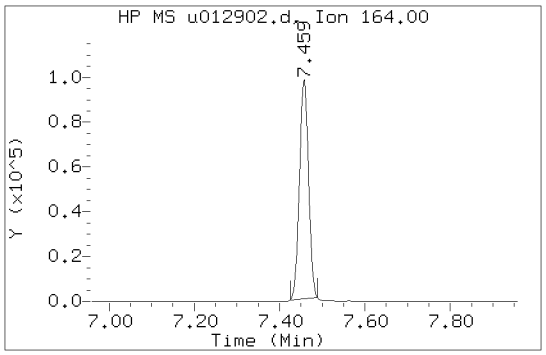
HEIGHT
97858
29-Jan-2024
10:45
firat
tastan



AFTER

MASS
164
AREA
149070
HEIGHT
97858
29-Jan-2024
10:45
firat
tastan



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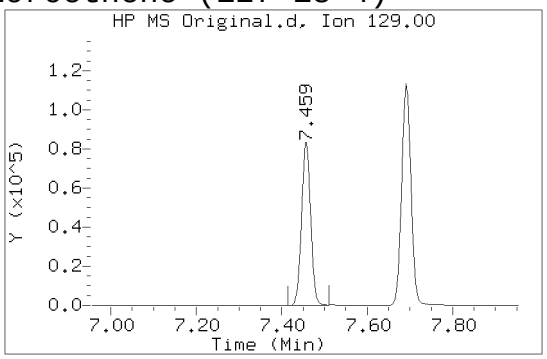
Inj Date : 29-JAN-2024 09:10
InstruID : VOA9.i
LabSampID : CCV

Tetrachloroethene (127-18-4)

Reason Code:

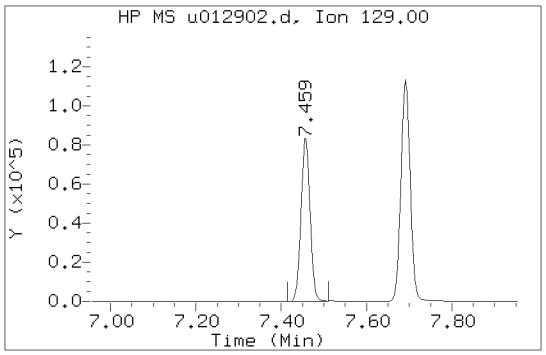
BEFORE

MASS
129
AREA
126670
HEIGHT
83326
29-Jan-2024
10:45
firat
tastan



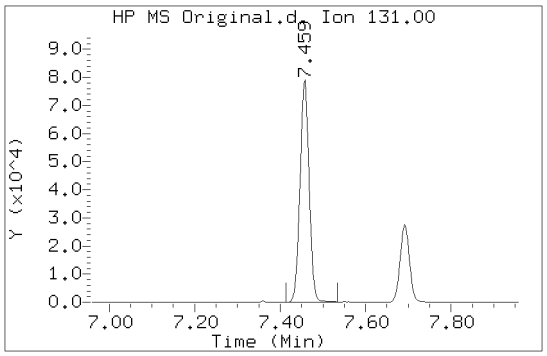
AFTER

MASS
129
AREA
126670
HEIGHT
83326
29-Jan-2024
10:45
firat
tastan



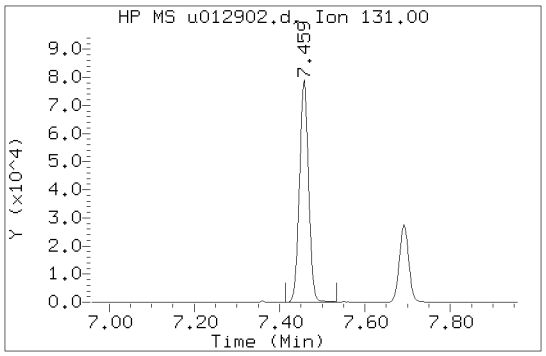
BEFORE

MASS
131
AREA
120334
HEIGHT
79080
29-Jan-2024
10:45
firat
tastan



AFTER

MASS
131
AREA
120334
HEIGHT
79080
29-Jan-2024
10:45
firat
tastan



Data File: \\nahstws005\Target\chem\voa9.i\U240129.b\U012903.D Page 1
Report Date: 29-Jan-2024 10:45

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240129.b\U012903.D
Lab Smp Id: VLCSW-240126 Client Smp ID: VLCSW-240126
Inj Date : 29-JAN-2024 09:32
Operator : FT Inst ID: VOA9.i
Smp Info : VLCSW-240126;VLCSW-240126;3;;LCS
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240129.b\8260C.m
Meth Date : 29-Jan-2024 10:45 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 3 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 000bhatebtex.sub
Target Version: 4.14
Processing Host: NAHSTW7066

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

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

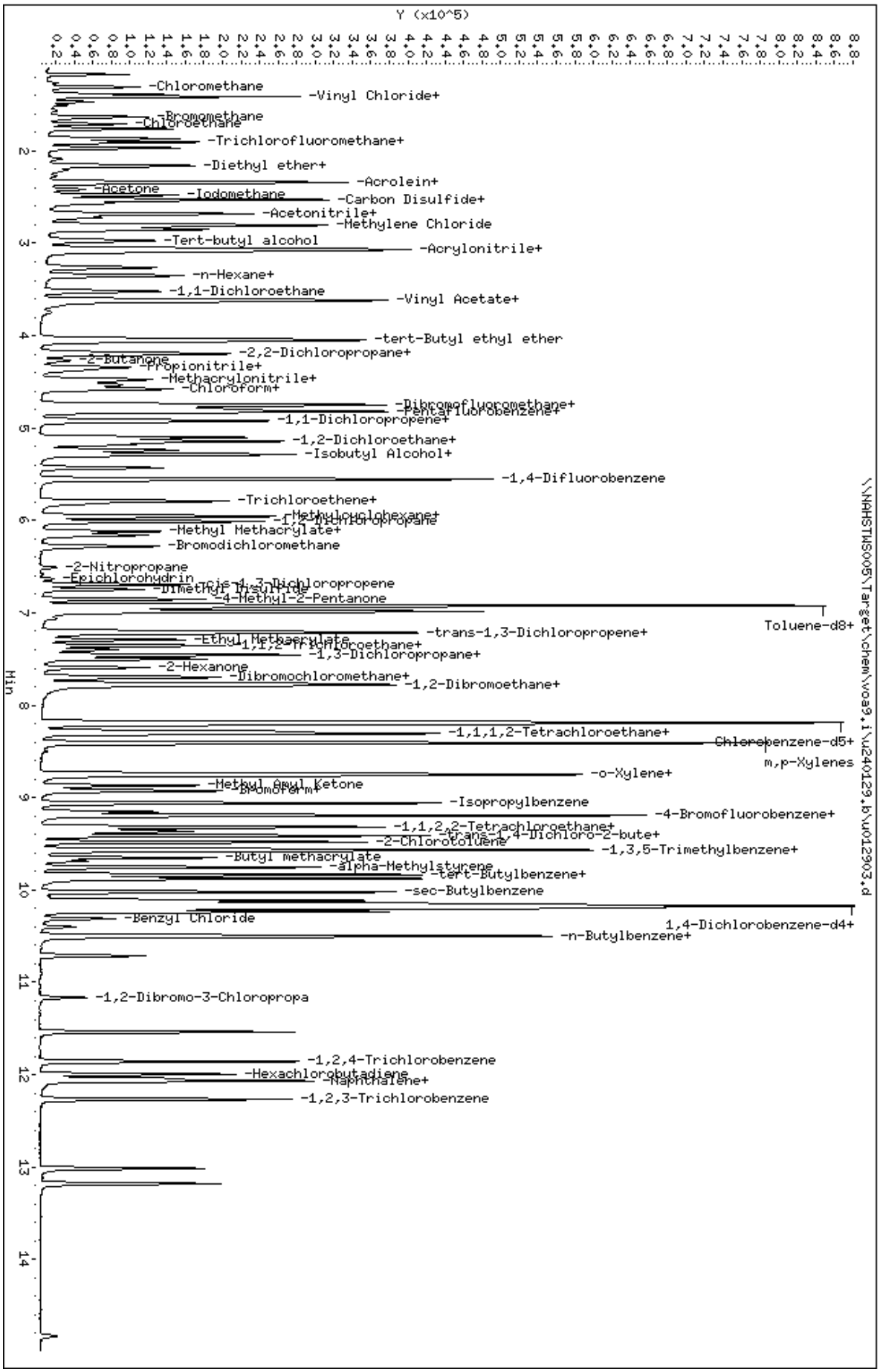
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.819	4.815	(1.000)	272285	50.0000	
$ 30 Dibromofluoromethane	113	4.752	4.748	(0.986)	143553	51.5469	51.54
$ 35 1,2-Dichloroethane-d4	65	5.100	5.096	(1.058)	144188	45.3746	45.37
* 36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	399465	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	407034	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	515972	55.0661	55.06
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	187702	52.9821	52.98
* 70 1,4-Dichlorobenzene-d4	152	10.168	10.168	(1.000)	232989	50.0000	
5 Vinyl Chloride	62	1.385	1.382	(0.288)	80900	27.1125	27.11
11 1,1-Dichloroethene	96	2.341	2.337	(0.486)	61609	29.3365	29.33
17 Methylene Chloride	84	2.802	2.799	(0.582)	73686	27.6861	27.68
20 trans-1,2-Dichloroethene	96	3.065	3.061	(0.636)	70082	27.9155	27.91
24 2-Butanone	43	4.268	4.264	(0.886)	39082	29.3011	29.30
27 cis-1,2-Dichloroethene	96	4.200	4.197	(0.872)	67594	20.0990	20.09
38 Trichloroethene	130	5.790	5.790	(1.043)	71764	23.9442	23.94
53 1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	45972	20.4071	20.40
56 Tetrachloroethene	164	7.458	7.458	(0.911)	62455	25.7092	25.70(M)
18 Methyl tert-butyl ether	73	3.087	3.083	(0.641)	181003	24.0535	24.05
33 1,2-Dichloroethane	62	5.179	5.175	(0.933)	75478	19.3928	19.39
37 Benzene	78	5.141	5.141	(0.926)	229624	21.1162	21.11

50 Toluene	91	6.982	6.982 (0.853)	254818	22.4525	22.45
61 Ethylbenzene	106	8.305	8.305 (1.015)	87555	22.6229	22.62

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
	62 m,p-Xylenes	106	8.406	8.407	(1.027)	223716	48.0793	48.07
	63 o-Xylene	106	8.748	8.744	(1.069)	109767	22.9382	22.93
	67 Isopropylbenzene	105	9.063	9.063	(1.107)	273374	23.6212	23.62
	79 1,2,4-Trimethylbenzene	105	9.880	9.876	(0.972)	223710	22.9561	22.95
	131 Methyl Acrylate	55	4.373	4.369	(0.907)	57730	16.1414	16.14
	141 Cyclohexane	56	4.789	4.789	(0.994)	79822	20.3452	20.34
	162 Butyl acrylate	55	8.733	8.733	(1.067)	78036	15.5622	15.56
	203 2-Ethylhexyl Acrylate	55	12.039	12.039	(1.184)	51541	16.7539	16.75
M	95 Xylenes (total)	106				333483	72.1478	72.14

QC Flag Legend

M - Compound response manually integrated.



Data File: \\NAHSTWS005\Target\chem\voa9,i\u240129,b\u012903.d
Date : 29-JAN-2024 09:32
Client ID: VLCSW-240126
Sample Info: VLCSW-240126;VLCSW-240126;3;;LCS
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9,i
Operator: FT
Column diameter: 0.18

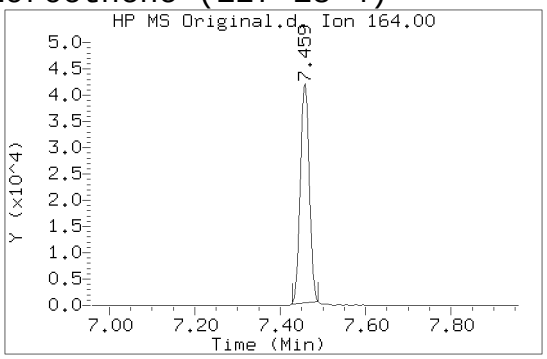
Data File : \\nahstws005\target\chem\voa9.i\u240129.b\u012903.d
Inj Date : 29-JAN-2024 09:32
InstruID : VOA9.i
LabSampID : VLCSW-240126

Tetrachloroethene (127-18-4)

Reason Code:

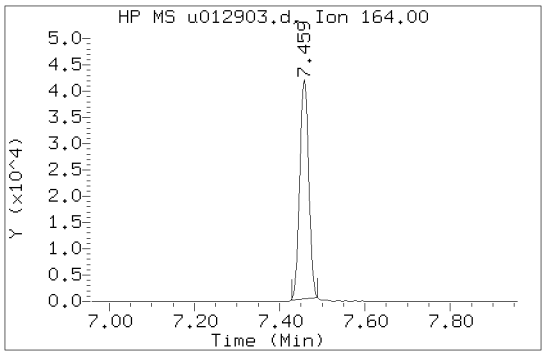
BEFORE

MASS
164
AREA
62455
HEIGHT
41718
29-Jan-2024
10:45
firat
tastan



AFTER

MASS
164
AREA
62455
HEIGHT
41718
29-Jan-2024
10:45
firat
tastan



BEFORE

MASS
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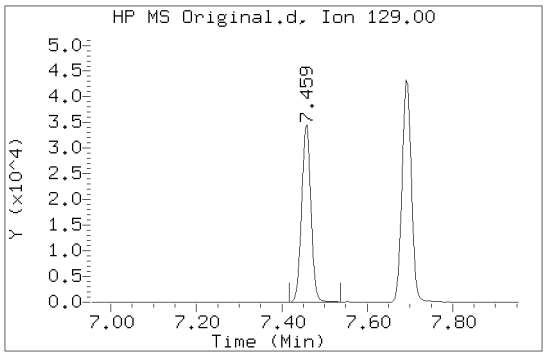
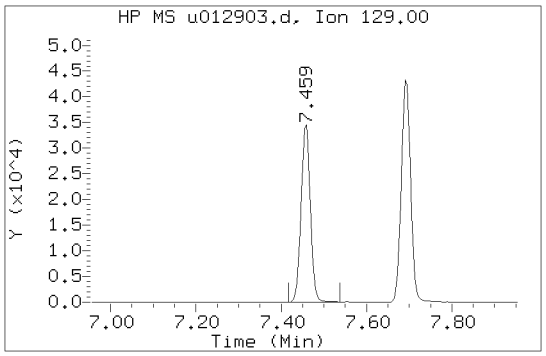
AREA
53485
HEIGHT
34552
29-Jan-2024
10:45
firat
tastan



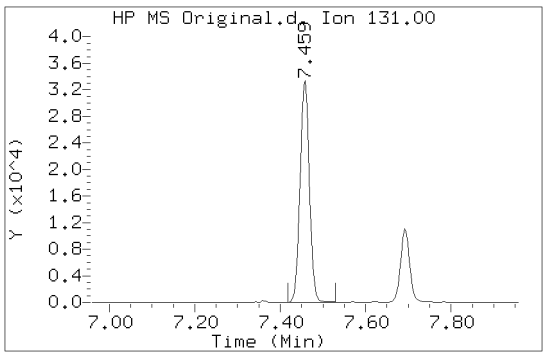
AFTER

MASS
129
AREA
53485
HEIGHT
34552
29-Jan-2024
10:45
firat
tastan



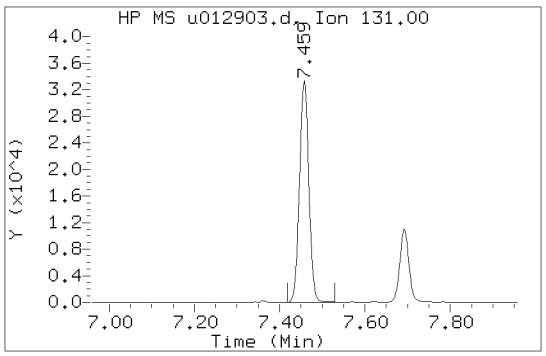
BEFORE

MASS
131
AREA
51674
HEIGHT
33368
29-Jan-2024
10:45
firat
tastan



AFTER

MASS
131
AREA
51674
HEIGHT
33368
29-Jan-2024
10:45
firat
tastan



Data File: \\nahstws005\Target\chem\voa9.i\U240129.b\U012905.D Page 1
Report Date: 29-Jan-2024 13:22

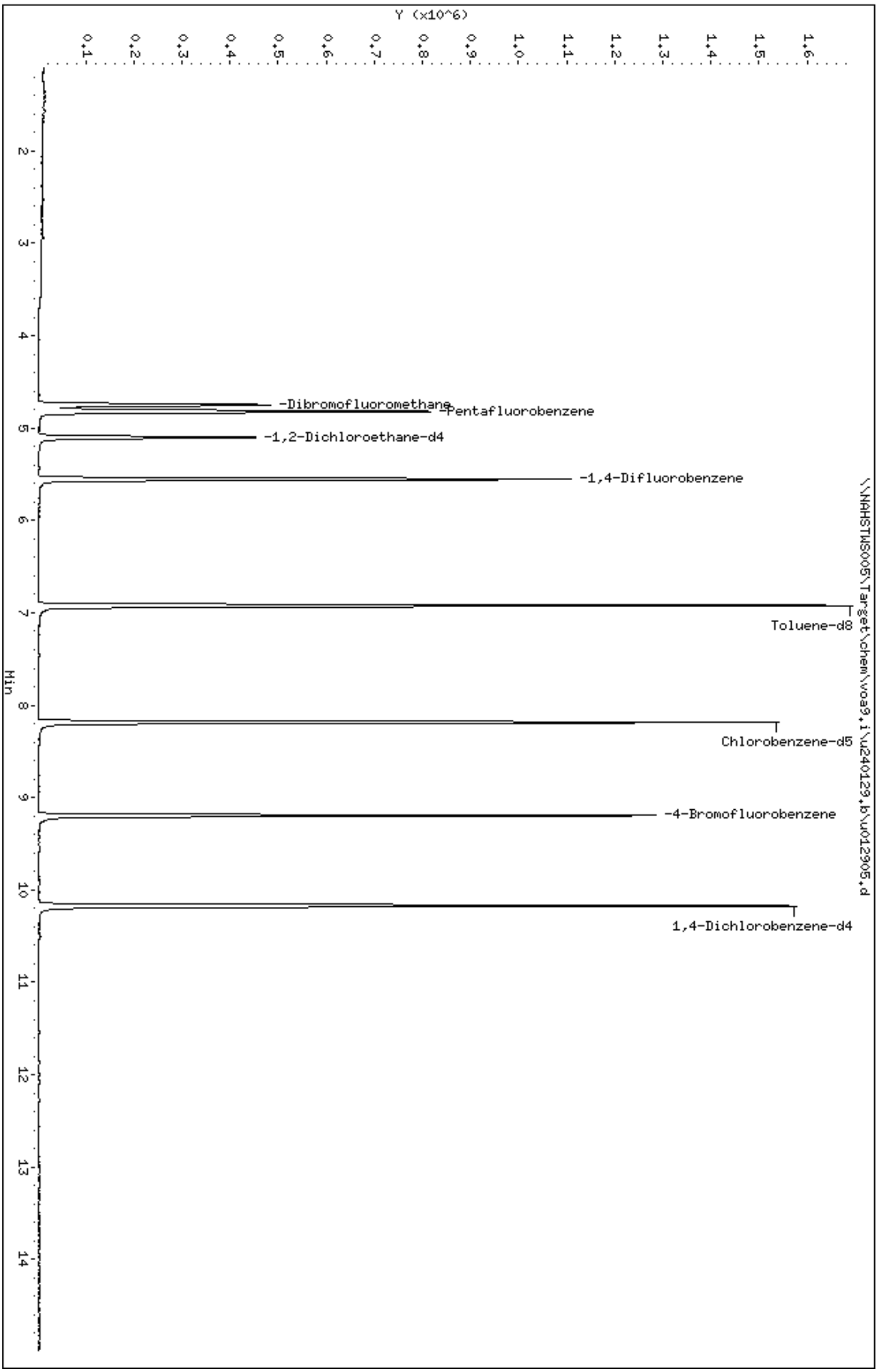
ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240129.b\U012905.D
Lab Smp Id: VBLKW-240126 Client Smp ID: VBLKW-240126
Inj Date : 29-JAN-2024 10:17
Operator : FT Inst ID: VOA9.i
Smp Info : VBLKW-240126;VBLKW-240126;3;;BLANK
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240129.b\8260C.m
Meth Date : 29-Jan-2024 10:46 Firat.Tast Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 5 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 000bhatebtex.sub
Target Version: 4.14

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.819	4.815	(1.000)	619340	50.0000	
$ 30 Dibromofluoromethane	113	4.751	4.748	(0.986)	288874	45.4844	45.48
$ 35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	293690	40.8357	40.83
* 36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	898560	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	861041	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	1047683	52.8561	52.85
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	367806	48.9823	48.98
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	458255	50.0000	



Data File: \\NAHSTWS005\Target\chem\voa9.i\u240129.b\u012905.d
Date : 29-JAN-2024 10:17
Client ID: VBLKW-240126
Sample Info: VBLKW-240126;VBLKW-240126;3;;BLANK
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9.i
Operator: FT
Column diameter: 0.18

Page 1

Data File : \\nahstws005\target\chem\voa9.i\u240129.b\u012905.d
Inj Date : 29-JAN-2024 10:17
InstruID : VOA9.i
LabSampID : VBLKW-240126

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240129.b\U012906.D Page 1
Report Date: 29-Jan-2024 11:13

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240129.b\U012906.D
Lab Smp Id: HS24011111-10
Inj Date : 29-JAN-2024 10:39
Operator : FT   Inst ID: VOA9.i
Smp Info : HS24011111-10
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240129.b\8260C.m
Meth Date : 29-Jan-2024 10:46 Firat.Tast Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11   Cal File: U120608.D
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: 000bhatebtex.sub
Target Version: 4.14
Processing Host: NAHSTWS005

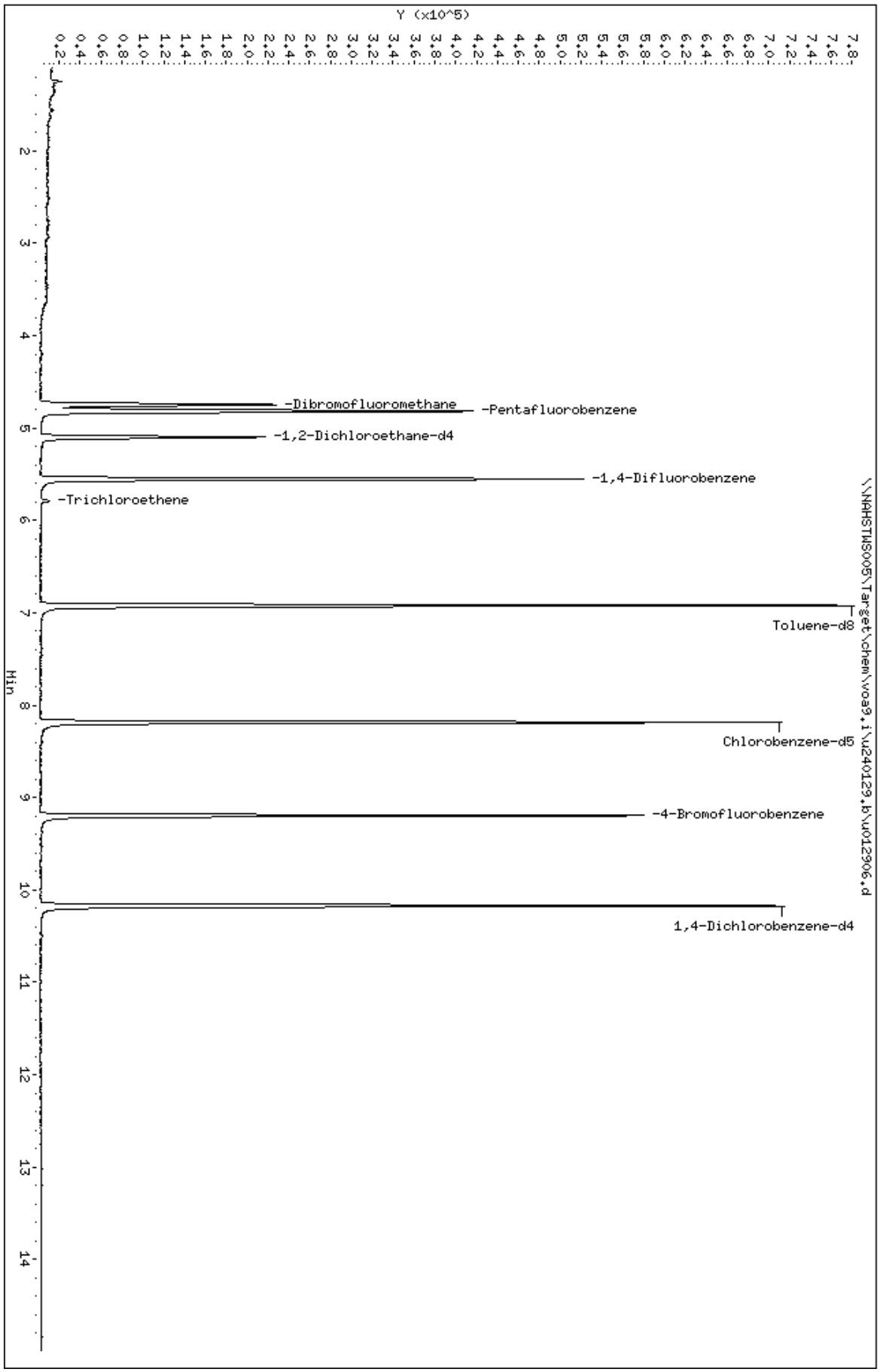
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.815	4.815	(1.000)	312975	50.0000	
$ 30 Dibromofluoromethane	113	4.748	4.748	(0.986)	136870	42.5821	42.58
$ 35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	137779	38.0190	38.01
* 36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	433417	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	403731	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	486782	52.3759	52.37
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	174056	49.4477	49.44
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	214045	50.0000	
38 Trichloroethene	130	5.790	5.790	(1.043)	2853	0.87734	0.87(a)

QC Flag Legend

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



Data File: \\NAHSTWS005\Target\chem\voa9,i\u240129,b\u012906,d
Date : 29-JAN-2024 10:39
Client ID:
Sample Info: HS24011111-10
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9,i
Operator: FT
Column diameter: 0.18

Data File: \\NAHSTWS005\Target\chem\voa9.i\u240129.b\u012906.d Page 2

Date : 29-JAN-2024 10:39

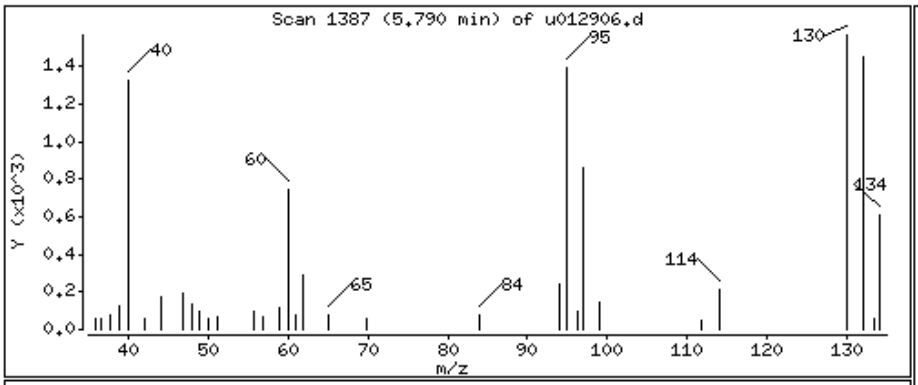
Client ID: Instrument: VOA9.i

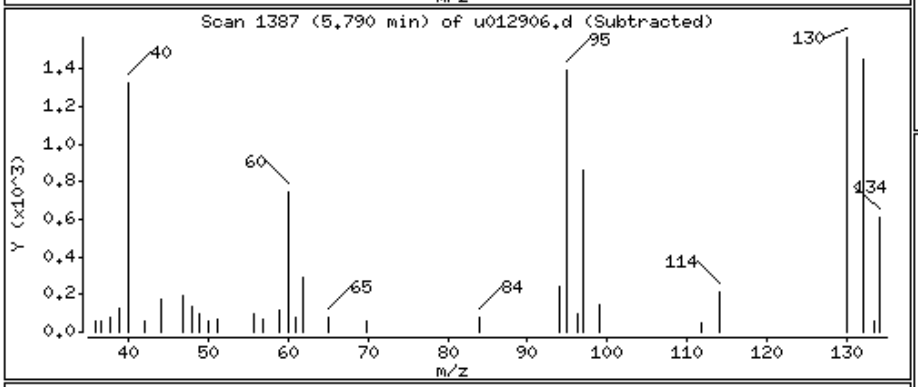
Sample Info: HS24011111-10

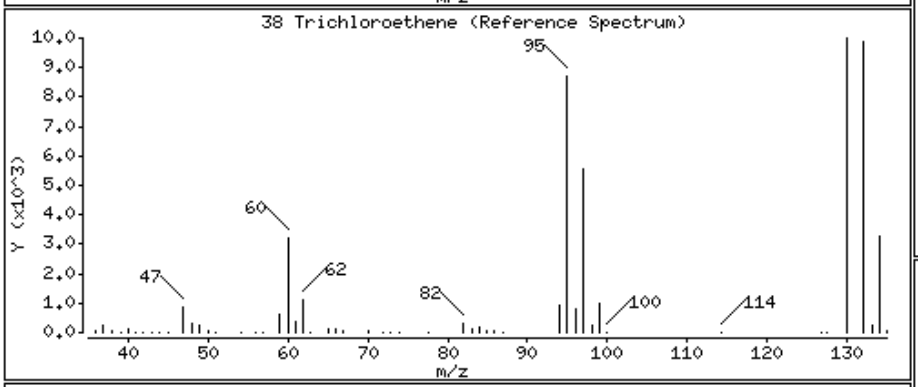
Purge Volume: 5.0 Operator: FT

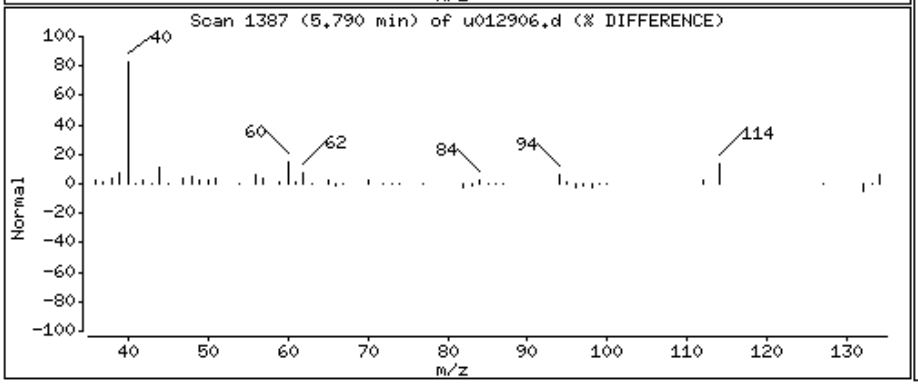
Column phase: DB624 Column diameter: 0.18

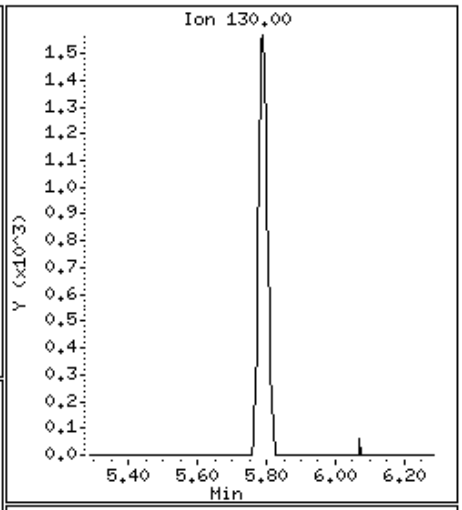
38 Trichloroethene Concentration: 0.87 ug/l

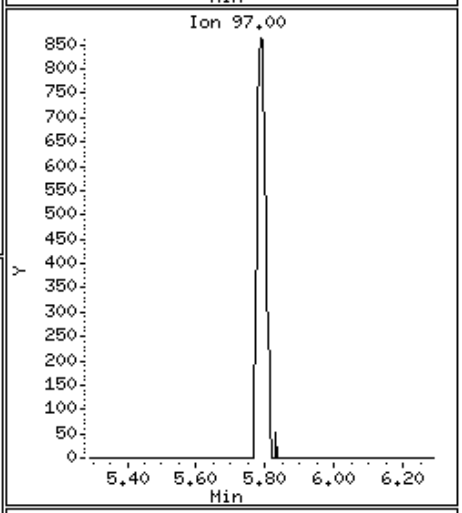


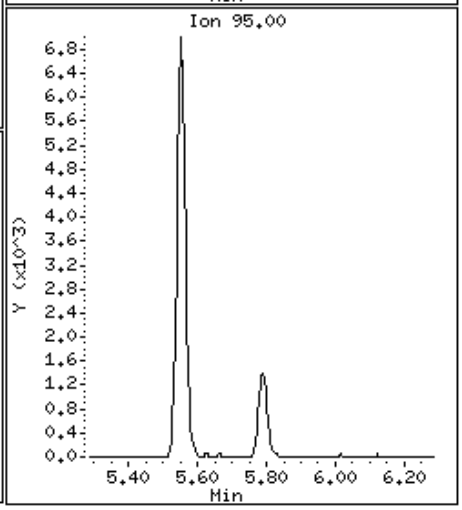












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Inj Date : 29-JAN-2024 10:39
InstruID : VOA9.i
LabSampID : HS24011111-10

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240129.b\U012907.D Page 1
Report Date: 29-Jan-2024 13:22

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240129.b\U012907.D
Lab Smp Id: HS24011111-07
Inj Date : 29-JAN-2024 11:02
Operator : FT   Inst ID: VOA9.i
Smp Info : HS24011111-07
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240129.b\8260C.m
Meth Date : 29-Jan-2024 10:46 Firat.Tast Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11   Cal File: U120608.D
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: 000bhatebtex.sub
Target Version: 4.14
Processing Host: NAHSTWS005

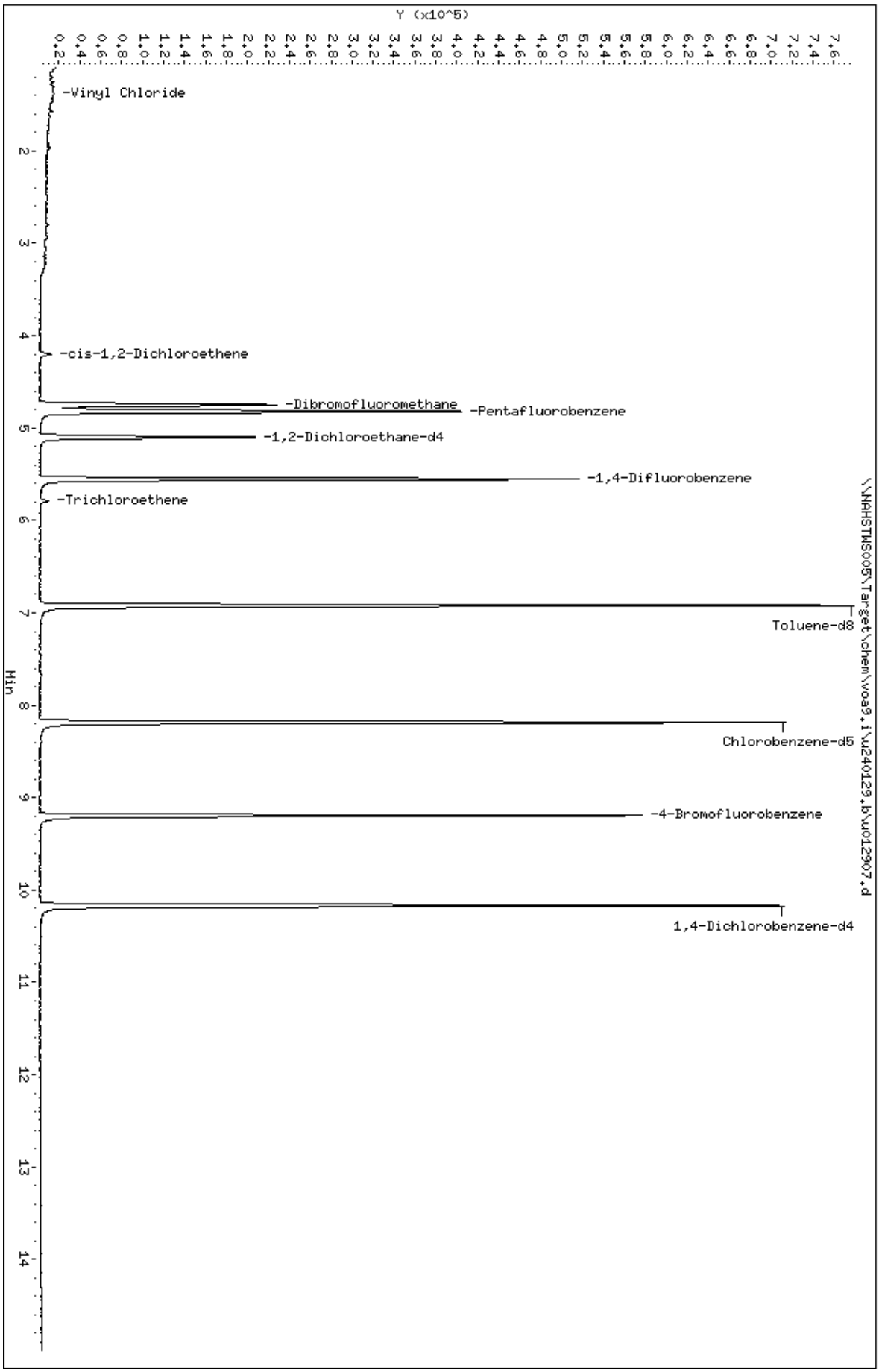
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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	4.819	4.815	(1.000)	312987	50.0000	
$ 30 Dibromofluoromethane	113	4.748	4.748	(0.985)	136812	42.5620	42.56
$ 35 1,2-Dichloroethane-d4	65	5.100	5.096	(1.058)	136515	37.6812	37.68
* 36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	427650	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	409454	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	485007	51.4555	51.45
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	172742	48.3607	48.36
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	210147	50.0000	
5 Vinyl Chloride	62	1.381	1.382	(0.287)	1679	0.48952	0.48(a)
27 cis-1,2-Dichloroethene	96	4.197	4.197	(0.871)	5059	1.30866	1.30(a)
38 Trichloroethene	130	5.794	5.790	(1.043)	2792	0.87016	0.87(a)

QC Flag Legend

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



Data File: \\NAHSTWS005\Target\chem\voa9.i\u240129.b\u012907.d
Date : 29-JAN-2024 11:02
Client ID:
Sample Info: HS24011111-07
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9.i
Operator: FT
Column diameter: 0.18

Data File: \\NAHSTWS005\Target\chem\voa9.i\u240129.b\u012907.d Page 2

Date : 29-JAN-2024 11:02

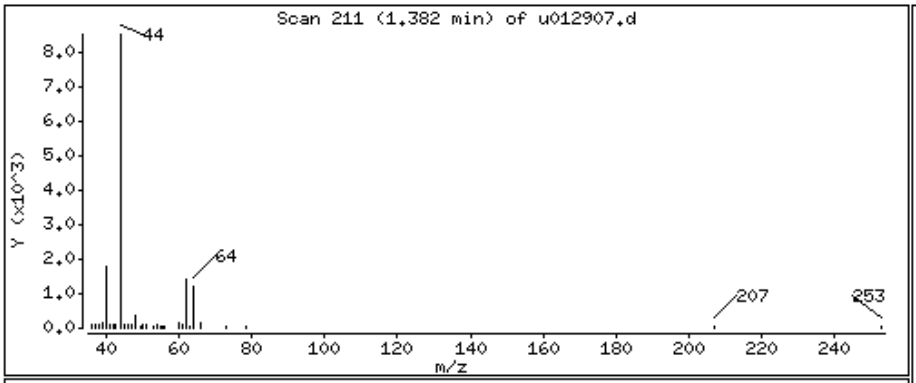
Client ID: Instrument: VOA9.i

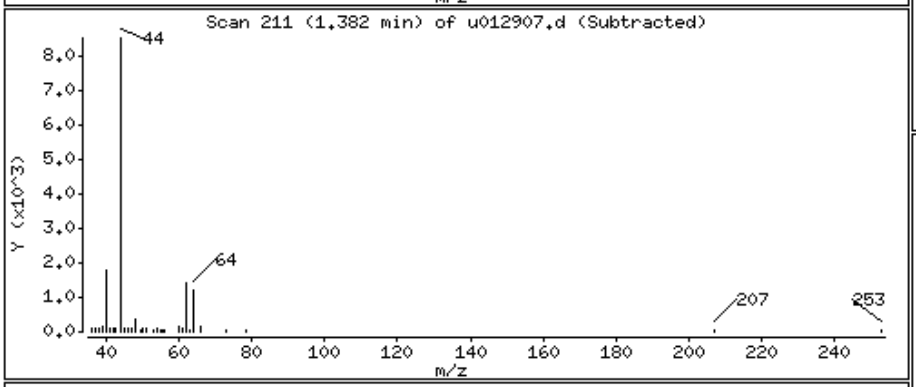
Sample Info: HS24011111-07

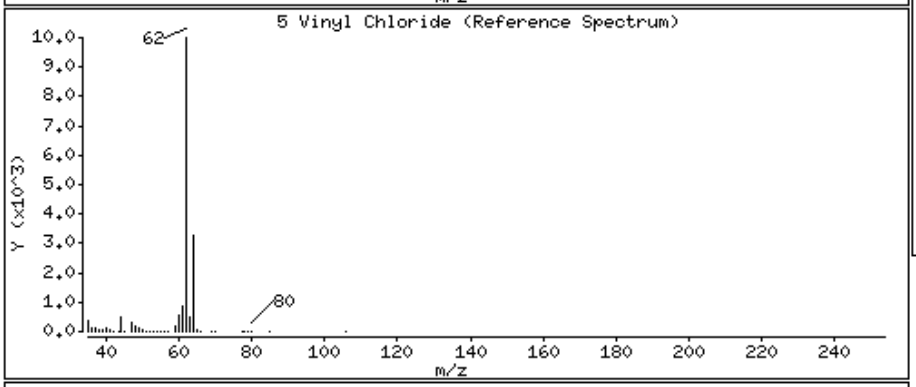
Purge Volume: 5.0 Operator: FT

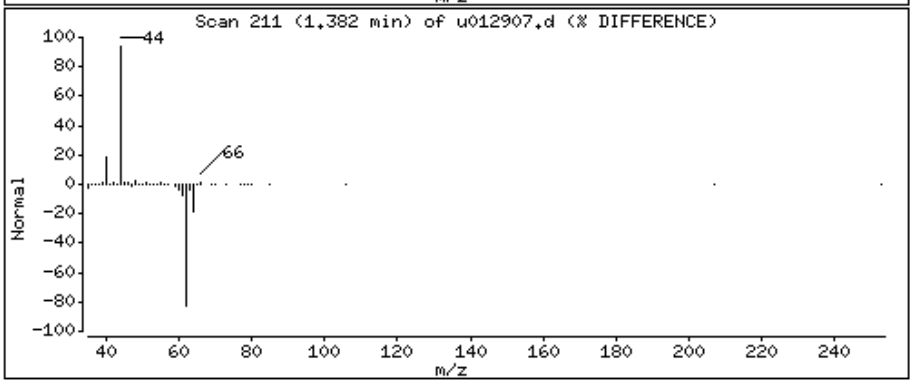
Column phase: DB624 Column diameter: 0.18

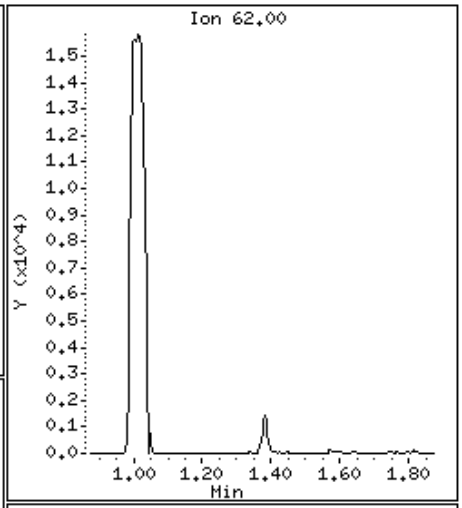
5 Vinyl Chloride Concentration: 0.48 ug/l

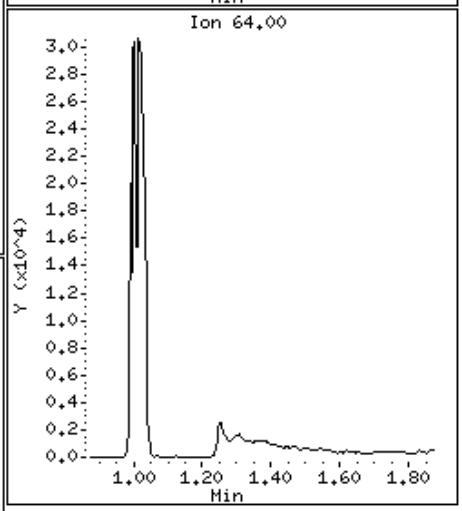












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240129.b\u012907.d Page 3

Date : 29-JAN-2024 11:02

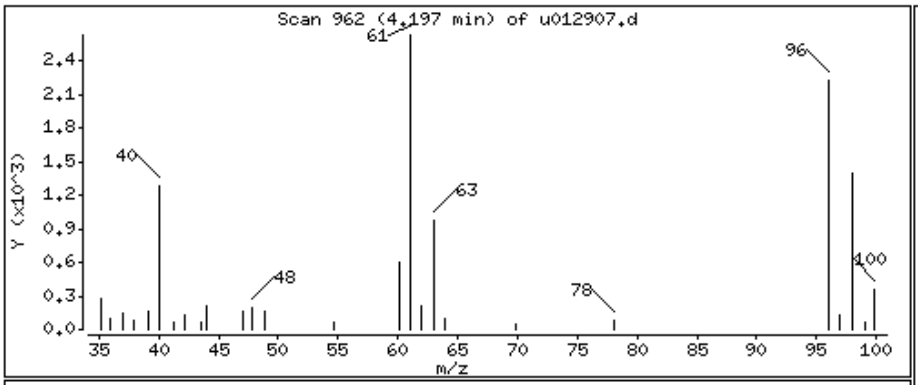
Client ID: Instrument: VOA9.i

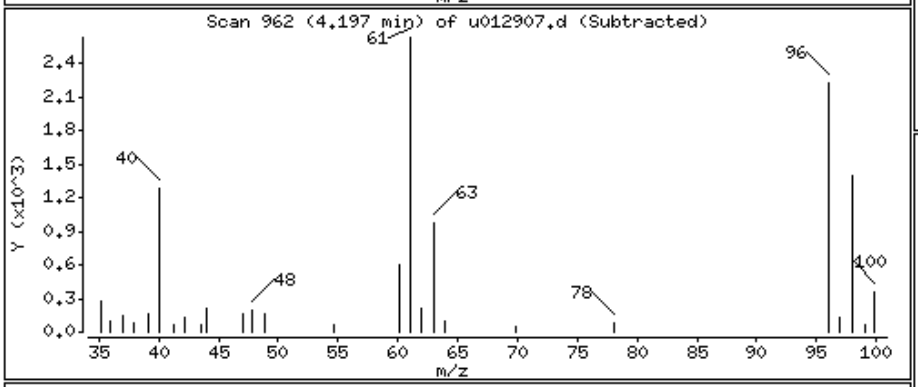
Sample Info: HS24011111-07

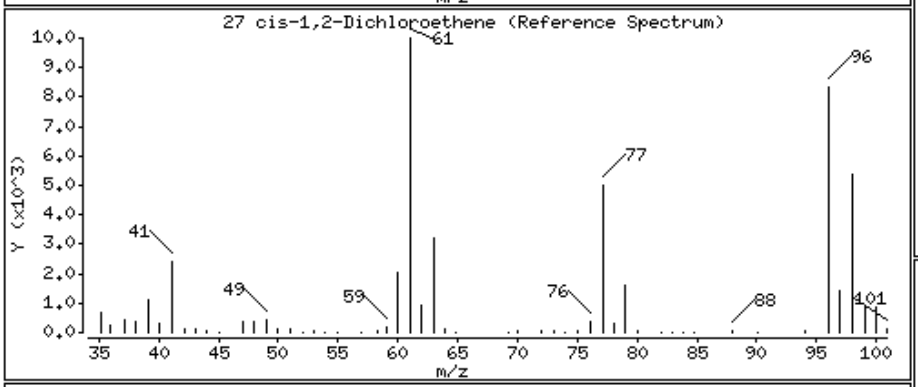
Purge Volume: 5.0 Operator: FT

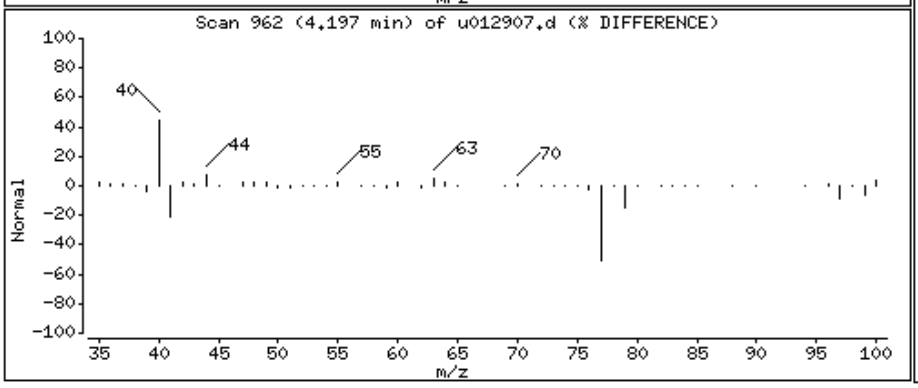
Column phase: DB624 Column diameter: 0.18

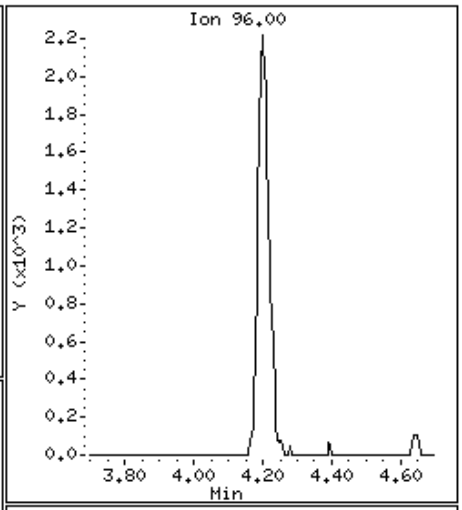
27 cis-1,2-Dichloroethene Concentration: 1.30 ug/l

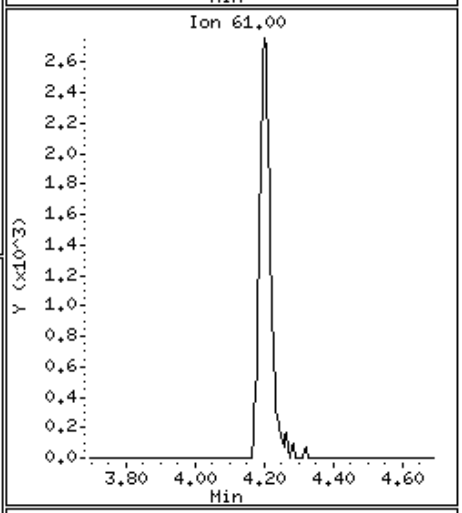


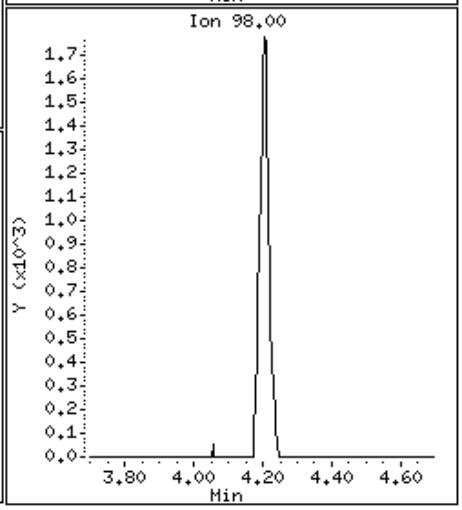












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240129.b\u012907.d Page 4

Date : 29-JAN-2024 11:02

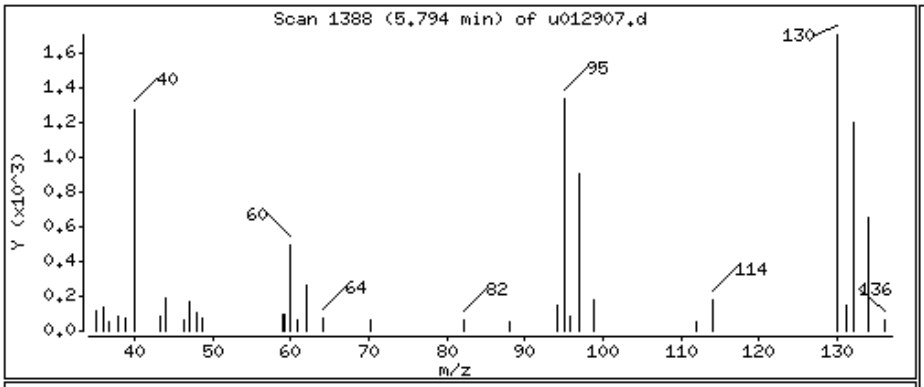
Client ID: Instrument: VOA9.i

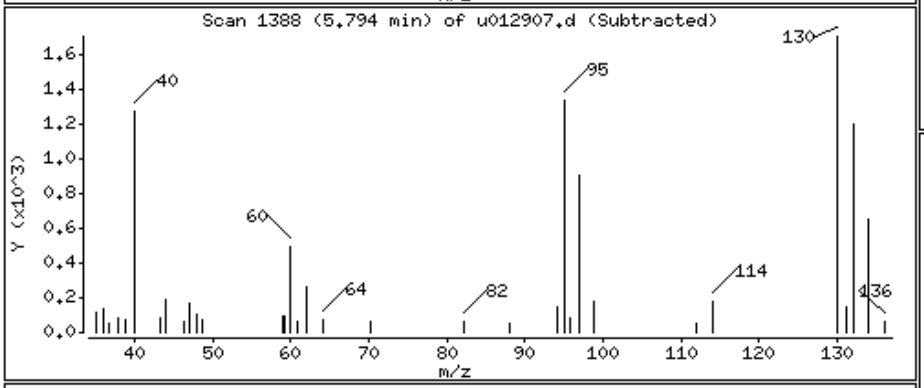
Sample Info: HS24011111-07

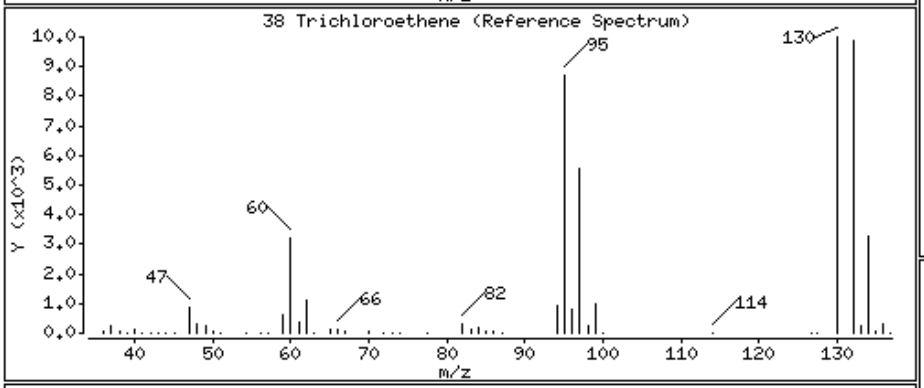
Purge Volume: 5.0 Operator: FT

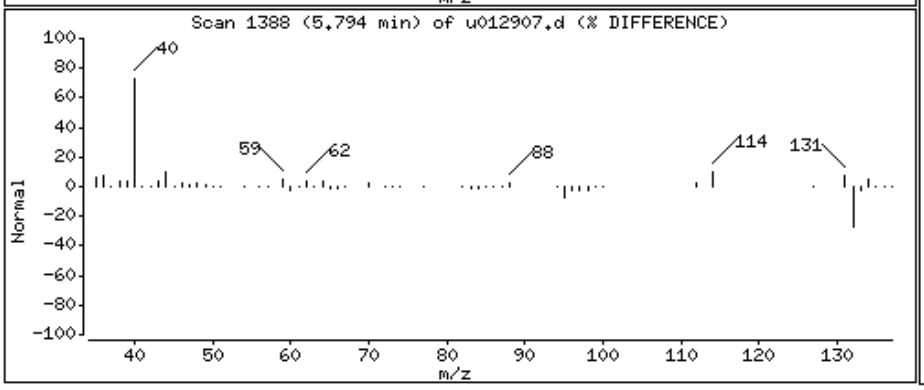
Column phase: DB624 Column diameter: 0.18

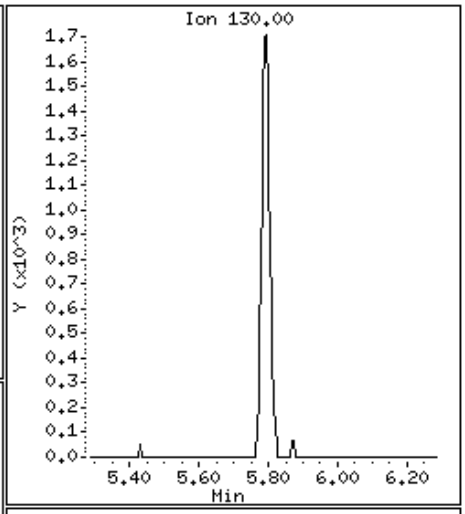
38 Trichloroethene Concentration: 0.87 ug/l

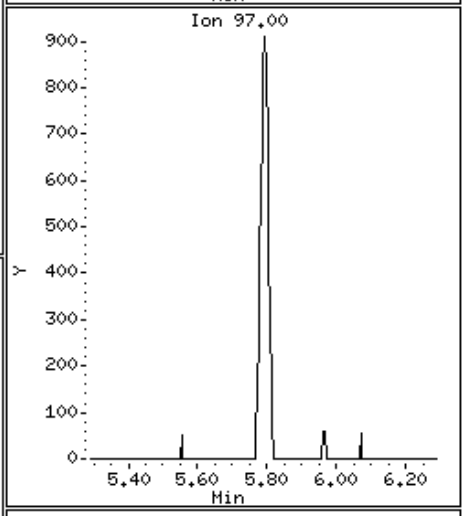


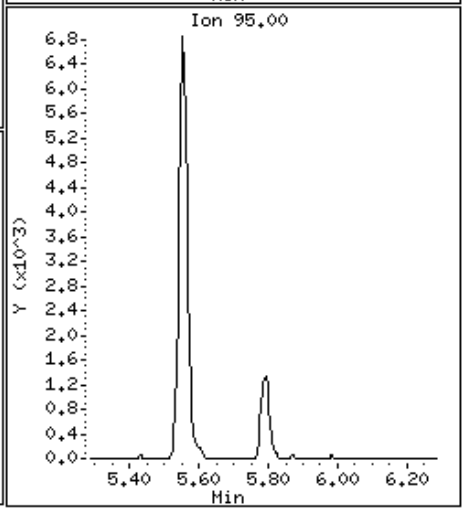












Data File : \\nahstws005\target\chem\voa9.i\u240129.b\u012907.d
Inj Date : 29-JAN-2024 11:02
InstruID : VOA9.i
LabSampID : HS24011111-07

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240129.b\U012908.D Page 1
Report Date: 29-Jan-2024 13:23

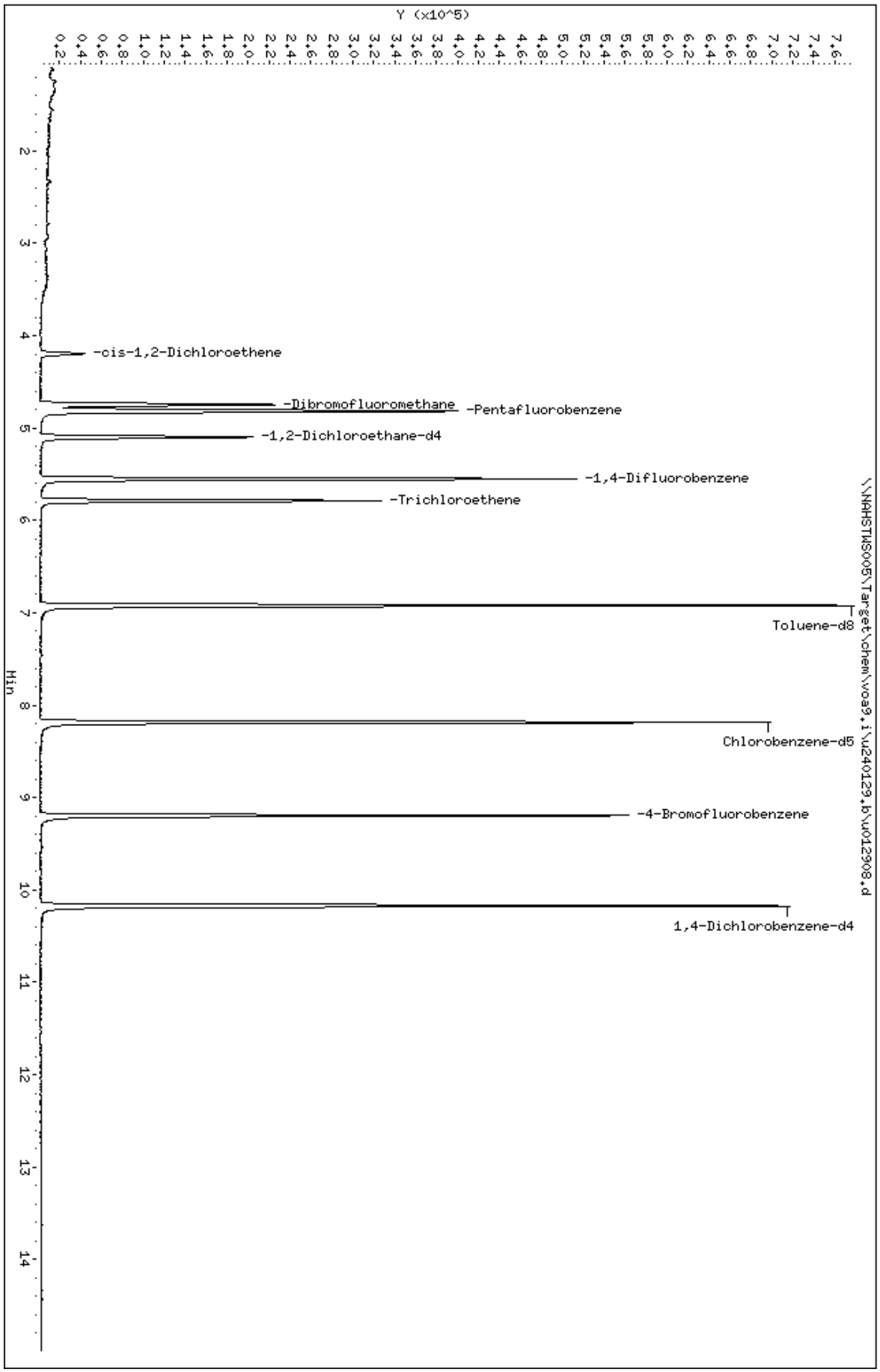
ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240129.b\U012908.D
Lab Smp Id: HS24011111-09
Inj Date : 29-JAN-2024 11:24
Operator : FT   Inst ID: VOA9.i
Smp Info : HS24011111-09
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240129.b\8260C.m
Meth Date : 29-Jan-2024 10:46 Firat.Tast Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11   Cal File: U120608.D
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: 000bhatebtex.sub
Target Version: 4.14
Processing Host: NAHSTWS005

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.815	4.815	(1.000)	303313	50.0000	
$ 30 Dibromofluoromethane	113	4.748	4.748	(0.986)	134326	43.1349	43.13
$ 35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	133328	37.9648	37.96
* 36 1,4-Difluorobenzene	114	5.550	5.554	(1.000)	426814	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	404309	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	483734	51.9736	51.97
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	167338	47.4194	47.41
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	210447	50.0000	
27 cis-1,2-Dichloroethene	96	4.193	4.197	(0.871)	23200	6.19279	6.19
38 Trichloroethene	130	5.786	5.790	(1.043)	112054	34.9914	34.99



Data File: \\NAHSTWS005\Target\chem\voa9.i\u240129.b\u012908.d
Date : 29-JAN-2024 11:24
Client ID:
Sample Info: HS24011111-09
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9.i
Operator: FT
Column diameter: 0.18

Page 1

Data File: \\NAHSTWS005\Target\chem\voa9.i\u240129.b\u012908.d

Date : 29-JAN-2024 11:24

Client ID:

Instrument: VOA9.i

Sample Info: HS24011111-09

Purge Volume: 5.0

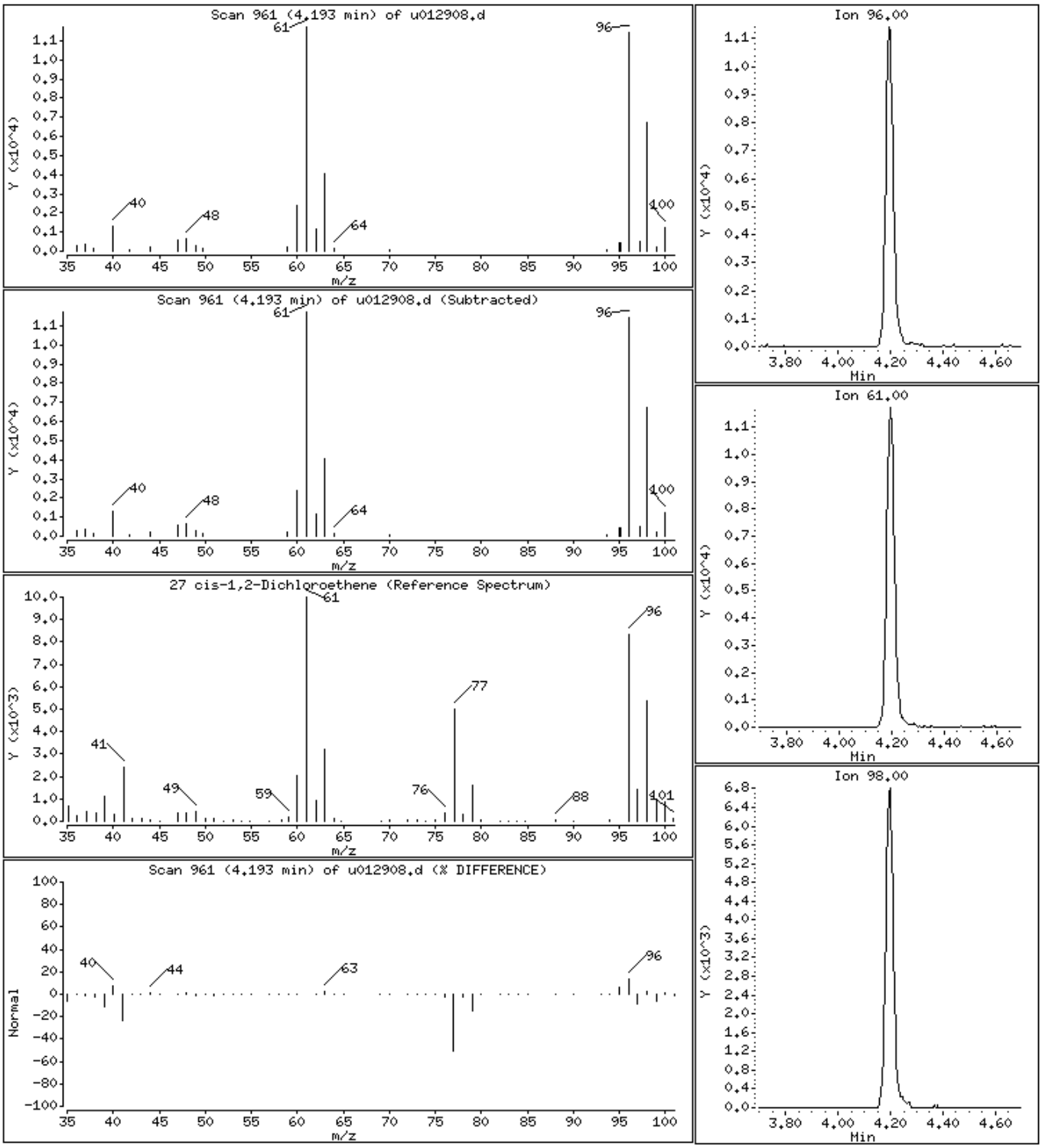
Operator: FT

Column phase: DB624

Column diameter: 0.18

27 cis-1,2-Dichloroethene

Concentration: 6.19 ug/l



Data File: \\NAHSTWS005\Target\chem\voa9.i\u240129.b\u012908.d Page 3

Date : 29-JAN-2024 11:24

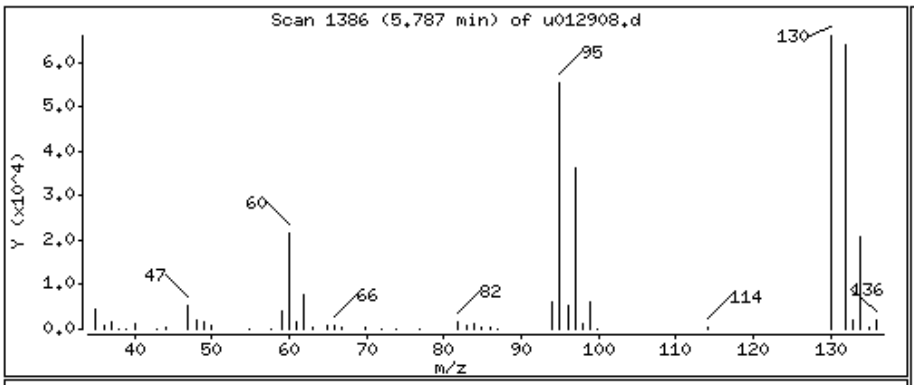
Client ID: Instrument: VOA9.i

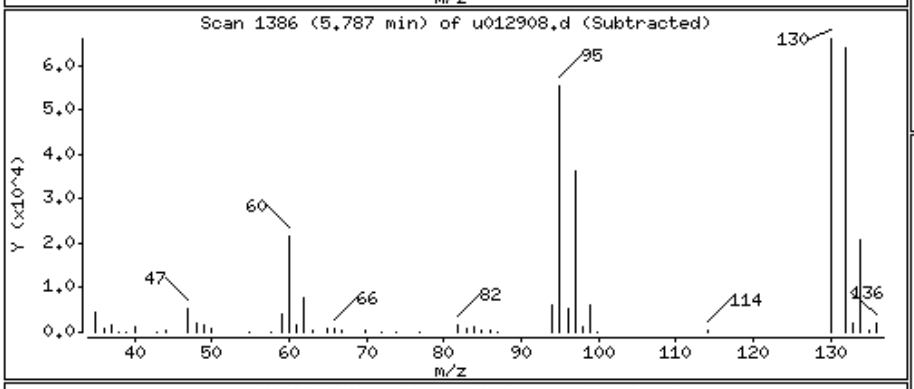
Sample Info: HS24011111-09

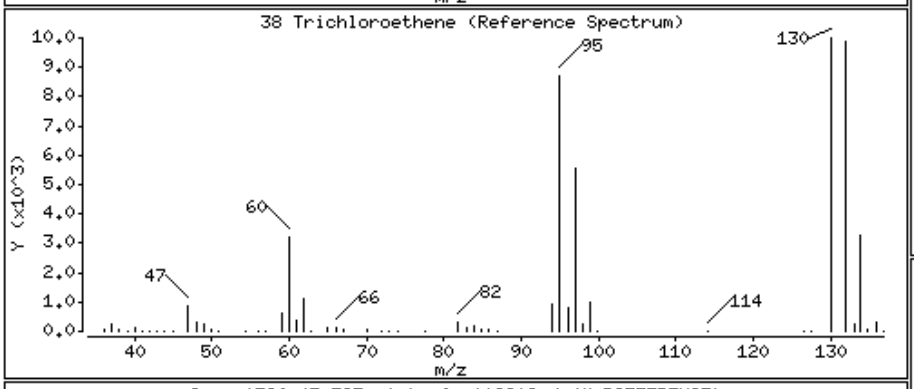
Purge Volume: 5.0 Operator: FT

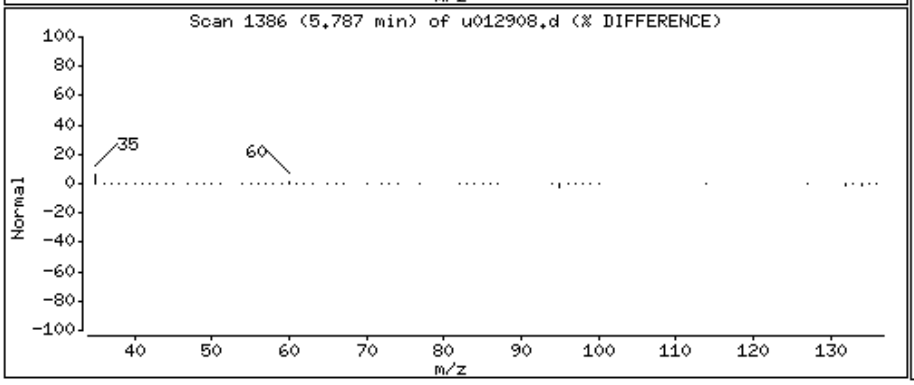
Column phase: DB624 Column diameter: 0.18

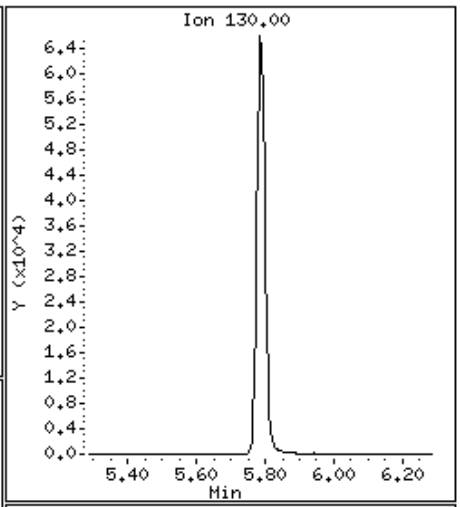
38 Trichloroethene Concentration: 34.99 ug/l

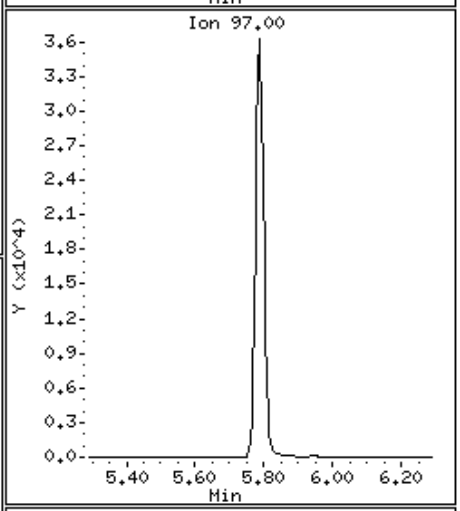


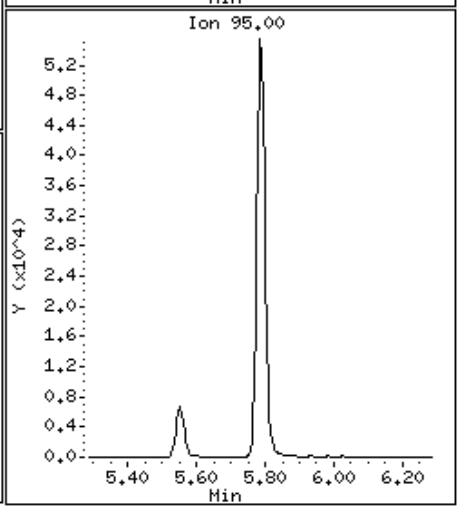












Data File : \\nahstws005\target\chem\voa9.i\u240129.b\u012908.d
Inj Date : 29-JAN-2024 11:24
InstruID : VOA9.i
LabSampID : HS24011111-09

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240129.b\U012909.D Page 1
Report Date: 29-Jan-2024 13:23

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240129.b\U012909.D
Lab Smp Id: HS24011111-11
Inj Date : 29-JAN-2024 11:46
Operator : FT   Inst ID: VOA9.i
Smp Info : HS24011111-11
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240129.b\8260C.m
Meth Date : 29-Jan-2024 10:46 Firat.Tast Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11   Cal File: U120608.D
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: 000bhatebtex.sub
Target Version: 4.14
Processing Host: NAHSTWS005

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.815	4.815	(1.000)	308346	50.0000	
$ 30 Dibromofluoromethane	113	4.748	4.748	(0.986)	134604	42.5040	42.50
$ 35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	135204	37.8739	37.87
* 36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	427254	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	406680	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	482766	51.5671	51.56
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	167423	47.1600	47.15
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	210537	50.0000	

Data File: \\NAHSTWS005\Target\chem\voa9.i\u240129.b\u012909.d

Date : 29-JAN-2024 11:46

Client ID:

Instrument: VOA9.i

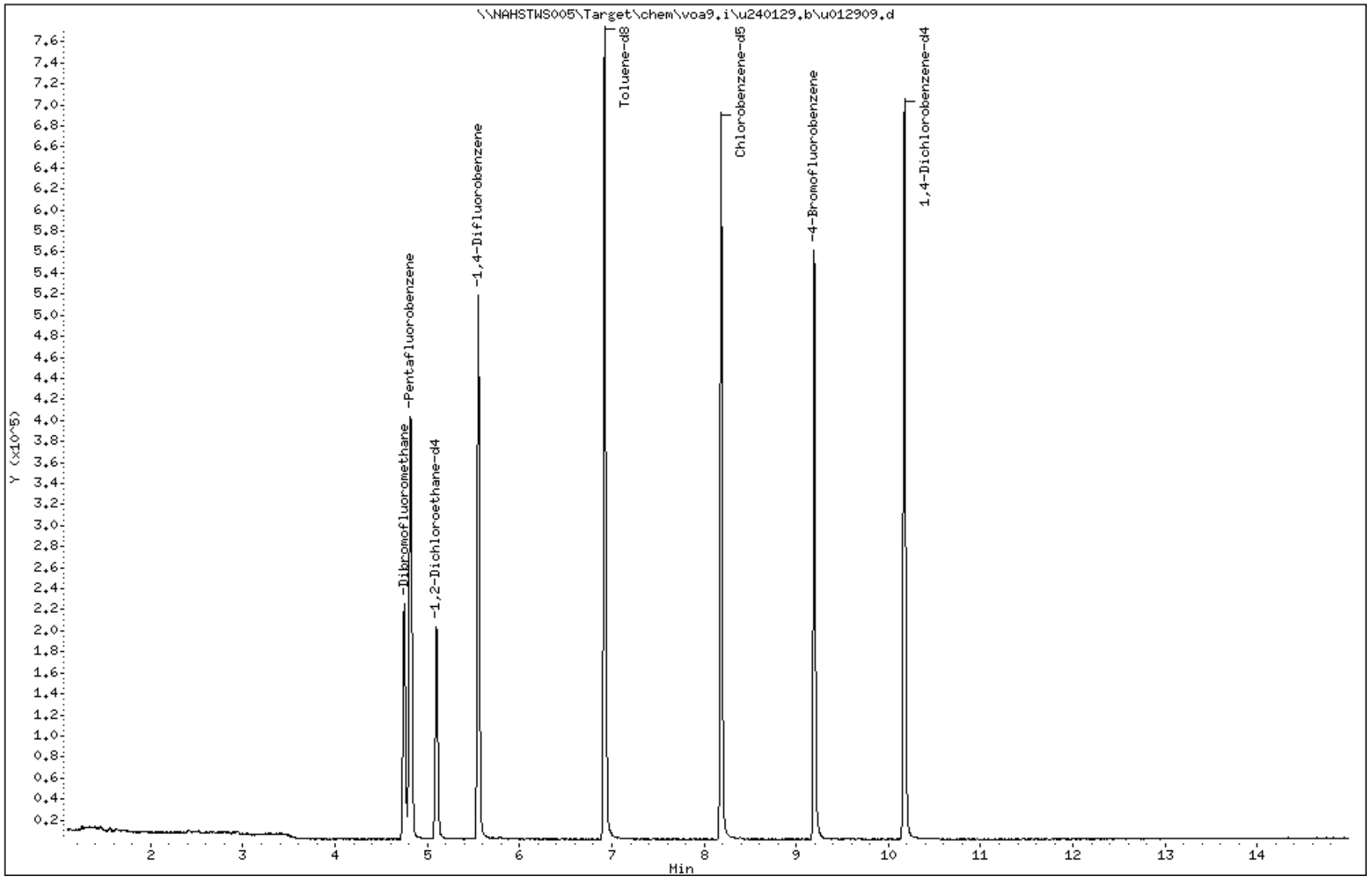
Sample Info: HS24011111-11

Purge Volume: 5.0

Operator: FT

Column phase: DB624

Column diameter: 0.18



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Inj Date : 29-JAN-2024 11:46
InstruID : VOA9.i
LabSampID : HS24011111-11

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240129.b\U012910.D Page 1
Report Date: 29-Jan-2024 13:23

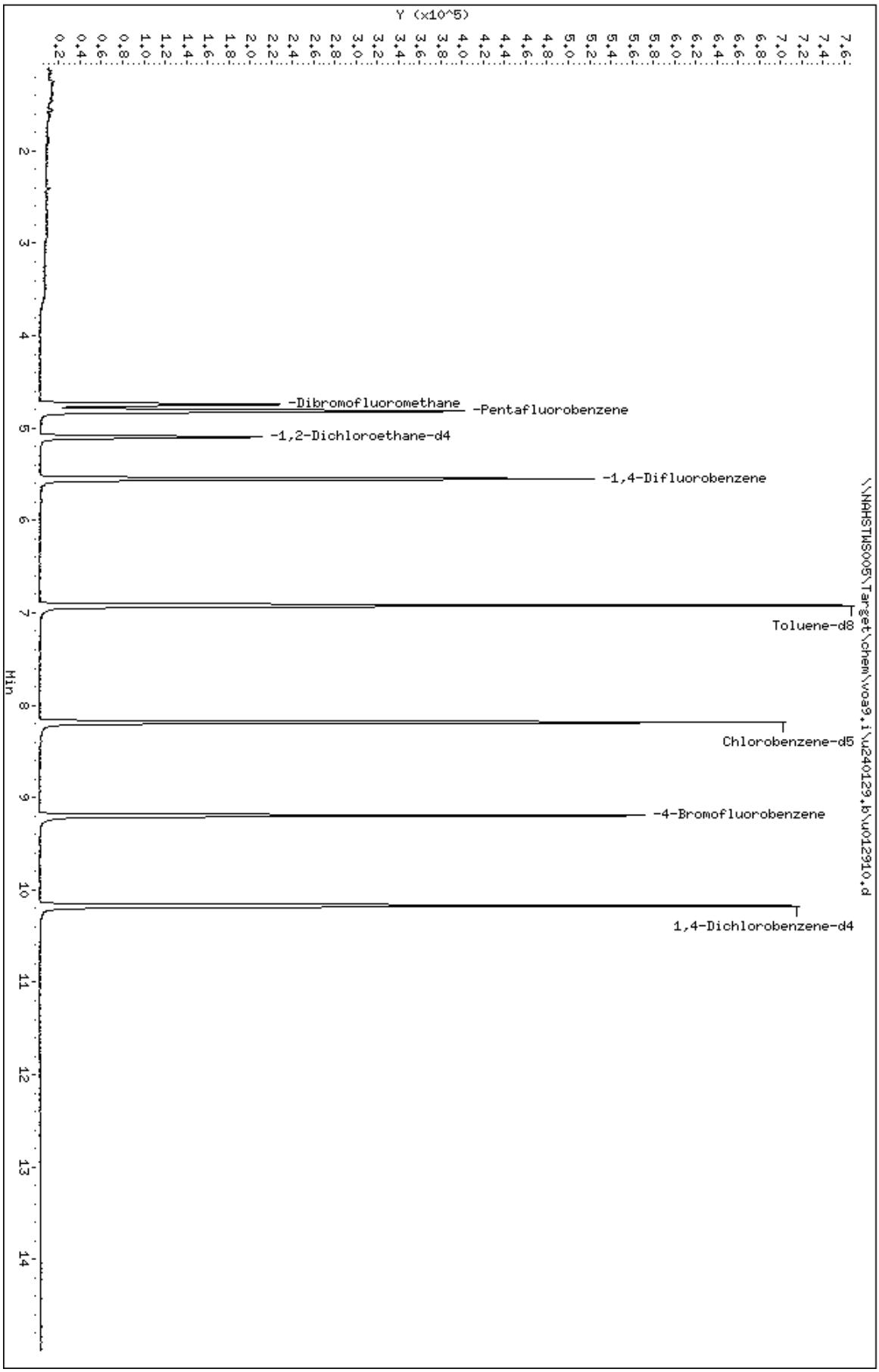
ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240129.b\U012910.D
Lab Smp Id: HS24011111-12
Inj Date : 29-JAN-2024 12:09
Operator : FT   Inst ID: VOA9.i
Smp Info : HS24011111-12
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240129.b\8260C.m
Meth Date : 29-Jan-2024 10:46 Firat.Tast Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11   Cal File: U120608.D
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: 000bhatebtex.sub
Target Version: 4.14
Processing Host: NAHSTWS005

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.815	4.815	(1.000)	306901	50.0000	
$ 30 Dibromofluoromethane	113	4.748	4.748	(0.986)	134602	42.7083	42.70
$ 35 1,2-Dichloroethane-d4	65	5.093	5.096	(1.058)	135405	38.1004	38.10
* 36 1,4-Difluorobenzene	114	5.550	5.554	(1.000)	429951	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	408377	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	482187	51.2913	51.29
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	173709	48.7704	48.77
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	211516	50.0000	



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Date : 29-JAN-2024 12:09
Client ID:
Sample Info: HS24011111-12
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9,i
Operator: FT
Column diameter: 0.18

Data File : \\nahstws005\target\chem\voa9.i\u240129.b\u012910.d
Inj Date : 29-JAN-2024 12:09
InstruID : VOA9.i
LabSampID : HS24011111-12

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240129.b\U012911.D Page 1
Report Date: 29-Jan-2024 13:23

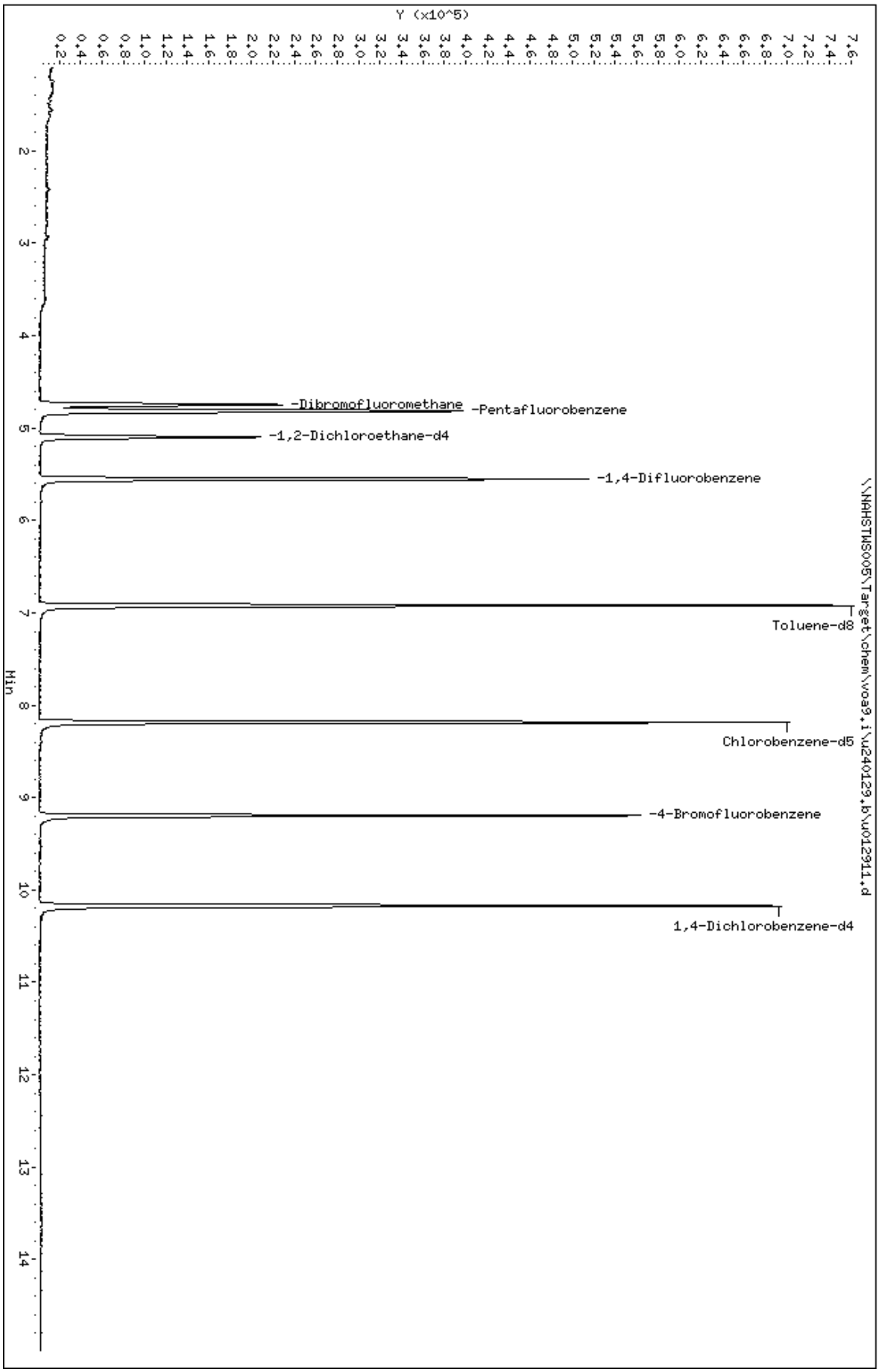
ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240129.b\U012911.D
Lab Smp Id: HS24011111-13
Inj Date : 29-JAN-2024 12:31
Operator : FT   Inst ID: VOA9.i
Smp Info : HS24011111-13
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240129.b\8260C.m
Meth Date : 29-Jan-2024 10:46 Firat.Tast Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11   Cal File: U120608.D
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: 000bhatebtex.sub
Target Version: 4.14
Processing Host: NAHSTWS005

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.815	4.815	(1.000)	306801	50.0000	
$ 30 Dibromofluoromethane	113	4.748	4.748	(0.986)	135466	43.0034	43.00
$ 35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	135519	38.1432	38.14
* 36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	426779	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	400080	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	479689	52.0837	52.08
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	165888	47.5077	47.50
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	211571	50.0000	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Date : 29-JAN-2024 12:31
Client ID:
Sample Info: HS24011111-13
Purge Volume: 5.0
Column phase: DB624
Instrument: VOA9.i
Operator: FT
Column diameter: 0.18
Page 1
Y (x10^5)
Min
-Dibromofluoromethane
-Pentafluorobenzene
-1,2-Dichloroethane-d4
-1,4-Difluorobenzene
Toluene-d8
Chlorobenzene-d5
-4-Bromofluorobenzene
1,4-Dichlorobenzene-d4
\\NAHSTWS005\Target\chem\voa9.i\u240129.b\u012911.d

Data File : \\nahstws005\target\chem\voa9.i\u240129.b\u012911.d
Inj Date : 29-JAN-2024 12:31
InstruID : VOA9.i
LabSampID : HS24011111-13

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240129.b\U012912.D Page 1
Report Date: 29-Jan-2024 13:23

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240129.b\U012912.D
Lab Smp Id: HS24011040-12
Inj Date : 29-JAN-2024 12:53
Operator : FT   Inst ID: VOA9.i
Smp Info : HS24011040-12
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240129.b\8260C.m
Meth Date : 29-Jan-2024 10:46 Firat.Tast Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11   Cal File: U120608.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: 000bhatebtex.sub
Target Version: 4.14
Processing Host: NAHSTWS005

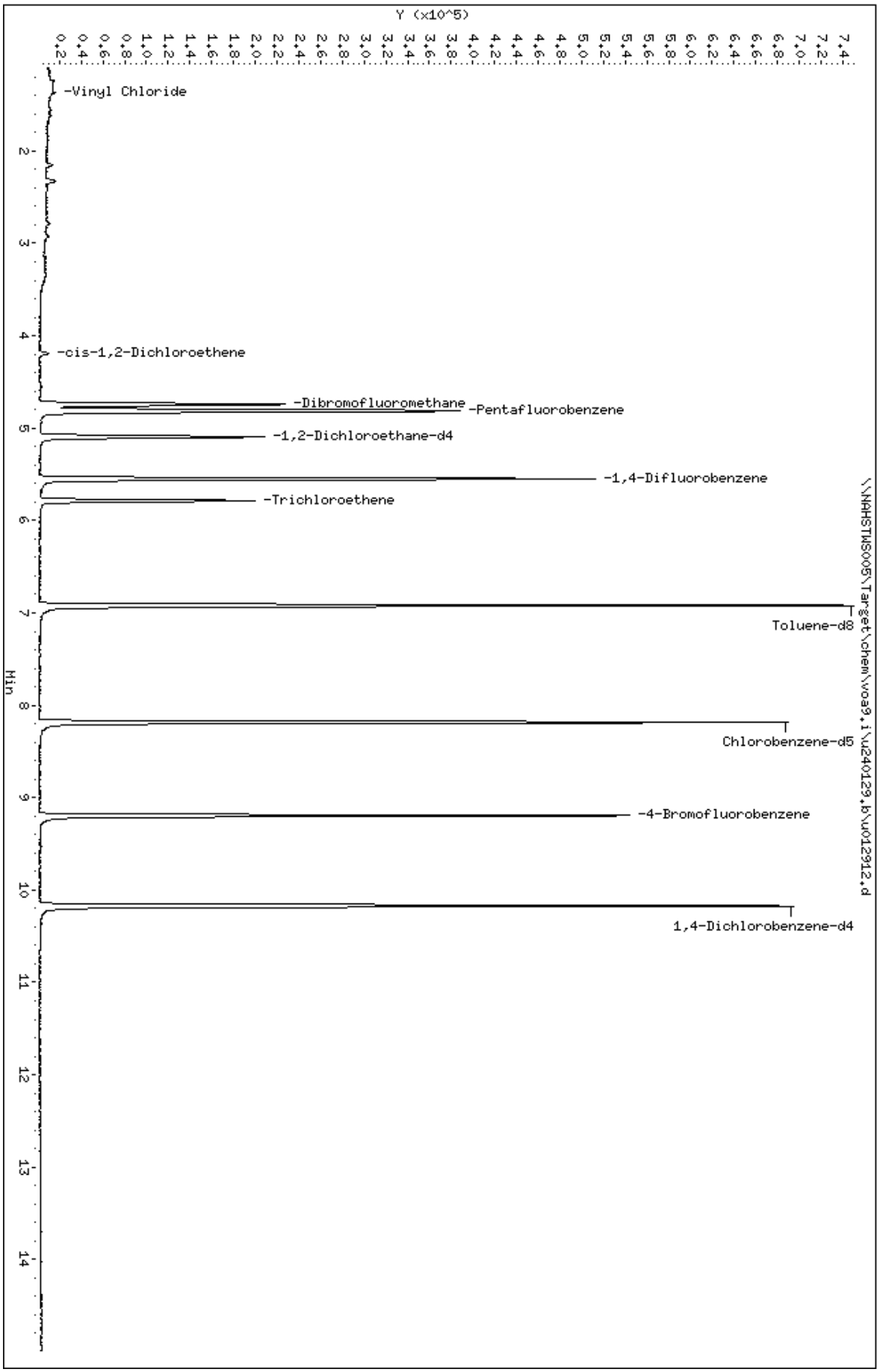
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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	4.811	4.815	(1.000)	303446	50.0000	
$ 30 Dibromofluoromethane	113	4.744	4.748	(0.986)	133669	42.8997	42.89
$ 35 1,2-Dichloroethane-d4	65	5.093	5.096	(1.058)	134244	38.2000	38.20
* 36 1,4-Difluorobenzene	114	5.550	5.554	(1.000)	422956	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	397669	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	478387	52.2573	52.25
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	161192	46.4137	46.41
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	208959	50.0000	
5 Vinyl Chloride	62	1.370	1.382	(0.285)	2587	0.77796	0.77(aH)
27 cis-1,2-Dichloroethene	96	4.197	4.197	(0.872)	4509	1.20306	1.20(a)
38 Trichloroethene	130	5.786	5.790	(1.043)	69502	21.9016	21.90

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
H - Operator selected an alternate compound hit.



Data File: \\NAHSTMS005\Target\chem\voa9.i\u240129.b\u012912.d
Date : 29-JAN-2024 12:53
Client ID:
Sample Info: HS24011111-02
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9.i
Operator: FT
Column diameter: 0.18

Data File: \\NAHSTWS005\Target\chem\voa9.i\u240129.b\u012912.d Page 2

Date : 29-JAN-2024 12:53

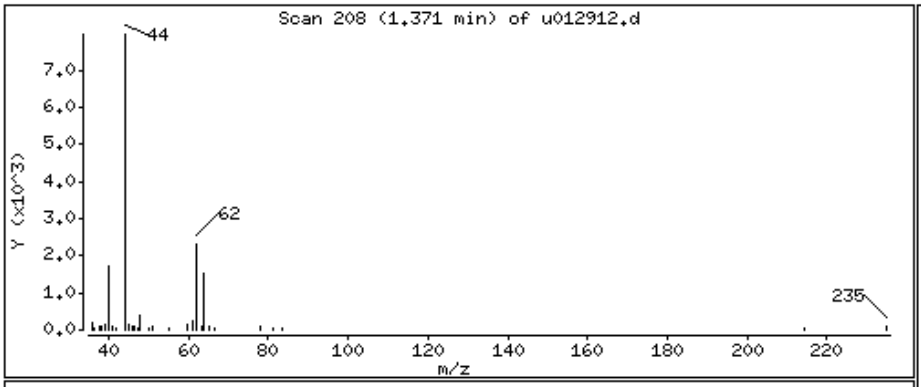
Client ID: Instrument: VOA9.i

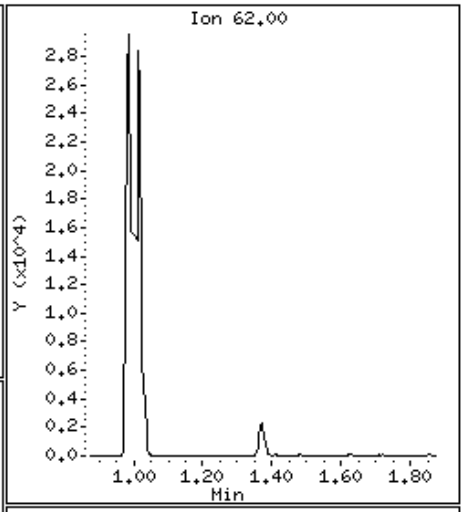
Sample Info: HS24011111-02

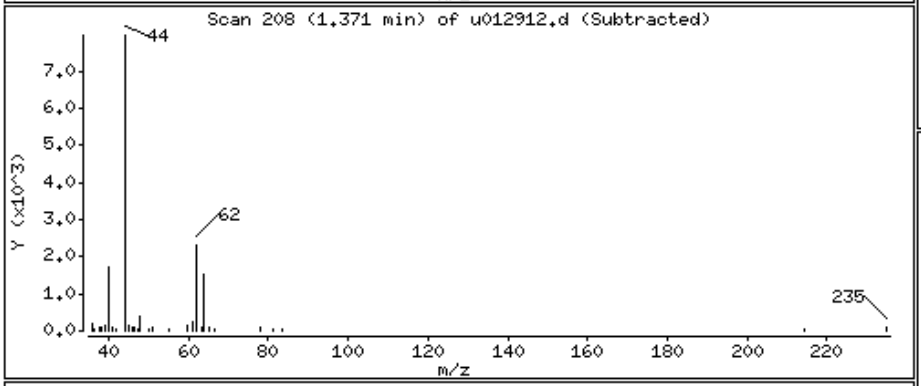
Purge Volume: 5.0 Operator: FT

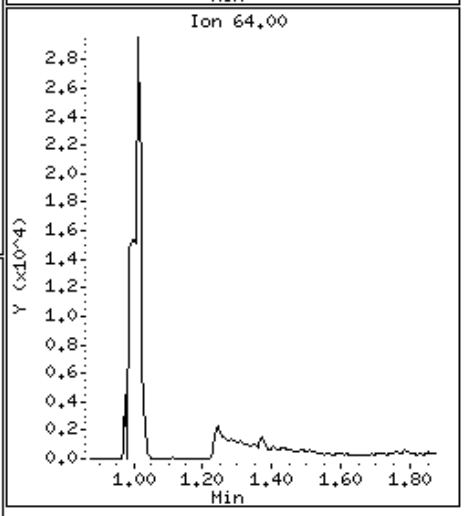
Column phase: DB624 Column diameter: 0.18

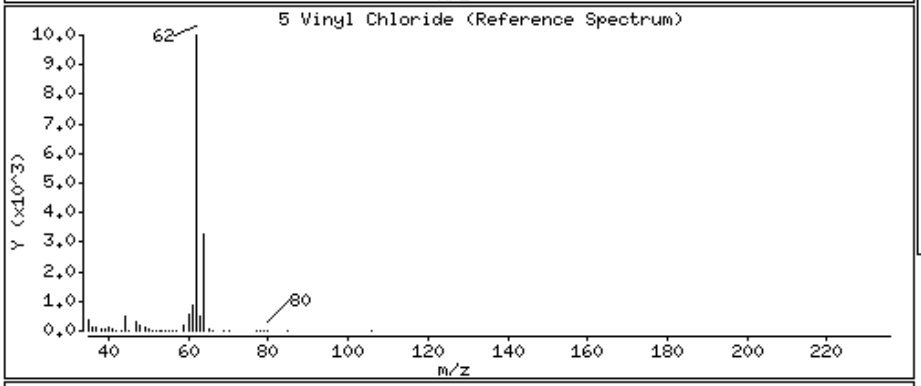
5 Vinyl Chloride Concentration: 0.77 ug/l

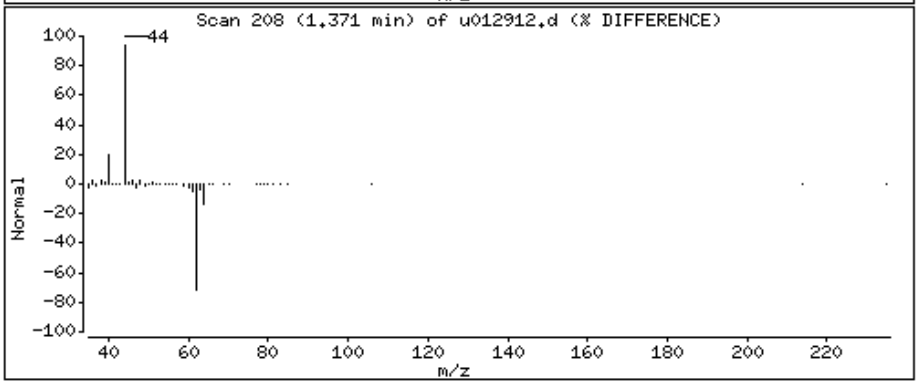












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240129.b\u012912.d Page 3

Date : 29-JAN-2024 12:53

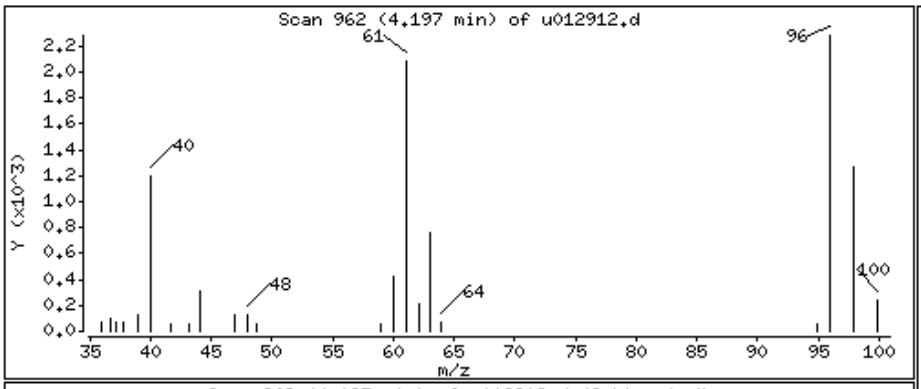
Client ID: Instrument: VOA9.i

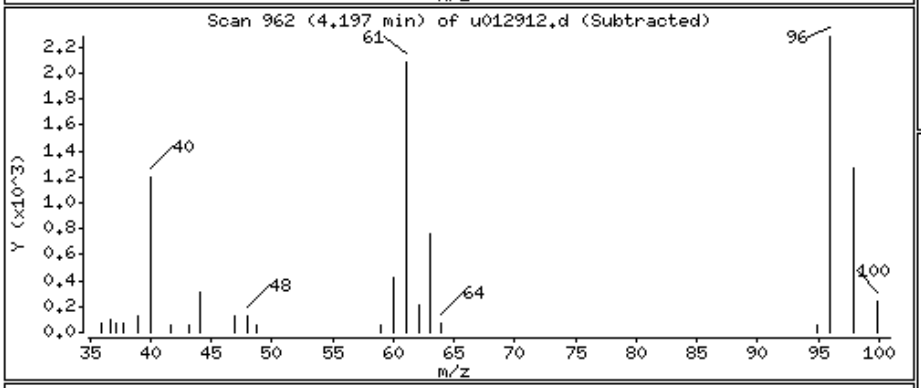
Sample Info: HS24011111-02

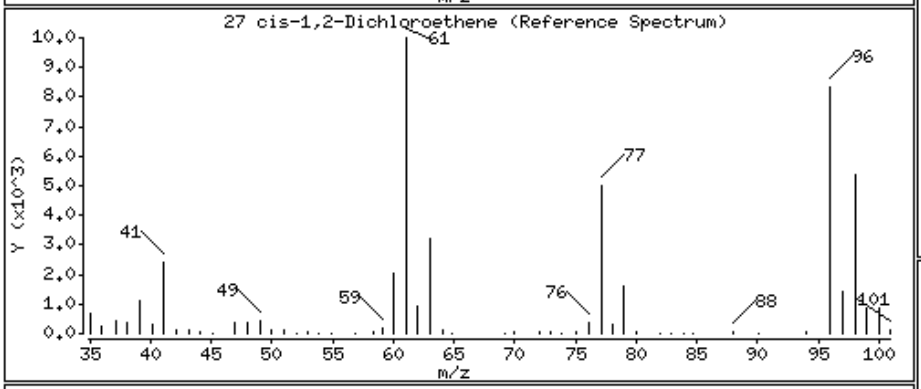
Purge Volume: 5.0 Operator: FT

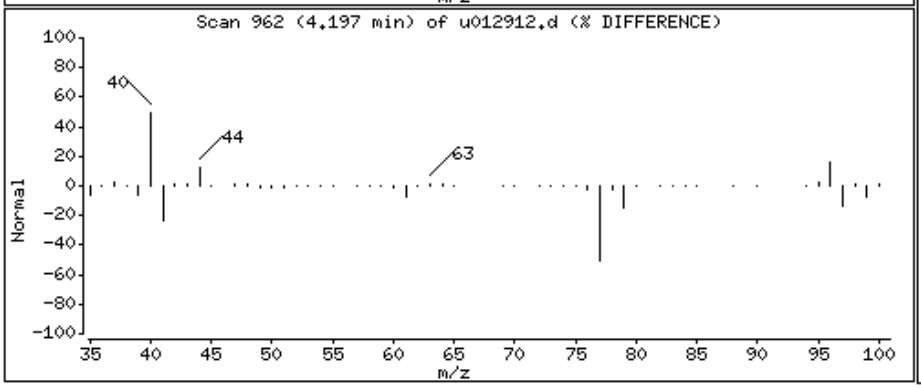
Column phase: DB624 Column diameter: 0.18

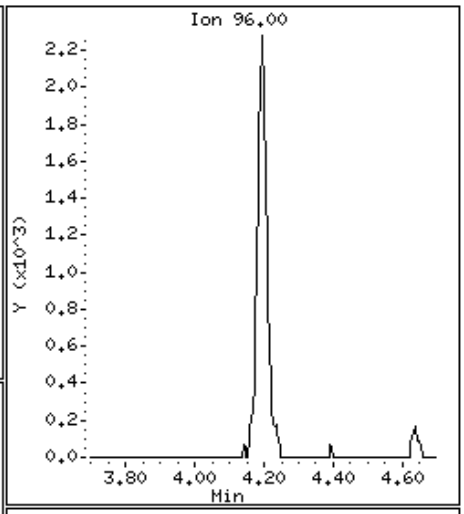
27 cis-1,2-Dichloroethene Concentration: 1.20 ug/l

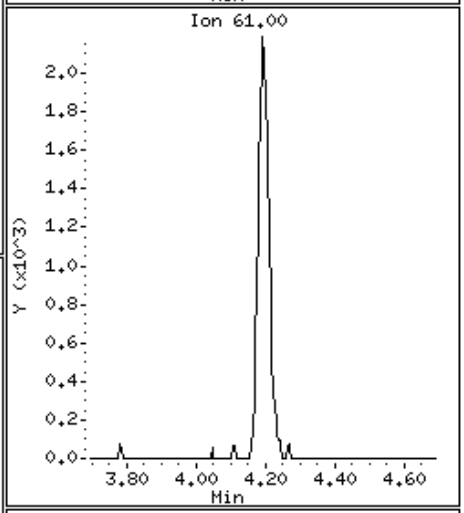


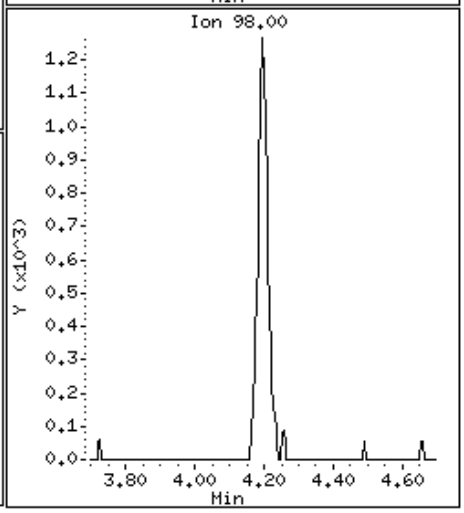












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240129.b\u012912.d Page 4

Date : 29-JAN-2024 12:53

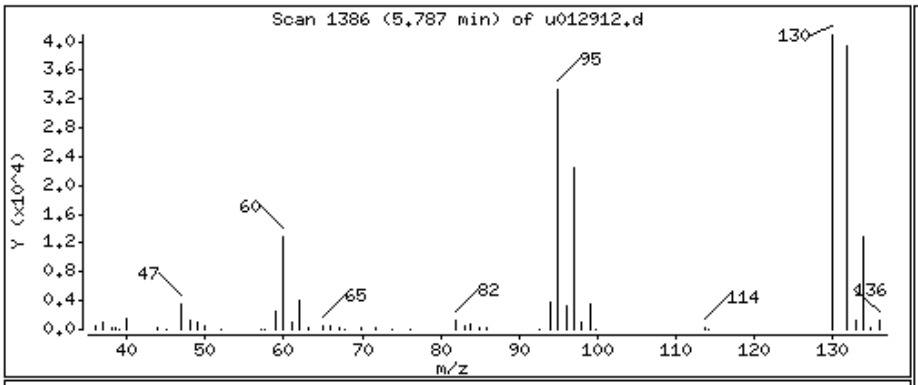
Client ID: Instrument: VOA9.i

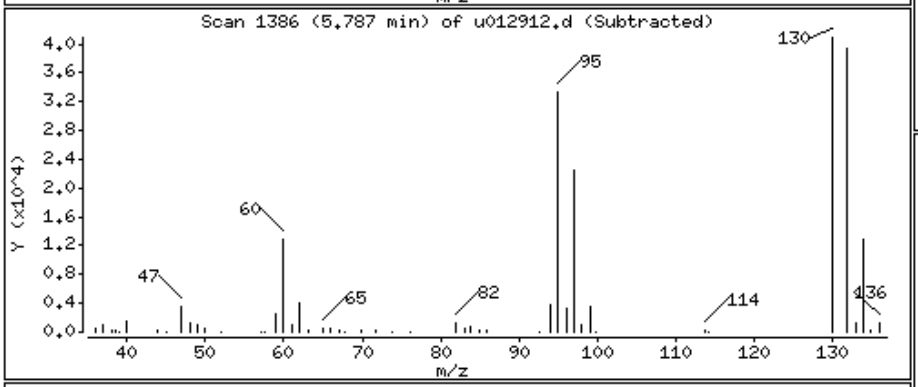
Sample Info: HS24011111-02

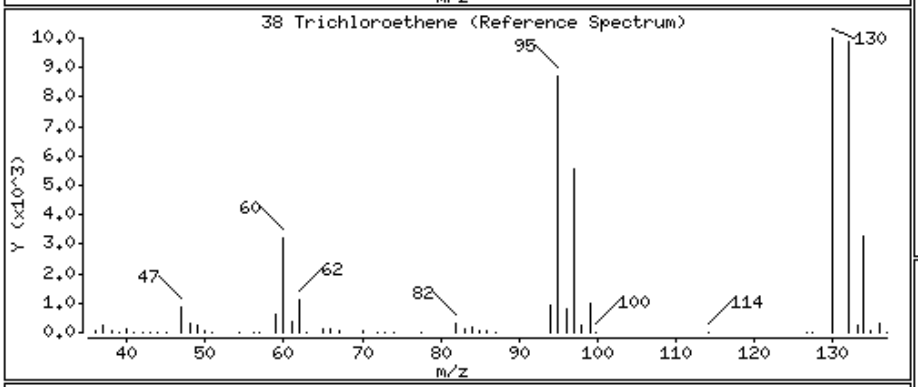
Purge Volume: 5.0 Operator: FT

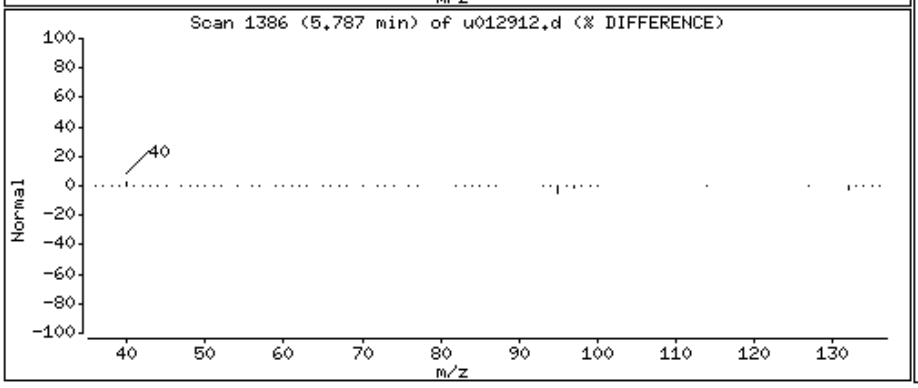
Column phase: DB624 Column diameter: 0.18

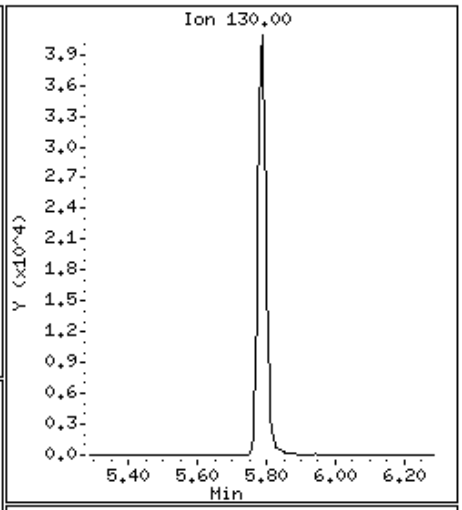
38 Trichloroethene Concentration: 21.90 ug/l

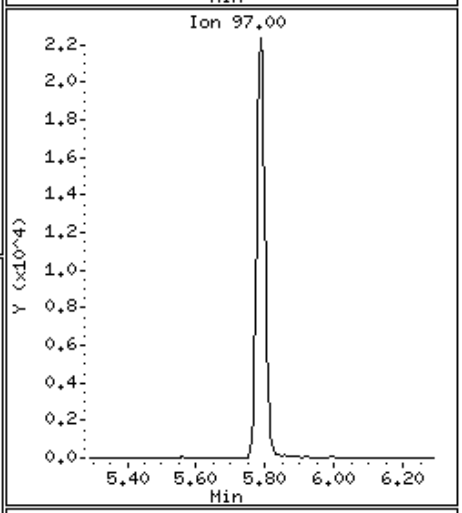


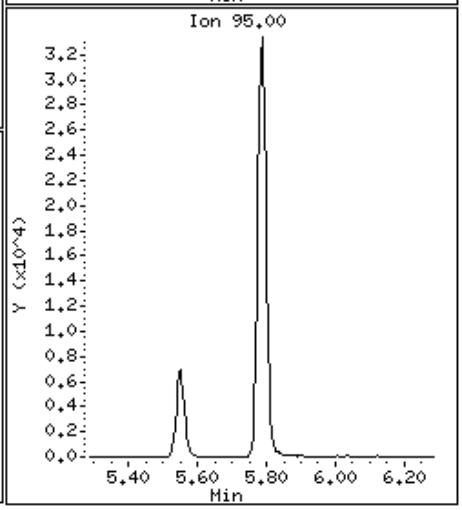












Data File : \\nahstws005\target\chem\voa9.i\u240129.b\u012912.d
Inj Date : 29-JAN-2024 12:53
InstruID : VOA9.i
LabSampID : HS24011111-02

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240129.b\U012913.D Page 1
Report Date: 29-Jan-2024 13:33

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240129.b\U012913.D
Lab Smp Id: HS24011111-02
Inj Date : 29-JAN-2024 13:16
Operator : FT   Inst ID: VOA9.i
Smp Info : HS24011111-02
Misc Info : V9;WATER;0;10;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240129.b\8260C.m
Meth Date : 29-Jan-2024 10:46 Firat.Tast Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11   Cal File: U120608.D
Als bottle: 12
Dil Factor: 10.00000
Integrator: HP RTE   Compound Sublist: 000bhatebtex.sub
Target Version: 4.14
Processing Host: NAHSTWS005

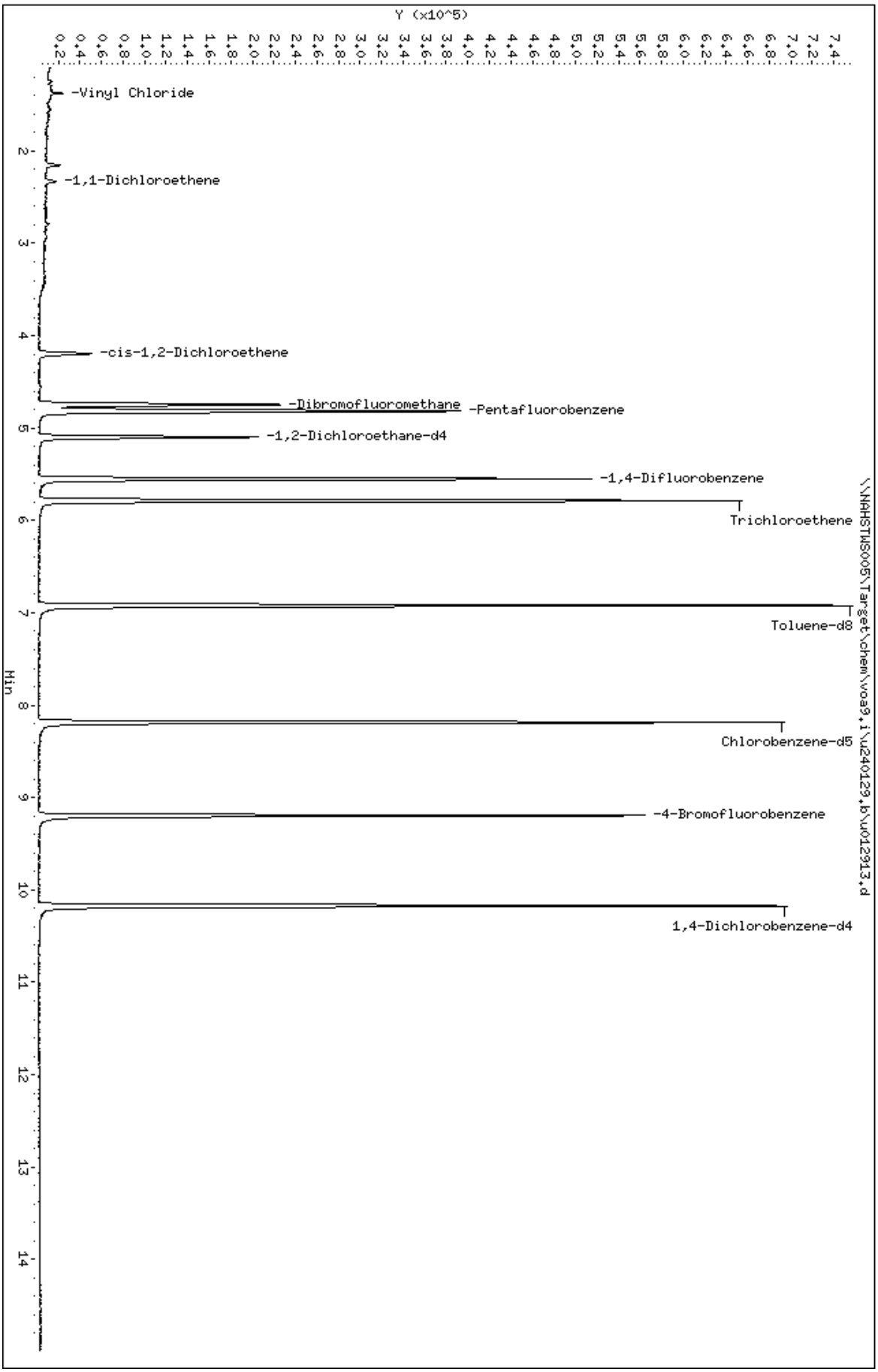
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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	4.815	4.815	(1.000)	302775	50.0000	
$ 30 Dibromofluoromethane	113	4.748	4.748	(0.986)	132929	42.7533	42.75
$ 35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	131992	37.6623	37.66
* 36 1,4-Difluorobenzene	114	5.550	5.554	(1.000)	420278	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	399463	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	480923	52.2984	52.29
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	167654	48.1035	48.10
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	208339	50.0000	
5 Vinyl Chloride	62	1.374	1.382	(0.285)	7689	2.31737	23.17(a)
11 1,1-Dichloroethene	96	2.330	2.337	(0.484)	1220	0.52243	5.22(a)
17 Methylene Chloride	84	2.795	2.799	(0.580)	1381	0.20606	2.06(a)
27 cis-1,2-Dichloroethene	96	4.197	4.197	(0.872)	26279	7.02713	70.27
38 Trichloroethene	130	5.786	5.790	(1.043)	228675	72.5195	725.19
33 1,2-Dichloroethane	62	4.819	5.175	(0.868)	791	0.19317	1.93(a)

QC Flag Legend

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



Data File: \\NAHSTWS005\Target\chem\voa9,i\u240129,b\u012913,d
Date : 29-JAN-2024 13:16
Client ID:
Sample Info: HS24011111-03
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9,i
Operator: FT
Column diameter: 0.18

Data File: \\NAHSTWS005\Target\chem\voa9.i\u240129.b\u012913.d Page 2

Date : 29-JAN-2024 13:16

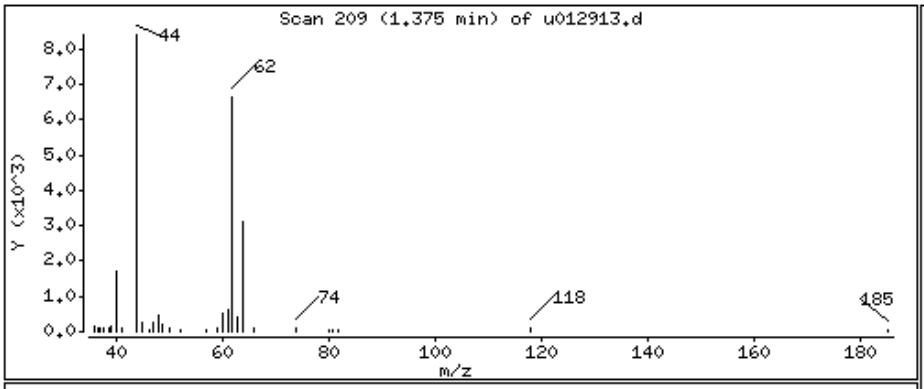
Client ID: Instrument: VOA9.i

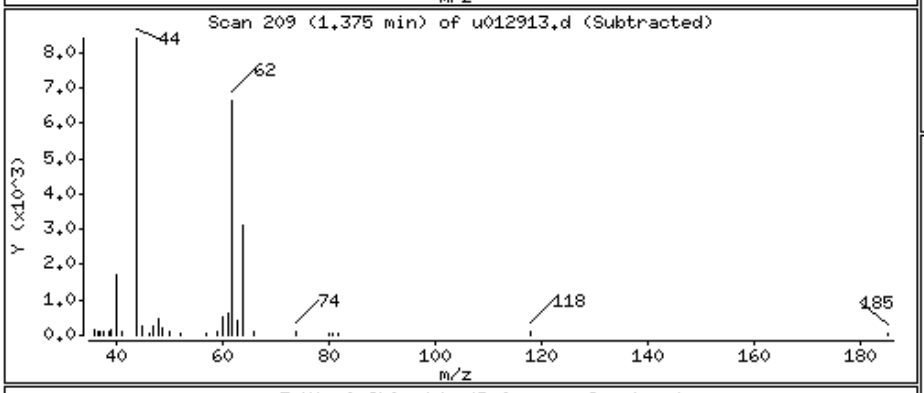
Sample Info: HS24011111-03

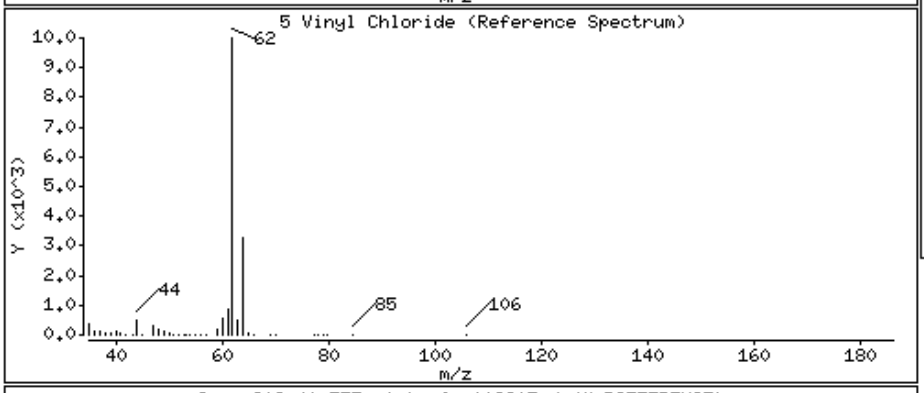
Purge Volume: 5.0 Operator: FT

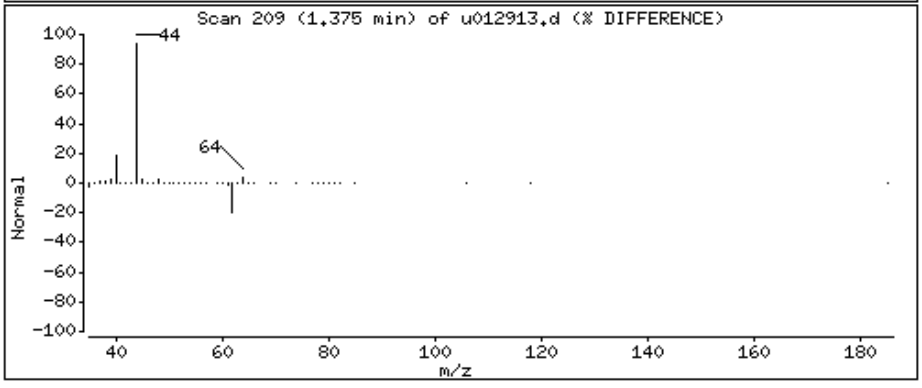
Column phase: DB624 Column diameter: 0.18

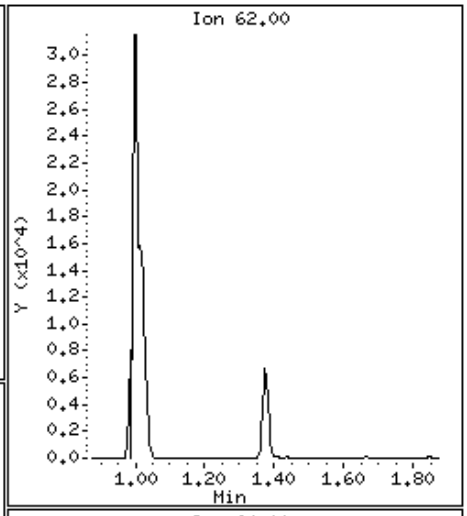
5 Vinyl Chloride Concentration: 115.86 ug/l

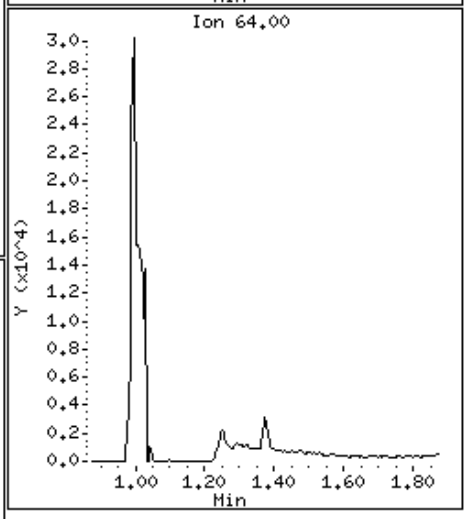












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240129.b\u012913.d Page 3

Date : 29-JAN-2024 13:16

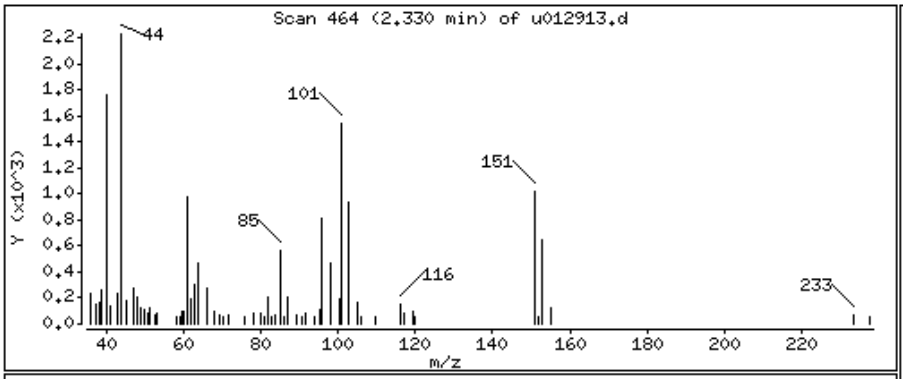
Client ID: Instrument: VOA9.i

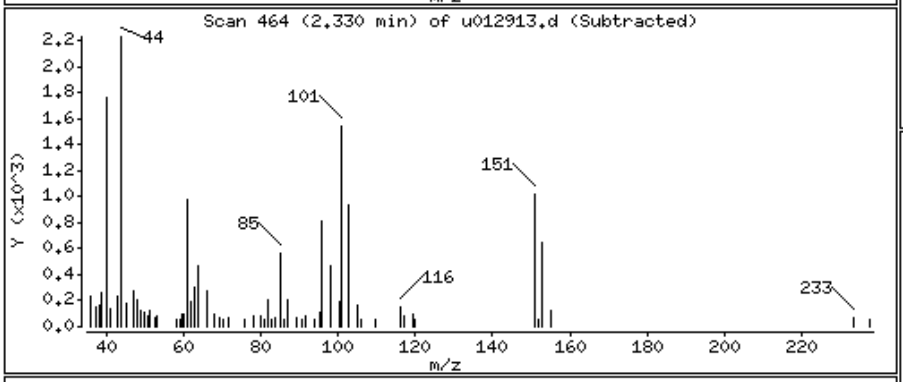
Sample Info: HS24011111-03

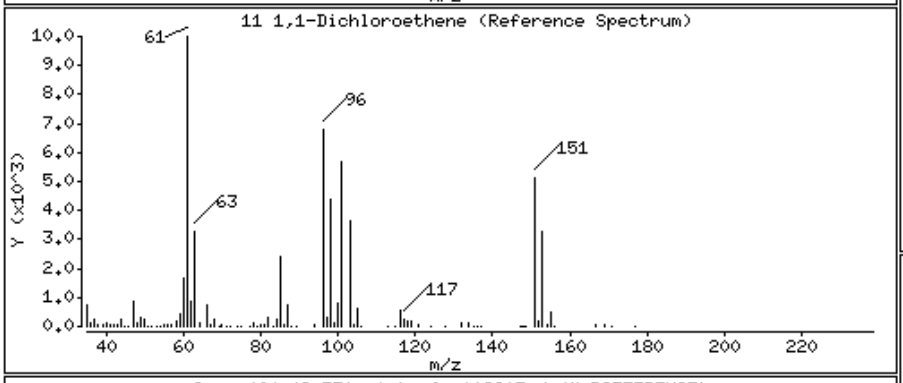
Purge Volume: 5.0 Operator: FT

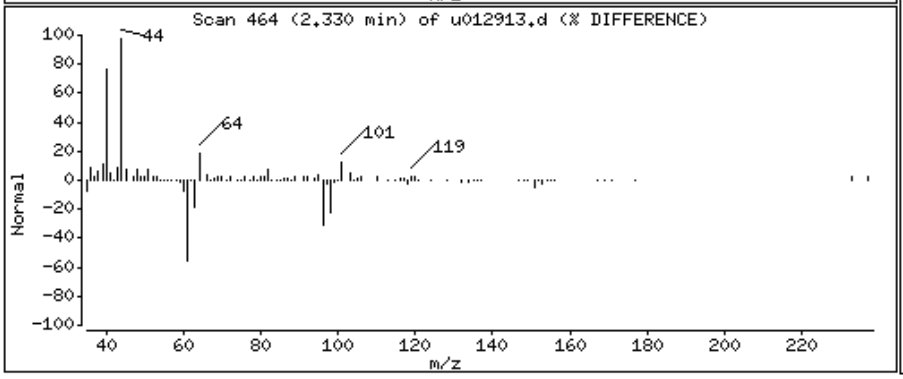
Column phase: DB624 Column diameter: 0.18

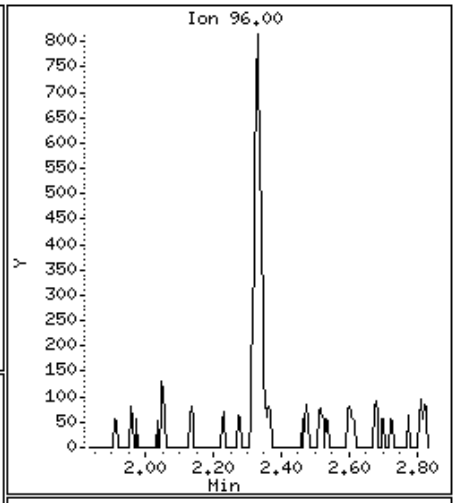
11 1,1-Dichloroethene Concentration: 26.12 ug/l

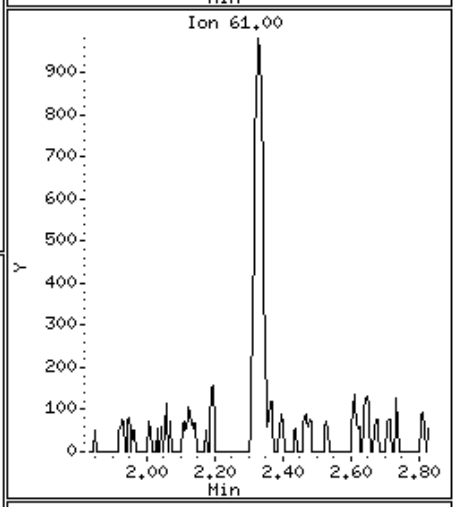


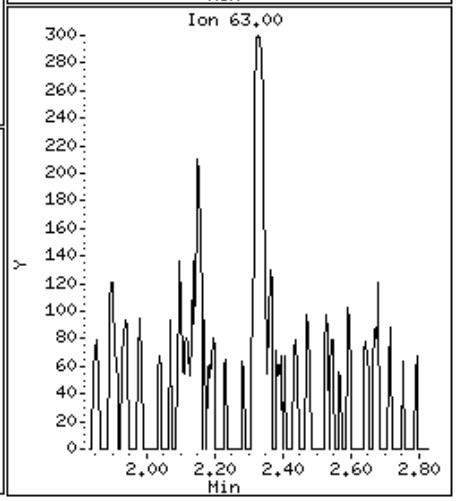












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240129.b\u012913.d Page 4

Date : 29-JAN-2024 13:16

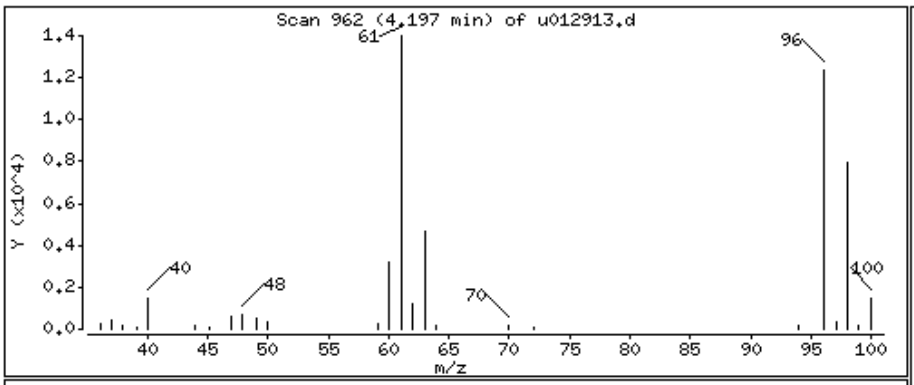
Client ID: Instrument: VOA9.i

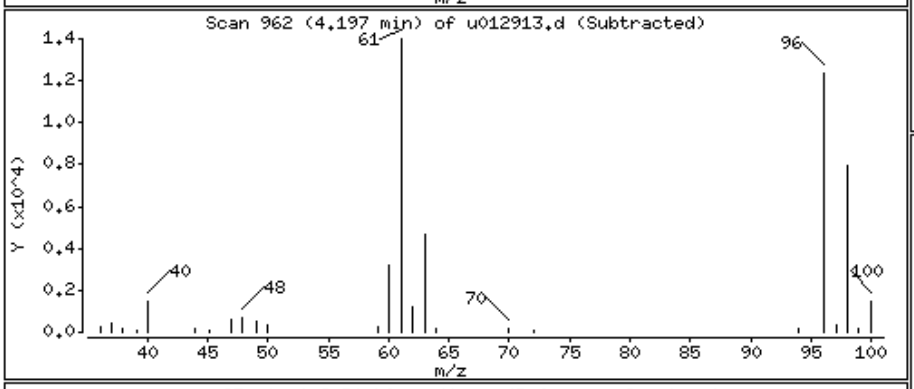
Sample Info: HS24011111-03

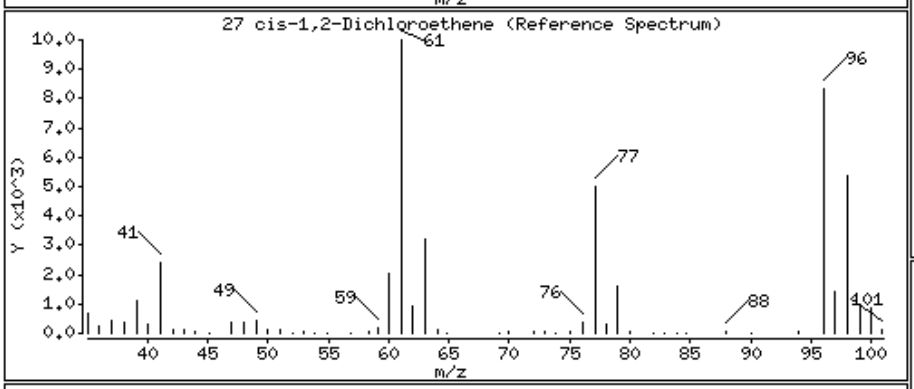
Purge Volume: 5.0 Operator: FT

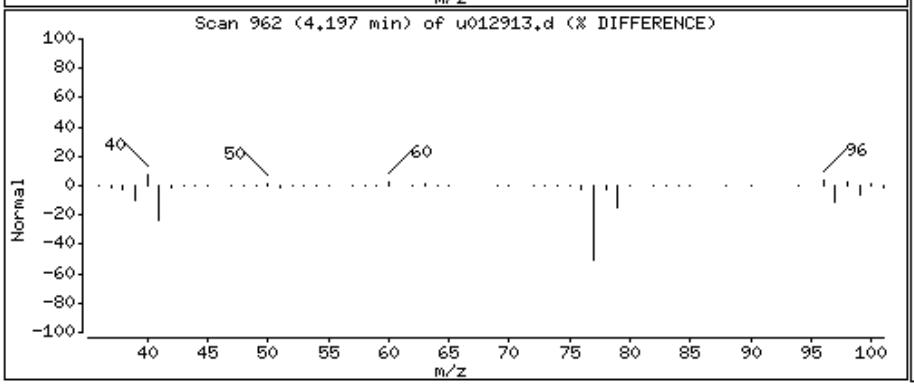
Column phase: DB624 Column diameter: 0.18

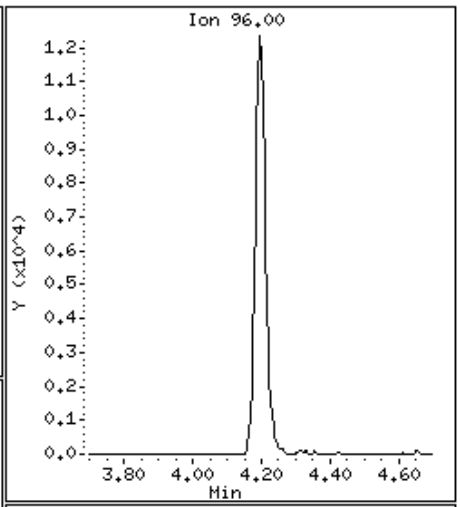
27 cis-1,2-Dichloroethene Concentration: 351.35 ug/l

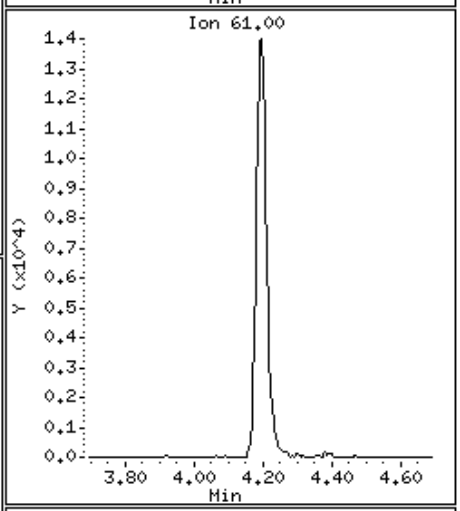


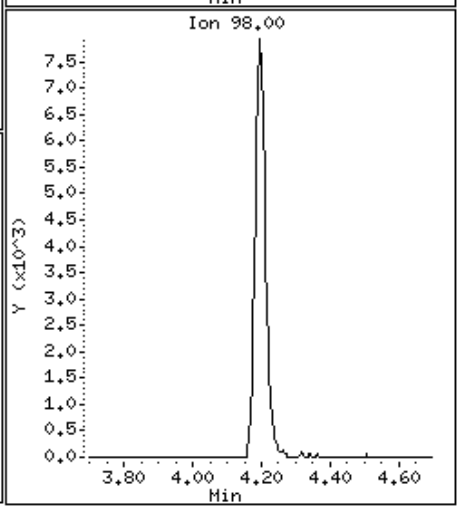












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240129.b\u012913.d Page 5

Date : 29-JAN-2024 13:16

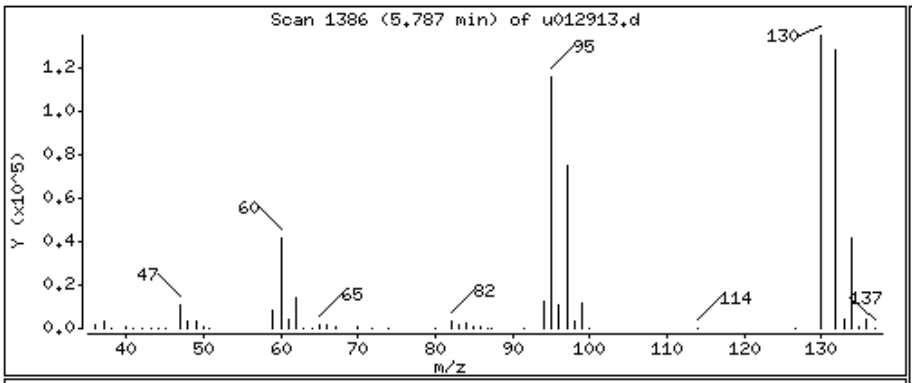
Client ID: Instrument: VOA9.i

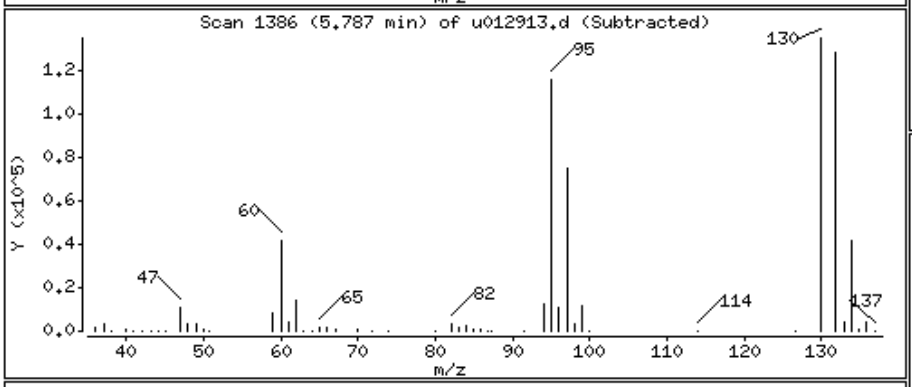
Sample Info: HS24011111-03

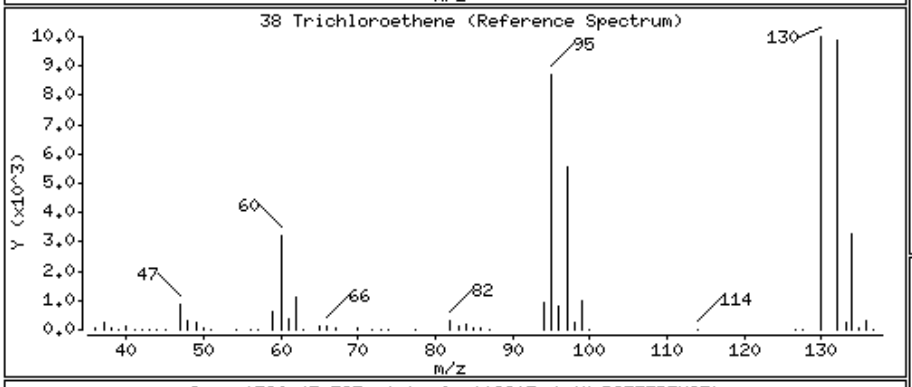
Purge Volume: 5.0 Operator: FT

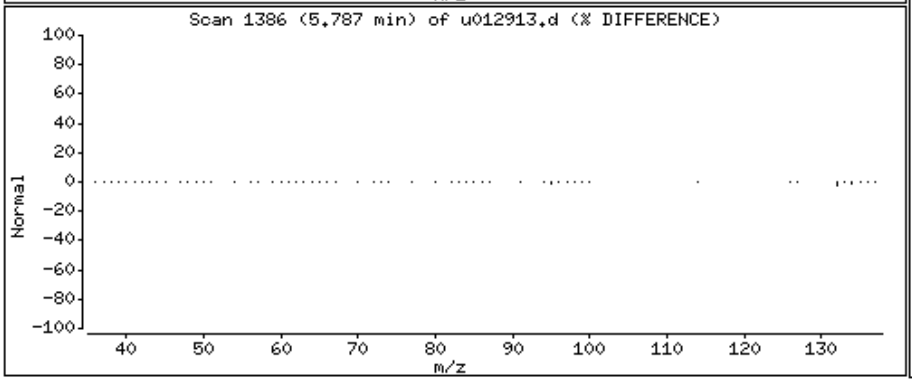
Column phase: DB624 Column diameter: 0.18

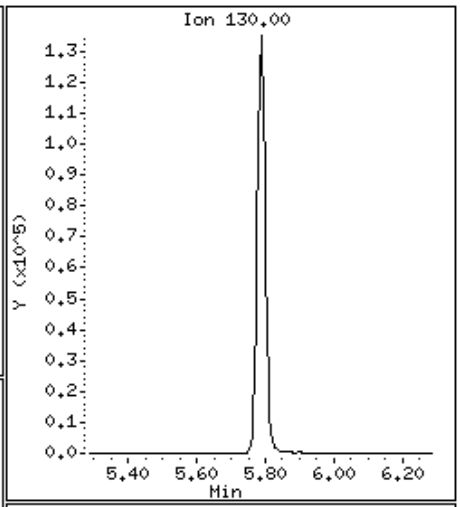
38 Trichloroethene Concentration: 3625.97 ug/l

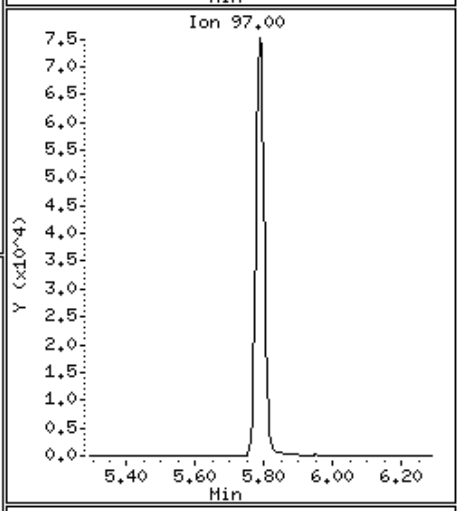


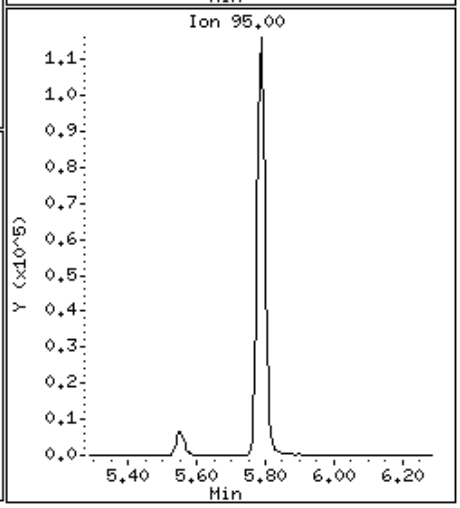












Data File : \\nahstws005\target\chem\voa9.i\u240129.b\u012913.d
Inj Date : 29-JAN-2024 13:16
InstruID : VOA9.i
LabSampID : HS24011111-03

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240129.b\U012914.D Page 1
Report Date: 29-Jan-2024 14:26

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240129.b\U012914.D
Lab Smp Id: HS24011111-04
Inj Date : 29-JAN-2024 13:38
Operator : FT   Inst ID: VOA9.i
Smp Info : HS24011111-04
Misc Info : V9;WATER;0;50;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240129.b\8260C.m
Meth Date : 29-Jan-2024 13:52 Firat.Tast Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11   Cal File: U120608.D
Als bottle: 14
Dil Factor: 50.00000
Integrator: HP RTE   Compound Sublist: 000bhatebtex.sub
Target Version: 4.14
Processing Host: NAHSTWS005

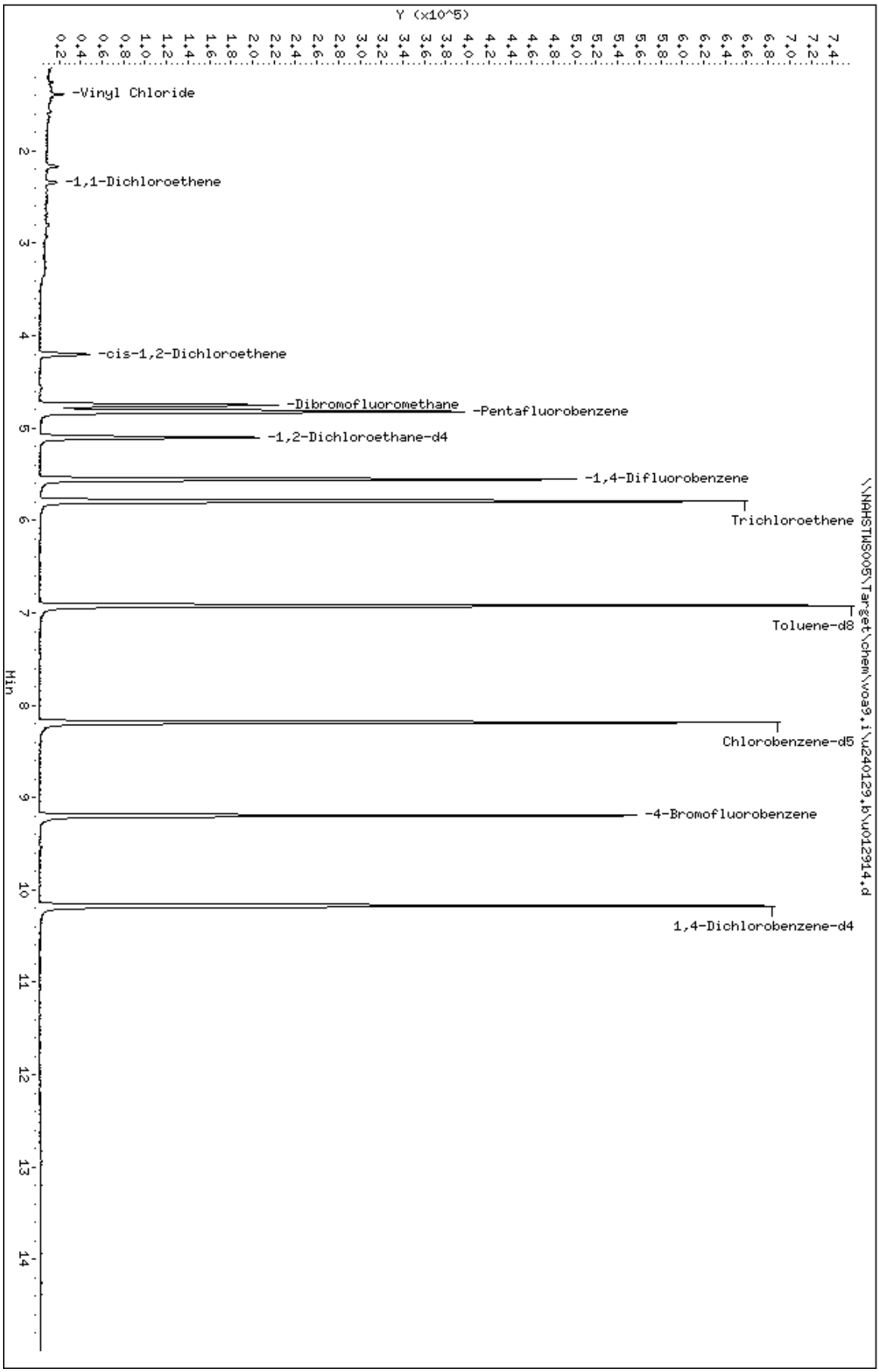
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	50.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.819	4.815	(1.000)	295595	50.0000	
$ 30 Dibromofluoromethane	113	4.751	4.748	(0.986)	133108	43.8771	43.87
$ 35 1,2-Dichloroethane-d4	65	5.100	5.096	(1.058)	130148	38.0247	38.02
* 36 1,4-Difluorobenzene	114	5.557	5.554	(1.000)	417740	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	393594	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	484001	53.4179	53.41
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	166316	48.4400	48.43
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	202760	50.0000	
5 Vinyl Chloride	62	1.385	1.382	(0.287)	7946	2.45299	122.64(a)
11 1,1-Dichloroethene	96	2.341	2.337	(0.486)	1267	0.55573	27.78(a)
27 cis-1,2-Dichloroethene	96	4.204	4.197	(0.872)	24445	6.69549	334.77
38 Trichloroethene	130	5.790	5.790	(1.042)	225690	72.0077	3600.38

QC Flag Legend

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



Data File: \\NAHSTWS005\Target\chem\voa9,i\u240129,b\u012914,d
Date : 29-JAN-2024 13:38
Client ID:
Sample Info: HS24011111-04
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9,i
Operator: FT
Column diameter: 0.18

Data File: \\NAHSTWS005\Target\chem\voa9.i\u240129.b\u012914.d Page 2

Date : 29-JAN-2024 13:38

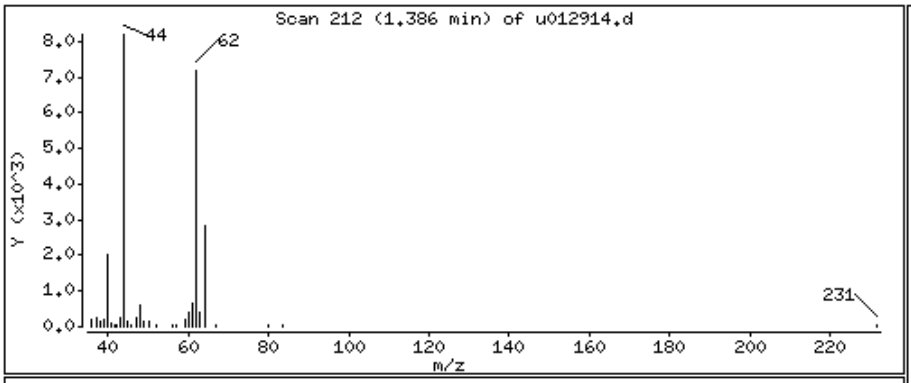
Client ID: Instrument: VOA9.i

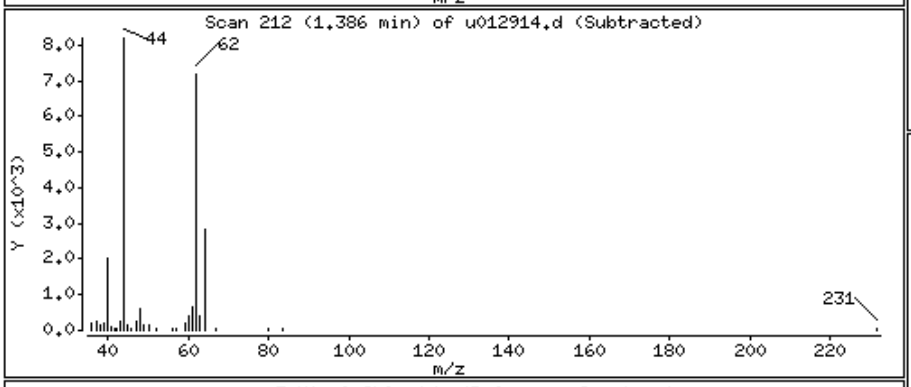
Sample Info: HS24011111-04

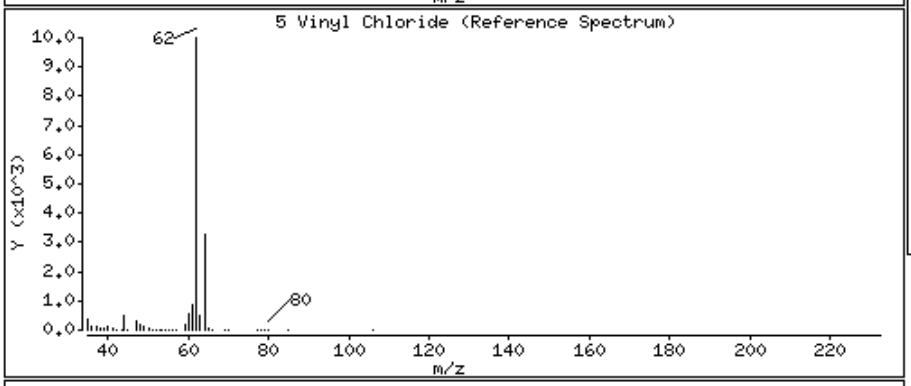
Purge Volume: 5.0 Operator: FT

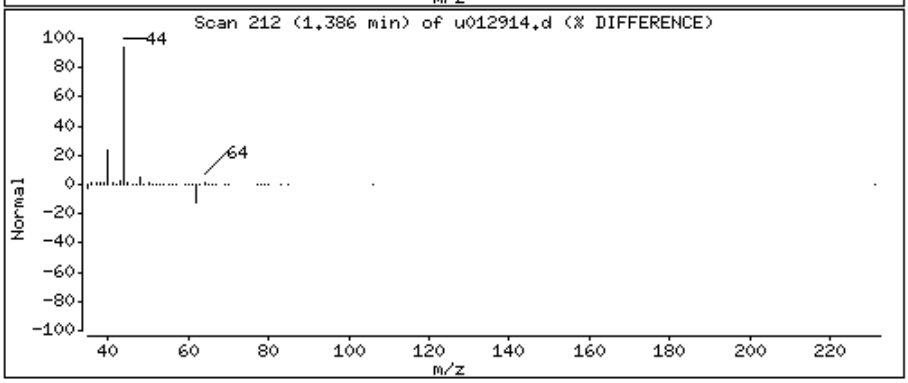
Column phase: DB624 Column diameter: 0.18

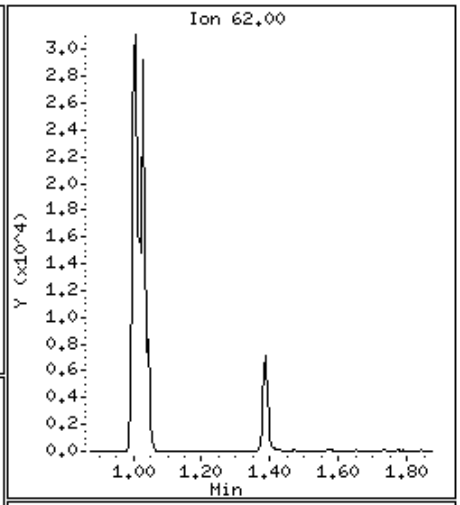
5 Vinyl Chloride Concentration: 122.64 ug/l

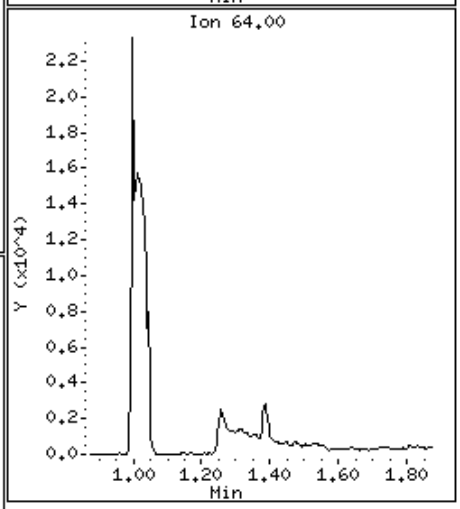












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240129.b\u012914.d Page 3

Date : 29-JAN-2024 13:38

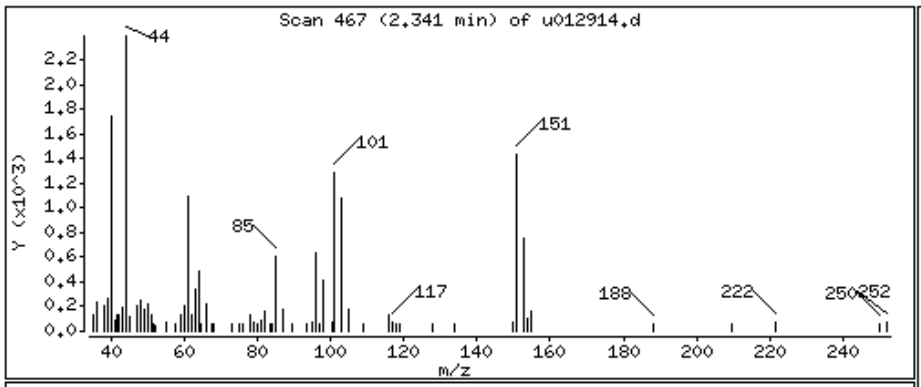
Client ID: Instrument: VOA9.i

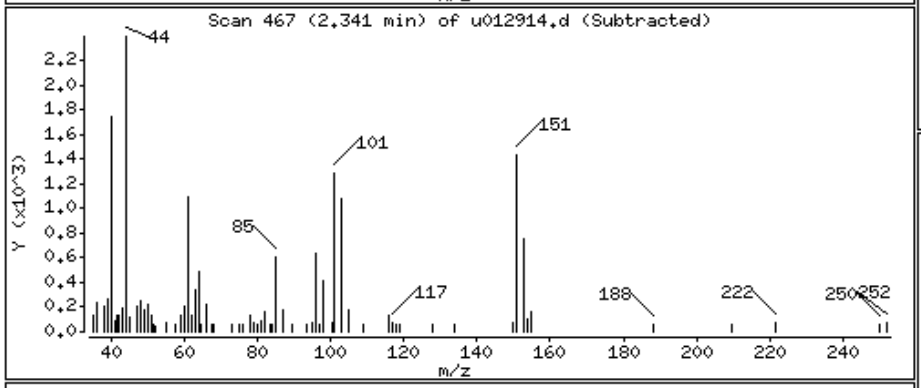
Sample Info: HS24011111-04

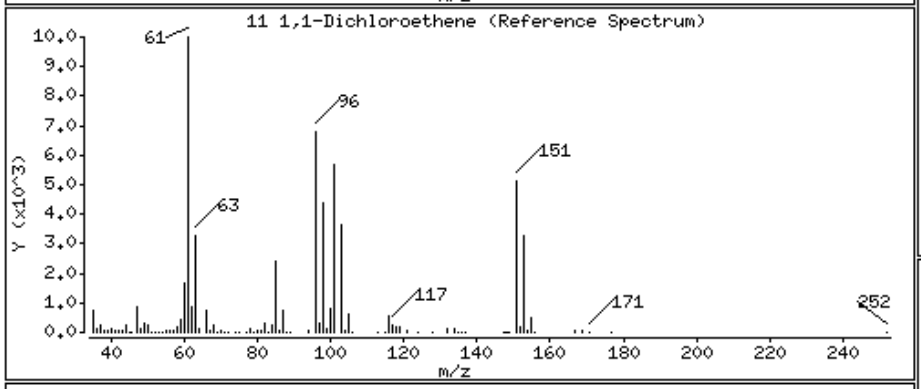
Purge Volume: 5.0 Operator: FT

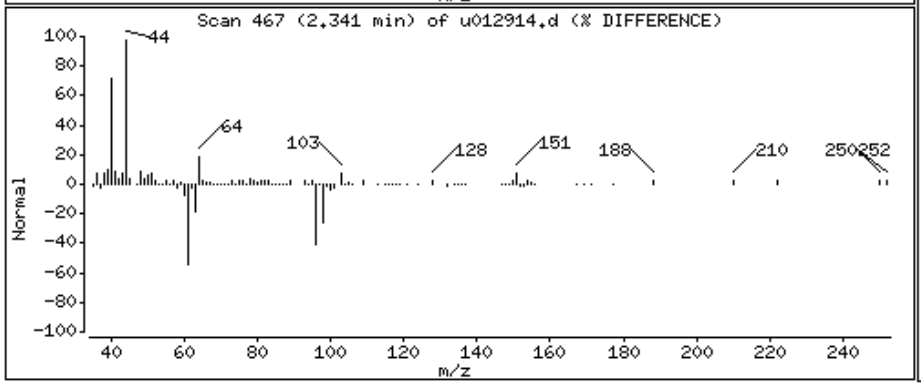
Column phase: DB624 Column diameter: 0.18

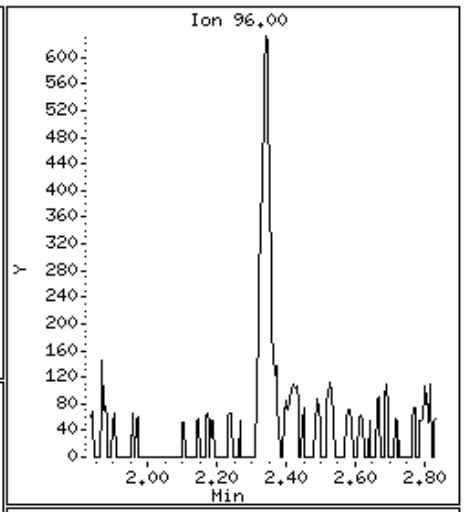
11 1,1-Dichloroethene Concentration: 27.78 ug/l

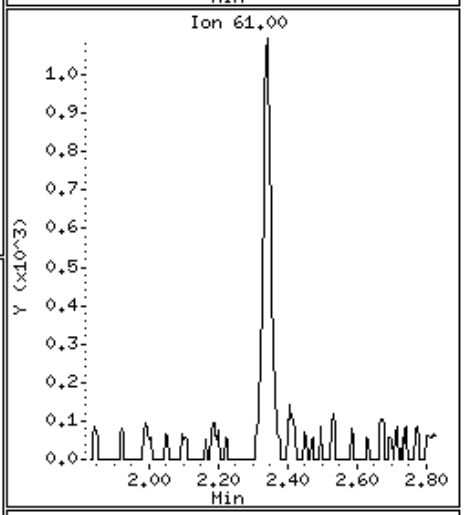


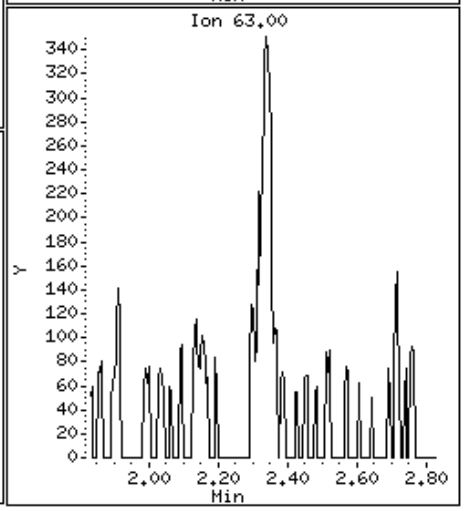












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240129.b\u012914.d Page 4

Date : 29-JAN-2024 13:38

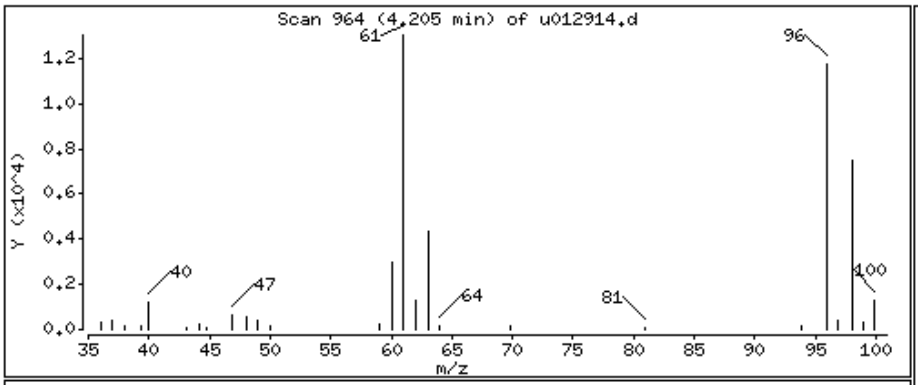
Client ID: Instrument: VOA9.i

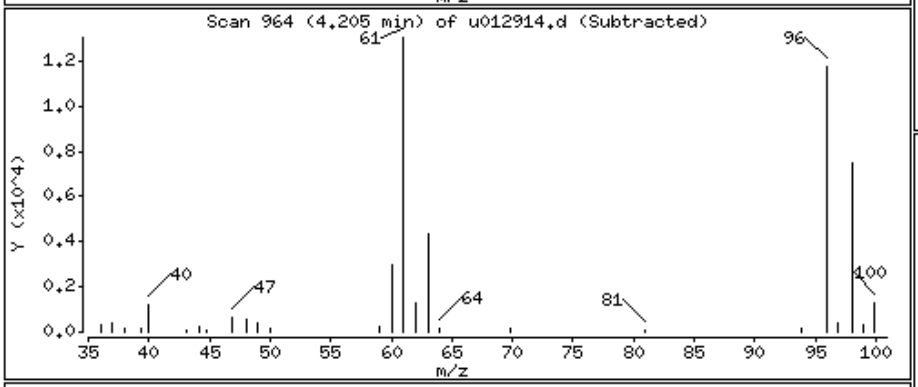
Sample Info: HS24011111-04

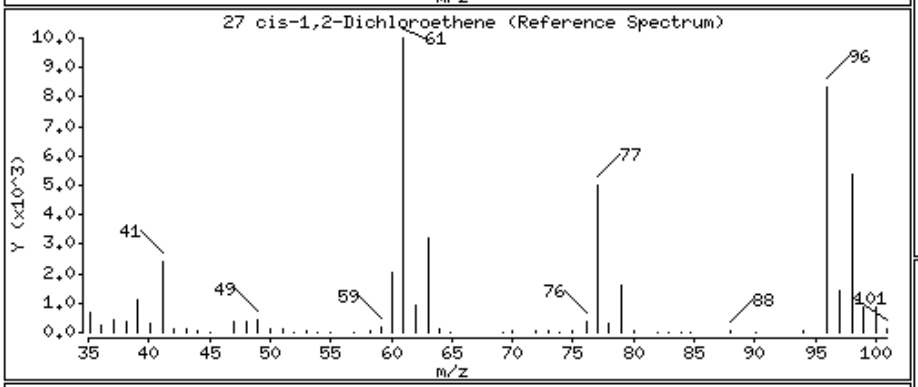
Purge Volume: 5.0 Operator: FT

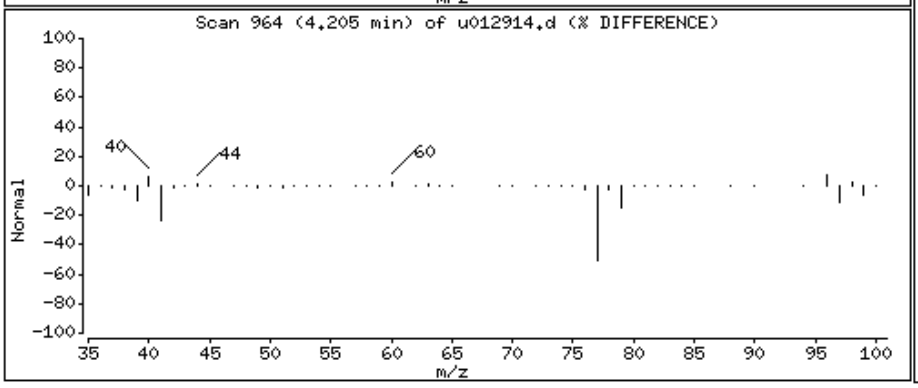
Column phase: DB624 Column diameter: 0.18

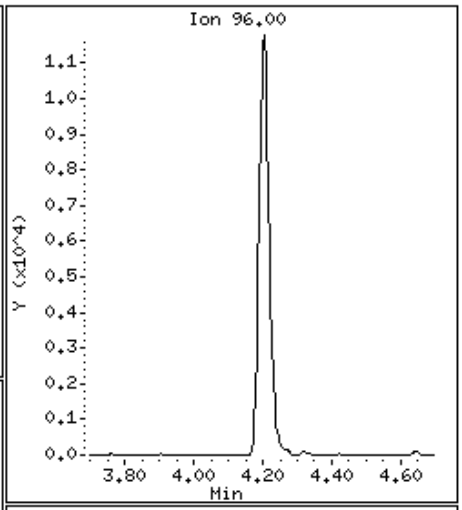
27 cis-1,2-Dichloroethene Concentration: 334.77 ug/l

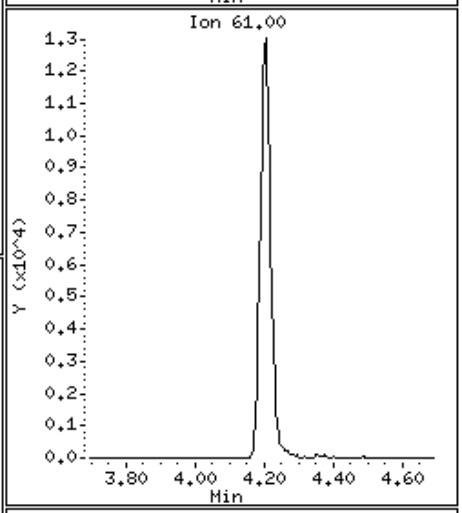


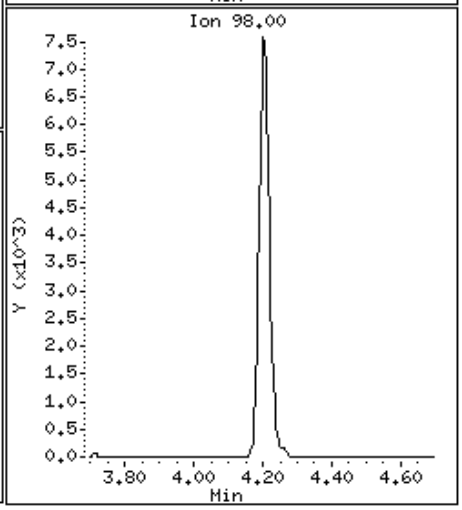












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240129.b\u012914.d Page 5

Date : 29-JAN-2024 13:38

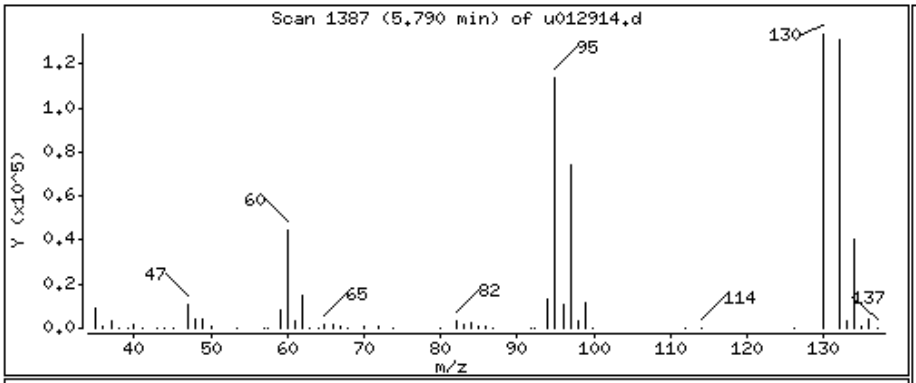
Client ID: Instrument: VOA9.i

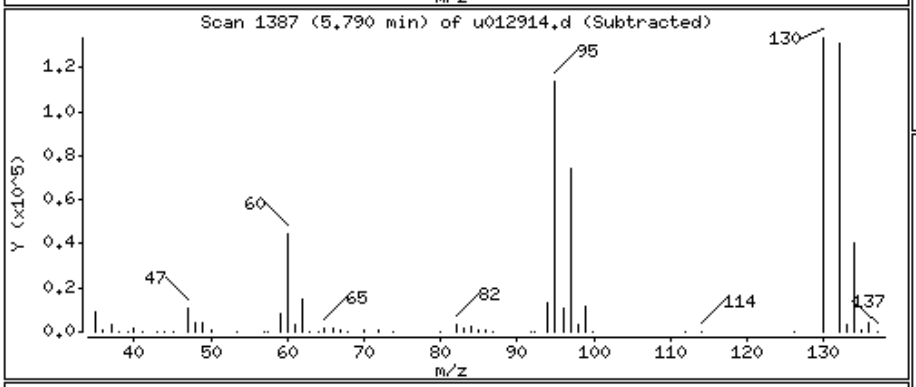
Sample Info: HS24011111-04

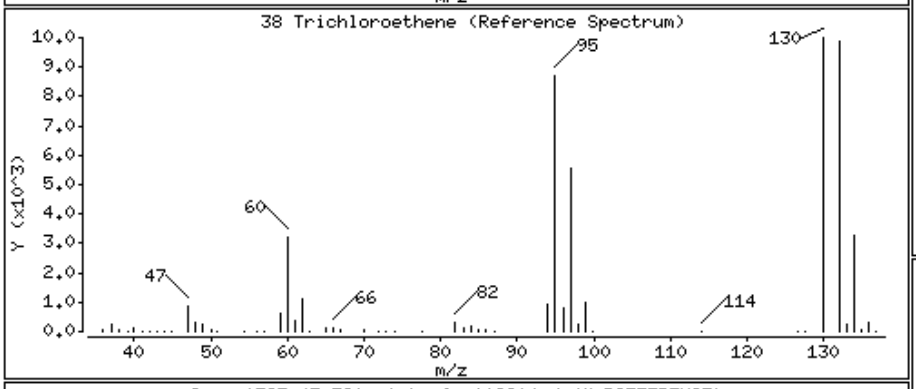
Purge Volume: 5.0 Operator: FT

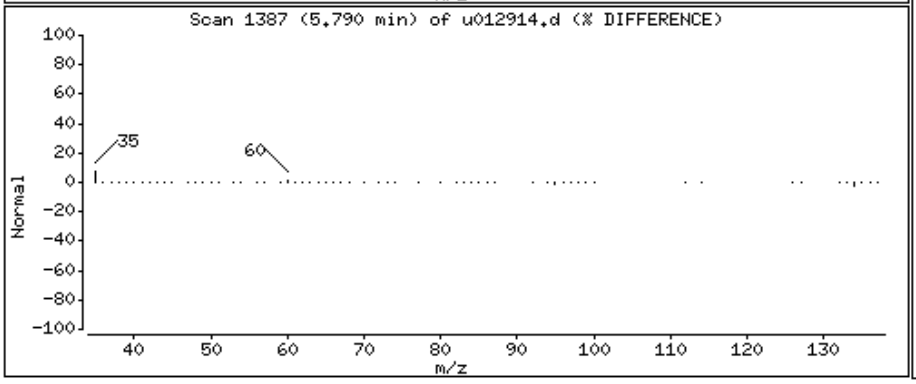
Column phase: DB624 Column diameter: 0.18

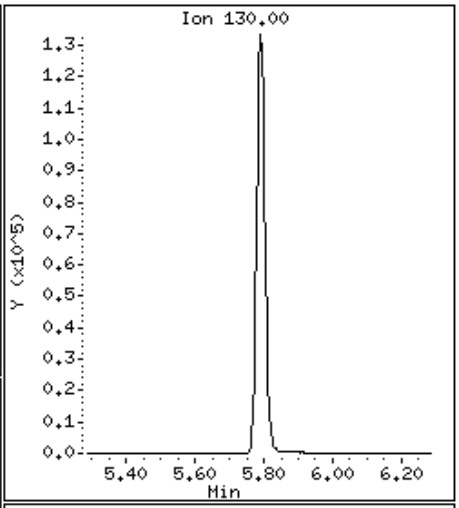
38 Trichloroethene Concentration: 3600.38 ug/l

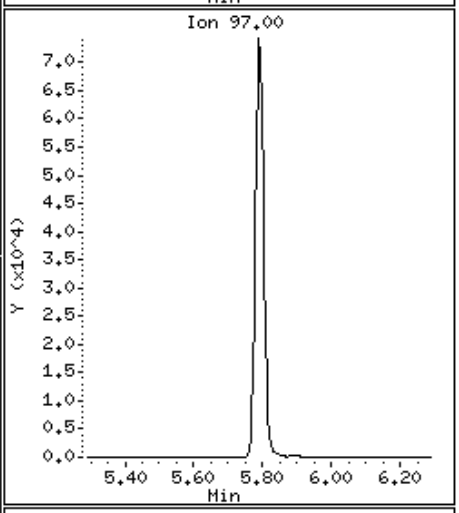


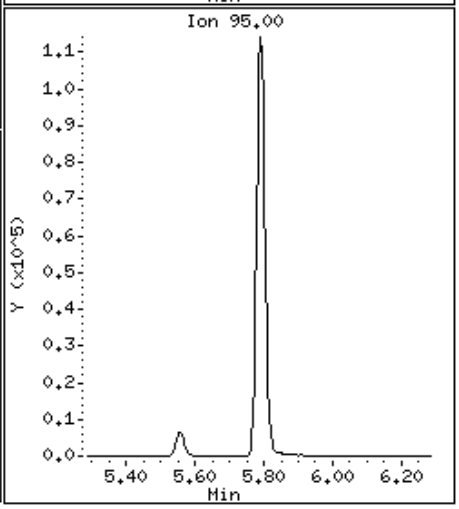












Data File : \\nahstws005\target\chem\voa9.i\u240129.b\u012914.d
Inj Date : 29-JAN-2024 13:38
InstruID : VOA9.i
LabSampID : HS24011111-04

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240129.b\U012915.D Page 1
Report Date: 29-Jan-2024 14:26

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240129.b\U012915.D
Lab Smp Id: HS24011111-05
Inj Date : 29-JAN-2024 14:01
Operator : FT   Inst ID: VOA9.i
Smp Info : HS24011111-05
Misc Info : V9;WATER;0;10;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240129.b\8260C.m
Meth Date : 29-Jan-2024 13:52 Firat.Tast Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11   Cal File: U120608.D
Als bottle: 15
Dil Factor: 10.00000
Integrator: HP RTE   Compound Sublist: 000bhatebtex.sub
Target Version: 4.14
Processing Host: NAHSTWS005

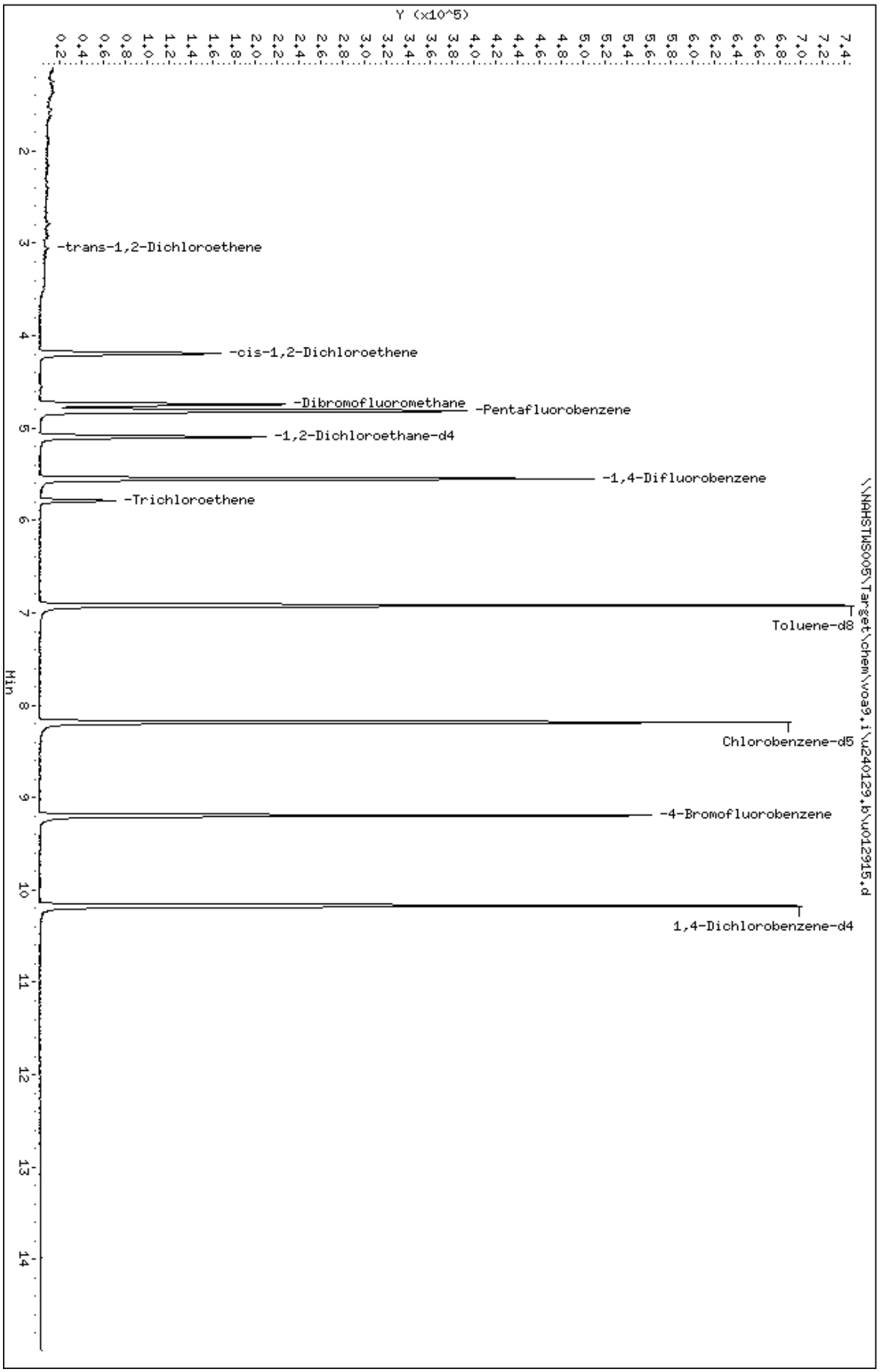
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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	4.811	4.815	(1.000)	303313	50.0000	
$ 30 Dibromofluoromethane	113	4.744	4.748	(0.986)	134331	43.1366	43.13
$ 35 1,2-Dichloroethane-d4	65	5.092	5.096	(1.058)	135801	38.6430	38.64
* 36 1,4-Difluorobenzene	114	5.550	5.554	(1.000)	419917	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	399521	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	475431	51.6936	51.69
$ 69 4-Bromofluorobenzene	95	9.193	9.194	(1.123)	168783	48.4289	48.42
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	206887	50.0000	
20 trans-1,2-Dichloroethene	96	3.057	3.061	(0.635)	1550	0.55425	5.54(a)
27 cis-1,2-Dichloroethene	96	4.193	4.197	(0.871)	89692	23.9415	239.41
38 Trichloroethene	130	5.786	5.790	(1.043)	23911	7.58939	75.89

QC Flag Legend

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



Data File: \\NAHSTMS005\Target\chem\voa9.i\u240129.b\u012915.d
Date : 29-JAN-2024 14:01
Client ID:
Sample Info: HS24011111-05
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9.i
Operator: FT
Column diameter: 0.18

Data File: \\NAHSTWS005\Target\chem\voa9.i\u240129.b\u012915.d Page 2

Date : 29-JAN-2024 14:01

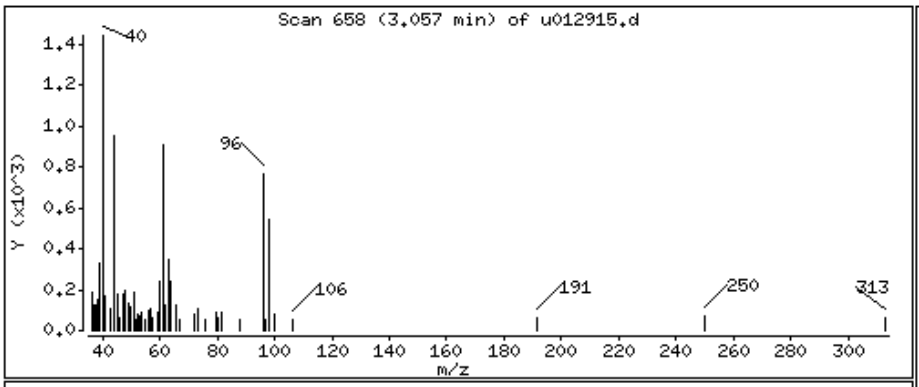
Client ID: Instrument: VOA9.i

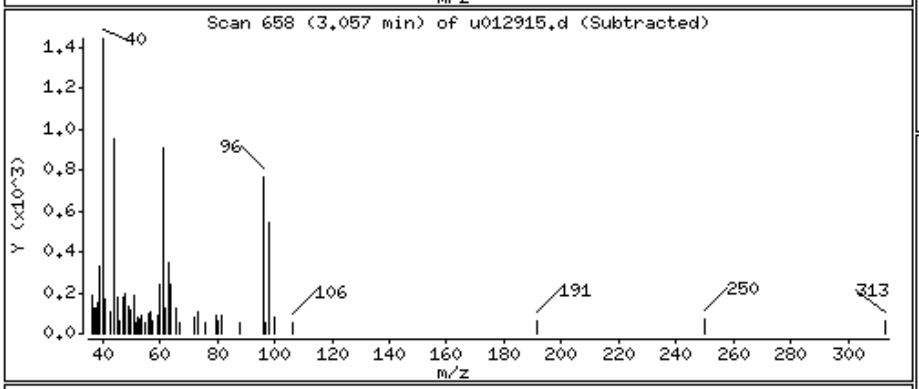
Sample Info: HS24011111-05

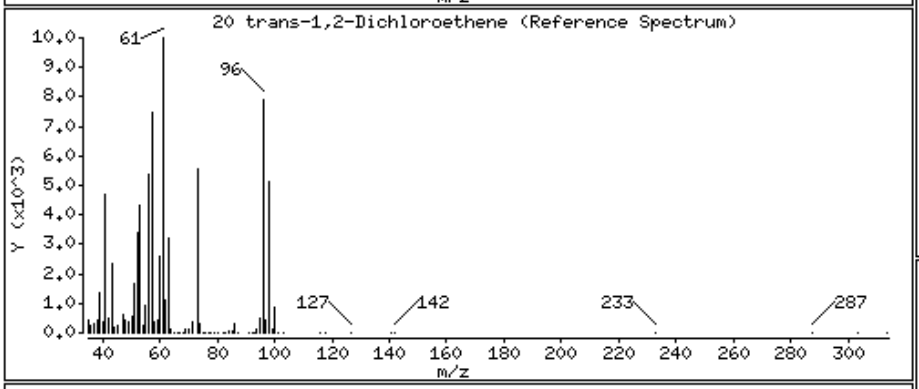
Purge Volume: 5.0 Operator: FT

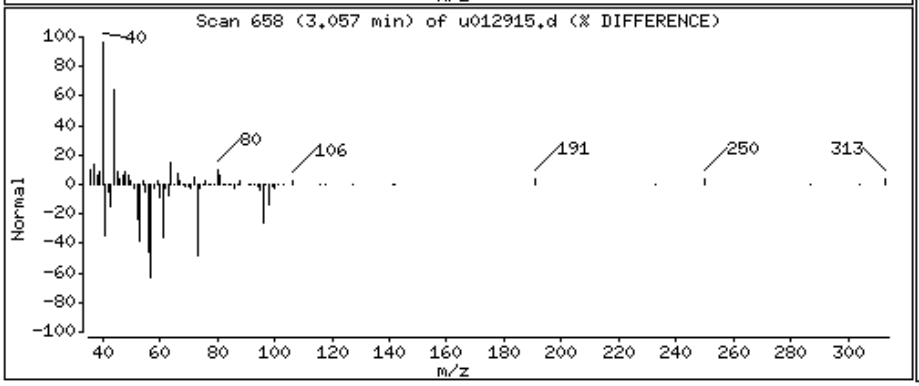
Column phase: DB624 Column diameter: 0.18

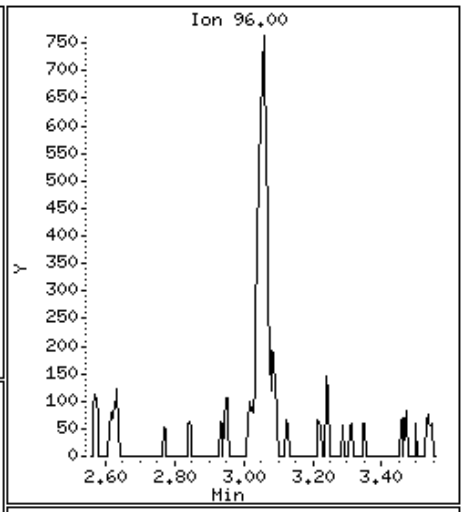
20 trans-1,2-Dichloroethene Concentration: 5.54 ug/l

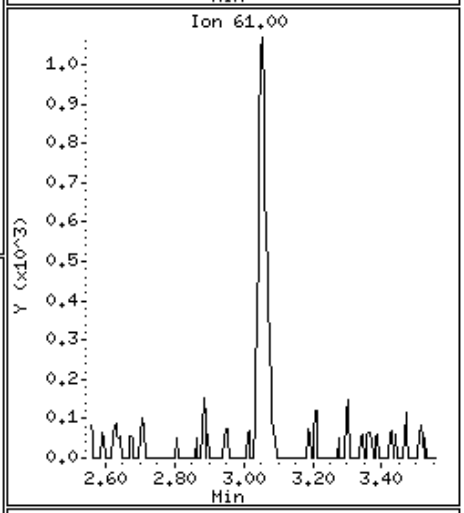


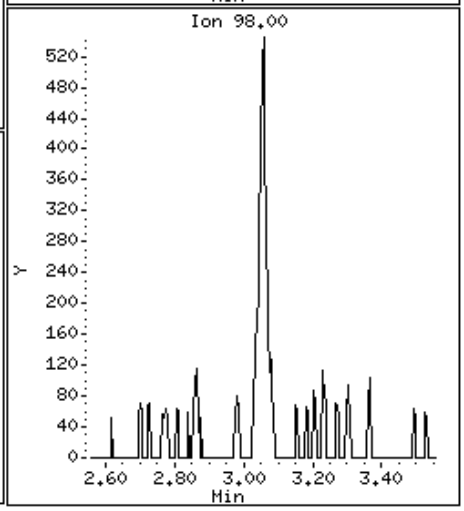












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240129.b\u012915.d Page 3

Date : 29-JAN-2024 14:01

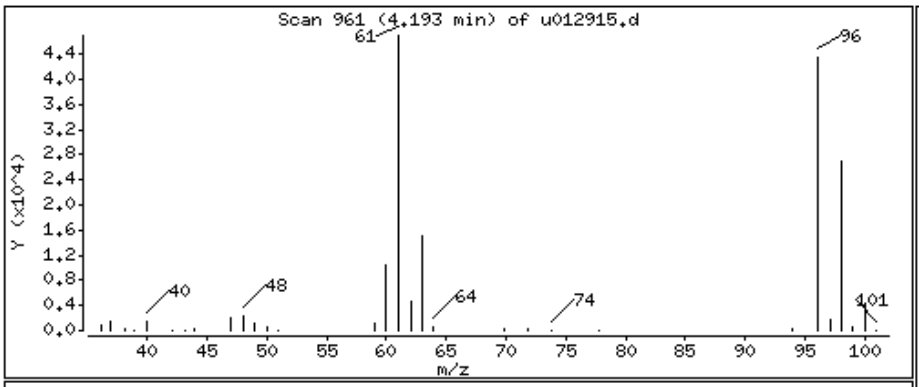
Client ID: Instrument: VOA9.i

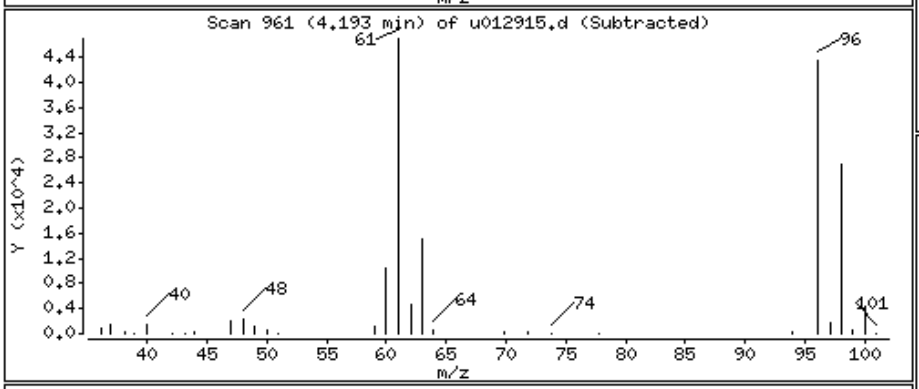
Sample Info: HS24011111-05

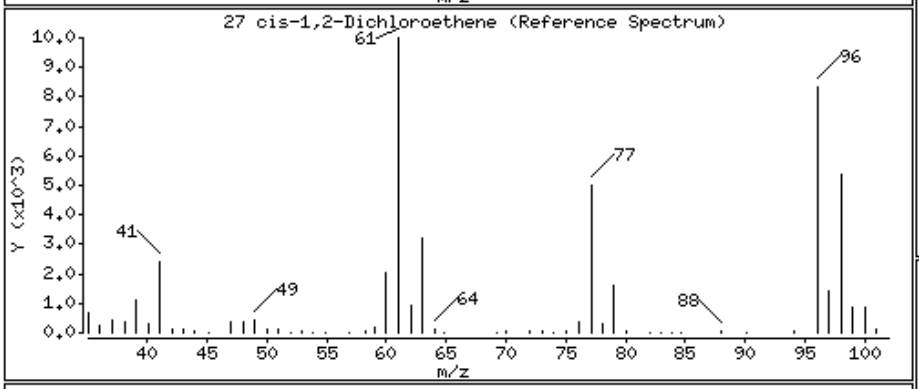
Purge Volume: 5.0 Operator: FT

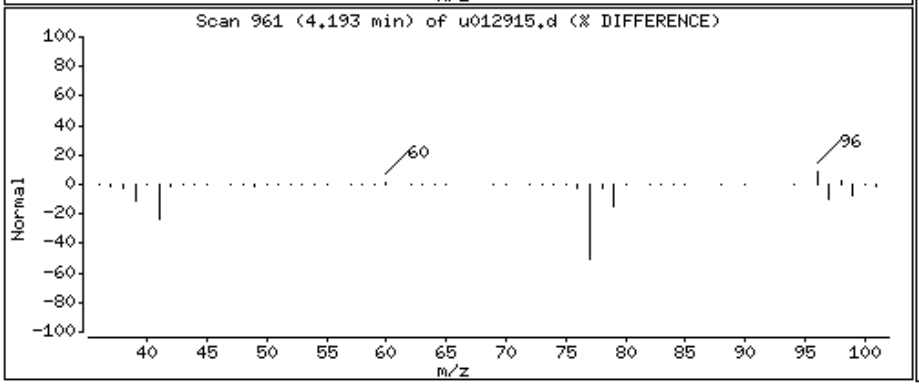
Column phase: DB624 Column diameter: 0.18

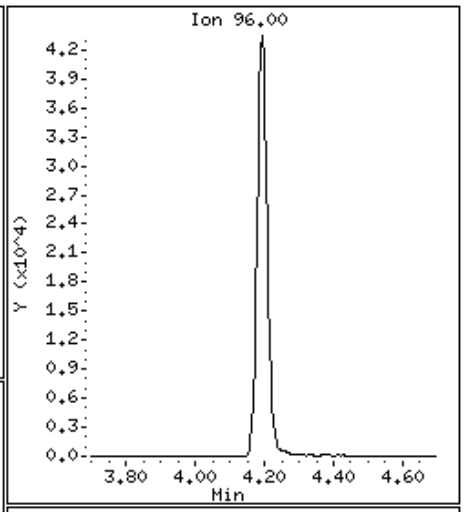
27 cis-1,2-Dichloroethene Concentration: 239.41 ug/l

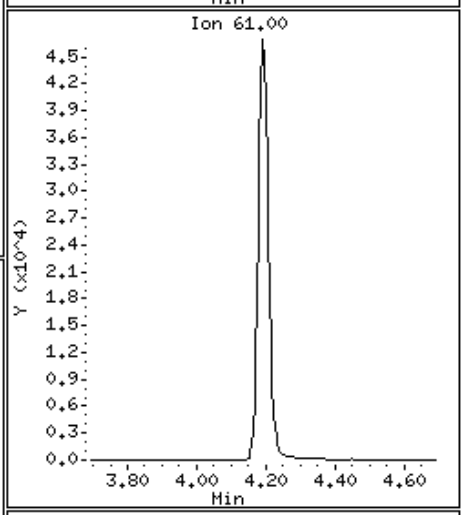


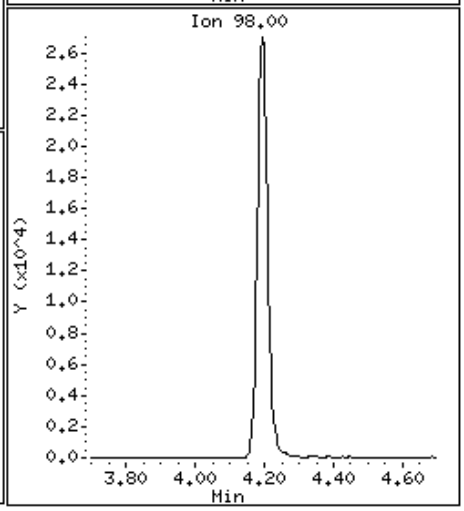












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240129.b\u012915.d Page 4

Date : 29-JAN-2024 14:01

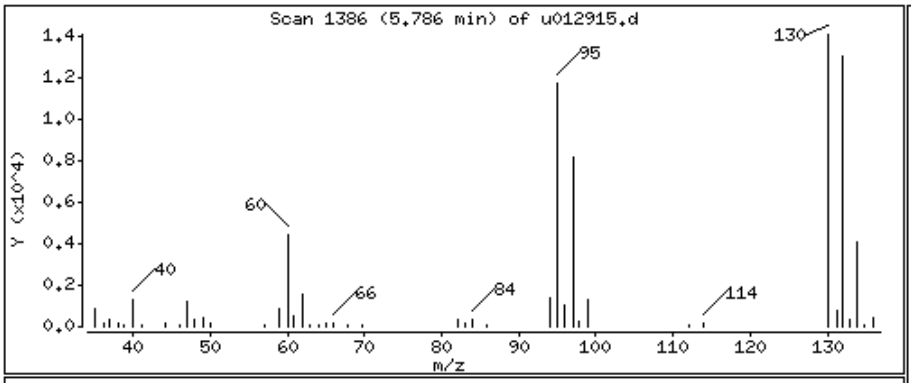
Client ID: Instrument: VOA9.i

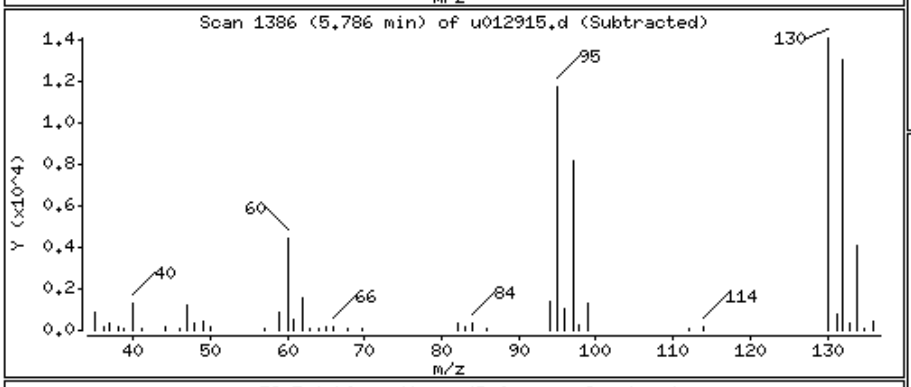
Sample Info: HS24011111-05

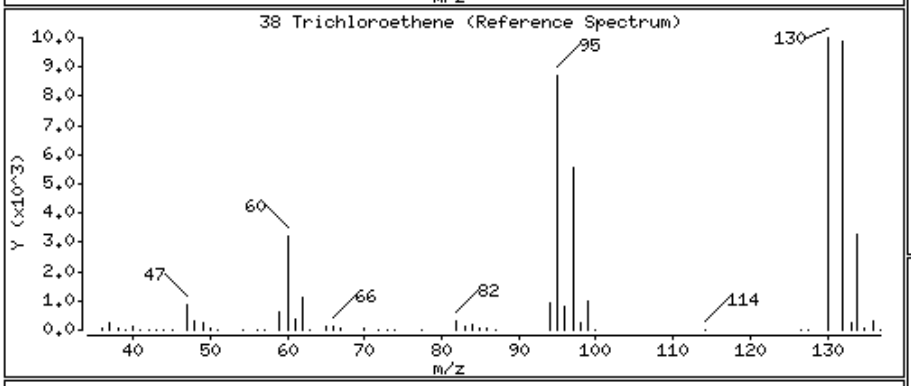
Purge Volume: 5.0 Operator: FT

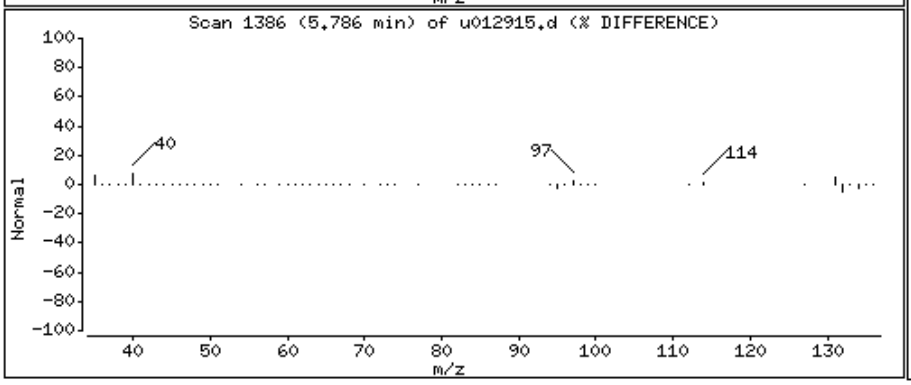
Column phase: DB624 Column diameter: 0.18

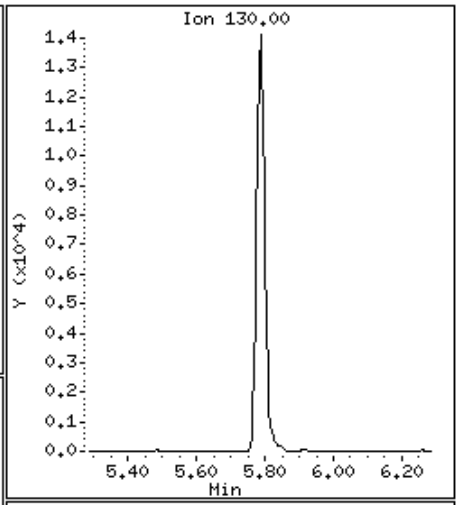
38 Trichloroethene Concentration: 75.89 ug/l

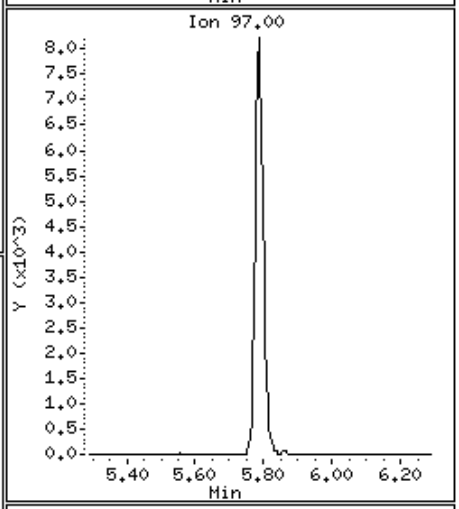


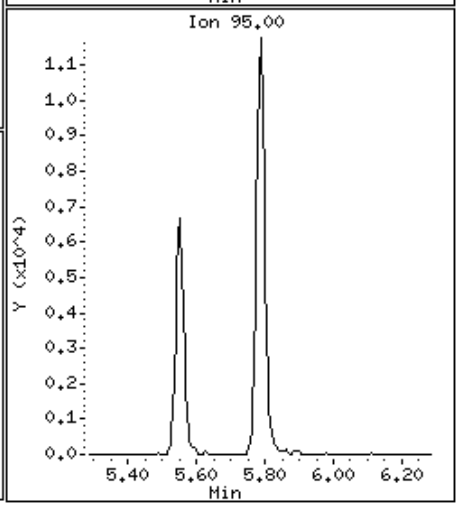












Data File : \\nahstws005\target\chem\voa9.i\u240129.b\u012915.d
Inj Date : 29-JAN-2024 14:01
InstruID : VOA9.i
LabSampID : HS24011111-05

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240129.b\U012916.D Page 1
Report Date: 29-Jan-2024 15:21

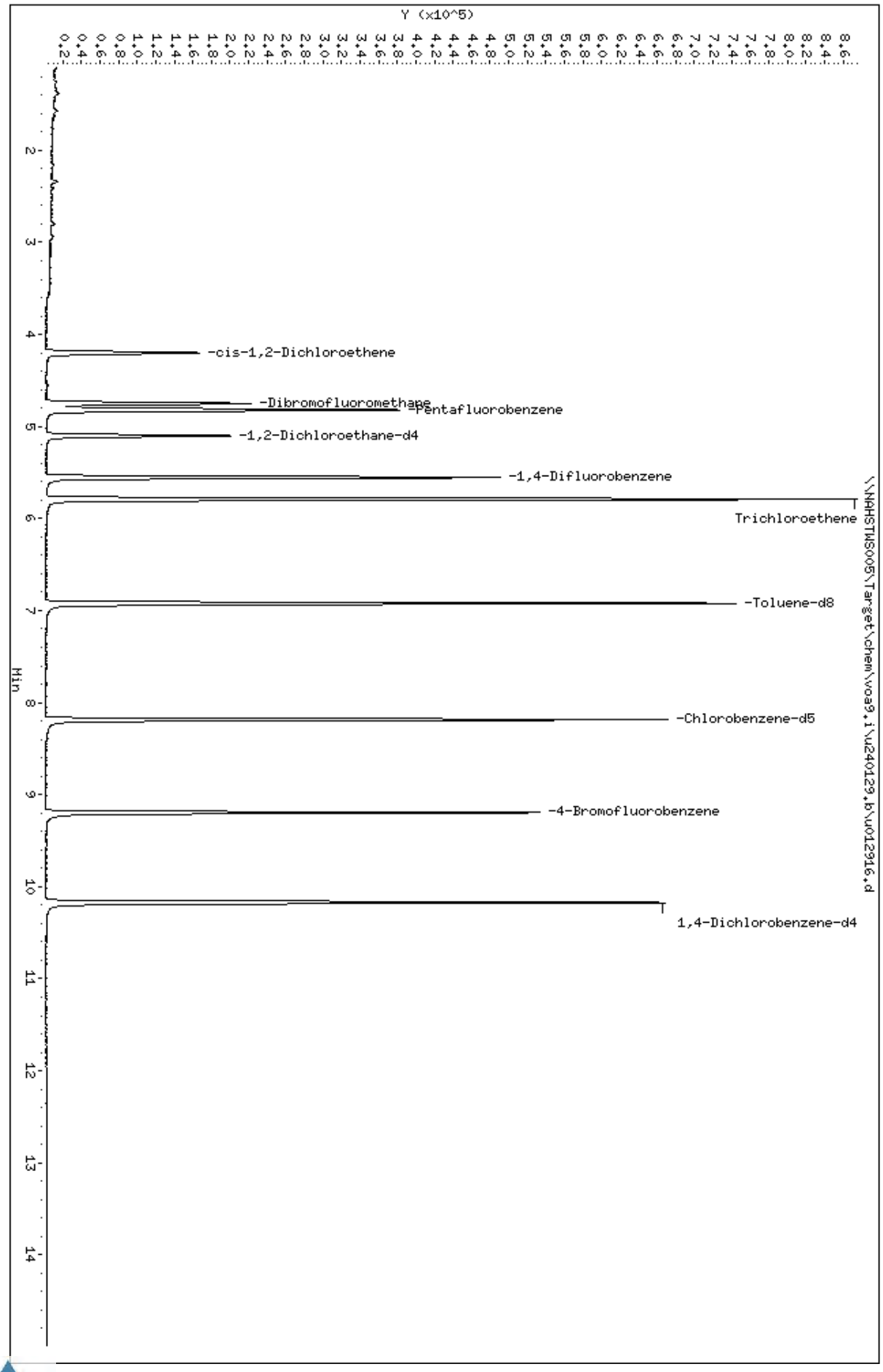
ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240129.b\U012916.D
Lab Smp Id: HS24011111-08
Inj Date : 29-JAN-2024 14:23
Operator : FT   Inst ID: VOA9.i
Smp Info : HS24011111-08
Misc Info : V9;WATER;0;100;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240129.b\8260C.m
Meth Date : 29-Jan-2024 13:52 Firat.Tast Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11   Cal File: U120608.D
Als bottle: 16
Dil Factor: 100.00000
Integrator: HP RTE   Compound Sublist: 000bhatebtex.sub
Target Version: 4.14
Processing Host: NAHSTWS005

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	4.819	4.815	(1.000)	294312	50.0000	
$ 30 Dibromofluoromethane	113	4.752	4.748	(0.986)	130250	43.1045	43.10
$ 35 1,2-Dichloroethane-d4	65	5.100	5.096	(1.058)	129349	37.9584	37.95
* 36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	408950	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	389808	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	468625	52.2232	52.22
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	160856	47.2744	47.27
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	201142	50.0000	
27 cis-1,2-Dichloroethene	96	4.201	4.197	(0.872)	87150	23.9744	2397.44
38 Trichloroethene	130	5.790	5.790	(1.043)	296715	96.7035	9670.34


Data File: \\NAHSTWS005\Target\chem\voa9.i\u240129.b\u012916.d
Date : 29-JAN-2024 14:23
Client ID:
Sample Info: HS24011111-08
Purge Volume: 5.0
Column phase: DB624
Instrument: VOA9.i
Operator: FT
Column diameter: 0.18
Page 1
Y (x10^5)
Min
-cis-1,2-Dichloroethene
-Dibromofluoromethane
-Pentafluorobenzene
-1,2-Dichloroethane-d4
-1,4-Difluorobenzene
Trichloroethene
-Toluene-d8
-Chlorobenzene-d5
-4-Bromofluorobenzene
1,4-Dichlorobenzene-d4
\\NAHSTWS005\Target\chem\voa9.i\u240129.b\u012916.d

Data File: \\NAHSTWS005\Target\chem\voa9.i\u240129.b\u012916.d Page 2

Date : 29-JAN-2024 14:23

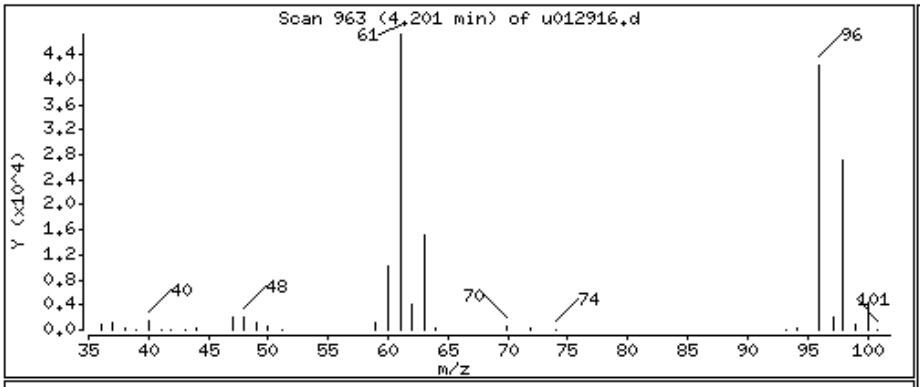
Client ID: Instrument: VOA9.i

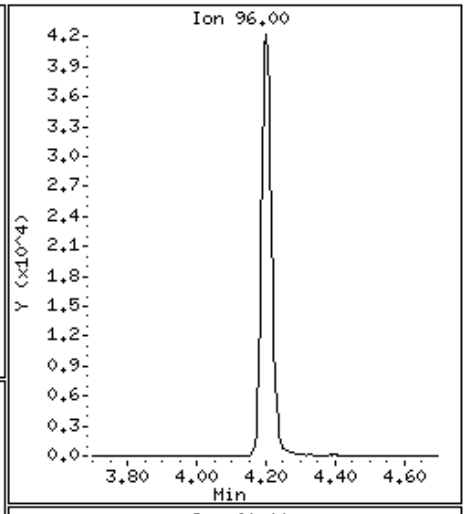
Sample Info: HS24011111-08

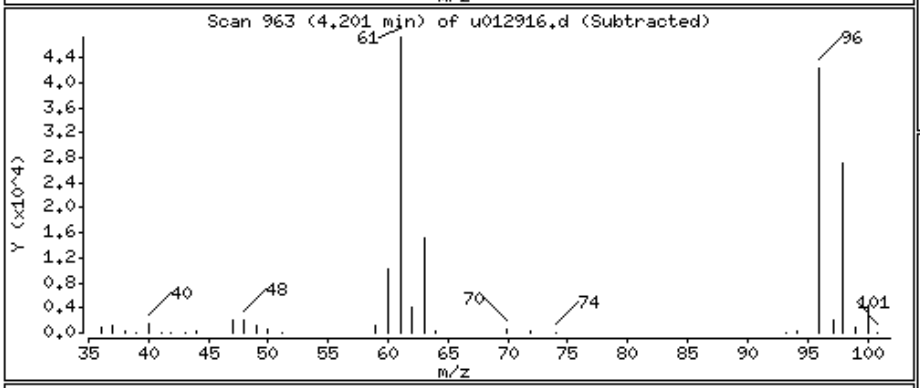
Purge Volume: 5.0 Operator: FT

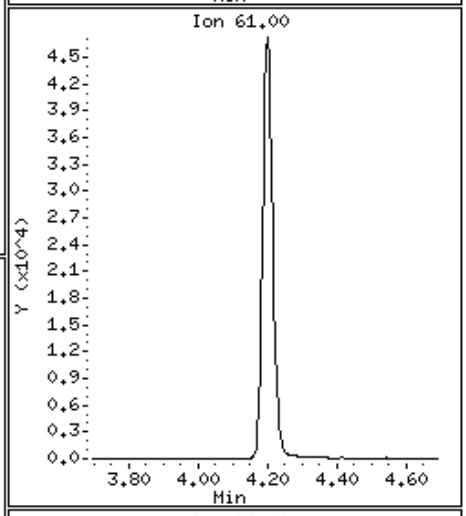
Column phase: DB624 Column diameter: 0.18

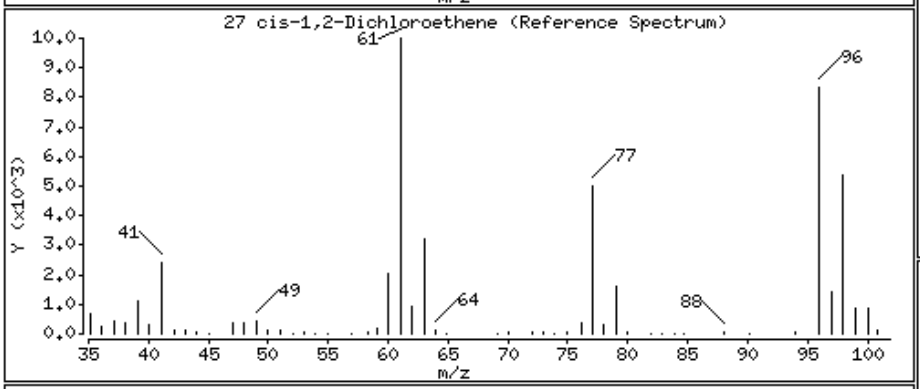
27 cis-1,2-Dichloroethene Concentration: 2397.44 ug/l

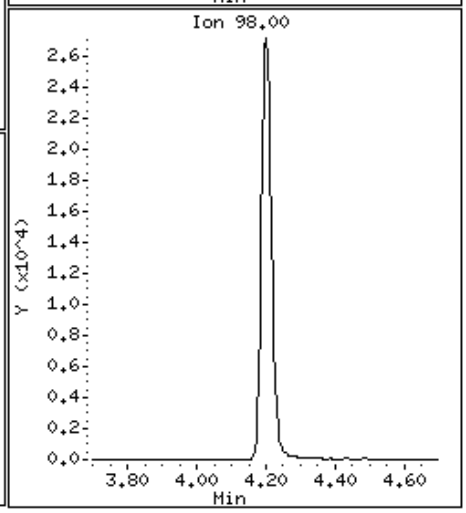


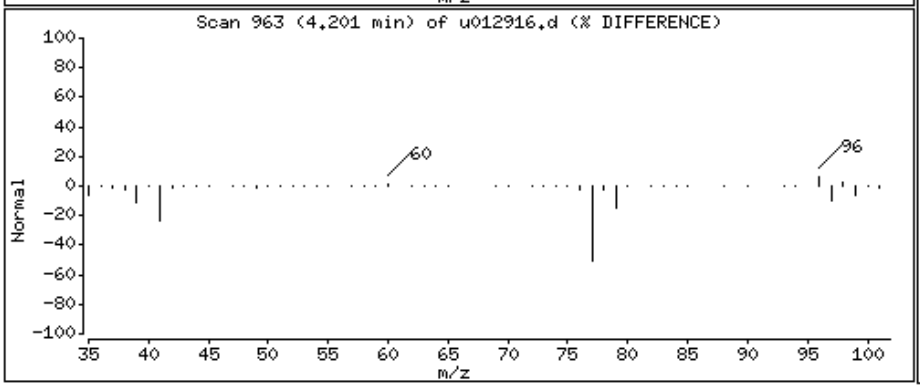












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240129.b\u012916.d Page 3

Date : 29-JAN-2024 14:23

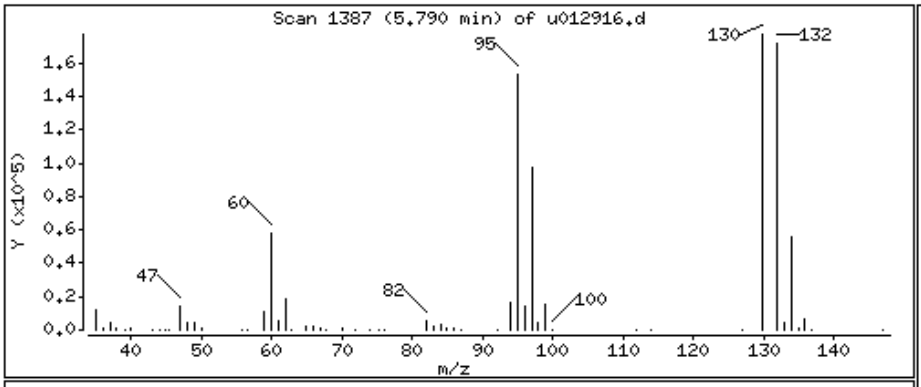
Client ID: Instrument: VOA9.i

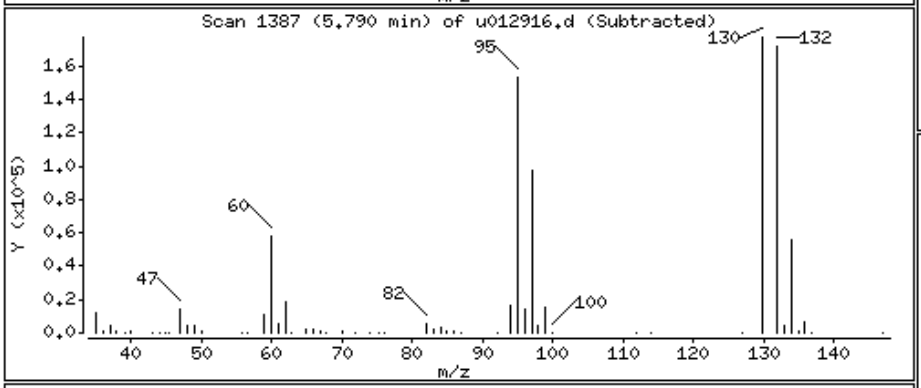
Sample Info: HS24011111-08

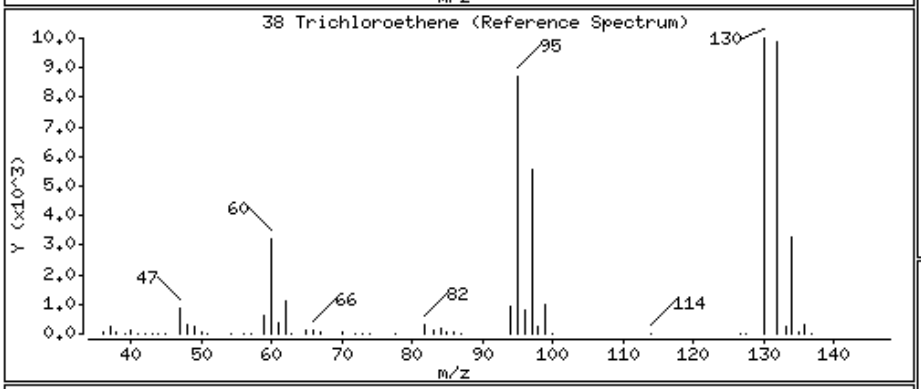
Purge Volume: 5.0 Operator: FT

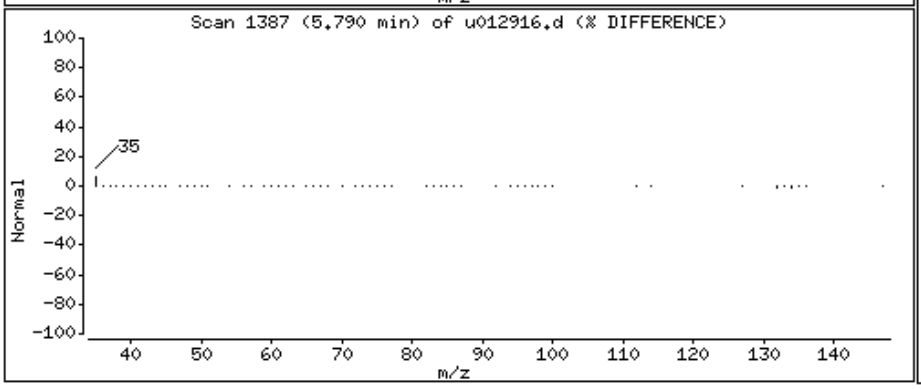
Column phase: DB624 Column diameter: 0.18

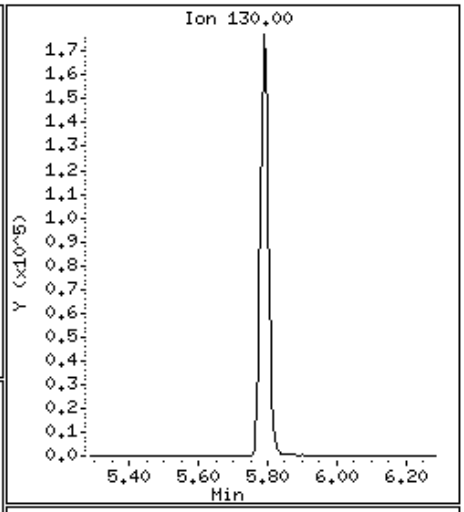
38 Trichloroethene Concentration: 9670.34 ug/l

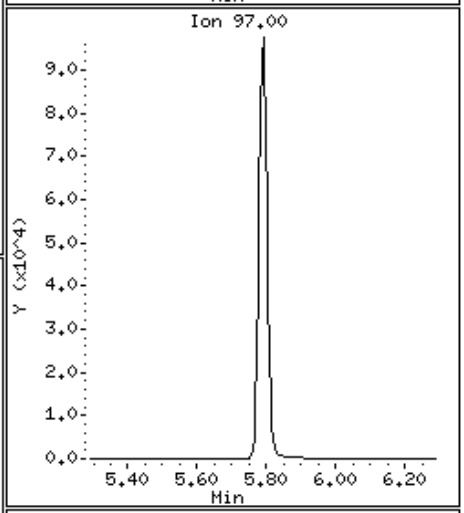


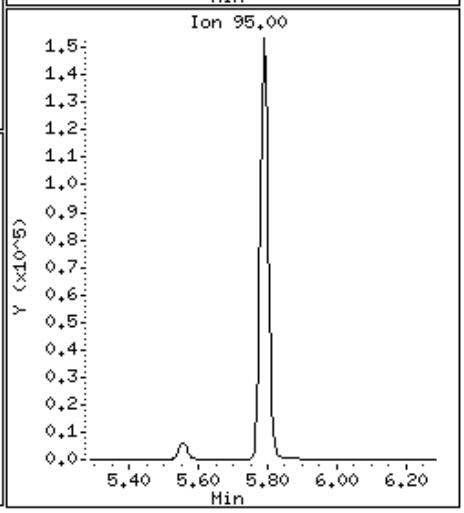












Data File : \\nahstws005\target\chem\voa9.i\u240129.b\u012916.d
Inj Date : 29-JAN-2024 14:23
InstruID : VOA9.i
LabSampID : HS24011111-08

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240129.b\U012917.D Page 1
Report Date: 29-Jan-2024 15:03

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240129.b\U012917.D
Lab Smp Id: HS24011111-08MS Client Smp ID: HS24011111-08MS
Inj Date : 29-JAN-2024 14:45
Operator : FT Inst ID: VOA9.i
Smp Info : HS24011111-08MS;HS24011111-08MS;3;;MS
Misc Info : V9;WATER;0;100;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240129.b\8260C.m
Meth Date : 29-Jan-2024 13:52 Firat.Tast Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 17 QC Sample: MS
Dil Factor: 100.00000
Integrator: HP RTE Compound Sublist: 000bhatebtex.sub
Target Version: 4.14
Processing Host: NAHSTWS005

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

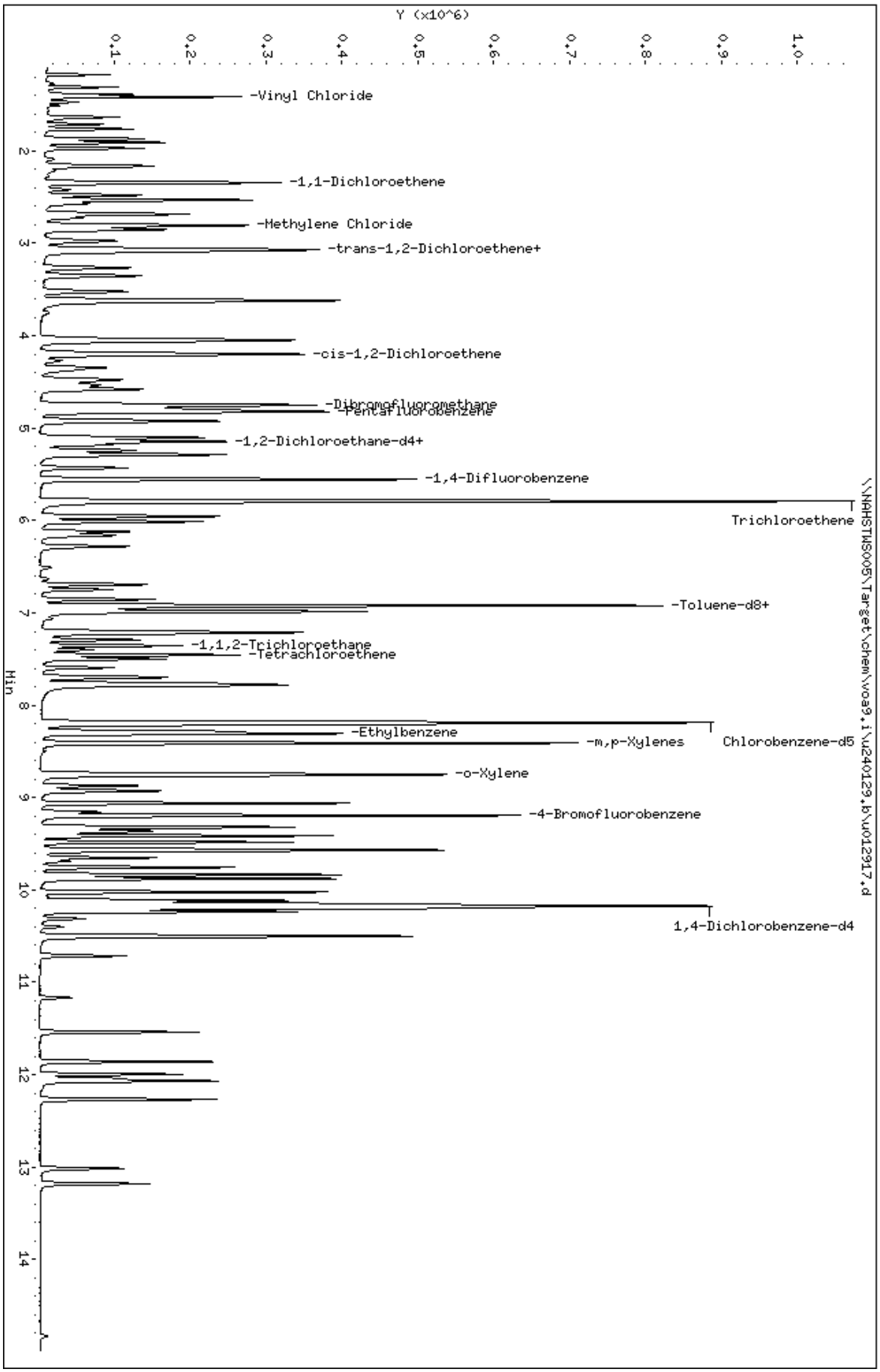
Name	Value	Description
DF	100.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.822	4.815	(1.000)	278543	50.0000	
$ 30 Dibromofluoromethane	113	4.751	4.748	(0.985)	139982	49.0872	49.08
$ 35 1,2-Dichloroethane-d4	65	5.100	5.096	(1.058)	141577	43.6376	43.63
* 36 1,4-Difluorobenzene	114	5.557	5.554	(1.000)	406962	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	423853	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	502919	51.5433	51.54
$ 69 4-Bromofluorobenzene	95	9.193	9.194	(1.123)	182063	49.2622	49.26
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	237779	50.0000	
5 Vinyl Chloride	62	1.389	1.382	(0.288)	79051	25.8976	2589.76
11 1,1-Dichloroethene	96	2.341	2.337	(0.485)	57799	26.9040	2690.39
17 Methylene Chloride	84	2.802	2.799	(0.581)	68148	25.0046	2500.46
20 trans-1,2-Dichloroethene	96	3.068	3.061	(0.636)	66404	25.8562	2585.61
27 cis-1,2-Dichloroethene	96	4.204	4.197	(0.872)	152875	44.4358	4443.58
38 Trichloroethene	130	5.790	5.790	(1.042)	364004	119.213	11921.34
53 1,1,2-Trichloroethane	83	7.357	7.353	(0.899)	42284	17.8687	1786.87
56 Tetrachloroethene	164	7.458	7.458	(0.911)	59970	23.7067	2370.66
18 Methyl tert-butyl ether	73	3.087	3.083	(0.640)	158562	20.5979	2059.78
33 1,2-Dichloroethane	62	5.179	5.175	(0.932)	69666	17.5698	1756.97
37 Benzene	78	5.145	5.141	(0.926)	212225	19.1566	1915.66
50 Toluene	91	6.982	6.982	(0.853)	239125	20.2337	2023.37

61 Ethylbenzene	106	8.309	8.305 (1.015)	80420	19.9548	1995.48
62 m,p-Xylenes	106	8.410	8.407 (1.027)	202479	41.7885	4178.85

Data File: \\nahstws005\Target\chem\voa9.i\U240129.b\U012917.D Page 2
Report Date: 29-Jan-2024 15:03

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
63 o-Xylene	106	8.747	8.744	(1.069)	100253	20.1187	2011.87
M 95 Xylenes (total)	106				302732	64.2884	6428.84



Data File: \\NAHSTWS005\Target\chem\voa9.i\u240129.b\u012917.d
Date : 29-JAN-2024 14:45
Client ID: HS24011111-08MS
Sample Info: HS24011111-08MS;HS24011111-08MS;3;;MS
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9.i
Operator: FT
Column diameter: 0.18

Page 1

Data File : \\nahstws005\target\chem\voa9.i\u240129.b\u012917.d
Inj Date : 29-JAN-2024 14:45
InstruID : VOA9.i
LabSampID : HS24011111-08MS

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240129.b\U012918.D Page 1
Report Date: 29-Jan-2024 15:24

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240129.b\U012918.D
Lab Smp Id: HS24011111-08MSD Client Smp ID: HS24011111-08MSD
Inj Date : 29-JAN-2024 15:07
Operator : FT Inst ID: VOA9.i
Smp Info : HS24011111-08MSD;HS24011111-08MSD;3;;MSD
Misc Info : V9;WATER;0;100;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240129.b\8260C.m
Meth Date : 29-Jan-2024 13:52 Firat.Tast Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 17 QC Sample: MSD
Dil Factor: 100.00000
Integrator: HP RTE Compound Sublist: 000bhatebtex.sub
Target Version: 4.14
Processing Host: NAHSTWS005

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

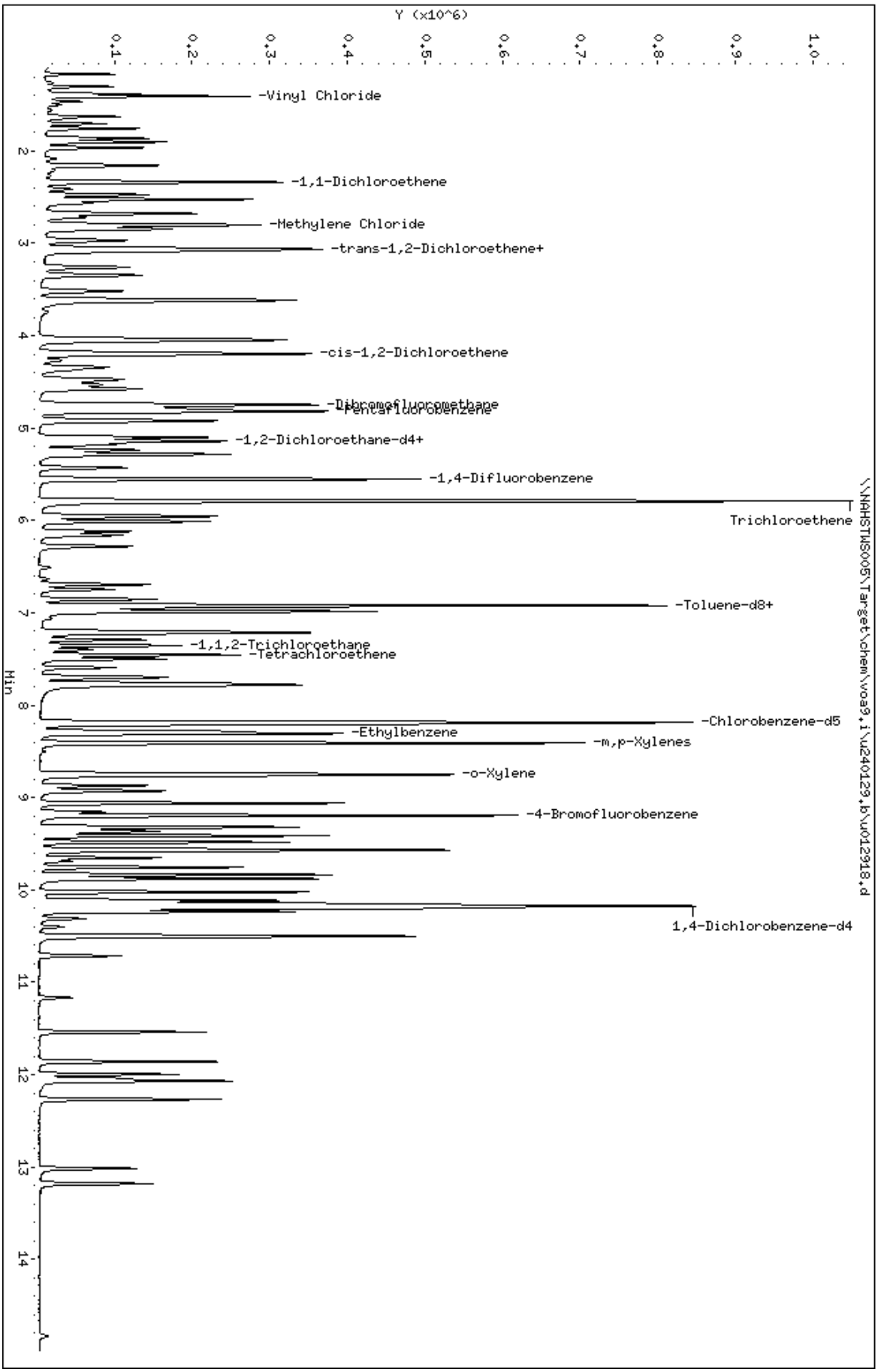
Name	Value	Description
DF	100.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.819	4.815	(1.000)	270576	50.0000	
$ 30 Dibromofluoromethane	113	4.751	4.748	(0.986)	140467	50.7416	50.74
$ 35 1,2-Dichloroethane-d4	65	5.100	5.096	(1.058)	141581	44.8619	44.86
* 36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	405567	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	404551	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	494206	53.0669	53.06
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	179379	50.8936	50.89
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	228921	50.0000	
5 Vinyl Chloride	62	1.381	1.382	(0.287)	79553	26.8295	2682.94
11 1,1-Dichloroethene	96	2.337	2.337	(0.485)	56568	27.1063	2710.62
17 Methylene Chloride	84	2.798	2.799	(0.581)	72324	27.3427	2734.27
20 trans-1,2-Dichloroethene	96	3.061	3.061	(0.635)	66672	26.7249	2672.49
27 cis-1,2-Dichloroethene	96	4.200	4.197	(0.872)	151586	45.3585	4535.85
38 Trichloroethene	130	5.790	5.790	(1.043)	357657	117.538	11753.76
53 1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	43649	19.4349	1943.49
56 Tetrachloroethene	164	7.458	7.458	(0.911)	59164	24.5039	2450.39
18 Methyl tert-butyl ether	73	3.083	3.083	(0.640)	166145	22.2185	2221.84
33 1,2-Dichloroethane	62	5.179	5.175	(0.933)	70624	17.8727	1787.26
37 Benzene	78	5.141	5.141	(0.926)	212908	19.2844	1928.44
50 Toluene	91	6.982	6.982	(0.853)	237428	21.0487	2104.86

61 Ethylbenzene	106	8.305	8.305 (1.015)	79792	20.7436	2074.36
62 m,p-Xylenes	106	8.410	8.407 (1.027)	205585	44.4539	4445.39

Data File: \\nahstws005\Target\chem\voa9.i\U240129.b\U012918.D Page 2
Report Date: 29-Jan-2024 15:24

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
63 o-Xylene	106	8.748	8.744	(1.069)	98933	20.8011	2080.10
M 95 Xylenes (total)	106				304518	64.8901	6489.01



Data File: \\NAHSTWS005\Target\chem\voa9,i\u240129,b\u012918,d
Date : 29-JAN-2024 15:07
Client ID: HS24011111-08MSD
Sample Info: HS24011111-08MSD;HS24011111-08MSD;3;;MSD
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9,i
Operator: FT
Column diameter: 0.18

Page 1

Data File : \\nahstws005\target\chem\voa9.i\u240129.b\u012918.d
Inj Date : 29-JAN-2024 15:07
InstruID : VOA9.i
LabSampID : HS24011111-08MSD

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240129.b\U012919.D Page 1
Report Date: 29-Jan-2024 15:45

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240129.b\U012919.D
Lab Smp Id: CCV-END Client Smp ID: CCV-END
Inj Date : 29-JAN-2024 15:30
Operator : FT Inst ID: VOA9.i
Smp Info : CCV-END;CCV-END;2;;;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240129.b\8260C.m
Meth Date : 29-Jan-2024 15:45 Firat.Tast Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 18 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 000bhatebtex.sub
Target Version: 4.14
Processing Host: NAHSTWS005

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

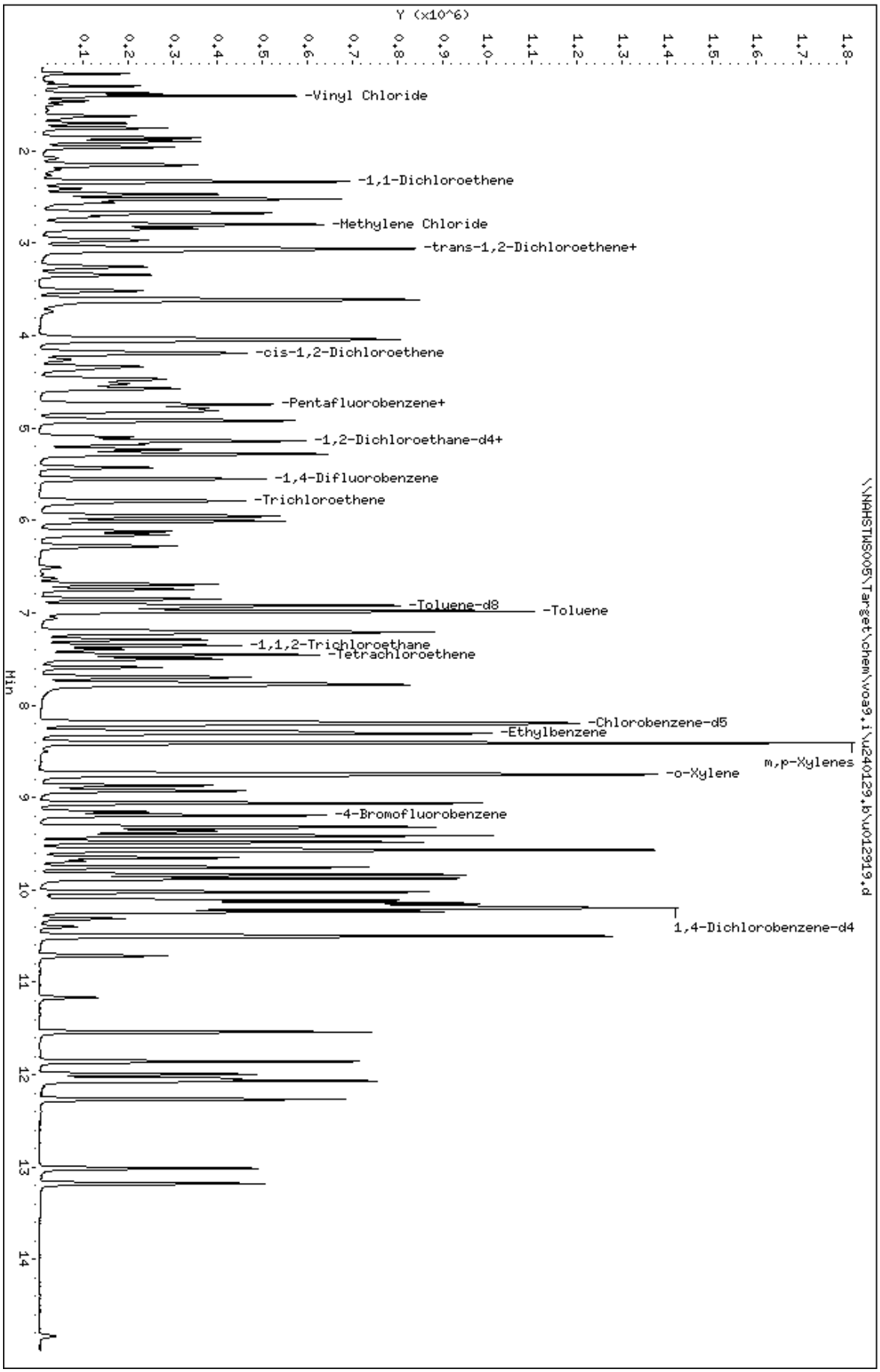
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.815	4.815	(1.000)	271059	50.0000	
$ 30 Dibromofluoromethane	113	4.748	4.748	(0.986)	135691	50.0000	48.89
$ 35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	134872	50.0000	42.76
* 36 1,4-Difluorobenzene	114	5.550	5.550	(1.000)	412703	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	424092	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	485887	50.0000	49.76
$ 69 4-Bromofluorobenzene	95	9.190	9.190	(1.123)	184734	50.0000	49.97
* 70 1,4-Dichlorobenzene-d4	152	10.168	10.168	(1.000)	234364	50.0000	
5 Vinyl Chloride	62	1.374	1.374	(0.285)	181166	50.0000	60.98
11 1,1-Dichloroethene	96	2.333	2.333	(0.485)	128500	50.0000	61.46
17 Methylene Chloride	84	2.791	2.791	(0.580)	165084	50.0000	62.63
20 trans-1,2-Dichloroethene	96	3.057	3.057	(0.635)	153895	50.0000	61.57
27 cis-1,2-Dichloroethene	96	4.197	4.197	(0.872)	155536	50.0000	46.45
38 Trichloroethene	130	5.786	5.786	(1.043)	161918	50.0000	52.29
53 1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	105060	50.0000	46.36
56 Tetrachloroethene	164	7.458	7.458	(0.911)	143836	50.0000	56.82
18 Methyl tert-butyl ether	73	3.079	3.079	(0.640)	400591	50.0000	53.47
33 1,2-Dichloroethane	62	5.175	5.175	(0.932)	171140	50.0000	42.56
37 Benzene	78	5.138	5.138	(0.926)	522577	50.0000	46.51
50 Toluene	91	6.978	6.978	(0.853)	582984	50.0000	49.30

61 Ethylbenzene	106	8.305	8.305 (1.015)	197815	50.0000	49.05
62 m,p-Xylenes	106	8.406	8.406 (1.027)	509982	100.000	105.19

Data File: \\nahstws005\Target\chem\voa9.i\U240129.b\U012919.D Page 2
Report Date: 29-Jan-2024 15:45

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
63 o-Xylene	106	8.744	8.744	(1.068)	250590	50.0000	50.25
M 95 Xylenes (total)	106				760572	150.000	159.26



Data File: \\NAHSTMS005\Target\chem\voa9.i\u240129.b\u012919.d
Date : 29-JAN-2024 15:30
Client ID: CCV-END
Sample Info: CCV-END,CCV-END,2,,,
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9.i
Operator: FT
Column diameter: 0.18

Data File : \\nahstws005\target\chem\voa9.i\u240129.b\u012919.d
Inj Date : 29-JAN-2024 15:30
InstruID : VOA9.i
LabSampID : CCV-END

NO MANUAL INTEGRATIONS

HS24011111-GCSEMI-RSK-175

ALS WO# HS24011111

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Form 1

Organic Analysis Data Sheet

Dissolved Gasses by Dissolved Gases by RSK-175

Workorder

HS24011111

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/30/2024

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

Form 1 - Organic Analysis Data Sheet

Client	Bhate Environmental Associates, Inc.	Workorder	
Project	LHAAP Site 16	HS24011111	

Dissolved Gasses by Dissolved Gases by RSK-175

16RW05-240119	Collected	Received	Matrix	Basis
HS24011111-07	01/19/24 10:40	01/20/24 10:20	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
Ethane	mg/L	0.00100	U	0.00014	0.00100	0.00100	1	01/23/24 15:03	FID-4_457054	025.D
Ethene	mg/L	0.00100	U	0.00023	0.00100	0.00100	1	01/23/24 15:03	FID-4_457054	025.D
Methane	mg/L	3.89		0.0214	0.100	0.100	200	01/23/24 15:35	FID-4_457054	026.D

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Form 3A

Matrix Spike/Spike Duplicate Recovery

Dissolved Gasses by Dissolved Gases by RSK-175

Workorder

HS24011111

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/30/2024

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

Form 3A - Matrix Spike/Spike Duplicate Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24011111

Dissolved Gasses by Dissolved Gases by RSK-175

SAMPLENUM HS24011040-03MS

BatchQC (HS24011040-03)				HS24011040-03MS				HS24011040-03MSD						
Spike Matrix Aqueous	Result Units mg/L			Run Date 01/23/24				Run Date 01/23/24						
Instrument ID FID4				Run Time 09:16				Run Time 09:26						
				Data File 006.D				Data File 007.D						
Analyte	%R Limits	DF	Sample Result	MS Result	Spike Added	%R	Q	MSD Result	Spike Added	%R	Q	RPD Limit	RPD	Q
Ethane	75-125	1	0	0.018447	0.0180	102		0.017462	0.0180	97		20	5.49	
Ethene	75-125	1	0.01439	0.024294	0.0168	59		0.024726	0.0168	62		20	1.76	
Methane	75-125	1	0.1721	0.173578	0.0096	16		0.173707	0.0096	17		20	0.0744	

Q - %Recovery / RPD Flag * - %Recovery / RPD Outside Limits OL - Outside Limits %R - %Recovery DF - Dilution Factor Amt - Amount (weight or volume)

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Form 3B

Laboratory Control Sample Recovery

Dissolved Gasses by Dissolved Gases by RSK-175

Workorder

HS24011111

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/30/2024

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

Form 3B - Laboratory Control Sample Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24011111

Dissolved Gasses by Dissolved Gases by RSK-175

SAMPLENUM LCS-240123

FID-4_457054			LCS-240123			LCSD-240123					
Spike Matrix Aqueous	Result Units mg/L		Run Date 01/23/24 Run Time 08:26			Run Date 01/23/24 Run Time 08:52					
Analyte	%Recovery Limits	Spike Added	LCS Result	%R	Q	LCSD Result	%R	Q	RPD Limit	RPD	Q
Ethane	75-125	0.01804	0.0196	108		0.0198	110		30	1.17	
Ethene	75-125	0.0168	0.0178	106		0.0177	105		30	0.751	
Methane	75-125	0.009647	0.00817	85		0.00842	87		30	3.01	

right solutions.
right partner.

Form 4

Method Blank Summary

Dissolved Gasses by Dissolved Gases by RSK-175

Workorder

HS24011111

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/30/2024

ALS Environmental–Houston Laboratory
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www.alsglobal.com

Form 4 - Method Blank Summary

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24011111

Dissolved Gasses by Dissolved Gases by RSK-175

METHOD BLANK	Matrix	Analysis Date	Analysis Batch	Inst ID
MBLK-240123	Aqueous	01/23/24 07:52	R457054	FID4

Client Sample ID	Lab Sample ID	Type	Analysis Date	Analysis Batch	Inst ID	FileID
LCS-240123	LCS-240123	LCS	01/23/24 08:26	R457054	FID4	003.D
LCSD-240123	LCSD-240123	LCSD	01/23/24 08:52	R457054	FID4	004.D
BatchQC	HS24011040-03MS	MS	01/23/24 09:16	R457054	FID4	006.D
BatchQC	HS24011040-03MSD	MSD	01/23/24 09:26	R457054	FID4	007.D
16RW05-240119	HS24011111-07	SAMP	01/23/24 15:03	R457054	FID4	025.D
16RW05-240119	HS24011111-07	SAMP	01/23/24 15:35	R457054	FID4	026.D

right solutions.
right partner.

Form 6

Initial Calibration Data

Dissolved Gasses by Dissolved Gases by RSK-175

Workorder

HS24011111

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/30/2024

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

INITIAL CALIBRATION DATA

Start Cal Date : 24-JAN-2017 09:06
End Cal Date : 24-JAN-2017 11:13
Quant Method : ESTD
Origin : Included
Target Version : 4.14
Integrator : Falcon
Method file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Last Edit : 04-Oct-2023 12:23 donna.broussard1

Calibration File Names:
Level 1: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\001.D
Level 2: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\002.D
Level 3: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\003.D
Level 4: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\004.D
Level 5: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\005.D
Level 6: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\006.D
Level 7: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\007.D

Compound	10.0000 Level 1	25.0000 Level 2	50.0000 Level 3	100.0000 Level 4	250.0000 Level 5	500.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	1000.0000 Level 7										
1 Methane	969	978	1020	881	961	931					
	1082						AVRG		974		6.55041
2 Ethene	536	567	565	516	665	426					
	829						AVRG		586		21.93197
3 Ethane	602	670	659	597	809	818					
	999						AVRG		736		19.88517
4 Propane	500	1279	2602	4785	18294	38286					
	96509						QUAD	0.97987	0.00153	-4.583e-00	0.99914

ALS Laboratory Group

INITIAL CALIBRATION DATA

Start Cal Date : 24-JAN-2017 09:06
End Cal Date : 24-JAN-2017 11:13
Quant Method : ESTD
Origin : Included
Target Version : 4.14
Integrator : Falcon
Method file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Last Edit : 04-Oct-2023 12:23 donna.broussard1

Compound	10.0000 Level 1	25.0000 Level 2	50.0000 Level 3	100.0000 Level 4	250.0000 Level 5	500.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	1000.0000 Level 7											
5 N-Butane	438 114164	936	2034	3864	18446	42817	QUAD	2.46870	0.00183	-5.537e-00	0.99808	
6 Pentane	115 488	3945	2080	950	501	412	AVRG		1213		112	<-
7 Hexane	+++++ +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	

ALS Laboratory Group

INITIAL CALIBRATION DATA

Start Cal Date : 24-JAN-2017 09:06
End Cal Date : 24-JAN-2017 11:13
Quant Method : ESTD
Origin : Included
Target Version : 4.14
Integrator : Falcon
Method file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Last Edit : 04-Oct-2023 12:23 donna.broussard1

Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Quad	Amt = b + m1*Rsp + m2*Rsp^2	Response

right solutions.
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Form 6I

Initial Calibration Verification (ICV)

Dissolved Gasses by Dissolved Gases by RSK-175

Workorder

HS24011111

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/30/2024

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 6I Initial Calibration Verification (ICV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24011111

RunID 008.D

Dissolved Gasses by Dissolved Gases by RSK-175

Sample Matrix LIQUID
Lab Smp Id ICV
Data Type GC DATA
File ID 008.D

Fraction GASES
Client Smp ID ICV
SampleType METHSPIKE
Inj Date 24-JAN-2017 1205

Compound	Conc Added	Conc Recovered	% Recovered	Limits	Q
Methane	9.65	9.60	99.5	75-125	
Ethene	16.8	19.1	114	75-125	
Ethane	18.0	19.7	109	75-125	
Propane	26.5	27.2	103	75-125	
N-Butane	35.0	36.0	103	75-125	

right solutions.
right partner.

Form 7

Continuing Calibration Verification (CCV)

Dissolved Gasses by Dissolved Gases by RSK-175

Workorder

HS24011111

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/30/2024

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Phone (281) 530-5656 Fax (281) 530-5887
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Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24011111

RunID 001.D

Dissolved Gasses by Dissolved Gases by RSK-175

Instrument ID FID-4.i
Lab File ID 001.D
Analysis Type WATER
Lab Sample ID RSK-CCV

Injection Date 23-JAN-2024 0739
ICAL Date(s) 24-JAN-2017, 24-JAN-2017
ICAL Times 09:06, 11:13
Quant Type ESTD

Compound	RRF / Conc	RF250	CCV RRF250	Min RRF	%D / %DRIFT	Max %D / %DRIFT	CURVE TYPE	Q
Methane	975	793	793	0.010	18.7	20.0	Averaged	
Ethene	586	608	608	0.010	-3.748	20.0	Averaged	
Ethane	719	782	782	0.010	-8.653	20.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24011111

RunID 011.D

Dissolved Gasses by Dissolved Gases by RSK-175

Instrument ID FID-4.i
Lab File ID 011.D
Analysis Type WATER
Lab Sample ID RSK-CCV

Injection Date 23-JAN-2024 1025
ICAL Date(s) 24-JAN-2017, 24-JAN-2017
ICAL Times 09:06, 11:13
Quant Type ESTD

Compound	RRF / Conc	RF250	CCV RRF250	Min RRF	%D / %DRIFT	Max %D / %DRIFT	CURVE TYPE	Q
Methane	975	920	920	0.010	5.59	20.0	Averaged	
Ethene	586	617	617	0.010	-5.339	20.0	Averaged	
Ethane	719	831	831	0.010	-15.562	20.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24011111

RunID 022.D

Dissolved Gasses by Dissolved Gases by RSK-175

Instrument ID FID-4.i
Lab File ID 022.D
Analysis Type WATER
Lab Sample ID RSK-CCV

Injection Date 23-JAN-2024 1405
ICAL Date(s) 24-JAN-2017, 24-JAN-2017
ICAL Times 09:06, 11:13
Quant Type ESTD

Compound	RRF / Conc	RF250	CCV RRF250	Min RRF	%D / %DRIFT	Max %D / %DRIFT	CURVE TYPE	Q
Methane	975	844	844	0.010	13.4	20.0	Averaged	
Ethene	586	611	611	0.010	-4.305	20.0	Averaged	
Ethane	719	785	785	0.010	-9.115	20.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24011111

RunID 027.D

Dissolved Gasses by Dissolved Gases by RSK-175

Instrument ID FID-4.i
Lab File ID 027.D
Analysis Type WATER
Lab Sample ID RSK-CCV

Injection Date 23-JAN-2024 1548
ICAL Date(s) 24-JAN-2017, 24-JAN-2017
ICAL Times 09:06, 11:13
Quant Type ESTD

Compound	RRF / Conc	RF250	CCV RRF250	Min RRF	%D / %DRIFT	Max %D / %DRIFT	CURVE TYPE	Q
Methane	975	854	854	0.010	12.5	20.0	Averaged	
Ethene	586	607	607	0.010	-3.647	20.0	Averaged	
Ethane	719	824	824	0.010	-14.499	20.0	Averaged	

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Analysis Run Log

Dissolved Gasses by Dissolved Gases by RSK-175

Workorder

HS24011111

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/30/2024

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

Form 13 - Analysis Run Log

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder **HS24011111**

RUNID FID-4-322102

Dissolved Gasses by Dissolved Gases by RSK-175

Run ID FID-4_322102 **Start Date** 01/24/17 **EndDate** 01/24/17

Inj. Time	Client Sample ID	Type	Lab Sample ID	File ID	Analysis Date	DF
09:06	ICAL1	ICAL1	ICAL1	001.D	01/24/17	1
09:30	ICAL2	ICAL2	ICAL2	002.D	01/24/17	1
09:59	ICAL3	ICAL3	ICAL3	003.D	01/24/17	1
10:15	ICAL4	ICAL4	ICAL4	004.D	01/24/17	1
10:39	ICAL5	ICAL5	ICAL5	005.D	01/24/17	1
10:57	ICAL6	ICAL6	ICAL6	006.D	01/24/17	1
11:13	ICAL7	ICAL7	ICAL7	007.D	01/24/17	1
12:05	ICV	ICV	ICV	008.D	01/24/17	1

Form 13 - Analysis Run Log

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder **HS24011111**

Dissolved Gasses by Dissolved Gases by RSK-175

RUNID FID-4-457054

Run ID FID-4_457054 **Start Date** 01/23/24 **EndDate** 01/23/24

Inj. Time	Client Sample ID	Type	Lab Sample ID	File ID	Analysis Date	DF
07:39	RSK-CCV	CCV	RSK-CCV	001.D	01/23/24	1
07:52	MBLK-240123	MBLK	MBLK-240123	002.D	01/23/24	1
08:26	LCS-240123	LCS	LCS-240123	003.D	01/23/24	1
08:52	LCSD-240123	LCSD	LCSD-240123	004.D	01/23/24	1
09:08	HS24011040-03	SAMP	ZZZZZZZZZZ	005.D	01/23/24	1
09:16	HS24011040-03MS	MS	ZZZZZZMS	006.D	01/23/24	1
09:26	HS24011040-03MSD	MSD	ZZZZZZMSD	007.D	01/23/24	1
09:37	HS24011040-01	SAMP	ZZZZZZZZZZ	008.D	01/23/24	1
09:46	HS24011040-02	SAMP	ZZZZZZZZZZ	009.D	01/23/24	1
10:12	HS24011040-10	SAMP	ZZZZZZZZZZ	010.D	01/23/24	1
10:25	RSK-CCV	CCV	RSK-CCV	011.D	01/23/24	1
10:58	HS24011040-12	SAMP	ZZZZZZZZZZ	012.D	01/23/24	1
11:08	HS24011040-03	SAMP	ZZZZZZZZZZ	013.D	01/23/24	10
11:19	HS24011040-01	SAMP	ZZZZZZZZZZ	014.D	01/23/24	100
11:30	HS24011040-02	SAMP	ZZZZZZZZZZ	015.D	01/23/24	100
11:53	HS24011040-10	SAMP	ZZZZZZZZZZ	016.D	01/23/24	50
12:05	HS24011040-12	SAMP	ZZZZZZZZZZ	017.D	01/23/24	10
12:34	HS24010986-08	SAMP	ZZZZZZZZZZ	018.D	01/23/24	1
12:47	HS24011010-03	SAMP	ZZZZZZZZZZ	019.D	01/23/24	1
12:56	HS24011010-04	SAMP	ZZZZZZZZZZ	020.D	01/23/24	1
13:08	HS24011010-05	SAMP	ZZZZZZZZZZ	021.D	01/23/24	1
14:05	RSK-CCV	CCV	RSK-CCV	022.D	01/23/24	1
14:16	HS24011010-06	SAMP	ZZZZZZZZZZ	023.D	01/23/24	1
14:25	HS24011010-07	SAMP	ZZZZZZZZZZ	024.D	01/23/24	1
15:03	HS24011111-07	SAMP	16RW05-240119	025.D	01/23/24	1
15:35	HS24011111-07	SAMP	16RW05-240119	026.D	01/23/24	200
15:48	RSK-CCV	CCV	RSK-CCV	027.D	01/23/24	1

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RawData

Dissolved Gasses by Dissolved Gases by RSK-175

Workorder

HS24011111

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/30/2024

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

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\001.D Page 1
Report Date: 28-Sep-2022 10:00

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\001.D
Lab Smp Id: ICAL1 Client Smp ID: ICAL1
Inj Date : 24-JAN-2017 09:06
Operator : JA Inst ID: FID-4.i
Smp Info : ICAL1;ICAL1;;;
Misc Info :
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Meth Date : 28-Sep-2022 10:00 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 11:13 Cal File: 007.D
Als bottle: 1 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Methane	1.043	1.043	0.000	374	0.38600	0.383(a)
2 Ethene	1.553	1.553	0.000	361	0.67400	0.615(a)
3 Ethane	1.716	1.716	0.000	435	0.72200	0.590(a)
4 Propane	4.073	4.073	0.000	500	1.05900	1.743
5 N-Butane	7.640	7.640	0.000	438	1.39800	3.271

QC Flag Legend

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

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\001.D

Date : 24-JAN-2017 09:06

Client ID: ICAL1

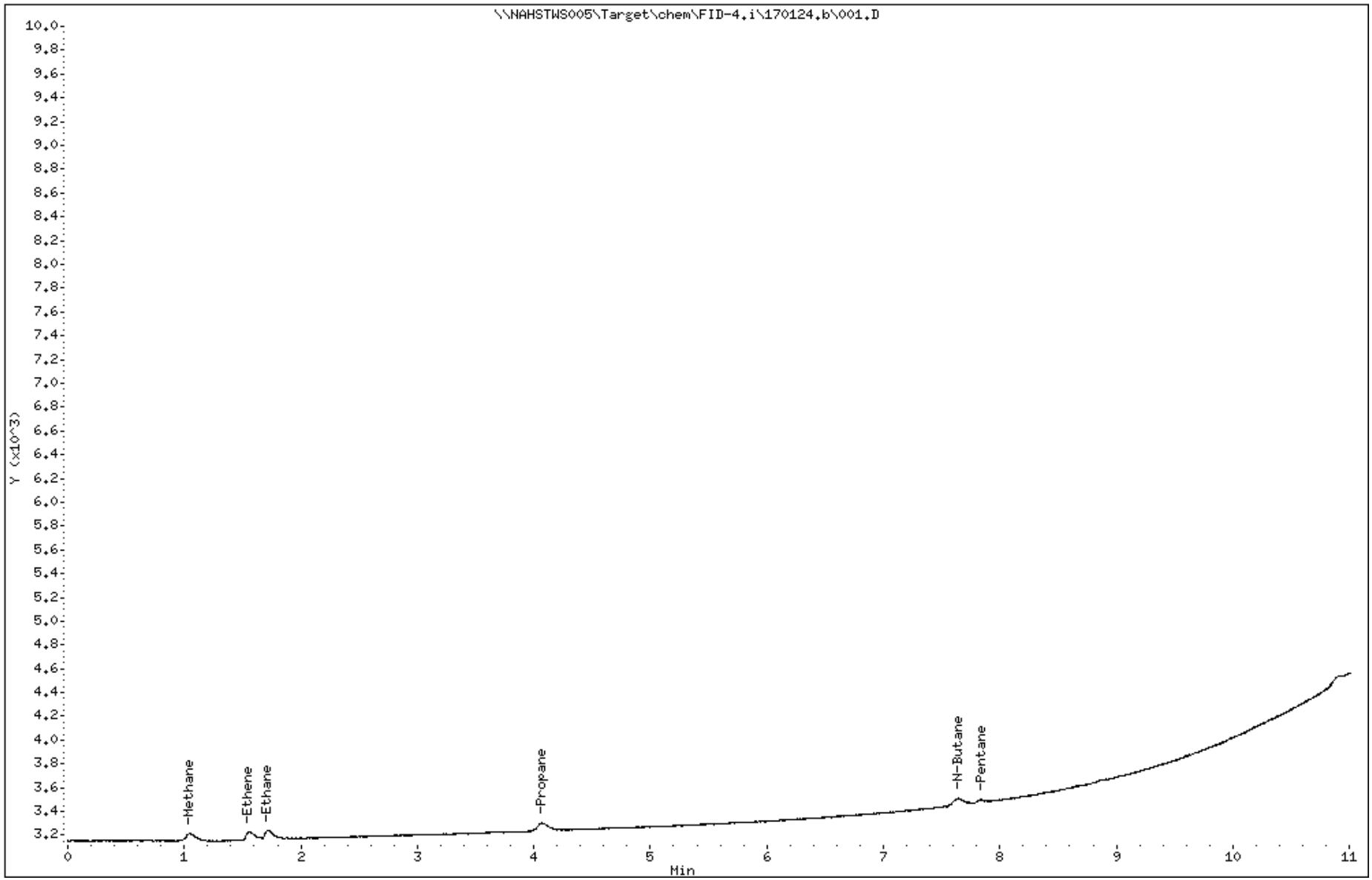
Instrument: FID-4.i

Sample Info: ICAL1;ICAL1;;;

Operator: JA

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\001.D
Inj Date : 24-JAN-2017 09:06
InstruID : FID-4.i
LabSampID : ICAL1

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\002.D Page 1
Report Date: 28-Sep-2022 10:00

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\002.D
Lab Smp Id: ICAL2 Client Smp ID: ICAL2
Inj Date : 24-JAN-2017 09:30
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL2;ICAL2;;;
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Meth Date : 28-Sep-2022 10:00 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 09:06 Cal File: 001.D
Als bottle: 2 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Methane	1.023	1.023	0.000	944	0.96500	0.968
2 Ethene	1.560	1.560	0.000	956	1.68500	1.630
3 Ethane	1.723	1.723	0.000	1209	1.80400	1.641
4 Propane	4.123	4.123	0.000	1279	2.64600	2.927
5 N-Butane	7.716	7.716	0.000	936	3.49600	4.180

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\002.D

Page 1

Date : 24-JAN-2017 09:30

Client ID: ICAL2

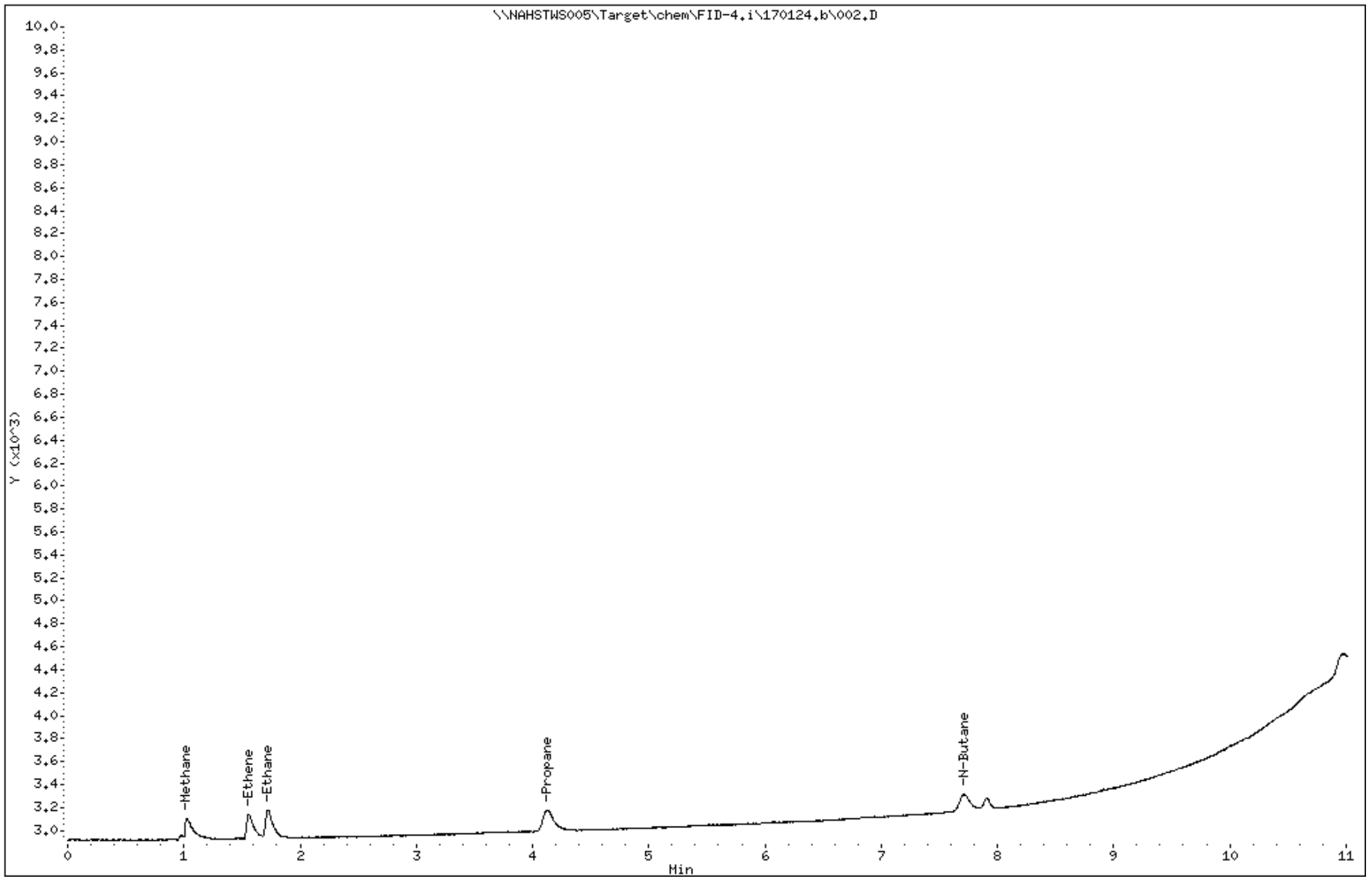
Instrument: FID-4.i

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

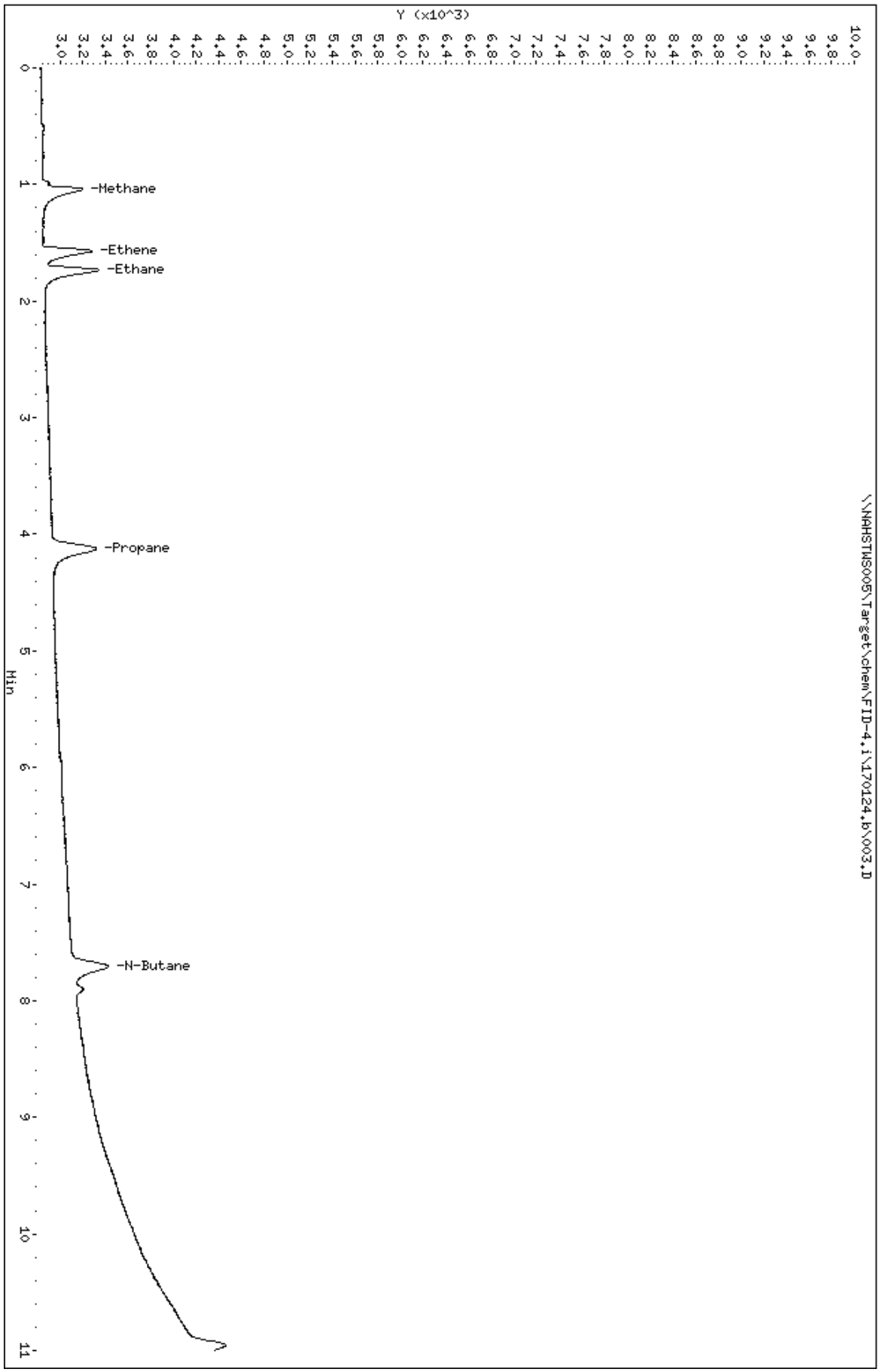
Data file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\003.D
Lab Smp Id: ICAL3 Client Smp ID: ICAL3
Inj Date : 24-JAN-2017 09:59
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL3;ICAL3;;;
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Meth Date : 28-Sep-2022 10:00 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
Sample Info: ICAL3;ICAL3;;;
Column phase: Rtx-PLOT

Instrument: FID-4,i
Operator: MA
Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\003.D
Inj Date : 24-JAN-2017 09:59
InstruID : FID-4.i
LabSampID : ICAL3

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\004.D Page 1
Report Date: 28-Sep-2022 10:02

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\004.D
Lab Smp Id: ICAL4 Client Smp ID: ICAL4
Inj Date : 24-JAN-2017 10:15
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL4;ICAL4;;;
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Meth Date : 28-Sep-2022 10:02 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 11:13 Cal File: 007.D
Als bottle: 4 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

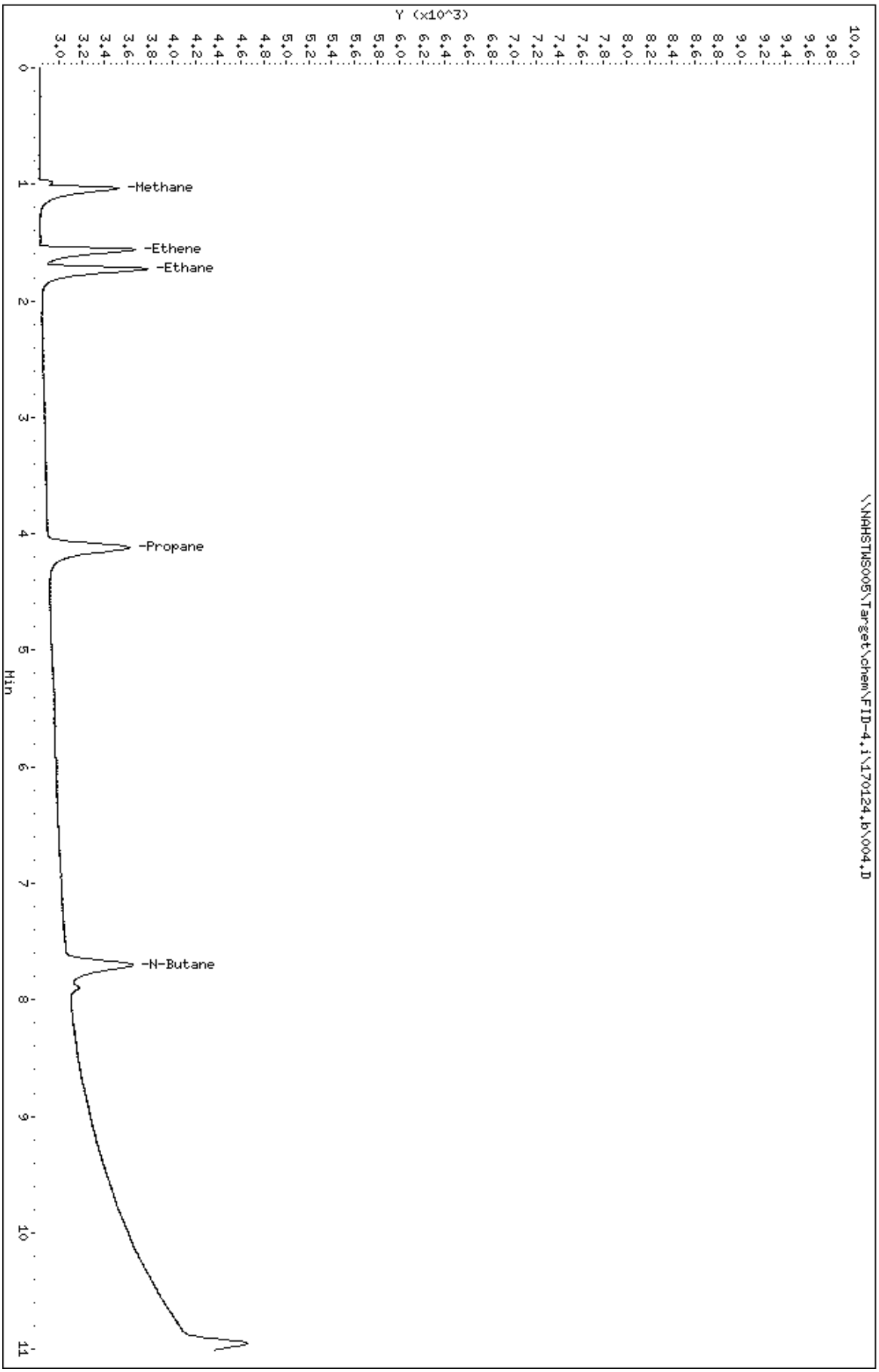
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Methane	1.033	1.033	0.000	3399	3.85900	3.488
2 Ethene	1.563	1.563	0.000	3478	6.74000	5.932
3 Ethane	1.726	1.726	0.000	4310	7.21700	5.853
4 Propane	4.120	4.120	0.000	4785	10.5850	8.190
5 N-Butane	7.703	7.703	0.000	3864	13.9820	9.473(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4,i\170124,b\004,D
Date : 24-JAN-2017 10:15
Client ID: ICAL4
Sample Info: ICAL4;ICAL4;;;
Column phase: Rtx-PLOT

Instrument: FID-4,i
Operator: MA
Column diameter: 0.53



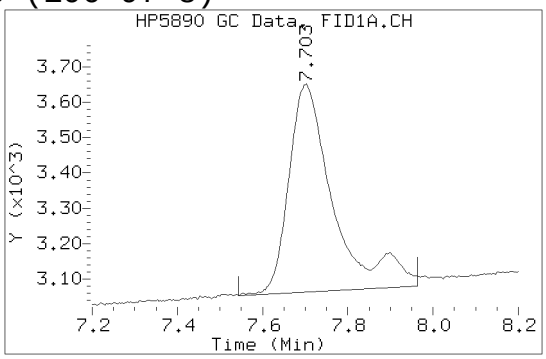
Data File : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\004.D
Inj Date : 24-JAN-2017 10:15
InstruID : FID-4.i
LabSampID : ICAL4

N-Butane (106-97-8)

Reason Code:

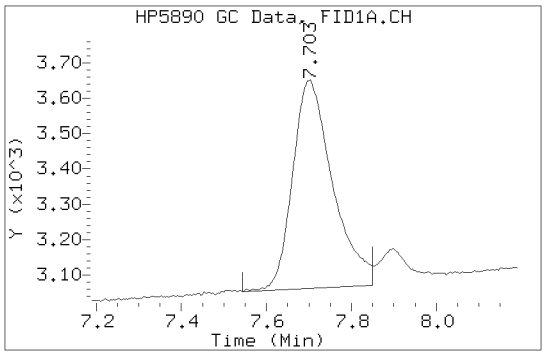
BEFORE

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

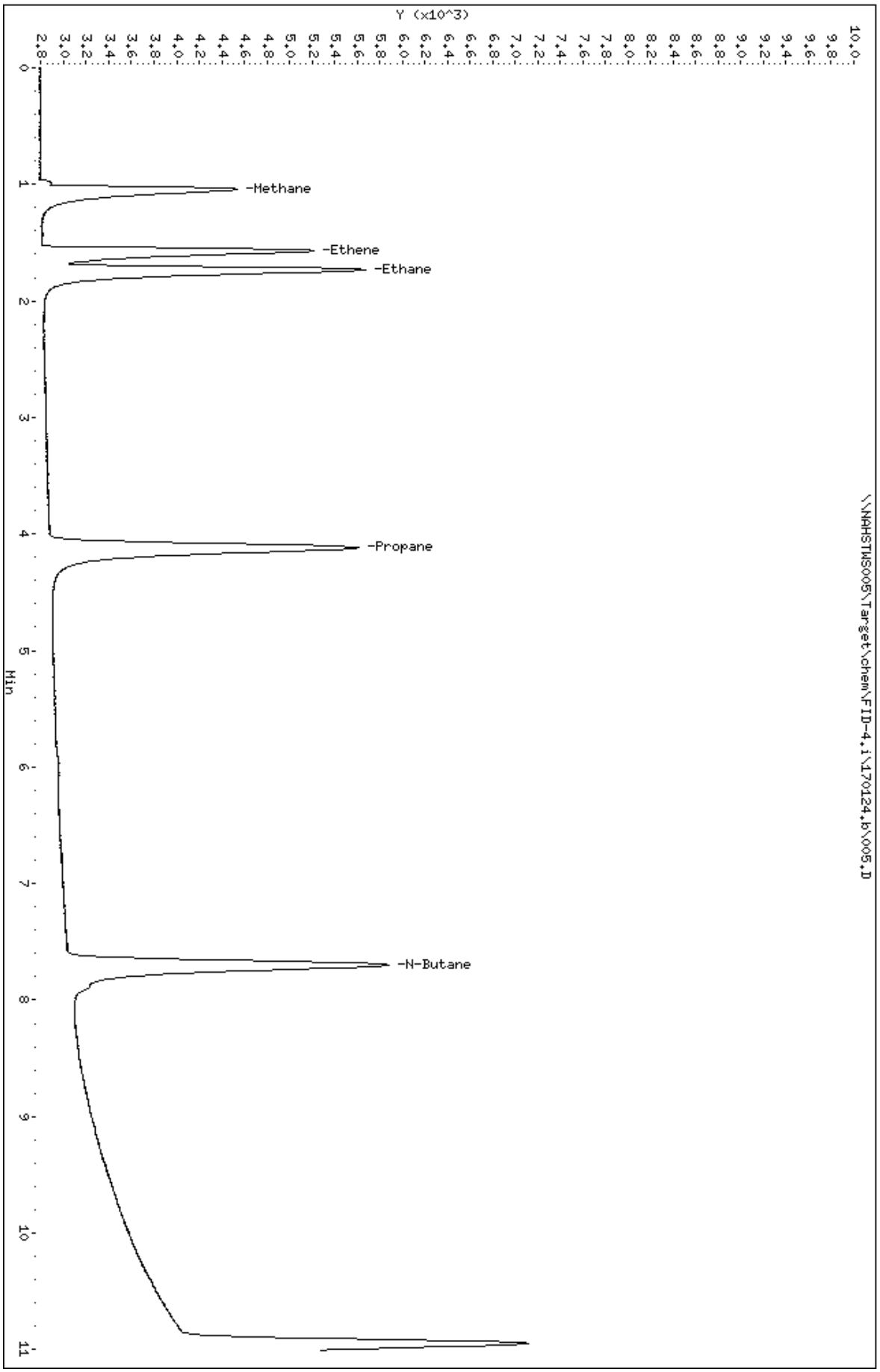
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Methane	1.043	1.043	0.000	9268	9.64700	9.511
2 Ethene	1.570	1.570	0.000	11210	16.8500	19.121
3 Ethane	1.733	1.733	0.000	14588	18.0430	19.811
4 Propane	4.120	4.120	0.000	18294	26.4630	27.415
5 N-Butane	7.700	7.700	0.000	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
Sample Info: ICAL5;ICAL5;;;
Column phase: Rtx-PLOT

Instrument: FID-4.i
Operator: MA
Column diameter: 0.53



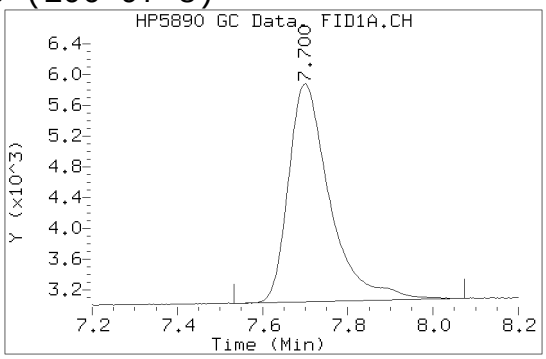
Data File : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\005.D
Inj Date : 24-JAN-2017 10:39
InstruID : FID-4.i
LabSampID : ICAL5

N-Butane (106-97-8)

Reason Code:

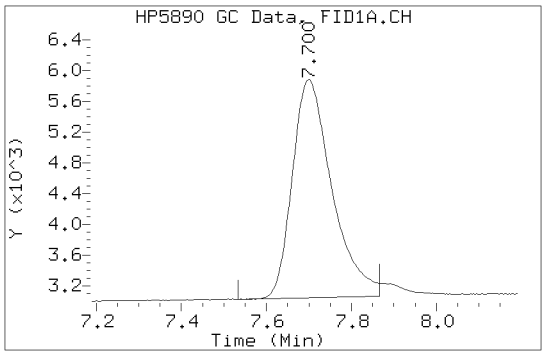
BEFORE

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

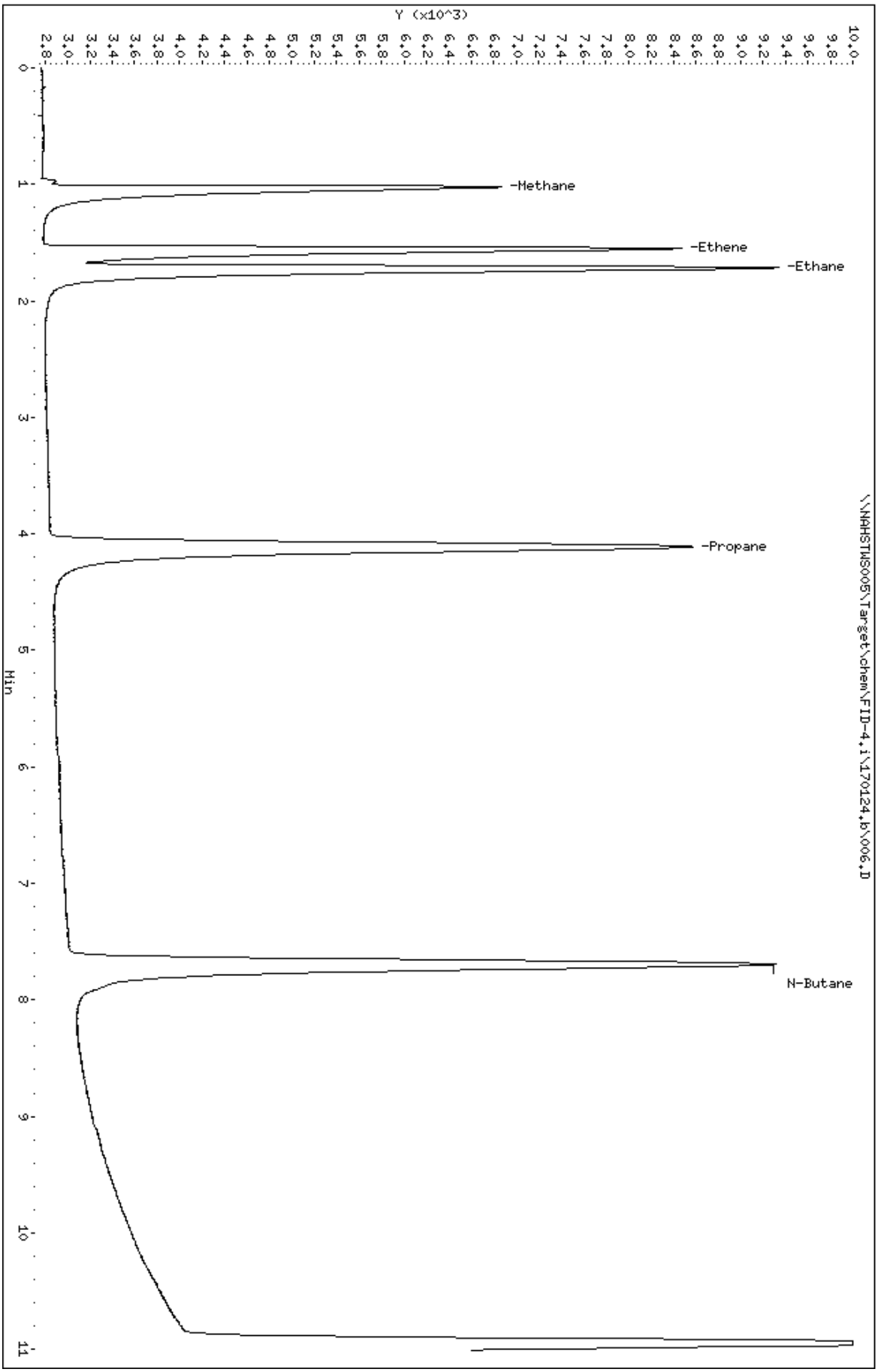
ALS Laboratory Group

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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Date : 24-JAN-2017 10:57
Client ID: ICAL6
Sample Info: ICAL6;ICAL6;;;
Column phase: Rtx-PLOT
Instrument: FID-4,i
Operator: MA
Column diameter: 0.53
Page 1
Y (x10^3)
-Methane
-Ethene
-Ethane
-Propane
N-Butane
Min
\\NAHSTWS005\Target\chem\FID-4,i\170124,b\006,D

Data File : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\006.D
Inj Date : 24-JAN-2017 10:57
InstruID : FID-4.i
LabSampID : ICAL6

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\007.D Page 1
Report Date: 28-Sep-2022 10:00

ALS Laboratory Group

Dissolved Gases Analysis

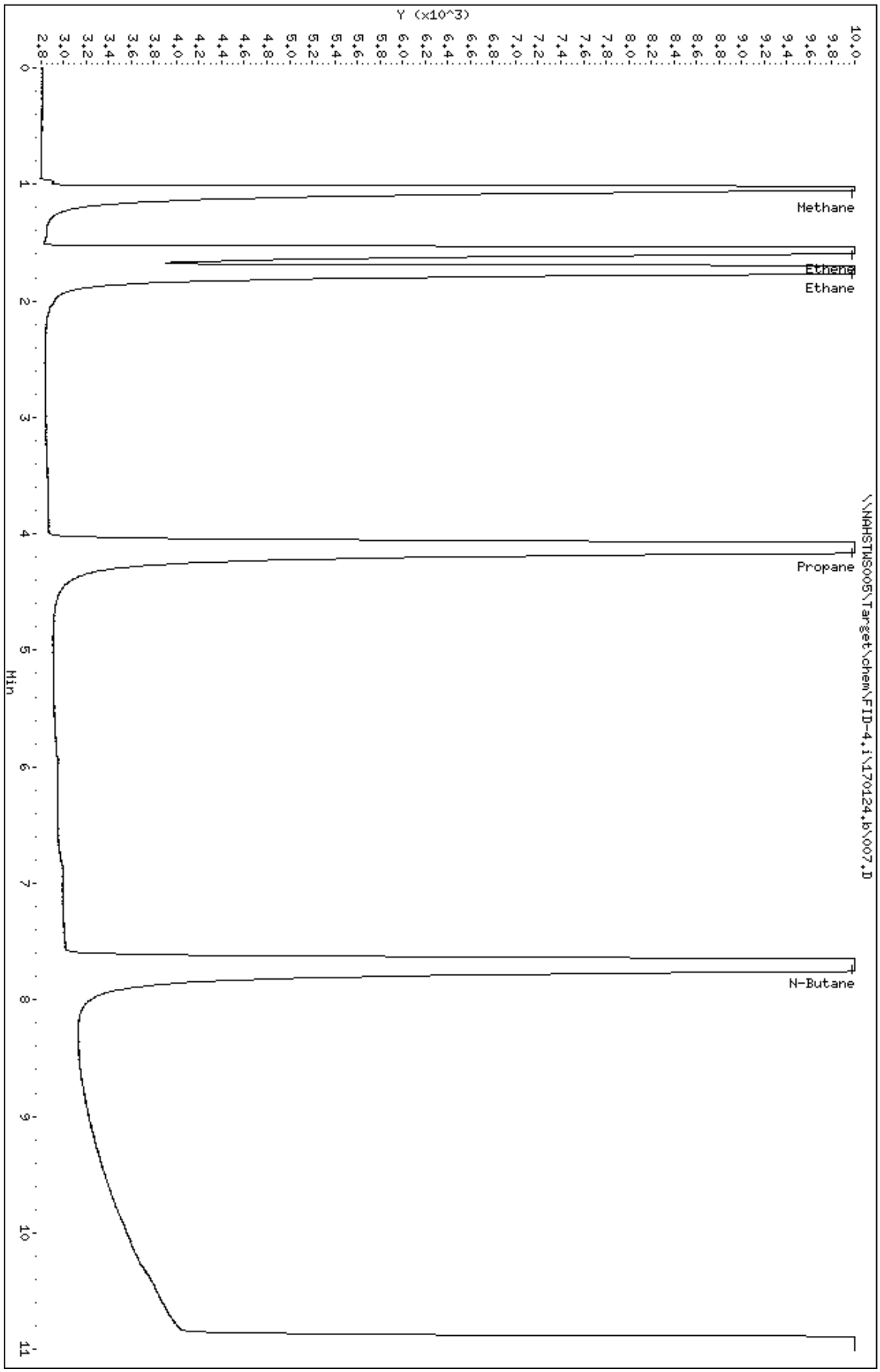
Data file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\007.D
Lab Smp Id: ICAL7 Client Smp ID: ICAL7
Inj Date : 24-JAN-2017 11:13
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL7;ICAL7;;;
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Meth Date : 28-Sep-2022 10:00 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 10:57 Cal File: 006.D
Als bottle: 7 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Methane	1.030	1.030	0.000	41736	38.5880	42.833(A)
2 Ethene	1.556	1.556	0.000	55865	67.4000	95.291(A)
3 Ethane	1.723	1.723	0.000	72124	72.1720	97.951(A)
4 Propane	4.113	4.113	0.000	96509	105.852	105.844
5 N-Butane	7.690	7.690	0.000	114164	139.821	139.707

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.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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
\\NAHSTWS005\Target\chem\FID-4,i\170124,b\007,D
Min

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

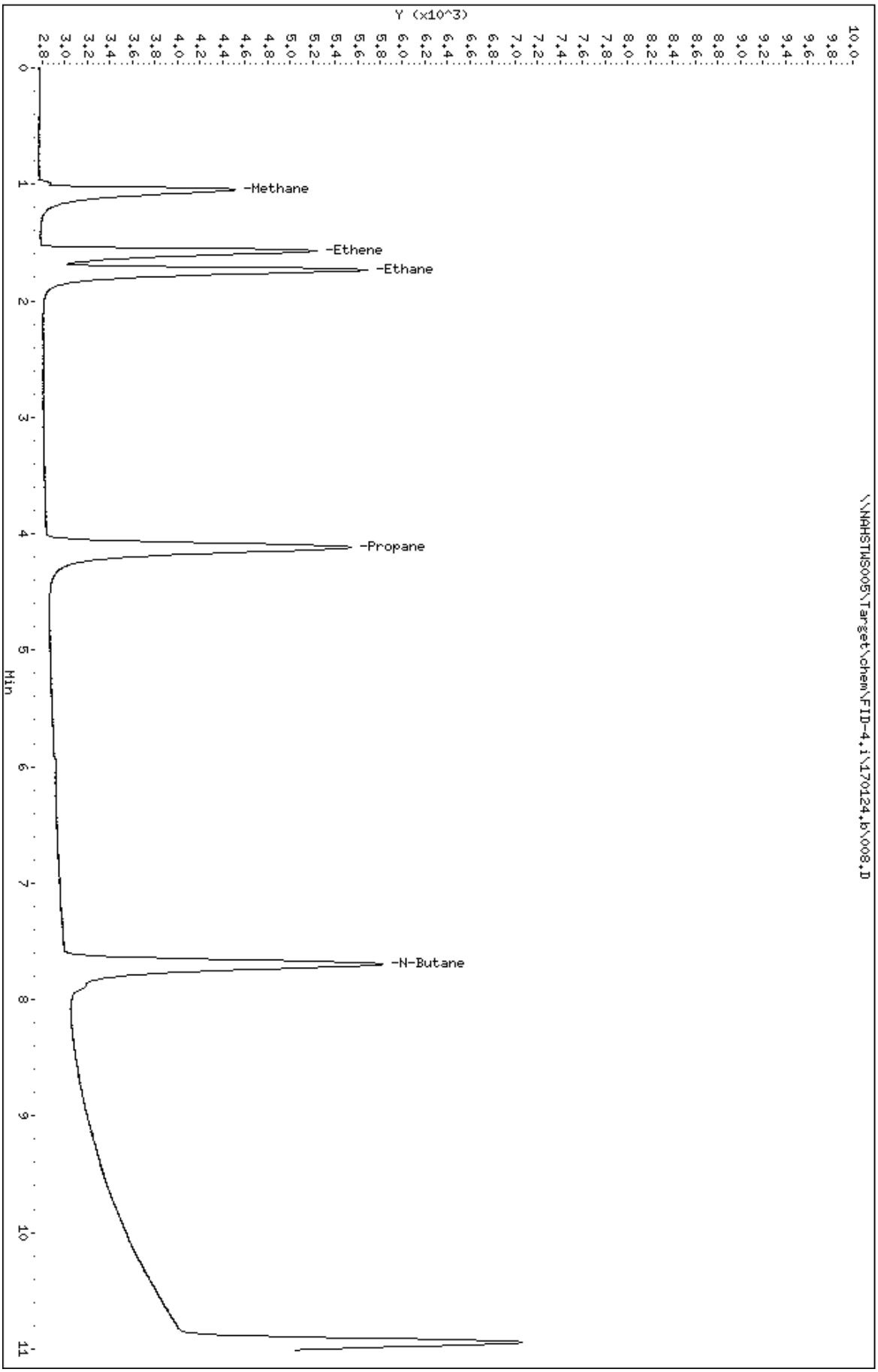
ALS Laboratory Group

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

					CONCENTRATIONS	
					ON-COLUMN	FINAL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	1.046	1.030	0.016	9352	9.59792	9.597
2 Ethene	1.573	1.556	0.017	11192	19.0906	19.090
3 Ethane	1.736	1.723	0.013	14474	19.6571	19.657
4 Propane	4.116	4.113	0.003	18164	27.2381	27.238
5 N-Butane	7.696	7.690	0.006	19425	36.0103	36.010


Data File: \\NAHSTWS005\Target\chem\FID-4,i\170124,b\008,D
Date : 24-JAN-2017 12:05
Client ID: ICV
Sample Info: ICV;ICV;;;
Column phase: Rtx-PLOT
Instrument: FID-4,i
Operator: MA
Column diameter: 0.53
Page 1
Y (x10^3)
-Methane
-Ethene
-Ethane
-Propane
-N-Butane
Min
\\NAHSTWS005\Target\chem\FID-4,i\170124,b\008,D

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.

RawData

Dissolved Gasses by Dissolved Gases by RSK-175

Workorder

HS24011111

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/30/2024

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

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240123.b\001.D Page 1
Report Date: 23-Jan-2024 07:50

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\001.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 23-JAN-2024 07:39
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\240123.b\RSKNI3.m
Meth Date : 23-Jan-2024 07:48 elona.hasa 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: NAHSTW7025

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	7646	9.64700	7.842
2 Ethene	0.636	0.636	0.000	10240	16.8500	17.481
3 Ethane	0.700	0.700	0.000	14105	18.0430	19.604(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240123.b\001.D

Date : 23-JAN-2024 07:39

Client ID: RSK-CCV

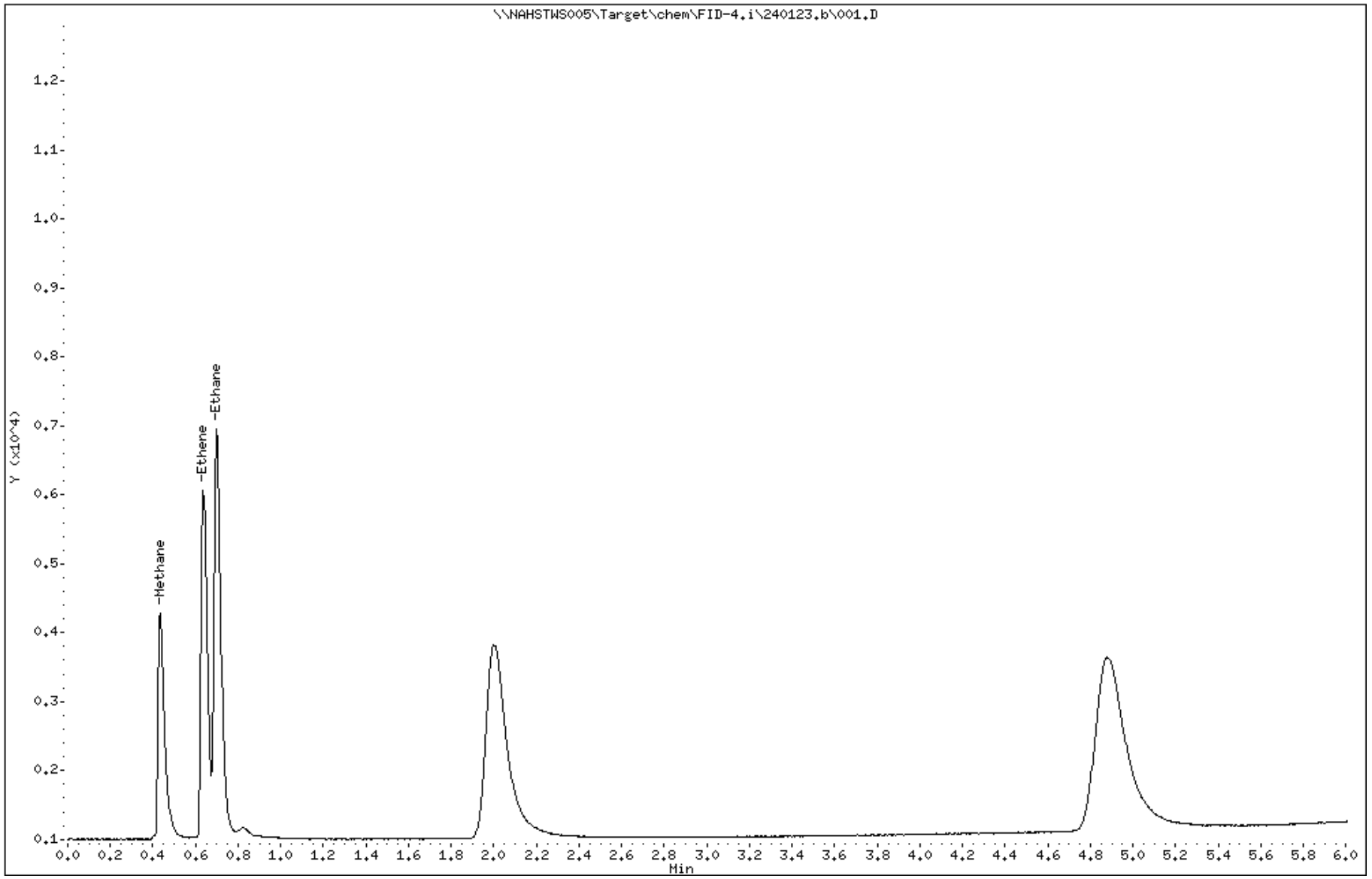
Instrument: FID-4.i

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

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



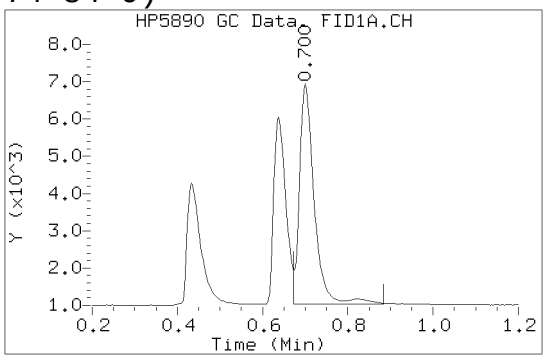
Data File : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\001.D
Inj Date : 23-JAN-2024 07:39
InstruID : FID-4.i
LabSampID : RSK-CCV

Ethane (74-84-0)

Reason Code:

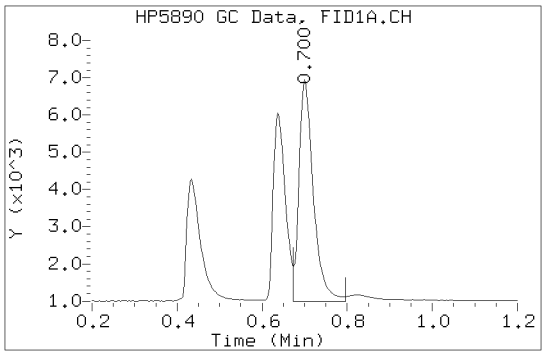
BEFORE

MASS
44
AREA
14254
HEIGHT
5922
23-Jan-2024
07:46
ALSHS
Server



AFTER

MASS
44
AREA
14105
HEIGHT
5953
23-Jan-2024
07:50
ALSHS
Server



Data File: \\NAHSTWS005\Target\chem\FID-4.i\240123.b\002.D Page 1
Report Date: 23-Jan-2024 09:05

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\002.D
Lab Smp Id: MBLK-240123 Client Smp ID: MBLK-240123
Inj Date : 23-JAN-2024 07:52
Operator : PL Inst ID: FID-4.i
Smp Info : MBLK-240123;MBLK-240123;3;;BLANK
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\RSKNI3.m
Meth Date : 23-Jan-2024 07:48 elona.hasa 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: NAHSTW7025

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\240123.b\002.D

Date : 23-JAN-2024 07:52

Client ID: MBLK-240123

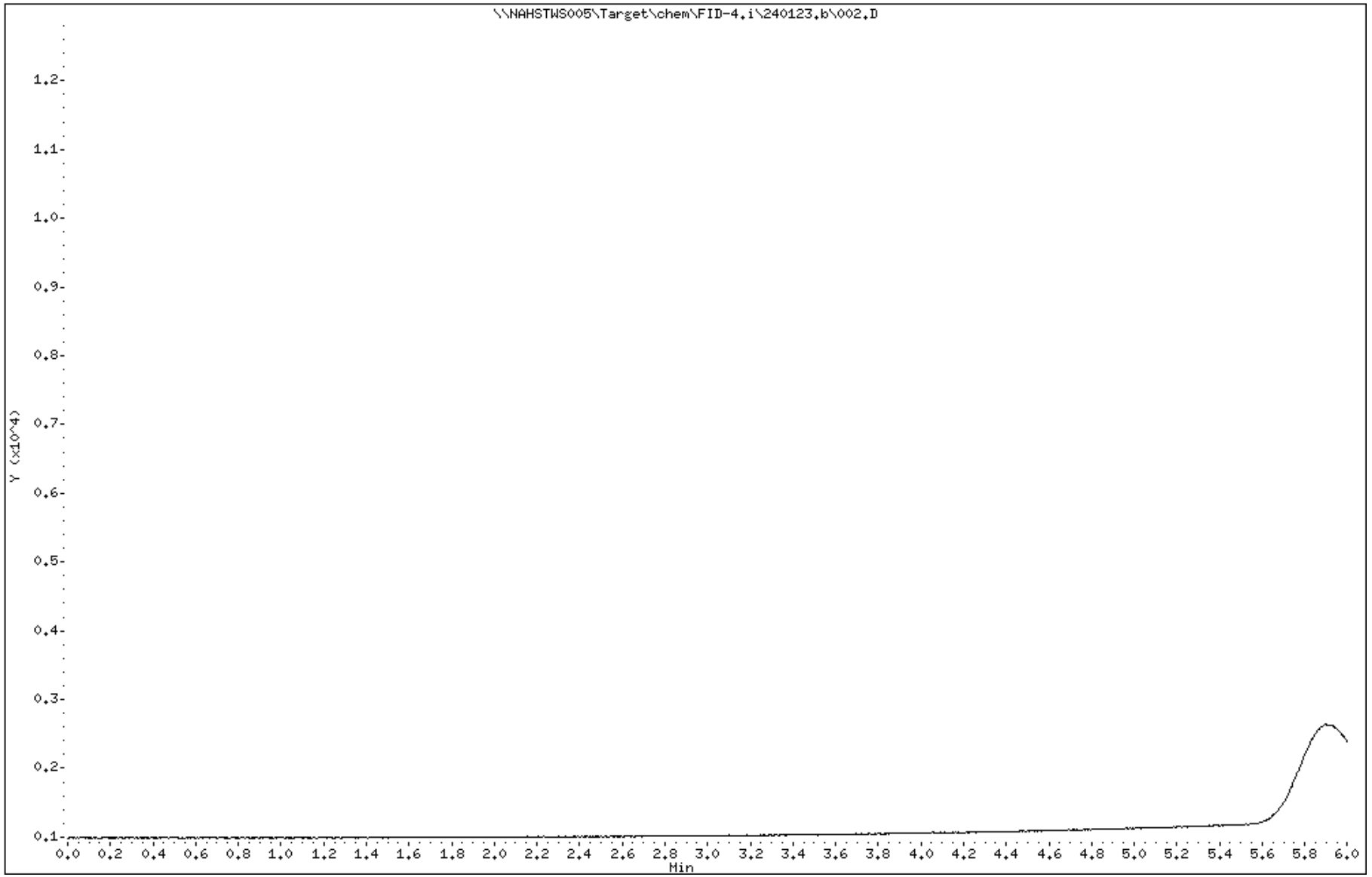
Instrument: FID-4.i

Sample Info: MBLK-240123;MBLK-240123;3;;BLANK

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\002.D
Inj Date : 23-JAN-2024 07:52
InstruID : FID-4.i
LabSampID : MBLK-240123

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240123.b\003.D Page 1
Report Date: 23-Jan-2024 09:06

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\003.D
Lab Smp Id: LCS-240123 Client Smp ID: LCS-240123
Inj Date : 23-JAN-2024 08:26
Operator : PL Inst ID: FID-4.i
Smp Info : LCS-240123;LCS-240123;3;;LCS
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\RSKNI3.m
Meth Date : 23-Jan-2024 07:48 elona.hasa 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: NAHSTW7025

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.433	0.433	0.000	7965	8.16929	8.169(M)
2 Ethene	0.640	0.636	0.004	10425	17.7974	17.797(M)
3 Ethane	0.700	0.700	0.000	14078	19.5666	19.566(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\fid-4.i\240123.b\003.d

Date : 23-JAN-2024 08:26

Client ID: LCS-240123

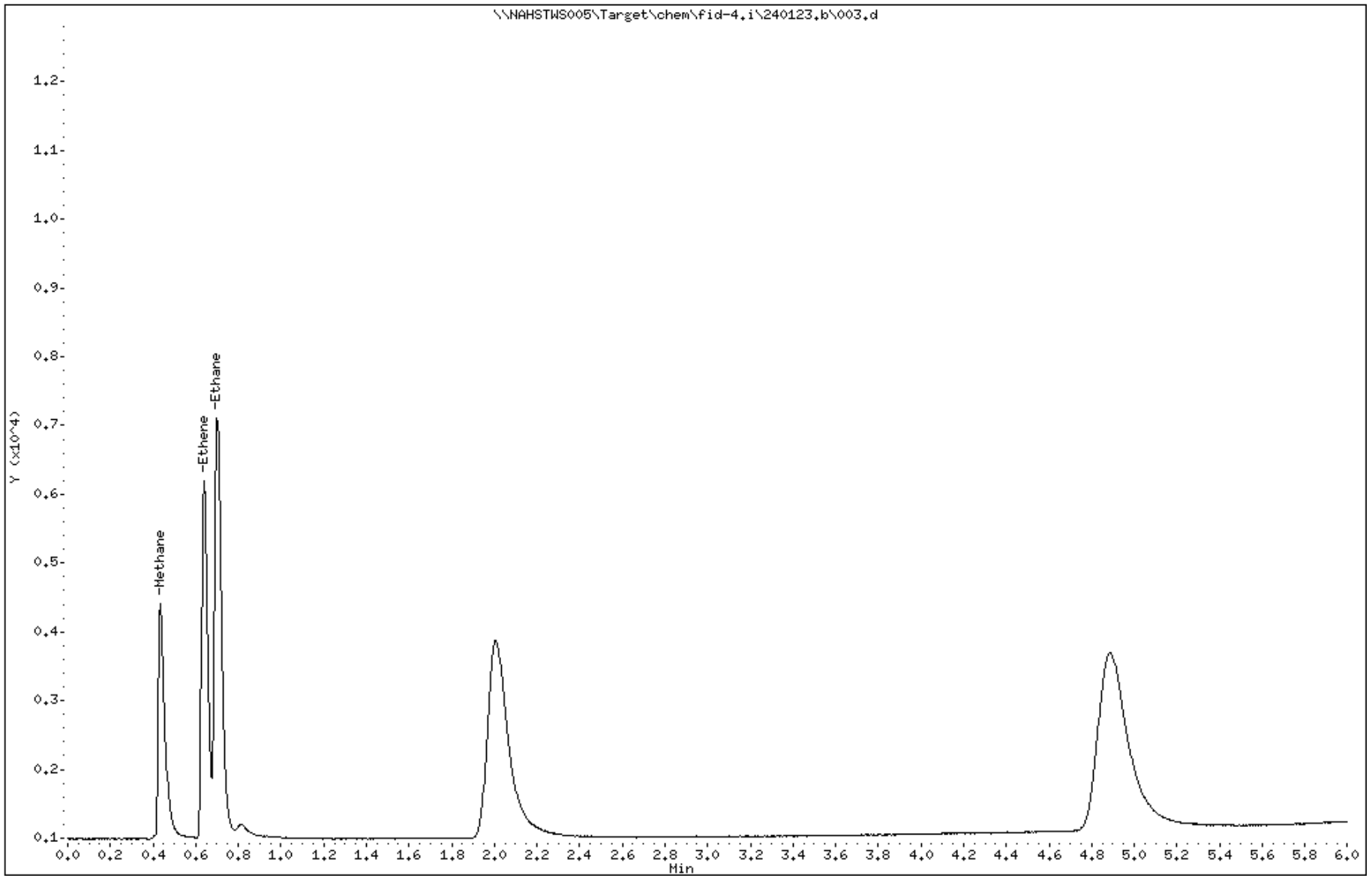
Instrument: FID-4.i

Sample Info: LCS-240123;LCS-240123;3;;LCS

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



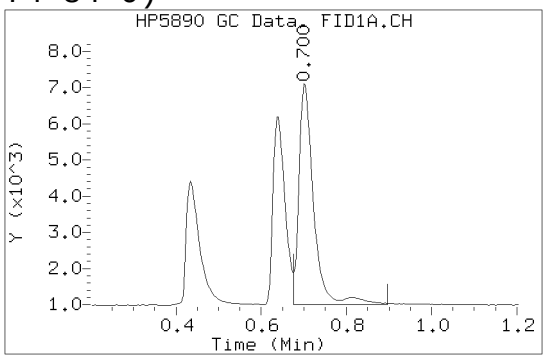
Data File : \\nahstws005\target\chem\fid-4.i\240123.b\003.d
Inj Date : 23-JAN-2024 08:26
InstruID : FID-4.i
LabSampID : LCS-240123

Ethane (74-84-0)

Reason Code:

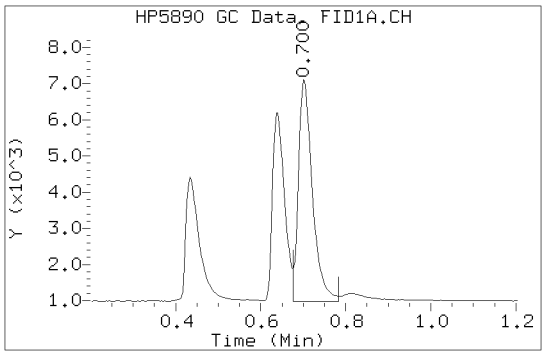
BEFORE

MASS
44
AREA
14604
HEIGHT
6104
23-Jan-2024
08:34
ALSHS
Server



AFTER

MASS
44
AREA
14078
HEIGHT
6126
24-Jan-2024
09:54
ALSHS
Server

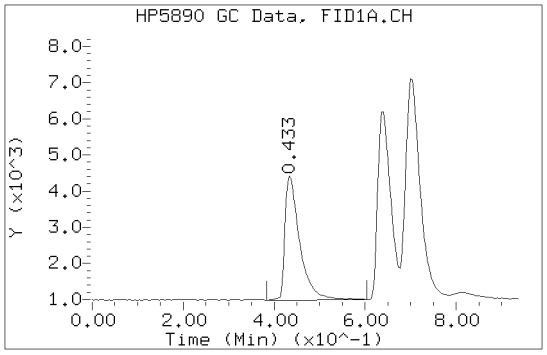


Methane (74-82-8)

Reason Code:

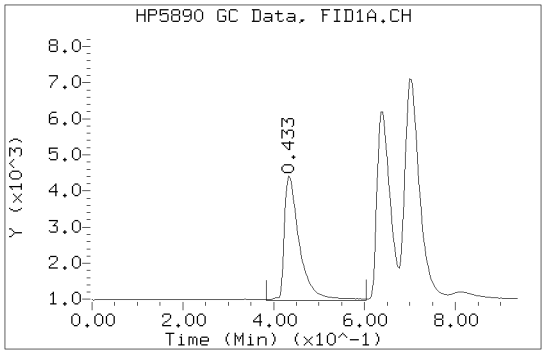
BEFORE

MASS
100
AREA
0
HEIGHT
0
23-Jan-2024
08:34
ALSHS
Server



AFTER

MASS
100
AREA
7965
HEIGHT
3441
24-Jan-2024
09:54
ALSHS
Server

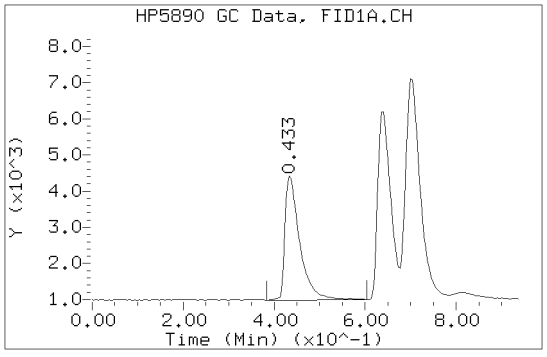


Ethene (74-85-1)

Reason Code:

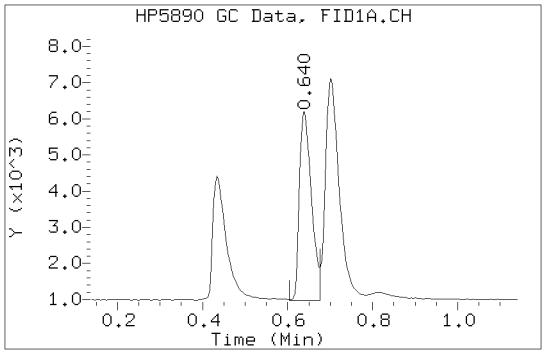
BEFORE

MASS
100
AREA
0
HEIGHT
0
23-Jan-2024
08:34
ALSHS
Server



AFTER

MASS
100
AREA
10425
HEIGHT
5214
24-Jan-2024
09:54
ALSHS
Server



Data File: \\NAHSTWS005\Target\chem\FID-4.i\240123.b\004.D Page 1
Report Date: 23-Jan-2024 09:06

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\004.D
Lab Smp Id: LCSD-240123 Client Smp ID: LCSD-240123
Inj Date : 23-JAN-2024 08:52
Operator : PL Inst ID: FID-4.i
Smp Info : LCSD-240123;LCSD-240123;3;;LCSD
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\RSKNI3.m
Meth Date : 23-Jan-2024 07:48 elona.hasa 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: NAHSTW7025

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.436	0.433	0.003	8208	8.41853	8.418(M)
2 Ethene	0.640	0.636	0.004	10347	17.6642	17.664(M)
3 Ethane	0.703	0.700	0.003	14244	19.7974	19.797(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\fid-4.i\240123.b\004.d

Date : 23-JAN-2024 08:52

Client ID: LCSD-240123

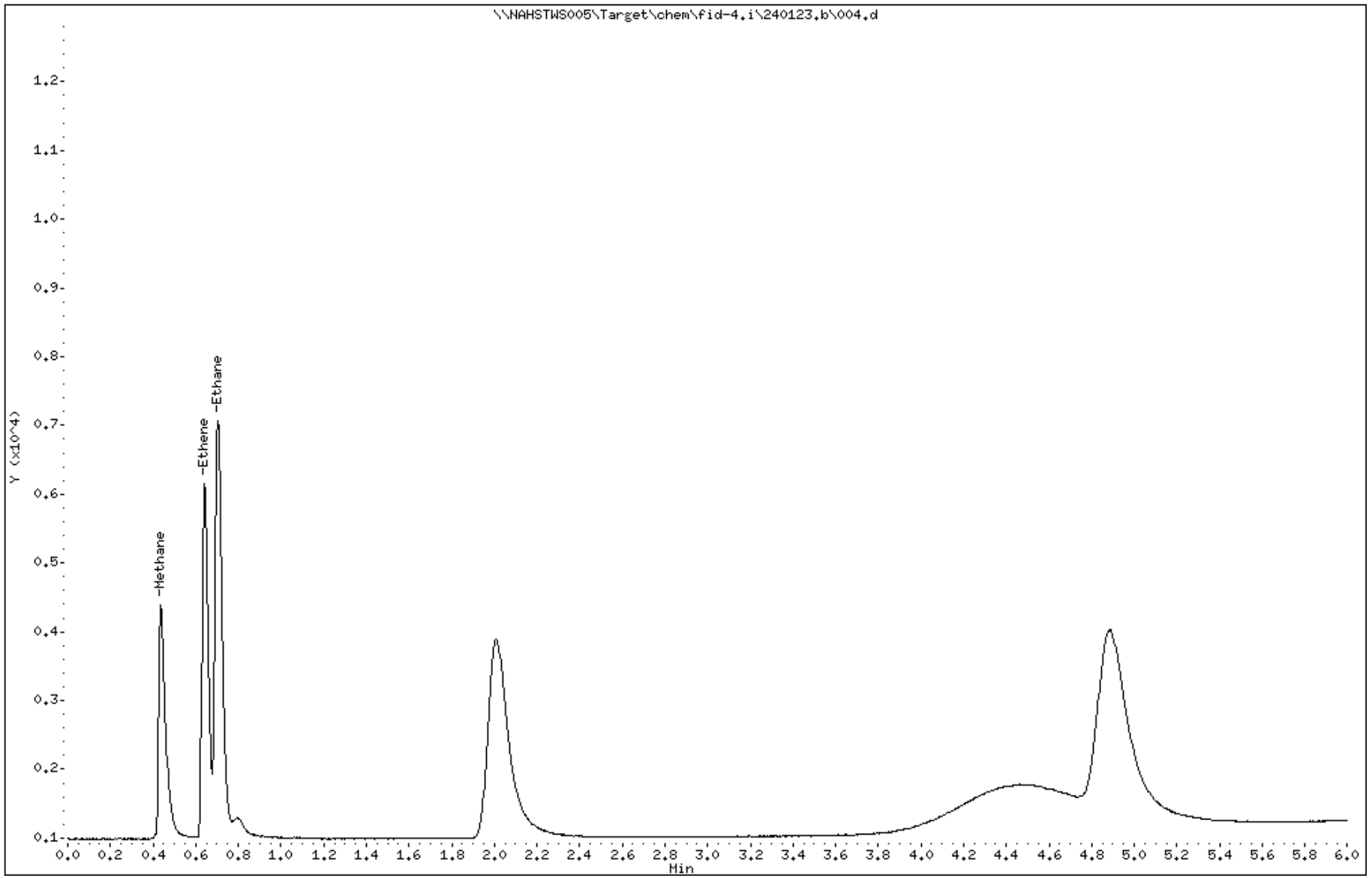
Instrument: FID-4.i

Sample Info: LCSD-240123;LCSD-240123;3;;LCSD

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



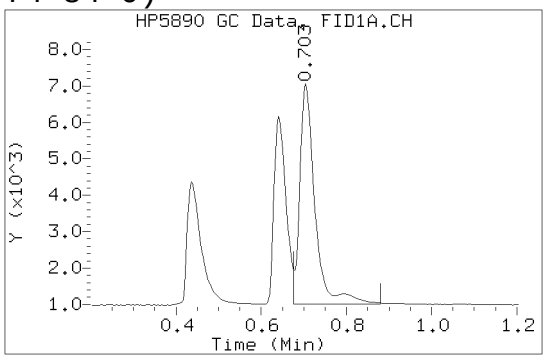
Data File : \\nahstws005\target\chem\fid-4.i\240123.b\004.d
Inj Date : 23-JAN-2024 08:52
InstruID : FID-4.i
LabSampID : LCSD-240123

Ethane (74-84-0)

Reason Code:

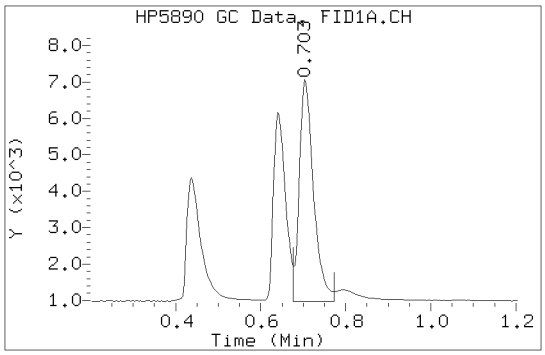
BEFORE

MASS
44
AREA
14929
HEIGHT
6052
23-Jan-2024
09:00
ALSHS
Server



AFTER

MASS
44
AREA
14244
HEIGHT
6084
24-Jan-2024
09:54
ALSHS
Server

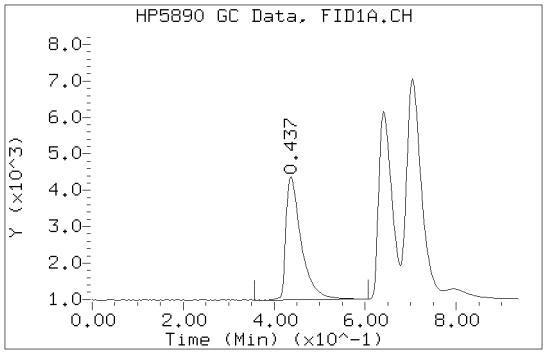


Methane (74-82-8)

Reason Code:

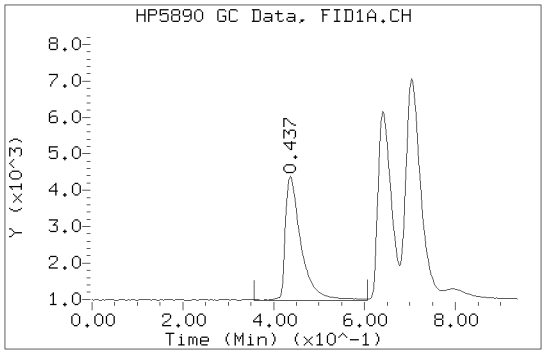
BEFORE

MASS
100
AREA
0
HEIGHT
0
23-Jan-2024
09:00
ALSHS
Server



AFTER

MASS
100
AREA
8208
HEIGHT
3406
24-Jan-2024
09:54
ALSHS
Server

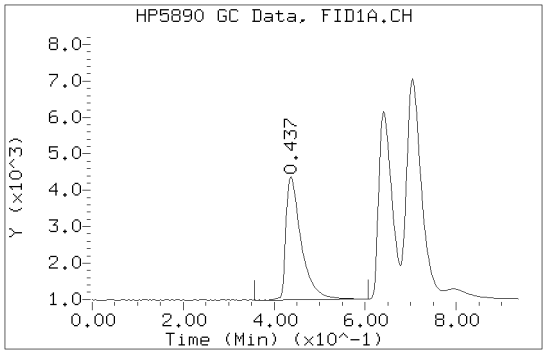


Ethene (74-85-1)

Reason Code:

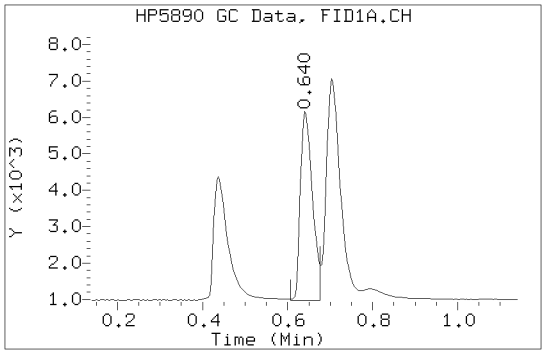
BEFORE

MASS
100
AREA
0
HEIGHT
0
23-Jan-2024
09:00
ALSHS
Server



AFTER

MASS
100
AREA
10347
HEIGHT
5181
24-Jan-2024
09:54
ALSHS
Server



Data File: \\NAHSTWS005\Target\chem\FID-4.i\240123.b\006.D Page 1
Report Date: 23-Jan-2024 16:10

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\006.D
Lab Smp Id: HS24011040-03MS Client Smp ID: HS24011040-03MS
Inj Date : 23-JAN-2024 09:16
Operator : PL Inst ID: FID-4.i
Smp Info : HS24011040-03MS;HS24011040-03MS
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\RSKNI3.m
Meth Date : 23-Jan-2024 16:06 elona.hasa Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 6 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7025

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

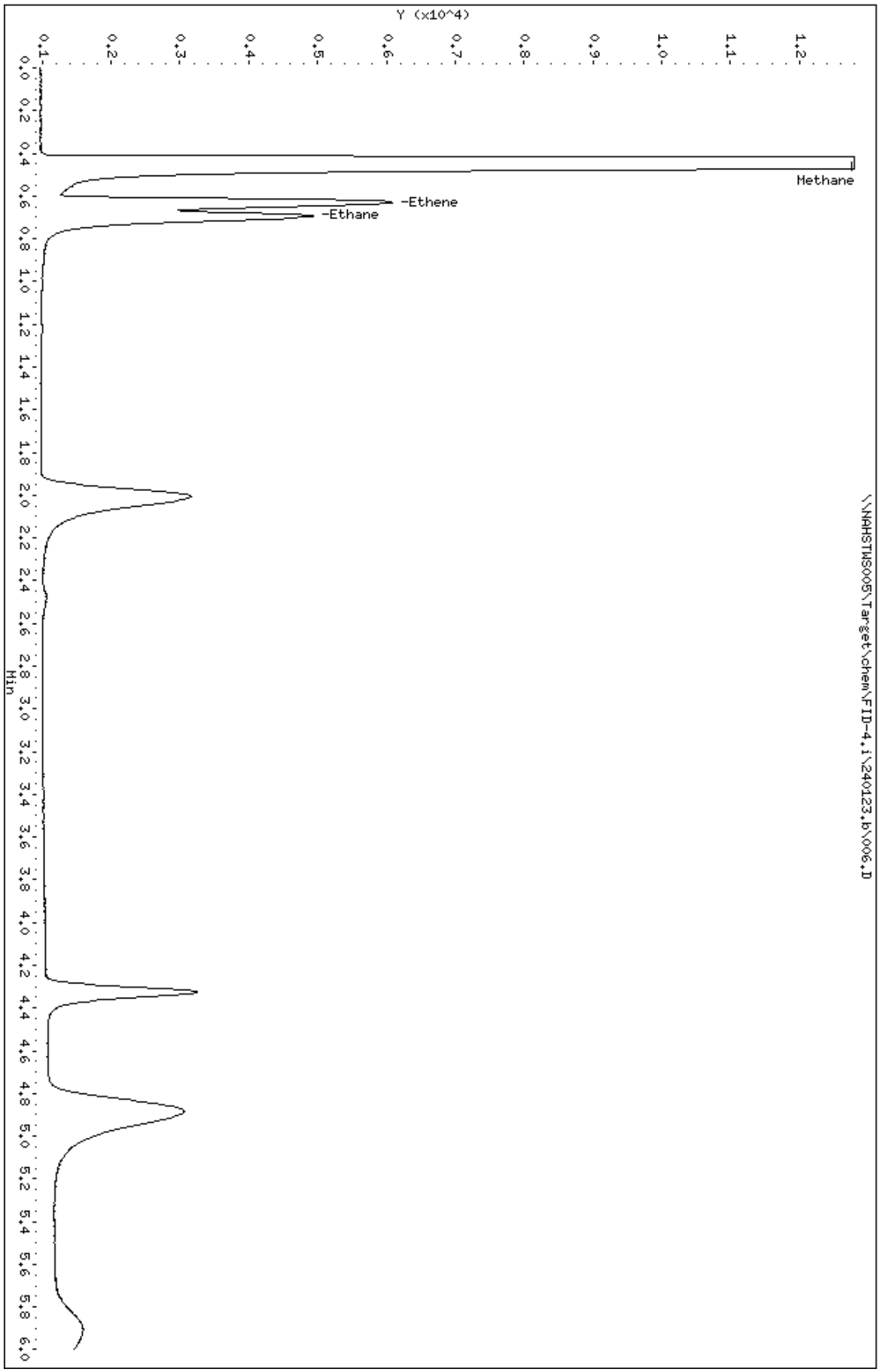
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.433	0.436	-0.003	169039	173.375	173.374(ARM)
2 Ethene	0.630	0.640	-0.010	14093	24.0593	24.059(RM)
3 Ethane	0.693	0.703	-0.010	12997	18.0642	18.064(M)

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\240123.b\006.D
Date : 23-JAN-2024 09:16
Client ID: HS24011040-03MS
Sample Info: HS24011040-03MS;HS24011040-03MS
Column phase: Rtx-PLOT

Instrument: FID-4.i
Operator: PL
Column diameter: 0.53

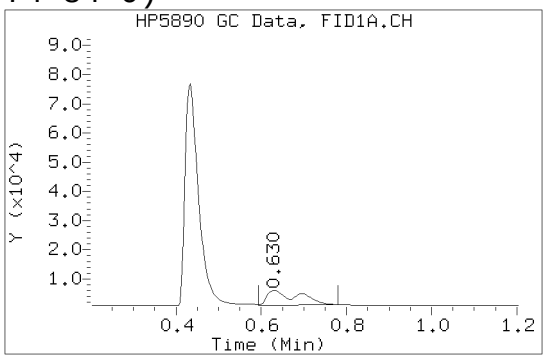


Data File : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\006.D
Inj Date : 23-JAN-2024 09:16
InstruID : FID-4.i
LabSampID : HS24011040-03MS

Ethane (74-84-0)

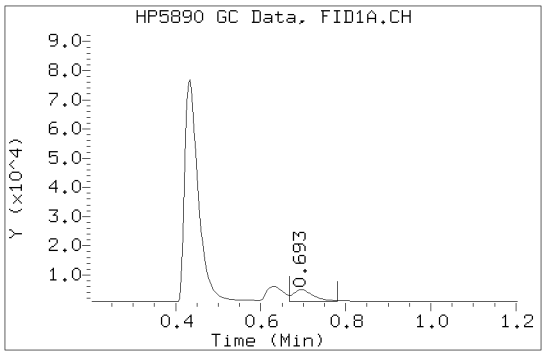
BEFORE

MASS
44
AREA
25724
HEIGHT
5012
23-Jan-2024
09:24
ALSHS
Server



AFTER

MASS
44
AREA
12997
HEIGHT
3938
23-Jan-2024
16:10
ALSHS
Server

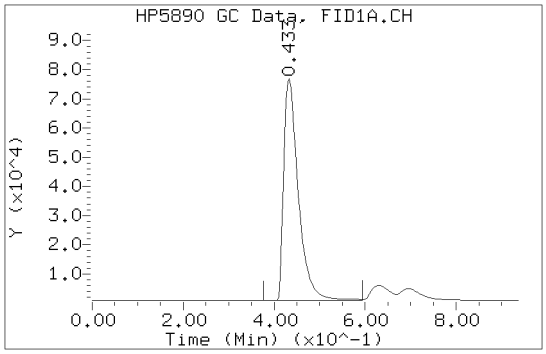


Reason Code:

Methane (74-82-8)

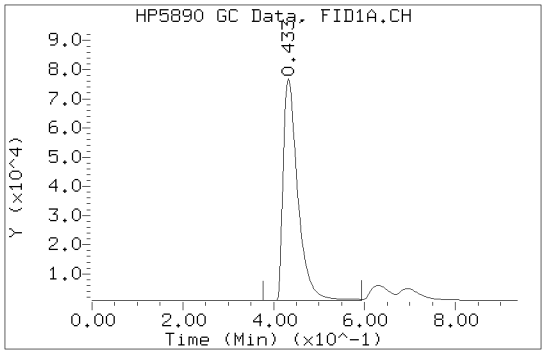
BEFORE

MASS
100
AREA
0
HEIGHT
0
23-Jan-2024
09:24
ALSHS
Server



AFTER

MASS
100
AREA
169039
HEIGHT
75913
23-Jan-2024
16:10
ALSHS
Server

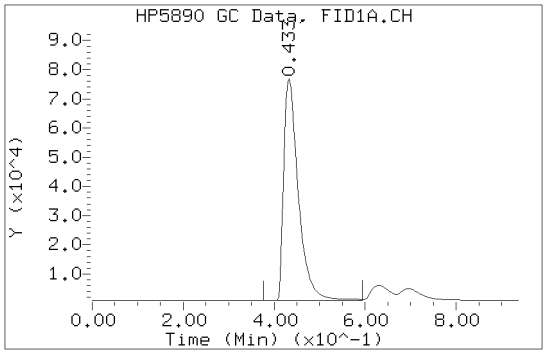


Reason Code:

Ethene (74-85-1)

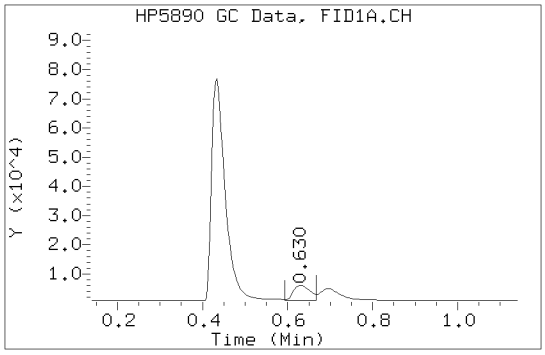
BEFORE

MASS
100
AREA
0
HEIGHT
0
23-Jan-2024
09:24
ALSHS
Server



AFTER

MASS
100
AREA
14093
HEIGHT
5097
23-Jan-2024
16:10
ALSHS
Server



Reason Code:

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240123.b\007.D Page 1
Report Date: 24-Jan-2024 09:58

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\007.D
Lab Smp Id: HS24011040-03MSD Client Smp ID: HS24011040-03MSD
Inj Date : 23-JAN-2024 09:26
Operator : PL Inst ID: FID-4.i
Smp Info : HS24011040-03MSD;HS24011040-03MSD
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\RSKNI3.m
Meth Date : 23-Jan-2024 16:06 elona.hasa Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 7 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7025

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	0.436	0.000	169363	173.707	173.707(ARM)
2 Ethene	0.633	0.640	-0.007	14484	24.7268	24.726(RM)
3 Ethane	0.700	0.703	-0.003	12564	17.4624	17.462(M)

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\240123.b\007.D

Date : 23-JAN-2024 09:26

Client ID: HS24011040-03MSD

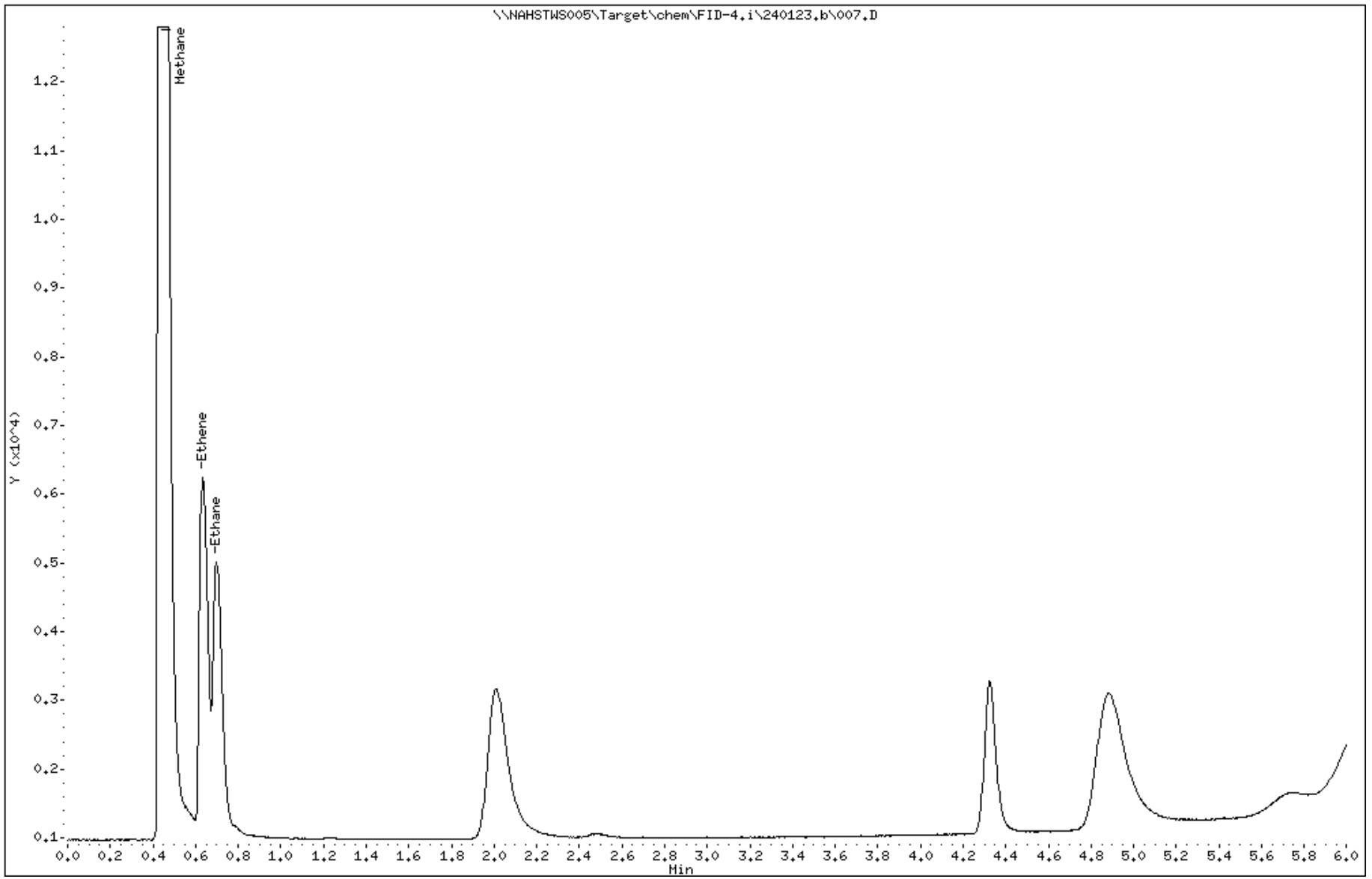
Instrument: FID-4.i

Sample Info: HS24011040-03MSD;HS24011040-03MSD

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



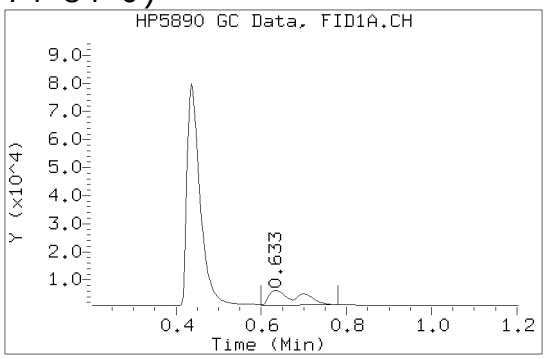
Data File : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\007.D
Inj Date : 23-JAN-2024 09:26
InstruID : FID-4.i
LabSampID : HS24011040-03MSD

Ethane (74-84-0)

Reason Code:

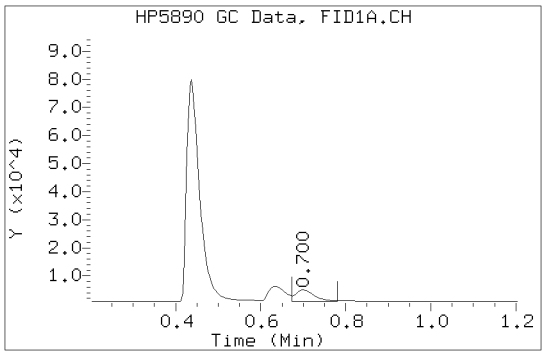
BEFORE

MASS
44
AREA
25414
HEIGHT
5161
23-Jan-2024
09:32
ALSHS
Server



AFTER

MASS
44
AREA
12564
HEIGHT
4055
24-Jan-2024
09:58
ALSHS
Server

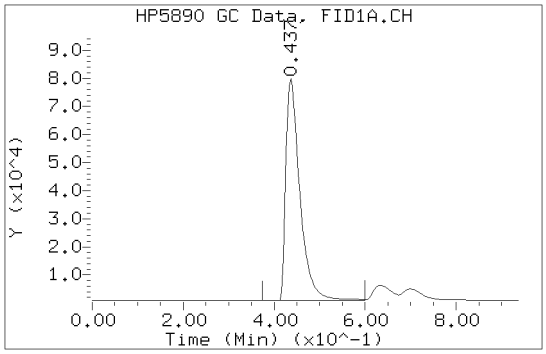


Methane (74-82-8)

Reason Code:

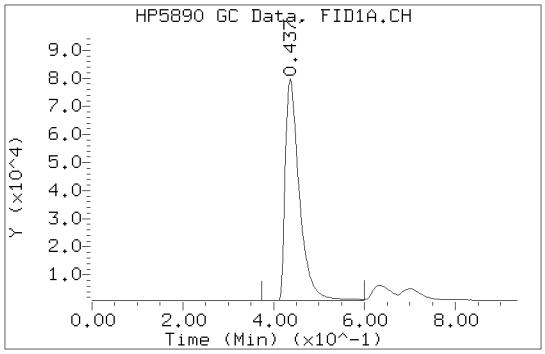
BEFORE

MASS
100
AREA
0
HEIGHT
0
23-Jan-2024
09:32
ALSHS
Server



AFTER

MASS
100
AREA
169363
HEIGHT
78936
24-Jan-2024
09:58
ALSHS
Server

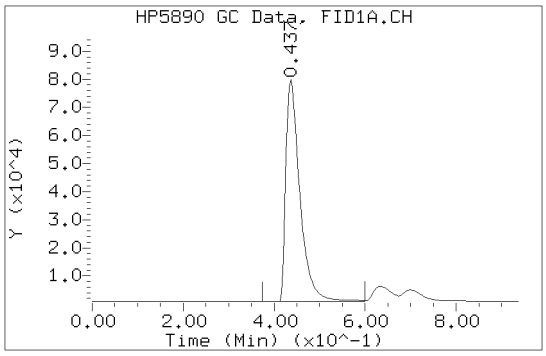


Ethene (74-85-1)

Reason Code:

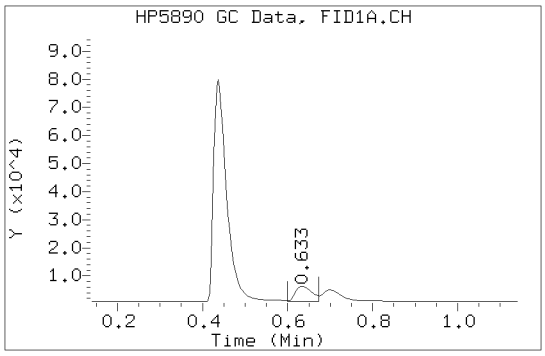
BEFORE

MASS
100
AREA
0
HEIGHT
0
23-Jan-2024
09:32
ALSHS
Server



AFTER

MASS
100
AREA
14484
HEIGHT
5274
24-Jan-2024
09:58
ALSHS
Server



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\011.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 23-JAN-2024 10:25
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\240123.b\RSKNI3.m
Meth Date : 23-Jan-2024 10:55 elona.hasa 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: NAHSTW7025

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	8880	9.64700	9.107
2 Ethene	0.636	0.636	0.000	10397	16.8500	17.749
3 Ethane	0.700	0.700	0.000	15002	18.0430	20.850

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240123.b\011.D

Date : 23-JAN-2024 10:25

Client ID: RSK-CCV

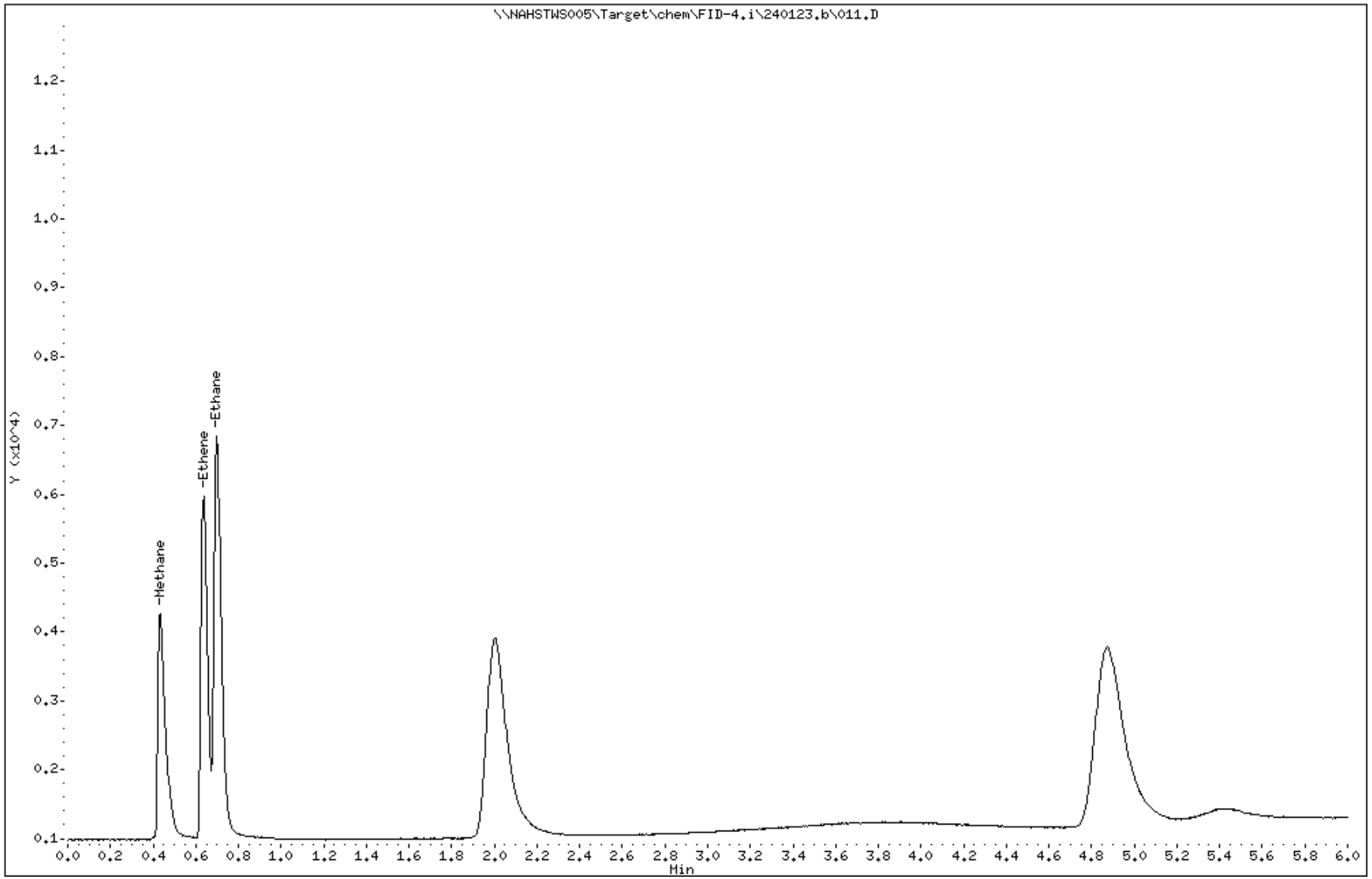
Instrument: FID-4.i

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\240123.b\011.D
Inj Date : 23-JAN-2024 10:25
InstruID : FID-4.i
LabSampID : RSK-CCV

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240123.b\022.D Page 1
Report Date: 23-Jan-2024 14:15

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\022.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 23-JAN-2024 14:05
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\240123.b\RSKNI3.m
Meth Date : 23-Jan-2024 14:14 elona.hasa 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: NAHSTW7025

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	8144	9.64700	8.352
2 Ethene	0.633	0.633	0.000	10295	16.8500	17.575(M)
3 Ethane	0.696	0.696	0.000	14165	18.0430	19.687(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240123.b\022.D

Date : 23-JAN-2024 14:05

Client ID: RSK-CCV

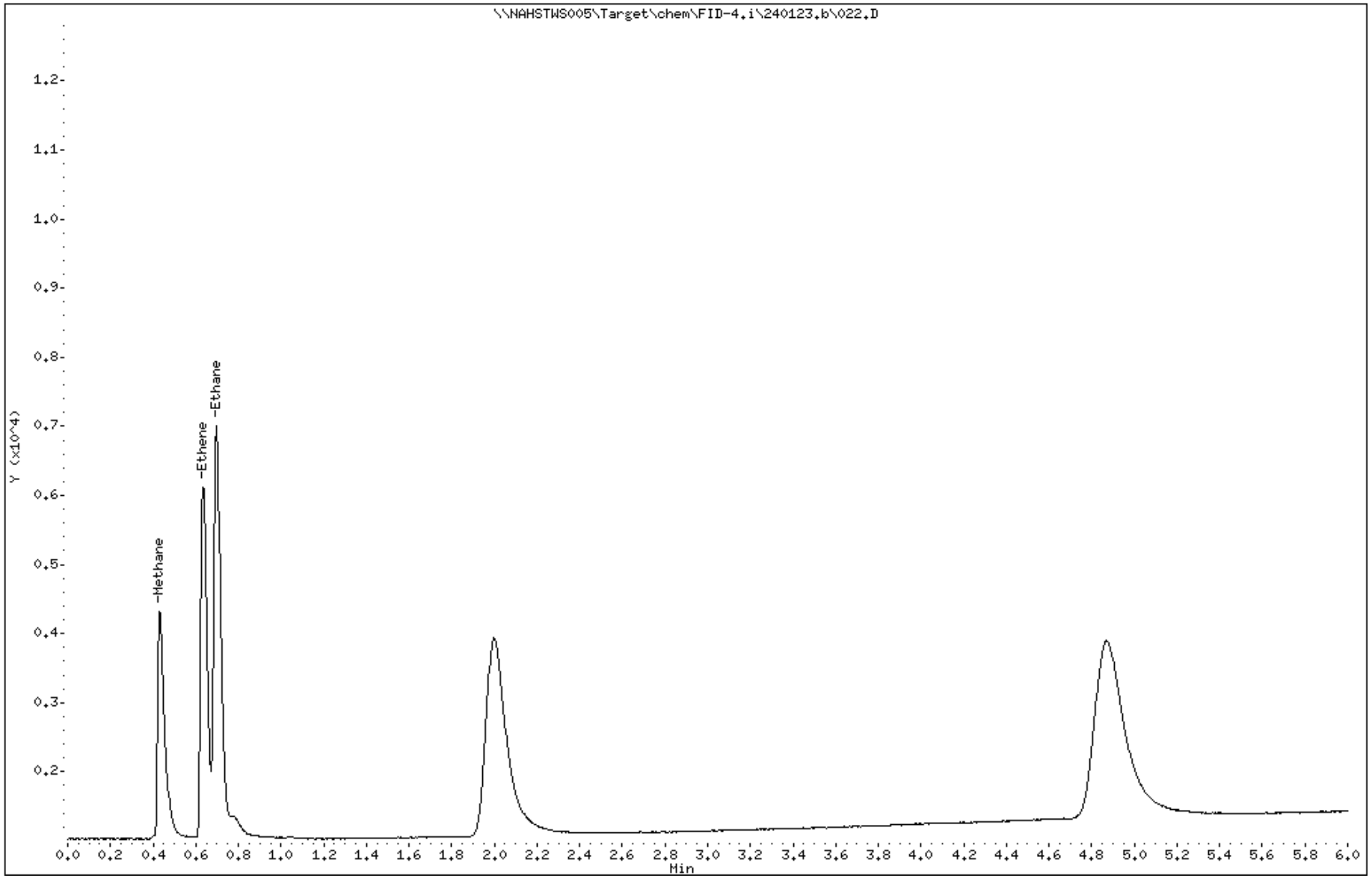
Instrument: FID-4.i

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

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



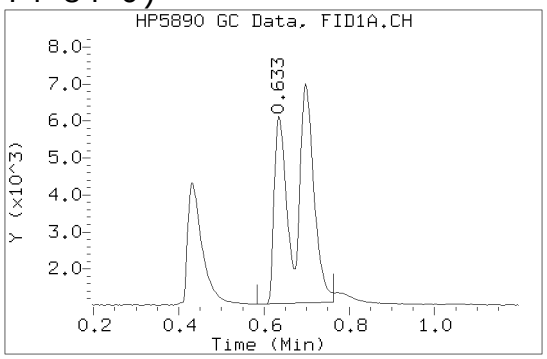
Data File : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\022.D
Inj Date : 23-JAN-2024 14:05
InstruID : FID-4.i
LabSampID : RSK-CCV

Ethane (74-84-0)

Reason Code:

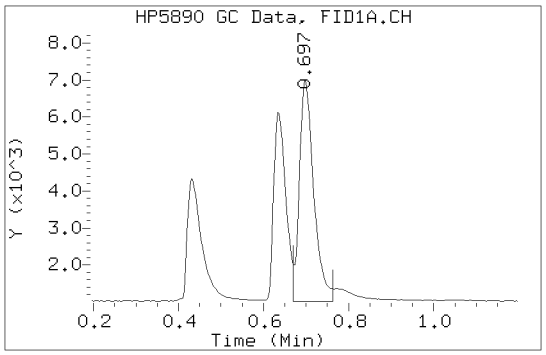
BEFORE

MASS
44
AREA
23624
HEIGHT
5056
23-Jan-2024
14:14
ALSHS
Server



AFTER

MASS
44
AREA
14165
HEIGHT
5987
23-Jan-2024
14:15
ALSHS
Server

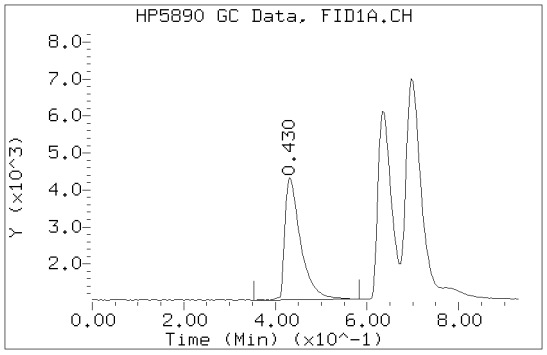


Ethene (74-85-1)

Reason Code:

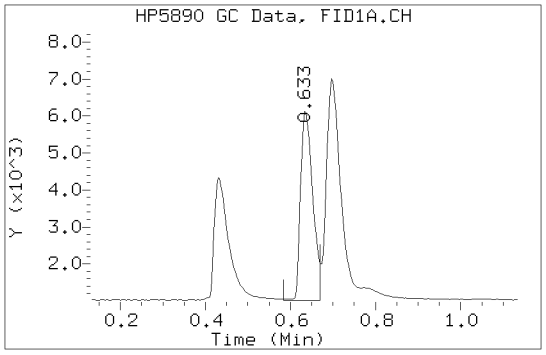
BEFORE

MASS
100
AREA
0
HEIGHT
0
23-Jan-2024
14:14
ALSHS
Server



AFTER

MASS
100
AREA
10295
HEIGHT
5100
23-Jan-2024
14:15
ALSHS
Server



Data File: \\NAHSTWS005\Target\chem\FID-4.i\240123.b\025.D Page 1
Report Date: 23-Jan-2024 15:12

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\025.D
Lab Smp Id: HS24011111-07 Client Smp ID: HS24011111-07
Inj Date : 23-JAN-2024 15:03
Operator : PL Inst ID: FID-4.i
Smp Info : HS24011111-07;HS24011111-07
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\RSKNI3.m
Meth Date : 23-Jan-2024 14:14 elona.hasa Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 25
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7025

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
1 Methane	0.433	0.430	0.003	4077948	4182.54	4182.543(A)

QC Flag Legend

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

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240123.b\025.D

Date : 23-JAN-2024 15:03

Client ID: HS24011111-07

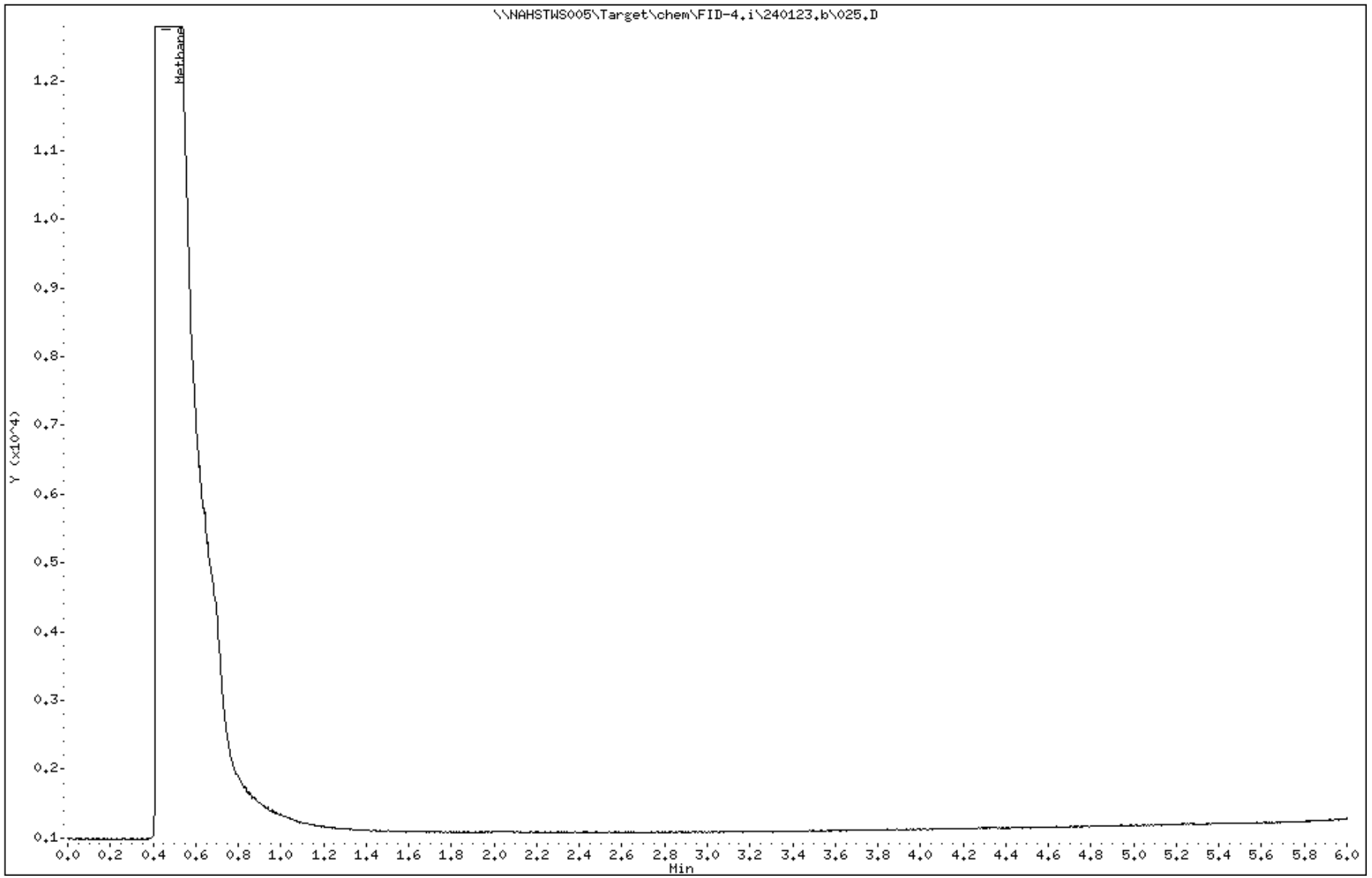
Instrument: FID-4.i

Sample Info: HS24011111-07;HS24011111-07

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\025.D
Inj Date : 23-JAN-2024 15:03
InstruID : FID-4.i
LabSampID : HS24011111-07

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240123.b\026.D Page 1
Report Date: 24-Jan-2024 10:10

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\026.D
Lab Smp Id: HS24011111-07 Client Smp ID: HS24011111-07
Inj Date : 23-JAN-2024 15:35
Operator : PL Inst ID: FID-4.i
Smp Info : HS24011111-07;HS24011111-07
Misc Info : ;1;0;200
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\RSKNI3.m
Meth Date : 23-Jan-2024 16:06 elona.hasa Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 26
Dil Factor: 200.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7025

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	0.436	-0.003	18962	19.4484	3889.671

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240123.b\026.D

Date : 23-JAN-2024 15:35

Client ID: HS24011111-07

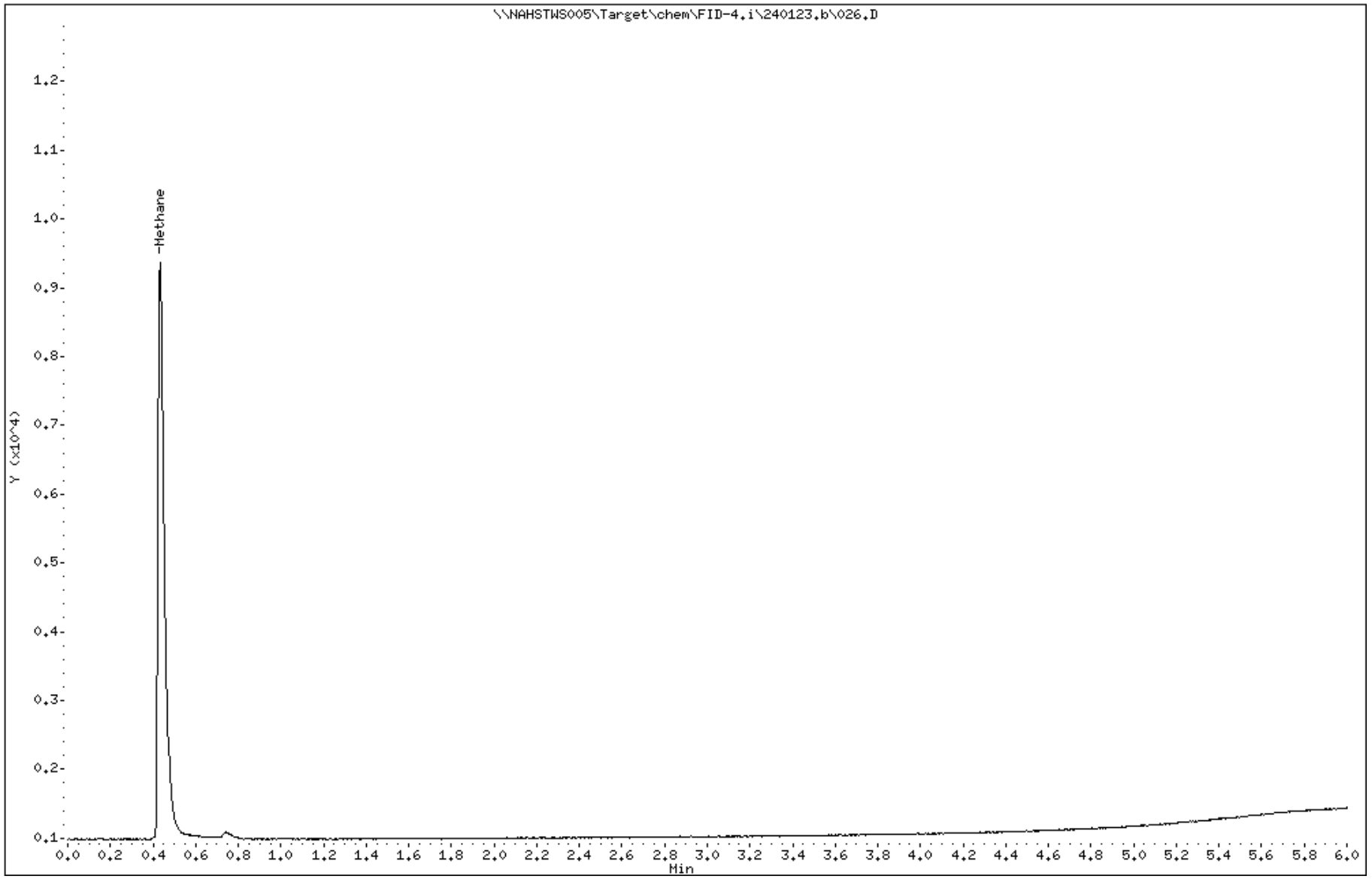
Instrument: FID-4.i

Sample Info: HS24011111-07;HS24011111-07

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\026.D
Inj Date : 23-JAN-2024 15:35
InstruID : FID-4.i
LabSampID : HS24011111-07

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240123.b\027.D Page 1
Report Date: 23-Jan-2024 16:07

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240123.b\027.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 23-JAN-2024 15:48
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\240123.b\RSKNI3.m
Meth Date : 23-Jan-2024 16:06 elona.hasa Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 27 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7025

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	0.436	0.436	0.000	8234	9.64700	8.445
2 Ethene	0.640	0.640	0.000	10230	16.8500	17.464
3 Ethane	0.703	0.703	0.000	14864	18.0430	20.659

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240123.b\027.D

Date : 23-JAN-2024 15:48

Client ID: RSK-CCV

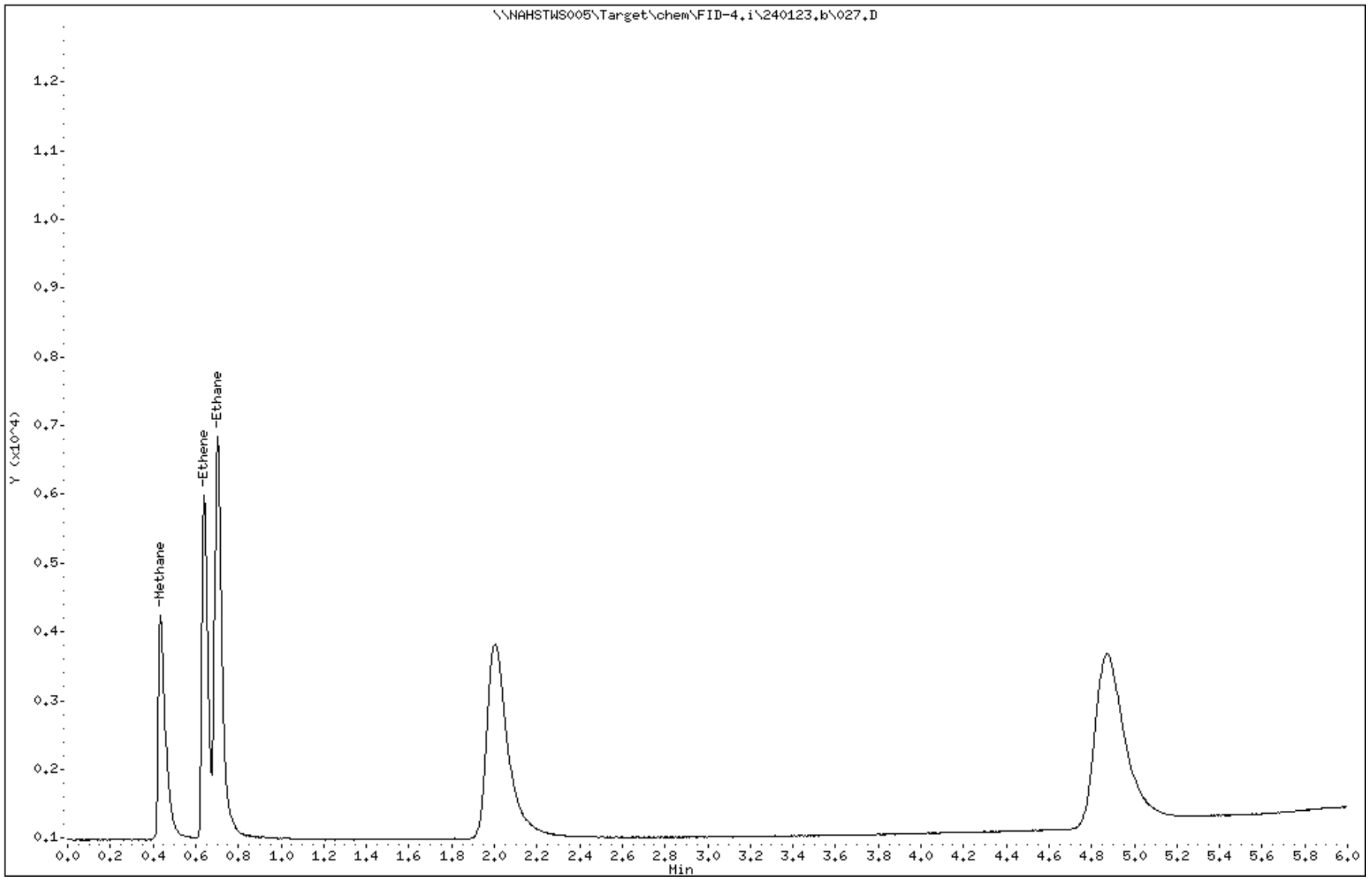
Instrument: FID-4.i

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\240123.b\027.D
Inj Date : 23-JAN-2024 15:48
InstruID : FID-4.i
LabSampID : RSK-CCV

NO MANUAL INTEGRATIONS

HS24011111 - ME - ICP_W_DOD

ALS WO# HS24011111

ALS Houston, US

Date: 31-Jan-24

FORM 13 - ANALYSIS RUN LOG

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24011111
Start Date: 26-Jan-2024 End Date: 26-Jan-2024

Run ID:ICPMS07_457269
Instrument:ICPMS07
Method:

Sample No.	D/F	Time	FileID	Analytes
ICPMS07_457269_Tune	1	26-Jan-2024 00:00	ICPMS07_457269_Tune_1	
CAL BLK	1	26-Jan-2024 10:36	018CALB.d_7797383	AS CR MN NI TL
2/10/200	1	26-Jan-2024 10:38	019CALS.d_7797384	AS CR MN NI TL
5/25/500	1	26-Jan-2024 10:41	020CALS.d_7797385	AS CR MN NI TL
10/50/100	1	26-Jan-2024 10:43	021CALS.d_7797386	AS CR MN NI TL
100/500/10K	1	26-Jan-2024 10:46	022CALS.d_7797387	AS CR MN NI TL
200/1000/20K	1	26-Jan-2024 10:48	023CALS.d_7797388	AS CR MN NI TL
ICV	1	26-Jan-2024 10:52	025_ICV.d_7797390	AS CR MN NI TL
LLICV2	1	26-Jan-2024 10:57	027LCV2.d_7797392	AS CR MN NI TL
LLICV5	1	26-Jan-2024 11:00	028LCV5.d_7797393	AS CR MN NI TL
ICB	1	26-Jan-2024 11:04	030_ICB.d_7797469	AS CR MN NI TL
ICSA	1	26-Jan-2024 11:07	031ICSA.d_7797470	AS CR MN NI TL
ICSAB	1	26-Jan-2024 11:09	032ICSB.d_7797471	AS CR MN NI TL
CCV 1	1	26-Jan-2024 11:19	036_CCV.d_7797692	AS CR MN NI TL
CCB 1	1	26-Jan-2024 11:22	037_CCB.d_7797693	AS CR MN NI TL
16SW03-240119SD	5	26-Jan-2024 11:40	045SMPL.d_7797727	AS MN TL
CCV 2	1	26-Jan-2024 11:47	048_CCV.d_7797736	AS CR MN NI TL
CCB 2	1	26-Jan-2024 11:50	049_CCB.d_7797737	AS CR MN NI TL
CCV 3	1	26-Jan-2024 11:52	050_CCV.d_7797738	AS CR MN NI TL
CCV 4	1	26-Jan-2024 11:59	053_CCV.d_7797741	AS CR MN NI TL
CCB 3	1	26-Jan-2024 12:01	054_CCB.d_7797742	AS CR MN NI TL
MBLK-206338	1	26-Jan-2024 12:04	055SMPL.d_7797743	AS CR MN NI TL
LCS-206338	1	26-Jan-2024 12:06	056SMPL.d_7797744	AS CR MN NI TL
16SW03-240119	1	26-Jan-2024 12:08	057SMPL.d_7797745	AS CR MN NI TL
16SW03-240119MS	1	26-Jan-2024 12:11	058SMPL.d_7797746	AS CR MN NI TL
16SW03-240119MSD	1	26-Jan-2024 12:13	059SMPL.d_7797747	AS CR MN NI TL
16SW03-240119PDS	1	26-Jan-2024 12:16	060SMPL.d_7797749	AS CR MN NI TL
16SW01-240119	1	26-Jan-2024 12:18	061SMPL.d_7797750	AS CR MN NI TL
16SW02-240119	1	26-Jan-2024 12:20	062SMPL.d_7797751	AS CR MN NI TL
16SW02-240119-FD	1	26-Jan-2024 12:23	063SMPL.d_7797752	AS CR MN NI TL
CCV 5	1	26-Jan-2024 12:27	065_CCV.d_7797754	AS CR MN NI TL
CCB 4	1	26-Jan-2024 12:30	066_CCB.d_7797755	AS CR MN NI TL

Form 2 - Initial and Continuing Calibration Verification

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24011111

Run ID: ICPMS07_457269
Instrument: ICPMS07
Method: SW6020A

ICV	Date: 26-Jan-2024 10:52		Seq: 7797390	ICV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Arsenic	100	100.456	100	90-110	
Chromium	100	99.19	99	90-110	
Manganese	100	97.564	98	90-110	
Nickel	100	103.8	104	90-110	
Thallium	100	101.234	101	90-110	

CCV1	Date: 26-Jan-2024 11:19		Seq: 7797692	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Arsenic	100	100.584	101	90-110	
Chromium	100	103.117	103	90-110	
Manganese	100	100.537	101	90-110	
Nickel	100	107.295	107	90-110	
Thallium	100	104.837	105	90-110	

CCV2	Date: 26-Jan-2024 11:47		Seq: 7797736	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Arsenic	100	106.338	106	90-110	
Chromium	100	111.28	111	90-110	S
Manganese	100	107.277	107	90-110	
Nickel	100	111.14	111	90-110	S
Thallium	100	108.928	109	90-110	

CCV3	Date: 26-Jan-2024 11:52		Seq: 7797738	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Arsenic	100	106.652	107	90-110	
Chromium	100	111.926	112	90-110	S
Manganese	100	108.116	108	90-110	
Nickel	100	112.745	113	90-110	S
Thallium	100	106.37	106	90-110	

CCV4	Date: 26-Jan-2024 11:59		Seq: 7797741	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Arsenic	100	103.191	103	90-110	
Chromium	100	106.057	106	90-110	
Manganese	100	101.971	102	90-110	
Nickel	100	105.034	105	90-110	
Thallium	100	105.018	105	90-110	

CCV5	Date: 26-Jan-2024 12:27		Seq: 7797754	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Arsenic	100	101.908	102	90-110	
Chromium	100	103.942	104	90-110	
Manganese	100	99.264	99	90-110	
Nickel	100	103.421	103	90-110	
Thallium	100	107.593	108	90-110	

Form 3 - BLANKS

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24011111

Run ID: ICPMS07_457269
Instrument: ICPMS07
Method: SW6020A

ICB	Date: 26-Jan-2024 11:04		Seq: 7797469	ICB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	5	0.4	5	U	
Chromium	5	0.4	5	U	
Manganese	5	0.7	5	U	
Nickel	5	0.6	5	U	
Thallium	2	0.2	2	U	

CCB1	Date: 26-Jan-2024 11:22		Seq: 7797693	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Chromium	4	0.4	4	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Thallium	2	0.2	2	U	

CCB2	Date: 26-Jan-2024 11:50		Seq: 7797737	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Chromium	4	0.4	4	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Thallium	2	0.2	2	U	

CCB3	Date: 26-Jan-2024 12:01		Seq: 7797742	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Chromium	4	0.4	4	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Thallium	2	0.2	2	U	

MBLK-206338	Date: 26-Jan-2024 12:04		Seq: 7797743	MBLK	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	5	0.4	5	U	
Chromium	5	0.4	5	U	
Manganese	5	0.7	5	U	
Nickel	5	0.6	5	U	
Thallium	2	0.2	2	U	

CCB4	Date: 26-Jan-2024 12:30		Seq: 7797755	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Chromium	4	0.4	4	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Thallium	2	0.2	2	U	

ALS Houston, US Date: 31-Jan-24

Form 4 - ICP Interference Check Sample

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24011111

Run ID: ICPMS07_457269
Instrument: ICPMS07
Method: SW6020A

ICSA	Date: 26-Jan-2024 11:07	Seq: 7797470	ICSA	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Arsenic		0.219	0	
Chromium		1.393	0	
Manganese		0.728	0	
Nickel		0.752	0	
Thallium		0.012	0	

ICSAB	Date: 26-Jan-2024 11:09	Seq: 7797471	ICSAB	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Arsenic	100	95.36	95.4	
Chromium	100	100.4	100	
Manganese	100	91.84	91.8	
Nickel	100	92.7	92.7	
Thallium	100	95.06	95.1	

ALS Houston, US

Date: 31-Jan-24

Form 5A - Matrix Spike/Matrix Spike Duplicate Recovery

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24011111

Date Analyzed: 26-Jan-2024 12:13
Date Extracted: 23-Jan-2024 14:00
Units: ug/L

Matrix Spike: HS24011111-14MS
Client Sample ID: 16SW03-240119

Analysis Method: SW6020A

Analyte	Sample Result	MS Result	Spike Amount	% Rec	MSD Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Arsenic	0.6430	44.69	50.00	88.1	47.29	50.00	93.3	84-116	5.67	20
Chromium	0.5260	46.74	50.00	92.4	45.30	50.00	89.5	85-116	3.13	20
Manganese	38.08	85.25	50.00	94.3	81.01	50.00	85.8	87-115	5.11	20
Nickel	2.316	49.01	50.00	93.4	49.69	50.00	94.7	85-117	1.37	20
Thallium	2.000	43.27	50.00	86.5	47.42	50.00	94.8	82-116	9.17	20

ALS Houston, US

Date: 31-Jan-24

Form 5B - Post Digest Sample Recovery

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24011111

Date Analyzed: 26-Jan-2024 12:16
Date Extracted: 23-Jan-2024 14:00
Units: ug/L

Lab Sample ID: HS24011111-14PDS
Client Sample ID: 16SW03-240119

Analysis Method: SW6020A

Analyte	Sample Result	PDS Result	Spike Amount	% Rec	% Rec Limits
Arsenic	0.643	103.4	100	103	80-120
Chromium	0.526	103.8	100	103	80-120
Manganese	38.08	142	100	104	80-120
Nickel	2.316	102	100	100	80-120
Thallium	0	116.3	100	116	80-120

ALS Houston, US

Date: 31-Jan-24

Form 7 - Laboratory Control Sample

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24011111

Date Analyzed: 26-Jan-2024 12:06
Date Extracted: 23-Jan-2024 14:00
Units: ug/L

Lab Sample ID: LCS-206338
Analysis Method: SW6020A

Analyte	Spike Amount	LCS Result	% Rec	% Rec Limits
Arsenic	50	46.78	94	84-116
Chromium	50	45.36	91	85-116
Manganese	50	46.99	94	87-115
Nickel	50	47.25	95	85-117
Thallium	50	45.97	92	82-116

ALS Houston, US

Date: 31-Jan-24

Form 8 - ICP Serial Dilutions

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24011111

Date Analyzed: 26-Jan-2024 11:40
Date Extracted: 23-Jan-2024 14:00
Units: ug/L

Lab Sample ID: HS24011111-14SD
Client Sample ID:16SW03-240119

Analysis Method: SW6020A

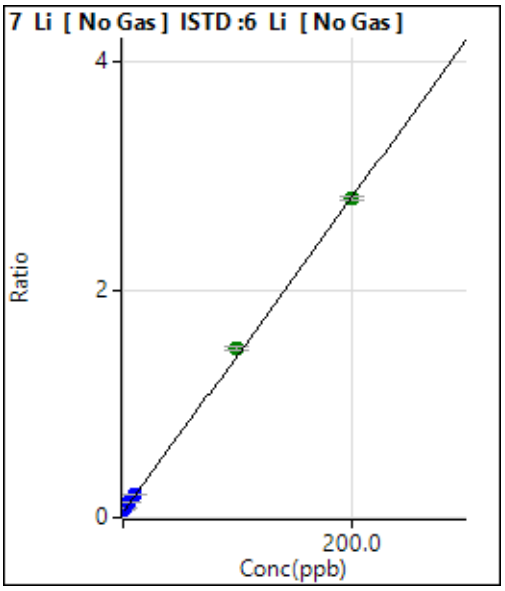
Analyte	Sample Result	C	SD Result	C	RPD	Q
Arsenic	0.643	J	0	U	0	
Manganese	38.08		40.04		5	
Thallium	0	U	0	U	0	

Calibration for 025_ICV.d

Batch Folder: C:\Agilent\ICPMH\1\DATA\012624A.b\
Analysis File: 012624A.batch.bin
DA Date-Time: 1/26/2024 10:53:35 AM
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	018CALB.d	CAL BLK	1/26/2024 10:36:04 AM
2	019CALS.d	2/10/200	1/26/2024 10:38:21 AM
3	020CALS.d	5/25/500	1/26/2024 10:41:35 AM
4	021CALS.d	10/50/100	1/26/2024 10:43:52 AM
5	022CALS.d	100/500/10K	1/26/2024 10:46:08 AM
6	023CALS.d	200/1000/20K	1/26/2024 10:48:17 AM

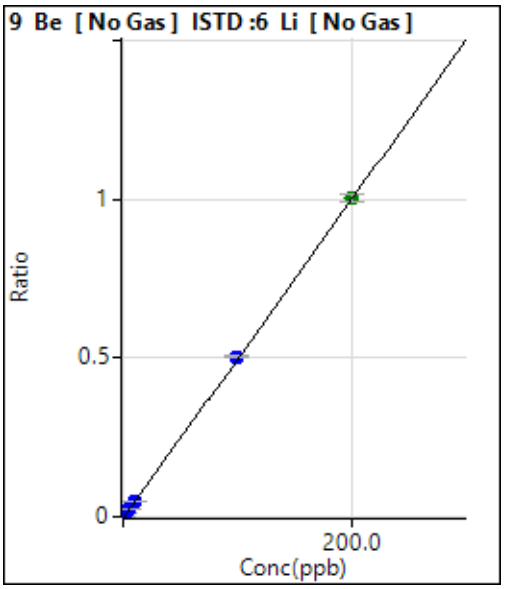
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	102546.00	0.0621	P	0.5	
2	☐	2.000	1.971	143706.42	0.0893	P	0.8	-1.5
3	☐	5.000	5.179	215081.89	0.1336	P	2.5	3.6
4	☐	10.000	9.757	320365.00	0.1967	P	2.2	-2.4
5	☐	100.000	102.963	2259138.77	1.4832	A	1.8	3.0
6	☐	200.000	198.527	4223886.50	2.8023	A	1.4	-0.7

y = 0.0138 * x + 0.0621
R = 0.9998
DL = 0.06948 ppb
BEC = 4.498 ppb

Weight: <None>
Min Conc: <None>

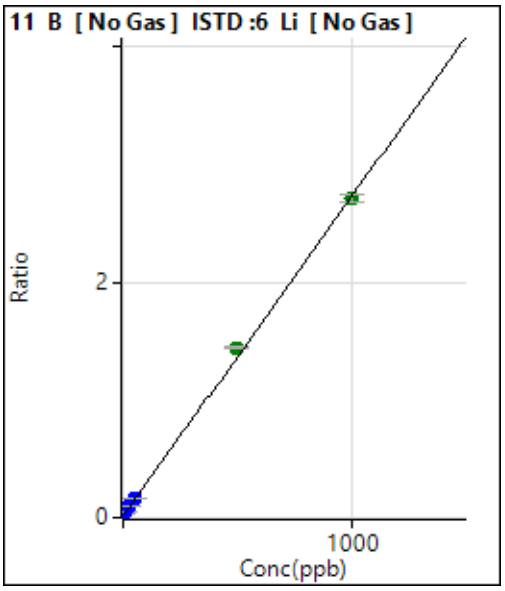


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	58.33	0.0000	P	26.4	
2	☐	2.000	1.876	15231.69	0.0095	P	4.1	-6.2
3	☐	5.000	4.791	38835.22	0.0241	P	2.4	-4.2
4	☐	10.000	9.285	76022.68	0.0467	P	3.7	-7.2
5	☐	100.000	100.261	767523.09	0.5039	P	1.5	0.3
6	☐	200.000	199.912	1514419.15	1.0047	A	2.7	0.0

y = 0.0050 * x + 3.5319E-005
R = 1.0000
DL = 0.00557 ppb
BEC = 0.007028 ppb

Weight: <None>
Min Conc: <None>

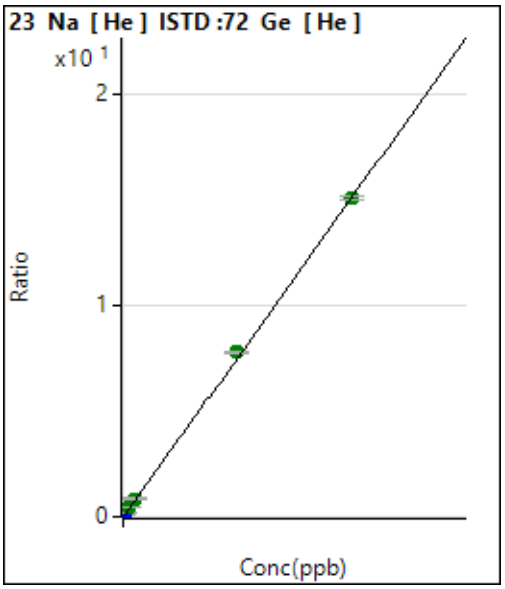
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	45899.76	0.0278	P	0.5	
2	☐	10.000	9.798	87519.56	0.0544	P	0.3	-2.0
3	☐	25.000	24.352	151153.67	0.0939	P	2.4	-2.6
4	☐	50.000	48.458	259294.38	0.1593	P	3.1	-3.1
5	☐	500.000	521.384	2196869.24	1.4424	A	1.4	4.3
6	☐	1000.000	989.403	4087863.90	2.7123	A	2.3	-1.1

y = 0.0027 * x + 0.0278
R = 0.9997
DL = 0.1612 ppb
BEC = 10.24 ppb

Weight: <None>
Min Conc: <None>

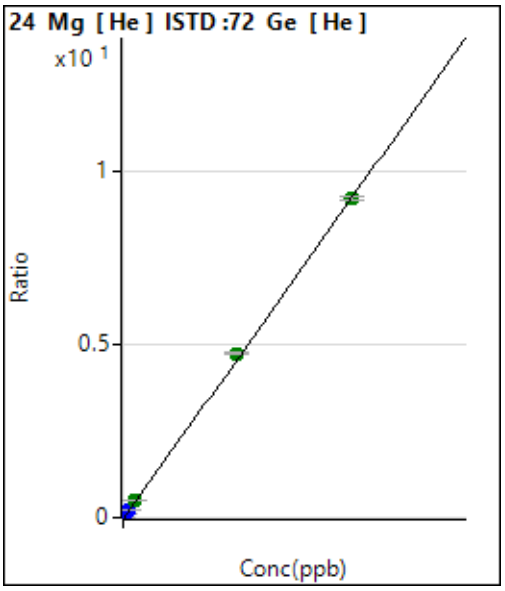


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	101926.88	0.0470	P	2.0	
2	☐	200.000	207.269	447285.15	0.2040	P	0.5	3.6
3	☐	500.000	547.083	999088.32	0.4615	A	2.5	9.4
4	☐	1000.000	1079.198	1863164.08	0.8646	A	1.7	7.9
5	☐	10000.00	10216.25	16467171.42	7.7863	A	1.7	2.2
6	☐	20000.00	19886.66	32089437.86	15.112	A	1.5	-0.6

y = 7.5755E-004 * x + 0.0470
R = 0.9999
DL = 3.79 ppb
BEC = 62.06 ppb

Weight: <None>
Min Conc: <None>

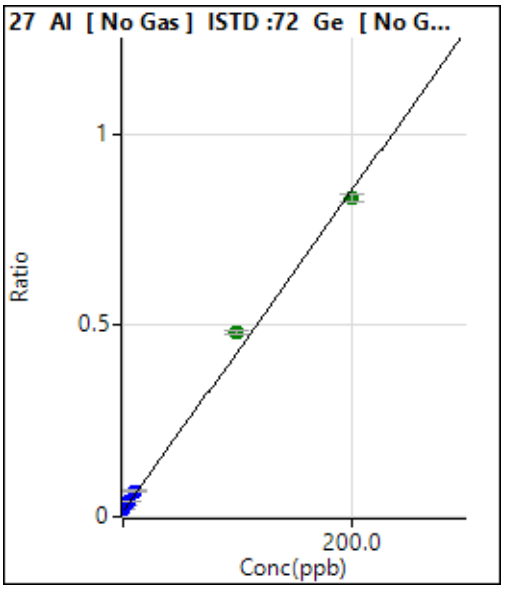
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	446.69	0.0002	P	7.9	
2	☐	200.000	205.997	210122.00	0.0958	P	0.7	3.0
3	☐	500.000	523.269	526401.48	0.2431	P	1.4	4.7
4	☐	1000.000	1076.236	1077324.93	0.4999	A	0.7	7.6
5	☐	10000.00	10232.67	10047195.89	4.7508	A	2.0	2.3
6	☐	20000.00	19879.21	19597560.96	9.2293	A	1.6	-0.6

y = 4.6426E-004 * x + 2.0604E-004
R = 0.9999
DL = 0.1052 ppb
BEC = 0.4438 ppb

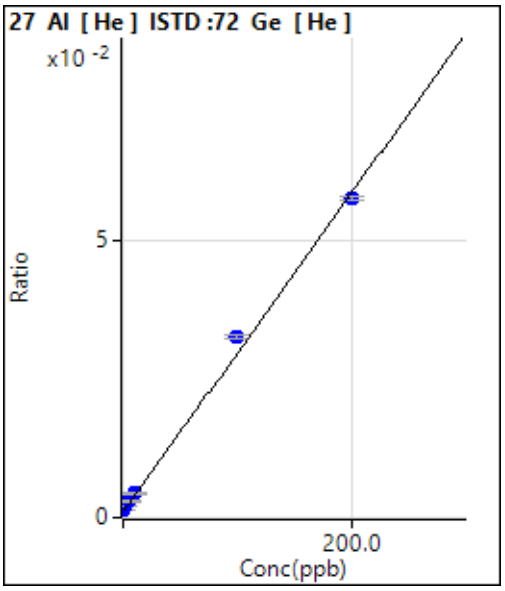
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	125916.59	0.0178	P	0.6	
2	☐	2.000	2.664	203515.27	0.0290	P	1.1	33.2
3	☐	5.000	5.770	294887.65	0.0420	P	0.3	15.4
4	☐	10.000	11.625	468160.60	0.0666	P	5.5	16.2
5	☐	100.000	110.763	3310643.80	0.4827	A	1.9	10.8
6	☐	200.000	194.511	5654387.42	0.8341	A	2.1	-2.7

y = 0.0042 * x + 0.0178
R = 0.9980
DL = 0.07931 ppb
BEC = 4.246 ppb

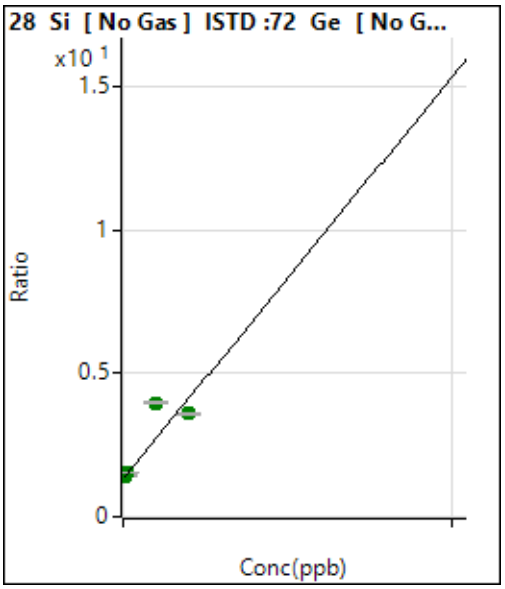
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2790.33	0.0013	P	7.6	
2	☐	2.000	2.460	4370.77	0.0020	P	2.2	23.0
3	☐	5.000	5.879	6441.63	0.0030	P	8.4	17.6
4	☐	10.000	10.996	9573.46	0.0044	P	6.2	10.0
5	☐	100.000	108.692	68726.69	0.0325	P	2.9	8.7
6	☐	200.000	195.578	121995.16	0.0574	P	1.5	-2.2

y = 2.8715E-004 * x + 0.0013
R = 0.9987
DL = 1.021 ppb
BEC = 4.482 ppb

Weight: <None>
Min Conc: <None>

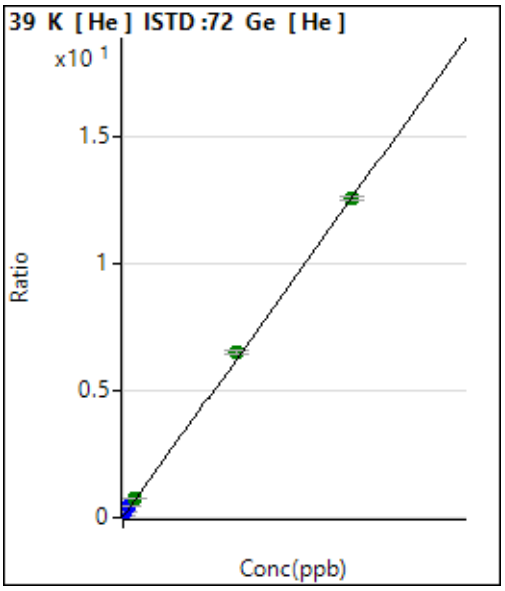


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	9739105.06	1.3781	A	0.2	
2	☐	10.000	7.299	9816011.31	1.3987	A	0.6	-27.0
3	☐	25.000	21.250	10086884.64	1.4379	A	1.5	-15.0
4	☐	50.000	50.170	10683654.01	1.5193	A	1.3	0.3
5	☐	500.000	923.255	27273831.26	3.9762	A	1.7	84.7
6	☐	1000.000	788.485	24384007.97	3.5970	A	1.5	-21.2

y = 0.0028 * x + 1.3781
R = 0.8796
DL = 3.52 ppb
BEC = 489.7 ppb

Weight: <None>
Min Conc: <None>

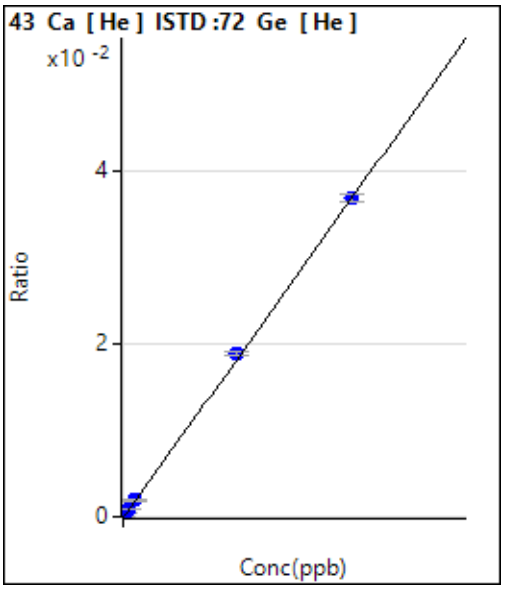
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	194147.59	0.0896	P	1.5	
2	☐	200.000	204.958	477801.61	0.2180	P	0.9	2.5
3	☐	500.000	528.287	910472.96	0.4205	P	1.4	5.7
4	☐	1000.000	1093.325	1669201.80	0.7745	A	1.4	9.3
5	☐	10000.00	10223.09	13735224.80	6.4946	A	1.5	2.2
6	☐	20000.00	19883.02	26643221.27	12.546	A	1.5	-0.6

y = 6.2652E-004 * x + 0.0896
R = 0.9999
DL = 6.376 ppb
BEC = 142.9 ppb

Weight: <None>
Min Conc: <None>

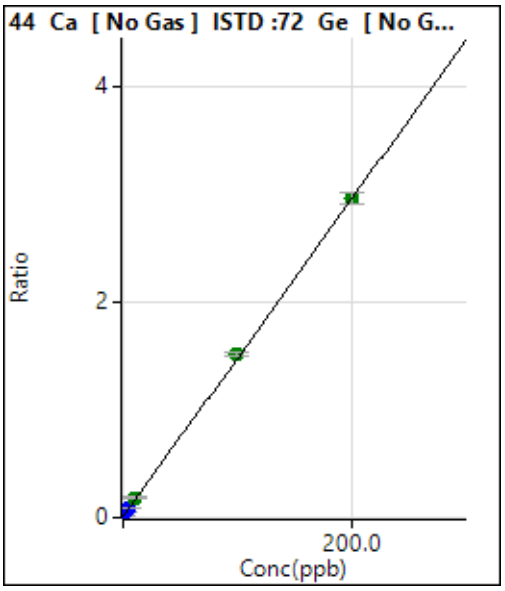


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	46.67	0.0000	P	44.6	
2	☐	200.000	206.522	886.71	0.0004	P	5.6	3.3
3	☐	500.000	487.705	2003.52	0.0009	P	3.8	-2.5
4	☐	1000.000	1020.654	4120.70	0.0019	P	6.2	2.1
5	☐	10000.00	10161.15	39871.49	0.0189	P	2.8	1.6
6	☐	20000.00	19918.63	78443.38	0.0369	P	2.4	-0.4

y = 1.8533E-006 * x + 2.1525E-005
R = 1.0000
DL = 15.55 ppb
BEC = 11.61 ppb

Weight: <None>
Min Conc: <None>

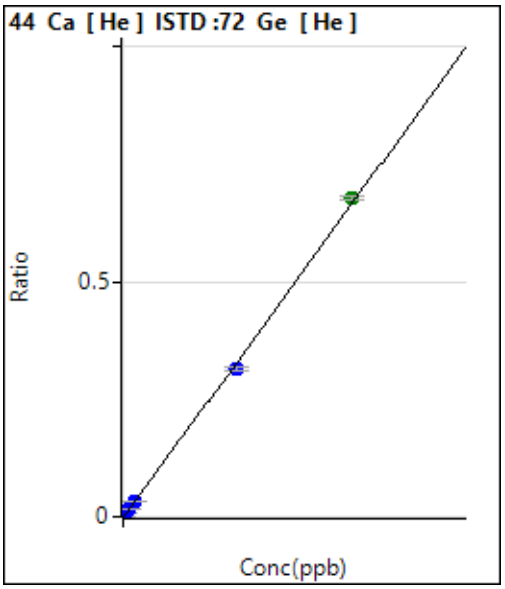
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	165802.33	0.0235	P	0.8	
2	☐	2.000	1.973	368964.14	0.0526	P	0.5	-1.3
3	☐	5.000	4.822	663574.26	0.0946	P	0.8	-3.6
4	☐	10.000	10.978	1303602.04	0.1854	A	2.7	9.8
5	☐	100.000	101.164	10397048.59	1.5158	A	1.9	1.2
6	☐	200.000	199.374	20095269.70	2.9645	A	3.3	-0.3

y = 0.0148 * x + 0.0235
R = 1.0000
DL = 0.03618 ppb
BEC = 1.591 ppb

Weight: <None>
Min Conc: <None>

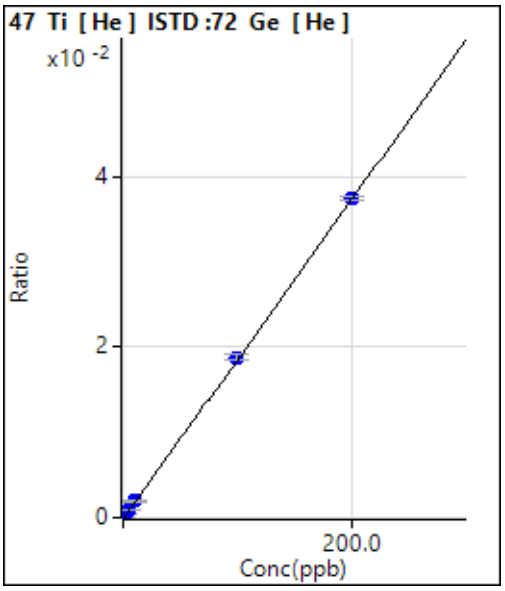


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1713.47	0.0008	P	7.9	
2	☐	200.000	197.284	16166.42	0.0074	P	2.5	-1.4
3	☐	500.000	486.258	36836.44	0.0170	P	3.4	-2.7
4	☐	1000.000	976.907	71948.01	0.0334	P	1.6	-2.3
5	☐	10000.00	9425.943	666788.87	0.3153	P	2.4	-5.7
6	☐	20000.00	20288.55	1439117.11	0.6777	A	1.2	1.4

y = 3.3365E-005 * x + 7.9029E-004
R = 0.9994
DL = 5.622 ppb
BEC = 23.69 ppb

Weight: <None>
Min Conc: <None>

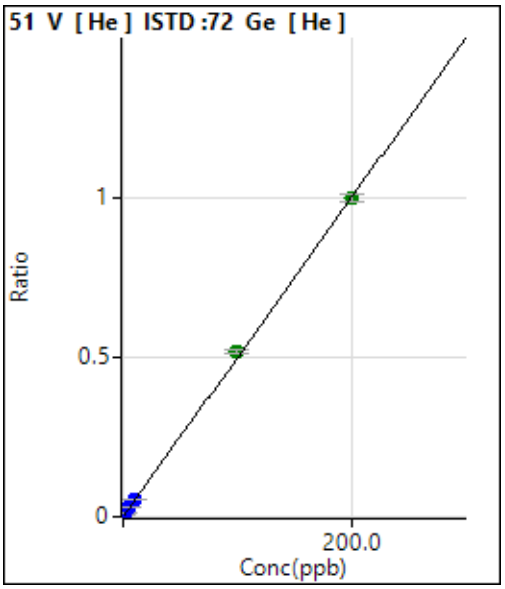
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	33.33	0.0000	P	17.2	
2	☐	2.000	2.265	963.39	0.0004	P	7.5	13.3
3	☐	5.000	4.695	1936.84	0.0009	P	5.1	-6.1
4	☐	10.000	10.207	4154.05	0.0019	P	4.6	2.1
5	☐	100.000	100.336	39771.23	0.0188	P	4.0	0.3
6	☐	200.000	199.827	79500.01	0.0374	P	1.0	-0.1

y = 1.8727E-004 * x + 1.5373E-005
R = 1.0000
DL = 0.04231 ppb
BEC = 0.08209 ppb

Weight: <None>
Min Conc: <None>

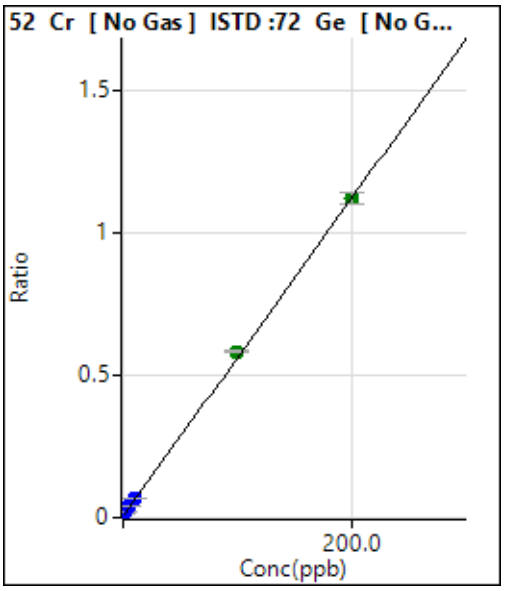


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	10762.04	0.0050	P	1.5	
2	☐	2.000	1.858	31227.74	0.0142	P	1.8	-7.1
3	☐	5.000	4.991	64727.60	0.0299	P	1.3	-0.2
4	☐	10.000	9.747	115651.74	0.0537	P	0.6	-2.5
5	☐	100.000	102.750	1096089.85	0.5183	A	2.7	2.7
6	☐	200.000	198.639	2117877.56	0.9973	A	2.0	-0.7

y = 0.0050 * x + 0.0050
R = 0.9999
DL = 0.04561 ppb
BEC = 0.9936 ppb

Weight: <None>
Min Conc: <None>

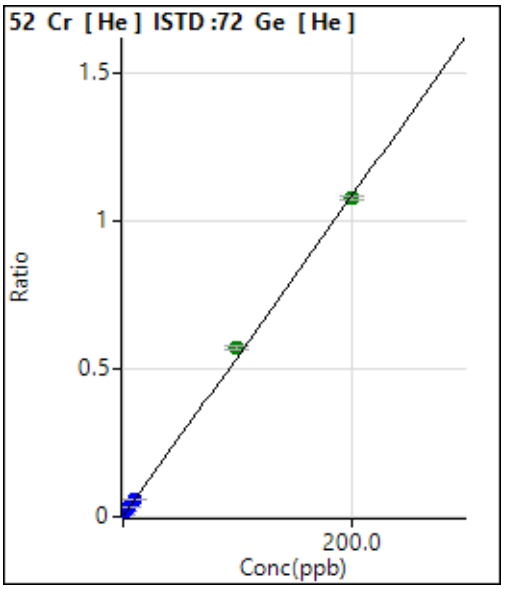
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	78759.72	0.0111	P	2.0	
2	☐	2.000	1.921	153352.32	0.0219	P	1.2	-3.9
3	☐	5.000	5.044	275330.62	0.0392	P	1.3	0.9
4	☐	10.000	10.055	472264.38	0.0672	P	2.8	0.5
5	☐	100.000	102.151	3980692.13	0.5803	A	1.3	2.2
6	☐	200.000	198.921	7588631.35	1.1195	A	3.3	-0.5

y = 0.0056 * x + 0.0111
R = 0.9999
DL = 0.1196 ppb
BEC = 2 ppb

Weight: <None>
Min Conc: <None>

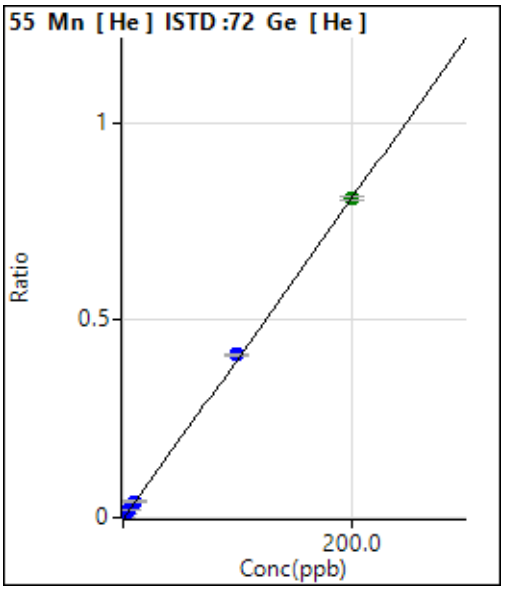


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	14601.37	0.0067	P	3.3	
2	☐	2.000	1.862	36843.42	0.0168	P	1.1	-6.9
3	☐	5.000	5.020	73380.15	0.0339	P	0.5	0.4
4	☐	10.000	10.017	131302.82	0.0609	P	1.3	0.2
5	☐	100.000	104.402	1208675.22	0.5715	A	2.6	4.4
6	☐	200.000	197.799	2286538.25	1.0768	A	1.5	-1.1

y = 0.0054 * x + 0.0067
R = 0.9997
DL = 0.1217 ppb
BEC = 1.245 ppb

Weight: <None>
Min Conc: <None>

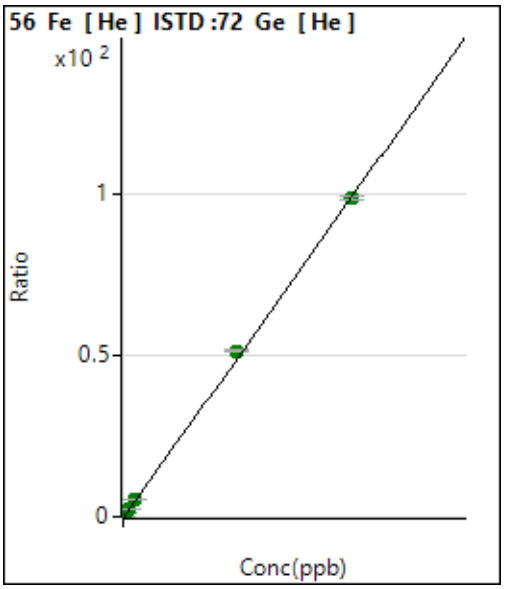
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	480.02	0.0002	P	16.6	
2	☐	2.000	2.091	19117.11	0.0087	P	3.6	4.6
3	☐	5.000	5.208	46282.02	0.0214	P	1.2	4.2
4	☐	10.000	10.107	88972.50	0.0413	P	0.7	1.1
5	☐	100.000	101.731	874534.88	0.4135	P	1.1	1.7
6	☐	200.000	199.123	1718177.32	0.8091	A	1.0	-0.4

y = 0.0041 * x + 2.2139E-004
R = 0.9999
DL = 0.02709 ppb
BEC = 0.0545 ppb

Weight: <None>
Min Conc: <None>

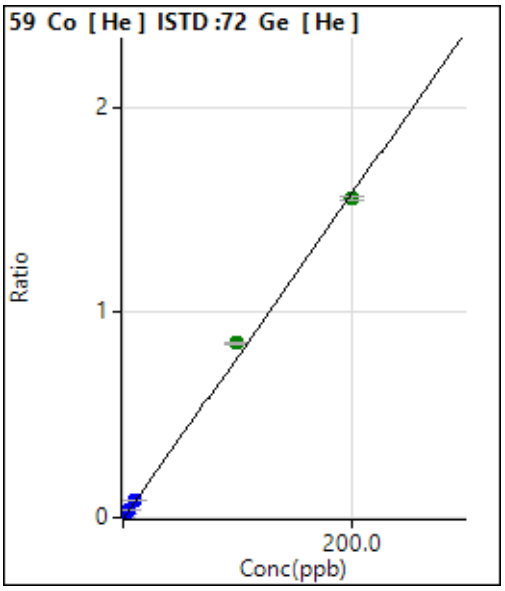


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	28550.30	0.0132	P	0.9	
2	☐	200.000	218.209	2405115.90	1.0970	A	0.8	9.1
3	☐	500.000	525.631	5680995.54	2.6240	A	0.6	5.1
4	☐	1000.000	1036.466	11124735.67	5.1613	A	1.1	3.6
5	☐	10000.00	10307.17	108305358.3	51.209	A	1.5	3.1
6	☐	20000.00	19843.76	209331450.2	98.577	A	1.0	-0.8

y = 0.0050 * x + 0.0132
R = 0.9998
DL = 0.07546 ppb
BEC = 2.651 ppb

Weight: <None>
Min Conc: <None>

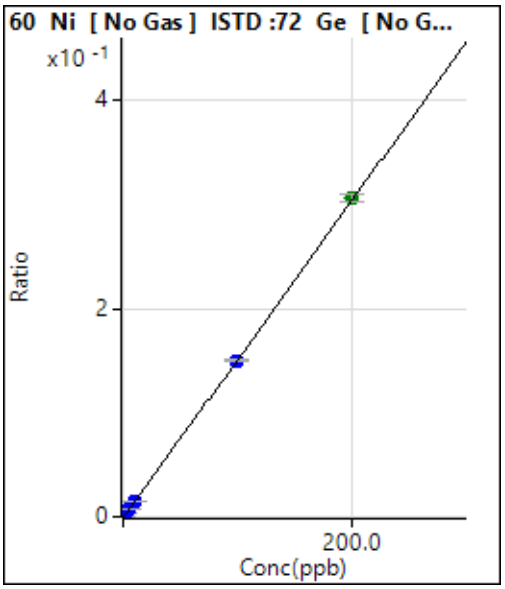
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	140.00	0.0001	P	14.4	
2	☐	2.000	2.030	35429.76	0.0162	P	0.4	1.5
3	☐	5.000	5.206	89526.57	0.0414	P	2.2	4.1
4	☐	10.000	10.211	174641.85	0.0810	P	1.3	2.1
5	☐	100.000	107.383	1801190.18	0.8516	A	0.8	7.4
6	☐	200.000	196.293	3305679.95	1.5567	A	0.7	-1.9

y = 0.0079 * x + 6.4581E-005
R = 0.9990
DL = 0.00351 ppb
BEC = 0.008144 ppb

Weight: <None>
Min Conc: <None>

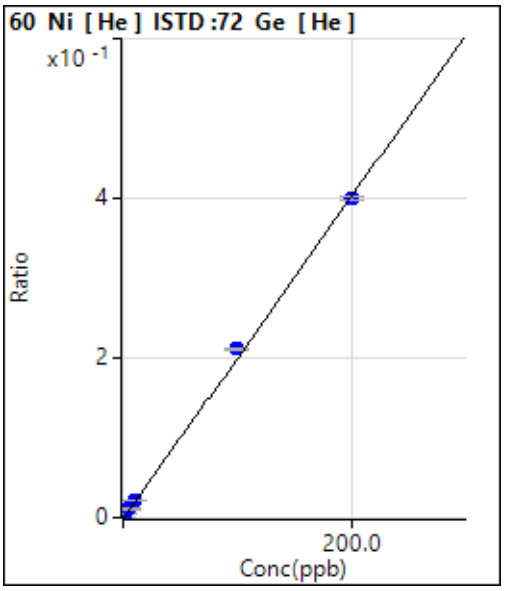


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1576.79	0.0002	P	8.0	
2	☐	2.000	2.048	23480.69	0.0033	P	3.8	2.4
3	☐	5.000	5.008	55128.55	0.0079	P	3.2	0.2
4	☐	10.000	9.809	106717.12	0.0152	P	3.8	-1.9
5	☐	100.000	98.277	1029464.83	0.1501	P	1.5	-1.7
6	☐	200.000	200.870	2077807.52	0.3065	A	2.9	0.4

y = 0.0015 * x + 2.2305E-004
R = 0.9999
DL = 0.03493 ppb
BEC = 0.1463 ppb

Weight: <None>
Min Conc: <None>

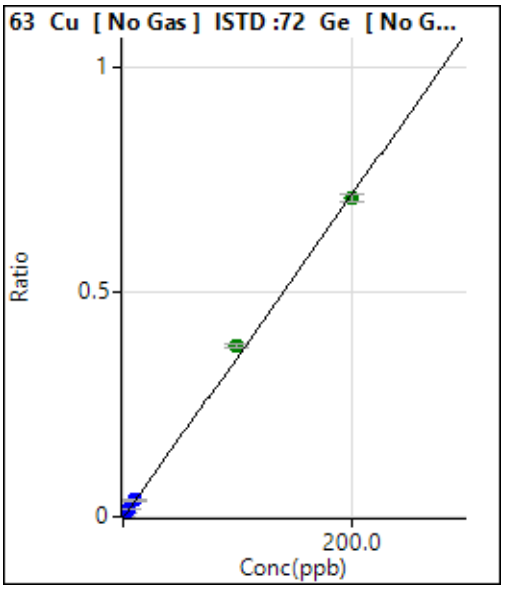
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	646.70	0.0003	P	10.9	
2	☐	2.000	2.095	9940.45	0.0045	P	1.3	4.7
3	☐	5.000	5.227	23530.73	0.0109	P	4.1	4.5
4	☐	10.000	10.320	45630.30	0.0212	P	2.3	3.2
5	☐	100.000	104.429	447267.75	0.2115	P	1.6	4.4
6	☐	200.000	197.763	849899.62	0.4002	P	0.7	-1.1

y = 0.0020 * x + 2.9831E-004
R = 0.9997
DL = 0.04841 ppb
BEC = 0.1475 ppb

Weight: <None>
Min Conc: <None>

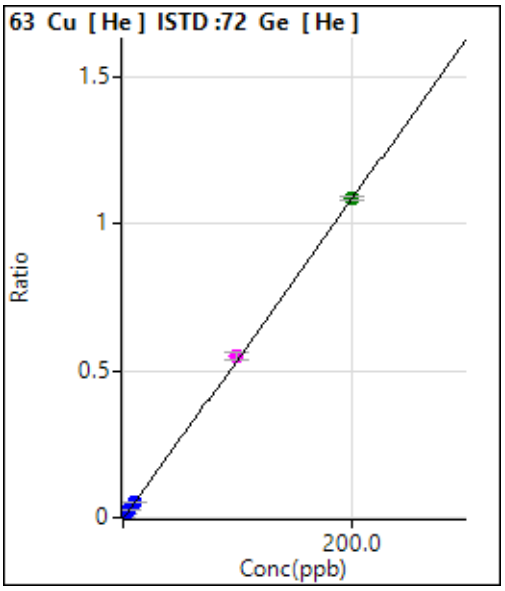


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2960.38	0.0004	P	8.1	
2	☐	2.000	2.067	55088.49	0.0078	P	0.5	3.3
3	☐	5.000	5.075	130933.84	0.0187	P	0.4	1.5
4	☐	10.000	10.029	256413.71	0.0365	P	3.9	0.3
5	☐	100.000	105.752	2610490.64	0.3806	A	2.2	5.8
6	☐	200.000	197.120	4806414.61	0.7091	A	2.8	-1.4

y = 0.0036 * x + 4.1907E-004
R = 0.9994
DL = 0.02836 ppb
BEC = 0.1166 ppb

Weight: <None>
Min Conc: <None>

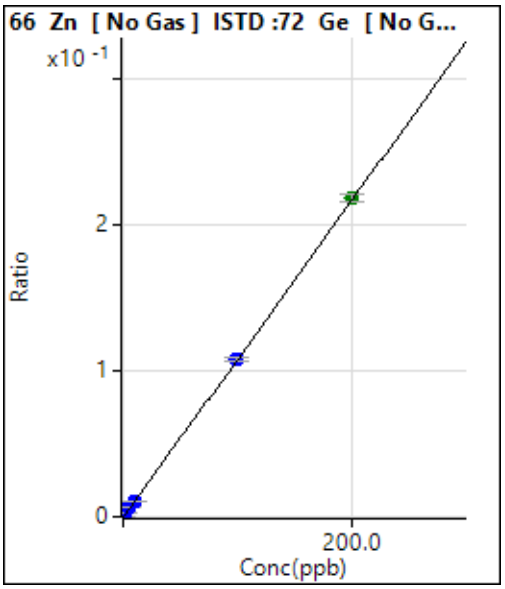
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1283.42	0.0006	P	10.7	
2	☐	2.000	2.079	26102.11	0.0119	P	2.1	3.9
3	☐	5.000	5.136	61817.30	0.0286	P	1.6	2.7
4	☐	10.000	10.008	118692.52	0.0551	P	0.6	0.1
5	☐	100.000	100.558	1159116.00	0.5480	M	4.9	0.6
6	☐	200.000	199.716	2309987.15	1.0878	A	0.8	-0.1

y = 0.0054 * x + 5.9193E-004
R = 1.0000
DL = 0.03486 ppb
BEC = 0.1087 ppb

Weight: <None>
Min Conc: <None>

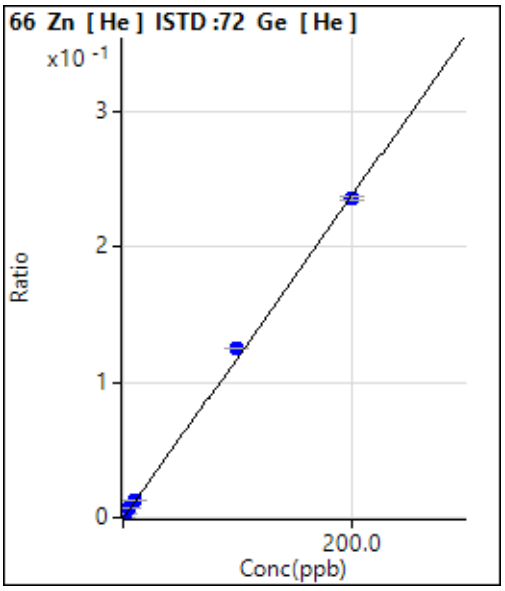


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2973.72	0.0004	P	6.7	
2	☐	2.000	2.316	20636.00	0.0029	P	1.5	15.8
3	☐	5.000	5.223	42811.35	0.0061	P	0.9	4.5
4	☐	10.000	9.831	78161.50	0.0111	P	1.3	-1.7
5	☐	100.000	98.681	739215.72	0.1078	P	2.5	-1.3
6	☐	200.000	200.659	1482611.70	0.2187	A	2.7	0.3

y = 0.0011 * x + 4.2079E-004
R = 1.0000
DL = 0.07778 ppb
BEC = 0.3868 ppb

Weight: <None>
Min Conc: <None>

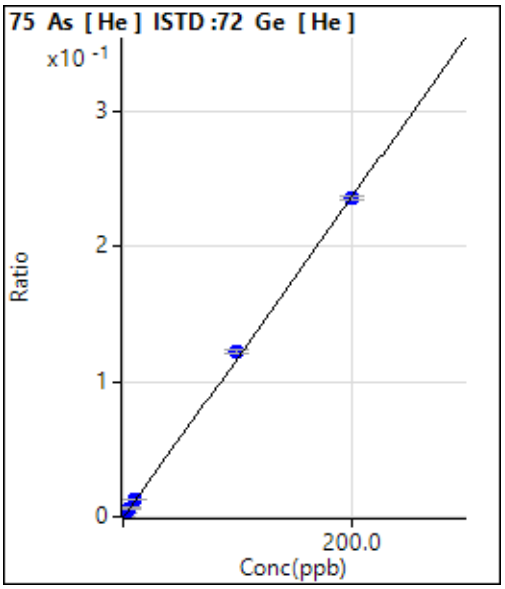
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1006.72	0.0005	P	6.7	
2	☐	2.000	2.486	7522.24	0.0034	P	6.8	24.3
3	☐	5.000	5.552	15338.92	0.0071	P	5.4	11.0
4	☐	10.000	10.650	28366.69	0.0132	P	2.8	6.5
5	☐	100.000	104.742	265149.37	0.1254	P	0.4	4.7
6	☐	200.000	197.578	501327.14	0.2361	P	1.3	-1.2

y = 0.0012 * x + 4.6438E-004
R = 0.9996
DL = 0.07875 ppb
BEC = 0.3894 ppb

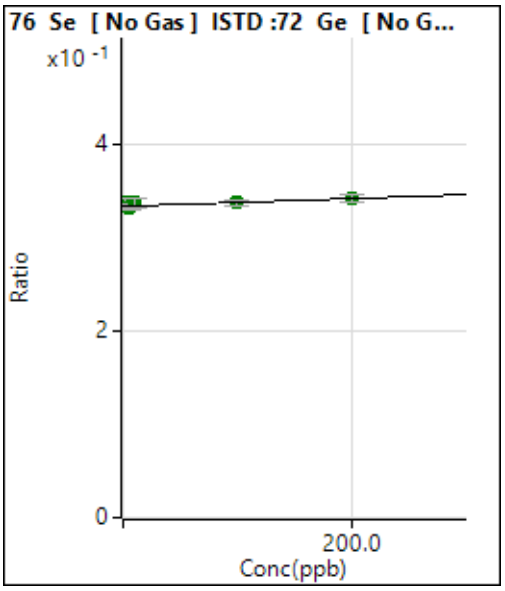
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	661.13	0.0003	P	2.7	
2	☐	2.000	2.012	5891.32	0.0027	P	1.4	0.6
3	☐	5.000	5.106	13752.62	0.0064	P	2.3	2.1
4	☐	10.000	10.094	26423.64	0.0123	P	1.3	0.9
5	☐	100.000	102.800	258135.79	0.1221	P	1.6	2.8
6	☐	200.000	198.593	500092.46	0.2355	P	1.4	-0.7

y = 0.0012 * x + 3.0496E-004
R = 0.9999
DL = 0.02066 ppb
BEC = 0.2575 ppb

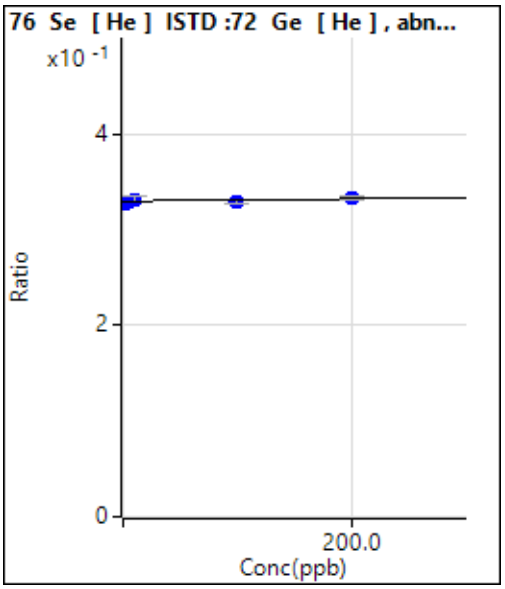
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2354131.58	0.3331	A	1.8	
2	☐	2.000	114.459	2371295.33	0.3379	A	2.5	5622.9
3	☐	5.000	-26.399	2329168.14	0.3320	A	2.0	-628.0
4	☐	10.000	89.112	2368284.70	0.3368	A	3.1	791.1
5	☐	100.000	82.769	2308725.96	0.3366	A	1.6	-17.2
6	☐	200.000	204.320	2315872.10	0.3416	A	2.4	2.2

y = 4.1497E-005 * x + 0.3331
R = 0.7553
DL = 437.3 ppb
BEC = 8028 ppb

Weight: <None>
Min Conc: <None>

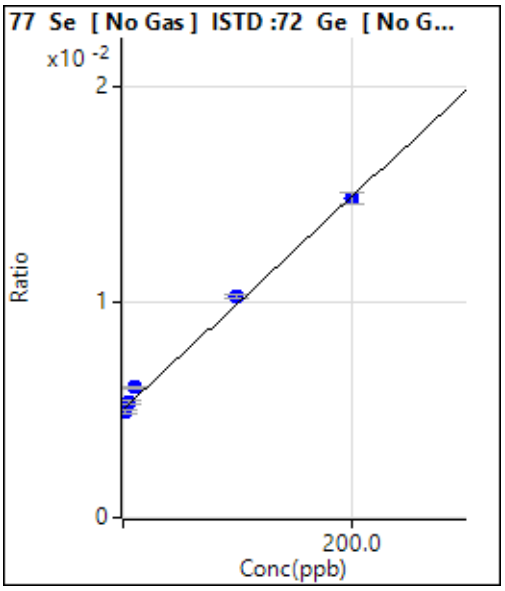


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	714403.79	0.3295	P	0.3	
2	☐	2.000	-199.160	716974.42	0.3271	P	0.5	-10058.
3	☐	5.000	-67.133	711623.14	0.3287	P	0.2	-1442.7
4	☐	10.000	152.440	714223.74	0.3314	P	1.5	1424.4
5	☐	100.000	-43.847	695777.65	0.3290	P	1.1	-143.8
6	☐	200.000	268.616	706802.59	0.3328	P	0.6	34.3

y = 1.2376E-005 * x + 0.3295
R = 0.6489
DL = 275.3 ppb
BEC = 2.663E+04 ppb

Weight: <None>
Min Conc: <None>

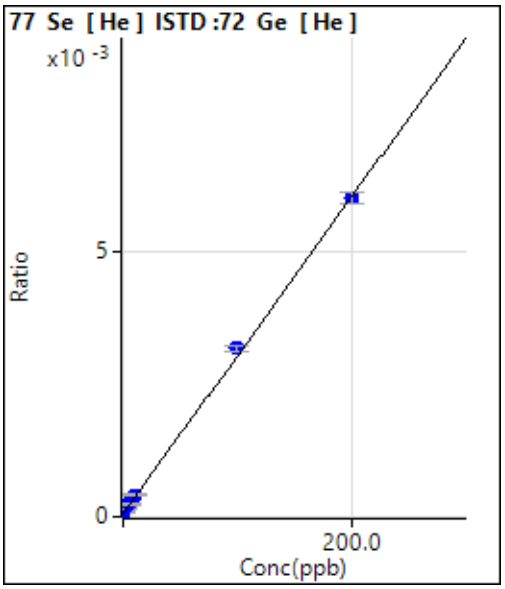
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	35971.77	0.0051	P	2.4	
2	☐	2.000	-4.325	34233.92	0.0049	P	4.1	-316.3
3	☐	5.000	5.039	37442.30	0.0053	P	3.7	0.8
4	☐	10.000	19.245	42457.24	0.0060	P	0.9	92.4
5	☐	100.000	104.540	70192.36	0.0102	P	1.8	4.5
6	☐	200.000	197.330	100305.09	0.0148	P	3.1	-1.3

y = 4.9190E-005 * x + 0.0051
R = 0.9978
DL = 7.501 ppb
BEC = 103.5 ppb

Weight: <None>
Min Conc: <None>

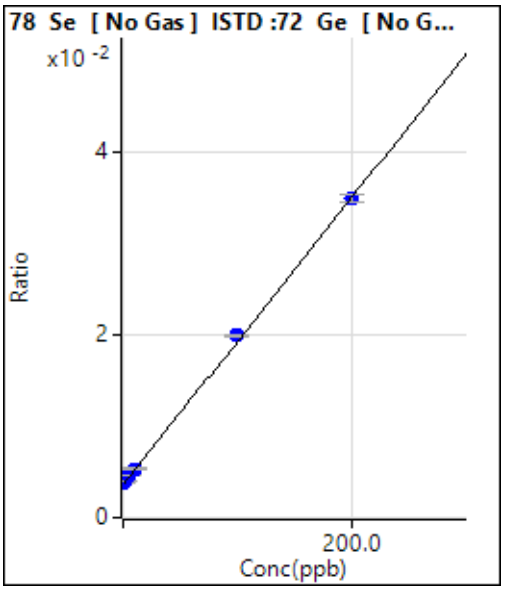


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	190.01	0.0001	P	27.3	
2	☐	2.000	2.625	363.34	0.0002	P	14.5	31.3
3	☐	5.000	5.225	526.69	0.0002	P	7.7	4.5
4	☐	10.000	10.982	893.38	0.0004	P	6.3	9.8
5	☐	100.000	103.363	6698.45	0.0032	P	3.2	3.4
6	☐	200.000	198.258	12726.22	0.0060	P	3.7	-0.9

y = 2.9791E-005 * x + 8.7625E-005
R = 0.9998
DL = 2.406 ppb
BEC = 2.941 ppb

Weight: <None>
Min Conc: <None>

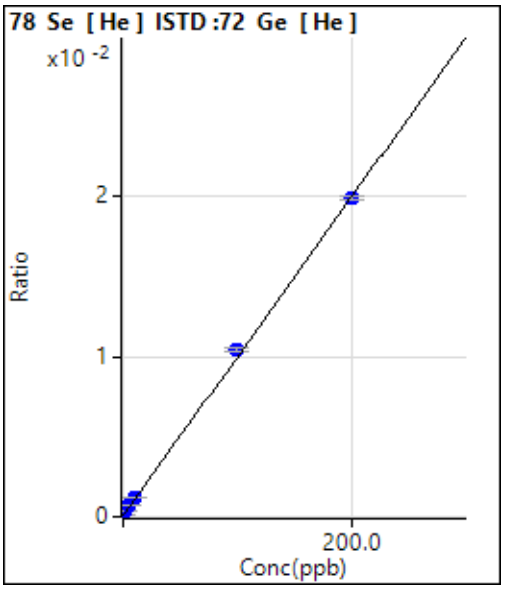
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	26773.52	0.0038	P	0.2	
2	☐	2.000	1.553	28293.36	0.0040	P	2.0	-22.4
3	☐	5.000	4.970	32035.16	0.0046	P	1.5	-0.6
4	☐	10.000	9.905	37539.35	0.0053	P	2.5	-0.9
5	☐	100.000	103.021	136608.16	0.0199	P	1.2	3.0
6	☐	200.000	198.499	236326.76	0.0349	P	2.5	-0.8

y = 1.5654E-004 * x + 0.0038
R = 0.9998
DL = 0.1532 ppb
BEC = 24.2 ppb

Weight: <None>
Min Conc: <None>

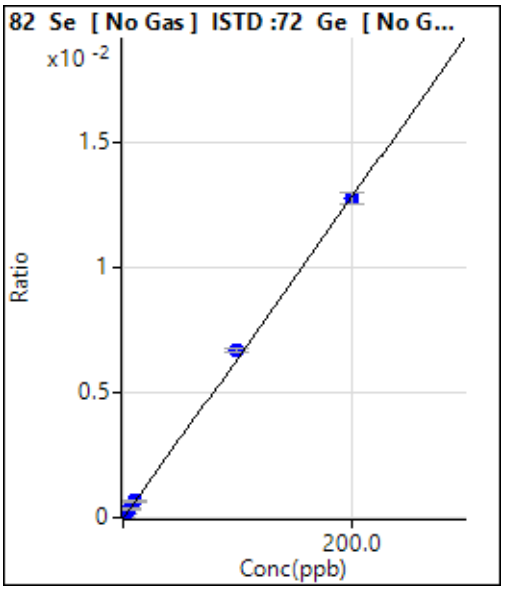


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	340.68	0.0002	P	10.3	
2	☐	2.000	2.009	783.36	0.0004	P	4.3	0.4
3	☐	5.000	5.194	1460.75	0.0007	P	2.4	3.9
4	☐	10.000	10.483	2590.26	0.0012	P	0.8	4.8
5	☐	100.000	103.406	22122.82	0.0105	P	2.6	3.4
6	☐	200.000	198.268	42286.73	0.0199	P	1.5	-0.9

y = 9.9644E-005 * x + 1.5714E-004
R = 0.9998
DL = 0.4854 ppb
BEC = 1.577 ppb

Weight: <None>
Min Conc: <None>

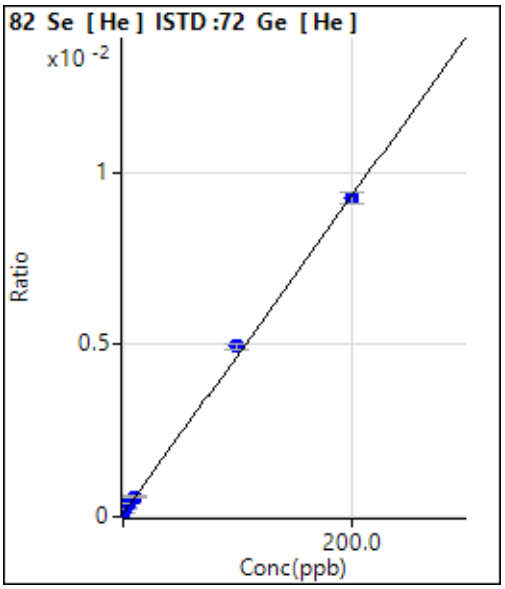
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	127.24	0.0000	P	43.6	
2	☐	2.000	1.767	923.70	0.0001	P	17.8	-11.7
3	☐	5.000	5.092	2424.34	0.0003	P	7.0	1.8
4	☐	10.000	10.309	4785.26	0.0007	P	9.3	3.1
5	☐	100.000	103.290	45675.46	0.0067	P	2.3	3.3
6	☐	200.000	198.340	86572.43	0.0128	P	3.1	-0.8

y = 6.4296E-005 * x + 1.8008E-005
R = 0.9998
DL = 0.3663 ppb
BEC = 0.2801 ppb

Weight: <None>
Min Conc: <None>

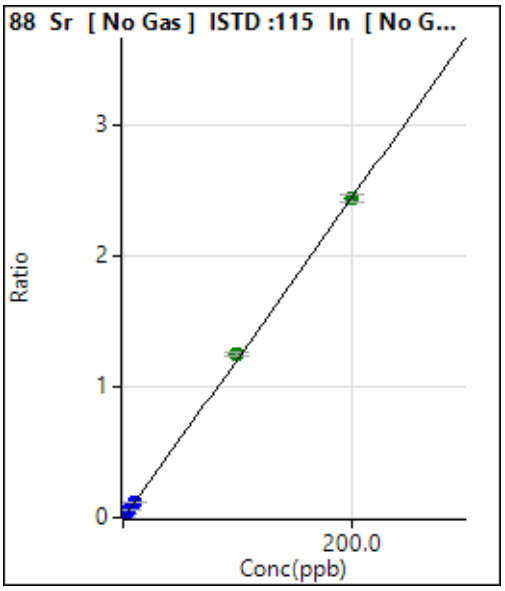


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	280.01	0.0001	P	9.3	
2	☐	2.000	2.567	543.36	0.0002	P	11.5	28.4
3	☐	5.000	5.704	850.05	0.0004	P	7.5	14.1
4	☐	10.000	9.537	1226.75	0.0006	P	9.3	-4.6
5	☐	100.000	104.515	10484.28	0.0050	P	3.1	4.5
6	☐	200.000	197.743	19671.44	0.0093	P	3.7	-1.1

y = 4.6199E-005 * x + 1.2915E-004
R = 0.9996
DL = 0.7818 ppb
BEC = 2.795 ppb

Weight: <None>
Min Conc: <None>

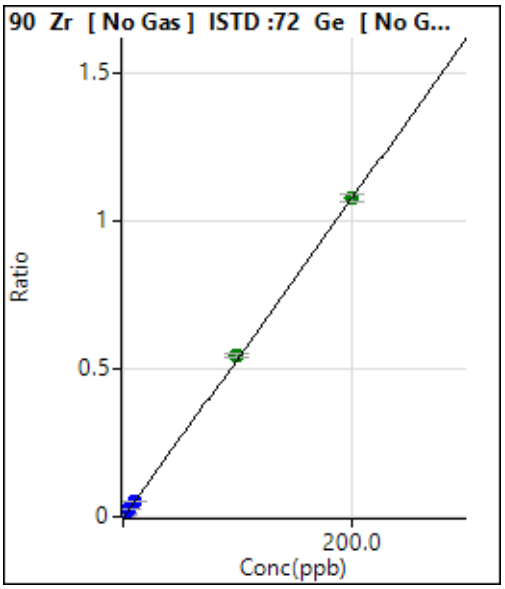
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2183.55	0.0005	P	9.2	
2	☐	2.000	2.008	116666.35	0.0251	P	1.4	0.4
3	☐	5.000	4.958	284639.84	0.0612	P	1.4	-0.8
4	☐	10.000	9.766	563509.51	0.1201	P	2.5	-2.3
5	☐	100.000	102.288	5654509.50	1.2538	A	2.5	2.3
6	☐	200.000	198.869	11015481.50	2.4371	A	2.8	-0.6

y = 0.0123 * x + 4.7204E-004
R = 0.9999
DL = 0.01067 ppb
BEC = 0.03853 ppb

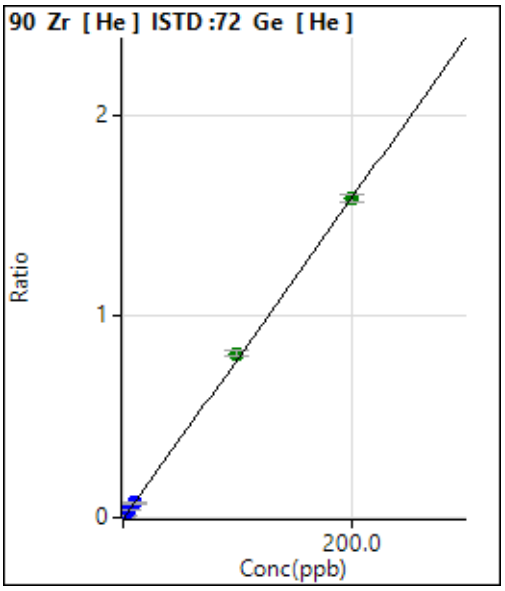
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2873.71	0.0004	P	10.7	
2	☐	2.000	1.753	69300.30	0.0099	P	3.0	-12.4
3	☐	5.000	4.512	173819.23	0.0248	P	1.1	-9.8
4	☐	10.000	9.310	356442.66	0.0507	P	2.3	-6.9
5	☐	100.000	101.163	3750909.32	0.5468	A	2.5	1.2
6	☐	200.000	199.468	7306657.81	1.0779	A	2.2	-0.3

y = 0.0054 * x + 4.0682E-004
R = 1.0000
DL = 0.02427 ppb
BEC = 0.07532 ppb

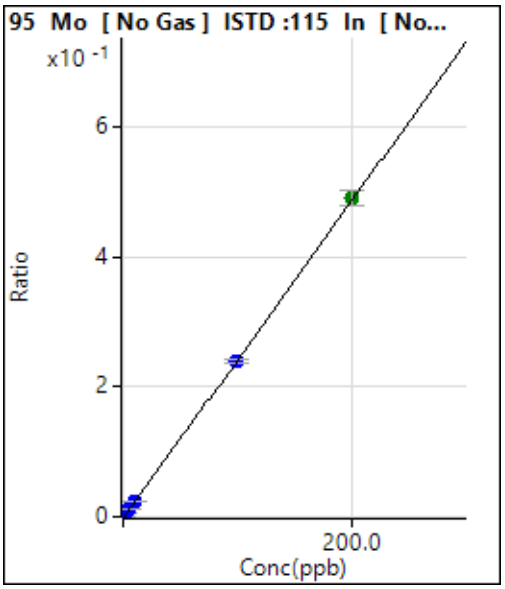
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1563.45	0.0007	P	5.1	
2	☐	2.000	1.678	30916.17	0.0141	P	1.4	-16.1
3	☐	5.000	4.396	77474.49	0.0358	P	1.6	-12.1
4	☐	10.000	8.964	155651.35	0.0722	P	1.8	-10.4
5	☐	100.000	102.374	1728311.90	0.8172	A	2.5	2.4
6	☐	200.000	198.883	3369955.99	1.5870	A	2.5	-0.6

y = 0.0080 * x + 7.2114E-004
R = 0.9999
DL = 0.01396 ppb
BEC = 0.09042 ppb

Weight: <None>
Min Conc: <None>

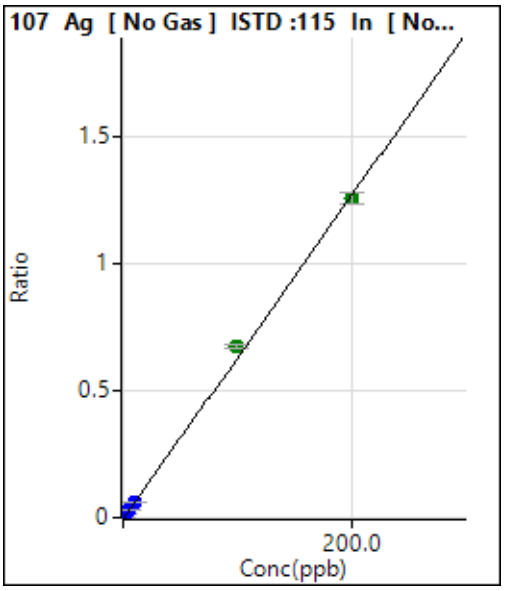


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	150.00	0.0000	P	23.5	
2	☐	2.000	1.958	22405.84	0.0048	P	2.5	-2.1
3	☐	5.000	4.799	54665.75	0.0118	P	1.8	-4.0
4	☐	10.000	9.563	109744.18	0.0234	P	2.0	-4.4
5	☐	100.000	98.306	1083364.51	0.2402	P	1.8	-1.7
6	☐	200.000	200.874	2217965.38	0.4908	A	4.3	0.4

y = 0.0024 * x + 3.2405E-005
R = 1.0000
DL = 0.009359 ppb
BEC = 0.01326 ppb

Weight: <None>
Min Conc: <None>

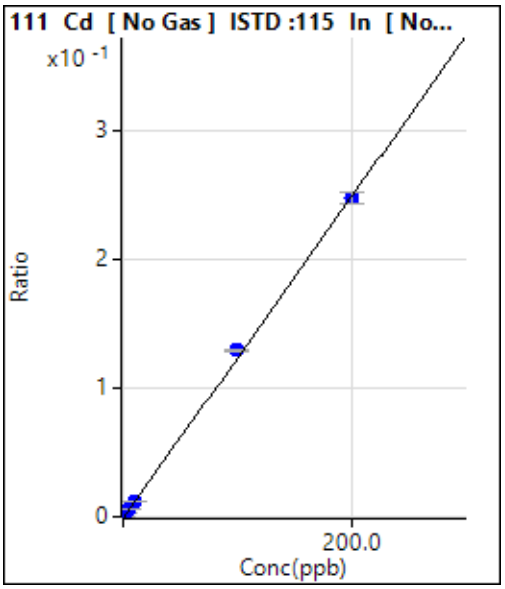
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	390.01	0.0001	P	25.7	
2	☐	2.000	1.928	57686.33	0.0124	P	2.8	-3.6
3	☐	5.000	4.829	143803.13	0.0309	P	2.7	-3.4
4	☐	10.000	9.531	285994.27	0.0610	P	1.2	-4.7
5	☐	100.000	105.588	3042212.45	0.6746	A	2.2	5.6
6	☐	200.000	197.235	5694738.04	1.2600	A	3.4	-1.4

y = 0.0064 * x + 8.4282E-005
R = 0.9994
DL = 0.01017 ppb
BEC = 0.01319 ppb

Weight: <None>
Min Conc: <None>

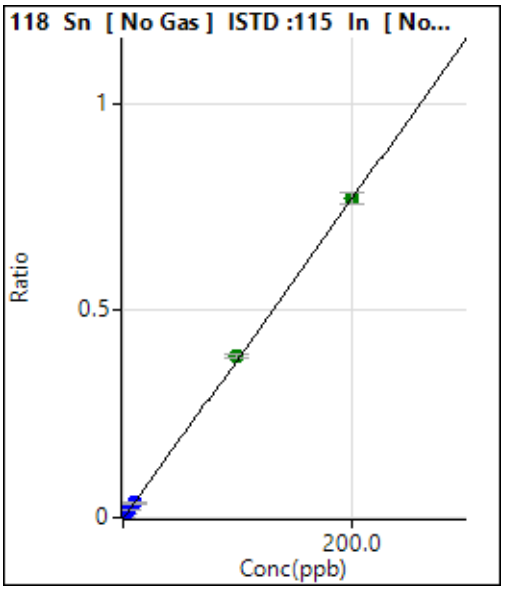


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	40.00	0.0000	P	43.7	
2	☐	2.000	1.939	11328.40	0.0024	P	3.5	-3.0
3	☐	5.000	4.965	28935.48	0.0062	P	3.9	-0.7
4	☐	10.000	9.910	58222.01	0.0124	P	1.0	-0.9
5	☐	100.000	103.697	585359.51	0.1298	P	1.0	3.7
6	☐	200.000	198.158	1120868.84	0.2480	P	3.1	-0.9

y = 0.0013 * x + 8.6647E-006
R = 0.9998
DL = 0.009069 ppb
BEC = 0.006924 ppb

Weight: <None>
Min Conc: <None>

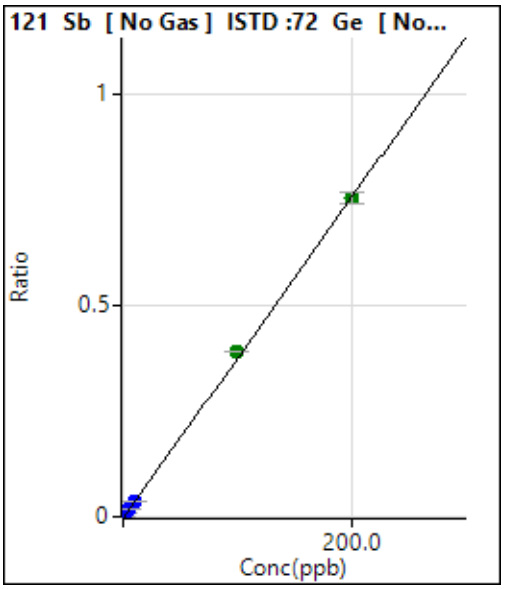
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2600.31	0.0006	P	1.3	
2	☐	2.000	1.825	35438.56	0.0076	P	2.9	-8.7
3	☐	5.000	4.556	84499.21	0.0182	P	2.2	-8.9
4	☐	10.000	8.939	164732.34	0.0351	P	2.3	-10.6
5	☐	100.000	101.077	1764554.87	0.3913	A	3.2	1.1
6	☐	200.000	199.527	3488473.59	0.7719	A	3.5	-0.2

y = 0.0039 * x + 5.6234E-004
R = 1.0000
DL = 0.005494 ppb
BEC = 0.1455 ppb

Weight: <None>
Min Conc: <None>

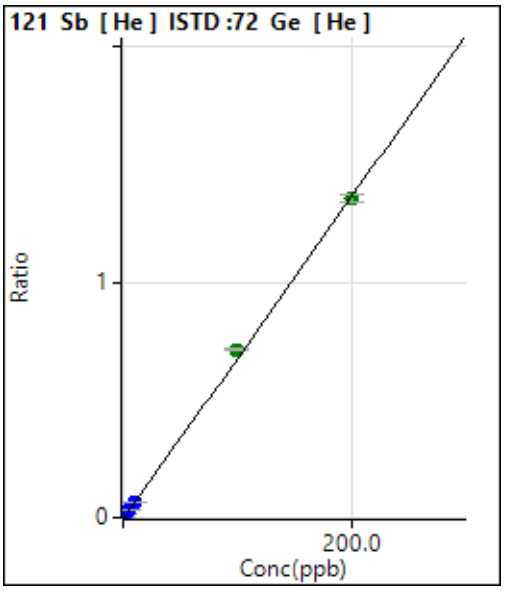


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	386.68	0.0001	P	12.9	
2	☐	2.000	1.857	49952.28	0.0071	P	1.8	-7.2
3	☐	5.000	4.620	123687.89	0.0176	P	2.2	-7.6
4	☐	10.000	9.343	250314.94	0.0356	P	2.3	-6.6
5	☐	100.000	102.854	2684471.63	0.3914	A	0.9	2.9
6	☐	200.000	198.617	5122459.51	0.7557	A	3.2	-0.7

y = 0.0038 * x + 5.4715E-005
R = 0.9998
DL = 0.005568 ppb
BEC = 0.01438 ppb

Weight: <None>
Min Conc: <None>

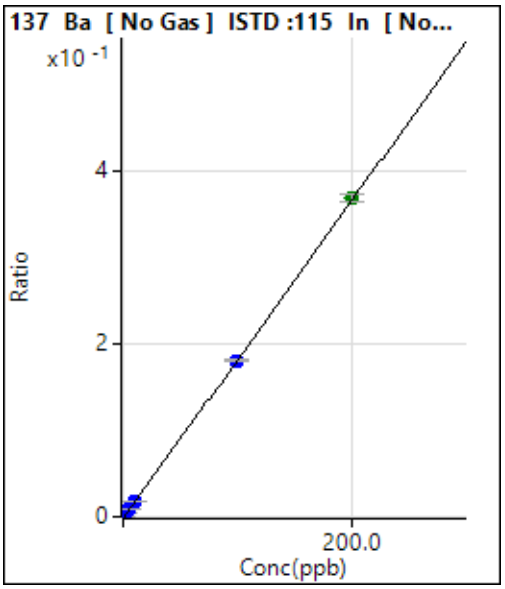
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	216.67	0.0001	P	25.3	
2	☐	2.000	1.831	27709.56	0.0126	P	2.2	-8.5
3	☐	5.000	4.625	68814.60	0.0318	P	1.3	-7.5
4	☐	10.000	9.255	136860.05	0.0635	P	0.8	-7.4
5	☐	100.000	104.224	1510281.13	0.7141	A	0.5	4.2
6	☐	200.000	197.936	2879372.14	1.3561	A	2.4	-1.0

y = 0.0069 * x + 9.9919E-005
R = 0.9997
DL = 0.01107 ppb
BEC = 0.01459 ppb

Weight: <None>
Min Conc: <None>

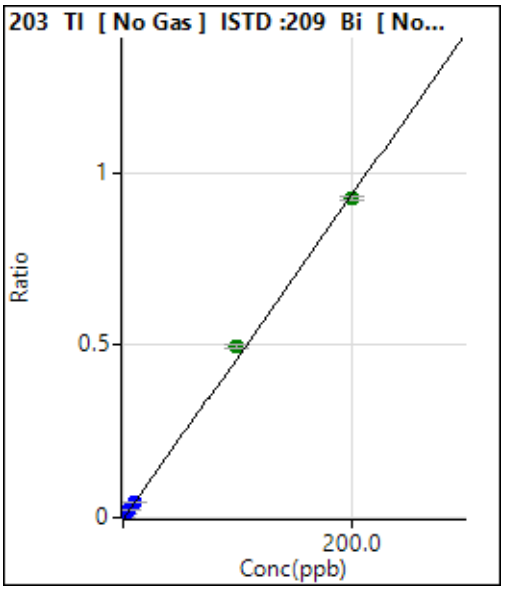


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	270.01	0.0001	P	26.7	
2	☐	2.000	1.921	16650.97	0.0036	P	2.7	-4.0
3	☐	5.000	4.832	41449.99	0.0089	P	1.1	-3.4
4	☐	10.000	9.423	81284.30	0.0173	P	3.6	-5.8
5	☐	100.000	98.543	814878.40	0.1807	P	2.3	-1.5
6	☐	200.000	200.762	1663608.83	0.3680	A	2.0	0.4

y = 0.0018 * x + 5.8468E-005
R = 1.0000
DL = 0.02553 ppb
BEC = 0.0319 ppb

Weight: <None>
Min Conc: <None>

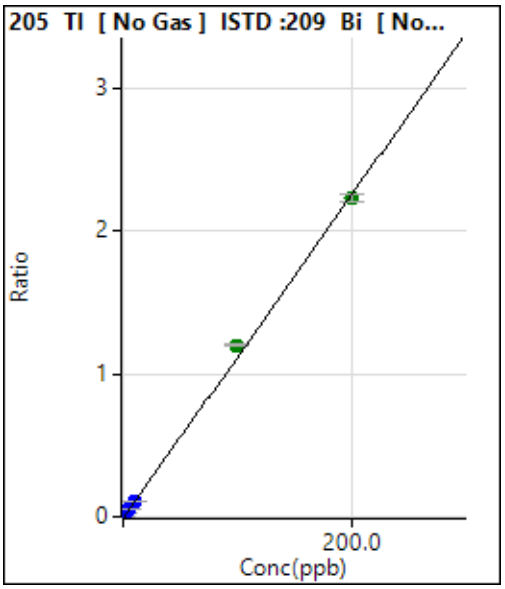
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	76.67	0.0000	P	26.7	
2	☐	2.000	1.964	33448.54	0.0093	P	1.3	-1.8
3	☐	5.000	4.862	83108.00	0.0229	P	2.6	-2.8
4	☐	10.000	9.522	164839.85	0.0448	P	2.1	-4.8
5	☐	100.000	106.062	1762258.83	0.4986	A	2.4	6.1
6	☐	200.000	196.997	3273897.35	0.9260	A	1.5	-1.5

y = 0.0047 * x + 2.1125E-005
R = 0.9993
DL = 0.003603 ppb
BEC = 0.004494 ppb

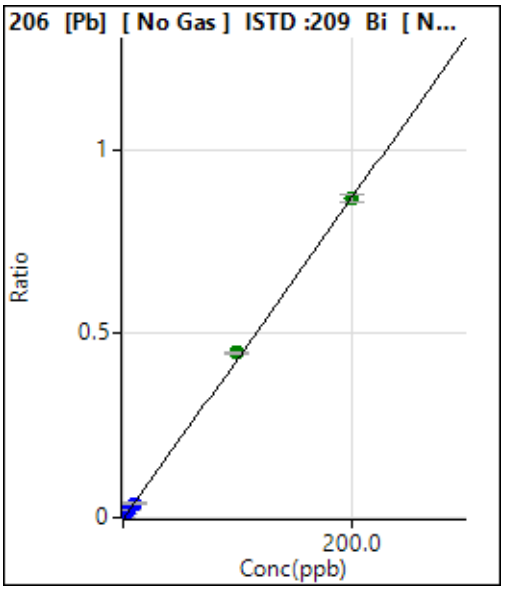
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	156.67	0.0000	P	8.3	
2	☐	2.000	1.982	81140.96	0.0225	P	1.5	-0.9
3	☐	5.000	4.944	203230.33	0.0559	P	2.1	-1.1
4	☐	10.000	9.502	395566.05	0.1075	P	2.4	-5.0
5	☐	100.000	105.778	4226568.16	1.1958	A	1.0	5.8
6	☐	200.000	197.138	7878150.72	2.2285	A	1.9	-1.4

y = 0.0113 * x + 4.3227E-005
R = 0.9994
DL = 0.0009579 ppb
BEC = 0.003824 ppb

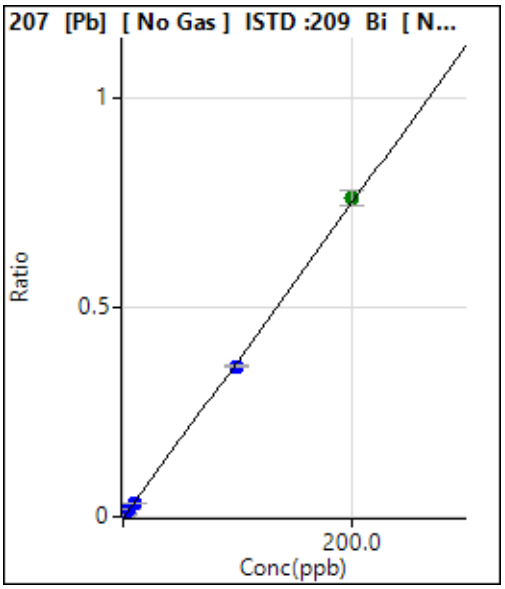
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	420.02	0.0001	P	17.8	
2	☐	2.000	1.809	28940.79	0.0080	P	1.1	-9.6
3	☐	5.000	4.596	73275.48	0.0202	P	2.2	-8.1
4	☐	10.000	8.934	143920.25	0.0391	P	3.3	-10.7
5	☐	100.000	102.509	1581206.33	0.4474	A	1.9	2.5
6	☐	200.000	198.811	3066605.37	0.8675	A	2.0	-0.6

y = 0.0044 * x + 1.1570E-004
R = 0.9999
DL = 0.01416 ppb
BEC = 0.02652 ppb

Weight: <None>
Min Conc: <None>

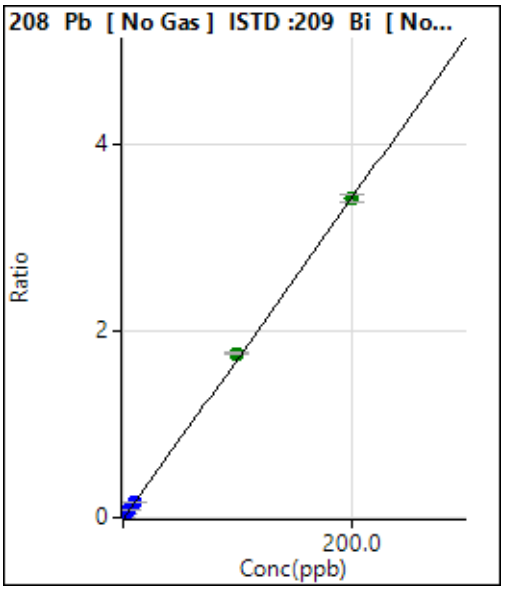


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	350.02	0.0001	P	17.7	
2	☐	2.000	1.792	24654.91	0.0068	P	2.5	-10.4
3	☐	5.000	4.636	63579.52	0.0175	P	2.3	-7.3
4	☐	10.000	8.993	124637.90	0.0339	P	0.3	-10.1
5	☐	100.000	95.284	1264488.45	0.3577	P	1.0	-4.7
6	☐	200.000	202.419	2685996.26	0.7599	A	4.7	1.2

y = 0.0038 * x + 9.6570E-005
R = 0.9996
DL = 0.01369 ppb
BEC = 0.02573 ppb

Weight: <None>
Min Conc: <None>

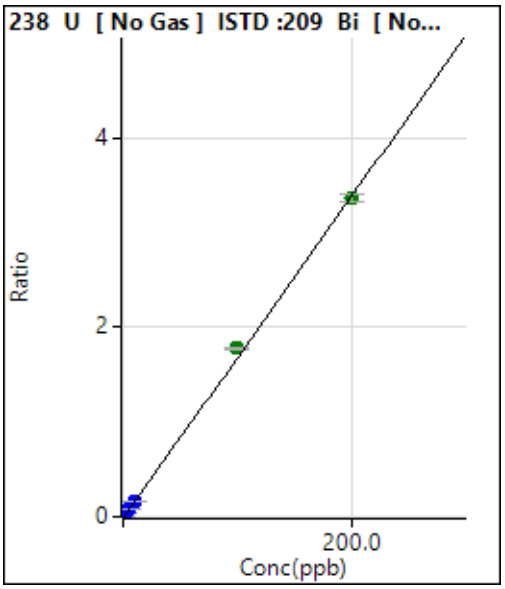
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1683.42	0.0005	P	5.5	
2	☐	2.000	1.834	115621.21	0.0320	P	0.9	-8.3
3	☐	5.000	4.640	291540.40	0.0802	P	2.8	-7.2
4	☐	10.000	9.027	573111.38	0.1557	P	1.4	-9.7
5	☐	100.000	102.304	6218858.79	1.7594	A	1.0	2.3
6	☐	200.000	198.907	12091196.12	3.4204	A	2.5	-0.5

y = 0.0172 * x + 4.6410E-004
R = 0.9999
DL = 0.004459 ppb
BEC = 0.02699 ppb

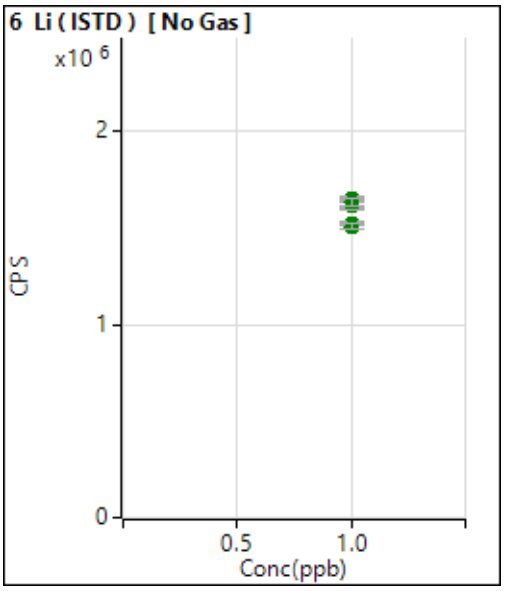
Weight: <None>
Min Conc: <None>



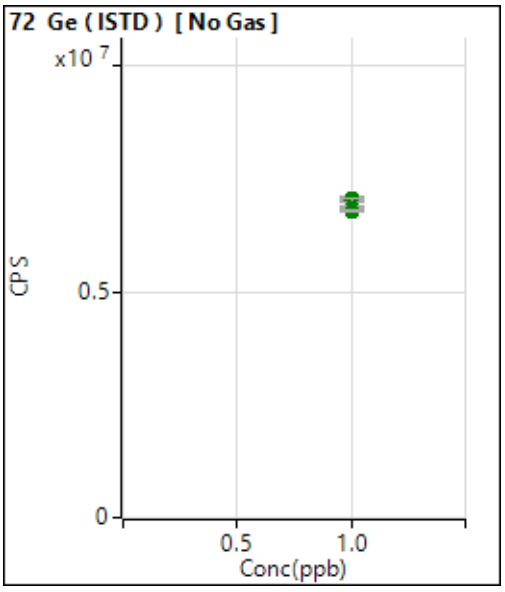
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	520.02	0.0001	P	7.0	
2	☐	2.000	1.828	112827.11	0.0312	P	1.7	-8.6
3	☐	5.000	4.591	284117.82	0.0782	P	2.2	-8.2
4	☐	10.000	9.024	565447.53	0.1536	P	0.6	-9.8
5	☐	100.000	104.361	6272319.49	1.7746	A	1.3	4.4
6	☐	200.000	197.880	11894306.07	3.3647	A	2.5	-1.1

y = 0.0170 * x + 1.4342E-004
R = 0.9996
DL = 0.001766 ppb
BEC = 0.008435 ppb

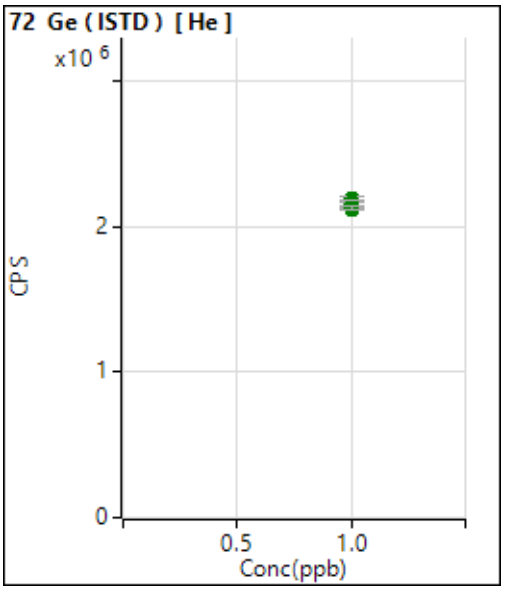
Weight: <None>
Min Conc: <None>



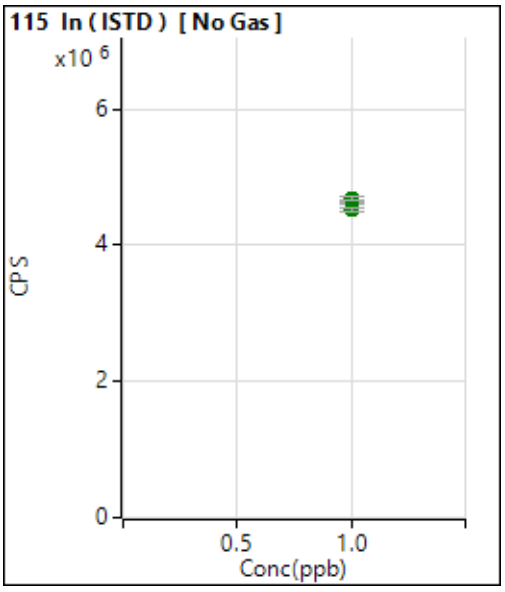
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1651948.66		A	1.1	
2	☐	1.000		1609678.20		A	0.5	
3	☐	1.000		1611021.58		A	2.3	
4	☐	1.000		1628915.66		A	2.5	
5	☐	1.000		1523225.85		A	1.4	
6	☐	1.000		1507322.90		A	1.4	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		7066877.60		A	0.7	
2	☐	1.000		7018015.11		A	0.1	
3	☐	1.000		7015674.06		A	1.4	
4	☐	1.000		7032678.02		A	1.5	
5	☐	1.000		6859626.57		A	0.6	
6	☐	1.000		6779501.36		A	0.8	

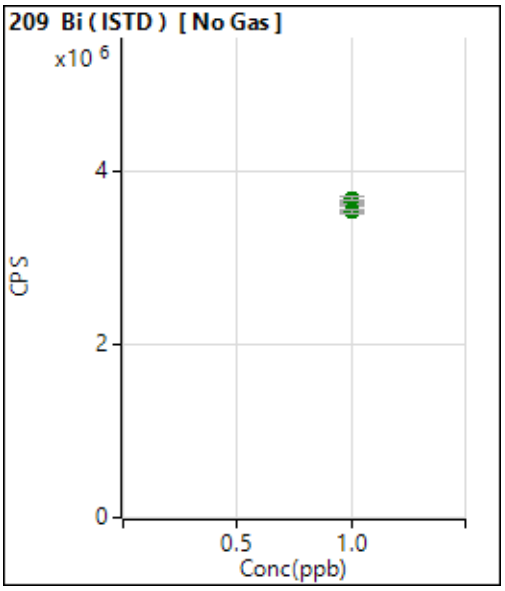


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		2168000.07		A	0.1	
2	☐	1.000		2192261.17		A	1.3	
3	☐	1.000		2165020.65		A	0.2	
4	☐	1.000		2155443.93		A	1.8	
5	☐	1.000		2115001.48		A	0.6	
6	☐	1.000		2123596.01		A	1.0	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		4624259.78		A	0.8	
2	☐	1.000		4651959.94		A	0.3	
3	☐	1.000		4649503.61		A	0.4	
4	☐	1.000		4691534.09		A	1.2	
5	☐	1.000		4510688.87		A	1.2	
6	☐	1.000		4521128.28		A	1.6	

Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		3626177.66		A	1.0	
2	☐	1.000		3614142.03		A	0.9	
3	☐	1.000		3633878.18		A	1.2	
4	☐	1.000		3681930.68		A	1.5	
5	☐	1.000		3534649.53		A	0.4	
6	☐	1.000		3535376.20		A	1.2	

Calibration Blank Report

Sample Table

Sample Name	CAL BLK
Data File Name	018CALB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\012624A.b
Acq Date Time	2024-01-26T10:36:04-06:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	7	1	No Gas	102546	0.00
Be	9	1	No Gas	58	44.89
V	51	2	He	10762	0.02
Cr	52	2	He	14601	0.02
Fe	56	2	He	28550	0.00
Se	78	2	He	341	3.00
As	75	2	He	661	0.38
Ca	44	2	He	1713	0.47
Na	23	2	He	101927	0.00
Mg	24	2	He	447	1.76
K	39	2	He	194148	0.00
Mn	55	2	He	480	3.47
Co	59	2	He	140	10.20
Ni	60	2	He	647	1.68
Cu	63	2	He	1283	0.84
Zn	66	2	He	1007	0.66
Al	27	2	He	2790	0.27
B	11	1	No Gas	45900	0.00
Al	27	1	No Gas	125917	0.00
Si	28	1	No Gas	9739105	0.00
Ag	107	1	No Gas	390	6.67
Cd	111	1	No Gas	40	108.25
Sr	88	1	No Gas	2184	0.45
Mo	95	1	No Gas	150	16.02
Sn	118	1	No Gas	2600	0.04
Sb	121	1	No Gas	387	3.37
Ba	137	1	No Gas	270	9.60
Tl	205	1	No Gas	157	4.70
Tl	203	1	No Gas	77	35.42
Pb	208	1	No Gas	1683	0.38
U	238	1	No Gas	520	1.33
Ca	43	2	He	47	95.59
Sb	121	2	He	217	11.73
Ti	47	2	He	33	51.96
Cu	63	1	No Gas	2960	0.25

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD

Calibration Blank Report

Li	6	1	No Gas	1651949	1.15
Ge	72	2	He	2168000	0.14
Ge	72	1	No Gas	7066878	0.72
In	115	1	No Gas	4624260	0.78

Calibration Blank Report

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Bi	209	1	No Gas	3626178	0.96

Calibration Standard Report

Sample Table

Sample Name	2/10/200
Data File Name	019CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\012624A.b
Acq Date Time	2024-01-26T10:38:21-06:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	018CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	15232	0.03
V	51	2	He	31228	0.00
Cr	52	2	He	36843	0.00
Fe	56	2	He	2405116	0.00
Se	78	2	He	783	0.57
As	75	2	He	5891	0.02
Ca	44	2	He	16166	0.02
Na	23	2	He	447285	0.00
Mg	24	2	He	210122	0.00
K	39	2	He	477802	0.00
Mn	55	2	He	19117	0.03
Co	59	2	He	35430	0.00
Ni	60	2	He	9940	0.01
Cu	63	2	He	26102	0.01
Zn	66	2	He	7522	0.11
Al	27	2	He	4371	0.08
B	11	1	No Gas	87520	0.00
Al	27	1	No Gas	203515	0.00
Si	28	1	No Gas	9816011	0.00
Ag	107	1	No Gas	57686	0.00
Cd	111	1	No Gas	11328	0.03
Sr	88	1	No Gas	116666	0.00
Mo	95	1	No Gas	22406	0.01
Sn	118	1	No Gas	35439	0.01
Sb	121	1	No Gas	49952	0.00
Ba	137	1	No Gas	16651	0.02
Tl	205	1	No Gas	81141	0.00
Tl	203	1	No Gas	33449	0.01
Pb	208	1	No Gas	115621	0.00
U	238	1	No Gas	112827	0.00
Ca	43	2	He	887	0.78
Sb	121	2	He	27710	0.00
Cu	63	1	No Gas	55088	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1609678	0.52	1651949	97.44	70	120	
Ge	72	2	He	2192261	1.31	2168000	101.12	70	120	
Ge	72	1	No Gas	7018015	0.15	7066878	99.31	70	120	

Calibration Standard Report

In	115	1	No Gas	4651960	0.35	4624260	100.60	70	120	
Bi	209	1	No Gas	3614142	0.86	3626178	99.67	70	120	

Calibration Standard Report

Sample Table

Sample Name	5/25/500
Data File Name	020CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\012624A.b
Acq Date Time	2024-01-26T10:41:35-06:00
Sample Type	CalStd
Level	3
Dilution	1
Comment	
ISTD Ref File Name	018CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	38835	0.00
V	51	2	He	64728	0.00
Cr	52	2	He	73380	0.00
Fe	56	2	He	5680996	0.00
Se	78	2	He	1461	0.17
As	75	2	He	13753	0.02
Ca	44	2	He	36836	0.01
Na	23	2	He	999088	0.00
Mg	24	2	He	526401	0.00
K	39	2	He	910473	0.00
Mn	55	2	He	46282	0.00
Co	59	2	He	89527	0.00
Ni	60	2	He	23531	0.02
Cu	63	2	He	61817	0.00
Zn	66	2	He	15339	0.04
Al	27	2	He	6442	0.13
B	11	1	No Gas	151154	0.00
Al	27	1	No Gas	294888	0.00
Si	28	1	No Gas	10086885	0.00
Ag	107	1	No Gas	143803	0.00
Cd	111	1	No Gas	28935	0.01
Sr	88	1	No Gas	284640	0.00
Mo	95	1	No Gas	54666	0.00
Sn	118	1	No Gas	84499	0.00
Sb	121	1	No Gas	123688	0.00
Ba	137	1	No Gas	41450	0.00
Tl	205	1	No Gas	203230	0.00
Tl	203	1	No Gas	83108	0.00
Pb	208	1	No Gas	291540	0.00
U	238	1	No Gas	284118	0.00
Ca	43	2	He	2004	0.19
Sb	121	2	He	68815	0.00
Cu	63	1	No Gas	130934	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1611022	2.27	1651949	97.52	70	120	
Ge	72	2	He	2165021	0.18	2168000	99.86	70	120	
Ge	72	1	No Gas	7015674	1.36	7066878	99.28	70	120	

Calibration Standard Report

In	115	1	No Gas	4649504	0.41	4624260	100.55	70	120	
Bi	209	1	No Gas	3633878	1.21	3626178	100.21	70	120	

Calibration Standard Report

Sample Table

Sample Name	10/50/100
Data File Name	021CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\012624A.b
Acq Date Time	2024-01-26T10:43:52-06:00
Sample Type	CalStd
Level	4
Dilution	1
Comment	
ISTD Ref File Name	018CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	76023	0.00
V	51	2	He	115652	0.00
Cr	52	2	He	131303	0.00
Fe	56	2	He	11124736	0.00
Se	78	2	He	2590	0.07
As	75	2	He	26424	0.01
Ca	44	2	He	71948	0.00
Na	23	2	He	1863164	0.00
Mg	24	2	He	1077325	0.00
K	39	2	He	1669202	0.00
Mn	55	2	He	88972	0.00
Co	59	2	He	174642	0.00
Ni	60	2	He	45630	0.01
Cu	63	2	He	118693	0.00
Zn	66	2	He	28367	0.00
Al	27	2	He	9573	0.05
B	11	1	No Gas	259294	0.00
Al	27	1	No Gas	468161	0.00
Si	28	1	No Gas	10683654	0.00
Ag	107	1	No Gas	285994	0.00
Cd	111	1	No Gas	58222	0.00
Sr	88	1	No Gas	563510	0.00
Mo	95	1	No Gas	109744	0.00
Sn	118	1	No Gas	164732	0.00
Sb	121	1	No Gas	250315	0.00
Ba	137	1	No Gas	81284	0.00
Tl	205	1	No Gas	395566	0.00
Tl	203	1	No Gas	164840	0.00
Pb	208	1	No Gas	573111	0.00
U	238	1	No Gas	565448	0.00
Ca	43	2	He	4121	0.11
Sb	121	2	He	136860	0.00
Cu	63	1	No Gas	256414	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1628916	2.54	1651949	98.61	70	120	
Ge	72	2	He	2155444	1.81	2168000	99.42	70	120	
Ge	72	1	No Gas	7032678	1.45	7066878	99.52	70	120	

Calibration Standard Report

In	115	1	No Gas	4691534	1.20	4624260	101.45	70	120	
Bi	209	1	No Gas	3681931	1.48	3626178	101.54	70	120	

Calibration Standard Report

Sample Table

Sample Name	100/500/10K
Data File Name	022CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\012624A.b
Acq Date Time	2024-01-26T10:46:08-06:00
Sample Type	CalStd
Level	5
Dilution	1
Comment	
ISTD Ref File Name	018CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	767523	0.00
V	51	2	He	1096090	0.00
Cr	52	2	He	1208675	0.00
Fe	56	2	He	108305358	0.00
Se	78	2	He	22123	0.01
As	75	2	He	258136	0.00
Ca	44	2	He	666789	0.00
Na	23	2	He	16467171	0.00
Mg	24	2	He	10047196	0.00
K	39	2	He	13735225	0.00
Mn	55	2	He	874535	0.00
Co	59	2	He	1801190	0.00
Ni	60	2	He	447268	0.00
Cu	63	2	He	1159116	0.00
Zn	66	2	He	265149	0.00
Al	27	2	He	68727	0.00
B	11	1	No Gas	2196869	0.00
Al	27	1	No Gas	3310644	0.00
Si	28	1	No Gas	27273831	0.00
Ag	107	1	No Gas	3042212	0.00
Cd	111	1	No Gas	585360	0.00
Sr	88	1	No Gas	5654510	0.00
Mo	95	1	No Gas	1083365	0.00
Sn	118	1	No Gas	1764555	0.00
Sb	121	1	No Gas	2684472	0.00
Ba	137	1	No Gas	814878	0.00
Tl	205	1	No Gas	4226568	0.00
Tl	203	1	No Gas	1762259	0.00
Pb	208	1	No Gas	6218859	0.00
U	238	1	No Gas	6272319	0.00
Ca	43	2	He	39871	0.01
Sb	121	2	He	1510281	0.00
Cu	63	1	No Gas	2610491	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1523226	1.39	1651949	92.21	70	120	
Ge	72	2	He	2115001	0.56	2168000	97.56	70	120	
Ge	72	1	No Gas	6859627	0.56	7066878	97.07	70	120	

Calibration Standard Report

In	115	1	No Gas	4510689	1.19	4624260	97.54	70	120	
Bi	209	1	No Gas	3534650	0.36	3626178	97.48	70	120	

Calibration Standard Report

Sample Table

Sample Name	200/1000/20K
Data File Name	023CALS.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\012624A.b
Acq Date Time	2024-01-26T10:48:17-06:00
Sample Type	CalStd
Level	6
Dilution	1
Comment	
ISTD Ref File Name	018CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	1514419	0.00
V	51	2	He	2117878	0.00
Cr	52	2	He	2286538	0.00
Fe	56	2	He	209331450	0.00
Se	78	2	He	42287	0.00
As	75	2	He	500092	0.00
Ca	44	2	He	1439117	0.00
Na	23	2	He	32089438	0.00
Mg	24	2	He	19597561	0.00
K	39	2	He	26643221	0.00
Mn	55	2	He	1718177	0.00
Co	59	2	He	3305680	0.00
Ni	60	2	He	849900	0.00
Cu	63	2	He	2309987	0.00
Zn	66	2	He	501327	0.00
Al	27	2	He	121995	0.00
B	11	1	No Gas	4087864	0.00
Al	27	1	No Gas	5654387	0.00
Si	28	1	No Gas	24384008	0.00
Ag	107	1	No Gas	5694738	0.00
Cd	111	1	No Gas	1120869	0.00
Sr	88	1	No Gas	11015482	0.00
Mo	95	1	No Gas	2217965	0.00
Sn	118	1	No Gas	3488474	0.00
Sb	121	1	No Gas	5122460	0.00
Ba	137	1	No Gas	1663609	0.00
Tl	205	1	No Gas	7878151	0.00
Tl	203	1	No Gas	3273897	0.00
Pb	208	1	No Gas	12091196	0.00
U	238	1	No Gas	11894306	0.00
Ca	43	2	He	78443	0.00
Sb	121	2	He	2879372	0.00
Cu	63	1	No Gas	4806415	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1507323	1.41	1651949	91.25	70	120	
Ge	72	2	He	2123596	0.96	2168000	97.95	70	120	
Ge	72	1	No Gas	6779501	0.78	7066878	95.93	70	120	

Calibration Standard Report

In	115	1	No Gas	4521128	1.62	4624260	97.77	70	120	
Bi	209	1	No Gas	3535376	1.21	3626178	97.50	70	120	

Initial Calibration Verification (ICV) Report

Sample Table

Sample Name	ICV
Data File Name	025_ICV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\012624A.b
Acq Date Time	2024-01-26T10:52:59-06:00
Sample Type	ICV
Dilution	1
Comment	
ISTD Ref File Name	018CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	1	No Gas	105.055	4.800	2353194	3.88	100	105.1	90	110	
Be	9	1	No Gas	99.500	1.339	778393	1.13	100	99.5	90	110	
V	51	2	He	98.466	4.650	1084190	2.26	100	98.5	90	110	
Cr	52	2	He	99.190	4.906	1185424	2.10	100	99.2	90	110	
Fe	56	2	He	10142.644	6.347	109913558	3.68	10000	101.4	90	110	
Se	78	2	He	100.764	3.751	22254	1.32	100	100.8	90	110	
As	75	2	He	100.456	2.362	260400	2.03	100	100.5	90	110	
Ca	44	2	He	9218.849	2.580	673177	1.86	10000	92.2	90	110	
Na	23	2	He	10329.935	2.024	17185521	1.31	10000	103.3	90	110	
Mg	24	2	He	10406.435	1.733	10548222	1.97	10000	104.1	90	110	
K	39	2	He	10162.189	2.613	14094497	2.17	10000	101.6	90	110	
Mn	55	2	He	97.564	6.055	865001	3.31	100	97.6	90	110	
Co	59	2	He	105.710	5.614	1828827	2.83	100	105.7	90	110	
Ni	60	2	He	103.800	4.858	458613	2.16	100	103.8	90	110	
Cu	63	2	He	106.053	4.903	1260885	2.49	100	106.1	90	110	
Zn	66	2	He	103.148	2.285	269507	0.87	100	103.1	90	110	
Al	27	2	He	102.356	5.111	66961	4.12	100	102.4	90	110	
B	11	1	No Gas	527.635	1.081	2271537	0.50	500	105.5	90	110	
Al	27	1	No Gas	104.744	1.740	3181103	1.24	100	104.7	90	110	
Si	28	1	No Gas	3460.888	1.887	77323054	1.81	500	692.2	90	110	ICV Main CR1 Failed
Ag	107	1	No Gas	105.321	2.643	3092350	0.92	100	105.3	90	110	
Cd	111	1	No Gas	103.338	2.566	594416	1.24	100	103.3	90	110	
Sr	88	1	No Gas	105.438	4.397	5938611	2.99	100	105.4	90	110	
Mo	95	1	No Gas	99.191	3.444	1113926	2.63	100	99.2	90	110	
Sn	118	1	No Gas	102.752	2.870	1828014	1.08	100	102.8	90	110	
Sb	121	1	No Gas	104.649	2.055	2769239	1.54	100	104.6	90	110	
Ba	137	1	No Gas	99.275	2.561	836538	0.72	100	99.3	90	110	
Tl	205	1	No Gas	101.234	4.428	4160248	2.57	100	101.2	90	110	
Tl	203	1	No Gas	102.086	4.097	1744624	2.15	100	102.1	90	110	
Pb	208	1	No Gas	102.740	2.144	6425388	1.09	100	102.7	90	110	
U	238	1	No Gas	103.412	2.986	6394471	2.29	100	103.4	90	110	
Ca	43	2	He	9930.318	3.126	40226	3.02	10000	99.3	90	110	
Sb	121	2	He	105.680	2.195	1580515	0.68	100	105.7	90	110	
Ti	47	2	He	96.911	3.435	39644	1.72	100	96.9	90	110	
Cu	63	1	No Gas	106.496	1.849	2665887	2.48	100	106.5	90	110	
Se	82	1	No Gas	101.683	2.050	45595	1.90	100	101.7	90	110	
Zr	90	1	No Gas	101.735	0.734	3824813	0.56	100	101.7	90	110	
Zr	90	2	He	105.314	4.190	1834548	2.10	100	105.3	90	1100	

QC ISTD Table

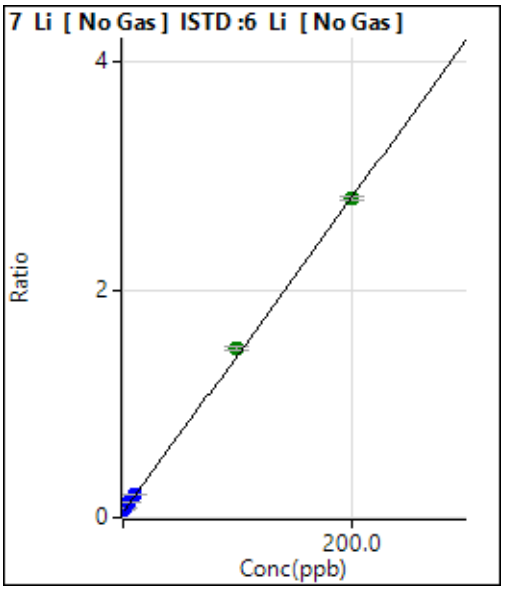
Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1556601	1.15	1651949	94.23	70	120	
Ge	72	2	He	2183770	2.90	2168000	100.73	70	120	
Ge	72	1	No Gas	6955170	0.69	7066878	98.42	70	120	
In	115	1	No Gas	4597319	1.83	4624260	99.42	70	120	
Bi	209	1	No Gas	3637410	2.05	3626178	100.31	70	120	

Calibration for 025_ICV.d

Batch Folder: C:\Agilent\ICPMH\1\DATA\012624A.b\
Analysis File: 012624A.batch.bin
DA Date-Time: 1/26/2024 10:53:35 AM
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	018CALB.d	CAL BLK	1/26/2024 10:36:04 AM
2	019CALS.d	2/10/200	1/26/2024 10:38:21 AM
3	020CALS.d	5/25/500	1/26/2024 10:41:35 AM
4	021CALS.d	10/50/100	1/26/2024 10:43:52 AM
5	022CALS.d	100/500/10K	1/26/2024 10:46:08 AM
6	023CALS.d	200/1000/20K	1/26/2024 10:48:17 AM

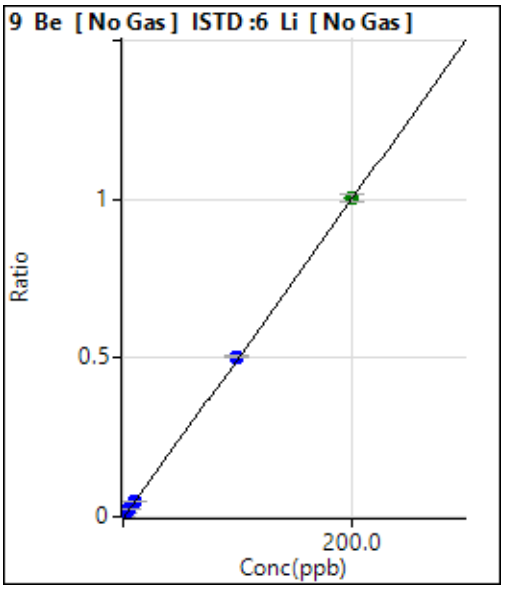
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	102546.00	0.0621	P	0.5	
2	☐	2.000	1.971	143706.42	0.0893	P	0.8	-1.5
3	☐	5.000	5.179	215081.89	0.1336	P	2.5	3.6
4	☐	10.000	9.757	320365.00	0.1967	P	2.2	-2.4
5	☐	100.000	102.963	2259138.77	1.4832	A	1.8	3.0
6	☐	200.000	198.527	4223886.50	2.8023	A	1.4	-0.7

y = 0.0138 * x + 0.0621
R = 0.9998
DL = 0.06948 ppb
BEC = 4.498 ppb

Weight: <None>
Min Conc: <None>

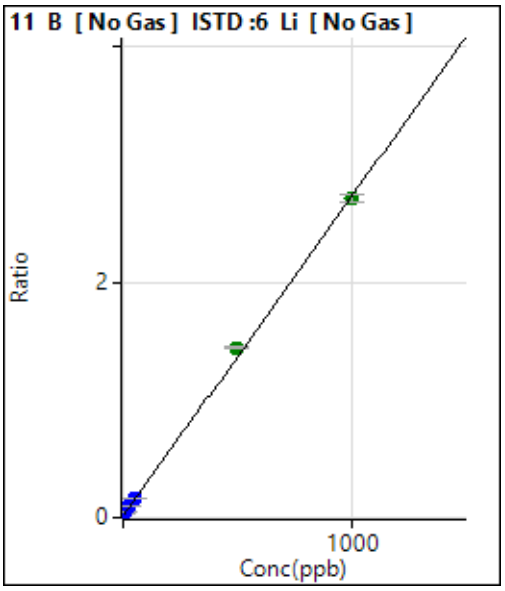


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	58.33	0.0000	P	26.4	
2	☐	2.000	1.876	15231.69	0.0095	P	4.1	-6.2
3	☐	5.000	4.791	38835.22	0.0241	P	2.4	-4.2
4	☐	10.000	9.285	76022.68	0.0467	P	3.7	-7.2
5	☐	100.000	100.261	767523.09	0.5039	P	1.5	0.3
6	☐	200.000	199.912	1514419.15	1.0047	A	2.7	0.0

y = 0.0050 * x + 3.5319E-005
R = 1.0000
DL = 0.00557 ppb
BEC = 0.007028 ppb

Weight: <None>
Min Conc: <None>

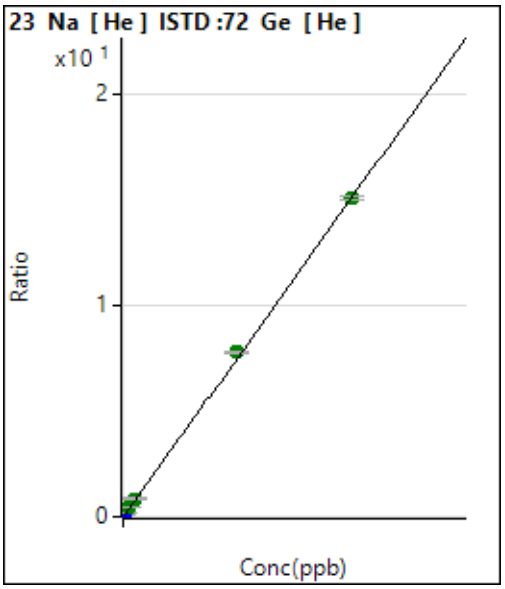
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	45899.76	0.0278	P	0.5	
2	☐	10.000	9.798	87519.56	0.0544	P	0.3	-2.0
3	☐	25.000	24.352	151153.67	0.0939	P	2.4	-2.6
4	☐	50.000	48.458	259294.38	0.1593	P	3.1	-3.1
5	☐	500.000	521.384	2196869.24	1.4424	A	1.4	4.3
6	☐	1000.000	989.403	4087863.90	2.7123	A	2.3	-1.1

y = 0.0027 * x + 0.0278
R = 0.9997
DL = 0.1612 ppb
BEC = 10.24 ppb

Weight: <None>
Min Conc: <None>

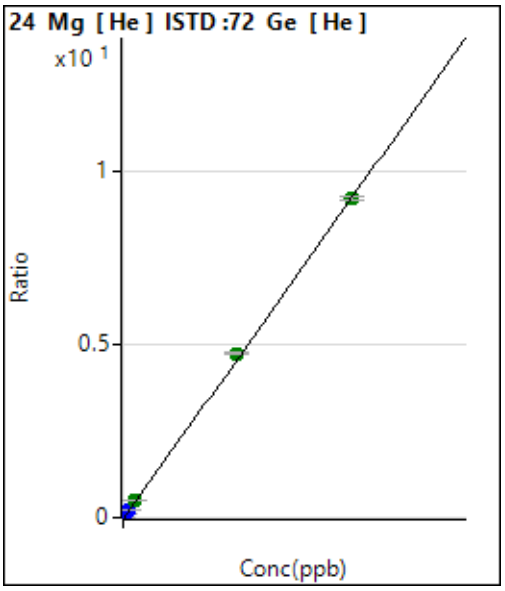


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	101926.88	0.0470	P	2.0	
2	☐	200.000	207.269	447285.15	0.2040	P	0.5	3.6
3	☐	500.000	547.083	999088.32	0.4615	A	2.5	9.4
4	☐	1000.000	1079.198	1863164.08	0.8646	A	1.7	7.9
5	☐	10000.00	10216.25	16467171.42	7.7863	A	1.7	2.2
6	☐	20000.00	19886.66	32089437.86	15.112	A	1.5	-0.6

y = 7.5755E-004 * x + 0.0470
R = 0.9999
DL = 3.79 ppb
BEC = 62.06 ppb

Weight: <None>
Min Conc: <None>

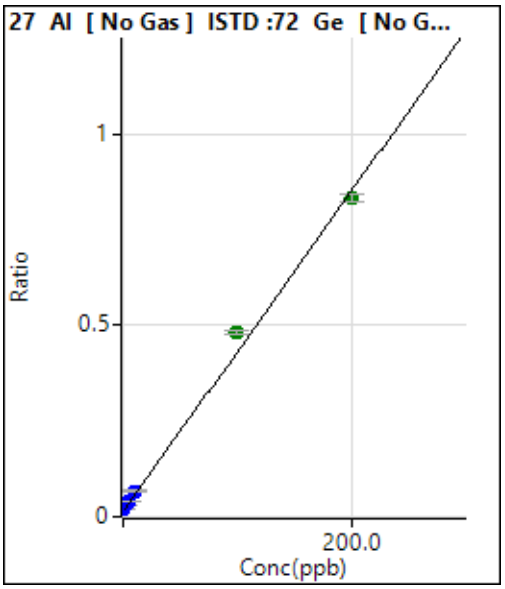
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	446.69	0.0002	P	7.9	
2	☐	200.000	205.997	210122.00	0.0958	P	0.7	3.0
3	☐	500.000	523.269	526401.48	0.2431	P	1.4	4.7
4	☐	1000.000	1076.236	1077324.93	0.4999	A	0.7	7.6
5	☐	10000.00	10232.67	10047195.89	4.7508	A	2.0	2.3
6	☐	20000.00	19879.21	19597560.96	9.2293	A	1.6	-0.6

y = 4.6426E-004 * x + 2.0604E-004
R = 0.9999
DL = 0.1052 ppb
BEC = 0.4438 ppb

Weight: <None>
Min Conc: <None>

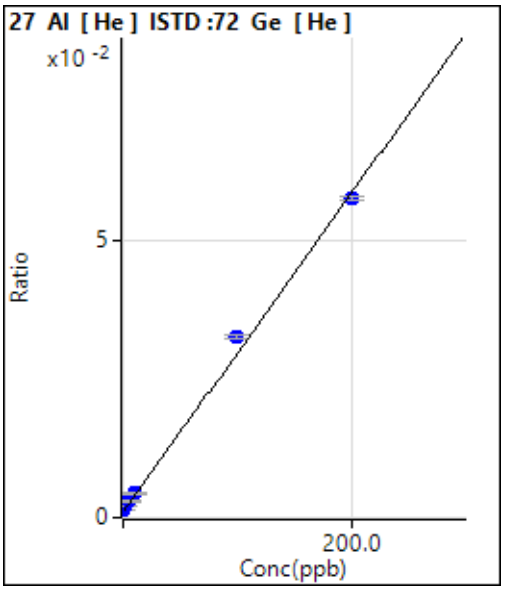


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	125916.59	0.0178	P	0.6	
2	☐	2.000	2.664	203515.27	0.0290	P	1.1	33.2
3	☐	5.000	5.770	294887.65	0.0420	P	0.3	15.4
4	☐	10.000	11.625	468160.60	0.0666	P	5.5	16.2
5	☐	100.000	110.763	3310643.80	0.4827	A	1.9	10.8
6	☐	200.000	194.511	5654387.42	0.8341	A	2.1	-2.7

y = 0.0042 * x + 0.0178
R = 0.9980
DL = 0.07931 ppb
BEC = 4.246 ppb

Weight: <None>
Min Conc: <None>

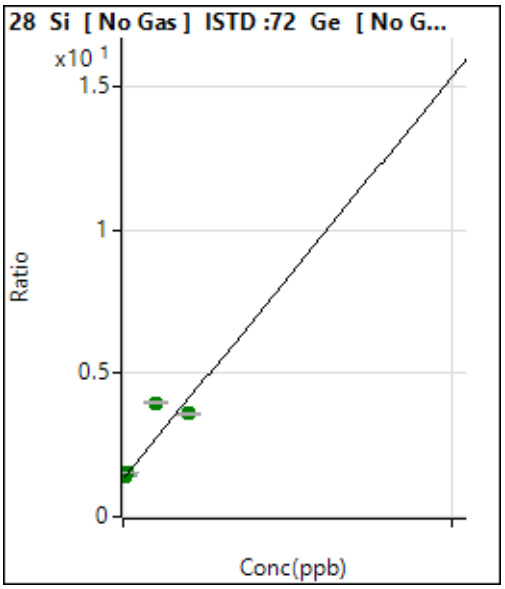
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2790.33	0.0013	P	7.6	
2	☐	2.000	2.460	4370.77	0.0020	P	2.2	23.0
3	☐	5.000	5.879	6441.63	0.0030	P	8.4	17.6
4	☐	10.000	10.996	9573.46	0.0044	P	6.2	10.0
5	☐	100.000	108.692	68726.69	0.0325	P	2.9	8.7
6	☐	200.000	195.578	121995.16	0.0574	P	1.5	-2.2

y = 2.8715E-004 * x + 0.0013
R = 0.9987
DL = 1.021 ppb
BEC = 4.482 ppb

Weight: <None>
Min Conc: <None>

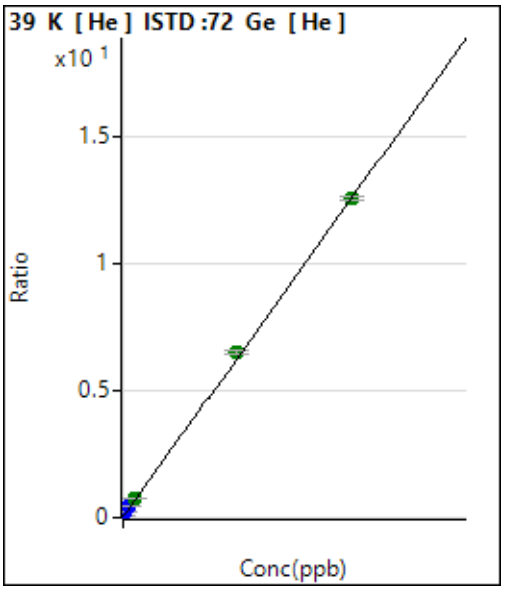


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	9739105.06	1.3781	A	0.2	
2	☐	10.000	7.299	9816011.31	1.3987	A	0.6	-27.0
3	☐	25.000	21.250	10086884.64	1.4379	A	1.5	-15.0
4	☐	50.000	50.170	10683654.01	1.5193	A	1.3	0.3
5	☐	500.000	923.255	27273831.26	3.9762	A	1.7	84.7
6	☐	1000.000	788.485	24384007.97	3.5970	A	1.5	-21.2

y = 0.0028 * x + 1.3781
R = 0.8796
DL = 3.52 ppb
BEC = 489.7 ppb

Weight: <None>
Min Conc: <None>

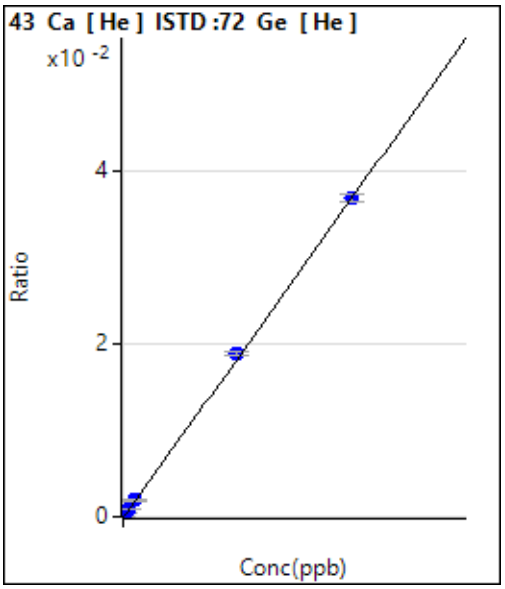
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	194147.59	0.0896	P	1.5	
2	☐	200.000	204.958	477801.61	0.2180	P	0.9	2.5
3	☐	500.000	528.287	910472.96	0.4205	P	1.4	5.7
4	☐	1000.000	1093.325	1669201.80	0.7745	A	1.4	9.3
5	☐	10000.00	10223.09	13735224.80	6.4946	A	1.5	2.2
6	☐	20000.00	19883.02	26643221.27	12.546	A	1.5	-0.6

y = 6.2652E-004 * x + 0.0896
R = 0.9999
DL = 6.376 ppb
BEC = 142.9 ppb

Weight: <None>
Min Conc: <None>

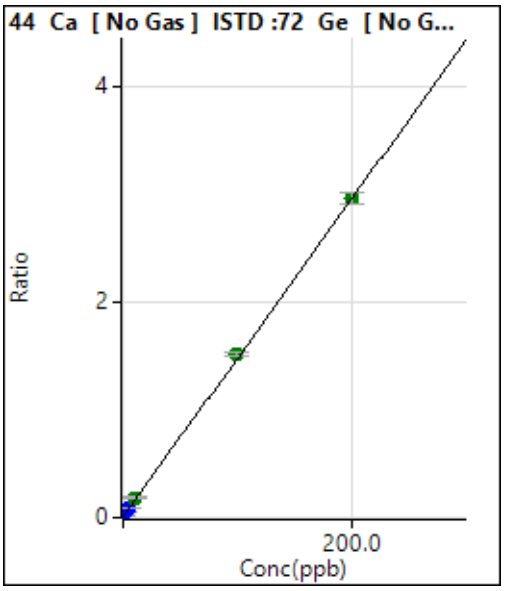


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	46.67	0.0000	P	44.6	
2	☐	200.000	206.522	886.71	0.0004	P	5.6	3.3
3	☐	500.000	487.705	2003.52	0.0009	P	3.8	-2.5
4	☐	1000.000	1020.654	4120.70	0.0019	P	6.2	2.1
5	☐	10000.00	10161.15	39871.49	0.0189	P	2.8	1.6
6	☐	20000.00	19918.63	78443.38	0.0369	P	2.4	-0.4

y = 1.8533E-006 * x + 2.1525E-005
R = 1.0000
DL = 15.55 ppb
BEC = 11.61 ppb

Weight: <None>
Min Conc: <None>

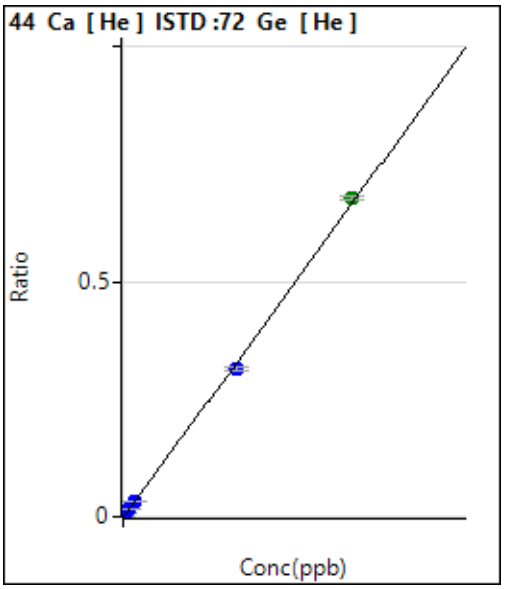
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	165802.33	0.0235	P	0.8	
2	☐	2.000	1.973	368964.14	0.0526	P	0.5	-1.3
3	☐	5.000	4.822	663574.26	0.0946	P	0.8	-3.6
4	☐	10.000	10.978	1303602.04	0.1854	A	2.7	9.8
5	☐	100.000	101.164	10397048.59	1.5158	A	1.9	1.2
6	☐	200.000	199.374	20095269.70	2.9645	A	3.3	-0.3

y = 0.0148 * x + 0.0235
R = 1.0000
DL = 0.03618 ppb
BEC = 1.591 ppb

Weight: <None>
Min Conc: <None>

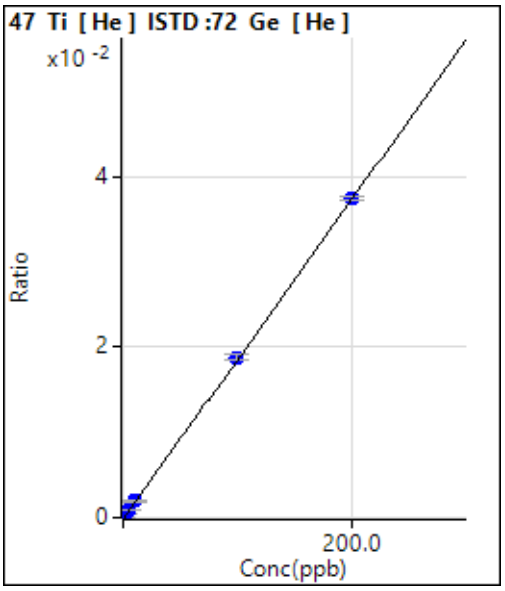


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1713.47	0.0008	P	7.9	
2	☐	200.000	197.284	16166.42	0.0074	P	2.5	-1.4
3	☐	500.000	486.258	36836.44	0.0170	P	3.4	-2.7
4	☐	1000.000	976.907	71948.01	0.0334	P	1.6	-2.3
5	☐	10000.00	9425.943	666788.87	0.3153	P	2.4	-5.7
6	☐	20000.00	20288.55	1439117.11	0.6777	A	1.2	1.4

y = 3.3365E-005 * x + 7.9029E-004
R = 0.9994
DL = 5.622 ppb
BEC = 23.69 ppb

Weight: <None>
Min Conc: <None>

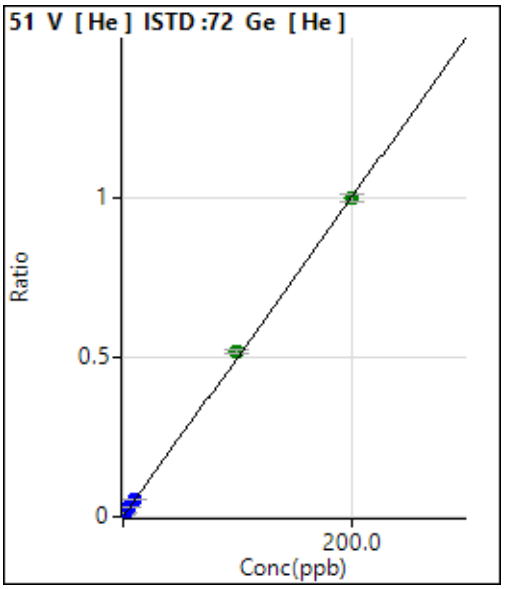
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	33.33	0.0000	P	17.2	
2	☐	2.000	2.265	963.39	0.0004	P	7.5	13.3
3	☐	5.000	4.695	1936.84	0.0009	P	5.1	-6.1
4	☐	10.000	10.207	4154.05	0.0019	P	4.6	2.1
5	☐	100.000	100.336	39771.23	0.0188	P	4.0	0.3
6	☐	200.000	199.827	79500.01	0.0374	P	1.0	-0.1

y = 1.8727E-004 * x + 1.5373E-005
R = 1.0000
DL = 0.04231 ppb
BEC = 0.08209 ppb

Weight: <None>
Min Conc: <None>

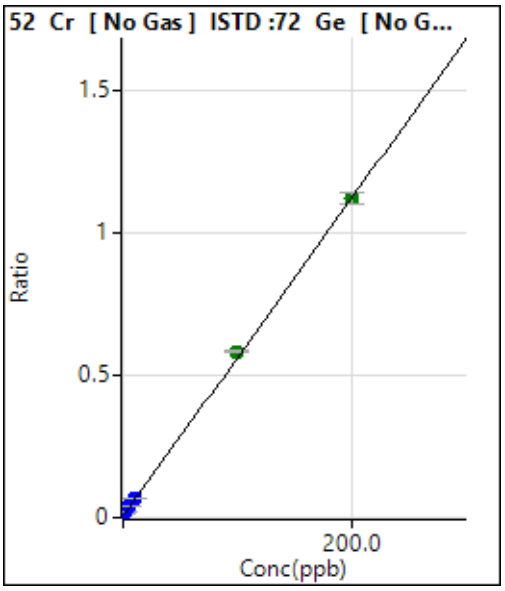


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	10762.04	0.0050	P	1.5	
2	☐	2.000	1.858	31227.74	0.0142	P	1.8	-7.1
3	☐	5.000	4.991	64727.60	0.0299	P	1.3	-0.2
4	☐	10.000	9.747	115651.74	0.0537	P	0.6	-2.5
5	☐	100.000	102.750	1096089.85	0.5183	A	2.7	2.7
6	☐	200.000	198.639	2117877.56	0.9973	A	2.0	-0.7

y = 0.0050 * x + 0.0050
R = 0.9999
DL = 0.04561 ppb
BEC = 0.9936 ppb

Weight: <None>
Min Conc: <None>

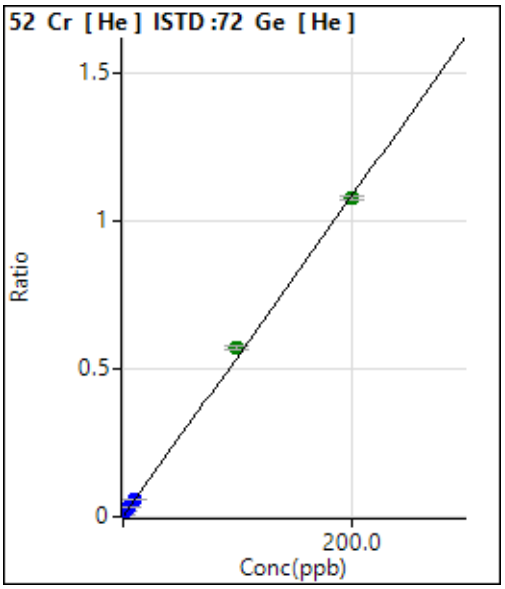
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	78759.72	0.0111	P	2.0	
2	☐	2.000	1.921	153352.32	0.0219	P	1.2	-3.9
3	☐	5.000	5.044	275330.62	0.0392	P	1.3	0.9
4	☐	10.000	10.055	472264.38	0.0672	P	2.8	0.5
5	☐	100.000	102.151	3980692.13	0.5803	A	1.3	2.2
6	☐	200.000	198.921	7588631.35	1.1195	A	3.3	-0.5

y = 0.0056 * x + 0.0111
R = 0.9999
DL = 0.1196 ppb
BEC = 2 ppb

Weight: <None>
Min Conc: <None>

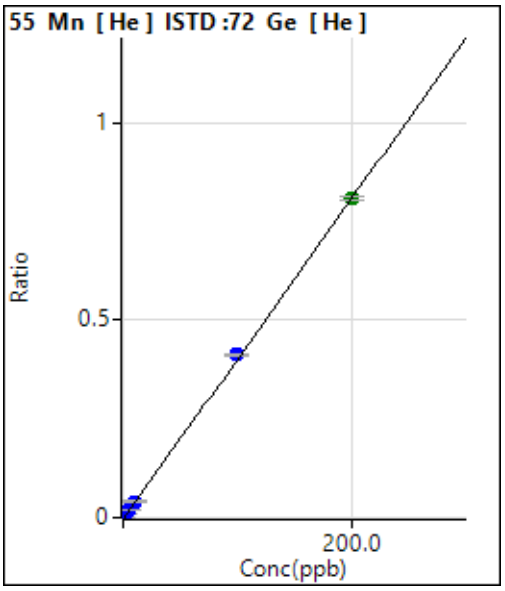


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	14601.37	0.0067	P	3.3	
2	☐	2.000	1.862	36843.42	0.0168	P	1.1	-6.9
3	☐	5.000	5.020	73380.15	0.0339	P	0.5	0.4
4	☐	10.000	10.017	131302.82	0.0609	P	1.3	0.2
5	☐	100.000	104.402	1208675.22	0.5715	A	2.6	4.4
6	☐	200.000	197.799	2286538.25	1.0768	A	1.5	-1.1

y = 0.0054 * x + 0.0067
R = 0.9997
DL = 0.1217 ppb
BEC = 1.245 ppb

Weight: <None>
Min Conc: <None>

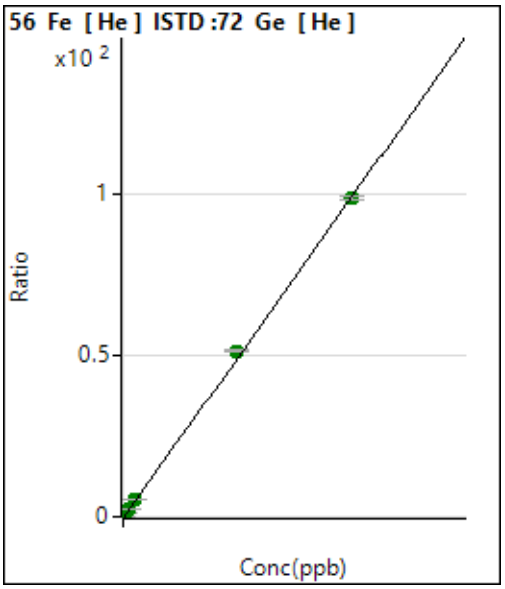
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	480.02	0.0002	P	16.6	
2	☐	2.000	2.091	19117.11	0.0087	P	3.6	4.6
3	☐	5.000	5.208	46282.02	0.0214	P	1.2	4.2
4	☐	10.000	10.107	88972.50	0.0413	P	0.7	1.1
5	☐	100.000	101.731	874534.88	0.4135	P	1.1	1.7
6	☐	200.000	199.123	1718177.32	0.8091	A	1.0	-0.4

y = 0.0041 * x + 2.2139E-004
R = 0.9999
DL = 0.02709 ppb
BEC = 0.0545 ppb

Weight: <None>
Min Conc: <None>

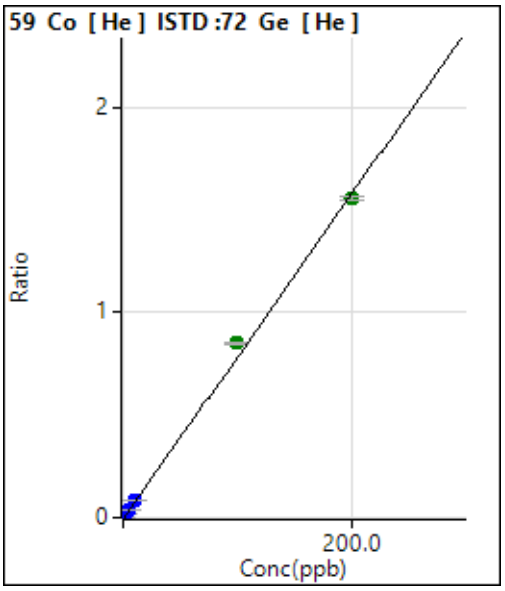


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	28550.30	0.0132	P	0.9	
2	☐	200.000	218.209	2405115.90	1.0970	A	0.8	9.1
3	☐	500.000	525.631	5680995.54	2.6240	A	0.6	5.1
4	☐	1000.000	1036.466	11124735.67	5.1613	A	1.1	3.6
5	☐	10000.00	10307.17	108305358.3	51.209	A	1.5	3.1
6	☐	20000.00	19843.76	209331450.2	98.577	A	1.0	-0.8

y = 0.0050 * x + 0.0132
R = 0.9998
DL = 0.07546 ppb
BEC = 2.651 ppb

Weight: <None>
Min Conc: <None>

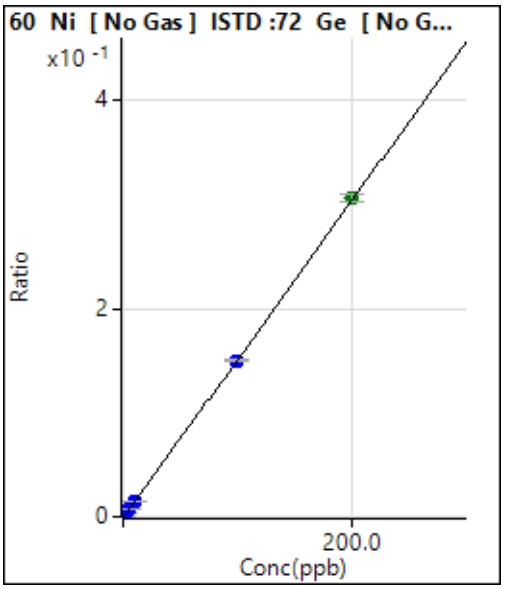
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	140.00	0.0001	P	14.4	
2	☐	2.000	2.030	35429.76	0.0162	P	0.4	1.5
3	☐	5.000	5.206	89526.57	0.0414	P	2.2	4.1
4	☐	10.000	10.211	174641.85	0.0810	P	1.3	2.1
5	☐	100.000	107.383	1801190.18	0.8516	A	0.8	7.4
6	☐	200.000	196.293	3305679.95	1.5567	A	0.7	-1.9

y = 0.0079 * x + 6.4581E-005
R = 0.9990
DL = 0.00351 ppb
BEC = 0.008144 ppb

Weight: <None>
Min Conc: <None>

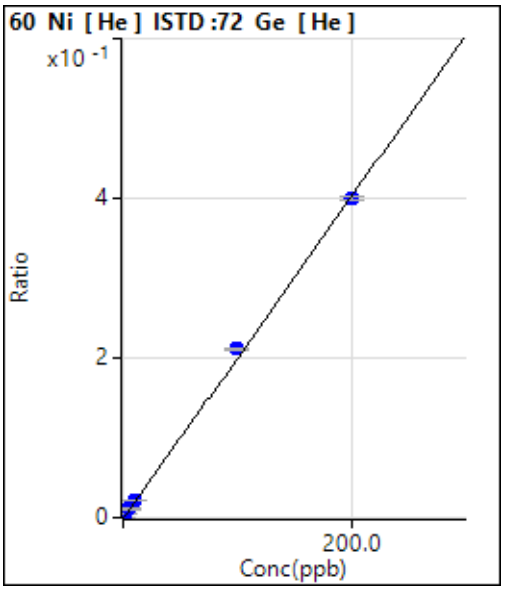


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1576.79	0.0002	P	8.0	
2	☐	2.000	2.048	23480.69	0.0033	P	3.8	2.4
3	☐	5.000	5.008	55128.55	0.0079	P	3.2	0.2
4	☐	10.000	9.809	106717.12	0.0152	P	3.8	-1.9
5	☐	100.000	98.277	1029464.83	0.1501	P	1.5	-1.7
6	☐	200.000	200.870	2077807.52	0.3065	A	2.9	0.4

y = 0.0015 * x + 2.2305E-004
R = 0.9999
DL = 0.03493 ppb
BEC = 0.1463 ppb

Weight: <None>
Min Conc: <None>

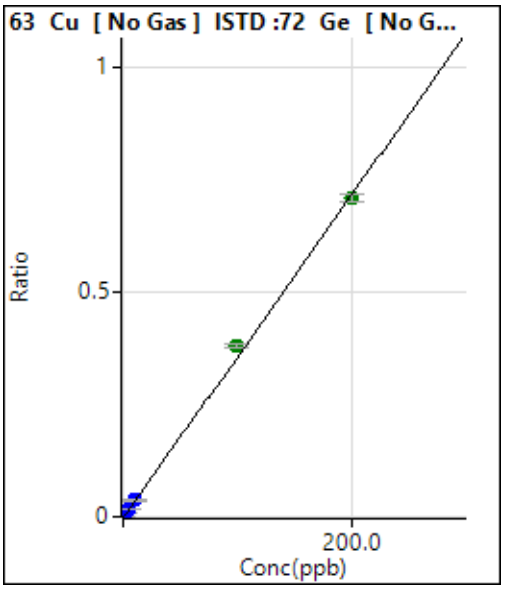
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	646.70	0.0003	P	10.9	
2	☐	2.000	2.095	9940.45	0.0045	P	1.3	4.7
3	☐	5.000	5.227	23530.73	0.0109	P	4.1	4.5
4	☐	10.000	10.320	45630.30	0.0212	P	2.3	3.2
5	☐	100.000	104.429	447267.75	0.2115	P	1.6	4.4
6	☐	200.000	197.763	849899.62	0.4002	P	0.7	-1.1

y = 0.0020 * x + 2.9831E-004
R = 0.9997
DL = 0.04841 ppb
BEC = 0.1475 ppb

Weight: <None>
Min Conc: <None>

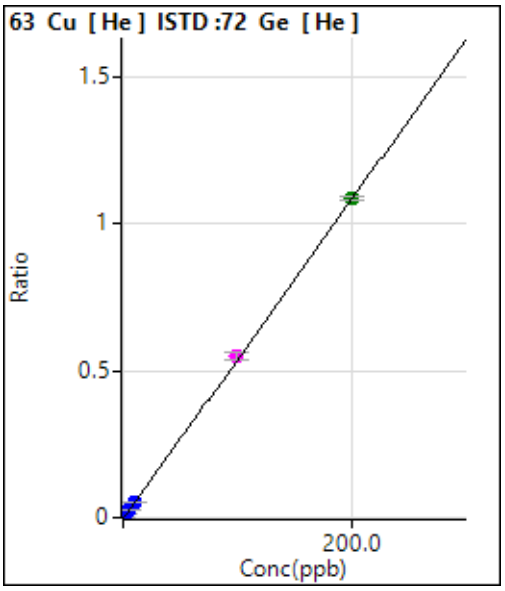


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2960.38	0.0004	P	8.1	
2	☐	2.000	2.067	55088.49	0.0078	P	0.5	3.3
3	☐	5.000	5.075	130933.84	0.0187	P	0.4	1.5
4	☐	10.000	10.029	256413.71	0.0365	P	3.9	0.3
5	☐	100.000	105.752	2610490.64	0.3806	A	2.2	5.8
6	☐	200.000	197.120	4806414.61	0.7091	A	2.8	-1.4

y = 0.0036 * x + 4.1907E-004
R = 0.9994
DL = 0.02836 ppb
BEC = 0.1166 ppb

Weight: <None>
Min Conc: <None>

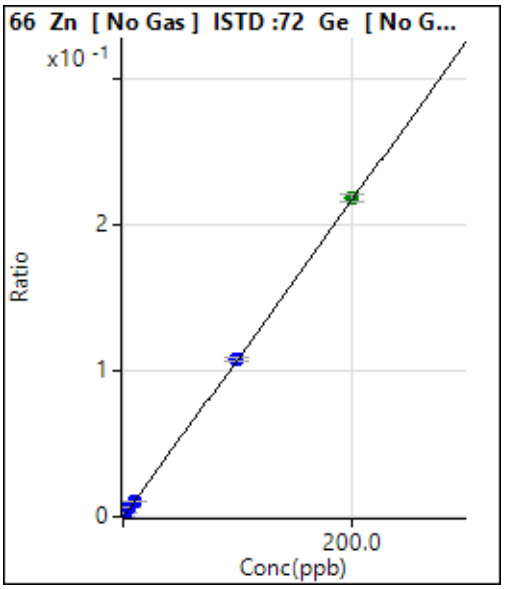
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1283.42	0.0006	P	10.7	
2	☐	2.000	2.079	26102.11	0.0119	P	2.1	3.9
3	☐	5.000	5.136	61817.30	0.0286	P	1.6	2.7
4	☐	10.000	10.008	118692.52	0.0551	P	0.6	0.1
5	☐	100.000	100.558	1159116.00	0.5480	M	4.9	0.6
6	☐	200.000	199.716	2309987.15	1.0878	A	0.8	-0.1

y = 0.0054 * x + 5.9193E-004
R = 1.0000
DL = 0.03486 ppb
BEC = 0.1087 ppb

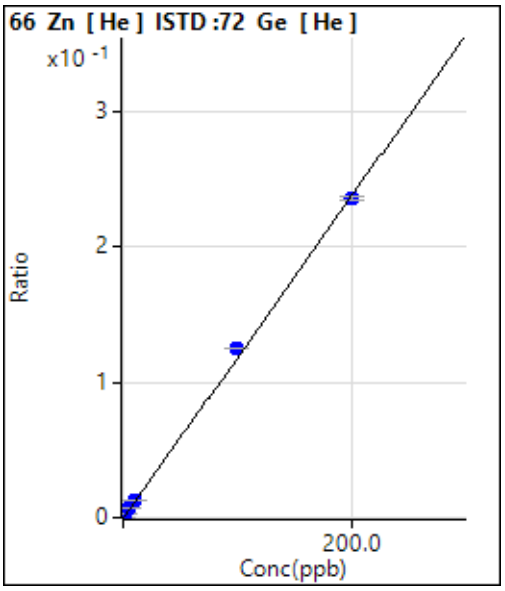
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2973.72	0.0004	P	6.7	
2	☐	2.000	2.316	20636.00	0.0029	P	1.5	15.8
3	☐	5.000	5.223	42811.35	0.0061	P	0.9	4.5
4	☐	10.000	9.831	78161.50	0.0111	P	1.3	-1.7
5	☐	100.000	98.681	739215.72	0.1078	P	2.5	-1.3
6	☐	200.000	200.659	1482611.70	0.2187	A	2.7	0.3

y = 0.0011 * x + 4.2079E-004
R = 1.0000
DL = 0.07778 ppb
BEC = 0.3868 ppb

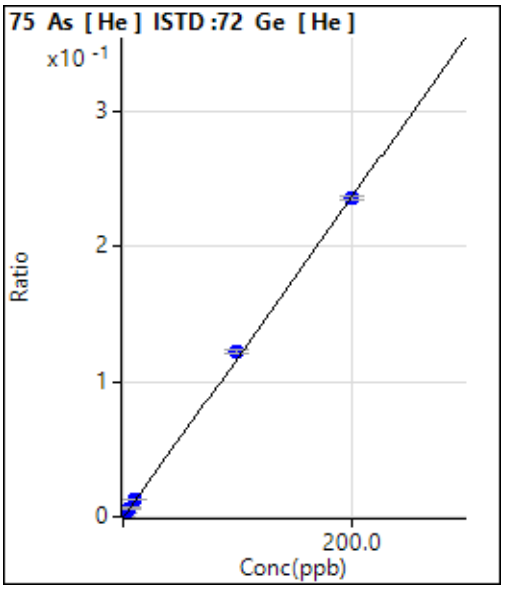
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1006.72	0.0005	P	6.7	
2	☐	2.000	2.486	7522.24	0.0034	P	6.8	24.3
3	☐	5.000	5.552	15338.92	0.0071	P	5.4	11.0
4	☐	10.000	10.650	28366.69	0.0132	P	2.8	6.5
5	☐	100.000	104.742	265149.37	0.1254	P	0.4	4.7
6	☐	200.000	197.578	501327.14	0.2361	P	1.3	-1.2

y = 0.0012 * x + 4.6438E-004
R = 0.9996
DL = 0.07875 ppb
BEC = 0.3894 ppb

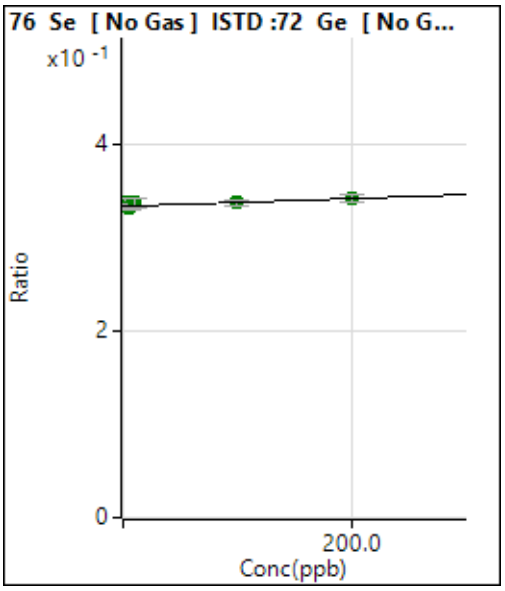
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	661.13	0.0003	P	2.7	
2	☐	2.000	2.012	5891.32	0.0027	P	1.4	0.6
3	☐	5.000	5.106	13752.62	0.0064	P	2.3	2.1
4	☐	10.000	10.094	26423.64	0.0123	P	1.3	0.9
5	☐	100.000	102.800	258135.79	0.1221	P	1.6	2.8
6	☐	200.000	198.593	500092.46	0.2355	P	1.4	-0.7

y = 0.0012 * x + 3.0496E-004
R = 0.9999
DL = 0.02066 ppb
BEC = 0.2575 ppb

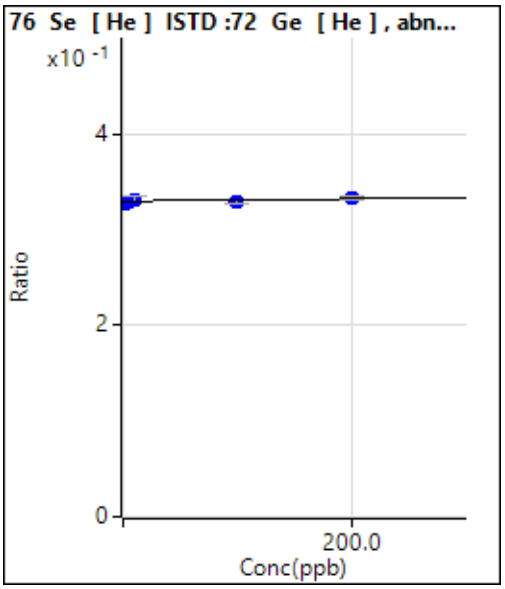
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2354131.58	0.3331	A	1.8	
2	☐	2.000	114.459	2371295.33	0.3379	A	2.5	5622.9
3	☐	5.000	-26.399	2329168.14	0.3320	A	2.0	-628.0
4	☐	10.000	89.112	2368284.70	0.3368	A	3.1	791.1
5	☐	100.000	82.769	2308725.96	0.3366	A	1.6	-17.2
6	☐	200.000	204.320	2315872.10	0.3416	A	2.4	2.2

y = 4.1497E-005 * x + 0.3331
R = 0.7553
DL = 437.3 ppb
BEC = 8028 ppb

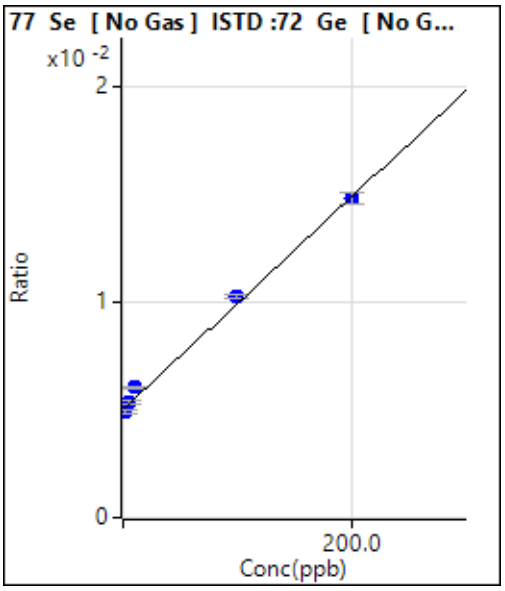
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	714403.79	0.3295	P	0.3	
2	☐	2.000	-199.160	716974.42	0.3271	P	0.5	-10058.
3	☐	5.000	-67.133	711623.14	0.3287	P	0.2	-1442.7
4	☐	10.000	152.440	714223.74	0.3314	P	1.5	1424.4
5	☐	100.000	-43.847	695777.65	0.3290	P	1.1	-143.8
6	☐	200.000	268.616	706802.59	0.3328	P	0.6	34.3

y = 1.2376E-005 * x + 0.3295
R = 0.6489
DL = 275.3 ppb
BEC = 2.663E+04 ppb

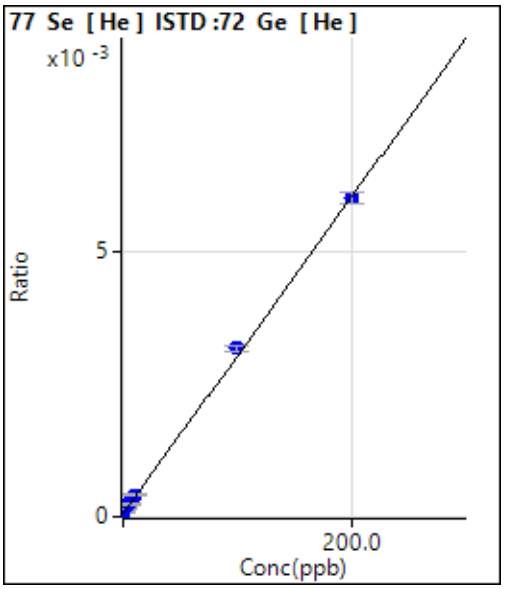
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	35971.77	0.0051	P	2.4	
2	☐	2.000	-4.325	34233.92	0.0049	P	4.1	-316.3
3	☐	5.000	5.039	37442.30	0.0053	P	3.7	0.8
4	☐	10.000	19.245	42457.24	0.0060	P	0.9	92.4
5	☐	100.000	104.540	70192.36	0.0102	P	1.8	4.5
6	☐	200.000	197.330	100305.09	0.0148	P	3.1	-1.3

y = 4.9190E-005 * x + 0.0051
R = 0.9978
DL = 7.501 ppb
BEC = 103.5 ppb

Weight: <None>
Min Conc: <None>

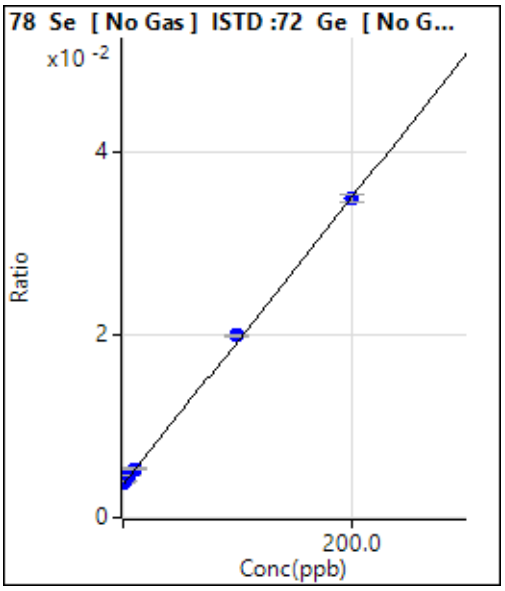


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	190.01	0.0001	P	27.3	
2	☐	2.000	2.625	363.34	0.0002	P	14.5	31.3
3	☐	5.000	5.225	526.69	0.0002	P	7.7	4.5
4	☐	10.000	10.982	893.38	0.0004	P	6.3	9.8
5	☐	100.000	103.363	6698.45	0.0032	P	3.2	3.4
6	☐	200.000	198.258	12726.22	0.0060	P	3.7	-0.9

y = 2.9791E-005 * x + 8.7625E-005
R = 0.9998
DL = 2.406 ppb
BEC = 2.941 ppb

Weight: <None>
Min Conc: <None>

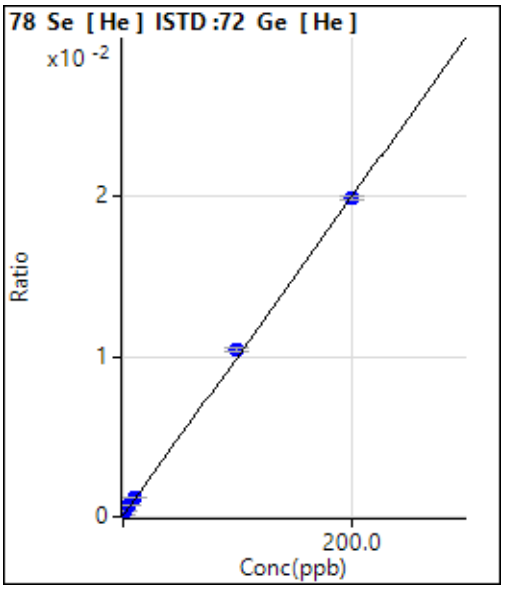
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	26773.52	0.0038	P	0.2	
2	☐	2.000	1.553	28293.36	0.0040	P	2.0	-22.4
3	☐	5.000	4.970	32035.16	0.0046	P	1.5	-0.6
4	☐	10.000	9.905	37539.35	0.0053	P	2.5	-0.9
5	☐	100.000	103.021	136608.16	0.0199	P	1.2	3.0
6	☐	200.000	198.499	236326.76	0.0349	P	2.5	-0.8

y = 1.5654E-004 * x + 0.0038
R = 0.9998
DL = 0.1532 ppb
BEC = 24.2 ppb

Weight: <None>
Min Conc: <None>

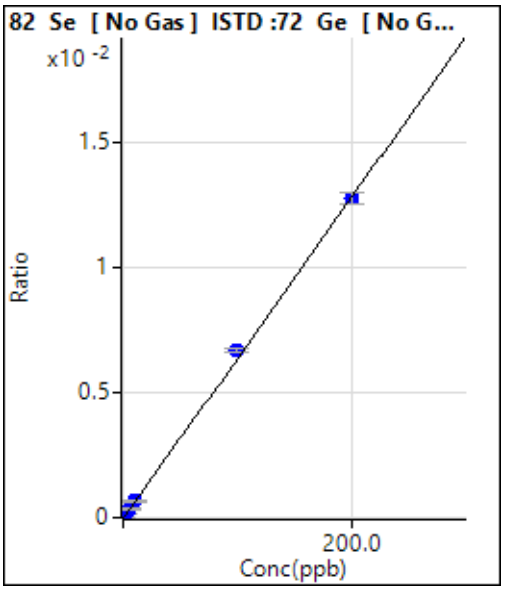


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	340.68	0.0002	P	10.3	
2	☐	2.000	2.009	783.36	0.0004	P	4.3	0.4
3	☐	5.000	5.194	1460.75	0.0007	P	2.4	3.9
4	☐	10.000	10.483	2590.26	0.0012	P	0.8	4.8
5	☐	100.000	103.406	22122.82	0.0105	P	2.6	3.4
6	☐	200.000	198.268	42286.73	0.0199	P	1.5	-0.9

y = 9.9644E-005 * x + 1.5714E-004
R = 0.9998
DL = 0.4854 ppb
BEC = 1.577 ppb

Weight: <None>
Min Conc: <None>

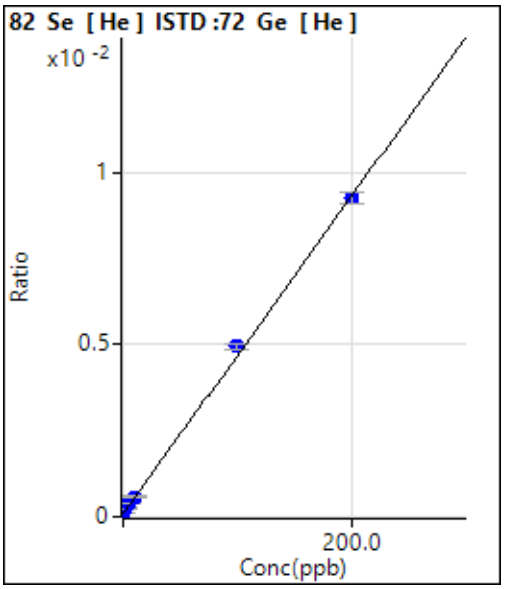
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	127.24	0.0000	P	43.6	
2	☐	2.000	1.767	923.70	0.0001	P	17.8	-11.7
3	☐	5.000	5.092	2424.34	0.0003	P	7.0	1.8
4	☐	10.000	10.309	4785.26	0.0007	P	9.3	3.1
5	☐	100.000	103.290	45675.46	0.0067	P	2.3	3.3
6	☐	200.000	198.340	86572.43	0.0128	P	3.1	-0.8

y = 6.4296E-005 * x + 1.8008E-005
R = 0.9998
DL = 0.3663 ppb
BEC = 0.2801 ppb

Weight: <None>
Min Conc: <None>

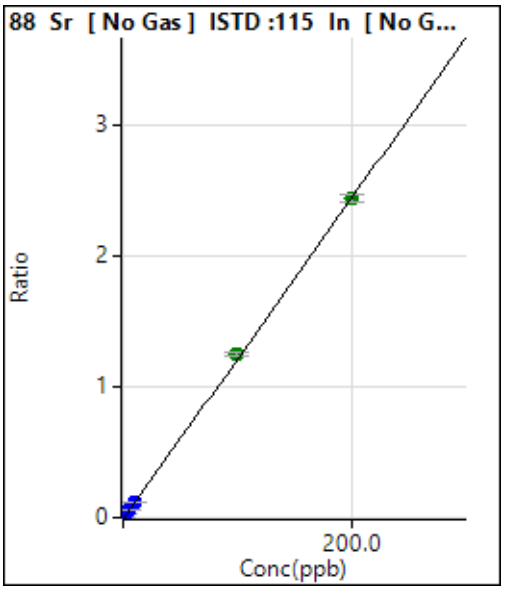


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	280.01	0.0001	P	9.3	
2	☐	2.000	2.567	543.36	0.0002	P	11.5	28.4
3	☐	5.000	5.704	850.05	0.0004	P	7.5	14.1
4	☐	10.000	9.537	1226.75	0.0006	P	9.3	-4.6
5	☐	100.000	104.515	10484.28	0.0050	P	3.1	4.5
6	☐	200.000	197.743	19671.44	0.0093	P	3.7	-1.1

y = 4.6199E-005 * x + 1.2915E-004
R = 0.9996
DL = 0.7818 ppb
BEC = 2.795 ppb

Weight: <None>
Min Conc: <None>

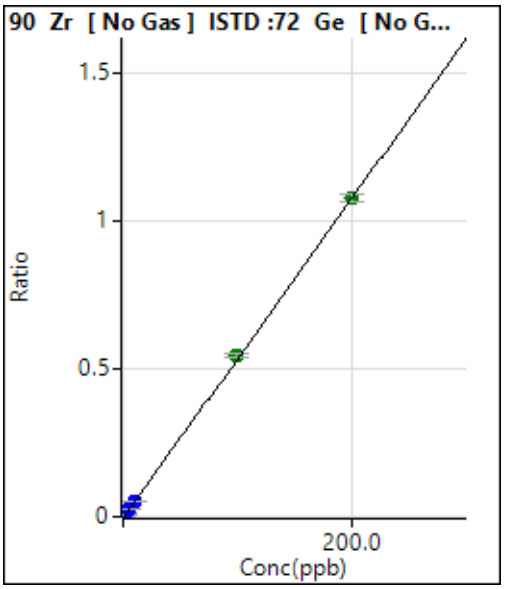
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2183.55	0.0005	P	9.2	
2	☐	2.000	2.008	116666.35	0.0251	P	1.4	0.4
3	☐	5.000	4.958	284639.84	0.0612	P	1.4	-0.8
4	☐	10.000	9.766	563509.51	0.1201	P	2.5	-2.3
5	☐	100.000	102.288	5654509.50	1.2538	A	2.5	2.3
6	☐	200.000	198.869	11015481.50	2.4371	A	2.8	-0.6

y = 0.0123 * x + 4.7204E-004
R = 0.9999
DL = 0.01067 ppb
BEC = 0.03853 ppb

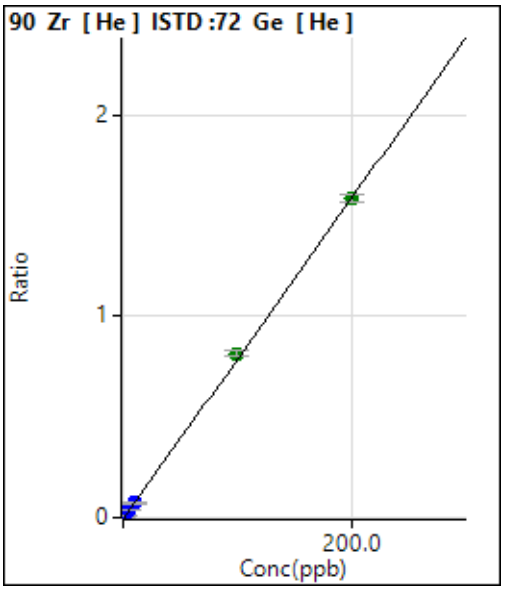
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2873.71	0.0004	P	10.7	
2	☐	2.000	1.753	69300.30	0.0099	P	3.0	-12.4
3	☐	5.000	4.512	173819.23	0.0248	P	1.1	-9.8
4	☐	10.000	9.310	356442.66	0.0507	P	2.3	-6.9
5	☐	100.000	101.163	3750909.32	0.5468	A	2.5	1.2
6	☐	200.000	199.468	7306657.81	1.0779	A	2.2	-0.3

y = 0.0054 * x + 4.0682E-004
R = 1.0000
DL = 0.02427 ppb
BEC = 0.07532 ppb

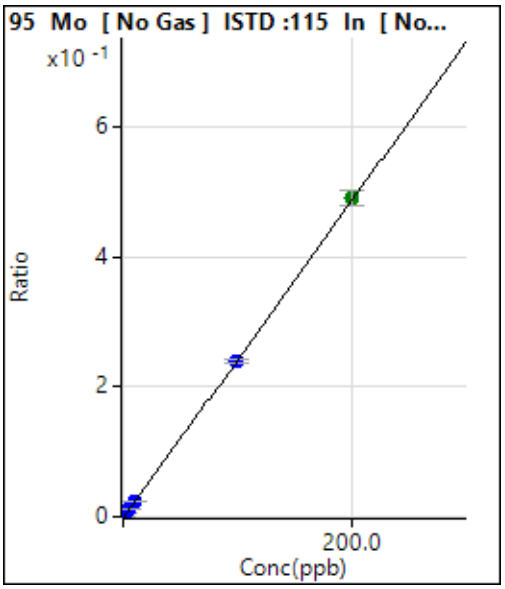
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1563.45	0.0007	P	5.1	
2	☐	2.000	1.678	30916.17	0.0141	P	1.4	-16.1
3	☐	5.000	4.396	77474.49	0.0358	P	1.6	-12.1
4	☐	10.000	8.964	155651.35	0.0722	P	1.8	-10.4
5	☐	100.000	102.374	1728311.90	0.8172	A	2.5	2.4
6	☐	200.000	198.883	3369955.99	1.5870	A	2.5	-0.6

y = 0.0080 * x + 7.2114E-004
R = 0.9999
DL = 0.01396 ppb
BEC = 0.09042 ppb

Weight: <None>
Min Conc: <None>

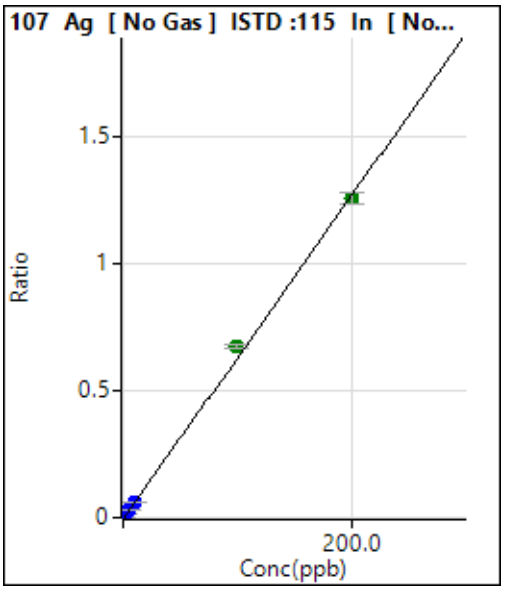


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	150.00	0.0000	P	23.5	
2	☐	2.000	1.958	22405.84	0.0048	P	2.5	-2.1
3	☐	5.000	4.799	54665.75	0.0118	P	1.8	-4.0
4	☐	10.000	9.563	109744.18	0.0234	P	2.0	-4.4
5	☐	100.000	98.306	1083364.51	0.2402	P	1.8	-1.7
6	☐	200.000	200.874	2217965.38	0.4908	A	4.3	0.4

y = 0.0024 * x + 3.2405E-005
R = 1.0000
DL = 0.009359 ppb
BEC = 0.01326 ppb

Weight: <None>
Min Conc: <None>

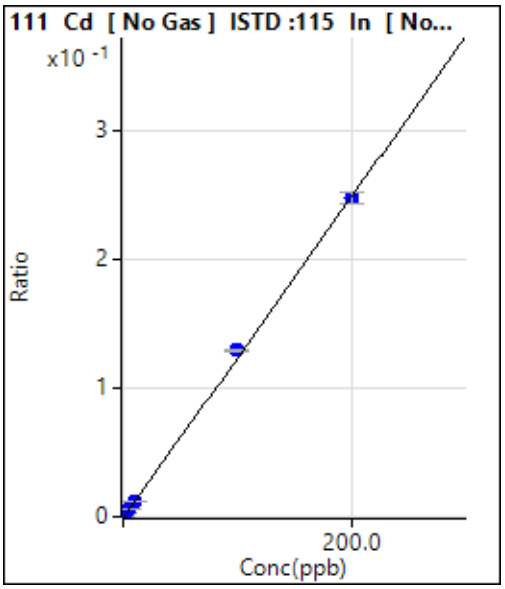
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	390.01	0.0001	P	25.7	
2	☐	2.000	1.928	57686.33	0.0124	P	2.8	-3.6
3	☐	5.000	4.829	143803.13	0.0309	P	2.7	-3.4
4	☐	10.000	9.531	285994.27	0.0610	P	1.2	-4.7
5	☐	100.000	105.588	3042212.45	0.6746	A	2.2	5.6
6	☐	200.000	197.235	5694738.04	1.2600	A	3.4	-1.4

y = 0.0064 * x + 8.4282E-005
R = 0.9994
DL = 0.01017 ppb
BEC = 0.01319 ppb

Weight: <None>
Min Conc: <None>

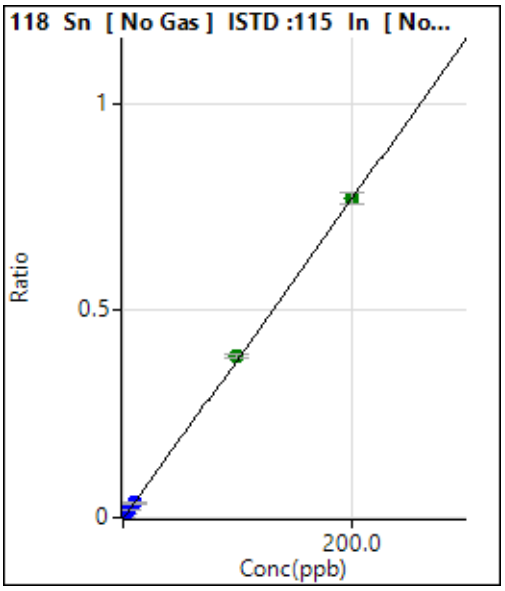


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	40.00	0.0000	P	43.7	
2	☐	2.000	1.939	11328.40	0.0024	P	3.5	-3.0
3	☐	5.000	4.965	28935.48	0.0062	P	3.9	-0.7
4	☐	10.000	9.910	58222.01	0.0124	P	1.0	-0.9
5	☐	100.000	103.697	585359.51	0.1298	P	1.0	3.7
6	☐	200.000	198.158	1120868.84	0.2480	P	3.1	-0.9

y = 0.0013 * x + 8.6647E-006
R = 0.9998
DL = 0.009069 ppb
BEC = 0.006924 ppb

Weight: <None>
Min Conc: <None>

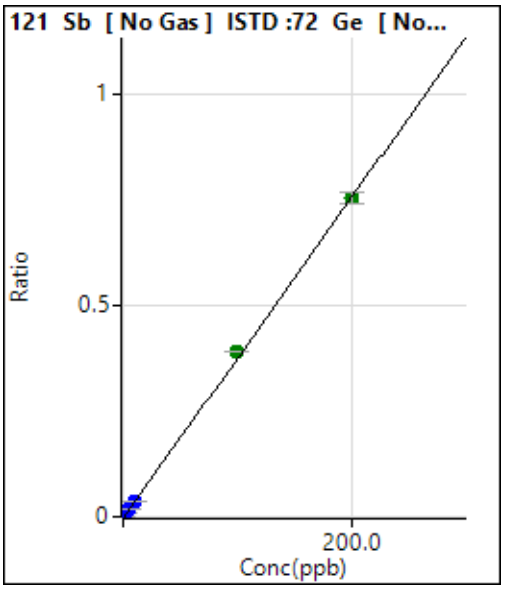
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2600.31	0.0006	P	1.3	
2	☐	2.000	1.825	35438.56	0.0076	P	2.9	-8.7
3	☐	5.000	4.556	84499.21	0.0182	P	2.2	-8.9
4	☐	10.000	8.939	164732.34	0.0351	P	2.3	-10.6
5	☐	100.000	101.077	1764554.87	0.3913	A	3.2	1.1
6	☐	200.000	199.527	3488473.59	0.7719	A	3.5	-0.2

y = 0.0039 * x + 5.6234E-004
R = 1.0000
DL = 0.005494 ppb
BEC = 0.1455 ppb

Weight: <None>
Min Conc: <None>

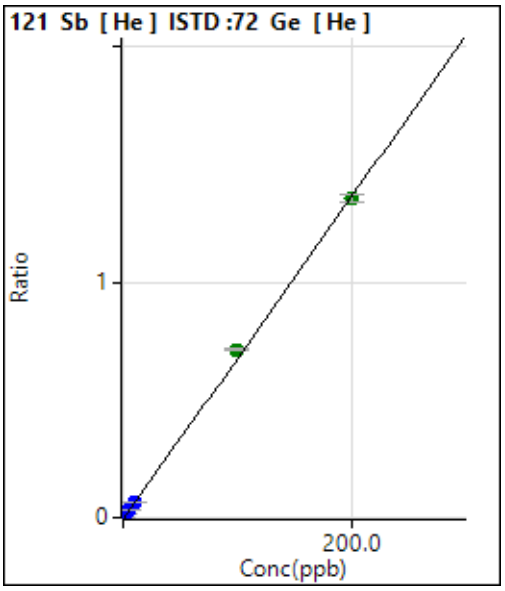


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	386.68	0.0001	P	12.9	
2	☐	2.000	1.857	49952.28	0.0071	P	1.8	-7.2
3	☐	5.000	4.620	123687.89	0.0176	P	2.2	-7.6
4	☐	10.000	9.343	250314.94	0.0356	P	2.3	-6.6
5	☐	100.000	102.854	2684471.63	0.3914	A	0.9	2.9
6	☐	200.000	198.617	5122459.51	0.7557	A	3.2	-0.7

y = 0.0038 * x + 5.4715E-005
R = 0.9998
DL = 0.005568 ppb
BEC = 0.01438 ppb

Weight: <None>
Min Conc: <None>

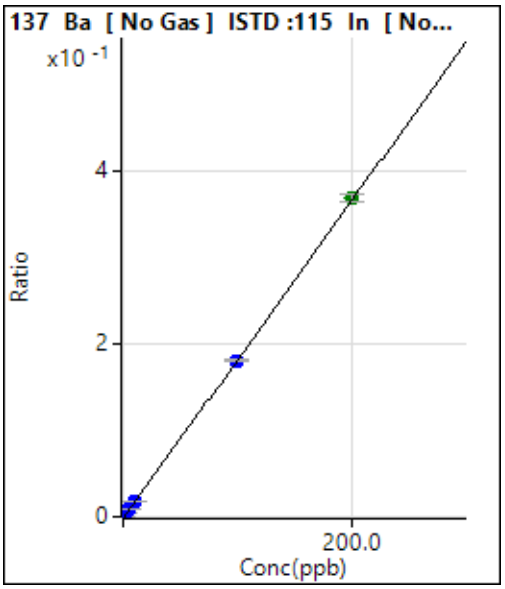
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	216.67	0.0001	P	25.3	
2	☐	2.000	1.831	27709.56	0.0126	P	2.2	-8.5
3	☐	5.000	4.625	68814.60	0.0318	P	1.3	-7.5
4	☐	10.000	9.255	136860.05	0.0635	P	0.8	-7.4
5	☐	100.000	104.224	1510281.13	0.7141	A	0.5	4.2
6	☐	200.000	197.936	2879372.14	1.3561	A	2.4	-1.0

y = 0.0069 * x + 9.9919E-005
R = 0.9997
DL = 0.01107 ppb
BEC = 0.01459 ppb

Weight: <None>
Min Conc: <None>

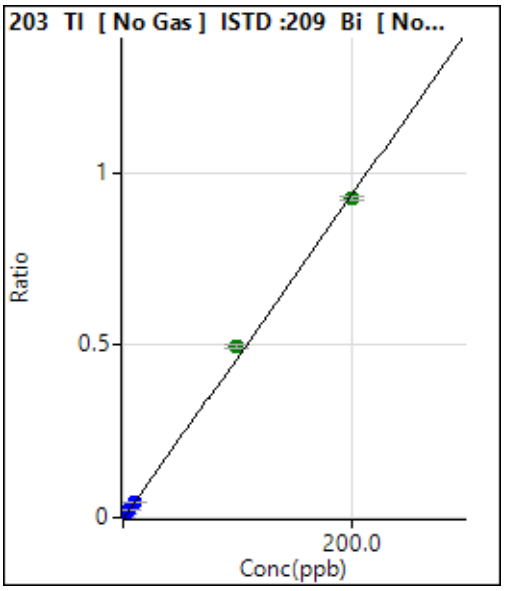


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	270.01	0.0001	P	26.7	
2	☐	2.000	1.921	16650.97	0.0036	P	2.7	-4.0
3	☐	5.000	4.832	41449.99	0.0089	P	1.1	-3.4
4	☐	10.000	9.423	81284.30	0.0173	P	3.6	-5.8
5	☐	100.000	98.543	814878.40	0.1807	P	2.3	-1.5
6	☐	200.000	200.762	1663608.83	0.3680	A	2.0	0.4

y = 0.0018 * x + 5.8468E-005
R = 1.0000
DL = 0.02553 ppb
BEC = 0.0319 ppb

Weight: <None>
Min Conc: <None>

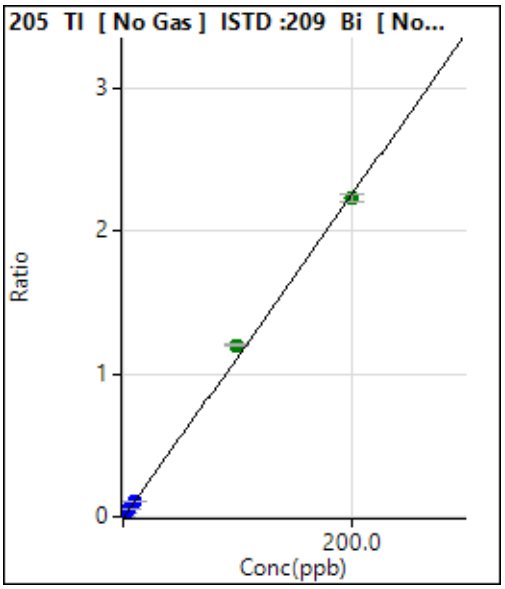
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	76.67	0.0000	P	26.7	
2	☐	2.000	1.964	33448.54	0.0093	P	1.3	-1.8
3	☐	5.000	4.862	83108.00	0.0229	P	2.6	-2.8
4	☐	10.000	9.522	164839.85	0.0448	P	2.1	-4.8
5	☐	100.000	106.062	1762258.83	0.4986	A	2.4	6.1
6	☐	200.000	196.997	3273897.35	0.9260	A	1.5	-1.5

y = 0.0047 * x + 2.1125E-005
R = 0.9993
DL = 0.003603 ppb
BEC = 0.004494 ppb

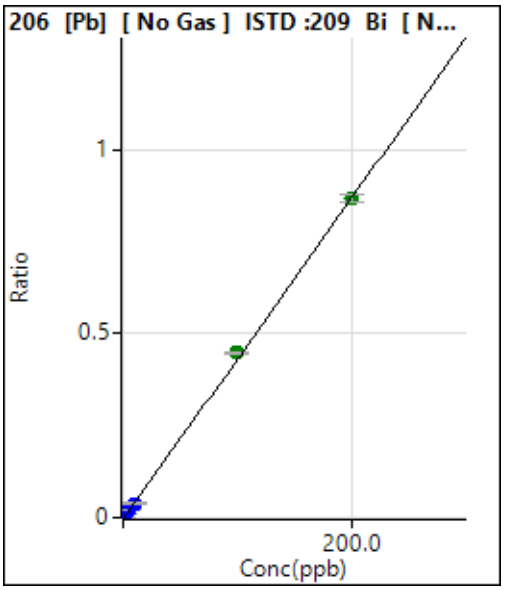
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	156.67	0.0000	P	8.3	
2	☐	2.000	1.982	81140.96	0.0225	P	1.5	-0.9
3	☐	5.000	4.944	203230.33	0.0559	P	2.1	-1.1
4	☐	10.000	9.502	395566.05	0.1075	P	2.4	-5.0
5	☐	100.000	105.778	4226568.16	1.1958	A	1.0	5.8
6	☐	200.000	197.138	7878150.72	2.2285	A	1.9	-1.4

y = 0.0113 * x + 4.3227E-005
R = 0.9994
DL = 0.0009579 ppb
BEC = 0.003824 ppb

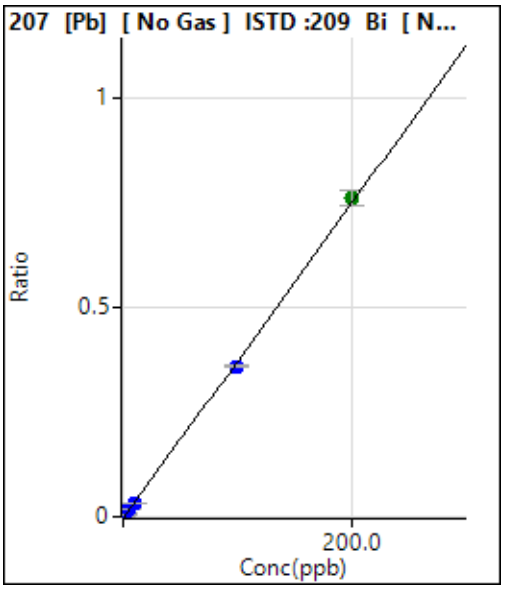
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	420.02	0.0001	P	17.8	
2	☐	2.000	1.809	28940.79	0.0080	P	1.1	-9.6
3	☐	5.000	4.596	73275.48	0.0202	P	2.2	-8.1
4	☐	10.000	8.934	143920.25	0.0391	P	3.3	-10.7
5	☐	100.000	102.509	1581206.33	0.4474	A	1.9	2.5
6	☐	200.000	198.811	3066605.37	0.8675	A	2.0	-0.6

y = 0.0044 * x + 1.1570E-004
R = 0.9999
DL = 0.01416 ppb
BEC = 0.02652 ppb

Weight: <None>
Min Conc: <None>

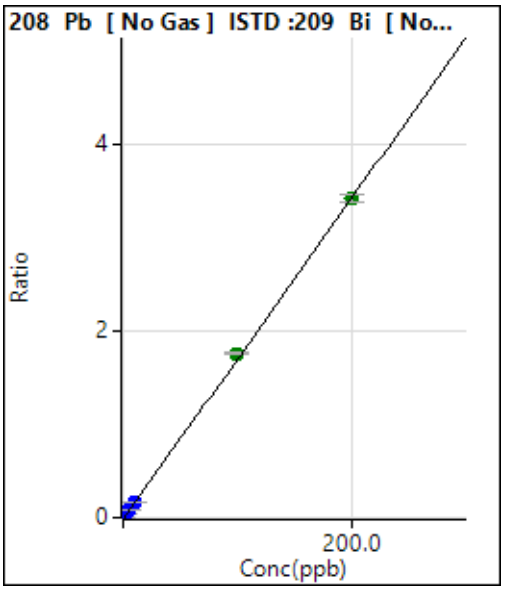


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	350.02	0.0001	P	17.7	
2	☐	2.000	1.792	24654.91	0.0068	P	2.5	-10.4
3	☐	5.000	4.636	63579.52	0.0175	P	2.3	-7.3
4	☐	10.000	8.993	124637.90	0.0339	P	0.3	-10.1
5	☐	100.000	95.284	1264488.45	0.3577	P	1.0	-4.7
6	☐	200.000	202.419	2685996.26	0.7599	A	4.7	1.2

y = 0.0038 * x + 9.6570E-005
R = 0.9996
DL = 0.01369 ppb
BEC = 0.02573 ppb

Weight: <None>
Min Conc: <None>

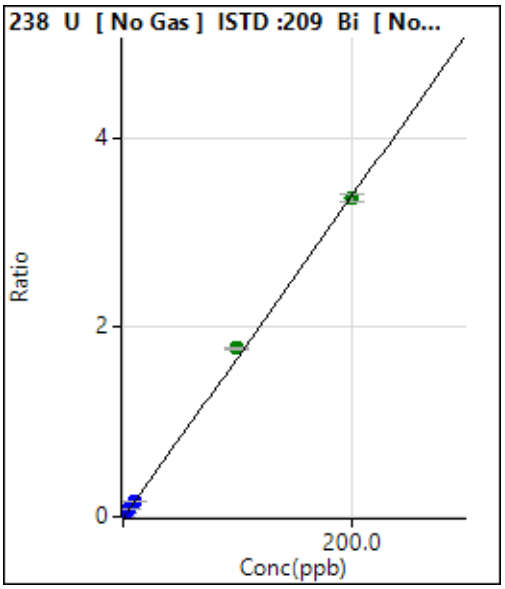
Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1683.42	0.0005	P	5.5	
2	☐	2.000	1.834	115621.21	0.0320	P	0.9	-8.3
3	☐	5.000	4.640	291540.40	0.0802	P	2.8	-7.2
4	☐	10.000	9.027	573111.38	0.1557	P	1.4	-9.7
5	☐	100.000	102.304	6218858.79	1.7594	A	1.0	2.3
6	☐	200.000	198.907	12091196.12	3.4204	A	2.5	-0.5

y = 0.0172 * x + 4.6410E-004
R = 0.9999
DL = 0.004459 ppb
BEC = 0.02699 ppb

Weight: <None>
Min Conc: <None>

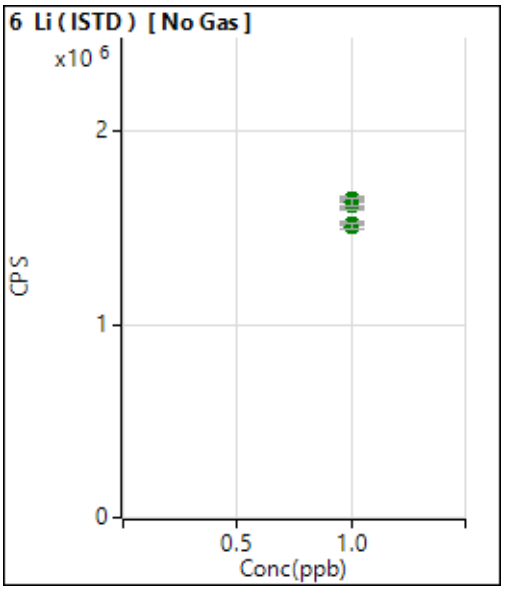


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	520.02	0.0001	P	7.0	
2	☐	2.000	1.828	112827.11	0.0312	P	1.7	-8.6
3	☐	5.000	4.591	284117.82	0.0782	P	2.2	-8.2
4	☐	10.000	9.024	565447.53	0.1536	P	0.6	-9.8
5	☐	100.000	104.361	6272319.49	1.7746	A	1.3	4.4
6	☐	200.000	197.880	11894306.07	3.3647	A	2.5	-1.1

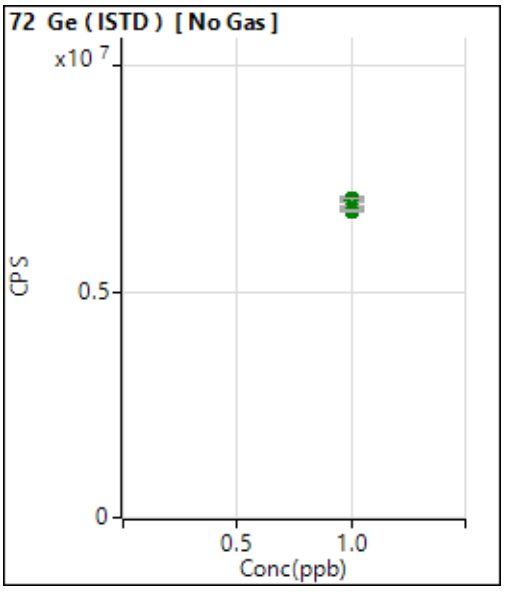
y = 0.0170 * x + 1.4342E-004
R = 0.9996
DL = 0.001766 ppb
BEC = 0.008435 ppb

Weight: <None>
Min Conc: <None>

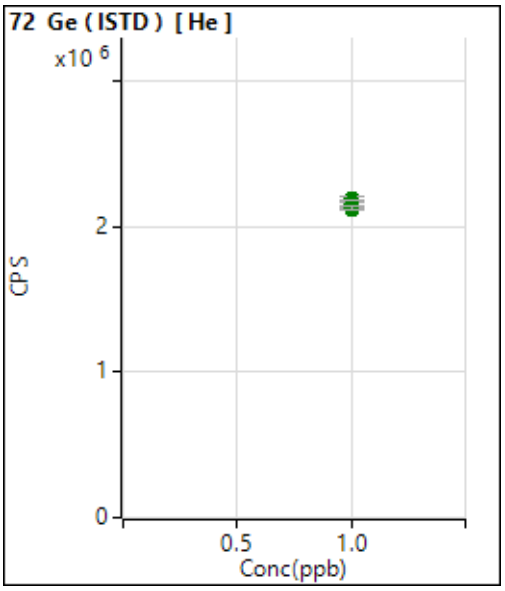
Calibration for 025_ICV.d



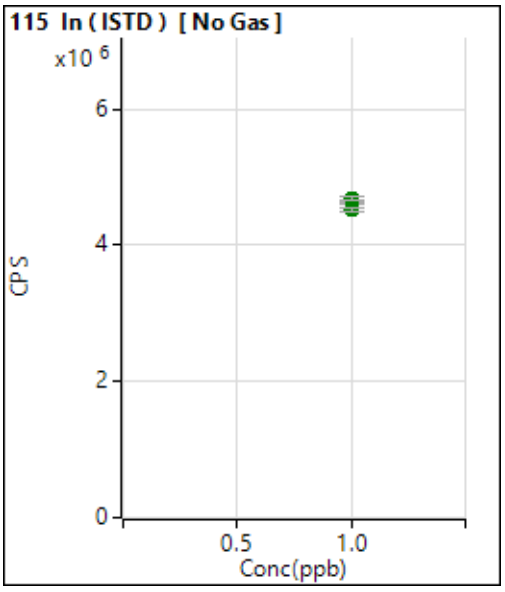
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1651948.66		A	1.1	
2	☐	1.000		1609678.20		A	0.5	
3	☐	1.000		1611021.58		A	2.3	
4	☐	1.000		1628915.66		A	2.5	
5	☐	1.000		1523225.85		A	1.4	
6	☐	1.000		1507322.90		A	1.4	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		7066877.60		A	0.7	
2	☐	1.000		7018015.11		A	0.1	
3	☐	1.000		7015674.06		A	1.4	
4	☐	1.000		7032678.02		A	1.5	
5	☐	1.000		6859626.57		A	0.6	
6	☐	1.000		6779501.36		A	0.8	

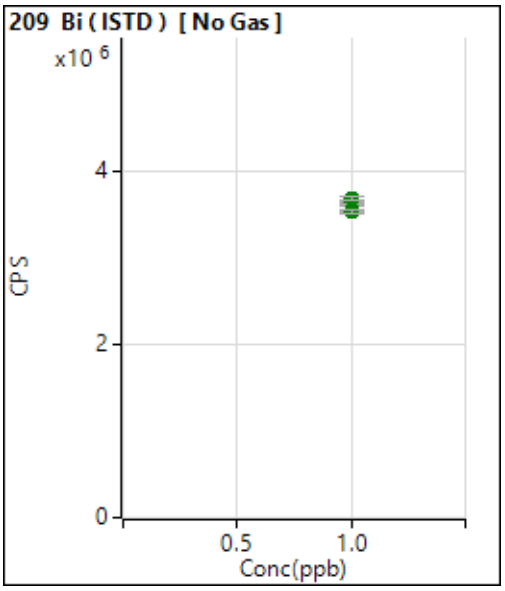


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		2168000.07		A	0.1	
2	☐	1.000		2192261.17		A	1.3	
3	☐	1.000		2165020.65		A	0.2	
4	☐	1.000		2155443.93		A	1.8	
5	☐	1.000		2115001.48		A	0.6	
6	☐	1.000		2123596.01		A	1.0	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		4624259.78		A	0.8	
2	☐	1.000		4651959.94		A	0.3	
3	☐	1.000		4649503.61		A	0.4	
4	☐	1.000		4691534.09		A	1.2	
5	☐	1.000		4510688.87		A	1.2	
6	☐	1.000		4521128.28		A	1.6	

Calibration for 025_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		3626177.66		A	1.0	
2	☐	1.000		3614142.03		A	0.9	
3	☐	1.000		3633878.18		A	1.2	
4	☐	1.000		3681930.68		A	1.5	
5	☐	1.000		3534649.53		A	0.4	
6	☐	1.000		3535376.20		A	1.2	

Sample Report

Sample Table

Sample Name	LLICV2
Data File Name	027LCV2.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\012624A.b
Acq Date Time	2024-01-26T10:57:40-06:00
Sample Type	LLCCV2
Dilution	1
Comment	
ISTD Ref FileName	018CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	1.958	1.958	9.35	145497	0.00	2	
Be	9	1	No Gas	1.762	1.762	3.23	14528	0.01	2	
V	51	2	He	1.441	1.441	2.90	27041	0.01	2	
Cr	52	2	He	1.752	1.752	2.95	36045	0.00	2	
Fe	56	2	He	205.451	205.451	0.53	2297731	0.01	200	
Se	78	2	He	1.935	1.935	2.14	778	0.25	2	
As	75	2	He	1.856	1.856	2.45	5563	0.03	2	
Ca	44	2	He	185.911	185.911	1.53	15546	1.20	200	
Na	23	2	He	189.498	189.498	0.49	423619	0.04	200	
Mg	24	2	He	193.201	193.201	1.03	199844	0.10	200	
K	39	2	He	183.173	183.173	2.03	454172	0.04	200	
Mn	55	2	He	1.945	1.945	2.92	18056	0.01	2	
Co	59	2	He	1.944	1.944	1.85	34421	0.01	2	
Ni	60	2	He	2.007	2.007	0.91	9687	0.02	2	
Cu	63	2	He	1.937	1.937	4.18	24750	0.01	2	
Zn	66	2	He	2.193	2.193	2.83	6845	0.03	2	
Al	27	2	He	2.422	2.422	18.36	4407	0.05	2	
B	11	1	No Gas	11.046	11.046	4.34	94310	0.01	10	
Al	27	1	No Gas	2.531	2.531	2.50	199802	0.00	2	
Si	28	1	No Gas	-8.350	-8.350	-60.36	9517342	0.00	10	NewName Main CR1 Failed
Ag	107	1	No Gas	1.870	1.870	3.99	56943	0.00	2	
Cd	111	1	No Gas	1.980	1.980	1.82	11769	0.02	2	
Sr	88	1	No Gas	1.956	1.956	2.77	115688	0.00	2	
Mo	95	1	No Gas	1.889	1.889	5.72	21998	0.01	2	
Sn	118	1	No Gas	1.775	1.775	3.50	35144	0.01	2	
Sb	121	1	No Gas	1.845	1.845	4.04	49698	0.00	2	
Ba	137	1	No Gas	1.907	1.907	3.02	16821	0.01	2	
Tl	205	1	No Gas	1.902	1.902	1.45	80668	0.00	2	
Tl	203	1	No Gas	1.916	1.916	0.92	33810	0.01	2	
Pb	208	1	No Gas	1.798	1.798	1.12	117519	0.00	2	
U	238	1	No Gas	1.797	1.797	2.30	114966	0.00	2	
Ca	43	2	He	173.674	173.674	1.30	763	22.75	200	
Sb	121	2	He	1.775	1.775	2.86	27259	0.01	2	
Ti	47	2	He	2.032	2.032	10.56	880	0.23	200	
Cu	63	1	No Gas	2.022	2.022	2.71	54014	0.00	2	
Se	82	1	No Gas	1.861	1.861	21.49	967	0.19	2	
Zr	90	1	No Gas	1.754	1.754	4.04	69421	0.00	2	
Zr	90	2	He	1.595	1.595	0.96	29874	0.01	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1633391	2.15	1651949	98.88	70	120	
Ge	72	2	He	2222907	0.30	2168000	102.53	70	120	
Ge	72	1	No Gas	7026432	1.52	7066878	99.43	70	120	
In	115	1	No Gas	4733941	0.89	4624260	102.37	70	120	
Bi	209	1	No Gas	3744875	0.53	3626178	103.27	70	120	

Sample Report

Sample Table

Sample Name	LLICV5
Data File Name	028LCV5.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\012624A.b
Acq Date Time	2024-01-26T11:00:01-06:00
Sample Type	LLCCV5
Dilution	1
Comment	
ISTD Ref FileName	018CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	4.791	4.791	6.21	208255	0.00	5	
Be	9	1	No Gas	4.534	4.534	2.68	37079	0.01	5	
V	51	2	He	4.331	4.331	0.64	59614	0.01	5	
Cr	52	2	He	4.833	4.833	2.46	73682	0.01	5	
Fe	56	2	He	497.594	497.594	0.99	5568260	0.01	500	
Se	78	2	He	4.911	4.911	3.81	1449	0.34	5	
As	75	2	He	4.816	4.816	1.71	13468	0.04	5	
Ca	44	2	He	461.085	461.085	1.45	36248	1.27	500	
Na	23	2	He	509.376	509.376	1.88	970015	0.05	500	
Mg	24	2	He	490.001	490.001	1.55	510254	0.10	500	
K	39	2	He	486.409	486.409	1.33	883571	0.06	500	
Mn	55	2	He	4.887	4.887	2.00	44978	0.01	5	
Co	59	2	He	4.936	4.936	1.73	87846	0.01	5	
Ni	60	2	He	5.010	5.010	2.63	23377	0.02	5	
Cu	63	2	He	4.808	4.808	2.36	59969	0.01	5	
Zn	66	2	He	5.254	5.254	0.85	15082	0.03	5	
Al	27	2	He	5.904	5.904	6.04	6685	0.09	5	
B	11	1	No Gas	25.078	25.078	4.19	155676	0.02	25	
Al	27	1	No Gas	5.563	5.563	1.76	294658	0.00	5	
Si	28	1	No Gas	9.588	9.588	24.14	10058613	0.00	25	NewName2 Main CR1 Failed
Ag	107	1	No Gas	4.709	4.709	3.56	143454	0.00	5	
Cd	111	1	No Gas	4.944	4.944	2.65	29473	0.02	5	
Sr	88	1	No Gas	4.845	4.845	2.65	284583	0.00	5	
Mo	95	1	No Gas	4.724	4.724	3.95	55044	0.01	5	
Sn	118	1	No Gas	4.466	4.466	2.59	84780	0.01	5	
Sb	121	1	No Gas	4.543	4.543	0.93	124111	0.00	5	
Ba	137	1	No Gas	4.619	4.619	2.85	40544	0.01	5	
Tl	205	1	No Gas	4.751	4.751	2.55	201342	0.00	5	
Tl	203	1	No Gas	4.744	4.744	2.40	83604	0.01	5	
Pb	208	1	No Gas	4.448	4.448	1.50	288188	0.00	5	
U	238	1	No Gas	4.434	4.434	1.24	282986	0.00	5	
Ca	43	2	He	509.583	509.583	13.78	2164	23.55	500	
Sb	121	2	He	4.369	4.369	0.41	67299	0.01	5	
Ti	47	2	He	5.068	5.068	12.41	2164	0.23	5	
Cu	63	1	No Gas	4.968	4.968	1.62	130846	0.00	5	
Se	82	1	No Gas	4.586	4.586	4.28	2240	0.20	5	
Zr	90	1	No Gas	4.444	4.444	3.35	174734	0.00	5	
Zr	90	2	He	4.240	4.240	1.91	77391	0.01	5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1625257	2.34	1651949	98.38	70	120	
Ge	72	2	He	2240879	1.25	2168000	103.36	70	120	
Ge	72	1	No Gas	7158623	0.70	7066878	101.30	70	120	
In	115	1	No Gas	4757425	1.52	4624260	102.88	70	120	
Bi	209	1	No Gas	3746507	1.80	3626178	103.32	70	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICB
Data File Name	030_ICB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\012624A.b
Acq Date Time	2024-01-26T11:04:42-06:00
Sample Type	ICB
Dilution	1
Comment	
ISTD Ref File Name	018CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.001	8814.7	101037	1.0	0.5	
Be	9	1	No Gas	0.003	162.0	80	45.1	0.5	
V	51	2	He	-0.294	-4.4	7963	1.7	2.5	
Cr	52	2	He	0.041	132.0	15849	4.6	2.5	
Fe	56	2	He	0.653	6.6	37368	0.7	100	
Se	78	2	He	0.112	162.9	383	11.0	1	
As	75	2	He	-0.052	-31.8	556	8.1	2.5	
Ca	44	2	He	5.181	7.0	2194	2.1	100	
Na	23	2	He	-2.231	-35.2	103210	0.6	100	
Mg	24	2	He	1.044	1.2	1573	0.4	100	
K	39	2	He	-7.083	-7.8	193827	0.9	100	
Mn	55	2	He	0.049	9.7	953	4.2	2.5	
Co	59	2	He	-0.001	-4.5	120	0.0	2.5	
Ni	60	2	He	0.005	203.9	703	7.8	2.5	
Cu	63	2	He	-0.002	-104.2	1320	2.7	1	
Zn	66	2	He	1.403	6.5	4868	5.8	2.5	
Al	27	2	He	1.086	22.1	3641	3.8	5	
B	11	1	No Gas	0.889	7.5	49141	0.5	0.5	ICB Main CR1 Failed
Al	27	1	No Gas	0.950	10.0	157343	1.6	5	
Si	28	1	No Gas	-5.460	-148.2	9833279	0.3	10	
Ag	107	1	No Gas	0.002	365.1	450	40.6	2.5	
Cd	111	1	No Gas	-0.003	-31.6	23	24.7	1	
Sr	88	1	No Gas	0.036	13.9	4321	7.6	2.5	
Mo	95	1	No Gas	0.005	26.4	217	7.1	2.5	
Sn	118	1	No Gas	0.042	19.6	3444	4.2	5	
Sb	121	1	No Gas	0.006	39.8	567	10.8	2.5	
Ba	137	1	No Gas	0.055	5.5	753	3.3	2.5	
Tl	205	1	No Gas	0.005	26.1	360	14.7	1	
Tl	203	1	No Gas	0.001	257.9	103	63.0	1	
Pb	208	1	No Gas	-0.003	-39.0	1527	5.9	2.5	
U	238	1	No Gas	0.000	170.6	553	6.3	2.5	
Ca	43	2	He	6.530	53.2	77	19.9	100	
Sb	121	2	He	0.004	107.1	293	24.2	2.5	
Ti	47	2	He	-0.012	-207.6	30	33.3	2.5	
Se	82	1	No Gas	0.126	132.3	188	40.2	1	
Zr	90	1	No Gas	0.014	32.1	3474	5.8	2.5	
Zr	90	2	He	0.021	44.0	2020	8.1	2.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1627406	0.85	1651949	98.51	70	120	
Ge	72	2	He	2277334	1.00	2168000	105.04	70	120	
Ge	72	1	No Gas	7216700	1.38	7066878	102.12	70	120	
In	115	1	No Gas	4743698	0.90	4624260	102.58	70	120	

Initial Calibration Blank (ICB) Report

Bi	209	1	No Gas	3689823	1.20	3626178	101.76	70	120	

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA
Data File Name	031ICSA.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\012624A.b
Acq Date Time	2024-01-26T11:07:02-06:00
Sample Type	ICSA
Dilution	1
Comment	
ISTD Ref File Name	018CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	-0.043	-191.0	95480	0.8	0	ICSA Main CR1 Failed
Be	9	1	No Gas	-0.001	-269.6	47	48.3	0	ICSA Main CR1 Failed
V	51	2	He	0.008	137.2	10579	3.1	0	ICSA Main CR1 Failed
Cr	52	2	He	1.393	3.4	30173	0.6	0	ICSA Main CR1 Failed
Fe	56	2	He	95633.572	2.8	1004144945	1.4	0	
Se	78	2	He	0.068	51.1	347	4.2	0	ICSA Main CR1 Failed
As	75	2	He	0.219	22.1	1195	12.4	0	ICSA Main CR1 Failed
Ca	44	2	He	91019.991	2.6	6421310	0.8	0	
Na	23	2	He	95758.851	2.5	153447381	1.1	0	
Mg	24	2	He	95592.790	3.1	93806775	1.4	0	
K	39	2	He	96234.121	2.8	127634261	0.6	0	
Mn	55	2	He	0.728	5.4	6715	2.8	0	ICSA Main CR1 Failed
Co	59	2	He	0.319	7.1	5485	7.6	0	ICSA Main CR1 Failed
Ni	60	2	He	0.752	6.9	3851	7.9	0	ICSA Main CR1 Failed
Cu	63	2	He	0.245	5.8	4071	3.1	0	ICSA Main CR1 Failed
Zn	66	2	He	4.146	5.5	11428	2.9	0	ICSA Main CR1 Failed
Al	27	2	He	90749.260	2.9	55083419	0.8	0	
B	11	1	No Gas	2.679	15.6	54429	2.2	0	
Al	27	1	No Gas	93392.611	2.2	2687305507	0.9	0	
Si	28	1	No Gas	-8.244	-42.2	9290989	1.0	0	ICSA Main CR1 Failed
Ag	107	1	No Gas	0.167	7.6	5038	6.6	0	ICSA Main CR1 Failed
Cd	111	1	No Gas	2.305	6.5	12680	5.7	0	
Sr	88	1	No Gas	4.347	2.9	235552	2.3	0	ICSA Main CR1 Failed
Mo	95	1	No Gas	1946.249	2.8	20844878	2.2	0	
Sn	118	1	No Gas	0.086	9.0	3924	2.5	0	ICSA Main CR1 Failed
Sb	121	1	No Gas	0.220	2.1	6125	0.8	0	ICSA Main CR1 Failed
Ba	137	1	No Gas	0.799	6.5	6679	5.7	0	ICSA Main CR1 Failed
Tl	205	1	No Gas	0.012	10.8	607	8.3	0	ICSA Main CR1 Failed
Tl	203	1	No Gas	0.014	33.1	300	25.2	0	ICSA Main CR1 Failed
Pb	208	1	No Gas	0.159	4.2	11096	3.6	0	ICSA Main CR1 Failed
U	238	1	No Gas	0.007	12.4	940	5.9	0	ICSA Main CR1 Failed
Ca	43	2	He	91086.893	2.4	356924	1.5	0	
Sb	121	2	He	0.209	7.7	3240	8.0	0	ICSA Main CR1 Failed
Ti	47	2	He	1888.520	2.6	747650	1.1	0	
Se	82	1	No Gas	-0.348	-96.0	-31	-474.3	0	ICSA Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1553068	1.14	1651949	94.01	70	120	
Ge	72	2	He	2114679	2.36	2168000	97.54	70	120	
Ge	72	1	No Gas	6857413	1.36	7066878	97.04	70	120	
In	115	1	No Gas	4384352	0.87	4624260	94.81	70	120	
Bi	209	1	No Gas	3472203	0.27	3626178	95.75	70	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB
Data File Name	032ICSB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\012624A.b
Acq Date Time	2024-01-26T11:09:23-06:00
Sample Type	ICSB
Dilution	1
Comment	
ISTD Ref File Name	018CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	1	No Gas	94.967	3.085	2099274	1.90	100	95.0	180	120	ICSB Main CR1 Failed
Be	9	1	No Gas	91.426	1.969	702715	1.23	100	91.4	80	120	
V	51	2	He	89.476	0.897	949136	0.61	100	89.5	80	120	
Cr	52	2	He	100.437	2.435	1155258	2.77	100	100.4	80	120	
Fe	56	2	He	104486.405	1.598	1089949717	1.91	100	104486.4	80	120	
Se	78	2	He	95.193	2.388	20251	2.62	100	95.2	80	120	
As	75	2	He	95.365	1.727	237837	1.89	100	95.4	80	120	
Ca	44	2	He	100051.383	0.970	7012162	1.20	100	100051.4	80	120	
Na	23	2	He	106031.742	1.607	168787651	1.94	100	106031.7	80	120	
Mg	24	2	He	104396.955	1.593	101784965	1.84	100	104397.0	80	120	
K	39	2	He	103479.432	0.873	136338791	1.09	100	103479.4	80	120	ICSB Main CR1 Failed
Mn	55	2	He	91.845	1.354	784016	1.61	100	91.8	80	120	
Co	59	2	He	93.202	3.827	1552432	4.19	100	93.2	80	120	
Ni	60	2	He	92.695	1.045	394276	1.26	100	92.7	80	120	
Cu	63	2	He	88.753	1.105	1015856	1.41	100	88.8	80	120	
Zn	66	2	He	97.232	1.619	244477	1.95	100	97.2	80	120	
Al	27	2	He	90488.911	1.339	54569914	1.53	100	90488.9	80	120	ICSB Main CR1 Failed
B	11	1	No Gas	485.177	4.583	2055100	3.21	100	485.2	80	120	
Al	27	1	No Gas	92569.623	1.988	2633511427	1.19	100	92569.6	80	120	ICSB Main CR1 Failed
Si	28	1	No Gas	390.912	4.933	16797934	1.03	100	390.9	80	120	ICSB Main CR1 Failed
Ag	107	1	No Gas	95.245	1.454	2646840	0.79	100	95.2	80	120	
Cd	111	1	No Gas	97.704	2.751	531857	1.80	100	97.7	80	120	
Sr	88	1	No Gas	101.633	3.946	5417851	2.98	100	101.6	80	120	
Mo	95	1	No Gas	2032.640	2.547	21599672	1.64	100	2032.6	80	120	
Sn	118	1	No Gas	95.649	2.232	1610727	1.72	100	95.6	80	120	
Sb	121	1	No Gas	96.990	2.388	2501604	1.78	100	97.0	80	120	
Ba	137	1	No Gas	93.273	3.093	743812	2.13	100	93.3	80	120	
Tl	205	1	No Gas	95.060	3.098	3701883	2.89	100	95.1	80	120	
Tl	203	1	No Gas	93.273	4.304	1510385	3.97	100	93.3	80	120	
Pb	208	1	No Gas	93.140	3.043	5518280	2.90	100	93.1	80	120	
U	238	1	No Gas	99.868	2.532	5850328	2.60	100	99.9	80	120	
Ca	43	2	He	100511.734	1.967	391252	2.17	100	100511.7	80	120	
Sb	121	2	He	92.555	7.645	1331807	7.77	100	92.6	80	120	
Ti	47	2	He	1994.668	1.957	784528	2.25	100	1994.7	80	120	
Cu	63	1	No Gas	97.242	3.594	2372326	2.94	100	97.2	80	120	
Se	82	1	No Gas	95.803	0.508	41882	1.31	100	95.8	80	120	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1529514	1.68	1651949	92.59	70	120	
Ge	72	2	He	2100027	0.36	2168000	96.86	70	120	
Ge	72	1	No Gas	6779416	1.15	7066878	95.93	70	120	
In	115	1	No Gas	4350181	0.98	4624260	94.07	70	120	
Bi	209	1	No Gas	3445034	0.44	3626178	95.00	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	036_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\012624A.b
Acq Date Time	2024-01-26T11:19:49-06:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	018CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	103.316	0.594	2398286	1.06	100	103.3	90	110	
Be	9	1	No Gas	98.211	2.526	795377	1.24	100	98.2	90	110	
V	51	2	He	101.222	4.514	1117341	2.37	100	101.2	90	110	
Cr	52	2	He	103.117	4.481	1235288	2.05	100	103.1	90	110	
Fe	56	2	He	10576.651	4.346	114973898	1.90	10000	105.8	90	110	
Se	78	2	He	101.101	4.693	22384	1.84	100	101.1	90	110	
As	75	2	He	100.584	2.381	261415	1.10	100	100.6	90	110	
Ca	44	2	He	9311.487	3.102	681687	1.56	10000	93.1	90	110	
Na	23	2	He	10789.090	3.153	17989380	0.48	10000	107.9	90	110	
Mg	24	2	He	10632.384	1.706	10805812	1.24	10000	106.3	90	110	
K	39	2	He	10278.309	2.251	14291259	1.05	10000	102.8	90	110	
Mn	55	2	He	100.537	4.345	894068	1.65	100	100.5	90	110	
Co	59	2	He	110.223	4.145	1912643	1.38	100	110.2	90	110	CCV Main CR1-2 Failed
Ni	60	2	He	107.295	3.606	475438	0.90	100	107.3	90	110	
Cu	63	2	He	107.412	4.024	1280651	1.27	100	107.4	90	110	
Zn	66	2	He	105.095	3.201	275276	0.75	100	105.1	90	110	
Al	27	2	He	103.996	3.410	68167	0.89	100	104.0	90	110	
B	11	1	No Gas	529.669	2.228	2360586	1.13	500	105.9	90	110	
Al	27	1	No Gas	108.811	3.365	3297134	2.03	100	108.8	90	110	
Si	28	1	No Gas	3583.139	3.347	79645692	1.47	5000	71.7	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	105.923	2.769	3149930	0.61	100	105.9	90	110	
Cd	111	1	No Gas	104.129	2.433	606664	0.58	100	104.1	90	110	
Sr	88	1	No Gas	106.117	2.760	6054851	1.59	100	106.1	90	110	
Mo	95	1	No Gas	98.564	3.334	1120987	1.48	100	98.6	90	110	
Sn	118	1	No Gas	104.224	0.661	1878588	1.68	100	104.2	90	110	
Sb	121	1	No Gas	107.921	2.366	2853765	1.27	100	107.9	90	110	
Ba	137	1	No Gas	99.530	2.716	849456	0.76	100	99.5	90	110	
Tl	205	1	No Gas	104.837	3.780	4323123	1.16	100	104.8	90	110	
Tl	203	1	No Gas	104.388	4.338	1789947	2.09	100	104.4	90	110	
Pb	208	1	No Gas	104.899	3.338	6581366	0.56	100	104.9	90	110	
U	238	1	No Gas	104.850	1.994	6505965	1.25	100	104.8	90	110	
Ca	43	2	He	9937.757	2.418	40363	1.79	10000	99.4	90	110	
Sb	121	2	He	106.325	3.455	1594102	0.64	100	106.3	90	110	
Ti	47	2	He	97.297	3.808	39905	1.28	100	97.3	90	110	
Cu	63	1	No Gas	109.940	4.121	2749085	2.71	100	109.9	90	110	
Se	82	1	No Gas	104.781	4.590	46934	3.17	100	104.8	90	110	
Zr	90	1	No Gas	104.616	3.132	3929686	1.77	100	104.6	90	110	
Zr	90	2	He	108.111	4.110	1888266	1.48	100	108.1	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1611697	1.37	1651949	97.56	70	120	
Ge	72	2	He	2189729	2.90	2168000	101.00	70	120	
Ge	72	1	No Gas	6951116	1.50	7066878	98.36	70	120	
In	115	1	No Gas	4656644	2.15	4624260	100.70	70	120	
Bi	209	1	No Gas	3650491	2.95	3626178	100.67	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	037_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\012624A.b
Acq Date Time	2024-01-26T11:22:10-06:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	018CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.162	68.4	110927	0.8	0.5	
Be	9	1	No Gas	0.002	129.6	82	33.7	0.5	
V	51	2	He	0.132	10.8	12066	1.0	2.5	
Cr	52	2	He	0.050	14.1	15035	0.5	2.5	
Fe	56	2	He	0.980	7.3	38712	1.1	100	
Se	78	2	He	-0.001	-17066.5	337	7.2	2	
As	75	2	He	-0.007	-218.6	638	6.0	2.5	
Ca	44	2	He	2.696	53.5	1890	6.2	100	
Na	23	2	He	-0.643	-72.0	99879	0.6	100	
Mg	24	2	He	0.543	12.0	983	6.6	100	
K	39	2	He	-0.729	-199.1	191251	0.3	100	
Mn	55	2	He	0.044	13.8	860	5.3	2.5	
Co	59	2	He	0.000	870.1	143	28.2	2.5	
Ni	60	2	He	0.003	717.9	653	14.5	2.5	
Cu	63	2	He	0.003	297.5	1310	9.7	2	
Zn	66	2	He	0.267	9.4	1680	4.3	2.5	
Al	27	2	He	1.279	25.7	3551	5.0	5	
B	11	1	No Gas	3.555	20.8	64543	4.1	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	1.428	4.9	169643	0.3	5	
Si	28	1	No Gas	-32.036	-13.0	9176085	0.1	10	
Ag	107	1	No Gas	0.006	61.8	580	18.2	2.5	
Cd	111	1	No Gas	-0.004	-47.7	20	50.0	1	
Sr	88	1	No Gas	0.025	25.3	3661	7.5	2.5	
Mo	95	1	No Gas	0.023	27.0	420	15.6	2.5	
Sn	118	1	No Gas	0.063	18.0	3831	7.1	5	
Sb	121	1	No Gas	0.023	9.4	1010	6.5	2.5	
Ba	137	1	No Gas	0.051	6.7	720	6.4	2.5	
Tl	205	1	No Gas	0.095	36.6	4251	35.2	1	
Tl	203	1	No Gas	0.088	37.8	1654	36.0	1	
Pb	208	1	No Gas	0.007	43.3	2247	9.0	2.5	
U	238	1	No Gas	0.003	52.2	727	14.1	2.5	
Ca	43	2	He	-5.761	-49.9	23	49.5	100	
Sb	121	2	He	0.022	19.9	537	12.4	2.5	
Ti	47	2	He	-0.016	-184.8	27	43.3	2.5	
Cu	63	1	No Gas	0.016	71.3	3384	7.5	2.5	
Se	82	1	No Gas	-0.319	-168.8	-17	-1484.3	2	
Zr	90	1	No Gas	0.038	18.2	4367	6.1	2.5	
Zr	90	2	He	0.047	14.0	2357	5.5	2.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1725149	1.56	1651949	104.43	70	120	
Ge	72	2	He	2146761	0.95	2168000	99.02	70	120	
Ge	72	1	No Gas	7124721	0.96	7066878	100.82	70	120	

Continuing Calibration Blank (CCB) Report

In	115	1	No Gas	4740153	2.27	4624260	102.51	70	120	
Bi	209	1	No Gas	3801954	1.33	3626178	104.85	70	120	

Sample Report

Sample Table

Sample Name	HS24011111-14SD
Data File Name	045SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\012624A.b
Acq Date Time	2024-01-26T11:40:53-06:00
Sample Type	Sample
Dilution	5
Comment	TWDOD 206338
ISTD Ref FileName	018CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	0.573	2.867	18.73	116974	0.00	2000	
Be	9	1	No Gas	0.020	0.100	11.92	227	0.01	2000	
V	51	2	He	1.559	7.793	4.94	27121	0.01	2000	
Cr	52	2	He	0.125	0.625	29.52	15769	0.00	2000	
Fe	56	2	He	202.452	1012.260	3.17	2166878	0.01	200000	
Se	78	2	He	-0.076	-0.382	-208.88	318	-0.02	2000	
As	75	2	He	0.236	1.180	6.98	1243	0.02	2000	
Ca	44	2	He	1152.555	5762.776	2.60	83480	1.38	200000	
Na	23	2	He	2593.167	12965.835	2.73	4278616	0.06	200000	
Mg	24	2	He	666.623	3333.113	2.77	658745	0.10	200000	
K	39	2	He	505.464	2527.321	2.75	864119	0.06	200000	
Mn	55	2	He	8.008	40.040	2.31	69671	0.01	2000	
Co	59	2	He	0.069	0.345	3.46	1300	0.01	2000	
Ni	60	2	He	0.416	2.078	9.82	2424	0.02	2000	
Cu	63	2	He	0.334	1.669	7.40	5124	0.01	2000	
Zn	66	2	He	1.871	9.354	8.92	5731	0.03	2000	
Al	27	2	He	49.731	248.654	3.01	33116	0.15	2000	
B	11	1	No Gas	3.816	19.078	14.79	63721	0.01	2000	
Al	27	1	No Gas	52.037	260.184	1.81	1632894	0.00	2000	
Si	28	1	No Gas	1158.056	5790.279	2.57	32055544	0.00	2000	
Ag	107	1	No Gas	0.003	0.016	70.61	490	0.00	2000	
Cd	111	1	No Gas	-0.001	-0.003	-539.66	37	0.00	2000	
Sr	88	1	No Gas	20.572	102.860	3.20	1176512	0.00	2000	
Mo	95	1	No Gas	0.046	0.228	17.26	670	0.01	2000	
Sn	118	1	No Gas	0.070	0.351	24.23	3884	0.00	2000	
Sb	121	1	No Gas	0.066	0.332	3.76	2124	0.00	2000	
Ba	137	1	No Gas	10.278	51.391	2.27	88039	0.01	2000	
Tl	205	1	No Gas	0.006	0.029	21.45	413	0.00	2000	
Tl	203	1	No Gas	0.005	0.025	56.81	167	0.00	2000	
Pb	208	1	No Gas	0.166	0.829	5.98	12523	0.00	2000	
U	238	1	No Gas	0.020	0.099	7.89	1820	0.00	2000	
Ca	43	2	He	1283.997	6419.985	2.03	5108	25.14	200000	
Sb	121	2	He	0.067	0.337	15.09	1193	0.01	2000	
Ti	47	2	He	0.421	2.106	42.75	200	0.21	2000	
Cu	63	1	No Gas	0.374	1.869	3.42	12192	0.00	2000	
Zn	66	1	No Gas	1.854	9.271	4.01	16851	0.01	2000	
Se	82	1	No Gas	0.257	1.285	100.55	238	0.11	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1671703	2.27	1651949	101.20	70	120	
Ge	72	2	He	2127374	1.05	2168000	98.13	70	120	
Ge	72	1	No Gas	6914246	1.71	7066878	97.84	70	120	
In	115	1	No Gas	4659317	0.74	4624260	100.76	70	120	

Sample Report

Bi	209	1	No Gas	3781121	1.38	3626178	104.27	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	048_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\012624A.b
Acq Date Time	2024-01-26T11:47:55-06:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	018CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	106.806	2.406	2476508	3.31	100	106.8	90	110	
Be	9	1	No Gas	100.023	1.616	810229	1.46	100	100.0	90	110	
V	51	2	He	110.578	6.664	1139864	3.43	100	110.6	90	110	CCV Main CR1-2 Failed
Cr	52	2	He	111.280	8.326	1244409	5.00	100	111.3	90	110	CCV Main CR1-2 Failed
Fe	56	2	He	11094.958	6.150	112739208	3.14	10000	110.9	90	110	CCV Main CR1-2 Failed
Se	78	2	He	108.508	4.810	22441	1.73	100	108.5	90	110	
As	75	2	He	106.338	3.405	258350	0.29	100	106.3	90	110	
Ca	44	2	He	9993.027	5.822	683544	2.51	10000	99.9	90	110	
Na	23	2	He	11186.441	2.443	17442819	1.82	10000	111.9	90	110	CCV Main CR1-2 Failed
Mg	24	2	He	11106.234	2.934	10553230	1.16	10000	111.1	90	110	CCV Main CR1-2 Failed
K	39	2	He	10728.074	3.824	13937653	1.74	10000	107.3	90	110	
Mn	55	2	He	107.277	6.585	891707	3.61	100	107.3	90	110	
Co	59	2	He	115.053	5.311	1866636	2.62	100	115.1	90	110	CCV Main CR1-2 Failed
Ni	60	2	He	111.140	4.157	460511	2.14	100	111.1	90	110	CCV Main CR1-2 Failed
Cu	63	2	He	109.313	5.979	1219398	5.99	100	109.3	90	110	
Zn	66	2	He	108.724	1.631	266371	1.81	100	108.7	90	110	
Al	27	2	He	109.351	4.132	66888	1.97	100	109.4	90	110	
B	11	1	No Gas	532.321	2.339	2372302	1.03	500	106.5	90	110	
Al	27	1	No Gas	109.516	1.795	3260420	2.06	100	109.5	90	110	
Si	28	1	No Gas	3573.962	1.951	78087214	1.12	5000	71.5	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	108.030	1.655	3105569	1.77	100	108.0	90	110	
Cd	111	1	No Gas	105.904	0.334	596416	0.56	100	105.9	90	110	
Sr	88	1	No Gas	108.401	0.272	5978614	0.09	100	108.4	90	110	
Mo	95	1	No Gas	100.669	0.408	1106841	0.56	100	100.7	90	110	
Sn	118	1	No Gas	107.316	2.938	1869261	3.07	100	107.3	90	110	
Sb	121	1	No Gas	108.459	2.609	2817806	1.78	100	108.5	90	110	
Ba	137	1	No Gas	102.024	0.180	841715	0.46	100	102.0	90	110	
Tl	205	1	No Gas	108.928	3.388	4405128	3.18	100	108.9	90	110	
Tl	203	1	No Gas	107.845	3.795	1813287	2.79	100	107.8	90	110	
Pb	208	1	No Gas	108.037	1.612	6646866	1.20	100	108.0	90	110	
U	238	1	No Gas	107.723	1.439	6553308	1.65	100	107.7	90	110	
Ca	43	2	He	10602.903	4.280	40249	1.12	10000	106.0	90	110	
Sb	121	2	He	109.788	1.676	1540054	2.56	100	109.8	90	110	
Ti	47	2	He	103.746	6.246	39765	2.92	100	103.7	90	110	
Cu	63	1	No Gas	108.979	0.764	2678316	1.23	100	109.0	90	110	
Se	82	1	No Gas	105.062	2.844	46244	1.62	100	105.1	90	110	
Zr	90	1	No Gas	104.074	1.453	3841760	1.54	100	104.1	90	110	
Zr	90	2	He	108.148	2.776	1767227	2.57	100	108.1	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1611825	1.40	1651949	97.57	70	120	
Ge	72	2	He	2047919	3.37	2168000	94.46	70	120	
Ge	72	1	No Gas	6829471	1.62	7066878	96.64	70	120	
In	115	1	No Gas	4499735	0.28	4624260	97.31	70	120	
Bi	209	1	No Gas	3577717	1.10	3626178	98.66	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	049_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\012624A.b
Acq Date Time	2024-01-26T11:50:15-06:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	018CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.191	42.9	109960	2.0	0.5	
Be	9	1	No Gas	0.009	38.7	140	22.3	0.5	
V	51	2	He	1.070	3.8	21492	1.5	2.5	
Cr	52	2	He	0.091	40.0	15062	2.1	2.5	
Fe	56	2	He	1.061	6.0	38434	2.4	100	
Se	78	2	He	0.060	60.2	340	2.6	2	
As	75	2	He	0.105	16.9	896	5.6	2.5	
Ca	44	2	He	-0.096	-2334.5	1640	9.0	100	
Na	23	2	He	1.114	33.6	99755	0.1	100	
Mg	24	2	He	0.735	21.7	1140	12.9	100	
K	39	2	He	-1.262	-44.4	185014	0.8	100	
Mn	55	2	He	0.039	31.7	793	12.8	2.5	
Co	59	2	He	0.001	56.1	157	7.4	2.5	
Ni	60	2	He	0.000	4751.3	623	14.5	2.5	
Cu	63	2	He	0.004	51.3	1283	2.0	2	
Zn	66	2	He	0.289	28.4	1687	11.8	2.5	
Al	27	2	He	2.079	30.6	3927	9.9	5	
B	11	1	No Gas	3.792	10.1	64688	3.0	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	1.662	5.4	167667	1.3	5	
Si	28	1	No Gas	-31.790	-12.1	8714406	0.5	10	
Ag	107	1	No Gas	0.006	47.4	557	14.5	2.5	
Cd	111	1	No Gas	0.004	137.4	63	50.8	1	
Sr	88	1	No Gas	0.031	20.0	3907	9.1	2.5	
Mo	95	1	No Gas	0.021	8.4	380	5.3	2.5	
Sn	118	1	No Gas	0.073	7.7	3891	2.8	5	
Sb	121	1	No Gas	0.034	10.3	1237	7.2	2.5	
Ba	137	1	No Gas	0.062	7.6	797	5.2	2.5	
Tl	205	1	No Gas	0.098	37.3	4311	35.7	1	
Tl	203	1	No Gas	0.100	36.3	1844	34.5	1	
Pb	208	1	No Gas	0.010	42.9	2373	11.3	2.5	
U	238	1	No Gas	0.005	62.3	870	24.5	2.5	
Ca	43	2	He	9.983	55.3	83	25.0	100	
Sb	121	2	He	0.033	12.9	683	8.4	2.5	
Ti	47	2	He	0.037	105.0	47	32.7	2.5	
Cu	63	1	No Gas	0.010	60.5	3087	5.7	2.5	
Se	82	1	No Gas	0.253	115.7	231	54.3	2	
Zr	90	1	No Gas	0.043	22.8	4307	8.6	2.5	
Zr	90	2	He	0.043	22.2	2217	6.5	2.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1698936	0.25	1651949	102.84	70	120	
Ge	72	2	He	2084438	0.70	2168000	96.15	70	120	
Ge	72	1	No Gas	6762433	0.73	7066878	95.69	70	120	

Continuing Calibration Blank (CCB) Report

In	115	1	No Gas	4606012	0.24	4624260	99.61	70	120	
Bi	209	1	No Gas	3746111	0.82	3626178	103.31	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	050_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\012624A.b
Acq Date Time	2024-01-26T11:52:36-06:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	018CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	105.811	4.260	2412848	2.70	100	105.8	90	110	
Be	9	1	No Gas	100.202	2.180	798244	0.86	100	100.2	90	110	
V	51	2	He	110.649	2.653	1116174	2.14	100	110.6	90	110	CCV Main CR1-2 Failed
Cr	52	2	He	111.926	2.093	1225229	1.51	100	111.9	90	110	CCV Main CR1-2 Failed
Fe	56	2	He	11235.293	3.624	111700912	3.06	10000	112.4	90	110	CCV Main CR1-2 Failed
Se	78	2	He	107.637	1.699	21779	1.15	100	107.6	90	110	
As	75	2	He	106.652	1.155	253403	0.59	100	106.7	90	110	
Ca	44	2	He	9895.557	1.148	662354	0.75	10000	99.0	90	110	
Na	23	2	He	11265.552	1.475	17173945	1.33	10000	112.7	90	110	CCV Main CR1-2 Failed
Mg	24	2	He	11162.122	0.904	10371567	0.69	10000	111.6	90	110	CCV Main CR1-2 Failed
K	39	2	He	10783.071	1.887	13699757	1.64	10000	107.8	90	110	
Mn	55	2	He	108.116	2.457	879387	1.89	100	108.1	90	110	
Co	59	2	He	116.159	4.444	1843470	3.97	100	116.2	90	110	CCV Main CR1-2 Failed
Ni	60	2	He	112.745	2.692	456855	2.13	100	112.7	90	110	CCV Main CR1-2 Failed
Cu	63	2	He	112.706	4.349	1228889	3.81	100	112.7	90	110	CCV Main CR1-2 Failed
Zn	66	2	He	109.759	1.091	262872	0.71	100	109.8	90	110	
Al	27	2	He	109.592	0.385	65558	0.78	100	109.6	90	110	
B	11	1	No Gas	542.318	2.159	2376368	1.03	500	108.5	90	110	
Al	27	1	No Gas	111.394	1.959	3231666	1.19	100	111.4	90	110	CCV Main CR1-2 Failed
Si	28	1	No Gas	3610.836	2.153	76840151	1.25	5000	72.2	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	107.597	1.195	3075653	1.25	100	107.6	90	110	
Cd	111	1	No Gas	105.852	2.343	592723	1.97	100	105.9	90	110	
Sr	88	1	No Gas	107.370	2.699	5887790	2.09	100	107.4	90	110	
Mo	95	1	No Gas	101.963	3.755	1114473	2.62	100	102.0	90	110	
Sn	118	1	No Gas	106.866	1.288	1850812	0.66	100	106.9	90	110	
Sb	121	1	No Gas	110.034	3.267	2787742	2.55	100	110.0	90	110	CCV Main CR1-2 Failed
Ba	137	1	No Gas	102.445	1.364	840389	1.05	100	102.4	90	110	
Tl	205	1	No Gas	106.370	3.022	4380770	2.17	100	106.4	90	110	
Tl	203	1	No Gas	107.371	3.483	1838871	2.83	100	107.4	90	110	
Pb	208	1	No Gas	108.292	2.550	6785309	1.78	100	108.3	90	110	
U	238	1	No Gas	107.115	3.167	6635218	1.81	100	107.1	90	110	
Ca	43	2	He	10702.462	3.924	39741	3.96	10000	107.0	90	110	
Sb	121	2	He	112.455	0.612	1542012	0.92	100	112.5	90	110	CCV Main CR1-2 Failed
Ti	47	2	He	105.405	3.535	39534	3.16	100	105.4	90	110	
Cu	63	1	No Gas	110.441	2.405	2646516	1.68	100	110.4	90	110	CCV Main CR1-2 Failed
Se	82	1	No Gas	107.656	1.017	46214	0.30	100	107.7	90	110	
Zr	90	1	No Gas	107.622	3.098	3873557	2.39	100	107.6	90	110	
Zr	90	2	He	111.902	0.886	1787669	0.59	100	111.9	90	110	CCV Main CR1-2 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1585357	1.55	1651949	95.97	70	120	
Ge	72	2	He	2001386	0.56	2168000	92.31	70	120	
Ge	72	1	No Gas	6659569	0.71	7066878	94.24	70	120	
In	115	1	No Gas	4474570	1.22	4624260	96.76	70	120	
Bi	209	1	No Gas	3644333	2.20	3626178	100.50	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	053_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\012624A.b
Acq Date Time	2024-01-26T11:59:37-06:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	018CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	101.703	1.799	2339025	1.99	100	101.7	90	110	
Be	9	1	No Gas	95.999	1.588	769904	1.84	100	96.0	90	110	
V	51	2	He	102.272	3.447	1033410	3.58	100	102.3	90	110	
Cr	52	2	He	106.057	0.656	1162729	0.53	100	106.1	90	110	
Fe	56	2	He	10433.090	0.518	103828755	0.94	10000	104.3	90	110	
Se	78	2	He	105.405	0.449	21353	0.63	100	105.4	90	110	
As	75	2	He	103.191	1.298	245409	1.08	100	103.2	90	110	
Ca	44	2	He	9641.896	1.189	645962	1.01	10000	96.4	90	110	
Na	23	2	He	10623.157	0.413	16213791	0.53	10000	106.2	90	110	
Mg	24	2	He	10527.386	0.613	9790442	1.21	10000	105.3	90	110	
K	39	2	He	10307.760	1.105	13114847	0.84	10000	103.1	90	110	
Mn	55	2	He	101.971	1.081	830207	1.34	100	102.0	90	110	
Co	59	2	He	106.577	1.135	1693030	0.99	100	106.6	90	110	
Ni	60	2	He	105.034	1.313	426068	1.87	100	105.0	90	110	
Cu	63	2	He	100.934	1.272	1101774	1.58	100	100.9	90	110	
Zn	66	2	He	105.382	1.448	252648	1.58	100	105.4	90	110	
Al	27	2	He	113.231	0.396	67705	0.54	100	113.2	90	110	CCV Main CR1-2 Failed
B	11	1	No Gas	509.393	1.457	2249745	1.71	500	101.9	90	110	
Al	27	1	No Gas	113.203	3.303	3300297	2.90	100	113.2	90	110	CCV Main CR1-2 Failed
Si	28	1	No Gas	926.539	2.247	26686176	1.04	5000	18.5	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	105.920	4.967	3018212	3.57	100	105.9	90	110	
Cd	111	1	No Gas	102.609	2.607	572919	1.18	100	102.6	90	110	
Sr	88	1	No Gas	103.187	2.784	5642467	1.41	100	103.2	90	110	
Mo	95	1	No Gas	98.031	3.157	1068571	1.69	100	98.0	90	110	
Sn	118	1	No Gas	100.880	2.121	1742381	1.10	100	100.9	90	110	
Sb	121	1	No Gas	105.769	1.701	2694685	1.26	100	105.8	90	110	
Ba	137	1	No Gas	98.578	2.481	806356	1.16	100	98.6	90	110	
Tl	205	1	No Gas	105.018	3.951	4237484	2.86	100	105.0	90	110	
Tl	203	1	No Gas	104.505	3.248	1753617	2.17	100	104.5	90	110	
Pb	208	1	No Gas	104.626	3.994	6422341	2.65	100	104.6	90	110	
U	238	1	No Gas	105.327	4.085	6392575	2.87	100	105.3	90	110	
Ca	43	2	He	10248.798	0.518	38090	0.45	10000	102.5	90	110	
Sb	121	2	He	105.124	1.736	1442792	2.27	100	105.1	90	110	
Ti	47	2	He	100.204	1.313	37619	1.19	100	100.2	90	110	
Cu	63	1	No Gas	108.187	2.492	2606895	2.04	100	108.2	90	110	
Se	82	1	No Gas	103.461	1.325	44663	0.96	100	103.5	90	110	
Zr	90	1	No Gas	102.114	0.828	3696070	0.40	100	102.1	90	110	
Zr	90	2	He	103.100	0.524	1648555	0.55	100	103.1	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1595635	0.38	1651949	96.59	70	120	
Ge	72	2	He	2003068	0.70	2168000	92.39	70	120	
Ge	72	1	No Gas	6696120	0.46	7066878	94.75	70	120	
In	115	1	No Gas	4462421	1.49	4624260	96.50	70	120	
Bi	209	1	No Gas	3570552	1.39	3626178	98.47	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	054_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\012624A.b
Acq Date Time	2024-01-26T12:01:57-06:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	018CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.292	27.8	110942	0.9	0.5	
Be	9	1	No Gas	0.012	21.9	157	12.9	0.5	
V	51	2	He	0.493	12.3	14927	3.0	2.5	
Cr	52	2	He	0.140	24.5	15059	1.3	2.5	
Fe	56	2	He	0.957	10.1	36028	2.6	100	
Se	78	2	He	-0.026	-85.7	311	1.6	2	
As	75	2	He	0.058	22.3	751	3.2	2.5	
Ca	44	2	He	0.507	307.0	1623	7.5	100	
Na	23	2	He	-1.864	-41.8	91663	0.7	100	
Mg	24	2	He	0.549	6.1	927	2.2	100	
K	39	2	He	0.816	231.5	181025	0.3	100	
Mn	55	2	He	0.030	34.6	693	13.3	2.5	
Co	59	2	He	0.000	-852.6	127	19.9	2.5	
Ni	60	2	He	-0.010	-125.6	560	7.8	2.5	
Cu	63	2	He	-0.004	-283.9	1143	12.4	2	
Zn	66	2	He	0.289	28.6	1627	13.2	2.5	
Al	27	2	He	1.698	18.1	3567	4.9	5	
B	11	1	No Gas	4.180	16.1	65648	3.9	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	1.507	4.6	161373	1.4	5	
Si	28	1	No Gas	-40.344	-14.2	8451660	0.3	10	
Ag	107	1	No Gas	0.004	34.3	503	8.3	2.5	
Cd	111	1	No Gas	0.000	2517.7	40	25.0	1	
Sr	88	1	No Gas	0.030	14.6	3817	6.1	2.5	
Mo	95	1	No Gas	0.019	30.0	360	16.9	2.5	
Sn	118	1	No Gas	0.186	110.2	5840	61.1	5	
Sb	121	1	No Gas	0.030	5.0	1117	4.2	2.5	
Ba	137	1	No Gas	0.058	10.5	757	6.1	2.5	
Tl	205	1	No Gas	0.086	41.7	3791	41.0	1	
Tl	203	1	No Gas	0.082	32.5	1523	32.1	1	
Pb	208	1	No Gas	0.011	42.3	2437	13.3	2.5	
U	238	1	No Gas	0.003	56.2	750	16.2	2.5	
Ca	43	2	He	5.397	32.1	63	9.1	100	
Sb	121	2	He	0.033	17.6	657	12.3	2.5	
Ti	47	2	He	0.051	53.2	50	20.0	2.5	
Cu	63	1	No Gas	-0.002	-466.2	2757	6.6	2.5	
Se	82	1	No Gas	-0.010	-4229.9	117	153.6	2	
Zr	90	1	No Gas	0.058	28.8	4811	11.9	2.5	
Zr	90	2	He	0.055	27.9	2334	10.4	2.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1678210	1.18	1651949	101.59	70	120	
Ge	72	2	He	2010208	1.12	2168000	92.72	70	120	
Ge	72	1	No Gas	6683734	0.97	7066878	94.58	70	120	

Continuing Calibration Blank (CCB) Report

In	115	1	No Gas	4571107	0.69	4624260	98.85	70	120	
Bi	209	1	No Gas	3742044	1.20	3626178	103.20	70	120	

Sample Report

Sample Table

Sample Name	MBLK-206338
Data File Name	055SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\012624A.b
Acq Date Time	2024-01-26T12:04:18-06:00
Sample Type	Sample
Dilution	1
Comment	TWDOD 206338
ISTD Ref FileName	018CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	0.148	0.148	83.11	107203	0.00	2000	
Be	9	1	No Gas	0.003	0.003	82.49	85	0.00	2000	
V	51	2	He	0.672	0.672	6.09	17107	0.00	2000	
Cr	52	2	He	0.099	0.099	36.55	14955	0.00	2000	
Fe	56	2	He	-0.124	-0.124	-36.90	25808	0.00	200000	
Se	78	2	He	-0.139	-0.139	-18.40	295	-0.05	2000	
As	75	2	He	0.068	0.068	11.43	793	0.01	2000	
Ca	44	2	He	-4.286	-4.286	-51.81	1330	-0.32	200000	
Na	23	2	He	-3.773	-3.773	-15.63	90787	0.00	200000	
Mg	24	2	He	0.297	0.297	6.31	707	0.04	200000	
K	39	2	He	-1.754	-1.754	-61.31	181863	0.00	200000	
Mn	55	2	He	0.019	0.019	36.65	617	0.00	2000	
Co	59	2	He	-0.002	-0.002	-58.32	97	0.00	2000	
Ni	60	2	He	-0.014	-0.014	-134.43	553	0.00	2000	
Cu	63	2	He	-0.014	-0.014	-45.64	1057	0.00	2000	
Zn	66	2	He	0.018	0.018	160.25	1000	0.00	2000	
Al	27	2	He	-0.302	-0.302	-162.86	2467	-0.01	2000	
B	11	1	No Gas	1.341	1.341	31.36	52535	0.00	2000	
Al	27	1	No Gas	0.094	0.094	87.17	121928	0.00	2000	
Si	28	1	No Gas	-30.521	-30.521	-17.26	8650912	0.00	2000	
Ag	107	1	No Gas	-0.001	-0.001	-263.97	340	0.00	2000	
Cd	111	1	No Gas	-0.002	-0.002	-120.00	27	-0.01	2000	
Sr	88	1	No Gas	0.000	0.000	-547.64	2130	0.00	2000	
Mo	95	1	No Gas	0.009	0.009	34.94	243	0.00	2000	
Sn	118	1	No Gas	0.018	0.018	27.31	2867	0.00	2000	
Sb	121	1	No Gas	0.006	0.006	42.20	527	0.00	2000	
Ba	137	1	No Gas	-0.004	-0.004	-168.13	233	0.00	2000	
Tl	205	1	No Gas	0.012	0.012	1.60	650	0.00	2000	
Tl	203	1	No Gas	0.010	0.010	22.26	247	0.00	2000	
Pb	208	1	No Gas	0.004	0.004	49.90	1963	0.00	2000	
U	238	1	No Gas	0.000	0.000	132.51	557	0.00	2000	
Ca	43	2	He	2.412	2.412	230.64	53	4.52	200000	
Sb	121	2	He	0.007	0.007	53.65	307	0.00	2000	
Ti	47	2	He	0.013	0.013	449.56	37	0.04	2000	
Cu	63	1	No Gas	-0.005	-0.005	-132.22	2680	0.00	2000	
Zn	66	1	No Gas	0.005	0.005	490.94	2850	0.00	2000	
Se	82	1	No Gas	0.343	0.343	45.12	268	0.13	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1672780	2.48	1651949	101.26	70	120	
Ge	72	2	He	2056165	0.85	2168000	94.84	70	120	
Ge	72	1	No Gas	6694343	0.16	7066878	94.73	70	120	
In	115	1	No Gas	4535073	0.66	4624260	98.07	70	120	

Sample Report

Bi	209	1	No Gas	3735606	0.78	3626178	103.02	70	120	

Sample Report

Sample Table

Sample Name	LCS-206338
Data File Name	056SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\012624A.b
Acq Date Time	2024-01-26T12:06:39-06:00
Sample Type	Sample
Dilution	1
Comment	TWDOD 206338
ISTD Ref FileName	018CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	93.618	93.618	3.65	2122506	0.00	2000	
Be	9	1	No Gas	43.778	43.778	2.48	344927	0.01	2000	
V	51	2	He	44.520	44.520	1.57	460941	0.01	2000	
Cr	52	2	He	45.357	45.357	1.59	511075	0.01	2000	
Fe	56	2	He	4757.281	4757.281	1.12	47932073	0.01	200000	
Se	78	2	He	47.291	47.291	2.92	9870	0.48	2000	
As	75	2	He	46.783	46.783	0.53	112960	0.04	2000	
Ca	44	2	He	4473.515	4473.515	0.79	304229	1.47	200000	
Na	23	2	He	4823.095	4823.095	2.40	7501094	0.06	200000	
Mg	24	2	He	4901.441	4901.441	1.49	4613374	0.11	200000	
K	39	2	He	4737.087	4737.087	1.68	6198210	0.08	200000	
Mn	55	2	He	46.991	46.991	1.19	387496	0.01	2000	
Co	59	2	He	47.053	47.053	0.71	756657	0.01	2000	
Ni	60	2	He	47.246	47.246	0.73	194332	0.02	2000	
Cu	63	2	He	46.110	46.110	1.64	510038	0.01	2000	
Zn	66	2	He	48.054	48.054	0.13	117133	0.04	2000	
Al	27	2	He	116.119	116.119	0.24	70217	0.17	2000	
B	11	1	No Gas	464.597	464.597	1.69	2019647	0.02	2000	
Al	27	1	No Gas	116.278	116.278	0.65	3379374	0.00	2000	
Si	28	1	No Gas	365.514	365.514	1.31	16079211	0.00	2000	
Ag	107	1	No Gas	47.411	47.411	3.15	1355990	0.00	2000	
Cd	111	1	No Gas	46.768	46.768	0.91	262026	0.02	2000	
Sr	88	1	No Gas	93.216	93.216	1.40	5114477	0.00	2000	
Mo	95	1	No Gas	43.939	43.939	1.25	480649	0.01	2000	
Sn	118	1	No Gas	92.986	92.986	2.27	1611432	0.01	2000	
Sb	121	1	No Gas	44.302	44.302	0.67	1126411	0.00	2000	
Ba	137	1	No Gas	44.662	44.662	1.50	366677	0.01	2000	
Tl	205	1	No Gas	45.973	45.973	2.70	1894878	0.00	2000	
Tl	203	1	No Gas	40.120	40.120	0.96	687593	0.01	2000	
Pb	208	1	No Gas	45.718	45.718	1.01	2867111	0.00	2000	
U	238	1	No Gas	90.220	90.220	1.06	5592738	0.00	2000	
Ca	43	2	He	4862.442	4862.442	1.19	18319	26.54	200000	
Sb	121	2	He	43.203	43.203	1.73	600148	0.01	2000	
Ti	47	2	He	136.040	136.040	1.19	51687	0.26	2000	
Cu	63	1	No Gas	45.744	45.744	0.73	1101500	0.00	2000	
Zn	66	1	No Gas	45.707	45.707	0.61	335028	0.01	2000	
Se	82	1	No Gas	45.761	45.761	1.27	19778	0.23	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1567880	1.75	1651949	94.91	70	120	
Ge	72	2	He	2027680	2.39	2168000	93.53	70	120	
Ge	72	1	No Gas	6681127	0.75	7066878	94.54	70	120	
In	115	1	No Gas	4476175	0.20	4624260	96.80	70	120	

Sample Report

Bi	209	1	No Gas	3645276	1.03	3626178	100.53	70	120	

Sample Report

Sample Table

Sample Name	HS24011111-14
Data File Name	057SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\012624A.b
Acq Date Time	2024-01-26T12:08:59-06:00
Sample Type	Sample
Dilution	1
Comment	TWDOD 206338
ISTD Ref FileName	018CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	3.741	3.741	6.39	186249	0.00	2000	
Be	9	1	No Gas	0.090	0.090	10.49	797	0.01	2000	
V	51	2	He	2.398	2.398	2.43	35103	0.01	2000	
Cr	52	2	He	0.811	0.811	16.67	23042	0.00	2000	
Fe	56	2	He	1112.823	1112.823	1.68	11479948	0.01	200000	
Se	78	2	He	0.098	0.098	83.81	346	0.03	2000	
As	75	2	He	0.695	0.695	7.23	2338	0.03	2000	
Ca	44	2	He	5888.109	5888.109	2.55	408669	1.44	200000	
Na	23	2	He	12817.134	12817.134	2.64	20214413	0.06	200000	
Mg	24	2	He	3408.986	3408.986	2.08	3279525	0.10	200000	
K	39	2	He	2628.042	2628.042	2.33	3596875	0.07	200000	
Mn	55	2	He	38.061	38.061	1.26	320816	0.01	2000	
Co	59	2	He	0.409	0.409	1.12	6855	0.01	2000	
Ni	60	2	He	2.896	2.896	2.33	12753	0.02	2000	
Cu	63	2	He	1.820	1.820	0.43	21758	0.01	2000	
Zn	66	2	He	11.302	11.302	3.21	28888	0.04	2000	
Al	27	2	He	510.359	510.359	2.96	306286	0.17	2000	
B	11	1	No Gas	17.329	17.329	6.70	122488	0.01	2000	
Al	27	1	No Gas	519.185	519.185	1.45	14532406	0.00	2000	
Si	28	1	No Gas	6383.828	6383.828	1.13	127958221	0.00	2000	>LDR
Ag	107	1	No Gas	0.033	0.033	13.97	1300	0.00	2000	
Cd	111	1	No Gas	0.010	0.010	92.62	93	0.01	2000	
Sr	88	1	No Gas	106.407	106.407	2.19	5802782	0.00	2000	
Mo	95	1	No Gas	0.127	0.127	8.15	1530	0.01	2000	
Sn	118	1	No Gas	0.411	0.411	1.80	9567	0.00	2000	
Sb	121	1	No Gas	0.126	0.126	3.01	3534	0.00	2000	
Ba	137	1	No Gas	53.660	53.660	0.63	437836	0.01	2000	
Tl	205	1	No Gas	0.064	0.064	45.29	2834	0.00	2000	
Tl	203	1	No Gas	0.065	0.065	25.21	1207	0.01	2000	
Pb	208	1	No Gas	0.874	0.874	3.34	57509	0.00	2000	
U	238	1	No Gas	0.116	0.116	3.88	7826	0.00	2000	
Ca	43	2	He	6429.775	6429.775	3.12	24733	26.00	200000	
Sb	121	2	He	0.110	0.110	10.06	1773	0.01	2000	
Ti	47	2	He	8.601	8.601	30.63	3364	0.26	2000	
Cu	63	1	No Gas	1.998	1.998	1.21	50280	0.00	2000	
Zn	66	1	No Gas	11.080	11.080	2.45	82517	0.01	2000	
Se	82	1	No Gas	-0.026	-0.026	-2392.90	108	-0.02	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1638461	2.43	1651949	99.18	70	120	
Ge	72	2	He	2072073	0.83	2168000	95.58	70	120	
Ge	72	1	No Gas	6615346	0.59	7066878	93.61	70	120	
In	115	1	No Gas	4449114	1.83	4624260	96.21	70	120	

Sample Report

Bi	209	1	No Gas	3711420	0.66	3626178	102.35	70	120	

Sample Report

Sample Table

Sample Name	HS24011111-14MS
Data File Name	058SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\012624A.b
Acq Date Time	2024-01-26T12:11:20-06:00
Sample Type	Sample
Dilution	1
Comment	TWDOD 206338
ISTD Ref FileName	018CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	102.677	102.677	2.90	2375361	0.00	2000	
Be	9	1	No Gas	44.448	44.448	2.88	358674	0.01	2000	
V	51	2	He	54.256	54.256	2.46	571156	0.01	2000	
Cr	52	2	He	50.699	50.699	2.66	581474	0.01	2000	
Fe	56	2	He	9076.823	9076.823	3.19	93315449	0.01	200000	
Se	78	2	He	47.130	47.130	3.04	10044	0.47	2000	
As	75	2	He	47.117	47.117	2.07	116101	0.04	2000	
Ca	44	2	He	10355.626	10355.626	2.15	716588	1.45	200000	
Na	23	2	He	17743.443	17743.443	1.64	27910419	0.06	200000	
Mg	24	2	He	8602.151	8602.151	1.67	8264177	0.10	200000	
K	39	2	He	7760.002	7760.002	2.12	10245670	0.08	200000	
Mn	55	2	He	90.095	90.095	2.26	757764	0.01	2000	
Co	59	2	He	47.506	47.506	2.36	779670	0.01	2000	
Ni	60	2	He	51.833	51.833	3.22	217517	0.02	2000	
Cu	63	2	He	48.017	48.017	2.62	542100	0.01	2000	
Zn	66	2	He	60.021	60.021	2.06	149064	0.04	2000	
Al	27	2	He	7858.103	7858.103	4.56	4672020	0.17	2000	>LDR
B	11	1	No Gas	499.045	499.045	2.94	2218386	0.02	2000	
Al	27	1	No Gas	9280.953	9280.953	2.90	264938463	0.00	2000	>LDR
Si	28	1	No Gas	19522.594	19522.594	3.55	382871368	0.01	2000	>LDR
Ag	107	1	No Gas	47.987	47.987	4.67	1384306	0.00	2000	
Cd	111	1	No Gas	47.132	47.132	2.44	266365	0.02	2000	
Sr	88	1	No Gas	199.125	199.125	1.52	11018764	0.00	2000	
Mo	95	1	No Gas	44.243	44.243	2.30	488193	0.01	2000	
Sn	118	1	No Gas	93.603	93.603	0.79	1636389	0.01	2000	
Sb	121	1	No Gas	45.588	45.588	0.69	1179913	0.00	2000	
Ba	137	1	No Gas	116.331	116.331	1.89	963034	0.01	2000	
Tl	205	1	No Gas	46.799	46.799	3.65	1917250	0.00	2000	
Tl	203	1	No Gas	40.864	40.864	3.64	696175	0.01	2000	
Pb	208	1	No Gas	48.252	48.252	3.19	3008208	0.00	2000	
U	238	1	No Gas	93.412	93.412	2.68	5756706	0.00	2000	
Ca	43	2	He	11410.432	11410.432	1.09	43803	26.05	200000	
Sb	121	2	He	42.314	42.314	2.30	600022	0.01	2000	
Ti	47	2	He	328.989	328.989	6.11	127505	0.26	2000	
Cu	63	1	No Gas	51.817	51.817	6.43	1268962	0.00	2000	
Zn	66	1	No Gas	58.000	58.000	2.85	431849	0.01	2000	
Se	82	1	No Gas	47.768	47.768	2.57	21003	0.23	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1606065	2.16	1651949	97.22	70	120	
Ge	72	2	He	2069360	1.04	2168000	95.45	70	120	
Ge	72	1	No Gas	6800740	1.82	7066878	96.23	70	120	
In	115	1	No Gas	4515626	0.67	4624260	97.65	70	120	

Sample Report

Bi	209	1	No Gas	3625068	1.43	3626178	99.97	70	120	

Sample Report

Sample Table

Sample Name	HS24011111-14MSD
Data File Name	059SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\012624A.b
Acq Date Time	2024-01-26T12:13:40-06:00
Sample Type	Sample
Dilution	1
Comment	TWDOD 206338
ISTD Ref FileName	018CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	96.192	96.192	1.67	2170554	0.00	2000	
Be	9	1	No Gas	45.980	45.980	0.82	360952	0.01	2000	
V	51	2	He	46.766	46.766	0.89	498423	0.01	2000	
Cr	52	2	He	45.297	45.297	0.79	525983	0.01	2000	
Fe	56	2	He	5833.394	5833.394	0.58	60554884	0.01	200000	
Se	78	2	He	45.618	45.618	0.15	9824	0.46	2000	
As	75	2	He	47.295	47.295	0.73	117649	0.04	2000	
Ca	44	2	He	10284.915	10284.915	0.71	718517	1.43	200000	
Na	23	2	He	17440.002	17440.002	0.37	27696839	0.06	200000	
Mg	24	2	He	8098.045	8098.045	2.11	7855025	0.10	200000	
K	39	2	He	7246.297	7246.297	1.03	9671311	0.07	200000	
Mn	55	2	He	81.008	81.008	1.10	687946	0.01	2000	
Co	59	2	He	46.974	46.974	1.24	778317	0.01	2000	
Ni	60	2	He	49.688	49.688	1.36	210531	0.02	2000	
Cu	63	2	He	47.466	47.466	1.86	541020	0.01	2000	
Zn	66	2	He	52.845	52.845	1.35	132618	0.04	2000	
Al	27	2	He	543.182	543.182	0.58	328512	0.17	2000	
B	11	1	No Gas	514.891	514.891	1.53	2225237	0.02	2000	
Al	27	1	No Gas	548.012	548.012	0.71	15784036	0.00	2000	
Si	28	1	No Gas	6476.012	6476.012	0.92	133490471	0.00	2000	>LDR
Ag	107	1	No Gas	49.010	49.010	0.90	1407400	0.00	2000	
Cd	111	1	No Gas	48.020	48.020	0.41	270118	0.02	2000	
Sr	88	1	No Gas	196.106	196.106	1.10	10800207	0.00	2000	
Mo	95	1	No Gas	45.005	45.005	0.59	494302	0.01	2000	
Sn	118	1	No Gas	97.233	97.233	2.13	1692003	0.01	2000	
Sb	121	1	No Gas	44.617	44.617	0.97	1156403	0.00	2000	
Ba	137	1	No Gas	98.015	98.015	0.78	807630	0.01	2000	
Tl	205	1	No Gas	47.423	47.423	2.21	1915966	0.00	2000	
Tl	203	1	No Gas	41.169	41.169	2.86	691689	0.01	2000	
Pb	208	1	No Gas	48.366	48.366	1.40	2973608	0.00	2000	
U	238	1	No Gas	95.618	95.618	2.00	5810681	0.00	2000	
Ca	43	2	He	11035.034	11035.034	2.60	42773	25.80	200000	
Sb	121	2	He	42.888	42.888	1.00	613943	0.01	2000	
Ti	47	2	He	137.559	137.559	2.11	53850	0.26	2000	
Cu	63	1	No Gas	50.659	50.659	1.57	1243131	0.00	2000	
Zn	66	1	No Gas	50.987	50.987	1.33	380640	0.01	2000	
Se	82	1	No Gas	44.731	44.731	1.71	19710	0.23	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1561742	0.49	1651949	94.54	70	120	
Ge	72	2	He	2088907	1.07	2168000	96.35	70	120	
Ge	72	1	No Gas	6809955	1.19	7066878	96.36	70	120	
In	115	1	No Gas	4494185	1.09	4624260	97.19	70	120	

Sample Report

Bi	209	1	No Gas	3574032	0.59	3626178	98.56	70	120	

Sample Report

Sample Table

Sample Name	HS24011111-14PDS
Data File Name	060SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\012624A.b
Acq Date Time	2024-01-26T12:16:00-06:00
Sample Type	Sample
Dilution	1
Comment	TWDOD 206338
ISTD Ref FileName	018CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	3.490	3.490	2.85	175522	0.00	2000	
Be	9	1	No Gas	96.273	96.273	0.46	770409	0.01	2000	
V	51	2	He	104.833	104.833	3.10	1085085	0.01	2000	
Cr	52	2	He	103.766	103.766	4.14	1165593	0.01	2000	
Fe	56	2	He	11153.480	11153.480	4.56	113689415	0.01	200000	
Se	78	2	He	101.330	101.330	3.26	21045	0.48	2000	
As	75	2	He	103.415	103.415	1.36	252116	0.04	2000	
Ca	44	2	He	17067.673	17067.673	2.81	1170475	1.46	200000	
Na	23	2	He	23212.625	23212.625	0.86	36211324	0.06	200000	
Mg	24	2	He	13907.788	13907.788	0.53	13262057	0.10	200000	
K	39	2	He	13171.818	13171.818	1.64	17129827	0.08	200000	
Mn	55	2	He	142.049	142.049	6.17	1183763	0.01	2000	
Co	59	2	He	102.652	102.652	3.76	1670581	0.01	2000	
Ni	60	2	He	102.005	102.005	4.12	423855	0.02	2000	
Cu	63	2	He	100.641	100.641	6.38	1125516	0.01	2000	
Zn	66	2	He	110.287	110.287	1.46	270981	0.04	2000	
Al	27	2	He	391.893	391.893	1.11	233844	0.17	2000	
B	11	1	No Gas	19.104	19.104	1.39	126776	0.02	2000	
Al	27	1	No Gas	385.580	385.580	1.56	10894645	0.00	2000	
Si	28	1	No Gas	6081.931	6081.931	2.32	123146145	0.00	2000	>LDR
Ag	107	1	No Gas	101.507	101.507	1.68	2859999	0.00	2000	
Cd	111	1	No Gas	103.346	103.346	1.20	570452	0.02	2000	
Sr	88	1	No Gas	105.289	105.289	2.80	5691103	0.00	2000	
Mo	95	1	No Gas	97.938	97.938	2.29	1055352	0.01	2000	
Sn	118	1	No Gas	0.342	0.342	2.41	8306	0.00	2000	
Sb	121	1	No Gas	106.425	106.425	2.78	2696331	0.00	2000	
Ba	137	1	No Gas	160.097	160.097	5.57	1294022	0.01	2000	
Tl	205	1	No Gas	116.343	116.343	3.20	4669584	0.00	2000	
Tl	203	1	No Gas	113.912	113.912	3.11	1901097	0.01	2000	
Pb	208	1	No Gas	105.076	105.076	3.44	6415651	0.00	2000	
U	238	1	No Gas	0.127	0.127	10.03	8160	0.00	2000	
Ca	43	2	He	16619.920	16619.920	1.87	63282	26.26	200000	
Sb	121	2	He	101.313	101.313	0.84	1425753	0.01	2000	
Ti	47	2	He	102.856	102.856	3.95	39557	0.26	2000	
Cu	63	1	No Gas	106.836	106.836	1.19	2560700	0.00	2000	
Zn	66	1	No Gas	106.419	106.419	0.70	773793	0.01	2000	
Se	82	1	No Gas	102.471	102.471	2.10	43996	0.23	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1592174	1.26	1651949	96.38	70	120	
Ge	72	2	He	2053984	4.03	2168000	94.74	70	120	
Ge	72	1	No Gas	6659675	0.94	7066878	94.24	70	120	
In	115	1	No Gas	4410763	1.11	4624260	95.38	70	120	

Sample Report

Bi	209	1	No Gas	3551288	1.44	3626178	97.93	70	120	

Sample Report

Sample Table

Sample Name	HS24011111-11
Data File Name	061SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\012624A.b
Acq Date Time	2024-01-26T12:18:20-06:00
Sample Type	Sample
Dilution	1
Comment	TWDOD 206338
ISTD Ref FileName	018CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	3.561	3.561	2.01	183304	0.00	2000	
Be	9	1	No Gas	0.096	0.096	7.41	857	0.01	2000	
V	51	2	He	2.651	2.651	1.56	37401	0.01	2000	
Cr	52	2	He	0.642	0.642	9.54	20970	0.00	2000	
Fe	56	2	He	1083.174	1083.174	1.71	11079407	0.01	200000	
Se	78	2	He	0.136	0.136	54.35	351	0.04	2000	
As	75	2	He	0.744	0.744	0.65	2437	0.03	2000	
Ca	44	2	He	6176.263	6176.263	1.95	424941	1.45	200000	
Na	23	2	He	13718.486	13718.486	1.96	21443931	0.06	200000	
Mg	24	2	He	3630.075	3630.075	1.81	3462104	0.10	200000	
K	39	2	He	2776.619	2776.619	1.25	3757407	0.07	200000	
Mn	55	2	He	38.725	38.725	1.32	323621	0.01	2000	
Co	59	2	He	0.374	0.374	6.29	6228	0.01	2000	
Ni	60	2	He	2.537	2.537	4.37	11151	0.02	2000	
Cu	63	2	He	1.893	1.893	1.90	22385	0.01	2000	
Zn	66	2	He	7.397	7.397	3.33	19077	0.04	2000	
Al	27	2	He	279.295	279.295	3.16	167381	0.17	2000	
B	11	1	No Gas	16.250	16.250	5.00	118414	0.01	2000	
Al	27	1	No Gas	279.936	279.936	2.04	8004085	0.00	2000	
Si	28	1	No Gas	6302.809	6302.809	2.10	128284755	0.00	2000	>LDR
Ag	107	1	No Gas	0.040	0.040	10.65	1527	0.00	2000	
Cd	111	1	No Gas	0.009	0.009	42.75	87	0.01	2000	
Sr	88	1	No Gas	110.830	110.830	2.46	6056561	0.00	2000	
Mo	95	1	No Gas	0.118	0.118	19.82	1423	0.01	2000	
Sn	118	1	No Gas	0.318	0.318	2.65	7993	0.00	2000	
Sb	121	1	No Gas	0.336	0.336	8.52	8943	0.00	2000	
Ba	137	1	No Gas	55.945	55.945	2.61	457418	0.01	2000	
Tl	205	1	No Gas	0.020	0.020	15.21	1010	0.00	2000	
Tl	203	1	No Gas	0.022	0.022	14.48	467	0.00	2000	
Pb	208	1	No Gas	0.897	0.897	1.16	58739	0.00	2000	
U	238	1	No Gas	0.103	0.103	6.03	7022	0.00	2000	
Ca	43	2	He	6671.991	6671.991	2.87	25447	26.22	200000	
Sb	121	2	He	0.292	0.292	1.61	4314	0.01	2000	
Ti	47	2	He	2.041	2.041	17.84	817	0.25	2000	
Cu	63	1	No Gas	1.972	1.972	3.63	50384	0.00	2000	
Zn	66	1	No Gas	7.050	7.050	1.32	54302	0.01	2000	
Se	82	1	No Gas	-0.328	-0.328	-129.06	-20	1.67	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1648072	1.90	1651949	99.77	70	120	
Ge	72	2	He	2054271	0.94	2168000	94.75	70	120	
Ge	72	1	No Gas	6712305	1.32	7066878	94.98	70	120	
In	115	1	No Gas	4459404	1.48	4624260	96.43	70	120	

Sample Report

Bi	209	1	No Gas	3697166	0.14	3626178	101.96	70	120	

Sample Report

Sample Table

Sample Name	HS24011111-12
Data File Name	062SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\012624A.b
Acq Date Time	2024-01-26T12:20:41-06:00
Sample Type	Sample
Dilution	1
Comment	TWDOD 206338
ISTD Ref FileName	018CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	3.090	3.090	2.88	171673	0.00	2000	
Be	9	1	No Gas	0.081	0.081	6.60	727	0.01	2000	
V	51	2	He	2.705	2.705	2.45	38322	0.01	2000	
Cr	52	2	He	0.496	0.496	13.89	19531	0.00	2000	
Fe	56	2	He	903.201	903.201	1.97	9331854	0.01	200000	
Se	78	2	He	0.194	0.194	34.60	366	0.05	2000	
As	75	2	He	0.671	0.671	11.07	2280	0.03	2000	
Ca	44	2	He	5475.709	5475.709	1.52	380599	1.44	200000	
Na	23	2	He	12091.488	12091.488	2.32	19097175	0.06	200000	
Mg	24	2	He	3207.671	3207.671	2.08	3089154	0.10	200000	
K	39	2	He	2431.093	2431.093	1.87	3345241	0.07	200000	
Mn	55	2	He	33.234	33.234	2.36	280468	0.01	2000	
Co	59	2	He	0.312	0.312	3.64	5268	0.01	2000	
Ni	60	2	He	2.299	2.299	5.17	10261	0.02	2000	
Cu	63	2	He	1.613	1.613	1.80	19444	0.01	2000	
Zn	66	2	He	7.205	7.205	2.94	18787	0.04	2000	
Al	27	2	He	203.858	203.858	2.22	124084	0.16	2000	
B	11	1	No Gas	13.818	13.818	1.71	107005	0.01	2000	
Al	27	1	No Gas	212.222	212.222	0.72	6089087	0.00	2000	
Si	28	1	No Gas	5641.387	5641.387	1.04	115643738	0.00	2000	>LDR
Ag	107	1	No Gas	0.026	0.026	5.62	1120	0.00	2000	
Cd	111	1	No Gas	0.001	0.001	271.82	47	0.00	2000	
Sr	88	1	No Gas	96.959	96.959	2.38	5337646	0.00	2000	
Mo	95	1	No Gas	0.079	0.079	11.48	1013	0.01	2000	
Sn	118	1	No Gas	0.273	0.273	9.08	7272	0.00	2000	
Sb	121	1	No Gas	0.129	0.129	6.36	3664	0.00	2000	
Ba	137	1	No Gas	48.475	48.475	2.92	399288	0.01	2000	
Tl	205	1	No Gas	0.009	0.009	18.77	543	0.00	2000	
Tl	203	1	No Gas	0.008	0.008	48.21	223	0.00	2000	
Pb	208	1	No Gas	0.773	0.773	2.87	51098	0.00	2000	
U	238	1	No Gas	0.093	0.093	4.48	6388	0.00	2000	
Ca	43	2	He	5765.885	5765.885	0.55	22212	25.96	200000	
Sb	121	2	He	0.121	0.121	6.04	1934	0.01	2000	
Ti	47	2	He	1.531	1.531	9.57	627	0.24	2000	
Cu	63	1	No Gas	1.686	1.686	0.37	43426	0.00	2000	
Zn	66	1	No Gas	7.043	7.043	1.06	54172	0.01	2000	
Se	82	1	No Gas	-0.250	-0.250	-160.52	14	-1.85	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1639317	0.86	1651949	99.24	70	120	
Ge	72	2	He	2074308	1.24	2168000	95.68	70	120	
Ge	72	1	No Gas	6702526	0.55	7066878	94.84	70	120	
In	115	1	No Gas	4492149	1.48	4624260	97.14	70	120	

Sample Report

Bi	209	1	No Gas	3715054	0.53	3626178	102.45	70	120	

Sample Report

Sample Table

Sample Name	HS24011111-13
Data File Name	063SMPL.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\012624A.b
Acq Date Time	2024-01-26T12:23:01-06:00
Sample Type	Sample
Dilution	1
Comment	TWDOD 206338
ISTD Ref FileName	018CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	3.549	3.549	3.49	183533	0.00	2000	
Be	9	1	No Gas	0.091	0.091	11.25	817	0.01	2000	
V	51	2	He	3.146	3.146	0.83	42675	0.01	2000	
Cr	52	2	He	0.588	0.588	14.93	20466	0.00	2000	
Fe	56	2	He	1037.469	1037.469	2.45	10660797	0.01	200000	
Se	78	2	He	0.197	0.197	83.67	365	0.05	2000	
As	75	2	He	0.716	0.716	6.99	2378	0.03	2000	
Ca	44	2	He	6389.542	6389.542	0.77	441588	1.45	200000	
Na	23	2	He	13761.295	13761.295	2.14	21610248	0.06	200000	
Mg	24	2	He	3657.668	3657.668	1.63	3504645	0.10	200000	
K	39	2	He	2831.538	2831.538	0.25	3845895	0.07	200000	
Mn	55	2	He	40.966	40.966	2.22	343881	0.01	2000	
Co	59	2	He	0.336	0.336	1.73	5638	0.01	2000	
Ni	60	2	He	2.509	2.509	4.90	11085	0.02	2000	
Cu	63	2	He	1.763	1.763	4.29	21023	0.01	2000	
Zn	66	2	He	7.191	7.191	2.28	18653	0.04	2000	
Al	27	2	He	242.383	242.383	1.09	146286	0.17	2000	
B	11	1	No Gas	14.869	14.869	3.36	112576	0.01	2000	
Al	27	1	No Gas	243.032	243.032	3.54	7017300	0.00	2000	
Si	28	1	No Gas	6375.968	6375.968	3.58	130649028	0.00	2000	>LDR
Ag	107	1	No Gas	0.025	0.025	7.64	1100	0.00	2000	
Cd	111	1	No Gas	0.006	0.006	51.72	70	0.01	2000	
Sr	88	1	No Gas	112.182	112.182	2.63	6161359	0.00	2000	
Mo	95	1	No Gas	0.082	0.082	7.31	1043	0.01	2000	
Sn	118	1	No Gas	2.837	2.837	3.59	51659	0.01	2000	
Sb	121	1	No Gas	0.122	0.122	6.96	3497	0.00	2000	
Ba	137	1	No Gas	55.592	55.592	1.30	456925	0.01	2000	
Tl	205	1	No Gas	0.008	0.008	6.68	480	0.00	2000	
Tl	203	1	No Gas	0.006	0.006	47.59	177	0.00	2000	
Pb	208	1	No Gas	0.873	0.873	1.93	56912	0.00	2000	
U	238	1	No Gas	0.105	0.105	1.25	7096	0.00	2000	
Ca	43	2	He	6915.315	6915.315	1.23	26493	26.10	200000	
Sb	121	2	He	0.128	0.128	13.63	2010	0.01	2000	
Ti	47	2	He	1.909	1.909	13.48	770	0.25	2000	
Cu	63	1	No Gas	1.925	1.925	2.44	49641	0.00	2000	
Zn	66	1	No Gas	6.942	6.942	3.13	53914	0.01	2000	
Se	82	1	No Gas	-0.090	-0.090	-409.53	84	-0.11	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1652611	1.03	1651949	100.04	70	120	
Ge	72	2	He	2063741	0.83	2168000	95.19	70	120	
Ge	72	1	No Gas	6764572	1.66	7066878	95.72	70	120	
In	115	1	No Gas	4482156	1.95	4624260	96.93	70	120	

Sample Report

Bi	209	1	No Gas	3678272	1.65	3626178	101.44	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	065_CCV.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\012624A.b
Acq Date Time	2024-01-26T12:27:42-06:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	018CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	102.787	1.582	2334026	1.46	100	102.8	90	110	
Be	9	1	No Gas	98.617	2.060	781228	1.94	100	98.6	90	110	
V	51	2	He	101.899	5.280	1078651	1.94	100	101.9	90	110	
Cr	52	2	He	103.942	4.997	1194192	1.82	100	103.9	90	110	
Fe	56	2	He	10201.077	3.393	106403715	1.45	10000	102.0	90	110	
Se	78	2	He	101.526	3.845	21567	1.70	100	101.5	90	110	
As	75	2	He	101.908	2.225	254083	1.18	100	101.9	90	110	
Ca	44	2	He	9413.437	2.915	661075	0.44	10000	94.1	90	110	
Na	23	2	He	10551.461	1.740	16889755	3.34	10000	105.5	90	110	
Mg	24	2	He	10357.566	1.645	10099492	2.16	10000	103.6	90	110	
K	39	2	He	10206.884	2.155	13617080	1.74	10000	102.1	90	110	
Mn	55	2	He	99.264	3.578	846973	0.83	100	99.3	90	110	
Co	59	2	He	105.429	2.712	1755950	2.66	100	105.4	90	110	
Ni	60	2	He	103.421	2.047	439853	2.31	100	103.4	90	110	
Cu	63	2	He	102.690	3.827	1176283	6.59	100	102.7	90	110	
Zn	66	2	He	104.417	1.494	262545	3.35	100	104.4	90	110	
Al	27	2	He	110.679	2.433	69450	2.68	100	110.7	90	110	CCV Main CR1-2 Failed
B	11	1	No Gas	516.037	1.338	2250664	1.19	500	103.2	90	110	
Al	27	1	No Gas	115.106	2.106	3337828	1.60	100	115.1	90	110	CCV Main CR1-2 Failed
Si	28	1	No Gas	951.658	2.406	27030243	1.23	5000	19.0	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	107.766	2.479	3049758	2.64	100	107.8	90	110	
Cd	111	1	No Gas	104.283	1.604	578141	1.73	100	104.3	90	110	
Sr	88	1	No Gas	104.572	1.967	5677128	1.05	100	104.6	90	110	
Mo	95	1	No Gas	99.924	1.198	1081501	0.86	100	99.9	90	110	
Sn	118	1	No Gas	104.107	1.050	1785075	0.57	100	104.1	90	110	
Sb	121	1	No Gas	107.231	1.008	2719003	0.68	100	107.2	90	110	
Ba	137	1	No Gas	100.821	1.296	818806	1.05	100	100.8	90	110	
Tl	205	1	No Gas	107.593	1.853	4374493	2.23	100	107.6	90	110	
Tl	203	1	No Gas	108.256	2.717	1830038	2.14	100	108.3	90	110	
Pb	208	1	No Gas	104.622	2.213	6471308	2.49	100	104.6	90	110	
U	238	1	No Gas	104.734	2.744	6405638	3.26	100	104.7	90	110	
Ca	43	2	He	10079.237	2.243	39280	2.90	10000	100.8	90	110	
Sb	121	2	He	104.674	1.584	1506173	1.92	100	104.7	90	110	
Ti	47	2	He	99.171	5.196	39006	2.06	100	99.2	90	110	
Cu	63	1	No Gas	108.857	1.794	2610599	1.41	100	108.9	90	110	
Se	82	1	No Gas	105.324	1.754	45247	1.28	100	105.3	90	110	
Zr	90	1	No Gas	103.499	0.987	3728327	0.52	100	103.5	90	110	
Zr	90	2	He	100.845	2.448	1690926	3.25	100	100.8	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1576189	0.15	1651949	95.41	70	120	
Ge	72	2	He	2100878	3.39	2168000	96.90	70	120	
Ge	72	1	No Gas	6664251	0.49	7066878	94.30	70	120	
In	115	1	No Gas	4429810	1.20	4624260	95.80	70	120	
Bi	209	1	No Gas	3596522	0.81	3626178	99.18	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	066_CCB.d
Data Path Name	C:\Agilent\ICPMH\1\DATA\012624A.b
Acq Date Time	2024-01-26T12:30:02-06:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	018CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	-0.050	-159.5	104599	0.5	0.5	
Be	9	1	No Gas	0.007	47.9	123	23.1	0.5	
V	51	2	He	1.141	4.5	21817	1.4	2.5	
Cr	52	2	He	0.180	32.3	15776	4.9	2.5	
Fe	56	2	He	0.846	7.2	35547	2.8	100	
Se	78	2	He	-0.056	-128.0	310	4.0	2	
As	75	2	He	0.132	10.1	944	2.5	2.5	
Ca	44	2	He	-1.662	-41.2	1503	2.8	100	
Na	23	2	He	-0.551	-326.9	95338	2.7	100	
Mg	24	2	He	0.441	1.6	840	1.2	100	
K	39	2	He	-0.321	-441.2	182812	0.3	100	
Mn	55	2	He	0.027	53.0	673	16.4	2.5	
Co	59	2	He	0.002	203.7	157	31.5	2.5	
Ni	60	2	He	-0.021	-116.0	523	19.6	2.5	
Cu	63	2	He	-0.011	-82.8	1087	10.7	2	
Zn	66	2	He	0.288	17.5	1653	6.9	2.5	
Al	27	2	He	1.113	21.6	3287	4.3	5	
B	11	1	No Gas	3.771	20.9	64756	4.2	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	1.399	9.5	161831	2.2	5	
Si	28	1	No Gas	-38.063	-1.4	8682906	0.2	10	
Ag	107	1	No Gas	0.006	14.6	570	3.5	2.5	
Cd	111	1	No Gas	0.002	157.8	53	39.0	1	
Sr	88	1	No Gas	0.027	8.8	3687	4.1	2.5	
Mo	95	1	No Gas	0.020	44.0	373	24.7	2.5	
Sn	118	1	No Gas	0.061	3.9	3687	1.3	5	
Sb	121	1	No Gas	0.034	30.8	1257	21.4	2.5	
Ba	137	1	No Gas	0.070	21.3	860	12.9	2.5	
Tl	205	1	No Gas	0.079	39.9	3534	39.3	1	
Tl	203	1	No Gas	0.081	39.5	1510	38.4	1	
Pb	208	1	No Gas	0.006	17.5	2123	3.9	2.5	
U	238	1	No Gas	0.005	33.5	870	14.0	2.5	
Ca	43	2	He	4.221	110.0	60	28.9	100	
Sb	121	2	He	0.044	14.7	817	11.6	2.5	
Ti	47	2	He	-0.003	-1505.8	30	66.7	2.5	
Cu	63	1	No Gas	-0.001	-2028.5	2850	9.1	2.5	
Se	82	1	No Gas	-0.249	-191.0	14	1531.8	2	
Zr	90	1	No Gas	0.050	17.3	4638	6.9	2.5	
Zr	90	2	He	0.062	5.9	2494	3.4	2.5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	1704272	1.52	1651949	103.17	70	120	
Ge	72	2	He	2046184	1.10	2168000	94.38	70	120	
Ge	72	1	No Gas	6831354	0.19	7066878	96.67	70	120	

Continuing Calibration Blank (CCB) Report

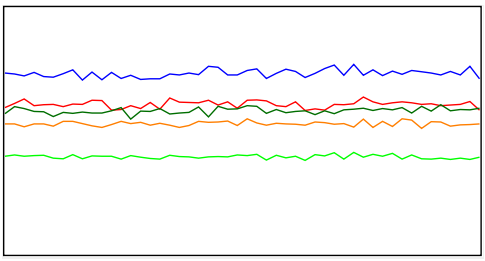
In	115	1	No Gas	4615316	1.78	4624260	99.81	70	120	
Bi	209	1	No Gas	3747170	1.12	3626178	103.34	70	120	

Tune Check Report

Operator Name	ALSHS NoUser
Acq/Data Batch	C:\Agilent\ICPMH\1\DATA\012624A.b
Acq. Date-Time	1/26/2024 9:31:48 AM
Report Comment	---
Instrument Name	G8422A SG22121190

[No Gas]

Sensitivity



Sampling Period [sec]	0.514
Integration Time [sec]	0.1

Mass	Range	Count	Resp [cps/(ug/L)]	Resp (Required) [cps/(ug/L)]	Resp (Flag)
9	10000	6085	60851.36		
24	50000	19752	197518.44		
59	50000	36667	366669.31		
115	100000	52922	529220.14		
208	50000	29106	291056.57		

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

Mass	RSD%	RSD% (Required)	RSD% (Flag)
9	2.219	5.000	
24	1.979	5.000	
59	2.163	5.000	
115	1.784	5.000	
208	2.105	5.000	

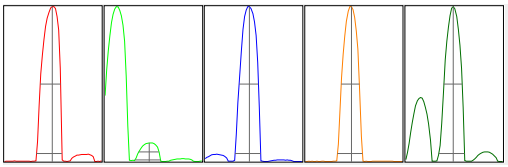
Mass	Background	Background (Required)	Background (Flag)
9	9.100		
24	3.200		
59	2.100		
115	4.300		
208	6.500		

Oxide/Doubly Charged Ratio

Oxide	156 / 140 1.272 %
Doubly Charged	70 / 140 1.195 %

Tune Check Report

Resolution/Axis



Integration Time [sec]	0.1
Acquisition Time [sec]	37.4
Y Axis	Linear

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	6167.39	9.00	8.90 - 9.10	
24	19827.31	23.90	23.90 - 24.10	
59	38706.80	58.90	58.90 - 59.10	
115	53327.43	114.95	114.90 - 115.10	
208	28949.88	208.00	207.90 - 208.10	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.62	0.778		
24	0.61	0.786		
59	0.59	0.780		
115	0.56	0.762		
208	0.56	0.786		

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.80 L/min	Dilution Gas	0.15 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	9.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.0 V	Deflect	14.0 V
Extract 2	-190.0 V	Cell Entrance	-30 V	Plate Bias	-50 V
Omega Bias	-90 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	123	Axis Gain	0.9995	QP Bias	-3.0 V
Mass Offset	126	Axis Offset	0.00		

Hardware Settings

Torch

Torch H	0.1 mm	Torch V	-0.4 mm

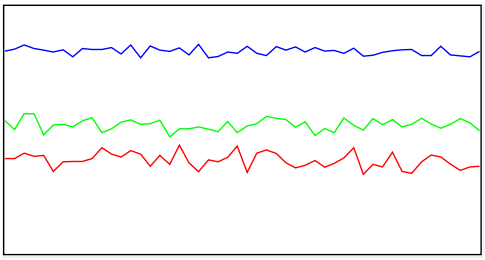
EM

Discriminator	4.0 mV	Analog HV	2259 V	Pulse HV	1413 V

[He]

Tune Check Report

Sensitivity



Sampling Period [sec] 0.306
Integration Time [sec] 0.1

Mass	Range	Count	Resp [cps/(ug/L)]	Resp (Required) [cps/(ug/L)]	Resp (Flag)
9	500	188	1882.33		
24	2000	1041	10410.46		
59	20000	16386	163860.10		

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

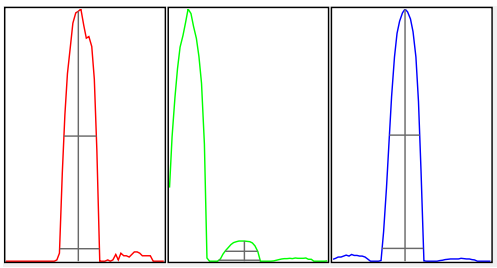
Mass	RSD%	RSD% (Required)	RSD% (Flag)
9	8.046	5.000	Fail
24	4.357	5.000	
59	1.830	5.000	

Mass	Background	Background (Required)	Background (Flag)
9	0.500		
24	0.400		
59	0.400		

Oxide/Doubly Charged Ratio

Oxide 156 / 140 1.201 %
Doubly Charged 70 / 140 0.924 %

Resolution/Axis



Integration Time [sec] 0.1
Acquisition Time [sec] 22.24
Y Axis Linear

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	187.02	8.90	8.90 - 9.10	
24	1063.70	23.95	23.90 - 24.10	
59	17091.88	58.90	58.90 - 59.10	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.61	0.742		
24	0.60	0.775		

Tune Check Report

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
59	0.57	0.773		

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.80 L/min	Dilution Gas	0.15 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	9.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.0 V	Deflect	1.0 V
Extract 2	-190.0 V	Cell Entrance	-40 V	Plate Bias	-60 V
Omega Bias	-90 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	3.0 V
He Flow	3.8 mL/min	OctP Bias	-18.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	123	Axis Gain	0.9995	QP Bias	-15.0 V
Mass Offset	126	Axis Offset	0.00		

Hardware Settings

Torch

Torch H	0.1 mm	Torch V	-0.4 mm

EM

Discriminator	4.0 mV	Analog HV	2259 V	Pulse HV	1413 V

HS24011111 E2400068 Perch Level IV Report

ALS WO# HS24011111

January 30, 2024 Service Request No:E2400068

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

Laboratory Results for: HS24011111

Dear James,

Enclosed are the results of the sample(s) submitted to our laboratory January 22, 2024
For your reference, these analyses have been assigned our service request number **E2400068.**

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

Please contact me if you have any questions. My extension is 2190. You may also contact me via email at hussam.kelany@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

HKelany

Hussam Kelany
Project Manager

ADDRESS 10450 Stancliff Rd., Suite 210, Houston, TX 77099
PHONE +1 281 530 5656 | FAX +1 281 530 5887
ALS Group USA, Corp.
dba ALS Environmental

Certificate of Analysis

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

Client:	ALS Environmental - US	**Service Request No.:**	E2400068
Project:	HS24011111	**Date Received:**	01/22/24
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

Fourteen samples were received for analysis at ALS Environmental in Houston on 01/22/24.

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

Data Validation Notes and Discussion

Precision and Accuracy:

EQ2400041: 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 batch precision (MS/DMS) measurements were determined on an unrelated sample in the extraction batch. The MS/DMS results are not included in this report.

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

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

Client: ALS Environmental - US **Service Request:**E2400068
Project: HS24011111

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
E2400068-001	16WW44-240119	1/19/2024	0700
E2400068-002	16WW37-240119	1/19/2024	0745
E2400068-003	16WW38-240119	1/19/2024	0830
E2400068-004	16WW38-240119-FD	1/19/2024	0830
E2400068-005	16WW13-240119	1/19/2024	0915
E2400068-006	16WW42-240119	1/19/2024	0955
E2400068-007	16RW05-240119	1/19/2024	1040
E2400068-008	16WW51-240119	1/19/2024	1125
E2400068-009	16WW30-240119	1/19/2024	1210
E2400068-010	16WW29-240119	1/19/2024	1250
E2400068-011	16SW01-240119	1/19/2024	1300
E2400068-012	16SW02-240119	1/19/2024	1315
E2400068-013	16SW02-240119-FD	1/19/2024	1315
E2400068-014	16SW03-240119	1/19/2024	1330

Service Request Summary

Folder #: **E2400068**
Client Name: ALS Environmental - US
Project Name: HS24011111
Project Number:

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

Project Chemist: Hussam Kelany
Originating Lab: HOUSTON
Logged By: JCORONADO2
Date Received: 01/22/24
Internal Due Date: 1/29/2024
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number:
EDD: BASIC_WQC_CASNo, EQUIS APTIM LONGHORN EFWEDD

16 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-WIC 5C
Pressure Gas:

Lab Samp No.	Client Samp No	Matrix	Collected	HOUSTON ClO4 DOD/6850
E2400068-001	16WW44-240119	Ground Water	01/19/24 0700	**IV**
E2400068-002	16WW37-240119	Ground Water	01/19/24 0745	**IV**
E2400068-003	16WW38-240119	Ground Water	01/19/24 0830	**IV**
E2400068-004	16WW38-240119-FD	Ground Water	01/19/24 0830	**IV**
E2400068-005	16WW13-240119	Ground Water	01/19/24 0915	**IV**
E2400068-006	16WW42-240119	Ground Water	01/19/24 0955	**IV**
E2400068-007	16RW05-240119	Ground Water	01/19/24 1040	**IV**
E2400068-008	16WW51-240119	Ground Water	01/19/24 1125	**IV**
E2400068-009	16WW30-240119	Ground Water	01/19/24 1210	**IV**
E2400068-010	16WW29-240119	Ground Water	01/19/24 1250	**IV**
E2400068-011	16SW01-240119	Ground Water	01/19/24 1300	**IV**
E2400068-012	16SW02-240119	Ground Water	01/19/24 1315	**IV**
E2400068-013	16SW02-240119-FD	Ground Water	01/19/24 1315	**IV**
E2400068-014	16SW03-240119	Ground Water	01/19/24 1330	**IV**

Service Request Summary

Folder #: **E2400068**
Client Name: ALS Environmental - US
Project Name: HS24011111
Project Number:

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

Project Chemist: Hussam Kelany
Originating Lab: HOUSTON
Logged By: JCORONADO2
Date Received: 01/22/24
Internal Due Date: 1/29/2024
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number:
EDD: BASIC_WQC_CASNo, EQUIS APTIM LONGHORN EFWEDD

16 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-WIC 5C
Pressure Gas:

Lab Samp No.	Client Samp No	Matrix	Collected	HOUSTON ClO4 DOD/6850
E2400068-001	16WW44-240119	Ground Water	01/19/24 0700	**IV**
E2400068-002	16WW37-240119	Ground Water	01/19/24 0745	**IV**
E2400068-003	16WW38-240119	Ground Water	01/19/24 0830	**IV**
E2400068-004	16WW38-240119-FD	Ground Water	01/19/24 0830	**IV**
E2400068-005	16WW13-240119	Ground Water	01/19/24 0915	**IV**
E2400068-006	16WW42-240119	Ground Water	01/19/24 0955	**IV**
E2400068-007	16RW05-240119	Ground Water	01/19/24 1040	**IV**
E2400068-008	16WW51-240119	Ground Water	01/19/24 1125	**IV**
E2400068-009	16WW30-240119	Ground Water	01/19/24 1210	**IV**
E2400068-010	16WW29-240119	Ground Water	01/19/24 1250	**IV**
E2400068-011	16SW01-240119	Ground Water	01/19/24 1300	**IV**
E2400068-012	16SW02-240119	Ground Water	01/19/24 1315	**IV**
E2400068-013	16SW02-240119-FD	Ground Water	01/19/24 1315	**IV**
E2400068-014	16SW03-240119	Ground Water	01/19/24 1330	**IV**

Service Request Summary

Folder #:	**E2400068**
Client Name:	ALS Environmental - US
Project Name:	HS24011111
Project Number:	

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

Project Chemist:	Hussam Kelany
Originating Lab:	HOUSTON
Logged By:	JCORONADO2
Date Received:	01/22/24
Internal Due Date:	1/29/2024
QAP:	LAB QAP
Qualifier Set:	Lab Standard
Formset:	Lab Standard
Merged?:	Y
Report to MDL?:	Y
P.O. Number:	
EDD:	BASIC_WQC_CASNo, EQUIS APTIM LONGHORN EFWEDD

16 120 mL-Plastic Bottle Natural WM Unpreserved

Location: EHRMS-WIC 5C

Pressure Gas:

Data Qualifiers

Lab Standard

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

Data Qualifiers

Lab Standard

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

ALS Laboratory Group

Acronyms

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

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

ALS Environmental

State Certifications, Accreditations, and Licenses

Agency	Number	Expire Date
Arizona Department of Health Services	AZ0793_2024	5/27/2024
Arkansas Department of Environmental Quality	88-00356	3/27/2024
California State Environmental Laboratory Accreditation Program	2919	4/30/2024
Department of Defense	L22-90	3/31/2024
Department of Defense	L23-358	5/31/2025
Florida Department of Health	E87611-38	6/30/2024
Illinois Environmental Protection Agency	2000322023-11	6/30/2024
Kansas Department of Health and Environment	E-10352 2023-2024	7/31/2024
Louisiana Department of Environmental Quality	03087-2023	6/30/2024
Louisiana Department of Health and Hospitals	LA028-2024	12/31/2024
Maine Department of Health and Human Services	2022017	6/5/2024
Maryland Department of the Environment	343-2023	6/30/2024
Michigan Depratment of Environmental Quality	9971-2023	4/30/2024
Minnesota Department of Health	2645386	12/31/2024
Nebraska Department of Health and Human Services	NE-OS-25-13	4/30/2024
Nevada Division of Environmental Protection	TX026932024-1	7/31/2024
New Hampshire Environmental Laboratory Accreditation Program	209423	4/24/2024
New Jersey Department of Environmental Protection	TX008-2024	6/30/2024
New York Department of Health	11707	3/31/2024
Oklahoma Department of Environmental Quality	2023-140	8/31/2024
Oregon Environmental Laboratory Accreditation Program	TX200002-011	5/15/2024
Pennsylvania Department of Environmental Protection	68-03441-017	6/30/2024
Perry Johnson Laboratory Accreditation	L22-91	3/31/2024
Tennessee Department of Environment and Concervation	TN04016-2023	4/30/2024
Texas Commision on Environmental Quality	T104704231-23-30	4/30/2024
Utah Department of Health Environmental Laboratory Certification	TX026932023-14	7/31/2024
Washington Department of Ecology	C819-23	11/14/2024

Chain of Custody

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

E2400068 5
ALS Group USA, Corp.
HS24011111

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:** **24518**

SUBCONTRACT TO:

ALS Environmental
10450 Stancliff RoadSuite 210
Houston, TX 77084

Phone: +1 281 530 5656

CUSTOMER INFORMATION:

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

INVOICE INFORMATION:

Company:	ALS Houston
Contact:	Accounts Payable
Address:	10450 Stancliff Rd, Ste 210
Phone:	+1 281 530 5656
Reference:	HS24011111
TSR:	Sonia West

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	**HS24011111-01**	**16WW44-240119**	**Groundwater**	**19 Jan 2024 07:00**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			31 Jan 2024
2.	**HS24011111-02**	**16WW37-240119**	**Groundwater**	**19 Jan 2024 07:45**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			31 Jan 2024
3.	**HS24011111-03**	**16WW38-240119**	**Groundwater**	**19 Jan 2024 08:30**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			31 Jan 2024
4.	**HS24011111-04**	**16WW38-240119-FD**	**Groundwater**	**19 Jan 2024 08:30**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			31 Jan 2024
5.	**HS24011111-05**	**16WW13-240119**	**Groundwater**	**19 Jan 2024 09:15**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			31 Jan 2024
6.	**HS24011111-06**	**16WW42-240119**	**Groundwater**	**19 Jan 2024 09:55**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			31 Jan 2024
7.	**HS24011111-07**	**16RW05-240119**	**Groundwater**	**19 Jan 2024 10:40**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			31 Jan 2024
8.	**HS24011111-08**	**16WW51-240119**	**Groundwater**	**19 Jan 2024 11:25**

Subcontract Chain of Custody

SAMPLING STATE: **Dept of Defense** **COC ID: 24518**

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			31 Jan 2024
9.	HS24011111-09	16WW30-240119	Groundwater	19 Jan 2024 12:10
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			31 Jan 2024
10.	HS24011111-10	16WW29-240119	Groundwater	19 Jan 2024 12:50
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			31 Jan 2024
11.	HS24011111-11	16SW01-240119	Groundwater	19 Jan 2024 13:00
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			31 Jan 2024
12.	HS24011111-12	16SW02-240119	Groundwater	19 Jan 2024 13:15
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			31 Jan 2024
13.	HS24011111-13	16SW02-240119-FD	Groundwater	19 Jan 2024 13:15
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			31 Jan 2024
14.	HS24011111-14	16SW03-240119	Groundwater	19 Jan 2024 13:30
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			31 Jan 2024

Comments: Please analyze for the analysis listed above.
Send report to the emails shown above.
HS24011111-14 = MS/MSD

QC Level: DOD IV (DoD Data Package)

Relinquished By: _____ Date/Time: _____

Received By: JC Date/Time: 1/22/24 14:48

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

E2400068
ALS Group USA, Corp.
HS24011111

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

Sample Receipt Checklist

Work Order ID: HS24011111 **Date/Time received:** 20 Jan 2024 10:20

Client name: Bhate Environmental Associates, Inc. **Received by:** Si Ma

Completed/By: 22 Jan 2024 14:48 (Date/Time) Paresh M. Giga (eSignature) **Reviewed/By:** _____ (Date/Time) _____ (eSignature)

Matrices: GW/Watwer **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 ID(s): none	
Samplers name present on COC?	☑ Yes	☐ No		
Chain of custody agrees with sample labels?	☑ Yes	☐ No		
Samples in proper container/bottle?	☑ Yes	☐ No		
Sample containers intact?	☑ Yes	☐ No		
Sufficient sample volume for indicated test?	☑ Yes	☐ No		
All samples received within holding time?	☑ Yes	☐ No		
Container/Temp Blank temperature in compliance?	☑ Yes	☐ No		

Temperature(s)/Thermometer(s): 2.0C/1.9C U/C IR31

Cooler Information: 1 Cooler(s), 43986

Date/Time sample(s) sent to storage: 1/20/24 15:00

Water - VOA vials have zero headspace?	☑ Yes	☐ No	☐ No VOA vials submitted
Water - pH acceptable upon receipt?	☑ Yes	☐ No	☐ Not Applicable
pH adjusted?	☐ Yes	☑ No	☐ Not Applicable

pH adjusted by: _____

Login notes: _____

Client contacted: _____ **Date contacted:** _____ **Person contacted:** _____

Contacted by: _____ **Regarding:** _____

Comments: _____

Corrective action: _____

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

SAMPLE ACCEPTANCE POLICY

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

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

- ✓ Intact on outside of cooler, signed and dated

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

The following is required on each COC:

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

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

Sample Integrity (mandatory):

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

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

Temperature Requirement (varies by sample matrix):

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

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

Preparation Information Benchsheets

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

Preparation Information Benchsheet

Prep Run#: 432987 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 1/23/24 15:58

#	Lab Code	Client ID	B#	Method /Test	pH	Cl	Matrix	Amt. Ext.	Sample Description
1	E2400066-001	OxideShaft@1100_0124	.01	6850/ClO4 DOD			Water	10mL	
2	E2400066-002	OxideShaft @900_0124	.01	6850/ClO4 DOD			Water	10mL	
3	E2400066-003	VentShaft1@950_0124	.01	6850/ClO4 DOD			Water	10mL	
4	E2400066-004	VentShaft1@500_0124	.01	6850/ClO4 DOD			Water	10mL	
5	E2400066-005	VentShaft5@500_0124	.01	6850/ClO4 DOD			Water	10mL	
6	E2400066-006	Borehole10@250_0124	.01	6850/ClO4 DOD			Water	10mL	
7	E2400068-001	16WW44-240119	.01	6850/ClO4 DOD			Ground Water	10mL	
8	E2400068-002	16WW37-240119	.01	6850/ClO4 DOD			Ground Water	10mL	
9	E2400068-003	16WW38-240119	.01	6850/ClO4 DOD			Ground Water	10mL	
10	E2400068-004	16WW38-240119-FD	.01	6850/ClO4 DOD			Ground Water	10mL	
11	E2400068-005	16WW13-240119	.01	6850/ClO4 DOD			Ground Water	10mL	
12	E2400068-006	16WW42-240119	.01	6850/ClO4 DOD			Ground Water	10mL	
13	E2400068-007	16RW05-240119	.01	6850/ClO4 DOD			Ground Water	10mL	
14	E2400068-008	16WW51-240119	.01	6850/ClO4 DOD			Ground Water	10mL	
15	E2400068-009	16WW30-240119	.01	6850/ClO4 DOD			Ground Water	10mL	
16	E2400068-010	16WW29-240119	.01	6850/ClO4 DOD			Ground Water	10mL	
17	E2400068-011	16SW01-240119	.01	6850/ClO4 DOD			Ground Water	10mL	
18	E2400068-012	16SW02-240119	.01	6850/ClO4 DOD			Ground Water	10mL	
19	E2400068-013	16SW02-240119-FD	.01	6850/ClO4 DOD			Ground Water	10mL	
20	E2400068-014	16SW03-240119	.02	6850/ClO4 DOD			Ground Water	10mL	
21	EQ2400041-01	MB		6850/ClO4 DOD			Liquid	10mL	
22	EQ2400041-02	LCS		6850/ClO4 DOD			Liquid	10mL	
23	EQ2400041-03	DLCS		6850/ClO4 DOD			Liquid	10mL	
24	EQ2400041-04	16SW03-240119 MS	.02	6850/ClO4 DOD			Liquid	10mL	
25	EQ2400041-05	16SW03-240119 DMS	.02	6850/ClO4 DOD			Liquid	10mL	
26	EQ2400041-06	ICS		6850/ClO4 DOD			Liquid	10mL	

Spiking Solutions

Name: Perchlorate Intermediate Stock 2 Inventory ID 230345 Logbook Ref: Perchlorate INT. Stock2 Expires On: 03/07/2024

EQ2400041-02 10.00µL EQ2400041-03 10.00µL EQ2400041-04 10.00µL EQ2400041-05 10.00µL EQ2400041-06 10.00µL

Name: Perchlorate Internal Standard 1ug/mL Inventory ID 232015 Logbook Ref: Perchlorate Internal Standard Expires On: 04/30/2024

E2400066-001 100.00µL E2400066-002 100.00µL E2400066-003 100.00µL E2400066-004 100.00µL E2400066-005 100.00µL E2400066-006 100.00µL

Preparation Information Benchsheet

Prep Run#: 432987 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 1/23/24 15:58

E2400068-001	100.00µL	E2400068-002	100.00µL	E2400068-003	100.00µL	E2400068-004	100.00µL	E2400068-005	100.00µL	E2400068-006	100.00µL
E2400068-007	100.00µL	E2400068-008	100.00µL	E2400068-009	100.00µL	E2400068-010	100.00µL	E2400068-011	100.00µL	E2400068-012	100.00µL
E2400068-013	100.00µL	E2400068-014	100.00µL	EQ2400041-01	100.00µL	EQ2400041-02	100.00µL	EQ2400041-03	100.00µL	EQ2400041-04	100.00µL
EQ2400041-05	100.00µL	EQ2400041-06	100.00µL								

Name: Perchlorate Anion Spiking Soln. 25,000 ppm Inventory ID 233096 Logbook Ref: Expires On: 02/04/2024

EQ2400041-06 20.00µL

Preparation Materials

Water HPLC Grade	HPLC water 083124 (233144)	6850 Amber Glass screw vial	2mL Screw Top Vial (221894)	6850 0.45um syringe filters	6850 0.45 SYRING FILTER (229979)
6850 Luer-Lok Syringes	Luer Lok Syringes (231696)				

Preparation Steps

Step: Preparation
Started: 1/23/24 15:58
Finished: 1/24/24 08:33
By: XMI
Comments

Comments: _____

Reviewed By: _____ Date: _____

Chain of Custody

Relinquished By: _____ Date: _____ Extracts Examined

Received By: _____ Date: _____ Yes No

Analytical Results

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

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400068
Project:	HS24011111	**Date Collected:**	1/19/24 0700
Sample Matrix:	Ground Water	**Date Received:**	1/22/24
Sample Name:	16WW44-240119	**Units:**	µg/L
Lab Code:	E2400068-001	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	1/23/24	1/26/24 20:18	432987	830662	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400068
Project:	HS24011111	**Date Collected:**	1/19/24 0745
Sample Matrix:	Ground Water	**Date Received:**	1/22/24
Sample Name:	16WW37-240119	**Units:**	µg/L
Lab Code:	E2400068-002	**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	**75.4**		0.500	0.250	0.125	5	1/23/24	1/26/24 20:24	432987	830662	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400068
Project:	HS24011111	**Date Collected:**	1/19/24 0830
Sample Matrix:	Ground Water	**Date Received:**	1/22/24
Sample Name:	16WW38-240119	**Units:**	µg/L
Lab Code:	E2400068-003	**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	1/23/24	1/26/24 20:29	432987	830662	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400068
Project:	HS24011111	**Date Collected:**	1/19/24 0830
Sample Matrix:	Ground Water	**Date Received:**	1/22/24
Sample Name:	16WW38-240119-FD	**Units:**	µg/L
Lab Code:	E2400068-004	**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	1/23/24	1/26/24 20:35	432987	830662	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400068
Project:	HS24011111	**Date Collected:**	1/19/24 0915
Sample Matrix:	Ground Water	**Date Received:**	1/22/24
Sample Name:	16WW13-240119	**Units:**	µg/L
Lab Code:	E2400068-005	**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	**0.0674**	J	0.100	0.0500	0.0250	1	1/23/24	1/26/24 20:40	432987	830662	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400068
Project:	HS24011111	**Date Collected:**	1/19/24 0955
Sample Matrix:	Ground Water	**Date Received:**	1/22/24
Sample Name:	16WW42-240119	**Units:**	µg/L
Lab Code:	E2400068-006	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.155**		0.100	0.0500	0.0250	1	1/23/24	1/26/24 20:46	432987	830662	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400068
Project:	HS24011111	**Date Collected:**	1/19/24 1040
Sample Matrix:	Ground Water	**Date Received:**	1/22/24
Sample Name:	16RW05-240119	**Units:**	µg/L
Lab Code:	E2400068-007	**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	1/23/24	1/26/24 20:51	432987	830662	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400068
Project:	HS24011111	**Date Collected:**	1/19/24 1125
Sample Matrix:	Ground Water	**Date Received:**	1/22/24
Sample Name:	16WW51-240119	**Units:**	µg/L
Lab Code:	E2400068-008	**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	1/23/24	1/26/24 20:57	432987	830662	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400068
Project:	HS24011111	**Date Collected:**	1/19/24 1210
Sample Matrix:	Ground Water	**Date Received:**	1/22/24
Sample Name:	16WW30-240119	**Units:**	µg/L
Lab Code:	E2400068-009	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.0524**	J	0.100	0.0500	0.0250	1	1/23/24	1/26/24 21:02	432987	830662	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400068
Project:	HS24011111	**Date Collected:**	1/19/24 1250
Sample Matrix:	Ground Water	**Date Received:**	1/22/24
Sample Name:	16WW29-240119	**Units:**	µg/L
Lab Code:	E2400068-010	**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	1/23/24	1/26/24 21:19	432987	830662	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400068
Project:	HS24011111	**Date Collected:**	1/19/24 1300
Sample Matrix:	Ground Water	**Date Received:**	1/22/24
Sample Name:	16SW01-240119	**Units:**	µg/L
Lab Code:	E2400068-011	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.0691**	J	0.100	0.0500	0.0250	1	1/23/24	1/26/24 21:25	432987	830662	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400068
Project:	HS24011111	**Date Collected:**	1/19/24 1315
Sample Matrix:	Ground Water	**Date Received:**	1/22/24
Sample Name:	16SW02-240119	**Units:**	µg/L
Lab Code:	E2400068-012	**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	**0.0813**	J	0.100	0.0500	0.0250	1	1/23/24	1/26/24 21:30	432987	830662	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400068
Project:	HS24011111	**Date Collected:**	1/19/24 1315
Sample Matrix:	Ground Water	**Date Received:**	1/22/24
Sample Name:	16SW02-240119-FD	**Units:**	µg/L
Lab Code:	E2400068-013	**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	**0.0628**	J	0.100	0.0500	0.0250	1	1/23/24	1/27/24 00:05	432987	830662	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400068
Project:	HS24011111	**Date Collected:**	1/19/24 1330
Sample Matrix:	Ground Water	**Date Received:**	1/22/24
Sample Name:	16SW03-240119	**Units:**	µg/L
Lab Code:	E2400068-014	**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	**0.0677**	J	0.100	0.0500	0.0250	1	1/23/24	1/26/24 18:45	432987	830662	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400068
Project:	HS24011111	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	EQ2400041-01	**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	1/23/24	1/26/24 18:28	432987	830662	

Accuracy & Precision

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

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS24011111
Sample Matrix: Ground Water

Service Request: E2400068
Date Analyzed: 1/26/24

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

Analytical Method: 6850
Prep Method: Method

Units: µg/L
Basis: NA

Extraction Lot: 432987

	Lab Control Sample EQ2400041-02			Duplicate Lab Control Sample EQ2400041-03					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	0.104	0.100	104	0.115	0.100	115	84 - 119	10	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:**	E2400068
Project:	HS24011111	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2400041-02	**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	**0.104**		0.100	0.0500	0.0250	1	1/23/24	1/26/24 18:34	432987	830662	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400068
Project:	HS24011111	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2400041-03	**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	**0.115**		0.100	0.0500	0.0250	1	1/23/24	1/26/24 19:18	432987	830662	

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2400068
Project:	HS24011111	**Date Collected:**	1/19/24
Sample Matrix:	Ground Water	**Date Received:**	1/22/24
		Date Analyzed:	1/29/24

Matrix Spike Summary

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

Sample Name:	16SW03-240119	**Units:**	µg/L
Lab Code:	E2400068-014	**Basis:**	NA

Analytical Method: 6850
Prep Method: Method

		16SW03-240119MS				16SW03-240119DMS					
		Matrix Spike				**Duplicate Matrix Spike**					
		EQ2400041-04				EQ2400041-05					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**		**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	0.0677	0.155	0.100	87		0.158	0.100	90	84 - 119	2	15

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

Results flagged with a pound (#) indicate the control criteria is not applicable.

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

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400068
Project:	HS24011111	**Date Collected:**	1/19/24 1330
Sample Matrix:	Ground Water	**Date Received:**	1/22/24
Sample Name:	16SW03-240119	**Units:**	µg/L
Lab Code:	EQ2400041-04	**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	**0.155**		0.100	0.0500	0.0250	1	1/23/24	1/29/24 09:20	432987	830812	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400068
Project:	HS24011111	**Date Collected:**	1/19/24 1330
Sample Matrix:	Ground Water	**Date Received:**	1/22/24
Sample Name:	16SW03-240119	**Units:**	µg/L
Lab Code:	EQ2400041-05	**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	**0.158**		0.100	0.0500	0.0250	1	1/23/24	1/29/24 09:25	432987	830812	

Initial Calibration

ALS Environmental - Houston HRMS
10450 Stancliff Rd., Suite 210, Houston, TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

20230802

Injection Log

LCMS01 -Shimadzu 8050

1st Review: XM
2nd Review: KN

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

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

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

Initial Calibration - Detailed Report

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

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

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

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

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

Analyte

Perchlorate RSE = 2.09

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

Initial Calibration Verification Summary Report

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

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

Insight Report

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

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

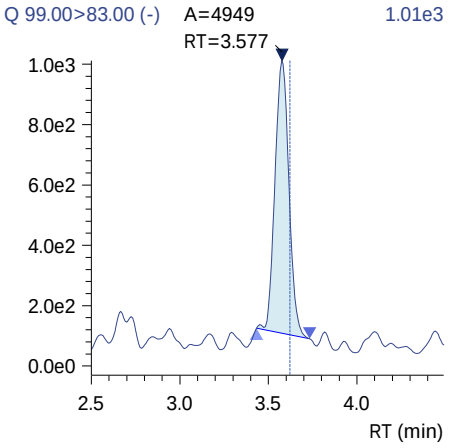
Perchlorate ICAL 1

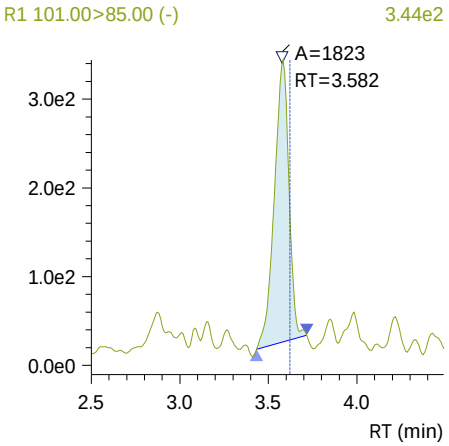
Sample ID: Perchlorate ICAL 1
Date Acquired: 8/2/2023 1:17:39 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-003.lcd
Vial: 1 | Inj. Volume: 10.0000uL | Tray: 1

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

Perchlorate

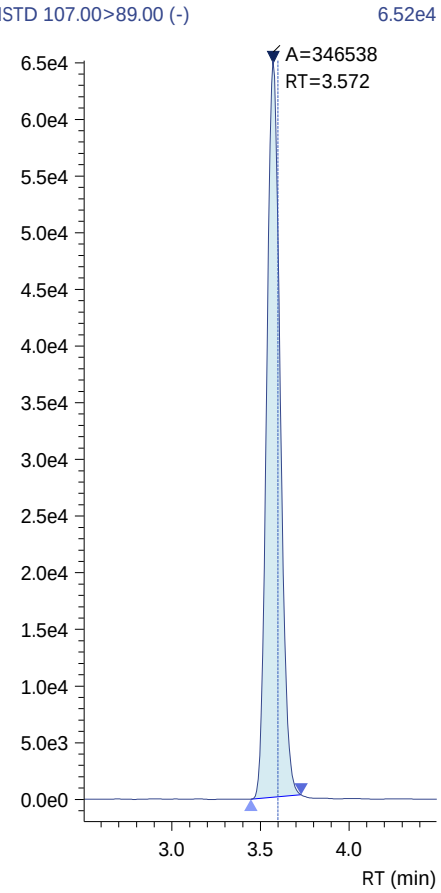
Conc 0.0968
R#1 36.83 (30.41)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

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

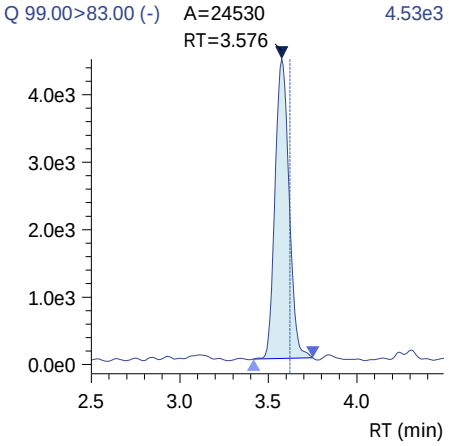
Perchlorate ICAL 2

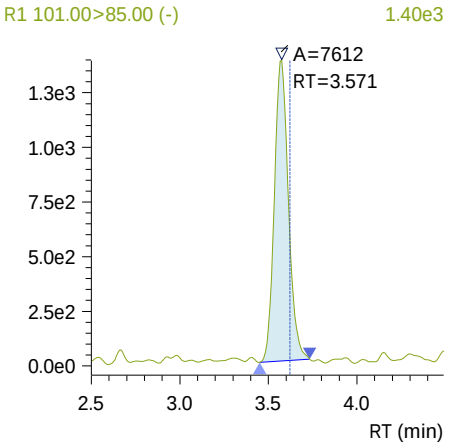
Sample ID: Perchlorate ICAL 2
Date Acquired: 8/2/2023 1:23:13 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-004.lcd
Vial: 2 | Inj. Volume: 10.0000uL | Tray: 1

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

Perchlorate

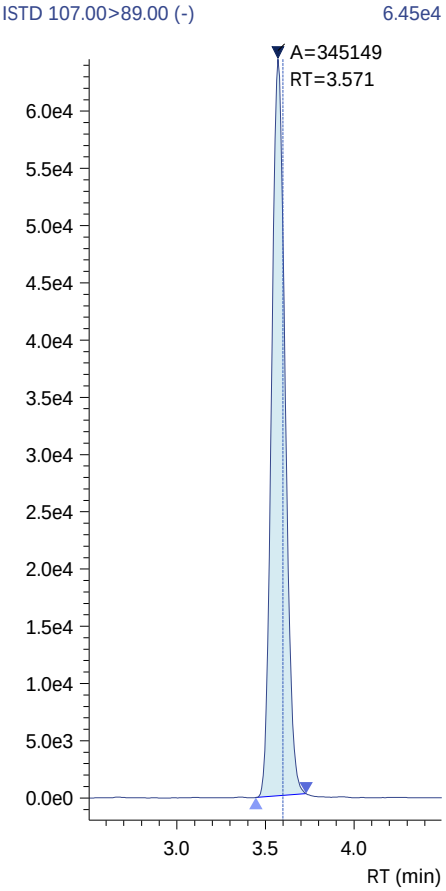
Conc 0.4820
R#1 31.03 (30.41)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

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

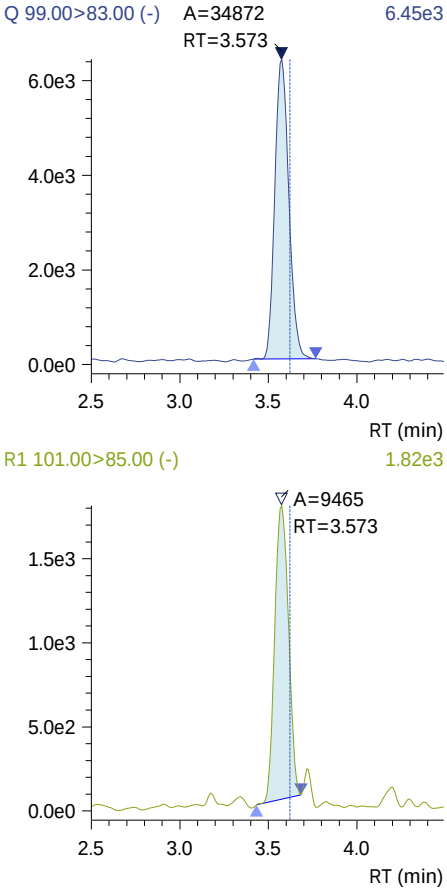
Perchlorate ICAL 3

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

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

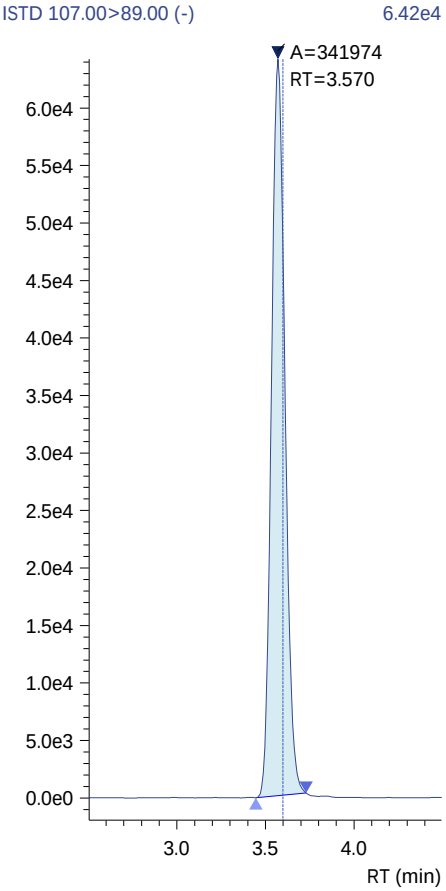
Perchlorate

Conc 0.6915
R#1 27.14 (30.41)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

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

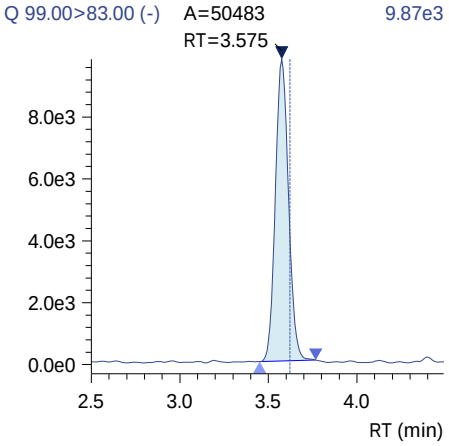
Perchlorate ICAL 4

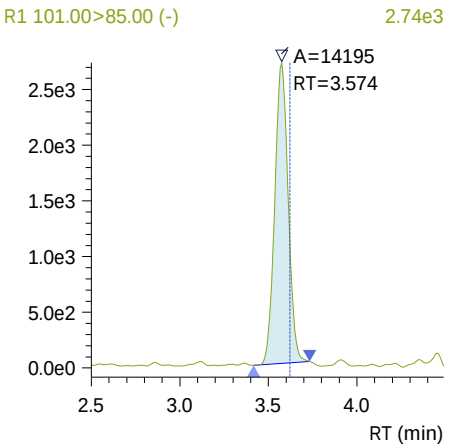
Sample ID: Perchlorate ICAL 4
Date Acquired: 8/2/2023 1:34:20 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-006.lcd
Vial: 4 | Inj. Volume: 10.0000uL | Tray: 1

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

Perchlorate

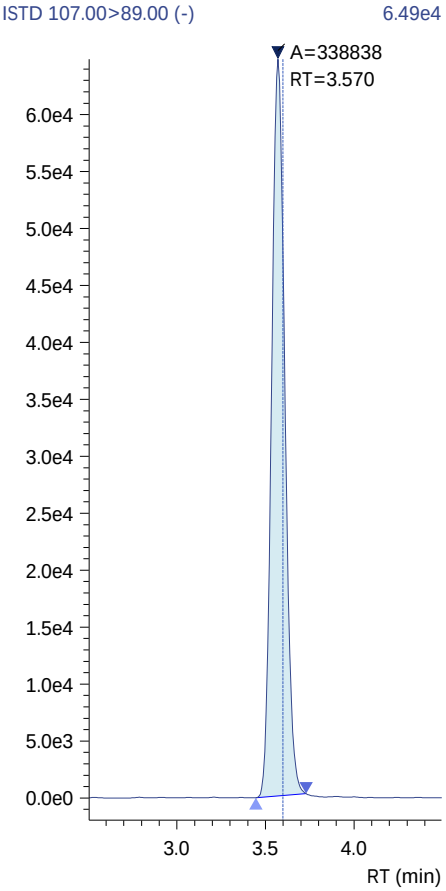
Conc 1.0104
R#1 28.12 (30.41)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

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

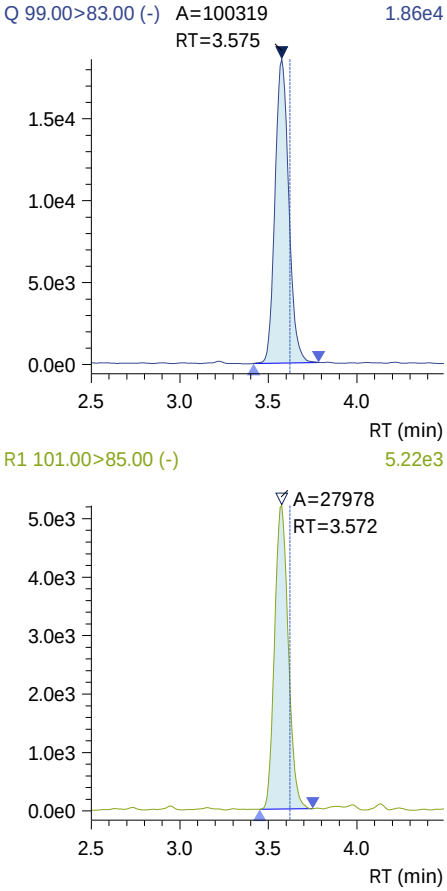
Perchlorate ICAL 5

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

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

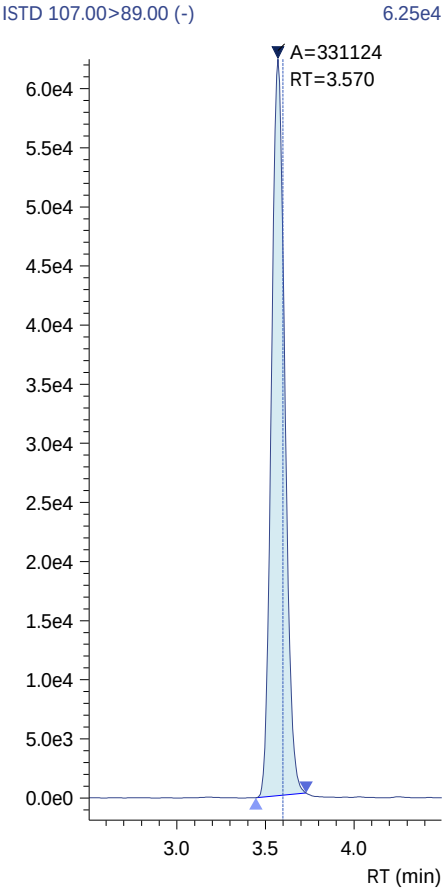
Perchlorate

Conc 2.0545
R#1 27.89 (30.41)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

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

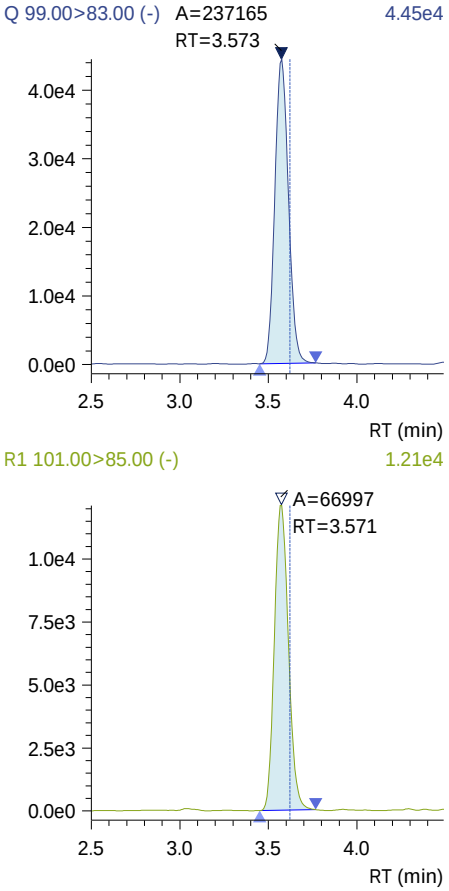
Perchlorate ICAL 6

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

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

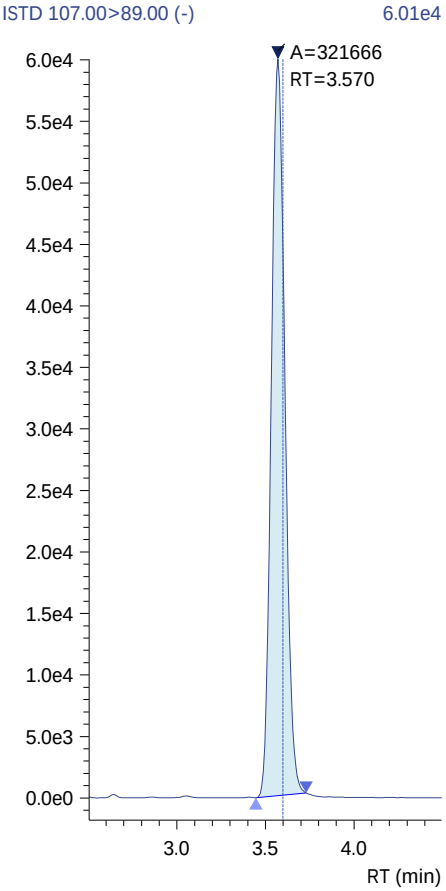
Perchlorate

Conc 5.0000
R#1 28.25 (30.41)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

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

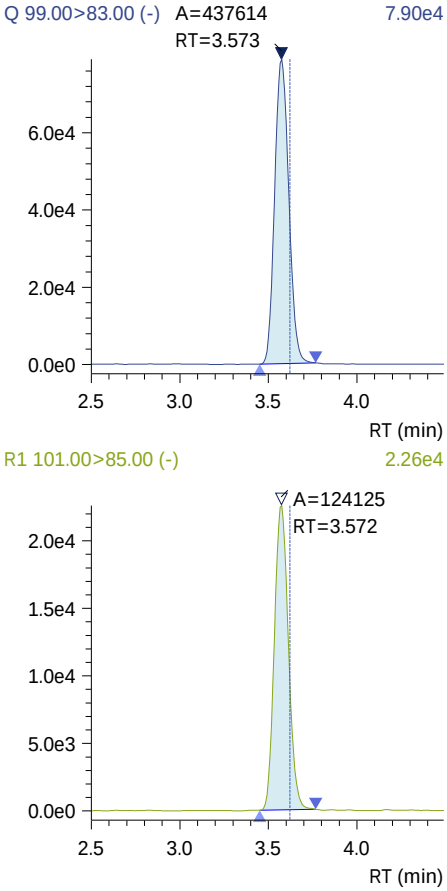
Perchlorate ICAL 7

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

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

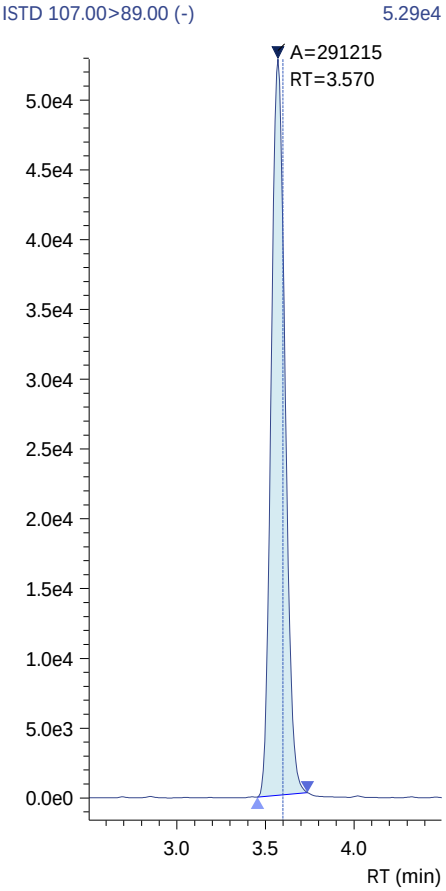
Perchlorate

Conc 10.1905
R#1 28.36 (30.41)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

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

Perchlorate ICAL 8

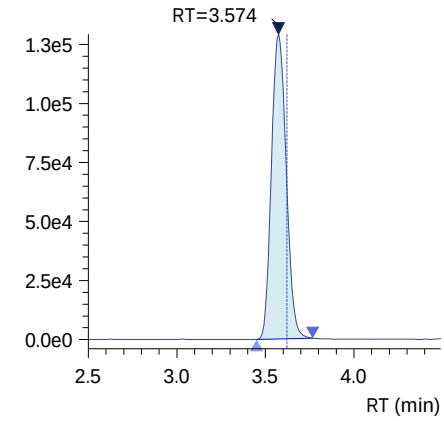
Sample ID: Perchlorate ICAL 8
Date Acquired: 8/2/2023 1:56:33 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-010.lcd
Vial: 8 | Inj. Volume: 10.0000uL | Tray: 1

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

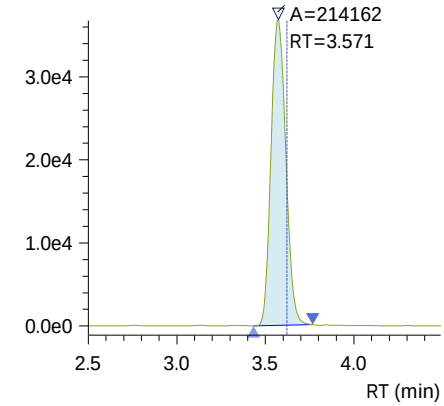
Perchlorate

Conc 20.0336
R#1 28.56 (30.41)

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



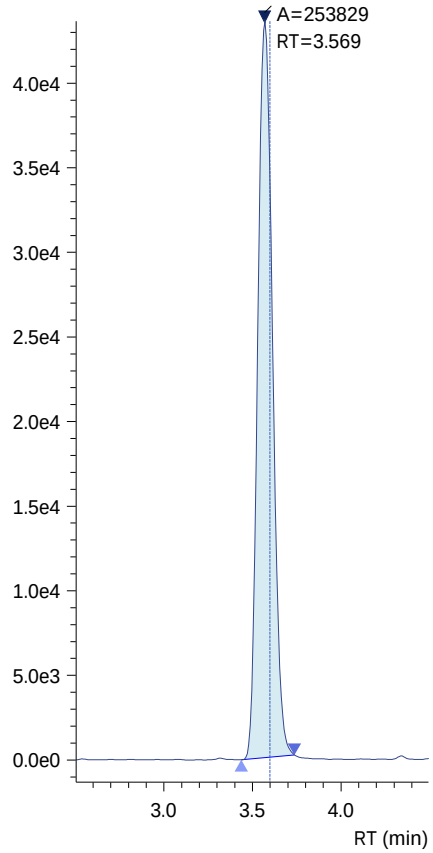
R1 101.00>85.00 (-) 3.68e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 4.37e4



Insight Report

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

Perchlorate ICAL 9

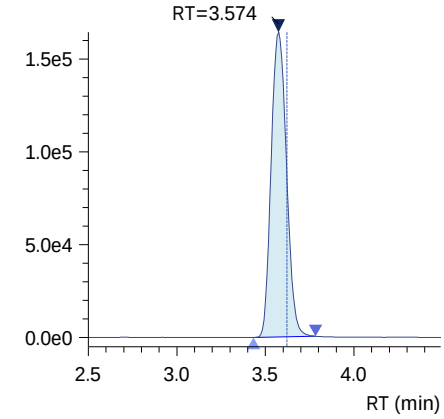
Sample ID: Perchlorate ICAL 9
Date Acquired: 8/2/2023 2:02:07 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-011.lcd
Vial: 9 | Inj. Volume: 10.0000uL | Tray: 1

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

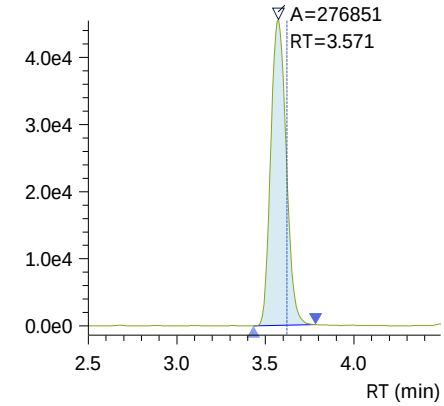
Perchlorate

Conc 30.2105
R#1 27.95 (30.41)

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



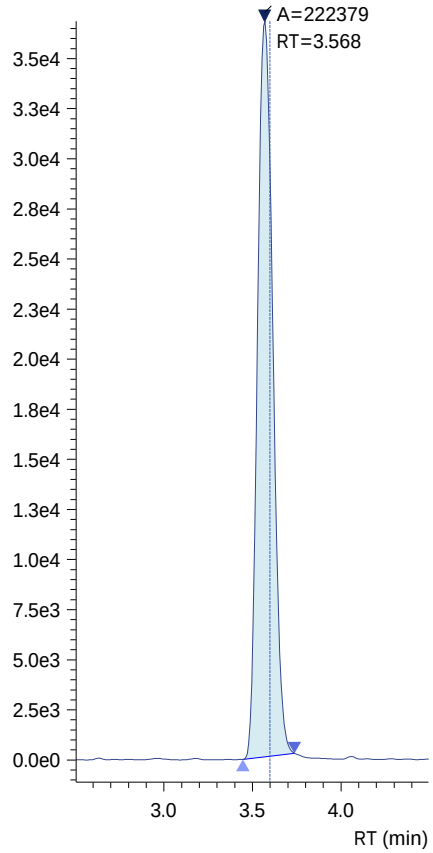
R1 101.00>85.00 (-) 4.55e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 3.69e4



Insight Report

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

Perchlorate ICAL 10

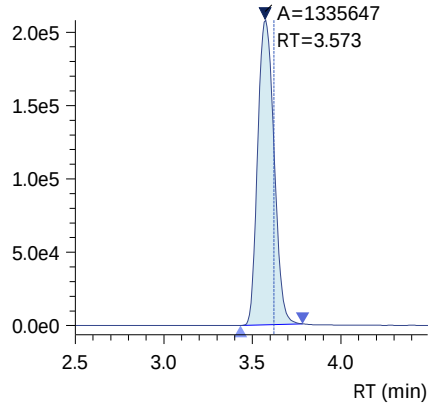
Sample ID: Perchlorate ICAL 10
Date Acquired: 8/2/2023 2:07:39 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-012.lcd
Vial: 10 | Inj. Volume: 10.0000uL | Tray: 1

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

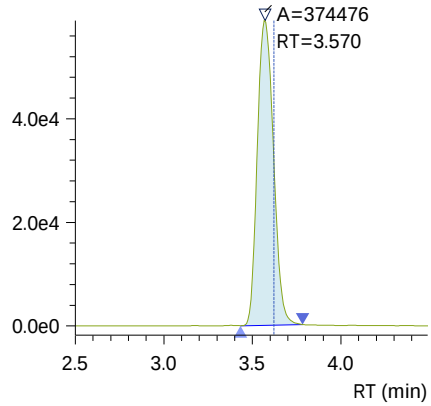
Perchlorate

Conc 50.7220
R#1 28.04 (30.41)

Q 99.00>83.00 (-) 2.08e5



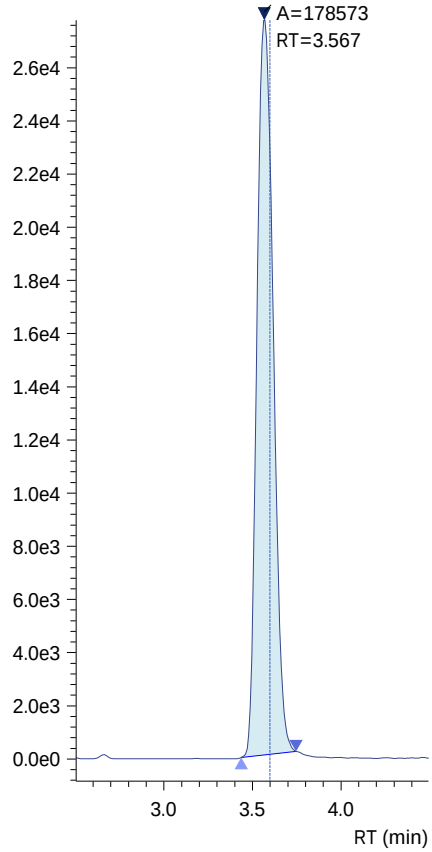
R1 101.00>85.00 (-) 5.90e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 2.78e4



Insight Report

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

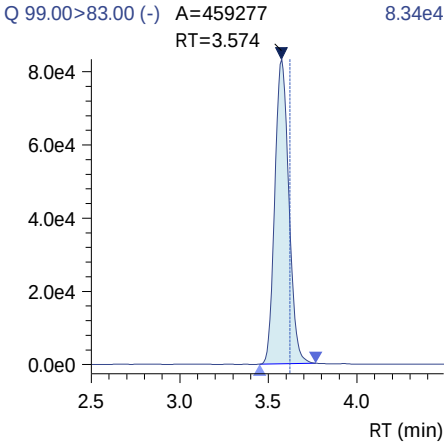
PerchlorateICV

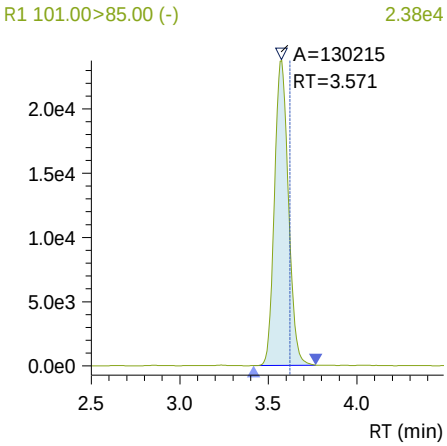
Sample ID: PerchlorateICV
Date Acquired: 8/2/2023 2:19:46 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-013.lcd
Vial: 11 | Inj. Volume: 10.0000uL | Tray: 1

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

Perchlorate

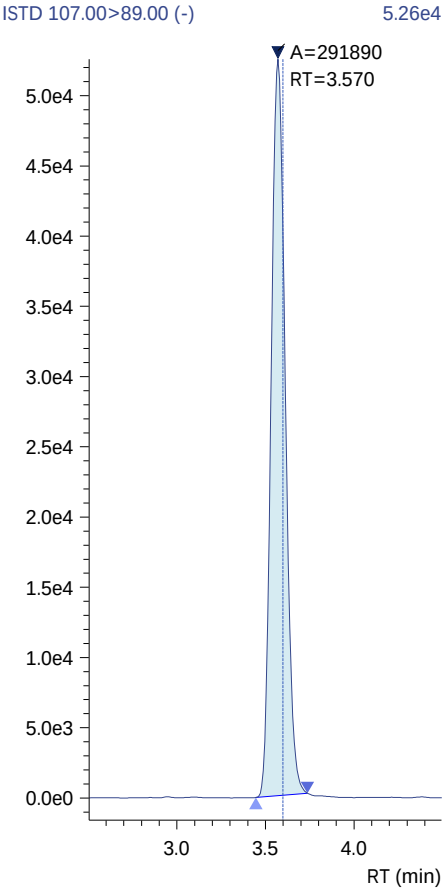
Conc 10.6703
R#1 28.35 (30.41)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Chromatograms and Selected Ion Monitoring

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

20240129-830812

Injection Log

LCMS01 -Shimadzu 8050

1st Review: XM
2nd Review: JLJ

ICAL Date: 8/2/2023
Cal. Std. xp: 02/02/2024
ICAL ID: EC2300012

Mobile Phases : A:20mM ammonium acetate in water 233412 **B:**Acetonitrile 229152
LODV: 230386 **CCV:**230380

	File Name	Sample Name	Acquisition Method	Dilution	Comments	Date/Time
1	20240129-001	IB	Perchlorate6850c.lcm	1x		1/29/2024 8:50
2	20240129-002	LODV	Perchlorate6850c.lcm	1x		1/29/2024 8:56
3	20240129-003	CCV	Perchlorate6850c.lcm	1x		1/29/2024 9:03
4	20240129-004	ICS	Perchlorate6850c.lcm	1x		1/29/2024 9:09
5	20240129-005	IB	Perchlorate6850c.lcm	1x		1/29/2024 9:14
6	20240129-006	EQ2400041-04 MS	Perchlorate6850c.lcm	1x		1/29/2024 9:20
7	20240129-007	EQ2400041-05 DMS	Perchlorate6850c.lcm	1x		1/29/2024 9:25
8	20240129-008	E2400063-001	Perchlorate6850c.lcm	1x		1/29/2024 11:07
9	20240129-009	E2400070-001	Perchlorate6850c.lcm	1x		1/29/2024 11:13
10	20240129-010	E2400070-002	Perchlorate6850c.lcm	1x		1/29/2024 11:18
11	20240129-011	E2400070-003	Perchlorate6850c.lcm	1x		1/29/2024 11:24
12	20240129-012	E2400070-004x10	Perchlorate6850c.lcm	10x		1/29/2024 13:00
13	20240129-013	E2400070-005	Perchlorate6850c.lcm	1x		1/29/2024 13:06
14	20240129-014	E2400070-006x1000	Perchlorate6850c.lcm	1000x		1/29/2024 13:11
15	20240129-015	E2400070-007	Perchlorate6850c.lcm	1x		1/29/2024 13:17
16	20240129-016	CCV	Perchlorate6850c.lcm	1x		1/29/2024 13:22
17	20240129-017	IB	Perchlorate6850c.lcm	1x		1/29/2024 13:28
18	20240129-018	E2400070-008	Perchlorate6850c.lcm	1x		1/29/2024 13:33
19	20240129-019	E2400070-009	Perchlorate6850c.lcm	1x		1/29/2024 13:39
20	20240129-020	E2400070-010	Perchlorate6850c.lcm	1x		1/29/2024 13:45
21	20240129-021	E2400074-001	Perchlorate6850c.lcm	1x		1/29/2024 13:50
22	20240129-022	E2400074-002	Perchlorate6850c.lcm	1x		1/29/2024 13:56
23	20240129-023	CCV	Perchlorate6850c.lcm	1x		1/29/2024 14:01
24	20240129-024	IB	Perchlorate6850c.lcm	1x		1/29/2024 14:07

20240126-830662

Injection Log

LCMS01 -Shimadzu 8050

1st Review: XM
2nd Review: GG

ICAL Date: 8/2/2023
Cal. Std. xp: 02/02/2024
ICAL ID: EC2300012

Mobile Phases : A:20mM ammonium acetate in water 233412 **B:**Acetonitrile 229152
LODV: 230386 **CCV:**230380

	File Name	Sample Name	Acquisition Method	Dilution	Comments	Date/Time
1	20240126-001	IB	Perchlorate6850c.lcm	1x		1/26/2024 10:19
2	20240126-002	LODV	Perchlorate6850c.lcm	1x		1/26/2024 10:24
3	20240126-003	CCV	Perchlorate6850c.lcm	1x		1/26/2024 10:32
4	20240126-004	IB	Perchlorate6850c.lcm	1x		1/26/2024 10:37
5	20240126-005	EQ2400040-01 MB	Perchlorate6850c.lcm	1x		1/26/2024 10:43
6	20240126-006	EQ2400040-02 LCS	Perchlorate6850c.lcm	1x		1/26/2024 10:48
7	20240126-007	EQ2400040-03 DLCS	Perchlorate6850c.lcm	1x		1/26/2024 10:54
8	20240126-008	EQ2400040-06 ICS	Perchlorate6850c.lcm	1x		1/26/2024 10:59
9	20240126-009	E2400055-003	Perchlorate6850c.lcm	1x		1/26/2024 11:05
10	20240126-010	E2400067-001X50	Perchlorate6850c.lcm	50x		1/26/2024 11:10
11	20240126-011	E2400067-002X50	Perchlorate6850c.lcm	50x		1/26/2024 11:16
12	20240126-012	E2400067-003X50	Perchlorate6850c.lcm	50x		1/26/2024 11:21
13	20240126-013	E2400067-004	Perchlorate6850c.lcm	1x		1/26/2024 11:27
14	20240126-014	E2400067-005	Perchlorate6850c.lcm	1x		1/26/2024 11:32
15	20240126-015	CCV	Perchlorate6850c.lcm	1x		1/26/2024 11:38
16	20240126-016	IB	Perchlorate6850c.lcm	1x		1/26/2024 11:44
17	20240126-017	E2400067-006	Perchlorate6850c.lcm	1x	DNU-IR	1/26/2024 11:49
18	20240126-018	E2400067-007X20	Perchlorate6850c.lcm	20x		1/26/2024 11:55
19	20240126-019	E2400067-008	Perchlorate6850c.lcm	1x		1/26/2024 12:00
20	20240126-020	E2400067-009	Perchlorate6850c.lcm	1x		1/26/2024 12:06
21	20240126-021	E2400067-010	Perchlorate6850c.lcm	1x		1/26/2024 12:11
22	20240126-022	E2400067-011	Perchlorate6850c.lcm	1x		1/26/2024 12:17
23	20240126-023	E2400067-012	Perchlorate6850c.lcm	1x		1/26/2024 12:22
24	20240126-024	E2400067-006RI	Perchlorate6850c.lcm	1x		1/26/2024 12:28
25	20240126-025	EQ2400040-04 MS	Perchlorate6850c.lcm	1x		1/26/2024 12:33
26	20240126-026	EQ2400040-05 DMS	Perchlorate6850c.lcm	1x		1/26/2024 12:39
27	20240126-027	CCV	Perchlorate6850c.lcm	1x		1/26/2024 12:44
28	20240126-028	IB	Perchlorate6850c.lcm	1x		1/26/2024 12:50
29	20240126-029	E2400067-008	Perchlorate6850c.lcm	1x	DNU-DUP	1/26/2024 12:55
30	20240126-030	E2400062-001X10	Perchlorate6850c.lcm	10x		1/26/2024 13:01
31	20240126-031	E2400062-002	Perchlorate6850c.lcm	1x		1/26/2024 13:06
32	20240126-032	E2400062-003	Perchlorate6850c.lcm	1x		1/26/2024 13:12
33	20240126-033	E2400062-004	Perchlorate6850c.lcm	1x		1/26/2024 13:18
34	20240126-034	E2400062-005	Perchlorate6850c.lcm	1x		1/26/2024 13:23
35	20240126-035	E2400062-006X5	Perchlorate6850c.lcm	5x		1/26/2024 13:29
36	20240126-036	E2400062-007	Perchlorate6850c.lcm	1x		1/26/2024 13:34
37	20240126-037	E2400062-008	Perchlorate6850c.lcm	1x		1/26/2024 13:46
38	20240126-038	IB	Perchlorate6850c.lcm	1x		1/26/2024 13:52

20240126-830662

Injection Log

LCMS01 -Shimadzu 8050

1st Review: XM
2nd Review: GG

ICAL Date: 8/2/2023
Cal. Std. xp: 02/02/2024
ICAL ID: EC2300012

Mobile Phases : A:20mM ammonium acetate in water 233412 **B:**Acetonitrile 229152
LODV: 230386 **CCV:**230380

	File Name	Sample Name	Acquisition Method	Dilution	Comments	Date/Time
39	20240126-039	CCV	Perchlorate6850c.lcm	1x		1/26/2024 13:59
40	20240126-040	IB	Perchlorate6850c.lcm	1x		1/26/2024 14:04
41	20240126-041	E2400072-001	Perchlorate6850c.lcm	1x		1/26/2024 16:06
42	20240126-042	E2400072-002	Perchlorate6850c.lcm	1x		1/26/2024 16:11
43	20240126-043	E2400072-003	Perchlorate6850c.lcm	1x		1/26/2024 16:17
44	20240126-044	E2400072-004x10	Perchlorate6850c.lcm	10x		1/26/2024 17:07
45	20240126-045	E2400072-005x10	Perchlorate6850c.lcm	10x		1/26/2024 17:13
46	20240126-046	E2400072-006	Perchlorate6850c.lcm	1x		1/26/2024 17:18
47	20240126-047	E2400072-007x500	Perchlorate6850c.lcm	500x		1/26/2024 17:24
48	20240126-048	E2400072-008x100	Perchlorate6850c.lcm	100x		1/26/2024 17:29
49	20240126-049	E2400072-009x100	Perchlorate6850c.lcm	100x		1/26/2024 17:35
50	20240126-050	CCV	Perchlorate6850c.lcm	1x		1/26/2024 17:40
51	20240126-051	IB	Perchlorate6850c.lcm	1x		1/26/2024 17:46
52	20240126-052	EQ2400049-01 MB	Perchlorate6850c.lcm	1x		1/26/2024 17:52
53	20240126-053	EQ2400049-02 LCS	Perchlorate6850c.lcm	1x		1/26/2024 17:57
54	20240126-054	EQ2400049-03 DLCS	Perchlorate6850c.lcm	1x		1/26/2024 18:03
55	20240126-055	EQ2400049-04 MS	Perchlorate6850c.lcm	1x		1/26/2024 18:08
56	20240126-056	EQ2400049-05 DMS	Perchlorate6850c.lcm	1x		1/26/2024 18:14
57	20240126-057	IB	Perchlorate6850c.lcm	1x		1/26/2024 18:23
58	20240126-058	EQ2400041-01 MB	Perchlorate6850c.lcm	1x		1/26/2024 18:28
59	20240126-059	EQ2400041-02 LCS	Perchlorate6850c.lcm	1x		1/26/2024 18:34
60	20240126-060	EQ2400041-03 DLCS	Perchlorate6850c.lcm	1x	DNU-RI	1/26/2024 18:39
61	20240126-061	E2400068-014	Perchlorate6850c.lcm	1x		1/26/2024 18:45
62	20240126-062	CCV	Perchlorate6850c.lcm	1x		1/26/2024 18:50
63	20240126-063	IB	Perchlorate6850c.lcm	1x		1/26/2024 18:56
64	20240126-064	EQ2400041-04 MS	Perchlorate6850c.lcm	1x	DNU-RI	1/26/2024 19:01
65	20240126-065	EQ2400041-05 DMS	Perchlorate6850c.lcm	1x	DNU-RI	1/26/2024 19:07
66	20240126-066	EQ2400041-06 ICS	Perchlorate6850c.lcm	1x		1/26/2024 19:12
67	20240126-067	EQ2400041-03 DLCS	Perchlorate6850c.lcm	1x		1/26/2024 19:18
68	20240126-068	E2400066-001x1k	Perchlorate6850c.lcm	1000x		1/26/2024 19:29
69	20240126-069	E2400066-002x1k	Perchlorate6850c.lcm	1000x		1/26/2024 19:34
70	20240126-070	E2400066-003	Perchlorate6850c.lcm	1x		1/26/2024 19:40
71	20240126-071	E2400066-004	Perchlorate6850c.lcm	1x		1/26/2024 19:45
72	20240126-072	E2400066-005	Perchlorate6850c.lcm	1x		1/26/2024 19:51
73	20240126-073	E2400066-006	Perchlorate6850c.lcm	1x		1/26/2024 19:56
74	20240126-074	CCV	Perchlorate6850c.lcm	1x		1/26/2024 20:02
75	20240126-075	IB	Perchlorate6850c.lcm	1x		1/26/2024 20:07
76	20240126-076	E2400066-007	Perchlorate6850c.lcm	1x		1/26/2024 20:13

20240126-830662

Injection Log

LCMS01 -Shimadzu 8050

1st Review: XM
2nd Review: GG

ICAL Date: 8/2/2023
Cal. Std. xp: 02/02/2024
ICAL ID: EC2300012

Mobile Phases : A:20mM ammonium acetate in water 233412 **B:**Acetonitrile 229152
LODV: 230386 **CCV:**230380

	File Name	Sample Name	Acquisition Method	Dilution	Comments	Date/Time
77	20240126-077	E2400068-001	Perchlorate6850c.lcm	1x		1/26/2024 20:18
78	20240126-078	E2400068-002x5	Perchlorate6850c.lcm	5x		1/26/2024 20:24
79	20240126-079	E2400068-003	Perchlorate6850c.lcm	1x		1/26/2024 20:29
80	20240126-080	E2400068-004	Perchlorate6850c.lcm	1x		1/26/2024 20:35
81	20240126-081	E2400068-005	Perchlorate6850c.lcm	1x		1/26/2024 20:40
82	20240126-082	E2400068-006	Perchlorate6850c.lcm	1x		1/26/2024 20:46
83	20240126-083	E2400068-007	Perchlorate6850c.lcm	1x		1/26/2024 20:51
84	20240126-084	E2400068-008	Perchlorate6850c.lcm	1x		1/26/2024 20:57
85	20240126-085	E2400068-009	Perchlorate6850c.lcm	1x		1/26/2024 21:02
86	20240126-086	CCV	Perchlorate6850c.lcm	1x		1/26/2024 21:08
87	20240126-087	IB	Perchlorate6850c.lcm	1x		1/26/2024 21:13
88	20240126-088	E2400068-010	Perchlorate6850c.lcm	1x		1/26/2024 21:19
89	20240126-089	E2400068-011	Perchlorate6850c.lcm	1x		1/26/2024 21:25
90	20240126-090	E2400068-012	Perchlorate6850c.lcm	1x		1/26/2024 21:30
91	20240126-091	E2400068-013	Perchlorate6850c.lcm	1x	DNU-IR	1/26/2024 21:36
92	20240126-092	IB	Perchlorate6850c.lcm	1x		1/26/2024 21:41
93	20240126-093	EQ2400042-01	Perchlorate6850c.lcm	1x		1/26/2024 21:47
94	20240126-094	EQ2400042-02	Perchlorate6850c.lcm	1x		1/26/2024 21:52
95	20240126-095	EQ2400042-03	Perchlorate6850c.lcm	1x		1/26/2024 21:58
96	20240126-096	E2400065-001X5	Perchlorate6850c.lcm	5x		1/26/2024 22:03
97	20240126-097	E2400065-002X5	Perchlorate6850c.lcm	5x		1/26/2024 22:09
98	20240126-098	CCV	Perchlorate6850c.lcm	1x		1/26/2024 22:14
99	20240126-099	IB	Perchlorate6850c.lcm	1x		1/26/2024 22:20
100	20240126-100	EQ2400042-04 ICS	Perchlorate6850c.lcm	1x		1/26/2024 22:31
101	20240126-101	E2400065-003	Perchlorate6850c.lcm	1x		1/26/2024 22:37
102	20240126-102	E2400065-004X5	Perchlorate6850c.lcm	5x		1/26/2024 22:42
103	20240126-103	E2400065-005	Perchlorate6850c.lcm	1x		1/26/2024 22:48
104	20240126-104	E2400065-006	Perchlorate6850c.lcm	1x		1/26/2024 22:53
105	20240126-105	E2400065-007X10	Perchlorate6850c.lcm	10x		1/26/2024 22:59
106	20240126-106	E2400065-008X5	Perchlorate6850c.lcm	5x		1/26/2024 23:04
107	20240126-107	E2400065-009X10	Perchlorate6850c.lcm	10x		1/26/2024 23:10
108	20240126-108	E2400065-010	Perchlorate6850c.lcm	1x		1/26/2024 23:16
109	20240126-109	E2400065-011	Perchlorate6850c.lcm	1x		1/26/2024 23:21
110	20240126-110	CCV	Perchlorate6850c.lcm	1x		1/26/2024 23:27
111	20240126-111	IB	Perchlorate6850c.lcm	1x		1/26/2024 23:32
112	20240126-112	E2400065-012	Perchlorate6850c.lcm	1x		1/26/2024 23:38
113	20240126-113	E2400065-013	Perchlorate6850c.lcm	1x		1/26/2024 23:43
114	20240126-114	E2400065-014X10	Perchlorate6850c.lcm	10x		1/26/2024 23:49

20240126-830662

Injection Log

LCMS01 -Shimadzu 8050

1st Review: XM
2nd Review: GG

ICAL Date: 8/2/2023
Cal. Std. xp: 02/02/2024
ICAL ID: EC2300012

Mobile Phases : A:20mM ammonium acetate in water 233412 **B:**Acetonitrile 229152
LODV: 230386 **CCV:**230380

	File Name	Sample Name	Acquisition Method	Dilution	Comments	Date/Time
115	20240126-115	E2400065-015	Perchlorate6850c.lcm	1x		1/26/2024 23:54
116	20240126-116	E2400065-016X5	Perchlorate6850c.lcm	5x		1/27/2024 0:00
117	20240126-117	E2400068-013	Perchlorate6850c.lcm	1x		1/27/2024 0:05
118	20240126-118	PT-2	Perchlorate6850c.lcm	1x		1/27/2024 0:11
119	20240126-119	CCV	Perchlorate6850c.lcm	1x		1/27/2024 0:16
120	20240126-120	IB	Perchlorate6850c.lcm	1x		1/27/2024 0:22

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2400068
Project:	HS24011111	**Date Analyzed:**	1/26/24

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

Analytical Method:	6850	**Calibration Date:**	8/2/23
File ID:	I:\LCMS01\DATA\20240126\20240126-003	**Calibration ID:**	EC2300012
		Analysis Lot:	830662
		Units:	ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.99	0.1475	0.1474	-0.1	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS24011111

Service Request: E2400068
Date Analyzed: 1/26/24

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\20240126\20240126-015

Calibration Date: 8/2/23
Calibration ID: EC2300012
Analysis Lot: 830662
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.4	0.1475	0.1538	4.3	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS24011111

Service Request: E2400068
Date Analyzed: 1/26/24

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\20240126\20240126-027

Calibration Date: 8/2/23
Calibration ID: EC2300012
Analysis Lot: 830662
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.6	0.1475	0.1567	6.3	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS24011111

Service Request: E2400068
Date Analyzed: 1/26/24

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\20240126\20240126-039

Calibration Date: 8/2/23
Calibration ID: EC2300012
Analysis Lot: 830662
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.3	0.1475	0.1521	3.1	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS24011111

Service Request: E2400068
Date Analyzed: 1/26/24

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\20240126\20240126-050

Calibration Date: 8/2/23
Calibration ID: EC2300012
Analysis Lot: 830662
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.2	0.1475	0.1503	1.9	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS24011111

Service Request: E2400068
Date Analyzed: 1/26/24

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\20240126\20240126-062

Calibration Date: 8/2/23
Calibration ID: EC2300012
Analysis Lot: 830662
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.7	0.1475	0.1575	6.8	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS24011111

Service Request: E2400068
Date Analyzed: 1/26/24

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\20240126\20240126-074

Calibration Date: 8/2/23
Calibration ID: EC2300012
Analysis Lot: 830662
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.3	0.1475	0.1522	3.2	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2400068
Project:	HS24011111	**Date Analyzed:**	1/26/24

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

Analytical Method:	6850	**Calibration Date:**	8/2/23
File ID:	I:\LCMS01\DATA\20240126\20240126-086	**Calibration ID:**	EC2300012
		Analysis Lot:	830662
		Units:	ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.5	0.1475	0.1551	5.2	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS24011111

Service Request: E2400068
Date Analyzed: 1/26/24

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\20240126\20240126-098

Calibration Date: 8/2/23
Calibration ID: EC2300012
Analysis Lot: 830662
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.7	0.1475	0.1573	6.7	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2400068
Project:	HS24011111	**Date Analyzed:**	1/26/24

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

Analytical Method:	6850	**Calibration Date:**	8/2/23
File ID:	I:\LCMS01\DATA\20240126\20240126-110	**Calibration ID:**	EC2300012
		Analysis Lot:	830662
		Units:	ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.4	0.1475	0.1531	3.8	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2400068
Project:	HS24011111	**Date Analyzed:**	1/27/24

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

Analytical Method:	6850	**Calibration Date:**	8/2/23
File ID:	I:\LCMS01\DATA\20240126\20240126-119	**Calibration ID:**	EC2300012
		Analysis Lot:	830662
		Units:	ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.6	0.1475	0.1563	6.0	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2400068
Project:	HS24011111	**Date Analyzed:**	1/29/24

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

Analytical Method:	6850	**Calibration Date:**	8/2/23
File ID:	I:\LCMS01\DATA\20240129\20240129-003	**Calibration ID:**	EC2300012
		Analysis Lot:	830812
		Units:	ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.53	0.1475	0.1406	-4.7	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2400068
Project:	HS24011111	**Date Analyzed:**	1/29/24

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

Analytical Method:	6850	**Calibration Date:**	8/2/23
File ID:	I:\LCMS01\DATA\20240129\20240129-016	**Calibration ID:**	EC2300012
		Analysis Lot:	830812
		Units:	ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.1	10.2	0.1475	0.1486	0.8	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2400068
Project:	HS24011111	**Date Analyzed:**	1/29/24

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

Analytical Method:	6850	**Calibration Date:**	8/2/23
File ID:	I:\LCMS01\DATA\20240129\20240129-023	**Calibration ID:**	EC2300012
		Analysis Lot:	830812
		Units:	ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.1	10.4	0.1475	0.1511	2.5	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2400068
Project:	HS24011111	**Date Analyzed:**	1/26/24 10:32

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20240126\20240126-003	**Lab Code:**	EQ2400048-01
Instrument ID:	E-LCMS-01	**Analysis Lot:**	830662
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	297,129	3.57
	Upper Limit ==>	445,694	5.57
	Lower Limit ==>	148,565	1.57
Associated Analyses			
Continuing Calibration Verification	EQ2400048-01	264,304	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:**	E2400068
Project:	HS24011111	**Date Analyzed:**	1/26/24 11:38

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20240126\20240126-015	**Lab Code:**	EQ2400048-02
Instrument ID:	E-LCMS-01	**Analysis Lot:**	830662
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	297,129	3.57
	Upper Limit ==>	445,694	5.57
	Lower Limit ==>	148,565	1.57
Associated Analyses			
Continuing Calibration Verification	EQ2400048-02	252,580	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:**	E2400068
Project:	HS24011111	**Date Analyzed:**	1/26/24 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\20240126\20240126-027	**Lab Code:**	EQ2400048-03
Instrument ID:	E-LCMS-01	**Analysis Lot:**	830662
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	297,129	3.57
	Upper Limit ==>	445,694	5.57
	Lower Limit ==>	148,565	1.57
Associated Analyses			
Continuing Calibration Verification	EQ2400048-03	235,649	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:**	E2400068
Project:	HS24011111	**Date Analyzed:**	1/26/24 13:59

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20240126\20240126-039	**Lab Code:**	EQ2400048-04
Instrument ID:	E-LCMS-01	**Analysis Lot:**	830662
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	297,129	3.57
	Upper Limit ==>	445,694	5.57
	Lower Limit ==>	148,565	1.57
Associated Analyses			
Continuing Calibration Verification	EQ2400048-04	241,298	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:**	E2400068
Project:	HS24011111	**Date Analyzed:**	1/26/24 17:40

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20240126\20240126-050	**Lab Code:**	EQ2400048-05
Instrument ID:	E-LCMS-01	**Analysis Lot:**	830662
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	297,129	3.57
	Upper Limit ==>	445,694	5.57
	Lower Limit ==>	148,565	1.57
Associated Analyses			
Continuing Calibration Verification	EQ2400048-05	280,156	3.56
Method Blank	EQ2400041-01	255,042	3.56
Lab Control Sample	EQ2400041-02	243,705	3.56
16SW03-240119	E2400068-014	300,240	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:**	E2400068
Project:	HS24011111	**Date Analyzed:**	1/26/24 18:50

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20240126\20240126-062	**Lab Code:**	EQ2400048-06
Instrument ID:	E-LCMS-01	**Analysis Lot:**	830662
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	297,129	3.57
	Upper Limit ==>	445,694	5.57
	Lower Limit ==>	148,565	1.57
Associated Analyses			
Continuing Calibration Verification	EQ2400048-06	274,383	3.56
Duplicate Lab Control Sample	EQ2400041-03	243,722	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:**	E2400068
Project:	HS24011111	**Date Analyzed:**	1/26/24 20:02

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20240126\20240126-074	**Lab Code:**	EQ2400048-07
Instrument ID:	E-LCMS-01	**Analysis Lot:**	830662
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	297,129	3.57
	Upper Limit ==>	445,694	5.57
	Lower Limit ==>	148,565	1.57
Associated Analyses			
Continuing Calibration Verification	EQ2400048-07	266,806	3.56
16WW44-240119	E2400068-001	280,433	3.56
16WW37-240119	E2400068-002	279,424	3.56
16WW38-240119	E2400068-003	292,425	3.56
16WW38-240119-FD	E2400068-004	302,520	3.56
16WW13-240119	E2400068-005	270,924	3.56
16WW42-240119	E2400068-006	260,086	3.56
16RW05-240119	E2400068-007	299,917	3.56
16WW51-240119	E2400068-008	263,101	3.56
16WW30-240119	E2400068-009	260,674	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:**	E2400068
Project:	HS24011111	**Date Analyzed:**	1/26/24 21:08

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20240126\20240126-086	**Lab Code:**	EQ2400048-08
Instrument ID:	E-LCMS-01	**Analysis Lot:**	830662
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	297,129	3.57
	Upper Limit ==>	445,694	5.57
	Lower Limit ==>	148,565	1.57
Associated Analyses			
Continuing Calibration Verification	EQ2400048-08	255,861	3.56
16WW29-240119	E2400068-010	285,210	3.56
16SW01-240119	E2400068-011	262,897	3.56
16SW02-240119	E2400068-012	264,318	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:**	E2400068
Project:	HS24011111	**Date Analyzed:**	1/26/24 22:14

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20240126\20240126-098	**Lab Code:**	EQ2400048-09
Instrument ID:	E-LCMS-01	**Analysis Lot:**	830662
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	297,129	3.57
	Upper Limit ==>	445,694	5.57
	Lower Limit ==>	148,565	1.57
Associated Analyses			
Continuing Calibration Verification	EQ2400048-09	252,116	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:**	E2400068
Project:	HS24011111	**Date Analyzed:**	1/26/24 23:27

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20240126\20240126-110	**Lab Code:**	EQ2400048-10
Instrument ID:	E-LCMS-01	**Analysis Lot:**	830662
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	297,129	3.57
	Upper Limit ==>	445,694	5.57
	Lower Limit ==>	148,565	1.57
Associated Analyses			
Continuing Calibration Verification	EQ2400048-10	246,409	3.56
16SW02-240119-FD	E2400068-013	254,610	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
Project: HS24011111

Service Request: E2400068
Date Analyzed: 1/27/24 00:16

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

File ID: I:\LCMS01\DATA\20240126\20240126-119
Instrument ID: E-LCMS-01
Analytical Method: 6850

Lab Code: EQ2400048-11
Analysis Lot: 830662
Signal ID: 1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	297,129	3.57
	Upper Limit ==>	445,694	5.57
	Lower Limit ==>	148,565	1.57
Associated Analyses			
Continuing Calibration Verification	EQ2400048-11	247,822	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:**	E2400068
Project:	HS24011111	**Date Analyzed:**	1/29/24 09:03

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20240129\20240129-003	**Lab Code:**	EQ2400052-01
Instrument ID:	E-LCMS-01	**Analysis Lot:**	830812
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	297,129	3.57
	Upper Limit ==>	445,694	5.57
	Lower Limit ==>	148,565	1.57
Associated Analyses			
Continuing Calibration Verification	EQ2400052-01	274,538	3.57
16SW03-240119MS	EQ2400041-04	288,585	3.57
16SW03-240119DMS	EQ2400041-05	295,052	3.57

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

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2400068
Project:	HS24011111	**Date Analyzed:**	1/29/24 13:22

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20240129\20240129-016	**Lab Code:**	EQ2400052-02
Instrument ID:	E-LCMS-01	**Analysis Lot:**	830812
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	297,129	3.57
	Upper Limit ==>	445,694	5.57
	Lower Limit ==>	148,565	1.57
Associated Analyses			
Continuing Calibration Verification	EQ2400052-02	267,931	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:**	E2400068
Project:	HS24011111	**Date Analyzed:**	1/29/24 14:01

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20240129\20240129-023	**Lab Code:**	EQ2400052-03
Instrument ID:	E-LCMS-01	**Analysis Lot:**	830812
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	297,129	3.57
	Upper Limit ==>	445,694	5.57
	Lower Limit ==>	148,565	1.57
Associated Analyses			
Continuing Calibration Verification	EQ2400052-03	263,974	3.56

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

Insight Report

Printed at 1/29/2024 2:34:44 PM

Method File: I:\LCMS01\DATA\20240126\20240126.lcm
Project File: I:\LCMS01\DATA\20240126\20240126.damlp

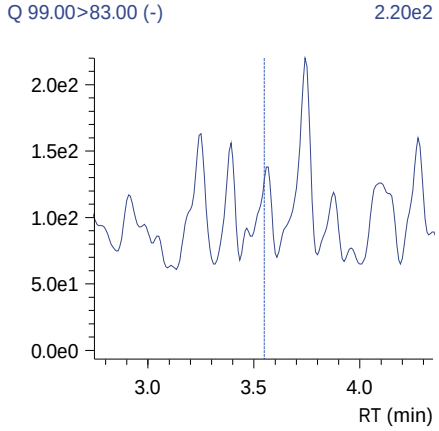
IB

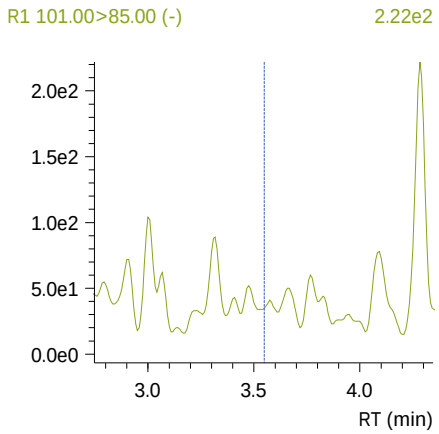
Sample ID: IB
Date Acquired: 1/26/2024 10:19:08 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-001.lcd
Vial: 1 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	288322	----	ng/mL	101.00 >85.00	0.00	23.01 -42.74
Sodium Perchlorate-18O4_IS	Auto	3.558	288322	288322	1.0000	ng/mL	----	----	

Perchlorate

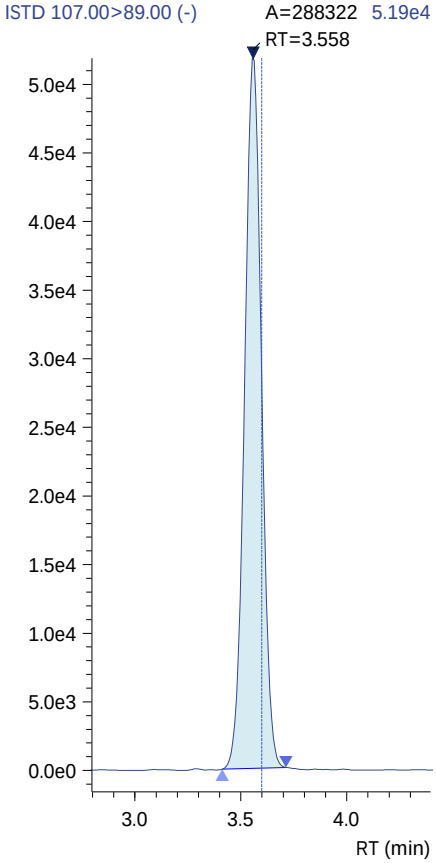
Conc ----
R#1 0.00 (32.88)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/29/2024 2:34:44 PM

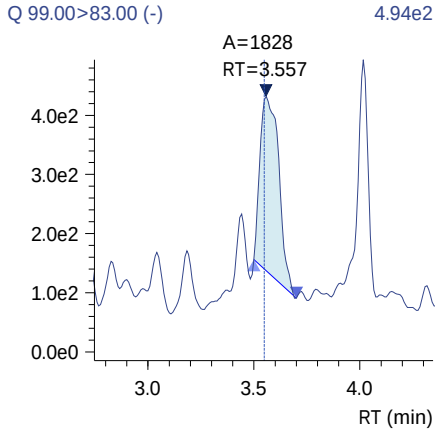
LODV

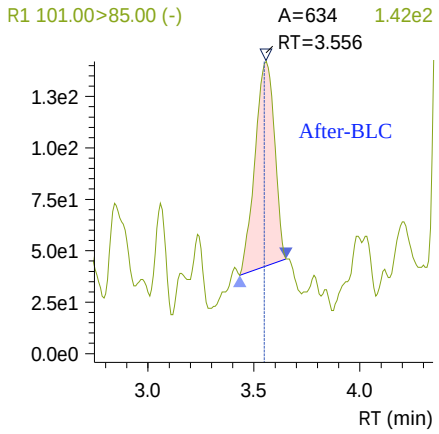
Sample ID: LODV
Date Acquired: 1/26/2024 10:24:37 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-002.lcd
Vial: 2 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	MI R1	3.557	1828	266783	0.0465	ng/mL	101.00 >85.00	34.65	23.01 -42.74
Sodium Perchlorate -18O4_IS	Auto	3.559	266783	266783	1.0000	ng/mL	----	----	

Perchlorate

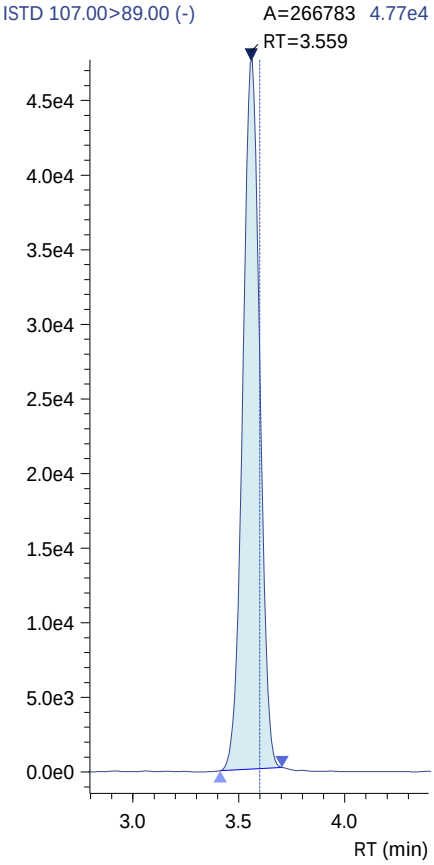
Conc 0.0465
R#1 34.65 (32.88)





Sodium Perchlorate-18O4_IS

Conc 1.0000



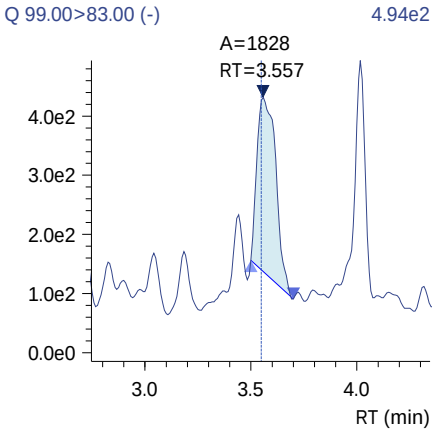
Insight Report

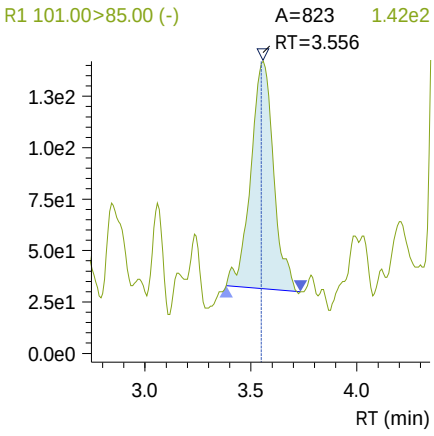
LODV

Sample ID: LODV
Date Acquired: 1/26/2024 10:24:37 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-002.lcd
Vial: 2 | Inj. Volume: 10.0000uL | Tray: 0

Perchlorate

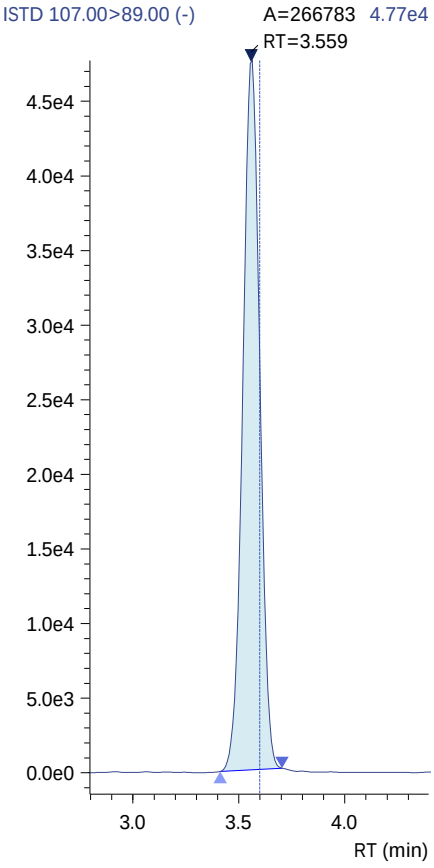
Conc 0.0465
R#1 45.03 (32.88)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/29/2024 2:34:44 PM

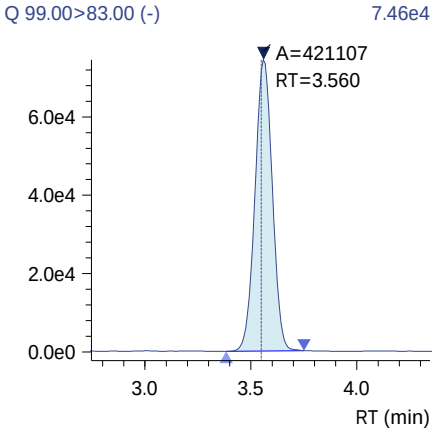
CCV

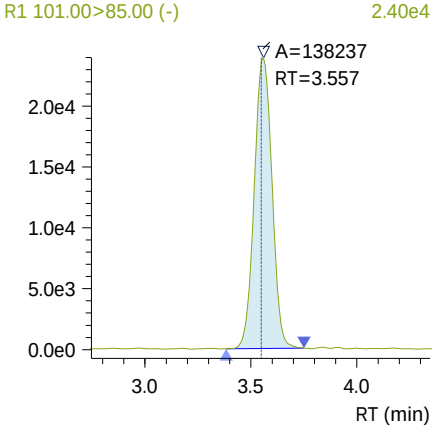
Sample ID: CCV
Date Acquired: 1/26/2024 5:40:58 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-050.lcd
Vial: 7 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.560	421107	280156	10.1933	ng/mL	101.00 >85.00	32.83	23.01 -42.74
Sodium Perchlorate -18O4_IS	Auto	3.557	280156	280156	1.0000	ng/mL	----	----	

Perchlorate

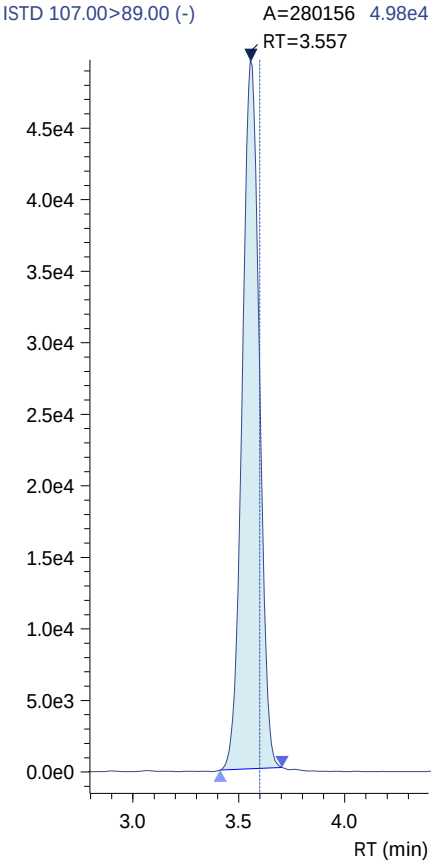
Conc 10.1933
R#1 32.83 (32.88)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/29/2024 2:34:44 PM

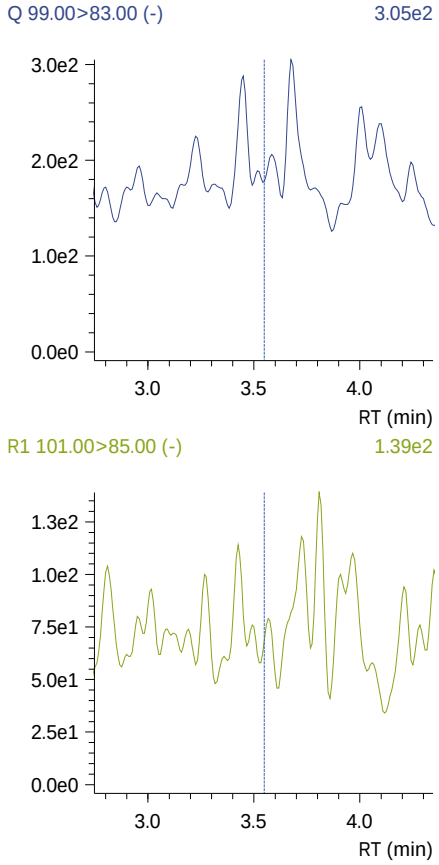
IB

Sample ID: IB
Date Acquired: 1/26/2024 5:46:30 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-051.lcd
Vial: 1 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	300104	----	ng/mL	101.00 >85.00	0.00	23.01 -42.74
Sodium Perchlorate-18O4_IS	Auto	3.557	300104	300104	1.0000	ng/mL	----	----	

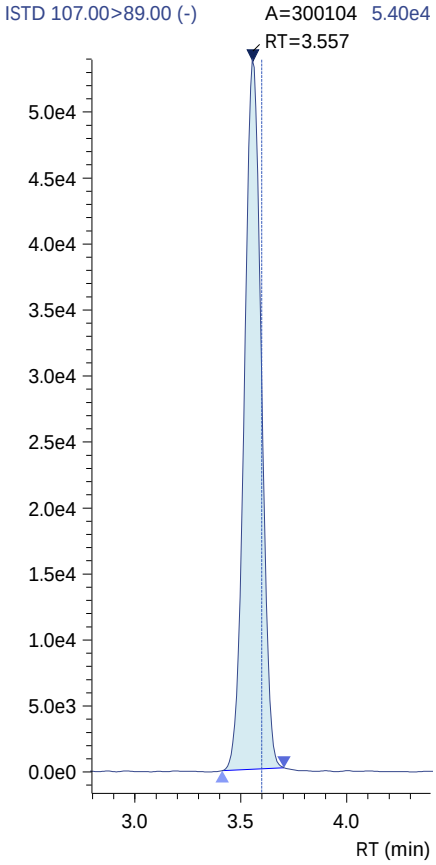
Perchlorate

Conc ----
R#1 0.00 (32.88)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/29/2024 2:34:44 PM

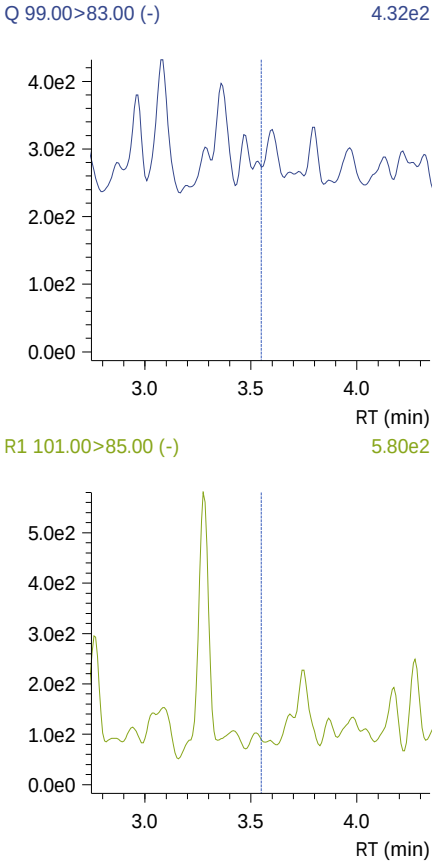
EQ2400041-01 MB

Sample ID: EQ2400041-01
Date Acquired: 1/26/2024 6:28:40 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-058.lcd
Vial: 26 | Inj. Volume: 10.0000uL | 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)	----	----	255042	----	ng/mL	101.00 >85.00	0.00	23.01 -42.74
Sodium Perchlorate-18O4_IS	Auto	3.558	255042	255042	1.0000	ng/mL	----	----	

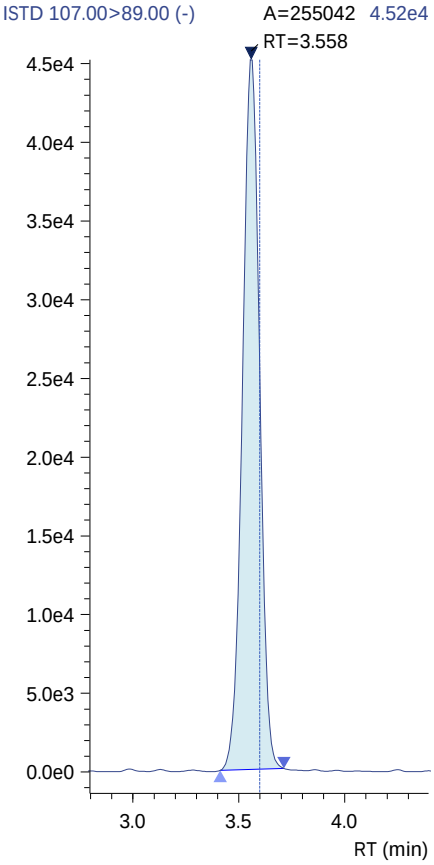
Perchlorate

Conc ----
R#1 0.00 (32.88)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/29/2024 2:34:44 PM

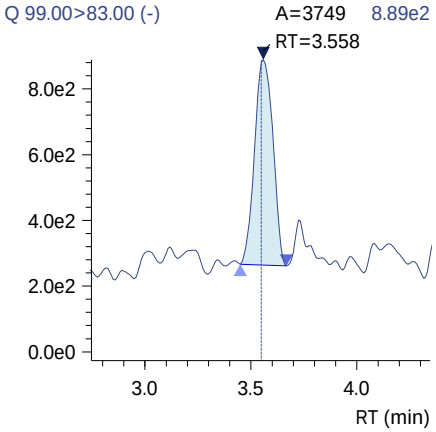
EQ2400041-02 LCS

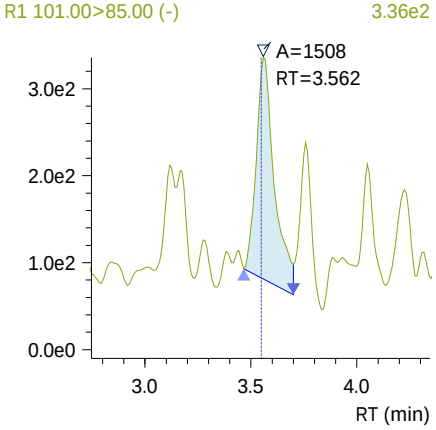
Sample ID: EQ2400041-02
Date Acquired: 1/26/2024 6:34:09 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-059.lcd
Vial: 27 | Inj. Volume: 10.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.558	3749	243705	0.1043	ng/mL	101.00 >85.00	40.23	23.01 -42.74
Sodium Perchlorate -18O4_IS	Auto	3.558	243705	243705	1.0000	ng/mL	----	----	

Perchlorate

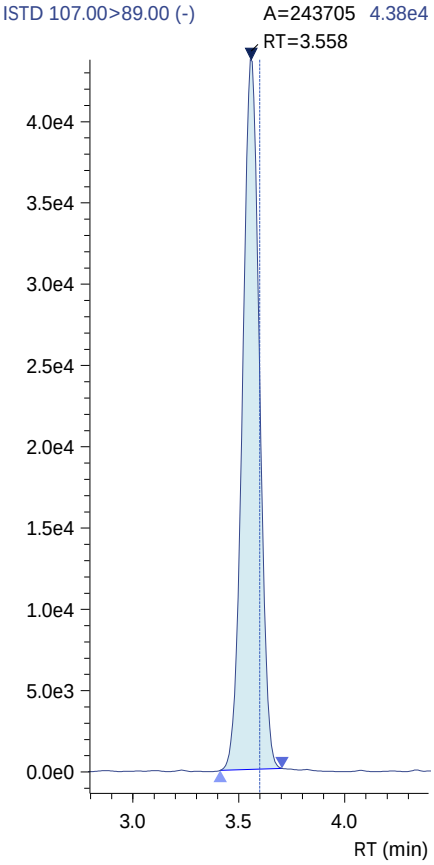
Conc 0.1043
R#1 40.23 (32.88)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/29/2024 2:34:44 PM

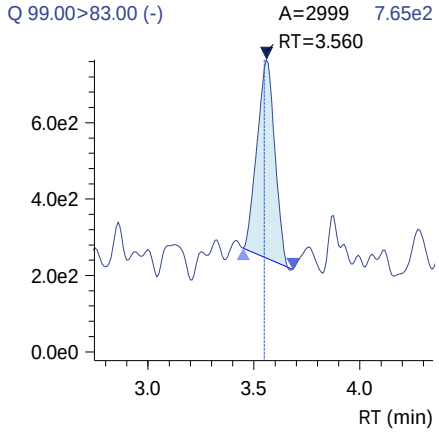
E2400068-014

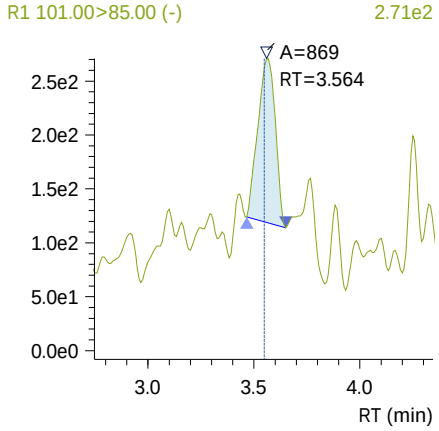
Sample ID: E2400068-014
Date Acquired: 1/26/2024 6:45:12 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-061.lcd
Vial: 50 | Inj. Volume: 10.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.560	2999	300240	0.0677	ng/mL	101.00 >85.00	28.96	23.01 -42.74
Sodium Perchlorate -18O4_IS	Auto	3.556	300240	300240	1.0000	ng/mL	----	----	

Perchlorate

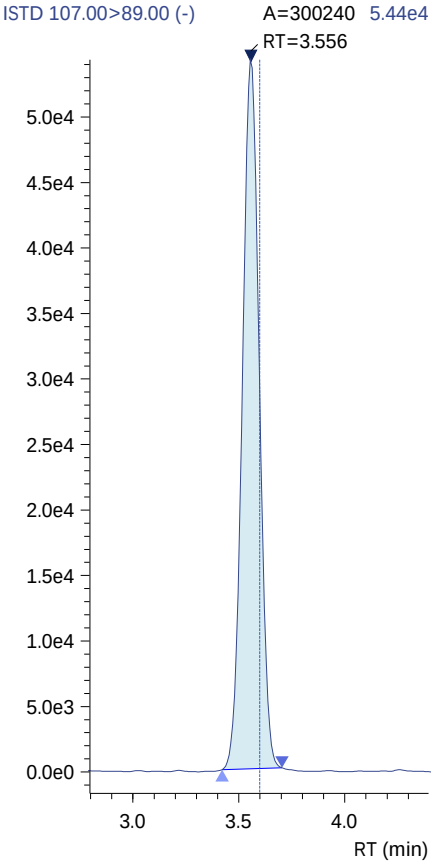
Conc 0.0677
R#1 28.96 (32.88)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/29/2024 2:34:44 PM

CCV

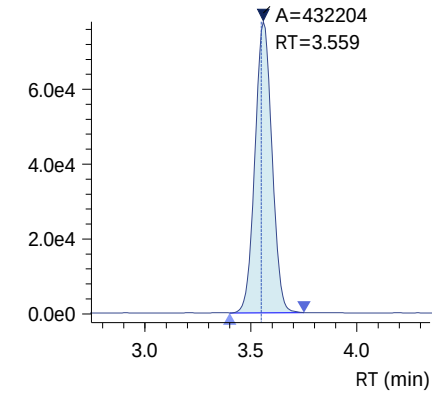
Sample ID: CCV
Date Acquired: 1/26/2024 6:50:47 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-062.lcd
Vial: 7 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.559	432204	274383	10.6820	ng/mL	101.00 >85.00	32.20	23.01 -42.74
Sodium Perchlorate -18O4_IS	Auto	3.557	274383	274383	1.0000	ng/mL	----	----	

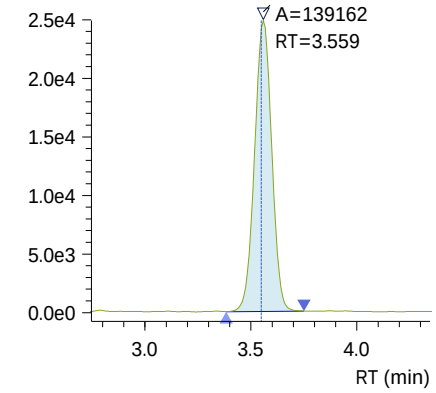
Perchlorate

Conc 10.6820
R#1 32.20 (32.88)

Q 99.00>83.00 (-) 7.81e4



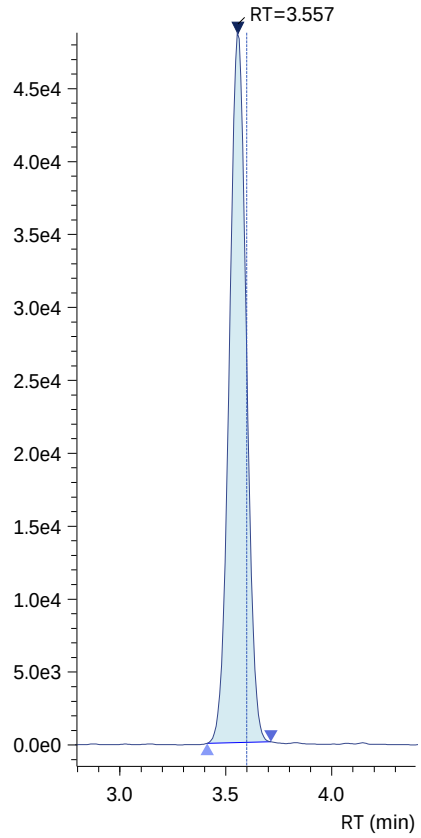
R1 101.00>85.00 (-) 2.49e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=274383 4.88e4



Insight Report

Printed at 1/29/2024 2:34:44 PM

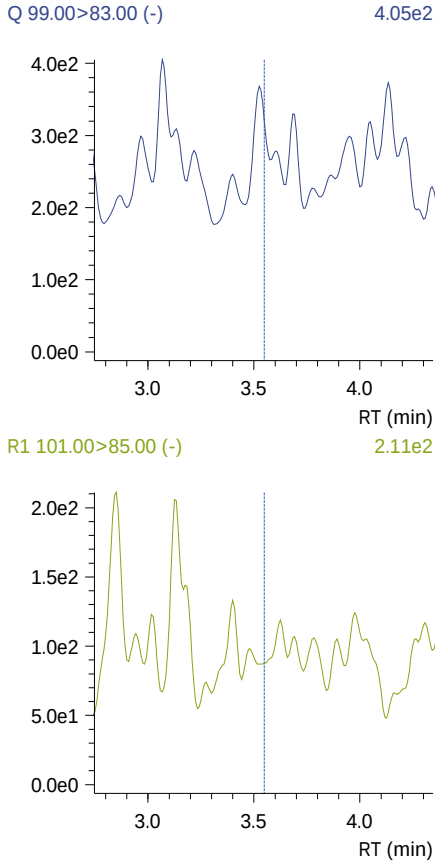
IB

Sample ID: IB
Date Acquired: 1/26/2024 6:56:16 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-063.lcd
Vial: 1 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	295139	----	ng/mL	101.00 >85.00	0.00	23.01 -42.74
Sodium Perchlorate-18O4_IS	Auto	3.557	295139	295139	1.0000	ng/mL	----	----	

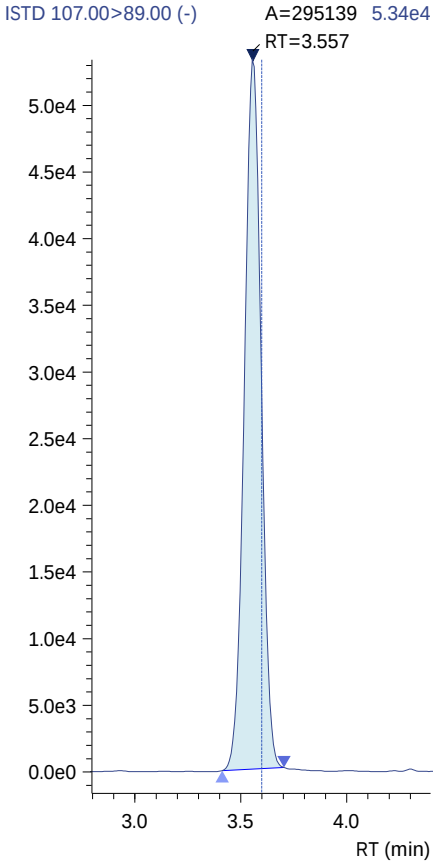
Perchlorate

Conc ----
R#1 0.00 (32.88)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/29/2024 2:34:44 PM

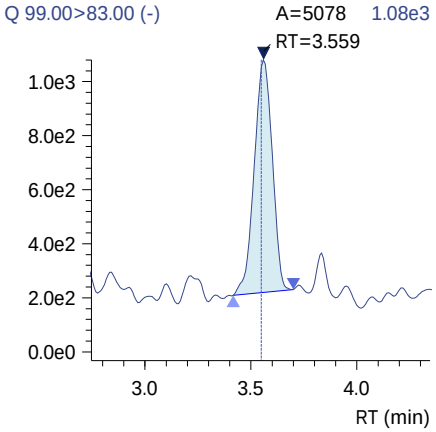
EQ2400041-06 ICS

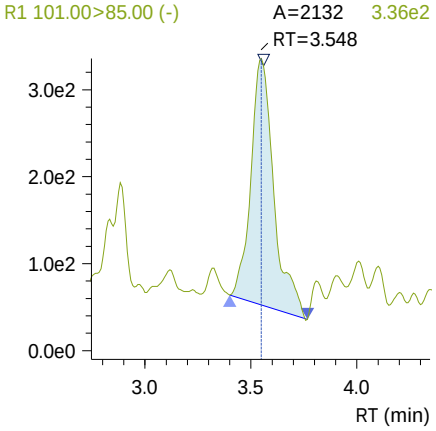
Sample ID: EQ2400041-06
Date Acquired: 1/26/2024 7:12:52 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-066.lcd
Vial: 4 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.559	5078	305348	0.1128	ng/mL	101.00 >85.00	41.98	23.01 -42.74
Sodium Perchlorate -18O4_IS	Auto	3.557	305348	305348	1.0000	ng/mL	----	----	

Perchlorate

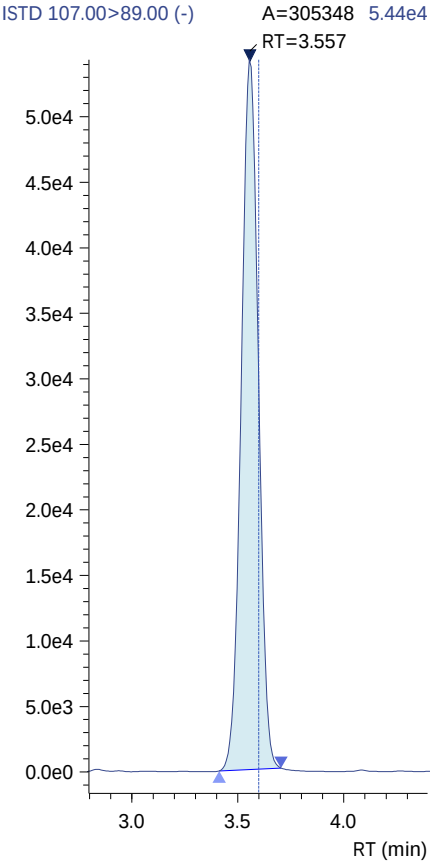
Conc 0.1128
R#1 41.98 (32.88)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/29/2024 2:34:44 PM

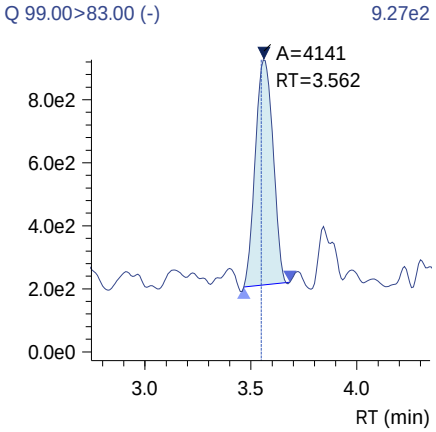
EQ2400041-03 DLCS

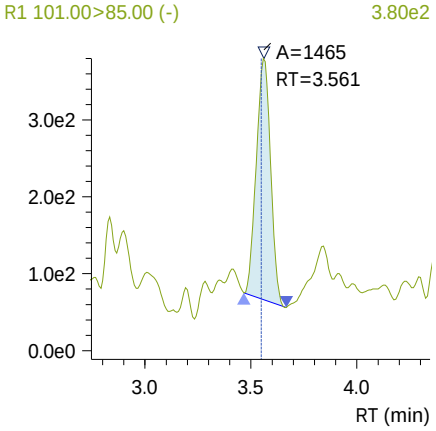
Sample ID: EQ2400041-03
Date Acquired: 1/26/2024 7:18:24 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-067.lcd
Vial: 28 | Inj. Volume: 10.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.562	4141	243722	0.1152	ng/mL	101.00 >85.00	35.38	23.01 -42.74
Sodium Perchlorate -18O4_IS	Auto	3.557	243722	243722	1.0000	ng/mL	----	----	

Perchlorate

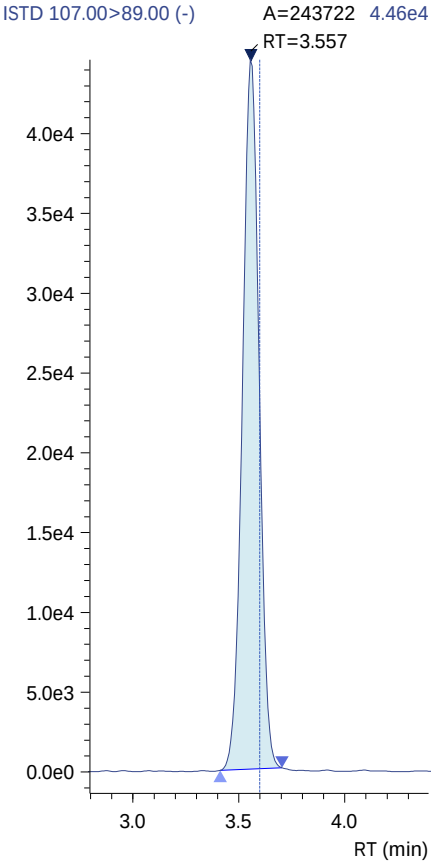
Conc 0.1152
R#1 35.38 (32.88)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/29/2024 2:34:44 PM

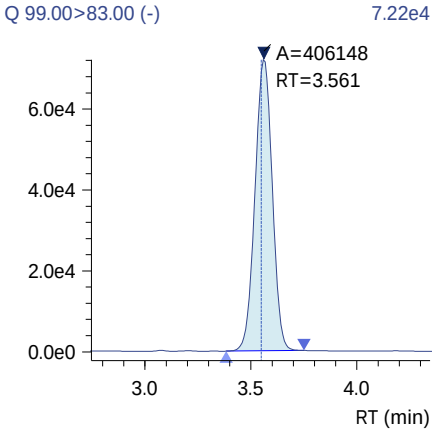
CCV

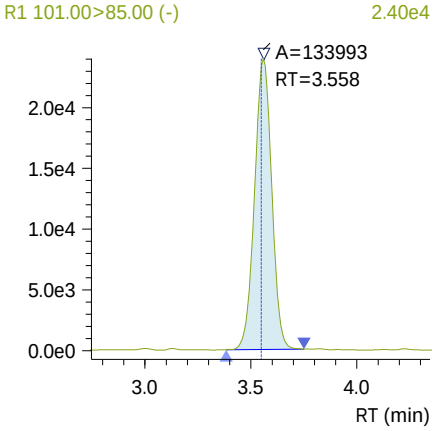
Sample ID: CCV
Date Acquired: 1/26/2024 8:02:14 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-074.lcd
Vial: 7 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.561	406148	266806	10.3231	ng/mL	101.00 >85.00	32.99	23.01 -42.74
Sodium Perchlorate -18O4_IS	Auto	3.556	266806	266806	1.0000	ng/mL	----	----	

Perchlorate

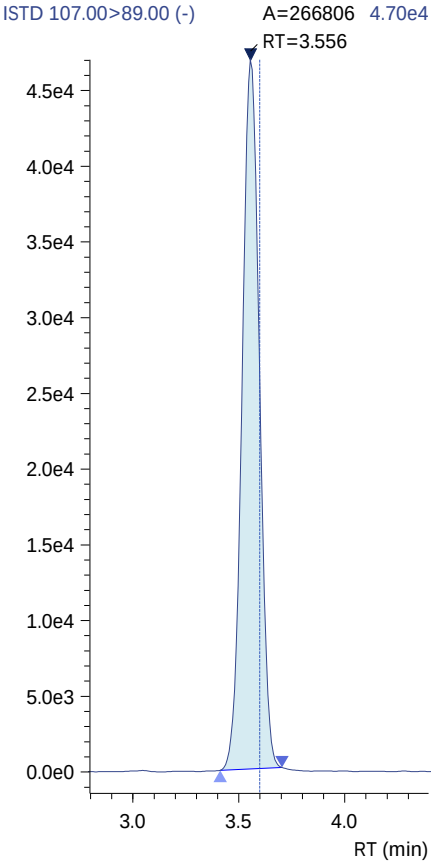
Conc 10.3231
R#1 32.99 (32.88)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/29/2024 2:34:44 PM

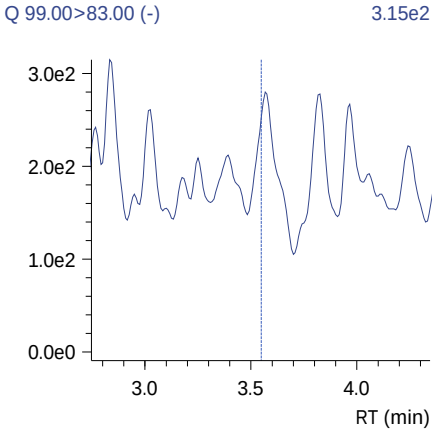
IB

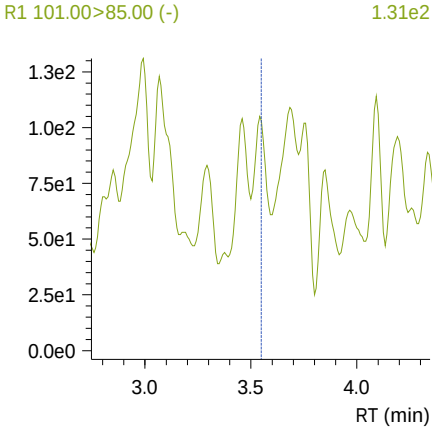
Sample ID: IB
Date Acquired: 1/26/2024 8:07:44 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-075.lcd
Vial: 1 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	283791	----	ng/mL	101.00 >85.00	0.00	23.01 -42.74
Sodium Perchlorate-18O4_IS	Auto	3.555	283791	283791	1.0000	ng/mL	----	----	

Perchlorate

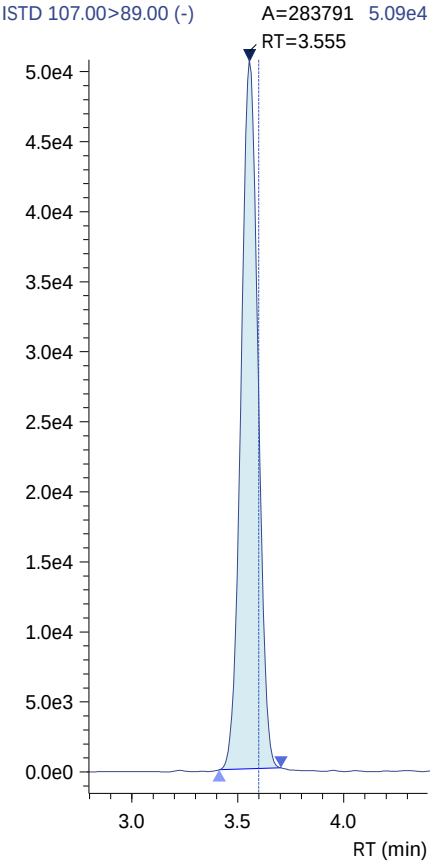
Conc ----
R#1 0.00 (32.88)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/29/2024 2:34:44 PM

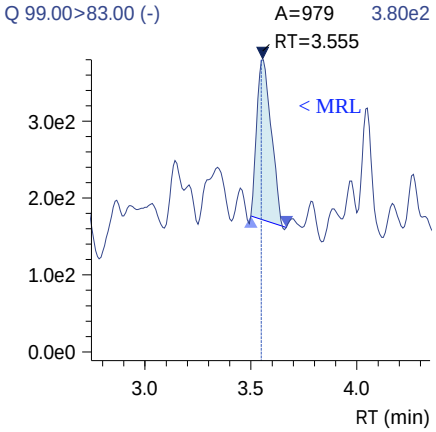
E2400068-001

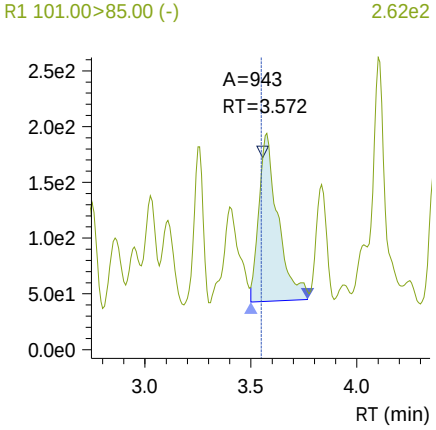
Sample ID: E2400068-001
Date Acquired: 1/26/2024 8:18:47 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-077.lcd
Vial: 37 | Inj. Volume: 10.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.555	979	280433	0.0237	ng/mL	101.00 >85.00	96.37	23.01 -42.74
Sodium Perchlorate -18O4_IS	Auto	3.557	280433	280433	1.0000	ng/mL	----	----	

Perchlorate

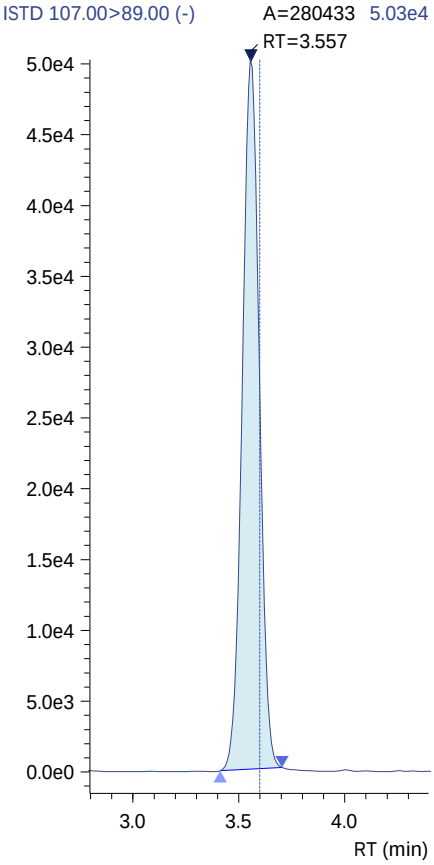
Conc 0.0237
R#1 96.37 (32.88)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/29/2024 2:34:44 PM

E2400068-002x5

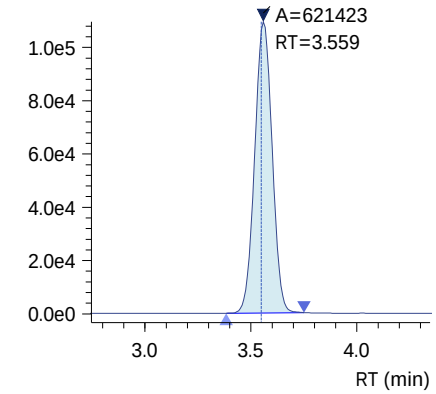
Sample ID: E2400068-002
Date Acquired: 1/26/2024 8:24:19 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-078.lcd
Vial: 38 | Inj. Volume: 10.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.559	621423	279424	15.0815	ng/mL	101.00 >85.00	33.01	23.01 -42.74
Sodium Perchlorate -18O4_IS	Auto	3.557	279424	279424	1.0000	ng/mL	----	----	

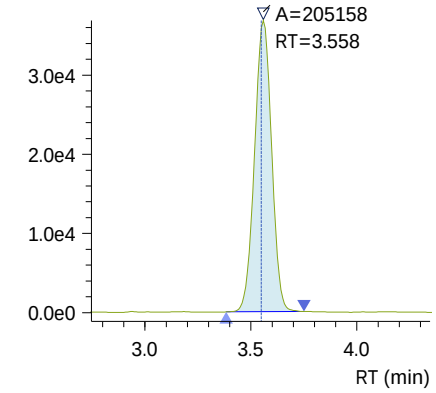
Perchlorate

Conc 15.0815
R#1 33.01 (32.88)

Q 99.00>83.00 (-) 1.10e5



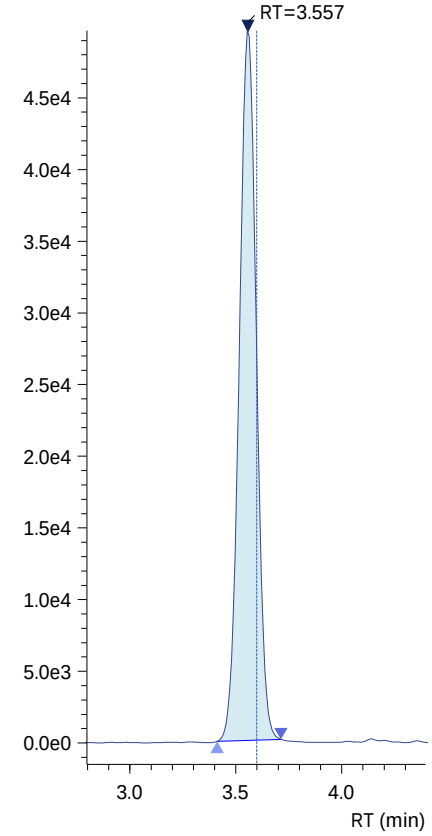
R1 101.00>85.00 (-) 3.69e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=279424 4.97e4



Insight Report

Printed at 1/29/2024 2:34:44 PM

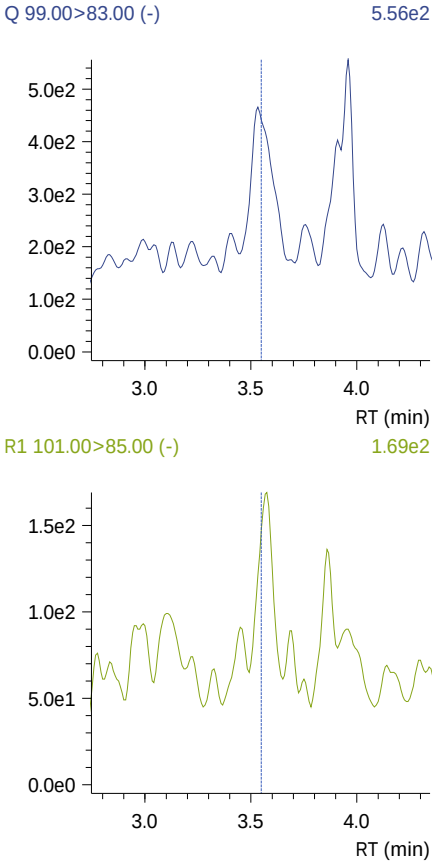
E2400068-003

Sample ID: E2400068-003
Date Acquired: 1/26/2024 8:29:51 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-079.lcd
Vial: 39 | Inj. Volume: 10.0000uL | 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)	----	----	292425	----	ng/mL	101.00 >85.00	0.00	23.01 -42.74
Sodium Perchlorate-18O4_IS	Auto	3.556	292425	292425	1.0000	ng/mL	----	----	

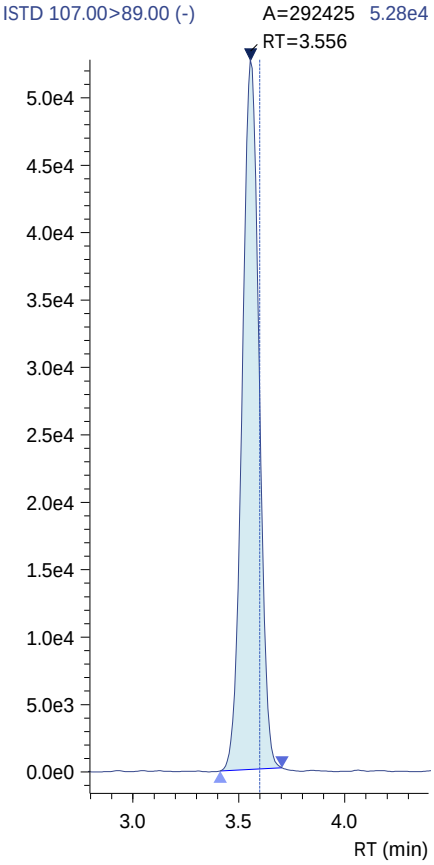
Perchlorate

Conc ----
R#1 0.00 (32.88)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/29/2024 2:34:44 PM

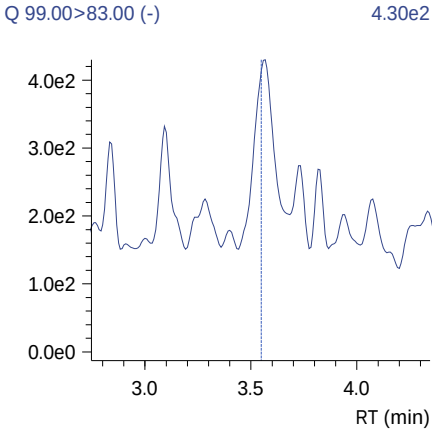
E2400068-004

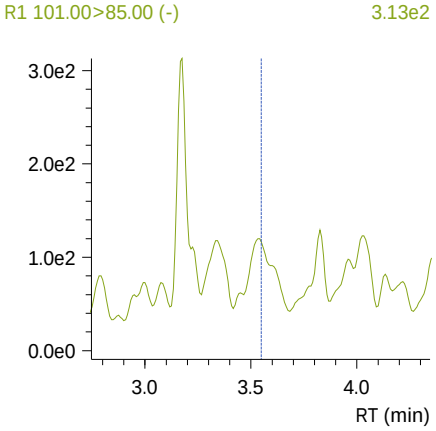
Sample ID: E2400068-004
Date Acquired: 1/26/2024 8:35:21 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-080.lcd
Vial: 40 | Inj. Volume: 10.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	302520	----	ng/mL	101.00 >85.00	0.00	23.01 -42.74
Sodium Perchlorate-18O4_IS	Auto	3.557	302520	302520	1.0000	ng/mL	----	----	

Perchlorate

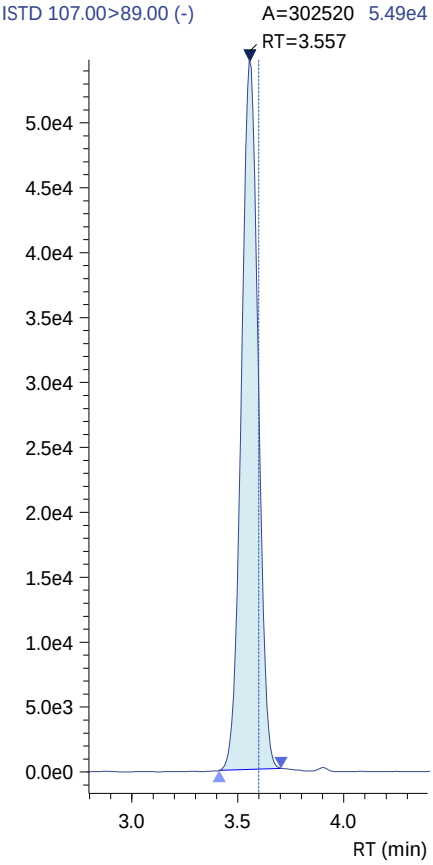
Conc ----
R#1 0.00 (32.88)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/29/2024 2:34:44 PM

E2400068-005

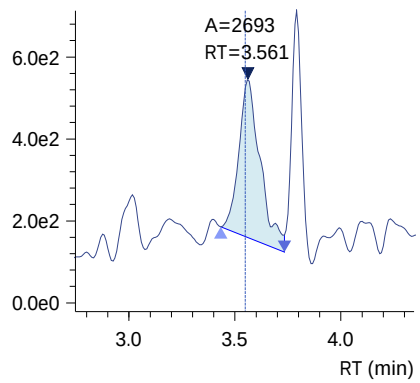
Sample ID: E2400068-005
Date Acquired: 1/26/2024 8:40:51 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-081.lcd
Vial: 41 | Inj. Volume: 10.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.561	2693	270924	0.0674	ng/mL	101.00 >85.00	30.24	23.01 -42.74
Sodium Perchlorate -18O4_IS	Auto	3.558	270924	270924	1.0000	ng/mL	----	----	

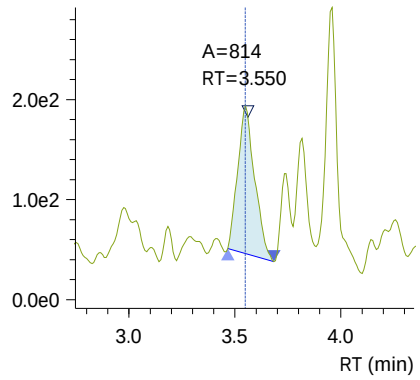
Perchlorate

Conc 0.0674
R#1 30.24 (32.88)

Q 99.00>83.00 (-) 7.13e2



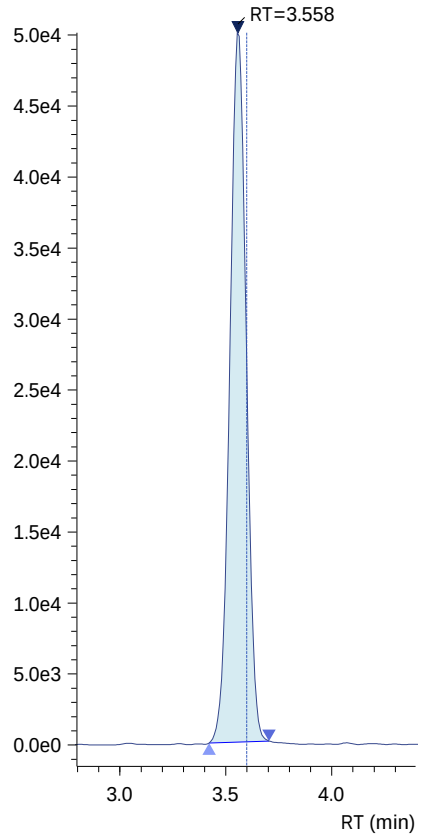
R1 101.00>85.00 (-) 2.92e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=270924 5.02e4



Insight Report

Printed at 1/29/2024 2:34:44 PM

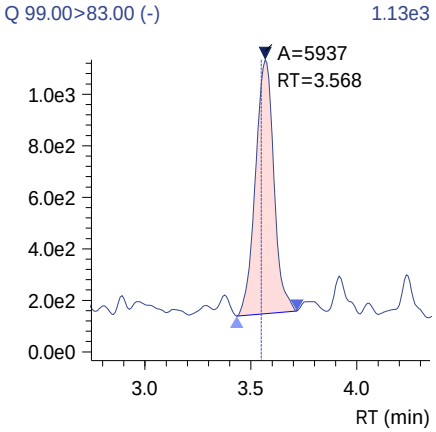
E2400068-006

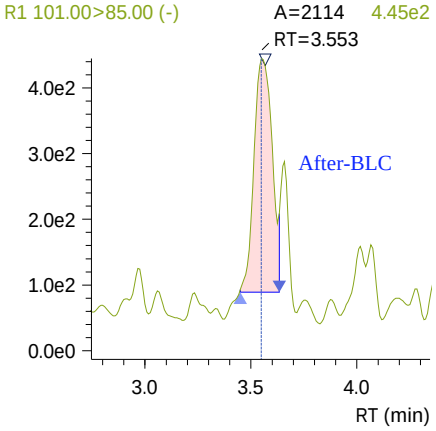
Sample ID: E2400068-006
Date Acquired: 1/26/2024 8:46:20 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-082.lcd
Vial: 42 | Inj. Volume: 10.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	MI	3.568	5937	260086	0.1548	ng/mL	101.00 >85.00	35.61	23.01 -42.74
Sodium Perchlorate -18O4_IS	Auto	3.556	260086	260086	1.0000	ng/mL	----	----	

Perchlorate

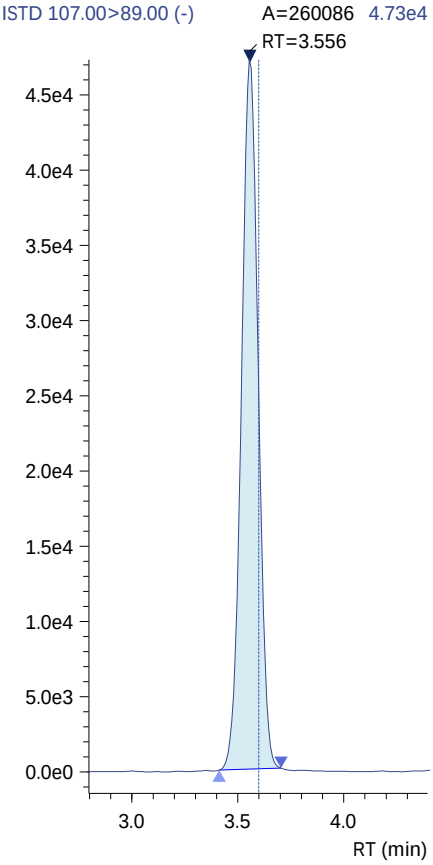
Conc 0.1548
R#1 35.61 (32.88)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/29/2024 3:32:37 PM

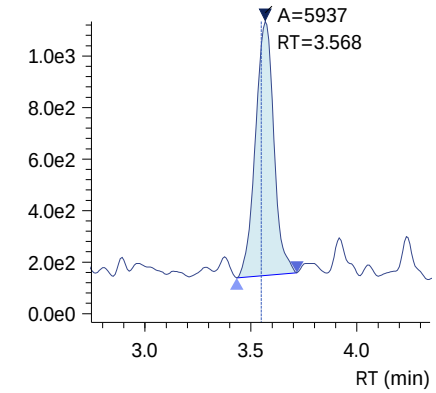
E2400068-006

Sample ID: E2400068-006
Date Acquired: 1/26/2024 8:46:20 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-082.lcd
Vial: 42 | Inj. Volume: 10.0000uL | Tray: 5

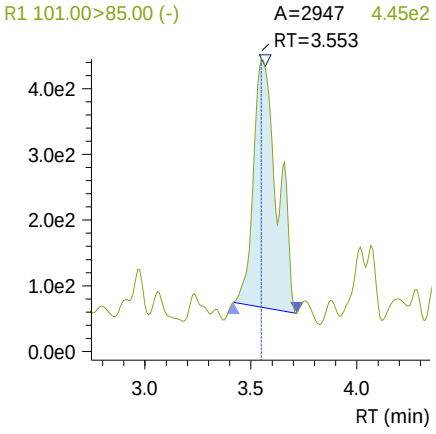
Perchlorate

Conc 0.1548
R#1 49.65 (32.88)

Q 99.00>83.00 (-) 1.13e3



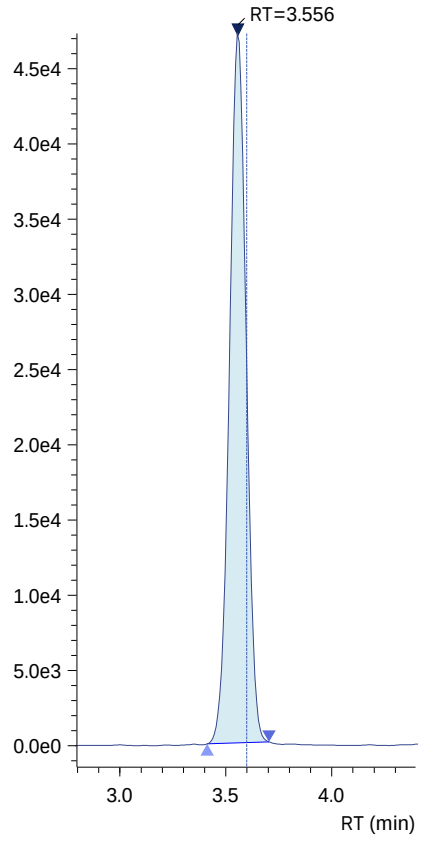
R1 101.00>85.00 (-) A=2947 4.45e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=260086 4.73e4



Insight Report

Printed at 1/29/2024 2:34:44 PM

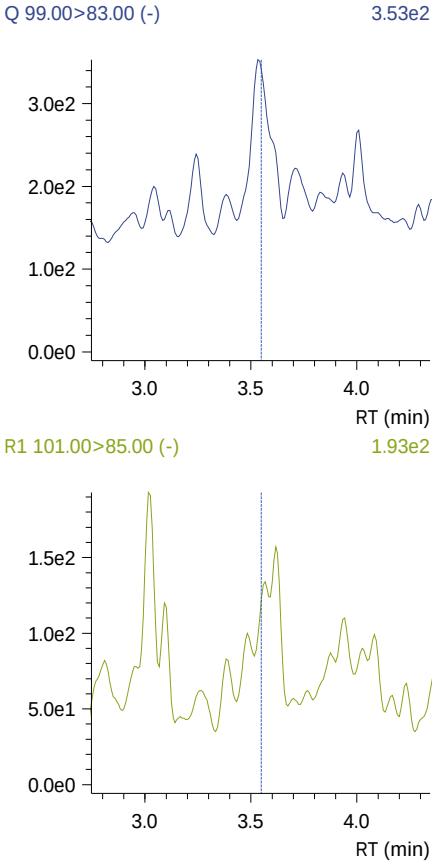
E2400068-007

Sample ID: E2400068-007
Date Acquired: 1/26/2024 8:51:53 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-083.lcd
Vial: 43 | Inj. Volume: 10.0000uL | 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)	----	----	299917	----	ng/mL	101.00 >85.00	0.00	23.01 -42.74
Sodium Perchlorate-18O4_IS	Auto	3.557	299917	299917	1.0000	ng/mL	----	----	

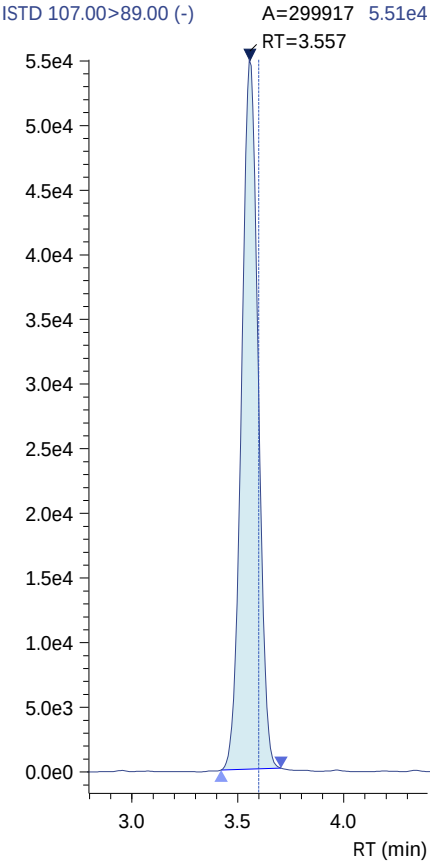
Perchlorate

Conc ----
R#1 0.00 (32.88)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/29/2024 2:34:44 PM

E2400068-008

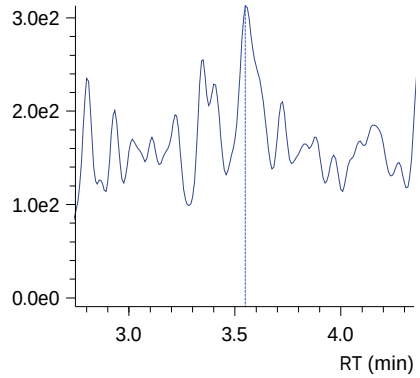
Sample ID: E2400068-008
Date Acquired: 1/26/2024 8:57:23 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-084.lcd
Vial: 44 | Inj. Volume: 10.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	263101	----	ng/mL	101.00 >85.00	0.00	23.01 -42.74
Sodium Perchlorate-18O4_IS	Auto	3.558	263101	263101	1.0000	ng/mL	----	----	

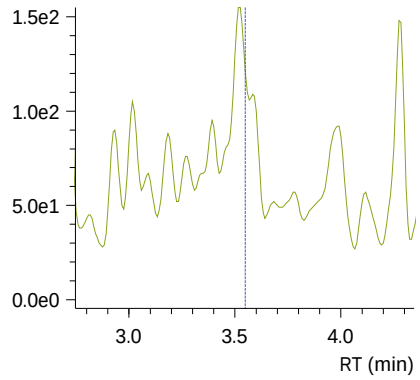
Perchlorate

Conc ----
R#1 0.00 (32.88)

Q 99.00>83.00 (-) 3.13e2



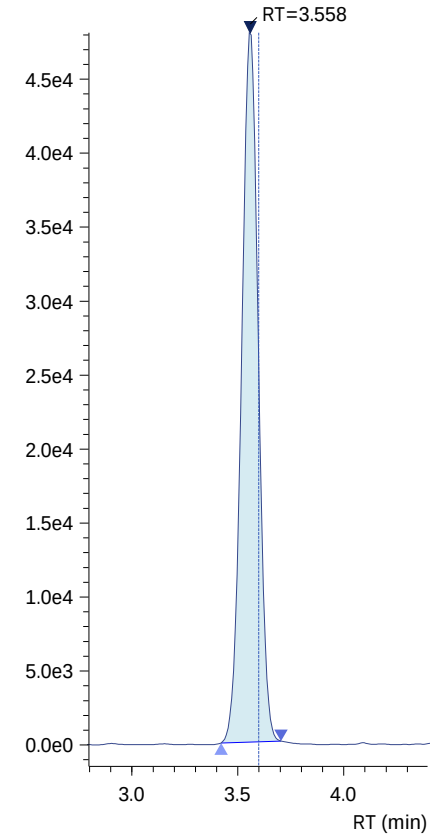
R1 101.00>85.00 (-) 1.55e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=263101 4.81e4



Insight Report

Printed at 1/29/2024 2:34:44 PM

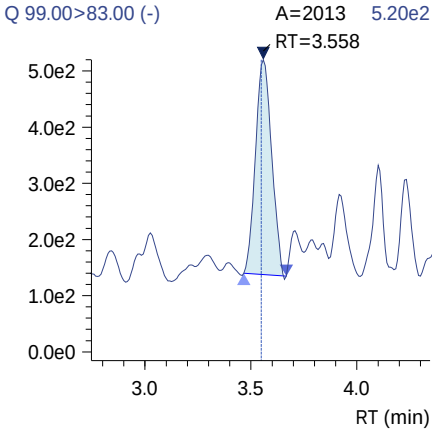
E2400068-009

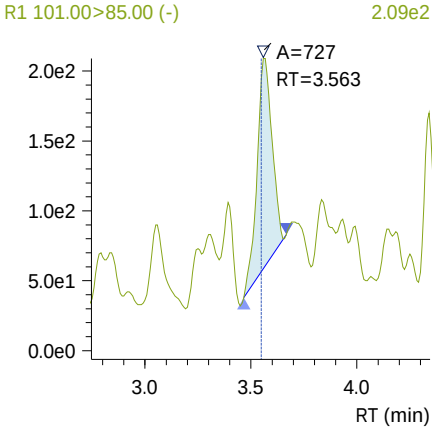
Sample ID: E2400068-009
Date Acquired: 1/26/2024 9:02:53 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-085.lcd
Vial: 45 | Inj. Volume: 10.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.558	2013	260674	0.0524	ng/mL	101.00 >85.00	36.10	23.01 -42.74
Sodium Perchlorate -18O4_IS	Auto	3.557	260674	260674	1.0000	ng/mL	----	----	

Perchlorate

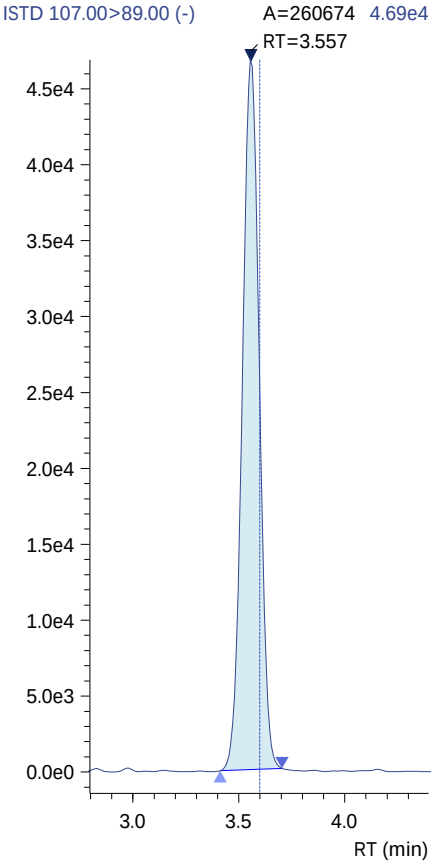
Conc 0.0524
R#1 36.10 (32.88)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/29/2024 2:34:44 PM

CCV

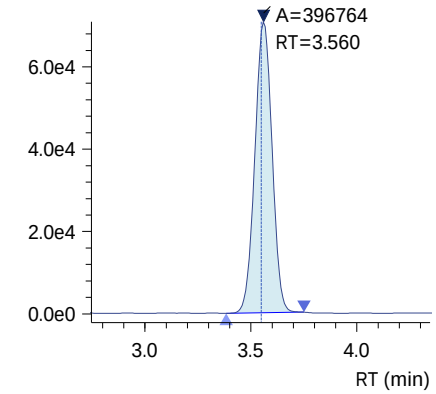
Sample ID: CCV
Date Acquired: 1/26/2024 9:08:27 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-086.lcd
Vial: 7 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.560	396764	255861	10.5160	ng/mL	101.00 >85.00	32.87	23.01 -42.74
Sodium Perchlorate -18O4_IS	Auto	3.555	255861	255861	1.0000	ng/mL	----	----	

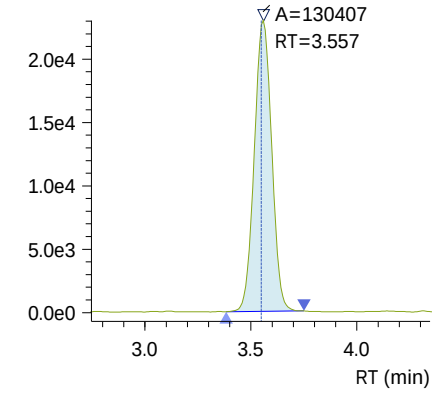
Perchlorate

Conc 10.5160
R#1 32.87 (32.88)

Q 99.00>83.00 (-) 7.10e4



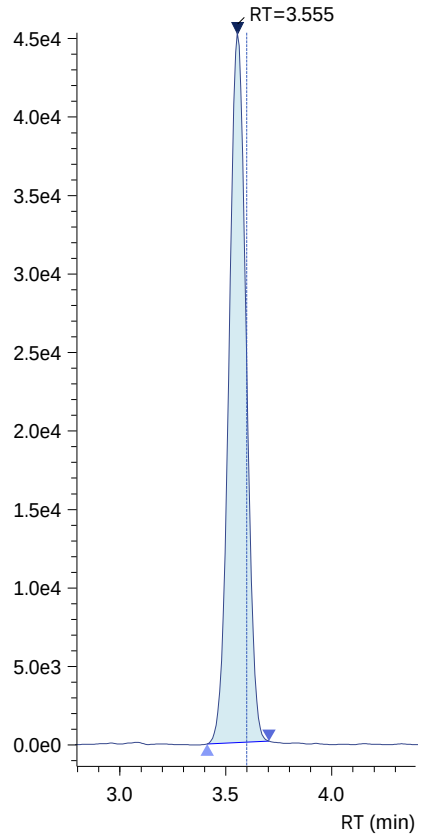
R1 101.00>85.00 (-) 2.31e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=255861 4.54e4



Insight Report

Printed at 1/29/2024 2:34:44 PM

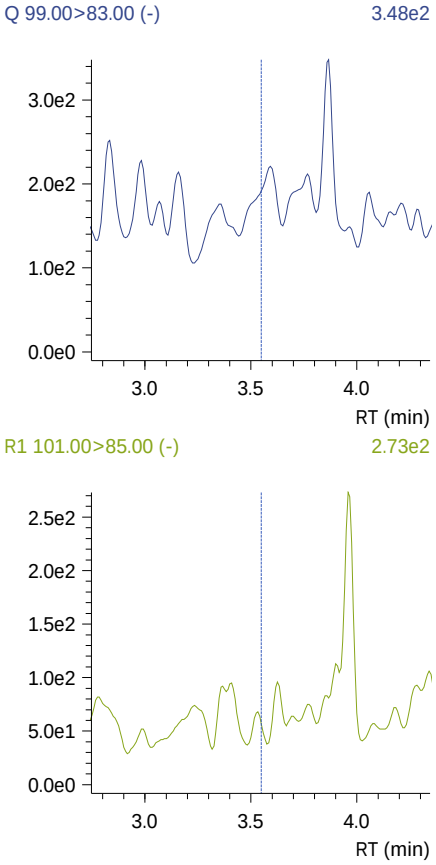
IB

Sample ID: IB
Date Acquired: 1/26/2024 9:13:59 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-087.lcd
Vial: 1 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	273150	----	ng/mL	101.00 >85.00	0.00	23.01 -42.74
Sodium Perchlorate-18O4_IS	Auto	3.557	273150	273150	1.0000	ng/mL	----	----	

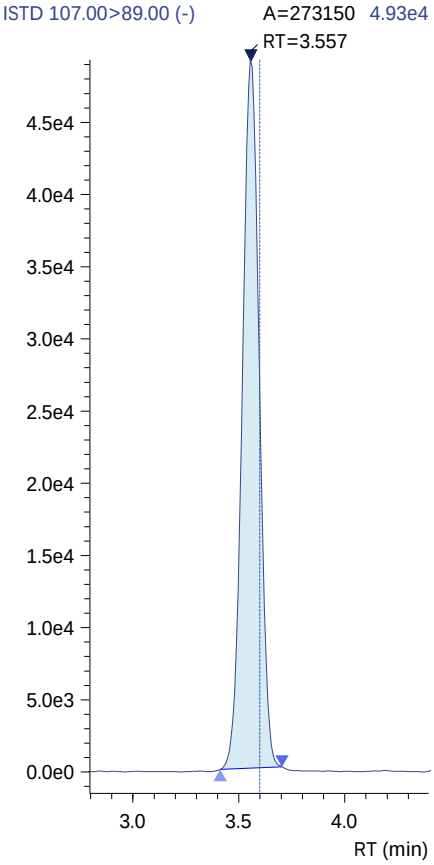
Perchlorate

Conc ----
R#1 0.00 (32.88)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/29/2024 2:34:44 PM

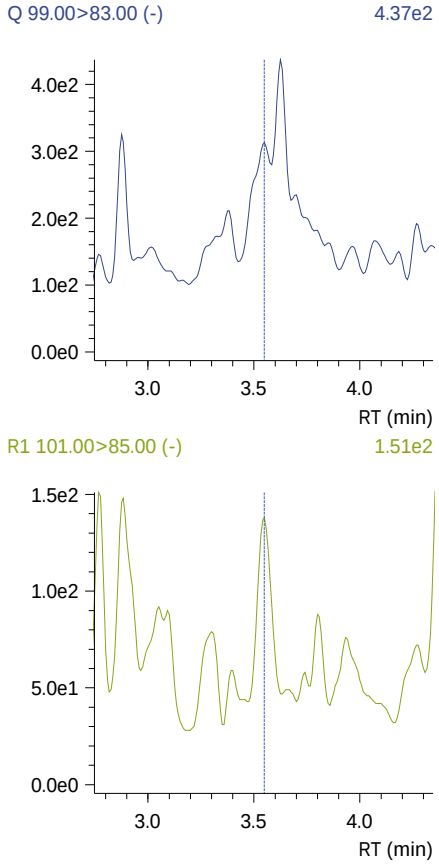
E2400068-010

Sample ID: E2400068-010
Date Acquired: 1/26/2024 9:19:28 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-088.lcd
Vial: 46 | Inj. Volume: 10.0000uL | 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)	----	----	285210	----	ng/mL	101.00 >85.00	0.00	23.01 -42.74
Sodium Perchlorate-18O4_IS	Auto	3.558	285210	285210	1.0000	ng/mL	----	----	

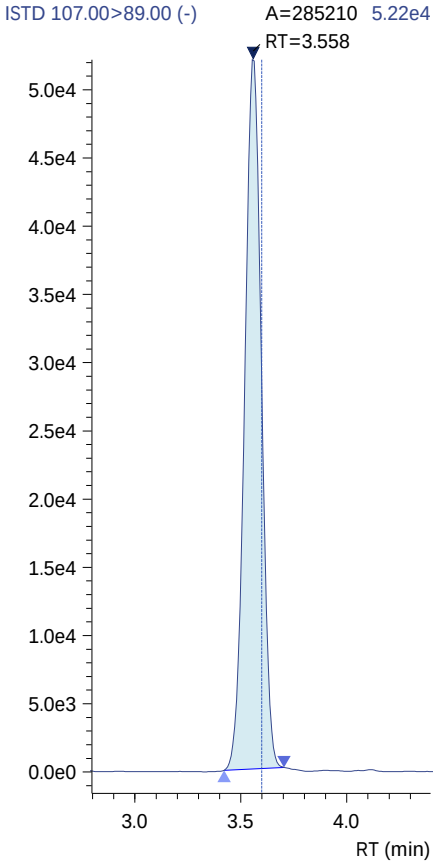
Perchlorate

Conc ----
R#1 0.00 (32.88)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/29/2024 2:34:44 PM

E2400068-011

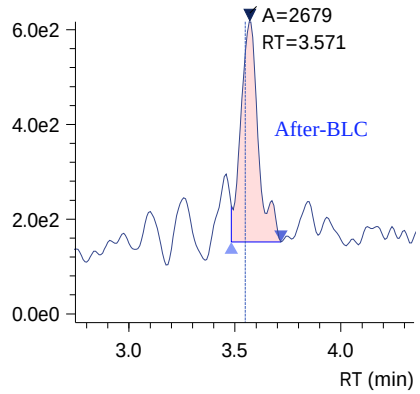
Sample ID: E2400068-011
Date Acquired: 1/26/2024 9:25:01 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-089.lcd
Vial: 47 | Inj. Volume: 10.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	M	3.571	2679	262897	0.0691	ng/mL	101.00 >85.00	33.97	23.01 -42.74
Sodium Perchlorate -18O4_IS	Auto	3.555	262897	262897	1.0000	ng/mL	----	----	

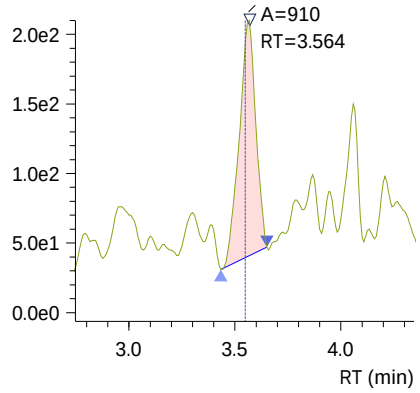
Perchlorate

Conc 0.0691
R#1 33.97 (32.88)

Q 99.00>83.00 (-) 6.17e2



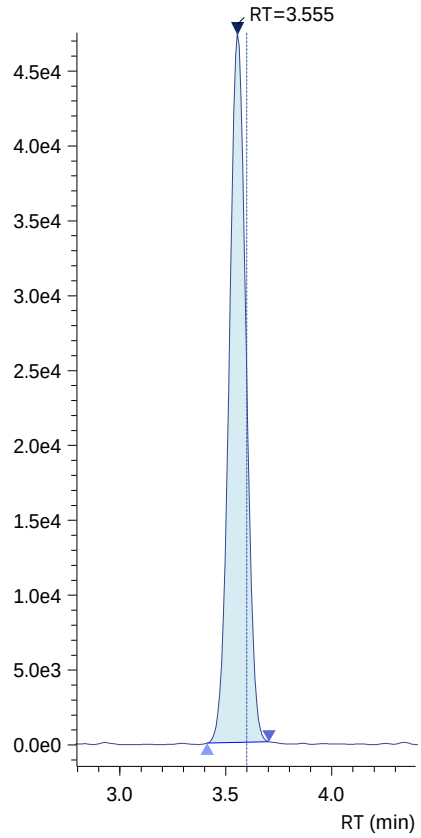
R1 101.00>85.00 (-) 2.10e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=262897 4.76e4



Insight Report

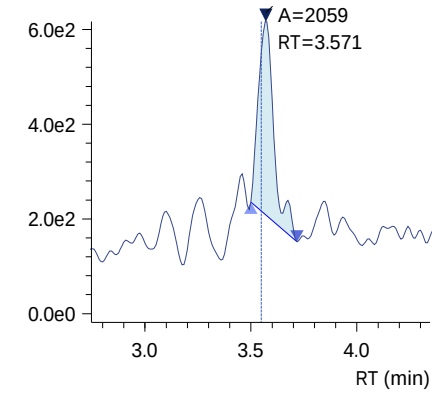
E2400068-011

Sample ID: E2400068-011
Date Acquired: 1/26/2024 9:25:01 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-089.lcd
Vial: 47 | Inj. Volume: 10.0000uL | Tray: 5

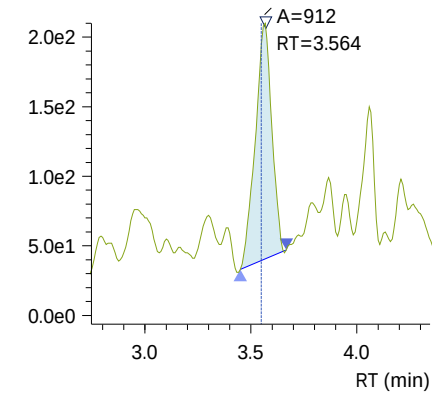
Perchlorate

Conc 0.0531
R#1 44.28 (32.88)

Q 99.00>83.00 (-) 6.17e2



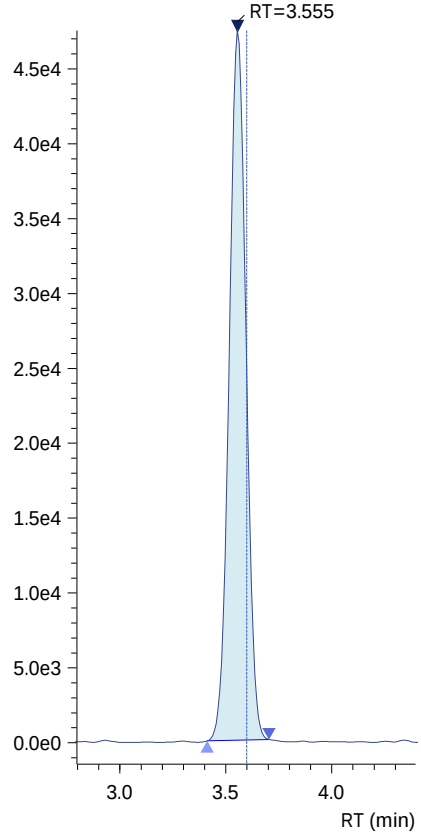
R1 101.00>85.00 (-) 2.10e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=262897 4.76e4



Insight Report

Printed at 1/29/2024 2:34:44 PM

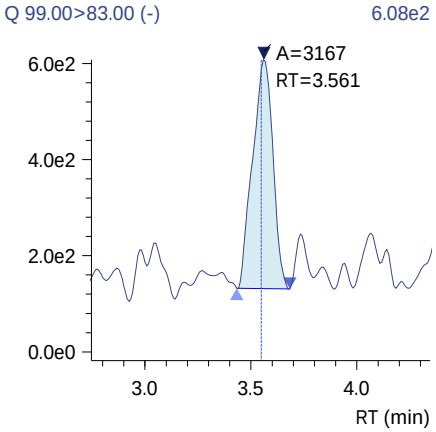
E2400068-012

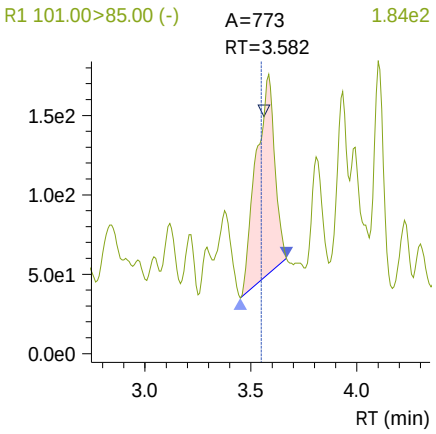
Sample ID: E2400068-012
Date Acquired: 1/26/2024 9:30:32 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-090.lcd
Vial: 48 | Inj. Volume: 10.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	MI R1	3.561	3167	264318	0.0813	ng/mL	101.00 >85.00	24.41	23.01 -42.74
Sodium Perchlorate -18O4_IS	Auto	3.556	264318	264318	1.0000	ng/mL	----	----	

Perchlorate

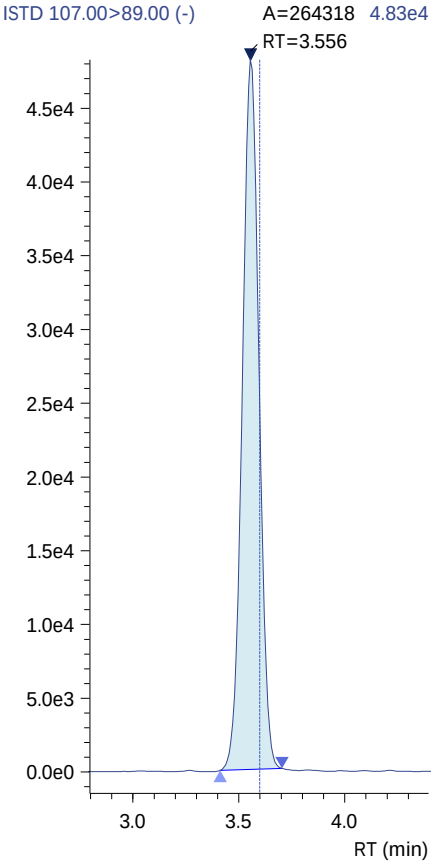
Conc 0.0813
R#1 24.41 (32.88)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/29/2024 3:32:37 PM

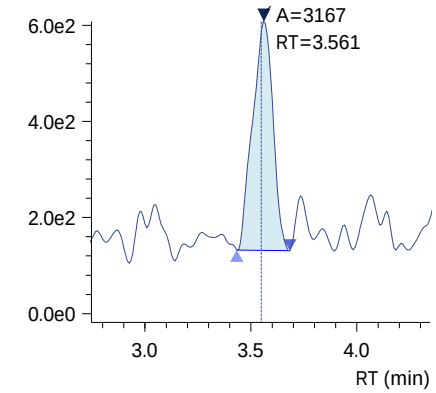
E2400068-012

Sample ID: E2400068-012
Date Acquired: 1/26/2024 9:30:32 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-090.lcd
Vial: 48 | Inj. Volume: 10.0000uL | Tray: 5

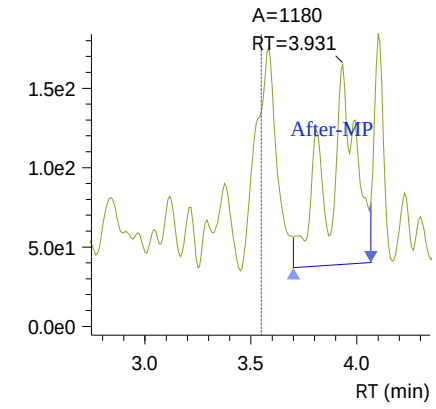
Perchlorate

Conc 0.0813
R#1 0.00 (32.88)

Q 99.00>83.00 (-) 6.08e2



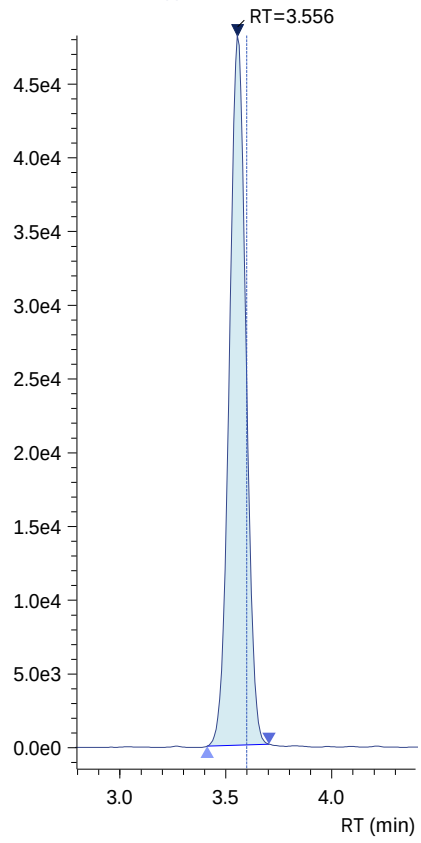
R1 101.00>85.00 (-) 1.84e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=264318 4.83e4



Insight Report

Printed at 1/29/2024 2:34:44 PM

CCV

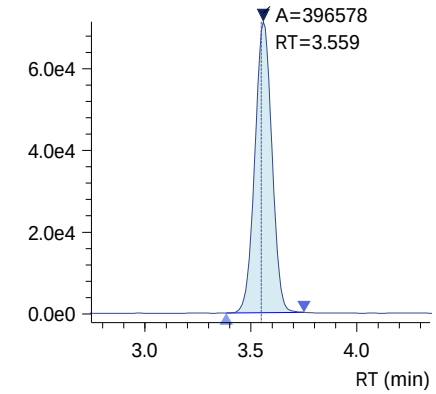
Sample ID: CCV
Date Acquired: 1/26/2024 10:14:47 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-098.lcd
Vial: 7 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.559	396578	252116	10.6672	ng/mL	101.00 >85.00	32.59	23.01 -42.74
Sodium Perchlorate -18O4_IS	Auto	3.556	252116	252116	1.0000	ng/mL	----	----	

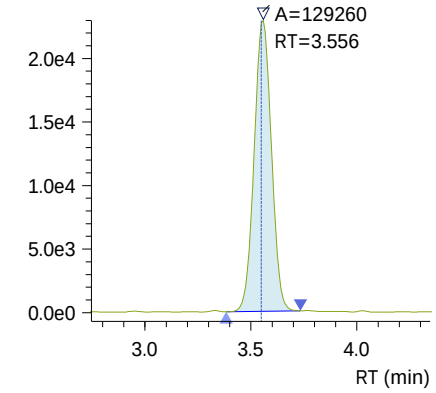
Perchlorate

Conc 10.6672
R#1 32.59 (32.88)

Q 99.00>83.00 (-) 7.15e4



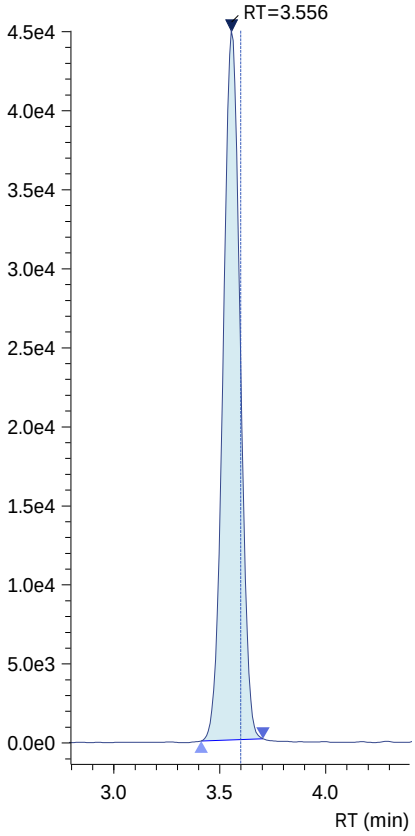
R1 101.00>85.00 (-) 2.30e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=252116 4.51e4



Insight Report

Printed at 1/29/2024 2:34:44 PM

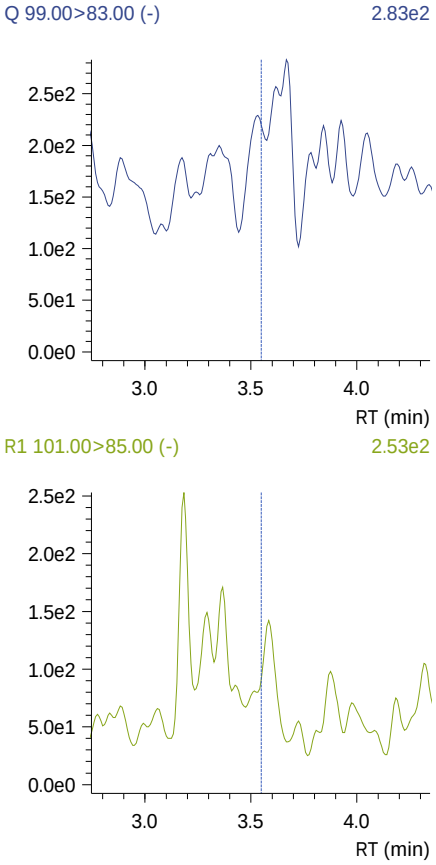
IB

Sample ID: IB
Date Acquired: 1/26/2024 10:20:19 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-099.lcd
Vial: 1 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	274221	----	ng/mL	101.00 >85.00	0.00	23.01 -42.74
Sodium Perchlorate-18O4_IS	Auto	3.555	274221	274221	1.0000	ng/mL	----	----	

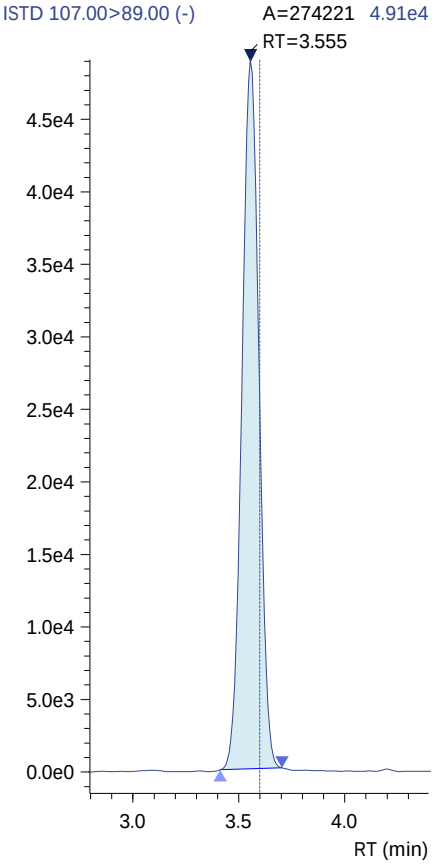
Perchlorate

Conc ----
R#1 0.00 (32.88)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/29/2024 2:34:44 PM

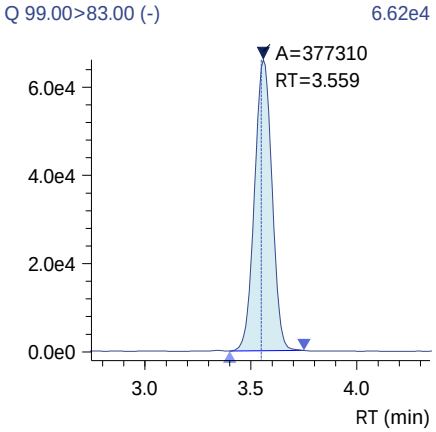
CCV

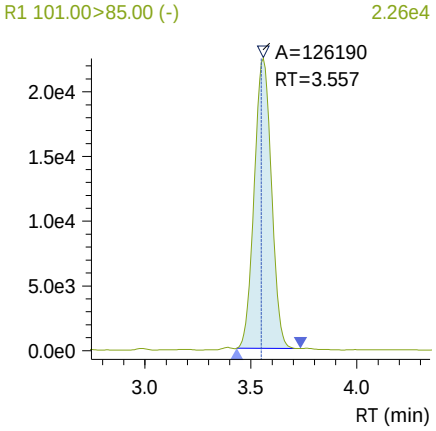
Sample ID: CCV
Date Acquired: 1/26/2024 11:27:05 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-110.lcd
Vial: 7 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.559	377310	246409	10.3839	ng/mL	101.00 >85.00	33.45	23.01 -42.74
Sodium Perchlorate -18O4_IS	Auto	3.555	246409	246409	1.0000	ng/mL	----	----	

Perchlorate

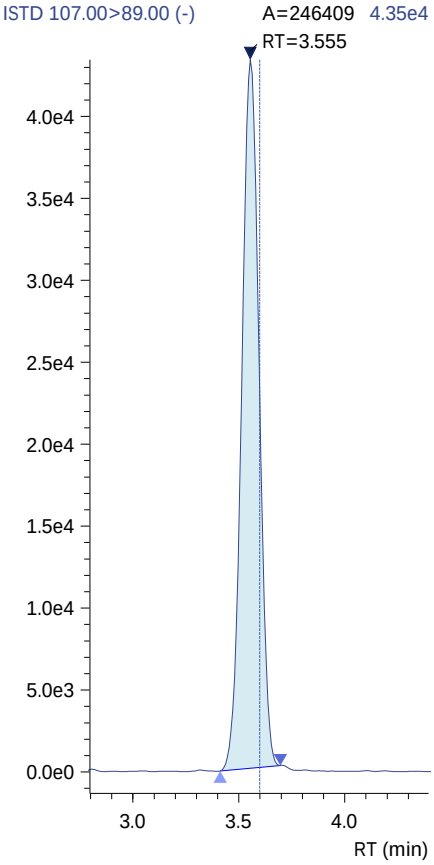
Conc 10.3839
R#1 33.45 (32.88)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/29/2024 2:34:44 PM

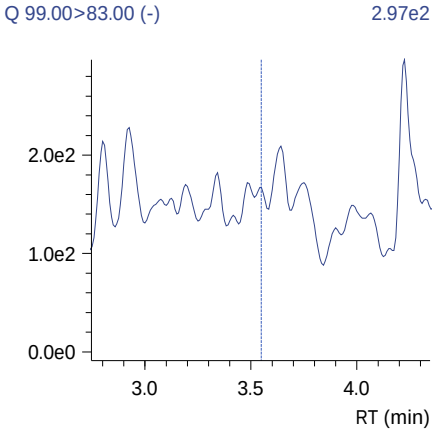
IB

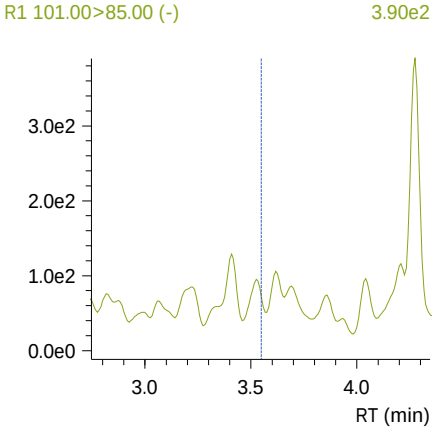
Sample ID: IB
Date Acquired: 1/26/2024 11:32:35 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-111.lcd
Vial: 1 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	266668	----	ng/mL	101.00 >85.00	0.00	23.01 -42.74
Sodium Perchlorate-18O4_IS	Auto	3.556	266668	266668	1.0000	ng/mL	----	----	

Perchlorate

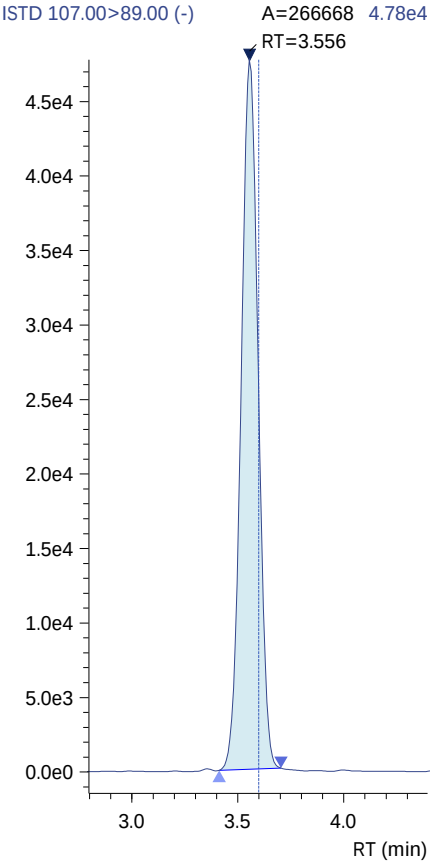
Conc ----
R#1 0.00 (32.88)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/29/2024 2:34:44 PM

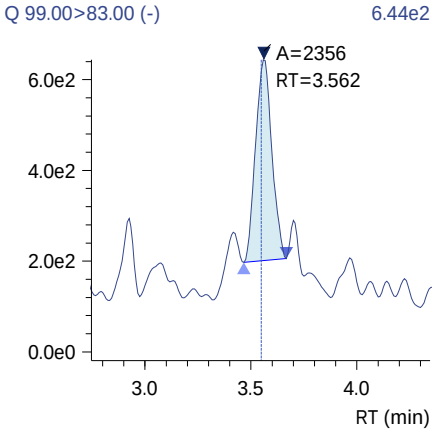
E2400068-013

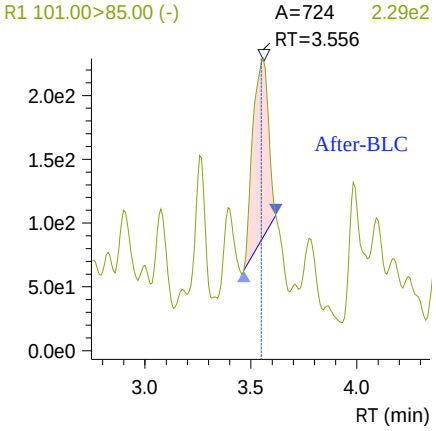
Sample ID: E2400068-013
Date Acquired: 1/27/2024 12:05:48 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-117.lcd
Vial: 49 | Inj. Volume: 10.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	MI R1	3.562	2356	254610	0.0628	ng/mL	101.00 >85.00	30.72	23.01 -42.74
Sodium Perchlorate -18O4_IS	Auto	3.555	254610	254610	1.0000	ng/mL	----	----	

Perchlorate

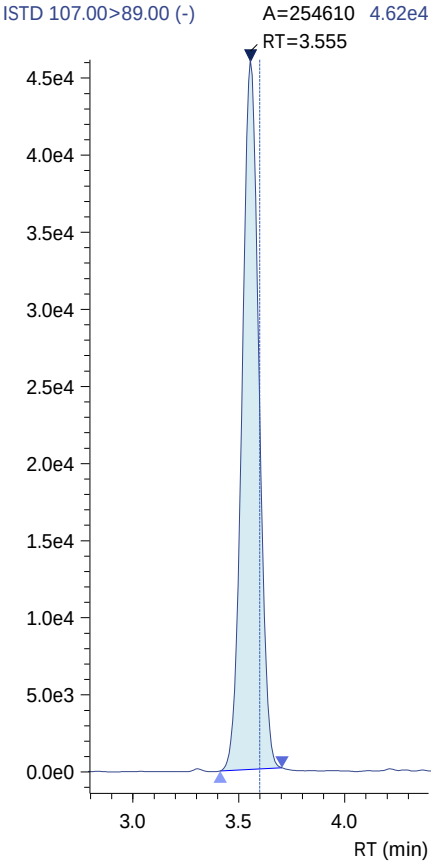
Conc 0.0628
R#1 30.72 (32.88)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/29/2024 3:32:37 PM

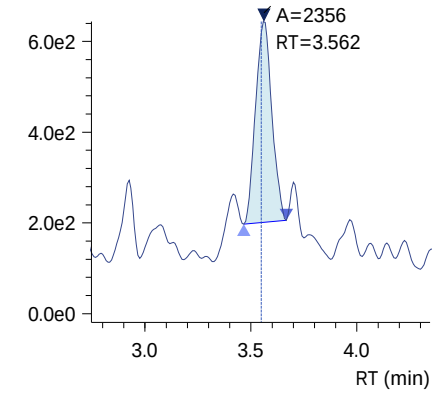
E2400068-013

Sample ID: E2400068-013
Date Acquired: 1/27/2024 12:05:48 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-117.lcd
Vial: 49 | Inj. Volume: 10.0000uL | Tray: 5

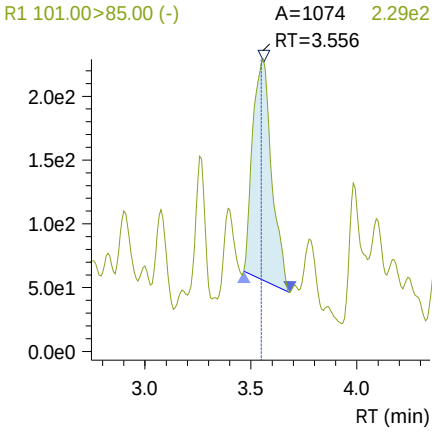
Perchlorate

Conc 0.0628
R#1 45.57 (32.88)

Q 99.00>83.00 (-) 6.44e2



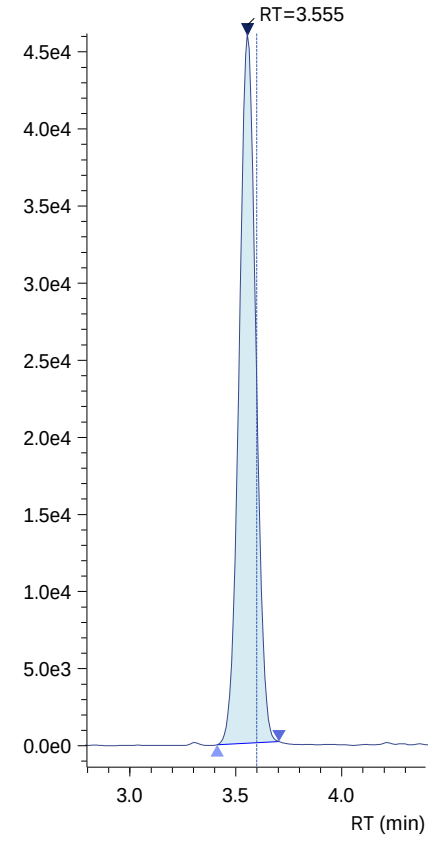
R1 101.00>85.00 (-) A=1074 2.29e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=254610 4.62e4



Insight Report

Printed at 1/29/2024 2:34:44 PM

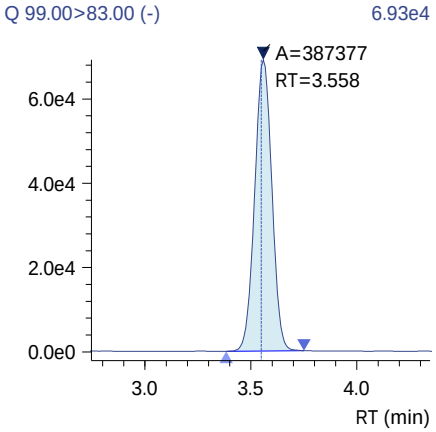
CCV

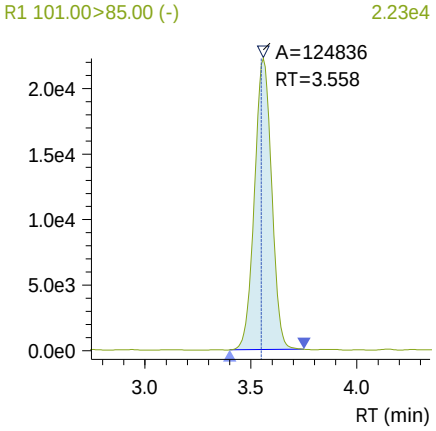
Sample ID: CCV
Date Acquired: 1/27/2024 12:16:52 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-119.lcd
Vial: 7 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.558	387377	247822	10.6002	ng/mL	101.00 >85.00	32.23	23.01 -42.74
Sodium Perchlorate -18O4_IS	Auto	3.555	247822	247822	1.0000	ng/mL	----	----	

Perchlorate

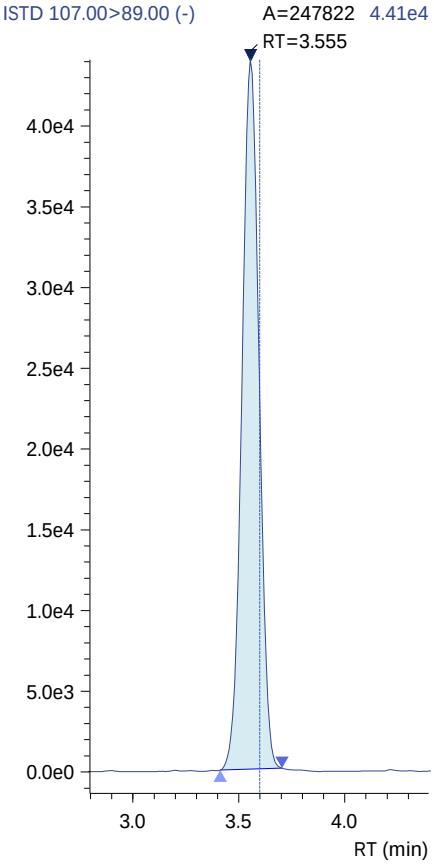
Conc 10.6002
R#1 32.23 (32.88)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/29/2024 2:34:44 PM

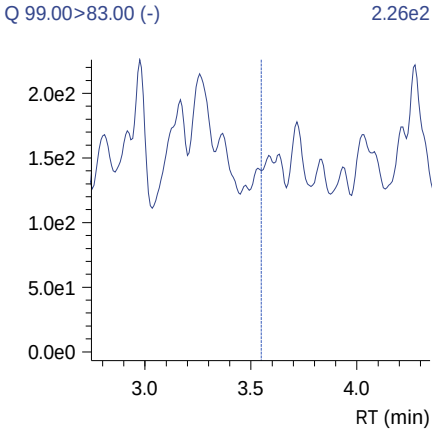
IB

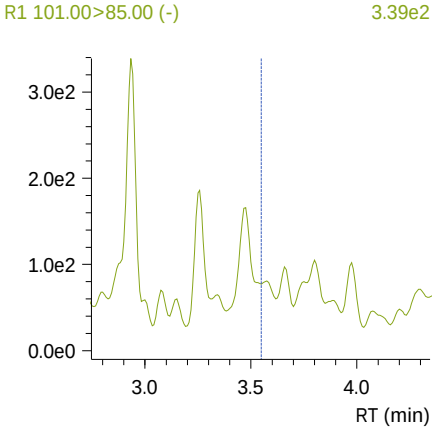
Sample ID: IB
Date Acquired: 1/27/2024 12:22:26 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240126\20240126-120.lcd
Vial: 1 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	272954	----	ng/mL	101.00 >85.00	0.00	23.01 -42.74
Sodium Perchlorate-18O4_IS	Auto	3.555	272954	272954	1.0000	ng/mL	----	----	

Perchlorate

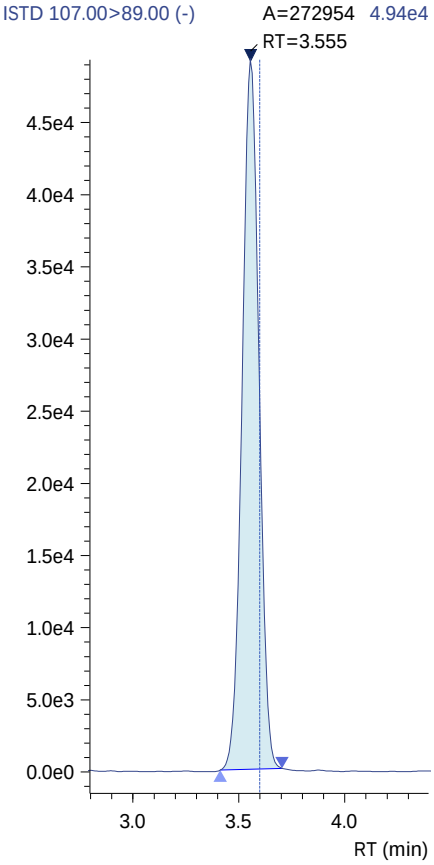
Conc ----
R#1 0.00 (32.88)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/29/2024 3:23:41 PM

Method File: I:\LCMS01\DATA\20240129\20240129.lcm
Project File: I:\LCMS01\DATA\20240129\20240129.damlp

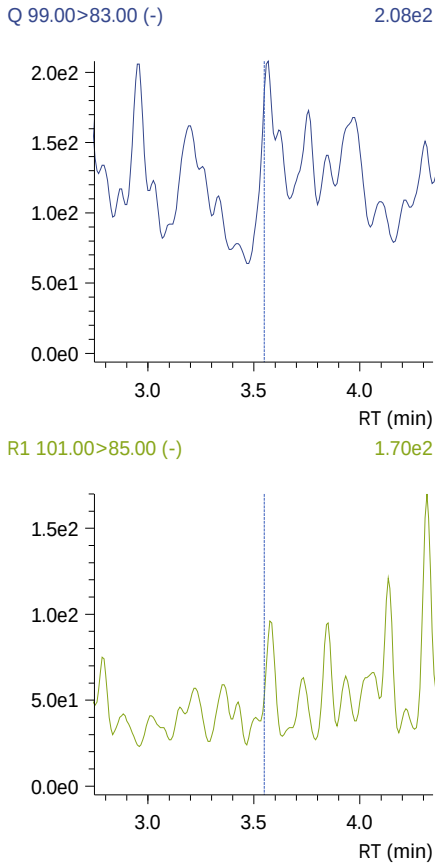
IB

Sample ID: IB
Date Acquired: 1/29/2024 8:50:46 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240129\20240129-001.lcd
Vial: 1 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	289684	----	ng/mL	101.00 >85.00	0.00	23.18 -43.06
Sodium Perchlorate-18O4_IS	Auto	3.570	289684	289684	1.0000	ng/mL	----	----	

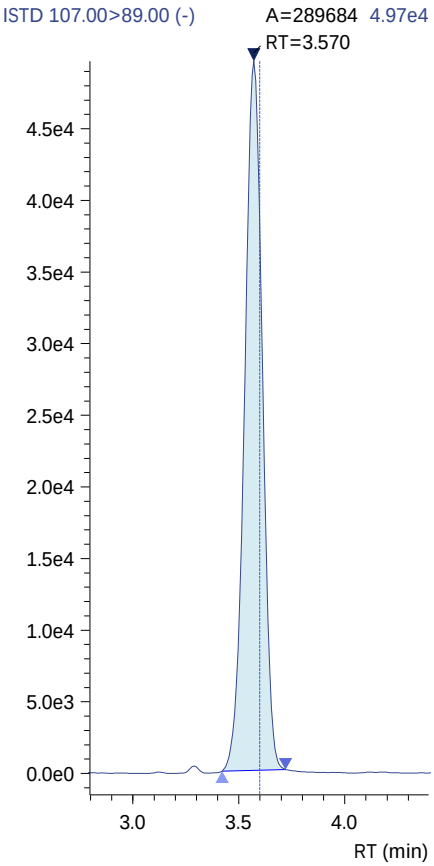
Perchlorate

Conc ----
R#1 0.00 (33.12)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/29/2024 3:23:41 PM

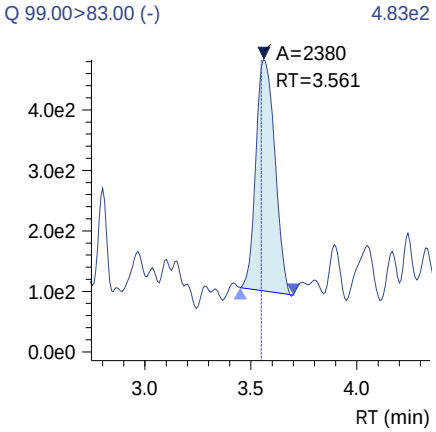
LODV

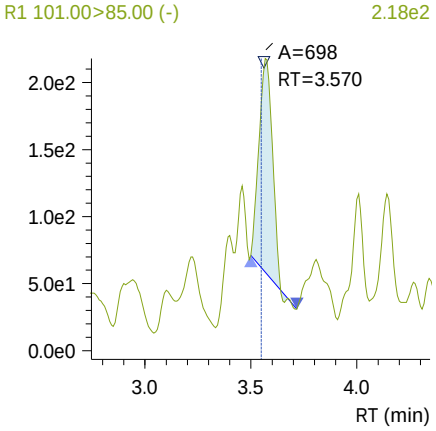
Sample ID: LODV
Date Acquired: 1/29/2024 8:56:20 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240129\20240129-002.lcd
Vial: 2 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.561	2380	269741	0.0598	ng/mL	101.00 >85.00	29.31	23.18 -43.06
Sodium Perchlorate -18O4_IS	Auto	3.569	269741	269741	1.0000	ng/mL	----	----	

Perchlorate

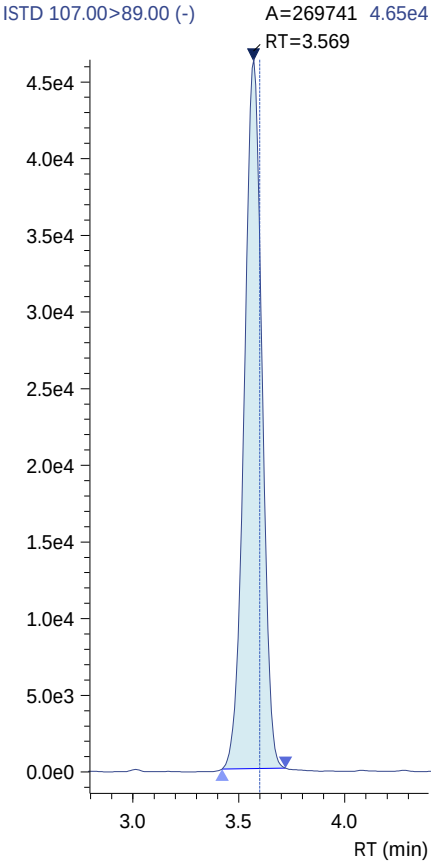
Conc 0.0598
R#1 29.31 (33.12)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/29/2024 3:23:41 PM

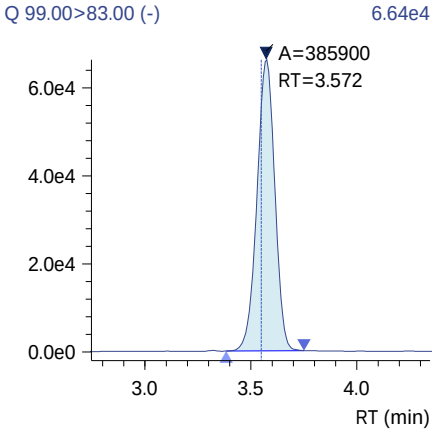
CCV

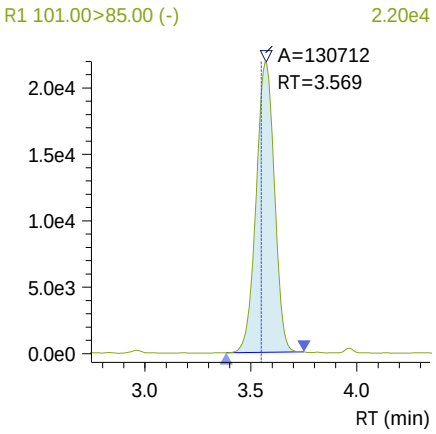
Sample ID: CCV
Date Acquired: 1/29/2024 9:03:41 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240129\20240129-003.lcd
Vial: 7 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.572	385900	274538	9.5322	ng/mL	101.00 >85.00	33.87	23.18 -43.06
Sodium Perchlorate -18O4_IS	Auto	3.569	274538	274538	1.0000	ng/mL	----	----	

Perchlorate

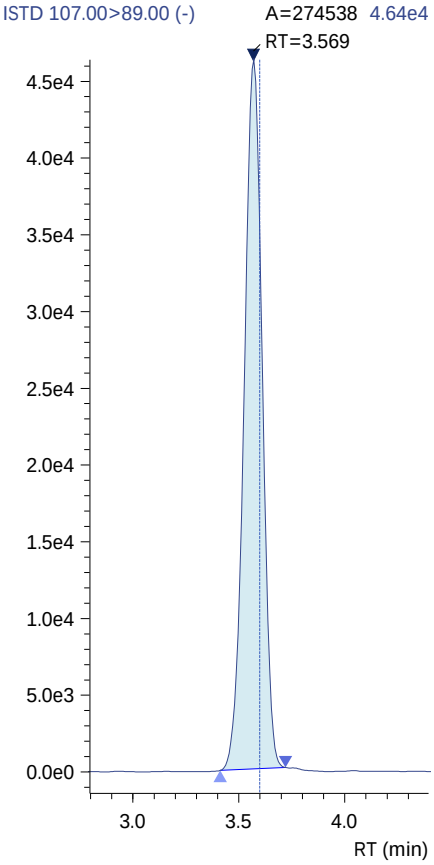
Conc 9.5322
R#1 33.87 (33.12)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/29/2024 3:23:41 PM

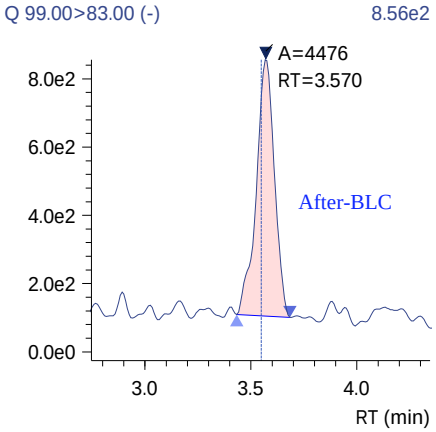
ICS

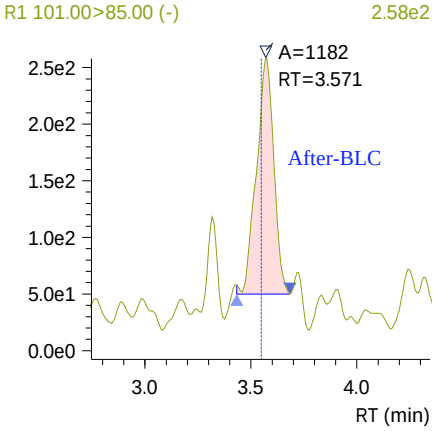
Sample ID: ICS
Date Acquired: 1/29/2024 9:09:10 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240129\20240129-004.lcd
Vial: 4 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	M	3.570	4476	298100	0.1018	ng/mL	101.00 >85.00	26.41	23.18 -43.06
Sodium Perchlorate -18O4_IS	Auto	3.568	298100	298100	1.0000	ng/mL	----	----	

Perchlorate

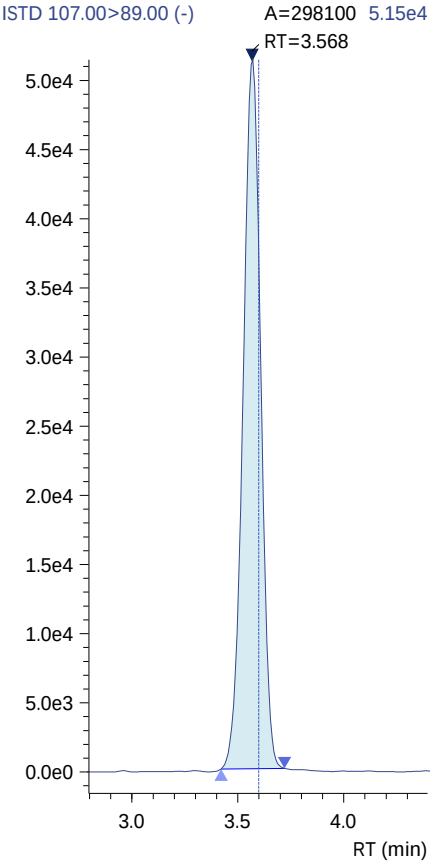
Conc 0.1018
R#1 26.41 (33.12)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/29/2024 3:29:28 PM

Method File: I:\LCMS01\DATA\20240129\20240129.lcm
Project File: I:\LCMS01\DATA\20240129\20240129.damlp

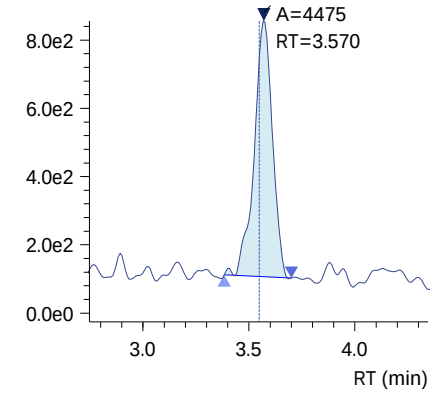
ICS

Sample ID: ICS
Date Acquired: 1/29/2024 9:09:10 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240129\20240129-004.lcd
Vial: 4 | Inj. Volume: 10.0000uL | Tray: 0

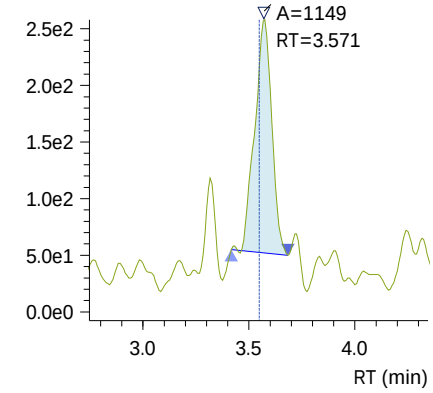
Perchlorate

Conc 0.1018
R#1 25.68 (33.12)

Q 99.00>83.00 (-) 8.56e2



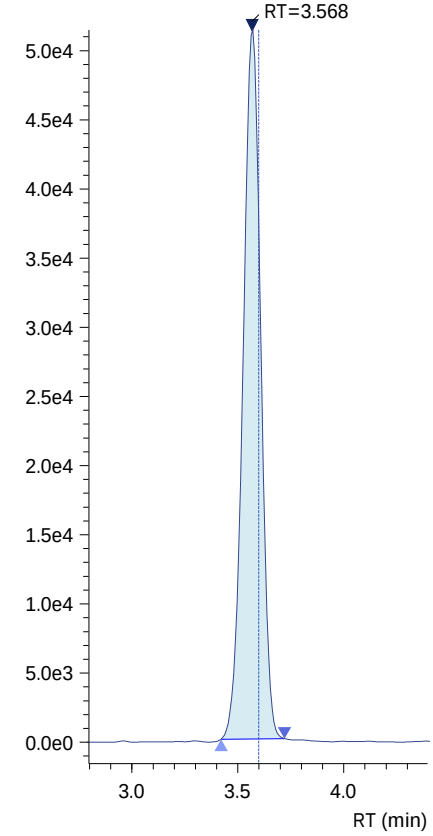
R1 101.00>85.00 (-) 2.58e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=298100 5.15e4



Insight Report

Printed at 1/29/2024 3:23:41 PM

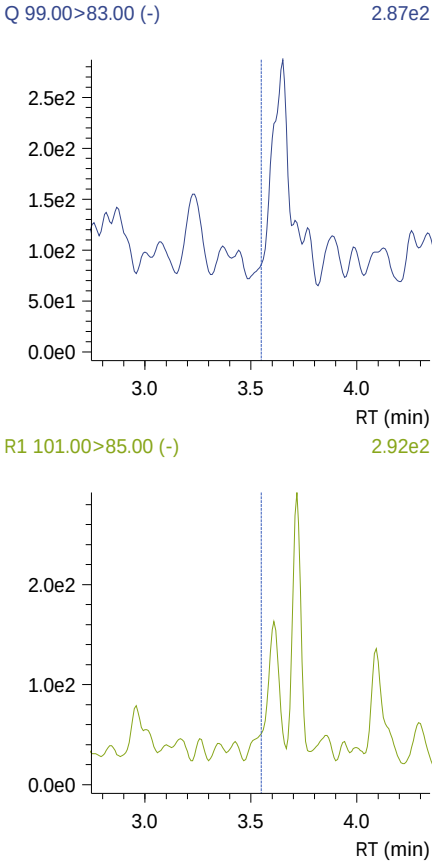
IB

Sample ID: IB
Date Acquired: 1/29/2024 9:14:42 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240129\20240129-005.lcd
Vial: 1 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	300393	----	ng/mL	101.00 >85.00	0.00	23.18 -43.06
Sodium Perchlorate-18O4_IS	Auto	3.566	300393	300393	1.0000	ng/mL	----	----	

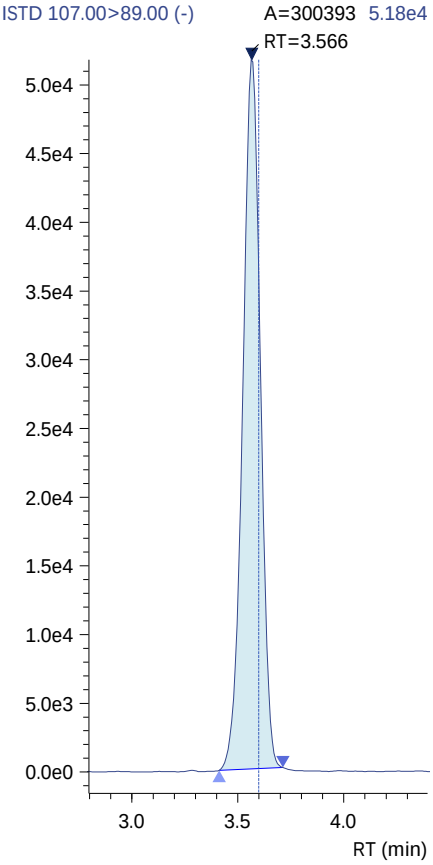
Perchlorate

Conc ----
R#1 0.00 (33.12)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/29/2024 3:23:41 PM

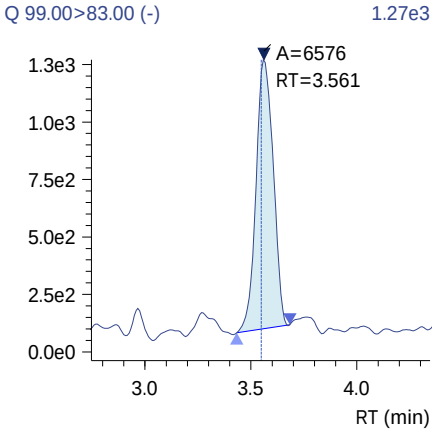
EQ2400041-04 MS

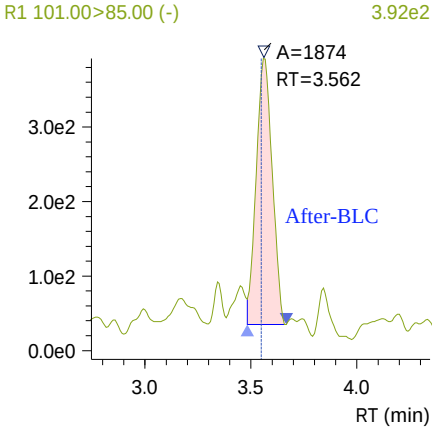
Sample ID: EQ2400041-04
Date Acquired: 1/29/2024 9:20:15 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240129\20240129-006.lcd
Vial: 29 | Inj. Volume: 10.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	MI R1	3.561	6576	288585	0.1545	ng/mL	101.00 >85.00	28.49	23.18 -43.06
Sodium Perchlorate -18O4_IS	Auto	3.566	288585	288585	1.0000	ng/mL	----	----	

Perchlorate

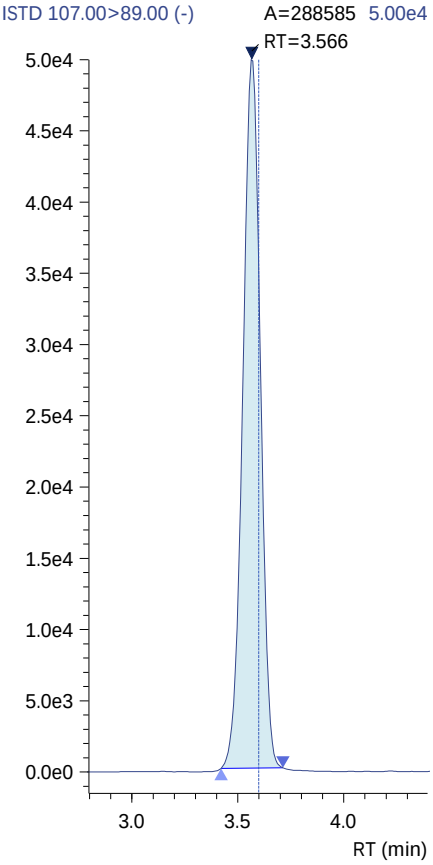
Conc 0.1545
R#1 28.49 (33.12)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/29/2024 3:29:28 PM

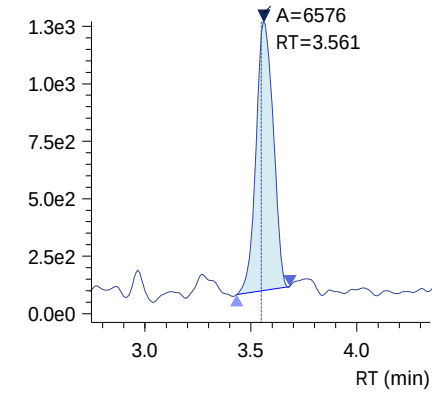
EQ2400041-04 MS

Sample ID: EQ2400041-04
Date Acquired: 1/29/2024 9:20:15 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240129\20240129-006.lcd
Vial: 29 | Inj. Volume: 10.0000uL | Tray: 5

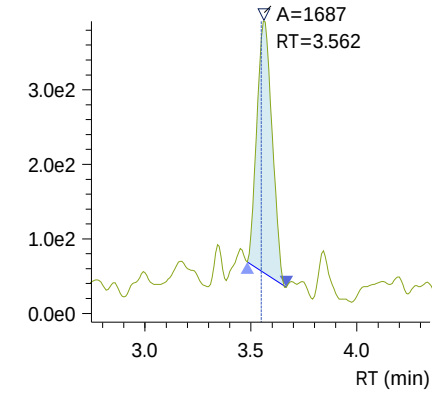
Perchlorate

Conc 0.1545
R#1 25.65 (33.12)

Q 99.00>83.00 (-) 1.27e3



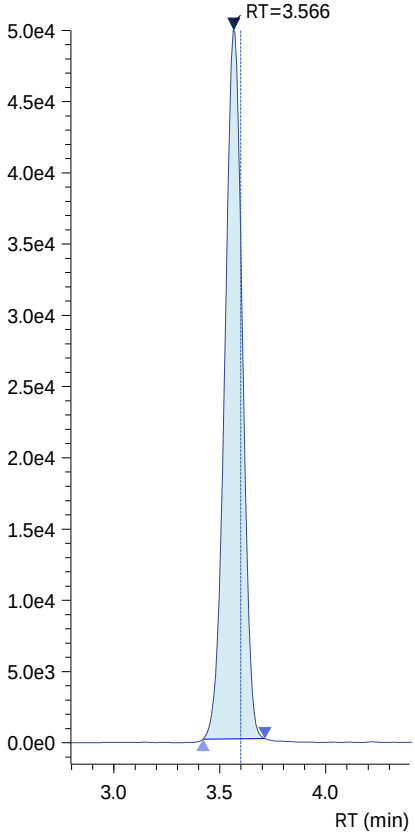
R1 101.00>85.00 (-) 3.92e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=288585 5.00e4



Insight Report

Printed at 1/29/2024 3:23:41 PM

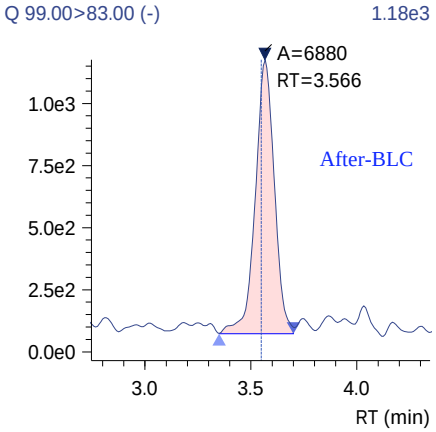
EQ2400041-05 DMS

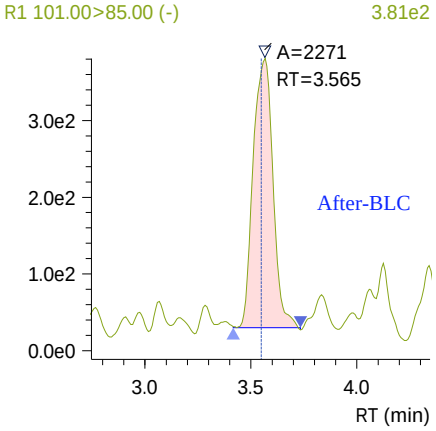
Sample ID: EQ2400041-05
Date Acquired: 1/29/2024 9:25:45 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240129\20240129-007.lcd
Vial: 30 | Inj. Volume: 10.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	M	3.566	6880	295052	0.1581	ng/mL	101.00 >85.00	33.00	23.18 -43.06
Sodium Perchlorate -18O4_IS	Auto	3.566	295052	295052	1.0000	ng/mL	----	----	

Perchlorate

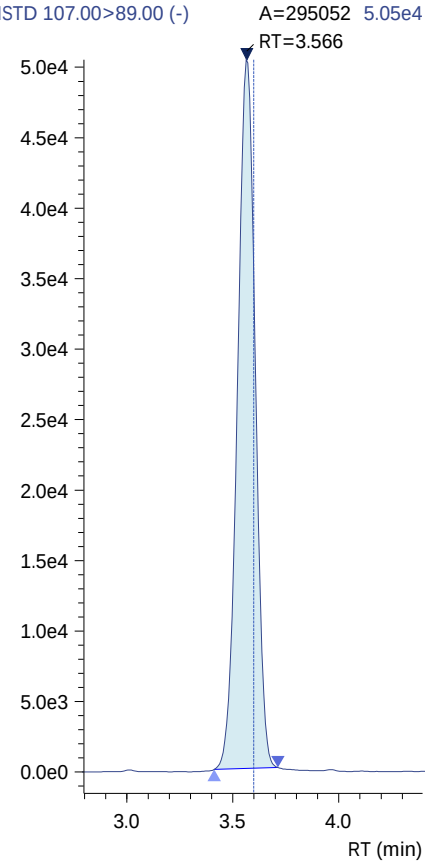
Conc 0.1581
R#1 33.00 (33.12)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/29/2024 3:29:28 PM

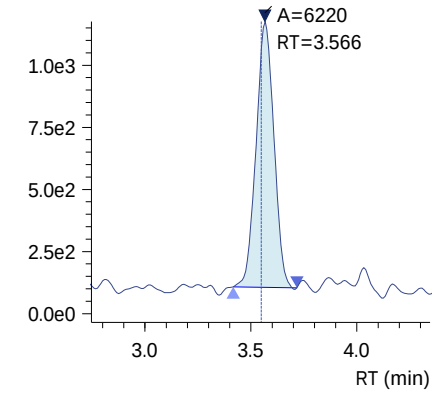
EQ2400041-05 DMS

Sample ID: EQ2400041-05
Date Acquired: 1/29/2024 9:25:45 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240129\20240129-007.lcd
Vial: 30 | Inj. Volume: 10.0000uL | Tray: 5

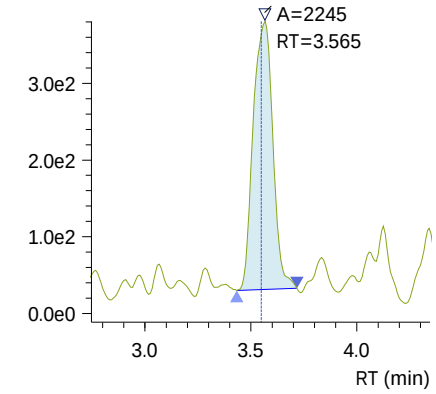
Perchlorate

Conc 0.1430
R#1 36.09 (33.12)

Q 99.00>83.00 (-) 1.18e3



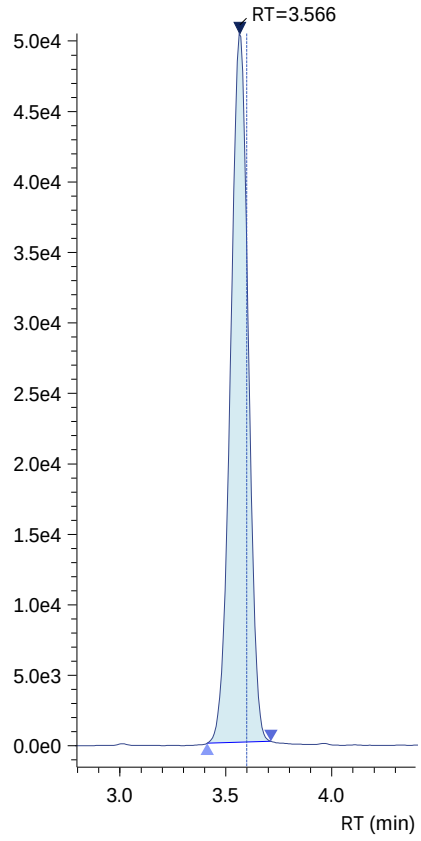
R1 101.00>85.00 (-) 3.81e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=295052 5.05e4



Insight Report

Printed at 1/29/2024 3:23:41 PM

CCV

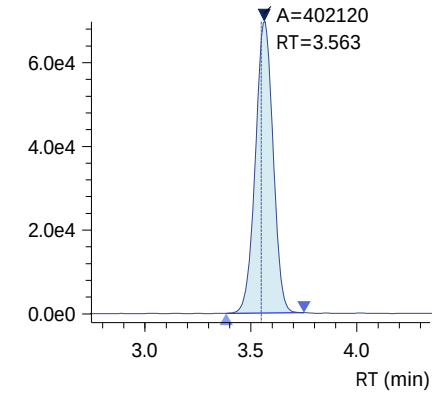
Sample ID: CCV
Date Acquired: 1/29/2024 1:22:56 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240129\20240129-016.lcd
Vial: 7 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.563	402120	267931	10.1778	ng/mL	101.00 >85.00	32.96	23.18 -43.06
Sodium Perchlorate -18O4_IS	Auto	3.561	267931	267931	1.0000	ng/mL	----	----	

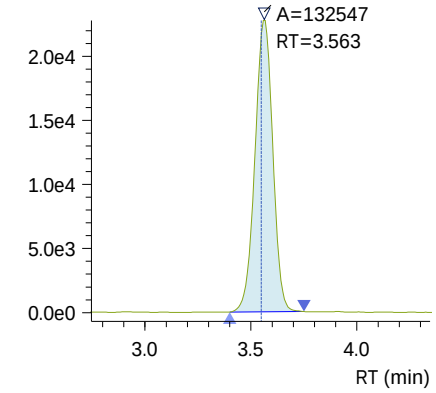
Perchlorate

Conc 10.1778
R#1 32.96 (33.12)

Q 99.00>83.00 (-) 6.98e4



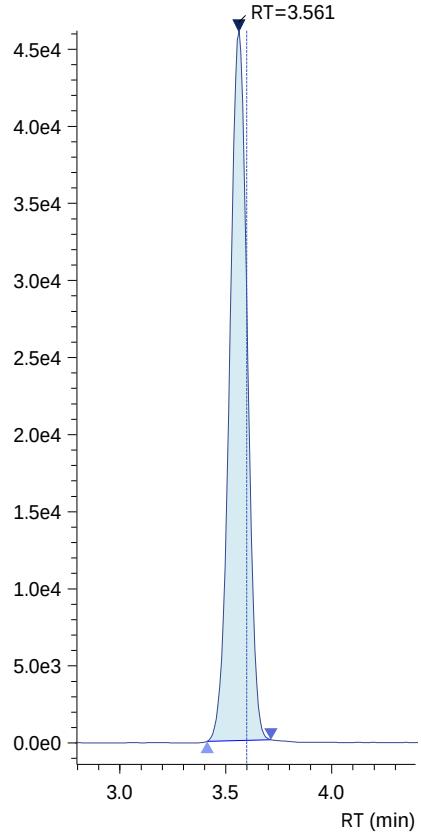
R1 101.00>85.00 (-) 2.28e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=267931 4.62e4



Insight Report

Printed at 1/29/2024 3:23:41 PM

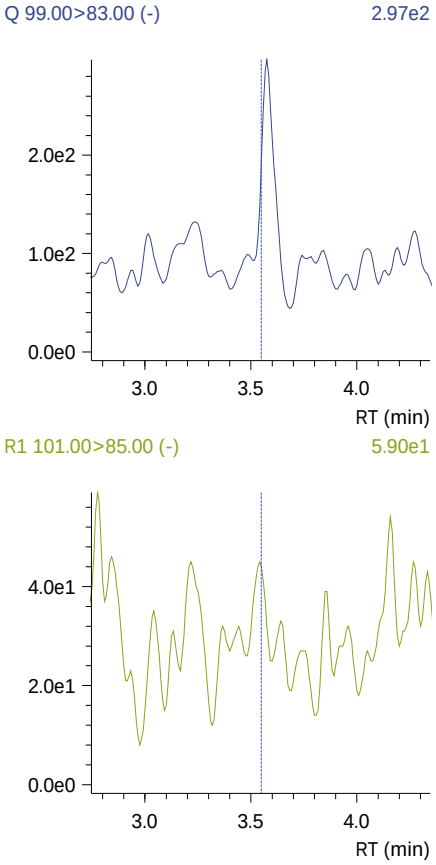
IB

Sample ID: IB
Date Acquired: 1/29/2024 1:28:29 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240129\20240129-017.lcd
Vial: 1 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	288431	----	ng/mL	101.00 >85.00	0.00	23.18 -43.06
Sodium Perchlorate-18O4_IS	Auto	3.560	288431	288431	1.0000	ng/mL	----	----	

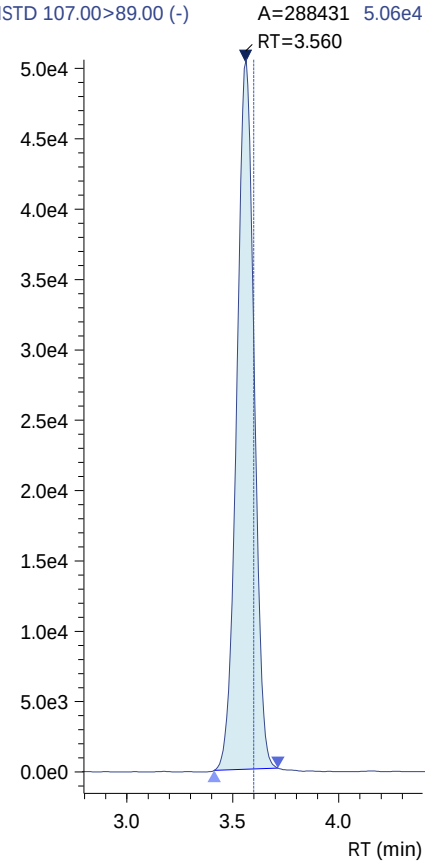
Perchlorate

Conc ----
R#1 0.00 (33.12)



Sodium Perchlorate-18O4_IS

Conc 1.0000



HS24020246 LHAAP Site 16 Cover Page

ALS WO# HS24020246

ALS Environmental
ALS Group USA, Corp
10450 Stancliff Road, Suite 210
Houston, TX 77099
T : +1 281 530 5656
F : +1 281 530 5887
www.alsglobal.com

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  - 16WW41-240205
  - 16WW48-240205
  - 16EW03-240205
  - 16EW08-240205
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STD3
STD4
STD5
STD6
ICV

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

WorkOrder: HS24020246

LHAAP Site 16

Bhate Environmental Associates, Inc.

Marcia Olive
445 Union Blvd Ste 129
Lakewood CO 80228

23-Feb-2024

HS24020246 LHAAP Site 16 Final REV01

ALS WO# HS24020246

10450 Stancliff Rd. Suite 210
Houston, TX 77099
T: +1 281 530 5656
F: +1 281 530 5887

February 22, 2024

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

Work Order: **HS24020246**

Laboratory Results for: **LHAAP Site 16**

Dear Marcia Olive,

ALS Environmental received 9 sample(s) on Feb 06, 2024 for the analysis presented in the following report.

This is a REVISED REPORT. Please see the Case Narrative for discussion concerning this revision.

Regards,

Generated By: JUMOKE.LAWAL
James Guin

ALS Houston, US Date: 22-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Work Order: HS24020246

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS24020246-01	16WW55-240205	Groundwater		05-Feb-2024 07:25	06-Feb-2024 09:30	☐
HS24020246-02	16WW41-240205	Groundwater		05-Feb-2024 08:15	06-Feb-2024 09:30	☐
HS24020246-03	16WW48-240205	Groundwater		05-Feb-2024 09:05	06-Feb-2024 09:30	☐
HS24020246-04	16EW03-240205	Groundwater		05-Feb-2024 09:50	06-Feb-2024 09:30	☐
HS24020246-05	16EW08-240205	Groundwater		05-Feb-2024 10:35	06-Feb-2024 09:30	☐
HS24020246-06	16EW04-240205	Groundwater		05-Feb-2024 11:15	06-Feb-2024 09:30	☐
HS24020246-07	16EW01-240205	Groundwater		05-Feb-2024 12:00	06-Feb-2024 09:30	☐
HS24020246-08	16WW49-240205	Groundwater		05-Feb-2024 12:45	06-Feb-2024 09:30	☐
HS24020246-09	Trip Blank-240205	Water	CG-111123-492	05-Feb-2024 00:00	06-Feb-2024 09:30	☐

Revision:1

ALS Houston, US Date: 22-Feb-24

Client: Bhate Environmental Associates, Inc. **CASE NARRATIVE**
Project: LHAAP Site 16
Work Order: HS24020246

Work Order Comments

• This report was revised 02/22/24 to update the Perchlorate and CO2 reports.

Work Order Comments

• The analysis for Carbon dioxide was subcontracted to Eurofins Environmental Laboratories in Lancaster, PA . Final report attached

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

GC Semivolatiles by Method RSK-175

Batch ID: R458696

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

GCMS Volatiles by Method SW8260

Batch ID: R458584

Sample ID: 16EW01-240205 (HS24020246-07)

• Lowest possible dilution due to high concentrations of target analytes.

Sample ID: 16EW03-240205 (HS24020246-04)

• Lowest possible dilution due to high concentrations of target analytes.

Sample ID: 16EW04-240205 (HS24020246-06)

• Lowest possible dilution due to high concentrations of target analytes.

Sample ID: 16WW41-240205 (HS24020246-02)

• Lowest possible dilution due to high concentrations of target analytes.

Sample ID: 16WW48-240205 (HS24020246-03)

• Lowest possible dilution due to high concentrations of target analytes.

Sample ID: 16WW55-240205 (HS24020246-01)

• Lowest possible dilution due to high concentrations of target analytes.

WetChemistry by Method SW9056

Batch ID: R458108

Sample ID: 16EW03-240205 (HS24020246-04)

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

WetChemistry by Method SM5310B

Batch ID: R458861

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

ALS Houston, US Date: 22-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Sample ID: 16WW55-240205
Collection Date: 05-Feb-2024 07:25

ANALYTICAL REPORT
WorkOrder:HS24020246
Lab ID:HS24020246-01
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: TS
1,1,2-Trichloroethane	20	U	6.0	20	20	ug/L	20	10-Feb-2024 08:56
1,1-Dichloroethene	20	U	4.0	20	20	ug/L	20	10-Feb-2024 08:56
1,2-Dichloroethane	20	U	4.0	20	20	ug/L	20	10-Feb-2024 08:56
cis-1,2-Dichloroethene	**610**		**4.0**	**20**	**20**	**ug/L**	20	10-Feb-2024 08:56
Methylene chloride	20	U	8.0	20	40	ug/L	20	10-Feb-2024 08:56
Trichloroethene	**2,100**		**4.0**	**20**	**20**	**ug/L**	20	10-Feb-2024 08:56
Vinyl chloride	**99**		**4.0**	**20**	**20**	**ug/L**	20	10-Feb-2024 08:56
Surr: 1,2-Dichloroethane-d4	*81.4*			**0**	*81-118*	*%REC*	*20*	*10-Feb-2024 08:56*
Surr: 4-Bromofluorobenzene	*87.6*			**0**	*85-114*	*%REC*	*20*	*10-Feb-2024 08:56*
Surr: Dibromofluoromethane	*81.6*			**0**	*80-119*	*%REC*	*20*	*10-Feb-2024 08:56*
Surr: Toluene-d8	*89.6*			**0**	*89-112*	*%REC*	*20*	*10-Feb-2024 08:56*
DISSOLVED GASES BY RSK-175		**Method:RSK-175**						Analyst: E.H.
Ethane	**0.00341**		**0.000144**	**0.000500**	**0.00100**	**mg/L**	1	13-Feb-2024 16:32
Ethene	**0.0193**		**0.000234**	**0.000500**	**0.00100**	**mg/L**	1	13-Feb-2024 16:32
Methane	**0.937**		**0.00535**	**0.0250**	**0.0250**	**mg/L**	50	13-Feb-2024 17:26
TOTAL ORGANIC CARBON - SM5310B-2011		**Method:SM5310B**						Analyst: DW
Organic Carbon, Total	**4.20**		**0.500**	**1.00**	**1.00**	**mg/L**	1	14-Feb-2024 15:22
ANIONS BY SW9056A		**Method:SW9056**						Analyst: TH
Nitrogen, Nitrate (As N)	0.0500	U	0.0300	0.0500	0.100	mg/L	1	06-Feb-2024 19:21
Nitrogen, Nitrite (As N)	0.100	U	0.0300	0.100	0.100	mg/L	1	06-Feb-2024 19:21
Sulfate	**575**		**2.00**	**2.50**	**5.00**	**mg/L**	10	06-Feb-2024 19:27
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	15-Feb-2024 09:15
SUBCONTRACT ANALYSIS - RSK		**Method:NA**						Analyst: SUB
Subcontract Analysis	**0**		**0**	**0**	**0**	**NA**	1	08-Feb-2024 15:59

Note: See Qualifiers Page for a list of qualifiers and their explanation. **Revision:** 1

ALS Houston, US Date: 22-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Sample ID: 16WW41-240205
Collection Date: 05-Feb-2024 08:15

ANALYTICAL REPORT
WorkOrder:HS24020246
Lab ID:HS24020246-02
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: TS
1,1,2-Trichloroethane	50	U	15	50	50	ug/L	50	10-Feb-2024 09:18
1,1-Dichloroethene	50	U	10	50	50	ug/L	50	10-Feb-2024 09:18
1,2-Dichloroethane	50	U	10	50	50	ug/L	50	10-Feb-2024 09:18
cis-1,2-Dichloroethene	**2,500**		**10**	**50**	**50**	**ug/L**	50	10-Feb-2024 09:18
Methylene chloride	50	U	20	50	100	ug/L	50	10-Feb-2024 09:18
Trichloroethene	**4,300**		**10**	**50**	**50**	**ug/L**	50	10-Feb-2024 09:18
Vinyl chloride	**420**		**10**	**50**	**50**	**ug/L**	50	10-Feb-2024 09:18
Surr: 1,2-Dichloroethane-d4	*81.9*			**0**	*81-118*	*%REC*	*50*	*10-Feb-2024 09:18*
Surr: 4-Bromofluorobenzene	*85.1*			**0**	*85-114*	*%REC*	*50*	*10-Feb-2024 09:18*
Surr: Dibromofluoromethane	*80.7*			**0**	*80-119*	*%REC*	*50*	*10-Feb-2024 09:18*
Surr: Toluene-d8	*90.1*			**0**	*89-112*	*%REC*	*50*	*10-Feb-2024 09:18*
DISSOLVED GASES BY RSK-175		**Method:RSK-175**						Analyst: E.H.
Ethane	**0.00355**		**0.000144**	**0.000500**	**0.00100**	**mg/L**	1	13-Feb-2024 16:41
Ethene	**0.0297**		**0.000234**	**0.000500**	**0.00100**	**mg/L**	1	13-Feb-2024 16:41
Methane	**0.0149**		**0.000107**	**0.000500**	**0.000500**	**mg/L**	1	13-Feb-2024 16:41
TOTAL ORGANIC CARBON - SM5310B-2011		**Method:SM5310B**						Analyst: DW
Organic Carbon, Total	**35.6**		**0.500**	**1.00**	**1.00**	**mg/L**	1	14-Feb-2024 15:38
ANIONS BY SW9056A		**Method:SW9056**						Analyst: TH
Nitrogen, Nitrate (As N)	0.250	U	0.150	0.250	0.500	mg/L	5	06-Feb-2024 19:33
Nitrogen, Nitrite (As N)	0.500	U	0.150	0.500	0.500	mg/L	5	06-Feb-2024 19:33
Sulfate	**7,710**		**20.0**	**25.0**	**50.0**	**mg/L**	100	06-Feb-2024 19:39
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	15-Feb-2024 09:15
SUBCONTRACT ANALYSIS - RSK		**Method:NA**						Analyst: SUB
Subcontract Analysis	**0**		**0**	**0**	**0**	**NA**	1	08-Feb-2024 15:59

Note: See Qualifiers Page for a list of qualifiers and their explanation. **Revision:** 1

ALS Houston, US Date: 22-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Sample ID: 16WW48-240205
Collection Date: 05-Feb-2024 09:05

ANALYTICAL REPORT
WorkOrder:HS24020246
Lab ID:HS24020246-03
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: TS
1,1,2-Trichloroethane	250	U	75	250	250	ug/L	250	10-Feb-2024 09:41
1,1-Dichloroethene	250	U	50	250	250	ug/L	250	10-Feb-2024 09:41
1,2-Dichloroethane	250	U	50	250	250	ug/L	250	10-Feb-2024 09:41
cis-1,2-Dichloroethene	**26,000**		**50**	**250**	**250**	**ug/L**	250	10-Feb-2024 09:41
Methylene chloride	250	U	100	250	500	ug/L	250	10-Feb-2024 09:41
Trichloroethene	**16,000**		**50**	**250**	**250**	**ug/L**	250	10-Feb-2024 09:41
Vinyl chloride	**600**		**50**	**250**	**250**	**ug/L**	250	10-Feb-2024 09:41
Surr: 1,2-Dichloroethane-d4	*81.4*			**0**	*81-118*	*%REC*	*250*	*10-Feb-2024 09:41*
Surr: 4-Bromofluorobenzene	*85.0*			**0**	*85-114*	*%REC*	*250*	*10-Feb-2024 09:41*
Surr: Dibromofluoromethane	*80.6*			**0**	*80-119*	*%REC*	*250*	*10-Feb-2024 09:41*
Surr: Toluene-d8	*90.4*			**0**	*89-112*	*%REC*	*250*	*10-Feb-2024 09:41*
DISSOLVED GASES BY RSK-175		**Method:RSK-175**						Analyst: E.H.
Ethane	0.000500	U	0.000144	0.000500	0.00100	mg/L	1	13-Feb-2024 16:51
Ethene	**0.0618**		**0.000234**	**0.000500**	**0.00100**	**mg/L**	1	13-Feb-2024 16:51
Methane	**0.0426**		**0.000214**	**0.00100**	**0.00100**	**mg/L**	2	13-Feb-2024 17:52
ANIONS BY SW9056A		**Method:SW9056**						Analyst: TH
Nitrogen, Nitrate (As N)	0.100	U	0.0600	0.100	0.200	mg/L	2	06-Feb-2024 19:45
Nitrogen, Nitrite (As N)	0.200	U	0.0600	0.200	0.200	mg/L	2	06-Feb-2024 19:45
Sulfate	**2,460**		**8.00**	**10.0**	**20.0**	**mg/L**	40	06-Feb-2024 19:51
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	15-Feb-2024 09:15
SUBCONTRACT ANALYSIS - RSK		**Method:NA**						Analyst: SUB
Subcontract Analysis	**0**		**0**	**0**	**0**	**NA**	1	08-Feb-2024 15:59

Note: See Qualifiers Page for a list of qualifiers and their explanation. **Revision:** 1

ALS Houston, US Date: 22-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Sample ID: 16EW03-240205
Collection Date: 05-Feb-2024 09:50

ANALYTICAL REPORT
WorkOrder:HS24020246
Lab ID:HS24020246-04
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: TS
1,1,2-Trichloroethane	20	U	6.0	20	20	ug/L	20	10-Feb-2024 10:03
1,1-Dichloroethene	20	U	4.0	20	20	ug/L	20	10-Feb-2024 10:03
1,2-Dichloroethane	20	U	4.0	20	20	ug/L	20	10-Feb-2024 10:03
cis-1,2-Dichloroethene	**1,500**		**4.0**	**20**	**20**	**ug/L**	20	10-Feb-2024 10:03
Methylene chloride	20	U	8.0	20	40	ug/L	20	10-Feb-2024 10:03
Trichloroethene	**820**		**4.0**	**20**	**20**	**ug/L**	20	10-Feb-2024 10:03
Vinyl chloride	**380**		**4.0**	**20**	**20**	**ug/L**	20	10-Feb-2024 10:03
Surr: 1,2-Dichloroethane-d4	*81.7*			**0**	*81-118*	*%REC*	*20*	*10-Feb-2024 10:03*
Surr: 4-Bromofluorobenzene	*85.1*			**0**	*85-114*	*%REC*	*20*	*10-Feb-2024 10:03*
Surr: Dibromofluoromethane	*80.8*			**0**	*80-119*	*%REC*	*20*	*10-Feb-2024 10:03*
Surr: Toluene-d8	*89.1*			**0**	*89-112*	*%REC*	*20*	*10-Feb-2024 10:03*
DISSOLVED GASES BY RSK-175		**Method:RSK-175**						Analyst: E.H.
Ethane	0.000500	U	0.000144	0.000500	0.00100	mg/L	1	13-Feb-2024 17:04
Ethene	**0.301**		**0.0234**	**0.0500**	**0.100**	**mg/L**	100	13-Feb-2024 18:21
Methane	**1.57**		**0.0107**	**0.0500**	**0.0500**	**mg/L**	100	13-Feb-2024 18:21
TOTAL ORGANIC CARBON - SM5310B-2011		**Method:SM5310B**						Analyst: DW
Organic Carbon, Total	**15.8**		**0.500**	**1.00**	**1.00**	**mg/L**	1	14-Feb-2024 15:53
ANIONS BY SW9056A		**Method:SW9056**						Analyst: TH
Nitrogen, Nitrate (As N)	0.100	U	0.0600	0.100	0.200	mg/L	2	06-Feb-2024 19:57
Nitrogen, Nitrite (As N)	0.200	U	0.0600	0.200	0.200	mg/L	2	06-Feb-2024 19:57
Sulfate	**2,610**		**8.00**	**10.0**	**20.0**	**mg/L**	40	06-Feb-2024 20:03
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	15-Feb-2024 09:15
SUBCONTRACT ANALYSIS - RSK		**Method:NA**						Analyst: SUB
Subcontract Analysis	**0**		**0**	**0**	**0**	**NA**	1	08-Feb-2024 15:59

Note: See Qualifiers Page for a list of qualifiers and their explanation. **Revision:** 1

ALS Houston, US Date: 22-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Sample ID: 16EW08-240205
Collection Date: 05-Feb-2024 10:35

ANALYTICAL REPORT
WorkOrder:HS24020246
Lab ID:HS24020246-05
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: TS
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	10-Feb-2024 08:11
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	10-Feb-2024 08:11
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	10-Feb-2024 08:11
cis-1,2-Dichloroethene	**1.2**		**0.20**	**1.0**	**1.0**	**ug/L**	1	10-Feb-2024 08:11
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	10-Feb-2024 08:11
Trichloroethene	**1.4**		**0.20**	**1.0**	**1.0**	**ug/L**	1	10-Feb-2024 08:11
Vinyl chloride	1.0	U	0.20	1.0	1.0	ug/L	1	10-Feb-2024 08:11
Surr: 1,2-Dichloroethane-d4	*81.9*			**0**	*81-118*	*%REC*	*1*	*10-Feb-2024 08:11*
Surr: 4-Bromofluorobenzene	*88.2*			**0**	*85-114*	*%REC*	*1*	*10-Feb-2024 08:11*
Surr: Dibromofluoromethane	*80.4*			**0**	*80-119*	*%REC*	*1*	*10-Feb-2024 08:11*
Surr: Toluene-d8	*91.3*			**0**	*89-112*	*%REC*	*1*	*10-Feb-2024 08:11*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	15-Feb-2024 09:15

Note: See Qualifiers Page for a list of qualifiers and their explanation. **Revision:** 1

ALS Houston, US Date: 22-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Sample ID: 16EW04-240205
Collection Date: 05-Feb-2024 11:15

ANALYTICAL REPORT
WorkOrder:HS24020246
Lab ID:HS24020246-06
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: TS
1,1,2-Trichloroethane	200	U	60	200	200	ug/L	200	10-Feb-2024 10:26
1,1-Dichloroethene	200	U	40	200	200	ug/L	200	10-Feb-2024 10:26
1,2-Dichloroethane	200	U	40	200	200	ug/L	200	10-Feb-2024 10:26
cis-1,2-Dichloroethene	**4,700**		**40**	**200**	**200**	**ug/L**	200	10-Feb-2024 10:26
Methylene chloride	200	U	80	200	400	ug/L	200	10-Feb-2024 10:26
Trichloroethene	**12,000**		**40**	**200**	**200**	**ug/L**	200	10-Feb-2024 10:26
Vinyl chloride	**320**		**40**	**200**	**200**	**ug/L**	200	10-Feb-2024 10:26
Surr: 1,2-Dichloroethane-d4	*81.4*			**0**	*81-118*	*%REC*	*200*	*10-Feb-2024 10:26*
Surr: 4-Bromofluorobenzene	*85.1*			**0**	*85-114*	*%REC*	*200*	*10-Feb-2024 10:26*
Surr: Dibromofluoromethane	*80.9*			**0**	*80-119*	*%REC*	*200*	*10-Feb-2024 10:26*
Surr: Toluene-d8	*90.0*			**0**	*89-112*	*%REC*	*200*	*10-Feb-2024 10:26*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	15-Feb-2024 09:15

Note: See Qualifiers Page for a list of qualifiers and their explanation. **Revision:** 1

ALS Houston, US Date: 22-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Sample ID: 16EW01-240205
Collection Date: 05-Feb-2024 12:00

ANALYTICAL REPORT
WorkOrder:HS24020246
Lab ID:HS24020246-07
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: TS
1,1,2-Trichloroethane	10	U	3.0	10	10	ug/L	10	10-Feb-2024 10:48
1,1-Dichloroethene	10	U	2.0	10	10	ug/L	10	10-Feb-2024 10:48
1,2-Dichloroethane	10	U	2.0	10	10	ug/L	10	10-Feb-2024 10:48
cis-1,2-Dichloroethene	**680**		**2.0**	**10**	**10**	**ug/L**	10	10-Feb-2024 10:48
Methylene chloride	10	U	4.0	10	20	ug/L	10	10-Feb-2024 10:48
Trichloroethene	**380**		**2.0**	**10**	**10**	**ug/L**	10	10-Feb-2024 10:48
Vinyl chloride	**93**		**2.0**	**10**	**10**	**ug/L**	10	10-Feb-2024 10:48
Surr: 1,2-Dichloroethane-d4	*81.5*			**0**	*81-118*	*%REC*	*10*	*10-Feb-2024 10:48*
Surr: 4-Bromofluorobenzene	*85.9*			**0**	*85-114*	*%REC*	*10*	*10-Feb-2024 10:48*
Surr: Dibromofluoromethane	*80.6*			**0**	*80-119*	*%REC*	*10*	*10-Feb-2024 10:48*
Surr: Toluene-d8	*90.7*			**0**	*89-112*	*%REC*	*10*	*10-Feb-2024 10:48*
TOTAL ORGANIC CARBON - SM5310B-2011		**Method:SM5310B**						Analyst: DW
Organic Carbon, Total	**16.4**		**0.500**	**1.00**	**1.00**	**mg/L**	1	14-Feb-2024 16:08
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	15-Feb-2024 09:15

Note: See Qualifiers Page for a list of qualifiers and their explanation. **Revision:** 1

ALS Houston, US Date: 22-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Sample ID: 16WW49-240205
Collection Date: 05-Feb-2024 12:45

ANALYTICAL REPORT
WorkOrder:HS24020246
Lab ID:HS24020246-08
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: TS
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	10-Feb-2024 08:34
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	10-Feb-2024 08:34
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	10-Feb-2024 08:34
cis-1,2-Dichloroethene	**25**		**0.20**	**1.0**	**1.0**	**ug/L**	1	10-Feb-2024 08:34
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	10-Feb-2024 08:34
Trichloroethene	**79**		**0.20**	**1.0**	**1.0**	**ug/L**	1	10-Feb-2024 08:34
Vinyl chloride	1.0	U	0.20	1.0	1.0	ug/L	1	10-Feb-2024 08:34
Surr: 1,2-Dichloroethane-d4	*82.1*			**0**	*81-118*	*%REC*	*1*	*10-Feb-2024 08:34*
Surr: 4-Bromofluorobenzene	*86.4*			**0**	*85-114*	*%REC*	*1*	*10-Feb-2024 08:34*
Surr: Dibromofluoromethane	*80.7*			**0**	*80-119*	*%REC*	*1*	*10-Feb-2024 08:34*
Surr: Toluene-d8	*90.3*			**0**	*89-112*	*%REC*	*1*	*10-Feb-2024 08:34*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	15-Feb-2024 09:15

Note: See Qualifiers Page for a list of qualifiers and their explanation. **Revision:** 1

ALS Houston, US Date: 22-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Sample ID: Trip Blank-240205
Collection Date: 05-Feb-2024 00:00

ANALYTICAL REPORT
WorkOrder:HS24020246
Lab ID:HS24020246-09
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C	**Method:SW8260**							Analyst: TS
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	10-Feb-2024 04:49
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	10-Feb-2024 04:49
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	10-Feb-2024 04:49
cis-1,2-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	10-Feb-2024 04:49
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	10-Feb-2024 04:49
Trichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	10-Feb-2024 04:49
Vinyl chloride	1.0	U	0.20	1.0	1.0	ug/L	1	10-Feb-2024 04:49
Surr: 1,2-Dichloroethane-d4	*82.3*			**0**	*81-118*	*%REC*	*1*	*10-Feb-2024 04:49*
Surr: 4-Bromofluorobenzene	*85.3*			**0**	*85-114*	*%REC*	*1*	*10-Feb-2024 04:49*
Surr: Dibromofluoromethane	*80.7*			**0**	*80-119*	*%REC*	*1*	*10-Feb-2024 04:49*
Surr: Toluene-d8	*89.2*			**0**	*89-112*	*%REC*	*1*	*10-Feb-2024 04:49*

Note: See Qualifiers Page for a list of qualifiers and their explanation. **Revision:** 1

ALS Houston, US Date: 22-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24020246

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: R458108 (0)	**Test Name :** ANIONS BY SW9056A				**Matrix:** Groundwater	
HS24020246-01	16WW55-240205	05 Feb 2024 07:25			06 Feb 2024 19:27	10
HS24020246-01	16WW55-240205	05 Feb 2024 07:25			06 Feb 2024 19:21	1
HS24020246-02	16WW41-240205	05 Feb 2024 08:15			06 Feb 2024 19:39	100
HS24020246-02	16WW41-240205	05 Feb 2024 08:15			06 Feb 2024 19:33	5
HS24020246-03	16WW48-240205	05 Feb 2024 09:05			06 Feb 2024 19:51	40
HS24020246-03	16WW48-240205	05 Feb 2024 09:05			06 Feb 2024 19:45	2
HS24020246-04	16EW03-240205	05 Feb 2024 09:50			06 Feb 2024 20:03	40
HS24020246-04	16EW03-240205	05 Feb 2024 09:50			06 Feb 2024 19:57	2
Batch ID: R458584 (0)	**Test Name :** VOLATILES ORGANICS BY METHOD 8260C				**Matrix:** Water	
HS24020246-09	Trip Blank-240205	05 Feb 2024 00:00			10 Feb 2024 04:49	1
Batch ID: R458584 (0)	**Test Name :** VOLATILES ORGANICS BY METHOD 8260C				**Matrix:** Groundwater	
HS24020246-01	16WW55-240205	05 Feb 2024 07:25			10 Feb 2024 08:56	20
HS24020246-02	16WW41-240205	05 Feb 2024 08:15			10 Feb 2024 09:18	50
HS24020246-03	16WW48-240205	05 Feb 2024 09:05			10 Feb 2024 09:41	250
HS24020246-04	16EW03-240205	05 Feb 2024 09:50			10 Feb 2024 10:03	20
HS24020246-05	16EW08-240205	05 Feb 2024 10:35			10 Feb 2024 08:11	1
HS24020246-06	16EW04-240205	05 Feb 2024 11:15			10 Feb 2024 10:26	200
HS24020246-07	16EW01-240205	05 Feb 2024 12:00			10 Feb 2024 10:48	10
HS24020246-08	16WW49-240205	05 Feb 2024 12:45			10 Feb 2024 08:34	1
Batch ID: R458655 (0)	**Test Name :** SUBCONTRACT ANALYSIS - RSK				**Matrix:** Groundwater	
HS24020246-01	16WW55-240205	05 Feb 2024 07:25			08 Feb 2024 15:59	1
HS24020246-02	16WW41-240205	05 Feb 2024 08:15			08 Feb 2024 15:59	1
HS24020246-03	16WW48-240205	05 Feb 2024 09:05			08 Feb 2024 15:59	1
HS24020246-04	16EW03-240205	05 Feb 2024 09:50			08 Feb 2024 15:59	1
Batch ID: R458696 (0)	**Test Name :** DISSOLVED GASES BY RSK-175				**Matrix:** Groundwater	
HS24020246-01	16WW55-240205	05 Feb 2024 07:25			13 Feb 2024 17:26	50
HS24020246-01	16WW55-240205	05 Feb 2024 07:25			13 Feb 2024 16:32	1
HS24020246-02	16WW41-240205	05 Feb 2024 08:15			13 Feb 2024 16:41	1
HS24020246-03	16WW48-240205	05 Feb 2024 09:05			13 Feb 2024 17:52	2
HS24020246-03	16WW48-240205	05 Feb 2024 09:05			13 Feb 2024 16:51	1
HS24020246-04	16EW03-240205	05 Feb 2024 09:50			13 Feb 2024 18:21	100
HS24020246-04	16EW03-240205	05 Feb 2024 09:50			13 Feb 2024 17:04	1

Revision: 1

ALS Houston, US Date: 22-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24020246

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: R458843 (0)	**Test Name :** SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)				**Matrix:** Groundwater	
HS24020246-01	16WW55-240205	05 Feb 2024 07:25			15 Feb 2024 09:15	1
HS24020246-02	16WW41-240205	05 Feb 2024 08:15			15 Feb 2024 09:15	1
HS24020246-03	16WW48-240205	05 Feb 2024 09:05			15 Feb 2024 09:15	1
HS24020246-04	16EW03-240205	05 Feb 2024 09:50			15 Feb 2024 09:15	1
HS24020246-05	16EW08-240205	05 Feb 2024 10:35			15 Feb 2024 09:15	1
HS24020246-06	16EW04-240205	05 Feb 2024 11:15			15 Feb 2024 09:15	1
HS24020246-07	16EW01-240205	05 Feb 2024 12:00			15 Feb 2024 09:15	1
HS24020246-08	16WW49-240205	05 Feb 2024 12:45			15 Feb 2024 09:15	1
Batch ID: R458861 (0)	**Test Name :** TOTAL ORGANIC CARBON - SM5310B-2011				**Matrix:** Groundwater	
HS24020246-01	16WW55-240205	05 Feb 2024 07:25			14 Feb 2024 15:22	1
HS24020246-02	16WW41-240205	05 Feb 2024 08:15			14 Feb 2024 15:38	1
HS24020246-04	16EW03-240205	05 Feb 2024 09:50			14 Feb 2024 15:53	1
HS24020246-07	16EW01-240205	05 Feb 2024 12:00			14 Feb 2024 16:08	1

Revision: 1

ALS Houston, US Date: 22-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24020246

QC BATCH REPORT

Batch ID: R458696 (0) **Instrument:** FID-4 **Method:** DISSOLVED GASES BY RSK-175

MBLK Sample ID: **MBLK-240213** Units: **mg/L** Analysis Date: **13-Feb-2024 15:52**
Client ID: Run ID: **FID-4_458696** SeqNo: **7828903** 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-240213** Units: **mg/L** Analysis Date: **13-Feb-2024 16:10**
Client ID: Run ID: **FID-4_458696** SeqNo: **7828904** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	0.0170	0.00100	0.01804	0	93.9	75 - 125				
Ethene	0.0138	0.00100	0.0168	0	82.0	75 - 125				
Methane	0.00791	0.000500	0.009647	0	81.9	75 - 125				

LCSD Sample ID: **LCSD-240213** Units: **mg/L** Analysis Date: **13-Feb-2024 16:23**
Client ID: Run ID: **FID-4_458696** SeqNo: **7828905** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	0.0159	0.00100	0.01804	0	88.1	75 - 125	0.01695	6.36	30	
Ethene	0.0148	0.00100	0.0168	0	88.4	75 - 125	0.01378	7.43	30	
Methane	0.00805	0.000500	0.009647	0	83.4	75 - 125	0.007906	1.79	30	

DUP Sample ID: **HS24020246-02DUP** Units: **mg/L** Analysis Date: **13-Feb-2024 17:41**
Client ID: **16WW41-240205** Run ID: **FID-4_458696** SeqNo: **7828911** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	0.00350	0.00100					0.003548	1.3	30	
Ethene	0.0299	0.00100					0.02972	0.75	30	
Methane	0.0155	0.000500					0.01494	3.45	30	

The following samples were analyzed in this batch: HS24020246-01 HS24020246-02 HS24020246-03 HS24020246-04

Revision: 1

ALS Houston, US Date: 22-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24020246

QC BATCH REPORT

Batch ID: R458584 (0) **Instrument:** VOA9 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MBLK Sample ID: **VBLKW-240210** Units: **ug/L** Analysis Date: **10-Feb-2024 02:35**
Client ID: Run ID: **VOA9_458584** SeqNo: **7826478** 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	*40.58*	*35*	*50*	*0*	*81.2*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*42.71*	*35*	*50*	*0*	*85.4*	*85 - 114*				
Surr: Dibromofluoromethane	*40.08*	*35*	*50*	*0*	*80.2*	*80 - 119*				
Surr: Toluene-d8	*44.71*	*35*	*50*	*0*	*89.4*	*89 - 112*				

LCS Sample ID: **VLCSW-240210** Units: **ug/L** Analysis Date: **10-Feb-2024 01:50**
Client ID: Run ID: **VOA9_458584** SeqNo: **7826477** 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	18.66	1.0	20	0	93.3	80 - 119				
1,1-Dichloroethene	17.41	1.0	20	0	87.1	71 - 131				
1,2-Dichloroethane	18.55	1.0	20	0	92.7	73 - 128				
cis-1,2-Dichloroethene	16.48	1.0	20	0	82.4	78 - 123				
Methylene chloride	17.65	2.0	20	0	88.2	74 - 124				
Trichloroethene	18.32	1.0	20	0	91.6	79 - 123				
Vinyl chloride	16.9	1.0	20	0	84.5	58 - 137				
Surr: 1,2-Dichloroethane-d4	*48.38*	*35*	*50*	*0*	*96.8*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*48.31*	*35*	*50*	*0*	*96.6*	*85 - 114*				
Surr: Dibromofluoromethane	*48.11*	*35*	*50*	*0*	*96.2*	*80 - 119*				
Surr: Toluene-d8	*48.25*	*35*	*50*	*0*	*96.5*	*89 - 112*				

Revision: 1

ALS Houston, US Date: 22-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24020246

QC BATCH REPORT

Batch ID: R458584 (0) **Instrument:** VOA9 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MS Sample ID: **HS24020269-09MS** Units: **ug/L** Analysis Date: **10-Feb-2024 04:05**
Client ID: Run ID: **VOA9_458584** SeqNo: **7826480** 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	17.69	1.0	20	0	88.5	80 - 119				
1,1-Dichloroethene	18.31	1.0	20	0	91.6	71 - 131				
1,2-Dichloroethane	19.16	1.0	20	0	95.8	73 - 128				
cis-1,2-Dichloroethene	17.21	1.0	20	0	86.1	78 - 123				
Methylene chloride	17.24	2.0	20	0	86.2	74 - 124				
Trichloroethene	18.35	1.0	20	0	91.8	79 - 123				
Vinyl chloride	17.42	1.0	20	0	87.1	58 - 137				
Surr: 1,2-Dichloroethane-d4	*51.83*	*35*	*50*	*0*	*104*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*50.55*	*35*	*50*	*0*	*101*	*85 - 114*				
Surr: Dibromofluoromethane	*52.17*	*35*	*50*	*0*	*104*	*80 - 119*				
Surr: Toluene-d8	*53.07*	*35*	*50*	*0*	*106*	*89 - 112*				

MSD Sample ID: **HS24020269-09MSD** Units: **ug/L** Analysis Date: **10-Feb-2024 04:27**
Client ID: Run ID: **VOA9_458584** SeqNo: **7826481** 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	18.59	1.0	20	0	93.0	80 - 119	17.69	4.98	20	
1,1-Dichloroethene	18.25	1.0	20	0	91.2	71 - 131	18.31	0.378	20	
1,2-Dichloroethane	19.1	1.0	20	0	95.5	73 - 128	19.16	0.361	20	
cis-1,2-Dichloroethene	16.99	1.0	20	0	85.0	78 - 123	17.21	1.3	20	
Methylene chloride	18.18	2.0	20	0	90.9	74 - 124	17.24	5.34	20	
Trichloroethene	17.88	1.0	20	0	89.4	79 - 123	18.35	2.59	20	
Vinyl chloride	17.01	1.0	20	0	85.0	58 - 137	17.42	2.39	20	
Surr: 1,2-Dichloroethane-d4	*50.82*	*35*	*50*	*0*	*102*	*81 - 118*	*51.83*	*1.97*	*20*	
Surr: 4-Bromofluorobenzene	*51.03*	*35*	*50*	*0*	*102*	*85 - 114*	*50.55*	*0.952*	*20*	
Surr: Dibromofluoromethane	*51.93*	*35*	*50*	*0*	*104*	*80 - 119*	*52.17*	*0.461*	*20*	
Surr: Toluene-d8	*53.53*	*35*	*50*	*0*	*107*	*89 - 112*	*53.07*	*0.873*	*20*	

The following samples were analyzed in this batch:

HS24020246-01	HS24020246-02	HS24020246-03	HS24020246-04
HS24020246-05	HS24020246-06	HS24020246-07	HS24020246-08
HS24020246-09			

Revision: 1

ALS Houston, US Date: 22-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24020246

QC BATCH REPORT

Batch ID: R458108 (0) **Instrument: ICS-Integrion** **Method: ANIONS BY SW9056A**

MBLK Sample ID: **MBLK** Units: **mg/L** Analysis Date: **06-Feb-2024 08:50**
Client ID: Run ID: **ICS-Integrion_458108** SeqNo: **7815875** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrogen, Nitrate (As N)	0.0500	0.100								U
Nitrogen, Nitrite (As N)	0.100	0.100								U
Sulfate	0.250	0.500								U

LCS Sample ID: **LCS** Units: **mg/L** Analysis Date: **06-Feb-2024 09:02**
Client ID: Run ID: **ICS-Integrion_458108** SeqNo: **7815876** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrogen, Nitrate (As N)	3.902	0.100	4	0	97.6	80 - 120				
Nitrogen, Nitrite (As N)	4.005	0.100	4	0	100	80 - 120				
Sulfate	20.12	0.500	20	0	101	80 - 120				

MS Sample ID: **HS24020193-01MS** Units: **mg/L** Analysis Date: **06-Feb-2024 09:14**
Client ID: Run ID: **ICS-Integrion_458108** SeqNo: **7815878** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrogen, Nitrate (As N)	1.907	0.100	2	0.0173	94.5	80 - 120				
Nitrogen, Nitrite (As N)	1.614	0.100	2	0	80.7	80 - 120				
Sulfate	33.57	0.500	10	25.31	82.6	80 - 120				

MSD Sample ID: **HS24020193-01MSD** Units: **mg/L** Analysis Date: **06-Feb-2024 09:20**
Client ID: Run ID: **ICS-Integrion_458108** SeqNo: **7815879** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrogen, Nitrate (As N)	1.911	0.100	2	0.0173	94.7	80 - 120	1.907	0.225	20	
Nitrogen, Nitrite (As N)	1.617	0.100	2	0	80.9	80 - 120	1.614	0.173	20	
Sulfate	33.73	0.500	10	25.31	84.2	80 - 120	33.57	0.478	20	

The following samples were analyzed in this batch: HS24020246-01 HS24020246-02 HS24020246-03 HS24020246-04

Revision: 1

ALS Houston, US Date: 22-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24020246

QC BATCH REPORT

Batch ID: R458861 (0) **Instrument:** TOC_05 **Method:** TOTAL ORGANIC CARBON - SM5310B-2011

MBLK Sample ID: **MBLK-02142024** Units: **mg/L** Analysis Date: **14-Feb-2024 14:27**
Client ID: Run ID: **TOC_05_458861** SeqNo: **7832290** 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-02142024** Units: **mg/L** Analysis Date: **14-Feb-2024 14:42**
Client ID: Run ID: **TOC_05_458861** SeqNo: **7832291** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	9.593	1.00	10	0	95.9	85 - 115				

LCSD Sample ID: **LCSD-02142024** Units: **mg/L** Analysis Date: **14-Feb-2024 14:56**
Client ID: Run ID: **TOC_05_458861** SeqNo: **7832292** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	9.551	1.00	10	0	95.5	85 - 115	9.593	0.439	20	

MS Sample ID: **HS24020284-01MS** Units: **mg/L** Analysis Date: **14-Feb-2024 16:34**
Client ID: Run ID: **TOC_05_458861** SeqNo: **7832299** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	10.18	1.00	10	1.258	89.2	80 - 120				

The following samples were analyzed in this batch: HS24020246-01 HS24020246-02 HS24020246-04 HS24020246-07

Revision: 1

ALS Houston, US Date: 22-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: **HS24020246**

QUALIFIERS, ACRONYMS, UNITS

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

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

Unit Reported	Description
mg/L	Milligrams per Liter

CERTIFICATIONS,ACCREDITATIONS & LICENSES

Agency	Number	Expire Date
Arkansas	88-00356	27-Mar-2024
California	2919; 2024	30-Apr-2024
Dept of Defense	L22-90-R2	31-Mar-2024
Florida	E87611-38	30-Jun-2024
Illinois	2000322023-11	30-Jun-2024
Kansas	E-10352 2023-2024	31-Jul-2024
Louisiana	03087 2023-2024	30-Jun-2024
Maryland	343; 2023-2024	30-Jun-2024
North Carolina	624 - 2024	31-Dec-2024
North Dakota	R-193 2023-2024	30-Apr-2024
Oklahoma	2023-140	31-Aug-2024
Texas	T104704231-23-32	30-Apr-2024
Utah	TX026932023-14	31-Jul-2024

ALS Houston, US Date: 22-Feb-24

Sample Receipt Checklist

Work Order ID: HS24020246 **Date/Time Received:** 06-Feb-2024 09:30

Client Name: Bhate Environmental **Received by:** Jacob Coronado

Completed By:	/S/ Jacob Coronado	06-Feb-2024 14:40	**Reviewed by:**	/S/ luis.aguilar	06-Feb-2024 16:32
	eSignature	Date/Time		eSignature	Date/Time

Matrices: W Carrier name: FedEx

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

Temperature(s)/Thermometer(s):	3.7UC/3.6C	IR31
Cooler(s)/Kit(s):	50913	
Date/Time sample(s) sent to storage:	02/06/2024 1500	

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

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

Corrective Action:

bhate

Page: ____ of ____

Project/Phase

No: IVPCIBH.0001

1608 13th Avenue South, Suite 300
Birmingham Alabama 35205

COC Number(1):

Chain of Custody and Analytical Request

LIMS Number: ____

Facility/Base I.D.: LHAAP / BILL to PCI

Project/Site Name: LHAAP / Site 16

Client Name:

Collected by: Scott Beesinger

Field Sample ID (30 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	Number of containers	VOC	Dissolved Gases	TOC	Carbon Dioxide	Anions	Perchlorate	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
16WW55_240205	05FEB2024	0925	-	N		WG	13	X	X	X	X	X	X				
16WW41_240205	05FEB2024	0815	-	N		WG	13	X	X	X	X	X	X				
16WW48_240205	05FEB2024	0905	-	N		WG	11	X	X		X	X	X				
16EW03_240205	05FEB2024	0950		N		WG	13	X	X	X	X	X	X				
16EW08_240205	05FEB2024	1035		N		WG	4	X					X				
16EW04_240205	05FEB2024	1115	-	N		WG	4	X					X				
16EW01_240205	05FEB2024	1200	-	N		WG	6	X		X			X				
16WW49_240205	05FEB2024	1245	-	N		WG	4	X					X				
TRIP BLANK_240205	05FEB2024		-	TB		W	2	X									
			-														
			-														

Quality Assurance Samples (6)

HS24020246

Bhate Environmental Associates, Inc.
LHAAP Site 16

COMMENTS: STANDARD TAT

Custody Transfers Prior to Receipt By Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
Scott Beesinger	2/5/24	1430	1.		
2.			2.		
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab: ____ Shipped ____ No.:

Method of Shipment: ____

Fed ____ Ex ____ Airbill ____ Number:

Analytical Lab: ALS 10450 Stancliff Rd. Suite 210 Houston, TX 77099 (281) 530-5656

ATTN: Dane Wacasey Lab Recipient: Delivery Date/Time:

1.) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)

2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)

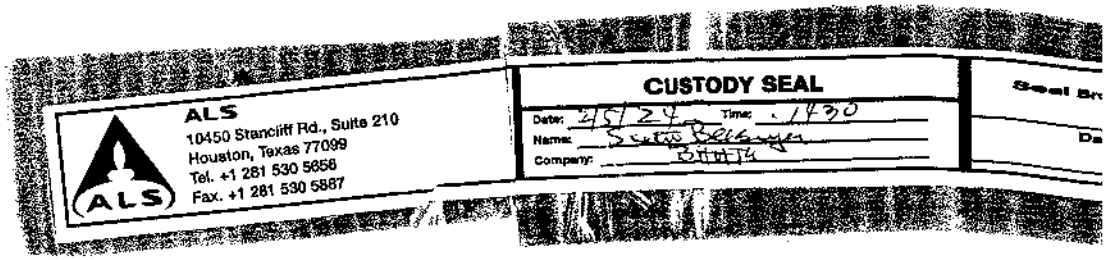
3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)

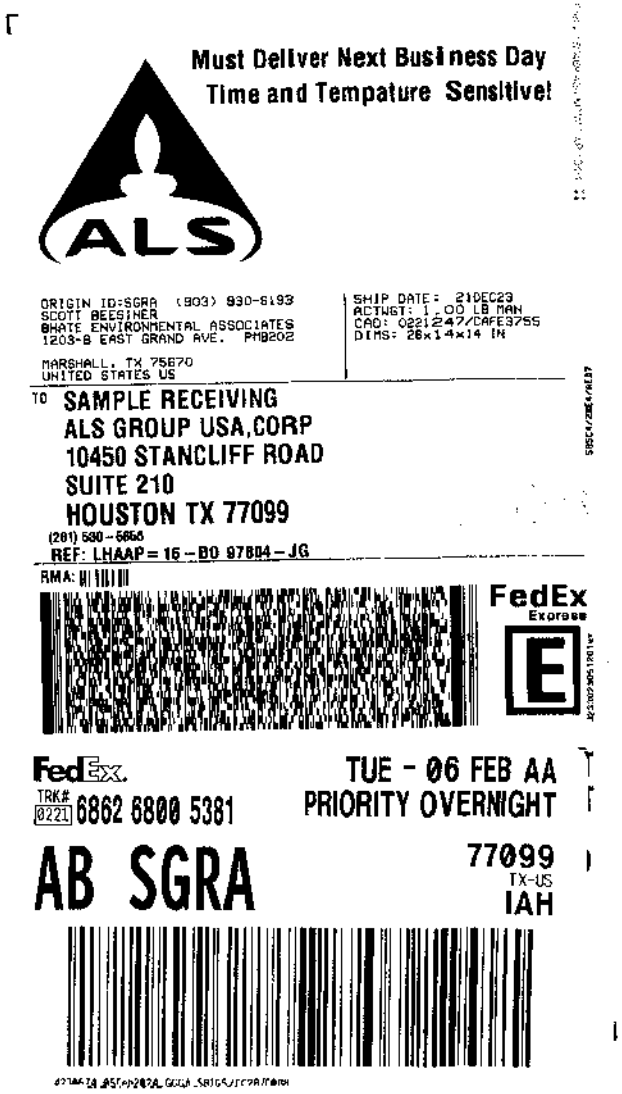
4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks

5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control

JC 2/6/24
0930 IR31
CF=0.1
50913 ug 5.7 IR31


ALS
10450 Stancliff Rd., Suite 210
Houston, Texas 77099
Tel. +1 281 530 5656
Fax. +1 281 530 5887
CUSTODY SEAL
Date: 2/5/24
Time: 1430
Name:
Company:


Must Deliver Next Business Day
Time and Tempature Sensitive!
ALS
ORIGIN ID:SGRA (903) 930-6193
SCOTT BEESINER
SHAKE ENVIRONMENTAL ASSOCIATES
1203-B EAST GRAND AVE. PH0202
MARSHALL, TX 75670
UNITED STATES US
SHIP DATE: 21DEC23
ACTWGT: 1.00 LB MAN
CAD: 0221247/CAFE3755
DIMS: 26x14x14 IN
TO SAMPLE RECEIVING
ALS GROUP USA,CORP
10450 STANCLIFF ROAD
SUITE 210
HOUSTON TX 77099
(281) 530-5656
REF: LHAAP=15-B0 97804-JG
RMA:
FedEx Express
FedEx.
TRK# 0221 6862 6800 5381
TUE - 06 FEB AA
PRIORITY OVERNIGHT
AB SGRA
77099
TX-US
IAH

February 14, 2024 Service Request No:E2400112

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

Laboratory Results for: HS24020246

Dear James,

Enclosed are the results of the sample(s) submitted to our laboratory February 06, 2024
For your reference, these analyses have been assigned our service request number **E2400112.**

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

Please contact me if you have any questions. My extension is 2190. You may also contact me via email at hussam.kelany@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Hussam Kelany
Project Manager

ADDRESS 10450 Stancliff Rd., Suite 210, Houston, TX 77099
PHONE +1 281 530 5656 | FAX +1 281 530 5887
ALS Group USA, Corp.
dba ALS Environmental

Certificate of Analysis

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

Client:	ALS Environmental - US	**Service Request No.:**	E2400112
Project:	HS24020246	**Date Received:**	02/06/24
Sample Matrix:	Water		

CASE NARRATIVE

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

Sample Receipt

Eight samples were received for analysis at ALS Environmental in Houston on 02/06/24.

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

Data Validation Notes and Discussion

Precision and Accuracy:

EQ2400081: 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 batch precision (MS/DMS) measurements were determined on an unrelated sample in the extraction batch. The MS/DMS results are not included in this report.

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

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

Client: ALS Environmental - US **Service Request:**E2400112
Project: HS24020246

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
E2400112-001	16WW55-240205	2/5/2024	0725
E2400112-002	16WW55-240205	2/5/2024	0815
E2400112-003	16WW48-240205	2/5/2024	0905
E2400112-004	16WW48-240205	2/5/2024	0950
E2400112-005	16EW08-240205	2/5/2024	1035
E2400112-006	16EW08-240205	2/5/2024	1115
E2400112-007	16EW01-240205	2/5/2024	1200
E2400112-008	16EW01-240205	2/5/2024	1245

Service Request Summary

Folder #: **E2400112**
Client Name: ALS Environmental - US
Project Name: HS24020246
Project Number:

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

Project Chemist: Hussam Kelany
Originating Lab: HOUSTON
Logged By: JCORONADO2
Date Received: 02/06/24
Internal Due Date: 2/13/2024
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number:
EDD: EQUIS APTIM
LONGHORN EFWEDD

8 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-WIC 10A
Pressure Gas:

Lab Samp No.	Client Samp No	Matrix	Collected	Semivoa GCMS ClO4 DOD/6850
E2400112-001	16WW55-240205	Water	02/05/24 0725	**IV**
E2400112-002	16WW55-240205	Water	02/05/24 0815	**IV**
E2400112-003	16WW48-240205	Water	02/05/24 0905	**IV**
E2400112-004	16WW48-240205	Water	02/05/24 0950	**IV**
E2400112-005	16EW08-240205	Water	02/05/24 1035	**IV**
E2400112-006	16EW08-240205	Water	02/05/24 1115	**IV**
E2400112-007	16EW01-240205	Water	02/05/24 1200	**IV**
E2400112-008	16EW01-240205	Water	02/05/24 1245	**IV**

Service Request Summary

Folder #: **E2400112**
Client Name: ALS Environmental - US
Project Name: HS24020246
Project Number:

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

Project Chemist: Hussam Kelany
Originating Lab: HOUSTON
Logged By: JCORONADO2
Date Received: 02/06/24
Internal Due Date: 2/13/2024
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number:
EDD: EQUIS APTIM
LONGHORN EFWEDD

8 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-WIC 10A
Pressure Gas:

Data Qualifiers

Lab Standard

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

Data Qualifiers

Lab Standard

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

ALS Laboratory Group

Acronyms

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

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

ALS Environmental

State Certifications, Accreditations, and Licenses

Agency	Number	Expire Date
Arizona Department of Health Services	AZ0793_2024	5/27/2024
Arkansas Department of Environmental Quality	88-00356	3/27/2024
California State Environmental Laboratory Accreditation Program	2919	4/30/2024
Department of Defense	L22-90	3/31/2024
Department of Defense	L23-358	5/31/2025
Florida Department of Health	E87611-38	6/30/2024
Illinois Environmental Protection Agency	2000322023-11	6/30/2024
Kansas Department of Health and Environment	E-10352 2023-2024	7/31/2024
Louisiana Department of Environmental Quality	03087-2023	6/30/2024
Louisiana Department of Health and Hospitals	LA028-2024	12/31/2024
Maine Department of Health and Human Services	2022017	6/5/2024
Maryland Department of the Environment	343-2023	6/30/2024
Michigan Depratment of Environmental Quality	9971-2023	4/30/2024
Minnesota Department of Health	2645386	12/31/2024
Nebraska Department of Health and Human Services	NE-OS-25-13	4/30/2024
Nevada Division of Environmental Protection	TX026932024-1	7/31/2024
New Hampshire Environmental Laboratory Accreditation Program	209423	4/24/2024
New Jersey Department of Environmental Protection	TX008-2024	6/30/2024
New York Department of Health	11707	3/31/2024
Oklahoma Department of Environmental Quality	2023-140	8/31/2024
Oregon Environmental Laboratory Accreditation Program	TX200002-011	5/15/2024
Pennsylvania Department of Environmental Protection	68-03441-017	6/30/2024
Perry Johnson Laboratory Accreditation	L22-91	3/31/2024
Tennessee Department of Environment and Concervation	TN04016-2023	4/30/2024
Texas Commision on Environmental Quality	T104704231-23-30	4/30/2024
Utah Department of Health Environmental Laboratory Certification	TX026932023-14	7/31/2024
Washington Department of Ecology	C819-23	11/14/2024

Chain of Custody

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

E2400112 5
ALS Group USA, Corp.
HS24020246

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:** 24665

SUBCONTRACT TO:

ALS Environmental
10450 Stancliff Road, Suite 210
Houston, TX 77099

Phone: +1 281 530 5656

CUSTOMER INFORMATION:

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

INVOICE INFORMATION:

Company:	ALS Houston
Contact:	Accounts Payable
Address:	10450 Stancliff Rd, Ste 210
Phone:	+1 281 530 5656
Reference:	HS24020246
TSR:	Sonia West

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	**HS24020246-01**	**16WW55_240205**	**Groundwater**	**05 Feb 2024 07:25**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			13 Feb 2024
2.	**HS24020246-02**	**16WW41_240205**	**Groundwater**	**05 Feb 2024 08:15**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			13 Feb 2024
3.	**HS24020246-03**	**16WW48_240205**	**Groundwater**	**05 Feb 2024 09:05**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			13 Feb 2024
4.	**HS24020246-04**	**16EW03_240205**	**Groundwater**	**05 Feb 2024 09:50**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			13 Feb 2024
5.	**HS24020246-05**	**16EW08_240205**	**Groundwater**	**05 Feb 2024 10:35**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			13 Feb 2024
6.	**HS24020246-06**	**16EW04_240205**	**Groundwater**	**05 Feb 2024 11:15**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			13 Feb 2024
7.	**HS24020246-07**	**16EW01_240205**	**Groundwater**	**05 Feb 2024 12:00**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			13 Feb 2024
8.	**HS24020246-08**	**16WW49_240205**	**Groundwater**	**05 Feb 2024 12:45**

Subcontract Chain of Custody

SAMPLING STATE: **Dept of Defense** **COC ID:** **24665**

LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
ANALYSIS REQUESTED			DUE DATE
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.		13 Feb 2024

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

QC Level: DOD IV (DoD Data Package)

Relinquished By: _____ Date/Time: 2/6 1440

Received By: JC Date/Time: _____

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

16 Feb 2024 Page 1 of 2

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: 24665**

SUBCONTRACT TO:

ALS Environmental
10450 Stancliff Road, Suite 210
Houston, TX 77099

Phone: +1 281 530 5656

CUSTOMER INFORMATION:

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

INVOICE INFORMATION:

Company: ALS Houston
Contact: Accounts Payable
Address: 10450 Stancliff Rd, Ste 210
Phone: +1 281 530 5656
Reference: HS24020246
TSR: Sonia West

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	**HS24020246-01**	**16WW55-240205**	**Groundwater**	**05 Feb 2024 07:25**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			13 Feb 2024
2.	**HS24020246-02**	**16WW41-240205**	**Groundwater**	**05 Feb 2024 08:15**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			13 Feb 2024
3.	**HS24020246-03**	**16WW48-240205**	**Groundwater**	**05 Feb 2024 09:05**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			13 Feb 2024
4.	**HS24020246-04**	**16EW03-240205**	**Groundwater**	**05 Feb 2024 09:50**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			13 Feb 2024
5.	**HS24020246-05**	**16EW08-240205**	**Groundwater**	**05 Feb 2024 10:35**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			13 Feb 2024
6.	**HS24020246-06**	**16EW04-240205**	**Groundwater**	**05 Feb 2024 11:15**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			13 Feb 2024
7.	**HS24020246-07**	**16EW01-240205**	**Groundwater**	**05 Feb 2024 12:00**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			13 Feb 2024
8.	**HS24020246-08**	**16WW49-240205**	**Groundwater**	**05 Feb 2024 12:45**

Subcontract Chain of Custody

SAMPLING STATE: **Dept of Defense** **COC ID: 24665**

LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
ANALYSIS REQUESTED			DUE DATE
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.		13 Feb 2024

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

QC Level: DOD IV (DoD Data Package)

Relinquished By: _____ Date/Time: _____

Received By: _____ Date/Time: _____

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

E2400112 5
ALS Group USA, Corp.
HS24020246

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

Sample Receipt Checklist

Work Order ID: HS24020246 **Date/Time received:** 06 Feb 2024 09:30

Client name: Bhate Environmental Associates, Inc. **Received by:** Jacob Coronado

Completed/By: 06 Feb 2024 14:40 (Date/Time) Jacob Coronado (eSignature) **Reviewed/By:** 06 Feb 2024 16:32 (Date/Time) luis.aguilar (eSignature)

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	COC ID(s):
Samplers name present on COC?	☑ Yes	☐ No	
Chain of custody agrees with sample labels?	☑ Yes	☐ No	
Samples in proper container/bottle?	☑ Yes	☐ No	
Sample containers intact?	☑ Yes	☐ No	
Sufficient sample volume for indicated test?	☑ Yes	☐ No	
All samples received within holding time?	☑ Yes	☐ No	
Container/Temp Blank temperature in compliance?	☑ Yes	☐ No	

Temperature(s)/Thermometer(s): 3.7UC/3.6C IR31

Cooler Information: 1 Cooler(s), 50913

Date/Time sample(s) sent to storage: 02/06/2024 1500

Water - VOA vials have zero headspace?	☑ Yes	☐ No	☐ No VOA vials submitted
Water - pH acceptable upon receipt?	☐ Yes	☐ No	☑ Not Applicable
pH adjusted?	☐ Yes	☐ No	☑ Not Applicable

pH adjusted by: _____

Login notes: _____

Client contacted: _____ **Date contacted:** _____ **Person contacted:** _____

Contacted by: _____ **Regarding:** _____

Comments: _____

Corrective action: _____

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T: +1 281 530 5656
F: +1 281 530 5887
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SAMPLE ACCEPTANCE POLICY

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

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

- ✓ Intact on outside of cooler, signed and dated

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

The following is required on each COC:

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

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

Sample Integrity (mandatory):

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

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

Temperature Requirement (varies by sample matrix):

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

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

Preparation Information Benchsheets

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

Preparation Information Benchsheet

Prep Run#: 433879 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/JOSEL.JUAREZ **Prep Method:** Method **Prep Date/Time:** 2/12/24 08:23

#	Lab Code	Client ID	B#	Method /Test	pH	Cl	Matrix	Amt. Ext.	Sample Description
1	E2400101-001	Q1/24-BFT-EOD-7	.01	6850/ClO4 DOD			Water	10mL	
2	E2400101-002	Q1/24-BFT-EOD-6	.01	6850/ClO4 DOD			Water	10mL	
3	E2400101-003	Q1/24-BFT-EOD-5	.01	6850/ClO4 DOD			Water	10mL	
4	E2400101-004	Q1/24-BFT-EOD-1	.01	6850/ClO4 DOD			Water	10mL	
5	E2400101-005	Q1/24-BFT-EOD-8	.01	6850/ClO4 DOD			Water	10mL	
6	E2400101-006	Q1/24-BFT-EOD-9	.01	6850/ClO4 DOD			Water	10mL	
7	E2400101-007	Q1/24-BFT-EOD-2	.02	6850/ClO4 DOD			Water	10mL	
8	E2400101-008	Q1/24-BFT-EOD-10	.01	6850/ClO4 DOD			Water	10mL	
9	E2400101-009	Q1/24-BFT-EOD-10D	.01	6850/ClO4 DOD			Water	10mL	
10	E2400101-010	Q1/24-BFT-EOD-4	.01	6850/ClO4 DOD			Water	10mL	
11	E2400101-011	Q1/24-BFT-EOD-11	.01	6850/ClO4 DOD			Water	10mL	
12	E2400101-012	Q1/24-BFT-EOD-3	.01	6850/ClO4 DOD			Water	10mL	
13	E2400112-001	16WW55-240205	.01	6850/ClO4 DOD			Water	10mL	
14	E2400112-002	16WW55-240205	.01	6850/ClO4 DOD			Water	10mL	
15	E2400112-003	16WW48-240205	.01	6850/ClO4 DOD			Water	10mL	
16	E2400112-004	16WW48-240205	.01	6850/ClO4 DOD			Water	10mL	
17	E2400112-005	16EW08-240205	.01	6850/ClO4 DOD			Water	10mL	
18	E2400112-006	16EW08-240205	.01	6850/ClO4 DOD			Water	10mL	
19	E2400112-007	16EW01-240205	.01	6850/ClO4 DOD			Water	10mL	
20	E2400112-008	16EW01-240205	.01	6850/ClO4 DOD			Water	10mL	
21	EQ2400081-01	MB		6850/ClO4 DOD			Liquid	10mL	
22	EQ2400081-02	LCS		6850/ClO4 DOD			Liquid	10mL	
23	EQ2400081-03	DLCS		6850/ClO4 DOD			Liquid	10mL	
24	EQ2400081-04	Q1/24-BFT-EOD-2 MS	.02	6850/ClO4 DOD			Liquid	10mL	
25	EQ2400081-05	Q1/24-BFT-EOD-2 DMS	.02	6850/ClO4 DOD			Liquid	10mL	
26	EQ2400081-06	ICS		6850/ClO4 DOD			Liquid	10mL	

Spiking Solutions

Name: Perchlorate Intermediate Stock 2 Inventory ID 233555 Logbook Ref: Perchlorate INT. Stock2 Expires On: 08/05/2024

EQ2400081-02 10.00µL EQ2400081-03 10.00µL EQ2400081-04 10.00µL EQ2400081-05 10.00µL

Name: Perchlorate Internal Standard 1ug/mL Inventory ID 233561 Logbook Ref: Perchlorate Internal Standard Expires On: 08/05/2024

E2400101-001 100.00µL E2400101-002 100.00µL E2400101-003 100.00µL E2400101-004 100.00µL E2400101-005 100.00µL E2400101-006 100.00µL

Preparation Information Benchsheet

Prep Run#: 433879 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/JOSEL.JUAREZ **Prep Method:** Method **Prep Date/Time:** 2/12/24 08:23

E2400101-007	100.00µL	E2400101-008	100.00µL	E2400101-009	100.00µL	E2400101-011	100.00µL	E2400101-012	100.00µL	E2400112-001	100.00µL
E2400112-002	100.00µL	E2400112-003	100.00µL	E2400112-004	100.00µL	E2400112-005	100.00µL	E2400112-006	100.00µL	E2400112-007	100.00µL
E2400112-008	100.00µL	EQ2400081-01	100.00µL	EQ2400081-02	100.00µL	EQ2400081-03	100.00µL	EQ2400081-04	100.00µL	EQ2400081-05	100.00µL
EQ2400081-06	100.00µL										

Preparation Materials

Water HPLC Grade	HPLC water 083124 (233144)	6850 Amber Glass screw vial	2mL Screw Top Vial (221894)	6850 0.45um syringe filters	6850 0.45 SYRING FILTER (229979)
6850 Luer-Lok Syringes	Luer Lok Syringes (231696)				

Preparation Steps

Step: Preparation
Started: 2/12/24 08:23
Finished: 2/12/24 13:26
By: XMI
Comments

Comments: _____

Reviewed By: _____ Date: _____

Chain of Custody

Relinquished By: _____ Date: _____ Extracts Examined

Received By: _____ Date: _____ Yes No

Analytical Results

ALS Environmental - Houston Specialties Laboratory
10450 Stancliff Rd., Suite 210, Houston TX 77099
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ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400112
Project:	HS24020246	**Date Collected:**	2/ 5/24 0725
Sample Matrix:	Water	**Date Received:**	2/ 6/24
Sample Name:	16WW55-240205	**Units:**	µg/L
Lab Code:	E2400112-001	**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	**45.8**		0.100	0.0500	0.0250	1	2/12/24	2/13/24 12:40	433879	832255	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400112
Project:	HS24020246	**Date Collected:**	2/ 5/24 0815
Sample Matrix:	Water	**Date Received:**	2/ 6/24
Sample Name:	16WW55-240205	**Units:**	µg/L
Lab Code:	E2400112-002	**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	**31.9**		1.00	0.500	0.250	10	2/12/24	2/13/24 15:22	433879	832255	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400112
Project:	HS24020246	**Date Collected:**	2/ 5/24 0905
Sample Matrix:	Water	**Date Received:**	2/ 6/24
Sample Name:	16WW48-240205	**Units:**	µg/L
Lab Code:	E2400112-003	**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	**2.38**		1.00	0.500	0.250	10	2/12/24	2/13/24 15:27	433879	832255	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400112
Project:	HS24020246	**Date Collected:**	2/ 5/24 0950
Sample Matrix:	Water	**Date Received:**	2/ 6/24
Sample Name:	16WW48-240205	**Units:**	µg/L
Lab Code:	E2400112-004	**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	2/12/24	2/13/24 14:39	433879	832255	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400112
Project:	HS24020246	**Date Collected:**	2/ 5/24 1035
Sample Matrix:	Water	**Date Received:**	2/ 6/24
Sample Name:	16EW08-240205	**Units:**	µg/L
Lab Code:	E2400112-005	**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	2/12/24	2/13/24 13:27	433879	832255	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400112
Project:	HS24020246	**Date Collected:**	2/ 5/24 1115
Sample Matrix:	Water	**Date Received:**	2/ 6/24
Sample Name:	16EW08-240205	**Units:**	µg/L
Lab Code:	E2400112-006	**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	2/12/24	2/13/24 14:58	433879	832255	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400112
Project:	HS24020246	**Date Collected:**	2/ 5/24 1200
Sample Matrix:	Water	**Date Received:**	2/ 6/24
Sample Name:	16EW01-240205	**Units:**	µg/L
Lab Code:	E2400112-007	**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	**44.2**		0.500	0.250	0.125	5	2/12/24	2/13/24 13:38	433879	832255	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400112
Project:	HS24020246	**Date Collected:**	2/ 5/24 1245
Sample Matrix:	Water	**Date Received:**	2/ 6/24
Sample Name:	16EW01-240205	**Units:**	µg/L
Lab Code:	E2400112-008	**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	2/12/24	2/13/24 13:55	433879	832255	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400112
Project:	HS24020246	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	EQ2400081-01	**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	2/12/24	2/13/24 14:06	433879	832255	

Accuracy & Precision

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ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS24020246
Sample Matrix: Water

Service Request: E2400112
Date Analyzed: 2/13/24

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

Analytical Method: 6850
Prep Method: Method

Units: µg/L
Basis: NA

Extraction Lot: 433879

	Lab Control Sample EQ2400081-02			Duplicate Lab Control Sample EQ2400081-03					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	0.101	0.100	101	0.118	0.100	118	84 - 119	15	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:**	E2400112
Project:	HS24020246	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2400081-02	**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	**0.101**		0.100	0.0500	0.0250	1	2/12/24	2/13/24 14:11	433879	832255	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400112
Project:	HS24020246	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2400081-03	**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	**0.118**		0.100	0.0500	0.0250	1	2/12/24	2/13/24 14:17	433879	832255	

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 2/21/2024 5:10:31 PM Revision 1

JOB DESCRIPTION

HS24020246

JOB NUMBER

410-159923-1

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

See page two for job notes and contact information.

my EOL

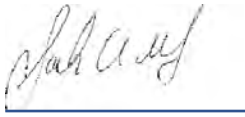
Eurofins Lancaster Laboratories Environment Testing, LLC

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

Authorization



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Revision 1

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

Eurofins Lancaster Laboratories Environment Testing, LLC

Compliance Statement

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

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

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

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

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Definitions/Glossary

Client: ALS Group USA, Corp
Job ID: 410-159923-1
Project/Site: HS24020246

Qualifiers

GC VOA

Qualifier	Qualifier Description
D	The reported value is from a dilution.
M	Manual integrated compound.
U	Undetected at the Limit of Detection.

Glossary

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

Case Narrative

Client: ALS Group USA, Corp
Project: HS24020246

Job ID: 410-159923-1

Job ID: 410-159923-1 **Eurofins Lancaster Laboratories Environment**

Job Narrative
410-159923-1

REVISION

The report being provided is a revision of the original report sent on 2/12/2024. The report (revision 1) is being revised due to sample IDs being updated to have a dash (-) instead of an underscore (_).

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 2/7/2024 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.7°C.

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

Detection Summary

Client: ALS Group USA, Corp
Project/Site: HS24020246

Job ID: 410-159923-1

Client Sample ID: 16WW55-240205 — Lab Sample ID: 410-159923-1

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	220000	M	12000	5600	ug/L	1		RSK-175	Total/NA

Client Sample ID: 16WW41-240205 — Lab Sample ID: 410-159923-2

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	830000	D	120000	56000	ug/L	10		RSK-175	Total/NA

Client Sample ID: 16WW48-240205 — Lab Sample ID: 410-159923-3

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	240000	M	12000	5600	ug/L	1		RSK-175	Total/NA

Client Sample ID: 16EW03-240205 — Lab Sample ID: 410-159923-4

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	170000		12000	5600	ug/L	1		RSK-175	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: ALS Group USA, Corp
Project/Site: HS24020246

Job ID: 410-159923-1

Client Sample ID: 16WW55-240205
Lab Sample ID: 410-159923-1
Date Collected: 02/05/24 07:25
Matrix: Water
Date Received: 02/07/24 10:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	220000	M	12000	5600	ug/L		02/08/24 09:54	02/08/24 14:54	1

Client Sample ID: 16WW41-240205
Lab Sample ID: 410-159923-2
Date Collected: 02/05/24 08:15
Matrix: Water
Date Received: 02/07/24 10:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	830000	D	120000	56000	ug/L		02/09/24 09:54	02/09/24 12:02	10

Client Sample ID: 16WW48-240205
Lab Sample ID: 410-159923-3
Date Collected: 02/05/24 09:05
Matrix: Water
Date Received: 02/07/24 10:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	240000	M	12000	5600	ug/L		02/08/24 09:54	02/08/24 15:10	1

Client Sample ID: 16EW03-240205
Lab Sample ID: 410-159923-4
Date Collected: 02/05/24 09:50
Matrix: Water
Date Received: 02/07/24 10:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	170000		12000	5600	ug/L		02/08/24 09:54	02/08/24 15:27	1

QC Sample Results

Client: ALS Group USA, Corp
Project/Site: HS24020246

Job ID: 410-159923-1

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 410-471442/1-A
Matrix: Water
Analysis Batch: 471392

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 471442

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	5600	U	12000	5600	ug/L		02/08/24 09:54	02/08/24 13:56	1

Lab Sample ID: LCS 410-471442/2-A
Matrix: Water
Analysis Batch: 471392

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 471442

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Carbon dioxide	35800	37000		ug/L		103	80 - 122

Lab Sample ID: MB 410-471859/1-A
Matrix: Water
Analysis Batch: 471838

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 471859

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	5600	U	12000	5600	ug/L		02/09/24 09:54	02/09/24 09:56	1

Lab Sample ID: LCS 410-471859/2-A
Matrix: Water
Analysis Batch: 471838

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 471859

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Carbon dioxide	35800	39800		ug/L		111	80 - 122

QC Association Summary

Client: ALS Group USA, Corp
Project/Site: HS24020246

Job ID: 410-159923-1

GC VOA

Analysis Batch: 471392

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-159923-1	16WW55-240205	Total/NA	Water	RSK-175	471442
410-159923-3	16WW48-240205	Total/NA	Water	RSK-175	471442
410-159923-4	16EW03-240205	Total/NA	Water	RSK-175	471442
MB 410-471442/1-A	Method Blank	Total/NA	Water	RSK-175	471442
LCS 410-471442/2-A	Lab Control Sample	Total/NA	Water	RSK-175	471442

Prep Batch: 471442

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-159923-1	16WW55-240205	Total/NA	Water	RSK-175	
410-159923-3	16WW48-240205	Total/NA	Water	RSK-175	
410-159923-4	16EW03-240205	Total/NA	Water	RSK-175	
MB 410-471442/1-A	Method Blank	Total/NA	Water	RSK-175	
LCS 410-471442/2-A	Lab Control Sample	Total/NA	Water	RSK-175	

Analysis Batch: 471838

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-159923-2	16WW41-240205	Total/NA	Water	RSK-175	471859
MB 410-471859/1-A	Method Blank	Total/NA	Water	RSK-175	471859
LCS 410-471859/2-A	Lab Control Sample	Total/NA	Water	RSK-175	471859

Prep Batch: 471859

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-159923-2	16WW41-240205	Total/NA	Water	RSK-175	
MB 410-471859/1-A	Method Blank	Total/NA	Water	RSK-175	
LCS 410-471859/2-A	Lab Control Sample	Total/NA	Water	RSK-175	

Lab Chronicle

Client: ALS Group USA, Corp
Project/Site: HS24020246

Job ID: 410-159923-1

Client Sample ID: 16WW55-240205
Date Collected: 02/05/24 07:25
Date Received: 02/07/24 10:00

Lab Sample ID: 410-159923-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	RSK-175			471442	HQR6	ELLE	02/08/24 09:54
Total/NA	Analysis	RSK-175		1	471392	LXF2	ELLE	02/08/24 14:54

Client Sample ID: 16WW41-240205
Date Collected: 02/05/24 08:15
Date Received: 02/07/24 10:00

Lab Sample ID: 410-159923-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	RSK-175			471859	HQR6	ELLE	02/09/24 09:54
Total/NA	Analysis	RSK-175		10	471838	LXF2	ELLE	02/09/24 12:02

Client Sample ID: 16WW48-240205
Date Collected: 02/05/24 09:05
Date Received: 02/07/24 10:00

Lab Sample ID: 410-159923-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	RSK-175			471442	HQR6	ELLE	02/08/24 09:54
Total/NA	Analysis	RSK-175		1	471392	LXF2	ELLE	02/08/24 15:10

Client Sample ID: 16EW03-240205
Date Collected: 02/05/24 09:50
Date Received: 02/07/24 10:00

Lab Sample ID: 410-159923-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	RSK-175			471442	HQR6	ELLE	02/08/24 09:54
Total/NA	Analysis	RSK-175		1	471392	LXF2	ELLE	02/08/24 15:27

Laboratory References:

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

Accreditation/Certification Summary

Client: ALS Group USA, Corp
Project/Site: HS24020246

Job ID: 410-159923-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

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

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

Method Summary

Client: ALS Group USA, Corp
Project/Site: HS24020246

Job ID: 410-159923-1

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

Protocol References:

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

Laboratory References:

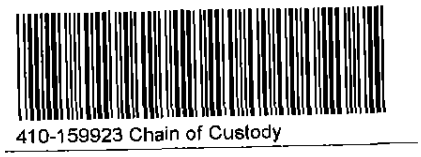
ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Sample Summary

Client: ALS Group USA, Corp
Project/Site: HS24020246

Job ID: 410-159923-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
410-159923-1	16WW55-240205	Water	02/05/24 07:25	02/07/24 10:00
410-159923-2	16WW41-240205	Water	02/05/24 08:15	02/07/24 10:00
410-159923-3	16WW48-240205	Water	02/05/24 09:05	02/07/24 10:00
410-159923-4	16EW03-240205	Water	02/05/24 09:50	02/07/24 10:00



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:** **24666**

SUBCONTRACT TO:

Eurofins Lancaster Laboratories Envt Testing
2425 New Holland Pike
Lancaster, PA 17601 **Phone:** +1 717 656 2300

CUSTOMER INFORMATION:

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

INVOICE INFORMATION:

Company:	ALS Houston
Contact:	Accounts Payable
Address:	10450 Stancliff Rd, Ste 210
Phone.	+1 281 530 5656
Reference·	HS24020246
TSR:	Sonia West

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	**HS24020246-01**	**16WW55_240205**	**Groundwater**	**05 Feb 2024 07:25**
	RSK-CO2, Level II & IV DoD, Equ_APTIM_GISKey (Aptim)			13 Feb 2024
2.	**HS24020246-02**	**16WW41_240205**	**Groundwater**	**05 Feb 2024 08:15**
	RSK-CO2 Level II & IV DoD, Equ_APTIM_GISKey (Aptim)			13 Feb 2024
3.	**HS24020246-03**	**16WW48_240205**	**Groundwater**	**05 Feb 2024 09:05**
	RSK-CO2, Level II & IV, DoD Equ_APTIM_GISKey (Aptim)			13 Feb 2024
4.	**HS24020246-04**	**16EW03_240205**	**Groundwater**	**05 Feb 2024 09:50**
	RSK CO2 Level II & IV, DoD Equ_APTIM_GISKey (Aptim)			13 Feb 2024

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

QC Level: DOD IV (DoD Data Package)

Relinquished By _____ Date/Time 2/6/24 1800.

Received By _____ Date/Time 2/7/24 1000

Cooler ID(s) _____ Temperature(s) _____

Raw 0.7-COR0.7

Login Sample Receipt Checklist

Client: ALS Group USA, Corp

Job Number: 410-159923-1

Login Number: 159923
List Number: 1
Creator: Ballard, Megan

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

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

HS24020246-MSVOA-SW8260

ALS WO# HS24020246

right solutions.
right partner.

Form 1

Organic Analysis Data Sheet

Volatiles by EPA Volatiles Organics by Method 8260C

Workorder

HS24020246

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

02/23/2024

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

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24020246

Volatiles by EPA Volatiles Organics by Method 8260C

16WW55-240205	Collected	Received	Matrix	Basis
HS24020246-01	02/05/24 07:25	02/06/24 09:30	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	20	U	6.0	20	20	20	02/10/24 08:56	VOA9_458584	U021022.D
1,1-Dichloroethene	ug/L	20	U	4.0	20	20	20	02/10/24 08:56	VOA9_458584	U021022.D
1,2-Dichloroethane	ug/L	20	U	4.0	20	20	20	02/10/24 08:56	VOA9_458584	U021022.D
cis-1,2-Dichloroethene	ug/L	610		4.0	20	20	20	02/10/24 08:56	VOA9_458584	U021022.D
Methylene chloride	ug/L	40	U	8.0	40	40	20	02/10/24 08:56	VOA9_458584	U021022.D
Trichloroethene	ug/L	2,100		4.0	20	20	20	02/10/24 08:56	VOA9_458584	U021022.D
Vinyl chloride	ug/L	99		4.0	20	20	20	02/10/24 08:56	VOA9_458584	U021022.D

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24020246

Volatiles by EPA Volatiles Organics by Method 8260C

16WW41-240205	Collected	Received	Matrix	Basis
HS24020246-02	02/05/24 08:15	02/06/24 09:30	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	02/10/24 09:18	VOA9_458584	U021023.D
1,1-Dichloroethene	ug/L	50	U	10	50	50	50	02/10/24 09:18	VOA9_458584	U021023.D
1,2-Dichloroethane	ug/L	50	U	10	50	50	50	02/10/24 09:18	VOA9_458584	U021023.D
cis-1,2-Dichloroethene	ug/L	2,500		10	50	50	50	02/10/24 09:18	VOA9_458584	U021023.D
Methylene chloride	ug/L	100	U	20	100	100	50	02/10/24 09:18	VOA9_458584	U021023.D
Trichloroethene	ug/L	4,300		10	50	50	50	02/10/24 09:18	VOA9_458584	U021023.D
Vinyl chloride	ug/L	420		10	50	50	50	02/10/24 09:18	VOA9_458584	U021023.D

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24020246

Volatiles by EPA Volatiles Organics by Method 8260C

16WW48-240205	Collected	Received	Matrix	Basis
HS24020246-03	02/05/24 09:05	02/06/24 09:30	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	02/10/24 09:41	VOA9_458584	U021024.D
1,1-Dichloroethene	ug/L	250	U	50	250	250	250	02/10/24 09:41	VOA9_458584	U021024.D
1,2-Dichloroethane	ug/L	250	U	50	250	250	250	02/10/24 09:41	VOA9_458584	U021024.D
cis-1,2-Dichloroethene	ug/L	26,000		50	250	250	250	02/10/24 09:41	VOA9_458584	U021024.D
Methylene chloride	ug/L	500	U	100	500	500	250	02/10/24 09:41	VOA9_458584	U021024.D
Trichloroethene	ug/L	16,000		50	250	250	250	02/10/24 09:41	VOA9_458584	U021024.D
Vinyl chloride	ug/L	600		50	250	250	250	02/10/24 09:41	VOA9_458584	U021024.D

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24020246

Volatiles by EPA Volatiles Organics by Method 8260C

16EW03-240205	Collected	Received	Matrix	Basis
HS24020246-04	02/05/24 09:50	02/06/24 09:30	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	20	U	6.0	20	20	20	02/10/24 10:03	VOA9_458584	U021025.D
1,1-Dichloroethene	ug/L	20	U	4.0	20	20	20	02/10/24 10:03	VOA9_458584	U021025.D
1,2-Dichloroethane	ug/L	20	U	4.0	20	20	20	02/10/24 10:03	VOA9_458584	U021025.D
cis-1,2-Dichloroethene	ug/L	1,500		4.0	20	20	20	02/10/24 10:03	VOA9_458584	U021025.D
Methylene chloride	ug/L	40	U	8.0	40	40	20	02/10/24 10:03	VOA9_458584	U021025.D
Trichloroethene	ug/L	820		4.0	20	20	20	02/10/24 10:03	VOA9_458584	U021025.D
Vinyl chloride	ug/L	380		4.0	20	20	20	02/10/24 10:03	VOA9_458584	U021025.D

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24020246

Volatiles by EPA Volatiles Organics by Method 8260C

16EW08-240205	Collected	Received	Matrix	Basis
HS24020246-05	02/05/24 10:35	02/06/24 09:30	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	02/10/24 08:11	VOA9_458584	U021020.D
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	02/10/24 08:11	VOA9_458584	U021020.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	02/10/24 08:11	VOA9_458584	U021020.D
cis-1,2-Dichloroethene	ug/L	1.2		0.20	1.0	1.0	1	02/10/24 08:11	VOA9_458584	U021020.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	02/10/24 08:11	VOA9_458584	U021020.D
Trichloroethene	ug/L	1.4		0.20	1.0	1.0	1	02/10/24 08:11	VOA9_458584	U021020.D
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	02/10/24 08:11	VOA9_458584	U021020.D

Form 1 - Organic Analysis Data Sheet

Client	Bhate Environmental Associates, Inc.	Workorder	
Project	LHAAP Site 16	**HS24020246**	

Volatiles by EPA Volatiles Organics by Method 8260C

16EW04-240205	Collected	Received	Matrix	Basis
HS24020246-06	02/05/24 11:15	02/06/24 09:30	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	200	U	60	200	200	200	02/10/24 10:26	VOA9_458584	U021026.D
1,1-Dichloroethene	ug/L	200	U	40	200	200	200	02/10/24 10:26	VOA9_458584	U021026.D
1,2-Dichloroethane	ug/L	200	U	40	200	200	200	02/10/24 10:26	VOA9_458584	U021026.D
cis-1,2-Dichloroethene	ug/L	4,700		40	200	200	200	02/10/24 10:26	VOA9_458584	U021026.D
Methylene chloride	ug/L	400	U	80	400	400	200	02/10/24 10:26	VOA9_458584	U021026.D
Trichloroethene	ug/L	12,000		40	200	200	200	02/10/24 10:26	VOA9_458584	U021026.D
Vinyl chloride	ug/L	320		40	200	200	200	02/10/24 10:26	VOA9_458584	U021026.D

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24020246

Volatiles by EPA Volatiles Organics by Method 8260C

16EW01-240205	Collected	Received	Matrix	Basis
HS24020246-07	02/05/24 12:00	02/06/24 09:30	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	02/10/24 10:48	VOA9_458584	U021027.D
1,1-Dichloroethene	ug/L	10	U	2.0	10	10	10	02/10/24 10:48	VOA9_458584	U021027.D
1,2-Dichloroethane	ug/L	10	U	2.0	10	10	10	02/10/24 10:48	VOA9_458584	U021027.D
cis-1,2-Dichloroethene	ug/L	680		2.0	10	10	10	02/10/24 10:48	VOA9_458584	U021027.D
Methylene chloride	ug/L	20	U	4.0	20	20	10	02/10/24 10:48	VOA9_458584	U021027.D
Trichloroethene	ug/L	380		2.0	10	10	10	02/10/24 10:48	VOA9_458584	U021027.D
Vinyl chloride	ug/L	93		2.0	10	10	10	02/10/24 10:48	VOA9_458584	U021027.D

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24020246

Volatiles by EPA Volatiles Organics by Method 8260C

16WW49-240205	Collected	Received	Matrix	Basis
HS24020246-08	02/05/24 12:45	02/06/24 09:30	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	02/10/24 08:34	VOA9_458584	U021021.D
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	02/10/24 08:34	VOA9_458584	U021021.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	02/10/24 08:34	VOA9_458584	U021021.D
cis-1,2-Dichloroethene	ug/L	25		0.20	1.0	1.0	1	02/10/24 08:34	VOA9_458584	U021021.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	02/10/24 08:34	VOA9_458584	U021021.D
Trichloroethene	ug/L	79		0.20	1.0	1.0	1	02/10/24 08:34	VOA9_458584	U021021.D
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	02/10/24 08:34	VOA9_458584	U021021.D

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24020246

Volatiles by EPA Volatiles Organics by Method 8260C

Trip Blank-240205

	Collected	Received	Matrix	Basis
HS24020246-09	02/05/24 00:00	02/06/24 09:30	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	02/10/24 04:49	VOA9_458584	U021011.D
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	02/10/24 04:49	VOA9_458584	U021011.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	02/10/24 04:49	VOA9_458584	U021011.D
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	02/10/24 04:49	VOA9_458584	U021011.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	02/10/24 04:49	VOA9_458584	U021011.D
Trichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	02/10/24 04:49	VOA9_458584	U021011.D
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	02/10/24 04:49	VOA9_458584	U021011.D

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Form 2

System Monitoring Compound Recovery

Volatiles by EPA Volatiles Organics by Method 8260C

Workorder

HS24020246

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

02/23/2024

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

Form 2 - System Monitoring Compound Recovery

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Workorder: HS24020246

Volatiles by EPA Volatiles Organics by Method 8260C

RUNID: VOA9-458584

CCV

	Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID: CCV U021002.D Instrument ID: VOA9	Aqueous	02/10/24 01:28	%REC	1

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U021002.D	48.08	50	96.2		80-120
4-Bromofluorobenzene	U021002.D	48.31	50	96.6		80-120
Dibromofluoromethane	U021002.D	48.1	50	96.2		80-120
Toluene-d8	U021002.D	47.6	50	95.2		80-120

16WW55-240205

	Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID: HS24020246-01 Instrument ID: VOA9	Groundwater	02/10/24 08:56	%REC	20

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U021022.D	810	1000	81.4		81-118
4-Bromofluorobenzene	U021022.D	880	1000	87.6		85-114
Dibromofluoromethane	U021022.D	820	1000	81.6		80-119
Toluene-d8	U021022.D	900	1000	89.6		89-112

16WW41-240205

	Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID: HS24020246-02 Instrument ID: VOA9	Groundwater	02/10/24 09:18	%REC	50

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U021023.D	2000	2500	81.9		81-118
4-Bromofluorobenzene	U021023.D	2100	2500	85.1		85-114
Dibromofluoromethane	U021023.D	2000	2500	80.7		80-119
Toluene-d8	U021023.D	2300	2500	90.1		89-112

Form 2 - System Monitoring Compound Recovery

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Workorder: HS24020246

Volatiles by EPA Volatiles Organics by Method 8260C

RUNID: VOA9-458584

16WW48-240205

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24020246-03	Groundwater	02/10/24 09:41	%REC	250
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U021024.D	10000	12500	81.4		81-118
4-Bromofluorobenzene	U021024.D	11000	12500	85.0		85-114
Dibromofluoromethane	U021024.D	10000	12500	80.6		80-119
Toluene-d8	U021024.D	11000	12500	90.4		89-112

16EW03-240205

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24020246-04	Groundwater	02/10/24 10:03	%REC	20
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U021025.D	820	1000	81.7		81-118
4-Bromofluorobenzene	U021025.D	850	1000	85.1		85-114
Dibromofluoromethane	U021025.D	810	1000	80.8		80-119
Toluene-d8	U021025.D	890	1000	89.1		89-112

16EW08-240205

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24020246-05	Groundwater	02/10/24 08:11	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U021020.D	41	50	81.9		81-118
4-Bromofluorobenzene	U021020.D	44	50	88.2		85-114
Dibromofluoromethane	U021020.D	40	50	80.4		80-119
Toluene-d8	U021020.D	46	50	91.3		89-112

Form 2 - System Monitoring Compound Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder **HS24020246**

Volatiles by EPA Volatiles Organics by Method 8260C

RUNID VOA9-458584

16EW04-240205

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24020246-06	Groundwater	02/10/24 10:26	%REC	200
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U021026.D	8100	10000	81.4		81-118
4-Bromofluorobenzene	U021026.D	8500	10000	85.1		85-114
Dibromofluoromethane	U021026.D	8100	10000	80.9		80-119
Toluene-d8	U021026.D	9000	10000	90.0		89-112

16EW01-240205

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24020246-07	Groundwater	02/10/24 10:48	%REC	10
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U021027.D	410	500	81.5		81-118
4-Bromofluorobenzene	U021027.D	430	500	85.9		85-114
Dibromofluoromethane	U021027.D	400	500	80.6		80-119
Toluene-d8	U021027.D	450	500	90.7		89-112

16WW49-240205

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24020246-08	Groundwater	02/10/24 08:34	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U021021.D	41	50	82.1		81-118
4-Bromofluorobenzene	U021021.D	43	50	86.4		85-114
Dibromofluoromethane	U021021.D	40	50	80.7		80-119
Toluene-d8	U021021.D	45	50	90.3		89-112

Form 2 - System Monitoring Compound Recovery

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Workorder: HS24020246

Volatiles by EPA Volatiles Organics by Method 8260C

RUNID: VOA9-458584

Trip Blank-240205

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24020246-09	Water	02/10/24 04:49	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U021011.D	41	50	82.3		81-118
4-Bromofluorobenzene	U021011.D	43	50	85.3		85-114
Dibromofluoromethane	U021011.D	40	50	80.7		80-119
Toluene-d8	U021011.D	45	50	89.2		89-112

BatchQC

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24020269-09MS	Aqueous	02/10/24 04:05	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U021009.D	51.83	50	104		81-118
4-Bromofluorobenzene	U021009.D	50.55	50	101		85-114
Dibromofluoromethane	U021009.D	52.17	50	104		80-119
Toluene-d8	U021009.D	53.07	50	106		89-112

BatchQC

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24020269-09MSD	Aqueous	02/10/24 04:27	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U021010.D	50.82	50	102		81-118
4-Bromofluorobenzene	U021010.D	51.03	50	102		85-114
Dibromofluoromethane	U021010.D	51.93	50	104		80-119
Toluene-d8	U021010.D	53.53	50	107		89-112

Form 2 - System Monitoring Compound Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24020246

Volatiles by EPA Volatiles Organics by Method 8260C

RUNID VOA9-458584

VBLKW-240210

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	VBLKW-240210	Aqueous	02/10/24 02:35	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U021005.D	40.58	50	81.2		81-118
4-Bromofluorobenzene	U021005.D	42.71	50	85.4		85-114
Dibromofluoromethane	U021005.D	40.08	50	80.2		80-119
Toluene-d8	U021005.D	44.71	50	89.4		89-112

VLCSW-240210

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	VLCSW-240210	Aqueous	02/10/24 01:50	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U021003.D	48.38	50	96.8		81-118
4-Bromofluorobenzene	U021003.D	48.31	50	96.6		85-114
Dibromofluoromethane	U021003.D	48.11	50	96.2		80-119
Toluene-d8	U021003.D	48.25	50	96.5		89-112

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Form 3A

Matrix Spike/Spike Duplicate Recovery

Volatiles by EPA Volatiles Organics by Method 8260C

Workorder

HS24020246

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

02/23/2024

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

Form 3A - Matrix Spike/Spike Duplicate Recovery

Client: Bhate Environmental Associates, Inc.

Project: LHAAP Site 16

Workorder: HS24020246

Volatiles by EPA Volatiles Organics by Method 8260C

SAMPLENUM: HS24020269-09MS

BatchQC (HS24020269-09)				HS24020269-09MS				HS24020269-09MSD						
Spike Matrix: Aqueous	Result Units: ug/L			Run Date: 02/10/24				Run Date: 02/10/24						
Instrument ID: VOA9				Run Time: 04:05				Run Time: 04:27						
				Data File: U021009.D				Data File: U021010.D						
Analyte	%R Limits	DF	Sample Result	MS Result	Spike Added	%R	Q	MSD Result	Spike Added	%R	Q	RPD Limit	RPD	Q
1,1,2-Trichloroethane	80-119	1	0	17.6910	20	88		18.5941	20	93		20	4.98	
1,1-Dichloroethene	71-131	1	0	18.3145	20	92		18.2454	20	91		20	0.378	
1,2-Dichloroethane	73-128	1	0	19.1643	20	96		19.0952	20	96		20	0.361	
cis-1,2-Dichloroethene	78-123	1	0	17.2132	20	86		16.9902	20	85		20	1.3	
Methylene chloride	74-124	1	0	17.2355	20	86		18.1819	20	91		20	5.34	
Trichloroethene	79-123	1	0	18.3535	20	92		17.8843	20	89		20	2.59	
Vinyl chloride	58-137	1	0	17.4177	20	87		17.0058	20	85		20	2.39	

Q - %Recovery / RPD Flag * - %Recovery / RPD Outside Limits OL - Outside Limits %R - %Recovery DF - Dilution Factor Amt - Amount (weight or volume)

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Form 3B

Laboratory Control Sample Recovery

Volatiles by EPA Volatiles Organics by Method 8260C

Workorder

HS24020246

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

02/23/2024

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 3B - Laboratory Control Sample Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24020246

SAMPLENUM VLCSW-240210

Volatiles by EPA Volatiles Organics by Method 8260C

VOA9_458584			VLCSW-240210				
Spike Matrix Aqueous	Result Units ug/L		Run Date 02/10/24 Run Time 01:50				
Analyte	%Recovery Limits	Spike Added	LCS Result	%R	Q		
1,1,2-Trichloroethane	80-119	20	18.66	93.3			
1,1-Dichloroethene	71-131	20	17.41	87.1			
1,2-Dichloroethane	73-128	20	18.55	92.7			
cis-1,2-Dichloroethene	78-123	20	16.48	82.4			
Methylene chloride	74-124	20	17.65	88.2			
Trichloroethene	79-123	20	18.32	91.6			
Vinyl chloride	58-137	20	16.9	84.5			

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Form 4

Method Blank Summary

Volatiles by EPA Volatiles Organics by Method 8260C

Workorder

HS24020246

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

02/23/2024

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

Form 4 - Method Blank Summary

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder **HS24020246**

Volatiles by EPA Volatiles Organics by Method 8260C

METHOD BLANK	Matrix	Analysis Date	Analysis Batch	Inst ID
VBLKW-240210	Aqueous	02/10/24 02:35	R458584	VOA9

Client Sample ID	Lab Sample ID	Type	Analysis Date	Analysis Batch	Inst ID	FileID
VLCSW-240210	VLCSW-240210	LCS	02/10/24 01:50	R458584	VOA9	U021003.D
BatchQC	HS24020269-09MS	MS	02/10/24 04:05	R458584	VOA9	U021009.D
BatchQC	HS24020269-09MSD	MSD	02/10/24 04:27	R458584	VOA9	U021010.D
Trip Blank-240205	HS24020246-09	SAMP	02/10/24 04:49	R458584	VOA9	U021011.D
16EW08-240205	HS24020246-05	SAMP	02/10/24 08:11	R458584	VOA9	U021020.D
16WW49-240205	HS24020246-08	SAMP	02/10/24 08:34	R458584	VOA9	U021021.D
16WW55-240205	HS24020246-01	SAMP	02/10/24 08:56	R458584	VOA9	U021022.D
16WW41-240205	HS24020246-02	SAMP	02/10/24 09:18	R458584	VOA9	U021023.D
16WW48-240205	HS24020246-03	SAMP	02/10/24 09:41	R458584	VOA9	U021024.D
16EW03-240205	HS24020246-04	SAMP	02/10/24 10:03	R458584	VOA9	U021025.D
16EW04-240205	HS24020246-06	SAMP	02/10/24 10:26	R458584	VOA9	U021026.D
16EW01-240205	HS24020246-07	SAMP	02/10/24 10:48	R458584	VOA9	U021027.D

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Form 5

Instrument Performance Check

Volatiles by EPA Volatiles Organics by Method 8260C

Workorder

HS24020246

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

02/23/2024

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

FORM 5
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: V9

Lab File ID: U020901 DFTPP Injection Date: 02/09/24

Instrument ID: VOA9 DFTPP Injection Time: 0740

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	15.8
75	30.0 - 60.0% of mass 95	45.2
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.5
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	100.1
175	5.0 - 9.0% of mass 174	8.7 (8.7)1
176	95.0 - 101.0% of mass 174	97.5 (97.4)1
177	5.0 - 9.0% of mass 176	6.6 (6.7)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD00.25	VSTD00.25	U020902	02/09/24	0922
02	VSTD00.5	VSTD00.5	U020903	02/09/24	0944
03	VSTD001	VSTD001	U020904	02/09/24	1006
04	VSTD002	VSTD002	U020905	02/09/24	1029
05	VSTD005	VSTD005	U020906	02/09/24	1051
06	VSTD020	VSTD020	U020907	02/09/24	1113
07	VSTD050	VSTD050	U020908	02/09/24	1135
08	VSTD100	VSTD100	U020909	02/09/24	1158
09	VSTD150	VSTD150	U020910	02/09/24	1220
10	VSTD200	VSTD200	U020911	02/09/24	1242
11	ICV	ICV	U020913	02/09/24	1327
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

Form 5 - Instrument Performance Check

Client: Bhate Environmental Associates, Inc.

Project: LHAAP Site 16

Workorder: **HS24020246**

Volatiles by EPA Volatiles Organics by Method 8260C

RUNID: VOA9-458584

Tune File: U021001.D 02/10/24 2/10/2024

m / e	Ion Abundance Criterion	%RA
50	15.0 - 40.0% of mass 95	15.3 (15.3)
75	30.0 - 60.0% of mass 95	43.8 (43.8)
95	Base peak, 100% RA	100 (90.8)
96	5.0 - 9.0% of mass 95	7.4 (7.38)
173	Less than 2.0% of mass 174	0.1 (0.047) 1
174	greater than 50.0% of mass 95	110.2 (110) 1
175	5.0 - 9.0% of mass 174	9.1 (8.25) 1
176	> 95% but < 101% of mass 174	108.8 (98.7) 1
177	5.0 - 9.0% of mass 176	7 (6.46) 2

%RA - Percent Relative Abundance

This check applies to the following analyses

	Lab Samp ID	Type	Date Analyzed	Lab File ID	Sample ID
1	CCV	CCV	2/10/2024	U021002	CCV
2	VLCSW-	LCS	2/10/2024	U021003	VLCSW-240210
3	VBLKW-	MBLK	2/10/2024	U021005	VBLKW-240210
4	HS24020269-	MS	2/10/2024	U021009	ZZZZZZMS
5	HS24020269-	MSD	2/10/2024	U021010	ZZZZZZMSD
6	HS24020246-	SAMP	2/10/2024	U021011	Trip Blank-240205
7	HS24020246-	SAMP	2/10/2024	U021020	16EW08-240205
8	HS24020246-	SAMP	2/10/2024	U021021	16WW49-240205
9	HS24020246-	SAMP	2/10/2024	U021022	16WW55-240205
10	HS24020246-	SAMP	2/10/2024	U021023	16WW41-240205
11	HS24020246-	SAMP	2/10/2024	U021024	16WW48-240205
12	HS24020246-	SAMP	2/10/2024	U021025	16EW03-240205
13	HS24020246-	SAMP	2/10/2024	U021026	16EW04-240205
14	HS24020246-	SAMP	2/10/2024	U021027	16EW01-240205
15	CCV-END	CCV_EN	2/10/2024	U021028	CCV-END

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Form 6

Initial Calibration Data

Volatiles by EPA Volatiles Organics by Method 8260C

Workorder

HS24020246

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

02/23/2024

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

INITIAL CALIBRATION DATA

Start Cal Date : 09-FEB-2024 09:22
End Cal Date : 09-FEB-2024 12:42
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\NAHSTWS005\Target\chem\voa9.i\U240209.b\8260C.m
Last Edit : 15-Feb-2024 11:14 VOA9.i

Calibration File Names:
Level 1: \\NAHSTWS005\Target\chem\voa9.i\U240209.b\U020902.D
Level 2: \\NAHSTWS005\Target\chem\voa9.i\U240209.b\U020903.D
Level 3: \\NAHSTWS005\Target\chem\voa9.i\U240209.b\U020904.D
Level 4: \\NAHSTWS005\Target\chem\voa9.i\U240209.b\U020905.D
Level 5: \\NAHSTWS005\Target\chem\voa9.i\U240209.b\U020906.D
Level 6: \\NAHSTWS005\Target\chem\voa9.i\U240209.b\U020907.D
Level 7: \\NAHSTWS005\Target\chem\voa9.i\U240209.b\U020908.D
Level 8: \\NAHSTWS005\Target\chem\voa9.i\U240209.b\U020909.D
Level 9: \\NAHSTWS005\Target\chem\voa9.i\U240209.b\U020910.D
Level 10: \\NAHSTWS005\Target\chem\voa9.i\U240209.b\U020911.D

Compound	0.2500000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	5.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	50.0000 Level 7	100.0000 Level 8	150.0000 Level 9	200.0000 Level 10							
2 Dichlorodifluoromethane	+++++	907	1508	2577	6902	27310					
	69589	142137	224828	297253			LINR	0.00255	0.32866		0.99854
3 Chloromethane	+++++	1281	2409	3934	8108	33475					
	80606	165791	256738	364440			LINR	0.00907	0.39182		0.99923
4 Propionitrile	+++++	0.06367	0.06892	0.04886	0.04684	0.05053					
	0.05123	0.05041	0.05210	0.05070			AVRG		0.05370		13.81094

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5 Vinyl Chloride	+++++	1370	1927	3412	7991	37094					
	92433	190664	290301	396253			LINR	0.00129	0.43367		0.99967
6 Bromomethane	+++++	1565	2599	3483	6995	23818					
	58408	122501	199120	274596			LINR	0.01225	0.29723		0.99796
7 Chloroethane	+++++	835	1401	2571	6630	25799					
	66462	129608	202297	273442			LINR	-0.00583	0.29935		0.99924
8 Trichlorofluoromethane	+++++	1847	2869	5784	13984	59528					
	150246	304288	458326	621502			LINR	-0.00811	0.68183		0.99959
9 Acrolein	+++++	+++++	279	413	908	3533					
	8060	16273	23107	33950			LINR	-0.04997	0.01803		0.99913
10 Acetone	+++++	1848	2336	3695	6278	24798					
	56771	111939	166382	219721			LINR	-0.10621	0.12074		0.99863
11 1,1-Dichloroethene	+++++	1102	1781	3506	7671	34207					
	88113	176082	274360	372803			LINR	0.00303	0.40805		0.99938

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12 Isobutyl Alcohol	+++++	0.06470	0.05527	0.04297	0.04261	0.04516					
	0.04593	0.04643	0.04967	0.04888			AVRG		0.04907		14.30443
13 Acetonitrile	+++++	0.04397	0.05008	0.03892	0.04459	0.03918					
	0.03946	0.03953	0.04022	0.03812			AVRG		0.04156		9.40537
14 Allyl Chloride	+++++	2623	3615	7042	16899	69739					
	175939	361060	547492	733286			LINR	-0.00813	0.80804		0.99928
15 Iodomethane	+++++	1327	2369	5358	16927	95233					
	266005	543854	+++++	+++++			LINR	0.03639	0.61682		0.99959
16 Acrylonitrile	+++++	738	1158	2213	5479	22101					
	54913	115719	171648	235255			LINR	-0.00964	0.12868		0.99979
17 Methylene Chloride	+++++	2539	3682	5315	10413	41234					
	99973	199305	302564	405366			LINR	-0.02769	0.44414		0.99929
18 Methyl tert-butyl ether	+++++	3059	4946	9274	23203	94025					
	236782	489347	747890	1023738			LINR	0.00217	1.11846		0.99967

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Compound	0.2500000 Level 1 / 50.0000 Level 7	0.5000000 Level 2 / 100.0000 Level 8	1.0000 Level 3 / 150.0000 Level 9	2.0000 Level 4 / 200.0000 Level 10	5.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
19 Carbon Disulfide	+++++	1.55194	1.40676	1.06487	1.04257	1.09505					
	1.11745	1.10607	1.17408	1.14413			AVRG		1.18921		14.53602
20 trans-1,2-Dichloroethene	+++++	1223	2406	4308	8449	40157					
	98160	204716	310253	425570			LINR	0.00071	0.46479		0.99974
21 Vinyl Acetate	+++++	1.26588	1.18715	0.86129	0.85524	0.88643					
	0.94049	0.91488	0.98986	0.95177			AVRG		0.98367		14.80312
22 1,1-Dichloroethane	+++++	1948	3356	6310	14081	62090					
	156179	312101	492499	662807			LINR	0.00216	0.72727		0.99905
23 Chloroprene	+++++	379	752	1068	2540	10723					
	26781	54641	90341	123052			LINR	0.02339	0.13424		0.99783
24 2-Butanone	+++++	0.18677	0.17098	0.13755	0.12203	0.14259					
	0.14925	0.14929	0.15421	0.15106			AVRG		0.15152		12.31014
25 Methacrylonitrile	+++++	0.45129	0.42992	0.40786	0.34609	0.32310					
	0.33646	0.34310	0.35028	0.34072			AVRG		0.36987		12.64528

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26 2,2-Dichloropropane	+++++	0.78806	0.66854	0.54601	0.48656	0.55051					
	0.55774	0.56094	0.60957	0.58314			AVRG		0.59456		14.77281
27 cis-1,2-Dichloroethene	+++++	0.64621	0.72515	0.51180	0.48270	0.51076					
	0.52483	0.50493	0.53462	0.51741			AVRG		0.55093		14.55155
28 Chloroform	+++++	2075	4001	6621	16177	68933					
	176056	352850	545173	735037			LINR	-0.00294	0.80695		0.99934
29 Bromochloromethane	+++++	750	1379	2531	5510	24362					
	62198	119737	181633	241921			LINR	-0.02154	0.26676		0.99886
31 1,1,1-Trichloroethane	+++++	0.89313	0.87988	0.58165	0.62962	0.66913					
	0.69189	0.69179	0.74070	0.70946			AVRG		0.72081		14.51334
32 1,1-Dichloropropene	+++++	1840	2580	4621	10861	49955					
	126795	255824	398596	540113			LINR	0.00281	0.41302		0.99918
33 1,2-Dichloroethane	+++++	1585	2847	5396	11071	51739					
	130130	254319	388749	523717			LINR	-0.01401	0.40105		0.99918

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34 Carbon Tetrachloride	+++++	0.53508	0.51552	0.42977	0.39176	0.43372						
	0.44112	0.42974	0.46351	0.45507			AVRG		0.45503		9.84915	
37 Benzene	+++++	4782	8539	14779	33049	149249						
	375334	760852	1187546	1608657			LINR	0.00259	1.22973		0.99915	
38 Trichloroethene	+++++	1597	2818	4366	10696	47513						
	120027	245643	379920	517591			LINR	0.00354	0.39513		0.99936	
39 Bromodichloromethane	+++++	0.55611	0.44317	0.37489	0.34469	0.41718						
	0.42192	0.40224	0.43198	0.42470			AVRG		0.42410		13.72635	
40 Methyl Methacrylate	+++++	0.35673	0.35067	0.24017	0.27283	0.26983						
	0.29093	0.30696	0.31992	0.30477			AVRG		0.30142		12.60358	
41 2-Chloroethylvinyl ether	+++++	+++++	+++++	0.00122	0.00073	0.00245						
	0.00215	0.00387	0.00488	0.00519			AVRG		0.00293		59.75125	<-
42 1,2-Dichloropropane	+++++	1218	2163	4042	7727	35658						
	92135	182962	286290	385455			LINR	-0.00139	0.29520		0.99899	

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Compound	0.2500000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	5.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	50.0000 Level 7	100.0000 Level 8	150.0000 Level 9	200.0000 Level 10							
43 2-Nitropropane	+++++	0.87947	0.83430	0.60067	0.61496	0.69726					
	0.71892	0.73685	0.78194	0.77233			AVRG		0.73741		12.54093
44 Dibromomethane	+++++	0.22779	0.26752	0.20569	0.18111	0.21244					
	0.21604	0.19467	0.20807	0.20209			AVRG		0.21283		11.44942
45 4-Methyl-2-Pentanone	+++++	0.35251	0.31190	0.23583	0.22440	0.27001					
	0.27429	0.27092	0.28471	0.28885			AVRG		0.27927		13.65206
46 cis-1,3-Dichloropropene	+++++	0.48540	0.43647	0.37826	0.33341	0.42127					
	0.46391	0.46492	0.50976	0.49931			AVRG		0.44363		13.10883
49 Ethyl Methacrylate	+++++	0.38603	0.34638	0.33442	0.34418	0.37844					
	0.39596	0.39428	0.42928	0.41964			AVRG		0.38096		8.79464
50 Toluene	+++++	2.07291	1.70797	1.43284	1.32102	1.51629					
	1.49853	1.41153	1.48634	1.47635			AVRG		1.54709		14.39741
51 trans-1,3-Dichloropropene	+++++	818	1606	3131	7589	44026					
	121449	258370	407217	554885			LINR	0.03366	0.42601		0.99894

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52 2-Hexanone	+++++	1322	2163	3749	8227	40547					
	105869	227893	357378	493142			LINR	0.05064	0.19932		0.99925
53 1,1,2-Trichloroethane	+++++	950	1420	3115	6711	29813					
	75785	151138	234464	318353			LINR	-0.00424	0.25782		0.99960
54 1,3-Dichloropropane	+++++	1884	3251	5927	13330	61623					
	161117	321486	492698	671252			LINR	-0.00352	0.54386		0.99970
55 Dibromochloromethane	+++++	0.47483	0.40133	0.31181	0.30759	0.39087					
	0.42419	0.40022	0.41806	0.42272			AVRG		0.39462		13.63740
56 Tetrachloroethene	+++++	1157	2061	3789	9440	40498					
	101511	206130	322517	435734			LINR	0.00008	0.35352		0.99956
57 1,2-Dibromoethane	+++++	0.36697	0.36508	0.33135	0.31136	0.35439					
	0.35724	0.33690	0.34857	0.34426			AVRG		0.34624		5.11266
58 1-Chlorohexane	+++++	2590	2981	4112	8072	30758					
	74982	155922	243289	328757			LINR	-0.00956	0.25039		0.99904

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59 Chlorobenzene	+++++	3697	6126	12192	26047	116535						
	299817	601383	936714	1257280			LINR	-0.00419	1.02278		0.99957	
60 1,1,1,2-Tetrachloroethane	+++++	0.46078	0.46080	0.37671	0.33550	0.38200						
	0.39651	0.37742	0.39819	0.39619			AVRG		0.39823		10.09482	
61 Ethylbenzene	+++++	0.60047	0.61729	0.46115	0.45927	0.51461						
	0.53382	0.50052	0.52578	0.52112			AVRG		0.52600		10.28236	
62 m,p-Xylenes	+++++	0.78705	0.69337	0.55417	0.53900	0.64725						
	0.65948	0.62809	0.65717	0.65184			AVRG		0.64638		11.30021	
63 o-Xylene	+++++	0.71081	0.65897	0.59808	0.51558	0.64999						
	0.66016	0.61584	0.64952	0.63782			AVRG		0.63297		8.53538	
64 Styrene	+++++	1.04472	0.97304	0.84988	0.83998	1.09440						
	1.14368	1.08845	1.15098	1.14011			AVRG		1.03614		11.76692	
65 cis-1,4-Dichloro-2-butene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	<-

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66 Bromoform	+++++	0.33267	0.28998	0.24851	0.20614	0.27089					
	0.29892	0.28941	0.31424	0.31777			AVRG		0.28539		13.67563
67 Isopropylbenzene	+++++	1.81462	1.83126	1.43359	1.35449	1.60942					
	1.65347	1.57728	1.66119	1.63096			AVRG		1.61848		9.58695
68 1,1,2,2-Tetrachloroethane	+++++	1437	2264	4391	10355	47752					
	123522	242003	375701	518878			LINR	-0.00379	0.75351		0.99960
71 1,2,3-Trichloropropane	+++++	0.86255	1.05835	0.79368	0.67556	0.71745					
	0.77873	0.75686	0.80362	0.78248			AVRG		0.80326		13.60449
72 trans-1,4-Dichloro-2-butene	+++++	0.06653	0.09138	0.07880	0.06446	0.07062					
	0.08003	0.08227	0.08630	0.09135			AVRG		0.07908		12.70659
73 n-Propylbenzene	+++++	3.82034	3.25727	2.46525	2.60719	3.06370					
	3.13984	3.04056	3.21217	3.20423			AVRG		3.09006		12.62935
74 Bromobenzene	+++++	1584	2658	4619	11779	56951					
	143938	288234	453792	612518			LINR	-0.00106	0.89742		0.99928

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75 1,3,5-Trimethylbenzene	+++++	2.63514	2.31176	1.93345	1.95433	2.31544					
	2.43034	2.36165	2.48668	2.40318			AVRG		2.31466		10.02655
76 2-Chlorotoluene	+++++	2.68341	2.37426	1.89143	1.76345	1.95376					
	1.97812	1.91132	1.99450	1.91793			AVRG		2.05202		14.07935
77 4-Chlorotoluene	+++++	2.96423	2.67671	2.12775	1.93511	2.27990					
	2.27281	2.18021	2.30305	2.22224			AVRG		2.32911		13.23200
78 tert-Butylbenzene	+++++	2.54341	2.35496	1.83122	1.80050	2.08978					
	2.13026	2.08065	2.16949	2.06558			AVRG		2.11843		10.91744
79 1,2,4-Trimethylbenzene	+++++	2.49030	2.36671	1.94325	1.93309	2.28698					
	2.39238	2.31976	2.44952	2.36538			AVRG		2.28304		8.97251
80 Pentachloroethane	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000
81 sec-Butylbenzene	+++++	3.18791	2.98628	2.23663	2.29988	2.60319					
	2.73185	2.69178	2.82999	2.73044			AVRG		2.69977		11.13594

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Compound	0.2500000 Level 1 / 50.0000 Level 7	0.5000000 Level 2 / 100.0000 Level 8	1.0000 Level 3 / 150.0000 Level 9	2.0000 Level 4 / 200.0000 Level 10	5.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
82 p-Isopropyltoluene	+++++	2.82825	2.44767	1.87743	1.94855	2.39290						
	2.55446	2.53126	2.66366	2.55189			AVRG		2.42178		12.99221	
83 1,3-Dichlorobenzene	+++++	2757	4590	8846	20783	97541						
	246607	502145	787039	1055922			LINR	-0.00195	1.55125		0.99923	
84 1,4-Dichlorobenzene	+++++	3199	5524	10205	21781	102103						
	253657	523178	801340	1084669			LINR	-0.00805	1.58864		0.99958	
85 bis(2-Chloro-isopropyl)ether	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	<-
86 Benzyl Chloride	+++++	1114	1659	2971	7297	33746						
	106029	266227	459017	673728			QUAD	0.03930	2.47859	-0.31374	0.99860	
87 n-Butylbenzene	+++++	2.00512	1.96904	1.60242	1.58943	1.82880						
	1.99989	1.98942	2.11502	2.02230			AVRG		1.90238		9.92174	
88 1,2-Dichlorobenzene	+++++	2762	4790	9072	20035	95888						
	243811	488949	762567	1028628			LINR	-0.00530	1.50750		0.99936	

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89 1,2-Dibromo-3-Chloropropane	+++++	72.00000	191	613	1238	7047					
	20432	44556	71535	102920			LINR	0.05747	0.14852		0.99792
90 1,2,4-Trichlorobenzene	+++++	1.01221	1.09694	0.77635	0.80425	0.98893					
	1.03804	1.04446	1.08766	1.05830			AVRG		0.98968		11.93156
91 Hexachlorobutadiene	+++++	860	1570	2247	5773	27240					
	71490	147841	225725	309875			LINR	0.00202	0.45241		0.99980
92 Naphthalene	+++++	2654	4198	8602	21969	130928					
	351457	739697	1165768	1594607			LINR	0.02490	2.33701		0.99940
93 1,2,3-Trichlorobenzene	+++++	0.91405	1.10659	0.80226	0.81400	0.94892					
	0.98962	0.93844	1.01084	0.97068			AVRG		0.94393		10.02496
130 Ethyl Acetate	+++++	1001	2103	4030	6852	29757					
	77144	153125	235617	323855			LINR	-0.00358	0.35252		0.99963
131 Methyl Acrylate	+++++	0.37459	0.44066	0.47963	0.41396	0.38464					
	0.39253	0.40642	0.42694	0.41993			AVRG		0.41548		7.67471

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132 n-Butanol	+++++	465	707	1236	3384	15663					
	45058	99387	162932	224072			LINR	1.10001	0.01228		0.99752
133 Ethyl Acrylate	+++++	0.85005	0.88597	0.70796	0.85040	0.82984					
	0.88090	0.90863	0.95265	0.93744			AVRG		0.86709		8.33873
134 Cyclohexanone	+++++	0.04083	0.03060	0.02338	0.02943	0.03036					
	0.03173	0.03134	0.03244	0.03093			AVRG		0.03123		14.32777
135 1,4-Dioxane	72.00000	308	478	742	1680	9244					
	22915	48044	74347	100798			LINR	0.19282	0.00553		0.99940
136 n-Hexane	+++++	1133	1770	2842	7699	33189					
	86336	180035	280489	381403			LINR	0.01362	0.41820		0.99931
137 n-Pentane	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000
138 Freon TF	+++++	1206	1903	3605	8106	34996					
	88837	178255	280437	374690			LINR	0.00015	0.41241		0.99893

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146 Methyl Acetate	+++++	726	2321	3096	5663	25789						
	64996	131072	197033	272795			LINR	-0.00812	0.29644		0.99987	
147 Methylcyclohexane	+++++	0.61840	0.59616	0.49358	0.56972	0.60363						
	0.62501	0.62387	0.66326	0.65680			AVRG		0.60560		8.40954	
149 Isopropyl alcohol	+++++	1338	2389	5220	8964	35913						
	95411	202950	308676	415230			LINR	0.04153	0.02286		0.99924	
152 Amyl alcohol	+++++	563	804	1113	2584	15715						
	46354	101657	167568	233541			LINR	1.22785	0.00944		0.99723	<-
150 Allyl alcohol	+++++	1133	1770	2842	7699	33189						
	86336	180035	280489	381403			LINR	0.27243	0.02091		0.99931	
151 4-Methyl-2-pentanol	+++++	3817	5668	11002	31481	153731						
	399304	884233	1459098	2014969			LINR	1.06560	0.07686		0.99698	
148 Tert-butyl alcohol	+++++	2997	3825	7150	16928	69193						
	173854	360713	547562	748988			LINR	-0.02055	0.04092		0.99971	

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139 Diethyl ether	+++++	732	1393	2342	6168	24074					
	62060	125748	185997	252083			LINR	-0.01472	0.27684		0.99951
140 1,3-Butadiene	+++++	1034	1880	2918	6867	32002					
	83934	167421	256882	353164			LINR	0.00342	0.38539		0.99967
141 Cyclohexane	+++++	2861	4524	6449	12221	47234					
	116003	240373	370929	509886			LINR	-0.00527	0.55372		0.99951
142 Tetrahydrofuran	+++++	561	572	990	2954	9512					
	25951	53751	81271	113004			LINR	0.00725	0.06139		0.99973
143 1-Chlorobutane	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000
144 Nitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000
145 alpha-Methylstyrene	+++++	996	2213	4011	10802	59463					
	161960	346480	550685	744171			LINR	0.02750	1.09588		0.99906

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153 Tetraethyl lead	+++++	+++++	+++++	+++++	+++++	+++++						
							AVRG		0.000e+000		0.000e+000	
154 2,3-Dichlorobutane	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	
155 2-Pentanone	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	
156 Diisopropyl ether	+++++	1.31920	1.33709	1.11450	1.13464	1.09639						
	1.12681	1.09696	1.15524	1.11586			AVRG		1.16630		8.02921	
157 n-Heptane	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	<-
158 Dichlorofluoromethane	+++++	0.86949	0.89991	0.78116	0.71363	0.67533						
	0.67165	0.66017	0.69135	0.65281			AVRG		0.73505		12.69866	
159 Propylene oxide	+++++	+++++	81.00000	572	1008	3888						
	7793	16012	23413	32675			LINR	-0.08543	0.01758		0.99953	<-

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160 2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	
161 3-Methyl-1-butanol	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	<-
162 Butyl acrylate	+++++	1055	1464	3846	9254	44204						
	132648	316240	540481	753691			QUAD	0.03407	2.02198	-0.17264	0.99857	
163 Butyl methacrylate	+++++	0.53346	0.54491	0.54108	0.56094	0.44384						
	0.46304	0.49934	0.57927	0.56984			AVRG		0.52619		9.02613	
164 Dicyclopentadiene	+++++	2.96020	2.87260	2.57046	2.64654	2.50743						
	2.63278	2.57601	2.71567	2.57512			AVRG		2.67298		5.66424	
165 4-Vinyl-1-cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	
166 1,2,3-Trimethylbenzene	+++++	1.74925	1.77105	1.64671	1.60948	1.71451						
	1.73903	1.65508	1.76098	1.67589			AVRG		1.70244		3.38099	

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167 Ethanol	+++++	367	603	929	1465	6987					
	17697	35912	56305	74560			LINR	-0.12210	0.00411		0.99868
168 1-Propanol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000
170 1,3,5-Trichlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000
172 tert-Butyl formate	+++++	1692	2140	4458	11099	42450					
	115450	251341	401953	570864			LINR	0.08877	0.30849		0.99791
173 3,3-Dimethyl-1-butanol	+++++	2924	3895	7767	16416	78105					
	188703	411223	659546	911976			LINR	0.56488	0.03675		0.99849
174 tert-Amyl methyl ether	+++++	1.25458	1.30864	1.32083	1.06053	1.09656					
	1.16550	1.14517	1.22605	1.20760			AVRG		1.19838		7.48934
175 tert-Butyl ethyl ether	+++++	1.23147	1.19949	1.00949	1.11075	1.05326					
	1.12038	1.10880	1.18732	1.14883			AVRG		1.12998		6.26472

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176 tert-Amyl alcohol	+++++	1680	1782	3734	10755	43101						
	115450	251341	401953	570864			LINR	0.91403	0.03086		0.99798	
177 Dimethyl ether	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	<-
178 Ethylene oxide	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	
179 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	<-
180 1-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	
181 2-Furfural	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	
182 Epichlorohydrin	+++++	24.00000	217	553	1420	6430						
	18021	39784	67174	92467			LINR	0.25882	0.01768		0.99600	

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183 2-Methylpropane(1)	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	
(2)	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
184 Cyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	
185 Isoprene	+++++	0.13239	0.12715	0.12236	0.09375	0.10267	AVRG		0.10863		13.42256	
	0.10487	0.09981	0.09810	0.09658								
186 Isopentane	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	
187 n-Amyl acetate	+++++	1619	2428	4630	9522	41714	QUAD	0.01142	2.50185	-0.26505	0.99897	
	112669	257180	439239	616175								
188 Isopropyl acetate	+++++	0.90773	0.78344	0.60553	0.58623	0.66077	AVRG		0.69012		14.39698	
	0.65179	0.63910	0.69161	0.68489								

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189 n-Butyl acetate	+++++	1760	2500	3378	8826	35752						
	83180	165842	259125	352075			LINR	-0.01572	0.28376		0.99940	
190 Propanal	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	
191 n-Buteraldehyde	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	
192 Isobuteraldehyde	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	
193 2-Ethyl-1-hexanol	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	<-
194 Acetaldehyde	+++++	173	736	947	3492	14266						
	31551	81064	107895	144165			QUAD	0.13204	20.35987	7.58271	0.99687	
195 Methyl Amyl Ketone	+++++	0.47070	0.49292	0.41973	0.43621	0.48060						
	0.52283	0.55871	0.61457	0.63200			AVRG		0.51425		14.50094	

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196 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	
197 3-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	
198 Methylcyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	
199 1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	
200 Dimethyl Disulfide	+++++	537	1377	2597	6785	35657	QUAD	0.04803	2.24932	-0.24661	0.99818	
	114686	288382	501140	717349								
201 1-Butene(1)	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	
(2)	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-

ALS Laboratory Group

INITIAL CALIBRATION DATA

Start Cal Date : 09-FEB-2024 09:22
End Cal Date : 09-FEB-2024 12:42
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\NAHSTWS005\Target\chem\voa9.i\U240209.b\8260C.m
Last Edit : 15-Feb-2024 11:14 VOA9.i

Compound	0.2500000 Level 1 / 50.0000 Level 7	0.5000000 Level 2 / 100.0000 Level 8	1.0000 Level 3 / 150.0000 Level 9	2.0000 Level 4 / 200.0000 Level 10	5.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
202 Isobutylene	+++++	475	951	1684	4184	14885					
	36833	77662	118906	160570			LINR	-0.00307	0.17611		0.99937
203 2-Ethylhexyl Acrylate	+++++	268	864	1755	5622	29386					
	93637	226006	369480	503204			LINR	0.07187	0.74411		0.99707
M 94 1,2-Dichloroethylene (total)	+++++	0.64437	0.71180	0.51353	0.45566	0.48810					
	0.49015	0.48198	0.50374	0.48967			AVRG		0.53100		16.29360
M 95 Xylenes (total)	+++++	0.70440	0.61935	0.51055	0.48763	0.60877					
	0.61342	0.58266	0.62586	0.60618			AVRG		0.59542		10.78305
$ 30 Dibromofluoromethane	+++++	1601	2659	4395	12182	46132					
	111088	225353	339618	471863			LINR	-0.00876	0.51162		0.99988
$ 35 1,2-Dichloroethane-d4	+++++	1632	2589	4833	11550	46575					
	114391	226192	338611	468937			LINR	-0.01505	0.50914		0.99986
$ 48 Toluene-d8	+++++	5559	9135	14699	39372	159212					
	391087	794101	1215187	1698429			LINR	-0.00110	1.36113		0.99943

ALS Laboratory Group

INITIAL CALIBRATION DATA

Start Cal Date : 09-FEB-2024 09:22
End Cal Date : 09-FEB-2024 12:42
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\NAHSTWS005\Target\chem\voa9.i\U240209.b\8260C.m
Last Edit : 15-Feb-2024 11:14 VOA9.i

Compound	0.2500000 Level 1 / 50.0000 Level 7	0.5000000 Level 2 / 100.0000 Level 8	1.0000 Level 3 / 150.0000 Level 9	2.0000 Level 4 / 200.0000 Level 10	5.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
$ 69 4-Bromofluorobenzene	+++++	2317	3587	5431	13924	59177					
	144170	295803	452247	620366			LINR	-0.00574	0.50049		0.99976

ALS Laboratory Group

INITIAL CALIBRATION DATA

Start Cal Date : 09-FEB-2024 09:22
End Cal Date : 09-FEB-2024 12:42
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\NAHSTWS005\Target\chem\voa9.i\U240209.b\8260C.m
Last Edit : 15-Feb-2024 11:14 VOA9.i

Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Linear	Amt = b + Rsp/m1	Response
Quad	Amt = b + m1*Rsp + m2*Rsp^2	Response

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Form 6I

Initial Calibration Verification (ICV)

Volatiles by EPA Volatiles Organics by Method 8260C

Workorder

HS24020246

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

02/23/2024

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

Form 6I Initial Calibration Verification (ICV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24020246

RunID U020913.D

Volatiles by EPA Volatiles Organics by Method 8260C

Sample Matrix LIQUID
Lab Smp Id ICV
Data Type MS DATA
File ID U020913.D
Fraction VOA
Client Smp ID ICV
SampleType METHSPIKE
Inj Date 09-FEB-2024 1327

Compound	Conc Added	Conc Recovered	% Recovered	Limits	Q
1,1,1,2-Tetrachloroethane	50.0	46.0	92.1	80-120	
1,1,1-Trichloroethane	50.0	44.7	89.5	80-120	
1,1,2,2-Tetrachloroethane	50.0	48.3	96.7	80-120	
Freon TF	50.0	43.5	87.1	80-120	
Methyl Acetate	50.0	45.8	91.6	80-120	
Cyclohexane	50.0	46.0	92.1	80-120	
Methylcyclohexane	50.0	50.1	100	80-120	
Carbon Disulfide	100	86.8	86.9	80-120	
2-Hexanone	100	93.6	93.6	80-120	
1,1,2-Trichloroethane	50.0	48.4	96.9	80-120	
1,1-Dichloroethane	50.0	46.5	93.0	80-120	
1,1-Dichloroethene	50.0	45.4	90.9	80-120	
1,1-Dichloropropene	50.0	47.3	94.7	80-120	
1,2,3-Trichlorobenzene	50.0	50.2	100	80-120	
1,2,3-Trichloropropane	50.0	44.3	88.6	80-120	
1,2,4-Trichlorobenzene	50.0	50.6	101	80-120	
1,2,4-Trimethylbenzene	50.0	49.6	99.3	80-120	
1,2-Dibromo-3-Chloropropane	50.0	45.5	91.1	80-120	
1,2-Dibromoethane	50.0	48.3	96.6	80-120	
Acrolein	100	90.0	90.0	80-120	
Acrylonitrile	100	94.3	94.3	80-120	
1,2-Dichlorobenzene	50.0	47.7	95.4	80-120	
1,2-Dichloroethane	50.0	47.3	94.6	80-120	
1,2-Dichloropropane	50.0	47.1	94.2	80-120	
1,3,5-Trimethylbenzene	50.0	49.7	99.4	80-120	
1,3-Dichlorobenzene	50.0	47.4	94.8	80-120	
1,3-Dichloropropane	50.0	47.9	95.9	80-120	
1,4-Dichlorobenzene	50.0	48.0	96.0	80-120	
1-Chlorohexane	50.0	45.8	91.5	80-120	
2,2-Dichloropropane	50.0	42.7	85.3	80-120	
2-Butanone	100	91.1	91.1	80-120	
2-Chloroethylvinyl ether	100	0.000		80-120	*
2-Chlorotoluene	50.0	45.3	90.7	80-120	
4-Chlorotoluene	50.0	45.8	91.6	80-120	

Form 6I Initial Calibration Verification (ICV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24020246

RunID U020913.D

Volatiles by EPA Volatiles Organics by Method 8260C

Sample Matrix LIQUID
Lab Smp Id ICV
Data Type MS DATA
File ID U020913.D

Fraction VOA
Client Smp ID ICV
SampleType METHSPIKE
Inj Date 09-FEB-2024 1327

Compound	Conc Added	Conc Recovered	% Recovered	Limits	Q
p-Isopropyltoluene	50.0	50.1	100	80-120	
4-Methyl-2-Pentanone	100	96.0	96.0	80-120	
Acetone	100	91.9	91.9	80-120	
Acetonitrile	500	444	88.9	80-120	
Allyl Chloride	50.0	48.0	96.1	80-120	
Benzene	50.0	47.4	94.9	80-120	
Bromobenzene	50.0	47.7	95.5	80-120	
Bromochloromethane	50.0	49.4	98.7	80-120	
Bromodichloromethane	50.0	46.0	91.9	80-120	
Bromoform	50.0	48.6	97.3	80-120	
Bromomethane	50.0	53.4	107	80-120	
Carbon Tetrachloride	50.0	44.9	89.7	80-120	
Chlorobenzene	50.0	47.6	95.2	80-120	
Chloroethane	50.0	45.4	90.9	80-120	
Chloroform	50.0	46.3	92.7	80-120	
Chloromethane	50.0	50.8	102	80-120	
Chloroprene	50.0	44.8	89.6	80-120	
cis-1,2-Dichloroethene	50.0	44.5	89.0	80-120	
cis-1,3-Dichloropropene	50.0	50.1	100	80-120	
Dibromochloromethane	50.0	48.7	97.4	80-120	
Dibromomethane	50.0	46.1	92.2	80-120	
Dichlorodifluoromethane	50.0	42.4	84.8	80-120	
Ethylbenzene	50.0	46.5	93.0	80-120	
Ethyl Methacrylate	50.0	52.5	105	80-120	
Iodomethane	100	80.9	80.9	80-120	
Isobutyl Alcohol	1000	879	87.9	70-130	
Propionitrile	500	462	92.5	70-130	
Hexachlorobutadiene	50.0	47.4	94.7	80-120	
Isopropylbenzene	50.0	47.9	95.9	80-120	
m,p-Xylenes	100	96.4	96.4	80-120	
Methyl tert-butyl ether	50.0	46.4	92.7	80-120	
Methylene Chloride	50.0	46.5	93.0	80-120	
Methacrylonitrile	50.0	44.5	89.0	80-120	
Methyl Methacrylate	50.0	47.5	95.1	80-120	

Form 6I Initial Calibration Verification (ICV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24020246

RunID U020913.D

Volatiles by EPA Volatiles Organics by Method 8260C

Sample Matrix LIQUID
Lab Smp Id ICV
Data Type MS DATA
File ID U020913.D

Fraction VOA
Client Smp ID ICV
SampleType METHSPIKE
Inj Date 09-FEB-2024 1327

Compound	Conc Added	Conc Recovered	% Recovered	Limits	Q
n-Butylbenzene	50.0	48.9	97.9	80-120	
n-Propylbenzene	50.0	49.4	98.9	80-120	
Naphthalene	50.0	47.7	95.3	80-120	
o-Xylene	50.0	48.3	96.6	80-120	
sec-Butylbenzene	50.0	48.0	96.0	80-120	
Styrene	50.0	51.1	102	80-120	
tert-Butylbenzene	50.0	47.2	94.4	80-120	
Tetrachloroethene	50.0	47.4	94.9	80-120	
Toluene	50.0	45.8	91.7	80-120	
trans-1,2-Dichloroethene	50.0	46.4	92.8	80-120	
trans-1,3-Dichloropropene	50.0	45.5	91.1	80-120	
trans-1,4-Dichloro-2-butene	50.0	46.0	92.0	80-120	
Trichloroethene	50.0	47.0	94.1	80-120	
Trichlorofluoromethane	50.0	44.5	88.9	80-120	
Vinyl Acetate	100	90.9	90.9	80-120	
Vinyl Chloride	50.0	45.4	90.8	80-120	
1,2-Dichloroethylene (total)	100	86.8	86.8	80-120	
Xylenes (total)	150	145	96.7	80-120	
1,4-Dioxane	1000	916	91.6	80-120	
Dibromofluoromethane	50.0	47.3	94.6	71-125	
1,2-Dichloroethane-d4	50.0	47.0	94.0	70-125	
Toluene-d8	50.0	49.7	99.4	75-125	
4-Bromofluorobenzene	50.0	48.8	97.7	72-125	

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Form 7

Continuing Calibration Verification (CCV)

Volatiles by EPA Volatiles Organics by Method 8260C

Workorder

HS24020246

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

02/23/2024

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

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24020246

RunID U021002.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U021002.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date 10-FEB-2024 0128
ICAL Date(s) 09-FEB-2024, 09-FEB-2024
ICAL Times 09:22, 12:42
Quant Type ISTD

Compound	RRF / RRF / Conc	RF50 / RF50	CCV RRF50	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
Dichlorodifluoromethane	50.0	41.6	0.272	0.100	16.9	20.0	Linear	
Chloromethane	50.0	41.5	0.322	0.100	16.9	20.0	Linear	
Propionitrile	0.054	0.046	0.046	0.010	13.9	20.0	Averaged	
Vinyl Chloride	50.0	41.4	0.359	0.100	17.1	20.0	Linear	
Bromomethane	50.0	42.0	0.246	0.100	16.0	20.0	Linear	
Chloroethane	50.0	42.2	0.255	0.100	15.5	20.0	Linear	
Trichlorofluoromethane	50.0	43.5	0.598	0.100	13.0	20.0	Linear	
Acrolein	100	95.1	0.018	0.010	4.88	20.0	Linear	
Acetone	100	86.5	0.111	0.100	13.5	20.0	Linear	
1,1-Dichloroethene	50.0	43.5	0.354	0.100	12.9	20.0	Linear	
Isobutyl Alcohol	0.049	0.041	0.041	0.005	17.1	20.0	Averaged	
Acetonitrile	0.042	0.034	0.034	0.005	19.3	20.0	Averaged	
Allyl Chloride	50.0	42.8	0.698	0.100	14.4	20.0	Linear	
Iodomethane	100	86.0	0.519	0.100	14.0	20.0	Linear	
Acrylonitrile	100	86.8	0.112	0.050	13.2	20.0	Linear	
Methylene Chloride	50.0	43.4	0.398	0.100	13.2	20.0	Linear	
Methyl tert-butyl ether	50.0	43.7	0.976	0.100	12.6	20.0	Linear	
Carbon Disulfide	1.19	0.952	0.952	0.100	20.0	20.0	Averaged	
trans-1,2-Dichloroethene	50.0	42.6	0.396	0.100	14.8	20.0	Linear	
Vinyl Acetate	0.984	0.787	0.787	0.010	19.9	20.0	Averaged	
1,1-Dichloroethane	50.0	42.9	0.622	0.200	14.2	20.0	Linear	
Chloroprene	50.0	44.1	0.115	0.100	11.8	20.0	Linear	
2-Butanone	0.152	0.125	0.125	0.100	17.5	20.0	Averaged	
Methacrylonitrile	0.370	0.305	0.305	0.100	17.5	20.0	Averaged	
2,2-Dichloropropane	0.595	0.408	0.408	0.100	31.3	20.0	Averaged	*
cis-1,2-Dichloroethene	0.551	0.456	0.456	0.100	17.2	20.0	Averaged	
Chloroform	50.0	44.1	0.714	0.200	11.8	20.0	Linear	
Bromochloromethane	50.0	47.8	0.261	0.100	4.36	20.0	Linear	
30 Dibromofluoromethane	50.0	48.1	0.497	0.100	3.80	20.0	Linear	
1,1,1-Trichloroethane	0.721	0.619	0.619	0.100	14.2	20.0	Averaged	
1,1-Dichloropropene	50.0	44.9	0.370	0.100	10.2	20.0	Linear	
1,2-Dichloroethane	50.0	47.1	0.383	0.100	5.79	20.0	Linear	
Carbon Tetrachloride	0.455	0.391	0.391	0.100	14.1	20.0	Averaged	
35 1,2-Dichloroethane-d4	50.0	48.1	0.497	0.100	3.85	20.0	Linear	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24020246

RunID U021002.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U021002.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date 10-FEB-2024 0128
ICAL Date(s) 09-FEB-2024, 09-FEB-2024
ICAL Times 09:22, 12:42
Quant Type ISTD

Compound	RRF / RRF / Conc	RF50 / RF50	CCV RRF50	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
Benzene	50.0	45.1	1.11	0.500	9.88	20.0	Linear	
Trichloroethene	50.0	46.9	0.369	0.200	6.23	20.0	Linear	
Bromodichloromethane	0.424	0.386	0.386	0.200	8.94	20.0	Averaged	
Methyl Methacrylate	0.301	0.269	0.269	0.100	10.8	20.0	Averaged	
1,2-Dichloropropane	50.0	44.5	0.263	0.100	11.0	20.0	Linear	
2-Nitropropane	0.737	0.637	0.637	0.000	13.6	20.0	Averaged	
Dibromomethane	0.213	0.196	0.196	0.100	7.95	20.0	Averaged	
4-Methyl-2-Pentanone	0.279	0.243	0.243	0.100	13.0	20.0	Averaged	
cis-1,3-Dichloropropene	0.444	0.413	0.413	0.200	6.96	20.0	Averaged	
48 Toluene-d8	50.0	47.6	1.30	0.100	4.80	20.0	Linear	
Ethyl Methacrylate	0.381	0.386	0.386	0.100	-1.405	20.0	Averaged	
Toluene	1.55	1.30	1.30	0.400	16.2	20.0	Averaged	
trans-1,3-Dichloropropene	50.0	43.1	0.353	0.100	13.8	20.0	Linear	
2-Hexanone	100	83.8	0.162	0.100	16.2	20.0	Linear	
1,1,2-Trichloroethane	50.0	45.8	0.237	0.100	8.35	20.0	Linear	
1,3-Dichloropropane	50.0	45.3	0.495	0.100	9.41	20.0	Linear	
Dibromochloromethane	0.395	0.372	0.372	0.100	5.69	20.0	Averaged	
Tetrachloroethene	50.0	45.6	0.322	0.200	8.85	20.0	Linear	
1,2-Dibromoethane	0.346	0.318	0.318	0.100	8.25	20.0	Averaged	
1-Chlorohexane	50.0	41.6	0.211	0.100	16.8	20.0	Linear	
Chlorobenzene	50.0	45.0	0.925	0.500	10.0	20.0	Linear	
1,1,1,2-Tetrachloroethane	0.398	0.348	0.348	0.100	12.7	20.0	Averaged	
Ethylbenzene	0.526	0.454	0.454	0.100	13.7	20.0	Averaged	
m,p-Xylenes	0.646	0.565	0.565	0.100	12.6	20.0	Averaged	
o-Xylene	0.633	0.557	0.557	0.300	11.9	20.0	Averaged	
Styrene	1.04	0.996	0.996	0.300	3.87	20.0	Averaged	
Bromoform	0.285	0.268	0.268	0.100	6.25	20.0	Averaged	
Isopropylbenzene	1.62	1.40	1.40	0.100	13.4	20.0	Averaged	
1,1,2,2-Tetrachloroethane	50.0	43.3	0.656	0.300	13.4	20.0	Linear	
69 4-Bromofluorobenzene	50.0	48.3	0.486	0.100	3.39	20.0	Linear	
1,2,3-Trichloropropane	0.803	0.643	0.643	0.100	20.0	20.0	Averaged	
trans-1,4-Dichloro-2-butene	0.079	0.064	0.064	0.050	19.6	20.0	Averaged	
n-Propylbenzene	3.09	2.71	2.71	0.100	12.4	20.0	Averaged	
Bromobenzene	50.0	44.9	0.807	0.100	10.2	20.0	Linear	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24020246

RunID U021002.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U021002.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date 10-FEB-2024 0128
ICAL Date(s) 09-FEB-2024, 09-FEB-2024
ICAL Times 09:22, 12:42
Quant Type ISTD

Compound	RRF / RRF / Conc	RF50 / RF50	CCV RRF50	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
1,3,5-Trimethylbenzene	2.31	2.04	2.04	0.100	11.7	20.0	Averaged	
2-Chlorotoluene	2.05	1.67	1.67	0.100	18.8	20.0	Averaged	
4-Chlorotoluene	2.33	1.94	1.94	0.100	16.7	20.0	Averaged	
tert-Butylbenzene	2.12	1.83	1.83	0.100	13.7	20.0	Averaged	
1,2,4-Trimethylbenzene	2.28	2.03	2.03	0.100	11.0	20.0	Averaged	
sec-Butylbenzene	2.70	2.26	2.26	0.100	16.2	20.0	Averaged	
p-Isopropyltoluene	2.42	2.13	2.13	0.100	11.9	20.0	Averaged	
1,3-Dichlorobenzene	50.0	43.8	1.36	0.600	12.5	20.0	Linear	
1,4-Dichlorobenzene	50.0	44.0	1.41	0.400	12.1	20.0	Linear	
Benzyl Chloride	50.0	29.9	0.232	0.010	40.2	20.0	Quadratic	*
n-Butylbenzene	1.90	1.59	1.59	0.500	16.6	20.0	Averaged	
1,2-Dichlorobenzene	50.0	44.9	1.36	0.400	10.2	20.0	Linear	
1,2-Dibromo-3-Chloropropane	50.0	43.1	0.119	0.050	13.8	20.0	Linear	
1,2,4-Trichlorobenzene	0.990	0.902	0.902	0.200	8.83	20.0	Averaged	
Hexachlorobutadiene	50.0	41.9	0.378	0.100	16.2	20.0	Linear	
Naphthalene	50.0	43.6	1.98	0.200	12.8	20.0	Linear	
1,2,3-Trichlorobenzene	0.944	0.863	0.863	0.100	8.55	20.0	Averaged	
Methyl Acetate	50.0	42.0	0.252	0.100	15.9	20.0	Linear	
Freon TF	50.0	41.5	0.342	0.100	16.9	20.0	Linear	
Cyclohexane	50.0	40.2	0.448	0.100	19.6	20.0	Linear	
Tetrahydrofuran	100	89.3	0.055	0.001	10.7	20.0	Linear	
Methylcyclohexane	0.606	0.566	0.566	0.100	6.61	20.0	Averaged	
1,4-Dioxane	1000	981	0.005	0.001	1.94	20.0	Linear	
n-Butanol	1000	835	0.010	0.005	16.5	20.0	Linear	
n-Hexane	50.0	35.5	0.291	0.100	29.1	20.0	Linear	*
Diethyl ether	50.0	43.3	0.244	0.100	13.4	20.0	Linear	
Tert-butyl alcohol	1000	892	0.037	0.005	10.8	20.0	Linear	
Isopropyl alcohol	1000	899	0.021	0.005	10.1	20.0	Linear	
Amyl alcohol	1000	873	0.008	0.005	12.7	20.0	Linear	
Diisopropyl ether	1.17	0.989	0.989	0.100	15.2	20.0	Averaged	
Butyl acrylate	50.0	44.5	0.439	0.100	11.1	20.0	Quadratic	
n-Amyl acetate	50.0	44.3	0.363	0.100	11.4	20.0	Quadratic	
Dicyclopentadiene	2.67	2.32	2.32	0.100	13.4	20.0	Averaged	
1,2,3-Trimethylbenzene	1.70	1.54	1.54	0.100	9.28	20.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24020246

RunID U021002.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U021002.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date 10-FEB-2024 0128
ICAL Date(s) 09-FEB-2024, 09-FEB-2024
ICAL Times 09:22, 12:42
Quant Type ISTD

Compound	RRF / RRF / Conc	RF50 / RF50	CCV RRF50	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
Ethanol	1000	878	0.004	0.001	12.2	20.0	Linear	
tert-Butyl formate	100	84.3	0.246	0.100	15.7	20.0	Linear	
3,3-Dimethyl-1-butanol	1000	860	0.031	0.005	14.0	20.0	Linear	
tert-Amyl methyl ether	1.20	1.05	1.05	0.005	12.6	20.0	Averaged	
tert-Butyl ethyl ether	1.13	1.02	1.02	0.100	9.80	20.0	Averaged	
tert-Amyl alcohol	1000	843	0.025	0.005	15.7	20.0	Linear	
4-Methyl-2-pentanol	1000	865	0.062	0.005	13.5	20.0	Linear	
1,3-Butadiene	50.0	42.8	0.329	0.100	14.4	20.0	Linear	
Dichlorofluoromethane	0.735	0.596	0.596	0.100	18.9	20.0	Averaged	
Epichlorohydrin	200	176	0.014	0.001	11.8	20.0	Linear	
94 1,2-Dichloroethylene (total	0.531	0.426	0.426	0.200	19.8	20.0	Averaged	
95 Xylenes (total)	0.595	0.542	0.542	0.100	8.91	20.0	Averaged	
alpha-Methylstyrene	50.0	42.0	0.891	0.100	15.9	20.0	Linear	
Ethyl Acetate	50.0	44.3	0.313	0.100	11.4	20.0	Linear	
Methyl Acrylate	0.415	0.367	0.367	0.100	11.7	20.0	Averaged	
n-Butyl acetate	50.0	45.3	0.261	0.100	9.43	20.0	Linear	
Cyclohexanone	0.031	0.028	0.028	0.005	10.7	20.0	Averaged	
Isoprene	0.109	0.088	0.088	0.010	18.9	20.0	Averaged	
Isopropyl acetate	0.690	0.598	0.598	0.100	13.3	20.0	Averaged	
Allyl alcohol	1000	684	0.014	0.004	31.6	20.0	Linear	*
Acetaldehyde	200	166	0.037	0.001	17.0	20.0	Quadratic	
Methyl Amyl Ketone	0.514	0.491	0.491	0.100	4.58	20.0	Averaged	
Dimethyl Disulfide	50.0	43.2	0.378	0.020	13.7	20.0	Quadratic	
Isobutylene	50.0	40.7	0.144	0.010	18.6	20.0	Linear	
2-Ethylhexyl Acrylate	50.0	40.4	0.548	0.100	19.1	20.0	Linear	
Ethyl Acrylate	0.867	0.769	0.769	0.100	11.3	20.0	Averaged	
Butyl methacrylate	0.526	0.433	0.433	0.100	17.7	20.0	Averaged	
Propylene oxide	100	94.3	0.017	0.005	5.71	20.0	Linear	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24020246

RunID U021028.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U021028.D
Analysis Type WATER
Lab Sample ID CCV-END

Injection Date 10-FEB-2024 1110
ICAL Date(s) 09-FEB-2024, 09-FEB-2024
ICAL Times 09:22, 12:42
Quant Type ISTD

Compound	RRF / RRF / Conc	RF50 / RF50	CCV RRF50	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
Dichlorodifluoromethane	50.0	45.6	0.299	0.100	8.88	50.0	Linear	
Chloromethane	50.0	42.2	0.327	0.100	15.6	50.0	Linear	
Propionitrile	0.054	0.046	0.046	0.010	14.6	50.0	Averaged	
Vinyl Chloride	50.0	41.7	0.361	0.100	16.6	50.0	Linear	
Bromomethane	50.0	41.3	0.242	0.100	17.4	50.0	Linear	
Chloroethane	50.0	44.5	0.268	0.100	11.1	50.0	Linear	
Trichlorofluoromethane	50.0	44.9	0.618	0.100	10.1	50.0	Linear	
Acrolein	100	82.8	0.015	0.010	17.2	50.0	Linear	
Acetone	100	83.3	0.107	0.100	16.7	50.0	Linear	
1,1-Dichloroethene	50.0	43.8	0.356	0.100	12.4	50.0	Linear	
Isobutyl Alcohol	0.049	0.041	0.041	0.005	16.9	50.0	Averaged	
Acetonitrile	0.042	0.033	0.033	0.005	21.7	50.0	Averaged	
Allyl Chloride	50.0	40.7	0.665	0.100	18.5	50.0	Linear	
Iodomethane	100	82.9	0.500	0.100	17.1	50.0	Linear	
Acrylonitrile	100	81.8	0.106	0.050	18.2	50.0	Linear	
Methylene Chloride	50.0	43.3	0.397	0.100	13.3	50.0	Linear	
Methyl tert-butyl ether	50.0	42.3	0.944	0.100	15.4	50.0	Linear	
Carbon Disulfide	1.19	0.924	0.924	0.100	22.3	50.0	Averaged	
trans-1,2-Dichloroethene	50.0	41.9	0.389	0.100	16.2	50.0	Linear	
Vinyl Acetate	0.984	0.613	0.613	0.010	37.7	50.0	Averaged	
1,1-Dichloroethane	50.0	43.6	0.633	0.200	12.8	50.0	Linear	
Chloroprene	++++	++++	1.603e+65	0.100	++++	50.0	Linear	*
2-Butanone	0.152	0.123	0.123	0.100	18.6	50.0	Averaged	
Methacrylonitrile	0.370	0.304	0.304	0.100	17.7	50.0	Averaged	
2,2-Dichloropropane	0.595	0.309	0.309	0.100	48.0	50.0	Averaged	
cis-1,2-Dichloroethene	0.551	0.462	0.462	0.100	16.1	50.0	Averaged	
Chloroform	50.0	45.4	0.736	0.200	9.10	50.0	Linear	
Bromochloromethane	50.0	47.9	0.261	0.100	4.19	50.0	Linear	
30 Dibromofluoromethane	50.0	49.4	0.510	0.100	1.15	50.0	Linear	
1,1,1-Trichloroethane	0.721	0.641	0.641	0.100	11.1	50.0	Averaged	
1,1-Dichloropropene	50.0	43.7	0.360	0.100	12.5	50.0	Linear	
1,2-Dichloroethane	50.0	46.7	0.380	0.100	6.59	50.0	Linear	
Carbon Tetrachloride	0.455	0.401	0.401	0.100	11.8	50.0	Averaged	
35 1,2-Dichloroethane-d4	50.0	50.6	0.523	0.100	-1.228	50.0	Linear	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24020246

RunID U021028.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U021028.D
Analysis Type WATER
Lab Sample ID CCV-END

Injection Date 10-FEB-2024 1110
ICAL Date(s) 09-FEB-2024, 09-FEB-2024
ICAL Times 09:22, 12:42
Quant Type ISTD

Compound	RRF / RRF / Conc	RF50 / RF50	CCV RRF50	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
Benzene	50.0	45.1	1.11	0.500	9.73	50.0	Linear	
Trichloroethene	50.0	48.1	0.379	0.200	3.83	50.0	Linear	
Bromodichloromethane	0.424	0.379	0.379	0.200	10.7	50.0	Averaged	
Methyl Methacrylate	0.301	0.264	0.264	0.100	12.3	50.0	Averaged	
1,2-Dichloropropane	50.0	45.2	0.267	0.100	9.53	50.0	Linear	
2-Nitropropane	0.737	0.626	0.626	0.000	15.1	50.0	Averaged	
Dibromomethane	0.213	0.192	0.192	0.100	9.92	50.0	Averaged	
4-Methyl-2-Pentanone	0.279	0.231	0.231	0.100	17.3	50.0	Averaged	
cis-1,3-Dichloropropene	0.444	0.381	0.381	0.200	14.0	50.0	Averaged	
48 Toluene-d8	50.0	49.4	1.35	0.100	1.12	50.0	Linear	
Ethyl Methacrylate	0.381	0.369	0.369	0.100	3.06	50.0	Averaged	
Toluene	1.55	1.31	1.31	0.400	15.5	50.0	Averaged	
trans-1,3-Dichloropropene	50.0	39.3	0.321	0.100	21.3	50.0	Linear	
2-Hexanone	100	81.2	0.157	0.100	18.8	50.0	Linear	
1,1,2-Trichloroethane	50.0	45.8	0.237	0.100	8.48	50.0	Linear	
1,3-Dichloropropane	50.0	45.0	0.492	0.100	9.92	50.0	Linear	
Dibromochloromethane	0.395	0.373	0.373	0.100	5.46	50.0	Averaged	
Tetrachloroethene	50.0	44.7	0.316	0.200	10.7	50.0	Linear	
1,2-Dibromoethane	0.346	0.312	0.312	0.100	9.83	50.0	Averaged	
1-Chlorohexane	50.0	40.5	0.205	0.100	19.0	50.0	Linear	
Chlorobenzene	50.0	44.6	0.917	0.500	10.8	50.0	Linear	
1,1,1,2-Tetrachloroethane	0.398	0.345	0.345	0.100	13.3	50.0	Averaged	
Ethylbenzene	0.526	0.455	0.455	0.100	13.4	50.0	Averaged	
m,p-Xylenes	0.646	0.572	0.572	0.100	11.5	50.0	Averaged	
o-Xylene	0.633	0.566	0.566	0.300	10.5	50.0	Averaged	
Styrene	1.04	0.985	0.985	0.300	4.94	50.0	Averaged	
Bromoform	0.285	0.263	0.263	0.100	8.02	50.0	Averaged	
Isopropylbenzene	1.62	1.43	1.43	0.100	11.6	50.0	Averaged	
1,1,2,2-Tetrachloroethane	50.0	41.3	0.625	0.300	17.5	50.0	Linear	
69 4-Bromofluorobenzene	50.0	49.7	0.501	0.100	0.549	50.0	Linear	
1,2,3-Trichloropropane	0.803	0.590	0.590	0.100	26.5	50.0	Averaged	
trans-1,4-Dichloro-2-butene	0.079	0.056	0.056	0.050	28.8	50.0	Averaged	
n-Propylbenzene	3.09	2.56	2.56	0.100	17.0	50.0	Averaged	
Bromobenzene	50.0	44.2	0.794	0.100	11.7	50.0	Linear	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24020246

RunID U021028.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U021028.D
Analysis Type WATER
Lab Sample ID CCV-END

Injection Date 10-FEB-2024 1110
ICAL Date(s) 09-FEB-2024, 09-FEB-2024
ICAL Times 09:22, 12:42
Quant Type ISTD

Compound	RRF / RRF / Conc	RF50 / RF50	CCV RRF50	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
1,3,5-Trimethylbenzene	2.31	2.02	2.02	0.100	12.6	50.0	Averaged	
2-Chlorotoluene	2.05	1.65	1.65	0.100	19.5	50.0	Averaged	
4-Chlorotoluene	2.33	1.87	1.87	0.100	19.8	50.0	Averaged	
tert-Butylbenzene	2.12	1.80	1.80	0.100	14.8	50.0	Averaged	
1,2,4-Trimethylbenzene	2.28	1.99	1.99	0.100	12.9	50.0	Averaged	
sec-Butylbenzene	2.70	2.23	2.23	0.100	17.3	50.0	Averaged	
p-Isopropyltoluene	2.42	2.10	2.10	0.100	13.1	50.0	Averaged	
1,3-Dichlorobenzene	50.0	42.8	1.33	0.600	14.4	50.0	Linear	
1,4-Dichlorobenzene	50.0	43.8	1.40	0.400	12.4	50.0	Linear	
Benzyl Chloride	50.0	18.1	0.133	0.010	63.7	50.0	Quadratic	*
n-Butylbenzene	1.90	1.53	1.53	0.500	19.5	50.0	Averaged	
1,2-Dichlorobenzene	50.0	43.7	1.32	0.400	12.7	50.0	Linear	
1,2-Dibromo-3-Chloropropane	50.0	40.6	0.112	0.050	18.8	50.0	Linear	
1,2,4-Trichlorobenzene	0.990	0.857	0.857	0.200	13.4	50.0	Averaged	
Hexachlorobutadiene	50.0	40.9	0.369	0.100	18.1	50.0	Linear	
Naphthalene	50.0	41.7	1.89	0.200	16.6	50.0	Linear	
1,2,3-Trichlorobenzene	0.944	0.814	0.814	0.100	13.8	50.0	Averaged	
Methyl Acetate	50.0	41.1	0.246	0.100	17.8	50.0	Linear	
Freon TF	50.0	42.3	0.349	0.100	15.3	50.0	Linear	
Cyclohexane	50.0	41.1	0.458	0.100	17.8	50.0	Linear	
Tetrahydrofuran	100	85.9	0.053	0.001	14.1	50.0	Linear	
Methylcyclohexane	0.606	0.550	0.550	0.100	9.10	50.0	Averaged	
1,4-Dioxane	1000	928	0.005	0.001	7.15	50.0	Linear	
n-Butanol	1000	840	0.010	0.005	16.0	50.0	Linear	
n-Hexane	50.0	30.8	0.252	0.100	38.4	50.0	Linear	
Diethyl ether	50.0	42.5	0.239	0.100	15.1	50.0	Linear	
Tert-butyl alcohol	1000	862	0.035	0.005	13.8	50.0	Linear	
Isopropyl alcohol	1000	861	0.020	0.005	13.9	50.0	Linear	
Amyl alcohol	1000	811	0.007	0.005	18.9	50.0	Linear	
Diisopropyl ether	1.17	0.979	0.979	0.100	16.1	50.0	Averaged	
Butyl acrylate	50.0	41.5	0.408	0.100	17.0	50.0	Quadratic	
n-Amyl acetate	50.0	41.3	0.338	0.100	17.4	50.0	Quadratic	
Dicyclopentadiene	2.67	2.20	2.20	0.100	17.5	50.0	Averaged	
1,2,3-Trimethylbenzene	1.70	1.52	1.52	0.100	10.4	50.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24020246

RunID U021028.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U021028.D
Analysis Type WATER
Lab Sample ID CCV-END

Injection Date 10-FEB-2024 1110
ICAL Date(s) 09-FEB-2024, 09-FEB-2024
ICAL Times 09:22, 12:42
Quant Type ISTD

Compound	RRF / RRF / Conc	RF50 / RF50	CCV RRF50	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
Ethanol	1000	832	0.003	0.001	16.8	50.0	Linear	
tert-Butyl formate	100	80.8	0.235	0.100	19.2	50.0	Linear	
3,3-Dimethyl-1-butanol	1000	818	0.029	0.005	18.2	50.0	Linear	
tert-Amyl methyl ether	1.20	1.03	1.03	0.005	14.1	50.0	Averaged	
tert-Butyl ethyl ether	1.13	0.996	0.996	0.100	11.8	50.0	Averaged	
tert-Amyl alcohol	1000	809	0.024	0.005	19.1	50.0	Linear	
4-Methyl-2-pentanol	1000	819	0.059	0.005	18.1	50.0	Linear	
1,3-Butadiene	50.0	41.9	0.322	0.100	16.1	50.0	Linear	
Dichlorofluoromethane	0.735	0.582	0.582	0.100	20.8	50.0	Averaged	
Epichlorohydrin	200	142	0.011	0.001	29.0	50.0	Linear	
94 1,2-Dichloroethylene (total	0.531	0.426	0.426	0.200	19.8	50.0	Averaged	
95 Xylenes (total)	0.595	0.548	0.548	0.100	7.91	50.0	Averaged	
alpha-Methylstyrene	50.0	40.6	0.860	0.100	18.8	50.0	Linear	
Ethyl Acetate	50.0	41.3	0.293	0.100	17.3	50.0	Linear	
Methyl Acrylate	0.415	0.365	0.365	0.100	12.3	50.0	Averaged	
n-Butyl acetate	50.0	43.7	0.252	0.100	12.7	50.0	Linear	
Cyclohexanone	0.031	0.025	0.025	0.005	19.3	50.0	Averaged	
Isoprene	0.109	0.083	0.083	0.010	23.6	50.0	Averaged	
Isopropyl acetate	0.690	0.580	0.580	0.100	16.0	50.0	Averaged	
Allyl alcohol	1000	616	0.013	0.004	38.4	50.0	Linear	
Acetaldehyde	200	185	0.041	0.001	7.45	50.0	Quadratic	
Methyl Amyl Ketone	0.514	0.446	0.446	0.100	13.3	50.0	Averaged	
Dimethyl Disulfide	50.0	40.2	0.350	0.020	19.5	50.0	Quadratic	
Isobutylene	++++	++++	1.603e+65	0.010	++++	50.0	Linear	*
2-Ethylhexyl Acrylate	50.0	35.6	0.476	0.100	28.8	50.0	Linear	
Ethyl Acrylate	0.867	0.775	0.775	0.100	10.6	50.0	Averaged	
Butyl methacrylate	0.526	0.388	0.388	0.100	26.2	50.0	Averaged	
Propylene oxide	100	88.0	0.016	0.005	12.0	50.0	Linear	

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Form 8

Internal Standard Area and RT Summary

Volatiles by EPA Volatiles Organics by Method 8260C

Workorder

HS24020246

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

02/23/2024

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

Form 8 - Internal Standard Area and RT Summary

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24020246

EPA SW8260

VOA9_458584		Pentafluorobenzene				1,4 Difluorobenzene				Chlorobenzene d5				1,4-Dichlorobenzene d4			
Sample ID	File ID	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
12-HOUR STD (CCV)	U021002.D	226739	#	4.82	#	308372	#	5.55	#	297306	#	8.19	#	167680	#	10.17	#
HS24020246-01	U021022.D	260828		4.82		340199		5.55		321773		8.19		178430		10.17	
HS24020246-02	U021023.D	260527		4.82		337736		5.56		320734		8.19		175957		10.17	
HS24020246-03	U021024.D	254089		4.82		323536		5.55		311473		8.19		167189		10.17	
HS24020246-04	U021025.D	248921		4.82		324501		5.55		315254		8.19		168490		10.17	
HS24020246-05	U021020.D	258261		4.82		335957		5.55		326096		8.19		177926		10.17	
HS24020246-06	U021026.D	270065		4.82		344578		5.55		331502		8.19		185830		10.17	
HS24020246-07	U021027.D	247570		4.82		327247		5.55		308666		8.19		169746		10.17	
HS24020246-08	U021021.D	258907		4.82		345506		5.55		324858		8.19		180139		10.17	
HS24020246-09	U021011.D	276093		4.82		358896		5.55		340018		8.19		186097		10.17	
VBLKW-240210	U021005.D	267082		4.82		352407		5.55		331444		8.19		179743		10.17	
VLCSW-240210	U021003.D	230880		4.82		324717		5.55		304756		8.19		170363		10.17	
MS-ZZZZZZMS	U021009.D	194267		4.82		276726		5.55		259712		8.19		146196		10.17	
ZZZZZZMSD	U021010.D	194595		4.82		272017		5.55		254336		8.19		141119		10.17	

AREA UPPER LIMIT = +100% of STD IS Area
AREA LOWER LIMIT = - 50% of STD IS Area
RT - Retention IS - Internal StandardTime

RT UPPER LIMIT = + 0.50 of STD IS RT
RT LOWER LIMIT = - 0.50 of STD IS RT
CCV - Continuing Calibration Verification

- Area or RT Limit Flag
* - Value Outside Area or RT limits
H - Hour STD - Standard

right solutions.
right partner.

Analysis Run Log

Volatiles by EPA Volatiles Organics by Method 8260C

Workorder

HS24020246

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

02/23/2024

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

MSVOA09 -Logbook

Batch: 58855 **Analyst:** Tianna Smith

Date: 02-09-2024 **Reviewer:**

Method: 8260 **Laboratory:** Houston

Comments:

#	Samp ID	Type	Analyzed	DF	Init Wt/Vol	Final Vol	File ID	Matrix	Status	pH
1	BFB	TUNE	02-09-2024 07:40 am	1.00	0.00 mL	0.00 mL	U020901.D	Liquid	Y	NA
2	VSTD00.25	ICAL1	02-09-2024 09:22 am	1.00	5.00 mL	0.00 mL	U020902.D	Liquid	Y	NA
3	VSTD00.5	ICAL2	02-09-2024 09:44 am	1.00	5.00 mL	0.00 mL	U020903.D	Liquid	Y	NA
4	VSTD001	ICAL3	02-09-2024 10:06 am	1.00	5.00 mL	0.00 mL	U020904.D	Liquid	Y	NA
5	VSTD002	ICAL4	02-09-2024 10:29 am	1.00	5.00 mL	0.00 mL	U020905.D	Liquid	Y	NA
6	VSTD005	ICAL5	02-09-2024 10:51 am	1.00	5.00 mL	0.00 mL	U020906.D	Liquid	Y	NA
7	VSTD020	ICAL6	02-09-2024 11:13 am	1.00	5.00 mL	0.00 mL	U020907.D	Liquid	Y	NA
8	VSTD050	ICAL7	02-09-2024 11:35 am	1.00	5.00 mL	0.00 mL	U020908.D	Liquid	Y	NA
9	VSTD100	ICAL8	02-09-2024 11:58 am	1.00	5.00 mL	0.00 mL	U020909.D	Liquid	Y	NA
10	VSTD150	ICAL9	02-09-2024 12:20 pm	1.00	5.00 mL	0.00 mL	U020910.D	Liquid	Y	NA
11	VSTD200	ICAL	02-09-2024 12:42 pm	1.00	5.00 mL	0.00 mL	U020911.D	Liquid	Y	NA
12	BLK	SAMP	02-09-2024 01:05 pm	1.00	5.00 mL	0.00 mL	U020912.D	Liquid	Y	NA
13	ICV	ICV	02-09-2024 01:27 pm	1.00	5.00 mL	0.00 mL	U020913.D	Liquid	Y	NA
14	BFB	TUNE	02-09-2024 01:49 pm	1.00	0.00 mL	0.00 mL	V020901.D	Liquid	Y	NA
15	CCV	CCV	02-09-2024 02:11 pm	1.00	5.00 mL	0.00 mL	V020902.D	Liquid	Y	NA
16	CCV	CCV	02-09-2024 02:34 pm	1.00	5.00 mL	0.00 mL	V020903.D	Liquid	Y	NA
17	VLCSW-240209	LCS	02-09-2024 02:56 pm	1.00	5.00 mL	0.00 mL	V020904.D	Liquid	Y	NA
18	VLCSDW-240209	LCSD	02-09-2024 03:18 pm	1.00	5.00 mL	0.00 mL	V020905.D	Liquid	Y	NA
19	BLK	SAMP	02-09-2024 03:46 pm	1.00	5.00 mL	0.00 mL	V020906.D	Liquid	Y	NA
20	VBLKW-240209	MBLK	02-09-2024 04:08 pm	1.00	5.00 mL	0.00 mL	V020907.D	Liquid	Y	NA
21	HS24020406-01	SAMP	02-09-2024 04:31 pm	1.00	5.00 mL	0.00 mL	V020908.D	Liquid	Y	NA
22	HS24020435-01	SAMP	02-09-2024 04:53 pm	1.00	5.00 mL	0.00 mL	V020909.D	Liquid	Y	NA
23	HS24020413-08	SAMP	02-09-2024 05:16 pm	1.00	5.00 mL	0.00 mL	V020910.D	Liquid	Y	NA
24	HS24020386-01	SAMP	02-09-2024 05:38 pm	1.00	5.00 mL	0.00 mL	V020911.D	Liquid	Y	NA
25	HS24020507-01	SAMP	02-09-2024 06:00 pm	1.00	5.00 mL	0.00 mL	V020912.D	Liquid	Y	NA
26	HS24020310-37	SAMP	02-09-2024 06:23 pm	1.00	5.00 mL	0.00 mL	V020913.D	Liquid	Y	NA
27	HS24020310-38	SAMP	02-09-2024 06:45 pm	1.00	5.00 mL	0.00 mL	V020914.D	Liquid	Y	NA
28	HS24020414-01	SAMP	02-09-2024 07:08 pm	1.00	5.00 mL	0.00 mL	V020915.D	Liquid	Y	NA
29	HS24020414-02	SAMP	02-09-2024 07:30 pm	1.00	5.00 mL	0.00 mL	V020916.D	Liquid	Y	NA
30	HS24020414-03	SAMP	02-09-2024 07:53 pm	1.00	5.00 mL	0.00 mL	V020917.D	Liquid	Y	NA
31	HS24020414-04	SAMP	02-09-2024 08:15 pm	1.00	5.00 mL	0.00 mL	V020918.D	Liquid	Y	NA
32	HS24020414-05	SAMP	02-09-2024 08:37 pm	1.00	5.00 mL	0.00 mL	V020919.D	Liquid	Y	NA
33	HS24020414-06	SAMP	02-09-2024 09:00 pm	1.00	5.00 mL	0.00 mL	V020920.D	Liquid	Y	NA
34	HS24020414-07	SAMP	02-09-2024 09:22 pm	1.00	5.00 mL	0.00 mL	V020921.D	Liquid	Y	NA
35	HS24020398-01	SAMP	02-09-2024 09:45 pm	1.00	5.00 mL	0.00 mL	V020922.D	Liquid	Y	NA
36	HS24020381-02	SAMP	02-09-2024 10:07 pm	1.00	5.00 mL	0.00 mL	V020923.D	Liquid	Y	NA
37	HS24020459-01	SAMP	02-09-2024 10:29 pm	1.00	5.00 mL	0.00 mL	V020924.D	Liquid	Y	NA
38	HS24020459-02	SAMP	02-09-2024 10:52 pm	1.00	5.00 mL	0.00 mL	V020925.D	Liquid	Y	NA
39	HS24020466-01	SAMP	02-09-2024 11:14 pm	1.00	5.00 mL	0.00 mL	V020926.D	Liquid	Y	NA
40	HS24020501-01	SAMP	02-09-2024 11:37 pm	1.00	5.00 mL	0.00 mL	V020927.D	Liquid	Y	NA
41	BLK	SAMP	02-09-2024 11:59 pm	1.00	5.00 mL	0.00 mL	V020928.D	Liquid	Y	NA

MSVOA09 -Logbook

#	Samp ID	Type	Analyzed	DF	Init Wt/Vol	Final Vol	File ID	Matrix	Status	pH
42	BLK	SAMP	02-10-2024 12:21 am	1.00	5.00 mL	0.00 mL	V020929.D	Liquid	Y	NA

MSVOA09 -Logbook

Batch: 59006 **Analyst:** Tianna Smith

Date: 02-10-2024 **Reviewer:**

Method: 8260 **Laboratory:** Houston

Comments:

#	Samp ID	Type	Analyzed	DF	Init Wt/Vol	Final Vol	File ID	Matrix	Status	pH
1	BFB	TUNE	02-10-2024 12:44 am	1.00	0.00 mL	0.00 mL	U021001.D	Liquid	Y	NA
2	CCV	CCV	02-10-2024 01:28 am	1.00	5.00 mL	0.00 mL	U021002.D	Liquid	Y	NA
3	VLCSW-240210	LCS	02-10-2024 01:50 am	1.00	5.00 mL	0.00 mL	U021003.D	Liquid	Y	NA
4	BLK	SAMP	02-10-2024 02:13 am	1.00	5.00 mL	0.00 mL	U021004.D	Liquid	Y	NA
5	VBLKW-240210	MBLK	02-10-2024 02:35 am	1.00	5.00 mL	0.00 mL	U021005.D	Liquid	Y	NA
6	HS24020269-09	SAMP	02-10-2024 02:58 am	1.00	5.00 mL	0.00 mL	U021006.D	Liquid	Y	NA
7	HS24020251-01	SAMP	02-10-2024 03:20 am	100.0(	5.00 mL	0.00 mL	U021007.D	Liquid	Y	NA
8	HS24020252-01	SAMP	02-10-2024 03:42 am	1000.0	5.00 mL	0.00 mL	U021008.D	Liquid	Y	NA
9	HS24020269-09MS	MS	02-10-2024 04:05 am	1.00	5.00 mL	0.00 mL	U021009.D	Liquid	Y	NA
10	HS24020269-09MSD	MSD	02-10-2024 04:27 am	1.00	5.00 mL	0.00 mL	U021010.D	Liquid	Y	NA
11	HS24020246-09	SAMP	02-10-2024 04:49 am	1.00	5.00 mL	0.00 mL	U021011.D	Liquid	Y	NA
12	HS24020269-01	SAMP	02-10-2024 05:12 am	1.00	5.00 mL	0.00 mL	U021012.D	Liquid	Y	NA
13	HS24020269-03	SAMP	02-10-2024 05:34 am	1.00	5.00 mL	0.00 mL	U021013.D	Liquid	Y	NA
14	HS24020269-04	SAMP	02-10-2024 05:57 am	1.00	5.00 mL	0.00 mL	U021014.D	Liquid	Y	NA
15	HS24020263-01	SAMP	02-10-2024 06:19 am	1.00	5.00 mL	0.00 mL	U021015.D	Liquid	Y	NA
16	HS24020271-01	SAMP	02-10-2024 06:42 am	1.00	5.00 mL	0.00 mL	U021016.D	Liquid	Y	NA
17	HS24020263-14	SAMP	02-10-2024 07:04 am	1.00	5.00 mL	0.00 mL	U021017.D	Liquid	Y	NA
18	HS24020263-15	SAMP	02-10-2024 07:26 am	1.00	5.00 mL	0.00 mL	U021018.D	Liquid	Y	NA
19	HS24020263-16	SAMP	02-10-2024 07:49 am	1.00	5.00 mL	0.00 mL	U021019.D	Liquid	Y	NA
20	HS24020246-05	SAMP	02-10-2024 08:11 am	1.00	5.00 mL	0.00 mL	U021020.D	Liquid	Y	NA
21	HS24020246-08	SAMP	02-10-2024 08:34 am	1.00	5.00 mL	0.00 mL	U021021.D	Liquid	Y	NA
22	HS24020246-01	SAMP	02-10-2024 08:56 am	20.00	5.00 mL	0.00 mL	U021022.D	Liquid	Y	NA
23	HS24020246-02	SAMP	02-10-2024 09:18 am	50.00	5.00 mL	0.00 mL	U021023.D	Liquid	Y	NA
24	HS24020246-03	SAMP	02-10-2024 09:41 am	250.0(	5.00 mL	0.00 mL	U021024.D	Liquid	Y	NA
25	HS24020246-04	SAMP	02-10-2024 10:03 am	20.00	5.00 mL	0.00 mL	U021025.D	Liquid	Y	NA
26	HS24020246-06	SAMP	02-10-2024 10:26 am	200.0(	5.00 mL	0.00 mL	U021026.D	Liquid	Y	NA
27	HS24020246-07	SAMP	02-10-2024 10:48 am	10.00	5.00 mL	0.00 mL	U021027.D	Liquid	Y	NA
28	CCV-END	CCV	02-10-2024 11:10 am	1.00	5.00 mL	0.00 mL	U021028.D	Liquid	Y	NA
29	BFB	TUNE	02-10-2024 12:18 pm	1.00	5.00 mL	0.00 mL	V021001.D	Liquid	Y	NA
30	CCV	CCV	02-10-2024 12:40 pm	1.00	5.00 mL	0.00 mL	V021002.D	Liquid	Y	NA
31	CCV	CCV	02-10-2024 01:03 pm	1.00	5.00 mL	0.00 mL	V021002A.D	Liquid	Y	NA
32	VLCSW-240210	LCS	02-10-2024 01:25 pm	1.00	5.00 mL	0.00 mL	V021003.D	Liquid	Y	NA
33	VLCSDW-240210	LCSD	02-10-2024 01:47 pm	1.00	5.00 mL	0.00 mL	V021004.D	Liquid	Y	NA
34	BLK	SAMP	02-10-2024 02:10 pm	1.00	5.00 mL	0.00 mL	V021005.D	Liquid	Y	NA
35	VBLKW-240210	MBLK	02-10-2024 02:32 pm	1.00	5.00 mL	0.00 mL	V021006.D	Liquid	Y	NA
36	BFB	TUNE	02-15-2024 08:31 am	1.00	0.00 mL	0.00 mL	U021501.D	Liquid	Y	NA

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RawData

Volatiles by EPA Volatiles Organics by Method 8260C

Workorder

HS24020246

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

02/23/2024

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

Data File: \\nahstws005\Target\chem\voa9.i\U240208.b\V020827.D Page 1
Report Date: 09-Feb-2024 10:48

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240208.b\V020827.D
Lab Smp Id: BLK
Inj Date : 09-FEB-2024 07:40
Operator : FT   Inst ID: VOA9.i
Smp Info : BLK
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240208.b\bfb.m
Meth Date : 27-Jan-2023 08:08 apoluri   Quant Type: ISTD
Cal Date : 30-MAR-2018 18:09   Cal File: U033003.d
Als bottle: 55   QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: all.sub
Target Version: 4.14   Sample Matrix: WATER
Processing Host: NAHSTW7066

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	2.000	Injection Volume
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/l)		
RT	EXP RT	REL RT	MASS	RESPONSE			TARGET RANGE	RATIO
1 bfb							CAS #: 460-00-4	
9.194	9.180	(0.000)	95	66104			0.00- 100.00	99.89
9.194	9.180	(0.000)	50	10452			15.00- 40.00	15.81
9.194	9.180	(0.000)	75	29904			30.00- 60.00	45.24
9.194	9.180	(0.000)	96	4979			5.00- 9.00	7.53
9.194	9.180	(0.000)	173	0	0.0	0.0	0.00- 2.00	0.00
9.194	9.180	(0.000)	174	66176			50.00- 0.00	100.11
9.194	9.180	(0.000)	175	5783			5.00- 9.00	8.74
9.194	9.180	(0.000)	176	64432			95.00- 101.00	97.36
9.194	9.180	(0.000)	177	4331			5.00- 9.00	6.72

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	15.81
75	30.00 - 60.00% of mass 95	45.24
96	5.00 - 9.00% of mass 95	7.53
173	Less than 2.00% of mass 174	0.00 (0.00)
174	Greater than 50.00% of mass 95	100.11
175	5.00 - 9.00% of mass 174	8.75 (8.74)
176	95.00 - 101.00% of mass 174	97.47 (97.36)
177	5.00 - 9.00% of mass 176	6.55 (6.72)

Data File: V020827.D
Spectrum: Scan 2293 (9.19)
Location of Maximum: 174.00
Number of points: 84

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.10	592	64.00	295	93.00	2773	140.90	648
37.10	2629	65.20	208	94.10	8318	141.80	63
38.10	2120	66.30	53	95.10	66104	142.90	721
39.10	881	68.10	5531	96.10	4979	144.20	64
40.00	118	69.00	6148	97.00	142	144.80	148
43.20	71	70.00	460	103.90	251	146.00	128
44.00	334	72.10	313	104.90	107	147.90	194
45.00	639	73.10	2774	105.90	241	153.10	113
47.10	577	74.10	10000	106.90	102	153.90	106
48.00	487	75.10	29904	115.10	94	154.90	246
49.00	2159	76.10	2841	115.90	325	156.80	91
50.10	10452	77.00	323	116.90	362	159.00	79
51.10	3397	77.90	537	118.00	203	172.00	521
51.90	116	78.90	1315	118.90	329	174.00	66176
55.10	207	79.90	535	124.90	89	175.00	5783
56.00	836	80.90	1464	127.90	254	176.00	64432
57.00	1421	82.00	345	128.80	83	177.00	4331
57.80	61	86.10	148	130.10	226	177.90	143
60.00	519	87.00	2632	130.90	75		
61.00	2432	88.00	2494	134.90	149		
62.10	2540	91.00	218	136.90	111		
63.00	2063	92.10	1630	140.20	109		

Data File: \\NAHSTWS005\Target\chem\voa9.i\u240209.b\u020901.d Page 1

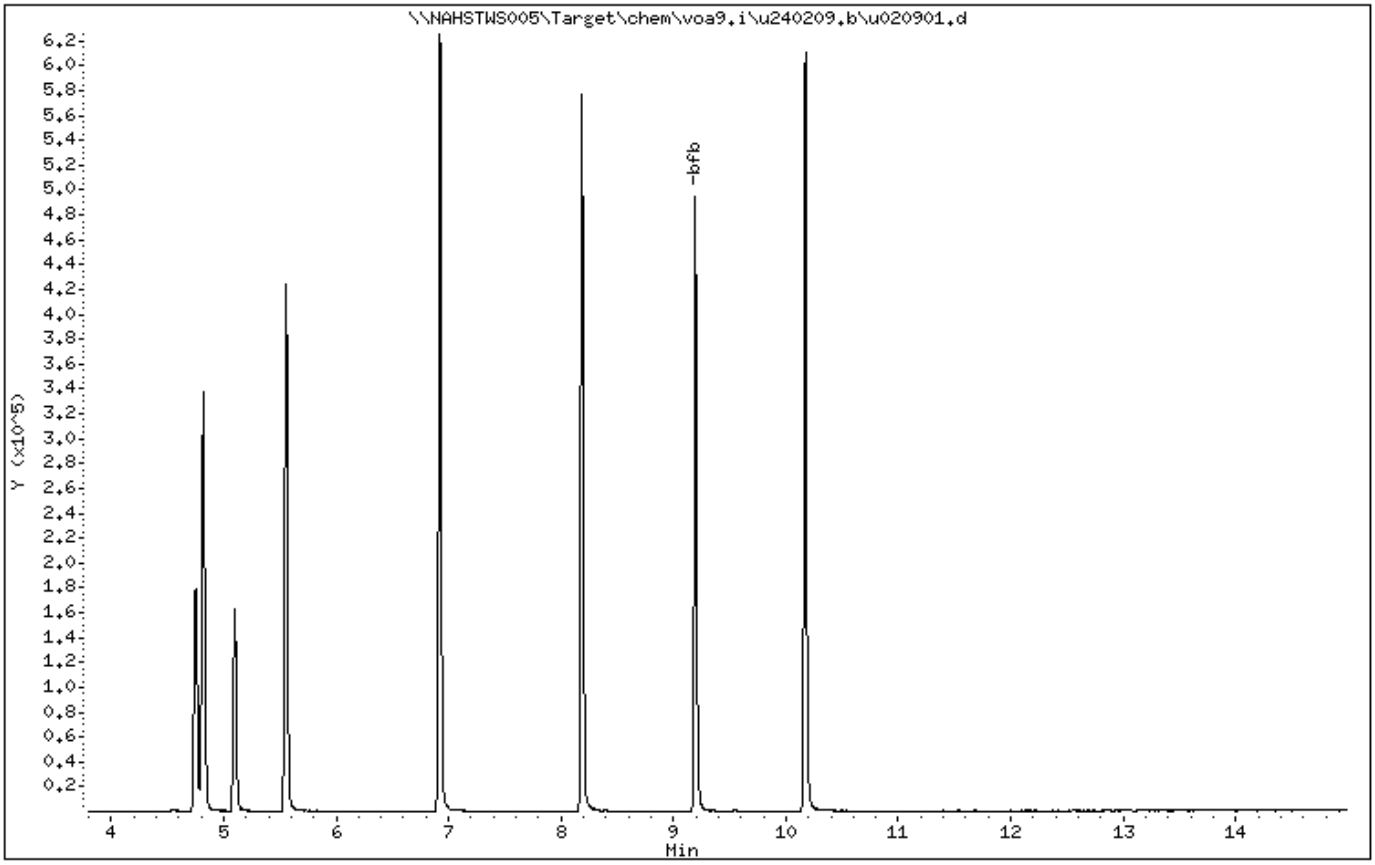
Date : 09-FEB-2024 07:40

Client ID: Instrument: VOA9.i

Sample Info: BFB

Volume Injected (uL): 2.0 Operator: FT

Column phase: DB624 Column diameter: 0.25



Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020901.d
Inj Date : 09-FEB-2024 07:40
InstruID : VOA9.i
LabSampID : BFB

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240209.b\U020902.D Page 1
Report Date: 15-Feb-2024 11:14

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240209.b\U020902.D
Lab Smp Id: VSTD00.25 Client Smp ID: VSTD00.25
Inj Date : 09-FEB-2024 09:22
Operator : FT Inst ID: VOA9.i
Smp Info : VSTD00.25;VSTD00.25;1;1;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240209.b\8260C.m
Meth Date : 15-Feb-2024 11:14 VOA9.i Quant Type: ISTD
Cal Date : 09-FEB-2024 12:42 Cal File: U020911.D
Als bottle: 2 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V9.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

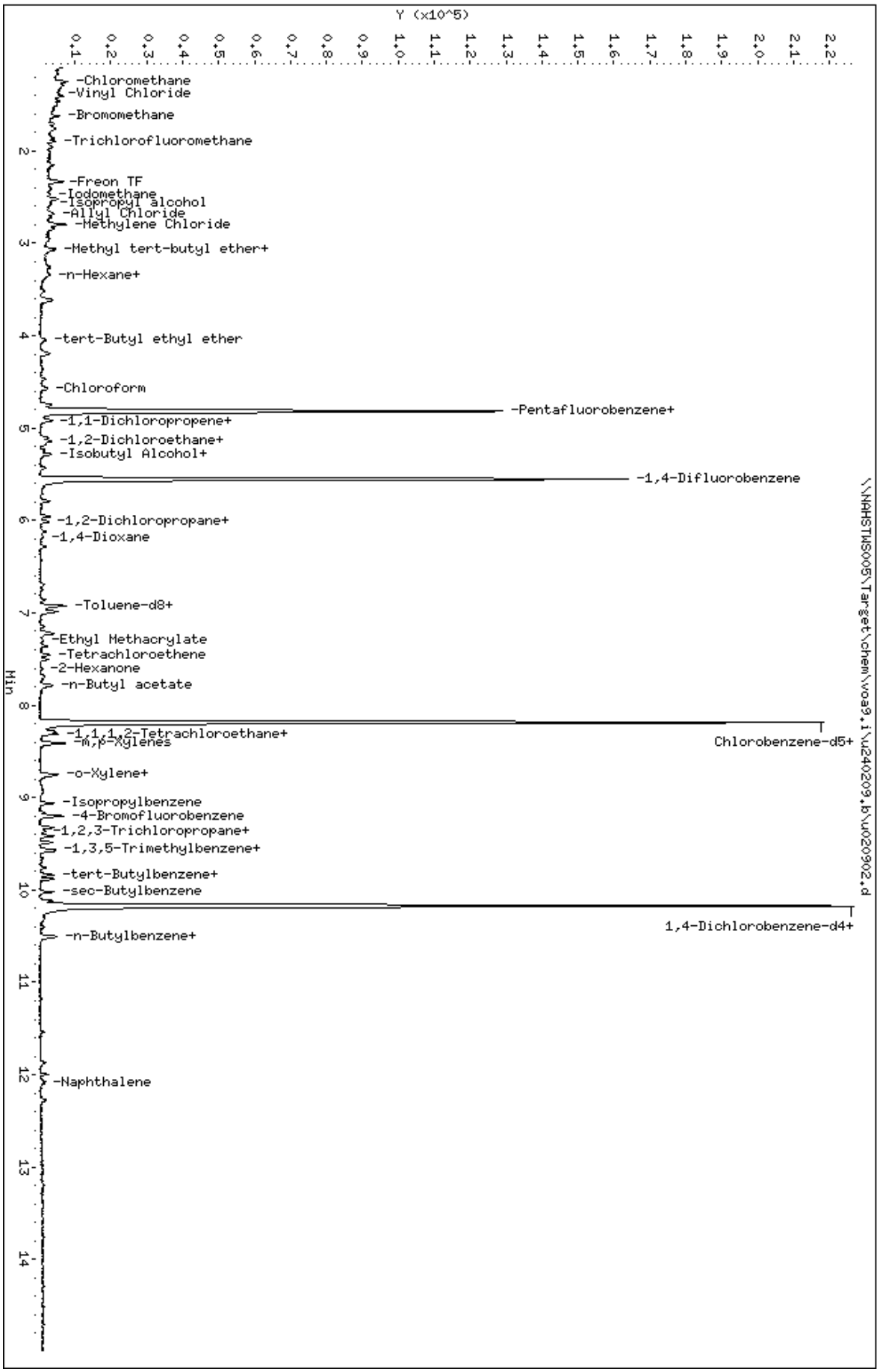
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
*	1 Pentafluorobenzene	168	4.815	4.815	(1.000)	101697	50.0000	
	2 Dichlorodifluoromethane	85	1.164	1.164	(0.242)	616	0.25000	1.04
	3 Chloromethane	50	1.299	1.299	(0.270)	883	0.25000	1.56
	5 Vinyl Chloride	62	1.378	1.378	(0.286)	645	0.25000	0.79
	6 Bromomethane	94	1.621	1.621	(0.337)	1137	0.25000	2.49
	8 Trichlorofluoromethane	101	1.895	1.895	(0.394)	1272	0.25000	0.51
	15 Iodomethane	142	2.469	2.469	(0.513)	770	0.50000	2.43(T)
	17 Methylene Chloride	84	2.791	2.791	(0.580)	1956	0.25000	0.78
	18 Methyl tert-butyl ether	73	3.083	3.083	(0.640)	1558	0.25000	0.79
	20 trans-1,2-Dichloroethene	96	3.061	3.061	(0.636)	801	0.25000	0.88
	28 Chloroform	83	4.575	4.575	(0.950)	1696	0.25000	0.88
$	30 Dibromofluoromethane	113	4.748	4.748	(0.986)	1429	0.25000	0.93
	31 1,1,1-Trichloroethane	97	4.740	4.740	(0.984)	1119	0.25000	0.76
	32 1,1-Dichloropropene	75	4.924	4.924	(0.887)	938	0.25000	0.93
	33 1,2-Dichloroethane	62	5.179	5.179	(0.933)	1202	0.25000	0.35
	34 Carbon Tetrachloride	117	4.913	4.913	(0.885)	1031	0.25000	0.79
$	35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	1646	0.25000	0.83(T)
*	36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	142579	50.0000	
	37 Benzene	78	5.145	5.145	(0.926)	2825	0.25000	0.93
	42 1,2-Dichloropropane	63	6.015	6.015	(1.083)	625	0.25000	0.67

*	47 Chlorobenzene-d5	117	8.185	8.185 (1.000)	133611	50.0000	
$	48 Toluene-d8	98	6.926	6.926 (0.846)	4938	0.25000	1.30(T)

		QUANT SIG					AMOUNTS CAL-AMT	ON-COL
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
	50 Toluene	91	6.986	6.986	(0.853)	2857	0.25000	0.69
	52 2-Hexanone	43	7.601	7.601	(0.929)	791	0.50000	4.01(T)
	56 Tetrachloroethene	164	7.458	7.458	(0.911)	760	0.25000	0.80
	58 1-Chlorohexane	55	8.185	8.185	(1.474)	1579	0.25000	1.73
	59 Chlorobenzene	112	8.212	8.212	(1.003)	2606	0.25000	0.74
	60 1,1,1,2-Tetrachloroethane	131	8.287	8.287	(1.012)	726	0.25000	0.68
	61 Ethylbenzene	106	8.313	8.313	(1.016)	848	0.25000	0.60
	62 m,p-Xylenes	106	8.414	8.414	(1.028)	2473	0.50000	1.43
	63 o-Xylene	106	8.748	8.748	(1.069)	1072	0.25000	0.63
	64 Styrene	104	8.770	8.770	(1.071)	1283	0.25000	0.46
	67 Isopropylbenzene	105	9.063	9.063	(1.107)	2667	0.25000	0.61
$	69 4-Bromofluorobenzene	95	9.201	9.201	(1.124)	2106	0.25000	1.28
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	69423	50.0000	
	71 1,2,3-Trichloropropane	75	9.370	9.370	(0.921)	877	0.25000	0.78
	73 n-Propylbenzene	91	9.415	9.415	(0.926)	3456	0.25000	0.80
	74 Bromobenzene	156	9.321	9.321	(0.916)	1071	0.25000	0.80
	75 1,3,5-Trimethylbenzene	105	9.565	9.565	(0.940)	1975	0.25000	0.61
	76 2-Chlorotoluene	91	9.490	9.490	(0.933)	2021	0.25000	0.70
	77 4-Chlorotoluene	91	9.584	9.584	(0.942)	1989	0.25000	0.61
	78 tert-Butylbenzene	119	9.835	9.835	(0.967)	2020	0.25000	0.68
	79 1,2,4-Trimethylbenzene	105	9.880	9.880	(0.971)	2079	0.25000	0.65
	81 sec-Butylbenzene	105	10.022	10.022	(0.985)	2465	0.25000	0.65
	82 p-Isopropyltoluene	119	10.150	10.150	(0.998)	1784	0.25000	0.53
	83 1,3-Dichlorobenzene	146	10.120	10.120	(0.995)	1816	0.25000	0.74
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	1920	0.25000	0.46
	87 n-Butylbenzene	91	10.498	10.498	(1.032)	1523	0.25000	0.57
	88 1,2-Dichlorobenzene	146	10.510	10.510	(1.033)	1823	0.25000	0.60
	92 Naphthalene	128	12.080	12.080	(1.188)	2012	0.25000	1.86
M	94 1,2-Dichloroethylene (total)	96				801	0.50000	
M	95 Xylenes (total)	106				3545	0.75000	
	135 1,4-Dioxane	88	6.180	6.180	(1.283)	72	5.00000	16.03(M)
	141 Cyclohexane	56	4.812	4.812	(0.999)	2235	0.25000	1.72
	138 Freon TF	101	2.341	2.341	(0.486)	749	0.25000	0.90
	147 Methylcyclohexane	55	5.955	5.955	(1.072)	903	0.25000	0.52
	149 Isopropyl Alcohol	45	2.570	2.570	(0.534)	1052	5.00000	24.69(T)

QC Flag Legend

T - Target compound detected outside RT window.
M - Compound response manually integrated.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-Chloromethane
-Vinyl Chloride
-Bromomethane
-Trichlorofluoromethane
-Freon TF
-Iodomethane
-Isopropyl alcohol
-Allyl Chloride
-Methylene Chloride
-Methyl tert-butyl ether+
-n-Hexane+
-tert-Butyl ethyl ether
-Chloroform
-Pentafluorobenzene+
-1,1-Dichloropropene+
-1,2-Dichloroethane+
-Isobutyl Alcohol+
-1,4-Difluorobenzene
-1,2-Dichloropropane+
-1,4-Dioxane
-Toluene-d8+
-Ethyl Methacrylate
-Tetrachloroethene
-2-Hexanone
-n-Butyl acetate
-1,1,1,2-Tetrachloroethane+
-m,p-Xylenes
Chlorobenzene-d5+
-o-Xylene+
-Isopropylbenzene
-4-Bromofluorobenzene
-1,2,3-Trichloropropane+
-1,3,5-Trimethylbenzene+
-tert-Butylbenzene+
-sec-Butylbenzene
1,4-Dichlorobenzene-d4+
-n-Butylbenzene+
-Naphthalene
Min
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Sample Info: VSTD00.25;VSTD00.25;1;1;
Purge Volume: 5.0
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Instrument: VOA9.i
Operator: FT
Column diameter: 0.18
Page 1

Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020902.d
Inj Date : 09-FEB-2024 09:22
InstruID : VOA9.i
LabSampID : VSTD00.25

1,4-Dioxane ()

Reason Code:

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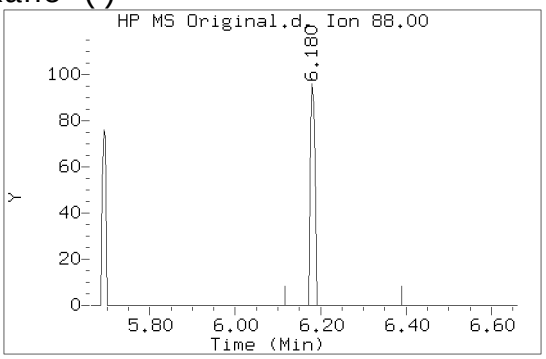

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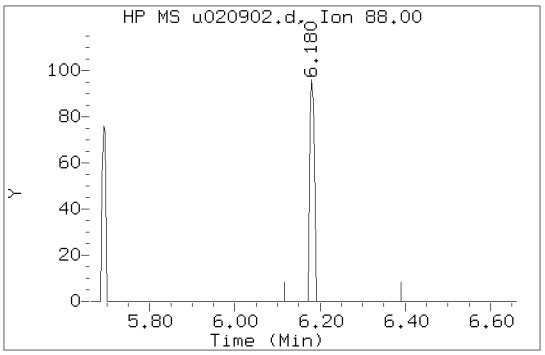

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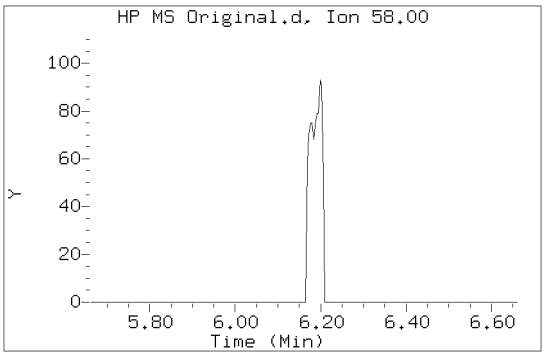

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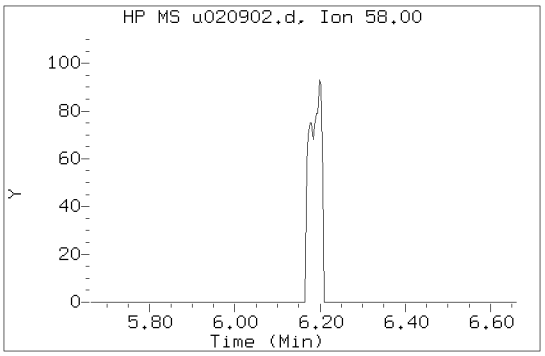

n-Butyl acetate (123-86-4)

Reason Code:

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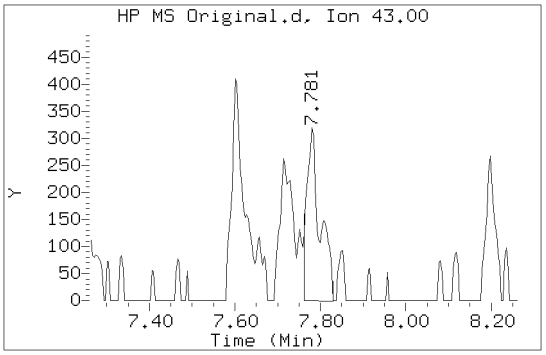

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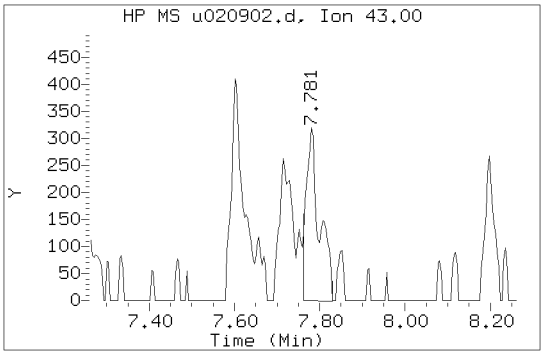

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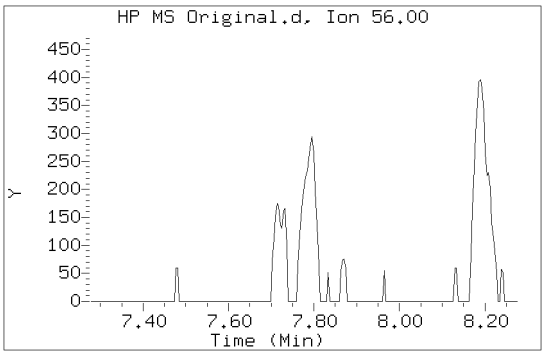

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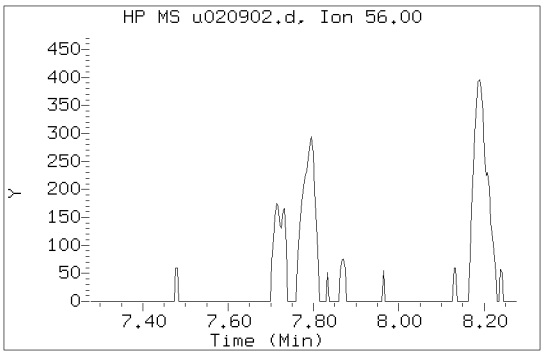

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InstruID : VOA9.i
LabSampID : VSTD00.25

n-Butyl acetate (123-86-4)

Reason Code:

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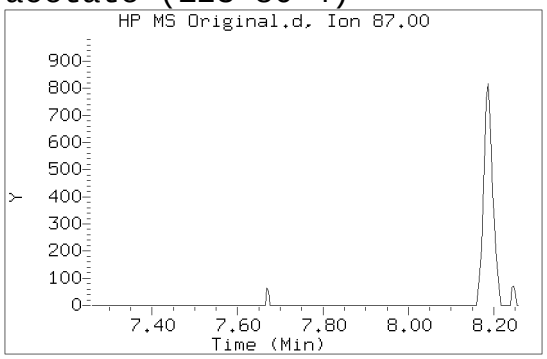

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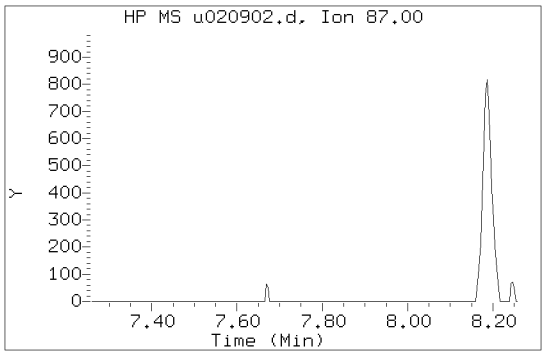

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240209.b\U020903.D Page 1
Report Date: 15-Feb-2024 11:14

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240209.b\U020903.D
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Inj Date : 09-FEB-2024 09:44
Operator : FT Inst ID: VOA9.i
Smp Info : VSTD00.5;VSTD00.5;1;2;
Misc Info : V9;WATER;0;1;
Comment   :
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Meth Date : 15-Feb-2024 11:14 VOA9.i Quant Type: ISTD
Cal Date : 09-FEB-2024 09:22 Cal File: U020902.D
Als bottle: 3 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V9.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1	Pentafluorobenzene	168	4.819	4.819	(1.000)	190342	50.0000	
2	Dichlorodifluoromethane	85	1.168	1.168	(0.242)	907	0.50000	0.85
3	Chloromethane	50	1.303	1.303	(0.270)	1281	0.50000	1.31
5	Vinyl Chloride	62	1.381	1.381	(0.287)	1370	0.50000	0.89
6	Bromomethane	94	1.625	1.625	(0.337)	1565	0.50000	1.99
7	Chloroethane	64	1.708	1.708	(0.354)	835	0.50000	0.44(M)
8	Trichlorofluoromethane	101	1.903	1.903	(0.395)	1847	0.50000	0.30
9	Acrolein	56	2.274	2.274	(0.472)	385	1.00000	3.11(M)
10	Acetone	43	2.412	2.412	(0.501)	1848	1.00000	(M)
11	1,1-Dichloroethene	96	2.337	2.337	(0.485)	1102	0.50000	0.86(M)
15	Iodomethane	142	2.469	2.469	(0.512)	1327	1.00000	2.38(T)
16	Acrylonitrile	53	3.068	3.068	(0.637)	738	1.00000	1.02
17	Methylene Chloride	84	2.795	2.795	(0.580)	2539	0.50000	0.11
18	Methyl tert-butyl ether	73	3.083	3.083	(0.640)	3059	0.50000	0.82
19	Carbon Disulfide	76	2.525	2.525	(0.524)	5908	1.00000	1.30
20	trans-1,2-Dichloroethene	96	3.061	3.061	(0.635)	1223	0.50000	0.72
21	Vinyl Acetate	43	3.616	3.616	(0.750)	4819	1.00000	1.28(M)
22	1,1-Dichloroethane	63	3.514	3.514	(0.729)	1948	0.50000	0.81(M)
24	2-Butanone	43	4.302	4.302	(0.893)	711	1.00000	1.23(M)
26	2,2-Dichloropropane	77	4.186	4.186	(0.869)	1500	0.50000	0.66(M)

27 cis-1,2-Dichloroethene	96	4.197	4.197 (0.871)	1230	0.50000	0.58
28 Chloroform	83	4.579	4.579 (0.950)	2075	0.50000	0.52

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240209.b\U020903.D Page 2
Report Date: 15-Feb-2024 11:14

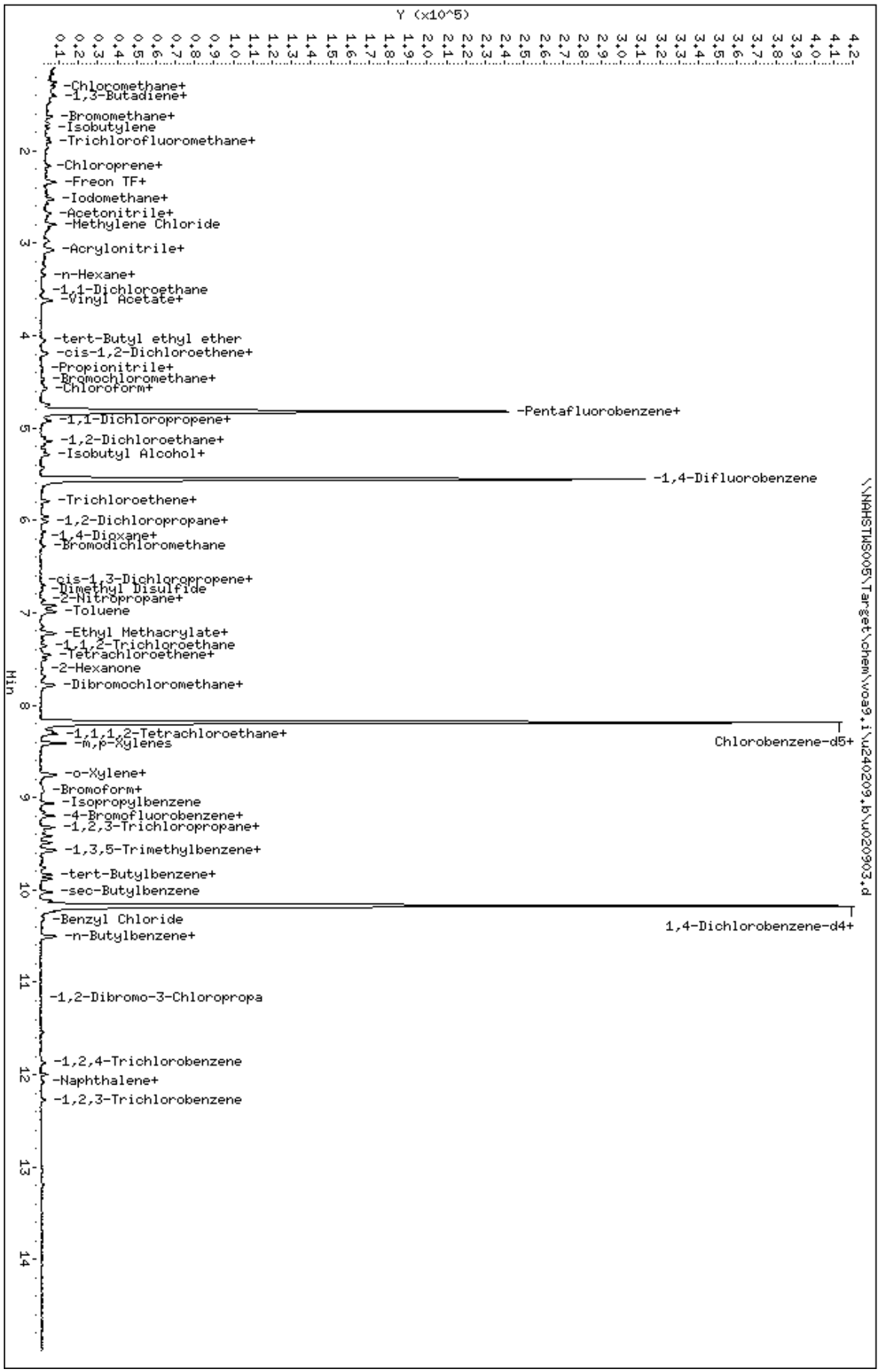
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	29 Bromochloromethane	128	4.470	4.470	(0.928)	750	0.50000	
$	30 Dibromofluoromethane	113	4.759	4.759	(0.988)	1601	0.50000	0.38
	31 1,1,1-Trichloroethane	97	4.748	4.748	(0.985)	1700	0.50000	0.61
	32 1,1-Dichloropropene	75	4.931	4.931	(0.888)	1840	0.50000	0.99
	33 1,2-Dichloroethane	62	5.179	5.179	(0.933)	1585	0.50000	0.05
	34 Carbon Tetrachloride	117	4.917	4.917	(0.885)	1400	0.50000	0.58
$	35 1,2-Dichloroethane-d4	65	5.100	5.100	(1.058)	1632	0.50000	0.08(T)
*	36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	261641	50.0000	
	37 Benzene	78	5.145	5.145	(0.926)	4782	0.50000	0.87
	38 Trichloroethene	130	5.790	5.790	(1.043)	1597	0.50000	0.94
	39 Bromodichloromethane	83	6.281	6.281	(1.131)	1455	0.50000	0.65(M)
	42 1,2-Dichloropropane	63	6.011	6.011	(1.082)	1218	0.50000	0.71
	44 Dibromomethane	93	6.124	6.124	(1.103)	596	0.50000	0.53(M)
	45 4-Methyl-2-Pentanone	43	6.858	6.858	(0.838)	1706	1.00000	1.26(M)
	46 cis-1,3-Dichloropropene	75	6.693	6.693	(1.205)	1270	0.50000	0.54(M)
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	241979	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	5559	0.50000	0.78
	50 Toluene	91	6.986	6.986	(0.853)	5016	0.50000	0.66
	51 trans-1,3-Dichloropropene	75	7.203	7.203	(1.297)	818	0.50000	2.05(M)
	52 2-Hexanone	43	7.601	7.601	(0.929)	1322	1.00000	3.90(T)
	53 1,1,2-Trichloroethane	83	7.357	7.357	(0.899)	950	0.50000	0.54
	54 1,3-Dichloropropane	76	7.503	7.503	(0.917)	1884	0.50000	0.53(M)
	55 Dibromochloromethane	129	7.694	7.694	(0.940)	1149	0.50000	0.60
	56 Tetrachloroethene	164	7.462	7.462	(0.912)	1157	0.50000	0.68
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	888	0.50000	0.52
	58 1-Chlorohexane	55	8.189	8.189	(1.474)	2590	0.50000	1.49
	59 Chlorobenzene	112	8.212	8.212	(1.003)	3697	0.50000	0.53
	60 1,1,1,2-Tetrachloroethane	131	8.287	8.287	(1.012)	1115	0.50000	0.57
	61 Ethylbenzene	106	8.313	8.313	(1.016)	1453	0.50000	0.57
	62 m,p-Xylenes	106	8.410	8.410	(1.027)	3809	1.00000	1.21
	63 o-Xylene	106	8.751	8.751	(1.069)	1720	0.50000	0.56
	64 Styrene	104	8.766	8.766	(1.071)	2528	0.50000	0.50
	66 Bromoform	173	8.924	8.924	(1.090)	805	0.50000	0.58(M)
	67 Isopropylbenzene	105	9.063	9.063	(1.107)	4391	0.50000	0.56
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	1437	0.50000	0.57(M)
$	69 4-Bromofluorobenzene	95	9.198	9.198	(1.124)	2317	0.50000	0.66
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	124282	50.0000	
	71 1,2,3-Trichloropropane	75	9.366	9.366	(0.921)	1072	0.50000	0.53
	73 n-Propylbenzene	91	9.415	9.415	(0.926)	4748	0.50000	0.61
	74 Bromobenzene	156	9.321	9.321	(0.916)	1584	0.50000	0.65
	75 1,3,5-Trimethylbenzene	105	9.565	9.565	(0.940)	3275	0.50000	0.56
	76 2-Chlorotoluene	91	9.486	9.486	(0.933)	3335	0.50000	0.65
	77 4-Chlorotoluene	91	9.584	9.584	(0.942)	3684	0.50000	0.63
	78 tert-Butylbenzene	119	9.839	9.839	(0.967)	3161	0.50000	0.60
	79 1,2,4-Trimethylbenzene	105	9.880	9.880	(0.971)	3095	0.50000	0.54
	81 sec-Butylbenzene	105	10.022	10.022	(0.985)	3962	0.50000	0.59
	82 p-Isopropyltoluene	119	10.146	10.146	(0.997)	3515	0.50000	0.58
	83 1,3-Dichlorobenzene	146	10.120	10.120	(0.995)	2757	0.50000	0.61
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	3199	0.50000	0.40
	87 n-Butylbenzene	91	10.495	10.495	(1.032)	2492	0.50000	0.52
	88 1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	2762	0.50000	0.47
	89 1,2-Dibromo-3-Chloropropane	155	11.177	11.177	(1.099)	72	0.50000	3.06(M)

90 1,2,4-Trichlorobenzene	180	11.867	11.867 (1.167)	1258	0.50000	0.51(M)
91 Hexachlorobutadiene	225	12.002	12.002 (1.180)	860	0.50000	0.86(M)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	92 Naphthalene	128	12.073	12.073	(1.187)	2654	0.50000	1.70
	93 1,2,3-Trichlorobenzene	180	12.275	12.275	(1.207)	1136	0.50000	0.48(M)
M	94 1,2-Dichloroethylene (total)	96				2453	1.00000	
M	95 Xylenes (total)	106				5529	1.50000	
	135 1,4-Dioxane	88	6.172	6.172	(1.281)	308	10.0000	24.26(M)
	141 Cyclohexane	56	4.815	4.815	(0.999)	2861	0.50000	1.09
	138 Freon TF	101	2.341	2.341	(0.486)	1206	0.50000	0.77
	140 1,3-Butadiene	54	1.404	1.404	(0.291)	1034	0.50000	0.87
	147 Methylcyclohexane	55	5.959	5.959	(1.073)	1618	0.50000	0.51
	146 Methyl Acetate	43	2.716	2.716	(0.564)	726	0.50000	0.23(M)
	148 Tert-Butyl alcohol	59	2.978	2.978	(0.618)	2997	10.0000	18.21(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.



Data File: \\NAHSTMS005\Target\chem\voa9.i\u240209.b\u020903.d
Date : 09-FEB-2024 09:44
Client ID: VSTD00.5
Sample Info: VSTD00.5;VSTD00.5;1;2;
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9.i
Operator: FT
Column diameter: 0.18

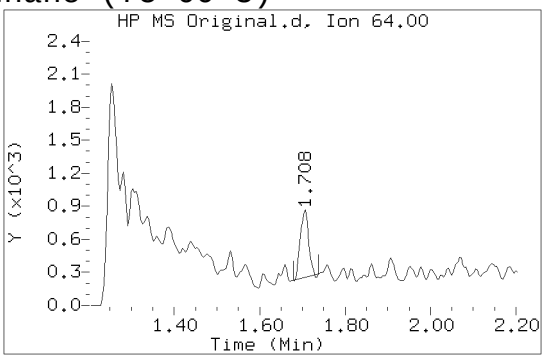
Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020903.d
Inj Date : 09-FEB-2024 09:44
InstruID : VOA9.i
LabSampID : VSTD00.5

Chloroethane (75-00-3)

Reason Code:

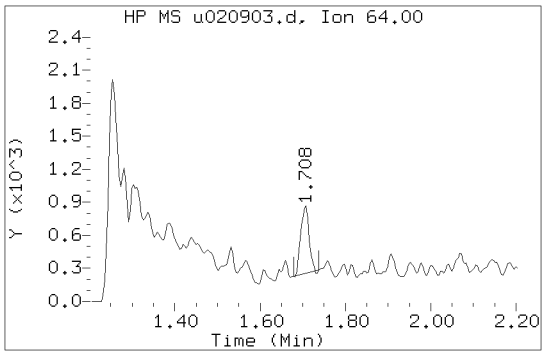
BEFORE

MASS
64
AREA
835
HEIGHT
607
09-Feb-2024
11:53
firat
tastan



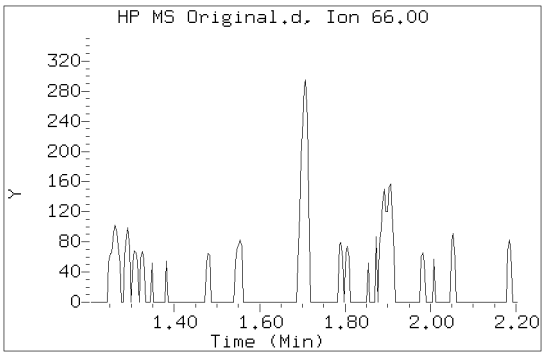
AFTER

MASS
64
AREA
835
HEIGHT
607
09-Feb-2024
11:53
firat
tastan



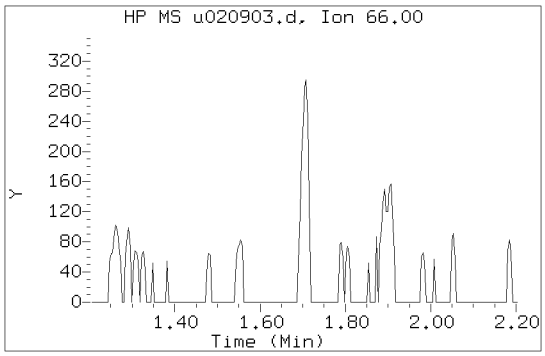
BEFORE

MASS
66
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



AFTER

MASS
66
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan

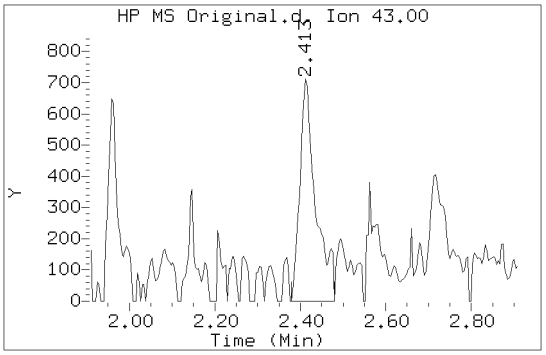


Acetone (67-64-1)

Reason Code:

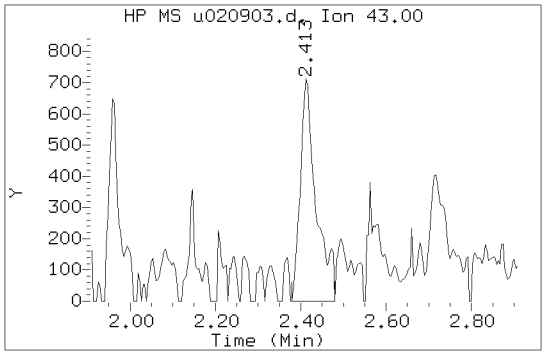
BEFORE

MASS
43
AREA
1848
HEIGHT
712
09-Feb-2024
11:53
firat
tastan



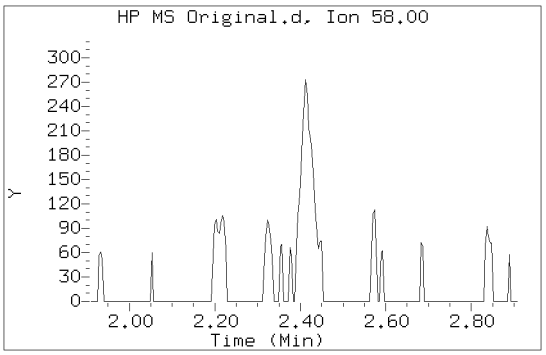
AFTER

MASS
43
AREA
1848
HEIGHT
712
09-Feb-2024
11:53
firat
tastan



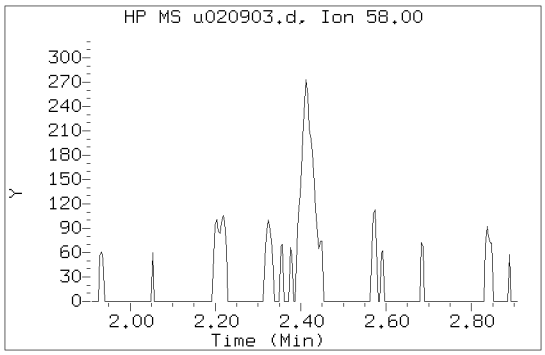
BEFORE

MASS
58
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



AFTER

MASS
58
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan

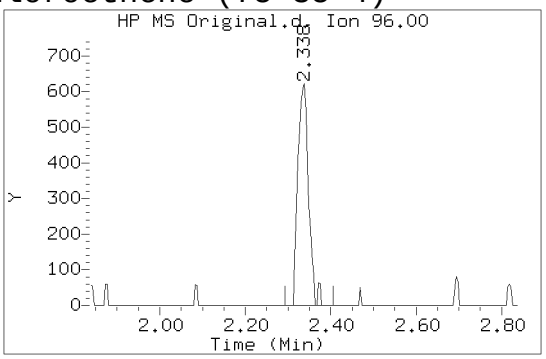


Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020903.d
Inj Date : 09-FEB-2024 09:44
InstruID : VOA9.i
LabSampID : VSTD00.5

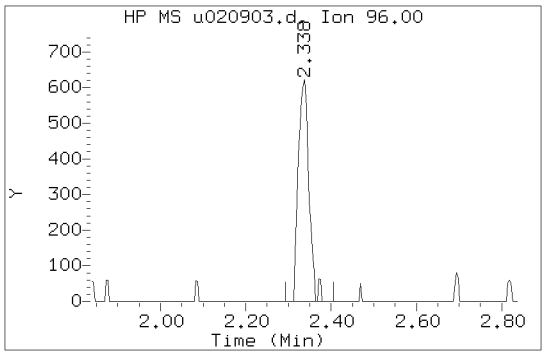
1,1-Dichloroethene (75-35-4)

Reason Code:

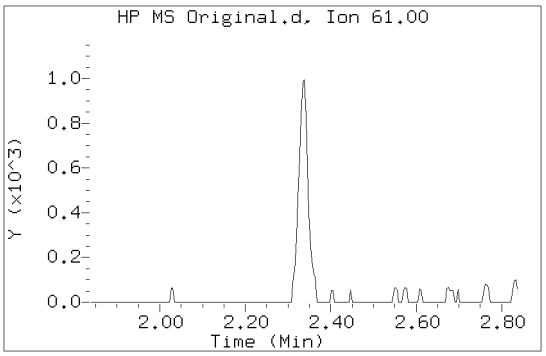
BEFORE
MASS
96
AREA
1102
HEIGHT
622
09-Feb-2024
11:53
firat
tastan



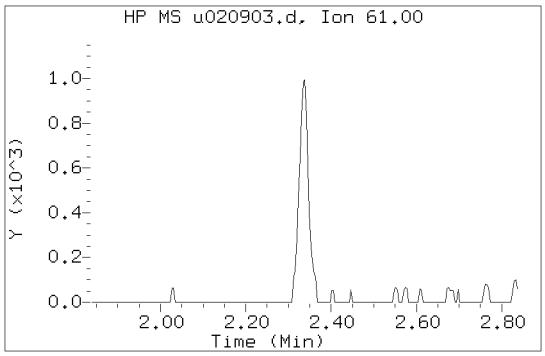
AFTER
MASS
96
AREA
1102
HEIGHT
622
09-Feb-2024
11:53
firat
tastan



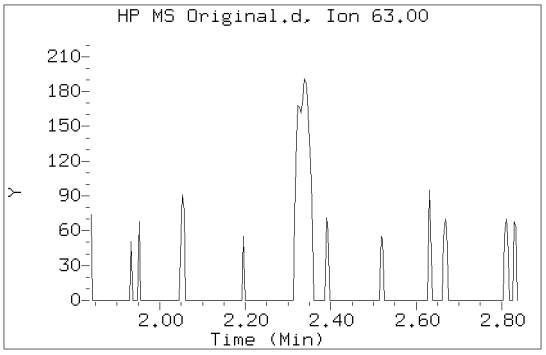
BEFORE
MASS
61
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



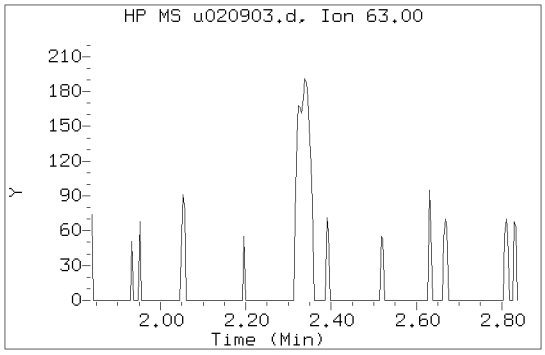
AFTER
MASS
61
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



BEFORE
MASS
63
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



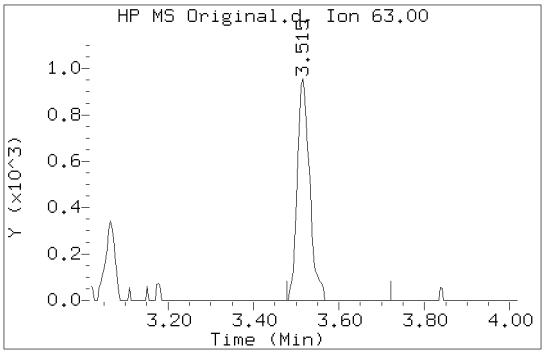
AFTER
MASS
63
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



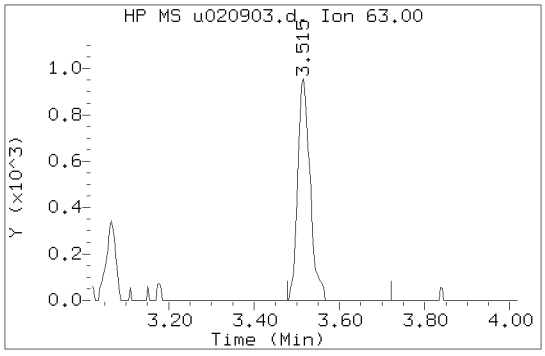
1,1-Dichloroethane (75-34-3)

Reason Code:

BEFORE
MASS
63
AREA
1948
HEIGHT
956
09-Feb-2024
11:53
firat
tastan



AFTER
MASS
63
AREA
1948
HEIGHT
956
09-Feb-2024
11:53
firat
tastan



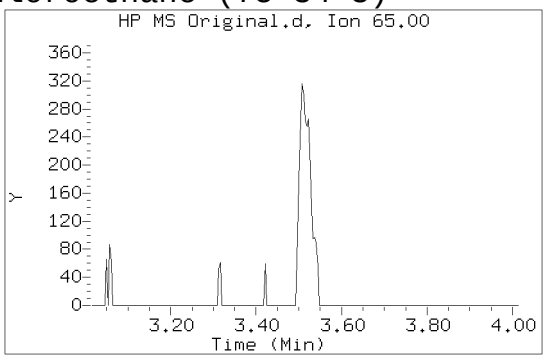
Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020903.d
Inj Date : 09-FEB-2024 09:44
InstruID : VOA9.i
LabSampID : VSTD00.5

1,1-Dichloroethane (75-34-3)

Reason Code:

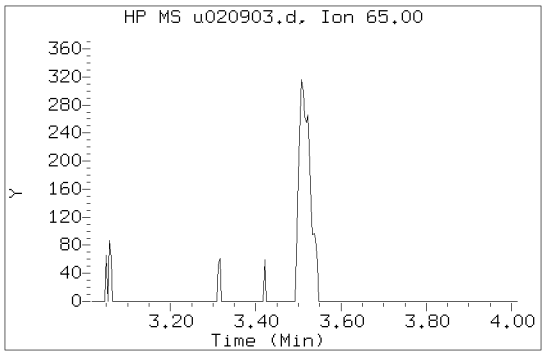
BEFORE

MASS
65
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



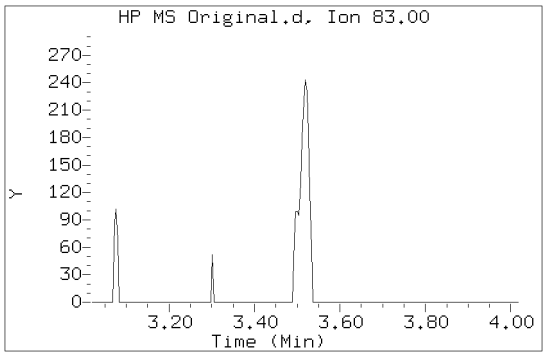
AFTER

MASS
65
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



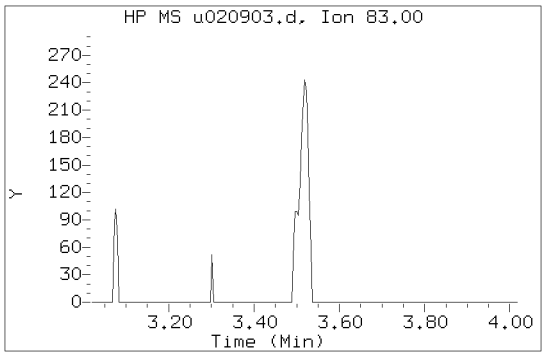
BEFORE

MASS
83
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



AFTER

MASS
83
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan

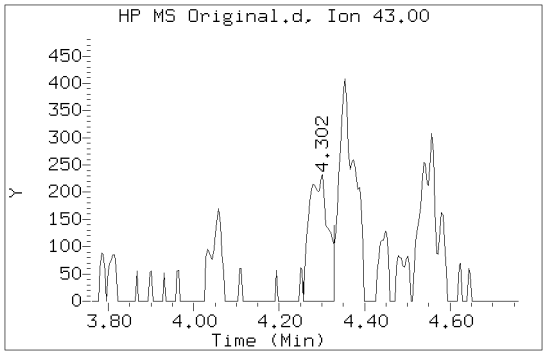


2-Butanone (78-93-3)

Reason Code:

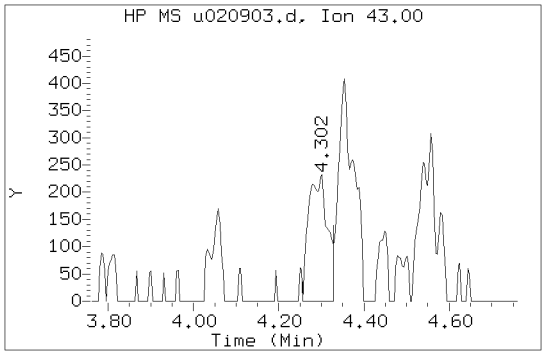
BEFORE

MASS
43
AREA
711
HEIGHT
233
09-Feb-2024
11:53
firat
tastan



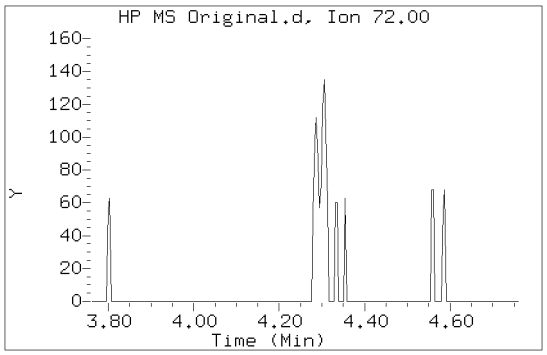
AFTER

MASS
43
AREA
711
HEIGHT
233
09-Feb-2024
11:53
firat
tastan



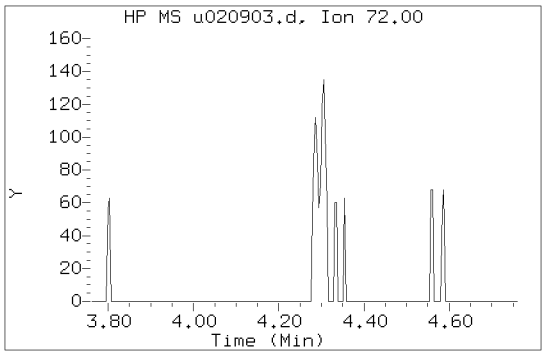
BEFORE

MASS
72
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



AFTER

MASS
72
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



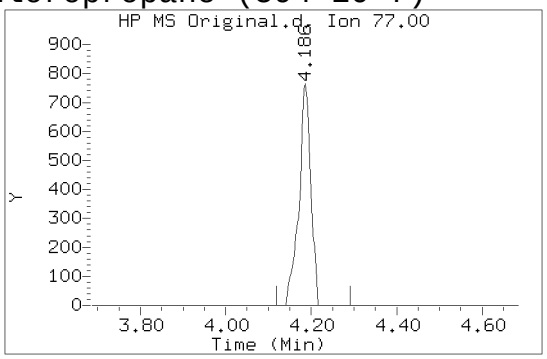
Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020903.d
Inj Date : 09-FEB-2024 09:44
InstruID : VOA9.i
LabSampID : VSTD00.5

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

Reason Code:

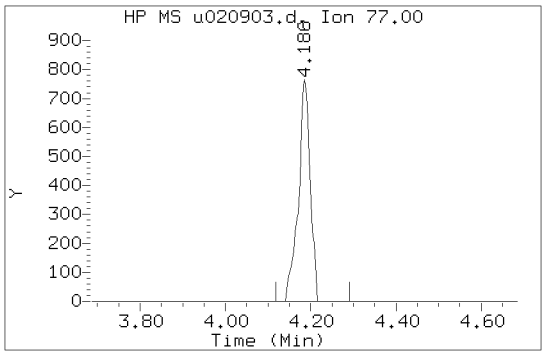
BEFORE

MASS
77
AREA
1500
HEIGHT
765
09-Feb-2024
11:53
firat
tastan



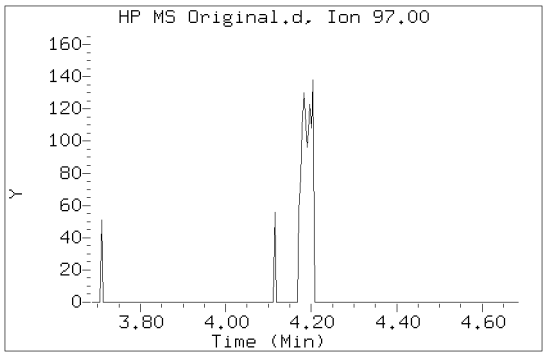
AFTER

MASS
77
AREA
1500
HEIGHT
765
09-Feb-2024
11:53
firat
tastan



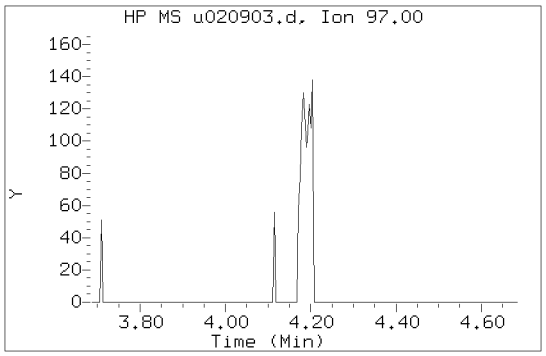
BEFORE

MASS
97
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



AFTER

MASS
97
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan

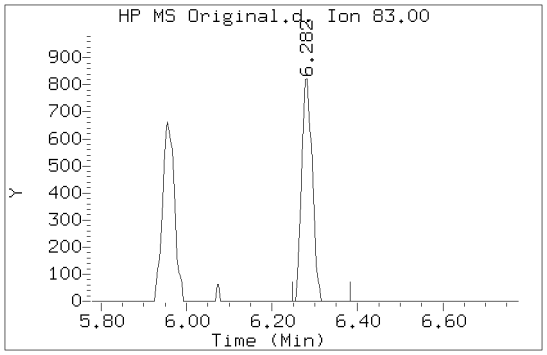


Bromodichloromethane (75-27-4)

Reason Code:

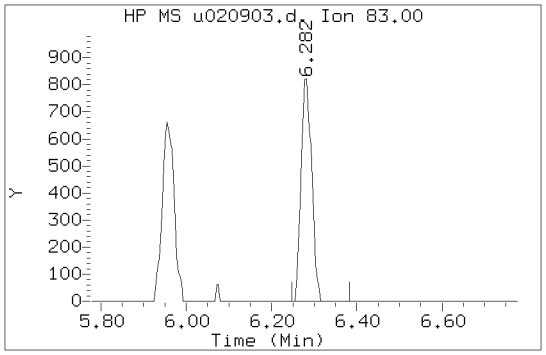
BEFORE

MASS
83
AREA
1455
HEIGHT
822
09-Feb-2024
11:53
firat
tastan



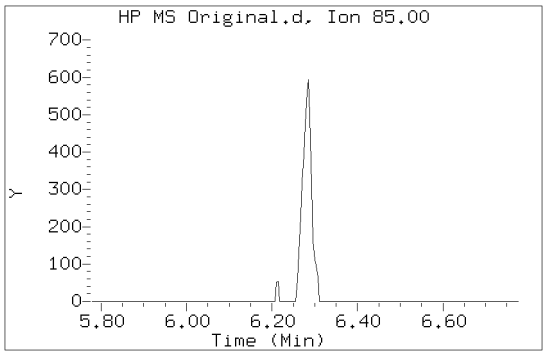
AFTER

MASS
83
AREA
1455
HEIGHT
822
09-Feb-2024
11:53
firat
tastan



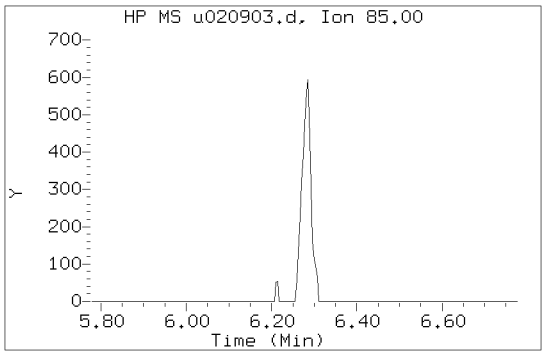
BEFORE

MASS
85
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



AFTER

MASS
85
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



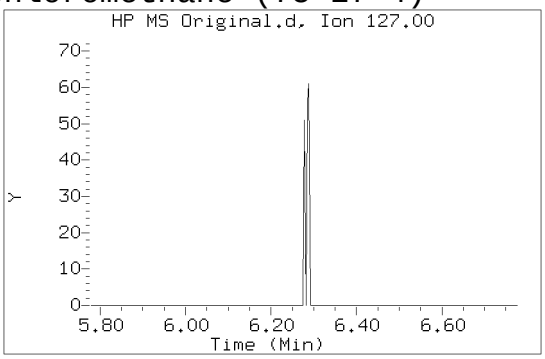
Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020903.d
Inj Date : 09-FEB-2024 09:44
InstruID : VOA9.i
LabSampID : VSTD00.5

Bromodichloromethane (75-27-4)

Reason Code:

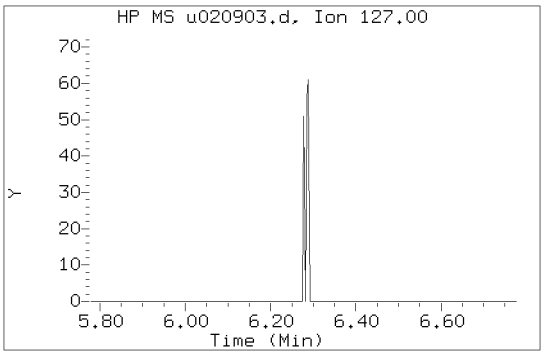
BEFORE

MASS
127
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



AFTER

MASS
127
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan

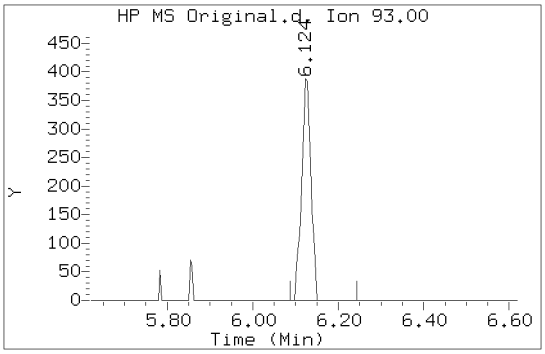


Dibromomethane (74-95-3)

Reason Code:

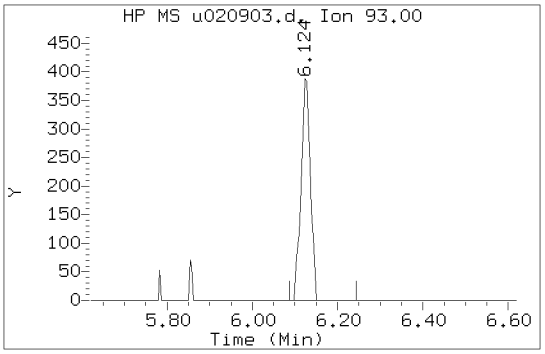
BEFORE

MASS
93
AREA
596
HEIGHT
388
09-Feb-2024
11:53
firat
tastan



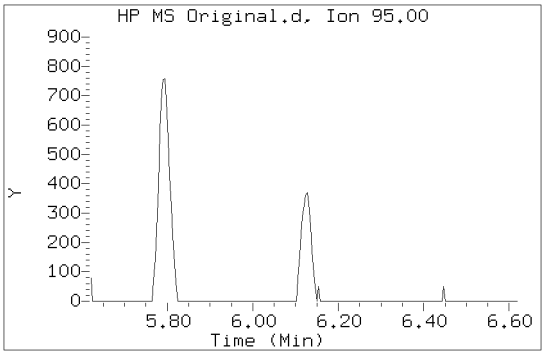
AFTER

MASS
93
AREA
596
HEIGHT
388
09-Feb-2024
11:53
firat
tastan



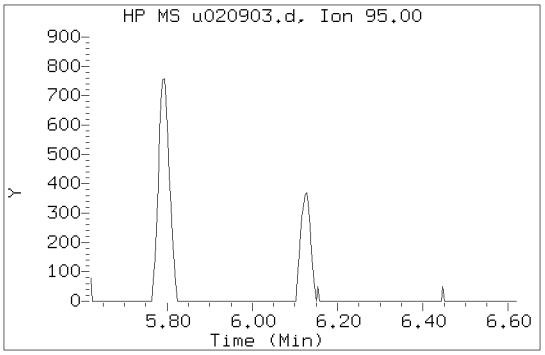
BEFORE

MASS
95
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



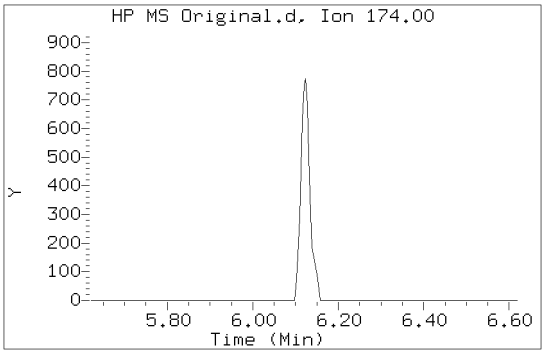
AFTER

MASS
95
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



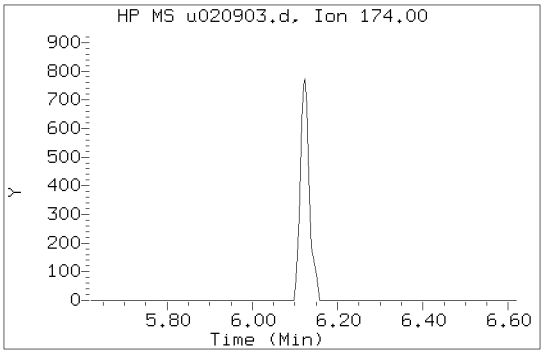
BEFORE

MASS
174
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



AFTER

MASS
174
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



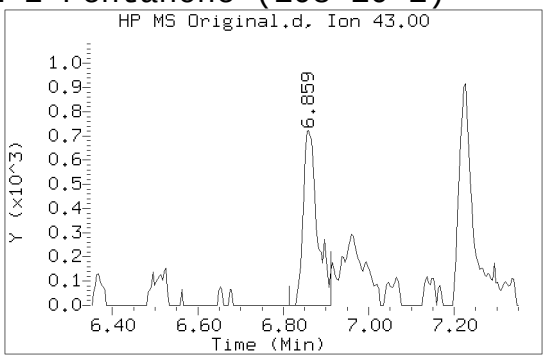
Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020903.d
Inj Date : 09-FEB-2024 09:44
InstruID : VOA9.i
LabSampID : VSTD00.5

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

Reason Code:

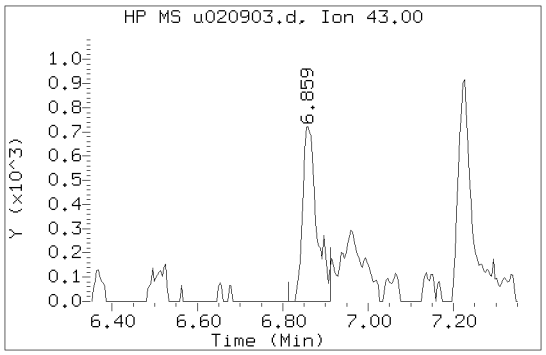
BEFORE

MASS
43
AREA
1706
HEIGHT
723
09-Feb-2024
11:53
firat
tastan



AFTER

MASS
43
AREA
1706
HEIGHT
723
09-Feb-2024
11:53
firat
tastan



BEFORE

MASS
58
AREA
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HEIGHT
0
09-Feb-2024
11:53
firat
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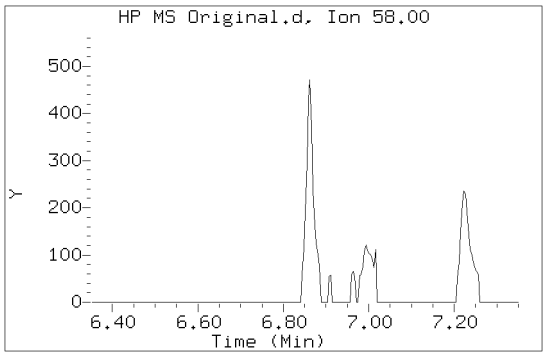

AFTER

MASS
58
AREA
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HEIGHT
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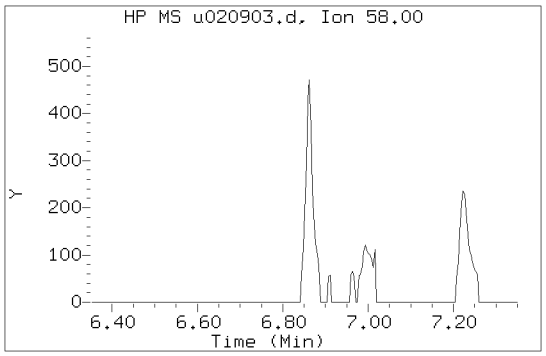
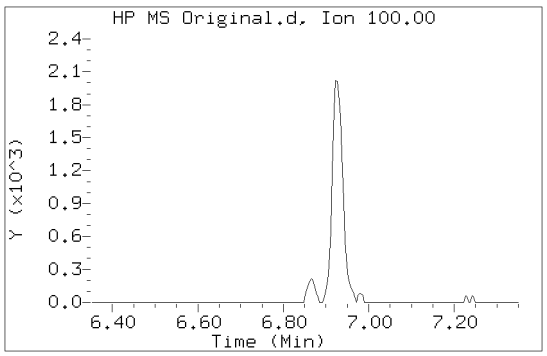
09-Feb-2024
11:53
firat
tastan



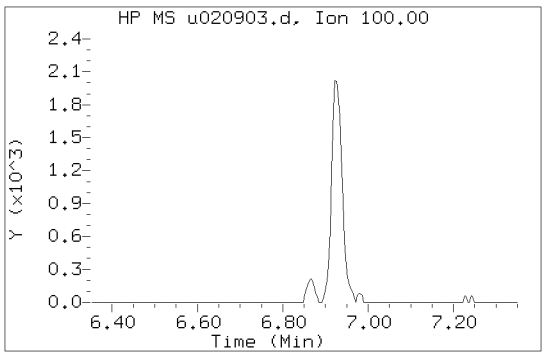
BEFORE

MASS
100
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



AFTER

MASS
100
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan

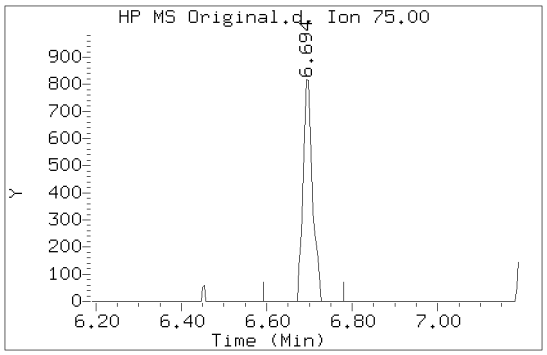


cis-1,3-Dichloropropene (10061-01-5)

Reason Code:

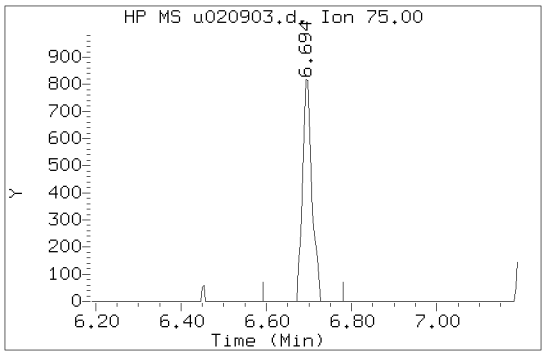
BEFORE

MASS
75
AREA
1270
HEIGHT
817
09-Feb-2024
11:53
firat
tastan



AFTER

MASS
75
AREA
1270
HEIGHT
817
09-Feb-2024
11:53
firat
tastan

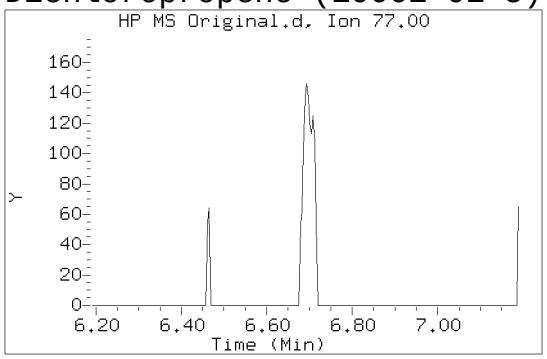


Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020903.d
Inj Date : 09-FEB-2024 09:44
InstruID : VOA9.i
LabSampID : VSTD00.5

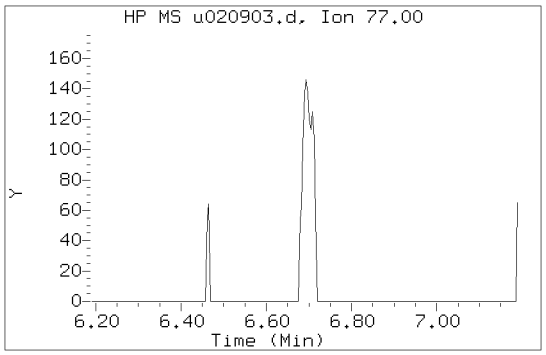
cis-1,3-Dichloropropene (10061-01-5)

Reason Code:

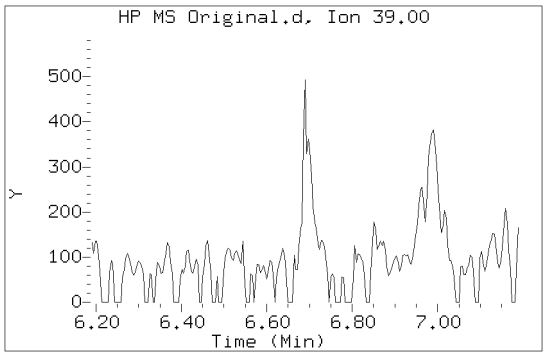
BEFORE
MASS
77
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



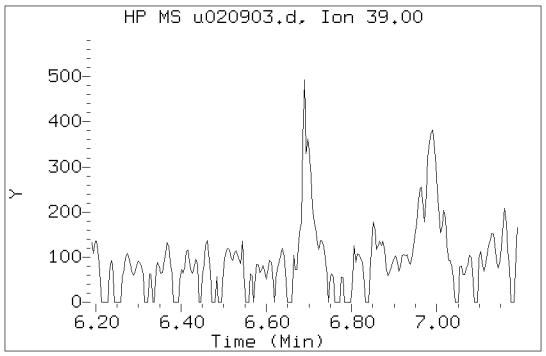
AFTER
MASS
77
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



BEFORE
MASS
39
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



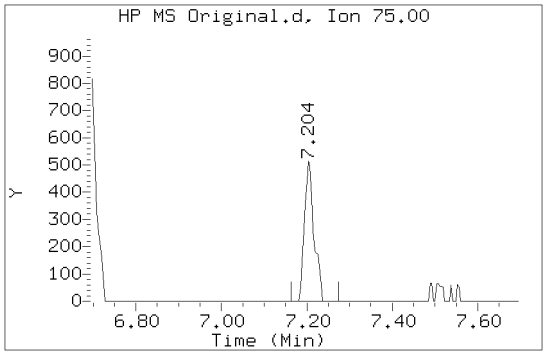
AFTER
MASS
39
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



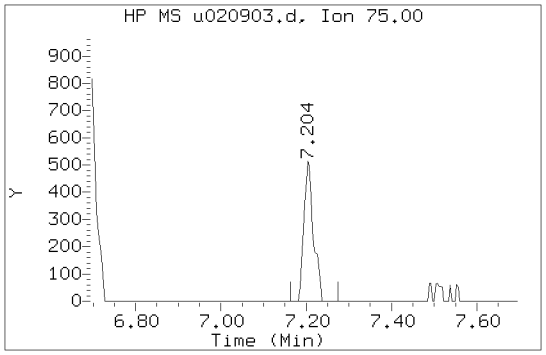
trans-1,3-Dichloropropene (10061-02-6)

Reason Code:

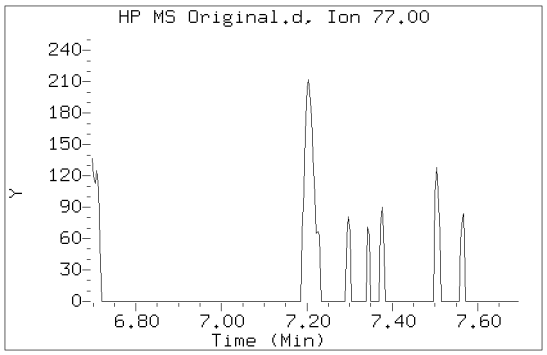
BEFORE
MASS
75
AREA
818
HEIGHT
515
09-Feb-2024
11:53
firat
tastan



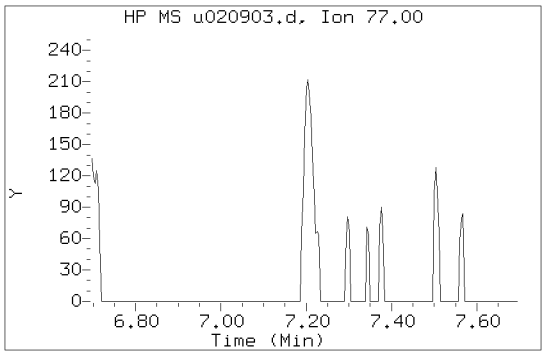
AFTER
MASS
75
AREA
818
HEIGHT
515
09-Feb-2024
11:53
firat
tastan



BEFORE
MASS
77
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



AFTER
MASS
77
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



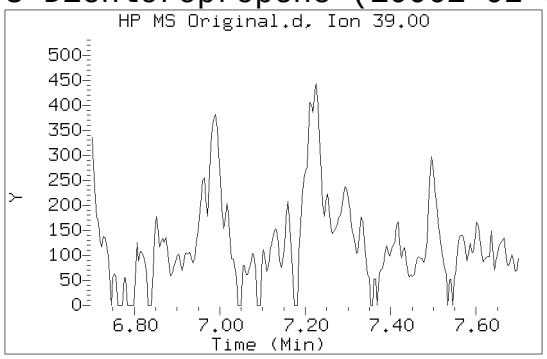
Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020903.d
Inj Date : 09-FEB-2024 09:44
InstruID : VOA9.i
LabSampID : VSTD00.5

trans-1,3-Dichloropropene (10061-02-6)

Reason Code:

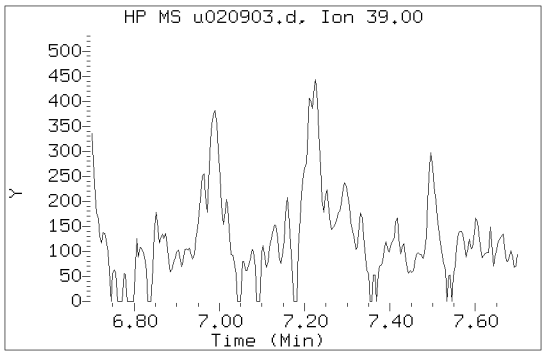
BEFORE

MASS
39
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



AFTER

MASS
39
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan

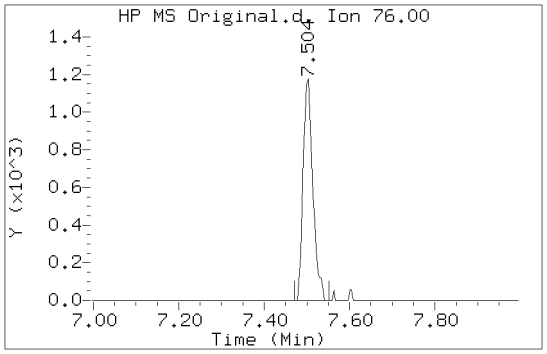


1,3-Dichloropropane (142-28-9)

Reason Code:

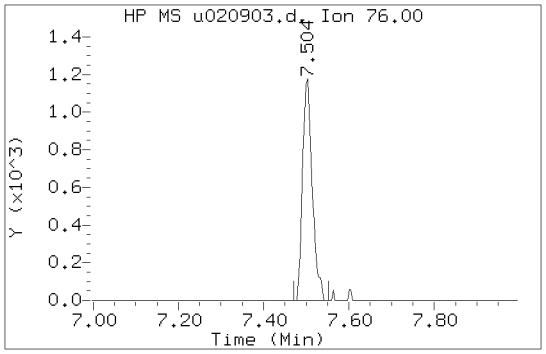
BEFORE

MASS
76
AREA
1884
HEIGHT
1178
09-Feb-2024
11:53
firat
tastan



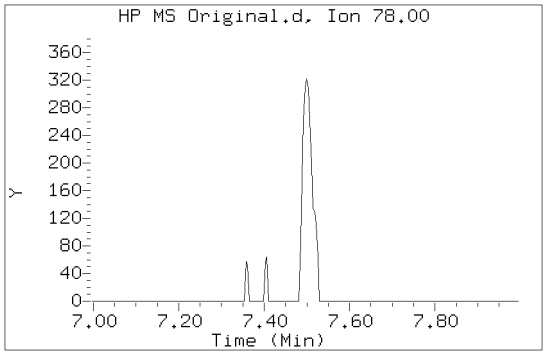
AFTER

MASS
76
AREA
1884
HEIGHT
1178
09-Feb-2024
11:53
firat
tastan



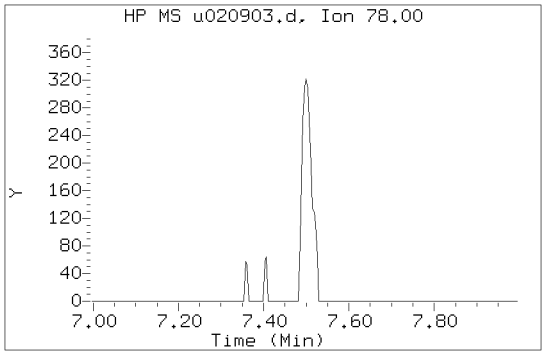
BEFORE

MASS
78
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



AFTER

MASS
78
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan

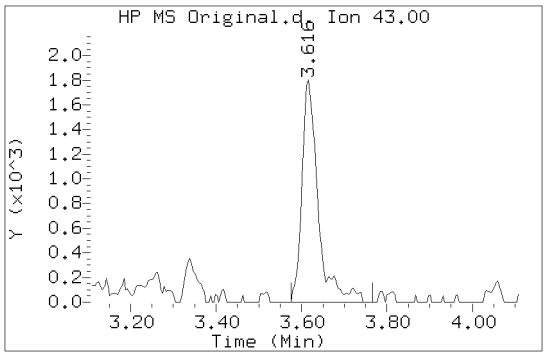


Vinyl Acetate (108-05-4)

Reason Code:

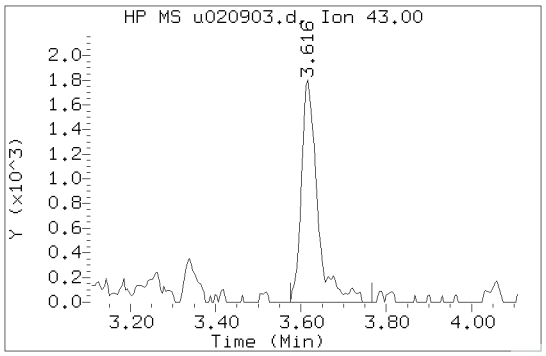
BEFORE

MASS
43
AREA
4819
HEIGHT
1802
09-Feb-2024
11:53
firat
tastan



AFTER

MASS
43
AREA
4819
HEIGHT
1802
09-Feb-2024
11:53
firat
tastan



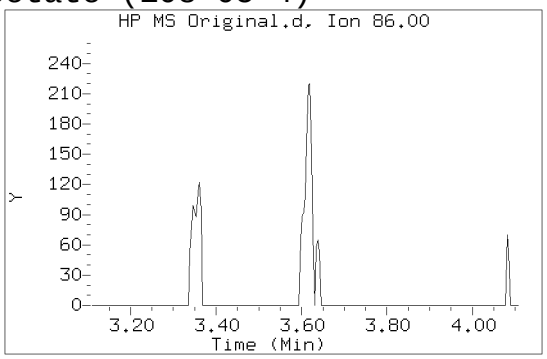
Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020903.d
Inj Date : 09-FEB-2024 09:44
InstruID : VOA9.i
LabSampID : VSTD00.5

Vinyl Acetate (108-05-4)

Reason Code:

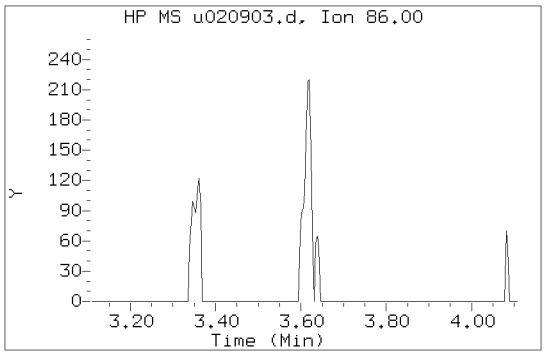
BEFORE

MASS
86
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



AFTER

MASS
86
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan

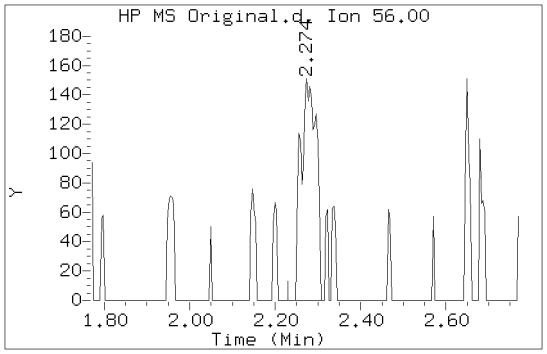


Acrolein (107-02-8)

Reason Code:

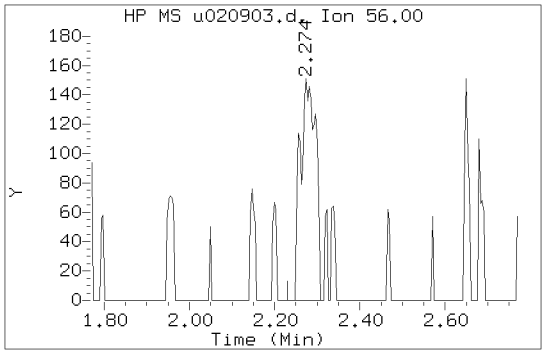
BEFORE

MASS
56
AREA
385
HEIGHT
151
09-Feb-2024
11:53
firat
tastan



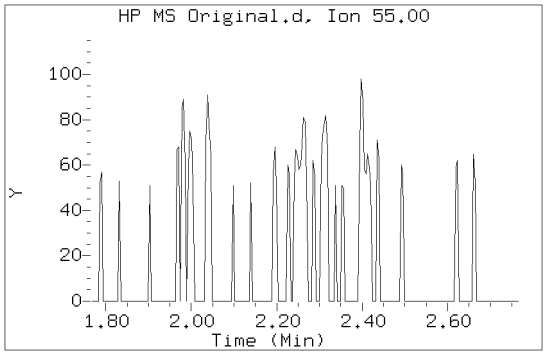
AFTER

MASS
56
AREA
385
HEIGHT
151
09-Feb-2024
11:53
firat
tastan



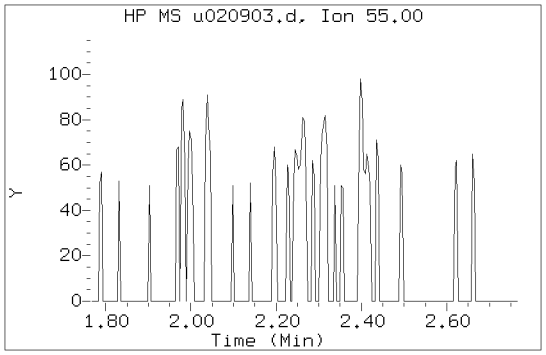
BEFORE

MASS
55
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



AFTER

MASS
55
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan

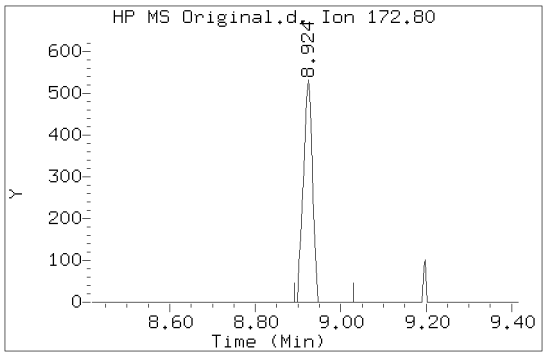


Bromoform (75-25-2)

Reason Code:

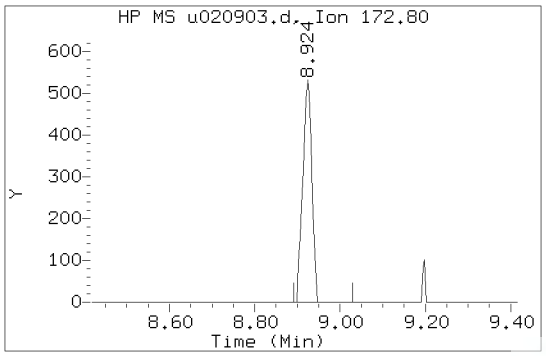
BEFORE

MASS
172.8
AREA
805
HEIGHT
532
09-Feb-2024
11:53
firat
tastan



AFTER

MASS
172.8
AREA
805
HEIGHT
532
09-Feb-2024
11:53
firat
tastan

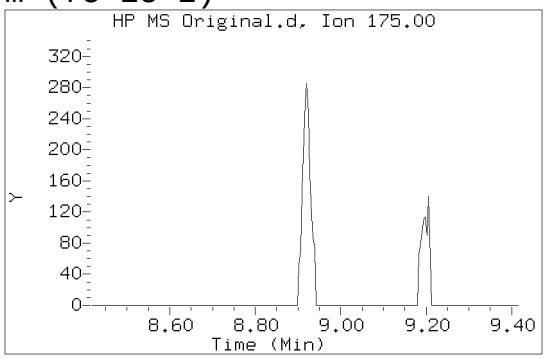


Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020903.d
Inj Date : 09-FEB-2024 09:44
InstruID : VOA9.i
LabSampID : VSTD00.5

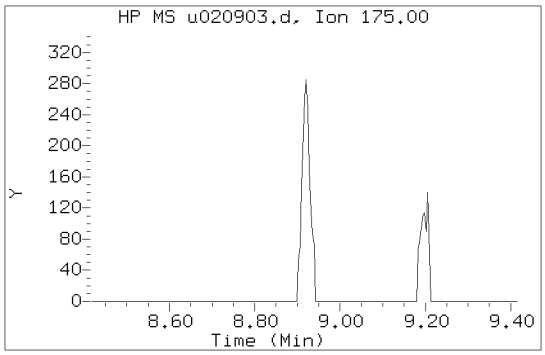
Bromoform (75-25-2)

Reason Code:

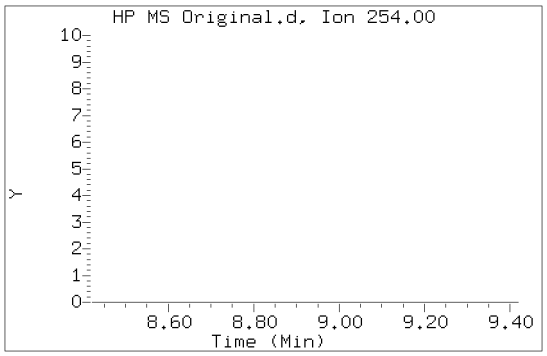
BEFORE
MASS
175
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



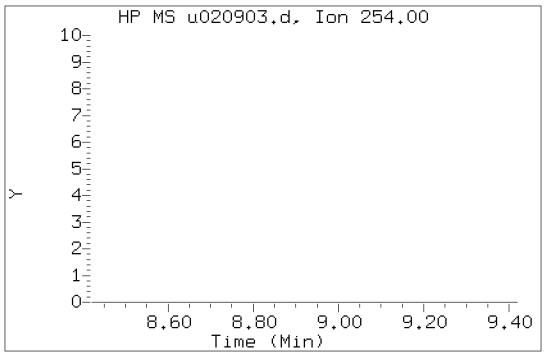
AFTER
MASS
175
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



BEFORE
MASS
254
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



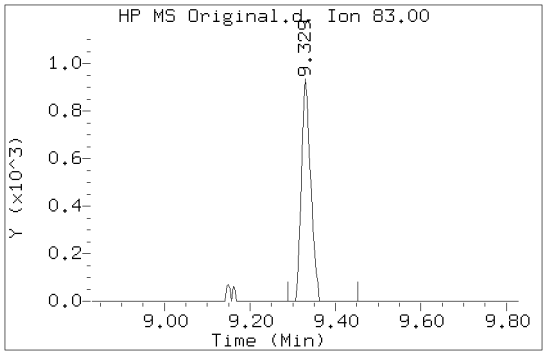
AFTER
MASS
254
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



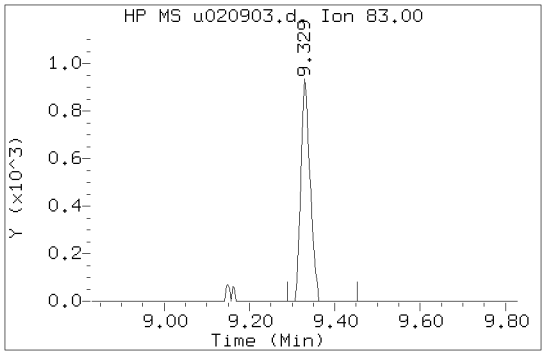
1,1,2,2-Tetrachloroethane (79-34-5)

Reason Code:

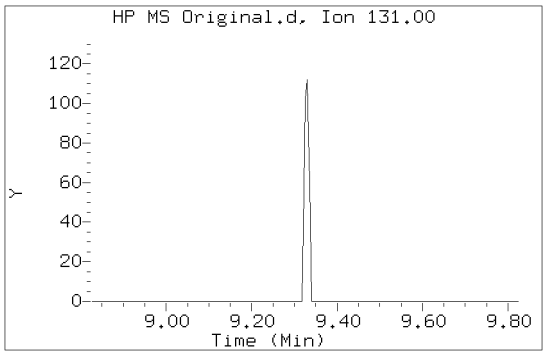
BEFORE
MASS
83
AREA
1437
HEIGHT
935
09-Feb-2024
11:53
firat
tastan



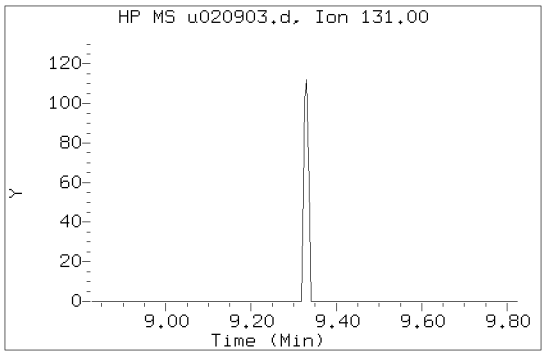
AFTER
MASS
83
AREA
1437
HEIGHT
935
09-Feb-2024
11:53
firat
tastan



BEFORE
MASS
131
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



AFTER
MASS
131
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



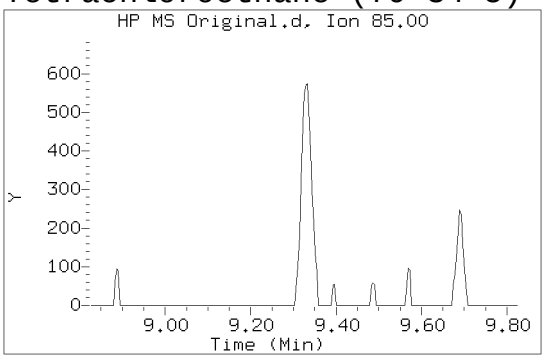
Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020903.d
Inj Date : 09-FEB-2024 09:44
InstruID : VOA9.i
LabSampID : VSTD00.5

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

Reason Code:

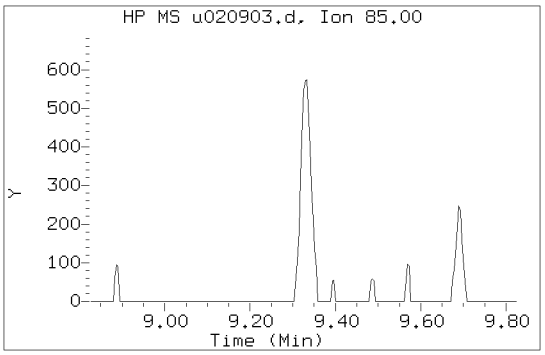
BEFORE

MASS
85
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



AFTER

MASS
85
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan

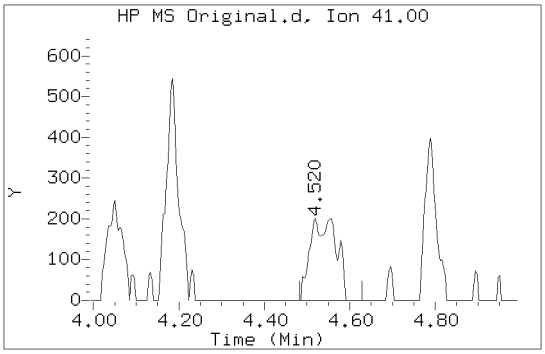


Methacrylonitrile (126-98-7)

Reason Code:

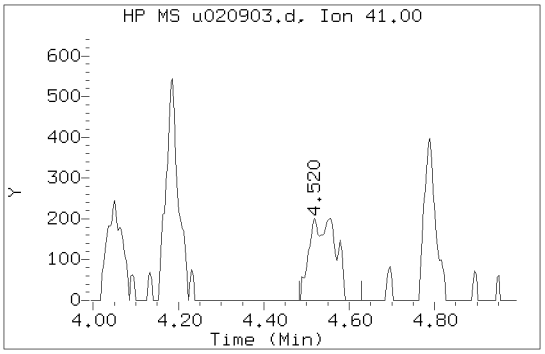
BEFORE

MASS
41
AREA
859
HEIGHT
202
09-Feb-2024
11:53
firat
tastan



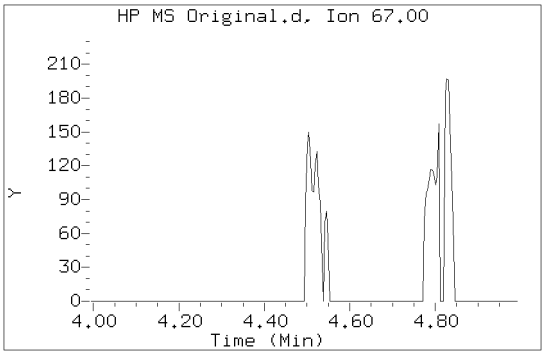
AFTER

MASS
41
AREA
859
HEIGHT
202
09-Feb-2024
11:53
firat
tastan



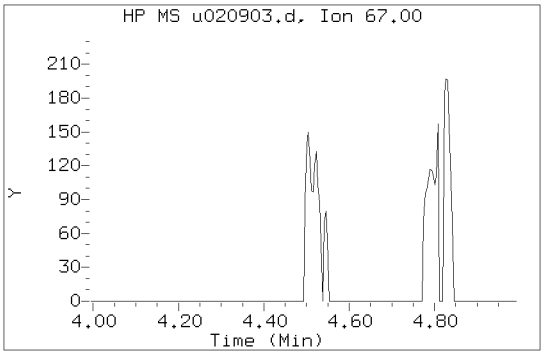
BEFORE

MASS
67
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



AFTER

MASS
67
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



BEFORE

MASS
39
AREA
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HEIGHT
0
09-Feb-2024
11:53
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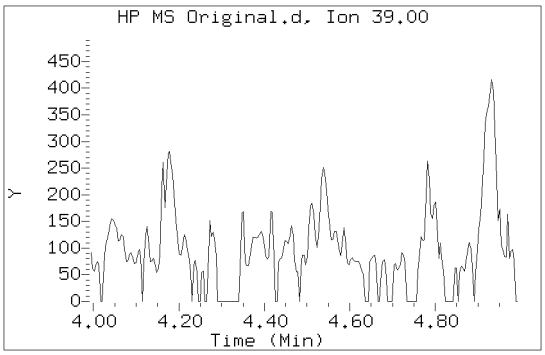
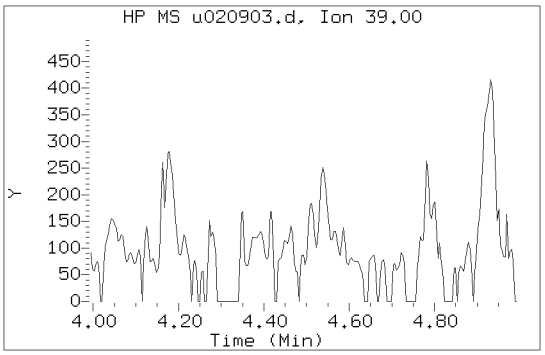


AFTER

MASS
39
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan

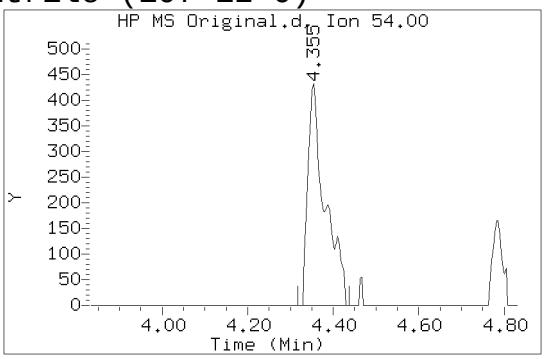


Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020903.d
Inj Date : 09-FEB-2024 09:44
InstruID : VOA9.i
LabSampID : VSTD00.5

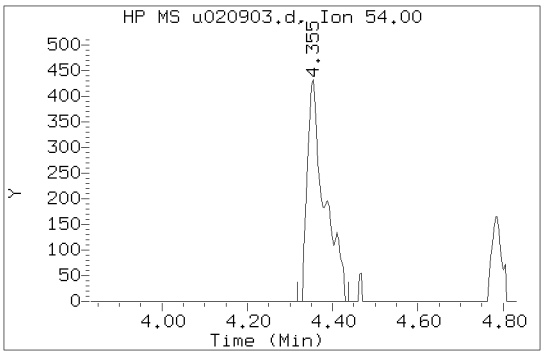
Propionitrile (107-12-0)

Reason Code:

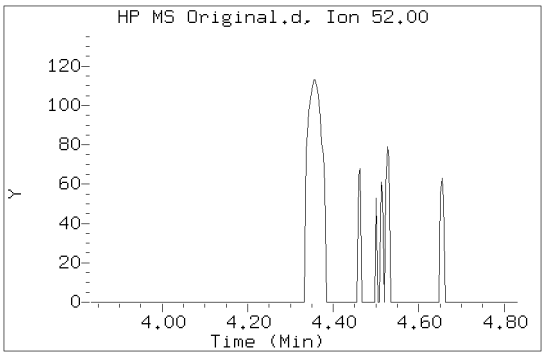
BEFORE
MASS
54
AREA
1212
HEIGHT
432
09-Feb-2024
11:53
firat
tastan



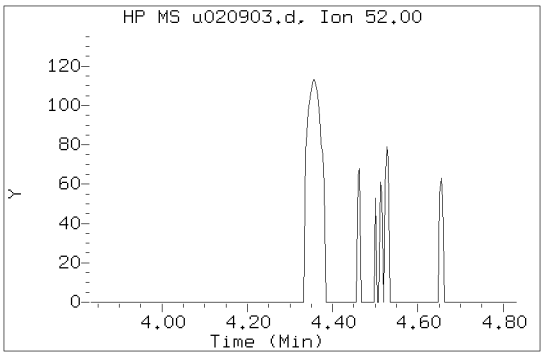
AFTER
MASS
54
AREA
1212
HEIGHT
432
09-Feb-2024
11:53
firat
tastan



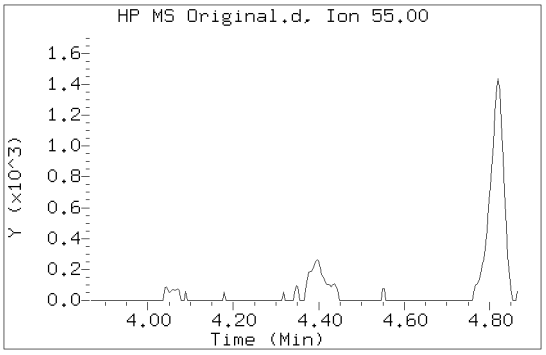
BEFORE
MASS
52
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



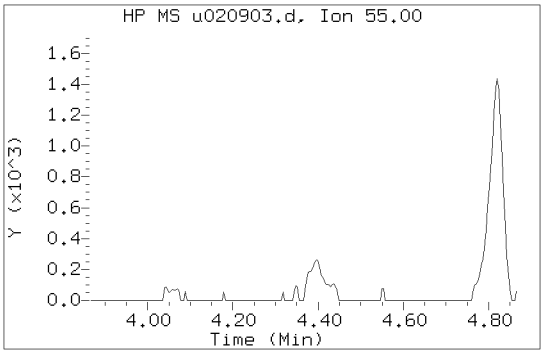
AFTER
MASS
52
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



BEFORE
MASS
55
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



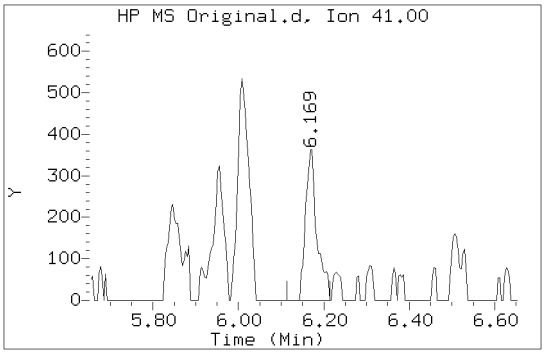
AFTER
MASS
55
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



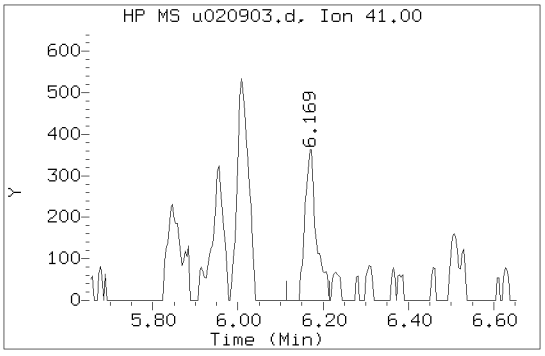
Methyl Methacrylate (80-62-6)

Reason Code:

BEFORE
MASS
41
AREA
679
HEIGHT
363
09-Feb-2024
11:53
firat
tastan



AFTER
MASS
41
AREA
679
HEIGHT
363
09-Feb-2024
11:53
firat
tastan

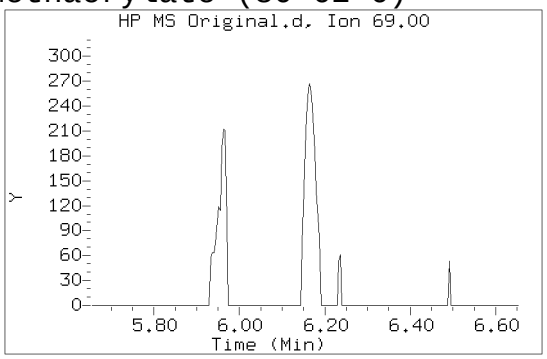


Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020903.d
Inj Date : 09-FEB-2024 09:44
InstruID : VOA9.i
LabSampID : VSTD00.5

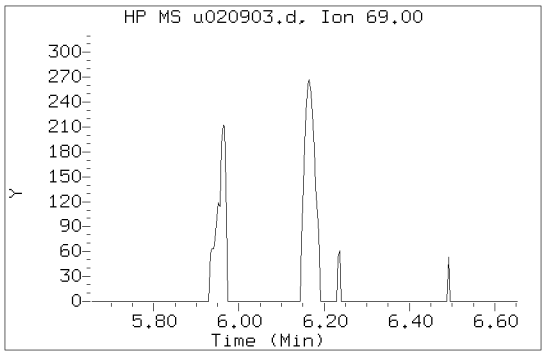
Methyl Methacrylate (80-62-6)

Reason Code:

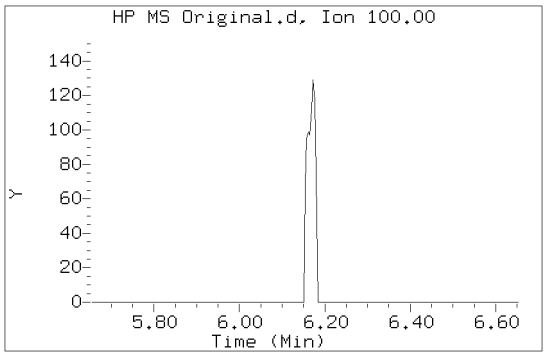
BEFORE
MASS
69
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



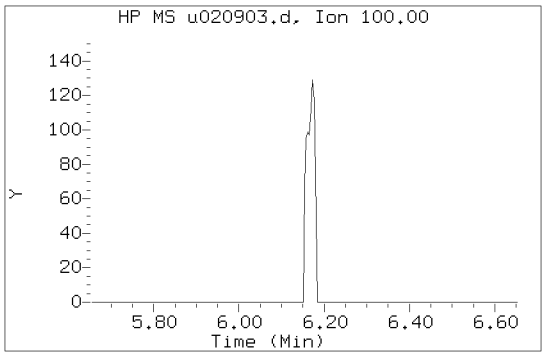
AFTER
MASS
69
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



BEFORE
MASS
100
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



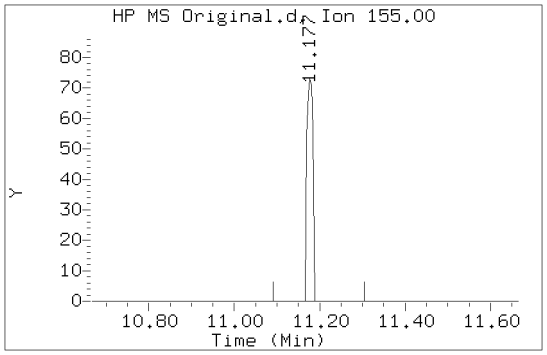
AFTER
MASS
100
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



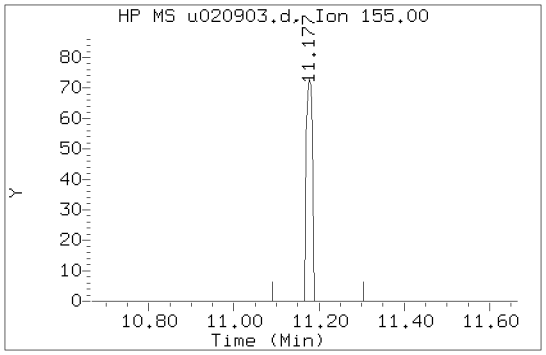
1,2-Dibromo-3-Chloropropane (96-12-8)

Reason Code:

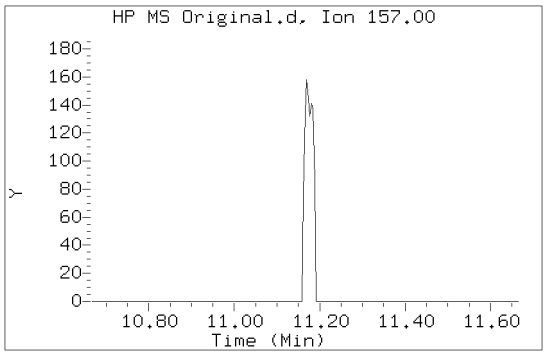
BEFORE
MASS
155
AREA
72
HEIGHT
73
09-Feb-2024
11:53
firat
tastan



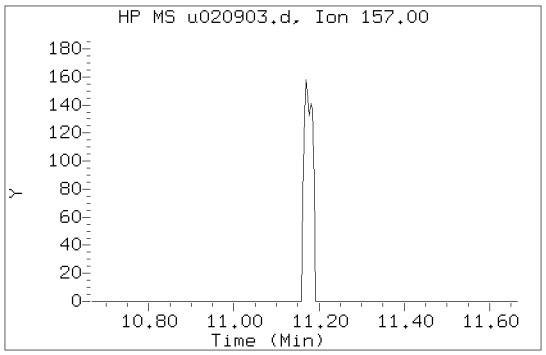
AFTER
MASS
155
AREA
72
HEIGHT
73
09-Feb-2024
11:53
firat
tastan



BEFORE
MASS
157
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



AFTER
MASS
157
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



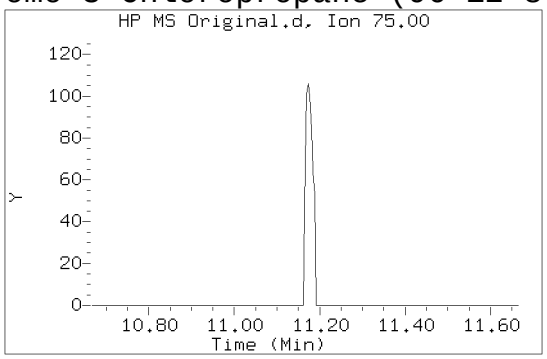
Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020903.d
Inj Date : 09-FEB-2024 09:44
InstruID : VOA9.i
LabSampID : VSTD00.5

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

Reason Code:

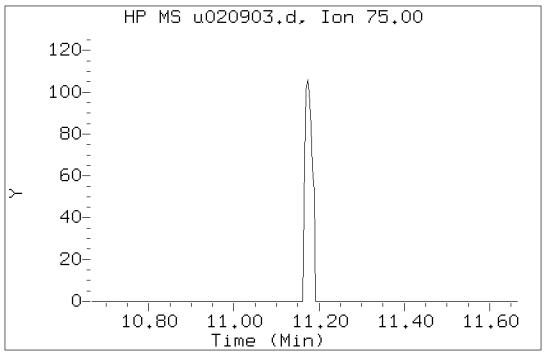
BEFORE

MASS
75
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



AFTER

MASS
75
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan

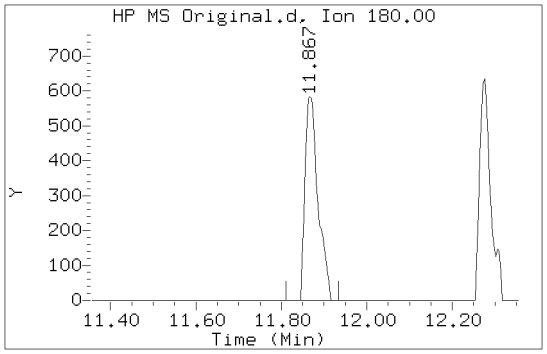


1,2,4-Trichlorobenzene (120-82-1)

Reason Code:

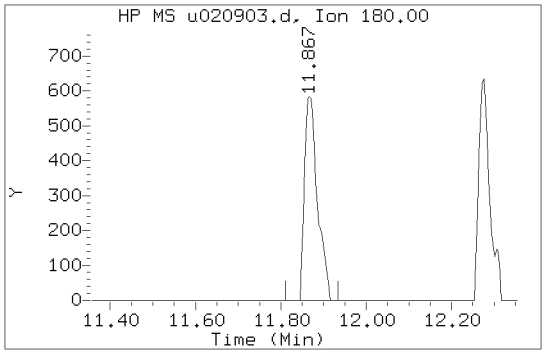
BEFORE

MASS
180
AREA
1258
HEIGHT
583
09-Feb-2024
11:53
firat
tastan



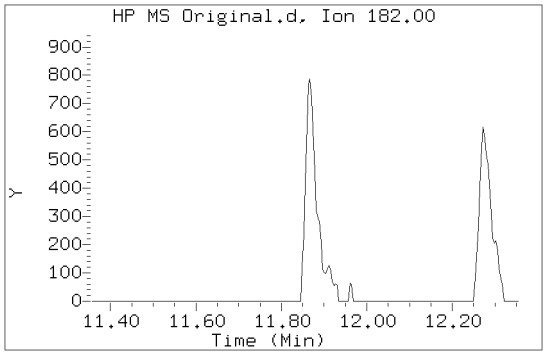
AFTER

MASS
180
AREA
1258
HEIGHT
583
09-Feb-2024
11:53
firat
tastan



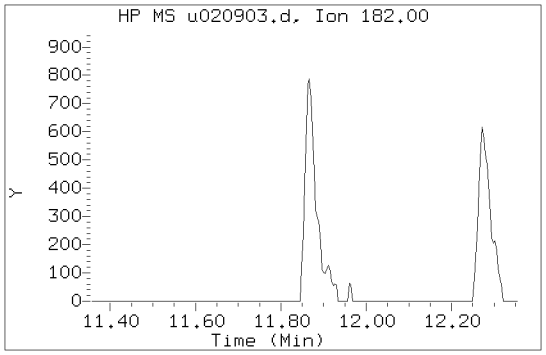
BEFORE

MASS
182
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



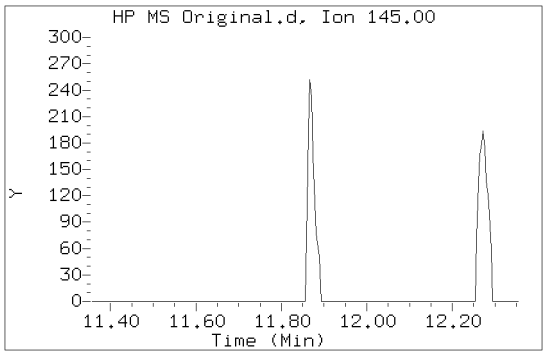
AFTER

MASS
182
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



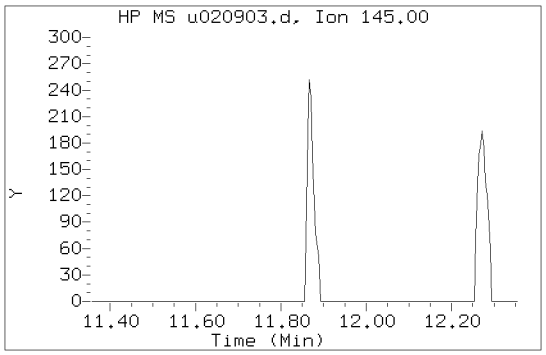
BEFORE

MASS
145
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



AFTER

MASS
145
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



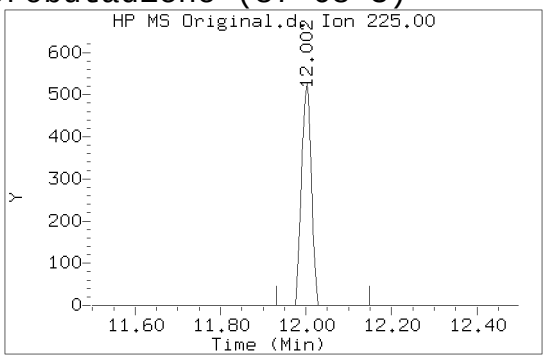
Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020903.d
Inj Date : 09-FEB-2024 09:44
InstruID : VOA9.i
LabSampID : VSTD00.5

Hexachlorobutadiene (87-68-3)

Reason Code:

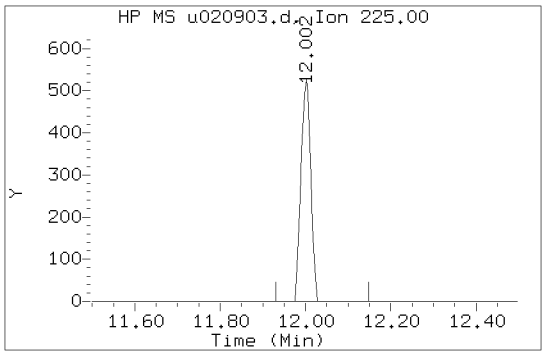
BEFORE

MASS
225
AREA
860
HEIGHT
526
09-Feb-2024
11:53
firat
tastan



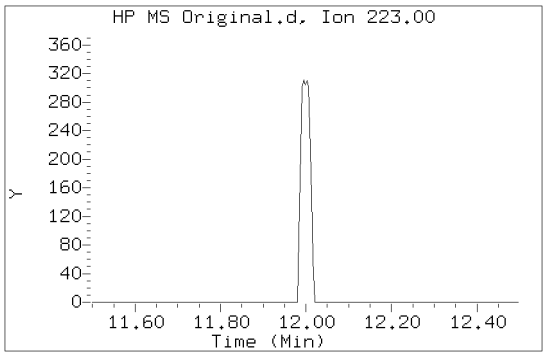
AFTER

MASS
225
AREA
860
HEIGHT
526
09-Feb-2024
11:53
firat
tastan



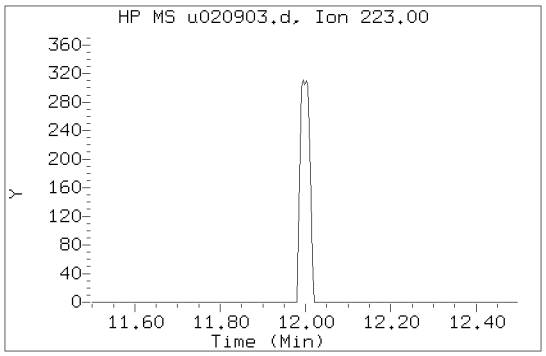
BEFORE

MASS
223
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



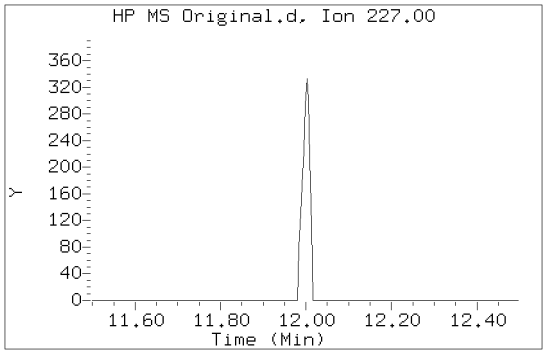
AFTER

MASS
223
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



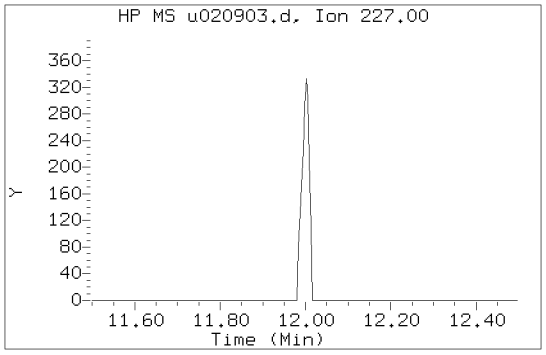
BEFORE

MASS
227
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



AFTER

MASS
227
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan

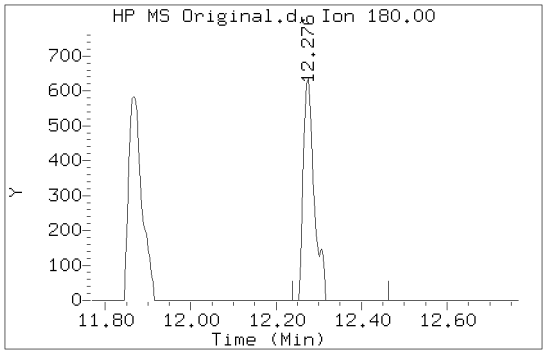


1,2,3-Trichlorobenzene (87-61-6)

Reason Code:

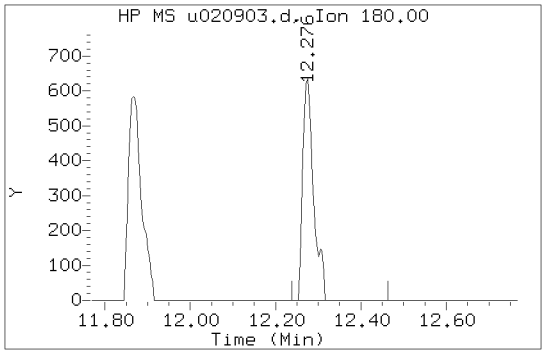
BEFORE

MASS
180
AREA
1136
HEIGHT
635
09-Feb-2024
11:53
firat
tastan



AFTER

MASS
180
AREA
1136
HEIGHT
635
09-Feb-2024
11:53
firat
tastan



Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020903.d
Inj Date : 09-FEB-2024 09:44
InstruID : VOA9.i
LabSampID : VSTD00.5

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

Reason Code:

BEFORE
MASS
182
AREA
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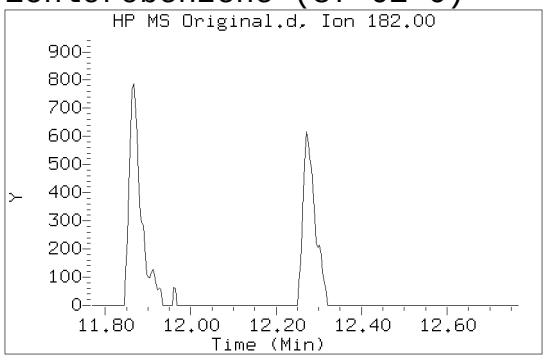
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



AFTER
MASS
182
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
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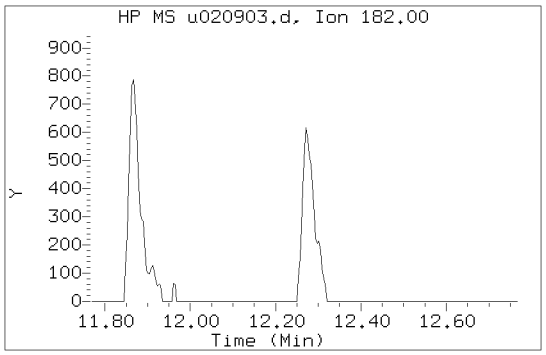

BEFORE
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09-Feb-2024
11:53
firat
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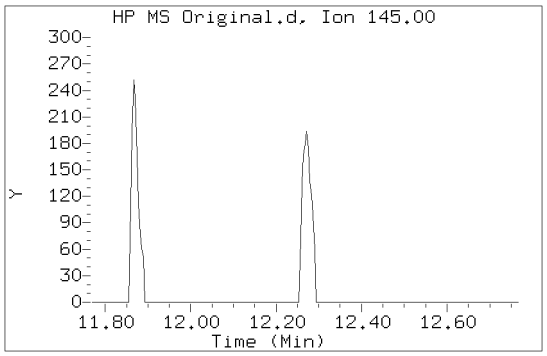

AFTER
MASS
145
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09-Feb-2024
11:53
firat
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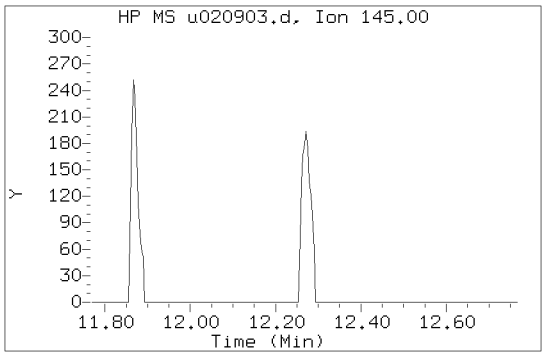
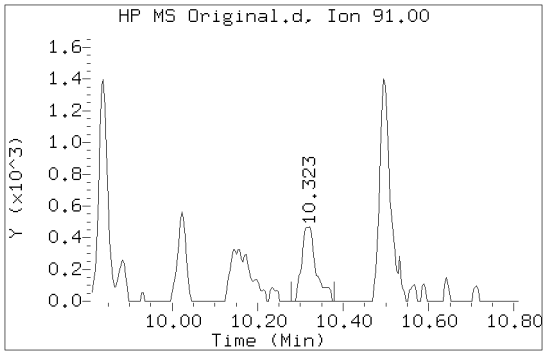


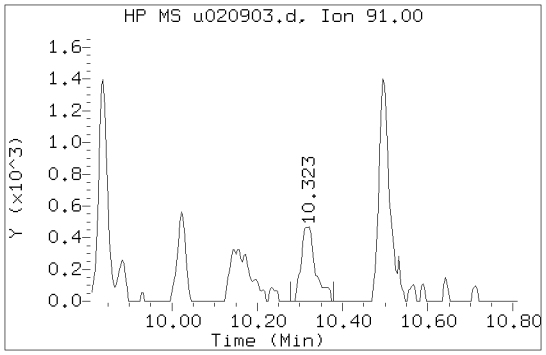
Benzyl Chloride (100-44-7)

Reason Code:

BEFORE
MASS
91
AREA
1114
HEIGHT
469
09-Feb-2024
11:53
firat
tastan



AFTER
MASS
91
AREA
1114
HEIGHT
469
09-Feb-2024
11:53
firat
tastan



BEFORE
MASS
126
AREA
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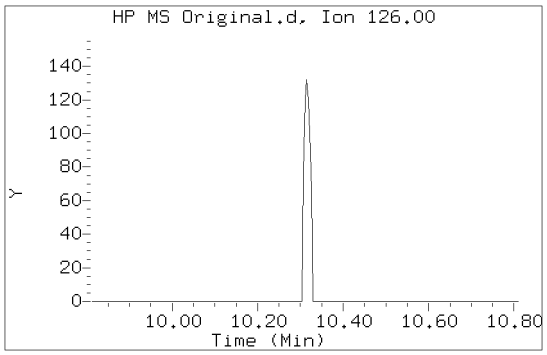
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



AFTER
MASS
126
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
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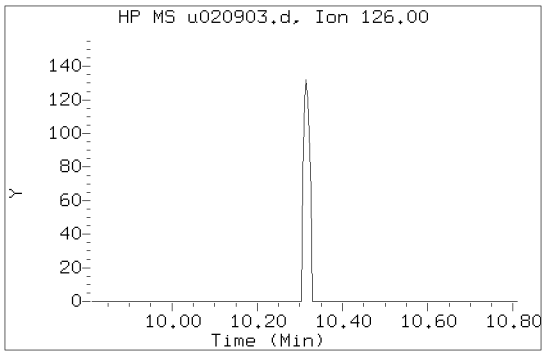


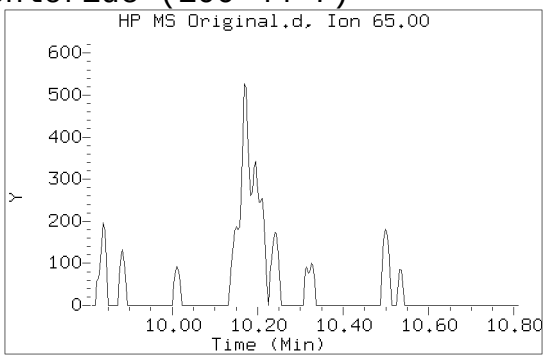
Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020903.d
Inj Date : 09-FEB-2024 09:44
InstruID : VOA9.i
LabSampID : VSTD00.5

Benzyl Chloride (100-44-7)

Reason Code:

BEFORE

MASS
65
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



AFTER

MASS
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AREA
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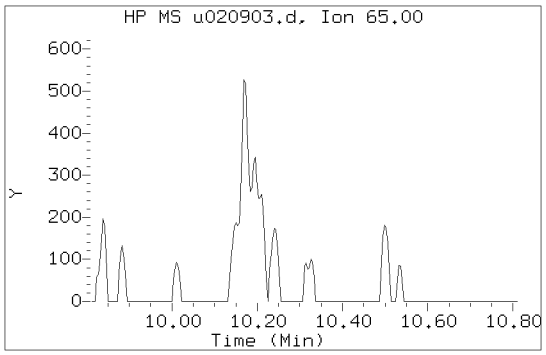
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



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

Reason Code:

BEFORE

MASS
53
AREA
161
HEIGHT
122
09-Feb-2024
11:53
firat
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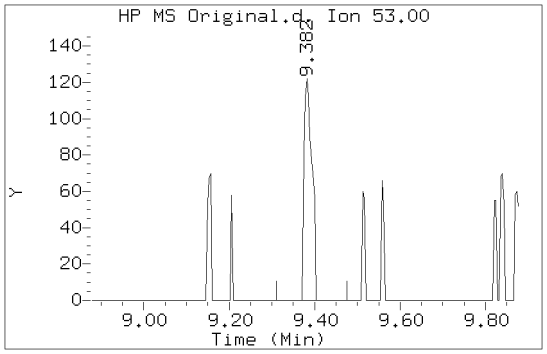

AFTER

MASS
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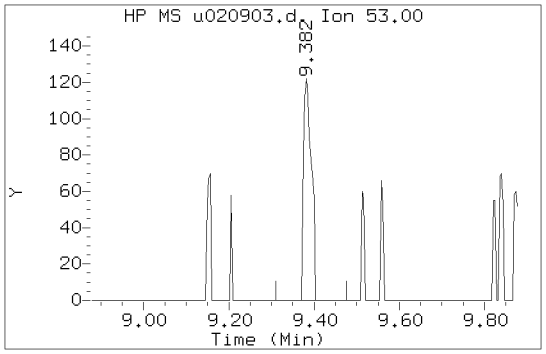
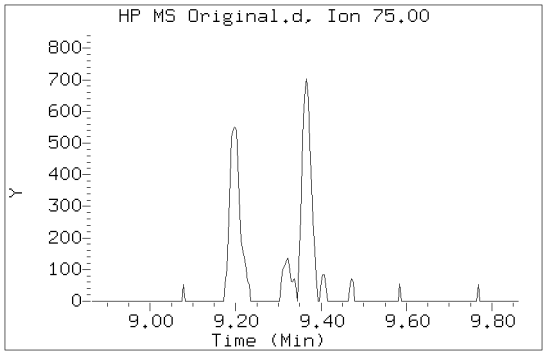
AREA
161
HEIGHT
122
09-Feb-2024
11:53
firat
tastan



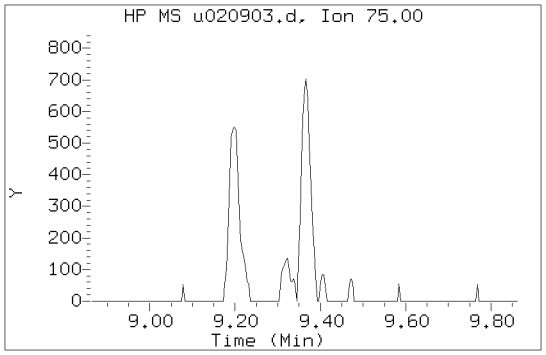
BEFORE

MASS
75
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



AFTER

MASS
75
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan

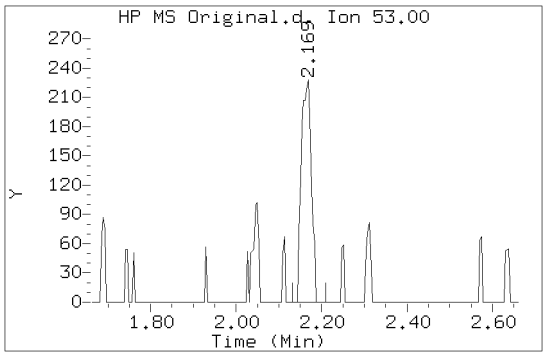


Chloroprene (126-99-8)

Reason Code:

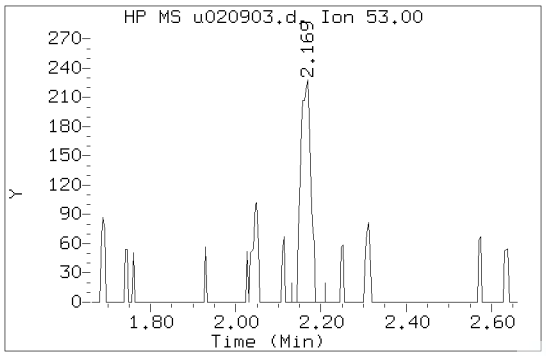
BEFORE

MASS
53
AREA
379
HEIGHT
228
09-Feb-2024
11:53
firat
tastan



AFTER

MASS
53
AREA
379
HEIGHT
228
09-Feb-2024
11:53
firat
tastan



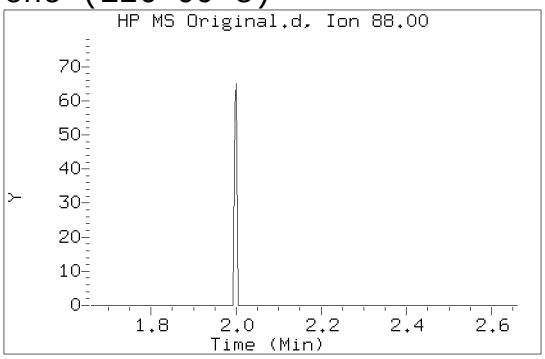
Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020903.d
Inj Date : 09-FEB-2024 09:44
InstruID : VOA9.i
LabSampID : VSTD00.5

Chloroprene (126-99-8)

Reason Code:

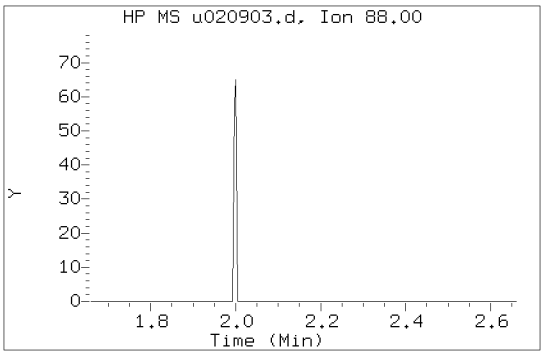
BEFORE

MASS
88
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



AFTER

MASS
88
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan

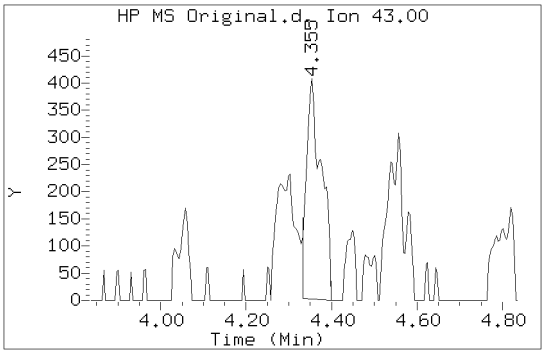


Ethyl Acetate (141-78-6)

Reason Code:

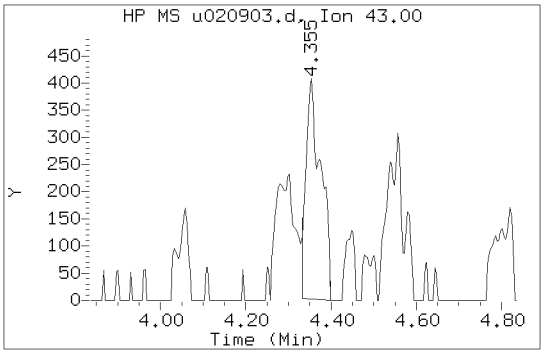
BEFORE

MASS
43
AREA
1001
HEIGHT
405
09-Feb-2024
11:53
firat
tastan



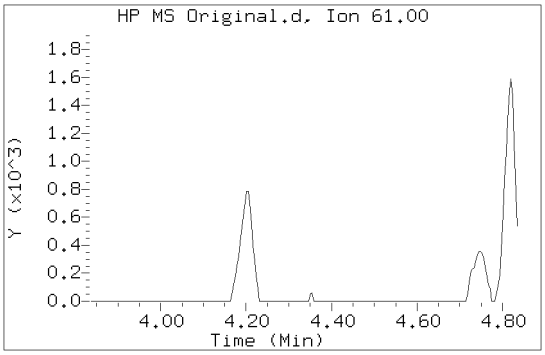
AFTER

MASS
43
AREA
1001
HEIGHT
405
09-Feb-2024
11:53
firat
tastan



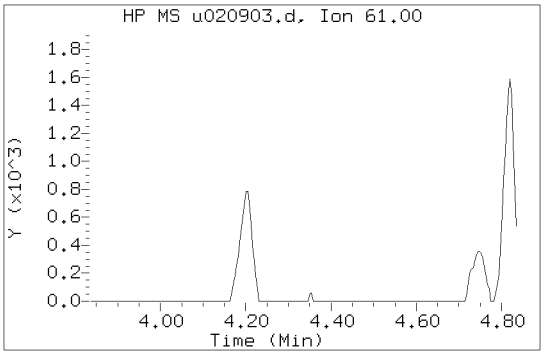
BEFORE

MASS
61
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



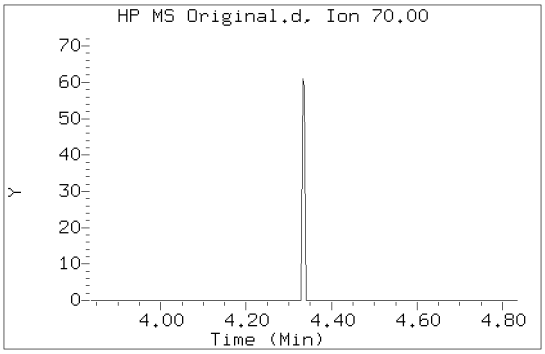
AFTER

MASS
61
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



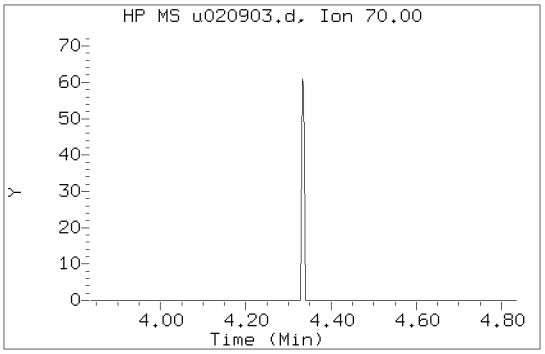
BEFORE

MASS
70
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



AFTER

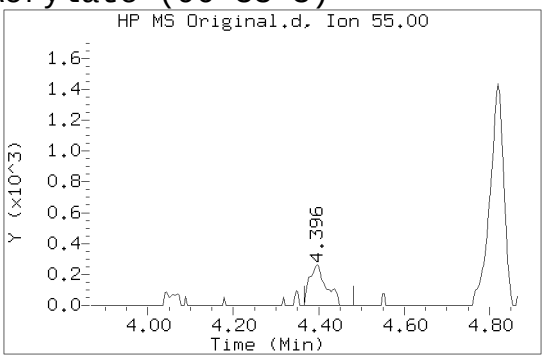
MASS
70
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020903.d
Inj Date : 09-FEB-2024 09:44
InstruID : VOA9.i
LabSampID : VSTD00.5

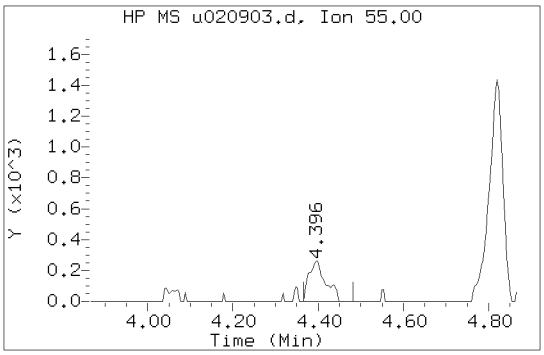
Methyl Acrylate (96-33-3)

BEFORE
MASS
55
AREA
713
HEIGHT
263
09-Feb-2024
11:53
firat
tastan

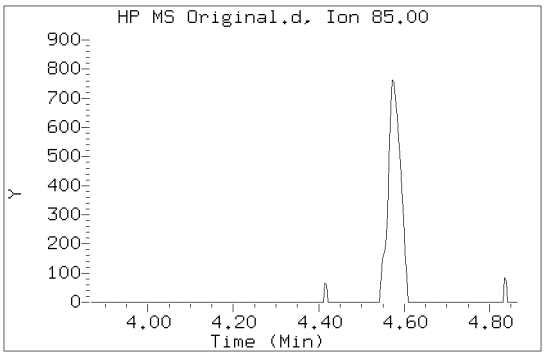


Reason Code:

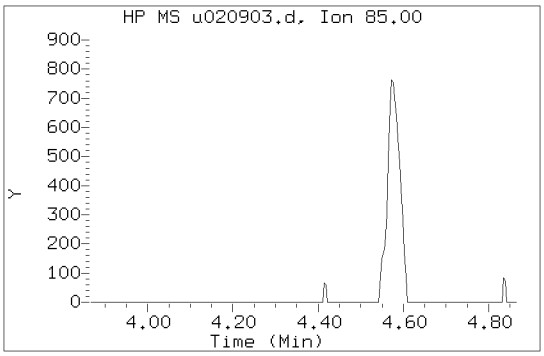
AFTER
MASS
55
AREA
713
HEIGHT
263
09-Feb-2024
11:53
firat
tastan



BEFORE
MASS
85
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan

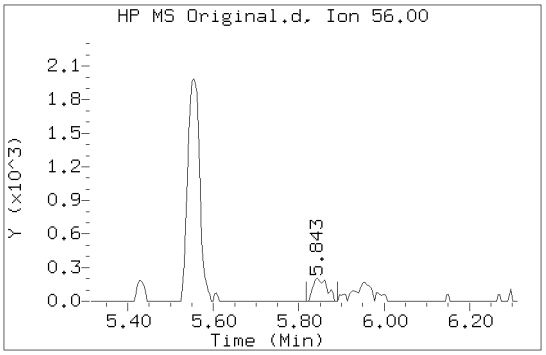


AFTER
MASS
85
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



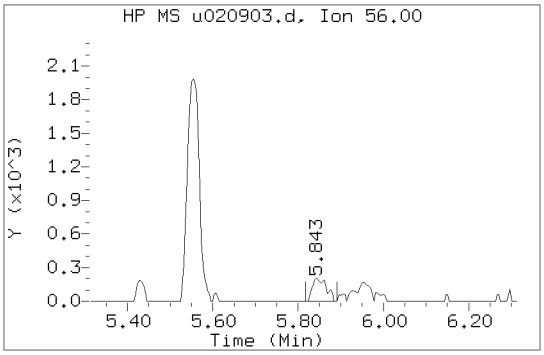
n-Butanol (71-36-3)

BEFORE
MASS
56
AREA
465
HEIGHT
205
09-Feb-2024
11:53
firat
tastan



Reason Code:

AFTER
MASS
56
AREA
465
HEIGHT
205
09-Feb-2024
11:53
firat
tastan



BEFORE
MASS
41
AREA
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HEIGHT
0
09-Feb-2024
11:53
firat
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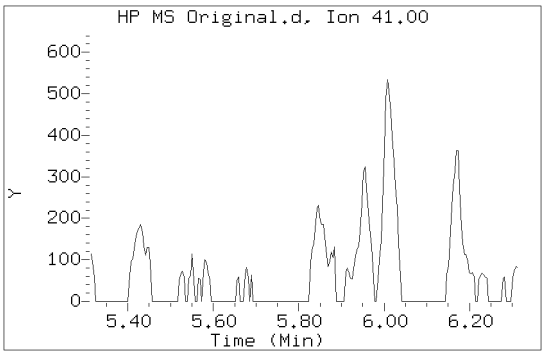
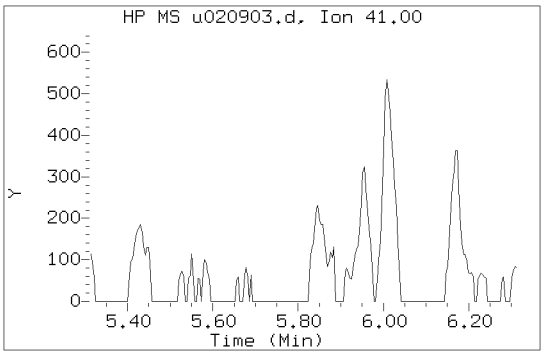


AFTER
MASS
41
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



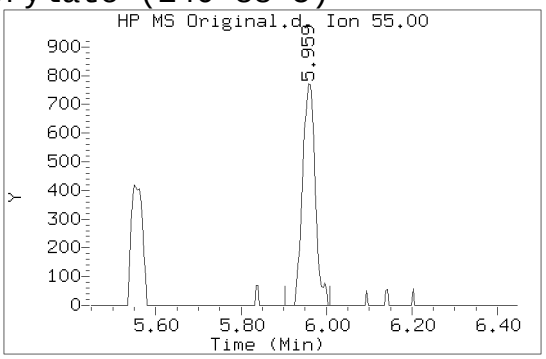
Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020903.d
Inj Date : 09-FEB-2024 09:44
InstruID : VOA9.i
LabSampID : VSTD00.5

Ethyl Acrylate (140-88-5)

Reason Code:

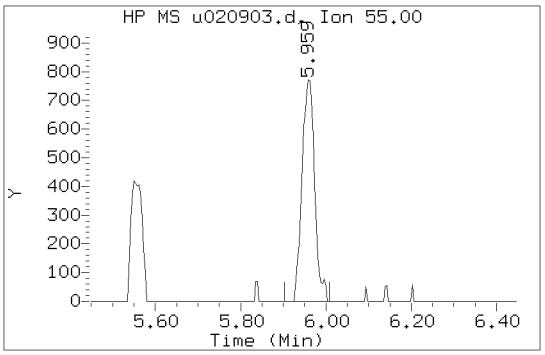
BEFORE

MASS
55
AREA
1618
HEIGHT
772
09-Feb-2024
11:53
firat
tastan



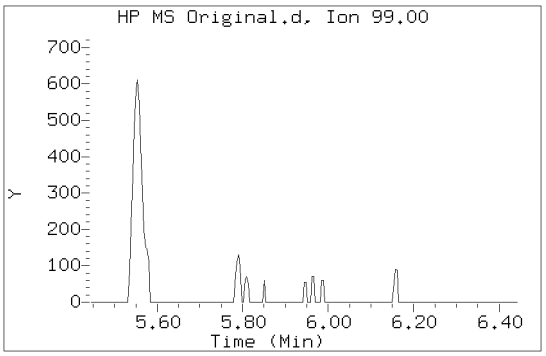
AFTER

MASS
55
AREA
1618
HEIGHT
772
09-Feb-2024
11:53
firat
tastan



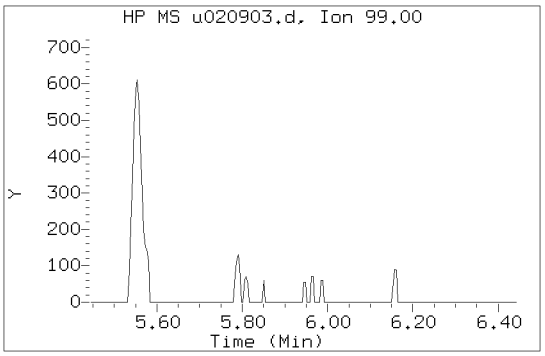
BEFORE

MASS
99
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



AFTER

MASS
99
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan

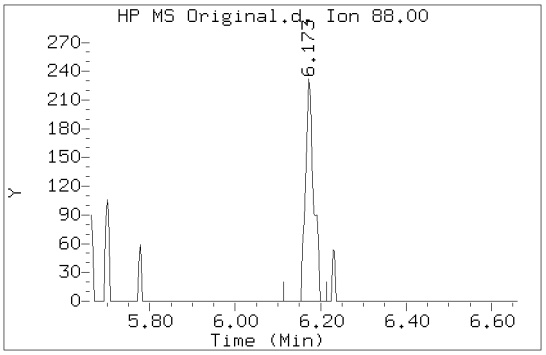


1,4-Dioxane ()

Reason Code:

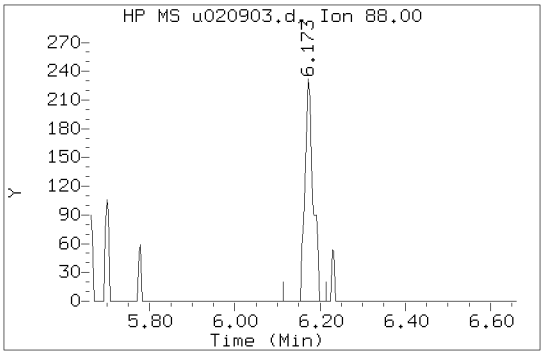
BEFORE

MASS
88
AREA
308
HEIGHT
232
09-Feb-2024
11:53
firat
tastan



AFTER

MASS
88
AREA
308
HEIGHT
232
09-Feb-2024
11:53
firat
tastan



BEFORE

MASS
58
AREA
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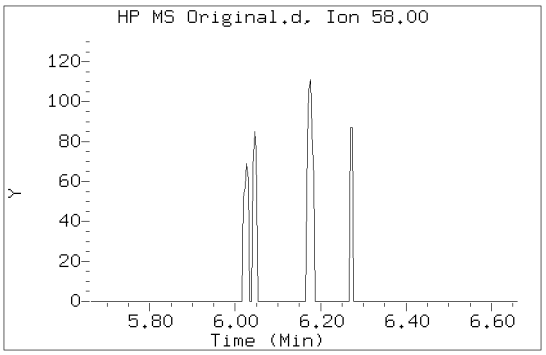
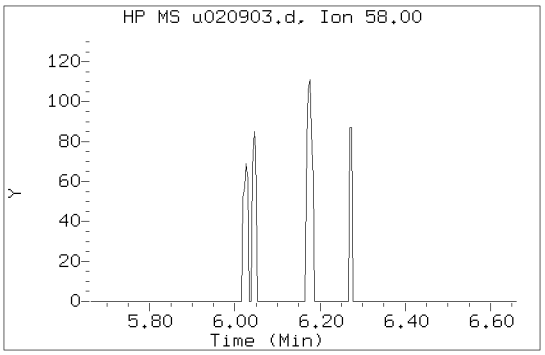
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



AFTER

MASS
58
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan

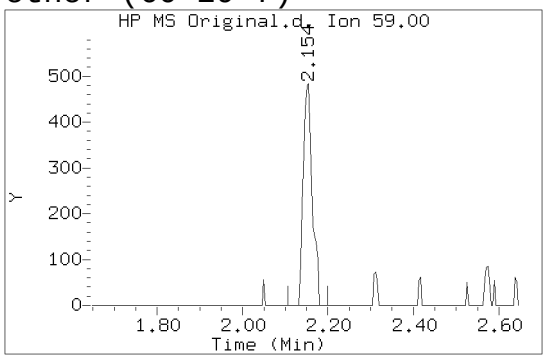


Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020903.d
Inj Date : 09-FEB-2024 09:44
InstruID : VOA9.i
LabSampID : VSTD00.5

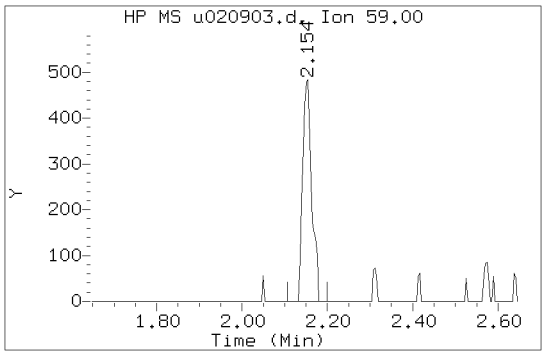
Diethyl ether (60-29-7)

Reason Code:

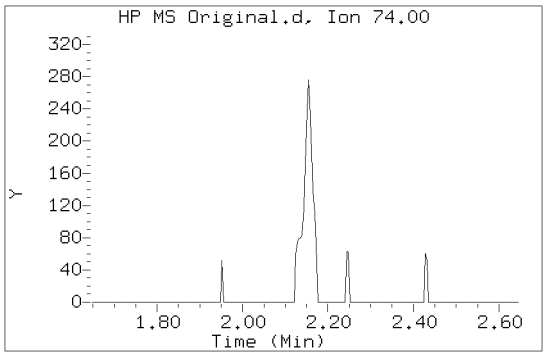
BEFORE
MASS
59
AREA
732
HEIGHT
484
09-Feb-2024
11:53
firat
tastan



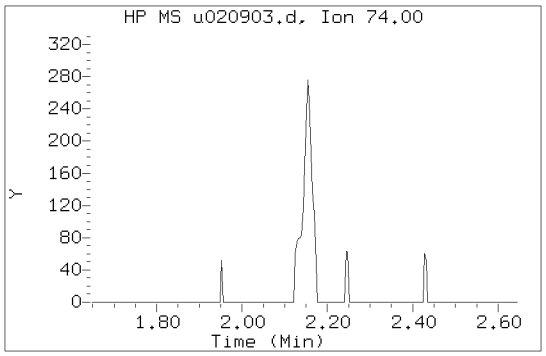
AFTER
MASS
59
AREA
732
HEIGHT
484
09-Feb-2024
11:53
firat
tastan



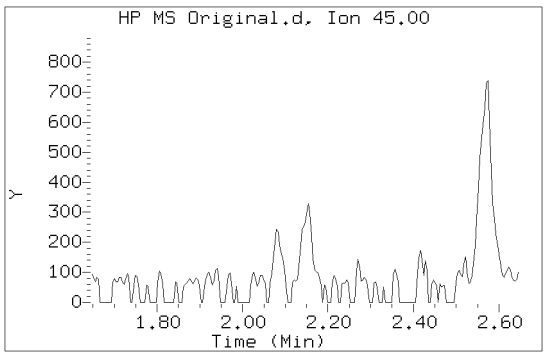
BEFORE
MASS
74
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



AFTER
MASS
74
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



BEFORE
MASS
45
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



AFTER
MASS
45
AREA
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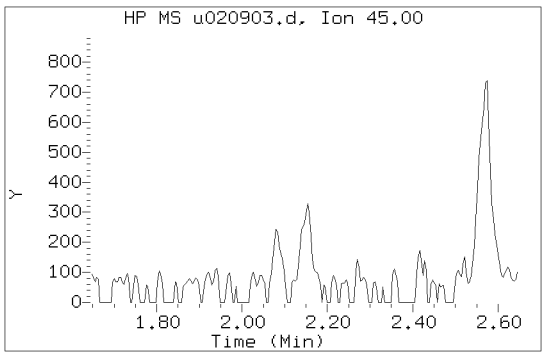
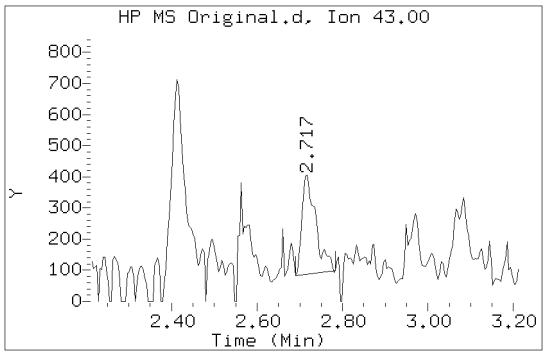
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



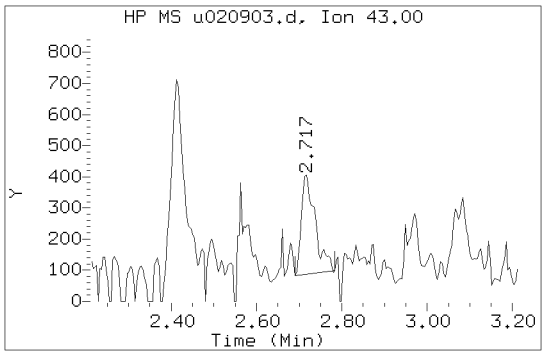
Methyl acetate (79-20-9)

Reason Code:

BEFORE
MASS
43
AREA
726
HEIGHT
318
09-Feb-2024
11:53
firat
tastan



AFTER
MASS
43
AREA
726
HEIGHT
318
09-Feb-2024
11:53
firat
tastan



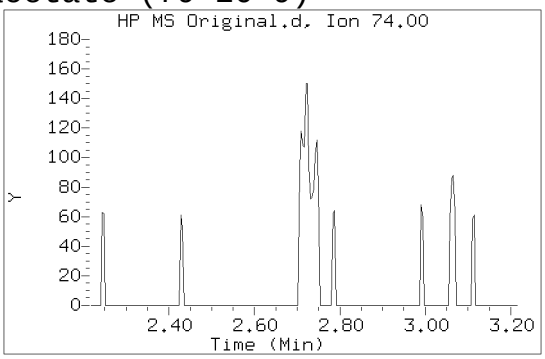
Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020903.d
Inj Date : 09-FEB-2024 09:44
InstruID : VOA9.i
LabSampID : VSTD00.5

Methyl acetate (79-20-9)

Reason Code:

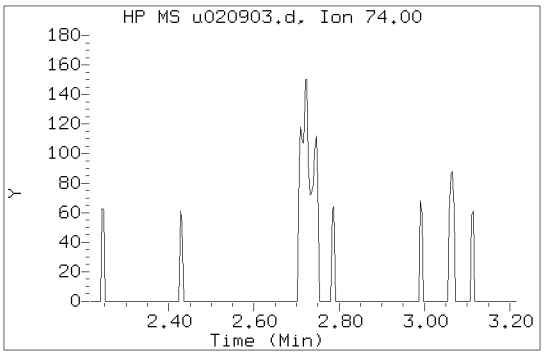
BEFORE

MASS
74
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



AFTER

MASS
74
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan

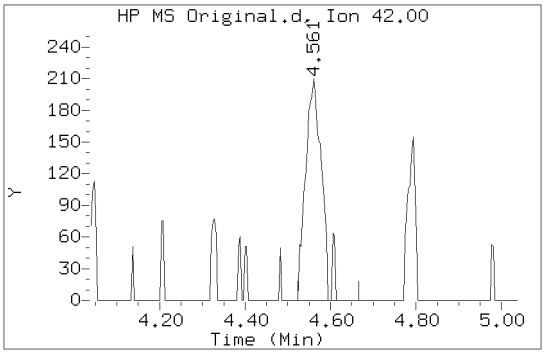


Tetrahydrofuran (109-99-9)

Reason Code:

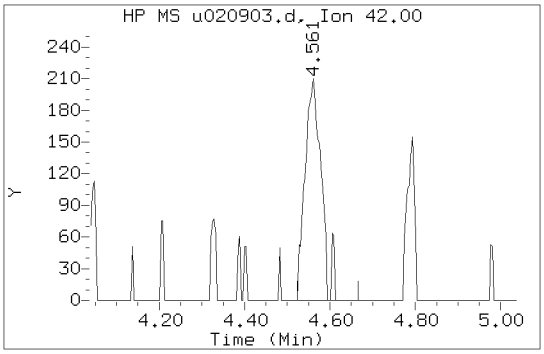
BEFORE

MASS
42
AREA
561
HEIGHT
210
09-Feb-2024
11:53
firat
tastan



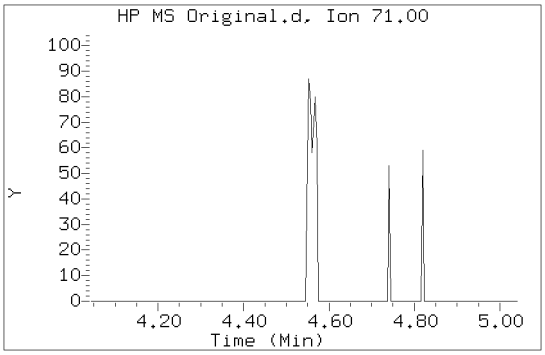
AFTER

MASS
42
AREA
561
HEIGHT
210
09-Feb-2024
11:53
firat
tastan



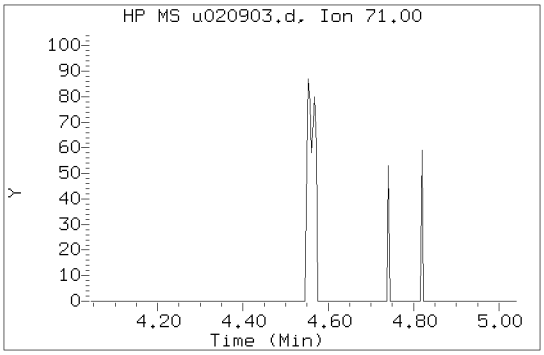
BEFORE

MASS
71
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



AFTER

MASS
71
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan

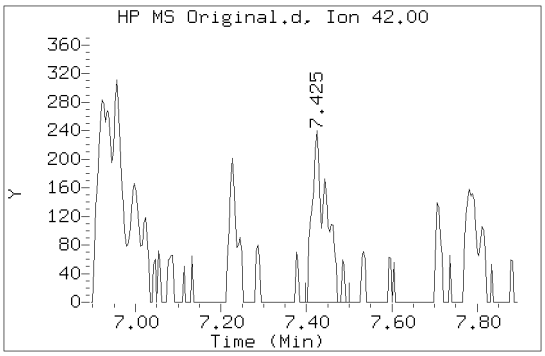


Amyl alcohol (71-41-0)

Reason Code:

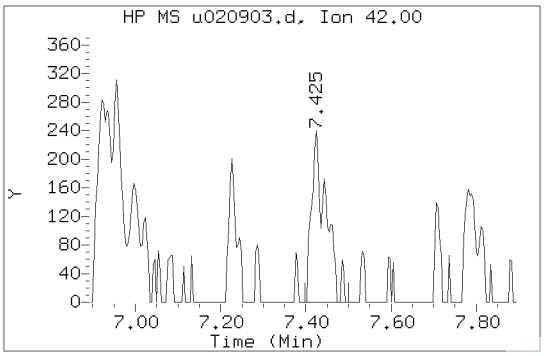
BEFORE

MASS
42
AREA
563
HEIGHT
240
09-Feb-2024
11:53
firat
tastan



AFTER

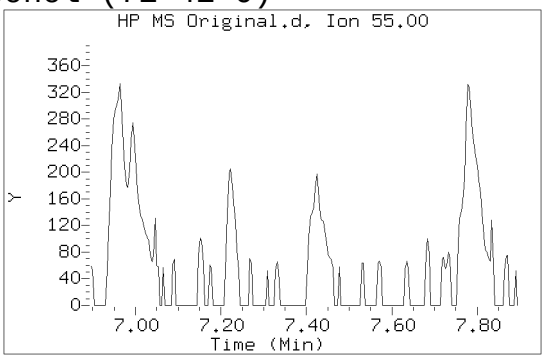
MASS
42
AREA
563
HEIGHT
240
09-Feb-2024
11:53
firat
tastan



Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020903.d
Inj Date : 09-FEB-2024 09:44
InstruID : VOA9.i
LabSampID : VSTD00.5

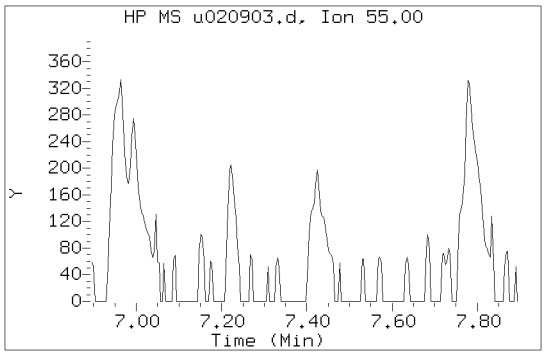
Amyl alcohol (71-41-0)

BEFORE
MASS
55
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan

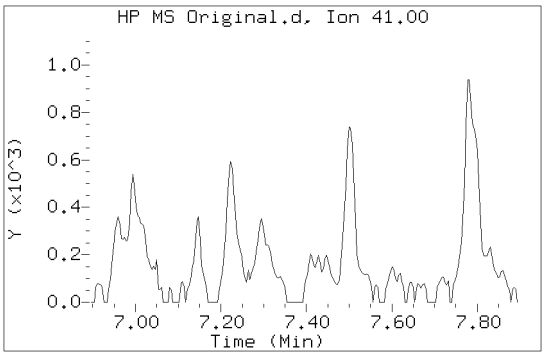


Reason Code:

AFTER
MASS
55
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



BEFORE
MASS
41
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



AFTER
MASS
41
AREA
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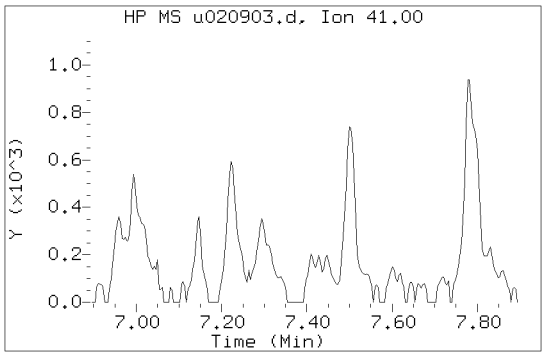
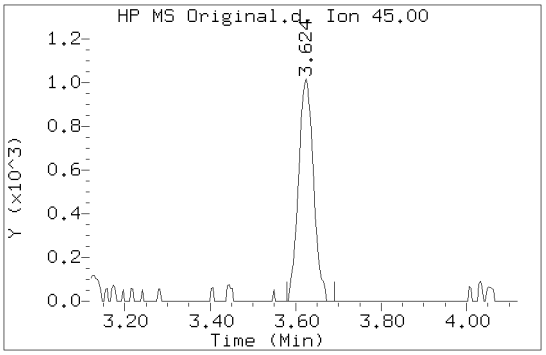
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



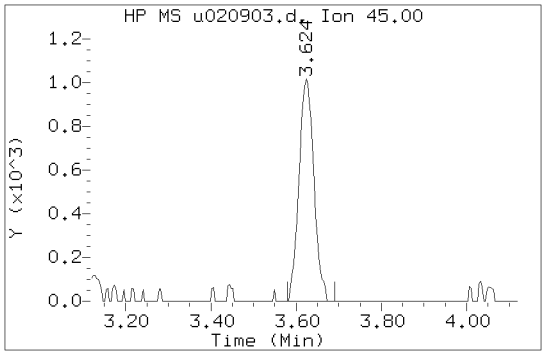
Diisopropyl ether (108-20-3)

BEFORE
MASS
45
AREA
2511
HEIGHT
1016
09-Feb-2024
11:53
firat
tastan

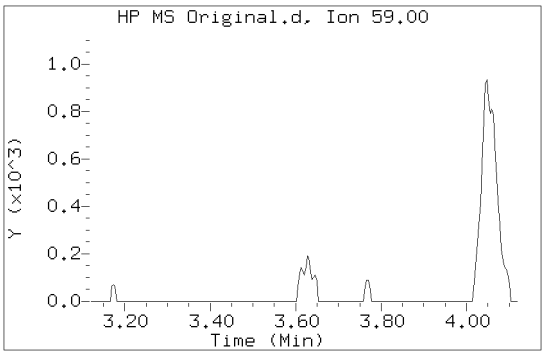


Reason Code:

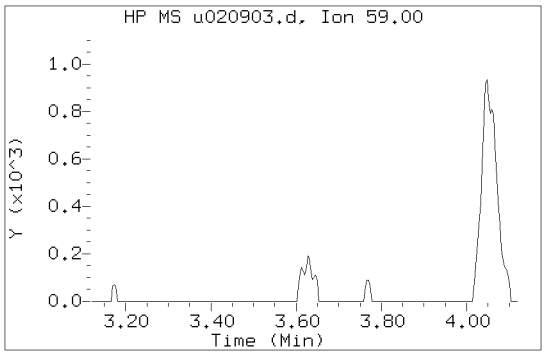
AFTER
MASS
45
AREA
2511
HEIGHT
1016
09-Feb-2024
11:53
firat
tastan



BEFORE
MASS
59
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



AFTER
MASS
59
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



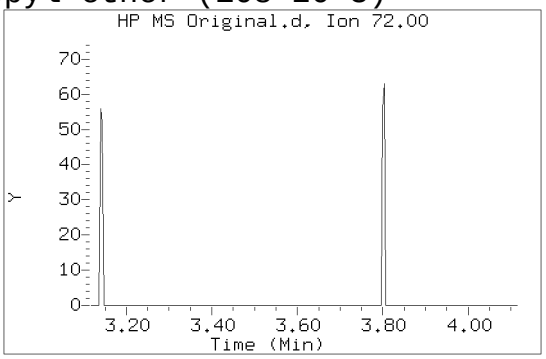
Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020903.d
Inj Date : 09-FEB-2024 09:44
InstruID : VOA9.i
LabSampID : VSTD00.5

Diisopropyl ether (108-20-3)

Reason Code:

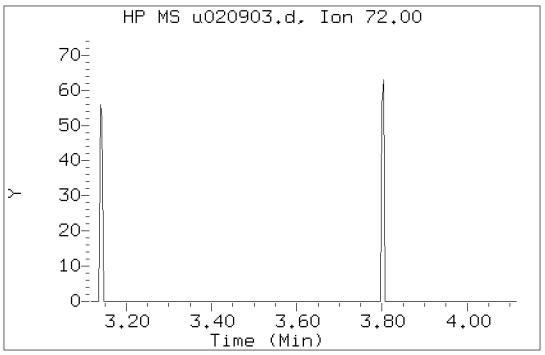
BEFORE

MASS
72
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



AFTER

MASS
72
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan

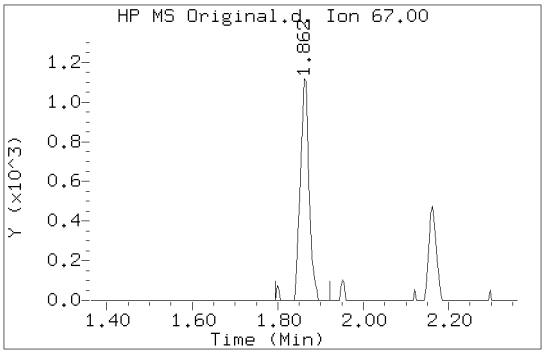


Dichlorofluoromethane (75-43-4)

Reason Code:

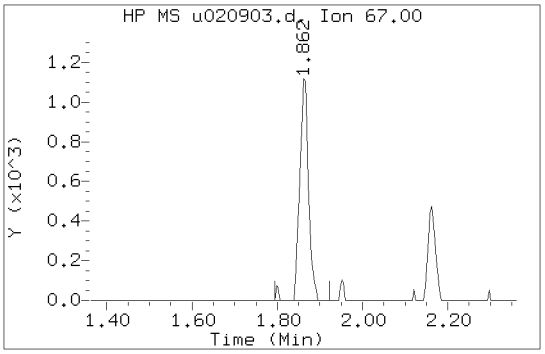
BEFORE

MASS
67
AREA
1655
HEIGHT
1118
09-Feb-2024
11:53
firat
tastan



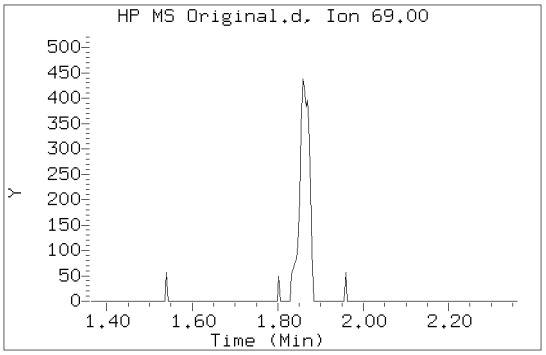
AFTER

MASS
67
AREA
1655
HEIGHT
1118
09-Feb-2024
11:53
firat
tastan



BEFORE

MASS
69
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



AFTER

MASS
69
AREA
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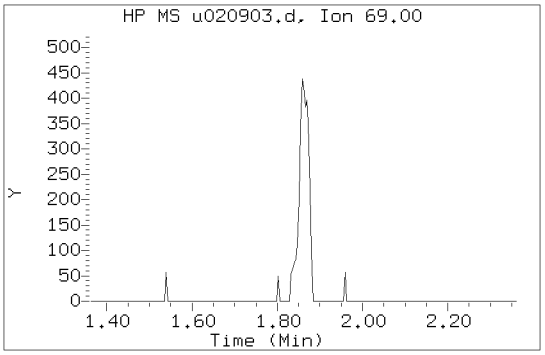
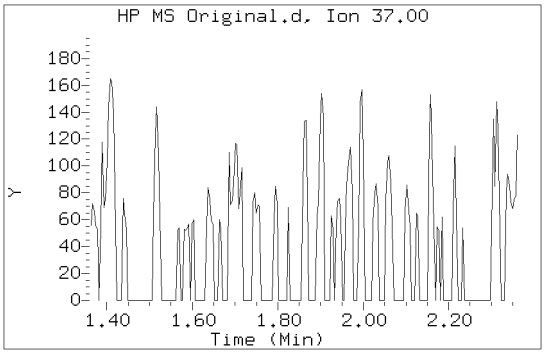
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



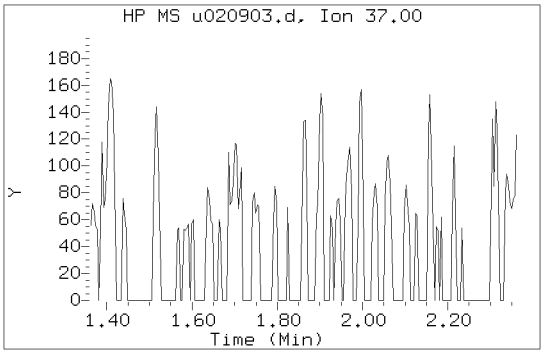
BEFORE

MASS
37
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



AFTER

MASS
37
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



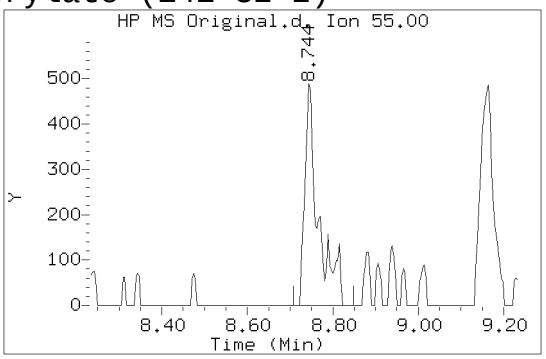
Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020903.d
Inj Date : 09-FEB-2024 09:44
InstruID : VOA9.i
LabSampID : VSTD00.5

Butyl acrylate (141-32-2)

Reason Code:

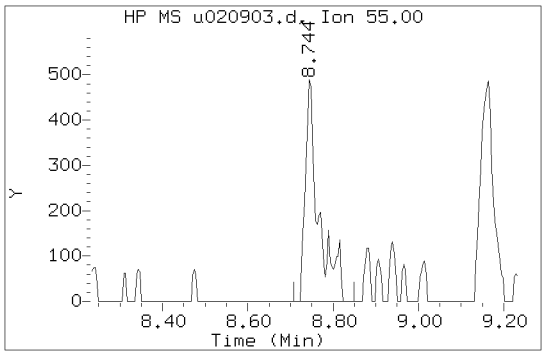
BEFORE

MASS
55
AREA
1055
HEIGHT
489
09-Feb-2024
11:53
firat
tastan



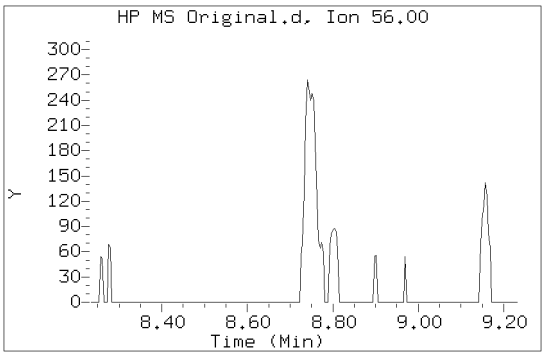
AFTER

MASS
55
AREA
1055
HEIGHT
489
09-Feb-2024
11:53
firat
tastan



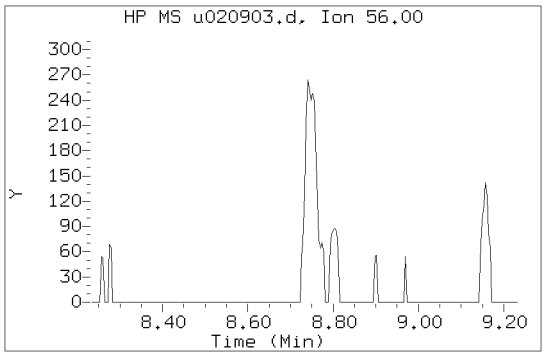
BEFORE

MASS
56
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



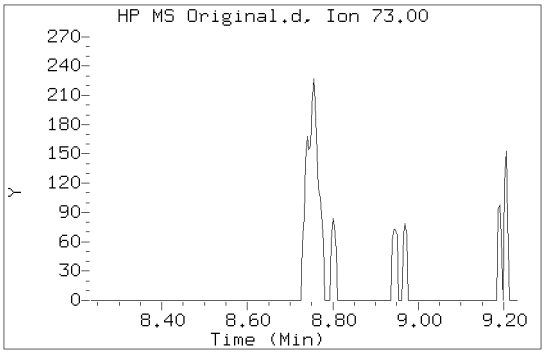
AFTER

MASS
56
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



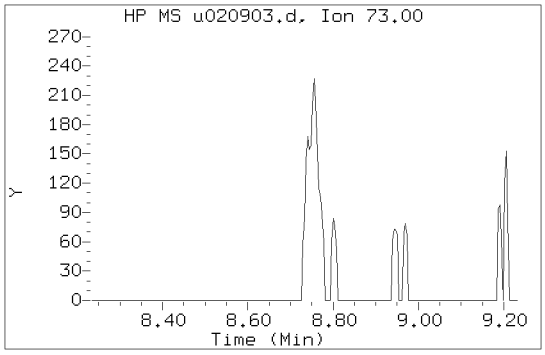
BEFORE

MASS
73
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



AFTER

MASS
73
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan

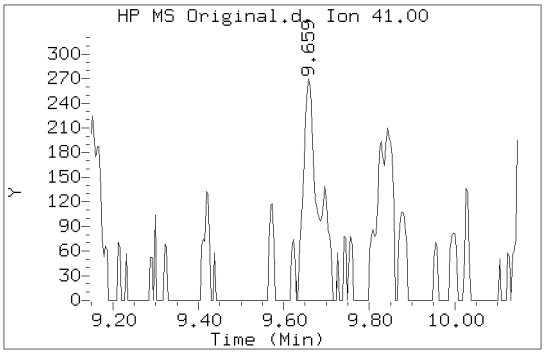


Butyl methacrylate (97-88-1)

Reason Code:

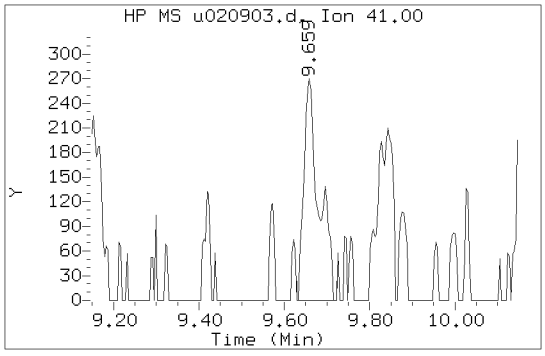
BEFORE

MASS
41
AREA
663
HEIGHT
270
09-Feb-2024
11:53
firat
tastan



AFTER

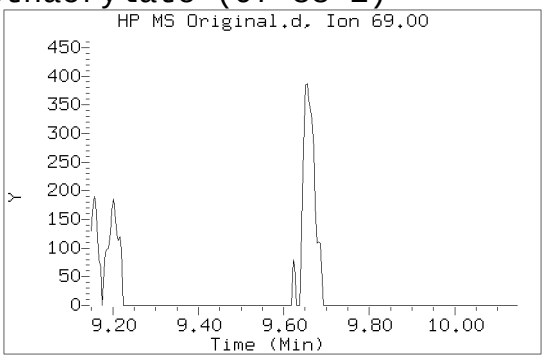
MASS
41
AREA
663
HEIGHT
270
09-Feb-2024
11:53
firat
tastan



Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020903.d
Inj Date : 09-FEB-2024 09:44
InstruID : VOA9.i
LabSampID : VSTD00.5

Butyl methacrylate (97-88-1)

BEFORE
MASS
69
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



Reason Code:

AFTER
MASS
69
AREA
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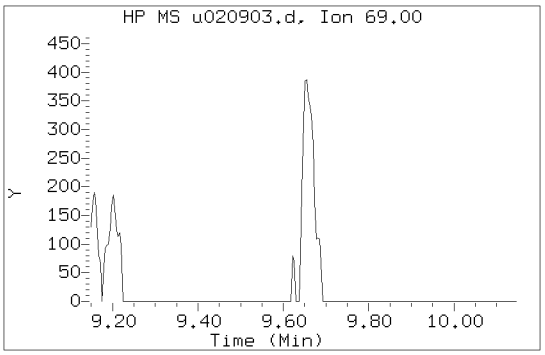
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



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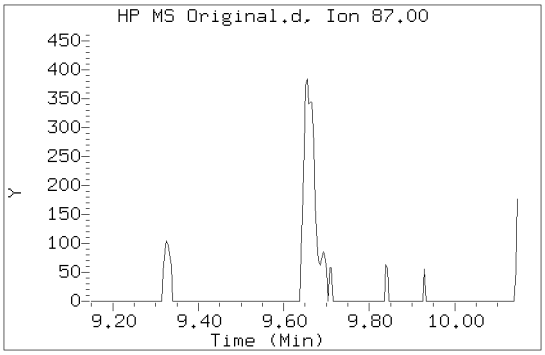

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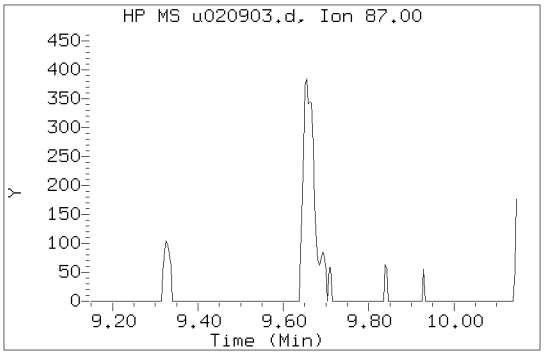

Ethanol (64-17-5)

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367
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09-Feb-2024
11:53
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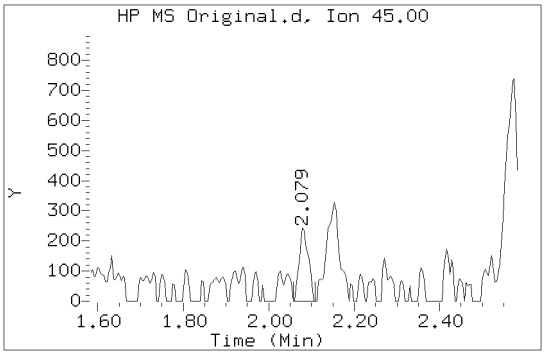

Reason Code:

AFTER
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09-Feb-2024
11:53
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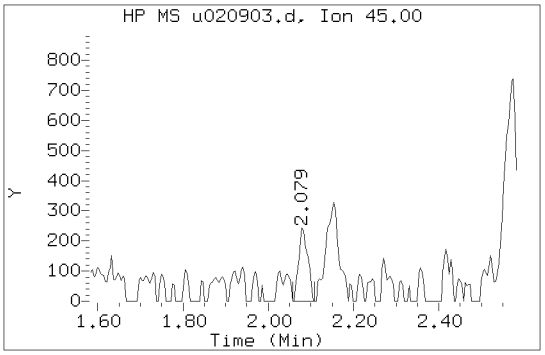

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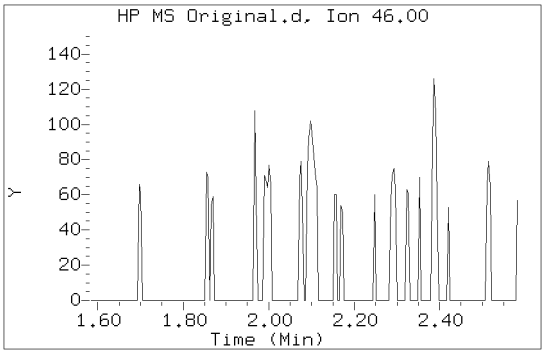

AFTER
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09-Feb-2024
11:53
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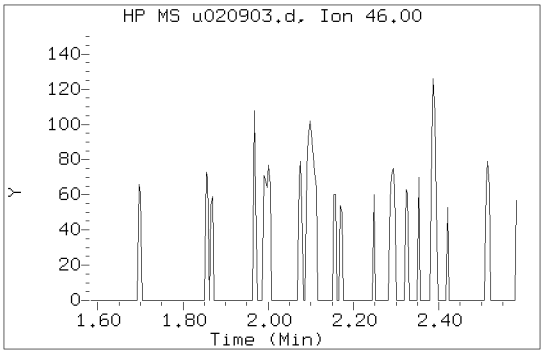

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Inj Date : 09-FEB-2024 09:44
InstruID : VOA9.i
LabSampID : VSTD00.5

Ethanol (64-17-5)

Reason Code:

BEFORE

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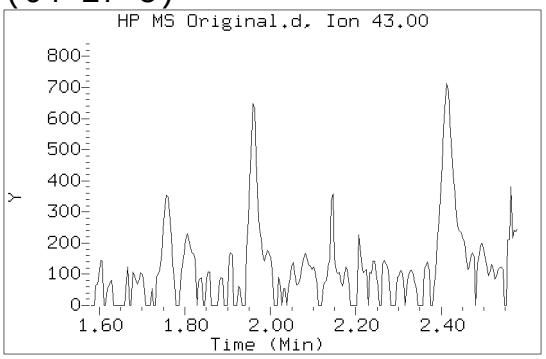

AFTER

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HEIGHT
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09-Feb-2024
11:53
firat
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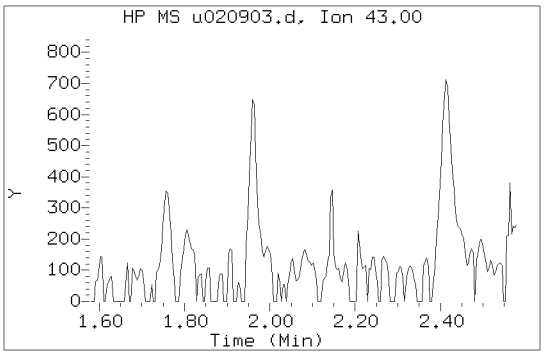

tert-Butyl formate (762-75-4)

Reason Code:

BEFORE

MASS
59
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629
09-Feb-2024
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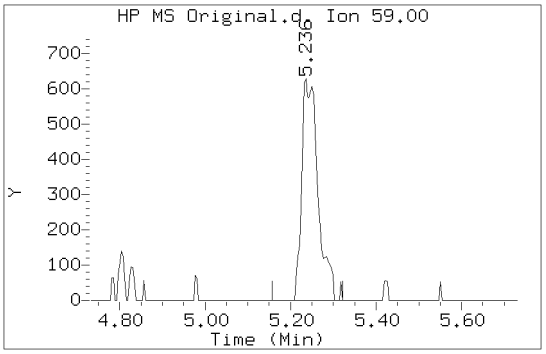

AFTER

MASS
59
AREA
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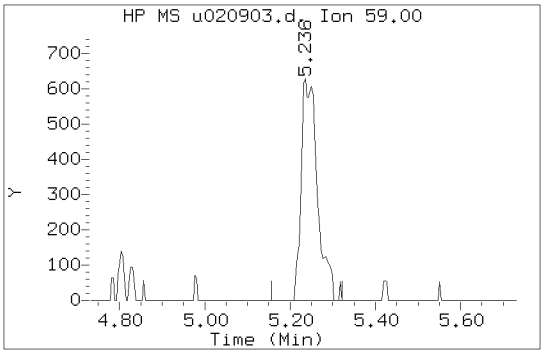
HEIGHT
629
09-Feb-2024
11:53
firat
tastan



BEFORE

MASS
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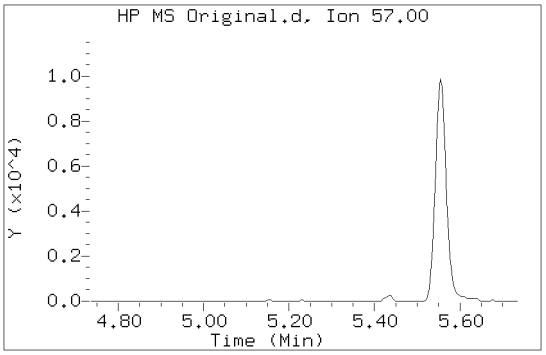
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



AFTER

MASS
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HEIGHT
0
09-Feb-2024
11:53
firat
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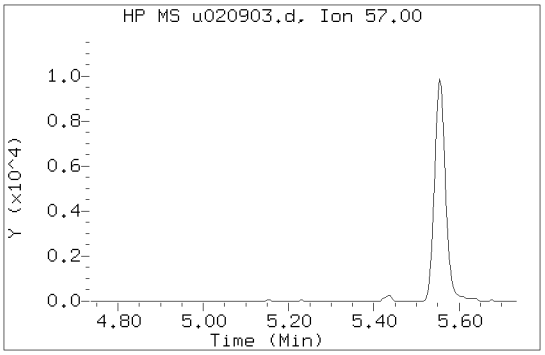

BEFORE

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09-Feb-2024
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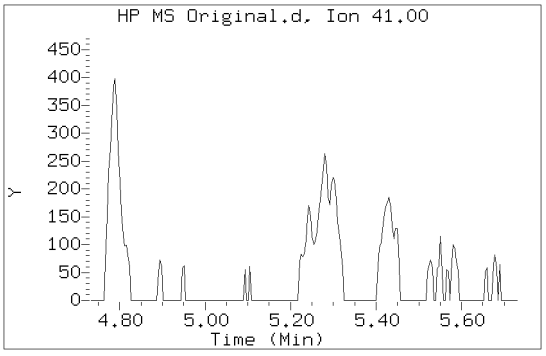

AFTER

MASS
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AREA
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HEIGHT
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09-Feb-2024
11:53
firat
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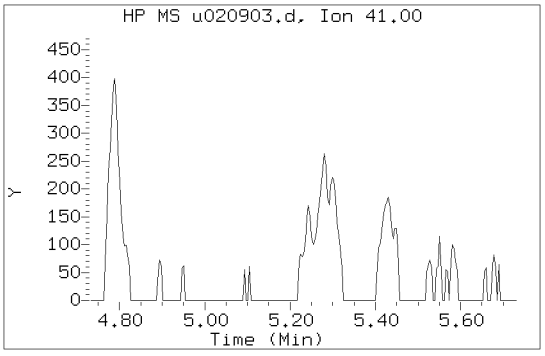

Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020903.d
Inj Date : 09-FEB-2024 09:44
InstruID : VOA9.i
LabSampID : VSTD00.5

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

Reason Code:

BEFORE

MASS
57
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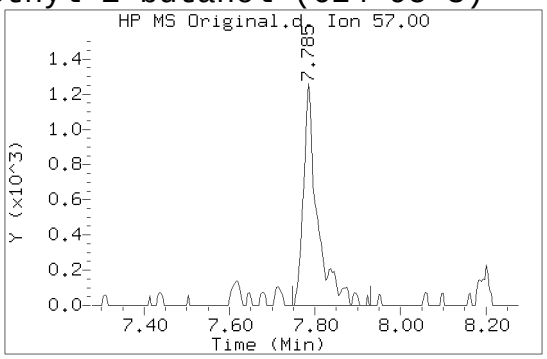
2924
HEIGHT
1260
09-Feb-2024
11:53
firat
tastan



AFTER

MASS
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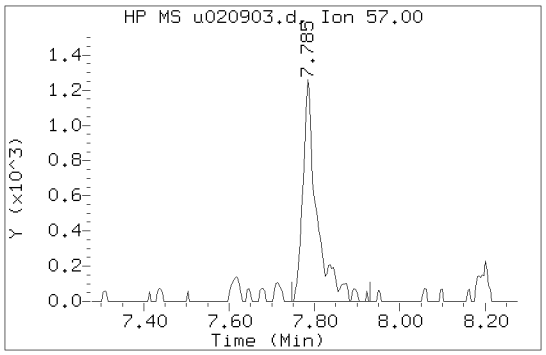
AREA
2924
HEIGHT
1260
09-Feb-2024
11:53
firat
tastan



BEFORE

MASS
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09-Feb-2024
11:53
firat
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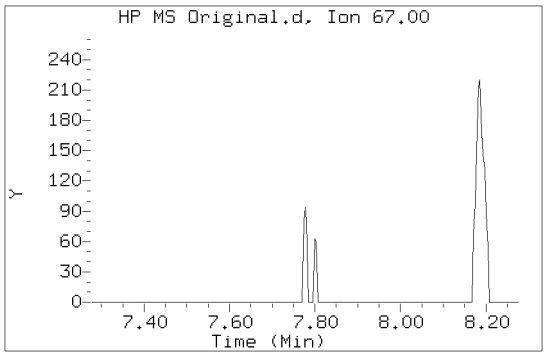

AFTER

MASS
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HEIGHT
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09-Feb-2024
11:53
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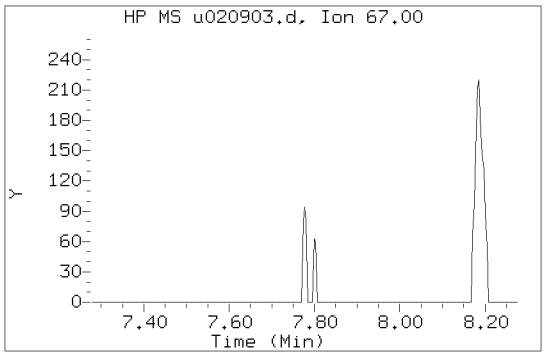

BEFORE

MASS
56
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HEIGHT
0
09-Feb-2024
11:53
firat
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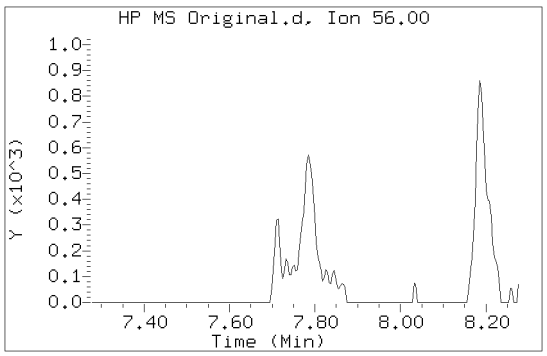

AFTER

MASS
56
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HEIGHT
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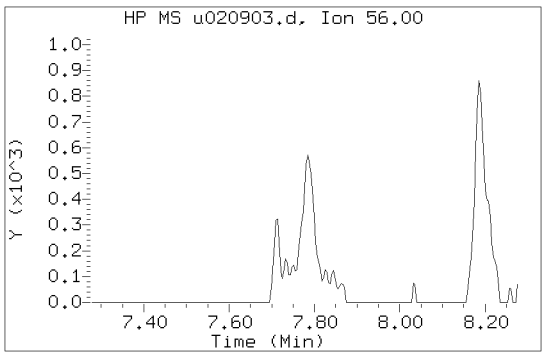
09-Feb-2024
11:53
firat
tastan



Epichlorohydrin (106-89-8)

Reason Code:

BEFORE

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AREA
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HEIGHT
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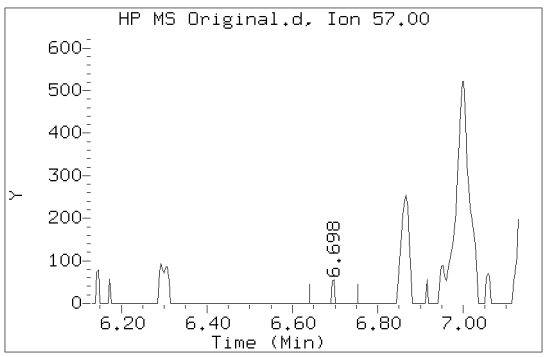
09-Feb-2024
11:53
firat
tastan



AFTER

MASS
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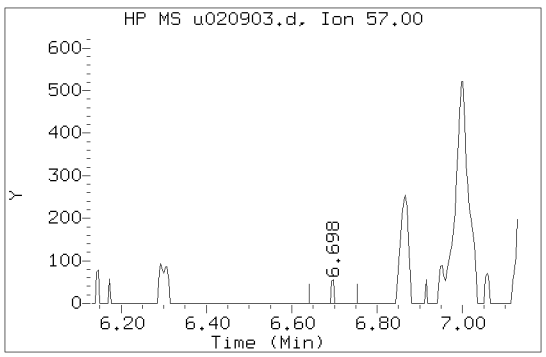
AREA
24
HEIGHT
55
09-Feb-2024
11:53
firat
tastan



Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020903.d
Inj Date : 09-FEB-2024 09:44
InstruID : VOA9.i
LabSampID : VSTD00.5

Epichlorohydrin (106-89-8)

Reason Code:

BEFORE

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HEIGHT
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09-Feb-2024
11:53
firat
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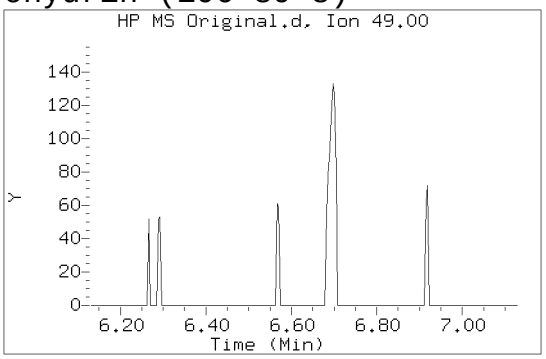

AFTER

MASS
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AREA
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HEIGHT
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09-Feb-2024
11:53
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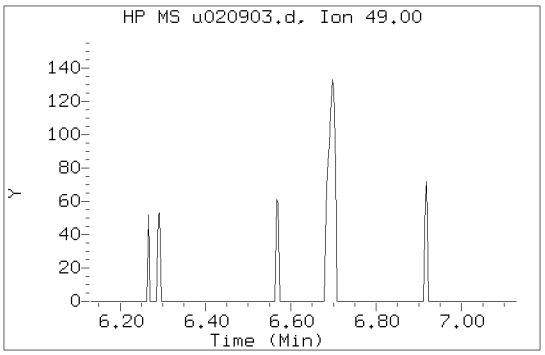

Isoprene (78-79-5)

Reason Code:

BEFORE

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154
09-Feb-2024
11:53
firat
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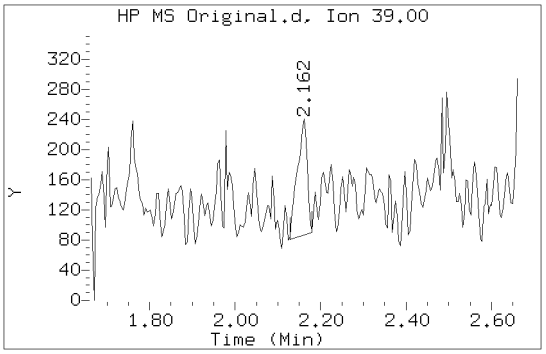

AFTER

MASS
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AREA
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HEIGHT
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09-Feb-2024
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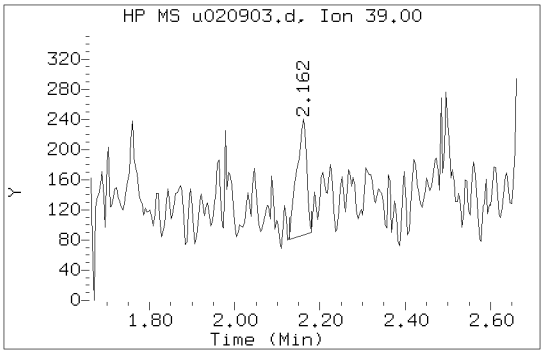

BEFORE

MASS
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AREA
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HEIGHT
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09-Feb-2024
11:53
firat
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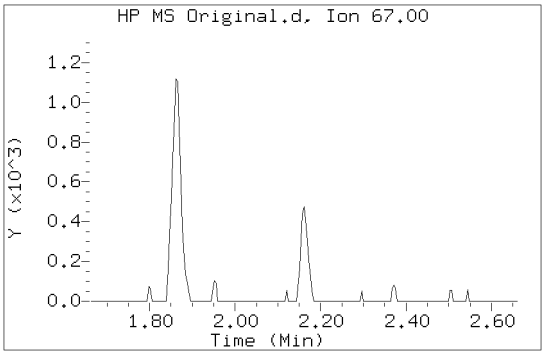

AFTER

MASS
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AREA
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HEIGHT
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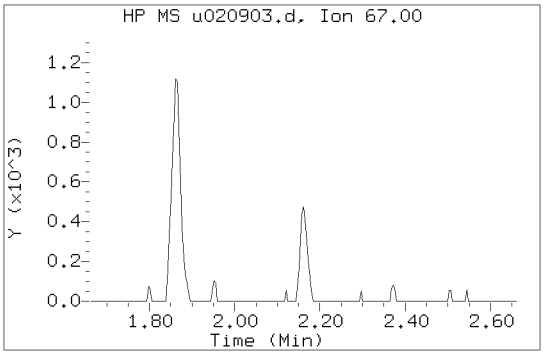
09-Feb-2024
11:53
firat
tastan



BEFORE

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09-Feb-2024
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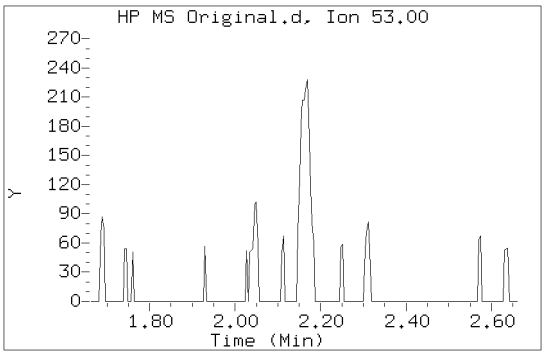

AFTER

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09-Feb-2024
11:53
firat
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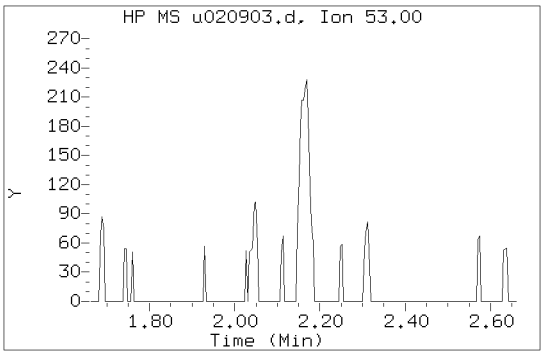
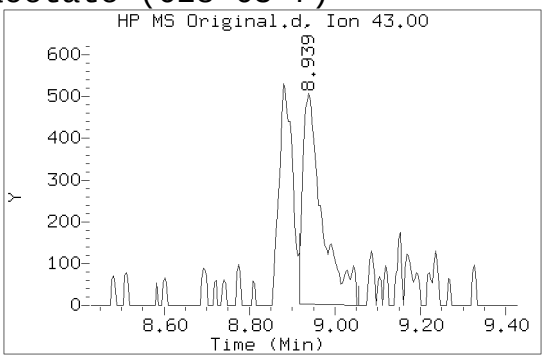


Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020903.d
Inj Date : 09-FEB-2024 09:44
InstruID : VOA9.i
LabSampID : VSTD00.5

n-Amyl acetate (628-63-7)

Reason Code:

BEFORE
MASS
43
AREA
1619
HEIGHT
505
09-Feb-2024
11:53
firat
tastan



AFTER
MASS
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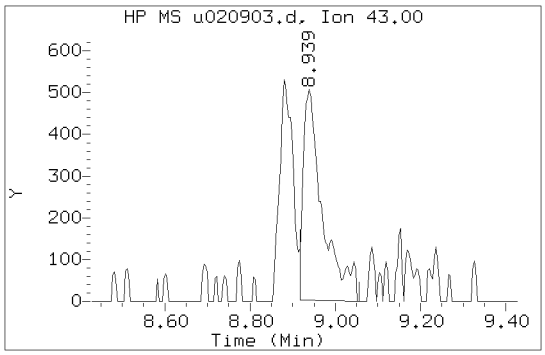
AREA
1619
HEIGHT
505
09-Feb-2024
11:53
firat
tastan



BEFORE
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70
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HEIGHT
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09-Feb-2024
11:53
firat
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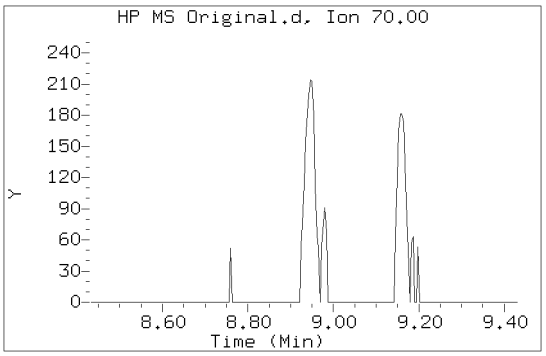

AFTER
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HEIGHT
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09-Feb-2024
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firat
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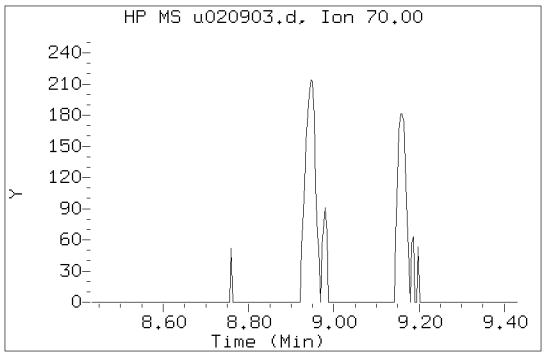

BEFORE
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HEIGHT
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09-Feb-2024
11:53
firat
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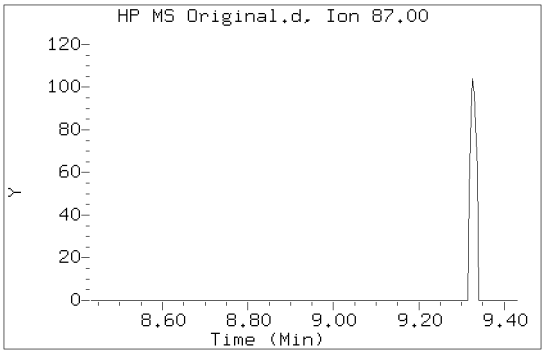

AFTER
MASS
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AREA
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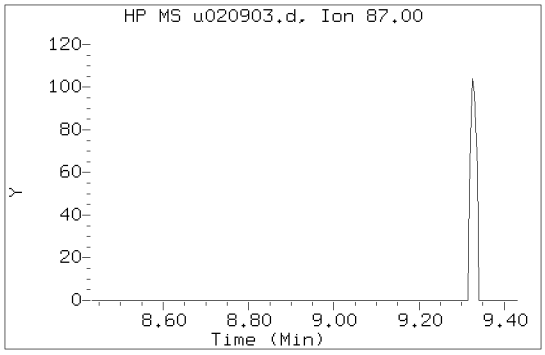
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



Isopropyl acetate (108-21-4)

Reason Code:

BEFORE
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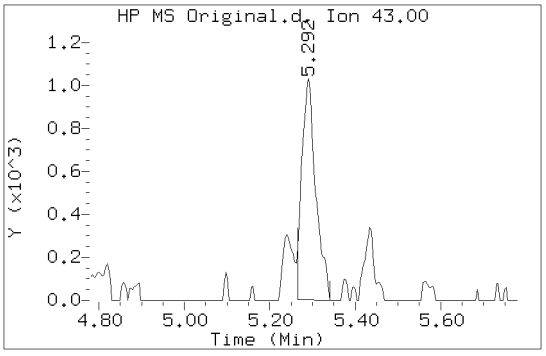
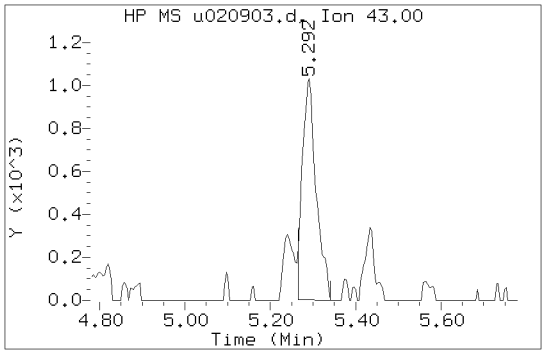
43
AREA
2375
HEIGHT
1029
09-Feb-2024
11:53
firat
tastan



AFTER
MASS
43
AREA
2375
HEIGHT
1029
09-Feb-2024
11:53
firat
tastan



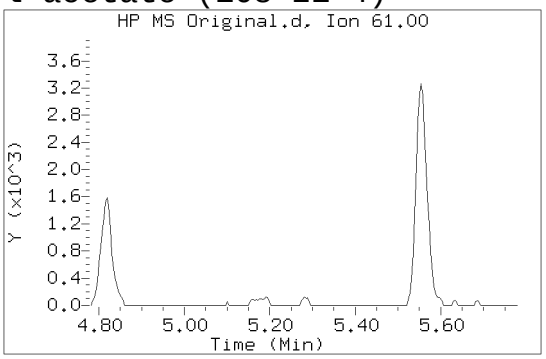
Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020903.d
Inj Date : 09-FEB-2024 09:44
InstruID : VOA9.i
LabSampID : VSTD00.5

Isopropyl acetate (108-21-4)

Reason Code:

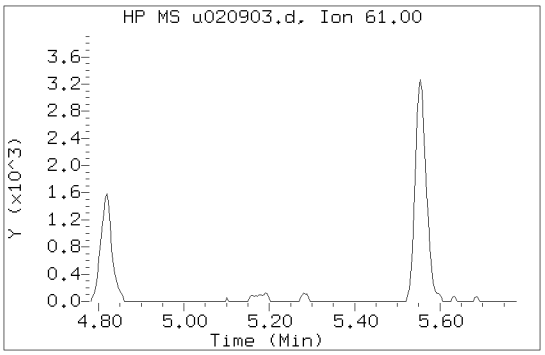
BEFORE

MASS
61
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



AFTER

MASS
61
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan

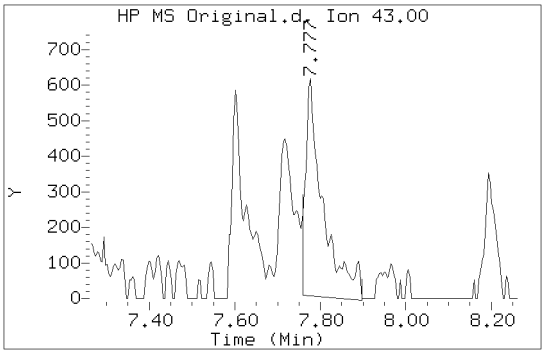


n-Butyl acetate (123-86-4)

Reason Code:

BEFORE

MASS
43
AREA
1760
HEIGHT
610
09-Feb-2024
11:53
firat
tastan



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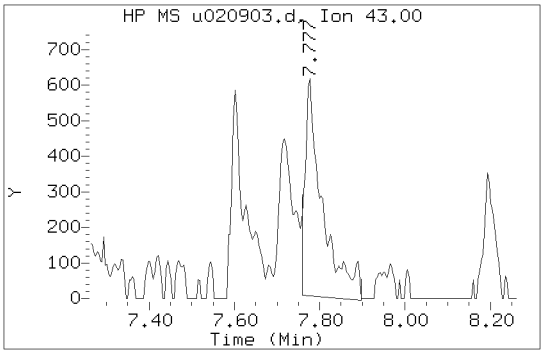

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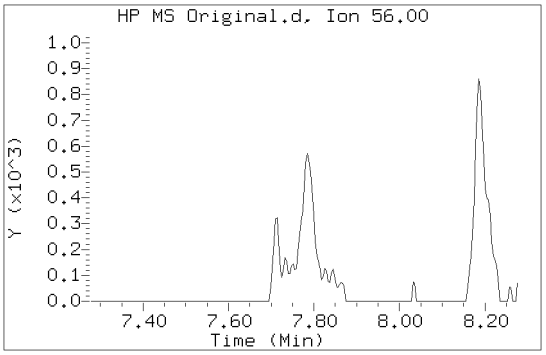

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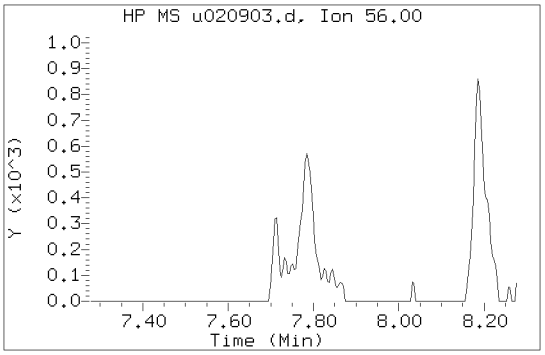

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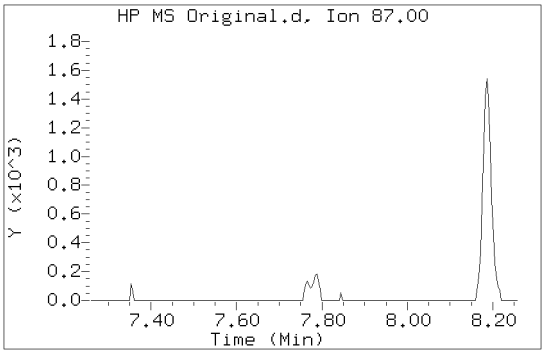

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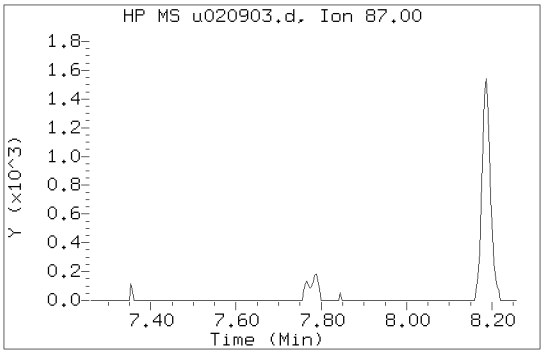

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Inj Date : 09-FEB-2024 09:44
InstruID : VOA9.i
LabSampID : VSTD00.5

Acetaldehyde (75-07-0)

Reason Code:

BEFORE
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09-Feb-2024
11:53
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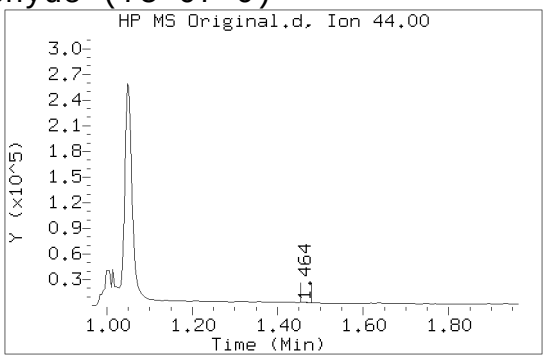

AFTER
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09-Feb-2024
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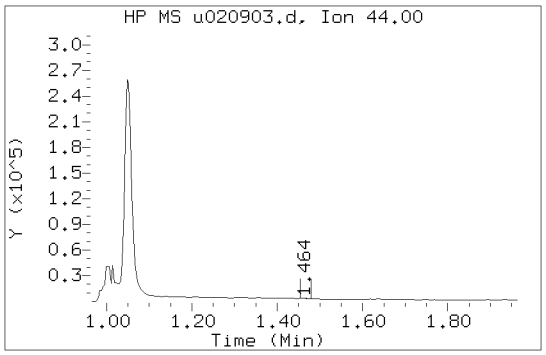

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09-Feb-2024
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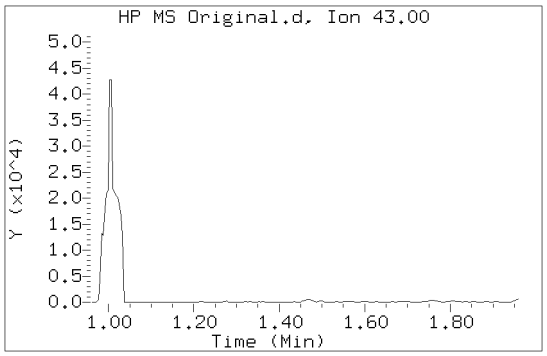

AFTER
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09-Feb-2024
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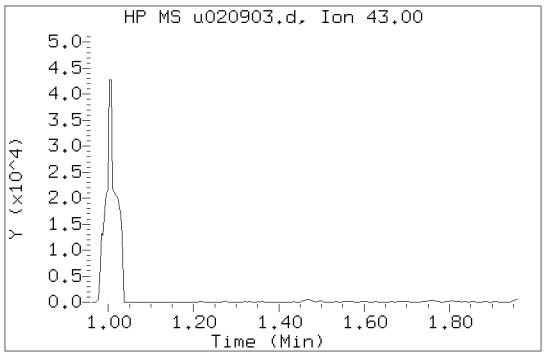

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09-Feb-2024
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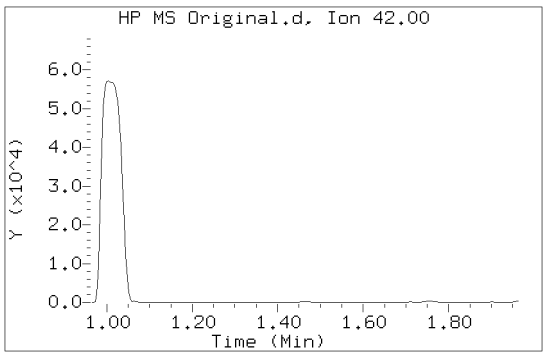

AFTER
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09-Feb-2024
11:53
firat
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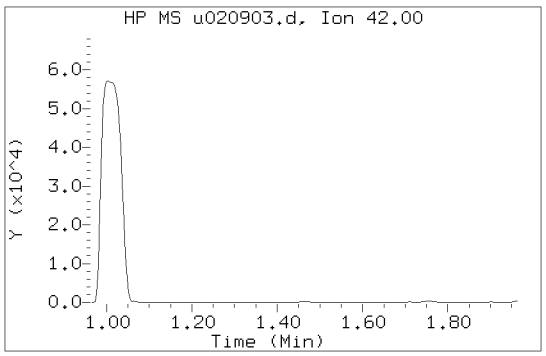

Methyl Amyl Ketone (110-43-0)

Reason Code:

BEFORE
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09-Feb-2024
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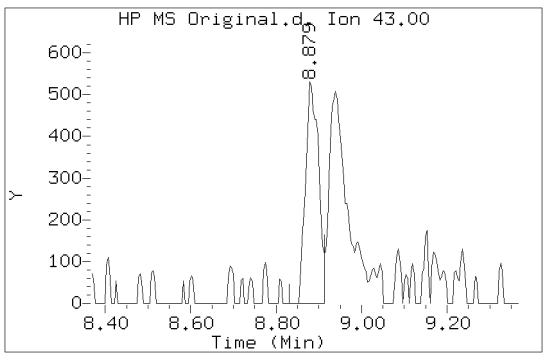

AFTER
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09-Feb-2024
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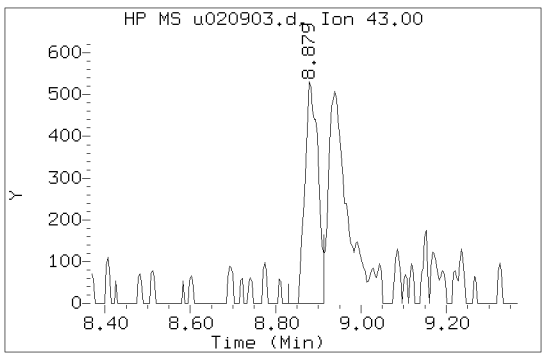

Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020903.d
Inj Date : 09-FEB-2024 09:44
InstruID : VOA9.i
LabSampID : VSTD00.5

Methyl Amyl Ketone (110-43-0)

Reason Code:

BEFORE

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09-Feb-2024
11:53
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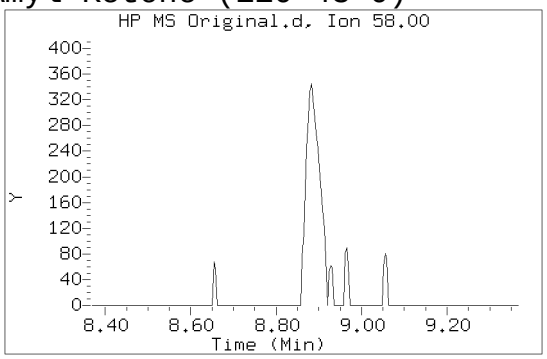

AFTER

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09-Feb-2024
11:53
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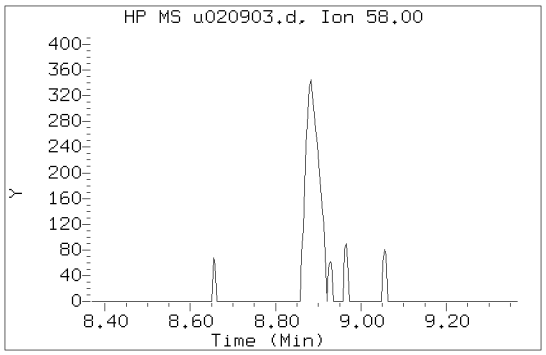

BEFORE

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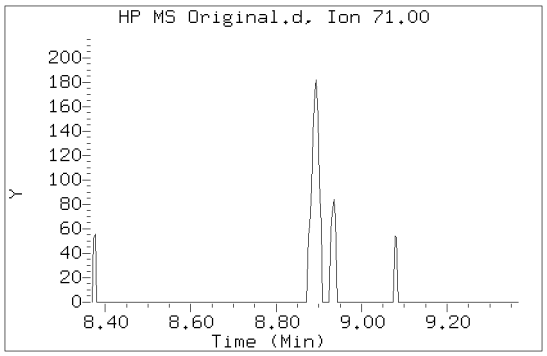

AFTER

MASS
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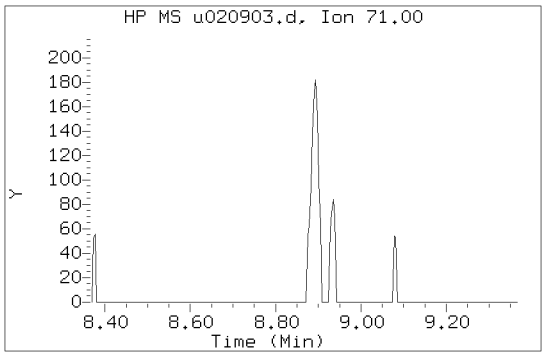

Dimethyl Disulfide (624-92-0)

Reason Code:

BEFORE

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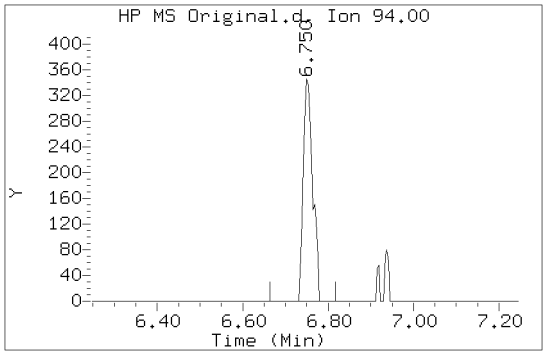
94
AREA
537
HEIGHT
346
09-Feb-2024
11:53
firat
tastan



AFTER

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AREA
537
HEIGHT
346
09-Feb-2024
11:53
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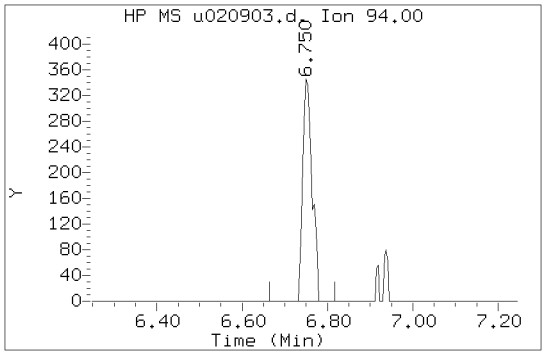
tastan



BEFORE

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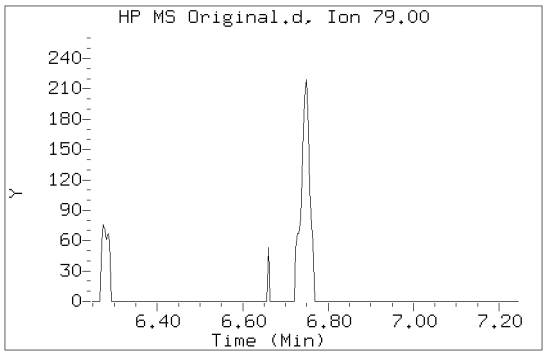

AFTER

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09-Feb-2024
11:53
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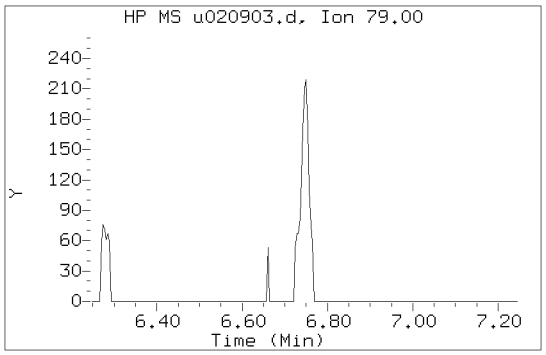

Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020903.d
Inj Date : 09-FEB-2024 09:44
InstruID : VOA9.i
LabSampID : VSTD00.5

Dimethyl Disulfide (624-92-0)

Reason Code:

BEFORE

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09-Feb-2024
11:53
firat
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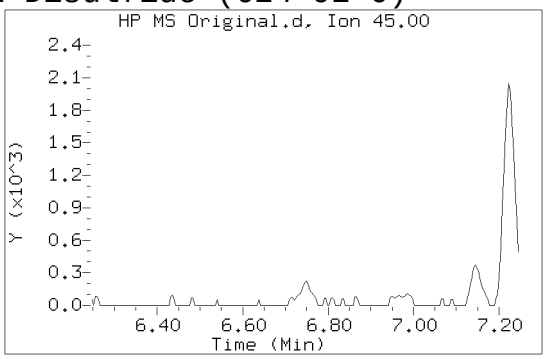

AFTER

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09-Feb-2024
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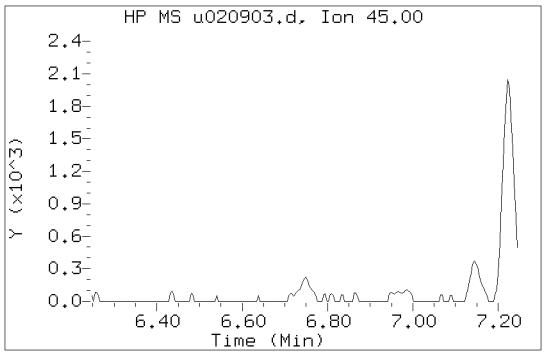

Isobutylene (115-11-7)

Reason Code:

BEFORE

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11:53
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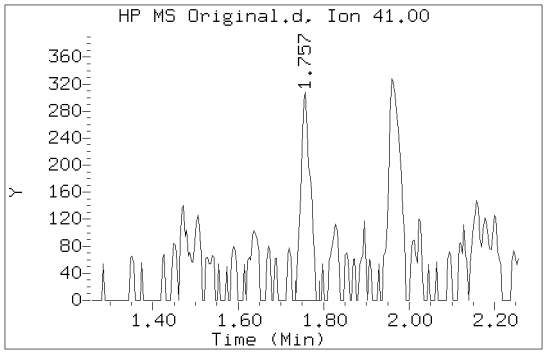

AFTER

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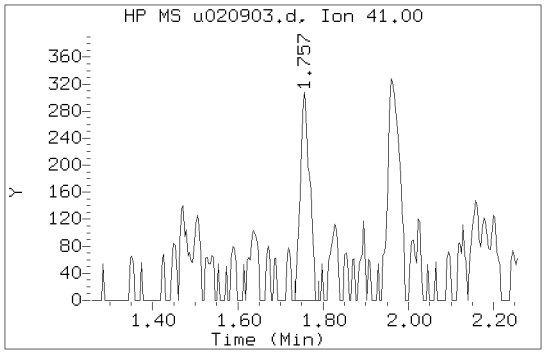

BEFORE

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09-Feb-2024
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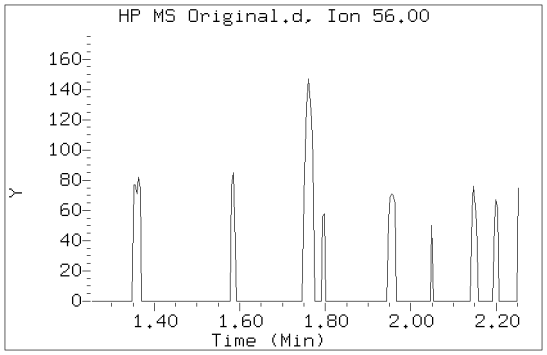

AFTER

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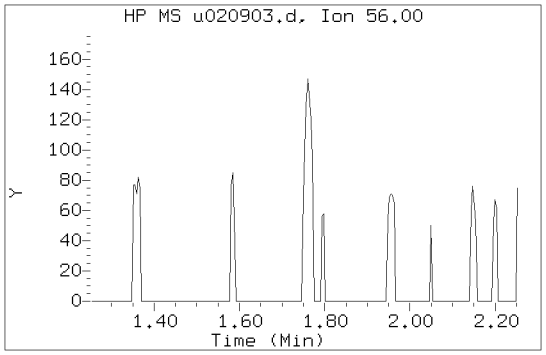

BEFORE

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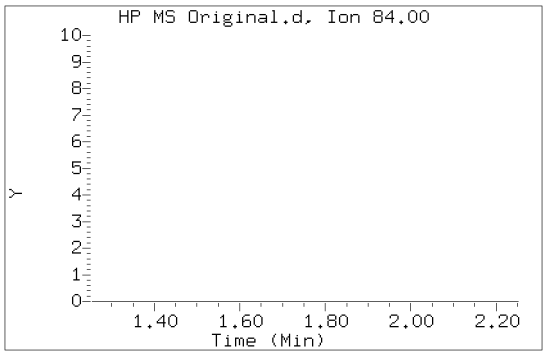

AFTER

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09-Feb-2024
11:53
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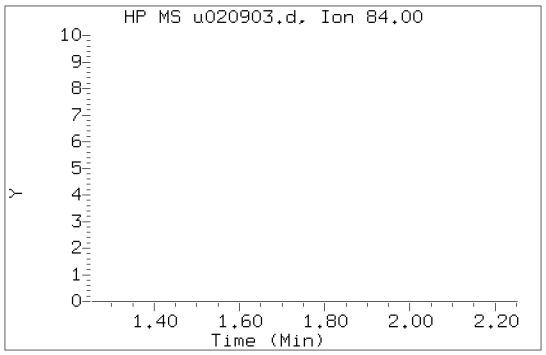

Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020903.d
Inj Date : 09-FEB-2024 09:44
InstruID : VOA9.i
LabSampID : VSTD00.5

2-Ethylhexyl Acrylate (103-11-7)

Reason Code:

BEFORE

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AREA
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HEIGHT
168
09-Feb-2024
11:53
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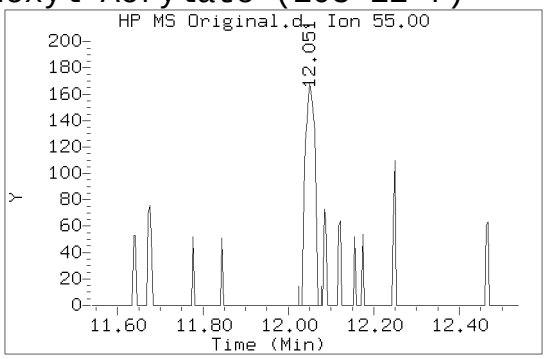

AFTER

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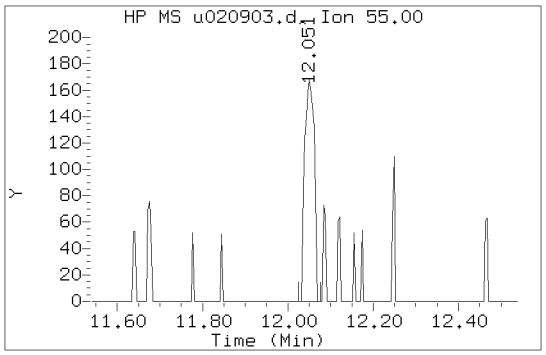

BEFORE

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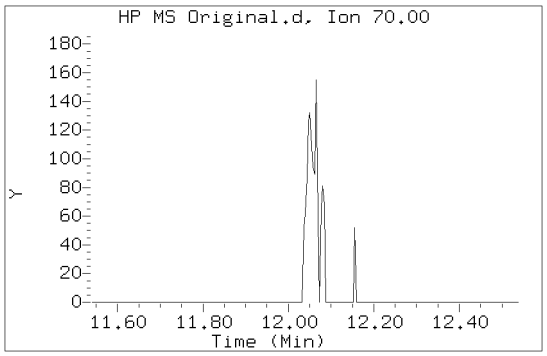

AFTER

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09-Feb-2024
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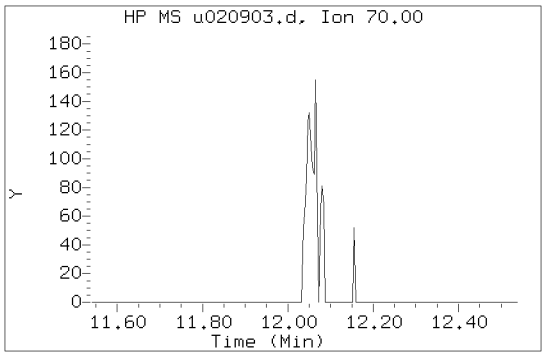


Data File: \\NAHSTWS005\Target\chem\voa9.i\U240209.b\U020904.D Page 1
Report Date: 15-Feb-2024 11:14

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240209.b\U020904.D
Lab Smp Id: VSTD001 Client Smp ID: VSTD001
Inj Date : 09-FEB-2024 10:06
Operator : FT Inst ID: VOA9.i
Smp Info : VSTD001;VSTD001;1;3;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240209.b\8260C.m
Meth Date : 15-Feb-2024 11:14 VOA9.i Quant Type: ISTD
Cal Date : 09-FEB-2024 09:44 Cal File: U020903.D
Als bottle: 4 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V9.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1	Pentafluorobenzene	168	4.815	4.815	(1.000)	172240	50.0000	
2	Dichlorodifluoromethane	85	1.160	1.160	(0.241)	1508	1.00000	1.45
3	Chloromethane	50	1.299	1.299	(0.270)	2409	1.00000	2.23
5	Vinyl Chloride	62	1.374	1.374	(0.285)	1927	1.00000	1.35
6	Bromomethane	94	1.621	1.621	(0.337)	2599	1.00000	3.15
7	Chloroethane	64	1.696	1.696	(0.352)	1401	1.00000	1.06
8	Trichlorofluoromethane	101	1.891	1.891	(0.393)	2869	1.00000	0.81
9	Acrolein	56	2.258	2.258	(0.469)	279	2.00000	1.99(M)
10	Acetone	43	2.408	2.408	(0.500)	2336	2.00000	0.30
11	1,1-Dichloroethene	96	2.333	2.333	(0.485)	1781	1.00000	1.41
15	Iodomethane	142	2.465	2.465	(0.512)	2369	2.00000	2.93(T)
16	Acrylonitrile	53	3.061	3.061	(0.636)	1158	2.00000	2.13
17	Methylene Chloride	84	2.791	2.791	(0.580)	3682	1.00000	1.02
18	Methyl tert-butyl ether	73	3.083	3.083	(0.640)	4946	1.00000	1.39
19	Carbon Disulfide	76	2.517	2.517	(0.523)	9692	2.00000	2.36
20	trans-1,2-Dichloroethene	96	3.057	3.057	(0.635)	2406	1.00000	1.53
21	Vinyl Acetate	43	3.612	3.612	(0.750)	8179	2.00000	2.41(M)
22	1,1-Dichloroethane	63	3.511	3.511	(0.729)	3356	1.00000	1.44(T)
24	2-Butanone	43	4.268	4.268	(0.886)	1178	2.00000	2.25(M)
26	2,2-Dichloropropane	77	4.189	4.189	(0.870)	2303	1.00000	1.12

27 cis-1,2-Dichloroethene	96	4.197	4.197 (0.872)	2498	1.00000	1.31
28 Chloroform	83	4.568	4.568 (0.949)	4001	1.00000	1.29

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240209.b\U020904.D Page 2
Report Date: 15-Feb-2024 11:14

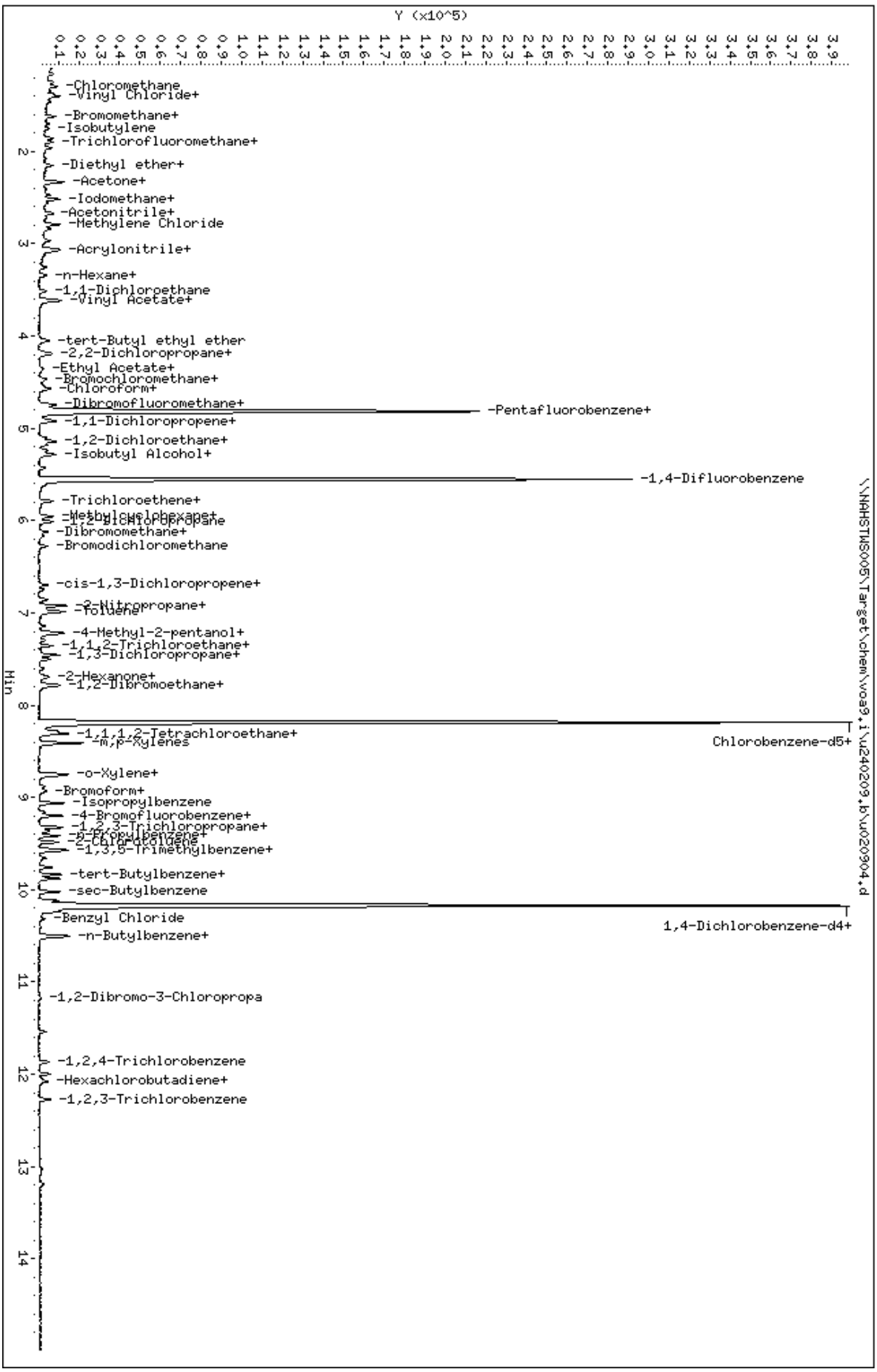
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	29 Bromochloromethane	128	4.466	4.466	(0.928)	1379	1.00000	0.42
$	30 Dibromofluoromethane	113	4.748	4.748	(0.986)	2659	1.00000	1.07
	31 1,1,1-Trichloroethane	97	4.740	4.740	(0.984)	3031	1.00000	1.22
	32 1,1-Dichloropropene	75	4.924	4.924	(0.887)	2580	1.00000	1.37
	33 1,2-Dichloroethane	62	5.179	5.179	(0.933)	2847	1.00000	0.69
	34 Carbon Tetrachloride	117	4.909	4.909	(0.884)	2615	1.00000	1.13
$	35 1,2-Dichloroethane-d4	65	5.100	5.100	(1.059)	2589	1.00000	0.72
*	36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	253625	50.0000	
	37 Benzene	78	5.141	5.141	(0.926)	8539	1.00000	1.49
	38 Trichloroethene	130	5.790	5.790	(1.043)	2818	1.00000	1.58
	39 Bromodichloromethane	83	6.277	6.277	(1.130)	2248	1.00000	1.04(M)
	42 1,2-Dichloropropane	63	6.007	6.007	(1.082)	2163	1.00000	1.37
	44 Dibromomethane	93	6.123	6.123	(1.103)	1357	1.00000	1.25
	45 4-Methyl-2-Pentanone	43	6.858	6.858	(0.838)	2874	2.00000	2.23
	46 cis-1,3-Dichloropropene	75	6.693	6.693	(1.205)	2214	1.00000	0.98
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	230361	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	9135	1.00000	1.40
	50 Toluene	91	6.982	6.982	(0.853)	7869	1.00000	1.10
	51 trans-1,3-Dichloropropene	75	7.199	7.199	(1.296)	1606	1.00000	2.42(M)
	52 2-Hexanone	43	7.600	7.600	(0.929)	2163	2.00000	4.88
	53 1,1,2-Trichloroethane	83	7.357	7.357	(0.899)	1420	1.00000	0.98
	54 1,3-Dichloropropane	76	7.503	7.503	(0.917)	3251	1.00000	1.12
	55 Dibromochloromethane	129	7.690	7.690	(0.940)	1849	1.00000	1.01
	56 Tetrachloroethene	164	7.458	7.458	(0.911)	2061	1.00000	1.26
	57 1,2-Dibromoethane	107	7.788	7.788	(0.951)	1682	1.00000	1.05
	58 1-Chlorohexane	55	8.189	8.189	(1.474)	2981	1.00000	1.86
	59 Chlorobenzene	112	8.208	8.208	(1.003)	6126	1.00000	1.09
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	2123	1.00000	1.15
	61 Ethylbenzene	106	8.309	8.309	(1.015)	2844	1.00000	1.17
	62 m,p-Xylenes	106	8.410	8.410	(1.027)	6389	2.00000	2.14
	63 o-Xylene	106	8.747	8.747	(1.069)	3036	1.00000	1.04
	64 Styrene	104	8.766	8.766	(1.071)	4483	1.00000	0.93
	66 Bromoform	173	8.920	8.920	(1.090)	1336	1.00000	1.01(T)
	67 Isopropylbenzene	105	9.062	9.062	(1.107)	8437	1.00000	1.13
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	2264	1.00000	1.07(M)
$	69 4-Bromofluorobenzene	95	9.197	9.197	(1.124)	3587	1.00000	1.26
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	119195	50.0000	
	71 1,2,3-Trichloropropane	75	9.359	9.359	(0.920)	2523	1.00000	1.31
	73 n-Propylbenzene	91	9.415	9.415	(0.926)	7765	1.00000	1.05
	74 Bromobenzene	156	9.321	9.321	(0.916)	2658	1.00000	1.18
	75 1,3,5-Trimethylbenzene	105	9.565	9.565	(0.940)	5511	1.00000	0.99
	76 2-Chlorotoluene	91	9.486	9.486	(0.933)	5660	1.00000	1.15
	77 4-Chlorotoluene	91	9.576	9.576	(0.941)	6381	1.00000	1.14
	78 tert-Butylbenzene	119	9.838	9.838	(0.967)	5614	1.00000	1.11
	79 1,2,4-Trimethylbenzene	105	9.880	9.880	(0.971)	5642	1.00000	1.03
	81 sec-Butylbenzene	105	10.022	10.022	(0.985)	7119	1.00000	1.10
	82 p-Isopropyltoluene	119	10.146	10.146	(0.997)	5835	1.00000	1.01
	83 1,3-Dichlorobenzene	146	10.119	10.119	(0.995)	4590	1.00000	1.14
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	5524	1.00000	1.05
	87 n-Butylbenzene	91	10.494	10.494	(1.032)	4694	1.00000	1.03
	88 1,2-Dichlorobenzene	146	10.509	10.509	(1.033)	4790	1.00000	1.06
	89 1,2-Dibromo-3-Chloropropane	155	11.173	11.173	(1.098)	191	1.00000	3.41(M)

90 1,2,4-Trichlorobenzene	180	11.866	11.866 (1.167)	2615	1.00000	1.10
91 Hexachlorobutadiene	225	12.001	12.001 (1.180)	1570	1.00000	1.55

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	92 Naphthalene	128	12.076	12.076	(1.187)	4198	1.00000	1.99
	93 1,2,3-Trichlorobenzene	180	12.271	12.271	(1.206)	2638	1.00000	1.17
M	94 1,2-Dichloroethylene (total)	96				4904	2.00000	
M	95 Xylenes (total)	106				9425	3.00000	
	135 1,4-Dioxane	88	6.176	6.176	(1.283)	478	20.0000	34.72(M)
	141 Cyclohexane	56	4.808	4.808	(0.998)	4524	1.00000	2.10
	138 Freon TF	101	2.333	2.333	(0.485)	1903	1.00000	1.34
	140 1,3-Butadiene	54	1.400	1.400	(0.291)	1880	1.00000	1.58
	147 Methylcyclohexane	55	5.955	5.955	(1.072)	3024	1.00000	0.98
	146 Methyl Acetate	43	2.708	2.708	(0.563)	2321	1.00000	1.86(M)
	148 Tert-Butyl alcohol	59	2.971	2.971	(0.617)	3825	20.0000	26.10(a)
	149 Isopropyl Alcohol	45	2.562	2.562	(0.532)	2389	20.0000	32.40(T)

QC Flag Legend

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



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Client ID: VSTD001
Sample Info: VSTD001;VSTD001;1;3;
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9.i
Operator: FT
Column diameter: 0.18

Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020904.d
Inj Date : 09-FEB-2024 10:06
InstruID : VOA9.i
LabSampID : VSTD001

2-Butanone (78-93-3)

Reason Code:

BEFORE

MASS
43
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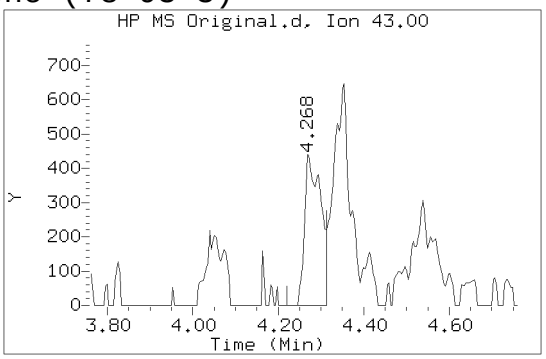
1178
HEIGHT
439
09-Feb-2024
11:46
firat
tastan



AFTER

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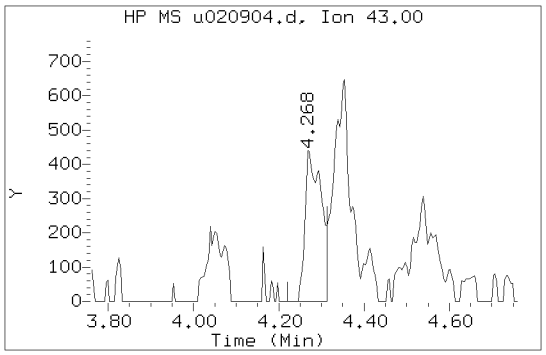

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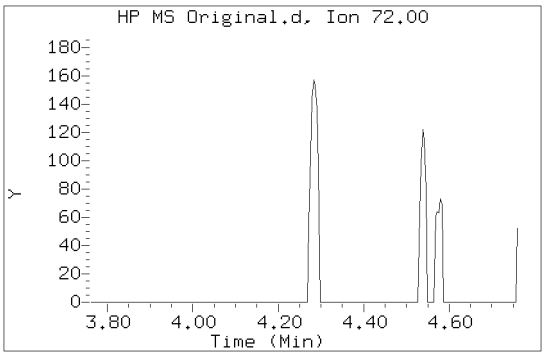

AFTER

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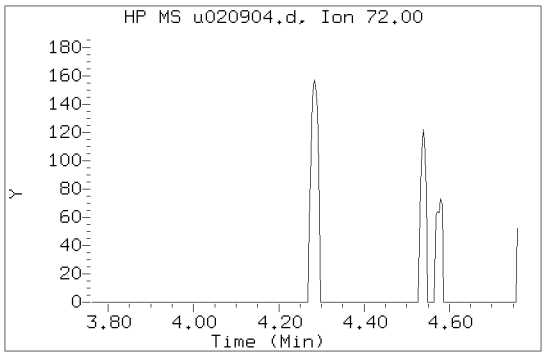

Bromodichloromethane (75-27-4)

Reason Code:

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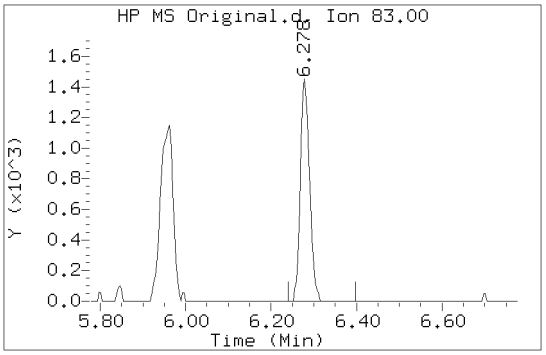

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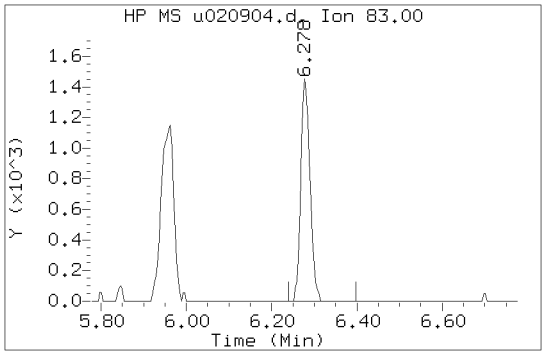

BEFORE

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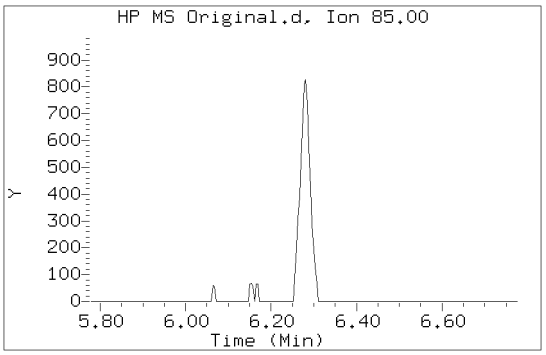

AFTER

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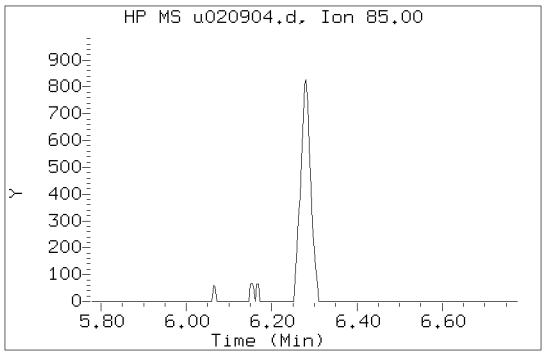

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Inj Date : 09-FEB-2024 10:06
InstruID : VOA9.i
LabSampID : VSTD001

Bromodichloromethane (75-27-4)

Reason Code:

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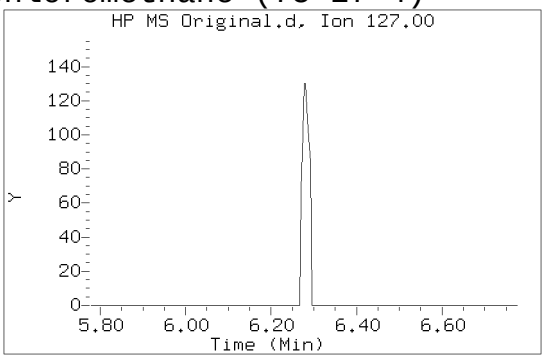

AFTER

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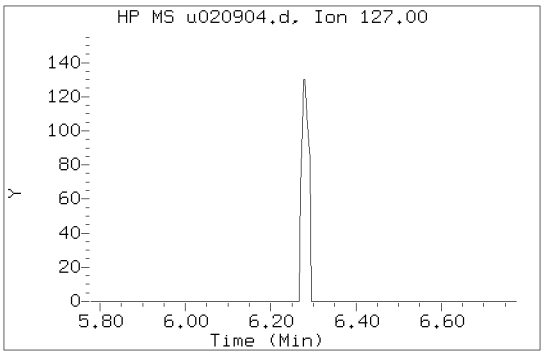

trans-1,3-Dichloropropene (10061-02-6)

Reason Code:

BEFORE

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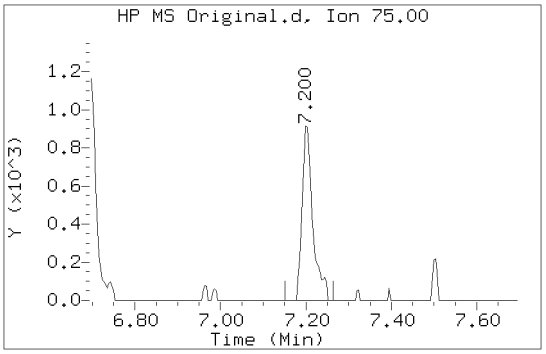

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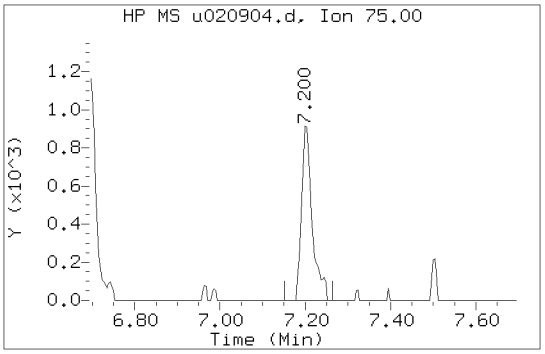

BEFORE

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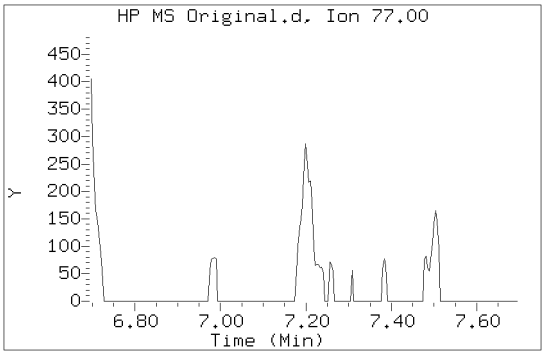

AFTER

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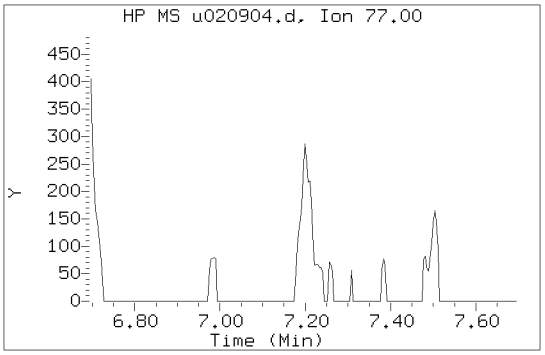

BEFORE

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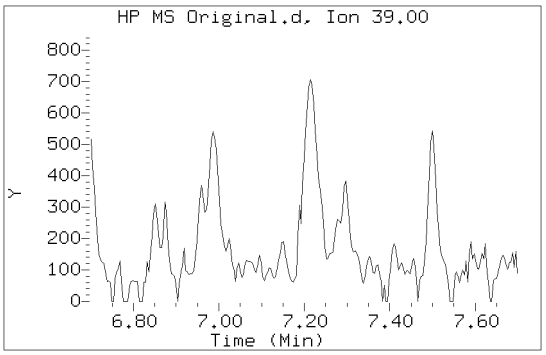

AFTER

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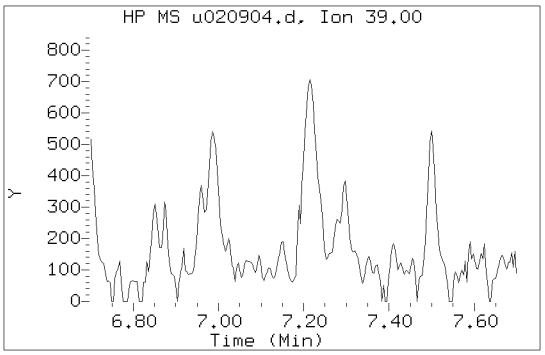

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Inj Date : 09-FEB-2024 10:06
InstruID : VOA9.i
LabSampID : VSTD001

Vinyl Acetate (108-05-4)

Reason Code:

BEFORE

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8179
HEIGHT
3066
09-Feb-2024
11:46
firat
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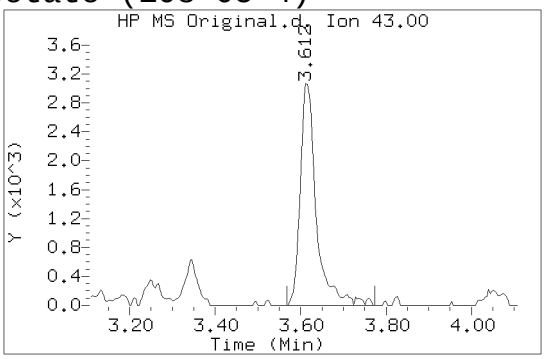

AFTER

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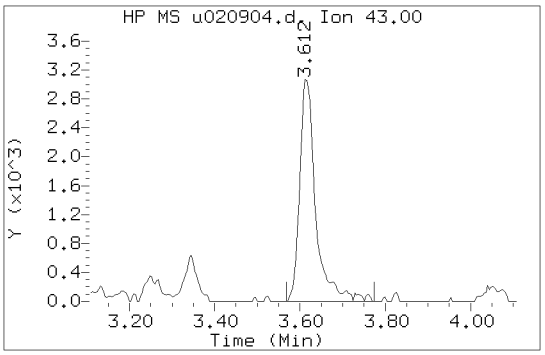

BEFORE

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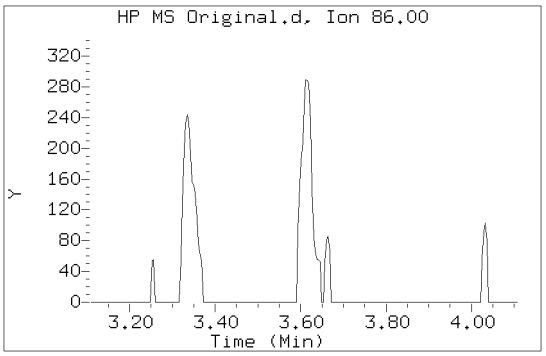

AFTER

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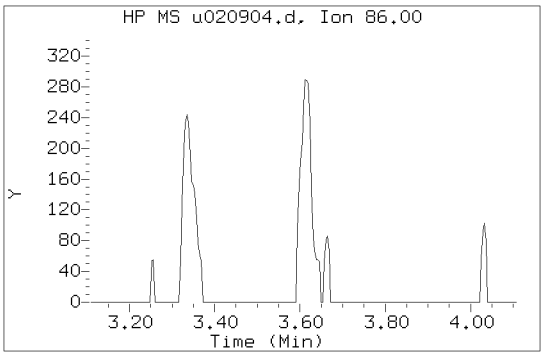

Acrolein (107-02-8)

Reason Code:

BEFORE

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AREA
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HEIGHT
193
09-Feb-2024
11:46
firat
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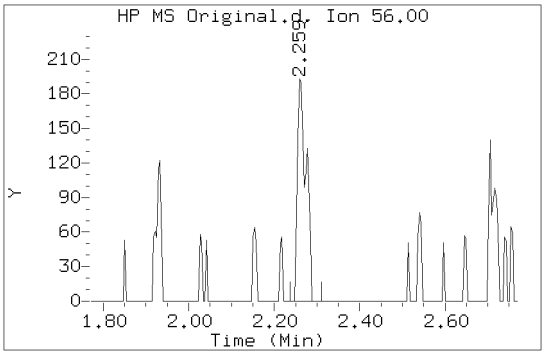

AFTER

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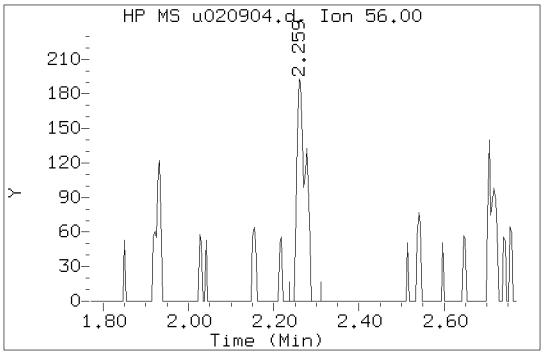

BEFORE

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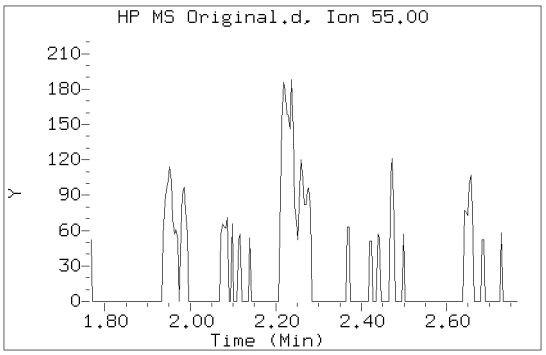

AFTER

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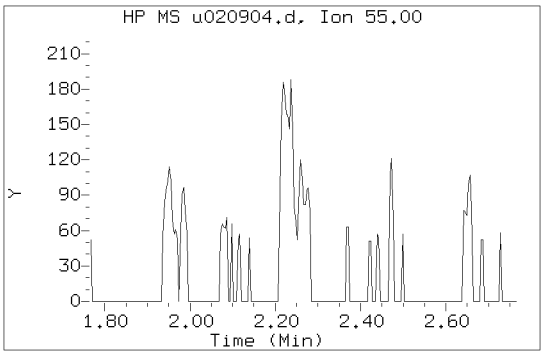

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Inj Date : 09-FEB-2024 10:06
InstruID : VOA9.i
LabSampID : VSTD001

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

Reason Code:

BEFORE
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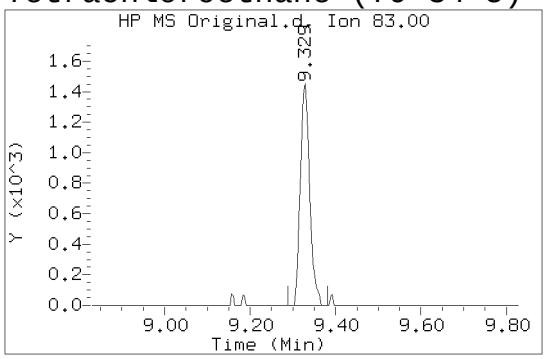

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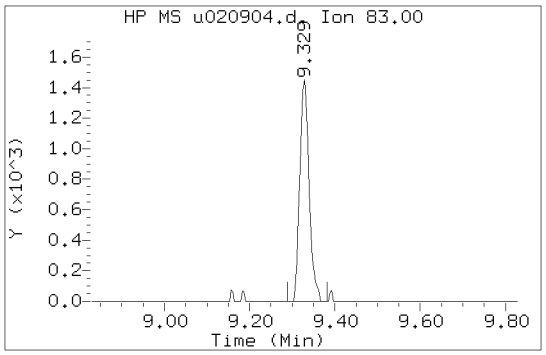

BEFORE
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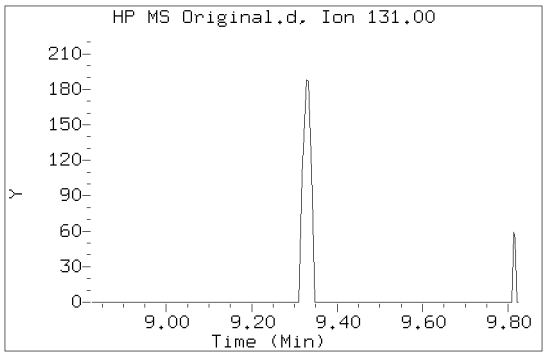
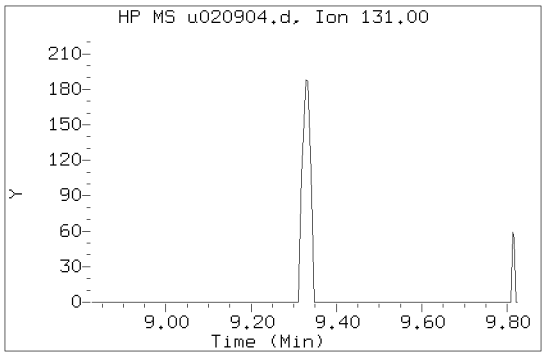
firat
tastan



AFTER
MASS
131
AREA
0
HEIGHT
0
09-Feb-2024
11:46
firat
tastan



BEFORE
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AREA
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HEIGHT
0
09-Feb-2024
11:46
firat
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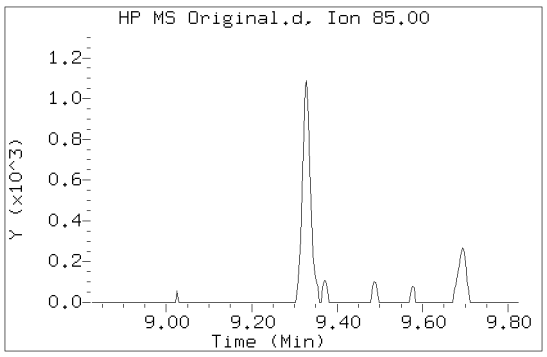

AFTER
MASS
85
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HEIGHT
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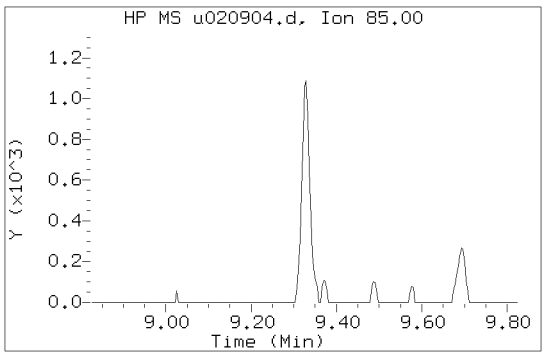
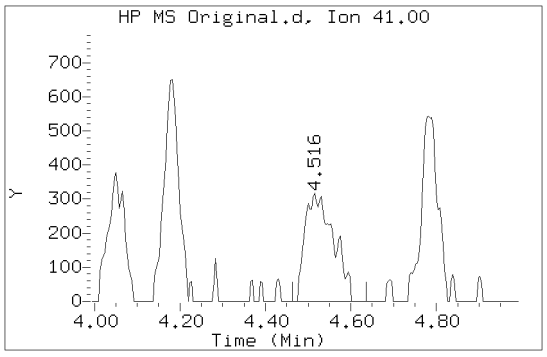
09-Feb-2024
11:46
firat
tastan



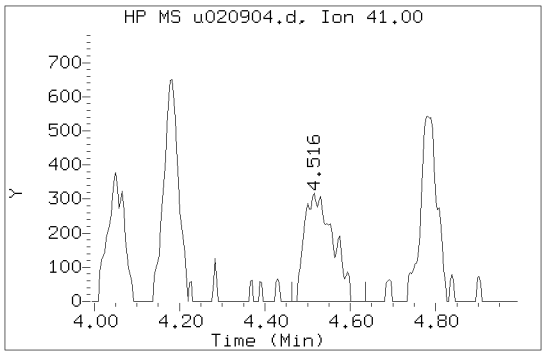
Methacrylonitrile (126-98-7)

Reason Code:

BEFORE
MASS
41
AREA
1481
HEIGHT
317
09-Feb-2024
11:46
firat
tastan



AFTER
MASS
41
AREA
1481
HEIGHT
317
09-Feb-2024
11:46
firat
tastan



Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020904.d
Inj Date : 09-FEB-2024 10:06
InstruID : VOA9.i
LabSampID : VSTD001

Methacrylonitrile (126-98-7)

Reason Code:

BEFORE

MASS
67
AREA
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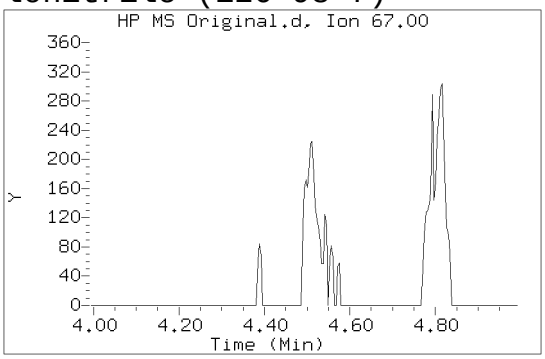
HEIGHT
0
09-Feb-2024
11:46
firat
tastan



AFTER

MASS
67
AREA
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HEIGHT
0
09-Feb-2024
11:46
firat
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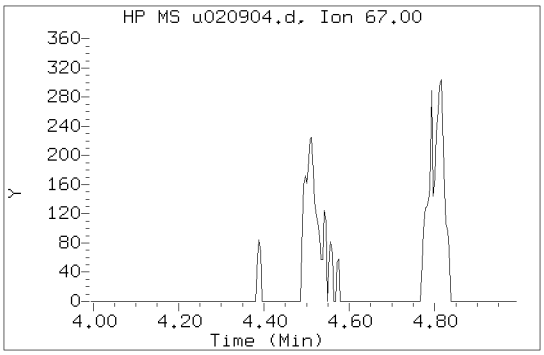

BEFORE

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39
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09-Feb-2024
11:46
firat
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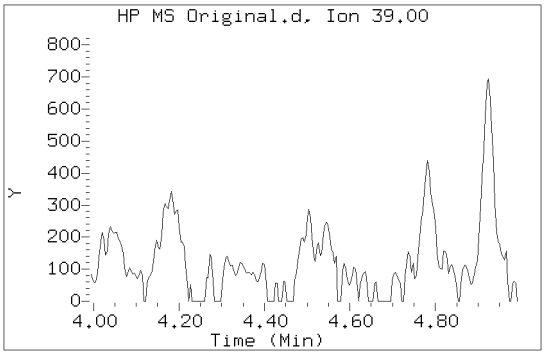
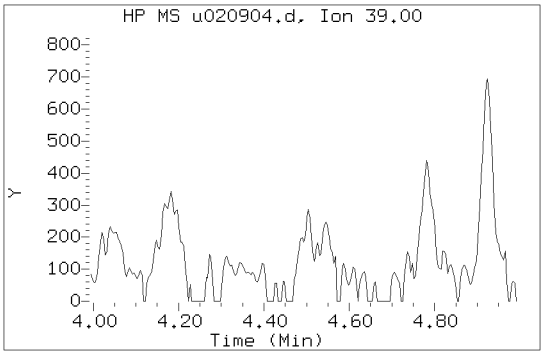


AFTER

MASS
39
AREA
0
HEIGHT
0
09-Feb-2024
11:46
firat
tastan

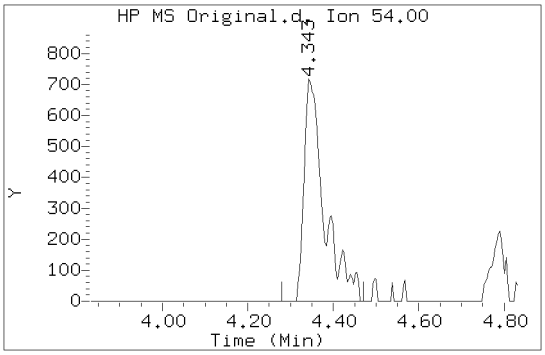


Propionitrile (107-12-0)

Reason Code:

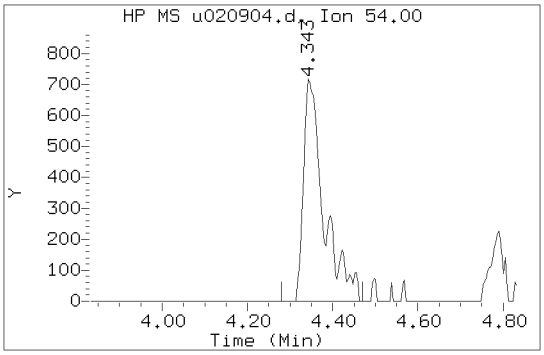
BEFORE

MASS
54
AREA
2374
HEIGHT
718
09-Feb-2024
11:46
firat
tastan



AFTER

MASS
54
AREA
2374
HEIGHT
718
09-Feb-2024
11:46
firat
tastan



BEFORE

MASS
52
AREA
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HEIGHT
0
09-Feb-2024
11:46
firat
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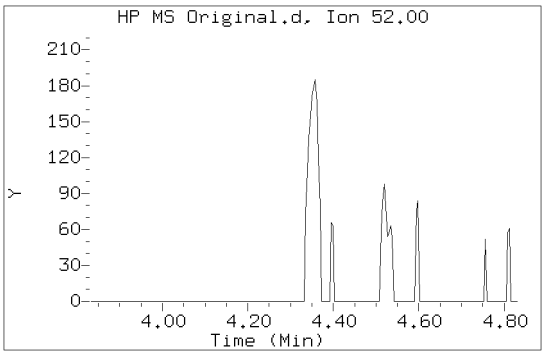

AFTER

MASS
52
AREA
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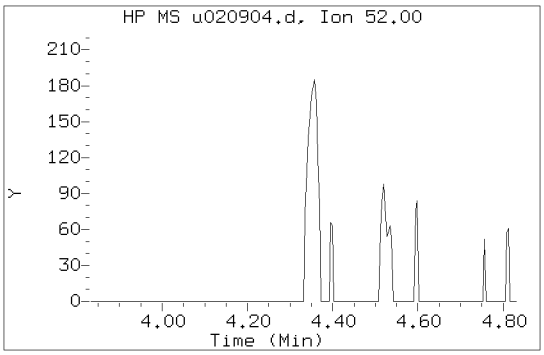
HEIGHT
0
09-Feb-2024
11:46
firat
tastan



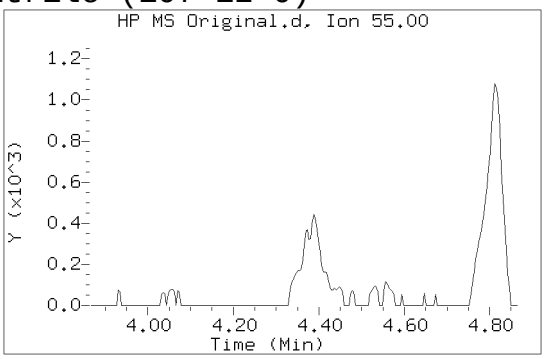
Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020904.d
Inj Date : 09-FEB-2024 10:06
InstruID : VOA9.i
LabSampID : VSTD001

Propionitrile (107-12-0)

Reason Code:

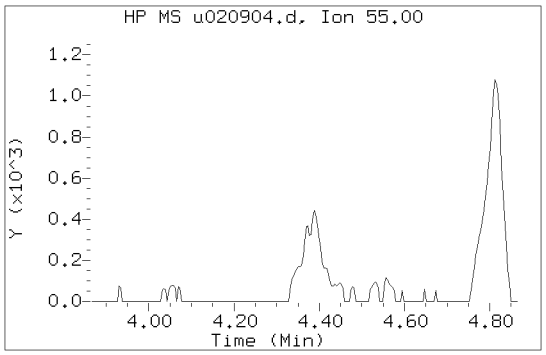
BEFORE

MASS
55
AREA
0
HEIGHT
0
09-Feb-2024
11:46
firat
tastan



AFTER

MASS
55
AREA
0
HEIGHT
0
09-Feb-2024
11:46
firat
tastan

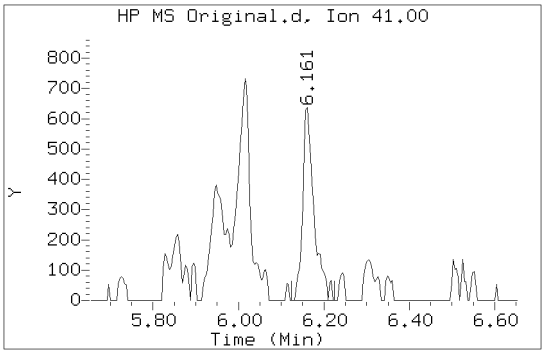


Methyl Methacrylate (80-62-6)

Reason Code:

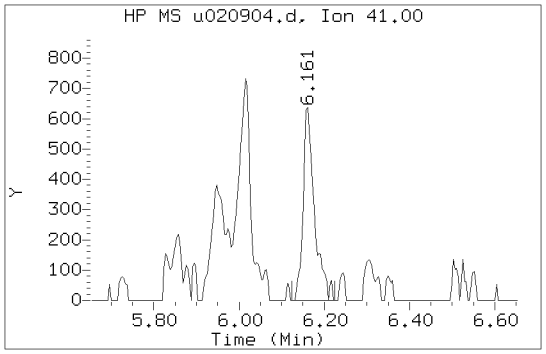
BEFORE

MASS
41
AREA
1208
HEIGHT
638
09-Feb-2024
11:46
firat
tastan



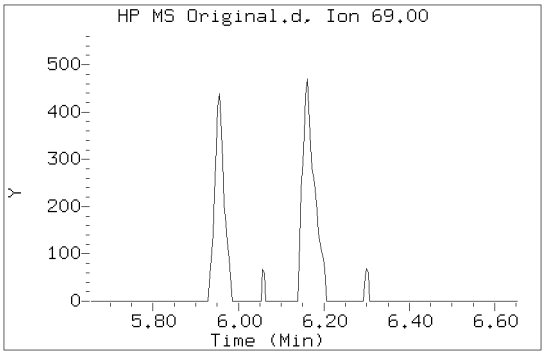
AFTER

MASS
41
AREA
1208
HEIGHT
638
09-Feb-2024
11:46
firat
tastan



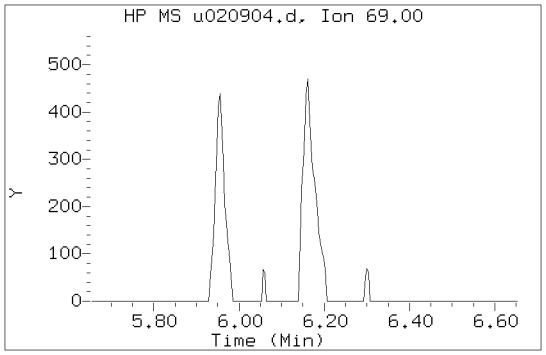
BEFORE

MASS
69
AREA
0
HEIGHT
0
09-Feb-2024
11:46
firat
tastan



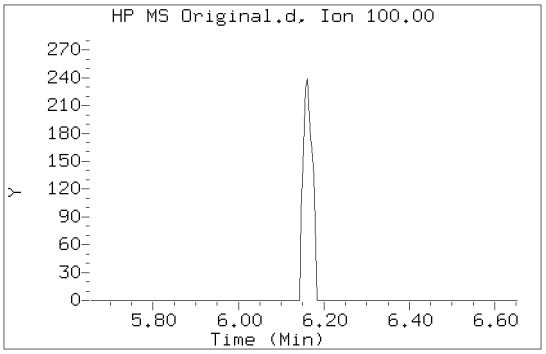
AFTER

MASS
69
AREA
0
HEIGHT
0
09-Feb-2024
11:46
firat
tastan



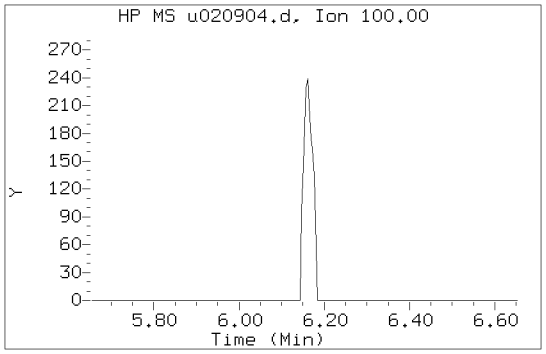
BEFORE

MASS
100
AREA
0
HEIGHT
0
09-Feb-2024
11:46
firat
tastan



AFTER

MASS
100
AREA
0
HEIGHT
0
09-Feb-2024
11:46
firat
tastan

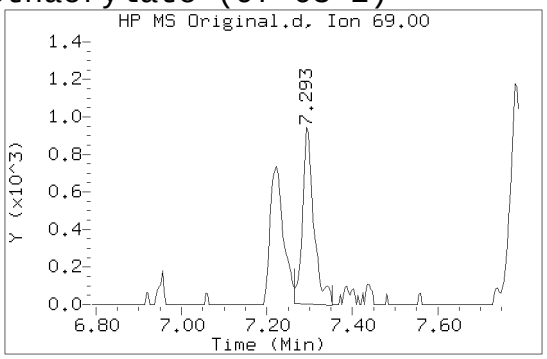


Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020904.d
Inj Date : 09-FEB-2024 10:06
InstruID : VOA9.i
LabSampID : VSTD001

Ethyl Methacrylate (97-63-2)

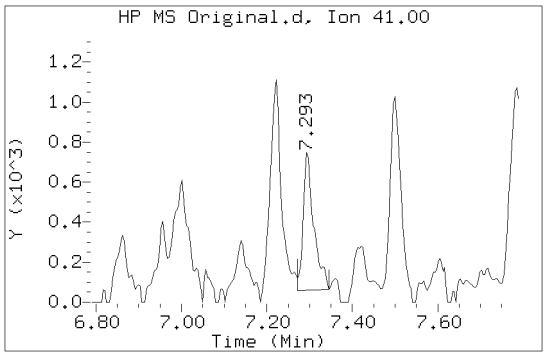
BEFORE

MASS
69
AREA
1757
HEIGHT
943
09-Feb-2024
11:46
firat
tastan



BEFORE

MASS
41
AREA
1204
HEIGHT
691
09-Feb-2024
11:46
firat
tastan



Reason Code:

AFTER

MASS
69
AREA
1757
HEIGHT
943
09-Feb-2024
11:46
firat
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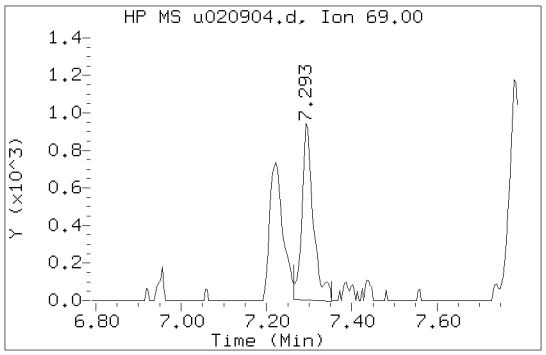
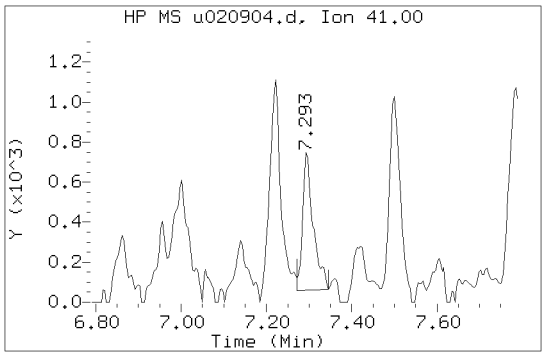


AFTER

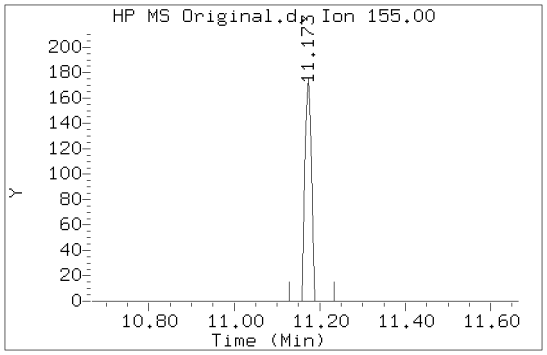
MASS
41
AREA
1204
HEIGHT
691
09-Feb-2024
11:46
firat
tastan



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

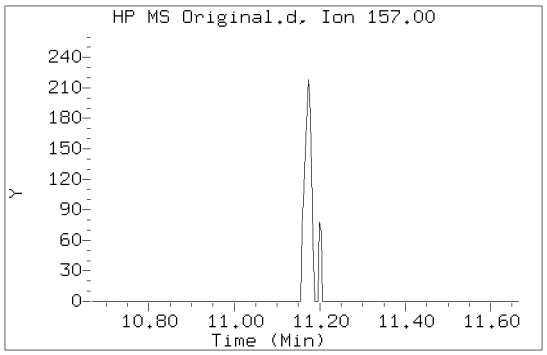
BEFORE

MASS
155
AREA
191
HEIGHT
175
09-Feb-2024
11:46
firat
tastan



BEFORE

MASS
157
AREA
0
HEIGHT
0
09-Feb-2024
11:46
firat
tastan



Reason Code:

AFTER

MASS
155
AREA
191
HEIGHT
175
09-Feb-2024
11:46
firat
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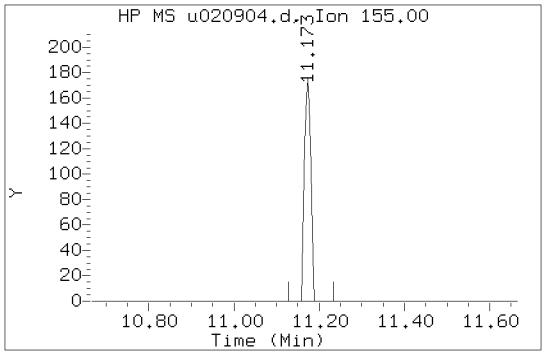
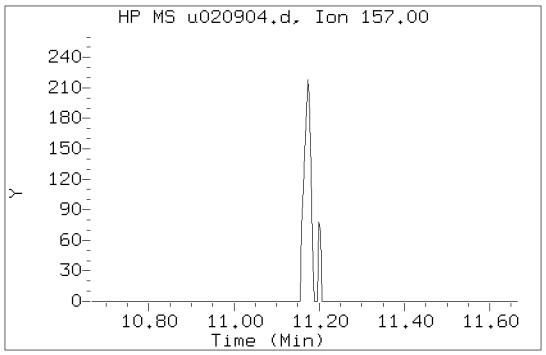


AFTER

MASS
157
AREA
0
HEIGHT
0
09-Feb-2024
11:46
firat
tastan



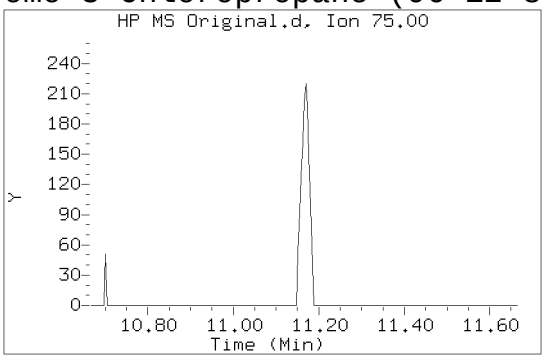
Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020904.d
Inj Date : 09-FEB-2024 10:06
InstruID : VOA9.i
LabSampID : VSTD001

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

Reason Code:

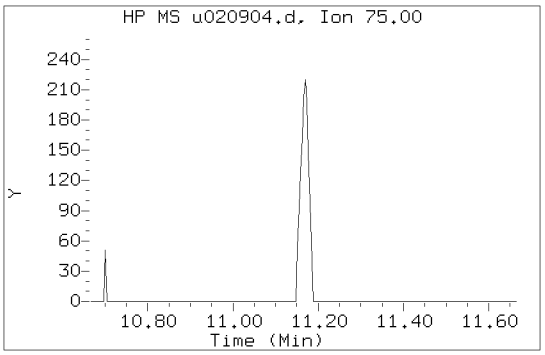
BEFORE

MASS
75
AREA
0
HEIGHT
0
09-Feb-2024
11:46
firat
tastan



AFTER

MASS
75
AREA
0
HEIGHT
0
09-Feb-2024
11:46
firat
tastan

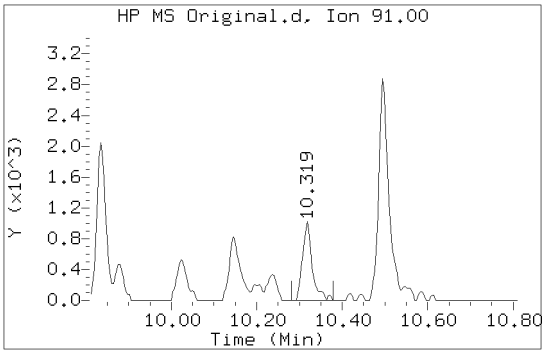


Benzyl Chloride (100-44-7)

Reason Code:

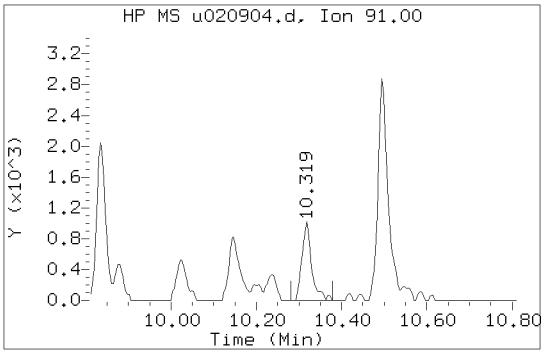
BEFORE

MASS
91
AREA
1659
HEIGHT
1025
09-Feb-2024
11:46
firat
tastan



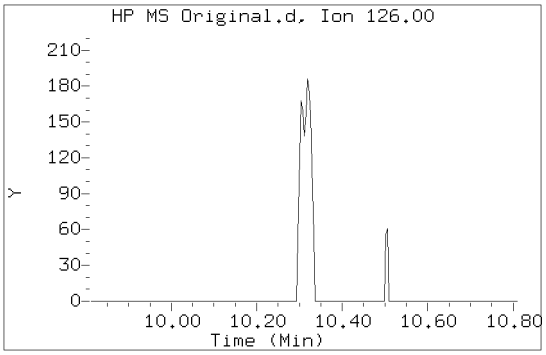
AFTER

MASS
91
AREA
1659
HEIGHT
1025
09-Feb-2024
11:46
firat
tastan



BEFORE

MASS
126
AREA
0
HEIGHT
0
09-Feb-2024
11:46
firat
tastan



AFTER

MASS
126
AREA
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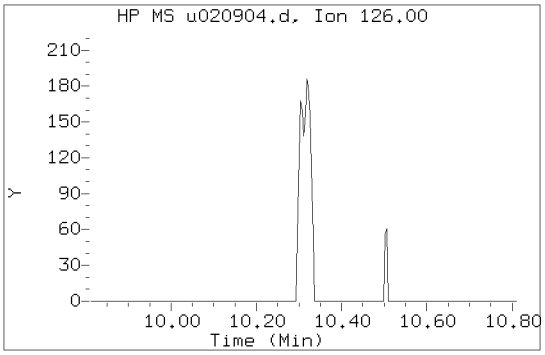
HEIGHT
0
09-Feb-2024
11:46
firat
tastan



BEFORE

MASS
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AREA
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HEIGHT
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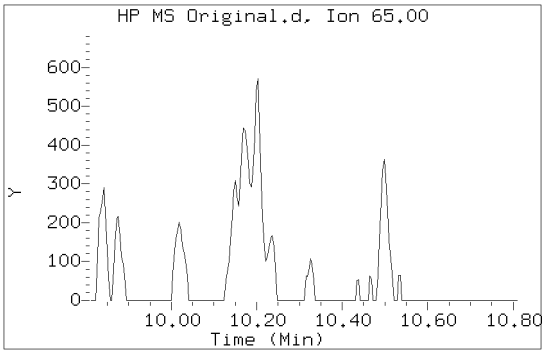
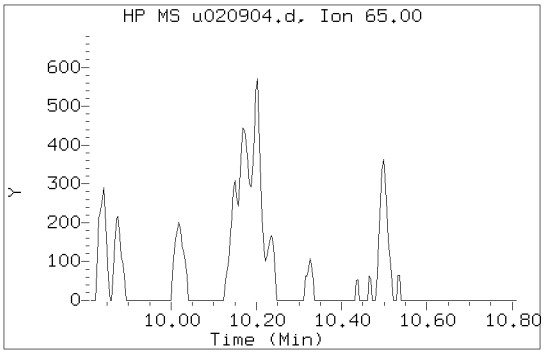
09-Feb-2024
11:46
firat
tastan



AFTER

MASS
65
AREA
0
HEIGHT
0
09-Feb-2024
11:46
firat
tastan



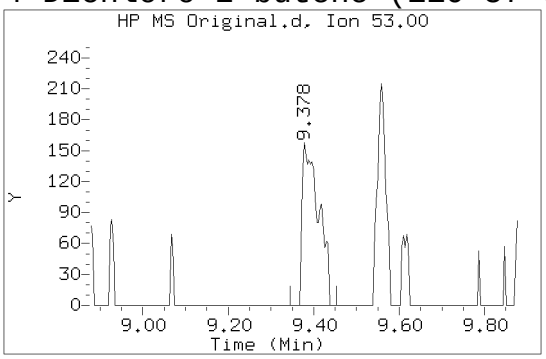
Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020904.d
Inj Date : 09-FEB-2024 10:06
InstruID : VOA9.i
LabSampID : VSTD001

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

Reason Code:

BEFORE

MASS
53
AREA
421
HEIGHT
158
09-Feb-2024
11:46
firat
tastan



AFTER

MASS
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AREA
421
HEIGHT
158
09-Feb-2024
11:46
firat
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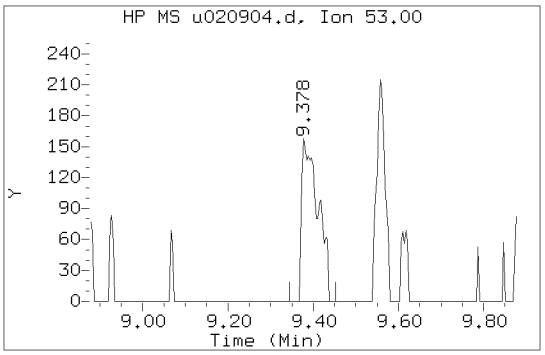
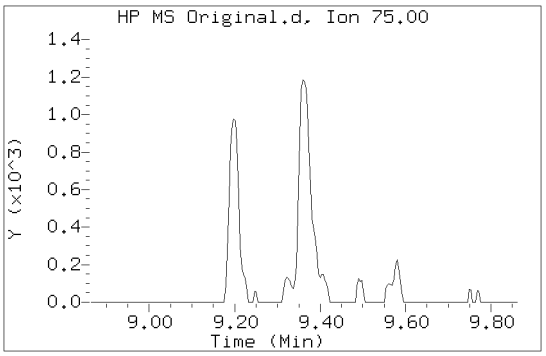


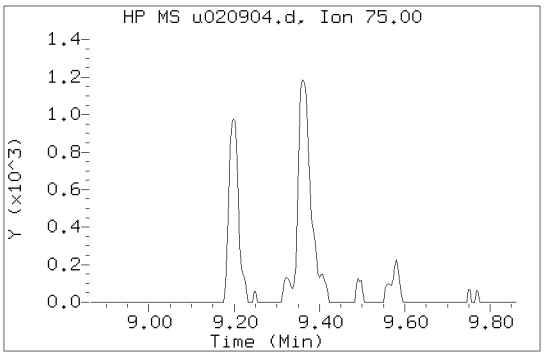
BEFORE

MASS
75
AREA
0
HEIGHT
0
09-Feb-2024
11:46
firat
tastan



AFTER

MASS
75
AREA
0
HEIGHT
0
09-Feb-2024
11:46
firat
tastan

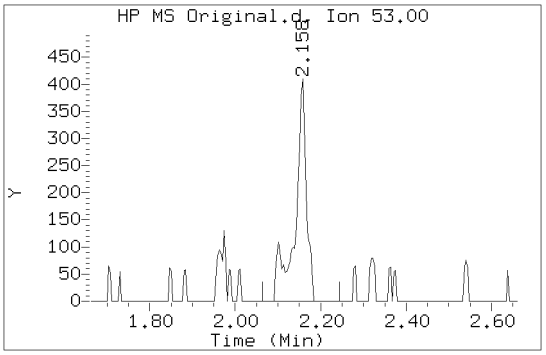


Chloroprene (126-99-8)

Reason Code:

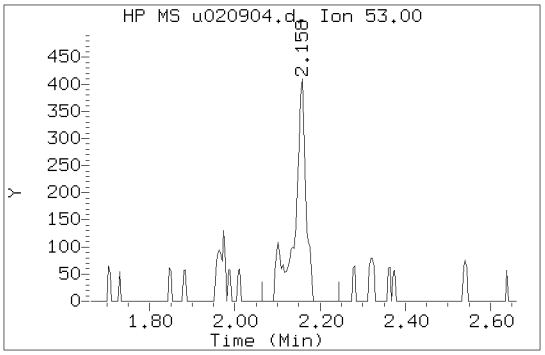
BEFORE

MASS
53
AREA
752
HEIGHT
410
09-Feb-2024
11:46
firat
tastan



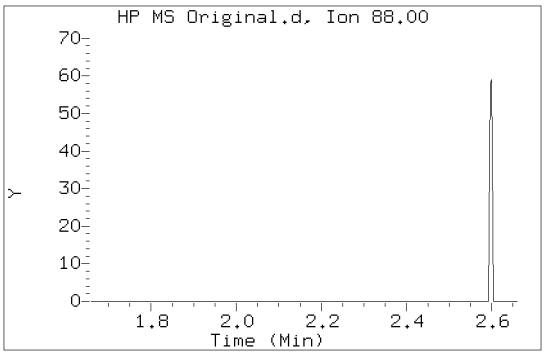
AFTER

MASS
53
AREA
752
HEIGHT
410
09-Feb-2024
11:46
firat
tastan



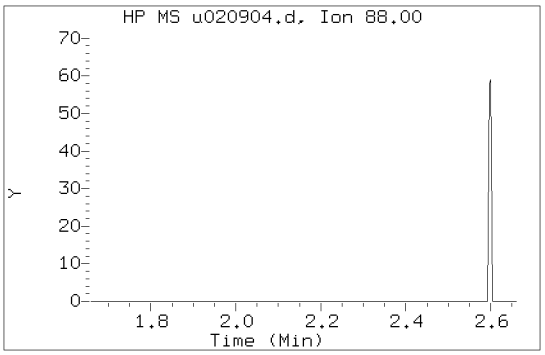
BEFORE

MASS
88
AREA
0
HEIGHT
0
09-Feb-2024
11:46
firat
tastan



AFTER

MASS
88
AREA
0
HEIGHT
0
09-Feb-2024
11:46
firat
tastan



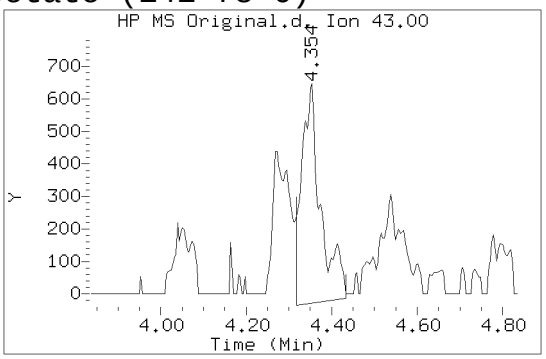
Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020904.d
Inj Date : 09-FEB-2024 10:06
InstruID : VOA9.i
LabSampID : VSTD001

Ethyl Acetate (141-78-6)

Reason Code:

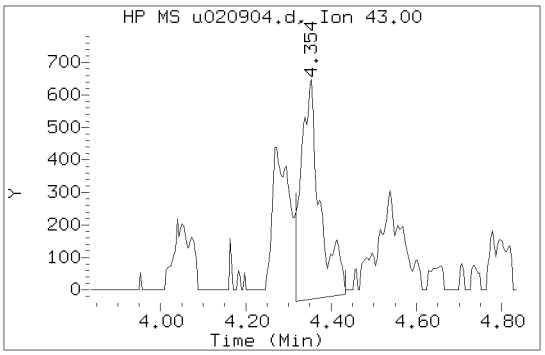
BEFORE

MASS
43
AREA
2103
HEIGHT
675
09-Feb-2024
11:46
firat
tastan



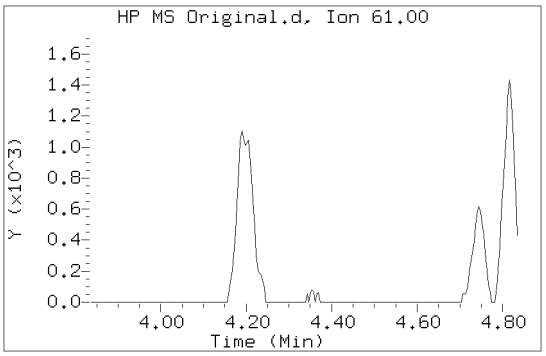
AFTER

MASS
43
AREA
2103
HEIGHT
675
09-Feb-2024
11:46
firat
tastan



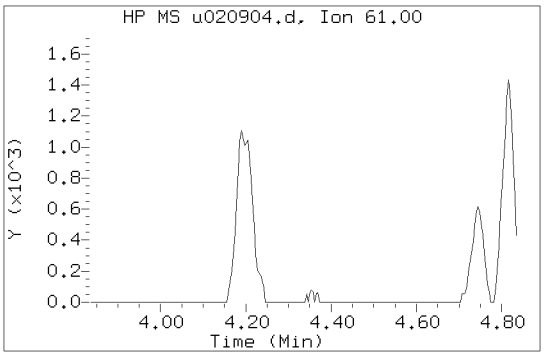
BEFORE

MASS
61
AREA
0
HEIGHT
0
09-Feb-2024
11:46
firat
tastan



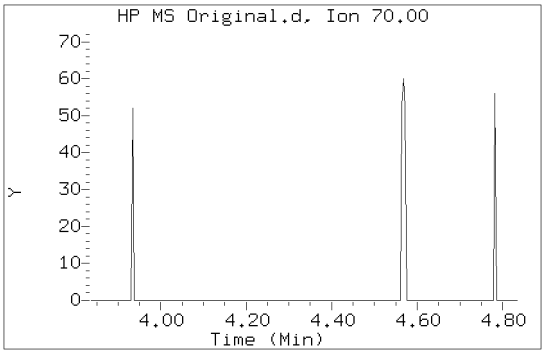
AFTER

MASS
61
AREA
0
HEIGHT
0
09-Feb-2024
11:46
firat
tastan



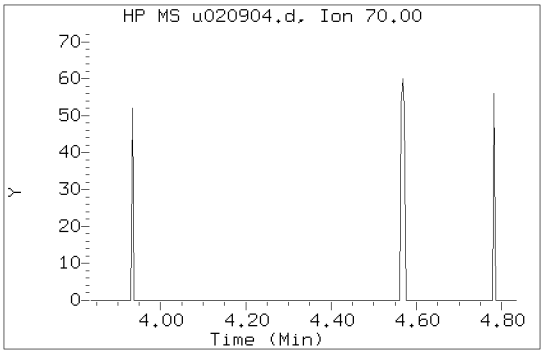
BEFORE

MASS
70
AREA
0
HEIGHT
0
09-Feb-2024
11:46
firat
tastan



AFTER

MASS
70
AREA
0
HEIGHT
0
09-Feb-2024
11:46
firat
tastan

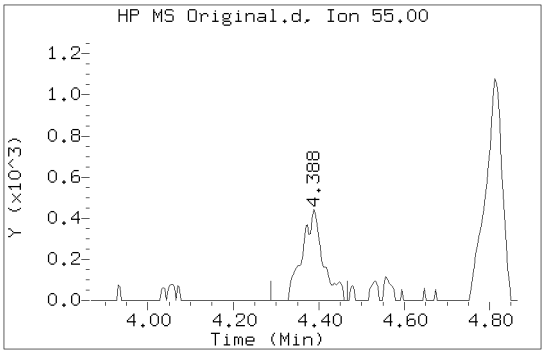


Methyl Acrylate (96-33-3)

Reason Code:

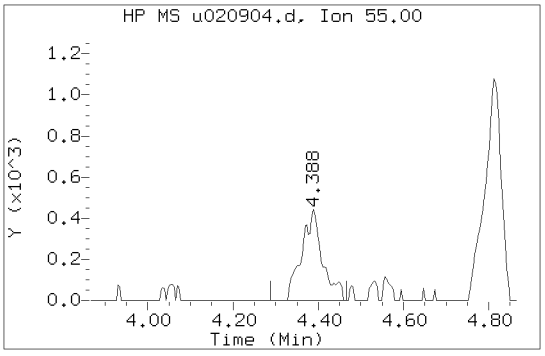
BEFORE

MASS
55
AREA
1518
HEIGHT
442
09-Feb-2024
11:46
firat
tastan



AFTER

MASS
55
AREA
1518
HEIGHT
442
09-Feb-2024
11:46
firat
tastan



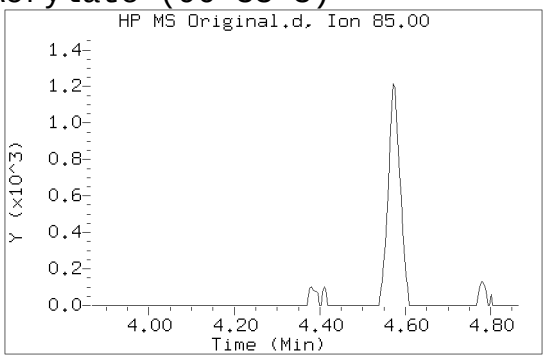
Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020904.d
Inj Date : 09-FEB-2024 10:06
InstruID : VOA9.i
LabSampID : VSTD001

Methyl Acrylate (96-33-3)

Reason Code:

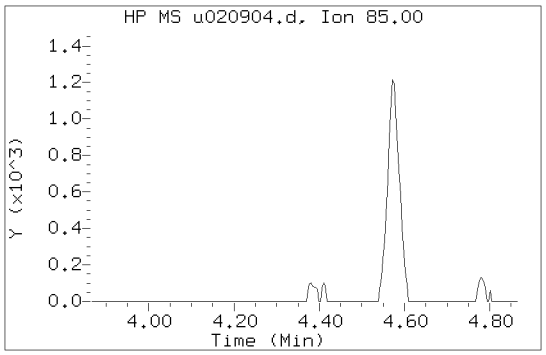
BEFORE

MASS
85
AREA
0
HEIGHT
0
09-Feb-2024
11:46
firat
tastan



AFTER

MASS
85
AREA
0
HEIGHT
0
09-Feb-2024
11:46
firat
tastan

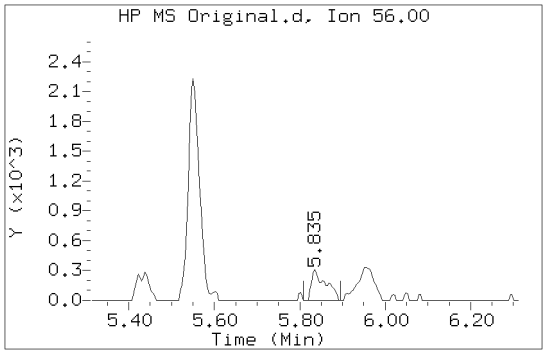


n-Butanol (71-36-3)

Reason Code:

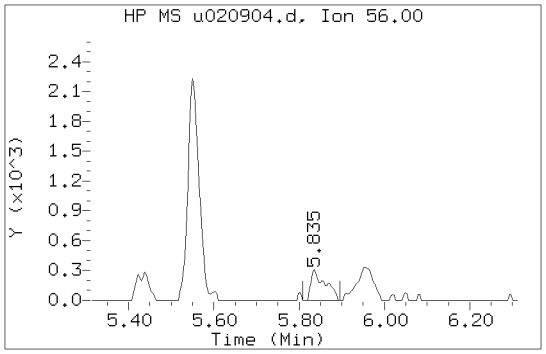
BEFORE

MASS
56
AREA
707
HEIGHT
307
09-Feb-2024
11:46
firat
tastan



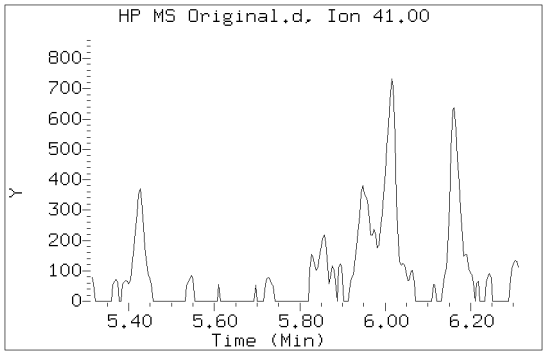
AFTER

MASS
56
AREA
707
HEIGHT
307
09-Feb-2024
11:46
firat
tastan



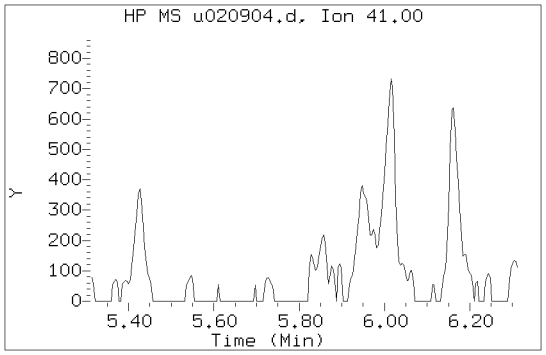
BEFORE

MASS
41
AREA
0
HEIGHT
0
09-Feb-2024
11:46
firat
tastan



AFTER

MASS
41
AREA
0
HEIGHT
0
09-Feb-2024
11:46
firat
tastan

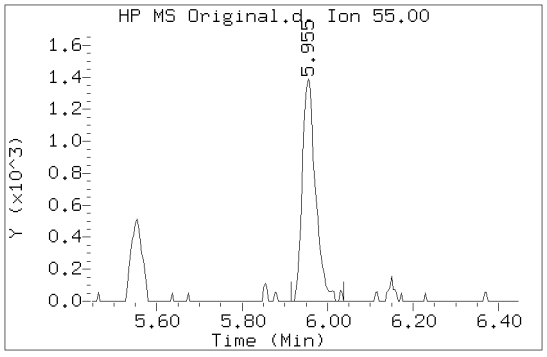


Ethyl Acrylate (140-88-5)

Reason Code:

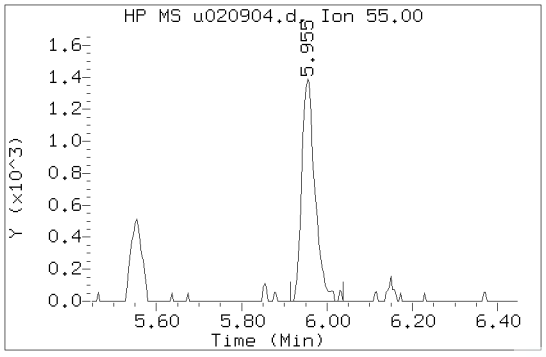
BEFORE

MASS
55
AREA
3052
HEIGHT
1390
09-Feb-2024
11:46
firat
tastan



AFTER

MASS
55
AREA
3052
HEIGHT
1390
09-Feb-2024
11:46
firat
tastan



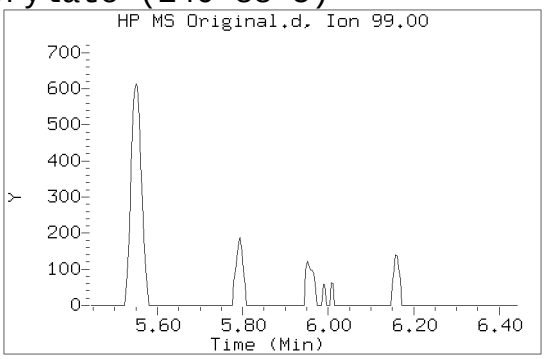
Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020904.d
Inj Date : 09-FEB-2024 10:06
InstruID : VOA9.i
LabSampID : VSTD001

Ethyl Acrylate (140-88-5)

Reason Code:

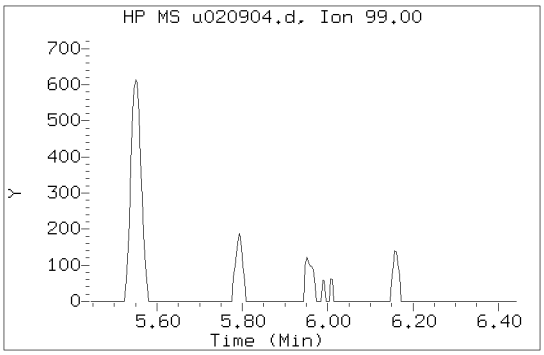
BEFORE

MASS
99
AREA
0
HEIGHT
0
09-Feb-2024
11:46
firat
tastan



AFTER

MASS
99
AREA
0
HEIGHT
0
09-Feb-2024
11:46
firat
tastan

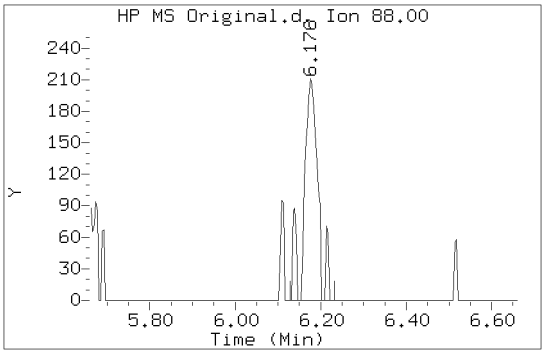


1,4-Dioxane ()

Reason Code:

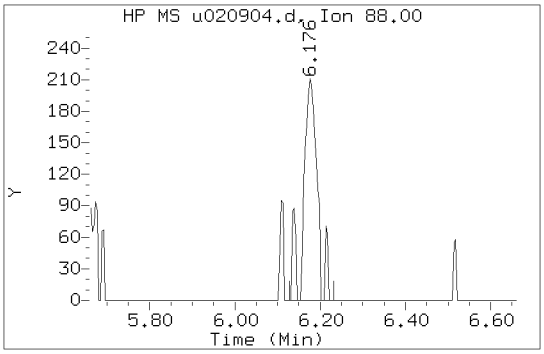
BEFORE

MASS
88
AREA
478
HEIGHT
211
09-Feb-2024
11:46
firat
tastan



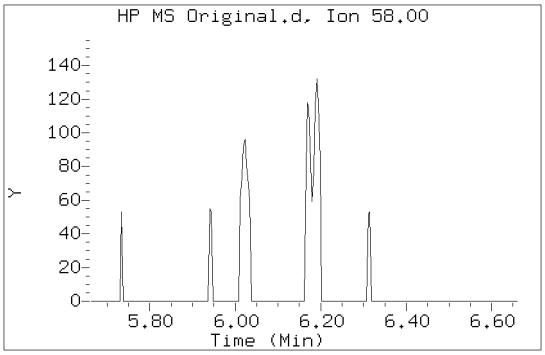
AFTER

MASS
88
AREA
478
HEIGHT
211
09-Feb-2024
11:46
firat
tastan



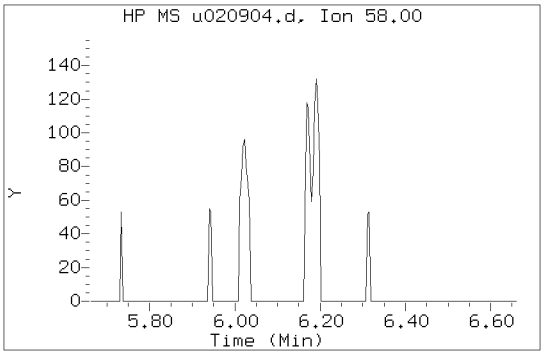
BEFORE

MASS
58
AREA
0
HEIGHT
0
09-Feb-2024
11:46
firat
tastan



AFTER

MASS
58
AREA
0
HEIGHT
0
09-Feb-2024
11:46
firat
tastan

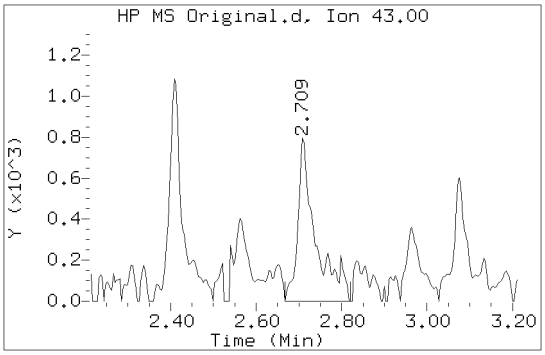


Methyl acetate (79-20-9)

Reason Code:

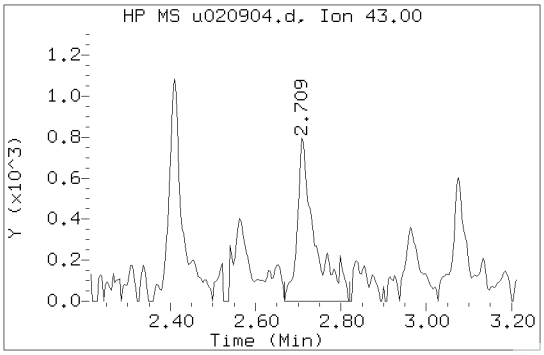
BEFORE

MASS
43
AREA
2321
HEIGHT
795
09-Feb-2024
11:46
firat
tastan



AFTER

MASS
43
AREA
2321
HEIGHT
795
09-Feb-2024
11:46
firat
tastan

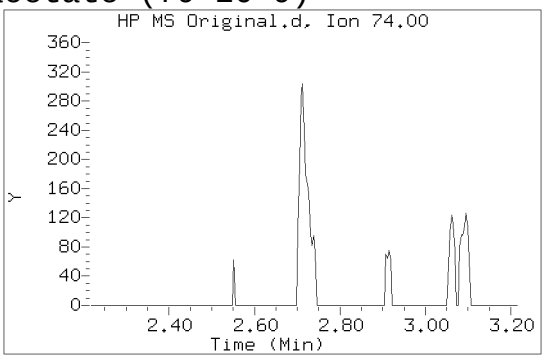


Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020904.d
Inj Date : 09-FEB-2024 10:06
InstruID : VOA9.i
LabSampID : VSTD001

Methyl acetate (79-20-9)

BEFORE

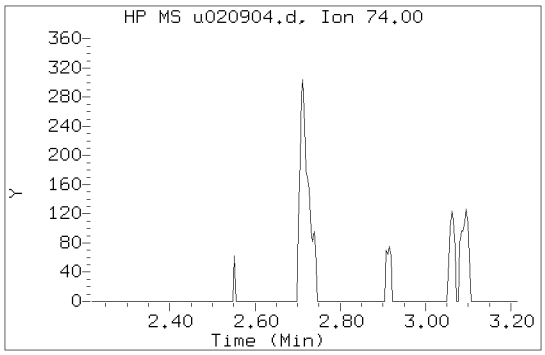
MASS
74
AREA
0
HEIGHT
0
09-Feb-2024
11:46
firat
tastan



Reason Code:

AFTER

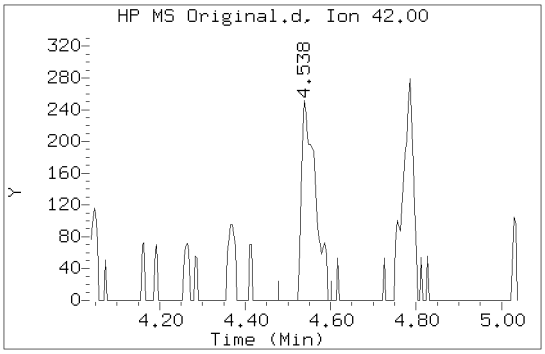
MASS
74
AREA
0
HEIGHT
0
09-Feb-2024
11:46
firat
tastan



Tetrahydrofuran (109-99-9)

BEFORE

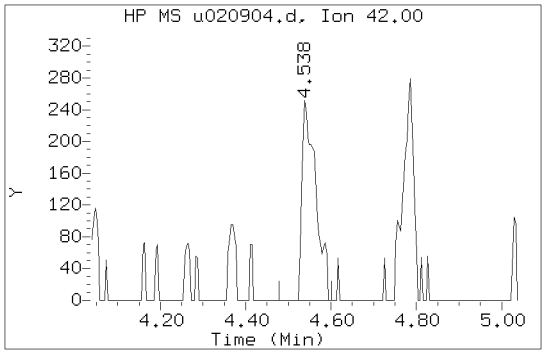
MASS
42
AREA
572
HEIGHT
252
09-Feb-2024
11:46
firat
tastan



Reason Code:

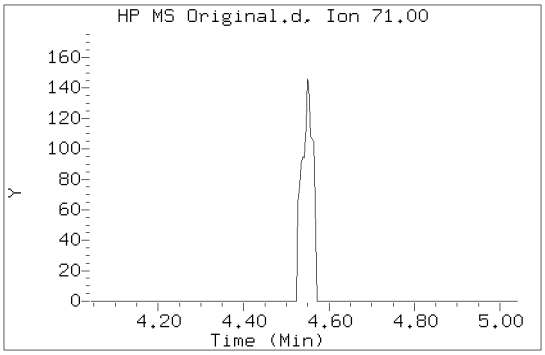
AFTER

MASS
42
AREA
572
HEIGHT
252
09-Feb-2024
11:46
firat
tastan



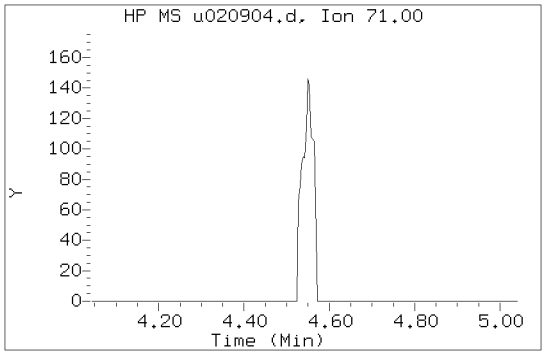
BEFORE

MASS
71
AREA
0
HEIGHT
0
09-Feb-2024
11:46
firat
tastan



AFTER

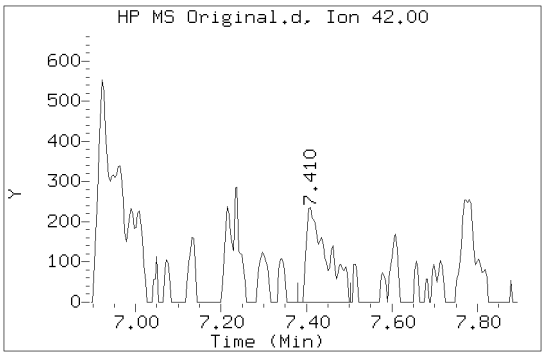
MASS
71
AREA
0
HEIGHT
0
09-Feb-2024
11:46
firat
tastan



Amyl alcohol (71-41-0)

BEFORE

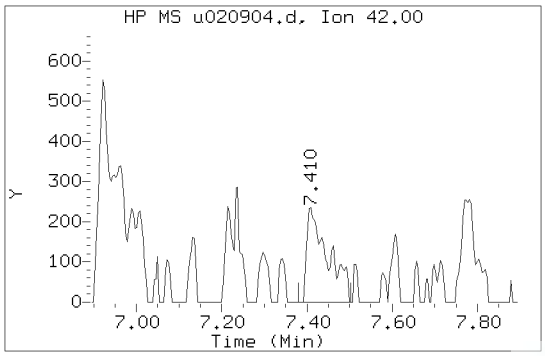
MASS
42
AREA
804
HEIGHT
235
09-Feb-2024
11:46
firat
tastan



Reason Code:

AFTER

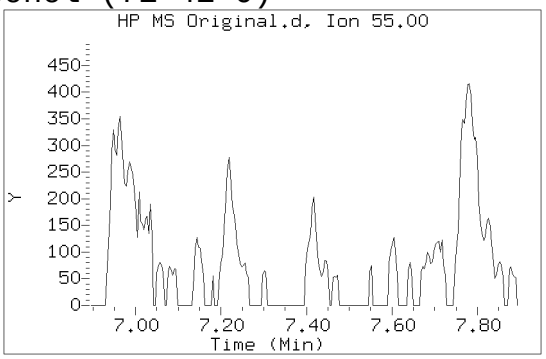
MASS
42
AREA
804
HEIGHT
235
09-Feb-2024
11:46
firat
tastan



Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020904.d
Inj Date : 09-FEB-2024 10:06
InstruID : VOA9.i
LabSampID : VSTD001

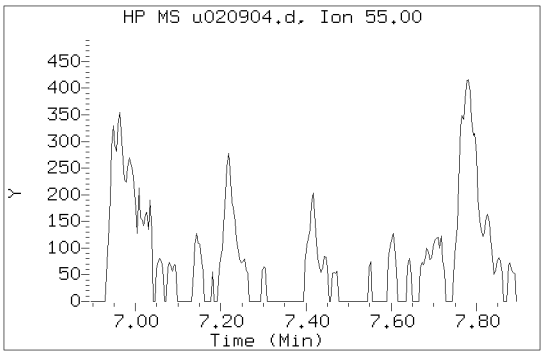
Amyl alcohol (71-41-0)

BEFORE
MASS
55
AREA
0
HEIGHT
0
09-Feb-2024
11:46
firat
tastan

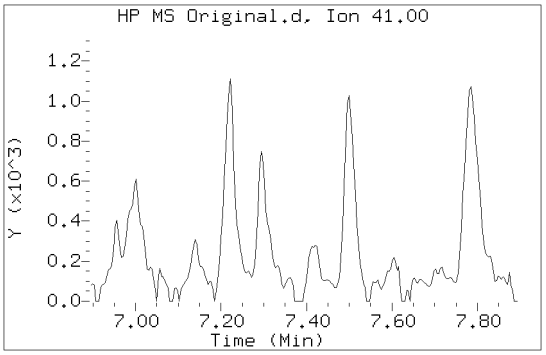


Reason Code:

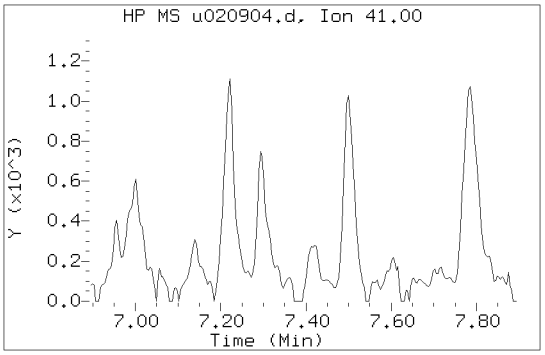
AFTER
MASS
55
AREA
0
HEIGHT
0
09-Feb-2024
11:46
firat
tastan



BEFORE
MASS
41
AREA
0
HEIGHT
0
09-Feb-2024
11:46
firat
tastan

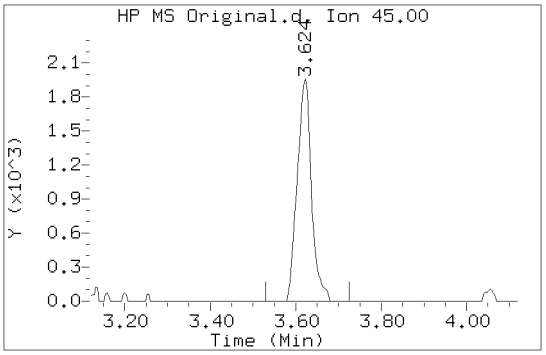


AFTER
MASS
41
AREA
0
HEIGHT
0
09-Feb-2024
11:46
firat
tastan



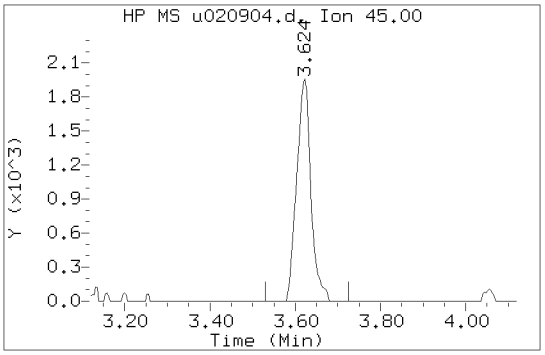
Diisopropyl ether (108-20-3)

BEFORE
MASS
45
AREA
4606
HEIGHT
1960
09-Feb-2024
11:46
firat
tastan



Reason Code:

AFTER
MASS
45
AREA
4606
HEIGHT
1960
09-Feb-2024
11:46
firat
tastan



BEFORE
MASS
59
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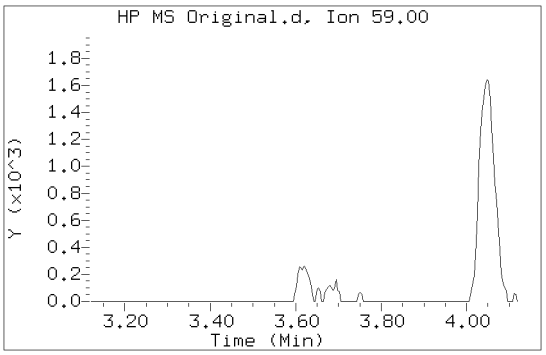
HEIGHT
0
09-Feb-2024
11:46
firat
tastan



AFTER
MASS
59
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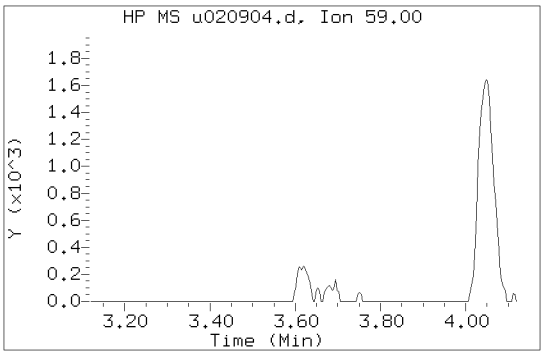
HEIGHT
0
09-Feb-2024
11:46
firat
tastan



Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020904.d
Inj Date : 09-FEB-2024 10:06
InstruID : VOA9.i
LabSampID : VSTD001

Diisopropyl ether (108-20-3)

Reason Code:

BEFORE

MASS
72
AREA
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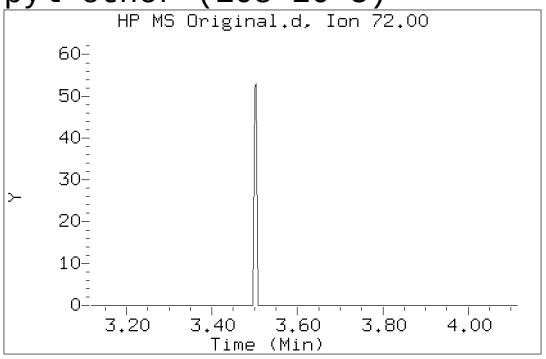
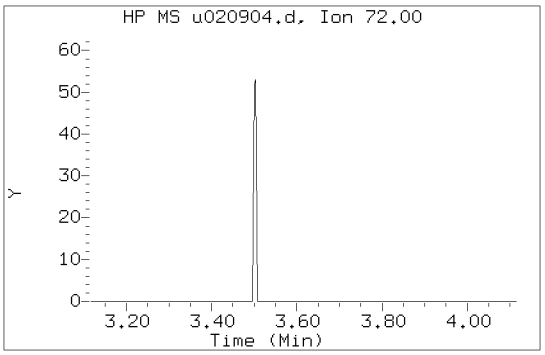
0
09-Feb-2024
11:46
firat
tastan



AFTER

MASS
72
AREA
0
HEIGHT
0
09-Feb-2024
11:46
firat
tastan

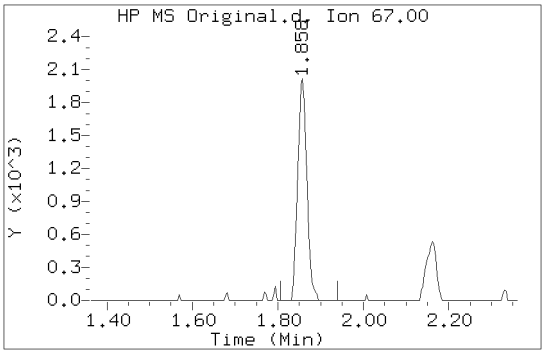


Dichlorofluoromethane (75-43-4)

Reason Code:

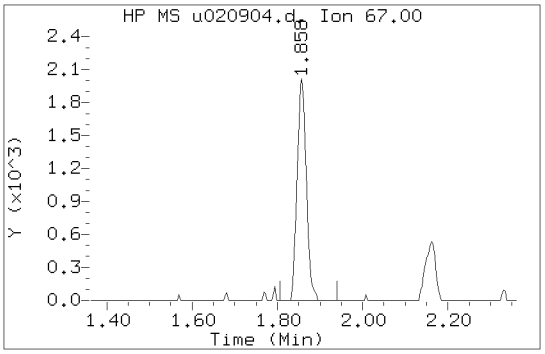
BEFORE

MASS
67
AREA
3100
HEIGHT
2017
09-Feb-2024
11:46
firat
tastan



AFTER

MASS
67
AREA
3100
HEIGHT
2017
09-Feb-2024
11:46
firat
tastan



BEFORE

MASS
69
AREA
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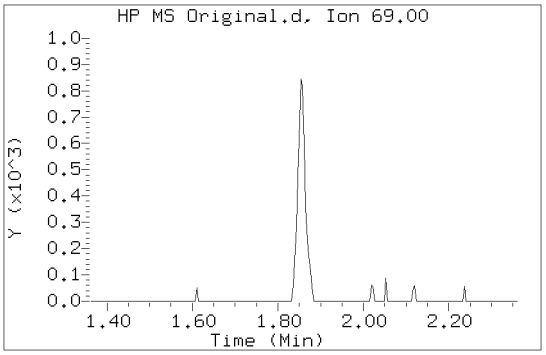
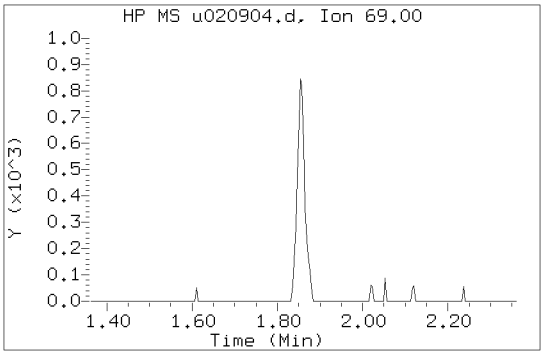
HEIGHT
0
09-Feb-2024
11:46
firat
tastan



AFTER

MASS
69
AREA
0
HEIGHT
0
09-Feb-2024
11:46
firat
tastan



BEFORE

MASS
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AREA
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HEIGHT
0
09-Feb-2024
11:46
firat
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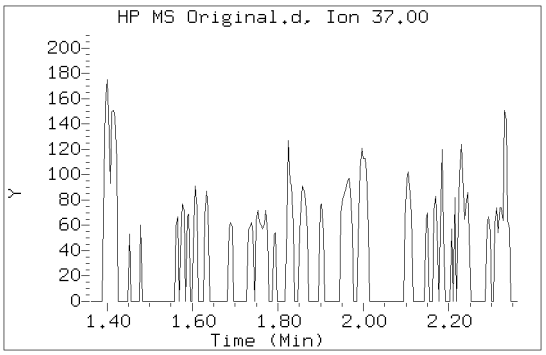

AFTER

MASS
37
AREA
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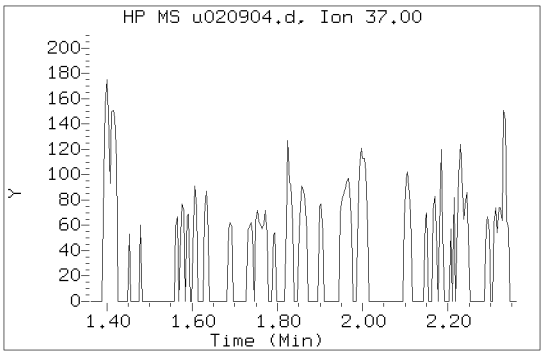
HEIGHT
0
09-Feb-2024
11:46
firat
tastan



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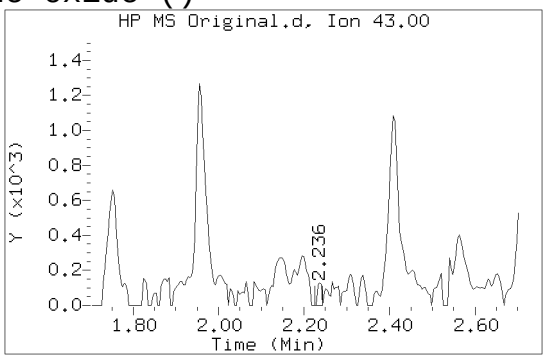
Inj Date : 09-FEB-2024 10:06
InstruID : VOA9.i
LabSampID : VSTD001

Propylene oxide ()

Reason Code:

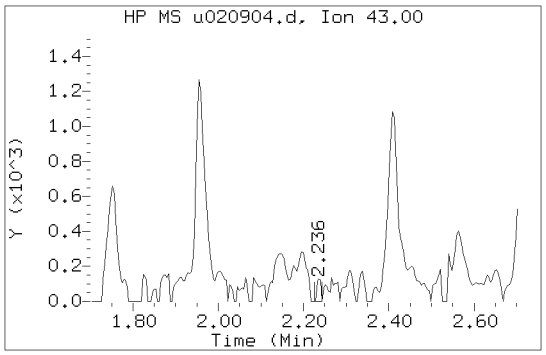
BEFORE

MASS
43
AREA
81
HEIGHT
130
09-Feb-2024
11:46
firat
tastan



AFTER

MASS
43
AREA
81
HEIGHT
130
09-Feb-2024
11:46
firat
tastan



BEFORE

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09-Feb-2024
11:46
firat
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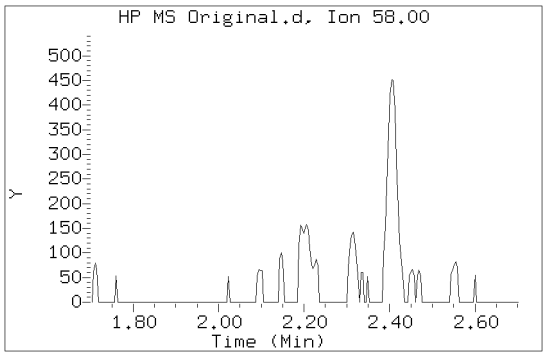

AFTER

MASS
58
AREA
0
HEIGHT
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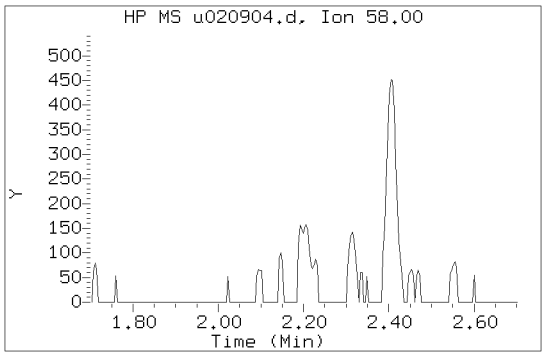
09-Feb-2024
11:46
firat
tastan



Ethanol (64-17-5)

Reason Code:

BEFORE

MASS
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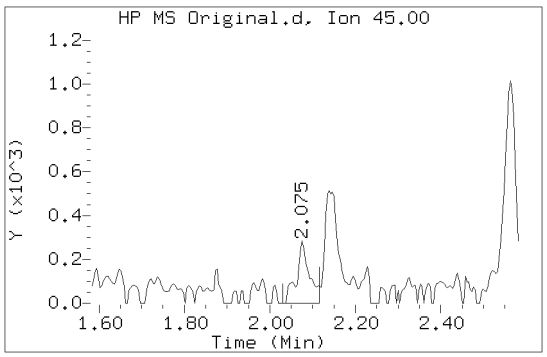
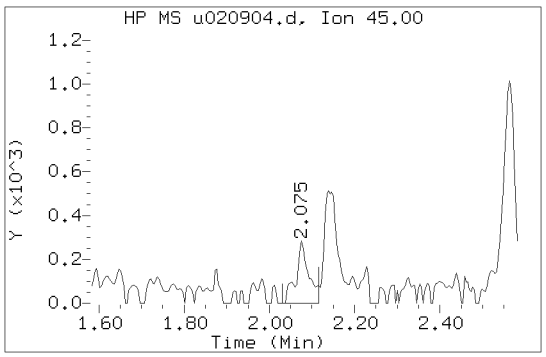
AREA
603
HEIGHT
285
09-Feb-2024
11:46
firat
tastan



AFTER

MASS
45
AREA
603
HEIGHT
285
09-Feb-2024
11:46
firat
tastan



BEFORE

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46
AREA
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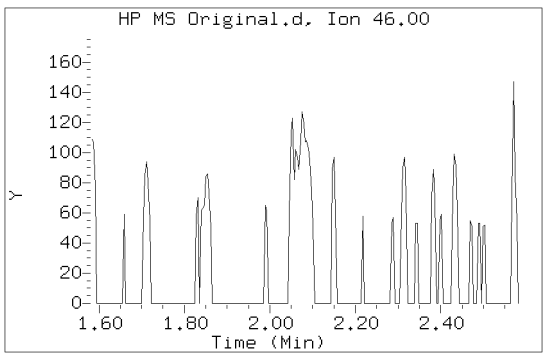
HEIGHT
0
09-Feb-2024
11:46
firat
tastan



AFTER

MASS
46
AREA
0
HEIGHT
0
09-Feb-2024
11:46
firat
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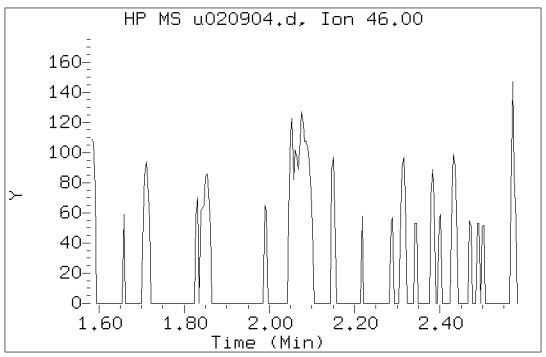


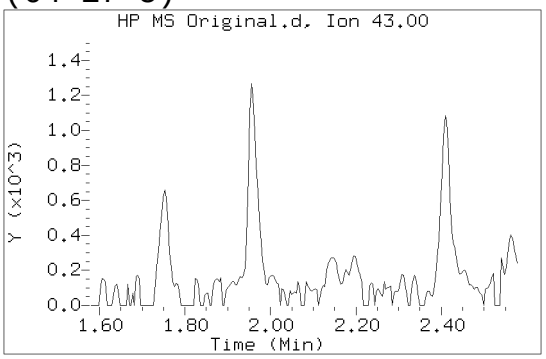
Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020904.d
Inj Date : 09-FEB-2024 10:06
InstruID : VOA9.i
LabSampID : VSTD001

Ethanol (64-17-5)

Reason Code:

BEFORE

MASS
43
AREA
0
HEIGHT
0
09-Feb-2024
11:46
firat
tastan



AFTER

MASS
43
AREA
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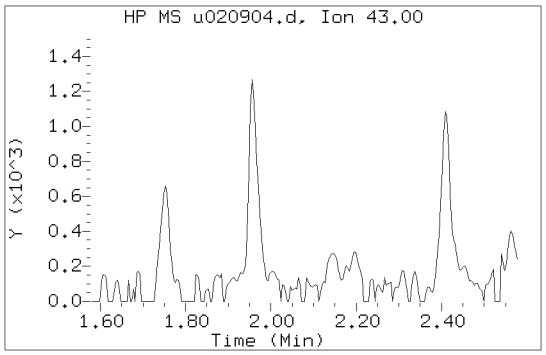
HEIGHT
0
09-Feb-2024
11:46
firat
tastan



tert-Butyl formate (762-75-4)

Reason Code:

BEFORE

MASS
59
AREA
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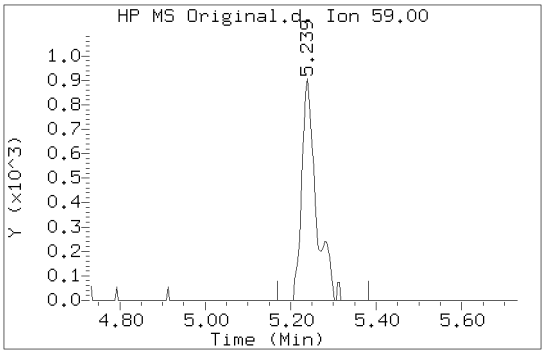
907
09-Feb-2024
11:46
firat
tastan



AFTER

MASS
59
AREA
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HEIGHT
907
09-Feb-2024
11:46
firat
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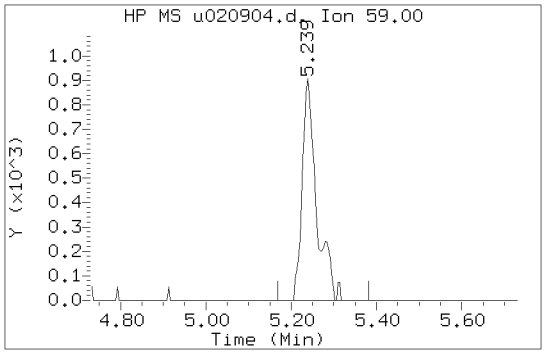

BEFORE

MASS
57
AREA
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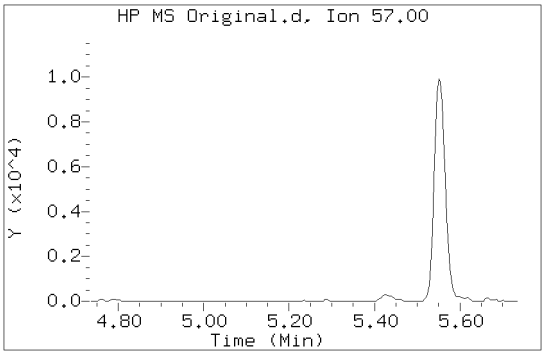
HEIGHT
0
09-Feb-2024
11:46
firat
tastan



AFTER

MASS
57
AREA
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HEIGHT
0
09-Feb-2024
11:46
firat
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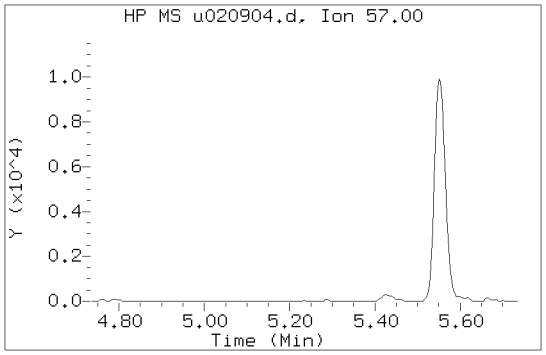

BEFORE

MASS
41
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09-Feb-2024
11:46
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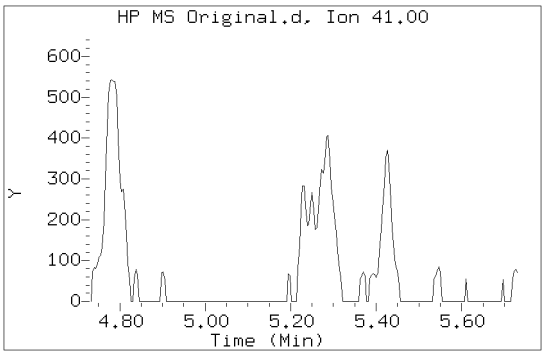

AFTER

MASS
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HEIGHT
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09-Feb-2024
11:46
firat
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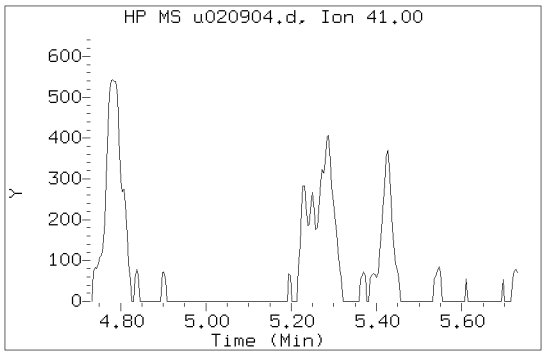

Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020904.d
Inj Date : 09-FEB-2024 10:06
InstruID : VOA9.i
LabSampID : VSTD001

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

Reason Code:

BEFORE
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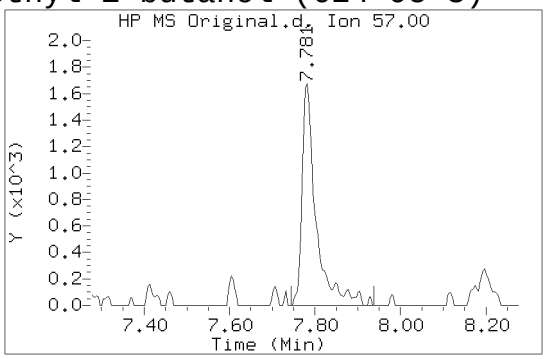
57
AREA
3895
HEIGHT
1675
09-Feb-2024
11:46
firat
tastan



AFTER
MASS
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AREA
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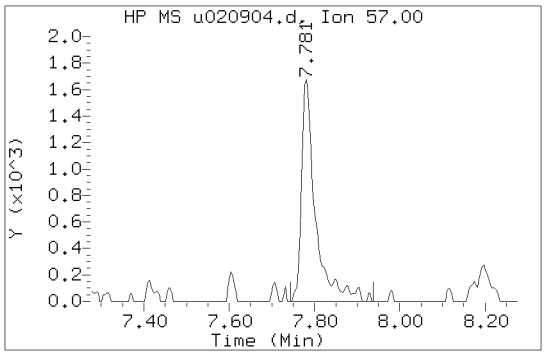
HEIGHT
1675
09-Feb-2024
11:46
firat
tastan



BEFORE
MASS
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AREA
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HEIGHT
0
09-Feb-2024
11:46
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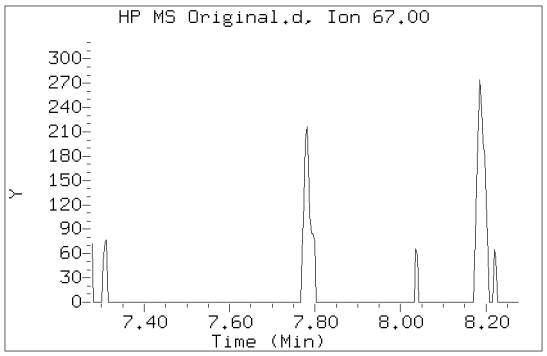

AFTER
MASS
67
AREA
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HEIGHT
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09-Feb-2024
11:46
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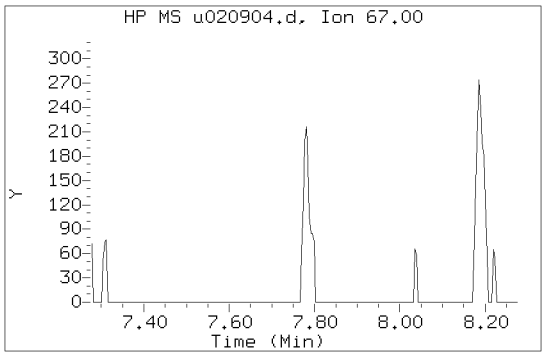

BEFORE
MASS
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HEIGHT
0
09-Feb-2024
11:46
firat
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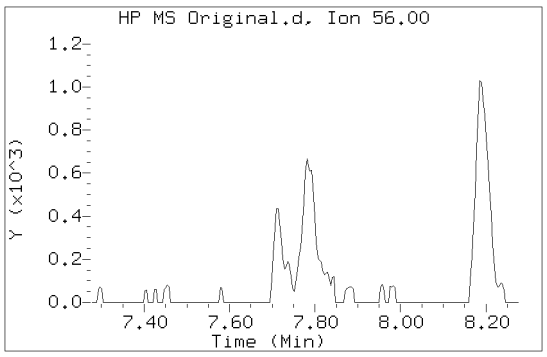

AFTER
MASS
56
AREA
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HEIGHT
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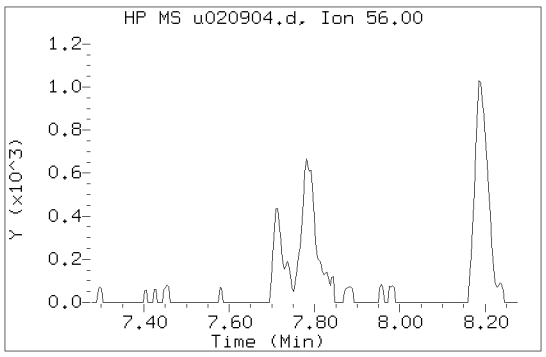
09-Feb-2024
11:46
firat
tastan



Epichlorohydrin (106-89-8)

Reason Code:

BEFORE
MASS
57
AREA
217
HEIGHT
130
09-Feb-2024
11:46
firat
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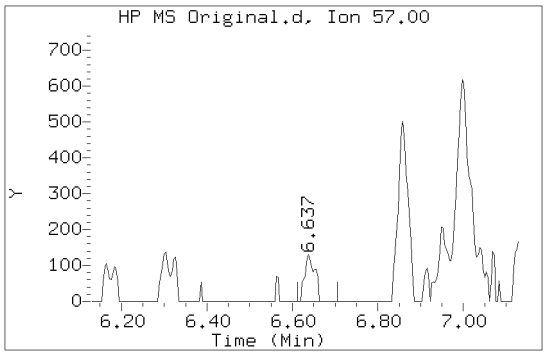
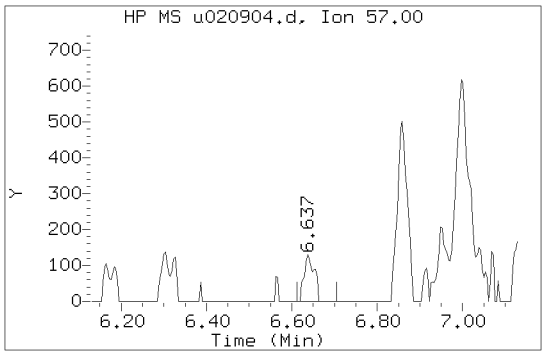


AFTER
MASS
57
AREA
217
HEIGHT
130
09-Feb-2024
11:46
firat
tastan



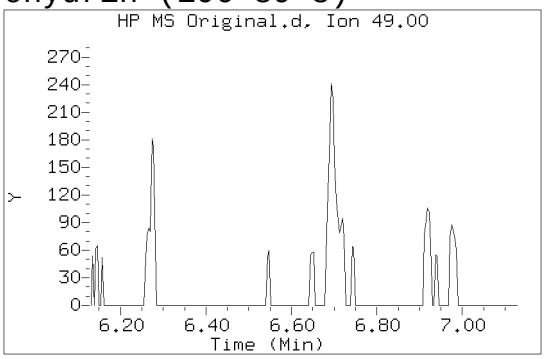
Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020904.d
Inj Date : 09-FEB-2024 10:06
InstruID : VOA9.i
LabSampID : VSTD001

Epichlorohydrin (106-89-8)

Reason Code:

BEFORE

MASS
49
AREA
0
HEIGHT
0
09-Feb-2024
11:46
firat
tastan



AFTER

MASS
49
AREA
0
HEIGHT
0
09-Feb-2024
11:46
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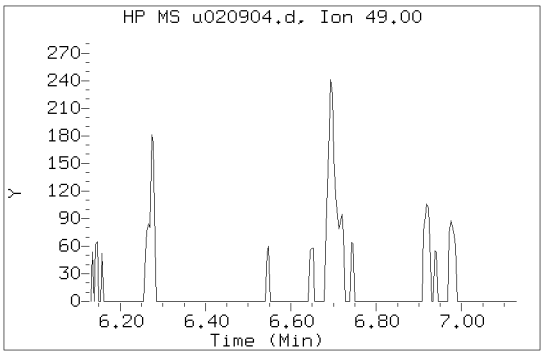
tastan

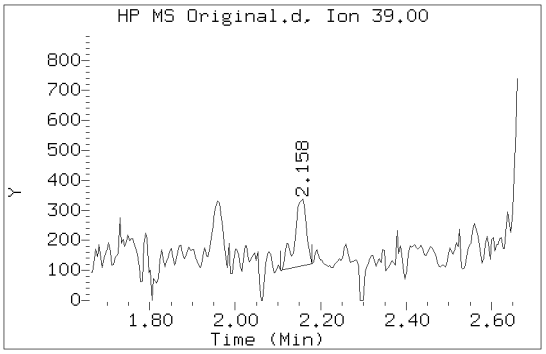


Isoprene (78-79-5)

Reason Code:

BEFORE

MASS
39
AREA
438
HEIGHT
223
09-Feb-2024
11:46
firat
tastan



AFTER

MASS
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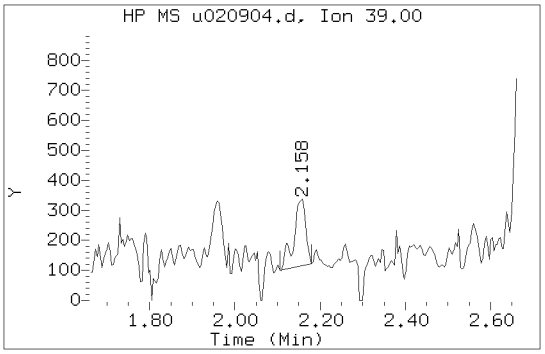
AREA
438
HEIGHT
223
09-Feb-2024
11:46
firat
tastan



BEFORE

MASS
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AREA
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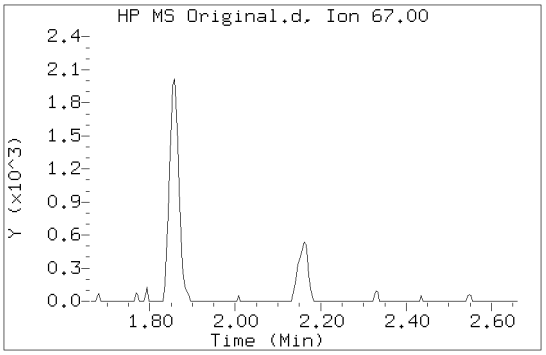
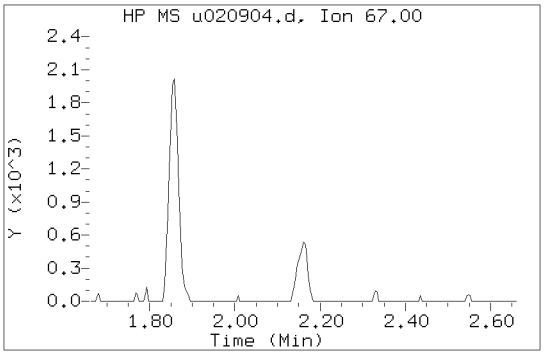
HEIGHT
0
09-Feb-2024
11:46
firat
tastan



AFTER

MASS
67
AREA
0
HEIGHT
0
09-Feb-2024
11:46
firat
tastan



BEFORE

MASS
53
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HEIGHT
0
09-Feb-2024
11:46
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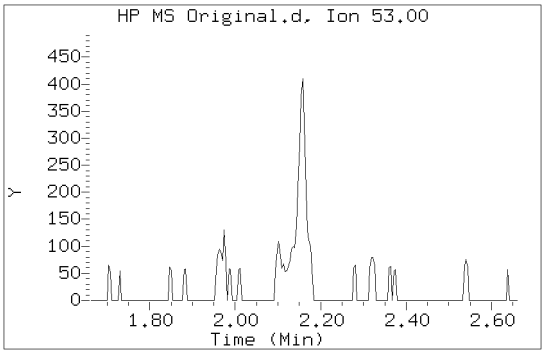

AFTER

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09-Feb-2024
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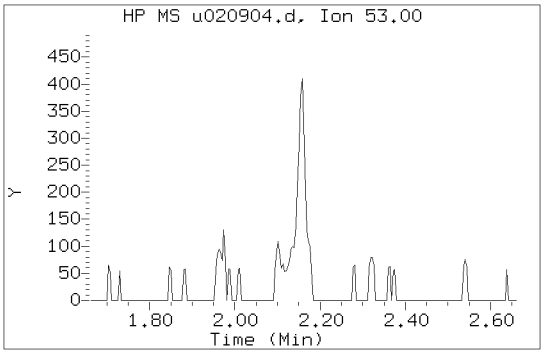

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Inj Date : 09-FEB-2024 10:06
InstruID : VOA9.i
LabSampID : VSTD001

n-Amyl acetate (628-63-7)

Reason Code:

BEFORE

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HEIGHT
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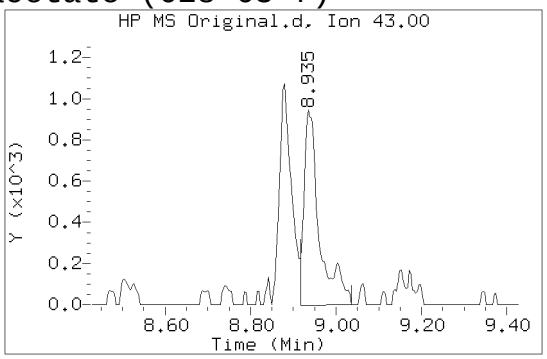
09-Feb-2024
11:46
firat
tastan



AFTER

MASS
43
AREA
2428
HEIGHT
947
09-Feb-2024
11:46
firat
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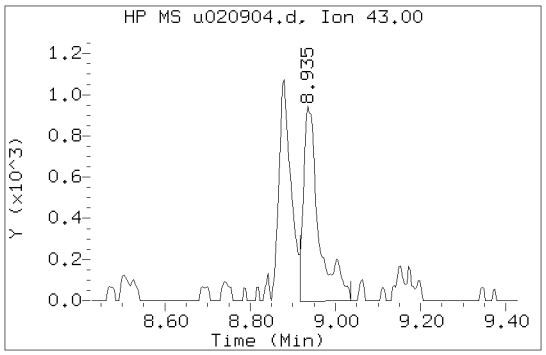

BEFORE

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09-Feb-2024
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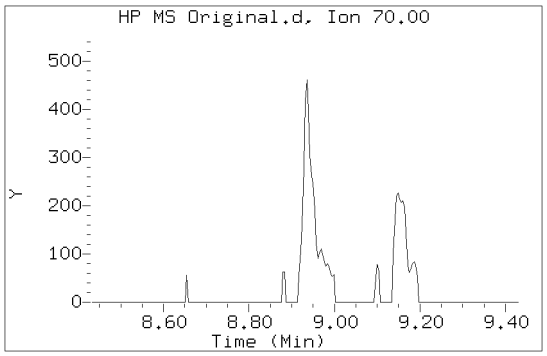

AFTER

MASS
70
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09-Feb-2024
11:46
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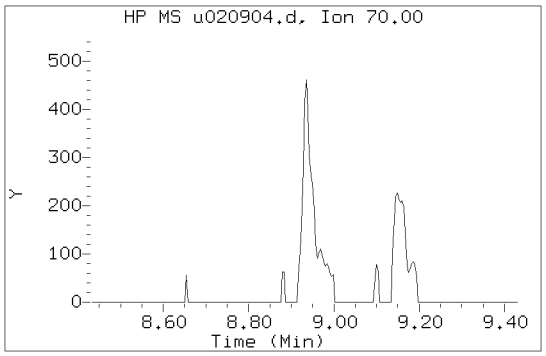
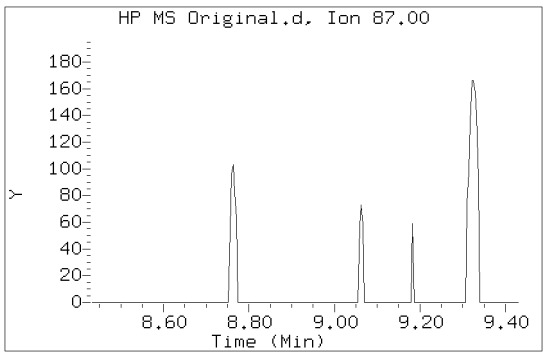


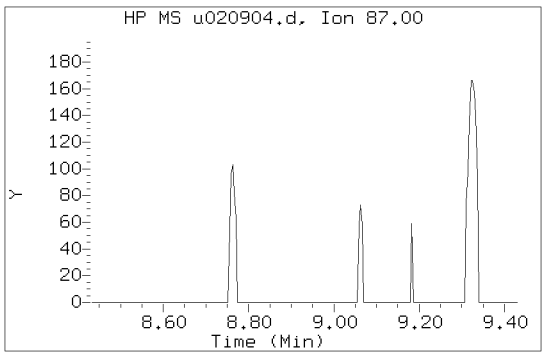
BEFORE

MASS
87
AREA
0
HEIGHT
0
09-Feb-2024
11:46
firat
tastan



AFTER

MASS
87
AREA
0
HEIGHT
0
09-Feb-2024
11:46
firat
tastan

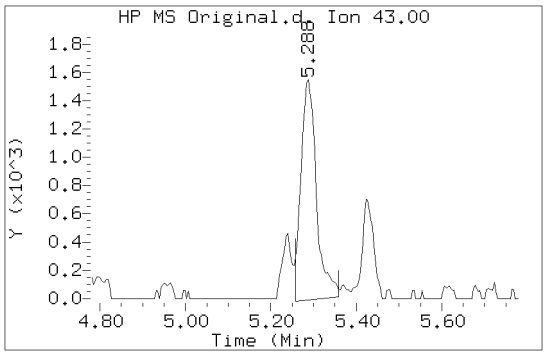


Isopropyl acetate (108-21-4)

Reason Code:

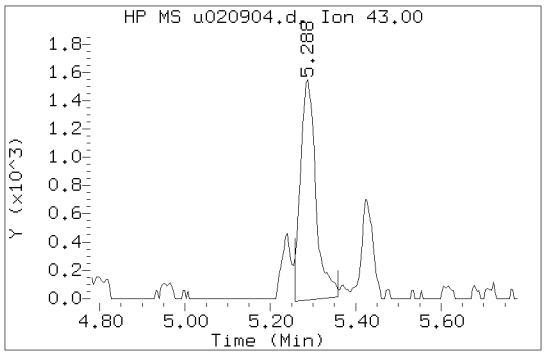
BEFORE

MASS
43
AREA
3974
HEIGHT
1557
09-Feb-2024
11:46
firat
tastan



AFTER

MASS
43
AREA
3974
HEIGHT
1557
09-Feb-2024
11:46
firat
tastan



Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020904.d
Inj Date : 09-FEB-2024 10:06
InstruID : VOA9.i
LabSampID : VSTD001

Isopropyl acetate (108-21-4)

Reason Code:

BEFORE

MASS
61
AREA
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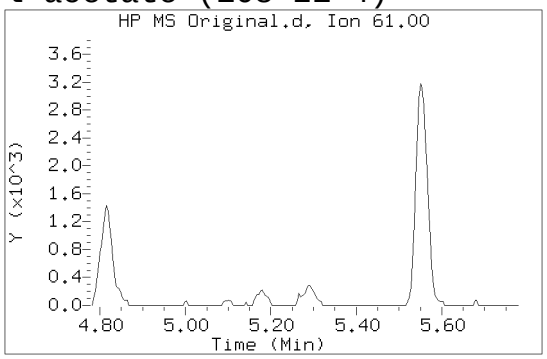
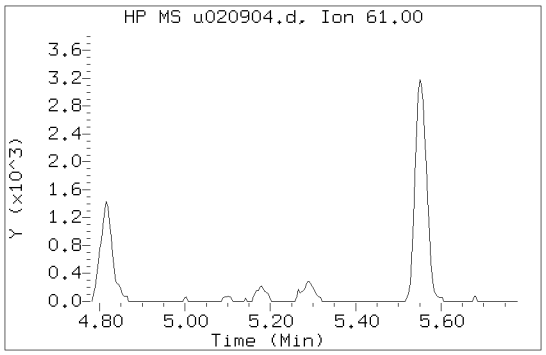
HEIGHT
0
09-Feb-2024
11:46
firat
tastan



AFTER

MASS
61
AREA
0
HEIGHT
0
09-Feb-2024
11:46
firat
tastan



n-Butyl acetate (123-86-4)

Reason Code:

BEFORE

MASS
43
AREA
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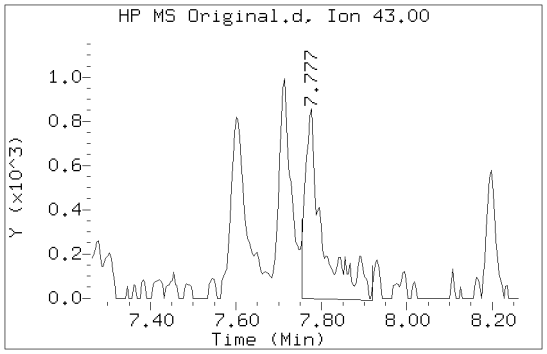
HEIGHT
858
09-Feb-2024
11:46
firat
tastan



AFTER

MASS
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AREA
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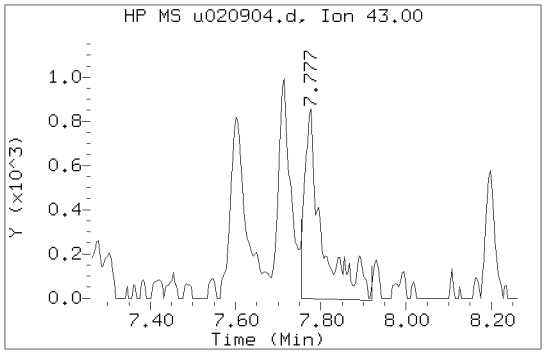
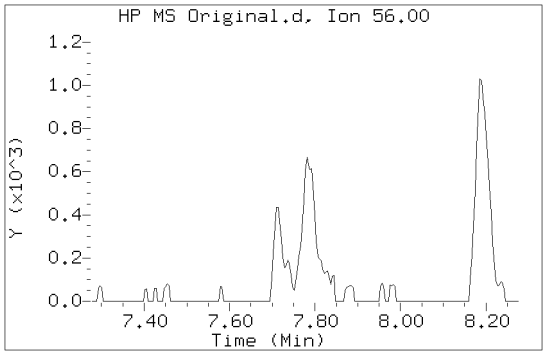
HEIGHT
858
09-Feb-2024
11:46
firat
tastan



BEFORE

MASS
56
AREA
0
HEIGHT
0
09-Feb-2024
11:46
firat
tastan



AFTER

MASS
56
AREA
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HEIGHT
0
09-Feb-2024
11:46
firat
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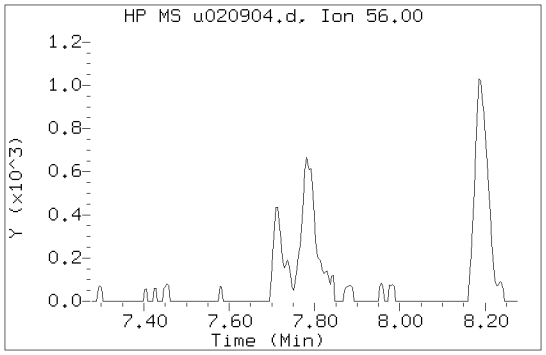

BEFORE

MASS
87
AREA
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HEIGHT
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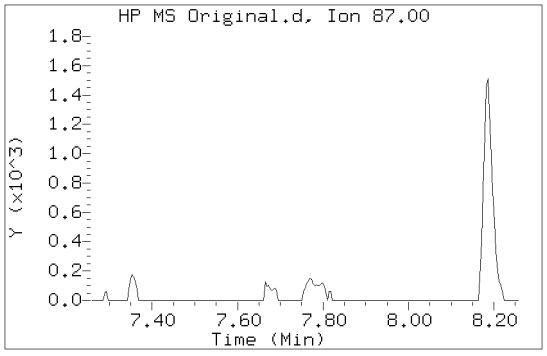
09-Feb-2024
11:46
firat
tastan



AFTER

MASS
87
AREA
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HEIGHT
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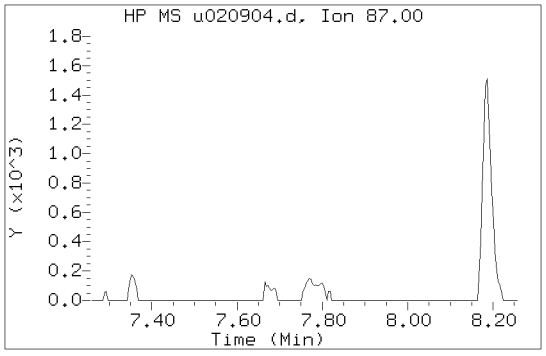
09-Feb-2024
11:46
firat
tastan



Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020904.d
Inj Date : 09-FEB-2024 10:06
InstruID : VOA9.i
LabSampID : VSTD001

Acetaldehyde (75-07-0)

Reason Code:

BEFORE
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44
AREA
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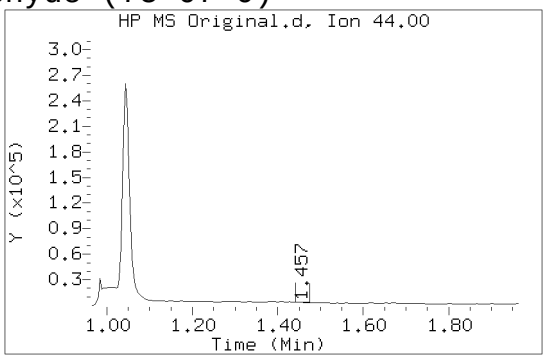
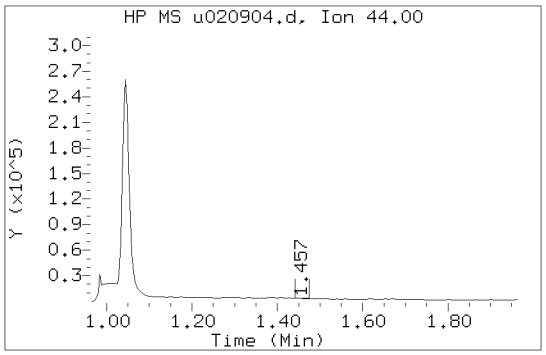
HEIGHT
714
09-Feb-2024
11:46
firat
tastan



AFTER
MASS
44
AREA
736
HEIGHT
714
09-Feb-2024
11:46
firat
tastan



BEFORE
MASS
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AREA
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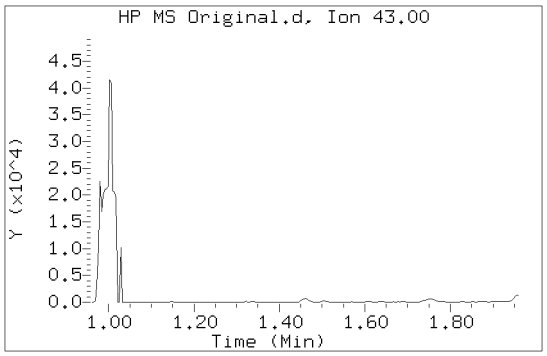
HEIGHT
0
09-Feb-2024
11:46
firat
tastan



AFTER
MASS
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AREA
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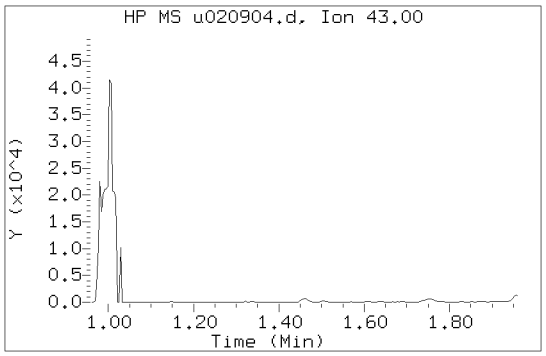
HEIGHT
0
09-Feb-2024
11:46
firat
tastan



BEFORE
MASS
42
AREA
0
HEIGHT
0
09-Feb-2024
11:46
firat
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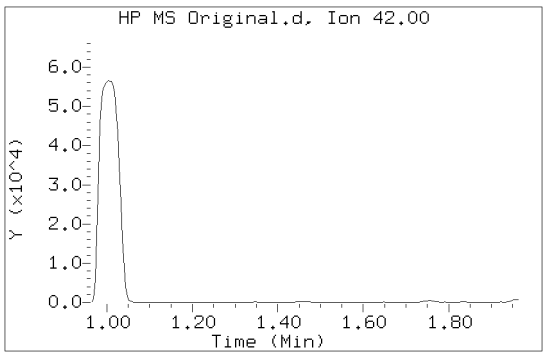

AFTER
MASS
42
AREA
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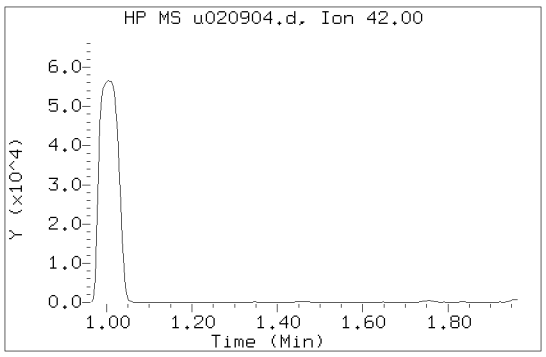
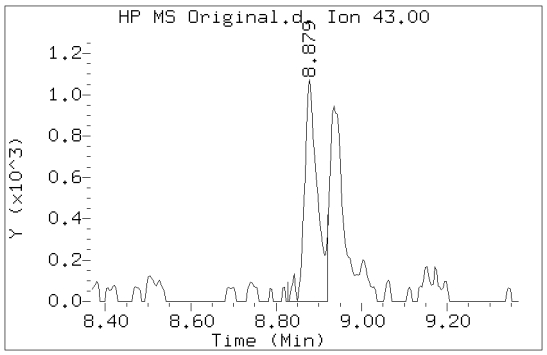
HEIGHT
0
09-Feb-2024
11:46
firat
tastan



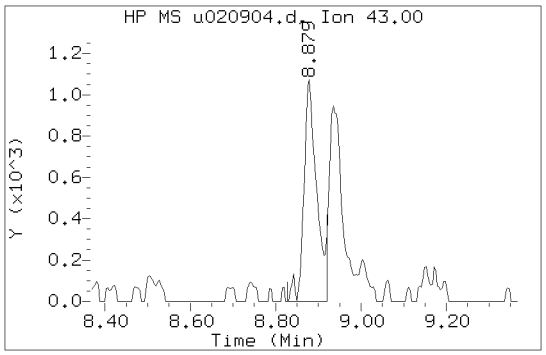
Methyl Amyl Ketone (110-43-0)

Reason Code:

BEFORE
MASS
43
AREA
2271
HEIGHT
1073
09-Feb-2024
11:46
firat
tastan



AFTER
MASS
43
AREA
2271
HEIGHT
1073
09-Feb-2024
11:46
firat
tastan



Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020904.d
Inj Date : 09-FEB-2024 10:06
InstruID : VOA9.i
LabSampID : VSTD001

Methyl Amyl Ketone (110-43-0)

BEFORE
MASS
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AREA
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HEIGHT
0
09-Feb-2024
11:46
firat
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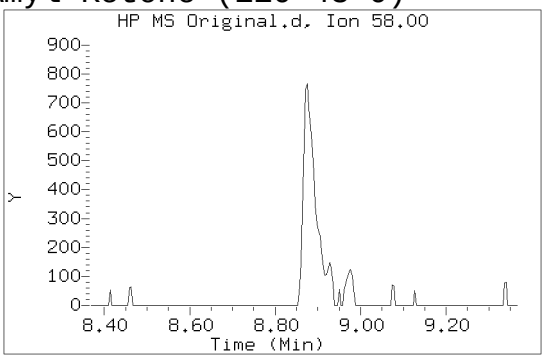

Reason Code:

AFTER
MASS
58
AREA
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HEIGHT
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09-Feb-2024
11:46
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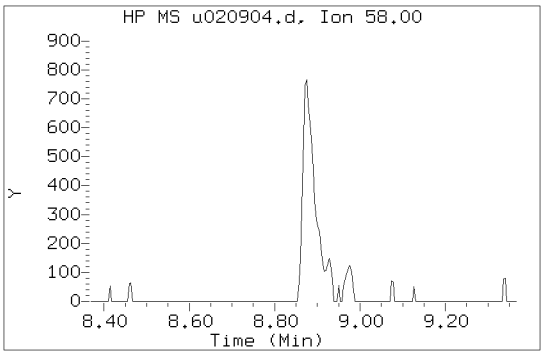

BEFORE
MASS
71
AREA
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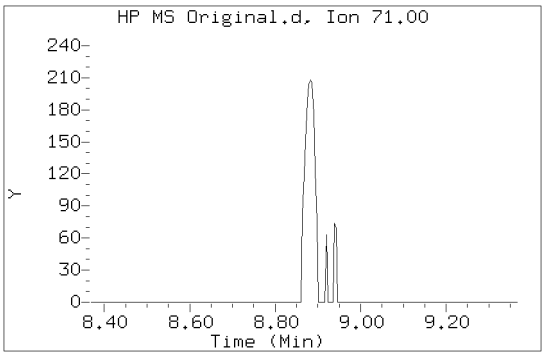
HEIGHT
0
09-Feb-2024
11:46
firat
tastan



AFTER
MASS
71
AREA
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HEIGHT
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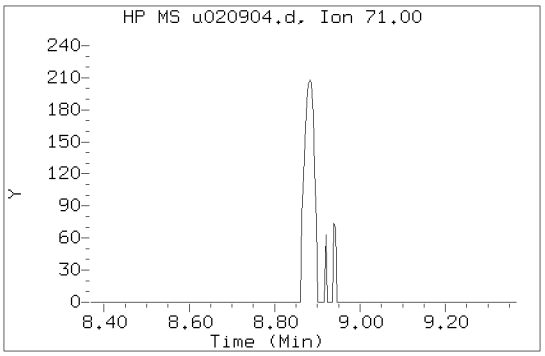
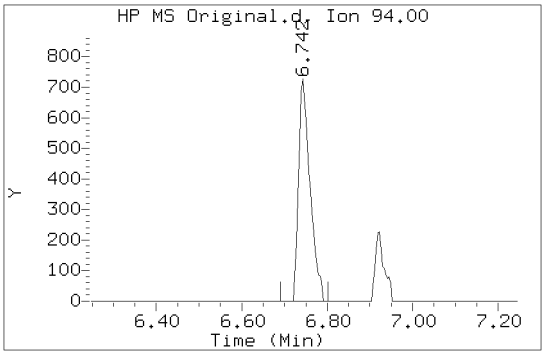
09-Feb-2024
11:46
firat
tastan



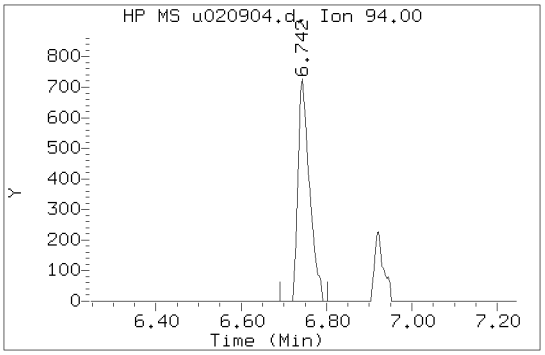
Dimethyl Disulfide (624-92-0)

BEFORE
MASS
94
AREA
1377
HEIGHT
727
09-Feb-2024
11:46
firat
tastan

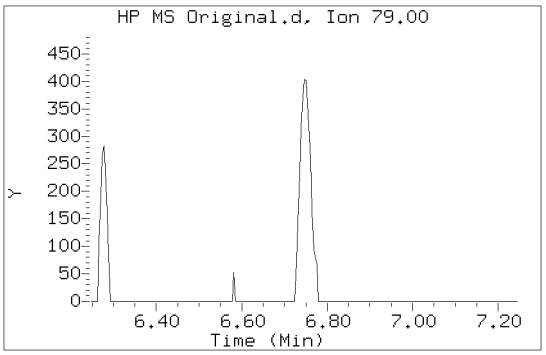


Reason Code:

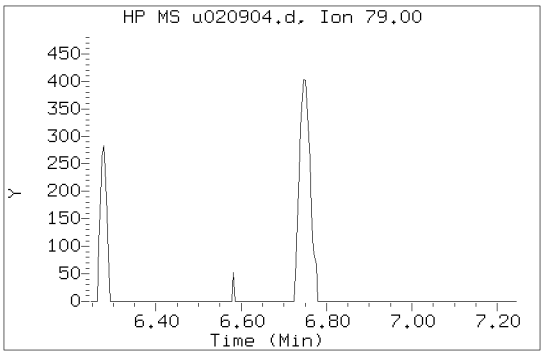
AFTER
MASS
94
AREA
1377
HEIGHT
727
09-Feb-2024
11:46
firat
tastan



BEFORE
MASS
79
AREA
0
HEIGHT
0
09-Feb-2024
11:46
firat
tastan



AFTER
MASS
79
AREA
0
HEIGHT
0
09-Feb-2024
11:46
firat
tastan



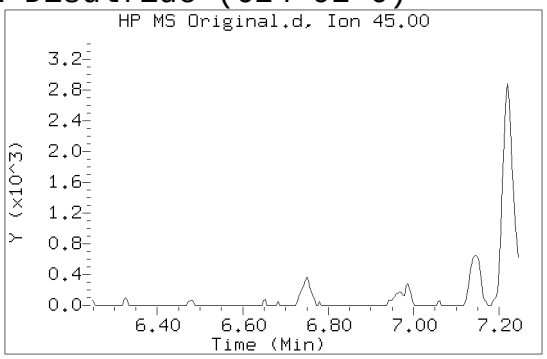
Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020904.d
Inj Date : 09-FEB-2024 10:06
InstruID : VOA9.i
LabSampID : VSTD001

Dimethyl Disulfide (624-92-0)

Reason Code:

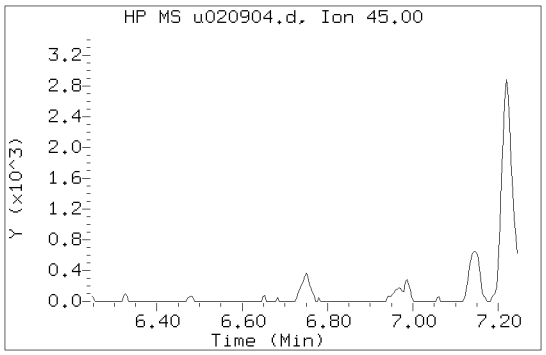
BEFORE

MASS
45
AREA
0
HEIGHT
0
09-Feb-2024
11:46
firat
tastan



AFTER

MASS
45
AREA
0
HEIGHT
0
09-Feb-2024
11:46
firat
tastan

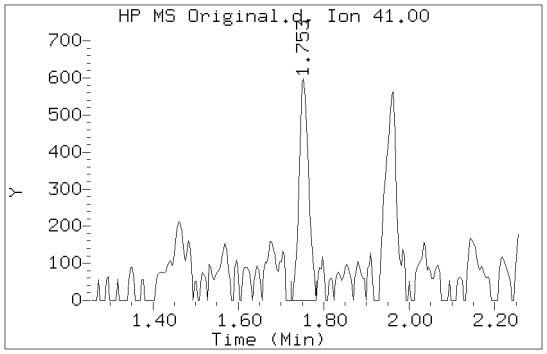


Isobutylene (115-11-7)

Reason Code:

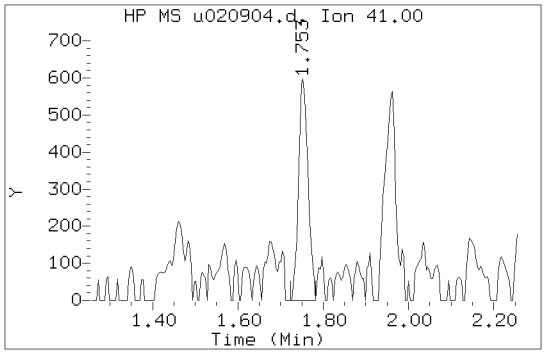
BEFORE

MASS
41
AREA
951
HEIGHT
598
09-Feb-2024
11:46
firat
tastan



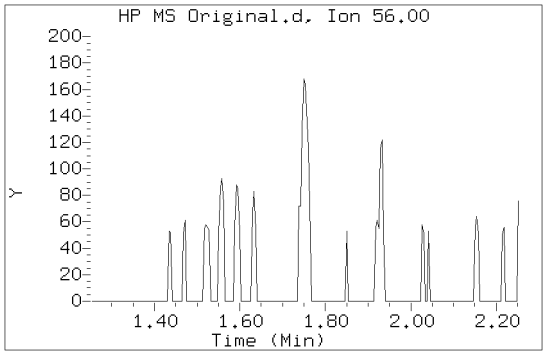
AFTER

MASS
41
AREA
951
HEIGHT
598
09-Feb-2024
11:46
firat
tastan



BEFORE

MASS
56
AREA
0
HEIGHT
0
09-Feb-2024
11:46
firat
tastan



AFTER

MASS
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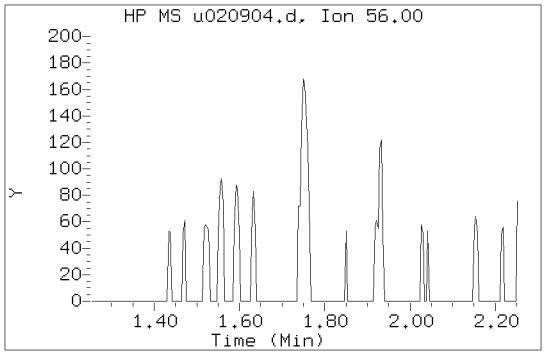
AREA
0
HEIGHT
0
09-Feb-2024
11:46
firat
tastan



BEFORE

MASS
84
AREA
0
HEIGHT
0
09-Feb-2024
11:46
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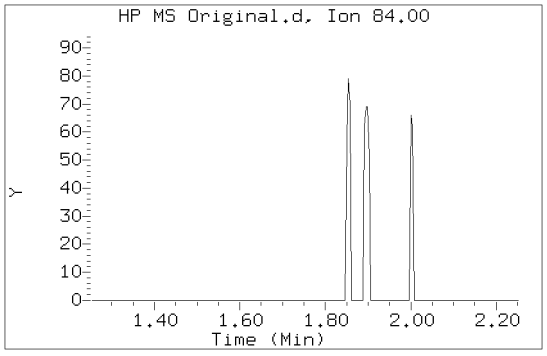

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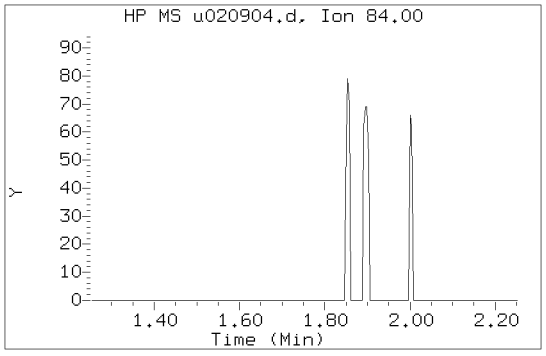


Data File: \\NAHSTWS005\Target\chem\voa9.i\U240209.b\U020905.D Page 1
Report Date: 15-Feb-2024 11:14

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240209.b\U020905.D
Lab Smp Id: VSTD002 Client Smp ID: VSTD002
Inj Date : 09-FEB-2024 10:29
Operator : FT Inst ID: VOA9.i
Smp Info : VSTD002;VSTD002;1;4;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240209.b\8260C.m
Meth Date : 15-Feb-2024 11:14 VOA9.i Quant Type: ISTD
Cal Date : 09-FEB-2024 10:06 Cal File: U020904.D
Als bottle: 5 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V9.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1	Pentafluorobenzene	168	4.815	4.815	(1.000)	209017	50.0000	
2	Dichlorodifluoromethane	85	1.164	1.164	(0.242)	2577	2.00000	2.00
3	Chloromethane	50	1.303	1.303	(0.271)	3934	2.00000	2.85
5	Vinyl Chloride	62	1.378	1.378	(0.286)	3412	2.00000	1.94
6	Bromomethane	94	1.625	1.625	(0.338)	3483	2.00000	3.41
7	Chloroethane	64	1.700	1.700	(0.353)	2571	2.00000	1.76
8	Trichlorofluoromethane	101	1.895	1.895	(0.394)	5784	2.00000	1.62
9	Acrolein	56	2.270	2.270	(0.471)	413	4.00000	2.98(M)
10	Acetone	43	2.412	2.412	(0.501)	3695	4.00000	2.01
11	1,1-Dichloroethene	96	2.334	2.334	(0.485)	3506	2.00000	2.20
15	Iodomethane	142	2.469	2.469	(0.513)	5358	4.00000	3.89
16	Acrylonitrile	53	3.065	3.065	(0.636)	2213	4.00000	3.63
17	Methylene Chloride	84	2.799	2.799	(0.581)	5315	2.00000	1.47
18	Methyl tert-butyl ether	73	3.083	3.083	(0.640)	9274	2.00000	2.09
19	Carbon Disulfide	76	2.521	2.521	(0.524)	17806	4.00000	3.58
20	trans-1,2-Dichloroethene	96	3.061	3.061	(0.636)	4308	2.00000	2.25
21	Vinyl Acetate	43	3.612	3.612	(0.750)	14402	4.00000	3.50
22	1,1-Dichloroethane	63	3.515	3.515	(0.730)	6310	2.00000	2.18
24	2-Butanone	43	4.279	4.279	(0.889)	2300	4.00000	3.63
26	2,2-Dichloropropane	77	4.182	4.182	(0.868)	4565	2.00000	1.83

27 cis-1,2-Dichloroethene	96	4.201	4.201 (0.872)	4279	2.00000	1.85
28 Chloroform	83	4.575	4.575 (0.950)	6621	2.00000	1.81

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240209.b\U020905.D Page 2
Report Date: 15-Feb-2024 11:14

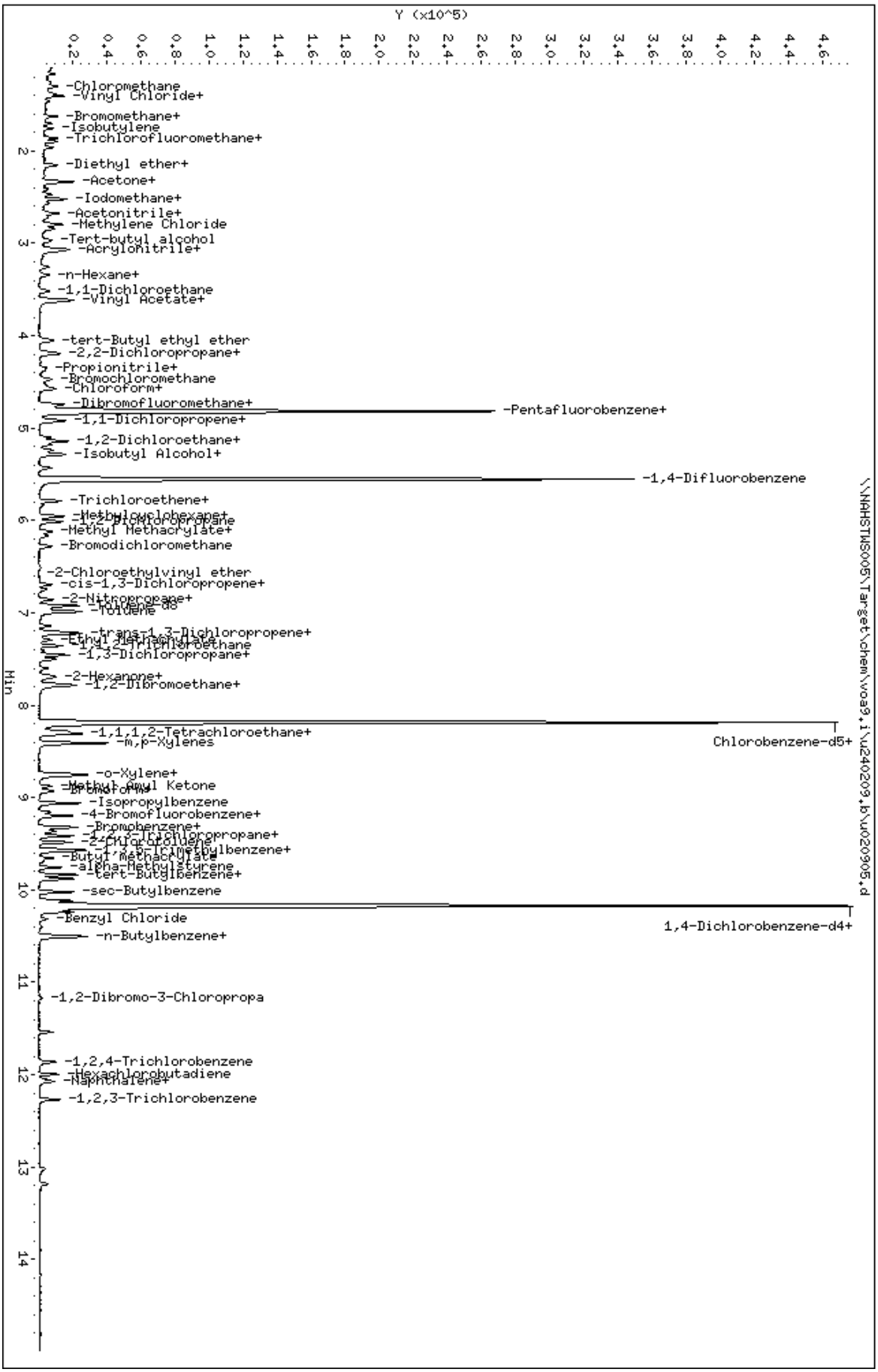
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	29 Bromochloromethane	128	4.474	4.474	(0.929)	2531	2.00000	1.19
$	30 Dibromofluoromethane	113	4.752	4.752	(0.987)	4395	2.00000	1.61
	31 1,1,1-Trichloroethane	97	4.740	4.740	(0.984)	4863	2.00000	1.61
	32 1,1-Dichloropropene	75	4.928	4.928	(0.887)	4621	2.00000	2.02
	33 1,2-Dichloroethane	62	5.179	5.179	(0.933)	5396	2.00000	1.56
	34 Carbon Tetrachloride	117	4.917	4.917	(0.885)	5098	2.00000	1.88
$	35 1,2-Dichloroethane-d4	65	5.100	5.100	(1.059)	4833	2.00000	1.51
*	36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	296557	50.0000	
	37 Benzene	78	5.141	5.141	(0.926)	14779	2.00000	2.15
	38 Trichloroethene	130	5.790	5.790	(1.043)	4366	2.00000	2.04
	39 Bromodichloromethane	83	6.277	6.277	(1.130)	4447	2.00000	1.76(M)
	41 2-Chloroethylvinyl ether	63	6.566	6.566	(1.182)	29	4.00000	1.67(MH)
	42 1,2-Dichloropropane	63	6.015	6.015	(1.083)	4042	2.00000	2.23
	44 Dibromomethane	93	6.116	6.116	(1.101)	2440	2.00000	1.93
	45 4-Methyl-2-Pentanone	43	6.855	6.855	(0.837)	5022	4.00000	3.37
	46 cis-1,3-Dichloropropene	75	6.693	6.693	(1.205)	4487	2.00000	1.70
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	266184	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	14699	2.00000	1.97
	50 Toluene	91	6.982	6.982	(0.853)	15256	2.00000	1.85
	51 trans-1,3-Dichloropropene	75	7.199	7.199	(1.296)	3131	2.00000	2.92
	52 2-Hexanone	43	7.597	7.597	(0.928)	3749	4.00000	6.06
	53 1,1,2-Trichloroethane	83	7.357	7.357	(0.899)	3115	2.00000	2.05
	54 1,3-Dichloropropane	76	7.499	7.499	(0.916)	5927	2.00000	1.87
	55 Dibromochloromethane	129	7.691	7.691	(0.940)	3320	2.00000	1.58
	56 Tetrachloroethene	164	7.458	7.458	(0.911)	3789	2.00000	2.01
	57 1,2-Dibromoethane	107	7.788	7.788	(0.951)	3528	2.00000	1.91
	58 1-Chlorohexane	55	8.193	8.193	(1.475)	4112	2.00000	2.29
	59 Chlorobenzene	112	8.212	8.212	(1.003)	12192	2.00000	2.02
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	4011	2.00000	1.89
	61 Ethylbenzene	106	8.305	8.305	(1.015)	4910	2.00000	1.75
	62 m,p-Xylenes	106	8.410	8.410	(1.027)	11801	4.00000	3.42
	63 o-Xylene	106	8.748	8.748	(1.069)	6368	2.00000	1.88
	64 Styrene	104	8.766	8.766	(1.071)	9049	2.00000	1.64
	66 Bromoform	173	8.920	8.920	(1.090)	2646	2.00000	1.74(T)
	67 Isopropylbenzene	105	9.063	9.063	(1.107)	15264	2.00000	1.77
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	4391	2.00000	1.85(M)
$	69 4-Bromofluorobenzene	95	9.198	9.198	(1.124)	5431	2.00000	1.75
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	142815	50.0000	
	71 1,2,3-Trichloropropane	75	9.366	9.366	(0.921)	4534	2.00000	1.97
	73 n-Propylbenzene	91	9.415	9.415	(0.926)	14083	2.00000	1.59
	74 Bromobenzene	156	9.318	9.318	(0.916)	4619	2.00000	1.74
	75 1,3,5-Trimethylbenzene	105	9.565	9.565	(0.940)	11045	2.00000	1.67
	76 2-Chlorotoluene	91	9.482	9.482	(0.932)	10805	2.00000	1.84
	77 4-Chlorotoluene	91	9.580	9.580	(0.942)	12155	2.00000	1.82
	78 tert-Butylbenzene	119	9.835	9.835	(0.967)	10461	2.00000	1.72
	79 1,2,4-Trimethylbenzene	105	9.880	9.880	(0.971)	11101	2.00000	1.70
	81 sec-Butylbenzene	105	10.022	10.022	(0.985)	12777	2.00000	1.65
	82 p-Isopropyltoluene	119	10.146	10.146	(0.997)	10725	2.00000	1.55
	83 1,3-Dichlorobenzene	146	10.116	10.116	(0.994)	8846	2.00000	1.89
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	10205	2.00000	1.84
	87 n-Butylbenzene	91	10.495	10.495	(1.032)	9154	2.00000	1.68
	88 1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	9072	2.00000	1.84

89	1,2-Dibromo-3-Chloropropane	155	11.173	11.173 (1.098)	613	2.00000	4.31(M)
90	1,2,4-Trichlorobenzene	180	11.863	11.863 (1.166)	4435	2.00000	1.56

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	91 Hexachlorobutadiene	225	11.998	11.998	(1.179)	2247	2.00000	1.83
	92 Naphthalene	128	12.073	12.073	(1.187)	8602	2.00000	2.53
	93 1,2,3-Trichlorobenzene	180	12.275	12.275	(1.207)	4583	2.00000	1.69
M	94 1,2-Dichloroethylene (total)	96				8587	4.00000	
M	95 Xylenes (total)	106				18169	6.00000	
	135 1,4-Dioxane	88	6.172	6.172	(1.282)	742	40.0000	41.72(M)
	141 Cyclohexane	56	4.785	4.785	(0.994)	6449	2.00000	2.52
	138 Freon TF	101	2.334	2.334	(0.485)	3605	2.00000	2.09
	140 1,3-Butadiene	54	1.404	1.404	(0.292)	2918	2.00000	1.98
	147 Methylcyclohexane	55	5.951	5.951	(1.072)	5855	2.00000	1.63
	146 Methyl Acetate	43	2.716	2.716	(0.564)	3096	2.00000	2.09
	148 Tert-Butyl alcohol	59	2.967	2.967	(0.616)	7150	40.0000	40.76(a)
	149 Isopropyl Alcohol	45	2.562	2.562	(0.532)	5220	40.0000	56.69(TM)

QC Flag Legend

T - Target compound detected outside RT window.
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.



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

Instrument: VOA9,i
Operator: FT
Column diameter: 0.18

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Inj Date : 09-FEB-2024 10:29
InstruID : VOA9.i
LabSampID : VSTD002

Bromodichloromethane (75-27-4)

Reason Code:

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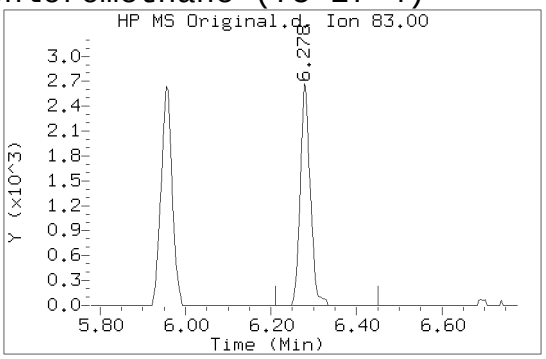

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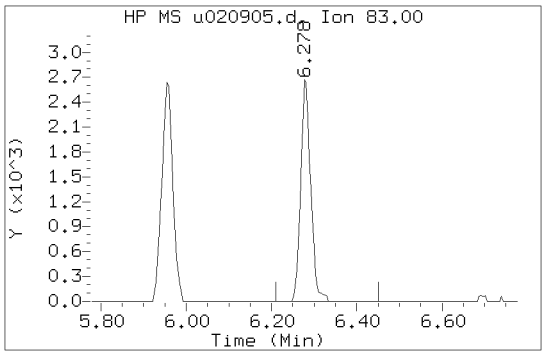

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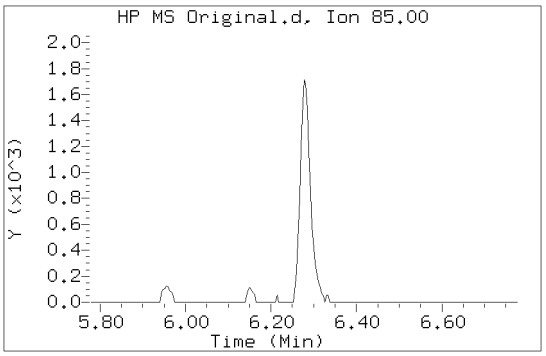

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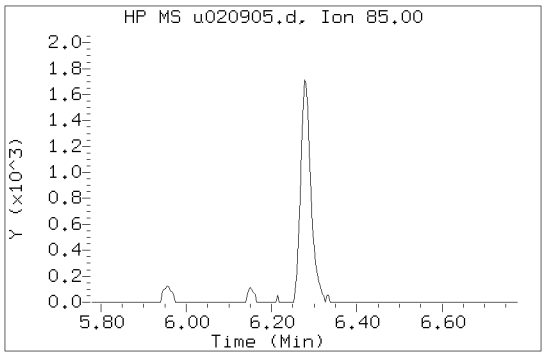

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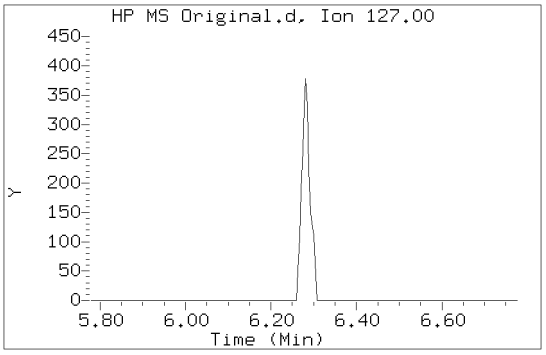

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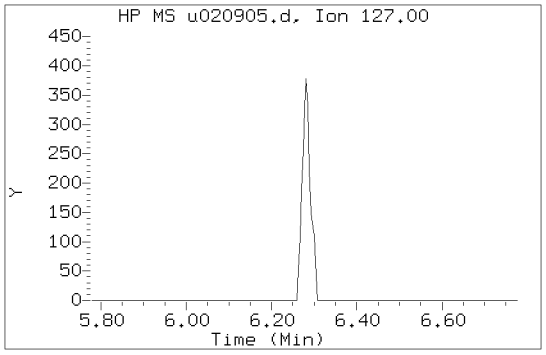

Acrolein (107-02-8)

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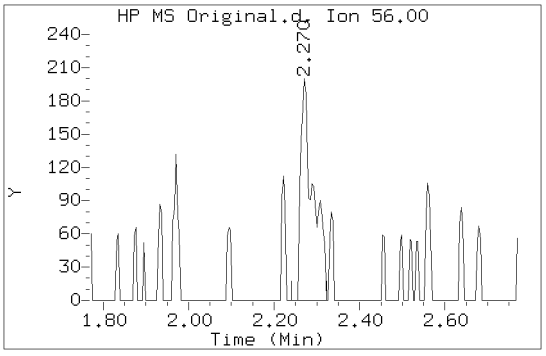

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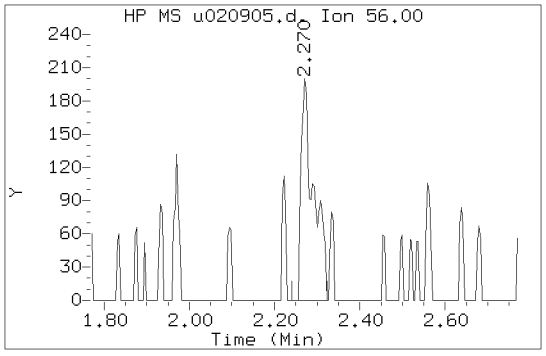

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InstruID : VOA9.i
LabSampID : VSTD002

Acrolein (107-02-8)

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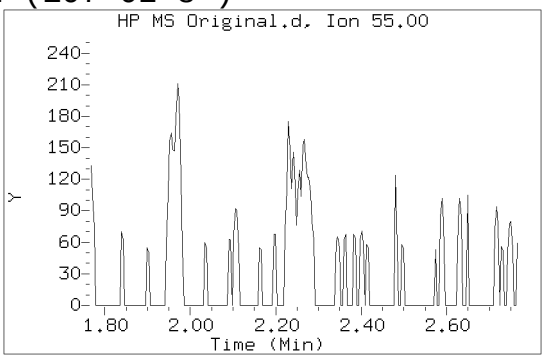

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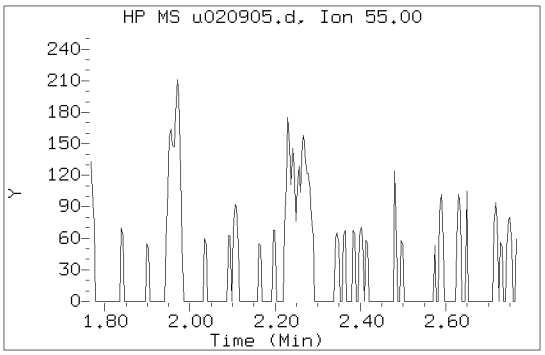

1,1,2,2-Tetrachloroethane (79-34-5)

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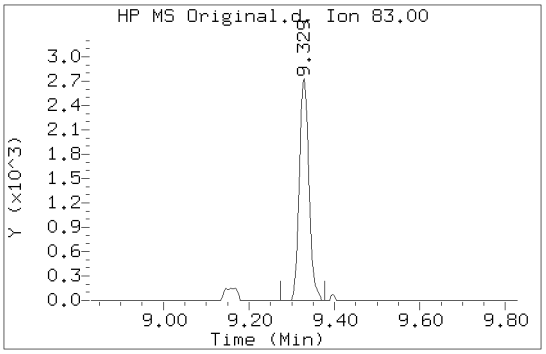

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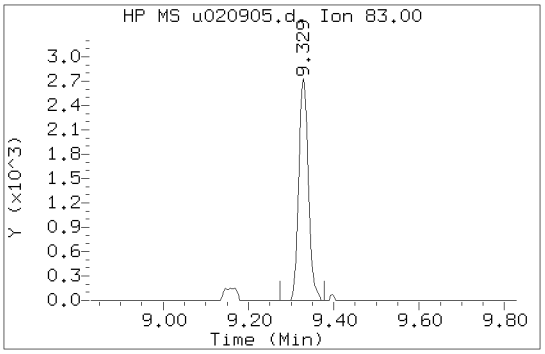

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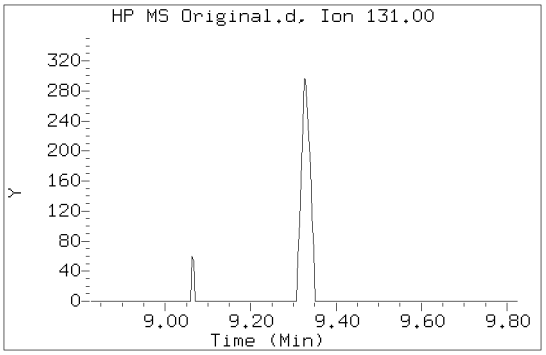

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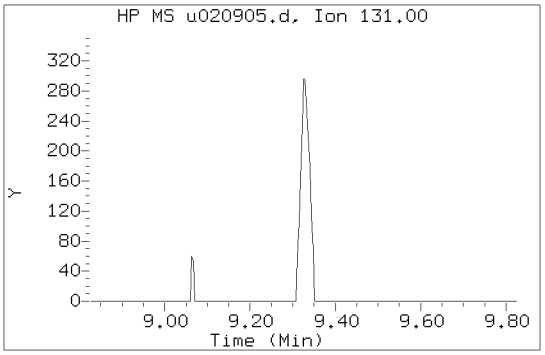

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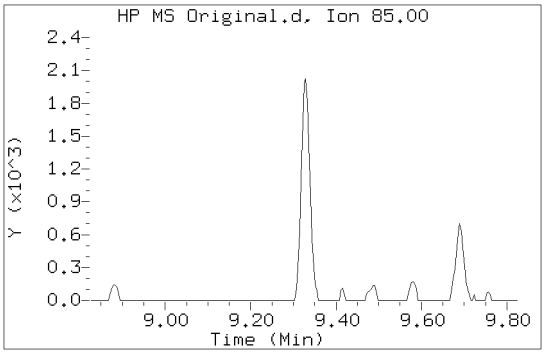

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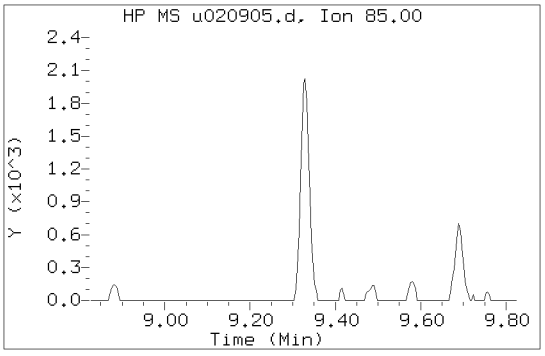

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Inj Date : 09-FEB-2024 10:29
InstruID : VOA9.i
LabSampID : VSTD002

Methacrylonitrile (126-98-7)

Reason Code:

BEFORE

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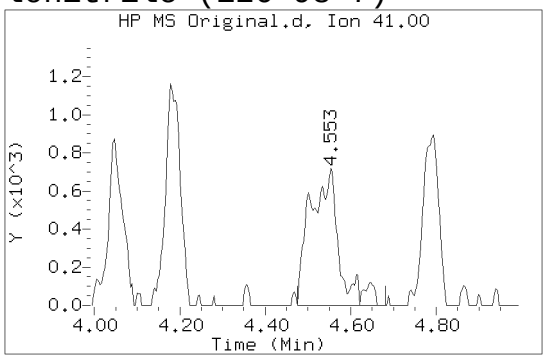

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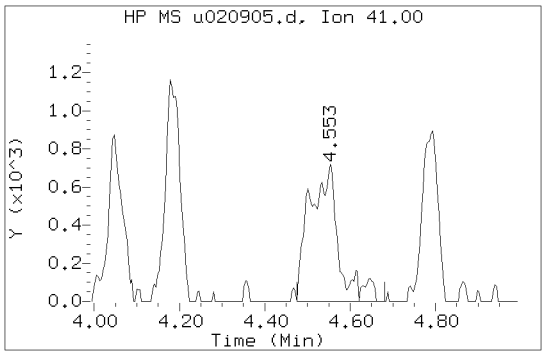
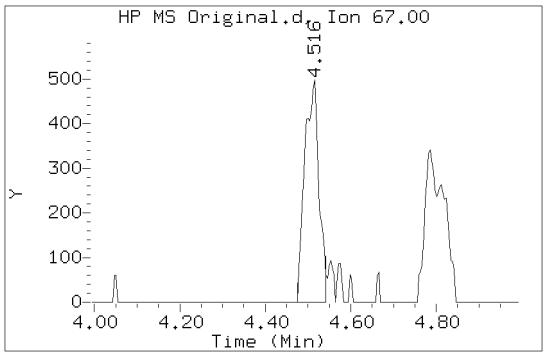


BEFORE

MASS
67
AREA
1165
HEIGHT
498
09-Feb-2024
11:53
firat
tastan



AFTER

MASS
67
AREA
1165
HEIGHT
498
09-Feb-2024
11:53
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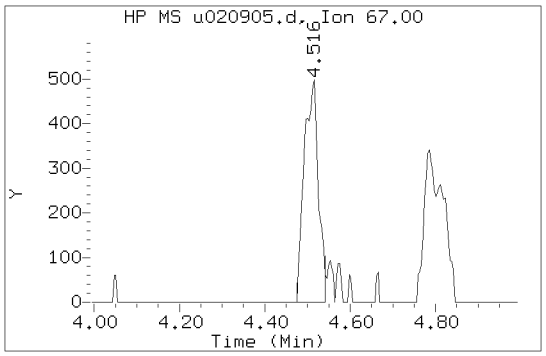

BEFORE

MASS
39
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658
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461
09-Feb-2024
11:53
firat
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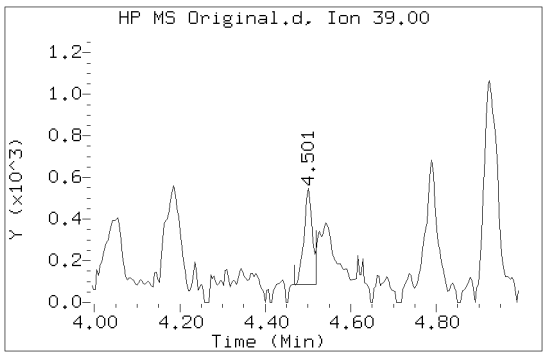

AFTER

MASS
39
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658
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461
09-Feb-2024
11:53
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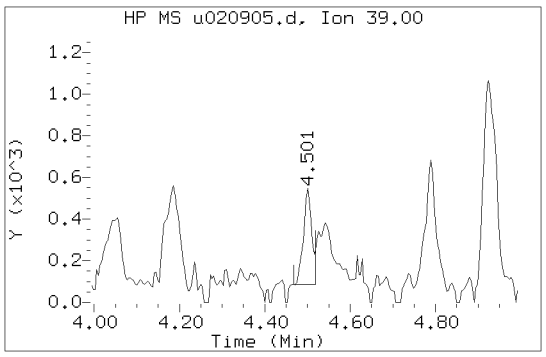

1,2-Dibromo-3-Chloropropane (96-12-8)

Reason Code:

BEFORE

MASS
155
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613
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366
09-Feb-2024
11:53
firat
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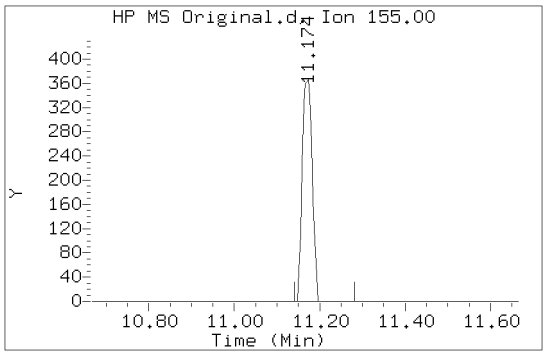

AFTER

MASS
155
AREA
613
HEIGHT
366
09-Feb-2024
11:53
firat
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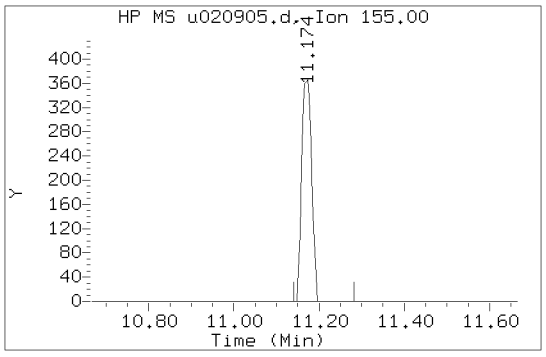

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Inj Date : 09-FEB-2024 10:29
InstruID : VOA9.i
LabSampID : VSTD002

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

Reason Code:

BEFORE
MASS
157
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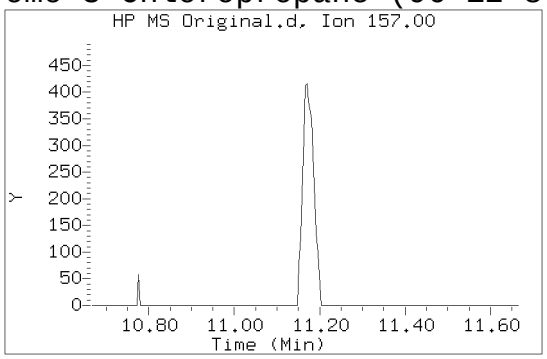
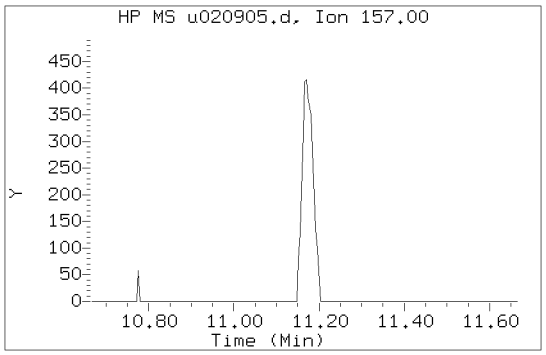
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



AFTER
MASS
157
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



BEFORE
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75
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HEIGHT
0
09-Feb-2024
11:53
firat
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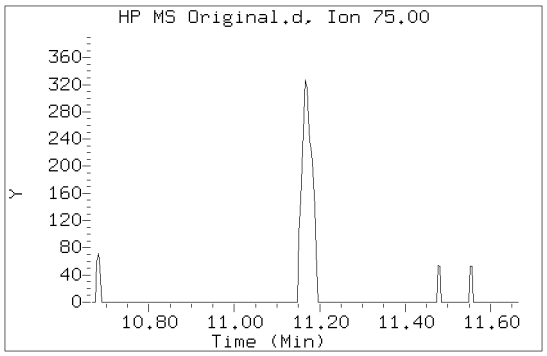
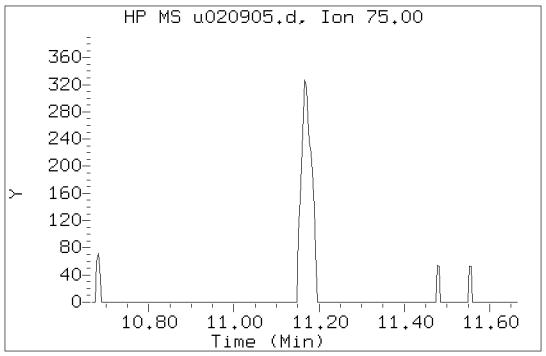


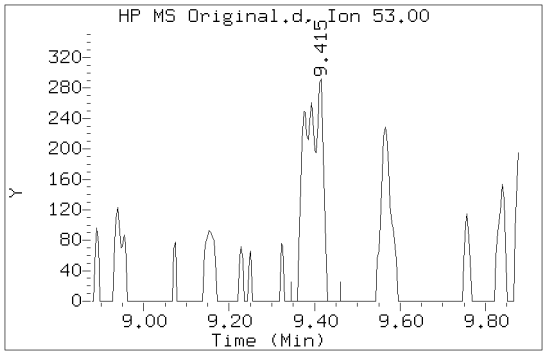
AFTER
MASS
75
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



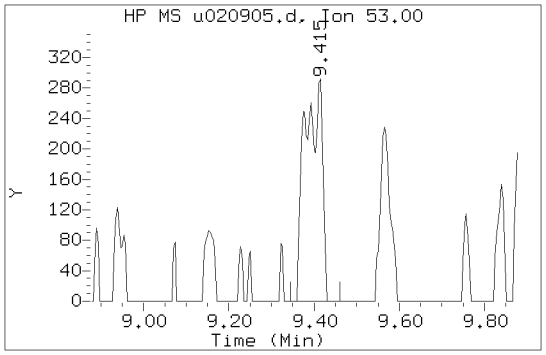
trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code:

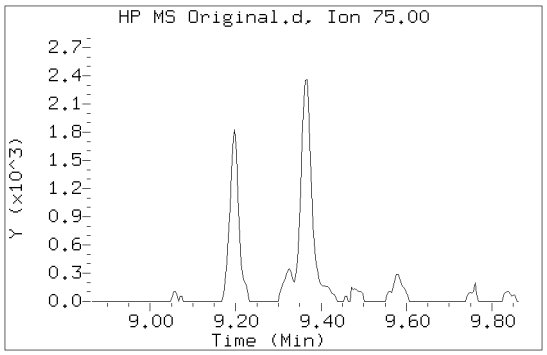
BEFORE
MASS
53
AREA
839
HEIGHT
292
09-Feb-2024
11:53
firat
tastan



AFTER
MASS
53
AREA
839
HEIGHT
292
09-Feb-2024
11:53
firat
tastan



BEFORE
MASS
75
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



AFTER
MASS
75
AREA
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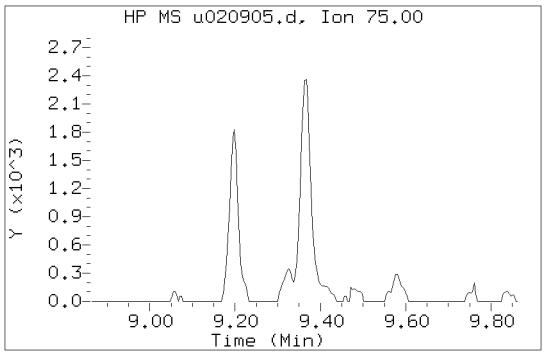
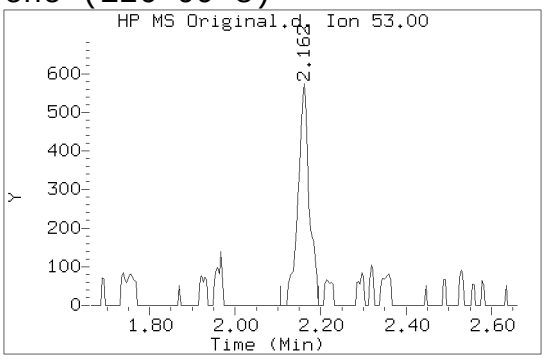
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



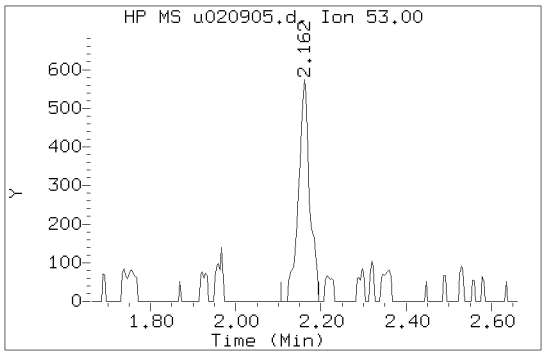
Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020905.d
Inj Date : 09-FEB-2024 10:29
InstruID : VOA9.i
LabSampID : VSTD002

Chloroprene (126-99-8)

BEFORE
MASS
53
AREA
1068
HEIGHT
574
09-Feb-2024
11:53
firat
tastan

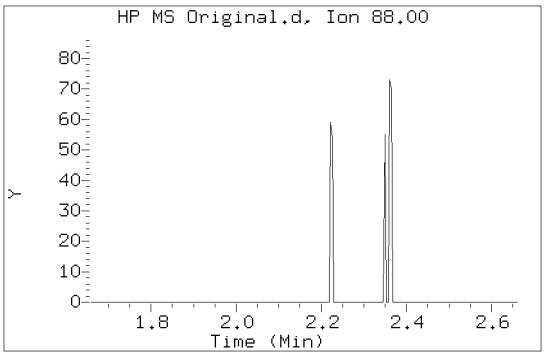


AFTER
MASS
53
AREA
1068
HEIGHT
574
09-Feb-2024
11:53
firat
tastan

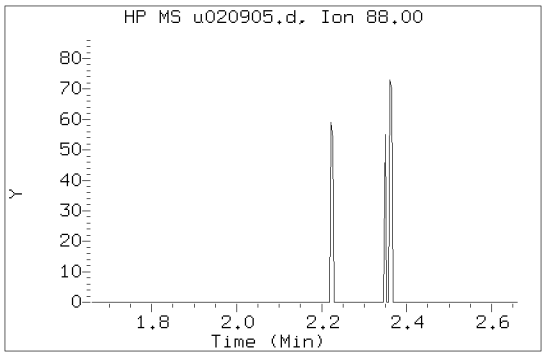


Reason Code:

BEFORE
MASS
88
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



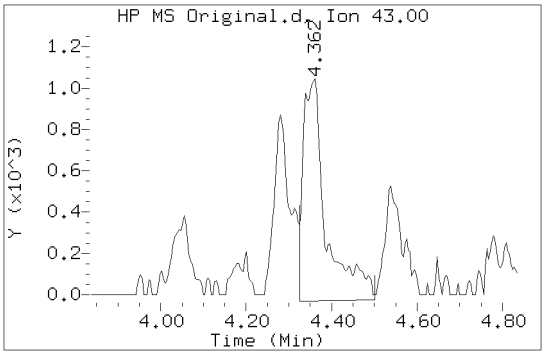
AFTER
MASS
88
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



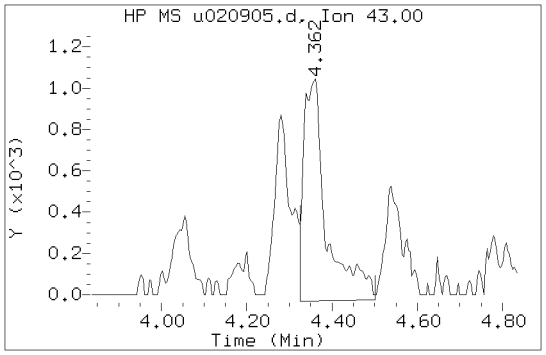
Reason Code:

Ethyl Acetate (141-78-6)

BEFORE
MASS
43
AREA
4030
HEIGHT
1074
09-Feb-2024
11:53
firat
tastan

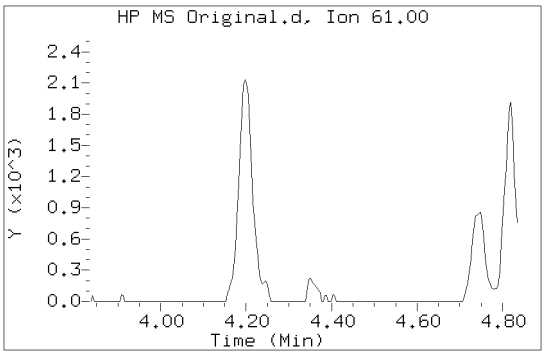


AFTER
MASS
43
AREA
4030
HEIGHT
1074
09-Feb-2024
11:53
firat
tastan

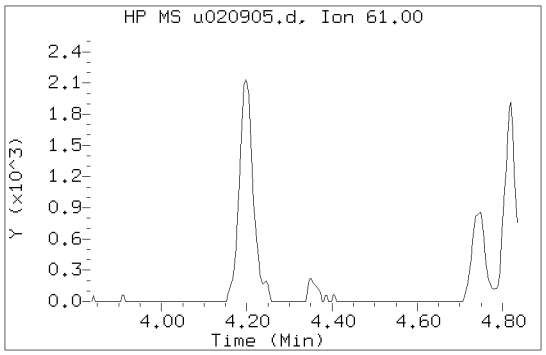


Reason Code:

BEFORE
MASS
61
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



AFTER
MASS
61
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan

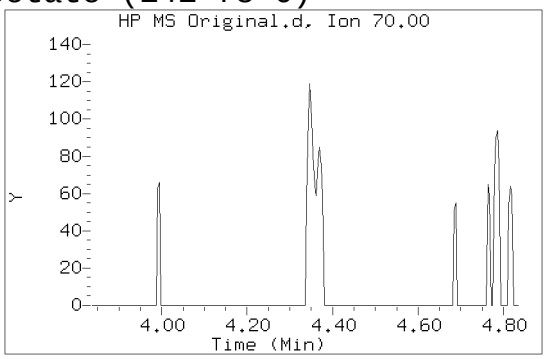


Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020905.d
Inj Date : 09-FEB-2024 10:29
InstruID : VOA9.i
LabSampID : VSTD002

Ethyl Acetate (141-78-6)

BEFORE

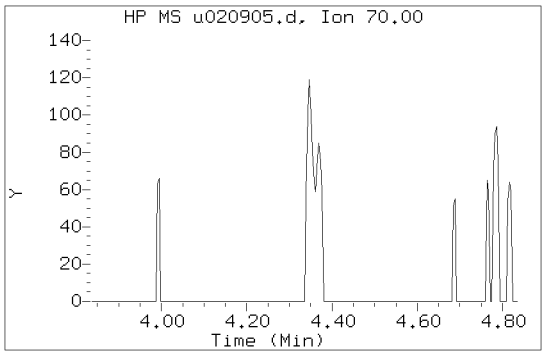
MASS
70
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



Reason Code:

AFTER

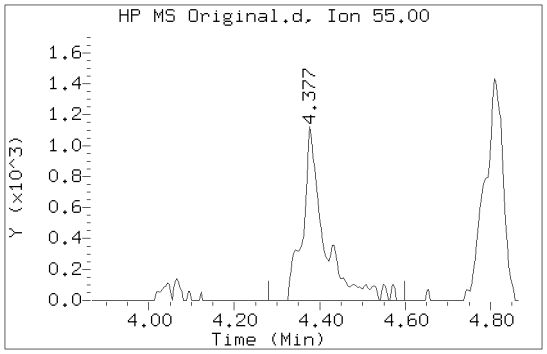
MASS
70
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



Methyl Acrylate (96-33-3)

BEFORE

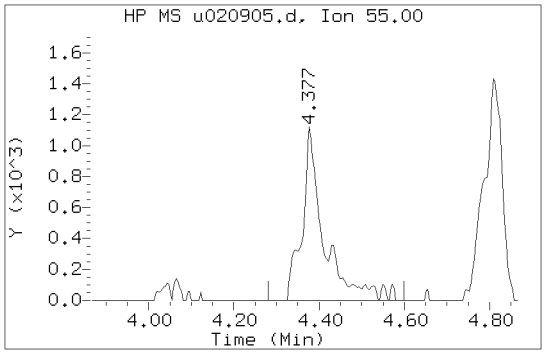
MASS
55
AREA
4010
HEIGHT
1124
09-Feb-2024
11:53
firat
tastan



Reason Code:

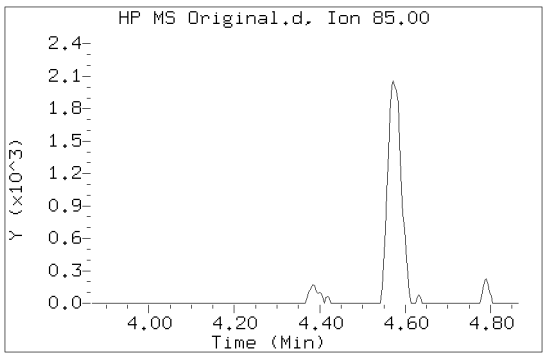
AFTER

MASS
55
AREA
4010
HEIGHT
1124
09-Feb-2024
11:53
firat
tastan



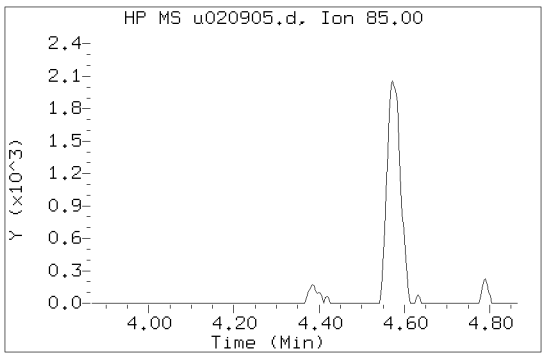
BEFORE

MASS
85
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



AFTER

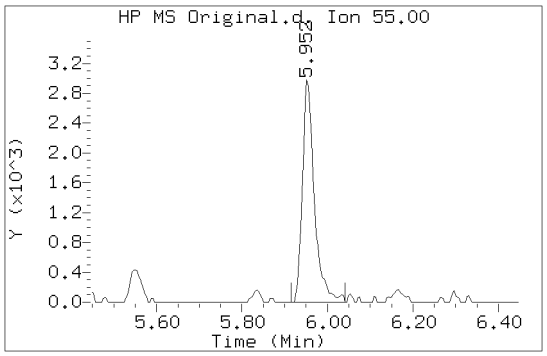
MASS
85
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



Ethyl Acrylate (140-88-5)

BEFORE

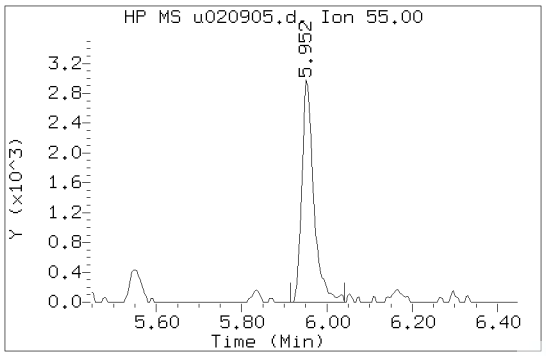
MASS
55
AREA
5919
HEIGHT
2979
09-Feb-2024
11:53
firat
tastan



Reason Code:

AFTER

MASS
55
AREA
5919
HEIGHT
2979
09-Feb-2024
11:53
firat
tastan



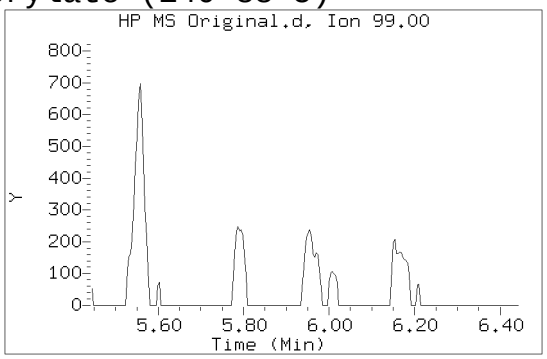
Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020905.d
Inj Date : 09-FEB-2024 10:29
InstruID : VOA9.i
LabSampID : VSTD002

Ethyl Acrylate (140-88-5)

Reason Code:

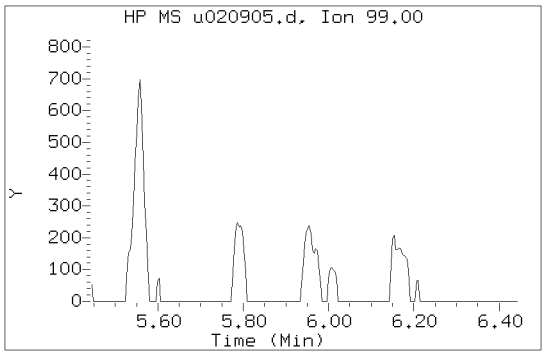
BEFORE

MASS
99
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



AFTER

MASS
99
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan

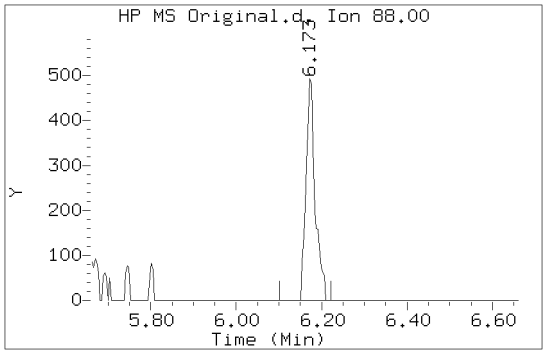


1,4-Dioxane ()

Reason Code:

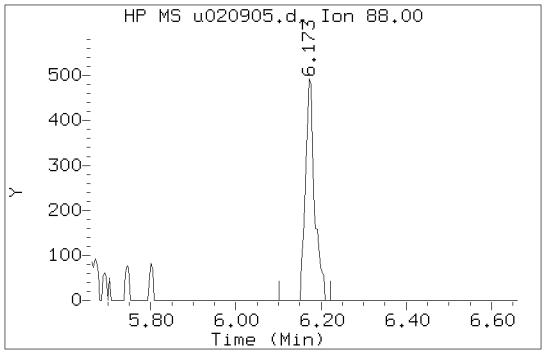
BEFORE

MASS
88
AREA
742
HEIGHT
493
09-Feb-2024
11:53
firat
tastan



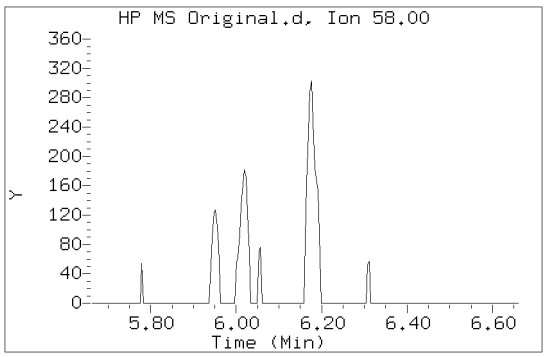
AFTER

MASS
88
AREA
742
HEIGHT
493
09-Feb-2024
11:53
firat
tastan



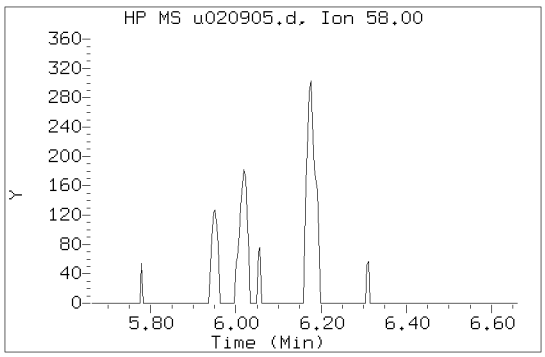
BEFORE

MASS
58
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



AFTER

MASS
58
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan

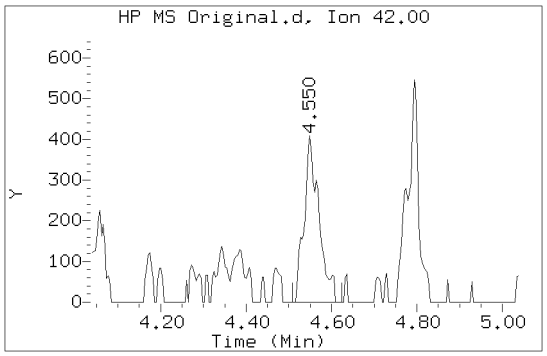


Tetrahydrofuran (109-99-9)

Reason Code:

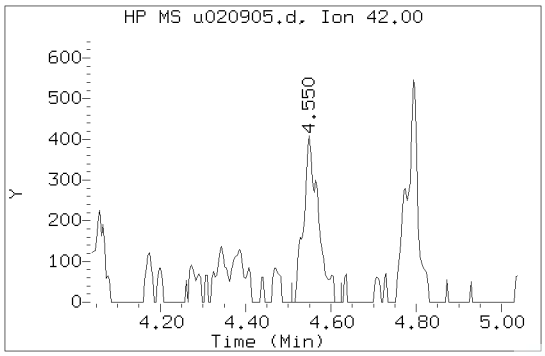
BEFORE

MASS
42
AREA
990
HEIGHT
409
09-Feb-2024
11:53
firat
tastan



AFTER

MASS
42
AREA
990
HEIGHT
409
09-Feb-2024
11:53
firat
tastan



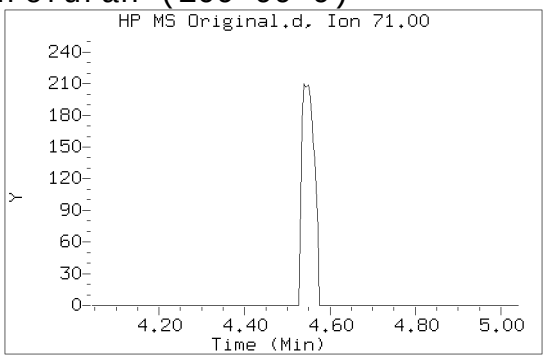
Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020905.d
Inj Date : 09-FEB-2024 10:29
InstruID : VOA9.i
LabSampID : VSTD002

Tetrahydrofuran (109-99-9)

Reason Code:

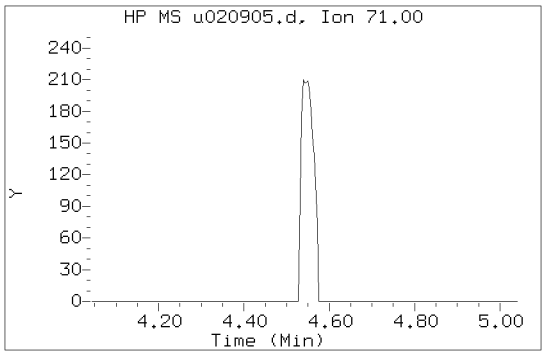
BEFORE

MASS
71
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



AFTER

MASS
71
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan

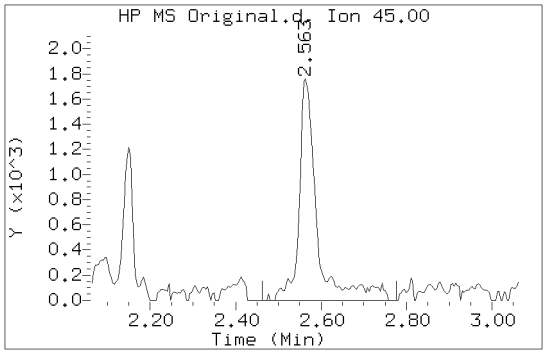


Isopropyl alcohol (67-63-0)

Reason Code:

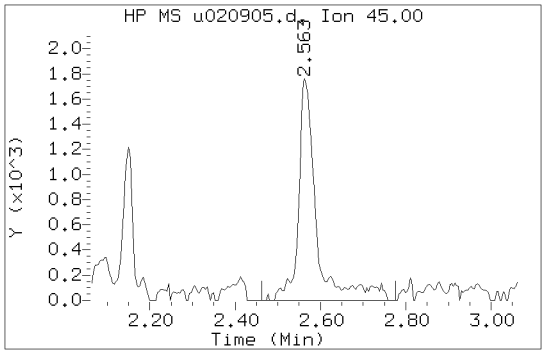
BEFORE

MASS
45
AREA
5220
HEIGHT
1762
09-Feb-2024
11:53
firat
tastan



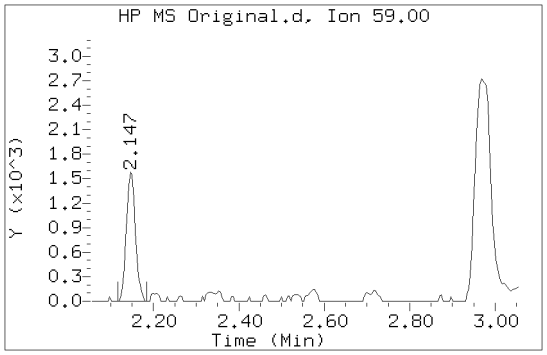
AFTER

MASS
45
AREA
5220
HEIGHT
1762
09-Feb-2024
11:53
firat
tastan



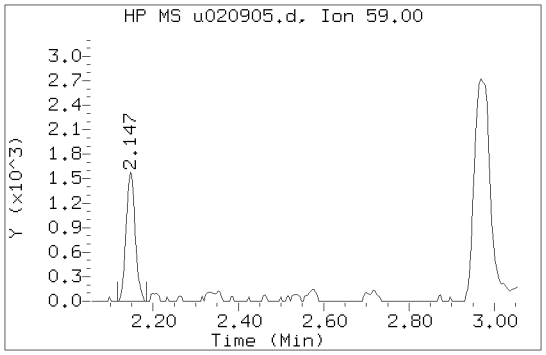
BEFORE

MASS
59
AREA
2342
HEIGHT
1583
09-Feb-2024
11:53
firat
tastan



AFTER

MASS
59
AREA
2342
HEIGHT
1583
09-Feb-2024
11:53
firat
tastan

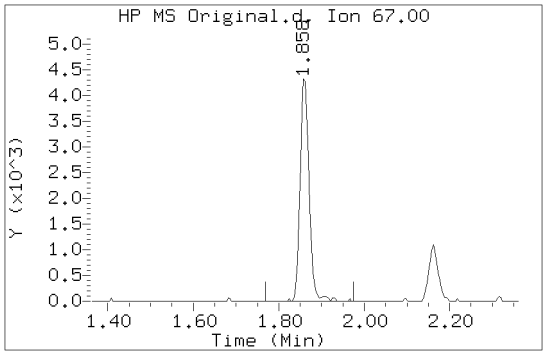


Dichlorofluoromethane (75-43-4)

Reason Code:

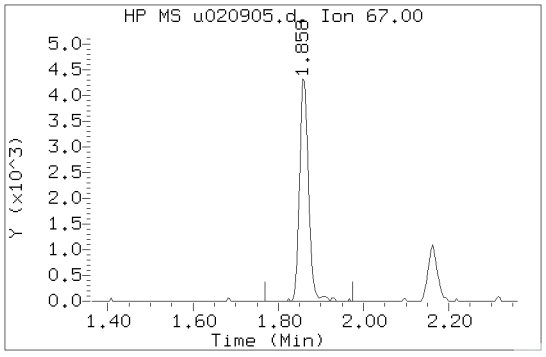
BEFORE

MASS
67
AREA
6531
HEIGHT
4321
09-Feb-2024
11:53
firat
tastan



AFTER

MASS
67
AREA
6531
HEIGHT
4321
09-Feb-2024
11:53
firat
tastan



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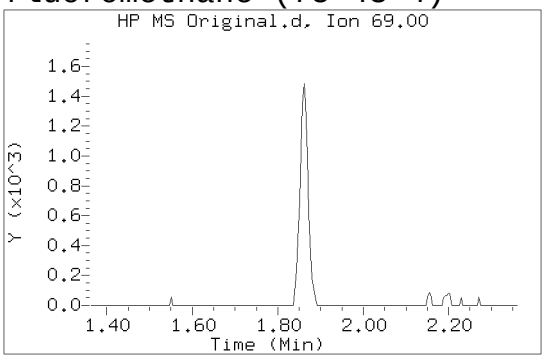
Inj Date : 09-FEB-2024 10:29
InstruID : VOA9.i
LabSampID : VSTD002

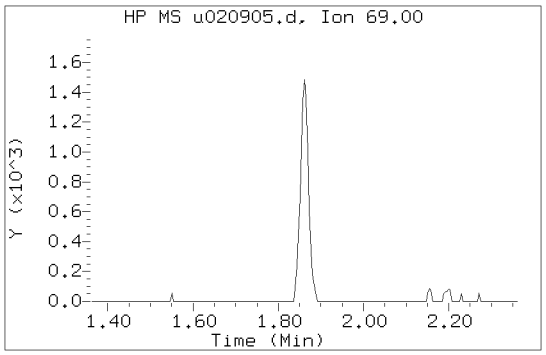
Dichlorofluoromethane (75-43-4)

Reason Code:

BEFORE
MASS
69
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



AFTER
MASS
69
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



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37
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HEIGHT
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09-Feb-2024
11:53
firat
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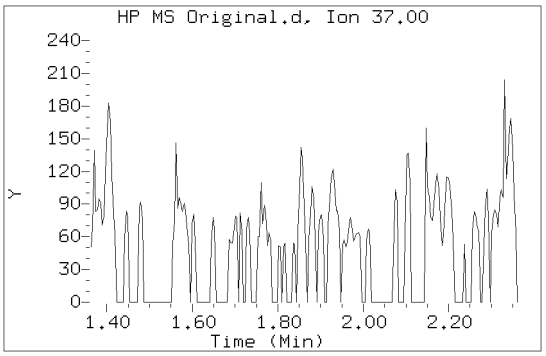
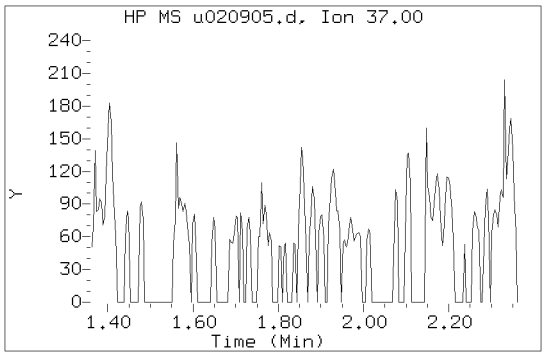


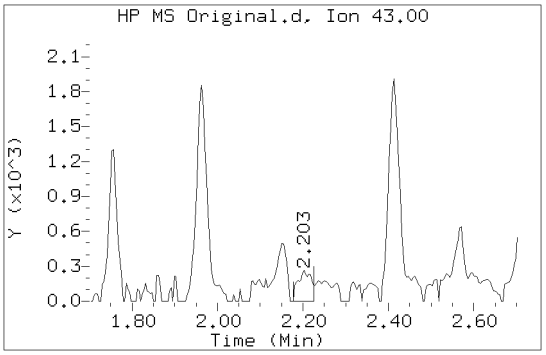
AFTER
MASS
37
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



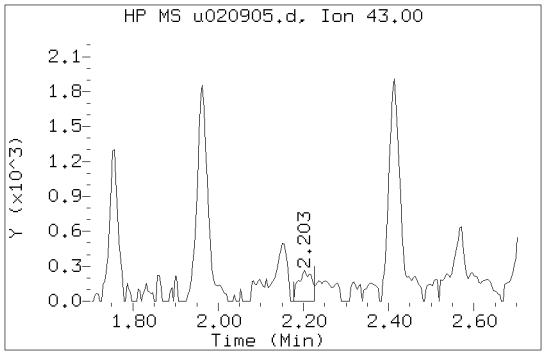
Propylene oxide ()

Reason Code:

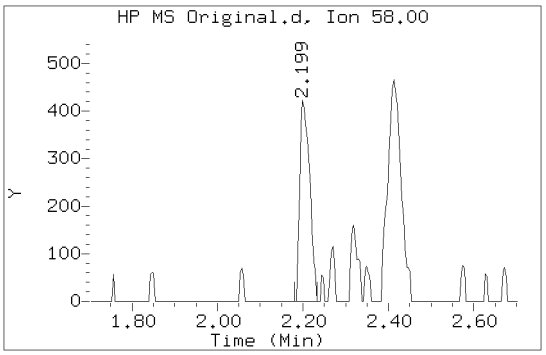
BEFORE
MASS
43
AREA
572
HEIGHT
264
09-Feb-2024
11:53
firat
tastan



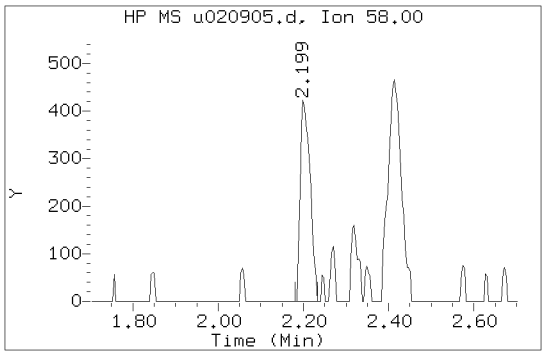
AFTER
MASS
43
AREA
572
HEIGHT
264
09-Feb-2024
11:53
firat
tastan



BEFORE
MASS
58
AREA
694
HEIGHT
423
09-Feb-2024
11:53
firat
tastan



AFTER
MASS
58
AREA
694
HEIGHT
423
09-Feb-2024
11:53
firat
tastan



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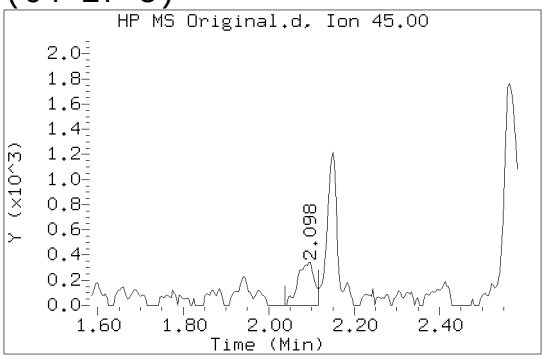
Inj Date : 09-FEB-2024 10:29
InstruID : VOA9.i
LabSampID : VSTD002

Ethanol (64-17-5)

Reason Code:

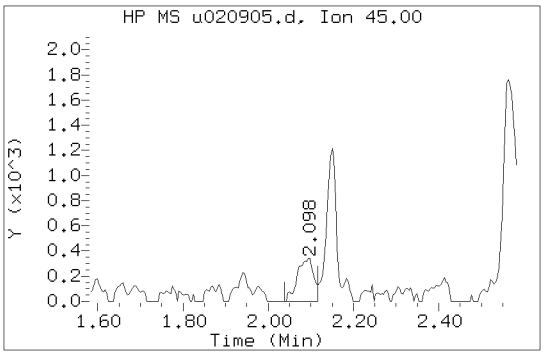
BEFORE

MASS
45
AREA
929
HEIGHT
343
09-Feb-2024
11:53
firat
tastan



AFTER

MASS
45
AREA
929
HEIGHT
343
09-Feb-2024
11:53
firat
tastan



BEFORE

MASS
46
AREA
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HEIGHT
0
09-Feb-2024
11:53
firat
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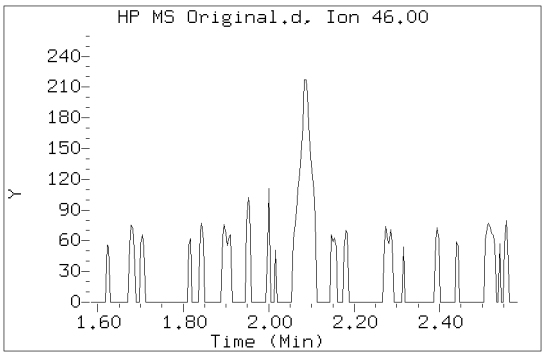
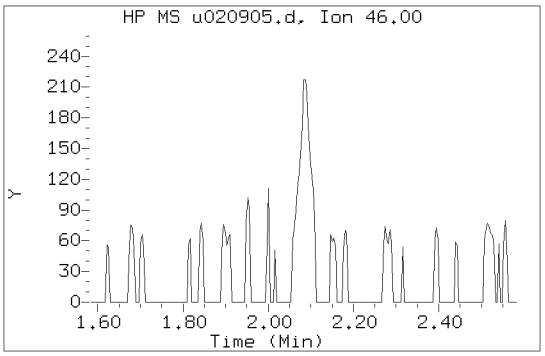


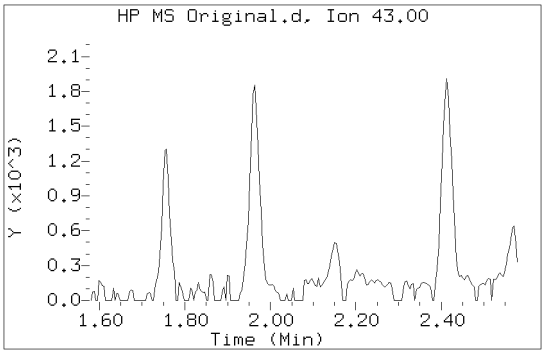
AFTER

MASS
46
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



BEFORE

MASS
43
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



AFTER

MASS
43
AREA
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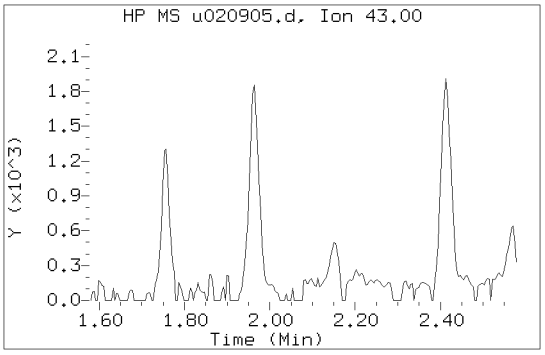
HEIGHT
0
09-Feb-2024
11:53
firat
tastan

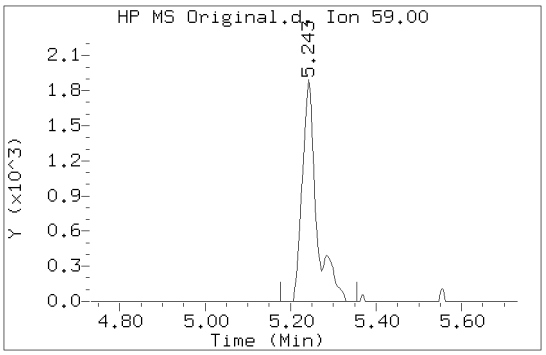


tert-Butyl formate (762-75-4)

Reason Code:

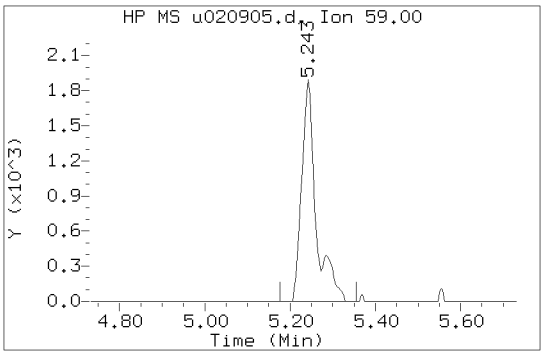
BEFORE

MASS
59
AREA
4458
HEIGHT
1893
09-Feb-2024
11:53
firat
tastan



AFTER

MASS
59
AREA
4458
HEIGHT
1893
09-Feb-2024
11:53
firat
tastan

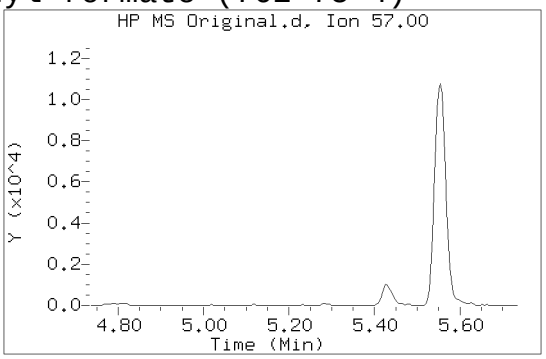


Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020905.d
Inj Date : 09-FEB-2024 10:29
InstruID : VOA9.i
LabSampID : VSTD002

tert-Butyl formate (762-75-4)

Reason Code:

BEFORE
MASS
57
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



AFTER
MASS
57
AREA
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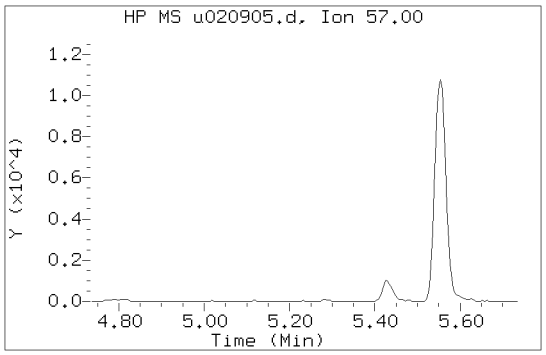
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



BEFORE
MASS
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AREA
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HEIGHT
0
09-Feb-2024
11:53
firat
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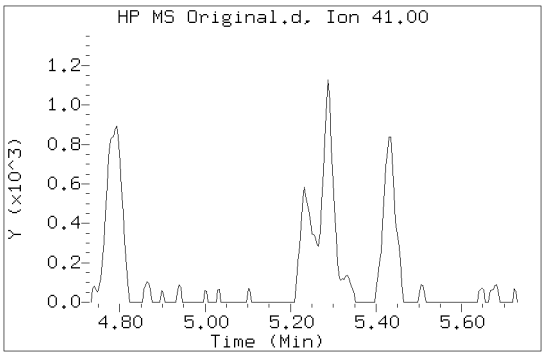

AFTER
MASS
41
AREA
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HEIGHT
0
09-Feb-2024
11:53
firat
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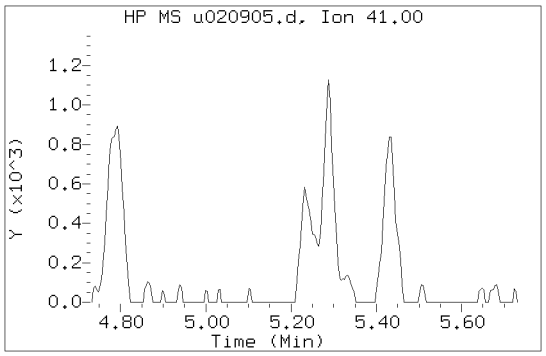
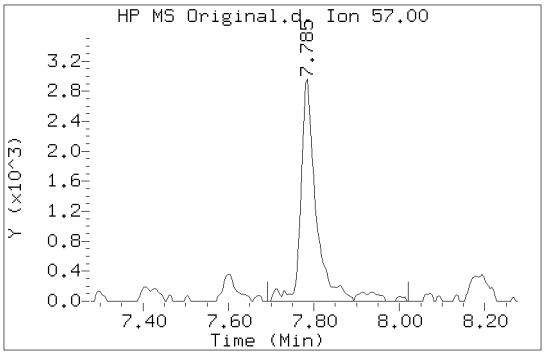


3,3-Dimethyl-1-butanol (624-95-3)

Reason Code:

BEFORE
MASS
57
AREA
7767
HEIGHT
2963
09-Feb-2024
11:53
firat
tastan



AFTER
MASS
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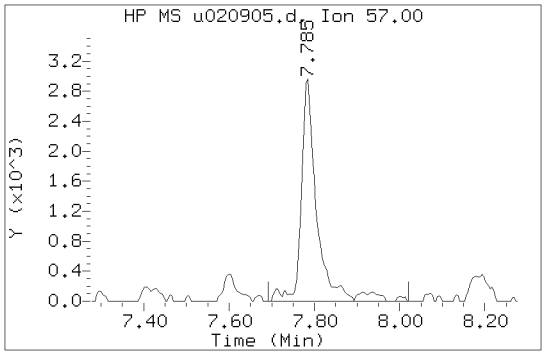
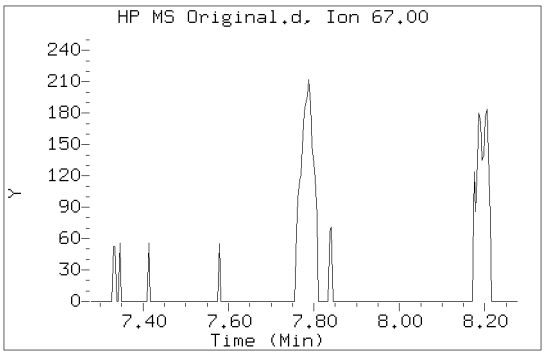
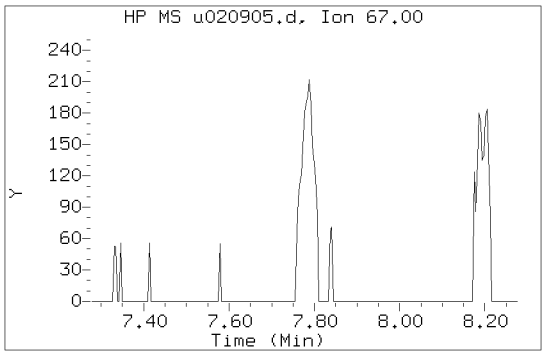
AREA
7767
HEIGHT
2963
09-Feb-2024
11:53
firat
tastan



BEFORE
MASS
67
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



AFTER
MASS
67
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



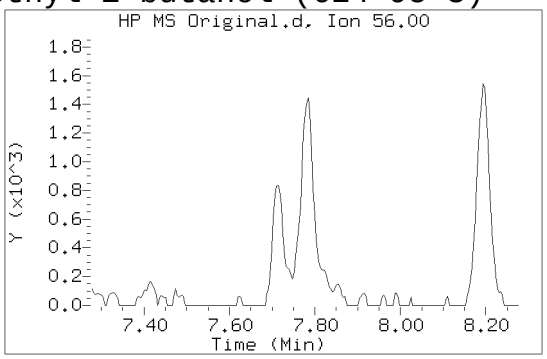
Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020905.d
Inj Date : 09-FEB-2024 10:29
InstruID : VOA9.i
LabSampID : VSTD002

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

Reason Code:

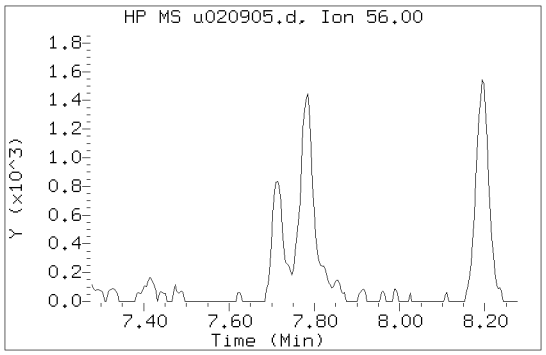
BEFORE

MASS
56
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



AFTER

MASS
56
AREA
0
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



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

Reason Code:

BEFORE

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73
AREA
11043
HEIGHT
4424
09-Feb-2024
11:53
firat
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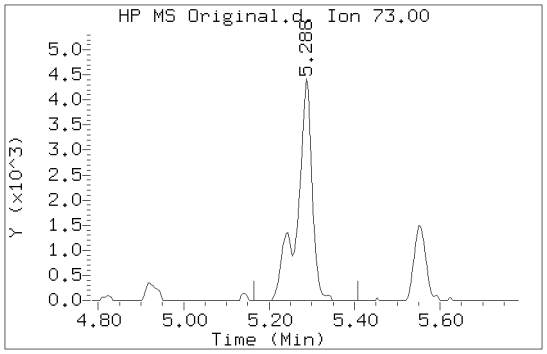

AFTER

MASS
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AREA
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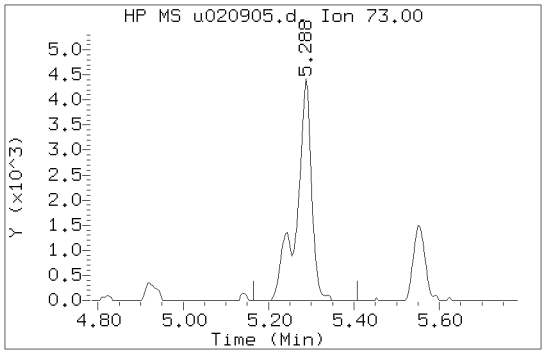
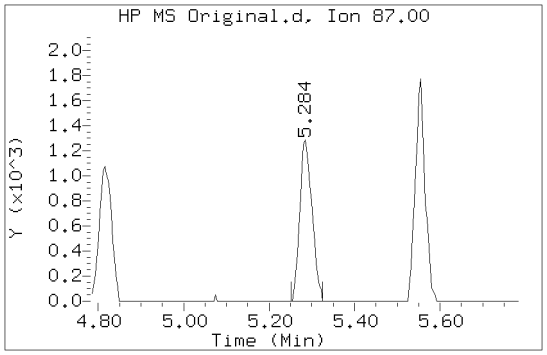
4424
09-Feb-2024
11:53
firat
tastan



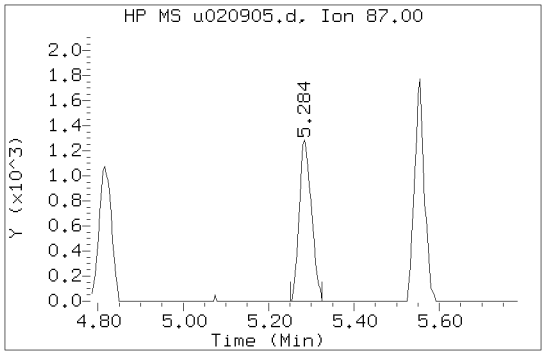
BEFORE

MASS
87
AREA
2602
HEIGHT
1288
09-Feb-2024
11:53
firat
tastan



AFTER

MASS
87
AREA
2602
HEIGHT
1288
09-Feb-2024
11:53
firat
tastan



BEFORE

MASS
55
AREA
3222
HEIGHT
1545
09-Feb-2024
11:53
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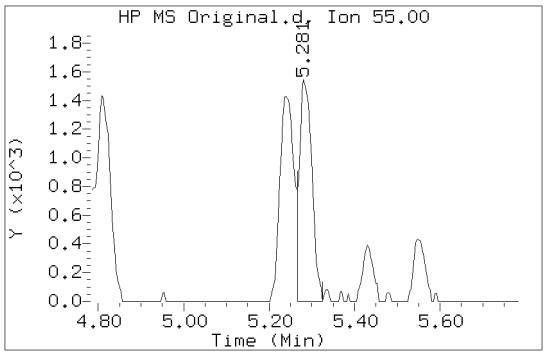
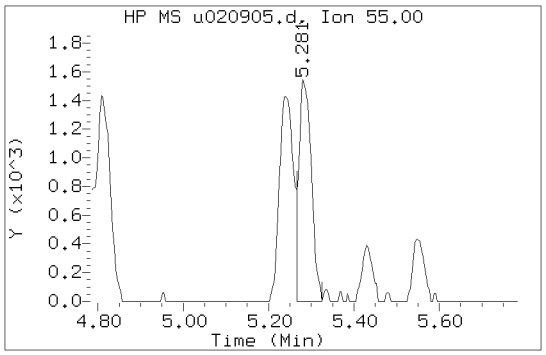
tastan



AFTER

MASS
55
AREA
3222
HEIGHT
1545
09-Feb-2024
11:53
firat
tastan



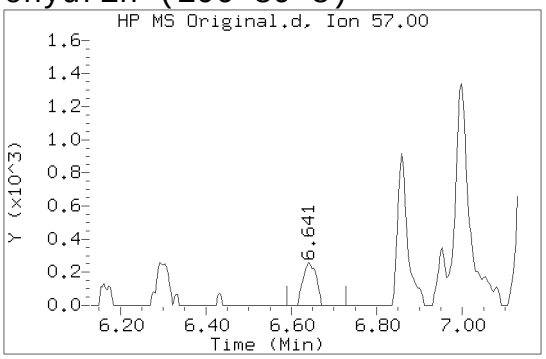
Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020905.d
Inj Date : 09-FEB-2024 10:29
InstruID : VOA9.i
LabSampID : VSTD002

Epichlorohydrin (106-89-8)

Reason Code:

BEFORE

MASS
57
AREA
553
HEIGHT
260
09-Feb-2024
11:53
firat
tastan



AFTER

MASS
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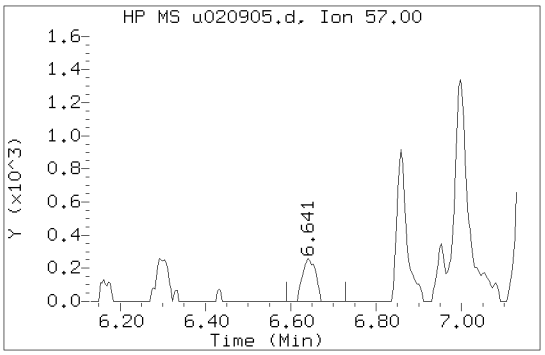
AREA
553
HEIGHT
260
09-Feb-2024
11:53
firat
tastan



BEFORE

MASS
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AREA
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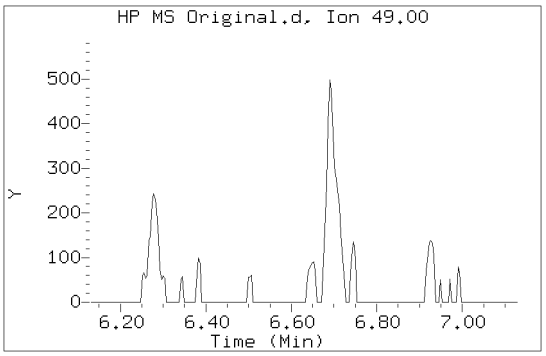
HEIGHT
0
09-Feb-2024
11:53
firat
tastan



AFTER

MASS
49
AREA
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HEIGHT
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09-Feb-2024
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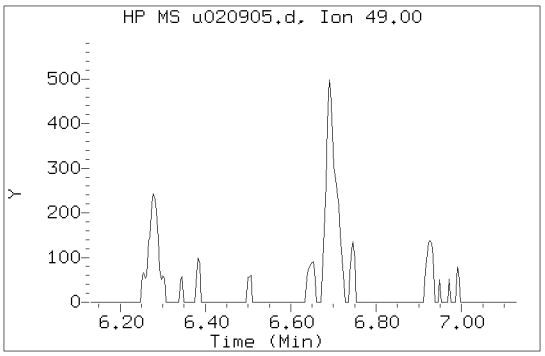

n-Amyl acetate (628-63-7)

Reason Code:

BEFORE

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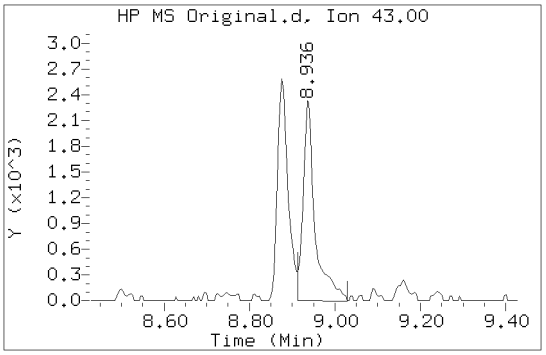

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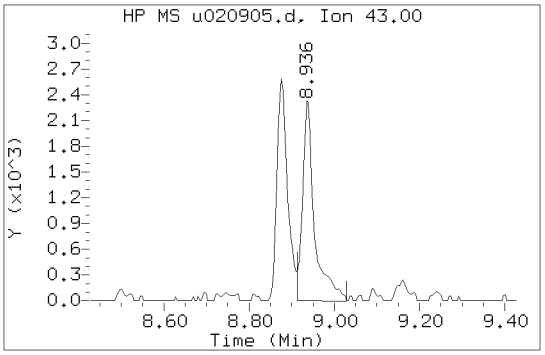

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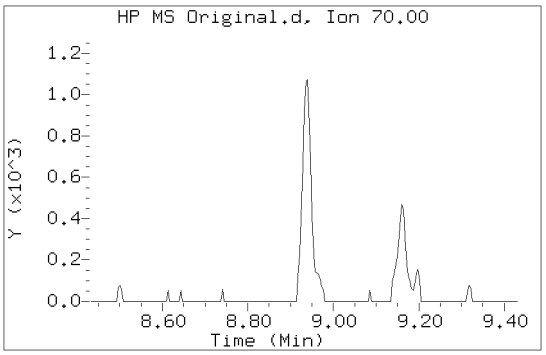

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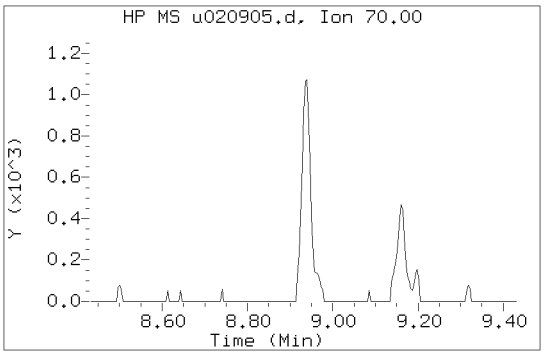

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Inj Date : 09-FEB-2024 10:29
InstruID : VOA9.i
LabSampID : VSTD002

n-Amyl acetate (628-63-7)

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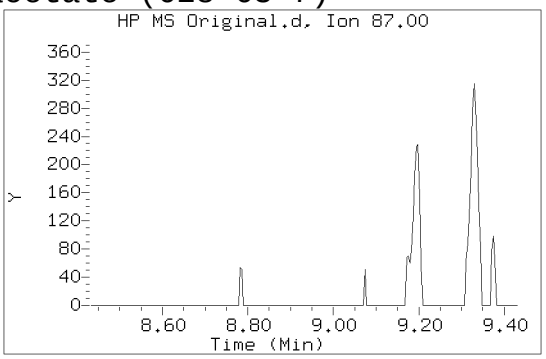

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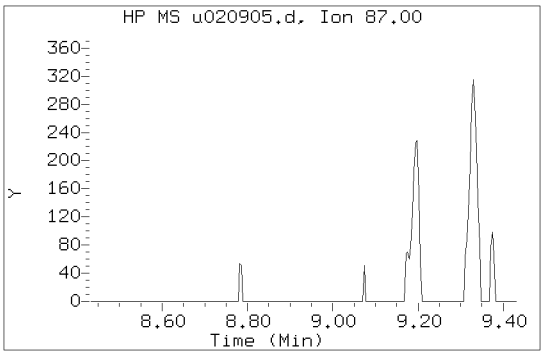

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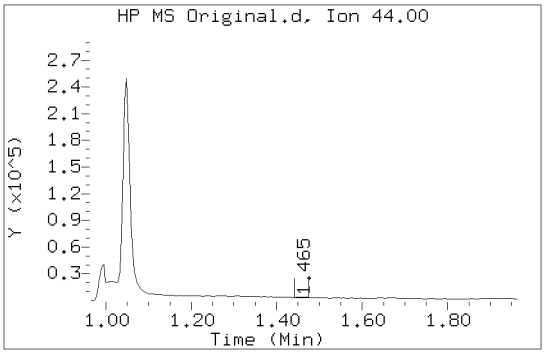

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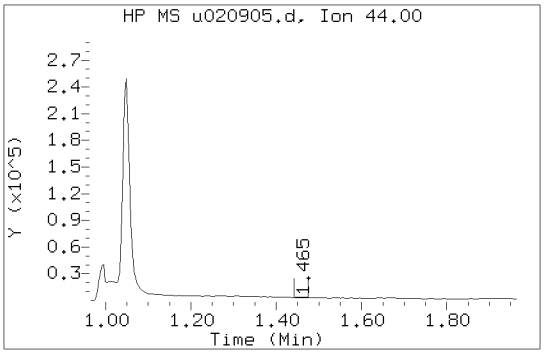

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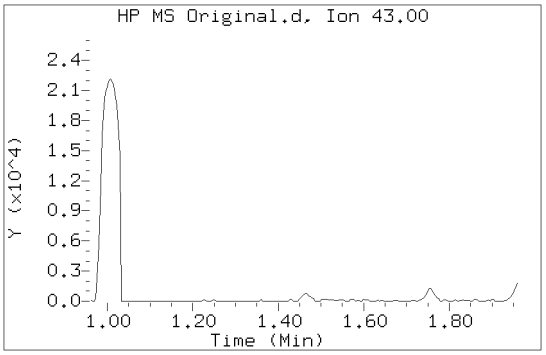

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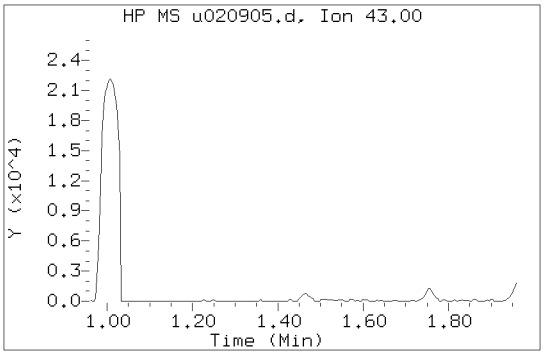

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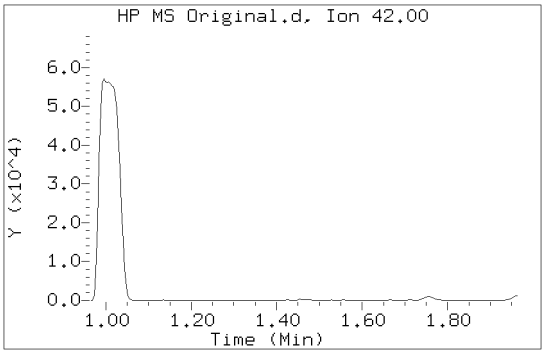

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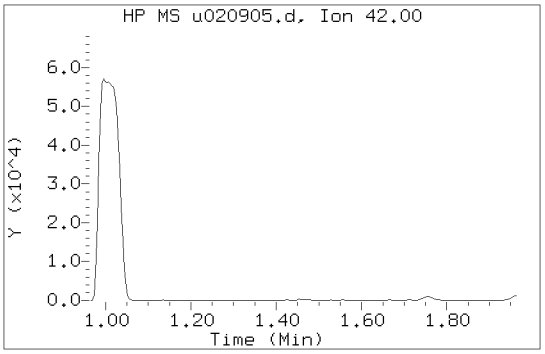

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Inj Date : 09-FEB-2024 10:29
InstruID : VOA9.i
LabSampID : VSTD002

Isobutylene (115-11-7)

Reason Code:

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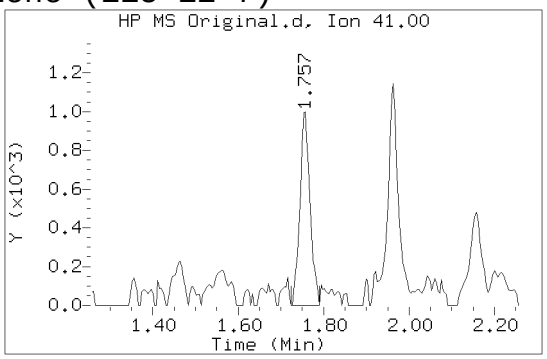

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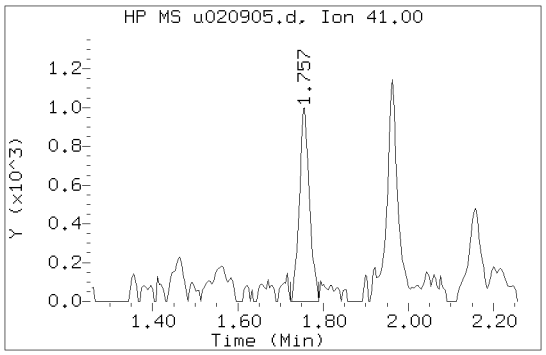

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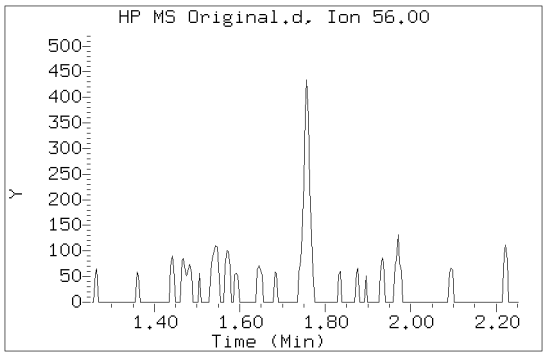

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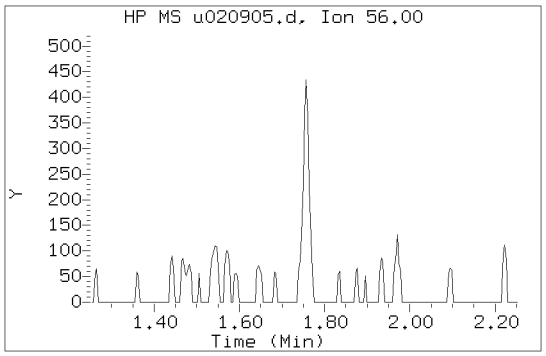

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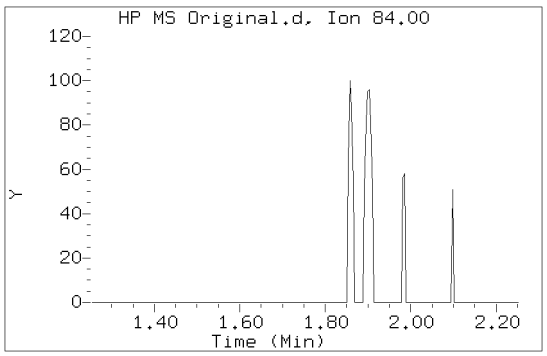

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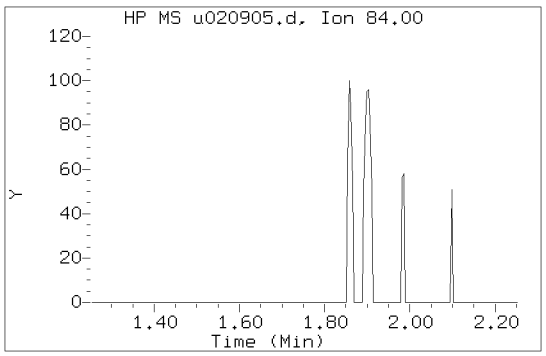


Data File: \\NAHSTWS005\Target\chem\voa9.i\U240209.b\U020906.D Page 1
Report Date: 15-Feb-2024 11:14

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240209.b\U020906.D
Lab Smp Id: VSTD005 Client Smp ID: VSTD005
Inj Date : 09-FEB-2024 10:51
Operator : FT Inst ID: VOA9.i
Smp Info : VSTD005;VSTD005;1;5;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240209.b\8260C.m
Meth Date : 15-Feb-2024 11:14 VOA9.i Quant Type: ISTD
Cal Date : 09-FEB-2024 10:29 Cal File: U020905.D
Als bottle: 6 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V9.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1	Pentafluorobenzene	168	4.819	4.819	(1.000)	197119	50.0000	
2	Dichlorodifluoromethane	85	1.168	1.168	(0.242)	6902	5.00000	5.45
3	Chloromethane	50	1.303	1.303	(0.270)	8108	5.00000	5.70
5	Vinyl Chloride	62	1.381	1.381	(0.287)	7991	5.00000	4.73
6	Bromomethane	94	1.625	1.625	(0.337)	6995	5.00000	6.58
7	Chloroethane	64	1.704	1.704	(0.354)	6630	5.00000	5.32
8	Trichlorofluoromethane	101	1.902	1.902	(0.395)	13984	5.00000	4.79
9	Acrolein	56	2.270	2.270	(0.471)	908	10.0000	10.27
10	Acetone	43	2.412	2.412	(0.501)	6278	10.0000	7.87
11	1,1-Dichloroethene	96	2.337	2.337	(0.485)	7671	5.00000	4.91
15	Iodomethane	142	2.472	2.472	(0.513)	16927	10.0000	8.78
16	Acrylonitrile	53	3.072	3.072	(0.638)	5479	10.0000	10.31
17	Methylene Chloride	84	2.798	2.798	(0.581)	10413	5.00000	4.56
18	Methyl tert-butyl ether	73	3.083	3.083	(0.640)	23203	5.00000	5.37
19	Carbon Disulfide	76	2.525	2.525	(0.524)	41102	10.0000	8.76
20	trans-1,2-Dichloroethene	96	3.061	3.061	(0.635)	8449	5.00000	4.64
21	Vinyl Acetate	43	3.616	3.616	(0.750)	33717	10.0000	8.69
22	1,1-Dichloroethane	63	3.518	3.518	(0.730)	14081	5.00000	5.01
24	2-Butanone	43	4.275	4.275	(0.887)	4811	10.0000	8.05
26	2,2-Dichloropropane	77	4.189	4.189	(0.869)	9591	5.00000	4.09

27 cis-1,2-Dichloroethene	96	4.204	4.204 (0.872)	9515	5.00000	4.38
28 Chloroform	83	4.575	4.575 (0.949)	16177	5.00000	4.93

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240209.b\U020906.D Page 2
Report Date: 15-Feb-2024 11:14

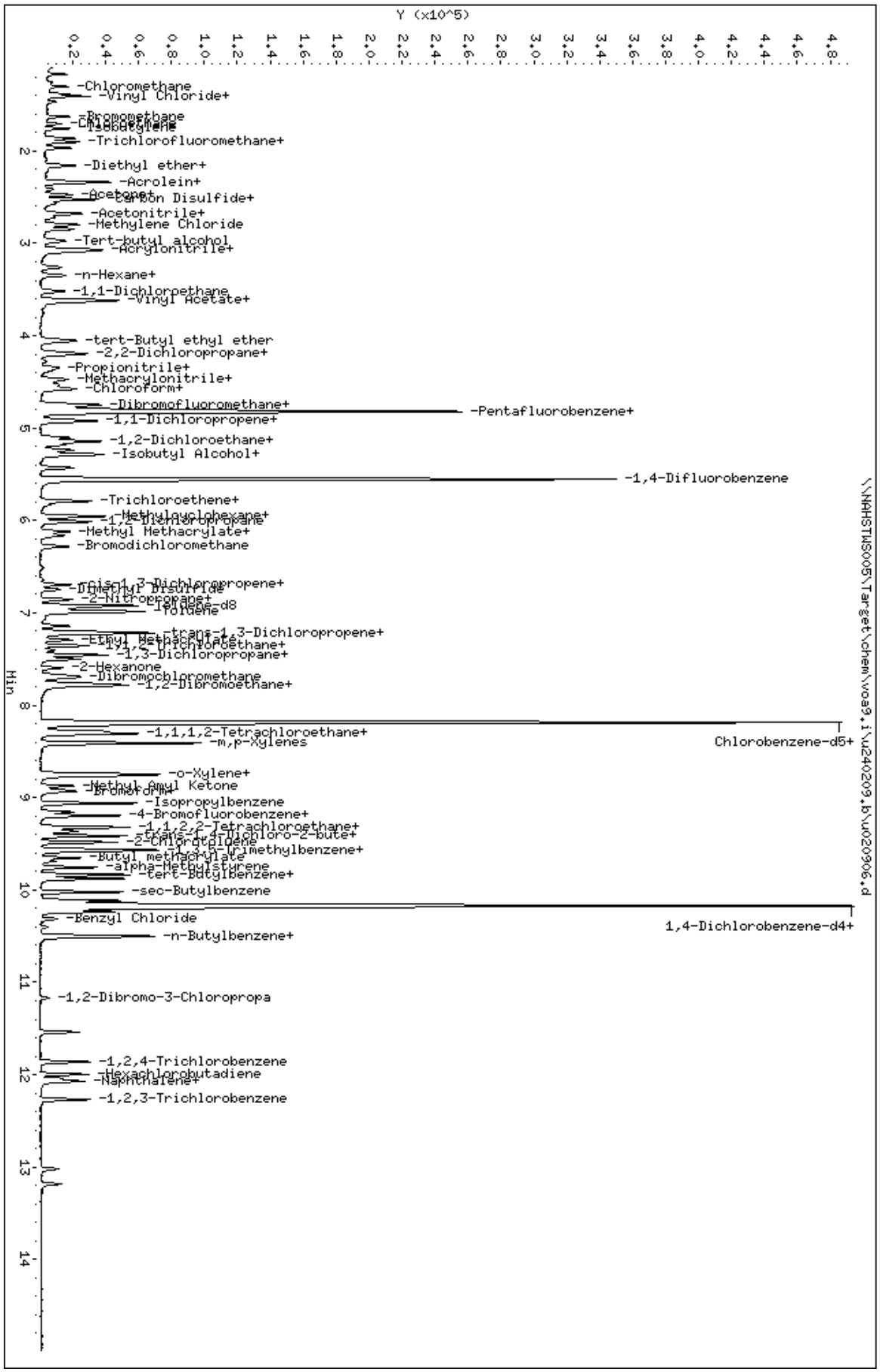
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	29 Bromochloromethane	128	4.474	4.474	(0.928)	5510	5.00000	4.16
$	30 Dibromofluoromethane	113	4.751	4.751	(0.986)	12182	5.00000	5.60
	31 1,1,1-Trichloroethane	97	4.748	4.748	(0.985)	12411	5.00000	4.36
	32 1,1-Dichloropropene	75	4.928	4.928	(0.887)	10861	5.00000	4.60
	33 1,2-Dichloroethane	62	5.183	5.183	(0.933)	11071	5.00000	3.99
	34 Carbon Tetrachloride	117	4.913	4.913	(0.885)	11527	5.00000	4.30
$	35 1,2-Dichloroethane-d4	65	5.100	5.100	(1.058)	11550	5.00000	5.00
*	36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	294234	50.0000	
	37 Benzene	78	5.141	5.141	(0.926)	33049	5.00000	4.69
	38 Trichloroethene	130	5.794	5.794	(1.043)	10696	5.00000	4.77
	39 Bromodichloromethane	83	6.281	6.281	(1.131)	10142	5.00000	4.06
	41 2-Chloroethylvinyl ether	63	6.648	6.648	(1.083)	43	10.0000	2.49(MH)
	42 1,2-Dichloropropane	63	6.011	6.011	(1.082)	7727	5.00000	4.37
	44 Dibromomethane	93	6.120	6.120	(1.102)	5329	5.00000	4.25
	45 4-Methyl-2-Pentanone	43	6.854	6.854	(0.837)	12122	10.0000	8.03
	46 cis-1,3-Dichloropropene	75	6.693	6.693	(1.205)	9810	5.00000	3.75
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	270102	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	39372	5.00000	5.29
	50 Toluene	91	6.982	6.982	(0.853)	35681	5.00000	4.26
	51 trans-1,3-Dichloropropene	75	7.199	7.199	(1.296)	7589	5.00000	4.71
	52 2-Hexanone	43	7.597	7.597	(0.928)	8227	10.0000	10.17
	53 1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	6711	5.00000	4.60
	54 1,3-Dichloropropane	76	7.499	7.499	(0.916)	13330	5.00000	4.36
	55 Dibromochloromethane	129	7.690	7.690	(0.940)	8308	5.00000	3.89
	56 Tetrachloroethene	164	7.458	7.458	(0.911)	9440	5.00000	4.94
	57 1,2-Dibromoethane	107	7.788	7.788	(0.951)	8410	5.00000	4.49
	58 1-Chlorohexane	55	8.196	8.196	(1.476)	8072	5.00000	5.00
	59 Chlorobenzene	112	8.211	8.211	(1.003)	26047	5.00000	4.50
	60 1,1,1,2-Tetrachloroethane	131	8.286	8.286	(1.012)	9062	5.00000	4.21
	61 Ethylbenzene	106	8.309	8.309	(1.015)	12405	5.00000	4.36
	62 m,p-Xylenes	106	8.410	8.410	(1.027)	29117	10.0000	8.33
	63 o-Xylene	106	8.748	8.748	(1.069)	13926	5.00000	4.07
	64 Styrene	104	8.763	8.763	(1.071)	22688	5.00000	4.05
	66 Bromoform	173	8.916	8.916	(1.089)	5568	5.00000	3.61
	67 Isopropylbenzene	105	9.062	9.062	(1.107)	36585	5.00000	4.18
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	10355	5.00000	4.59
$	69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	13924	5.00000	4.86
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	143599	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.920)	9701	5.00000	4.20
	73 n-Propylbenzene	91	9.411	9.411	(0.925)	37439	5.00000	4.21
	74 Bromobenzene	156	9.317	9.317	(0.916)	11779	5.00000	4.51
	75 1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	28064	5.00000	4.22
	76 2-Chlorotoluene	91	9.482	9.482	(0.932)	25323	5.00000	4.29
	77 4-Chlorotoluene	91	9.576	9.576	(0.941)	27788	5.00000	4.15
	78 tert-Butylbenzene	119	9.835	9.835	(0.967)	25855	5.00000	4.24
	79 1,2,4-Trimethylbenzene	105	9.880	9.880	(0.971)	27759	5.00000	4.23
	81 sec-Butylbenzene	105	10.022	10.022	(0.985)	33026	5.00000	4.25
	82 p-Isopropyltoluene	119	10.146	10.146	(0.997)	27981	5.00000	4.02
	83 1,3-Dichlorobenzene	146	10.116	10.116	(0.994)	20783	5.00000	4.56
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	21781	5.00000	4.37
	87 n-Butylbenzene	91	10.494	10.494	(1.032)	22824	5.00000	4.17
	88 1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	20035	5.00000	4.36

89	1,2-Dibromo-3-Chloropropane	155	11.169	11.169 (1.098)	1238	5.00000	5.77
90	1,2,4-Trichlorobenzene	180	11.863	11.863 (1.166)	11549	5.00000	4.06

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	91 Hexachlorobutadiene	225	11.998	11.998	(1.179)	5773	5.00000	4.54
	92 Naphthalene	128	12.069	12.069	(1.186)	21969	5.00000	4.51
	93 1,2,3-Trichlorobenzene	180	12.271	12.271	(1.206)	11689	5.00000	4.31
M	94 1,2-Dichloroethylene (total)	96				17964	10.0000	
M	95 Xylenes (total)	106				43043	15.0000	
	135 1,4-Dioxane	88	6.168	6.168	(1.280)	1680	100.000	86.67
	141 Cyclohexane	56	4.789	4.789	(0.994)	12221	5.00000	5.33
	138 Freon TF	101	2.341	2.341	(0.486)	8106	5.00000	4.99
	140 1,3-Butadiene	54	1.408	1.408	(0.292)	6867	5.00000	4.69
	147 Methylcyclohexane	55	5.951	5.951	(1.072)	16763	5.00000	4.70
	146 Methyl Acetate	43	2.720	2.720	(0.564)	5663	5.00000	4.43
	148 Tert-Butyl alcohol	59	2.971	2.971	(0.617)	16928	100.000	103.89
	149 Isopropyl Alcohol	45	2.566	2.566	(0.533)	8964	100.000	101.52(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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Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9,i
Operator: FT
Column diameter: 0.18

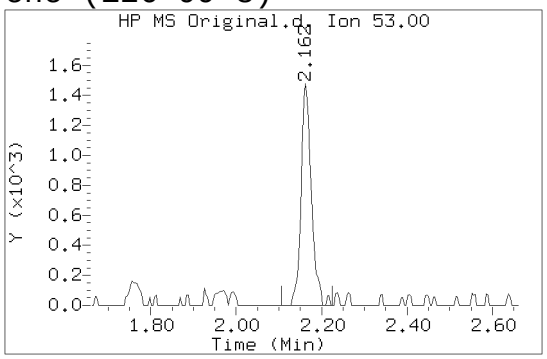
Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020906.d
Inj Date : 09-FEB-2024 10:51
InstruID : VOA9.i
LabSampID : VSTD005

Chloroprene (126-99-8)

Reason Code:

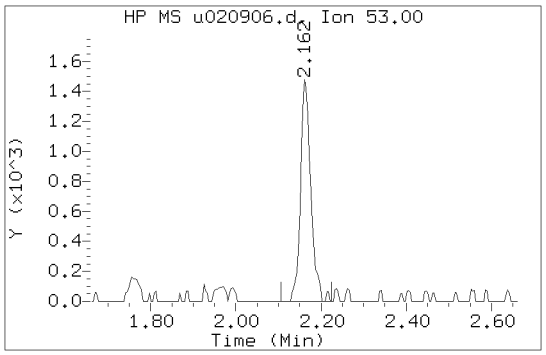
BEFORE

MASS
53
AREA
2540
HEIGHT
1478
09-Feb-2024
11:54
firat
tastan



AFTER

MASS
53
AREA
2540
HEIGHT
1478
09-Feb-2024
11:54
firat
tastan



BEFORE

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88
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09-Feb-2024
11:54
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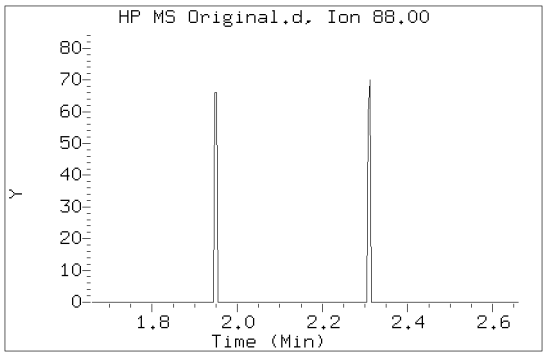
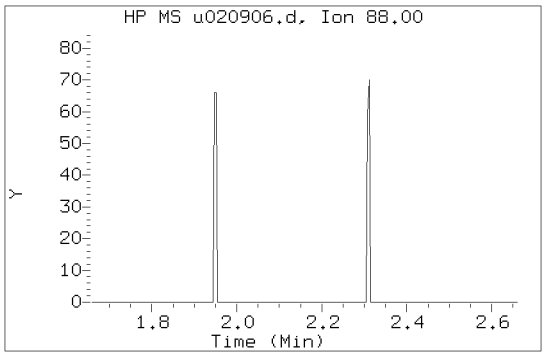


AFTER

MASS
88
AREA
0
HEIGHT
0
09-Feb-2024
11:54
firat
tastan

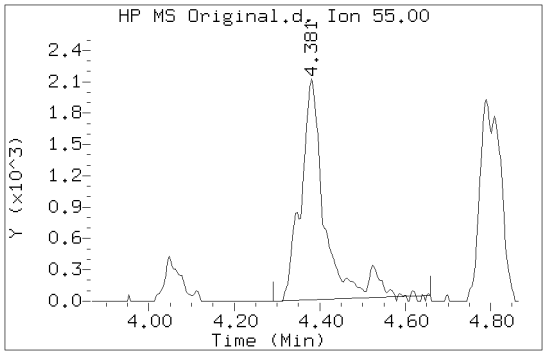


Methyl Acrylate (96-33-3)

Reason Code:

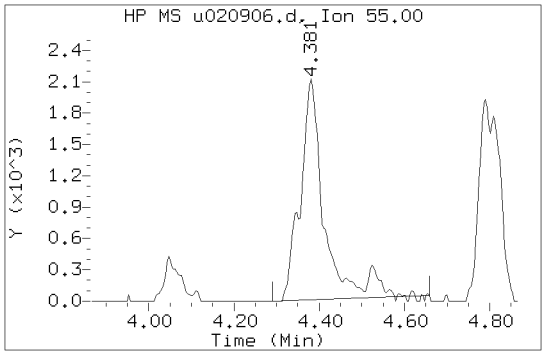
BEFORE

MASS
55
AREA
8160
HEIGHT
2113
09-Feb-2024
11:54
firat
tastan



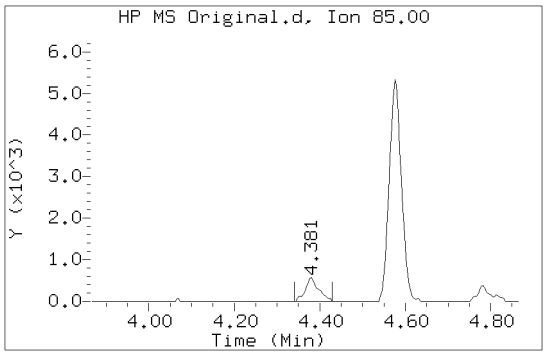
AFTER

MASS
55
AREA
8160
HEIGHT
2113
09-Feb-2024
11:54
firat
tastan



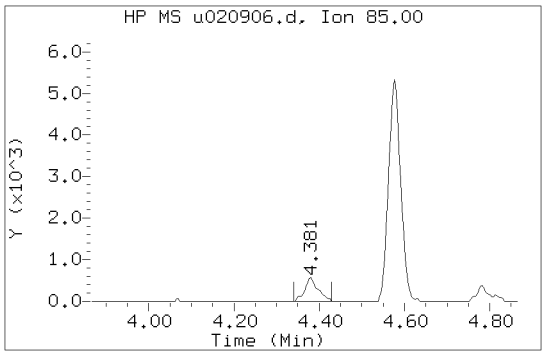
BEFORE

MASS
85
AREA
1241
HEIGHT
577
09-Feb-2024
11:54
firat
tastan



AFTER

MASS
85
AREA
1241
HEIGHT
577
09-Feb-2024
11:54
firat
tastan



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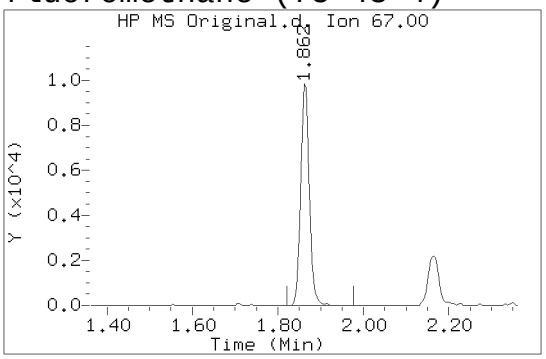
Inj Date : 09-FEB-2024 10:51
InstruID : VOA9.i
LabSampID : VSTD005

Dichlorofluoromethane (75-43-4)

Reason Code:

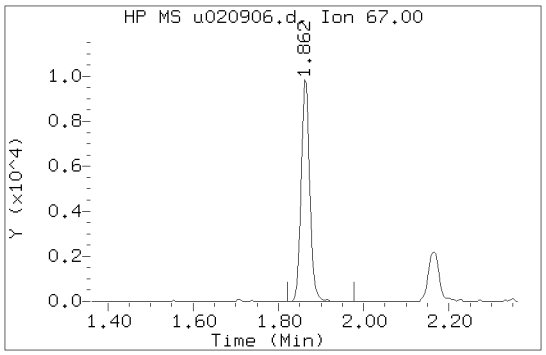
BEFORE

MASS
67
AREA
14067
HEIGHT
9847
09-Feb-2024
11:54
firat
tastan



AFTER

MASS
67
AREA
14067
HEIGHT
9847
09-Feb-2024
11:54
firat
tastan



BEFORE

MASS
69
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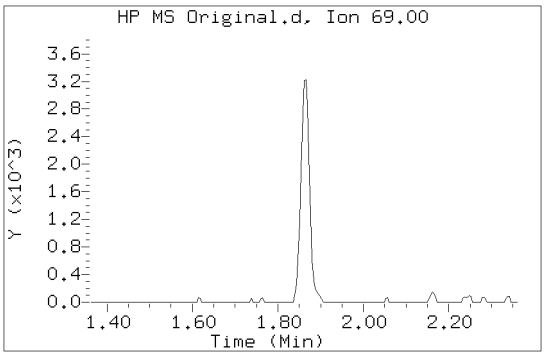
HEIGHT
0
09-Feb-2024
11:54
firat
tastan



AFTER

MASS
69
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HEIGHT
0
09-Feb-2024
11:54
firat
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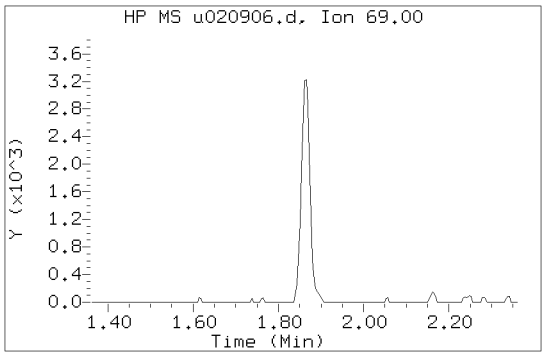

BEFORE

MASS
37
AREA
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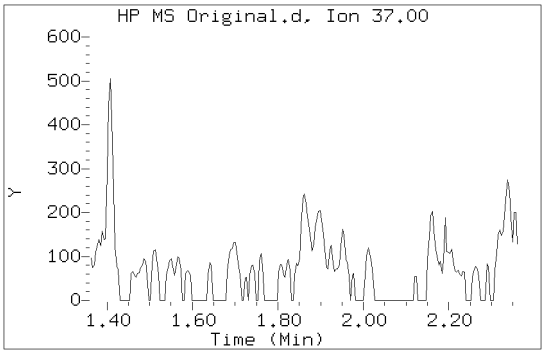
HEIGHT
0
09-Feb-2024
11:54
firat
tastan



AFTER

MASS
37
AREA
0
HEIGHT
0
09-Feb-2024
11:54
firat
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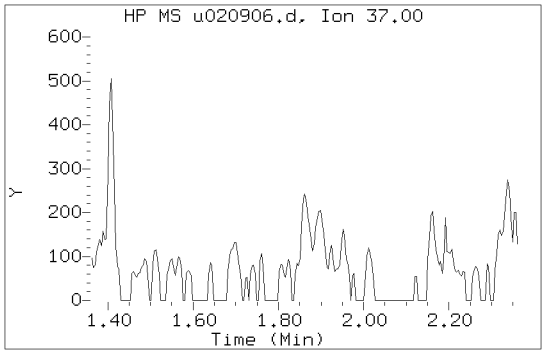
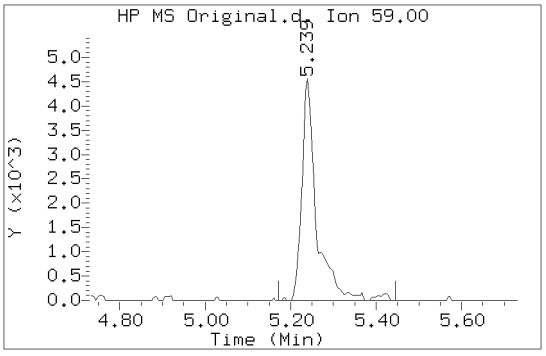


tert-Butyl formate (762-75-4)

Reason Code:

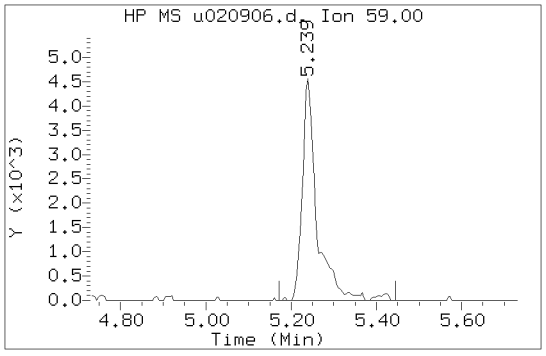
BEFORE

MASS
59
AREA
11099
HEIGHT
4562
09-Feb-2024
11:54
firat
tastan



AFTER

MASS
59
AREA
11099
HEIGHT
4562
09-Feb-2024
11:54
firat
tastan



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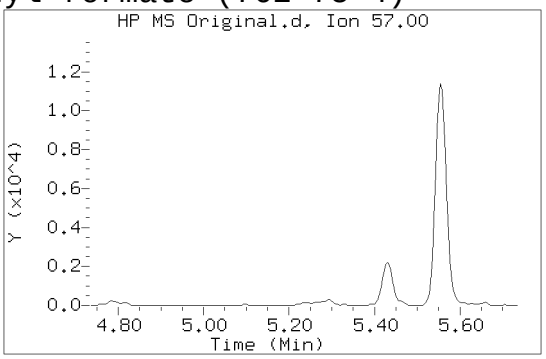
Inj Date : 09-FEB-2024 10:51
InstruID : VOA9.i
LabSampID : VSTD005

tert-Butyl formate (762-75-4)

Reason Code:

BEFORE

MASS
57
AREA
0
HEIGHT
0
09-Feb-2024
11:54
firat
tastan



AFTER

MASS
57
AREA
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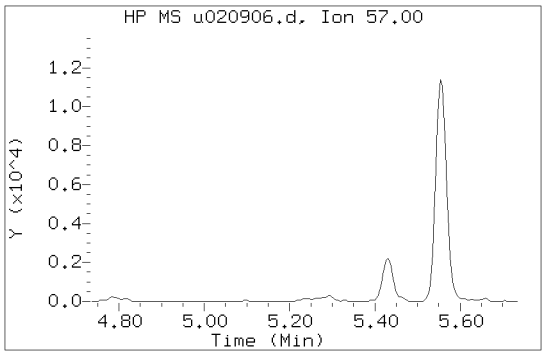
HEIGHT
0
09-Feb-2024
11:54
firat
tastan



BEFORE

MASS
41
AREA
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HEIGHT
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09-Feb-2024
11:54
firat
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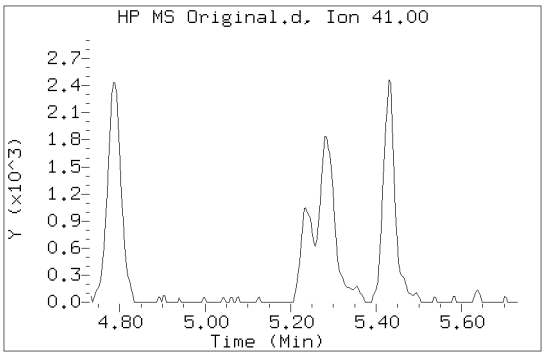

AFTER

MASS
41
AREA
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HEIGHT
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09-Feb-2024
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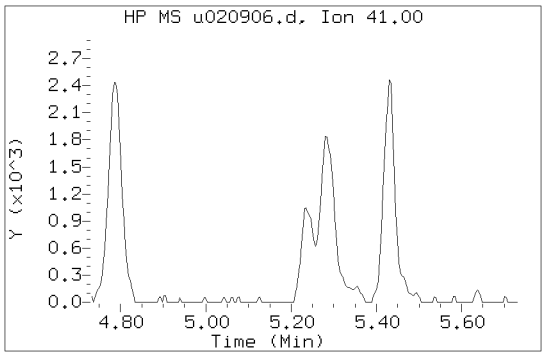
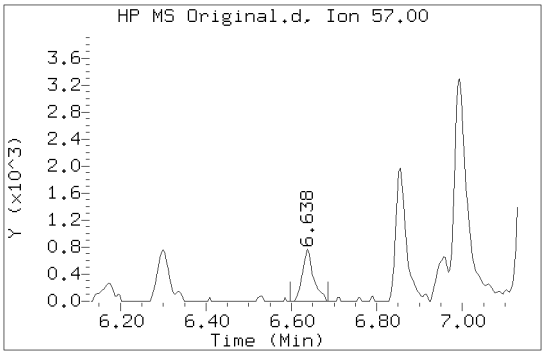


Epichlorohydrin (106-89-8)

Reason Code:

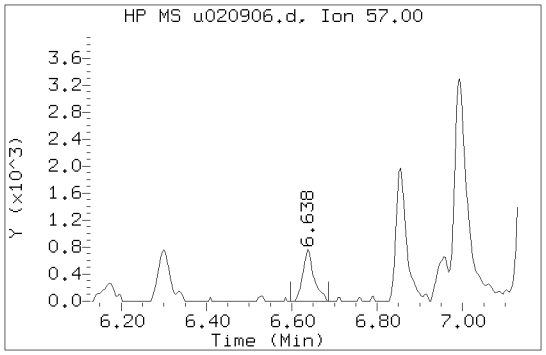
BEFORE

MASS
57
AREA
1420
HEIGHT
773
09-Feb-2024
11:54
firat
tastan



AFTER

MASS
57
AREA
1420
HEIGHT
773
09-Feb-2024
11:54
firat
tastan



BEFORE

MASS
49
AREA
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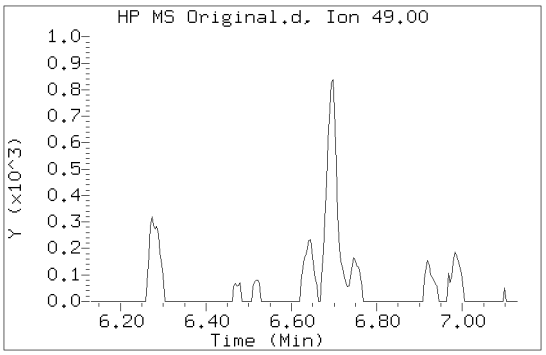
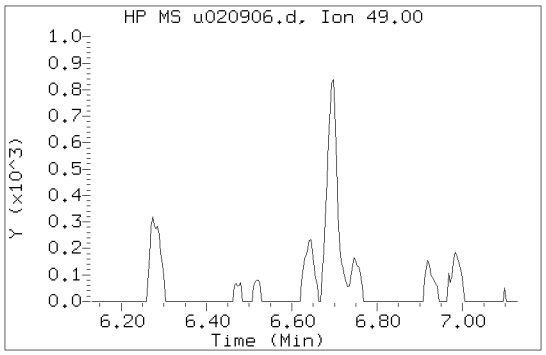
HEIGHT
0
09-Feb-2024
11:54
firat
tastan



AFTER

MASS
49
AREA
0
HEIGHT
0
09-Feb-2024
11:54
firat
tastan



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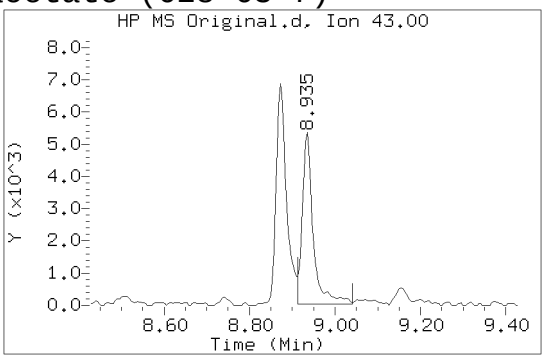
Inj Date : 09-FEB-2024 10:51
InstruID : VOA9.i
LabSampID : VSTD005

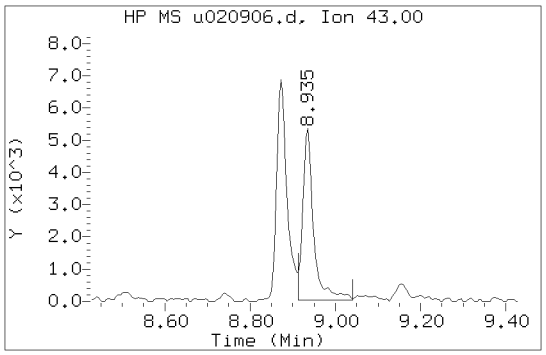
n-Amyl acetate (628-63-7)

Reason Code:

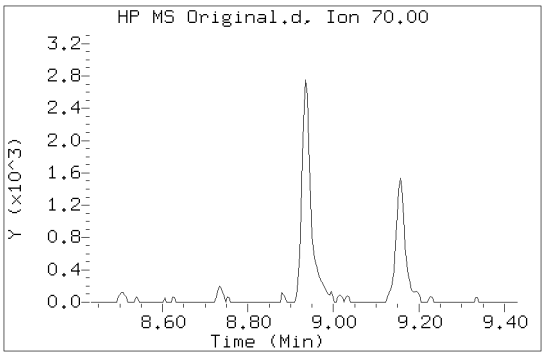
BEFORE
MASS
43
AREA
9522
HEIGHT
5327
09-Feb-2024
11:54
firat
tastan



AFTER
MASS
43
AREA
9522
HEIGHT
5327
09-Feb-2024
11:54
firat
tastan



BEFORE
MASS
70
AREA
0
HEIGHT
0
09-Feb-2024
11:54
firat
tastan



AFTER
MASS
70
AREA
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HEIGHT
0
09-Feb-2024
11:54
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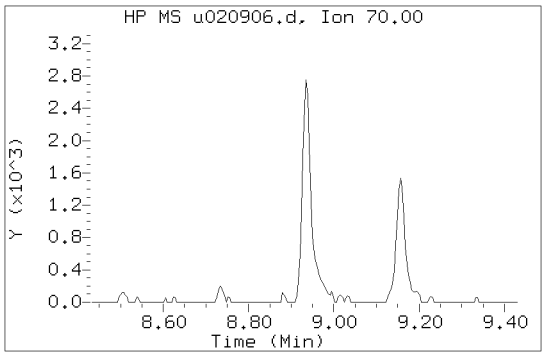

BEFORE
MASS
87
AREA
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HEIGHT
0
09-Feb-2024
11:54
firat
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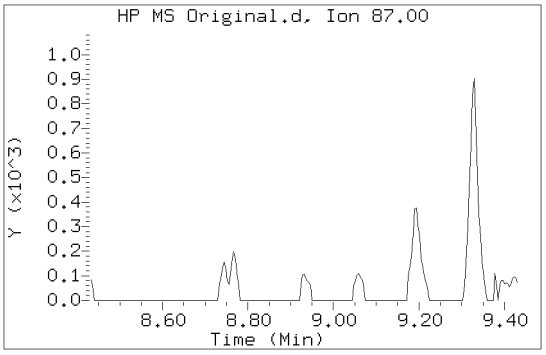
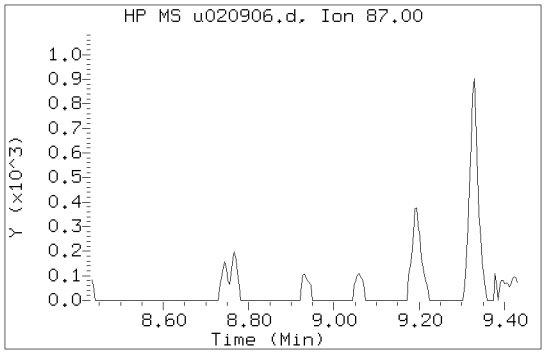


AFTER
MASS
87
AREA
0
HEIGHT
0
09-Feb-2024
11:54
firat
tastan



Acetaldehyde (75-07-0)

Reason Code:

BEFORE
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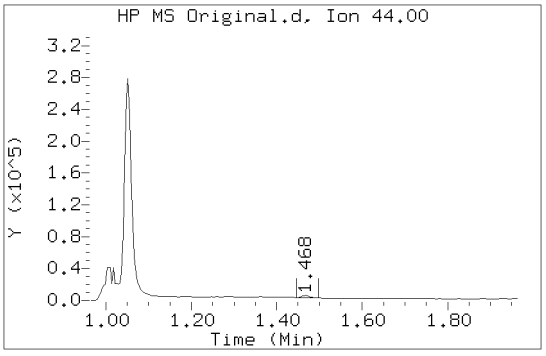
44
AREA
3492
HEIGHT
2970
09-Feb-2024
11:54
firat
tastan



AFTER
MASS
44
AREA
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HEIGHT
2970
09-Feb-2024
11:54
firat
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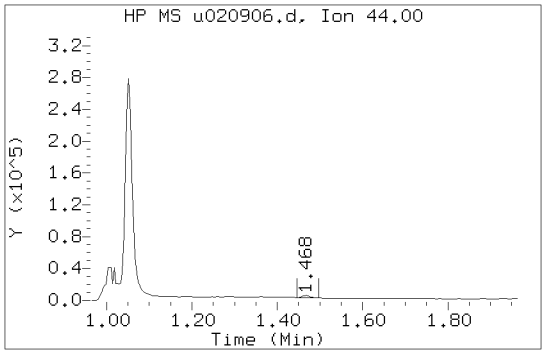


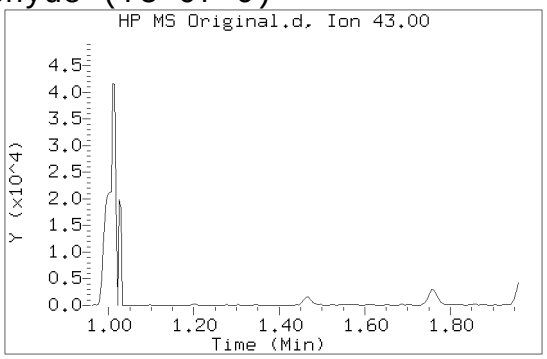
Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020906.d
Inj Date : 09-FEB-2024 10:51
InstruID : VOA9.i
LabSampID : VSTD005

Acetaldehyde (75-07-0)

Reason Code:

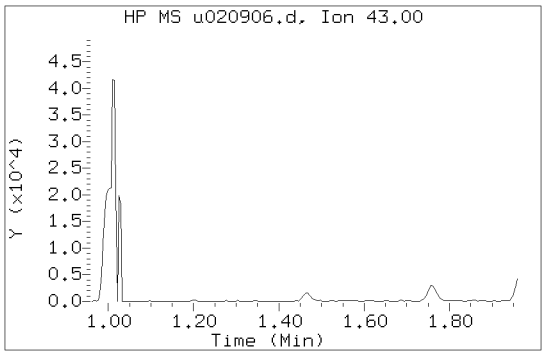
BEFORE

MASS
43
AREA
0
HEIGHT
0
09-Feb-2024
11:54
firat
tastan



AFTER

MASS
43
AREA
0
HEIGHT
0
09-Feb-2024
11:54
firat
tastan



BEFORE

MASS
42
AREA
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HEIGHT
0
09-Feb-2024
11:54
firat
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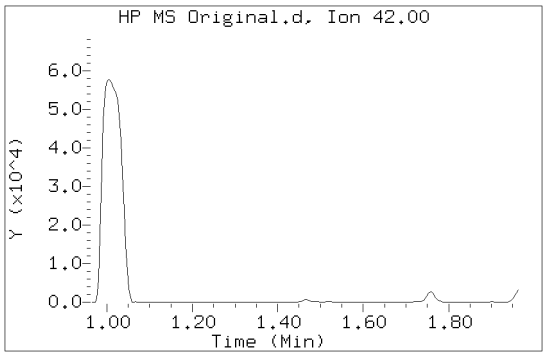

AFTER

MASS
42
AREA
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HEIGHT
0
09-Feb-2024
11:54
firat
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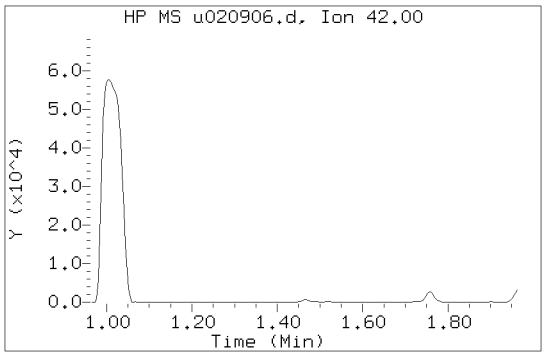
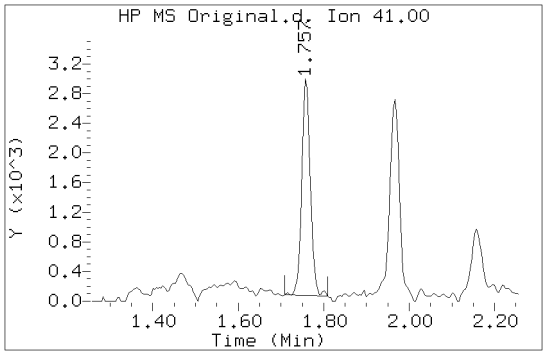


Isobutylene (115-11-7)

Reason Code:

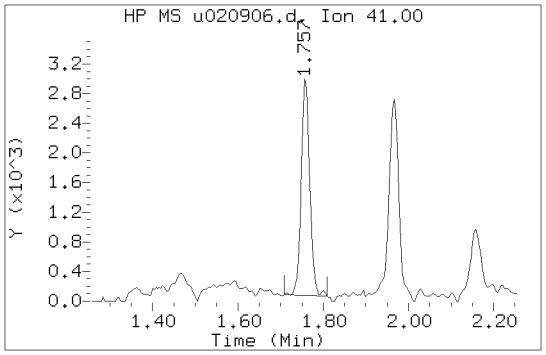
BEFORE

MASS
41
AREA
4184
HEIGHT
2923
09-Feb-2024
11:54
firat
tastan



AFTER

MASS
41
AREA
4184
HEIGHT
2923
09-Feb-2024
11:54
firat
tastan



BEFORE

MASS
56
AREA
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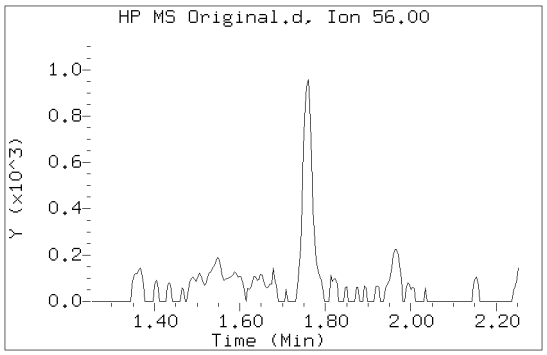
HEIGHT
0
09-Feb-2024
11:54
firat
tastan



AFTER

MASS
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AREA
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HEIGHT
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09-Feb-2024
11:54
firat
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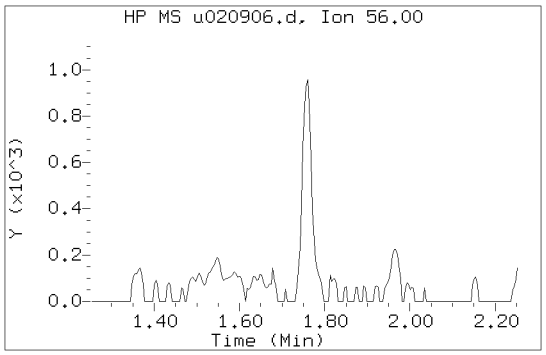


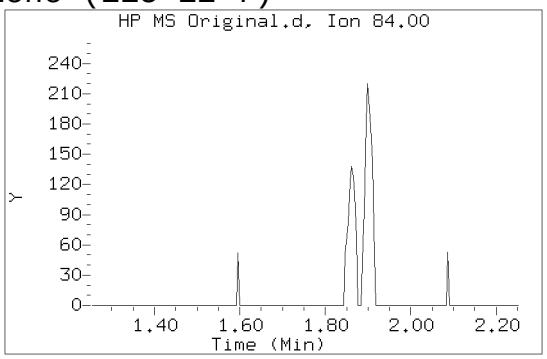
Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020906.d
Inj Date : 09-FEB-2024 10:51
InstruID : VOA9.i
LabSampID : VSTD005

Isobutylene (115-11-7)

Reason Code:

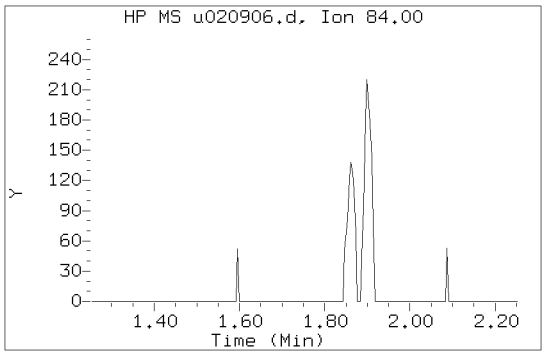
BEFORE

MASS
84
AREA
0
HEIGHT
0
09-Feb-2024
11:54
firat
tastan



AFTER

MASS
84
AREA
0
HEIGHT
0
09-Feb-2024
11:54
firat
tastan



Data File: \\NAHSTWS005\Target\chem\voa9.i\U240209.b\U020907.D Page 1
Report Date: 15-Feb-2024 11:14

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240209.b\U020907.D
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Inj Date : 09-FEB-2024 11:13
Operator : FT Inst ID: VOA9.i
Smp Info : VSTD020;VSTD020;1;6;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240209.b\8260C.m
Meth Date : 15-Feb-2024 11:14 VOA9.i Quant Type: ISTD
Cal Date : 09-FEB-2024 10:51 Cal File: U020906.D
Als bottle: 7 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V9.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1	Pentafluorobenzene	168	4.815	4.815	(1.000)	215695	50.0000	
2	Dichlorodifluoromethane	85	1.164	1.164	(0.242)	27310	20.0000	19.38
3	Chloromethane	50	1.299	1.299	(0.270)	33475	20.0000	20.25
5	Vinyl Chloride	62	1.378	1.378	(0.286)	37094	20.0000	19.89
6	Bromomethane	94	1.621	1.621	(0.337)	23818	20.0000	19.18
7	Chloroethane	64	1.700	1.700	(0.353)	25799	20.0000	19.68
8	Trichlorofluoromethane	101	1.895	1.895	(0.394)	59528	20.0000	19.83
9	Acrolein	56	2.262	2.262	(0.470)	3533	40.0000	42.92
10	Acetone	43	2.409	2.409	(0.500)	24798	40.0000	42.29
11	1,1-Dichloroethene	96	2.334	2.334	(0.485)	34207	20.0000	19.58
15	Iodomethane	142	2.469	2.469	(0.513)	95233	40.0000	37.60
16	Acrylonitrile	53	3.065	3.065	(0.636)	22101	40.0000	39.33
17	Methylene Chloride	84	2.791	2.791	(0.580)	41234	20.0000	20.13
18	Methyl tert-butyl ether	73	3.076	3.076	(0.639)	94025	20.0000	19.59
19	Carbon Disulfide	76	2.521	2.521	(0.524)	188957	40.0000	36.83
20	trans-1,2-Dichloroethene	96	3.057	3.057	(0.635)	40157	20.0000	20.06
21	Vinyl Acetate	43	3.608	3.608	(0.749)	152958	40.0000	36.04
22	1,1-Dichloroethane	63	3.514	3.514	(0.730)	62090	20.0000	19.89
24	2-Butanone	43	4.264	4.264	(0.886)	24604	40.0000	37.64
26	2,2-Dichloropropane	77	4.182	4.182	(0.868)	47497	20.0000	18.51

27 cis-1,2-Dichloroethene	96	4.197	4.197 (0.872)	44067	20.0000	18.54
28 Chloroform	83	4.572	4.572 (0.949)	68933	20.0000	19.65

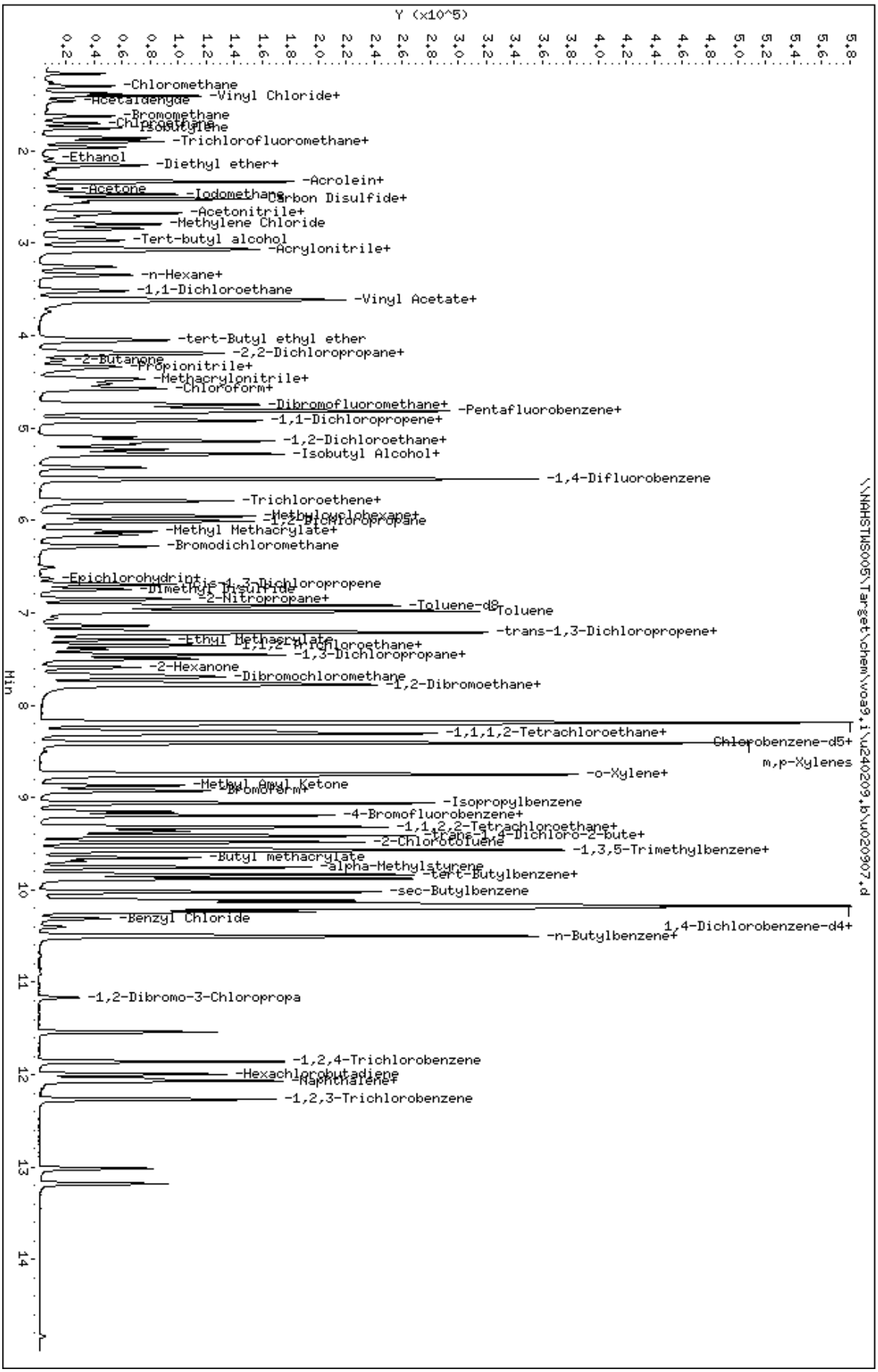
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	29 Bromochloromethane	128	4.467	4.467	(0.928)	24362	20.0000	20.09
$	30 Dibromofluoromethane	113	4.748	4.748	(0.986)	46132	20.0000	20.46
	31 1,1,1-Trichloroethane	97	4.740	4.740	(0.984)	57731	20.0000	18.56
	32 1,1-Dichloropropene	75	4.924	4.924	(0.887)	49955	20.0000	20.53
	33 1,2-Dichloroethane	62	5.175	5.175	(0.932)	51739	20.0000	21.05
	34 Carbon Tetrachloride	117	4.913	4.913	(0.885)	51444	20.0000	19.06
$	35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	46575	20.0000	20.45
*	36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	296529	50.0000	
	37 Benzene	78	5.138	5.138	(0.925)	149249	20.0000	20.59
	38 Trichloroethene	130	5.790	5.790	(1.043)	47513	20.0000	20.45
	39 Bromodichloromethane	83	6.277	6.277	(1.130)	49482	20.0000	19.67
	41 2-Chloroethylvinyl ether	63	6.577	6.577	(1.184)	581	40.0000	33.47(M)
	42 1,2-Dichloropropane	63	6.007	6.007	(1.082)	35658	20.0000	20.29
	44 Dibromomethane	93	6.120	6.120	(1.102)	25198	20.0000	19.96
	45 4-Methyl-2-Pentanone	43	6.851	6.851	(0.837)	60158	40.0000	38.67
	46 cis-1,3-Dichloropropene	75	6.690	6.690	(1.205)	49967	20.0000	18.99
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	278504	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	159212	20.0000	20.94
	50 Toluene	91	6.978	6.978	(0.853)	168917	20.0000	19.60
	51 trans-1,3-Dichloropropene	75	7.196	7.196	(1.296)	44026	20.0000	19.10
	52 2-Hexanone	43	7.589	7.589	(0.927)	40547	40.0000	39.05
	53 1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	29813	20.0000	20.54
	54 1,3-Dichloropropane	76	7.496	7.496	(0.916)	61623	20.0000	20.16
	55 Dibromochloromethane	129	7.690	7.690	(0.940)	43543	20.0000	19.80
	56 Tetrachloroethene	164	7.458	7.458	(0.911)	40498	20.0000	20.57
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	39480	20.0000	20.47
	58 1-Chlorohexane	55	8.197	8.197	(1.476)	30758	20.0000	20.23
	59 Chlorobenzene	112	8.208	8.208	(1.003)	116535	20.0000	20.24
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	42555	20.0000	19.18
	61 Ethylbenzene	106	8.305	8.305	(1.015)	57328	20.0000	19.56
	62 m,p-Xylenes	106	8.406	8.406	(1.027)	144210	40.0000	40.05
	63 o-Xylene	106	8.748	8.748	(1.069)	72410	20.0000	20.53
	64 Styrene	104	8.759	8.759	(1.070)	121918	20.0000	21.12
	66 Bromoform	173	8.916	8.916	(1.089)	30178	20.0000	18.98
	67 Isopropylbenzene	105	9.062	9.062	(1.107)	179292	20.0000	19.88
	68 1,1,2,2-Tetrachloroethane	83	9.325	9.325	(0.917)	47752	20.0000	20.26
$	69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	59177	20.0000	20.94
*	70 1,4-Dichlorobenzene-d4	152	10.168	10.168	(1.000)	154882	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.921)	44448	20.0000	17.86
	73 n-Propylbenzene	91	9.411	9.411	(0.926)	189805	20.0000	19.82
	74 Bromobenzene	156	9.317	9.317	(0.916)	56951	20.0000	20.43
	75 1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	143448	20.0000	20.00
	76 2-Chlorotoluene	91	9.482	9.482	(0.933)	121041	20.0000	19.04
	77 4-Chlorotoluene	91	9.576	9.576	(0.942)	141246	20.0000	19.57
	78 tert-Butylbenzene	119	9.835	9.835	(0.967)	129468	20.0000	19.72
	79 1,2,4-Trimethylbenzene	105	9.880	9.880	(0.972)	141685	20.0000	20.03
	81 sec-Butylbenzene	105	10.022	10.022	(0.986)	161275	20.0000	19.28
	82 p-Isopropyltoluene	119	10.146	10.146	(0.998)	148247	20.0000	19.76
	83 1,3-Dichlorobenzene	146	10.116	10.116	(0.995)	97541	20.0000	20.20
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	102103	20.0000	20.34
	87 n-Butylbenzene	91	10.491	10.491	(1.032)	113299	20.0000	19.22
	88 1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	95888	20.0000	20.26

89	1,2-Dibromo-3-Chloropropane	155	11.165	11.165 (1.098)	7047	20.0000	18.19
90	1,2,4-Trichlorobenzene	180	11.855	11.855 (1.166)	61267	20.0000	19.98

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	91 Hexachlorobutadiene	225	11.998	11.998	(1.180)	27240	20.0000	19.53
	92 Naphthalene	128	12.065	12.065	(1.187)	130928	20.0000	19.33
	93 1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	58788	20.0000	20.10
M	94 1,2-Dichloroethylene (total)	96				84224	40.0000	
M	95 Xylenes (total)	106				216620	60.0000	
	135 1,4-Dioxane	88	6.165	6.165	(1.280)	9244	400.000	396.98
	141 Cyclohexane	56	4.785	4.785	(0.994)	47234	20.0000	19.51
	138 Freon TF	101	2.334	2.334	(0.485)	34996	20.0000	19.67
	140 1,3-Butadiene	54	1.404	1.404	(0.292)	32002	20.0000	19.42
	147 Methylcyclohexane	55	5.947	5.947	(1.071)	71597	20.0000	19.93
	146 Methyl Acetate	43	2.712	2.712	(0.563)	25789	20.0000	19.75
	148 Tert-Butyl alcohol	59	2.963	2.963	(0.615)	69193	400.000	390.91
	149 Isopropyl Alcohol	45	2.559	2.559	(0.531)	35913	400.000	366.18(T)

QC Flag Legend

T - Target compound detected outside RT window.
M - Compound response manually integrated.


Y (x10^5)
Min
-Chloromethane
-Vinyl Chloride+
-Acetaldehyde
-Bromomethane
-Chloroethane
Isobutylene
-Trichlorofluoromethane+
-Ethanol
-Diethyl ether+
-Acrolein+
-Acetone
-Iodomethane
Carbon Disulfide+
-Acetonitrile+
-Methylene Chloride
-Tert-butyl alcohol
-Acrylonitrile+
-n-Hexane+
-1,1-Dichloroethane
-Vinyl Acetate+
-tert-Butyl ethyl ether
-2,2-Dichloropropane+
-2-Butanone
-Propionitrile+
-Methacrylonitrile+
-Chloroform+
-Dibromofluoromethane+
-Pentafluorobenzene+
-1,1-Dichloropropene+
-1,2-Dichloroethane+
-Isobutyl Alcohol+
-1,4-Difluorobenzene
-Trichloroethene+
-Methylcyclohexane+
-1,2-Dichloropropane
-Methyl Methacrylate+
-Bromodichloromethane
-Epichlorohydrin
-cis-1,3-Dichloropropene
-Dimethyl Disulfide
-2-Nitropropane+
-Toluene-d8
Toluene
-trans-1,3-Dichloropropene+
-Ethyl Methacrylate
1,1,2-Trichloroethane+
-1,3-Dichloropropane+
-2-Hexanone
-Dibromochloromethane
-1,2-Dibromoethane+
-1,1,1,2-Tetrachloroethane+
Chlorobenzene-d5+
m,p-Xylenes
-o-Xylene+
-Methyl Amyl Ketone
Bromoform+
-Isopropylbenzene
-4-Bromofluorobenzene+
-1,1,2,2-Tetrachloroethane+
-trans-1,4-Dichloro-2-bute+
-2-Chlorotoluene
-1,3,5-Trimethylbenzene+
-Butyl methacrylate
-alpha-Methylstyrene
-tert-Butylbenzene+
-sec-Butylbenzene
-Benzyl Chloride
1,4-Dichlorobenzene-d4+
-n-Butylbenzene+
-1,2-Dibromo-3-Chloropropa
-1,2,4-Trichlorobenzene
-Hexachlorobutadiene
-Naphthalene+
-1,2,3-Trichlorobenzene
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Client ID: VSTD020
Sample Info: VSTD020;VSTD020;1;6;
Purge Volume: 5.0
Column phase: DB624
Instrument: VOA9,i
Operator: FT
Column diameter: 0.18
Page 1

Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020907.d
Inj Date : 09-FEB-2024 11:13
InstruID : VOA9.i
LabSampID : VSTD020

Chloroprene (126-99-8)

Reason Code:

BEFORE

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10723
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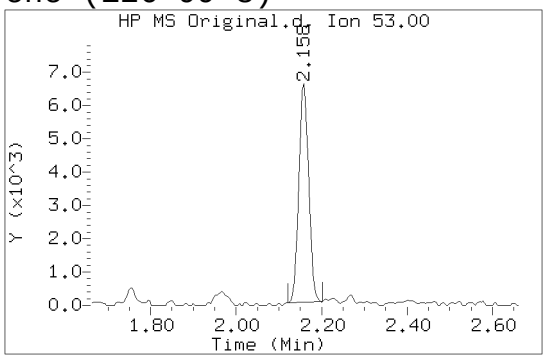
09-Feb-2024
11:55
firat
tastan



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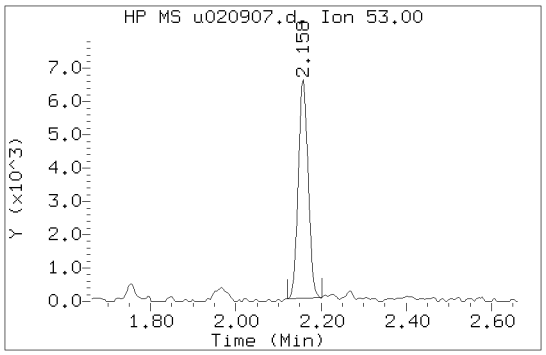

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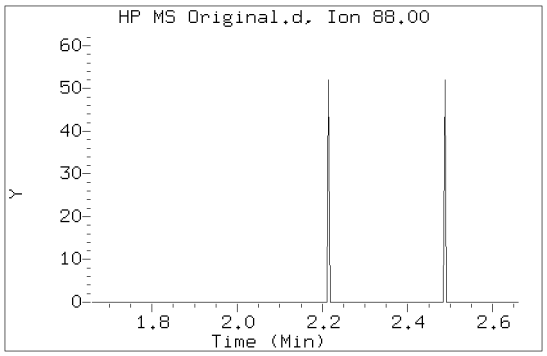

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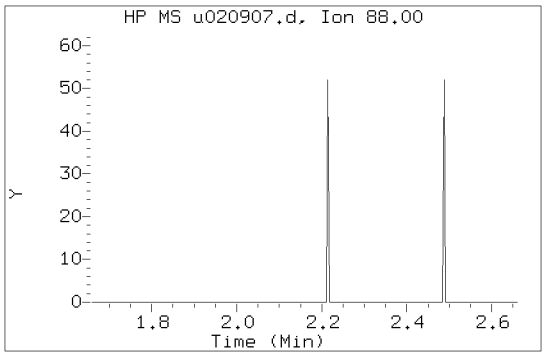

Acetaldehyde (75-07-0)

Reason Code:

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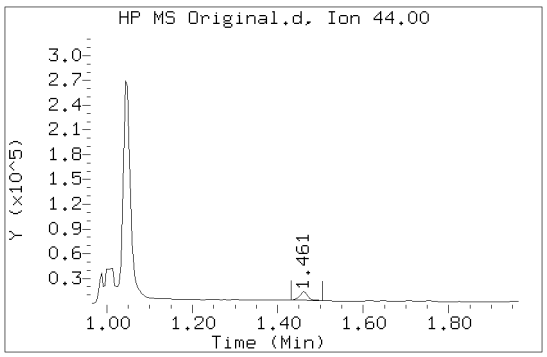

AFTER

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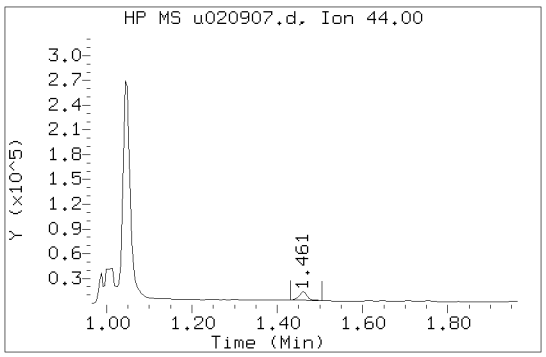

BEFORE

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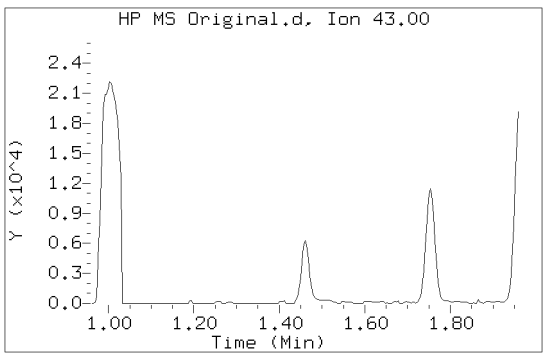

AFTER

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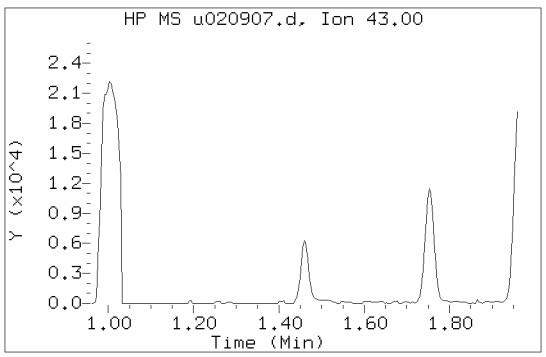

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Inj Date : 09-FEB-2024 11:13
InstruID : VOA9.i
LabSampID : VSTD020

Acetaldehyde (75-07-0)

Reason Code:

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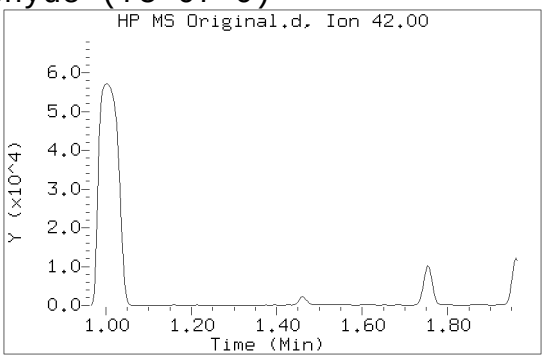

AFTER

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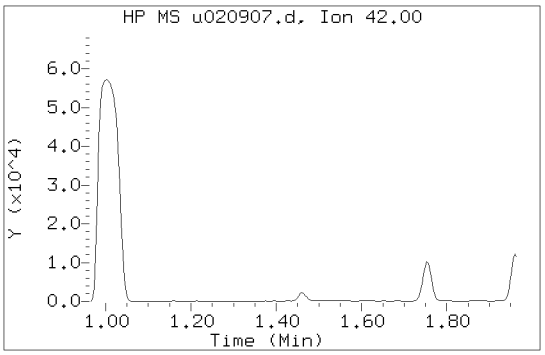

Isobutylene (115-11-7)

Reason Code:

BEFORE

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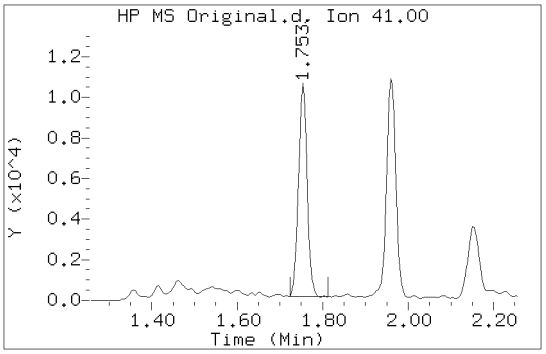
tastan



AFTER

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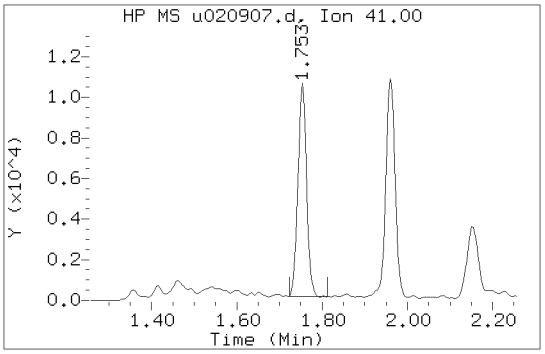

BEFORE

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09-Feb-2024
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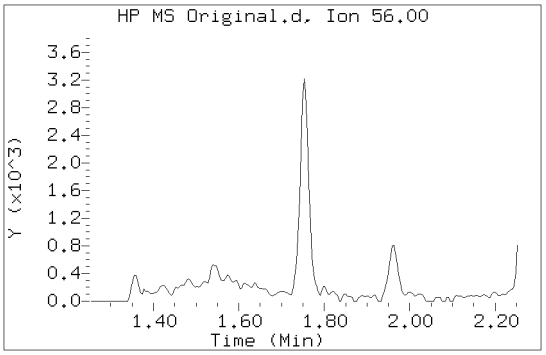

AFTER

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09-Feb-2024
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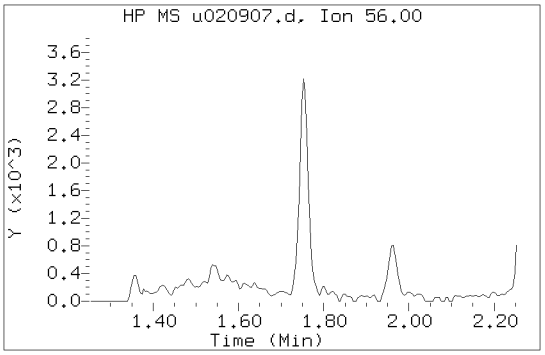

BEFORE

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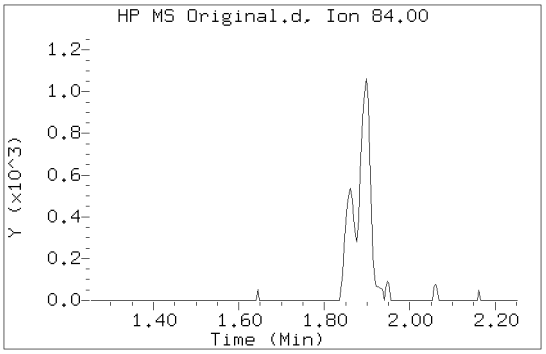

AFTER

MASS
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AREA
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HEIGHT
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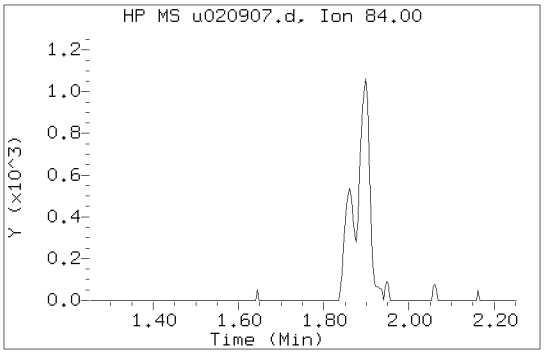
09-Feb-2024
11:55
firat
tastan



Data File: \\NAHSTWS005\Target\chem\voa9.i\U240209.b\U020908.D Page 1
Report Date: 15-Feb-2024 11:14

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240209.b\U020908.D
Lab Smp Id: VSTD050 Client Smp ID: VSTD050
Inj Date : 09-FEB-2024 11:35
Operator : FT Inst ID: VOA9.i
Smp Info : VSTD050;VSTD050;1;7;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240209.b\8260C.m
Meth Date : 15-Feb-2024 11:14 VOA9.i Quant Type: ISTD
Cal Date : 09-FEB-2024 11:13 Cal File: U020907.D
Als bottle: 8 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V9.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1	Pentafluorobenzene	168	4.819	4.819	(1.000)	215511	50.0000	
2	Dichlorodifluoromethane	85	1.168	1.168	(0.242)	69589	50.0000	49.25
3	Chloromethane	50	1.303	1.303	(0.270)	80606	50.0000	48.18
5	Vinyl Chloride	62	1.381	1.381	(0.287)	92433	50.0000	49.51
6	Bromomethane	94	1.625	1.625	(0.337)	58408	50.0000	46.20
7	Chloroethane	64	1.704	1.704	(0.354)	66462	50.0000	51.21
8	Trichlorofluoromethane	101	1.899	1.899	(0.394)	150246	50.0000	50.71
9	Acrolein	56	2.266	2.266	(0.470)	8060	100.000	101.21
10	Acetone	43	2.412	2.412	(0.501)	56771	100.000	103.77
11	1,1-Dichloroethene	96	2.337	2.337	(0.485)	88113	50.0000	50.25
15	Iodomethane	142	2.472	2.472	(0.513)	266005	100.000	101.87
16	Acrylonitrile	53	3.068	3.068	(0.637)	54913	100.000	98.52
17	Methylene Chloride	84	2.795	2.795	(0.580)	99973	50.0000	50.83
18	Methyl tert-butyl ether	73	3.083	3.083	(0.640)	236782	50.0000	49.22
19	Carbon Disulfide	76	2.525	2.525	(0.524)	481645	100.000	93.96
20	trans-1,2-Dichloroethene	96	3.061	3.061	(0.635)	98160	50.0000	49.03
21	Vinyl Acetate	43	3.608	3.608	(0.749)	405373	100.000	95.61
22	1,1-Dichloroethane	63	3.514	3.514	(0.729)	156179	50.0000	49.93
24	2-Butanone	43	4.260	4.260	(0.884)	64328	100.000	98.49
26	2,2-Dichloropropane	77	4.186	4.186	(0.869)	120199	50.0000	46.90

27 cis-1,2-Dichloroethene	96	4.197	4.197 (0.871)	113107	50.0000	47.63
28 Chloroform	83	4.575	4.575 (0.949)	176056	50.0000	50.47

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240209.b\U020908.D Page 2
Report Date: 15-Feb-2024 11:14

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	29 Bromochloromethane	128	4.470	4.470	(0.928)	62198	50.0000	53.01
$	30 Dibromofluoromethane	113	4.748	4.748	(0.985)	111088	50.0000	49.93
	31 1,1,1-Trichloroethane	97	4.744	4.744	(0.984)	149110	50.0000	47.99
	32 1,1-Dichloropropene	75	4.924	4.924	(0.887)	126795	50.0000	50.67
	33 1,2-Dichloroethane	62	5.175	5.175	(0.932)	130130	50.0000	52.71
	34 Carbon Tetrachloride	117	4.913	4.913	(0.885)	133989	50.0000	48.47
$	35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	114391	50.0000	51.37
*	36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	303747	50.0000	
	37 Benzene	78	5.141	5.141	(0.926)	375334	50.0000	50.37
	38 Trichloroethene	130	5.790	5.790	(1.043)	120027	50.0000	50.18
	39 Bromodichloromethane	83	6.277	6.277	(1.130)	128157	50.0000	49.74
	41 2-Chloroethylvinyl ether	63	6.581	6.581	(1.185)	1308	100.000	73.57(M)
	42 1,2-Dichloropropane	63	6.007	6.007	(1.082)	92135	50.0000	51.30
	44 Dibromomethane	93	6.120	6.120	(1.102)	65623	50.0000	50.75
	45 4-Methyl-2-Pentanone	43	6.851	6.851	(0.837)	154936	100.000	98.21
	46 cis-1,3-Dichloropropene	75	6.690	6.690	(1.205)	140911	50.0000	52.28
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	282435	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	391087	50.0000	50.81
	50 Toluene	91	6.982	6.982	(0.853)	423236	50.0000	48.43
	51 trans-1,3-Dichloropropene	75	7.196	7.196	(1.296)	121449	50.0000	48.61
	52 2-Hexanone	43	7.589	7.589	(0.927)	105869	100.000	96.56
	53 1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	75785	50.0000	51.82
	54 1,3-Dichloropropane	76	7.499	7.499	(0.916)	161117	50.0000	52.26
	55 Dibromochloromethane	129	7.691	7.691	(0.940)	119806	50.0000	53.74
	56 Tetrachloroethene	164	7.458	7.458	(0.911)	101511	50.0000	50.83
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	100897	50.0000	51.58
	58 1-Chlorohexane	55	8.197	8.197	(1.476)	74982	50.0000	48.81
	59 Chlorobenzene	112	8.208	8.208	(1.003)	299817	50.0000	51.68
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	111988	50.0000	49.78
	61 Ethylbenzene	106	8.305	8.305	(1.015)	150769	50.0000	50.74
	62 m,p-Xylenes	106	8.407	8.407	(1.027)	372519	100.000	102.02
	63 o-Xylene	106	8.748	8.748	(1.069)	186453	50.0000	52.14
	64 Styrene	104	8.759	8.759	(1.070)	323014	50.0000	55.18
	66 Bromoform	173	8.916	8.916	(1.089)	84425	50.0000	52.36
	67 Isopropylbenzene	105	9.063	9.063	(1.107)	466998	50.0000	51.08
	68 1,1,2,2-Tetrachloroethane	83	9.325	9.325	(0.917)	123522	50.0000	51.84
$	69 4-Bromofluorobenzene	95	9.190	9.190	(1.123)	144170	50.0000	50.70
*	70 1,4-Dichlorobenzene-d4	152	10.168	10.168	(1.000)	157506	50.0000	
	71 1,2,3-Trichloropropane	75	9.359	9.359	(0.920)	122655	50.0000	48.47
	73 n-Propylbenzene	91	9.411	9.411	(0.926)	494543	50.0000	50.80
	74 Bromobenzene	156	9.317	9.317	(0.916)	143938	50.0000	50.86
	75 1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	382793	50.0000	52.49
	76 2-Chlorotoluene	91	9.482	9.482	(0.933)	311566	50.0000	48.19
	77 4-Chlorotoluene	91	9.576	9.576	(0.942)	357981	50.0000	48.79
	78 tert-Butylbenzene	119	9.835	9.835	(0.967)	335529	50.0000	50.27
	79 1,2,4-Trimethylbenzene	105	9.876	9.876	(0.971)	376814	50.0000	52.39
	81 sec-Butylbenzene	105	10.022	10.022	(0.986)	430282	50.0000	50.59
	82 p-Isopropyltoluene	119	10.146	10.146	(0.998)	402342	50.0000	52.73
	83 1,3-Dichlorobenzene	146	10.112	10.112	(0.994)	246607	50.0000	50.36
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	253657	50.0000	50.28
	87 n-Butylbenzene	91	10.491	10.491	(1.032)	314995	50.0000	52.56
	88 1,2-Dichlorobenzene	146	10.502	10.502	(1.033)	243811	50.0000	51.07

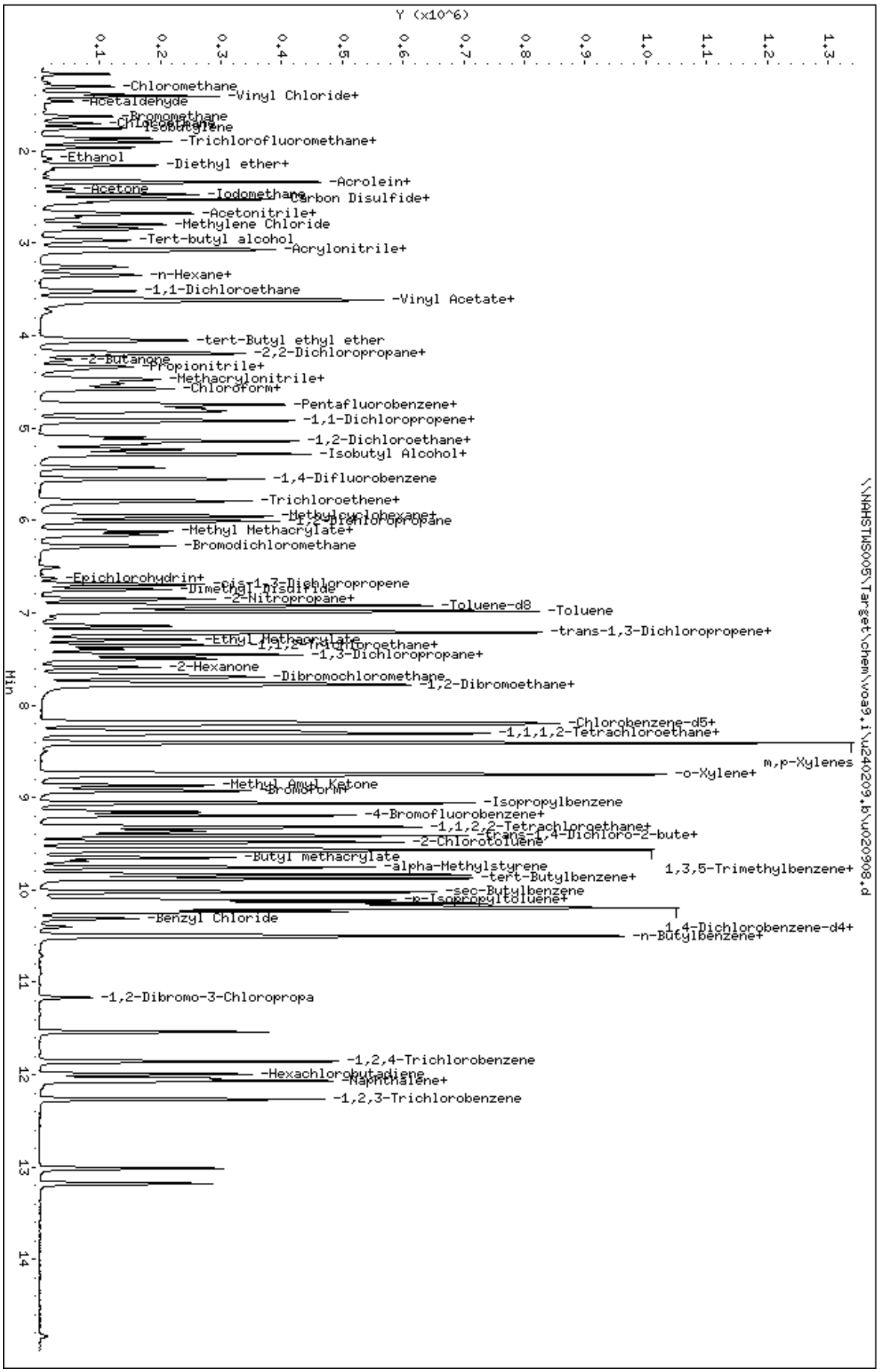
89	1,2-Dibromo-3-Chloropropane	155	11.166	11.166 (1.098)	20432	50.0000	46.54
90	1,2,4-Trichlorobenzene	180	11.855	11.855 (1.166)	163497	50.0000	52.44

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240209.b\U020908.D Page 3
Report Date: 15-Feb-2024 11:14

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	91 Hexachlorobutadiene	225	11.998	11.998	(1.180)	71490	50.0000	50.26
	92 Naphthalene	128	12.065	12.065	(1.187)	351457	50.0000	48.98
	93 1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	155871	50.0000	52.42
M	94 1,2-Dichloroethylene (total)	96				211267	100.000	
M	95 Xylenes (total)	106				558972	150.000	
	135 1,4-Dioxane	88	6.161	6.161	(1.278)	22915	1000.00	970.64
	141 Cyclohexane	56	4.789	4.789	(0.994)	116003	50.0000	48.34
	138 Freon TF	101	2.337	2.337	(0.485)	88837	50.0000	49.98
	140 1,3-Butadiene	54	1.408	1.408	(0.292)	83934	50.0000	50.70
	147 Methylcyclohexane	55	5.947	5.947	(1.071)	189844	50.0000	51.60
	146 Methyl Acetate	43	2.716	2.716	(0.564)	64996	50.0000	50.46
	148 Tert-Butyl alcohol	59	2.967	2.967	(0.616)	173854	1000.00	984.61
	149 Isopropyl Alcohol	45	2.562	2.562	(0.532)	95411	1000.00	970.24

QC Flag Legend

M - Compound response manually integrated.



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Date : 09-FEB-2024 11:35
Client ID: VSTD050
Sample Info: VSTD050;VSTD050;1;7;
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9.i
Operator: FT
Column diameter: 0.18

Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020908.d
Inj Date : 09-FEB-2024 11:35
InstruID : VOA9.i
LabSampID : VSTD050

Chloroprene (126-99-8)

Reason Code:

BEFORE

MASS
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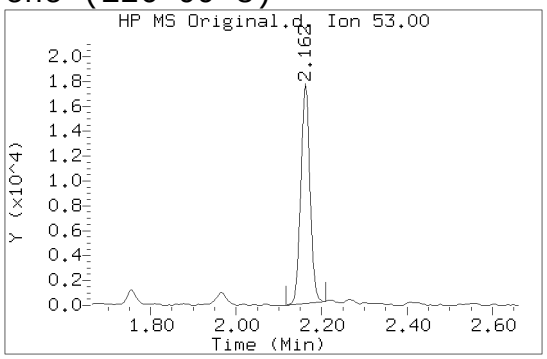
26781
HEIGHT
17665
09-Feb-2024
11:56
firat
tastan



AFTER

MASS
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AREA
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HEIGHT
17665
09-Feb-2024
11:56
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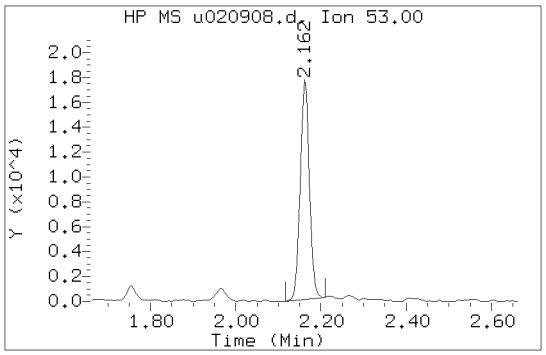

BEFORE

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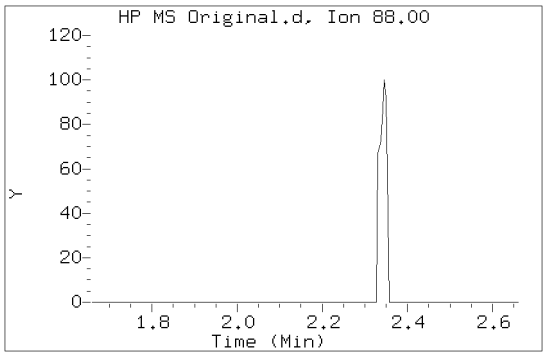

AFTER

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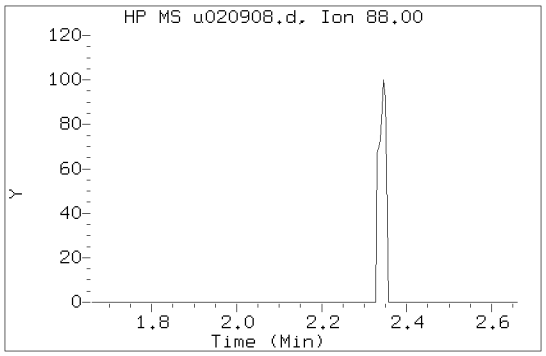

Acetaldehyde (75-07-0)

Reason Code:

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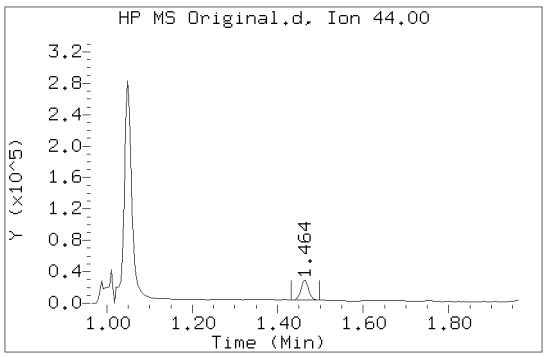
firat
tastan



AFTER

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09-Feb-2024
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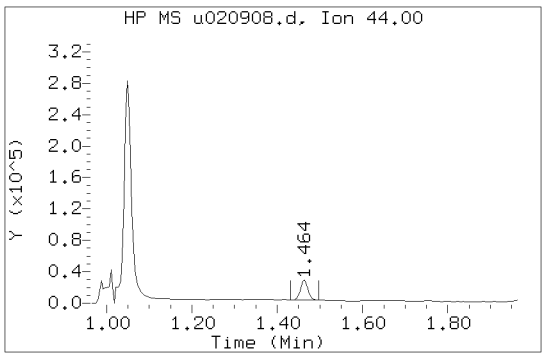

BEFORE

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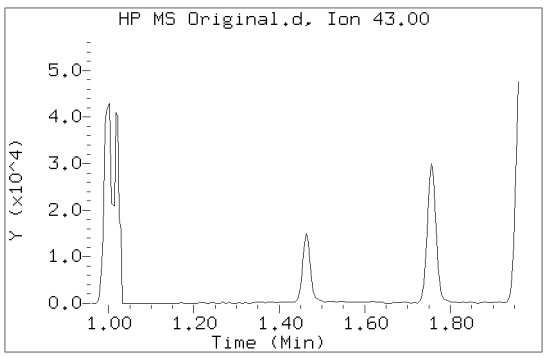

AFTER

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09-Feb-2024
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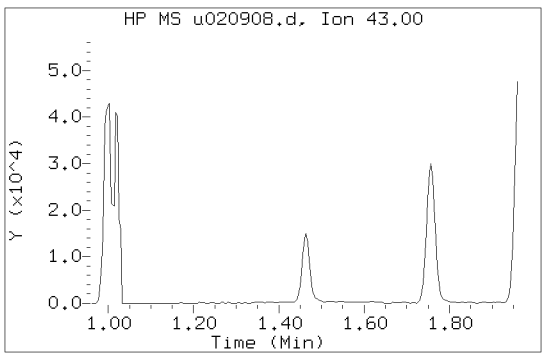

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Inj Date : 09-FEB-2024 11:35
InstruID : VOA9.i
LabSampID : VSTD050

Acetaldehyde (75-07-0)

Reason Code:

BEFORE

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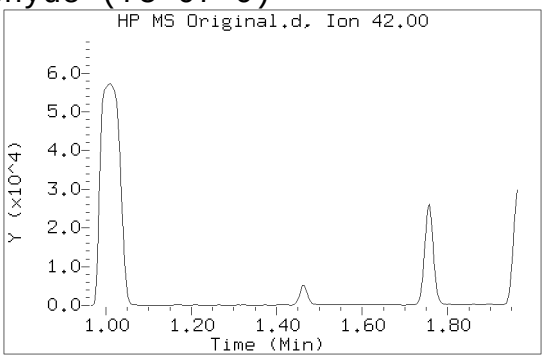
11:56
firat
tastan



AFTER

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09-Feb-2024
11:56
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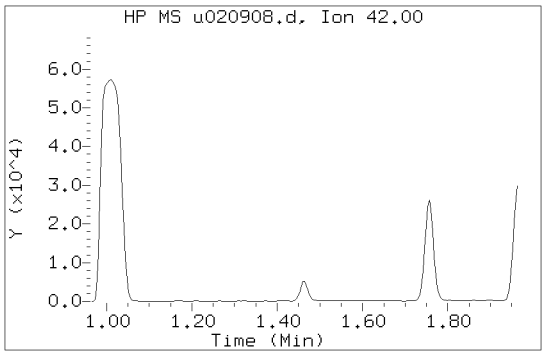

Isobutylene (115-11-7)

Reason Code:

BEFORE

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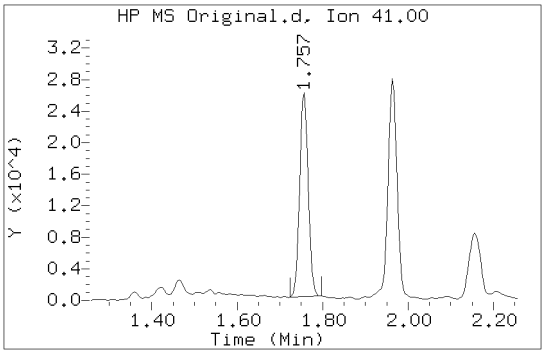
09-Feb-2024
11:56
firat
tastan



AFTER

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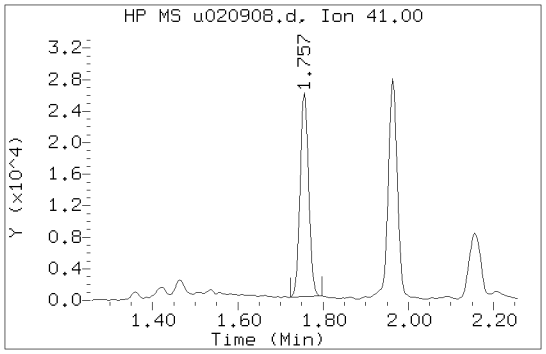

BEFORE

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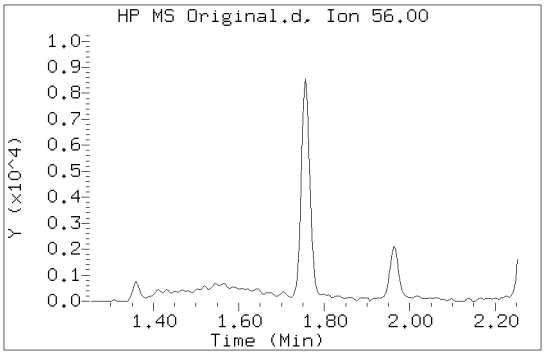

AFTER

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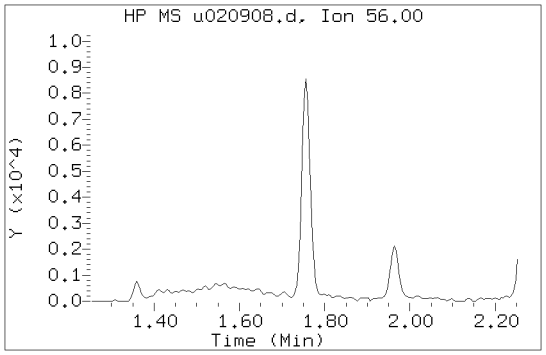

BEFORE

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09-Feb-2024
11:56
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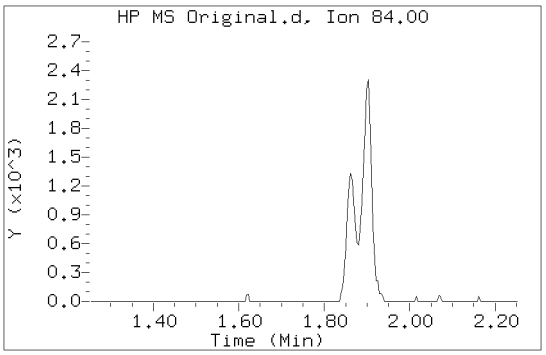

AFTER

MASS
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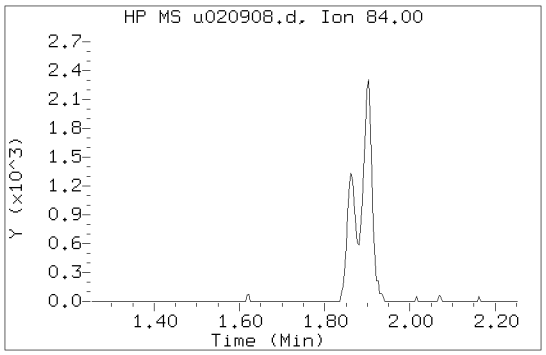
09-Feb-2024
11:56
firat
tastan



Data File: \\NAHSTWS005\Target\chem\voa9.i\U240209.b\U020909.D Page 1
Report Date: 15-Feb-2024 11:14

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240209.b\U020909.D
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Inj Date : 09-FEB-2024 11:58
Operator : FT Inst ID: VOA9.i
Smp Info : VSTD100;VSTD100;1;8;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240209.b\8260C.m
Meth Date : 15-Feb-2024 11:14 VOA9.i Quant Type: ISTD
Cal Date : 09-FEB-2024 11:35 Cal File: U020908.D
Als bottle: 9 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V9.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1	Pentafluorobenzene	168	4.815	4.815	(1.000)	222991	50.0000	
2	Dichlorodifluoromethane	85	1.160	1.160	(0.241)	142137	100.000	97.09
3	Chloromethane	50	1.295	1.295	(0.269)	165791	100.000	95.32
5	Vinyl Chloride	62	1.374	1.374	(0.285)	190664	100.000	98.64
6	Bromomethane	94	1.618	1.618	(0.336)	122501	100.000	93.02
7	Chloroethane	64	1.696	1.696	(0.352)	129608	100.000	96.78
8	Trichlorofluoromethane	101	1.895	1.895	(0.394)	304288	100.000	99.66
9	Acrolein	56	2.262	2.262	(0.470)	16273	200.000	199.87
10	Acetone	43	2.405	2.405	(0.499)	111939	200.000	202.56(A)
11	1,1-Dichloroethene	96	2.330	2.330	(0.484)	176082	100.000	96.90
15	Iodomethane	142	2.465	2.465	(0.512)	543854	200.000	199.51
16	Acrylonitrile	53	3.061	3.061	(0.636)	115719	200.000	201.15
17	Methylene Chloride	84	2.791	2.791	(0.580)	199305	100.000	99.23
18	Methyl tert-butyl ether	73	3.076	3.076	(0.639)	489347	100.000	98.21
19	Carbon Disulfide	76	2.517	2.517	(0.523)	986579	200.000	186.01
20	trans-1,2-Dichloroethene	96	3.057	3.057	(0.635)	204716	100.000	98.79
21	Vinyl Acetate	43	3.604	3.604	(0.749)	816037	200.000	186.01
22	1,1-Dichloroethane	63	3.511	3.511	(0.729)	312101	100.000	96.33
24	2-Butanone	43	4.257	4.257	(0.884)	133157	200.000	197.04
26	2,2-Dichloropropane	77	4.182	4.182	(0.868)	250168	100.000	94.34

27 cis-1,2-Dichloroethene	96	4.193	4.193 (0.871)	225189	100.000	91.64
28 Chloroform	83	4.572	4.572 (0.949)	352850	100.000	97.89

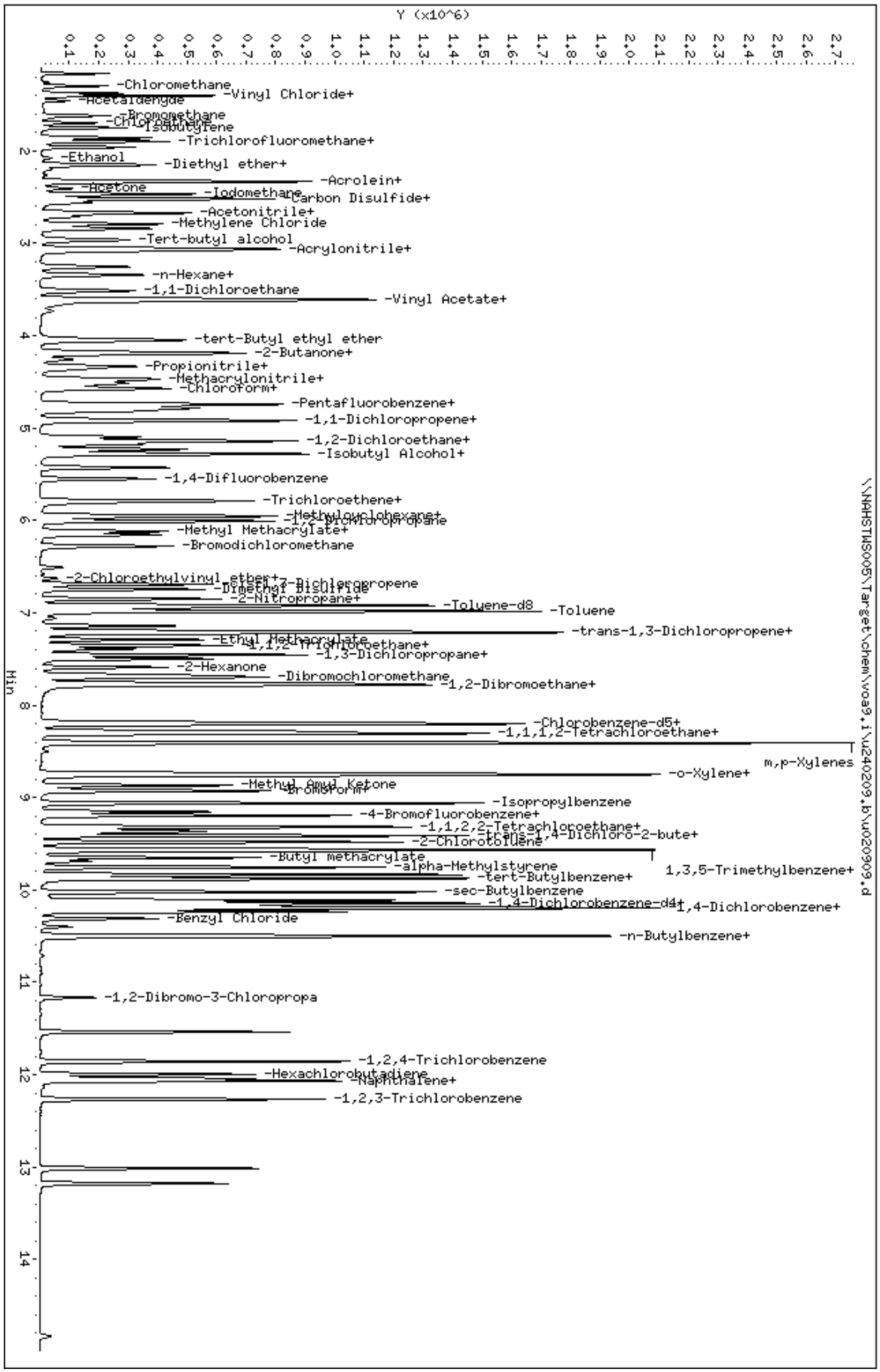
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	29 Bromochloromethane	128	4.467	4.467	(0.928)	119737	100.000	99.56
$	30 Dibromofluoromethane	113	4.748	4.748	(0.986)	225353	100.000	98.32
	31 1,1,1-Trichloroethane	97	4.744	4.744	(0.985)	308526	100.000	95.97
	32 1,1-Dichloropropene	75	4.920	4.920	(0.887)	255824	100.000	95.49
	33 1,2-Dichloroethane	62	5.171	5.171	(0.932)	254319	100.000	96.92
	34 Carbon Tetrachloride	117	4.913	4.913	(0.885)	279136	100.000	94.44
$	35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	226192	100.000	98.86
*	36 1,4-Difluorobenzene	114	5.550	5.550	(1.000)	324772	50.0000	
	37 Benzene	78	5.138	5.138	(0.926)	760852	100.000	95.38
	38 Trichloroethene	130	5.786	5.786	(1.043)	245643	100.000	95.88
	39 Bromodichloromethane	83	6.277	6.277	(1.131)	261272	100.000	94.84
	41 2-Chloroethylvinyl ether	63	6.577	6.577	(1.185)	5023	200.000	264.25
	42 1,2-Dichloropropane	63	6.007	6.007	(1.082)	182962	100.000	95.35
	44 Dibromomethane	93	6.116	6.116	(1.102)	126446	100.000	91.46
	45 4-Methyl-2-Pentanone	43	6.851	6.851	(0.837)	328621	200.000	194.01
	46 cis-1,3-Dichloropropene	75	6.690	6.690	(1.205)	301987	100.000	104.79
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	303250	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	794101	100.000	96.13
	50 Toluene	91	6.978	6.978	(0.853)	856091	100.000	91.23
	51 trans-1,3-Dichloropropene	75	7.196	7.196	(1.296)	258370	100.000	95.05
	52 2-Hexanone	43	7.589	7.589	(0.927)	227893	200.000	191.04
	53 1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	151138	100.000	96.44
	54 1,3-Dichloropropane	76	7.496	7.496	(0.916)	321486	100.000	97.28
	55 Dibromochloromethane	129	7.691	7.691	(0.940)	242732	100.000	101.41
	56 Tetrachloroethene	164	7.458	7.458	(0.911)	206130	100.000	96.14
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	204332	100.000	97.30
	58 1-Chlorohexane	55	8.197	8.197	(1.477)	155922	100.000	95.39
	59 Chlorobenzene	112	8.208	8.208	(1.003)	601383	100.000	96.73
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	228908	100.000	94.77
	61 Ethylbenzene	106	8.305	8.305	(1.015)	303567	100.000	95.15
	62 m,p-Xylenes	106	8.407	8.407	(1.027)	761879	200.000	194.34
	63 o-Xylene	106	8.748	8.748	(1.069)	373505	100.000	97.29
	64 Styrene	104	8.759	8.759	(1.070)	660147	100.000	105.04
	66 Bromoform	173	8.916	8.916	(1.089)	175528	100.000	101.40
	67 Isopropylbenzene	105	9.063	9.063	(1.107)	956619	100.000	97.45
	68 1,1,2,2-Tetrachloroethane	83	9.325	9.325	(0.917)	242003	100.000	96.77
$	69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	295803	100.000	97.16
*	70 1,4-Dichlorobenzene-d4	152	10.168	10.168	(1.000)	165613	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.921)	250693	100.000	94.22
	73 n-Propylbenzene	91	9.411	9.411	(0.926)	1007111	100.000	98.39
	74 Bromobenzene	156	9.317	9.317	(0.916)	288234	100.000	96.91
	75 1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	782239	100.000	102.02
	76 2-Chlorotoluene	91	9.482	9.482	(0.933)	633078	100.000	93.14
	77 4-Chlorotoluene	91	9.576	9.576	(0.942)	722143	100.000	93.60
	78 tert-Butylbenzene	119	9.835	9.835	(0.967)	689164	100.000	98.21
	79 1,2,4-Trimethylbenzene	105	9.880	9.880	(0.972)	768364	100.000	101.60
	81 sec-Butylbenzene	105	10.022	10.022	(0.986)	891589	100.000	99.70
	82 p-Isopropyltoluene	119	10.146	10.146	(0.998)	838420	100.000	104.52
	83 1,3-Dichlorobenzene	146	10.112	10.112	(0.994)	502145	100.000	97.63
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	523178	100.000	99.02
	87 n-Butylbenzene	91	10.491	10.491	(1.032)	658949	100.000	104.57
	88 1,2-Dichlorobenzene	146	10.502	10.502	(1.033)	488949	100.000	97.65

89	1,2-Dibromo-3-Chloropropane	155	11.166	11.166 (1.098)	44556	100.000	93.44
90	1,2,4-Trichlorobenzene	180	11.855	11.855 (1.166)	345953	100.000	105.53

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	91 Hexachlorobutadiene	225	11.998	11.998	(1.180)	147841	100.000	98.75
	92 Naphthalene	128	12.065	12.065	(1.187)	739697	100.000	96.80
	93 1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	310835	100.000	99.41
M	94 1,2-Dichloroethylene (total)	96				429905	200.000	
M	95 Xylenes (total)	106				1135384	300.000	
	135 1,4-Dioxane	88	6.161	6.161	(1.279)	48044	2000.00	1956.91
	141 Cyclohexane	56	4.785	4.785	(0.994)	240373	100.000	97.07
	138 Freon TF	101	2.334	2.334	(0.485)	178255	100.000	96.92
	140 1,3-Butadiene	54	1.400	1.400	(0.291)	167421	100.000	97.57
	147 Methylcyclohexane	55	5.944	5.944	(1.071)	405233	100.000	103.01(A)
	146 Methyl Acetate	43	2.709	2.709	(0.563)	131072	100.000	98.73
	148 Tert-Butyl alcohol	59	2.963	2.963	(0.615)	360713	2000.00	1975.38
	149 Isopropyl Alcohol	45	2.559	2.559	(0.531)	202950	2000.00	1992.39

QC Flag Legend

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



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Client ID: VSTD100
Sample Info: VSTD100;VSTD100;1;8;
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9,i
Operator: FT
Column diameter: 0.18

Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020909.d
Inj Date : 09-FEB-2024 11:58
InstruID : VOA9.i
LabSampID : VSTD100

Chloroprene (126-99-8)

Reason Code:

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09-Feb-2024
12:30
firat
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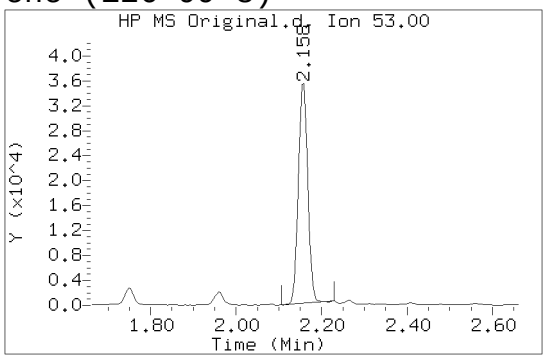

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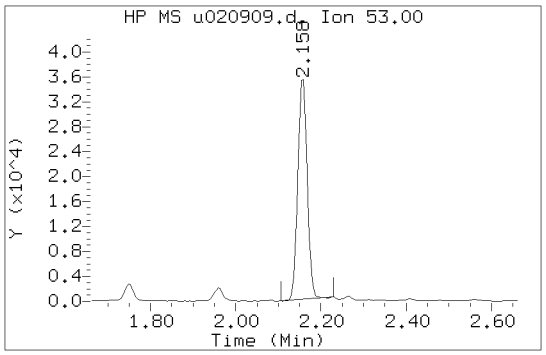

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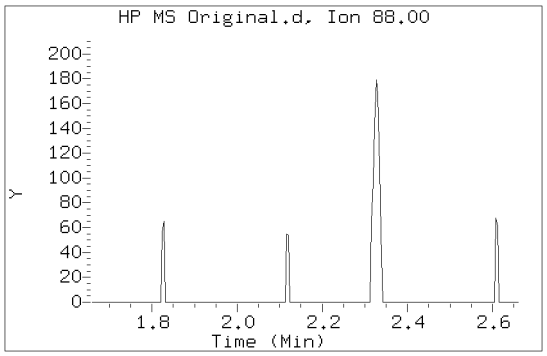

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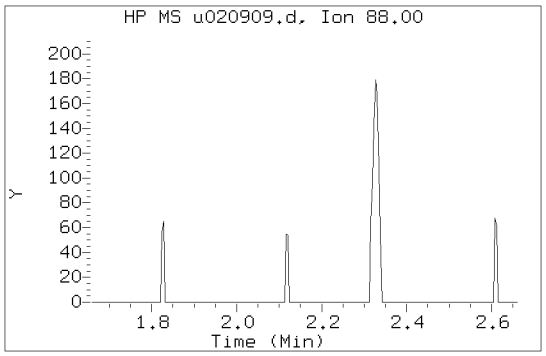

Isobutylene (115-11-7)

Reason Code:

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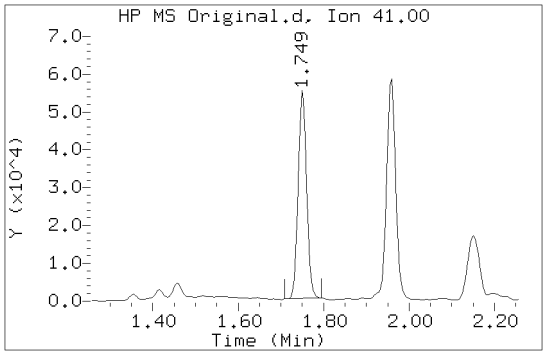

AFTER

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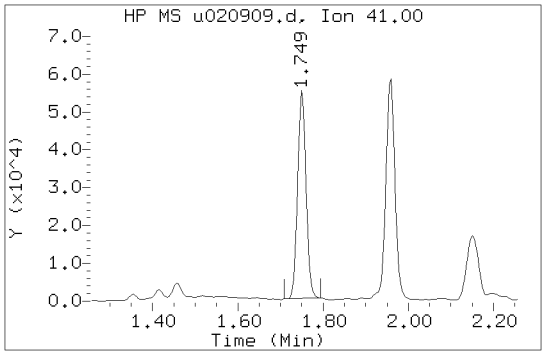

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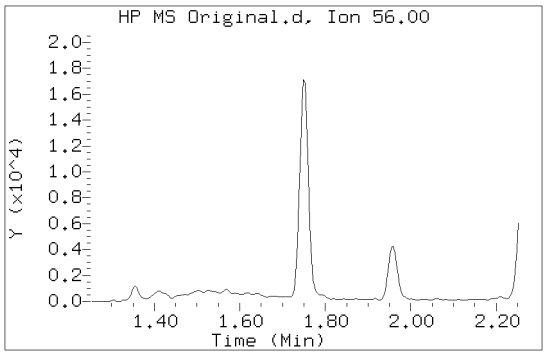

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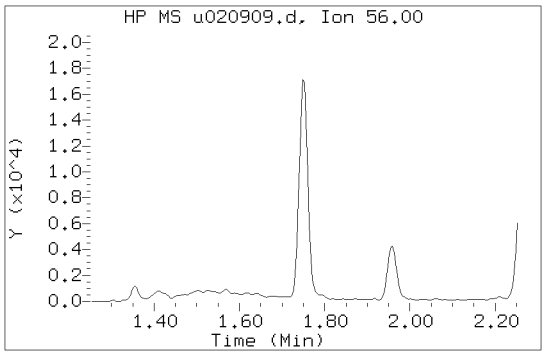

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Inj Date : 09-FEB-2024 11:58
InstruID : VOA9.i
LabSampID : VSTD100

Isobutylene (115-11-7)

Reason Code:

BEFORE

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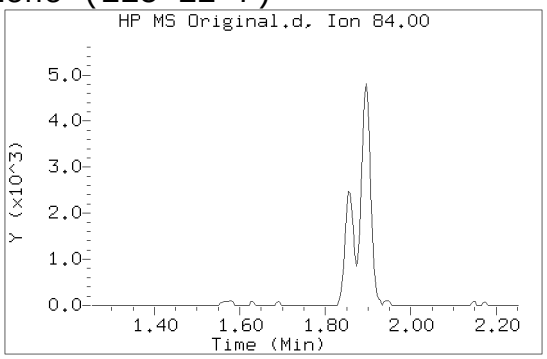

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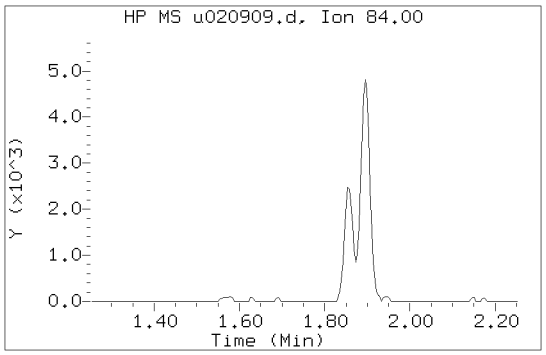

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240209.b\U020910.D Page 1
Report Date: 15-Feb-2024 11:14

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240209.b\U020910.D
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Inj Date : 09-FEB-2024 12:20
Operator : FT Inst ID: VOA9.i
Smp Info : VSTD150;VSTD150;1;9;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240209.b\8260C.m
Meth Date : 15-Feb-2024 11:14 VOA9.i Quant Type: ISTD
Cal Date : 09-FEB-2024 11:58 Cal File: U020909.D
Als bottle: 10 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V9.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1	Pentafluorobenzene	168	4.823	4.823	(1.000)	218706	50.0000	
2	Dichlorodifluoromethane	85	1.172	1.172	(0.243)	224828	150.000	156.52
3	Chloromethane	50	1.307	1.307	(0.271)	256738	150.000	150.25
5	Vinyl Chloride	62	1.385	1.385	(0.287)	290301	150.000	153.10
6	Bromomethane	94	1.625	1.625	(0.337)	199120	150.000	153.76
7	Chloroethane	64	1.708	1.708	(0.354)	202297	150.000	154.20
8	Trichlorofluoromethane	101	1.906	1.906	(0.395)	458326	150.000	153.27
9	Acrolein	56	2.274	2.274	(0.472)	23107	300.000	290.48
10	Acetone	43	2.416	2.416	(0.501)	166382	300.000	309.72(A)
11	1,1-Dichloroethene	96	2.341	2.341	(0.485)	274360	150.000	153.86
15	Iodomethane	142	2.476	2.476	(0.513)	836922	300.000	312.01
16	Acrylonitrile	53	3.072	3.072	(0.637)	171648	300.000	304.47
17	Methylene Chloride	84	2.802	2.802	(0.581)	302564	150.000	154.35
18	Methyl tert-butyl ether	73	3.087	3.087	(0.640)	747890	150.000	152.97
19	Carbon Disulfide	76	2.529	2.529	(0.524)	1540667	300.000	296.18
20	trans-1,2-Dichloroethene	96	3.065	3.065	(0.635)	310253	150.000	152.64
21	Vinyl Acetate	43	3.612	3.612	(0.749)	1298924	300.000	301.88
22	1,1-Dichloroethane	63	3.522	3.522	(0.730)	492499	150.000	154.92
24	2-Butanone	43	4.264	4.264	(0.884)	202359	300.000	305.31
26	2,2-Dichloropropane	77	4.189	4.189	(0.869)	399948	150.000	153.78

27	cis-1,2-Dichloroethene	96	4.204	4.204 (0.872)	350772	150.000	145.55
28	Chloroform	83	4.579	4.579 (0.949)	545173	150.000	154.30

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240209.b\U020910.D Page 2
Report Date: 15-Feb-2024 11:14

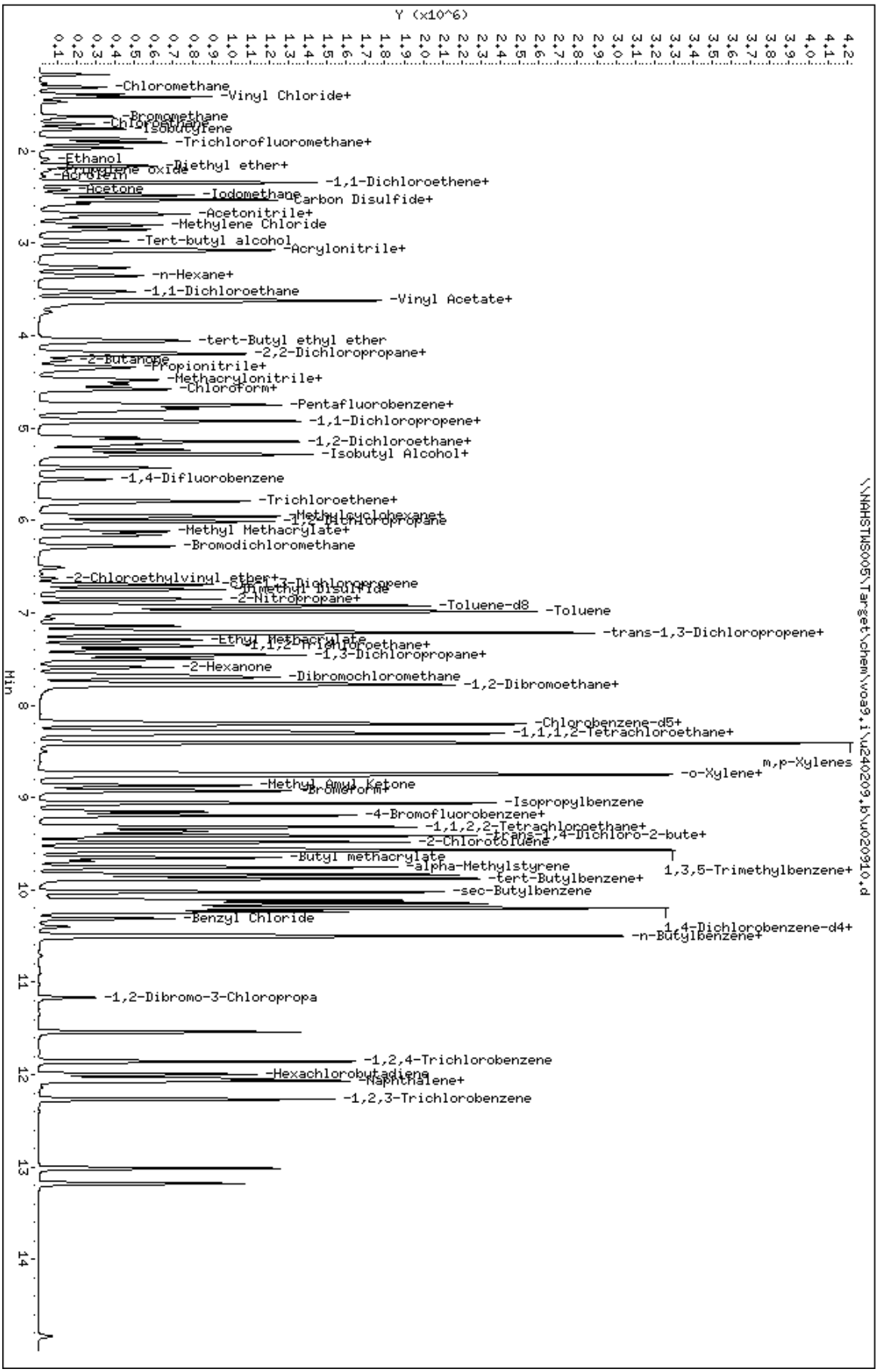
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	29 Bromochloromethane	128	4.474	4.474	(0.928)	181633	150.000	154.58
$	30 Dibromofluoromethane	113	4.752	4.752	(0.985)	339618	150.000	151.32
	31 1,1,1-Trichloroethane	97	4.748	4.748	(0.984)	485989	150.000	154.14
	32 1,1-Dichloropropene	75	4.928	4.928	(0.887)	398596	150.000	153.75
	33 1,2-Dichloroethane	62	5.179	5.179	(0.932)	388749	150.000	153.58
	34 Carbon Tetrachloride	117	4.917	4.917	(0.885)	436813	150.000	152.79
$	35 1,2-Dichloroethane-d4	65	5.100	5.100	(1.058)	338611	150.000	151.29
*	36 1,4-Difluorobenzene	114	5.558	5.558	(1.000)	314131	50.0000	
	37 Benzene	78	5.145	5.145	(0.926)	1187546	150.000	153.83
	38 Trichloroethene	130	5.790	5.790	(1.042)	379920	150.000	153.21
	39 Bromodichloromethane	83	6.281	6.281	(1.130)	407099	150.000	152.78
	41 2-Chloroethylvinyl ether	63	6.577	6.577	(1.183)	9190	300.000	499.85(A)
	42 1,2-Dichloropropane	63	6.011	6.011	(1.082)	286290	150.000	154.29
	44 Dibromomethane	93	6.120	6.120	(1.101)	196084	150.000	146.64
	45 4-Methyl-2-Pentanone	43	6.851	6.851	(0.837)	513045	300.000	305.84
	46 cis-1,3-Dichloropropene	75	6.693	6.693	(1.204)	480393	150.000	172.35
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	300329	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	1215187	150.000	148.57
	50 Toluene	91	6.982	6.982	(0.853)	1339174	150.000	144.11
	51 trans-1,3-Dichloropropene	75	7.196	7.196	(1.295)	407217	150.000	153.82
	52 2-Hexanone	43	7.589	7.589	(0.927)	357378	300.000	301.03
	53 1,1,2-Trichloroethane	83	7.357	7.357	(0.899)	234464	150.000	151.19
	54 1,3-Dichloropropane	76	7.499	7.499	(0.916)	492698	150.000	150.64
	55 Dibromochloromethane	129	7.691	7.691	(0.940)	376669	150.000	158.90
	56 Tetrachloroethene	164	7.458	7.458	(0.911)	322517	150.000	151.88
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	314056	150.000	151.01
	58 1-Chlorohexane	55	8.197	8.197	(1.475)	243289	150.000	154.17
	59 Chlorobenzene	112	8.208	8.208	(1.003)	936714	150.000	152.26
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	358760	150.000	149.98
	61 Ethylbenzene	106	8.305	8.305	(1.015)	473719	150.000	149.93
	62 m,p-Xylenes	106	8.410	8.410	(1.027)	1184202	300.000	305.00
	63 o-Xylene	106	8.748	8.748	(1.069)	585211	150.000	153.92
	64 Styrene	104	8.763	8.763	(1.071)	1037018	150.000	166.62
	66 Bromoform	173	8.916	8.916	(1.089)	283123	150.000	165.15
	67 Isopropylbenzene	105	9.063	9.063	(1.107)	1496713	150.000	153.95
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	375701	150.000	151.87
$	69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	452247	150.000	150.15
*	70 1,4-Dichlorobenzene-d4	152	10.168	10.168	(1.000)	163945	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.921)	395249	150.000	150.06
	73 n-Propylbenzene	91	9.411	9.411	(0.926)	1579857	150.000	155.92
	74 Bromobenzene	156	9.318	9.318	(0.916)	453792	150.000	154.16
	75 1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	1223036	150.000	161.14
	76 2-Chlorotoluene	91	9.482	9.482	(0.933)	980965	150.000	145.79
	77 4-Chlorotoluene	91	9.576	9.576	(0.942)	1132721	150.000	148.32
	78 tert-Butylbenzene	119	9.835	9.835	(0.967)	1067033	150.000	153.61
	79 1,2,4-Trimethylbenzene	105	9.880	9.880	(0.972)	1204758	150.000	160.93
	81 sec-Butylbenzene	105	10.022	10.022	(0.986)	1391890	150.000	157.23
	82 p-Isopropyltoluene	119	10.146	10.146	(0.998)	1310079	150.000	164.98
	83 1,3-Dichlorobenzene	146	10.116	10.116	(0.995)	787039	150.000	154.63
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	801340	150.000	153.43
	87 n-Butylbenzene	91	10.491	10.491	(1.032)	1040243	150.000	166.76
	88 1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	762567	150.000	154.00

89	1,2-Dibromo-3-Chloropropane	155	11.166	11.166 (1.098)	71535	150.000	149.76
90	1,2,4-Trichlorobenzene	180	11.855	11.855 (1.166)	534948	150.000	164.84

		QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	91 Hexachlorobutadiene	225	11.998	11.998	(1.180)	225725	150.000	152.26
	92 Naphthalene	128	12.065	12.065	(1.187)	1165768	150.000	153.37
	93 1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	497166	150.000	160.63
M	94 1,2-Dichloroethylene (total)	96				661025	300.000	
M	95 Xylenes (total)	106				1769413	450.000	
	135 1,4-Dioxane	88	6.165	6.165	(1.278)	74347	3000.00	3082.03
	141 Cyclohexane	56	4.789	4.789	(0.993)	370929	150.000	152.88(A)
	138 Freon TF	101	2.345	2.345	(0.486)	280437	150.000	155.46
	140 1,3-Butadiene	54	1.415	1.415	(0.294)	256882	150.000	152.55
	147 Methylcyclohexane	55	5.947	5.947	(1.070)	625053	150.000	164.28(A)
	146 Methyl Acetate	43	2.724	2.724	(0.565)	197033	150.000	151.54
	148 Tert-Butyl alcohol	59	2.975	2.975	(0.617)	547562	3000.00	3057.95
	149 Isopropyl Alcohol	45	2.574	2.574	(0.534)	308676	3000.00	3088.55

QC Flag Legend

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



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Client ID: VSTD150
Sample Info: VSTD150;VSTD150;1;9;
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9,i
Operator: FT
Column diameter: 0.18

Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020910.d
Inj Date : 09-FEB-2024 12:20
InstruID : VOA9.i
LabSampID : VSTD150

Chloroprene (126-99-8)

BEFORE
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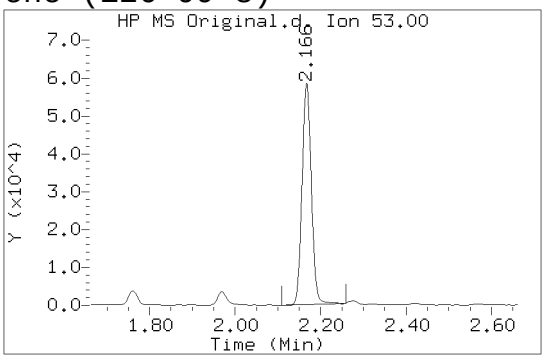
90341
HEIGHT
58294
09-Feb-2024
13:01
firat
tastan



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AFTER
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09-Feb-2024
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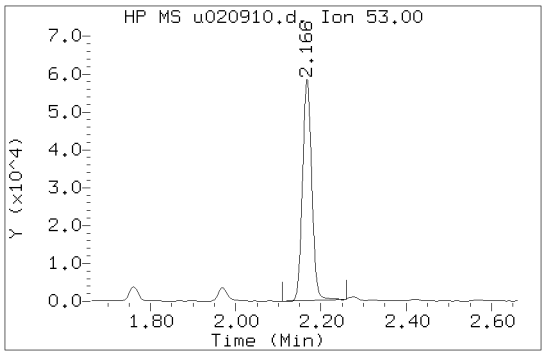

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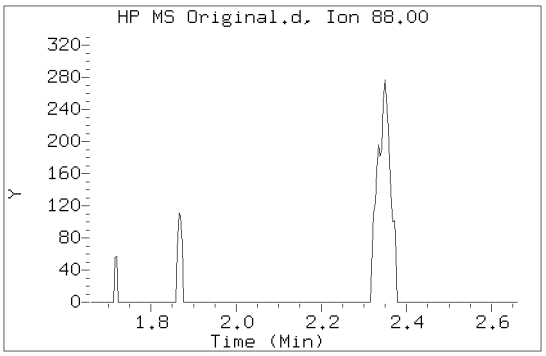

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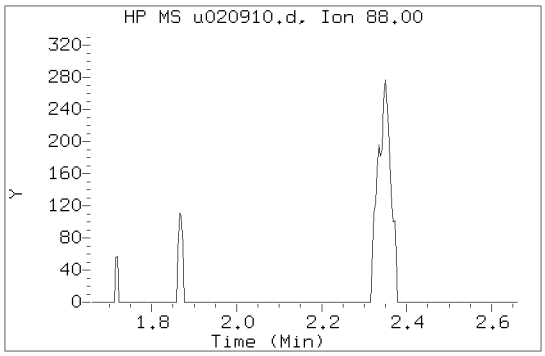

Isobutylene (115-11-7)

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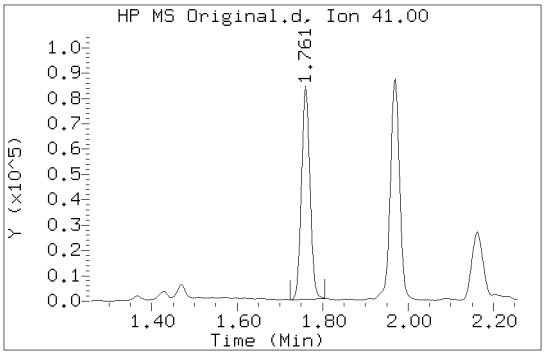

Reason Code:

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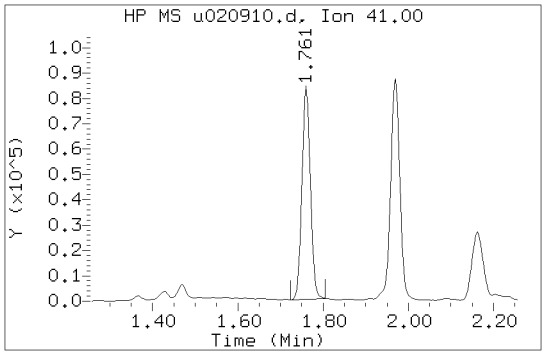

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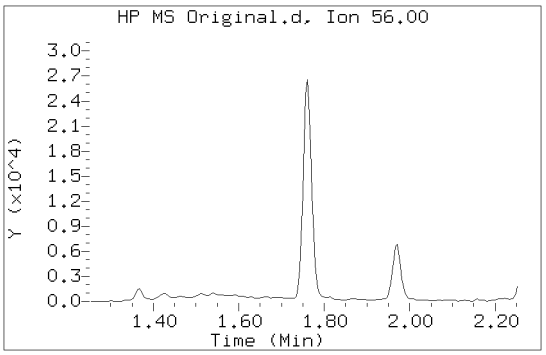

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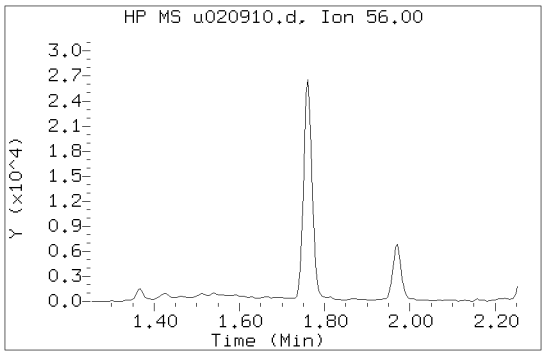

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Inj Date : 09-FEB-2024 12:20
InstruID : VOA9.i
LabSampID : VSTD150

Isobutylene (115-11-7)

Reason Code:

BEFORE

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HEIGHT
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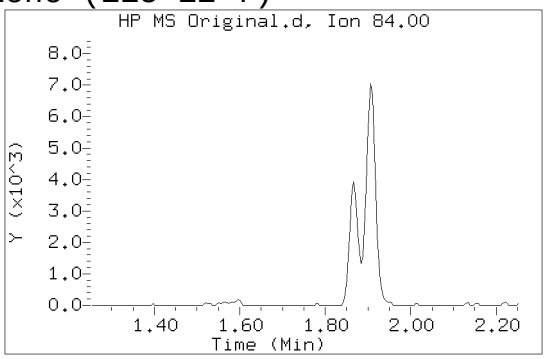
09-Feb-2024
13:01
firat
tastan



AFTER

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HEIGHT
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09-Feb-2024
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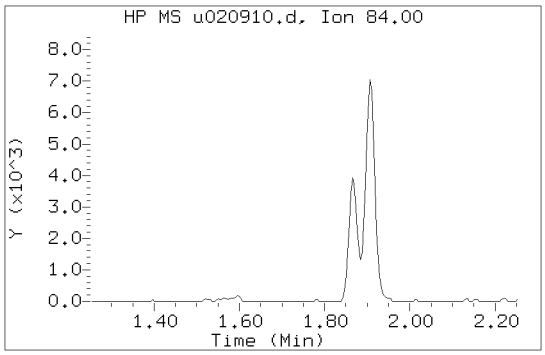


Data File: \\NAHSTWS005\Target\chem\voa9.i\U240209.b\U020911.D Page 1
Report Date: 15-Feb-2024 11:14

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240209.b\U020911.D
Lab Smp Id: VSTD200 Client Smp ID: VSTD200
Inj Date : 09-FEB-2024 12:42
Operator : FT Inst ID: VOA9.i
Smp Info : VSTD200;VSTD200;1;10;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240209.b\8260C.m
Meth Date : 15-Feb-2024 11:14 VOA9.i Quant Type: ISTD
Cal Date : 09-FEB-2024 12:20 Cal File: U020910.D
Als bottle: 11 Calibration Sample, Level: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V9.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1	Pentafluorobenzene	168	4.819	4.819	(1.000)	230325	50.0000	
2	Dichlorodifluoromethane	85	1.167	1.167	(0.242)	297253	200.000	196.46
3	Chloromethane	50	1.302	1.302	(0.270)	364440	200.000	202.36(A)
5	Vinyl Chloride	62	1.381	1.381	(0.287)	396253	200.000	198.41
6	Bromomethane	94	1.617	1.617	(0.336)	274596	200.000	201.16(A)
7	Chloroethane	64	1.700	1.700	(0.353)	273442	200.000	198.00
8	Trichlorofluoromethane	101	1.902	1.902	(0.395)	621502	200.000	197.47
9	Acrolein	56	2.270	2.270	(0.471)	33950	400.000	406.25(A)
10	Acetone	43	2.412	2.412	(0.501)	219721	400.000	389.73(A)
11	1,1-Dichloroethene	96	2.337	2.337	(0.485)	372803	200.000	198.48
15	Iodomethane	142	2.472	2.472	(0.513)	1096640	400.000	387.77
16	Acrylonitrile	53	3.068	3.068	(0.637)	235255	400.000	396.39
17	Methylene Chloride	84	2.798	2.798	(0.581)	405366	200.000	196.74
18	Methyl tert-butyl ether	73	3.083	3.083	(0.640)	1023738	200.000	198.80
19	Carbon Disulfide	76	2.524	2.524	(0.524)	2108182	400.000	384.83
20	trans-1,2-Dichloroethene	96	3.061	3.061	(0.635)	425570	200.000	198.80
21	Vinyl Acetate	43	3.608	3.608	(0.749)	1753724	400.000	387.02
22	1,1-Dichloroethane	63	3.518	3.518	(0.730)	662807	200.000	197.95
24	2-Butanone	43	4.260	4.260	(0.884)	278335	400.000	398.76
26	2,2-Dichloropropane	77	4.185	4.185	(0.869)	537243	200.000	196.15

27 cis-1,2-Dichloroethene	96	4.200	4.200 (0.872)	476692	200.000	187.83
28 Chloroform	83	4.575	4.575 (0.949)	735037	200.000	197.59

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240209.b\U020911.D Page 2
Report Date: 15-Feb-2024 11:14

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	29 Bromochloromethane	128	4.474	4.474	(0.928)	241921	200.000	195.79
$	30 Dibromofluoromethane	113	4.751	4.751	(0.986)	471863	200.000	199.77
	31 1,1,1-Trichloroethane	97	4.747	4.747	(0.985)	653629	200.000	196.85
	32 1,1-Dichloropropene	75	4.924	4.924	(0.887)	540113	200.000	199.03
	33 1,2-Dichloroethane	62	5.179	5.179	(0.933)	523717	200.000	197.91
	34 Carbon Tetrachloride	117	4.916	4.916	(0.885)	598406	200.000	200.01(A)
$	35 1,2-Dichloroethane-d4	65	5.100	5.100	(1.058)	468937	200.000	199.18
*	36 1,4-Difluorobenzene	114	5.553	5.553	(1.000)	328741	50.0000	
	37 Benzene	78	5.141	5.141	(0.926)	1608657	200.000	199.09
	38 Trichloroethene	130	5.790	5.790	(1.043)	517591	200.000	199.41
	39 Bromodichloromethane	83	6.277	6.277	(1.130)	558464	200.000	200.28(A)
	41 2-Chloroethylvinyl ether	63	6.577	6.577	(1.184)	13641	400.000	708.97(A)
	42 1,2-Dichloropropane	63	6.011	6.011	(1.082)	385455	200.000	198.53
	44 Dibromomethane	93	6.119	6.119	(1.102)	265739	200.000	189.90
	45 4-Methyl-2-Pentanone	43	6.850	6.850	(0.837)	711544	400.000	413.72(A)
	46 cis-1,3-Dichloropropene	75	6.693	6.693	(1.205)	656574	200.000	225.10(A)
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	307921	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	1698429	200.000	202.56(A)
	50 Toluene	91	6.982	6.982	(0.853)	1818396	200.000	190.85
	51 trans-1,3-Dichloropropene	75	7.195	7.195	(1.296)	554885	200.000	199.78
	52 2-Hexanone	43	7.589	7.589	(0.927)	493142	400.000	404.27(A)
	53 1,1,2-Trichloroethane	83	7.357	7.357	(0.899)	318353	200.000	200.29(A)
	54 1,3-Dichloropropane	76	7.499	7.499	(0.916)	671252	200.000	200.23(A)
	55 Dibromochloromethane	129	7.690	7.690	(0.940)	520656	200.000	214.23(A)
	56 Tetrachloroethene	164	7.458	7.458	(0.911)	435734	200.000	200.14(A)
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	424019	200.000	198.85
	58 1-Chlorohexane	55	8.196	8.196	(1.476)	328757	200.000	199.22
	59 Chlorobenzene	112	8.207	8.207	(1.003)	1257280	200.000	199.40
	60 1,1,1,2-Tetrachloroethane	131	8.282	8.282	(1.012)	487985	200.000	198.97
	61 Ethylbenzene	106	8.309	8.309	(1.015)	641854	200.000	198.14
	62 m,p-Xylenes	106	8.410	8.410	(1.027)	1605717	400.000	403.37(A)
	63 o-Xylene	106	8.747	8.747	(1.069)	785587	200.000	201.52(A)
	64 Styrene	104	8.762	8.762	(1.071)	1404250	200.000	220.06(A)
	66 Bromoform	173	8.916	8.916	(1.089)	391387	200.000	222.68(A)
	67 Isopropylbenzene	105	9.062	9.062	(1.107)	2008831	200.000	201.54(A)
	68 1,1,2,2-Tetrachloroethane	83	9.328	9.328	(0.917)	518878	200.000	199.64
$	69 4-Bromofluorobenzene	95	9.193	9.193	(1.123)	620366	200.000	200.98(A)
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	172299	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.920)	539282	200.000	194.82
	73 n-Propylbenzene	91	9.411	9.411	(0.925)	2208340	200.000	207.38(A)
	74 Bromobenzene	156	9.317	9.317	(0.916)	612518	200.000	198.01
	75 1,3,5-Trimethylbenzene	105	9.564	9.564	(0.940)	1656263	200.000	207.64(A)
	76 2-Chlorotoluene	91	9.482	9.482	(0.932)	1321830	200.000	186.93
	77 4-Chlorotoluene	91	9.576	9.576	(0.941)	1531559	200.000	190.82
	78 tert-Butylbenzene	119	9.838	9.838	(0.967)	1423591	200.000	195.01
	79 1,2,4-Trimethylbenzene	105	9.879	9.879	(0.971)	1630213	200.000	207.21(A)
	81 sec-Butylbenzene	105	10.022	10.022	(0.985)	1881810	200.000	202.27(A)
	82 p-Isopropyltoluene	119	10.146	10.146	(0.997)	1758751	200.000	210.74(A)
	83 1,3-Dichlorobenzene	146	10.116	10.116	(0.994)	1055922	200.000	197.43
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	1084669	200.000	197.73
	87 n-Butylbenzene	91	10.490	10.490	(1.031)	1393758	200.000	212.60(A)
	88 1,2-Dichlorobenzene	146	10.505	10.505	(1.033)	1028628	200.000	197.74

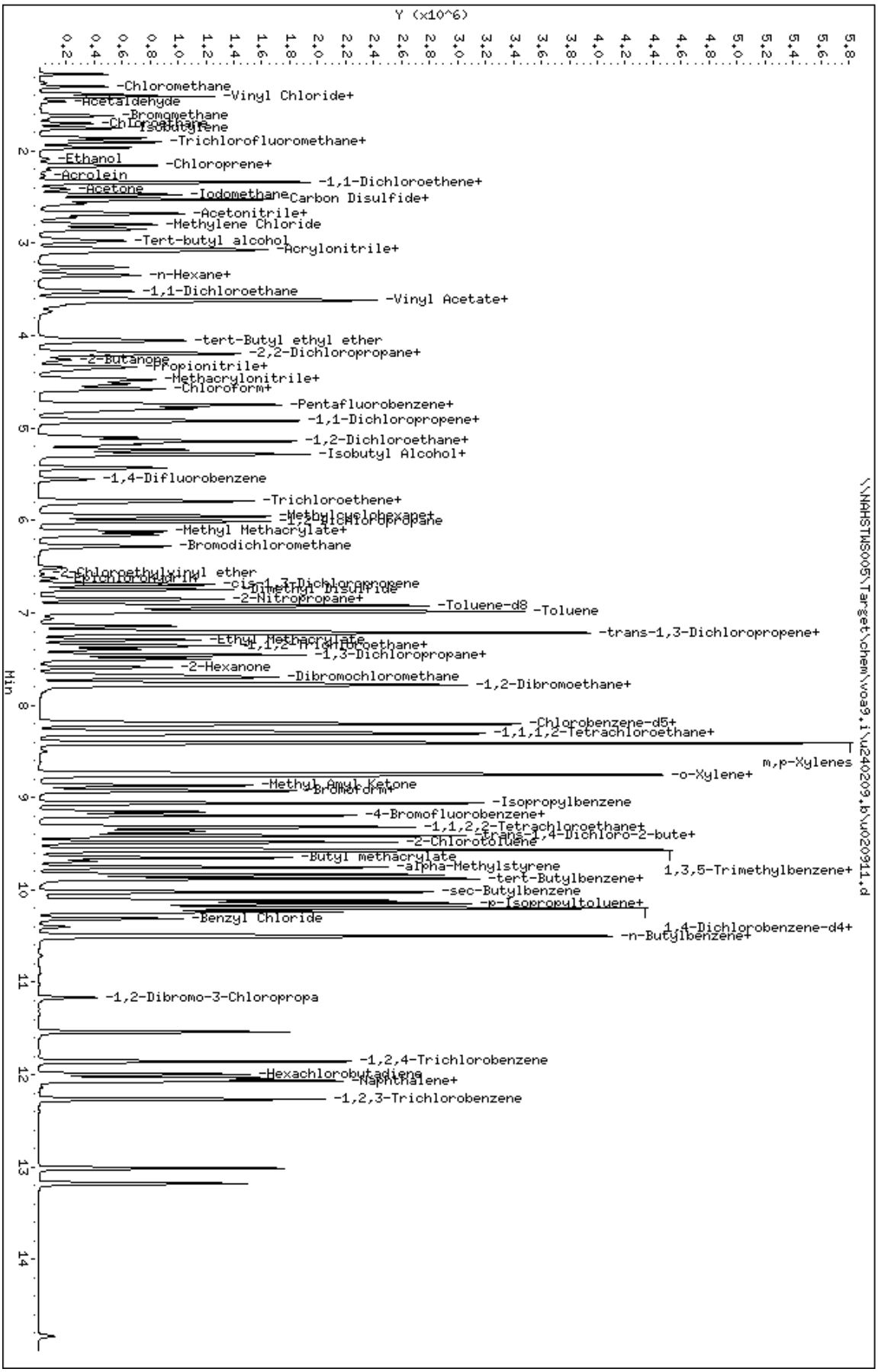
89	1,2-Dibromo-3-Chloropropane	155	11.165	11.165 (1.098)	102920	200.000	203.97(A)
90	1,2,4-Trichlorobenzene	180	11.855	11.855 (1.165)	729375	200.000	213.86(A)

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240209.b\U020911.D Page 3
Report Date: 15-Feb-2024 11:14

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	91 Hexachlorobutadiene	225	11.997	11.997	(1.179)	309875	200.000	198.86
	92 Naphthalene	128	12.065	12.065	(1.186)	1594607	200.000	199.25
	93 1,2,3-Trichlorobenzene	180	12.267	12.267	(1.206)	668989	200.000	205.66(A)
M	94 1,2-Dichloroethylene (total)	96				902262	400.000	
M	95 Xylenes (total)	106				2391304	600.000	
	135 1,4-Dioxane	88	6.164	6.164	(1.279)	100798	4000.00	3964.99
	141 Cyclohexane	56	4.789	4.789	(0.994)	509886	200.000	199.63(A)
	138 Freon TF	101	2.337	2.337	(0.485)	374690	200.000	197.23
	140 1,3-Butadiene	54	1.407	1.407	(0.292)	353164	200.000	199.10
	147 Methylcyclohexane	55	5.947	5.947	(1.071)	863668	200.000	216.90(A)
	146 Methyl Acetate	43	2.716	2.716	(0.564)	272795	200.000	199.36
	148 Tert-Butyl alcohol	59	2.971	2.971	(0.617)	748988	4000.00	3972.14
	149 Isopropyl Alcohol	45	2.569	2.569	(0.533)	415230	4000.00	3944.54

QC Flag Legend

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



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Date : 09-FEB-2024 12:42
Client ID: VSTD200
Sample Info: VSTD200;VSTD200;1;10;
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9.i
Operator: FT
Column diameter: 0.18

Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020911.d
Inj Date : 09-FEB-2024 12:42
InstruID : VOA9.i
LabSampID : VSTD200

Isobutylene (115-11-7)

Reason Code:

BEFORE

MASS
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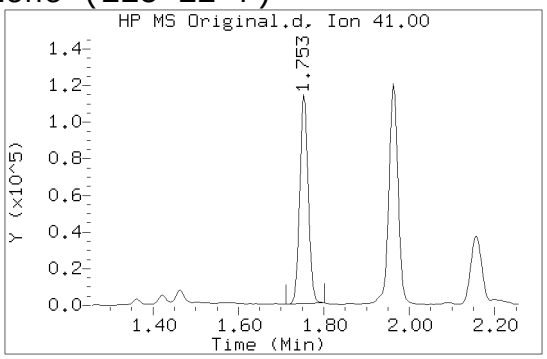
09-Feb-2024
13:03
firat
tastan



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09-Feb-2024
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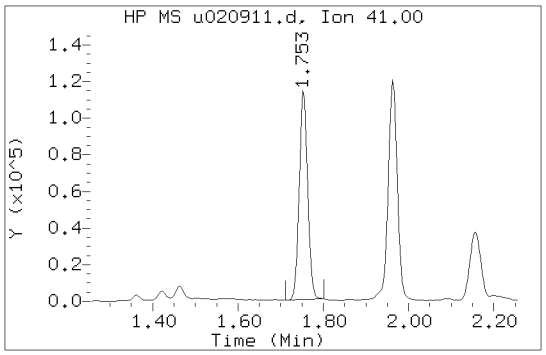

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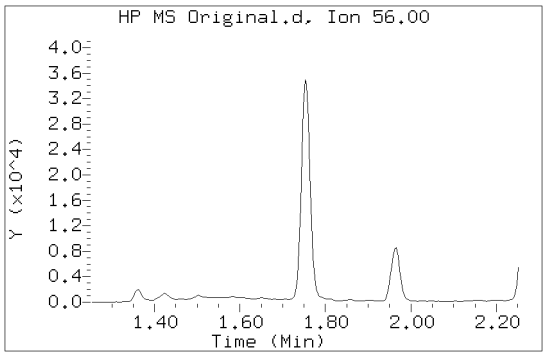

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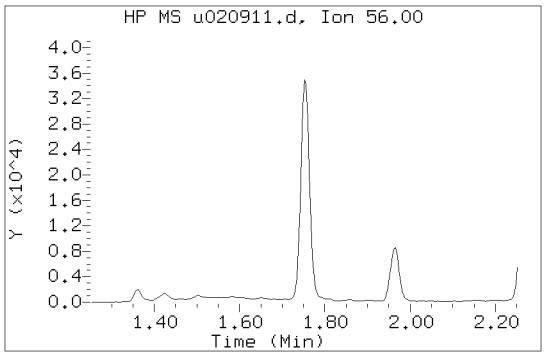

BEFORE

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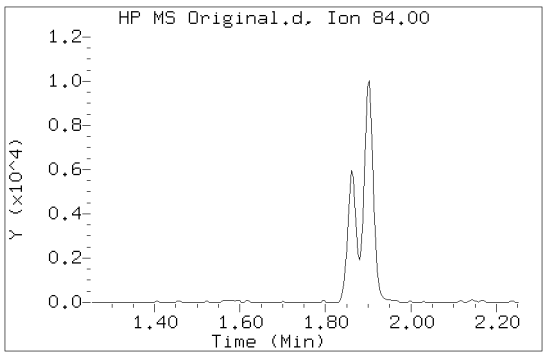

AFTER

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HEIGHT
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09-Feb-2024
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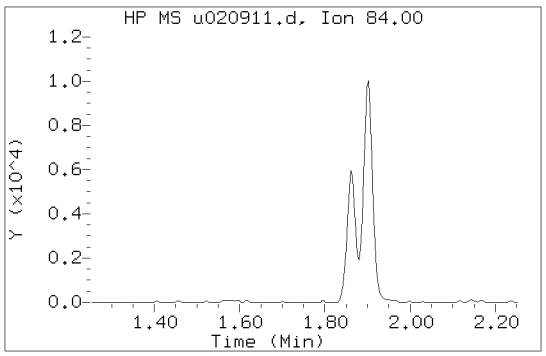


Data File: \\NAHSTWS005\Target\chem\voa9.i\U240209.b\U020913.D Page 1
Report Date: 15-Feb-2024 11:14

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240209.b\U020913.D
Lab Smp Id: ICV Client Smp ID: ICV
Inj Date : 09-FEB-2024 13:27
Operator : FT Inst ID: VOA9.i
Smp Info : VSTD050;VSTD050;2;;ICV
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240209.b\8260C.m
Meth Date : 15-Feb-2024 11:14 VOA9.i Quant Type: ISTD
Cal Date : 09-FEB-2024 12:42 Cal File: U020911.D
Als bottle: 13 QC Sample: METHSPIKE
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V9.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.815	4.819	(1.000)	247136	50.0000	
2 Dichlorodifluoromethane	85	1.164	1.167	(0.242)	68711	42.4252	42.42
3 Chloromethane	50	1.299	1.302	(0.270)	97477	50.7861	50.78
5 Vinyl Chloride	62	1.378	1.381	(0.286)	97135	45.3797	45.37
6 Bromomethane	94	1.621	1.617	(0.337)	77533	53.3880	53.38
7 Chloroethane	64	1.700	1.700	(0.353)	67671	45.4441	45.44
8 Trichlorofluoromethane	101	1.899	1.902	(0.394)	151220	44.4657	44.46
9 Acrolein	56	2.266	2.270	(0.471)	8248	90.0515	90.05
10 Acetone	43	2.409	2.412	(0.500)	58015	91.9008	91.90
11 1,1-Dichloroethene	96	2.334	2.337	(0.485)	91319	45.4288	45.42
15 Iodomethane	142	2.468	2.472	(0.513)	241206	80.9356	80.93(M)
16 Acrylonitrile	53	3.065	3.068	(0.636)	60264	94.2694	94.26
17 Methylene Chloride	84	2.795	2.798	(0.580)	105106	46.4945	46.49
18 Methyl tert-butyl ether	73	3.080	3.083	(0.640)	255656	46.3538	46.35
19 Carbon Disulfide	76	2.521	2.524	(0.524)	510531	86.8553	86.85
20 trans-1,2-Dichloroethene	96	3.057	3.061	(0.635)	106504	46.3956	46.39
21 Vinyl Acetate	43	3.604	3.608	(0.749)	441763	90.8607	90.86
22 1,1-Dichloroethane	63	3.514	3.518	(0.730)	166714	46.4860	46.48
24 2-Butanone	43	4.260	4.260	(0.885)	68210	91.0754	91.07
26 2,2-Dichloropropane	77	4.185	4.185	(0.869)	125393	42.6688	42.66

27 cis-1,2-Dichloroethene	96	4.197	4.200 (0.872)	121249	44.5259	44.52
28 Chloroform	83	4.572	4.575 (0.949)	185412	46.3396	46.33

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240209.b\U020913.D Page 2
Report Date: 15-Feb-2024 11:14

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	29 Bromochloromethane	128	4.470	4.474	(0.928)	66500	49.3585	49.35
$	30 Dibromofluoromethane	113	4.748	4.751	(0.986)	120774	47.3217	47.32
	31 1,1,1-Trichloroethane	97	4.744	4.747	(0.985)	159394	44.7391	44.73
	32 1,1-Dichloropropene	75	4.924	4.924	(0.887)	134606	47.3333	47.33
	33 1,2-Dichloroethane	62	5.175	5.179	(0.932)	132931	47.2954	47.29
	34 Carbon Tetrachloride	117	4.913	4.916	(0.885)	140987	44.8659	44.86
$	35 1,2-Dichloroethane-d4	65	5.096	5.100	(1.058)	120103	46.9726	46.97
*	36 1,4-Difluorobenzene	114	5.554	5.553	(1.000)	345294	50.0000	
	37 Benzene	78	5.138	5.141	(0.925)	401947	47.4597	47.45
	38 Trichloroethene	130	5.790	5.790	(1.043)	127869	47.0376	47.03
	39 Bromodichloromethane	83	6.277	6.277	(1.130)	134639	45.9712	45.97
	42 1,2-Dichloropropane	63	6.007	6.011	(1.082)	96156	47.0987	47.09
	44 Dibromomethane	93	6.120	6.119	(1.102)	67762	46.1044	46.10
	45 4-Methyl-2-Pentanone	43	6.851	6.850	(0.837)	172237	96.0252	96.02
	46 cis-1,3-Dichloropropene	75	6.690	6.693	(1.205)	153516	50.1084	50.10
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	321137	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	435036	49.7080	49.70
	50 Toluene	91	6.978	6.982	(0.853)	455376	45.8285	45.82
	51 trans-1,3-Dichloropropene	75	7.196	7.195	(1.296)	129035	45.5428	45.54
	52 2-Hexanone	43	7.589	7.589	(0.927)	116559	93.5804	93.58
	53 1,1,2-Trichloroethane	83	7.353	7.357	(0.898)	80589	48.4559	48.45
	54 1,3-Dichloropropane	76	7.495	7.499	(0.916)	168064	47.9374	47.93
	55 Dibromochloromethane	129	7.690	7.690	(0.940)	123501	48.7266	48.72
	56 Tetrachloroethene	164	7.458	7.458	(0.911)	107693	47.4342	47.43
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	107411	48.3009	48.30
	58 1-Chlorohexane	55	8.196	8.196	(1.476)	79937	45.7507	45.75
	59 Chlorobenzene	112	8.208	8.207	(1.003)	313979	47.5875	47.58
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.282	(1.012)	117784	46.0498	46.04
	61 Ethylbenzene	106	8.305	8.309	(1.015)	157029	46.4806	46.48
	62 m,p-Xylenes	106	8.406	8.410	(1.027)	400272	96.4154	96.41
	63 o-Xylene	106	8.744	8.747	(1.068)	196386	48.3064	48.30
	64 Styrene	104	8.759	8.762	(1.070)	340239	51.1266	51.12
	66 Bromoform	173	8.916	8.916	(1.089)	89188	48.6567	48.65
	67 Isopropylbenzene	105	9.062	9.062	(1.107)	498421	47.9479	47.94
	68 1,1,2,2-Tetrachloroethane	83	9.325	9.328	(0.917)	129514	48.3439	48.34
$	69 4-Bromofluorobenzene	95	9.194	9.193	(1.123)	157903	48.8351	48.83
*	70 1,4-Dichlorobenzene-d4	152	10.168	10.172	(1.000)	177074	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.921)	126040	44.3068	44.30
	73 n-Propylbenzene	91	9.411	9.411	(0.926)	541098	49.4452	49.44
	74 Bromobenzene	156	9.317	9.317	(0.916)	151860	47.7287	47.72
	75 1,3,5-Trimethylbenzene	105	9.561	9.564	(0.940)	407315	49.6887	49.68
	76 2-Chlorotoluene	91	9.482	9.482	(0.933)	329467	45.3362	45.33
	77 4-Chlorotoluene	91	9.576	9.576	(0.942)	377965	45.8223	45.82
	78 tert-Butylbenzene	119	9.835	9.838	(0.967)	353961	47.1799	47.17
	79 1,2,4-Trimethylbenzene	105	9.876	9.879	(0.971)	401348	49.6389	49.63
	81 sec-Butylbenzene	105	10.022	10.022	(0.986)	458876	47.9936	47.99
	82 p-Isopropyltoluene	119	10.146	10.146	(0.998)	429669	50.0972	50.09
	83 1,3-Dichlorobenzene	146	10.112	10.116	(0.994)	260932	47.3989	47.39
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	272364	48.0078	48.00
	87 n-Butylbenzene	91	10.491	10.490	(1.032)	329753	48.9448	48.94
	88 1,2-Dichlorobenzene	146	10.502	10.505	(1.033)	255954	47.6772	47.67
	89 1,2-Dibromo-3-Chloropropane	155	11.165	11.165	(1.098)	22437	45.5314	45.53

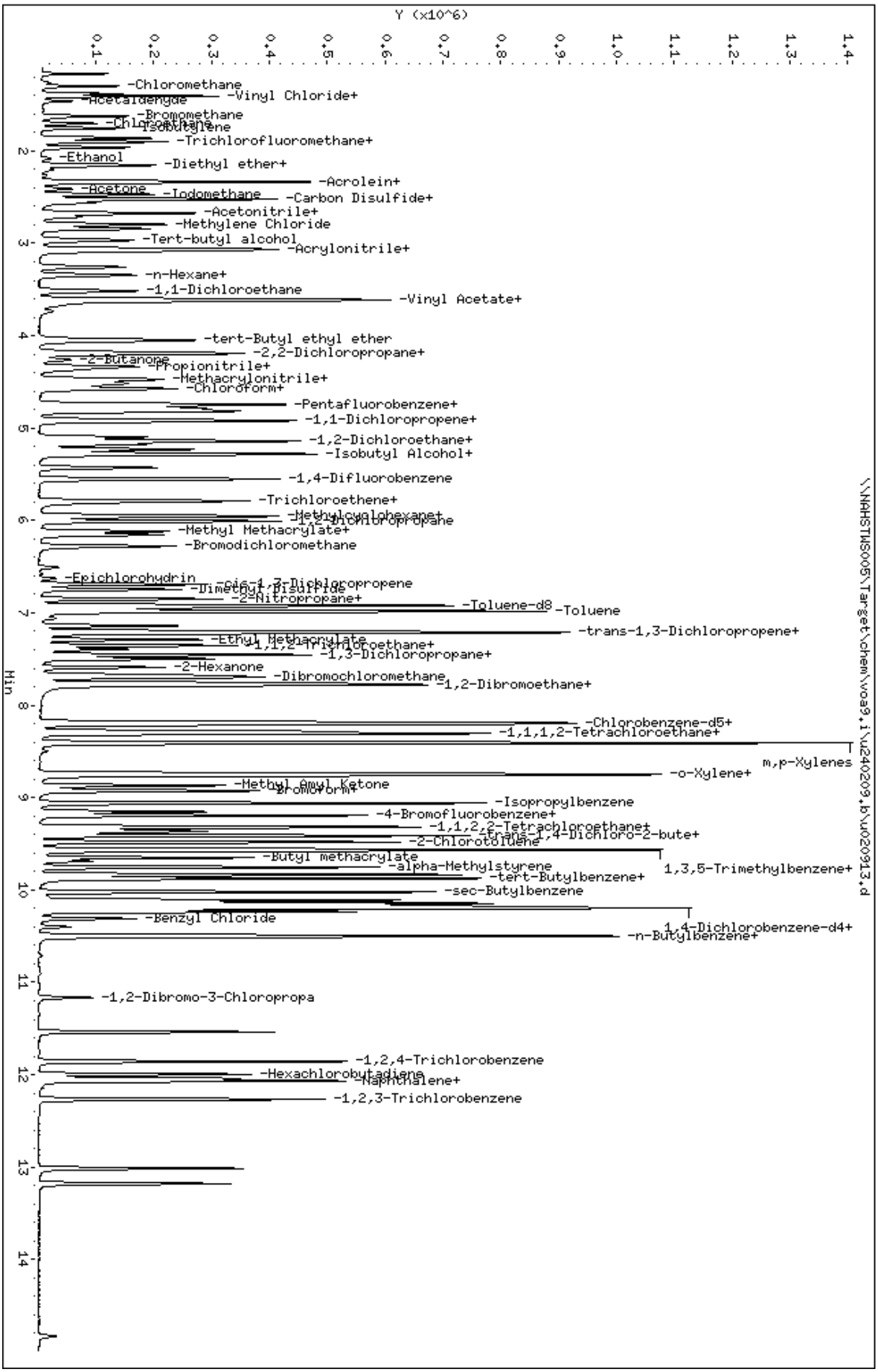
90 1,2,4-Trichlorobenzene	180	11.855	11.855 (1.166)	177295	50.5843	50.58
91 Hexachlorobutadiene	225	11.998	11.997 (1.180)	75729	47.3662	47.36

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240209.b\U020913.D Page 3
Report Date: 15-Feb-2024 11:14

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	92 Naphthalene	128	12.065	12.065	(1.187)	384239	47.6703	47.67
	93 1,2,3-Trichlorobenzene	180	12.268	12.267	(1.206)	167750	50.1807	50.18
M	94 1,2-Dichloroethylene (total)	96				227753	86.7769	86.77
M	95 Xylenes (total)	106				596658	145.104	145.10
	135 1,4-Dioxane	88	6.161	6.164	(1.279)	24786	916.094	916.09
	141 Cyclohexane	56	4.785	4.789	(0.994)	126749	46.0475	46.04
	138 Freon TF	101	2.337	2.337	(0.485)	88738	43.5398	43.53
	140 1,3-Butadiene	54	1.404	1.407	(0.292)	85110	44.8517	44.85
	147 Methylcyclohexane	55	5.944	5.947	(1.070)	209686	50.1375	50.13
	146 Methyl Acetate	43	2.712	2.716	(0.563)	67666	45.7749	45.77
	148 Tert-Butyl alcohol	59	2.963	2.971	(0.615)	191804	947.228	947.22
	149 Isopropyl Alcohol	45	2.558	2.569	(0.531)	105651	936.962	936.96

QC Flag Legend

M - Compound response manually integrated.



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Date : 09-FEB-2024 13:27
Client ID: ICV
Sample Info: WSTD050;WSTD050;2;;ICV
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9,i
Operator: FT
Column diameter: 0.18

Data File : \\nahstws005\target\chem\voa9.i\u240209.b\u020913.d
Inj Date : 09-FEB-2024 13:27
InstruID : VOA9.i
LabSampID : ICV

Iodomethane (74-88-4)

Reason Code:

BEFORE
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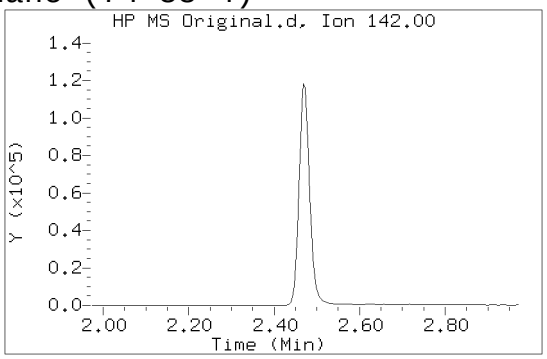
HEIGHT
118640
15-Feb-2024
11:13
linh
pham



AFTER
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15-Feb-2024
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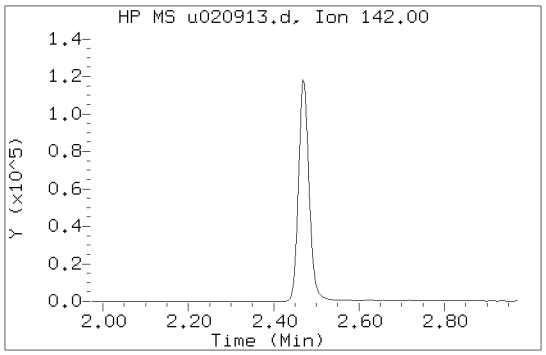

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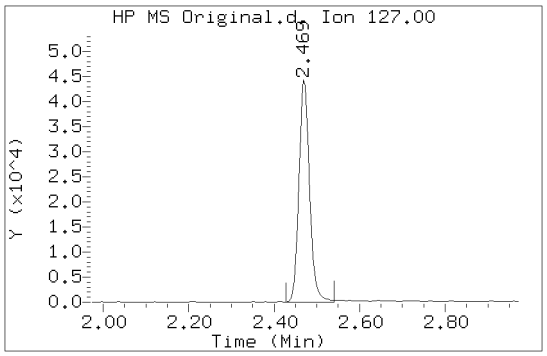

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15-Feb-2024
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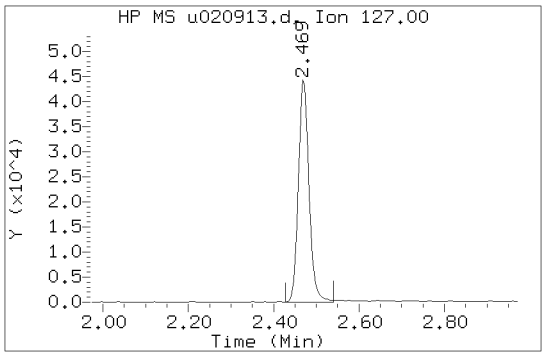

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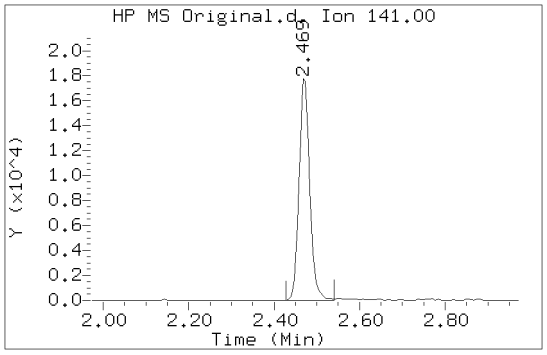

AFTER
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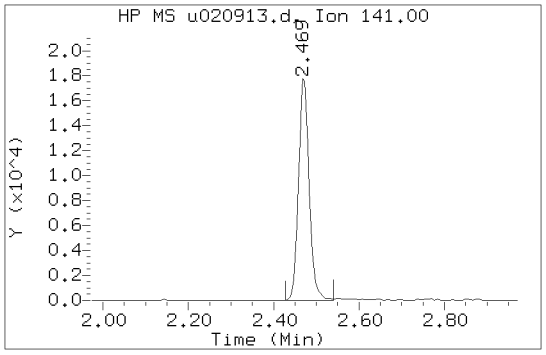


right solutions.
right partner.

RawData

Volatiles by EPA Volatiles Organics by Method 8260C

Workorder

HS24020246

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

02/23/2024

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

Data File: \\nahstws005\Target\chem\voa9.i\U240210.b\U021001.D Page 1
Report Date: 13-Feb-2024 08:36

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240210.b\U021001.D
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 10-FEB-2024 00:44
Operator : FT Inst ID: VOA9.i
Smp Info : BFB;BFB;3;;BFB
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240210.b\bfb.m
Meth Date : 27-Jan-2023 08:08 apoluri Quant Type: ISTD
Cal Date : 30-MAR-2018 18:09 Cal File: U033003.d
Als bottle: 41 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: NAHSTW7066

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

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	2.000	Injection Volume
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/l)	TARGET RANGE	RATIO
1 bfb							CAS #: 460-00-4	
9.194	9.180	(0.000)	95	17400			0.00- 100.00	90.78
9.194	9.180	(0.000)	50	2660			15.00- 40.00	15.29
9.194	9.180	(0.000)	75	7623			30.00- 60.00	43.81
9.194	9.180	(0.000)	96	1284			5.00- 9.00	7.38
9.194	9.180	(0.000)	173	9			0.00- 2.00	0.05
9.194	9.180	(0.000)	174	19168			50.00- 0.00	110.16
9.194	9.180	(0.000)	175	1581			5.00- 9.00	8.25
9.194	9.180	(0.000)	176	18928			95.00- 101.00	98.75
9.194	9.180	(0.000)	177	1222			5.00- 9.00	6.46

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	15.29
75	30.00 - 60.00% of mass 95	43.81
96	5.00 - 9.00% of mass 95	7.38
173	Less than 2.00% of mass 174	0.05 (0.05)
174	Greater than 50.00% of mass 95	110.16
175	5.00 - 9.00% of mass 174	9.09 (8.25)
176	95.00 - 101.00% of mass 174	108.78 (98.75)
177	5.00 - 9.00% of mass 176	7.02 (6.46)

Data File: U021001.D
Spectrum: Avg. Scans 2289-2317 (9.19)
Location of Maximum: 174.00
Number of points: 117

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	5	65.00	64	96.00	1284	141.00	173
36.00	149	66.00	3	97.00	97	142.00	48
37.00	637	67.00	85	98.00	758	143.00	165
38.00	610	68.00	1540	99.00	38	145.00	1
39.00	645	69.00	2048	103.00	7	146.00	16
40.00	222	70.00	505	104.00	71	147.00	11
41.00	593	71.00	59	105.00	80	148.00	44
42.00	843	72.00	100	106.00	65	149.00	13
43.00	384	73.00	714	107.00	29	150.00	20
44.00	188	74.00	2540	109.00	21	152.00	3
45.00	227	75.00	7623	111.00	4	153.00	3
46.00	17	76.00	657	114.00	1	154.00	11
47.00	179	77.00	142	115.00	3	155.00	61
48.00	94	78.00	107	116.00	41	156.00	12
49.00	600	79.00	383	117.00	106	157.00	36
50.00	2660	80.00	185	118.00	49	159.00	18
51.00	873	81.00	380	119.00	94	161.00	14
52.00	58	82.00	100	120.00	4	171.00	29
53.00	116	83.00	140	123.00	1	172.00	100
54.00	119	84.00	6	127.00	17	173.00	9
55.00	1361	85.00	21	128.00	69	174.00	19168
56.00	450	86.00	30	129.00	51	175.00	1581
57.00	470	87.00	766	130.00	69	176.00	18928
58.00	80	88.00	712	131.00	32	177.00	1222
59.00	102	89.00	1	135.00	24	178.00	41
60.00	146	91.00	79	136.00	10	186.00	10
61.00	738	92.00	456	137.00	30	189.00	4
62.00	702	93.00	694	138.00	6		
63.00	486	94.00	2053	139.00	4		
64.00	63	95.00	17400	140.00	8		

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240210.b\U021002.D Page 1
Report Date: 22-Feb-2024 14:57

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240210.b\U021002.D
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 10-FEB-2024 01:28
Operator : FT Inst ID: VOA9.i
Smp Info : CCV;CCV;2;;;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240210.b\8260C.m
Meth Date : 22-Feb-2024 14:57 VOA9.i Quant Type: ISTD
Cal Date : 09-FEB-2024 12:42 Cal File: U020911.D
Als bottle: 42 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.819	4.819	(1.000)	226739	50.0000	
2 Dichlorodifluoromethane	85	1.168	1.168	(0.242)	61756	50.0000	41.56
3 Chloromethane	50	1.303	1.303	(0.270)	72999	50.0000	41.53
4 Propionitrile	54	4.335	4.335	(0.900)	104837	500.000	430.53
5 Vinyl Chloride	62	1.378	1.378	(0.286)	81358	50.0000	41.43
6 Bromomethane	94	1.625	1.625	(0.337)	55766	50.0000	41.98
7 Chloroethane	64	1.704	1.704	(0.354)	57730	50.0000	42.23
8 Trichlorofluoromethane	101	1.899	1.899	(0.394)	135680	50.0000	43.47
9 Acrolein	56	2.266	2.266	(0.470)	7982	100.000	95.12
10 Acetone	43	2.409	2.409	(0.500)	50262	100.000	86.48
11 1,1-Dichloroethene	96	2.334	2.334	(0.484)	80269	50.0000	43.53
12 Isobutyl Alcohol	43	5.284	5.284	(1.096)	184483	1000.00	829.06
13 Acetonitrile	39	2.671	2.671	(0.554)	76066	500.000	403.57
14 Allyl Chloride	41	2.675	2.675	(0.555)	158326	50.0000	42.80
15 Iodomethane	142	2.472	2.472	(0.513)	235443	100.000	85.99
16 Acrylonitrile	53	3.065	3.065	(0.636)	50946	100.000	86.82
17 Methylene Chloride	84	2.795	2.795	(0.580)	90197	50.0000	43.39
18 Methyl tert-butyl ether	73	3.080	3.080	(0.639)	221184	50.0000	43.71
19 Carbon Disulfide	76	2.521	2.521	(0.523)	431571	100.000	80.02(M)
20 trans-1,2-Dichloroethene	96	3.061	3.061	(0.635)	89679	50.0000	42.58

21 Vinyl Acetate	43	3.608	3.608 (0.749)	357089	100.000	80.05(M)
22 1,1-Dichloroethane	63	3.514	3.514 (0.729)	141066	50.0000	42.88

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240210.b\U021002.D Page 2
Report Date: 22-Feb-2024 14:57

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
23	Chloroprene	53	2.161	2.161	(0.449)	26130	50.0000	44.09(M)
24	2-Butanone	43	4.260	4.260	(0.884)	56693	100.000	82.50
25	Methacrylonitrile	41	4.493	4.493	(0.932)	69194	50.0000	41.25(a)
26	2,2-Dichloropropane	77	4.185	4.185	(0.869)	92550	50.0000	34.32
27	cis-1,2-Dichloroethene	96	4.197	4.197	(0.871)	103427	50.0000	41.39
28	Chloroform	83	4.572	4.572	(0.949)	161901	50.0000	44.09
29	Bromochloromethane	128	4.470	4.470	(0.928)	59152	50.0000	47.82
$ 30	Dibromofluoromethane	113	4.748	4.748	(0.985)	112617	50.0000	48.10
31	1,1,1-Trichloroethane	97	4.744	4.744	(0.984)	140270	50.0000	42.91
32	1,1-Dichloropropene	75	4.924	4.924	(0.887)	114059	50.0000	44.91
33	1,2-Dichloroethane	62	5.175	5.175	(0.932)	118251	50.0000	47.10
34	Carbon Tetrachloride	117	4.913	4.913	(0.885)	120578	50.0000	42.96
$ 35	1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	112737	50.0000	48.07
* 36	1,4-Difluorobenzene	114	5.554	5.554	(1.000)	308372	50.0000	
37	Benzene	78	5.141	5.141	(0.926)	340778	50.0000	45.06
38	Trichloroethene	130	5.790	5.790	(1.043)	113828	50.0000	46.88
39	Bromodichloromethane	83	6.277	6.277	(1.130)	119093	50.0000	45.53
40	Methyl Methacrylate	41	6.153	6.153	(1.277)	60944	50.0000	44.58
42	1,2-Dichloropropane	63	6.007	6.007	(1.082)	81125	50.0000	44.49
43	2-Nitropropane	43	6.851	6.851	(1.422)	144396	50.0000	43.18
44	Dibromomethane	93	6.120	6.120	(1.102)	60414	50.0000	46.02
45	4-Methyl-2-Pentanone	43	6.851	6.851	(0.837)	144396	100.000	86.95
46	cis-1,3-Dichloropropene	75	6.690	6.690	(1.205)	127289	50.0000	46.52
* 47	Chlorobenzene-d5	117	8.185	8.185	(1.000)	297306	50.0000	
$ 48	Toluene-d8	98	6.922	6.922	(0.846)	385676	50.0000	47.59
49	Ethyl Methacrylate	69	7.289	7.289	(1.312)	119127	50.0000	50.70
50	Toluene	91	6.982	6.982	(0.853)	385664	50.0000	41.92
51	trans-1,3-Dichloropropene	75	7.196	7.196	(1.296)	108805	50.0000	43.09
52	2-Hexanone	43	7.589	7.589	(0.927)	96296	100.000	83.78
53	1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	70578	50.0000	45.82
54	1,3-Dichloropropane	76	7.495	7.495	(0.916)	147055	50.0000	45.29
55	Dibromochloromethane	129	7.690	7.690	(0.940)	110652	50.0000	47.15
56	Tetrachloroethene	164	7.458	7.458	(0.911)	95794	50.0000	45.57
57	1,2-Dibromoethane	107	7.784	7.784	(0.951)	94443	50.0000	45.87
58	1-Chlorohexane	55	8.196	8.196	(1.476)	65008	50.0000	41.61
59	Chlorobenzene	112	8.208	8.208	(1.003)	274929	50.0000	44.99
60	1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	103377	50.0000	43.65
61	Ethylbenzene	106	8.305	8.305	(1.015)	134976	50.0000	43.15
62	m,p-Xylenes	106	8.406	8.406	(1.027)	336033	100.000	87.42
63	o-Xylene	106	8.744	8.744	(1.068)	165733	50.0000	44.03
64	Styrene	104	8.759	8.759	(1.070)	296130	50.0000	48.06
66	Bromoform	173	8.916	8.916	(1.089)	79542	50.0000	46.87
67	Isopropylbenzene	105	9.062	9.062	(1.107)	416683	50.0000	43.29
68	1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	109949	50.0000	43.32
$ 69	4-Bromofluorobenzene	95	9.194	9.194	(1.123)	144615	50.0000	48.30
* 70	1,4-Dichlorobenzene-d4	152	10.168	10.168	(1.000)	167680	50.0000	
71	1,2,3-Trichloropropane	75	9.362	9.362	(0.921)	107801	50.0000	40.01
72	trans-1,4-Dichloro-2-butene	53	9.377	9.377	(1.146)	18914	50.0000	40.22
73	n-Propylbenzene	91	9.411	9.411	(0.926)	454076	50.0000	43.81
74	Bromobenzene	156	9.317	9.317	(0.916)	135305	50.0000	44.90
75	1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	342663	50.0000	44.14
76	2-Chlorotoluene	91	9.482	9.482	(0.933)	279550	50.0000	40.62

77 4-Chlorotoluene	91	9.576	9.576 (0.942)	325394	50.0000	41.65
78 tert-Butylbenzene	119	9.835	9.835 (0.967)	306450	50.0000	43.13

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240210.b\U021002.D Page 3
Report Date: 22-Feb-2024 14:57

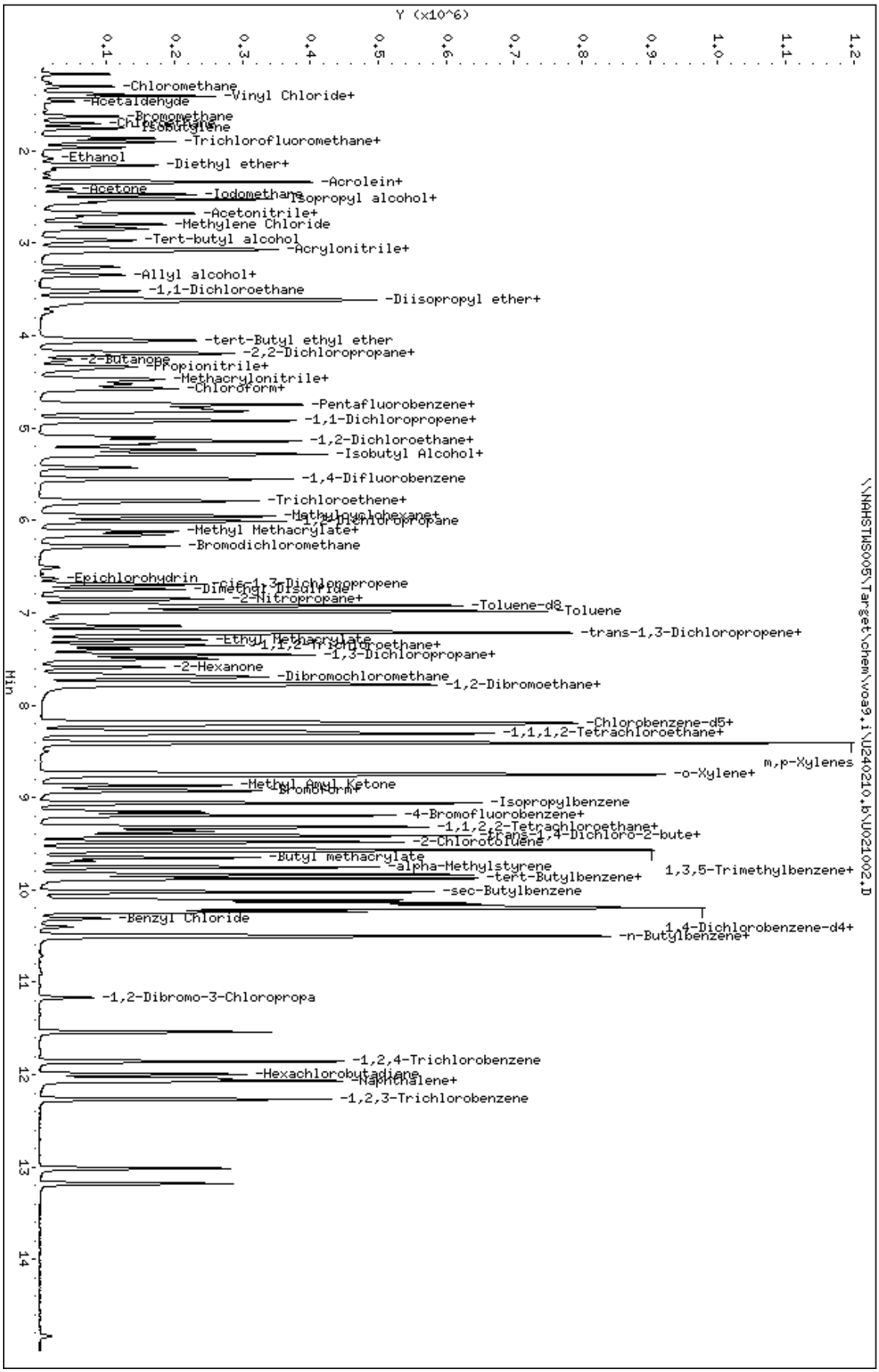
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
79	1,2,4-Trimethylbenzene	105	9.876	9.876	(0.971)	340850	50.0000	44.51
81	sec-Butylbenzene	105	10.022	10.022	(0.986)	379337	50.0000	41.89
82	p-Isopropyltoluene	119	10.146	10.146	(0.998)	357710	50.0000	44.04
83	1,3-Dichlorobenzene	146	10.112	10.112	(0.994)	228120	50.0000	43.75
84	1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	236421	50.0000	43.97
86	Benzyl Chloride	91	10.311	10.311	(1.260)	69094	50.0000	29.91
87	n-Butylbenzene	91	10.491	10.491	(1.032)	265887	50.0000	41.67
88	1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	228290	50.0000	44.89
89	1,2-Dibromo-3-Chloropropane	155	11.165	11.165	(1.098)	20026	50.0000	43.08
90	1,2,4-Trichlorobenzene	180	11.855	11.855	(1.166)	151294	50.0000	45.58
91	Hexachlorobutadiene	225	11.998	11.998	(1.180)	63401	50.0000	41.88
92	Naphthalene	128	12.065	12.065	(1.187)	331788	50.0000	43.57
93	1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	144746	50.0000	45.72
146	Methyl acetate	43	2.712	2.712	(0.563)	57047	50.0000	42.02
138	Freon TF	101	2.337	2.337	(0.485)	77650	50.0000	41.52
141	Cyclohexane	56	4.785	4.785	(0.993)	101663	50.0000	40.22(M)
142	Tetrahydrofuran	42	4.542	4.542	(0.942)	24766	100.000	89.32
147	Methylcyclohexane	55	5.947	5.947	(1.071)	174410	50.0000	46.69
135	1,4-Dioxane	88	6.165	6.165	(1.279)	24359	1000.00	980.61
132	n-Butanol	56	5.816	5.816	(1.207)	43434	1000.00	834.82
136	n-Hexane	57	3.342	3.342	(0.694)	65954	50.0000	35.45(M)
139	Diethyl ether	59	2.146	2.146	(0.445)	55253	50.0000	43.27
148	Tert-butyl alcohol	59	2.967	2.967	(0.616)	165638	1000.00	891.53
149	Isopropyl alcohol	45	2.562	2.562	(0.532)	93019	1000.00	899.22
152	Amyl alcohol	42	7.394	7.394	(0.903)	45581	1000.00	873.24
156	Diisopropyl ether	45	3.623	3.623	(0.752)	224334	50.0000	42.41
162	Butyl acrylate	55	8.733	8.733	(1.067)	130643	50.0000	44.46
187	n-Amyl acetate	43	8.931	8.931	(1.091)	108055	50.0000	44.28
164	Dicyclopentadiene	66	10.198	10.198	(1.003)	388245	50.0000	43.31
166	1,2,3-Trimethylbenzene	105	10.232	10.232	(1.006)	258972	50.0000	45.35
167	Ethanol	45	2.082	2.082	(0.432)	16498	1000.00	878.41
172	tert-Butyl formate	59	5.235	5.235	(1.086)	111658	100.000	84.25
173	3,3-Dimethyl-1-butanol	57	7.777	7.777	(0.950)	181682	1000.00	859.74
174	tert-Amyl methyl ether	73	5.284	5.284	(1.096)	237395	50.0000	43.68
175	tert-Butyl ethyl ether	59	4.050	4.050	(0.841)	231110	50.0000	45.10
176	tert-Amyl alcohol	59	5.235	5.235	(1.086)	111658	1000.00	843.49
151	4-Methyl-2-pentanol	45	7.214	7.214	(1.299)	384930	1000.00	865.32
140	1,3-Butadiene	54	1.404	1.404	(0.291)	74533	50.0000	42.81
158	Dichlorofluoromethane	67	1.861	1.861	(0.386)	135124	50.0000	40.53(M)
182	Epichlorohydrin	57	6.630	6.630	(1.194)	17826	200.000	176.43
M 94	1,2-Dichloroethylene (total)	96				193106	100.000	(a)
145	alpha-Methylstyrene	118	9.752	9.752	(0.959)	149400	50.0000	42.02
130	Ethyl Acetate	43	4.339	4.339	(0.900)	71066	50.0000	44.27
131	Methyl Acrylate	55	4.369	4.369	(0.907)	83203	50.0000	44.16
189	n-Butyl acetate	43	7.762	7.762	(0.948)	77732	50.0000	45.28
134	Cyclohexanone	55	9.152	9.152	(0.900)	93505	1000.00	892.90
185	Isoprene	39	2.161	2.161	(0.449)	19967	50.0000	40.53(M)
188	Isopropyl acetate	43	5.284	5.284	(0.951)	184483	50.0000	43.34
150	Allyl alcohol	57	3.342	3.342	(0.694)	63530	1000.00	683.60
194	Acetaldehyde	44	1.464	1.464	(0.304)	33645	200.000	166.00(M)
195	Methyl Amyl Ketone	43	8.868	8.868	(1.083)	145890	50.0000	47.71
200	Dimethyl Disulfide	94	6.746	6.746	(0.824)	112433	50.0000	43.16

202 Isobutylene	41	1.756	1.756 (0.364)	32626	50.0000	40.70(M)
203 2-Ethylhexyl Acrylate	55	12.039	12.039 (1.184)	91960	50.0000	40.44

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
133 Ethyl Acrylate	55	5.947	5.947	(1.234)	174410	50.0000	44.35
163 Butyl methacrylate	41	9.647	9.647	(0.949)	72591	50.0000	41.13
159 Propylene oxide	43	2.202	2.202	(0.457)	7856	100.000	94.29

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 : 10-FEB-2024 01:28
Client ID: CCV
Sample Info: CCV;CCV;2;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9.i
Operator: FT
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\voa9.i\U240210.b\U021002.D
Inj Date : 10-FEB-2024 01:28
InstruID : VOA9.i
LabSampID : CCV

Carbon Disulfide (75-15-0)

Reason Code:

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76
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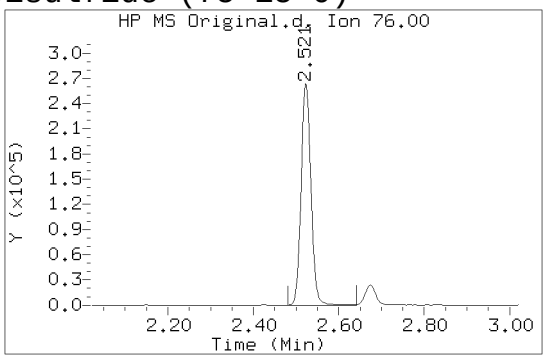
HEIGHT
263920
22-Feb-2024
14:57
linh
pham



AFTER

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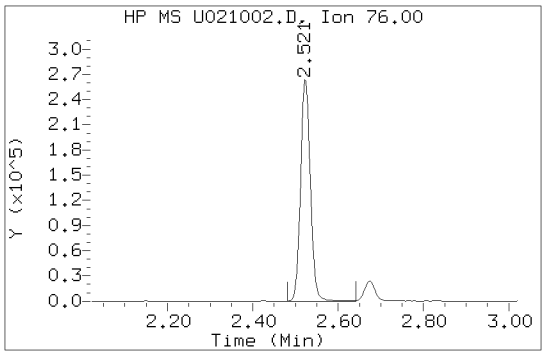

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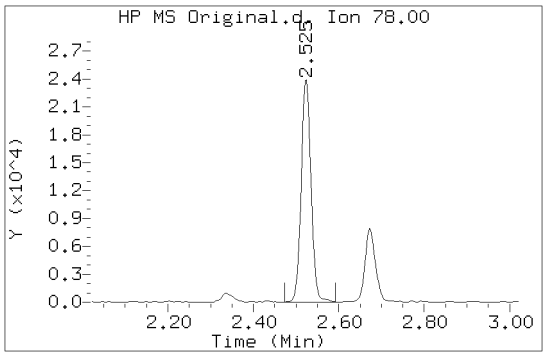

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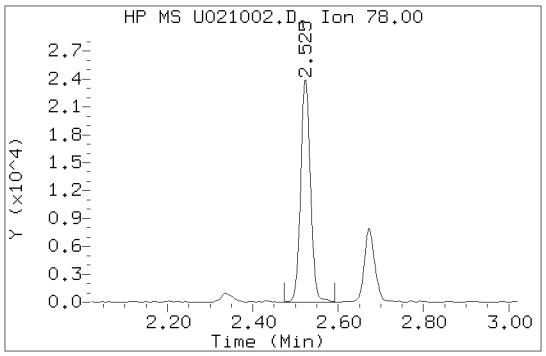

Vinyl Acetate (108-05-4)

Reason Code:

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HEIGHT
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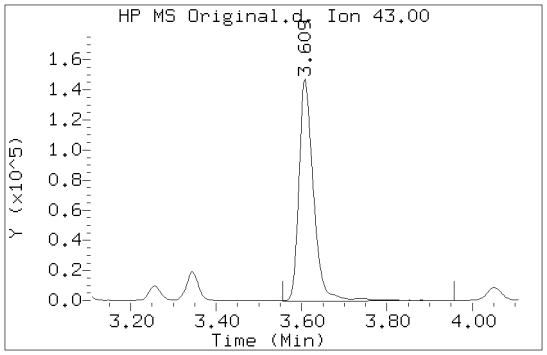
22-Feb-2024
14:57
linh
pham



AFTER

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22-Feb-2024
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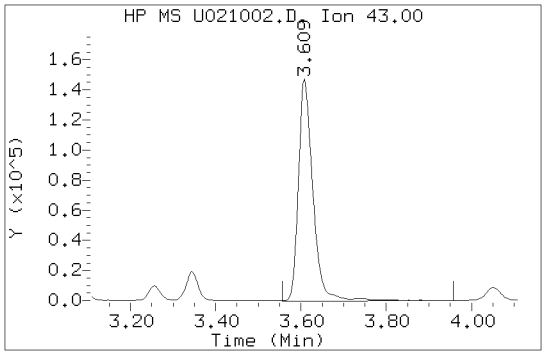
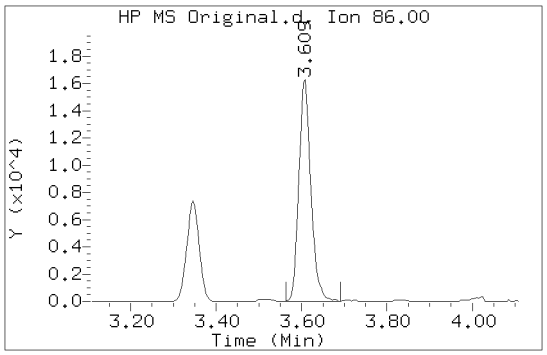


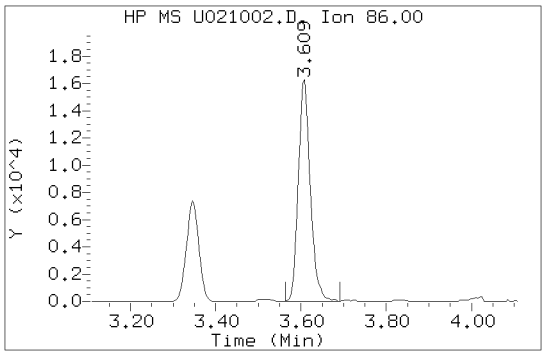
BEFORE

MASS
86
AREA
32500
HEIGHT
16280
22-Feb-2024
14:57
linh
pham



AFTER

MASS
86
AREA
32500
HEIGHT
16280
22-Feb-2024
14:57
linh
pham

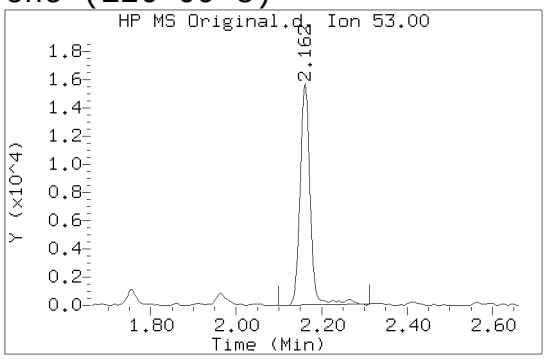


Data File : \\NAHSTWS005\Target\chem\voa9.i\U240210.b\U021002.D
Inj Date : 10-FEB-2024 01:28
InstruID : VOA9.i
LabSampID : CCV

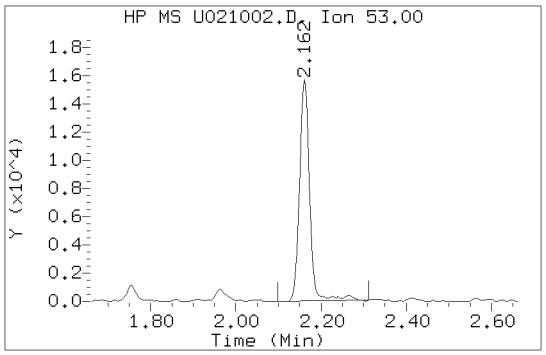
Chloroprene (126-99-8)

Reason Code:

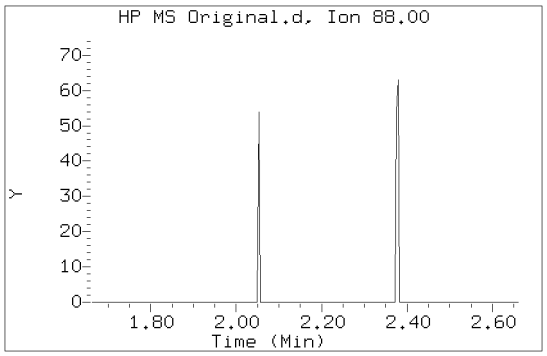
BEFORE
MASS
53
AREA
26130
HEIGHT
15672
22-Feb-2024
14:57
linh
pham



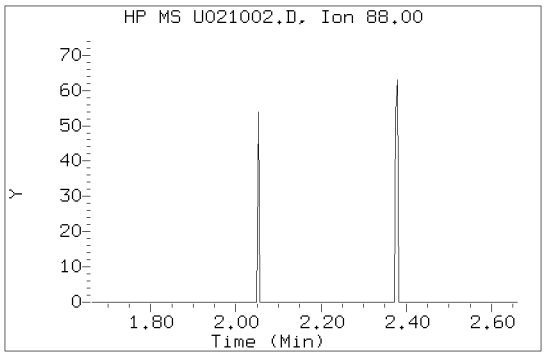
AFTER
MASS
53
AREA
26130
HEIGHT
15672
22-Feb-2024
14:57
linh
pham



BEFORE
MASS
88
AREA
0
HEIGHT
0
22-Feb-2024
14:57
linh
pham



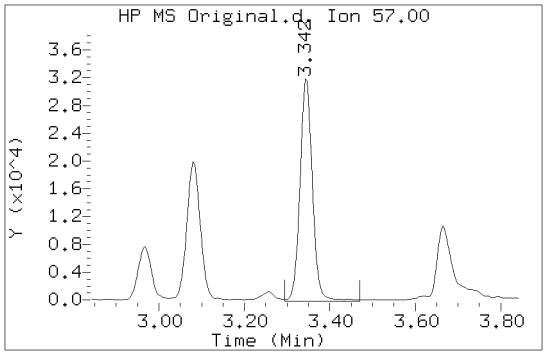
AFTER
MASS
88
AREA
0
HEIGHT
0
22-Feb-2024
14:57
linh
pham



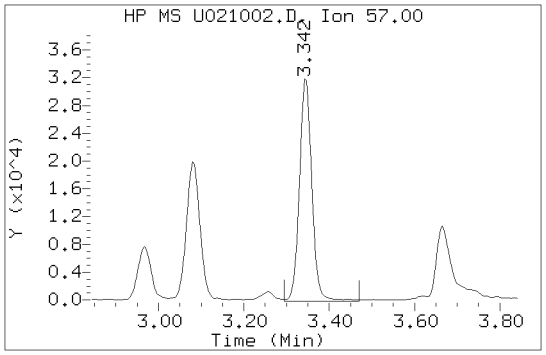
n-Hexane (110-54-3)

Reason Code:

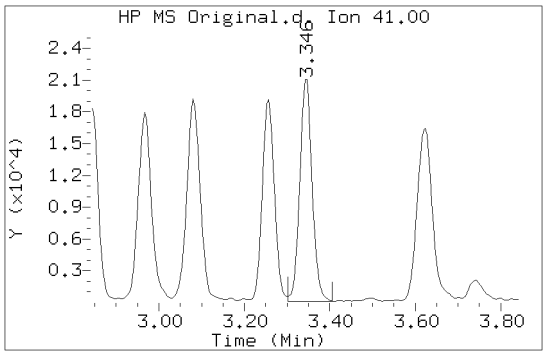
BEFORE
MASS
57
AREA
65954
HEIGHT
31976
22-Feb-2024
14:57
linh
pham



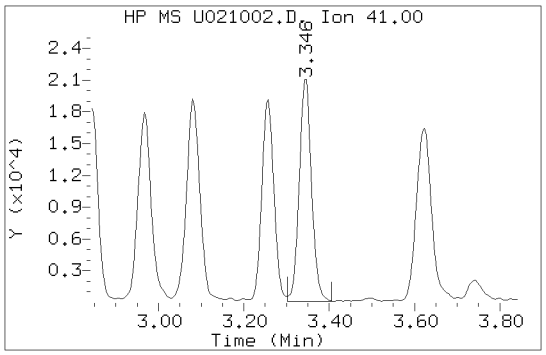
AFTER
MASS
57
AREA
65954
HEIGHT
31976
22-Feb-2024
14:57
linh
pham



BEFORE
MASS
41
AREA
42892
HEIGHT
20946
22-Feb-2024
14:57
linh
pham



AFTER
MASS
41
AREA
42892
HEIGHT
20946
22-Feb-2024
14:57
linh
pham



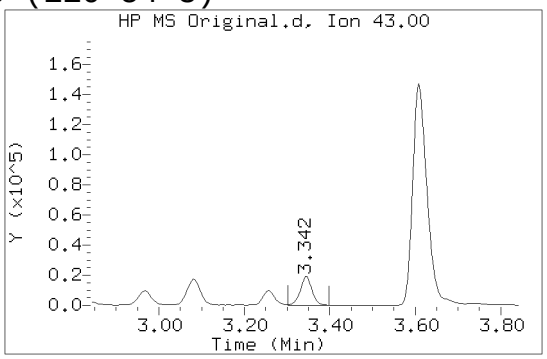
Data File : \\NAHSTWS005\Target\chem\voa9.i\U240210.b\U021002.D
Inj Date : 10-FEB-2024 01:28
InstruID : VOA9.i
LabSampID : CCV

n-Hexane (110-54-3)

Reason Code:

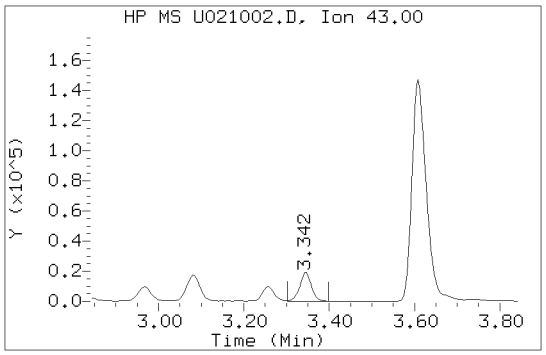
BEFORE

MASS
43
AREA
36429
HEIGHT
19096
22-Feb-2024
14:57
linh
pham



AFTER

MASS
43
AREA
36429
HEIGHT
19096
22-Feb-2024
14:57
linh
pham

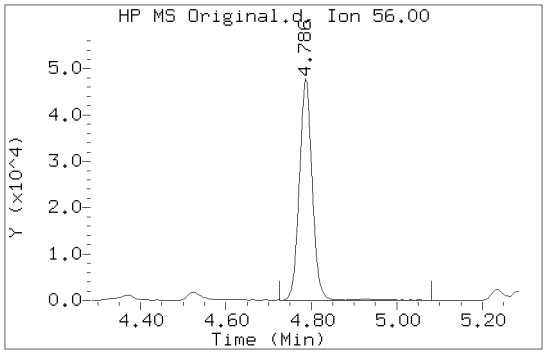


Cyclohexane (110-82-7)

Reason Code:

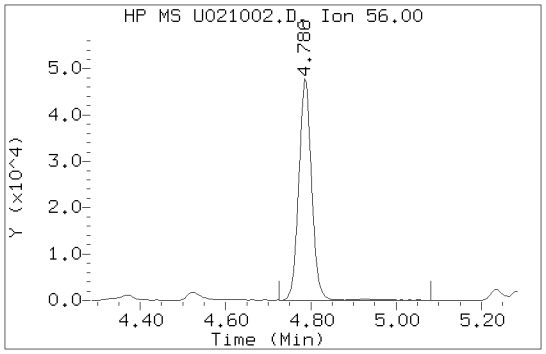
BEFORE

MASS
56
AREA
101663
HEIGHT
47783
22-Feb-2024
14:57
linh
pham



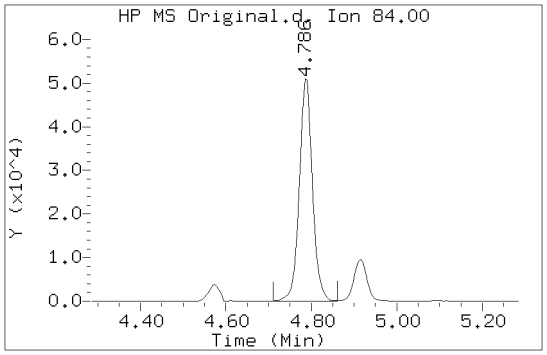
AFTER

MASS
56
AREA
101663
HEIGHT
47783
22-Feb-2024
14:57
linh
pham



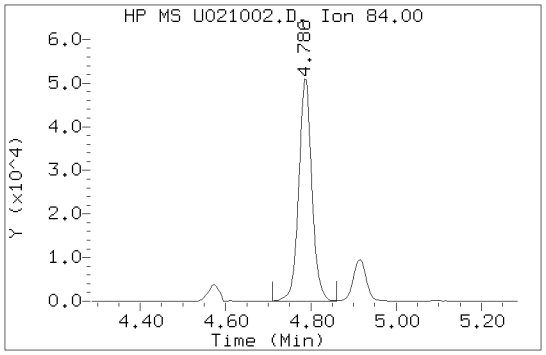
BEFORE

MASS
84
AREA
110950
HEIGHT
50960
22-Feb-2024
14:57
linh
pham



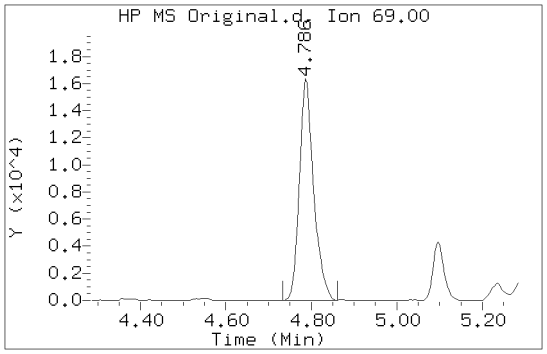
AFTER

MASS
84
AREA
110950
HEIGHT
50960
22-Feb-2024
14:57
linh
pham



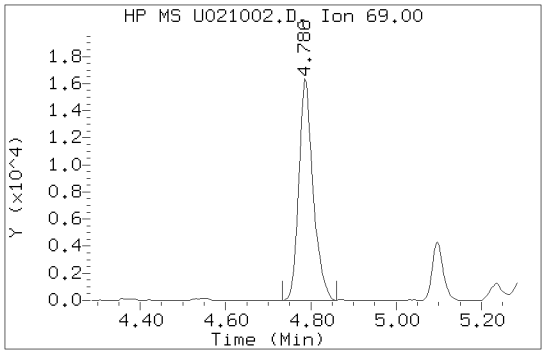
BEFORE

MASS
69
AREA
38501
HEIGHT
16363
22-Feb-2024
14:57
linh
pham



AFTER

MASS
69
AREA
38501
HEIGHT
16363
22-Feb-2024
14:57
linh
pham



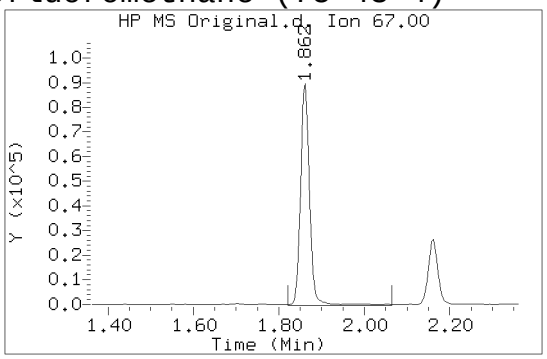
Data File : \\NAHSTWS005\Target\chem\voa9.i\U240210.b\U021002.D
Inj Date : 10-FEB-2024 01:28
InstruID : VOA9.i
LabSampID : CCV

Dichlorofluoromethane (75-43-4)

Reason Code:

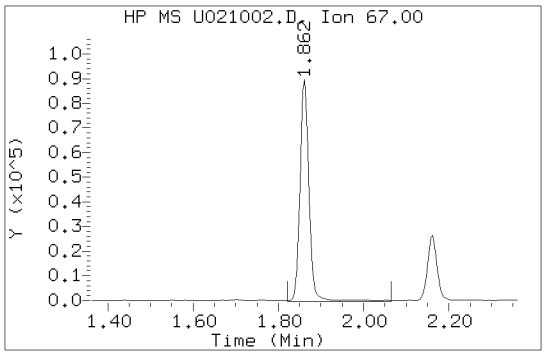
BEFORE

MASS
67
AREA
135124
HEIGHT
89901
22-Feb-2024
14:57
linh
pham



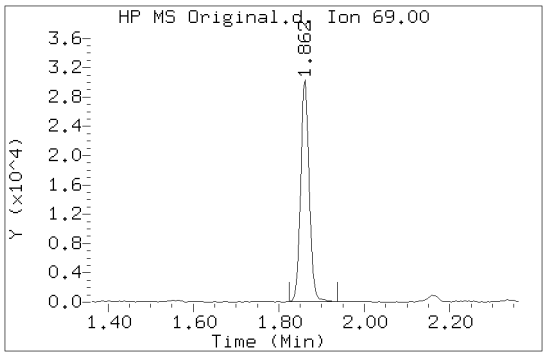
AFTER

MASS
67
AREA
135124
HEIGHT
89901
22-Feb-2024
14:57
linh
pham



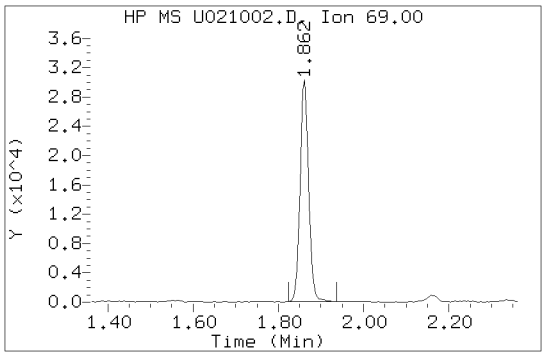
BEFORE

MASS
69
AREA
42869
HEIGHT
30242
22-Feb-2024
14:57
linh
pham



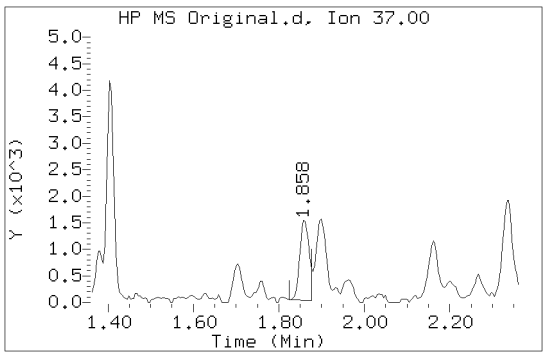
AFTER

MASS
69
AREA
42869
HEIGHT
30242
22-Feb-2024
14:57
linh
pham



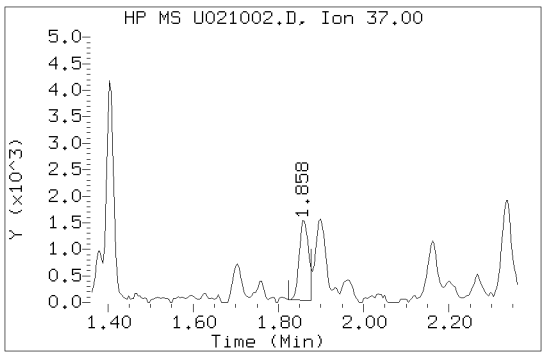
BEFORE

MASS
37
AREA
2355
HEIGHT
1508
22-Feb-2024
14:57
linh
pham



AFTER

MASS
37
AREA
2355
HEIGHT
1508
22-Feb-2024
14:57
linh
pham

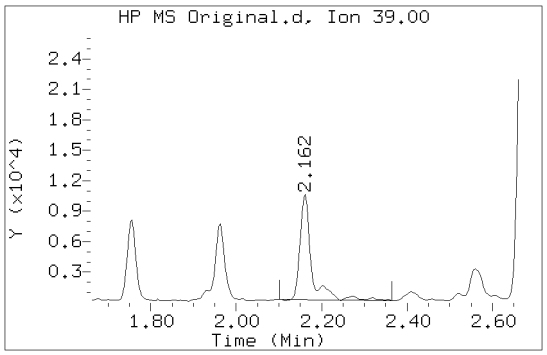


Isoprene (78-79-5)

Reason Code:

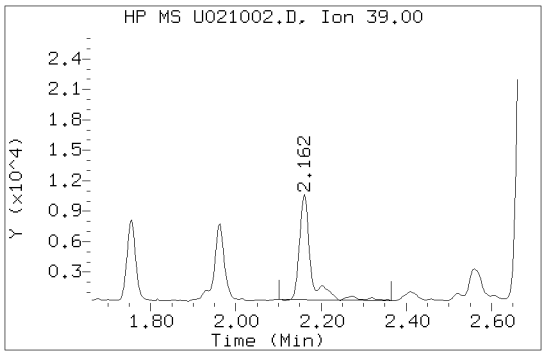
BEFORE

MASS
39
AREA
19967
HEIGHT
10387
22-Feb-2024
14:57
linh
pham



AFTER

MASS
39
AREA
19967
HEIGHT
10387
22-Feb-2024
14:57
linh
pham

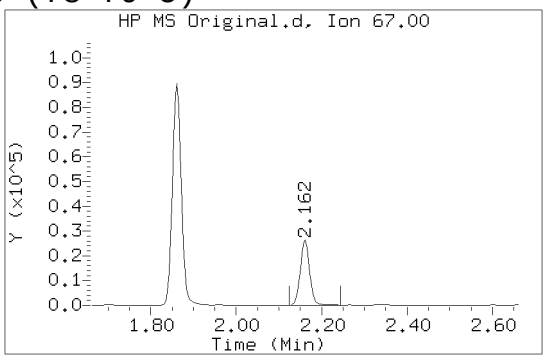


Data File : \\NAHSTWS005\Target\chem\voa9.i\U240210.b\U021002.D
Inj Date : 10-FEB-2024 01:28
InstruID : VOA9.i
LabSampID : CCV

Isoprene (78-79-5)

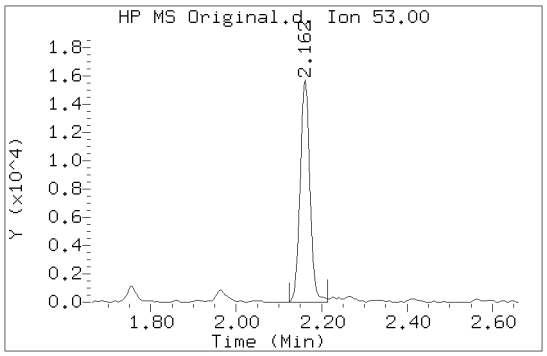
BEFORE

MASS
67
AREA
41082
HEIGHT
26472
22-Feb-2024
14:57
linh
pham



BEFORE

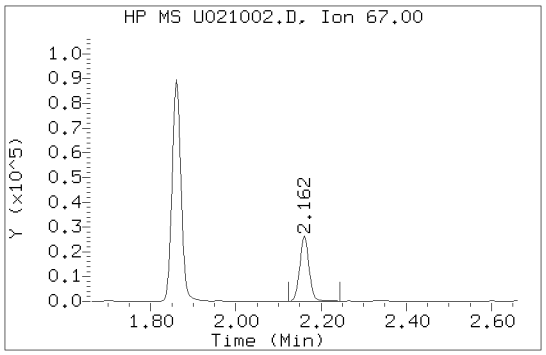
MASS
53
AREA
25480
HEIGHT
15703
22-Feb-2024
14:57
linh
pham



Reason Code:

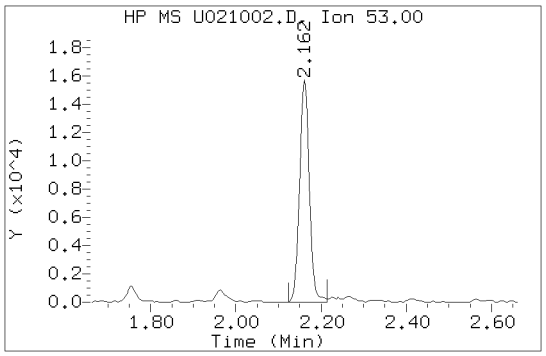
AFTER

MASS
67
AREA
41082
HEIGHT
26472
22-Feb-2024
14:57
linh
pham



AFTER

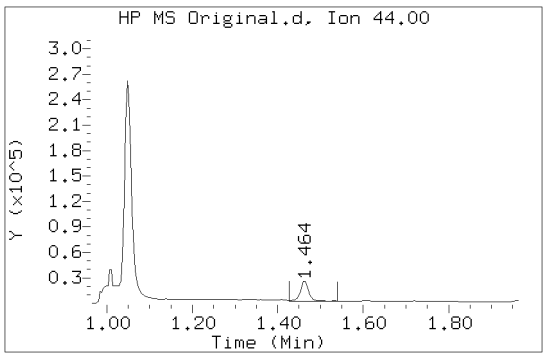
MASS
53
AREA
25480
HEIGHT
15703
22-Feb-2024
14:57
linh
pham



Acetaldehyde (75-07-0)

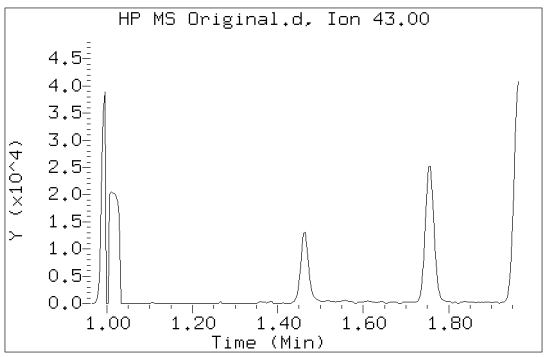
BEFORE

MASS
44
AREA
33645
HEIGHT
23737
22-Feb-2024
14:57
linh
pham



BEFORE

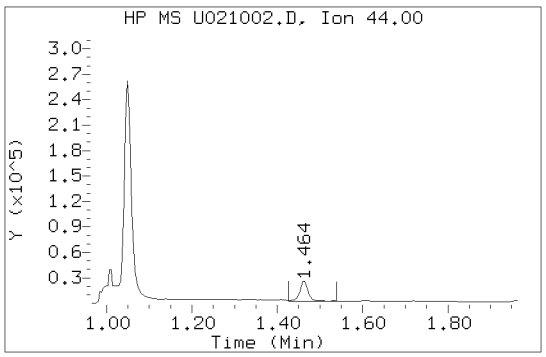
MASS
43
AREA
0
HEIGHT
0
22-Feb-2024
14:57
linh
pham



Reason Code:

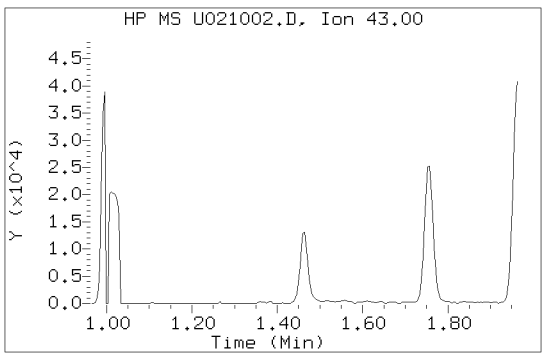
AFTER

MASS
44
AREA
33645
HEIGHT
23737
22-Feb-2024
14:57
linh
pham



AFTER

MASS
43
AREA
0
HEIGHT
0
22-Feb-2024
14:57
linh
pham



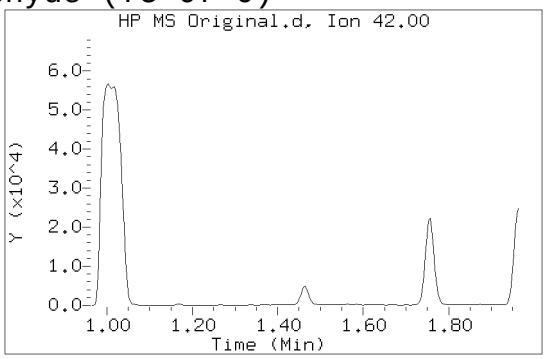
Data File : \\NAHSTWS005\Target\chem\voa9.i\U240210.b\U021002.D
Inj Date : 10-FEB-2024 01:28
InstruID : VOA9.i
LabSampID : CCV

Acetaldehyde (75-07-0)

Reason Code:

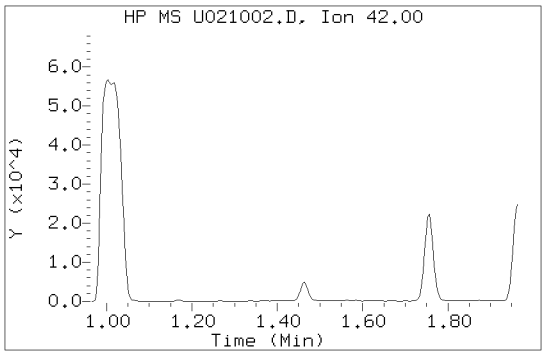
BEFORE

MASS
42
AREA
0
HEIGHT
0
22-Feb-2024
14:57
linh
pham



AFTER

MASS
42
AREA
0
HEIGHT
0
22-Feb-2024
14:57
linh
pham

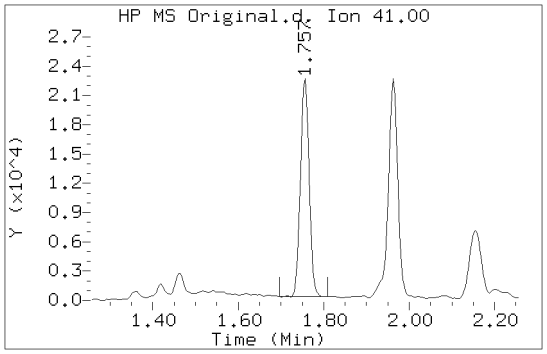


Isobutylene (115-11-7)

Reason Code:

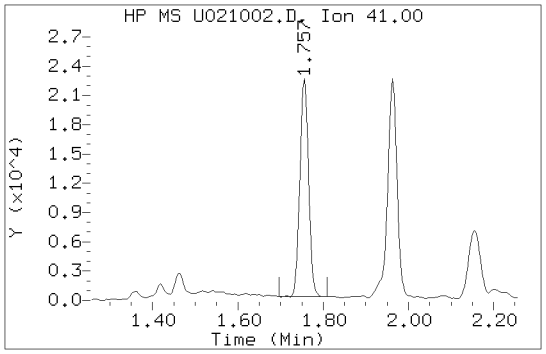
BEFORE

MASS
41
AREA
32626
HEIGHT
22337
22-Feb-2024
14:57
linh
pham



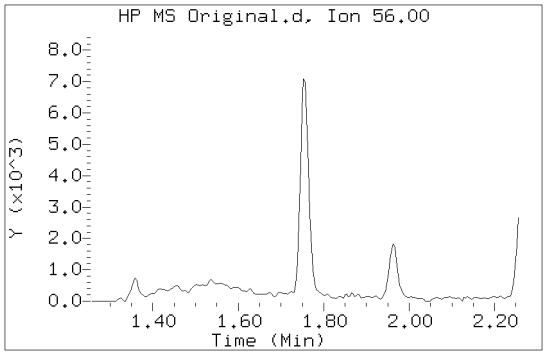
AFTER

MASS
41
AREA
32626
HEIGHT
22337
22-Feb-2024
14:57
linh
pham



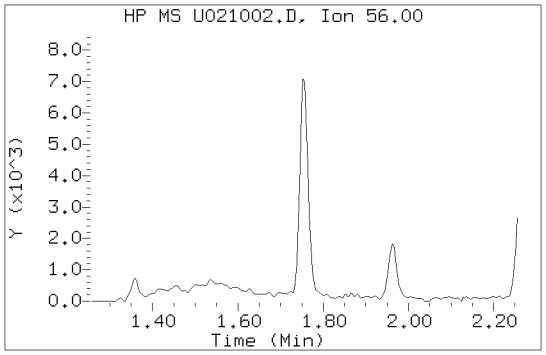
BEFORE

MASS
56
AREA
0
HEIGHT
0
22-Feb-2024
14:57
linh
pham



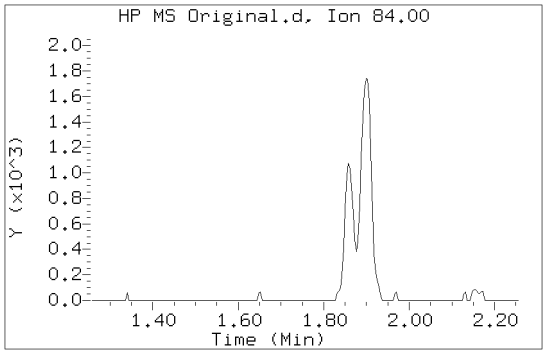
AFTER

MASS
56
AREA
0
HEIGHT
0
22-Feb-2024
14:57
linh
pham



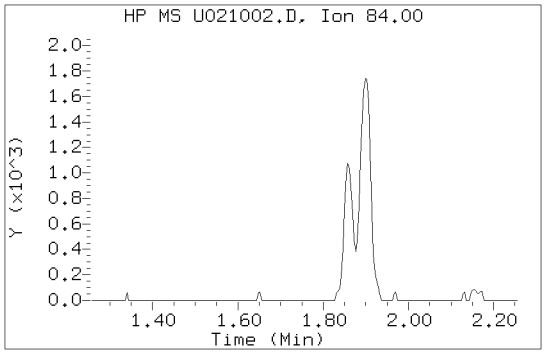
BEFORE

MASS
84
AREA
0
HEIGHT
0
22-Feb-2024
14:57
linh
pham



AFTER

MASS
84
AREA
0
HEIGHT
0
22-Feb-2024
14:57
linh
pham



Data File: \\NAHSTWS005\Target\chem\voa9.i\U240210.b\U021003.D Page 1
Report Date: 22-Feb-2024 14:58

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240210.b\U021003.D
Lab Smp Id: VLCSW-240210 Client Smp ID: VLCSW-240210
Inj Date : 10-FEB-2024 01:50
Operator : FT Inst ID: VOA9.i
Smp Info : VLCSW-240210;VLCSW-240210;3;;LCS
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240210.b\8260C.m
Meth Date : 22-Feb-2024 14:57 VOA9.i Quant Type: ISTD
Cal Date : 09-FEB-2024 12:42 Cal File: U020911.D
Als bottle: 43 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.819	4.819	(1.000)	230880	50.0000	
2 Dichlorodifluoromethane	85	1.168	1.168	(0.242)	24926	16.5520	16.55
3 Chloromethane	50	1.303	1.303	(0.270)	33539	18.9909	18.99
4 Propionitrile	54	4.339	4.335	(0.900)	41922	169.074	169.07(a)
5 Vinyl Chloride	62	1.381	1.378	(0.287)	33712	16.8990	16.89
6 Bromomethane	94	1.625	1.625	(0.337)	27378	20.5603	20.56
7 Chloroethane	64	1.707	1.704	(0.354)	24593	17.4999	17.49
8 Trichlorofluoromethane	101	1.902	1.899	(0.395)	54136	16.7891	16.78
9 Acrolein	56	2.266	2.266	(0.470)	3316	37.3299	37.32
10 Acetone	43	2.412	2.409	(0.501)	20567	31.5787	31.57
11 1,1-Dichloroethene	96	2.337	2.334	(0.485)	32520	17.4106	17.41
12 Isobutyl Alcohol	43	5.284	5.284	(1.096)	73988	326.537	326.53(a)
13 Acetonitrile	39	2.675	2.671	(0.555)	30956	161.293	161.29(a)
14 Allyl Chloride	41	2.675	2.675	(0.555)	65271	17.0870	17.08(a)
15 Iodomethane	142	2.472	2.472	(0.513)	84701	31.5579	31.55
16 Acrylonitrile	53	3.072	3.065	(0.638)	20512	34.0392	34.03
17 Methylene Chloride	84	2.798	2.795	(0.581)	39033	17.6482	17.64
18 Methyl tert-butyl ether	73	3.083	3.080	(0.640)	89737	17.4837	17.48
19 Carbon Disulfide	76	2.525	2.521	(0.524)	179582	32.7029	32.70
20 trans-1,2-Dichloroethene	96	3.061	3.061	(0.635)	37177	17.3576	17.35

21 Vinyl Acetate	43	3.612	3.608 (0.750)	144303	31.7696	31.76
22 1,1-Dichloroethane	63	3.518	3.514 (0.730)	59974	17.9669	17.96

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Report Date: 22-Feb-2024 14:58

			QUANT SIG					CONCENTRATIONS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/l)	FINAL (ug/l)
	24	2-Butanone	43	4.264	4.260	(0.885)	22653	32.3764	32.37
	25	Methacrylonitrile	41	4.496	4.493	(0.933)	28025	16.4090	16.40(a)
	26	2,2-Dichloropropane	77	4.185	4.185	(0.869)	37210	13.5533	13.55
	27	cis-1,2-Dichloroethene	96	4.204	4.197	(0.872)	41928	16.4812	16.48
	28	Chloroform	83	4.575	4.572	(0.949)	66536	17.7096	17.70
	29	Bromochloromethane	128	4.470	4.470	(0.928)	24477	18.7941	18.79
$	30	Dibromofluoromethane	113	4.751	4.748	(0.986)	114700	48.1133	48.11
	31	1,1,1-Trichloroethane	97	4.748	4.744	(0.985)	56323	16.9220	16.92
	32	1,1-Dichloropropene	75	4.924	4.924	(0.887)	47754	17.9441	17.94
	33	1,2-Dichloroethane	62	5.175	5.175	(0.932)	50129	18.5458	18.54
	34	Carbon Tetrachloride	117	4.916	4.913	(0.885)	49746	16.8337	16.83
$	35	1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	115506	48.3775	48.37
*	36	1,4-Difluorobenzene	114	5.554	5.554	(1.000)	324717	50.0000	
	37	Benzene	78	5.141	5.141	(0.926)	143268	18.0686	18.06
	38	Trichloroethene	130	5.790	5.790	(1.043)	46546	18.3159	18.31
	39	Bromodichloromethane	83	6.277	6.277	(1.130)	46437	16.8602	16.86
	40	Methyl Methacrylate	41	6.153	6.153	(1.277)	24361	17.5026	17.50(a)
	42	1,2-Dichloropropane	63	6.011	6.007	(1.082)	34455	17.9031	17.90
	43	2-Nitropropane	43	6.854	6.851	(1.422)	56337	16.5451	16.54
	44	Dibromomethane	93	6.120	6.120	(1.102)	24937	18.0420	18.04
	45	4-Methyl-2-Pentanone	43	6.854	6.851	(0.837)	56337	33.0971	33.09
	46	cis-1,3-Dichloropropene	75	6.693	6.690	(1.205)	48680	16.8963	16.89
*	47	Chlorobenzene-d5	117	8.185	8.185	(1.000)	304756	50.0000	
$	48	Toluene-d8	98	6.922	6.922	(0.846)	400790	48.2549	48.25
	49	Ethyl Methacrylate	69	7.289	7.289	(1.312)	45289	18.3055	18.30(a)
	50	Toluene	91	6.982	6.982	(0.853)	162418	17.2241	17.22
	51	trans-1,3-Dichloropropene	75	7.196	7.196	(1.296)	40660	16.3795	16.37
	52	2-Hexanone	43	7.593	7.589	(0.928)	38313	34.0684	34.06
	53	1,1,2-Trichloroethane	83	7.357	7.353	(0.899)	29650	18.6563	18.65
	54	1,3-Dichloropropane	76	7.499	7.495	(0.916)	60715	18.1399	18.13
	55	Dibromochloromethane	129	7.690	7.690	(0.940)	42309	17.5900	17.59
	56	Tetrachloroethene	164	7.458	7.458	(0.911)	39180	18.1871	18.18
	57	1,2-Dibromoethane	107	7.784	7.784	(0.951)	38804	18.3874	18.38
	58	1-Chlorohexane	55	8.196	8.196	(1.476)	27151	16.2188	16.21
	59	Chlorobenzene	112	8.208	8.208	(1.003)	115907	18.3835	18.38
	60	1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	42286	17.4211	17.42
	61	Ethylbenzene	106	8.305	8.305	(1.015)	53804	16.7820	16.78
	62	m,p-Xylenes	106	8.410	8.406	(1.027)	137155	34.8130	34.81
	63	o-Xylene	106	8.747	8.744	(1.069)	69650	18.0532	18.05
	64	Styrene	104	8.762	8.759	(1.071)	118526	18.7678	18.76
	66	Bromoform	173	8.920	8.916	(1.090)	30022	17.2589	17.25
	67	Isopropylbenzene	105	9.062	9.062	(1.107)	168562	17.0872	17.08
	68	1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	45901	17.6886	17.68
$	69	4-Bromofluorobenzene	95	9.194	9.194	(1.123)	148260	48.3143	48.31
*	70	1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	170363	50.0000	
	71	1,2,3-Trichloropropane	75	9.362	9.362	(0.920)	42142	15.3977	15.39
	72	trans-1,4-Dichloro-2-butene	53	9.377	9.377	(1.146)	7780	16.1408	16.14(a)
	73	n-Propylbenzene	91	9.411	9.411	(0.925)	183829	17.4599	17.45
	74	Bromobenzene	156	9.317	9.317	(0.916)	53612	17.4800	17.48
	75	1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	138663	17.5820	17.58
	76	2-Chlorotoluene	91	9.482	9.482	(0.932)	115763	16.5570	16.55
	77	4-Chlorotoluene	91	9.576	9.576	(0.941)	129999	16.3812	16.38

78	tert-Butylbenzene	119	9.835	9.835 (0.967)	124598	17.2620	17.26
79	1,2,4-Trimethylbenzene	105	9.880	9.876 (0.971)	142086	18.2655	18.26

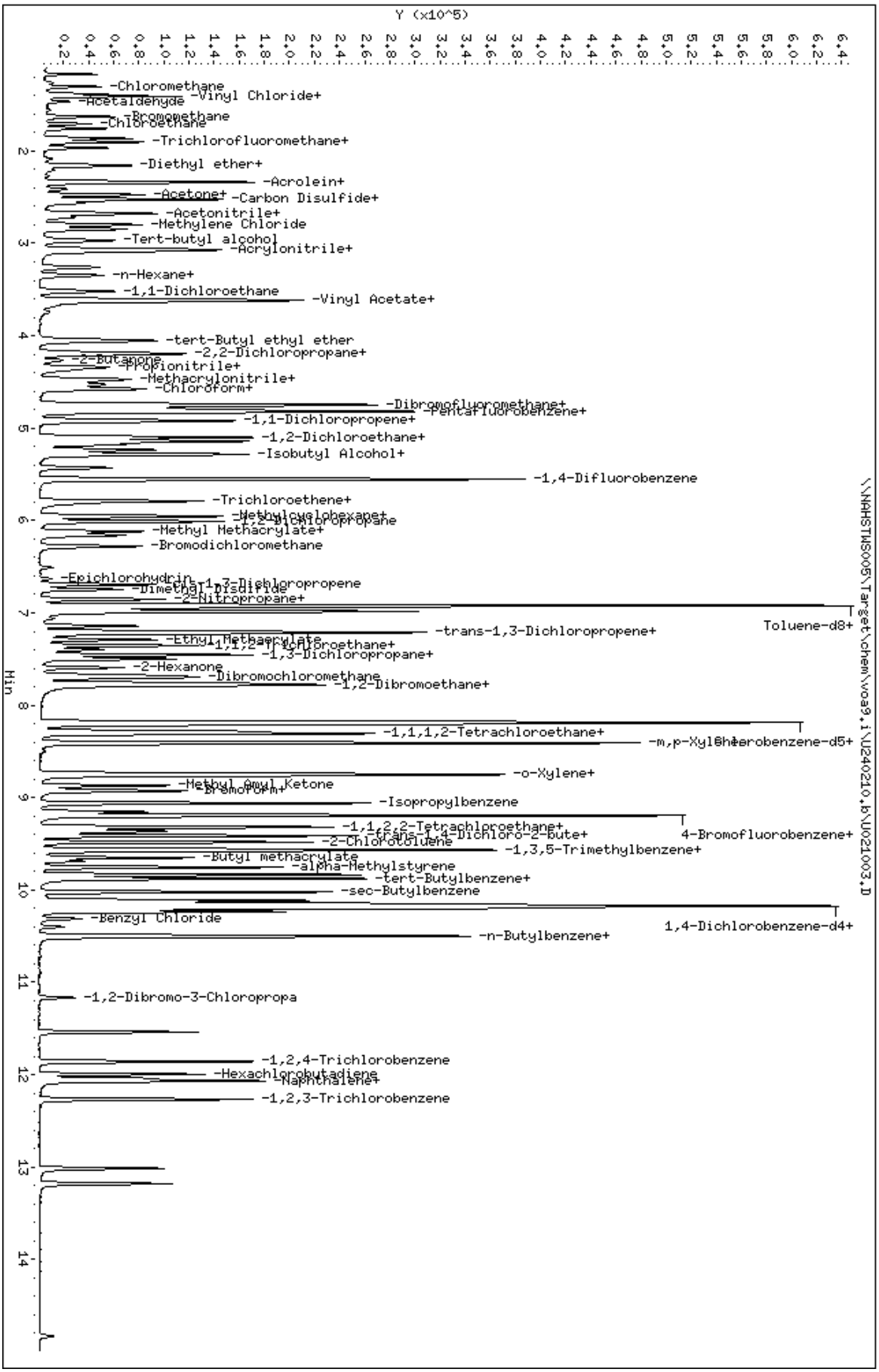
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
81	sec-Butylbenzene	105	10.022	10.022	(0.985)	155979	16.9564	16.95
82	p-Isopropyltoluene	119	10.146	10.146	(0.997)	143387	17.3768	17.37
83	1,3-Dichlorobenzene	146	10.116	10.112	(0.994)	93452	17.5832	17.58
84	1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	96597	17.4430	17.44
86	Benzyl Chloride	91	10.311	10.311	(1.260)	23656	11.4903	11.49
87	n-Butylbenzene	91	10.494	10.491	(1.032)	106968	16.5025	16.50
88	1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	93675	17.9722	17.97
89	1,2-Dibromo-3-Chloropropane	155	11.165	11.165	(1.098)	7304	17.3071	17.30
90	1,2,4-Trichlorobenzene	180	11.859	11.855	(1.166)	59990	17.7901	17.79
91	Hexachlorobutadiene	225	11.998	11.998	(1.179)	26168	17.0768	17.07
92	Naphthalene	128	12.065	12.065	(1.186)	133595	18.0223	18.02
93	1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	58105	18.0662	18.06
146	Methyl acetate	43	2.716	2.712	(0.564)	25824	18.4592	18.45
138	Freon TF	101	2.341	2.337	(0.486)	32585	17.1182	17.11
141	Cyclohexane	56	4.789	4.785	(0.994)	44179	17.0148	17.01
142	Tetrahydrofuran	42	4.541	4.542	(0.942)	9743	34.7323	34.73
147	Methylcyclohexane	55	5.947	5.947	(1.071)	69450	17.6583	17.65
135	1,4-Dioxane	88	6.165	6.165	(1.279)	8511	342.813	342.81
132	n-Butanol	56	5.820	5.816	(1.208)	16941	353.709	353.70(a)
136	n-Hexane	57	3.346	3.342	(0.694)	26351	14.3267	14.32
139	Diethyl ether	59	2.150	2.146	(0.446)	22342	16.7418	16.74
148	Tert-butyl alcohol	59	2.967	2.967	(0.616)	67418	355.747	355.74
149	Isopropyl alcohol	45	2.562	2.562	(0.532)	37394	356.267	356.26
152	Amyl alcohol	42	7.398	7.394	(0.904)	16852	354.210	354.21
156	Diisopropyl ether	45	3.623	3.623	(0.752)	90902	16.8790	16.87
162	Butyl acrylate	55	8.732	8.733	(1.067)	46771	17.0157	17.01
187	n-Amyl acetate	43	8.931	8.931	(1.091)	42279	17.6700	17.67
164	Dicyclopentadiene	66	10.198	10.198	(1.003)	157223	17.2630	17.26
166	1,2,3-Trimethylbenzene	105	10.232	10.232	(1.006)	108706	18.7403	18.74
167	Ethanol	45	2.086	2.082	(0.433)	6566	339.609	339.60
172	tert-Butyl formate	59	5.235	5.235	(1.086)	43244	34.7965	34.79
173	3,3-Dimethyl-1-butanol	57	7.780	7.777	(0.951)	71266	346.433	346.43
174	tert-Amyl methyl ether	73	5.287	5.284	(1.097)	91361	16.5101	16.51
175	tert-Butyl ethyl ether	59	4.050	4.050	(0.841)	90363	17.3183	17.31
176	tert-Amyl alcohol	59	5.235	5.235	(1.086)	43244	349.136	349.13
151	4-Methyl-2-pentanol	45	7.214	7.214	(1.299)	146504	346.788	346.78
140	1,3-Butadiene	54	1.408	1.404	(0.292)	31276	17.7462	17.74
158	Dichlorofluoromethane	67	1.865	1.861	(0.387)	54971	16.1956	16.19
182	Epichlorohydrin	57	6.633	6.630	(1.194)	6289	67.7183	67.71
M 94	1,2-Dichloroethylene (total)	96				79105	32.2622	32.26
M 95	Xylenes (total)	106				206805	53.4811	53.48
145	alpha-Methylstyrene	118	9.752	9.752	(0.959)	59324	17.2629	17.26
130	Ethyl Acetate	43	4.343	4.339	(0.901)	27119	16.4809	16.48
131	Methyl Acrylate	55	4.373	4.369	(0.907)	33057	17.2305	17.23
189	n-Butyl acetate	43	7.762	7.762	(0.948)	33217	18.4198	18.41
134	Cyclohexanone	55	9.152	9.152	(0.900)	34376	323.096	323.09(a)
185	Isoprene	39	2.161	2.161	(0.449)	8102	16.1518	16.15
188	Isopropyl acetate	43	5.284	5.284	(0.951)	73988	16.5082	16.50
150	Allyl alcohol	57	3.346	3.342	(0.694)	26351	286.533	286.53
194	Acetaldehyde	44	1.464	1.464	(0.304)	16168	79.7489	79.74(M)
195	Methyl Amyl Ketone	43	8.867	8.868	(1.083)	54524	17.3952	17.39
200	Dimethyl Disulfide	94	6.746	6.746	(0.824)	35003	15.1561	15.15

203 2-Ethylhexyl Acrylate	55	12.039	12.039 (1.184)	32785	16.5244	16.52
133 Ethyl Acrylate	55	5.947	5.947 (1.234)	69450	17.3456	17.34

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
163 Butyl methacrylate	41	9.651	9.647	(0.949)	28562	15.9309	15.93
159 Propylene oxide	43	2.202	2.202	(0.457)	3266	35.9693	35.96

QC Flag Legend

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


Y (x10^5)
Min
-Chloromethane
-Vinyl Chloride+
-Acetaldehyde
-Bromomethane
-Chloroethane
-Trichlorofluoromethane+
-Diethyl ether+
-Acrolein+
-Acetone+
-Carbon Disulfide+
-Acetonitrile+
-Methylene Chloride
-Tert-butyl alcohol
-Acrylonitrile+
-n-Hexane+
-1,1-Dichloroethane
-Vinyl Acetate+
-tert-Butyl ethyl ether
-2,2-Dichloropropane+
-2-Butanone
-Propionitrile+
-Methacrylonitrile+
-Chloroform+
-Dibromofluoromethane+
-Pentafluorobenzene+
-1,1-Dichloropropene+
-1,2-Dichloroethane+
-Isobutyl Alcohol+
-1,4-Difluorobenzene
-Trichloroethene+
-Methylcyclohexane+
-1,2-Dichloropropane
-Methyl Methacrylate+
-Bromodichloromethane
-Epichlorohydrin
-Dimethyl Disulfide
-cis-1,3-Dichloropropene
-2-Nitropropane+
Toluene-d8+
-trans-1,3-Dichloropropene+
-Ethyl Methacrylate
-1,1,2-Trichloroethane+
-1,3-Dichloropropane+
-2-Hexanone
-Dibromochloromethane
-1,2-Dibromoethane+
-1,1,1,2-Tetrachloroethane+
-m,p-Xylene+
-Chlorobenzene-d5+
-o-Xylene+
-Methyl Amyl Ketone
-Bromoform+
-Isopropylbenzene
-1,1,2,2-Tetrachloroethane+
-trans-1,4-Dichloro-2-bute+
4-Bromofluorobenzene+
-2-Chlorotoluene
-1,3,5-Trimethylbenzene+
-Butyl methacrylate
-alpha-Methylstyrene
-tert-Butylbenzene+
-sec-Butylbenzene
-Benzyl Chloride
1,4-Dichlorobenzene-d4+
-n-Butylbenzene+
-1,2-Dibromo-3-Chloropropa
-1,2,4-Trichlorobenzene
-Hexachlorobutadiene
-Naphthalene+
-1,2,3-Trichlorobenzene
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Purge Volume: 5.0
Column phase: DB624
Instrument: VOA9,i
Operator: FT
Column diameter: 0.18
Page 1

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Inj Date : 10-FEB-2024 01:50
InstruID : VOA9.i
LabSampID : VLCSW-240210

Acetaldehyde (75-07-0)

Reason Code:

BEFORE

MASS
44
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16168
HEIGHT
10494
22-Feb-2024
14:57
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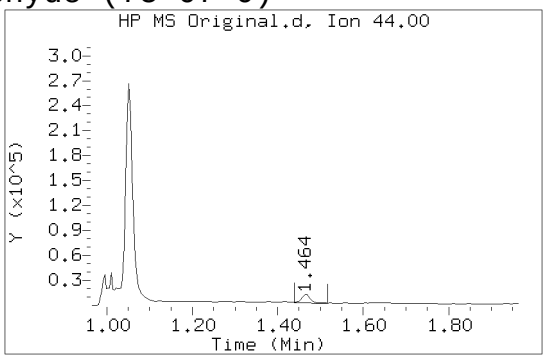

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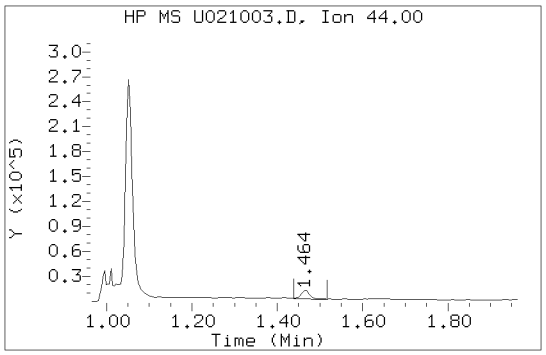

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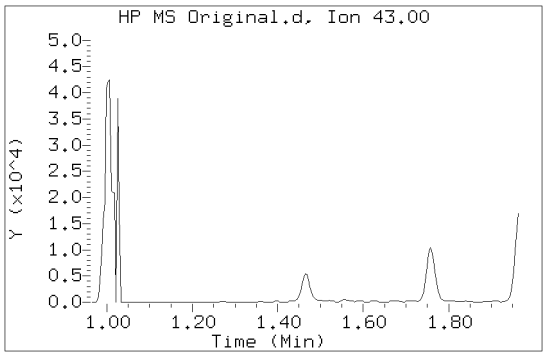

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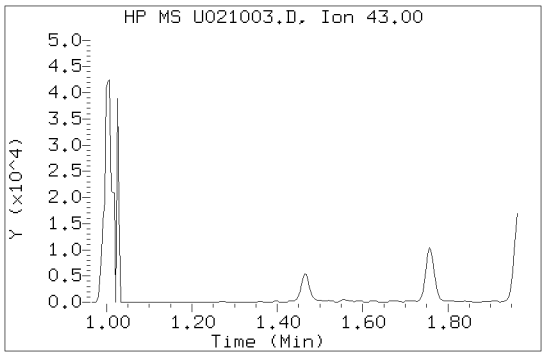

BEFORE

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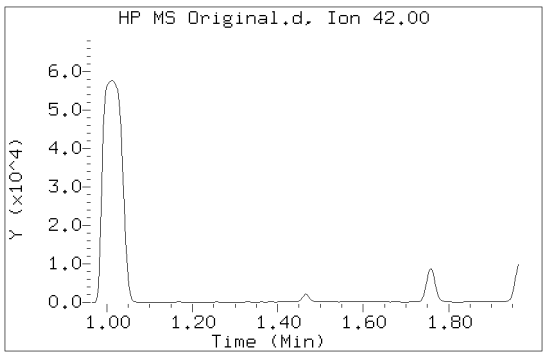
linh
pham



AFTER

MASS
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AREA
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HEIGHT
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22-Feb-2024
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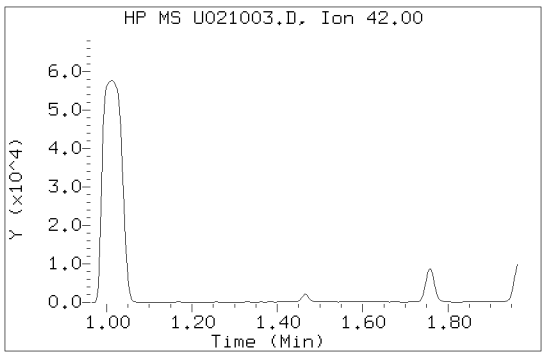


Data File: \\NAHSTWS005\Target\chem\voa9.i\U240210.b\U021005.D Page 1
Report Date: 22-Feb-2024 14:58

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240210.b\U021005.D
Lab Smp Id: VBLKW-240210 Client Smp ID: VBLKW-240210
Inj Date : 10-FEB-2024 02:35
Operator : FT Inst ID: VOA9.i
Smp Info : VBLKW-240210;VBLKW-240210;3;;BLANK
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240210.b\8260C.m
Meth Date : 22-Feb-2024 14:57 VOA9.i Quant Type: ISTD
Cal Date : 09-FEB-2024 12:42 Cal File: U020911.D
Als bottle: 45 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7056

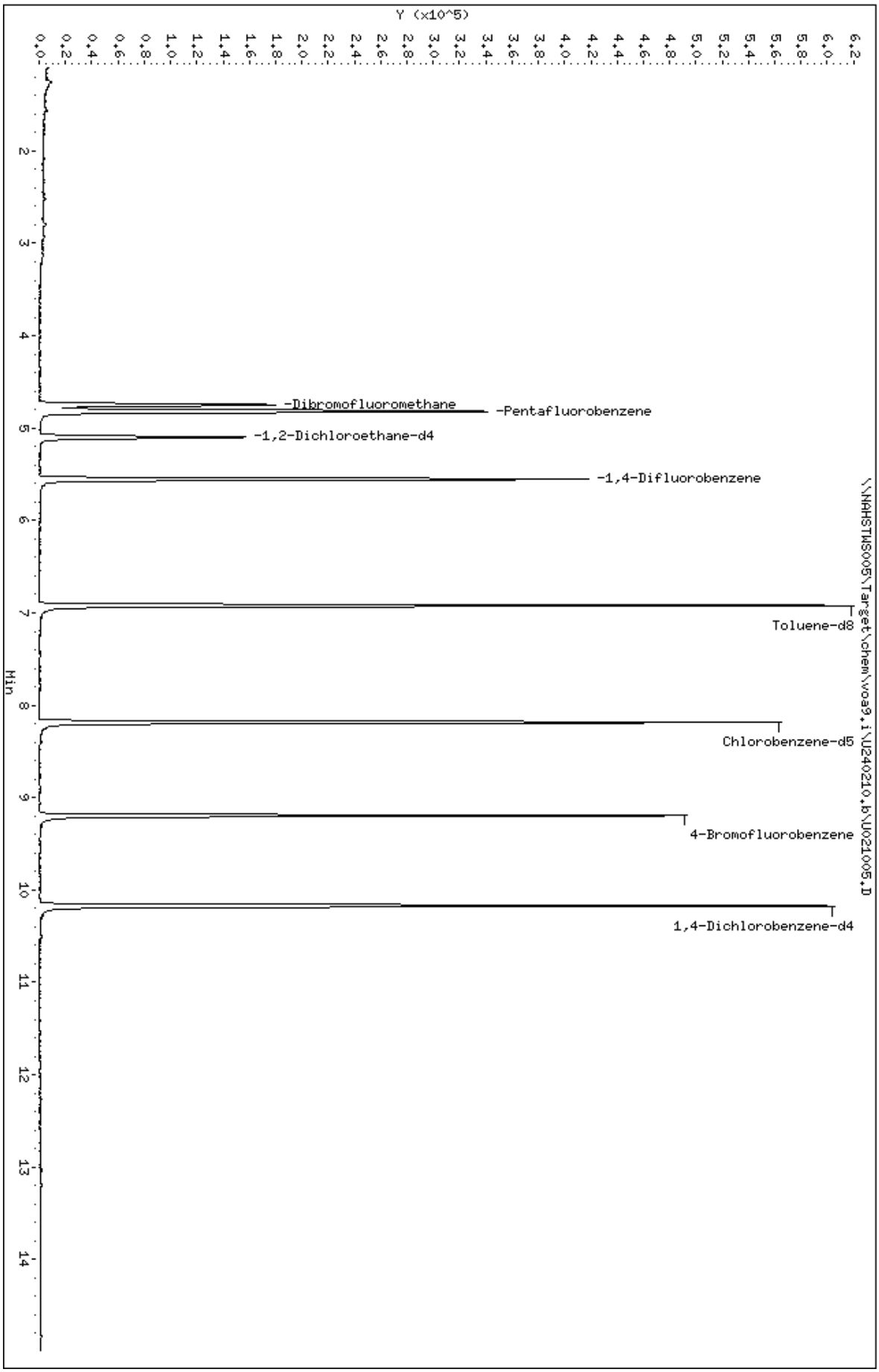
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.819	4.819	(1.000)	267082	50.0000	
$ 30 Dibromofluoromethane	113	4.748	4.748	(0.985)	110725	40.0779	40.07(M)
$ 35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	112405	40.5779	40.57(M)
* 36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	352407	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	331444	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	403909	44.7106	44.71(M)
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	142653	42.7109	42.71
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	179743	50.0000	

QC Flag Legend

M - Compound response manually integrated.



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Date : 10-FEB-2024 02:35
Client ID: VBLKW-240210
Sample Info: VBLKW-240210;VBLKW-240210;3;;BLANK
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9,i
Operator: FT
Column diameter: 0.18

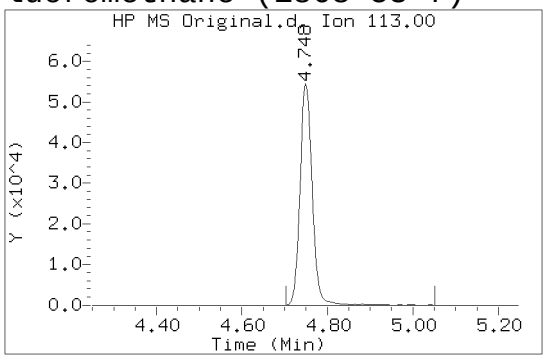
Data File : \\NAHSTWS005\Target\chem\voa9.i\U240210.b\U021005.D
Inj Date : 10-FEB-2024 02:35
InstruID : VOA9.i
LabSampID : VBLKW-240210

Dibromofluoromethane (1868-53-7)

Reason Code:

BEFORE

MASS
113
AREA
110725
HEIGHT
54546
22-Feb-2024
14:57
linh
pham



AFTER

MASS
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AREA
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22-Feb-2024
14:57
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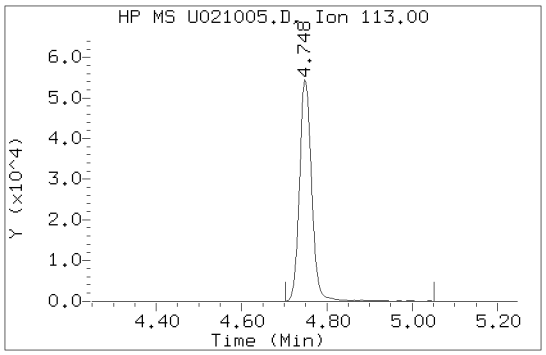

BEFORE

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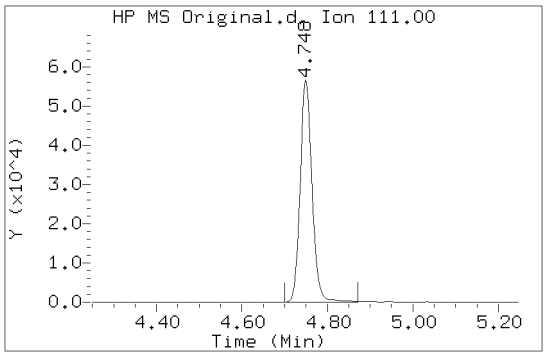

AFTER

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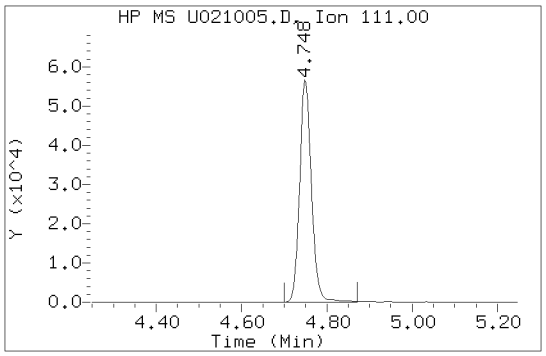

1,2-Dichloroethane-d4 (17060-07-0)

Reason Code:

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22-Feb-2024
14:57
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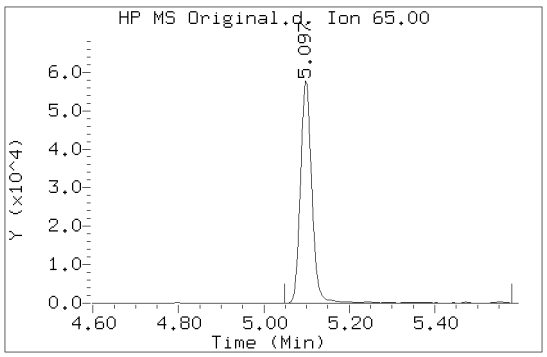

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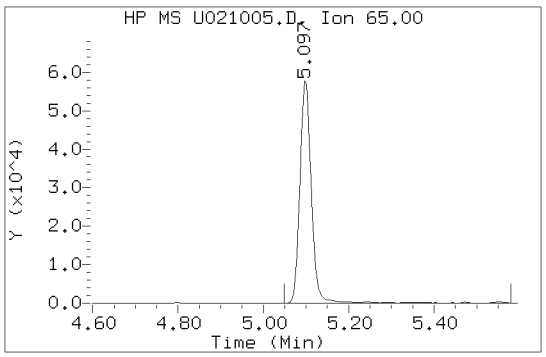

BEFORE

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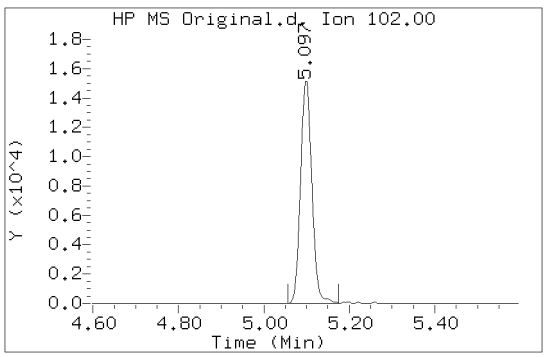

AFTER

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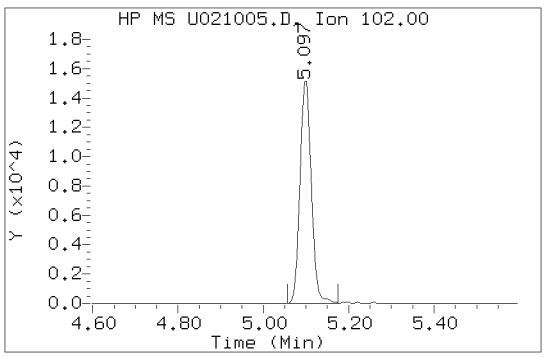

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Inj Date : 10-FEB-2024 02:35
InstruID : VOA9.i
LabSampID : VBLKW-240210

Toluene-d8 (2037-26-5)

Reason Code:

BEFORE
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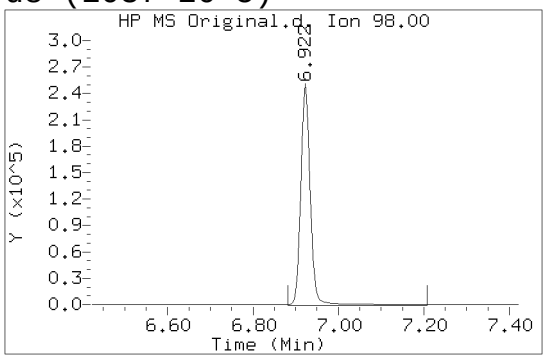
HEIGHT
251677
22-Feb-2024
14:57
linh
pham



AFTER
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HEIGHT
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22-Feb-2024
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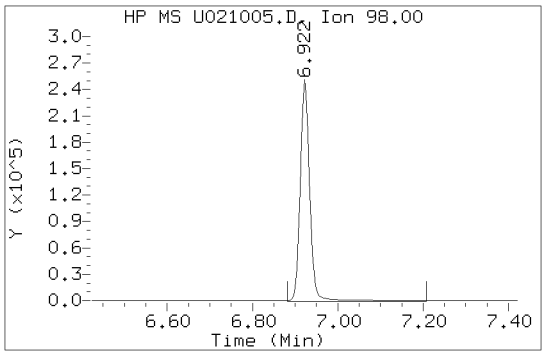
pham



BEFORE
MASS
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AREA
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22-Feb-2024
14:57
linh
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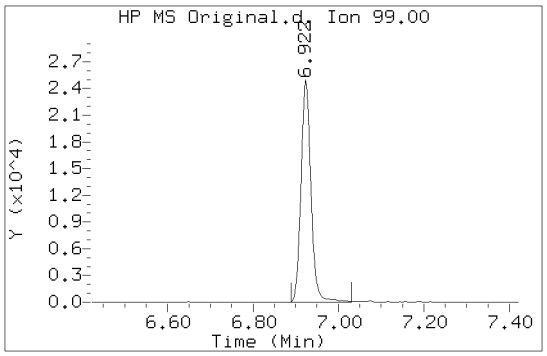

AFTER
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AREA
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22-Feb-2024
14:57
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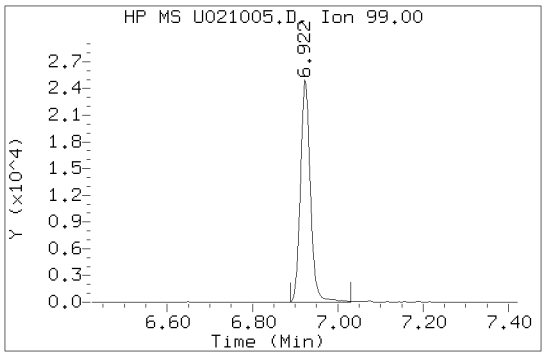

BEFORE
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22-Feb-2024
14:57
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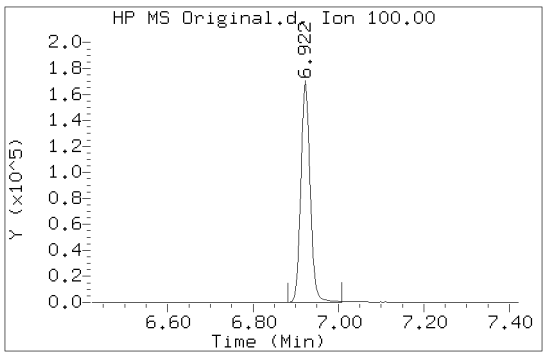

AFTER
MASS
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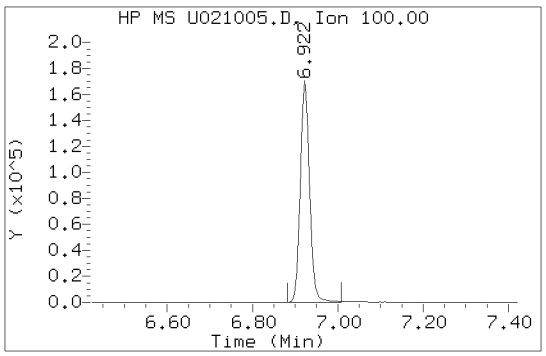
AREA
264785
HEIGHT
170560
22-Feb-2024
14:57
linh
pham



Data File: \\NAHSTWS005\Target\chem\voa9.i\U240210.b\U021009.D Page 1
Report Date: 22-Feb-2024 14:58

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240210.b\U021009.D
Lab Smp Id: HS24020269-09MS Client Smp ID: HS24020269-09MS
Inj Date : 10-FEB-2024 04:05
Operator : FT Inst ID: VOA9.i
Smp Info : HS24020269-09MS;HS24020269-09MS;3;;MS
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240210.b\8260C.m
Meth Date : 22-Feb-2024 14:57 VOA9.i Quant Type: ISTD
Cal Date : 09-FEB-2024 12:42 Cal File: U020911.D
Als bottle: 49 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1	Pentafluorobenzene	168	4.819	4.819	(1.000)	194267	50.0000	
2	Dichlorodifluoromethane	85	1.171	1.168	(0.243)	24270	19.1338	19.13
3	Chloromethane	50	1.306	1.303	(0.271)	26837	18.0822	18.08
4	Propionitrile	54	4.339	4.335	(0.900)	37358	179.063	179.06(a)
5	Vinyl Chloride	62	1.385	1.378	(0.287)	29240	17.4177	17.41
6	Bromomethane	94	1.632	1.625	(0.339)	20486	18.3519	18.35
7	Chloroethane	64	1.531	1.704	(0.318)	302752	260.010	260.01(A)
8	Trichlorofluoromethane	101	1.906	1.899	(0.396)	50984	18.8399	18.83
9	Acrolein	56	2.270	2.266	(0.471)	1644	20.9691	20.96
10	Acetone	43	2.416	2.409	(0.501)	17363	31.7013	31.70
11	1,1-Dichloroethene	96	2.341	2.334	(0.486)	28796	18.3145	18.31
12	Isobutyl Alcohol	43	5.284	5.284	(1.096)	59954	314.468	314.46(a)
13	Acetonitrile	39	2.678	2.671	(0.556)	25077	155.286	155.28(a)
14	Allyl Chloride	41	2.678	2.675	(0.556)	51796	16.0918	16.09(a)
15	Iodomethane	142	2.476	2.472	(0.514)	81256	35.7251	35.72
16	Acrylonitrile	53	3.072	3.065	(0.638)	21542	42.6055	42.60
17	Methylene Chloride	84	2.802	2.795	(0.582)	32131	17.2355	17.23
18	Methyl tert-butyl ether	73	3.087	3.080	(0.641)	104668	24.1943	24.19
19	Carbon Disulfide	76	2.528	2.521	(0.525)	154911	33.5269	33.52
20	trans-1,2-Dichloroethene	96	3.068	3.061	(0.637)	34066	18.8995	18.89

21 Vinyl Acetate	43	3.615	3.608 (0.750)	105315	27.5559	27.55
22 1,1-Dichloroethane	63	3.522	3.514 (0.731)	50859	18.1069	18.10

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240210.b\U021009.D Page 2
Report Date: 22-Feb-2024 14:58

			QUANT SIG					CONCENTRATIONS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/l)	FINAL (ug/l)
	24	2-Butanone	43	4.268	4.260	(0.886)	19693	33.4505	33.45
	25	Methacrylonitrile	41	4.500	4.493	(0.934)	25076	17.4495	17.44(a)
	26	2,2-Dichloropropane	77	4.189	4.185	(0.869)	29779	12.8909	12.89
	27	cis-1,2-Dichloroethene	96	4.200	4.197	(0.872)	36846	17.2132	17.21
	28	Chloroform	83	4.575	4.572	(0.949)	58032	18.3626	18.36
	29	Bromochloromethane	128	4.474	4.470	(0.928)	20909	19.0967	19.09
$	30	Dibromofluoromethane	113	4.751	4.748	(0.986)	104576	52.1706	52.17
	31	1,1,1-Trichloroethane	97	4.748	4.744	(0.985)	49804	17.7835	17.78
	32	1,1-Dichloropropene	75	4.928	4.924	(0.887)	40451	17.8368	17.83
	33	1,2-Dichloroethane	62	5.179	5.175	(0.933)	44093	19.1643	19.16
	34	Carbon Tetrachloride	117	4.920	4.913	(0.886)	45570	18.0949	18.09
$	35	1,2-Dichloroethane-d4	65	5.100	5.096	(1.058)	104025	51.8332	51.83
*	36	1,4-Difluorobenzene	114	5.554	5.554	(1.000)	276726	50.0000	
	37	Benzene	78	5.141	5.141	(0.926)	296800	43.7381	43.73
	38	Trichloroethene	130	5.790	5.790	(1.043)	39749	18.3535	18.35
	39	Bromodichloromethane	83	6.281	6.277	(1.131)	40092	17.0810	17.08
	40	Methyl Methacrylate	41	6.157	6.153	(1.278)	20479	17.4865	17.48(a)
	42	1,2-Dichloropropane	63	6.011	6.007	(1.082)	28969	17.6621	17.66
	43	2-Nitropropane	43	6.854	6.851	(1.422)	48903	17.0686	17.06
	44	Dibromomethane	93	6.120	6.120	(1.102)	20553	17.4490	17.44
	45	4-Methyl-2-Pentanone	43	6.854	6.851	(0.837)	48903	33.7126	33.71
	46	cis-1,3-Dichloropropene	75	6.693	6.690	(1.205)	38773	15.7916	15.79
*	47	Chlorobenzene-d5	117	8.185	8.185	(1.000)	259712	50.0000	
$	48	Toluene-d8	98	6.922	6.922	(0.846)	375577	53.0675	53.06
	49	Ethyl Methacrylate	69	7.289	7.289	(1.312)	37675	17.8689	17.86(a)
	50	Toluene	91	6.982	6.982	(0.853)	184004	22.8976	22.89
	51	trans-1,3-Dichloropropene	75	7.199	7.196	(1.296)	32911	15.6416	15.64
	52	2-Hexanone	43	7.593	7.589	(0.928)	32528	33.9504	33.95
	53	1,1,2-Trichloroethane	83	7.357	7.353	(0.899)	23975	17.6910	17.69
	54	1,3-Dichloropropane	76	7.499	7.495	(0.916)	51414	18.0241	18.02
	55	Dibromochloromethane	129	7.690	7.690	(0.940)	36329	17.7234	17.72
	56	Tetrachloroethene	164	7.458	7.458	(0.911)	34257	18.6597	18.65
	57	1,2-Dibromoethane	107	7.784	7.784	(0.951)	32175	17.8905	17.89
	58	1-Chlorohexane	55	8.196	8.196	(1.476)	23788	16.6876	16.68
	59	Chlorobenzene	112	8.208	8.208	(1.003)	95840	17.8310	17.83
	60	1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	34836	16.8410	16.84
	61	Ethylbenzene	106	8.305	8.305	(1.015)	53987	19.7597	19.75
	62	m,p-Xylenes	106	8.406	8.406	(1.027)	123529	36.7924	36.79
	63	o-Xylene	106	8.747	8.744	(1.069)	61127	18.5920	18.59
	64	Styrene	104	8.762	8.759	(1.071)	98780	18.3540	18.35
	66	Bromoform	173	8.920	8.916	(1.090)	25786	17.3948	17.39
	67	Isopropylbenzene	105	9.062	9.062	(1.107)	568539	67.6288	67.62
	68	1,1,2,2-Tetrachloroethane	83	9.325	9.329	(0.917)	40526	18.2044	18.20
$	69	4-Bromofluorobenzene	95	9.194	9.194	(1.123)	132149	50.5463	50.54
*	70	1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	146196	50.0000	
	71	1,2,3-Trichloropropane	75	9.362	9.362	(0.920)	35501	15.1155	15.11
	72	trans-1,4-Dichloro-2-butene	53	9.377	9.377	(1.146)	4668	11.3642	11.36(a)
	73	n-Propylbenzene	91	9.411	9.411	(0.925)	879031	97.2908	97.29
	74	Bromobenzene	156	9.317	9.317	(0.916)	45383	17.2423	17.24
	75	1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	122896	18.1587	18.15
	76	2-Chlorotoluene	91	9.482	9.482	(0.932)	104443	17.4073	17.40
	77	4-Chlorotoluene	91	9.576	9.576	(0.941)	111305	16.3440	16.34

78	tert-Butylbenzene	119	9.835	9.835 (0.967)	109725	17.7144	17.71
79	1,2,4-Trimethylbenzene	105	9.880	9.876 (0.971)	126438	18.9408	18.94

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240210.b\U021009.D Page 3
Report Date: 22-Feb-2024 14:58

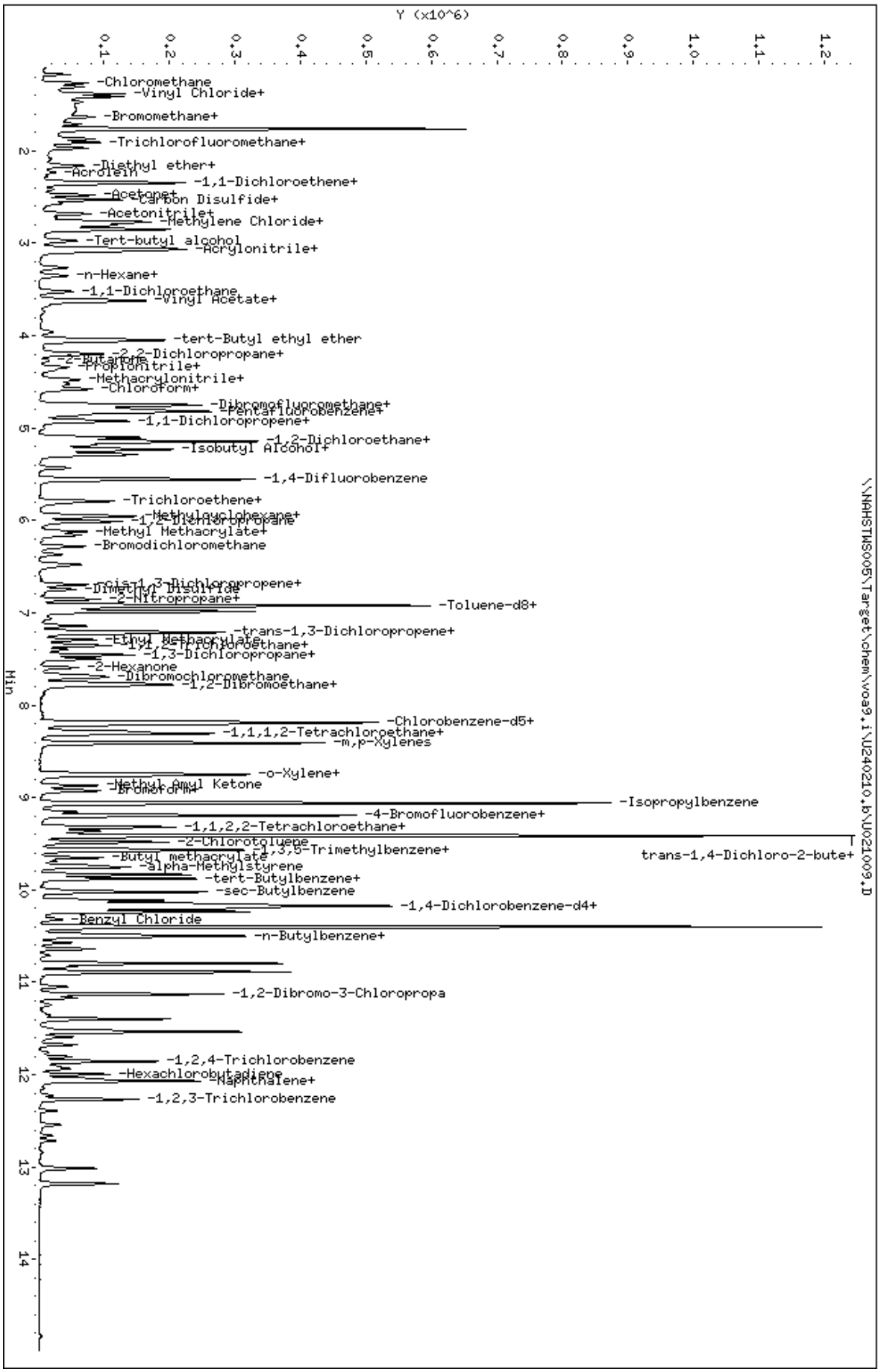
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
81	sec-Butylbenzene	105	10.022	10.022	(0.985)	164553	20.8455	20.84
82	p-Isopropyltoluene	119	10.146	10.146	(0.997)	130148	18.3796	18.37
83	1,3-Dichlorobenzene	146	10.116	10.112	(0.994)	79113	17.3446	17.34
84	1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	81708	17.1877	17.18
86	Benzyl Chloride	91	10.311	10.311	(1.260)	18131	10.5404	10.54
87	n-Butylbenzene	91	10.491	10.491	(1.031)	111028	19.9604	19.96
88	1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	80197	17.9292	17.92
89	1,2-Dibromo-3-Chloropropane	155	11.165	11.165	(1.098)	6428	17.6758	17.67
90	1,2,4-Trichlorobenzene	180	11.859	11.855	(1.166)	52840	18.2600	18.26
91	Hexachlorobutadiene	225	11.998	11.998	(1.179)	22997	17.4858	17.48
92	Naphthalene	128	12.065	12.065	(1.186)	186124	28.4829	28.48
93	1,2,3-Trichlorobenzene	180	12.267	12.268	(1.206)	49263	17.8490	17.84
146	Methyl acetate	43	2.723	2.712	(0.565)	17583	14.8597	14.85
138	Freon TF	101	2.345	2.337	(0.487)	28439	17.7556	17.75
141	Cyclohexane	56	4.789	4.785	(0.994)	55823	25.6836	25.68
142	Tetrahydrofuran	42	4.545	4.542	(0.943)	8535	36.1453	36.14
147	Methylcyclohexane	55	5.951	5.947	(1.072)	69031	20.5957	20.59
135	1,4-Dioxane	88	6.168	6.165	(1.280)	8564	408.071	408.07
132	n-Butanol	56	5.820	5.816	(1.208)	14338	355.459	355.45(a)
136	n-Hexane	57	3.349	3.342	(0.695)	21657	14.0095	14.00
139	Diethyl ether	59	2.153	2.146	(0.447)	18715	16.6637	16.66
148	Tert-butyl alcohol	59	2.971	2.967	(0.617)	61771	387.471	387.47
149	Isopropyl alcohol	45	2.570	2.562	(0.533)	32596	369.009	369.00
152	Amyl alcohol	42	7.394	7.394	(0.903)	15109	369.457	369.45
156	Diisopropyl ether	45	3.627	3.623	(0.753)	76593	16.9024	16.90
162	Butyl acrylate	55	8.732	8.733	(1.067)	40275	17.1737	17.17
187	n-Amyl acetate	43	8.931	8.931	(1.091)	30954	15.2919	15.29
164	Dicyclopentadiene	66	10.198	10.198	(1.003)	119979	15.3513	15.35
166	1,2,3-Trimethylbenzene	105	10.236	10.232	(1.006)	175931	35.3431	35.34
167	Ethanol	45	2.086	2.082	(0.433)	5911	363.778	363.77
172	tert-Butyl formate	59	5.231	5.235	(1.086)	42497	39.8947	39.89
173	3,3-Dimethyl-1-butanol	57	7.777	7.777	(0.950)	65203	369.854	369.85
174	tert-Amyl methyl ether	73	5.287	5.284	(1.097)	82014	17.6142	17.61
175	tert-Butyl ethyl ether	59	4.054	4.050	(0.841)	78152	17.8009	17.80
176	tert-Amyl alcohol	59	5.231	5.235	(1.086)	42497	400.094	400.09
151	4-Methyl-2-pentanol	45	7.214	7.214	(1.299)	135245	371.221	371.22
140	1,3-Butadiene	54	1.411	1.404	(0.293)	25228	17.0195	17.01
158	Dichlorofluoromethane	67	1.869	1.861	(0.388)	48734	17.0641	17.06
182	Epichlorohydrin	57	6.704	6.630	(1.207)	1509	28.3636	28.36
M 94	1,2-Dichloroethylene (total)	96				70912	34.3713	34.37
M 95	Xylenes (total)	106				184656	56.0348	56.03
145	alpha-Methylstyrene	118	9.756	9.752	(0.959)	40125	13.8975	13.89
130	Ethyl Acetate	43	4.343	4.339	(0.901)	19238	13.8668	13.86
131	Methyl Acrylate	55	4.373	4.369	(0.907)	28147	17.4363	17.43
189	n-Butyl acetate	43	7.762	7.762	(0.948)	30999	20.2459	20.24
134	Cyclohexanone	55	9.152	9.152	(0.900)	20998	229.982	229.98(a)
185	Isoprene	39	2.165	2.161	(0.449)	5430	12.8651	12.86
188	Isopropyl acetate	43	5.284	5.284	(0.951)	60379	15.8081	15.80
150	Allyl alcohol	57	3.349	3.342	(0.695)	21657	280.191	280.19
194	Acetaldehyde	44	1.467	1.464	(0.305)	30891	178.063	178.06
195	Methyl Amyl Ketone	43	8.867	8.868	(1.083)	46434	17.3835	17.38
200	Dimethyl Disulfide	94	6.746	6.746	(0.824)	28148	14.4457	14.44

203 2-Ethylhexyl Acrylate	55	12.043	12.039 (1.184)	26924	15.9682	15.96
133 Ethyl Acrylate	55	5.951	5.947 (1.235)	69031	20.4903	20.49

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
163 Butyl methacrylate	41	9.647	9.647	(0.948)	23225	15.0955	15.09

QC Flag Legend

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



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Column phase: DB624

Instrument: VOA9.i
Operator: FT
Column diameter: 0.18

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NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240210.b\U021010.D Page 1
Report Date: 22-Feb-2024 14:58

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240210.b\U021010.D
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Operator : FT Inst ID: VOA9.i
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Misc Info : V9;WATER;0;1;
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Cal Date : 09-FEB-2024 12:42 Cal File: U020911.D
Als bottle: 49 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1	Pentafluorobenzene	168	4.819	4.819	(1.000)	194595	50.0000	
2	Dichlorodifluoromethane	85	1.168	1.168	(0.242)	22335	17.5889	17.58
3	Chloromethane	50	1.303	1.303	(0.270)	27055	18.1954	18.19
4	Propionitrile	54	4.335	4.335	(0.900)	35435	169.560	169.55(a)
5	Vinyl Chloride	62	1.382	1.378	(0.287)	28594	17.0058	17.00
6	Bromomethane	94	1.625	1.625	(0.337)	18818	16.8800	16.88
7	Chloroethane	64	1.629	1.704	(0.338)	307028	263.242	263.24(A)
8	Trichlorofluoromethane	101	1.899	1.899	(0.394)	49415	18.2162	18.21
9	Acrolein	56	2.266	2.266	(0.470)	1309	16.1557	16.15(a)
10	Acetone	43	2.412	2.409	(0.501)	16425	29.6428	29.64
11	1,1-Dichloroethene	96	2.337	2.334	(0.485)	28735	18.2454	18.24
12	Isobutyl Alcohol	43	5.284	5.284	(1.096)	61896	324.106	324.10(a)
13	Acetonitrile	39	2.675	2.671	(0.555)	24652	152.397	152.39(a)
14	Allyl Chloride	41	2.675	2.675	(0.555)	52491	16.2850	16.28(a)
15	Iodomethane	142	2.472	2.472	(0.513)	83268	36.5060	36.50
16	Acrylonitrile	53	3.068	3.065	(0.637)	21364	42.1774	42.17
17	Methylene Chloride	84	2.795	2.795	(0.580)	33821	18.1819	18.18
18	Methyl tert-butyl ether	73	3.083	3.080	(0.640)	104540	24.1243	24.12
19	Carbon Disulfide	76	2.525	2.521	(0.524)	156287	33.7677	33.76
20	trans-1,2-Dichloroethene	96	3.061	3.061	(0.635)	32282	17.8815	17.88

21 Vinyl Acetate	43	3.612	3.608 (0.750)	104422	27.2762	27.27
22 1,1-Dichloroethane	63	3.518	3.514 (0.730)	49453	17.5799	17.57

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
24	2-Butanone	43	4.264	4.260	(0.885)	20359	34.5234	34.52
25	Methacrylonitrile	41	4.493	4.493	(0.932)	24794	17.2242	17.22(a)
26	2,2-Dichloropropane	77	4.186	4.185	(0.869)	29268	12.6484	12.64
27	cis-1,2-Dichloroethene	96	4.201	4.197	(0.872)	36430	16.9902	16.99
28	Chloroform	83	4.575	4.572	(0.949)	57329	18.1075	18.10
29	Bromochloromethane	128	4.470	4.470	(0.928)	20445	18.6158	18.61
$ 30	Dibromofluoromethane	113	4.748	4.748	(0.985)	104275	51.9308	51.93
31	1,1,1-Trichloroethane	97	4.744	4.744	(0.984)	50156	17.8790	17.87
32	1,1-Dichloropropene	75	4.924	4.924	(0.887)	40090	17.9825	17.98
33	1,2-Dichloroethane	62	5.175	5.175	(0.932)	43192	19.0952	19.09
34	Carbon Tetrachloride	117	4.917	4.913	(0.885)	42615	17.2144	17.21
$ 35	1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	102196	50.8215	50.82
* 36	1,4-Difluorobenzene	114	5.554	5.554	(1.000)	272017	50.0000	
37	Benzene	78	5.141	5.141	(0.926)	289964	43.4712	43.47
38	Trichloroethene	130	5.790	5.790	(1.043)	38064	17.8843	17.88
39	Bromodichloromethane	83	6.277	6.277	(1.130)	40323	17.4768	17.47
40	Methyl Methacrylate	41	6.154	6.153	(1.277)	20675	17.6241	17.62(a)
42	1,2-Dichloropropane	63	6.011	6.007	(1.082)	29113	18.0587	18.05
43	2-Nitropropane	43	6.851	6.851	(1.422)	50918	17.7419	17.74
44	Dibromomethane	93	6.120	6.120	(1.102)	20906	18.0559	18.05
45	4-Methyl-2-Pentanone	43	6.851	6.851	(0.837)	50918	35.8437	35.84
46	cis-1,3-Dichloropropene	75	6.690	6.690	(1.204)	39358	16.3073	16.30
* 47	Chlorobenzene-d5	117	8.185	8.185	(1.000)	254336	50.0000	
$ 48	Toluene-d8	98	6.922	6.922	(0.846)	371025	53.5329	53.53
49	Ethyl Methacrylate	69	7.289	7.289	(1.312)	40472	19.5278	19.52(a)
50	Toluene	91	6.982	6.982	(0.853)	181201	23.0255	23.02
51	trans-1,3-Dichloropropene	75	7.196	7.196	(1.296)	31728	15.3728	15.37
52	2-Hexanone	43	7.589	7.589	(0.927)	33568	35.6402	35.64
53	1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	24663	18.5941	18.59
54	1,3-Dichloropropane	76	7.499	7.495	(0.916)	51290	18.3640	18.36
55	Dibromochloromethane	129	7.691	7.690	(0.940)	36165	18.0164	18.01
56	Tetrachloroethene	164	7.458	7.458	(0.911)	33708	18.7488	18.74
57	1,2-Dibromoethane	107	7.784	7.784	(0.951)	31672	17.9831	17.98
58	1-Chlorohexane	55	8.197	8.196	(1.476)	24559	17.5508	17.55
59	Chlorobenzene	112	8.208	8.208	(1.003)	97316	18.4960	18.49
60	1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	36516	18.0263	18.02
61	Ethylbenzene	106	8.305	8.305	(1.015)	55679	20.8097	20.80
62	m,p-Xylenes	106	8.407	8.406	(1.027)	123799	37.6522	37.65
63	o-Xylene	106	8.748	8.744	(1.069)	59760	18.5604	18.56
64	Styrene	104	8.763	8.759	(1.071)	95993	18.2131	18.21
66	Bromoform	173	8.916	8.916	(1.089)	25540	17.5930	17.59
67	Isopropylbenzene	105	9.063	9.062	(1.107)	564994	68.6277	68.62
68	1,1,2,2-Tetrachloroethane	83	9.325	9.329	(0.917)	40556	18.8803	18.88
$ 69	4-Bromofluorobenzene	95	9.194	9.194	(1.123)	130644	51.0296	51.02
* 70	1,4-Dichlorobenzene-d4	152	10.168	10.168	(1.000)	141119	50.0000	
71	1,2,3-Trichloropropane	75	9.362	9.362	(0.921)	35534	15.6738	15.67
72	trans-1,4-Dichloro-2-butene	53	9.377	9.377	(1.146)	4832	12.0121	12.01(a)
73	n-Propylbenzene	91	9.411	9.411	(0.926)	868726	99.6094	99.60
74	Bromobenzene	156	9.317	9.317	(0.916)	45983	18.1014	18.10
75	1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	122190	18.7039	18.70
76	2-Chlorotoluene	91	9.482	9.482	(0.933)	105370	18.1936	18.19
77	4-Chlorotoluene	91	9.576	9.576	(0.942)	111804	17.0079	17.00

78	tert-Butylbenzene	119	9.835	9.835 (0.967)	109126	18.2515	18.25
79	1,2,4-Trimethylbenzene	105	9.876	9.876 (0.971)	126925	19.6978	19.69

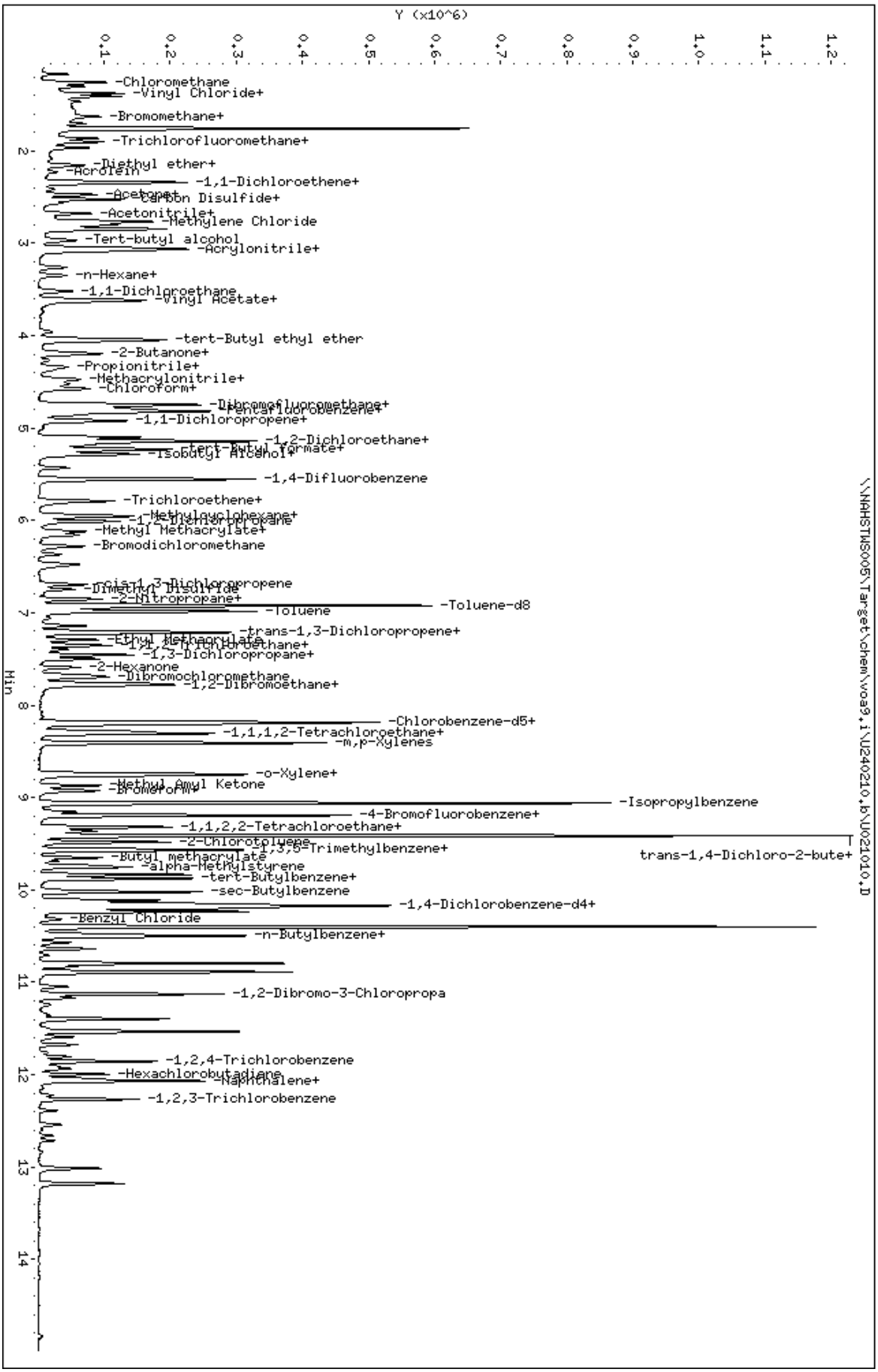
Data File: \\NAHSTWS005\Target\chem\voa9.i\U240210.b\U021010.D Page 3
Report Date: 22-Feb-2024 14:58

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
81	sec-Butylbenzene	105	10.022	10.022	(0.986)	160799	21.1028	21.10
82	p-Isopropyltoluene	119	10.146	10.146	(0.998)	126204	18.4638	18.46
83	1,3-Dichlorobenzene	146	10.112	10.112	(0.994)	76063	17.2755	17.27
84	1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	82350	17.9637	17.96
86	Benzyl Chloride	91	10.311	10.311	(1.260)	17607	10.4692	10.46
87	n-Butylbenzene	91	10.491	10.491	(1.032)	110995	20.6724	20.67
88	1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	77960	18.0580	18.05
89	1,2-Dibromo-3-Chloropropane	155	11.166	11.165	(1.098)	6483	18.3396	18.33
90	1,2,4-Trichlorobenzene	180	11.855	11.855	(1.166)	51112	18.2983	18.29
91	Hexachlorobutadiene	225	11.998	11.998	(1.180)	21818	17.1879	17.18
92	Naphthalene	128	12.065	12.065	(1.187)	191520	30.2810	30.28
93	1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	48376	18.1582	18.15
146	Methyl acetate	43	2.716	2.712	(0.564)	16239	13.6691	13.66
138	Freon TF	101	2.341	2.337	(0.486)	27207	16.9581	16.95
141	Cyclohexane	56	4.789	4.785	(0.994)	56733	26.0621	26.06
142	Tetrahydrofuran	42	4.542	4.542	(0.942)	8879	37.5248	37.52
147	Methylcyclohexane	55	5.947	5.947	(1.071)	69335	21.0445	21.04
135	1,4-Dioxane	88	6.165	6.165	(1.279)	7981	380.322	380.32
132	n-Butanol	56	5.816	5.816	(1.207)	15080	370.475	370.47(a)
136	n-Hexane	57	3.350	3.342	(0.695)	22199	14.3201	14.32
139	Diethyl ether	59	2.150	2.146	(0.446)	19734	17.5802	17.58
148	Tert-butyl alcohol	59	2.967	2.967	(0.616)	61925	387.783	387.78
149	Isopropyl alcohol	45	2.562	2.562	(0.532)	32708	369.649	369.64
152	Amyl alcohol	42	7.394	7.394	(0.903)	14865	370.889	370.88
156	Diisopropyl ether	45	3.623	3.623	(0.752)	75528	16.6393	16.63
162	Butyl acrylate	55	8.733	8.733	(1.067)	40224	17.4765	17.47
187	n-Amyl acetate	43	8.931	8.931	(1.091)	30340	15.3047	15.30
164	Dicyclopentadiene	66	10.198	10.198	(1.003)	118255	15.6750	15.67
166	1,2,3-Trimethylbenzene	105	10.232	10.232	(1.006)	171691	35.7322	35.73
167	Ethanol	45	2.083	2.082	(0.432)	6159	378.648	378.64
172	tert-Butyl formate	59	5.231	5.235	(1.086)	50245	46.2884	46.28
173	3,3-Dimethyl-1-butanol	57	7.777	7.777	(0.950)	64420	372.886	372.88
174	tert-Amyl methyl ether	73	5.284	5.284	(1.096)	85440	18.3191	18.31
175	tert-Butyl ethyl ether	59	4.047	4.050	(0.840)	78199	17.7816	17.78
176	tert-Amyl alcohol	59	5.231	5.235	(1.086)	50245	464.000	464.00
151	4-Methyl-2-pentanol	45	7.211	7.214	(1.298)	137747	382.708	382.70
140	1,3-Butadiene	54	1.408	1.404	(0.292)	25249	17.0051	17.00
158	Dichlorofluoromethane	67	1.861	1.861	(0.386)	48658	17.0088	17.00
M 94	1,2-Dichloroethylene (total)	96				68712	33.2489	33.24
M 95	Xylenes (total)	106				183559	56.6661	56.66
145	alpha-Methylstyrene	118	9.752	9.752	(0.959)	39195	14.0474	14.04
130	Ethyl Acetate	43	4.339	4.339	(0.900)	20444	14.7222	14.72
131	Methyl Acrylate	55	4.369	4.369	(0.907)	28604	17.6896	17.68
189	n-Butyl acetate	43	7.762	7.762	(0.948)	31488	21.0293	21.02
134	Cyclohexanone	55	9.153	9.152	(0.900)	22847	259.236	259.23(a)
185	Isoprene	39	2.161	2.161	(0.449)	5867	13.8771	13.87
188	Isopropyl acetate	43	5.284	5.284	(0.951)	61896	16.4858	16.48
150	Allyl alcohol	57	3.350	3.342	(0.695)	22199	286.402	286.40
194	Acetaldehyde	44	1.464	1.464	(0.304)	23814	136.859	136.85
195	Methyl Amyl Ketone	43	8.868	8.868	(1.083)	48557	18.5626	18.56
200	Dimethyl Disulfide	94	6.746	6.746	(0.824)	28412	14.8111	14.81
203	2-Ethylhexyl Acrylate	55	12.039	12.039	(1.184)	27027	16.4624	16.46

133 Ethyl Acrylate	55	5.947	5.947 (1.234)	69335	20.5459	20.54
163 Butyl methacrylate	41	9.647	9.647 (0.949)	22318	15.0278	15.02

QC Flag Legend

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



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Instrument: VOA9,i
Operator: FT
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InstruID : VOA9.i
LabSampID : HS24020269-09MSD

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240210.b\U021011.D Page 1
Report Date: 22-Feb-2024 14:58

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240210.b\U021011.D
Lab Smp Id: HS24020246-09
Inj Date : 10-FEB-2024 04:49
Operator : FT   Inst ID: VOA9.i
Smp Info : HS24020246-09
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240210.b\8260C.m
Meth Date : 22-Feb-2024 14:57 VOA9.i   Quant Type: ISTD
Cal Date : 09-FEB-2024 12:42   Cal File: U020911.D
Als bottle: 50
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: 000bhatedod+.sub
Target Version: 4.14
Processing Host: NAHSTW7056

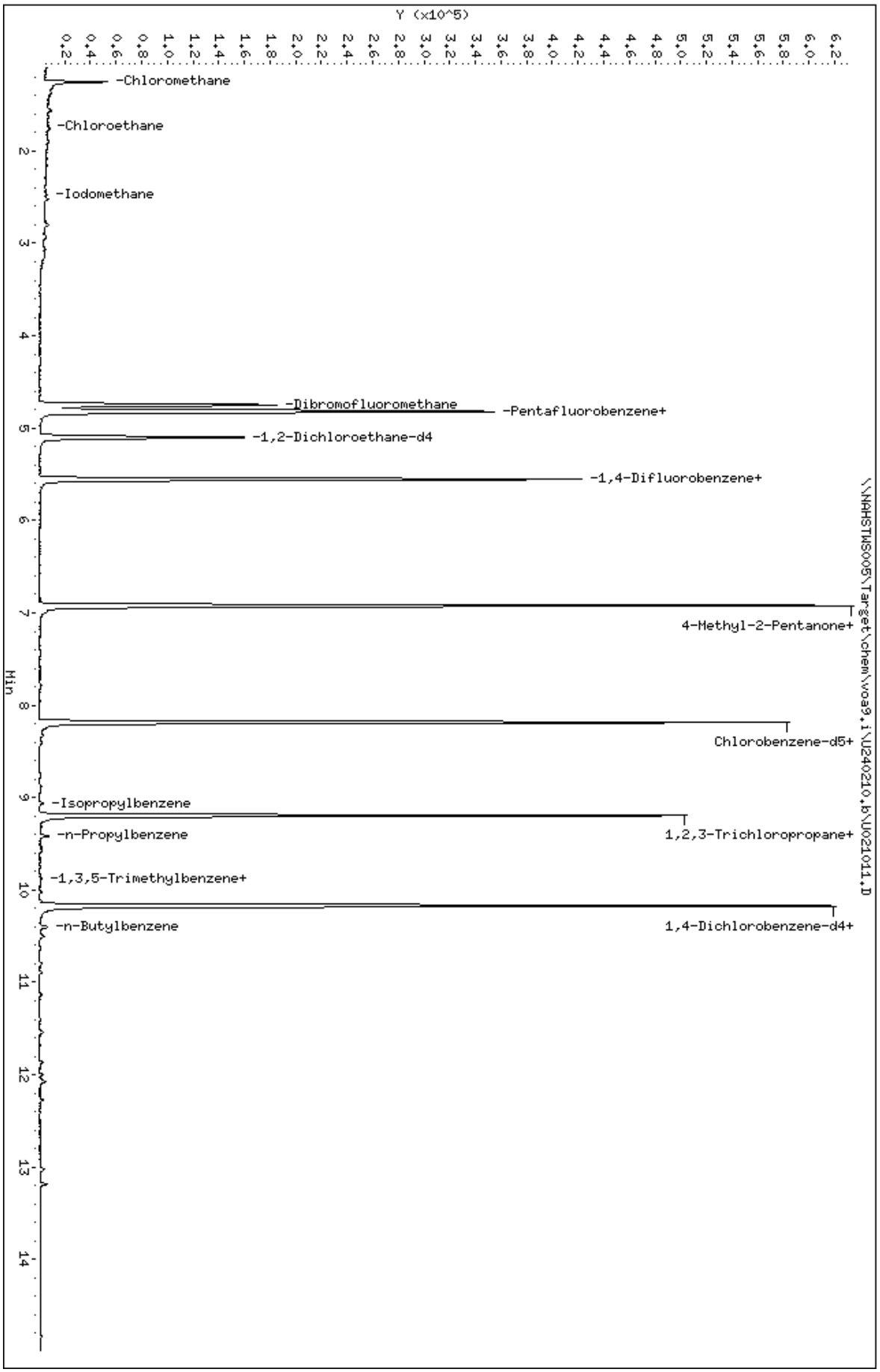
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.819	4.819	(1.000)	276093	50.0000	
$ 30 Dibromofluoromethane	113	4.751	4.748	(0.986)	115200	40.3396	40.33(M)
$ 35 1,2-Dichloroethane-d4	65	5.100	5.096	(1.058)	117908	41.1864	41.18(M)
* 36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	358896	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	340018	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	413321	44.5987	44.59(M)
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	146140	42.6512	42.65(M)
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	186097	50.0000	

QC Flag Legend

M - Compound response manually integrated.



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Date : 10-FEB-2024 04:49
Client ID:
Sample Info: HS24020246-09
Purge Volume: 5.0
Column phase: DB624

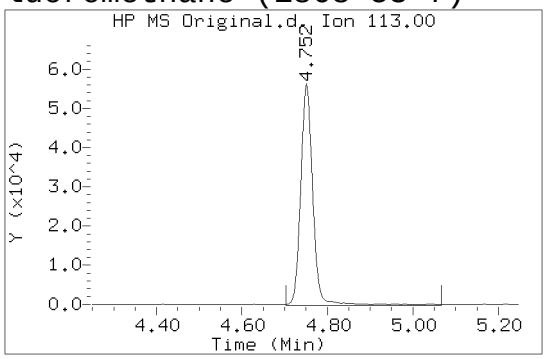
Instrument: VOA9.i
Operator: FT
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\voa9.i\U240210.b\U021011.D
Inj Date : 10-FEB-2024 04:49
InstruID : VOA9.i
LabSampID : HS24020246-09

Dibromofluoromethane (1868-53-7)

BEFORE

MASS
113
AREA
115200
HEIGHT
56549
22-Feb-2024
14:57
linh
pham



AFTER

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HEIGHT
56549
22-Feb-2024
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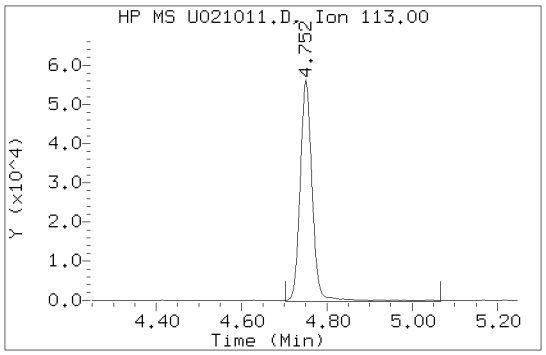

Reason Code:

BEFORE

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22-Feb-2024
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linh
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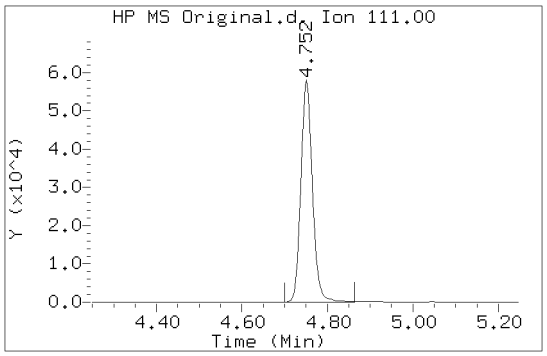

AFTER

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AREA
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22-Feb-2024
14:57
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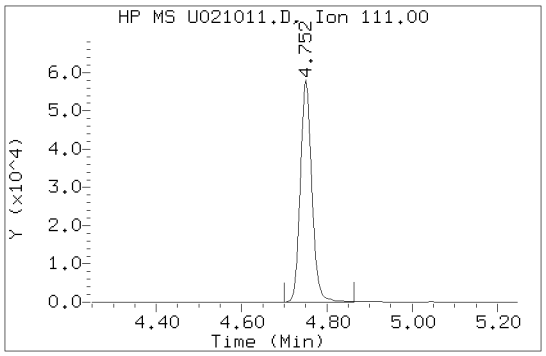

Reason Code:

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

BEFORE

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22-Feb-2024
14:57
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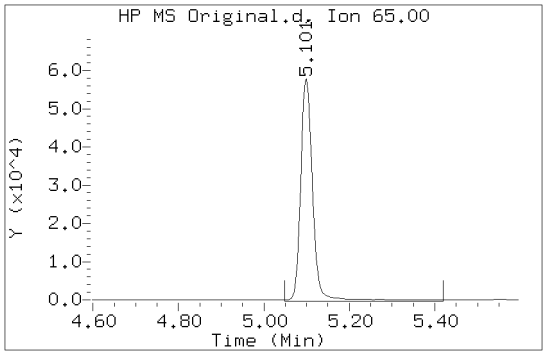

AFTER

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HEIGHT
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22-Feb-2024
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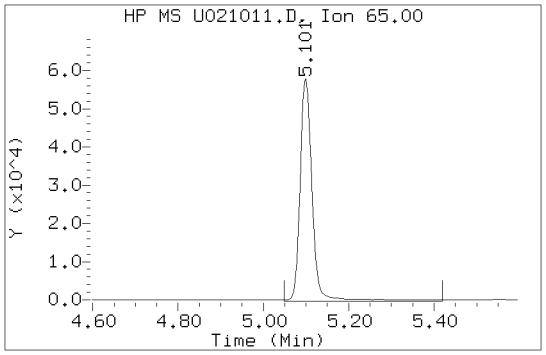

Reason Code:

BEFORE

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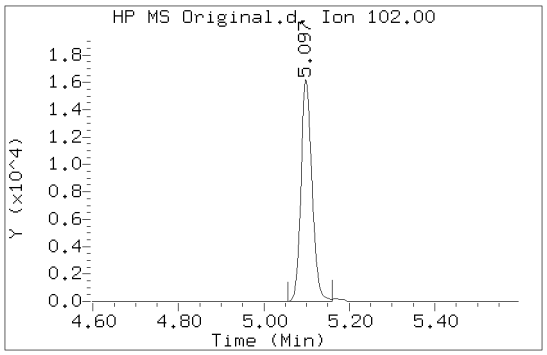

AFTER

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14:57
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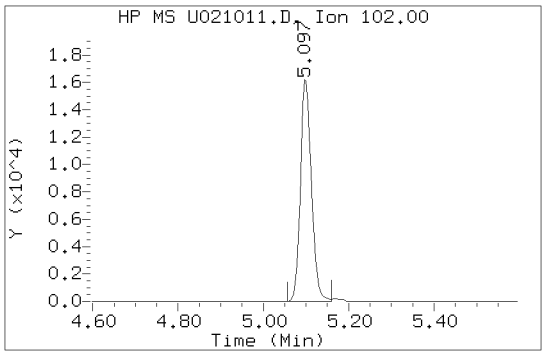


Reason Code:

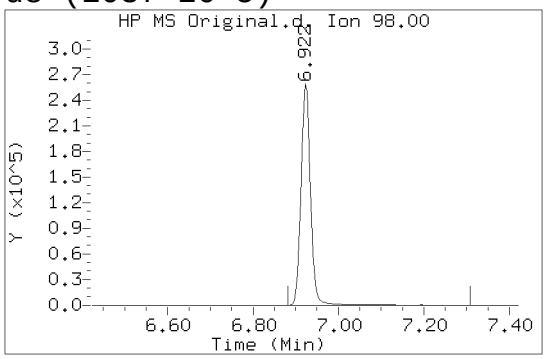
Data File : \\NAHSTWS005\Target\chem\voa9.i\U240210.b\U021011.D
Inj Date : 10-FEB-2024 04:49
InstruID : VOA9.i
LabSampID : HS24020246-09

Toluene-d8 (2037-26-5)

Reason Code:

BEFORE

MASS
98
AREA
413321
HEIGHT
259366
22-Feb-2024
14:57
linh
pham



AFTER

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22-Feb-2024
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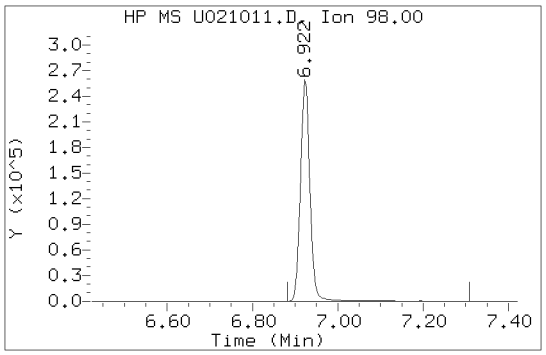

BEFORE

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AREA
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HEIGHT
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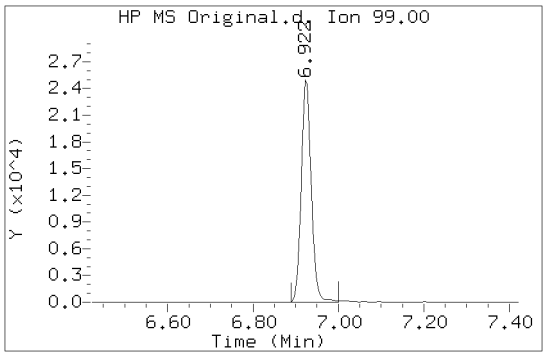
22-Feb-2024
14:57
linh
pham



AFTER

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HEIGHT
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14:57
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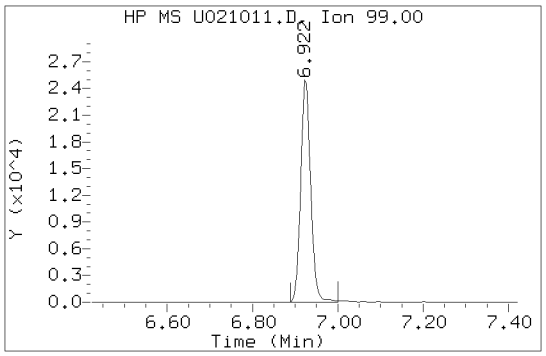

BEFORE

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AREA
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HEIGHT
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22-Feb-2024
14:57
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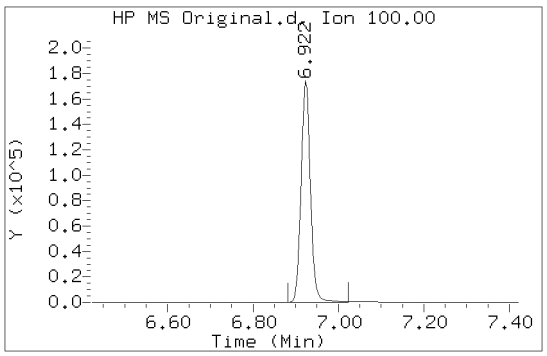
pham



AFTER

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HEIGHT
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22-Feb-2024
14:57
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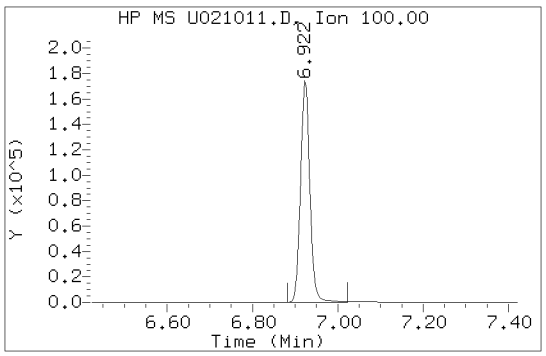
pham



4-Bromofluorobenzene (460-00-4)

Reason Code:

BEFORE

MASS
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AREA
146140
HEIGHT
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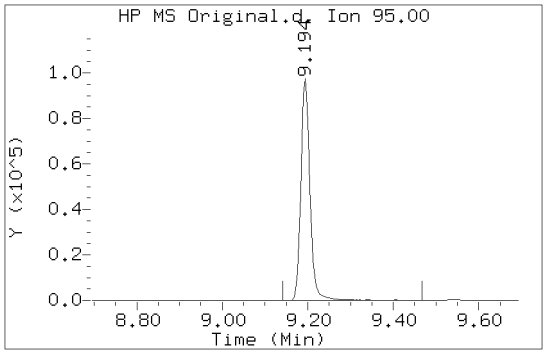
22-Feb-2024
14:57
linh
pham



AFTER

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HEIGHT
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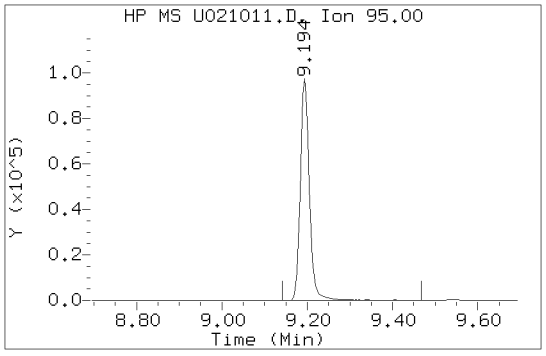
22-Feb-2024
14:57
linh
pham



Data File : \\NAHSTWS005\Target\chem\voa9.i\U240210.b\U021011.D
Inj Date : 10-FEB-2024 04:49
InstruID : VOA9.i
LabSampID : HS24020246-09

4-Bromofluorobenzene (460-00-4)

Reason Code:

BEFORE

MASS
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AREA
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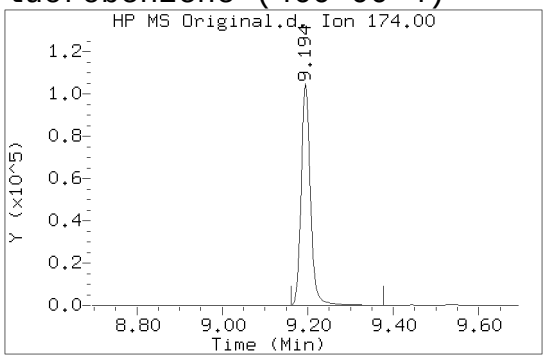
HEIGHT
104872
22-Feb-2024
14:57
linh
pham



AFTER

MASS
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AREA
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HEIGHT
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22-Feb-2024
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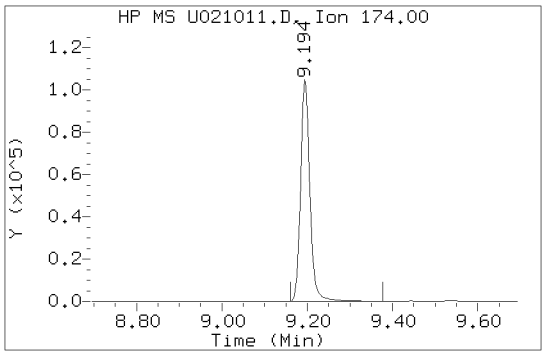
pham



BEFORE

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22-Feb-2024
14:57
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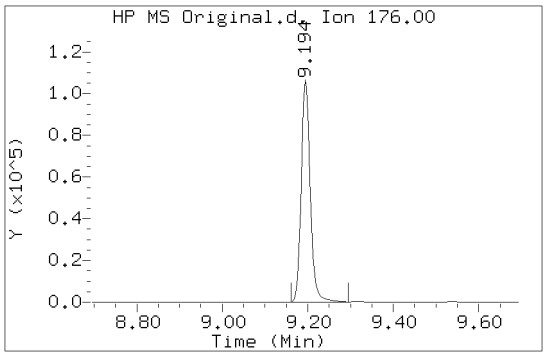

AFTER

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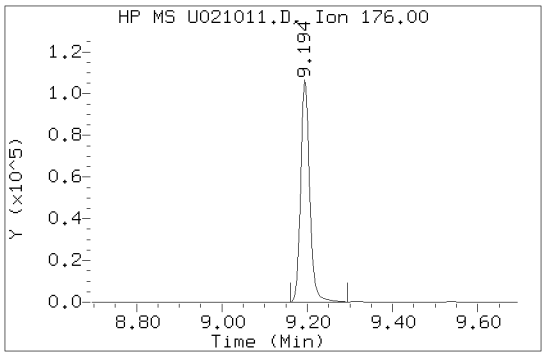

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Report Date: 22-Feb-2024 14:58

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240210.b\U021020.D
Lab Smp Id: HS24020246-05
Inj Date : 10-FEB-2024 08:11
Operator : FT   Inst ID: VOA9.i
Smp Info : HS24020246-05
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240210.b\8260C.m
Meth Date : 22-Feb-2024 14:57 VOA9.i   Quant Type: ISTD
Cal Date : 09-FEB-2024 12:42   Cal File: U020911.D
Als bottle: 59
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: 000bhatedod+.sub
Target Version: 4.14
Processing Host: NAHSTW7056

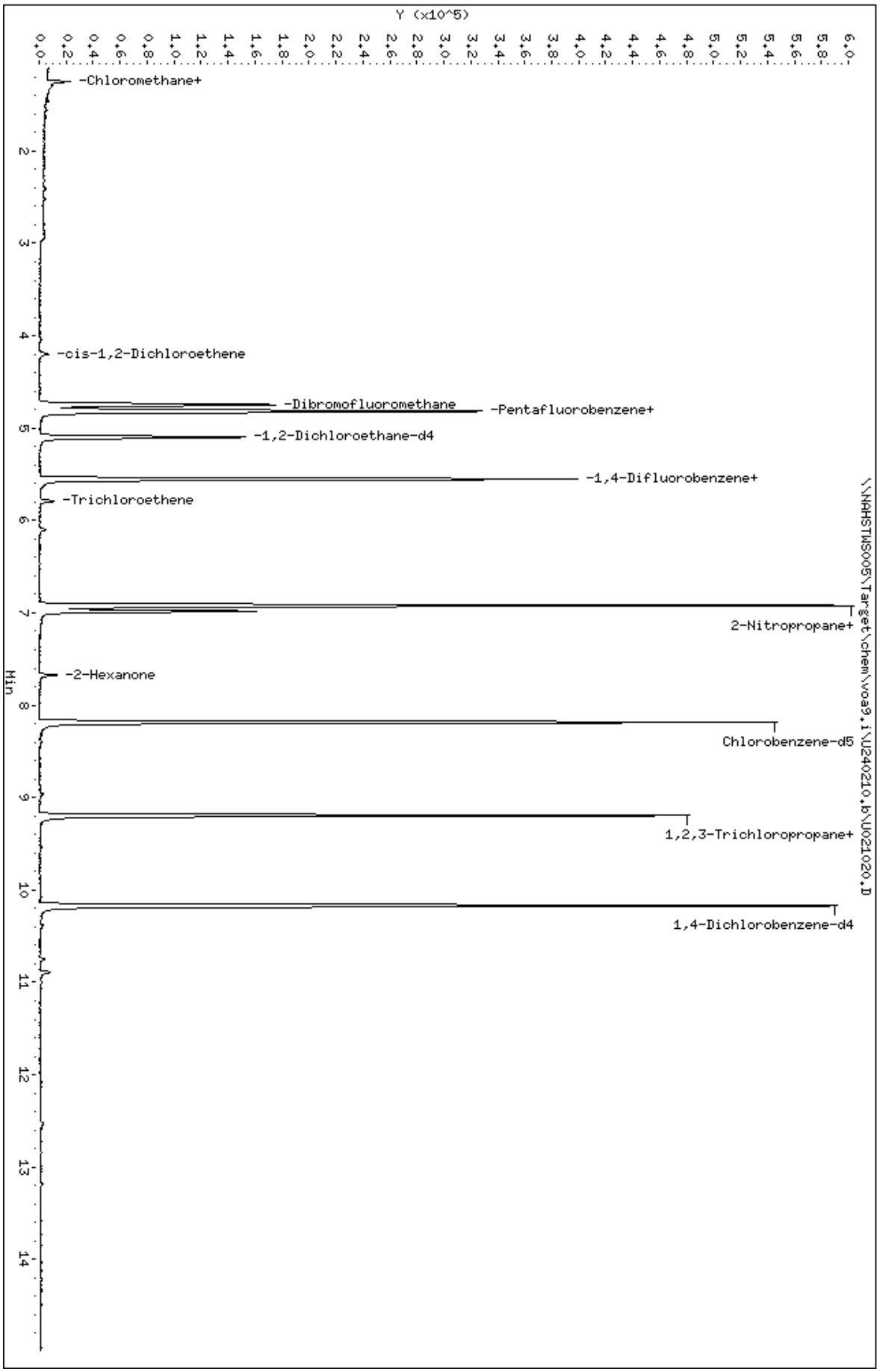
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.815	4.819	(1.000)	258261	50.0000	
$ 30 Dibromofluoromethane	113	4.748	4.748	(0.986)	107422	40.2118	40.21(M)
$ 35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	109722	40.9694	40.96(M)
* 36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	335957	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	326096	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	405662	45.6423	45.64(M)
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	144820	44.0800	44.07(M)
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	177926	50.0000	
27 cis-1,2-Dichloroethene	96	4.197	4.197	(0.872)	3440	1.20884	1.20(a)
38 Trichloroethene	130	5.790	5.790	(1.043)	3195	1.38064	1.38(a)
50 Toluene	91	6.982	6.982	(0.853)	109358	10.8383	10.83

QC Flag Legend

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



Data File: \\NAHSTMS005\Target\chem\voa9.i\U240210.b\U021020.D
Date : 10-FEB-2024 08:11
Client ID:
Sample Info: HS24020246-05
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9.i
Operator: FT
Column diameter: 0.18

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240210.b\U021020.D Page 2

Date : 10-FEB-2024 08:11

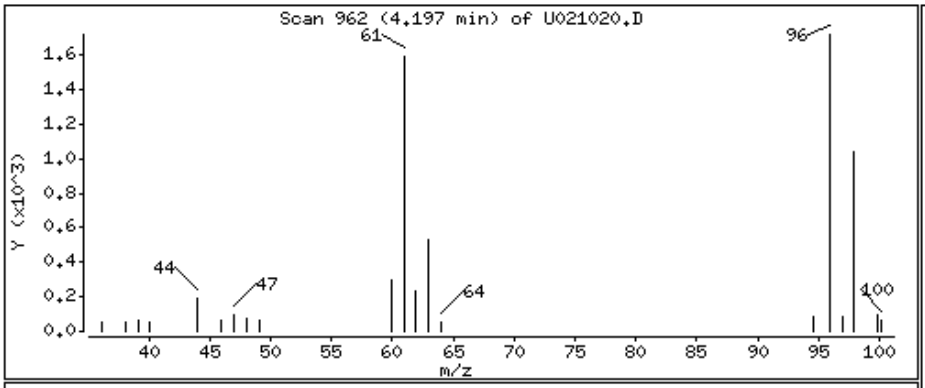
Client ID: Instrument: VOA9.i

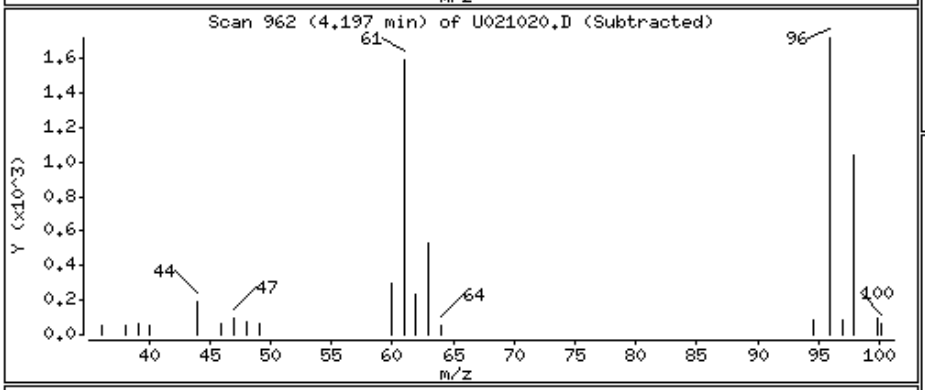
Sample Info: HS24020246-05

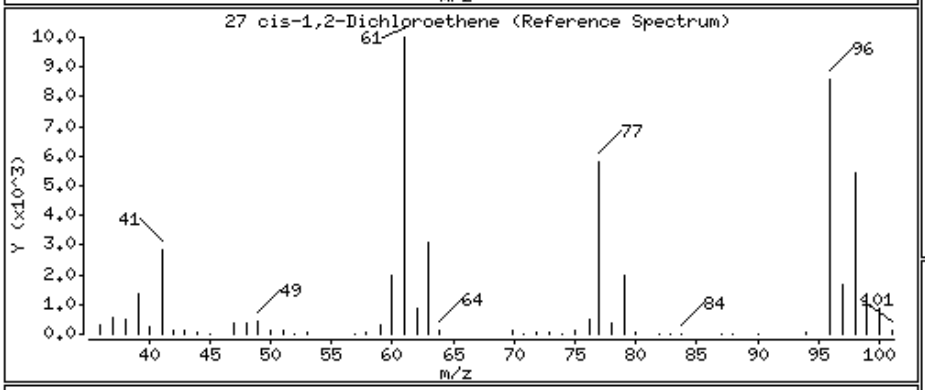
Purge Volume: 5.0 Operator: FT

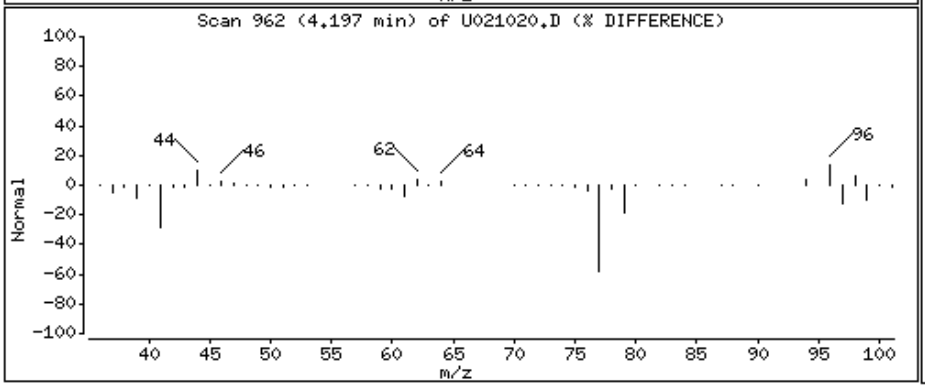
Column phase: DB624 Column diameter: 0.18

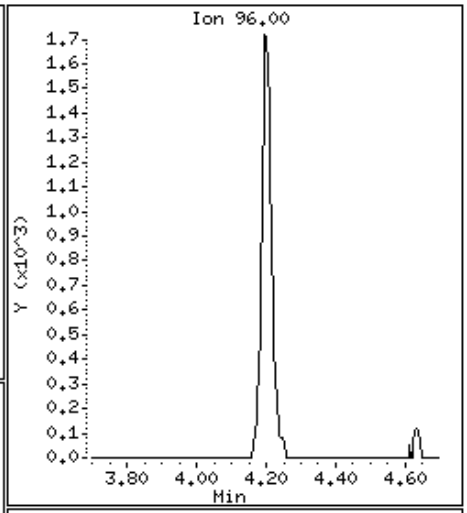
27 cis-1,2-Dichloroethene Concentration: 1.20 ug/l

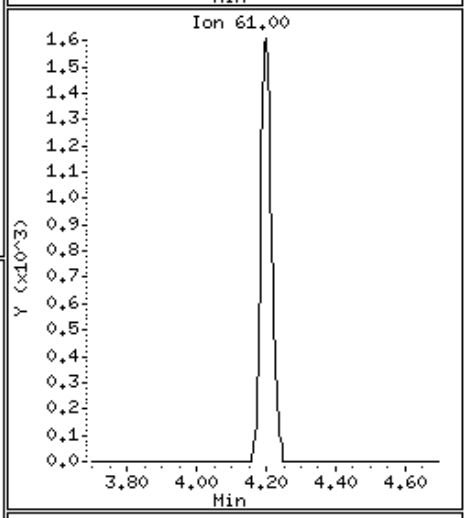


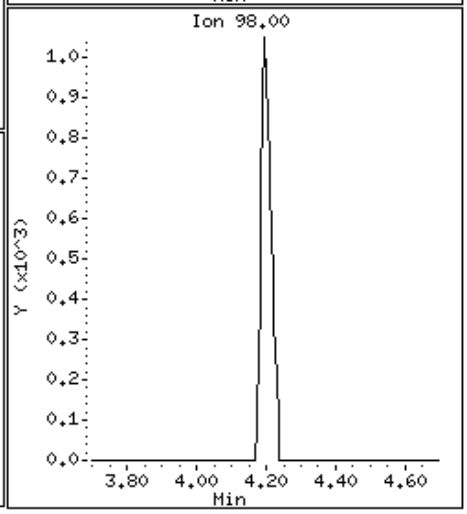












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Date : 10-FEB-2024 08:11

Client ID:

Instrument: VOA9.i

Sample Info: HS24020246-05

Purge Volume: 5.0

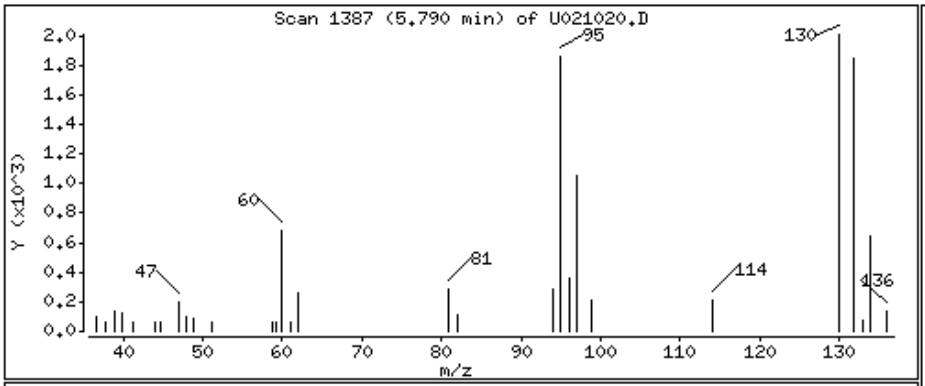
Operator: FT

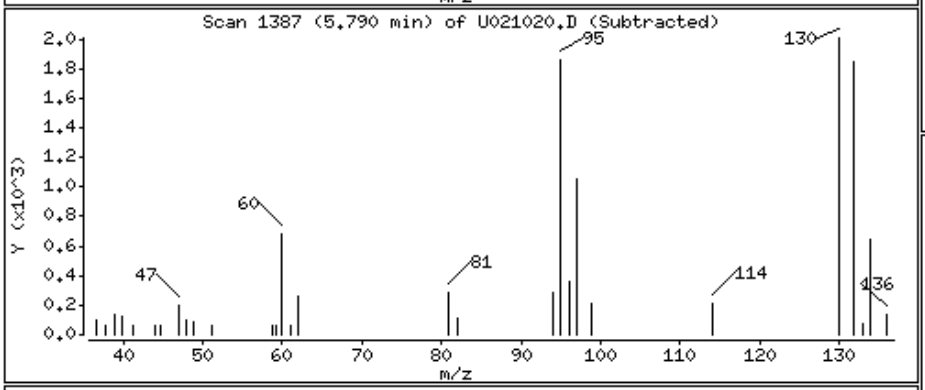
Column phase: DB624

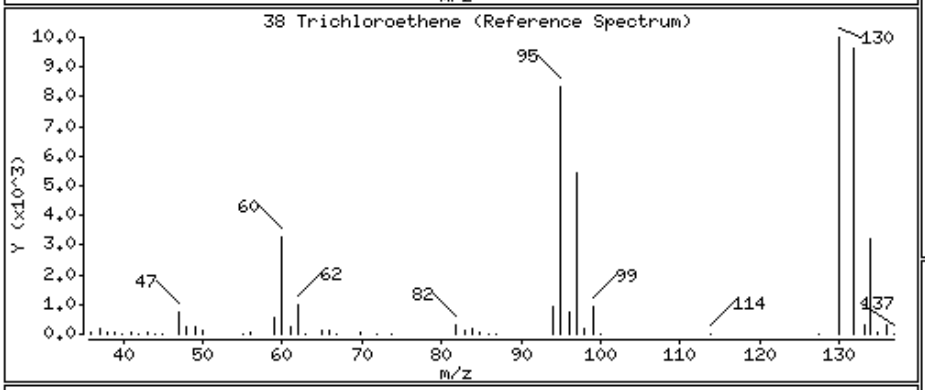
Column diameter: 0.18

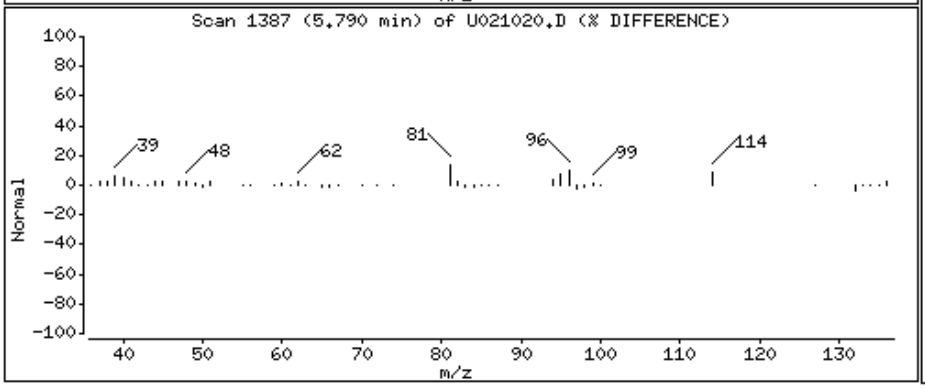
38 Trichloroethene

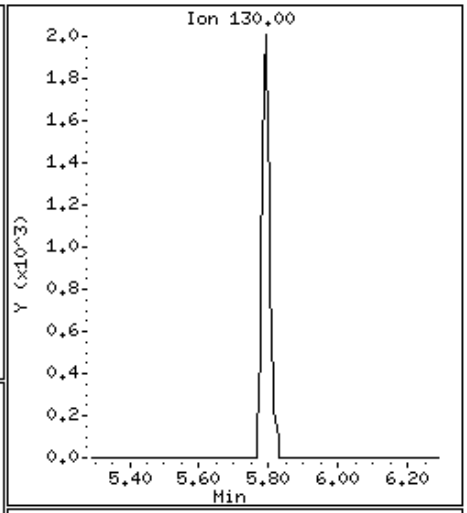
Concentration: 1.38 ug/l

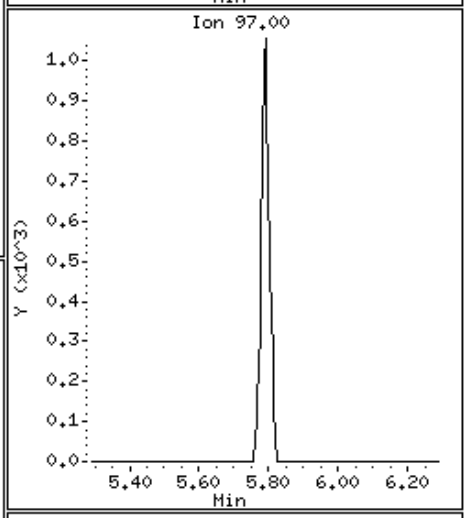


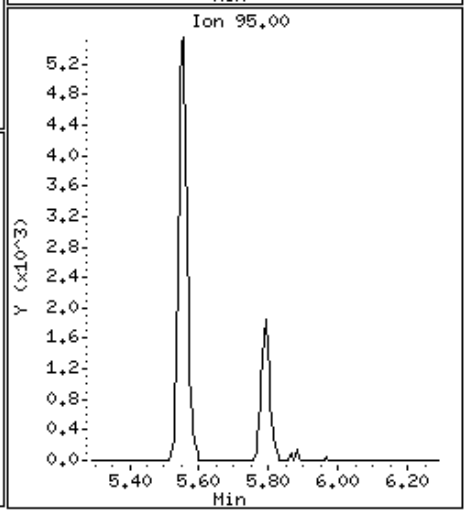












Data File: \\NAHSTWS005\Target\chem\voa9.i\U240210.b\U021020.D Page 4

Date : 10-FEB-2024 08:11

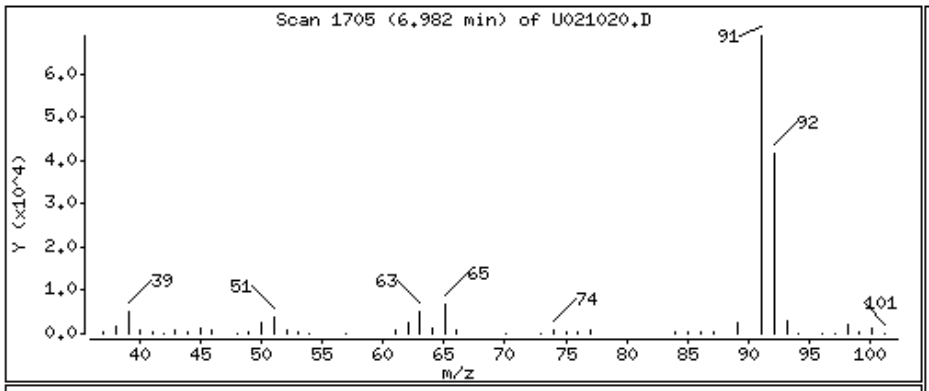
Client ID: Instrument: VOA9.i

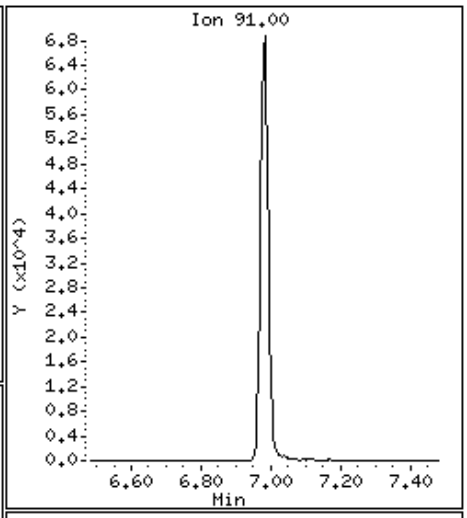
Sample Info: HS24020246-05

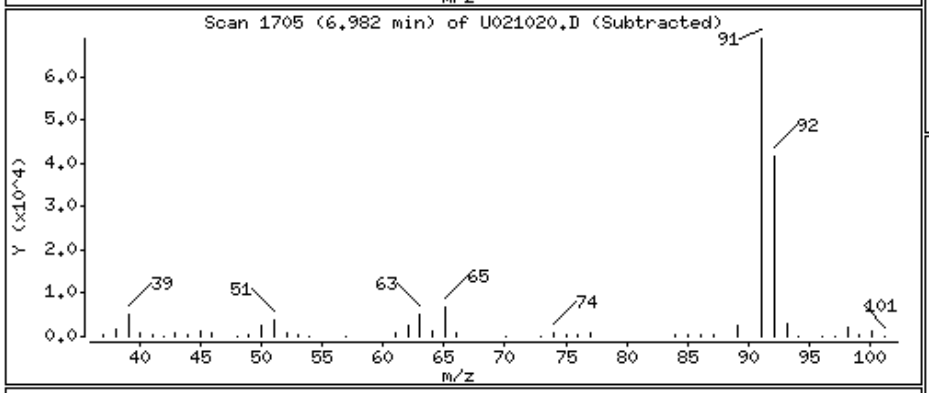
Purge Volume: 5.0 Operator: FT

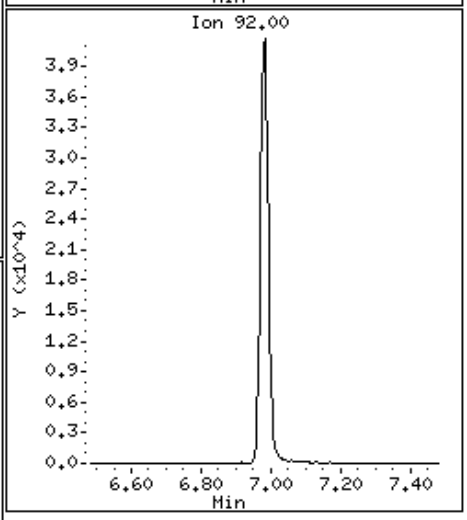
Column phase: DB624 Column diameter: 0.18

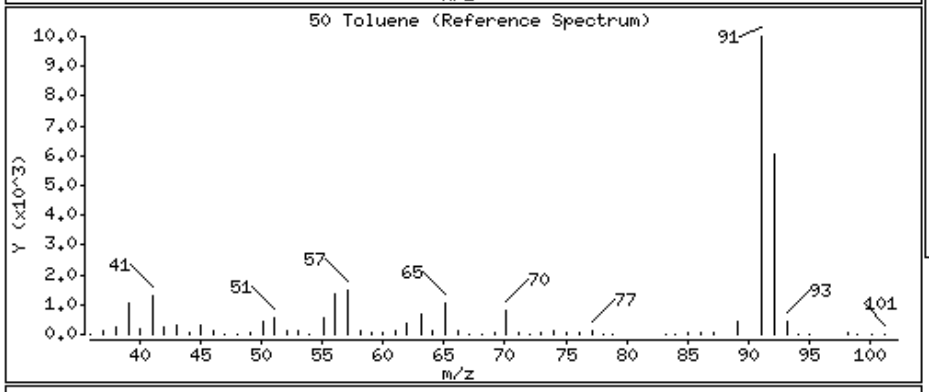
50 Toluene Concentration: 10.83 ug/l

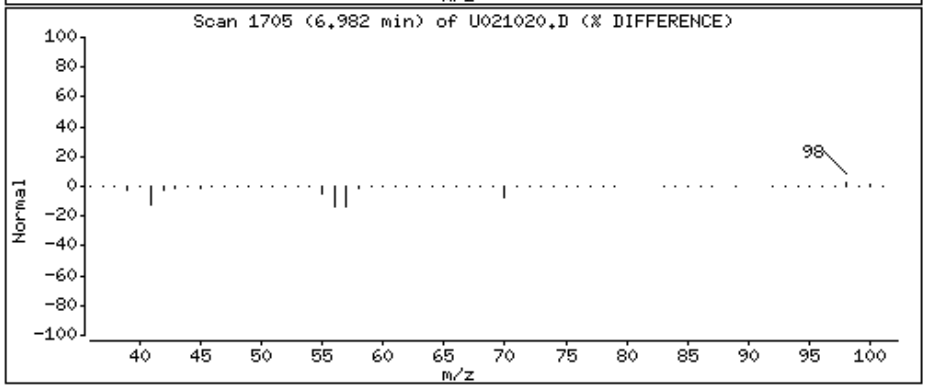












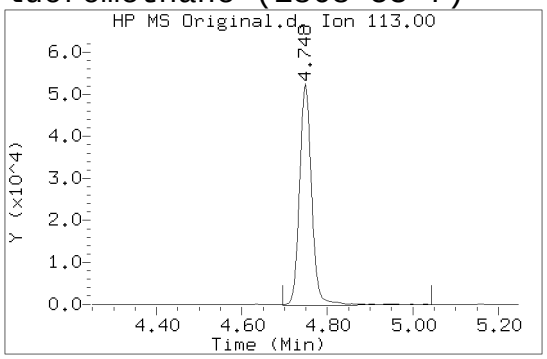
Data File : \\NAHSTWS005\Target\chem\voa9.i\U240210.b\U021020.D
Inj Date : 10-FEB-2024 08:11
InstruID : VOA9.i
LabSampID : HS24020246-05

Dibromofluoromethane (1868-53-7)

Reason Code:

BEFORE

MASS
113
AREA
107422
HEIGHT
52722
22-Feb-2024
14:57
linh
pham



AFTER

MASS
113
AREA
107422
HEIGHT
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22-Feb-2024
14:57
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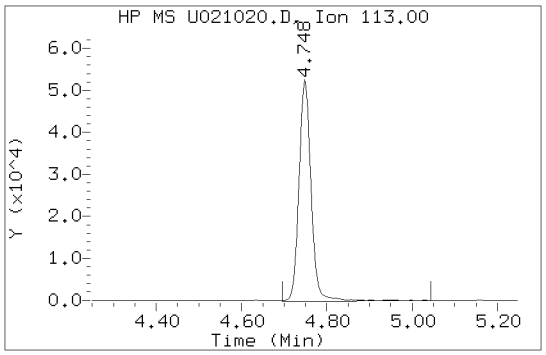
pham



BEFORE

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AREA
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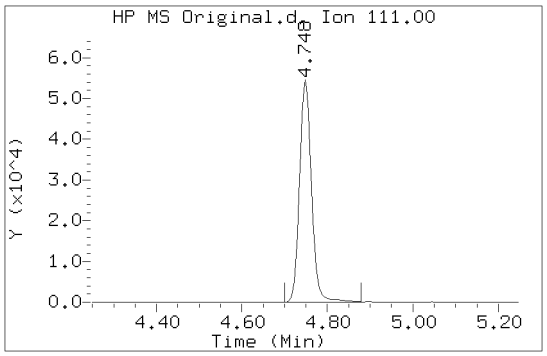
HEIGHT
54568
22-Feb-2024
14:57
linh
pham



AFTER

MASS
111
AREA
108631
HEIGHT
54568
22-Feb-2024
14:57
linh
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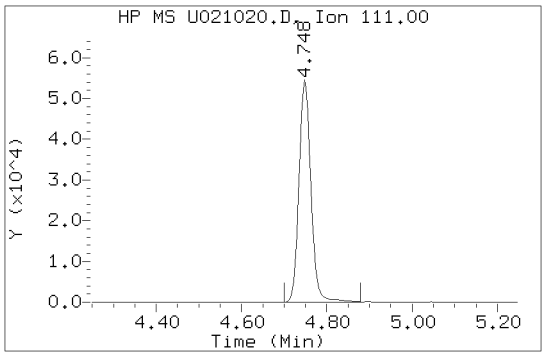

1,2-Dichloroethane-d4 (17060-07-0)

Reason Code:

BEFORE

MASS
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AREA
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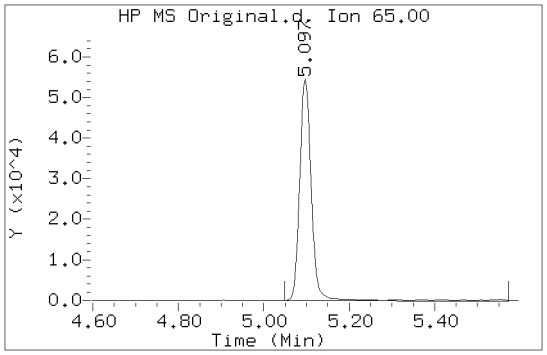
HEIGHT
54730
22-Feb-2024
14:57
linh
pham



AFTER

MASS
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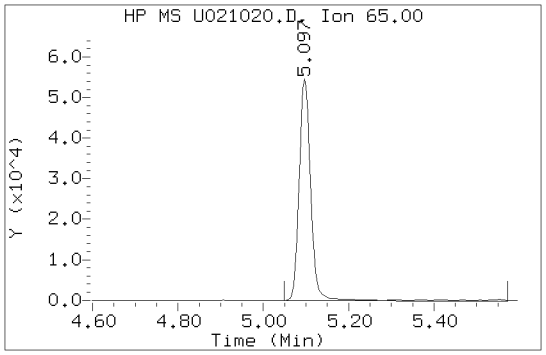
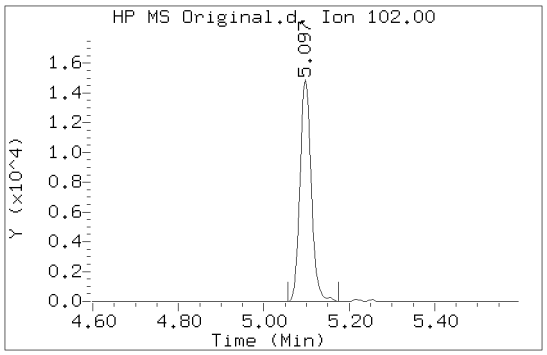
HEIGHT
54730
22-Feb-2024
14:57
linh
pham



BEFORE

MASS
102
AREA
27852
HEIGHT
14890
22-Feb-2024
14:57
linh
pham



AFTER

MASS
102
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27852
HEIGHT
14890
22-Feb-2024
14:57
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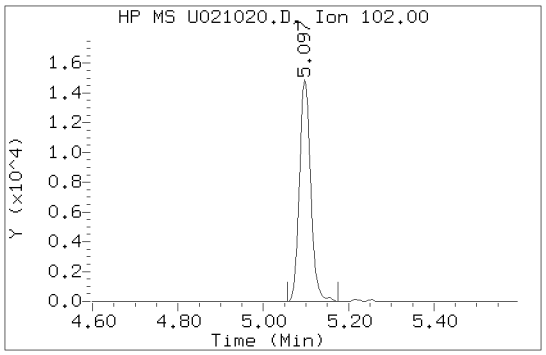
pham

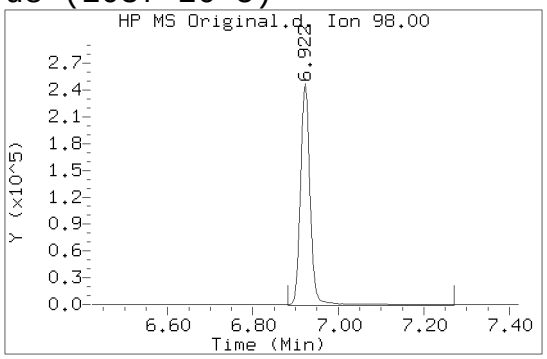


Data File : \\NAHSTWS005\Target\chem\voa9.i\U240210.b\U021020.D
Inj Date : 10-FEB-2024 08:11
InstruID : VOA9.i
LabSampID : HS24020246-05

Toluene-d8 (2037-26-5)

Reason Code:

BEFORE
MASS
98
AREA
405662
HEIGHT
247538
22-Feb-2024
14:57
linh
pham



AFTER
MASS
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AREA
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HEIGHT
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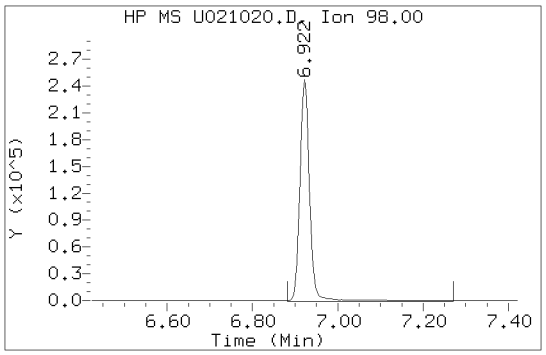
22-Feb-2024
14:57
linh
pham



BEFORE
MASS
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AREA
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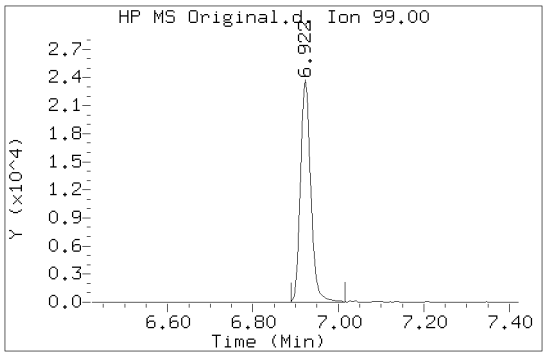
HEIGHT
23744
22-Feb-2024
14:57
linh
pham



AFTER
MASS
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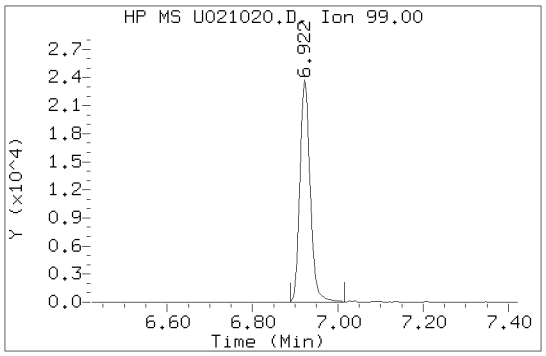
AREA
40681
HEIGHT
23744
22-Feb-2024
14:57
linh
pham



BEFORE
MASS
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AREA
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HEIGHT
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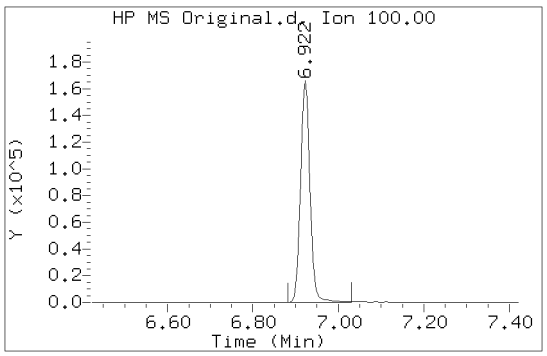
22-Feb-2024
14:57
linh
pham



AFTER
MASS
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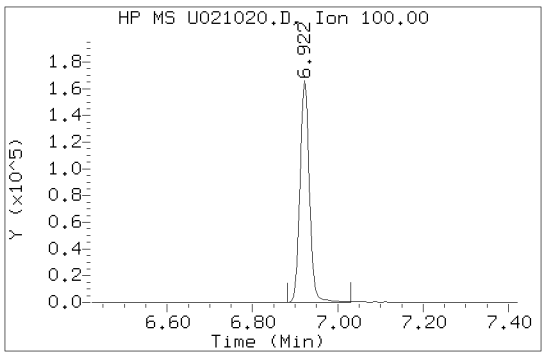
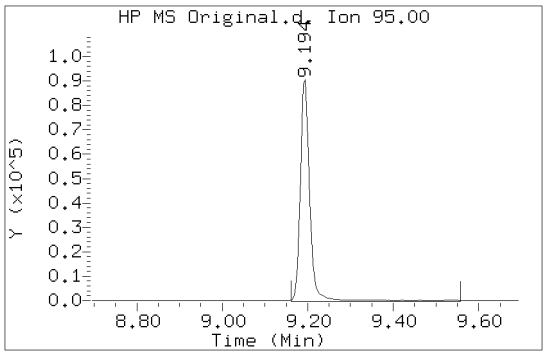
AREA
259596
HEIGHT
165957
22-Feb-2024
14:57
linh
pham



4-Bromofluorobenzene (460-00-4)

Reason Code:

BEFORE
MASS
95
AREA
144820
HEIGHT
90854
22-Feb-2024
14:57
linh
pham



AFTER
MASS
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AREA
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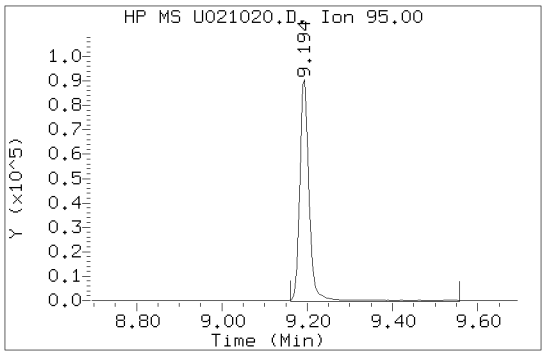
HEIGHT
90854
22-Feb-2024
14:57
linh
pham



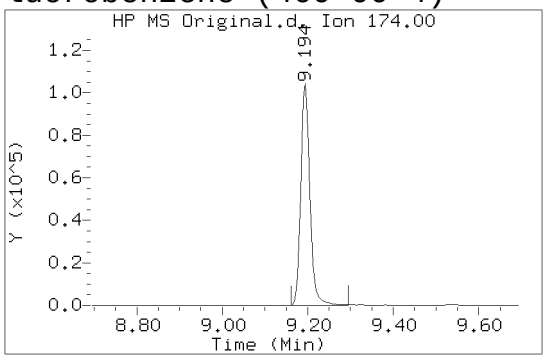
Data File : \\NAHSTWS005\Target\chem\voa9.i\U240210.b\U021020.D
Inj Date : 10-FEB-2024 08:11
InstruID : VOA9.i
LabSampID : HS24020246-05

4-Bromofluorobenzene (460-00-4)

Reason Code:

BEFORE

MASS
174
AREA
156411
HEIGHT
104177
22-Feb-2024
14:57
linh
pham



AFTER

MASS
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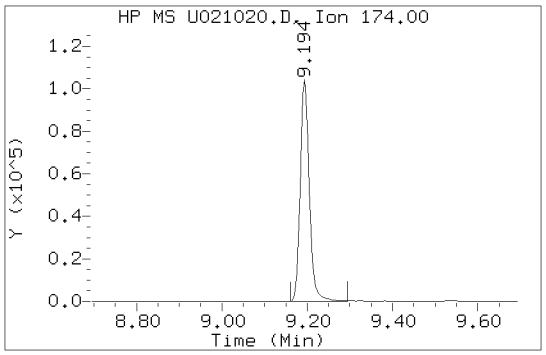
AREA
156411
HEIGHT
104177
22-Feb-2024
14:57
linh
pham



BEFORE

MASS
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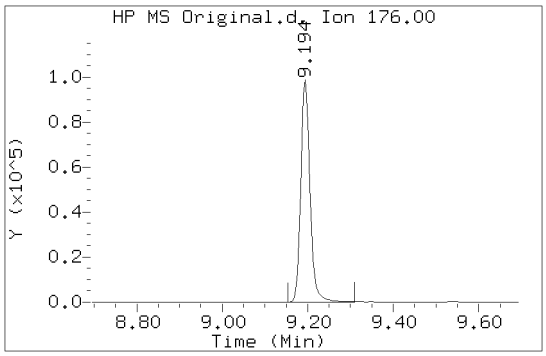
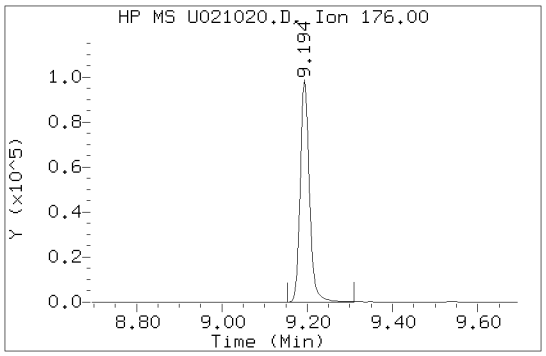
AREA
151617
HEIGHT
98720
22-Feb-2024
14:57
linh
pham



AFTER

MASS
176
AREA
151617
HEIGHT
98720
22-Feb-2024
14:57
linh
pham



Data File: \\NAHSTWS005\Target\chem\voa9.i\U240210.b\U021021.D Page 1
Report Date: 22-Feb-2024 14:58

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240210.b\U021021.D
Lab Smp Id: HS24020246-08
Inj Date : 10-FEB-2024 08:34
Operator : FT   Inst ID: VOA9.i
Smp Info : HS24020246-08
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240210.b\8260C.m
Meth Date : 22-Feb-2024 14:57 VOA9.i   Quant Type: ISTD
Cal Date : 09-FEB-2024 12:42   Cal File: U020911.D
Als bottle: 60
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: 000bhatedod+.sub
Target Version: 4.14
Processing Host: NAHSTW7056

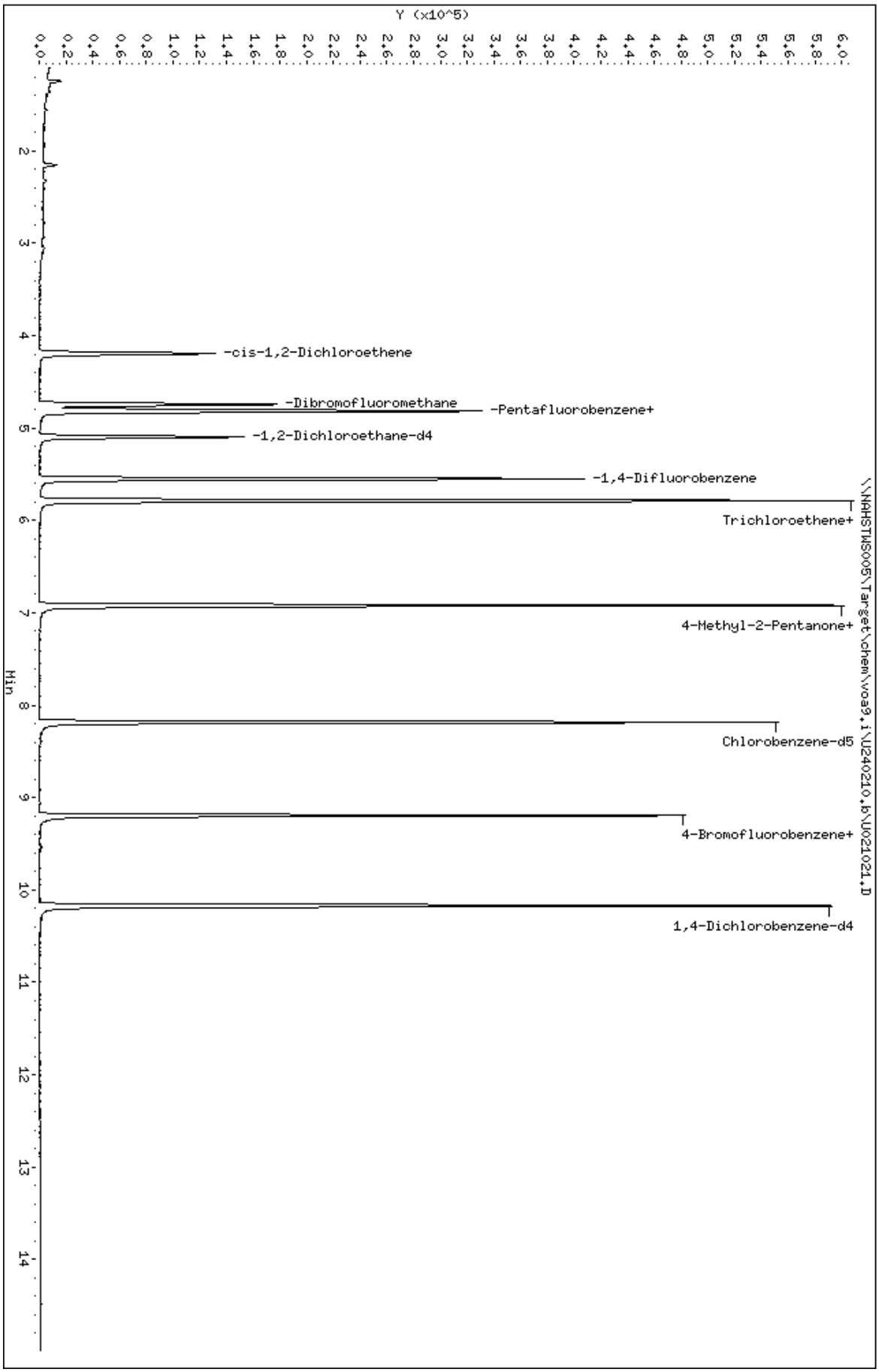
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.815	4.819	(1.000)	258907	50.0000	
$ 30 Dibromofluoromethane	113	4.744	4.748	(0.985)	108035	40.3418	40.34(M)
$ 35 1,2-Dichloroethane-d4	65	5.093	5.096	(1.058)	110233	41.0591	41.05(M)
* 36 1,4-Difluorobenzene	114	5.550	5.554	(1.000)	345506	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	324858	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	399882	45.1628	45.16(M)
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	141368	43.1874	43.18
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	180139	50.0000	
27 cis-1,2-Dichloroethene	96	4.193	4.197	(0.871)	71376	25.0195	25.01
38 Trichloroethene	130	5.786	5.790	(1.043)	214460	78.7225	78.72

QC Flag Legend

M - Compound response manually integrated.



Data File: \\NAHSTWS005\Target\chem\voa9,i\U240210,b\U021021,D
Date : 10-FEB-2024 08:34
Client ID:
Sample Info: HS24020246-08
Purge Volume: 5.0
Column phase: DB624

Instrument: VOA9,i
Operator: FT
Column diameter: 0.18

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240210.b\U021021.D Page 2

Date : 10-FEB-2024 08:34

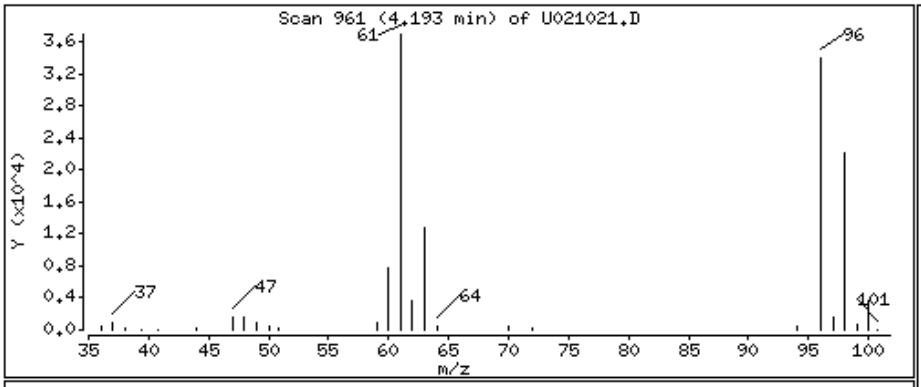
Client ID: Instrument: VOA9.i

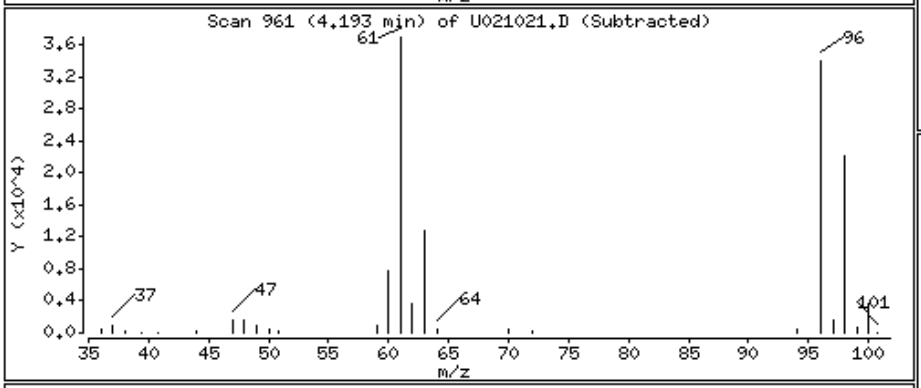
Sample Info: HS24020246-08

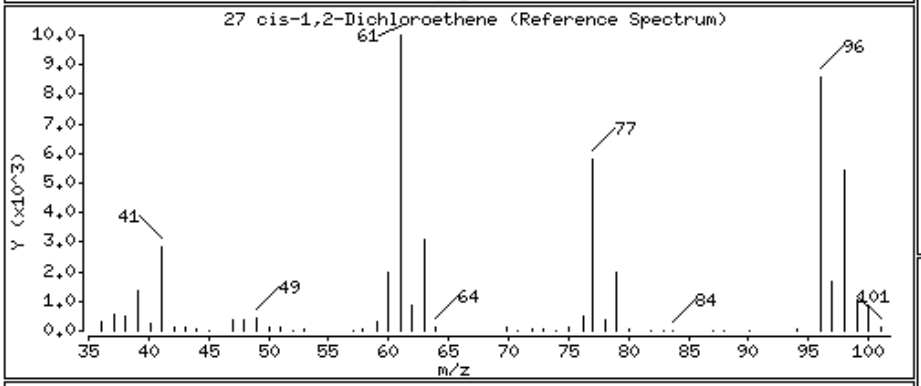
Purge Volume: 5.0 Operator: FT

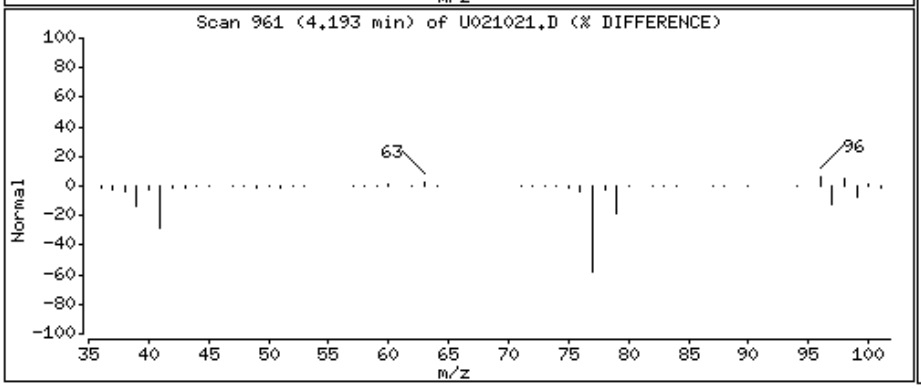
Column phase: DB624 Column diameter: 0.18

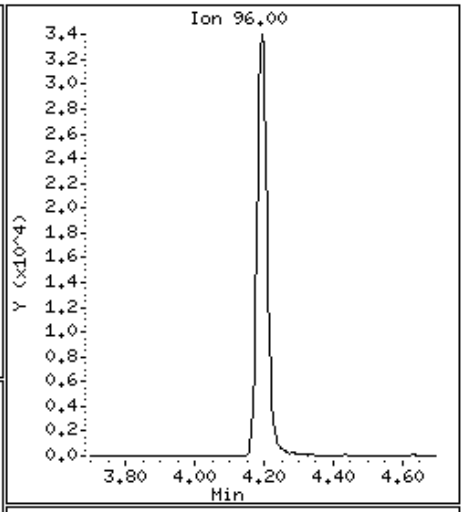
27 cis-1,2-Dichloroethene Concentration: 25.01 ug/l

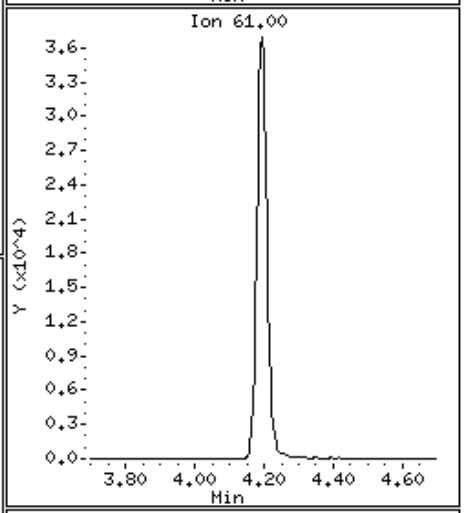


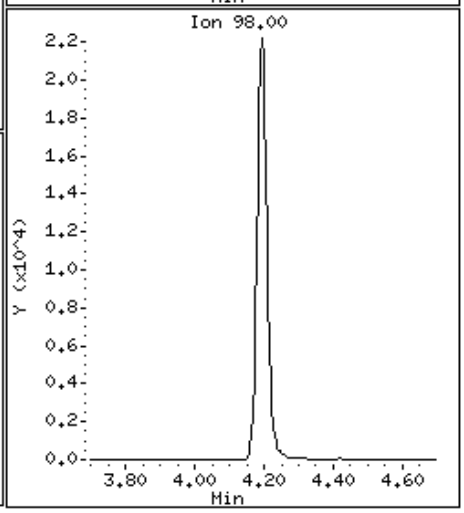












Data File: \\NAHSTWS005\Target\chem\voa9.i\U240210.b\U021021.D Page 3

Date : 10-FEB-2024 08:34

Client ID: Instrument: VOA9.i

Sample Info: HS24020246-08

Purge Volume: 5.0 Operator: FT

Column phase: DB624 Column diameter: 0.18

38 Trichloroethene Concentration: 78.72 ug/l