LONGHORN ARMY AMMUNITION PLANT KARNACK, TEXAS

ADMINISTRATIVE RECORD

Volume 20

2025

Bate Stamp Numbers
01325263 – 01327210

Prepared for

Department of the Army
Longhorn Army Ammunition Plant

1976–2025

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

VOLUME 20

2025

A. Title: (Cont'd) Report – Level IV DoD File No. 2 to Final Fourth Annual Remedial Action Operation Report, LHAAP-16 Landfill, Longhorn Army Ammunition Plant (LHAAP), Karnack, Texas, March 2025
Author(s): Department of the Army
Recipient: Environmental Protection Agency and Texas Commission on Environmental Quality
Date: March 19, 2025
Bate Stamp: 01325263–01325680

B. 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: 01325681–01327210

Form 3B - Laboratory Control Sample Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24010538

Dissolved Gasses by Dissolved Gases by RSK-175

SAMPLENUM LCS-240115

FID-4_456717			LCS-240115			LCSD-240115					
Spike Matrix Aqueous		Result Units mg/L	Run Date 01/15/24 Run Time 08:55			Run Date 01/15/24 Run Time 09:05					
Analyte	%Recovery Limits	Spike Added	LCS Result	%R	Q	LCSD Result	%R	Q	RPD Limit	RPD	Q
Ethane	75-125	0.01804	0.0205	114		0.0172	95		30	17.7	
Ethene	75-125	0.0168	0.0154	92		0.0144	86		30	6.62	
Methane	75-125	0.009647	0.0110	114		0.0100	104		30	9.49	

right solutions.
right partner.

Form 4

Method Blank Summary

Dissolved Gasses by Dissolved Gases by RSK-175

Workorder

HS24010538

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/29/2024

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

Form 4 - Method Blank Summary

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Workorder: HS24010538

Dissolved Gasses by Dissolved Gases by RSK-175

METHOD BLANK	Matrix	Analysis Date	Analysis Batch	Inst ID
MBLK-240115	Aqueous	01/15/24 08:45	R456717	FID4

Client Sample ID	Lab Sample ID	Type	Analysis Date	Analysis Batch	Inst ID	FileID
LCS-240115	LCS-240115	LCS	01/15/24 08:55	R456717	FID4	003.D
LCSD-240115	LCSD-240115	LCSD	01/15/24 09:05	R456717	FID4	004.D
BatchQC	HS24010611-01MS	MS	01/15/24 09:29	R456717	FID4	006.D
BatchQC	HS24010611-01MSD	MSD	01/15/24 09:38	R456717	FID4	007.D
BatchQC	HS24010611-02MS	MS	01/15/24 09:56	R456717	FID4	009.D
BatchQC	HS24010611-02MSD	MSD	01/15/24 10:04	R456717	FID4	010.D
16WW57_240110	HS24010538-02	SAMP	01/15/24 11:35	R456717	FID4	016.D
16WW58_240110	HS24010538-01	SAMP	01/15/24 11:44	R456717	FID4	017.D
16IW09_240110	HS24010538-03	SAMP	01/15/24 12:04	R456717	FID4	018.D
16IW26_240110	HS24010538-04	SAMP	01/15/24 12:13	R456717	FID4	019.D
16IW03_240110	HS24010538-08	SAMP	01/15/24 12:25	R456717	FID4	020.D
16IW03_240110-FD	HS24010538-09	SAMP	01/15/24 12:33	R456717	FID4	021.D
16IW09_240110	HS24010538-03	SAMP	01/15/24 13:39	R456717	FID4	023.D
16IW26_240110	HS24010538-04	SAMP	01/15/24 14:11	R456717	FID4	024.D
16IW03_240110	HS24010538-08	SAMP	01/15/24 14:19	R456717	FID4	025.D
16IW03_240110-FD	HS24010538-09	SAMP	01/15/24 14:27	R456717	FID4	026.D
BatchQC	HS24010611-02MS	MS	01/18/24 15:11	R456717	FID4	006.D
BatchQC	HS24010611-02MSD	MSD	01/18/24 15:19	R456717	FID4	007.D

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Form 6

Initial Calibration Data

Dissolved Gasses by Dissolved Gases by RSK-175

Workorder

HS24010538

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/29/2024

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

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

right solutions.
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Form 6I

Initial Calibration Verification (ICV)

Dissolved Gasses by Dissolved Gases by RSK-175

Workorder

HS24010538

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/29/2024

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

Form 6I Initial Calibration Verification (ICV)

Client	Bhate Environmental Associates, Inc.	**Workorder**	
Project	LHAAP Site 16	**HS24010538**	

Dissolved Gasses by Dissolved Gases by RSK-175

RunID **008.D**

Sample Matrix	LIQUID	**Fraction**	GASES
Lab Smp Id	ICV	**Client Smp ID**	ICV
Data Type	GC DATA	**SampleType**	METHSPIKE
File ID	008.D	**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

HS24010538

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/29/2024

ALS Environmental–Houston Laboratory
10450 Stancliff Road, Suite 210, Houston, TX 77099
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www.alsglobal.com

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010538

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 15-JAN-2024 0819
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	1082	1082	0.010	-10.985	20.0	Averaged	
Ethene	586	570	570	0.010	2.69	20.0	Averaged	
Ethane	719	842	842	0.010	-17.072	20.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010538

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 15-JAN-2024 1012
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	1089	1089	0.010	-11.687	20.0	Averaged	
Ethene	586	476	476	0.010	18.8	20.0	Averaged	
Ethane	719	653	653	0.010	9.23	20.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010538

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 15-JAN-2024 1012
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	1089	1089	0.010	-11.687	20.0	Averaged	
Ethene	586	476	476	0.010	18.8	20.0	Averaged	
Ethane	719	653	653	0.010	9.23	20.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010538

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 15-JAN-2024 1242
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	802	802	0.010	17.8	20.0	Averaged	
Ethene	586	475	475	0.010	18.9	20.0	Averaged	
Ethane	719	661	661	0.010	8.09	20.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010538

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 15-JAN-2024 1435
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	824	824	0.010	15.5	20.0	Averaged	
Ethene	586	562	562	0.010	4.11	20.0	Averaged	
Ethane	719	800	800	0.010	-11.202	20.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010538

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 18-JAN-2024 1341
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	848	848	0.010	13.1	20.0	Averaged	
Ethene	586	519	519	0.010	11.5	20.0	Averaged	
Ethane	719	754	754	0.010	-4.739	20.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010538

RunID 009.D

Dissolved Gasses by Dissolved Gases by RSK-175

Instrument ID FID-4.i
Lab File ID 009.D
Analysis Type WATER
Lab Sample ID RSK-CCV

Injection Date 18-JAN-2024 1545
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	846	846	0.010	13.2	20.0	Averaged	
Ethene	586	524	524	0.010	10.5	20.0	Averaged	
Ethane	719	783	783	0.010	-8.791	20.0	Averaged	

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Analysis Run Log

Dissolved Gasses by Dissolved Gases by RSK-175

Workorder

HS24010538

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/29/2024

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

Form 13 - Analysis Run Log

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder **HS24010538**

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 HS24010538

Dissolved Gasses by Dissolved Gases by RSK-175

RUNID FID-4-456717

Run ID FID-4_456717 **Start Date** 01/15/24 **EndDate** 01/18/24

Inj. Time	Client Sample ID	Type	Lab Sample ID	File ID	Analysis Date	DF
08:19	RSK-CCV	CCV	RSK-CCV	001.D	01/15/24	1
08:45	MBLK-240115	MBLK	MBLK-240115	002.D	01/15/24	1
08:55	LCS-240115	LCS	LCS-240115	003.D	01/15/24	1
09:05	LCSD-240115	LCSD	LCSD-240115	004.D	01/15/24	1
09:20	HS24010611-01	SAMP	ZZZZZZZZZZ	005.D	01/15/24	1
09:29	HS24010611-01MS	MS	ZZZZZZMS	006.D	01/15/24	1
09:38	HS24010611-01MSD	MSD	ZZZZZZMSD	007.D	01/15/24	1
09:46	HS24010611-02	SAMP	ZZZZZZZZZZ	008.D	01/15/24	1
09:56	HS24010611-02MS	MS	ZZZZZZMS	009.D	01/15/24	1
10:04	HS24010611-02MSD	MSD	ZZZZZZMSD	010.D	01/15/24	1
10:12	RSK-CCV	CCV	RSK-CCV	011.D	01/15/24	1
10:30	HS24010611-03	SAMP	ZZZZZZZZZZ	012.D	01/15/24	1
10:39	HS24010611-01	SAMP	ZZZZZZZZZZ	013.D	01/15/24	100
11:07	HS24010611-03	SAMP	ZZZZZZZZZZ	015.D	01/15/24	200
11:35	HS24010538-02	SAMP	16WW57_240110	016.D	01/15/24	1
11:44	HS24010538-01	SAMP	16WW58_240110	017.D	01/15/24	1
12:04	HS24010538-03	SAMP	16IW09_240110	018.D	01/15/24	1
12:13	HS24010538-04	SAMP	16IW26_240110	019.D	01/15/24	1
12:25	HS24010538-08	SAMP	16IW03_240110	020.D	01/15/24	1
12:33	HS24010538-09	SAMP	16IW03_240110-FD	021.D	01/15/24	1
12:42	RSK-CCV	CCV	RSK-CCV	022.D	01/15/24	1
13:39	HS24010538-03	SAMP	16IW09_240110	023.D	01/15/24	500
14:11	HS24010538-04	SAMP	16IW26_240110	024.D	01/15/24	200
14:19	HS24010538-08	SAMP	16IW03_240110	025.D	01/15/24	200
14:27	HS24010538-09	SAMP	16IW03_240110-FD	026.D	01/15/24	200
14:35	RSK-CCV	CCV	RSK-CCV	027.D	01/15/24	1
13:41	RSK-CCV	CCV	RSK-CCV	001.D	01/18/24	1
15:11	HS24010611-02MS	MS	ZZZZZZMS	006.D	01/18/24	50
15:19	HS24010611-02MSD	MSD	ZZZZZZMSD	007.D	01/18/24	50
15:33	HS24010611-02	SAMP	ZZZZZZZZZZ	008.D	01/18/24	50
15:45	RSK-CCV	CCV	RSK-CCV	009.D	01/18/24	1

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RawData

Dissolved Gasses by Dissolved Gases by RSK-175

Workorder

HS24010538

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/29/2024

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

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

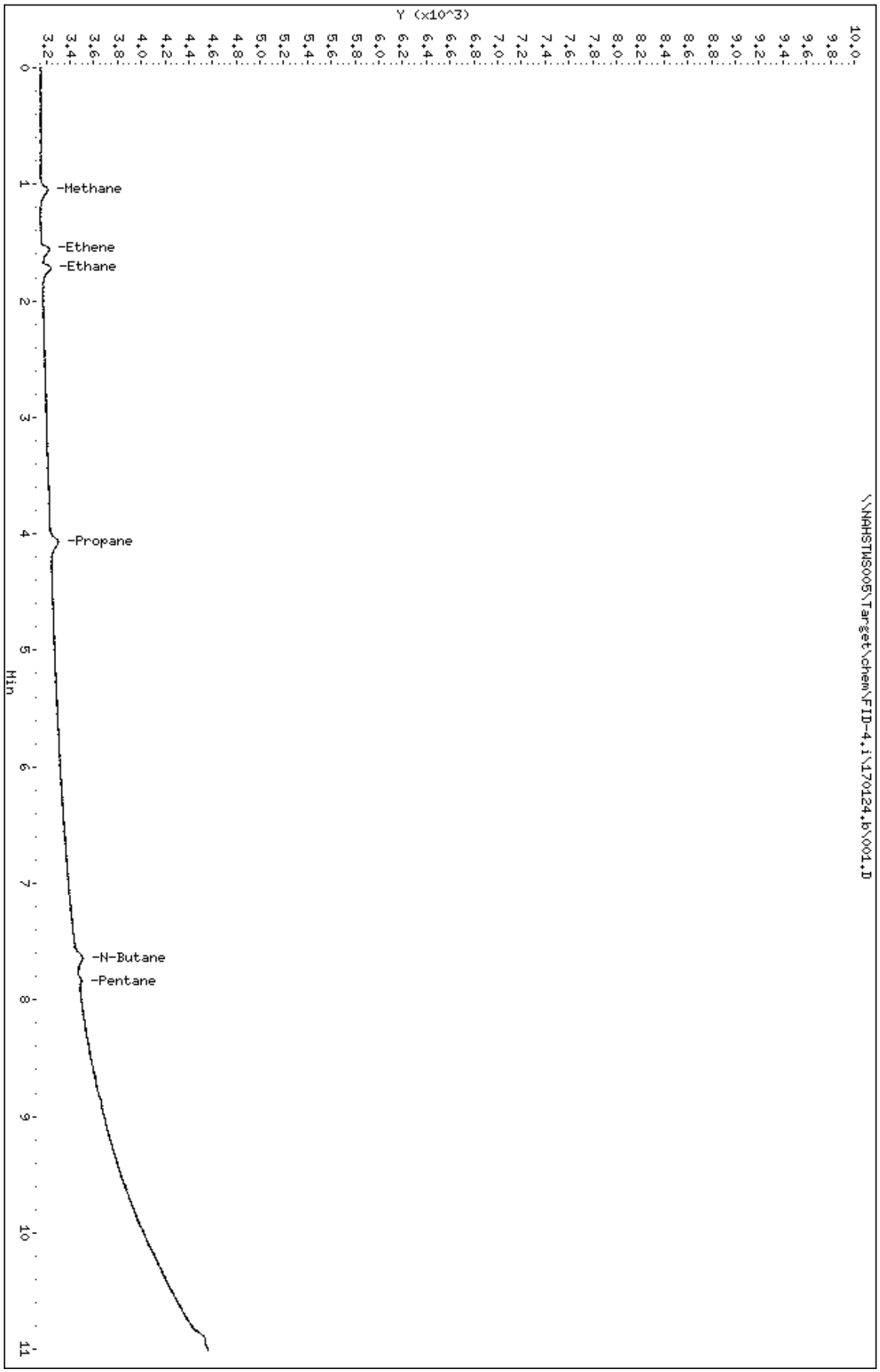
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Methane	1.043	1.043	0.000	374	0.38600	0.383(a)
2 Ethene	1.553	1.553	0.000	361	0.67400	0.615(a)
3 Ethane	1.716	1.716	0.000	435	0.72200	0.590(a)
4 Propane	4.073	4.073	0.000	500	1.05900	1.743
5 N-Butane	7.640	7.640	0.000	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
Sample Info: ICAL1;ICAL1;;;
Column phase: Rtx-PLOT

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



Data File : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\001.D
Inj Date : 24-JAN-2017 09:06
InstruID : FID-4.i
LabSampID : ICAL1

NO MANUAL INTEGRATIONS

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\002.D
Lab Smp Id: ICAL2 Client Smp ID: ICAL2
Inj Date : 24-JAN-2017 09:30
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL2;ICAL2;;;
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Meth Date : 28-Sep-2022 10:00 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 09:06 Cal File: 001.D
Als bottle: 2 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Methane	1.023	1.023	0.000	944	0.96500	0.968
2 Ethene	1.560	1.560	0.000	956	1.68500	1.630
3 Ethane	1.723	1.723	0.000	1209	1.80400	1.641
4 Propane	4.123	4.123	0.000	1279	2.64600	2.927
5 N-Butane	7.716	7.716	0.000	936	3.49600	4.180

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\002.D

Date : 24-JAN-2017 09:30

Client ID: ICAL2

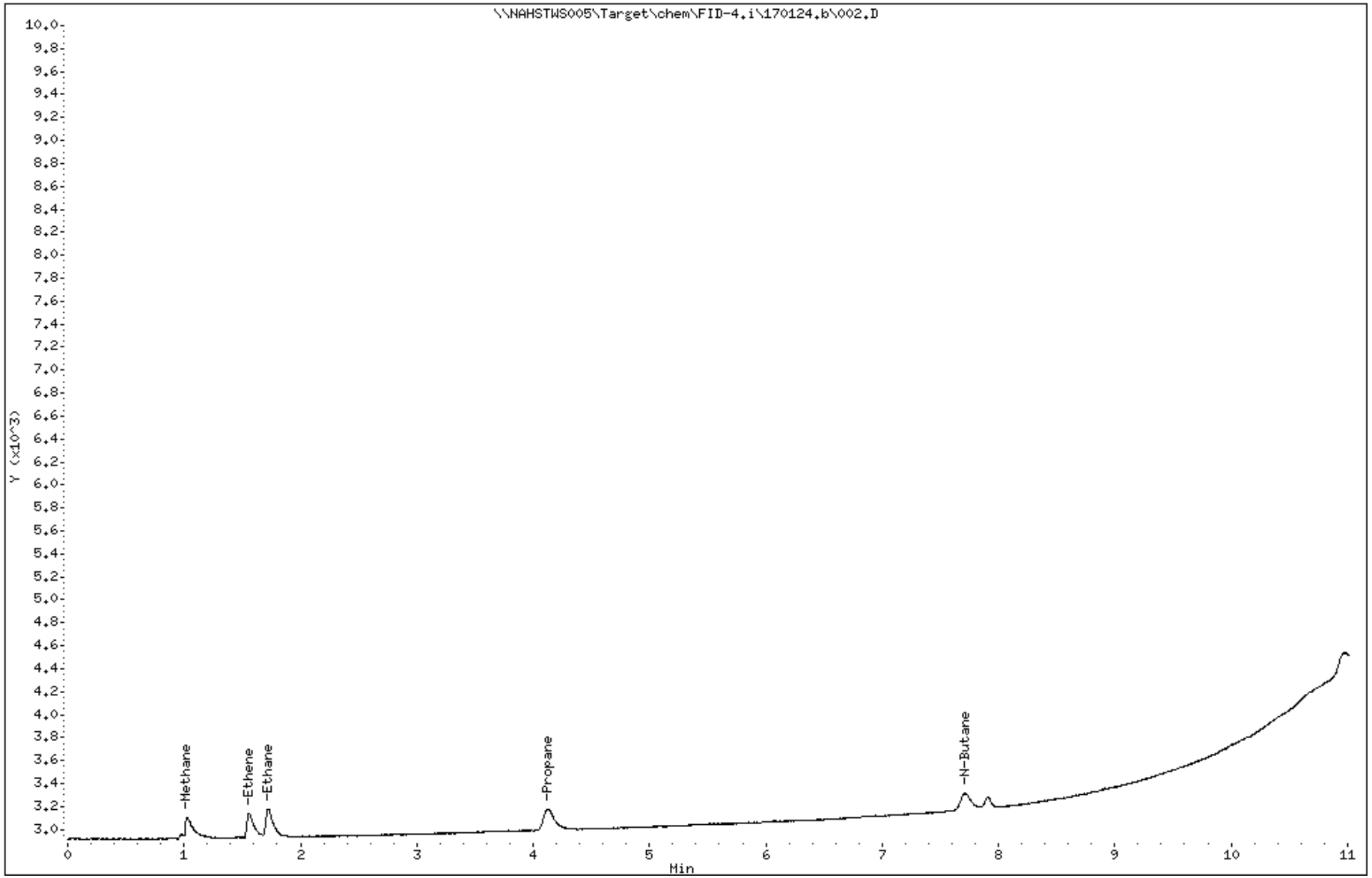
Instrument: FID-4.i

Sample Info: ICAL2;ICAL2;;;

Operator: MA

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\002.D
Inj Date : 24-JAN-2017 09:30
InstruID : FID-4.i
LabSampID : ICAL2

NO MANUAL INTEGRATIONS

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\003.D
Lab Smp Id: ICAL3 Client Smp ID: ICAL3
Inj Date : 24-JAN-2017 09:59
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL3;ICAL3;;;
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Meth Date : 28-Sep-2022 10:00 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 09:30 Cal File: 002.D
Als bottle: 3 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Methane	1.043	1.043	0.000	1967	1.92900	2.018
2 Ethene	1.570	1.570	0.000	1904	3.37000	3.247
3 Ethane	1.736	1.736	0.000	2378	3.60900	3.229
4 Propane	4.123	4.123	0.000	2602	5.29300	4.926
5 N-Butane	7.703	7.703	0.000	2034	6.99100	6.176

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\003.D

Date : 24-JAN-2017 09:59

Client ID: ICAL3

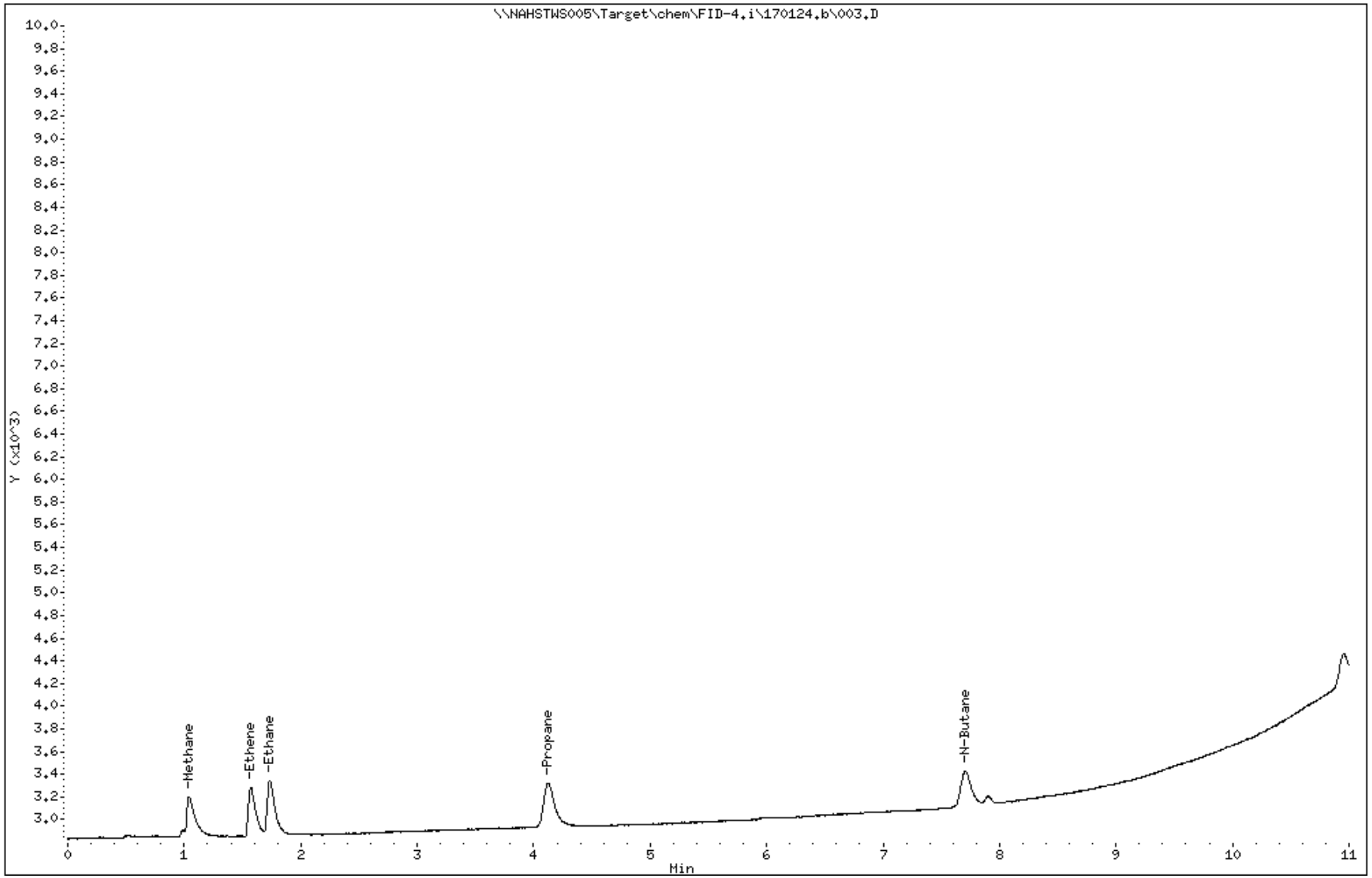
Instrument: FID-4.i

Sample Info: ICAL3;ICAL3;;;

Operator: MA

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\003.D
Inj Date : 24-JAN-2017 09:59
InstruID : FID-4.i
LabSampID : ICAL3

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\004.D Page 1
Report Date: 28-Sep-2022 10:02

ALS Laboratory Group

Dissolved Gases Analysis

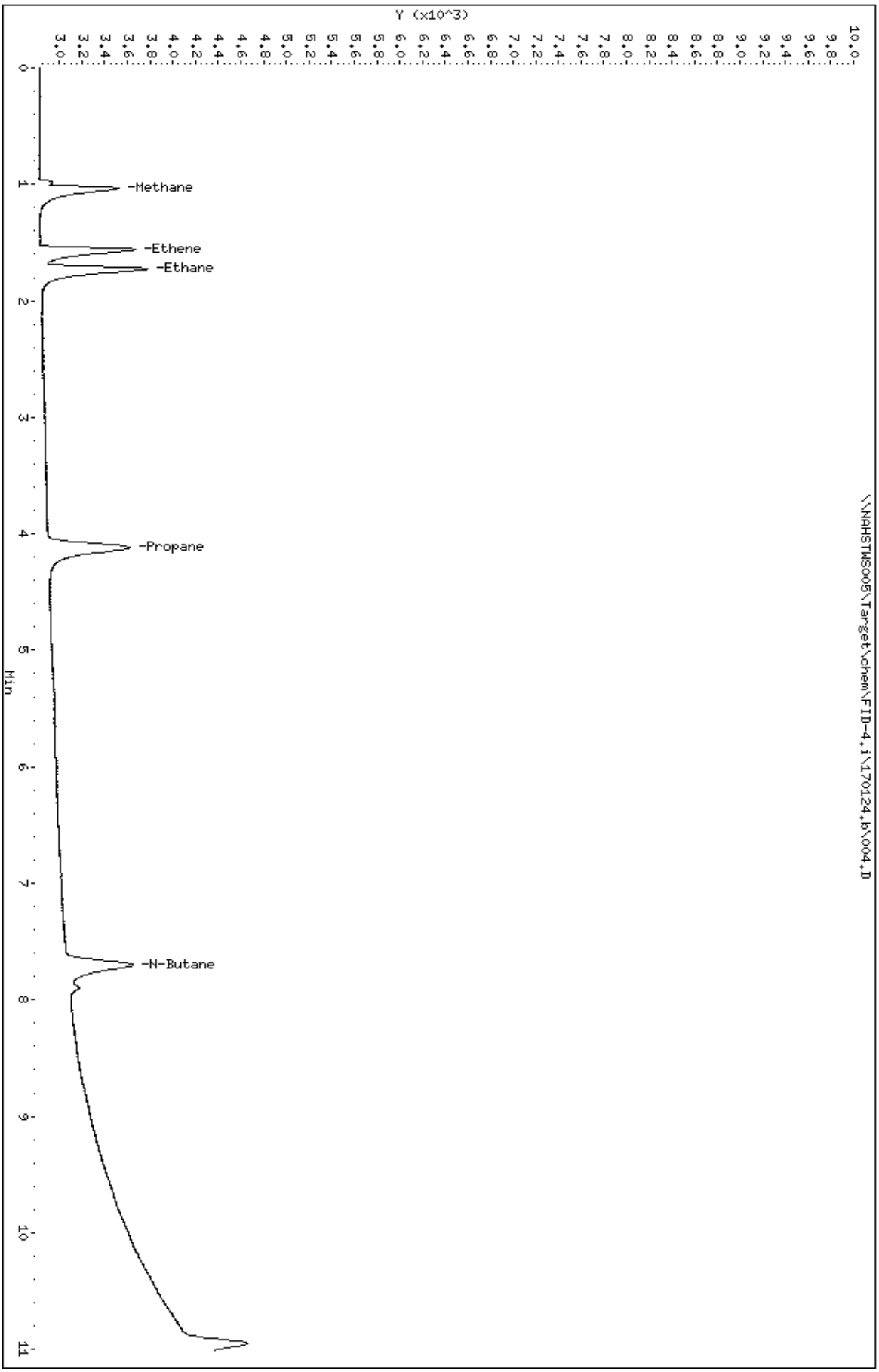
Data file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\004.D
Lab Smp Id: ICAL4 Client Smp ID: ICAL4
Inj Date : 24-JAN-2017 10:15
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL4;ICAL4;;;
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Meth Date : 28-Sep-2022 10:02 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 11:13 Cal File: 007.D
Als bottle: 4 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Methane	1.033	1.033	0.000	3399	3.85900	3.488
2 Ethene	1.563	1.563	0.000	3478	6.74000	5.932
3 Ethane	1.726	1.726	0.000	4310	7.21700	5.853
4 Propane	4.120	4.120	0.000	4785	10.5850	8.190
5 N-Butane	7.703	7.703	0.000	3864	13.9820	9.473(M)

QC Flag Legend

M - Compound response manually integrated.


Data File: \\NAHSTWS005\Target\chem\FID-4,i\170124,b\004,D
Date : 24-JAN-2017 10:15
Client ID: ICAL4
Sample Info: ICAL4;ICAL4;;;
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\004,D

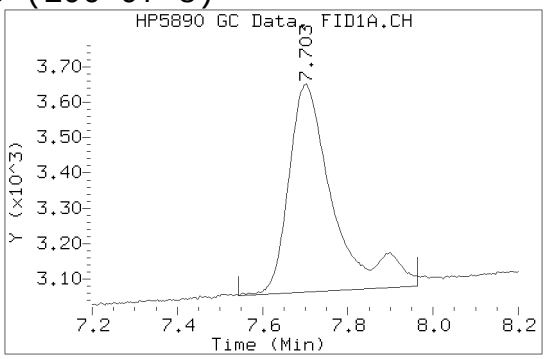
Data File : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\004.D
Inj Date : 24-JAN-2017 10:15
InstruID : FID-4.i
LabSampID : ICAL4

N-Butane (106-97-8)

Reason Code:

BEFORE

MASS
100
AREA
4292
HEIGHT
591
28-Sep-2022
10:02
linh
pham



AFTER

MASS
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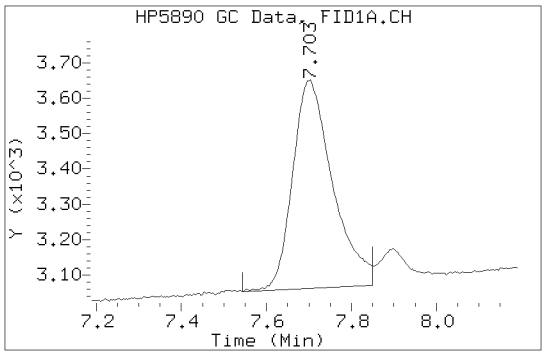
AREA
3864
HEIGHT
591
28-Sep-2022
10:02
linh
pham



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

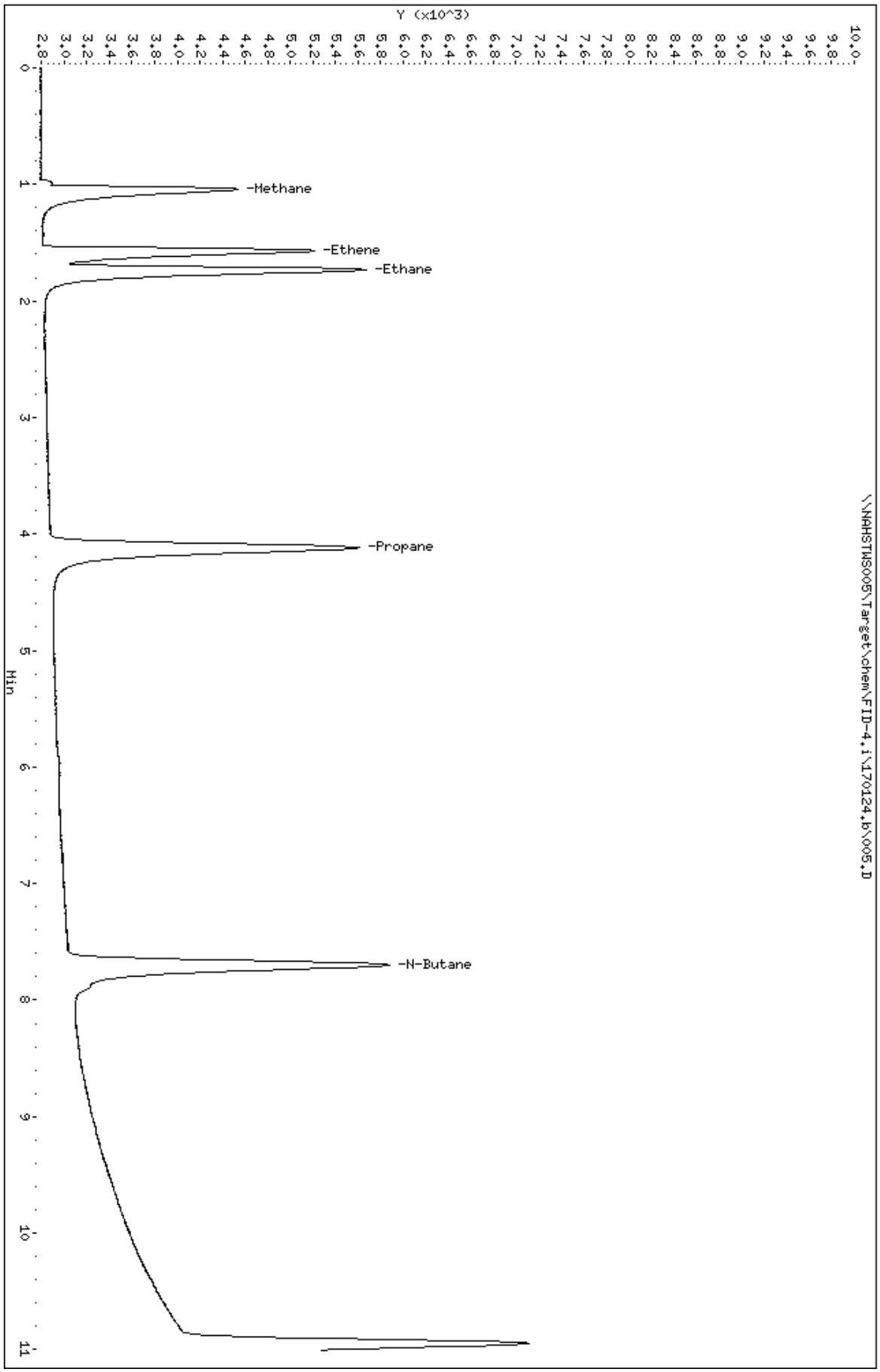
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Methane	1.043	1.043	0.000	9268	9.64700	9.511
2 Ethene	1.570	1.570	0.000	11210	16.8500	19.121
3 Ethane	1.733	1.733	0.000	14588	18.0430	19.811
4 Propane	4.120	4.120	0.000	18294	26.4630	27.415
5 N-Butane	7.700	7.700	0.000	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



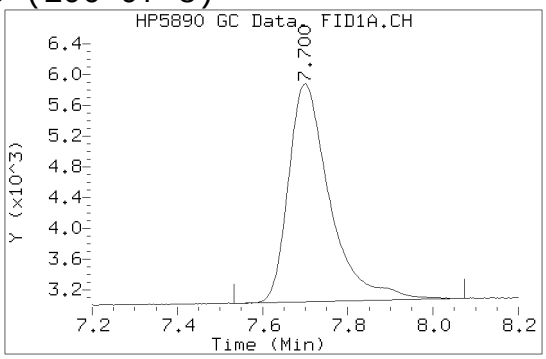
Data File : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\005.D
Inj Date : 24-JAN-2017 10:39
InstruID : FID-4.i
LabSampID : ICAL5

N-Butane (106-97-8)

Reason Code:

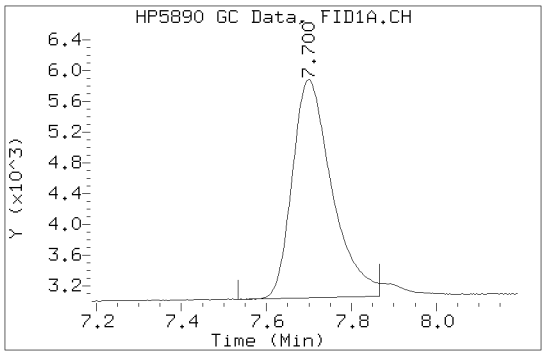
BEFORE

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

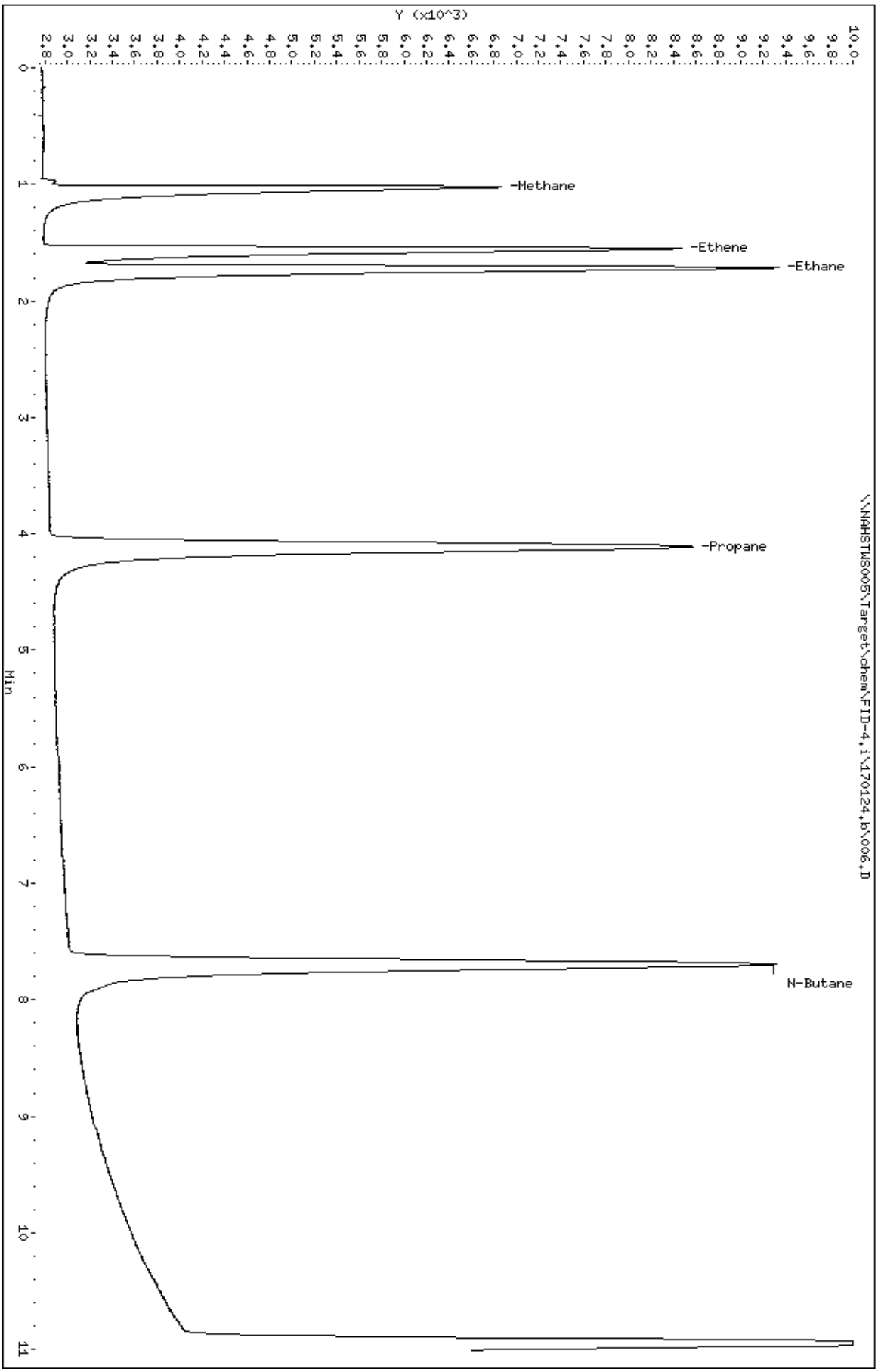
Data file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\006.D
Lab Smp Id: ICAL6 Client Smp ID: ICAL6
Inj Date : 24-JAN-2017 10:57
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL6;ICAL6;;;
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Meth Date : 28-Sep-2022 10:00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

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

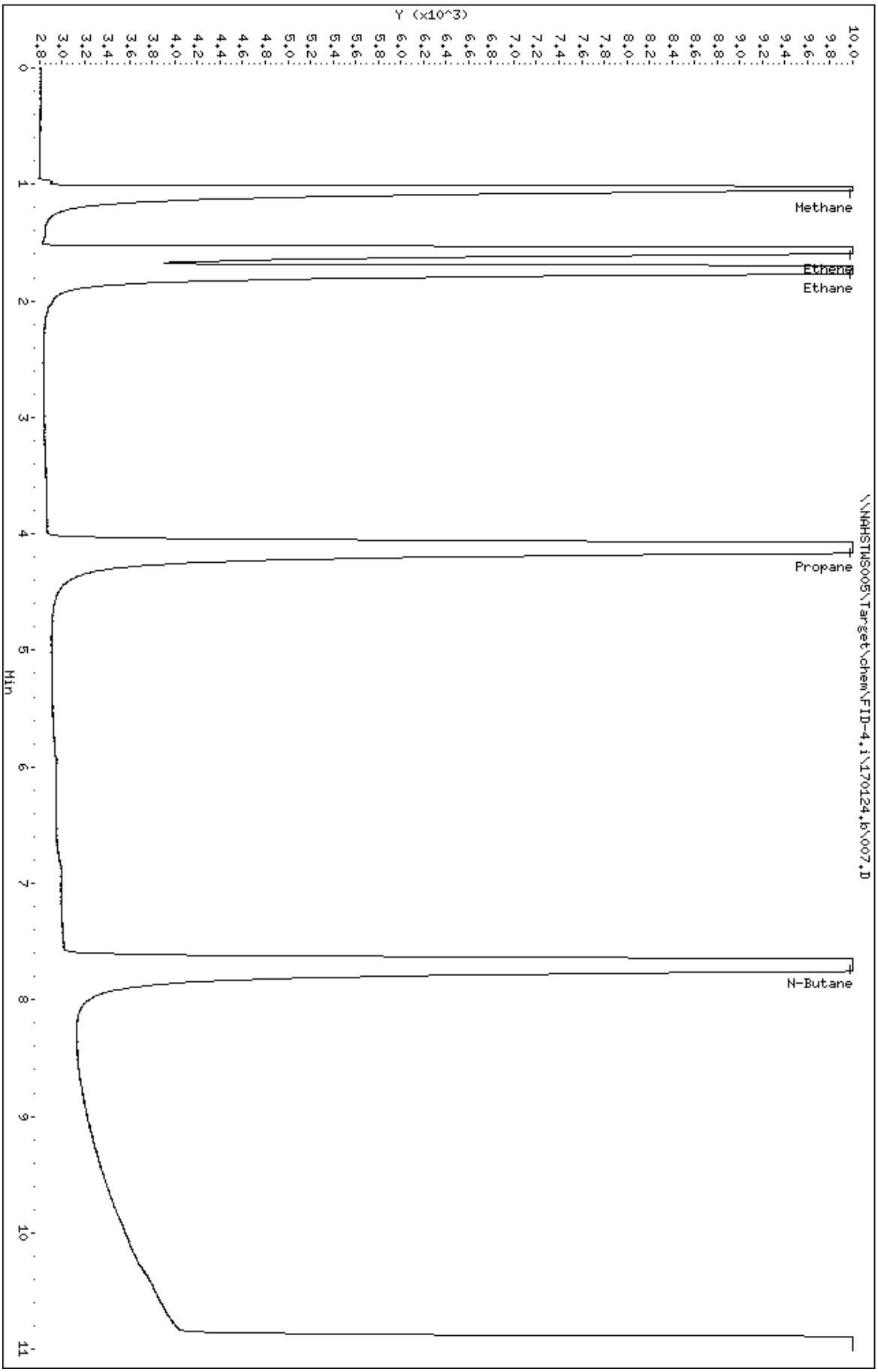
Data file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\007.D
Lab Smp Id: ICAL7 Client Smp ID: ICAL7
Inj Date : 24-JAN-2017 11:13
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL7;ICAL7;;;
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Meth Date : 28-Sep-2022 10:00 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)	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

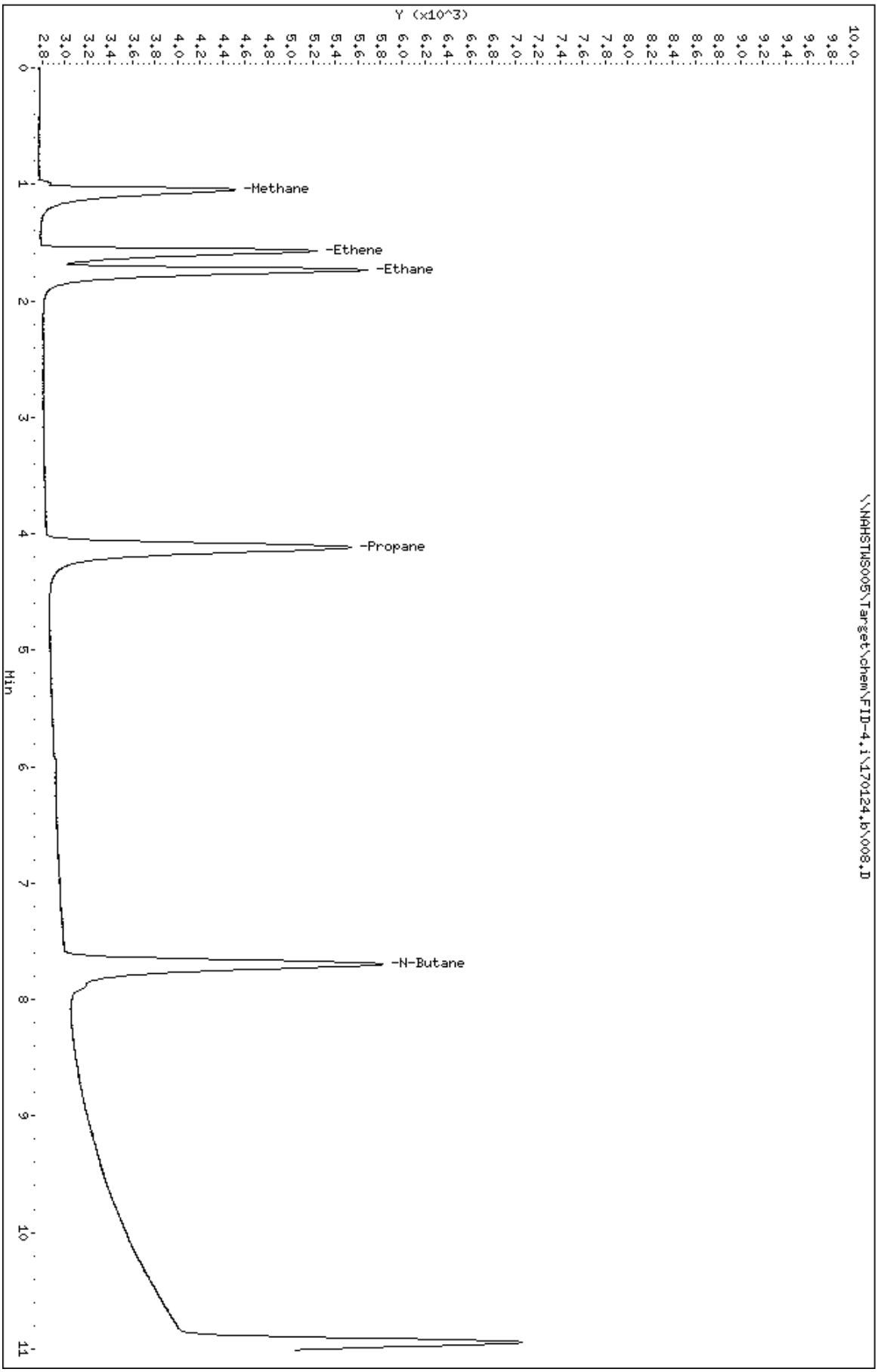
Data file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\008.D
Lab Smp Id: ICV Client Smp ID: ICV
Inj Date : 24-JAN-2017 12:05
Operator : MA Inst ID: FID-4.i
Smp Info : ICV;ICV;;;
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Meth Date : 28-Sep-2022 10:00 FID-4.i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

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

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

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



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

NO MANUAL INTEGRATIONS

right solutions.
right partner.

RawData

Dissolved Gasses by Dissolved Gases by RSK-175

Workorder

HS24010538

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/29/2024

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

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\001.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 15-JAN-2024 08:19
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\240115.b\RSKNI3.m
Meth Date : 15-Jan-2024 14:43 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: 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	10439	9.64700	10.706
2 Ethene	0.636	0.636	0.000	9605	16.8500	16.397(M)
3 Ethane	0.696	0.696	0.000	15198	18.0430	21.123(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240115.b\001.D

Page 1

Date : 15-JAN-2024 08:19

Client ID: RSK-CCV

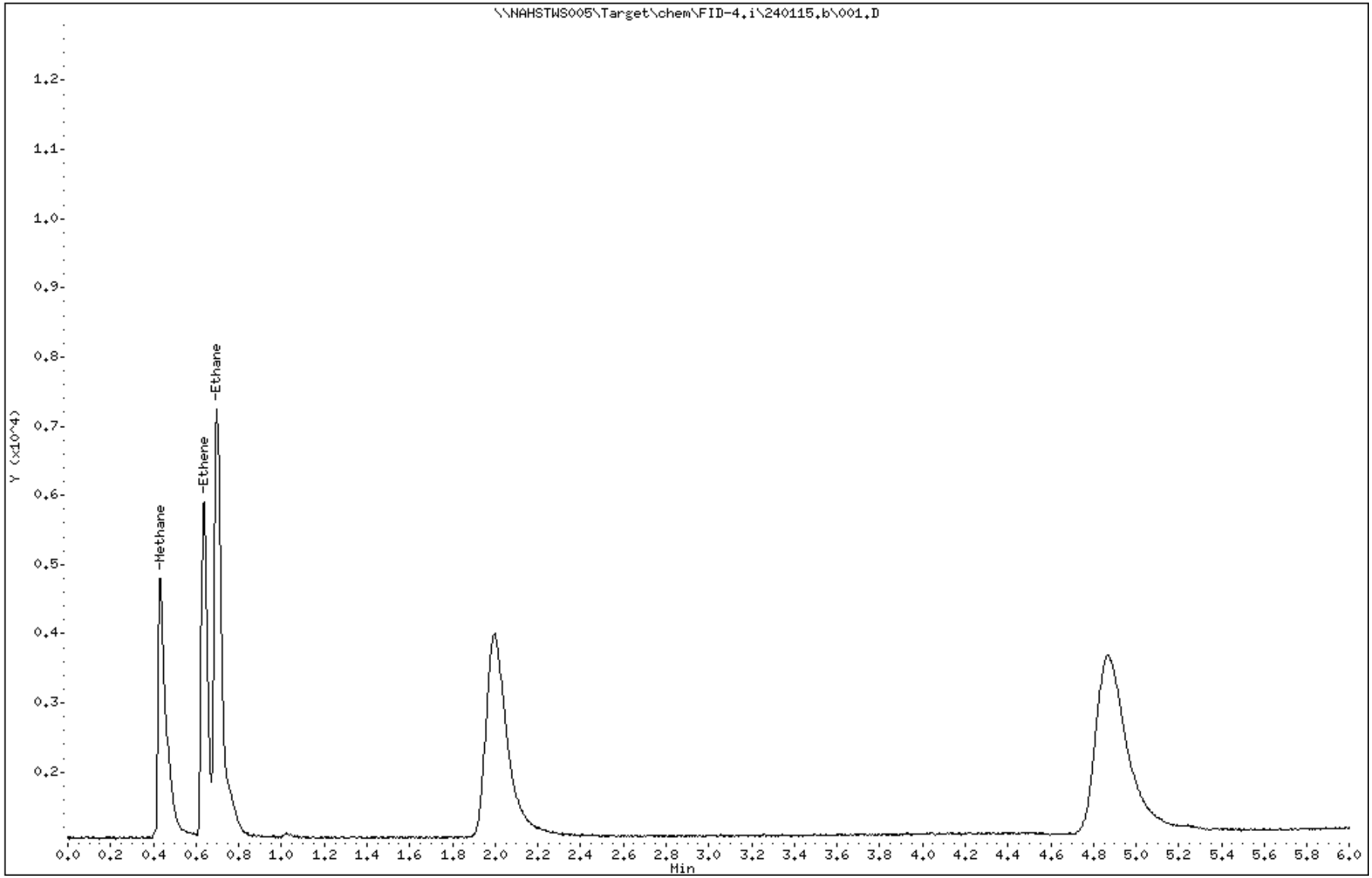
Instrument: FID-4.i

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

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



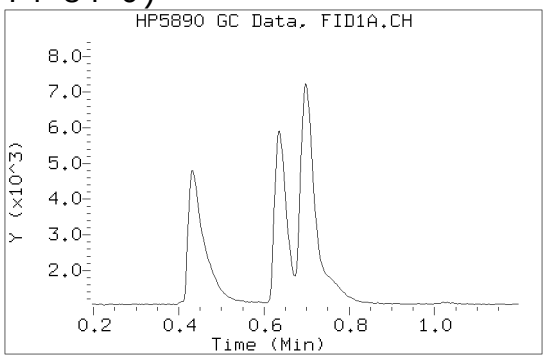
Data File : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\001.D
Inj Date : 15-JAN-2024 08:19
InstruID : FID-4.i
LabSampID : RSK-CCV

Ethane (74-84-0)

Reason Code:

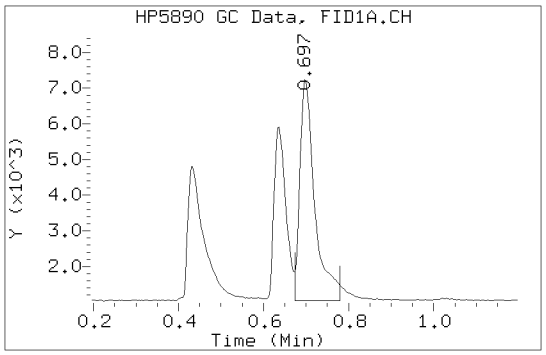
BEFORE

MASS
44
AREA
0
HEIGHT
0
15-Jan-2024
08:26
ALSHS
Server



AFTER

MASS
44
AREA
15198
HEIGHT
6193
19-Jan-2024
07:51
ALSHS
Server

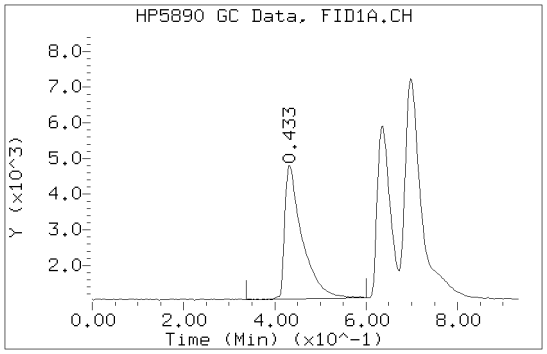


Ethene (74-85-1)

Reason Code:

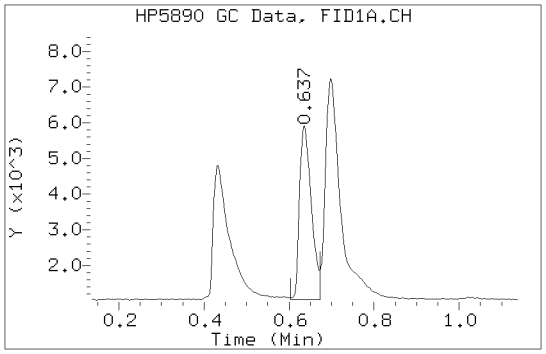
BEFORE

MASS
100
AREA
121
HEIGHT
31
15-Jan-2024
08:26
ALSHS
Server



AFTER

MASS
100
AREA
9605
HEIGHT
4863
19-Jan-2024
07:51
ALSHS
Server



Data File: \\NAHSTWS005\Target\chem\FID-4.i\240115.b\002.D Page 1
Report Date: 19-Jan-2024 07:52

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\002.D
Lab Smp Id: MBLK-240115 Client Smp ID: MBLK-240115
Inj Date : 15-JAN-2024 08:45
Operator : PL Inst ID: FID-4.i
Smp Info : MBLK-240115;MBLK-240115;3;;BLANK
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\RSKNI3.m
Meth Date : 15-Jan-2024 14:43 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 2 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: 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\240115.b\002.D

Date : 15-JAN-2024 08:45

Client ID: MBLK-240115

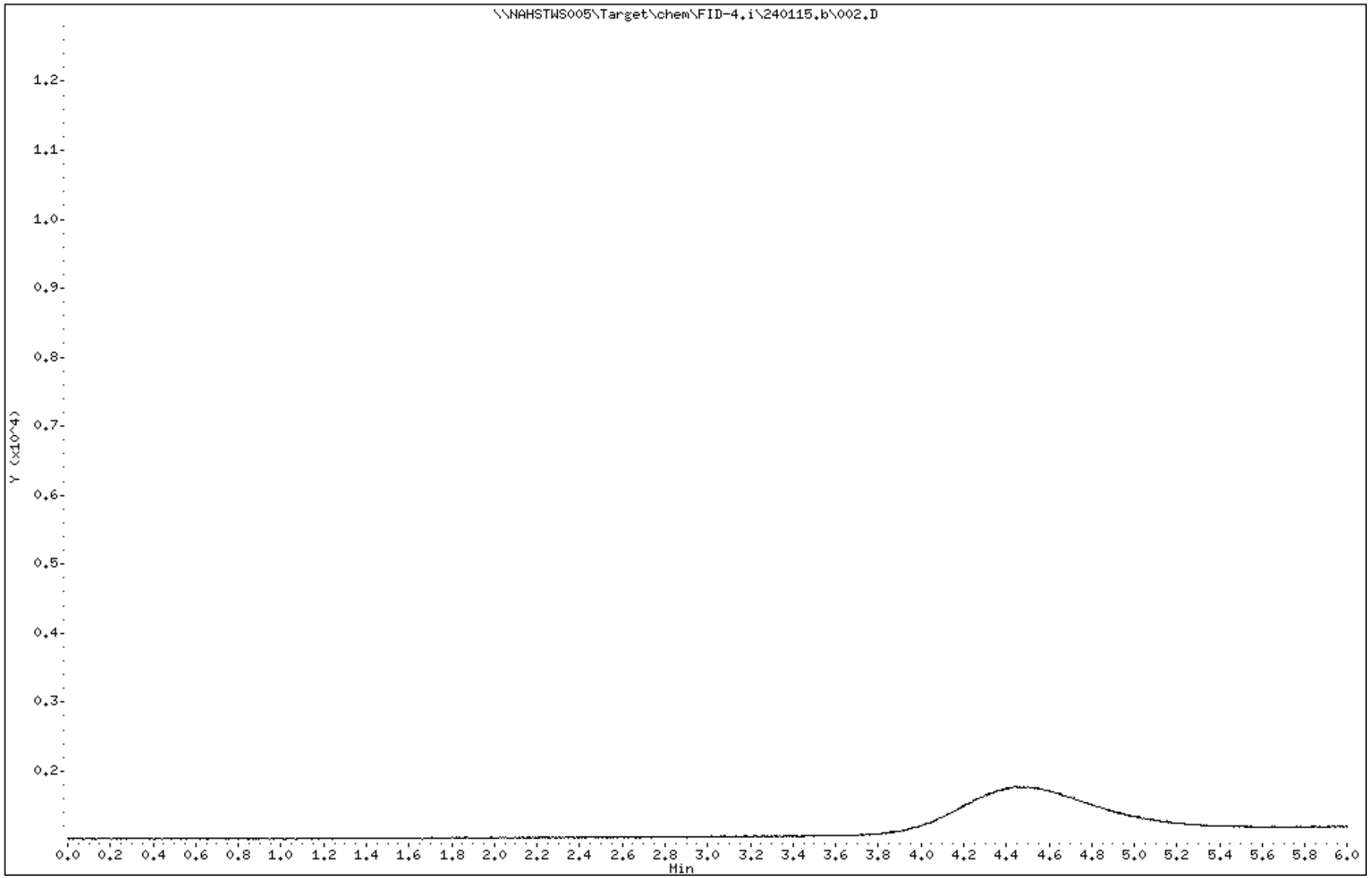
Instrument: FID-4.i

Sample Info: MBLK-240115;MBLK-240115;3;;BLANK

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\002.D
Inj Date : 15-JAN-2024 08:45
InstruID : FID-4.i
LabSampID : MBLK-240115

NO MANUAL INTEGRATIONS

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\003.D
Lab Smp Id: LCS-240115 Client Smp ID: LCS-240115
Inj Date : 15-JAN-2024 08:55
Operator : PL Inst ID: FID-4.i
Smp Info : LCS-240115;LCS-240115;3;;LCS
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\RSKNI3.m
Meth Date : 15-Jan-2024 08:43 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	0.430	0.433	-0.003	10755	11.0309	11.030
2 Ethene	0.636	0.636	0.000	9031	15.4176	15.417
3 Ethane	0.700	0.696	0.004	14758	20.5118	20.511

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240115.b\003.D

Date : 15-JAN-2024 08:55

Client ID: LCS-240115

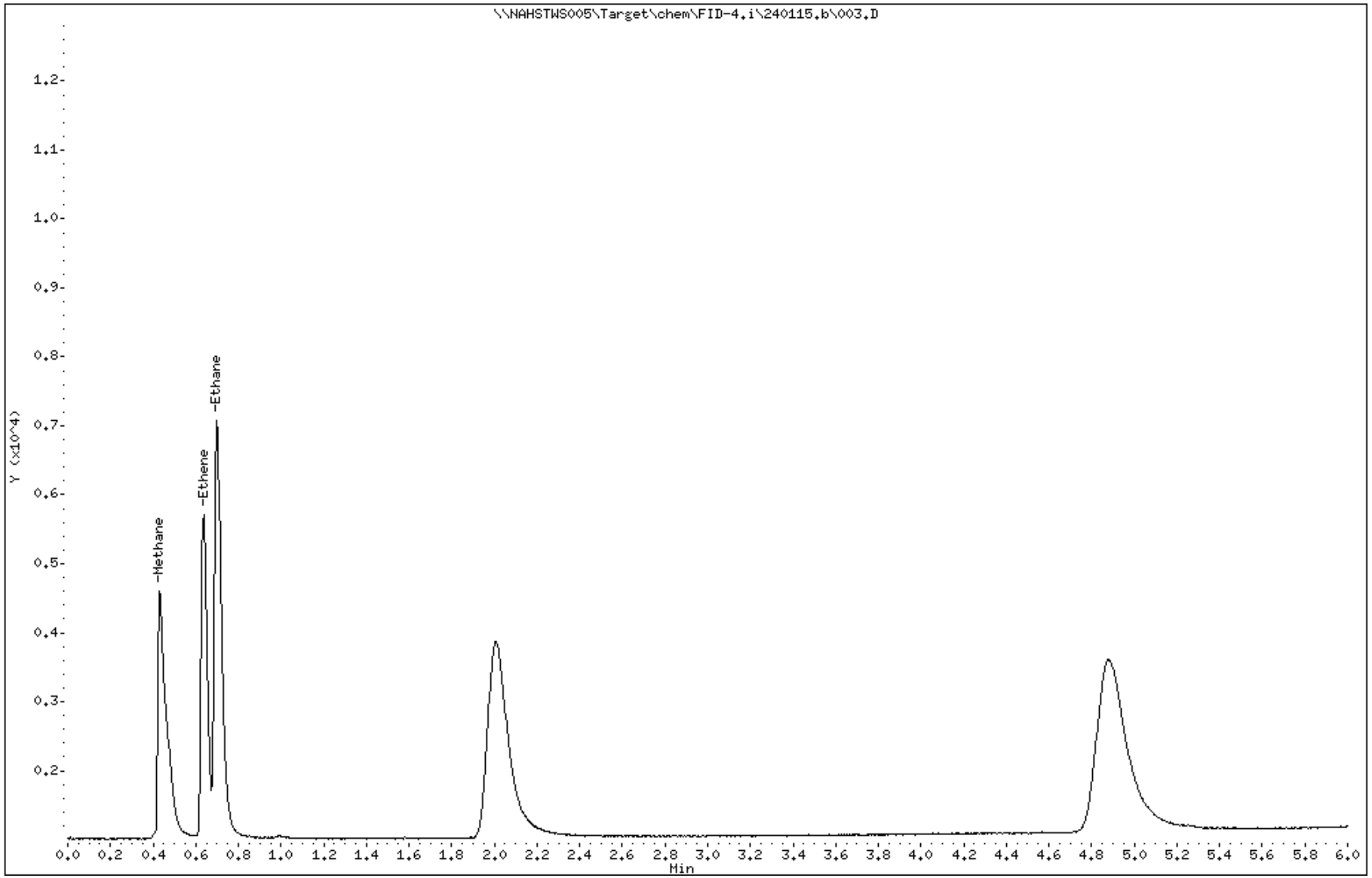
Instrument: FID-4.i

Sample Info: LCS-240115;LCS-240115;3;;LCS

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\003.D
Inj Date : 15-JAN-2024 08:55
InstruID : FID-4.i
LabSampID : LCS-240115

NO MANUAL INTEGRATIONS

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\004.D
Lab Smp Id: LCSD-240115 Client Smp ID: LCSD-240115
Inj Date : 15-JAN-2024 09:05
Operator : PL Inst ID: FID-4.i
Smp Info : LCSD-240115;LCSD-240115;3;;LCSD
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\RSKNI3.m
Meth Date : 15-Jan-2024 08:43 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)	FINAL (ug/L)
1 Methane	0.426	0.433	-0.007	9781	10.0319	10.031
2 Ethene	0.630	0.636	-0.006	8452	14.4291	14.429(M)
3 Ethane	0.693	0.696	-0.003	12363	17.1830	17.183(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240115.b\004.D

Date : 15-JAN-2024 09:05

Client ID: LCSD-240115

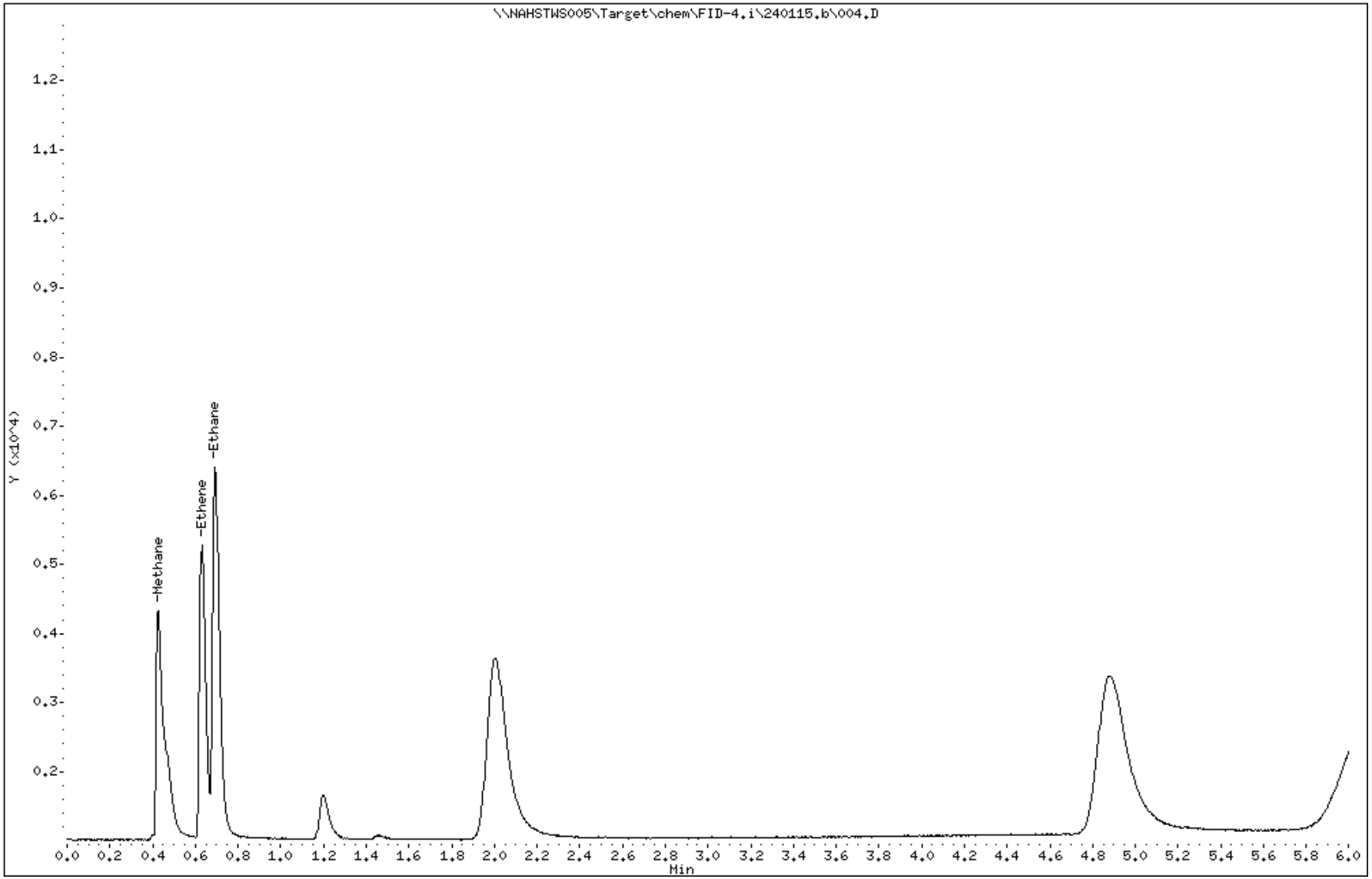
Instrument: FID-4.i

Sample Info: LCSD-240115;LCSD-240115;3;;LCSD

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



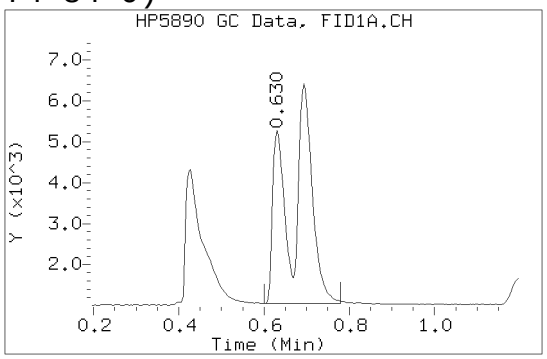
Data File : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\004.D
Inj Date : 15-JAN-2024 09:05
InstruID : FID-4.i
LabSampID : LCSD-240115

Ethane (74-84-0)

Reason Code:

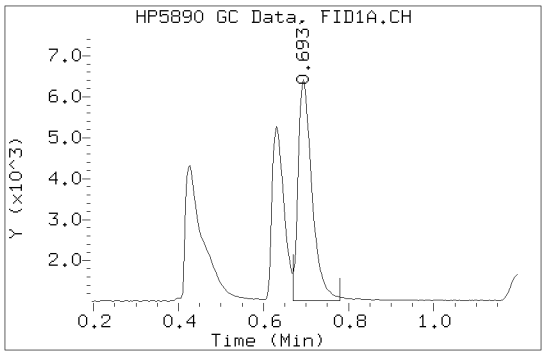
BEFORE

MASS
44
AREA
20344
HEIGHT
4229
15-Jan-2024
09:12
ALSHS
Server



AFTER

MASS
44
AREA
12363
HEIGHT
5401
15-Jan-2024
09:18
ALSHS
Server

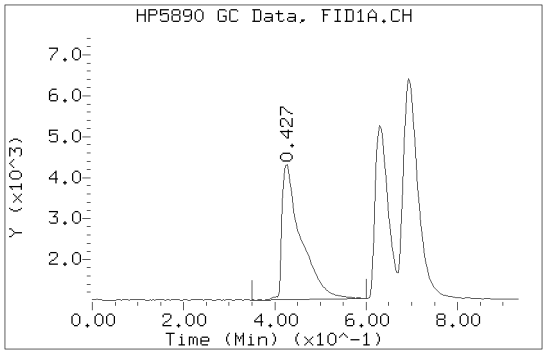


Ethene (74-85-1)

Reason Code:

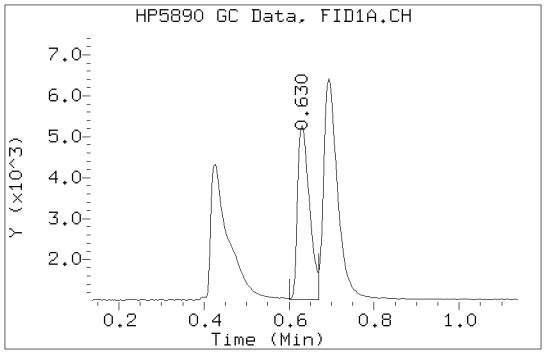
BEFORE

MASS
100
AREA
0
HEIGHT
0
15-Jan-2024
09:12
ALSHS
Server



AFTER

MASS
100
AREA
8452
HEIGHT
4260
15-Jan-2024
09:18
ALSHS
Server



Data File: \\NAHSTWS005\Target\chem\FID-4.i\240115.b\006.D Page 1
Report Date: 18-Jan-2024 12:43

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\006.D
Lab Smp Id: HS24010611-01MS Client Smp ID: HS24010611-01MS
Inj Date : 15-JAN-2024 09:29
Operator : PL Inst ID: FID-4.i
Smp Info : HS24010611-01MS;HS24010611-01MS
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\RSKNI3.m
Meth Date : 15-Jan-2024 14:43 samy.mata 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

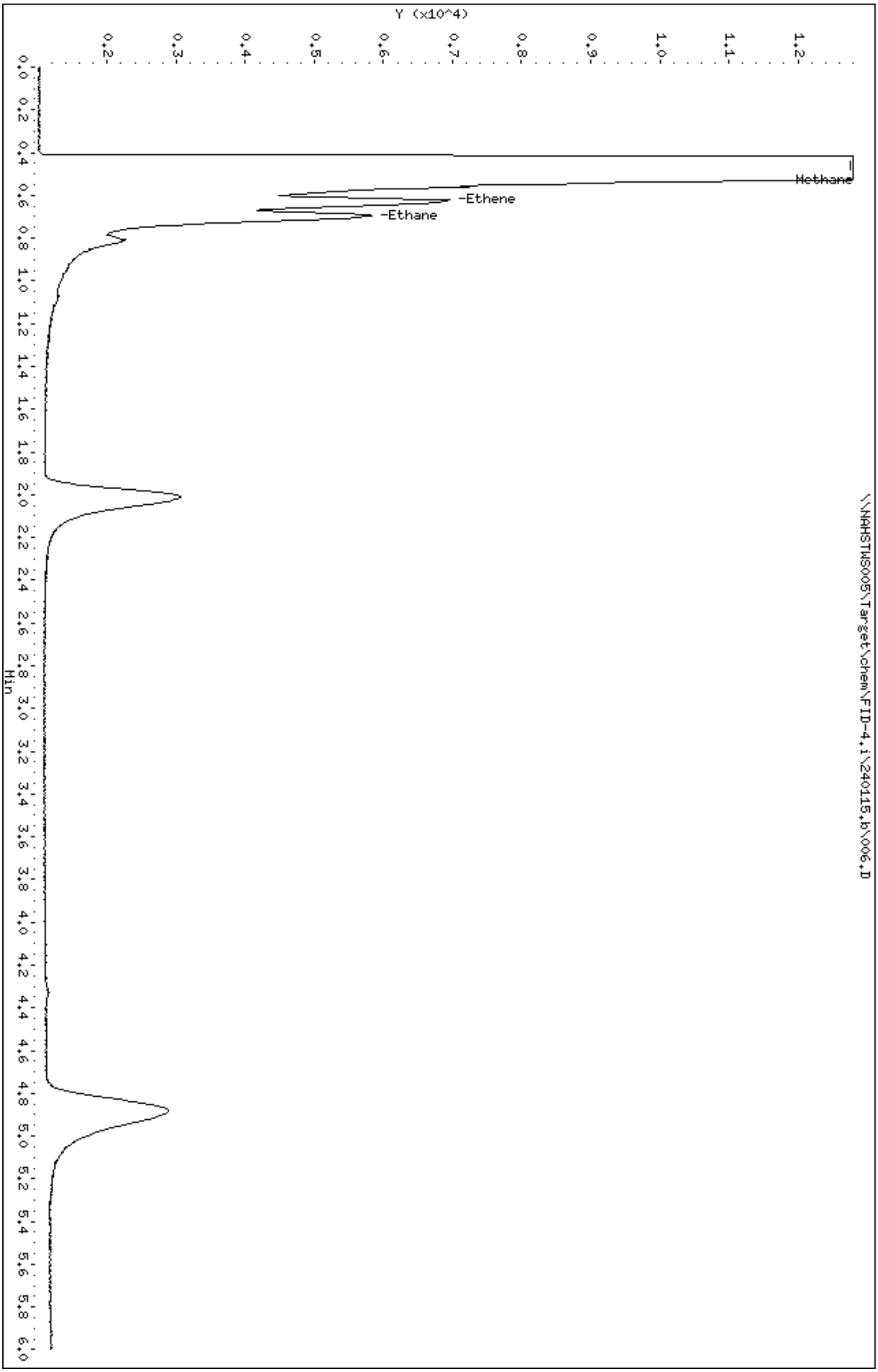
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.436	0.433	0.003	3636522	3729.80	3729.795(ARM)
2 Ethene	0.623	0.640	-0.017	19377	33.0801	33.080(RM)
3 Ethane	0.696	0.703	-0.007	18477	25.6807	25.680(RM)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4,i\240115,b\006.D
Date : 15-JAN-2024 09:29
Client ID: HS24010611-01HS
Sample Info: HS24010611-01HS;HS24010611-01HS
Column phase: Rtx-PLOT

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

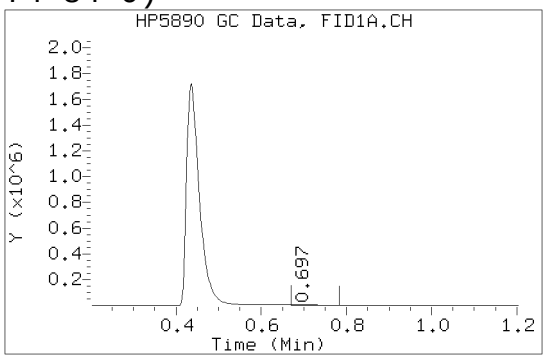


Data File : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\006.D
Inj Date : 15-JAN-2024 09:29
InstruID : FID-4.i
LabSampID : HS24010611-01MS

Ethane (74-84-0)

BEFORE

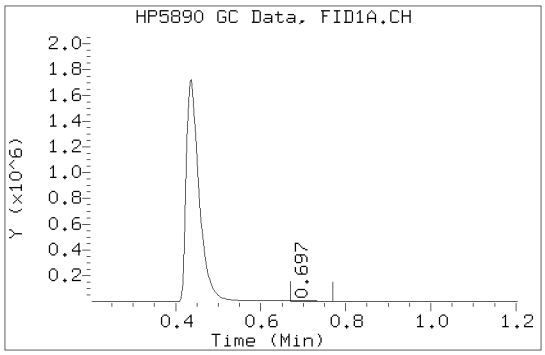
MASS
44
AREA
18658
HEIGHT
4785
15-Jan-2024
09:37
ALSHS
Server



Reason Code:

AFTER

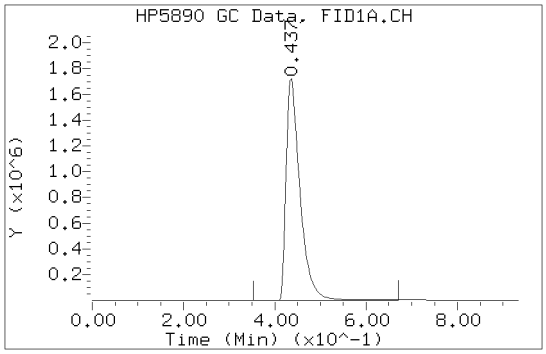
MASS
44
AREA
18477
HEIGHT
4809
18-Jan-2024
12:43
ALSHS
Server



Methane (74-82-8)

BEFORE

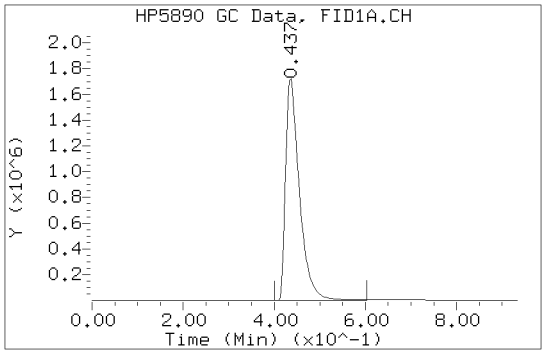
MASS
100
AREA
0
HEIGHT
0
15-Jan-2024
09:37
ALSHS
Server



Reason Code:

AFTER

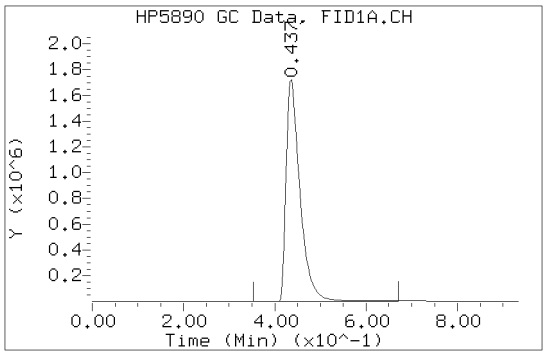
MASS
100
AREA
3636522
HEIGHT
1720873
18-Jan-2024
12:43
ALSHS
Server



Ethene (74-85-1)

BEFORE

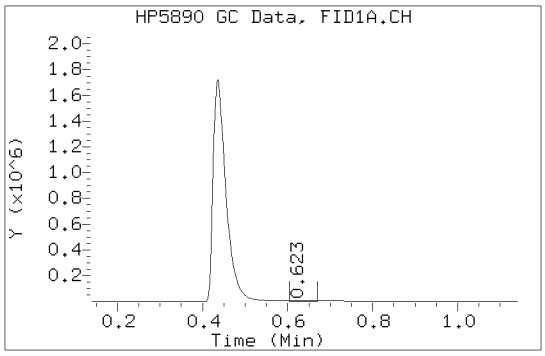
MASS
100
AREA
0
HEIGHT
0
15-Jan-2024
09:37
ALSHS
Server



Reason Code:

AFTER

MASS
100
AREA
19377
HEIGHT
5929
18-Jan-2024
12:43
ALSHS
Server



Data File: \\NAHSTWS005\Target\chem\FID-4.i\240115.b\007.D Page 1
Report Date: 19-Jan-2024 07:54

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\007.D
Lab Smp Id: HS24010611-01MSD Client Smp ID: HS24010611-01MSD
Inj Date : 15-JAN-2024 09:38
Operator : PL Inst ID: FID-4.i
Smp Info : HS24010611-01MSD;HS24010611-01MSD
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\RSKNI3.m
Meth Date : 15-Jan-2024 14:43 samy.mata 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	0.433	0.433	0.000	3599305	3691.62	3691.623(ARM)
2 Ethene	0.626	0.636	-0.010	20023	34.1829	34.182(RM)
3 Ethane	0.693	0.696	-0.003	17611	24.4771	24.477(RM)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240115.b\007.D

Date : 15-JAN-2024 09:38

Client ID: HS24010611-01MSD

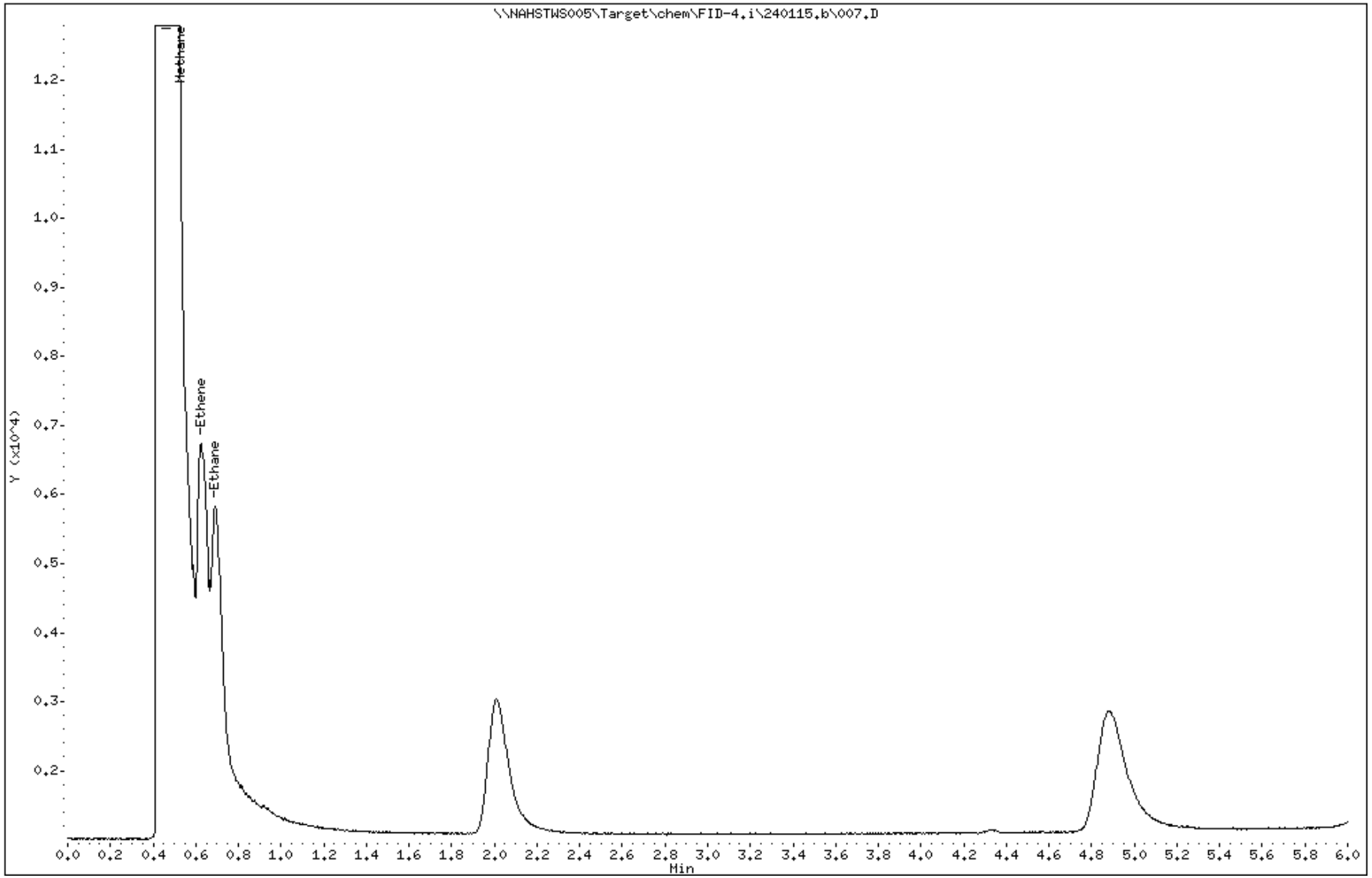
Instrument: FID-4.i

Sample Info: HS24010611-01MSD;HS24010611-01MSD

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



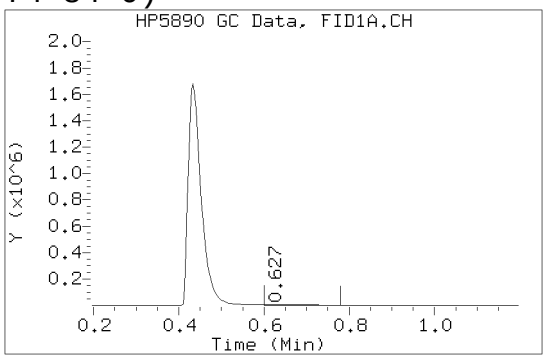
Data File : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\007.D
Inj Date : 15-JAN-2024 09:38
InstruID : FID-4.i
LabSampID : HS24010611-01MSD

Ethane (74-84-0)

Reason Code:

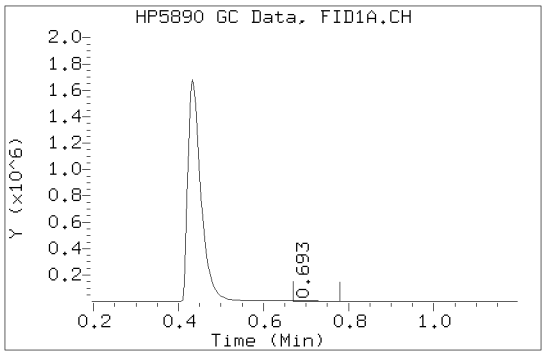
BEFORE

MASS
44
AREA
33066
HEIGHT
5247
15-Jan-2024
09:45
ALSHS
Server



AFTER

MASS
44
AREA
17611
HEIGHT
4646
19-Jan-2024
07:54
ALSHS
Server

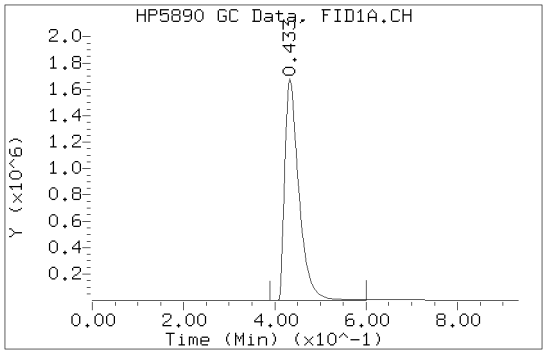


Methane (74-82-8)

Reason Code:

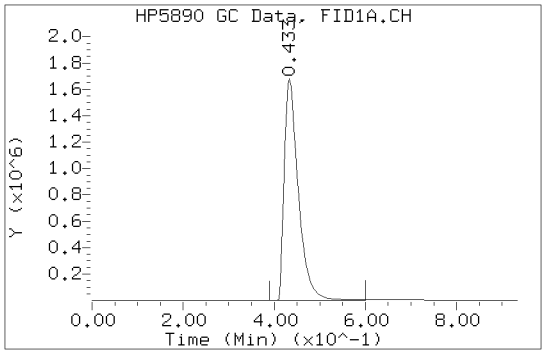
BEFORE

MASS
100
AREA
0
HEIGHT
0
15-Jan-2024
09:45
ALSHS
Server



AFTER

MASS
100
AREA
3599305
HEIGHT
1679653
19-Jan-2024
07:54
ALSHS
Server

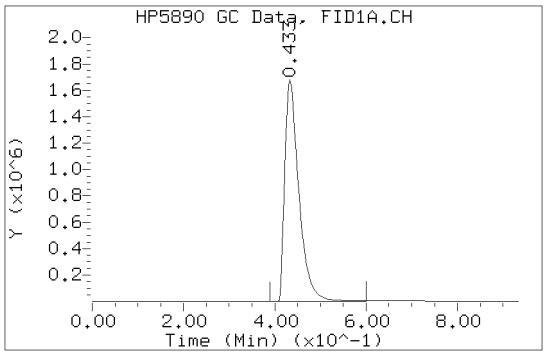


Ethene (74-85-1)

Reason Code:

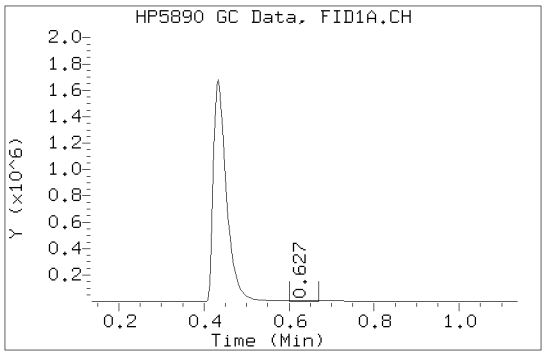
BEFORE

MASS
100
AREA
0
HEIGHT
0
15-Jan-2024
09:45
ALSHS
Server



AFTER

MASS
100
AREA
20023
HEIGHT
5593
19-Jan-2024
07:54
ALSHS
Server



Data File: \\NAHSTWS005\Target\chem\FID-4.i\240115.b\009.D Page 1
Report Date: 19-Jan-2024 08:55

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\009.D
Lab Smp Id: HS24010611-02MS Client Smp ID: HS24010611-02MS
Inj Date : 15-JAN-2024 09:56
Operator : PL Inst ID: FID-4.i
Smp Info : HS24010611-02MS;HS24010611-02MS
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\RSKNI3.m
Meth Date : 15-Jan-2024 14:43 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 9 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: 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	0.426	0.007	1192113	1222.69	1222.689(ARM)
2 Ethene	0.633	0.633	0.000	582822	994.984	994.983(ARM)

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\240115.b\009.D

Date : 15-JAN-2024 09:56

Client ID: HS24010611-02MS

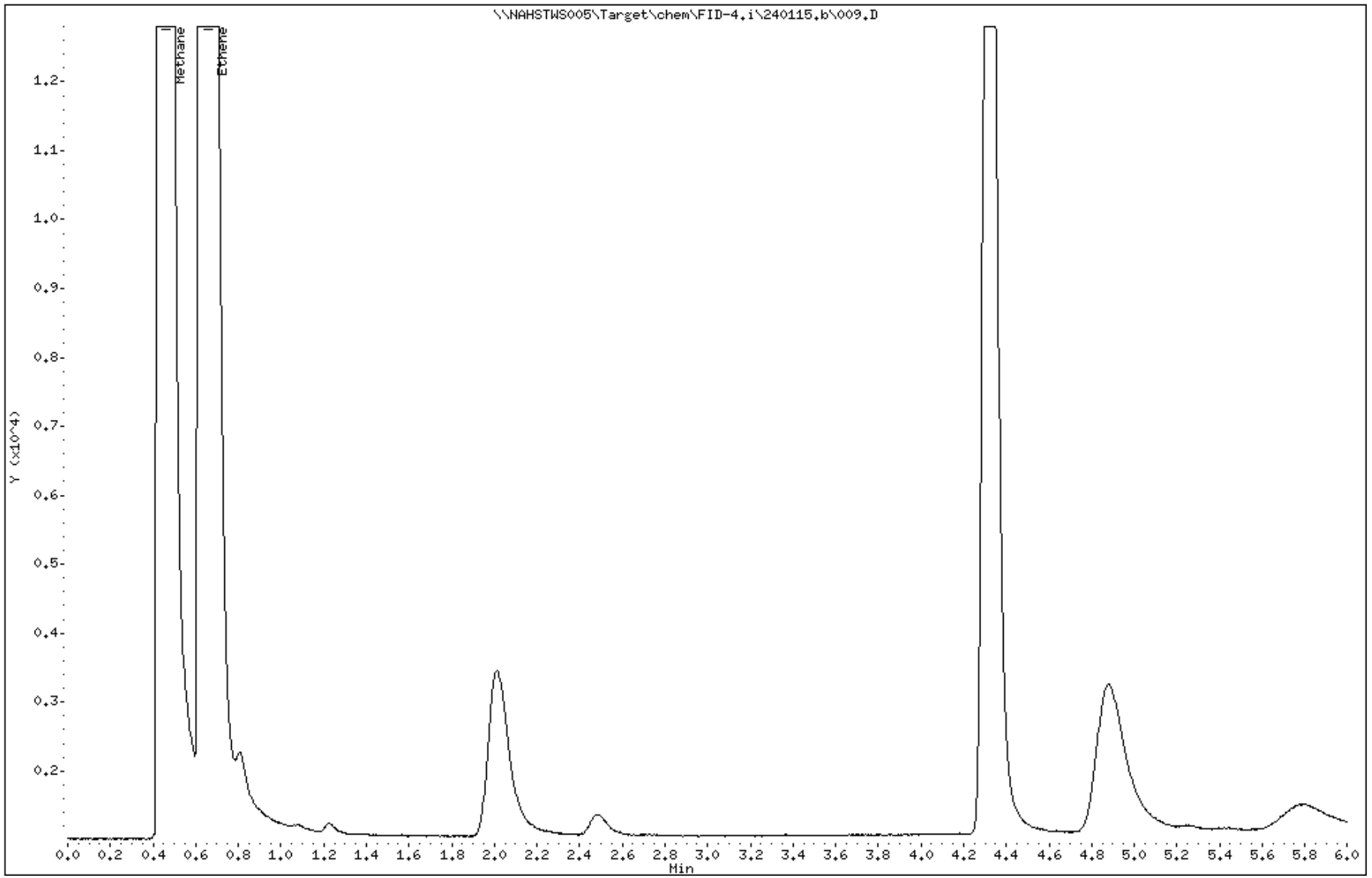
Instrument: FID-4.i

Sample Info: HS24010611-02MS;HS24010611-02MS

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53

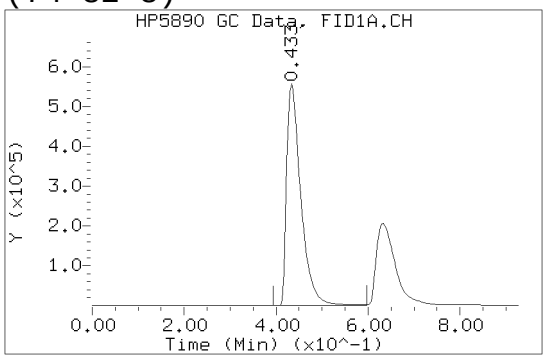


Data File : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\009.D
Inj Date : 15-JAN-2024 09:56
InstruID : FID-4.i
LabSampID : HS24010611-02MS

Methane (74-82-8)

BEFORE

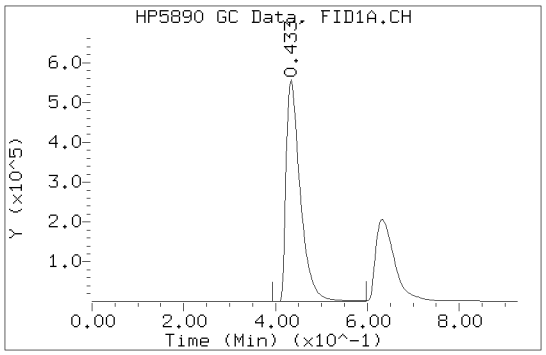
MASS
100
AREA
0
HEIGHT
0
15-Jan-2024
10:03
ALSHS
Server



Reason Code:

AFTER

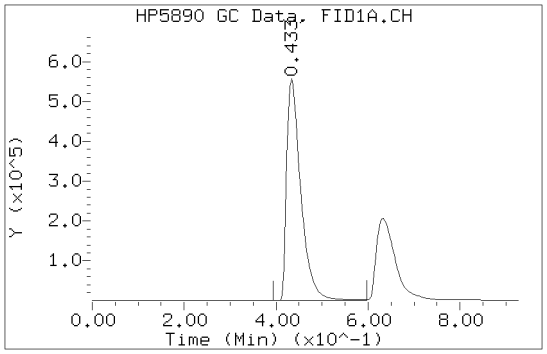
MASS
100
AREA
1192113
HEIGHT
556091
19-Jan-2024
08:54
ALSHS
Server



Ethene (74-85-1)

BEFORE

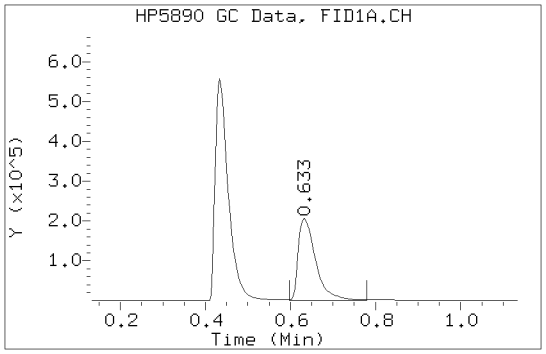
MASS
100
AREA
0
HEIGHT
0
15-Jan-2024
10:03
ALSHS
Server



Reason Code:

AFTER

MASS
100
AREA
582822
HEIGHT
205082
19-Jan-2024
08:54
ALSHS
Server



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\010.D
Lab Smp Id: HS24010611-02MSD Client Smp ID: HS24010611-02MSD
Inj Date : 15-JAN-2024 10:04
Operator : PL Inst ID: FID-4.i
Smp Info : HS24010611-02MSD;HS24010611-02MSD
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\RSKNI3.m
Meth Date : 15-Jan-2024 14:43 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 10 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14

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	0.433	0.426	0.007	1177104	1207.30	1207.295(AR)
2 Ethene	0.630	0.633	-0.003	579791	989.809	989.809(AR)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240115.b\010.D

Date : 15-JAN-2024 10:04

Client ID: HS24010611-02MSD

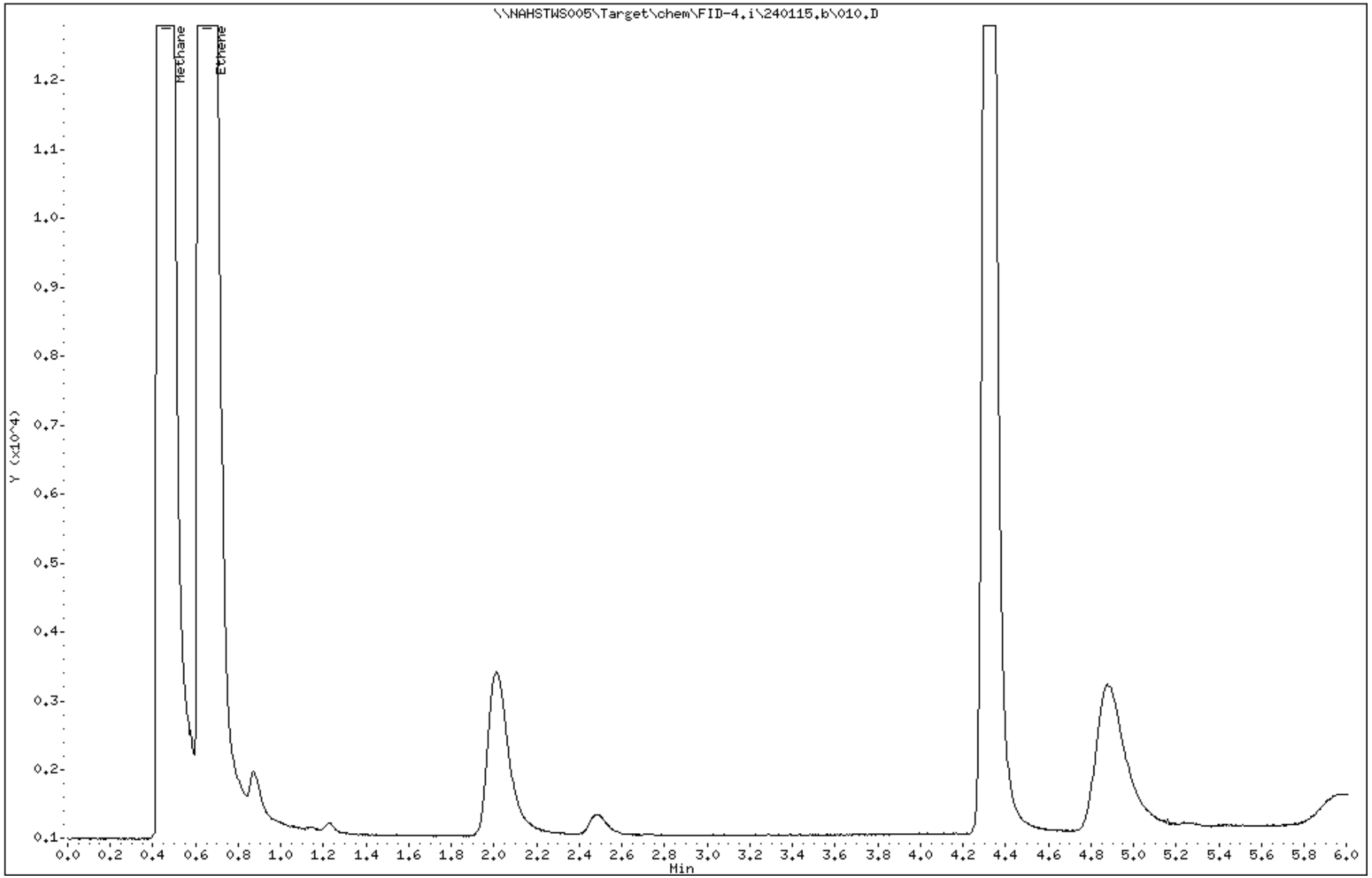
Instrument: FID-4.i

Sample Info: HS24010611-02MSD;HS24010611-02MSD

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\010.D
Inj Date : 15-JAN-2024 10:04
InstruID : FID-4.i
LabSampID : HS24010611-02MSD

NO MANUAL INTEGRATIONS

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\011.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 15-JAN-2024 10:12
Operator : PL Inst ID: FID-4.i
Smp Info : RSK-CCV;RSK-CCV;2;4
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\RSKNI3.m
Meth Date : 15-Jan-2024 10:21 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

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Methane	0.433	0.433	0.000	10505	9.64700	10.774
2 Ethene	0.636	0.636	0.000	8013	16.8500	13.679
3 Ethane	0.700	0.700	0.000	11783	18.0430	16.376

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240115.b\011.D

Date : 15-JAN-2024 10:12

Client ID: RSK-CCV

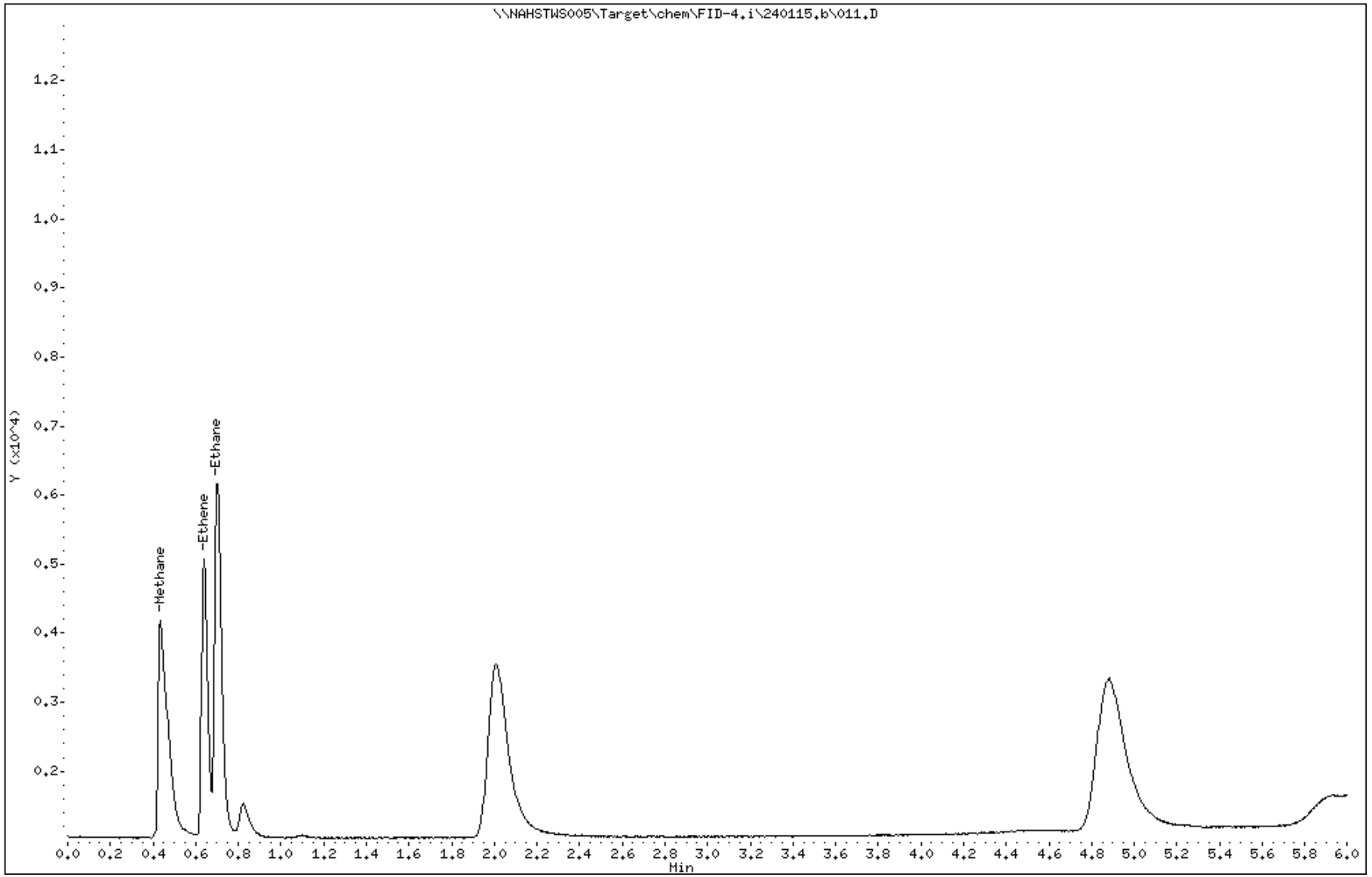
Instrument: FID-4.i

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

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\011.D
Inj Date : 15-JAN-2024 10:12
InstruID : FID-4.i
LabSampID : RSK-CCV

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240115.b\016.D Page 1
Report Date: 19-Jan-2024 08:00

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\016.D
Lab Smp Id: HS24010538-02 Client Smp ID: HS24010538-02
Inj Date : 15-JAN-2024 11:35
Operator : PL Inst ID: FID-4.i
Smp Info : HS24010538-02;HS24010538-02
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\RSKNI3.m
Meth Date : 15-Jan-2024 14:43 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 16
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	0.466	0.433	0.033	4201	4.30875	4.308(M)
2 Ethene	0.626	0.636	-0.010	460	0.78530	0.785(M)
3 Ethane	0.740	0.696	0.044	374	0.51981	0.519(a)

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\240115.b\016.D

Date : 15-JAN-2024 11:35

Client ID: HS24010538-02

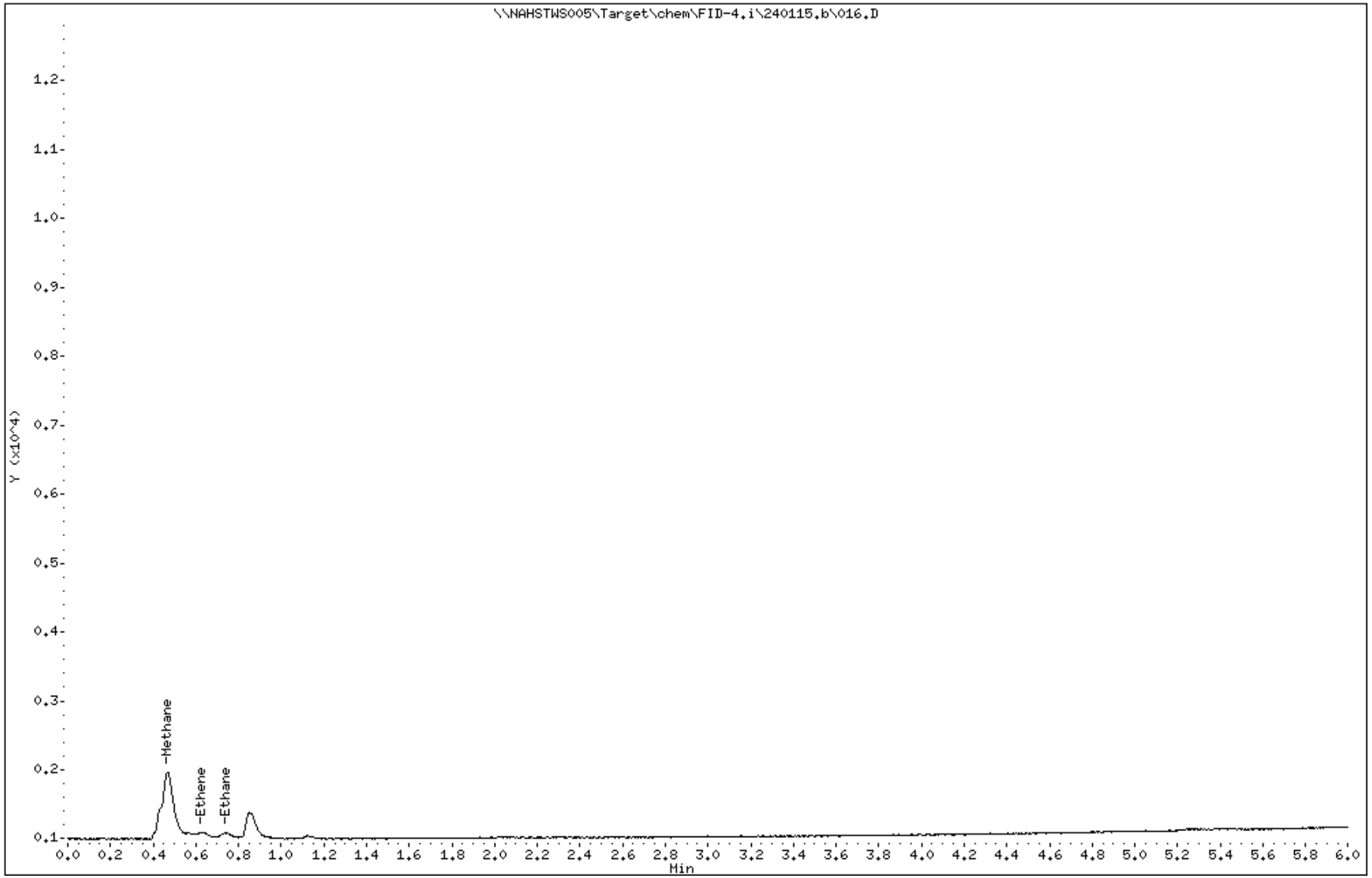
Instrument: FID-4.i

Sample Info: HS24010538-02;HS24010538-02

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\016.D
Inj Date : 15-JAN-2024 11:35
InstruID : FID-4.i
LabSampID : HS24010538-02

Methane (74-82-8)

Reason Code:

BEFORE

MASS
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AREA
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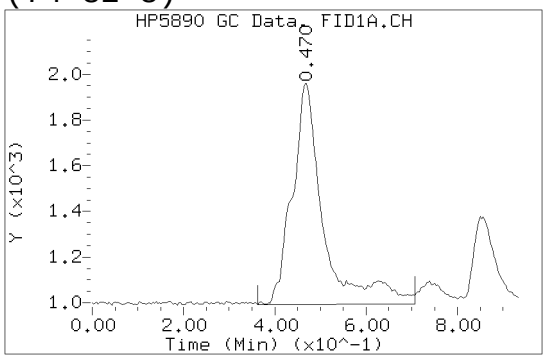
HEIGHT
0
15-Jan-2024
11:42
ALSHS
Server



AFTER

MASS
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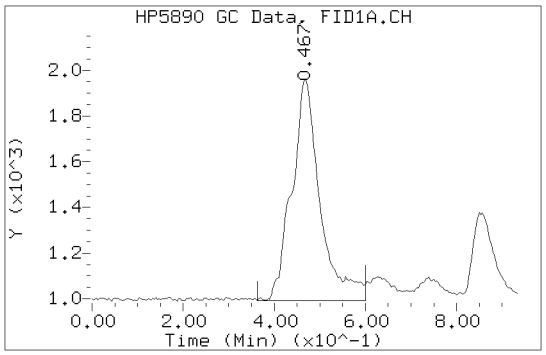
AREA
4201
HEIGHT
968
19-Jan-2024
08:00
ALSHS
Server

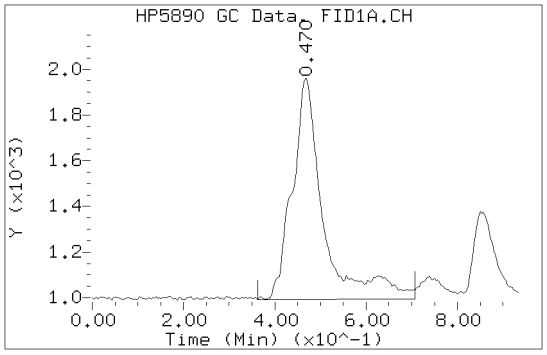


Ethene (74-85-1)

Reason Code:

BEFORE

MASS
100
AREA
0
HEIGHT
0
15-Jan-2024
11:42
ALSHS
Server



AFTER

MASS
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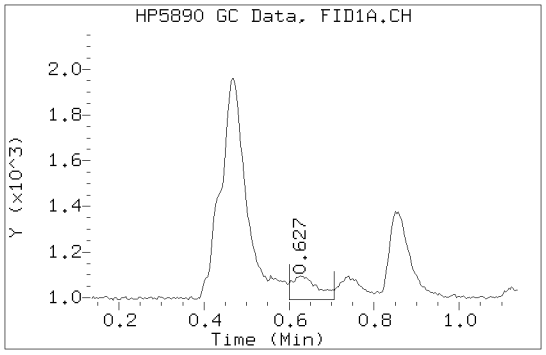
AREA
460
HEIGHT
105
19-Jan-2024
08:00
ALSHS
Server



Data File: \\NAHSTWS005\Target\chem\FID-4.i\240115.b\017.D Page 1
Report Date: 29-Jan-2024 10:15

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\017.D
Lab Smp Id: HS24010538-01 Client Smp ID: HS24010538-01
Inj Date : 15-JAN-2024 11:44
Operator : PL Inst ID: FID-4.i
Smp Info : HS24010538-01;HS24010538-01
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\RSKNI3.m
Meth Date : 29-Jan-2024 10:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 17
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.430	0.426	0.004	5806	5.95492	5.954(M)
3 Ethane	0.626	0.696	-0.070	566	0.78667	0.786(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\240115.b\017.D

Date : 15-JAN-2024 11:44

Client ID: HS24010538-01

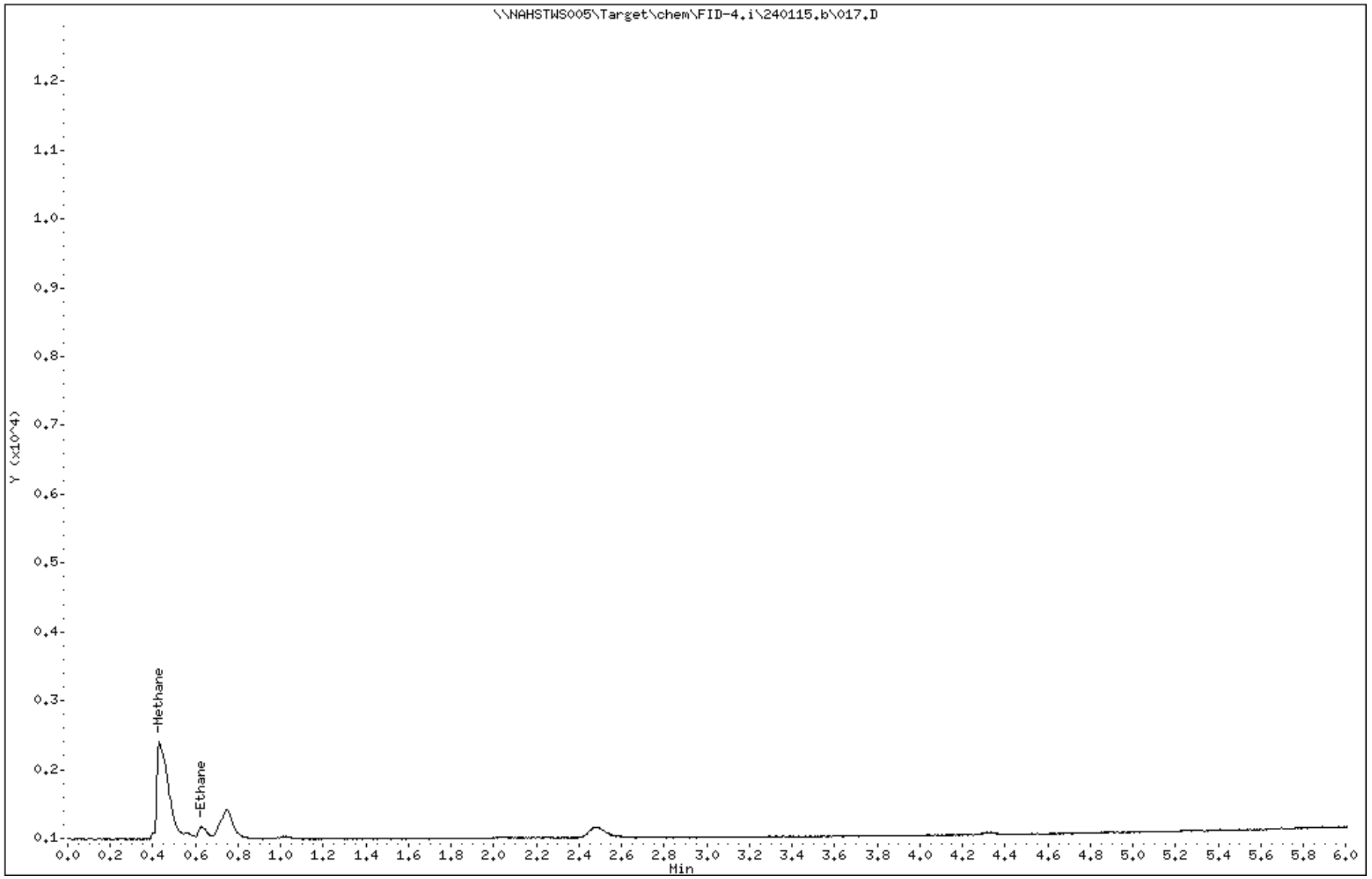
Instrument: FID-4.i

Sample Info: HS24010538-01;HS24010538-01

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



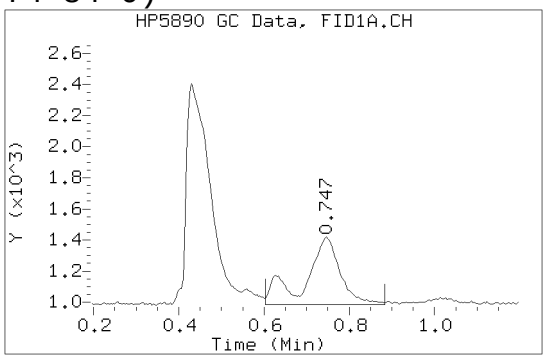
Data File : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\017.D
Inj Date : 15-JAN-2024 11:44
InstruID : FID-4.i
LabSampID : HS24010538-01

Ethane (74-84-0)

Reason Code:

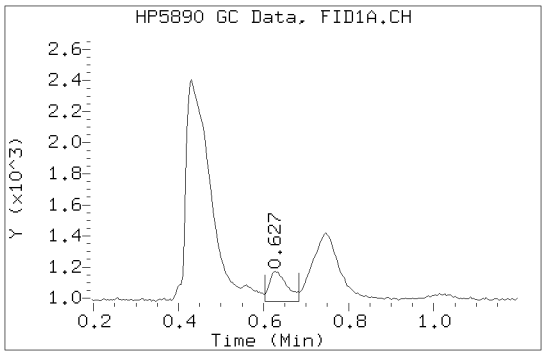
BEFORE

MASS
44
AREA
2435
HEIGHT
435
15-Jan-2024
11:51
ALSHS
Server



AFTER

MASS
44
AREA
566
HEIGHT
192
29-Jan-2024
10:15
ALSHS
Ser

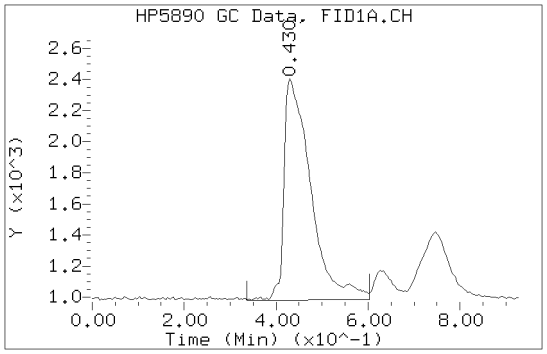


Methane (74-82-8)

Reason Code:

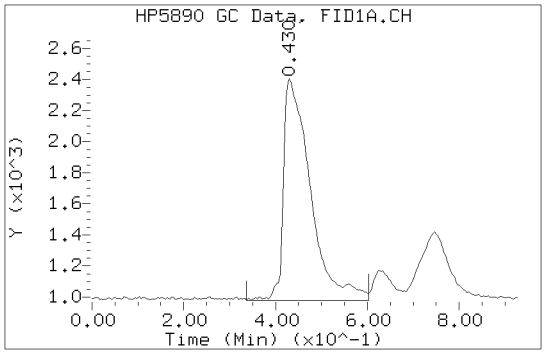
BEFORE

MASS
100
AREA
0
HEIGHT
0
15-Jan-2024
11:51
ALSHS
Server



AFTER

MASS
100
AREA
5806
HEIGHT
1425
29-Jan-2024
10:15
ALSHS
Ser



Data File: \\NAHSTWS005\Target\chem\FID-4.i\240115.b\018.D Page 1
Report Date: 15-Jan-2024 12:16

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\018.D
Lab Smp Id: HS24010538-03 Client Smp ID: HS24010538-03
Inj Date : 15-JAN-2024 12:04
Operator : PL Inst ID: FID-4.i
Smp Info : HS24010538-03;HS24010538-03
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\RSKNI3.m
Meth Date : 15-Jan-2024 10:21 elona.hasa Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 18
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: 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	0.426	0.433	-0.007	7991695	8196.67	8196.674(A)

QC Flag Legend

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

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240115.b\018.D

Page 1

Date : 15-JAN-2024 12:04

Client ID: HS24010538-03

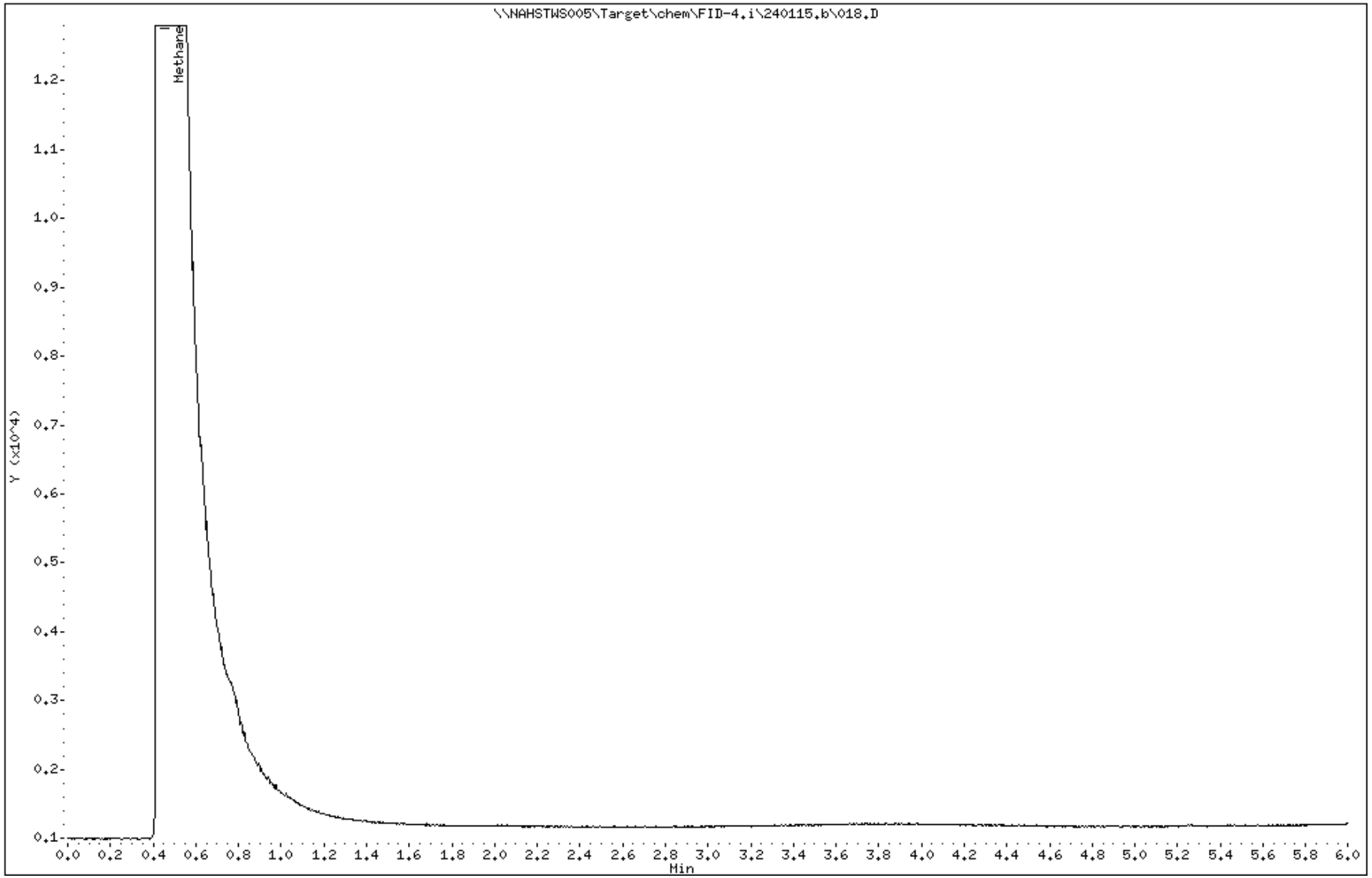
Instrument: FID-4.i

Sample Info: HS24010538-03;HS24010538-03

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\018.D
Inj Date : 15-JAN-2024 12:04
InstruID : FID-4.i
LabSampID : HS24010538-03

NO MANUAL INTEGRATIONS

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\240115.b\019.D
Lab Smp Id: HS24010538-04 Client Smp ID: HS24010538-04
Inj Date : 15-JAN-2024 12:13
Operator : PL Inst ID: FID-4.i
Smp Info : HS24010538-04;HS24010538-04
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\RSKNI3.m
Meth Date : 15-Jan-2024 12:49 elona.hasa Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 19
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: 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	0.426	0.426	0.000	3626691	3719.71	3719.712(A)
2 Ethene	0.616	0.633	-0.017	15605	26.6406	26.640(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\240115.b\019.D

Date : 15-JAN-2024 12:13

Client ID: HS24010538-04

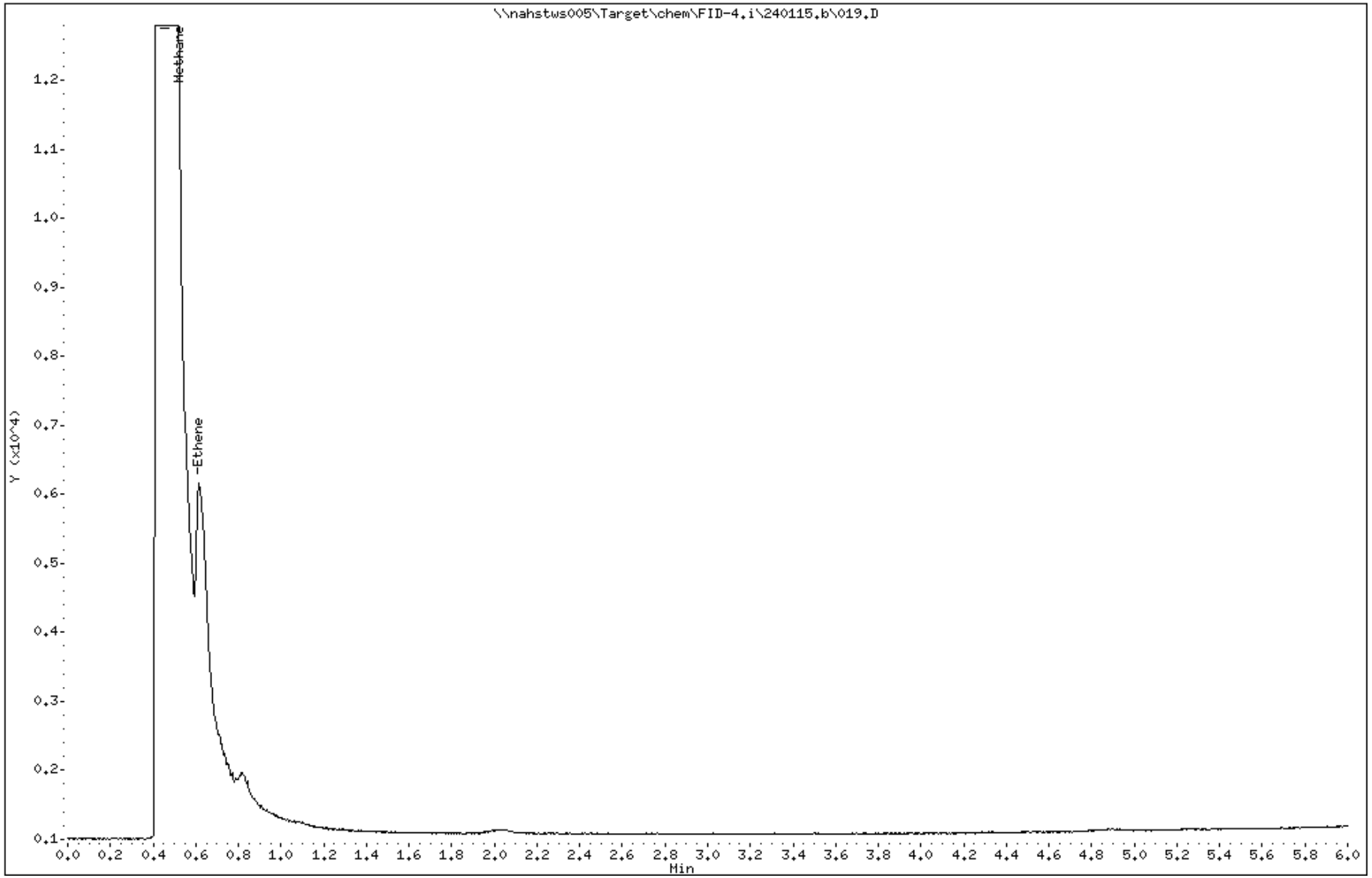
Instrument: FID-4.i

Sample Info: HS24010538-04;HS24010538-04

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



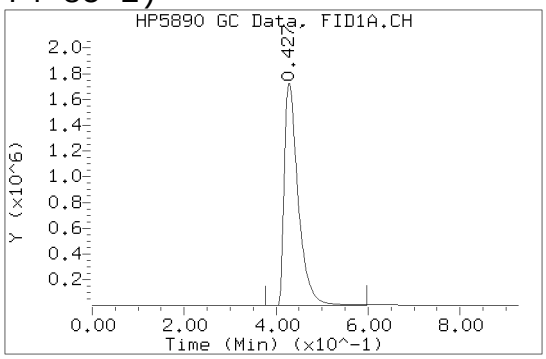
Data File : \\nahstws005\Target\chem\FID-4.i\240115.b\019.D
Inj Date : 15-JAN-2024 12:13
InstruID : FID-4.i
LabSampID : HS24010538-04

Ethene (74-85-1)

Reason Code:

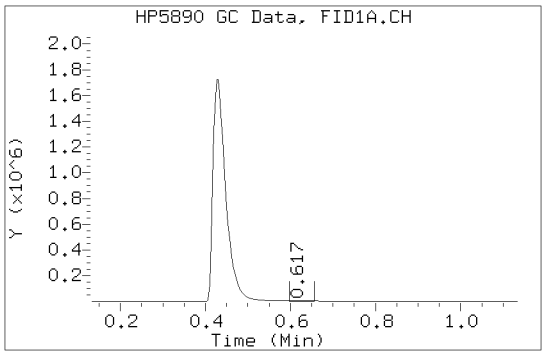
BEFORE

MASS
100
AREA
0
HEIGHT
0
15-Jan-2024
12:21
ALSHS
Server



AFTER

MASS
100
AREA
15605
HEIGHT
4936
15-Jan-2024
14:18
ALSHS
Ser



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\020.D
Lab Smp Id: HS24010538-08 Client Smp ID: HS24010538-08
Inj Date : 15-JAN-2024 12:25
Operator : PL Inst ID: FID-4.i
Smp Info : HS24010538-08;HS24010538-08
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\RSKNI3.m
Meth Date : 15-Jan-2024 10:21 elona.hasa Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 20
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	0.430	0.433	-0.003	6956590	7135.02	7135.020(A)
2 Ethene	0.630	0.636	-0.006	1154873	1971.58	1971.579(A)

QC Flag Legend

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

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240115.b\020.D

Page 1

Date : 15-JAN-2024 12:25

Client ID: HS24010538-08

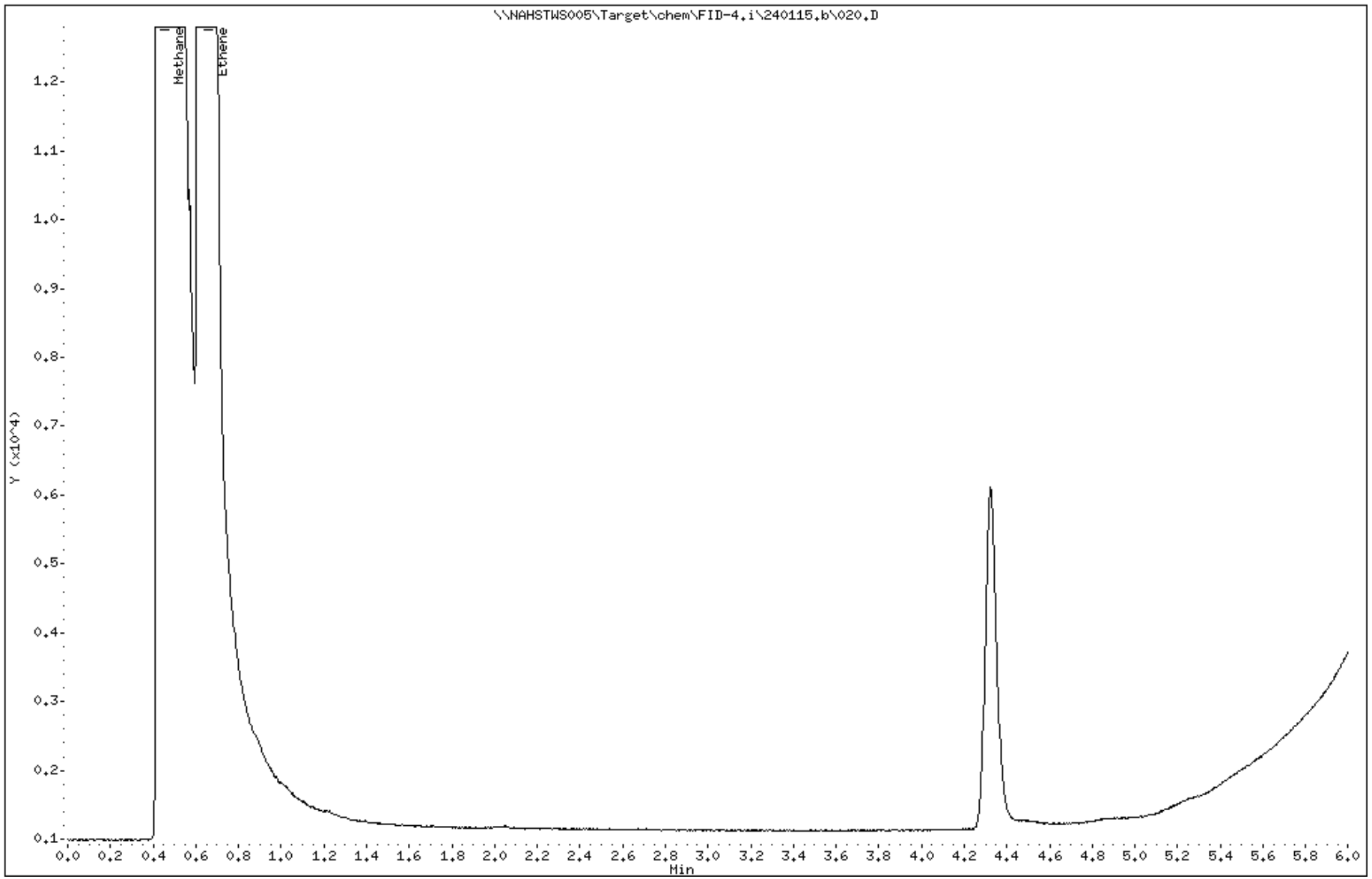
Instrument: FID-4.i

Sample Info: HS24010538-08;HS24010538-08

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\020.D
Inj Date : 15-JAN-2024 12:25
InstruID : FID-4.i
LabSampID : HS24010538-08

NO MANUAL INTEGRATIONS

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\021.D
Lab Smp Id: HS24010538-09 Client Smp ID: HS24010538-09
Inj Date : 15-JAN-2024 12:33
Operator : JA Inst ID: FID-4.i
Smp Info : HS24010538-09;HS24010538-09
Misc Info : 1x
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\RSKNI3.m
Meth Date : 15-Jan-2024 10:21 elona.hasa Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 21
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	0.423	0.433	-0.010	5277452	5412.81	5412.813(A)
2 Ethene	0.623	0.636	-0.013	727744	1242.39	1242.391(A)

QC Flag Legend

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

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240115.b\021.D

Page 1

Date : 15-JAN-2024 12:33

Client ID: HS24010538-09

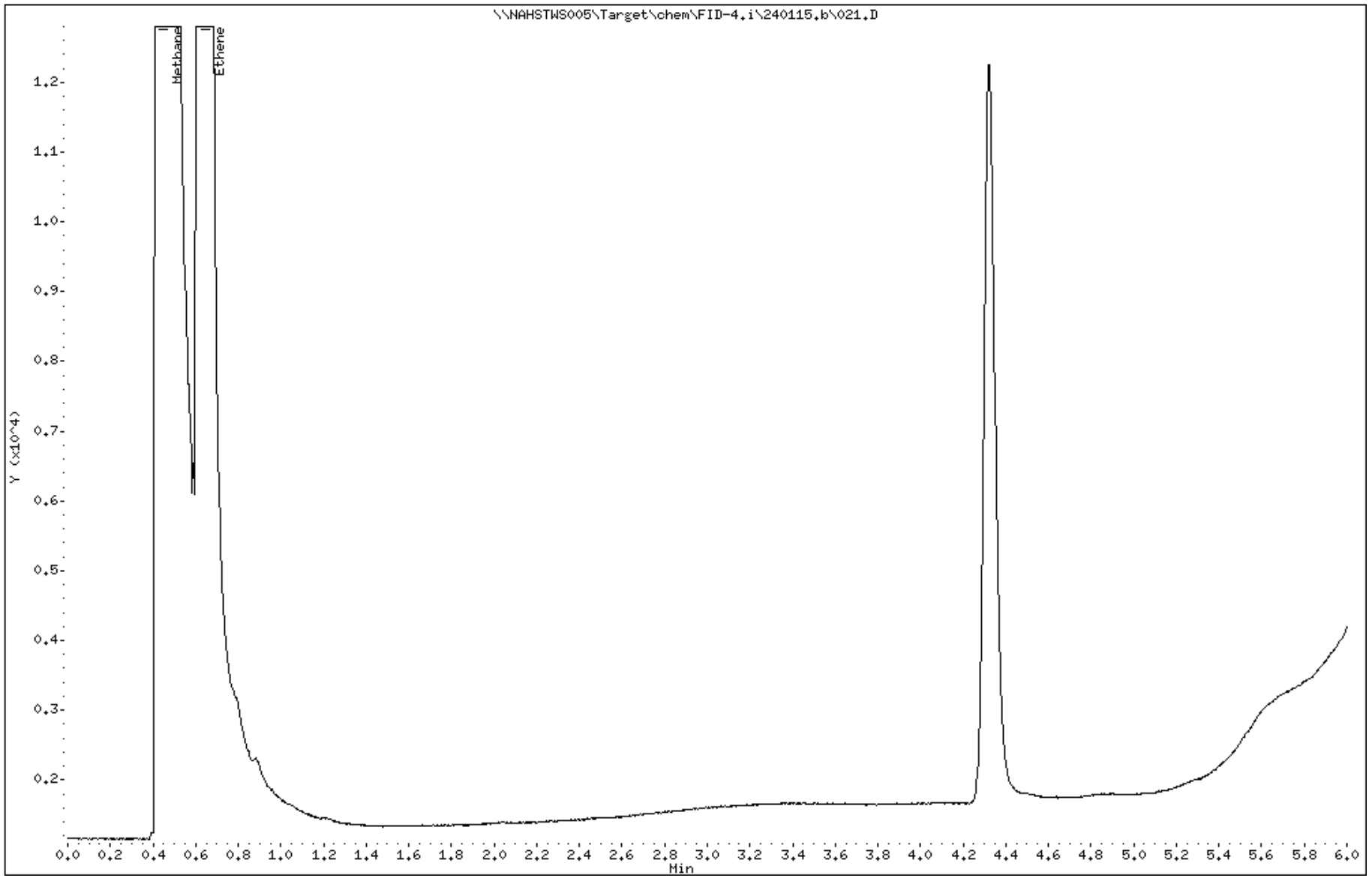
Instrument: FID-4.i

Sample Info: HS24010538-09;HS24010538-09

Operator: JA

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\021.D
Inj Date : 15-JAN-2024 12:33
InstruID : FID-4.i
LabSampID : HS24010538-09

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240115.b\022.D Page 1
Report Date: 19-Jan-2024 08:05

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\022.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 15-JAN-2024 12:42
Operator : JA Inst ID: FID-4.i
Smp Info : RSK-CCV;RSK-CCV;2;4
Misc Info : 1x
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\RSKNI3.m
Meth Date : 15-Jan-2024 14:43 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 22 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14

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

					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	0.426	0.426	0.000	7734	9.64700	7.932(M)
2 Ethene	0.633	0.633	0.000	8006	16.8500	13.667(M)
3 Ethane	0.696	0.696	0.000	11932	18.0430	16.583(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240115.b\022.D

Date : 15-JAN-2024 12:42

Client ID: RSK-CCV

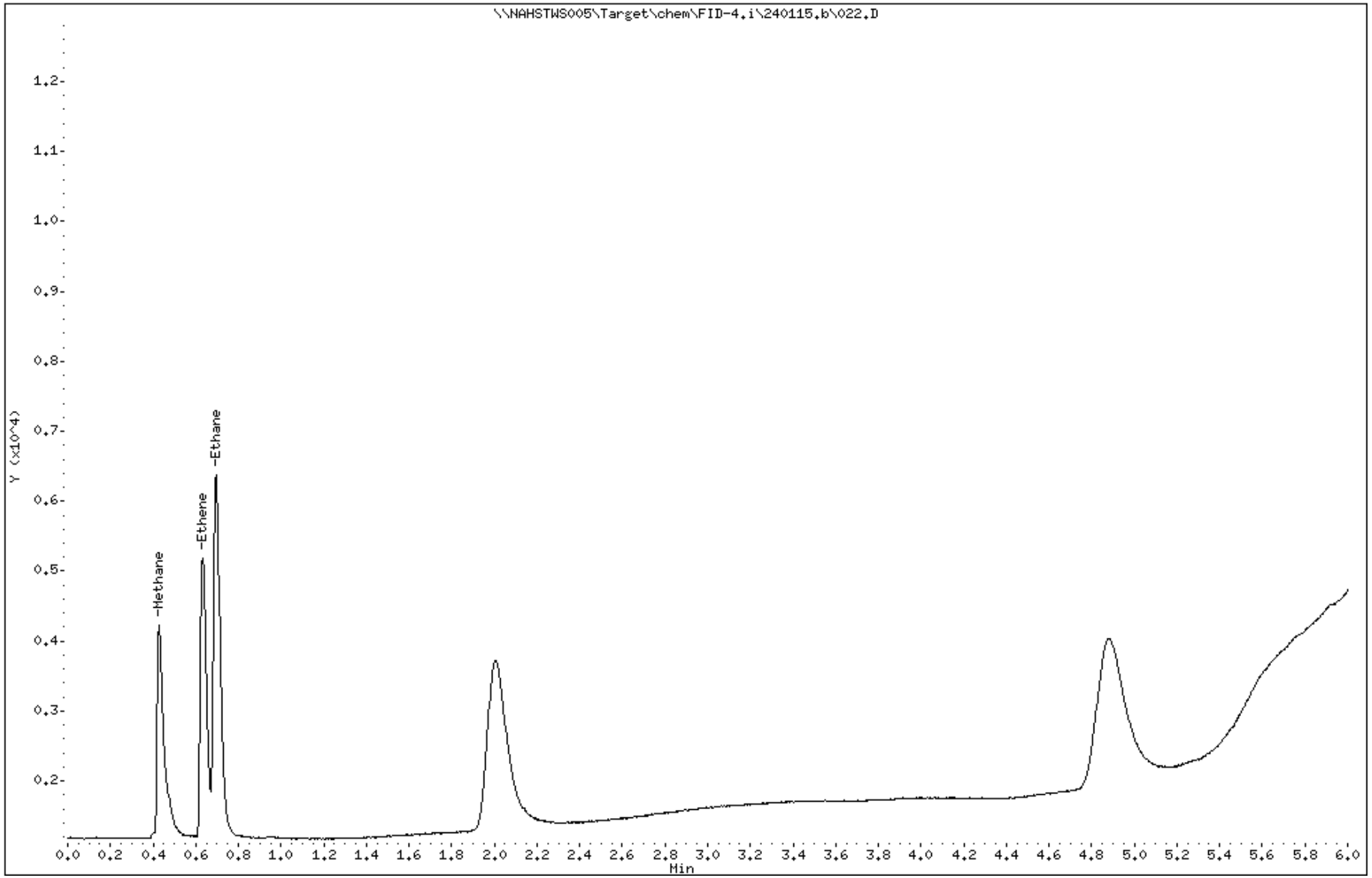
Instrument: FID-4.i

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

Operator: JA

Column phase: Rtx-PLOT

Column diameter: 0.53



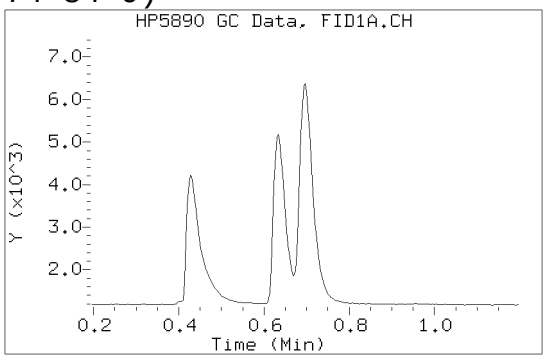
Data File : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\022.D
Inj Date : 15-JAN-2024 12:42
InstruID : FID-4.i
LabSampID : RSK-CCV

Ethane (74-84-0)

Reason Code:

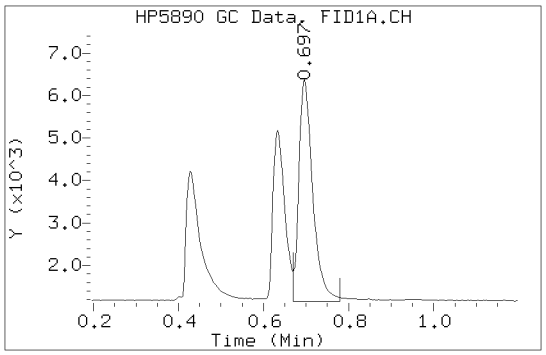
BEFORE

MASS
44
AREA
0
HEIGHT
0
15-Jan-2024
12:49
elona
hasani



AFTER

MASS
44
AREA
11932
HEIGHT
5216
19-Jan-2024
08:05
elona
hasani

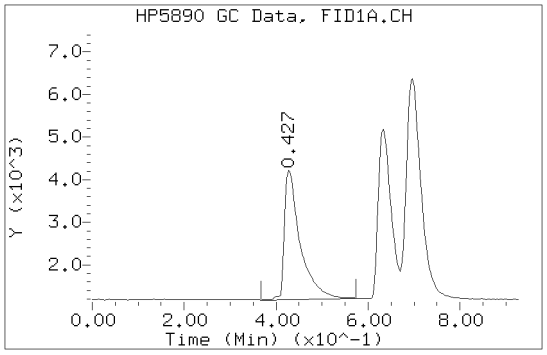


Methane (74-82-8)

Reason Code:

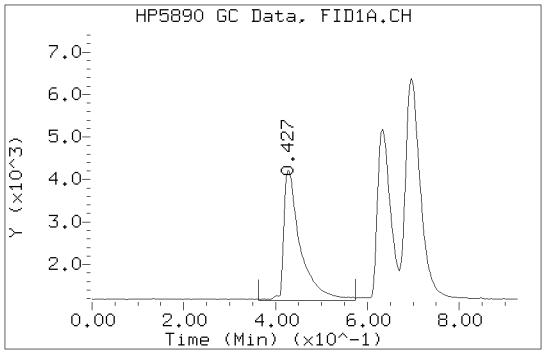
BEFORE

MASS
100
AREA
7281
HEIGHT
3041
15-Jan-2024
12:49
elona
hasani



AFTER

MASS
100
AREA
7734
HEIGHT
3069
19-Jan-2024
08:05
elona
hasani

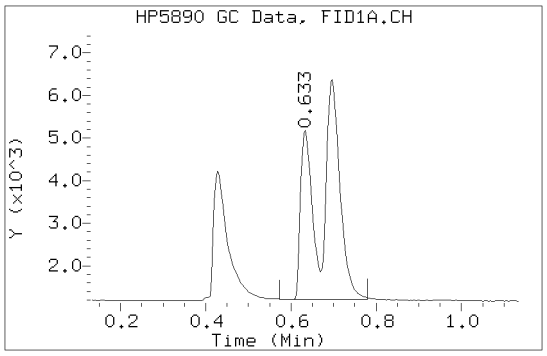


Ethene (74-85-1)

Reason Code:

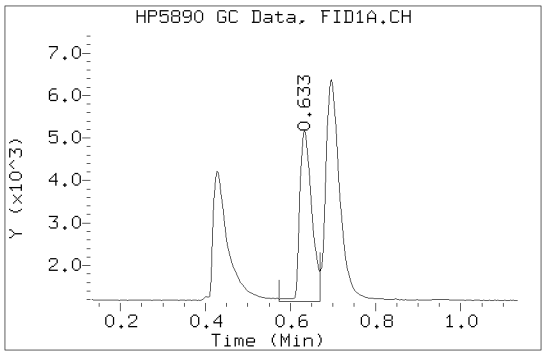
BEFORE

MASS
100
AREA
19116
HEIGHT
3981
15-Jan-2024
12:49
elona
hasani



AFTER

MASS
100
AREA
8006
HEIGHT
4034
19-Jan-2024
08:05
elona
hasani



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\023.D
Lab Smp Id: HS24010538-03 Client Smp ID: HS24010538-03
Inj Date : 15-JAN-2024 13:39
Operator : PL Inst ID: FID-4.i
Smp Info : HS24010538-03;HS24010538-03
Misc Info : ;1;0;500
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\RSKNI3.m
Meth Date : 15-Jan-2024 14:43 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 23
Dil Factor: 500.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: 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	0.426	0.007	15484	15.8812	7940.575

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240115.b\023.D

Date : 15-JAN-2024 13:39

Client ID: HS24010538-03

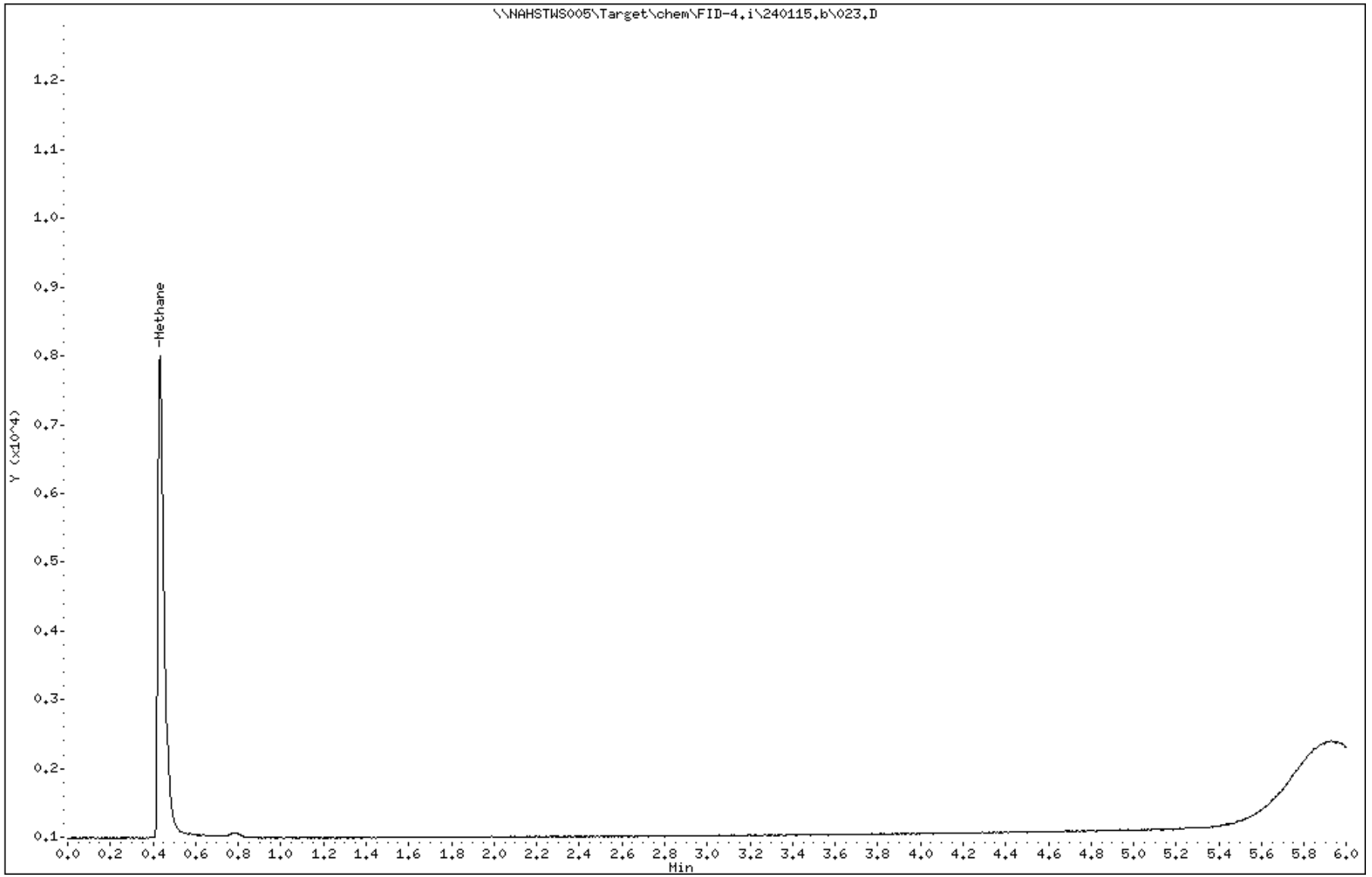
Instrument: FID-4.i

Sample Info: HS24010538-03;HS24010538-03

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\023.D
Inj Date : 15-JAN-2024 13:39
InstruID : FID-4.i
LabSampID : HS24010538-03

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240115.b\024.D Page 1
Report Date: 19-Jan-2024 08:04

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\024.D
Lab Smp Id: HS24010538-04 Client Smp ID: HS24010538-04
Inj Date : 15-JAN-2024 14:11
Operator : PL Inst ID: FID-4.i
Smp Info : HS24010538-04;HS24010538-04
Misc Info : ;1;0;200
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\RSKNI3.m
Meth Date : 15-Jan-2024 14:43 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 24
Dil Factor: 200.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7022

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

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.446	0.426	0.020	19218	19.7109	3942.184(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240115.b\024.D

Date : 15-JAN-2024 14:11

Client ID: HS24010538-04

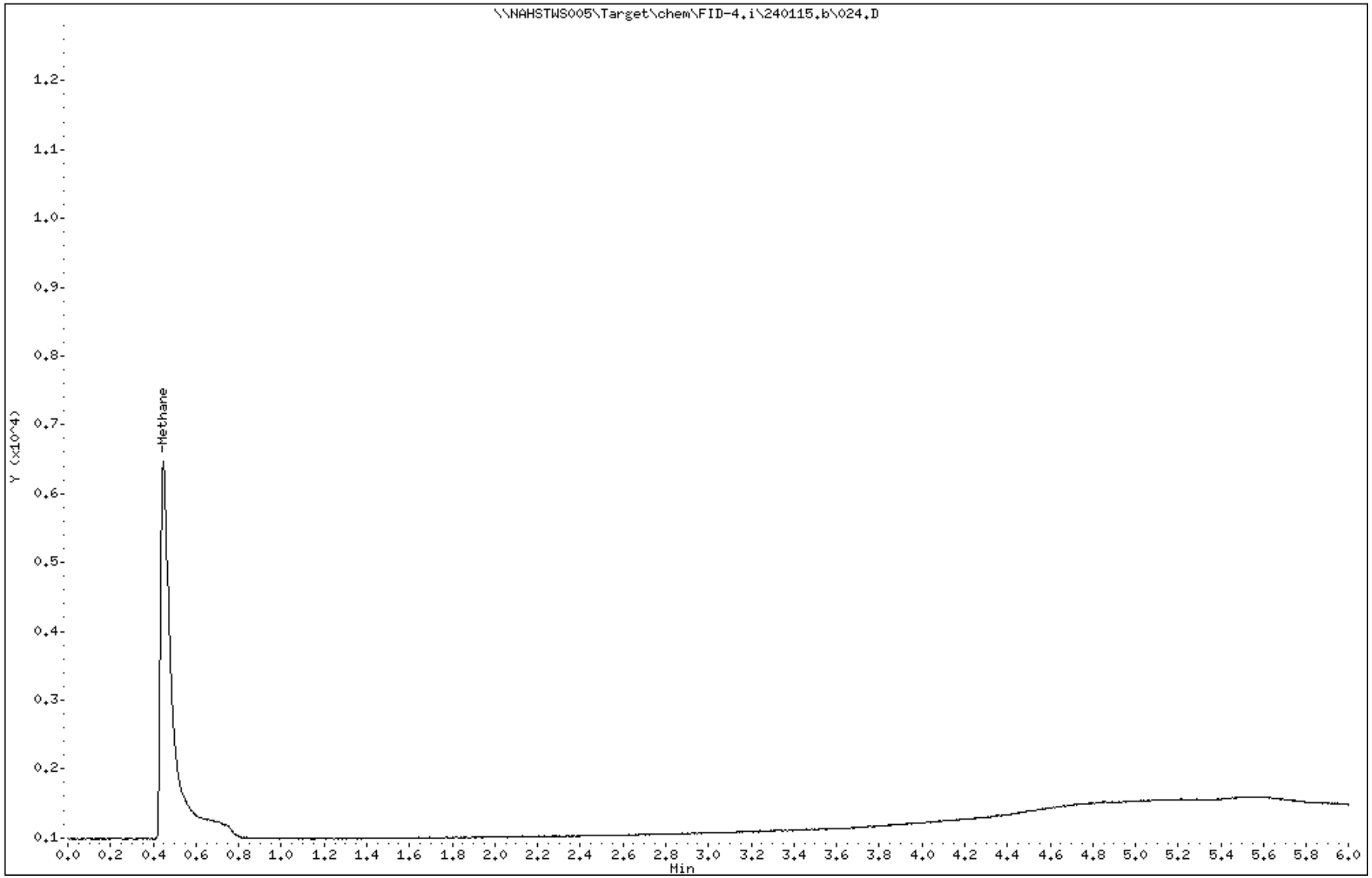
Instrument: FID-4.i

Sample Info: HS24010538-04;HS24010538-04

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



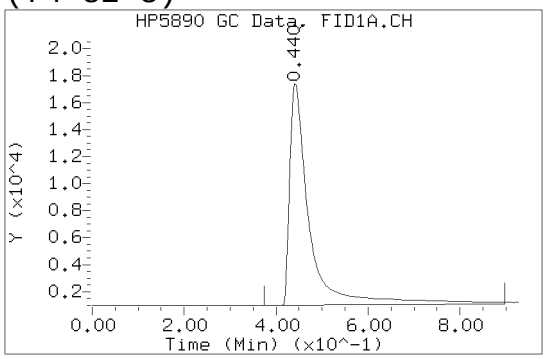
Data File : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\024.D
Inj Date : 15-JAN-2024 14:11
InstruID : FID-4.i
LabSampID : HS24010538-04

Methane (74-82-8)

Reason Code:

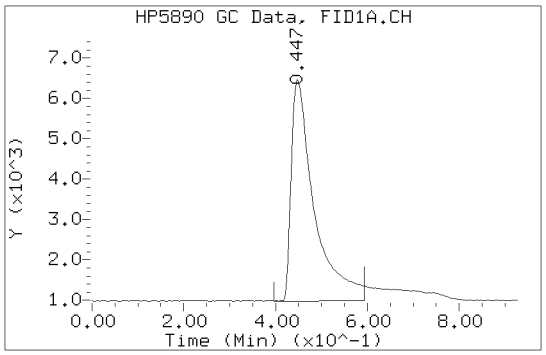
BEFORE

MASS
100
AREA
0
HEIGHT
0
15-Jan-2024
13:56
ALSHS
Server



AFTER

MASS
100
AREA
19218
HEIGHT
5483
19-Jan-2024
08:04
ALSHS
Server



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\240115.b\025.D
Lab Smp Id: HS24010538-08 Client Smp ID: HS24010538-08
Inj Date : 15-JAN-2024 14:19
Operator : PL Inst ID: FID-4.i
Smp Info : HS24010538-08;HS24010538-08
Misc Info : ;1;0;200
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\240115.b\RSKNI3.m
Meth Date : 15-Jan-2024 12:49 elona.hasa Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 25
Dil Factor: 200.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7022

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

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.446	0.426	0.020	35174	36.0762	7215.236
2 Ethene	0.650	0.633	0.017	7295	12.4539	2490.779(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\nahstws005\Target\chem\FID-4.i\240115.b\025.D

Date : 15-JAN-2024 14:19

Client ID: HS24010538-08

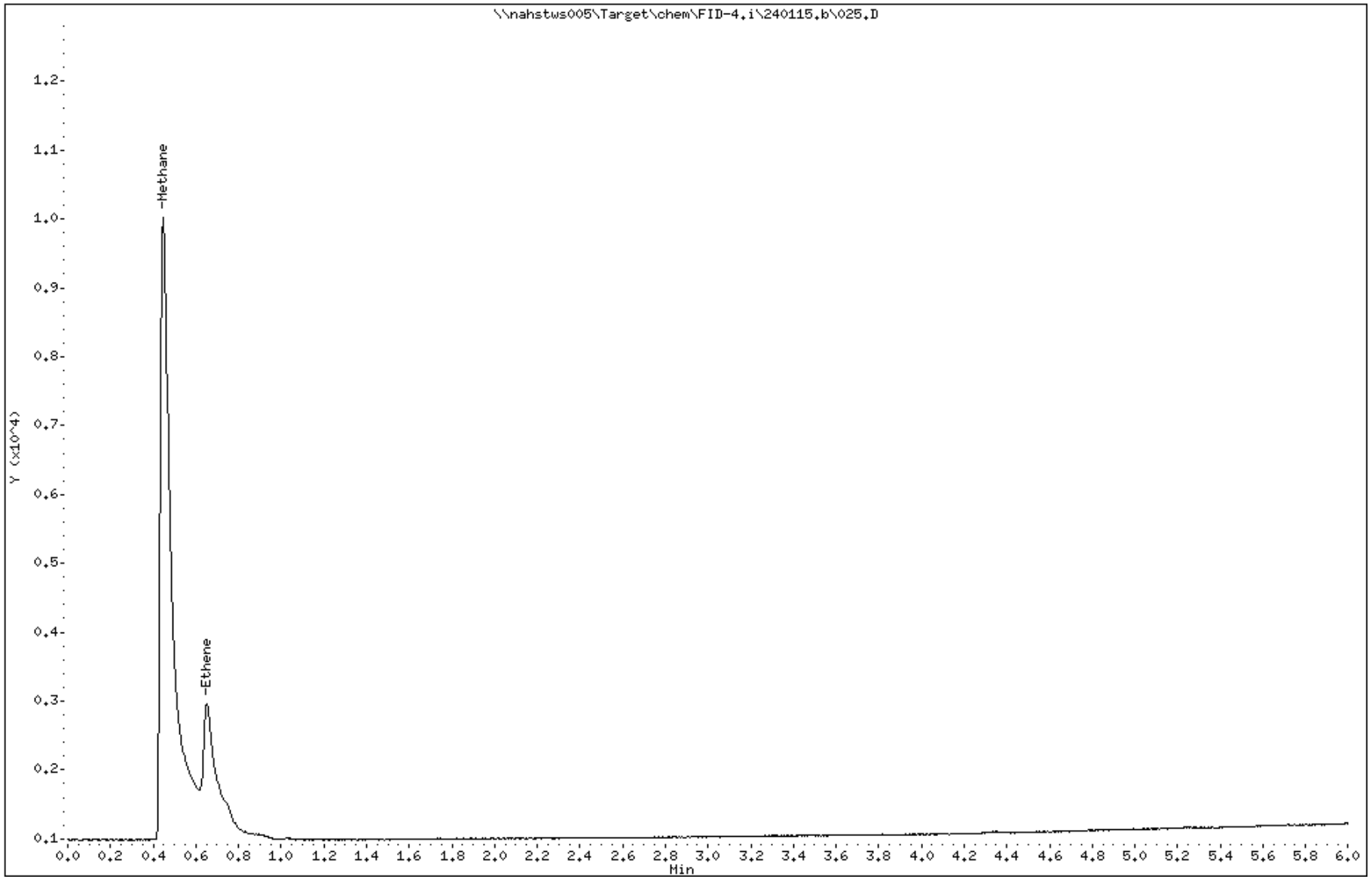
Instrument: FID-4.i

Sample Info: HS24010538-08;HS24010538-08

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



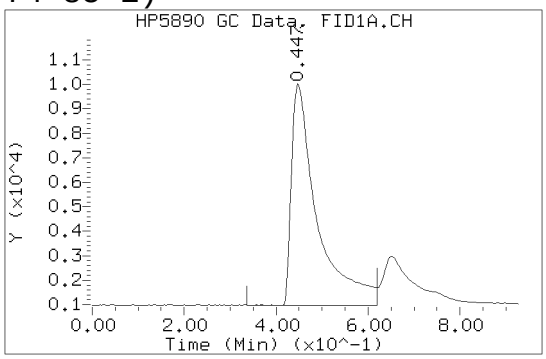
Data File : \\nahstws005\Target\chem\FID-4.i\240115.b\025.D
Inj Date : 15-JAN-2024 14:19
InstruID : FID-4.i
LabSampID : HS24010538-08

Ethene (74-85-1)

Reason Code:

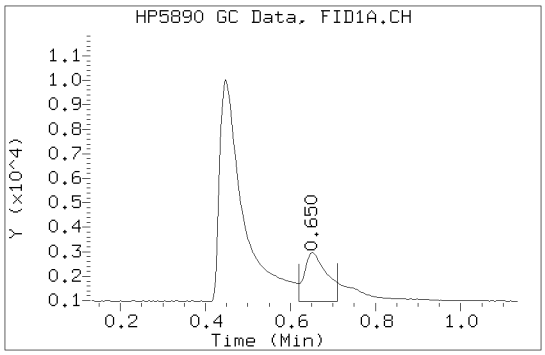
BEFORE

MASS
100
AREA
0
HEIGHT
0
15-Jan-2024
14:26
ALSHS
Server



AFTER

MASS
100
AREA
7295
HEIGHT
1987
15-Jan-2024
14:30
ALSHS
Ser



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\240115.b\026.D
Lab Smp Id: HS24010538-09 Client Smp ID: HS24010538-09
Inj Date : 15-JAN-2024 14:27
Operator : PL Inst ID: FID-4.i
Smp Info : HS24010538-09;HS24010538-09
Misc Info : ;1;0;200
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\240115.b\RSKNI3.m
Meth Date : 15-Jan-2024 12:49 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: NAHSTW7022

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

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.440	0.426	0.014	24612	25.2433	5048.655
2 Ethene	0.643	0.633	0.010	4073	6.95335	1390.670(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\nahstws005\Target\chem\FID-4.i\240115.b\026.D

Page 1

Date : 15-JAN-2024 14:27

Client ID: HS24010538-09

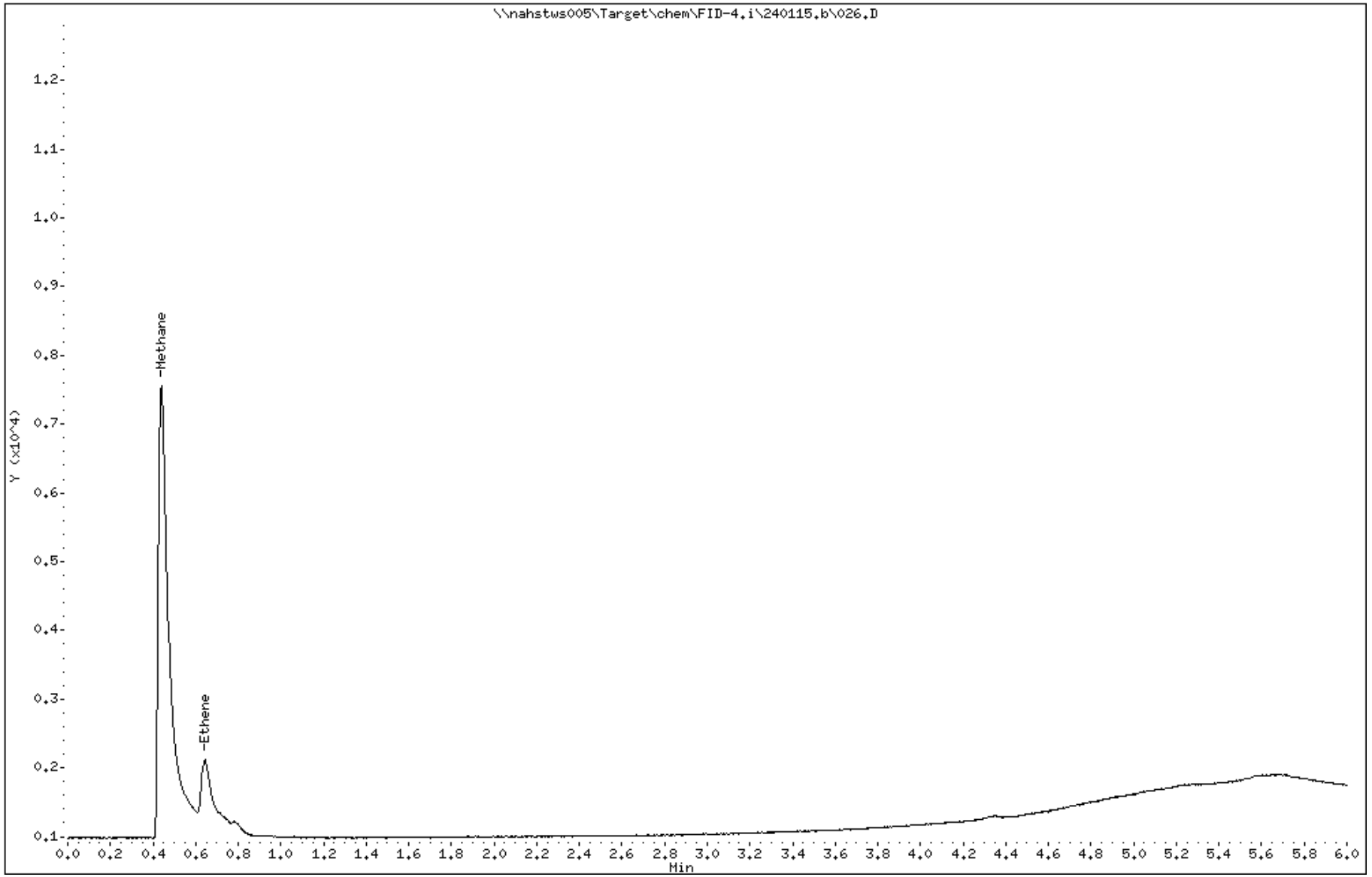
Instrument: FID-4.i

Sample Info: HS24010538-09;HS24010538-09

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



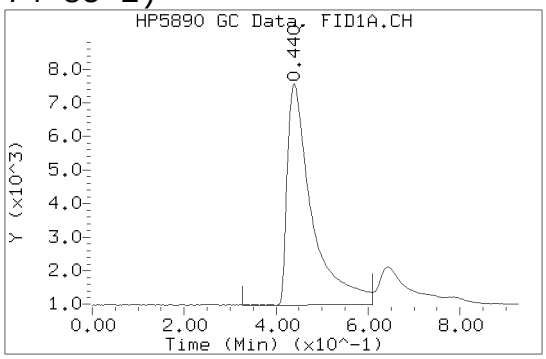
Data File : \\nahstws005\Target\chem\FID-4.i\240115.b\026.D
Inj Date : 15-JAN-2024 14:27
InstruID : FID-4.i
LabSampID : HS24010538-09

Ethene (74-85-1)

Reason Code:

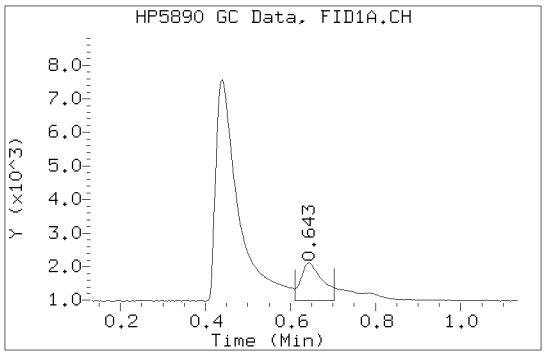
BEFORE

MASS
100
AREA
0
HEIGHT
0
15-Jan-2024
14:36
ALSHS
Server



AFTER

MASS
100
AREA
4073
HEIGHT
1129
15-Jan-2024
14:38
ALSHS
Ser



Data File: \\NAHSTWS005\Target\chem\FID-4.i\240115.b\027.D Page 1
Report Date: 18-Jan-2024 12:39

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\027.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 15-JAN-2024 14:35
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\240115.b\RSKNI3.m
Meth Date : 15-Jan-2024 14:43 samy.mata 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: NAHSTW7022

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

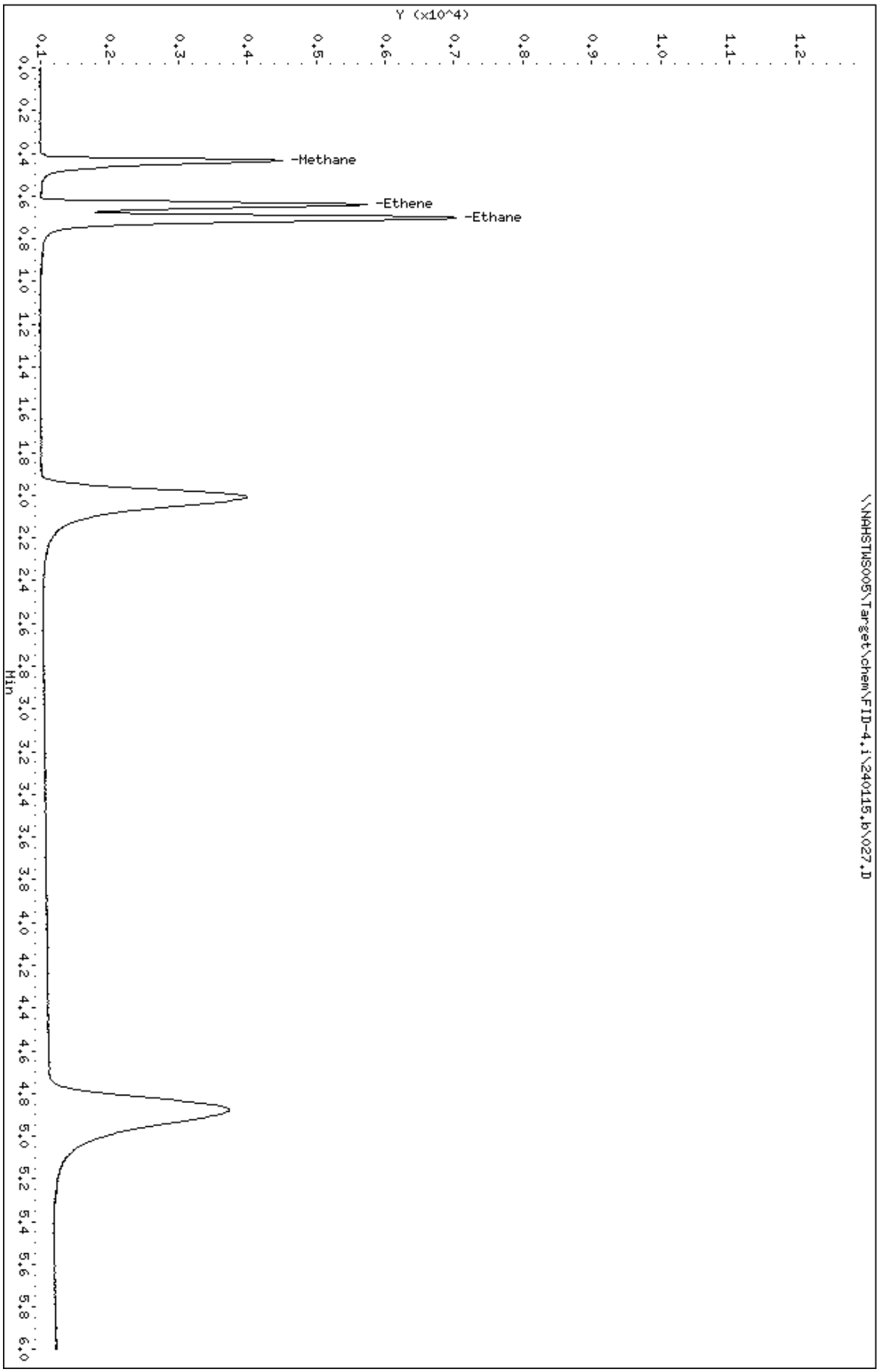
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Methane	0.433	0.433	0.000	7952	9.64700	8.155(M)
2 Ethene	0.640	0.640	0.000	9464	16.8500	16.156(M)
3 Ethane	0.703	0.703	0.000	14436	18.0430	20.064(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240115.b\027.D
Date : 15-JAN-2024 14:35
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

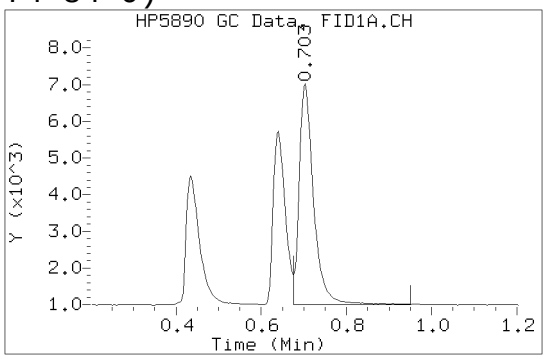


Data File : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\027.D
Inj Date : 15-JAN-2024 14:35
InstruID : FID-4.i
LabSampID : RSK-CCV

Ethane (74-84-0)

BEFORE

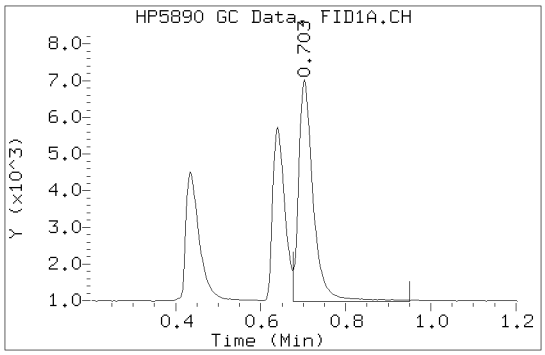
MASS
44
AREA
14165
HEIGHT
6024
15-Jan-2024
14:42
ALSHS
Server



Reason Code:

AFTER

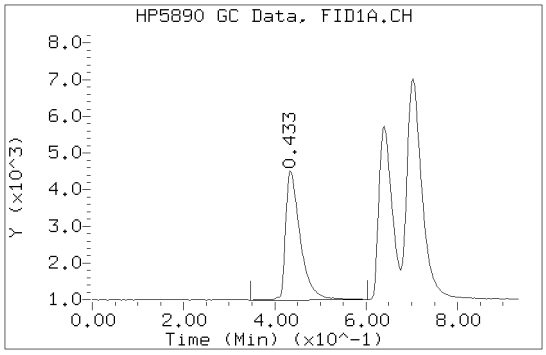
MASS
44
AREA
14436
HEIGHT
6035
18-Jan-2024
12:39
ALSHS
Server



Methane (74-82-8)

BEFORE

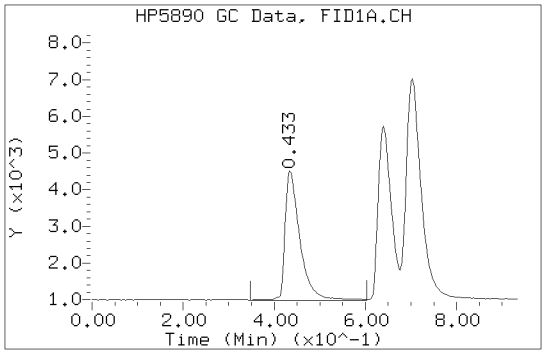
MASS
100
AREA
0
HEIGHT
0
15-Jan-2024
14:42
ALSHS
Server



Reason Code:

AFTER

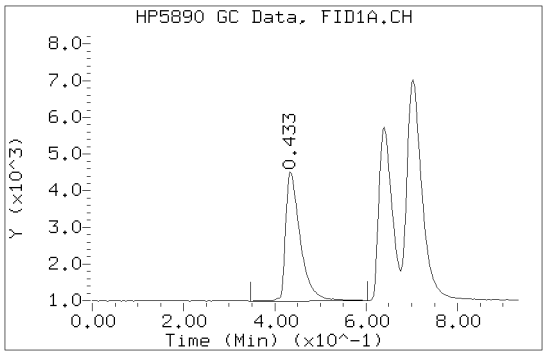
MASS
100
AREA
7952
HEIGHT
3526
18-Jan-2024
12:39
ALSHS
Server



Ethene (74-85-1)

BEFORE

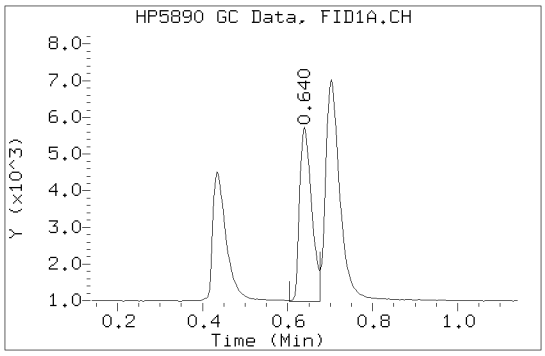
MASS
100
AREA
0
HEIGHT
0
15-Jan-2024
14:42
ALSHS
Server



Reason Code:

AFTER

MASS
100
AREA
9464
HEIGHT
4747
18-Jan-2024
12:39
ALSHS
Server



Data File: \\NAHSTWS005\Target\chem\FID-4.i\240118.b\001.D Page 1
Report Date: 18-Jan-2024 13:57

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240118.b\001.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 18-JAN-2024 13:41
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\240118.b\RSKNI3.m
Meth Date : 18-Jan-2024 13:57 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

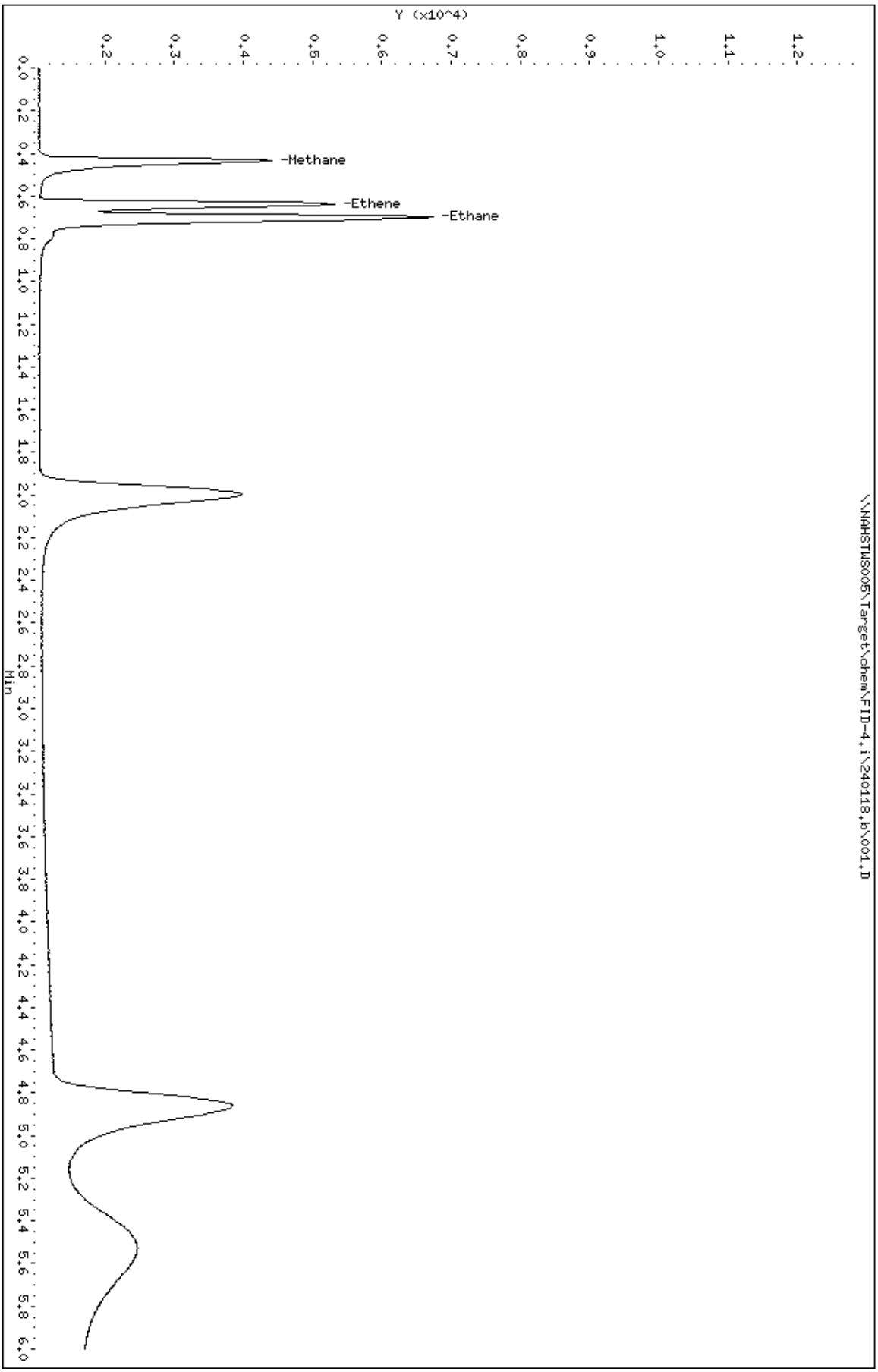
					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	0.433	0.433	0.000	8176	9.64700	8.385
2 Ethene	0.636	0.636	0.000	8737	16.8500	14.915
3 Ethane	0.700	0.700	0.000	13597	18.0430	18.898(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4,i\240118,b\001,D
Date : 18-JAN-2024 13:41
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



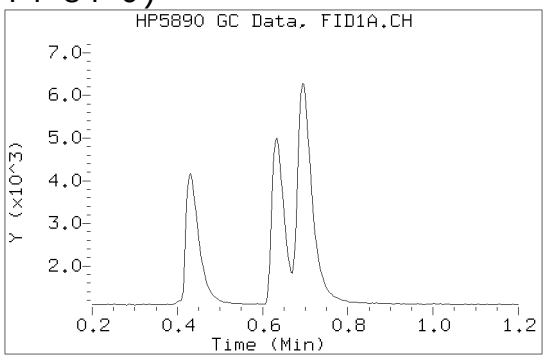
Data File : \\NAHSTWS005\Target\chem\FID-4.i\240118.b\001.D
Inj Date : 18-JAN-2024 13:41
InstruID : FID-4.i
LabSampID : RSK-CCV

Ethane (74-84-0)

Reason Code:

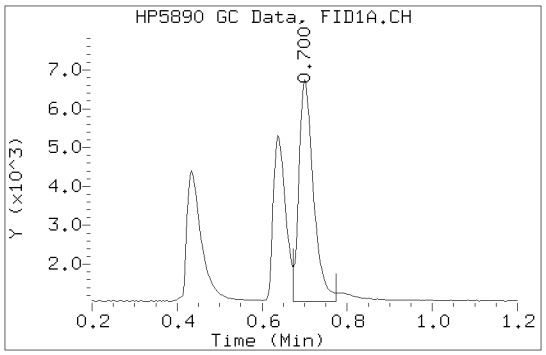
BEFORE

MASS
44
AREA
0
HEIGHT
0
18-Jan-2024
13:32
ALSHS
Server



AFTER

MASS
44
AREA
13597
HEIGHT
5702
18-Jan-2024
13:57
ALSHS
Server



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240118.b\006.D
Lab Smp Id: HS24010611-02MS Client Smp ID: HS24010611-02MS
Inj Date : 18-JAN-2024 15:11
Operator : PL Inst ID: FID-4.i
Smp Info : HS24010611-02MS;HS24010611-02MS
Misc Info : ;1;0;50
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\240118.b\RSKNI3.m
Meth Date : 18-Jan-2024 16:03 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 6 QC Sample: MS
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

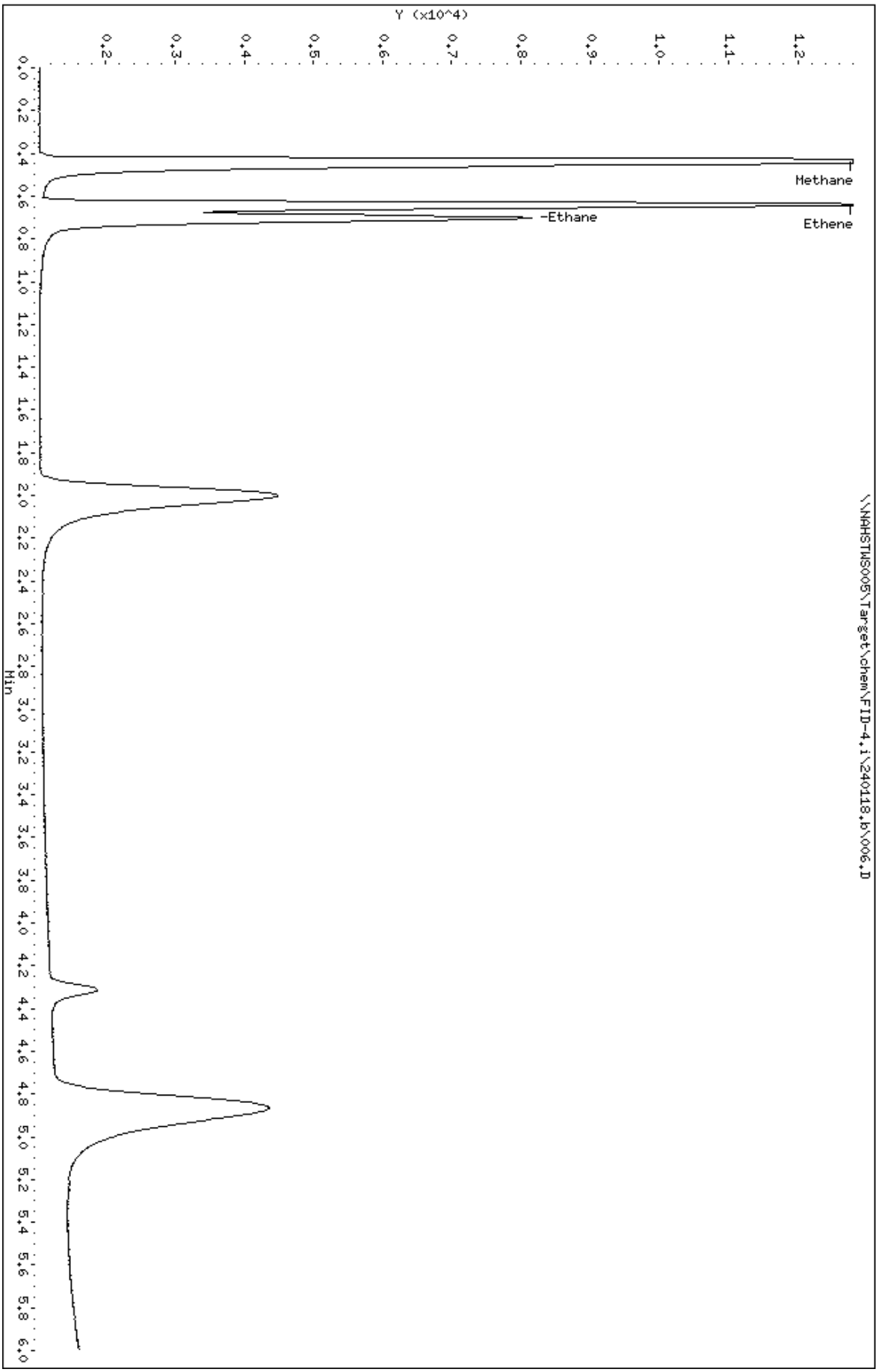
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.433	0.433	0.000	38401	39.3860	1969.297(ARM)
2 Ethene	0.640	0.636	0.004	26525	45.2830	2264.150(RM)
3 Ethane	0.700	0.700	0.000	19075	26.5118	1325.592(RM)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240118.b\006.D
Date : 18-JAN-2024 15:11
Client ID: HS24010611-02MS
Sample Info: HS24010611-02MS;HS24010611-02MS
Column phase: Rtx-PLOT

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



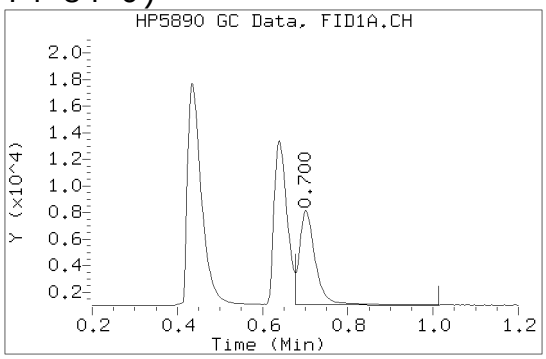
Data File : \\NAHSTWS005\Target\chem\FID-4.i\240118.b\006.D
Inj Date : 18-JAN-2024 15:11
InstruID : FID-4.i
LabSampID : HS24010611-02MS

Ethane (74-84-0)

Reason Code:

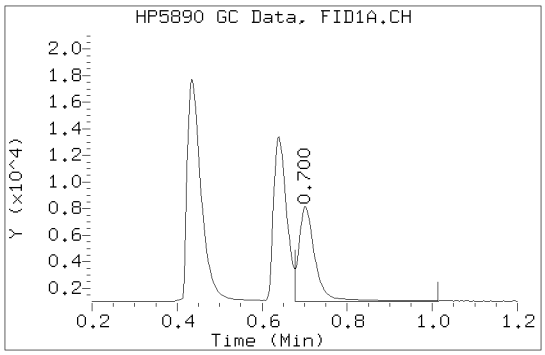
BEFORE

MASS
44
AREA
18433
HEIGHT
7090
18-Jan-2024
15:18
ALSHS
Server



AFTER

MASS
44
AREA
19075
HEIGHT
7120
19-Jan-2024
07:48
ALSHS
Server

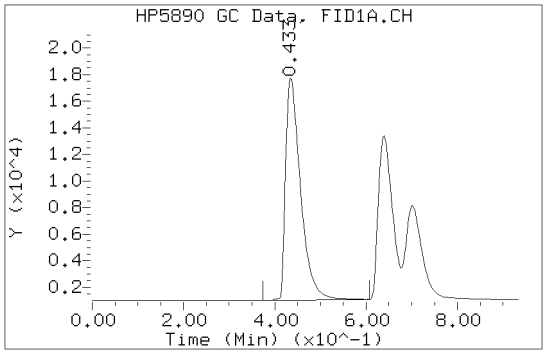


Methane (74-82-8)

Reason Code:

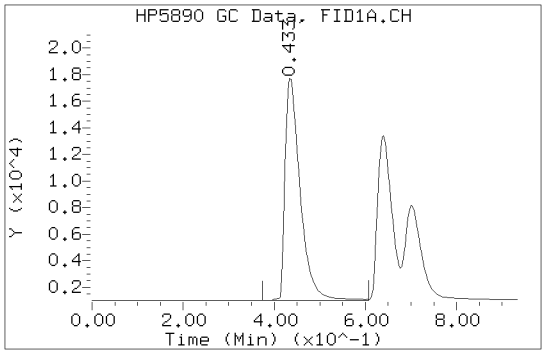
BEFORE

MASS
100
AREA
0
HEIGHT
0
18-Jan-2024
15:18
ALSHS
Server



AFTER

MASS
100
AREA
38401
HEIGHT
16658
19-Jan-2024
07:48
ALSHS
Server

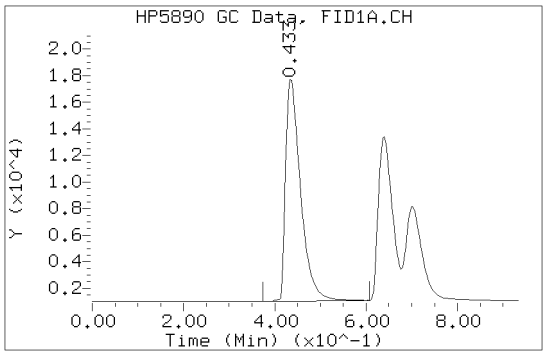


Ethene (74-85-1)

Reason Code:

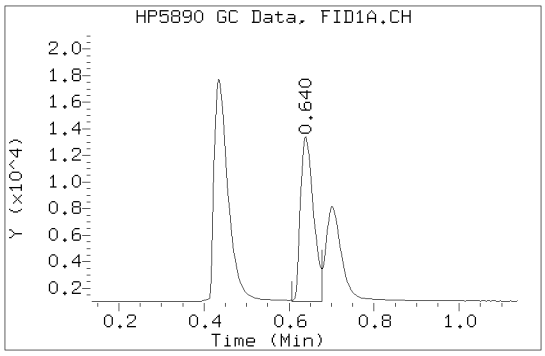
BEFORE

MASS
100
AREA
0
HEIGHT
0
18-Jan-2024
15:18
ALSHS
Server



AFTER

MASS
100
AREA
26525
HEIGHT
12365
19-Jan-2024
07:48
ALSHS
Server



Data File: \\NAHSTWS005\Target\chem\FID-4.i\240118.b\007.D Page 1
Report Date: 19-Jan-2024 07:49

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240118.b\007.D
Lab Smp Id: HS24010611-02MSD Client Smp ID: HS24010611-02MSD
Inj Date : 18-JAN-2024 15:19
Operator : PL Inst ID: FID-4.i
Smp Info : HS24010611-02MSD;HS24010611-02MSD
Misc Info : ;1;0;50
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\240118.b\RSKNI3.m
Meth Date : 18-Jan-2024 16:03 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 7 QC Sample: MSD
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	0.436	0.433	0.003	38036	39.0116	1950.579(ARM)
2 Ethene	0.640	0.636	0.004	25962	44.3219	2216.093(RM)
3 Ethane	0.703	0.700	0.003	18710	26.0045	1300.227(RM)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240118.b\007.D

Date : 18-JAN-2024 15:19

Client ID: HS24010611-02MSD

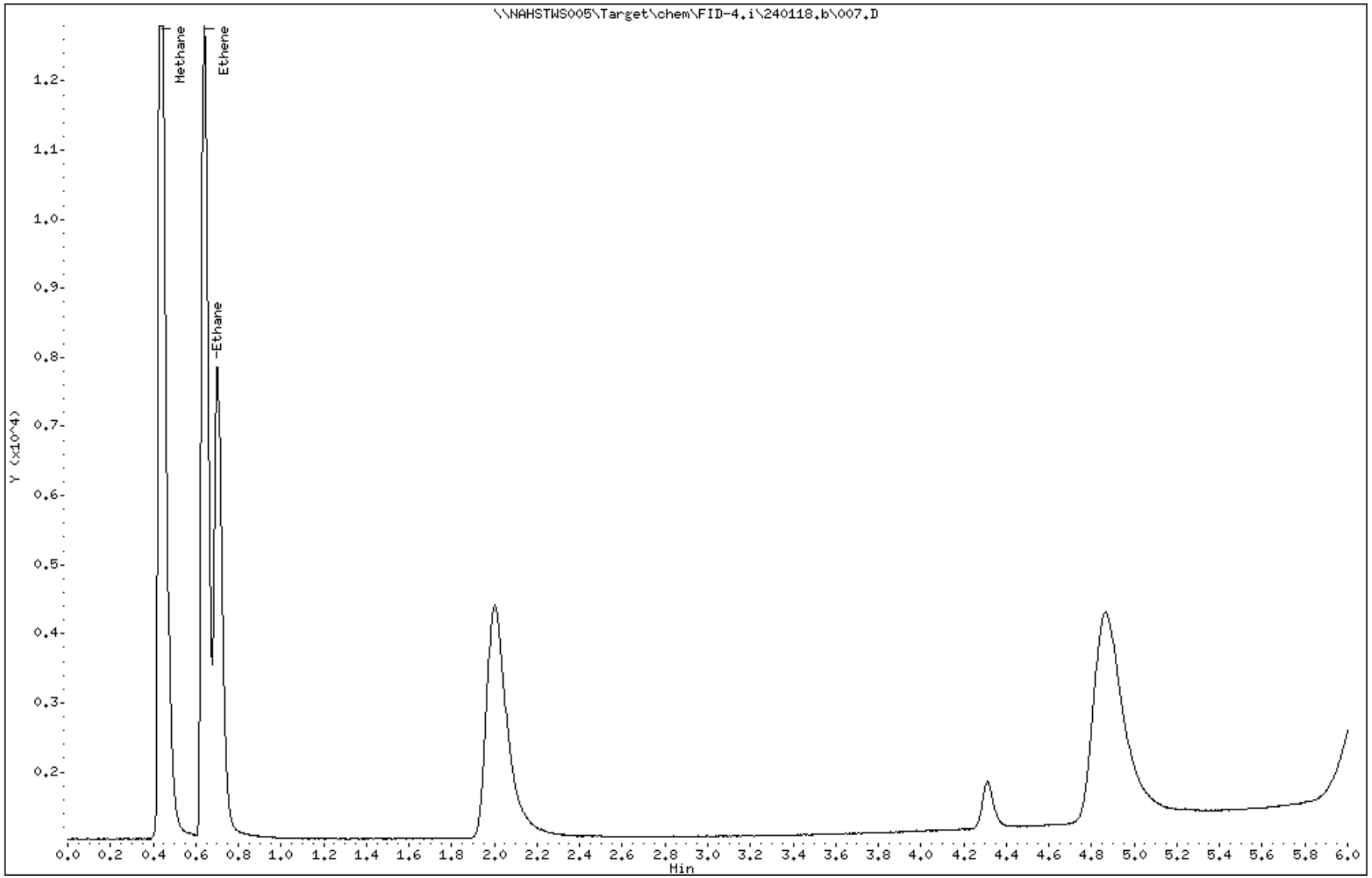
Instrument: FID-4.i

Sample Info: HS24010611-02MSD;HS24010611-02MSD

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53

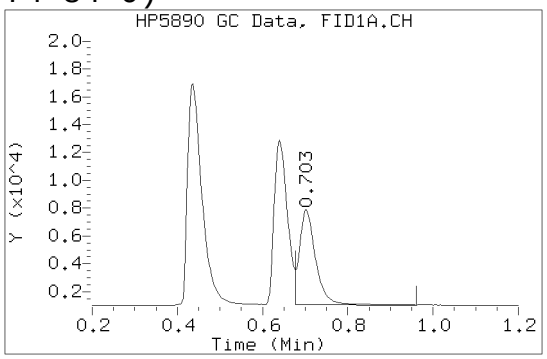


Data File : \\NAHSTWS005\Target\chem\FID-4.i\240118.b\007.D
Inj Date : 18-JAN-2024 15:19
InstruID : FID-4.i
LabSampID : HS24010611-02MSD

Ethane (74-84-0)

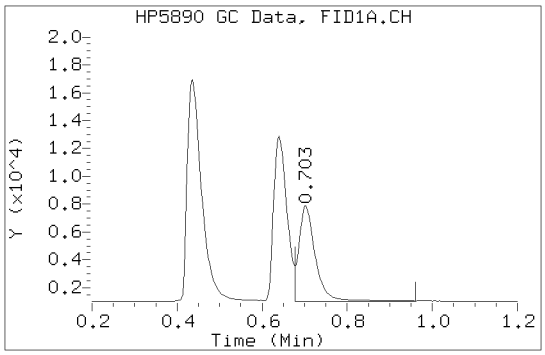
BEFORE

MASS
44
AREA
18048
HEIGHT
6812
18-Jan-2024
15:27
ALSHS
Server



AFTER

MASS
44
AREA
18710
HEIGHT
6843
19-Jan-2024
07:49
ALSHS
Server

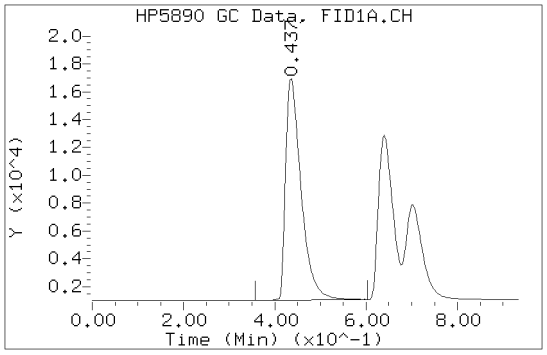


Reason Code:

Methane (74-82-8)

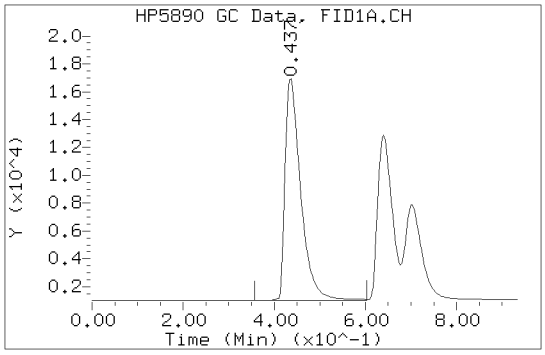
BEFORE

MASS
100
AREA
0
HEIGHT
0
18-Jan-2024
15:27
ALSHS
Server



AFTER

MASS
100
AREA
38036
HEIGHT
15914
19-Jan-2024
07:49
ALSHS
Server

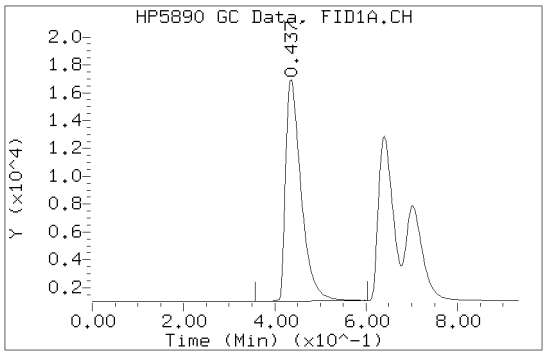


Reason Code:

Ethene (74-85-1)

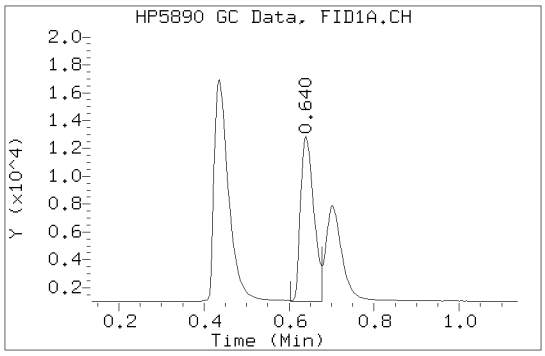
BEFORE

MASS
100
AREA
0
HEIGHT
0
18-Jan-2024
15:27
ALSHS
Server



AFTER

MASS
100
AREA
25962
HEIGHT
11876
19-Jan-2024
07:49
ALSHS
Server



Reason Code:

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240118.b\009.D Page 1
Report Date: 19-Jan-2024 07:50

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240118.b\009.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 18-JAN-2024 15:45
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\240118.b\RSKNI3.m
Meth Date : 18-Jan-2024 16:03 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 9 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7022

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

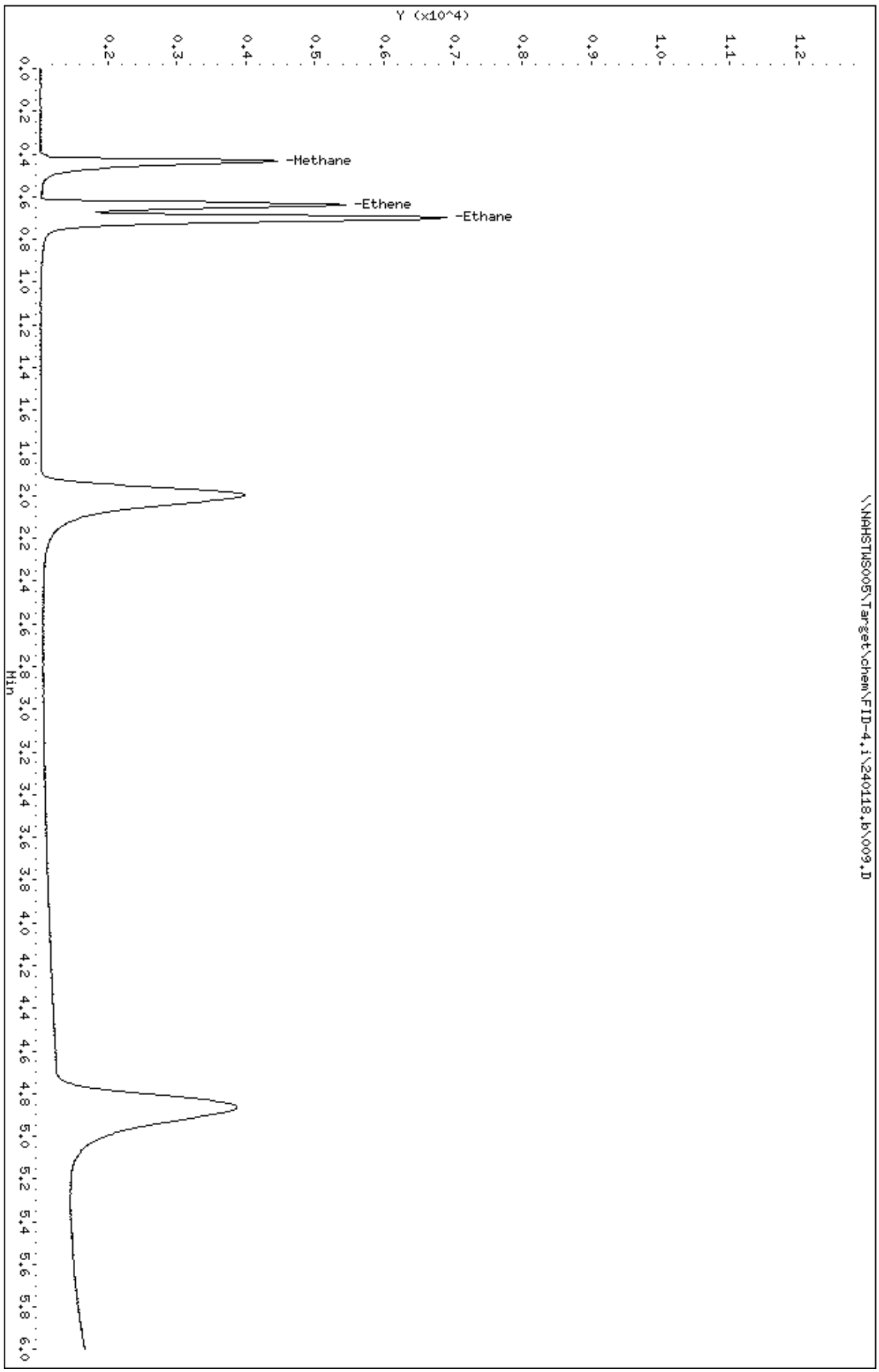
					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	0.433	0.433	0.000	8160	9.64700	8.369(M)
2 Ethene	0.636	0.636	0.000	8836	16.8500	15.084(M)
3 Ethane	0.700	0.700	0.000	14123	18.0430	19.629(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240118.b\009.D
Date : 18-JAN-2024 15:45
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



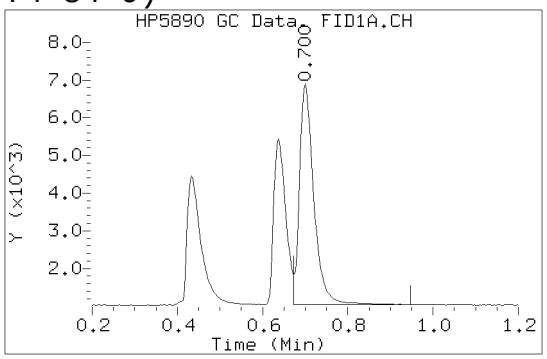
Data File : \\NAHSTWS005\Target\chem\FID-4.i\240118.b\009.D
Inj Date : 18-JAN-2024 15:45
InstruID : FID-4.i
LabSampID : RSK-CCV

Ethane (74-84-0)

Reason Code:

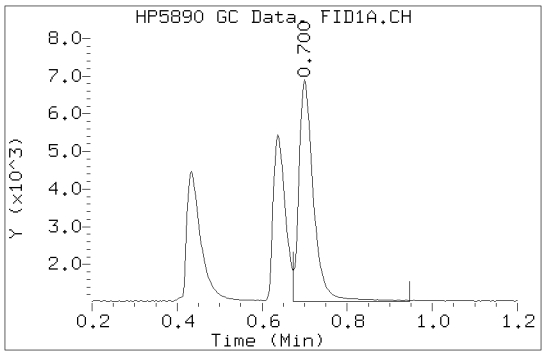
BEFORE

MASS
44
AREA
13778
HEIGHT
5868
18-Jan-2024
15:55
ALSHS
Server



AFTER

MASS
44
AREA
14123
HEIGHT
5883
19-Jan-2024
07:50
ALSHS
Server

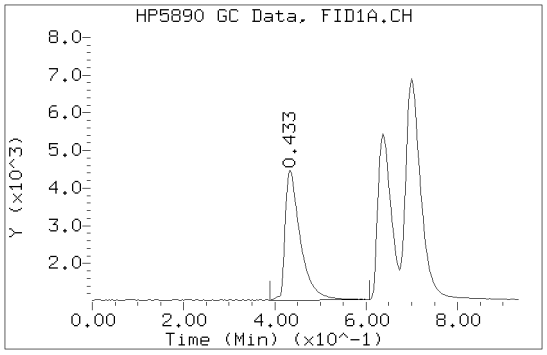


Methane (74-82-8)

Reason Code:

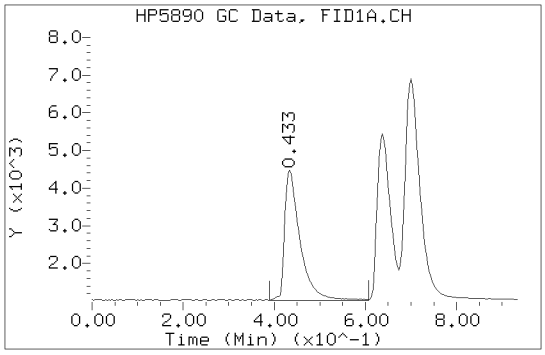
BEFORE

MASS
100
AREA
0
HEIGHT
0
18-Jan-2024
15:55
ALSHS
Server



AFTER

MASS
100
AREA
8160
HEIGHT
3447
19-Jan-2024
07:50
ALSHS
Server

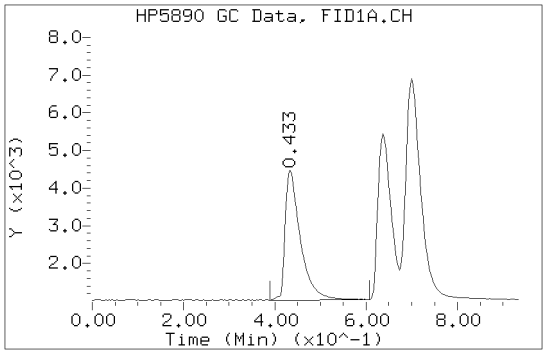


Ethene (74-85-1)

Reason Code:

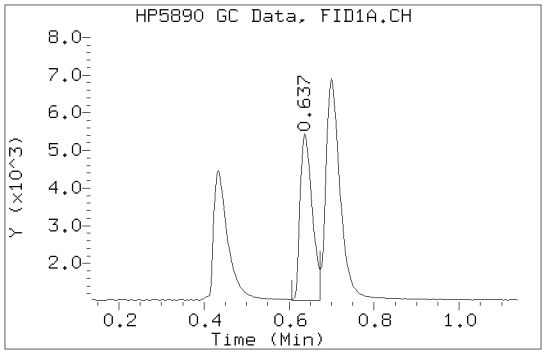
BEFORE

MASS
100
AREA
0
HEIGHT
0
18-Jan-2024
15:55
ALSHS
Server



AFTER

MASS
100
AREA
8836
HEIGHT
4427
19-Jan-2024
07:50
ALSHS
Server



HS24010538 Wetchem 9056_W

ALS WO# HS24010538

Sequence: 011124
Last Update Operator: alshs.nouser

CD	Name	Comment	Type	Position	Dilution	Level	Instrument Method
	STD1		Calibratic	GA1	1.00	1	Anions Program ISO37mM 150mm short 0.4 Constant current
	STD2		Calibratic	GA2	1.00	2	Anions Program ISO37mM 150mm short 0.4 Constant current
	STD3		Calibratic	GA3	1.00	3	Anions Program ISO37mM 150mm short 0.4 Constant current
	STD4		Calibratic	GA4	1.00	4	Anions Program ISO37mM 150mm short 0.4 Constant current
	STD5		Calibratic	GA5	1.00	5	Anions Program ISO37mM 150mm short 0.4 Constant current
	STD6		Calibratic	GA6	1.00	6	Anions Program ISO37mM 150mm short 0.4 Constant current
	ICV		Unknowr	GA7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	ICB		Unknowr	R4	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
	MBLK	300-W	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
	HS24010331-01DF100		Unknowr	RA1	100.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010331-02DF250		Unknowr	RA2	250.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010331-03DF10		Unknowr	RA3	10.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010331-03MSDF1(		Unknowr	RA4	10.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010331-03MSDDF		Unknowr	RA5	10.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010331-04DF250		Unknowr	RA6	250.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010331-05DF250		Unknowr	RA7	250.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010331-06DF10		Unknowr	RA8	10.00		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
	HS24010331-07DF250		Unknowr	RB1	250.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010331-08DF100		Unknowr	RB2	100.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010331-09DF10		Unknowr	RB3	10.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010331-10DF50		Unknowr	RB4	50.00		Anions Program ISO37mM 150mm short 0.4 Constant current

Sequence: 011124
Last Update Operator: alshs.nouser

CD	Name	Comment	Type	Position	Dilution	Level	Instrument Method
	HS24010331-11DF250		Unknown	RB5	250.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010331-12DF100		Unknown	RB6	100.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010331-12MSDF1(		Unknown	RB7	100.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010331-12MSDDF		Unknown	RB8	100.00		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	9056-W-SH	Unknown	R2	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	R8	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010519-02DF10	9056-W-SH	Unknown	RC1	10.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010519-02DF200	9056-W-SH	Unknown	RC2	200.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010519-03DF10	9056-W-SH	Unknown	RC3	10.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010519-03MSDF1(	9056-W-SH	Unknown	RC4	10.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010519-03MSDDF	9056-W-SH	Unknown	RC5	10.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010519-03DF200	9056-W-SH	Unknown	RC6	200.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010519-04DF20	9056-W-SH	Unknown	RC7	20.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010519-04DF400	9056-W-SH	Unknown	RC8	400.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010519-05DF10	9056-W-SH	Unknown	RD1	10.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010519-05DF200	9056-W-SH	Unknown	RD2	200.00		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
	HS24010519-06	9056-W-SH	Unknown	RD3	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010519-07	9056-W-SH	Unknown	RD4	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010519-07DF20	9056-W-SH	Unknown	RD5	20.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010519-08	9056-W-SH	Unknown	RD6	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010519-08DF20	9056-W-SH	Unknown	RD7	20.00		Anions Program ISO37mM 150mm short 0.4 Constant current

Sequence: 011124
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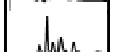
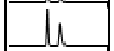
CD	Name	Comment	Type	Position	Dilution	Level	Instrument Method
	HS24010519-09DF20	9056-W-SH	Unknown	RD8	20.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010519-09MSDF20	9056-W-SH	Unknown	RE1	20.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010519-09MSDDF	9056-W-SH	Unknown	RE2	20.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010519-09DF400	9056-W-SH	Unknown	RE3	400.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010519-10	9056-W-SH	Unknown	RE4	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
	HS24010538-01	9056-W-SH	Unknown	RE5	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010538-02DF2	9056-W-SH	Unknown	RE6	2.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010538-03	9056-W-SH	Unknown	RE7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010538-04	9056-W-SH	Unknown	RE8	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010538-08	9056-W-SH	Unknown	GA1	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010538-09	9056-W-SH	Unknown	GA2	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010538-01DF20	9056-W-SH	Unknown	GA3	20.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010538-02DF50	9056-W-SH	Unknown	GA4	50.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010538-03DF20	9056-W-SH	Unknown	GA5	20.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010538-04DF20	9056-W-SH	Unknown	GA6	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	R6	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010538-08DF20	9056-W-SH	Unknown	GA7	20.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010538-09DF20	9056-W-SH	Unknown	GA8	20.00		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	R4	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current

Sequence: 011124
Last Update Operator: alshs.nouser

Processing Method	CD	Name	me	Status	Inject Time
Anions Processing Method ISO		STD1	5.0	Finished	12/14/2023 10:36:01 PM -06:00
Anions Processing Method ISO		STD2	5.0	Finished	12/14/2023 10:41:51 PM -06:00
Anions Processing Method ISO		STD3	5.0	Finished	12/14/2023 10:47:47 PM -06:00
Anions Processing Method ISO		STD4	5.0	Finished	12/14/2023 10:53:37 PM -06:00
Anions Processing Method ISO		STD5	5.0	Finished	12/14/2023 10:59:27 PM -06:00
Anions Processing Method ISO		STD6	5.0	Finished	12/14/2023 11:05:17 PM -06:00
Anions Processing Method ISO		ICV	5.0	Finished	12/14/2023 11:16:56 PM -06:00
Anions Processing Method ISO		ICB	5.0	Finished	12/14/2023 11:22:46 PM -06:00
Anions Processing Method ISO		CCV	5.0	Finished	1/11/2024 8:48:16 AM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/11/2024 8:54:06 AM -06:00
Anions Processing Method ISO		MBLK	5.0	Finished	1/11/2024 9:05:47 AM -06:00
Anions Processing Method ISO		LCS	5.0	Finished	1/11/2024 9:17:27 AM -06:00
Anions Processing Method ISO		HS24010331-01DF100	5.0	Finished	1/11/2024 9:34:35 AM -06:00
Anions Processing Method ISO		HS24010331-02DF250	5.0	Finished	1/11/2024 9:40:25 AM -06:00
Anions Processing Method ISO		HS24010331-03DF10	5.0	Finished	1/11/2024 9:46:15 AM -06:00
Anions Processing Method ISO		HS24010331-03MSDF1(	5.0	Finished	1/11/2024 9:52:17 AM -06:00
Anions Processing Method ISO		HS24010331-03MSDDF	5.0	Finished	1/11/2024 9:58:07 AM -06:00
Anions Processing Method ISO		HS24010331-04DF250	5.0	Finished	1/11/2024 10:03:57 AM -06:00
Anions Processing Method ISO		HS24010331-05DF250	5.0	Finished	1/11/2024 10:09:47 AM -06:00
Anions Processing Method ISO		HS24010331-06DF10	5.0	Finished	1/11/2024 10:15:37 AM -06:00
Anions Processing Method ISO		CCV1	5.0	Finished	1/11/2024 10:21:27 AM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/11/2024 10:33:08 AM -06:00
Anions Processing Method ISO		HS24010331-07DF250	5.0	Finished	1/11/2024 10:44:48 AM -06:00
Anions Processing Method ISO		HS24010331-08DF100	5.0	Finished	1/11/2024 10:50:38 AM -06:00
Anions Processing Method ISO		HS24010331-09DF10	5.0	Finished	1/11/2024 10:56:28 AM -06:00
Anions Processing Method ISO		HS24010331-10DF50	5.0	Finished	1/11/2024 11:02:18 AM -06:00

Sequence: 011124
Last Update Operator: alshs.nouser

Processing Method	CD	Name	me	Status	Inject Time
Anions Processing Method ISO		HS24010331-11DF250	5.0	Finished	1/11/2024 11:08:08 AM -06:00
Anions Processing Method ISO		HS24010331-12DF100	5.0	Finished	1/11/2024 11:13:59 AM -06:00
Anions Processing Method ISO		HS24010331-12MSDF10	5.0	Finished	1/11/2024 11:19:49 AM -06:00
Anions Processing Method ISO		HS24010331-12MSDDF	5.0	Finished	1/11/2024 11:25:39 AM -06:00
Anions Processing Method ISO		CCV	5.0	Finished	1/11/2024 11:37:19 AM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/11/2024 11:48:59 AM -06:00
Anions Processing Method ISO		MBLK	5.0	Finished	1/11/2024 12:06:30 PM -06:00
Anions Processing Method ISO		LCS	5.0	Finished	1/11/2024 12:12:20 PM -06:00
Anions Processing Method ISO		CCV1	5.0	Finished	1/11/2024 2:08:05 PM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/11/2024 2:25:36 PM -06:00
Anions Processing Method ISO		HS24010519-02DF10	5.0	Finished	1/11/2024 3:00:48 PM -06:00
Anions Processing Method ISO		HS24010519-02DF200	5.0	Finished	1/11/2024 3:06:38 PM -06:00
Anions Processing Method ISO		HS24010519-03DF10	5.0	Finished	1/11/2024 3:12:28 PM -06:00
Anions Processing Method ISO		HS24010519-03MSDF10	5.0	Finished	1/11/2024 3:18:18 PM -06:00
Anions Processing Method ISO		HS24010519-03MSDDF	5.0	Finished	1/11/2024 3:24:08 PM -06:00
Anions Processing Method ISO		HS24010519-03DF200	5.0	Finished	1/11/2024 3:29:58 PM -06:00
Anions Processing Method ISO		HS24010519-04DF20	5.0	Finished	1/11/2024 3:35:49 PM -06:00
Anions Processing Method ISO		HS24010519-04DF400	5.0	Finished	1/11/2024 3:41:39 PM -06:00
Anions Processing Method ISO		HS24010519-05DF10	5.0	Finished	1/11/2024 3:47:29 PM -06:00
Anions Processing Method ISO		HS24010519-05DF200	5.0	Finished	1/11/2024 3:53:19 PM -06:00
Anions Processing Method ISO		CCV	5.0	Finished	1/11/2024 4:04:59 PM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/11/2024 4:22:41 PM -06:00
Anions Processing Method ISO		HS24010519-06	5.0	Finished	1/11/2024 4:28:31 PM -06:00
Anions Processing Method ISO		HS24010519-07	5.0	Finished	1/11/2024 4:34:21 PM -06:00
Anions Processing Method ISO		HS24010519-07DF20	5.0	Finished	1/11/2024 4:40:22 PM -06:00
Anions Processing Method ISO		HS24010519-08	5.0	Finished	1/11/2024 4:46:12 PM -06:00
Anions Processing Method ISO		HS24010519-08DF20	5.0	Finished	1/11/2024 4:52:03 PM -06:00

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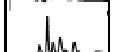
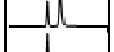
Last Update Operator: alshs.nouser

Processing Method	CD	Name	me	Status	Inject Time
Anions Processing Method ISO		HS24010519-09DF20	5.0	Finished	1/11/2024 4:57:53 PM -06:00
Anions Processing Method ISO		HS24010519-09MSDF20	5.0	Finished	1/11/2024 5:03:43 PM -06:00
Anions Processing Method ISO		HS24010519-09MSDDF	5.0	Finished	1/11/2024 5:09:33 PM -06:00
Anions Processing Method ISO		HS24010519-09DF400	5.0	Finished	1/11/2024 5:15:34 PM -06:00
Anions Processing Method ISO		HS24010519-10	5.0	Finished	1/11/2024 5:21:24 PM -06:00
Anions Processing Method ISO		CCV1	5.0	Finished	1/11/2024 5:33:04 PM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/11/2024 5:44:56 PM -06:00
Anions Processing Method ISO		HS24010538-01	5.0	Finished	1/11/2024 5:56:36 PM -06:00
Anions Processing Method ISO		HS24010538-02DF2	5.0	Finished	1/11/2024 6:02:26 PM -06:00
Anions Processing Method ISO		HS24010538-03	5.0	Finished	1/11/2024 6:08:16 PM -06:00
Anions Processing Method ISO		HS24010538-04	5.0	Finished	1/11/2024 6:14:07 PM -06:00
Anions Processing Method ISO		HS24010538-08	5.0	Finished	1/11/2024 6:20:08 PM -06:00
Anions Processing Method ISO		HS24010538-09	5.0	Finished	1/11/2024 6:25:58 PM -06:00
Anions Processing Method ISO		HS24010538-01DF20	5.0	Finished	1/11/2024 6:31:48 PM -06:00
Anions Processing Method ISO		HS24010538-02DF50	5.0	Finished	1/11/2024 6:37:38 PM -06:00
Anions Processing Method ISO		HS24010538-03DF20	5.0	Finished	1/11/2024 6:43:28 PM -06:00
Anions Processing Method ISO		HS24010538-04DF20	5.0	Finished	1/11/2024 6:49:18 PM -06:00
Anions Processing Method ISO		CCV	5.0	Finished	1/11/2024 7:18:27 PM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/11/2024 7:35:57 PM -06:00
Anions Processing Method ISO		HS24010538-08DF20	5.0	Finished	1/11/2024 7:47:37 PM -06:00
Anions Processing Method ISO		HS24010538-09DF20	5.0	Finished	1/11/2024 7:53:27 PM -06:00
Anions Processing Method ISO		CCV1	5.0	Finished	1/11/2024 8:22:37 PM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/11/2024 8:40:19 PM -06:00

Sequence: 121623
Injection #6: STD6

Calibration

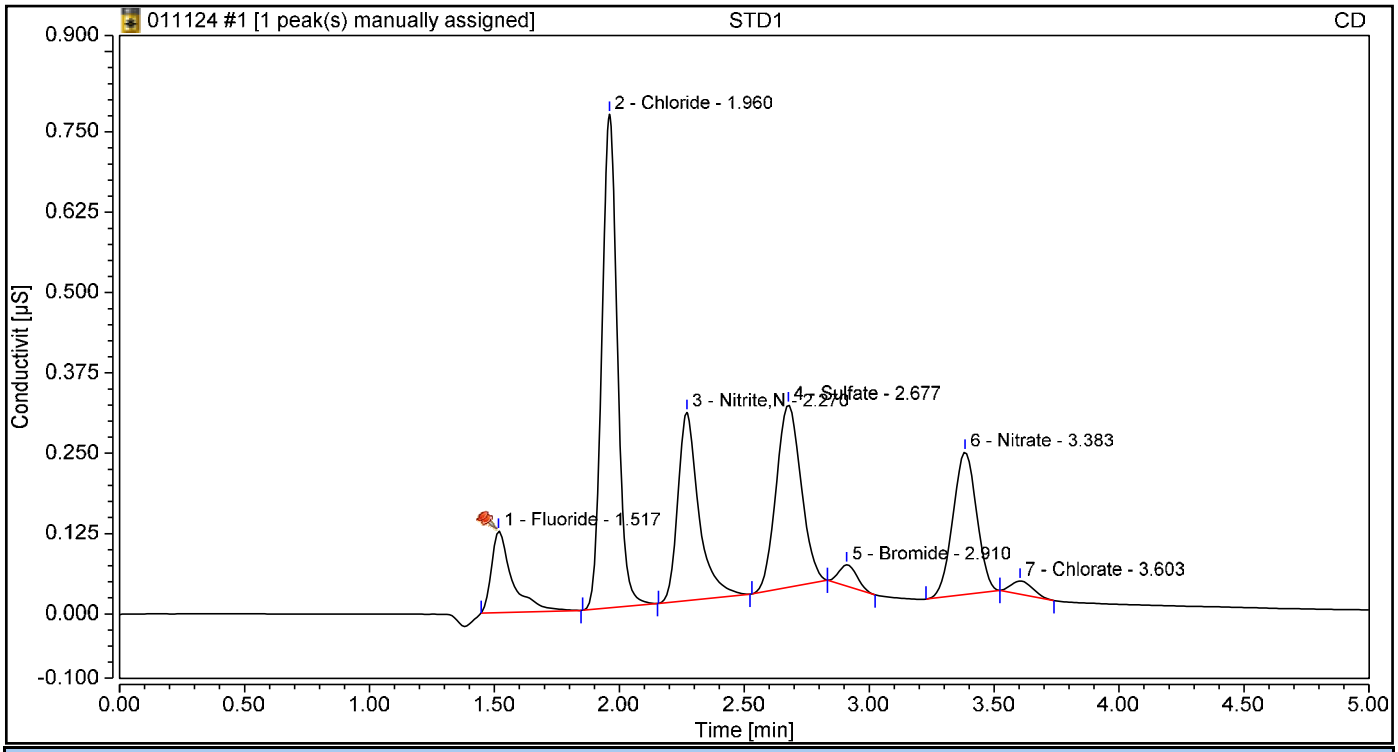
Peak No.	Peak Name	Cal.Type	Eval.Type	Number of Points	Rel.Std.Dev. %	Coeff.of Determination	C0 (Offset)	C1 (Slope)	C2 (Curve)
1	***Fluoride***	***Lin, WithOffset, 1/A***	***Area***	***6***	***11.9033***	***0.99943***	***-0.0119***	***0.2038***	***0.0000***
2	Chloride	Lin, WithOffset, 1/A	Area	6	4.2169	0.99992	-0.0204	0.1467	0.0000
3	Nitrite,N	Quad, WithOffset, 1/A	Area	6	7.6001	0.99974	-0.0035	0.3288	-0.0033
4	Sulfate	Quad, WithOffset, 1/A	Area	6	4.3557	0.99994	-0.0132	0.0896	0.0001
5	Bromide	Quad, WithOffset, 1/A	Area	6	13.7136	0.99952	-0.0004	0.0303	0.0008
6	Nitrate	Lin, WithOffset, 1/A	Area	6	3.8255	0.99993	-0.0106	0.3321	0.0000
7	Chlorate	Quad, WithOffset, 1/A	Area	6	8.5665	0.99976	-0.0016	0.0330	-0.0001
8	Phosphate	Lin, WithOffset, 1/A	Area	2	n.a.	1.00000	-0.6126	0.1265	0.0000
Maximum					**13.7136**	1.00000			
Minimum					3.8255	**0.99943**			

Chromatogram and Results

Injection Details

Injection Name:	**STD1**	*Run Time (min):*	**5.00**
Vial Number:	**GA1**	*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:	**14/Dec/23 22:36**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

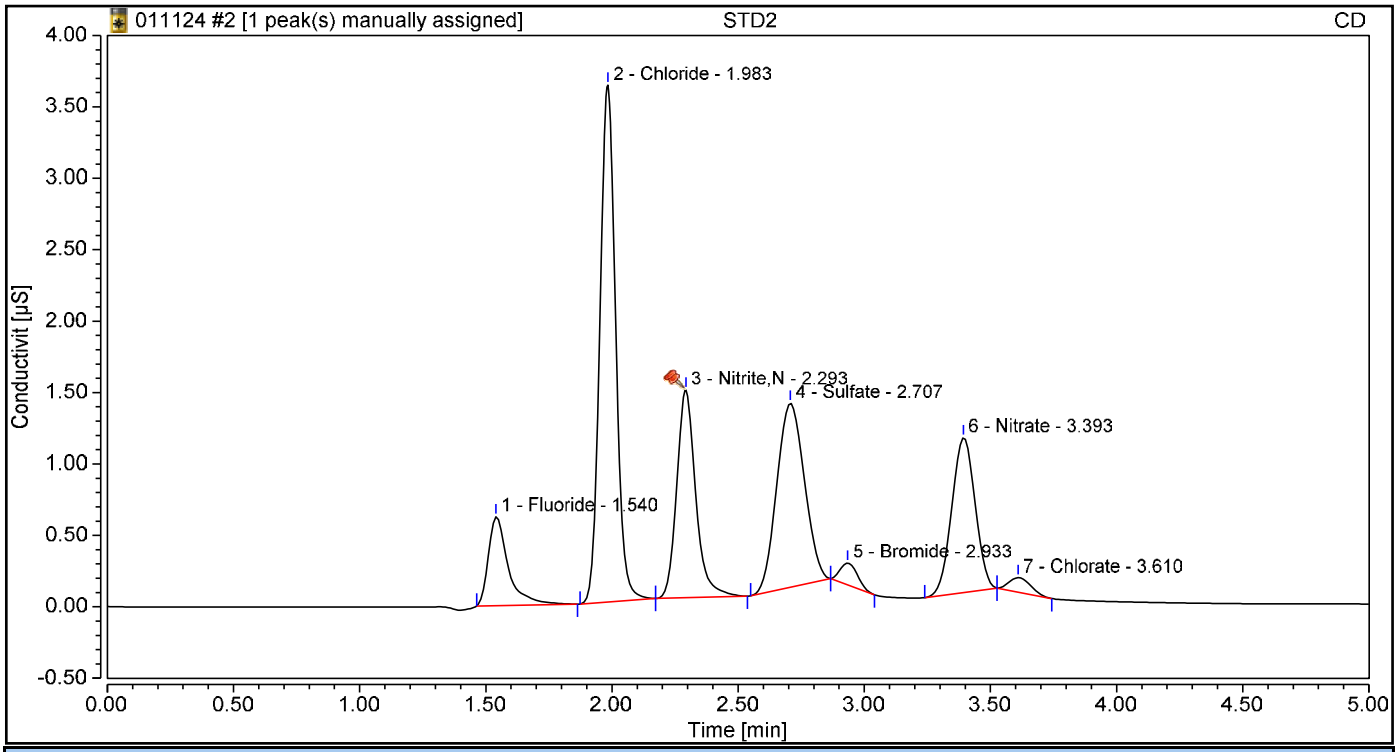
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.517	0.012	0.127	7.76	7.27	0.1185
2	Chloride	1.960	0.055	0.768	34.91	43.96	0.5164
3	Nitrite,N	2.270	0.029	0.293	18.01	16.76	0.0975
4	Sulfate	2.677	0.033	0.284	20.79	16.26	0.5150
5	Bromide	2.910	0.003	0.033	1.78	1.90	0.1043
6	Nitrate	3.383	0.024	0.221	15.44	12.68	0.1055
7	Chlorate	3.603	0.002	0.021	1.32	1.18	0.1115
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.158**	**1.747**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**STD2**	*Run Time (min):*	**5.00**
Vial Number:	**GA2**	*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:	**14/Dec/23 22:41**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

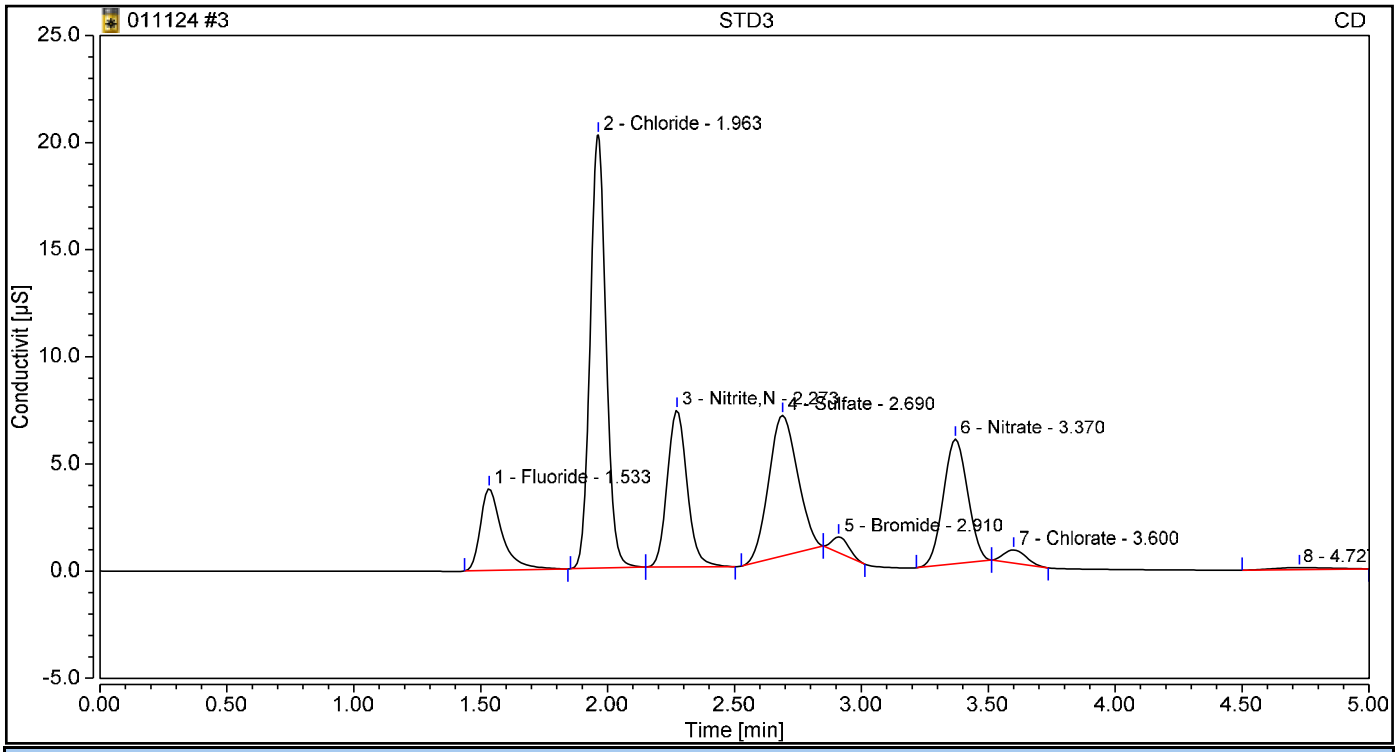
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.540	0.057	0.622	7.63	7.48	0.3379
2	Chloride	1.983	0.260	3.618	34.87	43.48	1.9144
3	Nitrite,N	2.293	0.127	1.454	16.98	17.48	0.3979
4	Sulfate	2.707	0.164	1.289	21.92	15.49	1.9706
5	Bromide	2.933	0.012	0.152	1.65	1.83	0.4125
6	Nitrate	3.393	0.116	1.084	15.58	13.03	0.3822
7	Chlorate	3.610	0.010	0.101	1.36	1.22	0.3557
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.747**	**8.321**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**STD3**	*Run Time (min):*	**5.00**
Vial Number:	**GA3**	*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:	**14/Dec/23 22:47**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

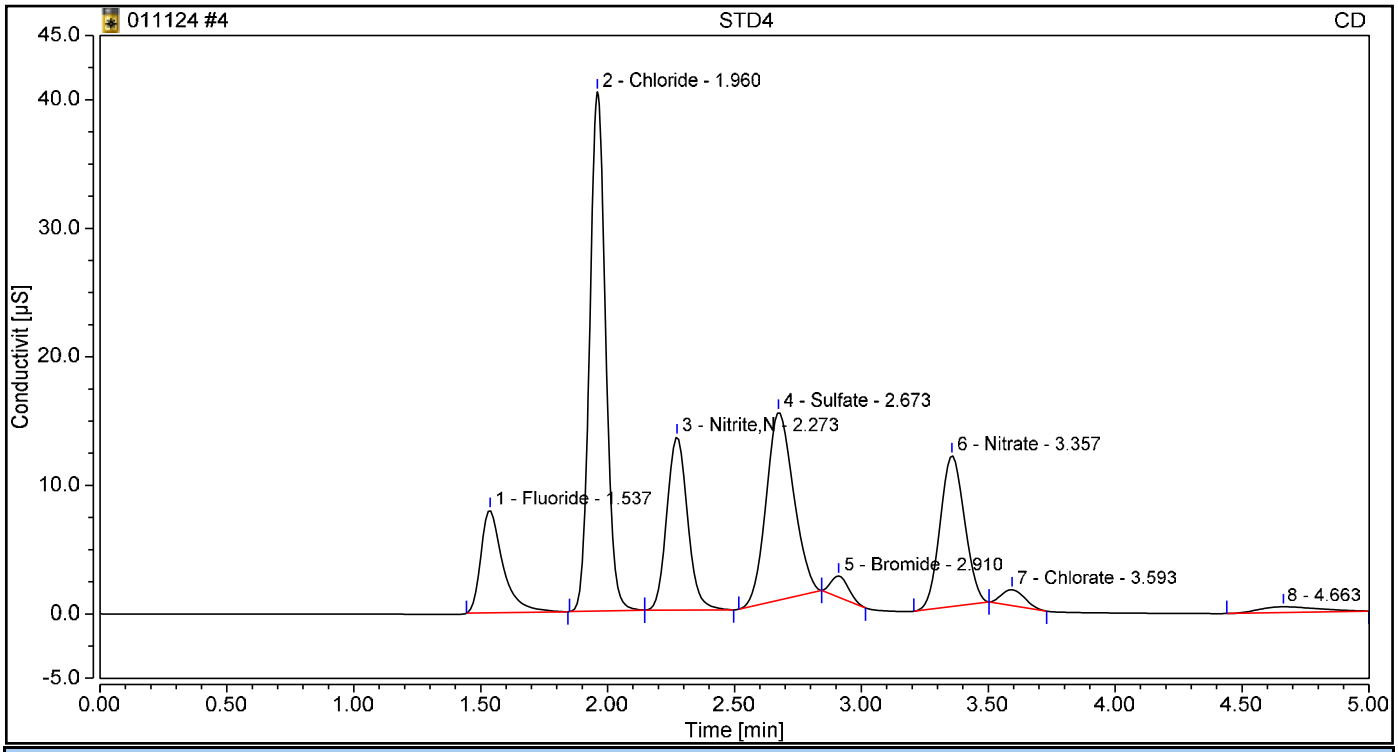
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.533	0.377	3.821	9.06	8.46	1.9075
2	Chloride	1.963	1.461	20.220	35.12	44.74	10.1020
3	Nitrite,N	2.273	0.662	7.317	15.91	16.19	2.0664
4	Sulfate	2.690	0.867	6.571	20.85	14.54	9.7231
5	Bromide	2.910	0.058	0.735	1.39	1.63	1.8267
6	Nitrate	3.370	0.648	5.824	15.58	12.89	1.9843
7	Chlorate	3.600	0.063	0.614	1.52	1.36	1.9670
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
8		4.727	0.024	0.092	0.58	0.20	n.a.
Total:			**4.161**	**45.194**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**STD4**	*Run Time (min):*	**5.00**
Vial Number:	**GA4**	*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:	**14/Dec/23 22:53**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

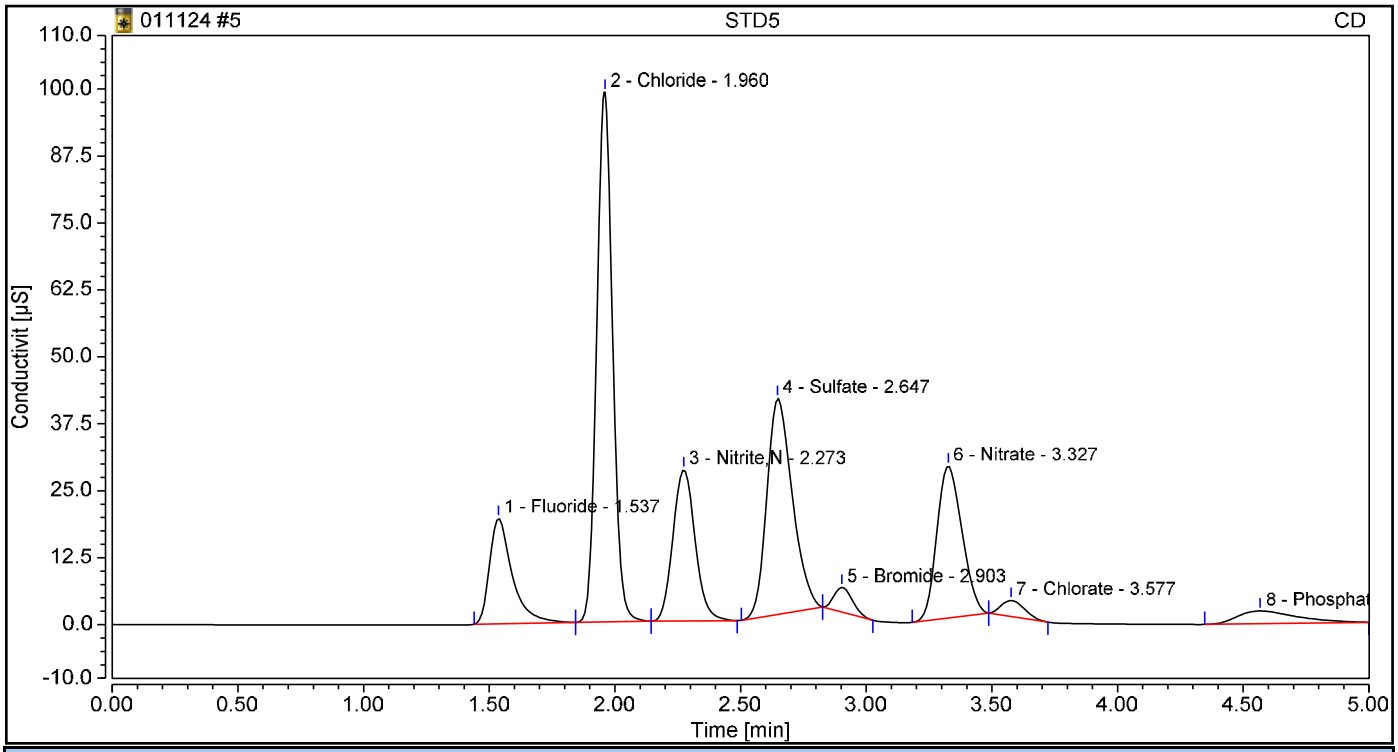
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.537	0.806	7.977	9.43	8.71	4.0156
2	Chloride	1.960	2.934	40.388	34.29	44.11	20.1409
3	Nitrite,N	2.273	1.275	13.474	14.91	14.72	4.0548
4	Sulfate	2.673	1.836	14.630	21.47	15.98	20.1831
5	Bromide	2.910	0.134	1.654	1.56	1.81	3.9776
6	Nitrate	3.357	1.316	11.738	15.39	12.82	3.9958
7	Chlorate	3.593	0.130	1.242	1.52	1.36	4.0261
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
8		4.663	0.123	0.452	1.43	0.49	n.a.
Total:			**8.555**	**91.554**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**STD5**	*Run Time (min):*	**5.00**
Vial Number:	**GA5**	*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:	**14/Dec/23 22:59**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

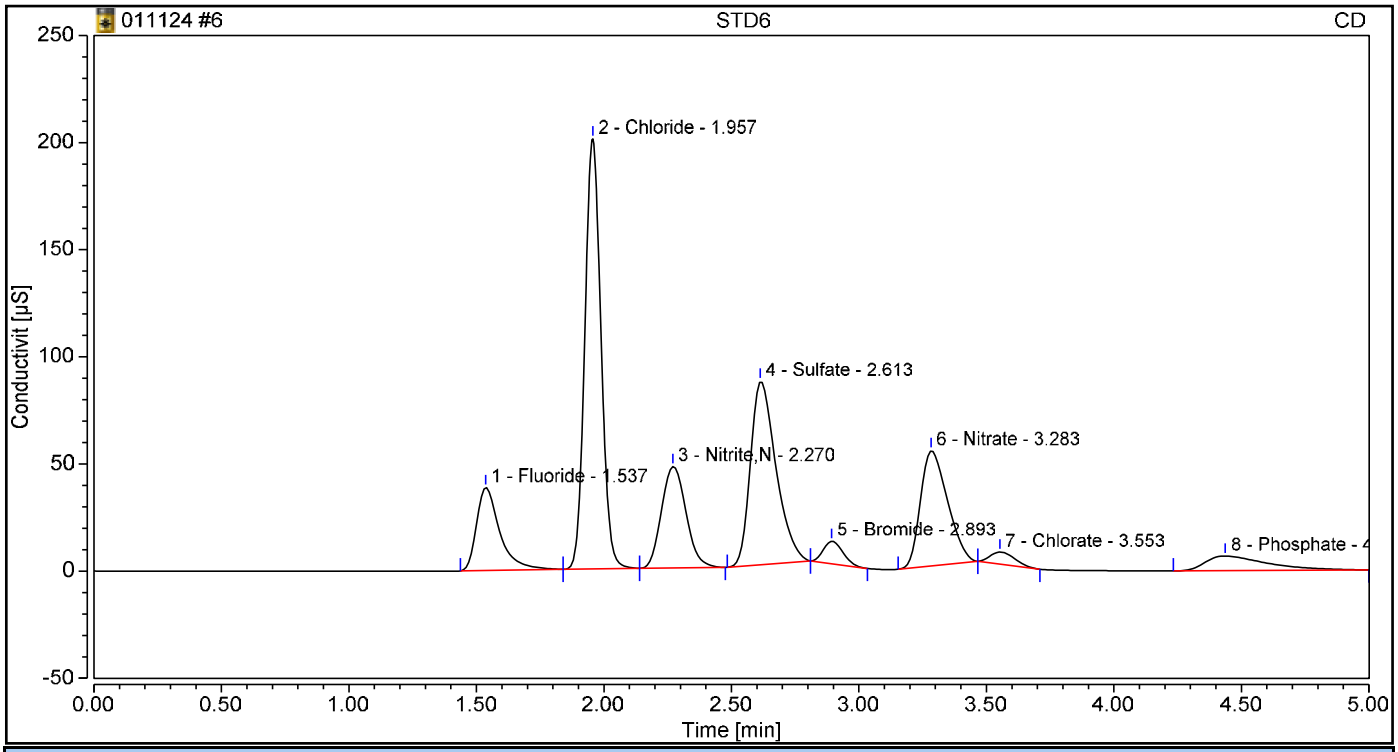
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.537	2.053	19.685	9.51	8.73	10.1343
2	Chloride	1.960	7.231	98.913	33.51	43.85	49.4399
3	Nitrite,N	2.273	2.893	28.253	13.41	12.53	9.7676
4	Sulfate	2.647	4.742	40.336	21.97	17.88	50.2072
5	Bromide	2.903	0.397	4.636	1.84	2.06	10.2281
6	Nitrate	3.327	3.287	28.359	15.23	12.57	9.9290
7	Chlorate	3.577	0.325	2.994	1.51	1.33	10.0850
8	Phosphate	4.567	0.653	2.388	3.02	1.06	10.0000
Total:			**21.581**	**225.564**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**STD6**	*Run Time (min):*	**5.00**
Vial Number:	**GA6**	*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:	**14/Dec/23 23:05**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

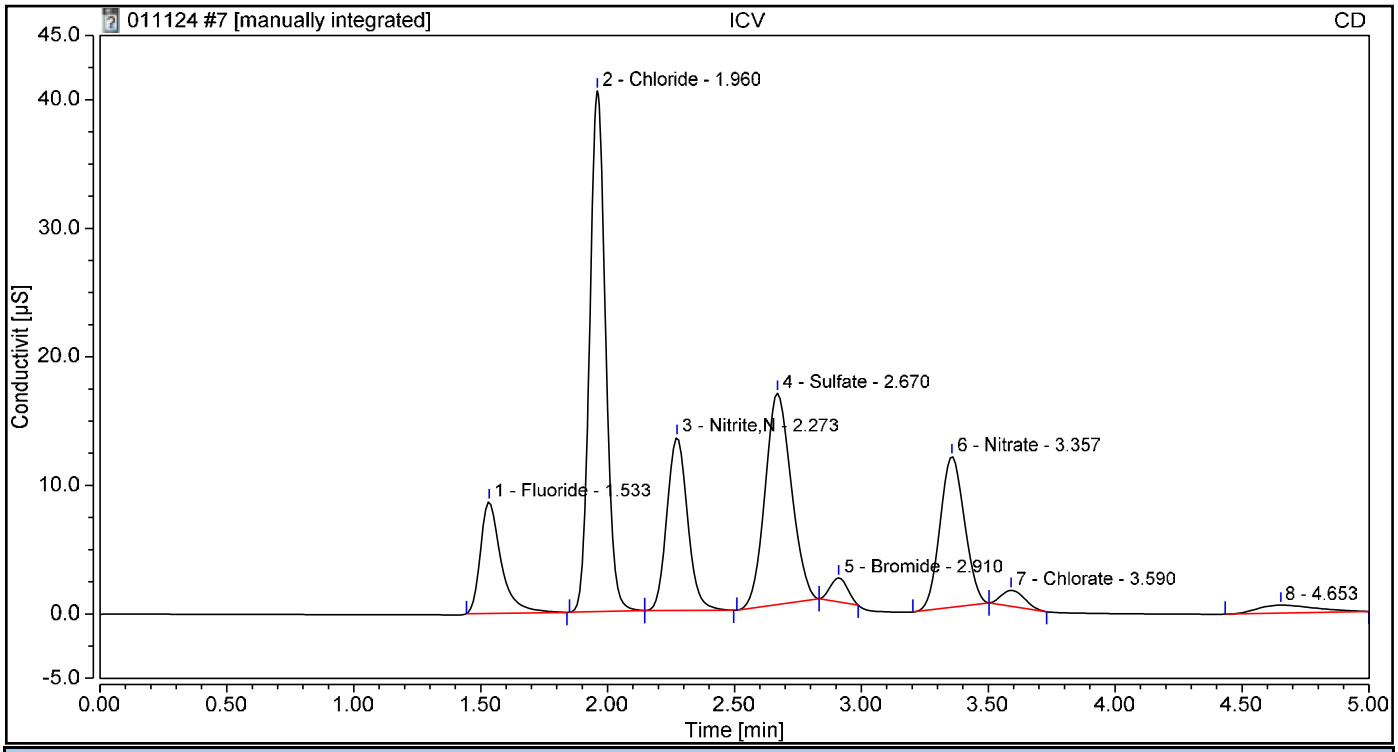
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.537	4.061	38.728	9.20	8.62	19.9862
2	Chloride	1.957	14.703	200.815	33.30	44.68	100.3863
3	Nitrite,N	2.270	5.278	47.425	11.95	10.55	20.1285
4	Sulfate	2.613	9.959	85.700	22.56	19.07	99.8983
5	Bromide	2.893	0.936	10.480	2.12	2.33	19.9270
6	Nitrate	3.283	6.665	53.831	15.10	11.98	20.1032
7	Chlorate	3.553	0.633	5.635	1.43	1.25	19.9547
8	Phosphate	4.437	1.918	6.848	4.34	1.52	20.0000
Total:			**44.153**	**449.460**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**ICV**	*Run Time (min):*	**5.00**
Vial Number:	**GA7**	*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:	**14/Dec/23 23:16**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

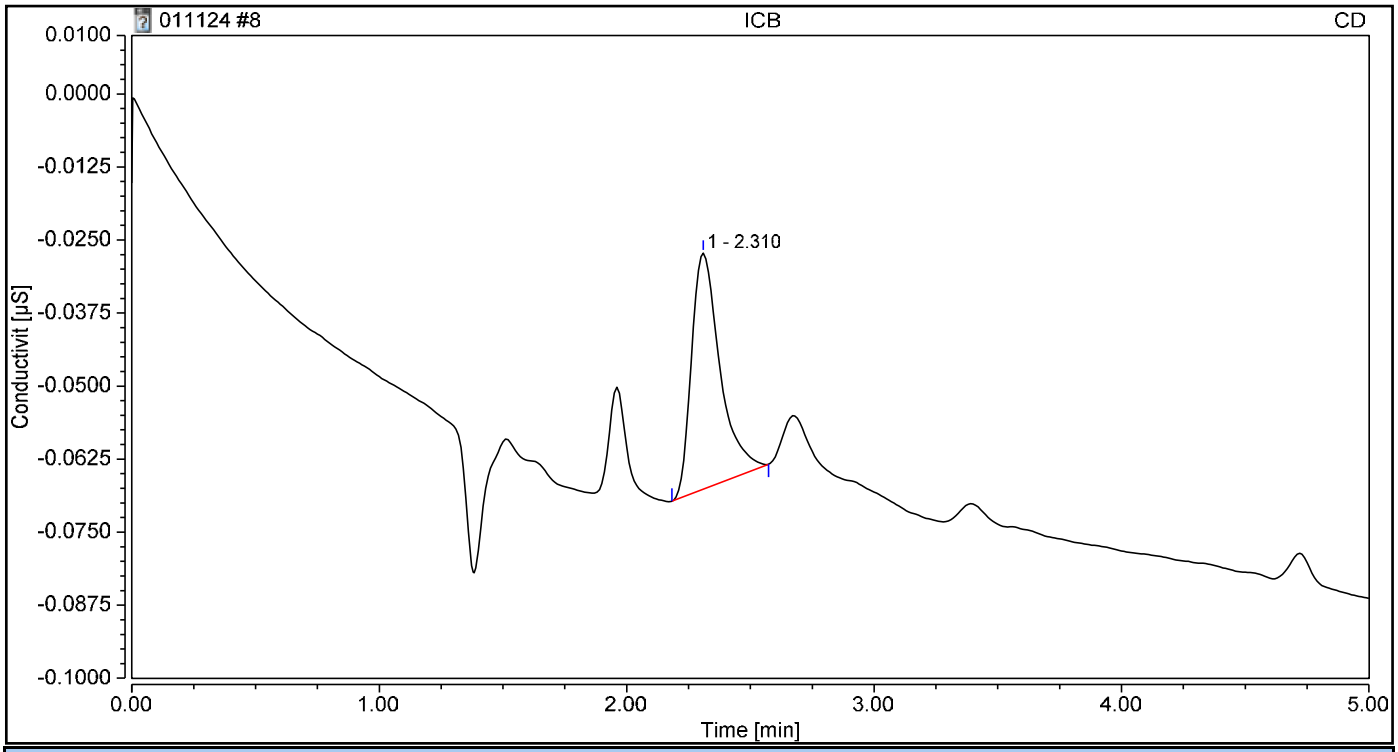
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.533	0.822	8.680	9.38	9.18	4.0915
2	Chloride	1.960	2.931	40.505	33.46	42.84	20.1253
3	Nitrite,N	2.273	1.271	13.471	14.51	14.25	4.0413
4	Sulfate	2.670	1.974	16.435	22.54	17.38	21.6553
5	Bromide	2.910	0.148	1.869	1.69	1.98	4.3666
6	Nitrate	3.357	1.316	11.735	15.03	12.41	3.9954
7	Chlorate	3.590	0.131	1.241	1.50	1.31	4.0538
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
8		4.653	0.166	0.623	1.89	0.66	n.a.
Total:			**8.760**	**94.559**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**ICB**	*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:	**14/Dec/23 23:22**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

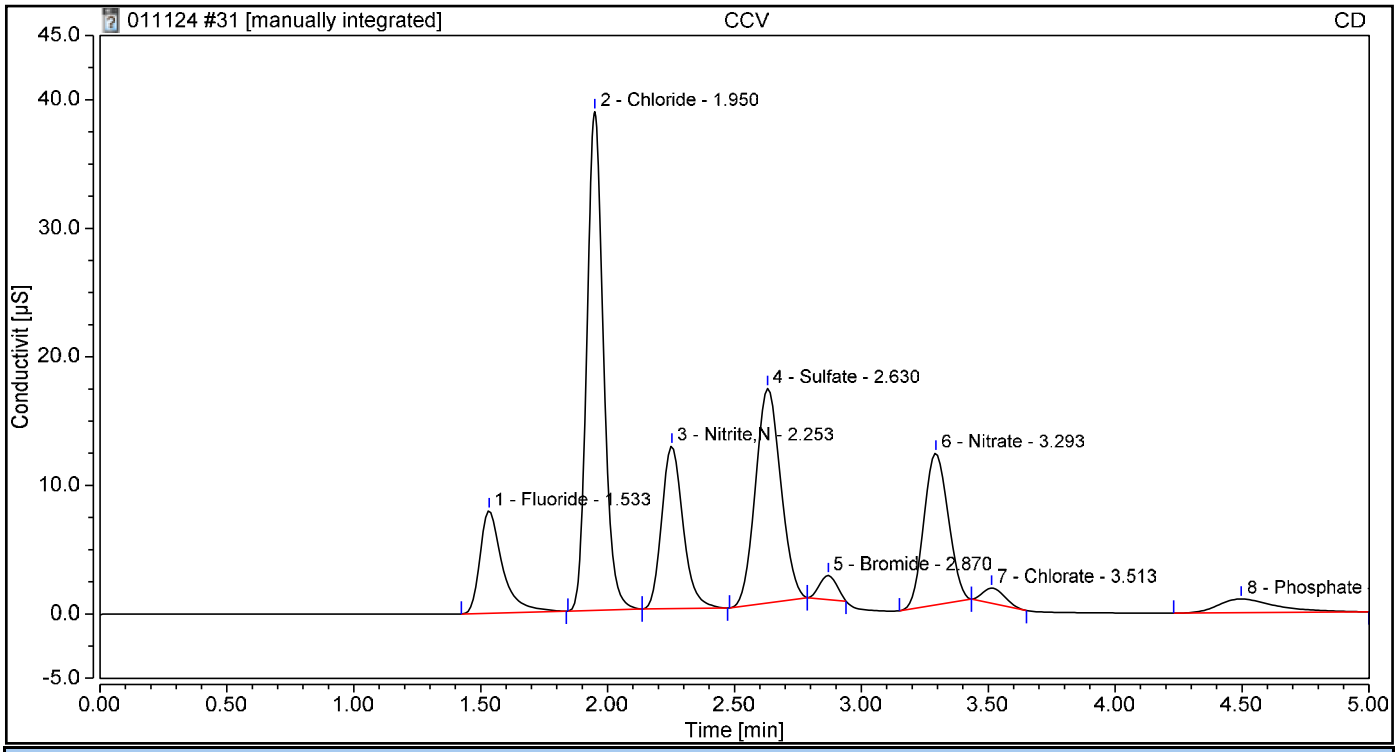
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1		2.310	0.005	0.040	100.00	100.00	n.a.
n.a.	Sulfate	n.a.	n.a.	n.a.	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:			**0.005**	**0.040**	**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:	**11/Jan/24 11:37**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

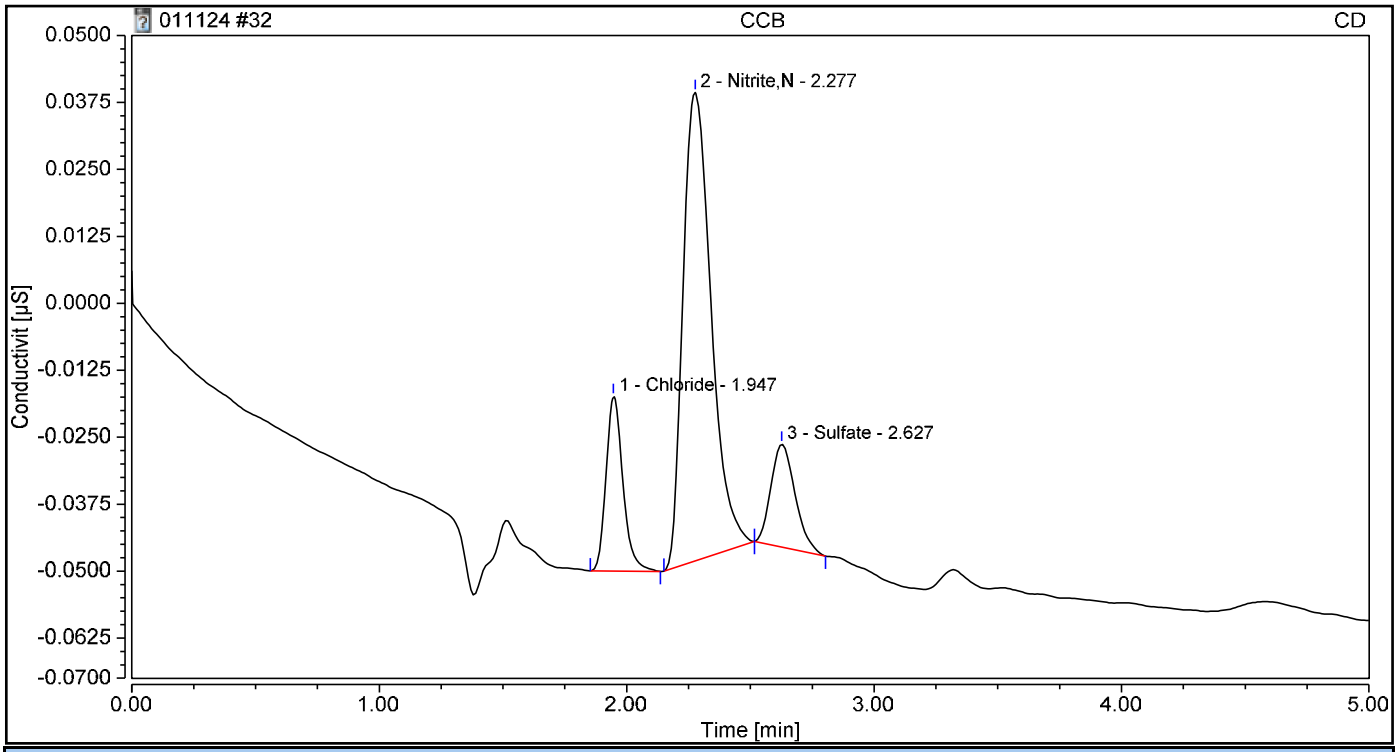
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.533	0.819	7.971	9.32	8.66	4.0791
2	Chloride	1.950	2.941	38.790	33.45	42.15	20.1880
3	Nitrite,N	2.253	1.237	12.643	14.07	13.74	3.9272
4	Sulfate	2.630	1.929	16.695	21.94	18.14	21.1717
5	Bromide	2.870	0.147	1.873	1.67	2.04	4.3333
6	Nitrate	3.293	1.313	11.800	14.93	12.82	3.9856
7	Chlorate	3.513	0.121	1.192	1.37	1.30	3.7368
8	Phosphate	4.497	0.286	1.073	3.25	1.17	7.1008
Total:			**8.792**	**92.038**	**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:	**11/Jan/24 11:48**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

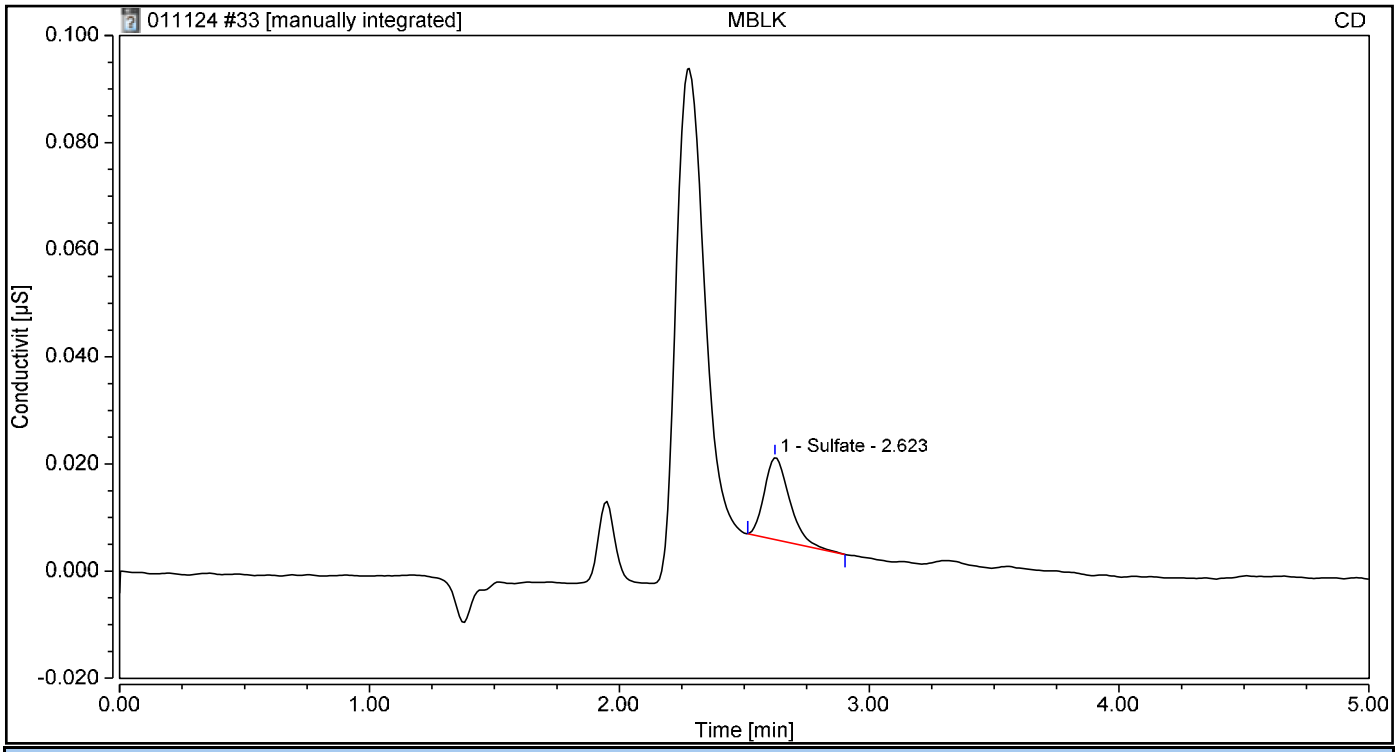
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	Chloride	1.947	0.003	0.033	15.82	23.43	0.1568
2	Nitrite,N	2.277	0.012	0.087	70.81	62.79	0.0457
3	Sulfate	2.627	0.002	0.019	13.37	13.79	0.1717
n.a.	Bromide	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**	

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:	**11/Jan/24 12:06**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

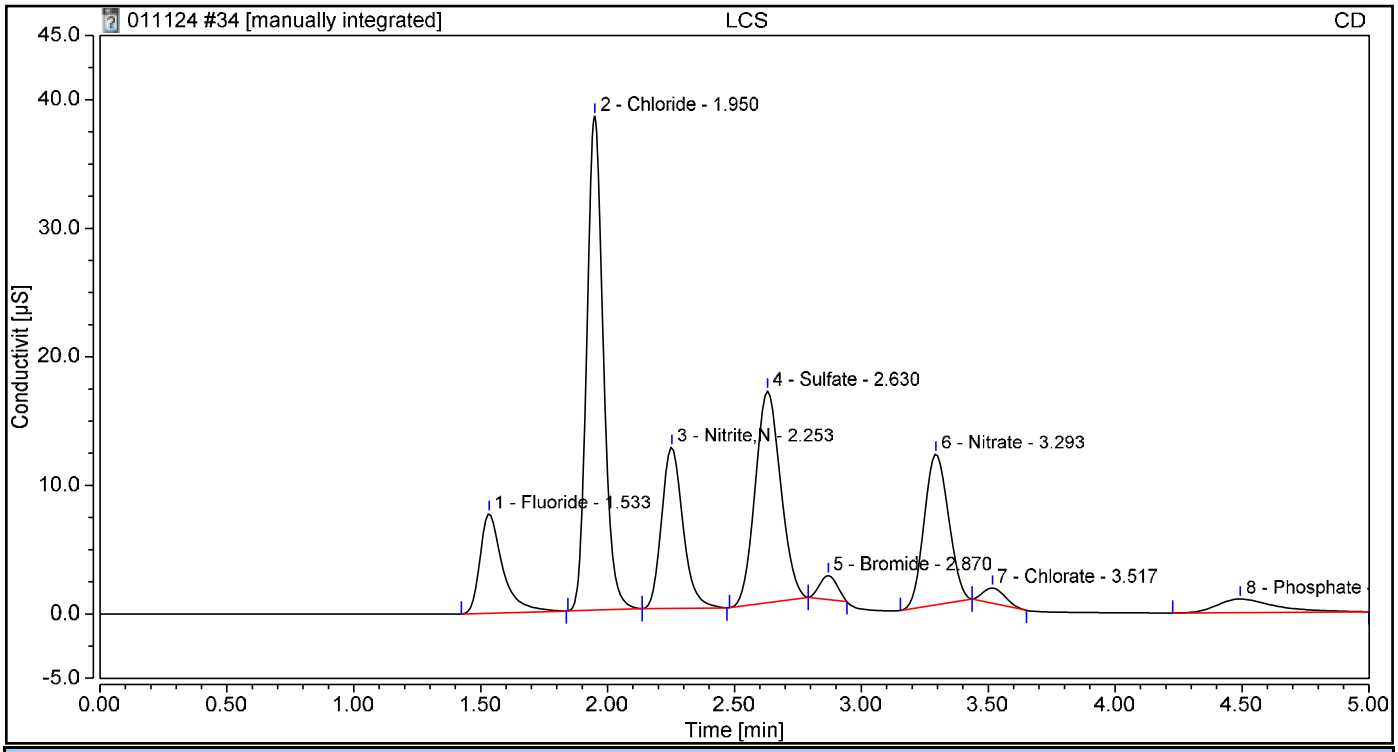
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	Sulfate	2.623	0.002	0.015	100.00	100.00	0.1676
n.a.	Bromide	n.a.	n.a.	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:			**0.002**	**0.015**	**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:	**11/Jan/24 12:12**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

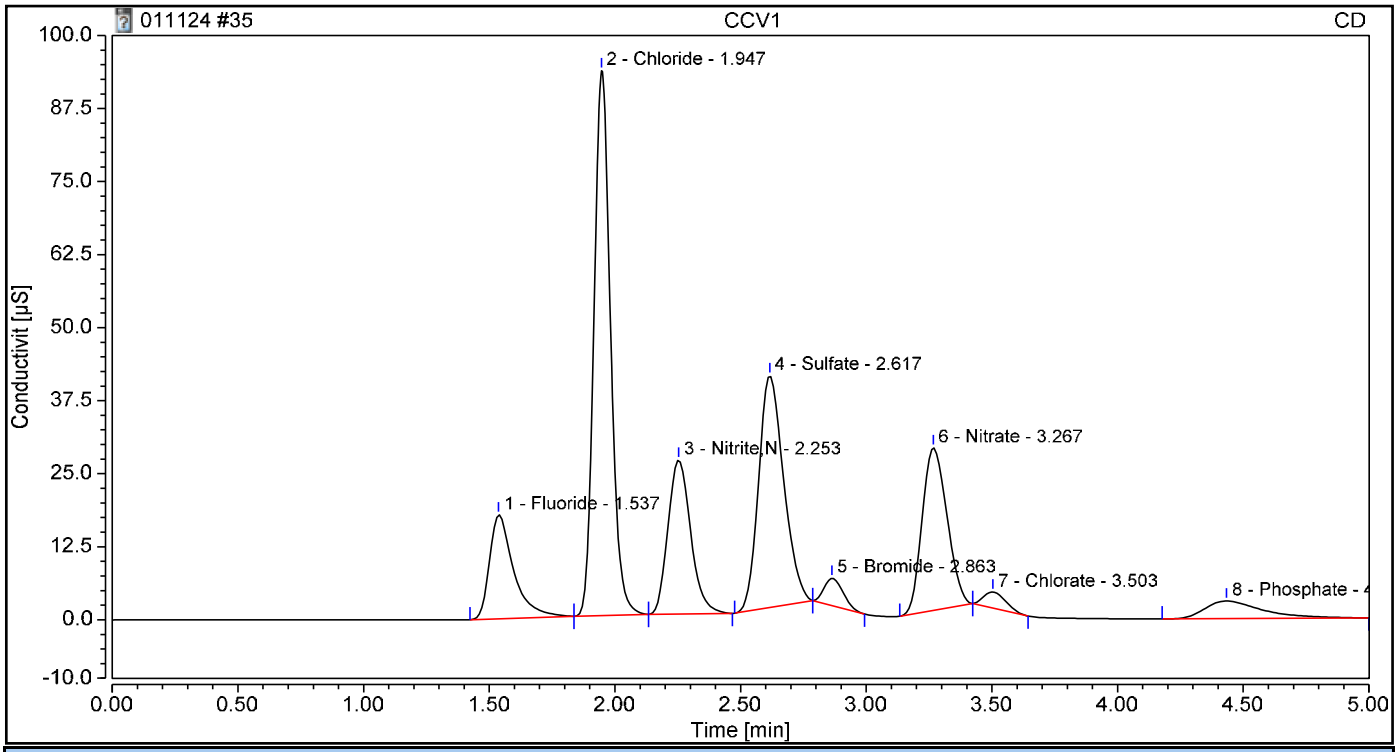
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.533	0.800	7.736	9.19	8.50	3.9853
2	Chloride	1.950	2.915	38.429	33.47	42.22	20.0162
3	Nitrite,N	2.253	1.227	12.541	14.09	13.78	3.8946
4	Sulfate	2.630	1.916	16.472	21.99	18.10	21.0309
5	Bromide	2.870	0.149	1.871	1.71	2.06	4.3806
6	Nitrate	3.293	1.305	11.730	14.99	12.89	3.9627
7	Chlorate	3.517	0.119	1.188	1.37	1.30	3.6825
8	Phosphate	4.493	0.279	1.054	3.21	1.16	7.0493
Total:			**8.711**	**91.021**	**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:	**11/Jan/24 14:08**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

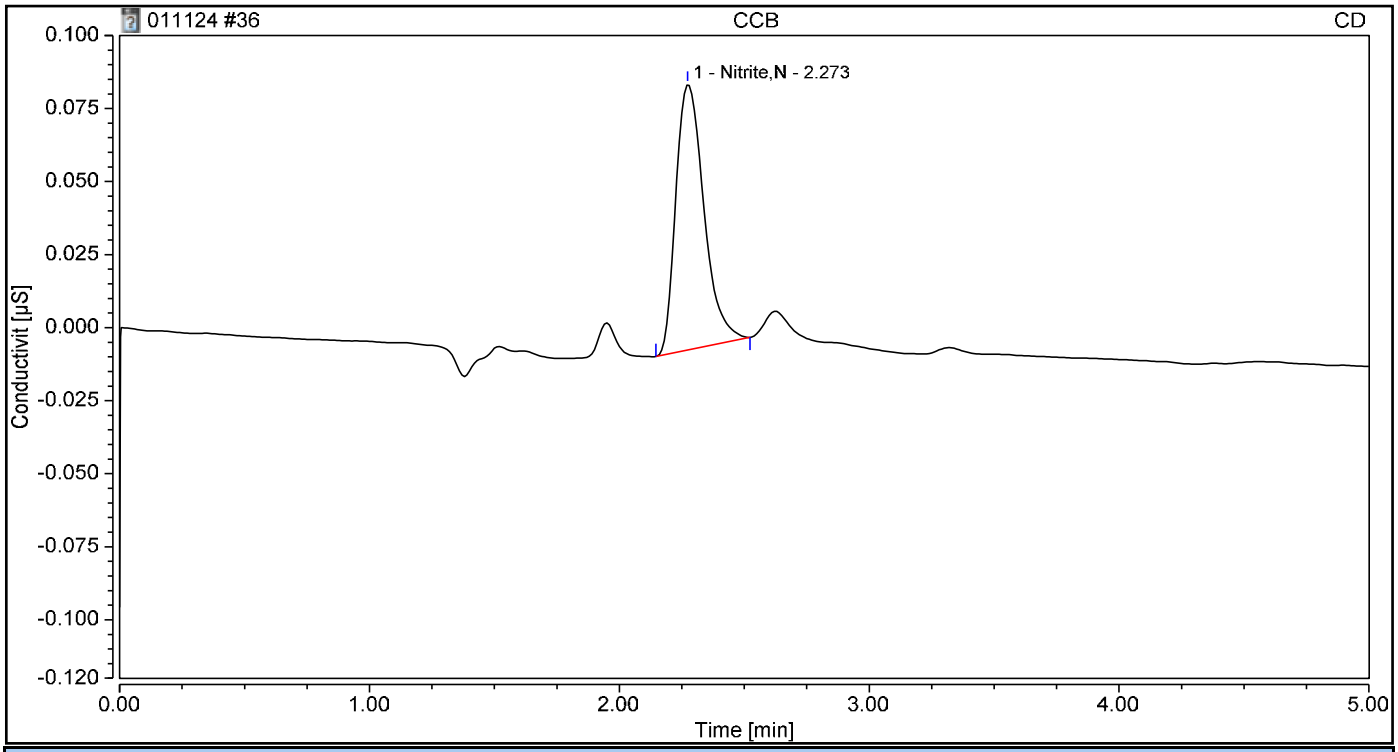
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.537	1.975	17.776	9.34	8.25	9.7511
2	Chloride	1.947	7.108	93.267	33.61	43.30	48.6002
3	Nitrite,N	2.253	2.770	26.365	13.10	12.24	9.3037
4	Sulfate	2.617	4.592	39.704	21.71	18.43	48.6958
5	Bromide	2.863	0.415	4.688	1.96	2.18	10.6032
6	Nitrate	3.267	3.197	27.852	15.12	12.93	9.6588
7	Chlorate	3.503	0.285	2.748	1.35	1.28	8.8269
8	Phosphate	4.433	0.807	3.015	3.82	1.40	11.2188
Total:			**21.148**	**215.416**	**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:	**11/Jan/24 14:25**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

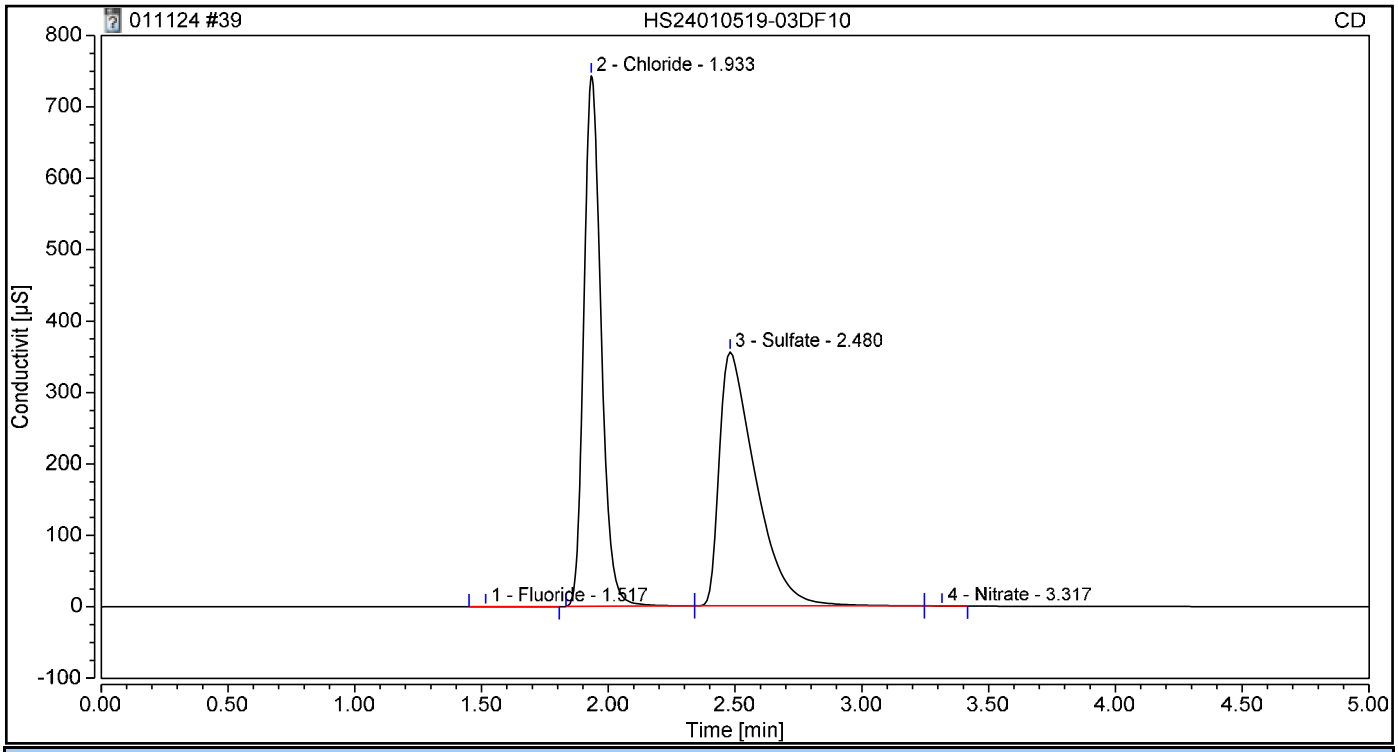
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	Nitrite,N	2.273	0.012	0.091	100.00	100.00	0.0467
n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide	n.a.	n.a.	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:			**0.012**	**0.091**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**HS24010519-03DF10**	*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:*	**10.0000**
Injection Date/Time:	**11/Jan/24 15:12**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

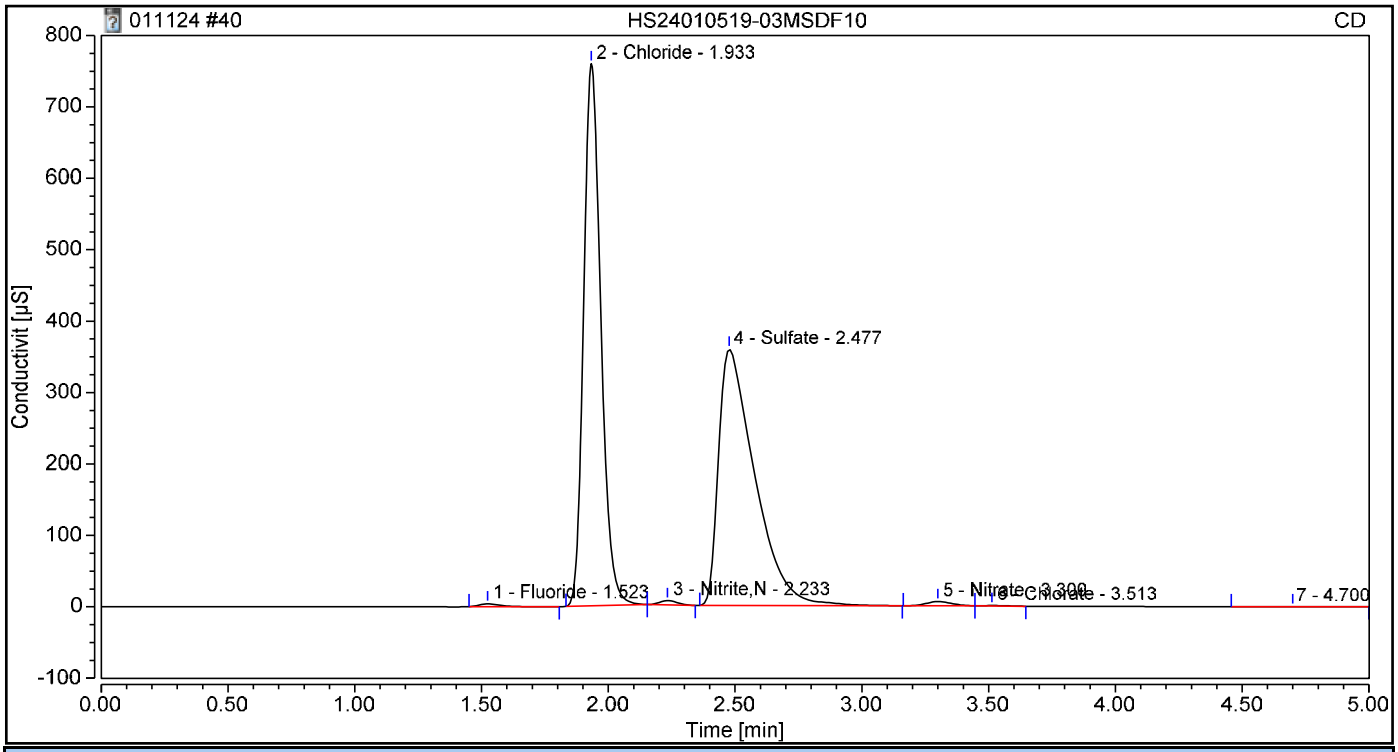
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.517	0.018	0.188	0.02	0.02	1.4576
2	Chloride	1.933	58.904	742.764	50.14	67.61	4017.4870
n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	Sulfate	2.480	58.548	355.538	49.84	32.36	4359.0803
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	Nitrate	3.317	0.005	0.058	0.00	0.01	0.4637
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:			**117.475**	**1098.547**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**HS24010519-03MSDF10**	*Run Time (min):*	**5.00**
Vial Number:	**RC4**	*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:	**11/Jan/24 15:18**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

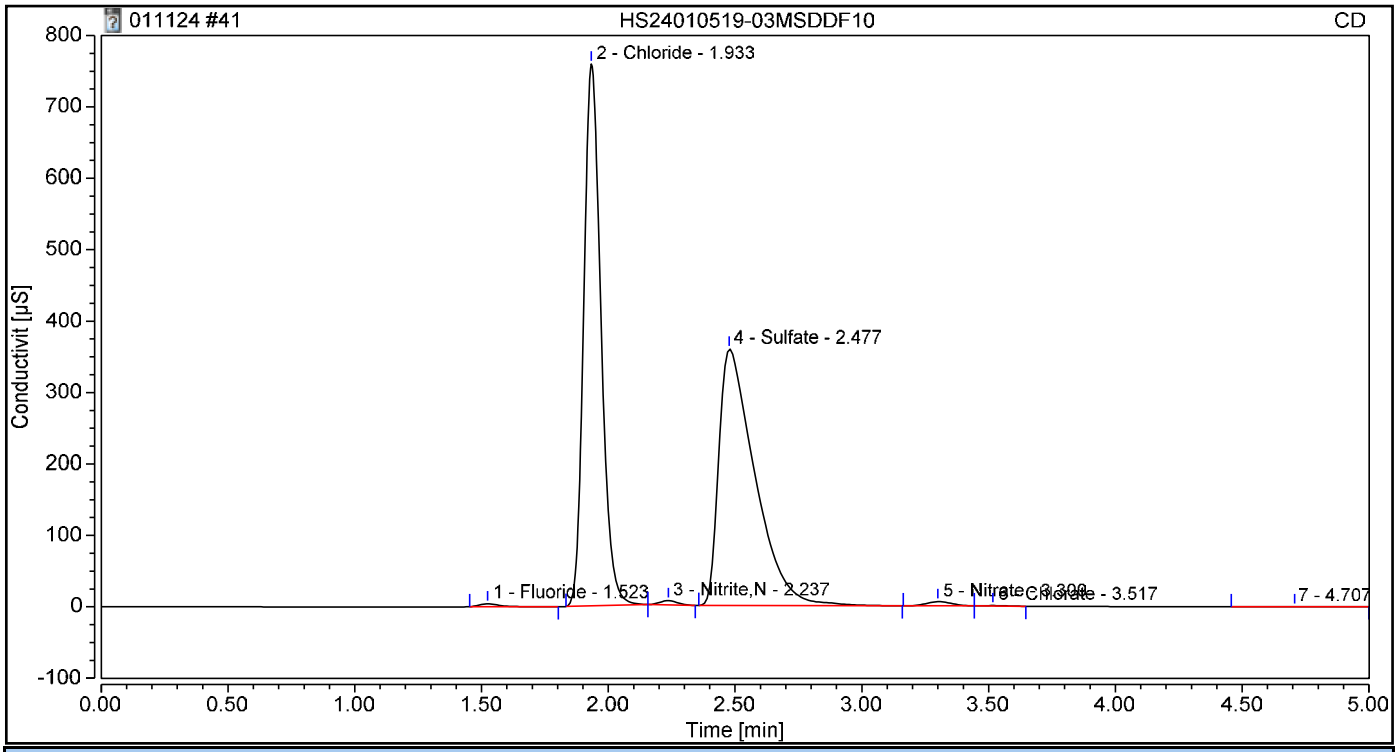
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.523	0.392	4.092	0.33	0.36	19.8066
2	Chloride	1.933	59.781	759.039	49.66	66.93	4077.3035
3	Nitrite,N	2.233	0.489	5.980	0.41	0.53	15.2046
4	Sulfate	2.477	58.987	358.637	49.00	31.62	4383.5477
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	Nitrate	3.300	0.648	5.749	0.54	0.51	19.8366
6	Chlorate	3.513	0.052	0.509	0.04	0.04	16.1481
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7		4.700	0.024	0.083	0.02	0.01	n.a.
Total:			**120.373**	**1134.088**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**HS24010519-03MSDDF10**	*Run Time (min):*	**5.00**
Vial Number:	**RC5**	*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:	**11/Jan/24 15:24**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

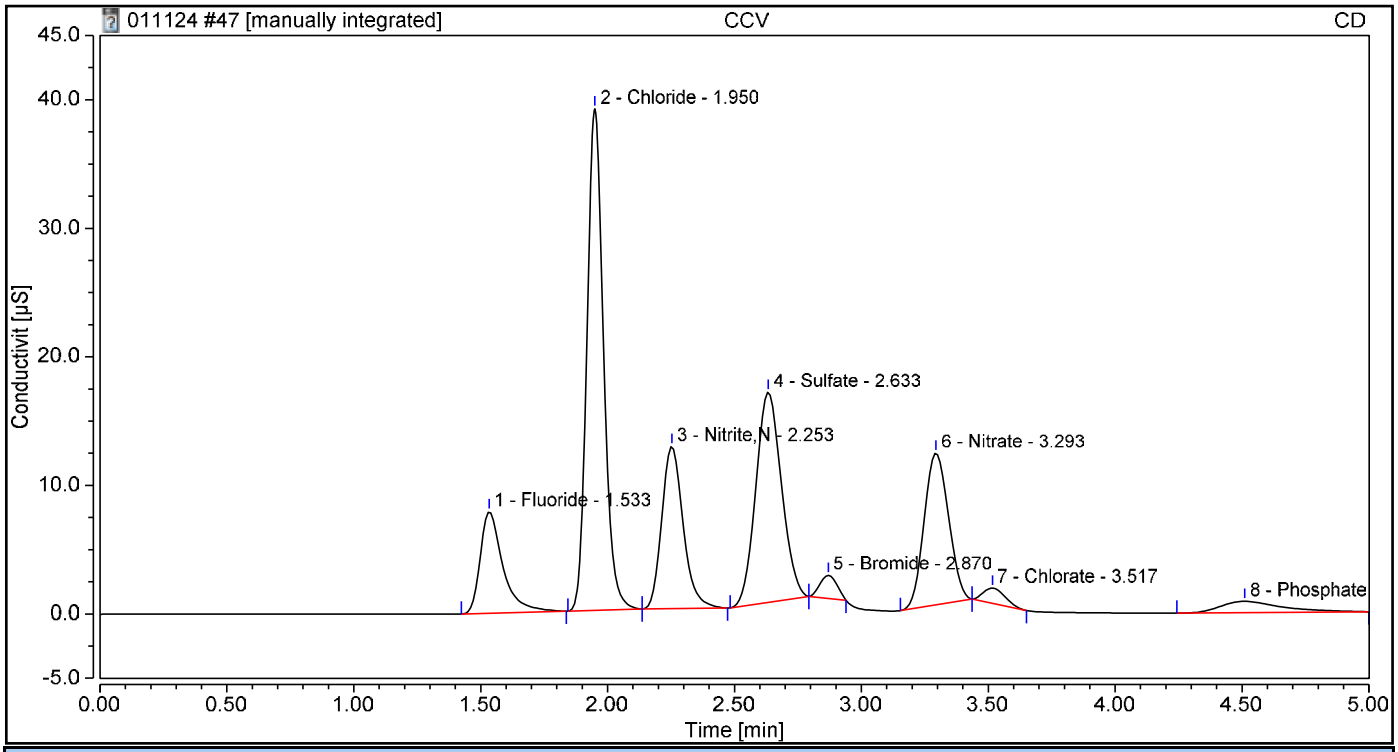
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.523	0.382	4.176	0.32	0.37	19.3479
2	Chloride	1.933	59.681	758.556	49.62	66.88	4070.4497
3	Nitrite,N	2.237	0.485	5.963	0.40	0.53	15.0968
4	Sulfate	2.477	58.987	359.045	49.04	31.66	4383.5289
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	Nitrate	3.300	0.656	5.816	0.55	0.51	20.0585
6	Chlorate	3.517	0.055	0.549	0.05	0.05	17.1408
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7		4.707	0.031	0.105	0.03	0.01	n.a.
Total:			**120.276**	**1134.211**	**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:	**11/Jan/24 16:04**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

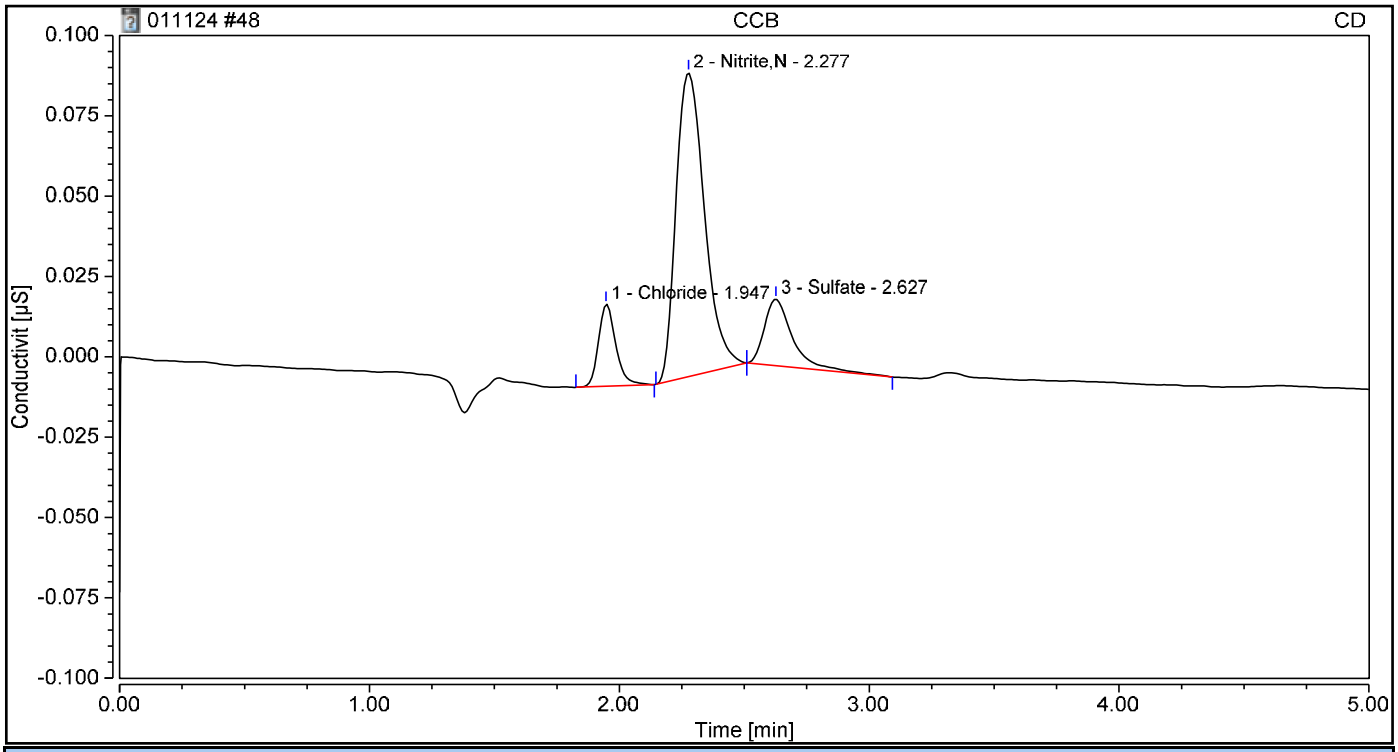
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.533	0.820	7.914	9.38	8.64	4.0834
2	Chloride	1.950	2.955	39.023	33.78	42.61	20.2832
3	Nitrite,N	2.253	1.236	12.614	14.13	13.77	3.9231
4	Sulfate	2.633	1.916	16.340	21.91	17.84	21.0343
5	Bromide	2.870	0.139	1.803	1.59	1.97	4.1329
6	Nitrate	3.293	1.314	11.817	15.02	12.90	3.9894
7	Chlorate	3.517	0.120	1.194	1.37	1.30	3.7085
8	Phosphate	4.510	0.247	0.882	2.83	0.96	6.7955
Total:			**8.747**	**91.589**	**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:	**11/Jan/24 16:22**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

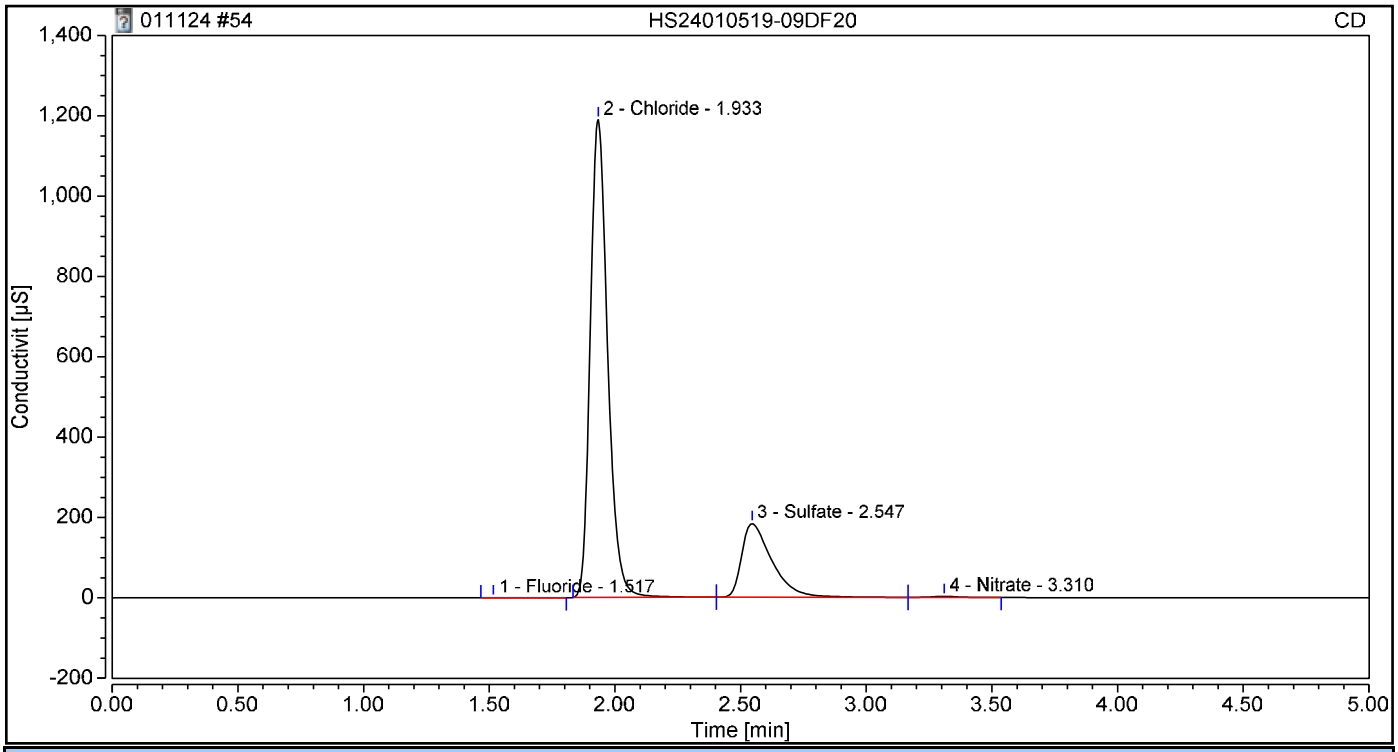
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	Chloride	1.947	0.002	0.026	11.90	18.11	0.1533
2	Nitrite,N	2.277	0.012	0.095	72.35	67.17	0.0487
3	Sulfate	2.627	0.003	0.021	15.75	14.71	0.1778
n.a.	Bromide	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**	**0.141**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**HS24010519-09DF20**	*Run Time (min):*	**5.00**
Vial Number:	**RD8**	*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:*	**20.0000**
Injection Date/Time:	**11/Jan/24 16:57**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

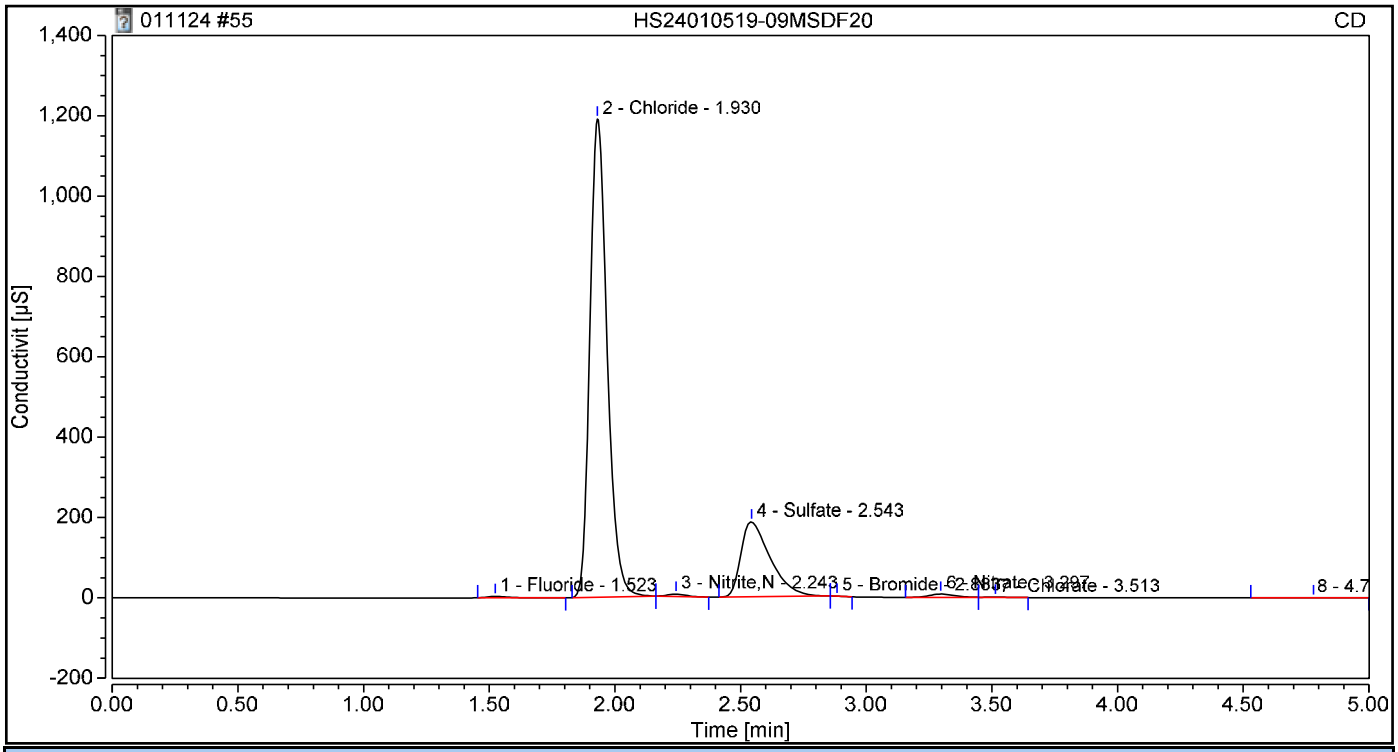
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.517	0.006	0.087	0.00	0.01	1.7557
2	Chloride	1.933	95.182	1189.153	78.65	86.47	12981.8887
n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	Sulfate	2.547	25.529	183.458	21.10	13.34	4527.9559
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	Nitrate	3.310	0.299	2.545	0.25	0.19	18.6282
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:			**121.016**	**1375.242**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**HS24010519-09MSDF20**	*Run Time (min):*	**5.00**
Vial Number:	**RE1**	*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:*	**20.0000**
Injection Date/Time:	**11/Jan/24 17:03**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

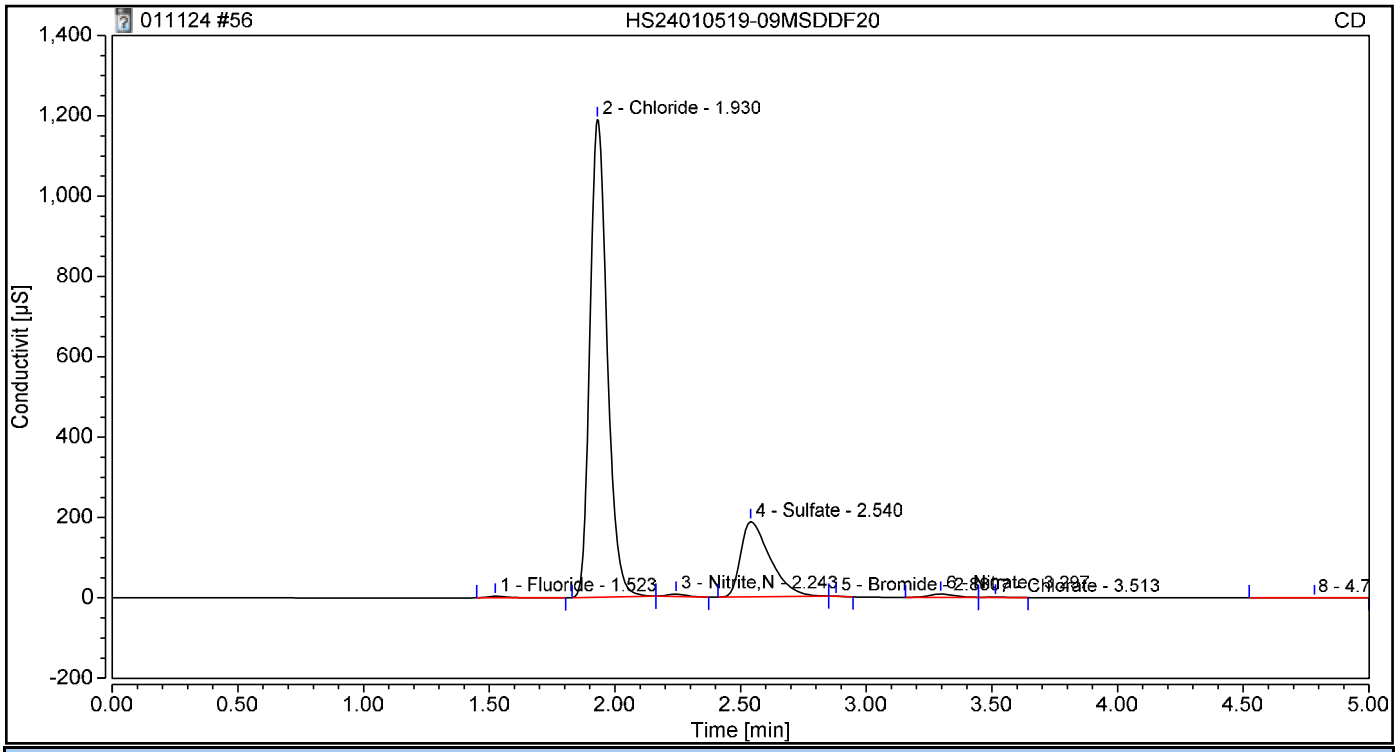
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.523	0.355	3.781	0.29	0.27	36.0064
2	Chloride	1.930	94.412	1189.917	77.71	85.30	12876.8577
3	Nitrite,N	2.243	0.482	5.832	0.40	0.42	29.9968
4	Sulfate	2.543	25.252	186.623	20.79	13.38	4487.2488
5	Bromide	2.883	0.008	0.207	0.01	0.01	5.6383
6	Nitrate	3.297	0.916	8.103	0.75	0.58	55.8165
7	Chlorate	3.513	0.050	0.498	0.04	0.04	31.2374
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
8		4.780	0.014	0.054	0.01	0.00	n.a.
Total:			**121.490**	**1395.016**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**HS24010519-09MSDDF20**	*Run Time (min):*	**5.00**
Vial Number:	**RE2**	*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:*	**20.0000**
Injection Date/Time:	**11/Jan/24 17:09**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

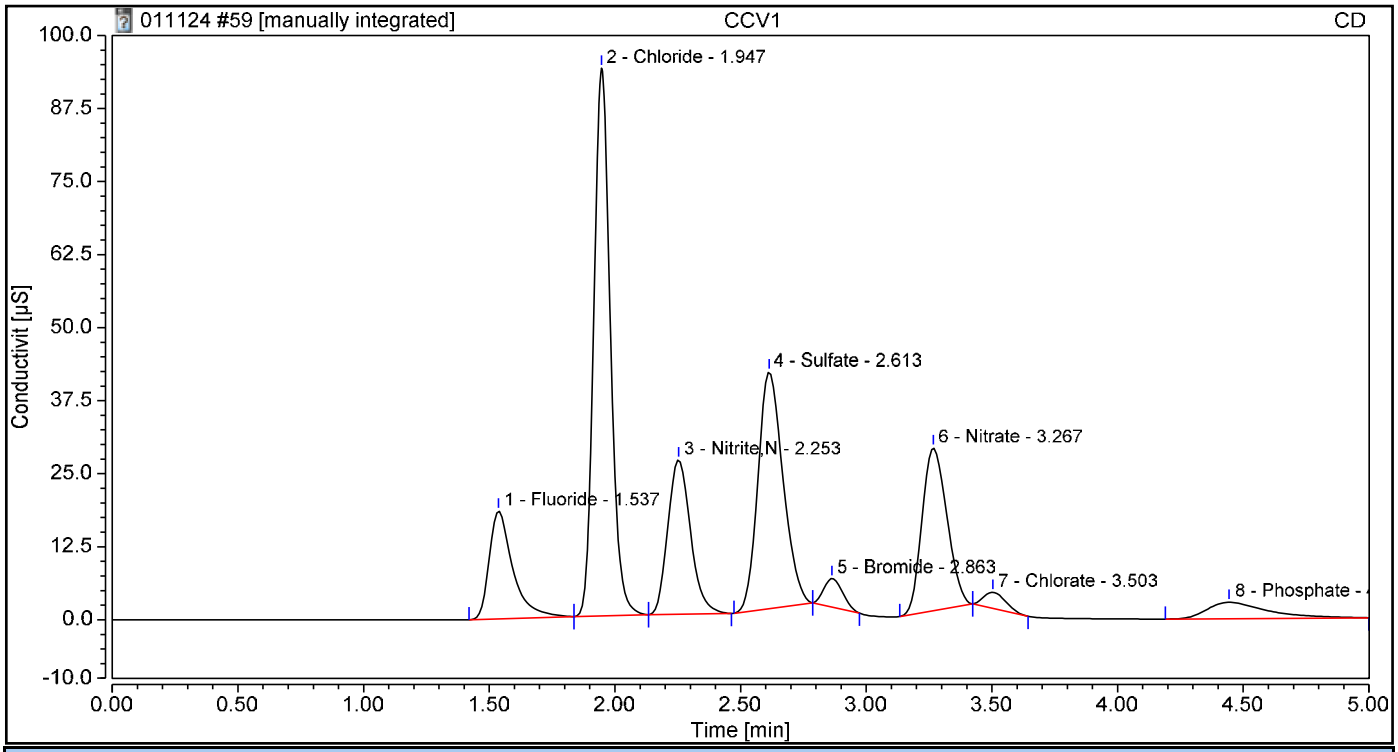
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.523	0.370	3.954	0.30	0.28	37.4937
2	Chloride	1.930	94.384	1188.862	77.67	85.25	12873.1593
3	Nitrite,N	2.243	0.482	5.829	0.40	0.42	30.0079
4	Sulfate	2.540	25.271	186.931	20.80	13.40	4490.0401
5	Bromide	2.880	0.014	0.302	0.01	0.02	9.1423
6	Nitrate	3.297	0.922	8.154	0.76	0.58	56.1832
7	Chlorate	3.513	0.052	0.520	0.04	0.04	32.3680
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
8		4.783	0.020	0.073	0.02	0.01	n.a.
Total:			**121.516**	**1394.625**	**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:	**11/Jan/24 17:33**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

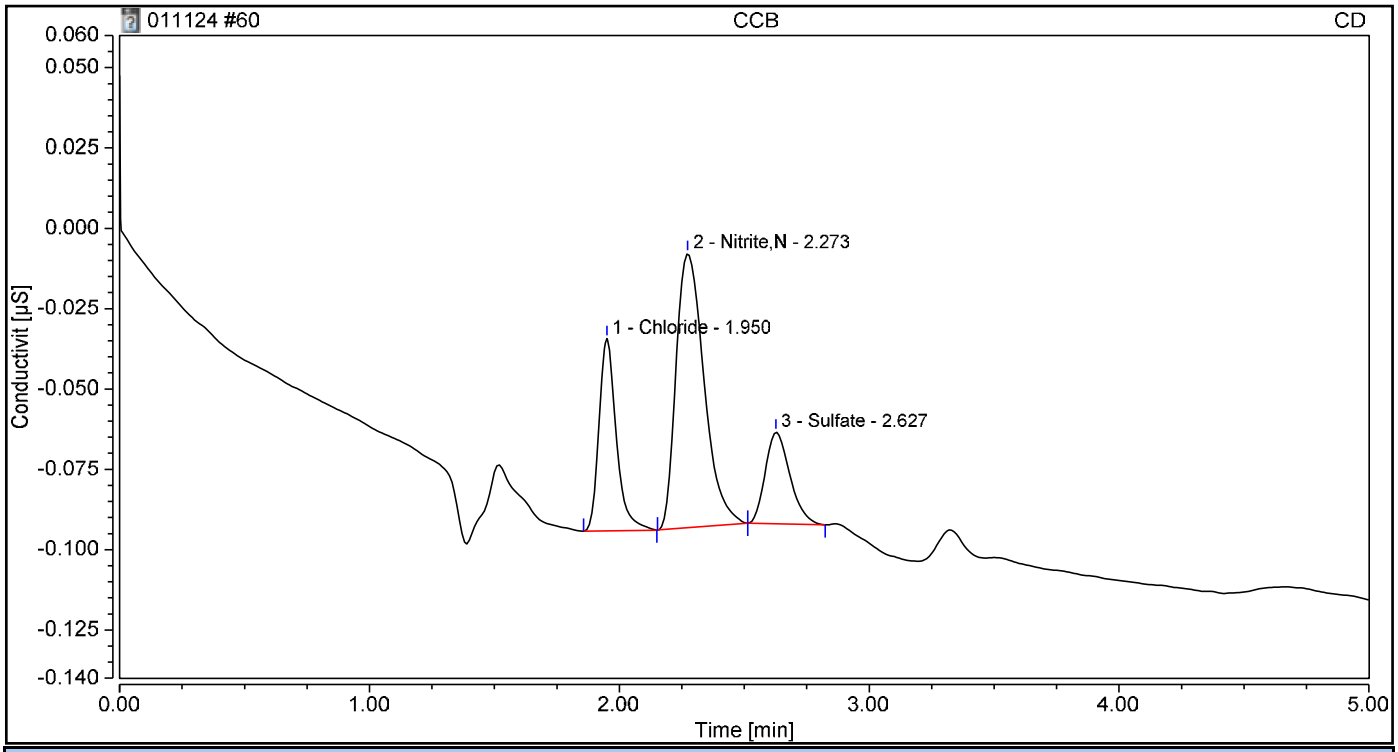
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.537	2.004	18.457	9.41	8.49	9.8922
2	Chloride	1.947	7.137	93.711	33.50	43.10	48.8000
3	Nitrite,N	2.253	2.775	26.404	13.03	12.14	9.3246
4	Sulfate	2.613	4.691	40.548	22.02	18.65	49.6942
5	Bromide	2.863	0.430	4.891	2.02	2.25	10.9019
6	Nitrate	3.267	3.205	27.880	15.04	12.82	9.6845
7	Chlorate	3.503	0.286	2.761	1.34	1.27	8.8626
8	Phosphate	4.443	0.778	2.794	3.65	1.29	10.9895
Total:			**21.307**	**217.446**	**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:	**11/Jan/24 17:44**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

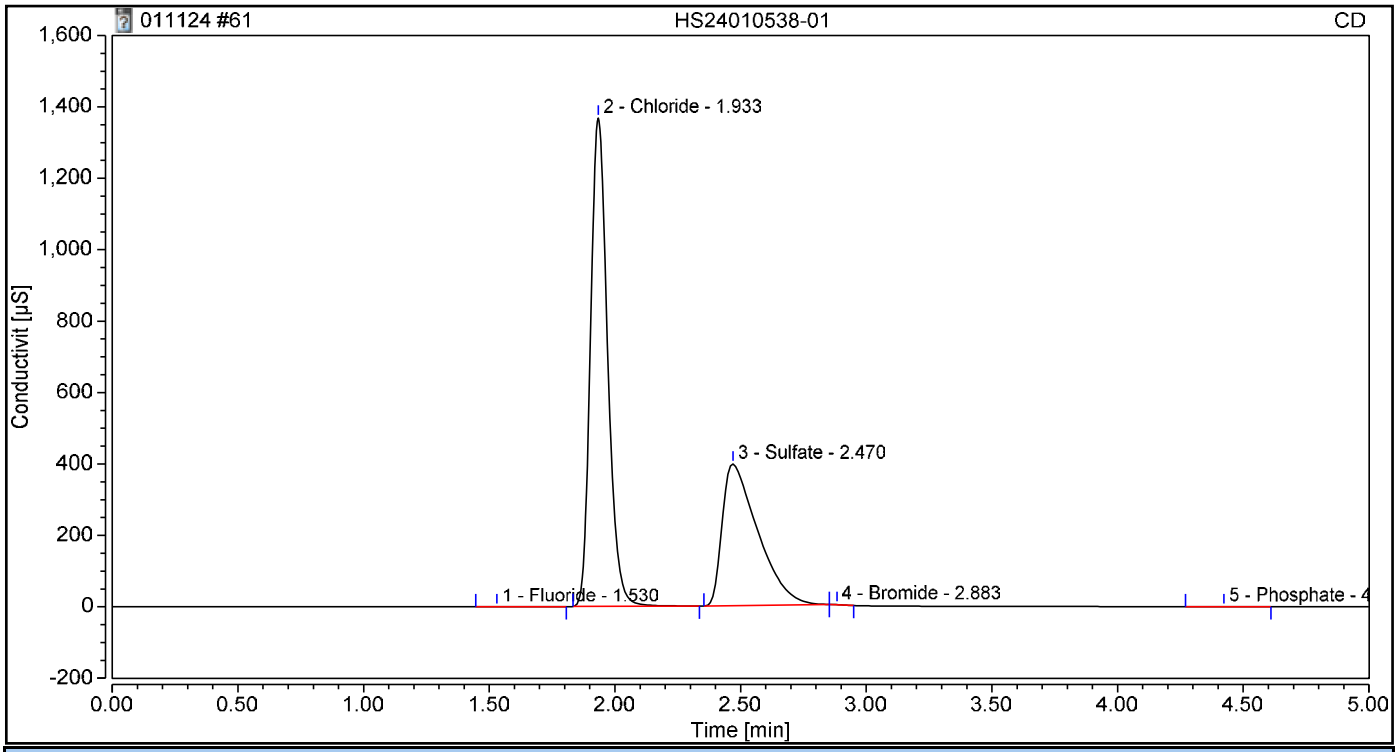
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	Chloride	1.950	0.005	0.060	25.03	34.44	0.1719
2	Nitrite,N	2.273	0.011	0.085	57.95	49.14	0.0444
3	Sulfate	2.627	0.003	0.029	17.02	16.42	0.1838
n.a.	Bromide	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**	**0.174**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**HS24010538-01**	*Run Time (min):*	**5.00**
Vial Number:	**RE5**	*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:	**11/Jan/24 17:56**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

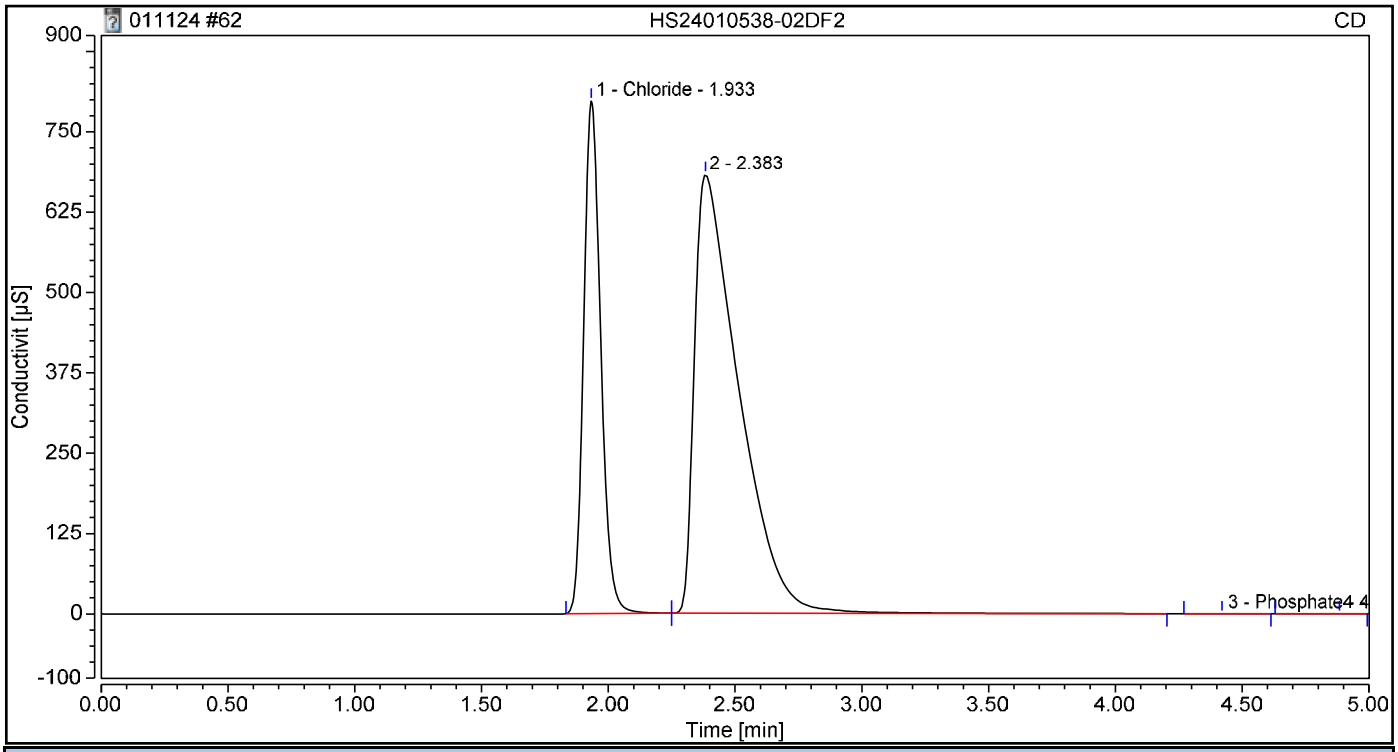
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.530	0.024	0.175	0.01	0.01	0.1776
2	Chloride	1.933	107.762	1367.538	62.45	77.50	734.8687
n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	Sulfate	2.470	64.754	396.522	37.53	22.47	469.8912
4	Bromide	2.883	0.018	0.394	0.01	0.02	0.5945
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.
5	Phosphate	4.423	0.003	0.020	0.00	0.00	4.8667
Total:			**172.562**	**1764.649**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**HS24010538-02DF2**	*Run Time (min):*	**5.00**
Vial Number:	**RE6**	*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:*	**2.0000**
Injection Date/Time:	**11/Jan/24 18:02**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

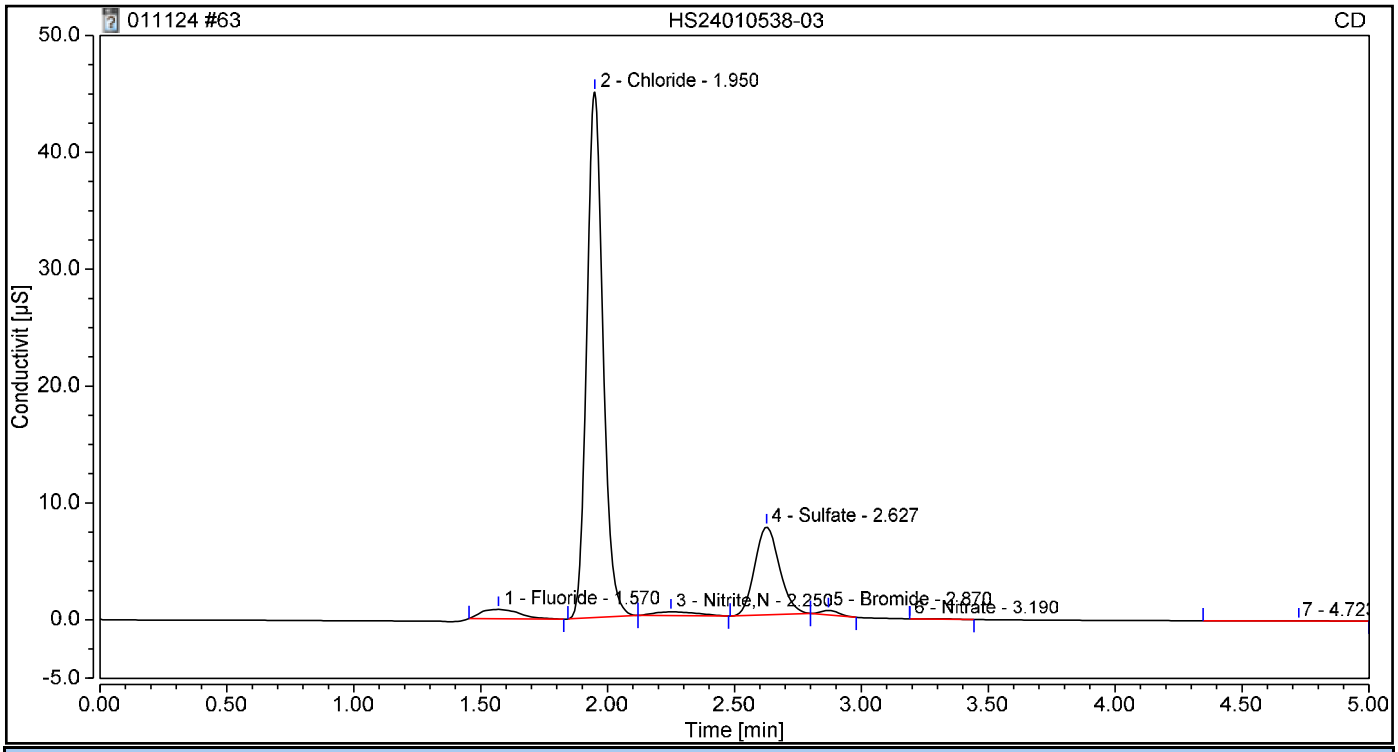
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	Chloride	1.933	62.231	797.438	31.15	53.89	848.8617
n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2		2.383	137.518	682.389	68.84	46.11	n.a.
n.a.	Sulfate	n.a.	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.
3	Phosphate	4.420	0.004	0.023	0.00	0.00	9.7404
4		4.883	0.002	0.013	0.00	0.00	n.a.
Total:			**199.754**	**1479.863**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**HS24010538-03**	*Run Time (min):*	**5.00**
Vial Number:	**RE7**	*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:	**11/Jan/24 18:08**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

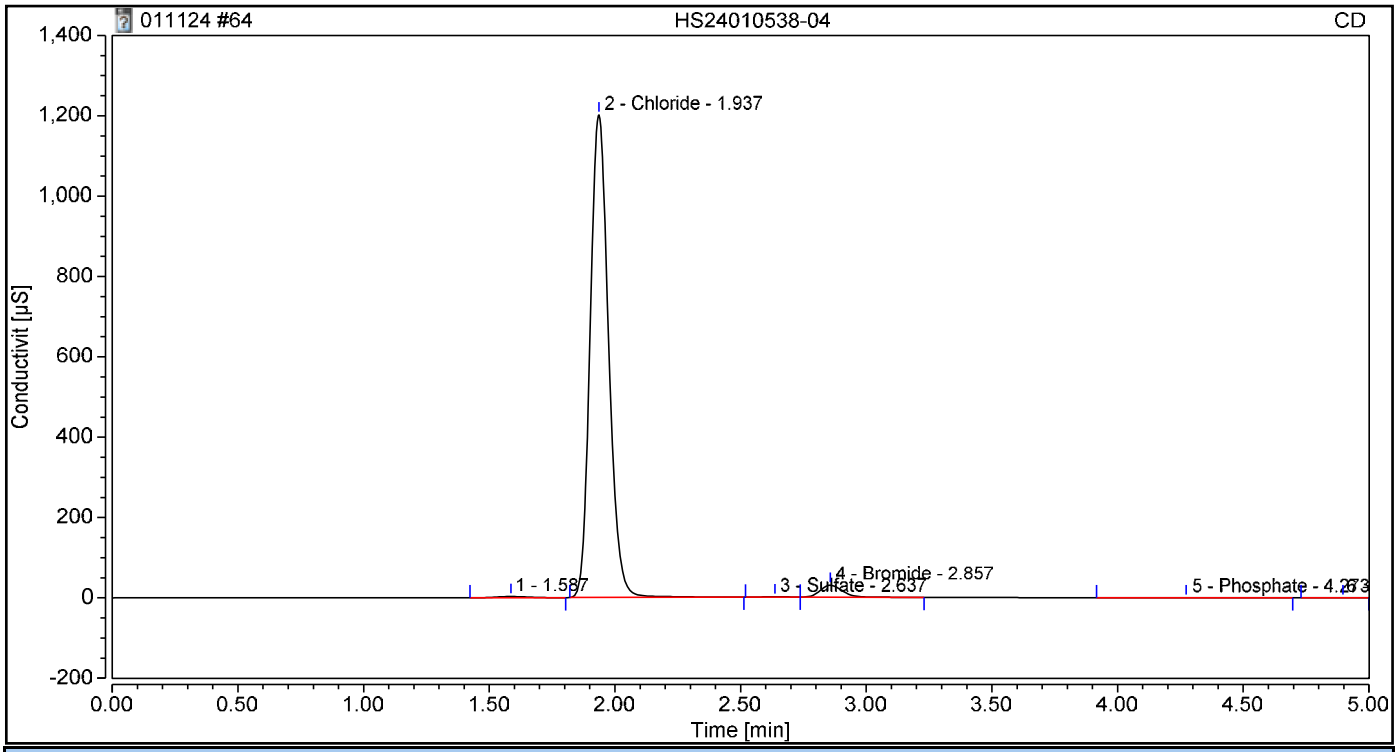
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.570	0.140	0.801	3.15	1.48	0.7453
2	Chloride	1.950	3.344	44.962	75.32	83.24	22.9399
3	Nitrite,N	2.250	0.065	0.321	1.46	0.59	0.2082
4	Sulfate	2.627	0.852	7.531	19.18	13.94	9.5533
5	Bromide	2.870	0.032	0.386	0.72	0.71	1.0327
6	Nitrate	3.190	0.003	0.000	0.07	0.00	0.0413
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.
7		4.723	0.004	0.012	0.10	0.02	n.a.
Total:			**4.440**	**54.013**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**HS24010538-04**	*Run Time (min):*	**5.00**
Vial Number:	**RE8**	*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:	**11/Jan/24 18:14**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

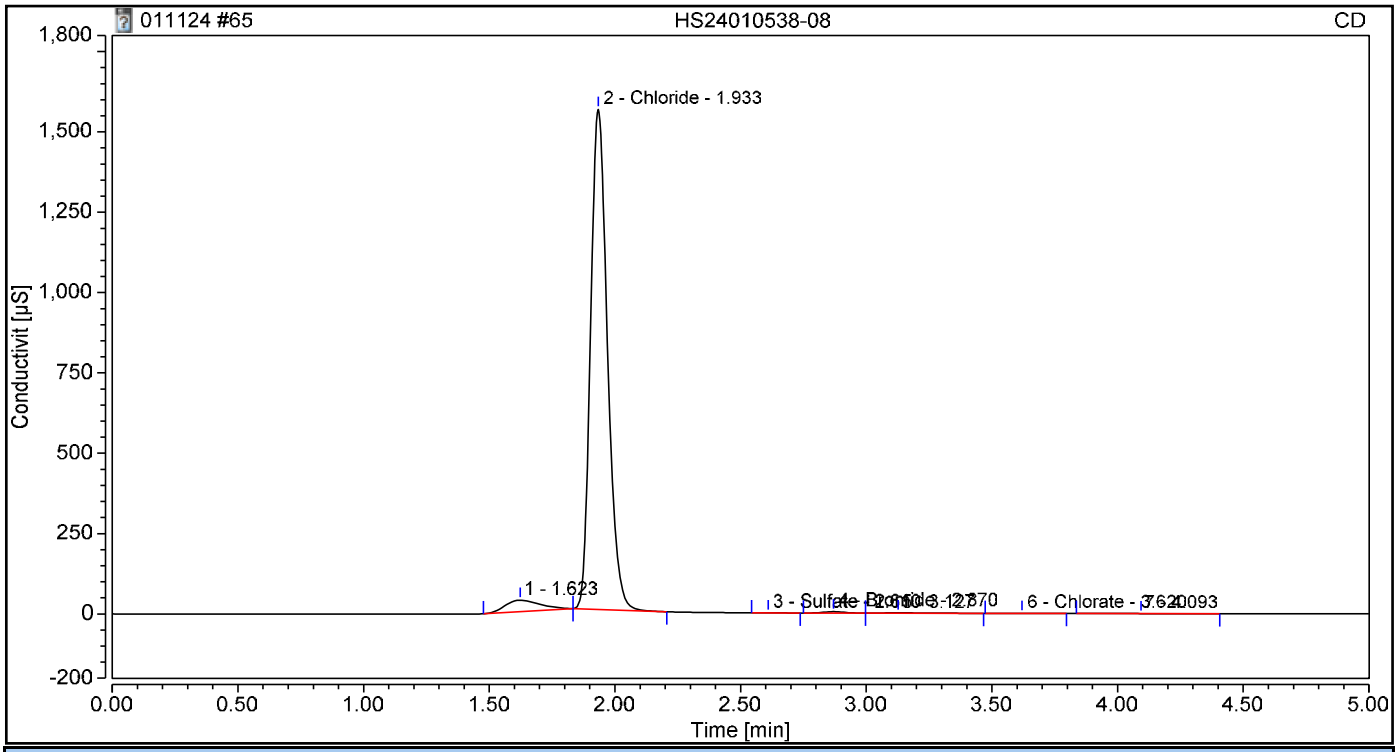
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1		1.587	0.474	3.117	0.45	0.25	n.a.
2	Chloride	1.937	101.942	1201.541	96.50	97.22	695.1838
n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	Sulfate	2.637	0.124	1.263	0.12	0.10	1.5322
4	Bromide	2.857	3.018	29.682	2.86	2.40	44.6454
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.
5	Phosphate	4.273	0.076	0.242	0.07	0.02	5.4457
6		4.897	0.003	0.018	0.00	0.00	n.a.
Total:			**105.637**	**1235.863**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**HS24010538-08**	*Run Time (min):*	**5.00**
Vial Number:	**GA1**	*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:	**11/Jan/24 18:20**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

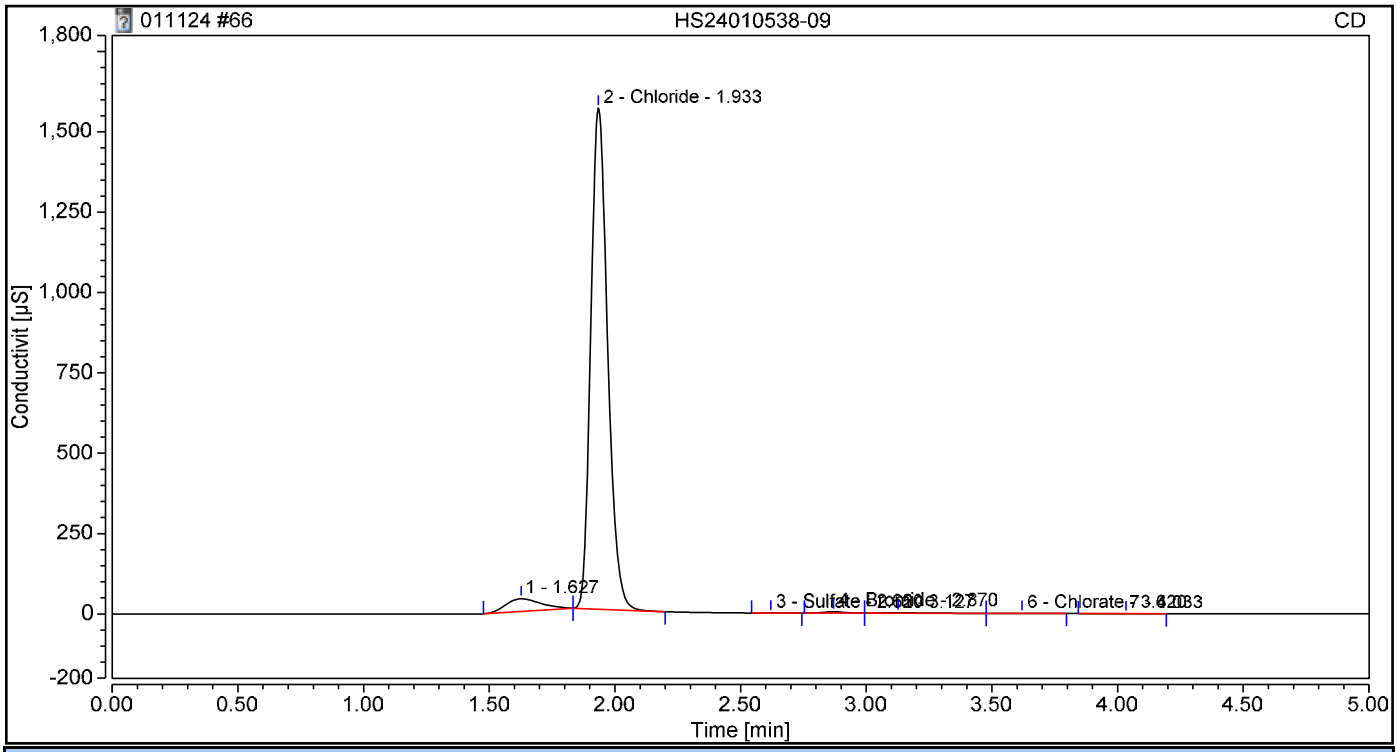
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1		1.623	5.804	35.838	4.56	2.24	n.a.
2	Chloride	1.933	120.821	1556.294	94.92	97.40	823.9031
n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	Sulfate	2.610	0.019	0.185	0.02	0.01	0.3623
4	Bromide	2.870	0.406	4.327	0.32	0.27	10.4015
5		3.127	0.187	0.968	0.15	0.06	n.a.
n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6	Chlorate	3.620	0.021	0.137	0.02	0.01	0.6860
7		4.093	0.027	0.094	0.02	0.01	n.a.
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**127.285**	**1597.843**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**HS24010538-09**	*Run Time (min):*	**5.00**
Vial Number:	**GA2**	*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:	**11/Jan/24 18:25**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

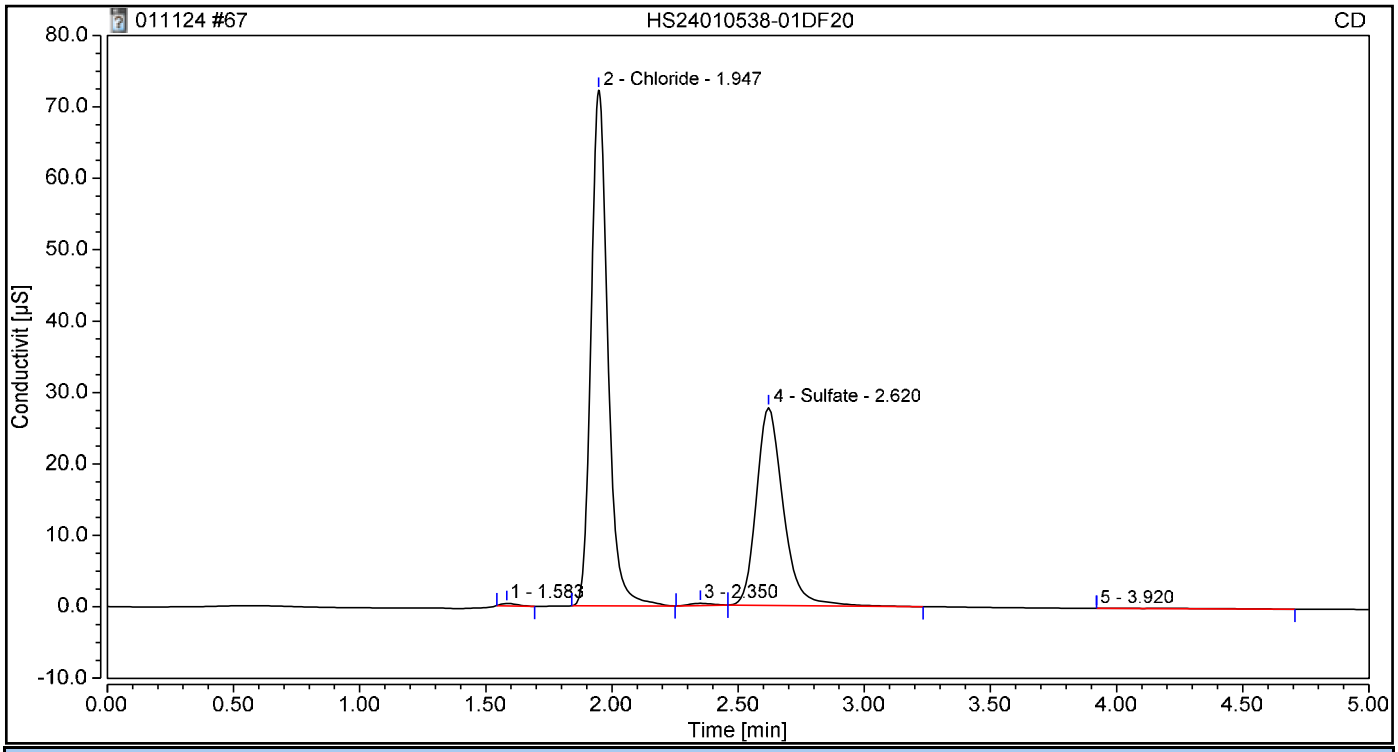
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1		1.627	6.439	39.582	5.03	2.47	n.a.
2	Chloride	1.933	120.864	1558.851	94.41	97.15	824.1948
n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	Sulfate	2.620	0.030	0.309	0.02	0.02	0.4813
4	Bromide	2.870	0.409	4.420	0.32	0.28	10.4678
5		3.127	0.246	1.223	0.19	0.08	n.a.
n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6	Chlorate	3.620	0.022	0.143	0.02	0.01	0.7118
7		4.033	0.010	0.059	0.01	0.00	n.a.
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**128.019**	**1604.587**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**HS24010538-01DF20**	*Run Time (min):*	**5.00**
Vial Number:	**GA3**	*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:*	**20.0000**
Injection Date/Time:	**11/Jan/24 18:31**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

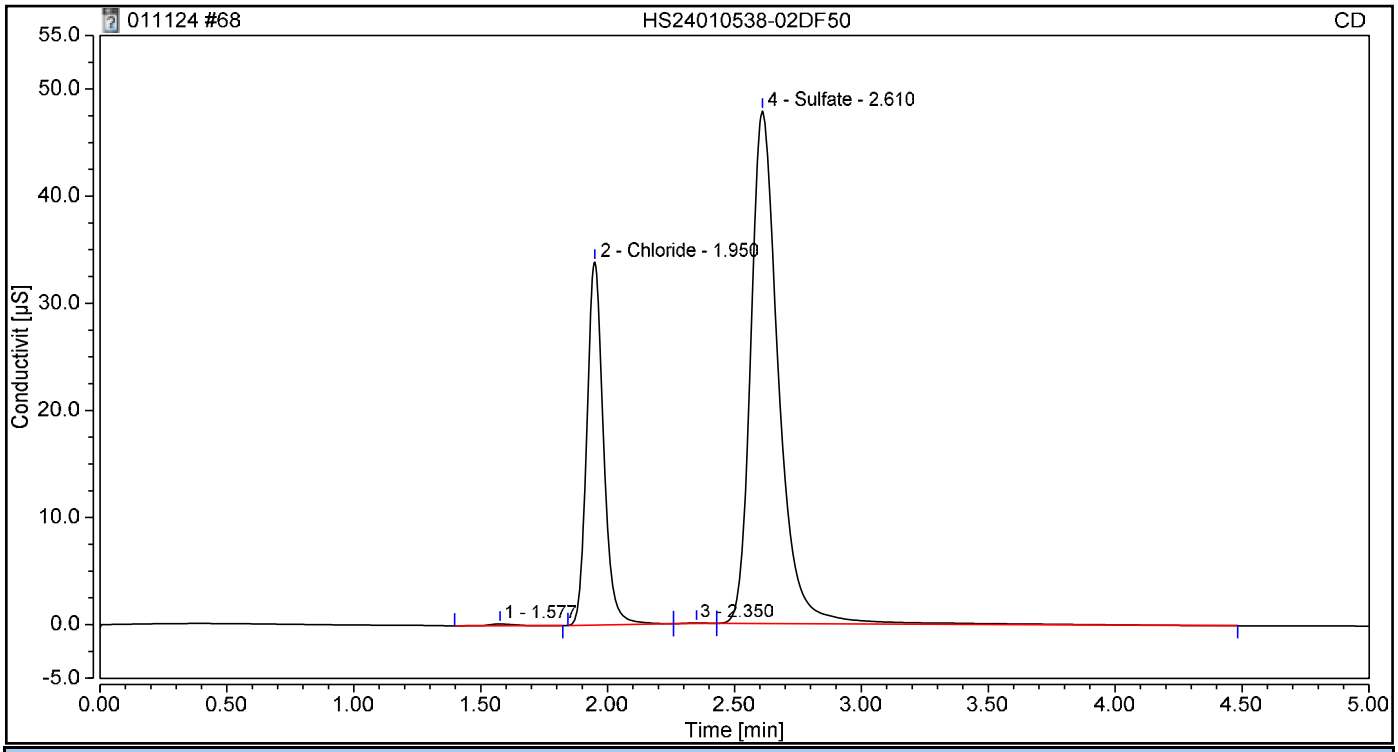
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1		1.583	0.025	0.343	0.27	0.34	n.a.
2	Chloride	1.947	5.595	72.209	61.64	71.82	765.7369
n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3		2.350	0.030	0.303	0.34	0.30	n.a.
4	Sulfate	2.620	3.412	27.681	37.58	27.53	733.8911
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.
5		3.920	0.016	0.000	0.18	0.00	n.a.
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**9.078**	**100.537**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**HS24010538-02DF50**	*Run Time (min):*	**5.00**
Vial Number:	**GA4**	*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:*	**50.0000**
Injection Date/Time:	**11/Jan/24 18:37**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

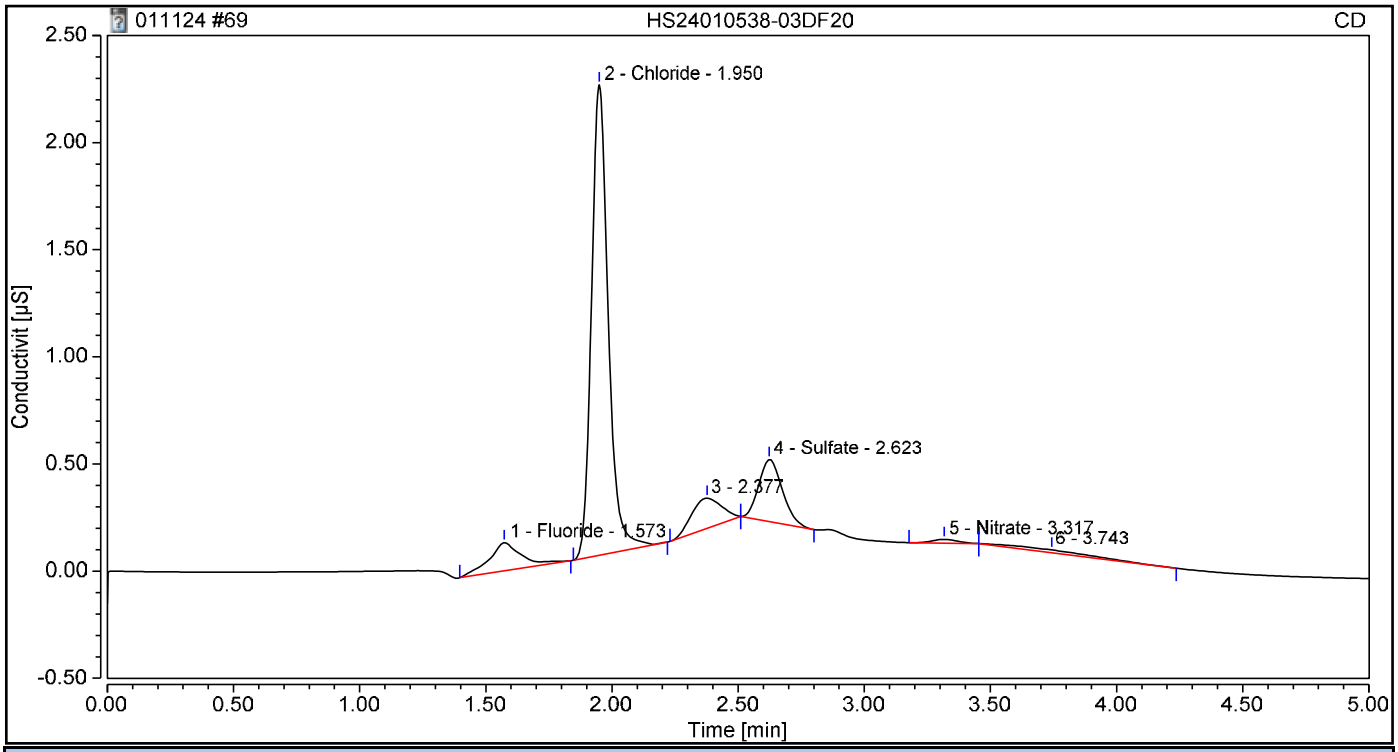
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1		1.577	0.020	0.177	0.23	0.22	n.a.
2	Chloride	1.950	2.573	33.894	29.57	41.35	884.1051
n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3		2.350	0.004	0.046	0.05	0.06	n.a.
4	Sulfate	2.610	6.103	47.852	70.15	58.38	3182.1581
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:			**8.700**	**81.969**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**HS24010538-03DF20**	*Run Time (min):*	**5.00**
Vial Number:	**GA5**	*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:*	**20.0000**
Injection Date/Time:	**11/Jan/24 18:43**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

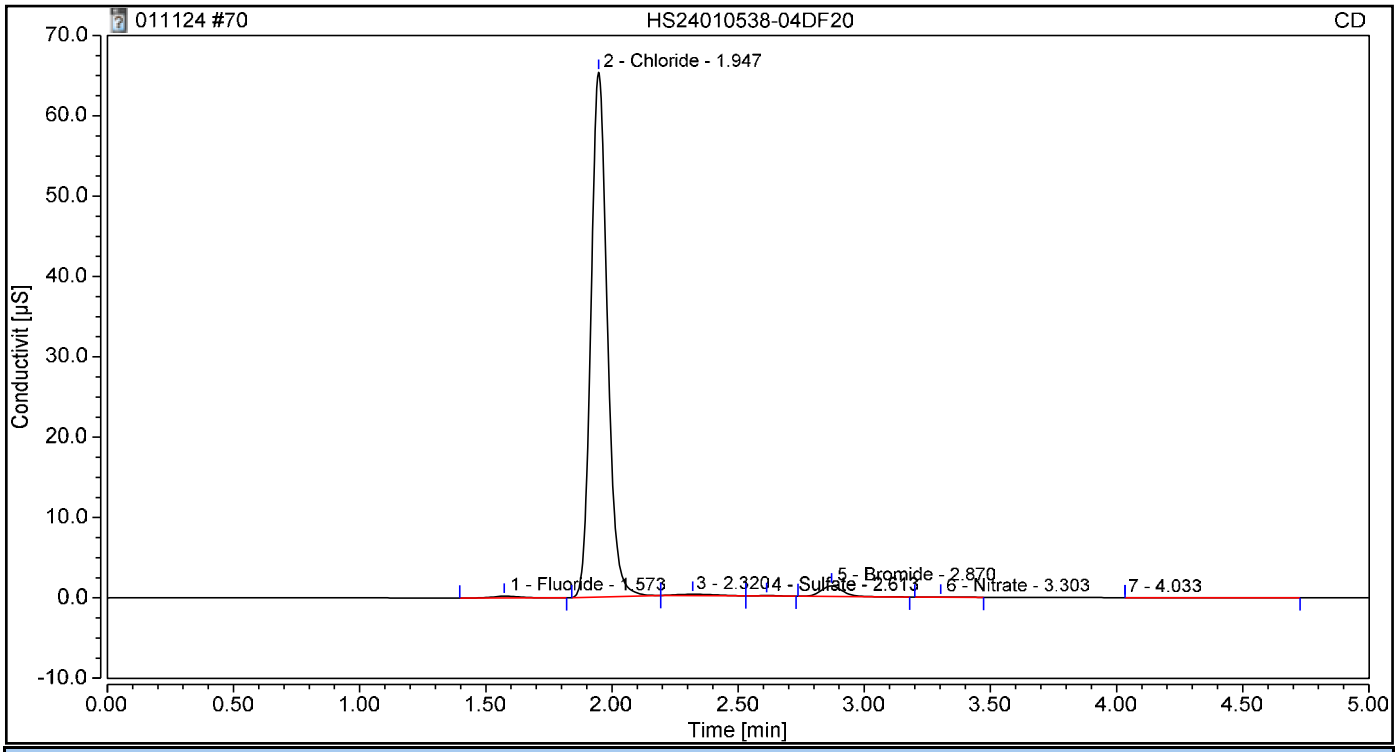
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.573	0.020	0.131	7.90	4.72	3.0786
2	Chloride	1.950	0.169	2.195	68.45	78.75	25.8541
n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3		2.377	0.020	0.141	7.93	5.06	n.a.
4	Sulfate	2.623	0.032	0.290	12.76	10.39	9.9855
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	Nitrate	3.317	0.002	0.017	0.81	0.62	0.7578
n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
6		3.743	0.005	0.013	2.15	0.46	n.a.
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.247**	**2.788**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**HS24010538-04DF20**	*Run Time (min):*	**5.00**
Vial Number:	**GA6**	*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:*	**20.0000**
Injection Date/Time:	**11/Jan/24 18:49**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

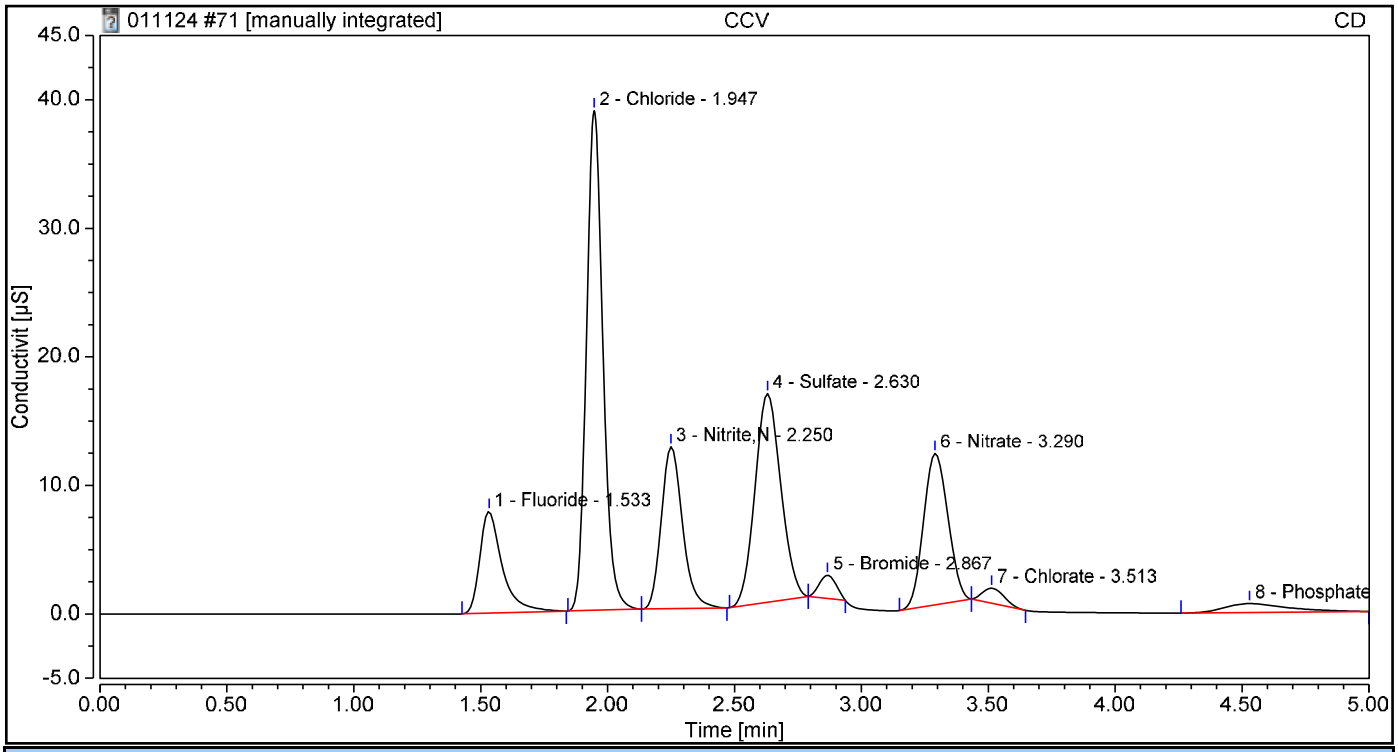
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.573	0.031	0.246	0.61	0.37	4.2111
2	Chloride	1.947	4.916	65.311	96.07	97.31	673.1544
n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3		2.320	0.029	0.161	0.56	0.24	n.a.
4	Sulfate	2.613	0.005	0.055	0.10	0.08	4.1412
5	Bromide	2.870	0.131	1.321	2.56	1.97	78.1252
6	Nitrate	3.303	0.002	0.020	0.04	0.03	0.7700
n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7		4.033	0.003	0.000	0.06	0.00	n.a.
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**5.117**	**67.115**	**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:	**11/Jan/24 19:18**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

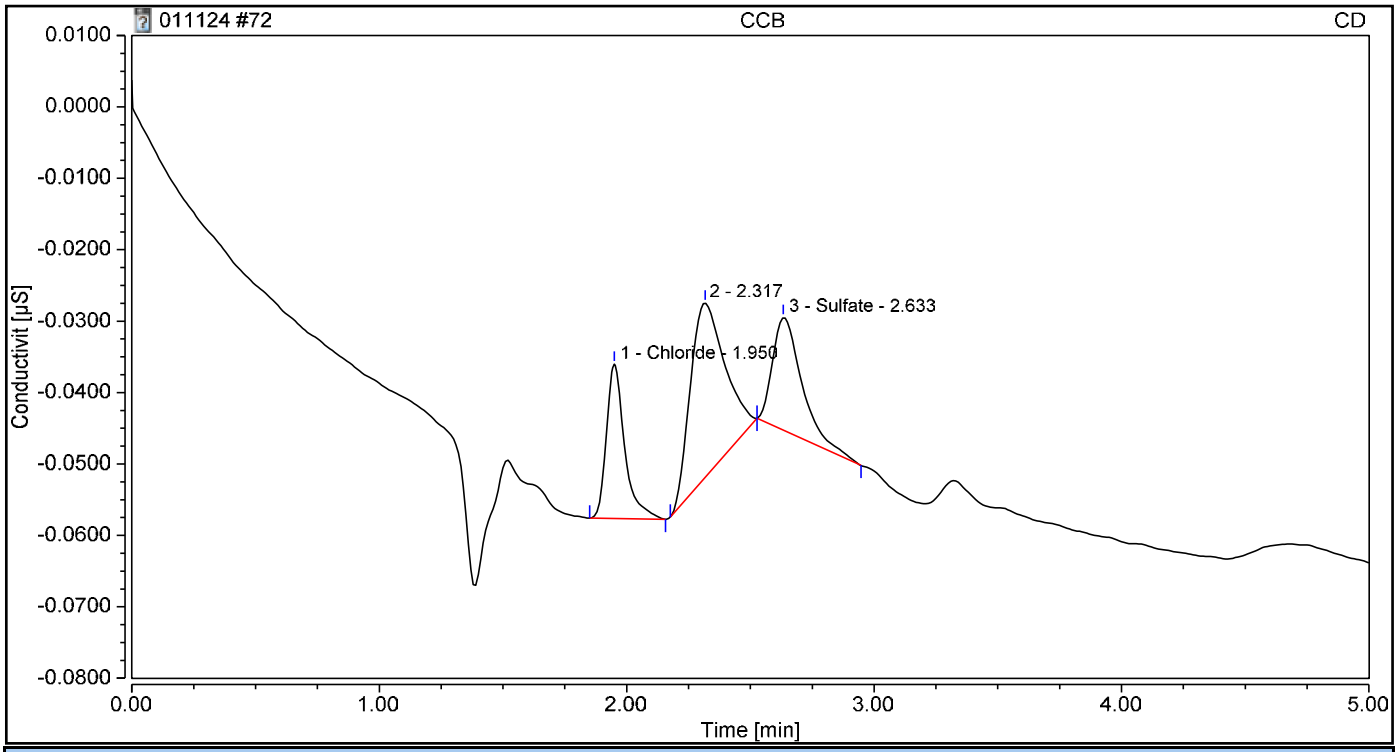
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.533	0.811	7.910	9.38	8.68	4.0360
2	Chloride	1.947	2.929	38.875	33.89	42.68	20.1117
3	Nitrite,N	2.250	1.226	12.609	14.19	13.84	3.8923
4	Sulfate	2.630	1.911	16.235	22.11	17.83	20.9800
5	Bromide	2.867	0.139	1.798	1.60	1.97	4.1138
6	Nitrate	3.290	1.306	11.780	15.11	12.93	3.9658
7	Chlorate	3.513	0.118	1.179	1.36	1.29	3.6446
8	Phosphate	4.530	0.203	0.693	2.35	0.76	6.4473
Total:			**8.643**	**91.078**	**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:	**11/Jan/24 19:35**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

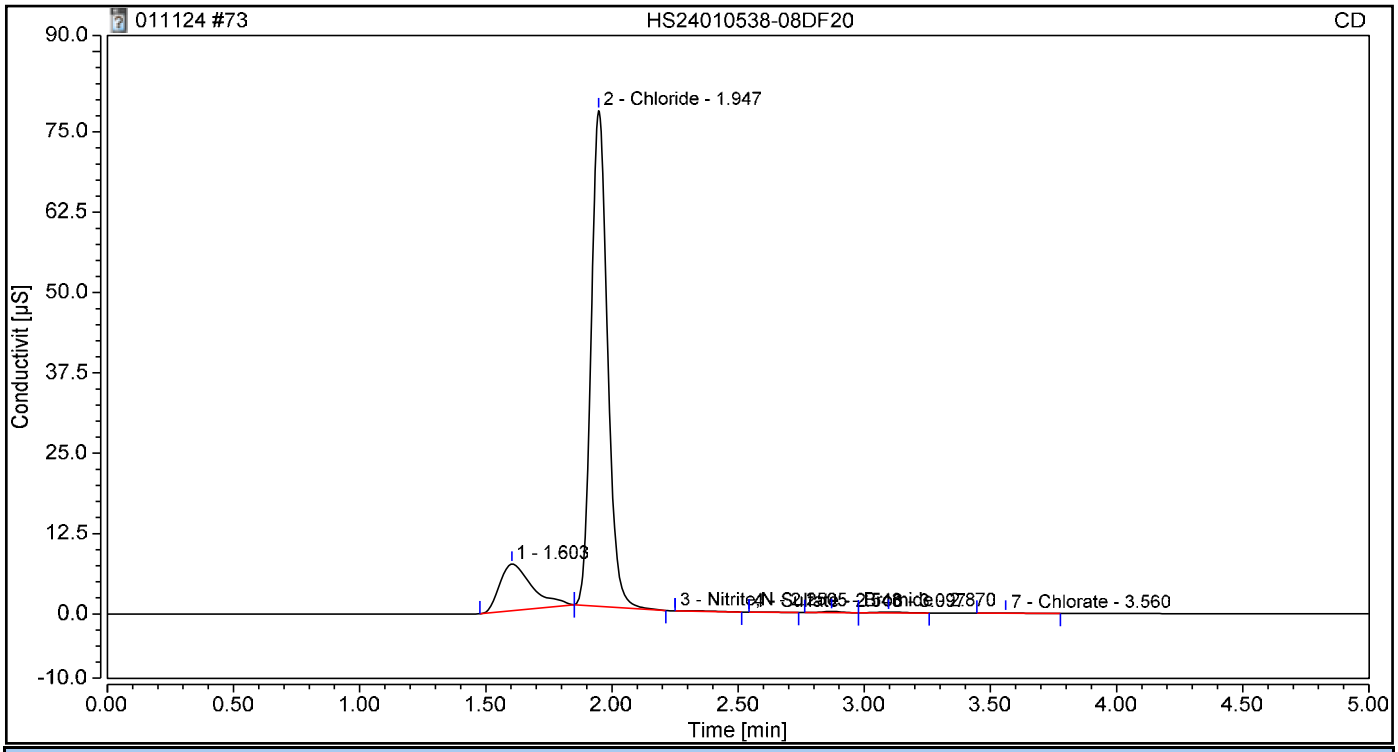
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	Chloride	1.950	0.002	0.022	23.17	34.93	0.1518
n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2		2.317	0.004	0.024	49.27	39.54	n.a.
3	Sulfate	2.633	0.002	0.016	27.56	25.53	0.1719
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:			**0.008**	**0.062**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**HS24010538-08DF20**	*Run Time (min):*	**5.00**
Vial Number:	**GA7**	*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:*	**20.0000**
Injection Date/Time:	**11/Jan/24 19:47**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

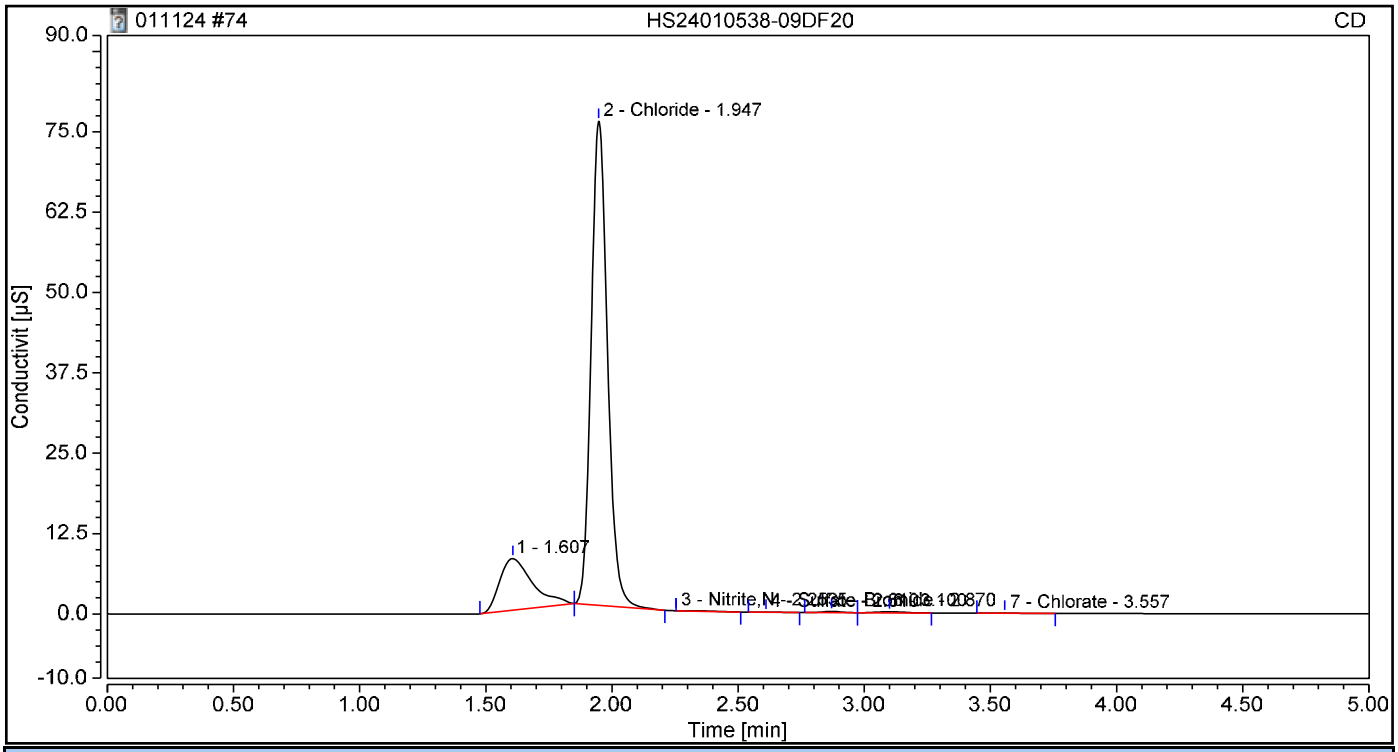
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1		1.603	1.078	7.263	15.55	8.58	n.a.
2	Chloride	1.947	5.812	77.104	83.84	91.05	795.3215
3	Nitrite,N	2.250	0.007	0.000	0.10	0.00	0.6395
4	Sulfate	2.543	0.002	0.000	0.03	0.00	3.3724
5	Bromide	2.870	0.016	0.183	0.23	0.22	10.8094
6		3.097	0.015	0.121	0.22	0.14	n.a.
n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7	Chlorate	3.560	0.002	0.012	0.03	0.01	2.0974
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**6.933**	**84.683**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**HS24010538-09DF20**	*Run Time (min):*	**5.00**
Vial Number:	**GA8**	*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:*	**20.0000**
Injection Date/Time:	**11/Jan/24 19:53**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

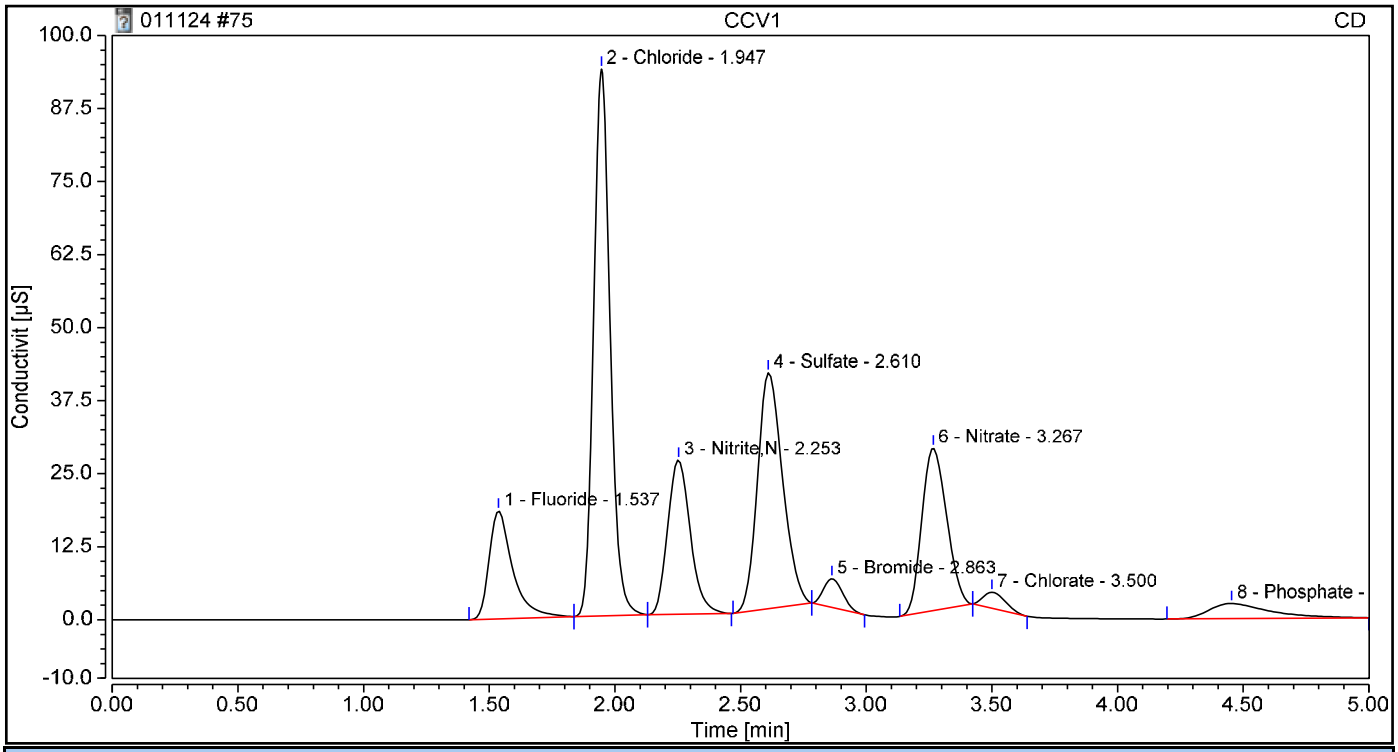
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1		1.607	1.215	8.064	17.52	9.62	n.a.
2	Chloride	1.947	5.669	75.347	81.78	89.92	775.7660
3	Nitrite,N	2.253	0.007	0.000	0.10	0.00	0.6294
4	Sulfate	2.610	0.003	0.028	0.04	0.03	3.5604
5	Bromide	2.870	0.016	0.182	0.23	0.22	10.7138
6		3.100	0.020	0.158	0.29	0.19	n.a.
n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
7	Chlorate	3.557	0.002	0.013	0.03	0.02	2.1796
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**6.931**	**83.792**	**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:	**11/Jan/24 20:22**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

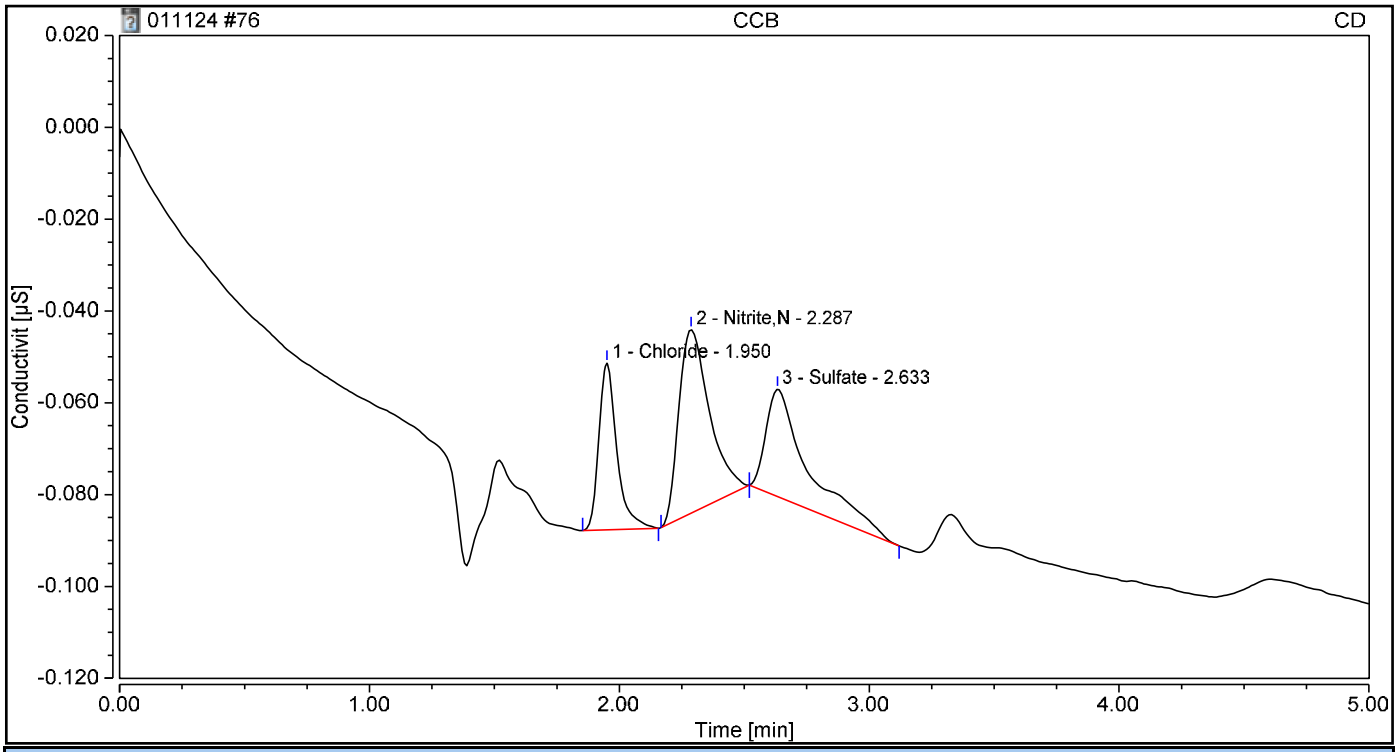
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.537	1.995	18.479	9.42	8.52	9.8494
2	Chloride	1.947	7.103	93.570	33.53	43.14	48.5651
3	Nitrite,N	2.253	2.759	26.382	13.02	12.16	9.2632
4	Sulfate	2.610	4.683	40.359	22.11	18.61	49.6118
5	Bromide	2.863	0.438	4.933	2.07	2.27	11.0662
6	Nitrate	3.267	3.196	27.863	15.09	12.85	9.6559
7	Chlorate	3.500	0.284	2.738	1.34	1.26	8.7865
8	Phosphate	4.453	0.727	2.579	3.43	1.19	10.5865
Total:			**21.184**	**216.904**	**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:	**11/Jan/24 20:40**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	Chloride	1.950	0.003	0.036	22.86	36.38	0.1599
2	Nitrite,N	2.287	0.006	0.040	42.90	40.13	0.0280
3	Sulfate	2.633	0.005	0.023	34.24	23.49	0.1981
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**	**0.100**	**100.00**	**100.00**	

HS24010538 Wetchem TOC_W

ALS WO# HS24010538

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	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

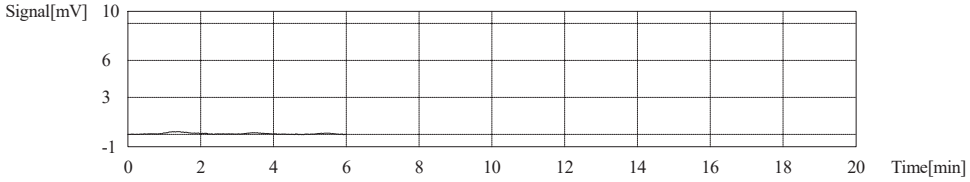
Sample Name:	CAL
Sample ID:	3100607917
Cal. Curve:	01.03.2024.2024_01_03_11_09_20.cal
Status	Completed

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

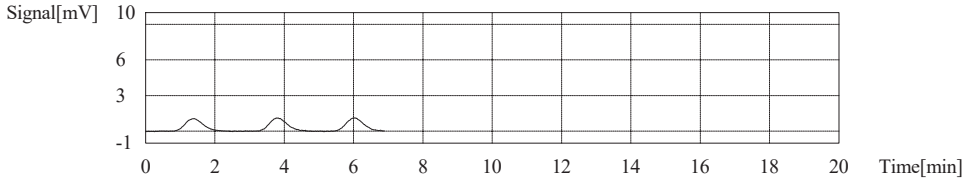
Acid Add.	1.500%
Sparge Gas Flow	80mL/min
Sp. Time	90.00sec
Mean Area	0.3419



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

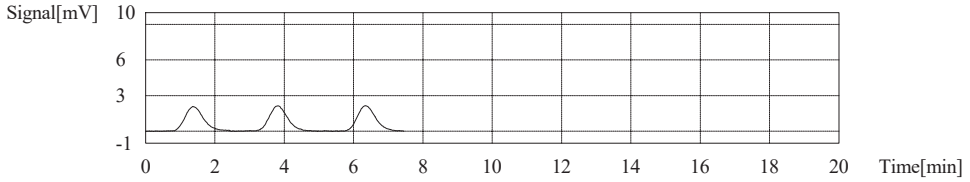
Acid Add.	1.500%
Sparge Gas Flow	80mL/min
Sp. Time	90.00sec
Mean Area	3.861



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



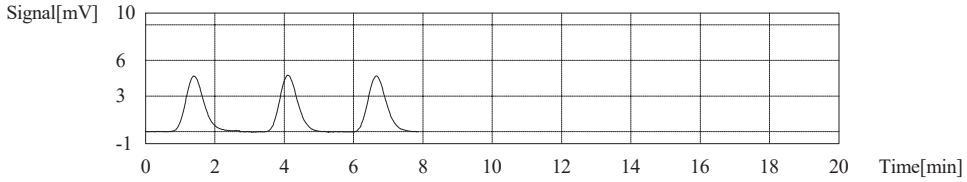
TOC-Control L Report

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

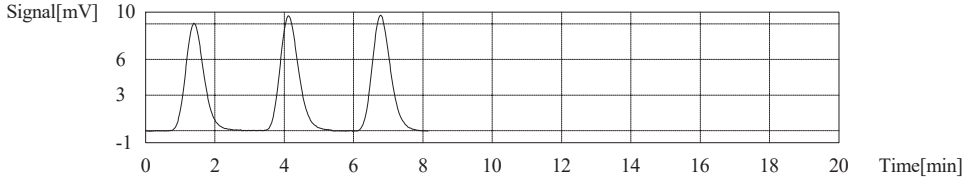
Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 90.00sec
Mean Area 17.28



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

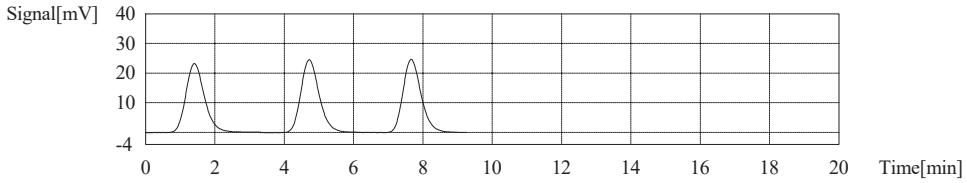
Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 90.00sec
Mean Area 35.31



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

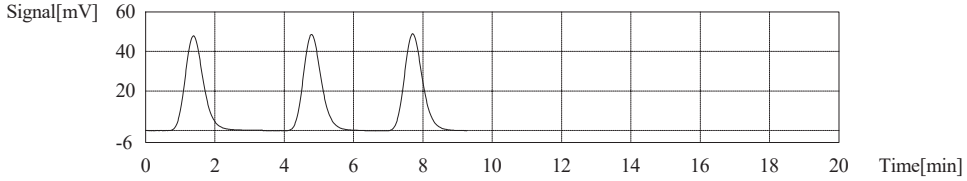
Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 90.00sec
Mean Area 89.91



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

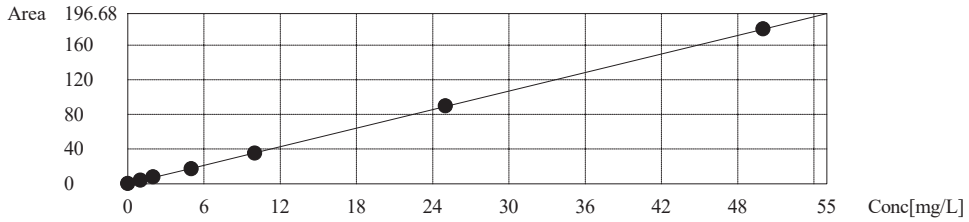
Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 90.00sec
Mean Area 178.8



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	

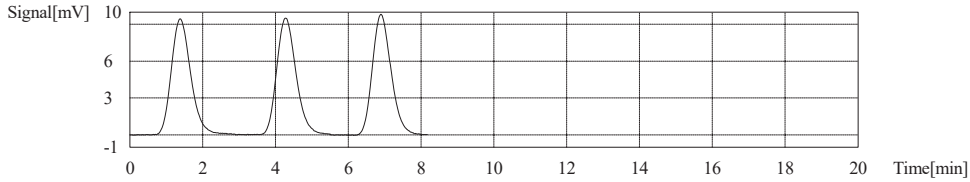
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.858mg/L

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

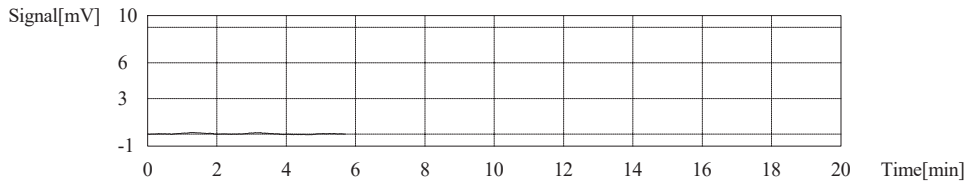
Anal.: NPOC

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



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	Analysis	Sample Name	Sample ID	Origin	Result	Status	Date / Time	Vial
1	NPOC	CCV	324065402	01.03.2024.	NPOC:24.2	Completed	1/21/2024 11:09:56 A	1
2	NPOC	CCB		01.03.2024.	NPOC:0.08	Completed	1/21/2024 11:25:25 A	2
3	NPOC	MBLK-01212024		01.03.2024.	NPOC:0.10	Completed	1/21/2024 11:46:52 A	3
4	NPOC	LCS-01212024	3100607917	01.03.2024.	NPOC:10.9	Completed	1/21/2024 12:05:18 P	4
5	NPOC	LCSD-01212024		01.03.2024.	NPOC:11.1	Completed	1/21/2024 12:20:06 P	5
6	NPOC	HS24010513-01		01.03.2024.	NPOC:18.4	Completed	1/21/2024 12:35:35 P	6
7	NPOC	HS24010513-02		01.03.2024.	NPOC:4.07	Completed	1/21/2024 12:49:57 P	7
8	NPOC	HS24010635-01		01.03.2024.	NPOC:12.0	Completed	1/21/2024 1:04:39 PM	8
9	NPOC	HS24010550-02		01.03.2024.	NPOC:7.60	Completed	1/21/2024 1:18:58 PM	9
10	NPOC	HS24010550-06		01.03.2024.	NPOC:268.	Completed	1/21/2024 1:34:56 PM	10
11	NPOC	HS24010550-08		01.03.2024.	NPOC:5.23	Completed	1/21/2024 1:49:00 PM	11
12	NPOC	HS24010550-11		01.03.2024.	NPOC:259.	Completed	1/21/2024 2:05:07 PM	12
13	NPOC	CCV	324065402	01.03.2024.	NPOC:23.5	Completed	1/21/2024 2:20:37 PM	1
14	NPOC	CCB		01.03.2024.	NPOC:0.23	Completed	1/21/2024 2:33:08 PM	2
15	NPOC	HS24010611-01		01.03.2024.	NPOC:133.	Completed	1/21/2024 2:48:43 PM	13
16	NPOC	HS24010611-01MS		01.03.2024.	NPOC:145.	Completed	1/21/2024 3:04:09 PM	14
17	NPOC	HS24010611-02		01.03.2024.	NPOC:13.9	Completed	1/21/2024 3:19:03 PM	15
18	NPOC	HS24010611-02MS		01.03.2024.	NPOC:23.8	Completed	1/21/2024 3:34:17 PM	16
19	NPOC	HS24010611-03		01.03.2024.	NPOC:9.02	Completed	1/21/2024 3:48:58 PM	17
20	NPOC	CCV	324065402	01.03.2024.	NPOC:23.4	Completed	1/21/2024 4:04:26 PM	1
21	NPOC	CCB		01.03.2024.	NPOC:0.21	Completed	1/21/2024 4:17:04 PM	2
22	NPOC	MBLK-01212024		01.03.2024.	NPOC:0.13	Completed	1/21/2024 4:29:51 PM	3
23	NPOC	LCS-01212024	3100607917	01.03.2024.	NPOC:9.69	Completed	1/21/2024 4:44:48 PM	4
24	NPOC	LCSD-01212024		01.03.2024.	NPOC:9.53	Completed	1/21/2024 5:00:03 PM	5
25	NPOC	HS24010647-01		01.03.2024.	NPOC:7.99	Completed	1/21/2024 5:15:11 PM	18
26	NPOC	HS24010647-01MS		01.03.2024.	NPOC:18.9	Completed	1/21/2024 5:30:34 PM	19
27	NPOC	HS24010710-01		01.03.2024.	NPOC:4.67	Completed	1/21/2024 5:45:28 PM	20
28	NPOC	HS24010730-01		01.03.2024.	NPOC:22.2	Completed	1/21/2024 6:01:04 PM	21
29	NPOC	HS24010730-02		01.03.2024.	NPOC:0.75	Completed	1/21/2024 6:14:39 PM	22
30	NPOC	HS24010736-01		01.03.2024.	NPOC:5.43	Completed	1/21/2024 6:29:37 PM	23
31	NPOC	HS24010736-02		01.03.2024.	NPOC:3.25	Completed	1/21/2024 6:44:05 PM	24
32	NPOC	CCV	324065402	01.03.2024.	NPOC:22.5	Completed	1/21/2024 6:59:55 PM	25
33	NPOC	CCB		01.03.2024.	NPOC:0.05	Completed	1/21/2024 7:12:21 PM	26
34	NPOC	HS24010741-01		01.03.2024.	NPOC:86.6	Completed	1/21/2024 7:28:35 PM	27
35	NPOC	HS24010741-02		01.03.2024.	NPOC:9.92	Completed	1/21/2024 7:43:45 PM	28
36	NPOC	HS24010743-01		01.03.2024.	NPOC:4.71	Completed	1/21/2024 7:58:34 PM	29
37	NPOC	HS24010743-02		01.03.2024.	NPOC:2.40	Completed	1/21/2024 8:13:16 PM	30
38	NPOC	CCV	324065402	01.03.2024.	NPOC:22.7	Completed	1/21/2024 8:30:01 PM	25
39	NPOC	CCB		01.03.2024.	NPOC:0.03	Completed	1/21/2024 8:42:29 PM	26
40	NPOC	MBLK-01212024		01.03.2024.	NPOC:0.01	Completed	1/21/2024 8:54:58 PM	3
41	NPOC	LCS-01212024	3100607917	01.03.2024.	NPOC:9.72	Completed	1/21/2024 9:10:03 PM	4
42	NPOC	LCSD-01212024		01.03.2024.	NPOC:9.93	Completed	1/21/2024 9:25:24 PM	5
43	NPOC	HS24010743-03		01.03.2024.	NPOC:1.38	Completed	1/21/2024 9:39:31 PM	31
44	NPOC	HS24010743-04		01.03.2024.	NPOC:1.14	Completed	1/21/2024 9:53:42 PM	32
45	NPOC	HS24010538-01		01.03.2024.	NPOC:5.90	Completed	1/21/2024 10:08:48 P	33
46	NPOC	HS24010538-01MS		01.03.2024.	NPOC:16.4	Completed	1/21/2024 10:24:27 P	34
47	NPOC	HS24010538-02		01.03.2024.	NPOC:19.1	Completed	1/21/2024 10:40:11 P	35
48	NPOC	HS24010538-03		01.03.2024.	NPOC:111.	Completed	1/21/2024 10:56:35 P	36
49	NPOC	HS24010538-04		01.03.2024.	NPOC:80.4	Completed	1/21/2024 11:11:09 P	37
50	NPOC	CCV	324065402	01.03.2024.	NPOC:24.1	Completed	1/21/2024 11:27:37 P	25
51	NPOC	CCB		01.03.2024.	NPOC:0.25	Completed	1/21/2024 11:40:45 P	26
52	NPOC	HS24010538-08		01.03.2024.	NPOC:555.	Completed	1/21/2024 11:58:00 P	38
53	NPOC	HS24010538-09		01.03.2024.	NPOC:650.	Completed	1/22/2024 12:15:24 A	39

C:\TOC-L\Data\2024_01_21_001.tlx

	Analysis	Sample Name	Sample ID	Origin	Result	Status	Date / Time	Vial
54	NPOC	HS24010767-02		01.03.2024.	NPOC:9.26	Completed	1/22/2024 12:31:23 A	40
55	NPOC	CCV	324065402	01.03.2024.	NPOC:23.6	Completed	1/22/2024 12:47:46 A	25
56	NPOC	CCB		01.03.2024.	NPOC:0.41	Completed	1/22/2024 1:01:28 AM	26

TOC-Control L Report

Instr.Information

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

Sample

Sample Name: CCV
Sample ID: 324065402
Origin: 01.03.2024.cal
Status: Completed
Chk. Result

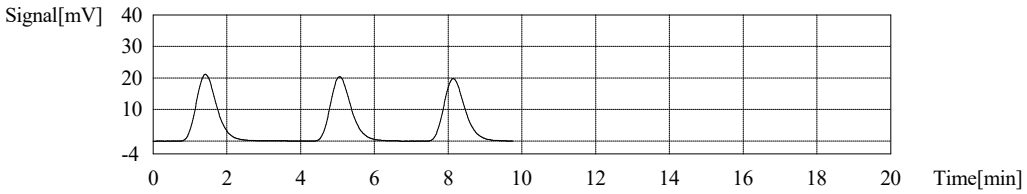
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:22.73mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	83.23	23.28mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 8:23:24 PM
2	80.78	22.60mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 8:26:44 PM
3	79.79	22.32mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 8:30:01 PM

Mean Area: 81.27
Mean Conc.: 22.73mg/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:0.03897mg/L

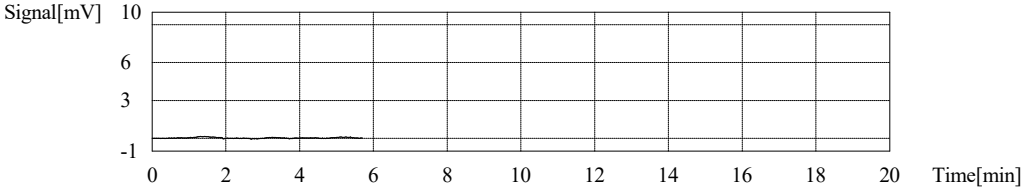
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.2859	0.07998mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 8:38:11 PM
2	0.000	0.000mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 8:40:21 PM
3	0.1320	0.03692mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 8:42:29 PM

TOC-Control L Report

Mean Area 0.1393
Mean Conc. 0.03897mg/L



Sample

Sample Name: MBLK-01212024
Sample ID:
Origin: 01.03.2024.cal
Status Completed
Chk. Result

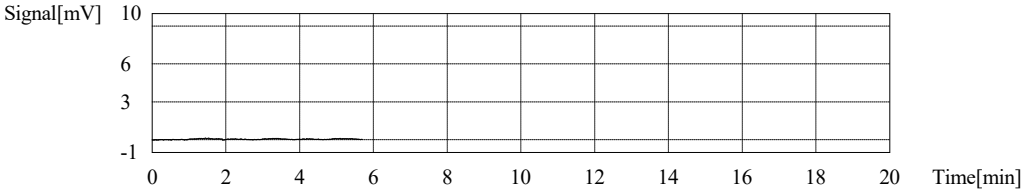
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.01739mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.04790	0.01340mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 8:50:41 PM
2	0.1386	0.03877mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 8:52:50 PM
3	0.000	0.000mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 8:54:58 PM

Mean Area 0.06217
Mean Conc. 0.01739mg/L



Sample

Sample Name: LCS-01212024
Sample ID: 3100607917
Origin: 01.03.2024.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.725mg/L

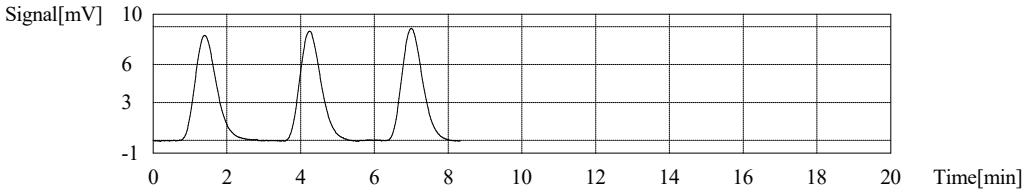
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	33.90	9.483mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 9:04:04 PM
2	35.11	9.821mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 9:07:04 PM
3	35.29	9.872mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 9:10:03 PM

TOC-Control L Report

Mean Area 34.77
Mean Conc. 9.725mg/L



Sample

Sample Name: LCSD-01212024
Sample ID:
Origin: 01.03.2024.cal
Status Completed
Chk. Result

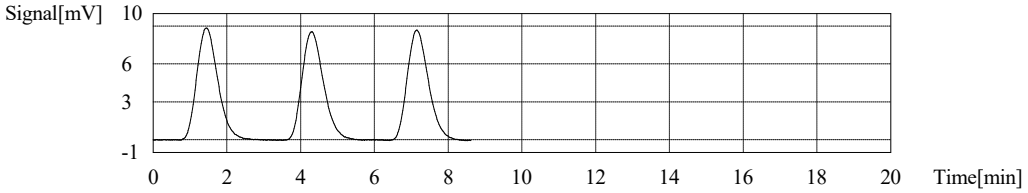
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.939mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	35.59	9.956mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 9:19:11 PM
2	35.35	9.889mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 9:22:16 PM
3	35.65	9.973mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 9:25:24 PM

Mean Area 35.53
Mean Conc. 9.939mg/L



Sample

Sample Name: HS24010538-01
Sample ID:
Origin: 01.03.2024.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:5.904mg/L

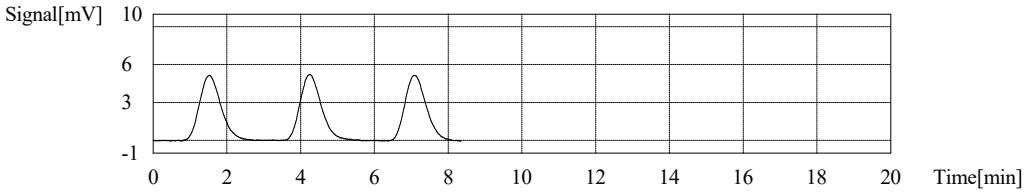
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	21.21	5.933mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 10:02:45 PM
2	21.02	5.880mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 10:05:50 PM
3	21.09	5.900mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 10:08:48 PM

TOC-Control L Report

Mean Area 21.11
Mean Conc. 5.904mg/L



Sample

Sample Name: HS24010538-01MS
Sample ID:
Origin: 01.03.2024.cal
Status Completed
Chk. Result

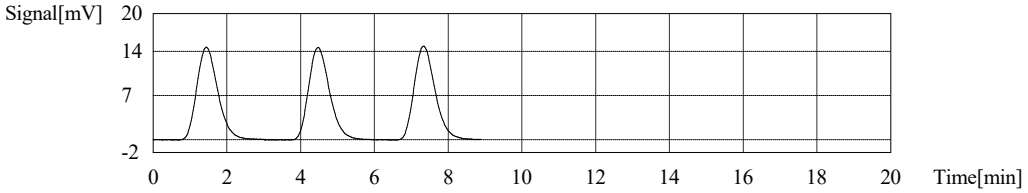
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:16.43mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	58.54	16.38mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 10:18:06 PM
2	58.36	16.33mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 10:21:14 PM
3	59.30	16.59mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 10:24:27 PM

Mean Area 58.73
Mean Conc. 16.43mg/L



Sample

Sample Name: HS24010538-02
Sample ID:
Origin: 01.03.2024.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:19.11mg/L

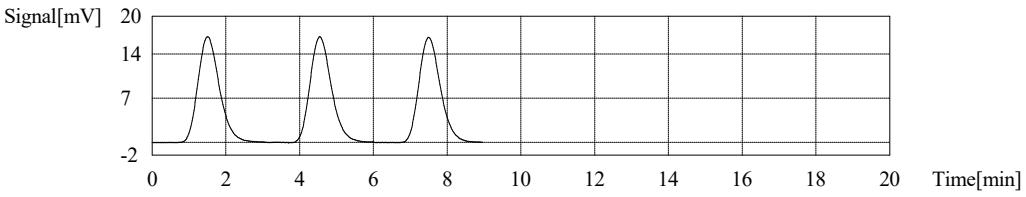
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	68.65	19.20mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 10:33:46 PM
2	68.17	19.07mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 10:36:59 PM
3	68.15	19.06mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 10:40:11 PM

TOC-Control L Report

Mean Area 68.32
Mean Conc. 19.11mg/L



Sample

Sample Name: HS24010538-03
Sample ID:
Origin: 01.03.2024.cal
Status Completed
Chk. Result

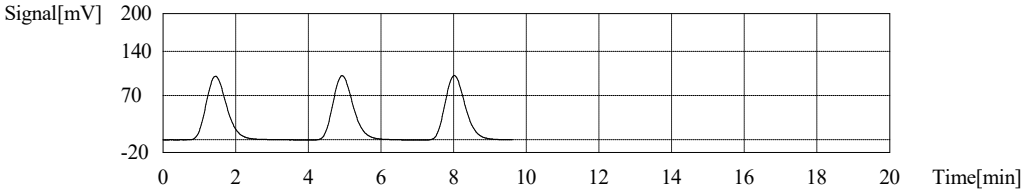
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:111.7mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	400.4	112.0mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 10:49:57 PM
2	399.6	111.8mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 10:53:17 PM
3	398.0	111.3mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 10:56:35 PM

Mean Area 399.3
Mean Conc. 111.7mg/L



Sample

Sample Name: HS24010538-04
Sample ID:
Origin: 01.03.2024.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:80.47mg/L

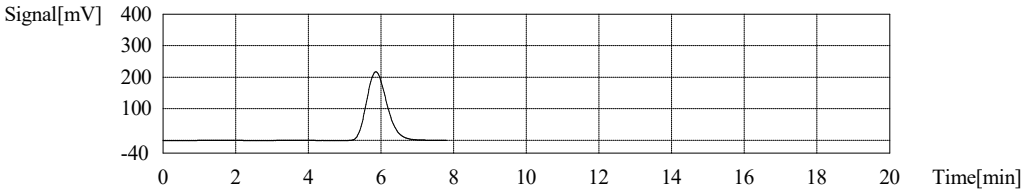
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.325	0.3706mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 11:05:04 PM
2	1.206	0.3374mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 11:07:30 PM
3	860.5	240.7mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 11:11:09 PM

TOC-Control L Report

Mean Area 287.7
Mean Conc. 80.47mg/L



Sample

Sample Name: CCV
Sample ID: 324065402
Origin: 01.03.2024.cal
Status Completed
Chk. Result

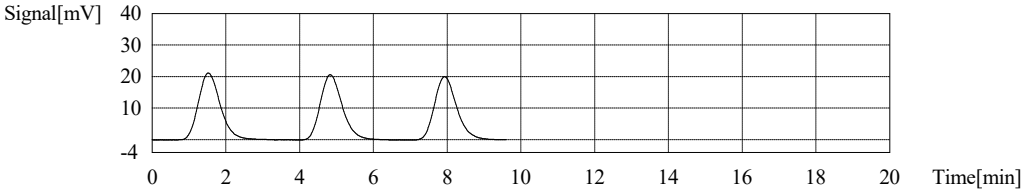
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.16mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	88.29	24.70mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 11:20:50 PM
2	85.89	24.03mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 11:24:11 PM
3	84.96	23.77mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 11:27:37 PM

Mean Area 86.38
Mean Conc. 24.16mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: 01.03.2024.cal
Status Completed
Chk. Result

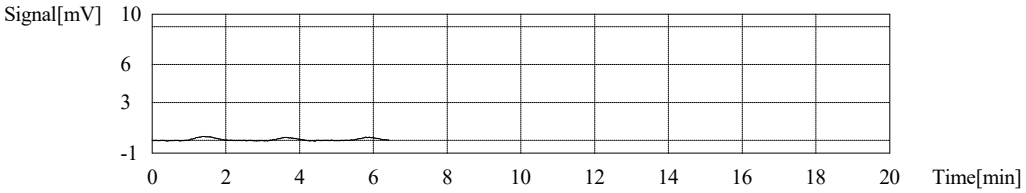
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2500mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.185	0.3315mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 11:36:05 PM
2	0.9146	0.2558mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 11:38:32 PM
3	0.5816	0.1627mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 11:40:45 PM

Mean Area 0.8937
Mean Conc. 0.2500mg/L



Sample

Sample Name: HS24010538-08
Sample ID:
Origin: 01.03.2024.cal
Status Completed
Chk. Result

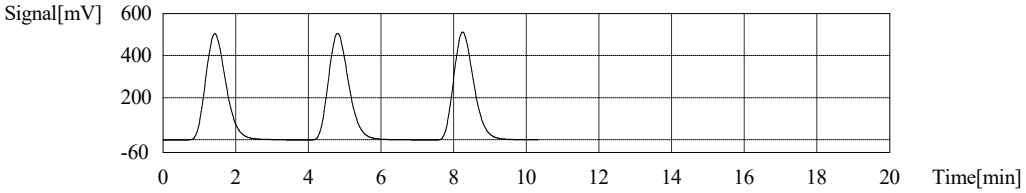
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:555.4mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1982	554.4mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 11:50:34 PM
2	1983	554.7mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 11:54:15 PM
3	1991	557.0mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 11:58:00 PM

Mean Area 1985
Mean Conc. 555.4mg/L



Sample

Sample Name: HS24010538-09
Sample ID:
Origin: 01.03.2024.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:650.3mg/L

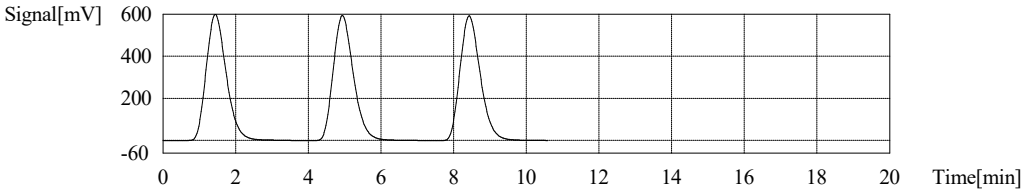
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2323	649.8mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/22/2024 12:07:47 AM
2	2324	650.1mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/22/2024 12:11:32 AM
3	2327	650.9mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/22/2024 12:15:24 AM

TOC-Control L Report

Mean Area 2325
Mean Conc. 650.3mg/L



Sample

Sample Name: CCV
Sample ID: 324065402
Origin: 01.03.2024.cal
Status Completed
Chk. Result

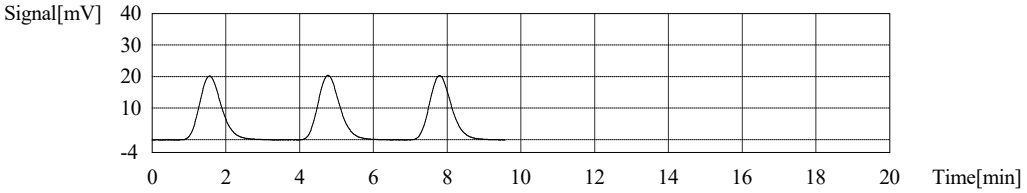
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:23.69mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	84.20	23.55mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/22/2024 12:40:56 AM
2	84.60	23.67mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/22/2024 12:44:13 AM
3	85.26	23.85mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/22/2024 12:47:46 AM

Mean Area 84.69
Mean Conc. 23.69mg/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:0.4151mg/L

1. Det

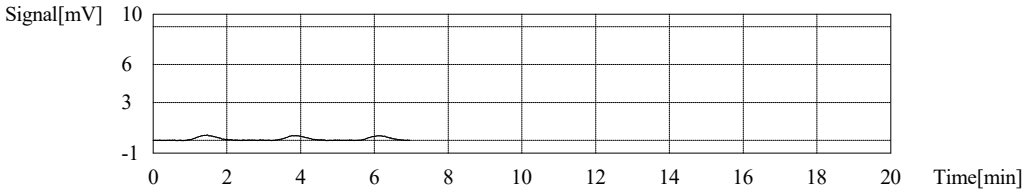
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.674	0.4683mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/22/2024 12:56:27 AM
2	1.428	0.3995mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/22/2024 12:58:57 AM
3	1.350	0.3776mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/22/2024 1:01:28 AM

TOC-Control L Report

2024_01_21_001.tlx

Mean Area	1.484
Mean Conc.	0.4151mg/L



HS24010538 E2400035 Perch Level IV Report

ALS WO# HS24010538

January 24, 2024 Service Request No:E2400035

James Guin
ALS Environmental - US
10450 Stancliff Rd #210
Houston, TX 77099

Laboratory Results for: HS24010538

Dear James,

Enclosed are the results of the sample(s) submitted to our laboratory January 11, 2024
For your reference, these analyses have been assigned our service request number **E2400035.**

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

Please contact me if you have any questions. My extension is 2190. You may also contact me via email at hussam.kelany@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

H Kelany

Hussam Kelany
Project Manager

ADDRESS 10450 Stancliff Rd., Suite 210, Houston, TX 77099
PHONE +1 281 530 5656 | FAX +1 281 530 5887
ALS Group USA, Corp.
dba ALS Environmental

Certificate of Analysis

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

Client:	ALS Environmental - US	**Service Request No.:**	E2400035
Project:	HS24010538	**Date Received:**	01/11/24
Sample Matrix:	Ground Water / Water		

CASE NARRATIVE

All analyses were performed in adherence to the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier IV. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Nine samples were received for analysis at ALS Environmental in Houston on 01/11/24.

The samples were received in good condition and are consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4°C upon receipt at the laboratory.

Data Validation Notes and Discussion

Precision and Accuracy:

EQ2400031: Laboratory Control Spike/Duplicate Laboratory Control Spike (LCS/DLCS) samples were analyzed and reported in lieu of a MS/MSD for this extraction batch.

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

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

Client: ALS Environmental - US **Service Request:**E2400035
Project: HS24010538

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
E2400035-001	16WW58-240110	1/10/2024	0705
E2400035-002	16WW57-240110	1/10/2024	0805
E2400035-003	16IW09-240110	1/10/2024	0900
E2400035-004	16IW26-240110	1/10/2024	0950
E2400035-005	16WW32-240110	1/10/2024	1040
E2400035-006	16WW31-240110	1/10/2024	1120
E2400035-007	16WW46-240110	1/10/2024	1200
E2400035-008	16IW03-240110	1/10/2024	1245
E2400035-009	16IW03-240110-FD	1/10/2024	1245

Service Request Summary

Folder #: **E2400035**
Client Name: ALS Environmental - US
Project Name: HS24010538
Project Number:

Report To: James Guin
ALS Environmental - US
10450 Stancliff Rd #210
Houston, TX 77099
USA
Phone Number: 281-530-5656
Cell Number:
Fax Number:
E-mail: james.guin@alsglobal.com

Project Chemist: Hussam Kelany
Originating Lab: HOUSTON
Logged By: JCORONADO2
Date Received: 01/11/24
Internal Due Date: 1/23/2024
QAP: LAB QAP
Qualifier Set: DOD
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number:
EDD: EQUIS APTIM
LONGHORN EFWEDD

9 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-WIC 4A
Pressure Gas:

Lab Samp No.	Client Samp No	Matrix	Collected	Semivoa GCMS ClO4 DOD/6850
E2400035-001	16WW58-240110	Ground Water	01/10/24 0705	**IV**
E2400035-002	16WW57-240110	Ground Water	01/10/24 0805	**IV**
E2400035-003	16IW09-240110	Ground Water	01/10/24 0900	**IV**
E2400035-004	16IW26-240110	Ground Water	01/10/24 0950	**IV**
E2400035-005	16WW32-240110	Ground Water	01/10/24 1040	**IV**
E2400035-006	16WW31-240110	Ground Water	01/10/24 1120	**IV**
E2400035-007	16WW46-240110	Ground Water	01/10/24 1200	**IV**
E2400035-008	16IW03-240110	Ground Water	01/10/24 1245	**IV**
E2400035-009	16IW03-240110-FD	Ground Water	01/10/24 1245	**IV**

Service Request Summary

Folder #: **E2400035**
Client Name: ALS Environmental - US
Project Name: HS24010538
Project Number:

Report To: James Guin
ALS Environmental - US
10450 Stancliff Rd #210
Houston, TX 77099
USA
Phone Number: 281-530-5656
Cell Number:
Fax Number:
E-mail: james.guin@alsglobal.com

Project Chemist: Hussam Kelany
Originating Lab: HOUSTON
Logged By: JCORONADO2
Date Received: 01/11/24
Internal Due Date: 1/23/2024
QAP: LAB QAP
Qualifier Set: DOD
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number:
EDD: EQUIS APTIM
LONGHORN EFWEDD

9 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-WIC 4A
Pressure Gas:

Data Qualifiers

DOD

B	Analyte found in the associated method blank as well as in the sample.
C	Result identification confirmed.
D	Compound identified in an analysis at a secondary dilution factor
E	Estimated value. Concentration above calibration range.
F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
I	(Auto) The reference ion ratio was outside acceptance criteria, which may indicate a potential bias to this result.
I	The reference ion ratio was outside acceptance criteria, which may indicate a potential bias to this result.
J	Estimated value. Concentration found below MRL.
K	A deflection in the QC ion may indicate interference with the quantitation of this ion. The concentration of this analyte should be considered as an estimate.
K	The reference ion ratio was outside acceptance criteria, which may indicate a potential bias to this result.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
P	Indicates chlorodiphenyl ether interference present at the retention time of the target compound.
Q	Pesticide/Aroclor target is not confirmed, >= 100% difference for the detected concentrations between the two GC columns
U	Compound was analyzed for, but was not detected (ND).
X	See case narrative.
Y	Recovery outside limits.
Y	The chromatogram resembles a petroleum product but does not match the calibration standard.
Z	The chromatogram does not resemble a petroleum product.
i	The MRL/MDL has been elevated due to a matrix interference.

ALS Laboratory Group

Acronyms

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

10450 Stancliff Rd, Houston, TX 77099 | 281-530-5656 | www.alsglobal.com

ALS Environmental

State Certifications, Accreditations, and Licenses

Agency	Number	Expire Date
Arizona Department of Health Services	AZ0793_2024	5/27/2024
Arkansas Department of Environmental Quality	88-00356	3/27/2024
California State Environmental Laboratory Accreditation Program	2919	4/30/2024
Department of Defense	L22-90	3/31/2024
Department of Defense	L23-358	5/31/2025
Florida Department of Health	E87611-38	6/30/2024
Illinois Environmental Protection Agency	2000322023-11	6/30/2024
Kansas Department of Health and Environment	E-10352 2023-2024	7/31/2024
Louisiana Department of Environmental Quality	03087-2023	6/30/2024
Louisiana Department of Health and Hospitals	LA028-2024	12/31/2024
Maine Department of Health and Human Services	2022017	6/5/2024
Maryland Department of the Environment	343-2023	6/30/2024
Michigan Depratment of Environmental Quality	9971-2023	4/30/2024
Minnesota Department of Health	2645386	12/31/2024
Nebraska Department of Health and Human Services	NE-OS-25-13	4/30/2024
Nevada Division of Environmental Protection	TX026932024-1	7/31/2024
New Hampshire Environmental Laboratory Accreditation Program	209423	4/24/2024
New Jersey Department of Environmental Protection	TX008-2024	6/30/2024
New York Department of Health	11707	3/31/2024
Oklahoma Department of Environmental Quality	2023-140	8/31/2024
Oregon Environmental Laboratory Accreditation Program	TX200002-011	5/15/2024
Pennsylvania Department of Environmental Protection	68-03441-017	6/30/2024
Perry Johnson Laboratory Accreditation	L22-91	3/31/2024
Tennessee Department of Environment and Concervation	TN04016-2023	4/30/2024
Texas Commision on Environmental Quality	T104704231-23-30	4/30/2024
Utah Department of Health Environmental Laboratory Certification	TX026932023-14	7/31/2024
Washington Department of Ecology	C819-23	11/14/2024

Chain of Custody

ALS Environmental - Houston Specialties Laboratory
10450 Stancliff Rd., Suite 210, Houston TX 77099
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E2400035 5
ALS Group USA, Corp.
24010538

10450 Stancliff Rd, Ste 210
Houston, TX 77099
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Subcontract Chain of Custody

SAMPLING STATE: **Dept of Defense** **COC ID: 24458**

SUBCONTRACT TO:

ALS Environmental
10450 Stancliff RoadSuite 210
Houston, TX 77084 **Phone:** +1 281 530 5656

CUSTOMER INFORMATION:

Company:	ALS Houston
Contact:	James Guin
Address:	10450 Stancliff Rd, Ste 210
Phone:	+1 281 530 5656
Email:	James.Guin@alsglobal.com
Alternate Contact:	Jumoke M. Lawal
Email:	jumoke.lawal@alsglobal.com

INVOICE INFORMATION:

Company:	ALS Houston
Contact:	Accounts Payable
Address:	10450 Stancliff Rd, Ste 210
Phone:	+1 281 530 5656
Reference:	HS24010538
TSR:	Sonia West

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	**HS24010538-01**	**16WW58-240110**	**Groundwater**	**10 Jan 2024 07:05**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			25 Jan 2024
2.	**HS24010538-02**	**16WW57-240110**	**Groundwater**	**10 Jan 2024 08:05**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			25 Jan 2024
3.	**HS24010538-03**	**16IW09-240110**	**Groundwater**	**10 Jan 2024 09:00**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			25 Jan 2024
4.	**HS24010538-04**	**16IW26-240110**	**Groundwater**	**10 Jan 2024 09:50**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			25 Jan 2024
5.	**HS24010538-05**	**16WW32-240110**	**Groundwater**	**10 Jan 2024 10:40**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			25 Jan 2024
6.	**HS24010538-06**	**16WW31-240110**	**Groundwater**	**10 Jan 2024 11:20**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			25 Jan 2024
7.	**HS24010538-07**	**16WW46-240110**	**Groundwater**	**10 Jan 2024 12:00**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			25 Jan 2024
8.	**HS24010538-08**	**16IW03-240110**	**Groundwater**	**10 Jan 2024 12:45**

Subcontract Chain of Custody

SAMPLING STATE: **Dept of Defense** **COC ID: 24458**

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			25 Jan 2024
9.	**HS24010538-09**	**16IW03-240110-FD**	**Groundwater**	**10 Jan 2024 12:45**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			25 Jan 2024

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

QC Level: DOD IV (DoD Data Package)

Relinquished By: _____ Date/Time: _____

Received By: JC Date/Time: 1/11/24 5:56

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

E2400035 5
ALS Group USA, Corp.
24010538

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

Sample Receipt Checklist

Work Order ID: HS24010538 **Date/Time received:** 11 Jan 2024 10:00

Client name: Bhate Environmental Associates, Inc. **Received by:** Si Ma

Completed/By: 11 Jan 2024 15:56 Paresh M. Giga **Reviewed/By:** _____
Date/Time eSignature Date/Time eSignature

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

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

Temperature(s)/Thermometer(s): 3.9C/3.8C U/c IR31

Cooler Information: 1 Cooler(s), 47394

Date/Time sample(s) sent to storage: 1/11/24 16:25

Water - VOA vials have zero headspace?	☑ Yes	☐ No	☐ No VOA vials submitted
Water - pH acceptable upon receipt?	☐ Yes	☐ No	☑ Not Applicable
pH adjusted?	☐ Yes	☐ No	☑ Not Applicable

pH adjusted by: _____

Login notes: 16IW03-240110 2nd sample logged in as FD

Client contacted: _____ **Date contacted:** _____ **Person contacted:** _____

Contacted by: _____ **Regarding:** _____

Comments: _____

Corrective action: _____

RIGHT CONDITIONS | RIGHT CONTRACTS

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Houston, TX 77099
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F: +1 281 530 5887
www.alsglobal.com

SAMPLE ACCEPTANCE POLICY

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

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

- ✓ Intact on outside of cooler, signed and dated

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

The following is required on each COC:

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

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

Sample Integrity (mandatory):

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

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

Temperature Requirement (varies by sample matrix):

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

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

Preparation Information Benchsheets

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

Preparation Information Benchsheet

Prep Run#: 432774 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 1/19/24 08:43

#	Lab Code	Client ID	B#	Method /Test	pH	Cl	Matrix	Amt. Ext.	Sample Description
1	E2400035-001	16WW58-240110	.01	6850/ClO4 DOD			Ground Water	10mL	
2	E2400035-002	16WW57-240110	.01	6850/ClO4 DOD			Ground Water	10mL	
3	E2400035-003	16IW09-240110	.01	6850/ClO4 DOD			Ground Water	10mL	
4	E2400035-004	16IW26-240110	.01	6850/ClO4 DOD			Ground Water	10mL	
5	E2400035-005	16WW32-240110	.01	6850/ClO4 DOD			Ground Water	10mL	
6	E2400035-006	16WW31-240110	.01	6850/ClO4 DOD			Ground Water	10mL	
7	E2400035-007	16WW46-240110	.01	6850/ClO4 DOD			Ground Water	10mL	
8	E2400035-008	16IW03-240110	.01	6850/ClO4 DOD			Ground Water	10mL	
9	E2400035-009	16IW03-240110-FD	.01	6850/ClO4 DOD			Ground Water	10mL	
10	E2400038-001	CTC-50_0124	.02	6850/ClO4 DOD			Water	10mL	
11	E2400038-002	MS-1_0124	.02	6850/ClO4 DOD			Water	10mL	
12	E2400038-003	East Side Shaft_0124	.02	6850/ClO4 DOD			Water	10mL	
13	E2400038-004	MN-1_0124	.02	6850/ClO4 DOD			Water	10mL	
14	E2400038-005	MN-2_0124	.02	6850/ClO4 DOD			Water	10mL	
15	E2400038-006	CTC-52_0124	.02	6850/ClO4 DOD			Water	10mL	
16	E2400038-007	CTC-53_0124	.02	6850/ClO4 DOD			Water	10mL	
17	E2400038-008	CTC- 46_0124	.02	6850/ClO4 DOD			Water	10mL	
18	E2400038-009	EA-32_0124	.02	6850/ClO4 DOD			Water	10mL	
19	E2400048-001	2401091020C 100-G-223	.01	6850/ClO4			Water	10mL	
20	E2400048-002	2401091410A 300-F-175	.01	6850/ClO4			Water	10mL	
21	EQ2400031-01	MB		6850/ClO4 DOD			Liquid	10mL	
22	EQ2400031-02	LCS		6850/ClO4			Liquid	10mL	
23	EQ2400031-03	DLCS		6850/ClO4			Liquid	10mL	
24	EQ2400031-04	ICS		6850/ClO4			Liquid	10mL	

Spiking Solutions

Name: Perchlorate Intermediate Stock 2 Inventory ID 230345 Logbook Ref: Perchlorate INT. Stock2 Expires On: 03/07/2024

EQ2400031-02	10.00µL	EQ2400031-02	10.00µL	EQ2400031-03	10.00µL	EQ2400031-03	10.00µL	EQ2400031-04	10.00µL	EQ2400031-04	10.00µL

Name: Perchlorate Internal Standard 1ug/mL Inventory ID 232015 Logbook Ref: Perchlorate Internal Standard Expires On: 04/30/2024

E2400035-001	100.00µL	E2400035-002	100.00µL	E2400035-003	100.00µL	E2400035-004	100.00µL	E2400035-005	100.00µL	E2400035-006	100.00µL
E2400035-007	100.00µL	E2400035-008	100.00µL	E2400035-009	100.00µL	E2400038-001	100.00µL	E2400038-002	100.00µL	E2400038-003	100.00µL
E2400038-004	100.00µL	E2400038-005	100.00µL	E2400038-006	100.00µL	E2400038-007	100.00µL	E2400038-008	100.00µL	E2400038-009	100.00µL
E2400048-001	100.00µL	E2400048-002	100.00µL	EQ2400031-01	100.00µL	EQ2400031-01	100.00µL	EQ2400031-02	100.00µL	EQ2400031-02	100.00µL

Preparation Information Benchsheet

Prep Run#: 432774 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 1/19/24 08:43

EQ2400031-03 100.00µL EQ2400031-03 100.00µL EQ2400031-04 100.00µL EQ2400031-04 100.00µL

Name:	Perchlorate Anion Spiking Soln. 25,000 ppm	Inventory ID	233096	Logbook Ref:	Expires On:	02/04/2024

EQ2400031-04 20.00µL EQ2400031-04 20.00µL

Preparation Materials

Water HPLC Grade	HPLC water 083124 (233144)	6850 Amber Glass screw vial	2mL Screw Top Vial (221894)	6850 0.45um syringe filters	6850 0.45 SYRING FILTER (229979)
6850 Luer-Lok Syringes	Luer Lok Syringes (231696)				

Preparation Steps

Step: Preparation
Started: 1/19/24 08:43
Finished: 1/19/24 13:54
By: XMI
Comments

Comments: _____

Reviewed By: _____ Date: _____

Chain of Custody

Relinquished By: _____ Date: _____ Extracts Examined

Received By: _____ Date: _____ Yes No

Analytical Results

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

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400035
Project:	HS24010538	**Date Collected:**	1/10/24 0705
Sample Matrix:	Ground Water	**Date Received:**	1/11/24
Sample Name:	16WW58-240110	**Units:**	µg/L
Lab Code:	E2400035-001	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	1/19/24	1/23/24 13:34	432774	830415	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400035
Project:	HS24010538	**Date Collected:**	1/10/24 0805
Sample Matrix:	Ground Water	**Date Received:**	1/11/24
Sample Name:	16WW57-240110	**Units:**	µg/L
Lab Code:	E2400035-002	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.0435**	J	0.100	0.0500	0.0250	1	1/19/24	1/22/24 12:55	432774	830337	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400035
Project:	HS24010538	**Date Collected:**	1/10/24 0900
Sample Matrix:	Ground Water	**Date Received:**	1/11/24
Sample Name:	16IW09-240110	**Units:**	µg/L
Lab Code:	E2400035-003	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.152**		0.100	0.0500	0.0250	1	1/19/24	1/22/24 13:01	432774	830337	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400035
Project:	HS24010538	**Date Collected:**	1/10/24 0950
Sample Matrix:	Ground Water	**Date Received:**	1/11/24
Sample Name:	16IW26-240110	**Units:**	µg/L
Lab Code:	E2400035-004	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.0968**	J	0.100	0.0500	0.0250	1	1/19/24	1/22/24 13:06	432774	830337	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400035
Project:	HS24010538	**Date Collected:**	1/10/24 1040
Sample Matrix:	Ground Water	**Date Received:**	1/11/24
Sample Name:	16WW32-240110	**Units:**	µg/L
Lab Code:	E2400035-005	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.0349**	J	0.100	0.0500	0.0250	1	1/19/24	1/22/24 13:12	432774	830337	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400035
Project:	HS24010538	**Date Collected:**	1/10/24 1120
Sample Matrix:	Ground Water	**Date Received:**	1/11/24
Sample Name:	16WW31-240110	**Units:**	µg/L
Lab Code:	E2400035-006	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	1/19/24	1/22/24 13:17	432774	830337	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400035
Project:	HS24010538	**Date Collected:**	1/10/24 1200
Sample Matrix:	Ground Water	**Date Received:**	1/11/24
Sample Name:	16WW46-240110	**Units:**	µg/L
Lab Code:	E2400035-007	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	1/19/24	1/22/24 13:34	432774	830337	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400035
Project:	HS24010538	**Date Collected:**	1/10/24 1245
Sample Matrix:	Ground Water	**Date Received:**	1/11/24
Sample Name:	16IW03-240110	**Units:**	µg/L
Lab Code:	E2400035-008	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.0633**	J	0.100	0.0500	0.0250	1	1/19/24	1/22/24 13:39	432774	830337	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400035
Project:	HS24010538	**Date Collected:**	1/10/24 1245
Sample Matrix:	Ground Water	**Date Received:**	1/11/24
Sample Name:	16IW03-240110-FD	**Units:**	µg/L
Lab Code:	E2400035-009	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.0393**	J	0.100	0.0500	0.0250	1	1/19/24	1/22/24 13:45	432774	830337	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400035
Project:	HS24010538	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	EQ2400031-01	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	1/19/24	1/22/24 12:27	432774	830337	

Accuracy & Precision

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

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS24010538
Sample Matrix: Ground Water

Service Request: E2400035
Date Analyzed: 1/22/24

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

Analytical Method: 6850
Prep Method: Method

Units: µg/L
Basis: NA

Extraction Lot: 432774

	Lab Control Sample EQ2400031-02			Duplicate Lab Control Sample EQ2400031-03					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	0.0910	0.100	91	0.0877	0.100	88	84 - 119	4	15

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400035
Project:	HS24010538	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2400031-02	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.0910**	J	0.100	0.0500	0.0250	1	1/19/24	1/22/24 12:33	432774	830337	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400035
Project:	HS24010538	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2400031-03	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.0877**	J	0.100	0.0500	0.0250	1	1/19/24	1/22/24 12:38	432774	830337	

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

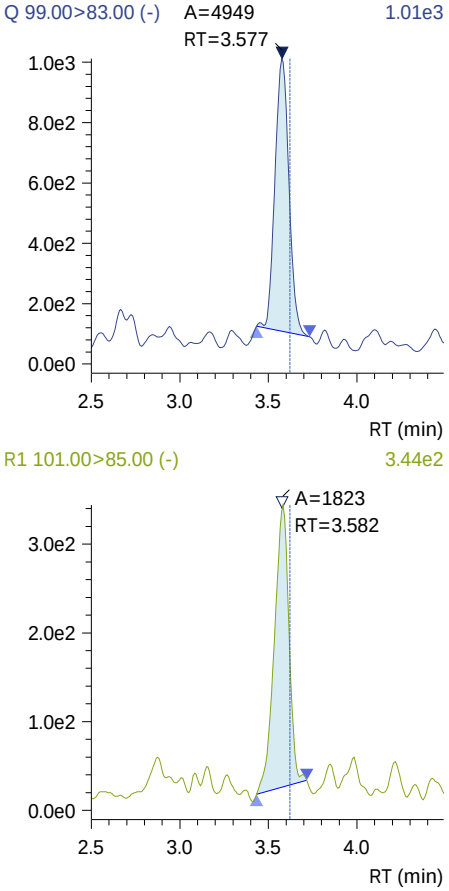
Perchlorate ICAL 1

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	----	----	

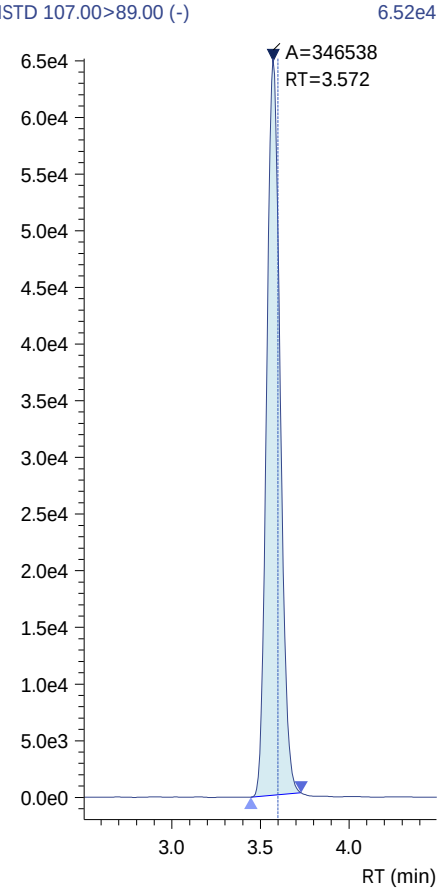
Perchlorate

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

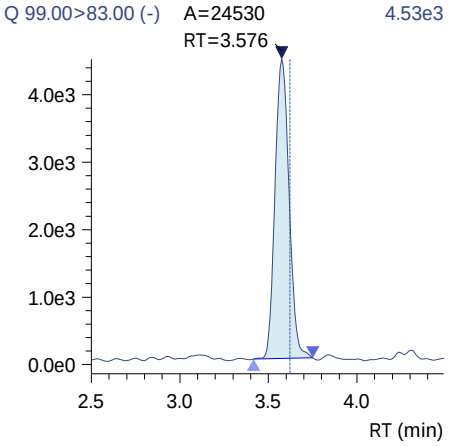
Perchlorate ICAL 2

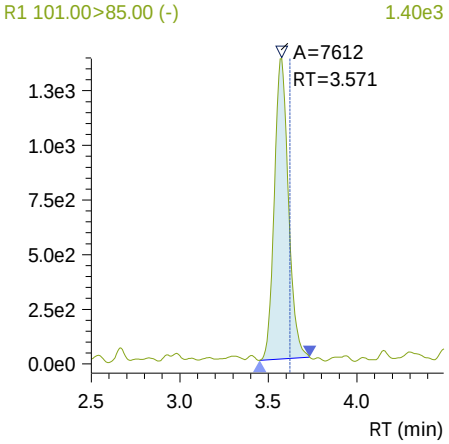
Sample ID: Perchlorate ICAL 2
Date Acquired: 8/2/2023 1:23:13 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-004.lcd
Vial: 2 | Inj. Volume: 10.0000uL | Tray: 1

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

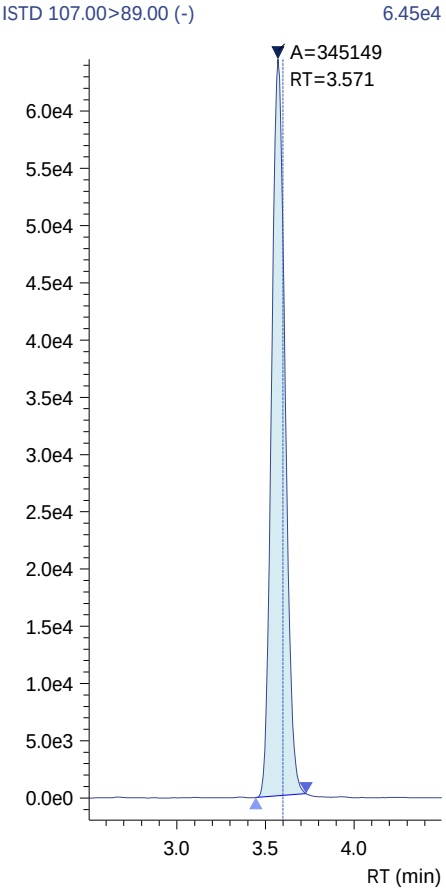
Conc 0.4820
R#1 31.03 (30.41)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/3/2023 9:30:46 AM

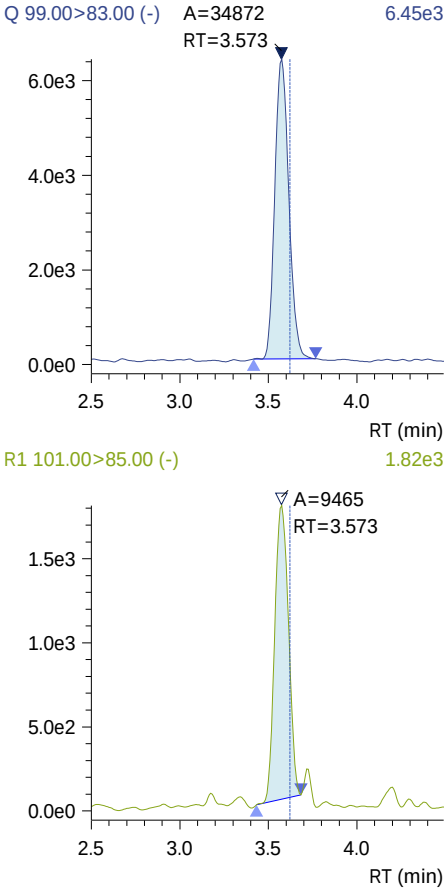
Perchlorate ICAL 3

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	----	----	

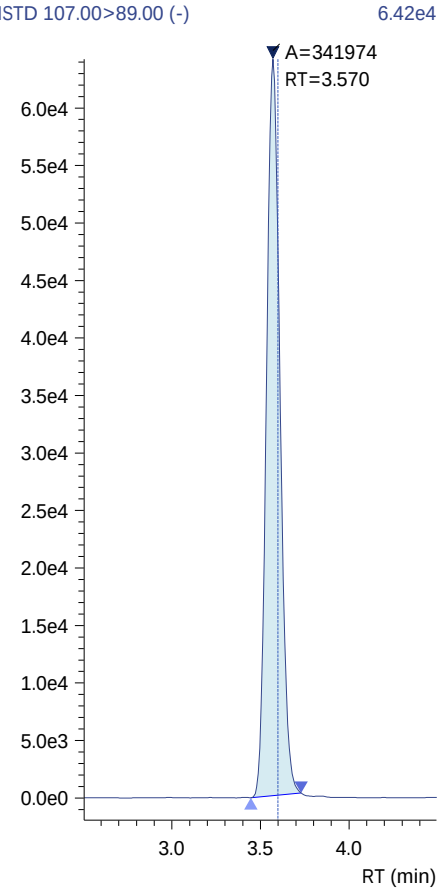
Perchlorate

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

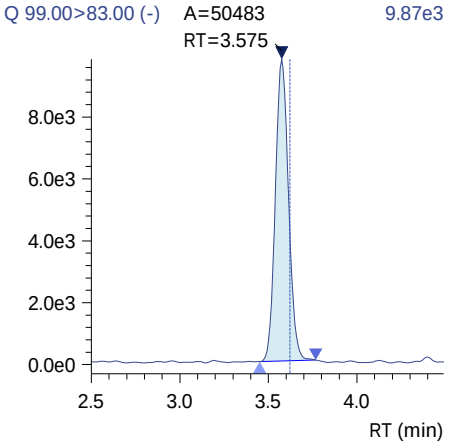
Perchlorate ICAL 4

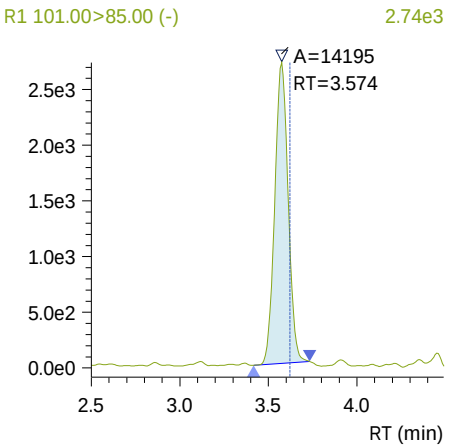
Sample ID: Perchlorate ICAL 4
Date Acquired: 8/2/2023 1:34:20 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-006.lcd
Vial: 4 | Inj. Volume: 10.0000uL | Tray: 1

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

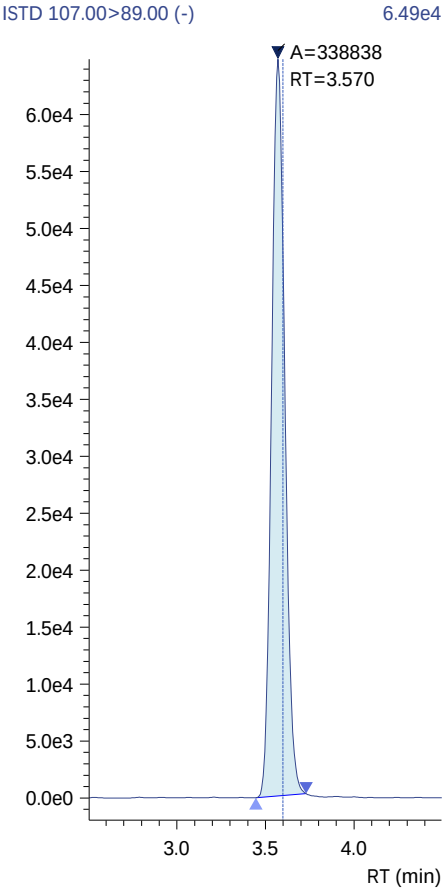
Conc 1.0104
R#1 28.12 (30.41)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/3/2023 9:30:46 AM

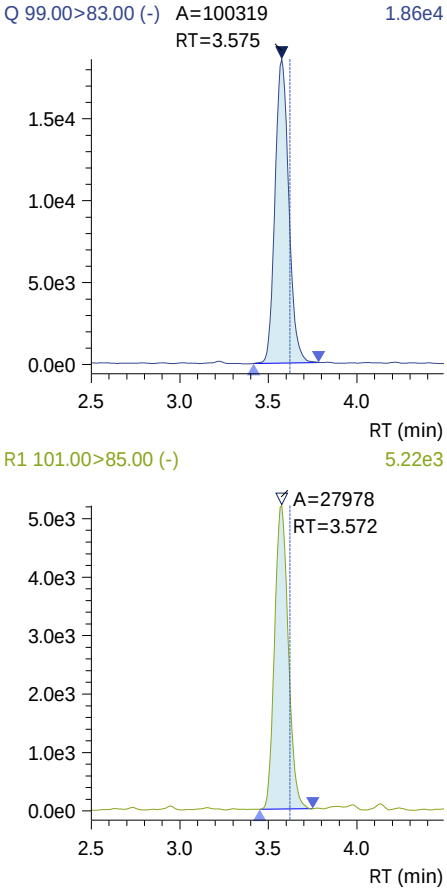
Perchlorate ICAL 5

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	----	----	

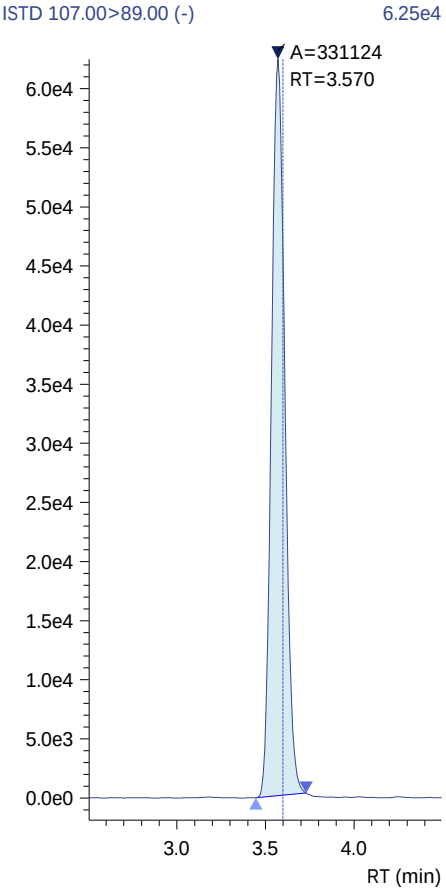
Perchlorate

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

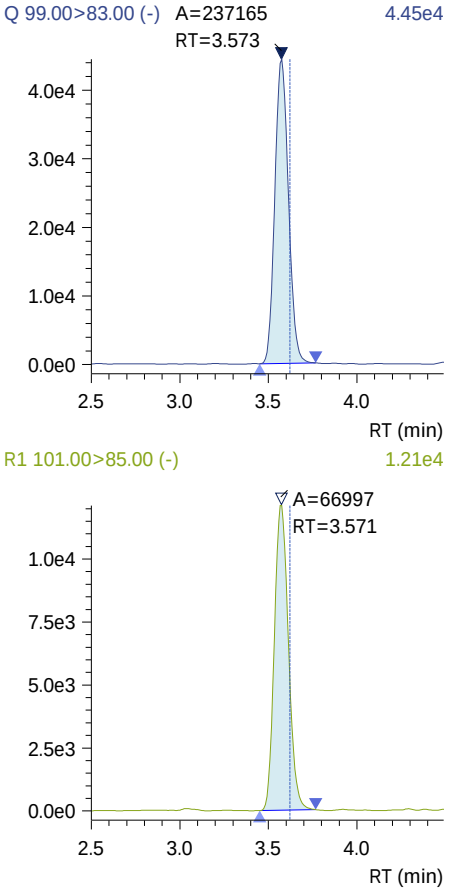
Perchlorate ICAL 6

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	----	----	

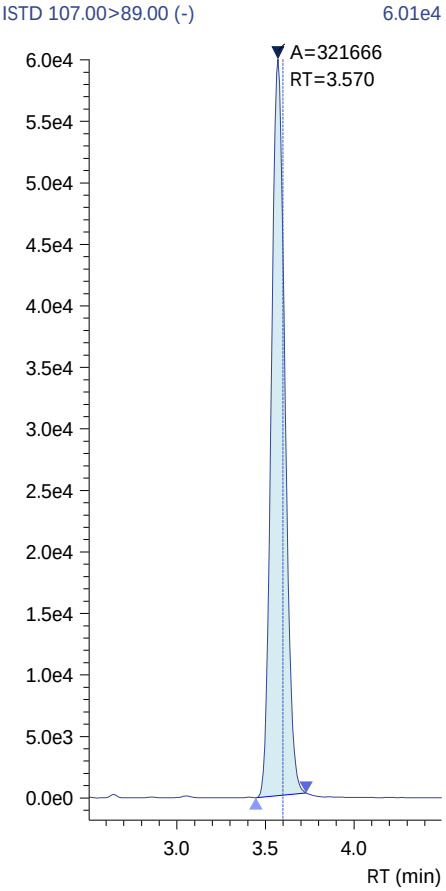
Perchlorate

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

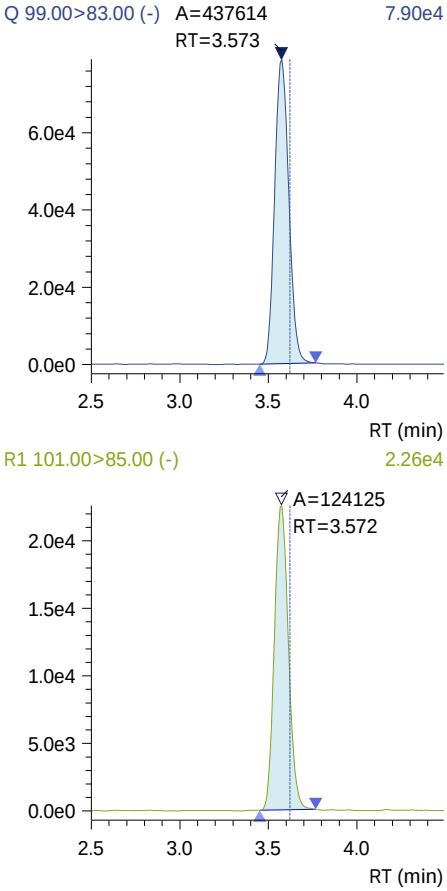
Perchlorate ICAL 7

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	----	----	

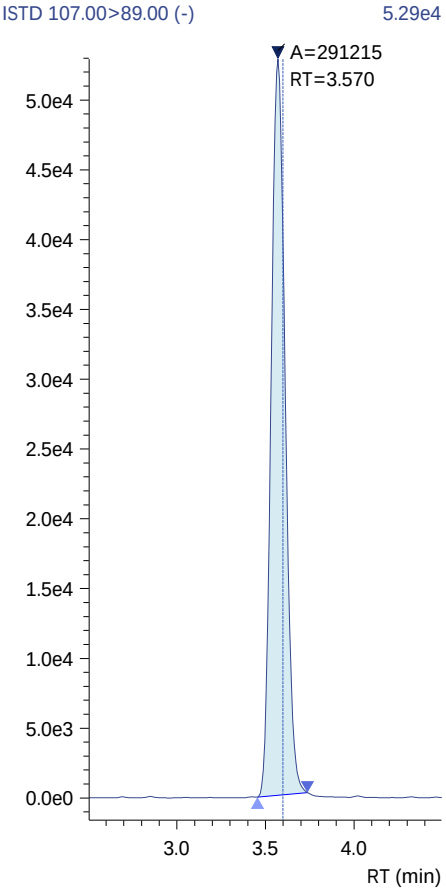
Perchlorate

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

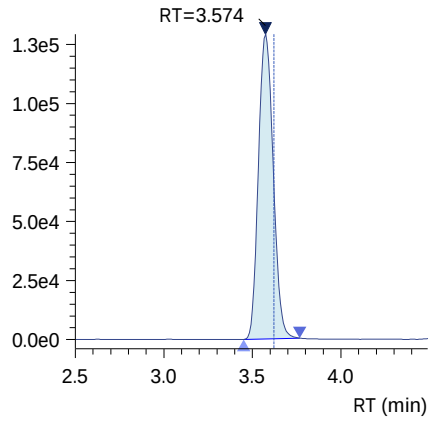
Sample ID: Perchlorate ICAL 8
Date Acquired: 8/2/2023 1:56:33 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-010.lcd
Vial: 8 | Inj. Volume: 10.0000uL | Tray: 1

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	----	----	

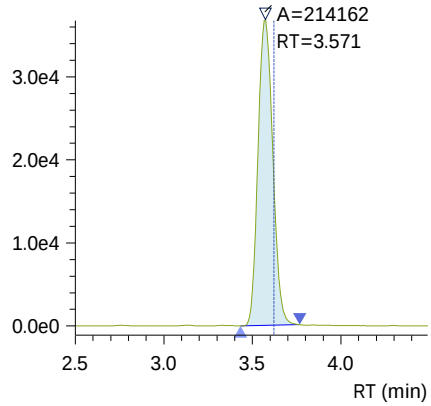
Perchlorate

Conc 20.0336
R#1 28.56 (30.41)

Q 99.00>83.00 (-) A=749856 1.29e5



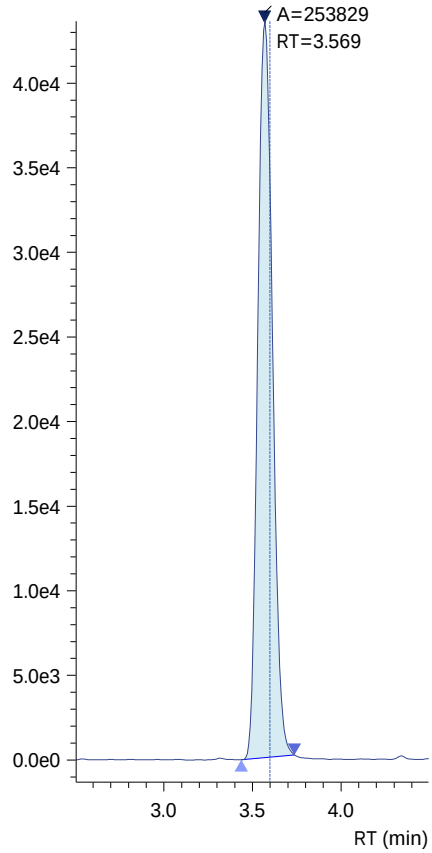
R1 101.00>85.00 (-) 3.68e4



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

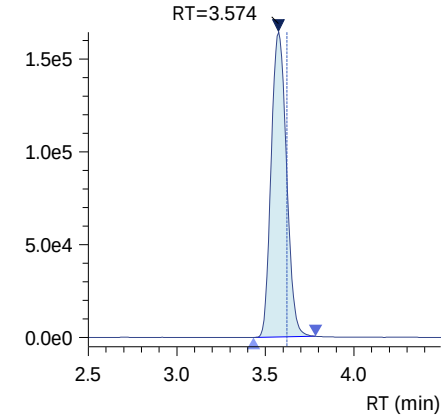
Sample ID: Perchlorate ICAL 9
Date Acquired: 8/2/2023 2:02:07 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-011.lcd
Vial: 9 | Inj. Volume: 10.0000uL | Tray: 1

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	----	----	

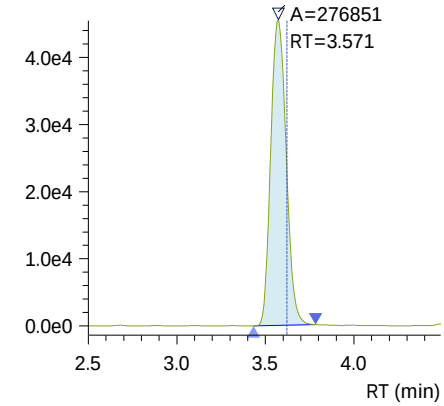
Perchlorate

Conc 30.2105
R#1 27.95 (30.41)

Q 99.00>83.00 (-) A=990671 RT=3.574 1.64e5



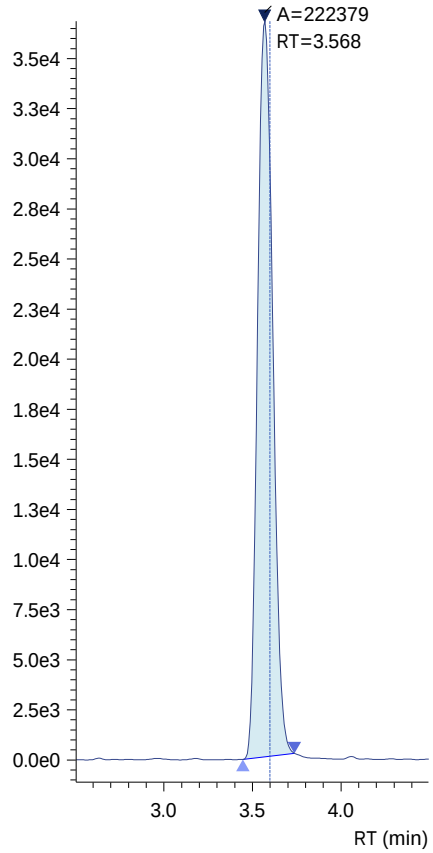
R1 101.00>85.00 (-) 4.55e4



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

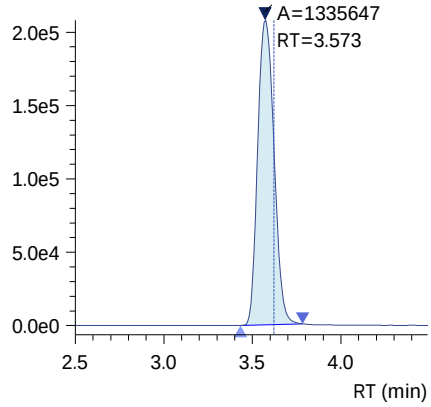
Sample ID: Perchlorate ICAL 10
Date Acquired: 8/2/2023 2:07:39 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-012.lcd
Vial: 10 | Inj. Volume: 10.0000uL | Tray: 1

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	----	----	

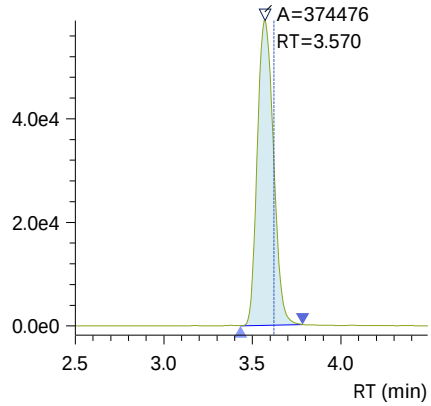
Perchlorate

Conc 50.7220
R#1 28.04 (30.41)

Q 99.00>83.00 (-) 2.08e5



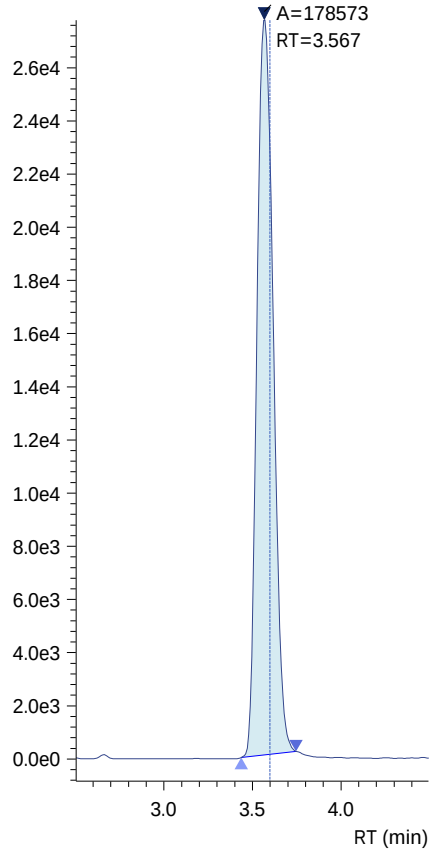
R1 101.00>85.00 (-) 5.90e4



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

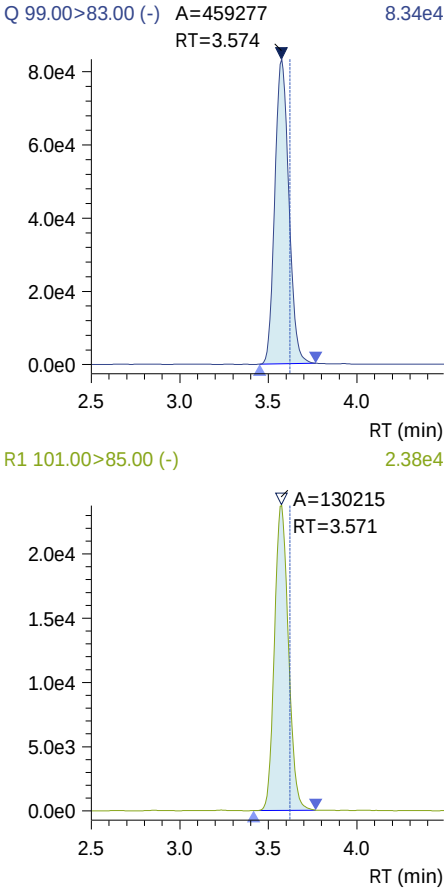
PerchlorateICV

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	----	----	

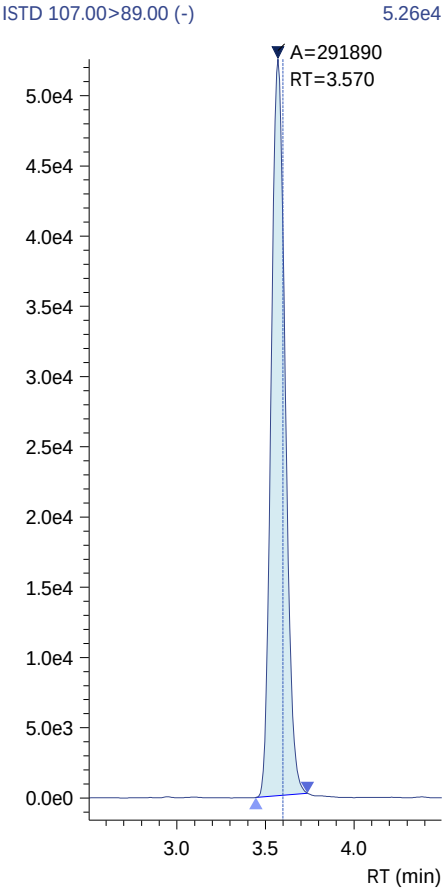
Perchlorate

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

20240123-830415

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 233216 **B:**Acetonitrile 229152
LODV: 230386 **CCV:**230380

	File Name	Sample Name	Acquisition Method	Dilution	Comments	Date/Time
1	20240123-009	IB	Perchlorate6850c.lcm	1x		1/23/2024 12:52
2	20240123-010	LODV	Perchlorate6850c.lcm	1x		1/23/2024 13:06
3	20240123-011	CCV	Perchlorate6850c.lcm	1x		1/23/2024 13:12
4	20240123-012	IB	Perchlorate6850c.lcm	1x		1/23/2024 13:18
5	20240123-013	EQ2400031-04 ICS	Perchlorate6850c.lcm	1x		1/23/2024 13:28
6	20240123-014	E2400035-001	Perchlorate6850c.lcm	1x		1/23/2024 13:34
7	20240123-015	E2400038-005	Perchlorate6850c.lcm	1x		1/23/2024 13:56
8	20240123-016	E2400034-001 DMS	Perchlorate6850c.lcm	1x		1/23/2024 14:12
9	20240123-017	EQ2400030-02 LCS	Perchlorate6850c.lcm	1x		1/23/2024 14:18
10	20240123-018	CCV	Perchlorate6850c.lcm	1x		1/23/2024 14:23
11	20240123-019	IB	Perchlorate6850c.lcm	1x		1/23/2024 14:29
12	20240123-020	E2400034-002	Perchlorate6850c.lcm	1x		1/23/2024 14:34
13	20240123-021	E2400054-005x5	Perchlorate6850c.lcm	5x		1/23/2024 14:56
14	20240123-022	E2400054-006x5	Perchlorate6850c.lcm	5x		1/23/2024 15:02
15	20240123-023	E2400054-007x5	Perchlorate6850c.lcm	5x		1/23/2024 15:07
16	20240123-024	E2400054-008x5	Perchlorate6850c.lcm	5x		1/23/2024 15:13
17	20240123-025	E2400054-011	Perchlorate6850c.lcm	1x		1/23/2024 15:18
18	20240123-026	E2400054-012	Perchlorate6850c.lcm	1x		1/23/2024 15:24
19	20240123-027	CCV	Perchlorate6850c.lcm	1x		1/23/2024 15:30
20	20240123-028	IB	Perchlorate6850c.lcm	1x		1/23/2024 15:35
21	20240123-029	EQ2400032-01MB	Perchlorate6850c.lcm	1x		1/23/2024 15:41
22	20240123-030	EQ2400032-02 LCS	Perchlorate6850c.lcm	1x	DNU-RI	1/23/2024 15:46
23	20240123-031	EQ2400032-03 DLCS	Perchlorate6850c.lcm	1x		1/23/2024 15:52
24	20240123-032	EQ2400032-04 ICS	Perchlorate6850c.lcm	1x	DNU-RI	1/23/2024 15:57
25	20240123-033	E2400037-001	Perchlorate6850c.lcm	1x		1/23/2024 16:03
26	20240123-034	E2400037-002	Perchlorate6850c.lcm	1x		1/23/2024 16:08
27	20240123-035	E2400037-003	Perchlorate6850c.lcm	1x		1/23/2024 16:14
28	20240123-036	E2400037-004	Perchlorate6850c.lcm	1x		1/23/2024 16:19
29	20240123-037	E2400037-005	Perchlorate6850c.lcm	1x		1/23/2024 16:25
30	20240123-038	E2400037-006	Perchlorate6850c.lcm	1x		1/23/2024 16:36
31	20240123-039	CCV	Perchlorate6850c.lcm	1x		1/23/2024 16:41
32	20240123-040	IB	Perchlorate6850c.lcm	1x		1/23/2024 16:47
33	20240123-041	E2400037-007	Perchlorate6850c.lcm	1x		1/23/2024 16:53
34	20240123-042	E2400050-001	Perchlorate6850c.lcm	1x		1/23/2024 16:58
35	20240123-043	E2400055-001x10	Perchlorate6850c.lcm	10x		1/23/2024 17:04
36	20240123-044	E2400055-002x10	Perchlorate6850c.lcm	10x		1/23/2024 17:09
37	20240123-045	E2400055-003	Perchlorate6850c.lcm	1x	DNU-Low IS	1/23/2024 17:15
38	20240123-046	E2400055-004	Perchlorate6850c.lcm	1x		1/23/2024 17:20

20240123-830415

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 233216 **B:**Acetonitrile 229152
LODV: 230386 **CCV:**230380

	File Name	Sample Name	Acquisition Method	Dilution	Comments	Date/Time
39	20240123-047	E2400055-005x500	Perchlorate6850c.lcm	500x		1/23/2024 17:26
40	20240123-048	E2400055-006x500	Perchlorate6850c.lcm	500x		1/23/2024 17:31
41	20240123-049	E2400055-007x100	Perchlorate6850c.lcm	100x		1/23/2024 17:37
42	20240123-050	CCV	Perchlorate6850c.lcm	1x		1/23/2024 17:42
43	20240123-051	IB	Perchlorate6850c.lcm	1x		1/23/2024 17:48
44	20240123-052	EQ2400032-04 ICS	Perchlorate6850c.lcm	1x		1/23/2024 17:53
45	20240123-053	EQ2400032-02 LCS	Perchlorate6850c.lcm	1x		1/23/2024 18:04
46	20240123-054	CCV	Perchlorate6850c.lcm	1x		1/23/2024 18:32
47	20240123-055	IB	Perchlorate6850c.lcm	1x		1/23/2024 18:38

20240122-830337

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 233216 **B:**Acetonitrile 229152
LODV: 230386 **CCV:**230380

	File Name	Sample Name	Acquisition Method	Dilution	Comments	Date/Time
1	20240122-001	IB	Perchlorate6850c.lcm	1x		1/22/2024 11:27
2	20240122-002	LODV	Perchlorate6850c.lcm	1x		1/22/2024 11:32
3	20240122-003	CCV	Perchlorate6850c.lcm	1x		1/22/2024 11:38
4	20240122-005	EQ2400031-01	Perchlorate6850c.lcm	1x		1/22/2024 12:27
5	20240122-006	EQ2400031-02	Perchlorate6850c.lcm	1x		1/22/2024 12:33
6	20240122-007	EQ2400031-03	Perchlorate6850c.lcm	1x		1/22/2024 12:38
7	20240122-008	EQ2400031-04	Perchlorate6850c.lcm	1x	DNU-RI	1/22/2024 12:44
8	20240122-009	E2400035-001	Perchlorate6850c.lcm	1x	DNU-RI	1/22/2024 12:49
9	20240122-010	E2400035-002	Perchlorate6850c.lcm	1x		1/22/2024 12:55
10	20240122-011	E2400035-003	Perchlorate6850c.lcm	1x		1/22/2024 13:01
11	20240122-012	E2400035-004	Perchlorate6850c.lcm	1x		1/22/2024 13:06
12	20240122-013	E2400035-005	Perchlorate6850c.lcm	1x		1/22/2024 13:12
13	20240122-014	E2400035-006	Perchlorate6850c.lcm	1x		1/22/2024 13:17
14	20240122-015	CCV	Perchlorate6850c.lcm	1x		1/22/2024 13:23
15	20240122-016	IB	Perchlorate6850c.lcm	1x		1/22/2024 13:28
16	20240122-017	E2400035-007	Perchlorate6850c.lcm	1x		1/22/2024 13:34
17	20240122-018	E2400035-008	Perchlorate6850c.lcm	1x		1/22/2024 13:39
18	20240122-019	E2400035-009	Perchlorate6850c.lcm	1x		1/22/2024 13:45
19	20240122-020	E2400038-001	Perchlorate6850c.lcm	1x		1/22/2024 13:50
20	20240122-021	E2400038-002	Perchlorate6850c.lcm	1x		1/22/2024 13:56
21	20240122-022	E2400038-003	Perchlorate6850c.lcm	1x		1/22/2024 14:01
22	20240122-023	E2400038-004	Perchlorate6850c.lcm	1x		1/22/2024 14:07
23	20240122-024	E2400038-005	Perchlorate6850c.lcm	1x	DNU-RI	1/22/2024 14:12
24	20240122-025	E2400038-006	Perchlorate6850c.lcm	1x		1/22/2024 14:18
25	20240122-026	E2400038-007	Perchlorate6850c.lcm	1x		1/22/2024 14:23
26	20240122-027	CCV	Perchlorate6850c.lcm	1x		1/22/2024 14:29
27	20240122-028	IB	Perchlorate6850c.lcm	1x		1/22/2024 14:34
28	20240122-029	E2400038-008	Perchlorate6850c.lcm	1x		1/22/2024 14:40
29	20240122-030	E2400038-009	Perchlorate6850c.lcm	1x		1/22/2024 14:46
30	20240122-031	E2400048-001	Perchlorate6850c.lcm	1x		1/22/2024 14:51
31	20240122-032	E2400048-002	Perchlorate6850c.lcm	1x		1/22/2024 14:57
32	20240122-033	EQ2400030-01	Perchlorate6850c.lcm	1x		1/22/2024 15:02
33	20240122-034	EQ2400030-02	Perchlorate6850c.lcm	1x	DNU-RI	1/22/2024 15:08
34	20240122-035	EQ2400030-03	Perchlorate6850c.lcm	1x		1/22/2024 15:13
35	20240122-036	EQ2400030-04	Perchlorate6850c.lcm	1x		1/22/2024 15:19
36	20240122-037	E2400034-001MS	Perchlorate6850c.lcm	1x		1/22/2024 15:24
37	20240122-038	E2400034-001DMS	Perchlorate6850c.lcm	1x	DNU-RI	1/22/2024 15:30
38	20240122-039	CCV	Perchlorate6850c.lcm	1x		1/22/2024 15:35

20240122-830337

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 233216 **B:**Acetonitrile 229152
LODV: 230386 **CCV:**230380

	File Name	Sample Name	Acquisition Method	Dilution	Comments	Date/Time
39	20240122-040	IB	Perchlorate6850c.lcm	1x		1/22/2024 15:41
40	20240122-041	E2400034-002MS	Perchlorate6850c.lcm	1x		1/22/2024 15:47
41	20240122-042	E2400034-002DMS	Perchlorate6850c.lcm	1x		1/22/2024 15:52
42	20240122-043	E2400034-001	Perchlorate6850c.lcm	1x		1/22/2024 16:26
43	20240122-044	E2400034-002	Perchlorate6850c.lcm	1x	DNU-RI	1/22/2024 16:31
44	20240122-045	E2400034-003	Perchlorate6850c.lcm	1x		1/22/2024 16:37
45	20240122-046	E2400034-004	Perchlorate6850c.lcm	1x		1/22/2024 16:42
46	20240122-047	E2400034-005	Perchlorate6850c.lcm	1x		1/22/2024 16:48
47	20240122-048	E2400034-006	Perchlorate6850c.lcm	1x		1/22/2024 16:53
48	20240122-049	E2400034-007	Perchlorate6850c.lcm	1x		1/22/2024 16:59
49	20240122-050	E2400034-008	Perchlorate6850c.lcm	1x		1/22/2024 17:04
50	20240122-051	CCV	Perchlorate6850c.lcm	1x		1/22/2024 17:10
51	20240122-052	IB	Perchlorate6850c.lcm	1x		1/22/2024 17:15
52	20240122-053	E2400054-001	Perchlorate6850c.lcm	1x		1/22/2024 17:21
53	20240122-054	E2400054-002	Perchlorate6850c.lcm	1x		1/22/2024 17:26
54	20240122-055	E2400054-003	Perchlorate6850c.lcm	1x		1/22/2024 17:32
55	20240122-056	E2400054-004	Perchlorate6850c.lcm	1x		1/22/2024 17:37
56	20240122-057	E2400054-005	Perchlorate6850c.lcm	1x	DNU-D	1/22/2024 17:43
57	20240122-058	E2400054-006	Perchlorate6850c.lcm	1x	DNU-D	1/22/2024 17:48
58	20240122-059	E2400054-007	Perchlorate6850c.lcm	1x	DNU-D	1/22/2024 17:54
59	20240122-060	E2400054-008	Perchlorate6850c.lcm	1x	DNU-D	1/22/2024 17:59
60	20240122-061	E2400054-009	Perchlorate6850c.lcm	1x		1/22/2024 18:05
61	20240122-062	E2400054-010	Perchlorate6850c.lcm	1x		1/22/2024 18:11
62	20240122-063	CCV	Perchlorate6850c.lcm	1x		1/22/2024 18:16
63	20240122-064	IB	Perchlorate6850c.lcm	1x		1/22/2024 18:22

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2400035
Project:	HS24010538	**Date Analyzed:**	1/22/24 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\20240122\20240122-003~2	**Lab Code:**	EQ2400039-01
Instrument ID:	E-LCMS-01	**Analysis Lot:**	830337
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	EQ2400039-01	171,557	3.55
Method Blank	EQ2400031-01	181,883	3.55
Lab Control Sample	EQ2400031-02	167,035	3.55
Duplicate Lab Control Sample	EQ2400031-03	166,159	3.55
16WW57-240110	E2400035-002	174,936	3.55
16IW09-240110	E2400035-003	189,145	3.54
16IW26-240110	E2400035-004	231,976	3.54
16WW32-240110	E2400035-005	203,904	3.53
16WW31-240110	E2400035-006	200,187	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
Project: HS24010538

Service Request: E2400035
Date Analyzed: 1/22/24 13:23

Internal Standard Area and RT Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

File ID: I:\LCMS01\DATA\20240122\20240122-015
Instrument ID: E-LCMS-01
Analytical Method: 6850

Lab Code: EQ2400039-02
Analysis Lot: 830337
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	EQ2400039-02	188,669	3.54
16WW46-240110	E2400035-007	191,977	3.54
16IW03-240110	E2400035-008	201,541	3.53
16IW03-240110-FD	E2400035-009	203,269	3.53

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:**	E2400035
Project:	HS24010538	**Date Analyzed:**	1/22/24 14:29

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20240122\20240122-027	**Lab Code:**	EQ2400039-03
Instrument ID:	E-LCMS-01	**Analysis Lot:**	830337
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	EQ2400039-03	181,683	3.53

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:**	E2400035
Project:	HS24010538	**Date Analyzed:**	1/22/24 15:35

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20240122\20240122-039	**Lab Code:**	EQ2400039-04
Instrument ID:	E-LCMS-01	**Analysis Lot:**	830337
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	EQ2400039-04	182,589	3.53

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:**	E2400035
Project:	HS24010538	**Date Analyzed:**	1/22/24 17:10

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20240122\20240122-051	**Lab Code:**	EQ2400039-05
Instrument ID:	E-LCMS-01	**Analysis Lot:**	830337
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	EQ2400039-05	165,414	3.53

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:**	E2400035
Project:	HS24010538	**Date Analyzed:**	1/22/24 18:16

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20240122\20240122-063	**Lab Code:**	EQ2400039-06
Instrument ID:	E-LCMS-01	**Analysis Lot:**	830337
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	EQ2400039-06	168,555	3.53

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:**	E2400035
Project:	HS24010538	**Date Analyzed:**	1/23/24 13:12

Internal Standard Area and RT Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

File ID:	I:\LCMS01\DATA\20240123\20240123-011	**Lab Code:**	EQ2400043-01
Instrument ID:	E-LCMS-01	**Analysis Lot:**	830415
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	EQ2400043-01	198,363	3.54
16WW58-240110	E2400035-001	200,308	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:**	E2400035
Project:	HS24010538	**Date Analyzed:**	1/23/24 14:23

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20240123\20240123-018	**Lab Code:**	EQ2400043-02
Instrument ID:	E-LCMS-01	**Analysis Lot:**	830415
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	EQ2400043-02	253,015	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:**	E2400035
Project:	HS24010538	**Date Analyzed:**	1/23/24 15:30

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20240123\20240123-027	**Lab Code:**	EQ2400043-03
Instrument ID:	E-LCMS-01	**Analysis Lot:**	830415
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	EQ2400043-03	229,532	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:**	E2400035
Project:	HS24010538	**Date Analyzed:**	1/23/24 16:41

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20240123\20240123-039	**Lab Code:**	EQ2400043-04
Instrument ID:	E-LCMS-01	**Analysis Lot:**	830415
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	EQ2400043-04	238,877	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:**	E2400035
Project:	HS24010538	**Date Analyzed:**	1/23/24 17:42

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20240123\20240123-050	**Lab Code:**	EQ2400043-05
Instrument ID:	E-LCMS-01	**Analysis Lot:**	830415
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	EQ2400043-05	236,348	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:**	E2400035
Project:	HS24010538	**Date Analyzed:**	1/23/24 18:32

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20240123\20240123-054	**Lab Code:**	EQ2400043-06
Instrument ID:	E-LCMS-01	**Analysis Lot:**	830415
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	EQ2400043-06	246,674	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
Project: HS24010538

Service Request: E2400035
Date Analyzed: 1/22/24

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\20240122\20240122-003~2

Calibration Date: 8/2/23
Calibration ID: EC2300012
Analysis Lot: 830337
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.37	0.1475	0.1381	-6.3	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS24010538

Service Request: E2400035
Date Analyzed: 1/22/24

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\20240122\20240122-015

Calibration Date: 8/2/23
Calibration ID: EC2300012
Analysis Lot: 830337
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.59	0.1475	0.1414	-4.1	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS24010538

Service Request: E2400035
Date Analyzed: 1/22/24

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\20240122\20240122-027

Calibration Date: 8/2/23
Calibration ID: EC2300012
Analysis Lot: 830337
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.0	0.1475	0.1478	0.2	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS24010538

Service Request: E2400035
Date Analyzed: 1/22/24

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\20240122\20240122-039

Calibration Date: 8/2/23
Calibration ID: EC2300012
Analysis Lot: 830337
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.1	0.1475	0.1496	1.5	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS24010538

Service Request: E2400035
Date Analyzed: 1/22/24

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\20240122\20240122-051

Calibration Date: 8/2/23
Calibration ID: EC2300012
Analysis Lot: 830337
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.88	0.1475	0.1457	-1.2	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS24010538

Service Request: E2400035
Date Analyzed: 1/22/24

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\20240122\20240122-063

Calibration Date: 8/2/23
Calibration ID: EC2300012
Analysis Lot: 830337
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.1	0.1475	0.1489	0.9	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS24010538

Service Request: E2400035
Date Analyzed: 1/23/24

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\20240123\20240123-011

Calibration Date: 8/2/23
Calibration ID: EC2300012
Analysis Lot: 830415
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.75	0.1475	0.1438	-2.5	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS24010538

Service Request: E2400035
Date Analyzed: 1/23/24

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\20240123\20240123-018

Calibration Date: 8/2/23
Calibration ID: EC2300012
Analysis Lot: 830415
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.1	0.1475	0.1493	1.2	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS24010538

Service Request: E2400035
Date Analyzed: 1/23/24

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\20240123\20240123-027

Calibration Date: 8/2/23
Calibration ID: EC2300012
Analysis Lot: 830415
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.5	0.1475	0.1548	4.9	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS24010538

Service Request: E2400035
Date Analyzed: 1/23/24

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\20240123\20240123-039

Calibration Date: 8/2/23
Calibration ID: EC2300012
Analysis Lot: 830415
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.4	0.1475	0.1532	3.9	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS24010538

Service Request: E2400035
Date Analyzed: 1/23/24

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\20240123\20240123-050

Calibration Date: 8/2/23
Calibration ID: EC2300012
Analysis Lot: 830415
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.4	0.1475	0.1529	3.7	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS24010538

Service Request: E2400035
Date Analyzed: 1/23/24

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\20240123\20240123-054

Calibration Date: 8/2/23
Calibration ID: EC2300012
Analysis Lot: 830415
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.5	0.1475	0.1552	5.3	NA	± 15 %	Average RF

Insight Report

Printed at 1/23/2024 2:22:49 PM

Method File: I:\LCMS01\DATA\20240122\20240122.lcm
Project File: I:\LCMS01\DATA\20240122\20240122.damlp

IB

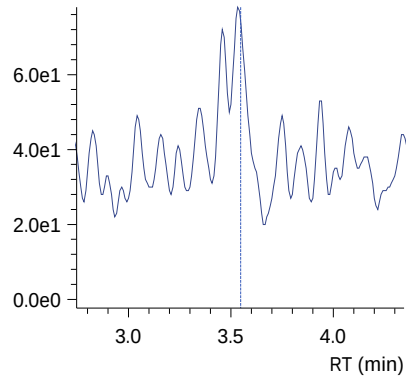
Sample ID: IB
Date Acquired: 1/22/2024 11:27:28 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240122\20240122-001~2.lcd
Vial: 1 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	193970	----	ng/mL	101.00 >85.00	0.00	23.7-44.02
Sodium Perchlorate-18O4_IS	Auto	3.549	193970	193970	1.0000	ng/mL	----	----	

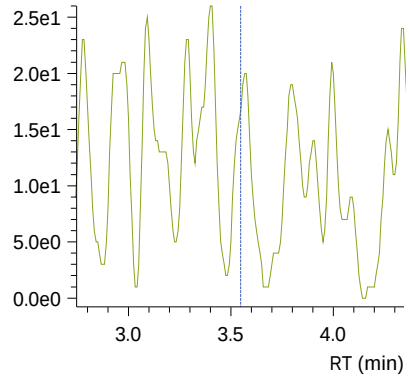
Perchlorate

Conc ----
R#1 0.00 (33.86)

Q 99.00>83.00 (-) 7.80e1



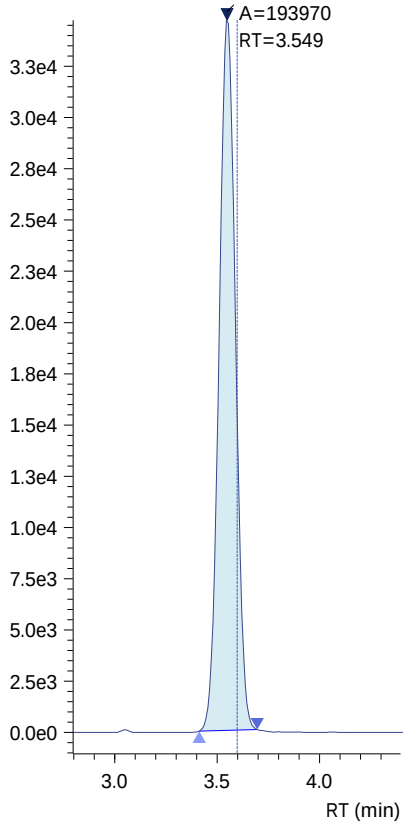
R1 101.00>85.00 (-) 2.60e1



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 3.48e4



Insight Report

Printed at 1/23/2024 2:22:49 PM

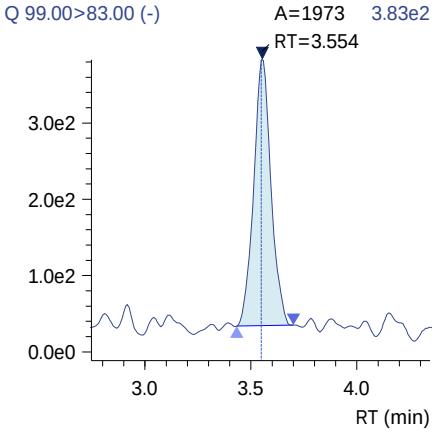
LODV

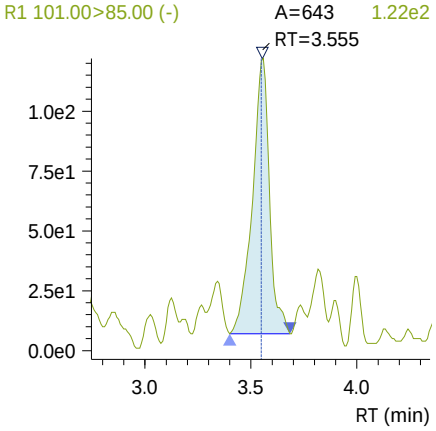
Sample ID: LODV
Date Acquired: 1/22/2024 11:32:59 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240122\20240122-002~2.lcd
Vial: 2 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.554	1973	229114	0.0584	ng/mL	101.00 >85.00	32.59	23.7-44.02
Sodium Perchlorate-18O4 _IS	Auto	3.550	229114	229114	1.0000	ng/mL	----	----	

Perchlorate

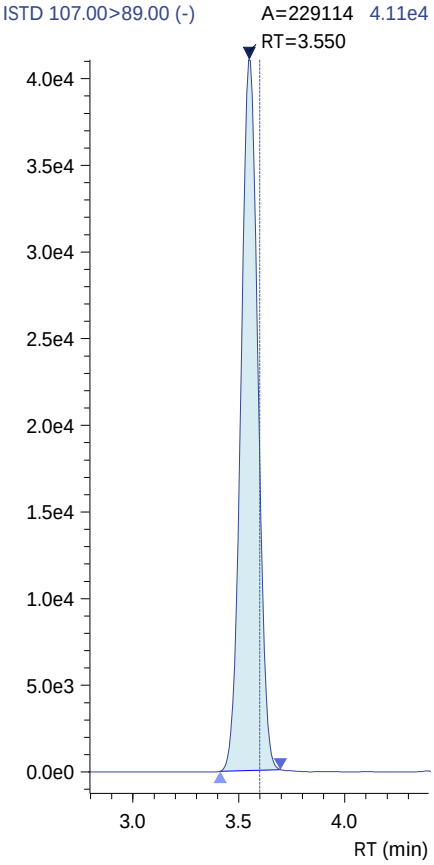
Conc 0.0584
R#1 32.59 (33.86)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/23/2024 2:22:49 PM

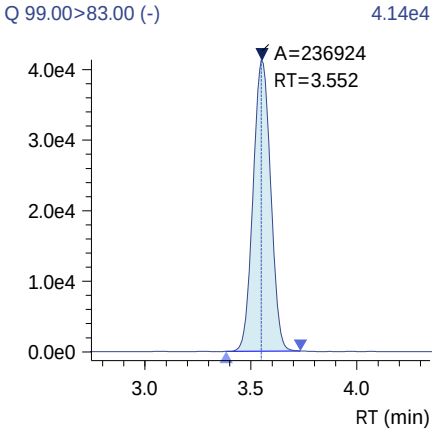
CCV

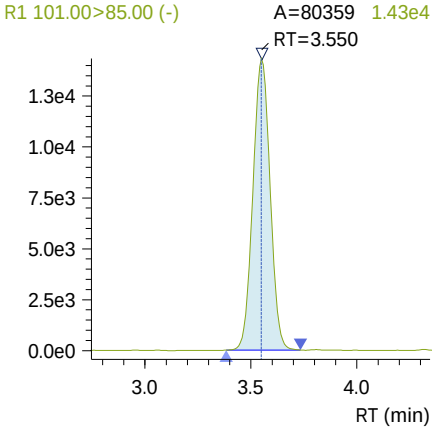
Sample ID: CCV
Date Acquired: 1/22/2024 11:38:30 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240122\20240122-003~2.lcd
Vial: 7 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.552	236924	171557	9.3653	ng/mL	101.00 >85.00	33.92	23.7-44.02
Sodium Perchlorate-18O4_IS	Auto	3.548	171557	171557	1.0000	ng/mL	----	----	

Perchlorate

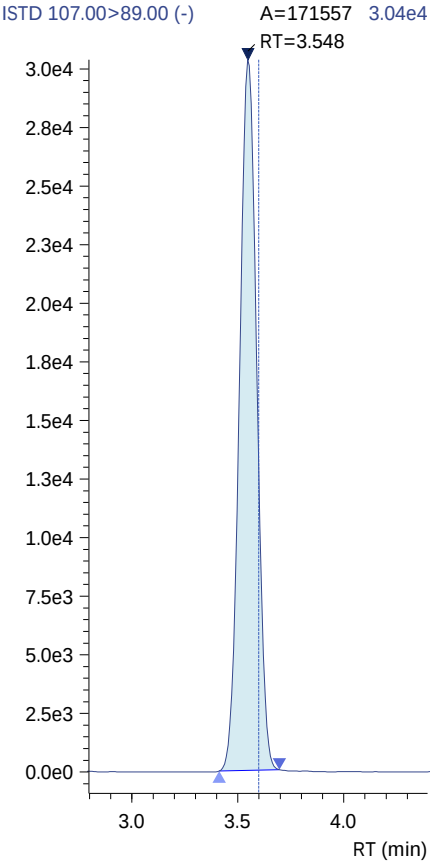
Conc 9.3653
R#1 33.92 (33.86)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/23/2024 2:22:49 PM

MB

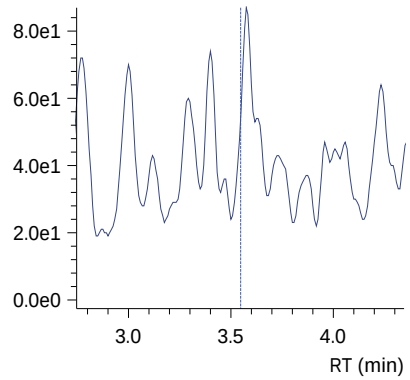
Sample ID: EQ2400031-01
Date Acquired: 1/22/2024 12:27:45 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240122\20240122-005.lcd
Vial: 1 | Inj. Volume: 10.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	181883	----	ng/mL	101.00 >85.00	0.00	23.7-44.02
Sodium Perchlorate-18O4_IS	Auto	3.552	181883	181883	1.0000	ng/mL	----	----	

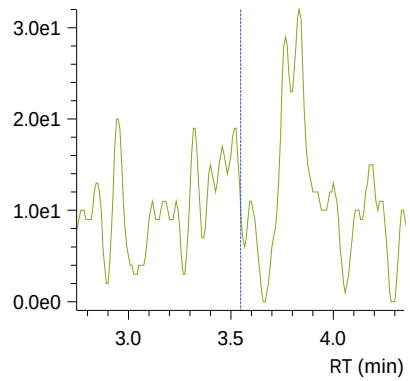
Perchlorate

Conc ----
R#1 0.00 (33.86)

Q 99.00>83.00 (-) 8.70e1



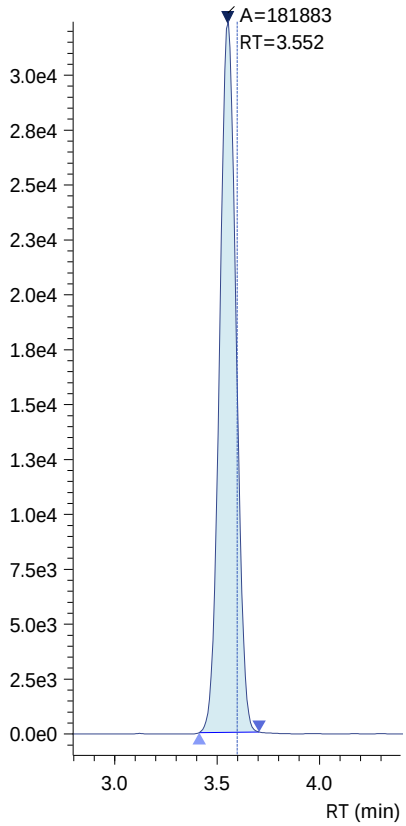
R1 101.00>85.00 (-) 3.20e1



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 3.24e4



Insight Report

Printed at 1/23/2024 2:22:49 PM

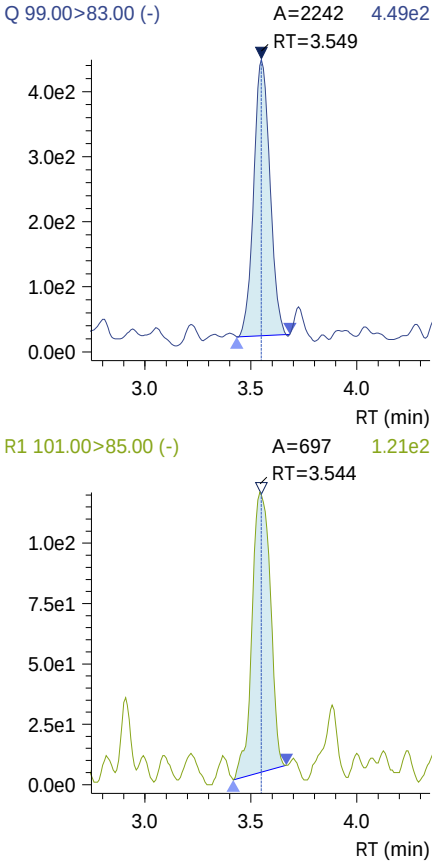
LCS

Sample ID: EQ2400031-02
Date Acquired: 1/22/2024 12:33:18 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240122\20240122-006.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	3.549	2242	167035	0.0910	ng/mL	101.00 >85.00	31.10	23.7-44.02
Sodium Perchlorate-18O4 _IS	Auto	3.550	167035	167035	1.0000	ng/mL	----	----	

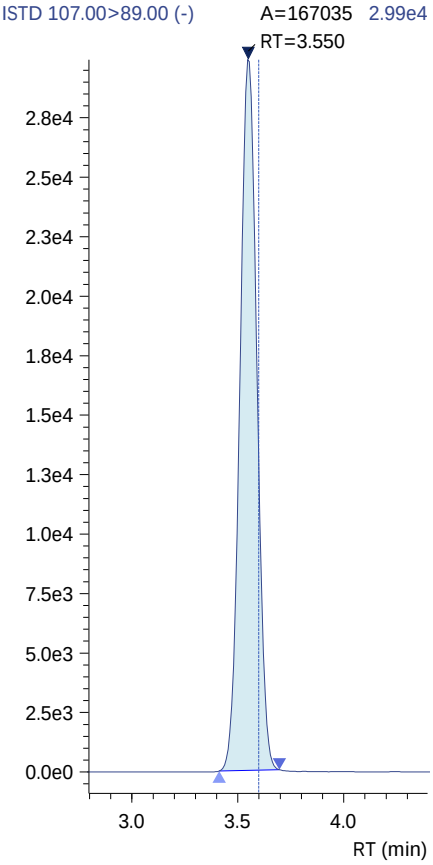
Perchlorate

Conc 0.0910
R#1 31.10 (33.86)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/23/2024 2:22:49 PM

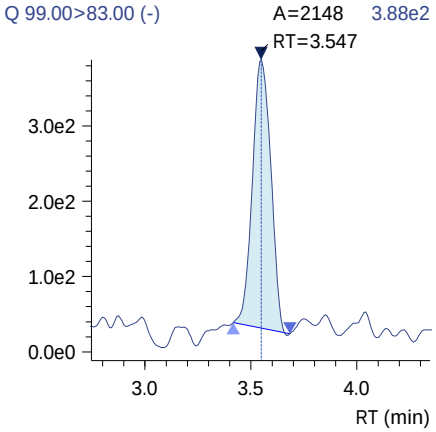
DLCS

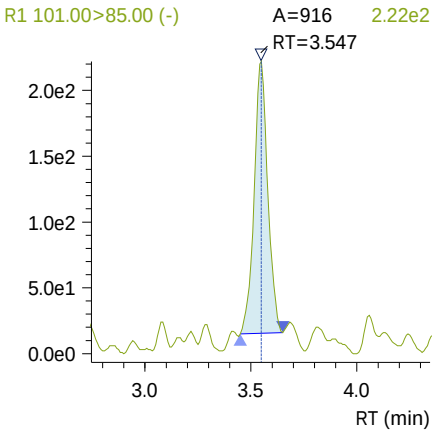
Sample ID: EQ2400031-03
Date Acquired: 1/22/2024 12:38:51 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240122\20240122-007.lcd
Vial: 3 | Inj. Volume: 10.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.547	2148	166159	0.0877	ng/mL	101.00 >85.00	42.65	23.7-44.02
Sodium Perchlorate-18O4 _IS	Auto	3.549	166159	166159	1.0000	ng/mL	----	----	

Perchlorate

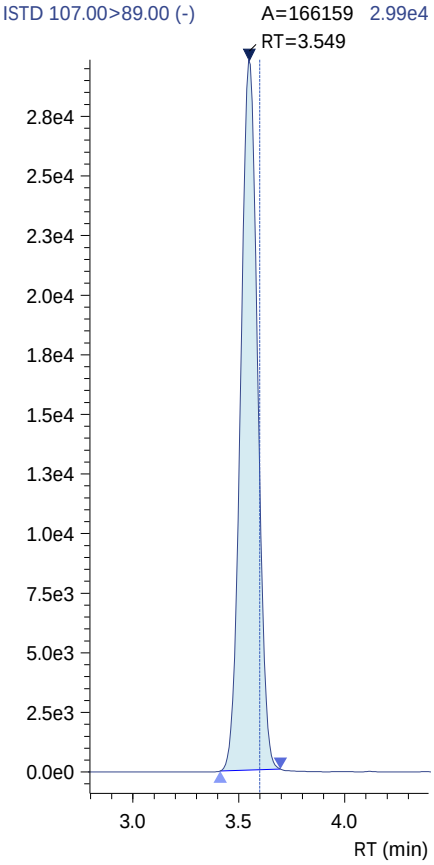
Conc 0.0877
R#1 42.65 (33.86)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/23/2024 2:46:39 PM

Method File: I:\LCMS01\DATA\20240122\20240122.lcm
Project File: I:\LCMS01\DATA\20240122\20240122.damlp

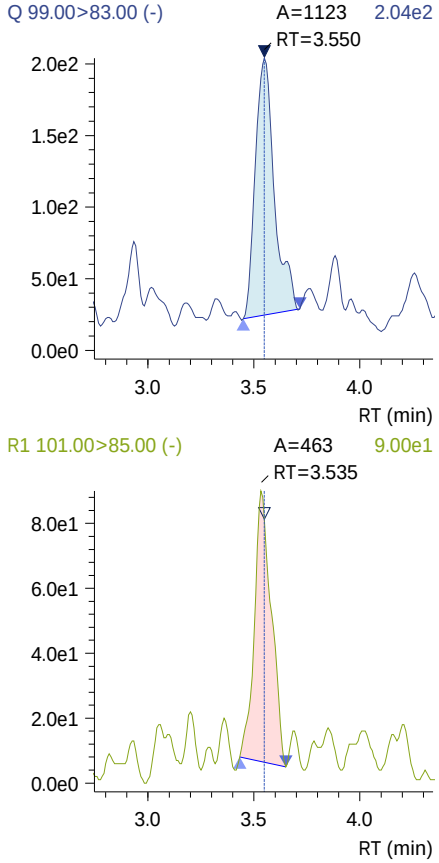
E2400035-002

Sample ID: E2400035-002
Date Acquired: 1/22/2024 12:55:26 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240122\20240122-010.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	MI R1	3.550	1123	174936	0.0435	ng/mL	101.00 >85.00	41.24	23.7-44.02
Sodium Perchlorate-18O4 _IS	Auto	3.548	1749 36	174936	1.0000	ng/mL	----	----	

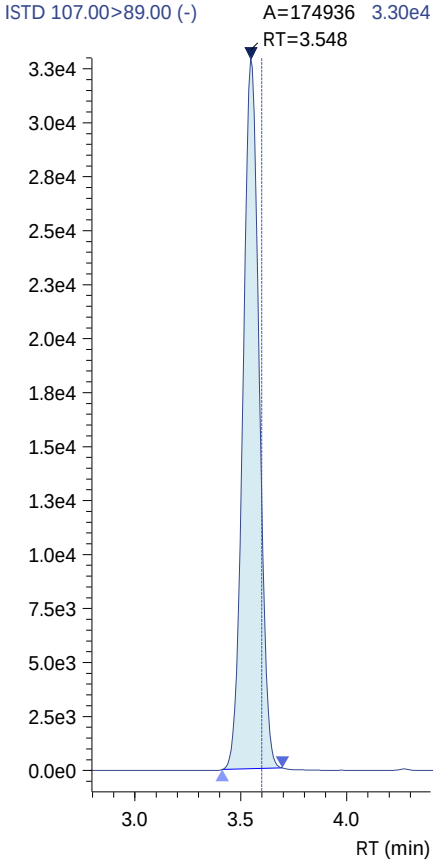
Perchlorate

Conc 0.0435
R#1 41.24 (33.86)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/23/2024 2:47:08 PM

Method File: I:\LCMS01\DATA\20240122\20240122.lcm
Project File: I:\LCMS01\DATA\20240122\20240122.damlp

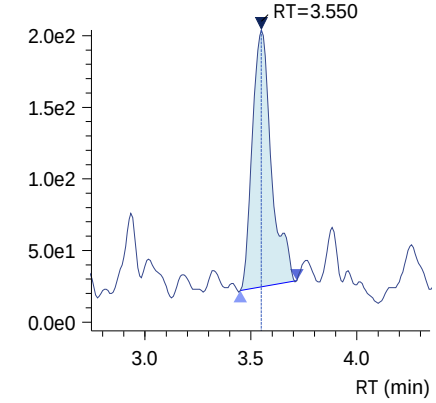
E2400035-002

Sample ID: E2400035-002
Date Acquired: 1/22/2024 12:55:26 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240122\20240122-010.lcd
Vial: 6 | Inj. Volume: 10.0000uL | Tray: 5

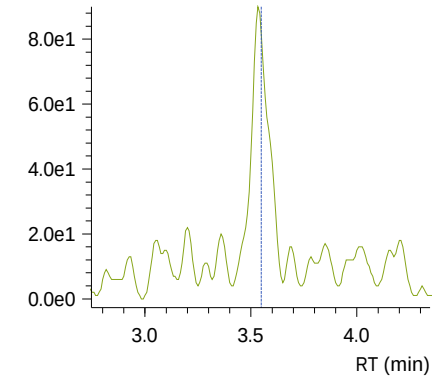
Perchlorate

Conc 0.0435
R#1 0.00 (33.86)

Q 99.00>83.00 (-) A=1123 2.04e2 RT=3.550



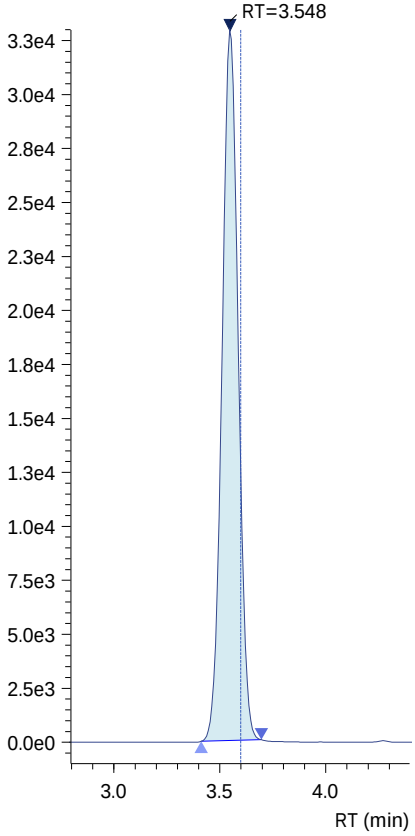
R1 101.00>85.00 (-) 9.00e1



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=174936 3.30e4 RT=3.548



Insight Report

Printed at 1/23/2024 2:22:49 PM

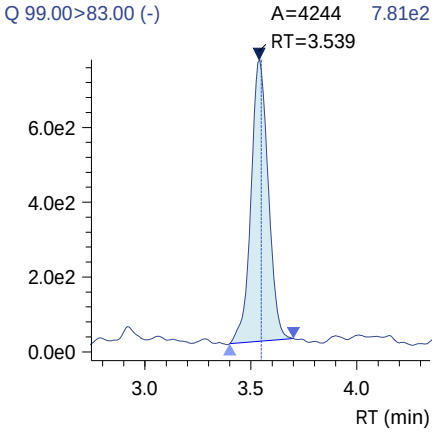
E2400035-003

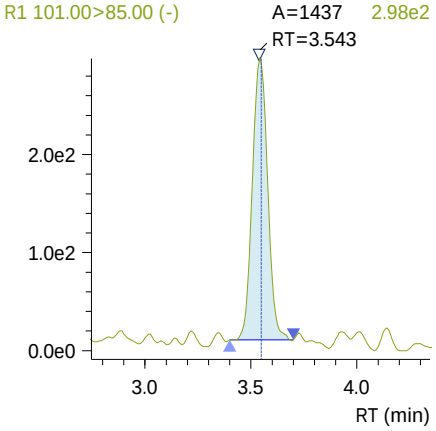
Sample ID: E2400035-003
Date Acquired: 1/22/2024 1:01:00 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240122\20240122-011.lcd
Vial: 7 | Inj. Volume: 10.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.539	4244	189145	0.1522	ng/mL	101.00 >85.00	33.86	23.7-44.02
Sodium Perchlorate-18O4 _IS	Auto	3.538	189145	189145	1.0000	ng/mL	----	----	

Perchlorate

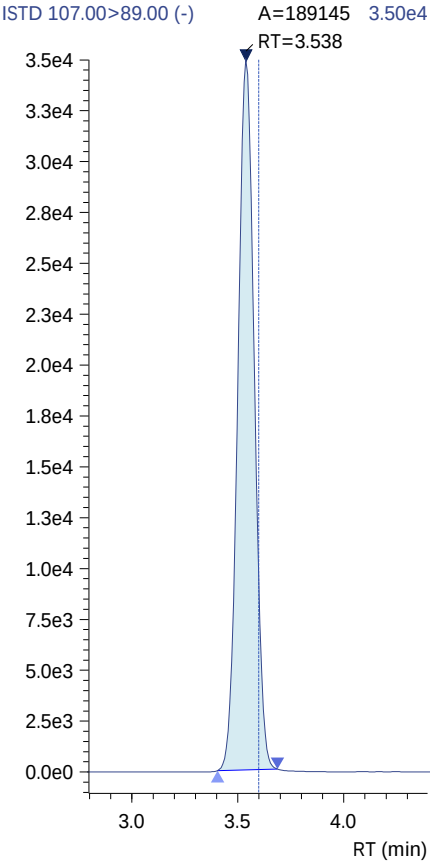
Conc 0.1522
R#1 33.86 (33.86)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/23/2024 2:22:49 PM

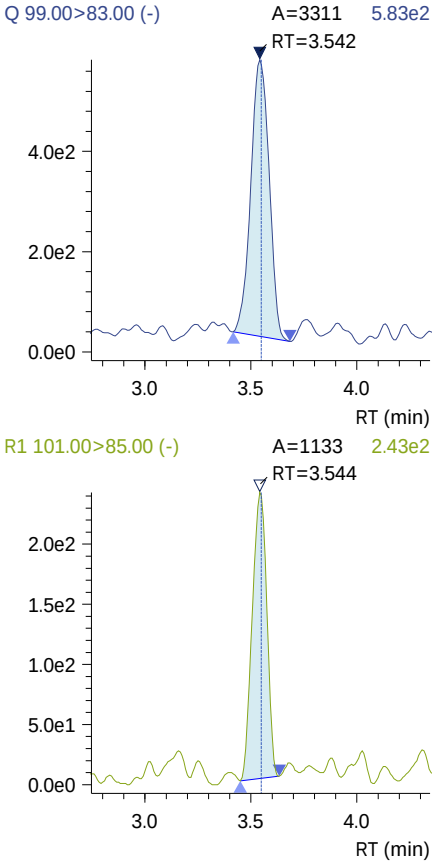
E2400035-004

Sample ID: E2400035-004
Date Acquired: 1/22/2024 1:06:29 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240122\20240122-012.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	3.542	3311	231976	0.0968	ng/mL	101.00 >85.00	34.21	23.7-44.02
Sodium Perchlorate-18O4 _IS	Auto	3.538	2319 76	231976	1.0000	ng/mL	----	----	

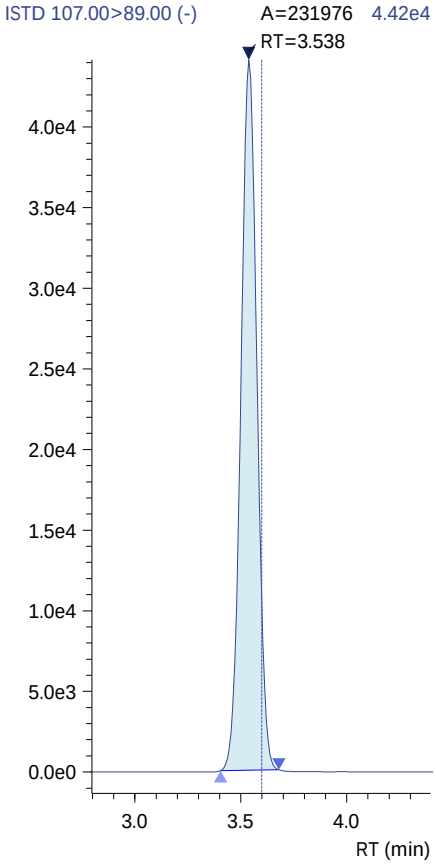
Perchlorate

Conc 0.0968
R#1 34.21 (33.86)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/23/2024 2:22:49 PM

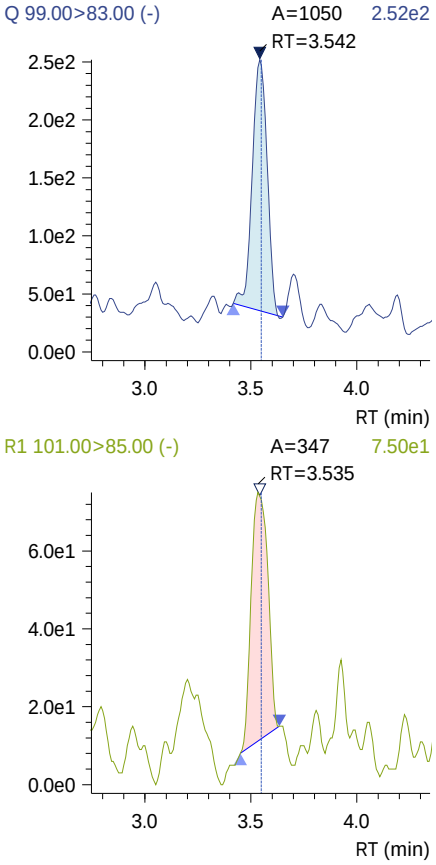
E2400035-005

Sample ID: E2400035-005
Date Acquired: 1/22/2024 1:12:00 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240122\20240122-013.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	MI R1	3.542	1050	203904	0.0349	ng/mL	101.00 >85.00	33.02	23.7-44.02
Sodium Perchlorate-18O4 _IS	Auto	3.534	203904	203904	1.0000	ng/mL	----	----	

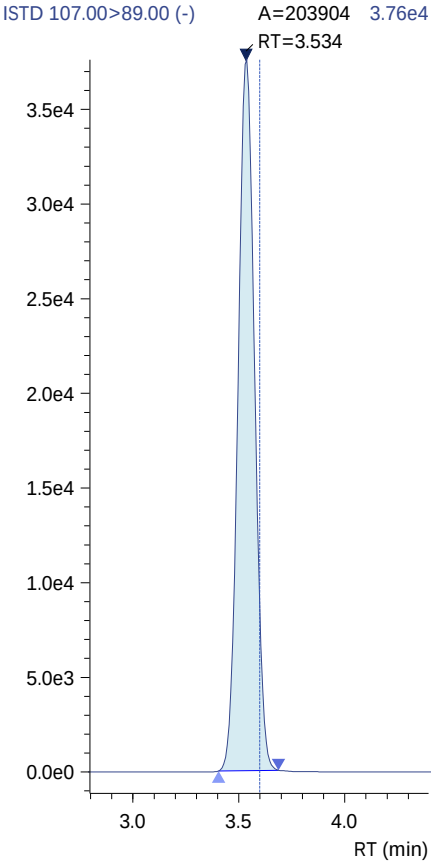
Perchlorate

Conc 0.0349
R#1 33.02 (33.86)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/23/2024 2:25:14 PM

Method File: I:\LCMS01\DATA\20240122\20240122.lcm
Project File: I:\LCMS01\DATA\20240122\20240122.damlp

E2400035-005

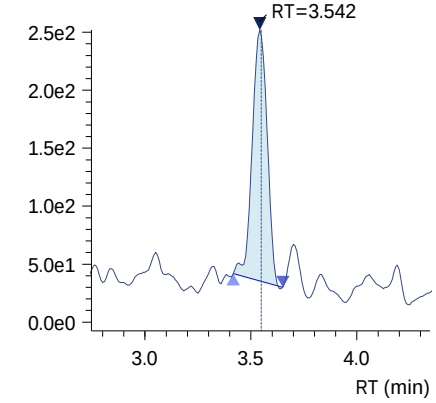
Sample ID: E2400035-005
Date Acquired: 1/22/2024 1:12:00 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240122\20240122-013.lcd
Vial: 9 | Inj. Volume: 10.0000uL | Tray: 5

Perchlorate

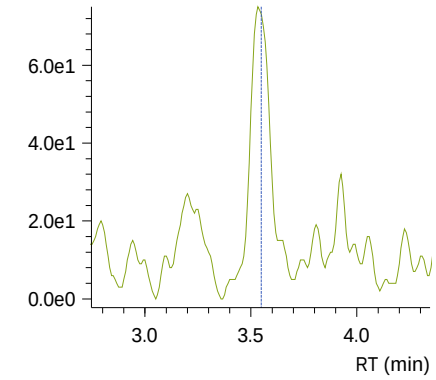
Conc 0.0349

R#1 0.00 (33.86)

Q 99.00>83.00 (-) A=1050 2.52e2



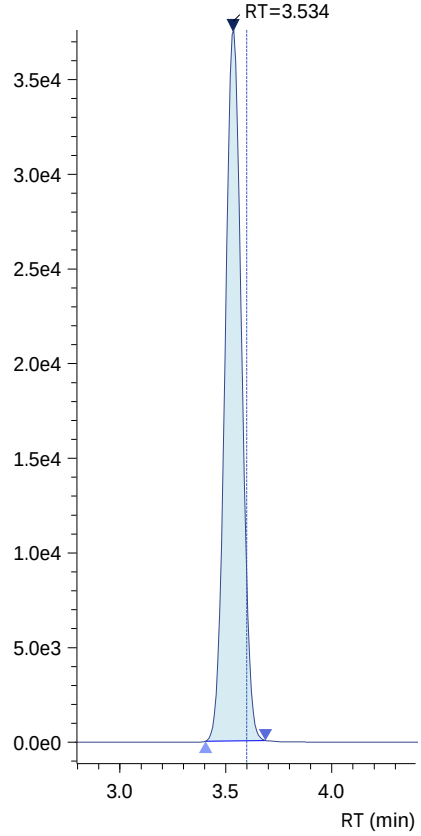
R1 101.00>85.00 (-) 7.50e1



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=203904 3.76e4



Insight Report

Printed at 1/23/2024 2:22:49 PM

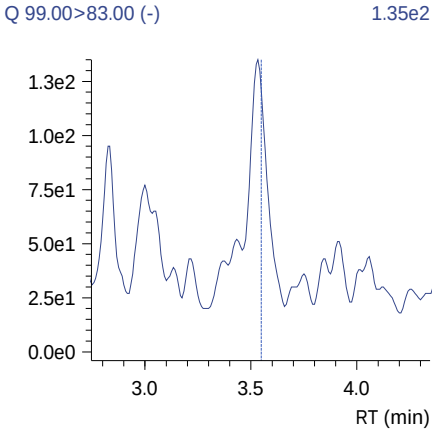
E2400035-006

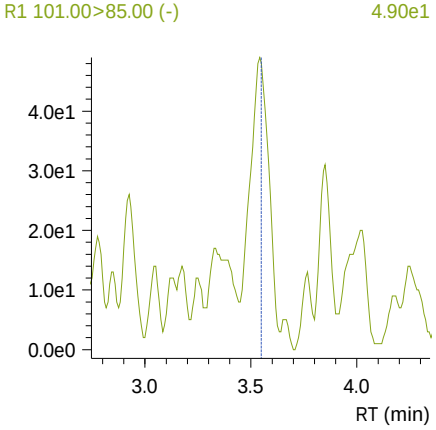
Sample ID: E2400035-006
Date Acquired: 1/22/2024 1:17:33 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240122\20240122-014.lcd
Vial: 10 | Inj. Volume: 10.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	200187	----	ng/mL	101.00 >85.00	0.00	23.7-44.02
Sodium Perchlorate-18O4_IS	Auto	3.535	200187	200187	1.0000	ng/mL	----	----	

Perchlorate

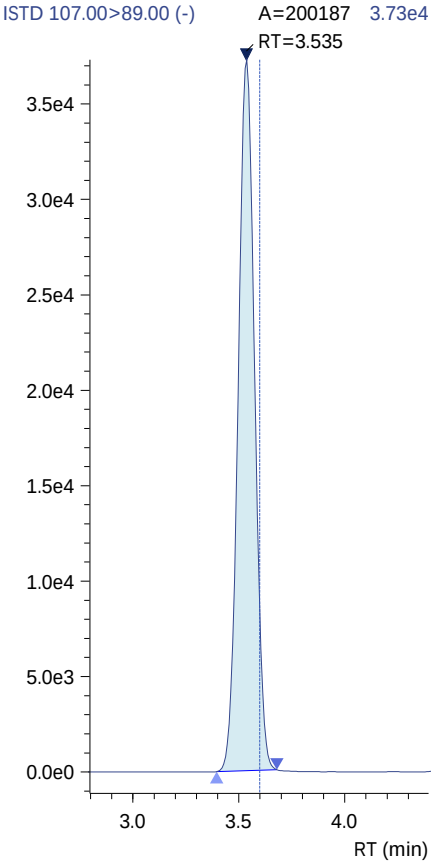
Conc ----
R#1 0.00 (33.86)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/23/2024 2:22:49 PM

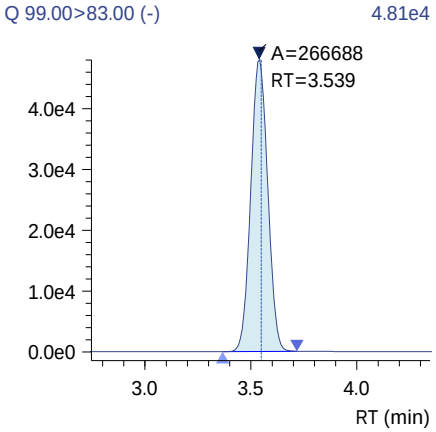
CCV

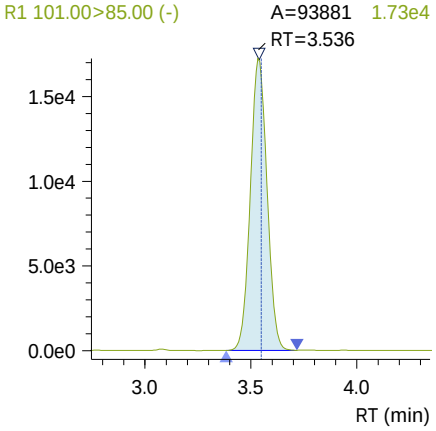
Sample ID: CCV
Date Acquired: 1/22/2024 1:23:04 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240122\20240122-015.lcd
Vial: 7 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.539	266688	188669	9.5857	ng/mL	101.00 >85.00	35.20	23.7-44.02
Sodium Perchlorate-18O4_IS	Auto	3.535	188669	188669	1.0000	ng/mL	----	----	

Perchlorate

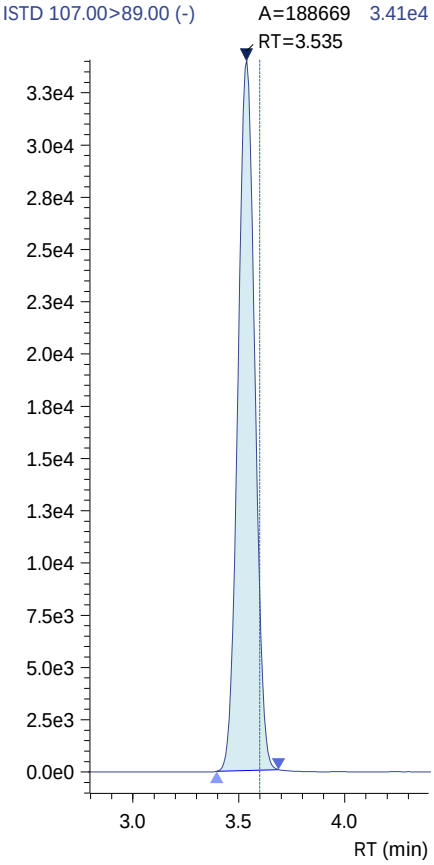
Conc 9.5857
R#1 35.20 (33.86)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/23/2024 2:22:49 PM

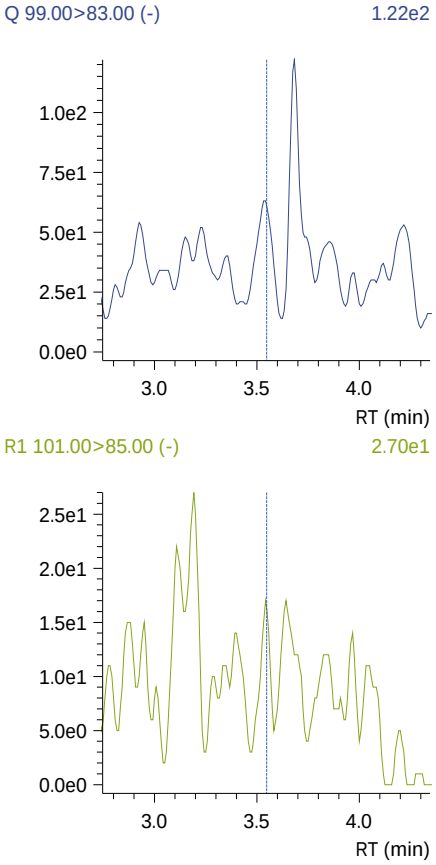
IB

Sample ID: IB
Date Acquired: 1/22/2024 1:28:34 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240122\20240122-016.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)	----	----	203521	----	ng/mL	101.00 >85.00	0.00	23.7-44.02
Sodium Perchlorate-18O4_IS	Auto	3.534	203521	203521	1.0000	ng/mL	----	----	

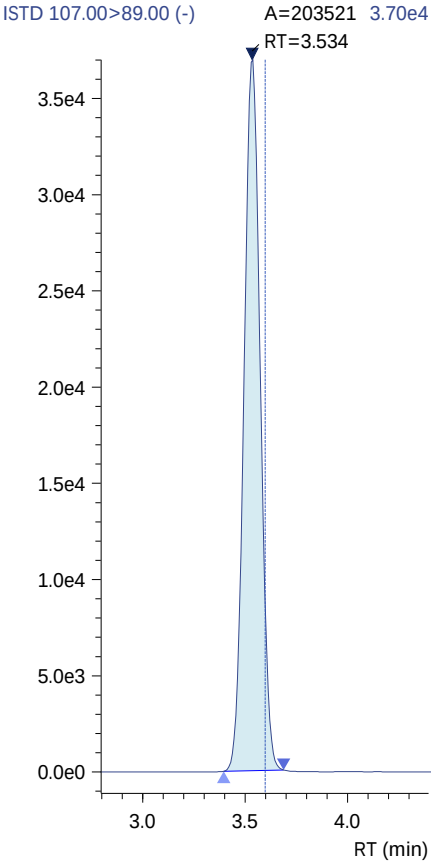
Perchlorate

Conc ----
R#1 0.00 (33.86)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/23/2024 2:22:49 PM

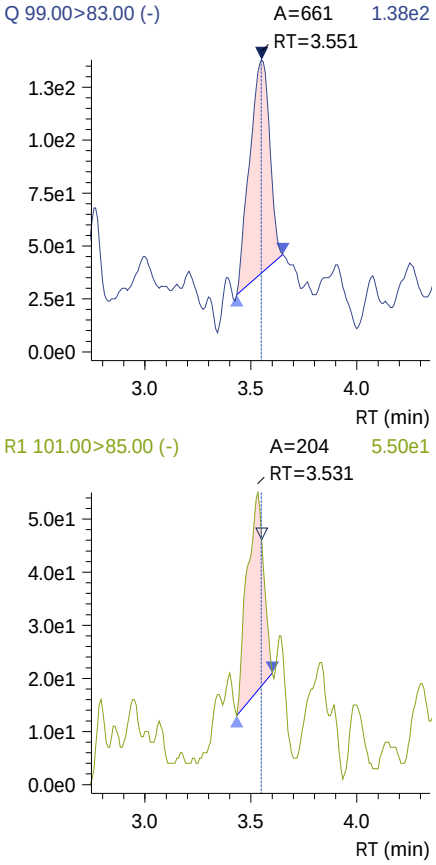
E2400035-007

Sample ID: E2400035-007
Date Acquired: 1/22/2024 1:34:06 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240122\20240122-017.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	M	3.551	661	191977	0.0233	ng/mL	101.00 >85.00	30.80	23.7-44.02
Sodium Perchlorate-18O4 _IS	Auto	3.536	1919 77	191977	1.0000	ng/mL	----	----	

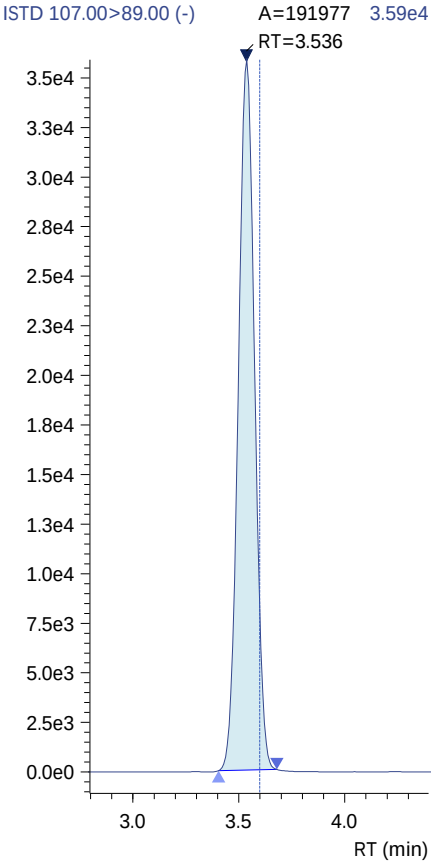
Perchlorate

Conc 0.0233
R#1 30.80 (33.86)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/23/2024 2:25:14 PM

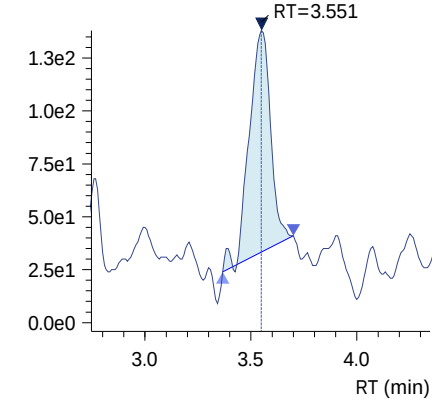
E2400035-007

Sample ID: E2400035-007
Date Acquired: 1/22/2024 1:34:06 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240122\20240122-017.lcd
Vial: 11 | Inj. Volume: 10.0000uL | Tray: 5

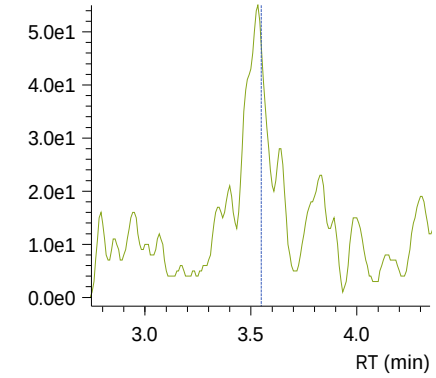
Perchlorate

Conc 0.0259
R#1 0.00 (33.86)

Q 99.00>83.00 (-) A=732 1.38e2



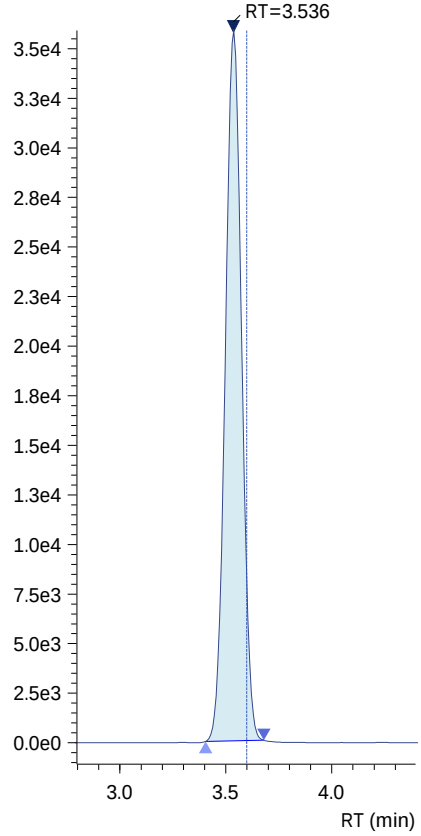
R1 101.00>85.00 (-) 5.50e1



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=191977 3.59e4



Insight Report

Printed at 1/24/2024 9:08:17 AM

Method File: I:\LCMS01\DATA\20240122\20240122.lcm
Project File: I:\LCMS01\DATA\20240122\20240122.damlp

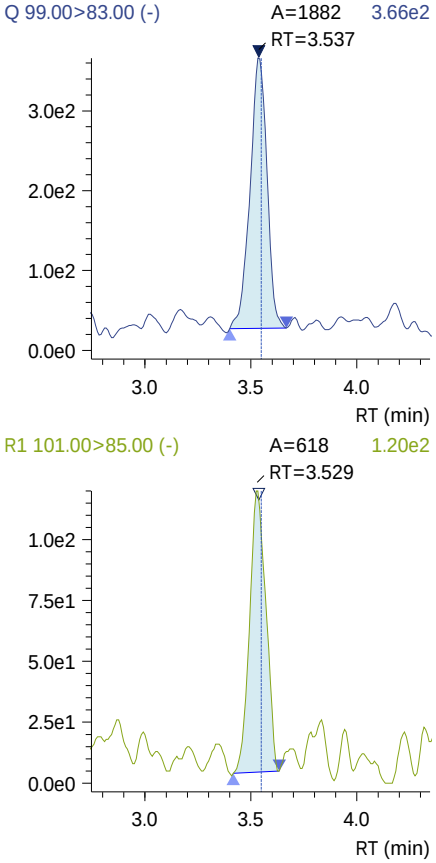
E2400035-008

Sample ID: E2400035-008
Date Acquired: 1/22/2024 1:39:40 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240122\20240122-018.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	3.537	1882	201541	0.0633	ng/mL	101.00 >85.00	32.82	23.7-44.02
Sodium Perchlorate-18O4 _IS	Auto	3.534	2015 41	201541	1.0000	ng/mL	----	----	

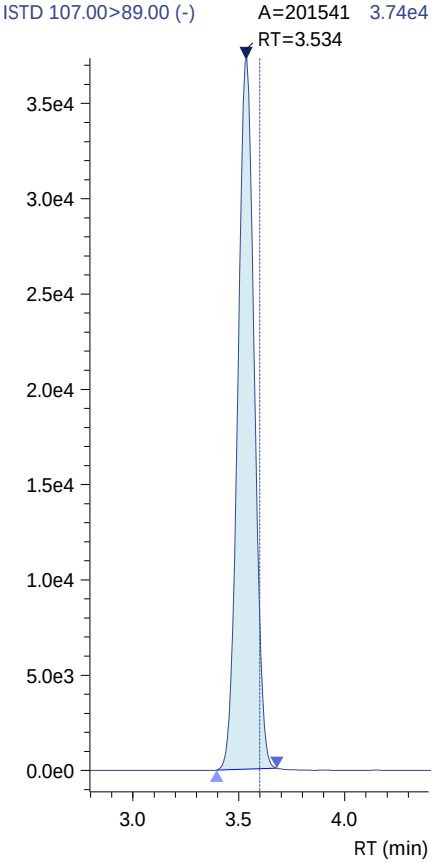
Perchlorate

Conc 0.0633
R#1 32.82 (33.86)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/24/2024 9:08:17 AM

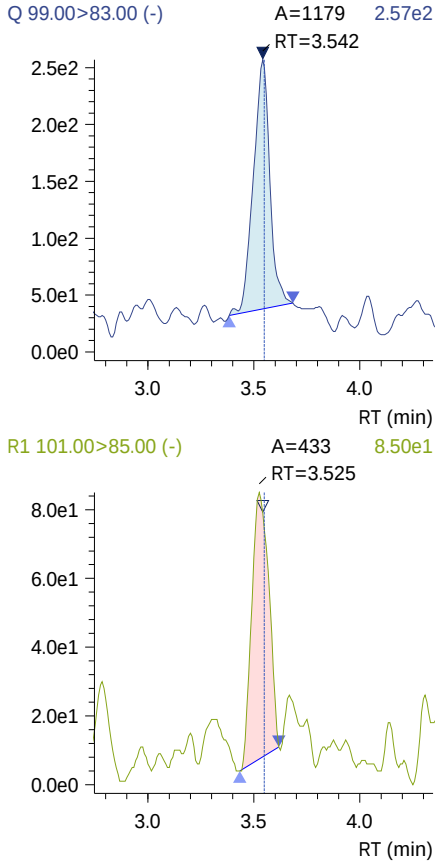
E2400035-009

Sample ID: E2400035-009
Date Acquired: 1/22/2024 1:45:11 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240122\20240122-019.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	MI R1	3.542	1179	203269	0.0393	ng/mL	101.00 >85.00	36.70	23.7-44.02
Sodium Perchlorate-18O4 _IS	Auto	3.534	2032 69	203269	1.0000	ng/mL	----	----	

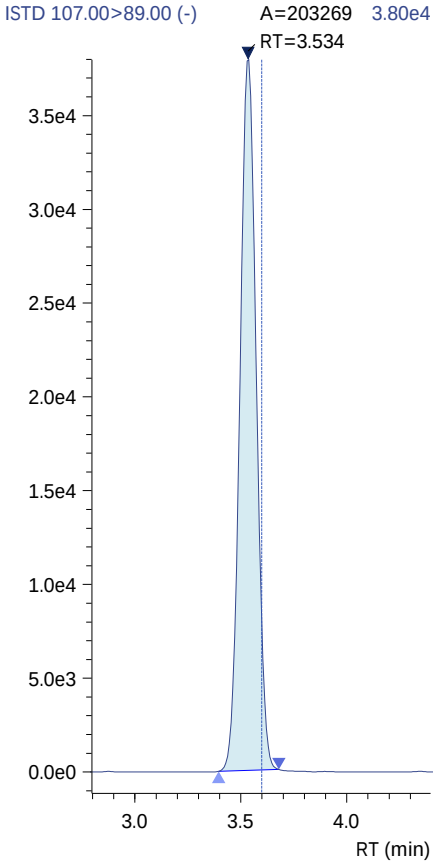
Perchlorate

Conc 0.0393
R#1 36.70 (33.86)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/24/2024 9:08:58 AM

Method File: I:\LCMS01\DATA\20240122\20240122.lcm
Project File: I:\LCMS01\DATA\20240122\20240122.damlp

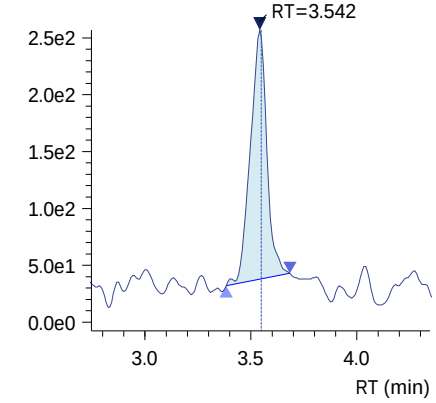
E2400035-009

Sample ID: E2400035-009
Date Acquired: 1/22/2024 1:45:11 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240122\20240122-019.lcd
Vial: 13 | Inj. Volume: 10.0000uL | Tray: 5

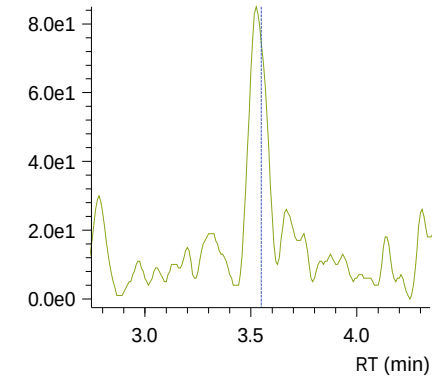
Perchlorate

Conc 0.0393
R#1 0.00 (33.86)

Q 99.00>83.00 (-) A=1179 2.57e2 RT=3.542



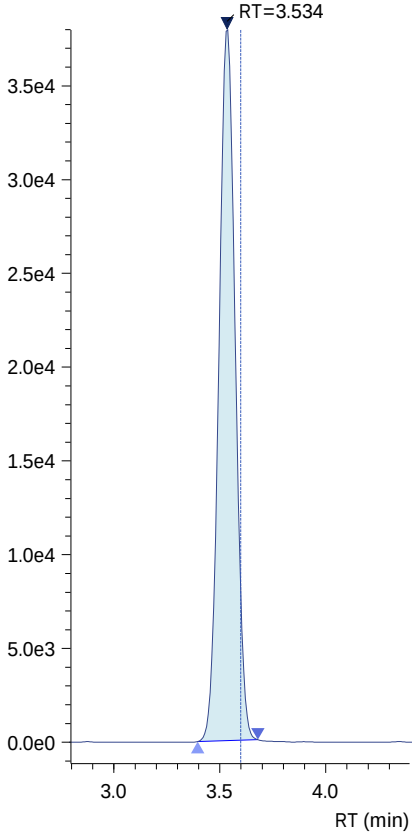
R1 101.00>85.00 (-) 8.50e1



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=203269 3.80e4 RT=3.534



Insight Report

Printed at 1/23/2024 2:22:49 PM

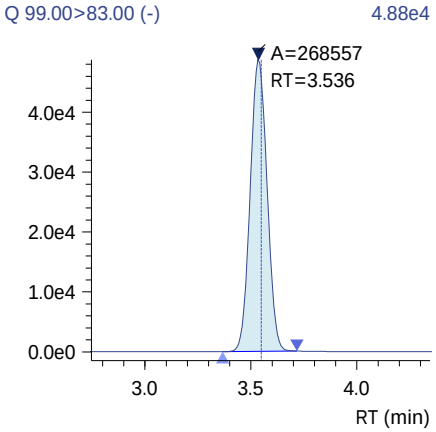
CCV

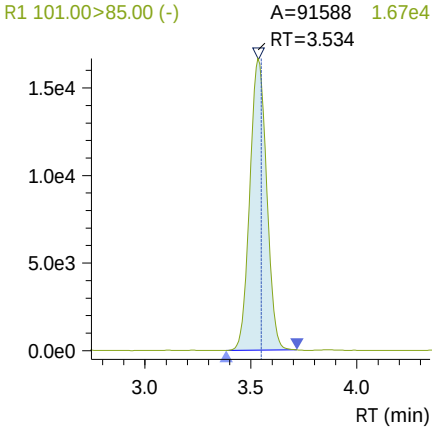
Sample ID: CCV
Date Acquired: 1/22/2024 2:29:25 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240122\20240122-027.lcd
Vial: 7 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.536	268557	181683	10.0240	ng/mL	101.00 >85.00	34.10	23.7-44.02
Sodium Perchlorate-18O4_IS	Auto	3.533	181683	181683	1.0000	ng/mL	----	----	

Perchlorate

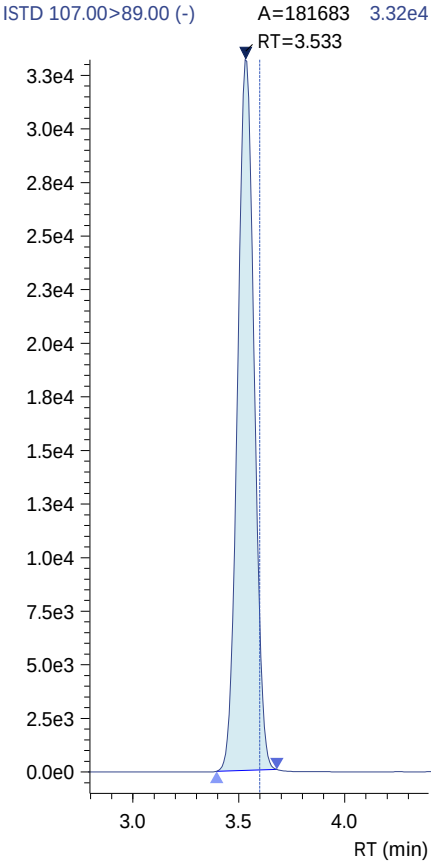
Conc 10.0240
R#1 34.10 (33.86)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/23/2024 2:22:49 PM

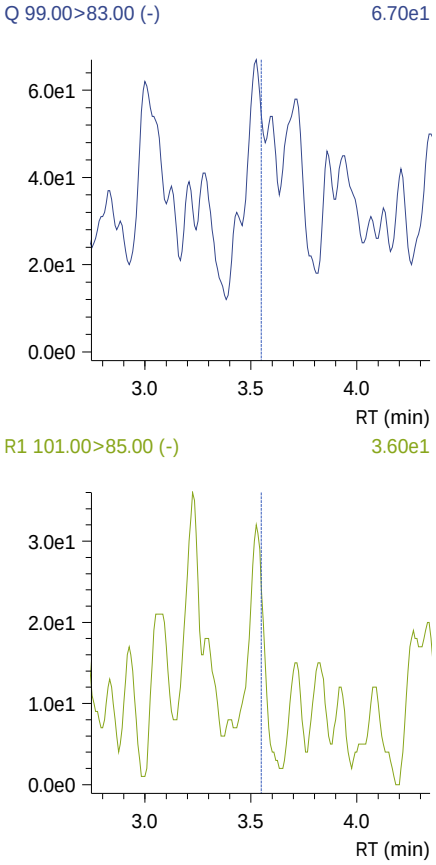
IB

Sample ID: IB
Date Acquired: 1/22/2024 2:34:59 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240122\20240122-028.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)	----	----	195819	----	ng/mL	101.00 >85.00	0.00	23.7-44.02
Sodium Perchlorate-18O4_IS	Auto	3.534	195819	195819	1.0000	ng/mL	----	----	

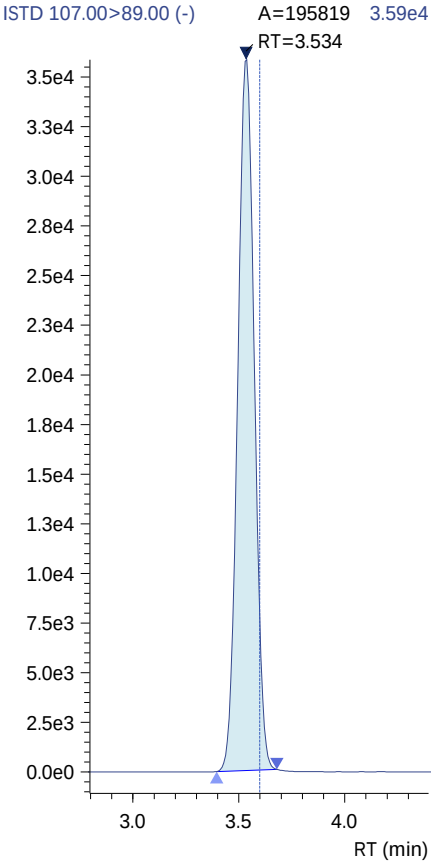
Perchlorate

Conc ----
R#1 0.00 (33.86)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/24/2024 12:12:44 PM

Method File: I:\LCMS01\DATA\20240123\20240123.lcm
Project File: I:\LCMS01\DATA\20240123\20240123.damlp

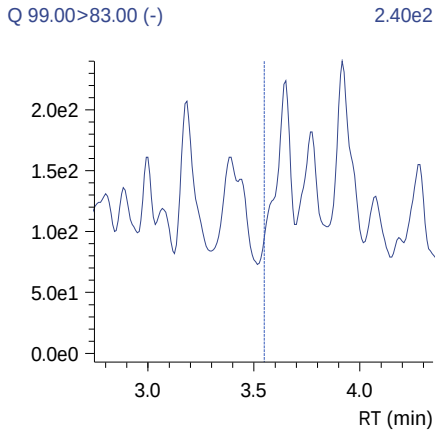
IB

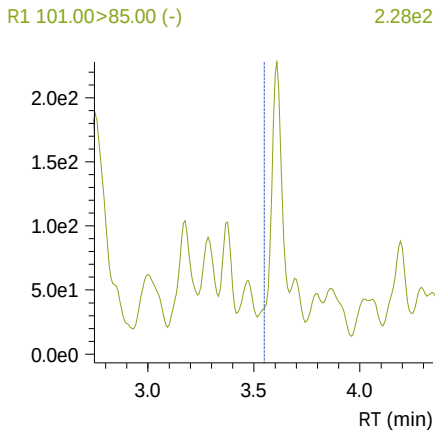
Sample ID: IB
Date Acquired: 1/23/2024 12:52:48 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240123\20240123-009.lcd
Vial: 1 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	222717	----	ng/mL	101.00 >85.00	0.00	23.37-43.4
Sodium Perchlorate -18O4_IS	Auto	3.540	222717	222717	1.0000	ng/mL	----	----	

Perchlorate

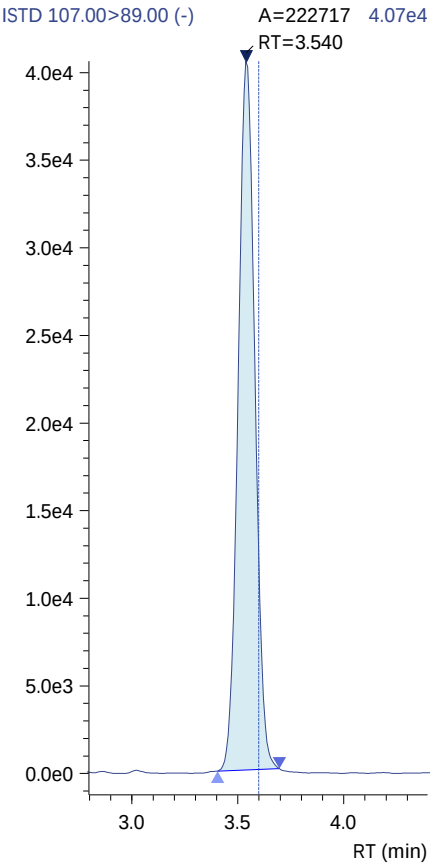
Conc ----
R#1 0.00 (33.38)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/24/2024 12:12:44 PM

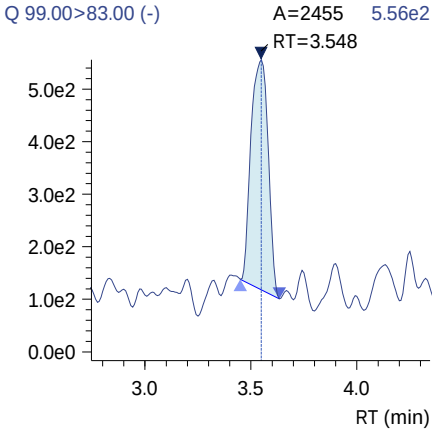
LODV

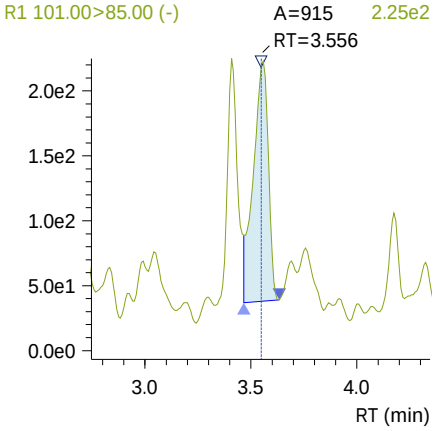
Sample ID: LODV
Date Acquired: 1/23/2024 1:06:01 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240123\20240123-010.lcd
Vial: 2 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.548	2455	270708	0.0615	ng/mL	101.00 >85.00	37.26	23.37-43.4
Sodium Perchlorate -18O4_IS	Auto	3.542	270708	270708	1.0000	ng/mL	----	----	

Perchlorate

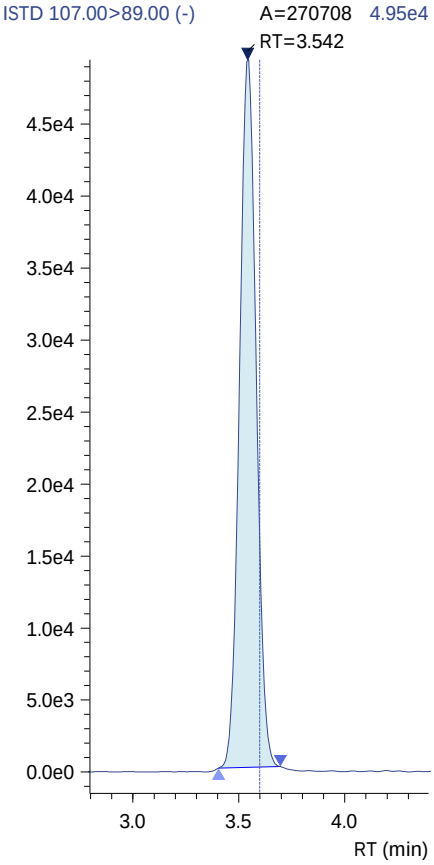
Conc 0.0615
R#1 37.26 (33.38)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/24/2024 12:12:44 PM

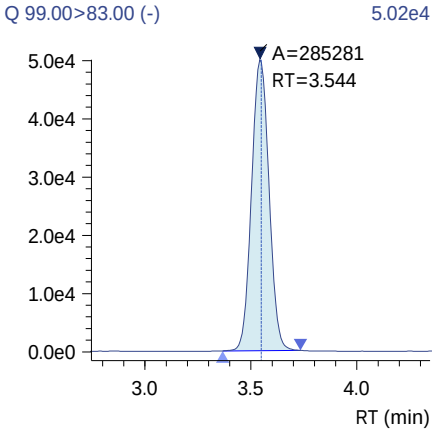
CCV

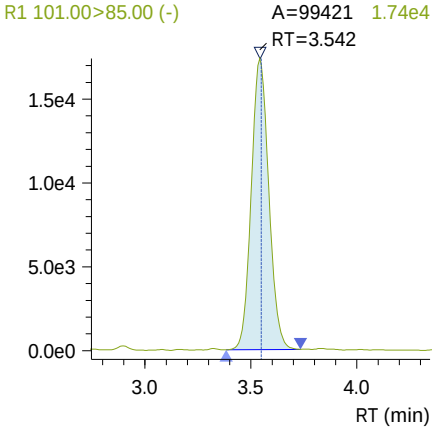
Sample ID: CCV
Date Acquired: 1/23/2024 1:12:15 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240123\20240123-011.lcd
Vial: 7 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.544	285281	198363	9.7529	ng/mL	101.00 >85.00	34.85	23.37-43.4
Sodium Perchlorate -18O4_IS	Auto	3.540	198363	198363	1.0000	ng/mL	----	----	

Perchlorate

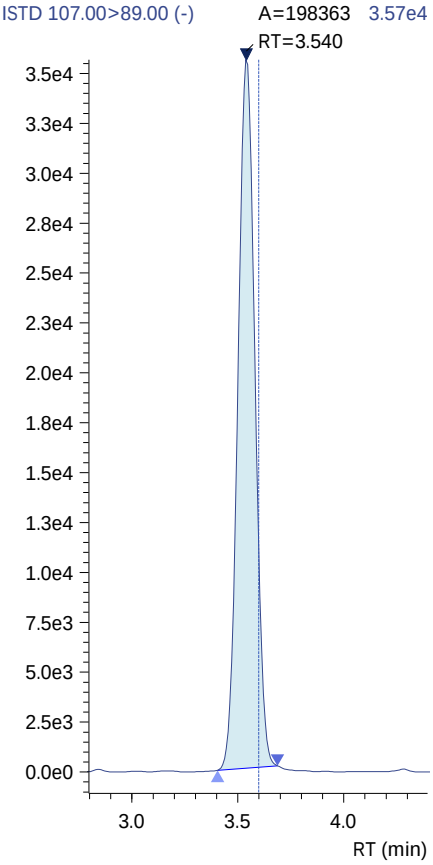
Conc 9.7529
R#1 34.85 (33.38)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/24/2024 12:12:44 PM

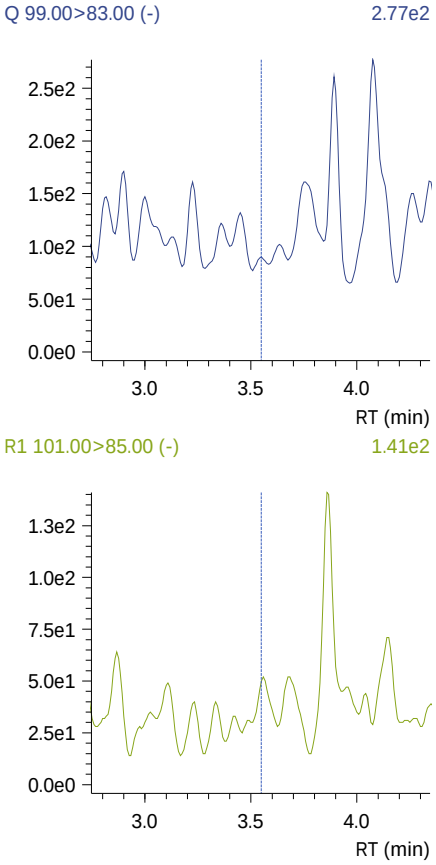
IB

Sample ID: IB
Date Acquired: 1/23/2024 1:18:35 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240123\20240123-012.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)	----	----	215024	----	ng/mL	101.00 >85.00	0.00	23.37-43.4
Sodium Perchlorate-18O4_IS	Auto	3.540	215024	215024	1.0000	ng/mL	----	----	

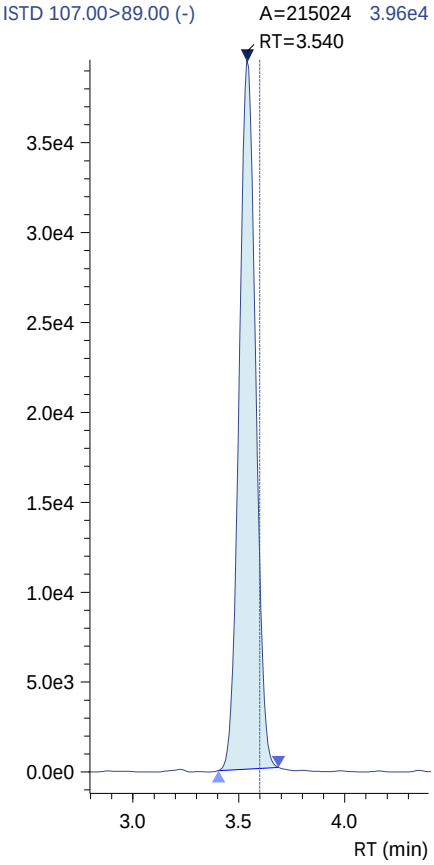
Perchlorate

Conc ----
R#1 0.00 (33.38)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/24/2024 12:12:44 PM

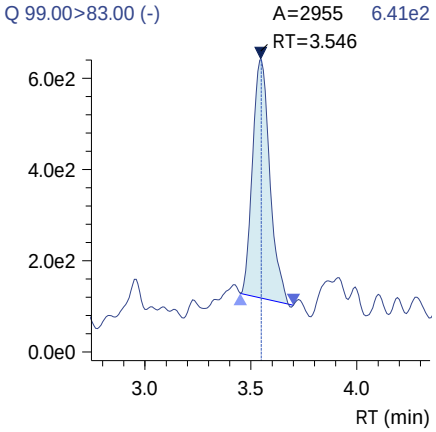
EQ2400031-04 ICS

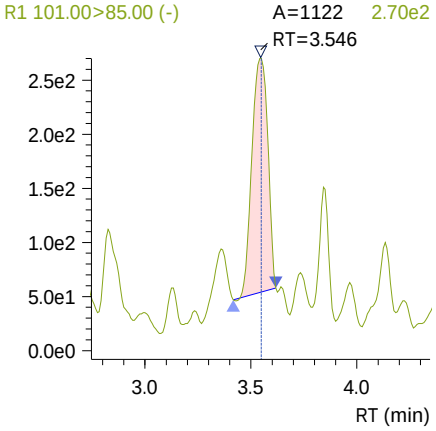
Sample ID: EQ2400031-04
Date Acquired: 1/23/2024 1:28:26 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240123\20240123-013.lcd
Vial: 28 | Inj. Volume: 10.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	MI R1	3.546	2955	218249	0.0918	ng/mL	101.00 >85.00	37.97	23.37-43.4
Sodium Perchlorate -18O4_IS	Auto	3.541	218249	218249	1.0000	ng/mL	----	----	

Perchlorate

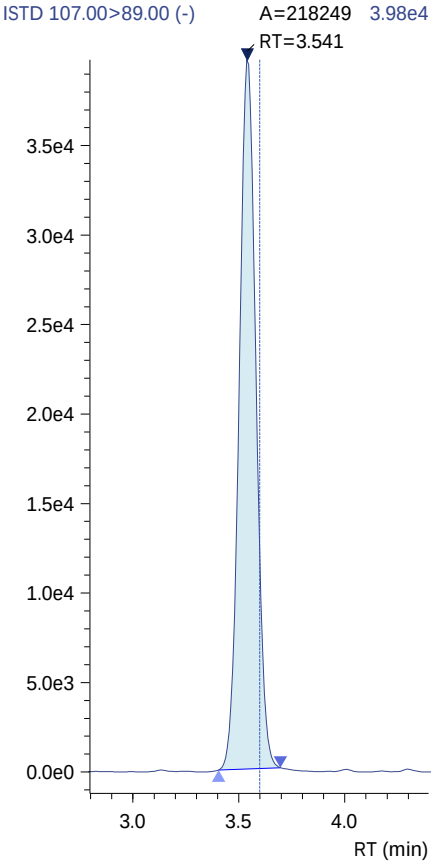
Conc 0.0918
R#1 37.97 (33.38)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/24/2024 10:46:16 AM

Method File: I:\LCMS01\DATA\20240123\20240123.lcm
Project File: I:\LCMS01\DATA\20240123\20240123.damlp

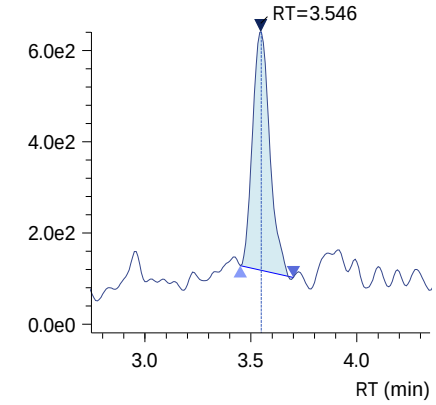
EQ2400031-04 ICS

Sample ID: EQ2400031-04
Date Acquired: 1/23/2024 1:28:26 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240123\20240123-013.lcd
Vial: 28 | Inj. Volume: 10.0000uL | Tray: 5

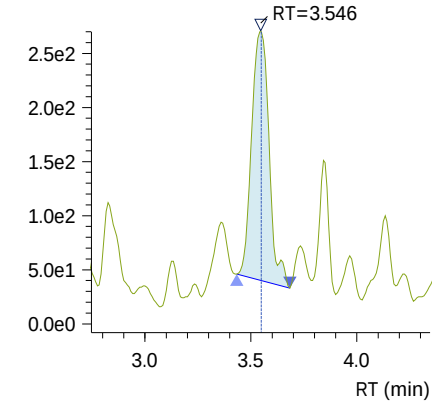
Perchlorate

Conc 0.0918
R#1 44.43 (33.38)

Q 99.00>83.00 (-) A=2955 6.41e2



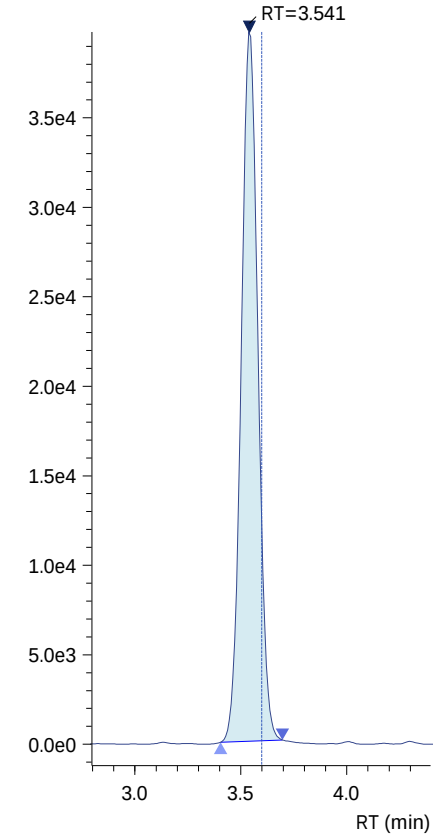
R1 101.00>85.00 (-) A=1313 2.70e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=218249 3.98e4



Insight Report

Printed at 1/24/2024 12:12:44 PM

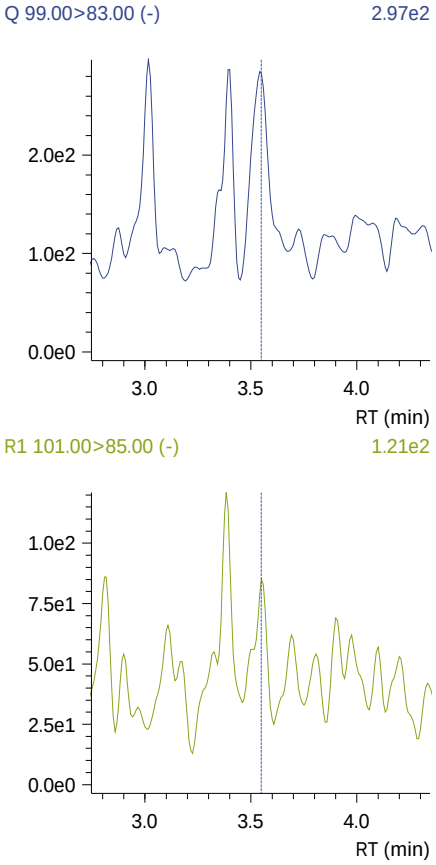
E2400035-001

Sample ID: E2400035-001
Date Acquired: 1/23/2024 1:34:00 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240123\20240123-014.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	ND(W/B)	----	----	200308	----	ng/mL	101.00 >85.00	0.00	23.37-43.4
Sodium Perchlorate-18O4_IS	Auto	3.538	200308	200308	1.0000	ng/mL	----	----	

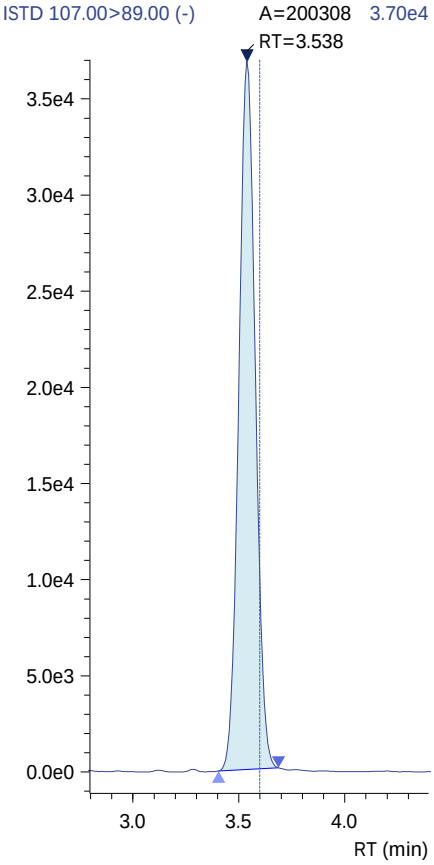
Perchlorate

Conc ----
R#1 0.00 (33.38)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/24/2024 12:12:44 PM

CCV

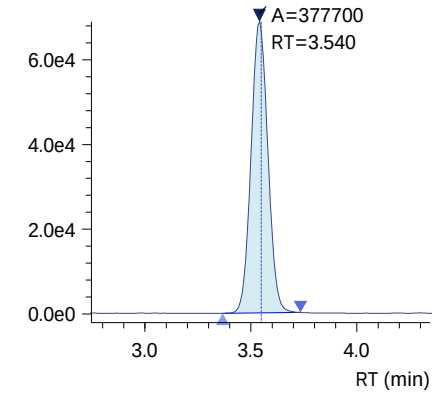
Sample ID: CCV
Date Acquired: 1/23/2024 2:23:43 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240123\20240123-018.lcd
Vial: 7 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.540	377700	253015	10.1 233	ng/mL	101.00 >85.00	33.83	23.37-43.4
Sodium Perchlorate -18O4_IS	Auto	3.536	253015	253015	1.0000	ng/mL	----	----	

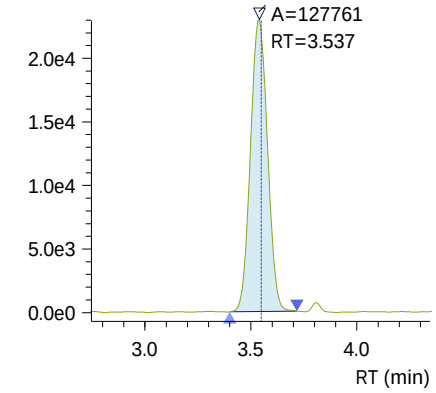
Perchlorate

Conc 10.1233
R#1 33.83 (33.38)

Q 99.00>83.00 (-) 6.90e4



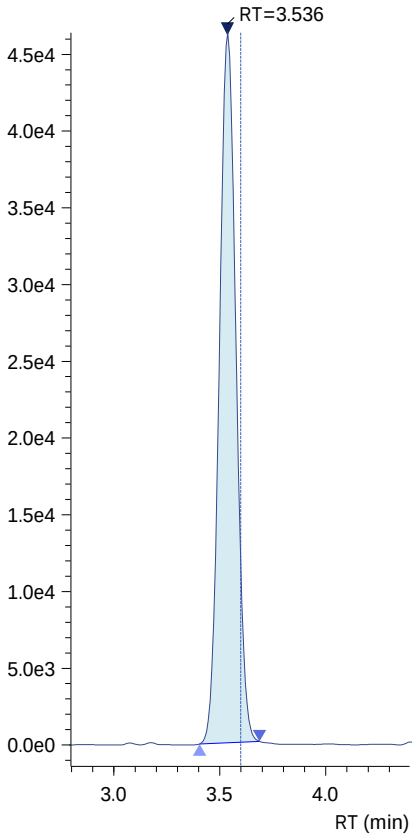
R1 101.00>85.00 (-) 2.30e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=253015 4.64e4



Insight Report

Printed at 1/24/2024 12:12:44 PM

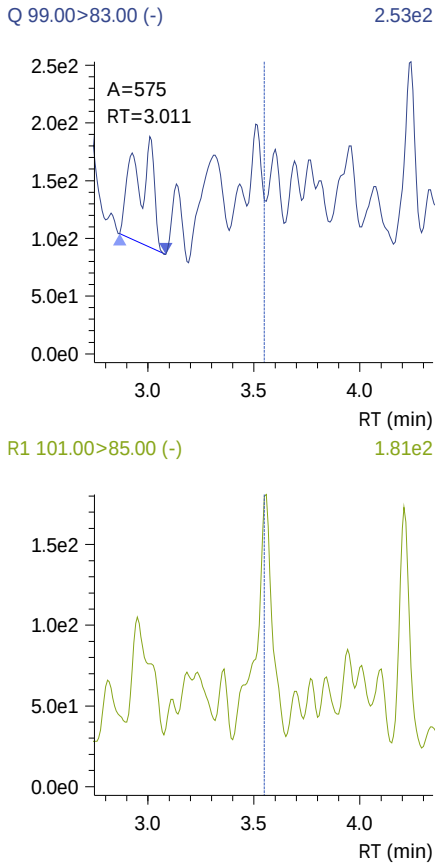
IB

Sample ID: IB
Date Acquired: 1/23/2024 2:29:12 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240123\20240123-019.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)	----	----	261034	----	ng/mL	101.00 >85.00	0.00	23.37-43.4
Sodium Perchlorate-18O4_IS	Auto	3.537	261034	261034	1.0000	ng/mL	----	----	

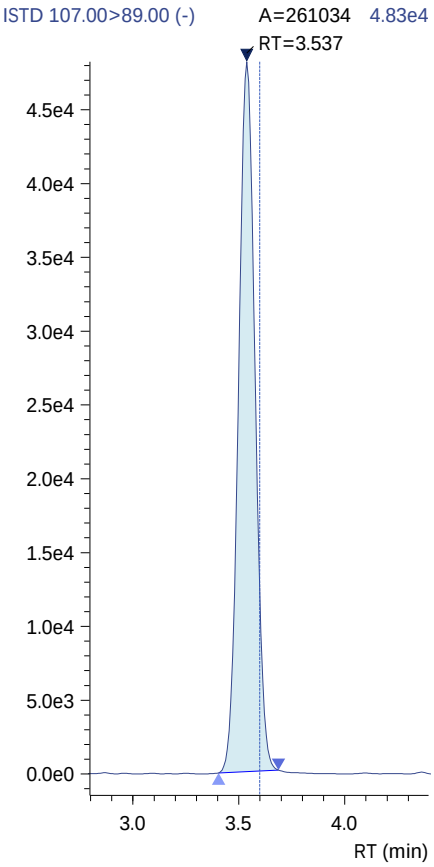
Perchlorate

Conc ----
R#1 0.00 (33.38)



Sodium Perchlorate-18O4_IS

Conc 1.0000



HS24010538 Eurofin Lab J157387-1 Std_Tal_L4 Rev(1) Final Report

ALS WO# HS24010538

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Jumoke Lawal
ALS Group USA, Corp
10450 Stancliff Rd.
Suite 210
Houston TX 77099

Generated 01/30/2024 Revision 1

JOB DESCRIPTION

HS24010538

JOB NUMBER

410-157387-1

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

See page two for job notes and contact information.

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
01/30/2024
Revision 1

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

Eurofins Lancaster Laboratories Environment Testing, LLC

Compliance Statement

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

·QC results that exceed the upper limits and are associated with non-detect samples are qualified but further narration is not required since the bias is high and does not change a non-detect result. Further narration is also not required with QC blank detection when the associated sample concentration is non-detect or more than ten times the level in the blank.

·Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD is performed, unless otherwise specified in the method.

·Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

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

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

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Definitions/Glossary

Client: ALS Group USA, Corp
Job ID: 410-157387-1
Project/Site: HS24010538

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

Job Narrative
410-157387-1

REVISION

The report being provided is a revision of the original report sent on 1/19/2024. The report (revision 1) is being revised due to sample IDs were updated per the client's request.

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 1/12/2024 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.2°C

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

Detection Summary

Client: ALS Group USA, Corp
Project/Site: HS24010538

Job ID: 410-157387-1

Client Sample ID: 16WW58-240110 — Lab Sample ID: 410-157387-1

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	270000	M	12000		5600	ug/L	1		RSK-175	Total/NA

Client Sample ID: 16WW57-240110 — Lab Sample ID: 410-157387-2

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	220000	M	12000		5600	ug/L	1		RSK-175	Total/NA

Client Sample ID: 16IW09-240110 — Lab Sample ID: 410-157387-3

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	210000	M	12000		5600	ug/L	1		RSK-175	Total/NA

Client Sample ID: 16IW26-240110 — Lab Sample ID: 410-157387-4

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	760000	D	120000		56000	ug/L	10		RSK-175	Total/NA

Client Sample ID: 16IW03-240110 — Lab Sample ID: 410-157387-5

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	230000	M	12000		5600	ug/L	1		RSK-175	Total/NA

Client Sample ID: 16IW03-240110-FD — Lab Sample ID: 410-157387-6

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	250000	M	12000		5600	ug/L	1		RSK-175	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: ALS Group USA, Corp
Project/Site: HS24010538

Job ID: 410-157387-1

Client Sample ID: 16WW58-240110
Lab Sample ID: 410-157387-1
Date Collected: 01/10/24 07:05
Matrix: Water
Date Received: 01/12/24 10:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Carbon dioxide	270000	M	12000		5600	ug/L		01/16/24 14:01	1

Client Sample ID: 16WW57-240110
Lab Sample ID: 410-157387-2
Date Collected: 01/10/24 08:05
Matrix: Water
Date Received: 01/12/24 10:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Carbon dioxide	220000	M	12000		5600	ug/L		01/16/24 14:08	1

Client Sample ID: 16IW09-240110
Lab Sample ID: 410-157387-3
Date Collected: 01/10/24 09:00
Matrix: Water
Date Received: 01/12/24 10:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Carbon dioxide	210000	M	12000		5600	ug/L		01/16/24 14:16	1

Client Sample ID: 16IW26-240110
Lab Sample ID: 410-157387-4
Date Collected: 01/10/24 09:50
Matrix: Water
Date Received: 01/12/24 10:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Carbon dioxide	760000	D	120000		56000	ug/L		01/18/24 15:40	10

Client Sample ID: 16IW03-240110
Lab Sample ID: 410-157387-5
Date Collected: 01/10/24 12:45
Matrix: Water
Date Received: 01/12/24 10:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Carbon dioxide	230000	M	12000		5600	ug/L		01/16/24 14:31	1

Client Sample ID: 16IW03-240110-FD
Lab Sample ID: 410-157387-6
Date Collected: 01/10/24 12:45
Matrix: Water
Date Received: 01/12/24 10:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Carbon dioxide	250000	M	12000		5600	ug/L		01/16/24 14:47	1

Default Detection Limits

Client: ALS Group USA, Corp
Project/Site: HS24010538

Job ID: 410-157387-1

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: HS24010538

Job ID: 410-157387-1

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 410-463746/1-A
Matrix: Water
Analysis Batch: 463730

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 463746

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Carbon dioxide	5600	U M	12000		5600	ug/L		01/16/24 12:15	1

Lab Sample ID: LCS 410-463746/2-A
Matrix: Water
Analysis Batch: 463730

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 463746

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Carbon dioxide	35800	36600		ug/L		102	80 - 122

Lab Sample ID: LCSD 410-463746/3-A
Matrix: Water
Analysis Batch: 463730

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 463746

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Carbon dioxide	35800	37900		ug/L		106	80 - 122	4	20

Lab Sample ID: MB 410-464737/1-A
Matrix: Water
Analysis Batch: 464516

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 464737

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Carbon dioxide	5600	U M	12000		5600	ug/L		01/18/24 10:00	1

Lab Sample ID: LCS 410-464737/2-A
Matrix: Water
Analysis Batch: 464516

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 464737

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Carbon dioxide	35800	38200		ug/L		107	80 - 122

Lab Sample ID: LCSD 410-464737/3-A
Matrix: Water
Analysis Batch: 464516

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 464737

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Carbon dioxide	35800	38900		ug/L		109	80 - 122	2	20

QC Association Summary

Client: ALS Group USA, Corp
Project/Site: HS24010538

Job ID: 410-157387-1

GC VOA

Analysis Batch: 463730

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-157387-1	16WW58-240110	Total/NA	Water	RSK-175	463746
410-157387-2	16WW57-240110	Total/NA	Water	RSK-175	463746
410-157387-3	16IW09-240110	Total/NA	Water	RSK-175	463746
410-157387-5	16IW03-240110	Total/NA	Water	RSK-175	463746
410-157387-6	16IW03-240110-FD	Total/NA	Water	RSK-175	463746
MB 410-463746/1-A	Method Blank	Total/NA	Water	RSK-175	463746
LCS 410-463746/2-A	Lab Control Sample	Total/NA	Water	RSK-175	463746
LCSD 410-463746/3-A	Lab Control Sample Dup	Total/NA	Water	RSK-175	463746

Prep Batch: 463746

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-157387-1	16WW58-240110	Total/NA	Water	RSK-175	
410-157387-2	16WW57-240110	Total/NA	Water	RSK-175	
410-157387-3	16IW09-240110	Total/NA	Water	RSK-175	
410-157387-5	16IW03-240110	Total/NA	Water	RSK-175	
410-157387-6	16IW03-240110-FD	Total/NA	Water	RSK-175	
MB 410-463746/1-A	Method Blank	Total/NA	Water	RSK-175	
LCS 410-463746/2-A	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 410-463746/3-A	Lab Control Sample Dup	Total/NA	Water	RSK-175	

Analysis Batch: 464516

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-157387-4	16IW26-240110	Total/NA	Water	RSK-175	464737
MB 410-464737/1-A	Method Blank	Total/NA	Water	RSK-175	464737
LCS 410-464737/2-A	Lab Control Sample	Total/NA	Water	RSK-175	464737
LCSD 410-464737/3-A	Lab Control Sample Dup	Total/NA	Water	RSK-175	464737

Prep Batch: 464737

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-157387-4	16IW26-240110	Total/NA	Water	RSK-175	
MB 410-464737/1-A	Method Blank	Total/NA	Water	RSK-175	
LCS 410-464737/2-A	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 410-464737/3-A	Lab Control Sample Dup	Total/NA	Water	RSK-175	

Lab Chronicle

Client: ALS Group USA, Corp
Project/Site: HS24010538

Job ID: 410-157387-1

Client Sample ID: 16WW58-240110
Date Collected: 01/10/24 07:05
Date Received: 01/12/24 10:00

Lab Sample ID: 410-157387-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	RSK-175			463746	HQR6	ELLE	01/16/24 12:03
Total/NA	Analysis	RSK-175		1	463730	LXF2	ELLE	01/16/24 14:01

Client Sample ID: 16WW57-240110
Date Collected: 01/10/24 08:05
Date Received: 01/12/24 10:00

Lab Sample ID: 410-157387-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	RSK-175			463746	HQR6	ELLE	01/16/24 12:03
Total/NA	Analysis	RSK-175		1	463730	LXF2	ELLE	01/16/24 14:08

Client Sample ID: 16IW09-240110
Date Collected: 01/10/24 09:00
Date Received: 01/12/24 10:00

Lab Sample ID: 410-157387-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	RSK-175			463746	HQR6	ELLE	01/16/24 12:03
Total/NA	Analysis	RSK-175		1	463730	LXF2	ELLE	01/16/24 14:16

Client Sample ID: 16IW26-240110
Date Collected: 01/10/24 09:50
Date Received: 01/12/24 10:00

Lab Sample ID: 410-157387-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	RSK-175			464737	HQR6	ELLE	01/18/24 09:58
Total/NA	Analysis	RSK-175		10	464516	LXF2	ELLE	01/18/24 15:40

Client Sample ID: 16IW03-240110
Date Collected: 01/10/24 12:45
Date Received: 01/12/24 10:00

Lab Sample ID: 410-157387-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	RSK-175			463746	HQR6	ELLE	01/16/24 12:03
Total/NA	Analysis	RSK-175		1	463730	LXF2	ELLE	01/16/24 14:31

Client Sample ID: 16IW03-240110-FD
Date Collected: 01/10/24 12:45
Date Received: 01/12/24 10:00

Lab Sample ID: 410-157387-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	RSK-175			463746	HQR6	ELLE	01/16/24 12:03
Total/NA	Analysis	RSK-175		1	463730	LXF2	ELLE	01/16/24 14:47

Laboratory References:

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

Accreditation/Certification Summary

Client: ALS Group USA, Corp
Project/Site: HS24010538

Job ID: 410-157387-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

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

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

Method Summary

Client: ALS Group USA, Corp
Project/Site: HS24010538

Job ID: 410-157387-1

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

Protocol References:

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

Laboratory References:

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

Sample Summary

Client: ALS Group USA, Corp
Project/Site: HS24010538

Job ID: 410-157387-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
410-157387-1	16WW58-240110	Water	01/10/24 07:05	01/12/24 10:00
410-157387-2	16WW57-240110	Water	01/10/24 08:05	01/12/24 10:00
410-157387-3	16IW09-240110	Water	01/10/24 09:00	01/12/24 10:00
410-157387-4	16IW26-240110	Water	01/10/24 09:50	01/12/24 10:00
410-157387-5	16IW03-240110	Water	01/10/24 12:45	01/12/24 10:00
410-157387-6	16IW03-240110-FD	Water	01/10/24 12:45	01/12/24 10:00

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-157387-1

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.: 410-157387-1

SDG No.:

Instrument ID: 19506-B Analysis Batch Number: 463730

Lab Sample ID: MB 410-463746/1-A Client Sample ID:

Date Analyzed: 01/16/24 12:15 Lab File ID: 312024_1_16BB.0003.d GC Column: HP Plot ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon dioxide	2.04	Peak not integrated	LXF2	01/17/24 03:27

Lab Sample ID: 410-157387-1 Client Sample ID: 16WW58-240110

Date Analyzed: 01/16/24 14:01 Lab File ID: 312024_1_16BB.0008.d GC Column: HP Plot ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon dioxide	1.98	Assign Peak	LXF2	01/17/24 03:27

Lab Sample ID: 410-157387-2 Client Sample ID: 16WW57-240110

Date Analyzed: 01/16/24 14:08 Lab File ID: 312024_1_16BB.0009.d GC Column: HP Plot ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon dioxide	1.99	Assign Peak	LXF2	01/17/24 03:27

Lab Sample ID: 410-157387-3 Client Sample ID: 16IW09-240110

Date Analyzed: 01/16/24 14:16 Lab File ID: 312024_1_16BB.0010.d GC Column: HP Plot ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon dioxide	1.99	Assign Peak	LXF2	01/17/24 03:27

Lab Sample ID: 410-157387-5 Client Sample ID: 16IW03-240110

Date Analyzed: 01/16/24 14:31 Lab File ID: 312024_1_16BB.0012.d GC Column: HP Plot ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon dioxide	1.99	Assign Peak	LXF2	01/17/24 03:27

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-157387-1

SDG No.:

Instrument ID: 19506-B Analysis Batch Number: 463730

Lab Sample ID: 410-157387-6 Client Sample ID: 16IW03-240110-FD

Date Analyzed: 01/16/24 14:47 Lab File ID: 312024_1_16BB.0014.d GC Column: HP Plot ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon dioxide	1.98	Assign Peak	LXF2	01/17/24 03:27

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-157387-1

SDG No.:

Instrument ID: 19506-B Analysis Batch Number: 464516

Lab Sample ID: MB 410-464737/1-A Client Sample ID:

Date Analyzed: 01/18/24 10:00 Lab File ID: 312024_1_18BB.0003.d GC Column: HP Plot ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon dioxide	2.05	Peak not integrated	LXF2	01/19/24 03:53

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-157387-1

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.: 410-157387-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 312024_1_16BB.0004.d

Lab ID: LCS 410-463746/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Carbon dioxide	35800	36600	102	80-122	

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-157387-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 312024_1_18BB.0004.d

Lab ID: LCS 410-464737/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Carbon dioxide	35800	38200	107	80-122	

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-157387-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 312024_1_16BB.0005.d

Lab ID: LCSD 410-463746/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Carbon dioxide	35800	37900	106	4	20	80-122	

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-157387-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 312024_1_18BB.0005.d

Lab ID: LCSD 410-464737/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Carbon dioxide	35800	38900	109	2	20	80-122	

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.: 410-157387-1

SDG No.:

Lab File ID: 312024_1_16BB.0003.d Lab Sample ID: MB 410-463746/1-A

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: 19506-B Date Analyzed: 01/16/2024 12:15

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 410-463746/2-A	312024_1_16 BB.0004.d	01/16/2024 12:22
	LCSD 410-463746/3-A	312024_1_16 BB.0005.d	01/16/2024 12:31
16WW58-240110	410-157387-1	312024_1_16 BB.0008.d	01/16/2024 14:01
16WW57-240110	410-157387-2	312024_1_16 BB.0009.d	01/16/2024 14:08
16IW09-240110	410-157387-3	312024_1_16 BB.0010.d	01/16/2024 14:16
16IW03-240110	410-157387-5	312024_1_16 BB.0012.d	01/16/2024 14:31
16IW03-240110-FD	410-157387-6	312024_1_16 BB.0014.d	01/16/2024 14:47

FORM IV
GC VOA METHOD BLANK SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-157387-1

SDG No.:

Lab File ID: 312024_1_18BB.0003.d Lab Sample ID: MB 410-464737/1-A

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: 19506-B Date Analyzed: 01/18/2024 10:00

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 410-464737/2-A	312024_1_18BB.0004.d	01/18/2024 10:07
	LCSD 410-464737/3-A	312024_1_18BB.0005.d	01/18/2024 10:15
16IW26-240110	410-157387-4	312024_1_18BB.0006.d	01/18/2024 15:40

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-157387-1

SDG No.:

Client Sample ID: 16WW58-240110 Lab Sample ID: 410-157387-1

Matrix: Water Lab File ID: 312024_1_16BB.0008.d

Analysis Method: RSK-175 Date Collected: 01/10/2024 07:05

Sample wt/vol: 5(mL) Date Analyzed: 01/16/2024 14:01

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP Plot ID: 0.53(mm)

Purge Volume: Heated Purge: (Y/N) N pH: 6.0

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 463730 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	DL
124-38-9	Carbon dioxide	270000	M	12000	5600

Report Date: 17-Jan-2024 03:28:35 Chrom Revision: 2.3 30-Nov-2023 17:25:52

Eurofins Lancaster Laboratories Environment Testing, LLC

Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20240116-104124.b\312024_1_16BB.0008.d				
Lims ID:	410-157387-A-1-A				
Client ID:	16WW58-240110				
Sample Type:	Client				
Inject. Date:	16-Jan-2024 14:01:00	ALS Bottle#:	0	Worklist Smp#:	8
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	410-0104124-008				
Operator ID:		Instrument ID:	19506-B		
Method:	\\chromfs\Lancaster\ChromData\19506-B\20240116-104124.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	17-Jan-2024 03:28:33	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				
First Level Reviewer: LXF2		Date:	17-Jan-2024 03:27:20		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
1 Carbon dioxide	1.977	2.039	-0.062	883666946H	268582	Ma

QC Flag Legend

Processing Flags

H - Response Measured by Height

Review Flags

M - Manually Integrated

a - User Assigned ID

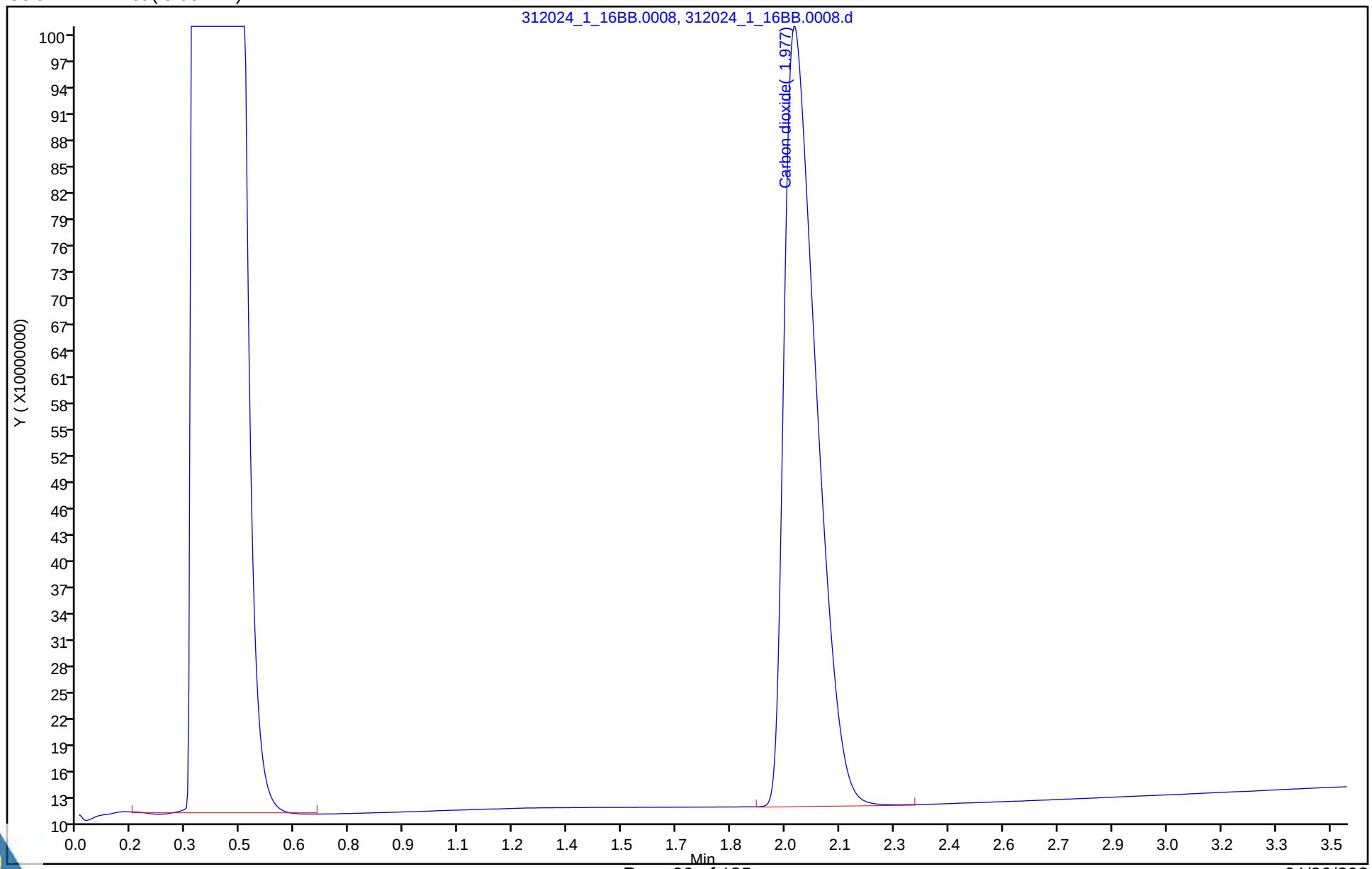
Report Date: 17-Jan-2024 03:28:35 Chrom Revision: 2.3 30-Nov-2023 17:25:52

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20240116-104124.b\312024_1_16BB.0008.d

Injection Date:	16-Jan-2024 14:01:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	410-157387-A-1-A	Lab Sample ID:	410-157387-1	Worklist Smp#:	8
Client ID:	16WW58-240110				
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: 17-Jan-2024 03:28:35 Chrom Revision: 2.3 30-Nov-2023 17:25:52 Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

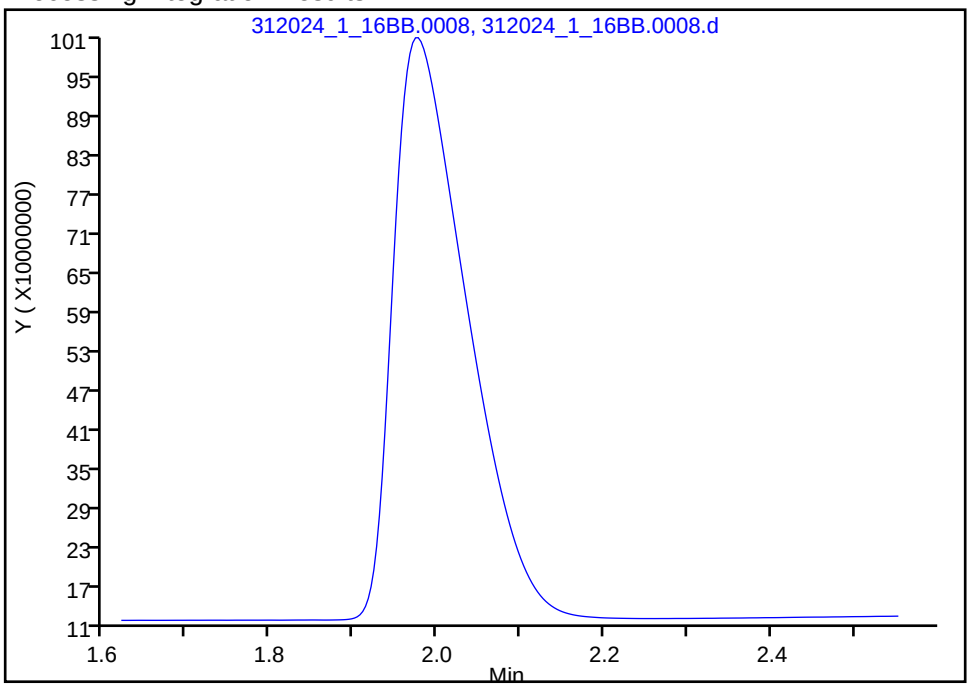
Data File:	\\chromfs\Lancaster\ChromData\19506-B\20240116-104124.b\312024_1_16BB.0008.d		
Injection Date:	16-Jan-2024 14:01:00	Instrument ID:	19506-B
Lims ID:	410-157387-A-1-A	Lab Sample ID:	410-157387-1
Client ID:	16WW58-240110		
Operator ID:		ALS Bottle#:	0 Worklist Smp#: 8
Purge Vol:	1.000 mL	Dil. Factor:	1.0000
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2
Column:	HP Plot (0.00 mm)	Detector	0FIDA

1 Carbon dioxide, CAS: 124-38-9

Signal: 1

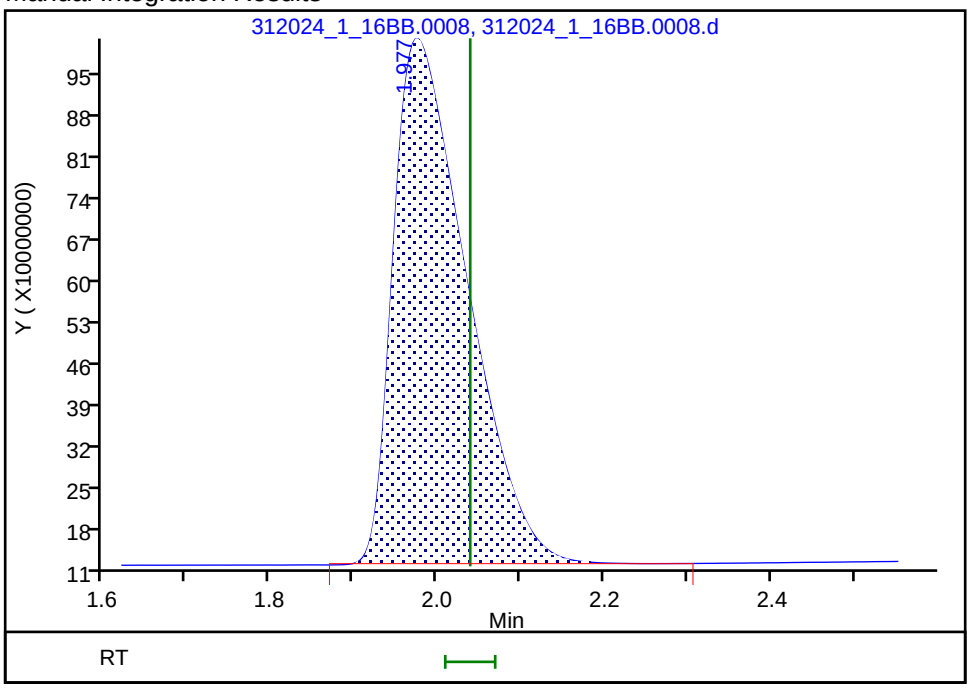
Not Detected
Expected RT: 2.04

Processing Integration Results



Manual Integration Results

RT: 1.98
Height: 883666946
Amount: 268582
Amount Units: ug/l



Reviewer: LXF2, 17-Jan-2024 03:27:19 -05:00:00 (UTC)
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Assign Peak

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-157387-1

SDG No.:

Client Sample ID: 16WW57-240110 Lab Sample ID: 410-157387-2

Matrix: Water Lab File ID: 312024_1_16BB.0009.d

Analysis Method: RSK-175 Date Collected: 01/10/2024 08:05

Sample wt/vol: 5(mL) Date Analyzed: 01/16/2024 14:08

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP Plot ID: 0.53(mm)

Purge Volume: Heated Purge: (Y/N) N pH: 6.0

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 463730 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	DL
124-38-9	Carbon dioxide	220000	M	12000	5600

Report Date: 17-Jan-2024 03:28:35 Chrom Revision: 2.3 30-Nov-2023 17:25:52

Eurofins Lancaster Laboratories Environment Testing, LLC

Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20240116-104124.b\312024_1_16BB.0009.d				
Lims ID:	410-157387-A-2-A				
Client ID:	16WW57-240110				
Sample Type:	Client				
Inject. Date:	16-Jan-2024 14:08:00	ALS Bottle#:	0	Worklist Smp#:	9
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	410-0104124-009				
Operator ID:		Instrument ID:	19506-B		
Method:	\\chromfs\Lancaster\ChromData\19506-B\20240116-104124.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	17-Jan-2024 03:28:33	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				
First Level Reviewer: LXF2		Date:	17-Jan-2024 03:27:27		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
1 Carbon dioxide	1.987	2.039	-0.052	725304611H	220449	Ma

QC Flag Legend

Processing Flags

H - Response Measured by Height

Review Flags

M - Manually Integrated

a - User Assigned ID

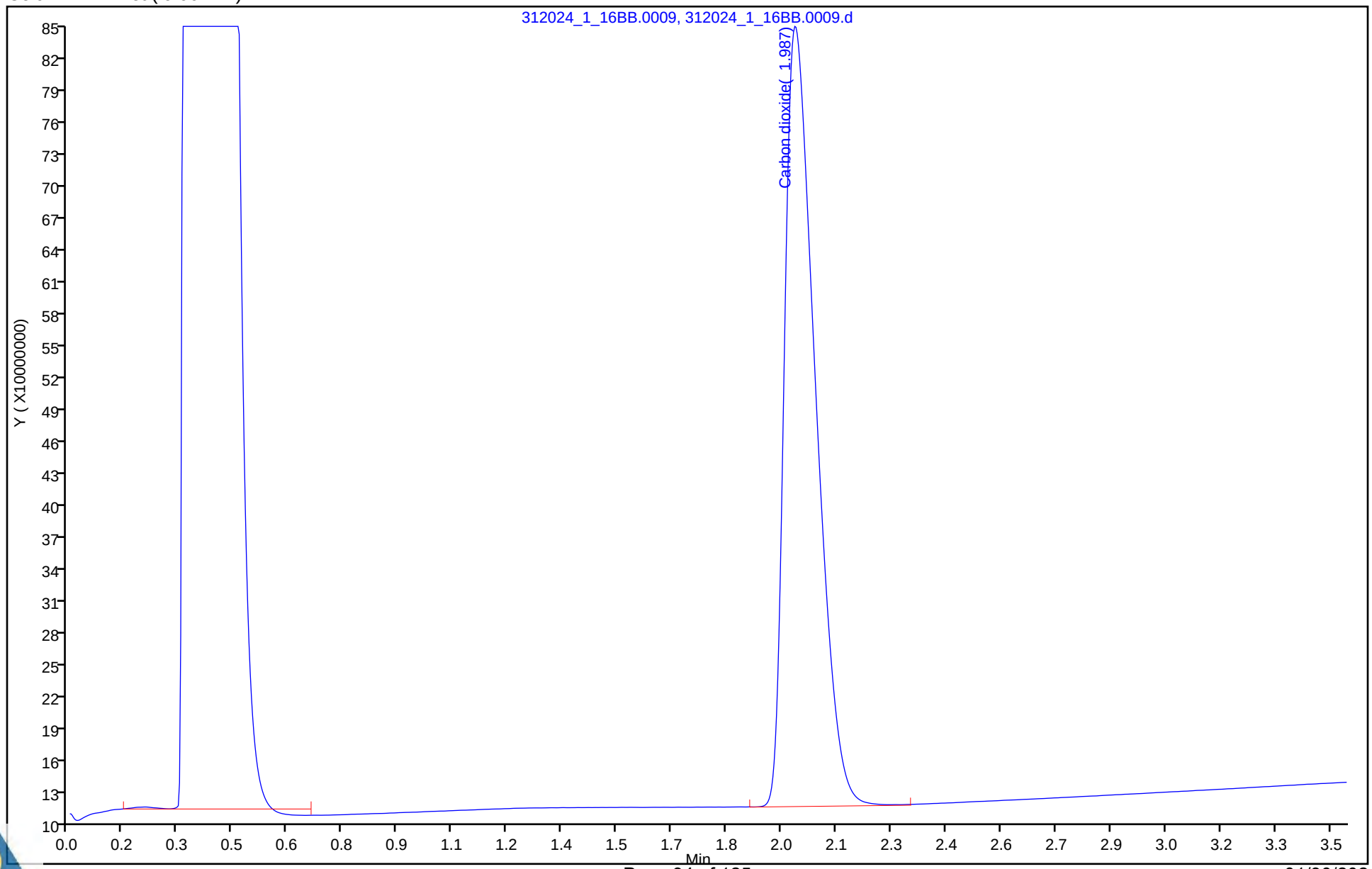
Report Date: 17-Jan-2024 03:28:35 Chrom Revision: 2.3 30-Nov-2023 17:25:52

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20240116-104124.b\312024_1_16BB.0009.d

Injection Date:	16-Jan-2024 14:08:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	410-157387-A-2-A	Lab Sample ID:	410-157387-2	Worklist Smp#:	9
Client ID:	16WW57-240110				
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: 17-Jan-2024 03:28:35

Chrom Revision: 2.3 30-Nov-2023 17:25:52 Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

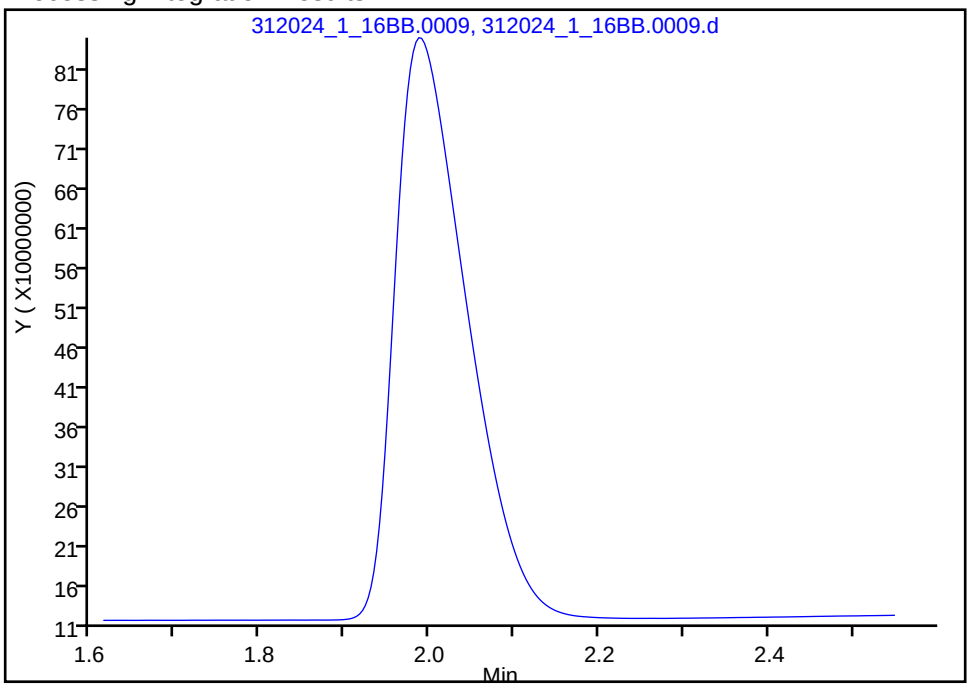
Data File:	\\chromfs\Lancaster\ChromData\19506-B\20240116-104124.b\312024_1_16BB.0009.d		
Injection Date:	16-Jan-2024 14:08:00	Instrument ID:	19506-B
Lims ID:	410-157387-A-2-A	Lab Sample ID:	410-157387-2
Client ID:	16WW57-240110		
Operator ID:		ALS Bottle#:	0 Worklist Smp#: 9
Purge Vol:	1.000 mL	Dil. 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

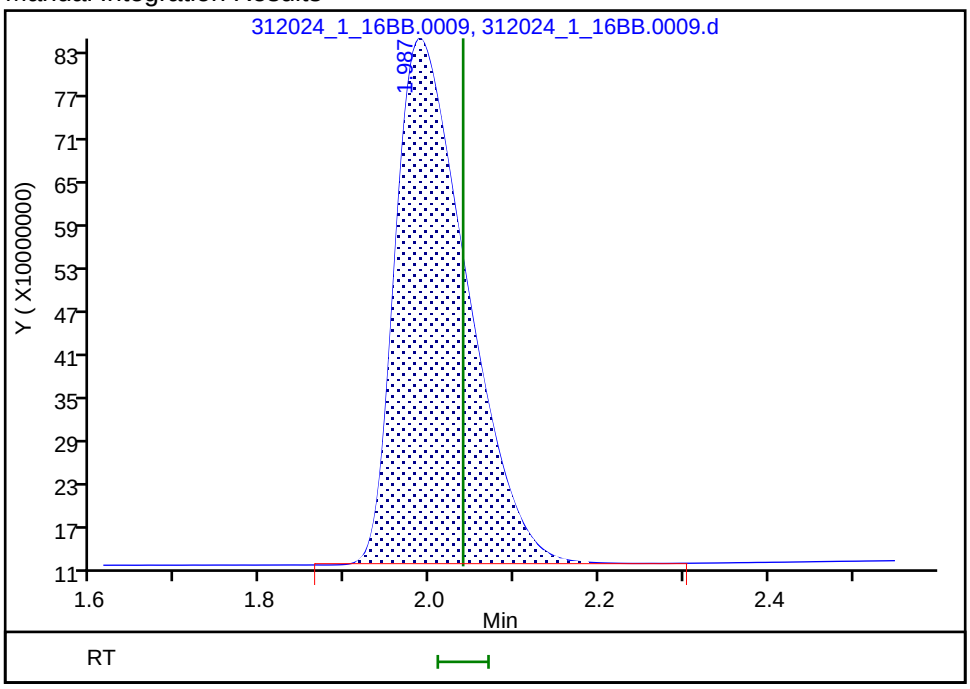
Not Detected
Expected RT: 2.04

Processing Integration Results



Manual Integration Results

RT: 1.99
Height: 725304611
Amount: 220449
Amount Units: ug/l



Reviewer: LXF2, 17-Jan-2024 03:27:26 -05:00:00 (UTC)
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Assign Peak

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-157387-1

SDG No.:

Client Sample ID: 16IW09-240110 Lab Sample ID: 410-157387-3

Matrix: Water Lab File ID: 312024_1_16BB.0010.d

Analysis Method: RSK-175 Date Collected: 01/10/2024 09:00

Sample wt/vol: 5(mL) Date Analyzed: 01/16/2024 14:16

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP Plot ID: 0.53(mm)

Purge Volume: Heated Purge: (Y/N) N pH: 6.0

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 463730 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	DL
124-38-9	Carbon dioxide	210000	M	12000	5600

Report Date: 17-Jan-2024 03:28:35 Chrom Revision: 2.3 30-Nov-2023 17:25:52

Eurofins Lancaster Laboratories Environment Testing, LLC

Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20240116-104124.b\312024_1_16BB.0010.d				
Lims ID:	410-157387-A-3-A				
Client ID:	16IW09-240110				
Sample Type:	Client				
Inject. Date:	16-Jan-2024 14:16:00	ALS Bottle#:	0	Worklist Smp#:	10
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	410-0104124-010				
Operator ID:		Instrument ID:	19506-B		
Method:	\\chromfs\Lancaster\ChromData\19506-B\20240116-104124.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	17-Jan-2024 03:28:33	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				
First Level Reviewer: LXF2		Date:	17-Jan-2024 03:27:34		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
1 Carbon dioxide	1.990	2.039	-0.049	683135567H	207632	Ma

QC Flag Legend

Processing Flags

H - Response Measured by Height

Review Flags

M - Manually Integrated

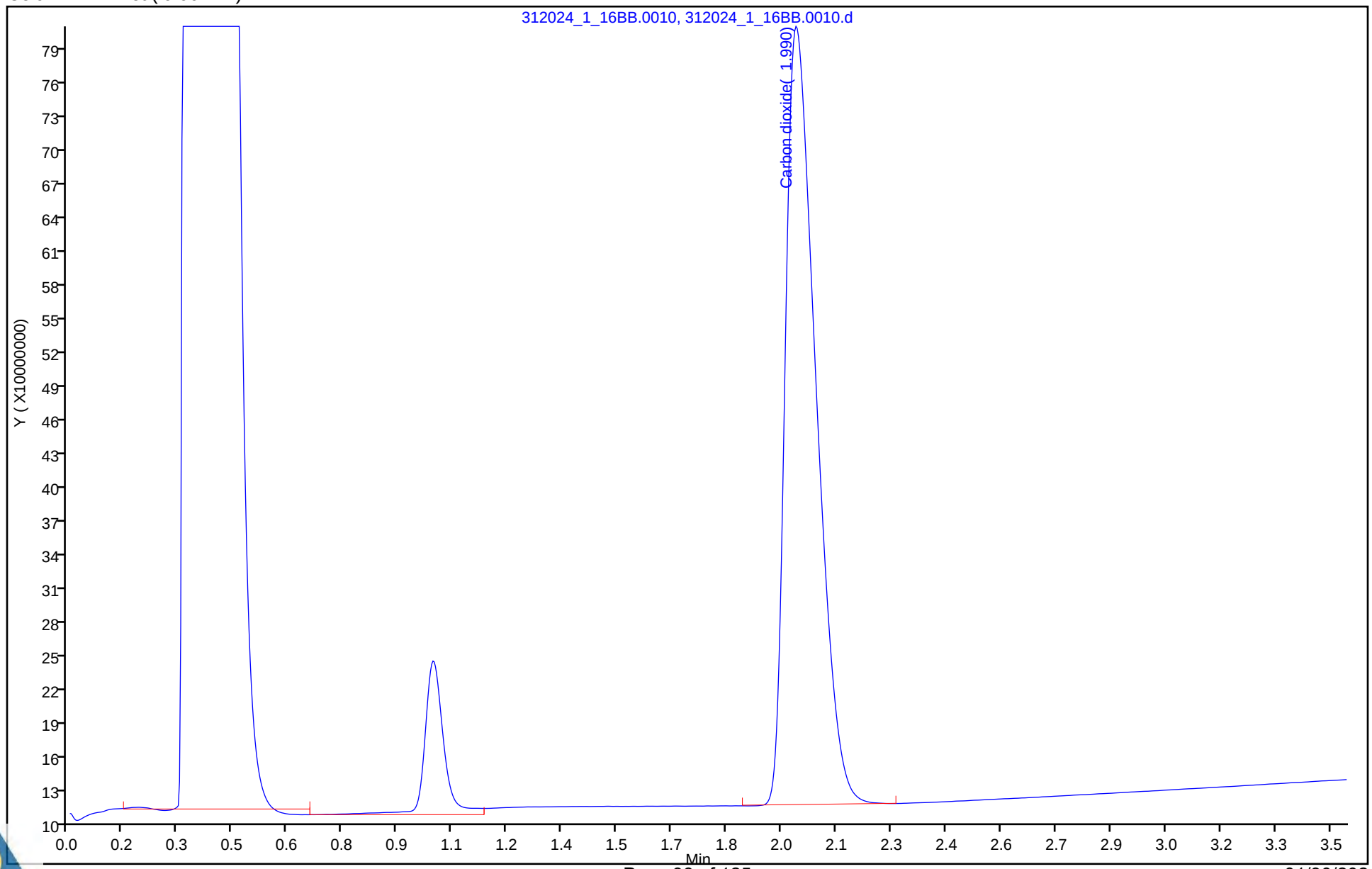
a - User Assigned ID

Report Date: 17-Jan-2024 03:28:35 Chrom Revision: 2.3 30-Nov-2023 17:25:52

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20240116-104124.b\312024_1_16BB.0010.d				
Injection Date:	16-Jan-2024 14:16:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	410-157387-A-3-A	Lab Sample ID:	410-157387-3	Worklist Smp#:	10
Client ID:	16IW09-240110				
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: 17-Jan-2024 03:28:35

Chrom Revision: 2.3 30-Nov-2023 17:25:52 Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

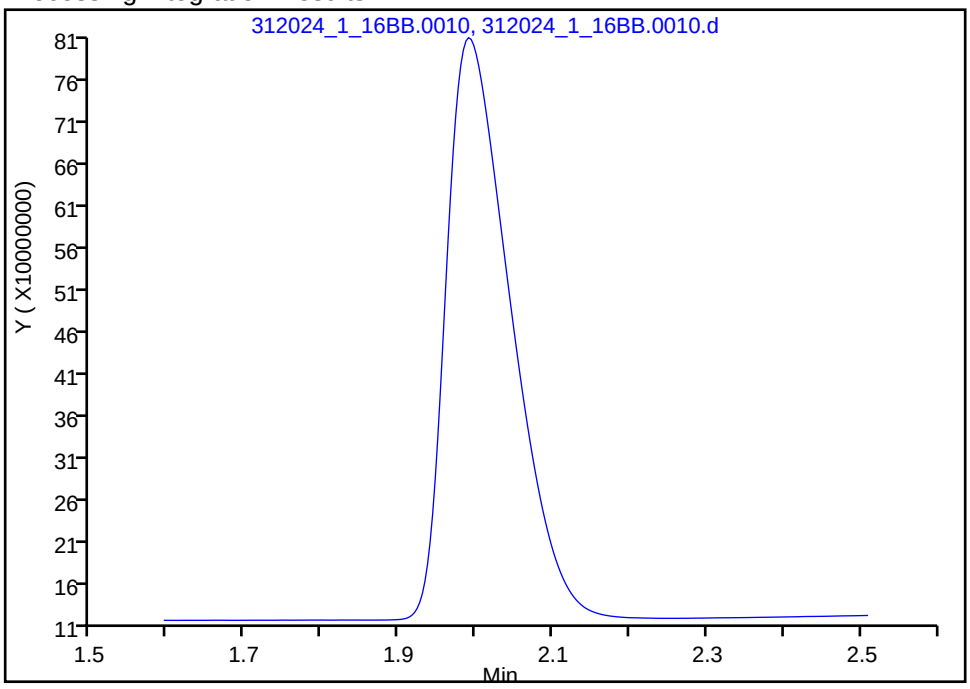
Data File:	\\chromfs\Lancaster\ChromData\19506-B\20240116-104124.b\312024_1_16BB.0010.d		
Injection Date:	16-Jan-2024 14:16:00	Instrument ID:	19506-B
Lims ID:	410-157387-A-3-A	Lab Sample ID:	410-157387-3
Client ID:	16IW09-240110		
Operator ID:		ALS Bottle#:	0 Worklist Smp#: 10
Purge Vol:	1.000 mL	Dil. 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

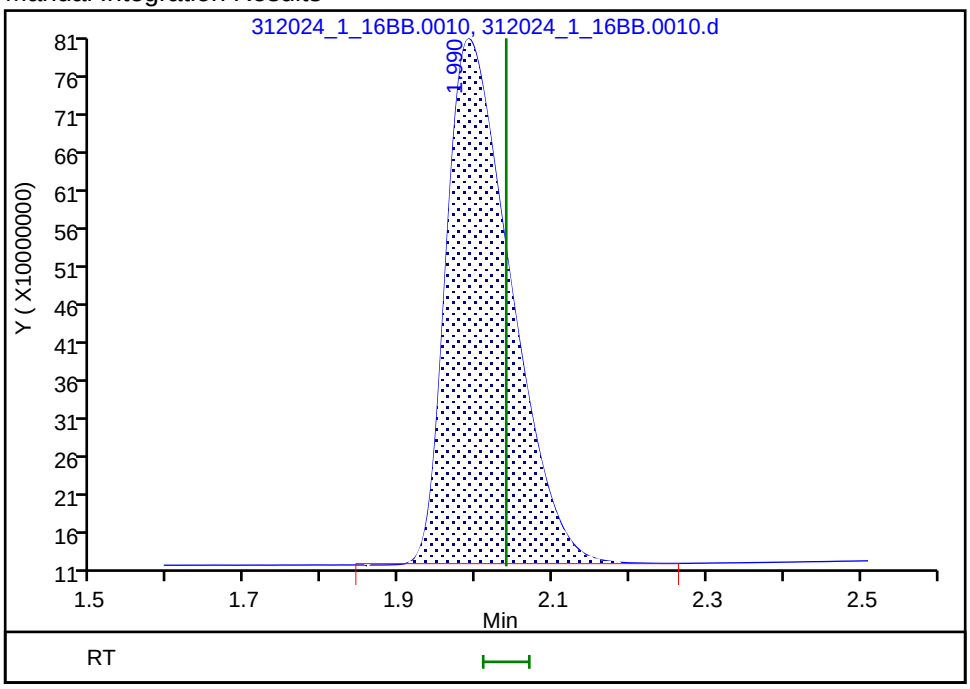
Not Detected
Expected RT: 2.04

Processing Integration Results



Manual Integration Results

RT: 1.99
Height: 683135567
Amount: 207632
Amount Units: ug/l



Reviewer: LXF2, 17-Jan-2024 03:27:33 -05:00:00 (UTC)
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Assign Peak

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-157387-1

SDG No.:

Client Sample ID: 16IW26-240110 Lab Sample ID: 410-157387-4

Matrix: Water Lab File ID: 312024_1_18BB.0006.d

Analysis Method: RSK-175 Date Collected: 01/10/2024 09:50

Sample wt/vol: 5(mL) Date Analyzed: 01/18/2024 15:40

Soil Aliquot Vol: Dilution Factor: 10

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.: 464516 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	DL
124-38-9	Carbon dioxide	760000	D	120000	56000

Report Date: 19-Jan-2024 03:53:39 Chrom Revision: 2.3 18-Jan-2024 13:39:22

Eurofins Lancaster Laboratories Environment Testing, LLC

Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20240118-104302.b\312024_1_18BB.0006.d				
Lims ID:	410-157387-B-4-A DL				
Client ID:	16IW26-240110				
Sample Type:	Client				
Inject. Date:	18-Jan-2024 15:40:00	ALS Bottle#:	0	Worklist Smp#:	6
Purge Vol:	1.000 mL	Dil. Factor:	10.0000		
Sample Info:					
Misc. Info.:	410-0104302-006				
Operator ID:		Instrument ID:	19506-B		
Method:	\\chromfs\Lancaster\ChromData\19506-B\20240118-104302.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	19-Jan-2024 03:53:39	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	2.035	2.044	-0.009	250654835	76184	H

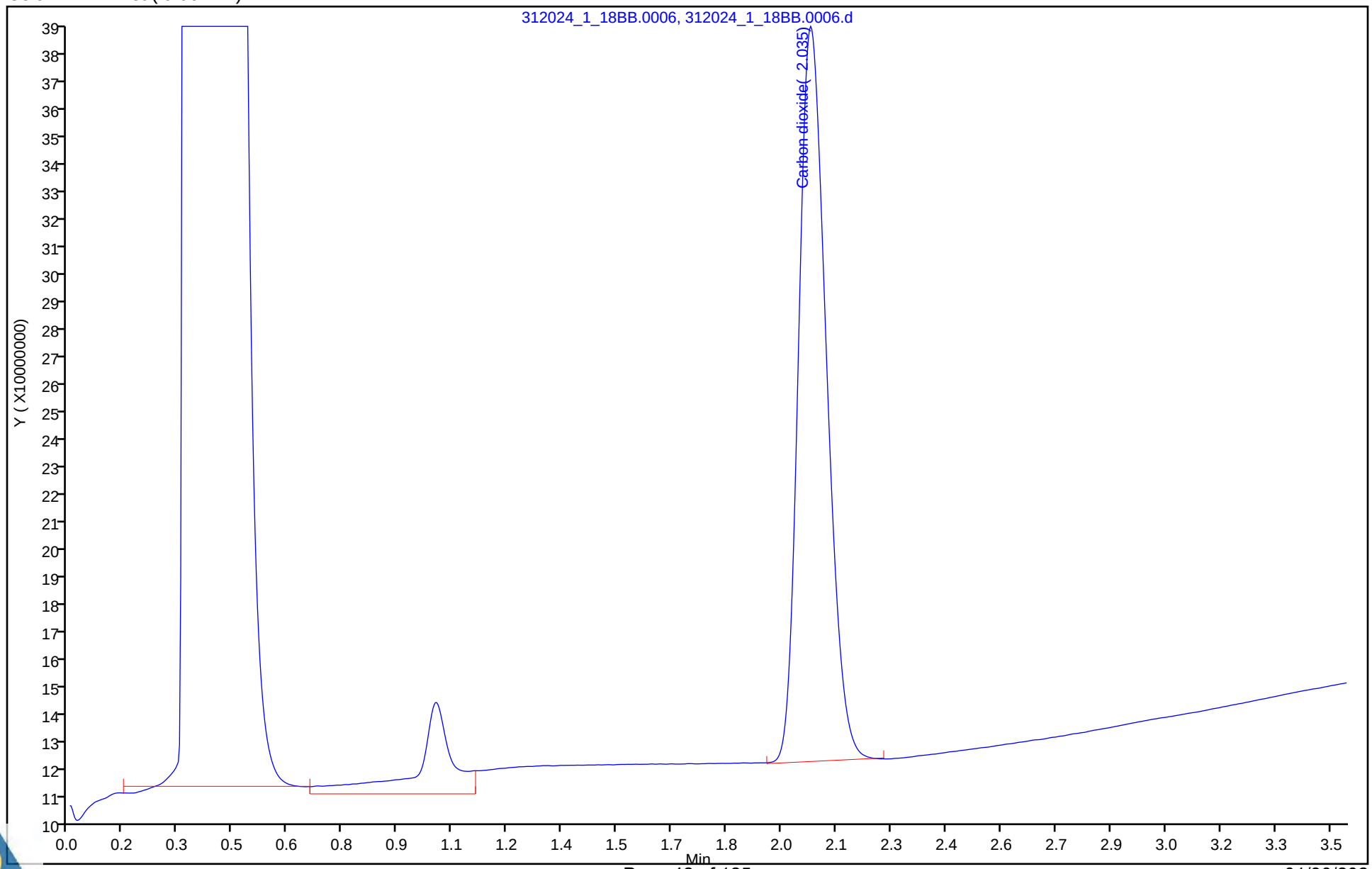
Report Date: 19-Jan-2024 03:53:39 Chrom Revision: 2.3 18-Jan-2024 13:39:22

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20240118-104302.b\312024_1_18BB.0006.d

Injection Date:	18-Jan-2024 15:40:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	410-157387-B-4-A DL	Lab Sample ID:	410-157387-4	Worklist Smp#:	6
Client ID:	16IW26-240110				
Purge Vol:	1.000 mL	Dil. Factor:	10.0000	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.: 410-157387-1

SDG No.:

Client Sample ID: 16IW03-240110 Lab Sample ID: 410-157387-5

Matrix: Water Lab File ID: 312024_1_16BB.0012.d

Analysis Method: RSK-175 Date Collected: 01/10/2024 12:45

Sample wt/vol: 5(mL) Date Analyzed: 01/16/2024 14:31

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP Plot ID: 0.53(mm)

Purge Volume: Heated Purge: (Y/N) N pH: 6.0

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 463730 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	DL
124-38-9	Carbon dioxide	230000	M	12000	5600

Report Date: 17-Jan-2024 03:28:36 Chrom Revision: 2.3 30-Nov-2023 17:25:52

Eurofins Lancaster Laboratories Environment Testing, LLC

Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20240116-104124.b\312024_1_16BB.0012.d				
Lims ID:	410-157387-A-5-A				
Client ID:	16IW03-240110				
Sample Type:	Client				
Inject. Date:	16-Jan-2024 14:31:00	ALS Bottle#:	0	Worklist Smp#:	12
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	410-0104124-012				
Operator ID:		Instrument ID:	19506-B		
Method:	\\chromfs\Lancaster\ChromData\19506-B\20240116-104124.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	17-Jan-2024 03:28:33	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				
First Level Reviewer: LXF2		Date:	17-Jan-2024 03:27:48		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
1 Carbon dioxide	1.987	2.039	-0.052	741645075H	225416	Ma

QC Flag Legend

Processing Flags

H - Response Measured by Height

Review Flags

M - Manually Integrated

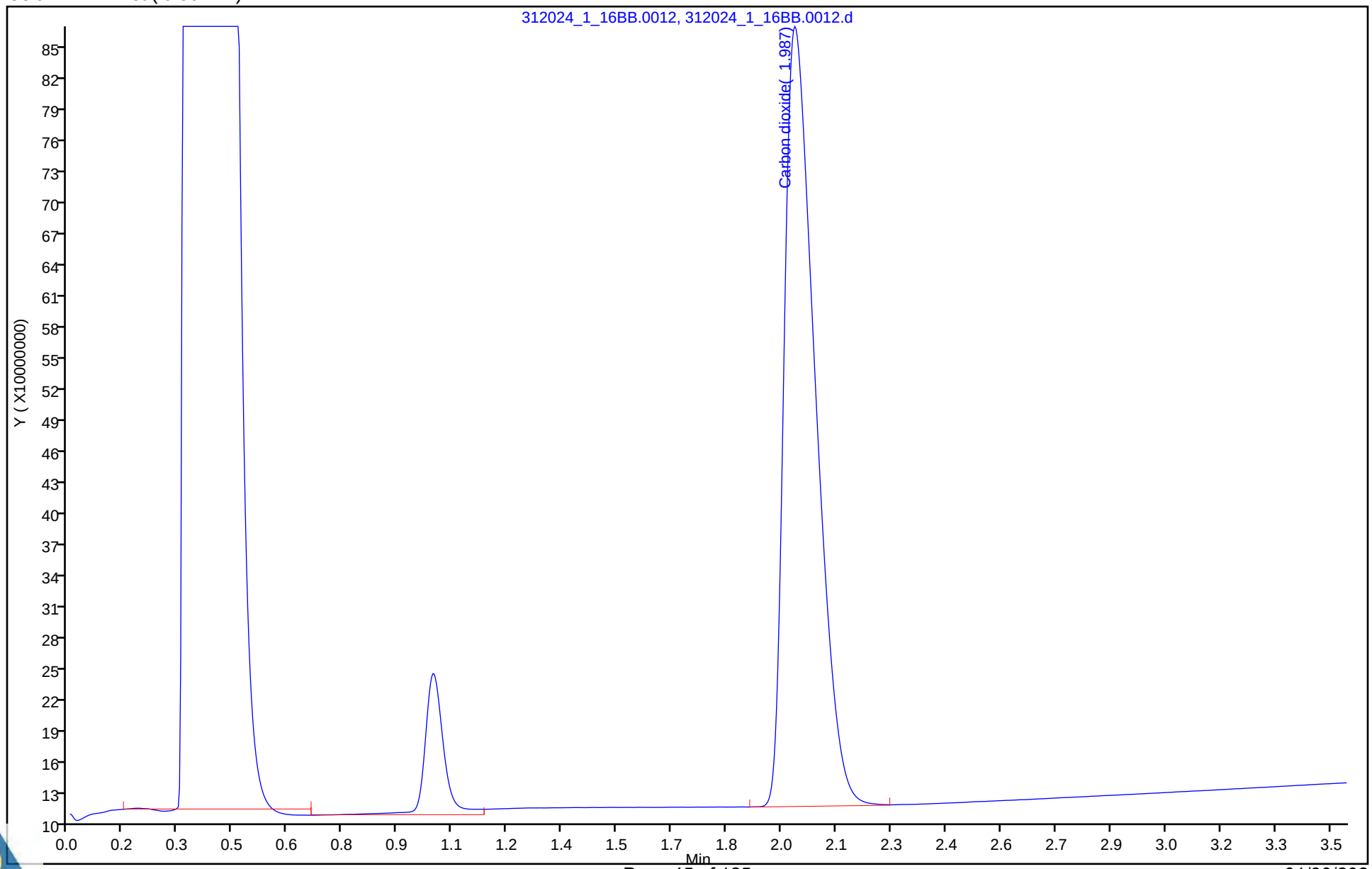
a - User Assigned ID

Report Date: 17-Jan-2024 03:28:36 Chrom Revision: 2.3 30-Nov-2023 17:25:52

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20240116-104124.b\312024_1_16BB.0012.d				
Injection Date:	16-Jan-2024 14:31:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	410-157387-A-5-A	Lab Sample ID:	410-157387-5	Worklist Smp#:	12
Client ID:	16IW03-240110				
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: 17-Jan-2024 03:28:36

Chrom Revision: 2.3 30-Nov-2023 17:25:52 Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

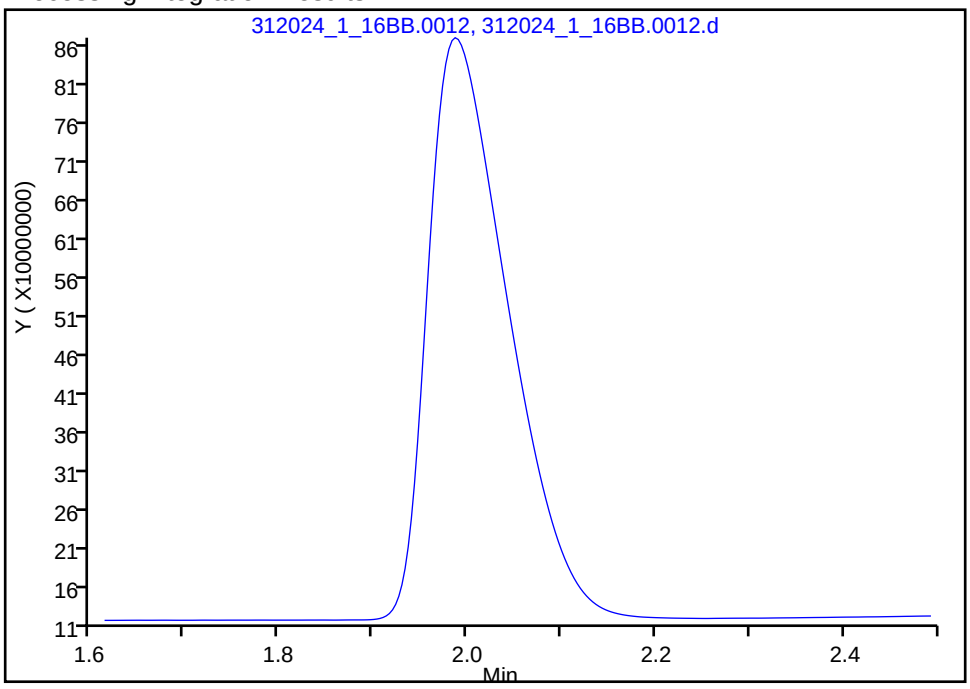
Data File:	\\chromfs\Lancaster\ChromData\19506-B\20240116-104124.b\312024_1_16BB.0012.d		
Injection Date:	16-Jan-2024 14:31:00	Instrument ID:	19506-B
Lims ID:	410-157387-A-5-A	Lab Sample ID:	410-157387-5
Client ID:	16IW03-240110		
Operator ID:		ALS Bottle#:	0 Worklist Smp#: 12
Purge Vol:	1.000 mL	Dil. 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

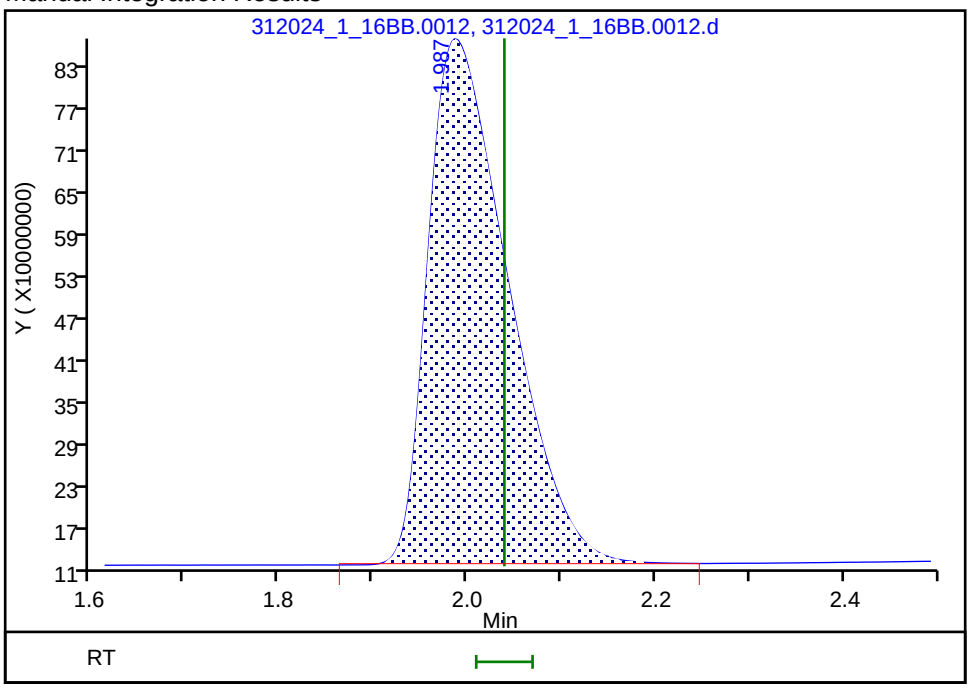
Not Detected
Expected RT: 2.04

Processing Integration Results



Manual Integration Results

RT: 1.99
Height: 741645075
Amount: 225416
Amount Units: ug/l



Reviewer: LXF2, 17-Jan-2024 03:27:47 -05:00:00 (UTC)
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Assign Peak

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-157387-1

SDG No.:

Client Sample ID: 16IW03-240110-FD Lab Sample ID: 410-157387-6

Matrix: Water Lab File ID: 312024_1_16BB.0014.d

Analysis Method: RSK-175 Date Collected: 01/10/2024 12:45

Sample wt/vol: 5(mL) Date Analyzed: 01/16/2024 14:47

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP Plot ID: 0.53(mm)

Purge Volume: Heated Purge: (Y/N) N pH: 6.0

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 463730 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	DL
124-38-9	Carbon dioxide	250000	M	12000	5600

Report Date: 17-Jan-2024 03:28:37 Chrom Revision: 2.3 30-Nov-2023 17:25:52

Eurofins Lancaster Laboratories Environment Testing, LLC

Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20240116-104124.b\312024_1_16BB.0014.d				
Lims ID:	410-157387-A-6-A				
Client ID:	16IW03-240110-FD				
Sample Type:	Client				
Inject. Date:	16-Jan-2024 14:47:00	ALS Bottle#:	0	Worklist Smp#:	14
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	410-0104124-014				
Operator ID:		Instrument ID:	19506-B		
Method:	\\chromfs\Lancaster\ChromData\19506-B\20240116-104124.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	17-Jan-2024 03:28:36	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				
First Level Reviewer: LXF2		Date:	17-Jan-2024 03:27:57		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
1 Carbon dioxide	1.980	2.039	-0.059	834980772H	253784	Ma

QC Flag Legend

Processing Flags

H - Response Measured by Height

Review Flags

M - Manually Integrated

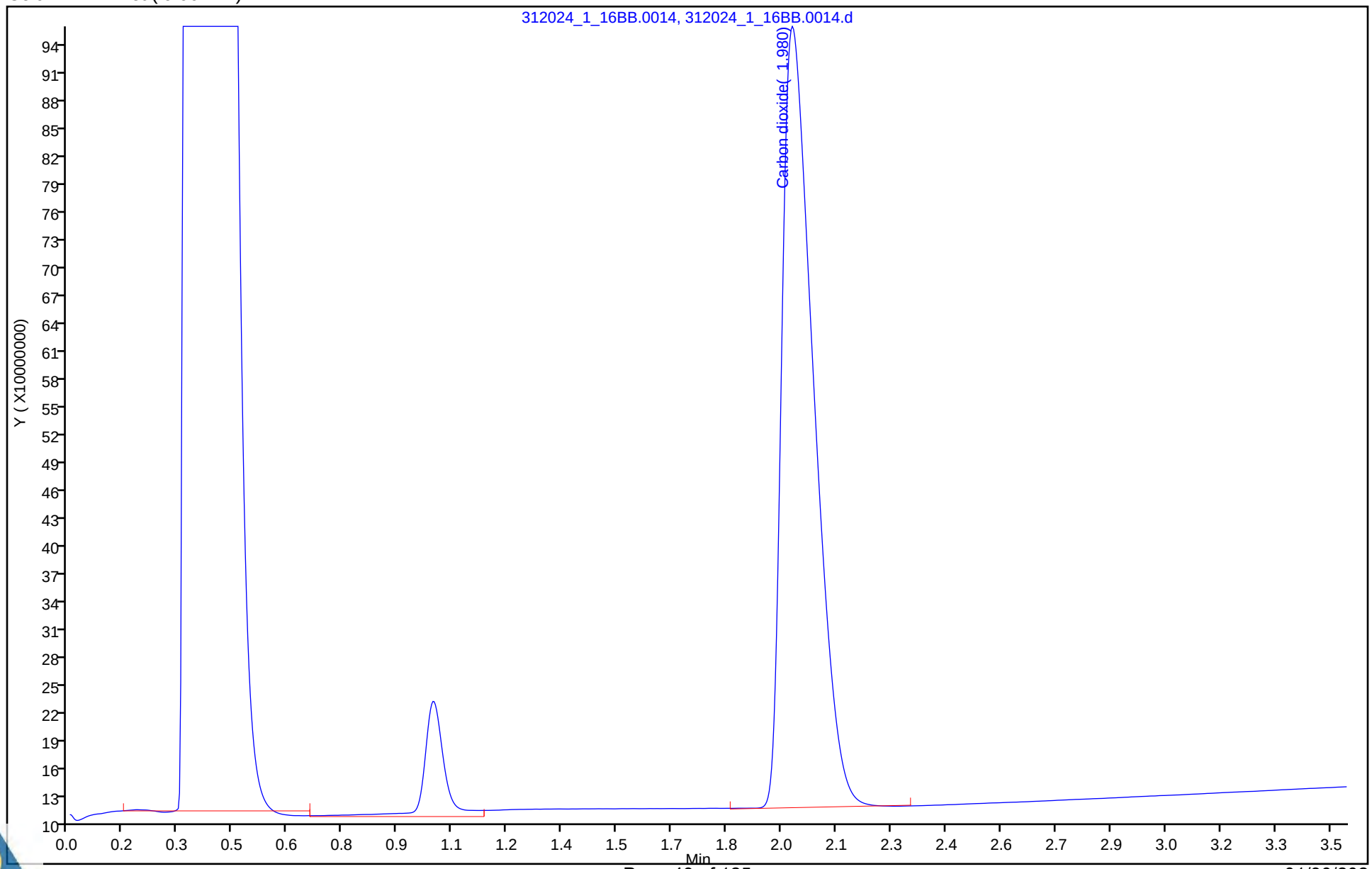
a - User Assigned ID

Report Date: 17-Jan-2024 03:28:37 Chrom Revision: 2.3 30-Nov-2023 17:25:52

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20240116-104124.b\312024_1_16BB.0014.d				
Injection Date:	16-Jan-2024 14:47:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	410-157387-A-6-A	Lab Sample ID:	410-157387-6	Worklist Smp#:	14
Client ID:	16IW03-240110-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)



Report Date: 17-Jan-2024 03:28:37 Chrom Revision: 2.3 30-Nov-2023 17:25:52 Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

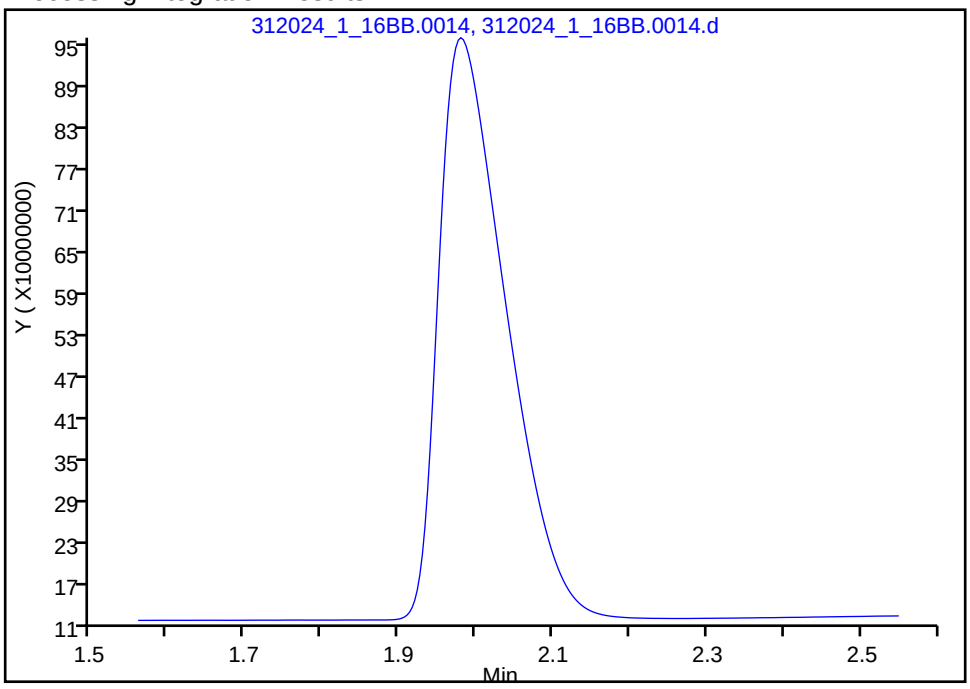
Data File:	\\chromfs\Lancaster\ChromData\19506-B\20240116-104124.b\312024_1_16BB.0014.d		
Injection Date:	16-Jan-2024 14:47:00	Instrument ID:	19506-B
Lims ID:	410-157387-A-6-A	Lab Sample ID:	410-157387-6
Client ID:	16IW03-240110-FD		
Operator ID:		ALS Bottle#:	0 Worklist Smp#: 14
Purge Vol:	1.000 mL	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

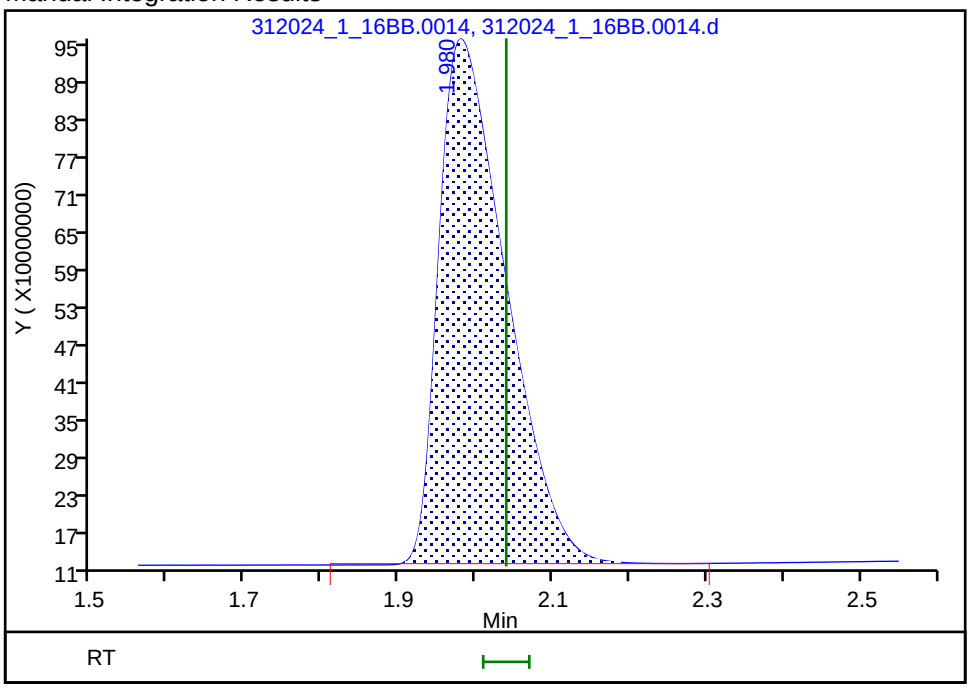
Not Detected
Expected RT: 2.04

Processing Integration Results



Manual Integration Results

RT: 1.98
Height: 834980772
Amount: 253784
Amount Units: ug/l



Reviewer: LXF2, 17-Jan-2024 03:27:56 -05:00:00 (UTC)
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Assign Peak

FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-157387-1 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.: 410-157387-1 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		3290.1221 4				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.: 410-157387-1 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

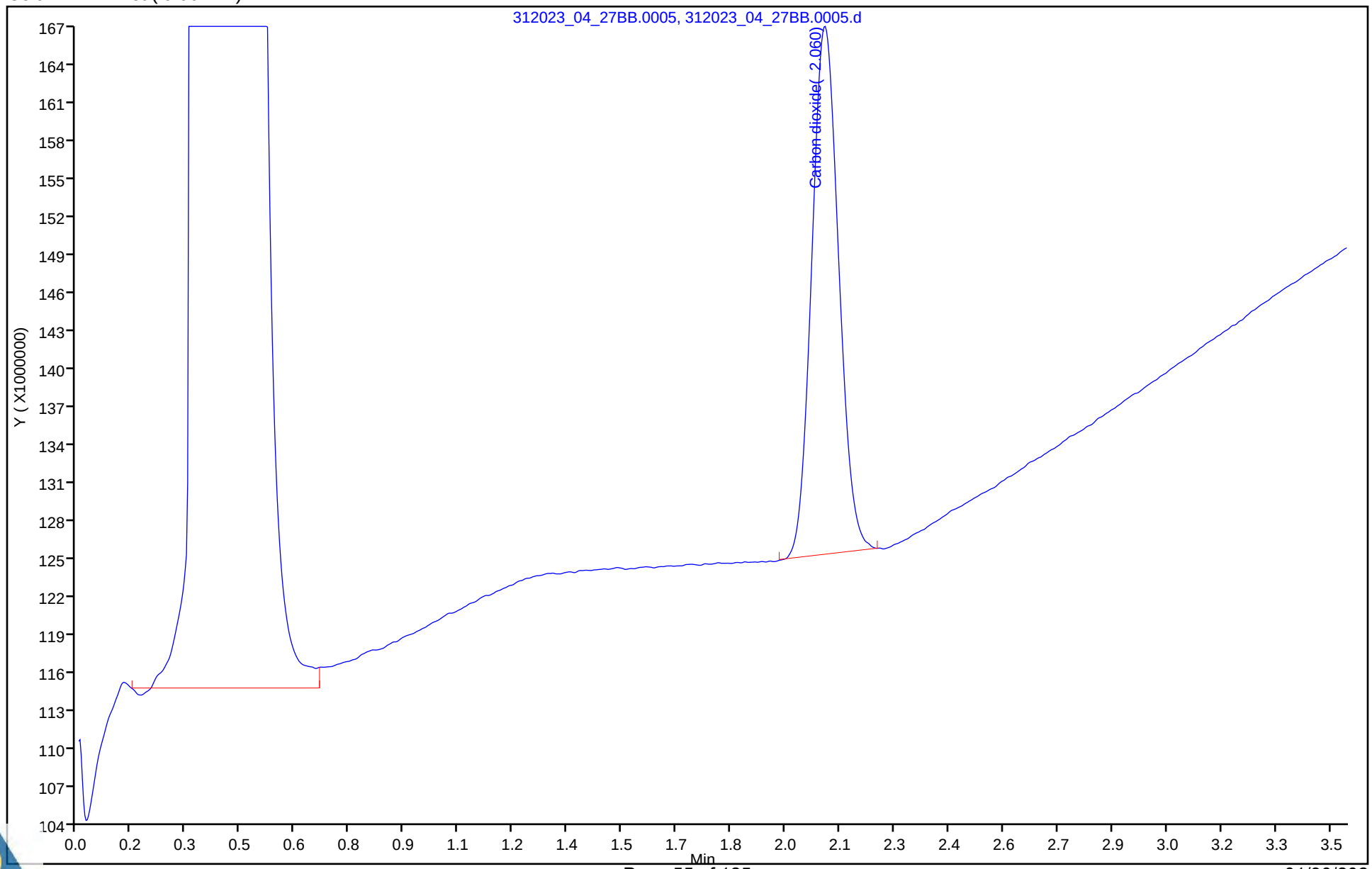
Report Date: 28-Apr-2023 07:19:05 Chrom Revision: 2.3 20-Apr-2023 08:27:48

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

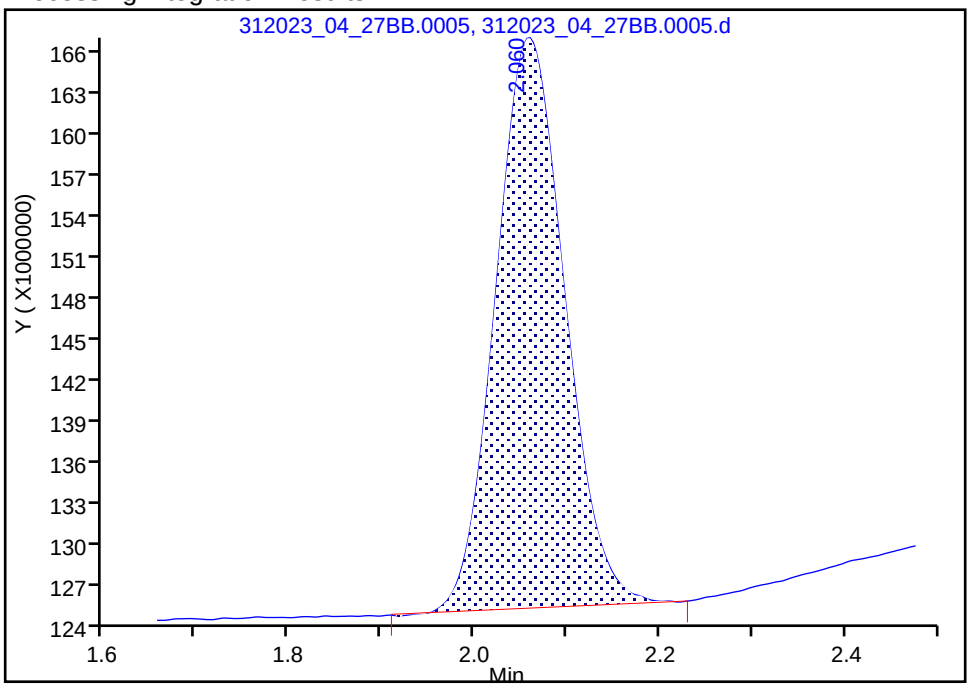
Data File: \\chromfs\Lancaster\ChromData\19506-B\20230427-82537.b\312023_04_27BB.0005.d
Injection Date: 27-Apr-2023 09:59:00 Instrument ID: 19506-B
Lims ID: ic
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 5
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Method: RSK_CO2_19506B Limit Group: GCV - RSK175 CO2
Column: HP Plot (0.00 mm) Detector 0FIDA

1 Carbon dioxide, CAS: 124-38-9

Signal: 1

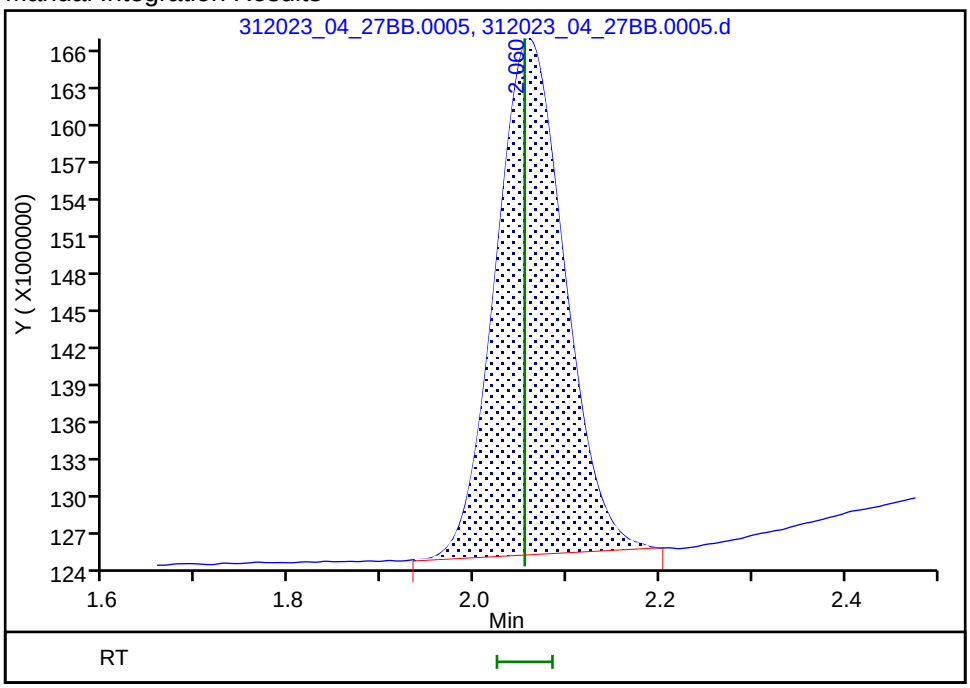
Processing Integration Results

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	70308888	H 21492	21370	

Reagents:

EPH_CO2MS_00004 Amount Added: 60.00 Units: uL

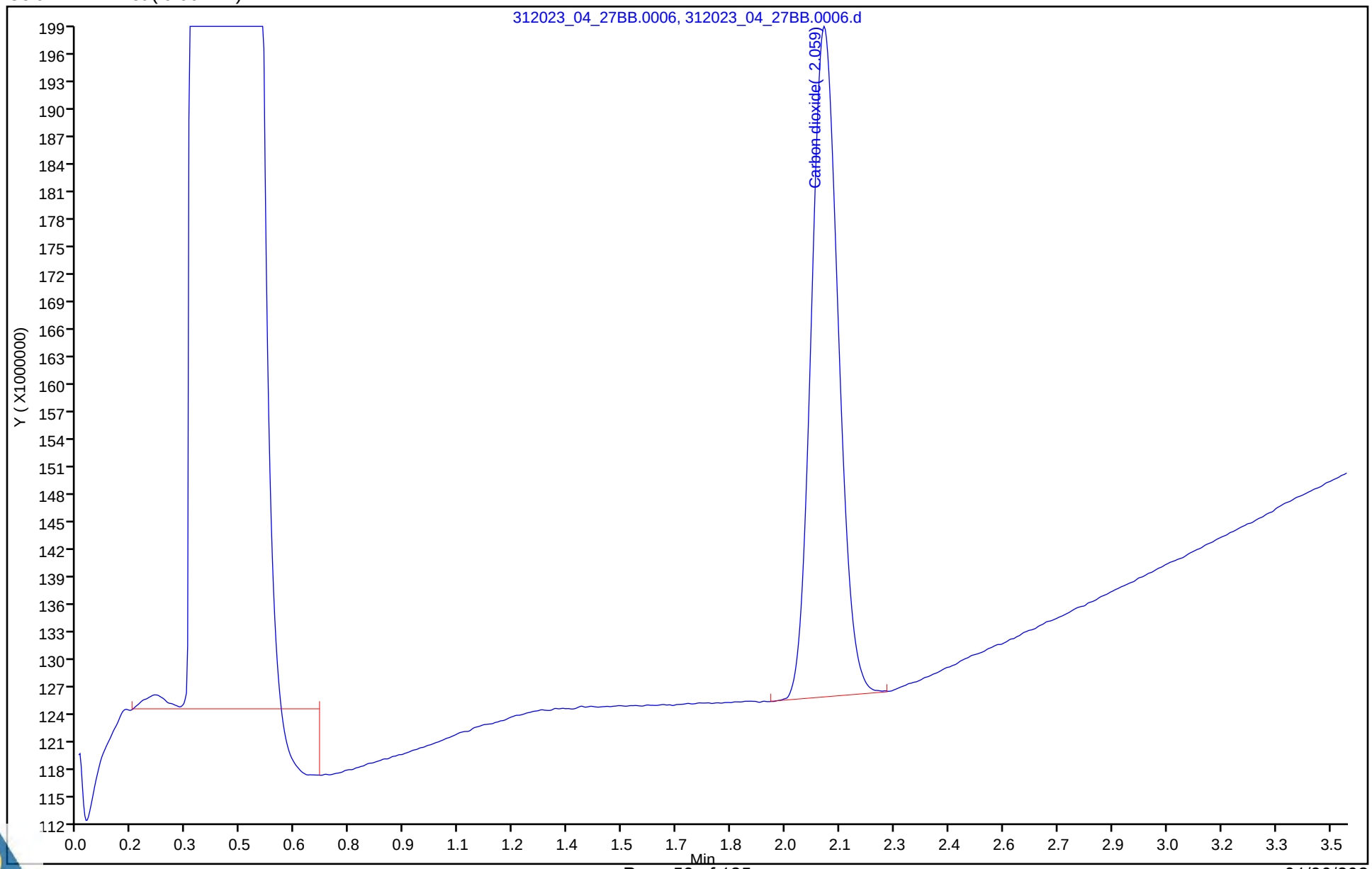
Report Date: 28-Apr-2023 07:19:06 Chrom Revision: 2.3 20-Apr-2023 08:27:48

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:

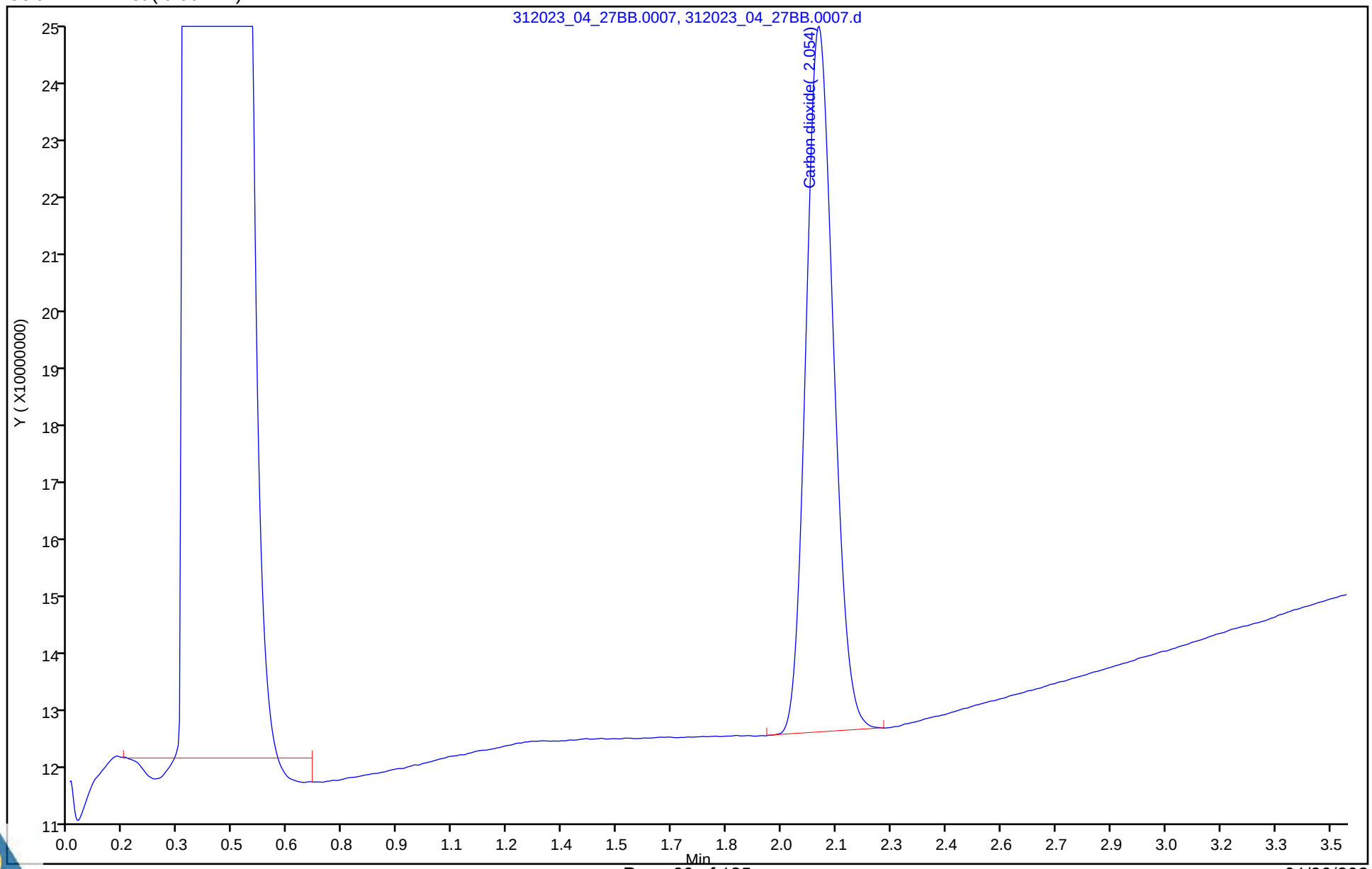
EPH_CO2MS_00004 Amount Added: 100.00 Units: uL

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

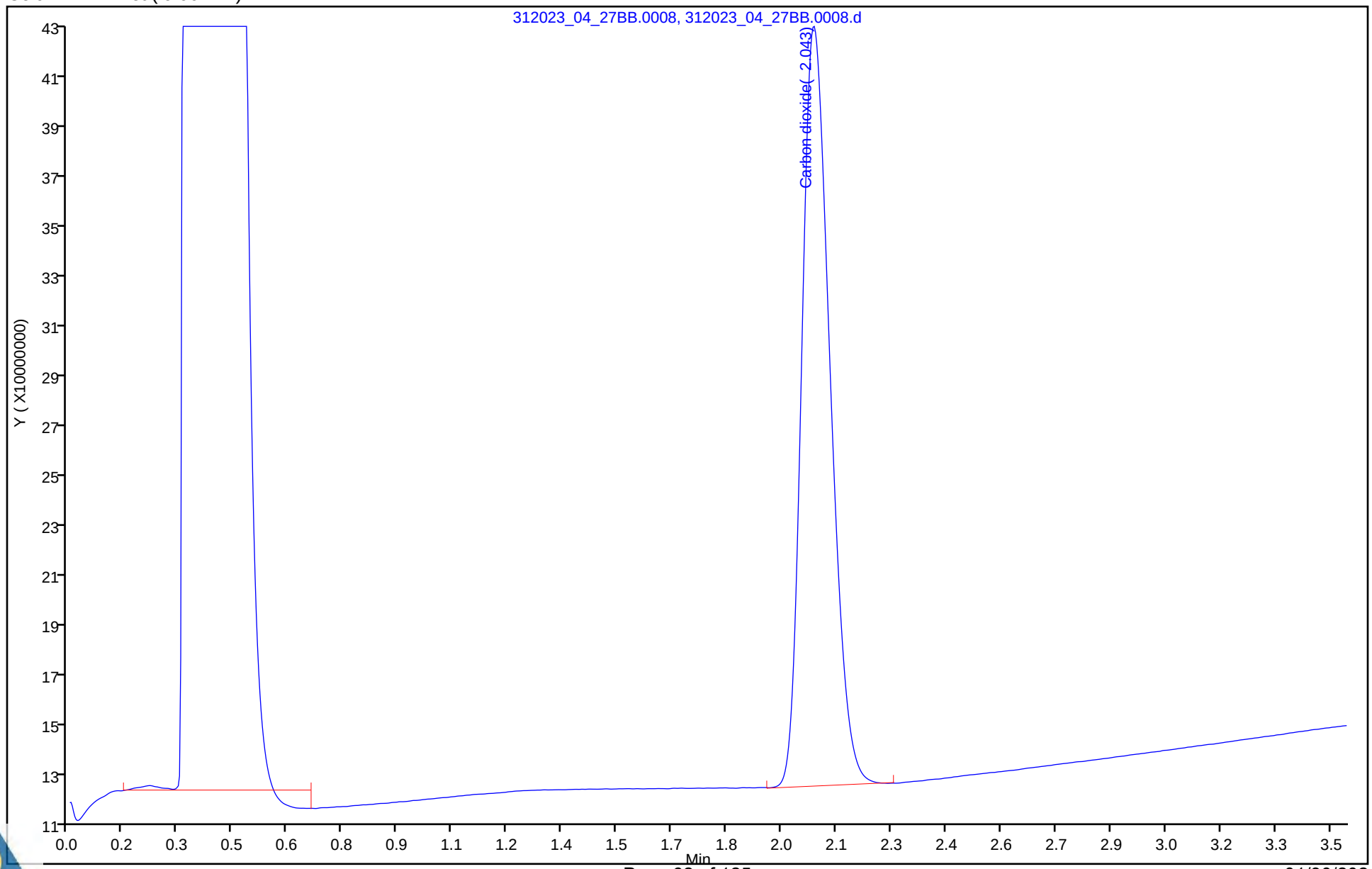
Report Date: 28-Apr-2023 07:19:09 Chrom Revision: 2.3 20-Apr-2023 08:27:48

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

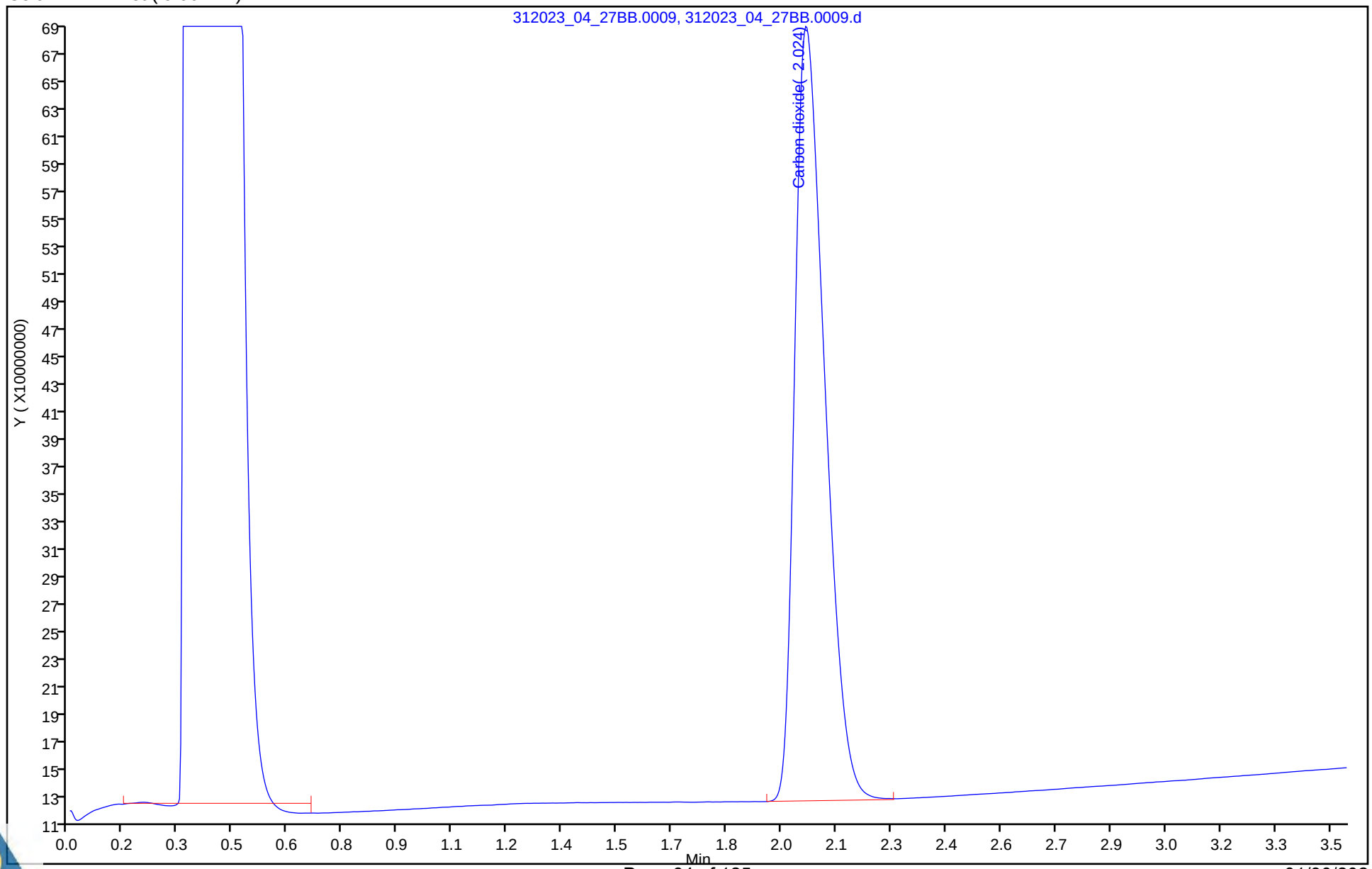
Report Date: 28-Apr-2023 07:19:10 Chrom Revision: 2.3 20-Apr-2023 08:27:48

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

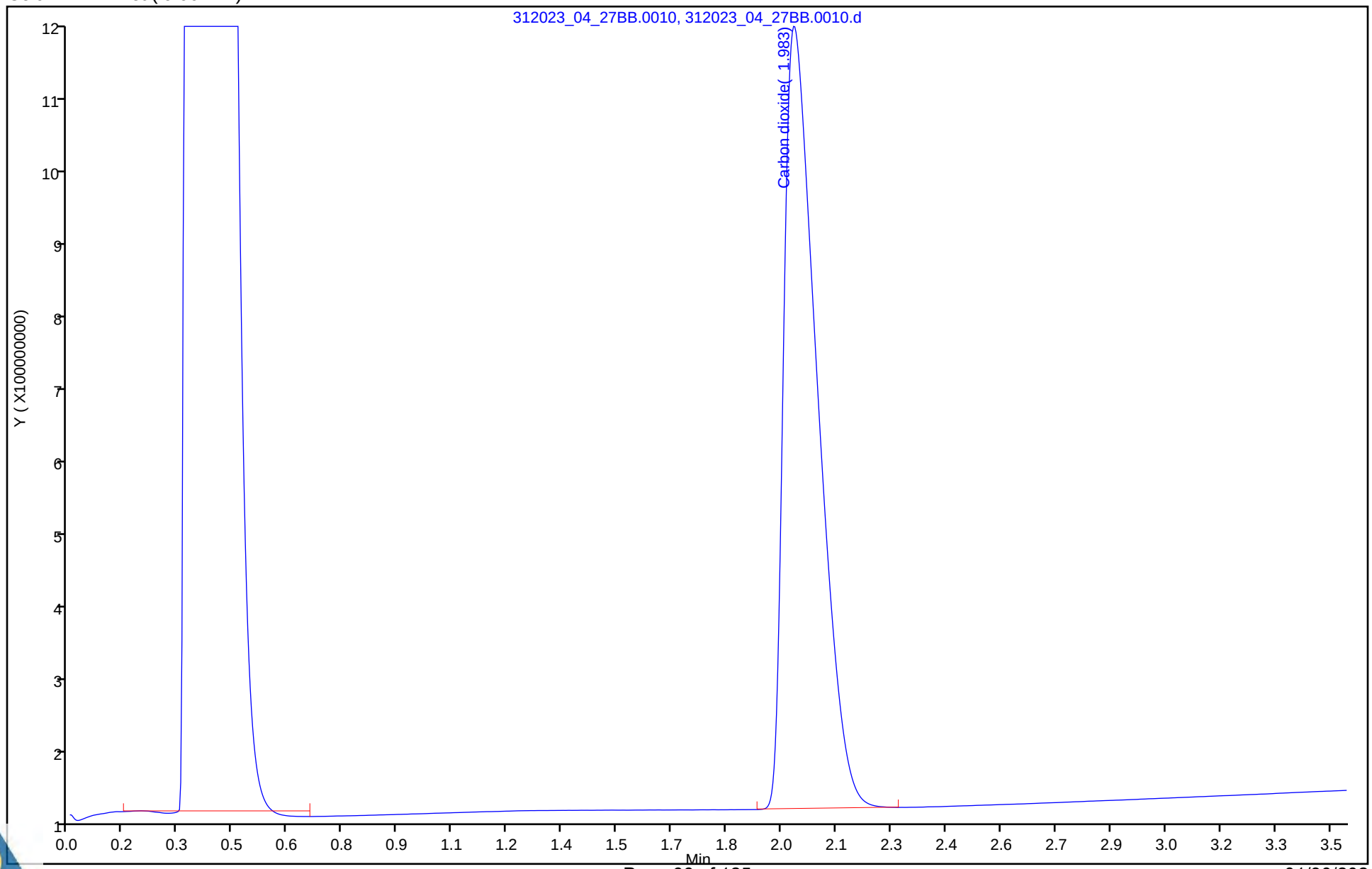
Report Date: 28-Apr-2023 07:19:12 Chrom Revision: 2.3 20-Apr-2023 08:27:48

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

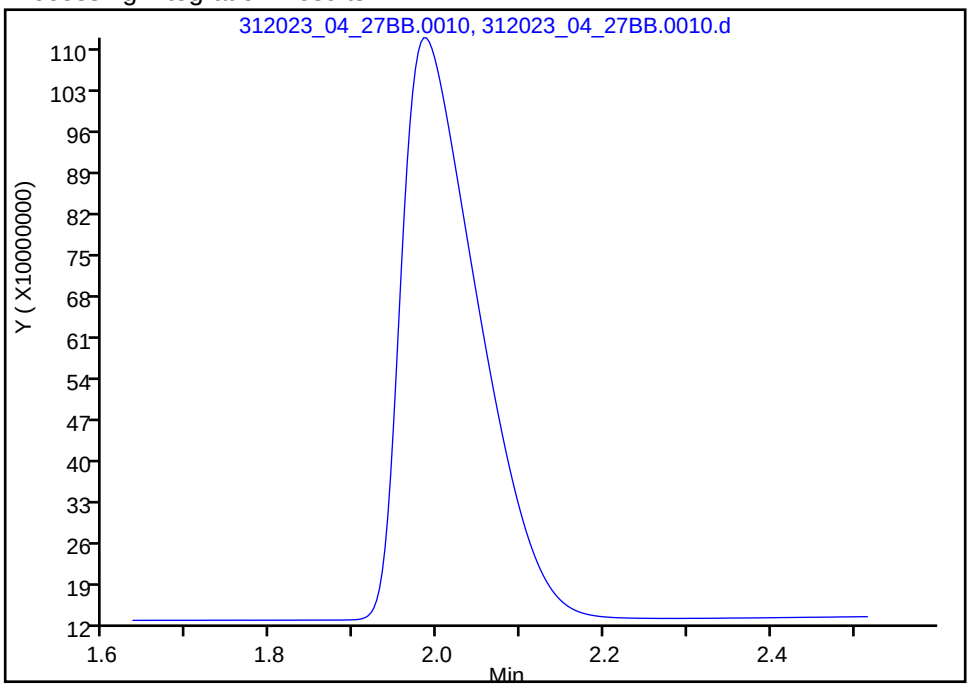
Data File: \\chromfs\Lancaster\ChromData\19506-B\20230427-82537.b\312023_04_27BB.0010.d
Injection Date: 27-Apr-2023 10:37:00 Instrument ID: 19506-B
Lims ID: ic
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 10
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Method: RSK_CO2_19506B Limit Group: GCV - RSK175 CO2
Column: HP Plot (0.00 mm) Detector 0FIDA

1 Carbon dioxide, CAS: 124-38-9

Signal: 1

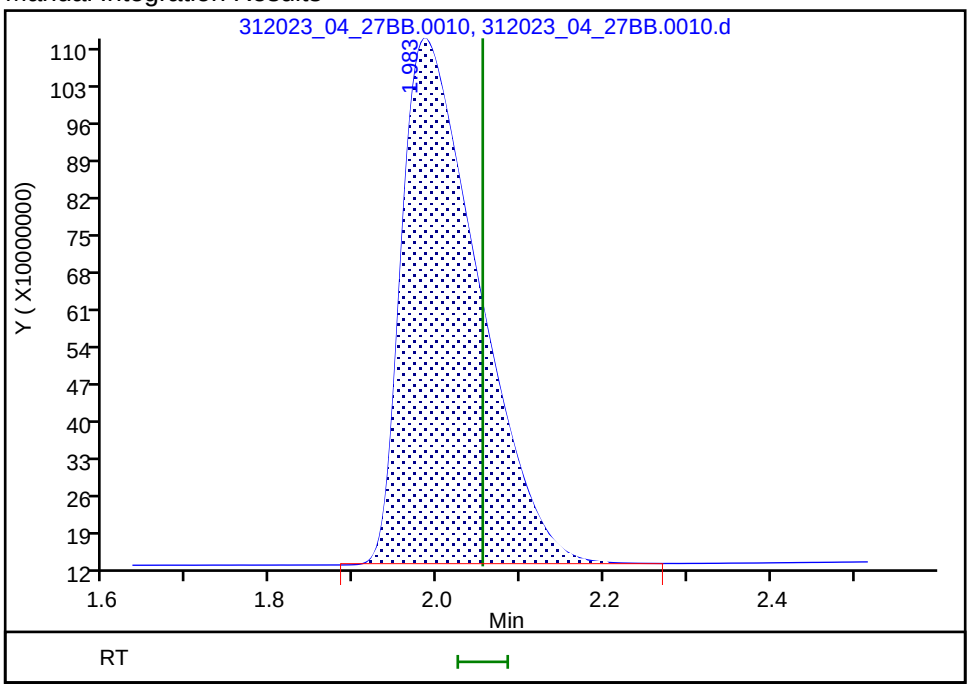
Not Detected
Expected RT: 2.05

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

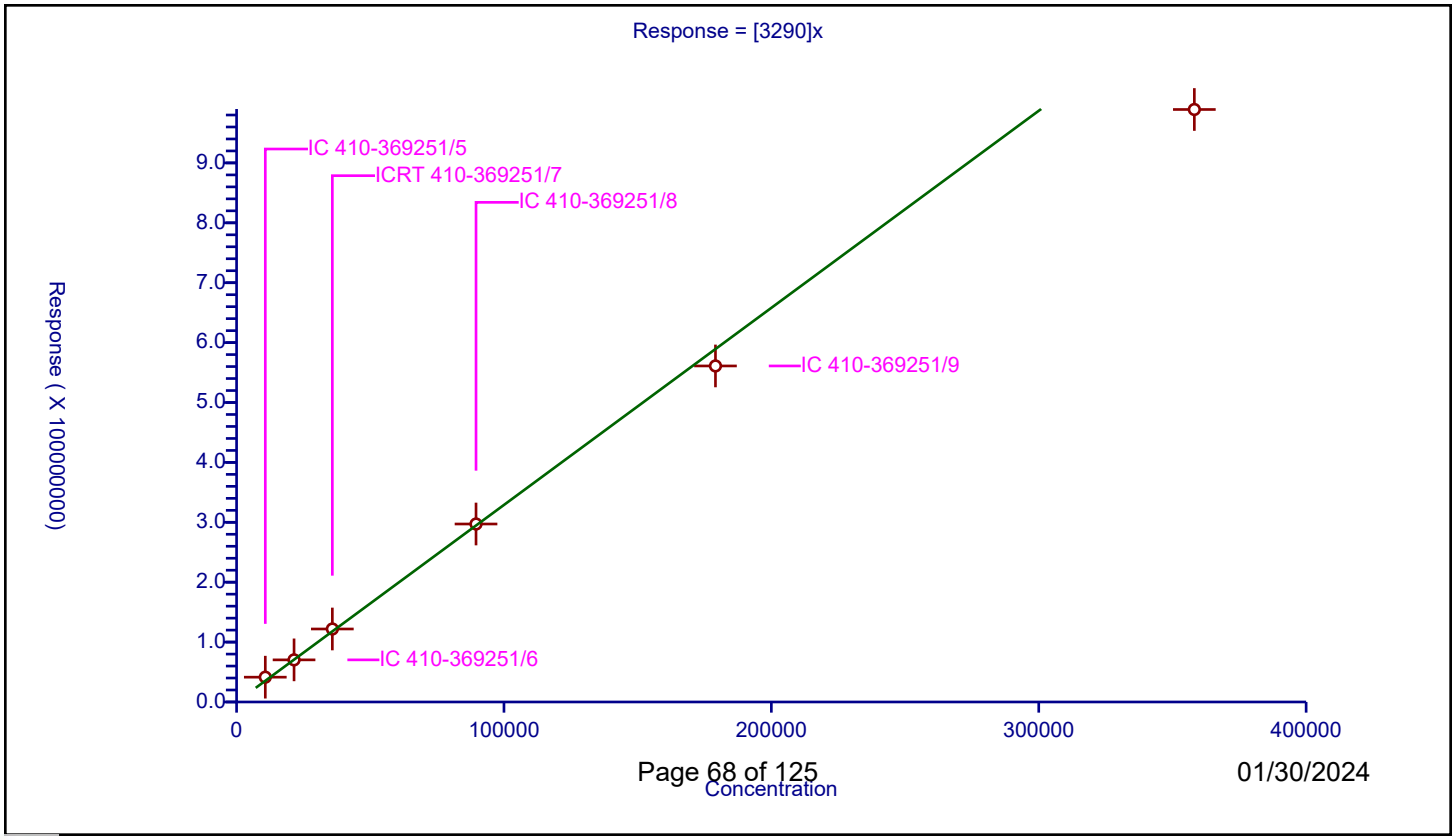
Curve Coefficients

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.: 410-157387-1

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.: 410-157387-1

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

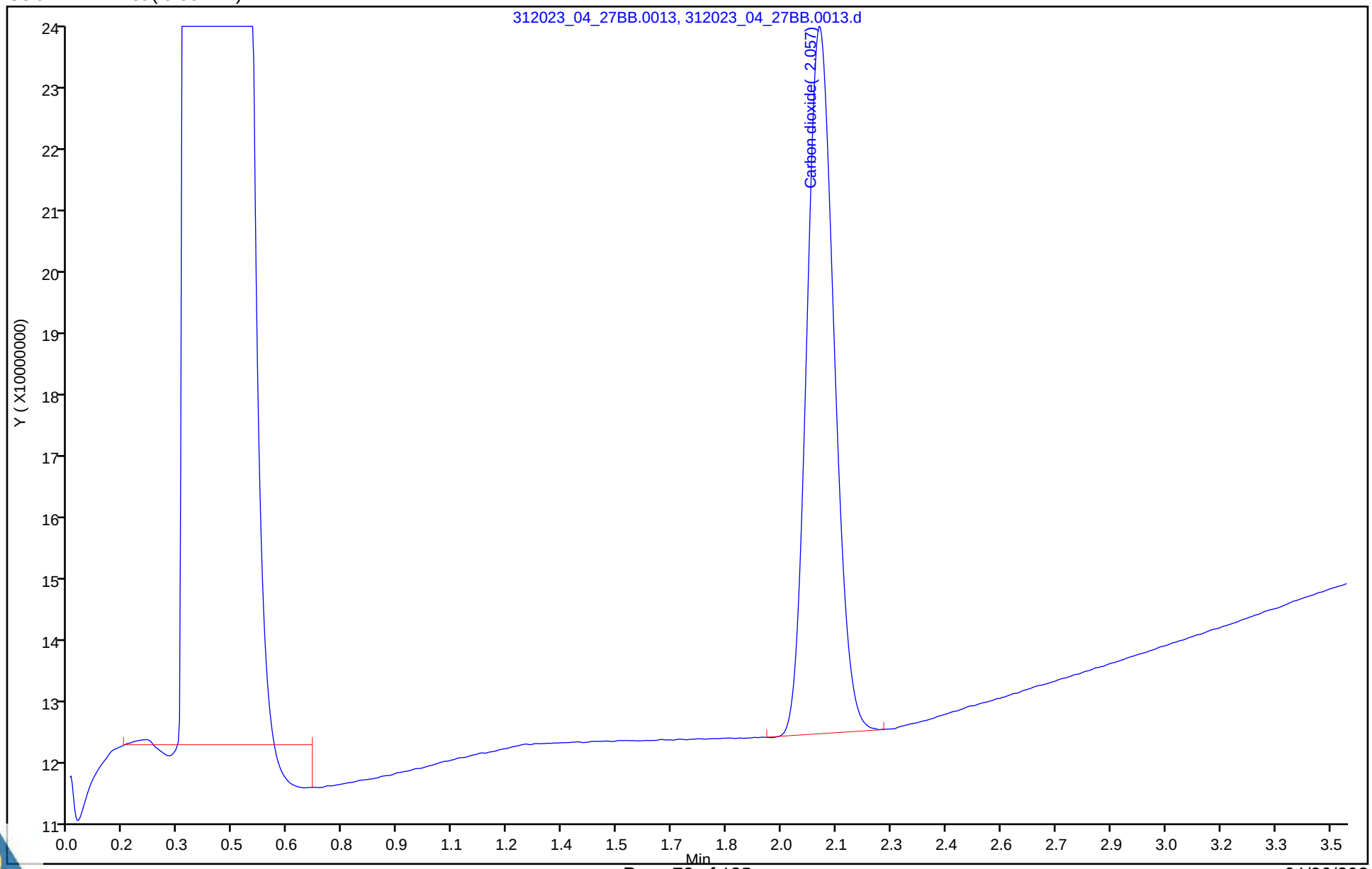
Report Date: 28-Apr-2023 08:51:00 Chrom Revision: 2.3 20-Apr-2023 08:27:48

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.: 410-157387-1

SDG No.:

Lab Sample ID: CCVRT 410-463730/2 Calibration Date: 01/16/2024 11:54

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_16BB.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	3559		38700	35800	8.2	15.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-157387-1

SDG No.:

Lab Sample ID: CCVRT 410-463730/2
Calibration Date: 01/16/2024 11:54

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_16BB.0002.d
Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Carbon dioxide	2.04	2.01	2.07

Report Date: 17-Jan-2024 03:28:33 Chrom Revision: 2.3 30-Nov-2023 17:25:52

Eurofins Lancaster Laboratories Environment Testing, LLC

Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20240116-104124.b\312024_1_16BB.0002.d				
Lims ID:	ccvrt				
Client ID:					
Sample Type:	CCVRT				
Inject. Date:	16-Jan-2024 11:54:00	ALS Bottle#:	0	Worklist Smp#:	2
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:	ccvrt				
Misc. Info.:	410-0104124-002				
Operator ID:		Instrument ID:	19506-B		
Sublist:	chrom-RSK_CO2_19506B*sub1				
Method:	\\chromfs\Lancaster\ChromData\19506-B\20240116-104124.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	17-Jan-2024 03:28:33	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	2.039	2.039	0.000	127476380H	35820	38745	

Reagents:

EPH_CO2MS_00006 Amount Added: 100.00 Units: uL

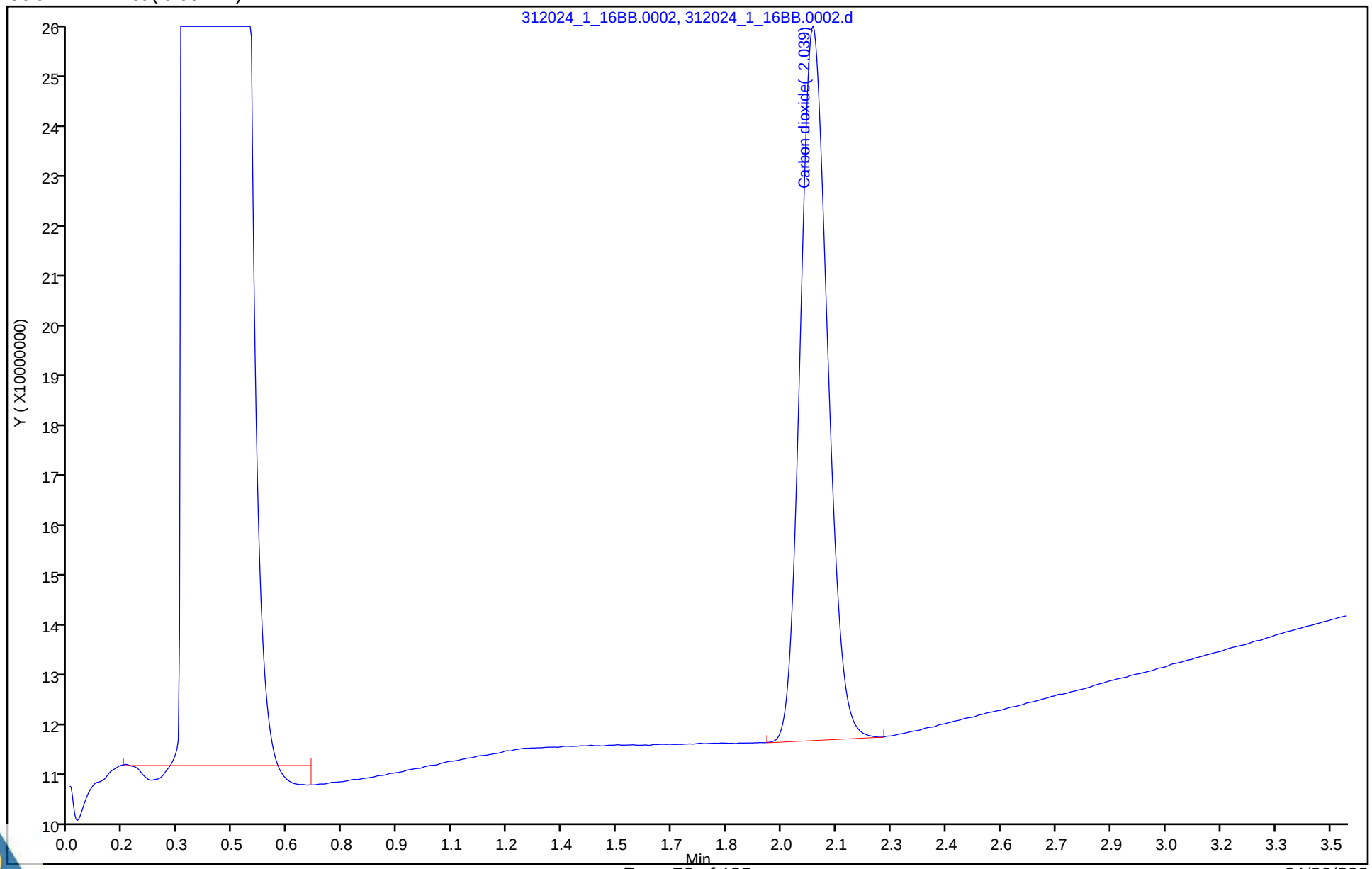
Report Date: 17-Jan-2024 03:28:33 Chrom Revision: 2.3 30-Nov-2023 17:25:52

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20240116-104124.b\312024_1_16BB.0002.d

Injection Date:	16-Jan-2024 11:54:00	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.: 410-157387-1

SDG No.:

Lab Sample ID: CCV 410-463730/13 Calibration Date: 01/16/2024 14:39

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_16BB.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	3043		33100	35800	-7.5	15.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-157387-1

SDG No.:

Lab Sample ID: CCV 410-463730/13
Calibration Date: 01/16/2024 14:39

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_16BB.0013.d
Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Carbon dioxide	2.04	2.01	2.07

Report Date: 17-Jan-2024 03:28:36 Chrom Revision: 2.3 30-Nov-2023 17:25:52

Eurofins Lancaster Laboratories Environment Testing, LLC

Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20240116-104124.b\312024_1_16BB.0013.d				
Lims ID:	ccv				
Client ID:					
Sample Type:	CCV				
Inject. Date:	16-Jan-2024 14:39:00	ALS Bottle#:	0	Worklist Smp#:	13
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	410-0104124-013				
Operator ID:		Instrument ID:	19506-B		
Sublist:	chrom-RSK_CO2_19506B*sub1				
Method:	\\chromfs\Lancaster\ChromData\19506-B\20240116-104124.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	17-Jan-2024 03:28:36	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	2.037	2.039	-0.002	108986187	H 35820	33125	

Reagents:

EPH_CO2MS_00006 Amount Added: 100.00 Units: uL

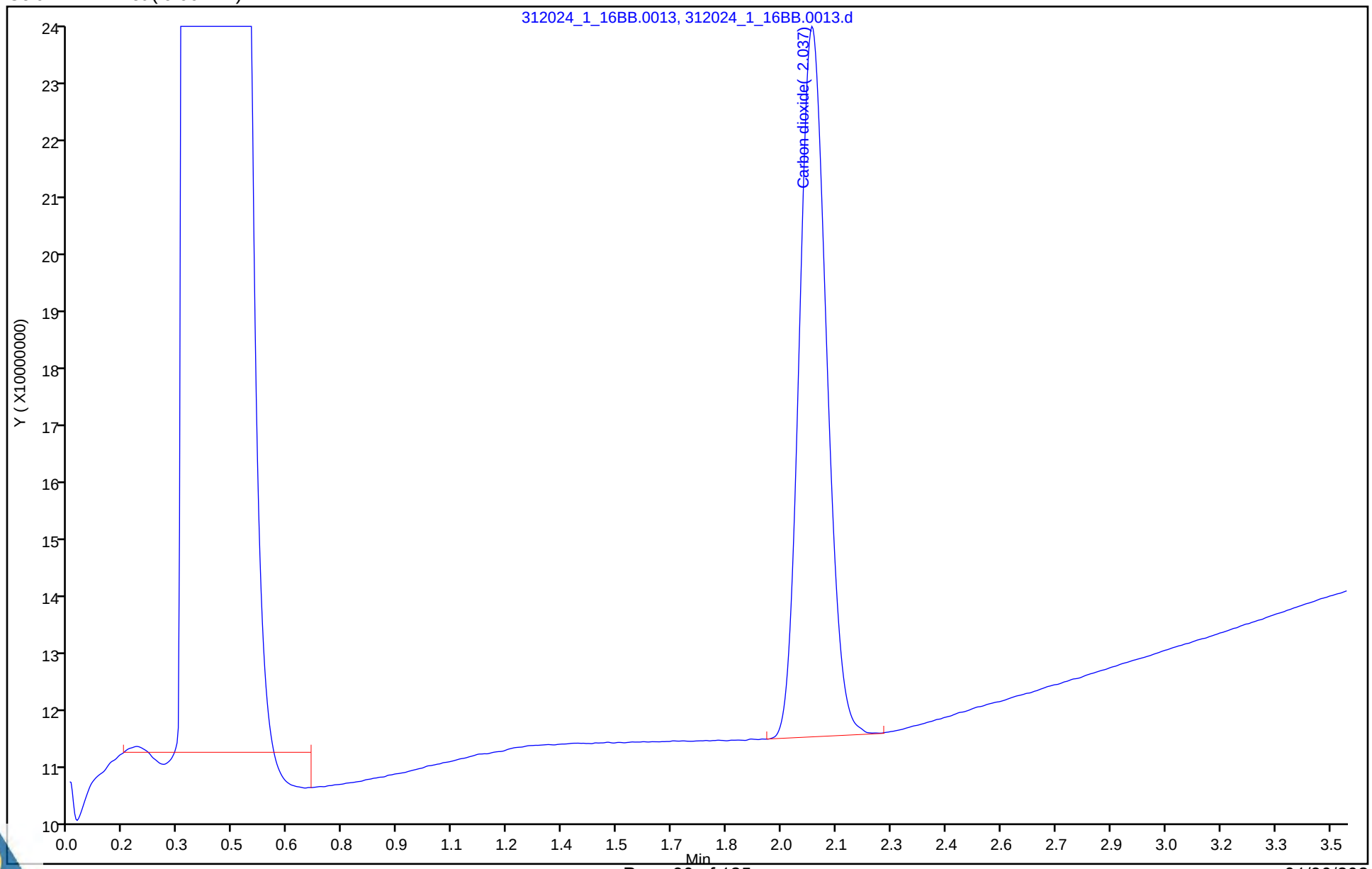
Report Date: 17-Jan-2024 03:28:36 Chrom Revision: 2.3 30-Nov-2023 17:25:52

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20240116-104124.b\312024_1_16BB.0013.d

Injection Date:	16-Jan-2024 14:39:00	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 VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-157387-1

SDG No.:

Lab Sample ID: CCV 410-463730/21 Calibration Date: 01/16/2024 15:40

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_16BB.0021.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	3043		33100	35800	-7.5	15.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-157387-1

SDG No.:

Lab Sample ID: CCV 410-463730/21 Calibration Date: 01/16/2024 15:40

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_16BB.0021.d Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Carbon dioxide	2.04	2.01	2.07

Report Date: 17-Jan-2024 03:28:39 Chrom Revision: 2.3 30-Nov-2023 17:25:52

Eurofins Lancaster Laboratories Environment Testing, LLC

Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20240116-104124.b\312024_1_16BB.0021.d				
Lims ID:	ccv				
Client ID:					
Sample Type:	CCV				
Inject. Date:	16-Jan-2024 15:40:00	ALS Bottle#:	0	Worklist Smp#:	21
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	410-0104124-021				
Operator ID:		Instrument ID:	19506-B		
Sublist:	chrom-RSK_CO2_19506B*sub1				
Method:	\\chromfs\Lancaster\ChromData\19506-B\20240116-104124.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	17-Jan-2024 03:28:39	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	2.040	2.039	0.001	109016071	H 35820	33134	

Reagents:

EPH_CO2MS_00006 Amount Added: 100.00 Units: uL

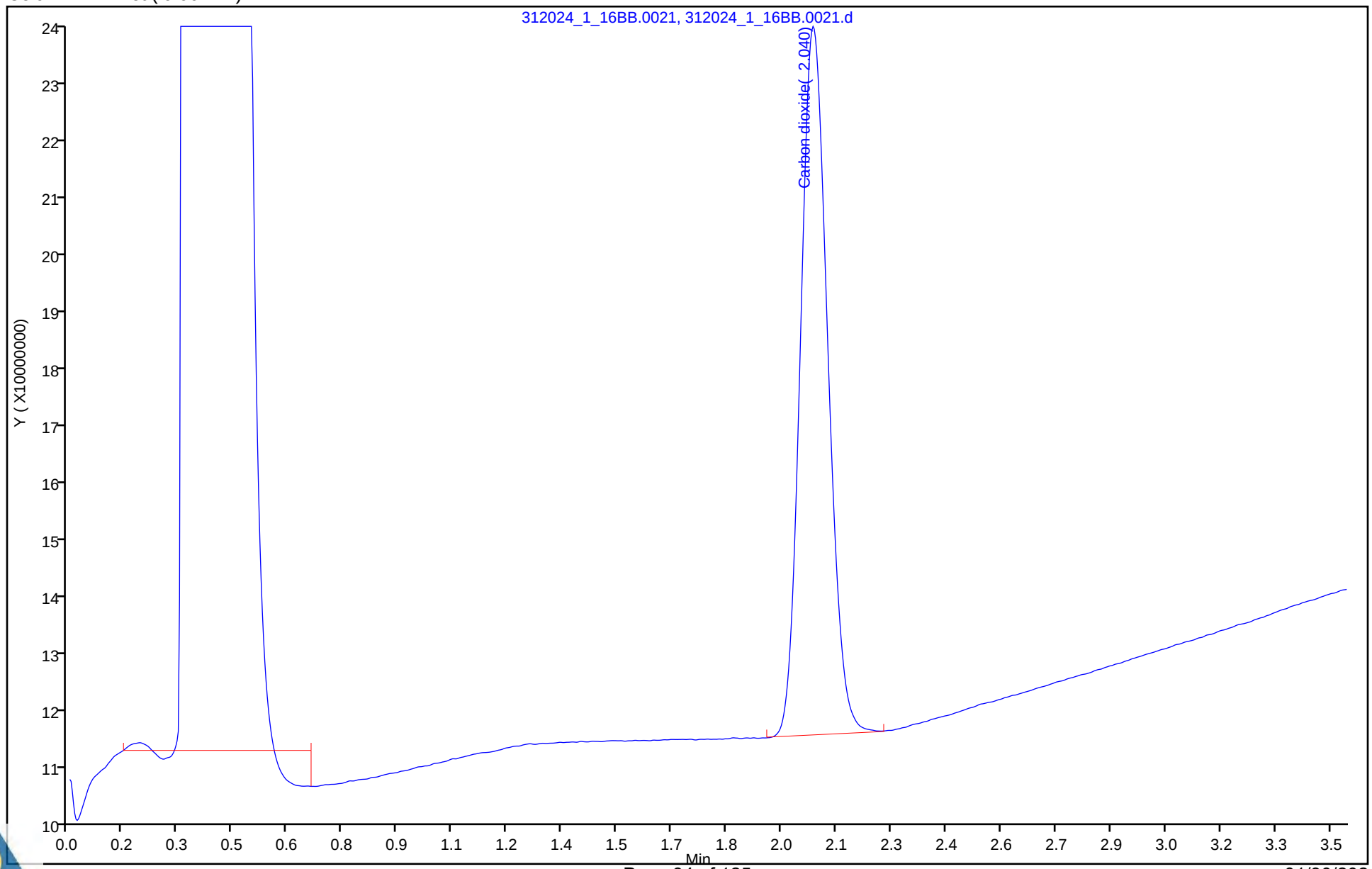
Report Date: 17-Jan-2024 03:28:39 Chrom Revision: 2.3 30-Nov-2023 17:25:52

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20240116-104124.b\312024_1_16BB.0021.d

Injection Date:	16-Jan-2024 15:40:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	ccv			Worklist Smp#:	21
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.: 410-157387-1

SDG No.:

Lab Sample ID: CCVRT 410-464516/2 Calibration Date: 01/18/2024 09:41

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_18BB.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	3576		38900	35800	8.7	15.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-157387-1

SDG No.:

Lab Sample ID: CCVRT 410-464516/2 Calibration Date: 01/18/2024 09:41

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_18BB.0002.d Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Carbon dioxide	2.04	2.01	2.07

Report Date: 19-Jan-2024 03:53:40 Chrom Revision: 2.3 18-Jan-2024 13:39:22

Eurofins Lancaster Laboratories Environment Testing, LLC

Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20240118-104302.b\312024_1_18BB.0002.d				
Lims ID:	ccvrt				
Client ID:					
Sample Type:	CCVRT				
Inject. Date:	18-Jan-2024 09:41:00	ALS Bottle#:	0	Worklist Smp#:	2
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:	ccvrt				
Misc. Info.:	410-0104302-002				
Operator ID:		Instrument ID:	19506-B		
Sublist:	chrom-RSK_CO2_19506B*sub1				
Method:	\\chromfs\Lancaster\ChromData\19506-B\20240118-104302.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	19-Jan-2024 03:53:40	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	2.044	2.044	0.000	128075781	H 35820	38927	

Reagents:

EPH_CO2MS_00006 Amount Added: 100.00 Units: uL

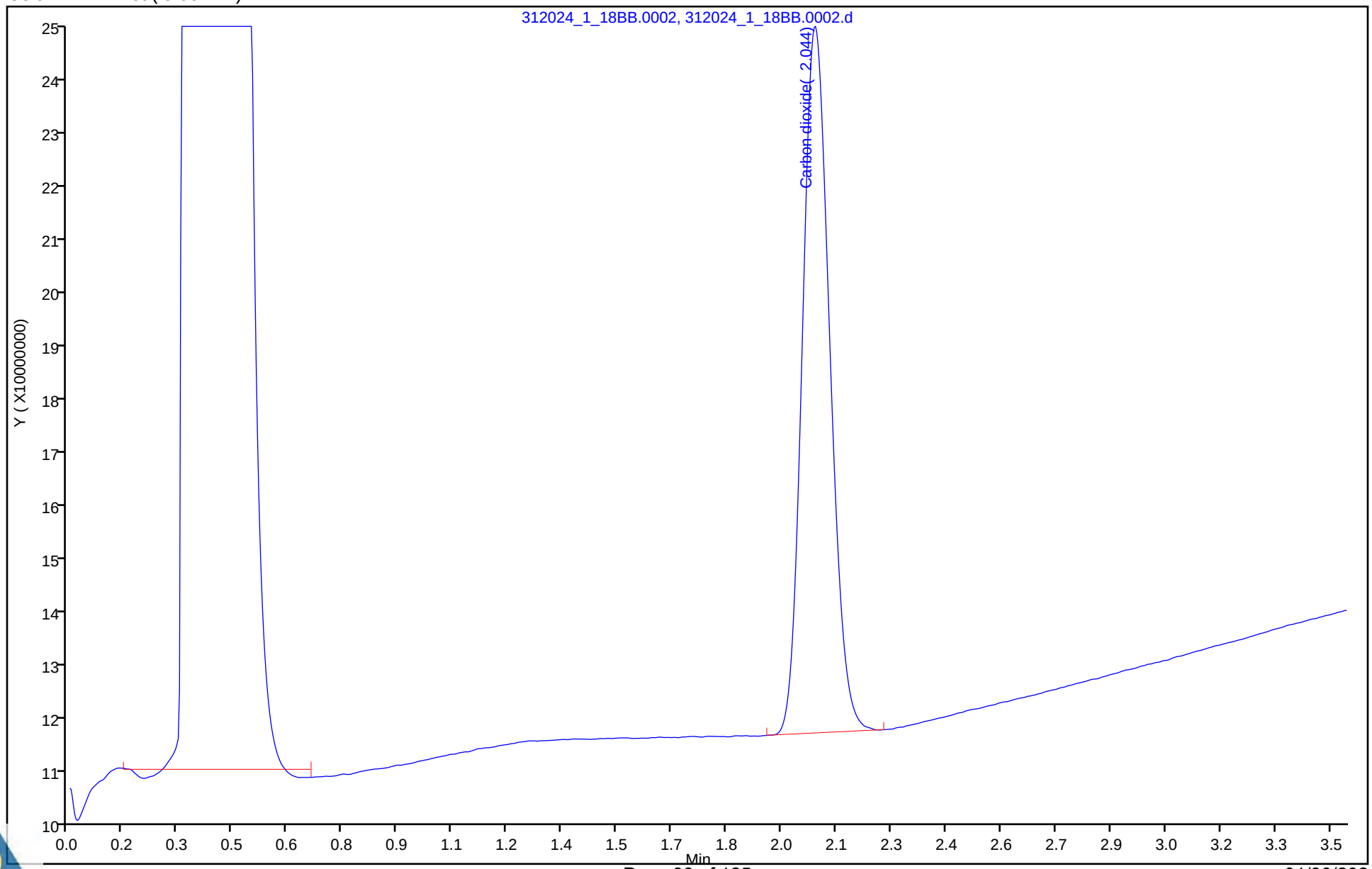
Report Date: 19-Jan-2024 03:53:41 Chrom Revision: 2.3 18-Jan-2024 13:39:22

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20240118-104302.b\312024_1_18BB.0002.d

Injection Date:	18-Jan-2024 09:41:00	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.: 410-157387-1

SDG No.:

Lab Sample ID: CCV 410-464516/7 Calibration Date: 01/18/2024 15:48

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_18BB.0007.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	3533		38500	35800	7.4	15.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-157387-1

SDG No.:

Lab Sample ID: CCV 410-464516/7
Calibration Date: 01/18/2024 15:48

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_18BB.0007.d
Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Carbon dioxide	2.04	2.01	2.07

Report Date: 19-Jan-2024 03:53:39 Chrom Revision: 2.3 18-Jan-2024 13:39:22

Eurofins Lancaster Laboratories Environment Testing, LLC

Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20240118-104302.b\312024_1_18BB.0007.d				
Lims ID:	ccv				
Client ID:					
Sample Type:	CCV				
Inject. Date:	18-Jan-2024 15:48:00	ALS Bottle#:	0	Worklist Smp#:	7
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	410-0104302-007				
Operator ID:		Instrument ID:	19506-B		
Sublist:	chrom-RSK_CO2_19506B*sub1				
Method:	\\chromfs\Lancaster\ChromData\19506-B\20240118-104302.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	19-Jan-2024 03:53:39	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	2.044	2.044	0.000	126547314	H 35820	38463	

Reagents:

EPH_CO2MS_00006 Amount Added: 100.00 Units: uL

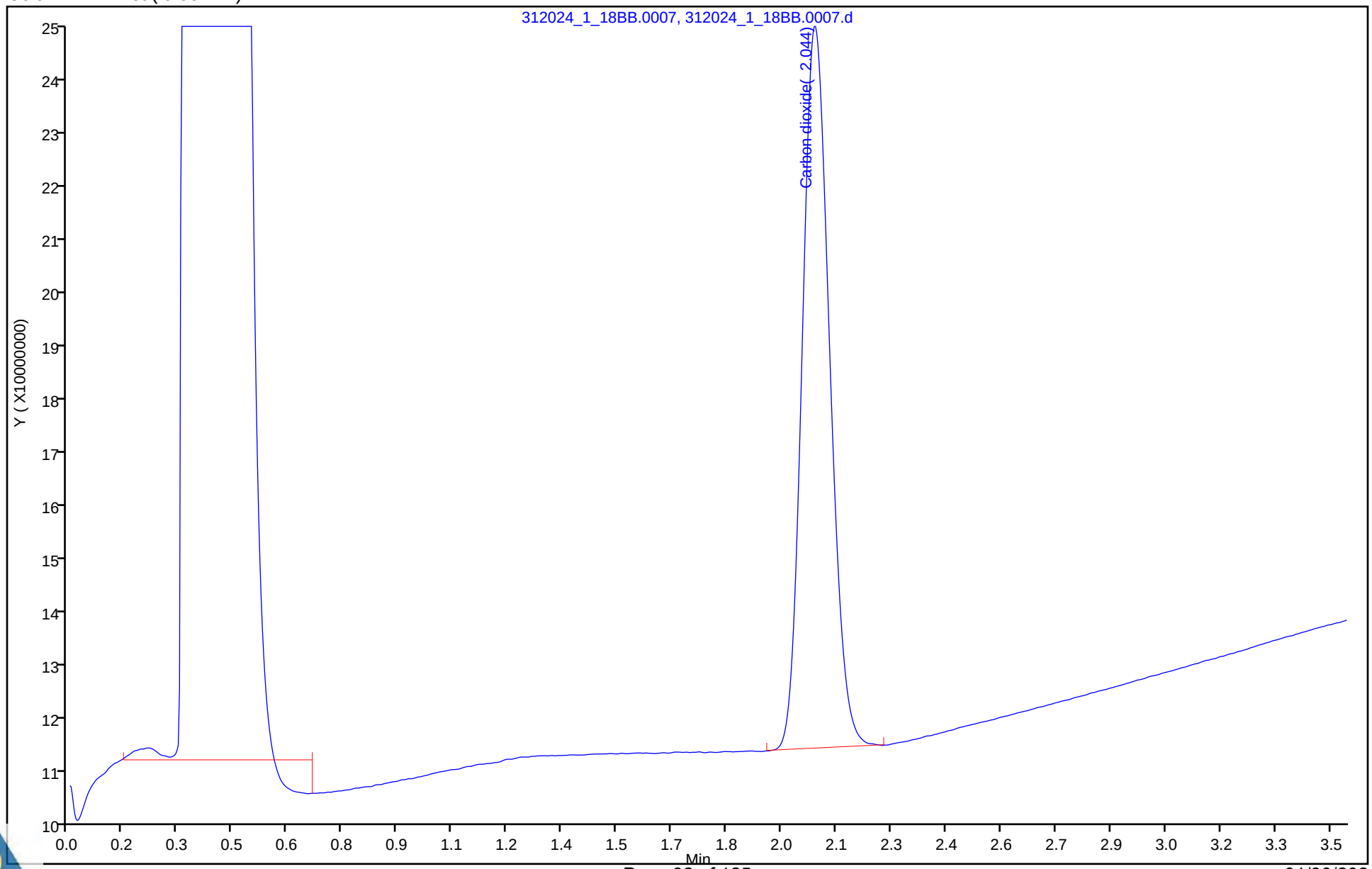
Report Date: 19-Jan-2024 03:53:39 Chrom Revision: 2.3 18-Jan-2024 13:39:22

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20240118-104302.b\312024_1_18BB.0007.d

Injection Date:	18-Jan-2024 15:48:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	ccv			Worklist Smp#:	7
Client ID:					
Purge Vol:	1.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2		

Column: HP Plot (0.00 mm)



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-157387-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 410-463746/1-A

Matrix: Water Lab File ID: 312024_1_16BB.0003.d

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 01/16/2024 12:15

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.: 463730 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	DL
124-38-9	Carbon dioxide	5600	U M	12000	5600

Report Date: 17-Jan-2024 03:28:33 Chrom Revision: 2.3 30-Nov-2023 17:25:52

Eurofins Lancaster Laboratories Environment Testing, LLC

Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20240116-104124.b\312024_1_16BB.0003.d				
Lims ID:	MB 410-463746/1-A				
Client ID:					
Sample Type:	MB				
Inject. Date:	16-Jan-2024 12:15:00	ALS Bottle#:	0	Worklist Smp#:	3
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	410-0104124-003				
Operator ID:		Instrument ID:	19506-B		
Method:	\\chromfs\Lancaster\ChromData\19506-B\20240116-104124.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	17-Jan-2024 03:28:33	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				
First Level Reviewer: LXF2		Date:	17-Jan-2024 03:27:02		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Carbon dioxide	2.043	2.039	0.004	317072H		96.4	Ma

QC Flag Legend

Processing Flags

H - Response Measured by Height

Review Flags

M - Manually Integrated

a - User Assigned ID

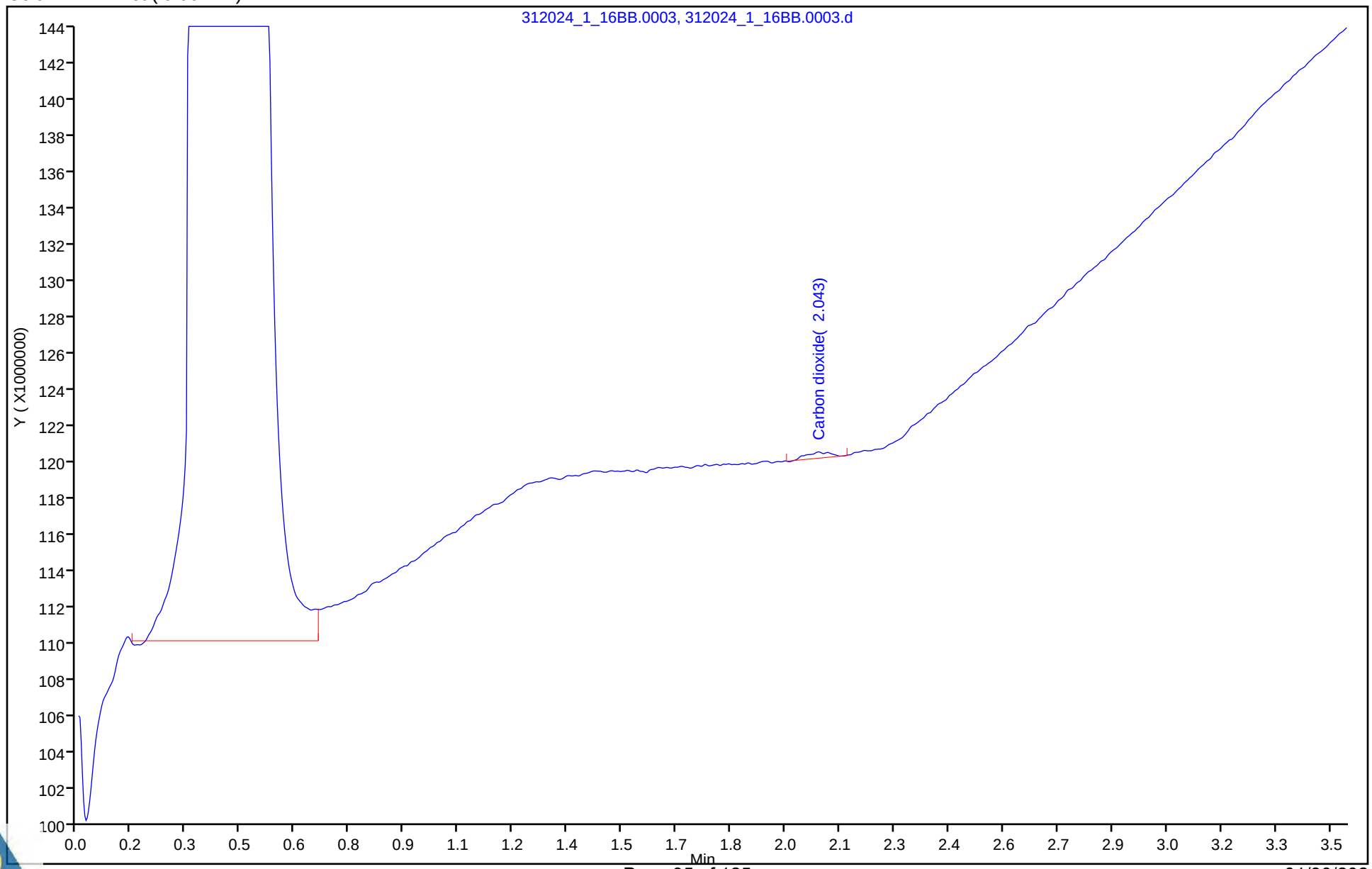
Report Date: 17-Jan-2024 03:28:33 Chrom Revision: 2.3 30-Nov-2023 17:25:52

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20240116-104124.b\312024_1_16BB.0003.d

Injection Date:	16-Jan-2024 12:15:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	MB 410-463746/1-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)



Report Date: 17-Jan-2024 03:28:33 Chrom Revision: 2.3 30-Nov-2023 17:25:52 Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

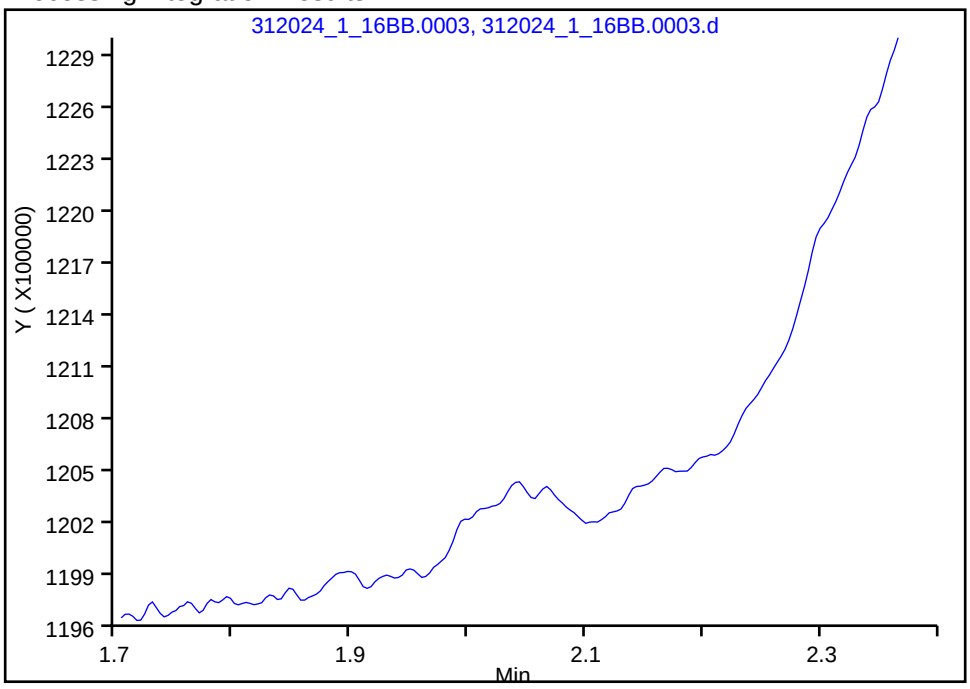
Data File: \\chromfs\Lancaster\ChromData\19506-B\20240116-104124.b\312024_1_16BB.0003.d
Injection Date: 16-Jan-2024 12:15:00 Instrument ID: 19506-B
Lims ID: MB 410-463746/1-A
Client ID:
Operator ID: ALS Bottle#: 0 Worklist Smp#: 3
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Method: RSK_CO2_19506B Limit Group: GCV - RSK175 CO2
Column: HP Plot (0.00 mm) Detector 0FIDA

1 Carbon dioxide, CAS: 124-38-9

Signal: 1

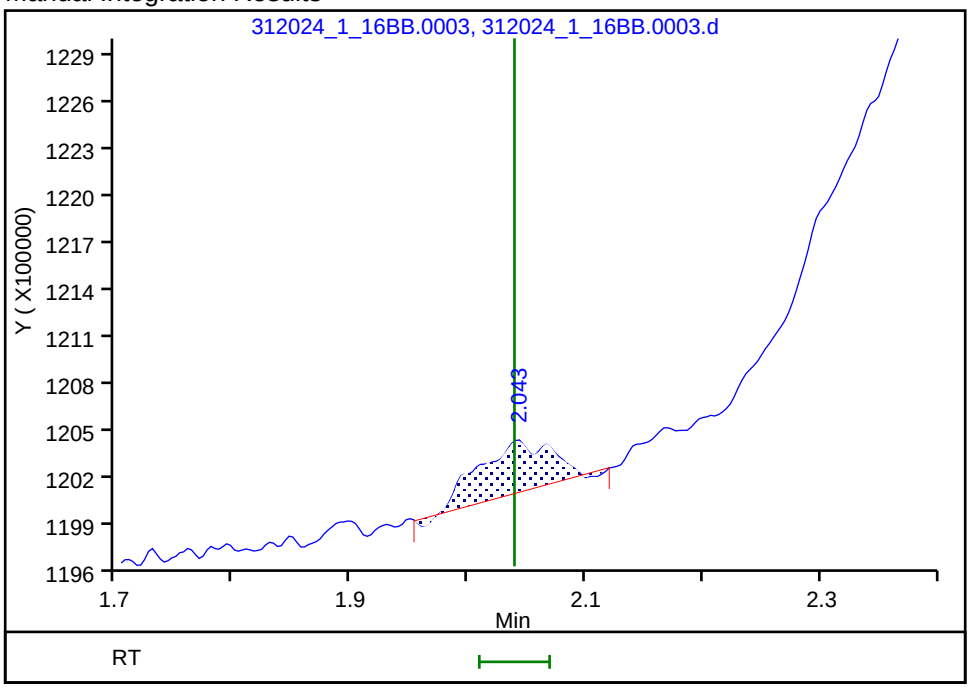
Not Detected
Expected RT: 2.04

Processing Integration Results



Manual Integration Results

RT: 2.04
Height: 317072
Amount: 96.370890
Amount Units: ug/l



Reviewer: LXF2, 17-Jan-2024 03:27:01 -05:00:00 (UTC)
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak not integrated

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-157387-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 410-464737/1-A

Matrix: Water Lab File ID: 312024_1_18BB.0003.d

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 01/18/2024 10:00

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP Plot ID: 0.53(mm)

Purge Volume: Heated Purge: (Y/N) N pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 464516 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	DL
124-38-9	Carbon dioxide	5600	U M	12000	5600

Report Date: 19-Jan-2024 03:53:40 Chrom Revision: 2.3 18-Jan-2024 13:39:22

Eurofins Lancaster Laboratories Environment Testing, LLC

Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20240118-104302.b\312024_1_18BB.0003.d				
Lims ID:	MB 410-464737/1-A				
Client ID:					
Sample Type:	MB				
Inject. Date:	18-Jan-2024 10:00:00	ALS Bottle#:	0	Worklist Smp#:	3
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	410-0104302-003				
Operator ID:		Instrument ID:	19506-B		
Method:	\\chromfs\Lancaster\ChromData\19506-B\20240118-104302.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	19-Jan-2024 03:53:39	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:	19-Jan-2024 03:53:25		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Carbon dioxide	2.047	2.044	0.003	774682H		235.5	Ma

QC Flag Legend

Processing Flags

H - Response Measured by Height

Review Flags

M - Manually Integrated

a - User Assigned ID

Report Date: 19-Jan-2024 03:53:40 Chrom Revision: 2.3 18-Jan-2024 13:39:22

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20240118-104302.b\312024_1_18BB.0003.d

Injection Date: 18-Jan-2024 10:00:00 Instrument ID: 19506-B Operator ID:

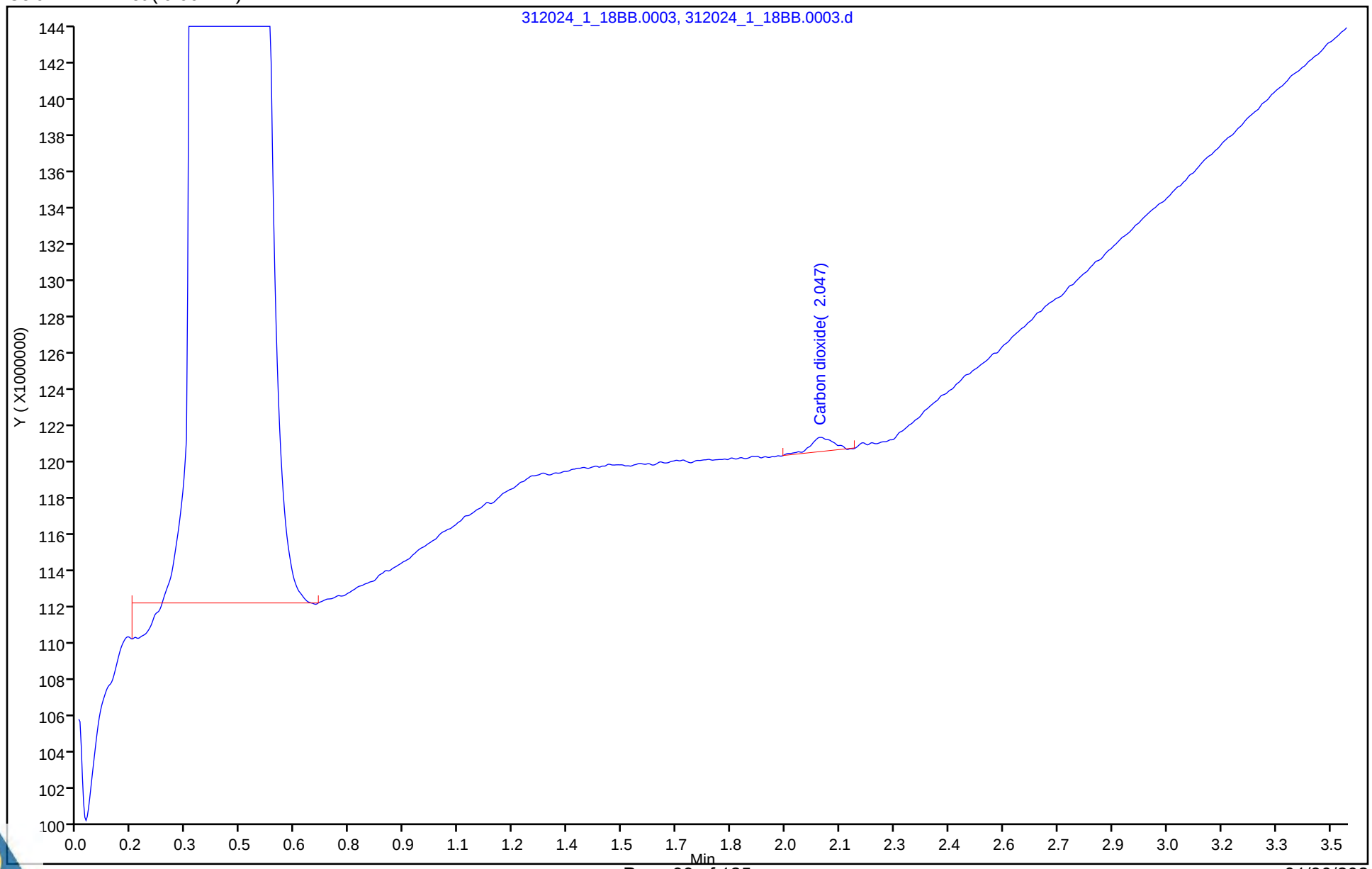
Lims ID: MB 410-464737/1-A Worklist Smp#: 3

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)



Report Date: 19-Jan-2024 03:53:40 Chrom Revision: 2.3 18-Jan-2024 13:39:22 Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

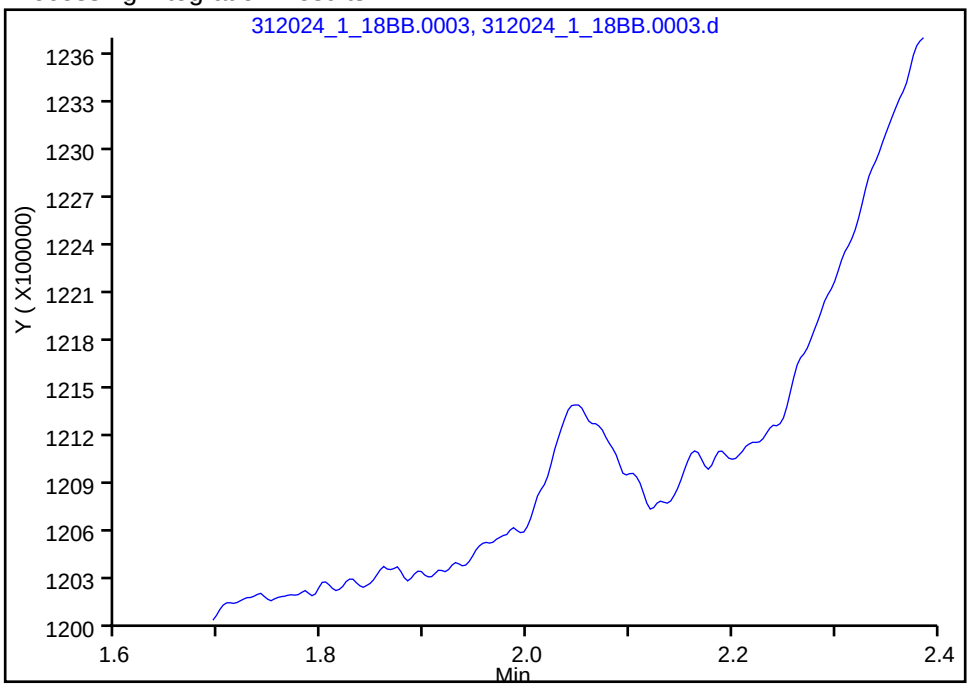
Data File:	\\chromfs\Lancaster\ChromData\19506-B\20240118-104302.b\312024_1_18BB.0003.d		
Injection Date:	18-Jan-2024 10:00:00	Instrument ID:	19506-B
Lims ID:	MB 410-464737/1-A		
Client ID:			
Operator ID:		ALS Bottle#:	0 Worklist Smp#: 3
Purge Vol:	1.000 mL	Dil. Factor:	1.0000
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2
Column:	HP Plot (0.00 mm)	Detector	0FIDA

1 Carbon dioxide, CAS: 124-38-9

Signal: 1

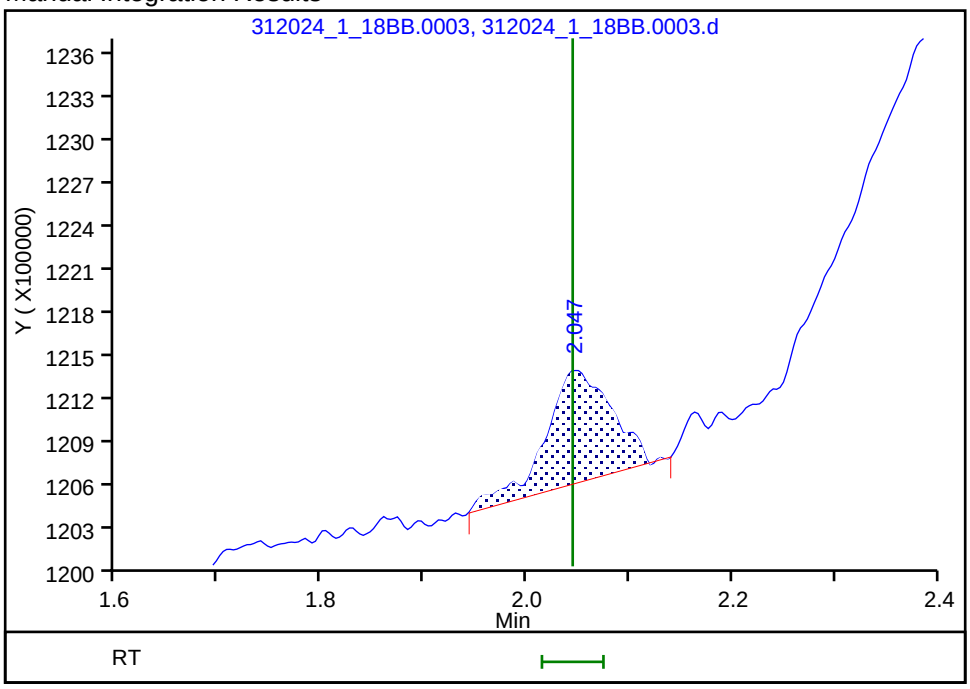
Not Detected
Expected RT: 2.04

Processing Integration Results



RT: 2.05
Height: 774682
Amount: 235.4569
Amount Units: ug/l

Manual Integration Results



Reviewer: LXF2, 19-Jan-2024 03:53:23 -05:00:00 (UTC)
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak not integrated

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-157387-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 410-463746/2-A

Matrix: Water Lab File ID: 312024_1_16BB.0004.d

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 01/16/2024 12:22

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP Plot ID: 0.53(mm)

Purge Volume: Heated Purge: (Y/N) N pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 463730 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	DL
124-38-9	Carbon dioxide	36600		12000	5600

Report Date: 17-Jan-2024 03:28:34 Chrom Revision: 2.3 30-Nov-2023 17:25:52

Eurofins Lancaster Laboratories Environment Testing, LLC

Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19506-B\20240116-104124.b\312024_1_16BB.0004.d
Lims ID: LCS 410-463746/2-A
Client ID:
Sample Type: LCS
Inject. Date: 16-Jan-2024 12:22:00 ALS Bottle#: 0 Worklist Smp#: 4
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info:
Misc. Info.: 410-0104124-004
Operator ID: Instrument ID: 19506-B

Method: \\chromfs\Lancaster\ChromData\19506-B\20240116-104124.b\RSK_CO2_19506B.m
Limit Group: GCV - RSK175 CO2
Last Update: 17-Jan-2024 03:28:33 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	2.036	2.039	-0.003	120321376H	35820	36570	

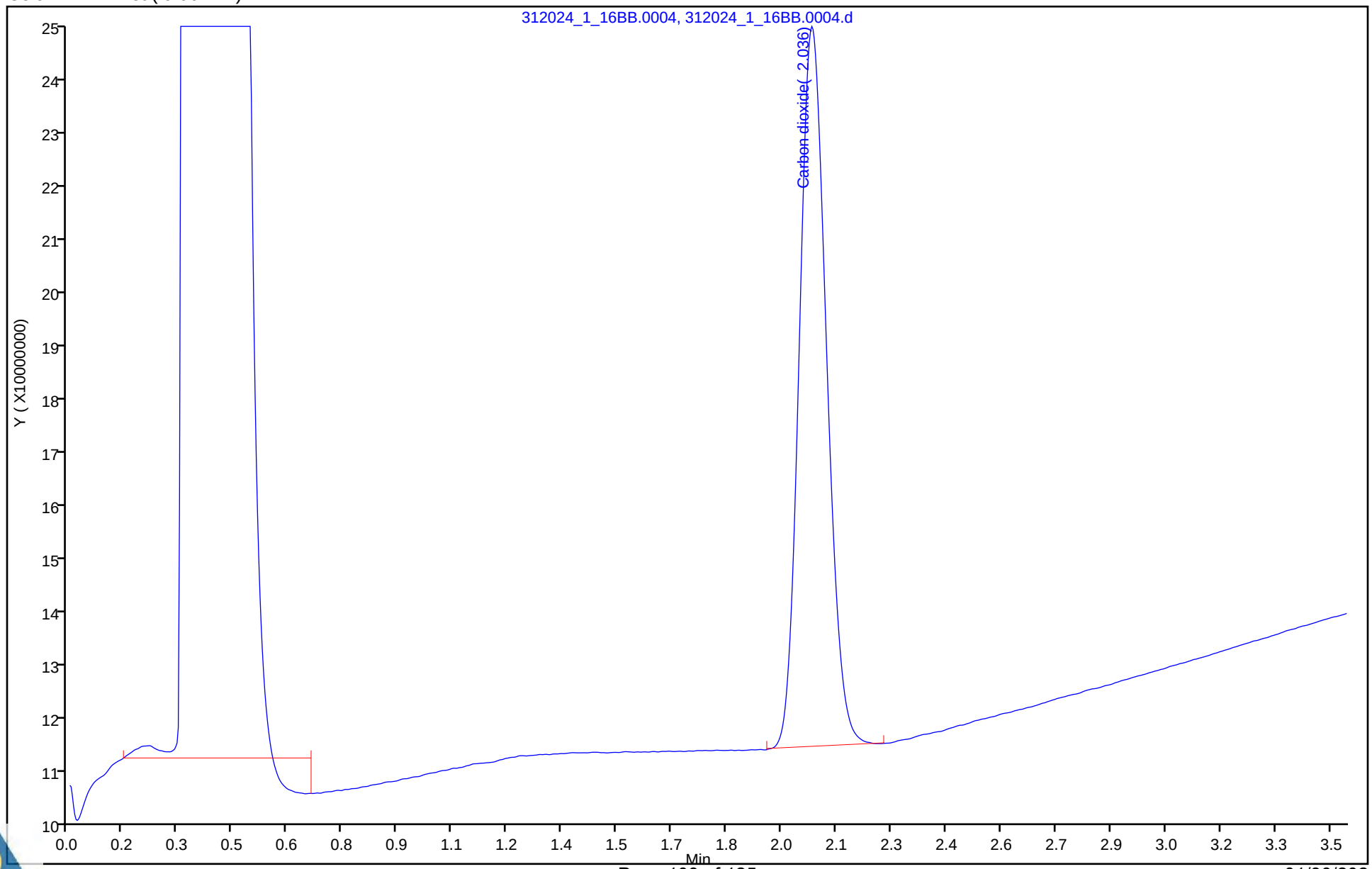
Report Date: 17-Jan-2024 03:28:34 Chrom Revision: 2.3 30-Nov-2023 17:25:52

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20240116-104124.b\312024_1_16BB.0004.d

Injection Date:	16-Jan-2024 12:22:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	LCS 410-463746/2-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.: 410-157387-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 410-464737/2-A

Matrix: Water Lab File ID: 312024_1_18BB.0004.d

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 01/18/2024 10:07

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.: 464516 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	DL
124-38-9	Carbon dioxide	38200		12000	5600

Report Date: 19-Jan-2024 03:53:40 Chrom Revision: 2.3 18-Jan-2024 13:39:22

Eurofins Lancaster Laboratories Environment Testing, LLC

Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19506-B\20240118-104302.b\312024_1_18BB.0004.d
Lims ID: LCS 410-464737/2-A
Client ID:
Sample Type: LCS
Inject. Date: 18-Jan-2024 10:07:00 ALS Bottle#: 0 Worklist Smp#: 4
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info:
Misc. Info.: 410-0104302-004
Operator ID: Instrument ID: 19506-B

Method: \\chromfs\Lancaster\ChromData\19506-B\20240118-104302.b\RSK_CO2_19506B.m
Limit Group: GCV - RSK175 CO2
Last Update: 19-Jan-2024 03:53:39 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	2.045	2.044	0.001	125595684	H 35820	38174	

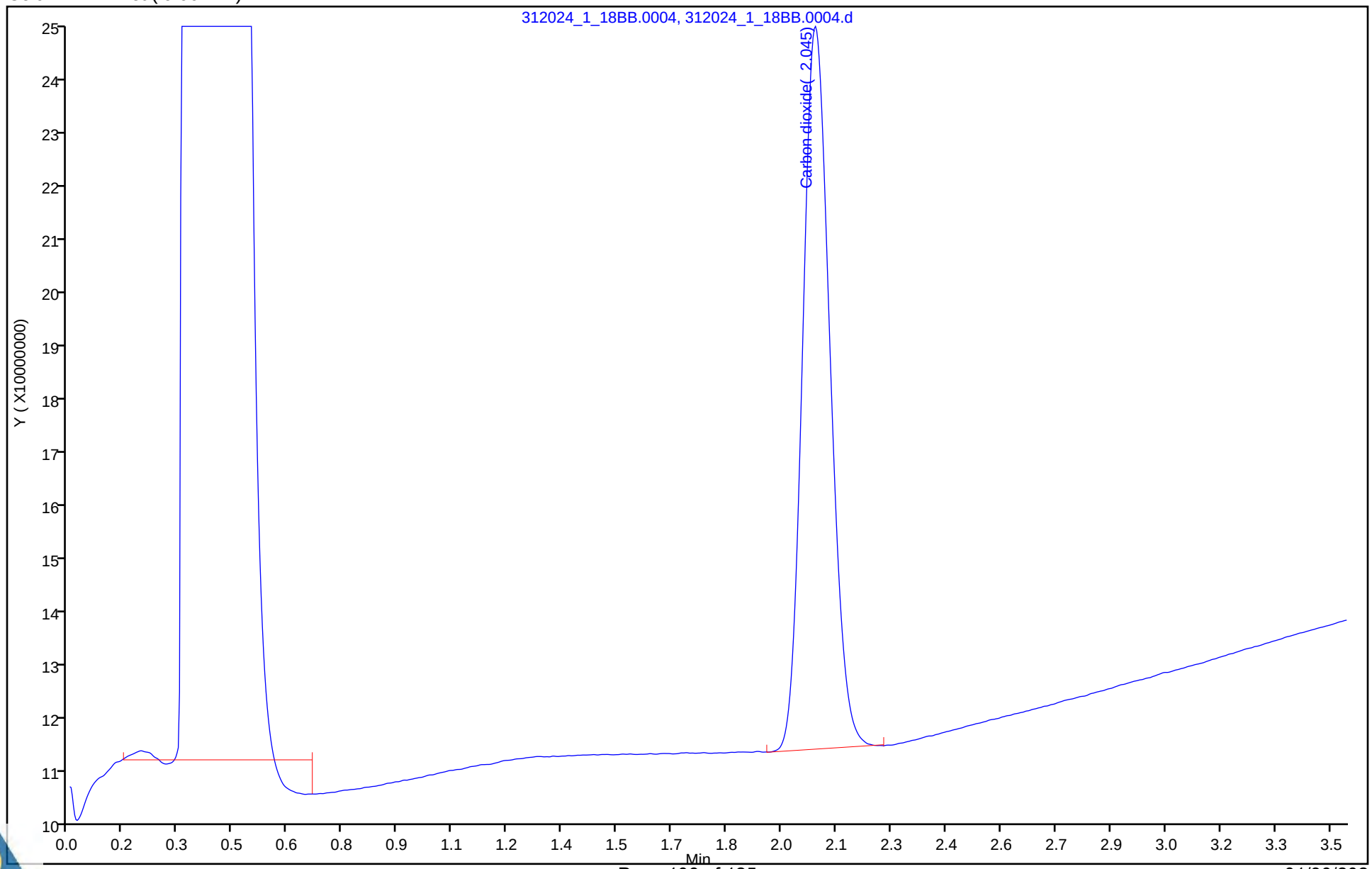
Report Date: 19-Jan-2024 03:53:40 Chrom Revision: 2.3 18-Jan-2024 13:39:22

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20240118-104302.b\312024_1_18BB.0004.d

Injection Date:	18-Jan-2024 10:07:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	LCS 410-464737/2-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.: 410-157387-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 410-463746/3-A

Matrix: Water Lab File ID: 312024_1_16BB.0005.d

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 01/16/2024 12:31

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.: 463730 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	DL
124-38-9	Carbon dioxide	37900		12000	5600

Report Date: 17-Jan-2024 03:28:34 Chrom Revision: 2.3 30-Nov-2023 17:25:52

Eurofins Lancaster Laboratories Environment Testing, LLC

Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20240116-104124.b\312024_1_16BB.0005.d				
Lims ID:	LCSD 410-463746/3-A				
Client ID:					
Sample Type:	LCSD				
Inject. Date:	16-Jan-2024 12:31:00	ALS Bottle#:	0	Worklist Smp#:	5
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	410-0104124-005				
Operator ID:		Instrument ID:	19506-B		
Method:	\\chromfs\Lancaster\ChromData\19506-B\20240116-104124.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	17-Jan-2024 03:28:33	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	2.036	2.039	-0.003	124773366H	35820	37924	

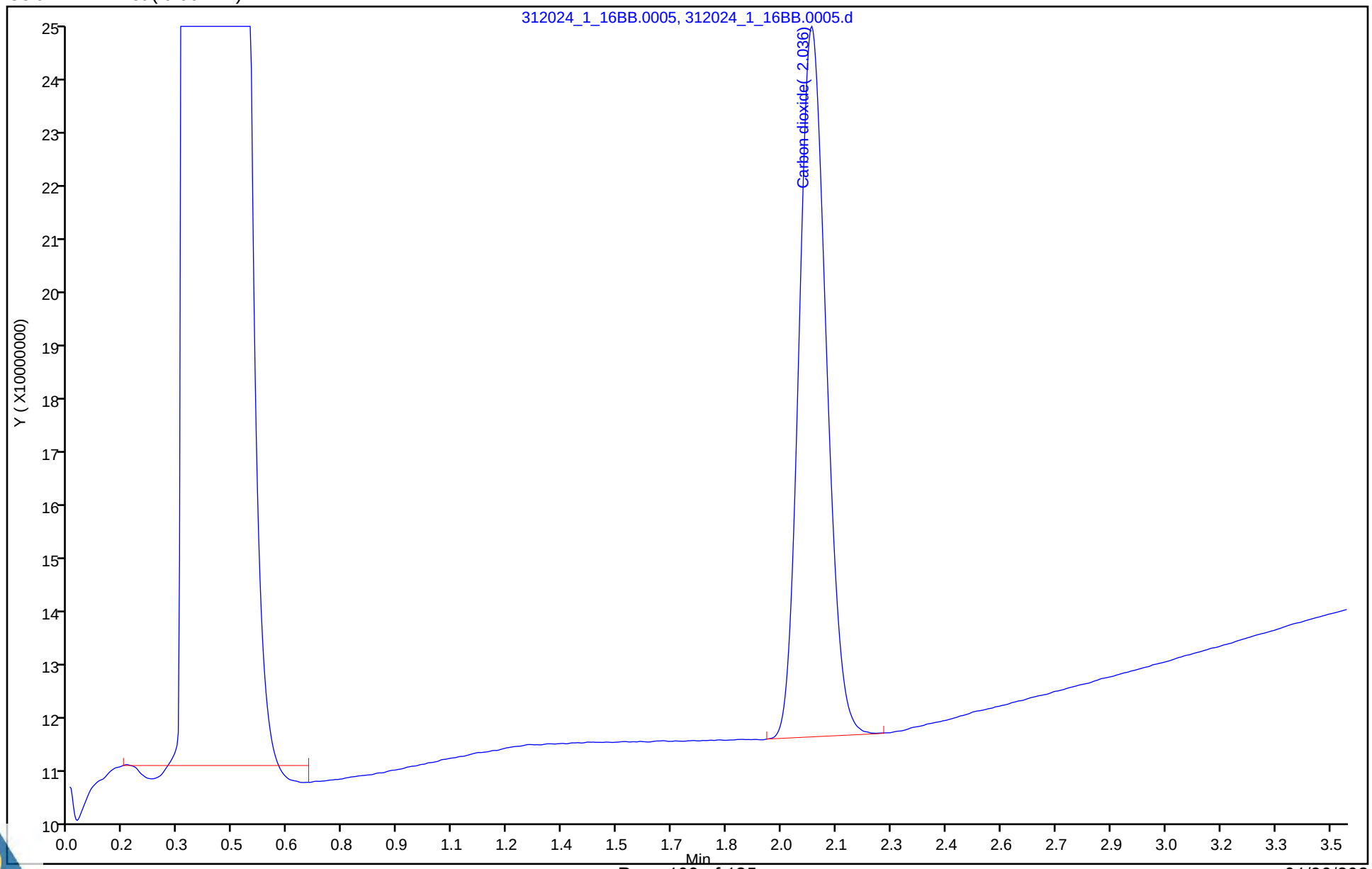
Report Date: 17-Jan-2024 03:28:34 Chrom Revision: 2.3 30-Nov-2023 17:25:52

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20240116-104124.b\312024_1_16BB.0005.d

Injection Date:	16-Jan-2024 12:31:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	LCSD 410-463746/3-A			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)



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-157387-1

SDG No.:

Client Sample ID: Lab Sample ID: LCSD 410-464737/3-A

Matrix: Water Lab File ID: 312024_1_18BB.0005.d

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 01/18/2024 10:15

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.: 464516 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	DL
124-38-9	Carbon dioxide	38900		12000	5600

Report Date: 19-Jan-2024 03:53:40 Chrom Revision: 2.3 18-Jan-2024 13:39:22

Eurofins Lancaster Laboratories Environment Testing, LLC

Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19506-B\20240118-104302.b\312024_1_18BB.0005.d
Lims ID: LCSD 410-464737/3-A
Client ID:
Sample Type: LCSD
Inject. Date: 18-Jan-2024 10:15:00 ALS Bottle#: 0 Worklist Smp#: 5
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info:
Misc. Info.: 410-0104302-005
Operator ID: Instrument ID: 19506-B

Method: \\chromfs\Lancaster\ChromData\19506-B\20240118-104302.b\RSK_CO2_19506B.m
Limit Group: GCV - RSK175 CO2
Last Update: 19-Jan-2024 03:53:39 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	2.044	2.044	0.000	128072571	H 35820	38926	

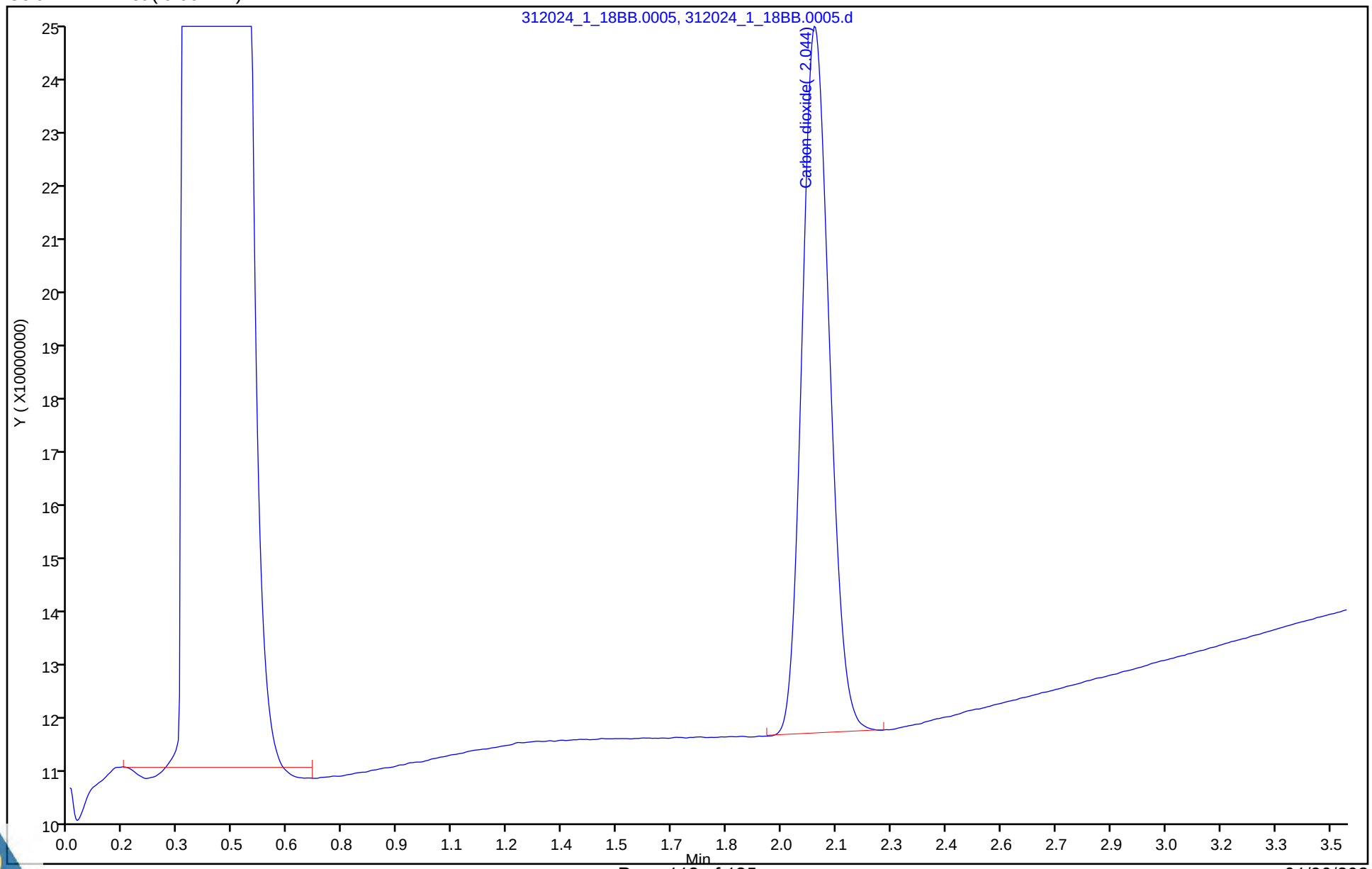
Report Date: 19-Jan-2024 03:53:40 Chrom Revision: 2.3 18-Jan-2024 13:39:22

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20240118-104302.b\312024_1_18BB.0005.d

Injection Date:	18-Jan-2024 10:15:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	LCSD 410-464737/3-A			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)



GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-157387-1

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.: 410-157387-1

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.: 410-157387-1

SDG No.:

Instrument ID: 19506-B Start Date: 01/16/2024 11:54

Analysis Batch Number: 463730 End Date: 01/16/2024 16:41

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVRT 410-463730/2		01/16/2024 11:54	1	312024_1_16BB.0002.d	HP Plot 0.53(mm)
MB 410-463746/1-A		01/16/2024 12:15	1	312024_1_16BB.0003.d	HP Plot 0.53(mm)
LCS 410-463746/2-A		01/16/2024 12:22	1	312024_1_16BB.0004.d	HP Plot 0.53(mm)
LCSD 410-463746/3-A		01/16/2024 12:31	1	312024_1_16BB.0005.d	HP Plot 0.53(mm)
ZZZZZ		01/16/2024 13:46	1		HP Plot 0.53(mm)
ZZZZZ		01/16/2024 13:53	1		HP Plot 0.53(mm)
410-157387-1	16WW58-240110	01/16/2024 14:01	1	312024_1_16BB.0008.d	HP Plot 0.53(mm)
410-157387-2	16WW57-240110	01/16/2024 14:08	1	312024_1_16BB.0009.d	HP Plot 0.53(mm)
410-157387-3	16IW09-240110	01/16/2024 14:16	1	312024_1_16BB.0010.d	HP Plot 0.53(mm)
ZZZZZ		01/16/2024 14:24	1		HP Plot 0.53(mm)
410-157387-5	16IW03-240110	01/16/2024 14:31	1	312024_1_16BB.0012.d	HP Plot 0.53(mm)
CCV 410-463730/13		01/16/2024 14:39	1	312024_1_16BB.0013.d	HP Plot 0.53(mm)
410-157387-6	16IW03-240110-FD	01/16/2024 14:47	1	312024_1_16BB.0014.d	HP Plot 0.53(mm)
ZZZZZ		01/16/2024 14:54	1		HP Plot 0.53(mm)
ZZZZZ		01/16/2024 15:02	1		HP Plot 0.53(mm)
ZZZZZ		01/16/2024 15:10	1		HP Plot 0.53(mm)
ZZZZZ		01/16/2024 15:17	1		HP Plot 0.53(mm)
ZZZZZ		01/16/2024 15:25	1		HP Plot 0.53(mm)
ZZZZZ		01/16/2024 15:33	1		HP Plot 0.53(mm)
CCV 410-463730/21		01/16/2024 15:40	1	312024_1_16BB.0021.d	HP Plot 0.53(mm)
ZZZZZ		01/16/2024 15:48	1		HP Plot 0.53(mm)
ZZZZZ		01/16/2024 15:55	1		HP Plot 0.53(mm)
ZZZZZ		01/16/2024 16:03	1		HP Plot 0.53(mm)
ZZZZZ		01/16/2024 16:11	1		HP Plot 0.53(mm)
ZZZZZ		01/16/2024 16:18	1		HP Plot 0.53(mm)
ZZZZZ		01/16/2024 16:26	1		HP Plot 0.53(mm)
ZZZZZ		01/16/2024 16:34	1		HP Plot 0.53(mm)
CCV 410-463730/29		01/16/2024 16:41	1		HP Plot 0.53(mm)

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC

Job No.: 410-157387-1

SDG No.:

Instrument ID: 19506-B

Start Date: 01/18/2024 09:41

Analysis Batch Number: 464516

End Date: 01/18/2024 15:48

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVRT 410-464516/2		01/18/2024 09:41	1	312024_1_18BB.0002.d	HP Plot 0.53(mm)
MB 410-464737/1-A		01/18/2024 10:00	1	312024_1_18BB.0003.d	HP Plot 0.53(mm)
LCS 410-464737/2-A		01/18/2024 10:07	1	312024_1_18BB.0004.d	HP Plot 0.53(mm)
LCSD 410-464737/3-A		01/18/2024 10:15	1	312024_1_18BB.0005.d	HP Plot 0.53(mm)
410-157387-4	16IW26-240110	01/18/2024 15:40	10	312024_1_18BB.0006.d	HP Plot 0.53(mm)
CCV 410-464516/7		01/18/2024 15:48	1	312024_1_18BB.0007.d	HP Plot 0.53(mm)

GC VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-157387-1

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.: 410-157387-1

SDG No.:

Batch Number: 463746 Batch Start Date: 01/16/24 12:03 Batch Analyst: Omorogbe, Malachi

Batch Method: RSK-175 Batch End Date: 01/16/24 13:32

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	Headspace	EPH_CO2MS 00006	AnalysisComment
MB 410-463746/1		RSK-175, RSK-175			5 mL	5 mL			
LCS 410-463746/2		RSK-175, RSK-175			5 mL	5 mL		0.1 mL	
LCSD 410-463746/3		RSK-175, RSK-175			5 mL	5 mL		0.1 mL	
410-157387-A-1	16WW58-240110	RSK-175, RSK-175	T	6 SU	5 mL	5 mL	No		ph 6
410-157387-A-2	16WW57-240110	RSK-175, RSK-175	T	6 SU	5 mL	5 mL	No		ph 6
410-157387-A-3	16IW09-240110	RSK-175, RSK-175	T	6 SU	5 mL	5 mL	No		ph 6
410-157387-A-5	16IW03-240110	RSK-175, RSK-175	T	6 SU	5 mL	5 mL	No		ph 6
410-157387-A-6	16IW03-240110-FD	RSK-175, RSK-175	T	6 SU	5 mL	5 mL	No		ph 6

Batch Notes	
Pipette/Syringe/Dispenser ID	7105
pH Indicator ID	10BDH2631

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.

GC VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-157387-1

SDG No.:

Batch Number: 464737 Batch Start Date: 01/18/24 09:58 Batch Analyst: Omorogbe, Malachi

Batch Method: RSK-175 Batch End Date: 01/18/24 15:31

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	Headspace	EPH_CO2MS 00006	AnalysisComment
MB 410-464737/1		RSK-175, RSK-175			5 mL	5 mL			
LCS 410-464737/2		RSK-175, RSK-175			5 mL	5 mL		0.1 mL	
LCSD 410-464737/3		RSK-175, RSK-175			5 mL	5 mL		0.1 mL	
410-157387-B-4	16IW26-240110	RSK-175, RSK-175	T	7 SU	5 mL	5 mL	No		DF10

Batch Notes	
Pipette/Syringe/Dispenser ID	7105
pH Indicator ID	10BDH2631

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

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

Subcontract Chain of Custody

SAMPLING STATE: **Dept of Defense** **COC ID: 24457**

SUBCONTRACT TO:

Eurofins Lancaster Laboratories Envt Testing
2425 New Holland Pike
Lancaster, PA 17601 **Phone:** +1 717 656 2300

CUSTOMER INFORMATION:

Company:	ALS Houston
Contact:	James Guin
Address:	10450 Stancliff Rd, Ste 210
Phone:	+1 281 530 5656
Email:	James.Guin@alsglobal.com
Alternate Contact:	Jumoke M. Lawal
Email:	jumoke.lawal@alsglobal.com

INVOICE INFORMATION:

Company:	ALS Houston
Contact:	Accounts Payable
Address:	10450 Stancliff Rd, Ste 210
Phone:	+1 281 530 5656
Reference:	HS24010538
TSR:	Sonia West

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	**HS24010538-01**	**16WW58-240110**	**Groundwater**	**10 Jan 2024 07:05**
	RSK-CO2; Level II & IV, DoD, Equ_APTIM_GISKey (Aptim)			25 Jan 2024
2.	**HS24010538-02**	**16WW57-240110**	**Groundwater**	**10 Jan 2024 08:05**
	RSK-CO2; Level II & IV, DoD, Equ_APTIM_GISKey (Aptim)			25 Jan 2024
3.	**HS24010538-03**	**16IW09-240110**	**Groundwater**	**10 Jan 2024 09:00**
	RSK-CO2; Level II & IV, DoD, Equ_APTIM_GISKey (Aptim)			25 Jan 2024
4.	**HS24010538-04**	**16IW26-240110**	**Groundwater**	**10 Jan 2024 09:50**
	RSK-CO2; Level II & IV, DoD, Equ_APTIM_GISKey (Aptim)			25 Jan 2024
5.	**HS24010538-08**	**16IW03-240110**	**Groundwater**	**10 Jan 2024 12:45**
	RSK-CO2; Level II & IV, DoD, Equ_APTIM_GISKey (Aptim)			25 Jan 2024
6.	**HS24010538-09**	**16IW03-240110-FD**	**Groundwater**	**10 Jan 2024 12:45**
	RSK-CO2; Level II & IV, DoD, Equ_APTIM_GISKey (Aptim)			25 Jan 2024

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

QC Level: DOD IV (DoD Data Package)

Subcontract Chain of Custody

SAMPLING STATE: **Dept of Defense** **COC ID:** **24457**

Relinquished By: _____ Date/Time: _____

Received By: _____ Date/Time: _____

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

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Houston, TX 77099
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F: +1 281 530 5887
www.alsglobal.com

Subcontract Chain of Custody

SAMPLING STATE: **Dept of Defense** **COC ID:** **24457**

SUBCONTRACT TO:

Eurofins Lancaster Laboratories Envt Testing
2425 New Holland Pike
Lancaster, PA 17601 **Phone:** +1 717 656 2300

CUSTOMER INFORMATION:

Company:	ALS Houston
Contact:	James Guin
Address:	10450 Stancliff Rd, Ste 210
Phone:	+1 281 530 5656
Email:	James.Guin@alsglobal.com
Alternate Contact:	Jumoke M. Lawal
Email:	jumoke.lawal@alsglobal.com

INVOICE INFORMATION:

Company:	ALS Houston
Contact:	Accounts Payable
Address:	10450 Stancliff Rd, Ste 210
Phone:	+1 281 530 5656
Reference:	HS24010538
TSR:	Sonia West

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	**HS24010538-01**	**16WW58-240110**	**Groundwater**	**10 Jan 2024 07:05**
	RSK-CO2; Level II & IV, DoD, Equ_APTIM_GISKey (Aptim)			25 Jan 2024
2.	**HS24010538-02**	**16WW57-240110**	**Groundwater**	**10 Jan 2024 08:05**
	RSK-CO2; Level II & IV, DoD, Equ_APTIM_GISKey (Aptim)			25 Jan 2024
3.	**HS24010538-03**	**16IW09-240110**	**Groundwater**	**10 Jan 2024 09:00**
	RSK-CO2; Level II & IV, DoD, Equ_APTIM_GISKey (Aptim)			25 Jan 2024
4.	**HS24010538-04**	**16IW26-240110**	**Groundwater**	**10 Jan 2024 09:50**
	RSK-CO2; Level II & IV, DoD, Equ_APTIM_GISKey (Aptim)			25 Jan 2024
5.	**HS24010538-08**	**16IW03-240110**	**Groundwater**	**10 Jan 2024 12:45**
	RSK-CO2; Level II & IV, DoD, Equ_APTIM_GISKey (Aptim)			25 Jan 2024
6.	**HS24010538-09**	**16IW03-240110-FD**	**Groundwater**	**10 Jan 2024 12:45**
	RSK-CO2; Level II & IV, DoD, Equ_APTIM_GISKey (Aptim)			25 Jan 2024

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

QC Level: DOD IV (DoD Data Package)

NS

R:1.2 C:1.2

Subcontract Chain of Custody

SAMPLING STATE: **Dept of Defense** **COC ID:** **24457**

Relinquished By: _____ Date/Time: 11/11/24 1800

Received By: _____ Date/Time: 11/12/24 10:00

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

R:1.2 C:1.2

Login Sample Receipt Checklist

Client: ALS Group USA, Corp

Job Number: 410-157387-1

Login Number: 157387
List Number: 1
Creator: Santiago, Nathaniel

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

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

HS24010611 LHAAP Site 16 Cover Page

ALS WO# HS24010611

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ALS Group USA, Corp
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  - 16EW02-240111
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HS24010611 E2400034 Perch Level II Report

HS24010611-MSVOA-SW8260

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Form 3B - LCS/LCSD

Form 4 - MB Assoc

Form 5 - Tune

Form 6 - ICAL

Form 6I - ICV

Form 7 - CCV

Form 8 - ISTD

Run Log

Raw Data VOA9_453430 U231206

Raw Data VOA9_456454 U240112

Raw Data VOA9_456549 U240117

Raw Data VOA9_456781 U240119

Raw Data VOA9_456935 U240122

HS24010611-GCSEMI-RSK-175 REV01

Form 1 - Sample Results

Form 3A - MS/MSD

Form 3B - LCS/LCSD

Form 4 - MB Assoc

Form 6 - ICAL

Form 6I - ICV

Form 7 - CCV

Run Log

Raw Data FID_4_322102 170124

Raw Data FID_4_456717 240115

HS24010611 Wetchem 9056_W

Sequence Overview

121423 ICAL 2

STD1

STD2

STD3

10450 Stancliff Rd. Suite 210
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right solutions.
right partner.

WorkOrder: HS24010611

LHAAP Site 16

Bhate Environmental Associates, Inc.

Marcia Olive
445 Union Blvd Ste 129
Lakewood CO 80228

02-Feb-2024

HS24010611 LHAAP Site 16 Final REV02

ALS WO# HS24010611

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Houston, TX 77099
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February 28, 2024

Marcia Olive
Bhate Environmental Associates, Inc.
445 Union Blvd Ste 129
Lakewood, CO 80228

Work Order: **HS24010611**

Laboratory Results for: **LHAAP Site 16**

Dear Marcia Olive,

ALS Environmental received 9 sample(s) on Jan 12, 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: HS24010611

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS24010611-01	16IW10-240111	Groundwater		11-Jan-2024 07:05	12-Jan-2024 10:00	☐
HS24010611-02	16EW02-240111	Groundwater		11-Jan-2024 08:05	12-Jan-2024 10:00	☐
HS24010611-03	16IW20-240111	Groundwater		11-Jan-2024 09:05	12-Jan-2024 10:00	☐
HS24010611-04	16WW39-240111	Groundwater		11-Jan-2024 09:50	12-Jan-2024 10:00	☐
HS24010611-05	16WW22-240111	Groundwater		11-Jan-2024 10:35	12-Jan-2024 10:00	☐
HS24010611-06	16WW56-240111	Groundwater		11-Jan-2024 11:15	12-Jan-2024 10:00	☐
HS24010611-07	16RW06-240111	Groundwater		11-Jan-2024 11:55	12-Jan-2024 10:00	☐
HS24010611-08	16RW07-240111	Groundwater		11-Jan-2024 12:40	12-Jan-2024 10:00	☐
HS24010611-09	Trip Blank-240111	Water	CG-111123-640	11-Jan-2024 00:00	12-Jan-2024 10:00	☐

Revision:2

ALS Houston, US Date: 28-Feb-24

Client: Bhate Environmental Associates, Inc. **CASE NARRATIVE**
Project: LHAAP Site 16
Work Order: HS24010611

Work Order Comments

- This report was revised 02/27/24 to report only the 50x dilution for sample ID 16EW02-240111 for the MS/MSD for RSK175.

Work Order Comments

- This report was revised 02/07/24 to update the subcontract Eurofins report.
- The analysis for Carbon Dioxide was subcontracted to Eurofins Environmental Testing America l 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: R456717

Sample ID: 16EW02-240111 (HS24010611-02MS)

- The recovery of the Matrix Spike (MS) associated to this analyte was outside of the established control limits. However, the LCS was within control limits. The recovery of the MS may be due to sample matrix interference.

Sample ID: 16EW02-240111 (HS24010611-02MSD)

- The recovery of the Matrix Spike Duplicate (MSD) associated to this analyte was outside of the established control limits. However, the LCS was within control limits. The failed recovery of the MSD may be due to sample matrix interference.
- The RPD between the MS and MSD was outside of the control limit.

Sample ID: 16IW10-240111 (HS24010611-01MS)

- The recovery of the Matrix Spike (MS) associated to this analyte was outside of the established control limits. However, the LCS was within control limits. The recovery of the MS may be due to sample matrix interference.

Sample ID: 16IW10-240111 (HS24010611-01MSD)

- The recovery of the Matrix Spike Duplicate (MSD) associated to this analyte was outside of the established control limits. However, the LCS was within control limits. The failed recovery of the MSD may be due to sample matrix interference.

Client: Bhate Environmental Associates, Inc. **CASE NARRATIVE**
Project: LHAAP Site 16
Work Order: HS24010611

GCMS Volatiles by Method SW8260

Batch ID: R456781

Sample ID: 16EW02-240111 (HS24010611-02)

- Surrogate failed outside control limits high. This surrogate is not associated with the target compounds. This was confirmed by reanalysis.

Sample ID: 16RW06-240111 (HS24010611-07)

- Surrogate failed outside control limits high. There are no hits associatedwith this surrogate.

Sample ID: 16WW56-240111 (HS24010611-06)

- Surrogate failed outside control limits high. There are no hits associatedwith this surrogate.

Sample ID: Trip Blank-240111 (HS24010611-09)

- Surrogates failed outside control limits high. Sample is ND.

Sample ID: 16EW02-240111 (HS24010611-02MS)

- The recovery of the Matrix Spike (MS) associated to this analyte was outside of the established control limits. However, the LCS was within control limits. The recovery of the MS may be due to sample matrix interference.

Sample ID: 16EW02-240111 (HS24010611-02MSD)

- The recovery of the Matrix Spike Duplicate (MSD) associated to this analyte was outside of the established control limits. However, the LCS was within control limits. The failed recovery of the MSD may be due to sample matrix interference.

  The RPD between the MS and MSD was outside of the control limit.

Sample ID: VBLKW-240119

- Surrogate failed outside control limits high. This surrogate is not associated with the target compounds.

Batch ID: R456549

Sample ID: 16WW39-240111 (HS24010611-04)

- Surrogate failed outside control limits high. These surrogates are not associated with the reported compound.

Batch ID: R456454,R456935

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

WetChemistry by Method SM5310B

Batch ID: R456818

Sample ID: 16IW10-240111(HS24010611-01MS

- The recovery of the Matrix Spike (MS) associated to this analyte was outside of the established control limits. However, the LCS was within control limits. The recovery of the MS may be due to sample matrix interference.

ALS Houston, US Date: 28-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Work Order: HS24010611

CASE NARRATIVE

WetChemistry by Method SW9056

Batch ID: R456437

Sample ID: 16EW02-240111 (HS24010611-02)

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

Sample ID: 16EW02-240111 (HS24010611-02MS)

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

Sample ID: 16IW10-240111 (HS24010611-01MS)

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

ALS Houston, US Date: 28-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Sample ID: 16IW10-240111
Collection Date: 11-Jan-2024 07:05

ANALYTICAL REPORT
WorkOrder:HS24010611
Lab ID:HS24010611-01
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	17-Jan-2024 11:41
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	17-Jan-2024 11:41
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	17-Jan-2024 11:41
cis-1,2-Dichloroethene	**7.3**		**0.20**	**1.0**	**1.0**	**ug/L**	1	17-Jan-2024 11:41
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	17-Jan-2024 11:41
Trichloroethene	**0.98**	J	**0.20**	**1.0**	**1.0**	**ug/L**	1	17-Jan-2024 11:41
Vinyl chloride	1.0	U	0.20	1.0	1.0	ug/L	1	17-Jan-2024 11:41
Surr: 1,2-Dichloroethane-d4	*99.0*			**0**	*81-118*	*%REC*	*1*	*17-Jan-2024 11:41*
Surr: 4-Bromofluorobenzene	*97.1*			**0**	*85-114*	*%REC*	*1*	*17-Jan-2024 11:41*
Surr: Dibromofluoromethane	*111*			**0**	*80-119*	*%REC*	*1*	*17-Jan-2024 11:41*
Surr: Toluene-d8	*108*			**0**	*89-112*	*%REC*	*1*	*17-Jan-2024 11:41*
DISSOLVED GASES BY RSK-175		**Method:RSK-175**						Analyst: E.H.
Ethane	**0.00264**		**0.000144**	**0.000500**	**0.00100**	**mg/L**	1	15-Jan-2024 09:20
Ethene	**0.0227**		**0.000234**	**0.000500**	**0.00100**	**mg/L**	1	15-Jan-2024 09:20
Methane	**2.82**		**0.0107**	**0.0500**	**0.0500**	**mg/L**	100	15-Jan-2024 10:39
TOTAL ORGANIC CARBON - SM5310B-2011		**Method:SM5310B**						Analyst: DW
Organic Carbon, Total	**133**		**5.00**	**10.0**	**10.0**	**mg/L**	10	21-Jan-2024 14:48
ANIONS BY SW9056A		**Method:SW9056**						Analyst: TH
Nitrogen, Nitrate (As N)	**0.0425**	J	**0.0300**	**0.0500**	**0.100**	**mg/L**	1	12-Jan-2024 17:09
Nitrogen, Nitrite (As N)	0.100	U	0.0300	0.100	0.100	mg/L	1	12-Jan-2024 17:09
Sulfate	**3.71**		**0.200**	**0.250**	**0.500**	**mg/L**	1	12-Jan-2024 17:09
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	25-Jan-2024 11:40
SUBCONTRACT ANALYSIS - RSK		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	30-Jan-2024 18:09

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: 16EW02-240111
Collection Date: 11-Jan-2024 08:05

ANALYTICAL REPORT
WorkOrder:HS24010611
Lab ID:HS24010611-02
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	200	U	60	200	200	ug/L	200	19-Jan-2024 13:59
1,1-Dichloroethene	**260**		**40**	**200**	**200**	**ug/L**	200	19-Jan-2024 13:59
1,2-Dichloroethane	200	U	40	200	200	ug/L	200	19-Jan-2024 13:59
cis-1,2-Dichloroethene	**22,000**		**100**	**500**	**500**	**ug/L**	500	19-Jan-2024 15:05
Methylene chloride	200	U	80	200	400	ug/L	200	19-Jan-2024 13:59
Trichloroethene	**31,000**		**40**	**200**	**200**	**ug/L**	200	19-Jan-2024 13:59
Vinyl chloride	**2,100**		**40**	**200**	**200**	**ug/L**	200	19-Jan-2024 13:59
Surr: 1,2-Dichloroethane-d4	*107*			**0**	*81-118*	*%REC*	*200*	*19-Jan-2024 13:59*
Surr: 1,2-Dichloroethane-d4	*86.8*			**0**	*81-118*	*%REC*	*500*	*19-Jan-2024 15:05*
Surr: 4-Bromofluorobenzene	*113*			**0**	*85-114*	*%REC*	*200*	*19-Jan-2024 13:59*
Surr: 4-Bromofluorobenzene	*106*			**0**	*85-114*	*%REC*	*500*	*19-Jan-2024 15:05*
Surr: Dibromofluoromethane	*97.6*			**0**	*80-119*	*%REC*	*500*	*19-Jan-2024 15:05*
Surr: Dibromofluoromethane	*119*			**0**	*80-119*	*%REC*	*200*	*19-Jan-2024 13:59*
Surr: Toluene-d8	*129*	*S*		**0**	*89-112*	*%REC*	*200*	*19-Jan-2024 13:59*
Surr: Toluene-d8	*114*	*S*		**0**	*89-112*	*%REC*	*500*	*19-Jan-2024 15:05*
DISSOLVED GASES BY RSK-175		**Method:RSK-175**						Analyst: E.H.
Ethane	0.0250	U	0.00720	0.0250	0.0500	mg/L	50	18-Jan-2024 15:33
Ethene	**1.09**		**0.0117**	**0.0250**	**0.0500**	**mg/L**	50	18-Jan-2024 15:33
Methane	**1.25**		**0.00535**	**0.0250**	**0.0250**	**mg/L**	50	18-Jan-2024 15:33
TOTAL ORGANIC CARBON - SM5310B-2011		**Method:SM5310B**						Analyst: DW
Organic Carbon, Total	**13.9**		**0.500**	**1.00**	**1.00**	**mg/L**	1	21-Jan-2024 15:19
ANIONS BY SW9056A		**Method:SW9056**						Analyst: TH
Nitrogen, Nitrate (As N)	0.100	U	0.0600	0.100	0.200	mg/L	2	12-Jan-2024 17:33
Nitrogen, Nitrite (As N)	0.200	U	0.0600	0.200	0.200	mg/L	2	12-Jan-2024 17:33
Sulfate	**3,510**		**10.0**	**12.5**	**25.0**	**mg/L**	50	12-Jan-2024 17:50
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	25-Jan-2024 11:40
SUBCONTRACT ANALYSIS - RSK		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	30-Jan-2024 18:09

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: 16IW20-240111
Collection Date: 11-Jan-2024 09:05

ANALYTICAL REPORT
WorkOrder:HS24010611
Lab ID:HS24010611-03
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	12-Jan-2024 17:52
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	12-Jan-2024 17:52
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	12-Jan-2024 17:52
cis-1,2-Dichloroethene	**4.7**		**0.20**	**1.0**	**1.0**	**ug/L**	1	12-Jan-2024 17:52
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	12-Jan-2024 17:52
Trichloroethene	**5.4**		**0.20**	**1.0**	**1.0**	**ug/L**	1	12-Jan-2024 17:52
Vinyl chloride	**24**		**0.20**	**1.0**	**1.0**	**ug/L**	1	12-Jan-2024 17:52
Surr: 1,2-Dichloroethane-d4	*94.9*			**0**	*81-118*	*%REC*	*1*	*12-Jan-2024 17:52*
Surr: 4-Bromofluorobenzene	*87.7*			**0**	*85-114*	*%REC*	*1*	*12-Jan-2024 17:52*
Surr: Dibromofluoromethane	*101*			**0**	*80-119*	*%REC*	*1*	*12-Jan-2024 17:52*
Surr: Toluene-d8	*97.9*			**0**	*89-112*	*%REC*	*1*	*12-Jan-2024 17:52*
DISSOLVED GASES BY RSK-175		**Method:RSK-175**						Analyst: E.H.
Ethane	**0.00227**		**0.000144**	**0.000500**	**0.00100**	**mg/L**	1	15-Jan-2024 10:30
Ethene	**0.0242**		**0.000234**	**0.000500**	**0.00100**	**mg/L**	1	15-Jan-2024 10:30
Methane	**4.61**		**0.0214**	**0.100**	**0.100**	**mg/L**	200	15-Jan-2024 11:07
TOTAL ORGANIC CARBON - SM5310B-2011		**Method:SM5310B**						Analyst: DW
Organic Carbon, Total	**9.02**		**0.500**	**1.00**	**1.00**	**mg/L**	1	21-Jan-2024 15:48
ANIONS BY SW9056A		**Method:SW9056**						Analyst: TH
Nitrogen, Nitrate (As N)	0.0500	U	0.0300	0.0500	0.100	mg/L	1	12-Jan-2024 18:25
Nitrogen, Nitrite (As N)	0.100	U	0.0300	0.100	0.100	mg/L	1	12-Jan-2024 18:25
Sulfate	**252**		**4.00**	**5.00**	**10.0**	**mg/L**	20	12-Jan-2024 18:31
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	25-Jan-2024 11:40
SUBCONTRACT ANALYSIS - RSK		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	30-Jan-2024 18:09

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: 16WW39-240111
Collection Date: 11-Jan-2024 09:50

ANALYTICAL REPORT
WorkOrder:HS24010611
Lab ID:HS24010611-04
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	12-Jan-2024 21:12
1,1-Dichloroethene	**2.3**		**0.20**	**1.0**	**1.0**	**ug/L**	1	12-Jan-2024 21:12
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	12-Jan-2024 21:12
cis-1,2-Dichloroethene	**56**		**0.20**	**1.0**	**1.0**	**ug/L**	1	12-Jan-2024 21:12
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	12-Jan-2024 21:12
Trichloroethene	**600**		**2.0**	**10**	**10**	**ug/L**	10	17-Jan-2024 13:32
Vinyl chloride	**9.2**		**0.20**	**1.0**	**1.0**	**ug/L**	1	12-Jan-2024 21:12
Surr: 1,2-Dichloroethane-d4	*95.0*			**0**	*81-118*	*%REC*	*1*	*12-Jan-2024 21:12*
Surr: 1,2-Dichloroethane-d4	*113*			**0**	*81-118*	*%REC*	*10*	*17-Jan-2024 13:32*
Surr: 4-Bromofluorobenzene	*89.0*			**0**	*85-114*	*%REC*	*1*	*12-Jan-2024 21:12*
Surr: 4-Bromofluorobenzene	*109*			**0**	*85-114*	*%REC*	*10*	*17-Jan-2024 13:32*
Surr: Dibromofluoromethane	*102*			**0**	*80-119*	*%REC*	*1*	*12-Jan-2024 21:12*
Surr: Dibromofluoromethane	*128*	*S*		**0**	*80-119*	*%REC*	*10*	*17-Jan-2024 13:32*
Surr: Toluene-d8	*99.6*			**0**	*89-112*	*%REC*	*1*	*12-Jan-2024 21:12*
Surr: Toluene-d8	*122*	*S*		**0**	*89-112*	*%REC*	*10*	*17-Jan-2024 13:32*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	25-Jan-2024 11:40

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

Revision: 2

ALS Houston, US Date: 28-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Sample ID: 16WW22-240111
Collection Date: 11-Jan-2024 10:35

ANALYTICAL REPORT
WorkOrder:HS24010611
Lab ID:HS24010611-05
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	12-Jan-2024 18:15
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	12-Jan-2024 18:15
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	12-Jan-2024 18:15
cis-1,2-Dichloroethene	**8.6**		**0.20**	**1.0**	**1.0**	**ug/L**	1	12-Jan-2024 18:15
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	12-Jan-2024 18:15
Trichloroethene	**35**		**0.20**	**1.0**	**1.0**	**ug/L**	1	12-Jan-2024 18:15
Vinyl chloride	**1.7**		**0.20**	**1.0**	**1.0**	**ug/L**	1	12-Jan-2024 18:15
Surr: 1,2-Dichloroethane-d4	*95.1*			**0**	*81-118*	*%REC*	*1*	*12-Jan-2024 18:15*
Surr: 4-Bromofluorobenzene	*90.7*			**0**	*85-114*	*%REC*	*1*	*12-Jan-2024 18:15*
Surr: Dibromofluoromethane	*99.8*			**0**	*80-119*	*%REC*	*1*	*12-Jan-2024 18:15*
Surr: Toluene-d8	*101*			**0**	*89-112*	*%REC*	*1*	*12-Jan-2024 18:15*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	25-Jan-2024 11:40

Note: See Qualifiers Page for a list of qualifiers and their explanation. **Revision:** 2

ALS Houston, US Date: 28-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Sample ID: 16WW56-240111
Collection Date: 11-Jan-2024 11:15

ANALYTICAL REPORT
WorkOrder:HS24010611
Lab ID:HS24010611-06
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	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jan-2024 16:57
1,1-Dichloroethene	**1.8**		**0.20**	**1.0**	**1.0**	**ug/L**	1	19-Jan-2024 16:57
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	19-Jan-2024 16:57
cis-1,2-Dichloroethene	**37**		**0.20**	**1.0**	**1.0**	**ug/L**	1	19-Jan-2024 16:57
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	19-Jan-2024 16:57
Trichloroethene	**120**		**0.20**	**1.0**	**1.0**	**ug/L**	1	19-Jan-2024 16:57
Vinyl chloride	**3.3**		**0.20**	**1.0**	**1.0**	**ug/L**	1	19-Jan-2024 16:57
Surr: 1,2-Dichloroethane-d4	*105*			**0**	*81-118*	*%REC*	*1*	*19-Jan-2024 16:57*
Surr: 4-Bromofluorobenzene	*102*			**0**	*85-114*	*%REC*	*1*	*19-Jan-2024 16:57*
Surr: Dibromofluoromethane	*117*			**0**	*80-119*	*%REC*	*1*	*19-Jan-2024 16:57*
Surr: Toluene-d8	*116*	*S*		**0**	*89-112*	*%REC*	*1*	*19-Jan-2024 16:57*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	25-Jan-2024 11:40

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

Revision: 2

ALS Houston, US Date: 28-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Sample ID: 16RW06-240111
Collection Date: 11-Jan-2024 11:55

ANALYTICAL REPORT
WorkOrder:HS24010611
Lab ID:HS24010611-07
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	1.0	U	0.30	1.0	1.0	ug/L	1	19-Jan-2024 17:19
1,1-Dichloroethene	**1.6**		**0.20**	**1.0**	**1.0**	**ug/L**	1	19-Jan-2024 17:19
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	19-Jan-2024 17:19
cis-1,2-Dichloroethene	**12**		**0.20**	**1.0**	**1.0**	**ug/L**	1	19-Jan-2024 17:19
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	19-Jan-2024 17:19
Trichloroethene	**120**		**0.20**	**1.0**	**1.0**	**ug/L**	1	19-Jan-2024 17:19
Vinyl chloride	**6.7**		**0.20**	**1.0**	**1.0**	**ug/L**	1	19-Jan-2024 17:19
Surr: 1,2-Dichloroethane-d4	*102*			**0**	*81-118*	*%REC*	*1*	*19-Jan-2024 17:19*
Surr: 4-Bromofluorobenzene	*100*			**0**	*85-114*	*%REC*	*1*	*19-Jan-2024 17:19*
Surr: Dibromofluoromethane	*114*			**0**	*80-119*	*%REC*	*1*	*19-Jan-2024 17:19*
Surr: Toluene-d8	*114*	*S*		**0**	*89-112*	*%REC*	*1*	*19-Jan-2024 17:19*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	25-Jan-2024 11:40

Note: See Qualifiers Page for a list of qualifiers and their explanation. **Revision:** 2

ALS Houston, US Date: 28-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Sample ID: 16RW07-240111
Collection Date: 11-Jan-2024 12:40

ANALYTICAL REPORT
WorkOrder:HS24010611
Lab ID:HS24010611-08
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	19-Jan-2024 17:41
1,1-Dichloroethene	**17**		**0.20**	**1.0**	**1.0**	**ug/L**	1	19-Jan-2024 17:41
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	19-Jan-2024 17:41
cis-1,2-Dichloroethene	**140**		**0.20**	**1.0**	**1.0**	**ug/L**	1	19-Jan-2024 17:41
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	19-Jan-2024 17:41
Trichloroethene	**1,900**		**10**	**50**	**50**	**ug/L**	50	22-Jan-2024 14:04
Vinyl chloride	**99**		**0.20**	**1.0**	**1.0**	**ug/L**	1	19-Jan-2024 17:41
Surr: 1,2-Dichloroethane-d4	*94.5*			**0**	*81-118*	*%REC*	*1*	*19-Jan-2024 17:41*
Surr: 1,2-Dichloroethane-d4	*90.5*			**0**	*81-118*	*%REC*	*50*	*22-Jan-2024 14:04*
Surr: 4-Bromofluorobenzene	*93.8*			**0**	*85-114*	*%REC*	*1*	*19-Jan-2024 17:41*
Surr: 4-Bromofluorobenzene	*93.4*			**0**	*85-114*	*%REC*	*50*	*22-Jan-2024 14:04*
Surr: Dibromofluoromethane	*107*			**0**	*80-119*	*%REC*	*1*	*19-Jan-2024 17:41*
Surr: Dibromofluoromethane	*101*			**0**	*80-119*	*%REC*	*50*	*22-Jan-2024 14:04*
Surr: Toluene-d8	*108*			**0**	*89-112*	*%REC*	*1*	*19-Jan-2024 17:41*
Surr: Toluene-d8	*106*			**0**	*89-112*	*%REC*	*50*	*22-Jan-2024 14:04*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	25-Jan-2024 11:40

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

Revision: 2

ALS Houston, US Date: 28-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Sample ID: Trip Blank-240111
Collection Date: 11-Jan-2024 00:00

ANALYTICAL REPORT
WorkOrder:HS24010611
Lab ID:HS24010611-09
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	19-Jan-2024 16:35
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	19-Jan-2024 16:35
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	19-Jan-2024 16:35
cis-1,2-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	19-Jan-2024 16:35
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	19-Jan-2024 16:35
Trichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	19-Jan-2024 16:35
Vinyl chloride	1.0	U	0.20	1.0	1.0	ug/L	1	19-Jan-2024 16:35
Surr: 1,2-Dichloroethane-d4	*115*			**0**	*81-118*	*%REC*	*1*	*19-Jan-2024 16:35*
Surr: 4-Bromofluorobenzene	*114*	*S*		**0**	*85-114*	*%REC*	*1*	*19-Jan-2024 16:35*
Surr: Dibromofluoromethane	*131*	*S*		**0**	*80-119*	*%REC*	*1*	*19-Jan-2024 16:35*
Surr: Toluene-d8	*131*	*S*		**0**	*89-112*	*%REC*	*1*	*19-Jan-2024 16:35*

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
WorkOrder: HS24010611

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: R456437 (0)	**Test Name :** ANIONS BY SW9056A				**Matrix:** Groundwater	
HS24010611-01	16IW10-240111	11 Jan 2024 07:05			12 Jan 2024 17:09	1
HS24010611-02	16EW02-240111	11 Jan 2024 08:05			12 Jan 2024 17:50	50
HS24010611-02	16EW02-240111	11 Jan 2024 08:05			12 Jan 2024 17:33	2
HS24010611-03	16IW20-240111	11 Jan 2024 09:05			12 Jan 2024 18:31	20
HS24010611-03	16IW20-240111	11 Jan 2024 09:05			12 Jan 2024 18:25	1
Batch ID: R456454 (0)	**Test Name :** VOLATILES ORGANICS BY METHOD 8260C				**Matrix:** Groundwater	
HS24010611-03	16IW20-240111	11 Jan 2024 09:05			12 Jan 2024 17:52	1
HS24010611-04	16WW39-240111	11 Jan 2024 09:50			12 Jan 2024 21:12	1
HS24010611-05	16WW22-240111	11 Jan 2024 10:35			12 Jan 2024 18:15	1
Batch ID: R456549 (0)	**Test Name :** VOLATILES ORGANICS BY METHOD 8260C				**Matrix:** Groundwater	
HS24010611-01	16IW10-240111	11 Jan 2024 07:05			17 Jan 2024 11:41	1
HS24010611-04	16WW39-240111	11 Jan 2024 09:50			17 Jan 2024 13:32	10
Batch ID: R456717 (0)	**Test Name :** DISSOLVED GASES BY RSK-175				**Matrix:** Groundwater	
HS24010611-01	16IW10-240111	11 Jan 2024 07:05			15 Jan 2024 10:39	100
HS24010611-01	16IW10-240111	11 Jan 2024 07:05			15 Jan 2024 09:20	1
HS24010611-02	16EW02-240111	11 Jan 2024 08:05			18 Jan 2024 15:33	50
HS24010611-03	16IW20-240111	11 Jan 2024 09:05			15 Jan 2024 11:07	200
HS24010611-03	16IW20-240111	11 Jan 2024 09:05			15 Jan 2024 10:30	1
Batch ID: R456781 (0)	**Test Name :** VOLATILES ORGANICS BY METHOD 8260C				**Matrix:** Water	
HS24010611-09	Trip Blank-240111	11 Jan 2024 00:00			19 Jan 2024 16:35	1
Batch ID: R456781 (0)	**Test Name :** VOLATILES ORGANICS BY METHOD 8260C				**Matrix:** Groundwater	
HS24010611-02	16EW02-240111	11 Jan 2024 08:05			19 Jan 2024 15:05	500
HS24010611-02	16EW02-240111	11 Jan 2024 08:05			19 Jan 2024 13:59	200
HS24010611-06	16WW56-240111	11 Jan 2024 11:15			19 Jan 2024 16:57	1
HS24010611-07	16RW06-240111	11 Jan 2024 11:55			19 Jan 2024 17:19	1
HS24010611-08	16RW07-240111	11 Jan 2024 12:40			19 Jan 2024 17:41	1
Batch ID: R456818 (0)	**Test Name :** TOTAL ORGANIC CARBON - SM5310B-2011				**Matrix:** Groundwater	
HS24010611-01	16IW10-240111	11 Jan 2024 07:05			21 Jan 2024 14:48	10
HS24010611-02	16EW02-240111	11 Jan 2024 08:05			21 Jan 2024 15:19	1
HS24010611-03	16IW20-240111	11 Jan 2024 09:05			21 Jan 2024 15:48	1
Batch ID: R456935 (0)	**Test Name :** VOLATILES ORGANICS BY METHOD 8260C				**Matrix:** Groundwater	
HS24010611-08	16RW07-240111	11 Jan 2024 12:40			22 Jan 2024 14:04	50

Revision: 2

ALS Houston, US Date: 28-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24010611

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: R457161 (0)	**Test Name :** SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)				**Matrix:** Groundwater	
HS24010611-01	16IW10-240111	11 Jan 2024 07:05			25 Jan 2024 11:40	1
HS24010611-02	16EW02-240111	11 Jan 2024 08:05			25 Jan 2024 11:40	1
HS24010611-03	16IW20-240111	11 Jan 2024 09:05			25 Jan 2024 11:40	1
HS24010611-04	16WW39-240111	11 Jan 2024 09:50			25 Jan 2024 11:40	1
HS24010611-05	16WW22-240111	11 Jan 2024 10:35			25 Jan 2024 11:40	1
HS24010611-06	16WW56-240111	11 Jan 2024 11:15			25 Jan 2024 11:40	1
HS24010611-07	16RW06-240111	11 Jan 2024 11:55			25 Jan 2024 11:40	1
HS24010611-08	16RW07-240111	11 Jan 2024 12:40			25 Jan 2024 11:40	1
Batch ID: R457568 (0)	**Test Name :** SUBCONTRACT ANALYSIS - RSK				**Matrix:** Groundwater	
HS24010611-01	16IW10-240111	11 Jan 2024 07:05			30 Jan 2024 18:09	1
HS24010611-02	16EW02-240111	11 Jan 2024 08:05			30 Jan 2024 18:09	1
HS24010611-03	16IW20-240111	11 Jan 2024 09:05			30 Jan 2024 18:09	1

Revision: 2

ALS Houston, US Date: 28-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24010611

QC BATCH REPORT

Batch ID: R456717 (0) **Instrument:** FID-4 **Method:** DISSOLVED GASES BY RSK-175

MBLK Sample ID: **MBLK-240115** Units: **mg/L** Analysis Date: **15-Jan-2024 08:45**
Client ID: Run ID: **FID-4_456717** SeqNo: **7785579** PrepDate: DF: **1**

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

LCS Sample ID: **LCS-240115** Units: **mg/L** Analysis Date: **15-Jan-2024 08:55**
Client ID: Run ID: **FID-4_456717** SeqNo: **7785580** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	0.0205	0.00100	0.01804	0	114	75 - 125				
Ethene	0.0154	0.00100	0.0168	0	91.8	75 - 125				
Methane	0.0110	0.000500	0.009647	0	114	75 - 125				

LCSD Sample ID: **LCSD-240115** Units: **mg/L** Analysis Date: **15-Jan-2024 09:05**
Client ID: Run ID: **FID-4_456717** SeqNo: **7785581** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	0.0172	0.00100	0.01804	0	95.2	75 - 125	0.02051	17.7	30	
Ethene	0.0144	0.00100	0.0168	0	85.9	75 - 125	0.01542	6.62	30	
Methane	0.0100	0.000500	0.009647	0	104	75 - 125	0.01103	9.49	30	

MS Sample ID: **HS24010611-02MS** Units: **mg/L** Analysis Date: **18-Jan-2024 15:11**
Client ID: **16EW02-240111** Run ID: **FID-4_456717** SeqNo: **7785607** PrepDate: DF: **50**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	1.33	0.0500	0.01804	0	7350	75 - 125				S
Ethene	2.26	0.0500	0.0168	1.088	7000	75 - 125				SO
Methane	1.97	0.0250	0.009647	1.253	7430	75 - 125				SEO

Revision: 2

ALS Houston, US Date: 28-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24010611

QC BATCH REPORT

Batch ID: R456717 (0) **Instrument:** FID-4 **Method:** DISSOLVED GASES BY RSK-175

MS Sample ID: **HS24010611-01MS** Units: **mg/L** Analysis Date: **15-Jan-2024 09:29**
Client ID: **16IW10-240111** Run ID: **FID-4_456717** SeqNo: **7785583** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	0.0257	0.00100	0.01804	0.002635	128	75 - 125				S
Ethene	0.0331	0.00100	0.0168	0.02267	61.9	75 - 125				S
Methane	3.73	0.000500	0.009647	3.435	3050	75 - 125				SEO

MSD Sample ID: **HS24010611-02MSD** Units: **mg/L** Analysis Date: **18-Jan-2024 15:19**
Client ID: **16EW02-240111** Run ID: **FID-4_456717** SeqNo: **7785608** PrepDate: DF: **50**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	1.30	0.0500	0.01804	0	7210	75 - 125	1.326	1.93	30	S
Ethene	2.22	0.0500	0.0168	1.088	6720	75 - 125	2.264	2.15	30	SO
Methane	1.95	0.0250	0.009647	1.253	7230	75 - 125	1.969	0.955	30	SEO

MSD Sample ID: **HS24010611-01MSD** Units: **mg/L** Analysis Date: **15-Jan-2024 09:38**
Client ID: **16IW10-240111** Run ID: **FID-4_456717** SeqNo: **7785584** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	0.0245	0.00100	0.01804	0.002635	121	75 - 125	0.02568	4.8	30	
Ethene	0.0342	0.00100	0.0168	0.02267	68.5	75 - 125	0.03308	3.28	30	S
Methane	3.69	0.000500	0.009647	3.435	2660	75 - 125	3.730	1.03	30	SEO

The following samples were analyzed in this batch: HS24010611-01 HS24010611-02 HS24010611-03

Revision: 2

ALS Houston, US Date: 28-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24010611

QC BATCH REPORT

Batch ID: R456454 (0) **Instrument:** VOA9 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MBLK Sample ID: **VBLKW-240112** Units: **ug/L** Analysis Date: **12-Jan-2024 13:03**
Client ID: Run ID: **VOA9_456454** SeqNo: **7779881** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	1.0	1.0								U
1,1-Dichloroethene	1.0	1.0								U
1,2-Dichloroethane	1.0	1.0								U
cis-1,2-Dichloroethene	1.0	1.0								U
Methylene chloride	1.0	2.0								U
Trichloroethene	1.0	1.0								U
Vinyl chloride	1.0	1.0								U
Surr: 1,2-Dichloroethane-d4	*47.15*	*35*	*50*	*0*	*94.3*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*47.21*	*35*	*50*	*0*	*94.4*	*85 - 114*				
Surr: Dibromofluoromethane	*50.75*	*35*	*50*	*0*	*101*	*80 - 119*				
Surr: Toluene-d8	*51.98*	*35*	*50*	*0*	*104*	*89 - 112*				

LCS Sample ID: **VLCSW-240112** Units: **ug/L** Analysis Date: **12-Jan-2024 12:18**
Client ID: Run ID: **VOA9_456454** SeqNo: **7779880** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	20.08	1.0	20	0	100	80 - 119				
1,1-Dichloroethene	21.49	1.0	20	0	107	71 - 131				
1,2-Dichloroethane	18.35	1.0	20	0	91.7	73 - 128				
cis-1,2-Dichloroethene	18.3	1.0	20	0	91.5	78 - 123				
Methylene chloride	21.45	2.0	20	0	107	74 - 124				
Trichloroethene	19.36	1.0	20	0	96.8	79 - 123				
Vinyl chloride	19.78	1.0	20	0	98.9	58 - 137				
Surr: 1,2-Dichloroethane-d4	*48.36*	*35*	*50*	*0*	*96.7*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*50.4*	*35*	*50*	*0*	*101*	*85 - 114*				
Surr: Dibromofluoromethane	*51.68*	*35*	*50*	*0*	*103*	*80 - 119*				
Surr: Toluene-d8	*51.84*	*35*	*50*	*0*	*104*	*89 - 112*				

Revision: 2

ALS Houston, US Date: 28-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24010611

QC BATCH REPORT

Batch ID: R456454 (0) **Instrument:** VOA9 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MS Sample ID: **HS24010519-09MS** Units: **ug/L** Analysis Date: **12-Jan-2024 14:32**
Client ID: Run ID: **VOA9_456454** SeqNo: **7779884** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	16.93	1.0	20	0	84.6	80 - 119				
1,1-Dichloroethene	19.7	1.0	20	0	98.5	71 - 131				
1,2-Dichloroethane	16.55	1.0	20	0	82.8	73 - 128				
cis-1,2-Dichloroethene	16.43	1.0	20	0	82.1	78 - 123				
Methylene chloride	18.7	2.0	20	0	93.5	74 - 124				
Trichloroethene	17.86	1.0	20	0	89.3	79 - 123				
Vinyl chloride	17.54	1.0	20	0	87.7	58 - 137				
Surr: 1,2-Dichloroethane-d4	*48.3*	*35*	*50*	*0*	*96.6*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*51.02*	*35*	*50*	*0*	*102*	*85 - 114*				
Surr: Dibromofluoromethane	*51.72*	*35*	*50*	*0*	*103*	*80 - 119*				
Surr: Toluene-d8	*54.14*	*35*	*50*	*0*	*108*	*89 - 112*				

MSD Sample ID: **HS24010519-09MSD** Units: **ug/L** Analysis Date: **12-Jan-2024 14:54**
Client ID: Run ID: **VOA9_456454** SeqNo: **7779885** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	18.04	1.0	20	0	90.2	80 - 119	16.93	6.39	20	
1,1-Dichloroethene	20.25	1.0	20	0	101	71 - 131	19.7	2.78	20	
1,2-Dichloroethane	16.92	1.0	20	0	84.6	73 - 128	16.55	2.23	20	
cis-1,2-Dichloroethene	16.79	1.0	20	0	84.0	78 - 123	16.43	2.19	20	
Methylene chloride	19.27	2.0	20	0	96.3	74 - 124	18.7	2.97	20	
Trichloroethene	18.3	1.0	20	0	91.5	79 - 123	17.86	2.44	20	
Vinyl chloride	17.56	1.0	20	0	87.8	58 - 137	17.54	0.137	20	
Surr: 1,2-Dichloroethane-d4	*49.01*	*35*	*50*	*0*	*98.0*	*81 - 118*	*48.3*	*1.45*	*20*	
Surr: 4-Bromofluorobenzene	*51.16*	*35*	*50*	*0*	*102*	*85 - 114*	*51.02*	*0.261*	*20*	
Surr: Dibromofluoromethane	*52.56*	*35*	*50*	*0*	*105*	*80 - 119*	*51.72*	*1.63*	*20*	
Surr: Toluene-d8	*53.09*	*35*	*50*	*0*	*106*	*89 - 112*	*54.14*	*1.96*	*20*	

The following samples were analyzed in this batch: HS24010611-03 HS24010611-04 HS24010611-05

Revision: 2

ALS Houston, US Date: 28-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24010611

QC BATCH REPORT

Batch ID: R456549 (0) **Instrument:** VOA9 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MBLK Sample ID: **VBLKW-240117** Units: **ug/L** Analysis Date: **17-Jan-2024 08:42**
Client ID: Run ID: **VOA9_456549** SeqNo: **7781704** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	1.0	1.0								U
1,1-Dichloroethene	1.0	1.0								U
1,2-Dichloroethane	1.0	1.0								U
cis-1,2-Dichloroethene	1.0	1.0								U
Methylene chloride	1.0	2.0								U
Trichloroethene	1.0	1.0								U
Vinyl chloride	1.0	1.0								U
Surr: 1,2-Dichloroethane-d4	*41.22*	*35*	*50*	*0*	*82.4*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*48.52*	*35*	*50*	*0*	*97.0*	*85 - 114*				
Surr: Dibromofluoromethane	*42.43*	*35*	*50*	*0*	*84.9*	*80 - 119*				
Surr: Toluene-d8	*52.95*	*35*	*50*	*0*	*106*	*89 - 112*				

LCS Sample ID: **VLCSW-240117** Units: **ug/L** Analysis Date: **17-Jan-2024 07:58**
Client ID: Run ID: **VOA9_456549** SeqNo: **7781703** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	20.02	1.0	20	0	100	80 - 119				
1,1-Dichloroethene	21.78	1.0	20	0	109	71 - 131				
1,2-Dichloroethane	17.95	1.0	20	0	89.7	73 - 128				
cis-1,2-Dichloroethene	19.05	1.0	20	0	95.2	78 - 123				
Methylene chloride	21.8	2.0	20	0	109	74 - 124				
Trichloroethene	20.37	1.0	20	0	102	79 - 123				
Vinyl chloride	17.22	1.0	20	0	86.1	58 - 137				
Surr: 1,2-Dichloroethane-d4	*47.69*	*35*	*50*	*0*	*95.4*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*51.99*	*35*	*50*	*0*	*104*	*85 - 114*				
Surr: Dibromofluoromethane	*52.69*	*35*	*50*	*0*	*105*	*80 - 119*				
Surr: Toluene-d8	*54.68*	*35*	*50*	*0*	*109*	*89 - 112*				

Revision: 2

ALS Houston, US Date: 28-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24010611

QC BATCH REPORT

Batch ID: R456549 (0) **Instrument:** VOA9 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MS Sample ID: **HS24010611-01MS** Units: **ug/L** Analysis Date: **17-Jan-2024 12:03**
Client ID: **16IW10-240111** Run ID: **VOA9_456549** SeqNo: **7781706** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	21.33	1.0	20	0	107	80 - 119				
1,1-Dichloroethene	23.2	1.0	20	0	116	71 - 131				
1,2-Dichloroethane	18.4	1.0	20	0	92.0	73 - 128				
cis-1,2-Dichloroethene	26.87	1.0	20	7.33	97.7	78 - 123				
Methylene chloride	22.74	2.0	20	0	114	74 - 124				
Trichloroethene	22.36	1.0	20	0.9797	107	79 - 123				
Vinyl chloride	21.83	1.0	20	0	109	58 - 137				
Surr: 1,2-Dichloroethane-d4	*43.08*	*35*	*50*	*0*	*86.2*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*47.87*	*35*	*50*	*0*	*95.7*	*85 - 114*				
Surr: Dibromofluoromethane	*47.92*	*35*	*50*	*0*	*95.8*	*80 - 119*				
Surr: Toluene-d8	*49.37*	*35*	*50*	*0*	*98.7*	*89 - 112*				

MSD Sample ID: **HS24010611-01MSD** Units: **ug/L** Analysis Date: **17-Jan-2024 12:25**
Client ID: **16IW10-240111** Run ID: **VOA9_456549** SeqNo: **7781707** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	20.74	1.0	20	0	104	80 - 119	21.33	2.78	20	
1,1-Dichloroethene	23.39	1.0	20	0	117	71 - 131	23.2	0.79	20	
1,2-Dichloroethane	18.56	1.0	20	0	92.8	73 - 128	18.4	0.845	20	
cis-1,2-Dichloroethene	26.31	1.0	20	7.33	94.9	78 - 123	26.87	2.11	20	
Methylene chloride	22.73	2.0	20	0	114	74 - 124	22.74	0.0165	20	
Trichloroethene	22.39	1.0	20	0.9797	107	79 - 123	22.36	0.119	20	
Vinyl chloride	22.04	1.0	20	0	110	58 - 137	21.83	0.951	20	
Surr: 1,2-Dichloroethane-d4	*42.81*	*35*	*50*	*0*	*85.6*	*81 - 118*	*43.08*	*0.628*	*20*	
Surr: 4-Bromofluorobenzene	*47.28*	*35*	*50*	*0*	*94.6*	*85 - 114*	*47.87*	*1.23*	*20*	
Surr: Dibromofluoromethane	*48.67*	*35*	*50*	*0*	*97.3*	*80 - 119*	*47.92*	*1.56*	*20*	
Surr: Toluene-d8	*49.23*	*35*	*50*	*0*	*98.5*	*89 - 112*	*49.37*	*0.292*	*20*	

The following samples were analyzed in this batch: HS24010611-01 HS24010611-04

Revision: 2

ALS Houston, US Date: 28-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24010611

QC BATCH REPORT

Batch ID: R456781 (0) **Instrument:** VOA9 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MBLK Sample ID: **VBLKW-240119** Units: **ug/L** Analysis Date: **19-Jan-2024 10:58**
Client ID: Run ID: **VOA9_456781** SeqNo: **7786756** 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	*54.32*	*35*	*50*	*0*	*109*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*56.42*	*35*	*50*	*0*	*113*	*85 - 114*				
Surr: Dibromofluoromethane	*59.44*	*35*	*50*	*0*	*119*	*80 - 119*				
Surr: Toluene-d8	*63.29*	*35*	*50*	*0*	*127*	*89 - 112*				S

LCS Sample ID: **VLCSW-240119** Units: **ug/L** Analysis Date: **19-Jan-2024 09:51**
Client ID: Run ID: **VOA9_456781** SeqNo: **7786755** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	20.74	1.0	20	0	104	80 - 119				
1,1-Dichloroethene	21.01	1.0	20	0	105	71 - 131				
1,2-Dichloroethane	17.62	1.0	20	0	88.1	73 - 128				
cis-1,2-Dichloroethene	19	1.0	20	0	95.0	78 - 123				
Methylene chloride	21.16	2.0	20	0	106	74 - 124				
Trichloroethene	21.52	1.0	20	0	108	79 - 123				
Vinyl chloride	16.24	1.0	20	0	81.2	58 - 137				
Surr: 1,2-Dichloroethane-d4	*43.14*	*35*	*50*	*0*	*86.3*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*49.28*	*35*	*50*	*0*	*98.6*	*85 - 114*				
Surr: Dibromofluoromethane	*50.32*	*35*	*50*	*0*	*101*	*80 - 119*				
Surr: Toluene-d8	*51.64*	*35*	*50*	*0*	*103*	*89 - 112*				

Revision: 2

ALS Houston, US Date: 28-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24010611

QC BATCH REPORT

Batch ID: R456781 (0) **Instrument:** VOA9 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MS Sample ID: **HS24010611-02MS** Units: **ug/L** Analysis Date: **19-Jan-2024 14:21**
Client ID: **16EW02-240111** Run ID: **VOA9_456781** SeqNo: **7786758** PrepDate: DF: **200**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	3189	200	4000	0	79.7	80 - 119				S
1,1-Dichloroethene	3698	200	4000	255.9	86.0	71 - 131				
1,2-Dichloroethane	2712	200	4000	0	67.8	73 - 128				S
cis-1,2-Dichloroethene	53140	200	4000	48820	108	78 - 123				EO
Methylene chloride	3361	400	4000	0	84.0	74 - 124				
Trichloroethene	35270	200	4000	31150	103	79 - 123				O
Vinyl chloride	4616	200	4000	2081	63.4	58 - 137				
Surr: 1,2-Dichloroethane-d4	*8980*	*7000*	*10000*	*0*	*89.8*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*10460*	*7000*	*10000*	*0*	*105*	*85 - 114*				
Surr: Dibromofluoromethane	*10540*	*7000*	*10000*	*0*	*105*	*80 - 119*				
Surr: Toluene-d8	*11290*	*7000*	*10000*	*0*	*113*	*89 - 112*				S

MSD Sample ID: **HS24010611-02MSD** Units: **ug/L** Analysis Date: **19-Jan-2024 14:43**
Client ID: **16EW02-240111** Run ID: **VOA9_456781** SeqNo: **7786759** PrepDate: DF: **200**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	3237	200	4000	0	80.9	80 - 119	3189	1.51	20	
1,1-Dichloroethene	3467	200	4000	255.9	80.3	71 - 131	3698	6.44	20	
1,2-Dichloroethane	2704	200	4000	0	67.6	73 - 128	2712	0.291	20	S
cis-1,2-Dichloroethene	41070	200	4000	48820	-194	78 - 123	53140	25.6	20	SREO
Methylene chloride	3263	400	4000	0	81.6	74 - 124	3361	2.94	20	
Trichloroethene	26550	200	4000	31150	-115	79 - 123	35270	28.2	20	SRO
Vinyl chloride	4100	200	4000	2081	50.5	58 - 137	4616	11.9	20	S
Surr: 1,2-Dichloroethane-d4	*9286*	*7000*	*10000*	*0*	*92.9*	*81 - 118*	*8980*	*3.35*	*20*	
Surr: 4-Bromofluorobenzene	*10140*	*7000*	*10000*	*0*	*101*	*85 - 114*	*10460*	*3.06*	*20*	
Surr: Dibromofluoromethane	*10700*	*7000*	*10000*	*0*	*107*	*80 - 119*	*10540*	*1.5*	*20*	
Surr: Toluene-d8	*10840*	*7000*	*10000*	*0*	*108*	*89 - 112*	*11290*	*4.04*	*20*	

The following samples were analyzed in this batch: HS24010611-02 HS24010611-06 HS24010611-07 HS24010611-08 HS24010611-09

Revision: 2

ALS Houston, US Date: 28-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24010611

QC BATCH REPORT

Batch ID: R456935 (0) **Instrument:** VOA9 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MBLK Sample ID: **VBLKW-240122** Units: **ug/L** Analysis Date: **22-Jan-2024 13:41**
Client ID: Run ID: **VOA9_456935** SeqNo: **7800912** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Trichloroethene	1.0	1.0								U
Surr: 1,2-Dichloroethane-d4	*42.26*	*35*	*50*	*0*	*84.5*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*42.91*	*35*	*50*	*0*	*85.8*	*85 - 114*				
Surr: Dibromofluoromethane	*47.18*	*35*	*50*	*0*	*94.4*	*80 - 119*				
Surr: Toluene-d8	*48.84*	*35*	*50*	*0*	*97.7*	*89 - 112*				

LCS Sample ID: **VLCSW-240122** Units: **ug/L** Analysis Date: **22-Jan-2024 12:57**
Client ID: Run ID: **VOA9_456935** SeqNo: **7800911** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Trichloroethene	21.86	1.0	20	0	109	79 - 123				
Surr: 1,2-Dichloroethane-d4	*49.13*	*35*	*50*	*0*	*98.3*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*52.52*	*35*	*50*	*0*	*105*	*85 - 114*				
Surr: Dibromofluoromethane	*55.01*	*35*	*50*	*0*	*110*	*80 - 119*				
Surr: Toluene-d8	*54.39*	*35*	*50*	*0*	*109*	*89 - 112*				

MS Sample ID: **HS24010611-08MS** Units: **ug/L** Analysis Date: **22-Jan-2024 14:26**
Client ID: **16RW07-240111** Run ID: **VOA9_456935** SeqNo: **7800914** PrepDate: DF: **50**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Trichloroethene	2763	50	1000	1900	86.3	79 - 123				
Surr: 1,2-Dichloroethane-d4	*2114*	*1800*	*2500*	*0*	*84.6*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*2367*	*1800*	*2500*	*0*	*94.7*	*85 - 114*				
Surr: Dibromofluoromethane	*2367*	*1800*	*2500*	*0*	*94.7*	*80 - 119*				
Surr: Toluene-d8	*2534*	*1800*	*2500*	*0*	*101*	*89 - 112*				

Revision: 2

ALS Houston, US Date: 28-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24010611

QC BATCH REPORT

Batch ID: R456935 (0) **Instrument:** VOA9 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MSD Sample ID: **HS24010611-08MSD** Units: **ug/L** Analysis Date: **22-Jan-2024 14:48**
Client ID: **16RW07-240111** Run ID: **VOA9_456935** SeqNo: **7800915** PrepDate: DF: **50**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Trichloroethene	2775	50	1000	1900	87.5	79 - 123	2763	0.446	20	
Surr: 1,2-Dichloroethane-d4	*2159*	*1800*	*2500*	*0*	*86.4*	*81 - 118*	*2114*	*2.1*	*20*	
Surr: 4-Bromofluorobenzene	*2371*	*1800*	*2500*	*0*	*94.9*	*85 - 114*	*2367*	*0.178*	*20*	
Surr: Dibromofluoromethane	*2410*	*1800*	*2500*	*0*	*96.4*	*80 - 119*	*2367*	*1.8*	*20*	
Surr: Toluene-d8	*2531*	*1800*	*2500*	*0*	*101*	*89 - 112*	*2534*	*0.0823*	*20*	

The following samples were analyzed in this batch: HS24010611-08

Revision: 2

ALS Houston, US Date: 28-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24010611

QC BATCH REPORT

Batch ID: R456437 (0) **Instrument:** ICS-Integrion **Method:** ANIONS BY SW9056A

MBLK Sample ID: **MBLK** Units: **mg/L** Analysis Date: **12-Jan-2024 16:51**
Client ID: Run ID: **ICS-Integrion_456437** SeqNo: **7779607** 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: **12-Jan-2024 16:57**
Client ID: Run ID: **ICS-Integrion_456437** SeqNo: **7779608** 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)	3.888	0.100	4	0	97.2	80 - 120				
Nitrogen, Nitrite (As N)	3.8	0.100	4	0	95.0	80 - 120				
Sulfate	20.46	0.500	20	0	102	80 - 120				

MS Sample ID: **HS24010611-02MS** Units: **mg/L** Analysis Date: **12-Jan-2024 17:39**
Client ID: **16EW02-240111** Run ID: **ICS-Integrion_456437** SeqNo: **7779614** PrepDate: DF: **2**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrogen, Nitrate (As N)	3.581	0.200	4	0	89.5	80 - 120				
Nitrogen, Nitrite (As N)	1.336	0.200	4	0	33.4	80 - 120				S
Sulfate	1642	1.00	20	1693	-255	80 - 120				SEO

MS Sample ID: **HS24010611-01MS** Units: **mg/L** Analysis Date: **12-Jan-2024 17:15**
Client ID: **16IW10-240111** Run ID: **ICS-Integrion_456437** SeqNo: **7779610** 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)	1.967	0.100	2	0.0425	96.2	80 - 120				
Nitrogen, Nitrite (As N)	0.9696	0.100	2	0	48.5	80 - 120				S
Sulfate	13.64	0.500	10	3.708	99.3	80 - 120				

Revision: 2

ALS Houston, US Date: 28-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24010611

QC BATCH REPORT

Batch ID: R456437 (0) **Instrument:** ICS-Integrion **Method:** ANIONS BY SW9056A

MSD Sample ID: **HS24010611-02MSD** Units: **mg/L** Analysis Date: **12-Jan-2024 17:44**
Client ID: **16EW02-240111** Run ID: **ICS-Integrion_456437** SeqNo: **7779615** PrepDate: DF: **2**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrogen, Nitrate (As N)	3.683	0.200	4	0	92.1	80 - 120	3.581	2.8	20	
Nitrogen, Nitrite (As N)	1.335	0.200	4	0	33.4	80 - 120	1.336	0.0749	20	S
Sulfate	1659	1.00	20	1693	-172	80 - 120	1642	1.01	20	SEO

MSD Sample ID: **HS24010611-01MSD** Units: **mg/L** Analysis Date: **12-Jan-2024 17:21**
Client ID: **16IW10-240111** Run ID: **ICS-Integrion_456437** SeqNo: **7779611** 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)	1.93	0.100	2	0.0425	94.4	80 - 120	1.967	1.86	20	
Nitrogen, Nitrite (As N)	0.9565	0.100	2	0	47.8	80 - 120	0.9696	1.36	20	S
Sulfate	13.79	0.500	10	3.708	101	80 - 120	13.64	1.07	20	

The following samples were analyzed in this batch: HS24010611-01 HS24010611-02 HS24010611-03

Revision: 2

ALS Houston, US Date: 28-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24010611

QC BATCH REPORT

Batch ID: R456818 (0) **Instrument:** TOC_05 **Method:** TOTAL ORGANIC CARBON - SM5310B-2011

MBLK Sample ID: **MBLK-01212024** Units: **mg/L** Analysis Date: **21-Jan-2024 11:46**
Client ID: Run ID: **TOC_05_456818** SeqNo: **7788010** PrepDate: DF: **1**

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

LCS Sample ID: **LCS-01212024** Units: **mg/L** Analysis Date: **21-Jan-2024 12:05**
Client ID: Run ID: **TOC_05_456818** SeqNo: **7788011** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	10.99	1.00	10	0	110	85 - 115				

LCSD Sample ID: **LCSD-01212024** Units: **mg/L** Analysis Date: **21-Jan-2024 12:20**
Client ID: Run ID: **TOC_05_456818** SeqNo: **7788012** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	11.11	1.00	10	0	111	85 - 115	10.99	1.09	20	

MS Sample ID: **HS24010611-02MS** Units: **mg/L** Analysis Date: **21-Jan-2024 15:34**
Client ID: **16EW02-240111** Run ID: **TOC_05_456818** SeqNo: **7788022** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	23.8	1.00	10	13.94	98.6	80 - 120				

MS Sample ID: **HS24010611-01MS** Units: **mg/L** Analysis Date: **21-Jan-2024 15:04**
Client ID: **16IW10-240111** Run ID: **TOC_05_456818** SeqNo: **7788020** PrepDate: DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	145.9	10.0	100	133.1	12.8	80 - 120				S

The following samples were analyzed in this batch: HS24010611-01 HS24010611-02 HS24010611-03

Revision: 2

ALS Houston, US Date: 28-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: **HS24010611**

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: HS24010611 **Date/Time Received:** 12-Jan-2024 10:00

Client Name: Bhate Environmental **Received by:** Paresh M. Giga

Completed By:	/S/ Paresh M. Giga	12-Jan-2024 13:08	**Reviewed by:**	/S/ James Guin	12-Jan-2024 18:47
	eSignature	Date/Time		eSignature	Date/Time

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

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
VOA/TX1005/TX1006 Solids in hermetically sealed vials?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	2 Page(s)
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	COC IDs:none
Samplers name present on COC?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	1.6C/1.5C U/C	IR31	
Cooler(s)/Kit(s):	Red		
Date/Time sample(s) sent to storage:	1/12/24 13:30		
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):

LIMS Number:

Chain of Custody and Analytical Request

Facility/Base I.D.: LHAAP / BILL to PCI

Project/Site Name: LHAAP / Site 16

Client Name:

Collected by: Scott Beesinger

Sample Analysis Requested (5) | 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	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
16IW10-240111	11-JAN-2024	0705	-	N		wg	13	X	X	X	X	X	X				
16IW10-240111-MS	11-JAN-2024	0705	-	MS		wg	13	X	X	X	X	X	X				
16IW10-240111-MSD	11-JAN-2024	0705	-	SD		wg	13	X	X	X	X	X	X				
16EW02-240111	11-JAN-2024	0805	-	N		wg	13	X	X	X	X	X	X				
16EW02-240111-MS	11-JAN-2024	0805	-	MS		wg	13	X	X	X	X	X	X				
16EW02-240111-MSD	11-JAN-2024	0805	-	SD		wg	13	X	X	X	X	X	X				
16IW21-240111	11-JAN-2024	0905	-	N		wg	13	X	X	X	X	X	X				
16WW39-240111	11-JAN-2024	0950	-	N		wg	4	X					X				
16WW22-240111	11-JAN-2024	1035	-	N		wg	4	X					X				
16WW56-240111	11-JAN-2024	1115	-	N		wg	4	X					X				
16RW06-240111	11-JAN-2024	1155	-	N		wg	4	X					X				

HS24010611

Bhate Environmental Associates, Inc.
LHAAP Site 16

COMMENTS: STANDARD TAT

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. Scott Beesinger	1/11/24	1430	1.	1/12/24	10:30
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 Stanfield 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

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)	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
							Sample Analysis Requested (5)											Quality Assurance Samples (6)			
16BW07240111	11-JAN-2024	1240	-	N		WG	4	X					X								
TRIPBLANK240111	11-JAN-2024		-	TB		W	2	X													
			-																		
			-																		
			-																		
			-																		
			-																		
			-																		
			-																		

HS24010611

Bhate Environmental Associates, Inc.
LHAAP Site 16

COMMENTS: STANDARD TAT

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. Scott Beesinger	1/11/24	1430	1.	1/11/24	15:30
2.			2.		
3.			3.		

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab: ____ Shipped ____ No.:

____ Method of Shipment: ____

____ Fed Ex ____ Airbill Number: ____

____ Analytical Lab: ALS 10450 Stanciff Rd. Suite 210 Houston, TX 77099 (281) 530-5656

ATTN: Dane Wanzer Lab Recipient: ____ Delivery Date/Time: ____

1.) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)

2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)

3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)

4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks

5.) Sample Analysis Requested: Analytical method requested and number of containers provided for each.

6.) Quality assurance samples are assigned by date (ddmmyy) and the sample number associated with the sample (01, 02, etc) (e.g. Equipment blank collected in association with MW-1 on 10/10/99 will be designated 10109901 in the Equipment Blank Lot Control

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

Red

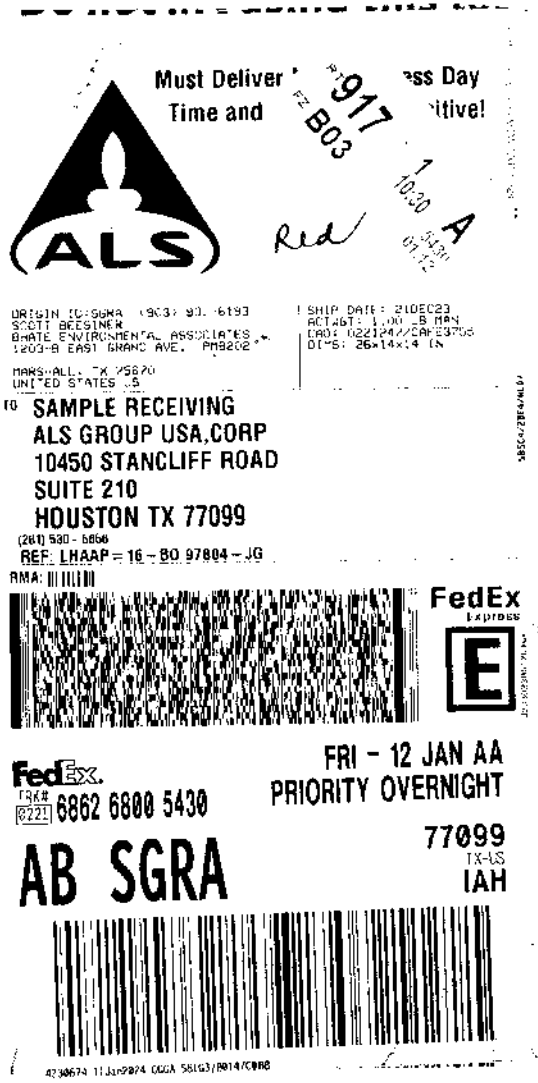
CUSTODY SEAL

Date: 1/11/24 Time: 1430
Name: Scott Beesinger
Company: BMATE

Seal Broken By: ZM
Date: 01/12/24

Red

JAN 12 2024



eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 2/7/2024 10:26:57 AM Revision 1

JOB DESCRIPTION

HS24010611

JOB NUMBER

410-157797-1

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

Generated
2/7/2024 10:26:57 AM
Revision 1

Authorized for release by
Bu Meh, Project Manager
bu.meh@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
Project/Site: HS24010611

Job ID: 410-157797-1

Qualifiers

GC VOA

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

Glossary

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

Case Narrative

Client: ALS Group USA, Corp
Project: HS24010611

Job ID: 410-157797-1

Job ID: 410-157797-1 Eurofins Lancaster Laboratories Environment

Job Narrative
410-157797-1

REVISION

The report being provided is a revision of the original report sent on 2/2/2024. The report (revision 1) is being revised due to removal of case narrative comment.

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 1/18/2024 1:55 PM and 1/25/2024 9:45 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.8°C and 2.4°C

GC VOA
Method RSK_175_CO2_D5: The software does not display the % Drift data to the whole number as is listed in the method (i.e. limit of 15 %). When the 15.2% drift is evaluated to the whole number, the continuing calibration verification (CCV) passes the method criteria for Carbon dioxide.

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: HS24010611

Job ID: 410-157797-1

Client Sample ID: 16EW02-240111 — Lab Sample ID: 410-157797-2

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	230000	M Q J1 cn	12000	5600	ug/L	1		RSK-175	Total/NA

Client Sample ID: 16IW20-240111 — Lab Sample ID: 410-157797-3

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	240000	M Q cn	12000	5600	ug/L	1		RSK-175	Total/NA

Client Sample ID: 16IW10-240111 — Lab Sample ID: 410-158493-1

Analyte	Result	Qualifier	LOQ	DL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	210000	H M cn	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: HS24010611

Job ID: 410-157797-1

Client Sample ID: 16EW02-240111
Lab Sample ID: 410-157797-2
Date Collected: 01/11/24 08:05
Matrix: Water
Date Received: 01/18/24 13:55

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	230000	M Q J1 cn	12000	5600	ug/L		01/22/24 10:24	01/22/24 10:44	1

Client Sample ID: 16IW20-240111
Lab Sample ID: 410-157797-3
Date Collected: 01/11/24 09:05
Matrix: Water
Date Received: 01/18/24 13:55

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	240000	M Q cn	12000	5600	ug/L		01/22/24 10:24	01/22/24 11:07	1

Client Sample ID: 16IW10-240111
Lab Sample ID: 410-158493-1
Date Collected: 01/11/24 07:05
Matrix: Water
Date Received: 01/25/24 09:45

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	210000	H M cn	12000	5600	ug/L		01/31/24 10:07	01/31/24 13:20	1

QC Sample Results

Client: ALS Group USA, Corp
Project/Site: HS24010611

Job ID: 410-157797-1

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 410-465370/1-A
Matrix: Water
Analysis Batch: 465326

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 465370

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	5600	U M	12000	5600	ug/L		01/22/24 10:24	01/22/24 10:28	1

Lab Sample ID: LCS 410-465370/2-A
Matrix: Water
Analysis Batch: 465326

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 465370

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Carbon dioxide	35800	37600		ug/L		105	80 - 122

Lab Sample ID: 410-157797-2 MS
Matrix: Water
Analysis Batch: 465326

Client Sample ID: 16EW02-240111
Prep Type: Total/NA
Prep Batch: 465370

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Carbon dioxide	230000	M Q J1 cn	35800	232000	M 4 cn	ug/L		-2	80 - 122

Lab Sample ID: 410-157797-2 MSD
Matrix: Water
Analysis Batch: 465326

Client Sample ID: 16EW02-240111
Prep Type: Total/NA
Prep Batch: 465370

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Carbon dioxide	230000	M Q J1 cn	35800	217000	M 4 cn	ug/L		-44	80 - 122	7	20

Lab Sample ID: MB 410-468591/1-A
Matrix: Water
Analysis Batch: 468532

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 468591

Analyte	MB Result	MB Qualifier	LOQ	DL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	5600	U M	12000	5600	ug/L		01/31/24 10:07	01/31/24 13:04	1

Lab Sample ID: LCS 410-468591/2-A
Matrix: Water
Analysis Batch: 468532

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 468591

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Carbon dioxide	35800	37900		ug/L		106	80 - 122

Lab Sample ID: 410-158493-1 MS
Matrix: Water
Analysis Batch: 468532

Client Sample ID: 16IW10-240111
Prep Type: Total/NA
Prep Batch: 468591

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Carbon dioxide	210000	H M cn	35800	256000	H M 4	ug/L		120	80 - 122

Lab Sample ID: 410-158493-1 MSD
Matrix: Water
Analysis Batch: 468532

Client Sample ID: 16IW10-240111
Prep Type: Total/NA
Prep Batch: 468591

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Carbon dioxide	210000	H M cn	35800	257000	H M 4	ug/L		122	80 - 122	0	20

QC Association Summary

Client: ALS Group USA, Corp
Project/Site: HS24010611

Job ID: 410-157797-1

GC VOA

Analysis Batch: 465326

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-157797-2	16EW02-240111	Total/NA	Water	RSK-175	465370
410-157797-3	16IW20-240111	Total/NA	Water	RSK-175	465370
MB 410-465370/1-A	Method Blank	Total/NA	Water	RSK-175	465370
LCS 410-465370/2-A	Lab Control Sample	Total/NA	Water	RSK-175	465370
410-157797-2 MS	16EW02-240111	Total/NA	Water	RSK-175	465370
410-157797-2 MSD	16EW02-240111	Total/NA	Water	RSK-175	465370

Prep Batch: 465370

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-157797-2	16EW02-240111	Total/NA	Water	RSK-175	
410-157797-3	16IW20-240111	Total/NA	Water	RSK-175	
MB 410-465370/1-A	Method Blank	Total/NA	Water	RSK-175	
LCS 410-465370/2-A	Lab Control Sample	Total/NA	Water	RSK-175	
410-157797-2 MS	16EW02-240111	Total/NA	Water	RSK-175	
410-157797-2 MSD	16EW02-240111	Total/NA	Water	RSK-175	

Analysis Batch: 468532

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-158493-1	16IW10-240111	Total/NA	Water	RSK-175	468591
MB 410-468591/1-A	Method Blank	Total/NA	Water	RSK-175	468591
LCS 410-468591/2-A	Lab Control Sample	Total/NA	Water	RSK-175	468591
410-158493-1 MS	16IW10-240111	Total/NA	Water	RSK-175	468591
410-158493-1 MSD	16IW10-240111	Total/NA	Water	RSK-175	468591

Prep Batch: 468591

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-158493-1	16IW10-240111	Total/NA	Water	RSK-175	
MB 410-468591/1-A	Method Blank	Total/NA	Water	RSK-175	
LCS 410-468591/2-A	Lab Control Sample	Total/NA	Water	RSK-175	
410-158493-1 MS	16IW10-240111	Total/NA	Water	RSK-175	
410-158493-1 MSD	16IW10-240111	Total/NA	Water	RSK-175	

Lab Chronicle

Client: ALS Group USA, Corp
Project/Site: HS24010611

Job ID: 410-157797-1

Client Sample ID: 16EW02-240111
Date Collected: 01/11/24 08:05
Date Received: 01/18/24 13:55

Lab Sample ID: 410-157797-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	RSK-175			465370	HQR6	ELLE	01/22/24 10:24
Total/NA	Analysis	RSK-175		1	465326	LXF2	ELLE	01/22/24 10:44

Client Sample ID: 16IW20-240111
Date Collected: 01/11/24 09:05
Date Received: 01/18/24 13:55

Lab Sample ID: 410-157797-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	RSK-175			465370	HQR6	ELLE	01/22/24 10:24
Total/NA	Analysis	RSK-175		1	465326	LXF2	ELLE	01/22/24 11:07

Client Sample ID: 16IW10-240111
Date Collected: 01/11/24 07:05
Date Received: 01/25/24 09:45

Lab Sample ID: 410-158493-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	RSK-175			468591	HQR6	ELLE	01/31/24 10:07
Total/NA	Analysis	RSK-175		1	468532	LXF2	ELLE	01/31/24 13:20

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: HS24010611

Job ID: 410-157797-1

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: HS24010611

Job ID: 410-157797-1

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: HS24010611

Job ID: 410-157797-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
410-157797-2	16EW02-240111	Water	01/11/24 08:05	01/18/24 13:55
410-157797-3	16IW20-240111	Water	01/11/24 09:05	01/18/24 13:55
410-158493-1	16IW10-240111	Water	01/11/24 07:05	01/25/24 09:45

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www.alsglobal.com

410-157797 Chain of Custody

Subcontract Chain of Custody

SAMPLING STATE: **Dept of Defense** **COC ID:** **24466**

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:	HS24010611
TSR:	Sonia West

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	**HS24010611-01**	**16IW10-240111**	**Groundwater**	**11 Jan 2024 07:05**
	RSK-CO2; Level II & IV, DoD, Equ_APTIM_GISKey (Aptim)			26 Jan 2024
2.	**HS24010611-02**	**16EW02-240111**	**Groundwater**	**11 Jan 2024 08:05**
	RSK-CO2; Level II & IV, DoD, Equ_APTIM_GISKey (Aptim)			26 Jan 2024
3.	**HS24010611-03**	**16IW20-240111**	**Groundwater**	**11 Jan 2024 09:05**
	RSK-CO2; Level II & IV, DoD, Equ_APTIM_GISKey (Aptim)			26 Jan 2024

Comments: Please analyze for the analysis listed above.
Send report to the emails shown above.
HS24010611-01 & HS24010611-02 = MS/MSD

QC Level: DOD IV (DoD Data Package)

Relinquished By: _____ Date/Time: 11/17/24 1800

Received By: _____ Date/Time: 1/18/24 1355

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

R: 2.3
C: 2.4

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Subcontract Chain of Custody

SAMPLING STATE: **Dept of Defense** **COC ID:** **24466**

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:	HS24010611
TSR:	Sonia West

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	**HS24010611-01**	**16IW10-240111**	**Groundwater**	**11 Jan 2024 07:05**
	RSK-CO2; Level II & IV, DoD, Equ_APTIM_GISKey (Aptim)			26 Jan 2024
2.	**HS24010611-02**	**16EW02-240111**	**Groundwater**	**11 Jan 2024 08:05**
	RSK-CO2; Level II & IV, DoD, Equ_APTIM_GISKey (Aptim)			26 Jan 2024
3.	**HS24010611-03**	**16IW20-240111**	**Groundwater**	**11 Jan 2024 09:05**
	RSK-CO2; Level II & IV, DoD, Equ_APTIM_GISKey (Aptim)			26 Jan 2024

Comments: Please analyze for the analysis listed above.
Send report to the emails shown above.
HS24010611-01 & HS24010611-02 = MS/MSD

QC Level: DOD IV (DoD Data Package)

Relinquished By: _____ Date/Time: 1/24/24 1800.

Received By: Debra A. Byrne Date/Time: 1-25-24 09:45

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

6 x vials for HS24010611-01 (ms/msd)

R: 2.4
C: 1.8

HA

CJ

Login Sample Receipt Checklist

Client: ALS Group USA, Corp

Job Number: 410-157797-1

Login Number: 157797
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.	False	Refer to Job Narrative for details.
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	

Login Sample Receipt Checklist

Client: ALS Group USA, Corp

Job Number: 410-157797-1

Login Number: 158493
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.	False	Refer to Job Narrative for details.
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	

January 24, 2024 Service Request No:E2400034

James Guin
ALS Environmental - US
10450 Stancliff Rd #210
Houston, TX 77099

Laboratory Results for: HS24010611

Dear James,

Enclosed are the results of the sample(s) submitted to our laboratory January 12, 2024
For your reference, these analyses have been assigned our service request number **E2400034.**

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

Please contact me if you have any questions. My extension is 2190. You may also contact me via email at hussam.kelany@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

H Kelany

Hussam Kelany
Project Manager

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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.:**	E2400034
Project:	HS24010611	**Date Received:**	01/12/24
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

Eight samples were received for analysis at ALS Environmental in Houston on 01/12/24.

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:

EQ2400030: 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:**E2400034
Project: HS24010611

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
E2400034-001	16IW10-240111	1/11/2024	0705
E2400034-002	16EW02-240111	1/11/2024	0805
E2400034-003	16IW20-24011	1/11/2024	0905
E2400034-004	16WW39-240111	1/11/2024	0950
E2400034-005	16WW22-240111	1/11/2024	1035
E2400034-006	16WW56-240111	1/11/2024	1115
E2400034-007	16RW06-240111	1/11/2024	1155
E2400034-008	16RW07-240111	1/11/2024	1240

Service Request Summary

Folder #: **E2400034**
Client Name: ALS Environmental - US
Project Name: HS24010611
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: 01/12/24
Internal Due Date: 1/23/2024
QAP: LAB QAP
Qualifier Set: DOD
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number:
EDD: EQUIS APTIM
LONGHORN EFWEDD

12 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-WIC 4A
Pressure Gas:

Lab Samp No.	Client Samp No	Matrix	Collected	Semivoa GCMS ClO4 DOD/6850
E2400034-001	16IW10-240111	Ground Water	01/11/24 0705	**IV**
E2400034-002	16EW02-240111	Ground Water	01/11/24 0805	**IV**
E2400034-003	16IW20-24011	Ground Water	01/11/24 0905	**IV**
E2400034-004	16WW39-240111	Ground Water	01/11/24 0950	**IV**
E2400034-005	16WW22-240111	Ground Water	01/11/24 1035	**IV**
E2400034-006	16WW56-240111	Ground Water	01/11/24 1115	**IV**
E2400034-007	16RW06-240111	Ground Water	01/11/24 1155	**IV**
E2400034-008	16RW07-240111	Ground Water	01/11/24 1240	**IV**

Service Request Summary

Folder #:	**E2400034**
Client Name:	ALS Environmental - US
Project Name:	HS24010611
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:	01/12/24
Internal Due Date:	1/23/2024
QAP:	LAB QAP
Qualifier Set:	DOD
Formset:	Lab Standard
Merged?:	Y
Report to MDL?:	Y
P.O. Number:	
EDD:	EQUIS APTIM LONGHORN EFWEDD

12 120 mL-Plastic Bottle Natural WM Unpreserved

Location: EHRMS-WIC 4A

Pressure Gas:

Data Qualifiers

DOD

B	Analyte found in the associated method blank as well as in the sample.
C	Result identification confirmed.
D	Compound identified in an analysis at a secondary dilution factor
E	Estimated value. Concentration above calibration range.
F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
I	(Auto) The reference ion ratio was outside acceptance criteria, which may indicate a potential bias to this result.
I	The reference ion ratio was outside acceptance criteria, which may indicate a potential bias to this result.
J	Estimated value. Concentration found below MRL.
K	A deflection in the QC ion may indicate interference with the quantitation of this ion. The concentration of this analyte should be considered as an estimate.
K	The reference ion ratio was outside acceptance criteria, which may indicate a potential bias to this result.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
P	Indicates chlorodiphenyl ether interference present at the retention time of the target compound.
Q	Pesticide/Aroclor target is not confirmed, >= 100% difference for the detected concentrations between the two GC columns
U	Compound was analyzed for, but was not detected (ND).
X	See case narrative.
Y	Recovery outside limits.
Y	The chromatogram resembles a petroleum product but does not match the calibration standard.
Z	The chromatogram does not resemble a petroleum product.
i	The MRL/MDL has been elevated due to a matrix interference.

ALS Laboratory Group

Acronyms

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

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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
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E2400034
ALS Group USA, Corp.
24010611

5

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Subcontract Chain of Custody

SAMPLING STATE: **Dept of Defense** **COC ID: 24465**

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:	HS24010611
TSR:	Sonia West

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	**HS24010611-01**	**16IW10-240111**	**Groundwater**	**11 Jan 2024 07:05**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			26 Jan 2024
2.	**HS24010611-02**	**16EW02-240111**	**Groundwater**	**11 Jan 2024 08:05**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			26 Jan 2024
3.	**HS24010611-03**	**16IW20-240111**	**Groundwater**	**11 Jan 2024 09:05**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			26 Jan 2024
4.	**HS24010611-04**	**16WW39-240111**	**Groundwater**	**11 Jan 2024 09:50**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			26 Jan 2024
5.	**HS24010611-05**	**16WW22-240111**	**Groundwater**	**11 Jan 2024 10:35**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			26 Jan 2024
6.	**HS24010611-06**	**16WW56-240111**	**Groundwater**	**11 Jan 2024 11:15**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			26 Jan 2024
7.	**HS24010611-07**	**16RW06-240111**	**Groundwater**	**11 Jan 2024 11:55**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			26 Jan 2024
8.	**HS24010611-08**	**16RW07-240111**	**Groundwater**	**11 Jan 2024 12:40**

Subcontract Chain of Custody

SAMPLING STATE: **Dept of Defense** **COC ID: 24465**

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.			26 Jan 2024

Comments: Please analyze for the analysis listed above.
Send report to the emails shown above.
HS24010611-01 & HS24010611-02 = MS/MSD

QC Level: DOD IV (DoD Data Package)

Relinquished By: _____ Date/Time: _____

Received By: JC Date/Time: 1/12/24 1308

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

ALS Group USA, Corp.
24010611

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Houston, TX 77099
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F: +1 281 530 5887
www.alsglobal.com

E2400034 5

Sample Receipt Checklist

Work Order ID: HS24010611 **Date/Time received:** 12 Jan 2024 10:00

Client name: Bhate Environmental Associates, Inc. **Received by:** Paresh M. Giga

Completed/By: 12 Jan 2024 13:08 (Date/Time) Paresh M. Giga (eSignature) **Reviewed/By:** _____ (Date/Time) _____ (eSignature)

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

Shipping container/cooler in good condition?	☑ Yes	☐ No	☐ Not Present	
Custody seals intact on shipping container/cooler?	☑ Yes	☐ No	☐ Not Present	
Custody seals intact on Sample bottles?	☐ Yes	☐ No	☑ Not Present	
VOA/TX1005/TX1006 Solids in hermetically sealed vials?	☐ Yes	☐ No	☑ Not Present	
Chain of custody present?	☑ Yes	☐ No	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):	1.6C/1.5C U/C		IR31	
Cooler Information:	1 Cooler(s), Red			
Date/Time sample(s) sent to storage:	1/12/24 13:30			
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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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#: 432773 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 1/19/24 08:41

#	Lab Code	Client ID	B#	Method /Test	pH	Cl	Matrix	Amt. Ext.	Sample Description
1	E2400034-001	16IW10-240111	.02	6850/ClO4 DOD			Ground Water	10mL	
2	E2400034-002	16EW02-240111	.02	6850/ClO4 DOD			Ground Water	10mL	
3	E2400034-003	16IW20-24011	.01	6850/ClO4 DOD			Ground Water	10mL	
4	E2400034-004	16WW39-240111	.01	6850/ClO4 DOD			Ground Water	10mL	
5	E2400034-005	16WW22-240111	.01	6850/ClO4 DOD			Ground Water	10mL	
6	E2400034-006	16WW56-240111	.01	6850/ClO4 DOD			Ground Water	10mL	
7	E2400034-007	16RW06-240111	.01	6850/ClO4 DOD			Ground Water	10mL	
8	E2400034-008	16RW07-240111	.01	6850/ClO4 DOD			Ground Water	10mL	
9	E2400054-001	CTC-36_0124	.01	6850/ClO4			Water	10mL	
10	E2400054-002	EA-14_0124	.01	6850/ClO4			Water	10mL	
11	E2400054-003	EA-40_0124	.01	6850/ClO4			Water	10mL	
12	E2400054-004	CTC-43_0124	.01	6850/ClO4			Water	10mL	
13	E2400054-005	CTC-10_0124	.01	6850/ClO4			Water	10mL	
14	E2400054-006	CTC-23_0124	.01	6850/ClO4			Water	10mL	
15	E2400054-007	CTC-32_0124	.01	6850/ClO4			Water	10mL	
16	E2400054-008	CTC-35-0124	.01	6850/ClO4			Water	10mL	
17	E2400054-009	CTC-26_0124	.01	6850/ClO4			Water	10mL	
18	E2400054-010	EA-38_0124	.01	6850/ClO4			Water	10mL	
19	E2400054-011	CTC-9-0124	.01	6850/ClO4			Water	10mL	
20	E2400054-012	CTC-44-0124	.01	6850/ClO4			Water	10mL	
21	EQ2400030-01	MB		6850/ClO4			Liquid	10mL	
22	EQ2400030-02	LCS		6850/ClO4			Liquid	10mL	
23	EQ2400030-03	DLCS		6850/ClO4			Liquid	10mL	
24	EQ2400030-04	ICS		6850/ClO4			Liquid	10mL	
25	EQ2400030-05	16IW10-240111 MS	.02	6850/ClO4 DOD			Liquid	10mL	
26	EQ2400030-06	16IW10-240111 DMS	.02	6850/ClO4 DOD			Liquid	10mL	
27	EQ2400030-07	16EW02-240111 MS	.02	6850/ClO4 DOD			Liquid	10mL	
28	EQ2400030-08	16EW02-240111 DMS	.02	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

EQ2400030-02	10.00µL	EQ2400030-02	10.00µL	EQ2400030-03	10.00µL	EQ2400030-03	10.00µL	EQ2400030-04	10.00µL	EQ2400030-04	10.00µL
EQ2400030-05	10.00µL	EQ2400030-06	10.00µL	EQ2400030-07	10.00µL	EQ2400030-08	10.00µL				

Preparation Information Benchsheet

Prep Run#: 432773 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 1/19/24 08:41

Name:	Perchlorate Internal Standard 1ug/mL	Inventory ID	232015	Logbook Ref:	Perchlorate Internal Standard	Expires On:	04/30/2024

E2400034-001	100.00µL	E2400034-002	100.00µL	E2400034-003	100.00µL	E2400034-004	100.00µL	E2400034-005	100.00µL	E2400034-006	100.00µL
E2400034-007	100.00µL	E2400034-008	100.00µL	E2400054-001	100.00µL	E2400054-002	100.00µL	E2400054-003	100.00µL	E2400054-004	100.00µL
E2400054-005	100.00µL	E2400054-006	100.00µL	E2400054-007	100.00µL	E2400054-008	100.00µL	E2400054-009	100.00µL	E2400054-010	100.00µL
E2400054-011	100.00µL	E2400054-012	100.00µL	EQ2400030-01	100.00µL	EQ2400030-01	100.00µL	EQ2400030-02	100.00µL	EQ2400030-02	100.00µL
EQ2400030-03	100.00µL	EQ2400030-03	100.00µL	EQ2400030-04	100.00µL	EQ2400030-04	100.00µL	EQ2400030-05	100.00µL	EQ2400030-06	100.00µL
EQ2400030-07	100.00µL	EQ2400030-08	100.00µL								

Name:	Perchlorate Anion Spiking Soln. 25,000 ppm	Inventory ID	233096	Logbook Ref:		Expires On:	02/04/2024

EQ2400030-04	20.00µL	EQ2400030-04	20.00µL

Preparation Materials

Water HPLC Grade	HPLC water 083124 (233144)	6850 Amber Glass screw vial	2mL Screw Top Vial (221894)	6850 0.45um syringe filters	6850 0.45 SYRING FILTER (229979)
6850 Luer-Lok Syringes	Luer Lok Syringes (231696)				

Preparation Steps

Step: Preparation
Started: 1/19/24 08:41
Finished: 1/19/24 13:54
By: XMI
Comments

Comments: _____

Reviewed By: _____ Date: _____

Chain of Custody

Relinquished By: _____ Date: _____ Extracts Examined

Received By: _____ Date: _____ Yes No

Analytical Results

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ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400034
Project:	HS24010611	**Date Collected:**	1/11/24 0705
Sample Matrix:	Ground Water	**Date Received:**	1/12/24
Sample Name:	16IW10-240111	**Units:**	µg/L
Lab Code:	E2400034-001	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.0531**	J	0.100	0.0500	0.0250	1	1/19/24	1/22/24 16:26	432773	830337	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400034
Project:	HS24010611	**Date Collected:**	1/11/24 0805
Sample Matrix:	Ground Water	**Date Received:**	1/12/24
Sample Name:	16EW02-240111	**Units:**	µg/L
Lab Code:	E2400034-002	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	1/19/24	1/23/24 14:34	432773	830415	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400034
Project:	HS24010611	**Date Collected:**	1/11/24 0905
Sample Matrix:	Ground Water	**Date Received:**	1/12/24
Sample Name:	16IW20-24011	**Units:**	µg/L
Lab Code:	E2400034-003	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.0445**	J	0.100	0.0500	0.0250	1	1/19/24	1/22/24 16:37	432773	830337	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400034
Project:	HS24010611	**Date Collected:**	1/11/24 0950
Sample Matrix:	Ground Water	**Date Received:**	1/12/24
Sample Name:	16WW39-240111	**Units:**	µg/L
Lab Code:	E2400034-004	**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	**8.17**		0.100	0.0500	0.0250	1	1/19/24	1/22/24 16:42	432773	830337	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400034
Project:	HS24010611	**Date Collected:**	1/11/24 1035
Sample Matrix:	Ground Water	**Date Received:**	1/12/24
Sample Name:	16WW22-240111	**Units:**	µg/L
Lab Code:	E2400034-005	**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	**2.31**		0.100	0.0500	0.0250	1	1/19/24	1/22/24 16:48	432773	830337	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400034
Project:	HS24010611	**Date Collected:**	1/11/24 1115
Sample Matrix:	Ground Water	**Date Received:**	1/12/24
Sample Name:	16WW56-240111	**Units:**	µg/L
Lab Code:	E2400034-006	**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	**0.0476**	J	0.100	0.0500	0.0250	1	1/19/24	1/22/24 16:53	432773	830337	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400034
Project:	HS24010611	**Date Collected:**	1/11/24 1155
Sample Matrix:	Ground Water	**Date Received:**	1/12/24
Sample Name:	16RW06-240111	**Units:**	µg/L
Lab Code:	E2400034-007	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.0367**	J	0.100	0.0500	0.0250	1	1/19/24	1/22/24 16:59	432773	830337	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400034
Project:	HS24010611	**Date Collected:**	1/11/24 1240
Sample Matrix:	Ground Water	**Date Received:**	1/12/24
Sample Name:	16RW07-240111	**Units:**	µg/L
Lab Code:	E2400034-008	**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	**0.366**		0.100	0.0500	0.0250	1	1/19/24	1/22/24 17:04	432773	830337	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400034
Project:	HS24010611	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	EQ2400030-01	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	1/19/24	1/22/24 15:02	432773	830337	

Accuracy & Precision

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ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2400034
Project:	HS24010611	**Date Analyzed:**	1/23/24 - 1/23/24
Sample Matrix:	Ground Water		

Lab Control Sample Summary

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

Analytical Method:	6850	**Units:**	µg/L
Prep Method:	Method	**Basis:**	NA
		Extraction Lot:	432773

	Lab Control Sample EQ2400030-02			Duplicate Lab Control Sample EQ2400030-03					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	0.109	0.100	109	0.104	0.100	104	84 - 119	4	15

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400034
Project:	HS24010611	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2400030-02	**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	**0.109**		0.100	0.0500	0.0250	1	1/19/24	1/23/24 14:18	432773	830415	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400034
Project:	HS24010611	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2400030-03	**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	**0.104**		0.100	0.0500	0.0250	1	1/19/24	1/22/24 15:13	432773	830337	

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2400034
Project:	HS24010611	**Date Collected:**	1/11/24
Sample Matrix:	Ground Water	**Date Received:**	1/12/24
		Date Analyzed:	1/22/24 - 1/23/24

Matrix Spike Summary

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

Sample Name:	16IW10-240111	**Units:**	µg/L
Lab Code:	E2400034-001	**Basis:**	NA

Analytical Method: 6850
Prep Method: Method

		16IW10-240111MS Matrix Spike EQ2400030-05				16IW10-240111DMS Duplicate Matrix Spike EQ2400030-06					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**		**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	0.0531	0.135	0.100	82	*	0.151	0.100	97	84 - 119	11	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:**	E2400034
Project:	HS24010611	**Date Collected:**	1/11/24 0705
Sample Matrix:	Ground Water	**Date Received:**	1/12/24
Sample Name:	16IW10-240111	**Units:**	µg/L
Lab Code:	EQ2400030-05	**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	**0.135**		0.100	0.0500	0.0250	1	1/19/24	1/22/24 15:24	432773	830337	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400034
Project:	HS24010611	**Date Collected:**	1/11/24 0705
Sample Matrix:	Ground Water	**Date Received:**	1/12/24
Sample Name:	16IW10-240111	**Units:**	µg/L
Lab Code:	EQ2400030-06	**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	**0.151**		0.100	0.0500	0.0250	1	1/19/24	1/23/24 14:12	432773	830415	

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2400034
Project:	HS24010611	**Date Collected:**	1/11/24
Sample Matrix:	Ground Water	**Date Received:**	1/12/24
		Date Analyzed:	1/22/24

Matrix Spike Summary

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

Sample Name:	16EW02-240111	**Units:**	µg/L
Lab Code:	E2400034-002	**Basis:**	NA

Analytical Method: 6850
Prep Method: Method

		16EW02-240111MS				16EW02-240111DMS					
		Matrix Spike				**Duplicate Matrix Spike**					
		EQ2400030-07				EQ2400030-08					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**		**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	ND	0.124	0.100	124	*	0.118	0.100	118	84 - 119	5	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:**	E2400034
Project:	HS24010611	**Date Collected:**	1/11/24 0805
Sample Matrix:	Ground Water	**Date Received:**	1/12/24
Sample Name:	16EW02-240111	**Units:**	µg/L
Lab Code:	EQ2400030-07	**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	**0.124**		0.100	0.0500	0.0250	1	1/19/24	1/22/24 15:47	432773	830337	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400034
Project:	HS24010611	**Date Collected:**	1/11/24 0805
Sample Matrix:	Ground Water	**Date Received:**	1/12/24
Sample Name:	16EW02-240111	**Units:**	µg/L
Lab Code:	EQ2400030-08	**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	**0.118**		0.100	0.0500	0.0250	1	1/19/24	1/22/24 15:52	432773	830337	

HS24010611-MSVOA-SW8260

ALS WO# HS24010611

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Form 1

Organic Analysis Data Sheet

Volatiles by EPA Volatiles Organics by Method 8260C

Workorder

HS24010611

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/29/2024

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

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24010611

Volatiles by EPA Volatiles Organics by Method 8260C

16IW10-240111	Collected	Received	Matrix	Basis
HS24010611-01	01/11/24 07:05	01/12/24 10:00	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	01/17/24 11:41	VOA9_456549	U011713.D
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/17/24 11:41	VOA9_456549	U011713.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	01/17/24 11:41	VOA9_456549	U011713.D
cis-1,2-Dichloroethene	ug/L	7.3		0.20	1.0	1.0	1	01/17/24 11:41	VOA9_456549	U011713.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	01/17/24 11:41	VOA9_456549	U011713.D
Trichloroethene	ug/L	0.98	J	0.20	1.0	1.0	1	01/17/24 11:41	VOA9_456549	U011713.D
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	01/17/24 11:41	VOA9_456549	U011713.D

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24010611

Volatiles by EPA Volatiles Organics by Method 8260C

16EW02-240111	Collected	Received	Matrix	Basis
HS24010611-02	01/11/24 08:05	01/12/24 10:00	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	01/19/24 13:59	VOA9_456781	U011914.D
1,1-Dichloroethene	ug/L	260		40	200	200	200	01/19/24 13:59	VOA9_456781	U011914.D
1,2-Dichloroethane	ug/L	200	U	40	200	200	200	01/19/24 13:59	VOA9_456781	U011914.D
cis-1,2-Dichloroethene	ug/L	22,000		100	500	500	500	01/19/24 15:05	VOA9_456781	U011917.D
Methylene chloride	ug/L	400	U	80	400	400	200	01/19/24 13:59	VOA9_456781	U011914.D
Trichloroethene	ug/L	31,000		40	200	200	200	01/19/24 13:59	VOA9_456781	U011914.D
Vinyl chloride	ug/L	2,100		40	200	200	200	01/19/24 13:59	VOA9_456781	U011914.D

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24010611

Volatiles by EPA Volatiles Organics by Method 8260C

16IW20-240111	Collected	Received	Matrix	Basis
HS24010611-03	01/11/24 09:05	01/12/24 10:00	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	01/12/24 17:52	VOA9_456454	U011220.D
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/12/24 17:52	VOA9_456454	U011220.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	01/12/24 17:52	VOA9_456454	U011220.D
cis-1,2-Dichloroethene	ug/L	4.7		0.20	1.0	1.0	1	01/12/24 17:52	VOA9_456454	U011220.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	01/12/24 17:52	VOA9_456454	U011220.D
Trichloroethene	ug/L	5.4		0.20	1.0	1.0	1	01/12/24 17:52	VOA9_456454	U011220.D
Vinyl chloride	ug/L	24		0.20	1.0	1.0	1	01/12/24 17:52	VOA9_456454	U011220.D

Form 1 - Organic Analysis Data Sheet

Client	Bhate Environmental Associates, Inc.	Workorder	
Project	LHAAP Site 16	HS24010611	

Volatiles by EPA Volatiles Organics by Method 8260C

16WW39-240111	Collected	Received	Matrix	Basis
HS24010611-04	01/11/24 09:50	01/12/24 10:00	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	01/12/24 21:12	VOA9_456454	U011229.D
1,1-Dichloroethene	ug/L	2.3		0.20	1.0	1.0	1	01/12/24 21:12	VOA9_456454	U011229.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	01/12/24 21:12	VOA9_456454	U011229.D
cis-1,2-Dichloroethene	ug/L	56		0.20	1.0	1.0	1	01/12/24 21:12	VOA9_456454	U011229.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	01/12/24 21:12	VOA9_456454	U011229.D
Trichloroethene	ug/L	600		2.0	10	10	10	01/17/24 13:32	VOA9_456549	U011718.D
Vinyl chloride	ug/L	9.2		0.20	1.0	1.0	1	01/12/24 21:12	VOA9_456454	U011229.D

Form 1 - Organic Analysis Data Sheet

Client	Bhate Environmental Associates, Inc.	Workorder	
Project	LHAAP Site 16	HS24010611	

Volatiles by EPA Volatiles Organics by Method 8260C

16WW22-240111	Collected	Received	Matrix	Basis
HS24010611-05	01/11/24 10:35	01/12/24 10:00	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	01/12/24 18:15	VOA9_456454	U011221.D
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/12/24 18:15	VOA9_456454	U011221.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	01/12/24 18:15	VOA9_456454	U011221.D
cis-1,2-Dichloroethene	ug/L	8.6		0.20	1.0	1.0	1	01/12/24 18:15	VOA9_456454	U011221.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	01/12/24 18:15	VOA9_456454	U011221.D
Trichloroethene	ug/L	35		0.20	1.0	1.0	1	01/12/24 18:15	VOA9_456454	U011221.D
Vinyl chloride	ug/L	1.7		0.20	1.0	1.0	1	01/12/24 18:15	VOA9_456454	U011221.D

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24010611

Volatiles by EPA Volatiles Organics by Method 8260C

16WW56-240111	Collected	Received	Matrix	Basis
HS24010611-06	01/11/24 11:15	01/12/24 10:00	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	01/19/24 16:57	VOA9_456781	U011922.D
1,1-Dichloroethene	ug/L	1.8		0.20	1.0	1.0	1	01/19/24 16:57	VOA9_456781	U011922.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	01/19/24 16:57	VOA9_456781	U011922.D
cis-1,2-Dichloroethene	ug/L	37		0.20	1.0	1.0	1	01/19/24 16:57	VOA9_456781	U011922.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	01/19/24 16:57	VOA9_456781	U011922.D
Trichloroethene	ug/L	120		0.20	1.0	1.0	1	01/19/24 16:57	VOA9_456781	U011922.D
Vinyl chloride	ug/L	3.3		0.20	1.0	1.0	1	01/19/24 16:57	VOA9_456781	U011922.D

Form 1 - Organic Analysis Data Sheet

Client	Bhate Environmental Associates, Inc.	Workorder	
Project	LHAAP Site 16	HS24010611	

Volatiles by EPA Volatiles Organics by Method 8260C

16RW06-240111	Collected	Received	Matrix	Basis
HS24010611-07	01/11/24 11:55	01/12/24 10:00	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	01/19/24 17:19	VOA9_456781	U011923.D
1,1-Dichloroethene	ug/L	1.6		0.20	1.0	1.0	1	01/19/24 17:19	VOA9_456781	U011923.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	01/19/24 17:19	VOA9_456781	U011923.D
cis-1,2-Dichloroethene	ug/L	12		0.20	1.0	1.0	1	01/19/24 17:19	VOA9_456781	U011923.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	01/19/24 17:19	VOA9_456781	U011923.D
Trichloroethene	ug/L	120		0.20	1.0	1.0	1	01/19/24 17:19	VOA9_456781	U011923.D
Vinyl chloride	ug/L	6.7		0.20	1.0	1.0	1	01/19/24 17:19	VOA9_456781	U011923.D

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24010611

Volatiles by EPA Volatiles Organics by Method 8260C

16RW07-240111	Collected	Received	Matrix	Basis
HS24010611-08	01/11/24 12:40	01/12/24 10:00	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	01/19/24 17:41	VOA9_456781	U011924.D
1,1-Dichloroethene	ug/L	17		0.20	1.0	1.0	1	01/19/24 17:41	VOA9_456781	U011924.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	01/19/24 17:41	VOA9_456781	U011924.D
cis-1,2-Dichloroethene	ug/L	140		0.20	1.0	1.0	1	01/19/24 17:41	VOA9_456781	U011924.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	01/19/24 17:41	VOA9_456781	U011924.D
Trichloroethene	ug/L	1,900		10	50	50	50	01/22/24 14:04	VOA9_456935	U012208.D
Vinyl chloride	ug/L	99		0.20	1.0	1.0	1	01/19/24 17:41	VOA9_456781	U011924.D

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24010611

Volatiles by EPA Volatiles Organics by Method 8260C

Trip Blank-240111

	Collected	Received	Matrix	Basis
HS24010611-09	01/11/24 00:00	01/12/24 10:00	Water	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	01/19/24 16:35	VOA9_456781	U011921.D
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/19/24 16:35	VOA9_456781	U011921.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	01/19/24 16:35	VOA9_456781	U011921.D
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/19/24 16:35	VOA9_456781	U011921.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	01/19/24 16:35	VOA9_456781	U011921.D
Trichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/19/24 16:35	VOA9_456781	U011921.D
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	01/19/24 16:35	VOA9_456781	U011921.D

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Form 2

System Monitoring Compound Recovery

Volatiles by EPA Volatiles Organics by Method 8260C

Workorder

HS24010611

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/29/2024

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

Form 2 - System Monitoring Compound Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24010611

Volatiles by EPA Volatiles Organics by Method 8260C

RUNID VOA9-456454

CCB

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	CCB	Aqueous	01/12/24 11:56	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U011204.D	39.69	50	79.4		80-120
4-Bromofluorobenzene	U011204.D	49.19	50	98.4		80-120
Dibromofluoromethane	U011204.D	42.62	50	85.2		80-120
Toluene-d8	U011204.D	53.08	50	106		80-120

CCV

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	CCV U011203.D	Aqueous	01/12/24 11:34	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U011203.D	50.98	50	102		80-120
4-Bromofluorobenzene	U011203.D	51.28	50	103		80-120
Dibromofluoromethane	U011203.D	54.65	50	109		80-120
Toluene-d8	U011203.D	51.51	50	103		80-120

BatchQC

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24010519-09MS	Aqueous	01/12/24 14:32	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U011211.D	48.3	50	96.6		81-118
4-Bromofluorobenzene	U011211.D	51.02	50	102		85-114
Dibromofluoromethane	U011211.D	51.72	50	103		80-119
Toluene-d8	U011211.D	54.14	50	108		89-112

Form 2 - System Monitoring Compound Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder **HS24010611**

Volatiles by EPA Volatiles Organics by Method 8260C

RUNID VOA9-456454

BatchQC

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24010519-09MSD	Aqueous	01/12/24 14:54	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U011212.D	49.01	50	98.0		81-118
4-Bromofluorobenzene	U011212.D	51.16	50	102		85-114
Dibromofluoromethane	U011212.D	52.56	50	105		80-119
Toluene-d8	U011212.D	53.09	50	106		89-112

16IW20-240111

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24010611-03	Groundwater	01/12/24 17:52	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U011220.D	47	50	94.9		81-118
4-Bromofluorobenzene	U011220.D	44	50	87.7		85-114
Dibromofluoromethane	U011220.D	50	50	101		80-119
Toluene-d8	U011220.D	49	50	97.9		89-112

16WW39-240111

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24010611-04	Groundwater	01/12/24 21:12	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U011229.D	48	50	95.0		81-118
4-Bromofluorobenzene	U011229.D	44	50	89.0		85-114
Dibromofluoromethane	U011229.D	51	50	102		80-119
Toluene-d8	U011229.D	50	50	99.6		89-112

Form 2 - System Monitoring Compound Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24010611

Volatiles by EPA Volatiles Organics by Method 8260C

RUNID VOA9-456454

16WW22-240111

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24010611-05	Groundwater	01/12/24 18:15	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U011221.D	48	50	95.1		81-118
4-Bromofluorobenzene	U011221.D	45	50	90.7		85-114
Dibromofluoromethane	U011221.D	50	50	99.8		80-119
Toluene-d8	U011221.D	50	50	101		89-112

VBLKW-240112

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	VBLKW-240112	Aqueous	01/12/24 13:03	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U011207.D	47.15	50	94.3		81-118
4-Bromofluorobenzene	U011207.D	47.21	50	94.4		85-114
Dibromofluoromethane	U011207.D	50.75	50	101		80-119
Toluene-d8	U011207.D	51.98	50	104		89-112

VLCSW-240112

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	VLCSW-240112	Aqueous	01/12/24 12:18	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U011205.D	48.36	50	96.7		81-118
4-Bromofluorobenzene	U011205.D	50.4	50	101		85-114
Dibromofluoromethane	U011205.D	51.68	50	103		80-119
Toluene-d8	U011205.D	51.84	50	104		89-112

Form 2 - System Monitoring Compound Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24010611

Volatiles by EPA Volatiles Organics by Method 8260C

RUNID VOA9-456549

CCV

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	CCV U011702.D	Aqueous	01/17/24 07:36	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U011702.D	48.08	50	96.2		80-120
4-Bromofluorobenzene	U011702.D	51.95	50	104		80-120
Dibromofluoromethane	U011702.D	54.17	50	108		80-120
Toluene-d8	U011702.D	53.62	50	107		80-120

16IW10-240111

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24010611-01	Groundwater	01/17/24 11:41	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U011713.D	50	50	99.0		81-118
4-Bromofluorobenzene	U011713.D	49	50	97.1		85-114
Dibromofluoromethane	U011713.D	56	50	111		80-119
Toluene-d8	U011713.D	54	50	108		89-112

16IW10-240111

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24010611-01MS	Aqueous	01/17/24 12:03	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U011714.D	43.08	50	86.2		81-118
4-Bromofluorobenzene	U011714.D	47.87	50	95.7		85-114
Dibromofluoromethane	U011714.D	47.92	50	95.8		80-119
Toluene-d8	U011714.D	49.37	50	98.7		89-112

Form 2 - System Monitoring Compound Recovery

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Workorder: HS24010611

Volatiles by EPA Volatiles Organics by Method 8260C

RUNID: VOA9-456549

16IW10-240111

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24010611-01MSD	Aqueous	01/17/24 12:25	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U011715.D	42.81	50	85.6		81-118
4-Bromofluorobenzene	U011715.D	47.28	50	94.6		85-114
Dibromofluoromethane	U011715.D	48.67	50	97.3		80-119
Toluene-d8	U011715.D	49.23	50	98.5		89-112

16WW39-240111

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24010611-04	Groundwater	01/17/24 13:32	%REC	10
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U011718.D	570	500	113		81-118
4-Bromofluorobenzene	U011718.D	550	500	109		85-114
Dibromofluoromethane	U011718.D	640	500	128		80-119
Toluene-d8	U011718.D	610	500	122		89-112

VBLKW-240117

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	VBLKW-240117	Aqueous	01/17/24 08:42	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U011705.D	41.22	50	82.4		81-118
4-Bromofluorobenzene	U011705.D	48.52	50	97.0		85-114
Dibromofluoromethane	U011705.D	42.43	50	84.9		80-119
Toluene-d8	U011705.D	52.95	50	106		89-112

Form 2 - System Monitoring Compound Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24010611

Volatiles by EPA Volatiles Organics by Method 8260C

RUNID VOA9-456549

VLCSW-240117

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	VLCSW-240117	Aqueous	01/17/24 07:58	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U011703.D	47.69	50	95.4		81-118
4-Bromofluorobenzene	U011703.D	51.99	50	104		85-114
Dibromofluoromethane	U011703.D	52.69	50	105		80-119
Toluene-d8	U011703.D	54.68	50	109		89-112

Form 2 - System Monitoring Compound Recovery

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Workorder: HS24010611

Volatiles by EPA Volatiles Organics by Method 8260C

RUNID: VOA9-456781

CCV

	Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID: CCV U011902.D Instrument ID: VOA9	Aqueous	01/19/24 09:07	%REC	1

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U011902.D	43.66	50	87.3		80-120
4-Bromofluorobenzene	U011902.D	49.34	50	98.7		80-120
Dibromofluoromethane	U011902.D	49.77	50	99.5		80-120
Toluene-d8	U011902.D	51.42	50	103		80-120

16EW02-240111

	Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID: HS24010611-02 Instrument ID: VOA9	Groundwater	01/19/24 13:59	%REC	200

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U011914.D	11000	10000	107		81-118
4-Bromofluorobenzene	U011914.D	11000	10000	113		85-114
Dibromofluoromethane	U011914.D	12000	10000	119		80-119
Toluene-d8	U011914.D	13000	10000	129		89-112

16EW02-240111

	Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID: HS24010611-02 Instrument ID: VOA9	Groundwater	01/19/24 15:05	%REC	500

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U011917.D	22000	25000	86.8		81-118
4-Bromofluorobenzene	U011917.D	26000	25000	106		85-114
Dibromofluoromethane	U011917.D	24000	25000	97.6		80-119
Toluene-d8	U011917.D	28000	25000	114		89-112

Form 2 - System Monitoring Compound Recovery

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Workorder: HS24010611

Volatiles by EPA Volatiles Organics by Method 8260C

RUNID: VOA9-456781

16EW02-240111

Lab Sample ID	Matrix	Analysis Date	Conc Units	Dilution
HS24010611-02MS	Aqueous	01/19/24 14:21	%REC	200

Instrument ID: VOA9

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U011915.D	8980	10000	89.8		81-118
4-Bromofluorobenzene	U011915.D	10460	10000	105		85-114
Dibromofluoromethane	U011915.D	10540	10000	105		80-119
Toluene-d8	U011915.D	11290	10000	113		89-112

16EW02-240111

Lab Sample ID	Matrix	Analysis Date	Conc Units	Dilution
HS24010611-02MSD	Aqueous	01/19/24 14:43	%REC	200

Instrument ID: VOA9

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U011916.D	9286	10000	92.9		81-118
4-Bromofluorobenzene	U011916.D	10140	10000	101		85-114
Dibromofluoromethane	U011916.D	10700	10000	107		80-119
Toluene-d8	U011916.D	10840	10000	108		89-112

16WW56-240111

Lab Sample ID	Matrix	Analysis Date	Conc Units	Dilution
HS24010611-06	Groundwater	01/19/24 16:57	%REC	1

Instrument ID: VOA9

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U011922.D	53	50	105		81-118
4-Bromofluorobenzene	U011922.D	51	50	102		85-114
Dibromofluoromethane	U011922.D	59	50	117		80-119
Toluene-d8	U011922.D	58	50	116		89-112

Form 2 - System Monitoring Compound Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder **HS24010611**

Volatiles by EPA Volatiles Organics by Method 8260C

RUNID VOA9-456781

16RW06-240111

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24010611-07	Groundwater	01/19/24 17:19	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U011923.D	51	50	102		81-118
4-Bromofluorobenzene	U011923.D	50	50	100		85-114
Dibromofluoromethane	U011923.D	57	50	114		80-119
Toluene-d8	U011923.D	57	50	114		89-112

16RW07-240111

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24010611-08	Groundwater	01/19/24 17:41	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U011924.D	47	50	94.5		81-118
4-Bromofluorobenzene	U011924.D	47	50	93.8		85-114
Dibromofluoromethane	U011924.D	53	50	107		80-119
Toluene-d8	U011924.D	54	50	108		89-112

Trip Blank-240111

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24010611-09	Water	01/19/24 16:35	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U011921.D	57	50	115		81-118
4-Bromofluorobenzene	U011921.D	57	50	114		85-114
Dibromofluoromethane	U011921.D	66	50	131		80-119
Toluene-d8	U011921.D	65	50	131		89-112

Form 2 - System Monitoring Compound Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24010611

Volatiles by EPA Volatiles Organics by Method 8260C

RUNID VOA9-456781

VBLKW-240119

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	VBLKW-240119	Aqueous	01/19/24 10:58	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U011906.D	54.32	50	109		81-118
4-Bromofluorobenzene	U011906.D	56.42	50	113		85-114
Dibromofluoromethane	U011906.D	59.44	50	119		80-119
Toluene-d8	U011906.D	63.29	50	127		89-112

VLCSW-240119

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	VLCSW-240119	Aqueous	01/19/24 09:51	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U011903.D	43.14	50	86.3		81-118
4-Bromofluorobenzene	U011903.D	49.28	50	98.6		85-114
Dibromofluoromethane	U011903.D	50.32	50	101		80-119
Toluene-d8	U011903.D	51.64	50	103		89-112

Form 2 - System Monitoring Compound Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24010611

Volatiles by EPA Volatiles Organics by Method 8260C

RUNID VOA9-456935

CCV

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	CCV U012203.D	Aqueous	01/22/24 12:12	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012203.D	48.15	50	96.3		80-120
4-Bromofluorobenzene	U012203.D	51.61	50	103		80-120
Dibromofluoromethane	U012203.D	54.1	50	108		80-120
Toluene-d8	U012203.D	53.51	50	107		80-120

16RW07-240111

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24010611-08	Groundwater	01/22/24 14:04	%REC	50
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012208.D	2300	2500	90.5		81-118
4-Bromofluorobenzene	U012208.D	2300	2500	93.4		85-114
Dibromofluoromethane	U012208.D	2500	2500	101		80-119
Toluene-d8	U012208.D	2700	2500	106		89-112

16RW07-240111

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24010611-08MS	Aqueous	01/22/24 14:26	%REC	50
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012209.D	2114	2500	84.6		81-118
4-Bromofluorobenzene	U012209.D	2367	2500	94.7		85-114
Dibromofluoromethane	U012209.D	2367	2500	94.7		80-119
Toluene-d8	U012209.D	2534	2500	101		89-112

Form 2 - System Monitoring Compound Recovery

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Workorder: HS24010611

Volatiles by EPA Volatiles Organics by Method 8260C

RUNID: VOA9-456935

16RW07-240111

Lab Sample ID	Instrument ID	Matrix	Analysis Date	Conc Units	Dilution
HS24010611-08MSD	VOA9	Aqueous	01/22/24 14:48	%REC	50

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012210.D	2159	2500	86.4		81-118
4-Bromofluorobenzene	U012210.D	2371	2500	94.9		85-114
Dibromofluoromethane	U012210.D	2410	2500	96.4		80-119
Toluene-d8	U012210.D	2531	2500	101		89-112

VBLKW-240122

Lab Sample ID	Instrument ID	Matrix	Analysis Date	Conc Units	Dilution
VBLKW-240122	VOA9	Aqueous	01/22/24 13:41	%REC	1

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012207.D	42.26	50	84.5		81-118
4-Bromofluorobenzene	U012207.D	42.91	50	85.8		85-114
Dibromofluoromethane	U012207.D	47.18	50	94.4		80-119
Toluene-d8	U012207.D	48.84	50	97.7		89-112

VLCSW-240122

Lab Sample ID	Instrument ID	Matrix	Analysis Date	Conc Units	Dilution
VLCSW-240122	VOA9	Aqueous	01/22/24 12:57	%REC	1

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012205.D	49.13	50	98.3		81-118
4-Bromofluorobenzene	U012205.D	52.52	50	105		85-114
Dibromofluoromethane	U012205.D	55.01	50	110		80-119
Toluene-d8	U012205.D	54.39	50	109		89-112

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Form 3A

Matrix Spike/Spike Duplicate Recovery

Volatiles by EPA Volatiles Organics by Method 8260C

Workorder

HS24010611

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/29/2024

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

Form 3A - Matrix Spike/Spike Duplicate Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24010611

Volatiles by EPA Volatiles Organics by Method 8260C

SAMPLENUM HS24010519-09MS

BatchQC (HS24010519-09)				HS24010519-09MS				HS24010519-09MSD						
Spike Matrix Aqueous	Result Units ug/L			Run Date 01/12/24				Run Date 01/12/24						
Instrument ID VOA9				Run Time 14:32				Run Time 14:54						
				Data File U011211.D				Data File U011212.D						
Analyte	%R Limits	DF	Sample Result	MS Result	Spike Added	%R	Q	MSD Result	Spike Added	%R	Q	RPD Limit	RPD	Q
1,1,2-Trichloroethane	80-119	1	0	16.9274	20	85		18.0449	20	90		20	6.39	
1,1-Dichloroethene	71-131	1	0	19.6951	20	98		20.2512	20	101		20	2.78	
1,2-Dichloroethane	73-128	1	0	16.5505	20	83		16.9244	20	85		20	2.23	
cis-1,2-Dichloroethene	78-123	1	0	16.4266	20	82		16.7903	20	84		20	2.19	
Methylene chloride	74-124	1	0	18.7044	20	94		19.2680	20	96		20	2.97	
Trichloroethene	79-123	1	0	17.8629	20	89		18.3050	20	92		20	2.44	
Vinyl chloride	58-137	1	0	17.5376	20	88		17.5617	20	88		20	0.137	

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

Form 3A - Matrix Spike/Spike Duplicate Recovery

Client: Bhate Environmental Associates, Inc.

Project: LHAAP Site 16

Workorder: HS24010611

SAMPLENUM: HS24010611-01MS

Volatiles by EPA Volatiles Organics by Method 8260C

16IW10-240111 (HS24010611-01)			HS24010611-01MS				HS24010611-01MSD						
Spike Matrix: Aqueous	Result Units: ug/L		Run Date: 01/17/24				Run Date: 01/17/24						
Instrument ID: VOA9			Run Time: 12:03				Run Time: 12:25						
			Data File: U011714.D				Data File: U011715.D						
Analyte	%R Limits	DF	Sample Result	MS Result	Spike Added	%R	Q	MSD Result	Spike Added	%R	Q	RPD Limit	RPD	Q
1,1,2-Trichloroethane	80-119	1	0	21.3272	20	107		20.7434	20	104		20	2.78	
1,1-Dichloroethene	71-131	1	0	23.2042	20	116		23.3883	20	117		20	0.79	
1,2-Dichloroethane	73-128	1	0	18.4041	20	92		18.5602	20	93		20	0.845	
cis-1,2-Dichloroethene	78-123	1	7.33	26.8738	20	98		26.3123	20	95		20	2.11	
Methylene chloride	74-124	1	0	22.7355	20	114		22.7317	20	114		20	0.0165	
Trichloroethene	79-123	1	0.9797	22.3606	20	107		22.3873	20	107		20	0.119	
Vinyl chloride	58-137	1	0	21.8309	20	109		22.0395	20	110		20	0.951	

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

Form 3A - Matrix Spike/Spike Duplicate Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24010611

SAMPLENUM HS24010611-02MS

Volatiles by EPA Volatiles Organics by Method 8260C

16EW02-240111 (HS24010611-02)				HS24010611-02MS				HS24010611-02MSD						
Spike Matrix Aqueous		Result Units ug/L		Run Date 01/19/24				Run Date 01/19/24						
Instrument ID VOA9				Run Time 14:21				Run Time 14:43						
				Data File U011915.D				Data File U011916.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	200	0	3188.75	4000	80		3237.39	4000	81		20	1.51	
1,1-Dichloroethene	71-131	200	255.9	3697.65	4000	86		3466.95	4000	80		20	6.44	
1,2-Dichloroethane	73-128	200	0	2712.17	4000	68		2704.28	4000	68		20	0.291	
cis-1,2-Dichloroethene	78-123	200	48820	53135.4	4000	108		41067.6	4000	-194		20	25.6	
Methylene chloride	74-124	200	0	3360.71	4000	84		3263.25	4000	82		20	2.94	
Trichloroethene	79-123	200	31150	35265.2	4000	103		26554.8	4000	-115		20	28.2	
Vinyl chloride	58-137	200	2081	4615.97	4000	63		4099.51	4000	50		20	11.9	

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 HS24010611

SAMPLENUM HS24010611-08MS

Volatiles by EPA Volatiles Organics by Method 8260C

16RW07-240111 (HS24010611-08)				HS24010611-08MS				HS24010611-08MSD						
Spike Matrix Aqueous		Result Units ug/L		Run Date 01/22/24				Run Date 01/22/24						
Instrument ID VOA9				Run Time 14:26				Run Time 14:48						
				Data File U012209.D				Data File U012210.D						
Analyte	%R Limits	DF	Sample Result	MS Result	Spike Added	%R	Q	MSD Result	Spike Added	%R	Q	RPD Limit	RPD	Q
Trichloroethene	79-123	50	1900	2762.63	1000	86		2774.97	1000	88		20	0.446	

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

HS24010611

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/29/2024

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

Form 3B - Laboratory Control Sample Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24010611

Volatiles by EPA Volatiles Organics by Method 8260C

SAMPLENUM VLCSW-240112

VOA9_456454			VLCSW-240112				
Spike Matrix Aqueous	Result Units ug/L		Run Date 01/12/24 Run Time 12:18				
Analyte	%Recovery Limits	Spike Added	LCS Result	%R	Q		
1,1,2-Trichloroethane	80-119	20	20.08	100			
1,1-Dichloroethene	71-131	20	21.49	107			
1,2-Dichloroethane	73-128	20	18.35	91.7			
cis-1,2-Dichloroethene	78-123	20	18.3	91.5			
Methylene chloride	74-124	20	21.45	107			
Trichloroethene	79-123	20	19.36	96.8			
Vinyl chloride	58-137	20	19.78	98.9			

Form 3B - Laboratory Control Sample Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24010611

SAMPLENUM VLCSW-240117

Volatiles by EPA Volatiles Organics by Method 8260C

VOA9_456549			VLCSW-240117				
Spike Matrix Aqueous	Result Units ug/L		Run Date 01/17/24 Run Time 07:58				
Analyte	%Recovery Limits	Spike Added	LCS Result	%R	Q		
1,1,2-Trichloroethane	80-119	20	20.02	100			
1,1-Dichloroethene	71-131	20	21.78	109			
1,2-Dichloroethane	73-128	20	17.95	89.7			
cis-1,2-Dichloroethene	78-123	20	19.05	95.2			
Methylene chloride	74-124	20	21.8	109			
Trichloroethene	79-123	20	20.37	102			
Vinyl chloride	58-137	20	17.22	86.1			

Form 3B - Laboratory Control Sample Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24010611

SAMPLENUM VLCSW-240119

Volatiles by EPA Volatiles Organics by Method 8260C

VOA9_456781			VLCSW-240119				
Spike Matrix Aqueous	Result Units ug/L		Run Date 01/19/24 Run Time 09:51				
Analyte	%Recovery Limits	Spike Added	LCS Result	%R	Q		
1,1,2-Trichloroethane	80-119	20	20.74	104			
1,1-Dichloroethene	71-131	20	21.01	105			
1,2-Dichloroethane	73-128	20	17.62	88.1			
cis-1,2-Dichloroethene	78-123	20	19	95.0			
Methylene chloride	74-124	20	21.16	106			
Trichloroethene	79-123	20	21.52	108			
Vinyl chloride	58-137	20	16.24	81.2			

Form 3B - Laboratory Control Sample Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24010611

Volatiles by EPA Volatiles Organics by Method 8260C

SAMPLENUM VLCSW-240122

VOA9_456935			VLCSW-240122				
Spike Matrix Aqueous	Result Units ug/L		Run Date 01/22/24 Run Time 12:57				
Analyte	%Recovery Limits	Spike Added	LCS Result	%R	Q		
Trichloroethene	79-123	20	21.86	109			

right solutions.
right partner.

Form 4

Method Blank Summary

Volatiles by EPA Volatiles Organics by Method 8260C

Workorder

HS24010611

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/29/2024

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

Form 4 - Method Blank Summary

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24010611

Volatiles by EPA Volatiles Organics by Method 8260C

METHOD BLANK	Matrix	Analysis Date	Analysis Batch	Inst ID
VBLKW-240112	Aqueous	01/12/24 13:03	R456454	VOA9

Client Sample ID	Lab Sample ID	Type	Analysis Date	Analysis Batch	Inst ID	FileID
VLCSW-240112	VLCSW-240112	LCS	01/12/24 12:18	R456454	VOA9	U011205.D
BatchQC	HS24010519-09MS	MS	01/12/24 14:32	R456454	VOA9	U011211.D
BatchQC	HS24010519-09MSD	MSD	01/12/24 14:54	R456454	VOA9	U011212.D
16IW20-240111	HS24010611-03	SAMP	01/12/24 17:52	R456454	VOA9	U011220.D
16WW22-240111	HS24010611-05	SAMP	01/12/24 18:15	R456454	VOA9	U011221.D
16WW39-240111	HS24010611-04	SAMP	01/12/24 21:12	R456454	VOA9	U011229.D

Form 4 - Method Blank Summary

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Workorder: HS24010611

Volatiles by EPA Volatiles Organics by Method 8260C

METHOD BLANK	Matrix	Analysis Date	Analysis Batch	Inst ID
VBLKW-240117	Aqueous	01/17/24 08:42	R456549	VOA9

Client Sample ID	Lab Sample ID	Type	Analysis Date	Analysis Batch	Inst ID	FileID
VLCSW-240117	VLCSW-240117	LCS	01/17/24 07:58	R456549	VOA9	U011703.D
16IW10-240111	HS24010611-01	SAMP	01/17/24 11:41	R456549	VOA9	U011713.D
16IW10-240111	HS24010611-01MS	MS	01/17/24 12:03	R456549	VOA9	U011714.D
16IW10-240111	HS24010611-01MSD	MSD	01/17/24 12:25	R456549	VOA9	U011715.D
16WW39-240111	HS24010611-04	SAMP	01/17/24 13:32	R456549	VOA9	U011718.D

Form 4 - Method Blank Summary

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24010611

Volatiles by EPA Volatiles Organics by Method 8260C

METHOD BLANK	Matrix	Analysis Date	Analysis Batch	Inst ID
VBLKW-240119	Aqueous	01/19/24 10:58	R456781	VOA9

Client Sample ID	Lab Sample ID	Type	Analysis Date	Analysis Batch	Inst ID	FileID
VLCSW-240119	VLCSW-240119	LCS	01/19/24 09:51	R456781	VOA9	U011903.D
16EW02-240111	HS24010611-02	SAMP	01/19/24 13:59	R456781	VOA9	U011914.D
16EW02-240111	HS24010611-02MS	MS	01/19/24 14:21	R456781	VOA9	U011915.D
16EW02-240111	HS24010611-02MSD	MSD	01/19/24 14:43	R456781	VOA9	U011916.D
16EW02-240111	HS24010611-02	SAMP	01/19/24 15:05	R456781	VOA9	U011917.D
Trip Blank-240111	HS24010611-09	SAMP	01/19/24 16:35	R456781	VOA9	U011921.D
16WW56-240111	HS24010611-06	SAMP	01/19/24 16:57	R456781	VOA9	U011922.D
16RW06-240111	HS24010611-07	SAMP	01/19/24 17:19	R456781	VOA9	U011923.D
16RW07-240111	HS24010611-08	SAMP	01/19/24 17:41	R456781	VOA9	U011924.D

Form 4 - Method Blank Summary

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24010611

Volatiles by EPA Volatiles Organics by Method 8260C

METHOD BLANK	Matrix	Analysis Date	Analysis Batch	Inst ID
VBLKW-240122	Aqueous	01/22/24 13:41	R456935	VOA9

Client Sample ID	Lab Sample ID	Type	Analysis Date	Analysis Batch	Inst ID	FileID
VLCSW-240122	VLCSW-240122	LCS	01/22/24 12:57	R456935	VOA9	U012205.D
16RW07-240111	HS24010611-08	SAMP	01/22/24 14:04	R456935	VOA9	U012208.D
16RW07-240111	HS24010611-08MS	MS	01/22/24 14:26	R456935	VOA9	U012209.D
16RW07-240111	HS24010611-08MSD	MSD	01/22/24 14:48	R456935	VOA9	U012210.D

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Form 5

Instrument Performance Check

Volatiles by EPA Volatiles Organics by Method 8260C

Workorder

HS24010611

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/29/2024

ALS Environmental–Houston Laboratory
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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 **HS24010611**

Volatiles by EPA Volatiles Organics by Method 8260C

RUNID VOA9-456454

Tune File U011201.D 01/12/24 1/12/2024

m / e	Ion Abundance Criterion	%RA
50	15.0 - 40.0% of mass 95	15.5 (15.5)
75	30.0 - 60.0% of mass 95	46.6 (46.6)
95	Base peak, 100% RA	100 (100)
96	5.0 - 9.0% of mass 95	6.8 (6.78)
173	Less than 2.0% of mass 174	0 (0) 1
174	greater than 50.0% of mass 95	99.4 (99.4) 1
175	5.0 - 9.0% of mass 174	8.5 (8.56) 1
176	> 95% but < 101% of mass 174	95 (95.5) 1
177	5.0 - 9.0% of mass 176	5.8 (6.13) 2

%RA - Percent Relative Abundance

This check applies to the following analyses

	Lab Samp ID	Type	Date Analyzed	Lab File ID	Sample ID
1	CCV	CCV	1/12/2024	U011203	CCV
2	CCB	CCB	1/12/2024	U011204	CCB
3	VLCSW-	LCS	1/12/2024	U011205	VLCSW-240112
4	VBLKW-	MBLK	1/12/2024	U011207	VBLKW-240112
5	HS24010519-	MS	1/12/2024	U011211	ZZZZZZMS
6	HS24010519-	MSD	1/12/2024	U011212	ZZZZZZMSD
7	HS24010611-	SAMP	1/12/2024	U011220	16IW20-240111
8	HS24010611-	SAMP	1/12/2024	U011221	16WW22-240111
9	HS24010611-	SAMP	1/12/2024	U011229	16WW39-240111
10	CCV-END	CCV_EN	1/12/2024	U011230	CCV-END

Form 5 - Instrument Performance Check

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24010611

Volatiles by EPA Volatiles Organics by Method 8260C

RUNID VOA9-456549

Tune File U011701.D 01/17/24 1/17/2024

m / e	Ion Abundance Criterion	%RA
50	15.0 - 40.0% of mass 95	17.1 (17.1)
75	30.0 - 60.0% of mass 95	48 (48)
95	Base peak, 100% RA	100 (100)
96	5.0 - 9.0% of mass 95	7.1 (7.06)
173	Less than 2.0% of mass 174	0 (0) 1
174	greater than 50.0% of mass 95	92.1 (92.1) 1
175	5.0 - 9.0% of mass 174	8.2 (8.9) 1
176	> 95% but < 101% of mass 174	89.8 (97.5) 1
177	5.0 - 9.0% of mass 176	6 (6.66) 2

%RA - Percent Relative Abundance

This check applies to the following analyses

	Lab Samp ID	Type	Date Analyzed	Lab File ID	Sample ID
1	CCV	CCV	1/17/2024	U011702	CCV
2	VLCSW-	LCS	1/17/2024	U011703	VLCSW-240117
3	VBLKW-	MBLK	1/17/2024	U011705	VBLKW-240117
4	HS24010611-	SAMP	1/17/2024	U011713	16IW10-240111
5	HS24010611-	MS	1/17/2024	U011714	HS24010611-01MS
6	HS24010611-	MSD	1/17/2024	U011715	HS24010611-01MSD
7	HS24010611-	SAMP	1/17/2024	U011718	16WW39-240111
8	CCV-END	CCV_EN	1/17/2024	U011728	CCV-END

Form 5 - Instrument Performance Check

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder **HS24010611**

Volatiles by EPA Volatiles Organics by Method 8260C

RUNID VOA9-456781

Tune File U011901.D 01/19/24 1/19/2024

m / e	Ion Abundance Criterion	%RA
50	15.0 - 40.0% of mass 95	15.8 (15.8)
75	30.0 - 60.0% of mass 95	45 (45)
95	Base peak, 100% RA	100 (100)
96	5.0 - 9.0% of mass 95	6.8 (6.85)
173	Less than 2.0% of mass 174	0 (0) 1
174	greater than 50.0% of mass 95	96.6 (96.6) 1
175	5.0 - 9.0% of mass 174	8.2 (8.44) 1
176	> 95% but < 101% of mass 174	92.9 (96.2) 1
177	5.0 - 9.0% of mass 176	6.1 (6.6) 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	1/19/2024	U011902	CCV
2	VLCSW-	LCS	1/19/2024	U011903	VLCSW-240119
3	VBLKW-	MBLK	1/19/2024	U011906	VBLKW-240119
4	HS24010611-	SAMP	1/19/2024	U011914	16EW02-240111
5	HS24010611-	MS	1/19/2024	U011915	HS24010611-02MS
6	HS24010611-	MSD	1/19/2024	U011916	HS24010611-02MSD
7	HS24010611-	SAMP	1/19/2024	U011917	16EW02-240111
8	HS24010611-	SAMP	1/19/2024	U011921	Trip Blank-240111
9	HS24010611-	SAMP	1/19/2024	U011922	16WW56-240111
10	HS24010611-	SAMP	1/19/2024	U011923	16RW06-240111
11	HS24010611-	SAMP	1/19/2024	U011924	16RW07-240111
12	CCV-END	CCV_EN	1/19/2024	U011925	CCV-END

Form 5 - Instrument Performance Check

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder **HS24010611**

Volatiles by EPA Volatiles Organics by Method 8260C

RUNID VOA9-456935

Tune File U012201.D 01/22/24 1/22/2024

m / e	Ion Abundance Criterion	%RA
50	15.0 - 40.0% of mass 95	16.4 (16.4)
75	30.0 - 60.0% of mass 95	45.3 (45.3)
95	Base peak, 100% RA	100 (100)
96	5.0 - 9.0% of mass 95	6.8 (6.82)
173	Less than 2.0% of mass 174	0 (0) 1
174	greater than 50.0% of mass 95	95.3 (95.3) 1
175	5.0 - 9.0% of mass 174	7.8 (8.23) 1
176	> 95% but < 101% of mass 174	91.8 (96.3) 1
177	5.0 - 9.0% of mass 176	6.4 (6.96) 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	1/22/2024	U012203	CCV
2	VLCSW-	LCS	1/22/2024	U012205	VLCSW-240122
3	VBLKW-	MBLK	1/22/2024	U012207	VBLKW-240122
4	HS24010611-	SAMP	1/22/2024	U012208	16RW07-240111
5	HS24010611-	MS	1/22/2024	U012209	HS24010611-08MS
6	HS24010611-	MSD	1/22/2024	U012210	HS24010611-08MSD
7	CCV-END	CCV_EN	1/22/2024	U012212	CCV-END

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Form 6

Initial Calibration Data

Volatiles by EPA Volatiles Organics by Method 8260C

Workorder

HS24010611

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/29/2024

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

Report Date : 14-Dec-2023 15:02 Page 1

ALS Laboratory Group

INITIAL CALIBRATION DATA

Start Cal Date : 06-DEC-2023 11:36
End Cal Date : 06-DEC-2023 15:18
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\8260C.m
Last Edit : 12-Dec-2023 09:44 VOA9.i

Calibration File Names:
Level 1: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120602.D
Level 2: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120603A.D
Level 3: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120604.D
Level 4: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120605.D
Level 5: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120606.D
Level 6: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120607.D
Level 7: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120608.D
Level 8: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120609.D
Level 9: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120610.D
Level 10: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120611.D

Compound	0.2500000 Level 1 / 50.0000 Level 7	0.5000000 Level 2 / 100.0000 Level 8	1.0000 Level 3 / 150.0000 Level 9	2.0000 Level 4 / 200.0000 Level 10	5.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
2 Dichlorodifluoromethane	+++++ / 137759	1356 / 297342	2370 / 450623	5944 / 628396	11260	61984	LINR	0.01736	0.41016		0.99952
3 Chloromethane	+++++ / 0.54210	0.60765 / 0.55111	0.67529 / 0.55358	0.58774 / 0.58002	0.51372	0.55086	AVRG		0.57356		8.21079
4 Propionitrile	+++++ / 0.08620	0.08042 / 0.08206	0.08383 / 0.08100	0.08835 / 0.08011	0.08153	0.08261	AVRG		0.08290		3.34979

ALS Laboratory Group

INITIAL CALIBRATION DATA

Start Cal Date : 06-DEC-2023 11:36
End Cal Date : 06-DEC-2023 15:18
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\8260C.m
Last Edit : 12-Dec-2023 09:44 VOA9.i

Compound	0.2500000 Level 1 / 50.0000 Level 7	0.5000000 Level 2 / 100.0000 Level 8	1.0000 Level 3 / 150.0000 Level 9	2.0000 Level 4 / 200.0000 Level 10	5.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
5 Vinyl Chloride	+++++	0.55587	0.61723	0.56266	0.46518	0.53420					
	0.52469	0.55584	0.55083	0.56486			AVRG		0.54793		7.36189
6 Bromomethane	+++++	1430	3158	6114	12339	41799					
	101286	220567	359673	+++++			QUAD	-0.01874	3.83540	-0.74314	0.99990
7 Chloroethane	+++++	0.35816	0.41332	0.39749	0.34723	0.36477					
	0.35630	0.35791	0.36028	0.36484			AVRG		0.36892		5.87872
8 Trichlorofluoromethane	+++++	0.63268	0.75900	0.78293	0.59845	0.71196					
	0.64859	0.70858	0.69884	0.70980			AVRG		0.69454		8.50131
9 Acrolein	+++++	0.03144	0.03185	0.02874	0.03295	0.03051					
	0.02630	0.02379	0.02495	0.02593			AVRG		0.02849		11.76525
10 Acetone	+++++	3182	5741	7963	15039	64015					
	141600	236750	361348	496605			LINR	-0.12178	0.16045		0.99800
11 1,1-Dichloroethene	+++++	0.41876	0.43897	0.39233	0.32202	0.38924					
	0.36693	0.37803	0.37669	0.38779			AVRG		0.38564		8.47183

ALS Laboratory Group

INITIAL CALIBRATION DATA

Start Cal Date : 06-DEC-2023 11:36
End Cal Date : 06-DEC-2023 15:18
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\8260C.m
Last Edit : 12-Dec-2023 09:44 VOA9.i

Compound	0.2500000 Level 1 / 50.0000 Level 7	0.5000000 Level 2 / 100.0000 Level 8	1.0000 Level 3 / 150.0000 Level 9	2.0000 Level 4 / 200.0000 Level 10	5.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
12 Isobutyl Alcohol	+++++	0.06025	0.09256	0.07598	0.06825	0.07045					
	0.07489	0.07672	0.07767	0.07812			AVRG		0.07499		11.67336
13 Acetonitrile	+++++	0.05343	0.05964	0.05843	0.04799	0.05018					
	0.05492	0.05526	0.05365	0.05081			AVRG		0.05381		7.04201
14 Allyl Chloride	+++++	1.37916	1.14075	1.27746	1.18123	1.17505					
	1.24952	1.23822	1.22682	1.19586			AVRG		1.22934		5.71471
15 Iodomethane	+++++	1035	2707	6285	19119	127779					
	363885	780690	+++++	+++++			QUAD	0.04619	2.10790	-0.11445	0.99961
16 Acrylonitrile	+++++	0.21421	0.19581	0.20958	0.18176	0.18548					
	0.19652	0.19516	0.19399	0.19267			AVRG		0.19613		5.24118
17 Methylene Chloride	+++++	2348	5310	9102	16803	72366					
	178723	355722	541571	738924			LINR	-0.00530	0.48410		0.99998
18 Methyl tert-butyl ether	+++++	1.40135	1.40371	1.49933	1.37308	1.28423					
	1.37244	1.36043	1.36592	1.37596			AVRG		1.38183		4.05374

ALS Laboratory Group

INITIAL CALIBRATION DATA

Start Cal Date : 06-DEC-2023 11:36
End Cal Date : 06-DEC-2023 15:18
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\8260C.m
Last Edit : 12-Dec-2023 09:44 VOA9.i

Compound	0.2500000 Level 1 / 50.0000 Level 7	0.5000000 Level 2 / 100.0000 Level 8	1.0000 Level 3 / 150.0000 Level 9	2.0000 Level 4 / 200.0000 Level 10	5.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
19 Carbon Disulfide	+++++	1.20122	1.11116	1.15935	0.92147	1.13379					
	1.13229	1.18462	1.18369	1.19921			AVRG		1.13631		7.62721
20 trans-1,2-Dichloroethene	+++++	0.55417	0.48054	0.47607	0.38501	0.44304					
	0.44920	0.45332	0.45240	0.45533			AVRG		0.46101		9.60667
21 Vinyl Acetate	+++++	1.25328	1.34805	1.39014	1.24374	1.35438					
	1.47594	1.52209	1.49580	1.46306			AVRG		1.39405		7.36501
22 1,1-Dichloroethane	+++++	1.06054	1.01956	0.93556	0.78304	0.95745					
	0.84206	0.96296	0.95773	0.94403			AVRG		0.94033		8.91915
23 Chloroprene	+++++	0.21279	0.20645	0.15987	0.13265	0.16426					
	0.15437	0.16624	0.16487	0.17350			AVRG		0.17056		14.63520
24 2-Butanone	+++++	0.29856	0.26092	0.23769	0.22713	0.24239					
	0.24034	0.23130	0.23227	0.23375			AVRG		0.24493		9.12891
25 Methacrylonitrile	+++++	0.37978	0.37485	0.30519	0.37643	0.31505					
	0.36911	0.37184	0.36480	0.35604			AVRG		0.35701		7.72693

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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
26 2,2-Dichloropropane	+++++ / 0.63940	0.75017 / 0.67045	0.70489 / 0.67783	0.65761 / 0.67647	0.53723	0.63563	AVRG		0.66108		8.77671
27 cis-1,2-Dichloroethene	+++++ / 0.60755	0.68190 / 0.59702	0.71757 / 0.58954	0.62535 / 0.58574	0.54538	0.60802	AVRG		0.61756		8.45747
28 Chloroform	+++++ / 0.99055	1.15926 / 0.98078	1.14653 / 0.96783	1.06171 / 0.95407	0.95147	0.99951	AVRG		1.02352		7.84830
29 Bromochloromethane	+++++ / 0.32533	0.33967 / 0.29495	0.35061 / 0.28692	0.35688 / 0.28037	0.30868	0.33246	AVRG		0.31954		8.77237
31 1,1,1-Trichloroethane	+++++ / 0.75539	0.78915 / 0.80529	0.84496 / 0.78969	0.79505 / 0.80003	0.63694	0.78391	AVRG		0.77782		7.42854
32 1,1-Dichloropropene	+++++ / 0.40996	0.44487 / 0.43410	0.43049 / 0.41847	0.42755 / 0.42504	0.34161	0.43259	AVRG		0.41830		7.26595
33 1,2-Dichloroethane	+++++ / 0.46886	0.58135 / 0.45322	0.52767 / 0.45366	0.51067 / 0.44116	0.46133	0.48650	AVRG		0.48716		9.31080

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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
Last Edit : 12-Dec-2023 09:44 VOA9.i

Compound	0.2500000 Level 1 / 50.0000 Level 7	0.5000000 Level 2 / 100.0000 Level 8	1.0000 Level 3 / 150.0000 Level 9	2.0000 Level 4 / 200.0000 Level 10	5.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
34 Carbon Tetrachloride	+++++ / 0.39493	0.39672 / 0.42983	0.45767 / 0.42163	0.39224 / 0.42951	0.33753	0.41734	AVRG		0.40860		8.29467
37 Benzene	+++++ / 1.32095	1.49959 / 1.32039	1.51995 / 1.30062	1.41790 / 1.29293	1.21619	1.36147	AVRG		1.36111		7.35672
38 Trichloroethene	+++++ / 0.36192	0.37972 / 0.36121	0.45421 / 0.36296	0.40167 / 0.36115	0.32349	0.36997	AVRG		0.37514		9.60373
39 Bromodichloromethane	+++++ / 0.43840	0.45336 / 0.45561	0.49916 / 0.46078	0.43009 / 0.45784	0.38071	0.43558	AVRG		0.44572		7.10034
40 Methyl Methacrylate	+++++ / 0.52375	0.52031 / 0.52048	0.44827 / 0.51476	0.47454 / 0.51861	0.44740	0.47358	AVRG		0.49352		6.55463
41 2-Chloroethylvinyl ether	+++++ / 5248	81.00000 / 10683	104 / 18550	254 / +++++	541	2163	QUAD	-0.04260	253	-1858	0.99946
42 1,2-Dichloropropane	+++++ / 0.34891	0.41867 / 0.34499	0.40704 / 0.34342	0.40057 / 0.34246	0.33347	0.35856	AVRG		0.36645		8.92774

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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
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

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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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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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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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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
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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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							
146 Methyl Acetate	+++++	0.52117	0.57158	0.57924	0.48951	0.46823					
	0.47002	0.46297	0.46059	0.45532			AVRG		0.49762		9.72555
147 Methylcyclohexane	+++++	0.61021	0.66741	0.68546	0.66253	0.74881					
	0.80628	0.82105	0.82621	0.84188			AVRG		0.74109		11.67899
149 Isopropyl alcohol	+++++	2543	6719	10615	26635	91067					
	232846	469315	695746	961491			LINR	-0.14984	0.03141		0.99991
152 Amyl alcohol	+++++	0.01034	0.01304	0.01216	0.00963	0.01033					
	0.01037	0.01106	0.01137	0.01152			AVRG		0.01109		9.55870
150 Allyl alcohol	+++++	0.02169	0.02472	0.02511	0.01815	0.02361					
	0.01879	0.02305	0.02645	0.02757			AVRG		0.02324		13.86740
151 4-Methyl-2-pentanol	+++++	6106	13189	29170	71142	354355					
	842831	1866546	2986592	4203138			LINR	0.91650	0.08489		0.99821
148 Tert-butyl alcohol	+++++	0.06200	0.07026	0.06171	0.06116	0.04926					
	0.04918	0.04947	0.04996	0.05076			AVRG		0.05597		14.08200

ALS Laboratory Group

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
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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ALS Laboratory Group

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
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	Coefficients m1	Coefficients m2	%RSD or R^2	
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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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
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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	
160 2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	
161 3-Methyl-1-butanol	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	<-
162 Butyl acrylate	+++++	3857	5594	11163	26306	122126						
	370735	863117	1392486	1960531			LINR	0.06515	0.77905		0.99783	
163 Butyl methacrylate	+++++	1360	3261	5931	14661	67770						
	193469	444124	721496	+++++			LINR	0.05411	0.72714		0.99595	
164 Dicyclopentadiene	+++++	2.72946	2.69453	2.56436	2.53492	2.56821						
	2.73472	2.72122	2.68006	2.76120			AVRG		2.66541		3.22053	
165 4-Vinyl-1-cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	
166 1,2,3-Trimethylbenzene	+++++	1.98121	1.76129	1.98244	1.91315	2.06886						
	2.23196	2.19460	2.21027	2.22652			AVRG		2.06337		8.05498	

ALS Laboratory Group

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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
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

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	
176 tert-Amyl alcohol	+++++	2851	7701	13541	26979	98771						
	251714	544871	860896	1234680			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	+++++	0.01859	0.01839	0.01955	0.01516	0.01638						
	0.01974	0.02141	0.02245	0.02316			AVRG		0.01942		13.65916	

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INITIAL CALIBRATION DATA

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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	AVRG		0.11641		14.21949	
	0.10943	0.11738	0.11526	0.11867								
186 Isopentane	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	
187 n-Amyl acetate	+++++	0.64243	0.74648	0.65955	0.60868	0.55039	AVRG		0.63374		9.29581	
	0.56050	0.62075	0.65114	0.66375								
188 Isopropyl acetate	+++++	0.77254	0.98712	0.96350	0.84720	0.91226	AVRG		0.92241		7.56797	
	0.93292	0.95616	0.96722	0.96278								

ALS Laboratory Group

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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	

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	
196 2-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	
197 3-Methylpentane	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	
198 Methylcyclopentane	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	
199 1-Hexene	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	
200 Dimethyl Disulfide	+++++	1052	2485	4131	12085	62736						
	226129	585738	980385	1440923			QUAD	0.06177	2.22322	-0.22531	0.99800	
201 1-Butene(1)	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	
(2)	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-

ALS Laboratory Group

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	0.2500000	0.5000000	1.0000	2.0000	5.0000	20.0000		Coefficients			%RSD
Compound	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Curve	b	m1	m2	or R^2
	50.0000	100.0000	150.0000	200.0000							
	Level 7	Level 8	Level 9	Level 10							
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

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ALS Laboratory Group

INITIAL CALIBRATION DATA

Start Cal Date : 06-DEC-2023 11:36
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Compound	0.2500000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	5.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	50.0000 Level 7	100.0000 Level 8	150.0000 Level 9	200.0000 Level 10							
$ 69 4-Bromofluorobenzene	+++++ 257187	4583 539241	5567 784122	12602 1059633	28295	106137	LINR	-0.02595	0.42479		0.99901

ALS Laboratory Group

INITIAL CALIBRATION DATA

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

right solutions.
right partner.

Form 6I

Initial Calibration Verification (ICV)

Volatiles by EPA Volatiles Organics by Method 8260C

Workorder

HS24010611

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/29/2024

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

Form 6I Initial Calibration Verification (ICV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010611

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
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 HS24010611

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 HS24010611

RunID U120614.D

Volatiles by EPA Volatiles Organics by Method 8260C

Sample Matrix	LIQUID	**Fraction**	VOA
Lab Smp Id	ICV	**Client Smp ID**	ICV
Data Type	MS DATA	**SampleType**	METHSPIKE
File ID	U120614.D	**Inj Date**	06-DEC-2023 1625

Compound	Conc Added	Conc Recovered	% Recovered	Limits	Q
n-Butylbenzene	50.0	53.6	107	80-120	
n-Propylbenzene	50.0	51.3	103	80-120	
Naphthalene	50.0	53.1	106	80-120	
o-Xylene	50.0	49.2	98.5	80-120	
sec-Butylbenzene	50.0	50.2	101	80-120	
Styrene	50.0	52.5	105	80-120	
tert-Butylbenzene	50.0	48.3	96.6	80-120	
Tetrachloroethene	50.0	48.2	96.5	80-120	
Toluene	50.0	49.2	98.4	80-120	
trans-1,2-Dichloroethene	50.0	47.0	94.0	80-120	
trans-1,3-Dichloropropene	50.0	47.4	94.8	80-120	
trans-1,4-Dichloro-2-butene	50.0	48.5	96.9	80-120	
Trichloroethene	50.0	45.9	91.8	80-120	
Trichlorofluoromethane	50.0	46.1	92.2	80-120	
Vinyl Acetate	100	103	103	80-120	
Vinyl Chloride	50.0	45.9	91.9	80-120	
Methyl Acrylate	50.0	48.6	97.2	80-120	
Ethyl Acrylate	50.0	49.8	99.7	80-120	
Butyl acrylate	50.0	44.8	89.6	80-120	
2-Ethylhexyl Acrylate	50.0	49.2	98.3	80-120	
1,2-Dichloroethylene (total)	100	92.9	92.9	80-120	
Xylenes (total)	150	147	98.0	80-120	
1,4-Dioxane	1000	866	86.6	80-120	
Dibromofluoromethane	50.0	50.8	102	71-125	
1,2-Dichloroethane-d4	50.0	49.0	98.0	70-125	
Toluene-d8	50.0	53.6	107	75-125	
4-Bromofluorobenzene	50.0	52.7	105	72-125	

right solutions.
right partner.

Form 7

Continuing Calibration Verification (CCV)

Volatiles by EPA Volatiles Organics by Method 8260C

Workorder

HS24010611

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/29/2024

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

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010611

RunID U011203.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U011203.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date 12-JAN-2024 1134
ICAL Date(s) 06-DEC-2023, 06-DEC-2023
ICAL Times 11:36, 15:18
Quant Type ISTD

Compound	RRF / RRF / Conc	RF50 / RF50	CCV RRF50	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
Dichlorodifluoromethane	50.0	46.8	0.377	0.100	6.36	20.0	Linear	
Chloromethane	0.574	0.481	0.481	0.100	16.1	20.0	Averaged	
Vinyl Chloride	0.548	0.510	0.510	0.100	7.01	20.0	Averaged	
Bromomethane	50.0	56.1	0.317	0.100	-12.145	20.0	Quadratic	
Chloroethane	0.369	0.356	0.356	0.100	3.64	20.0	Averaged	
Trichlorofluoromethane	0.695	0.691	0.691	0.100	0.474	20.0	Averaged	
Acrolein	0.028	0.023	0.023	0.010	18.1	20.0	Averaged	
Acetone	100	93.8	0.160	0.100	6.21	20.0	Linear	
1,1-Dichloroethene	0.386	0.405	0.405	0.100	-5.042	20.0	Averaged	
Iodomethane	100	109	0.537	0.100	-8.959	20.0	Quadratic	
Acrylonitrile	0.196	0.209	0.209	0.050	-6.733	20.0	Averaged	
Methylene Chloride	50.0	55.0	0.535	0.100	-9.905	20.0	Linear	
Methyl tert-butyl ether	1.38	1.50	1.50	0.100	-8.305	20.0	Averaged	
Carbon Disulfide	1.14	1.23	1.23	0.100	-8.399	20.0	Averaged	
trans-1,2-Dichloroethene	0.461	0.490	0.490	0.100	-6.273	20.0	Averaged	
Vinyl Acetate	1.39	1.41	1.41	0.010	-1.484	20.0	Averaged	
1,1-Dichloroethane	0.940	0.887	0.887	0.200	5.66	20.0	Averaged	
2-Butanone	0.245	0.217	0.217	0.100	11.2	20.0	Averaged	
2,2-Dichloropropane	0.661	0.675	0.675	0.100	-2.035	20.0	Averaged	
cis-1,2-Dichloroethene	0.618	0.589	0.589	0.100	4.59	20.0	Averaged	
Chloroform	1.02	0.973	0.973	0.200	4.96	20.0	Averaged	
Bromochloromethane	0.320	0.328	0.328	0.100	-2.717	20.0	Averaged	
30 Dibromofluoromethane	50.0	54.6	0.558	0.100	-9.292	20.0	Linear	
1,1,1-Trichloroethane	0.778	0.747	0.747	0.100	3.93	20.0	Averaged	
1,1-Dichloropropene	0.418	0.389	0.389	0.100	7.10	20.0	Averaged	
1,2-Dichloroethane	0.487	0.456	0.456	0.100	6.30	20.0	Averaged	
Carbon Tetrachloride	0.409	0.397	0.397	0.100	2.93	20.0	Averaged	
35 1,2-Dichloroethane-d4	50.0	51.0	0.599	0.100	-1.963	20.0	Quadratic	
Benzene	1.36	1.26	1.26	0.500	7.45	20.0	Averaged	
Trichloroethene	0.375	0.363	0.363	0.200	3.19	20.0	Averaged	
Bromodichloromethane	0.446	0.454	0.454	0.200	-1.879	20.0	Averaged	
2-Chloroethylvinyl ether	100	133	0.006	0.001	-33.208	20.0	Quadratic	*
1,2-Dichloropropane	0.366	0.340	0.340	0.100	7.29	20.0	Averaged	
Dibromomethane	0.237	0.229	0.229	0.100	3.21	20.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010611

RunID U011203.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U011203.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date 12-JAN-2024 1134
ICAL Date(s) 06-DEC-2023, 06-DEC-2023
ICAL Times 11:36, 15:18
Quant Type ISTD

Compound	RRF / RRF / Conc	RF50 / RF50	CCV RRF50	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
4-Methyl-2-Pentanone	100	92.8	0.335	0.100	7.21	20.0	Linear	
cis-1,3-Dichloropropene	50.0	48.1	0.552	0.200	3.86	20.0	Linear	
48 Toluene-d8	1.15	1.19	1.19	0.100	-3.024	20.0	Averaged	
Toluene	1.39	1.35	1.35	0.400	2.99	20.0	Averaged	
trans-1,3-Dichloropropene	50.0	48.5	0.468	0.100	3.05	20.0	Linear	
2-Hexanone	0.252	0.224	0.224	0.100	11.2	20.0	Averaged	
1,1,2-Trichloroethane	50.0	51.5	0.274	0.100	-2.989	20.0	Linear	
1,3-Dichloropropane	0.619	0.580	0.580	0.100	6.39	20.0	Averaged	
Dibromochloromethane	0.372	0.387	0.387	0.100	-4.016	20.0	Averaged	
Tetrachloroethene	0.298	0.300	0.300	0.200	-0.649	20.0	Averaged	
1,2-Dibromoethane	0.347	0.349	0.349	0.100	-0.595	20.0	Averaged	
1-Chlorohexane	0.280	0.257	0.257	0.100	8.45	20.0	Averaged	
Chlorobenzene	1.02	0.963	0.963	0.500	5.15	20.0	Averaged	
1,1,1,2-Tetrachloroethane	0.355	0.358	0.358	0.100	-0.730	20.0	Averaged	
Ethylbenzene	0.475	0.455	0.455	0.100	4.29	20.0	Averaged	
m,p-Xylenes	0.572	0.583	0.583	0.100	-1.996	20.0	Averaged	
o-Xylene	0.588	0.593	0.593	0.300	-0.825	20.0	Averaged	
Styrene	0.979	1.03	1.03	0.300	-5.370	20.0	Averaged	
Bromoform	50.0	50.1	0.255	0.100	-0.147	20.0	Linear	
Isopropylbenzene	1.42	1.42	1.42	0.100	0.256	20.0	Averaged	
1,1,2,2-Tetrachloroethane	50.0	48.7	0.794	0.300	2.59	20.0	Linear	
69 4-Bromofluorobenzene	50.0	51.3	0.447	0.100	-2.555	20.0	Linear	
1,2,3-Trichloropropane	0.949	0.838	0.838	0.100	11.7	20.0	Averaged	
n-Propylbenzene	2.94	2.81	2.81	0.100	4.24	20.0	Averaged	
Bromobenzene	0.840	0.785	0.785	0.100	6.57	20.0	Averaged	
1,3,5-Trimethylbenzene	2.09	2.09	2.09	0.100	-0.253	20.0	Averaged	
2-Chlorotoluene	1.98	1.81	1.81	0.100	8.62	20.0	Averaged	
4-Chlorotoluene	2.24	2.11	2.11	0.100	5.72	20.0	Averaged	
tert-Butylbenzene	1.87	1.82	1.82	0.100	2.88	20.0	Averaged	
1,2,4-Trimethylbenzene	2.09	2.14	2.14	0.100	-2.498	20.0	Averaged	
sec-Butylbenzene	2.42	2.38	2.38	0.100	1.44	20.0	Averaged	
p-Isopropyltoluene	2.09	2.20	2.20	0.100	-5.124	20.0	Averaged	
1,3-Dichlorobenzene	1.49	1.38	1.38	0.600	7.18	20.0	Averaged	
1,4-Dichlorobenzene	1.58	1.43	1.43	0.400	9.30	20.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010611

RunID U011203.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U011203.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date 12-JAN-2024 1134
ICAL Date(s) 06-DEC-2023, 06-DEC-2023
ICAL Times 11:36, 15:18
Quant Type ISTD

Compound	RRF / RRF / Conc	RF50 / RF50	CCV RRF50	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
n-Butylbenzene	1.76	1.79	1.79	0.500	-2.031	20.0	Averaged	
1,2-Dichlorobenzene	1.50	1.38	1.38	0.400	7.53	20.0	Averaged	
1,2-Dibromo-3-Chloropropane	50.0	47.0	0.137	0.050	6.10	20.0	Linear	
1,2,4-Trichlorobenzene	0.923	0.932	0.932	0.200	-0.957	20.0	Averaged	
Hexachlorobutadiene	0.370	0.382	0.382	0.100	-3.268	20.0	Averaged	
Naphthalene	2.23	2.30	2.30	0.200	-3.220	20.0	Averaged	
1,2,3-Trichlorobenzene	0.931	0.894	0.894	0.100	4.00	20.0	Averaged	
94 1,2-Dichloroethylene (total	0.539	0.540	0.540	0.200	-0.056	20.0	Averaged	
95 Xylenes (total)	0.579	0.593	0.593	0.100	-2.522	20.0	Averaged	
1,4-Dioxane	0.008	0.007	0.007	0.001	6.72	20.0	Averaged	
Cyclohexane	0.720	0.601	0.601	0.100	16.6	20.0	Averaged	
Freon TF	50.0	57.8	0.428	0.100	-15.539	20.0	Quadratic	
1,3-Butadiene	0.502	0.442	0.442	0.100	12.0	20.0	Averaged	
Methylcyclohexane	0.741	0.742	0.742	0.100	-0.070	20.0	Averaged	
Methyl Acetate	0.498	0.496	0.496	0.100	0.347	20.0	Averaged	
Tert-butyl alcohol	0.056	0.059	0.059	0.005	-5.612	20.0	Averaged	
Isopropyl alcohol	1000	1138	0.036	0.005	-13.824	20.0	Linear	
trans-1,4-Dichloro-2-butene	0.090	0.090	0.090	0.050	-0.107	20.0	Averaged	
Isobutyl Alcohol	0.075	0.069	0.069	0.005	7.67	20.0	Averaged	
Acetonitrile	0.054	0.058	0.058	0.005	-6.864	20.0	Averaged	
Allyl Chloride	1.23	1.32	1.32	0.100	-6.978	20.0	Averaged	
Methacrylonitrile	0.357	0.333	0.333	0.100	6.86	20.0	Averaged	
Methyl Methacrylate	0.494	0.457	0.457	0.100	7.34	20.0	Averaged	
Propionitrile	0.083	0.078	0.078	0.010	6.02	20.0	Averaged	
n-Hexane	0.465	0.456	0.456	0.100	1.87	20.0	Averaged	
Acetaldehyde	200	183	0.059	0.001	8.33	20.0	Linear	
Methyl Acrylate	0.657	0.647	0.647	0.100	1.48	20.0	Averaged	
Chloroprene	0.171	0.158	0.158	0.100	7.42	20.0	Averaged	
Ethyl Methacrylate	0.491	0.500	0.500	0.100	-1.858	20.0	Averaged	
1,2,3-Trimethylbenzene	2.06	2.00	2.00	0.100	2.85	20.0	Averaged	
Ethanol	1000	1083	0.007	0.001	-8.267	20.0	Linear	
Dicyclopentadiene	2.67	2.41	2.41	0.100	9.44	20.0	Averaged	
alpha-Methylstyrene	50.0	47.1	0.952	0.100	5.87	20.0	Linear	
Tetrahydrofuran	0.106	0.095	0.095	0.001	10.1	20.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010611

RunID U011203.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U011203.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date 12-JAN-2024 1134
ICAL Date(s) 06-DEC-2023, 06-DEC-2023
ICAL Times 11:36, 15:18
Quant Type ISTD

Compound	RRF / RRF / Conc	RF50 / RF50	CCV RRF50	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
Diisopropyl ether	1.74	1.59	1.59	0.100	8.73	20.0	Averaged	
Butyl acrylate	50.0	40.0	0.573	0.100	20.0	20.0	Linear	
2-Ethylhexyl Acrylate	50.0	41.5	0.606	0.100	17.1	20.0	Linear	
Ethyl Acetate	0.607	0.568	0.568	0.100	6.52	20.0	Averaged	
n-Butyl acetate	0.557	0.526	0.526	0.100	5.52	20.0	Averaged	
Epichlorohydrin	0.019	0.018	0.018	0.001	6.87	20.0	Averaged	
n-Butanol	0.016	0.015	0.015	0.005	7.14	20.0	Averaged	
Ethyl Acrylate	1.20	1.17	1.17	0.100	2.99	20.0	Averaged	
Butyl methacrylate	50.0	43.9	0.600	0.100	12.1	20.0	Linear	
n-Amyl acetate	0.634	0.523	0.523	0.100	17.4	20.0	Averaged	
Isopropyl acetate	0.922	0.882	0.882	0.100	4.42	20.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010611

RunID U011230.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U011230.D
Analysis Type WATER
Lab Sample ID CCV-END

Injection Date 12-JAN-2024 2134
ICAL Date(s) 06-DEC-2023, 06-DEC-2023
ICAL Times 11:36, 15:18
Quant Type ISTD

Compound	RRF / RRF / Conc	RF50 / RF50	CCV RRF50	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
Dichlorodifluoromethane	50.0	52.8	0.426	0.100	-5.541	50.0	Linear	
Chloromethane	0.574	0.505	0.505	0.100	12.0	50.0	Averaged	
Vinyl Chloride	0.548	0.550	0.550	0.100	-0.341	50.0	Averaged	
Bromomethane	50.0	56.3	0.318	0.100	-12.502	50.0	Quadratic	
Chloroethane	0.369	0.399	0.399	0.100	-8.236	50.0	Averaged	
Trichlorofluoromethane	0.695	0.774	0.774	0.100	-11.409	50.0	Averaged	
Acrolein	0.028	0.019	0.019	0.010	32.3	50.0	Averaged	
Acetone	100	100	0.171	0.100	-0.359	50.0	Linear	
1,1-Dichloroethene	0.386	0.428	0.428	0.100	-11.037	50.0	Averaged	
Iodomethane	100	110	0.544	0.100	-10.271	50.0	Quadratic	
Acrylonitrile	0.196	0.206	0.206	0.050	-5.172	50.0	Averaged	
Methylene Chloride	50.0	57.0	0.554	0.100	-13.972	50.0	Linear	
Methyl tert-butyl ether	1.38	1.43	1.43	0.100	-3.198	50.0	Averaged	
Carbon Disulfide	1.14	1.32	1.32	0.100	-16.351	50.0	Averaged	
trans-1,2-Dichloroethene	0.461	0.513	0.513	0.100	-11.214	50.0	Averaged	
Vinyl Acetate	1.39	1.38	1.38	0.010	1.20	50.0	Averaged	
1,1-Dichloroethane	0.940	0.920	0.920	0.200	2.18	50.0	Averaged	
2-Butanone	0.245	0.213	0.213	0.100	12.9	50.0	Averaged	
2,2-Dichloropropane	0.661	0.577	0.577	0.100	12.8	50.0	Averaged	
cis-1,2-Dichloroethene	0.618	0.621	0.621	0.100	-0.489	50.0	Averaged	
Chloroform	1.02	1.02	1.02	0.200	0.756	50.0	Averaged	
Bromochloromethane	0.320	0.339	0.339	0.100	-6.237	50.0	Averaged	
30 Dibromofluoromethane	50.0	55.8	0.570	0.100	-11.551	50.0	Linear	
1,1,1-Trichloroethane	0.778	0.808	0.808	0.100	-3.881	50.0	Averaged	
1,1-Dichloropropene	0.418	0.422	0.422	0.100	-0.947	50.0	Averaged	
1,2-Dichloroethane	0.487	0.464	0.464	0.100	4.79	50.0	Averaged	
Carbon Tetrachloride	0.409	0.436	0.436	0.100	-6.806	50.0	Averaged	
35 1,2-Dichloroethane-d4	50.0	50.3	0.590	0.100	-0.556	50.0	Quadratic	
Benzene	1.36	1.33	1.33	0.500	2.33	50.0	Averaged	
Trichloroethene	0.375	0.388	0.388	0.200	-3.322	50.0	Averaged	
Bromodichloromethane	0.446	0.469	0.469	0.200	-5.113	50.0	Averaged	
2-Chloroethylvinyl ether	100	139	0.006	0.001	-38.866	50.0	Quadratic	
1,2-Dichloropropane	0.366	0.350	0.350	0.100	4.38	50.0	Averaged	
Dibromomethane	0.237	0.235	0.235	0.100	0.840	50.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010611

RunID U011230.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U011230.D
Analysis Type WATER
Lab Sample ID CCV-END

Injection Date 12-JAN-2024 2134
ICAL Date(s) 06-DEC-2023, 06-DEC-2023
ICAL Times 11:36, 15:18
Quant Type ISTD

Compound	RRF / RRF / Conc	RF50 / RF50	CCV RRF50	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
4-Methyl-2-Pentanone	100	94.1	0.339	0.100	5.91	50.0	Linear	
cis-1,3-Dichloropropene	50.0	47.2	0.541	0.200	5.61	50.0	Linear	
48 Toluene-d8	1.15	1.21	1.21	0.100	-5.400	50.0	Averaged	
Toluene	1.39	1.43	1.43	0.400	-2.241	50.0	Averaged	
trans-1,3-Dichloropropene	50.0	47.4	0.457	0.100	5.23	50.0	Linear	
2-Hexanone	0.252	0.227	0.227	0.100	9.93	50.0	Averaged	
1,1,2-Trichloroethane	50.0	51.7	0.275	0.100	-3.405	50.0	Linear	
1,3-Dichloropropane	0.619	0.588	0.588	0.100	4.99	50.0	Averaged	
Dibromochloromethane	0.372	0.405	0.405	0.100	-8.864	50.0	Averaged	
Tetrachloroethene	0.298	0.314	0.314	0.200	-5.245	50.0	Averaged	
1,2-Dibromoethane	0.347	0.349	0.349	0.100	-0.527	50.0	Averaged	
1-Chlorohexane	0.280	0.275	0.275	0.100	2.03	50.0	Averaged	
Chlorobenzene	1.02	0.999	0.999	0.500	1.65	50.0	Averaged	
1,1,1,2-Tetrachloroethane	0.355	0.369	0.369	0.100	-3.933	50.0	Averaged	
Ethylbenzene	0.475	0.479	0.479	0.100	-0.797	50.0	Averaged	
m,p-Xylenes	0.572	0.614	0.614	0.100	-7.469	50.0	Averaged	
o-Xylene	0.588	0.613	0.613	0.300	-4.259	50.0	Averaged	
Styrene	0.979	1.07	1.07	0.300	-9.239	50.0	Averaged	
Bromoform	50.0	50.7	0.258	0.100	-1.428	50.0	Linear	
Isopropylbenzene	1.42	1.49	1.49	0.100	-5.155	50.0	Averaged	
1,1,2,2-Tetrachloroethane	50.0	49.7	0.809	0.300	0.699	50.0	Linear	
69 4-Bromofluorobenzene	50.0	52.5	0.457	0.100	-5.036	50.0	Linear	
1,2,3-Trichloropropane	0.949	0.815	0.815	0.100	14.1	50.0	Averaged	
n-Propylbenzene	2.94	2.85	2.85	0.100	2.99	50.0	Averaged	
Bromobenzene	0.840	0.796	0.796	0.100	5.17	50.0	Averaged	
1,3,5-Trimethylbenzene	2.09	2.15	2.15	0.100	-2.795	50.0	Averaged	
2-Chlorotoluene	1.98	1.83	1.83	0.100	7.25	50.0	Averaged	
4-Chlorotoluene	2.24	2.15	2.15	0.100	4.09	50.0	Averaged	
tert-Butylbenzene	1.87	1.89	1.89	0.100	-0.883	50.0	Averaged	
1,2,4-Trimethylbenzene	2.09	2.14	2.14	0.100	-2.406	50.0	Averaged	
sec-Butylbenzene	2.42	2.41	2.41	0.100	0.210	50.0	Averaged	
p-Isopropyltoluene	2.09	2.20	2.20	0.100	-5.206	50.0	Averaged	
1,3-Dichlorobenzene	1.49	1.42	1.42	0.600	4.88	50.0	Averaged	
1,4-Dichlorobenzene	1.58	1.46	1.46	0.400	7.41	50.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010611

RunID U011230.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U011230.D
Analysis Type WATER
Lab Sample ID CCV-END

Injection Date 12-JAN-2024 2134
ICAL Date(s) 06-DEC-2023, 06-DEC-2023
ICAL Times 11:36, 15:18
Quant Type ISTD

Compound	RRF / RRF / Conc	RF50 / RF50	CCV RRF50	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
n-Butylbenzene	1.76	1.74	1.74	0.500	0.695	50.0	Averaged	
1,2-Dichlorobenzene	1.50	1.40	1.40	0.400	6.40	50.0	Averaged	
1,2-Dibromo-3-Chloropropane	50.0	47.0	0.137	0.050	5.91	50.0	Linear	
1,2,4-Trichlorobenzene	0.923	0.903	0.903	0.200	2.17	50.0	Averaged	
Hexachlorobutadiene	0.370	0.356	0.356	0.100	3.85	50.0	Averaged	
Naphthalene	2.23	2.25	2.25	0.200	-1.172	50.0	Averaged	
1,2,3-Trichlorobenzene	0.931	0.887	0.887	0.100	4.80	50.0	Averaged	
94 1,2-Dichloroethylene (total	0.539	0.567	0.567	0.200	-5.073	50.0	Averaged	
95 Xylenes (total)	0.579	0.630	0.630	0.100	-8.828	50.0	Averaged	
1,4-Dioxane	0.008	0.008	0.008	0.001	5.03	50.0	Averaged	
Cyclohexane	0.720	0.648	0.648	0.100	10.1	50.0	Averaged	
Freon TF	50.0	59.5	0.441	0.100	-19.079	50.0	Quadratic	
1,3-Butadiene	0.502	0.473	0.473	0.100	5.87	50.0	Averaged	
Methylcyclohexane	0.741	0.721	0.721	0.100	2.75	50.0	Averaged	
Methyl Acetate	0.498	0.477	0.477	0.100	4.07	50.0	Averaged	
Tert-butyl alcohol	0.056	0.059	0.059	0.005	-4.791	50.0	Averaged	
Isopropyl alcohol	1000	1135	0.036	0.005	-13.483	50.0	Linear	
trans-1,4-Dichloro-2-butene	0.090	0.089	0.089	0.050	1.19	50.0	Averaged	
Isobutyl Alcohol	0.075	0.069	0.069	0.005	7.62	50.0	Averaged	
Acetonitrile	0.054	0.056	0.056	0.005	-3.444	50.0	Averaged	
Allyl Chloride	1.23	1.27	1.27	0.100	-3.505	50.0	Averaged	
Methacrylonitrile	0.357	0.324	0.324	0.100	9.25	50.0	Averaged	
Methyl Methacrylate	0.494	0.459	0.459	0.100	6.99	50.0	Averaged	
Propionitrile	0.083	0.077	0.077	0.010	7.38	50.0	Averaged	
n-Hexane	0.465	0.413	0.413	0.100	11.1	50.0	Averaged	
Acetaldehyde	200	175	0.057	0.001	12.7	50.0	Linear	
Methyl Acrylate	0.657	0.624	0.624	0.100	4.92	50.0	Averaged	
Chloroprene	0.171	0.172	0.172	0.100	-0.847	50.0	Averaged	
Ethyl Methacrylate	0.491	0.490	0.490	0.100	0.067	50.0	Averaged	
1,2,3-Trimethylbenzene	2.06	1.96	1.96	0.100	4.86	50.0	Averaged	
Ethanol	1000	1031	0.006	0.001	-3.089	50.0	Linear	
Dicyclopentadiene	2.67	2.37	2.37	0.100	11.3	50.0	Averaged	
alpha-Methylstyrene	50.0	47.7	0.965	0.100	4.65	50.0	Linear	
Tetrahydrofuran	0.106	0.088	0.088	0.001	17.0	50.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010611

RunID U011230.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U011230.D
Analysis Type WATER
Lab Sample ID CCV-END

Injection Date 12-JAN-2024 2134
ICAL Date(s) 06-DEC-2023, 06-DEC-2023
ICAL Times 11:36, 15:18
Quant Type ISTD

Compound	RRF / RRF / Conc	RF50 / RF50	CCV RRF50	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
Diisopropyl ether	1.74	1.54	1.54	0.100	11.5	50.0	Averaged	
Butyl acrylate	50.0	39.4	0.562	0.100	21.3	50.0	Linear	
2-Ethylhexyl Acrylate	50.0	38.6	0.560	0.100	22.9	50.0	Linear	
Ethyl Acetate	0.607	0.552	0.552	0.100	9.09	50.0	Averaged	
n-Butyl acetate	0.557	0.529	0.529	0.100	5.05	50.0	Averaged	
Epichlorohydrin	0.019	0.018	0.018	0.001	7.71	50.0	Averaged	
n-Butanol	0.016	0.015	0.015	0.005	7.52	50.0	Averaged	
Ethyl Acrylate	1.20	1.14	1.14	0.100	5.23	50.0	Averaged	
Butyl methacrylate	50.0	37.1	0.500	0.100	25.8	50.0	Linear	
n-Amyl acetate	0.634	0.533	0.533	0.100	15.9	50.0	Averaged	
Isopropyl acetate	0.922	0.878	0.878	0.100	4.77	50.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010611

RunID U011702.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U011702.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date 17-JAN-2024 0736
ICAL Date(s) 06-DEC-2023, 06-DEC-2023
ICAL Times 11:36, 15:18
Quant Type ISTD

Compound	RRF / RRF / Conc	RF50 / RF50	CCV RRF50	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
Dichlorodifluoromethane	50.0	28.0	0.223	0.100	43.9	20.0	Linear	*
Chloromethane	0.574	0.396	0.396	0.100	30.9	20.0	Averaged	*
Propionitrile	0.083	0.068	0.068	0.010	18.1	20.0	Averaged	
Vinyl Chloride	0.548	0.494	0.494	0.100	9.92	20.0	Averaged	
Bromomethane	50.0	55.9	0.316	0.100	-11.843	20.0	Quadratic	
Chloroethane	0.369	0.376	0.376	0.100	-1.793	20.0	Averaged	
Trichlorofluoromethane	0.695	0.782	0.782	0.100	-12.530	20.0	Averaged	
Acrolein	0.028	0.023	0.023	0.010	18.5	20.0	Averaged	
Acetone	100	101	0.172	0.100	-1.344	20.0	Linear	
1,1-Dichloroethene	0.386	0.438	0.438	0.100	-13.642	20.0	Averaged	
Isobutyl Alcohol	0.075	0.065	0.065	0.005	13.2	20.0	Averaged	
Acetonitrile	0.054	0.056	0.056	0.005	-4.100	20.0	Averaged	
Allyl Chloride	1.23	1.25	1.25	0.100	-1.321	20.0	Averaged	
Iodomethane	100	114	0.564	0.100	-13.973	20.0	Quadratic	
Acrylonitrile	0.196	0.187	0.187	0.050	4.72	20.0	Averaged	
Methylene Chloride	50.0	57.2	0.556	0.100	-14.397	20.0	Linear	
Methyl tert-butyl ether	1.38	1.39	1.39	0.100	-0.708	20.0	Averaged	
Carbon Disulfide	1.14	1.35	1.35	0.100	-18.384	20.0	Averaged	
trans-1,2-Dichloroethene	0.461	0.535	0.535	0.100	-16.149	20.0	Averaged	
Vinyl Acetate	1.39	1.34	1.34	0.010	4.00	20.0	Averaged	
1,1-Dichloroethane	0.940	0.930	0.930	0.200	1.07	20.0	Averaged	
Chloroprene	0.171	0.173	0.173	0.100	-1.657	20.0	Averaged	
2-Butanone	0.245	0.196	0.196	0.100	19.9	20.0	Averaged	
Methacrylonitrile	0.357	0.359	0.359	0.100	-0.466	20.0	Averaged	
2,2-Dichloropropane	0.661	0.746	0.746	0.100	-12.782	20.0	Averaged	
cis-1,2-Dichloroethene	0.618	0.622	0.622	0.100	-0.642	20.0	Averaged	
Chloroform	1.02	1.01	1.01	0.200	1.33	20.0	Averaged	
Bromochloromethane	0.320	0.335	0.335	0.100	-4.887	20.0	Averaged	
30 Dibromofluoromethane	50.0	54.2	0.553	0.100	-8.333	20.0	Linear	
1,1,1-Trichloroethane	0.778	0.815	0.815	0.100	-4.782	20.0	Averaged	
1,1-Dichloropropene	0.418	0.460	0.460	0.100	-9.999	20.0	Averaged	
1,2-Dichloroethane	0.487	0.465	0.465	0.100	4.47	20.0	Averaged	
Carbon Tetrachloride	0.409	0.480	0.480	0.100	-17.472	20.0	Averaged	
35 1,2-Dichloroethane-d4	50.0	48.1	0.563	0.100	3.84	20.0	Quadratic	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010611

RunID U011702.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U011702.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date 17-JAN-2024 0736
ICAL Date(s) 06-DEC-2023, 06-DEC-2023
ICAL Times 11:36, 15:18
Quant Type ISTD

Compound	RRF / RRF / Conc	RF50 / RF50	CCV RRF50	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
Benzene	1.36	1.38	1.38	0.500	-1.307	20.0	Averaged	
Trichloroethene	0.375	0.411	0.411	0.200	-9.438	20.0	Averaged	
Bromodichloromethane	0.446	0.489	0.489	0.200	-9.633	20.0	Averaged	
Methyl Methacrylate	0.494	0.416	0.416	0.100	15.8	20.0	Averaged	
2-Chloroethylvinyl ether	100	104	0.005	0.001	-4.335	20.0	Quadratic	
1,2-Dichloropropane	0.366	0.362	0.362	0.100	1.30	20.0	Averaged	
2-Nitropropane	0.128	0.109	0.109	0.000	14.8	20.0	Averaged	
Dibromomethane	0.237	0.237	0.237	0.100	0.094	20.0	Averaged	
4-Methyl-2-Pentanone	100	87.6	0.316	0.100	12.4	20.0	Linear	
cis-1,3-Dichloropropene	50.0	52.1	0.599	0.200	-4.208	20.0	Linear	
48 Toluene-d8	1.15	1.23	1.23	0.100	-7.234	20.0	Averaged	
Ethyl Methacrylate	0.491	0.473	0.473	0.100	3.55	20.0	Averaged	
Toluene	1.39	1.51	1.51	0.400	-8.323	20.0	Averaged	
trans-1,3-Dichloropropene	50.0	52.3	0.506	0.100	-4.576	20.0	Linear	
2-Hexanone	0.252	0.210	0.210	0.100	16.9	20.0	Averaged	
1,1,2-Trichloroethane	50.0	53.2	0.283	0.100	-6.363	20.0	Linear	
1,3-Dichloropropane	0.619	0.602	0.602	0.100	2.82	20.0	Averaged	
Dibromochloromethane	0.372	0.416	0.416	0.100	-11.740	20.0	Averaged	
Tetrachloroethene	0.298	0.345	0.345	0.200	-15.724	20.0	Averaged	
1,2-Dibromoethane	0.347	0.347	0.347	0.100	-0.017	20.0	Averaged	
1-Chlorohexane	0.280	0.305	0.305	0.100	-8.857	20.0	Averaged	
Chlorobenzene	1.02	1.08	1.08	0.500	-5.919	20.0	Averaged	
1,1,1,2-Tetrachloroethane	0.355	0.391	0.391	0.100	-9.956	20.0	Averaged	
Ethylbenzene	0.475	0.514	0.514	0.100	-8.094	20.0	Averaged	
m,p-Xylenes	0.572	0.653	0.653	0.100	-14.283	20.0	Averaged	
o-Xylene	0.588	0.653	0.653	0.300	-11.159	20.0	Averaged	
Styrene	0.979	1.13	1.13	0.300	-15.961	20.0	Averaged	
Bromoform	50.0	53.2	0.271	0.100	-6.414	20.0	Linear	
Isopropylbenzene	1.42	1.64	1.64	0.100	-15.207	20.0	Averaged	
1,1,2,2-Tetrachloroethane	50.0	49.5	0.807	0.300	1.03	20.0	Linear	
69 4-Bromofluorobenzene	50.0	51.9	0.452	0.100	-3.898	20.0	Linear	
1,2,3-Trichloropropane	0.949	0.822	0.822	0.100	13.4	20.0	Averaged	
trans-1,4-Dichloro-2-butene	0.090	0.086	0.086	0.050	4.13	20.0	Averaged	
n-Propylbenzene	2.94	3.32	3.32	0.100	-13.028	20.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010611

RunID U011702.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U011702.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date 17-JAN-2024 0736
ICAL Date(s) 06-DEC-2023, 06-DEC-2023
ICAL Times 11:36, 15:18
Quant Type ISTD

Compound	RRF / RRF / Conc	RF50 / RF50	CCV RRF50	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
Bromobenzene	0.840	0.844	0.844	0.100	-0.479	20.0	Averaged	
1,3,5-Trimethylbenzene	2.09	2.40	2.40	0.100	-15.050	20.0	Averaged	
2-Chlorotoluene	1.98	2.02	2.02	0.100	-2.126	20.0	Averaged	
4-Chlorotoluene	2.24	2.36	2.36	0.100	-5.316	20.0	Averaged	
tert-Butylbenzene	1.87	2.09	2.09	0.100	-11.696	20.0	Averaged	
1,2,4-Trimethylbenzene	2.09	2.39	2.39	0.100	-14.377	20.0	Averaged	
sec-Butylbenzene	2.42	2.80	2.80	0.100	-15.814	20.0	Averaged	
p-Isopropyltoluene	2.09	2.44	2.44	0.100	-16.751	20.0	Averaged	
1,3-Dichlorobenzene	1.49	1.55	1.55	0.600	-3.937	20.0	Averaged	
1,4-Dichlorobenzene	1.58	1.60	1.60	0.400	-1.203	20.0	Averaged	
Benzyl Chloride	50.0	53.8	0.482	0.010	-7.540	20.0	Quadratic	
n-Butylbenzene	1.76	2.09	2.09	0.500	-18.965	20.0	Averaged	
1,2-Dichlorobenzene	1.50	1.50	1.50	0.400	-0.482	20.0	Averaged	
1,2-Dibromo-3-Chloropropane	50.0	46.1	0.134	0.050	7.86	20.0	Linear	
1,2,4-Trichlorobenzene	0.923	1.00	1.00	0.200	-8.637	20.0	Averaged	
Hexachlorobutadiene	0.370	0.449	0.449	0.100	-21.389	20.0	Averaged	*
Naphthalene	2.23	2.26	2.26	0.200	-1.392	20.0	Averaged	
1,2,3-Trichlorobenzene	0.931	0.933	0.933	0.100	-0.155	20.0	Averaged	
Methyl Acetate	0.498	0.449	0.449	0.100	9.81	20.0	Averaged	
Freon TF	50.0	65.6	0.488	0.100	-31.171	20.0	Quadratic	*
Cyclohexane	0.720	0.688	0.688	0.100	4.45	20.0	Averaged	
Tetrahydrofuran	0.106	0.087	0.087	0.001	17.8	20.0	Averaged	
Methylcyclohexane	0.741	0.758	0.758	0.100	-2.291	20.0	Averaged	
1,4-Dioxane	0.008	0.007	0.007	0.001	15.0	20.0	Averaged	
n-Butanol	0.016	0.014	0.014	0.005	16.5	20.0	Averaged	
n-Hexane	0.465	0.540	0.540	0.100	-16.282	20.0	Averaged	
Diethyl ether	0.408	0.395	0.395	0.100	3.23	20.0	Averaged	
Tert-butyl alcohol	0.056	0.050	0.050	0.005	11.2	20.0	Averaged	
Isopropyl alcohol	1000	981	0.031	0.005	1.92	20.0	Linear	
Amyl alcohol	0.011	0.009	0.009	0.005	19.7	20.0	Averaged	
Diisopropyl ether	1.74	1.57	1.57	0.100	10.1	20.0	Averaged	
Butyl acrylate	50.0	40.2	0.576	0.100	19.6	20.0	Linear	
n-Amyl acetate	0.634	0.531	0.531	0.100	16.2	20.0	Averaged	
Dicyclopentadiene	2.67	2.54	2.54	0.100	4.85	20.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010611

RunID U011702.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U011702.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date 17-JAN-2024 0736
ICAL Date(s) 06-DEC-2023, 06-DEC-2023
ICAL Times 11:36, 15:18
Quant Type ISTD

Compound	RRF / RRF / Conc	RF50 / RF50	CCV RRF50	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
1,2,3-Trimethylbenzene	2.06	2.09	2.09	0.100	-1.084	20.0	Averaged	
Ethanol	1000	957	0.006	0.001	4.32	20.0	Linear	
tert-Butyl formate	100	86.0	0.327	0.100	14.0	20.0	Linear	
3,3-Dimethyl-1-butanol	0.041	0.032	0.032	0.005	23.4	20.0	Averaged	*
tert-Amyl methyl ether	1.55	1.44	1.44	0.005	7.22	20.0	Averaged	
tert-Butyl ethyl ether	1.55	1.45	1.45	0.100	6.93	20.0	Averaged	
tert-Amyl alcohol	1000	862	0.033	0.005	13.8	20.0	Linear	
4-Methyl-2-pentanol	1000	745	0.059	0.005	25.5	20.0	Linear	*
1,3-Butadiene	0.502	0.428	0.428	0.100	14.8	20.0	Averaged	
Dichlorofluoromethane	0.762	0.853	0.853	0.100	-11.913	20.0	Averaged	
Epichlorohydrin	0.019	0.017	0.017	0.001	14.5	20.0	Averaged	
94 1,2-Dichloroethylene (total	0.539	0.578	0.578	0.200	-7.270	20.0	Averaged	
95 Xylenes (total)	0.579	0.664	0.664	0.100	-14.736	20.0	Averaged	
alpha-Methylstyrene	50.0	53.5	1.09	0.100	-6.905	20.0	Linear	
Ethyl Acetate	0.607	0.498	0.498	0.100	18.0	20.0	Averaged	
Methyl Acrylate	0.657	0.552	0.552	0.100	16.0	20.0	Averaged	
n-Butyl acetate	0.557	0.496	0.496	0.100	10.9	20.0	Averaged	
Cyclohexanone	0.033	0.030	0.030	0.005	10.5	20.0	Averaged	
Isoprene	0.116	0.139	0.139	0.010	-19.207	20.0	Averaged	
Isopropyl acetate	0.922	0.857	0.857	0.100	7.05	20.0	Averaged	
Allyl alcohol	0.023	0.027	0.027	0.004	-16.282	20.0	Averaged	
Acetaldehyde	200	180	0.058	0.001	10.0	20.0	Linear	
Methyl Amyl Ketone	50.0	35.4	0.548	0.100	29.2	20.0	Linear	*
Dimethyl Disulfide	50.0	51.7	0.459	0.020	-3.429	20.0	Quadratic	
Isobutylene	0.049	0.052	0.052	0.010	-6.731	20.0	Averaged	
2-Ethylhexyl Acrylate	50.0	41.2	0.602	0.100	17.6	20.0	Linear	
Ethyl Acrylate	1.20	1.15	1.15	0.100	4.18	20.0	Averaged	
Butyl methacrylate	50.0	40.6	0.552	0.100	18.7	20.0	Linear	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010611

RunID U011728.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U011728.D
Analysis Type WATER
Lab Sample ID CCV-END

Injection Date 17-JAN-2024 1716
ICAL Date(s) 06-DEC-2023, 06-DEC-2023
ICAL Times 11:36, 15:18
Quant Type ISTD

Compound	RRF / RRF / Conc	RF50 / RF50	CCV RRF50	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
Dichlorodifluoromethane	50.0	26.3	0.209	0.100	47.4	50.0	Linear	
Chloromethane	0.574	0.359	0.359	0.100	37.3	50.0	Averaged	
Propionitrile	0.083	0.072	0.072	0.010	13.1	50.0	Averaged	
Vinyl Chloride	0.548	0.474	0.474	0.100	13.5	50.0	Averaged	
Bromomethane	50.0	51.5	0.290	0.100	-3.072	50.0	Quadratic	
Chloroethane	0.369	0.357	0.357	0.100	3.28	50.0	Averaged	
Trichlorofluoromethane	0.695	0.767	0.767	0.100	-10.417	50.0	Averaged	
Acrolein	0.028	0.026	0.026	0.010	7.88	50.0	Averaged	
Acetone	100	88.5	0.152	0.100	11.5	50.0	Linear	
1,1-Dichloroethene	0.386	0.421	0.421	0.100	-9.069	50.0	Averaged	
Isobutyl Alcohol	0.075	0.065	0.065	0.005	12.8	50.0	Averaged	
Acetonitrile	0.054	0.054	0.054	0.005	-0.874	50.0	Averaged	
Allyl Chloride	1.23	1.24	1.24	0.100	-1.196	50.0	Averaged	
Iodomethane	100	113	0.561	0.100	-13.281	50.0	Quadratic	
Acrylonitrile	0.196	0.198	0.198	0.050	-0.859	50.0	Averaged	
Methylene Chloride	50.0	55.7	0.542	0.100	-11.467	50.0	Linear	
Methyl tert-butyl ether	1.38	1.41	1.41	0.100	-1.932	50.0	Averaged	
Carbon Disulfide	1.14	1.26	1.26	0.100	-10.716	50.0	Averaged	
trans-1,2-Dichloroethene	0.461	0.517	0.517	0.100	-12.079	50.0	Averaged	
Vinyl Acetate	1.39	1.22	1.22	0.010	12.6	50.0	Averaged	
1,1-Dichloroethane	0.940	0.896	0.896	0.200	4.74	50.0	Averaged	
Chloroprene	0.171	0.159	0.159	0.100	6.52	50.0	Averaged	
2-Butanone	0.245	0.204	0.204	0.100	16.6	50.0	Averaged	
Methacrylonitrile	0.357	0.499	0.499	0.100	-39.891	50.0	Averaged	
2,2-Dichloropropane	0.661	0.634	0.634	0.100	4.09	50.0	Averaged	
cis-1,2-Dichloroethene	0.618	0.611	0.611	0.100	1.01	50.0	Averaged	
Chloroform	1.02	0.977	0.977	0.200	4.51	50.0	Averaged	
Bromochloromethane	0.320	0.330	0.330	0.100	-3.330	50.0	Averaged	
30 Dibromofluoromethane	50.0	51.7	0.529	0.100	-3.486	50.0	Linear	
1,1,1-Trichloroethane	0.778	0.792	0.792	0.100	-1.805	50.0	Averaged	
1,1-Dichloropropene	0.418	0.435	0.435	0.100	-3.983	50.0	Averaged	
1,2-Dichloroethane	0.487	0.448	0.448	0.100	8.10	50.0	Averaged	
Carbon Tetrachloride	0.409	0.449	0.449	0.100	-10.006	50.0	Averaged	
35 1,2-Dichloroethane-d4	50.0	46.2	0.539	0.100	7.63	50.0	Quadratic	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010611

RunID U011728.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U011728.D
Analysis Type WATER
Lab Sample ID CCV-END

Injection Date 17-JAN-2024 1716
ICAL Date(s) 06-DEC-2023, 06-DEC-2023
ICAL Times 11:36, 15:18
Quant Type ISTD

Compound	RRF / RRF / Conc	RF50 / RF50	CCV RRF50	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
Benzene	1.36	1.32	1.32	0.500	3.29	50.0	Averaged	
Trichloroethene	0.375	0.403	0.403	0.200	-7.331	50.0	Averaged	
Bromodichloromethane	0.446	0.459	0.459	0.200	-3.023	50.0	Averaged	
Methyl Methacrylate	0.494	0.424	0.424	0.100	14.0	50.0	Averaged	
2-Chloroethylvinyl ether	100	142	0.006	0.001	-42.137	50.0	Quadratic	
1,2-Dichloropropane	0.366	0.345	0.345	0.100	5.80	50.0	Averaged	
2-Nitropropane	0.128	0.108	0.108	0.000	16.2	50.0	Averaged	
Dibromomethane	0.237	0.232	0.232	0.100	2.33	50.0	Averaged	
4-Methyl-2-Pentanone	100	91.5	0.330	0.100	8.47	50.0	Linear	
cis-1,3-Dichloropropene	50.0	47.9	0.550	0.200	4.18	50.0	Linear	
48 Toluene-d8	1.15	1.17	1.17	0.100	-1.942	50.0	Averaged	
Ethyl Methacrylate	0.491	0.474	0.474	0.100	3.38	50.0	Averaged	
Toluene	1.39	1.46	1.46	0.400	-4.382	50.0	Averaged	
trans-1,3-Dichloropropene	50.0	47.9	0.462	0.100	4.27	50.0	Linear	
2-Hexanone	0.252	0.217	0.217	0.100	14.0	50.0	Averaged	
1,1,2-Trichloroethane	50.0	51.2	0.273	0.100	-2.449	50.0	Linear	
1,3-Dichloropropane	0.619	0.594	0.594	0.100	4.05	50.0	Averaged	
Dibromochloromethane	0.372	0.405	0.405	0.100	-8.824	50.0	Averaged	
Tetrachloroethene	0.298	0.336	0.336	0.200	-12.494	50.0	Averaged	
1,2-Dibromoethane	0.347	0.356	0.356	0.100	-2.551	50.0	Averaged	
1-Chlorohexane	0.280	0.288	0.288	0.100	-2.603	50.0	Averaged	
Chlorobenzene	1.02	1.02	1.02	0.500	-0.630	50.0	Averaged	
1,1,1,2-Tetrachloroethane	0.355	0.373	0.373	0.100	-4.981	50.0	Averaged	
Ethylbenzene	0.475	0.498	0.498	0.100	-4.785	50.0	Averaged	
m,p-Xylenes	0.572	0.630	0.630	0.100	-10.272	50.0	Averaged	
o-Xylene	0.588	0.639	0.639	0.300	-8.648	50.0	Averaged	
Styrene	0.979	1.09	1.09	0.300	-11.305	50.0	Averaged	
Bromoform	50.0	51.5	0.262	0.100	-2.972	50.0	Linear	
Isopropylbenzene	1.42	1.58	1.58	0.100	-11.329	50.0	Averaged	
1,1,2,2-Tetrachloroethane	50.0	49.2	0.803	0.300	1.52	50.0	Linear	
69 4-Bromofluorobenzene	50.0	49.7	0.433	0.100	0.645	50.0	Linear	
1,2,3-Trichloropropane	0.949	0.830	0.830	0.100	12.5	50.0	Averaged	
trans-1,4-Dichloro-2-butene	0.090	0.087	0.087	0.050	3.82	50.0	Averaged	
n-Propylbenzene	2.94	3.04	3.04	0.100	-3.706	50.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010611

RunID U011728.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U011728.D
Analysis Type WATER
Lab Sample ID CCV-END

Injection Date 17-JAN-2024 1716
ICAL Date(s) 06-DEC-2023, 06-DEC-2023
ICAL Times 11:36, 15:18
Quant Type ISTD

Compound	RRF / RRF / Conc	RF50 / RF50	CCV RRF50	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
Bromobenzene	0.840	0.823	0.823	0.100	2.02	50.0	Averaged	
1,3,5-Trimethylbenzene	2.09	2.26	2.26	0.100	-8.333	50.0	Averaged	
2-Chlorotoluene	1.98	1.90	1.90	0.100	3.91	50.0	Averaged	
4-Chlorotoluene	2.24	2.23	2.23	0.100	0.703	50.0	Averaged	
tert-Butylbenzene	1.87	2.04	2.04	0.100	-8.640	50.0	Averaged	
1,2,4-Trimethylbenzene	2.09	2.23	2.23	0.100	-6.661	50.0	Averaged	
sec-Butylbenzene	2.42	2.62	2.62	0.100	-8.460	50.0	Averaged	
p-Isopropyltoluene	2.09	2.37	2.37	0.100	-13.220	50.0	Averaged	
1,3-Dichlorobenzene	1.49	1.47	1.47	0.600	1.41	50.0	Averaged	
1,4-Dichlorobenzene	1.58	1.54	1.54	0.400	2.58	50.0	Averaged	
Benzyl Chloride	50.0	48.0	0.426	0.010	3.91	50.0	Quadratic	
n-Butylbenzene	1.76	1.91	1.91	0.500	-8.837	50.0	Averaged	
1,2-Dichlorobenzene	1.50	1.47	1.47	0.400	1.58	50.0	Averaged	
1,2-Dibromo-3-Chloropropane	50.0	47.6	0.139	0.050	4.84	50.0	Linear	
1,2,4-Trichlorobenzene	0.923	0.938	0.938	0.200	-1.623	50.0	Averaged	
Hexachlorobutadiene	0.370	0.393	0.393	0.100	-6.109	50.0	Averaged	
Naphthalene	2.23	2.31	2.31	0.200	-3.627	50.0	Averaged	
1,2,3-Trichlorobenzene	0.931	0.916	0.916	0.100	1.61	50.0	Averaged	
Methyl Acetate	0.498	0.469	0.469	0.100	5.74	50.0	Averaged	
Freon TF	50.0	63.4	0.470	0.100	-26.717	50.0	Quadratic	
Cyclohexane	0.720	0.677	0.677	0.100	6.03	50.0	Averaged	
Tetrahydrofuran	0.106	0.088	0.088	0.001	17.4	50.0	Averaged	
Methylcyclohexane	0.741	0.750	0.750	0.100	-1.268	50.0	Averaged	
1,4-Dioxane	0.008	0.007	0.007	0.001	7.95	50.0	Averaged	
n-Butanol	0.016	0.015	0.015	0.005	9.87	50.0	Averaged	
n-Hexane	0.465	0.457	0.457	0.100	1.62	50.0	Averaged	
Diethyl ether	0.408	0.387	0.387	0.100	5.11	50.0	Averaged	
Tert-butyl alcohol	0.056	0.057	0.057	0.005	-1.003	50.0	Averaged	
Isopropyl alcohol	1000	1083	0.034	0.005	-8.318	50.0	Linear	
Amyl alcohol	0.011	0.010	0.010	0.005	11.6	50.0	Averaged	
Diisopropyl ether	1.74	1.53	1.53	0.100	12.0	50.0	Averaged	
Butyl acrylate	50.0	38.3	0.545	0.100	23.5	50.0	Linear	
n-Amyl acetate	0.634	0.523	0.523	0.100	17.5	50.0	Averaged	
Dicyclopentadiene	2.67	2.51	2.51	0.100	5.72	50.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010611

RunID U011728.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U011728.D
Analysis Type WATER
Lab Sample ID CCV-END

Injection Date 17-JAN-2024 1716
ICAL Date(s) 06-DEC-2023, 06-DEC-2023
ICAL Times 11:36, 15:18
Quant Type ISTD

Compound	RRF / RRF / Conc	RF50 / RF50	CCV RRF50	Min RRF	%D / %D / %DRIFT	Max %D / %D / %DRIFT	Curve CURVE TYPE	Q
1,2,3-Trimethylbenzene	2.06	2.01	2.01	0.100	2.70	50.0	Averaged	
Ethanol	1000	991	0.006	0.001	0.877	50.0	Linear	
tert-Butyl formate	100	95.4	0.364	0.100	4.61	50.0	Linear	
3,3-Dimethyl-1-butanol	0.041	0.034	0.034	0.005	16.4	50.0	Averaged	
tert-Amyl methyl ether	1.55	1.41	1.41	0.005	9.18	50.0	Averaged	
tert-Butyl ethyl ether	1.55	1.42	1.42	0.100	8.31	50.0	Averaged	
tert-Amyl alcohol	1000	955	0.036	0.005	4.48	50.0	Linear	
4-Methyl-2-pentanol	1000	834	0.067	0.005	16.6	50.0	Linear	
1,3-Butadiene	0.502	0.402	0.402	0.100	19.9	50.0	Averaged	
Dichlorofluoromethane	0.762	0.843	0.843	0.100	-10.591	50.0	Averaged	
Epichlorohydrin	0.019	0.019	0.019	0.001	3.29	50.0	Averaged	
94 1,2-Dichloroethylene (total	0.539	0.564	0.564	0.200	-4.582	50.0	Averaged	
95 Xylenes (total)	0.579	0.640	0.640	0.100	-10.633	50.0	Averaged	
alpha-Methylstyrene	50.0	50.7	1.03	0.100	-1.367	50.0	Linear	
Ethyl Acetate	0.607	0.513	0.513	0.100	15.5	50.0	Averaged	
Methyl Acrylate	0.657	0.583	0.583	0.100	11.2	50.0	Averaged	
n-Butyl acetate	0.557	0.514	0.514	0.100	7.64	50.0	Averaged	
Cyclohexanone	0.033	0.023	0.023	0.005	31.4	50.0	Averaged	
Isoprene	0.116	0.129	0.129	0.010	-10.951	50.0	Averaged	
Isopropyl acetate	0.922	0.852	0.852	0.100	7.69	50.0	Averaged	
Allyl alcohol	0.023	0.023	0.023	0.004	1.62	50.0	Averaged	
Acetaldehyde	++++	++++	2.973e+68	0.001	++++	50.0	Linear	*
Methyl Amyl Ketone	50.0	36.9	0.572	0.100	26.2	50.0	Linear	
Dimethyl Disulfide	50.0	46.5	0.407	0.020	7.06	50.0	Quadratic	
Isobutylene	0.049	++++	2.973e+68	0.010	++++	50.0	Averaged	*
2-Ethylhexyl Acrylate	50.0	38.7	0.563	0.100	22.6	50.0	Linear	
Ethyl Acrylate	1.20	1.16	1.16	0.100	3.68	50.0	Averaged	
Butyl methacrylate	50.0	38.5	0.521	0.100	23.0	50.0	Linear	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010611

RunID U011902.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U011902.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date 19-JAN-2024 0907
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	22.2	0.175	0.100	55.6	20.0	Linear	*
Chloromethane	0.574	0.320	0.320	0.100	44.3	20.0	Averaged	*
Propionitrile	0.083	0.069	0.069	0.010	16.8	20.0	Averaged	
Vinyl Chloride	0.548	0.443	0.443	0.100	19.2	20.0	Averaged	
Bromomethane	50.0	45.2	0.253	0.100	9.68	20.0	Quadratic	
Chloroethane	0.369	0.319	0.319	0.100	13.5	20.0	Averaged	
Trichlorofluoromethane	0.695	0.680	0.680	0.100	2.13	20.0	Averaged	
Acrolein	0.028	0.025	0.025	0.010	13.8	20.0	Averaged	
Acetone	100	97.6	0.166	0.100	2.40	20.0	Linear	
1,1-Dichloroethene	0.386	0.391	0.391	0.100	-1.379	20.0	Averaged	
Isobutyl Alcohol	0.075	0.060	0.060	0.005	19.5	20.0	Averaged	
Acetonitrile	0.054	0.052	0.052	0.005	3.44	20.0	Averaged	
Allyl Chloride	1.23	1.20	1.20	0.100	2.20	20.0	Averaged	
Iodomethane	100	110	0.541	0.100	-9.666	20.0	Quadratic	
Acrylonitrile	0.196	0.191	0.191	0.050	2.74	20.0	Averaged	
Methylene Chloride	50.0	50.5	0.492	0.100	-1.008	20.0	Linear	
Methyl tert-butyl ether	1.38	1.33	1.33	0.100	3.56	20.0	Averaged	
Carbon Disulfide	1.14	1.15	1.15	0.100	-1.344	20.0	Averaged	
trans-1,2-Dichloroethene	0.461	0.479	0.479	0.100	-3.878	20.0	Averaged	
Vinyl Acetate	1.39	1.21	1.21	0.010	13.3	20.0	Averaged	
1,1-Dichloroethane	0.940	0.812	0.812	0.200	13.6	20.0	Averaged	
Chloroprene	0.171	0.142	0.142	0.100	16.6	20.0	Averaged	
2-Butanone	0.245	0.197	0.197	0.100	19.5	20.0	Averaged	
Methacrylonitrile	0.357	0.304	0.304	0.100	14.9	20.0	Averaged	
2,2-Dichloropropane	0.661	0.629	0.629	0.100	4.88	20.0	Averaged	
cis-1,2-Dichloroethene	0.618	0.549	0.549	0.100	11.1	20.0	Averaged	
Chloroform	1.02	0.893	0.893	0.200	12.8	20.0	Averaged	
Bromochloromethane	0.320	0.307	0.307	0.100	3.77	20.0	Averaged	
30 Dibromofluoromethane	50.0	49.8	0.509	0.100	0.456	20.0	Linear	
1,1,1-Trichloroethane	0.778	0.709	0.709	0.100	8.80	20.0	Averaged	
1,1-Dichloropropene	0.418	0.404	0.404	0.100	3.34	20.0	Averaged	
1,2-Dichloroethane	0.487	0.408	0.408	0.100	16.3	20.0	Averaged	
Carbon Tetrachloride	0.409	0.418	0.418	0.100	-2.244	20.0	Averaged	
35 1,2-Dichloroethane-d4	50.0	43.7	0.509	0.100	12.7	20.0	Quadratic	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010611

RunID U011902.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U011902.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date 19-JAN-2024 0907
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	1.23	1.23	0.500	9.76	20.0	Averaged	
Trichloroethene	0.375	0.385	0.385	0.200	-2.643	20.0	Averaged	
Bromodichloromethane	0.446	0.426	0.426	0.200	4.38	20.0	Averaged	
Methyl Methacrylate	0.494	0.401	0.401	0.100	18.7	20.0	Averaged	
2-Chloroethylvinyl ether	100	143	0.006	0.001	-42.556	20.0	Quadratic	*
1,2-Dichloropropane	0.366	0.323	0.323	0.100	11.8	20.0	Averaged	
2-Nitropropane	0.128	0.108	0.108	0.000	16.2	20.0	Averaged	
Dibromomethane	0.237	0.217	0.217	0.100	8.67	20.0	Averaged	
4-Methyl-2-Pentanone	100	84.7	0.305	0.100	15.3	20.0	Linear	
cis-1,3-Dichloropropene	50.0	46.1	0.528	0.200	7.79	20.0	Linear	
48 Toluene-d8	1.15	1.18	1.18	0.100	-2.850	20.0	Averaged	
Ethyl Methacrylate	0.491	0.468	0.468	0.100	4.60	20.0	Averaged	
Toluene	1.39	1.39	1.39	0.400	0.498	20.0	Averaged	
trans-1,3-Dichloropropene	50.0	46.0	0.444	0.100	7.90	20.0	Linear	
2-Hexanone	0.252	0.211	0.211	0.100	16.3	20.0	Averaged	
1,1,2-Trichloroethane	50.0	50.8	0.271	0.100	-1.566	20.0	Linear	
1,3-Dichloropropane	0.619	0.557	0.557	0.100	10.1	20.0	Averaged	
Dibromochloromethane	0.372	0.389	0.389	0.100	-4.537	20.0	Averaged	
Tetrachloroethene	0.298	0.338	0.338	0.200	-13.278	20.0	Averaged	
1,2-Dibromoethane	0.347	0.344	0.344	0.100	0.912	20.0	Averaged	
1-Chlorohexane	0.280	0.266	0.266	0.100	5.28	20.0	Averaged	
Chlorobenzene	1.02	0.989	0.989	0.500	2.63	20.0	Averaged	
1,1,1,2-Tetrachloroethane	0.355	0.370	0.370	0.100	-4.110	20.0	Averaged	
Ethylbenzene	0.475	0.486	0.486	0.100	-2.268	20.0	Averaged	
m,p-Xylenes	0.572	0.610	0.610	0.100	-6.796	20.0	Averaged	
o-Xylene	0.588	0.612	0.612	0.300	-4.181	20.0	Averaged	
Styrene	0.979	1.06	1.06	0.300	-8.590	20.0	Averaged	
Bromoform	50.0	50.9	0.259	0.100	-1.854	20.0	Linear	
Isopropylbenzene	1.42	1.52	1.52	0.100	-6.957	20.0	Averaged	
1,1,2,2-Tetrachloroethane	50.0	47.2	0.770	0.300	5.53	20.0	Linear	
69 4-Bromofluorobenzene	50.0	49.3	0.430	0.100	1.32	20.0	Linear	
1,2,3-Trichloropropane	0.949	0.791	0.791	0.100	16.7	20.0	Averaged	
trans-1,4-Dichloro-2-butene	0.090	0.088	0.088	0.050	1.82	20.0	Averaged	
n-Propylbenzene	2.94	2.99	2.99	0.100	-1.777	20.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010611

RunID U011902.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U011902.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date 19-JAN-2024 0907
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	0.794	0.794	0.100	5.38	20.0	Averaged	
1,3,5-Trimethylbenzene	2.09	2.15	2.15	0.100	-2.797	20.0	Averaged	
2-Chlorotoluene	1.98	1.81	1.81	0.100	8.35	20.0	Averaged	
4-Chlorotoluene	2.24	2.11	2.11	0.100	5.67	20.0	Averaged	
tert-Butylbenzene	1.87	1.90	1.90	0.100	-1.363	20.0	Averaged	
1,2,4-Trimethylbenzene	2.09	2.15	2.15	0.100	-2.710	20.0	Averaged	
sec-Butylbenzene	2.42	2.49	2.49	0.100	-3.059	20.0	Averaged	
p-Isopropyltoluene	2.09	2.29	2.29	0.100	-9.258	20.0	Averaged	
1,3-Dichlorobenzene	1.49	1.43	1.43	0.600	3.68	20.0	Averaged	
1,4-Dichlorobenzene	1.58	1.51	1.51	0.400	4.20	20.0	Averaged	
Benzyl Chloride	50.0	53.2	0.477	0.010	-6.445	20.0	Quadratic	
n-Butylbenzene	1.76	1.83	1.83	0.500	-4.122	20.0	Averaged	
1,2-Dichlorobenzene	1.50	1.42	1.42	0.400	4.94	20.0	Averaged	
1,2-Dibromo-3-Chloropropane	50.0	45.1	0.131	0.050	9.73	20.0	Linear	
1,2,4-Trichlorobenzene	0.923	0.927	0.927	0.200	-0.412	20.0	Averaged	
Hexachlorobutadiene	0.370	0.415	0.415	0.100	-12.011	20.0	Averaged	
Naphthalene	2.23	2.21	2.21	0.200	0.671	20.0	Averaged	
1,2,3-Trichlorobenzene	0.931	0.886	0.886	0.100	4.90	20.0	Averaged	
Methyl Acetate	0.498	0.405	0.405	0.100	18.5	20.0	Averaged	
Freon TF	50.0	58.0	0.429	0.100	-16.009	20.0	Quadratic	
Cyclohexane	0.720	0.598	0.598	0.100	16.9	20.0	Averaged	
Tetrahydrofuran	0.106	0.088	0.088	0.001	17.1	20.0	Averaged	
Methylcyclohexane	0.741	0.757	0.757	0.100	-2.160	20.0	Averaged	
1,4-Dioxane	0.008	0.006	0.006	0.001	19.0	20.0	Averaged	
n-Butanol	0.016	0.013	0.013	0.005	18.2	20.0	Averaged	
n-Hexane	0.465	0.447	0.447	0.100	3.74	20.0	Averaged	
Diethyl ether	0.408	0.378	0.378	0.100	7.35	20.0	Averaged	
Tert-butyl alcohol	0.056	0.051	0.051	0.005	9.18	20.0	Averaged	
Isopropyl alcohol	1000	976	0.031	0.005	2.37	20.0	Linear	
Amyl alcohol	0.011	0.009	0.009	0.005	14.4	20.0	Averaged	
Diisopropyl ether	1.74	1.44	1.44	0.100	17.1	20.0	Averaged	
Butyl acrylate	50.0	40.0	0.573	0.100	19.9	20.0	Linear	
n-Amyl acetate	0.634	0.491	0.491	0.100	22.6	20.0	Averaged	*
Dicyclopentadiene	2.67	2.45	2.45	0.100	8.07	20.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010611

RunID U011902.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U011902.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date 19-JAN-2024 0907
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	2.16	20.0	Averaged	
Ethanol	1000	912	0.006	0.001	8.80	20.0	Linear	
tert-Butyl formate	100	88.3	0.336	0.100	11.7	20.0	Linear	
3,3-Dimethyl-1-butanol	0.041	0.036	0.036	0.005	12.8	20.0	Averaged	
tert-Amyl methyl ether	1.55	1.35	1.35	0.005	12.9	20.0	Averaged	
tert-Butyl ethyl ether	1.55	1.36	1.36	0.100	12.3	20.0	Averaged	
tert-Amyl alcohol	1000	884	0.034	0.005	11.6	20.0	Linear	
4-Methyl-2-pentanol	1000	821	0.066	0.005	17.9	20.0	Linear	
1,3-Butadiene	0.502	0.353	0.353	0.100	29.7	20.0	Averaged	*
Dichlorofluoromethane	0.762	0.829	0.829	0.100	-8.785	20.0	Averaged	
Epichlorohydrin	0.019	0.018	0.018	0.001	5.94	20.0	Averaged	
94 1,2-Dichloroethylene (total	0.539	0.514	0.514	0.200	4.72	20.0	Averaged	
95 Xylenes (total)	0.579	0.614	0.614	0.100	-6.111	20.0	Averaged	
alpha-Methylstyrene	50.0	49.4	1.00	0.100	1.24	20.0	Linear	
Ethyl Acetate	0.607	0.469	0.469	0.100	22.8	20.0	Averaged	*
Methyl Acrylate	0.657	0.562	0.562	0.100	14.4	20.0	Averaged	
n-Butyl acetate	0.557	0.482	0.482	0.100	13.5	20.0	Averaged	
Cyclohexanone	0.033	0.034	0.034	0.005	-3.024	20.0	Averaged	
Isoprene	0.116	0.117	0.117	0.010	-0.672	20.0	Averaged	
Isopropyl acetate	0.922	0.796	0.796	0.100	13.7	20.0	Averaged	
Allyl alcohol	0.023	0.022	0.022	0.004	3.74	20.0	Averaged	
Acetaldehyde	200	192	0.062	0.001	3.82	20.0	Linear	
Methyl Amyl Ketone	50.0	36.5	0.566	0.100	26.9	20.0	Linear	*
Dimethyl Disulfide	50.0	45.3	0.395	0.020	9.47	20.0	Quadratic	
Isobutylene	0.049	0.043	0.043	0.010	11.7	20.0	Averaged	
2-Ethylhexyl Acrylate	50.0	40.6	0.593	0.100	18.8	20.0	Linear	
Ethyl Acrylate	1.20	1.14	1.14	0.100	5.26	20.0	Averaged	
Butyl methacrylate	50.0	37.3	0.502	0.100	25.5	20.0	Linear	*

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010611

RunID U011925.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U011925.D
Analysis Type WATER
Lab Sample ID CCV-END

Injection Date 19-JAN-2024 1803
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	21.2	0.167	0.100	57.5	50.0	Linear	*
Chloromethane	0.574	0.365	0.365	0.100	36.3	50.0	Averaged	
Propionitrile	0.083	0.068	0.068	0.010	18.5	50.0	Averaged	
Vinyl Chloride	0.548	0.426	0.426	0.100	22.2	50.0	Averaged	
Bromomethane	50.0	46.2	0.258	0.100	7.70	50.0	Quadratic	
Chloroethane	0.369	0.320	0.320	0.100	13.3	50.0	Averaged	
Trichlorofluoromethane	0.695	0.689	0.689	0.100	0.748	50.0	Averaged	
Acrolein	0.028	0.022	0.022	0.010	23.3	50.0	Averaged	
Acetone	100	82.4	0.142	0.100	17.6	50.0	Linear	
1,1-Dichloroethene	0.386	0.403	0.403	0.100	-4.438	50.0	Averaged	
Isobutyl Alcohol	0.075	0.059	0.059	0.005	21.9	50.0	Averaged	
Acetonitrile	0.054	0.052	0.052	0.005	4.26	50.0	Averaged	
Allyl Chloride	1.23	1.18	1.18	0.100	4.22	50.0	Averaged	
Iodomethane	100	102	0.502	0.100	-2.307	50.0	Quadratic	
Acrylonitrile	0.196	0.184	0.184	0.050	6.35	50.0	Averaged	
Methylene Chloride	50.0	52.9	0.515	0.100	-5.794	50.0	Linear	
Methyl tert-butyl ether	1.38	1.36	1.36	0.100	1.78	50.0	Averaged	
Carbon Disulfide	1.14	1.16	1.16	0.100	-1.812	50.0	Averaged	
trans-1,2-Dichloroethene	0.461	0.492	0.492	0.100	-6.737	50.0	Averaged	
Vinyl Acetate	1.39	1.21	1.21	0.010	13.3	50.0	Averaged	
1,1-Dichloroethane	0.940	0.838	0.838	0.200	10.9	50.0	Averaged	
Chloroprene	0.171	++++	5.541e+59	0.100	++++	50.0	Averaged	*
2-Butanone	0.245	0.179	0.179	0.100	27.1	50.0	Averaged	
Methacrylonitrile	0.357	0.448	0.448	0.100	-25.479	50.0	Averaged	
2,2-Dichloropropane	0.661	0.544	0.544	0.100	17.7	50.0	Averaged	
cis-1,2-Dichloroethene	0.618	0.588	0.588	0.100	4.78	50.0	Averaged	
Chloroform	1.02	0.935	0.935	0.200	8.65	50.0	Averaged	
Bromochloromethane	0.320	0.316	0.316	0.100	1.19	50.0	Averaged	
30 Dibromofluoromethane	50.0	52.1	0.533	0.100	-4.296	50.0	Linear	
1,1,1-Trichloroethane	0.778	0.733	0.733	0.100	5.81	50.0	Averaged	
1,1-Dichloropropene	0.418	0.411	0.411	0.100	1.65	50.0	Averaged	
1,2-Dichloroethane	0.487	0.421	0.421	0.100	13.5	50.0	Averaged	
Carbon Tetrachloride	0.409	0.420	0.420	0.100	-2.721	50.0	Averaged	
35 1,2-Dichloroethane-d4	50.0	44.6	0.520	0.100	10.8	50.0	Quadratic	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010611

RunID U011925.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U011925.D
Analysis Type WATER
Lab Sample ID CCV-END

Injection Date 19-JAN-2024 1803
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	1.26	1.26	0.500	7.55	50.0	Averaged	
Trichloroethene	0.375	0.440	0.440	0.200	-17.159	50.0	Averaged	
Bromodichloromethane	0.446	0.443	0.443	0.200	0.686	50.0	Averaged	
Methyl Methacrylate	0.494	0.384	0.384	0.100	22.2	50.0	Averaged	
2-Chloroethylvinyl ether	100	130	0.006	0.001	-29.519	50.0	Quadratic	
1,2-Dichloropropane	0.366	0.333	0.333	0.100	9.23	50.0	Averaged	
2-Nitropropane	0.128	0.098	0.098	0.000	23.6	50.0	Averaged	
Dibromomethane	0.237	0.220	0.220	0.100	7.27	50.0	Averaged	
4-Methyl-2-Pentanone	100	83.9	0.303	0.100	16.1	50.0	Linear	
cis-1,3-Dichloropropene	50.0	45.0	0.515	0.200	10.1	50.0	Linear	
48 Toluene-d8	1.15	1.20	1.20	0.100	-4.442	50.0	Averaged	
Ethyl Methacrylate	0.491	0.460	0.460	0.100	6.36	50.0	Averaged	
Toluene	1.39	1.41	1.41	0.400	-0.855	50.0	Averaged	
trans-1,3-Dichloropropene	50.0	44.7	0.431	0.100	10.6	50.0	Linear	
2-Hexanone	0.252	0.197	0.197	0.100	22.0	50.0	Averaged	
1,1,2-Trichloroethane	50.0	51.2	0.273	0.100	-2.458	50.0	Linear	
1,3-Dichloropropane	0.619	0.558	0.558	0.100	9.78	50.0	Averaged	
Dibromochloromethane	0.372	0.394	0.394	0.100	-6.052	50.0	Averaged	
Tetrachloroethene	0.298	0.330	0.330	0.200	-10.599	50.0	Averaged	
1,2-Dibromoethane	0.347	0.343	0.343	0.100	1.22	50.0	Averaged	
1-Chlorohexane	0.280	0.259	0.259	0.100	7.63	50.0	Averaged	
Chlorobenzene	1.02	1.000	1.000	0.500	1.55	50.0	Averaged	
1,1,1,2-Tetrachloroethane	0.355	0.373	0.373	0.100	-4.915	50.0	Averaged	
Ethylbenzene	0.475	0.470	0.470	0.100	1.13	50.0	Averaged	
m,p-Xylenes	0.572	0.605	0.605	0.100	-5.862	50.0	Averaged	
o-Xylene	0.588	0.614	0.614	0.300	-4.462	50.0	Averaged	
Styrene	0.979	1.06	1.06	0.300	-8.076	50.0	Averaged	
Bromoform	50.0	50.7	0.258	0.100	-1.393	50.0	Linear	
Isopropylbenzene	1.42	1.51	1.51	0.100	-6.490	50.0	Averaged	
1,1,2,2-Tetrachloroethane	50.0	47.2	0.770	0.300	5.59	50.0	Linear	
69 4-Bromofluorobenzene	50.0	48.7	0.425	0.100	2.52	50.0	Linear	
1,2,3-Trichloropropane	0.949	0.780	0.780	0.100	17.8	50.0	Averaged	
trans-1,4-Dichloro-2-butene	0.090	0.077	0.077	0.050	14.6	50.0	Averaged	
n-Propylbenzene	2.94	2.95	2.95	0.100	-0.444	50.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010611

RunID U011925.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U011925.D
Analysis Type WATER
Lab Sample ID CCV-END

Injection Date 19-JAN-2024 1803
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	0.826	0.826	0.100	1.60	50.0	Averaged	
1,3,5-Trimethylbenzene	2.09	2.15	2.15	0.100	-2.940	50.0	Averaged	
2-Chlorotoluene	1.98	1.85	1.85	0.100	6.17	50.0	Averaged	
4-Chlorotoluene	2.24	2.13	2.13	0.100	4.87	50.0	Averaged	
tert-Butylbenzene	1.87	1.90	1.90	0.100	-1.119	50.0	Averaged	
1,2,4-Trimethylbenzene	2.09	2.13	2.13	0.100	-1.762	50.0	Averaged	
sec-Butylbenzene	2.42	2.42	2.42	0.100	-0.080	50.0	Averaged	
p-Isopropyltoluene	2.09	2.20	2.20	0.100	-5.228	50.0	Averaged	
1,3-Dichlorobenzene	1.49	1.42	1.42	0.600	4.89	50.0	Averaged	
1,4-Dichlorobenzene	1.58	1.49	1.49	0.400	5.17	50.0	Averaged	
Benzyl Chloride	50.0	37.2	0.322	0.010	25.5	50.0	Quadratic	
n-Butylbenzene	1.76	1.67	1.67	0.500	4.94	50.0	Averaged	
1,2-Dichlorobenzene	1.50	1.42	1.42	0.400	4.81	50.0	Averaged	
1,2-Dibromo-3-Chloropropane	50.0	45.1	0.131	0.050	9.78	50.0	Linear	
1,2,4-Trichlorobenzene	0.923	0.854	0.854	0.200	7.52	50.0	Averaged	
Hexachlorobutadiene	0.370	0.343	0.343	0.100	7.44	50.0	Averaged	
Naphthalene	2.23	2.14	2.14	0.200	3.86	50.0	Averaged	
1,2,3-Trichlorobenzene	0.931	0.850	0.850	0.100	8.75	50.0	Averaged	
Methyl Acetate	0.498	0.415	0.415	0.100	16.6	50.0	Averaged	
Freon TF	50.0	58.2	0.431	0.100	-16.443	50.0	Quadratic	
Cyclohexane	0.720	0.605	0.605	0.100	16.0	50.0	Averaged	
Tetrahydrofuran	0.106	0.081	0.081	0.001	23.4	50.0	Averaged	
Methylcyclohexane	0.741	0.726	0.726	0.100	2.01	50.0	Averaged	
1,4-Dioxane	0.008	0.006	0.006	0.001	19.1	50.0	Averaged	
n-Butanol	0.016	0.012	0.012	0.005	23.1	50.0	Averaged	
n-Hexane	0.465	0.393	0.393	0.100	15.4	50.0	Averaged	
Diethyl ether	0.408	0.374	0.374	0.100	8.27	50.0	Averaged	
Tert-butyl alcohol	0.056	0.051	0.051	0.005	9.16	50.0	Averaged	
Isopropyl alcohol	1000	957	0.030	0.005	4.34	50.0	Linear	
Amyl alcohol	0.011	0.009	0.009	0.005	19.6	50.0	Averaged	
Diisopropyl ether	1.74	1.48	1.48	0.100	14.9	50.0	Averaged	
Butyl acrylate	50.0	36.0	0.510	0.100	28.1	50.0	Linear	
n-Amyl acetate	0.634	0.480	0.480	0.100	24.3	50.0	Averaged	
Dicyclopentadiene	2.67	2.42	2.42	0.100	9.17	50.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010611

RunID U011925.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U011925.D
Analysis Type WATER
Lab Sample ID CCV-END

Injection Date 19-JAN-2024 1803
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	1.99	1.99	0.100	3.43	50.0	Averaged	
Ethanol	1000	901	0.006	0.001	9.85	50.0	Linear	
tert-Butyl formate	100	82.7	0.314	0.100	17.3	50.0	Linear	
3,3-Dimethyl-1-butanol	0.041	0.032	0.032	0.005	22.4	50.0	Averaged	
tert-Amyl methyl ether	1.55	1.36	1.36	0.005	12.4	50.0	Averaged	
tert-Butyl ethyl ether	1.55	1.33	1.33	0.100	14.4	50.0	Averaged	
tert-Amyl alcohol	1000	828	0.031	0.005	17.2	50.0	Linear	
4-Methyl-2-pentanol	1000	750	0.060	0.005	25.0	50.0	Linear	
1,3-Butadiene	0.502	0.356	0.356	0.100	29.1	50.0	Averaged	
Dichlorofluoromethane	0.762	0.834	0.834	0.100	-9.398	50.0	Averaged	
Epichlorohydrin	0.019	0.016	0.016	0.001	18.9	50.0	Averaged	
94 1,2-Dichloroethylene (total	0.539	0.540	0.540	0.200	-0.143	50.0	Averaged	
95 Xylenes (total)	0.579	0.614	0.614	0.100	-6.096	50.0	Averaged	
alpha-Methylstyrene	50.0	48.5	0.983	0.100	2.91	50.0	Linear	
Ethyl Acetate	0.607	0.464	0.464	0.100	23.5	50.0	Averaged	
Methyl Acrylate	0.657	0.546	0.546	0.100	16.9	50.0	Averaged	
n-Butyl acetate	0.557	0.472	0.472	0.100	15.3	50.0	Averaged	
Cyclohexanone	0.033	0.020	0.020	0.005	40.2	50.0	Averaged	
Isoprene	0.116	0.100	0.100	0.010	14.3	50.0	Averaged	
Isopropyl acetate	0.922	0.777	0.777	0.100	15.8	50.0	Averaged	
Allyl alcohol	0.023	0.020	0.020	0.004	15.4	50.0	Averaged	
Acetaldehyde	++++	++++	5.541e+59	0.001	++++	50.0	Linear	*
Methyl Amyl Ketone	50.0	33.3	0.514	0.100	33.3	50.0	Linear	
Dimethyl Disulfide	50.0	44.2	0.385	0.020	11.6	50.0	Quadratic	
Isobutylene	0.049	++++	5.541e+59	0.010	++++	50.0	Averaged	*
2-Ethylhexyl Acrylate	50.0	33.5	0.482	0.100	33.0	50.0	Linear	
Ethyl Acrylate	1.20	1.10	1.10	0.100	8.86	50.0	Averaged	
Butyl methacrylate	50.0	36.0	0.484	0.100	28.1	50.0	Linear	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010611

RunID U012203.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U012203.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date 22-JAN-2024 1212
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	20.2	0.159	0.100	59.5	20.0	Linear	*
Chloromethane	0.574	0.355	0.355	0.100	38.1	20.0	Averaged	*
Vinyl Chloride	0.548	0.419	0.419	0.100	23.5	20.0	Averaged	*
Bromomethane	50.0	51.0	0.287	0.100	-2.092	20.0	Quadratic	
Chloroethane	0.369	0.334	0.334	0.100	9.34	20.0	Averaged	
Trichlorofluoromethane	0.695	0.689	0.689	0.100	0.782	20.0	Averaged	
Acrolein	0.028	0.025	0.025	0.010	12.7	20.0	Averaged	
Acetone	100	100	0.170	0.100	0.100	20.0	Linear	
1,1-Dichloroethene	0.386	0.406	0.406	0.100	-5.383	20.0	Averaged	
Iodomethane	100	111	0.550	0.100	-11.276	20.0	Quadratic	
Acrylonitrile	0.196	0.210	0.210	0.050	-6.932	20.0	Averaged	
Methylene Chloride	50.0	55.9	0.543	0.100	-11.714	20.0	Linear	
Methyl tert-butyl ether	1.38	1.51	1.51	0.100	-9.097	20.0	Averaged	
Carbon Disulfide	1.14	1.19	1.19	0.100	-4.393	20.0	Averaged	
trans-1,2-Dichloroethene	0.461	0.507	0.507	0.100	-9.996	20.0	Averaged	
Vinyl Acetate	1.39	1.38	1.38	0.010	0.715	20.0	Averaged	
1,1-Dichloroethane	0.940	0.898	0.898	0.200	4.45	20.0	Averaged	
2-Butanone	0.245	0.209	0.209	0.100	14.8	20.0	Averaged	
2,2-Dichloropropane	0.661	0.692	0.692	0.100	-4.620	20.0	Averaged	
cis-1,2-Dichloroethene	0.618	0.607	0.607	0.100	1.76	20.0	Averaged	
Chloroform	1.02	0.997	0.997	0.200	2.61	20.0	Averaged	
Bromochloromethane	0.320	0.343	0.343	0.100	-7.352	20.0	Averaged	
30 Dibromofluoromethane	50.0	54.1	0.553	0.100	-8.209	20.0	Linear	
1,1,1-Trichloroethane	0.778	0.772	0.772	0.100	0.790	20.0	Averaged	
1,1-Dichloropropene	0.418	0.426	0.426	0.100	-1.787	20.0	Averaged	
1,2-Dichloroethane	0.487	0.463	0.463	0.100	5.05	20.0	Averaged	
Carbon Tetrachloride	0.409	0.436	0.436	0.100	-6.749	20.0	Averaged	
35 1,2-Dichloroethane-d4	50.0	48.2	0.564	0.100	3.70	20.0	Quadratic	
Benzene	1.36	1.32	1.32	0.500	3.24	20.0	Averaged	
Trichloroethene	0.375	0.403	0.403	0.200	-7.530	20.0	Averaged	
Bromodichloromethane	0.446	0.490	0.490	0.200	-10.042	20.0	Averaged	
2-Chloroethylvinyl ether	100	147	0.007	0.001	-47.417	20.0	Quadratic	*
1,2-Dichloropropane	0.366	0.358	0.358	0.100	2.44	20.0	Averaged	
Dibromomethane	0.237	0.239	0.239	0.100	-0.946	20.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010611

RunID U012203.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U012203.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date 22-JAN-2024 1212
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	99.0	0.357	0.100	0.921	20.0	Linear	
cis-1,3-Dichloropropene	50.0	52.3	0.602	0.200	-4.614	20.0	Linear	
48 Toluene-d8	1.15	1.23	1.23	0.100	-7.021	20.0	Averaged	
Toluene	1.39	1.49	1.49	0.400	-6.780	20.0	Averaged	
trans-1,3-Dichloropropene	50.0	52.0	0.503	0.100	-3.974	20.0	Linear	
2-Hexanone	0.252	0.245	0.245	0.100	2.98	20.0	Averaged	
1,1,2-Trichloroethane	50.0	57.3	0.305	0.100	-14.611	20.0	Linear	
1,3-Dichloropropane	0.619	0.630	0.630	0.100	-1.776	20.0	Averaged	
Dibromochloromethane	0.372	0.444	0.444	0.100	-19.280	20.0	Averaged	
Tetrachloroethene	0.298	0.351	0.351	0.200	-17.700	20.0	Averaged	
1,2-Dibromoethane	0.347	0.379	0.379	0.100	-8.960	20.0	Averaged	
1-Chlorohexane	0.280	0.290	0.290	0.100	-3.283	20.0	Averaged	
Chlorobenzene	1.02	1.07	1.07	0.500	-5.814	20.0	Averaged	
1,1,1,2-Tetrachloroethane	0.355	0.414	0.414	0.100	-16.397	20.0	Averaged	
Ethylbenzene	0.475	0.519	0.519	0.100	-9.254	20.0	Averaged	
m,p-Xylenes	0.572	0.655	0.655	0.100	-14.640	20.0	Averaged	
o-Xylene	0.588	0.675	0.675	0.300	-14.789	20.0	Averaged	
Styrene	0.979	1.16	1.16	0.300	-18.713	20.0	Averaged	
Bromoform	50.0	58.4	0.298	0.100	-16.866	20.0	Linear	
Isopropylbenzene	1.42	1.66	1.66	0.100	-16.513	20.0	Averaged	
1,1,2,2-Tetrachloroethane	50.0	54.3	0.884	0.300	-8.621	20.0	Linear	
69 4-Bromofluorobenzene	50.0	51.6	0.449	0.100	-3.211	20.0	Linear	
1,2,3-Trichloropropane	0.949	0.902	0.902	0.100	4.98	20.0	Averaged	
n-Propylbenzene	2.94	3.27	3.27	0.100	-11.416	20.0	Averaged	
Bromobenzene	0.840	0.889	0.889	0.100	-5.893	20.0	Averaged	
1,3,5-Trimethylbenzene	2.09	2.38	2.38	0.100	-14.160	20.0	Averaged	
2-Chlorotoluene	1.98	2.02	2.02	0.100	-2.226	20.0	Averaged	
4-Chlorotoluene	2.24	2.32	2.32	0.100	-3.519	20.0	Averaged	
tert-Butylbenzene	1.87	2.08	2.08	0.100	-11.180	20.0	Averaged	
1,2,4-Trimethylbenzene	2.09	2.41	2.41	0.100	-15.262	20.0	Averaged	
sec-Butylbenzene	2.42	2.73	2.73	0.100	-12.879	20.0	Averaged	
p-Isopropyltoluene	2.09	2.51	2.51	0.100	-20.204	20.0	Averaged	*
1,3-Dichlorobenzene	1.49	1.57	1.57	0.600	-5.696	20.0	Averaged	
1,4-Dichlorobenzene	1.58	1.65	1.65	0.400	-4.866	20.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010611

RunID U012203.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U012203.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date 22-JAN-2024 1212
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	2.02	2.02	0.500	-14.964	20.0	Averaged	
1,2-Dichlorobenzene	1.50	1.59	1.59	0.400	-6.120	20.0	Averaged	
1,2-Dibromo-3-Chloropropane	50.0	53.7	0.158	0.050	-7.480	20.0	Linear	
1,2,4-Trichlorobenzene	0.923	1.05	1.05	0.200	-13.592	20.0	Averaged	
Hexachlorobutadiene	0.370	0.446	0.446	0.100	-20.587	20.0	Averaged	*
Naphthalene	2.23	2.56	2.56	0.200	-14.726	20.0	Averaged	
1,2,3-Trichlorobenzene	0.931	1.01	1.01	0.100	-8.571	20.0	Averaged	
94 1,2-Dichloroethylene (total	0.539	0.557	0.557	0.200	-3.264	20.0	Averaged	
95 Xylenes (total)	0.579	0.662	0.662	0.100	-14.431	20.0	Averaged	
1,4-Dioxane	0.008	0.007	0.007	0.001	5.94	20.0	Averaged	
Cyclohexane	0.720	0.649	0.649	0.100	9.93	20.0	Averaged	
Freon TF	50.0	62.1	0.461	0.100	-24.227	20.0	Quadratic	*
1,3-Butadiene	0.502	0.352	0.352	0.100	29.9	20.0	Averaged	*
Methylcyclohexane	0.741	0.769	0.769	0.100	-3.741	20.0	Averaged	
Methyl Acetate	0.498	0.481	0.481	0.100	3.34	20.0	Averaged	
Tert-butyl alcohol	0.056	0.063	0.063	0.005	-13.251	20.0	Averaged	
Isopropyl alcohol	1000	1197	0.038	0.005	-19.742	20.0	Linear	
trans-1,4-Dichloro-2-butene	0.090	0.101	0.101	0.050	-11.861	20.0	Averaged	
Isobutyl Alcohol	0.075	0.069	0.069	0.005	7.71	20.0	Averaged	
Acetonitrile	0.054	0.056	0.056	0.005	-3.149	20.0	Averaged	
Allyl Chloride	1.23	1.30	1.30	0.100	-5.557	20.0	Averaged	
Methacrylonitrile	0.357	0.524	0.524	0.100	-46.804	20.0	Averaged	*
Methyl Methacrylate	0.494	0.437	0.437	0.100	11.4	20.0	Averaged	
2-Nitropropane	0.128	0.122	0.122	0.000	5.32	20.0	Averaged	
Propionitrile	0.083	0.076	0.076	0.010	8.47	20.0	Averaged	
n-Hexane	0.465	0.486	0.486	0.100	-4.581	20.0	Averaged	
Acetaldehyde	++++	++++	3.590e+65	0.001	++++	20.0	Linear	*
Methyl Acrylate	0.657	0.618	0.618	0.100	5.89	20.0	Averaged	
Dimethyl Disulfide	50.0	51.3	0.455	0.020	-2.636	20.0	Quadratic	
Chloroprene	0.171	0.162	0.162	0.100	5.31	20.0	Averaged	
Ethyl Methacrylate	0.491	0.509	0.509	0.100	-3.699	20.0	Averaged	
1,2,3-Trimethylbenzene	2.06	2.08	2.08	0.100	-0.852	20.0	Averaged	
Ethanol	1000	1062	0.007	0.001	-6.206	20.0	Linear	
Dicyclopentadiene	2.67	2.47	2.47	0.100	7.40	20.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010611

RunID U012203.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U012203.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date 22-JAN-2024 1212
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	50.0	54.2	1.10	0.100	-8.494	20.0	Linear	
Tetrahydrofuran	0.106	0.096	0.096	0.001	10.00	20.0	Averaged	
Diisopropyl ether	1.74	1.61	1.61	0.100	7.83	20.0	Averaged	
4-Methyl-2-pentanol	1000	896	0.072	0.005	10.4	20.0	Linear	
Allyl alcohol	0.023	0.024	0.024	0.004	-4.581	20.0	Averaged	
Benzyl Chloride	50.0	61.8	0.562	0.010	-23.540	20.0	Quadratic	*
Butyl acrylate	50.0	41.6	0.597	0.100	16.9	20.0	Linear	
Diethyl ether	0.408	0.417	0.417	0.100	-2.196	20.0	Averaged	
2-Ethylhexyl Acrylate	50.0	42.0	0.614	0.100	16.0	20.0	Linear	
Cyclohexanone	0.033	0.033	0.033	0.005	1.52	20.0	Averaged	
Ethyl Acetate	0.607	0.535	0.535	0.100	11.8	20.0	Averaged	
n-Butyl acetate	0.557	0.574	0.574	0.100	-3.101	20.0	Averaged	
Epichlorohydrin	0.019	0.021	0.021	0.001	-9.669	20.0	Averaged	
n-Butanol	0.016	0.016	0.016	0.005	0.867	20.0	Averaged	
Ethyl Acrylate	1.20	1.18	1.18	0.100	1.78	20.0	Averaged	
Butyl methacrylate	50.0	41.2	0.560	0.100	17.6	20.0	Linear	
tert-Amyl methyl ether	1.55	1.51	1.51	0.005	2.39	20.0	Averaged	
tert-Butyl ethyl ether	1.55	1.52	1.52	0.100	2.19	20.0	Averaged	
n-Amyl acetate	0.634	0.586	0.586	0.100	7.58	20.0	Averaged	
Isopropyl acetate	0.922	0.901	0.901	0.100	2.27	20.0	Averaged	
Hexachloroethane	++++	++++	3.590e+65	0.001	++++	20.0	Averaged	*

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010611

RunID U012212.D

Volatiles by EPA Volatiles Organics by Method 8260C

Instrument ID VOA9.i
Lab File ID U012212.D
Analysis Type WATER
Lab Sample ID CCV-END

Injection Date 22-JAN-2024 1533
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	52.5	0.536	0.100	-4.909	50.0	Linear	
35 1,2-Dichloroethane-d4	50.0	45.7	0.534	0.100	8.58	50.0	Quadratic	
48 Toluene-d8	1.15	1.20	1.20	0.100	-4.002	50.0	Averaged	
69 4-Bromofluorobenzene	50.0	48.6	0.424	0.100	2.79	50.0	Linear	
Vinyl Chloride	0.548	0.601	0.601	0.100	-9.760	50.0	Averaged	
1,1-Dichloroethene	0.386	0.478	0.478	0.100	-23.930	50.0	Averaged	
trans-1,2-Dichloroethene	0.461	0.566	0.566	0.100	-22.705	50.0	Averaged	
cis-1,2-Dichloroethene	0.618	0.644	0.644	0.100	-4.209	50.0	Averaged	
Trichloroethene	0.375	0.418	0.418	0.200	-11.361	50.0	Averaged	
Tetrachloroethene	0.298	0.355	0.355	0.200	-18.860	50.0	Averaged	

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Form 8

Internal Standard Area and RT Summary

Volatiles by EPA Volatiles Organics by Method 8260C

Workorder

HS24010611

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/29/2024

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

Form 8 - Internal Standard Area and RT Summary

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24010611

EPA SW8260

VOA9_456454		Pentafluorobenzene				1,4 Difluorobenzene				Chlorobenzene d5				1,4-Dichlorobenzene d4			
Sample ID	File ID	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
12-HOUR STD (CCV)	U011203.D	306195	#	4.82	#	481399	#	5.55	#	487086	#	8.19	#	271110	#	10.17	#
HS24010611-03	U011220.D	357480		4.82		562317		5.55		560350		8.19		287803		10.17	
HS24010611-04	U011229.D	361751		4.82		564448		5.56		567939		8.19		285025		10.17	
HS24010611-05	U011221.D	372322		4.82		573037		5.55		569927		8.19		290108		10.17	
VBLKW-240112	U011207.D	379364		4.82		587698		5.55		571579		8.19		297476		10.17	
VLCSW-240112	U011205.D	321090		4.82		497003		5.55		504161		8.19		283593		10.17	
MS-ZZZZZZMS	U011211.D	377626		4.82		575693		5.55		571441		8.19		314865		10.17	
ZZZZZZMSD	U011212.D	365053		4.82		556044		5.55		561962		8.19		305514		10.17	

AREA UPPER LIMIT = +100% of STD IS Area
AREA LOWER LIMIT = - 50% of STD IS Area
RT - Retention IS - Internal StandardTime

RT UPPER LIMIT = + 0.50 of STD IS RT
RT LOWER LIMIT = - 0.50 of STD IS RT
CCV - Continuing Calibration Verification

- Area or RT Limit Flag
* - Value Outside Area or RT limits
H - Hour STD - Standard

Form 8 - Internal Standard Area and RT Summary

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24010611

EPA SW8260

VOA9_456549		Pentafluorobenzene				1,4 Difluorobenzene				Chlorobenzene d5				1,4-Dichlorobenzene d4			
Sample ID	File ID	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
12-HOUR STD (CCV)	U011702.D	306651	#	4.82	#	465856	#	5.55	#	473358	#	8.19	#	262624	#	10.17	#
HS24010611-01	U011713.D	288483		4.82		465399		5.55		460000		8.19		237667		10.17	
HS24010611-01MS	U011714.D	292268		4.82		449762		5.55		450536		8.19		251189		10.17	
HS24010611-01MSD	U011715.D	289585		4.82		446969		5.55		449402		8.19		246852		10.17	
HS24010611-04	U011718.D	248255		4.81		397228		5.55		401919		8.19		209111		10.17	
VBLKW-240117	U011705.D	382509		4.82		534494		5.55		486876		8.19		249463		10.17	
VLCSW-240117	U011703.D	322070		4.82		492661		5.55		487887		8.19		273131		10.17	

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 HS24010611

EPA SW8260

VOA9_456781		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)	U011902.D	317534	#	4.82	#	477565	#	5.55	#	479768	#	8.19	#	272353	#	10.17	#
HS24010611-02	U011917.D	681121	#	4.82		970821		5.55	#	912881		8.19	#	478376		10.17	
HS24010611-02	U011914.D	285049		4.82		427575		5.55		422441		8.19		220446		10.17	
HS24010611-02MS	U011915.D	282869		4.82		421628		5.55		414153		8.19		234980		10.17	
HS24010611-02MSD	U011916.D	348364		4.82		532004		5.55		526975		8.19		292878		10.17	
HS24010611-06	U011922.D	284237		4.82		448510		5.55		442188		8.19		221635		10.17	
HS24010611-07	U011923.D	268122		4.82		409935		5.55		407887		8.19		209318		10.17	
HS24010611-08	U011924.D	356244		4.82		542940		5.55		524939		8.19		268329		10.17	
HS24010611-09	U011921.D	268630		4.81		414431		5.55		411072		8.19		205145		10.17	
VBLKW-240119	U011906.D	320054		4.82		481973		5.55		474234		8.19		245605		10.17	
VLCSW-240119	U011903.D	326587		4.82		491247		5.55		490054		8.19		272989		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
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Form 8 - Internal Standard Area and RT Summary

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24010611

EPA SW8260

VOA9_456935		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)	U012203.D	281296	#	4.81	#	431915	#	5.55	#	432097	#	8.19	#	243382	#	10.17	#
HS24010611-08	U012208.D	371022		4.82		557491		5.56		535970		8.19		280484		10.17	
HS24010611-08MS	U012209.D	407338		4.82		602949		5.55		589116		8.19		331056		10.17	
HS24010611-08MSD	U012210.D	392693		4.82		592368		5.55		575290		8.19		322412		10.17	
VBLKW-240122	U012207.D	391587		4.82		592018		5.55		568454		8.19		295747		10.17	
VLCSW-240122	U012205.D	300975		4.82		464117		5.55		449675		8.19		249772		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

HS24010611

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/29/2024

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

MSVOA09 -Logbook

Batch: 57869 **Analyst:** Presenta Cabascango

Date: 12-06-2023 **Reviewer:**

Method: 8260 **Laboratory:** Houston

Comments:

#	Samp ID	Type	Analyzed	DF	Init Wt/Vol	Final Vol	File ID	Matrix	Status	pH
1	BFB	TUNE	12-06-2023 11:14 am	1.00	50 mL	50 mL	U120601.D	Liquid	Y	NA
2	VSTD000.25	ICAL1	12-06-2023 11:36 am	1.00	50 mL	50 mL	U120602.D	Liquid	Y	NA
3	VSTD000.5	ICAL2	12-06-2023 11:58 am	1.00	50 mL	50 mL	U120603.D	Liquid	Y	NA
4	VSTD001	ICAL3	12-06-2023 12:43 pm	1.00	50 mL	50 mL	U120604.D	Liquid	Y	NA
5	VSTD002	ICAL4	12-06-2023 01:05 pm	1.00	50 mL	50 mL	U120605.D	Liquid	Y	NA
6	VSTD005	ICAL5	12-06-2023 01:27 pm	1.00	50 mL	50 mL	U120606.D	Liquid	Y	NA
7	VSTD020	ICAL6	12-06-2023 01:49 pm	1.00	50 mL	50 mL	U120607.D	Liquid	Y	NA
8	VSTD050	ICAL7	12-06-2023 02:11 pm	1.00	50 mL	50 mL	U120608.D	Liquid	Y	NA
9	VSTD100	ICAL8	12-06-2023 02:34 pm	1.00	50 mL	50 mL	U120609.D	Liquid	Y	NA
10	VSTD150	ICAL9	12-06-2023 02:56 pm	1.00	50 mL	50 mL	U120610.D	Liquid	Y	NA
11	VSTD200	ICAL	12-06-2023 03:18 pm	1.00	50 mL	50 mL	U120611.D	Liquid	Y	NA
12	BLANK	SAMP	12-06-2023 03:40 pm	1.00	50 mL	50 mL	U120612.D	Liquid	Y	NA
13	BLANK	SAMP	12-06-2023 04:03 pm	1.00	50 mL	50 mL	U120613.D	Liquid	Y	NA
14	ICV	ICV	12-06-2023 04:25 pm	1.00	50 mL	50 mL	U120614.D	Liquid	Y	NA
15	CCB	SAMP	12-06-2023 04:47 pm	1.00	50 mL	50 mL	U120615.D	Liquid	Y	NA
16	VLCSW-231206	LCS	12-06-2023 05:10 pm	1.00	50 mL	50 mL	U120616.D	Liquid	Y	NA
17	BLANK	SAMP	12-06-2023 05:32 pm	1.00	50 mL	50 mL	U120617.D	Liquid	Y	NA
18	VBLKW-231206	MBLK	12-06-2023 05:54 pm	1.00	50 mL	50 mL	U120618.D	Liquid	Y	NA
19	HS23111879-07	SAMP	12-06-2023 06:17 pm	25.00	2 mL	50 mL	U120619.D	Liquid	Y	<2
20	HS23111879-08	SAMP	12-06-2023 06:39 pm	5.00	10 mL	50 mL	U120620.D	Liquid	Y	<2
21	HS23111879-08	SAMP	12-06-2023 07:02 pm	25.00	2 mL	50 mL	U120621.D	Liquid	Y	<2
22	HS23111879-09	SAMP	12-06-2023 07:24 pm	10.00	5 mL	50 mL	U120622.D	Liquid	Y	<2
23	HS23111879-09	SAMP	12-06-2023 07:46 pm	50.00	1 mL	50 mL	U120623.D	Liquid	Y	<2
24	HS23111879-12	SAMP	12-06-2023 08:09 pm	25.00	2 mL	50 mL	U120624.D	Liquid	Y	<2
25	HS23111879-12	SAMP	12-06-2023 08:31 pm	100.0(	500 µL	50 mL	U120625.D	Liquid	Y	<2
26	HS23120168-01	SAMP	12-06-2023 08:53 pm	100.0(	500 µL	50 mL	U120626.D	Liquid	Y	<2
27	HS23111879-07MS	MS	12-06-2023 09:16 pm	25.00	2 mL	50 mL	U120627.D	Liquid	Y	<2
28	HS23111879-07MSD	MSD	12-06-2023 09:38 pm	25.00	2 mL	50 mL	U120628.D	Liquid	Y	<2
29	CCV-END	CCV	12-06-2023 10:00 pm	1.00	50 mL	50 mL	U120629.D	Liquid	Y	NA
30	HS23120168-01	SAMP	12-06-2023 10:23 pm	2000.0	25 µL	50 mL	U120630.D	Liquid	Y	<2
31	HS23120230-01	SAMP	12-06-2023 10:45 pm	100.0(	500 µL	50 mL	U120631.D	Liquid	Y	<2
32	HS23120233-01	SAMP	12-06-2023 11:08 pm	100.0(	500 µL	50 mL	U120632.D	Liquid	Y	<2
33	BLANK	SAMP	12-06-2023 11:30 pm	1.00	50 mL	50 mL	U120633.D	Liquid	Y	NA
34	BFB	TUNE	12-06-2023 11:52 pm	1.00	50 mL	50 mL	V120601.D	Liquid	Y	NA
35	CCV	CCV	12-07-2023 12:15 am	1.00	50 mL	50 mL	V120602a.D	Liquid	Y	NA
36	CCV	CCV	12-07-2023 12:37 am	1.00	50 mL	50 mL	V120603.D	Liquid	Y	NA
37	CCB	SAMP	12-07-2023 12:59 am	1.00	50 mL	50 mL	V120604.D	Liquid	Y	NA
38	VLCSW-231206	LCS	12-07-2023 01:21 am	1.00	50 mL	50 mL	V120605.D	Liquid	Y	NA
39	BLANK	SAMP	12-07-2023 01:44 am	1.00	50 mL	50 mL	V120606.D	Liquid	Y	NA
40	VBLKW-231206	MBLK	12-07-2023 02:06 am	1.00	50 mL	50 mL	V120607.D	Liquid	Y	NA
41	HS23111910-01	SAMP	12-07-2023 02:29 am	1.00	50 mL	50 mL	V120608.D	Liquid	Y	<2

MSVOA09 -Logbook

#	Samp ID	Type	Analyzed	DF	Init Wt/Vol	Final Vol	File ID	Matrix	Status	pH
42	HS23111910-02	SAMP	12-07-2023 02:51 am	1.00	50 mL	50 mL	V120609.D	Liquid	Y	<2
43	HS23111910-03	SAMP	12-07-2023 03:14 am	1.00	50 mL	50 mL	V120610.D	Liquid	Y	<2
44	HS23111910-04	SAMP	12-07-2023 03:36 am	1.00	50 mL	50 mL	V120611.D	Liquid	Y	<2
45	HS23111910-16	SAMP	12-07-2023 03:58 am	1.00	50 mL	50 mL	V120612.D	Liquid	Y	<2
46	HS23111910-06	SAMP	12-07-2023 04:21 am	1.00	50 mL	50 mL	V120613.D	Liquid	Y	<2
47	HS23111910-16MS	MS	12-07-2023 04:43 am	1.00	50 mL	50 mL	V120614.D	Liquid	Y	<2
48	HS23111910-16MSD	MSD	12-07-2023 05:06 am	1.00	50 mL	50 mL	V120615.D	Liquid	Y	<2
49	BLANK	SAMP	12-07-2023 05:28 am	1.00	50 mL	50 mL	V120616.D	Liquid	Y	NA
50	HS23111910-05	SAMP	12-07-2023 05:50 am	1.00	50 mL	50 mL	V120617.D	Liquid	Y	<2
51	HS23111910-08	SAMP	12-07-2023 06:13 am	1.00	50 mL	50 mL	V120618.D	Liquid	Y	<2
52	HS23111910-09	SAMP	12-07-2023 06:35 am	1.00	50 mL	50 mL	V120619.D	Liquid	Y	<2
53	HS23111910-10	SAMP	12-07-2023 06:58 am	1.00	50 mL	50 mL	V120620.D	Liquid	Y	<2
54	HS23111910-11	SAMP	12-07-2023 07:20 am	1.00	50 mL	50 mL	V120621.D	Liquid	Y	<2
55	HS23111910-12	SAMP	12-07-2023 07:43 am	1.00	50 mL	50 mL	V120622.D	Liquid	Y	<2
56	HS23111910-20	SAMP	12-07-2023 08:05 am	1.00	50 mL	50 mL	V120623.D	Liquid	Y	<2
57	HS23111910-21	SAMP	12-07-2023 08:27 am	1.00	50 mL	50 mL	V120624.D	Liquid	Y	<2
58	HS23111910-13	SAMP	12-07-2023 08:50 am	1.00	50 mL	50 mL	V120625.D	Liquid	Y	<2
59	HS23111910-17	SAMP	12-07-2023 09:12 am	1.00	50 mL	50 mL	V120626.D	Liquid	Y	<2
60	HS23111910-18	SAMP	12-07-2023 09:34 am	1.00	50 mL	50 mL	V120627.D	Liquid	Y	<2
61	HS23111910-19	SAMP	12-07-2023 09:57 am	1.00	50 mL	50 mL	V120628.D	Liquid	Y	<2
62	HS23111910-07	SAMP	12-07-2023 10:19 am	5.00	10 mL	50 mL	V120629.D	Liquid	Y	<2
63	HS23111910-07	SAMP	12-07-2023 10:42 am	25.00	2 mL	50 mL	V120630.D	Liquid	Y	<2
64	CCV-END	CCV	12-07-2023 11:04 am	1.00	50 mL	50 mL	V120631.D	Liquid	Y	NA

Chemical	Value
pH Paper	634-64-10

MSVOA09 -Logbook

Batch: 58467 **Analyst:** Presenta Cabascango

Date: 01-12-2024 **Reviewer:**

Method: 8260 **Laboratory:** Houston

Comments:

#	Samp ID	Type	Analyzed	DF	Init Wt/Vol	Final Vol	File ID	Matrix	Status	pH
1	BFB	TUNE	01-12-2024 10:49 am	1.00	50 mL	50 mL	U011201.D	Liquid	Y	NA
2	CCV	CCV	01-12-2024 11:11 am	1.00	50 mL	50 mL	U011202a.D	Liquid	Y	NA
3	CCV	CCV	01-12-2024 11:34 am	1.00	50 mL	50 mL	U011203.D	Liquid	Y	NA
4	CCB	SAMP	01-12-2024 11:56 am	1.00	50 mL	50 mL	U011204.D	Liquid	Y	NA
5	VLCSW-240112	LCS	01-12-2024 12:18 pm	1.00	50 mL	50 mL	U011205.D	Liquid	Y	NA
6	BLANK	SAMP	01-12-2024 12:40 pm	1.00	50 mL	50 mL	U011206.D	Liquid	Y	NA
7	VBLKW-240112	MBLK	01-12-2024 01:03 pm	1.00	50 mL	50 mL	U011207.D	Liquid	Y	NA
8	HS24010519-10	SAMP	01-12-2024 01:25 pm	1.00	50 mL	50 mL	U011208.D	Liquid	Y	<2
9	HS24010519-09	SAMP	01-12-2024 01:47 pm	1.00	50 mL	50 mL	U011209.D	Liquid	Y	<2
10	HS24010423-01	SAMP	01-12-2024 02:09 pm	1.00	50 mL	50 mL	U011210.D	Liquid	Y	<2
11	HS24010519-09MS	MS	01-12-2024 02:32 pm	1.00	50 mL	50 mL	U011211.D	Liquid	Y	<2
12	HS24010519-09MSD	MSD	01-12-2024 02:54 pm	1.00	50 mL	50 mL	U011212.D	Liquid	Y	<2
13	HS24010423-01	SAMP	01-12-2024 03:16 pm	20.00	2.5 mL	50 mL	U011213.D	Liquid	Y	<2
14	HS24010551-01	SAMP	01-12-2024 03:39 pm	1.00	50 mL	50 mL	U011214.D	Liquid	Y	NA
	neat sample									
15	HS24010538-10	SAMP	01-12-2024 04:01 pm	1.00	50 mL	50 mL	U011215.D	Liquid	Y	<2
16	HS24010538-03	SAMP	01-12-2024 04:23 pm	1.00	50 mL	50 mL	U011216.D	Liquid	Y	<2
17	HS24010538-05	SAMP	01-12-2024 04:46 pm	1.00	50 mL	50 mL	U011217.D	Liquid	Y	<2
18	HS24010538-06	SAMP	01-12-2024 05:08 pm	1.00	50 mL	50 mL	U011218.D	Liquid	Y	<2
19	HS24010538-07	SAMP	01-12-2024 05:30 pm	1.00	50 mL	50 mL	U011219.D	Liquid	Y	<2
20	HS24010611-03	SAMP	01-12-2024 05:52 pm	1.00	50 mL	50 mL	U011220.D	Liquid	Y	<2
21	HS24010611-05	SAMP	01-12-2024 06:15 pm	1.00	50 mL	50 mL	U011221.D	Liquid	Y	<2
22	HS24010538-04	SAMP	01-12-2024 06:37 pm	1.00	50 mL	50 mL	U011222.D	Liquid	Y	<2
23	HS24010538-02	SAMP	01-12-2024 06:59 pm	5.00	10 mL	50 mL	U011223.D	Liquid	Y	<2
24	HS24010538-01	SAMP	01-12-2024 07:21 pm	50.00	1 mL	50 mL	U011224.D	Liquid	Y	<2
25	HS24010538-08n/r	SAMP	01-12-2024 07:43 pm	50.00	1 mL	50 mL	U011225.D	Liquid	Y	<2
26	HS24010538-08n/r	SAMP	01-12-2024 08:06 pm	250.0(	200 µL	50 mL	U011226.D	Liquid	Y	<2
27	HS24010538-09	SAMP	01-12-2024 08:28 pm	50.00	1 mL	50 mL	U011227.D	Liquid	Y	<2
28	HS24010538-09n/r	SAMP	01-12-2024 08:50 pm	250.0(	200 µL	50 mL	U011228.D	Liquid	Y	<2
29	HS24010611-04	SAMP	01-12-2024 09:12 pm	1.00	50 mL	50 mL	U011229.D	Liquid	Y	<2
30	CCV-END	CCV	01-12-2024 09:34 pm	1.00	50 mL	50 mL	U011230.D	Liquid	Y	NA
31	BLANK	SAMP	01-12-2024 09:57 pm	1.00	50 mL	50 mL	U011231.D	Liquid	Y	<2
32	BLANK	SAMP	01-12-2024 10:19 pm	1.00	50 mL	50 mL	U011232.D	Liquid	Y	<2

Chemical	Value
pH Paper	624-64-10

MSVOA09 -Logbook

Batch: 58517 **Analyst:** Presenta Cabascango

Date: 01-17-2024 **Reviewer:**

Method: 8260 **Laboratory:** Houston

Comments:

#	Samp ID	Type	Analyzed	DF	Init Wt/Vol	Final Vol	File ID	Matrix	Status	pH
1	BFB	TUNE	01-17-2024 06:52 am	1.00	50 mL	50 mL	U011701.D	Liquid	Y	NA
2	CCV	CCV	01-17-2024 07:36 am	1.00	50 mL	50 mL	U011702.D	Liquid	Y	NA
3	VLCSW-240117	LCS	01-17-2024 07:58 am	1.00	50 mL	50 mL	U011703.D	Liquid	Y	NA
4	VBLKM-240117	MBLK	01-17-2024 08:20 am	50.00	1 mL	50 mL	U011704.D	Liquid	Y	NA
5	VBLKW-240117	MBLK	01-17-2024 08:42 am	1.00	50 mL	50 mL	U011705.D	Liquid	Y	NA
6	HS24010627-12	SAMP	01-17-2024 09:05 am	1.00	50 mL	50 mL	U011706.D	Liquid	Y	NA
7	HS24010606-01	SAMP	01-17-2024 09:27 am	1.00	50 mL	50 mL	U011707.D	Liquid	Y	<2
8	HS24010606-02	SAMP	01-17-2024 09:49 am	5.00	10 mL	50 mL	U011708.D	Liquid	Y	<2
9	HS24010606-03	SAMP	01-17-2024 10:12 am	1.00	50 mL	50 mL	U011709.D	Liquid	Y	<2
10	HS24010606-04	SAMP	01-17-2024 10:34 am	1.00	50 mL	50 mL	U011710.D	Liquid	Y	<2
11	HS24010606-05	SAMP	01-17-2024 10:56 am	1.00	50 mL	50 mL	U011711.D	Liquid	Y	<2
12	HS24010606-06	SAMP	01-17-2024 11:19 am	1.00	50 mL	50 mL	U011712.D	Liquid	Y	<2
13	HS24010611-01	SAMP	01-17-2024 11:41 am	1.00	50 mL	50 mL	U011713.D	Liquid	Y	<2
14	HS24010611-01MS	MS	01-17-2024 12:03 pm	1.00	50 mL	50 mL	U011714.D	Liquid	Y	<2
15	HS24010611-01MSD	MSD	01-17-2024 12:25 pm	1.00	50 mL	50 mL	U011715.D	Liquid	Y	<2
16	HS24010491-05	SAMP	01-17-2024 12:48 pm	500.0(	100 µL	50 mL	U011716.D	Liquid	Y	<2
17	HS24010538-08	SAMP	01-17-2024 01:10 pm	50.00	1 mL	50 mL	U011717.D	Liquid	Y	<2
18	HS24010611-04	SAMP	01-17-2024 01:32 pm	10.00	5 mL	50 mL	U011718.D	Liquid	Y	<2
19	HS24010625-01	SAMP	01-17-2024 01:54 pm	1.00	50 mL	50 mL	U011719.D	Liquid	Y	<2
20	HS24010595-05	SAMP	01-17-2024 02:17 pm	1.00	50 mL	50 mL	U011720.D	Liquid	Y	<2
21	HS24010595-01	SAMP	01-17-2024 02:39 pm	1.00	50 mL	50 mL	U011721.D	Liquid	Y	<2
22	HS24010595-02	SAMP	01-17-2024 03:02 pm	1.00	50 mL	50 mL	U011722.D	Liquid	Y	<2
23	HS24010595-03	SAMP	01-17-2024 03:24 pm	1.00	50 mL	50 mL	U011723.D	Liquid	Y	<2
24	HS24010595-04	SAMP	01-17-2024 03:46 pm	1.00	50 mL	50 mL	U011724.D	Liquid	Y	<2
25	HS24010766-01	SAMP	01-17-2024 04:09 pm	100.0(	500 µL	50 mL	U011725.D	Liquid	Y	<2
26	HS24010699-01	SAMP	01-17-2024 04:31 pm	1.00	50 mL	50 mL	U011726.D	Liquid	Y	<2
27	HS24010699-02	SAMP	01-17-2024 04:54 pm	1.00	50 mL	50 mL	U011727.D	Liquid	Y	<2
28	CCV-END	CCV	01-17-2024 05:16 pm	1.00	50 mL	50 mL	U011728.D	Liquid	Y	NA
29	BLANK	SAMP	01-17-2024 05:38 pm	1.00	50 mL	50 mL	U011729.D	Liquid	Y	NA
30	BLANK	SAMP	01-17-2024 06:01 pm	1.00	50 mL	50 mL	U011730.D	Liquid	Y	NA
31	BFB	TUNE	01-17-2024 06:23 pm	1.00	50 mL	50 mL	V011701.D	Liquid	Y	NA
32	CCV	CCV	01-17-2024 07:07 pm	1.00	50 mL	50 mL	V011702.D	Liquid	Y	NA
33	VLCSW-240117	LCS	01-17-2024 07:29 pm	1.00	50 mL	50 mL	V011703.D	Liquid	Y	NA
34	VLCSDW-240117	LCSD	01-17-2024 07:52 pm	1.00	50 mL	50 mL	V011704.D	Liquid	Y	NA
35	BLANK	SAMP	01-17-2024 08:14 pm	1.00	50 mL	50 mL	V011705.D	Liquid	Y	NA
36	VBLKW-240117	MBLK	01-17-2024 08:36 pm	1.00	50 mL	50 mL	V011706.D	Liquid	Y	NA
37	HS24010734-19	SAMP	01-17-2024 08:58 pm	1.00	50 mL	50 mL	V011707.D	Liquid	Y	<2
38	HS24010643-02	SAMP	01-17-2024 09:21 pm	1.00	50 mL	50 mL	V011708.D	Liquid	Y	<2
39	HS24010711-02	SAMP	01-17-2024 09:43 pm	1.00	50 mL	50 mL	V011709.D	Liquid	Y	<2
40	HS24010812-08	SAMP	01-17-2024 10:06 pm	1.00	50 mL	50 mL	V011710.D	Liquid	Y	<2
41	HS24010749-14	SAMP	01-17-2024 10:28 pm	1.00	50 mL	50 mL	V011711.D	Liquid	Y	<2

MSVOA09 -Logbook

#	Samp ID	Type	Analyzed	DF	Init Wt/Vol	Final Vol	File ID	Matrix	Status	pH
42	HS24010699-04	SAMP	01-17-2024 10:50 pm	1.00	50 mL	50 mL	V011712.D	Liquid	Y	<2
43	HS24010705-04	SAMP	01-17-2024 11:13 pm	1.00	50 mL	50 mL	V011713.D	Liquid	Y	<2
44	HS24010732-06	SAMP	01-17-2024 11:35 pm	1.00	50 mL	50 mL	V011714.D	Liquid	Y	<2
45	HS24010732-07	SAMP	01-17-2024 11:57 pm	1.00	50 mL	50 mL	V011715.D	Liquid	Y	<2
46	HS24010699-03	SAMP	01-18-2024 12:20 am	1.00	50 mL	50 mL	V011716.D	Liquid	Y	<2
47	HS24010705-01	SAMP	01-18-2024 12:42 am	1.00	50 mL	50 mL	V011717.D	Liquid	Y	<2
48	HS24010705-02	SAMP	01-18-2024 01:05 am	1.00	50 mL	50 mL	V011718.D	Liquid	Y	<2
49	HS24010705-03	SAMP	01-18-2024 01:27 am	1.00	50 mL	50 mL	V011719.D	Liquid	Y	<2
50	HS24010812-01	SAMP	01-18-2024 01:49 am	1.00	50 mL	50 mL	V011720.D	Liquid	Y	<2
51	HS24010812-02	SAMP	01-18-2024 02:12 am	1.00	50 mL	50 mL	V011721.D	Liquid	Y	<2
52	HS24010812-03	SAMP	01-18-2024 02:36 am	10.00	5 mL	50 mL	V011722.D	Liquid	Y	<2
53	HS24010812-04	SAMP	01-18-2024 03:01 am	10.00	5 mL	50 mL	V011723.D	Liquid	Y	<2
54	HS24010812-05	SAMP	01-18-2024 03:26 am	10.00	5 mL	50 mL	V011724.D	Liquid	Y	<2
55	HS24010812-06	SAMP	01-18-2024 03:51 am	10.00	5 mL	50 mL	V011725.D	Liquid	Y	<2
56	HS24010812-07	SAMP	01-18-2024 04:16 am	10.00	5 mL	50 mL	V011726.D	Liquid	Y	<2
57	BLK	SAMP	01-18-2024 04:38 am	1.00	50 mL	50 mL	V011727.D	Liquid	Y	NA
58	BLK	SAMP	01-18-2024 05:01 am	1.00	50 mL	50 mL	V011728.D	Liquid	Y	NA

Chemical	Value
pH Paper	634-64-10

MSVOA09 -Logbook

Batch: 58519 **Analyst:** Presenta Cabascango

Date: 01-19-2024 **Reviewer:**

Method: 8260 **Laboratory:** Houston

Comments:

#	Samp ID	Type	Analyzed	DF	Init Wt/Vol	Final Vol	File ID	Matrix	Status	pH
1	BFB	TUNE	01-19-2024 08:44 am	1.00	50 mL	50 mL	U011901.D	Liquid	Y	NA
2	CCV	CCV	01-19-2024 09:07 am	1.00	50 mL	50 mL	U011902.D	Liquid	Y	NA
3	VLCSW-240119	LCS	01-19-2024 09:51 am	1.00	50 mL	50 mL	U011903.D	Liquid	Y	NA
4	BLK	MBLK	01-19-2024 10:14 am	50.00	1 mL	50 mL	U011904.D	Liquid	Y	NA
5	VBLKM-240119	MBLK	01-19-2024 10:36 am	50.00	1 mL	50 mL	U011905.D	Liquid	Y	NA
6	VBLKW-240119	MBLK	01-19-2024 10:58 am	1.00	50 mL	50 mL	U011906.D	Liquid	Y	NA
7	HS24010960-01	SAMP	01-19-2024 11:21 am	1.00	50 mL	50 mL	U011907.D	Liquid	Y	<2
8	HS24010828-01	SAMP	01-19-2024 11:43 am	1.00	50 mL	50 mL	U011908.D	Liquid	Y	<2
9	HS24010611-02	SAMP	01-19-2024 12:05 pm	1.00	50 mL	50 mL	U011909.D	Liquid	Y	<2
10	HS24010611-02MS	MS	01-19-2024 12:27 pm	1.00	50 mL	50 mL	U011910.D	Liquid	Y	<2
11	HS24010611-06	SAMP	01-19-2024 12:50 pm	1.00	50 mL	50 mL	U011911.D	Liquid	Y	<2
12	HS24010611-06	SAMP	01-19-2024 01:12 pm	1.00	50 mL	50 mL	U011912.D	Liquid	Y	<2
13	HS24010957-03	SAMP	01-19-2024 01:37 pm	1.00	50 mL	50 mL	U011913.D	Liquid	Y	<2
14	HS24010611-02	SAMP	01-19-2024 01:59 pm	200.0(	250 µL	50 mL	U011914.D	Liquid	Y	<2
15	HS24010611-02MS	MS	01-19-2024 02:21 pm	200.0(	250 µL	50 mL	U011915.D	Liquid	Y	<2
16	HS24010611-02MSD	MSD	01-19-2024 02:43 pm	200.0(	250 µL	50 mL	U011916.D	Liquid	Y	<2
17	HS24010611-02	SAMP	01-19-2024 03:05 pm	500.0(	100 µL	50 mL	U011917.D	Liquid	Y	<2
18	HS24011018-01	SAMP	01-19-2024 03:28 pm	1.00	50 mL	50 mL	U011918.D	Liquid	Y	<2
19	HS24010965-01	SAMP	01-19-2024 03:50 pm	1.00	50 mL	50 mL	U011919.D	Liquid	Y	<2
20	HS24010967-01	SAMP	01-19-2024 04:12 pm	1.00	50 mL	50 mL	U011920.D	Liquid	Y	<2
21	HS24010611-09	SAMP	01-19-2024 04:35 pm	1.00	50 mL	50 mL	U011921.D	Liquid	Y	<2
22	HS24010611-06	SAMP	01-19-2024 04:57 pm	1.00	50 mL	50 mL	U011922.D	Liquid	Y	<2
23	HS24010611-07	SAMP	01-19-2024 05:19 pm	1.00	50 mL	50 mL	U011923.D	Liquid	Y	<2
24	HS24010611-08	SAMP	01-19-2024 05:41 pm	1.00	50 mL	50 mL	U011924.D	Liquid	Y	<2
25	CCV-END	CCV	01-19-2024 06:03 pm	1.00	50 mL	50 mL	U011925.D	Liquid	Y	NA
26	BLANK	SAMP	01-19-2024 06:25 pm	1.00	50 mL	50 mL	U011926.D	Liquid	Y	NA
27	MBLK-206183	MBLK	01-19-2024 06:48 pm	20.00	2.5 mL	50 mL	U011927.D	Liquid	Y	<2
28	HS24010954-01	SAMP	01-19-2024 07:10 pm	20.00	2.5 mL	50 mL	U011928.D	Liquid	Y	<2
29	BLANK	SAMP	01-19-2024 07:32 pm	1.00	50 mL	50 mL	U011929.D	Liquid	Y	NA
30	BLANK	SAMP	01-19-2024 07:55 pm	1.00	50 mL	50 mL	U011930.D	Liquid	Y	NA

Chemical	Value
pH Paper	634-64-10

MSVOA09 -Logbook

Batch: 58549 **Analyst:** Presenta Cabascango

Date: 01-22-2024 **Reviewer:**

Method: 8260 **Laboratory:** Houston

Comments:

#	Samp ID	Type	Analyzed	DF	Init Wt/Vol	Final Vol	File ID	Matrix	Status	pH
1	VSTD50	ICAL7	11-06-2023 02:04 pm	1.00	50 mL	50 mL	U110608.D	Liquid	Y	NA
2	BFB	TUNE	01-22-2024 11:28 am	1.00	50 mL	50 mL	U012201.D	Liquid	Y	NA
3	CCV	CCV	01-22-2024 11:50 am	1.00	50 mL	50 mL	U012202a.D	Liquid	Y	NA
4	CCV	CCV	01-22-2024 12:12 pm	1.00	50 mL	50 mL	U012203.D	Liquid	Y	NA
5	CCB	SAMP	01-22-2024 12:35 pm	1.00	50 mL	50 mL	U012204.D	Liquid	Y	NA
6	VLCSW-240122	LCS	01-22-2024 12:57 pm	1.00	50 mL	50 mL	U012205.D	Liquid	Y	NA
7	BLANK	SAMP	01-22-2024 01:19 pm	1.00	50 mL	50 mL	U012206.D	Liquid	Y	NA
8	VBLKW-240122	MBLK	01-22-2024 01:41 pm	1.00	50 mL	50 mL	U012207.D	Liquid	Y	NA
9	HS24010611-08	SAMP	01-22-2024 02:04 pm	50.00	1 mL	50 mL	U012208.D	Liquid	Y	<2
10	HS24010611-08MS	MS	01-22-2024 02:26 pm	50.00	1 mL	50 mL	U012209.D	Liquid	Y	<2
11	HS24010611-08MSD	MSD	01-22-2024 02:48 pm	50.00	1 mL	50 mL	U012210.D	Liquid	Y	<2
12	HS24010945-01	SAMP	01-22-2024 03:10 pm	1.00	50 mL	50 mL	U012211.D	Liquid	Y	<2
13	CCV-END	CCV	01-22-2024 03:33 pm	1.00	50 mL	50 mL	U012212.D	Liquid	Y	NA
14	BLANK	SAMP	01-22-2024 03:55 pm	1.00	50 mL	50 mL	U012213.D	Liquid	Y	NA
15	HS24010771-18	SAMP	01-22-2024 04:17 pm	1.00	50 mL	50 mL	U012214.D	Liquid	Y	<2
16	HS24010986-09	SAMP	01-22-2024 04:40 pm	1.00	50 mL	50 mL	U012215.D	Liquid	Y	<2
17	HS24011059-01	SAMP	01-22-2024 05:02 pm	1.00	50 mL	50 mL	U012216.D	Liquid	Y	<2
18	HS24011022-01	SAMP	01-22-2024 05:24 pm	1.00	50 mL	50 mL	U012217.D	Liquid	Y	<2
19	HS24011083-01	SAMP	01-22-2024 05:47 pm	1.00	50 mL	50 mL	U012218.D	Liquid	Y	<2
20	HS24011054-06	SAMP	01-22-2024 06:09 pm	1.00	50 mL	50 mL	U012219.D	Liquid	Y	<2
21	HS24011065-30	SAMP	01-22-2024 06:32 pm	1.00	50 mL	50 mL	U012220.D	Liquid	Y	<2
22	HS24010945-01	SAMP	01-22-2024 06:54 pm	10.00	5 mL	50 mL	U012221.D	Liquid	Y	<2
23	HS24011038-06	SAMP	01-22-2024 07:16 pm	1.00	50 mL	50 mL	U012222.D	Liquid	Y	<2
24	HS24010986-08	SAMP	01-22-2024 07:39 pm	1.00	50 mL	50 mL	U012223.D	Liquid	Y	<2
25	HS24011010-10	SAMP	01-22-2024 08:01 pm	1.00	50 mL	50 mL	U012224.D	Liquid	Y	<2
26	HS24011010-03	SAMP	01-22-2024 08:23 pm	1.00	50 mL	50 mL	U012225.D	Liquid	Y	<2
27	HS24011010-04	SAMP	01-22-2024 08:46 pm	1.00	50 mL	50 mL	U012226.D	Liquid	Y	<2
28	HS24011010-05	SAMP	01-22-2024 09:08 pm	1.00	50 mL	50 mL	U012227.D	Liquid	Y	<2
29	HS24011010-06	SAMP	01-22-2024 09:31 pm	1.00	50 mL	50 mL	U012228.D	Liquid	Y	<2
30	HS24011010-07	SAMP	01-22-2024 09:53 pm	1.00	50 mL	50 mL	U012229.D	Liquid	Y	<2
31	HS24011087-01	SAMP	01-22-2024 10:15 pm	1.00	50 mL	50 mL	U012230.D	Liquid	Y	<2
32	HS24010949-01	SAMP	01-22-2024 10:38 pm	10.00	5 mL	50 mL	U012231.D	Liquid	Y	<2
33	BLANK	SAMP	01-22-2024 11:00 pm	1.00	50 mL	50 mL	U012232.D	Liquid	Y	NA
34	BFB	TUNE	01-22-2024 11:22 pm	1.00	50 mL	50 mL	V012201.D	Liquid	Y	NA
35	CCV	CCV	01-22-2024 11:45 pm	1.00	50 mL	50 mL	V012202a.D	Liquid	Y	NA
36	CCV	CCV	01-23-2024 12:07 am	1.00	50 mL	50 mL	V012203.D	Liquid	Y	NA
37	CCB	SAMP	01-23-2024 12:29 am	1.00	50 mL	50 mL	V012204.D	Liquid	Y	NA
38	VLCSW-240122	LCS	01-23-2024 12:52 am	1.00	50 mL	50 mL	V012205.D	Liquid	Y	NA
39	BLANK	SAMP	01-23-2024 01:14 am	1.00	50 mL	50 mL	V012206.D	Liquid	Y	NA
40	VBLKW-240122	MBLK	01-23-2024 01:36 am	1.00	50 mL	50 mL	V012207.D	Liquid	Y	NA
41	HS24011100-01	SAMP	01-23-2024 01:59 am	1.00	50 mL	50 mL	V012208.D	Liquid	Y	<2

MSVOA09 -Logbook

#	Samp ID	Type	Analyzed	DF	Init Wt/Vol	Final Vol	File ID	Matrix	Status	pH
42	HS24011100-01MS	MS	01-23-2024 02:21 am	1.00	50 mL	50 mL	V012209.D	Liquid	Y	<2
43	HS24011100-01MSD	MSD	01-23-2024 02:43 am	1.00	50 mL	50 mL	V012210.D	Liquid	Y	<2
44	BLANK	SAMP	01-23-2024 03:06 am	1.00	50 mL	50 mL	V012211.D	Liquid	Y	NA
45	HS24011087-02	SAMP	01-23-2024 03:28 am	1.00	50 mL	50 mL	V012212.D	Liquid	Y	<2
46	HS24011087-03	SAMP	01-23-2024 03:50 am	1.00	50 mL	50 mL	V012213.D	Liquid	Y	<2
47	HS24011087-04	SAMP	01-23-2024 04:13 am	1.00	50 mL	50 mL	V012214.D	Liquid	Y	<2
48	HS24011087-05	SAMP	01-23-2024 04:35 am	1.00	50 mL	50 mL	V012215.D	Liquid	Y	<2
49	HS24011087-06	SAMP	01-23-2024 04:57 am	1.00	50 mL	50 mL	V012216.D	Liquid	Y	<2
50	HS24011087-07	SAMP	01-23-2024 05:20 am	1.00	50 mL	50 mL	V012217.D	Liquid	Y	<2
51	HS24011100-02	SAMP	01-23-2024 05:42 am	1.00	50 mL	50 mL	V012218.D	Liquid	Y	<2
52	HS24011100-03	SAMP	01-23-2024 06:05 am	1.00	50 mL	50 mL	V012219.D	Liquid	Y	<2
53	HS24011100-04	SAMP	01-23-2024 06:27 am	1.00	50 mL	50 mL	V012220.D	Liquid	Y	<2
54	HS24011100-05	SAMP	01-23-2024 06:49 am	1.00	50 mL	50 mL	V012221.D	Liquid	Y	<2
55	HS24011100-06	SAMP	01-23-2024 07:12 am	1.00	50 mL	50 mL	V012222.D	Liquid	Y	<2
56	HS24011100-07	SAMP	01-23-2024 07:34 am	1.00	50 mL	50 mL	V012223.D	Liquid	Y	<2
57	HS24011100-08	SAMP	01-23-2024 07:56 am	1.00	50 mL	50 mL	V012224.D	Liquid	Y	<2
58	HS24011100-09	SAMP	01-23-2024 08:19 am	1.00	50 mL	50 mL	V012225.D	Liquid	Y	<2
59	HS24011100-10	SAMP	01-23-2024 08:41 am	1.00	50 mL	50 mL	V012226.D	Liquid	Y	<2
60	HS24011100-11	SAMP	01-23-2024 09:04 am	1.00	50 mL	50 mL	V012227.D	Liquid	Y	<2
61	HS24011100-12	SAMP	01-23-2024 09:26 am	1.00	50 mL	50 mL	V012228.D	Liquid	Y	<2
62	HS24011100-13	SAMP	01-23-2024 09:48 am	1.00	50 mL	50 mL	V012229.D	Liquid	Y	<2
63	HS24011100-14	SAMP	01-23-2024 10:11 am	1.00	50 mL	50 mL	V012230.D	Liquid	Y	<2
64	BLANK	SAMP	01-23-2024 10:33 am	1.00	50 mL	50 mL	V012231.D	Liquid	Y	NA
65	BLANK	SAMP	01-23-2024 10:54 am	1.00	50 mL	50 mL	V012232.D	Liquid	Y	NA
66	BLANK	SAMP	01-23-2024 11:14 am	1.00	50 mL	50 mL	V012233.D	Liquid	Y	v

Chemical	Value
pH Paper	634-64-10

right solutions.
right partner.

RawData

Volatiles by EPA Volatiles Organics by Method 8260C

Workorder

HS24010611

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/29/2024

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

Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120601.D Page 1
Report Date: 07-Dec-2023 10:08

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120601.D
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 06-DEC-2023 11:14
Operator : PC Inst ID: VOA9.i
Smp Info : BFB;BFB;3;;BFB
Misc Info : V9;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\bfb.m
Meth Date : 27-Jan-2023 08:08 apoluri Quant Type: ISTD
Cal Date : 30-MAR-2018 18:09 Cal File: U033003.d
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: NAHSTW7051

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

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

					CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/l)		
RT	EXP RT	REL RT	MASS	RESPONSE			TARGET RANGE	RATIO
1 bfb							CAS #: 460-00-4	
9.197	9.180	(0.000)	95	70800			0.00- 100.00	100.00
9.197	9.180	(0.000)	50	12933			15.00- 40.00	18.27
9.197	9.180	(0.000)	75	34640			30.00- 60.00	48.93
9.197	9.180	(0.000)	96	4799			5.00- 9.00	6.78
9.197	9.180	(0.000)	173	0	0.0	0.0	0.00- 2.00	0.00
9.197	9.180	(0.000)	174	62608			50.00- 0.00	88.43
9.197	9.180	(0.000)	175	5227			5.00- 9.00	8.35
9.197	9.180	(0.000)	176	62160			95.00- 101.00	99.28
9.197	9.180	(0.000)	177	3938			5.00- 9.00	6.34

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	18.27
75	30.00 - 60.00% of mass 95	48.93
96	5.00 - 9.00% of mass 95	6.78
173	Less than 2.00% of mass 174	0.00 (0.00)
174	Greater than 50.00% of mass 95	88.43
175	5.00 - 9.00% of mass 174	7.38 (8.35)
176	95.00 - 101.00% of mass 174	87.80 (99.28)
177	5.00 - 9.00% of mass 176	5.56 (6.34)

Data File: U120601.D
Spectrum: Scan 2294 (9.19)
Location of Maximum: 95.10
Number of points: 109

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.10	672	64.00	389	95.10	70800	143.00	651
37.10	3196	65.00	563	96.10	4799	143.80	56
38.10	3144	65.90	92	97.00	209	144.90	127
39.10	1362	67.20	312	104.00	312	145.80	165
40.00	711	68.10	6883	104.60	133	147.00	102
41.20	184	69.00	7438	105.90	338	147.90	161
42.00	128	70.00	506	107.00	124	148.90	82
42.80	102	70.90	89	108.00	52	149.90	109
44.00	800	72.00	494	110.30	59	151.90	72
45.10	619	73.10	2968	111.90	52	153.00	96
45.80	184	74.10	12043	113.00	61	153.90	108
47.10	1050	75.10	34640	114.90	108	155.00	258
48.00	459	76.10	3228	116.00	230	158.80	121
49.10	2929	77.10	500	116.90	767	160.70	72
50.10	12933	78.00	528	117.90	289	169.60	61
51.10	3950	79.00	1680	118.90	454	171.00	127
52.10	292	79.90	570	123.90	81	171.90	699
52.80	140	80.90	1880	126.80	90	174.00	62608
53.90	84	81.90	317	127.90	321	175.00	5227
55.10	167	83.30	77	128.90	112	176.00	62160
56.00	930	86.10	145	129.80	309	177.00	3938
57.00	1888	87.00	3421	130.80	118	177.90	135
58.00	106	88.00	2987	132.10	62	218.50	58
58.80	66	90.30	87	134.90	141	262.20	52
60.10	741	91.00	213	136.90	95	328.30	63
61.00	3325	92.10	1915	140.20	85		
62.10	2880	93.00	3307	140.90	647		
63.10	2110	94.10	8223	141.90	133		

Data File: \\NAHSTWS005\Target\chem\voa9.i\u231206.b\u120601.d Page 1

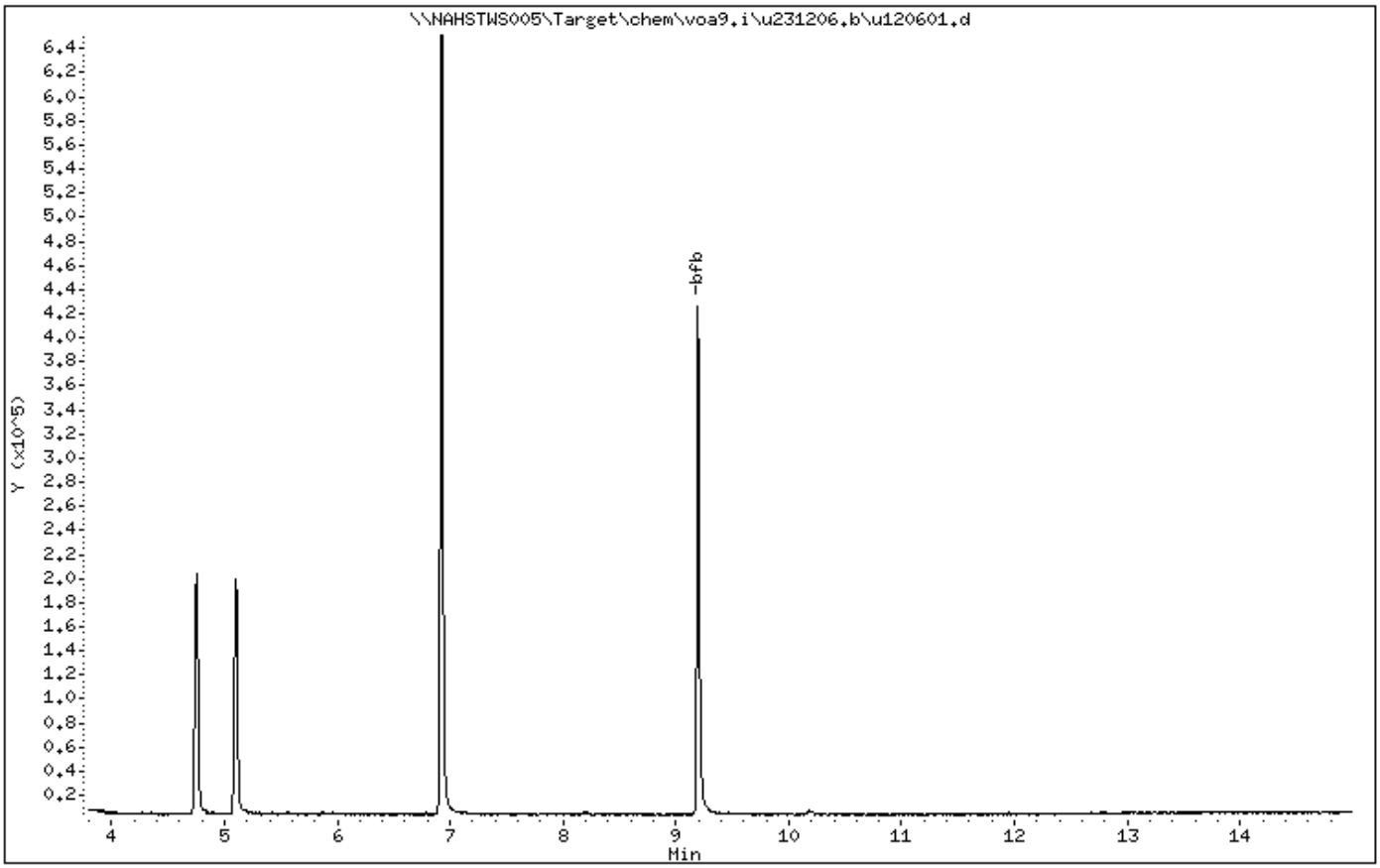
Date : 06-DEC-2023 11:14

Client ID: BFB Instrument: VOA9.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0 Operator: PC

Column phase: DB624 Column diameter: 0.25



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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

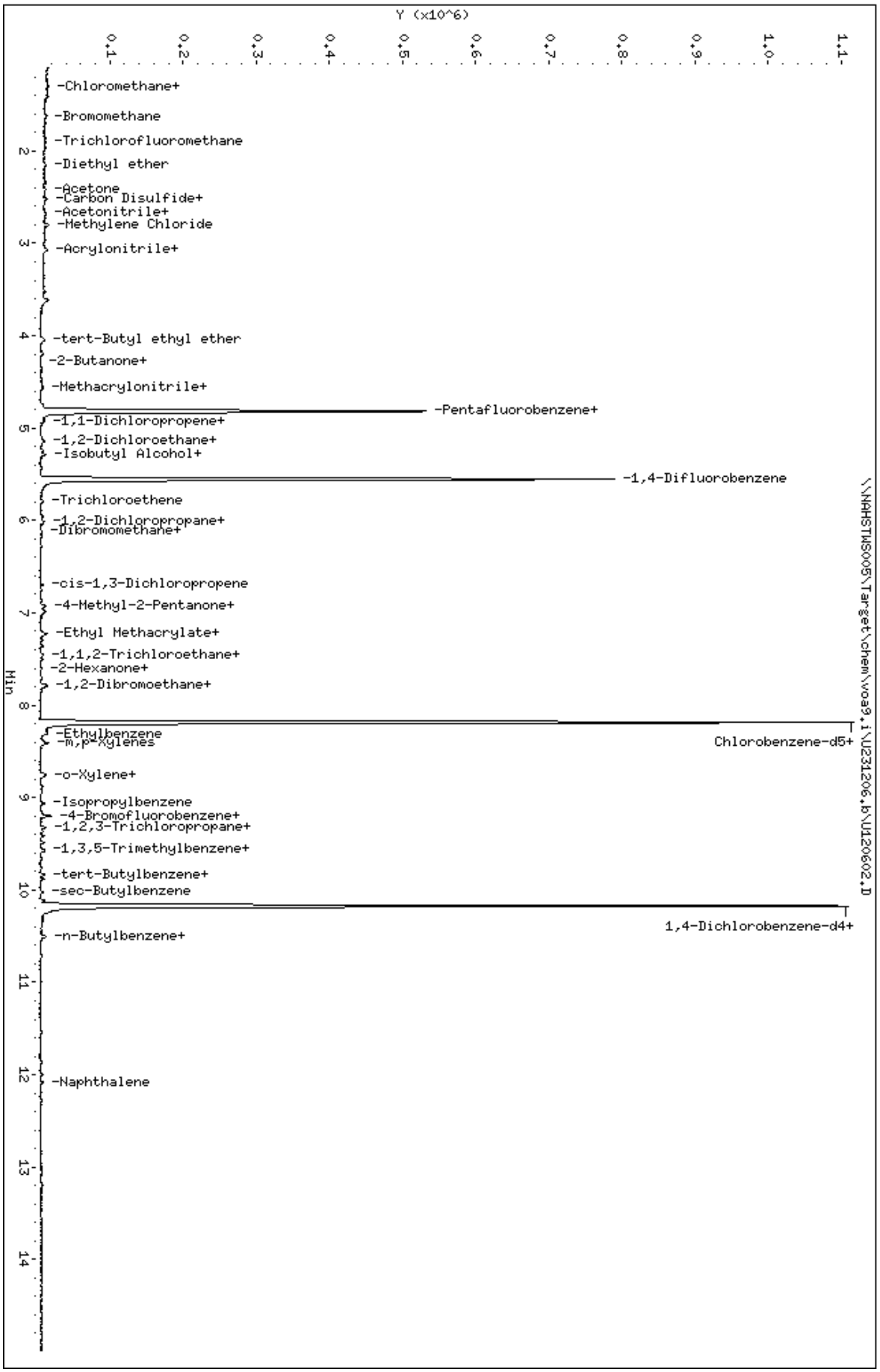
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
*	1 Pentafluorobenzene	168	4.815	4.815	(1.000)	385732	50.0000	
	2 Dichlorodifluoromethane	85	1.164	1.164	(0.242)	431	0.25000	1.00(M)
	3 Chloromethane	50	1.303	1.303	(0.271)	2053	0.25000	0.46
	5 Vinyl Chloride	62	1.378	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)

	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.



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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

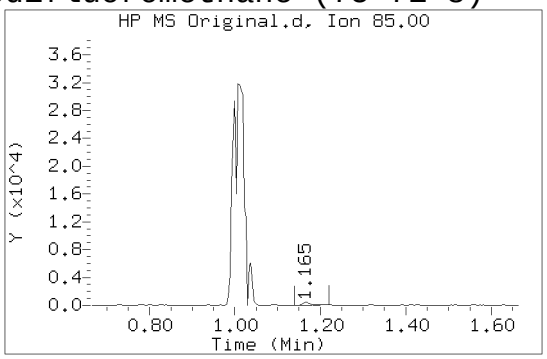
Instrument: VOA9.i
Operator: PC
Column diameter: 0.18

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
MASS
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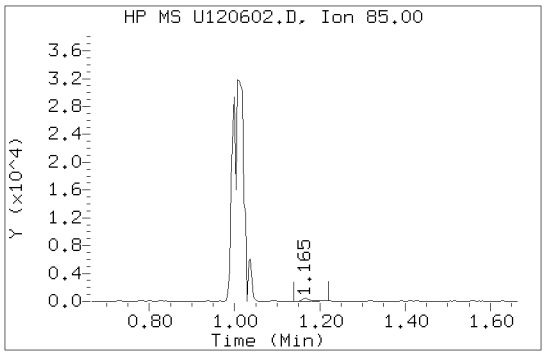
AREA
431
HEIGHT
467
12-Dec-2023
09:43
linh
pham



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AREA
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HEIGHT
30487
11-Dec-2023
17:18
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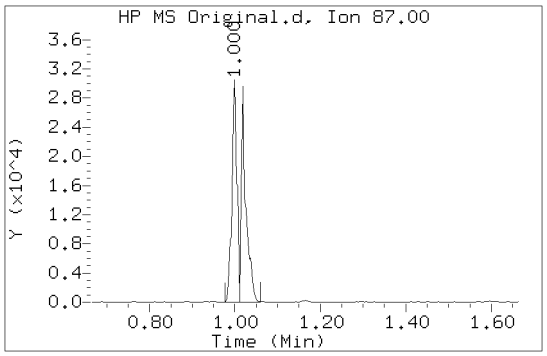
pham



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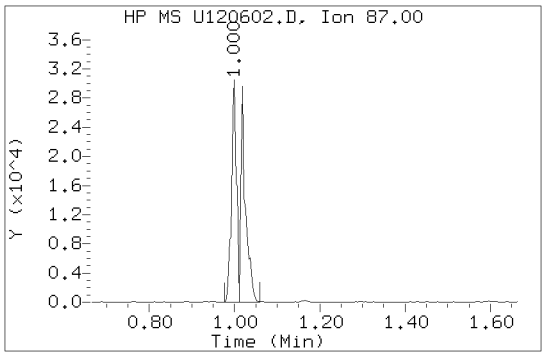
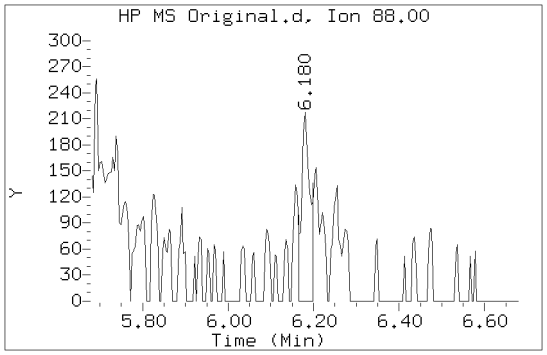


1,4-Dioxane ()

Reason Code:

BEFORE
MASS
88
AREA
310
HEIGHT
218
11-Dec-2023
17:18
linh
pham



AFTER
MASS
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AREA
310
HEIGHT
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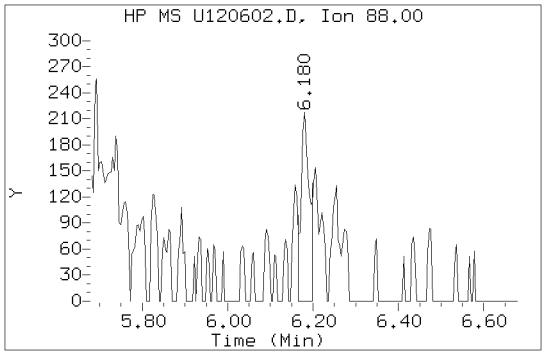
12-Dec-2023
09:43
linh
pham



BEFORE
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HEIGHT
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11-Dec-2023
17:18
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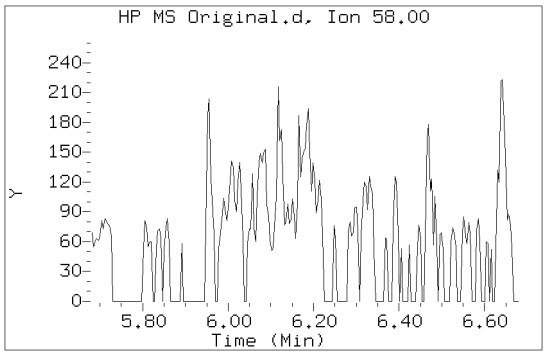
pham



AFTER
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HEIGHT
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12-Dec-2023
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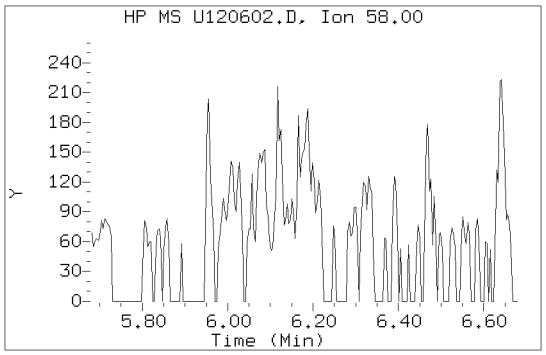

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Report Date: 12-Dec-2023 09:43

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120603.D
Lab Smp Id: VSTD000.5 Client Smp ID: VSTD000.5
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

Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120603.D Page 2
Report Date: 12-Dec-2023 09:43

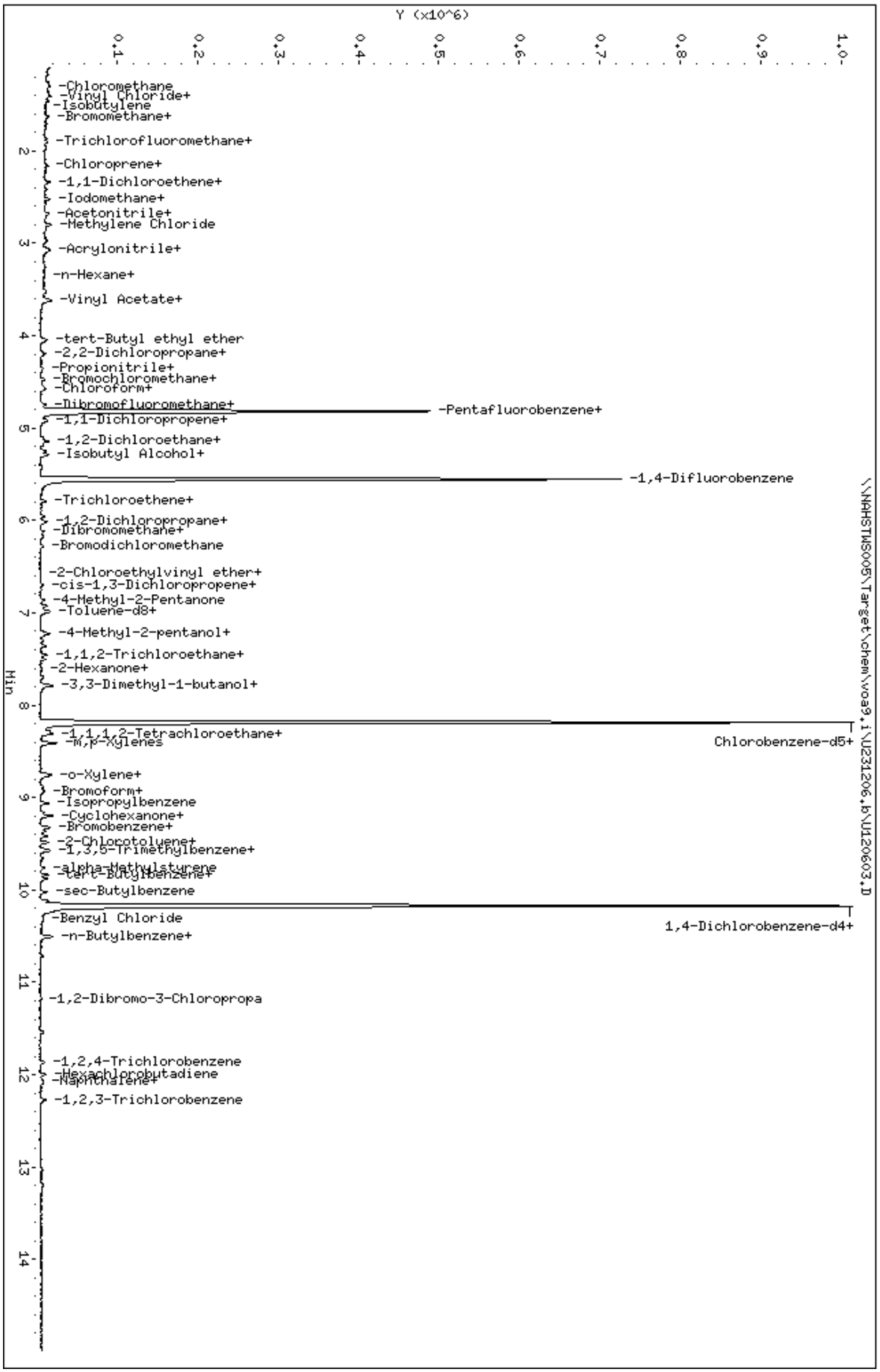
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	29 Bromochloromethane	128	4.470	4.470	(0.928)	1194	0.50000	0.53
$	30 Dibromofluoromethane	113	4.748	4.748	(0.985)	2084	0.50000	
	31 1,1,1-Trichloroethane	97	4.740	4.740	(0.984)	2774	0.50000	0.50
	32 1,1-Dichloropropene	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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Sample Info: VSTD000.5;VSTD000.5;1;2;
Purge Volume: 5.0
Column phase: DB624

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

Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120603.D
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

Dichlorodifluoromethane (75-71-8)

Reason Code:

BEFORE

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1954
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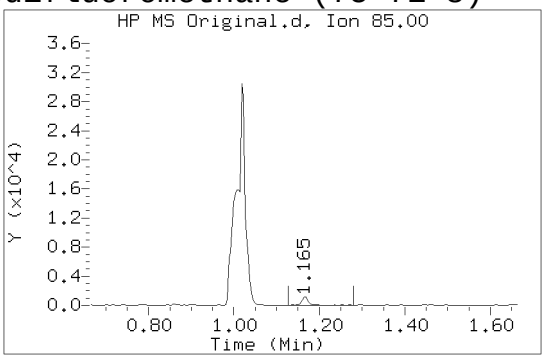
06-Dec-2023
23:21



AFTER

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HEIGHT
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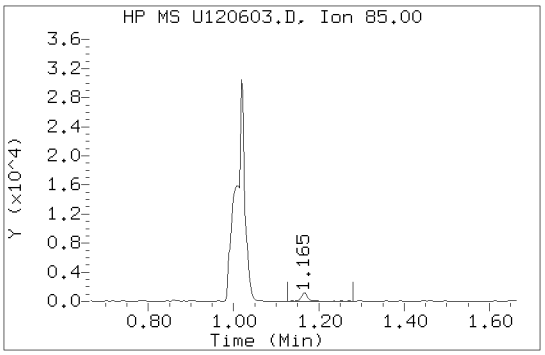
12-Dec-2023
09:43



BEFORE

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HEIGHT
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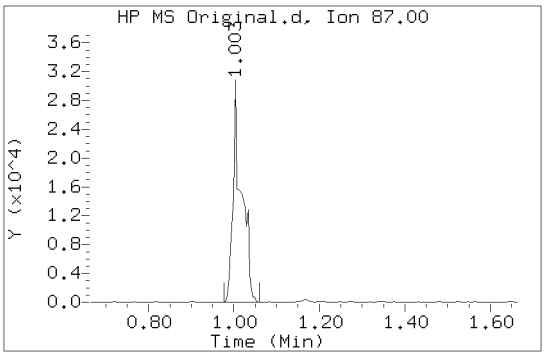
06-Dec-2023
23:21



AFTER

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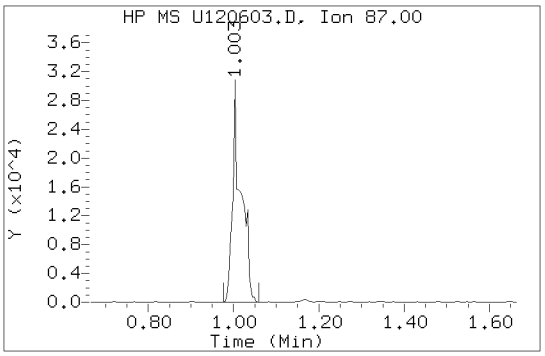
12-Dec-2023
09:43



Chloromethane (74-87-3)

Reason Code:

BEFORE

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AREA
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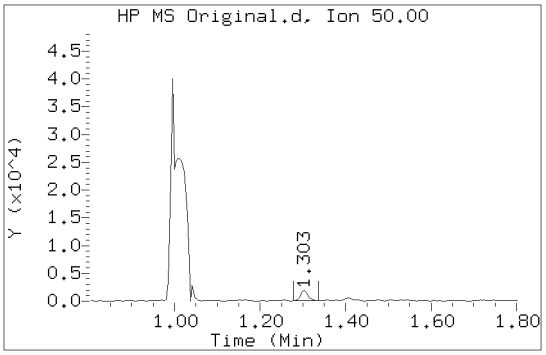
HEIGHT
1441
06-Dec-2023
23:21



AFTER

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AREA
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HEIGHT
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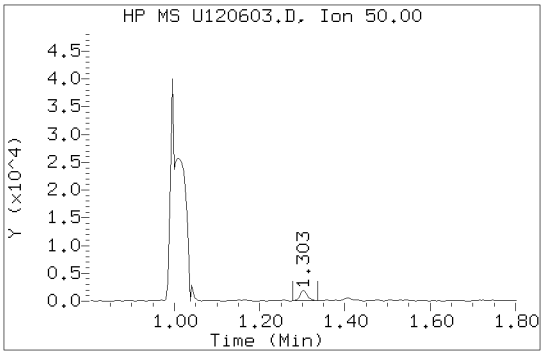
12-Dec-2023
09:43



BEFORE

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AREA
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HEIGHT
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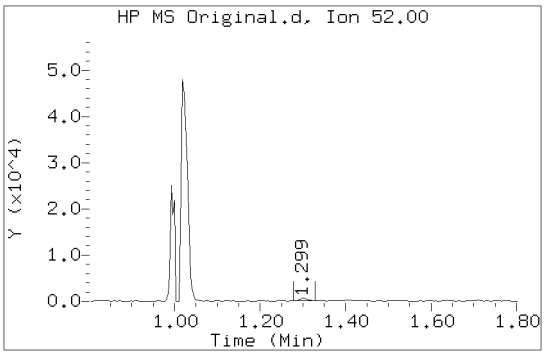
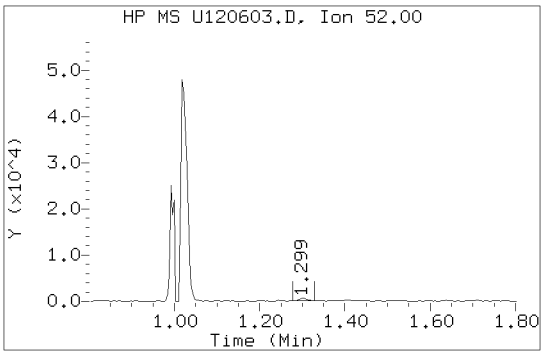
06-Dec-2023
23:21



AFTER

MASS
52
AREA
810
HEIGHT
671
12-Dec-2023
09:43



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Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

Bromomethane (74-83-9)

Reason Code:

BEFORE
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101
AREA
2224
HEIGHT
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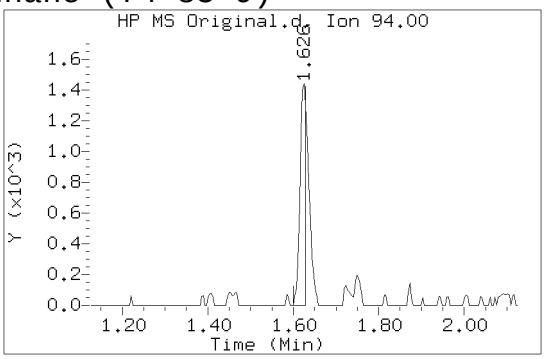
06-Dec-2023
23:21



AFTER
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1430
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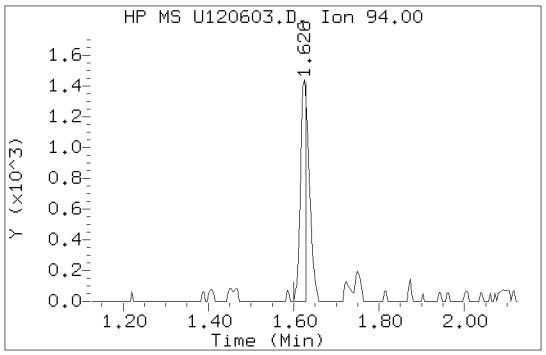
12-Dec-2023
09:43



BEFORE
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AREA
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06-Dec-2023
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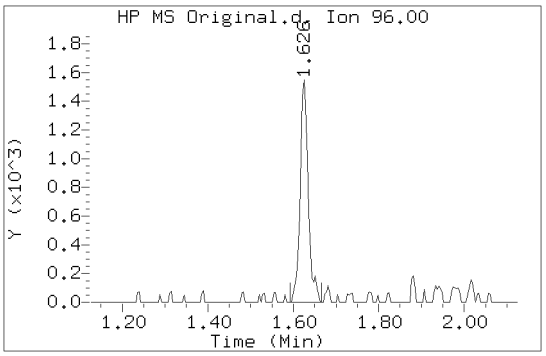

AFTER
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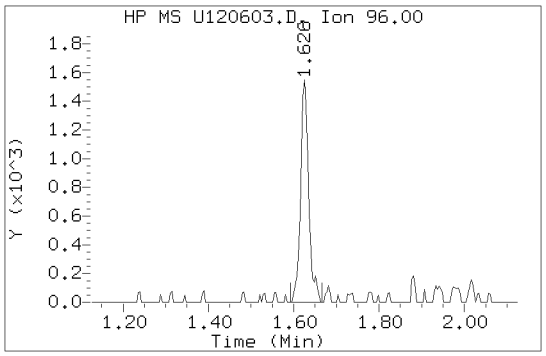

Chloroethane (75-00-3)

Reason Code:

BEFORE
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AREA
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HEIGHT
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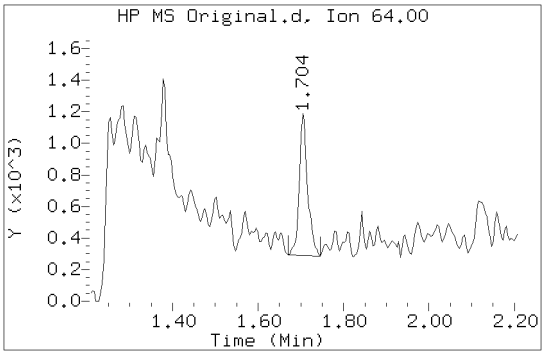
06-Dec-2023
23:21



AFTER
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HEIGHT
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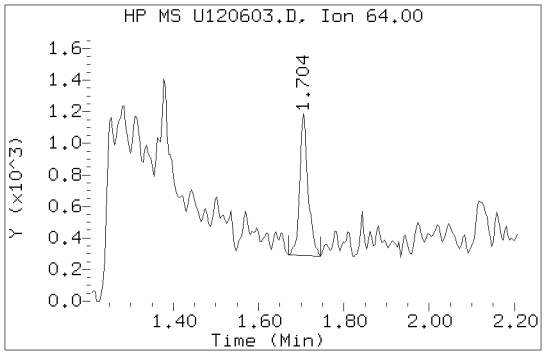
12-Dec-2023
09:43



BEFORE
MASS
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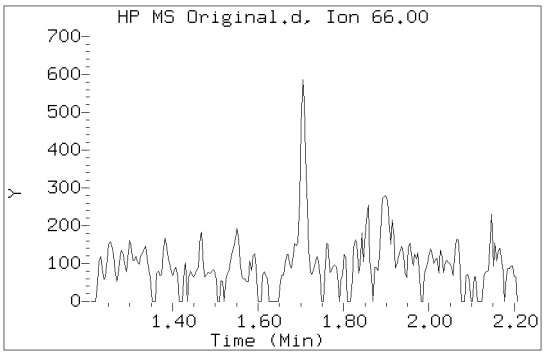
AREA
1171
HEIGHT
620
06-Dec-2023
23:21



AFTER
MASS
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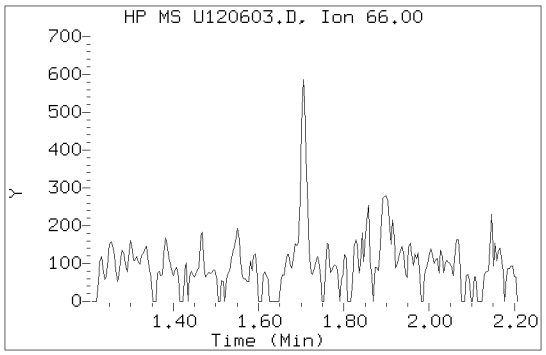
12-Dec-2023
09:43



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Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

Acrolein (107-02-8)

Reason Code:

BEFORE
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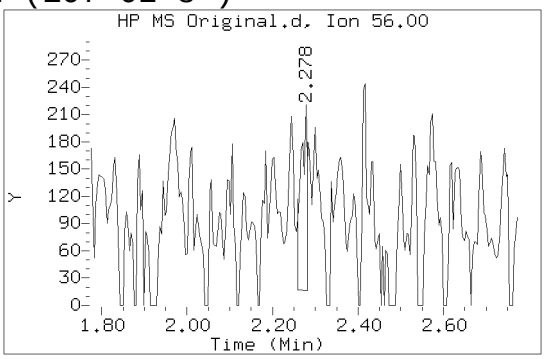
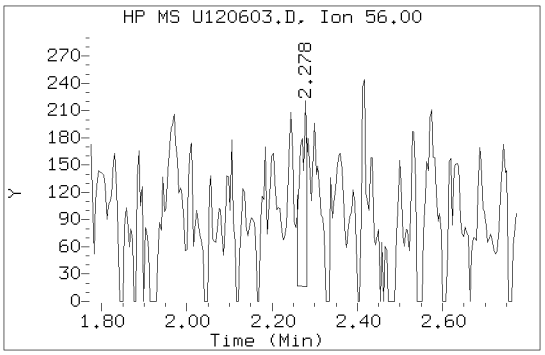
142
AREA
1035
HEIGHT
550
06-Dec-2023
23:21



AFTER
MASS
56
AREA
221
HEIGHT
204
12-Dec-2023
09:43



BEFORE
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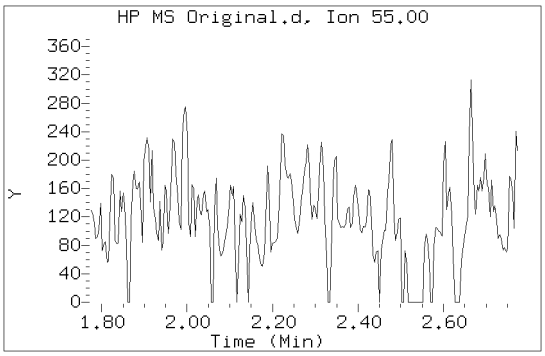
625
HEIGHT
328
06-Dec-2023
23:21



AFTER
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12-Dec-2023
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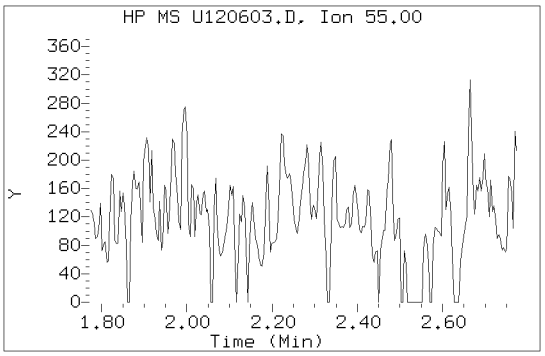

Acetone (67-64-1)

Reason Code:

BEFORE
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06-Dec-2023
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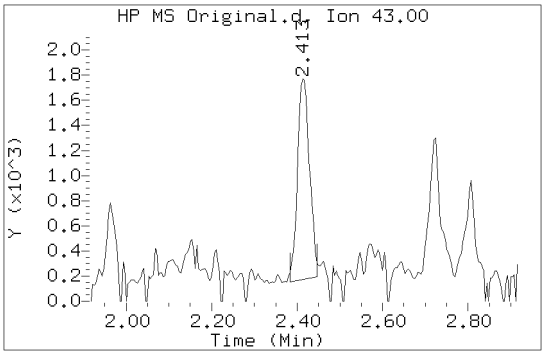

AFTER
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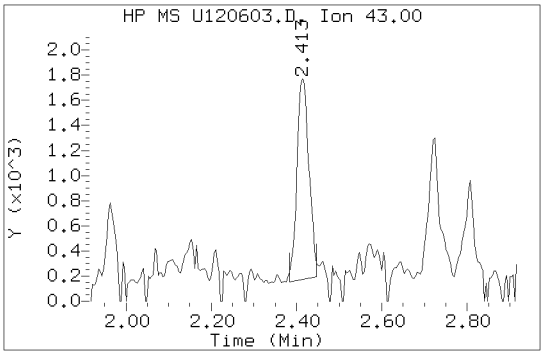

BEFORE
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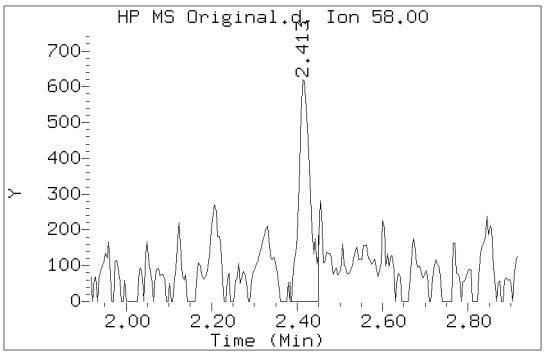
06-Dec-2023
23:21



AFTER
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AREA
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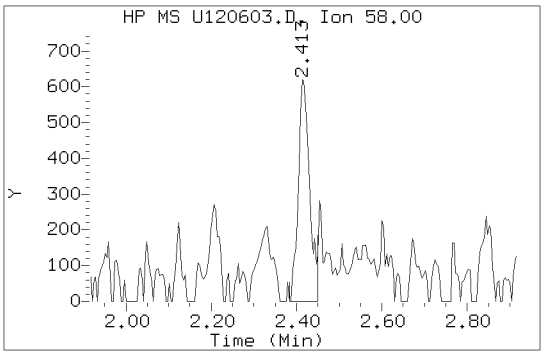
12-Dec-2023
09:43



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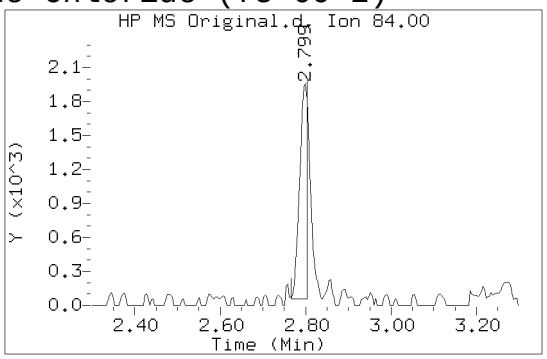
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

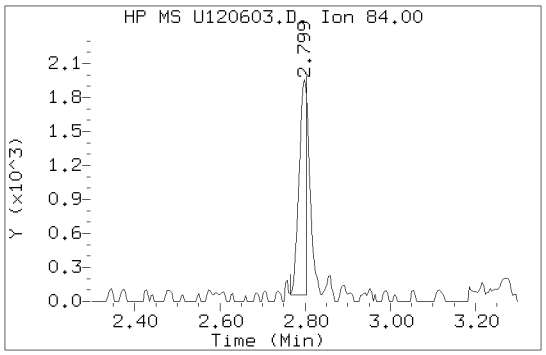
Methylene Chloride (75-09-2)

BEFORE
MASS
96
AREA
1948
HEIGHT
1118
06-Dec-2023
23:21

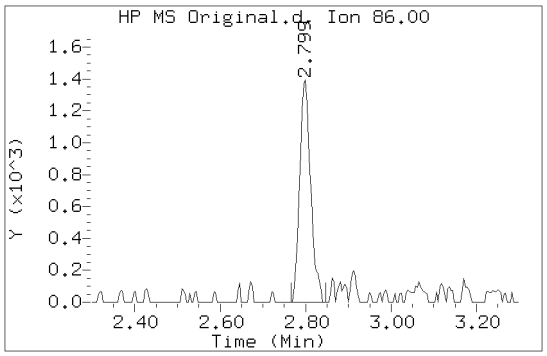


Reason Code:

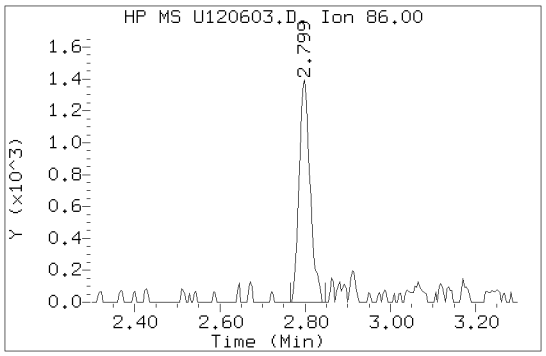
AFTER
MASS
84
AREA
2348
HEIGHT
1904
12-Dec-2023
09:43



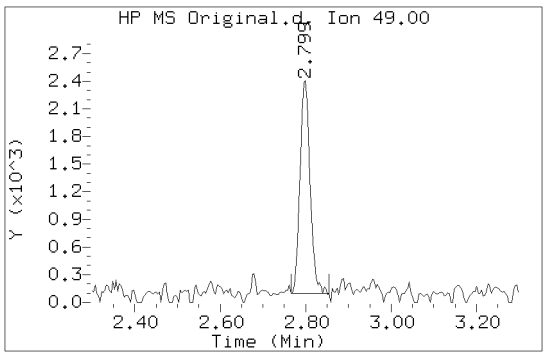
BEFORE
MASS
61
AREA
2182
HEIGHT
1143
06-Dec-2023
23:21



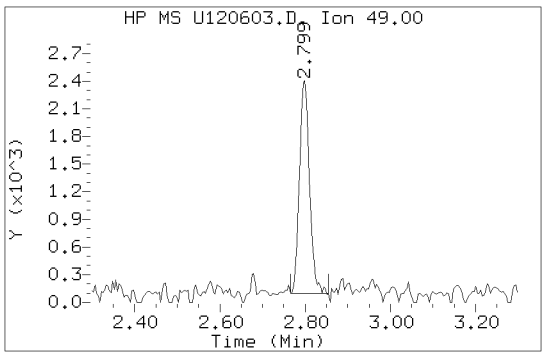
AFTER
MASS
86
AREA
2533
HEIGHT
1394
12-Dec-2023
09:43



BEFORE
MASS
98
AREA
1022
HEIGHT
586
06-Dec-2023
23:21

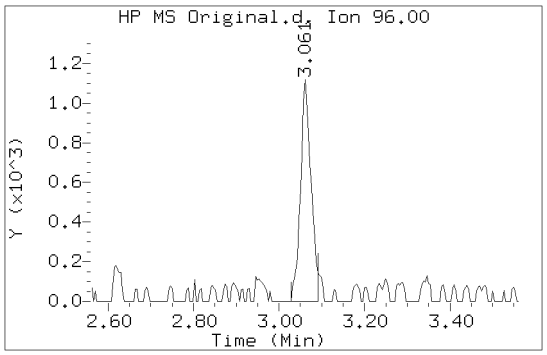


AFTER
MASS
49
AREA
3879
HEIGHT
2311
12-Dec-2023
09:43



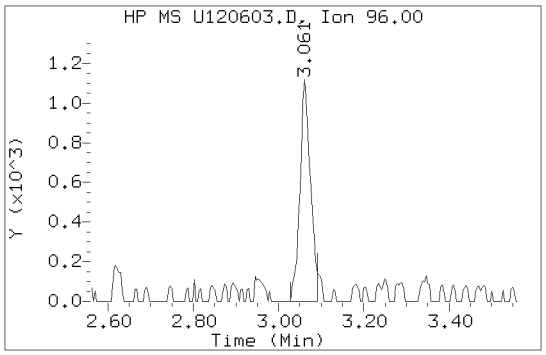
trans-1,2-Dichloroethene (156-60-5)

BEFORE
MASS
77
AREA
2637
HEIGHT
1068
06-Dec-2023
23:21



Reason Code:

AFTER
MASS
96
AREA
1948
HEIGHT
1118
12-Dec-2023
09:43



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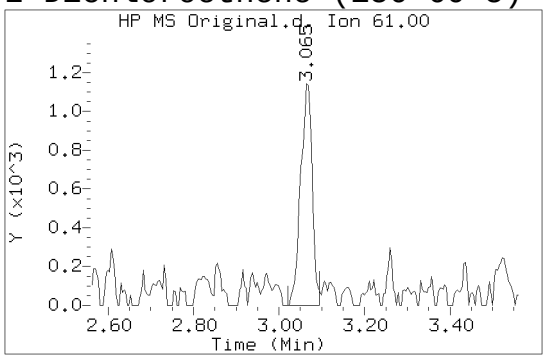
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

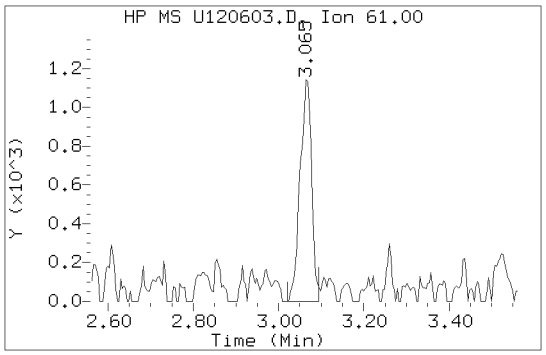
trans-1,2-Dichloroethene (156-60-5)

Reason Code:

BEFORE
MASS
97
AREA
675
HEIGHT
294
06-Dec-2023
23:21



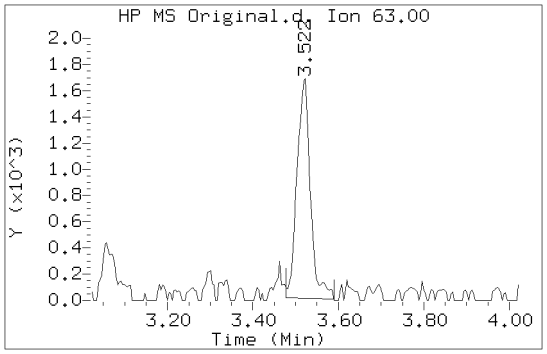
AFTER
MASS
61
AREA
2182
HEIGHT
1143
12-Dec-2023
09:43



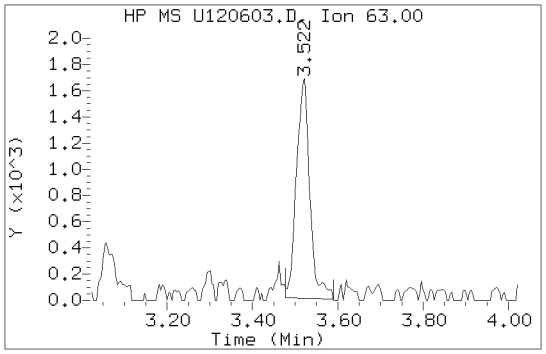
1,1-Dichloroethane (75-34-3)

Reason Code:

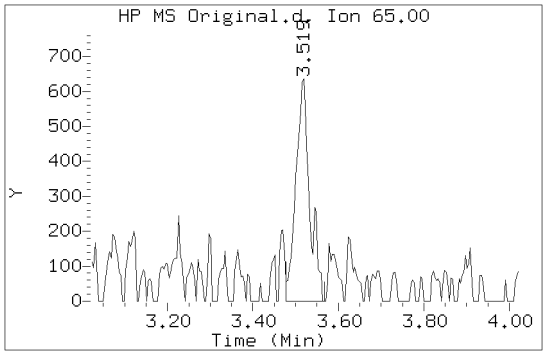
BEFORE
MASS
83
AREA
4075
HEIGHT
1886
06-Dec-2023
23:21



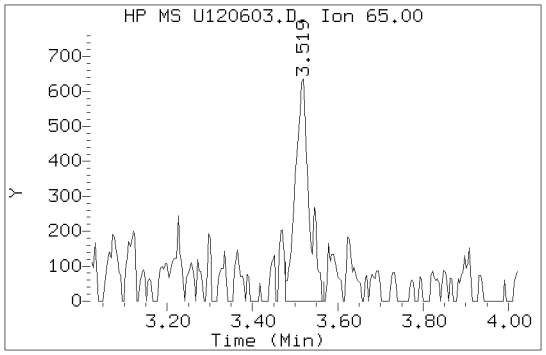
AFTER
MASS
63
AREA
3728
HEIGHT
1675
12-Dec-2023
09:43



BEFORE
MASS
85
AREA
2646
HEIGHT
1265
06-Dec-2023
23:21



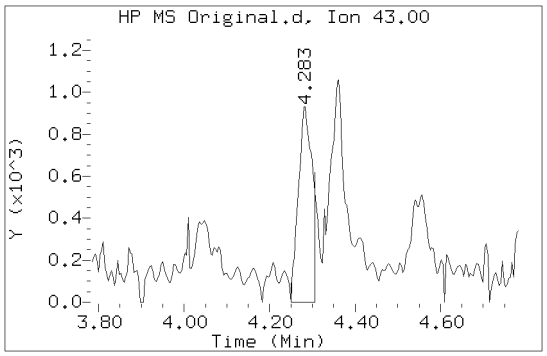
AFTER
MASS
65
AREA
1459
HEIGHT
636
12-Dec-2023
09:43



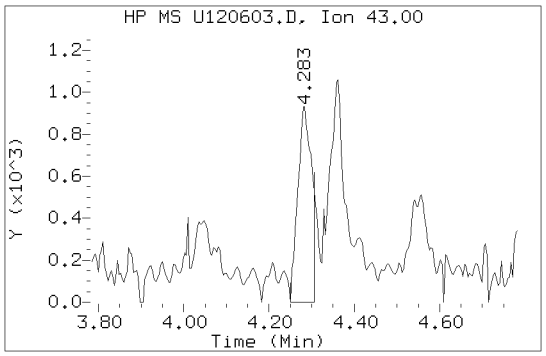
2-Butanone (78-93-3)

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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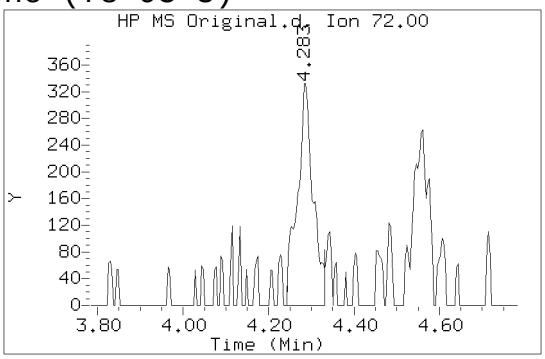
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

2-Butanone (78-93-3)

Reason Code:

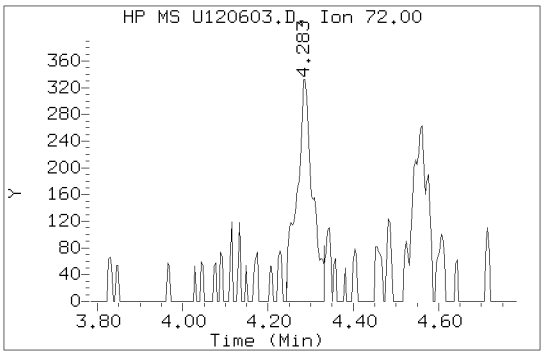
BEFORE

MASS
49
AREA
2419
HEIGHT
1056
06-Dec-2023
23:21



AFTER

MASS
72
AREA
868
HEIGHT
332
12-Dec-2023
09:43

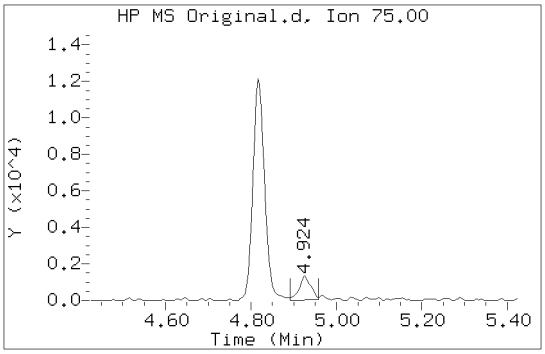


1,1-Dichloropropene (563-58-6)

Reason Code:

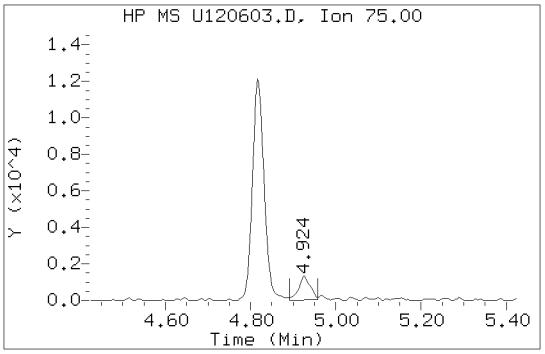
BEFORE

MASS
78
AREA
8471
HEIGHT
4567
06-Dec-2023
23:21



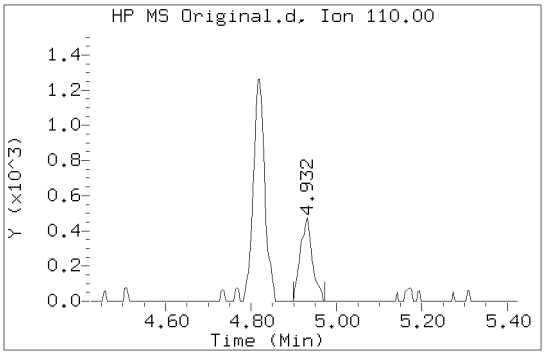
AFTER

MASS
75
AREA
2513
HEIGHT
1297
12-Dec-2023
09:43



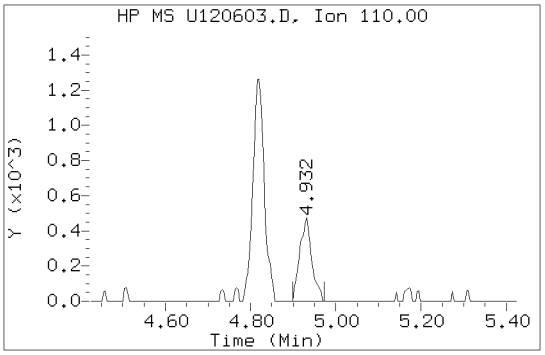
BEFORE

MASS
77
AREA
2577
HEIGHT
1507
06-Dec-2023
23:21



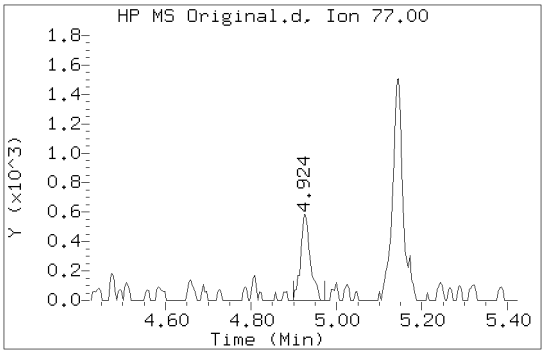
AFTER

MASS
110
AREA
946
HEIGHT
475
12-Dec-2023
09:43



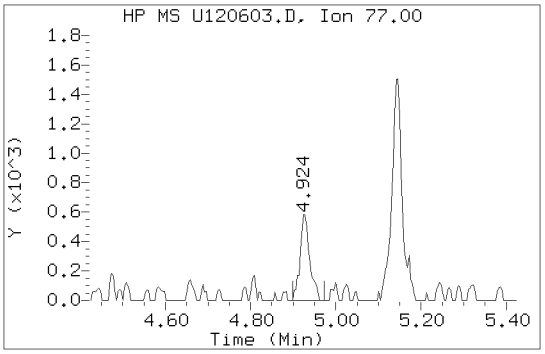
BEFORE

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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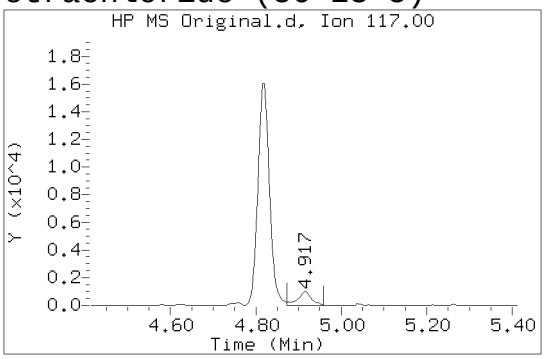
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

Carbon Tetrachloride (56-23-5)

Reason Code:

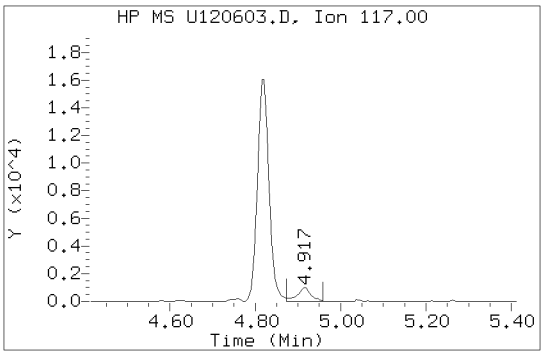
BEFORE

MASS
83
AREA
2561
HEIGHT
1370
06-Dec-2023
23:21



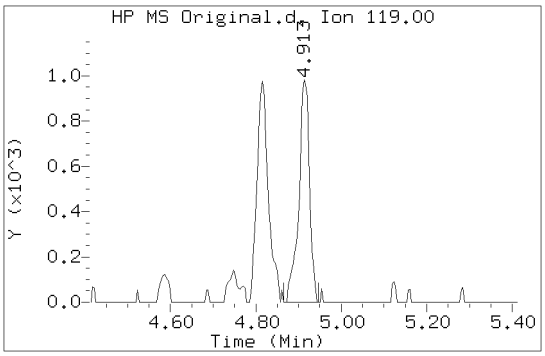
AFTER

MASS
117
AREA
2241
HEIGHT
1012
12-Dec-2023
09:43



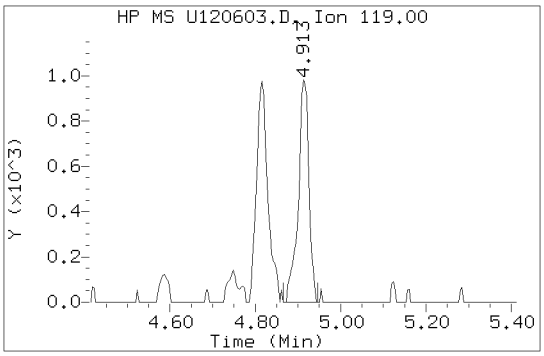
BEFORE

MASS
85
AREA
0
HEIGHT
0
06-Dec-2023
23:21



AFTER

MASS
119
AREA
1738
HEIGHT
982
12-Dec-2023
09:43

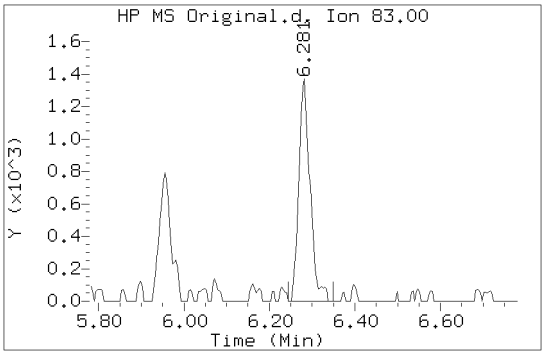


Bromodichloromethane (75-27-4)

Reason Code:

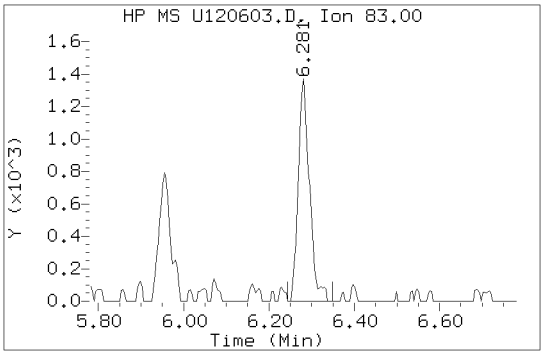
BEFORE

MASS
75
AREA
2180
HEIGHT
1317
06-Dec-2023
23:21



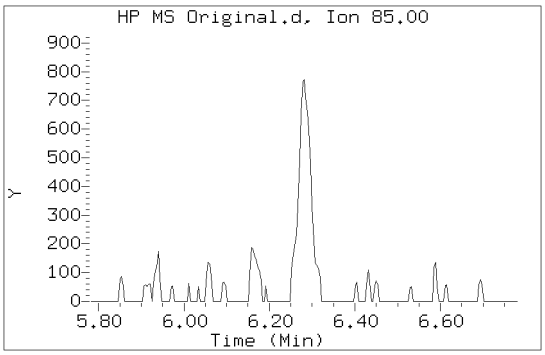
AFTER

MASS
83
AREA
2561
HEIGHT
1370
12-Dec-2023
09:43



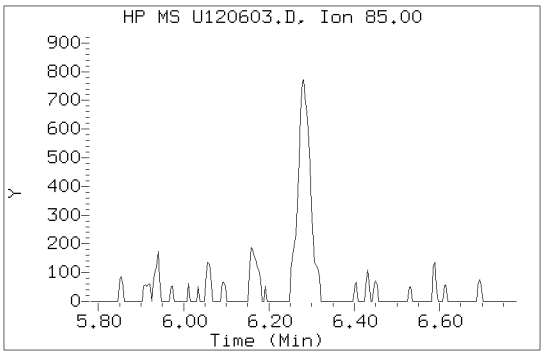
BEFORE

MASS
77
AREA
894
HEIGHT
610
06-Dec-2023
23:21



AFTER

MASS
85
AREA
0
HEIGHT
0
12-Dec-2023
09:43

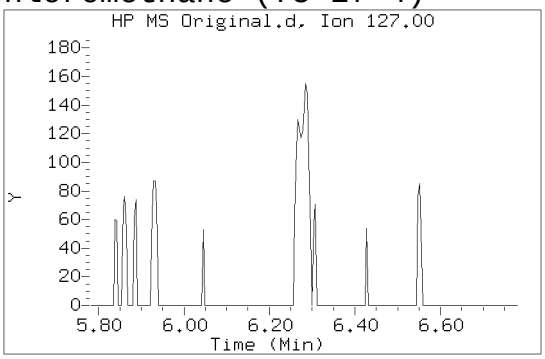


Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120603.D
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

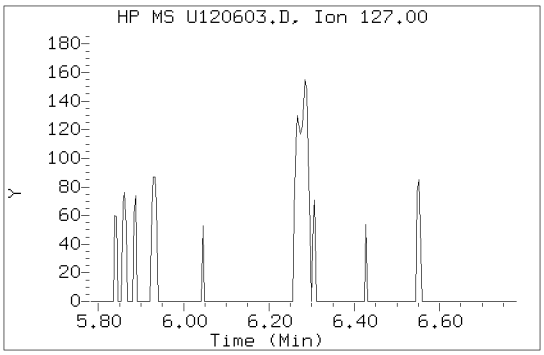
Bromodichloromethane (75-27-4)

Reason Code:

BEFORE
MASS
39
AREA
987
HEIGHT
625
06-Dec-2023
23:21



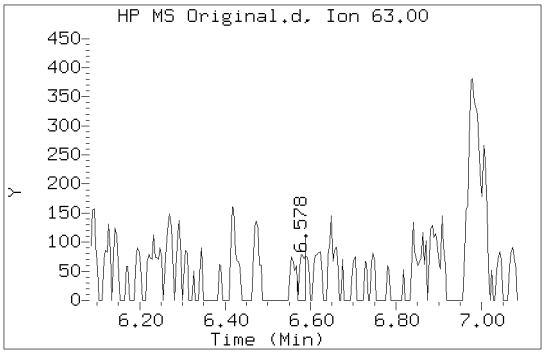
AFTER
MASS
127
AREA
0
HEIGHT
0
12-Dec-2023
09:43



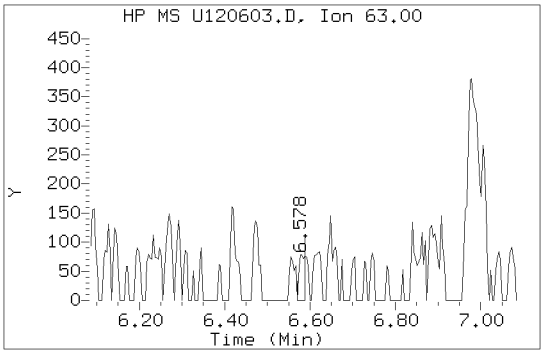
2-Chloroethylvinyl ether (110-75-8)

Reason Code:

BEFORE
MASS
117
AREA
556790
HEIGHT
357308
06-Dec-2023
23:21



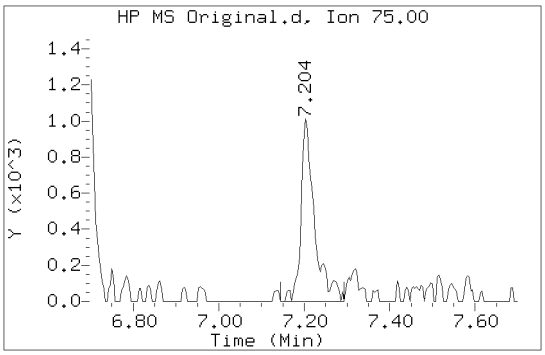
AFTER
MASS
63
AREA
81
HEIGHT
78
12-Dec-2023
09:43



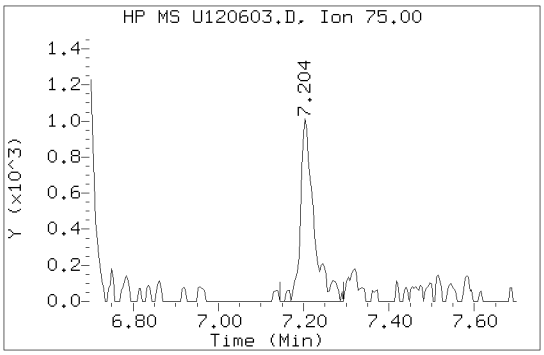
trans-1,3-Dichloropropene (10061-02-6)

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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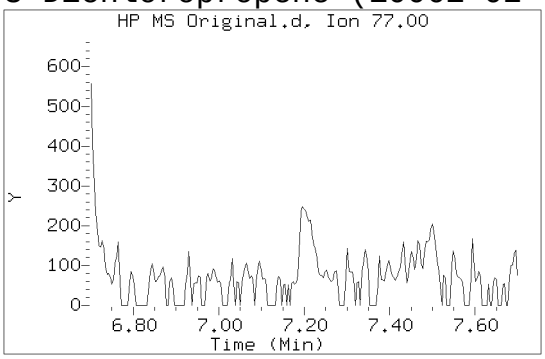
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

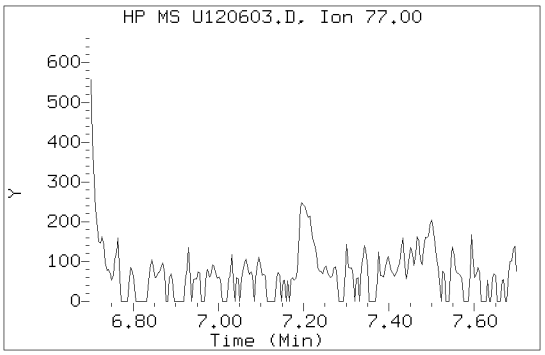
trans-1,3-Dichloropropene (10061-02-6)

Reason Code:

BEFORE
MASS
86
AREA
811
HEIGHT
369
06-Dec-2023
23:21



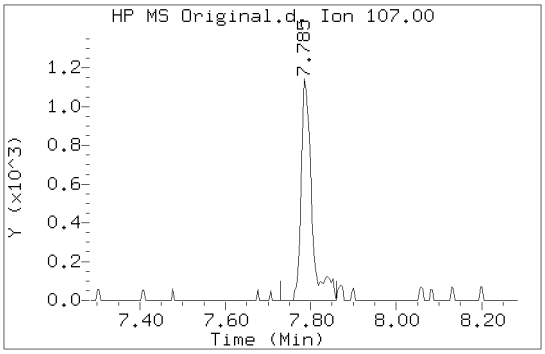
AFTER
MASS
77
AREA
0
HEIGHT
0
12-Dec-2023
09:43



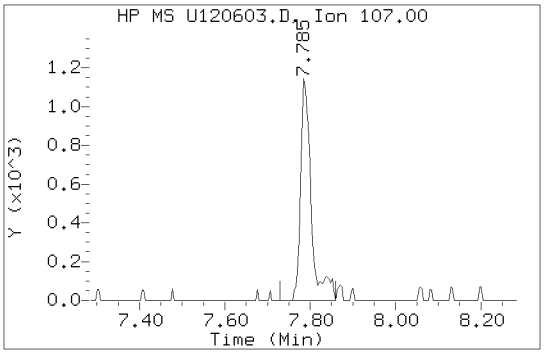
1,2-Dibromoethane (106-93-4)

Reason Code:

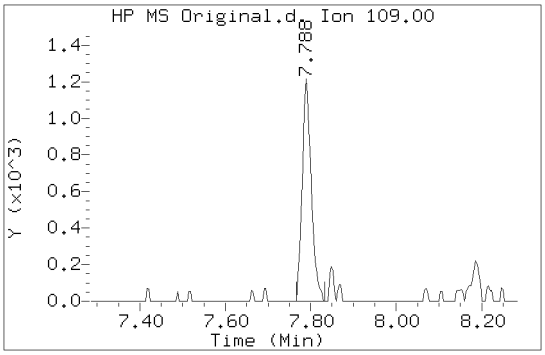
BEFORE
MASS
112
AREA
6178
HEIGHT
3872
06-Dec-2023
23:21



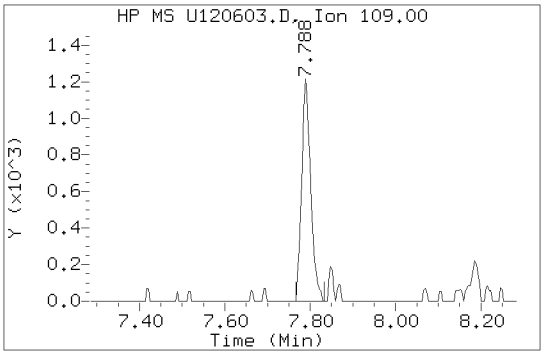
AFTER
MASS
107
AREA
2016
HEIGHT
1144
12-Dec-2023
09:43



BEFORE
MASS
77
AREA
8323
HEIGHT
3106
06-Dec-2023
23:21



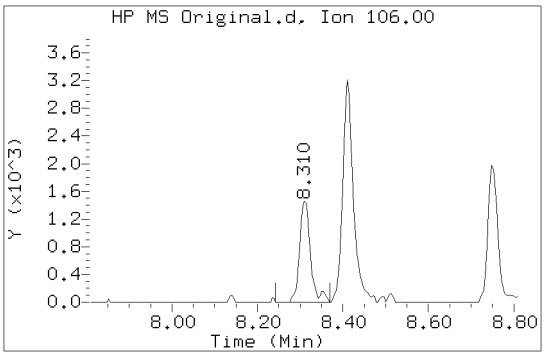
AFTER
MASS
109
AREA
1841
HEIGHT
1216
12-Dec-2023
09:43



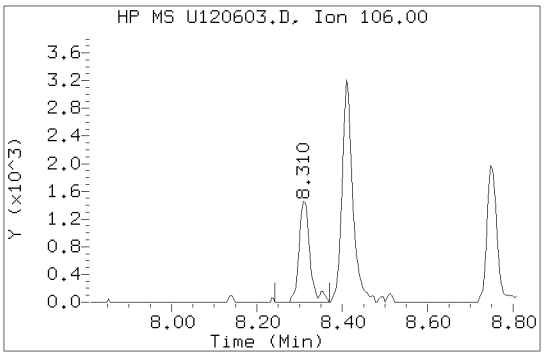
Ethylbenzene (100-41-4)

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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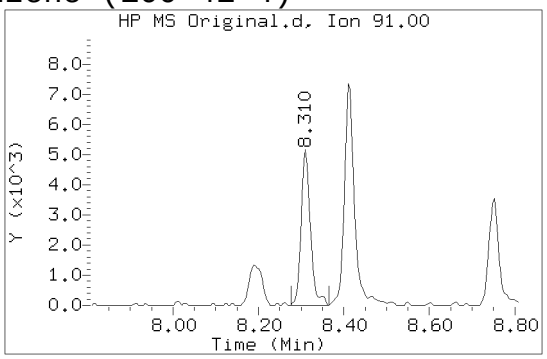
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

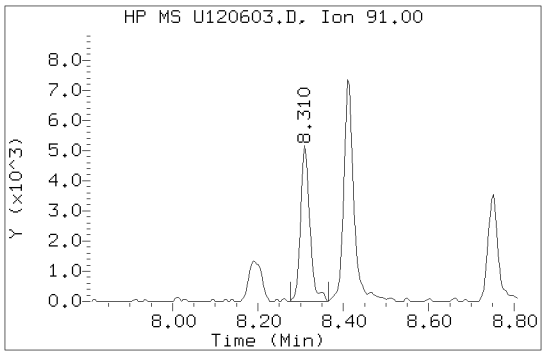
Ethylbenzene (100-41-4)

Reason Code:

BEFORE
MASS
91
AREA
11651
HEIGHT
7349
06-Dec-2023
23:21



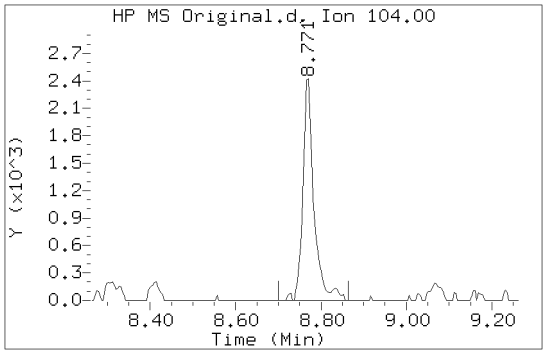
AFTER
MASS
91
AREA
7965
HEIGHT
5156
12-Dec-2023
09:43



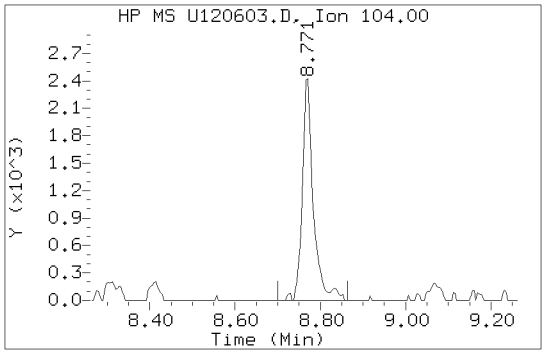
Styrene (100-42-5)

Reason Code:

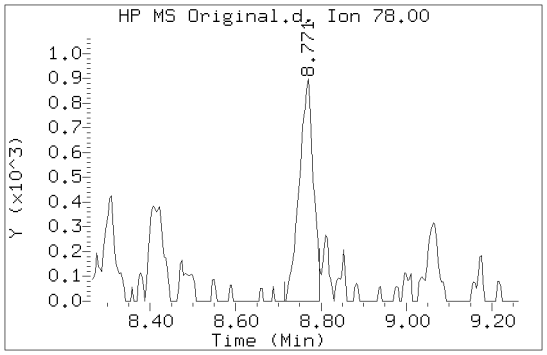
BEFORE
MASS
39
AREA
1878
HEIGHT
895
06-Dec-2023
23:21



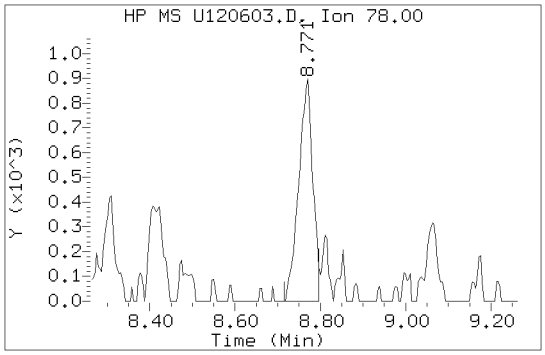
AFTER
MASS
104
AREA
4395
HEIGHT
2424
12-Dec-2023
09:43



BEFORE
MASS
40
AREA
2702
HEIGHT
1000
06-Dec-2023
23:21



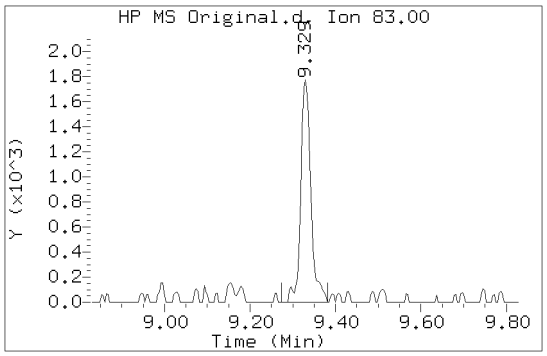
AFTER
MASS
78
AREA
2092
HEIGHT
898
12-Dec-2023
09:43



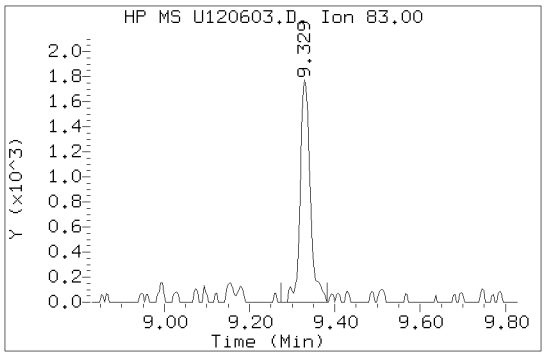
1,1,2,2-Tetrachloroethane (79-34-5)

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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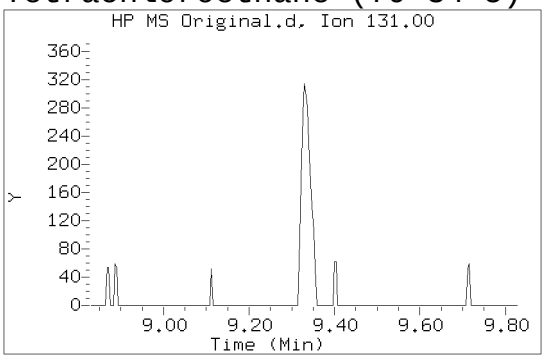
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

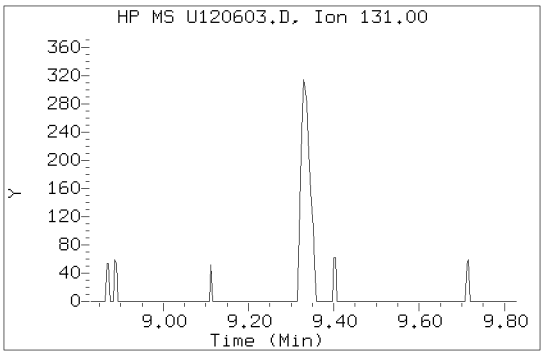
1,1,2,2-Tetrachloroethane (79-34-5)

Reason Code:

BEFORE
MASS
120
AREA
1897
HEIGHT
1147
06-Dec-2023
23:21



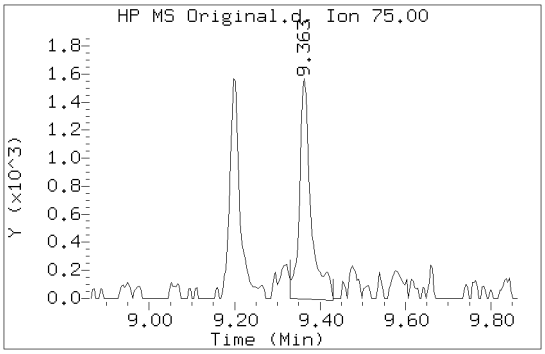
AFTER
MASS
131
AREA
0
HEIGHT
0
12-Dec-2023
09:43



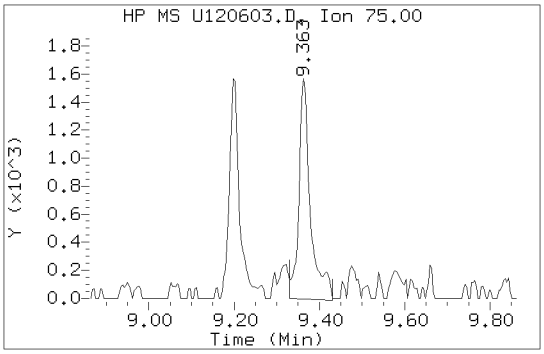
1,2,3-Trichloropropane (96-18-4)

Reason Code:

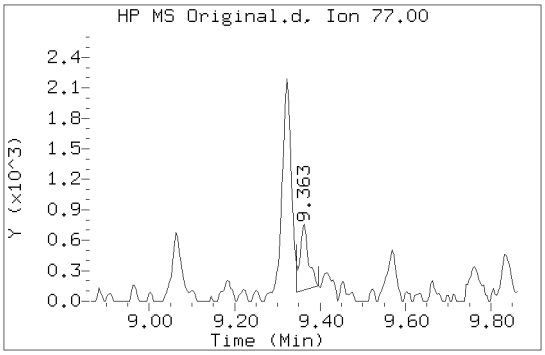
BEFORE
MASS
152
AREA
283463
HEIGHT
182528
06-Dec-2023
23:21



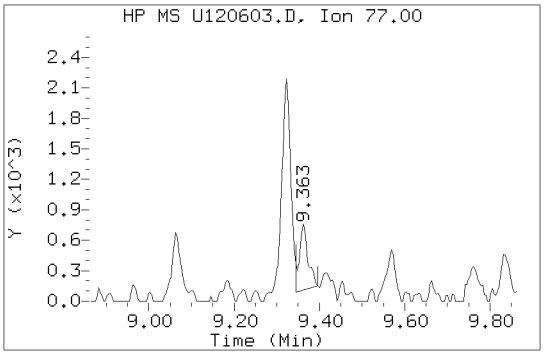
AFTER
MASS
75
AREA
3019
HEIGHT
1574
12-Dec-2023
09:43



BEFORE
MASS
115
AREA
153211
HEIGHT
96264
06-Dec-2023
23:21



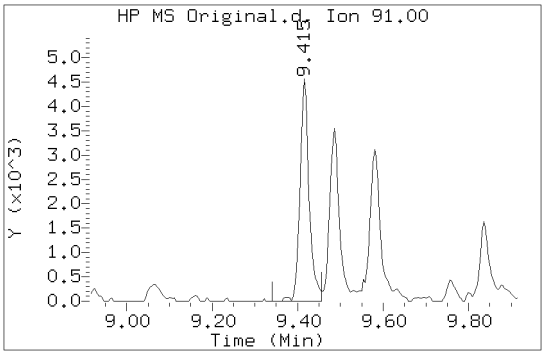
AFTER
MASS
77
AREA
958
HEIGHT
648
12-Dec-2023
09:43



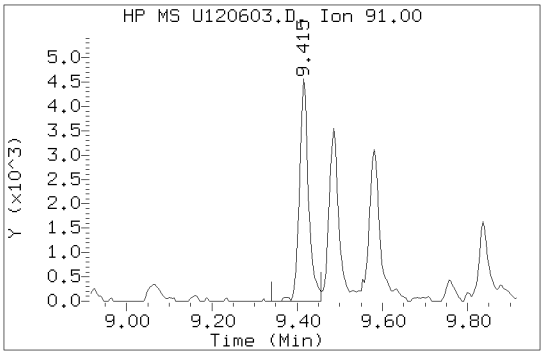
n-Propylbenzene (106-65-1)

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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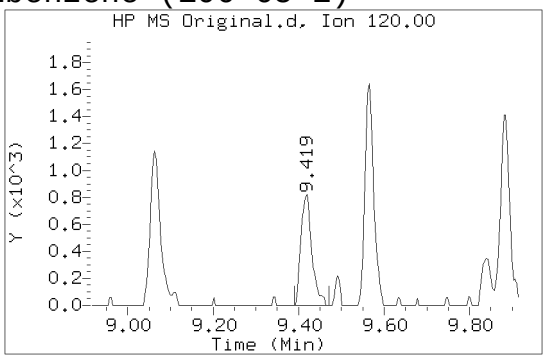
InstruID : VOA9.i
LabSampID : VSTD000.5

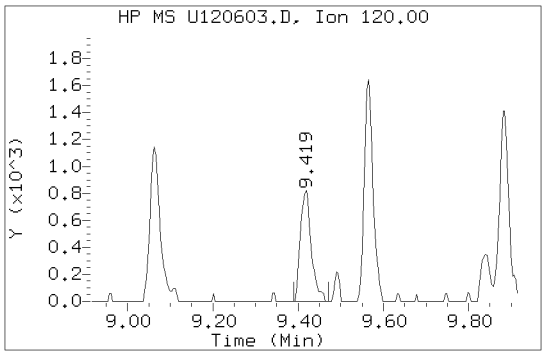
n-Propylbenzene (106-65-1)

Reason Code:

BEFORE
MASS
67
AREA
870
HEIGHT
457
06-Dec-2023
23:21



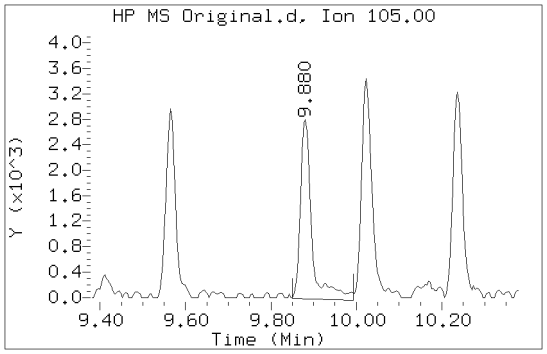
AFTER
MASS
120
AREA
1497
HEIGHT
820
12-Dec-2023
09:43



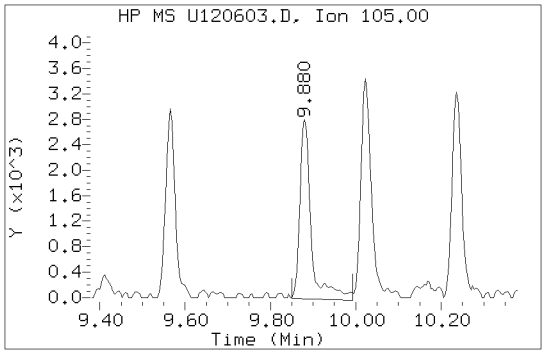
1,2,4-Trimethylbenzene (95-63-6)

Reason Code:

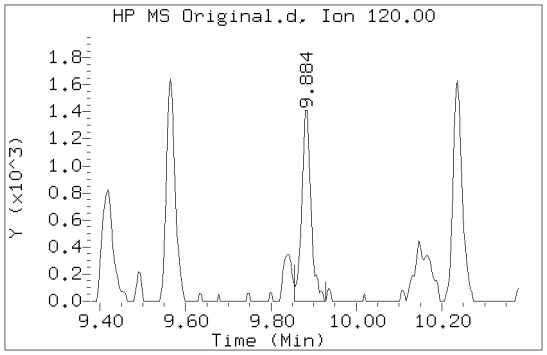
BEFORE
MASS
91
AREA
5799
HEIGHT
3547
06-Dec-2023
23:21



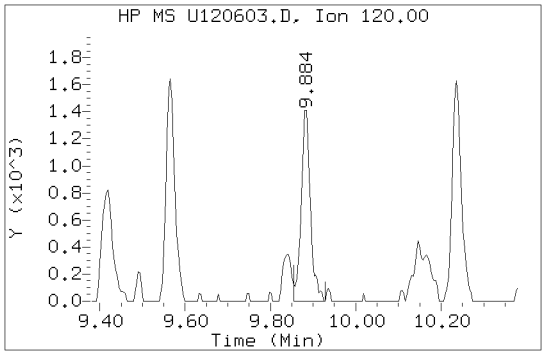
AFTER
MASS
105
AREA
5368
HEIGHT
2820
12-Dec-2023
09:43



BEFORE
MASS
126
AREA
1923
HEIGHT
1114
06-Dec-2023
23:21



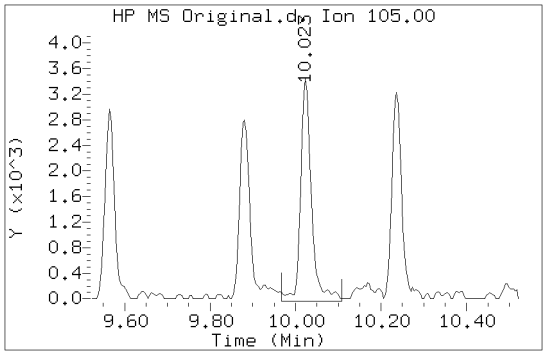
AFTER
MASS
120
AREA
2194
HEIGHT
1412
12-Dec-2023
09:43



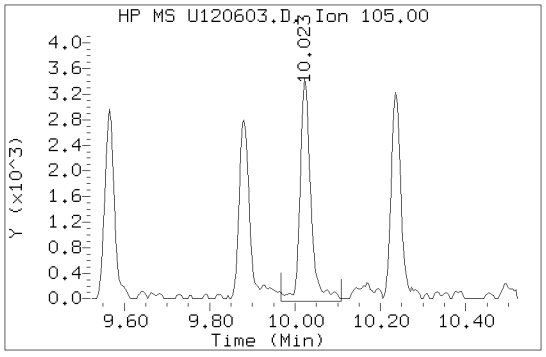
sec-Butylbenzene (135-98-8)

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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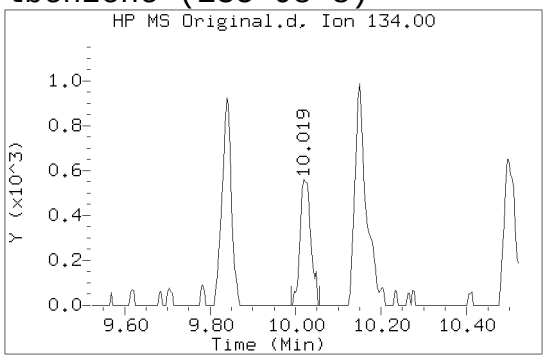
InstruID : VOA9.i
LabSampID : VSTD000.5

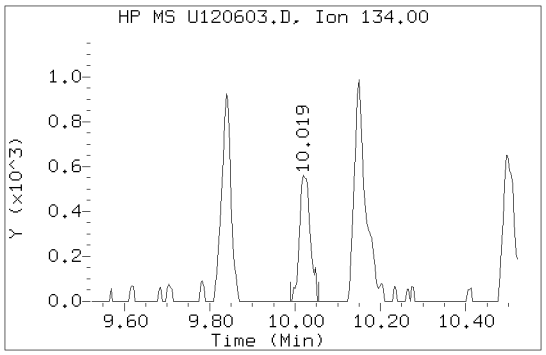
sec-Butylbenzene (135-98-8)

Reason Code:

BEFORE
MASS
126
AREA
1785
HEIGHT
845
06-Dec-2023
23:21



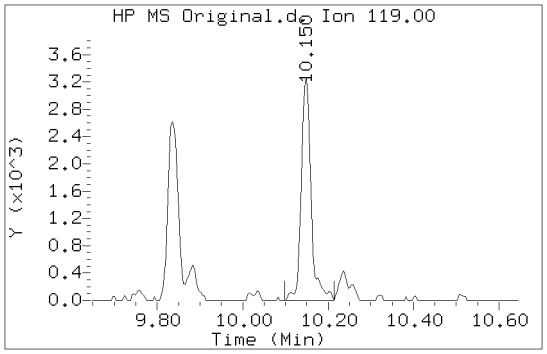
AFTER
MASS
134
AREA
1010
HEIGHT
562
12-Dec-2023
09:43



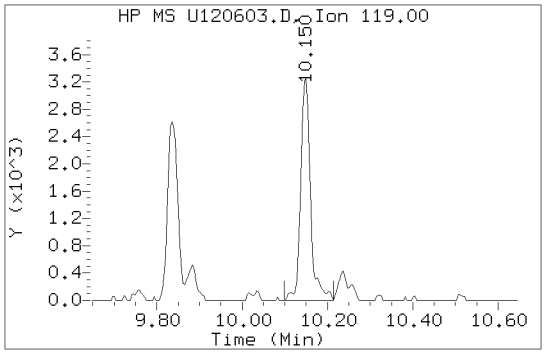
p-Isopropyltoluene (99-87-6)

Reason Code:

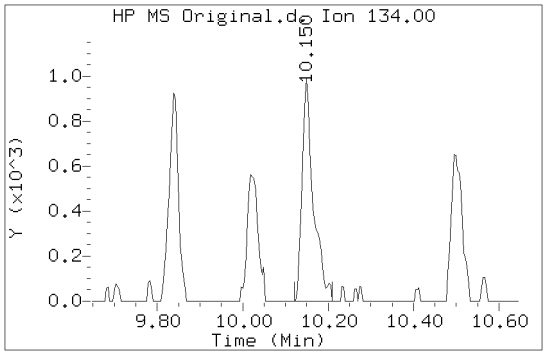
BEFORE
MASS
54
AREA
2827
HEIGHT
1063
06-Dec-2023
23:21



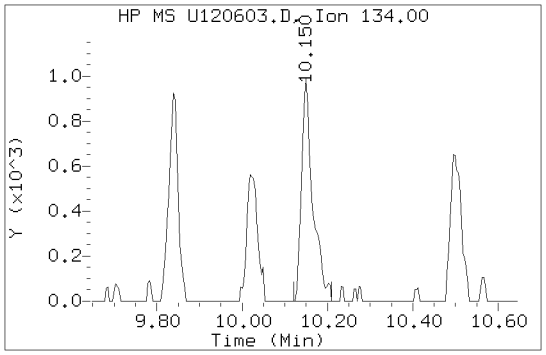
AFTER
MASS
119
AREA
5327
HEIGHT
3247
12-Dec-2023
09:43



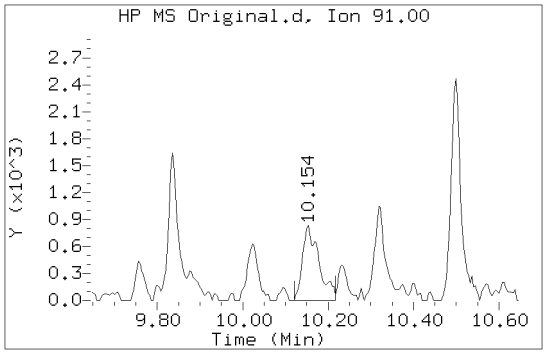
BEFORE
MASS
52
AREA
1029
HEIGHT
355
06-Dec-2023
23:21



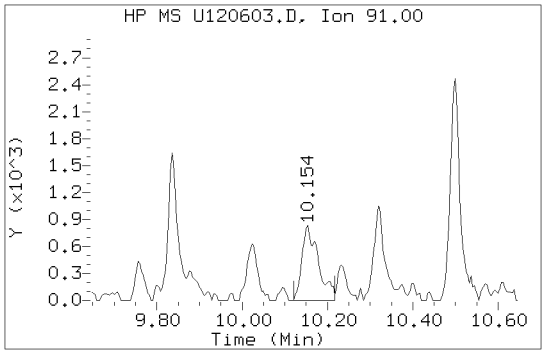
AFTER
MASS
134
AREA
1845
HEIGHT
988
12-Dec-2023
09:43



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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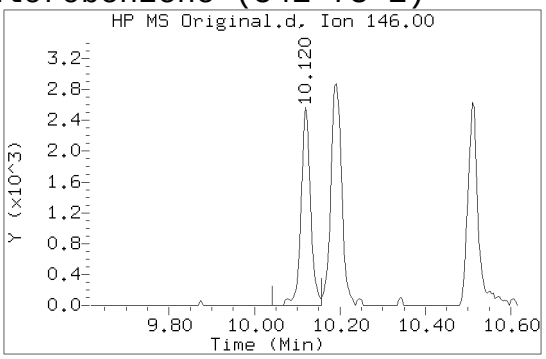
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

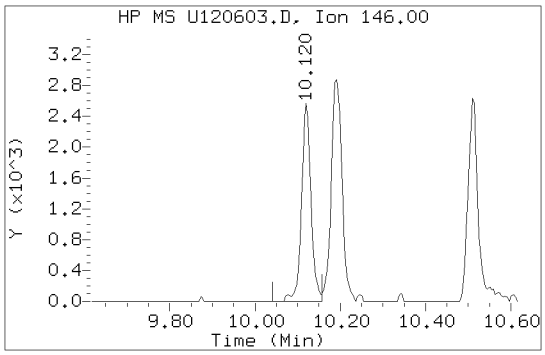
1,3-Dichlorobenzene (541-73-1)

Reason Code:

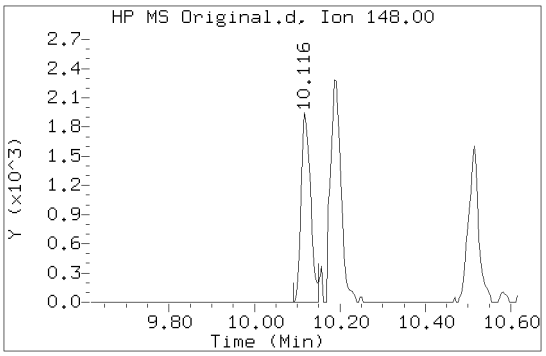
BEFORE
MASS
119
AREA
4379
HEIGHT
2623
06-Dec-2023
23:21



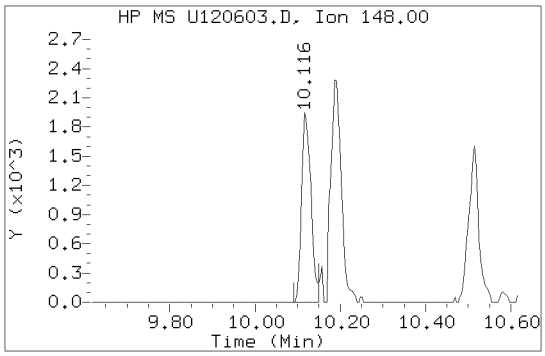
AFTER
MASS
146
AREA
4068
HEIGHT
2569
12-Dec-2023
09:43



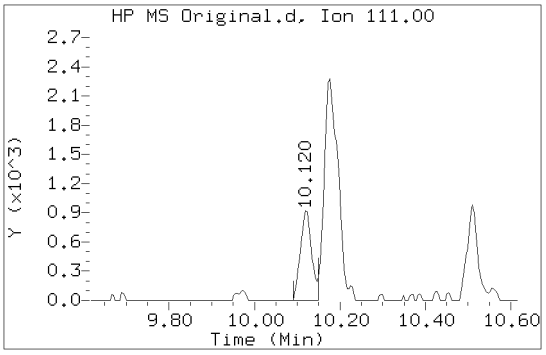
BEFORE
MASS
91
AREA
2568
HEIGHT
1643
06-Dec-2023
23:21



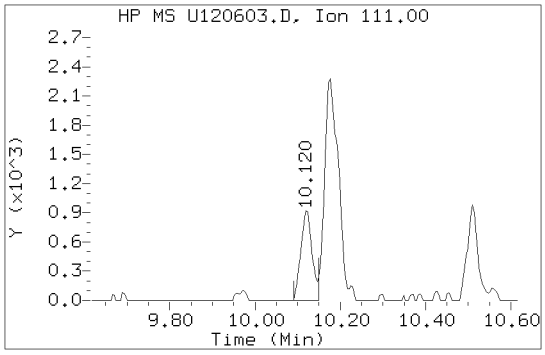
AFTER
MASS
148
AREA
3074
HEIGHT
1946
12-Dec-2023
09:43



BEFORE
MASS
134
AREA
1399
HEIGHT
925
06-Dec-2023
23:21



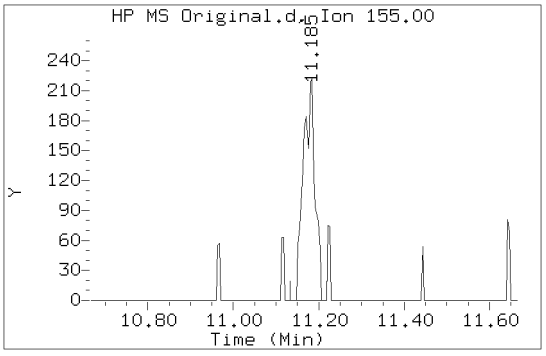
AFTER
MASS
111
AREA
1758
HEIGHT
922
12-Dec-2023
09:43



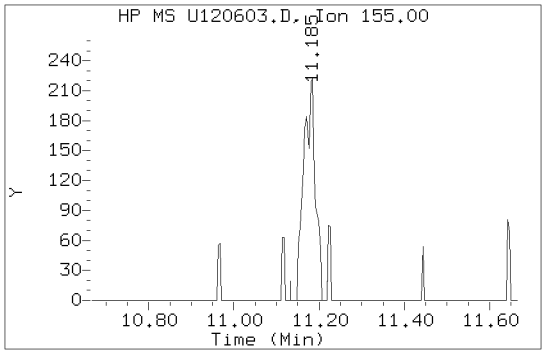
1,2-Dibromo-3-Chloropropane (96-12-8)

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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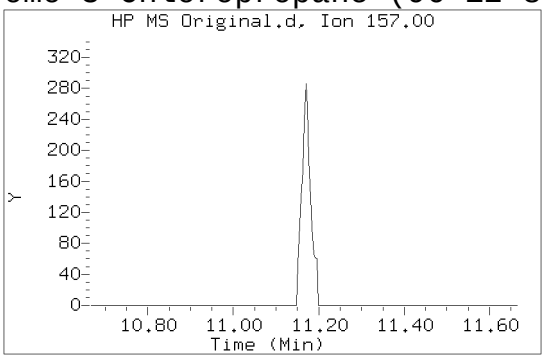
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

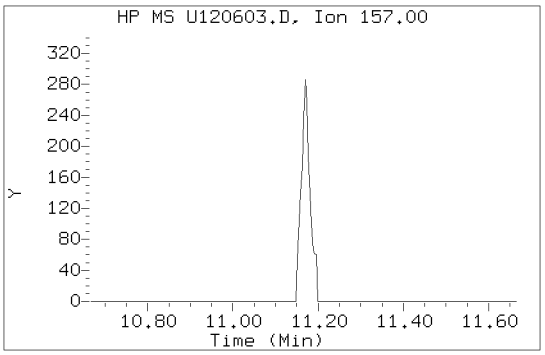
1,2-Dibromo-3-Chloropropane (96-12-8)

Reason Code:

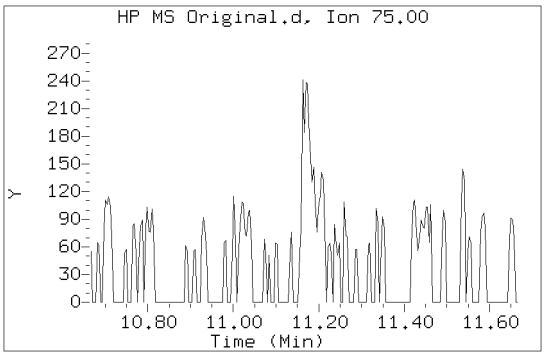
BEFORE
MASS
134
AREA
1845
HEIGHT
988
06-Dec-2023
23:21



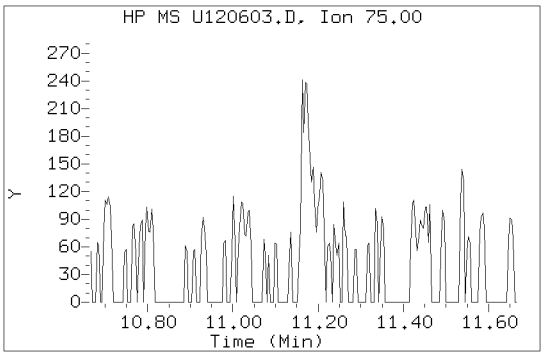
AFTER
MASS
157
AREA
0
HEIGHT
0
12-Dec-2023
09:43



BEFORE
MASS
91
AREA
2242
HEIGHT
834
06-Dec-2023
23:21



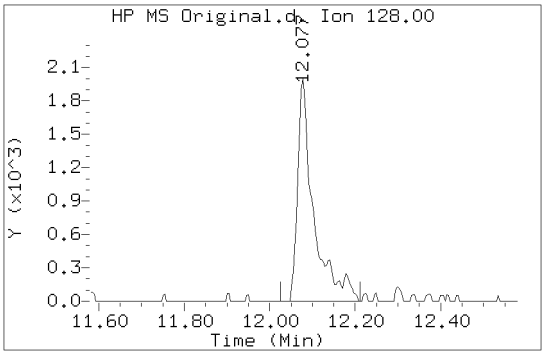
AFTER
MASS
75
AREA
0
HEIGHT
0
12-Dec-2023
09:43



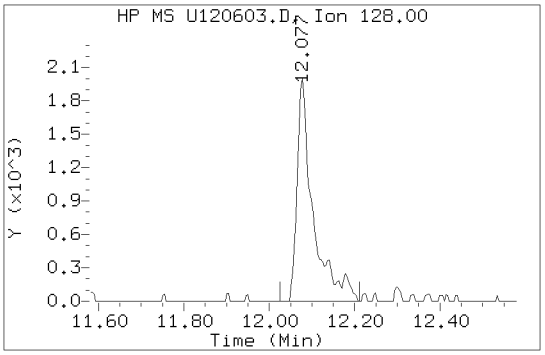
Naphthalene (91-20-3)

Reason Code:

BEFORE
MASS
43
AREA
498
HEIGHT
226
06-Dec-2023
23:21



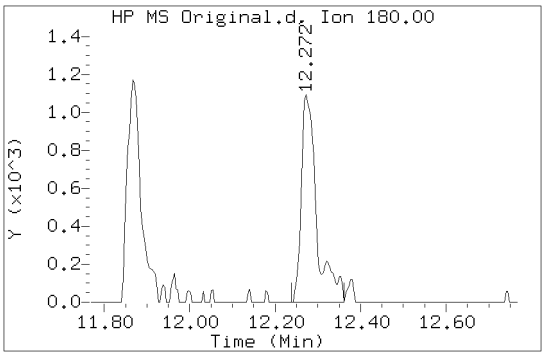
AFTER
MASS
128
AREA
5275
HEIGHT
1997
12-Dec-2023
09:43



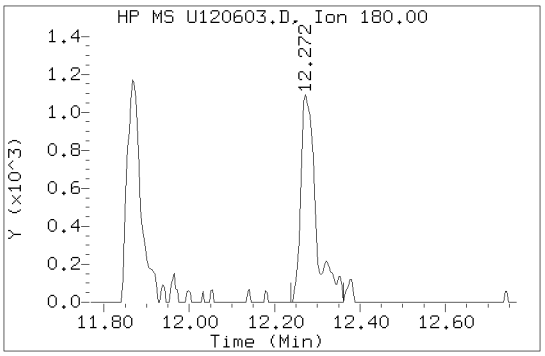
1,2,3-Trichlorobenzene (87-61-6)

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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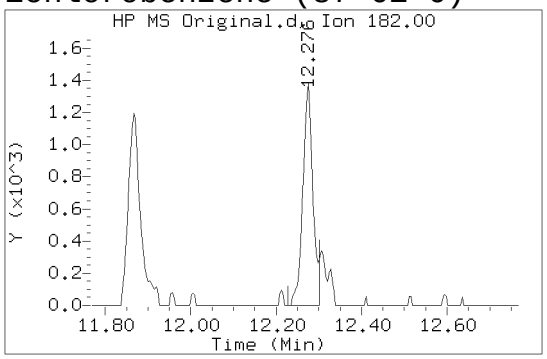
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

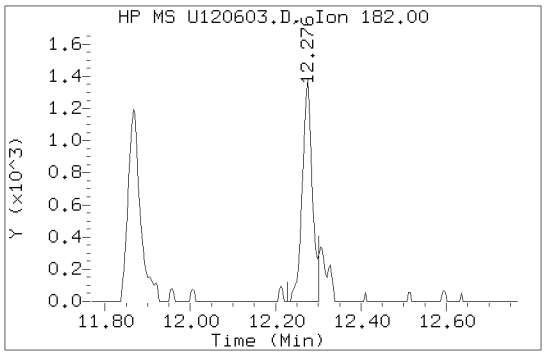
1,2,3-Trichlorobenzene (87-61-6)

Reason Code:

BEFORE
MASS
41
AREA
1454
HEIGHT
807
06-Dec-2023
23:21



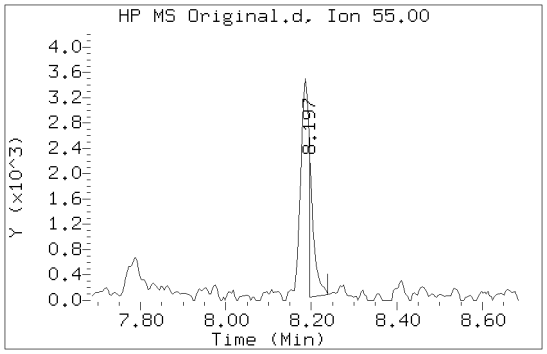
AFTER
MASS
182
AREA
2320
HEIGHT
1379
12-Dec-2023
09:43



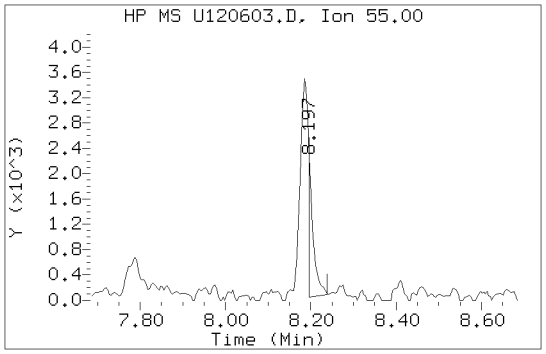
1-Chlorohexane (544-10-5)

Reason Code:

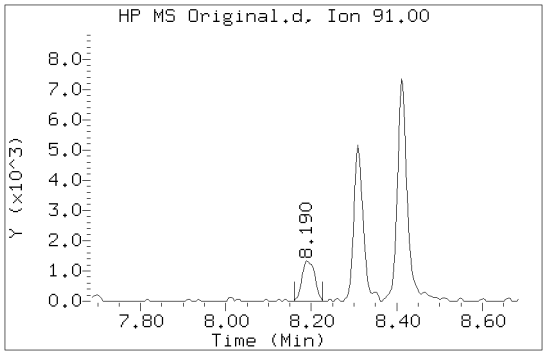
BEFORE
MASS
91
AREA
4072
HEIGHT
2467
06-Dec-2023
23:21



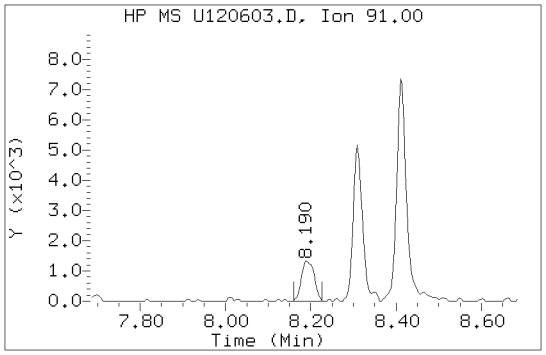
AFTER
MASS
55
AREA
1630
HEIGHT
2213
12-Dec-2023
09:43



BEFORE
MASS
92
AREA
2324
HEIGHT
1337
06-Dec-2023
23:21



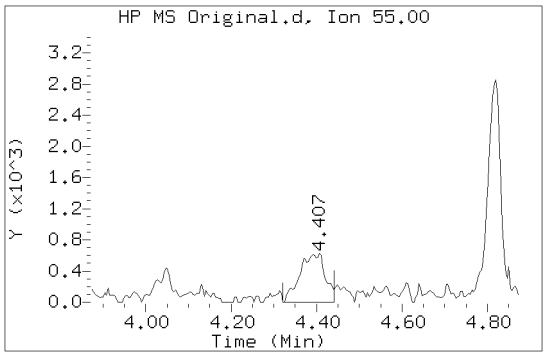
AFTER
MASS
91
AREA
2810
HEIGHT
1343
12-Dec-2023
09:43



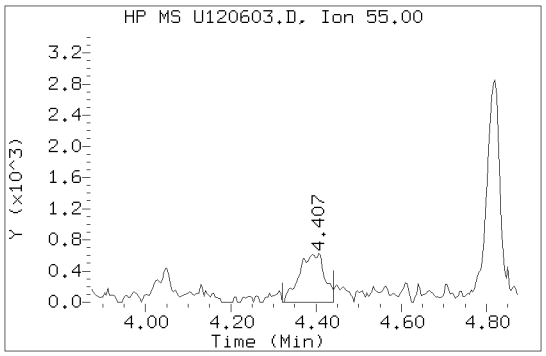
Methyl Acrylate (96-33-3)

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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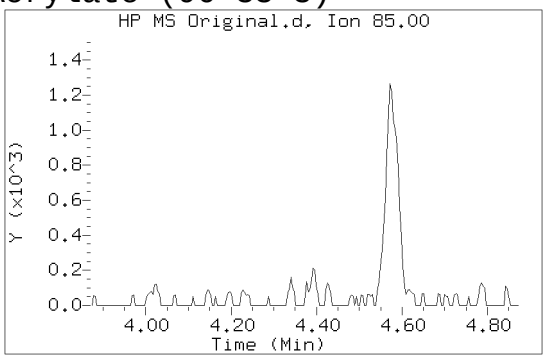
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

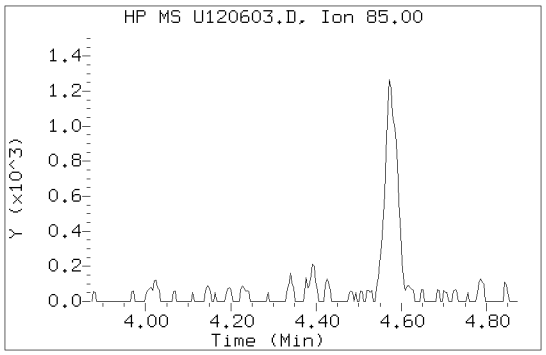
Methyl Acrylate (96-33-3)

Reason Code:

BEFORE
MASS
111
AREA
1683
HEIGHT
980
06-Dec-2023
23:21



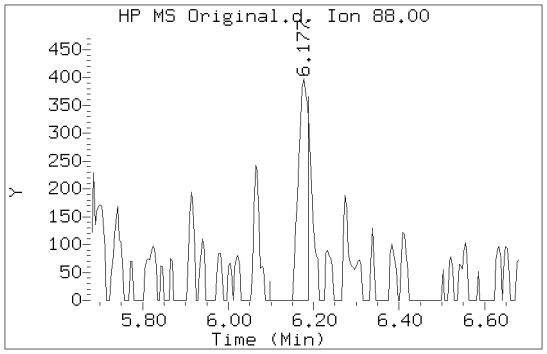
AFTER
MASS
85
AREA
0
HEIGHT
0
12-Dec-2023
09:43



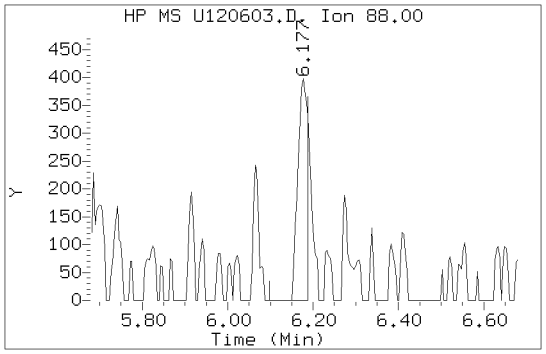
1,4-Dioxane ()

Reason Code:

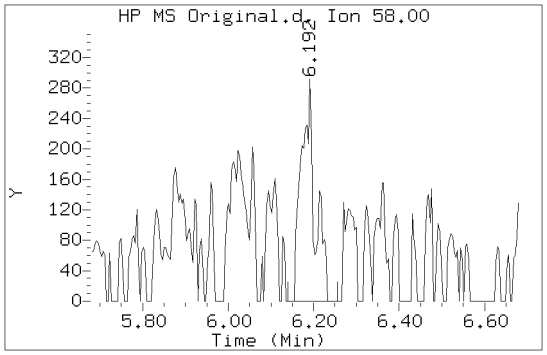
BEFORE
MASS
155
AREA
428
HEIGHT
222
06-Dec-2023
23:21



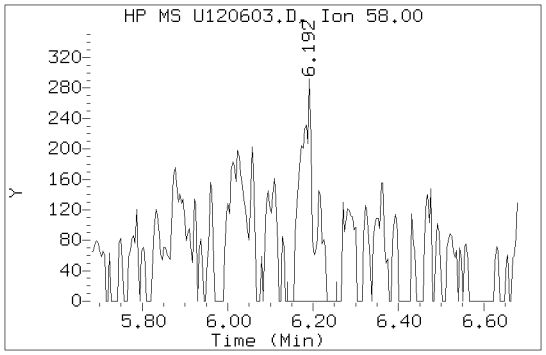
AFTER
MASS
88
AREA
631
HEIGHT
398
12-Dec-2023
09:43



BEFORE
MASS
157
AREA
0
HEIGHT
0
06-Dec-2023
23:21



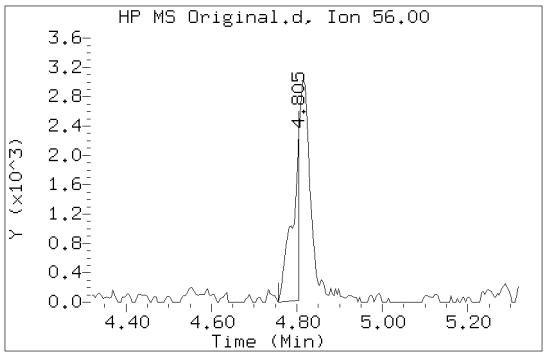
AFTER
MASS
58
AREA
659
HEIGHT
292
12-Dec-2023
09:43



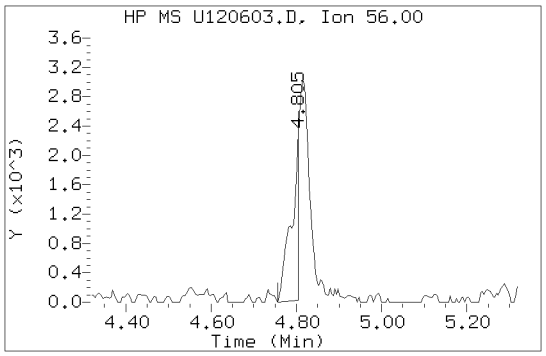
Cyclohexane (110-82-7)

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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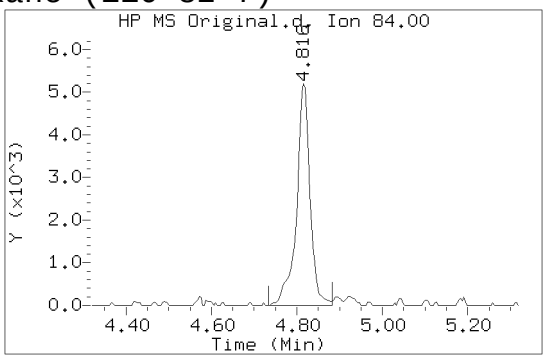
InstruID : VOA9.i
LabSampID : VSTD000.5

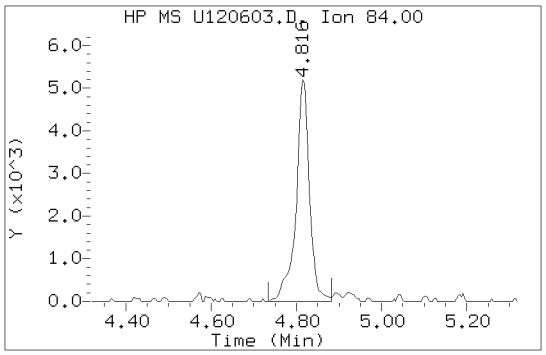
Cyclohexane (110-82-7)

Reason Code:

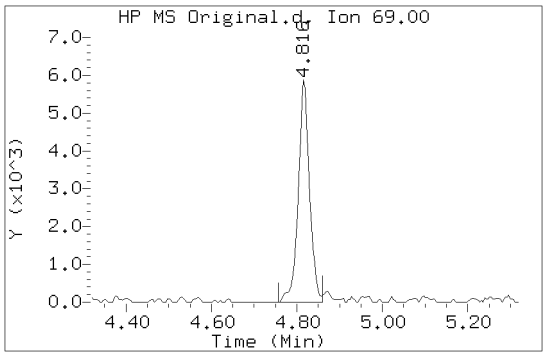
BEFORE
MASS
223
AREA
804
HEIGHT
596
06-Dec-2023
23:21



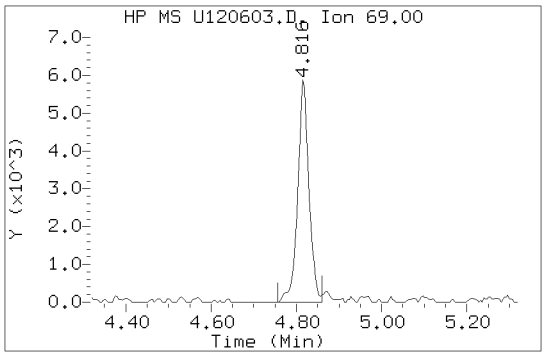
AFTER
MASS
84
AREA
11638
HEIGHT
5200
12-Dec-2023
09:43



BEFORE
MASS
227
AREA
867
HEIGHT
483
06-Dec-2023
23:21



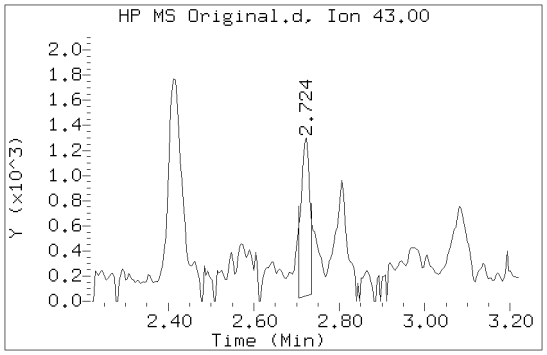
AFTER
MASS
69
AREA
10984
HEIGHT
5878
12-Dec-2023
09:43



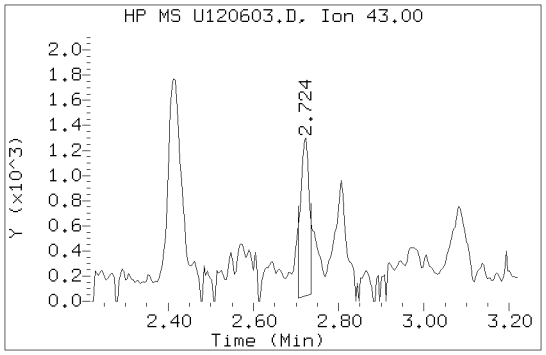
Methyl Acetate (79-20-9)

Reason Code:

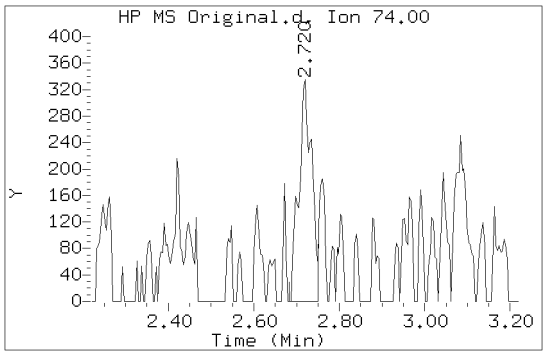
BEFORE
MASS
96
AREA
4345
HEIGHT
2092
06-Dec-2023
23:21



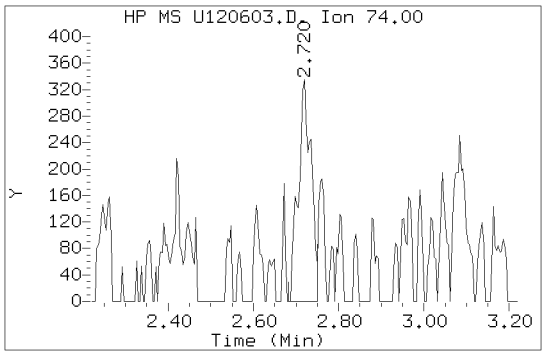
AFTER
MASS
43
AREA
1832
HEIGHT
1256
12-Dec-2023
09:43



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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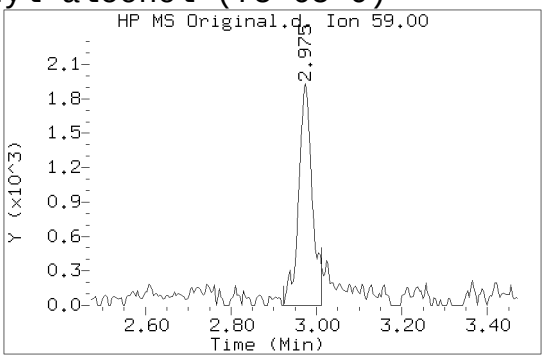
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

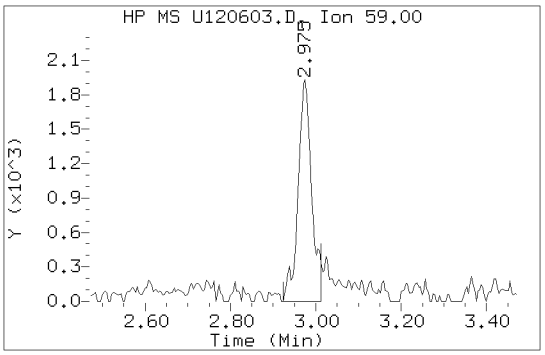
Tert-Butyl alcohol (75-65-0)

BEFORE
MASS
106
AREA
8901
HEIGHT
5189
06-Dec-2023
23:21

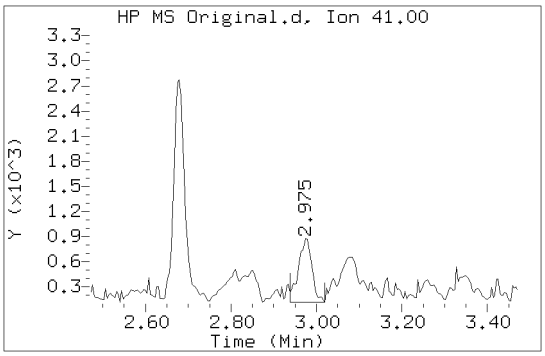


Reason Code:

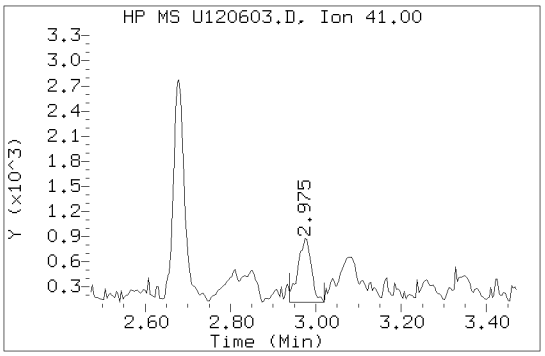
AFTER
MASS
59
AREA
4359
HEIGHT
1932
12-Dec-2023
09:43



BEFORE
MASS
91
AREA
0
HEIGHT
0
06-Dec-2023
23:21

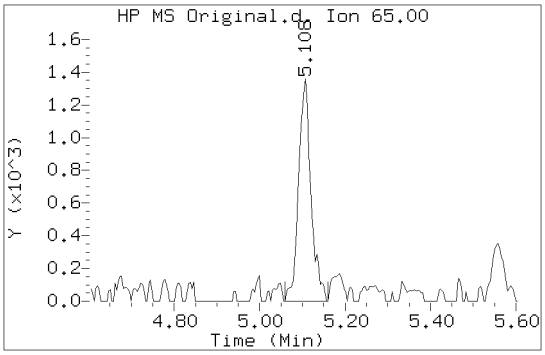


AFTER
MASS
41
AREA
1697
HEIGHT
762
12-Dec-2023
09:43



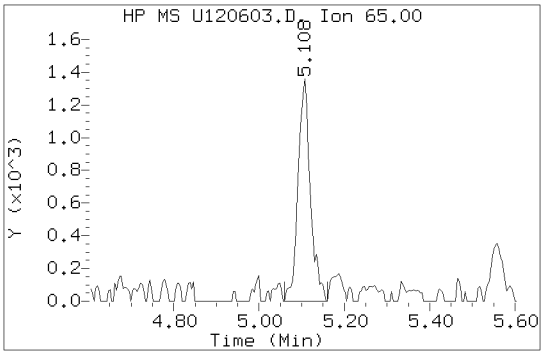
1,2-Dichloroethane-d4 (17060-07-0)

BEFORE
MASS
53
AREA
748
HEIGHT
511
06-Dec-2023
23:21

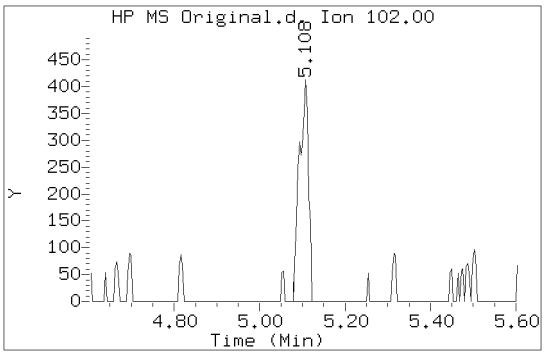


Reason Code:

AFTER
MASS
65
AREA
2783
HEIGHT
1359
12-Dec-2023
09:43



BEFORE
MASS
88
AREA
0
HEIGHT
0
06-Dec-2023
23:21



AFTER
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102
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627
HEIGHT
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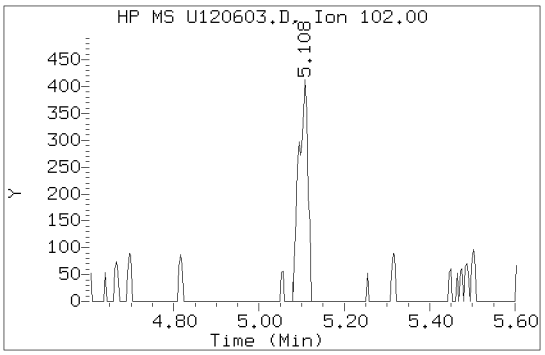
12-Dec-2023
09:43



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Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

4-Bromofluorobenzene (460-00-4)

Reason Code:

BEFORE

MASS
55
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2589
HEIGHT
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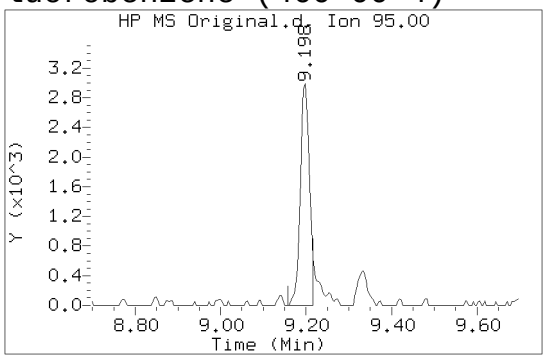
06-Dec-2023
23:21



AFTER

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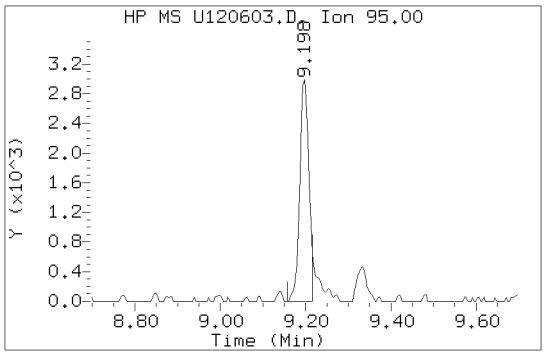
12-Dec-2023
09:43



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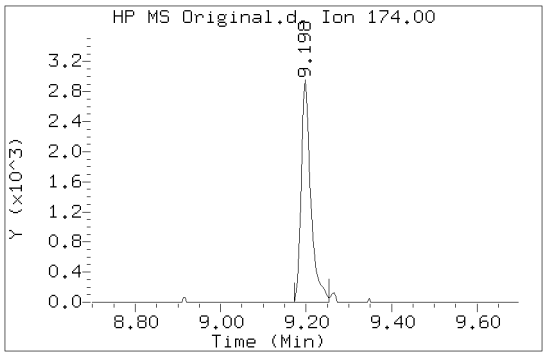
06-Dec-2023
23:21



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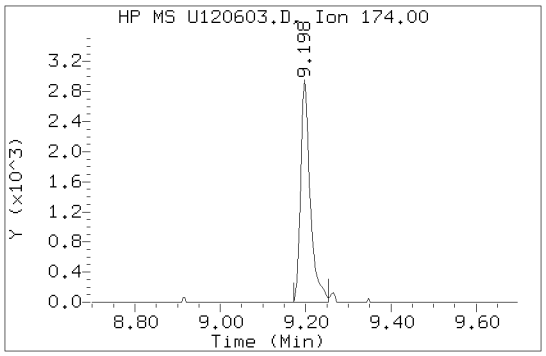
12-Dec-2023
09:43



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

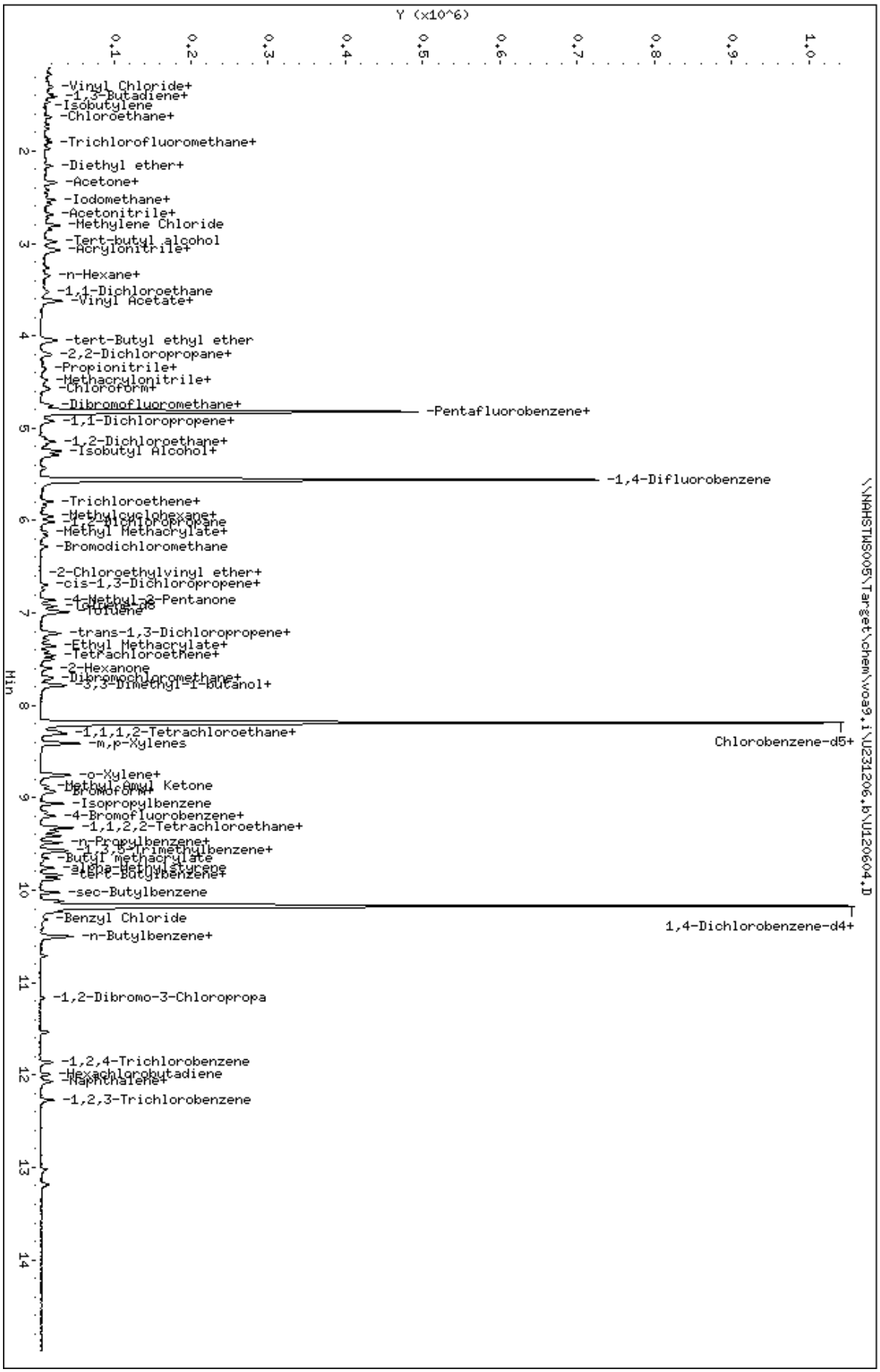
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	29 Bromochloromethane	128	4.474	4.474	(0.928)	2488	1.00000	1.09
$	30 Dibromofluoromethane	113	4.755	4.755	(0.986)	3773	1.00000	0.03
	31 1,1,1-Trichloroethane	97	4.748	4.748	(0.984)	5996	1.00000	1.08
	32 1,1-Dichloropropene	75	4.928	4.928	(0.887)	4846	1.00000	1.02
	33 1,2-Dichloroethane	62	5.183	5.183	(0.933)	5940	1.00000	1.08
	34 Carbon Tetrachloride	117	4.920	4.920	(0.885)	5152	1.00000	1.12
$	35 1,2-Dichloroethane-d4	65	5.104	5.104	(1.058)	4689	1.00000	0.63(M)
*	36 1,4-Difluorobenzene	114	5.558	5.558	(1.000)	562847	50.0000	
	37 Benzene	78	5.145	5.145	(0.926)	17110	1.00000	1.11
	38 Trichloroethene	130	5.797	5.797	(1.043)	5113	1.00000	1.21(M)
	39 Bromodichloromethane	83	6.281	6.281	(1.130)	5619	1.00000	1.11(M)
	41 2-Chloroethylvinyl ether	63	6.573	6.573	(1.183)	104	2.00000	0.20(M)
	42 1,2-Dichloropropane	63	6.015	6.015	(1.082)	4582	1.00000	1.11(M)
	44 Dibromomethane	93	6.127	6.127	(1.103)	3012	1.00000	1.12
	45 4-Methyl-2-Pentanone	43	6.858	6.858	(0.838)	12410	2.00000	2.72(M)
	46 cis-1,3-Dichloropropene	75	6.697	6.697	(1.205)	5439	1.00000	2.29
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	559222	50.0000	
$	48 Toluene-d8	98	6.926	6.926	(0.846)	13196	1.00000	1.02
	50 Toluene	91	6.986	6.986	(0.853)	16234	1.00000	1.04
	51 trans-1,3-Dichloropropene	75	7.203	7.203	(1.296)	4518	1.00000	2.57
	52 2-Hexanone	43	7.601	7.601	(0.929)	7475	2.00000	2.64(M)
	53 1,1,2-Trichloroethane	83	7.357	7.357	(0.899)	4469	1.00000	0.19
	54 1,3-Dichloropropane	76	7.499	7.499	(0.916)	8254	1.00000	1.19(M)
	55 Dibromochloromethane	129	7.694	7.694	(0.940)	5059	1.00000	1.21(M)
	56 Tetrachloroethene	164	7.458	7.458	(0.911)	3841	1.00000	1.15
	57 1,2-Dibromoethane	107	7.788	7.788	(0.951)	4790	1.00000	1.23(M)
	58 1-Chlorohexane	55	8.197	8.197	(1.475)	3275	1.00000	1.03(M)
	59 Chlorobenzene	112	8.212	8.212	(1.003)	13746	1.00000	1.21(M)
	60 1,1,1,2-Tetrachloroethane	131	8.287	8.287	(1.012)	4936	1.00000	1.24
	61 Ethylbenzene	106	8.305	8.305	(1.015)	6099	1.00000	1.14
	62 m,p-Xylenes	106	8.410	8.410	(1.027)	13585	2.00000	2.12
	63 o-Xylene	106	8.748	8.748	(1.069)	7030	1.00000	1.06
	64 Styrene	104	8.766	8.766	(1.071)	12128	1.00000	1.10
	66 Bromoform	173	8.924	8.924	(1.090)	4009	1.00000	2.45(TM)
	67 Isopropylbenzene	105	9.063	9.063	(1.107)	17436	1.00000	1.09
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	10887	1.00000	1.65
$	69 4-Bromofluorobenzene	95	9.198	9.198	(1.124)	5567	1.00000	
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	292314	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.920)	7225	1.00000	1.30(M)
	73 n-Propylbenzene	91	9.415	9.415	(0.926)	18576	1.00000	1.08
	74 Bromobenzene	156	9.321	9.321	(0.916)	6451	1.00000	1.31(M)
	75 1,3,5-Trimethylbenzene	105	9.565	9.565	(0.940)	13515	1.00000	1.10
	76 2-Chlorotoluene	91	9.486	9.486	(0.933)	13144	1.00000	1.13(M)
	77 4-Chlorotoluene	91	9.580	9.580	(0.942)	15217	1.00000	1.16(M)
	78 tert-Butylbenzene	119	9.835	9.835	(0.967)	13105	1.00000	1.19
	79 1,2,4-Trimethylbenzene	105	9.880	9.880	(0.971)	12864	1.00000	1.05
	81 sec-Butylbenzene	105	10.022	10.022	(0.985)	14821	1.00000	1.04
	82 p-Isopropyltoluene	119	10.146	10.146	(0.997)	12618	1.00000	1.03
	83 1,3-Dichlorobenzene	146	10.116	10.116	(0.994)	11762	1.00000	1.35(M)
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	11764	1.00000	1.27(M)
	87 n-Butylbenzene	91	10.495	10.495	(1.032)	10752	1.00000	1.04
	88 1,2-Dichlorobenzene	146	10.510	10.510	(1.033)	11314	1.00000	1.29(M)

89	1,2-Dibromo-3-Chloropropane	155	11.169	11.169 (1.098)	1017	1.00000	3.25(M)
90	1,2,4-Trichlorobenzene	180	11.863	11.863 (1.166)	6332	1.00000	1.17

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	91 Hexachlorobutadiene	225	11.994	11.994	(1.179)	2507	1.00000	1.15
	92 Naphthalene	128	12.073	12.073	(1.187)	13023	1.00000	1.00(M)
	93 1,2,3-Trichlorobenzene	180	12.271	12.271	(1.206)	6413	1.00000	1.17(M)
M	94 1,2-Dichloroethylene (total)	96				8502	2.00000	
M	95 Xylenes (total)	106				20615	3.00000	
	131 Methyl Acrylate	55	4.388	4.388	(0.910)	3784	1.00000	0.81(a)
	135 1,4-Dioxane	88	6.172	6.172	(1.280)	1303	20.0000	23.14(M)
	141 Cyclohexane	56	4.797	4.797	(0.995)	5330	1.00000	1.04(M)
	138 Freon TF	101	2.345	2.345	(0.486)	3267	1.00000	1.27
	140 1,3-Butadiene	54	1.411	1.411	(0.293)	3808	1.00000	1.06
	147 Methylcyclohexane	55	5.955	5.955	(1.071)	7513	1.00000	0.90
	146 Methyl Acetate	43	2.724	2.724	(0.565)	4056	1.00000	1.14
	148 Tert-Butyl alcohol	59	2.982	2.982	(0.618)	9972	20.0000	25.10(aM)
	149 Isopropyl Alcohol	45	2.577	2.577	(0.534)	6719	20.0000	22.65(M)

QC Flag Legend

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



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Client ID: VSTD001
Sample Info: VSTD001;VSTD001;1;3;
Purge Volume: 5.0
Column phase: DB624

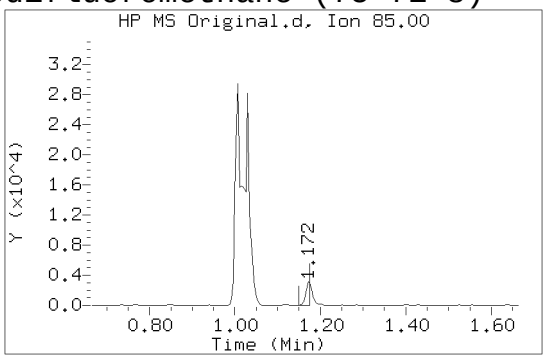
Instrument: VOA9,i
Operator: PC
Column diameter: 0.18

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
MASS
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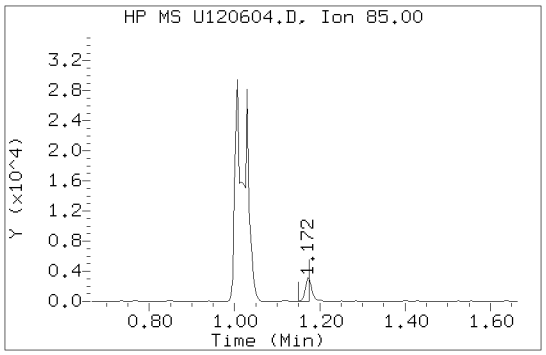
AREA
2370
HEIGHT
3168
12-Dec-2023
09:43



BEFORE
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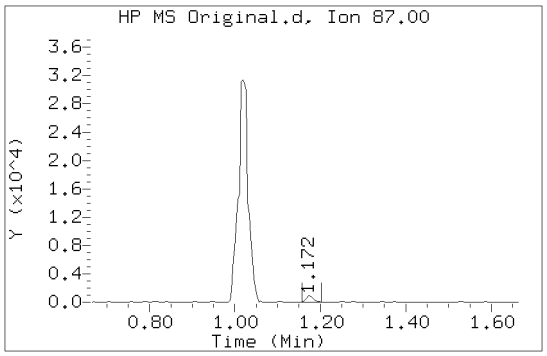
06-Dec-2023
23:21



AFTER
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AREA
1076
HEIGHT
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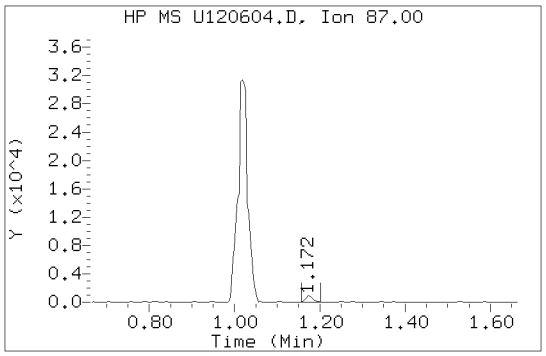
12-Dec-2023
09:43



Chloromethane (74-87-3)

Reason Code:

BEFORE
MASS
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3158
HEIGHT
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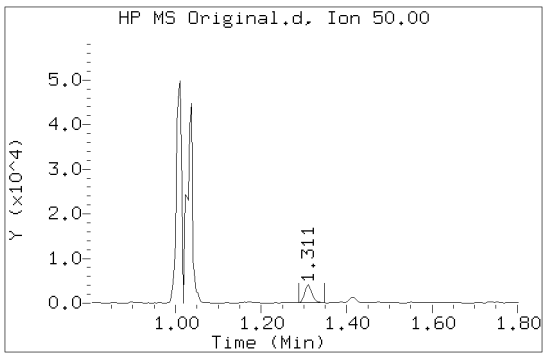
06-Dec-2023
23:21



AFTER
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AREA
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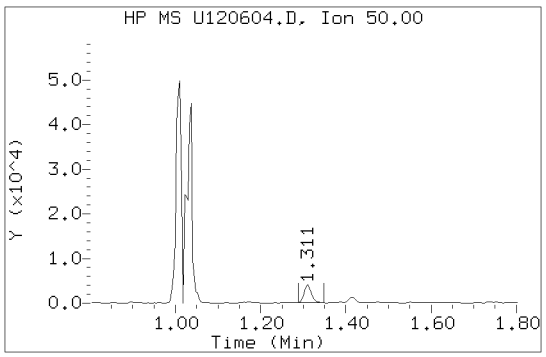
HEIGHT
4016
12-Dec-2023
09:43



BEFORE
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AREA
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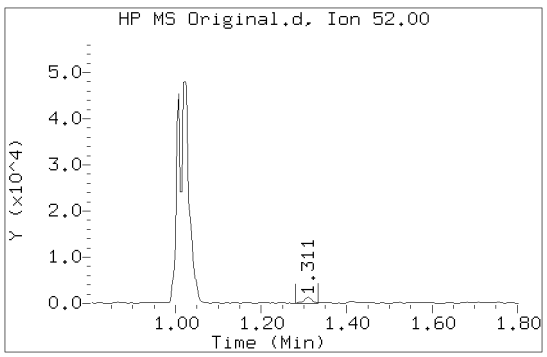
HEIGHT
3099
06-Dec-2023
23:21



AFTER
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52
AREA
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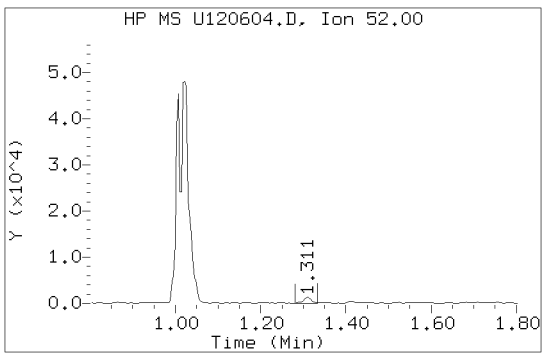
HEIGHT
1412
12-Dec-2023
09:43



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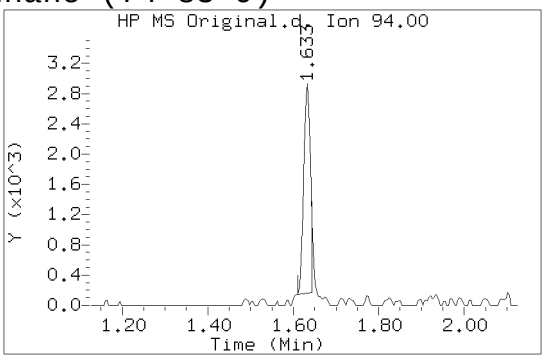
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

Bromomethane (74-83-9)

Reason Code:

BEFORE
MASS
101
AREA
5386
HEIGHT
3672
06-Dec-2023
23:21



AFTER
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AREA
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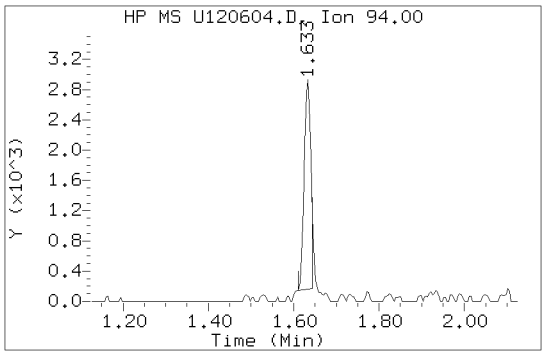
HEIGHT
2771
12-Dec-2023
09:43



BEFORE
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AREA
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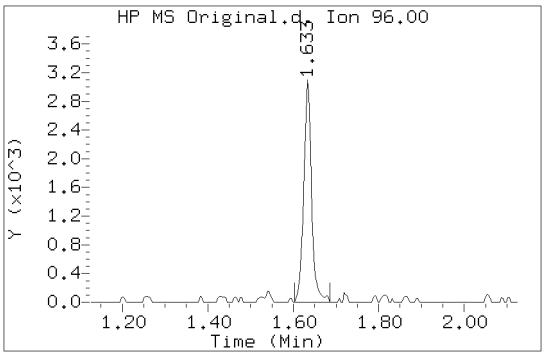
HEIGHT
2271
06-Dec-2023
23:21



AFTER
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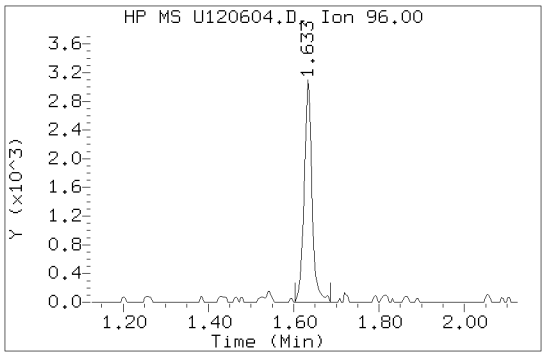
HEIGHT
3099
12-Dec-2023
09:43



Acrolein (107-02-8)

Reason Code:

BEFORE
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AREA
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HEIGHT
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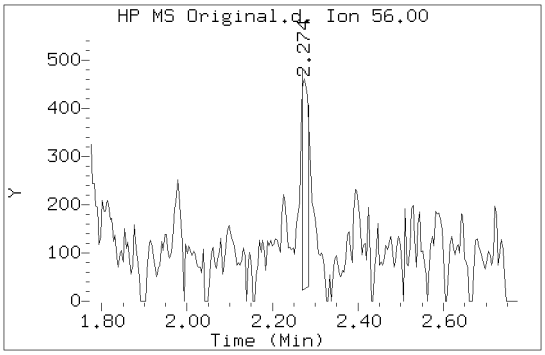
06-Dec-2023
23:21



AFTER
MASS
56
AREA
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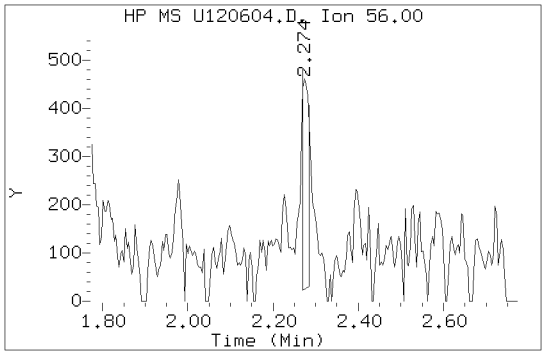
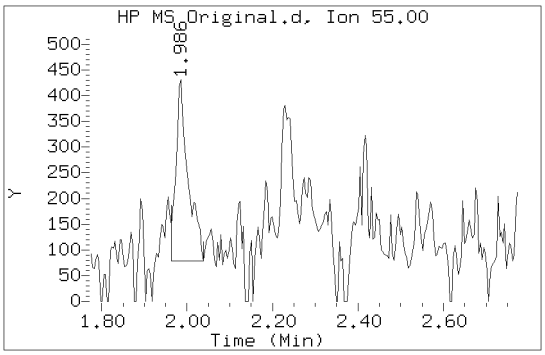
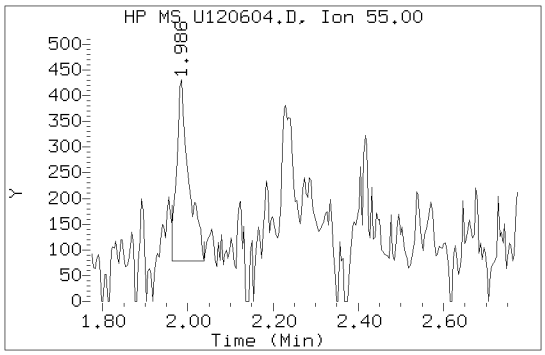
HEIGHT
436
12-Dec-2023
09:43



BEFORE
MASS
127
AREA
1345
HEIGHT
757
06-Dec-2023
23:21



AFTER
MASS
55
AREA
701
HEIGHT
352
12-Dec-2023
09:43



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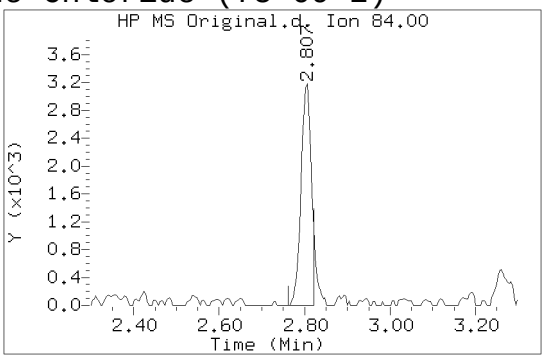
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

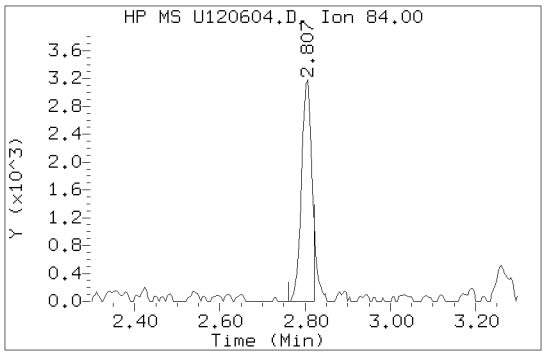
Methylene Chloride (75-09-2)

Reason Code:

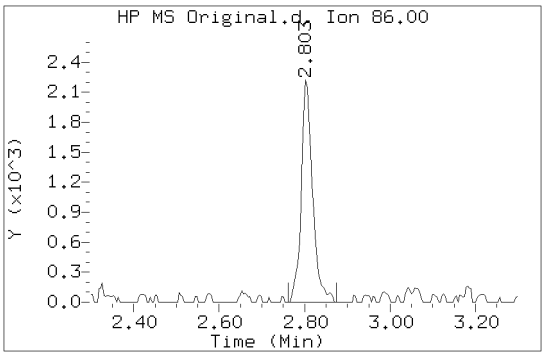
BEFORE
MASS
96
AREA
3410
HEIGHT
1769
06-Dec-2023
23:21



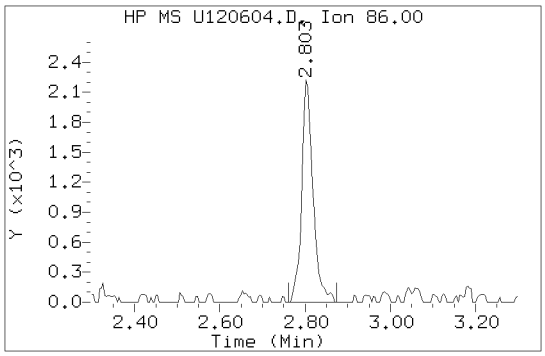
AFTER
MASS
84
AREA
5310
HEIGHT
3183
12-Dec-2023
09:43



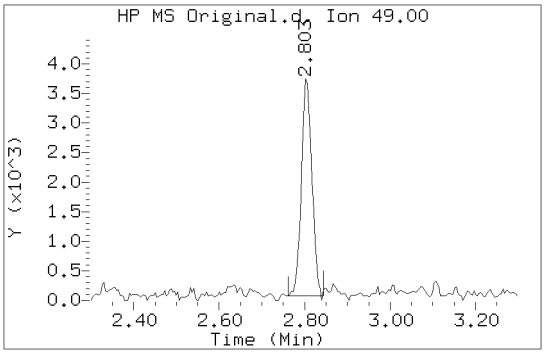
BEFORE
MASS
61
AREA
4667
HEIGHT
2499
06-Dec-2023
23:21



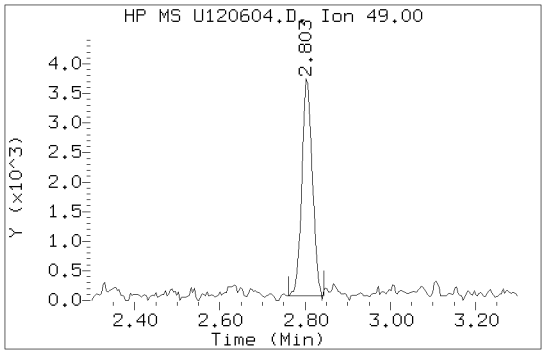
AFTER
MASS
86
AREA
4161
HEIGHT
2223
12-Dec-2023
09:43



BEFORE
MASS
98
AREA
2308
HEIGHT
1305
06-Dec-2023
23:21



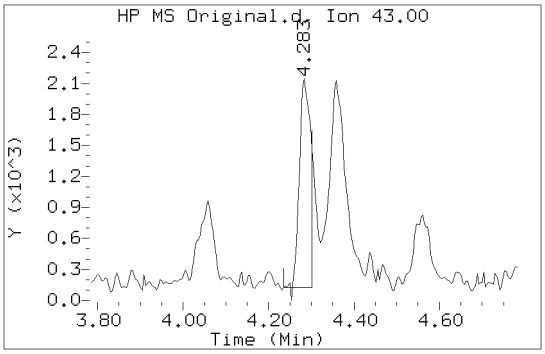
AFTER
MASS
49
AREA
6329
HEIGHT
3671
12-Dec-2023
09:43



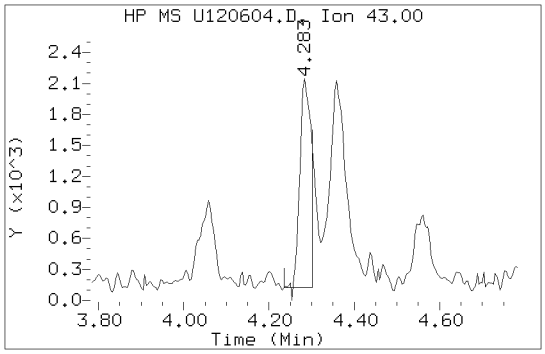
2-Butanone (78-93-3)

Reason Code:

BEFORE
MASS
128
AREA
2488
HEIGHT
1332
06-Dec-2023
23:21



AFTER
MASS
43
AREA
3703
HEIGHT
2024
12-Dec-2023
09:43



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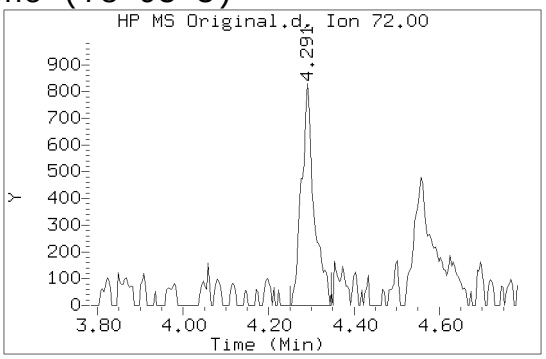
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

2-Butanone (78-93-3)

Reason Code:

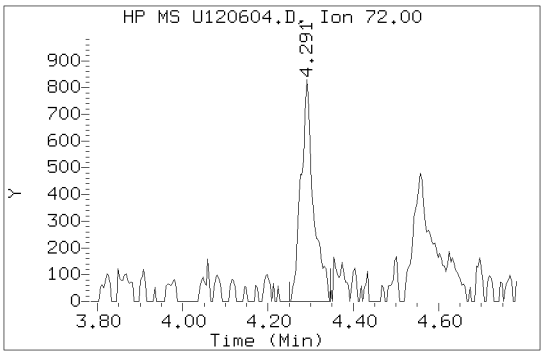
BEFORE

MASS
49
AREA
4566
HEIGHT
2024
06-Dec-2023
23:21



AFTER

MASS
72
AREA
1726
HEIGHT
829
12-Dec-2023
09:43

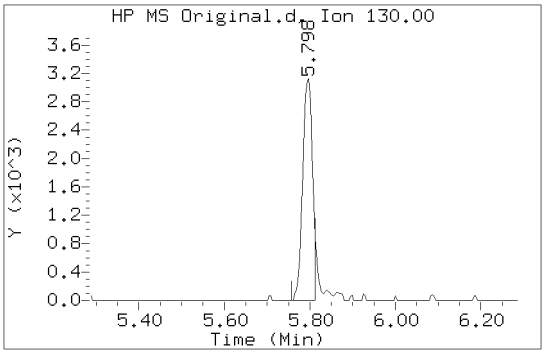


Trichloroethene (79-01-6)

Reason Code:

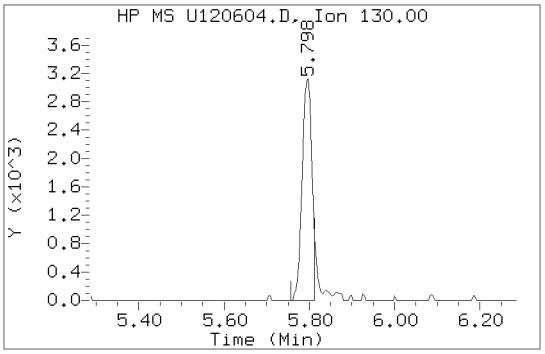
BEFORE

MASS
43
AREA
12410
HEIGHT
7604
06-Dec-2023
23:21



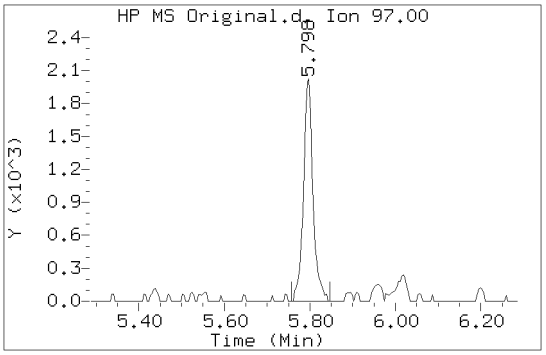
AFTER

MASS
130
AREA
5113
HEIGHT
3126
12-Dec-2023
09:43



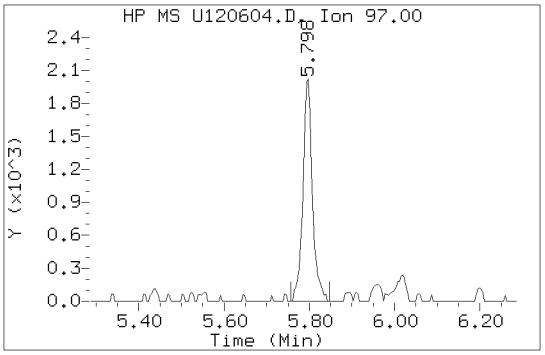
BEFORE

MASS
58
AREA
5581
HEIGHT
2850
06-Dec-2023
23:21



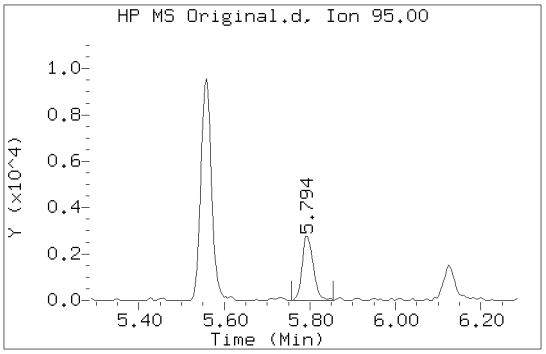
AFTER

MASS
97
AREA
3184
HEIGHT
2024
12-Dec-2023
09:43



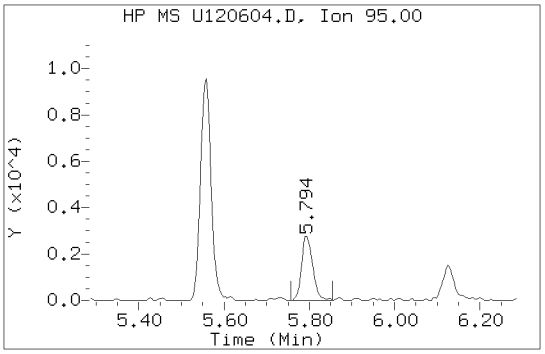
BEFORE

MASS
100
AREA
2108
HEIGHT
1166
06-Dec-2023
23:21



AFTER

MASS
95
AREA
5146
HEIGHT
2773
12-Dec-2023
09:43



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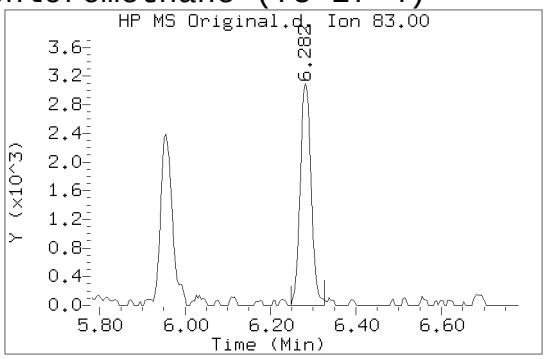
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

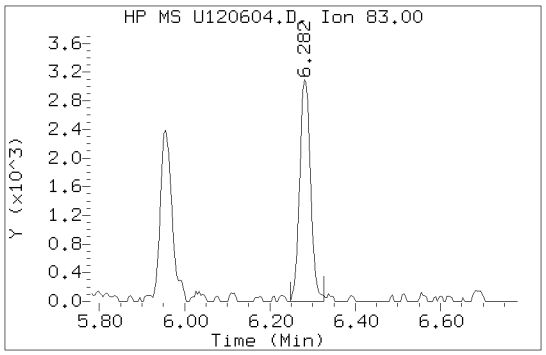
Bromodichloromethane (75-27-4)

Reason Code:

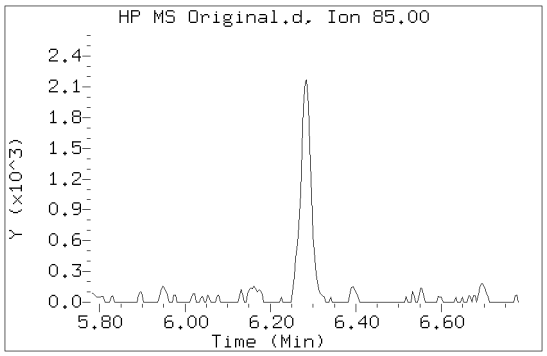
BEFORE
MASS
75
AREA
5439
HEIGHT
2909
06-Dec-2023
23:21



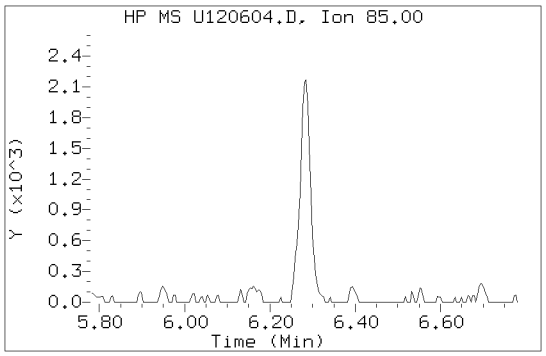
AFTER
MASS
83
AREA
5619
HEIGHT
3095
12-Dec-2023
09:43



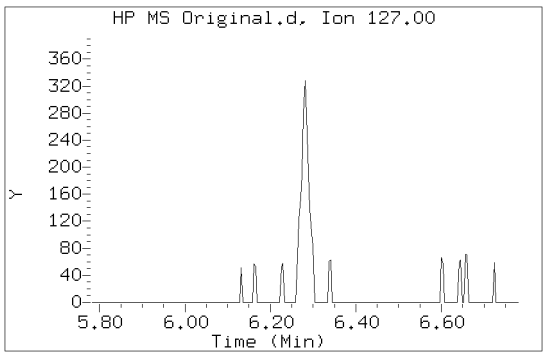
BEFORE
MASS
77
AREA
1996
HEIGHT
1030
06-Dec-2023
23:21



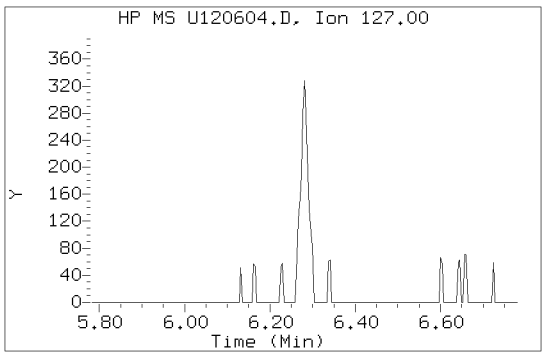
AFTER
MASS
85
AREA
0
HEIGHT
0
12-Dec-2023
09:43



BEFORE
MASS
39
AREA
2491
HEIGHT
1211
06-Dec-2023
23:21



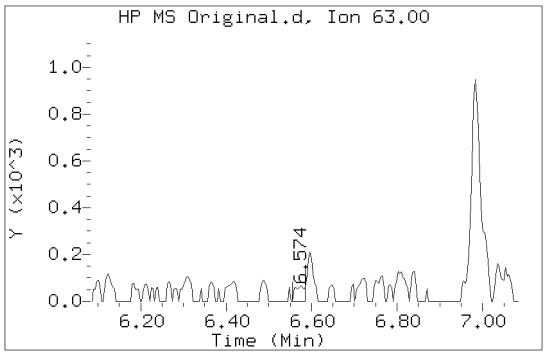
AFTER
MASS
127
AREA
0
HEIGHT
0
12-Dec-2023
09:43



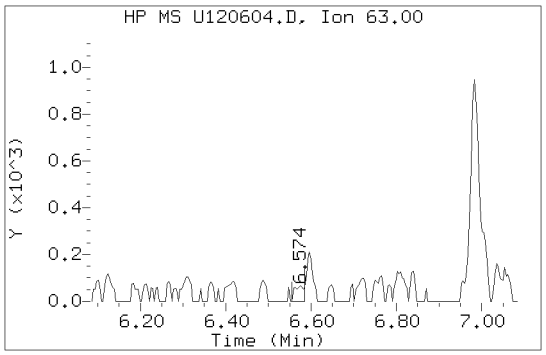
2-Chloroethylvinyl ether (110-75-8)

Reason Code:

BEFORE
MASS
117
AREA
559222
HEIGHT
361794
06-Dec-2023
23:21



AFTER
MASS
63
AREA
104
HEIGHT
66
12-Dec-2023
09:43



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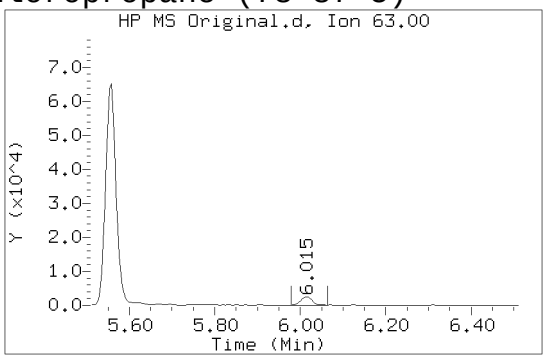
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

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

Reason Code:

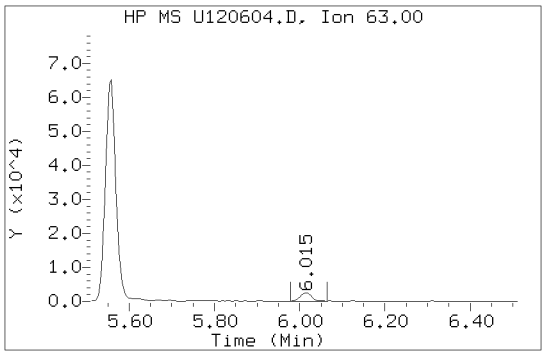
BEFORE

MASS
91
AREA
16234
HEIGHT
9383
06-Dec-2023
23:21



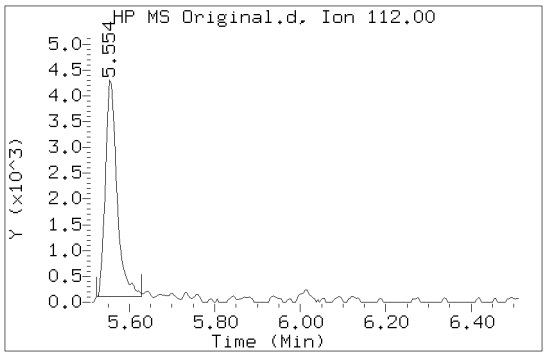
AFTER

MASS
63
AREA
4582
HEIGHT
2449
12-Dec-2023
09:43



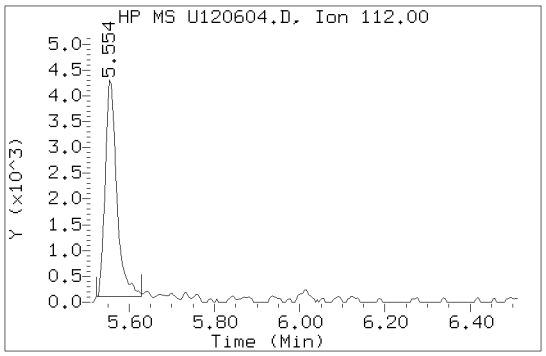
BEFORE

MASS
92
AREA
9713
HEIGHT
5645
06-Dec-2023
23:21



AFTER

MASS
112
AREA
7920
HEIGHT
4197
12-Dec-2023
09:43

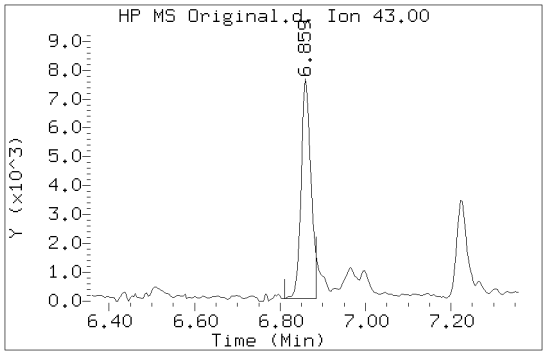


4-Methyl-2-Pentanone (108-10-1)

Reason Code:

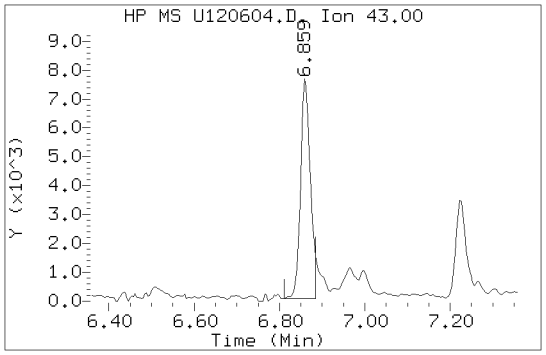
BEFORE

MASS
43
AREA
7475
HEIGHT
5102
06-Dec-2023
23:21



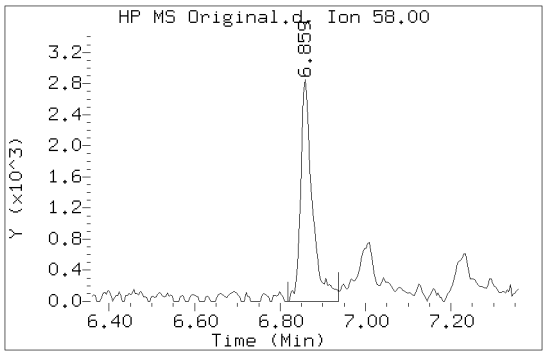
AFTER

MASS
43
AREA
12410
HEIGHT
7604
12-Dec-2023
09:43



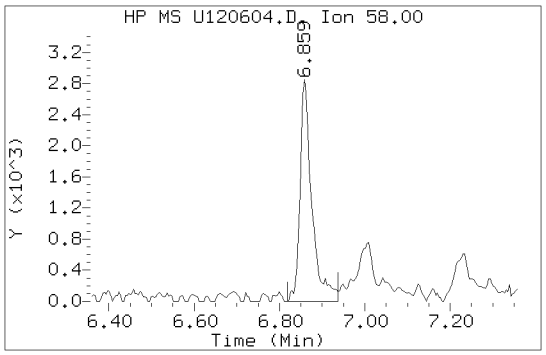
BEFORE

MASS
58
AREA
5297
HEIGHT
2649
06-Dec-2023
23:21



AFTER

MASS
58
AREA
5581
HEIGHT
2850
12-Dec-2023
09:43



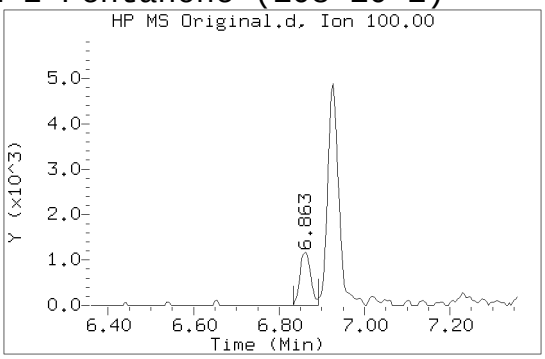
Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120604.D
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

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

Reason Code:

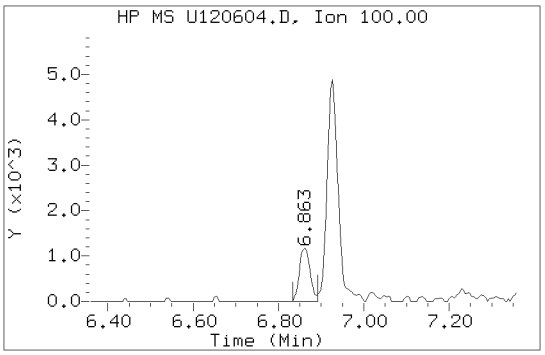
BEFORE

MASS
57
AREA
1979
HEIGHT
942
06-Dec-2023
23:21



AFTER

MASS
100
AREA
2108
HEIGHT
1166
12-Dec-2023
09:43

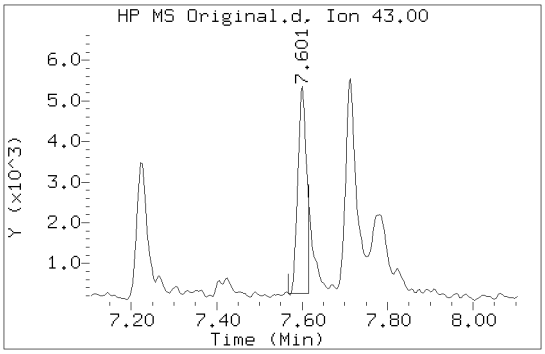


2-Hexanone (591-78-6)

Reason Code:

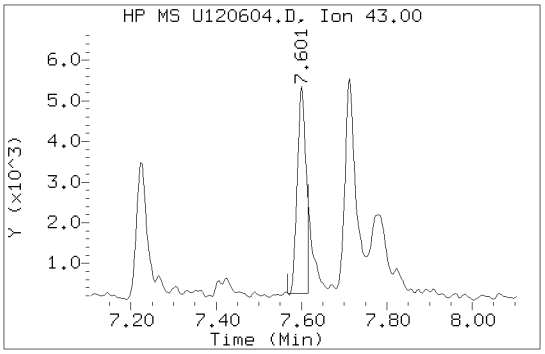
BEFORE

MASS
164
AREA
3841
HEIGHT
2495
06-Dec-2023
23:21



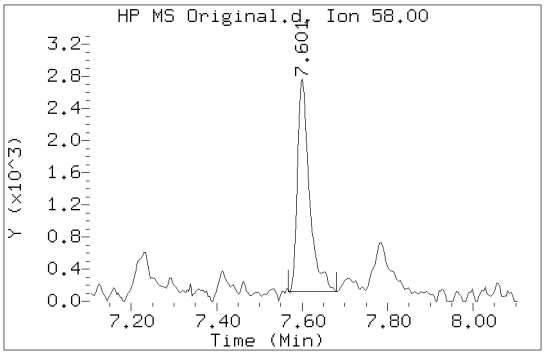
AFTER

MASS
43
AREA
7475
HEIGHT
5102
12-Dec-2023
09:43



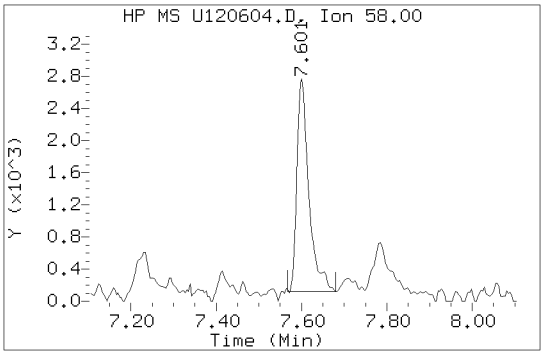
BEFORE

MASS
129
AREA
3164
HEIGHT
2200
06-Dec-2023
23:21



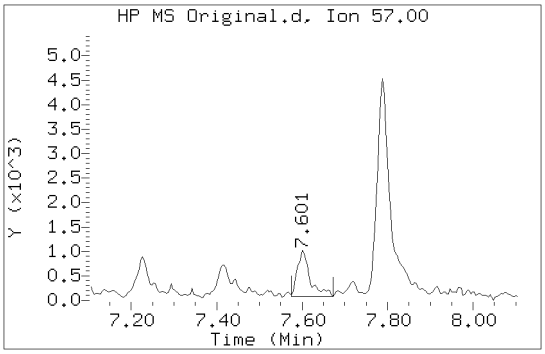
AFTER

MASS
58
AREA
5297
HEIGHT
2649
12-Dec-2023
09:43



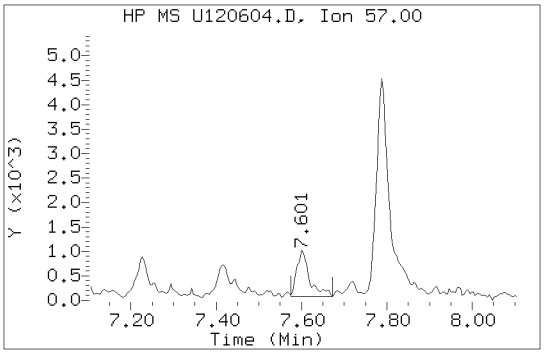
BEFORE

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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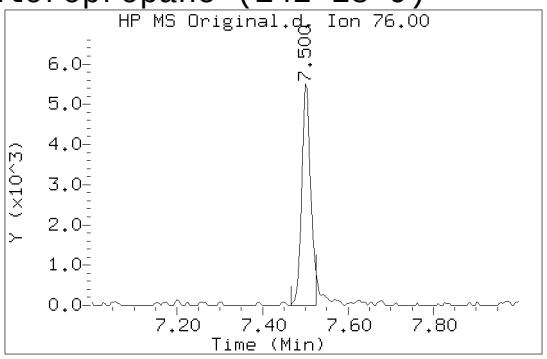
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

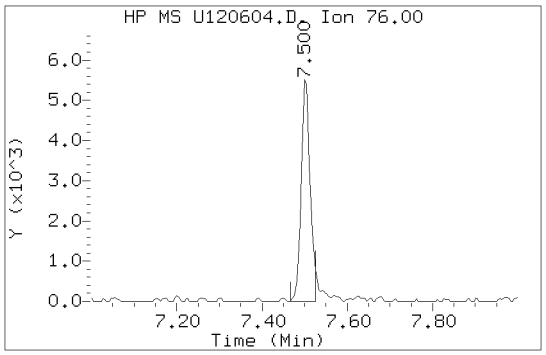
1,3-Dichloropropane (142-28-9)

Reason Code:

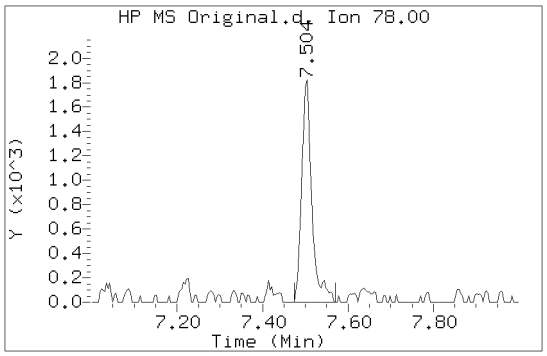
BEFORE
MASS
56
AREA
452
HEIGHT
436
06-Dec-2023
23:21



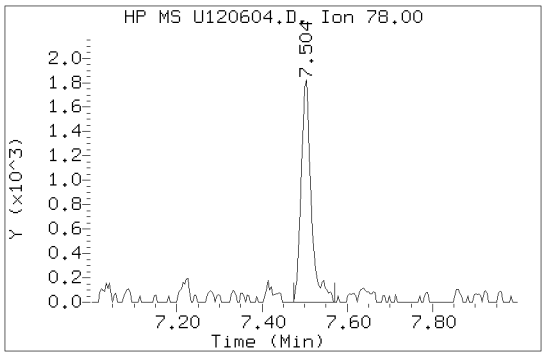
AFTER
MASS
76
AREA
8254
HEIGHT
5512
12-Dec-2023
09:43



BEFORE
MASS
55
AREA
701
HEIGHT
352
06-Dec-2023
23:21



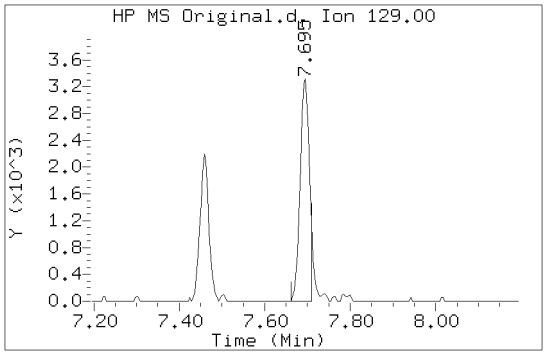
AFTER
MASS
78
AREA
3088
HEIGHT
1823
12-Dec-2023
09:43



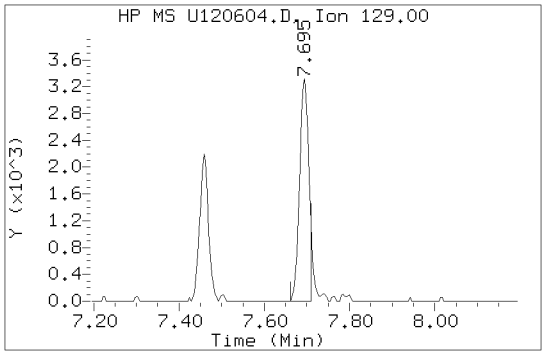
Dibromochloromethane (124-48-1)

Reason Code:

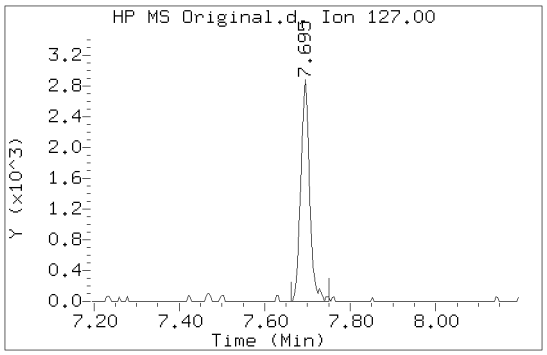
BEFORE
MASS
63
AREA
104
HEIGHT
66
06-Dec-2023
23:21



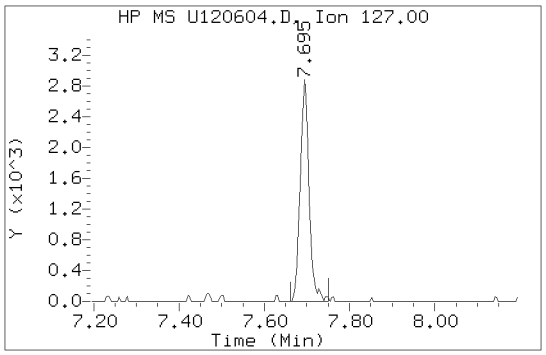
AFTER
MASS
129
AREA
5059
HEIGHT
3317
12-Dec-2023
09:43



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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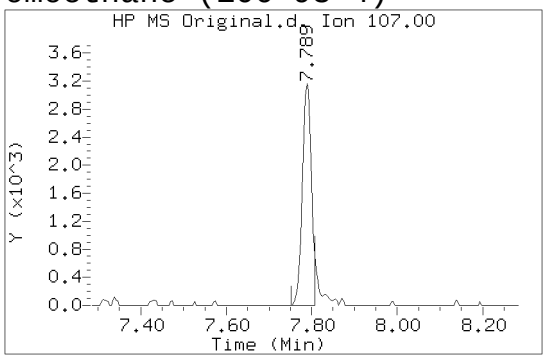
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

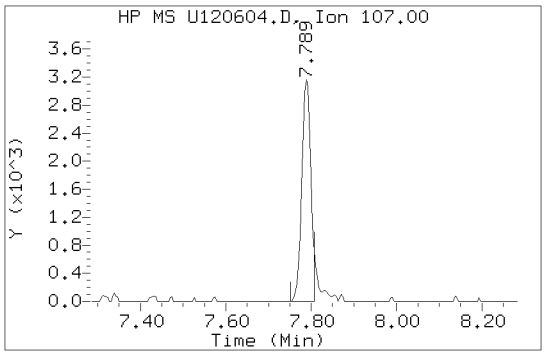
1,2-Dibromoethane (106-93-4)

Reason Code:

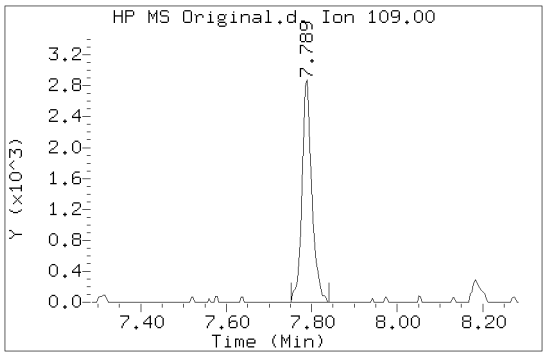
BEFORE
MASS
112
AREA
13746
HEIGHT
9169
06-Dec-2023
23:21



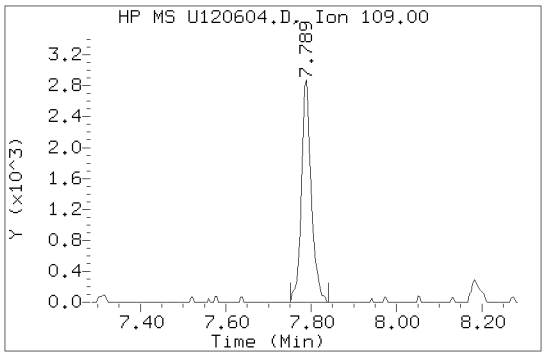
AFTER
MASS
107
AREA
4790
HEIGHT
3163
12-Dec-2023
09:43



BEFORE
MASS
77
AREA
14266
HEIGHT
5843
06-Dec-2023
23:21



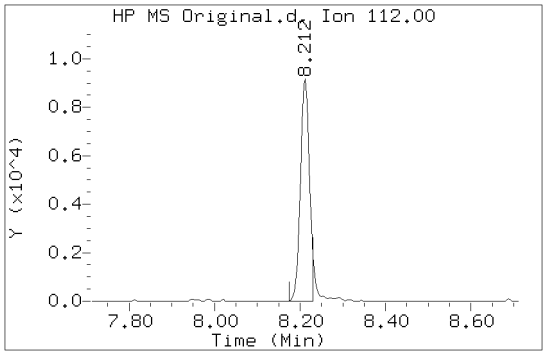
AFTER
MASS
109
AREA
4725
HEIGHT
2876
12-Dec-2023
09:43



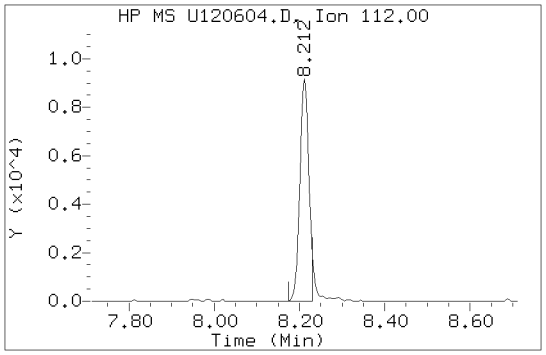
Chlorobenzene (108-90-7)

Reason Code:

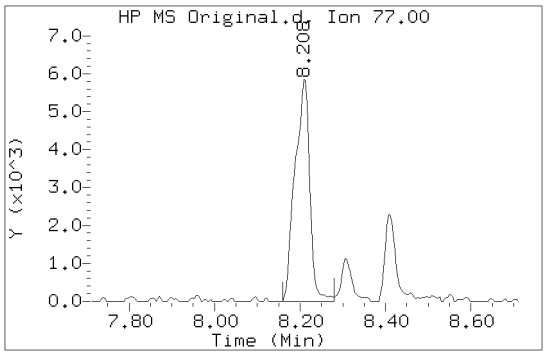
BEFORE
MASS
131
AREA
4936
HEIGHT
3097
06-Dec-2023
23:21



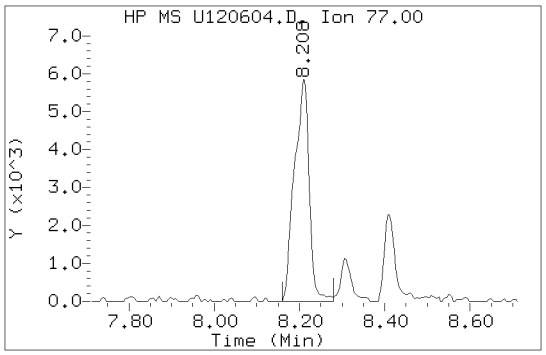
AFTER
MASS
112
AREA
13746
HEIGHT
9169
12-Dec-2023
09:43



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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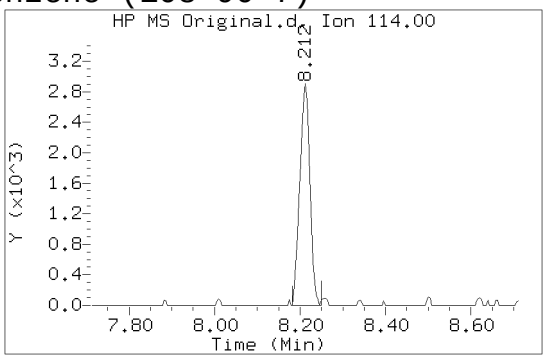
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

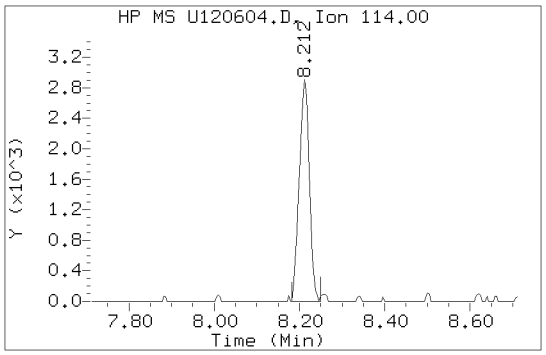
Chlorobenzene (108-90-7)

Reason Code:

BEFORE
MASS
119
AREA
4987
HEIGHT
2688
06-Dec-2023
23:21



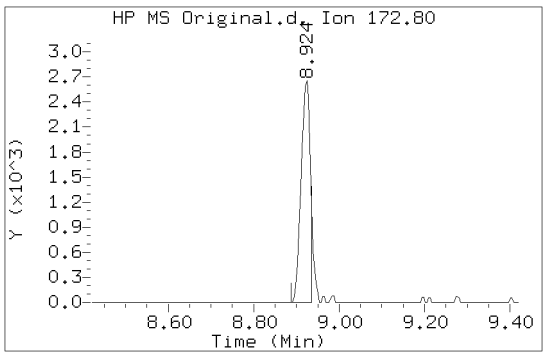
AFTER
MASS
114
AREA
4887
HEIGHT
2906
12-Dec-2023
09:43



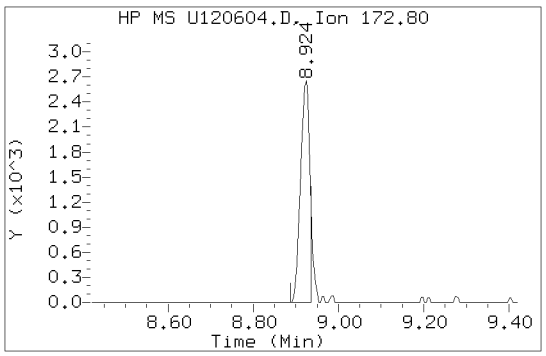
Bromoform (75-25-2)

Reason Code:

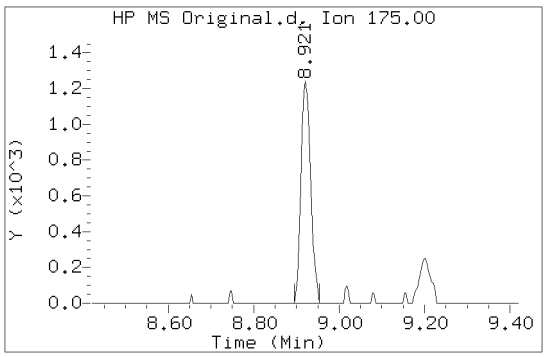
BEFORE
MASS
172.8
AREA
4009
HEIGHT
2655
06-Dec-2023
23:21



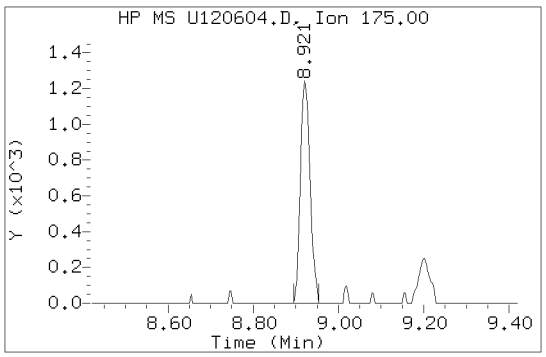
AFTER
MASS
172.8
AREA
4009
HEIGHT
2655
12-Dec-2023
09:43



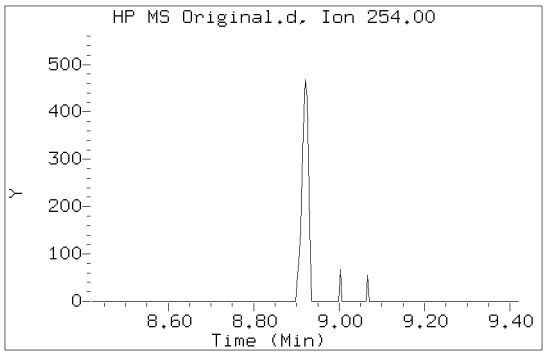
BEFORE
MASS
175
AREA
2010
HEIGHT
1243
06-Dec-2023
23:21



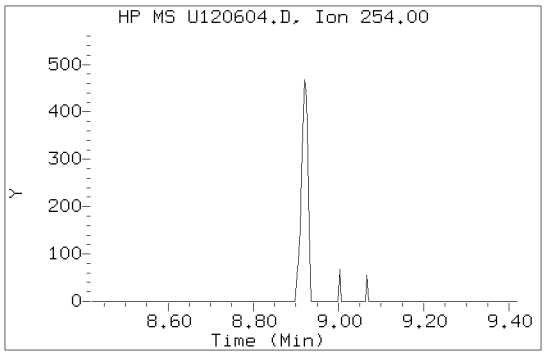
AFTER
MASS
175
AREA
2010
HEIGHT
1243
12-Dec-2023
09:43



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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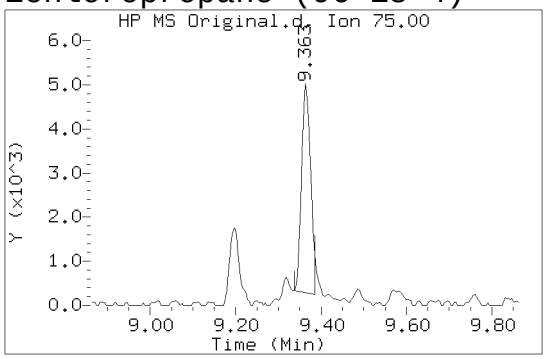
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

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

Reason Code:

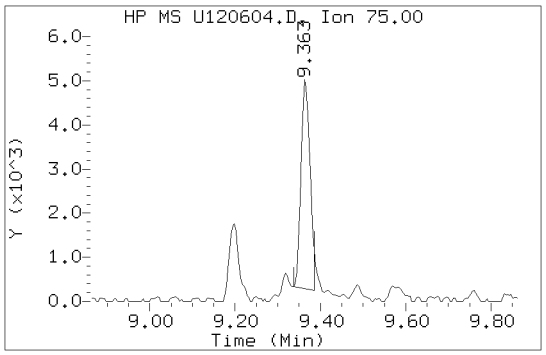
BEFORE

MASS
152
AREA
292314
HEIGHT
188877
06-Dec-2023
23:21



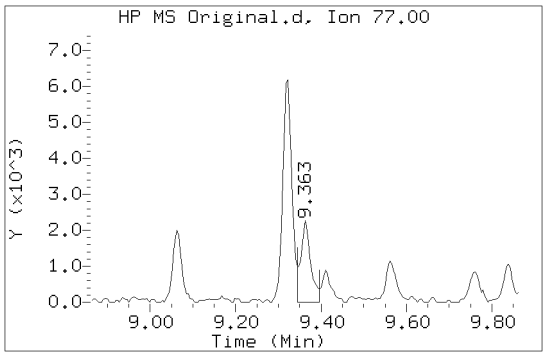
AFTER

MASS
75
AREA
7225
HEIGHT
4742
12-Dec-2023
09:43



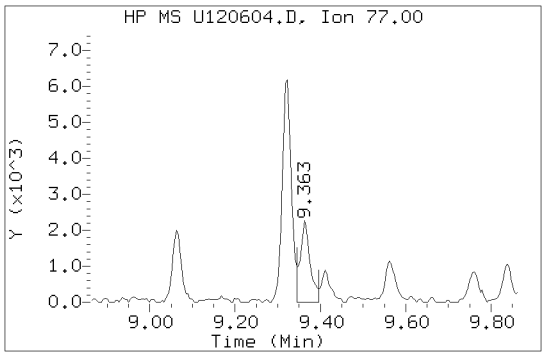
BEFORE

MASS
115
AREA
159675
HEIGHT
100656
06-Dec-2023
23:21



AFTER

MASS
77
AREA
3895
HEIGHT
2276
12-Dec-2023
09:43

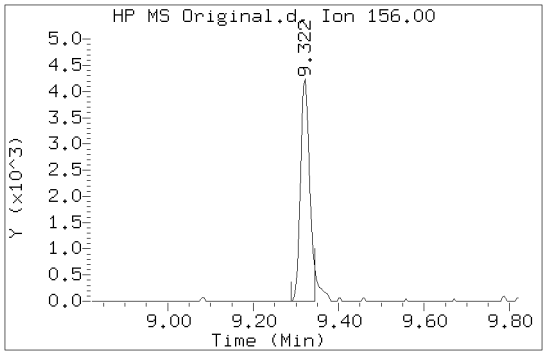


Bromobenzene (108-86-1)

Reason Code:

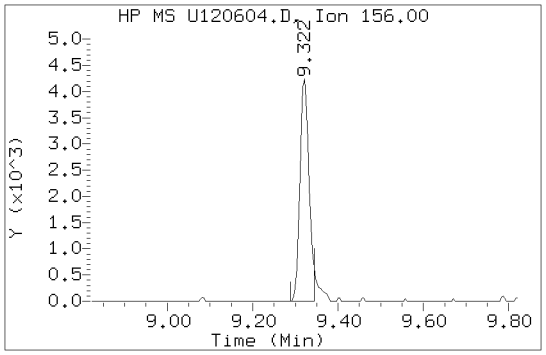
BEFORE

MASS
75
AREA
7225
HEIGHT
4742
06-Dec-2023
23:21



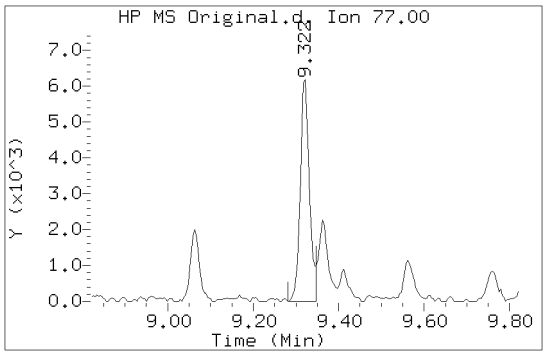
AFTER

MASS
156
AREA
6451
HEIGHT
4241
12-Dec-2023
09:43



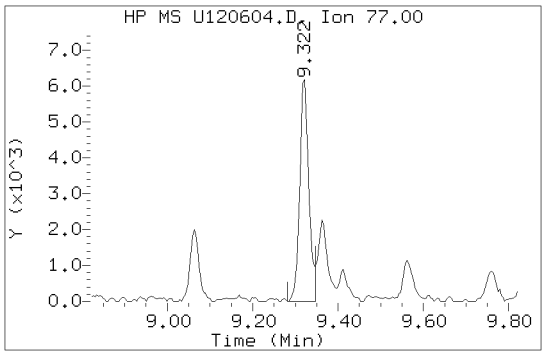
BEFORE

MASS
77
AREA
3895
HEIGHT
2276
06-Dec-2023
23:21



AFTER

MASS
77
AREA
9489
HEIGHT
6181
12-Dec-2023
09:43



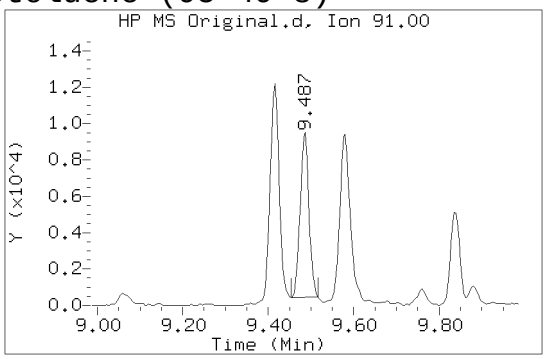
Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120604.D
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

2-Chlorotoluene (95-49-8)

Reason Code:

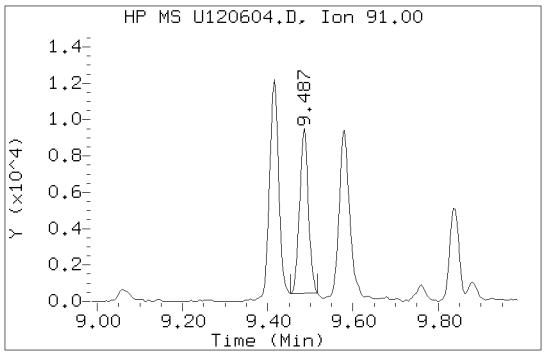
BEFORE

MASS
91
AREA
18576
HEIGHT
12131
06-Dec-2023
23:21



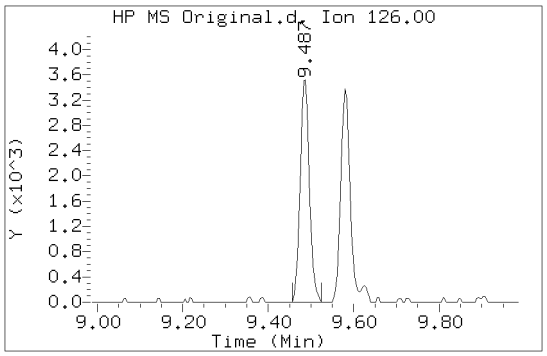
AFTER

MASS
91
AREA
13144
HEIGHT
9069
12-Dec-2023
09:43



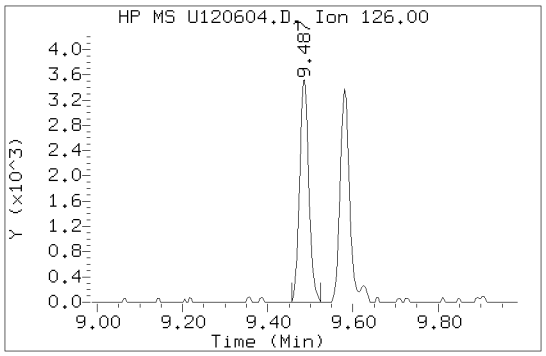
BEFORE

MASS
120
AREA
4175
HEIGHT
2622
06-Dec-2023
23:21



AFTER

MASS
126
AREA
5403
HEIGHT
3519
12-Dec-2023
09:43

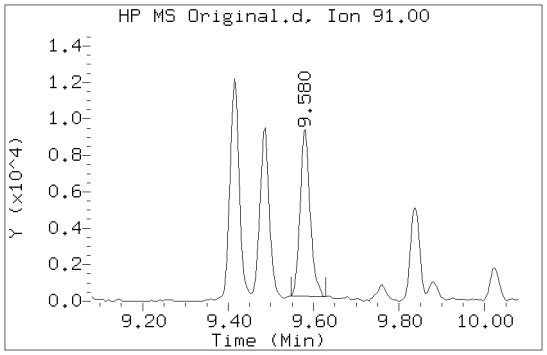


4-Chlorotoluene (106-43-4)

Reason Code:

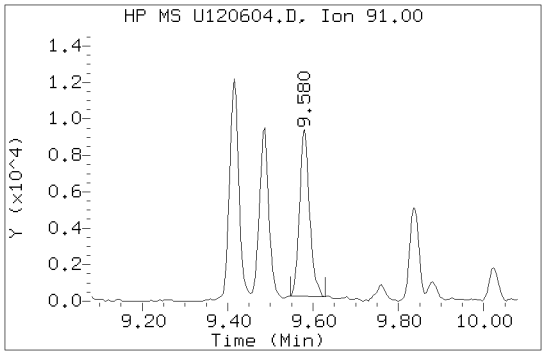
BEFORE

MASS
156
AREA
6451
HEIGHT
4241
06-Dec-2023
23:21



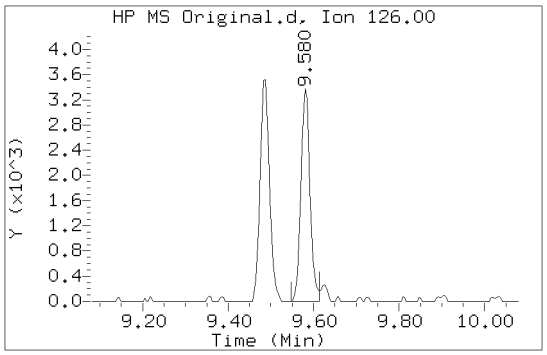
AFTER

MASS
91
AREA
15217
HEIGHT
9149
12-Dec-2023
09:43



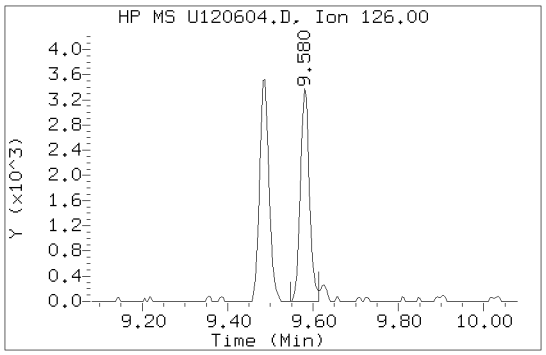
BEFORE

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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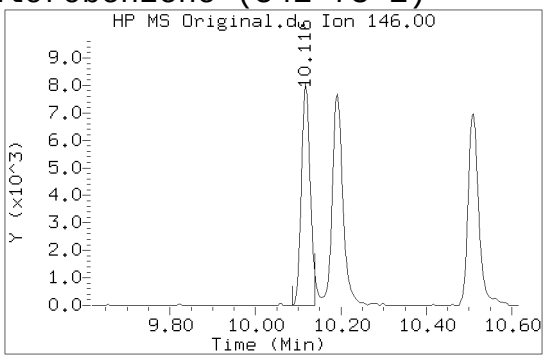
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

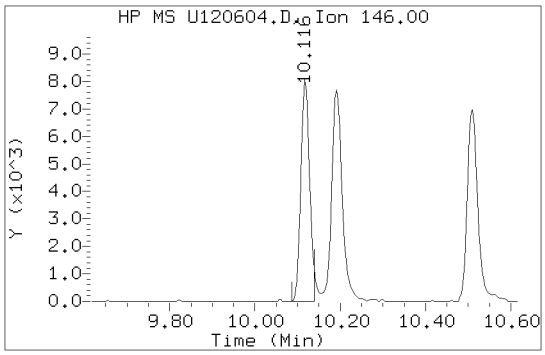
1,3-Dichlorobenzene (541-73-1)

Reason Code:

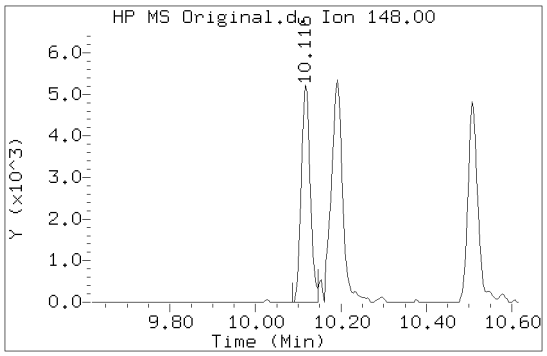
BEFORE
MASS
119
AREA
13105
HEIGHT
8645
06-Dec-2023
23:21



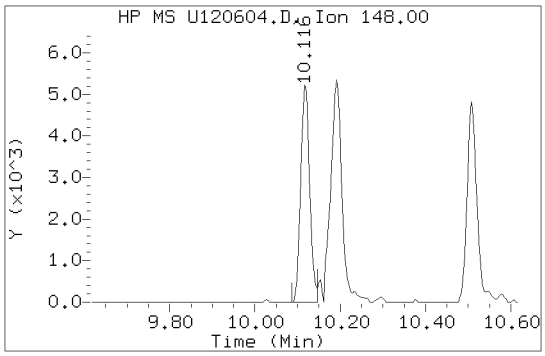
AFTER
MASS
146
AREA
11762
HEIGHT
8063
12-Dec-2023
09:43



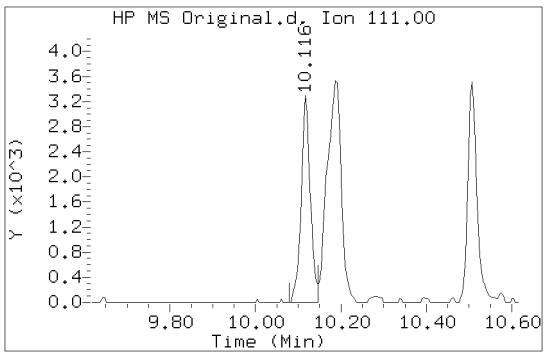
BEFORE
MASS
91
AREA
7970
HEIGHT
5113
06-Dec-2023
23:21



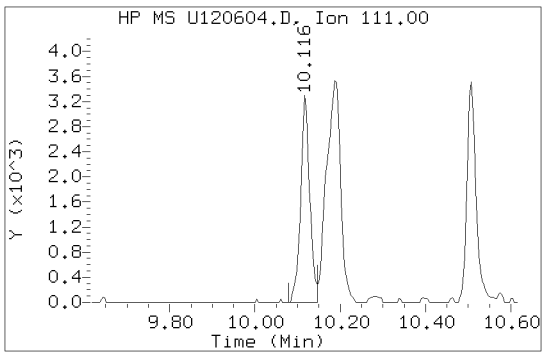
AFTER
MASS
148
AREA
7837
HEIGHT
5232
12-Dec-2023
09:43



BEFORE
MASS
134
AREA
3501
HEIGHT
2543
06-Dec-2023
23:21



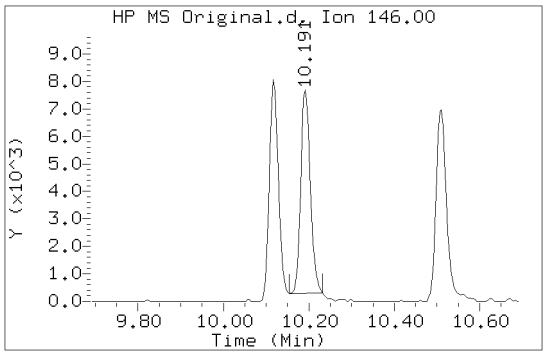
AFTER
MASS
111
AREA
4991
HEIGHT
3301
12-Dec-2023
09:43



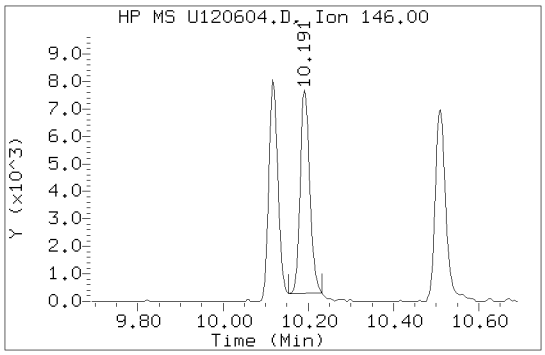
1,4-Dichlorobenzene (106-46-7)

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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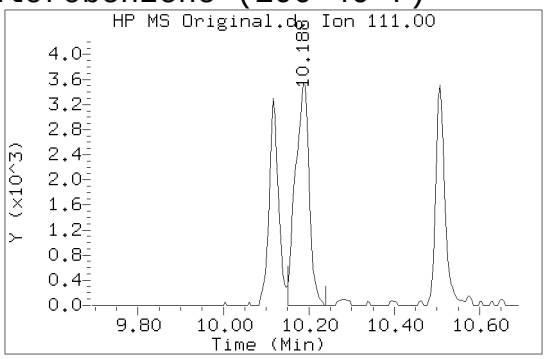
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

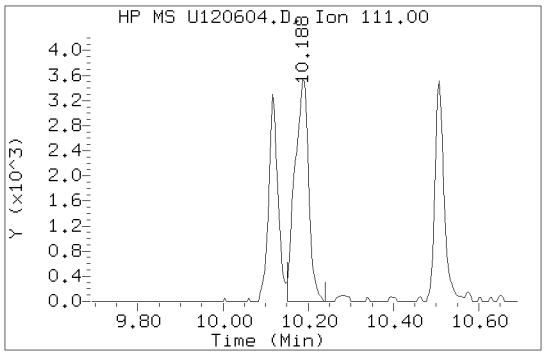
1,4-Dichlorobenzene (106-46-7)

Reason Code:

BEFORE
MASS
120
AREA
6131
HEIGHT
4307
06-Dec-2023
23:21



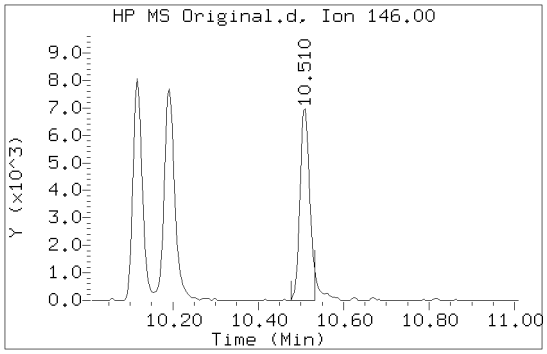
AFTER
MASS
111
AREA
8078
HEIGHT
3533
12-Dec-2023
09:43



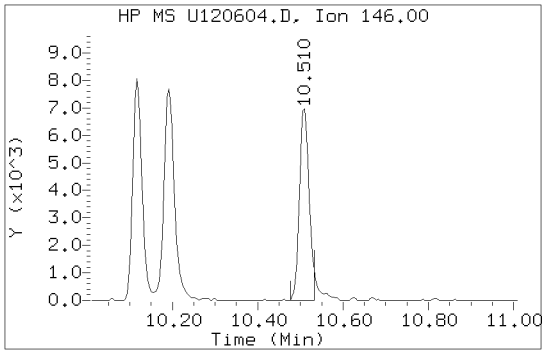
1,2-Dichlorobenzene (95-50-1)

Reason Code:

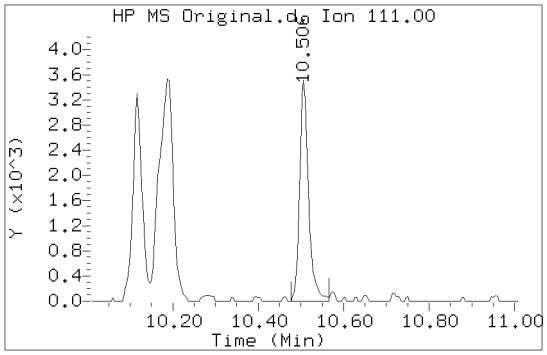
BEFORE
MASS
41
AREA
3181
HEIGHT
1500
06-Dec-2023
23:21



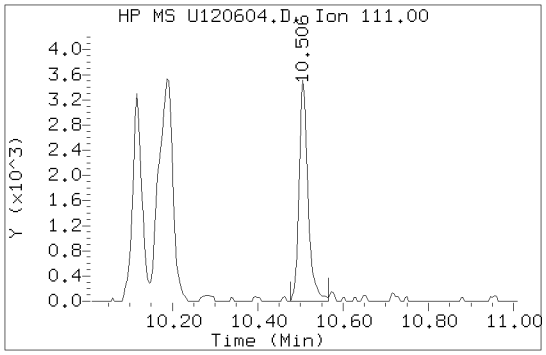
AFTER
MASS
146
AREA
11314
HEIGHT
6978
12-Dec-2023
09:43



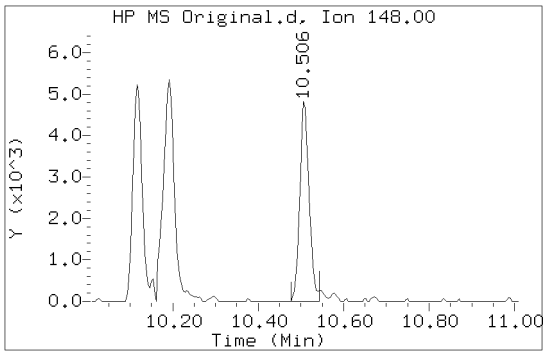
BEFORE
MASS
69
AREA
3138
HEIGHT
1288
06-Dec-2023
23:21



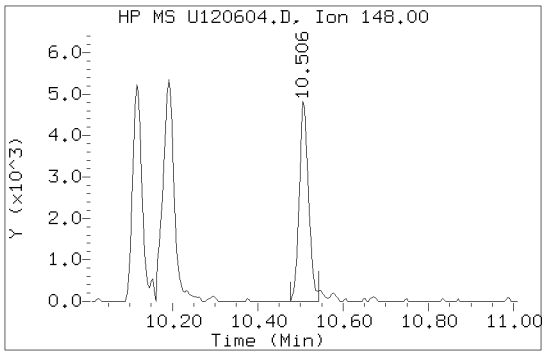
AFTER
MASS
111
AREA
5243
HEIGHT
3519
12-Dec-2023
09:43



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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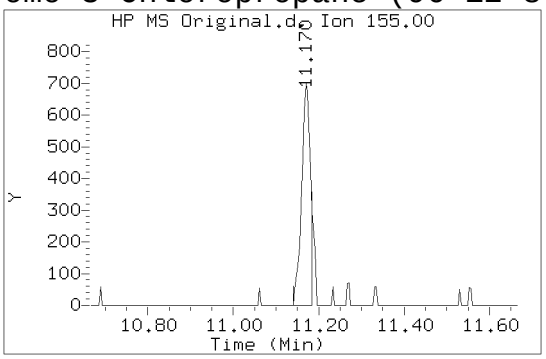
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

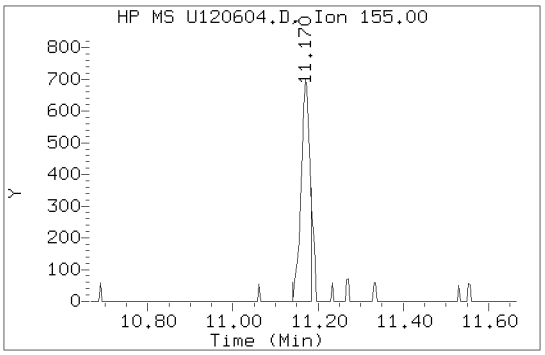
1,2-Dibromo-3-Chloropropane (96-12-8)

Reason Code:

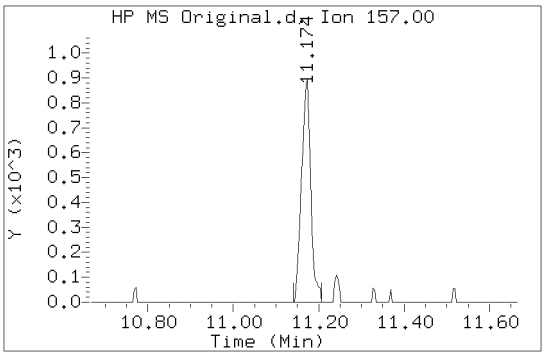
BEFORE
MASS
119
AREA
12618
HEIGHT
8526
06-Dec-2023
23:21



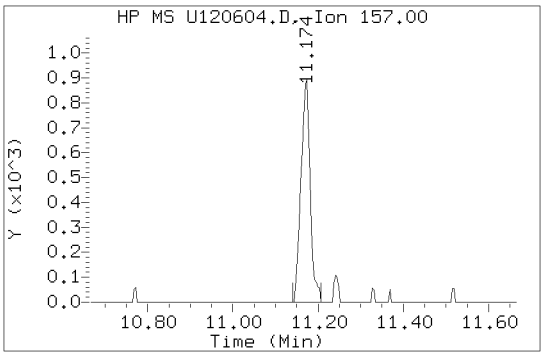
AFTER
MASS
155
AREA
1017
HEIGHT
699
12-Dec-2023
09:43



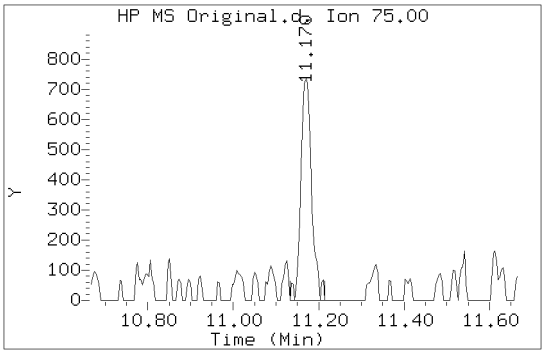
BEFORE
MASS
134
AREA
3443
HEIGHT
2049
06-Dec-2023
23:21



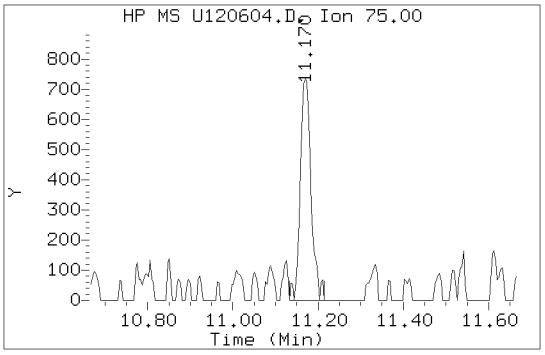
AFTER
MASS
157
AREA
1379
HEIGHT
892
12-Dec-2023
09:43



BEFORE
MASS
91
AREA
3724
HEIGHT
1712
06-Dec-2023
23:21



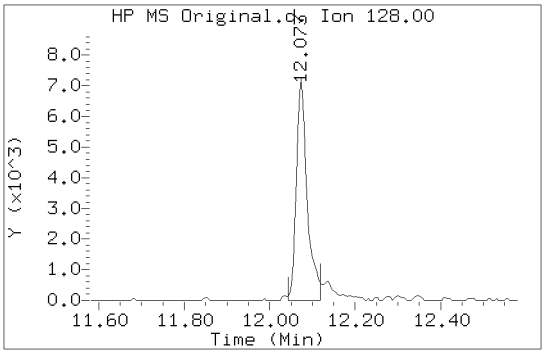
AFTER
MASS
75
AREA
1331
HEIGHT
735
12-Dec-2023
09:43



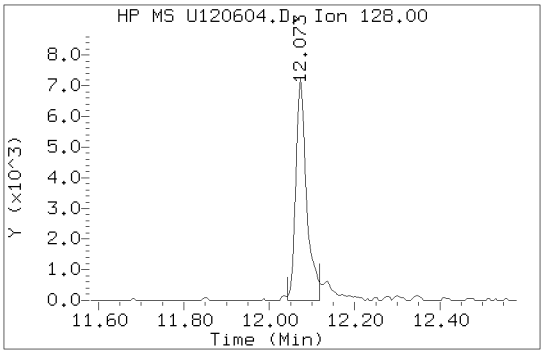
Naphthalene (91-20-3)

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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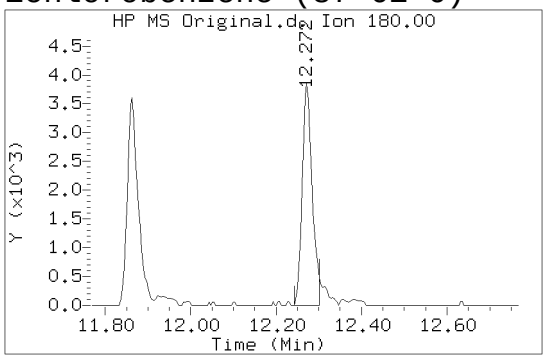
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

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

Reason Code:

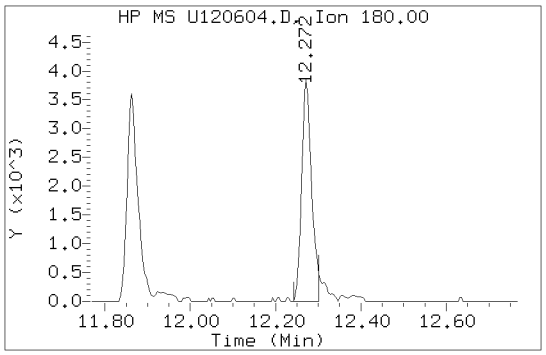
BEFORE

MASS
69
AREA
4516
HEIGHT
2548
06-Dec-2023
23:21



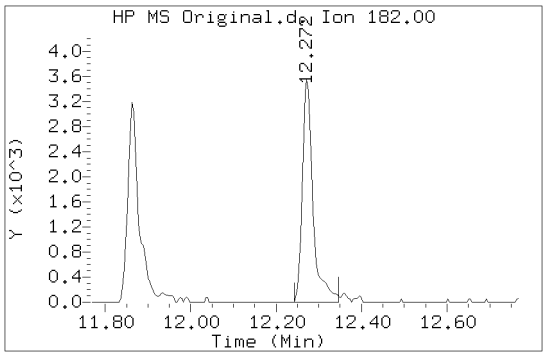
AFTER

MASS
180
AREA
6413
HEIGHT
3848
12-Dec-2023
09:43



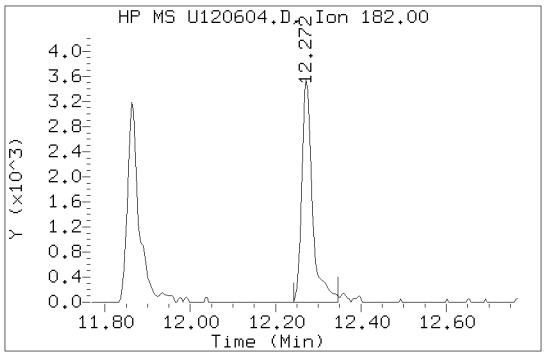
BEFORE

MASS
41
AREA
3380
HEIGHT
1662
06-Dec-2023
23:21



AFTER

MASS
182
AREA
6322
HEIGHT
3544
12-Dec-2023
09:43

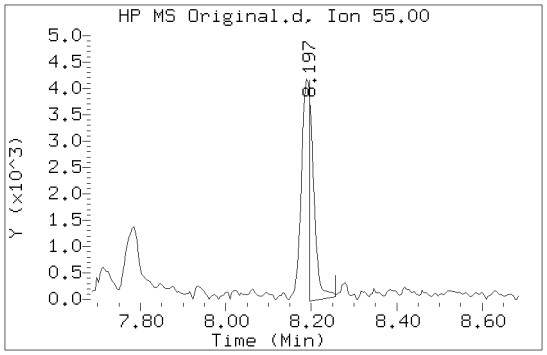


1-Chlorohexane (544-10-5)

Reason Code:

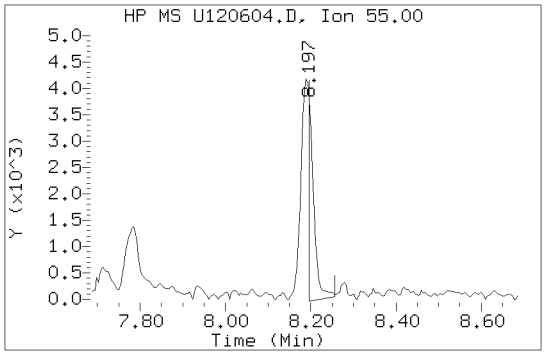
BEFORE

MASS
91
AREA
10752
HEIGHT
5764
06-Dec-2023
23:21



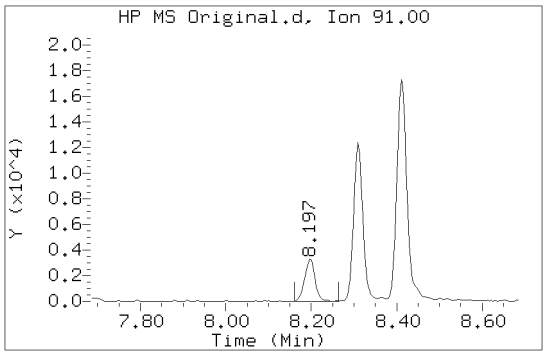
AFTER

MASS
55
AREA
3275
HEIGHT
3828
12-Dec-2023
09:43



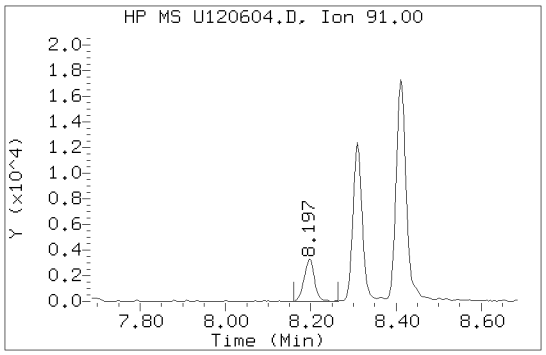
BEFORE

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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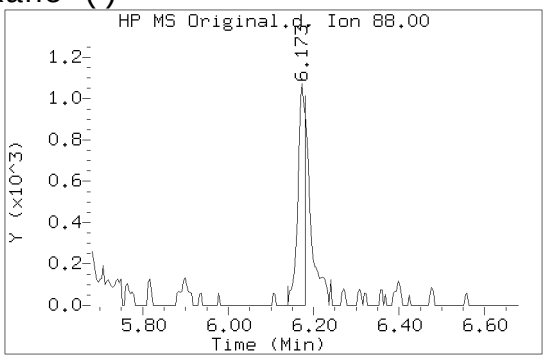
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

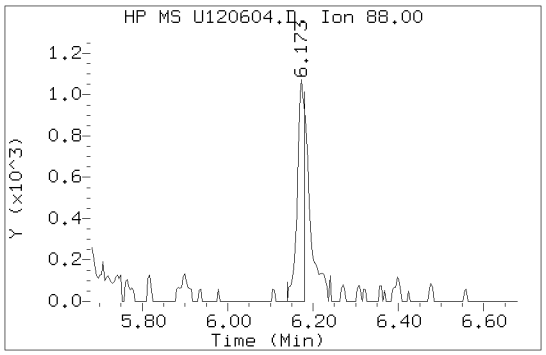
1,4-Dioxane ()

Reason Code:

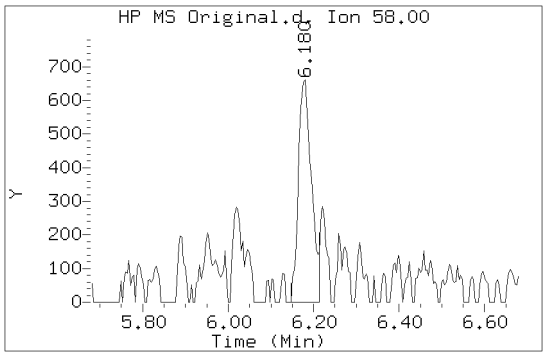
BEFORE
MASS
155
AREA
1017
HEIGHT
699
06-Dec-2023
23:21



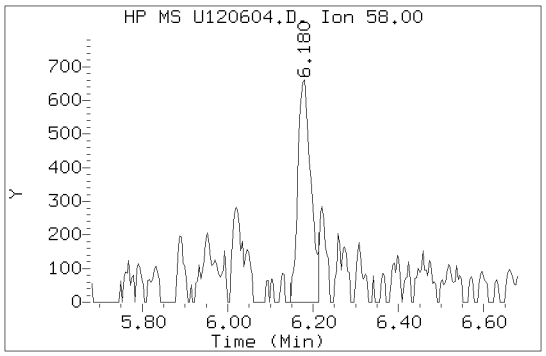
AFTER
MASS
88
AREA
1303
HEIGHT
1072
12-Dec-2023
09:43



BEFORE
MASS
157
AREA
1379
HEIGHT
892
06-Dec-2023
23:21



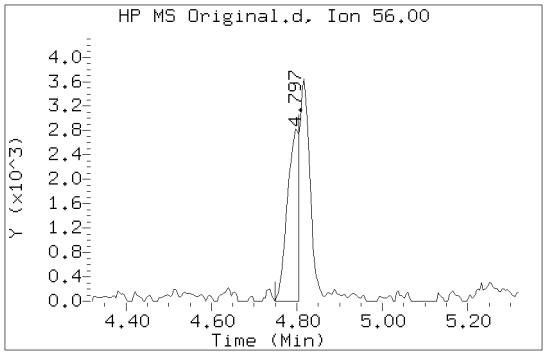
AFTER
MASS
58
AREA
1437
HEIGHT
661
12-Dec-2023
09:43



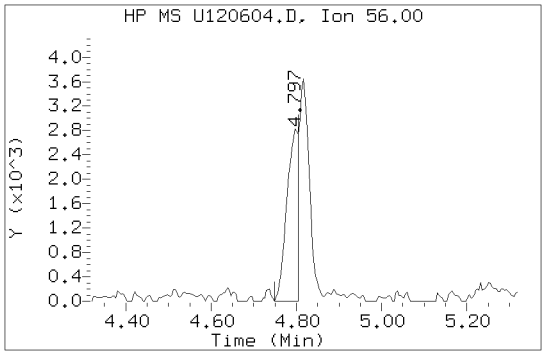
Cyclohexane (110-82-7)

Reason Code:

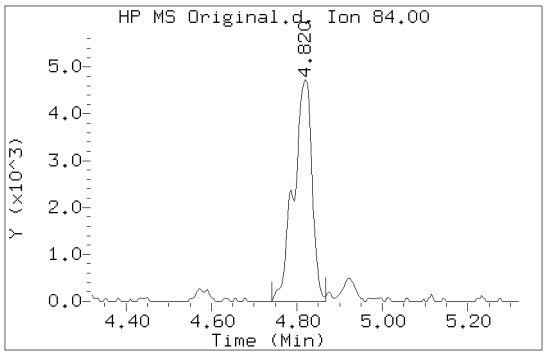
BEFORE
MASS
225
AREA
2507
HEIGHT
1544
06-Dec-2023
23:21



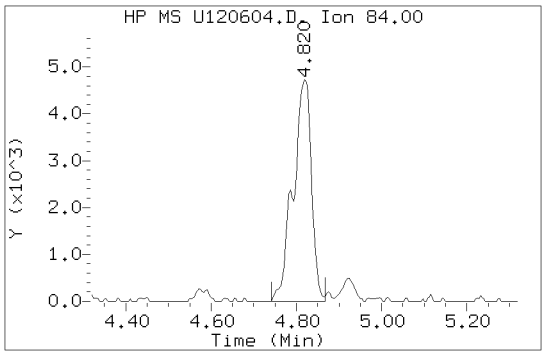
AFTER
MASS
56
AREA
5330
HEIGHT
2825
12-Dec-2023
09:43



BEFORE
MASS
223
AREA
1722
HEIGHT
1179
06-Dec-2023
23:21



AFTER
MASS
84
AREA
14309
HEIGHT
4728
12-Dec-2023
09:43



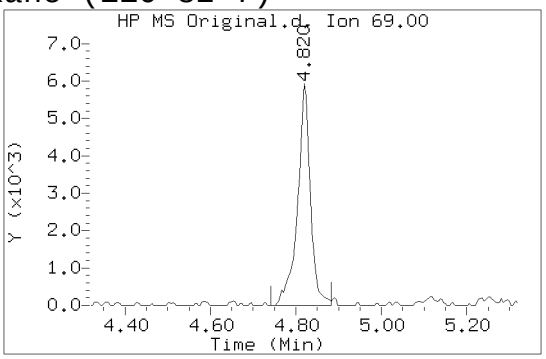
Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120604.D
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

Cyclohexane (110-82-7)

Reason Code:

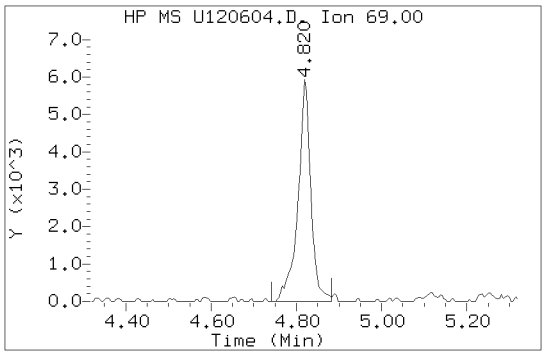
BEFORE

MASS
227
AREA
1694
HEIGHT
927
06-Dec-2023
23:21



AFTER

MASS
69
AREA
12632
HEIGHT
5931
12-Dec-2023
09:43

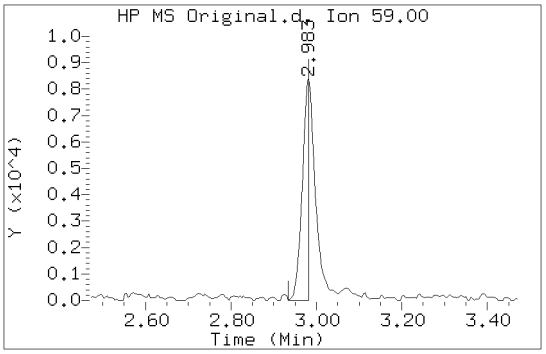


Tert-Butyl alcohol (75-65-0)

Reason Code:

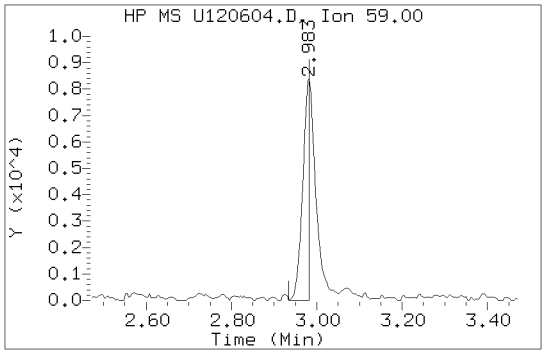
BEFORE

MASS
106
AREA
20615
HEIGHT
12759
06-Dec-2023
23:21



AFTER

MASS
59
AREA
9972
HEIGHT
8396
12-Dec-2023
09:43



BEFORE

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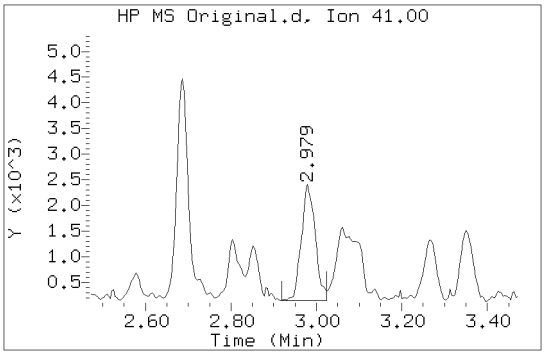
06-Dec-2023
23:21



AFTER

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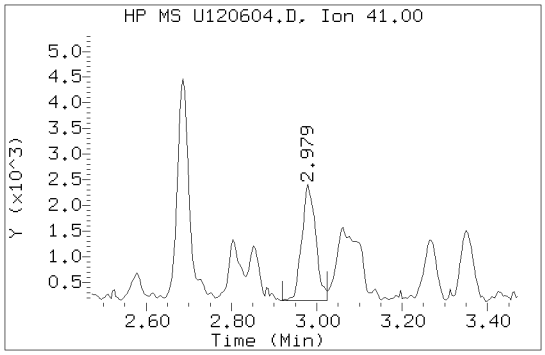
12-Dec-2023
09:43



Isopropyl Alcohol (67-63-0)

Reason Code:

BEFORE

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91
AREA
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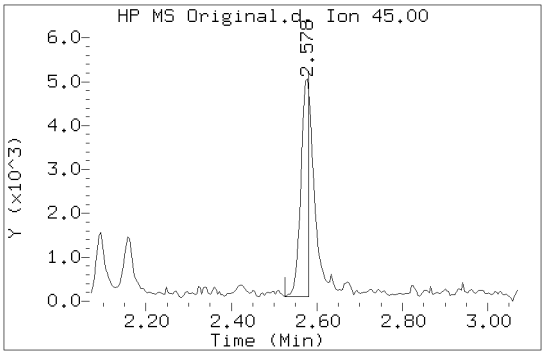
06-Dec-2023
23:21



AFTER

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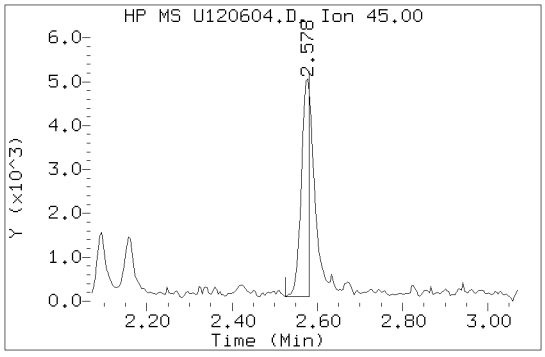
12-Dec-2023
09:43



Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120604.D
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

Isopropyl Alcohol (67-63-0)

Reason Code:

BEFORE

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AREA
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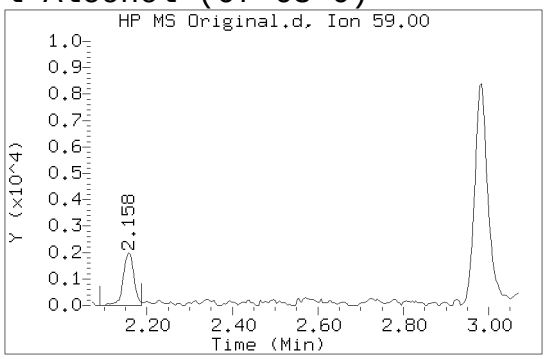
HEIGHT
673
06-Dec-2023
23:21



AFTER

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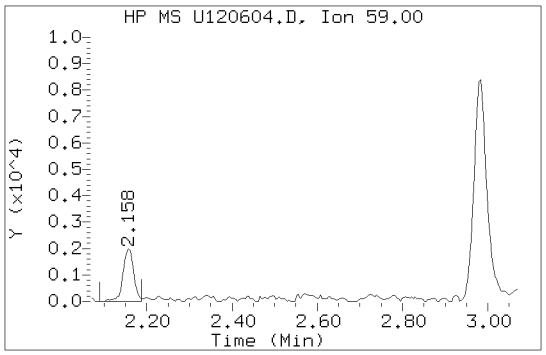
12-Dec-2023
09:43



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

Reason Code:

BEFORE

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HEIGHT
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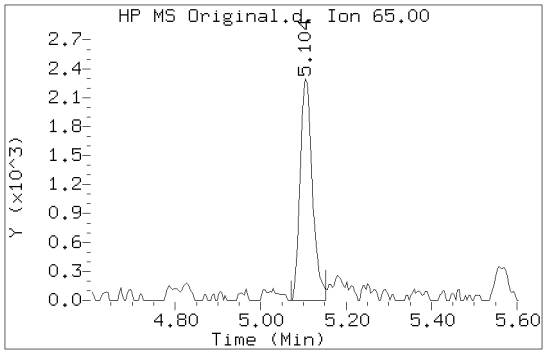
06-Dec-2023
23:21



AFTER

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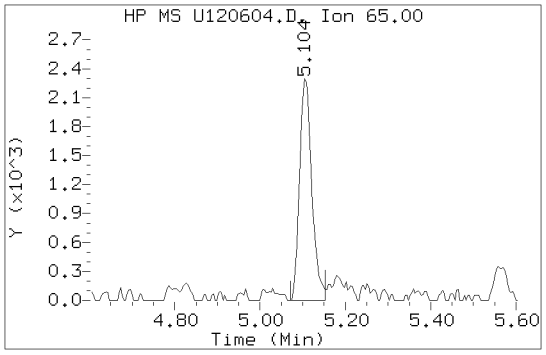
12-Dec-2023
09:43



BEFORE

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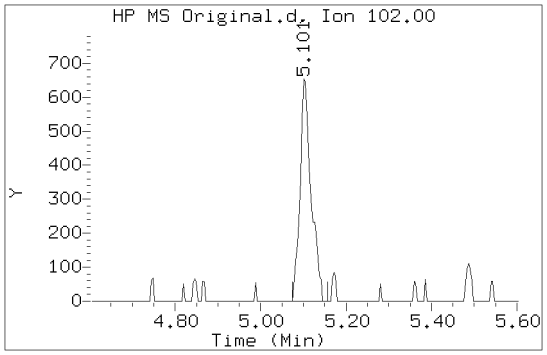
06-Dec-2023
23:21



AFTER

MASS
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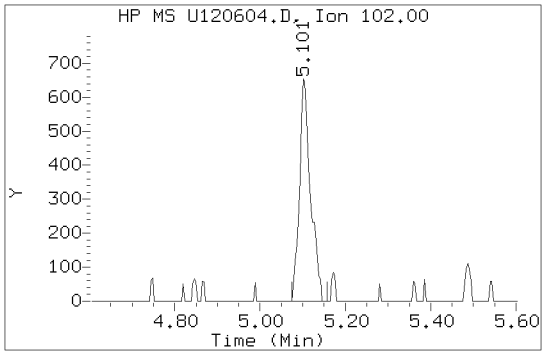
AREA
1197
HEIGHT
654
12-Dec-2023
09:43



Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120605.D Page 1
Report Date: 12-Dec-2023 09:43

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120605.D
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Inj Date : 06-DEC-2023 13:05
Operator : PC Inst ID: VOA9.i
Smp Info : VSTD002;VSTD002;1;4;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\8260C.m
Meth Date : 12-Dec-2023 09:43 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 12:43 Cal File: U120604.D
Als bottle: 6 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V9.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1	Pentafluorobenzene	168	4.815	4.815	(1.000)	358877	50.0000	
2	Dichlorodifluoromethane	85	1.160	1.160	(0.241)	5944	2.00000	2.88
3	Chloromethane	50	1.295	1.295	(0.269)	8437	2.00000	2.04
5	Vinyl Chloride	62	1.374	1.374	(0.285)	8077	2.00000	2.05
6	Bromomethane	94	1.617	1.617	(0.336)	6114	2.00000	2.31(M)
7	Chloroethane	64	1.696	1.696	(0.352)	5706	2.00000	2.15
8	Trichlorofluoromethane	101	1.895	1.895	(0.394)	11239	2.00000	2.25
9	Acrolein	56	2.266	2.266	(0.471)	825	4.00000	4.03(M)
10	Acetone	43	2.408	2.408	(0.500)	7963	4.00000	0.82(M)
11	1,1-Dichloroethene	96	2.326	2.326	(0.483)	5632	2.00000	2.03
15	Iodomethane	142	2.465	2.465	(0.512)	6285	4.00000	4.15
16	Acrylonitrile	53	3.068	3.068	(0.637)	6017	4.00000	4.27
17	Methylene Chloride	84	2.791	2.791	(0.580)	9102	2.00000	2.35
18	Methyl tert-butyl ether	73	3.079	3.079	(0.640)	21523	2.00000	2.17
19	Carbon Disulfide	76	2.517	2.517	(0.523)	33285	4.00000	4.08
20	trans-1,2-Dichloroethene	96	3.057	3.057	(0.635)	6834	2.00000	2.06
21	Vinyl Acetate	43	3.612	3.612	(0.750)	39911	4.00000	3.98
22	1,1-Dichloroethane	63	3.507	3.507	(0.728)	13430	2.00000	1.98
24	2-Butanone	43	4.275	4.275	(0.888)	6824	4.00000	3.88(M)
26	2,2-Dichloropropane	77	4.181	4.181	(0.868)	9440	2.00000	1.98

27 cis-1,2-Dichloroethene	96	4.196	4.196 (0.872)	8977	2.00000	2.02
28 Chloroform	83	4.571	4.571 (0.949)	15241	2.00000	2.07

Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120605.D Page 2
Report Date: 12-Dec-2023 09:43

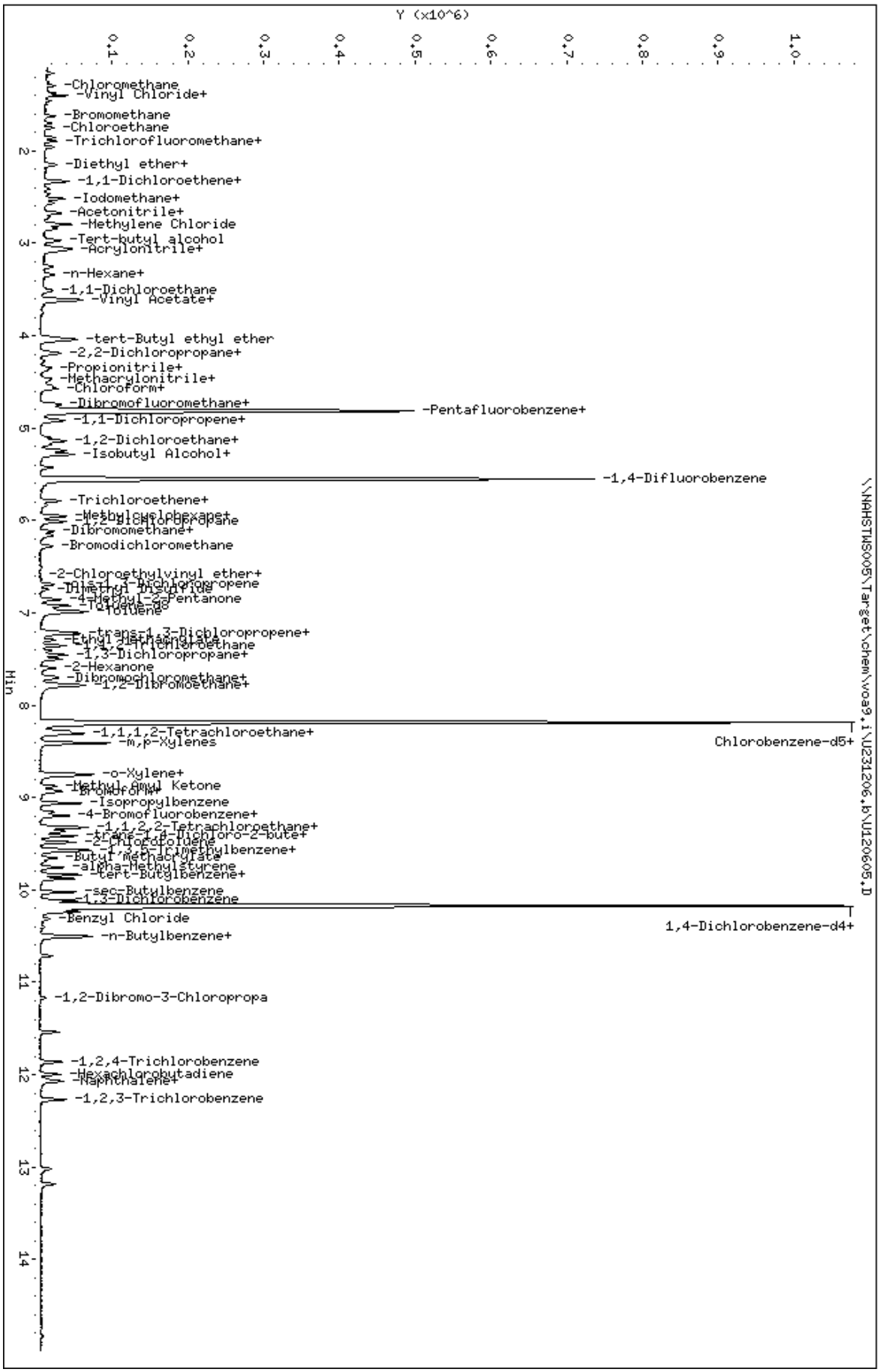
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	29 Bromochloromethane	128	4.466	4.466	(0.928)	5123	2.00000	2.23
$	30 Dibromofluoromethane	113	4.747	4.747	(0.986)	6940	2.00000	0.90
	31 1,1,1-Trichloroethane	97	4.744	4.744	(0.985)	11413	2.00000	2.04
	32 1,1-Dichloropropene	75	4.920	4.920	(0.886)	9794	2.00000	2.04
	33 1,2-Dichloroethane	62	5.179	5.179	(0.933)	11698	2.00000	2.09
	34 Carbon Tetrachloride	117	4.909	4.909	(0.884)	8985	2.00000	1.91
$	35 1,2-Dichloroethane-d4	65	5.100	5.100	(1.059)	9346	2.00000	1.80(M)
*	36 1,4-Difluorobenzene	114	5.553	5.553	(1.000)	572677	50.0000	
	37 Benzene	78	5.137	5.137	(0.925)	32480	2.00000	2.08
	38 Trichloroethene	130	5.790	5.790	(1.043)	9201	2.00000	2.14(M)
	39 Bromodichloromethane	83	6.277	6.277	(1.130)	9852	2.00000	1.92
	41 2-Chloroethylvinyl ether	63	6.584	6.584	(1.186)	254	4.00000	3.45(M)
	42 1,2-Dichloropropane	63	6.011	6.011	(1.082)	9176	2.00000	2.18
	44 Dibromomethane	93	6.119	6.119	(1.102)	5523	2.00000	2.03
	45 4-Methyl-2-Pentanone	43	6.858	6.858	(0.838)	19058	4.00000	4.27
	46 cis-1,3-Dichloropropene	75	6.693	6.693	(1.205)	10504	2.00000	3.03
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	571943	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	25656	2.00000	1.94
	50 Toluene	91	6.982	6.982	(0.853)	33168	2.00000	2.07
	51 trans-1,3-Dichloropropene	75	7.199	7.199	(1.296)	8323	2.00000	3.22
	52 2-Hexanone	43	7.596	7.596	(0.928)	12214	4.00000	4.23(M)
	53 1,1,2-Trichloroethane	83	7.357	7.357	(0.899)	8230	2.00000	1.43
	54 1,3-Dichloropropane	76	7.499	7.499	(0.916)	15193	2.00000	2.14
	55 Dibromochloromethane	129	7.690	7.690	(0.940)	8217	2.00000	1.93
	56 Tetrachloroethene	164	7.458	7.458	(0.911)	7082	2.00000	2.07
	57 1,2-Dibromoethane	107	7.788	7.788	(0.951)	7796	2.00000	1.96
	58 1-Chlorohexane	55	8.193	8.193	(1.475)	6133	2.00000	1.90(M)
	59 Chlorobenzene	112	8.211	8.211	(1.003)	24639	2.00000	2.12
	60 1,1,1,2-Tetrachloroethane	131	8.282	8.282	(1.012)	8251	2.00000	2.03
	61 Ethylbenzene	106	8.309	8.309	(1.015)	10659	2.00000	1.96
	62 m,p-Xylenes	106	8.410	8.410	(1.027)	26832	4.00000	4.10
	63 o-Xylene	106	8.747	8.747	(1.069)	13354	2.00000	1.98
	64 Styrene	104	8.766	8.766	(1.071)	20738	2.00000	1.85
	66 Bromoform	173	8.920	8.920	(1.090)	6134	2.00000	3.13
	67 Isopropylbenzene	105	9.062	9.062	(1.107)	32228	2.00000	1.98
	68 1,1,2,2-Tetrachloroethane	83	9.328	9.328	(0.917)	14293	2.00000	2.34(M)
$	69 4-Bromofluorobenzene	95	9.197	9.197	(1.124)	12602	2.00000	1.29
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	295659	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.920)	12628	2.00000	2.24(M)
	73 n-Propylbenzene	91	9.411	9.411	(0.925)	36000	2.00000	2.07
	74 Bromobenzene	156	9.317	9.317	(0.916)	10570	2.00000	2.12(M)
	75 1,3,5-Trimethylbenzene	105	9.565	9.565	(0.940)	23362	2.00000	1.89
	76 2-Chlorotoluene	91	9.482	9.482	(0.932)	24734	2.00000	2.11
	77 4-Chlorotoluene	91	9.576	9.576	(0.941)	28220	2.00000	2.12
	78 tert-Butylbenzene	119	9.838	9.838	(0.967)	23141	2.00000	2.08
	79 1,2,4-Trimethylbenzene	105	9.879	9.879	(0.971)	22592	2.00000	1.82
	81 sec-Butylbenzene	105	10.022	10.022	(0.985)	28888	2.00000	2.02
	82 p-Isopropyltoluene	119	10.146	10.146	(0.997)	22922	2.00000	1.85
	83 1,3-Dichlorobenzene	146	10.116	10.116	(0.994)	19974	2.00000	2.27
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	21680	2.00000	2.32(M)
	87 n-Butylbenzene	91	10.494	10.494	(1.032)	20530	2.00000	1.97
	88 1,2-Dichlorobenzene	146	10.509	10.509	(1.033)	20103	2.00000	2.27(M)

89	1,2-Dibromo-3-Chloropropane	155	11.169	11.169 (1.098)	1816	2.00000	4.12(M)
90	1,2,4-Trichlorobenzene	180	11.859	11.859 (1.166)	10130	2.00000	1.85

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	91 Hexachlorobutadiene	225	11.997	11.997	(1.179)	4820	2.00000	2.20
	92 Naphthalene	128	12.072	12.072	(1.187)	26823	2.00000	2.03
	93 1,2,3-Trichlorobenzene	180	12.271	12.271	(1.206)	11346	2.00000	2.06
M	94 1,2-Dichloroethylene (total)	96				15811	4.00000	
M	95 Xylenes (total)	106				40186	6.00000	
	131 Methyl Acrylate	55	4.376	4.376	(0.909)	10017	2.00000	2.12(a)
	135 1,4-Dioxane	88	6.172	6.172	(1.282)	2559	40.0000	44.94(M)
	141 Cyclohexane	56	4.785	4.785	(0.994)	10415	2.00000	2.01(M)
	138 Freon TF	101	2.333	2.333	(0.485)	6155	2.00000	2.38(M)
	140 1,3-Butadiene	54	1.400	1.400	(0.291)	7520	2.00000	2.08
	147 Methylcyclohexane	55	5.951	5.951	(1.072)	15702	2.00000	1.84
	146 Methyl Acetate	43	2.716	2.716	(0.564)	8315	2.00000	2.32
	148 Tert-Butyl alcohol	59	2.971	2.971	(0.617)	17716	40.0000	44.09(aM)
	149 Isopropyl Alcohol	45	2.562	2.562	(0.532)	10615	40.0000	39.59(TM)

QC Flag Legend

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



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

\\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120605.D

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

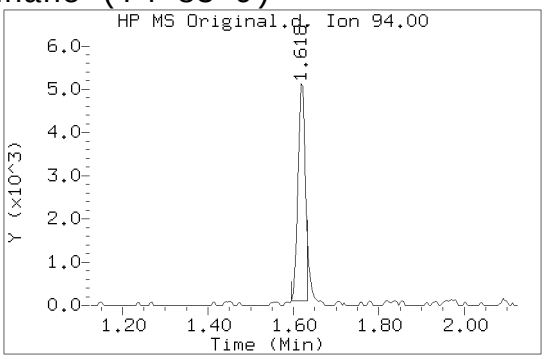
Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120605.D
Inj Date : 06-DEC-2023 13:05
InstruID : VOA9.i
LabSampID : VSTD002

Bromomethane (74-83-9)

Reason Code:

BEFORE

MASS
94
AREA
6114
HEIGHT
5031
11-Dec-2023
17:18
linh
pham



AFTER

MASS
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AREA
6114
HEIGHT
5031
12-Dec-2023
09:43
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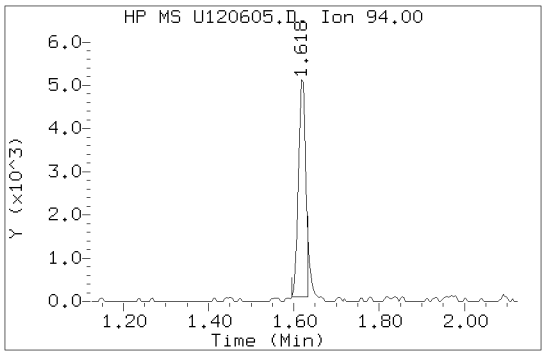

BEFORE

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11-Dec-2023
17:18
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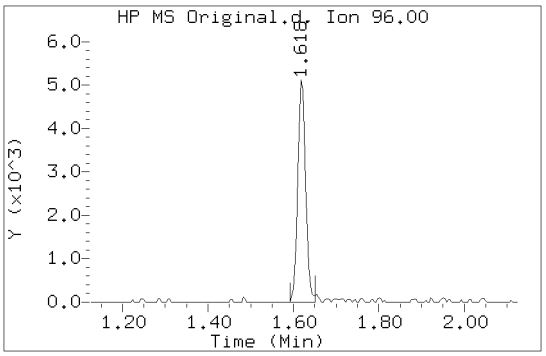

AFTER

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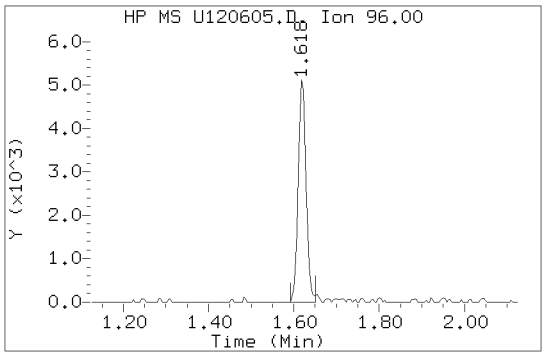

Acrolein (107-02-8)

Reason Code:

BEFORE

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56
AREA
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HEIGHT
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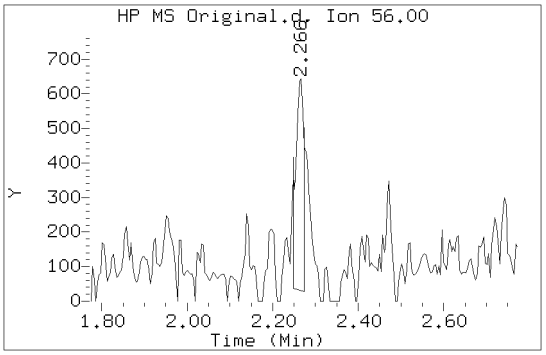
11-Dec-2023
17:18
linh
pham



AFTER

MASS
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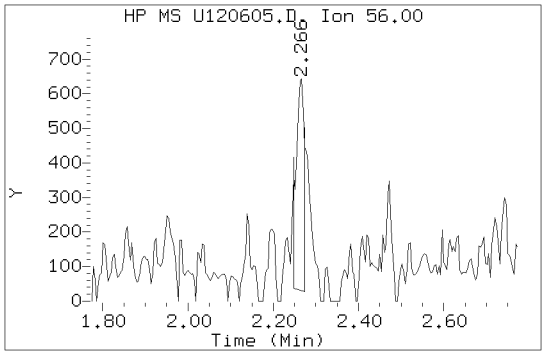
AREA
825
HEIGHT
612
12-Dec-2023
09:43
linh
pham



BEFORE

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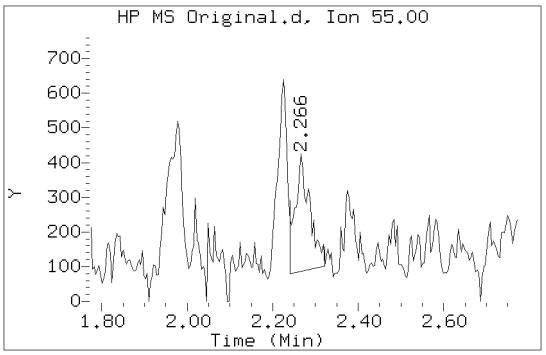
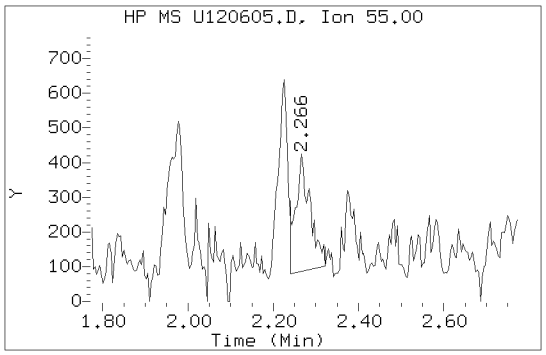
55
AREA
819
HEIGHT
339
11-Dec-2023
17:18
linh
pham



AFTER

MASS
55
AREA
819
HEIGHT
339
12-Dec-2023
09:43
linh
pham

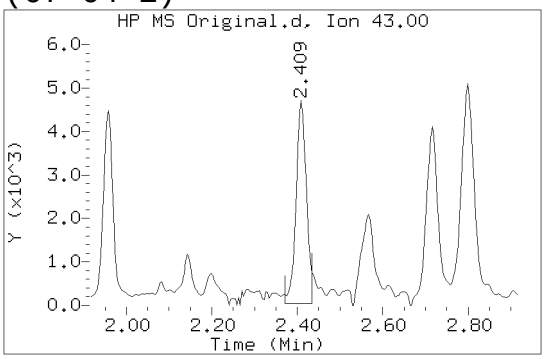


Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120605.D
Inj Date : 06-DEC-2023 13:05
InstruID : VOA9.i
LabSampID : VSTD002

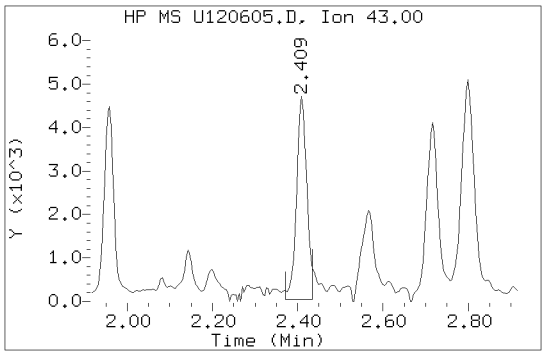
Acetone (67-64-1)

Reason Code:

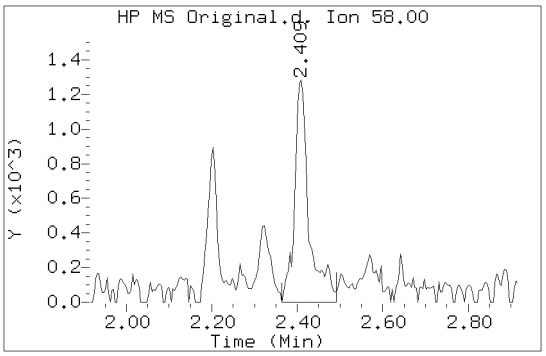
BEFORE
MASS
43
AREA
7963
HEIGHT
4678
11-Dec-2023
17:18
linh
pham



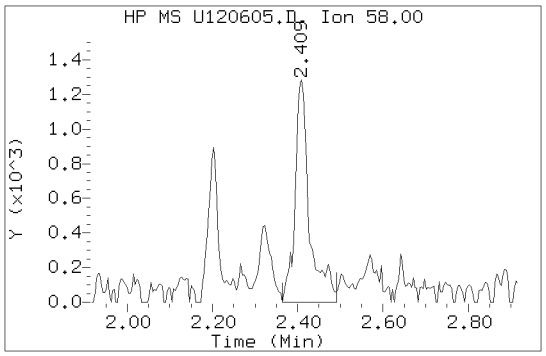
AFTER
MASS
43
AREA
7963
HEIGHT
4678
12-Dec-2023
09:43
linh
pham



BEFORE
MASS
58
AREA
3033
HEIGHT
1284
11-Dec-2023
17:18
linh
pham



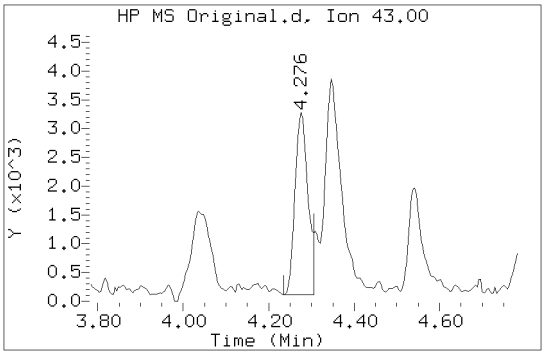
AFTER
MASS
58
AREA
3033
HEIGHT
1284
12-Dec-2023
09:43
linh
pham



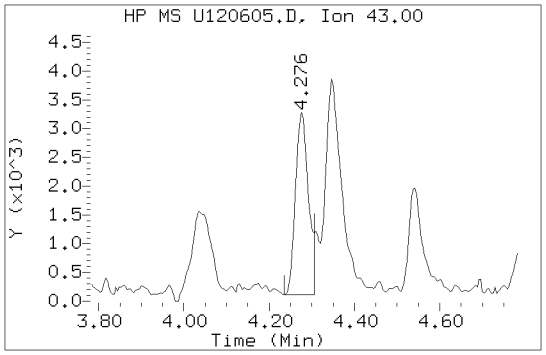
2-Butanone (78-93-3)

Reason Code:

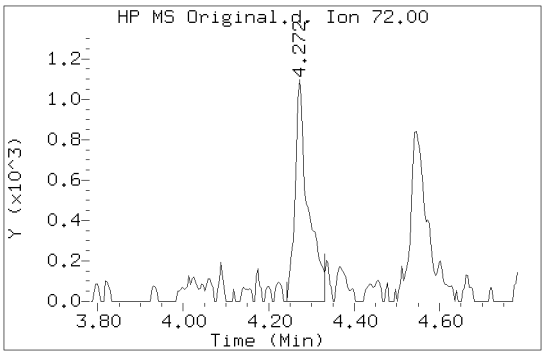
BEFORE
MASS
43
AREA
6824
HEIGHT
3175
11-Dec-2023
17:18
linh
pham



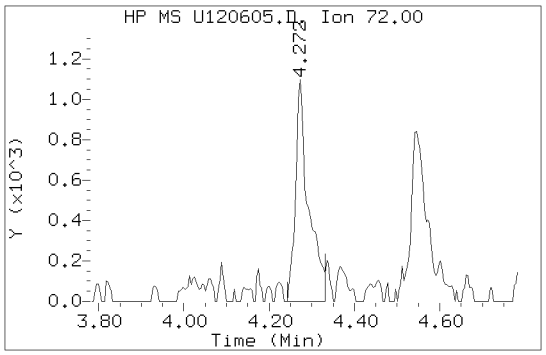
AFTER
MASS
43
AREA
6824
HEIGHT
3175
12-Dec-2023
09:43
linh
pham



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

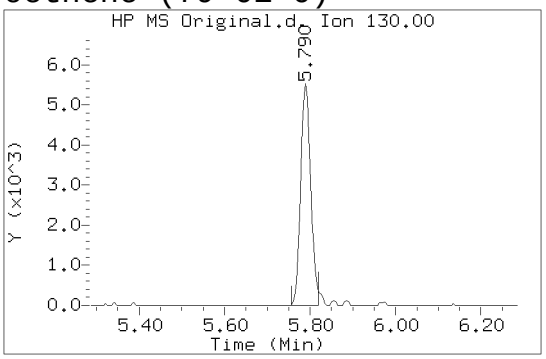


Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120605.D
Inj Date : 06-DEC-2023 13:05
InstruID : VOA9.i
LabSampID : VSTD002

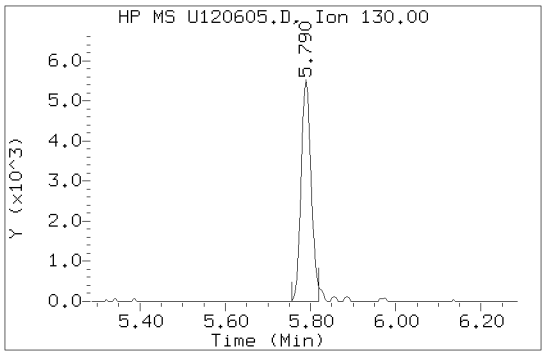
Trichloroethene (79-01-6)

Reason Code:

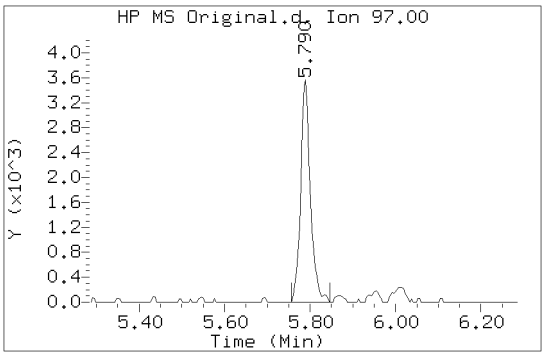
BEFORE
MASS
130
AREA
9201
HEIGHT
5527
11-Dec-2023
17:18
linh
pham



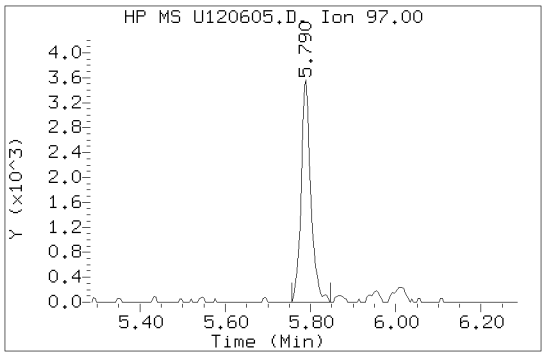
AFTER
MASS
130
AREA
9201
HEIGHT
5527
12-Dec-2023
09:43
linh
pham



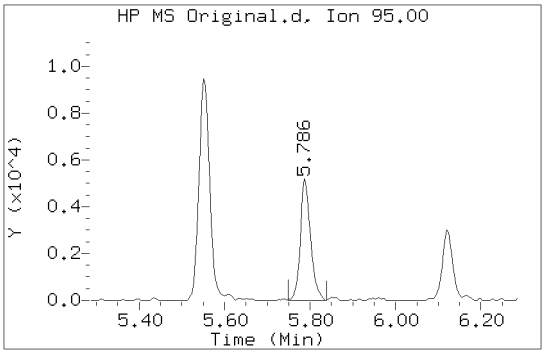
BEFORE
MASS
97
AREA
5731
HEIGHT
3565
11-Dec-2023
17:18
linh
pham



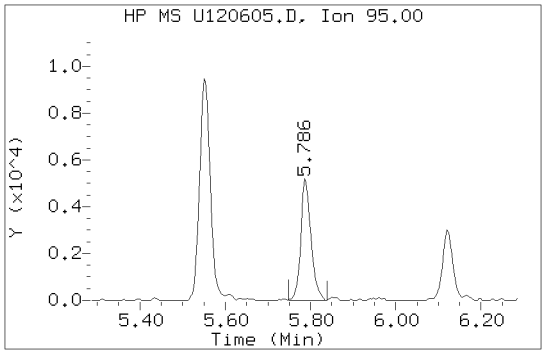
AFTER
MASS
97
AREA
5731
HEIGHT
3565
12-Dec-2023
09:43
linh
pham



BEFORE
MASS
95
AREA
8757
HEIGHT
5211
11-Dec-2023
17:18
linh
pham



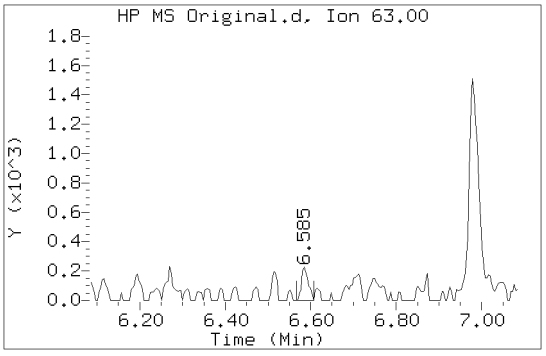
AFTER
MASS
95
AREA
8757
HEIGHT
5211
12-Dec-2023
09:43
linh
pham



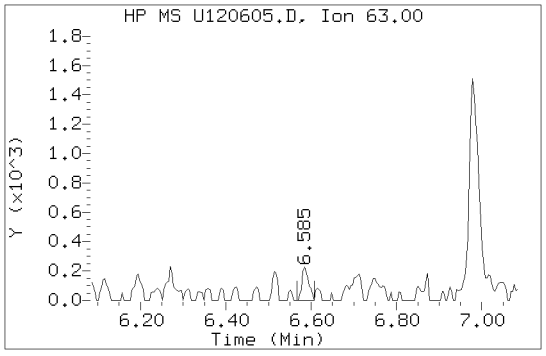
2-Chloroethylvinyl ether (110-75-8)

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



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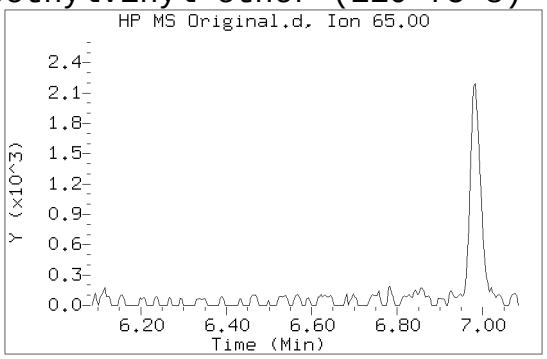
Inj Date : 06-DEC-2023 13:05
InstruID : VOA9.i
LabSampID : VSTD002

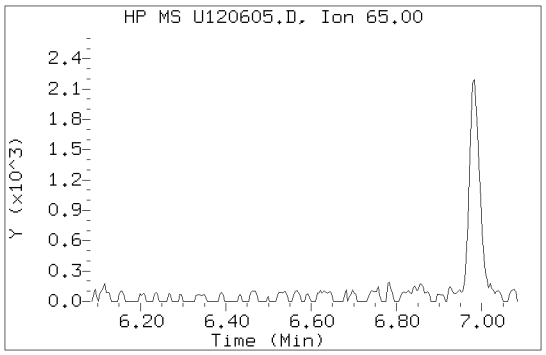
2-Chloroethylvinyl ether (110-75-8)

Reason Code:

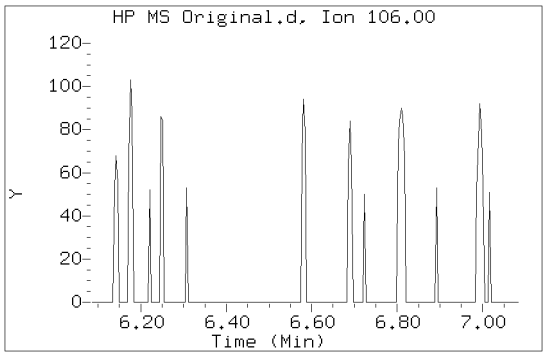
BEFORE
MASS
65
AREA
0
HEIGHT
0
11-Dec-2023
17:18
linh
pham



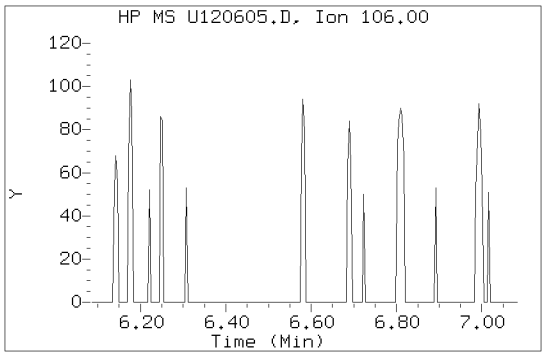
AFTER
MASS
65
AREA
0
HEIGHT
0
12-Dec-2023
09:43
linh
pham



BEFORE
MASS
106
AREA
0
HEIGHT
0
11-Dec-2023
17:18
linh
pham



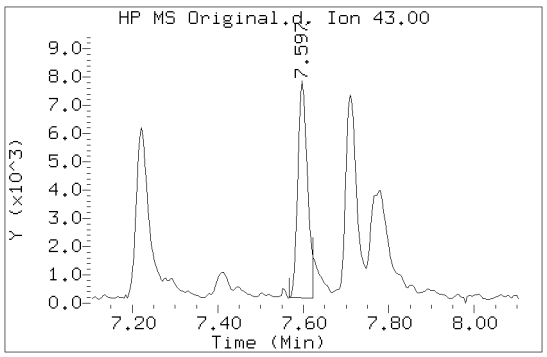
AFTER
MASS
106
AREA
0
HEIGHT
0
12-Dec-2023
09:43
linh
pham



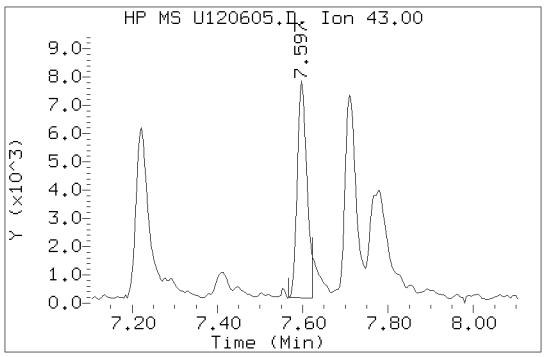
2-Hexanone (591-78-6)

Reason Code:

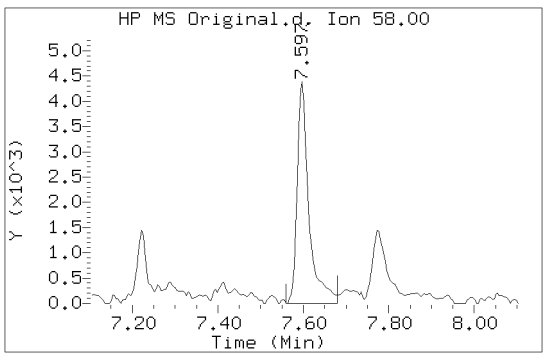
BEFORE
MASS
43
AREA
12214
HEIGHT
7667
11-Dec-2023
17:18
linh
pham



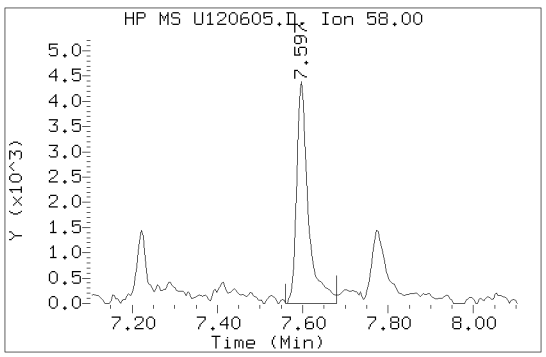
AFTER
MASS
43
AREA
12214
HEIGHT
7667
12-Dec-2023
09:43
linh
pham



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



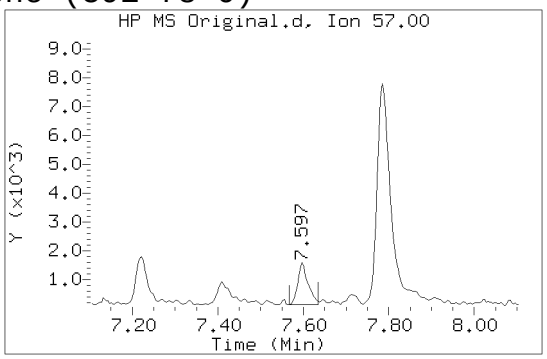
Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120605.D
Inj Date : 06-DEC-2023 13:05
InstruID : VOA9.i
LabSampID : VSTD002

2-Hexanone (591-78-6)

Reason Code:

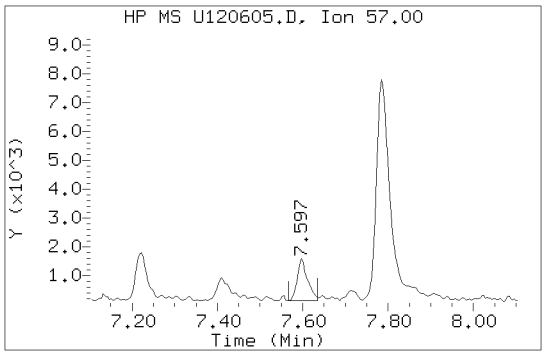
BEFORE

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

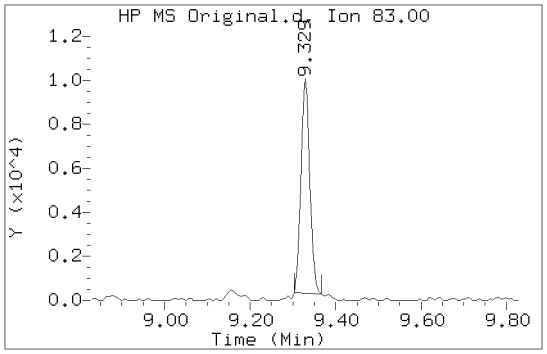


1,1,2,2-Tetrachloroethane (79-34-5)

Reason Code:

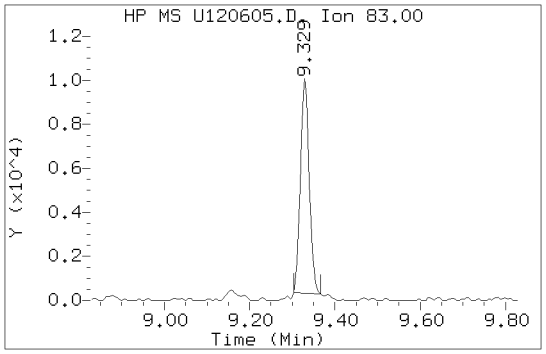
BEFORE

MASS
83
AREA
14293
HEIGHT
9756
11-Dec-2023
17:18
linh
pham



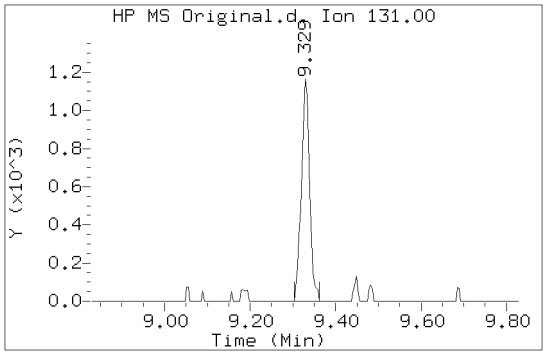
AFTER

MASS
83
AREA
14293
HEIGHT
9756
12-Dec-2023
09:43
linh
pham



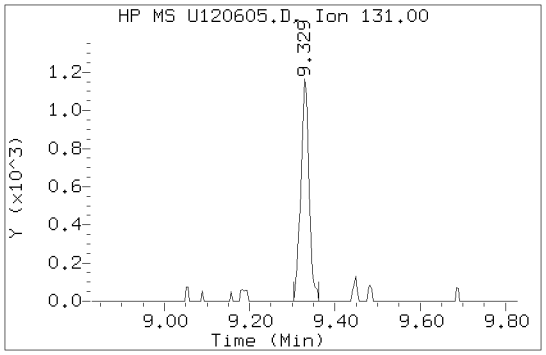
BEFORE

MASS
131
AREA
1599
HEIGHT
1165
11-Dec-2023
17:18
linh
pham



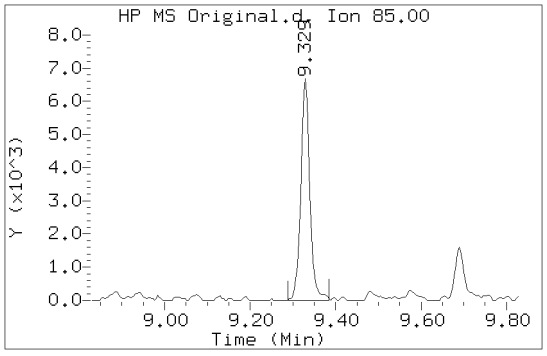
AFTER

MASS
131
AREA
1599
HEIGHT
1165
12-Dec-2023
09:43
linh
pham



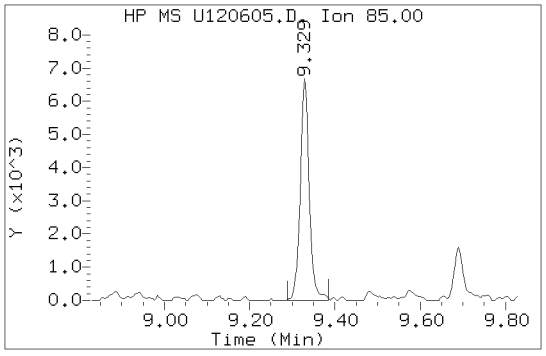
BEFORE

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

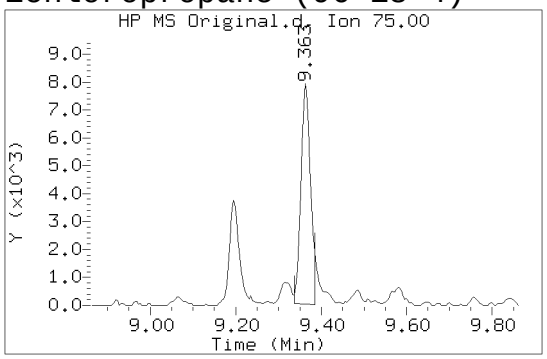


Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120605.D
Inj Date : 06-DEC-2023 13:05
InstruID : VOA9.i
LabSampID : VSTD002

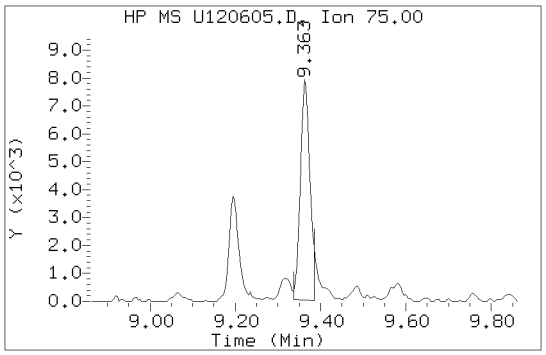
1,2,3-Trichloropropane (96-18-4)

Reason Code:

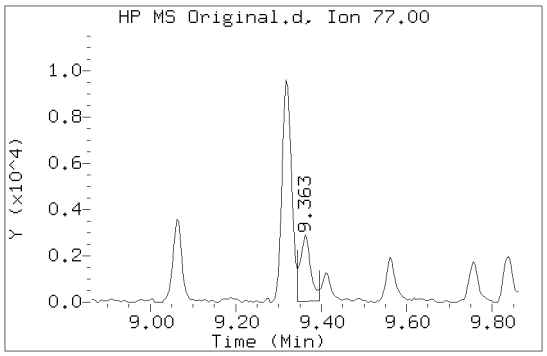
BEFORE
MASS
75
AREA
12628
HEIGHT
7893
11-Dec-2023
17:18
linh
pham



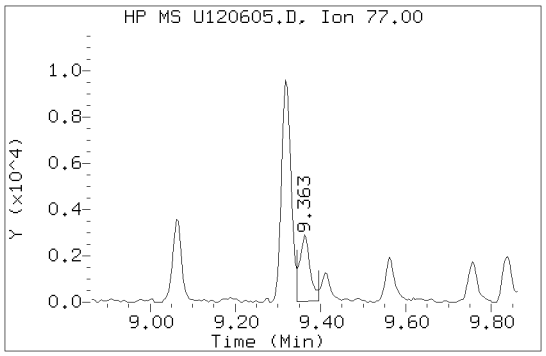
AFTER
MASS
75
AREA
12628
HEIGHT
7893
12-Dec-2023
09:43
linh
pham



BEFORE
MASS
77
AREA
5160
HEIGHT
2862
11-Dec-2023
17:18
linh
pham



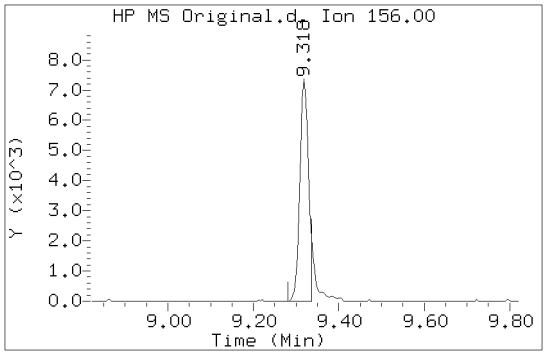
AFTER
MASS
77
AREA
5160
HEIGHT
2862
12-Dec-2023
09:43
linh
pham



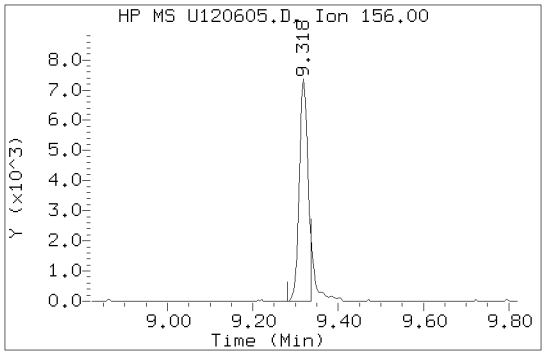
Bromobenzene (108-86-1)

Reason Code:

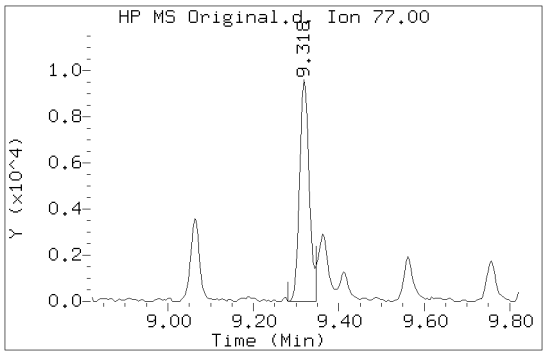
BEFORE
MASS
156
AREA
10570
HEIGHT
7371
11-Dec-2023
17:18
linh
pham



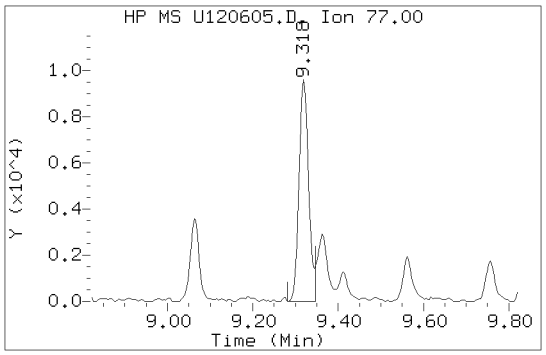
AFTER
MASS
156
AREA
10570
HEIGHT
7371
12-Dec-2023
09:43
linh
pham



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



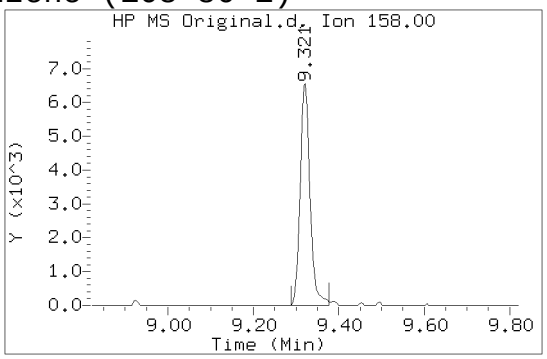
Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120605.D
Inj Date : 06-DEC-2023 13:05
InstruID : VOA9.i
LabSampID : VSTD002

Bromobenzene (108-86-1)

Reason Code:

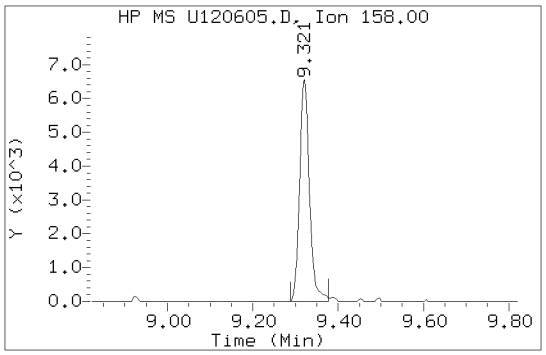
BEFORE

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

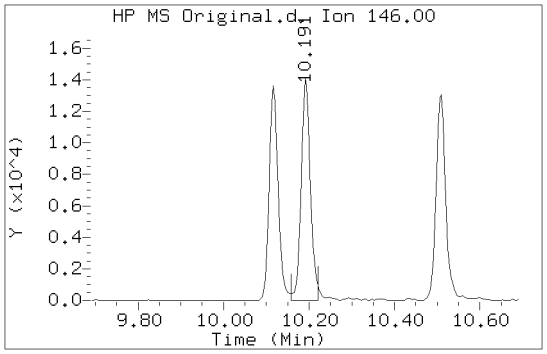


1,4-Dichlorobenzene (106-46-7)

Reason Code:

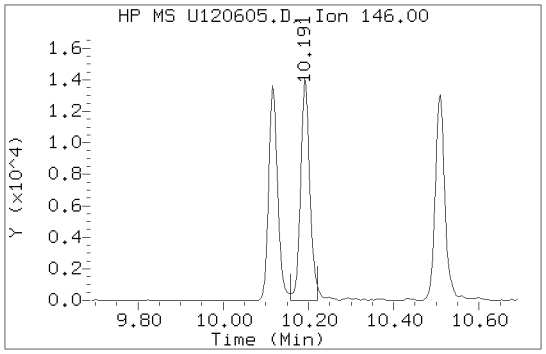
BEFORE

MASS
146
AREA
21680
HEIGHT
14068
11-Dec-2023
17:18
linh
pham



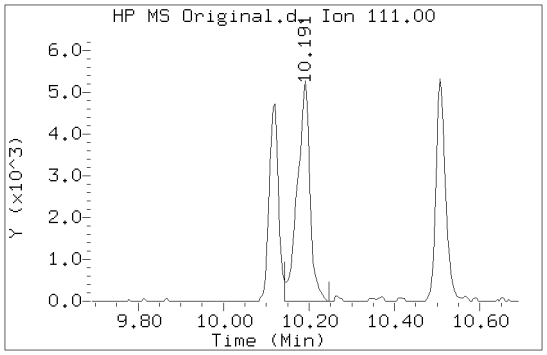
AFTER

MASS
146
AREA
21680
HEIGHT
14068
12-Dec-2023
09:43
linh
pham



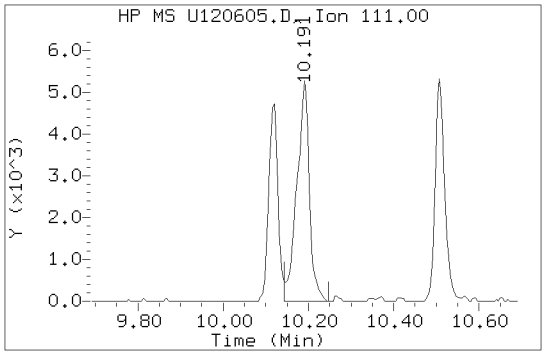
BEFORE

MASS
111
AREA
11017
HEIGHT
5266
11-Dec-2023
17:18
linh
pham



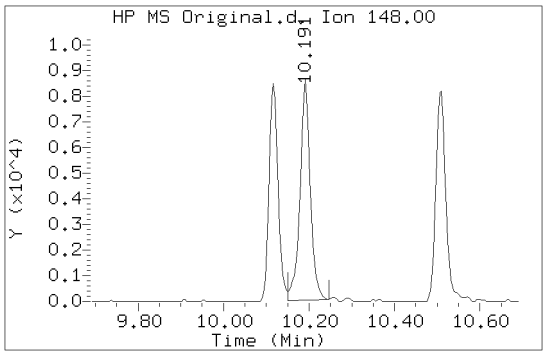
AFTER

MASS
111
AREA
11017
HEIGHT
5266
12-Dec-2023
09:43
linh
pham



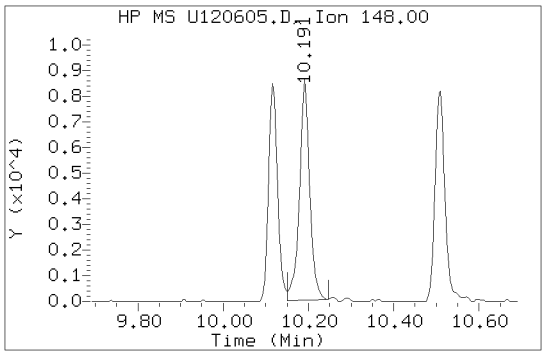
BEFORE

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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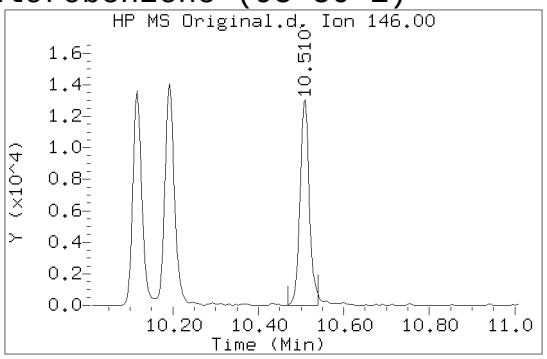
Inj Date : 06-DEC-2023 13:05
InstruID : VOA9.i
LabSampID : VSTD002

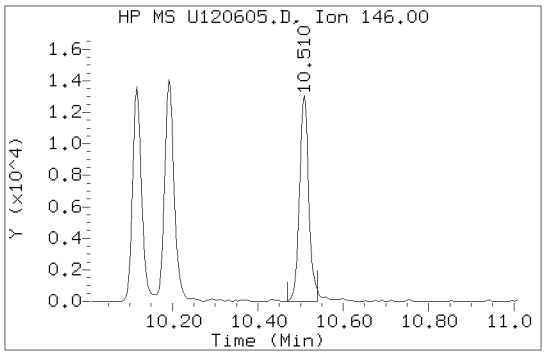
1,2-Dichlorobenzene (95-50-1)

Reason Code:

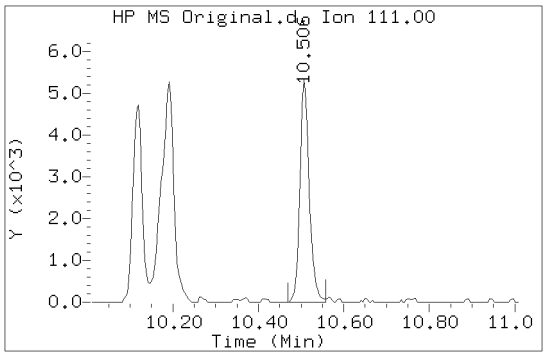
BEFORE
MASS
146
AREA
20103
HEIGHT
13043
11-Dec-2023
17:18
linh
pham



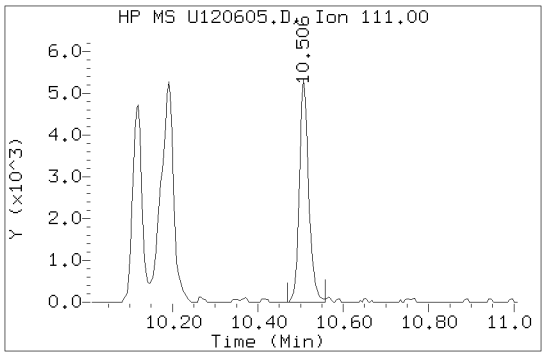
AFTER
MASS
146
AREA
20103
HEIGHT
13043
12-Dec-2023
09:43
linh
pham



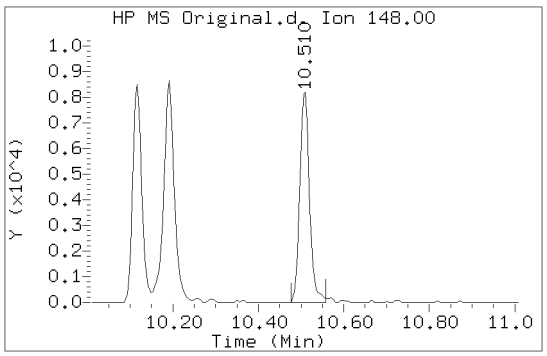
BEFORE
MASS
111
AREA
8235
HEIGHT
5315
11-Dec-2023
17:18
linh
pham



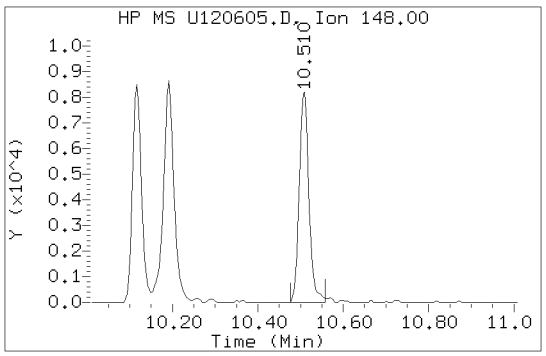
AFTER
MASS
111
AREA
8235
HEIGHT
5315
12-Dec-2023
09:43
linh
pham



BEFORE
MASS
148
AREA
13168
HEIGHT
8208
11-Dec-2023
17:18
linh
pham



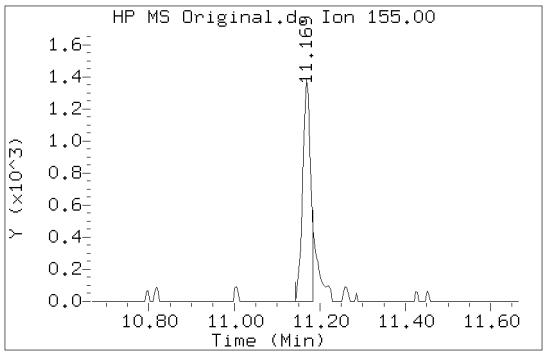
AFTER
MASS
148
AREA
13168
HEIGHT
8208
12-Dec-2023
09:43
linh
pham



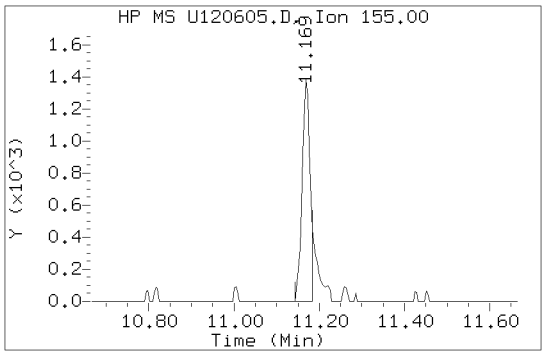
1,2-Dibromo-3-Chloropropane (96-12-8)

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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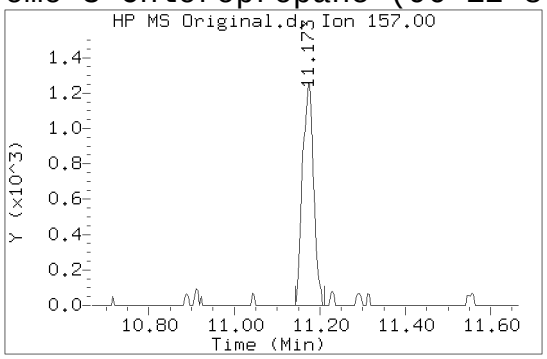
Inj Date : 06-DEC-2023 13:05
InstruID : VOA9.i
LabSampID : VSTD002

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

Reason Code:

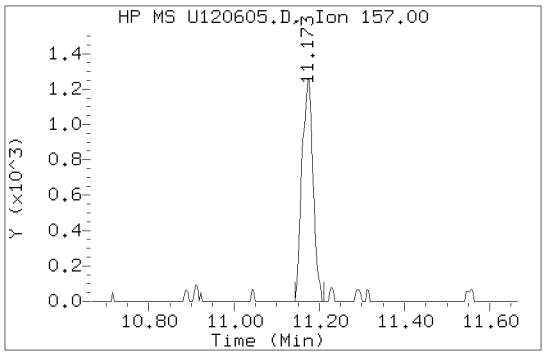
BEFORE

MASS
157
AREA
2298
HEIGHT
1253
11-Dec-2023
17:18
linh
pham



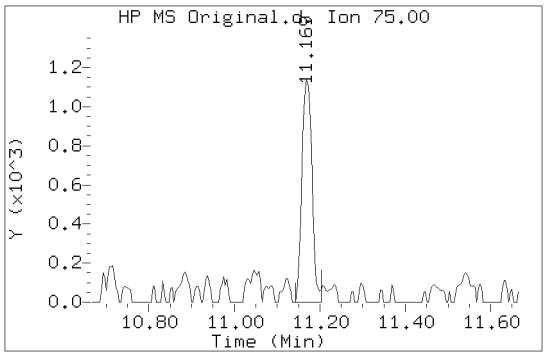
AFTER

MASS
157
AREA
2298
HEIGHT
1253
12-Dec-2023
09:43
linh
pham



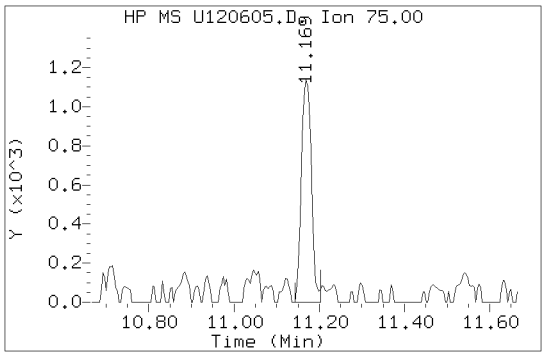
BEFORE

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

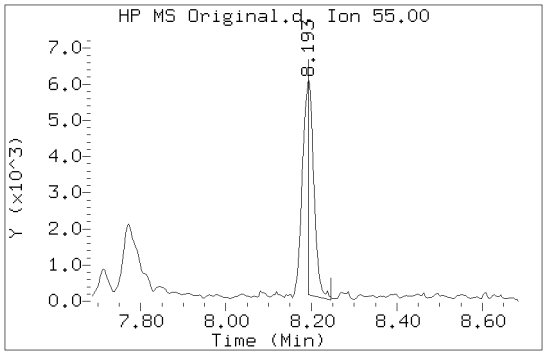


1-Chlorohexane (544-10-5)

Reason Code:

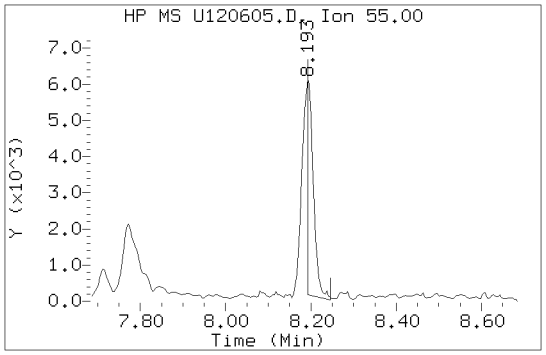
BEFORE

MASS
55
AREA
6133
HEIGHT
5975
11-Dec-2023
17:18
linh
pham



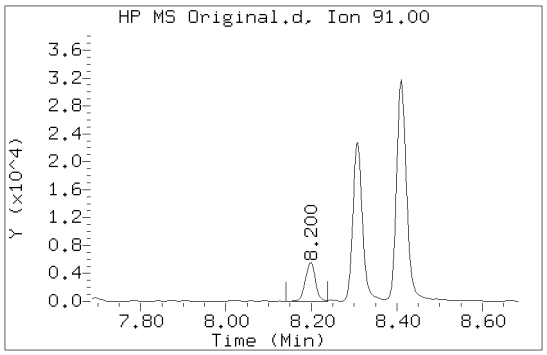
AFTER

MASS
55
AREA
6133
HEIGHT
5975
12-Dec-2023
09:43
linh
pham



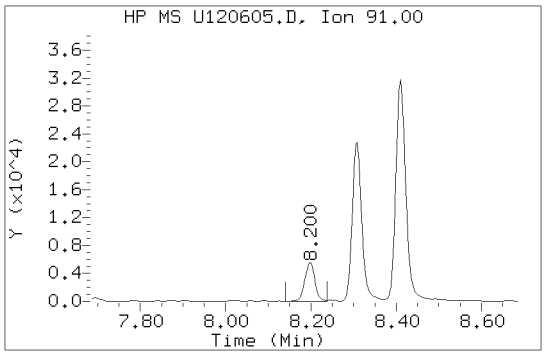
BEFORE

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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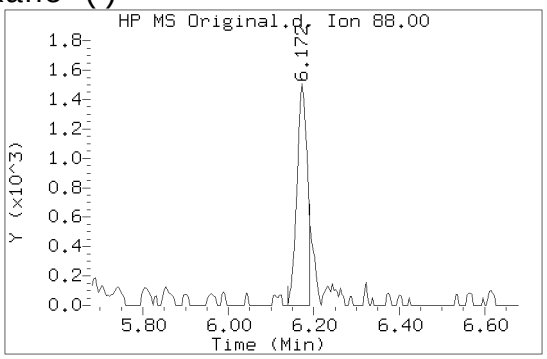
Inj Date : 06-DEC-2023 13:05
InstruID : VOA9.i
LabSampID : VSTD002

1,4-Dioxane ()

Reason Code:

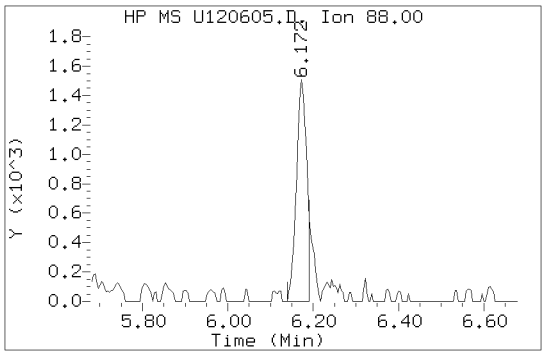
BEFORE

MASS
88
AREA
2559
HEIGHT
1508
11-Dec-2023
17:18
linh
pham



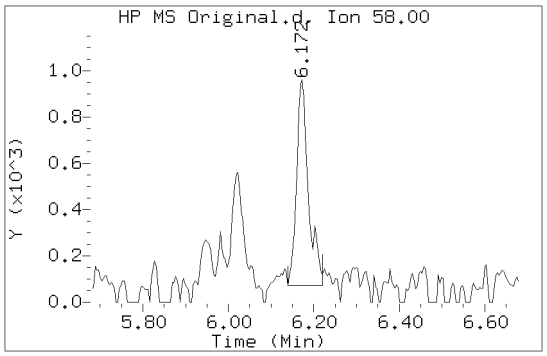
AFTER

MASS
88
AREA
2559
HEIGHT
1508
12-Dec-2023
09:43
linh
pham



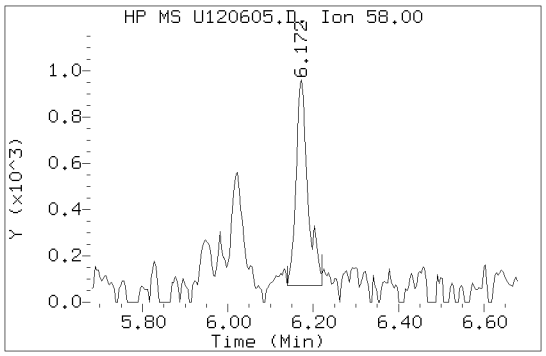
BEFORE

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

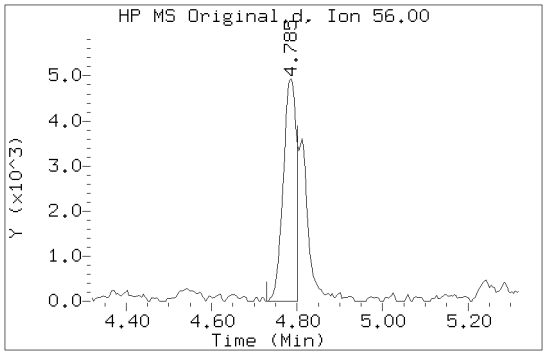


Cyclohexane (110-82-7)

Reason Code:

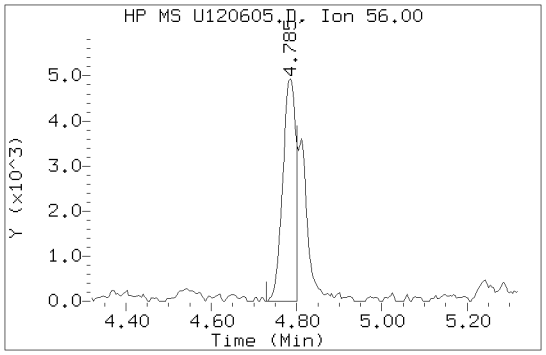
BEFORE

MASS
56
AREA
10415
HEIGHT
4933
11-Dec-2023
17:18
linh
pham



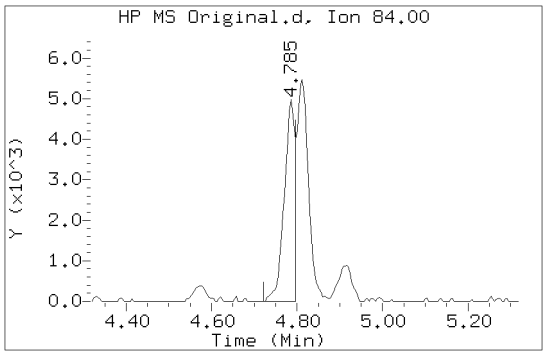
AFTER

MASS
56
AREA
10415
HEIGHT
4933
12-Dec-2023
09:43
linh
pham



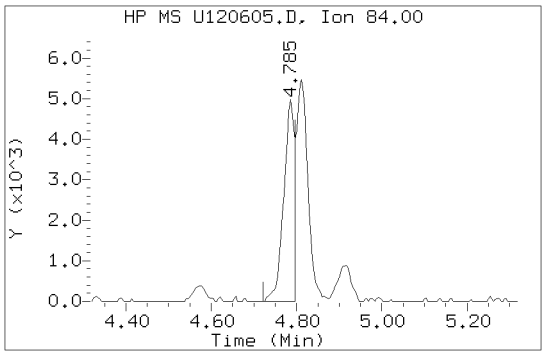
BEFORE

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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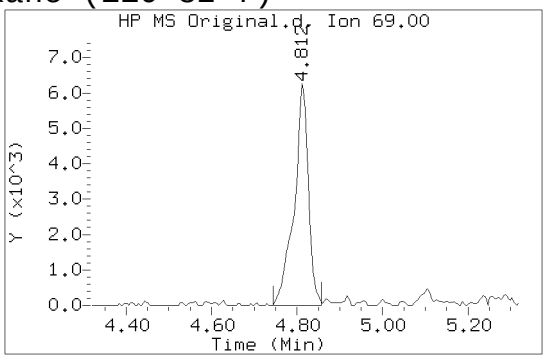
Inj Date : 06-DEC-2023 13:05
InstruID : VOA9.i
LabSampID : VSTD002

Cyclohexane (110-82-7)

BEFORE

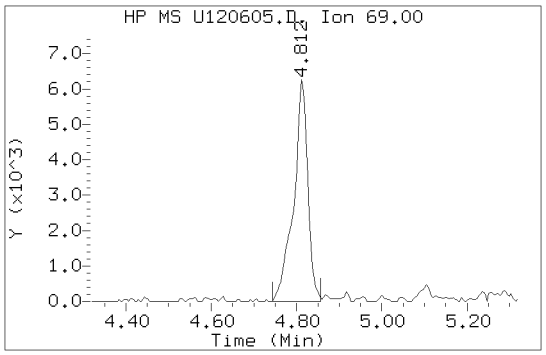
MASS
69
AREA
14726
HEIGHT
6260
11-Dec-2023
17:18
linh
pham



Reason Code:

AFTER

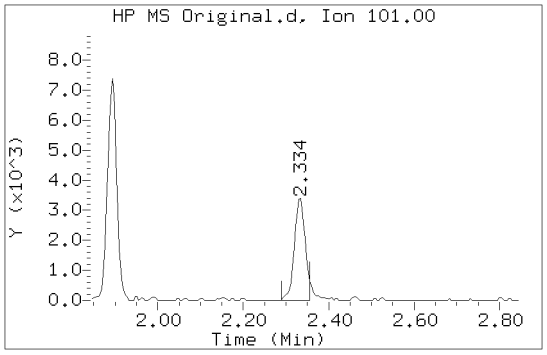
MASS
69
AREA
14726
HEIGHT
6260
12-Dec-2023
09:43
linh
pham



Freon TF (76-13-1)

BEFORE

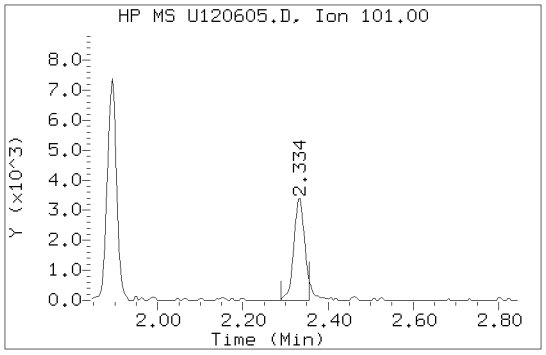
MASS
101
AREA
6155
HEIGHT
3393
11-Dec-2023
17:18
linh
pham



Reason Code:

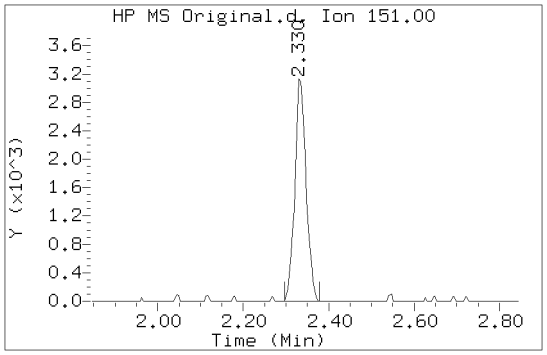
AFTER

MASS
101
AREA
6155
HEIGHT
3393
12-Dec-2023
09:43
linh
pham



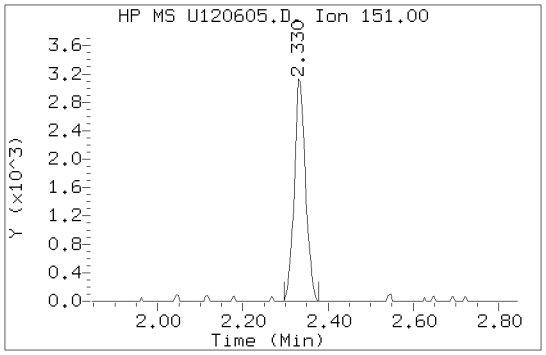
BEFORE

MASS
151
AREA
5851
HEIGHT
3131
11-Dec-2023
17:18
linh
pham



AFTER

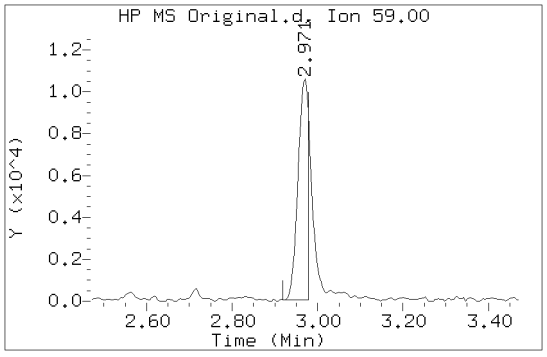
MASS
151
AREA
5851
HEIGHT
3131
12-Dec-2023
09:43
linh
pham



Tert-Butyl alcohol (75-65-0)

BEFORE

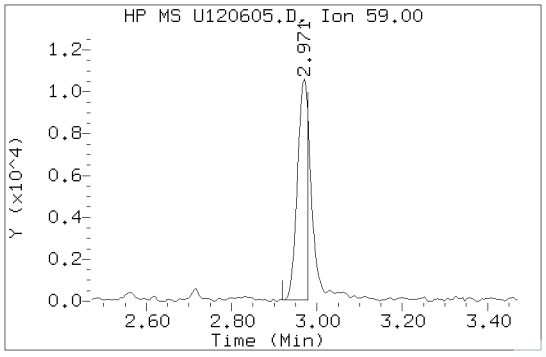
MASS
59
AREA
17716
HEIGHT
10555
11-Dec-2023
17:18
linh
pham



Reason Code:

AFTER

MASS
59
AREA
17716
HEIGHT
10555
12-Dec-2023
09:43
linh
pham



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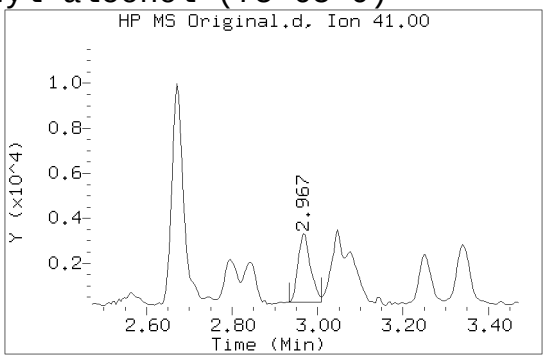
Inj Date : 06-DEC-2023 13:05
InstruID : VOA9.i
LabSampID : VSTD002

Tert-Butyl alcohol (75-65-0)

Reason Code:

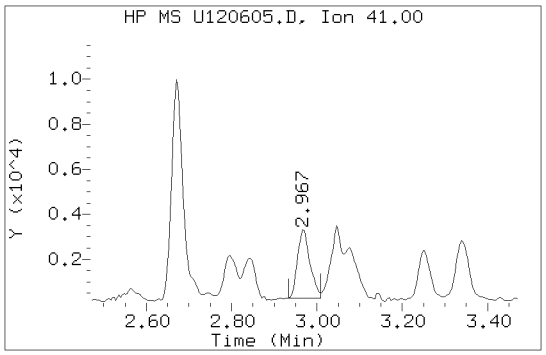
BEFORE

MASS
41
AREA
6290
HEIGHT
3044
11-Dec-2023
17:18
linh
pham



AFTER

MASS
41
AREA
6290
HEIGHT
3044
12-Dec-2023
09:43
linh
pham



Isopropyl Alcohol (67-63-0)

Reason Code:

BEFORE

MASS
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AREA
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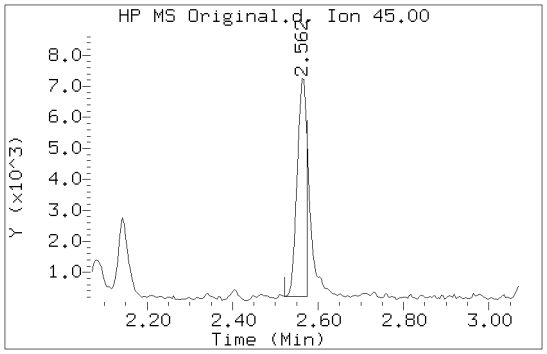
HEIGHT
7018
11-Dec-2023
17:18
linh
pham



AFTER

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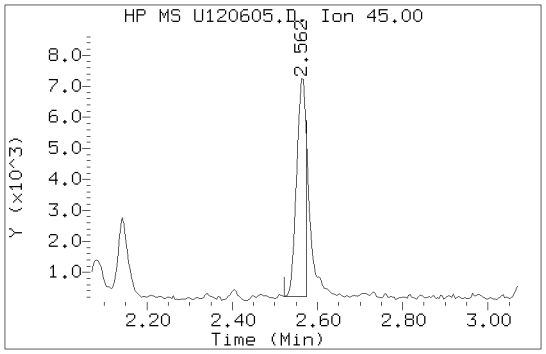

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17:18
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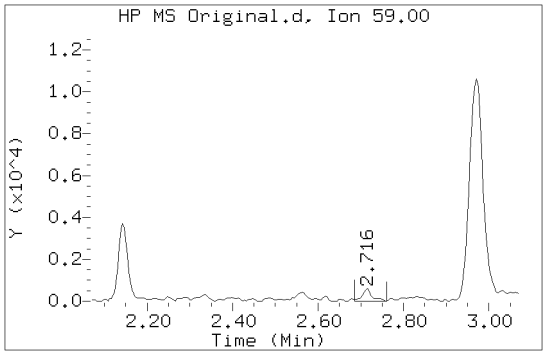

AFTER

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12-Dec-2023
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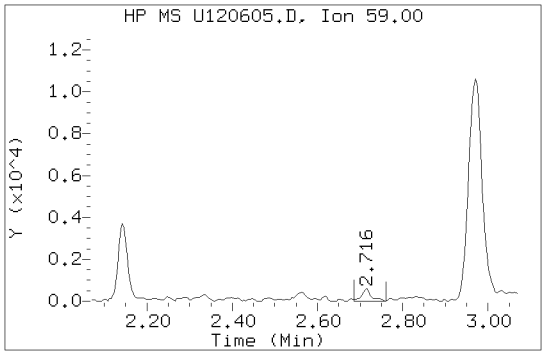

1,2-Dichloroethane-d4 (17060-07-0)

Reason Code:

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11-Dec-2023
17:18
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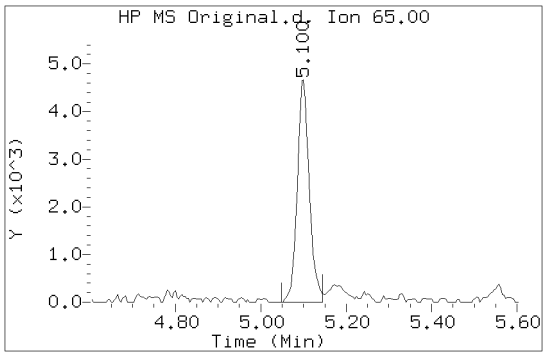

AFTER

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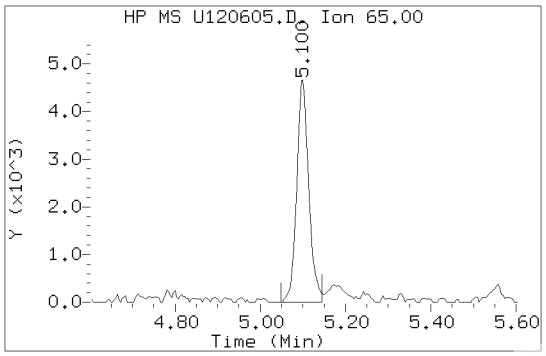

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Inj Date : 06-DEC-2023 13:05
InstruID : VOA9.i
LabSampID : VSTD002

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

Reason Code:

BEFORE

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1396
11-Dec-2023
17:18
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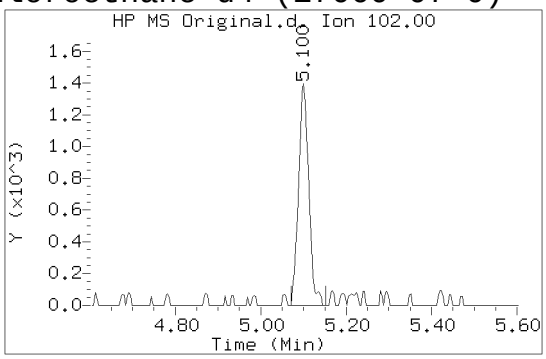

AFTER

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12-Dec-2023
09:43
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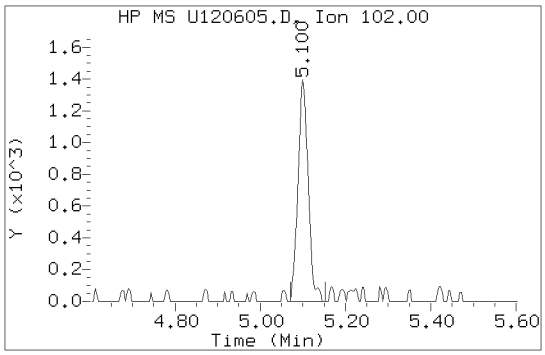


Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120606.D Page 1
Report Date: 12-Dec-2023 09:43

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

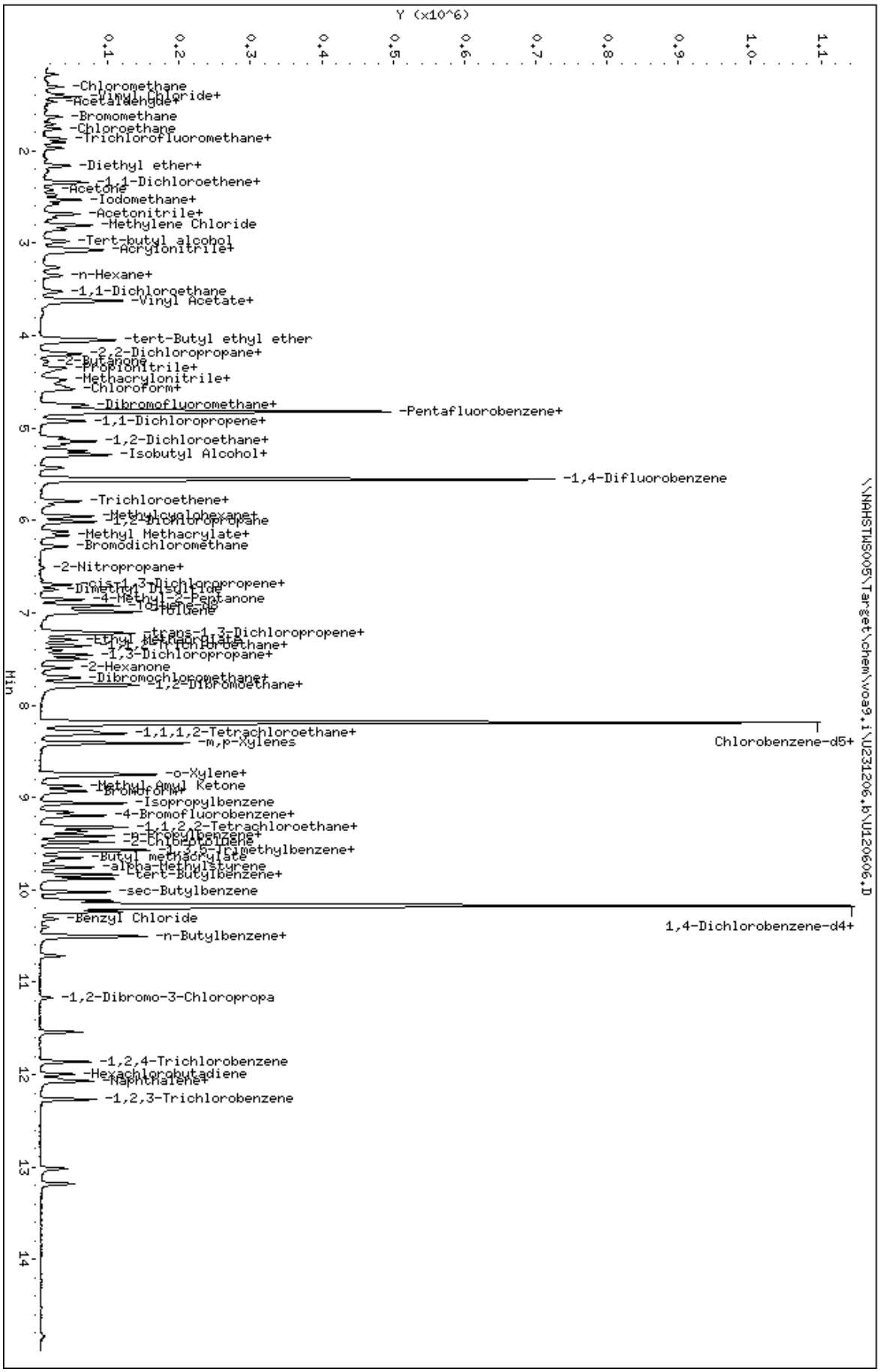
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	29 Bromochloromethane	128	4.478	4.478	(0.929)	10835	5.00000	4.83
$	30 Dibromofluoromethane	113	4.755	4.755	(0.987)	19773	5.00000	4.58
	31 1,1,1-Trichloroethane	97	4.748	4.748	(0.985)	22357	5.00000	4.09
	32 1,1-Dichloropropene	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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	91 Hexachlorobutadiene	225	11.998	11.998	(1.179)	9215	5.00000	4.09
	92 Naphthalene	128	12.069	12.069	(1.186)	59899	5.00000	4.41
	93 1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	25542	5.00000	4.50
M	94 1,2-Dichloroethylene (total)	96				32657	10.0000	
M	95 Xylenes (total)	106				85023	15.0000	
	131 Methyl Acrylate	55	4.380	4.380	(0.909)	21324	5.00000	4.62(a)
	135 1,4-Dioxane	88	6.172	6.172	(1.281)	5590	100.000	100.37
	141 Cyclohexane	56	4.789	4.789	(0.994)	21511	5.00000	4.25(M)
	138 Freon TF	101	2.345	2.345	(0.487)	11826	5.00000	4.68
	140 1,3-Butadiene	54	1.411	1.411	(0.293)	14067	5.00000	3.99
	147 Methylcyclohexane	55	5.951	5.951	(1.071)	37654	5.00000	4.46
	146 Methyl Acetate	43	2.723	2.723	(0.565)	17182	5.00000	4.91
	148 Tert-Butyl alcohol	59	2.978	2.978	(0.618)	42933	100.000	109.25
	149 Isopropyl Alcohol	45	2.573	2.573	(0.534)	26635	100.000	113.30(T)

QC Flag Legend

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



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Client ID: VSTD005
Sample Info: VSTD005;VSTD005;1;5;
Purge Volume: 5.0
Column phase: DB624

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

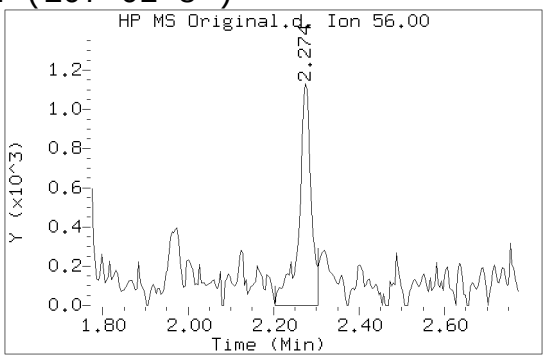
Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120606.D
Inj Date : 06-DEC-2023 13:27
InstruID : VOA9.i
LabSampID : VSTD005

Acrolein (107-02-8)

Reason Code:

BEFORE

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
linh
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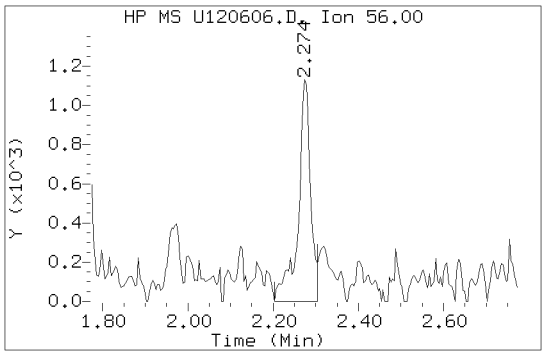

BEFORE

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923
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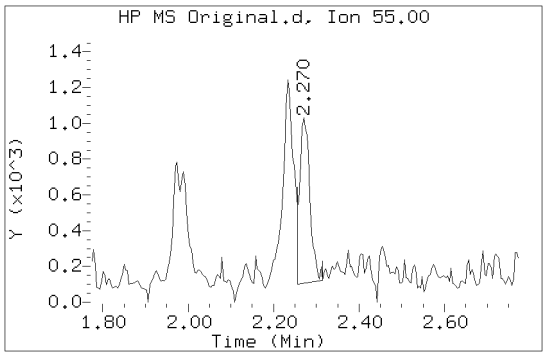

AFTER

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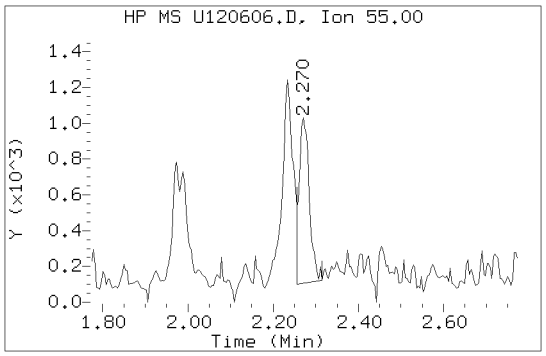
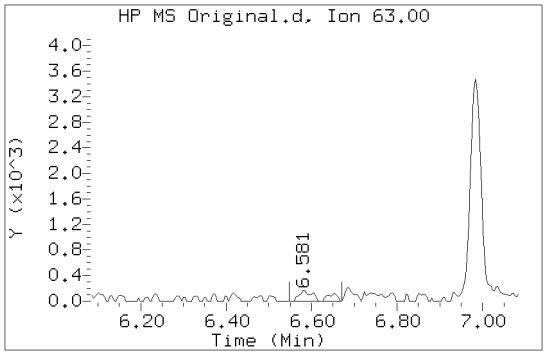


2-Chloroethylvinyl ether (110-75-8)

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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12-Dec-2023
09:43
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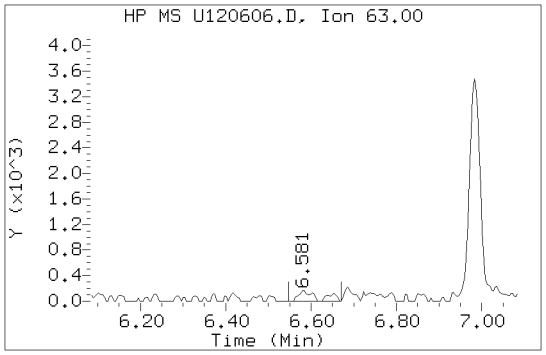

BEFORE

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17:18
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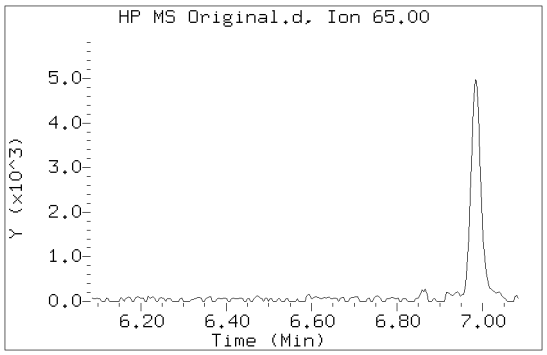

AFTER

MASS
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AREA
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HEIGHT
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12-Dec-2023
09:43
linh
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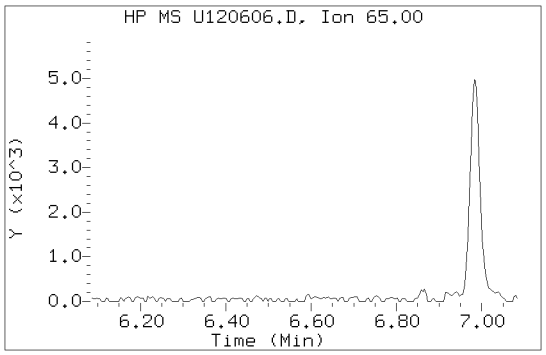

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Inj Date : 06-DEC-2023 13:27
InstruID : VOA9.i
LabSampID : VSTD005

2-Chloroethylvinyl ether (110-75-8)

Reason Code:

BEFORE

MASS
106
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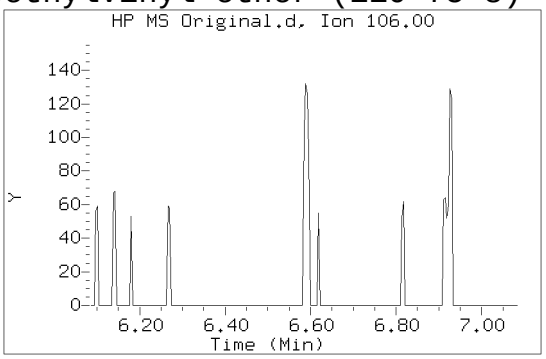
HEIGHT
0
11-Dec-2023
17:18
linh
pham



AFTER

MASS
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AREA
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HEIGHT
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12-Dec-2023
09:43
linh
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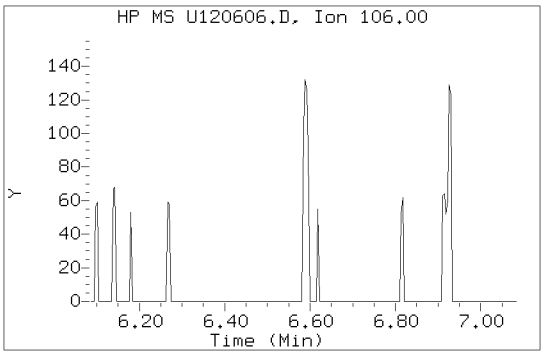

Cyclohexane (110-82-7)

Reason Code:

BEFORE

MASS
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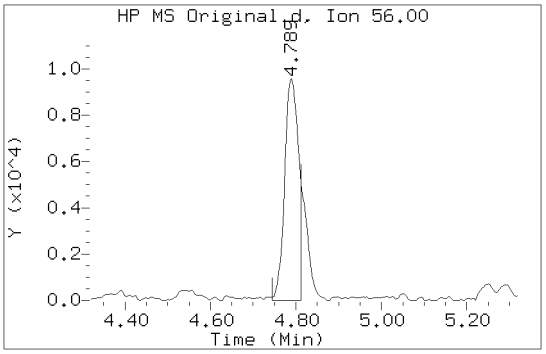

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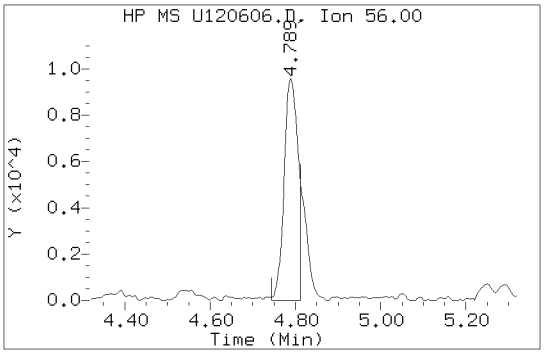

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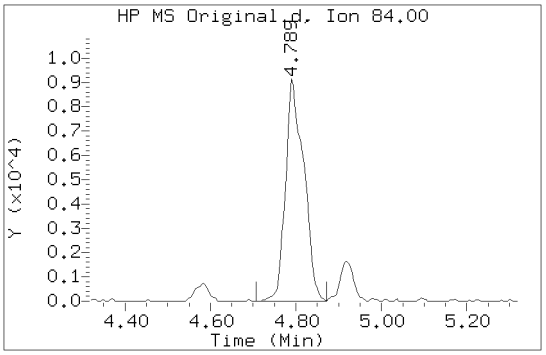

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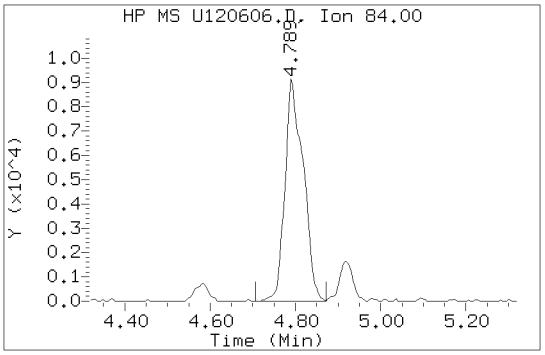

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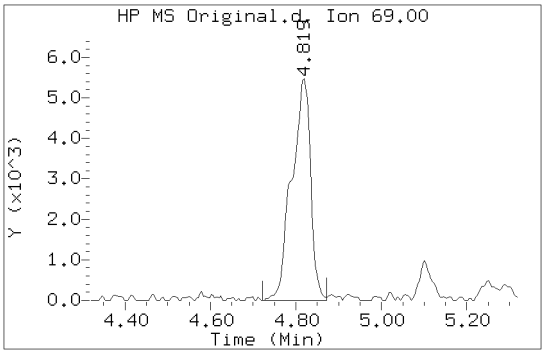

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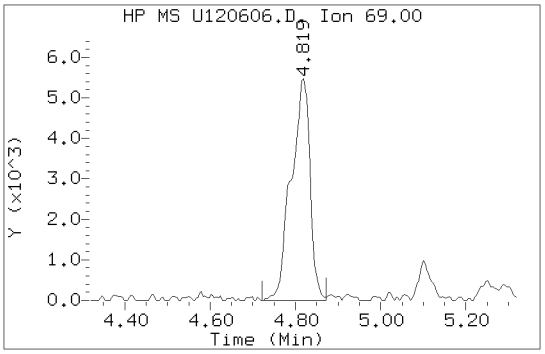

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Inj Date : 06-DEC-2023 13:27
InstruID : VOA9.i
LabSampID : VSTD005

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

Reason Code:

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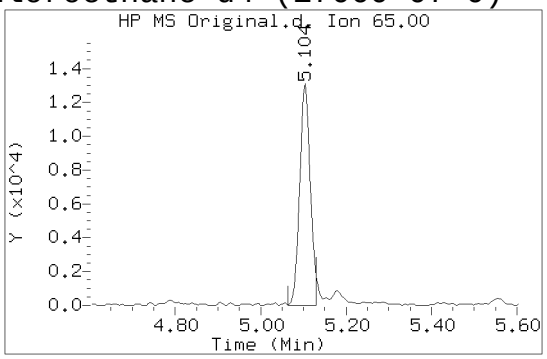

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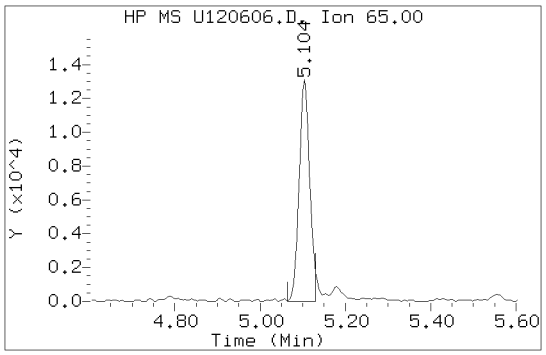

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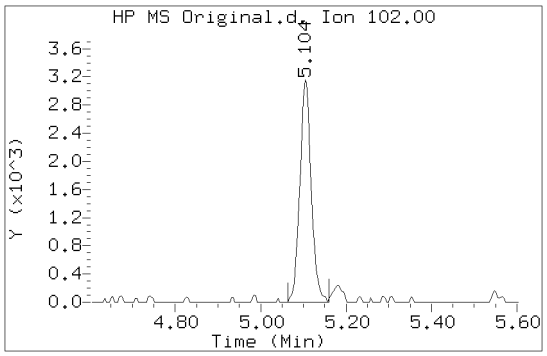

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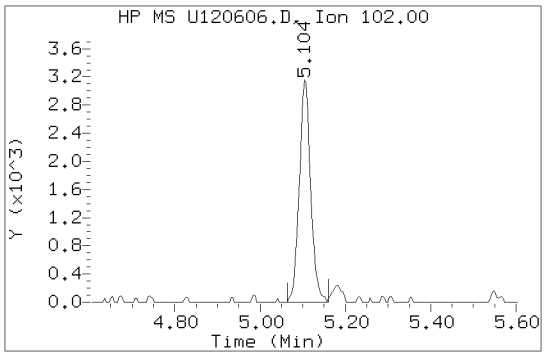

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Report Date: 12-Dec-2023 09:43

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
Operator : PC Inst ID: VOA9.i
Smp Info : VSTD020;VSTD020;1;6;
Misc Info : V9;WATER;0;1;
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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

Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120607.D Page 2
Report Date: 12-Dec-2023 09:43

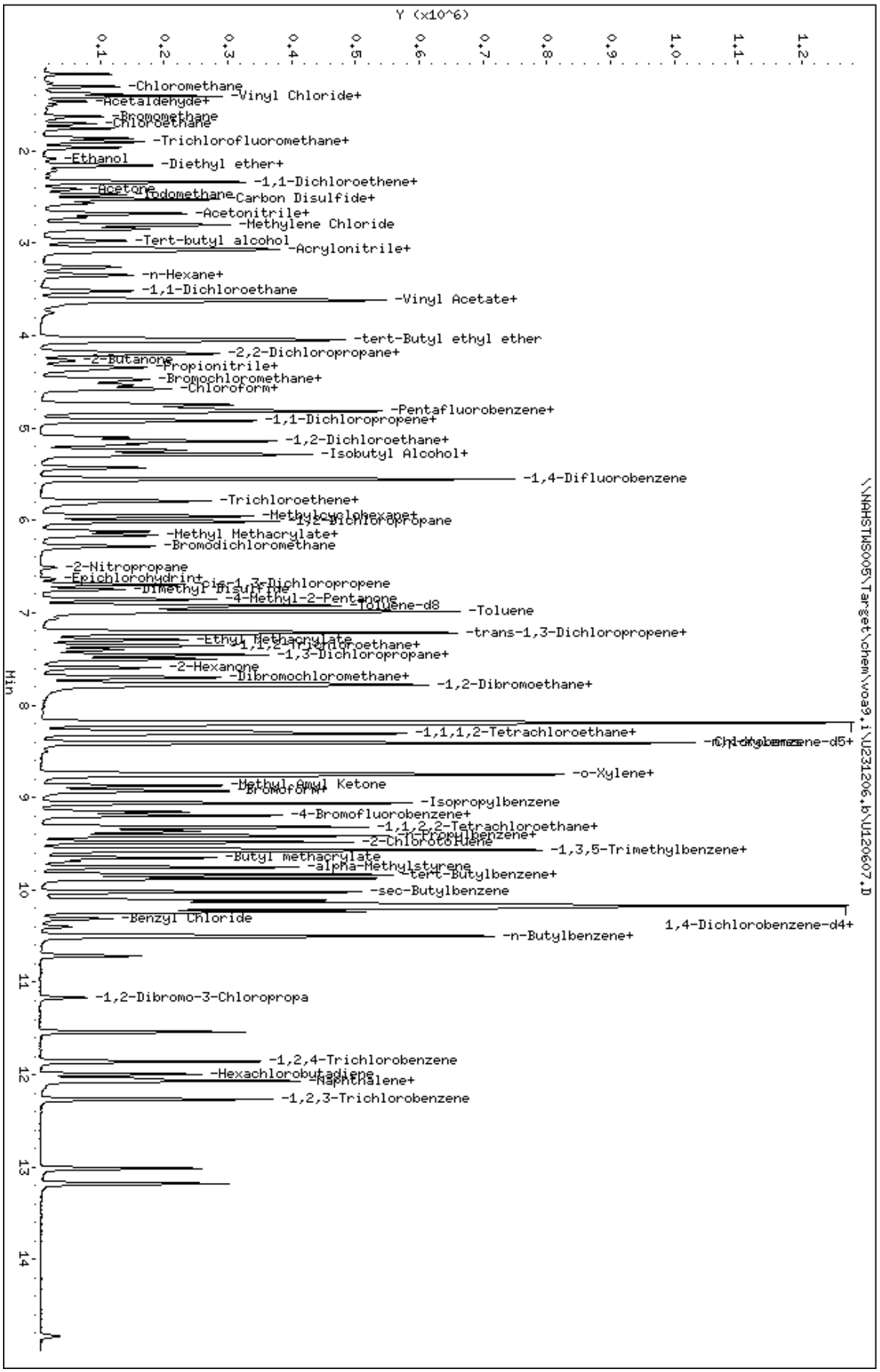
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	29 Bromochloromethane	128	4.470	4.470	(0.928)	49140	20.0000	20.80
$	30 Dibromofluoromethane	113	4.752	4.752	(0.986)	78610	20.0000	20.18
	31 1,1,1-Trichloroethane	97	4.744	4.744	(0.984)	115867	20.0000	20.15
	32 1,1-Dichloropropene	75	4.924	4.924	(0.887)	100335	20.0000	20.68
	33 1,2-Dichloroethane	62	5.179	5.179	(0.933)	112838	20.0000	19.97
	34 Carbon Tetrachloride	117	4.913	4.913	(0.885)	96798	20.0000	20.42
$	35 1,2-Dichloroethane-d4	65	5.100	5.100	(1.058)	89394	20.0000	21.11(M)
*	36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	579849	50.0000	
	37 Benzene	78	5.141	5.141	(0.926)	315779	20.0000	20.00
	38 Trichloroethene	130	5.790	5.790	(1.043)	85810	20.0000	19.72
	39 Bromodichloromethane	83	6.281	6.281	(1.131)	101029	20.0000	19.54
	41 2-Chloroethylvinyl ether	63	6.585	6.585	(1.186)	2163	40.0000	43.74(M)
	42 1,2-Dichloropropane	63	6.011	6.011	(1.082)	83165	20.0000	19.56
	44 Dibromomethane	93	6.120	6.120	(1.102)	55037	20.0000	20.01
	45 4-Methyl-2-Pentanone	43	6.855	6.855	(0.837)	166511	40.0000	39.46
	46 cis-1,3-Dichloropropene	75	6.693	6.693	(1.205)	118570	20.0000	18.75
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	581885	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	283330	20.0000	21.15
	50 Toluene	91	6.982	6.982	(0.853)	343935	20.0000	21.19
	51 trans-1,3-Dichloropropene	75	7.199	7.199	(1.296)	97024	20.0000	18.46
	52 2-Hexanone	43	7.593	7.593	(0.928)	111036	40.0000	37.81
	53 1,1,2-Trichloroethane	83	7.357	7.357	(0.899)	66320	20.0000	20.60
	54 1,3-Dichloropropane	76	7.499	7.499	(0.916)	141645	20.0000	19.66
	55 Dibromochloromethane	129	7.691	7.691	(0.940)	84329	20.0000	19.48
	56 Tetrachloroethene	164	7.458	7.458	(0.911)	72888	20.0000	20.98
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	77975	20.0000	19.28
	58 1-Chlorohexane	55	8.197	8.197	(1.476)	68345	20.0000	21.01
	59 Chlorobenzene	112	8.208	8.208	(1.003)	228536	20.0000	19.33
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	79680	20.0000	19.27
	61 Ethylbenzene	106	8.305	8.305	(1.015)	111588	20.0000	20.16
	62 m,p-Xylenes	106	8.410	8.410	(1.027)	281574	40.0000	42.32
	63 o-Xylene	106	8.748	8.748	(1.069)	140260	20.0000	20.50
	64 Styrene	104	8.763	8.763	(1.071)	236657	20.0000	20.77
	66 Bromoform	173	8.920	8.920	(1.090)	53027	20.0000	18.59
	67 Isopropylbenzene	105	9.063	9.063	(1.107)	349789	20.0000	21.14
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	105283	20.0000	19.75
$	69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	106137	20.0000	20.17
*	70 1,4-Dichlorobenzene-d4	152	10.168	10.168	(1.000)	320589	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.921)	103797	20.0000	17.05
	73 n-Propylbenzene	91	9.411	9.411	(0.926)	394967	20.0000	20.98
	74 Bromobenzene	156	9.317	9.317	(0.916)	102438	20.0000	19.02
	75 1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	280571	20.0000	20.97
	76 2-Chlorotoluene	91	9.482	9.482	(0.933)	254146	20.0000	20.05
	77 4-Chlorotoluene	91	9.576	9.576	(0.942)	285359	20.0000	19.85
	78 tert-Butylbenzene	119	9.835	9.835	(0.967)	250022	20.0000	20.80
	79 1,2,4-Trimethylbenzene	105	9.880	9.880	(0.972)	276998	20.0000	20.65
	81 sec-Butylbenzene	105	10.022	10.022	(0.986)	322694	20.0000	20.82
	82 p-Isopropyltoluene	119	10.146	10.146	(0.998)	280155	20.0000	20.89
	83 1,3-Dichlorobenzene	146	10.116	10.116	(0.995)	176237	20.0000	18.47
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	185919	20.0000	18.39
	87 n-Butylbenzene	91	10.491	10.491	(1.032)	229910	20.0000	20.42
	88 1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	177221	20.0000	18.46

89	1,2-Dibromo-3-Chloropropane	155	11.166	11.166 (1.098)	16207	20.0000	18.66
90	1,2,4-Trichlorobenzene	180	11.855	11.855 (1.166)	110885	20.0000	18.72

	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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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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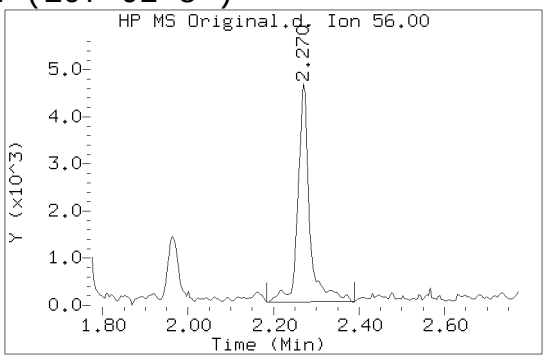

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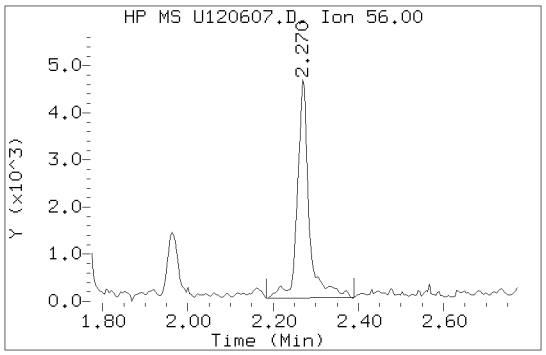

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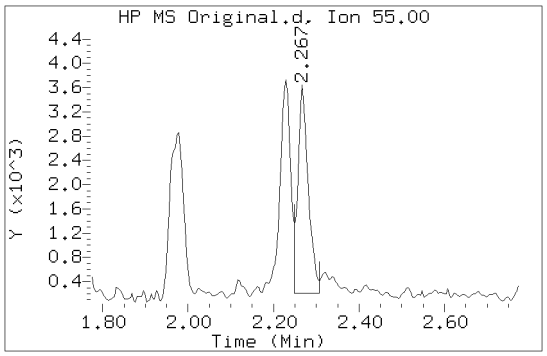

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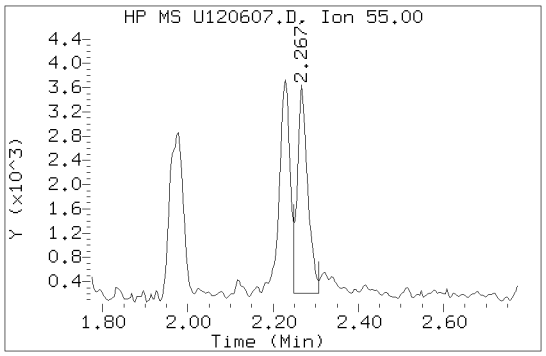

2-Chloroethylvinyl ether (110-75-8)

Reason Code:

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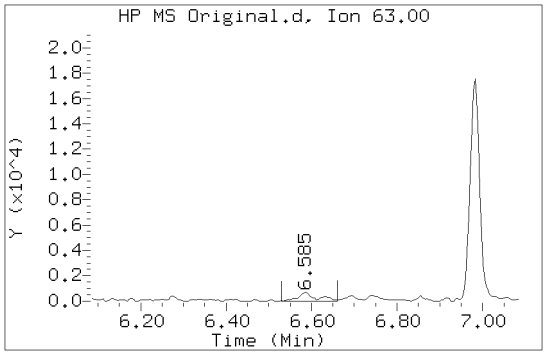

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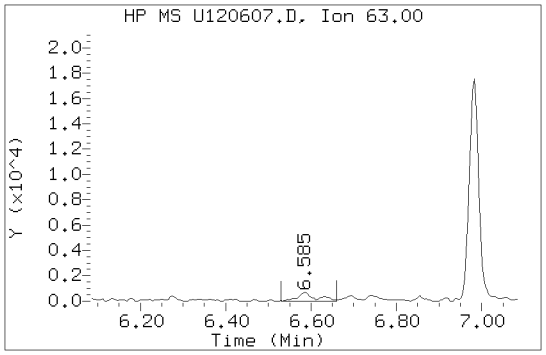

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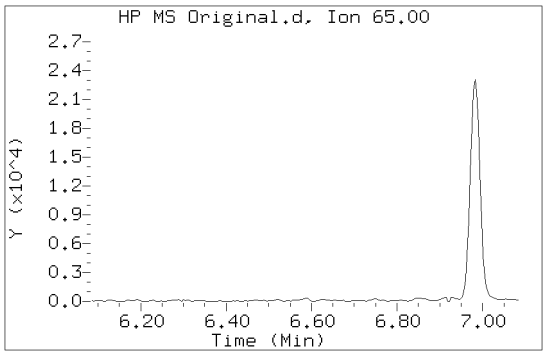

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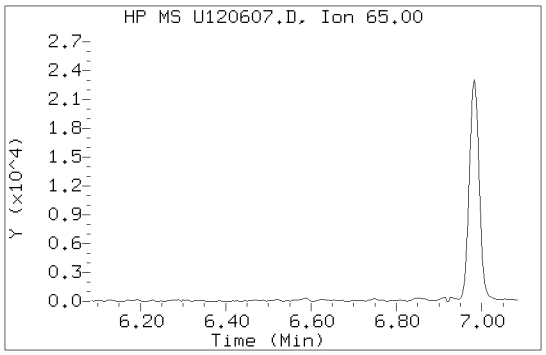

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Inj Date : 06-DEC-2023 13:49
InstruID : VOA9.i
LabSampID : VSTD020

2-Chloroethylvinyl ether (110-75-8)

Reason Code:

BEFORE

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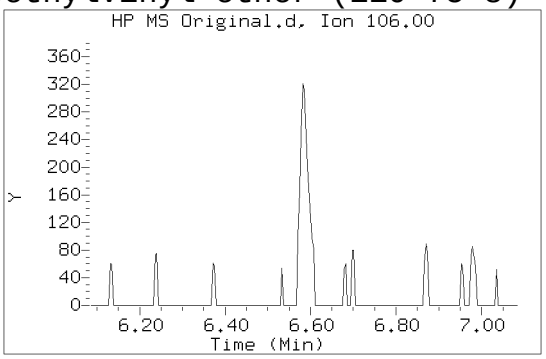

AFTER

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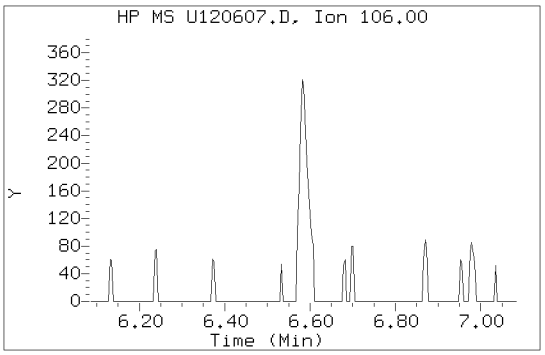

1,2-Dichloroethane-d4 (17060-07-0)

Reason Code:

BEFORE

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11-Dec-2023
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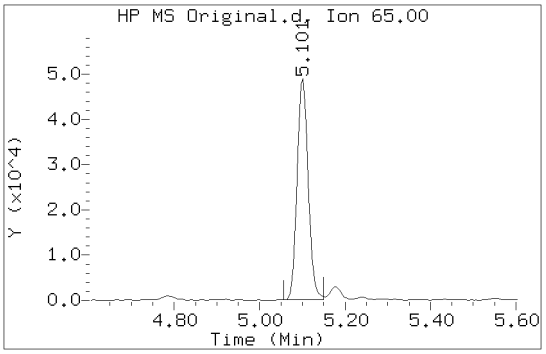

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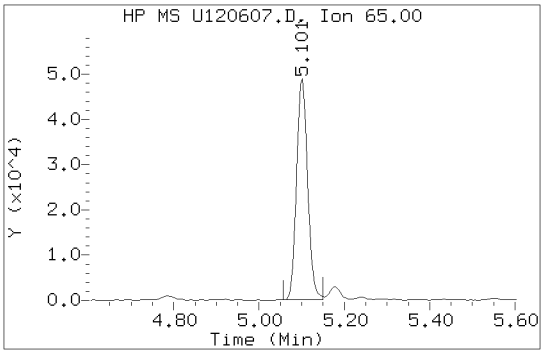

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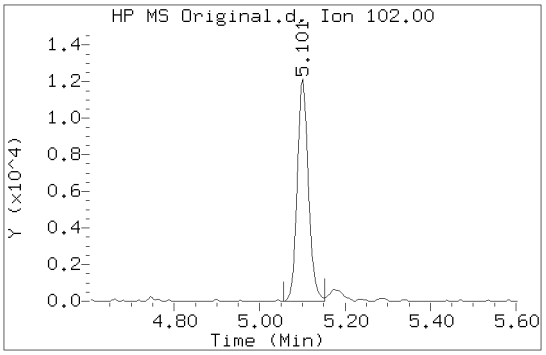

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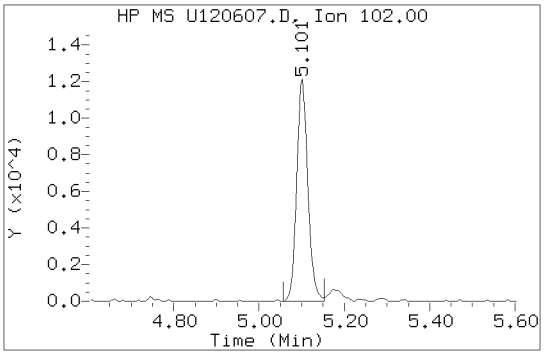

Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120608.D Page 1
Report Date: 12-Dec-2023 09:43

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120608.D
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Inj Date : 06-DEC-2023 14:11
Operator : PC Inst ID: VOA9.i
Smp Info : VSTD050;VSTD050;1;7;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\8260C.m
Meth Date : 12-Dec-2023 09:43 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 13:49 Cal File: U120607.D
Als bottle: 9 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V9.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1	Pentafluorobenzene	168	4.815	4.815	(1.000)	366831	50.0000	
2	Dichlorodifluoromethane	85	1.160	1.160	(0.241)	137759	50.0000	46.64
3	Chloromethane	50	1.295	1.295	(0.269)	198858	50.0000	47.25
5	Vinyl Chloride	62	1.374	1.374	(0.285)	192474	50.0000	47.87
6	Bromomethane	94	1.617	1.617	(0.336)	101286	50.0000	49.17
7	Chloroethane	64	1.696	1.696	(0.352)	130701	50.0000	48.28
8	Trichlorofluoromethane	101	1.895	1.895	(0.394)	237922	50.0000	46.69
9	Acrolein	56	2.262	2.262	(0.470)	19296	100.000	92.30
10	Acetone	43	2.405	2.405	(0.499)	141600	100.000	114.20
11	1,1-Dichloroethene	96	2.330	2.330	(0.484)	134600	50.0000	47.57
15	Iodomethane	142	2.465	2.465	(0.512)	363885	100.000	101.22
16	Acrylonitrile	53	3.064	3.064	(0.636)	144182	100.000	100.19
17	Methylene Chloride	84	2.791	2.791	(0.580)	178723	50.0000	50.05
18	Methyl tert-butyl ether	73	3.079	3.079	(0.640)	503453	50.0000	49.66
19	Carbon Disulfide	76	2.517	2.517	(0.523)	830715	100.000	99.64
20	trans-1,2-Dichloroethene	96	3.057	3.057	(0.635)	164779	50.0000	48.71
21	Vinyl Acetate	43	3.604	3.604	(0.749)	1082843	100.000	105.87
22	1,1-Dichloroethane	63	3.511	3.511	(0.729)	308894	50.0000	44.77
24	2-Butanone	43	4.260	4.260	(0.885)	176331	100.000	98.12
26	2,2-Dichloropropane	77	4.182	4.182	(0.868)	234552	50.0000	48.36

27 cis-1,2-Dichloroethene	96	4.193	4.193 (0.871)	222870	50.0000	49.18
28 Chloroform	83	4.571	4.571 (0.949)	363364	50.0000	48.38

Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120608.D Page 2
Report Date: 12-Dec-2023 09:43

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	29 Bromochloromethane	128	4.467	4.467	(0.928)	119341	50.0000	50.90
$	30 Dibromofluoromethane	113	4.748	4.748	(0.986)	189455	50.0000	50.47
	31 1,1,1-Trichloroethane	97	4.740	4.740	(0.984)	277100	50.0000	48.55
	32 1,1-Dichloropropene	75	4.920	4.920	(0.887)	241449	50.0000	49.00
	33 1,2-Dichloroethane	62	5.175	5.175	(0.932)	276143	50.0000	48.12
	34 Carbon Tetrachloride	117	4.909	4.909	(0.885)	232598	50.0000	48.32
$	35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	211870	50.0000	49.26(M)
*	36 1,4-Difluorobenzene	114	5.550	5.550	(1.000)	588962	50.0000	
	37 Benzene	78	5.138	5.138	(0.926)	777989	50.0000	48.52
	38 Trichloroethene	130	5.786	5.786	(1.043)	213155	50.0000	48.23
	39 Bromodichloromethane	83	6.277	6.277	(1.131)	258199	50.0000	49.17
	41 2-Chloroethylvinyl ether	63	6.581	6.581	(1.186)	5248	100.000	103.15
	42 1,2-Dichloropropane	63	6.007	6.007	(1.082)	205492	50.0000	47.60
	44 Dibromomethane	93	6.120	6.120	(1.103)	134471	50.0000	48.15
	45 4-Methyl-2-Pentanone	43	6.851	6.851	(0.837)	421109	100.000	99.77
	46 cis-1,3-Dichloropropene	75	6.689	6.689	(1.205)	322591	50.0000	47.74
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	585326	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	688161	50.0000	51.07
	50 Toluene	91	6.978	6.978	(0.853)	825618	50.0000	50.58
	51 trans-1,3-Dichloropropene	75	7.196	7.196	(1.296)	270774	50.0000	47.62
	52 2-Hexanone	43	7.589	7.589	(0.927)	284123	100.000	96.18
	53 1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	162935	50.0000	52.25
	54 1,3-Dichloropropane	76	7.499	7.499	(0.916)	347309	50.0000	47.92
	55 Dibromochloromethane	129	7.690	7.690	(0.940)	221256	50.0000	50.82
	56 Tetrachloroethene	164	7.454	7.454	(0.911)	165847	50.0000	47.47
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	200095	50.0000	49.20
	58 1-Chlorohexane	55	8.196	8.196	(1.477)	149444	50.0000	45.25
	59 Chlorobenzene	112	8.208	8.208	(1.003)	554780	50.0000	46.66
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	203091	50.0000	48.83
	61 Ethylbenzene	106	8.305	8.305	(1.015)	267891	50.0000	48.13
	62 m,p-Xylenes	106	8.406	8.406	(1.027)	682174	100.000	101.95
	63 o-Xylene	106	8.748	8.748	(1.069)	345583	50.0000	50.21
	64 Styrene	104	8.759	8.759	(1.070)	602189	50.0000	52.56
	66 Bromoform	173	8.920	8.920	(1.090)	142982	50.0000	48.05
	67 Isopropylbenzene	105	9.062	9.062	(1.107)	836214	50.0000	50.24
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	257467	50.0000	49.42
$	69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	257187	50.0000	50.42
*	70 1,4-Dichlorobenzene-d4	152	10.168	10.168	(1.000)	319548	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.921)	269676	50.0000	44.45
	73 n-Propylbenzene	91	9.411	9.411	(0.926)	950507	50.0000	50.65
	74 Bromobenzene	156	9.317	9.317	(0.916)	244856	50.0000	45.62
	75 1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	684053	50.0000	51.29
	76 2-Chlorotoluene	91	9.482	9.482	(0.933)	609247	50.0000	48.24
	77 4-Chlorotoluene	91	9.576	9.576	(0.942)	695361	50.0000	48.54
	78 tert-Butylbenzene	119	9.835	9.835	(0.967)	573100	50.0000	47.84
	79 1,2,4-Trimethylbenzene	105	9.876	9.876	(0.971)	683706	50.0000	51.15
	81 sec-Butylbenzene	105	10.022	10.022	(0.986)	741751	50.0000	48.02
	82 p-Isopropyltoluene	119	10.146	10.146	(0.998)	675300	50.0000	50.51
	83 1,3-Dichlorobenzene	146	10.116	10.116	(0.995)	433413	50.0000	45.57
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	447745	50.0000	44.44
	87 n-Butylbenzene	91	10.491	10.491	(1.032)	556242	50.0000	49.58
	88 1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	431690	50.0000	45.12

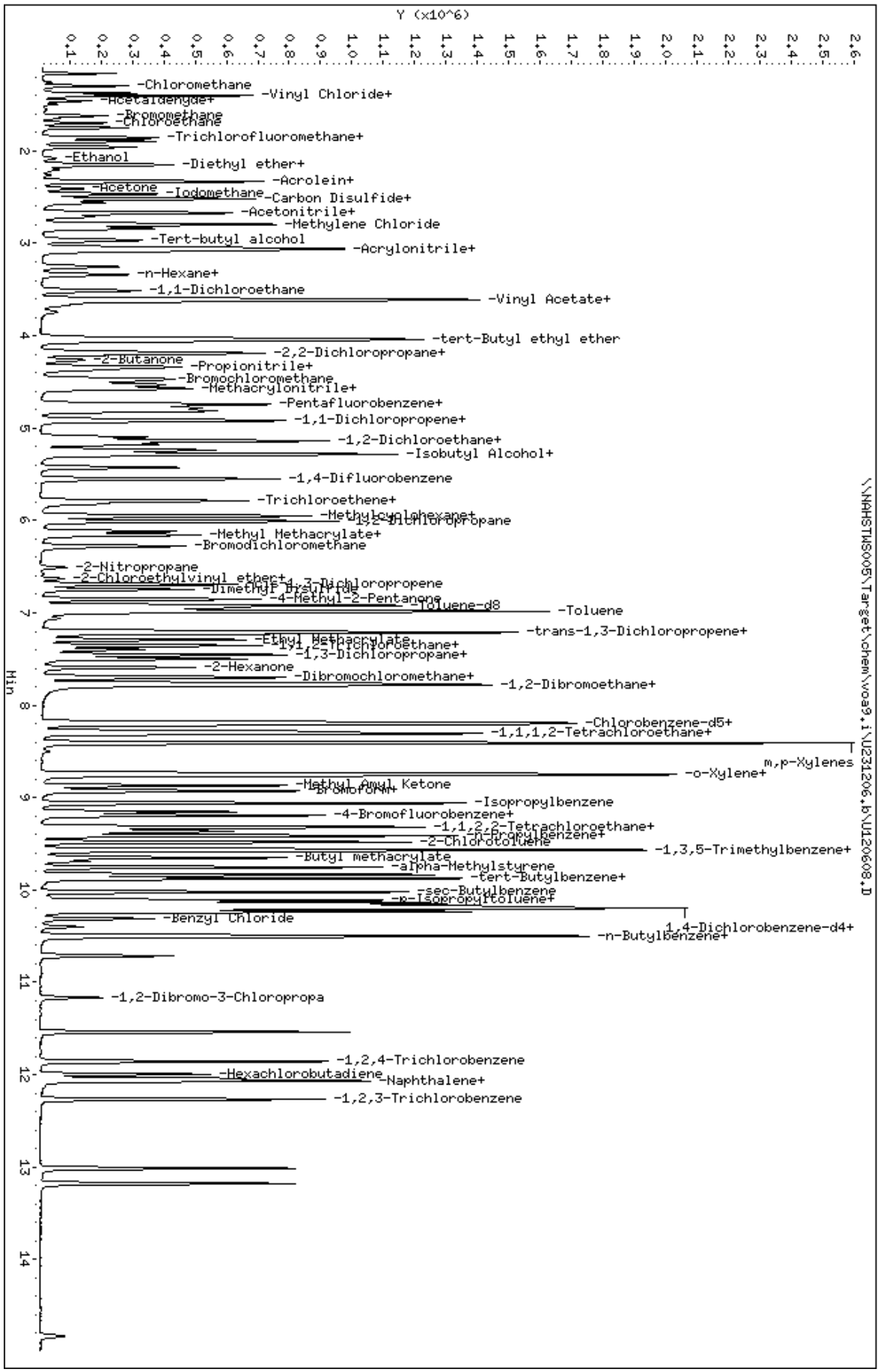
89	1,2-Dibromo-3-Chloropropane	155	11.165	11.165 (1.098)	43056	50.0000	46.22
90	1,2,4-Trichlorobenzene	180	11.855	11.855 (1.166)	285101	50.0000	48.30

Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120608.D Page 3
Report Date: 12-Dec-2023 09:43

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	91 Hexachlorobutadiene	225	11.998	11.998	(1.180)	102297	50.0000	43.24
	92 Naphthalene	128	12.065	12.065	(1.187)	724100	50.0000	50.87
	93 1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	278076	50.0000	46.72
M	94 1,2-Dichloroethylene (total)	96				387649	100.000	
M	95 Xylenes (total)	106				1027757	150.000	
	131 Methyl Acrylate	55	4.365	4.365	(0.907)	252491	50.0000	52.40
	135 1,4-Dioxane	88	6.165	6.165	(1.280)	54651	1000.00	939.00
	141 Cyclohexane	56	4.785	4.785	(0.994)	230272	50.0000	43.56
	138 Freon TF	101	2.333	2.333	(0.485)	124522	50.0000	46.16
	140 1,3-Butadiene	54	1.400	1.400	(0.291)	184133	50.0000	49.97
	147 Methylcyclohexane	55	5.947	5.947	(1.072)	474867	50.0000	54.39
	146 Methyl Acetate	43	2.712	2.712	(0.563)	172417	50.0000	47.22
	148 Tert-Butyl alcohol	59	2.963	2.963	(0.615)	360815	1000.00	878.61
	149 Isopropyl Alcohol	45	2.558	2.558	(0.531)	232846	1000.00	1002.97

QC Flag Legend

M - Compound response manually integrated.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-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+
-cis-1,3-Dichloropropene
-Dimethyl Disulfide
-4-Methyl-2-Pentanone
-Toluene-d8
-Toluene
-trans-1,3-Dichloropropene+
-Ethyl Methacrylate
-1,1,2-Trichloroethane+
-1,3-Dichloropropane+
-2-Hexanone
-Dibromochloromethane+
-1,2-Dibromoethane+
-Chlorobenzene-d5+
-1,1,1,2-Tetrachloroethane+
m,p-Xylenes
-o-Xylene+
-Methyl Amyl Ketone
-Bromoform+
-Isopropylbenzene
-4-Bromofluorobenzene+
-1,1,2,2-Tetrachloroethane+
-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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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
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HEIGHT
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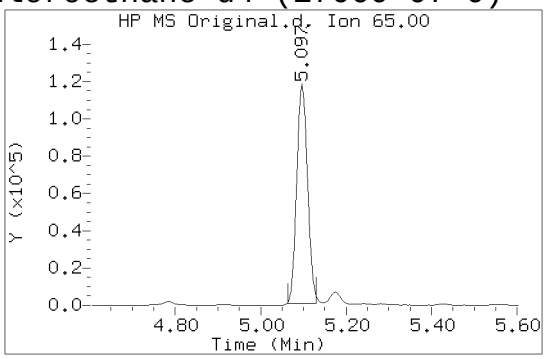
06-Dec-2023
23:48



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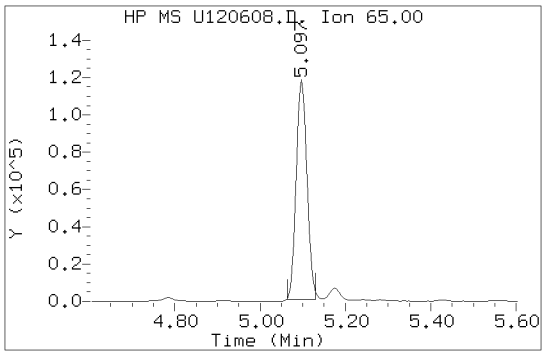
12-Dec-2023
09:43



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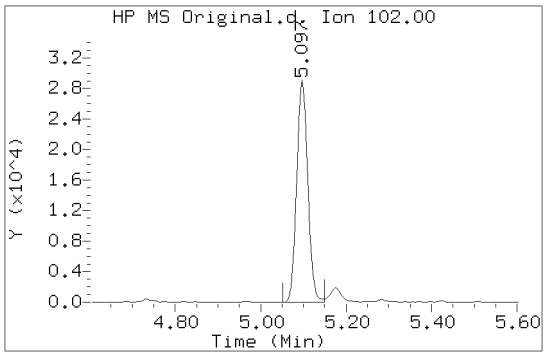

AFTER

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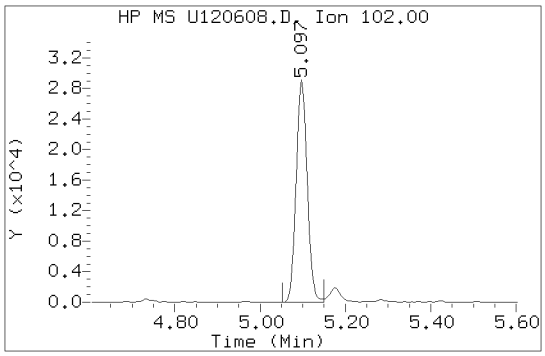
12-Dec-2023
09:43



Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120609.D Page 1
Report Date: 12-Dec-2023 09:44

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120609.D
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Inj Date : 06-DEC-2023 14:34
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Smp Info : VSTD100;VSTD100;1;8;
Misc Info : V9;WATER;0;1;
Comment   :
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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

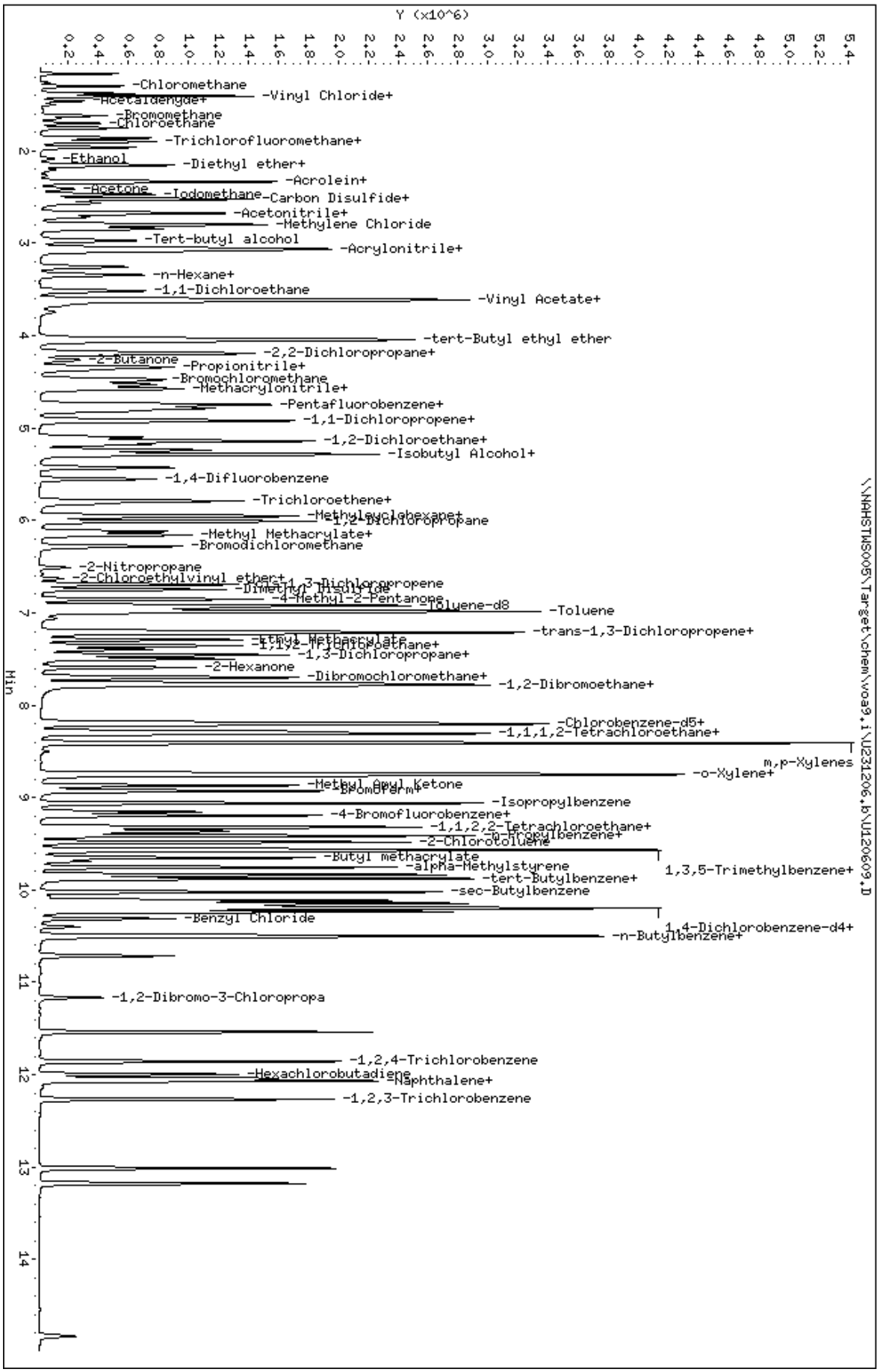
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	29 Bromochloromethane	128	4.470	4.470	(0.928)	217538	100.000	92.30
$	30 Dibromofluoromethane	113	4.748	4.748	(0.986)	396102	100.000	106.08
	31 1,1,1-Trichloroethane	97	4.744	4.744	(0.985)	593935	100.000	103.53
	32 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

		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)	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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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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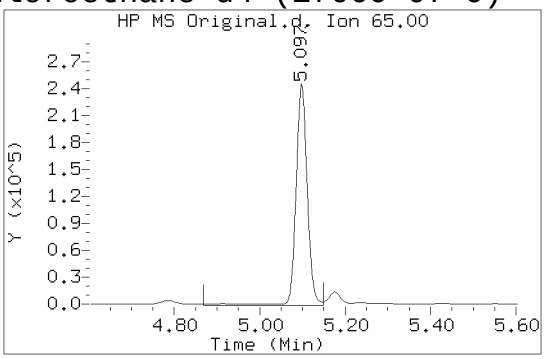

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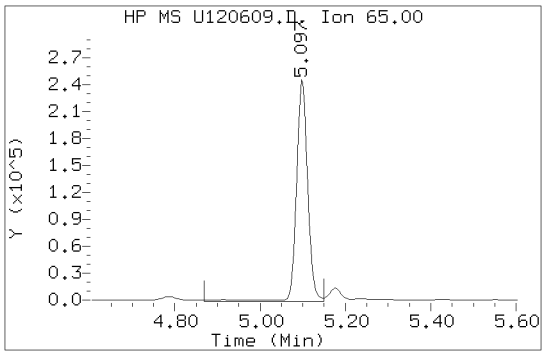

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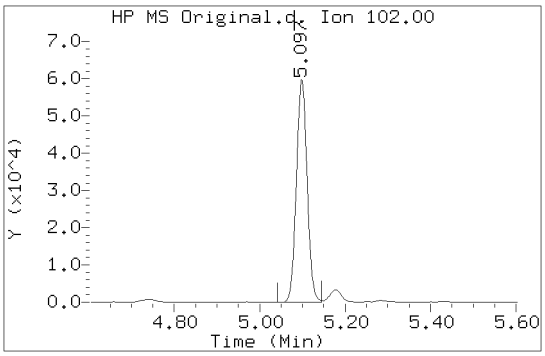

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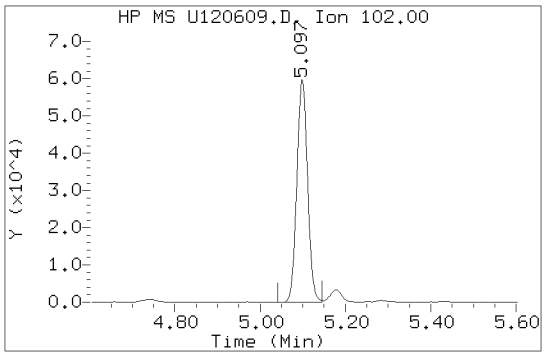

Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120610.D Page 1
Report Date: 12-Dec-2023 09:44

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   :
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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

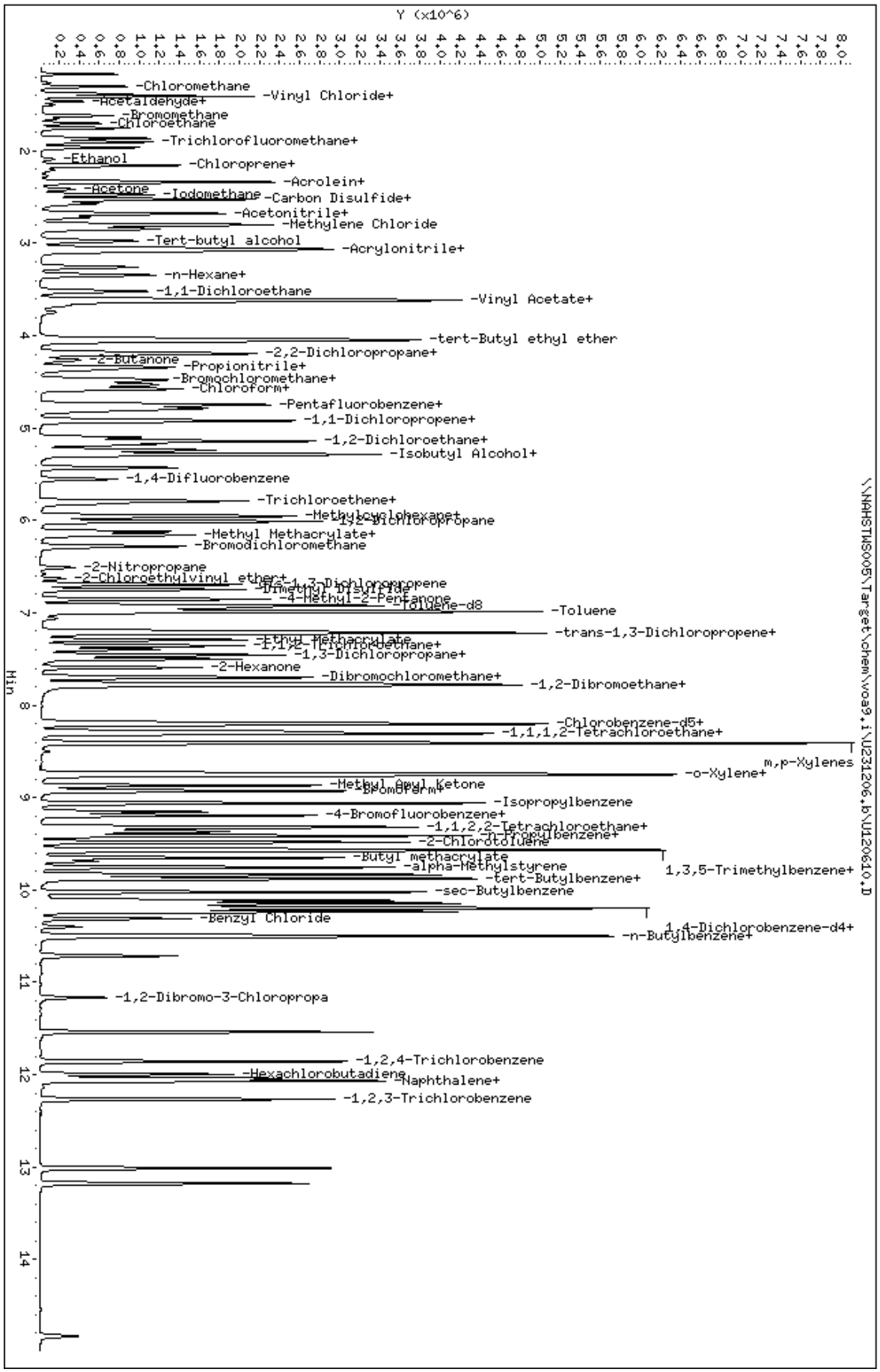
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	29 Bromochloromethane	128	4.474	4.474	(0.928)	319815	150.000	134.68
$	30 Dibromofluoromethane	113	4.752	4.752	(0.986)	564100	150.000	150.37
	31 1,1,1-Trichloroethane	97	4.744	4.744	(0.984)	880243	150.000	152.28
	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

		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)	372344	150.000	153.48
	92 Naphthalene	128	12.065	12.065	(1.186)	2375691	150.000	162.76
	93 1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	909761	150.000	149.06
M	94 1,2-Dichloroethylene (total)	96				1161409	300.000	
M	95 Xylenes (total)	106				3230318	450.000	
	131 Methyl Acrylate	55	4.369	4.369	(0.907)	740924	150.000	151.81
	135 1,4-Dioxane	88	6.165	6.165	(1.279)	162429	3000.00	2755.36
	141 Cyclohexane	56	4.789	4.789	(0.994)	787373	150.000	147.06
	138 Freon TF	101	2.337	2.337	(0.485)	434378	150.000	149.11
	140 1,3-Butadiene	54	1.408	1.408	(0.292)	594677	150.000	159.35
	147 Methylcyclohexane	55	5.944	5.944	(1.070)	1479356	150.000	167.22(A)
	146 Methyl Acetate	43	2.716	2.716	(0.564)	513402	150.000	138.83
	148 Tert-Butyl alcohol	59	2.975	2.975	(0.617)	1113820	3000.00	2677.78
	149 Isopropyl Alcohol	45	2.570	2.570	(0.533)	695746	3000.00	2973.41

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.



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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

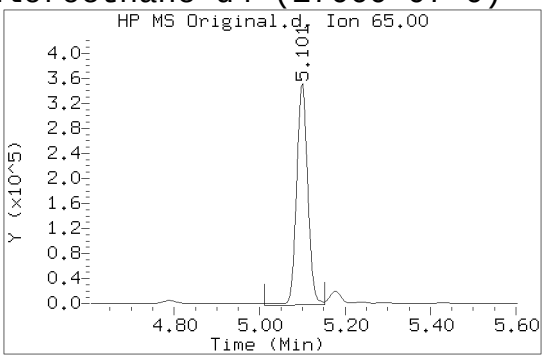
Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120610.D
Inj Date : 06-DEC-2023 14:56
InstruID : VOA9.i
LabSampID : VSTD150

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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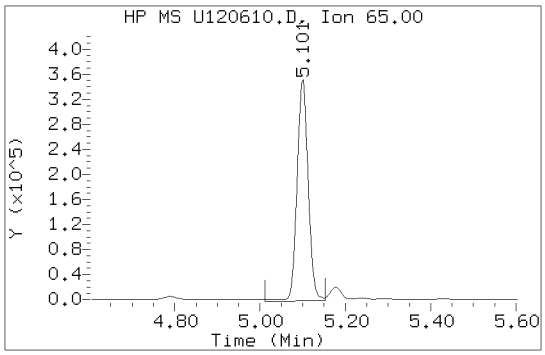
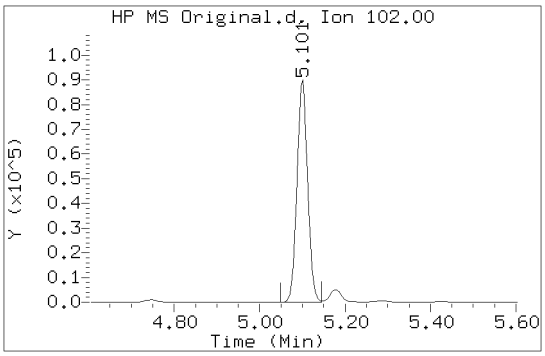
HEIGHT
353763
12-Dec-2023
09:43



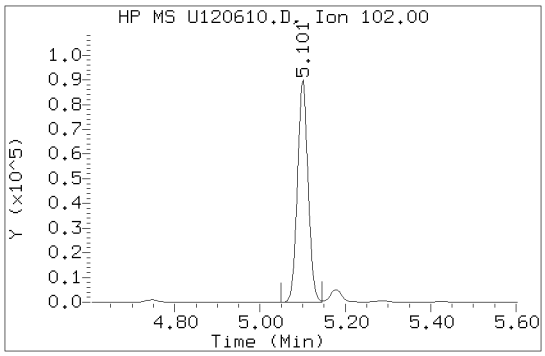
BEFORE

MASS
88
AREA
796
HEIGHT
340
06-Dec-2023
23:21



AFTER

MASS
102
AREA
158712
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

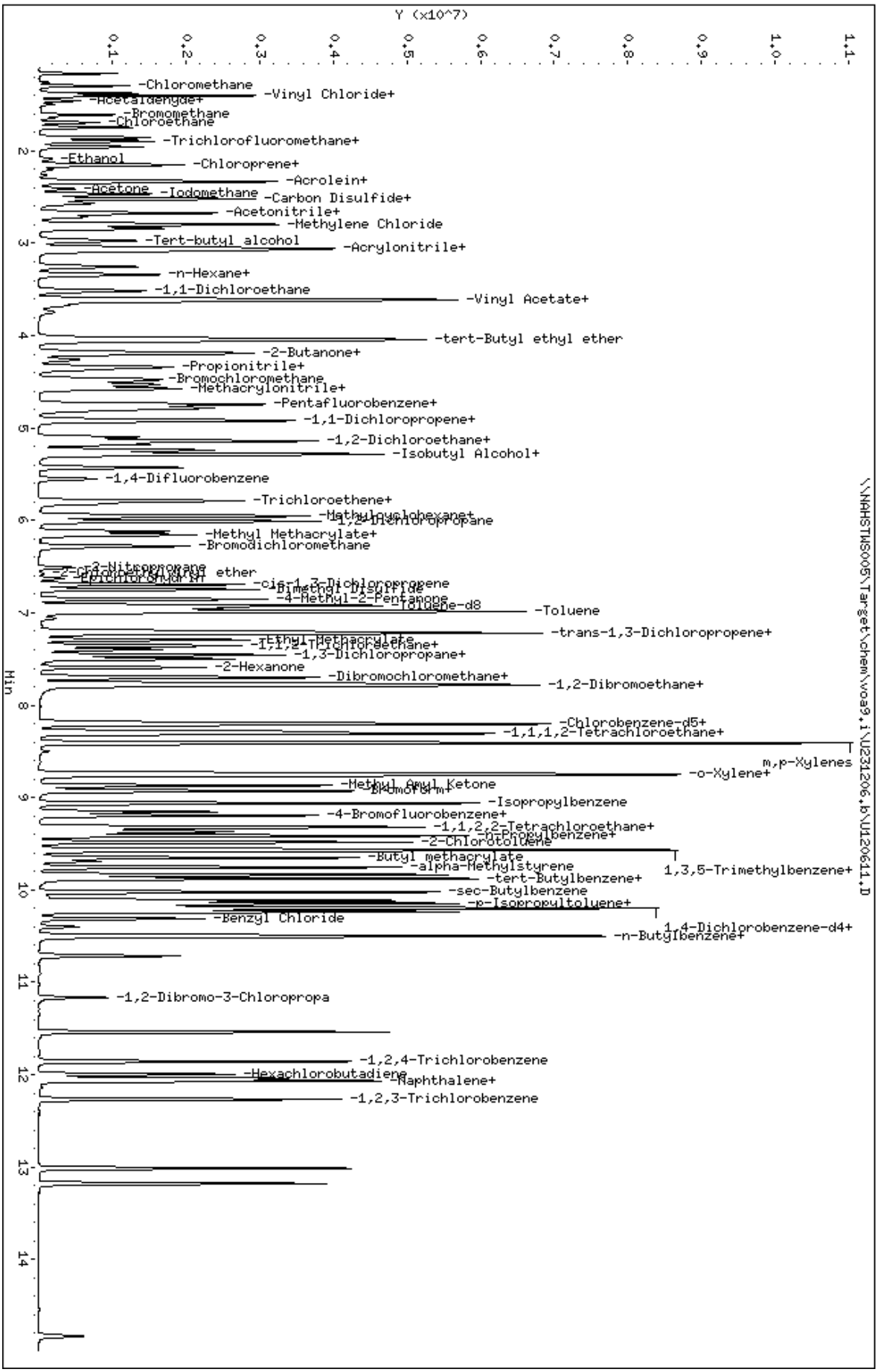
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	29 Bromochloromethane	128	4.470	4.470	(0.928)	427192	200.000	175.48
$	30 Dibromofluoromethane	113	4.748	4.748	(0.986)	753738	200.000	196.29
	31 1,1,1-Trichloroethane	97	4.744	4.744	(0.985)	1218967	200.000	205.70(A)
	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)

							AMOUNTS	
		QUANT SIG					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)	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

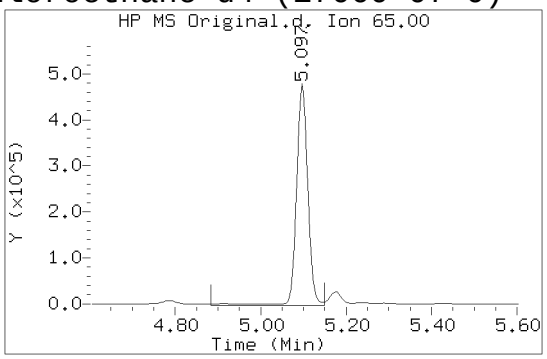
Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120611.D
Inj Date : 06-DEC-2023 15:18
InstruID : VOA9.i
LabSampID : VSTD200

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

Reason Code:

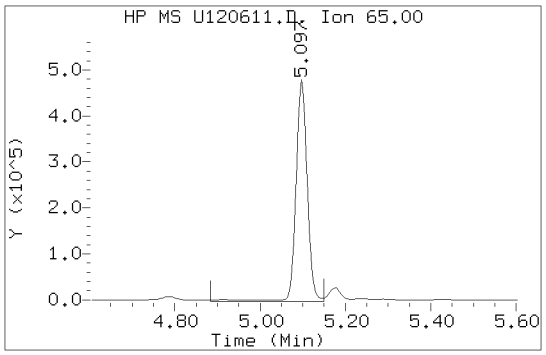
BEFORE

MASS
65
AREA
912175
HEIGHT
481644
11-Dec-2023
17:18
linh
pham



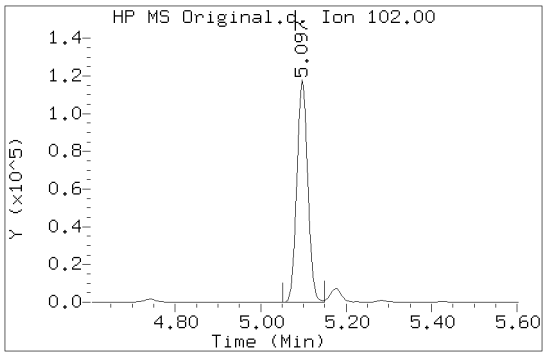
AFTER

MASS
65
AREA
912175
HEIGHT
481644
12-Dec-2023
09:43
linh
pham



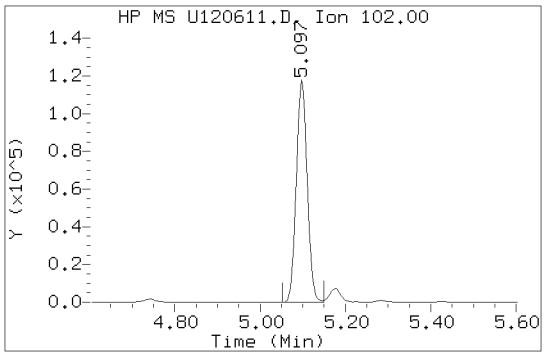
BEFORE

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

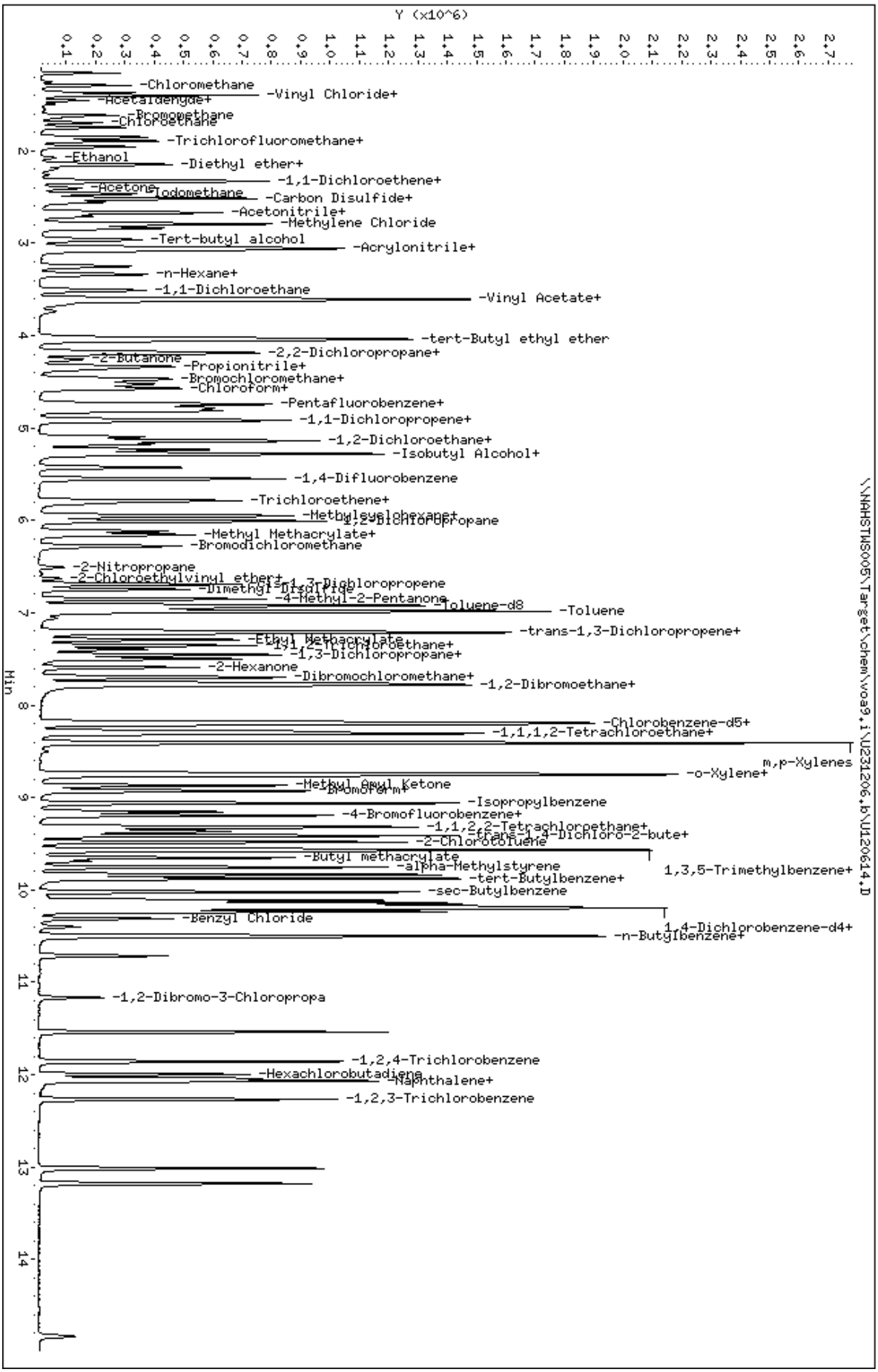
89	1,2-Dibromo-3-Chloropropane	155	11.165	11.165 (1.098)	47469	47.5374	47.53
90	1,2,4-Trichlorobenzene	180	11.859	11.855 (1.166)	327888	51.8913	51.89

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: \\NAHSTWS005\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

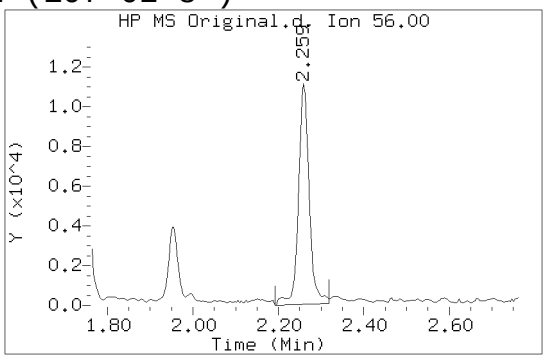
Instrument: VOA9,i
Operator: PC
Column diameter: 0.18

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



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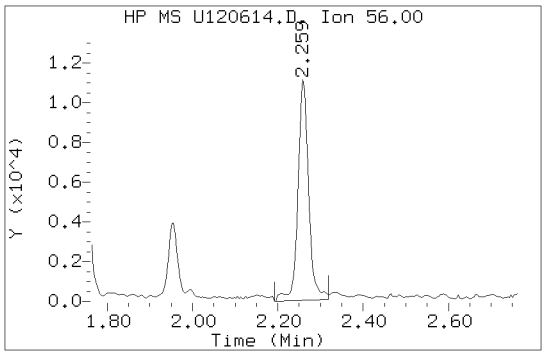
12-Dec-2023
09:51



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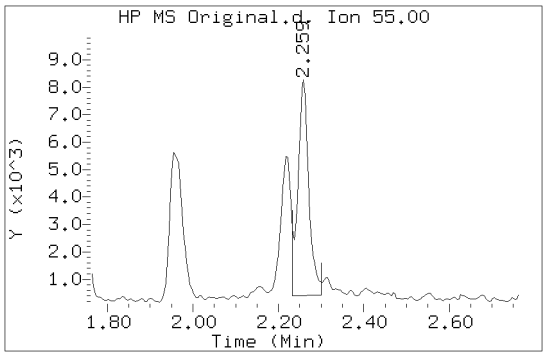
06-Dec-2023
23:36



AFTER
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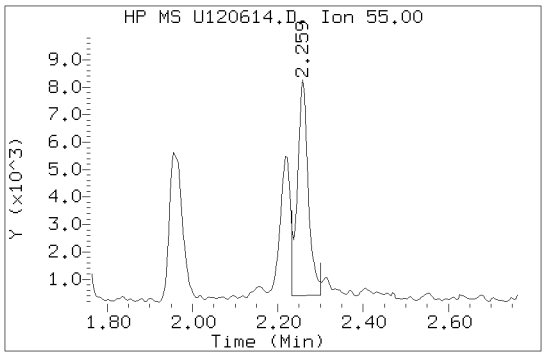
12-Dec-2023
09:51



right solutions.
right partner.

RawData

Volatiles by EPA Volatiles Organics by Method 8260C

Workorder

HS24010611

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/29/2024

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

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011201.D Page 1
Report Date: 12-Jan-2024 11:13

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011201.D
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 12-JAN-2024 10:49
Operator : PC Inst ID: VOA9.i
Smp Info : BFB;BFB;3;;BFB
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240112.b\bfb.m
Meth Date : 27-Jan-2023 08:08 apoluri Quant Type: ISTD
Cal Date : 30-MAR-2018 18:09 Cal File: U033003.d
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: NAHSTW7051

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

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

					CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/l)		
RT	EXP RT	REL RT	MASS	RESPONSE			TARGET RANGE	RATIO
1 bfb							CAS #: 460-00-4	
9.194	9.180	(0.000)	95	131968			0.00- 100.00	100.00
9.194	9.180	(0.000)	50	20520			15.00- 40.00	15.55
9.194	9.180	(0.000)	75	61560			30.00- 60.00	46.65
9.194	9.180	(0.000)	96	8954			5.00- 9.00	6.78
9.194	9.180	(0.000)	173	0	0.0	0.0	0.00- 2.00	0.00
9.194	9.180	(0.000)	174	131200			50.00- 0.00	99.42
9.194	9.180	(0.000)	175	11236			5.00- 9.00	8.56
9.194	9.180	(0.000)	176	125312			95.00- 101.00	95.51
9.194	9.180	(0.000)	177	7681			5.00- 9.00	6.13

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	15.55
75	30.00 - 60.00% of mass 95	46.65
96	5.00 - 9.00% of mass 95	6.78
173	Less than 2.00% of mass 174	0.00 (0.00)
174	Greater than 50.00% of mass 95	99.42
175	5.00 - 9.00% of mass 174	8.51 (8.56)
176	95.00 - 101.00% of mass 174	94.96 (95.51)
177	5.00 - 9.00% of mass 176	5.82 (6.13)

Data File: U011201.D
Spectrum: Scan 2295 (9.19)
Location of Maximum: 95.05
Number of points: 102

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.20	72	63.00	4100	94.10	15760	141.90	140
36.10	1013	64.00	468	95.10	131968	142.90	1576
37.10	5333	65.00	628	96.10	8954	143.90	210
38.10	4684	68.00	11425	97.10	277	144.90	297
39.00	2275	69.00	12784	103.90	405	145.90	224
40.00	356	70.00	863	104.90	202	146.80	133
40.90	126	71.30	53	105.90	413	148.00	382
42.20	70	72.00	705	106.90	144	148.80	102
42.50	71	73.10	4980	109.90	71	150.00	168
43.10	95	74.10	21296	110.80	100	152.80	100
44.00	780	75.10	61560	111.90	75	154.20	124
45.00	1125	76.00	5312	112.90	170	154.90	354
47.10	1652	77.00	918	114.90	148	155.90	113
48.10	656	78.00	447	116.00	324	156.90	314
49.10	4752	78.90	2890	116.90	871	158.90	189
50.10	20520	80.00	1028	118.00	412	160.90	158
51.10	6405	81.00	3323	118.90	561	169.90	64
52.00	384	82.00	762	121.90	56	171.20	236
52.90	172	83.00	71	127.90	507	172.00	1254
54.90	262	86.20	369	129.00	251	174.00	131200
56.00	1798	87.00	5425	130.00	569	175.10	11236
57.10	2954	88.00	5103	131.00	118	176.00	125312
58.00	171	90.20	56	134.80	240	177.00	7681
60.10	1206	91.00	459	136.00	51	178.00	250
61.10	5937	92.00	3306	136.90	262		
62.00	5661	93.10	5472	141.00	1337		

Data File: \\NAHSTWS005\Target\chem\voa9.i\u240112.b\u011201.d Page 1

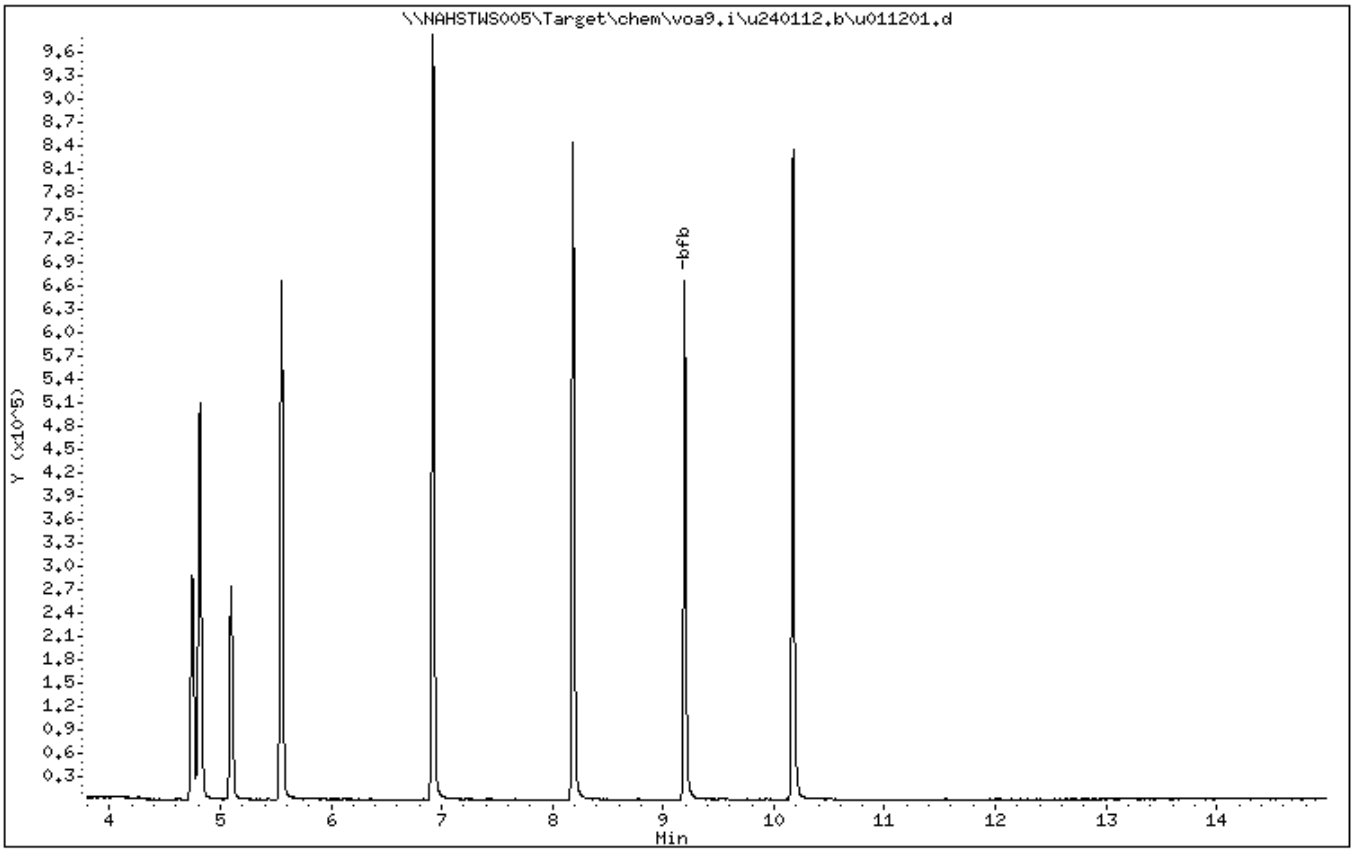
Date : 12-JAN-2024 10:49

Client ID: BFB Instrument: VOA9.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0 Operator: PC

Column phase: DB624 Column diameter: 0.25



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Inj Date : 12-JAN-2024 10:49
InstruID : VOA9.i
LabSampID : BFB

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011203.D Page 1
Report Date: 17-Jan-2024 14:06

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011203.D
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 12-JAN-2024 11:34
Operator : PC Inst ID: VOA9.i
Smp Info : CCV;CCV;2;;;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240112.b\8260C.m
Meth Date : 17-Jan-2024 14:06 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.815	4.815	(1.000)	306195	50.0000	
2 Dichlorodifluoromethane	85	1.164	1.164	(0.242)	115422	50.0000	46.82
3 Chloromethane	50	1.299	1.299	(0.270)	147362	50.0000	41.95
5 Vinyl Chloride	62	1.378	1.378	(0.286)	156009	50.0000	46.49
6 Bromomethane	94	1.621	1.621	(0.337)	96977	50.0000	56.07
7 Chloroethane	64	1.700	1.700	(0.353)	108852	50.0000	48.18
8 Trichlorofluoromethane	101	1.895	1.895	(0.394)	211656	50.0000	49.76
9 Acrolein	56	2.266	2.266	(0.471)	14291	100.000	81.89
10 Acetone	43	2.409	2.409	(0.500)	98139	100.000	93.79
11 1,1-Dichloroethene	96	2.334	2.334	(0.485)	124035	50.0000	52.52
15 Iodomethane	142	2.469	2.469	(0.513)	329040	100.000	108.95
16 Acrylonitrile	53	3.065	3.065	(0.636)	128197	100.000	106.73
17 Methylene Chloride	84	2.795	2.795	(0.580)	163696	50.0000	54.95
18 Methyl tert-butyl ether	73	3.080	3.080	(0.640)	458247	50.0000	54.15
19 Carbon Disulfide	76	2.521	2.521	(0.524)	754309	100.000	108.39
20 trans-1,2-Dichloroethene	96	3.057	3.057	(0.635)	150013	50.0000	53.13
21 Vinyl Acetate	43	3.604	3.604	(0.749)	866373	100.000	101.48
22 1,1-Dichloroethane	63	3.514	3.514	(0.730)	271639	50.0000	47.17
24 2-Butanone	43	4.260	4.260	(0.885)	133147	100.000	88.76
26 2,2-Dichloropropane	77	4.182	4.182	(0.868)	206537	50.0000	51.01

27 cis-1,2-Dichloroethene	96	4.197	4.197 (0.872)	180423	50.0000	47.70
28 Chloroform	83	4.572	4.572 (0.949)	297852	50.0000	47.51

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011203.D Page 2
Report Date: 17-Jan-2024 14:06

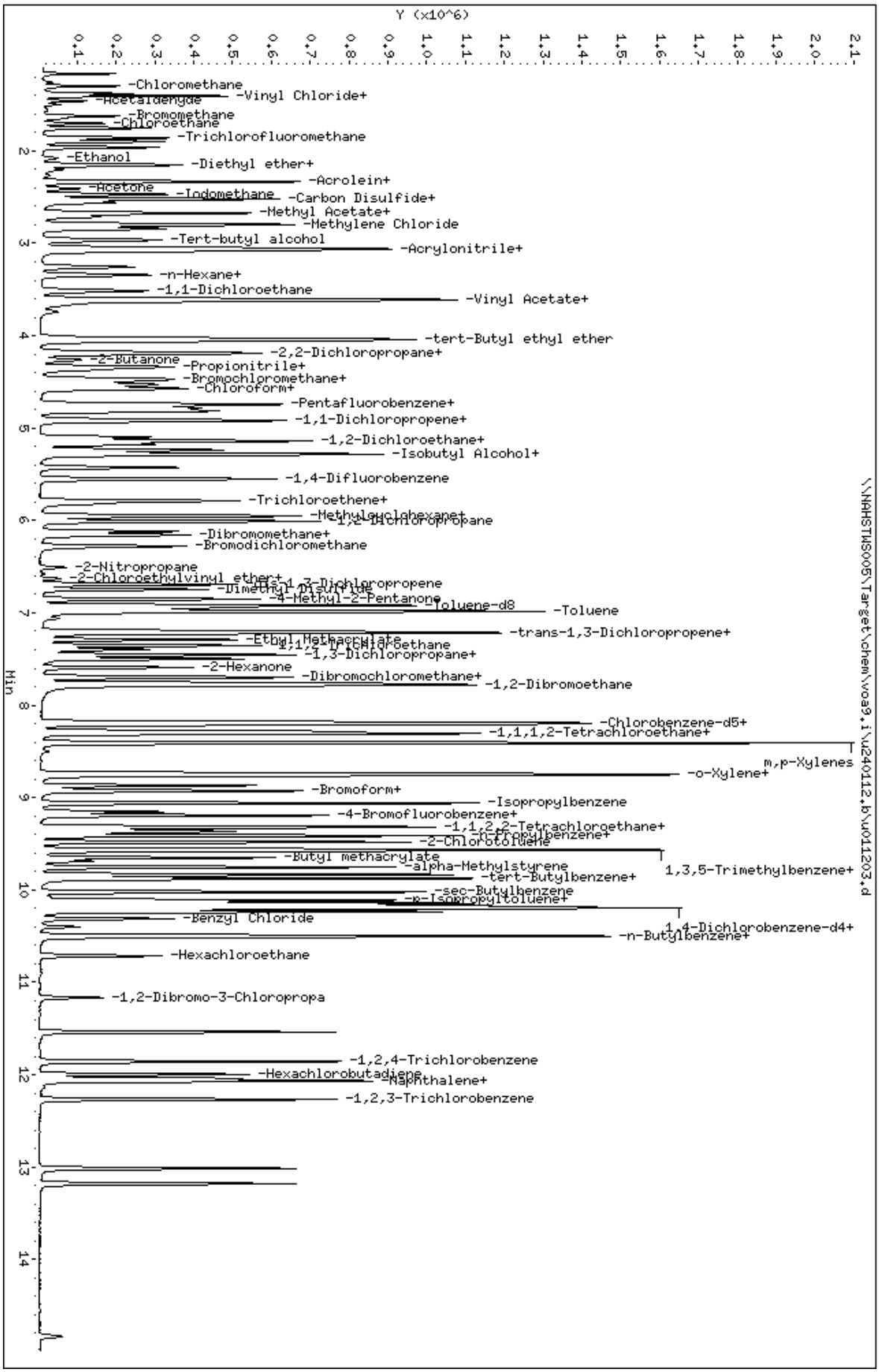
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
29	Bromochloromethane	128	4.470	4.470	(0.928)	100500	50.0000	51.35
$ 30	Dibromofluoromethane	113	4.748	4.748	(0.986)	170947	50.0000	54.64
31	1,1,1-Trichloroethane	97	4.744	4.744	(0.985)	228815	50.0000	48.03
32	1,1-Dichloropropene	75	4.920	4.920	(0.886)	187074	50.0000	46.45
33	1,2-Dichloroethane	62	5.175	5.175	(0.932)	219736	50.0000	46.84
34	Carbon Tetrachloride	117	4.913	4.913	(0.885)	190942	50.0000	48.53
$ 35	1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	183406	50.0000	50.98
* 36	1,4-Difluorobenzene	114	5.554	5.554	(1.000)	481399	50.0000	
37	Benzene	78	5.138	5.138	(0.925)	606443	50.0000	46.27
38	Trichloroethene	130	5.786	5.786	(1.042)	174841	50.0000	48.40
39	Bromodichloromethane	83	6.277	6.277	(1.130)	218603	50.0000	50.93
41	2-Chloroethylvinyl ether	63	6.577	6.577	(1.184)	5638	100.000	133.20
42	1,2-Dichloropropane	63	6.007	6.007	(1.082)	163545	50.0000	46.35
44	Dibromomethane	93	6.120	6.120	(1.102)	110469	50.0000	48.39
45	4-Methyl-2-Pentanone	43	6.851	6.851	(0.837)	325974	100.000	92.78
46	cis-1,3-Dichloropropene	75	6.690	6.690	(1.205)	265519	50.0000	48.06
* 47	Chlorobenzene-d5	117	8.185	8.185	(1.000)	487086	50.0000	
$ 48	Toluene-d8	98	6.922	6.922	(0.846)	577597	50.0000	51.51
50	Toluene	91	6.978	6.978	(0.853)	658738	50.0000	48.50
51	trans-1,3-Dichloropropene	75	7.196	7.196	(1.296)	225411	50.0000	48.47
52	2-Hexanone	43	7.589	7.589	(0.927)	218171	100.000	88.75
53	1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	133652	50.0000	51.49
54	1,3-Dichloropropane	76	7.499	7.499	(0.916)	282267	50.0000	46.80
55	Dibromochloromethane	129	7.690	7.690	(0.940)	188402	50.0000	52.00
56	Tetrachloroethene	164	7.458	7.458	(0.911)	146297	50.0000	50.32
57	1,2-Dibromoethane	107	7.784	7.784	(0.951)	170218	50.0000	50.29
58	1-Chlorohexane	55	8.197	8.197	(1.476)	123566	50.0000	45.77
59	Chlorobenzene	112	8.208	8.208	(1.003)	469196	50.0000	47.42
60	1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	174300	50.0000	50.36
61	Ethylbenzene	106	8.305	8.305	(1.015)	221643	50.0000	47.85
62	m,p-Xylenes	106	8.406	8.406	(1.027)	567932	100.000	101.99
63	o-Xylene	106	8.748	8.748	(1.069)	288685	50.0000	50.41
64	Styrene	104	8.759	8.759	(1.070)	502273	50.0000	52.68
66	Bromoform	173	8.916	8.916	(1.089)	124101	50.0000	50.07
67	Isopropylbenzene	105	9.062	9.062	(1.107)	690698	50.0000	49.87
68	1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	215268	50.0000	48.70
$ 69	4-Bromofluorobenzene	95	9.194	9.194	(1.123)	217563	50.0000	51.27
* 70	1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	271110	50.0000	
71	1,2,3-Trichloropropane	75	9.362	9.362	(0.920)	227163	50.0000	44.13
73	n-Propylbenzene	91	9.411	9.411	(0.925)	762190	50.0000	47.87
74	Bromobenzene	156	9.317	9.317	(0.916)	212690	50.0000	46.71
75	1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	567163	50.0000	50.12
76	2-Chlorotoluene	91	9.482	9.482	(0.932)	489554	50.0000	45.68
77	4-Chlorotoluene	91	9.576	9.576	(0.941)	572820	50.0000	47.13
78	tert-Butylbenzene	119	9.835	9.835	(0.967)	493521	50.0000	48.56
79	1,2,4-Trimethylbenzene	105	9.880	9.880	(0.971)	581144	50.0000	51.24
81	sec-Butylbenzene	105	10.022	10.022	(0.985)	645809	50.0000	49.28
82	p-Isopropyltoluene	119	10.146	10.146	(0.997)	596113	50.0000	52.56
83	1,3-Dichlorobenzene	146	10.116	10.116	(0.994)	374413	50.0000	46.40
84	1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	387616	50.0000	45.34
87	n-Butylbenzene	91	10.491	10.491	(1.031)	485539	50.0000	51.01
88	1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	375257	50.0000	46.23

89	1,2-Dibromo-3-Chloropropane	155	11.165	11.165 (1.098)	37131	50.0000	46.95
90	1,2,4-Trichlorobenzene	180	11.855	11.855 (1.165)	252758	50.0000	50.47

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
91	Hexachlorobutadiene	225	11.998	11.998	(1.179)	103638	50.0000	51.63
92	Naphthalene	128	12.065	12.065	(1.186)	623248	50.0000	51.61
93	1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	242373	50.0000	47.99
M 94	1,2-Dichloroethylene (total)	96				330436	100.000	(a)
135	1,4-Dioxane	88	6.165	6.165	(1.280)	45316	1000.00	932.80
141	Cyclohexane	56	4.785	4.785	(0.994)	184008	50.0000	41.70
138	Freon TF	101	2.337	2.337	(0.485)	130920	50.0000	57.76
140	1,3-Butadiene	54	1.404	1.404	(0.292)	135368	50.0000	44.01
147	Methylcyclohexane	55	5.944	5.944	(1.070)	357012	50.0000	50.03
146	Methyl Acetate	43	2.712	2.712	(0.563)	151841	50.0000	49.82
148	Tert-Butyl alcohol	59	2.963	2.963	(0.615)	362017	1000.00	1056.11
149	Isopropyl Alcohol	45	2.558	2.558	(0.531)	220375	1000.00	1138.24
72	trans-1,4-Dichloro-2-butene	53	9.377	9.377	(1.146)	43875	50.0000	50.05
12	Isobutyl Alcohol	43	5.284	5.284	(1.097)	424007	1000.00	923.31
13	Acetonitrile	39	2.671	2.671	(0.555)	176080	500.000	534.31
14	Allyl Chloride	41	2.671	2.671	(0.555)	402685	50.0000	53.48
25	Methacrylonitrile	41	4.493	4.493	(0.933)	101816	50.0000	46.57(M)
40	Methyl Methacrylate	41	6.153	6.153	(1.278)	140017	50.0000	46.32
4	Propionitrile	54	4.335	4.335	(0.900)	238561	500.000	469.90
136	n-Hexane	57	3.342	3.342	(0.694)	139650	50.0000	49.06
194	Acetaldehyde	44	1.460	1.460	(0.303)	72673	200.000	183.33(M)
131	Methyl Acrylate	55	4.369	4.369	(0.907)	198111	50.0000	49.25
23	Chloroprene	53	2.157	2.157	(0.448)	48346	50.0000	46.28(M)
49	Ethyl Methacrylate	69	7.289	7.289	(1.312)	240634	50.0000	50.92
166	1,2,3-Trimethylbenzene	105	10.232	10.232	(1.006)	543438	50.0000	48.57
167	Ethanol	45	2.079	2.079	(0.432)	41548	1000.00	1082.67
164	Dicyclopentadiene	66	10.198	10.198	(1.003)	654411	50.0000	45.28
145	alpha-Methylstyrene	118	9.752	9.752	(0.959)	258108	50.0000	47.06
142	Tetrahydrofuran	42	4.542	4.542	(0.943)	58398	100.000	89.85
156	Diisopropyl ether	45	3.619	3.619	(0.752)	486776	50.0000	45.63
162	Butyl acrylate	55	8.733	8.733	(1.067)	279024	50.0000	40.02
203	2-Ethylhexyl Acrylate	55	12.043	12.043	(1.184)	164181	50.0000	41.45
130	Ethyl Acetate	43	4.339	4.339	(0.901)	173860	50.0000	46.74
189	n-Butyl acetate	43	7.705	7.705	(0.941)	256293	50.0000	47.23
182	Epichlorohydrin	57	6.630	6.630	(1.194)	34834	200.000	186.26
132	n-Butanol	56	5.820	5.820	(1.209)	92408	1000.00	928.58
133	Ethyl Acrylate	55	5.944	5.944	(1.234)	357012	50.0000	48.50
163	Butyl methacrylate	41	9.647	9.647	(0.948)	162567	50.0000	43.93(M)
187	n-Amyl acetate	43	8.931	8.931	(1.091)	254979	50.0000	41.30
188	Isopropyl acetate	43	5.284	5.284	(0.951)	424400	50.0000	47.78

QC Flag Legend

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



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Sample Info: CCV;CCV;2;;;
Purge Volume: 5.0
Column phase: DB624

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

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Inj Date : 12-JAN-2024 11:34
InstruID : VOA9.i
LabSampID : CCV

Methacrylonitrile (126-98-7)

Reason Code:

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49987
17-Jan-2024
14:06
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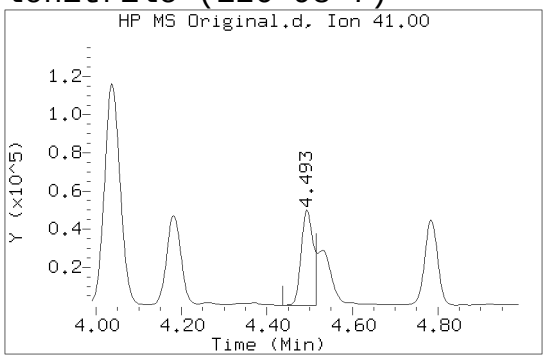

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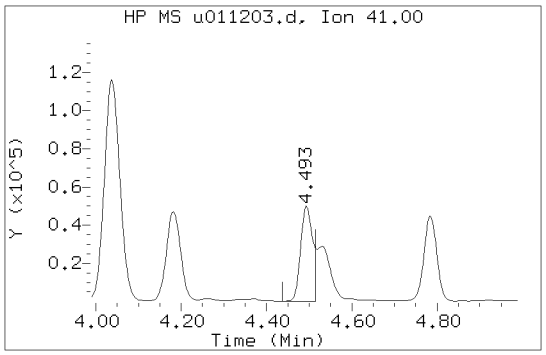

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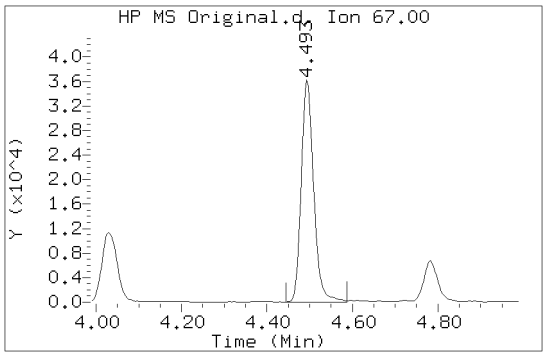

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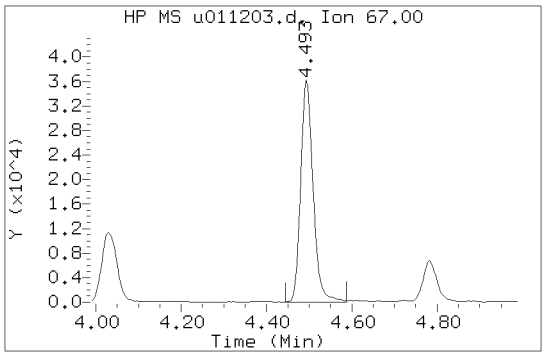

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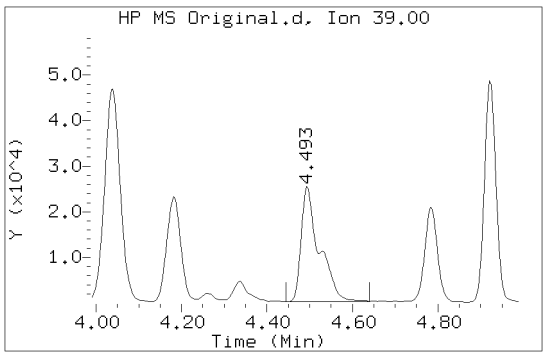

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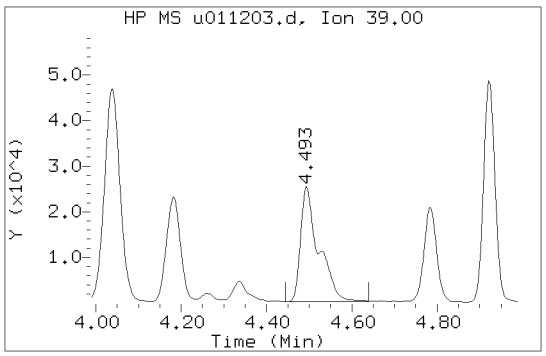

Chloroprene (126-99-8)

Reason Code:

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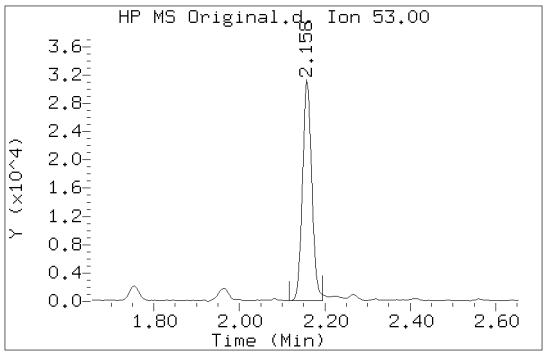

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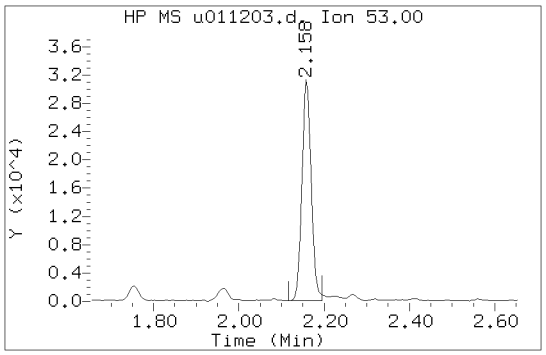

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InstruID : VOA9.i
LabSampID : CCV

Chloroprene (126-99-8)

Reason Code:

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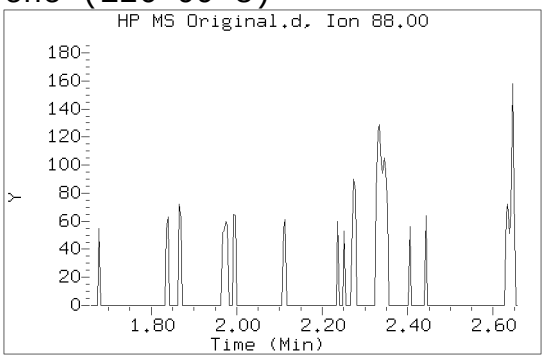

AFTER

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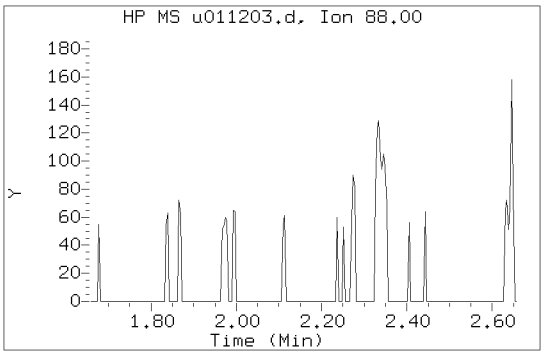

Butyl methacrylate (97-88-1)

Reason Code:

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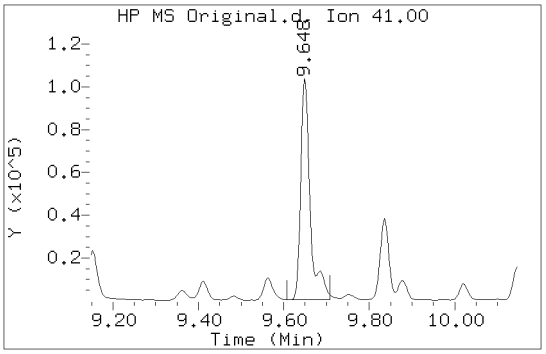

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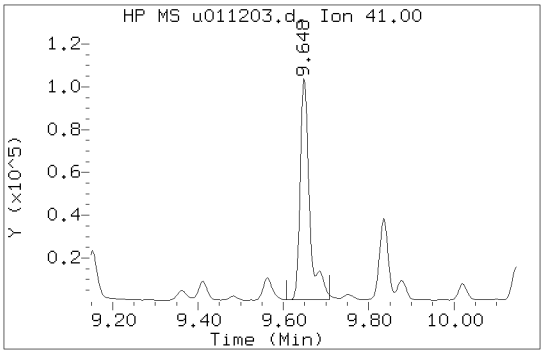

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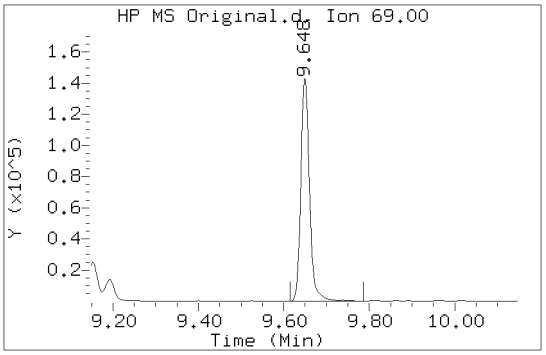

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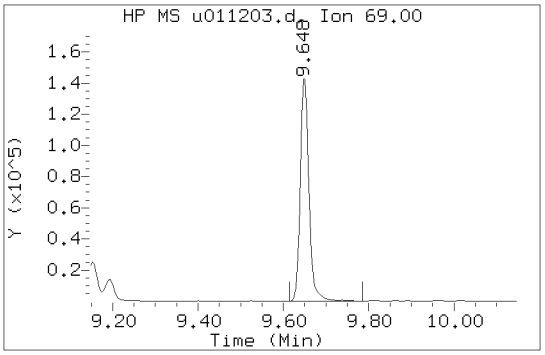

BEFORE

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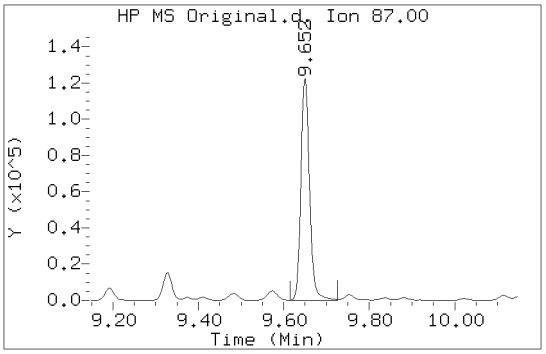

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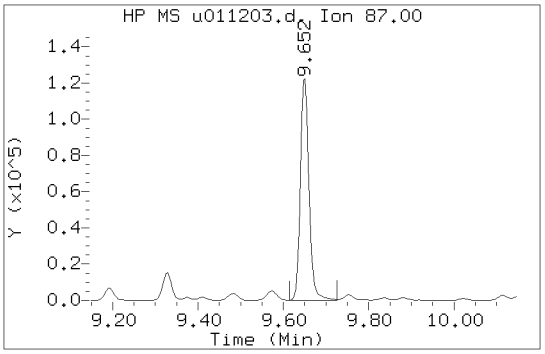

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Inj Date : 12-JAN-2024 11:34
InstruID : VOA9.i
LabSampID : CCV

Acetaldehyde (75-07-0)

Reason Code:

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57784
17-Jan-2024
14:06
linh
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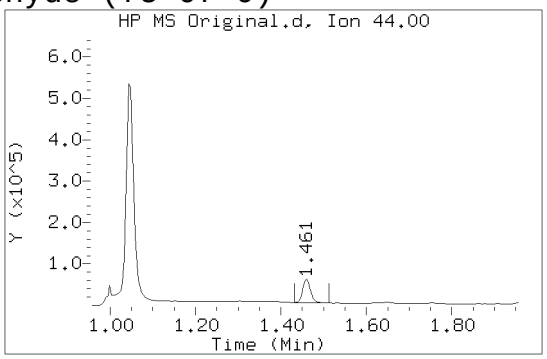

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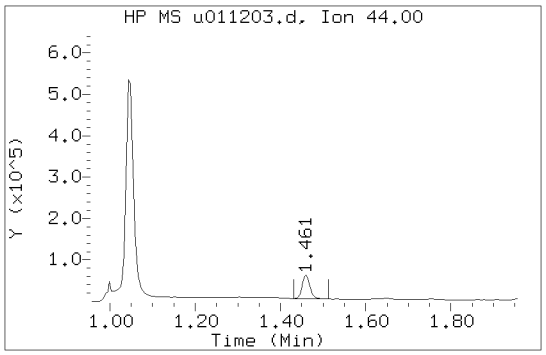

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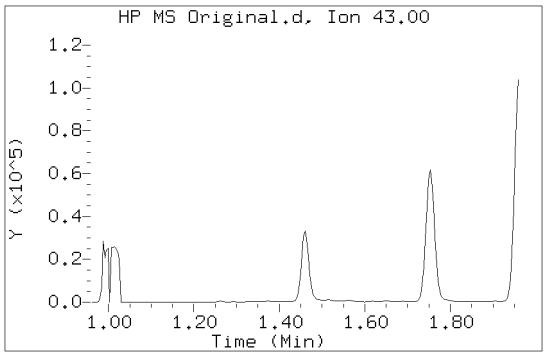

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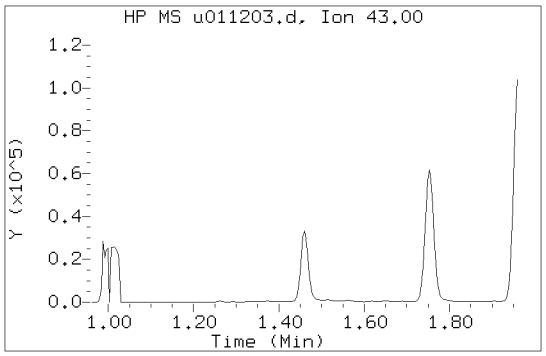

BEFORE
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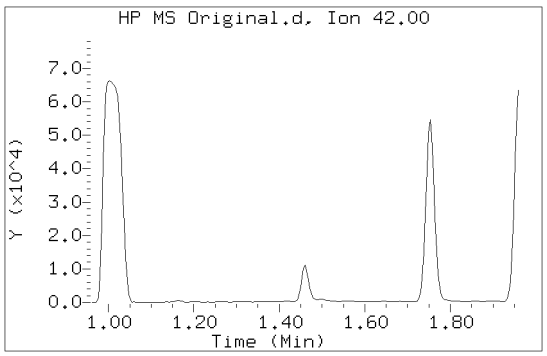

AFTER
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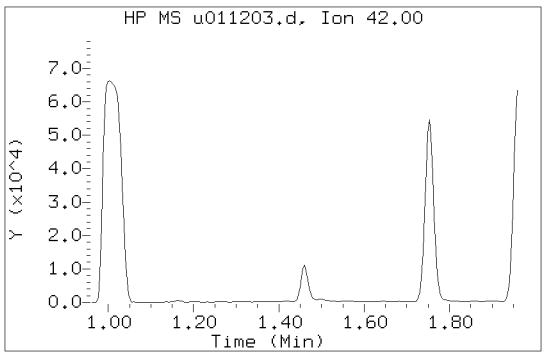

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Report Date: 17-Jan-2024 14:06

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011204.D
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Inj Date : 12-JAN-2024 11:56
Operator : PC Inst ID: VOA9.i
Smp Info : CCB;CCB;;;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240112.b\8260C.m
Meth Date : 17-Jan-2024 14:06 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

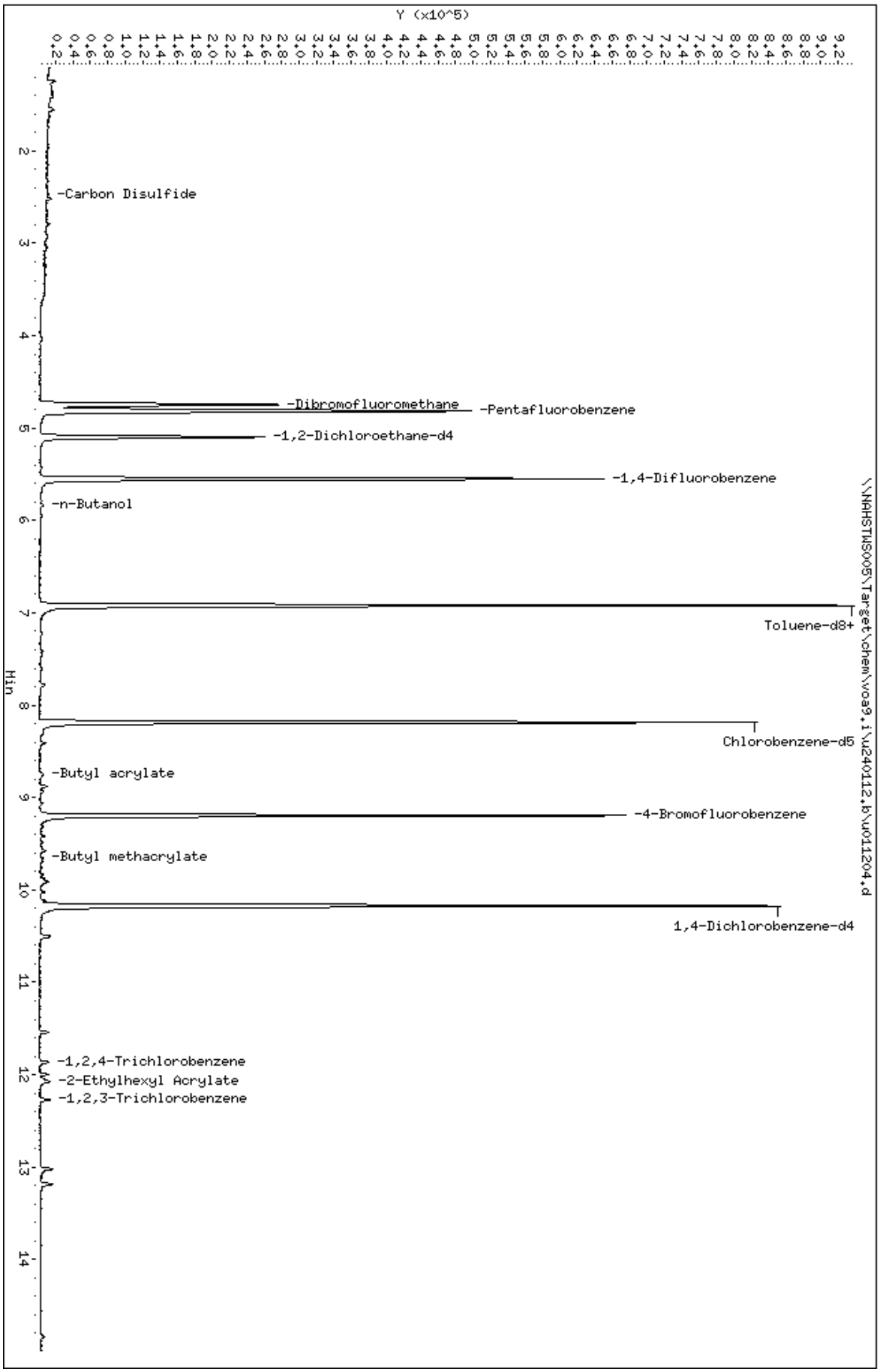
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.815	4.815	(1.000)	372673	50.0000	
19 Carbon Disulfide	76	2.517	2.521	(0.523)	7895	0.93218	0.93(a)
$ 30 Dibromofluoromethane	113	4.744	4.748	(0.985)	163130	42.6231	42.62
$ 35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	171542	39.6864	39.68
* 36 1,4-Difluorobenzene	114	5.550	5.554	(1.000)	518261	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	469230	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	573331	53.0773	53.07
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	201277	49.1927	49.19
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	240159	50.0000	
90 1,2,4-Trichlorobenzene	180	11.863	11.855	(1.166)	4240	0.95590	0.95(a)
93 1,2,3-Trichlorobenzene	180	12.275	12.268	(1.207)	4605	1.02951	1.02(a)
162 Butyl acrylate	55	8.744	8.733	(1.068)	2011	3.53259	3.53(a)
203 2-Ethylhexyl Acrylate	55	12.046	12.043	(1.184)	2796	3.28508	3.28(a)
132 n-Butanol	56	5.835	5.820	(1.212)	2301	18.9976	18.99(a)
163 Butyl methacrylate	41	9.655	9.647	(0.949)	1725	3.19956	3.19(a)

QC Flag Legend

a - Target compound detected but, quantitated amount

Below Limit Of Quantitation(BLOQ).



Data File: \\NAHSTWS005\Target\chem\voa9.i\u240112.b\u011204.d
Date : 12-JAN-2024 11:56
Client ID: CCB
Sample Info: CCB;CCB;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa9.i\u240112.b\u011204.d Page 2

Date : 12-JAN-2024 11:56

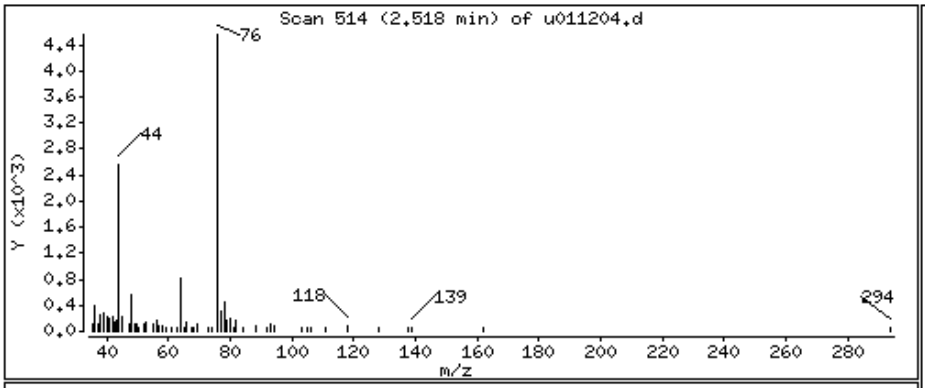
Client ID: CCB Instrument: VOA9.i

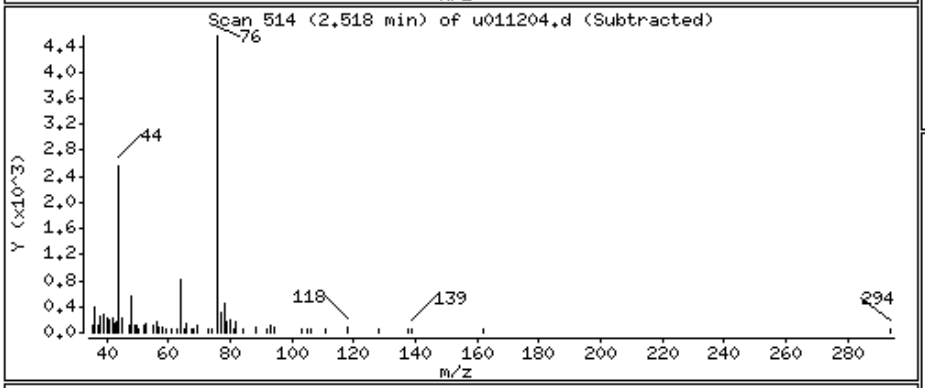
Sample Info: CCB;CCB;;;

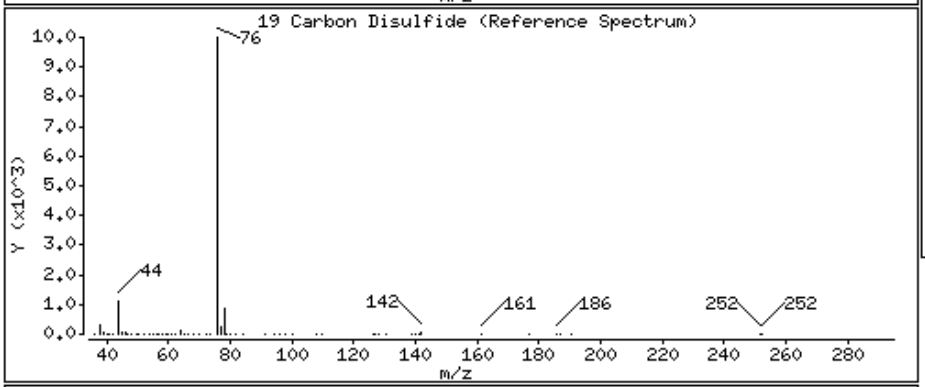
Purge Volume: 5.0 Operator: PC

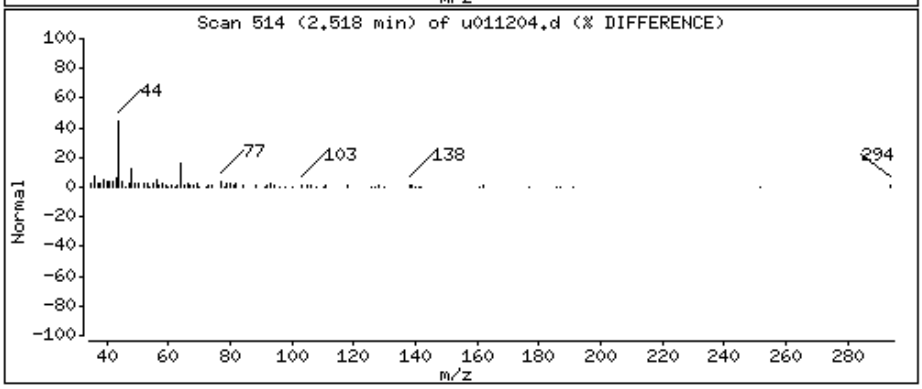
Column phase: DB624 Column diameter: 0.18

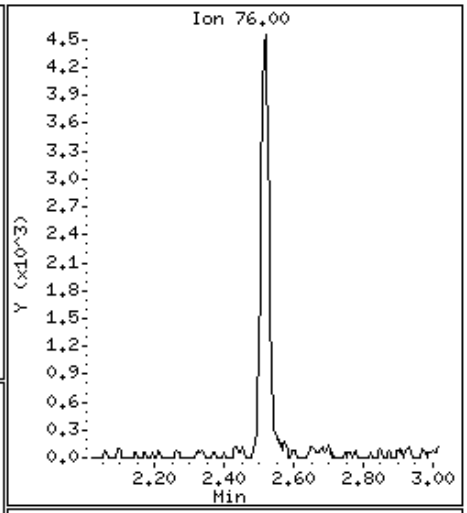
19 Carbon Disulfide Concentration: 0.93 ug/l

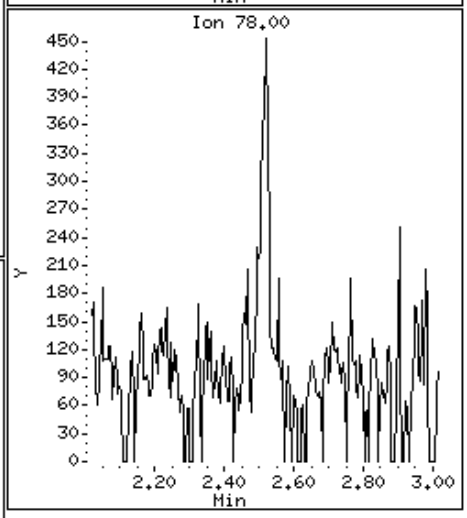












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240112.b\u011204.d Page 3

Date : 12-JAN-2024 11:56

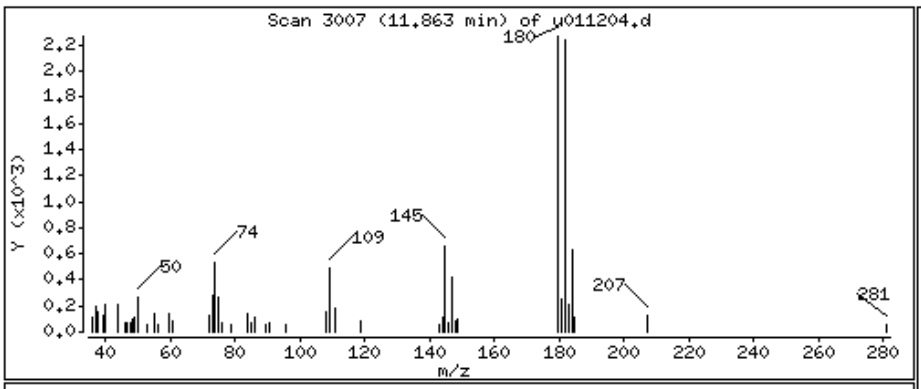
Client ID: CCB Instrument: VOA9.i

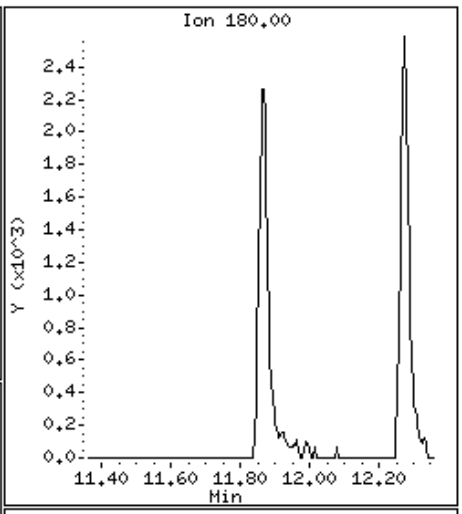
Sample Info: CCB;CCB;;;

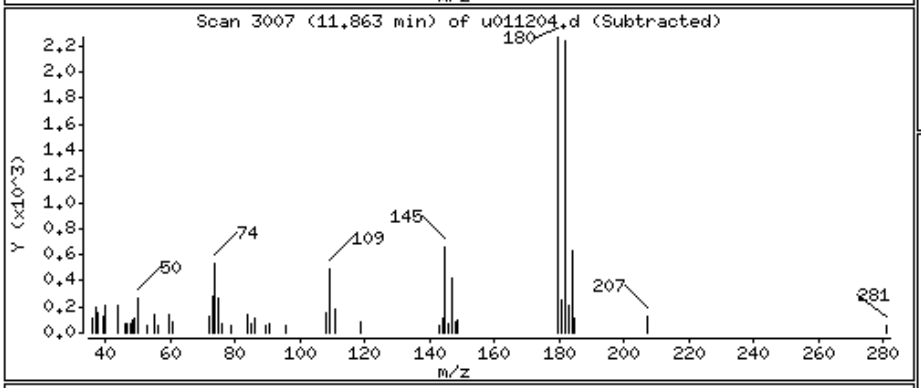
Purge Volume: 5.0 Operator: PC

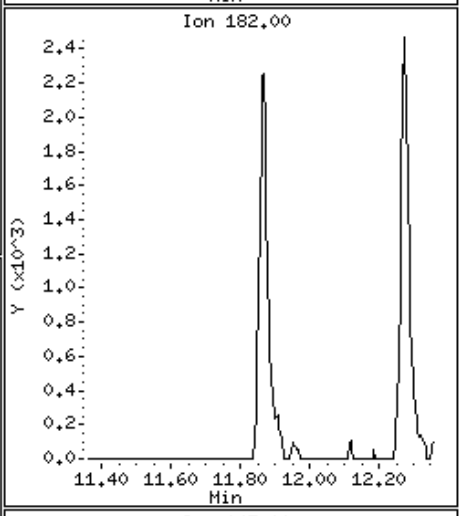
Column phase: DB624 Column diameter: 0.18

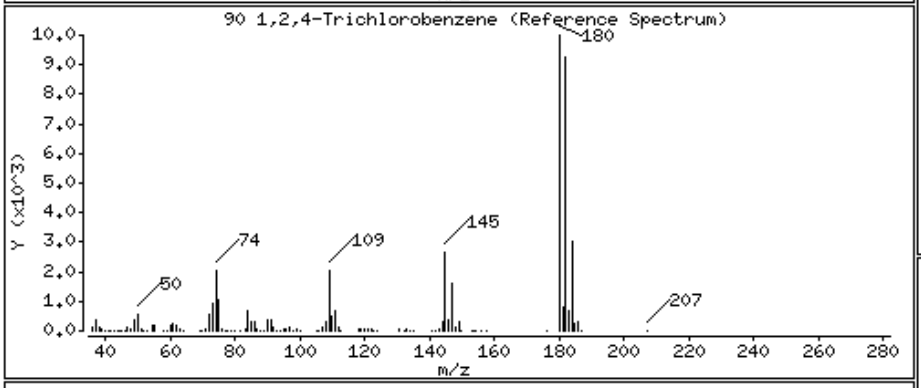
90 1,2,4-Trichlorobenzene Concentration: 0.95 ug/l

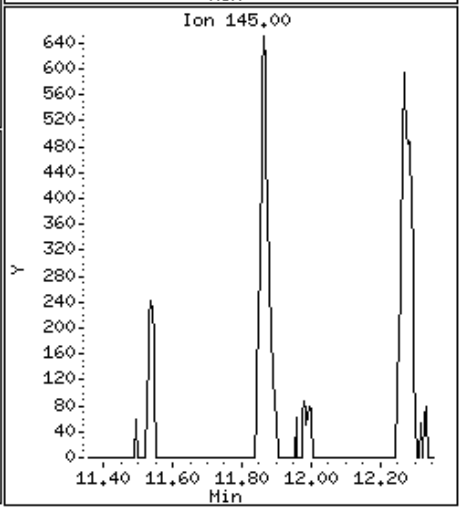


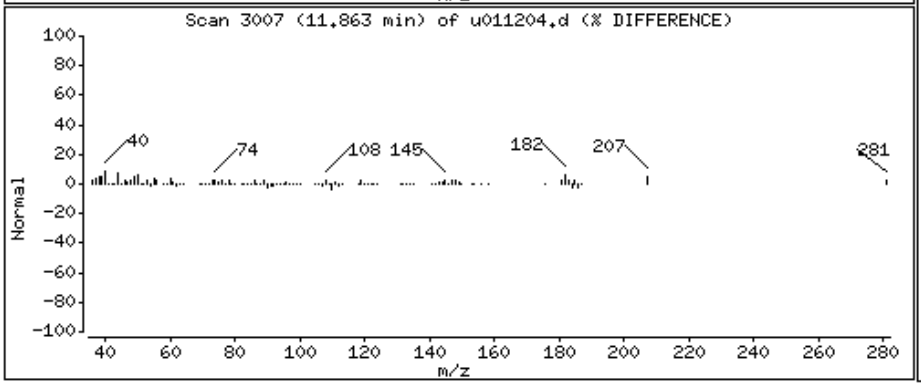












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240112.b\u011204.d Page 4

Date : 12-JAN-2024 11:56

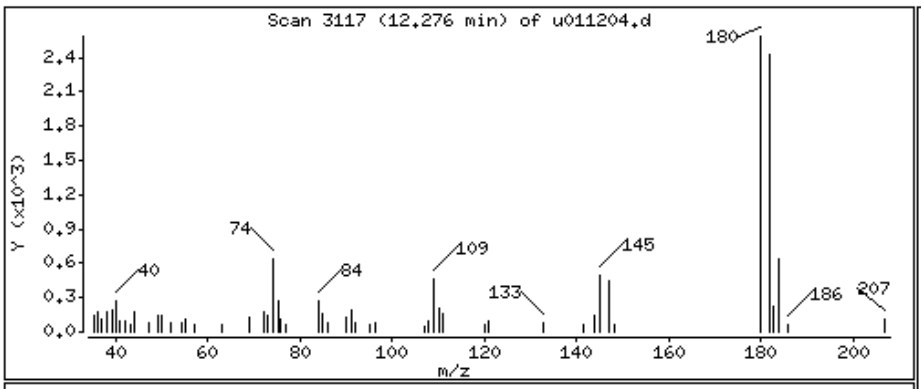
Client ID: CCB Instrument: VOA9.i

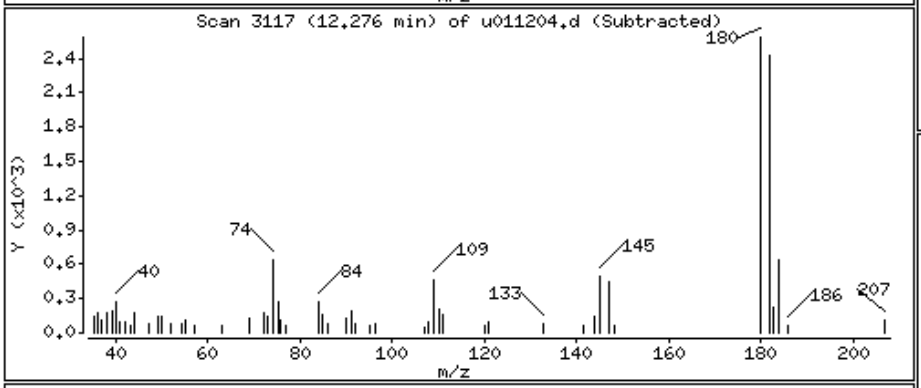
Sample Info: CCB;CCB;;;

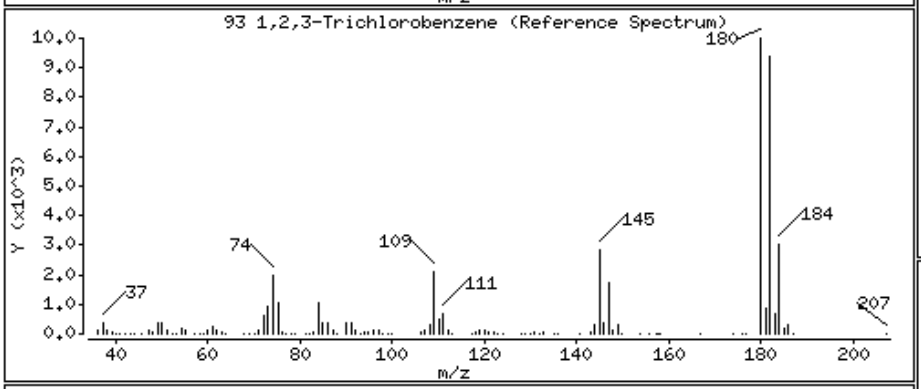
Purge Volume: 5.0 Operator: PC

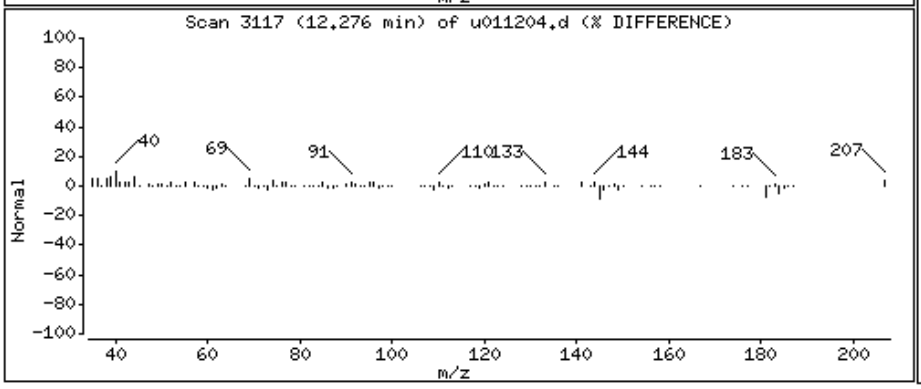
Column phase: DB624 Column diameter: 0.18

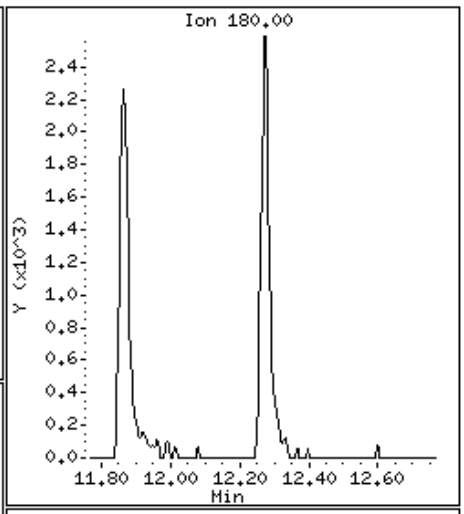
93 1,2,3-Trichlorobenzene Concentration: 1.02 ug/l

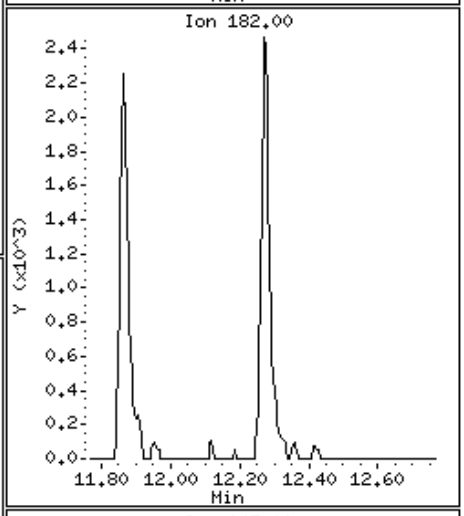


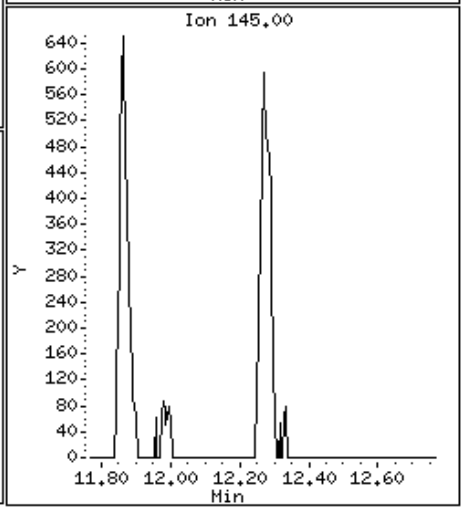












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240112.b\u011204.d Page 5

Date : 12-JAN-2024 11:56

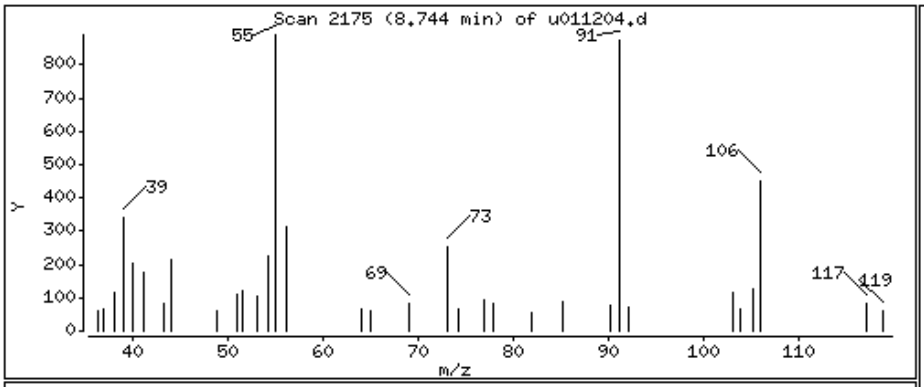
Client ID: CCB Instrument: VOA9.i

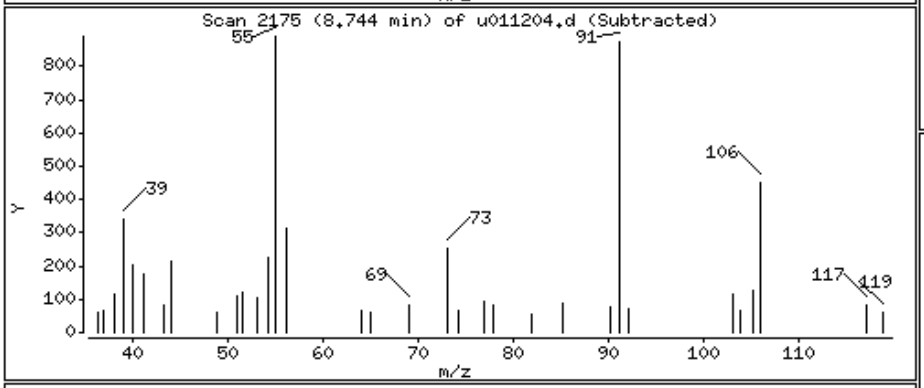
Sample Info: CCB;CCB;;;

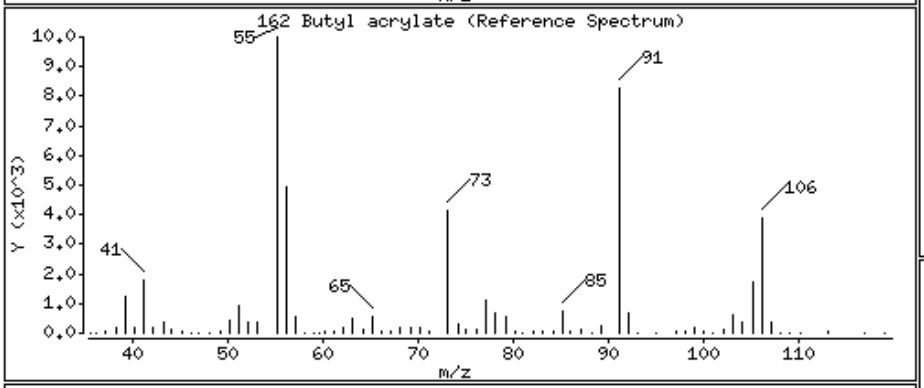
Purge Volume: 5.0 Operator: PC

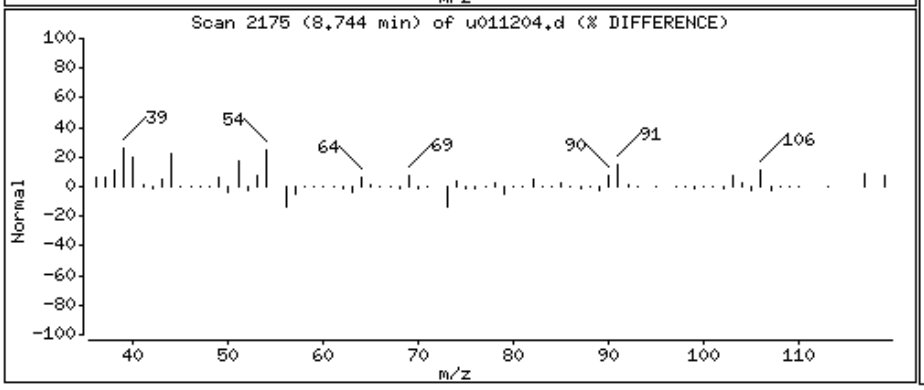
Column phase: DB624 Column diameter: 0.18

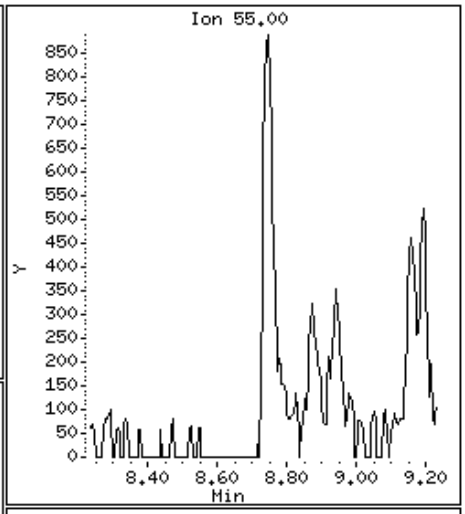
162 Butyl acrylate Concentration: 3.53 ug/l

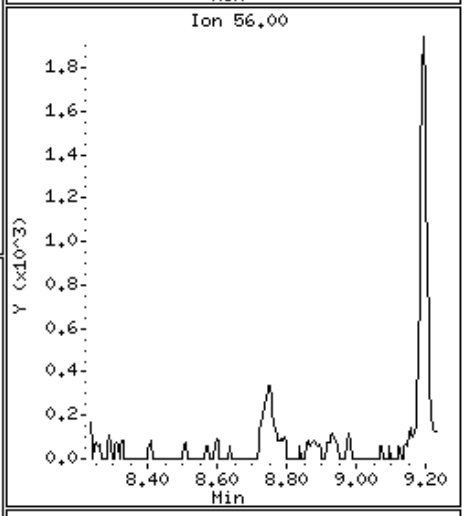


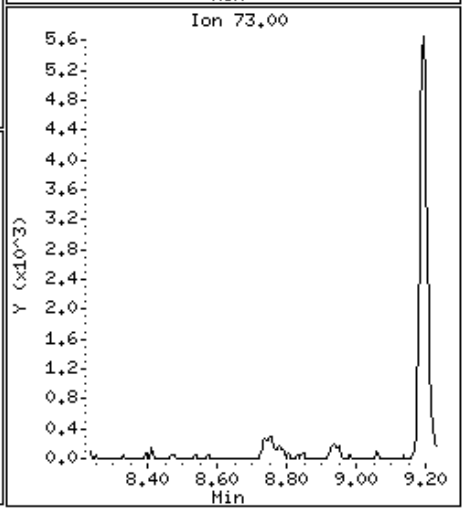












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240112.b\u011204.d Page 6

Date : 12-JAN-2024 11:56

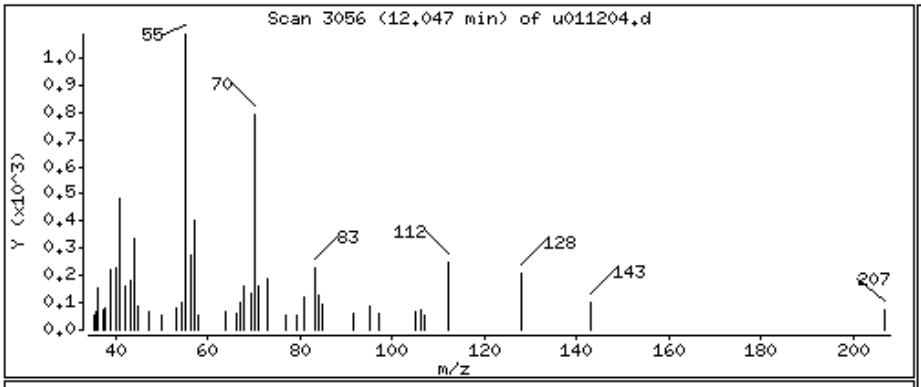
Client ID: CCB Instrument: VOA9.i

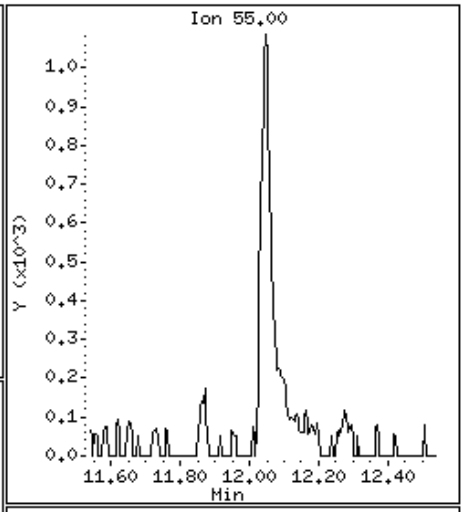
Sample Info: CCB;CCB;;;

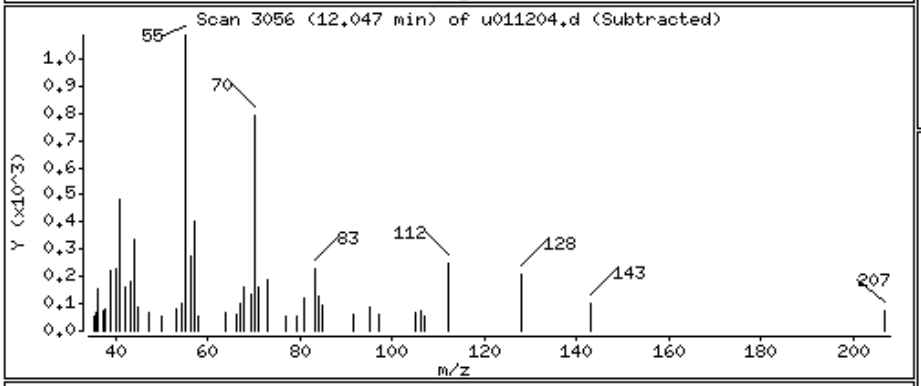
Purge Volume: 5.0 Operator: PC

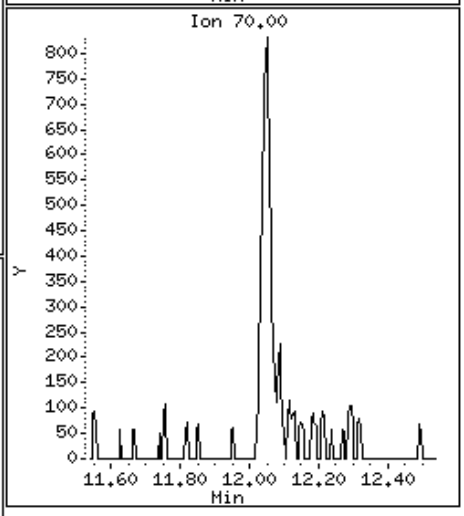
Column phase: DB624 Column diameter: 0.18

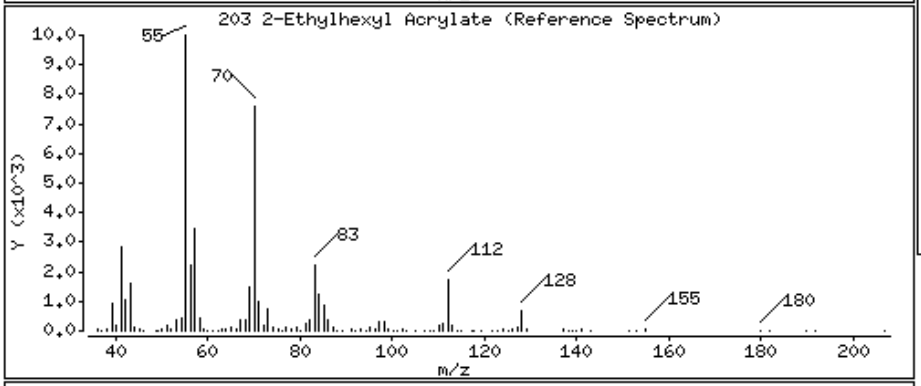
203 2-Ethylhexyl Acrylate Concentration: 3.28 ug/l

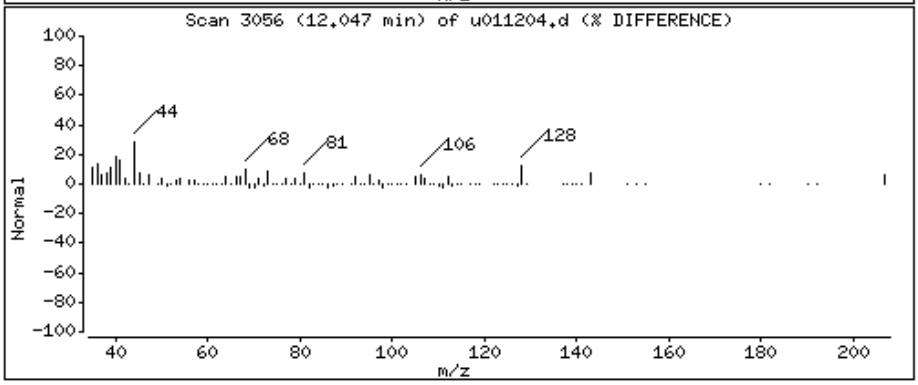












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240112.b\u011204.d Page 7

Date : 12-JAN-2024 11:56

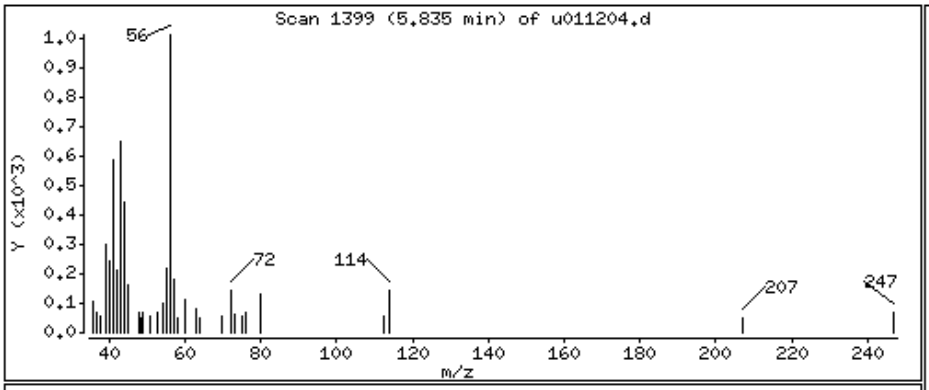
Client ID: CCB Instrument: VOA9.i

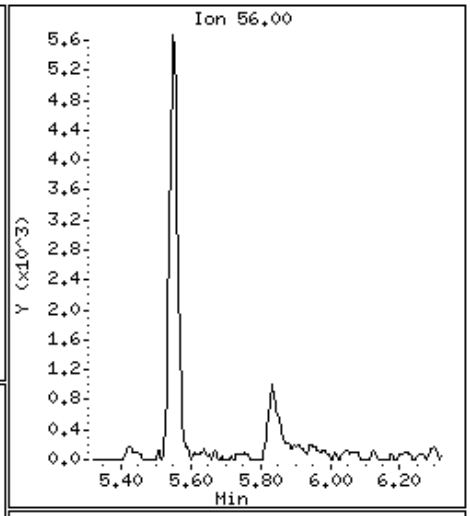
Sample Info: CCB;CCB;;;

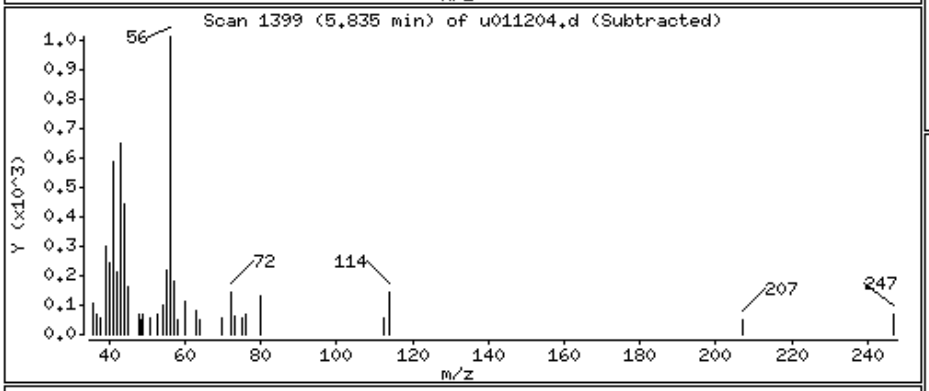
Purge Volume: 5.0 Operator: PC

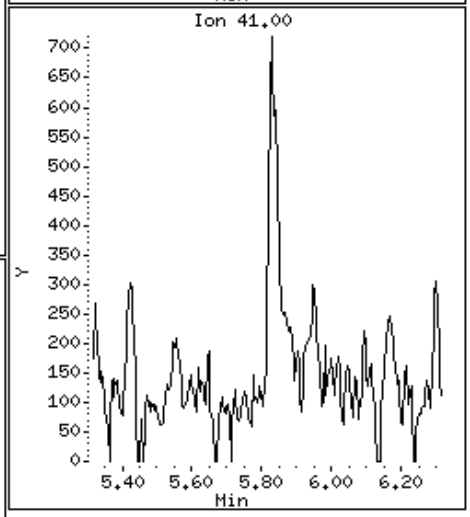
Column phase: DB624 Column diameter: 0.18

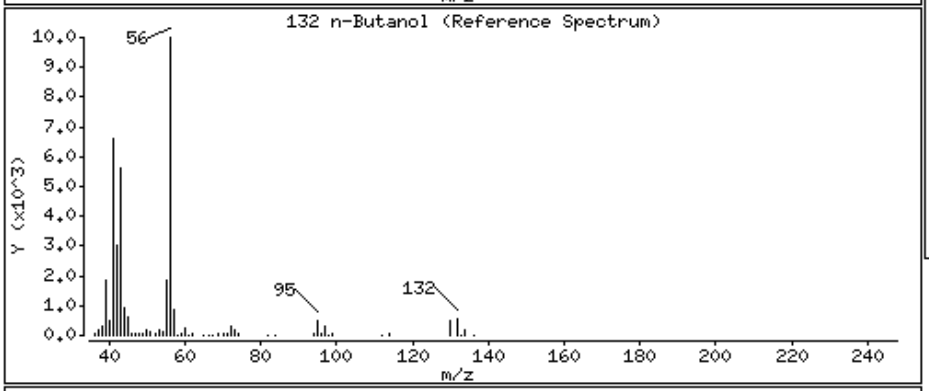
132 n-Butanol Concentration: 18.99 ug/l

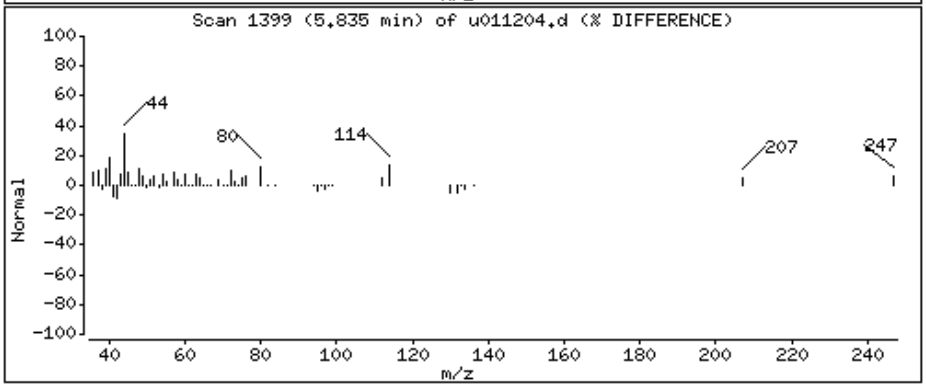












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240112.b\u011204.d Page 8

Date : 12-JAN-2024 11:56

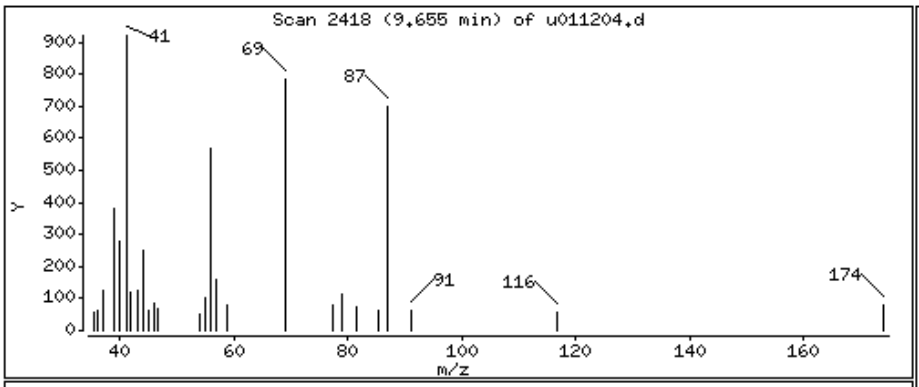
Client ID: CCB Instrument: VOA9.i

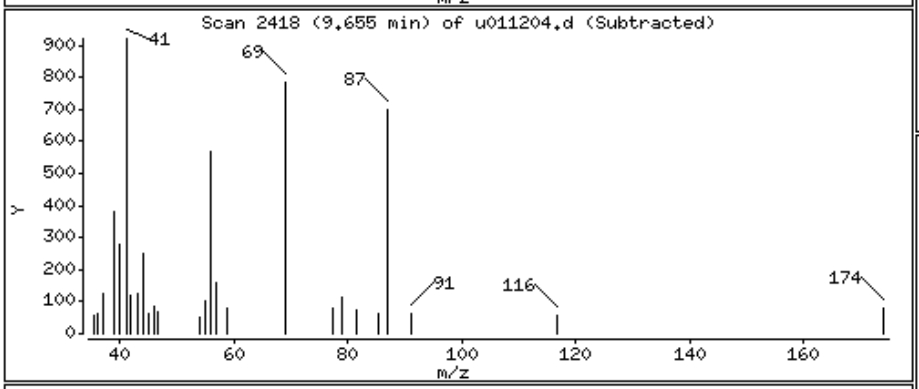
Sample Info: CCB;CCB;;;

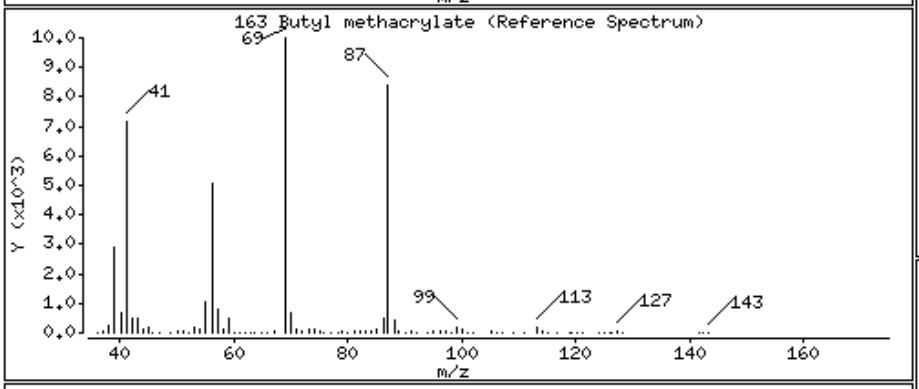
Purge Volume: 5.0 Operator: PC

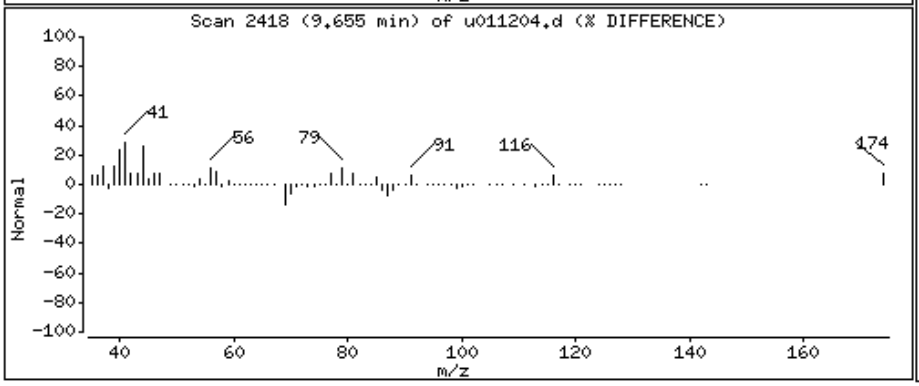
Column phase: DB624 Column diameter: 0.18

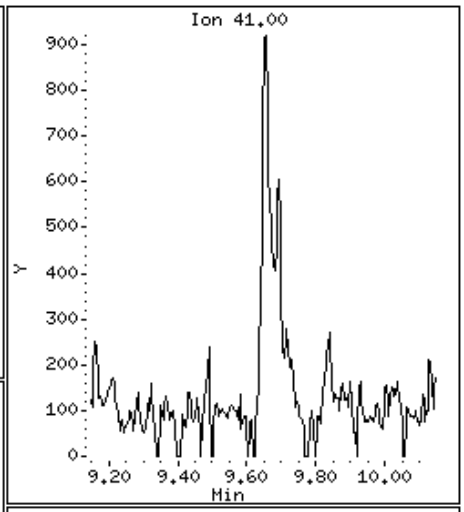
163 Butyl methacrylate Concentration: 3.19 ug/l

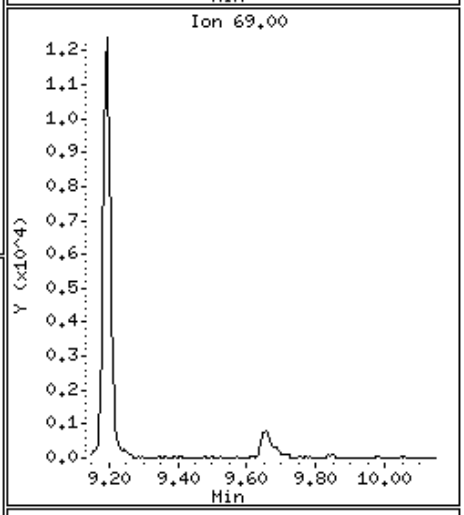


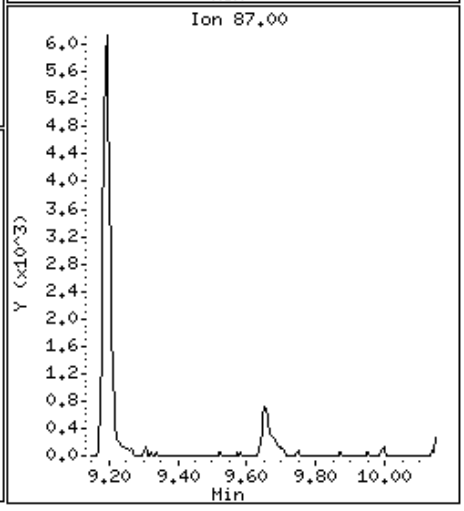












Data File : \\nahstws005\target\chem\voa9.i\u240112.b\u011204.d
Inj Date : 12-JAN-2024 11:56
InstruID : VOA9.i
LabSampID : CCB

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011205.D Page 1
Report Date: 17-Jan-2024 14:06

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011205.D
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Inj Date : 12-JAN-2024 12:18
Operator : PC Inst ID: VOA9.i
Smp Info : VLCSW-240112;VLCSW-240112;3;;LCS
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240112.b\8260C.m
Meth Date : 17-Jan-2024 14:06 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 4 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.815	4.815	(1.000)	321090	50.0000	
2 Dichlorodifluoromethane	85	1.164	1.164	(0.242)	52202	20.6868	20.68
3 Chloromethane	50	1.299	1.299	(0.270)	66160	17.9621	17.96
5 Vinyl Chloride	62	1.378	1.378	(0.286)	69609	19.7826	19.78
6 Bromomethane	94	1.621	1.621	(0.337)	47391	26.5577	26.55
7 Chloroethane	64	1.700	1.700	(0.353)	47890	20.2141	20.21
8 Trichlorofluoromethane	101	1.895	1.895	(0.394)	94798	21.2543	21.25
9 Acrolein	56	2.266	2.266	(0.471)	5657	30.9157	30.91
10 Acetone	43	2.409	2.409	(0.500)	40413	33.1325	33.13
11 1,1-Dichloroethene	96	2.334	2.334	(0.485)	53224	21.4916	21.49
15 Iodomethane	142	2.469	2.469	(0.513)	115047	39.3378	39.33
16 Acrylonitrile	53	3.065	3.065	(0.636)	49162	39.0322	39.03
17 Methylene Chloride	84	2.795	2.795	(0.580)	67504	21.4490	21.44
18 Methyl tert-butyl ether	73	3.080	3.080	(0.640)	171936	19.3756	19.37
19 Carbon Disulfide	76	2.521	2.521	(0.524)	329890	45.2081	45.20
20 trans-1,2-Dichloroethene	96	3.057	3.057	(0.635)	63746	21.5322	21.53
21 Vinyl Acetate	43	3.605	3.604	(0.749)	337061	37.6506	37.65
22 1,1-Dichloroethane	63	3.511	3.514	(0.729)	112522	18.6338	18.63
24 2-Butanone	43	4.264	4.260	(0.886)	50716	32.2440	32.24
26 2,2-Dichloropropane	77	4.182	4.182	(0.868)	83701	19.7162	19.71

27 cis-1,2-Dichloroethene	96	4.197	4.197 (0.872)	72569	18.2984	18.29
28 Chloroform	83	4.572	4.572 (0.949)	122306	18.6077	18.60

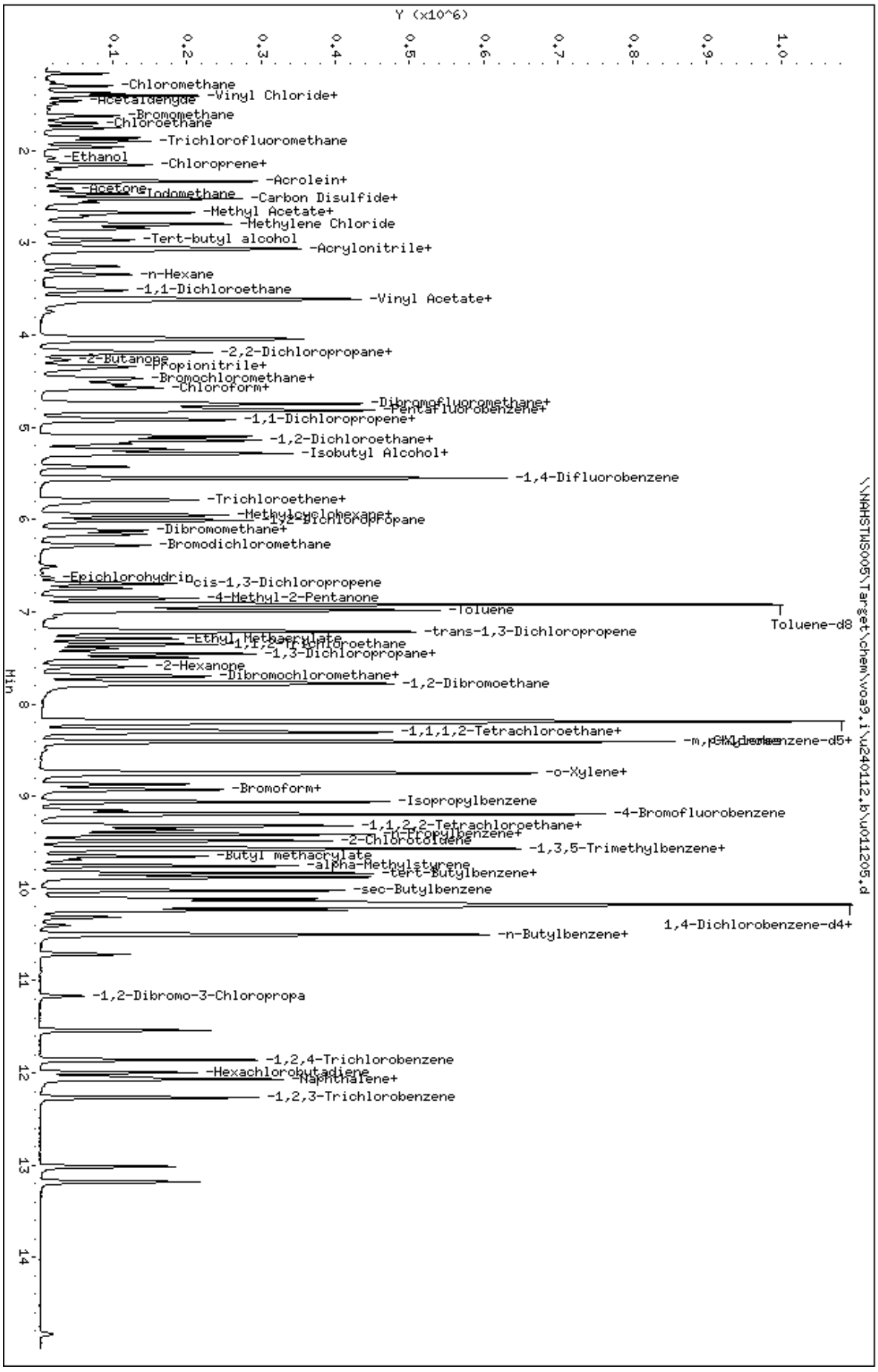
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
	29 Bromochloromethane	128	4.470	4.470	(0.928)	40971	19.9661	19.96
$	30 Dibromofluoromethane	113	4.748	4.748	(0.986)	169700	51.6761	51.67
	31 1,1,1-Trichloroethane	97	4.744	4.744	(0.985)	95919	19.2029	19.20
	32 1,1-Dichloropropene	75	4.924	4.920	(0.887)	81848	19.6849	19.68
	33 1,2-Dichloroethane	62	5.175	5.175	(0.932)	88855	18.3494	18.34
	34 Carbon Tetrachloride	117	4.913	4.913	(0.885)	83030	20.4431	20.44
$	35 1,2-Dichloroethane-d4	65	5.097	5.096	(1.058)	181840	48.3560	48.35
*	36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	497003	50.0000	
	37 Benzene	78	5.138	5.138	(0.925)	257267	19.0152	19.01
	38 Trichloroethene	130	5.790	5.786	(1.043)	72200	19.3620	19.36
	39 Bromodichloromethane	83	6.277	6.277	(1.130)	86438	19.5096	19.50
	42 1,2-Dichloropropane	63	6.007	6.007	(1.082)	68111	18.6986	18.69
	44 Dibromomethane	93	6.116	6.120	(1.101)	44721	18.9762	18.97
	45 4-Methyl-2-Pentanone	43	6.851	6.851	(0.837)	126402	34.5353	34.53
	46 cis-1,3-Dichloropropene	75	6.690	6.690	(1.204)	100139	18.5002	18.50
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	504161	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	601692	51.8435	51.84
	50 Toluene	91	6.978	6.978	(0.853)	278705	19.8263	19.82
	51 trans-1,3-Dichloropropene	75	7.196	7.196	(1.296)	82537	18.3374	18.33
	52 2-Hexanone	43	7.593	7.589	(0.928)	83005	32.6246	32.62
	53 1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	56087	20.0806	20.08
	54 1,3-Dichloropropane	76	7.499	7.499	(0.916)	114707	18.3773	18.37
	55 Dibromochloromethane	129	7.691	7.690	(0.940)	73802	19.6829	19.68
	56 Tetrachloroethene	164	7.454	7.458	(0.911)	64397	21.4017	21.40
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	69499	19.8406	19.84
	58 1-Chlorohexane	55	8.197	8.197	(1.476)	52922	18.9893	18.98
	59 Chlorobenzene	112	8.208	8.208	(1.003)	199466	19.4785	19.47
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	70939	19.8039	19.80
	61 Ethylbenzene	106	8.305	8.305	(1.015)	91484	19.0842	19.08
	62 m,p-Xylenes	106	8.407	8.406	(1.027)	232972	40.4228	40.42
	63 o-Xylene	106	8.748	8.748	(1.069)	117591	19.8391	19.83
	64 Styrene	104	8.763	8.759	(1.071)	202932	20.5652	20.56
	66 Bromoform	173	8.920	8.916	(1.090)	46808	18.9284	18.92
	67 Isopropylbenzene	105	9.063	9.062	(1.107)	286801	20.0072	20.00
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	89276	18.9086	18.90
$	69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	221445	50.4030	50.40
*	70 1,4-Dichlorobenzene-d4	152	10.168	10.172	(1.000)	283593	50.0000	
	71 1,2,3-Trichloropropane	75	9.363	9.362	(0.921)	85927	15.9612	15.96
	73 n-Propylbenzene	91	9.411	9.411	(0.926)	322819	19.3857	19.38
	74 Bromobenzene	156	9.318	9.317	(0.916)	88548	18.5933	18.59
	75 1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	236413	19.9748	19.97
	76 2-Chlorotoluene	91	9.482	9.482	(0.933)	206741	18.4455	18.44
	77 4-Chlorotoluene	91	9.576	9.576	(0.942)	238534	18.7655	18.76
	78 tert-Butylbenzene	119	9.835	9.835	(0.967)	205531	19.3336	19.33
	79 1,2,4-Trimethylbenzene	105	9.876	9.880	(0.971)	238371	20.0958	20.09
	81 sec-Butylbenzene	105	10.022	10.022	(0.986)	265247	19.3495	19.34
	82 p-Isopropyltoluene	119	10.146	10.146	(0.998)	235642	19.8631	19.86
	83 1,3-Dichlorobenzene	146	10.116	10.116	(0.995)	155895	18.4728	18.47
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	162526	18.1780	18.17
	87 n-Butylbenzene	91	10.491	10.491	(1.032)	190101	19.0947	19.09
	88 1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	157070	18.5002	18.50
	89 1,2-Dibromo-3-Chloropropane	155	11.166	11.165	(1.098)	13159	17.3080	17.30

90 1,2,4-Trichlorobenzene	180	11.859	11.855 (1.166)	95049	18.1467	18.14
91 Hexachlorobutadiene	225	11.998	11.998 (1.180)	41362	19.7000	19.70

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
	92 Naphthalene	128	12.065	12.065	(1.187)	237611	18.8100	18.81
	93 1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	95986	18.1725	18.17
M	94 1,2-Dichloroethylene (total)	96				136315	39.3612	39.36
M	95 Xylenes (total)	106				350563	60.9587	60.95
	135 1,4-Dioxane	88	6.165	6.165	(1.280)	17494	343.400	343.39
	141 Cyclohexane	56	4.785	4.785	(0.994)	82057	17.7358	17.73
	138 Freon TF	101	2.334	2.337	(0.485)	55890	23.9658	23.96
	140 1,3-Butadiene	54	1.404	1.404	(0.292)	58845	18.2474	18.24
	147 Methylcyclohexane	55	5.947	5.944	(1.071)	134895	18.3119	18.31
	146 Methyl Acetate	43	2.712	2.712	(0.563)	61457	19.2315	19.23
	148 Tert-Butyl alcohol	59	2.967	2.963	(0.616)	140181	389.982	389.98
	149 Isopropyl Alcohol	45	2.559	2.558	(0.531)	83695	407.454	407.45
	72 trans-1,4-Dichloro-2-butene	53	9.378	9.377	(1.146)	16528	18.2169	18.21
	12 Isobutyl Alcohol	43	5.284	5.284	(1.097)	165782	344.261	344.26
	13 Acetonitrile	39	2.671	2.671	(0.555)	66911	193.624	193.62
	14 Allyl Chloride	41	2.671	2.671	(0.555)	156372	19.8075	19.80
	25 Methacrylonitrile	41	4.493	4.493	(0.933)	37358	16.2947	16.29
	40 Methyl Methacrylate	41	6.154	6.153	(1.278)	51657	16.2992	16.29
	4 Propionitrile	54	4.336	4.335	(0.900)	93153	174.975	174.97(a)
	136 n-Hexane	57	3.342	3.342	(0.694)	58925	19.7423	19.74
	194 Acetaldehyde	44	1.460	1.460	(0.303)	29732	66.5232	66.52(M)
	131 Methyl Acrylate	55	4.369	4.369	(0.907)	76439	18.1239	18.12
	23 Chloroprene	53	2.158	2.157	(0.448)	22001	20.0871	20.08(M)
	49 Ethyl Methacrylate	69	7.289	7.289	(1.312)	90629	18.5790	18.57
	166 1,2,3-Trimethylbenzene	105	10.232	10.232	(1.006)	211589	18.0797	18.07
	167 Ethanol	45	2.079	2.079	(0.432)	15348	380.237	380.23
	164 Dicyclopentadiene	66	10.198	10.198	(1.003)	247576	16.3764	16.37
	145 alpha-Methylstyrene	118	9.752	9.752	(0.959)	101492	18.6879	18.68
	142 Tetrahydrofuran	42	4.542	4.542	(0.943)	22633	33.2077	33.20
	156 Diisopropyl ether	45	3.620	3.619	(0.752)	192072	17.1710	17.17
	162 Butyl acrylate	55	8.733	8.733	(1.067)	96346	15.5226	15.52
	203 2-Ethylhexyl Acrylate	55	12.039	12.043	(1.184)	50630	14.0106	14.01(M)
	130 Ethyl Acetate	43	4.339	4.339	(0.901)	67377	17.2740	17.27
	189 n-Butyl acetate	43	7.706	7.705	(0.941)	95116	16.9373	16.93
	182 Epichlorohydrin	57	6.630	6.630	(1.194)	11556	59.8536	59.85
	132 n-Butanol	56	5.824	5.820	(1.209)	33992	325.731	325.73(a)
	133 Ethyl Acrylate	55	5.947	5.944	(1.235)	134895	17.4780	17.47
	163 Butyl methacrylate	41	9.651	9.647	(0.949)	54249	15.8593	15.85
	187 n-Amyl acetate	43	8.931	8.931	(1.091)	98418	15.4015	15.40
	188 Isopropyl acetate	43	5.284	5.284	(0.951)	166451	18.1540	18.15

QC Flag Legend

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



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Sample Info: VLCSW-240112;VLCSW-240112;3;;LCS
Purge Volume: 5.0
Column phase: DB624

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

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Inj Date : 12-JAN-2024 12:18
InstruID : VOA9.i
LabSampID : VLCSW-240112

Chloroprene (126-99-8)

Reason Code:

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17-Jan-2024
14:06
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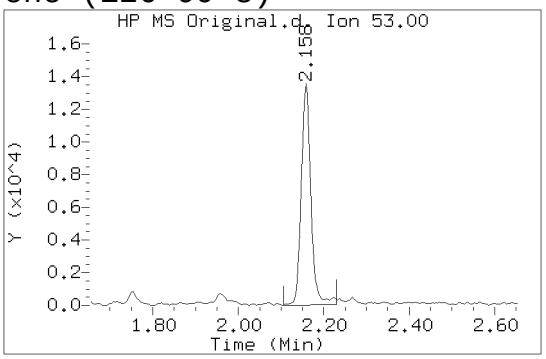

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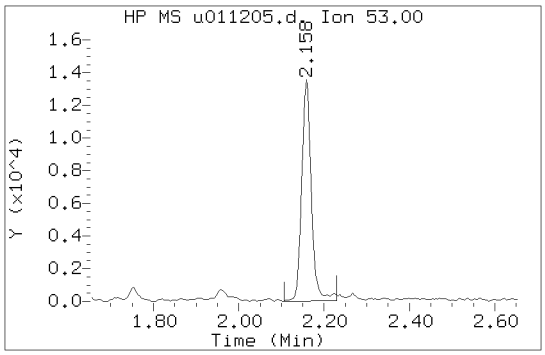

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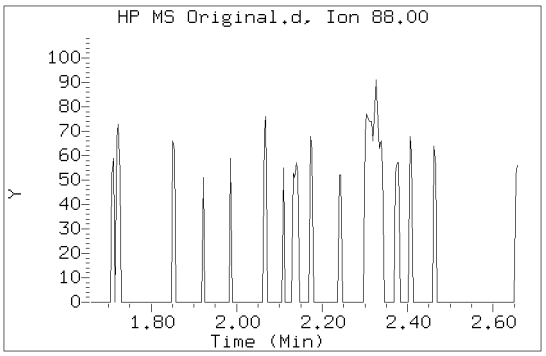

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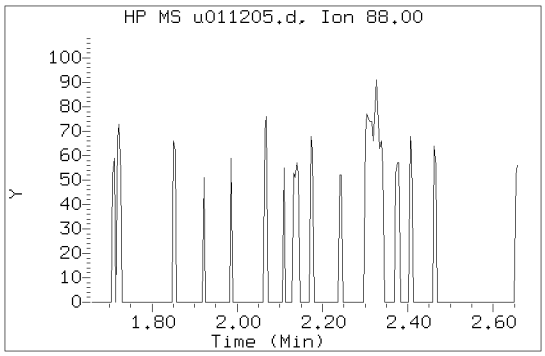

Acetaldehyde (75-07-0)

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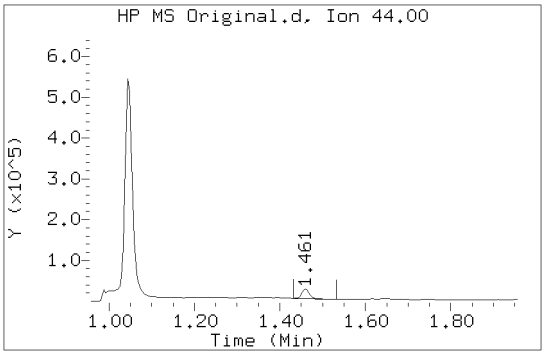

AFTER
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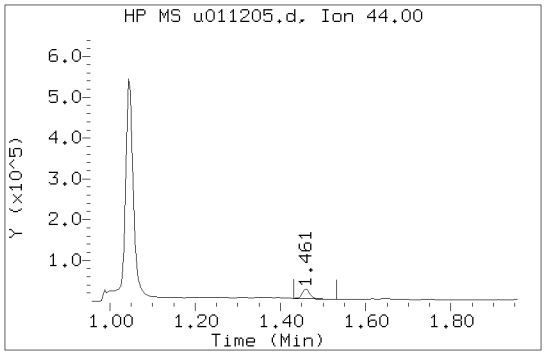

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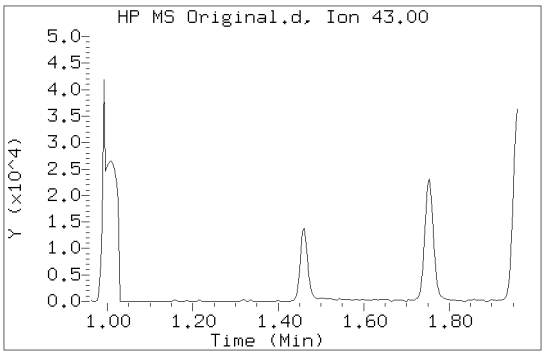

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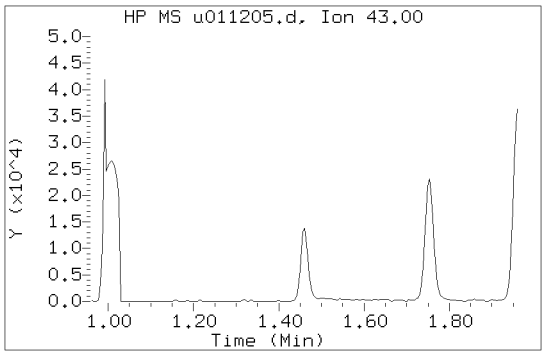

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InstruID : VOA9.i
LabSampID : VLCSW-240112

Acetaldehyde (75-07-0)

Reason Code:

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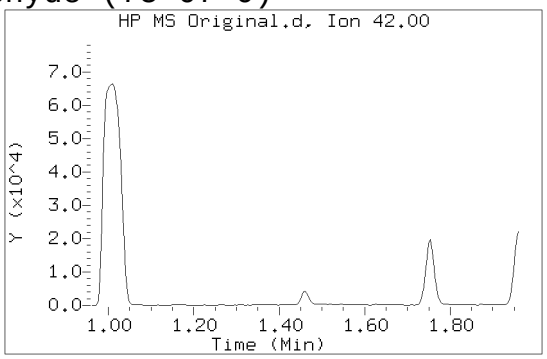

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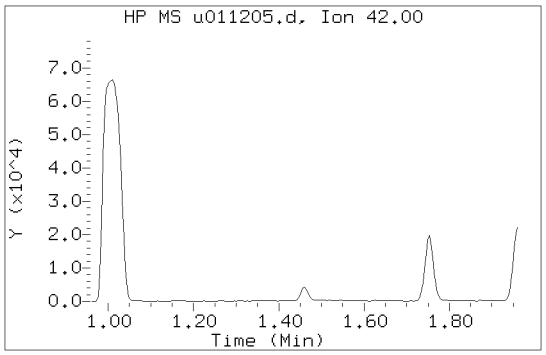

2-Ethylhexyl Acrylate (103-11-7)

Reason Code:

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17-Jan-2024
14:06
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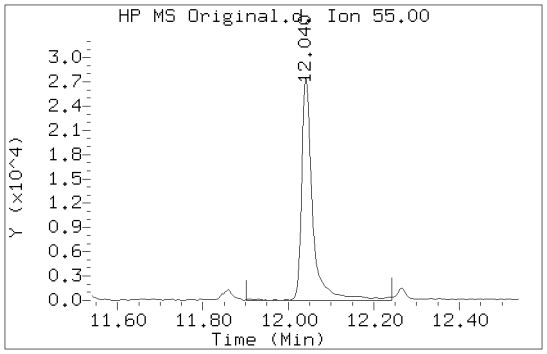

AFTER

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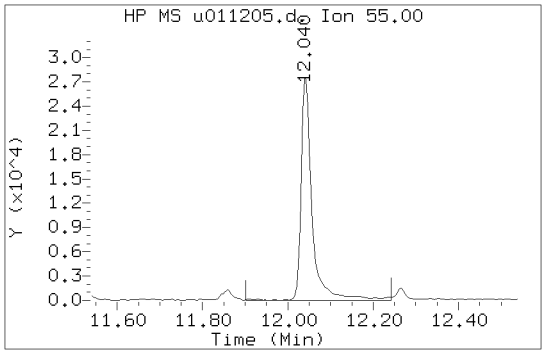

BEFORE

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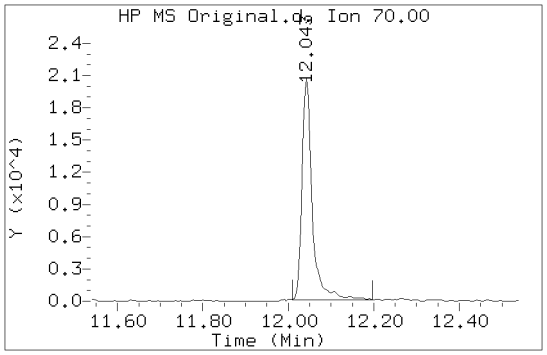

AFTER

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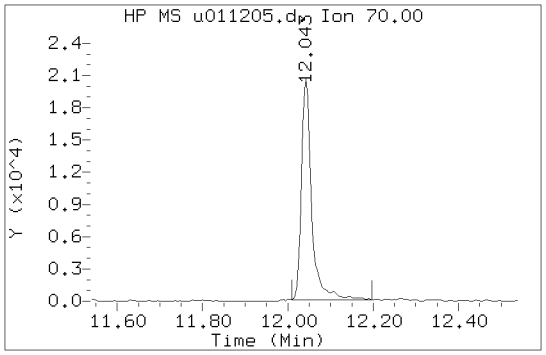

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Report Date: 17-Jan-2024 14:06

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011207.D
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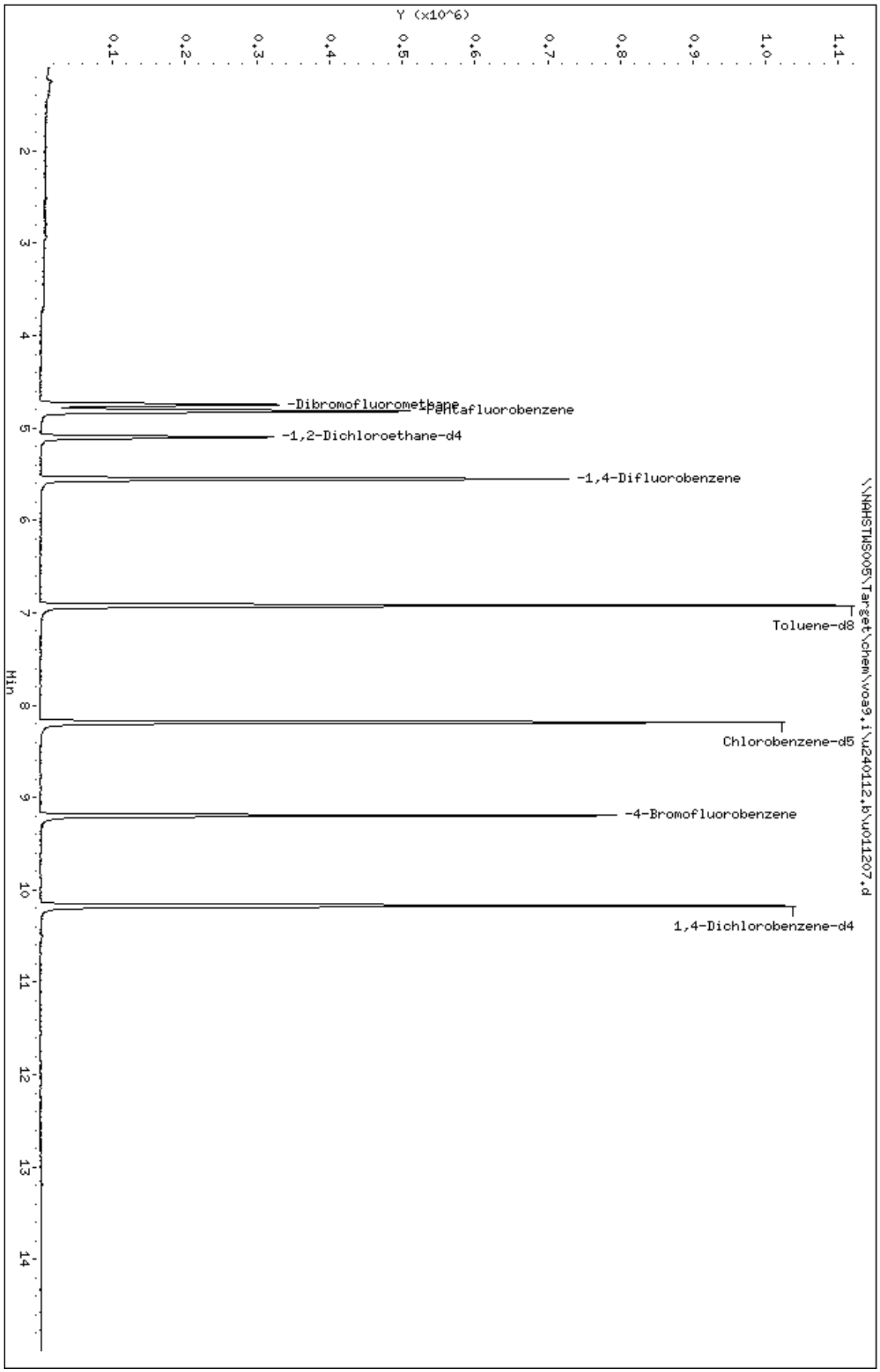
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240112.b\8260C.m
Meth Date : 17-Jan-2024 14:06 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.815	4.815	(1.000)	379364	50.0000	
$ 30 Dibromofluoromethane	113	4.748	4.748	(0.986)	196968	50.7481	50.74
$ 35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	209172	47.1476	47.14
* 36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	587698	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	571579	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	683985	51.9828	51.98
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	235572	47.2141	47.21
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	297476	50.0000	



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Sample Info: VBLKW-240112;VBLKW-240112;3;;BLANK
Purge Volume: 5.0
Column phase: DB624

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

Page 1

Data File : \\nahstws005\target\chem\voa9.i\u240112.b\u011207.d
Inj Date : 12-JAN-2024 13:03
InstruID : VOA9.i
LabSampID : VBLKW-240112

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011211.D Page 1
Report Date: 17-Jan-2024 14:06

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011211.D
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Inj Date : 12-JAN-2024 14:32
Operator : PC Inst ID: VOA9.i
Smp Info : HS24010519-09MS;HS24010519-09MS;3;;MS
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240112.b\8260C.m
Meth Date : 17-Jan-2024 14:06 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 10 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.815	4.815	(1.000)	377626	50.0000	
2 Dichlorodifluoromethane	85	1.164	1.164	(0.242)	43576	14.9350	14.93
3 Chloromethane	50	1.299	1.299	(0.270)	64914	14.9853	14.98
5 Vinyl Chloride	62	1.378	1.378	(0.286)	72575	17.5376	17.53
6 Bromomethane	94	1.621	1.621	(0.337)	48362	23.0133	23.01
7 Chloroethane	64	1.700	1.700	(0.353)	51665	18.5426	18.54
8 Trichlorofluoromethane	101	1.899	1.895	(0.394)	108377	20.6609	20.66
9 Acrolein	56	2.266	2.266	(0.471)	6112	28.4015	28.40
10 Acetone	43	2.409	2.409	(0.500)	46057	31.9180	31.91
11 1,1-Dichloroethene	96	2.334	2.334	(0.485)	57363	19.6951	19.69
15 Iodomethane	142	2.469	2.469	(0.513)	120956	35.4809	35.48
16 Acrylonitrile	53	3.068	3.065	(0.637)	57265	38.6588	38.65
17 Methylene Chloride	84	2.795	2.795	(0.580)	69355	18.7044	18.70
18 Methyl tert-butyl ether	73	3.080	3.080	(0.640)	200588	19.2202	19.22
19 Carbon Disulfide	76	2.521	2.521	(0.524)	363609	42.3688	42.36
20 trans-1,2-Dichloroethene	96	3.061	3.057	(0.636)	67293	19.3272	19.32
21 Vinyl Acetate	43	3.608	3.604	(0.749)	353479	33.5731	33.57
22 1,1-Dichloroethane	63	3.514	3.514	(0.730)	119051	16.7634	16.76
24 2-Butanone	43	4.264	4.260	(0.886)	58674	31.7186	31.71
26 2,2-Dichloropropane	77	4.182	4.182	(0.868)	89164	17.8586	17.85

27 cis-1,2-Dichloroethene	96	4.197	4.197 (0.872)	76616	16.4266	16.42
28 Chloroform	83	4.572	4.572 (0.949)	125254	16.2032	16.20

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011211.D Page 2
Report Date: 17-Jan-2024 14:06

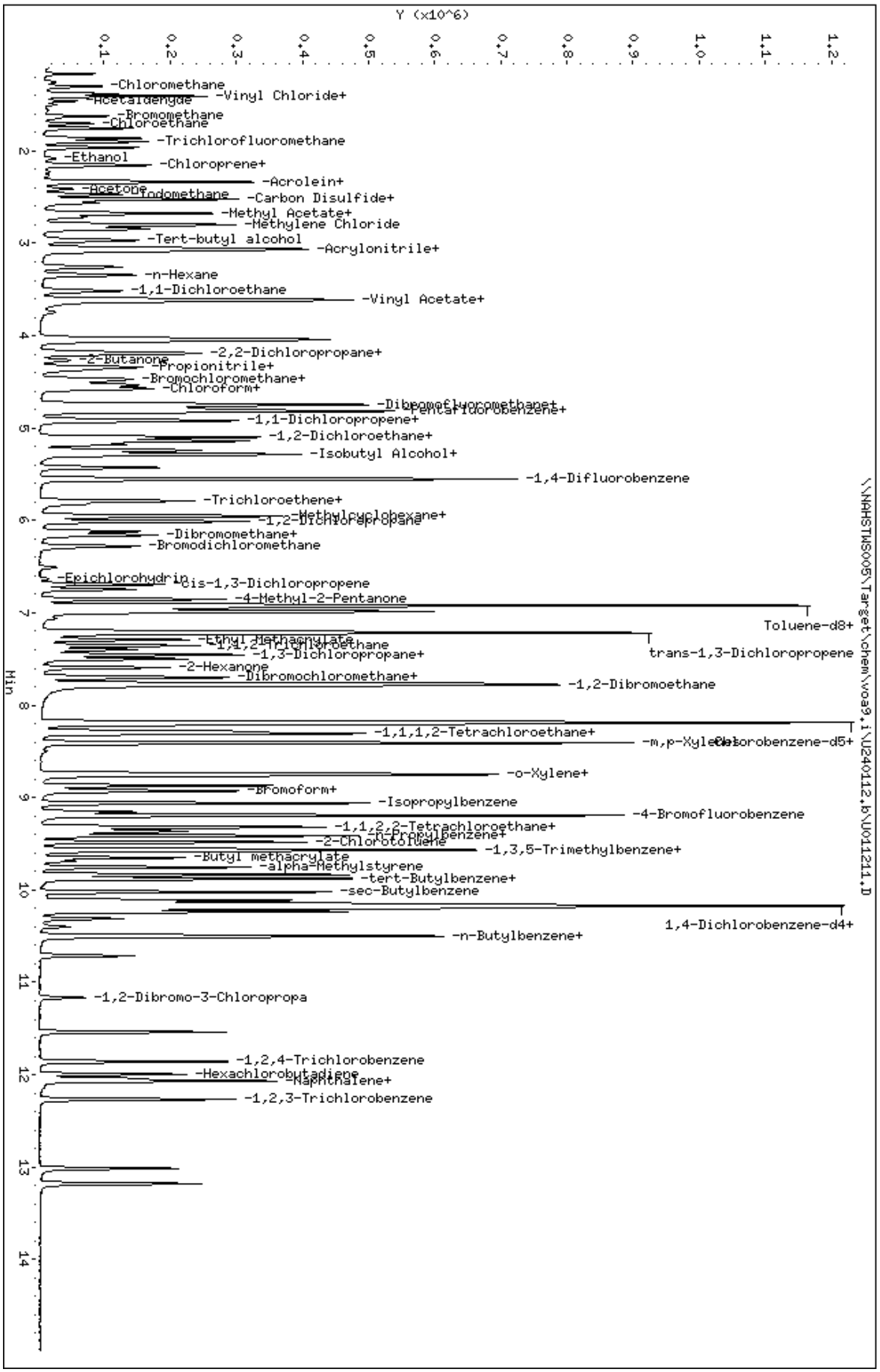
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	29 Bromochloromethane	128	4.470	4.470	(0.928)	41362	17.1389	17.13
$	30 Dibromofluoromethane	113	4.748	4.748	(0.986)	199729	51.7155	51.71
	31 1,1,1-Trichloroethane	97	4.744	4.744	(0.985)	106142	18.0682	18.06
	32 1,1-Dichloropropene	75	4.924	4.920	(0.887)	88831	18.4441	18.44
	33 1,2-Dichloroethane	62	5.175	5.175	(0.932)	92833	16.5505	16.55
	34 Carbon Tetrachloride	117	4.913	4.913	(0.885)	91637	19.4783	19.47
$	35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	213595	48.2999	48.29
*	36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	575693	50.0000	
	37 Benzene	78	5.138	5.138	(0.925)	273216	17.4338	17.43
	38 Trichloroethene	130	5.790	5.786	(1.043)	77156	17.8629	17.86
	39 Bromodichloromethane	83	6.277	6.277	(1.130)	86961	16.9448	16.94
	42 1,2-Dichloropropane	63	6.007	6.007	(1.082)	68462	16.2259	16.22
	44 Dibromomethane	93	6.120	6.120	(1.102)	45940	16.8290	16.82
	45 4-Methyl-2-Pentanone	43	6.855	6.851	(0.837)	164190	39.6308	39.63
	46 cis-1,3-Dichloropropene	75	6.690	6.690	(1.204)	99358	16.0595	16.05
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	571441	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	712152	54.1365	54.13
	50 Toluene	91	6.978	6.978	(0.853)	295262	18.5311	18.53
	51 trans-1,3-Dichloropropene	75	7.196	7.196	(1.296)	87239	16.8880	16.88
	52 2-Hexanone	43	7.593	7.589	(0.928)	113197	39.2530	39.25
	53 1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	54214	16.9274	16.92
	54 1,3-Dichloropropane	76	7.499	7.499	(0.916)	119989	16.9602	16.96
	55 Dibromochloromethane	129	7.691	7.690	(0.940)	75279	17.7131	17.71
	56 Tetrachloroethene	164	7.458	7.458	(0.911)	68616	20.1190	20.11
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	71717	18.0632	18.06
	58 1-Chlorohexane	55	8.197	8.197	(1.476)	60829	18.8431	18.84
	59 Chlorobenzene	112	8.208	8.208	(1.003)	207387	17.8676	17.86
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	70249	17.3023	17.30
	61 Ethylbenzene	106	8.305	8.305	(1.015)	94995	17.4835	17.48
	62 m,p-Xylenes	106	8.407	8.406	(1.027)	247001	37.8111	37.81
	63 o-Xylene	106	8.748	8.748	(1.069)	121799	18.1297	18.12
	64 Styrene	104	8.763	8.759	(1.071)	205530	18.3762	18.37
	66 Bromoform	173	8.916	8.916	(1.089)	50228	17.9771	17.97
	67 Isopropylbenzene	105	9.063	9.062	(1.107)	309061	19.0217	19.02
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	95228	18.1400	18.13
$	69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	254014	51.0245	51.02
*	70 1,4-Dichlorobenzene-d4	152	10.168	10.172	(1.000)	314865	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.921)	97252	16.2706	16.27
	73 n-Propylbenzene	91	9.411	9.411	(0.926)	331835	17.9480	17.94
	74 Bromobenzene	156	9.317	9.317	(0.916)	89797	16.9829	16.98
	75 1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	241296	18.3625	18.36
	76 2-Chlorotoluene	91	9.482	9.482	(0.933)	210972	16.9535	16.95
	77 4-Chlorotoluene	91	9.576	9.576	(0.942)	243964	17.2865	17.28
	78 tert-Butylbenzene	119	9.835	9.835	(0.967)	216498	18.3426	18.34
	79 1,2,4-Trimethylbenzene	105	9.880	9.880	(0.972)	241555	18.3417	18.34
	81 sec-Butylbenzene	105	10.022	10.022	(0.986)	277768	18.2504	18.25
	82 p-Isopropyltoluene	119	10.146	10.146	(0.998)	245608	18.6470	18.64
	83 1,3-Dichlorobenzene	146	10.112	10.116	(0.994)	157695	16.8302	16.83
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	164970	16.6188	16.61
	87 n-Butylbenzene	91	10.491	10.491	(1.032)	196094	17.7404	17.74
	88 1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	154842	16.4264	16.42
	89 1,2-Dibromo-3-Chloropropane	155	11.166	11.165	(1.098)	15661	18.4005	18.40

90 1,2,4-Trichlorobenzene	180	11.859	11.855 (1.166)	92975	15.9877	15.98
91 Hexachlorobutadiene	225	11.998	11.998 (1.180)	42978	18.4367	18.43

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	92 Naphthalene	128	12.065	12.065	(1.187)	257763	18.3787	18.37
	93 1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	95312	16.2527	16.25
M	94 1,2-Dichloroethylene (total)	96				143909	35.3328	35.33
M	95 Xylenes (total)	106				368800	55.3641	55.36
	135 1,4-Dioxane	88	6.165	6.165	(1.280)	18626	310.882	310.88
	141 Cyclohexane	56	4.785	4.785	(0.994)	98171	18.0420	18.04
	138 Freon TF	101	2.337	2.337	(0.485)	63775	23.2615	23.26
	140 1,3-Butadiene	54	1.404	1.404	(0.292)	68961	18.1827	18.18
	147 Methylcyclohexane	55	5.947	5.944	(1.071)	179738	21.0643	21.06
	146 Methyl Acetate	43	2.716	2.712	(0.564)	68612	18.2561	18.25
	148 Tert-Butyl alcohol	59	2.967	2.963	(0.616)	169986	402.100	402.09
	149 Isopropyl Alcohol	45	2.562	2.558	(0.532)	96155	397.857	397.85
	72 trans-1,4-Dichloro-2-butene	53	9.377	9.377	(1.146)	19439	18.9027	18.90
	12 Isobutyl Alcohol	43	5.284	5.284	(1.097)	195509	345.209	345.20
	13 Acetonitrile	39	2.671	2.671	(0.555)	86020	211.654	211.65
	14 Allyl Chloride	41	2.675	2.671	(0.556)	191035	20.5754	20.57
	25 Methacrylonitrile	41	4.497	4.493	(0.934)	40433	14.9956	14.99
	40 Methyl Methacrylate	41	6.157	6.153	(1.279)	66201	17.7610	17.76
	4 Propionitrile	54	4.339	4.335	(0.901)	111525	178.121	178.12(a)
	136 n-Hexane	57	3.342	3.342	(0.694)	69475	19.7921	19.79
	194 Acetaldehyde	44	1.460	1.460	(0.303)	29492	54.8222	54.82(M)
	131 Methyl Acrylate	55	4.369	4.369	(0.907)	84165	16.9681	16.96
	23 Chloroprene	53	2.157	2.157	(0.448)	22419	17.4043	17.40(M)
	49 Ethyl Methacrylate	69	7.289	7.289	(1.312)	108866	19.2671	19.26
	166 1,2,3-Trimethylbenzene	105	10.232	10.232	(1.006)	241926	18.6188	18.61
	167 Ethanol	45	2.082	2.079	(0.433)	18487	389.477	389.47
	164 Dicyclopentadiene	66	10.198	10.198	(1.003)	277217	16.5159	16.51
	145 alpha-Methylstyrene	118	9.752	9.752	(0.959)	91524	15.4781	15.47
	142 Tetrahydrofuran	42	4.542	4.542	(0.943)	27116	33.8288	33.82
	156 Diisopropyl ether	45	3.623	3.619	(0.752)	207863	15.8006	15.80
	162 Butyl acrylate	55	8.733	8.733	(1.067)	115251	16.2019	16.20
	203 2-Ethylhexyl Acrylate	55	12.039	12.043	(1.184)	52488	13.2503	13.25
	130 Ethyl Acetate	43	4.343	4.339	(0.902)	80460	17.5399	17.53
	189 n-Butyl acetate	43	7.706	7.705	(0.941)	127626	20.0506	20.05
	182 Epichlorohydrin	57	6.633	6.630	(1.194)	11310	50.5724	50.57
	132 n-Butanol	56	5.824	5.820	(1.209)	41900	341.398	341.39(a)
	133 Ethyl Acrylate	55	5.947	5.944	(1.235)	179738	19.8016	19.80
	163 Butyl methacrylate	41	9.651	9.647	(0.949)	53347	14.3559	14.35
	187 n-Amyl acetate	43	8.931	8.931	(1.091)	129663	17.9020	17.90
	188 Isopropyl acetate	43	5.284	5.284	(0.951)	195375	18.3960	18.39

QC Flag Legend

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



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Sample Info: HS24010519-09MS;HS24010519-09MS;3;;MS
Purge Volume: 5.0
Column phase: DB624

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

Data File : \\nahstws005\target\chem\voa9.i\u240112.b\u011211.d
Inj Date : 12-JAN-2024 14:32
InstruID : VOA9.i
LabSampID : HS24010519-09MS

Chloroprene (126-99-8)

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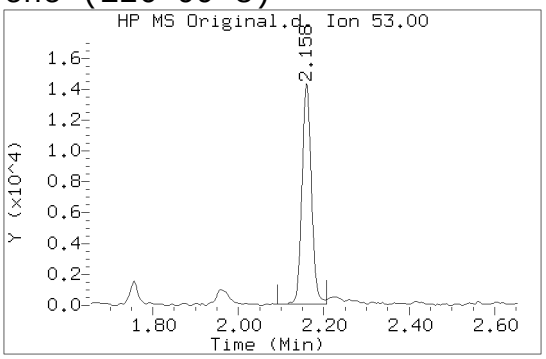
14259
17-Jan-2024
14:06
linh
pham



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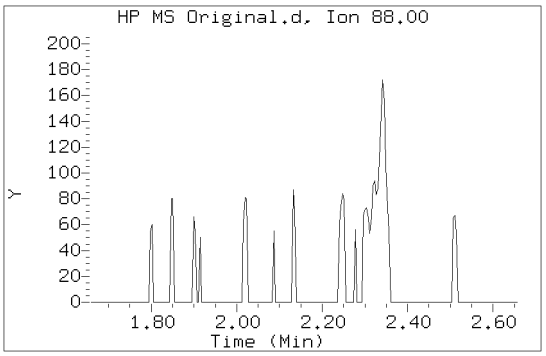

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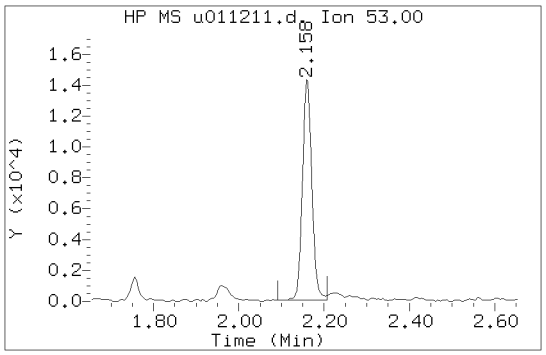

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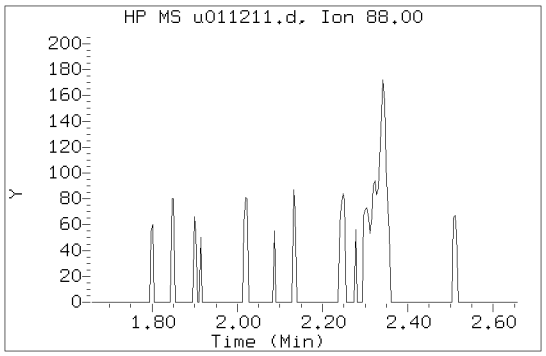

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14:06
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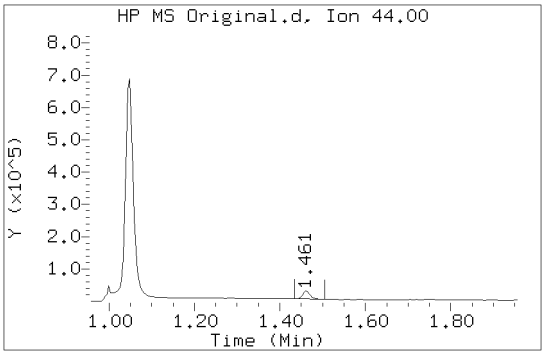

BEFORE
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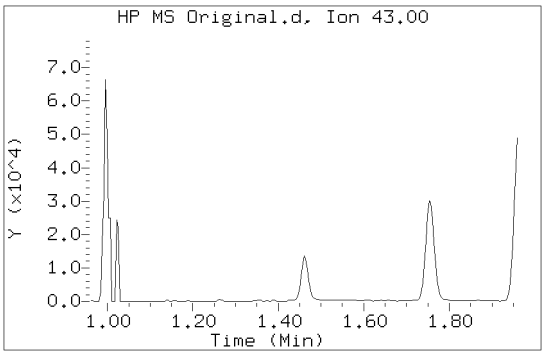
pham



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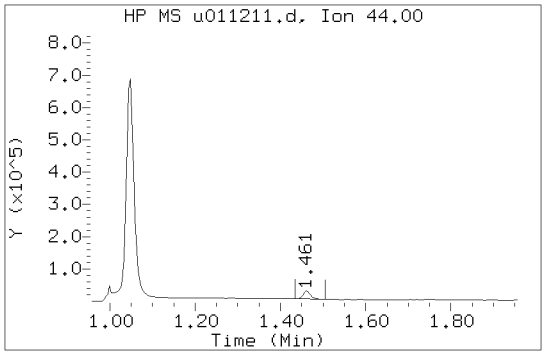

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HEIGHT
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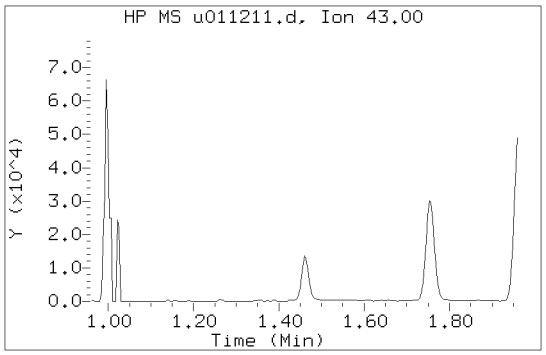
17-Jan-2024
14:06
linh
pham



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Inj Date : 12-JAN-2024 14:32
InstruID : VOA9.i
LabSampID : HS24010519-09MS

Acetaldehyde (75-07-0)

Reason Code:

BEFORE

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HEIGHT
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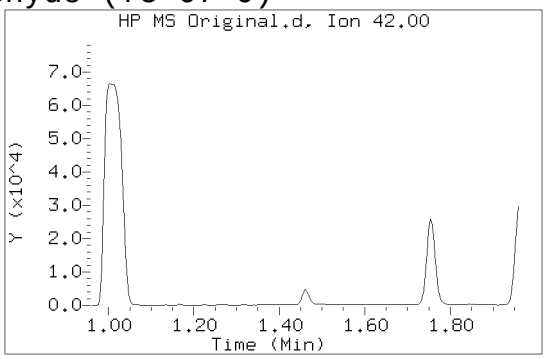
17-Jan-2024
14:06
linh
pham



AFTER

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17-Jan-2024
14:06
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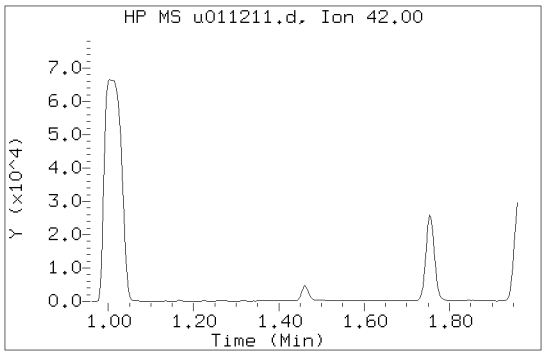

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011212.D Page 1
Report Date: 17-Jan-2024 14:06

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011212.D
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Inj Date : 12-JAN-2024 14:54
Operator : PC Inst ID: VOA9.i
Smp Info : HS24010519-09MSD;HS24010519-09MSD;3;;MSD
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240112.b\8260C.m
Meth Date : 17-Jan-2024 14:06 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 10 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1	Pentafluorobenzene	168	4.819	4.815	(1.000)	365053	50.0000	
2	Dichlorodifluoromethane	85	1.168	1.164	(0.242)	44869	15.8513	15.85
3	Chloromethane	50	1.303	1.299	(0.270)	63522	15.1690	15.16
5	Vinyl Chloride	62	1.381	1.378	(0.287)	70255	17.5617	17.56
6	Bromomethane	94	1.625	1.621	(0.337)	45746	22.5108	22.51
7	Chloroethane	64	1.704	1.700	(0.354)	51986	19.3004	19.30
8	Trichlorofluoromethane	101	1.903	1.895	(0.395)	102499	20.2134	20.21
9	Acrolein	56	2.270	2.266	(0.471)	5727	27.5290	27.52
10	Acetone	43	2.412	2.409	(0.501)	45980	33.1613	33.16
11	1,1-Dichloroethene	96	2.337	2.334	(0.485)	57019	20.2512	20.25
15	Iodomethane	142	2.472	2.469	(0.513)	125109	37.7576	37.75
16	Acrylonitrile	53	3.068	3.065	(0.637)	55901	39.0377	39.03
17	Methylene Chloride	84	2.798	2.795	(0.581)	69038	19.2680	19.26
18	Methyl tert-butyl ether	73	3.083	3.080	(0.640)	203682	20.1889	20.18
19	Carbon Disulfide	76	2.525	2.521	(0.524)	351699	42.3925	42.39
20	trans-1,2-Dichloroethene	96	3.065	3.057	(0.636)	66956	19.8928	19.89
21	Vinyl Acetate	43	3.612	3.604	(0.750)	352679	34.6509	34.65
22	1,1-Dichloroethane	63	3.518	3.514	(0.730)	115309	16.7957	16.79
24	2-Butanone	43	4.268	4.260	(0.886)	58298	32.6008	32.60
26	2,2-Dichloropropane	77	4.185	4.182	(0.869)	85772	17.7709	17.77

27 cis-1,2-Dichloroethene	96	4.200	4.197 (0.872)	75705	16.7903	16.79
28 Chloroform	83	4.575	4.572 (0.949)	124494	16.6596	16.65

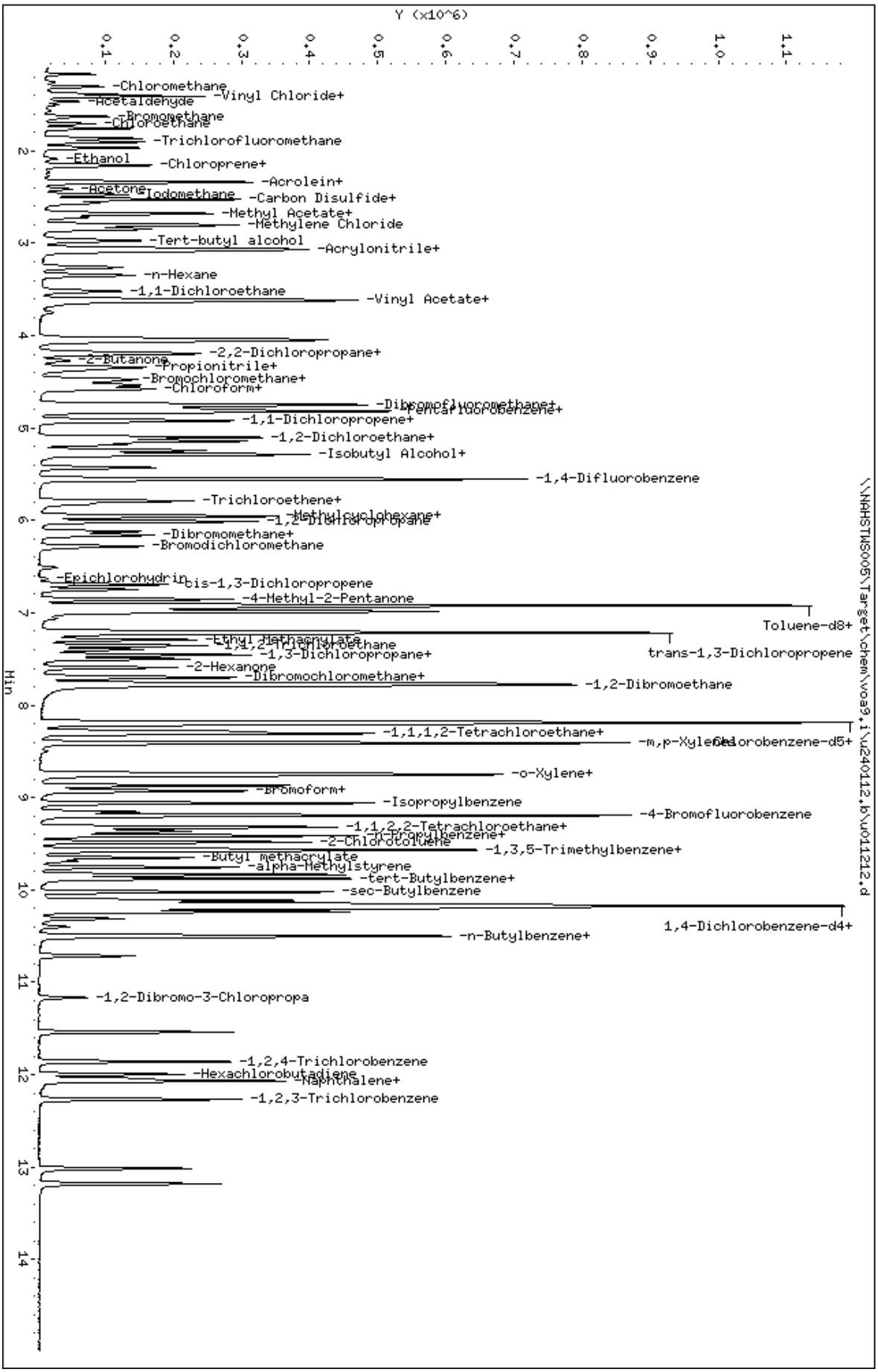
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
	29 Bromochloromethane	128	4.470	4.470	(0.928)	41349	17.7236	17.72
$	30 Dibromofluoromethane	113	4.752	4.748	(0.986)	196188	52.5648	52.56
	31 1,1,1-Trichloroethane	97	4.744	4.744	(0.984)	102883	18.1166	18.11
	32 1,1-Dichloropropene	75	4.924	4.920	(0.887)	87459	18.8009	18.80
	33 1,2-Dichloroethane	62	5.179	5.175	(0.933)	91690	16.9244	16.92
	34 Carbon Tetrachloride	117	4.913	4.913	(0.885)	89470	19.6897	19.68
$	35 1,2-Dichloroethane-d4	65	5.100	5.096	(1.058)	209687	49.0075	49.00
*	36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	556044	50.0000	
	37 Benzene	78	5.141	5.138	(0.926)	265022	17.5085	17.50
	38 Trichloroethene	130	5.790	5.786	(1.043)	76367	18.3050	18.30
	39 Bromodichloromethane	83	6.277	6.277	(1.130)	84908	17.1294	17.12
	42 1,2-Dichloropropane	63	6.011	6.007	(1.082)	67930	16.6688	16.66
	44 Dibromomethane	93	6.120	6.120	(1.102)	46284	17.5541	17.55
	45 4-Methyl-2-Pentanone	43	6.855	6.851	(0.837)	166232	40.8111	40.81
	46 cis-1,3-Dichloropropene	75	6.690	6.690	(1.205)	102386	17.0346	17.03
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	561962	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	686769	53.0876	53.08
	50 Toluene	91	6.982	6.978	(0.853)	285169	18.1996	18.19
	51 trans-1,3-Dichloropropene	75	7.196	7.196	(1.296)	85398	17.0918	17.09
	52 2-Hexanone	43	7.593	7.589	(0.928)	116816	41.1913	41.19
	53 1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	56576	18.0449	18.04
	54 1,3-Dichloropropane	76	7.499	7.499	(0.916)	116303	16.7165	16.71
	55 Dibromochloromethane	129	7.690	7.690	(0.940)	74622	17.8546	17.85
	56 Tetrachloroethene	164	7.458	7.458	(0.911)	68909	20.5457	20.54
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	72133	18.4745	18.47
	58 1-Chlorohexane	55	8.197	8.197	(1.476)	58811	18.8617	18.86
	59 Chlorobenzene	112	8.208	8.208	(1.003)	201361	17.6411	17.64
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	72314	18.1114	18.11
	61 Ethylbenzene	106	8.305	8.305	(1.015)	95446	17.8628	17.86
	62 m,p-Xylenes	106	8.406	8.406	(1.027)	243845	37.9576	37.95
	63 o-Xylene	106	8.748	8.748	(1.069)	121934	18.4559	18.45
	64 Styrene	104	8.763	8.759	(1.071)	200433	18.2228	18.22
	66 Bromoform	173	8.920	8.916	(1.090)	48725	17.7478	17.74
	67 Isopropylbenzene	105	9.063	9.062	(1.107)	299066	18.7170	18.71
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	95286	18.7273	18.72
$	69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	250436	51.1576	51.15
*	70 1,4-Dichlorobenzene-d4	152	10.168	10.172	(1.000)	305514	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.921)	97364	16.7879	16.78
	73 n-Propylbenzene	91	9.411	9.411	(0.926)	322583	17.9816	17.98
	74 Bromobenzene	156	9.317	9.317	(0.916)	87103	16.9776	16.97
	75 1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	235828	18.4957	18.49
	76 2-Chlorotoluene	91	9.482	9.482	(0.933)	208443	17.2629	17.26
	77 4-Chlorotoluene	91	9.576	9.576	(0.942)	236091	17.2406	17.24
	78 tert-Butylbenzene	119	9.835	9.835	(0.967)	208990	18.2484	18.24
	79 1,2,4-Trimethylbenzene	105	9.880	9.880	(0.972)	243938	19.0895	19.08
	81 sec-Butylbenzene	105	10.022	10.022	(0.986)	274064	18.5582	18.55
	82 p-Isopropyltoluene	119	10.146	10.146	(0.998)	244352	19.1194	19.11
	83 1,3-Dichlorobenzene	146	10.116	10.116	(0.995)	154937	17.0420	17.04
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	162304	16.8507	16.85
	87 n-Butylbenzene	91	10.491	10.491	(1.032)	195129	18.1934	18.19
	88 1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	154249	16.8644	16.86
	89 1,2-Dibromo-3-Chloropropane	155	11.166	11.165	(1.098)	16042	19.3071	19.30

90 1,2,4-Trichlorobenzene	180	11.859	11.855 (1.166)	95773	16.9729	16.97
91 Hexachlorobutadiene	225	11.998	11.998 (1.180)	41596	18.3900	18.38

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	92 Naphthalene	128	12.065	12.065	(1.187)	266199	19.5611	19.56
	93 1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	95383	16.7626	16.76
M	94 1,2-Dichloroethylene (total)	96				142661	36.2327	36.23
M	95 Xylenes (total)	106				365779	56.8510	56.85
	135 1,4-Dioxane	88	6.169	6.165	(1.280)	17981	310.453	310.45
	141 Cyclohexane	56	4.785	4.785	(0.993)	94945	18.0501	18.05
	138 Freon TF	101	2.341	2.337	(0.486)	61298	23.1297	23.12
	140 1,3-Butadiene	54	1.408	1.404	(0.292)	65597	17.8914	17.89
	147 Methylcyclohexane	55	5.947	5.944	(1.071)	171272	20.7814	20.78
	146 Methyl Acetate	43	2.716	2.712	(0.564)	69616	19.1612	19.16
	148 Tert-Butyl alcohol	59	2.971	2.963	(0.617)	166240	406.782	406.78
	149 Isopropyl Alcohol	45	2.566	2.558	(0.533)	93561	400.506	400.50
	72 trans-1,4-Dichloro-2-butene	53	9.377	9.377	(1.146)	19674	19.4540	19.45
	12 Isobutyl Alcohol	43	5.288	5.284	(1.097)	197192	360.172	360.17
	13 Acetonitrile	39	2.675	2.671	(0.555)	84878	216.037	216.03
	14 Allyl Chloride	41	2.675	2.671	(0.555)	187382	20.8771	20.87
	25 Methacrylonitrile	41	4.497	4.493	(0.933)	44071	16.9078	16.90(M)
	40 Methyl Methacrylate	41	6.157	6.153	(1.278)	62420	17.3233	17.32
	4 Propionitrile	54	4.339	4.335	(0.900)	111439	184.114	184.11(a)
	136 n-Hexane	57	3.346	3.342	(0.694)	68006	20.0409	20.04
	194 Acetaldehyde	44	1.464	1.460	(0.304)	29267	56.4956	56.49(M)
	131 Methyl Acrylate	55	4.373	4.369	(0.907)	85681	17.8687	17.86
	23 Chloroprene	53	2.161	2.157	(0.449)	20793	16.6980	16.69(M)
	49 Ethyl Methacrylate	69	7.289	7.289	(1.312)	110948	20.3294	20.32
	166 1,2,3-Trimethylbenzene	105	10.236	10.232	(1.007)	234007	18.5606	18.56
	167 Ethanol	45	2.086	2.079	(0.433)	18010	392.510	392.51
	164 Dicyclopentadiene	66	10.198	10.198	(1.003)	266181	16.3438	16.34
	145 alpha-Methylstyrene	118	9.752	9.752	(0.959)	85822	15.0116	15.01
	142 Tetrahydrofuran	42	4.545	4.542	(0.943)	28510	36.7930	36.79
	156 Diisopropyl ether	45	3.623	3.619	(0.752)	209130	16.4444	16.44
	162 Butyl acrylate	55	8.733	8.733	(1.067)	119686	16.9267	16.92
	203 2-Ethylhexyl Acrylate	55	12.043	12.043	(1.184)	52139	13.5048	13.50
	130 Ethyl Acetate	43	4.343	4.339	(0.901)	78794	17.7683	17.76
	189 n-Butyl acetate	43	7.705	7.705	(0.941)	128658	20.5536	20.55
	182 Epichlorohydrin	57	6.633	6.630	(1.194)	9236	42.7579	42.75
	132 n-Butanol	56	5.824	5.820	(1.208)	42068	354.573	354.57(a)
	133 Ethyl Acrylate	55	5.947	5.944	(1.234)	171272	19.5188	19.51
	163 Butyl methacrylate	41	9.647	9.647	(0.949)	63153	16.9196	16.91
	187 n-Amyl acetate	43	8.931	8.931	(1.091)	127103	17.8446	17.84
	188 Isopropyl acetate	43	5.288	5.284	(0.952)	197750	19.2776	19.27

QC Flag Legend

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



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Purge Volume: 5.0
Column phase: DB624

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

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Inj Date : 12-JAN-2024 14:54
InstruID : VOA9.i
LabSampID : HS24010519-09MSD

Methacrylonitrile (126-98-7)

Reason Code:

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17-Jan-2024
14:06
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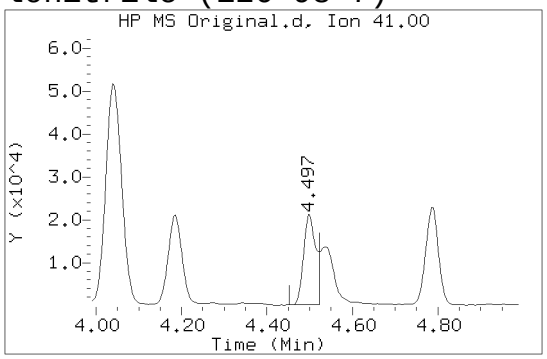

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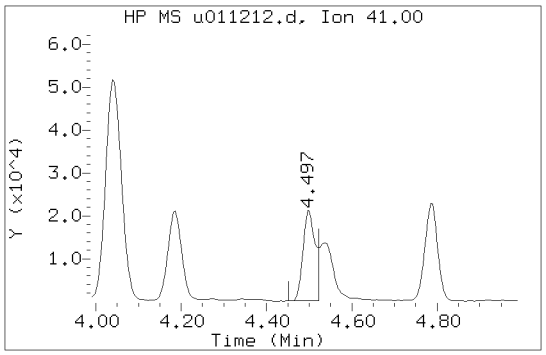

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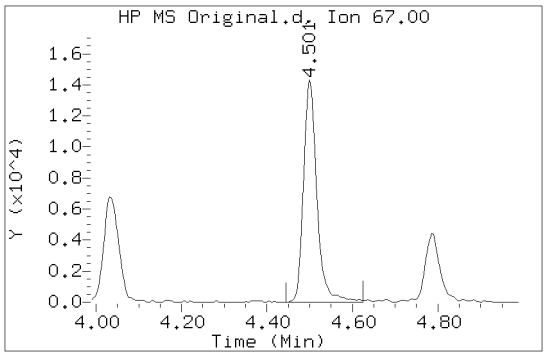

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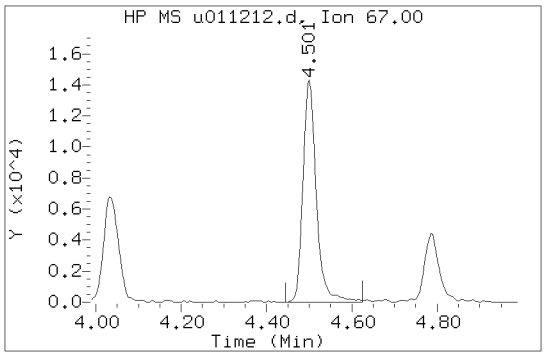

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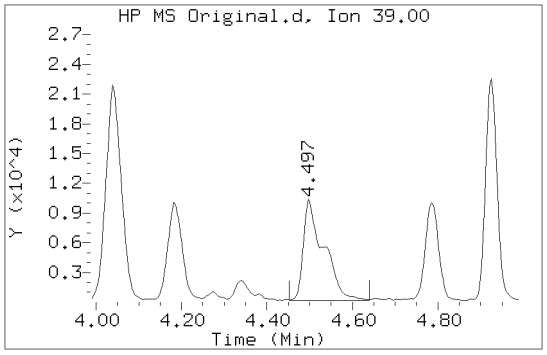

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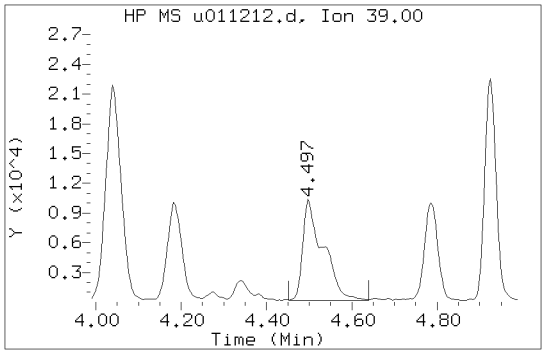

Chloroprene (126-99-8)

Reason Code:

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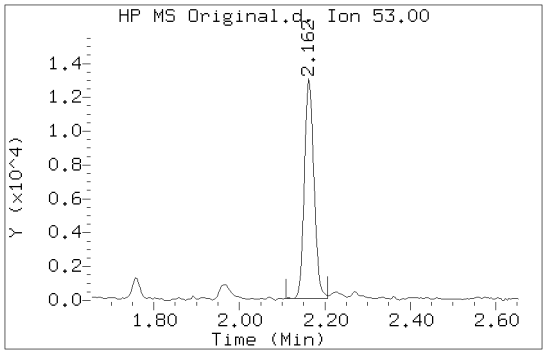

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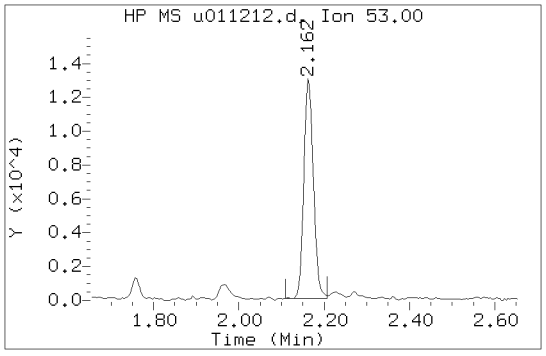

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InstruID : VOA9.i
LabSampID : HS24010519-09MSD

Chloroprene (126-99-8)

Reason Code:

BEFORE

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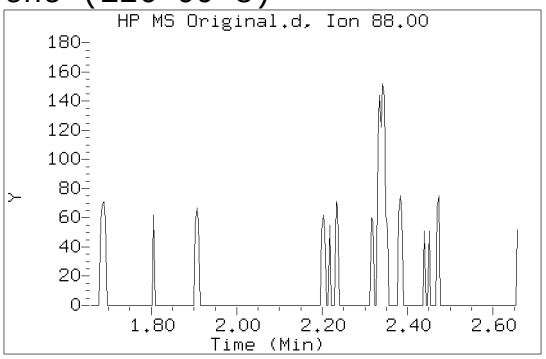

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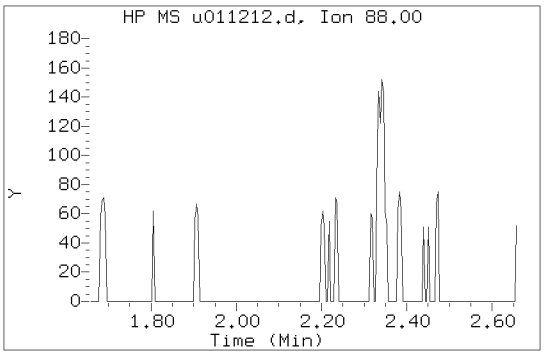

Acetaldehyde (75-07-0)

Reason Code:

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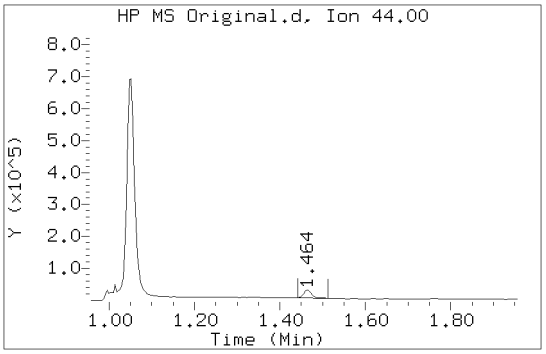

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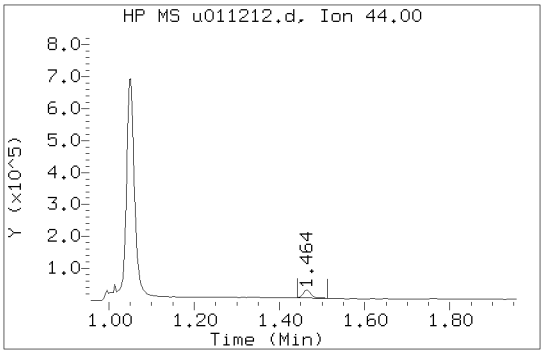

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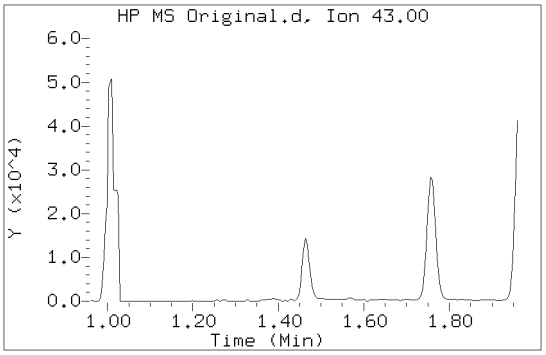

AFTER

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HEIGHT
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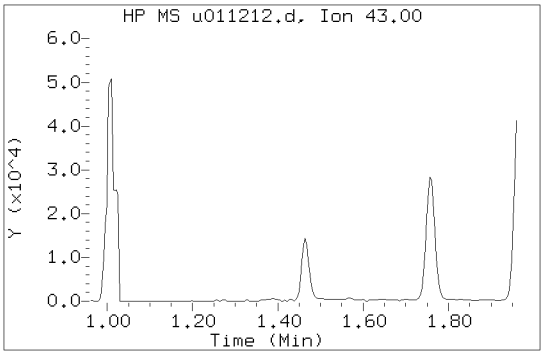
17-Jan-2024
14:06
linh
pham



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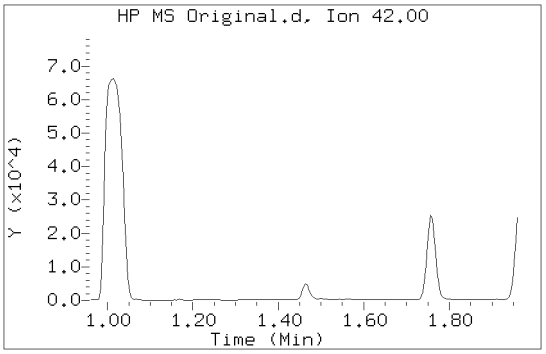

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HEIGHT
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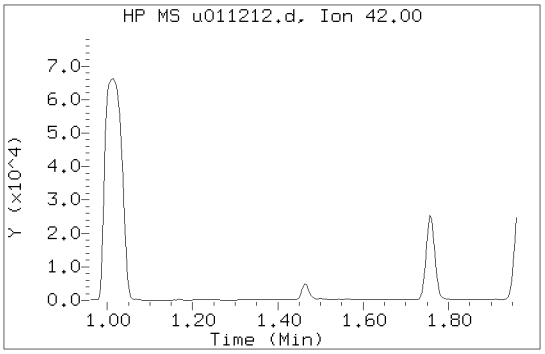
17-Jan-2024
14:06
linh
pham



Data File: \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011220.D Page 1
Report Date: 17-Jan-2024 14:06

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011220.D
Lab Smp Id: HS24010611-03 Client Smp ID: HS24010611-03
Inj Date : 12-JAN-2024 17:52
Operator : PC Inst ID: VOA9.i
Smp Info : HS24010611-03;HS24010611-03;;;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240112.b\8260C.m
Meth Date : 17-Jan-2024 14:06 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0538-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

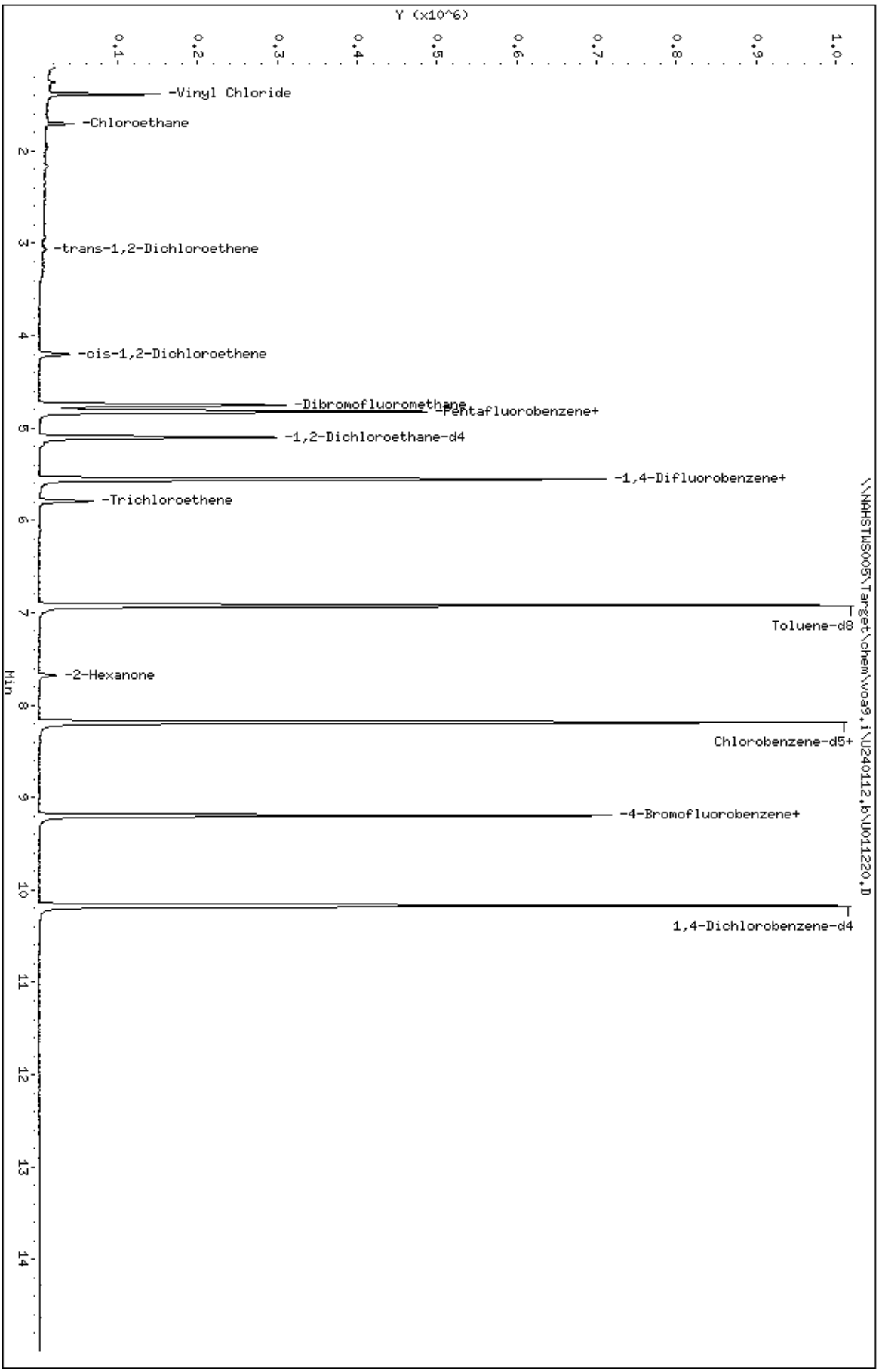
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.819	4.815	(1.000)	357480	50.0000	
$ 30 Dibromofluoromethane	113	4.752	4.748	(0.986)	184398	50.4112	50.41
$ 35 1,2-Dichloroethane-d4	65	5.100	5.096	(1.058)	198448	47.4516	47.45
* 36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	562317	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	560350	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	631555	48.9600	48.95
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	214967	43.8580	43.85
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	287803	50.0000	
5 Vinyl Chloride	62	1.382	1.378	(0.287)	95558	24.3927	24.39
27 cis-1,2-Dichloroethene	96	4.204	4.197	(0.872)	20933	4.74099	4.74(a)
38 Trichloroethene	130	5.790	5.786	(1.043)	22966	5.44348	5.44
20 trans-1,2-Dichloroethene	96	3.061	3.057	(0.635)	1842	0.55886	0.55(a)

QC Flag Legend

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



Data File: \\NAHSTWS005\Target\chem\voa9,i\U240112,b\U011220.D
Date : 12-JAN-2024 17:52
Client ID: HS24010611-03
Sample Info: HS24010611-03;HS24010611-03;;;
Purge Volume: 5.0
Column phase: DB624

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

Page 1

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011220.D Page 2

Date : 12-JAN-2024 17:52

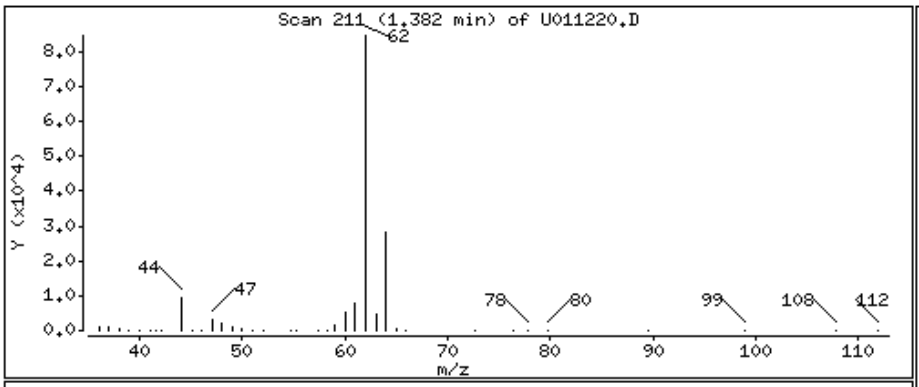
Client ID: HS24010611-03 Instrument: VOA9.i

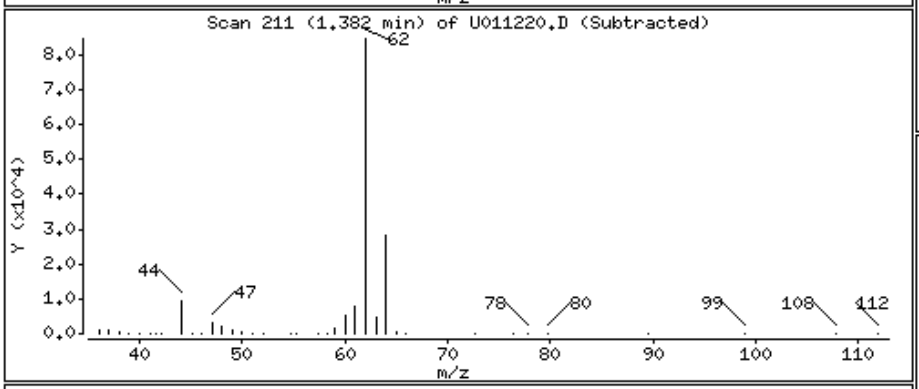
Sample Info: HS24010611-03;HS24010611-03;;;

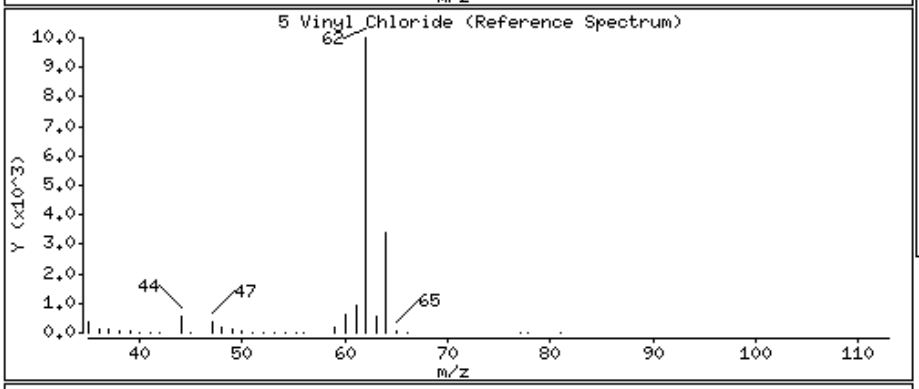
Purge Volume: 5.0 Operator: PC

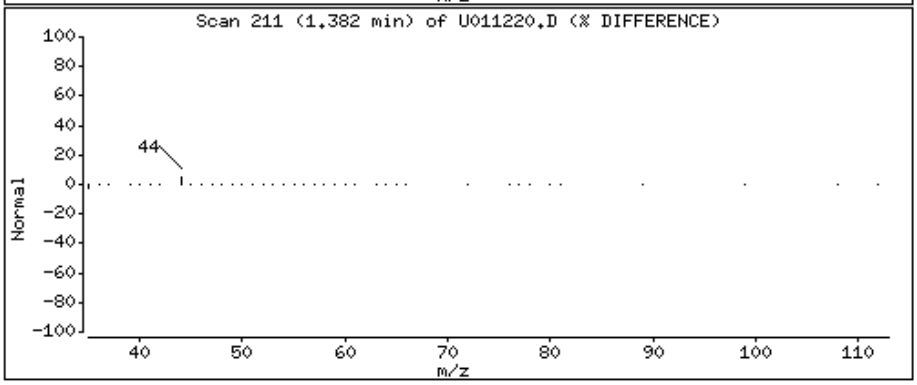
Column phase: DB624 Column diameter: 0.18

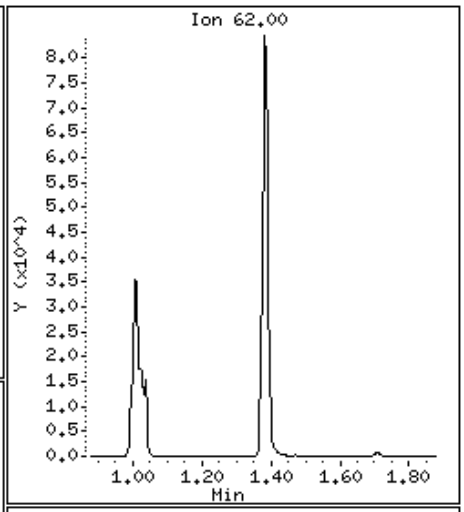
5 Vinyl Chloride Concentration: 24.39 ug/l

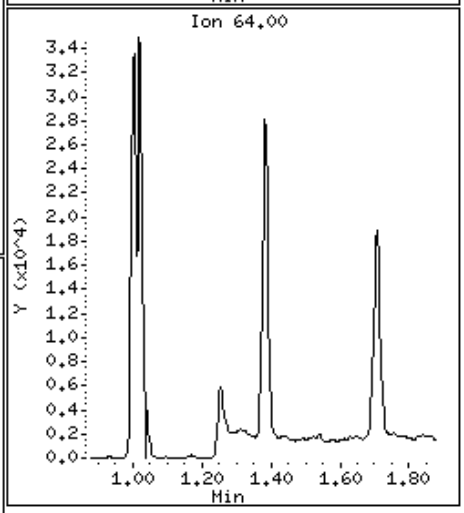












Data File: \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011220.D Page 3

Date : 12-JAN-2024 17:52

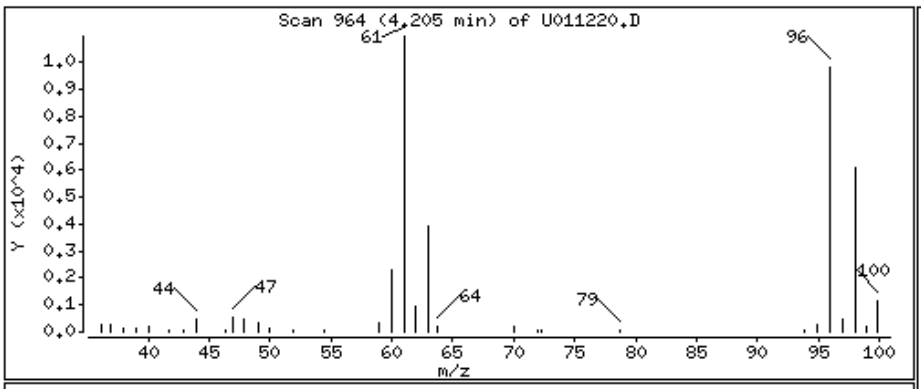
Client ID: HS24010611-03 Instrument: VOA9.i

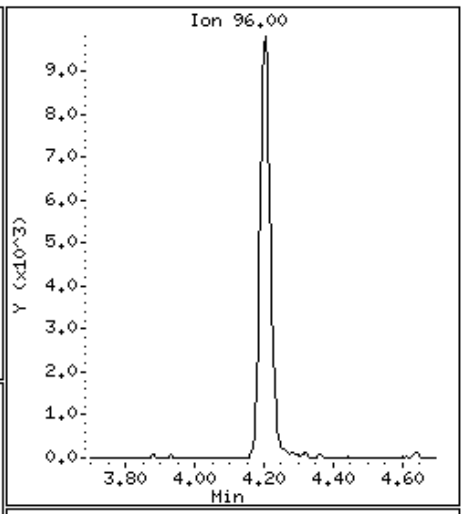
Sample Info: HS24010611-03;HS24010611-03;;;

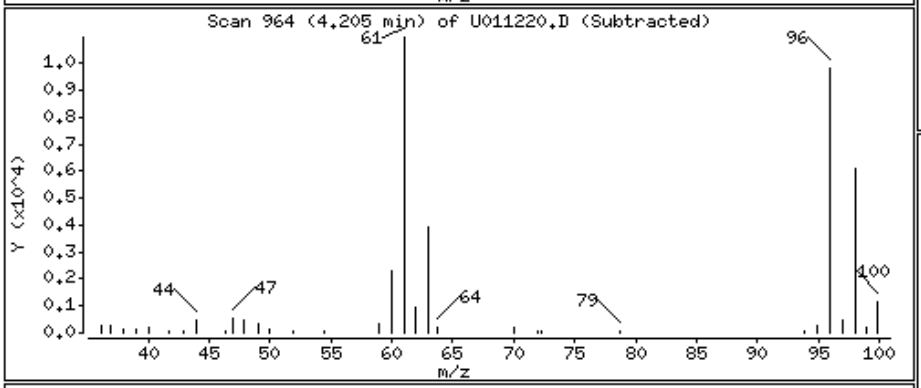
Purge Volume: 5.0 Operator: PC

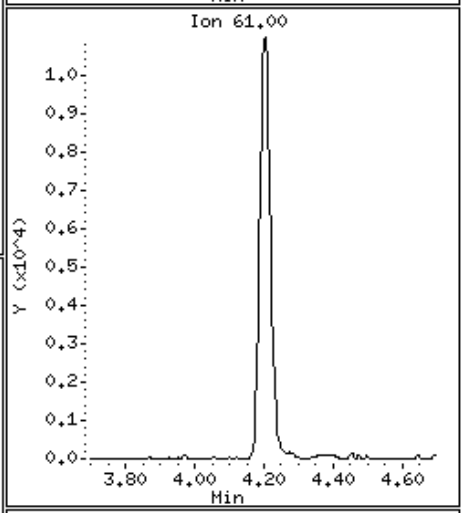
Column phase: DB624 Column diameter: 0.18

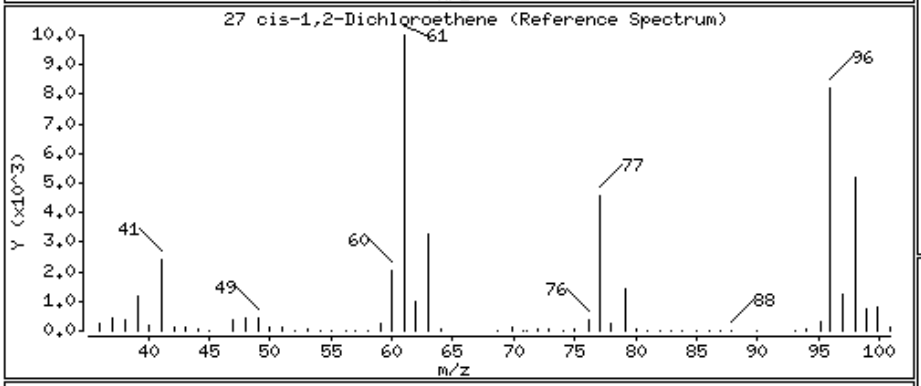
27 cis-1,2-Dichloroethene Concentration: 4.74 ug/l

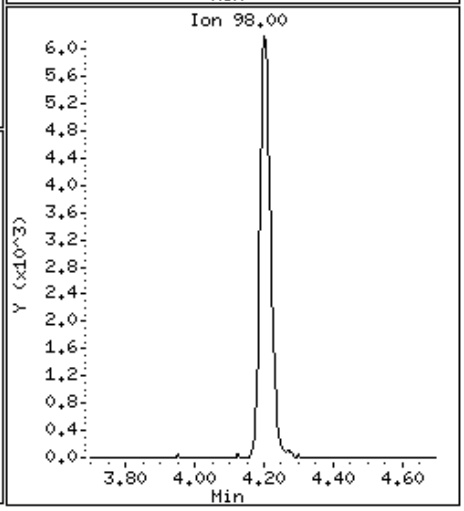


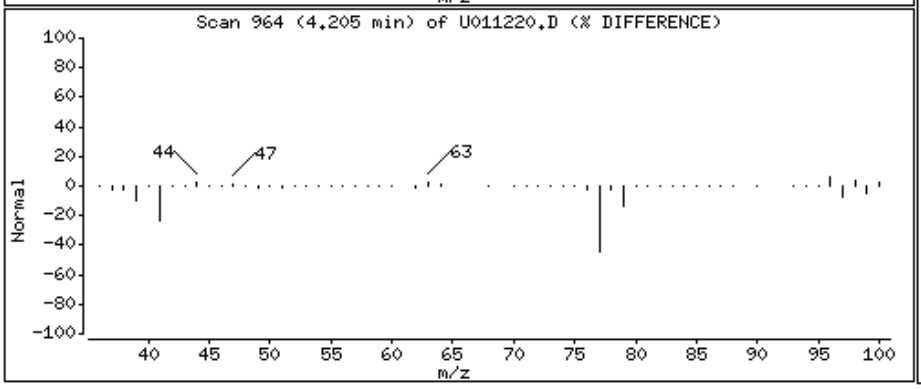












Data File: \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011220.D Page 4

Date : 12-JAN-2024 17:52

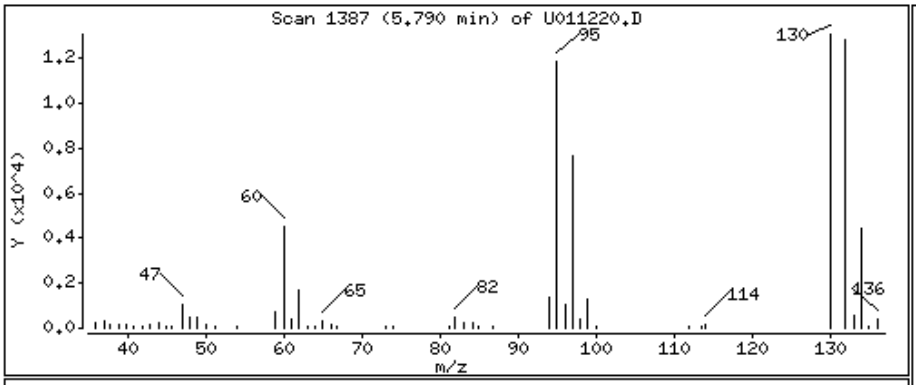
Client ID: HS24010611-03 Instrument: VOA9.i

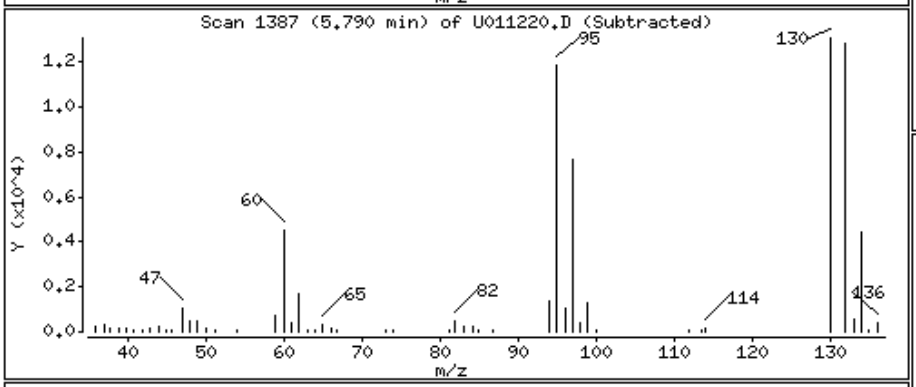
Sample Info: HS24010611-03;HS24010611-03;;;

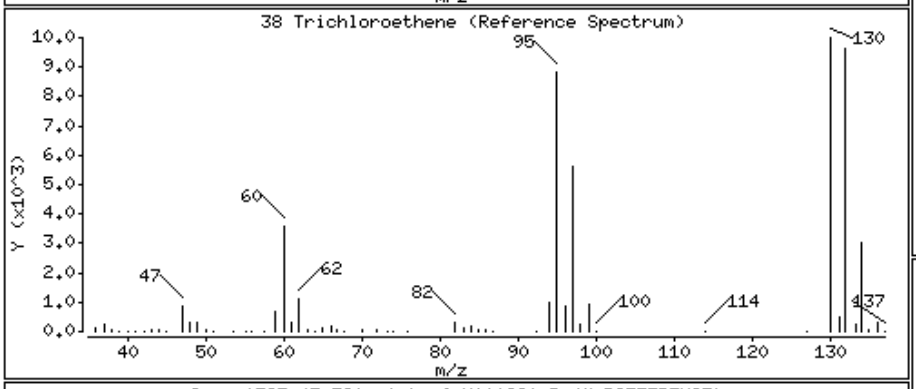
Purge Volume: 5.0 Operator: PC

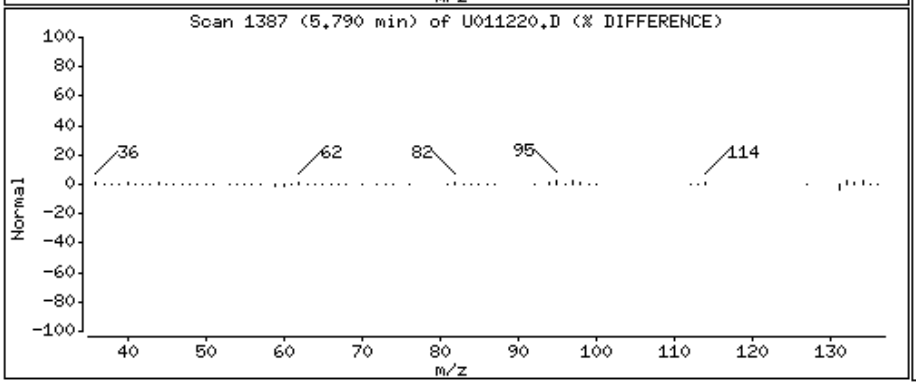
Column phase: DB624 Column diameter: 0.18

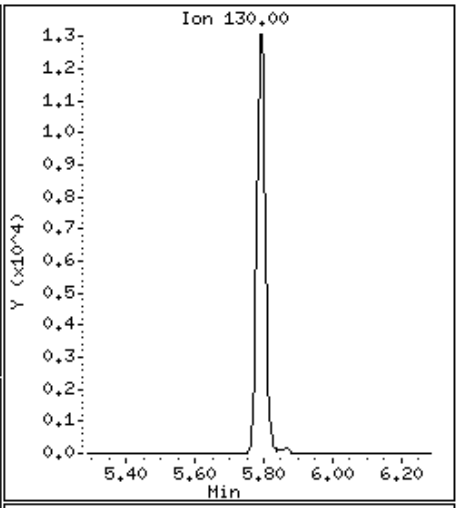
38 Trichloroethene Concentration: 5.44 ug/l

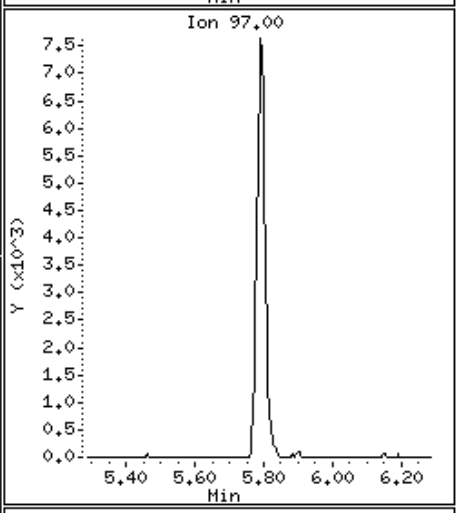


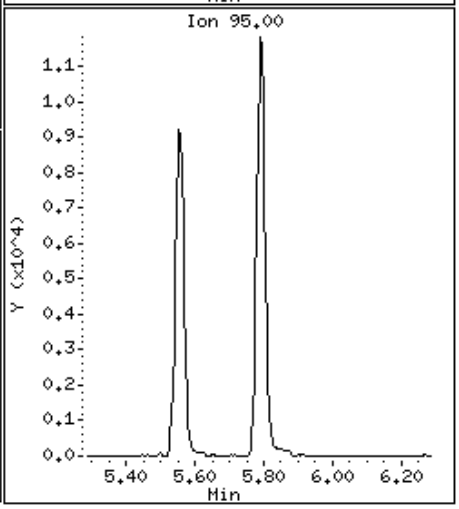












Data File: \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011220.D Page 5

Date : 12-JAN-2024 17:52

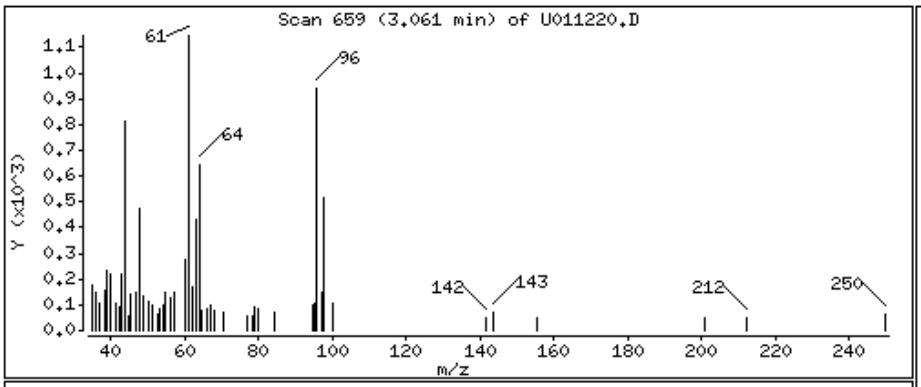
Client ID: HS24010611-03 Instrument: VOA9.i

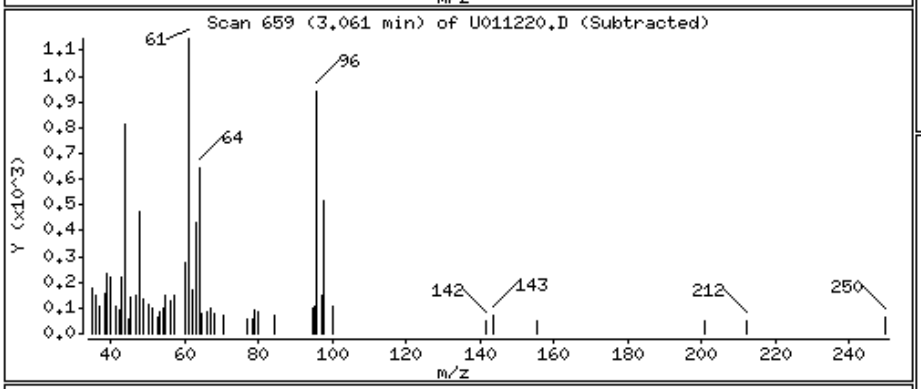
Sample Info: HS24010611-03;HS24010611-03;;;

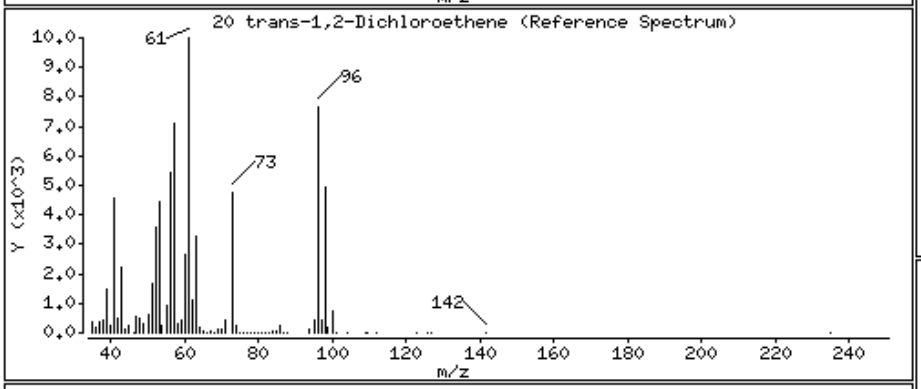
Purge Volume: 5.0 Operator: PC

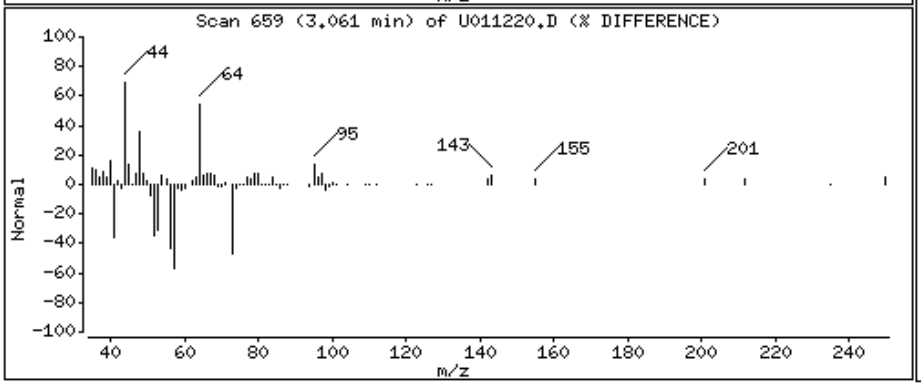
Column phase: DB624 Column diameter: 0.18

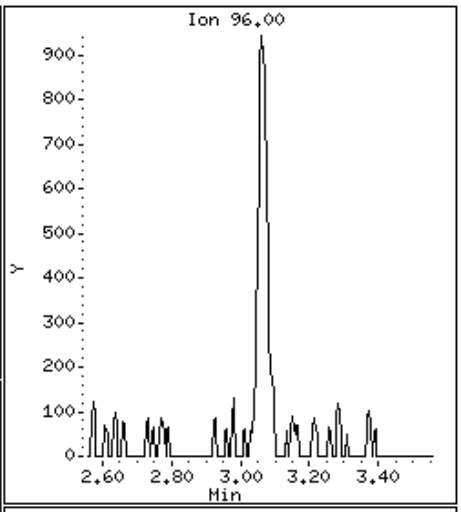
20 trans-1,2-Dichloroethene Concentration: 0.55 ug/l

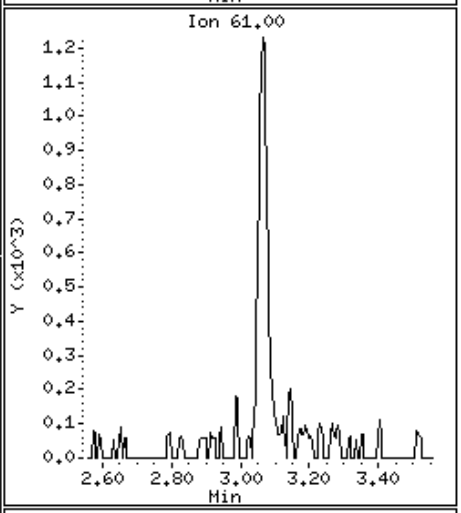


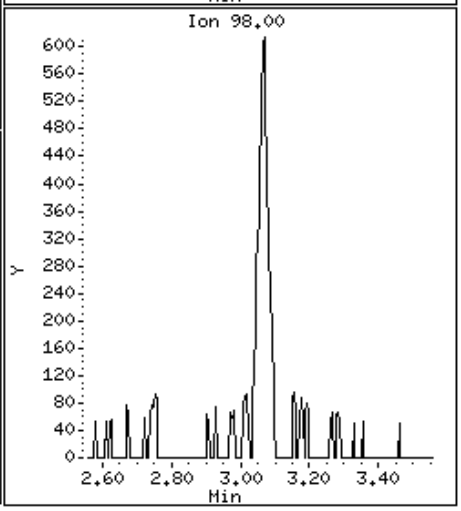












Data File : \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011220.D
Inj Date : 12-JAN-2024 17:52
InstruID : VOA9.i
LabSampID : HS24010611-03

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011221.D Page 1
Report Date: 17-Jan-2024 14:06

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011221.D
Lab Smp Id: HS24010611-05 Client Smp ID: HS24010611-05
Inj Date : 12-JAN-2024 18:15
Operator : PC Inst ID: VOA9.i
Smp Info : HS24010611-05;HS24010611-05;;;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240112.b\8260C.m
Meth Date : 17-Jan-2024 14:06 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0538-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

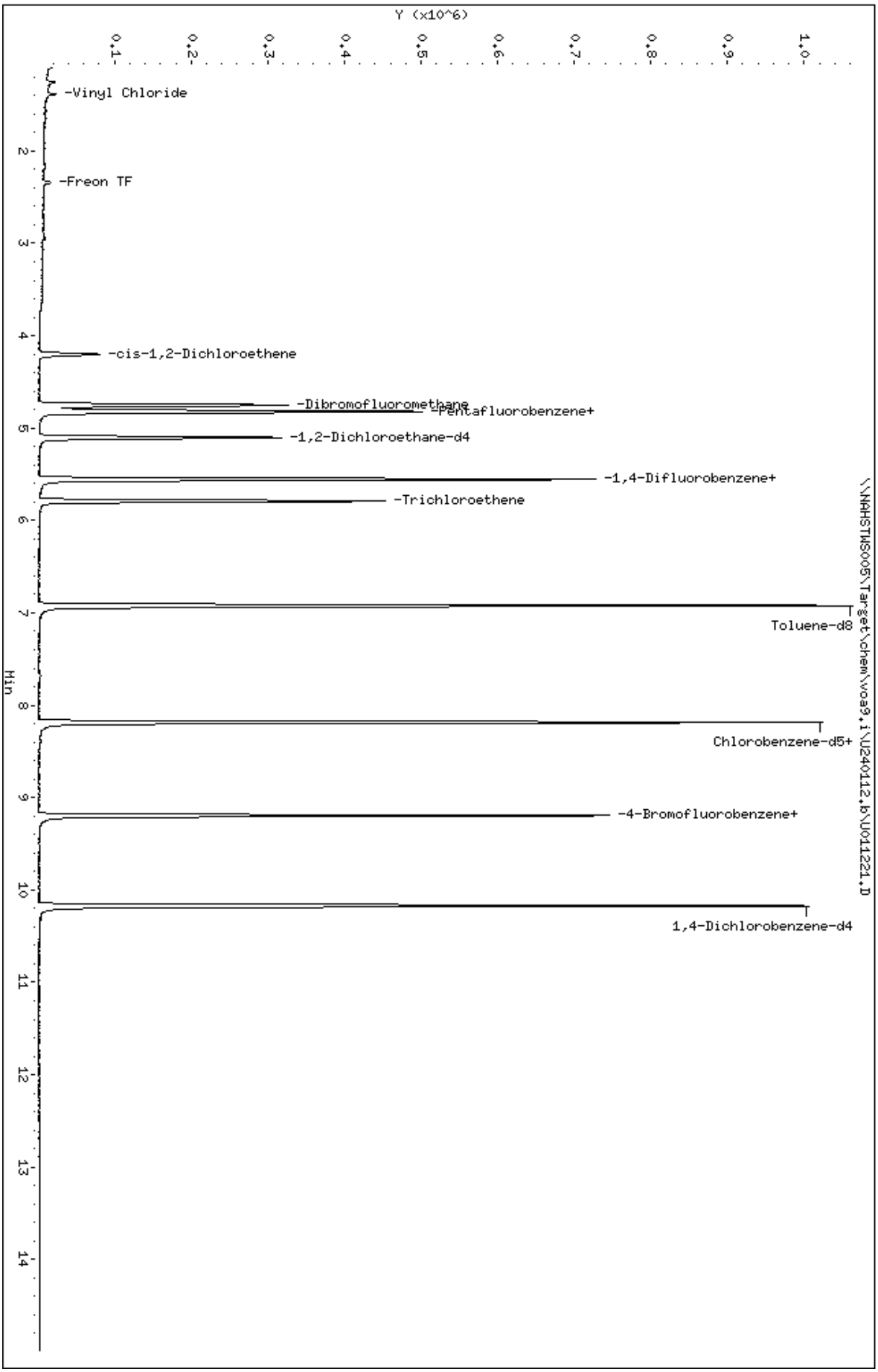
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.819	4.815	(1.000)	372322	50.0000	
$ 30 Dibromofluoromethane	113	4.752	4.748	(0.986)	190103	49.8886	49.88
$ 35 1,2-Dichloroethane-d4	65	5.100	5.096	(1.058)	207235	47.5706	47.57
* 36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	573037	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	569927	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	661291	50.4037	50.40
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	225934	45.3642	45.36
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	290108	50.0000	
5 Vinyl Chloride	62	1.385	1.378	(0.288)	6845	1.67764	1.67(a)
27 cis-1,2-Dichloroethene	96	4.200	4.197	(0.872)	39615	8.61450	8.61
38 Trichloroethene	130	5.790	5.786	(1.043)	152444	35.4569	35.45

QC Flag Legend

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



Data File: \\NAHSTMS005\Target\chem\voa9,i\U240112,b\U011221.D
Date : 12-JAN-2024 18:15
Client ID: HS2401011-05
Sample Info: HS2401011-05;HS2401011-05;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011221.D Page 2

Date : 12-JAN-2024 18:15

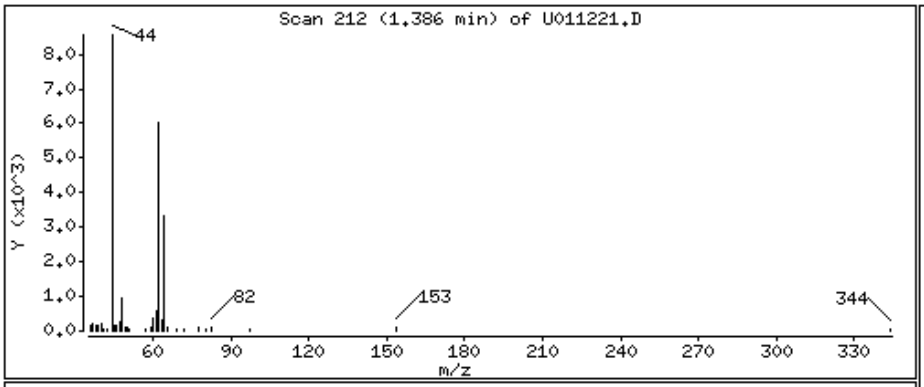
Client ID: HS24010611-05 Instrument: VOA9.i

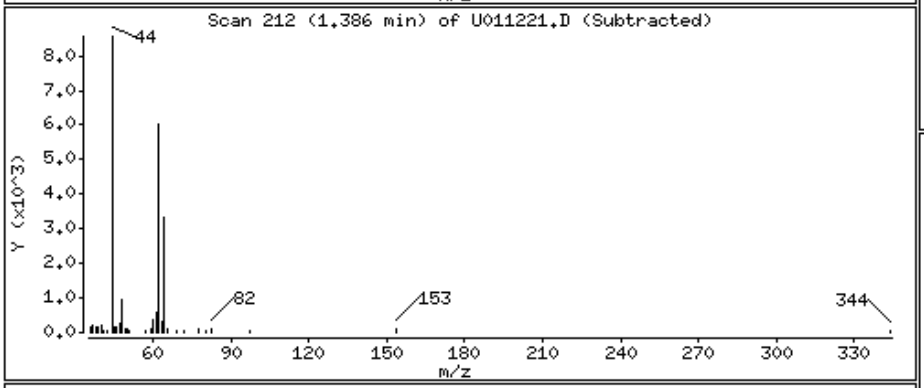
Sample Info: HS24010611-05;HS24010611-05;;;

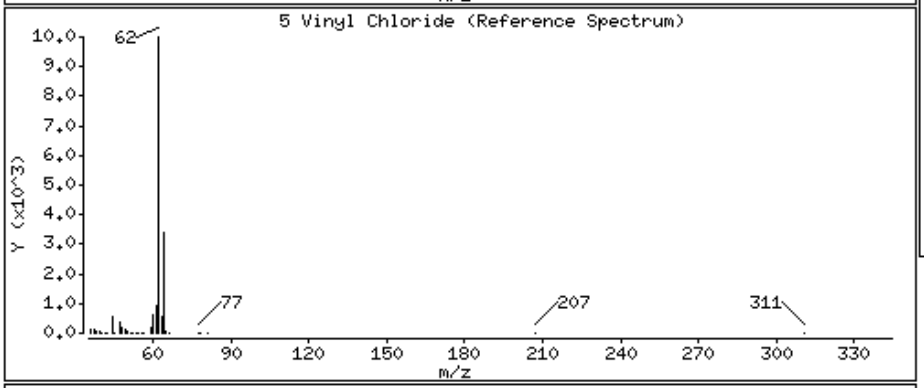
Purge Volume: 5.0 Operator: PC

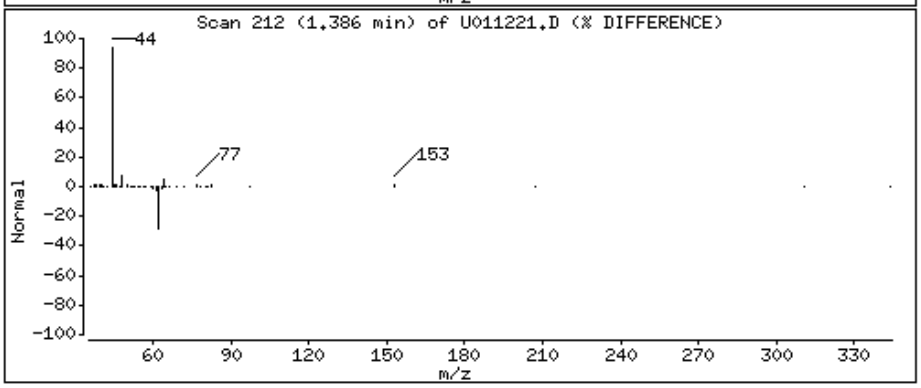
Column phase: DB624 Column diameter: 0.18

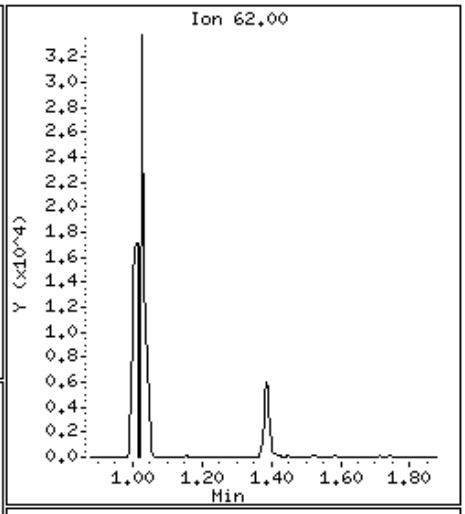
5 Vinyl Chloride Concentration: 1.67 ug/l

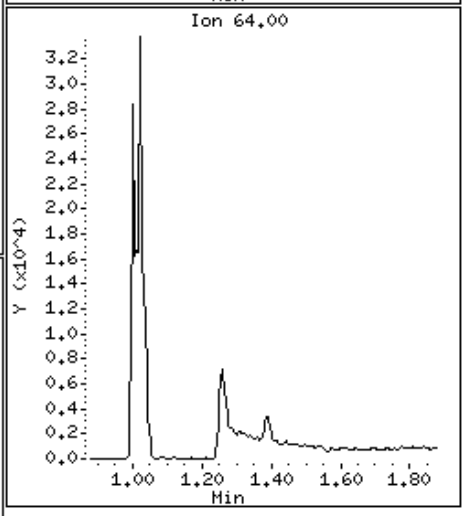












Data File: \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011221.D Page 3

Date : 12-JAN-2024 18:15

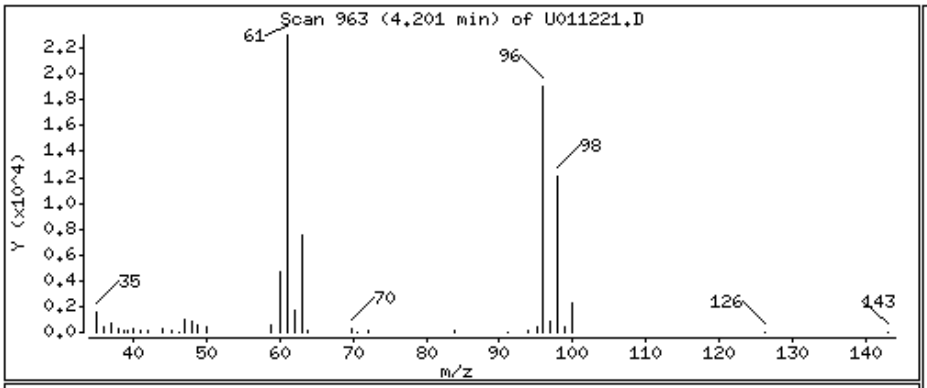
Client ID: HS24010611-05 Instrument: VOA9.i

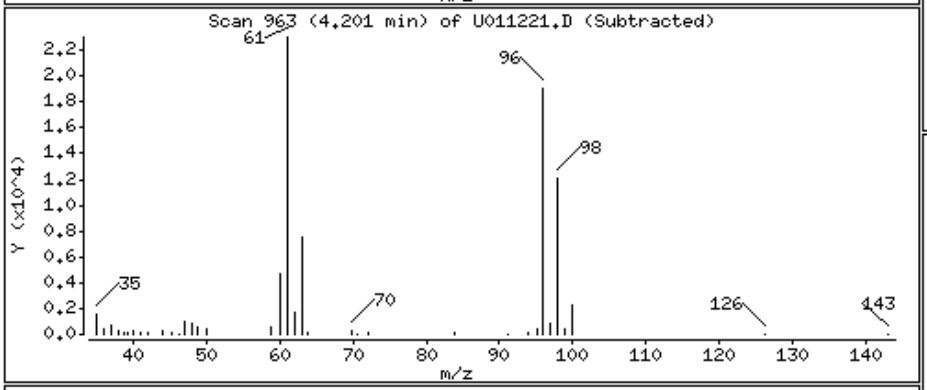
Sample Info: HS24010611-05;HS24010611-05;;;

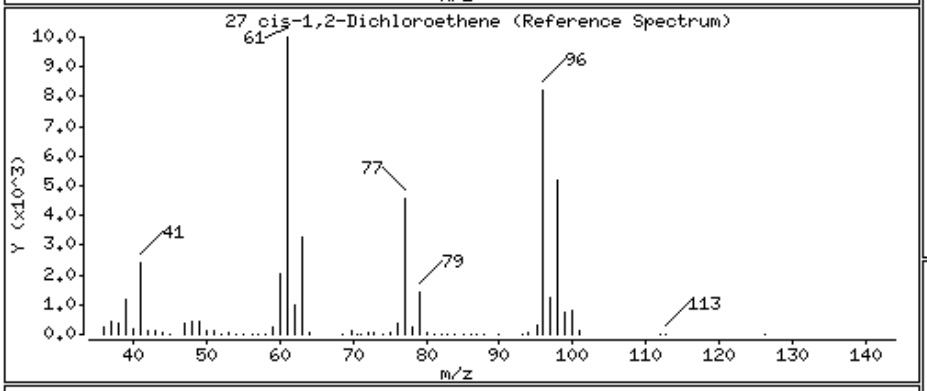
Purge Volume: 5.0 Operator: PC

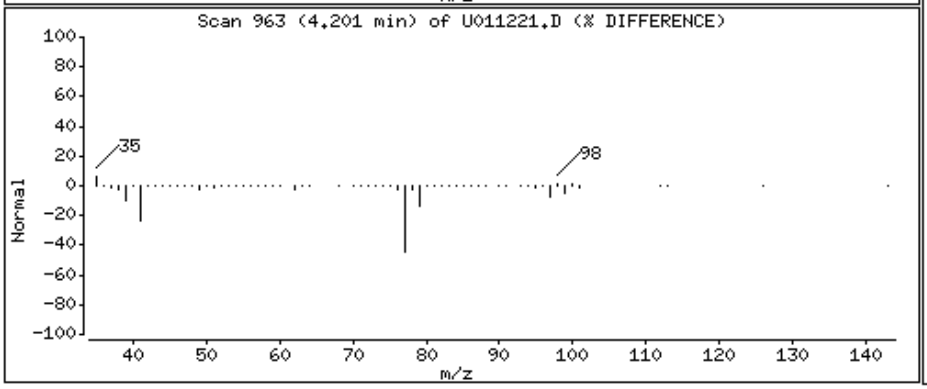
Column phase: DB624 Column diameter: 0.18

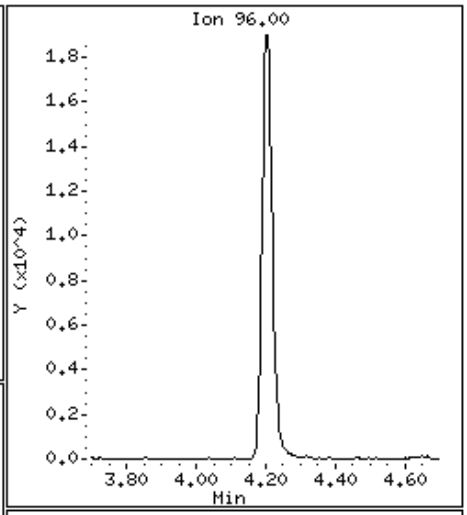
27 cis-1,2-Dichloroethene Concentration: 8.61 ug/l

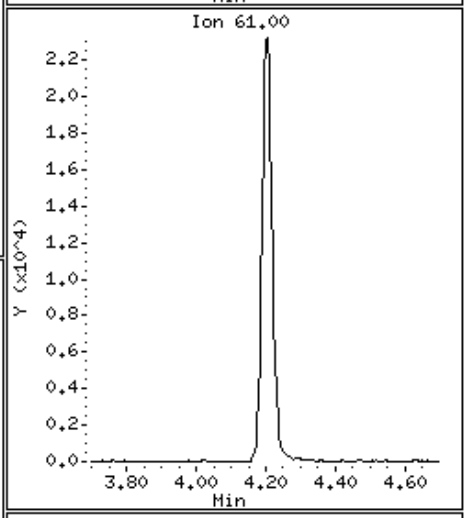


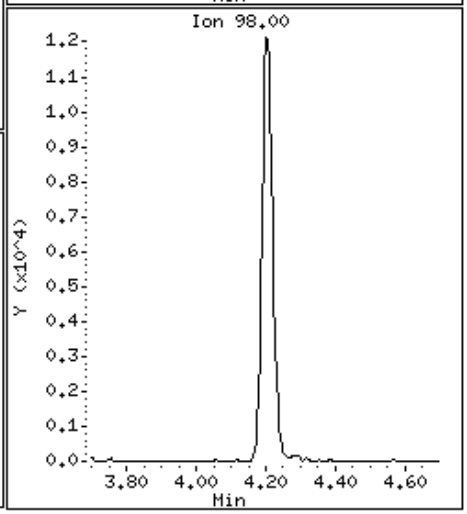












Data File: \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011221.D Page 4

Date : 12-JAN-2024 18:15

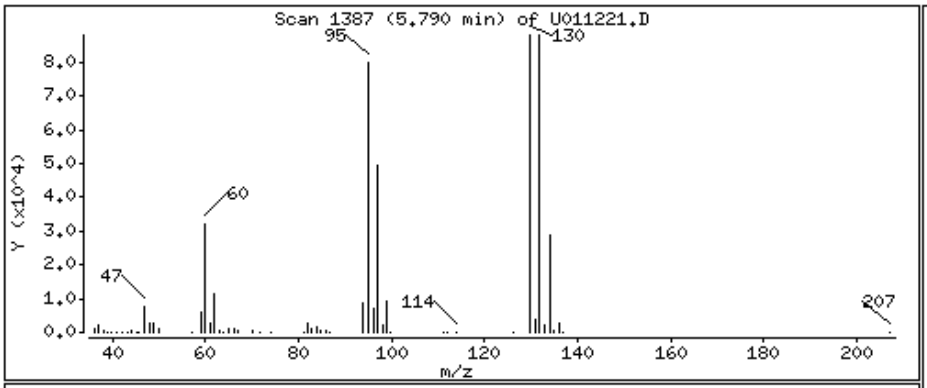
Client ID: HS24010611-05 Instrument: VOA9.i

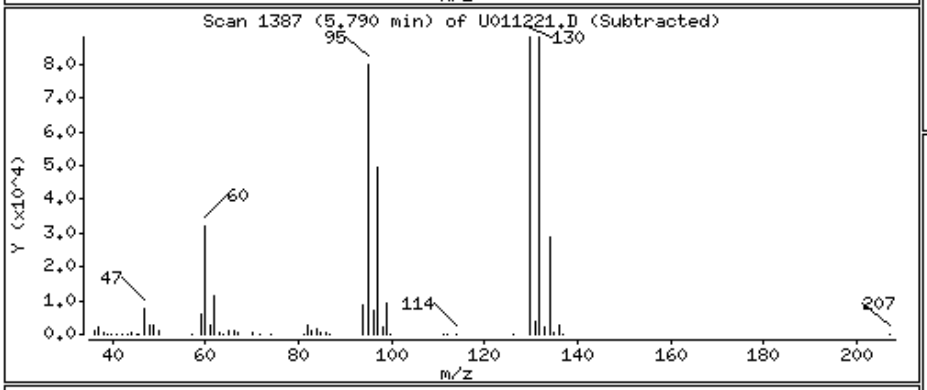
Sample Info: HS24010611-05;HS24010611-05;;;

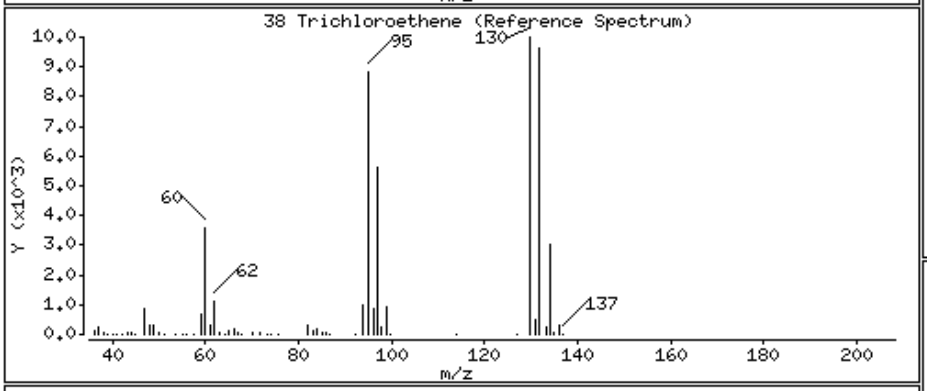
Purge Volume: 5.0 Operator: PC

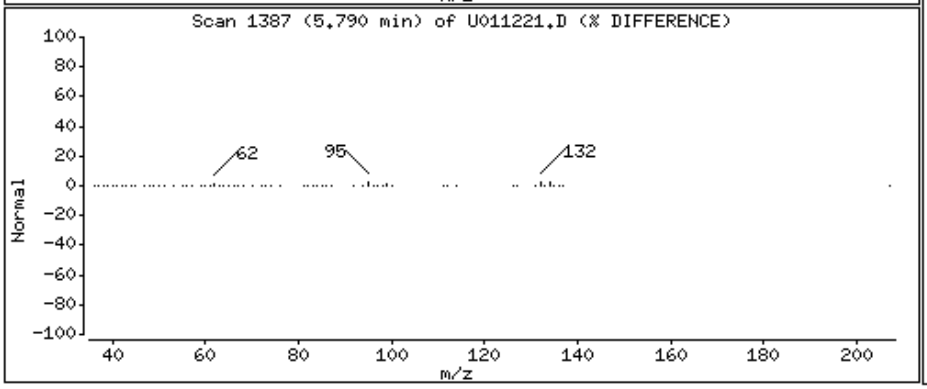
Column phase: DB624 Column diameter: 0.18

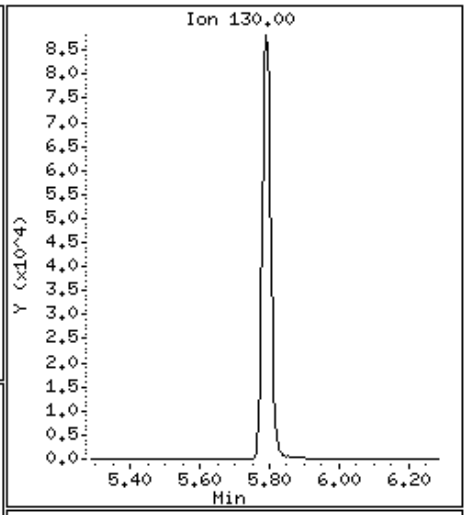
38 Trichloroethene Concentration: 35.45 ug/l

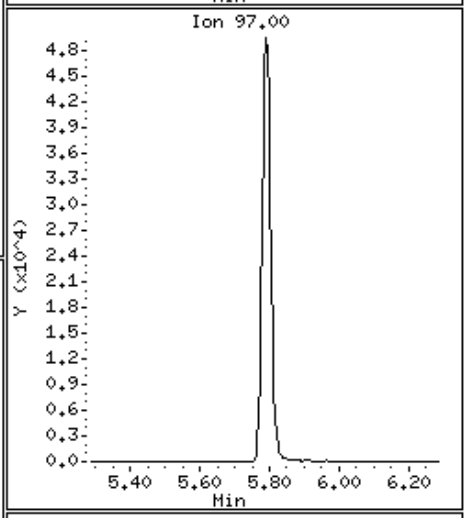


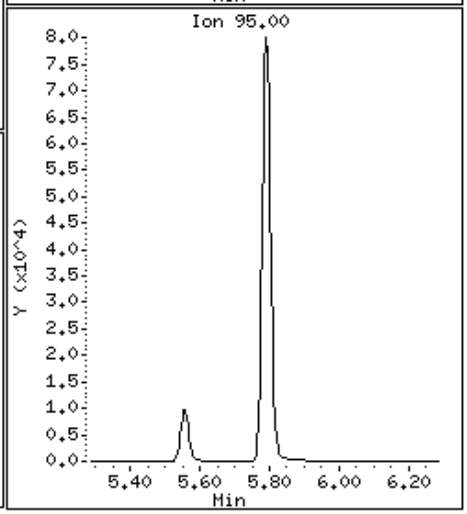












Data File : \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011221.D
Inj Date : 12-JAN-2024 18:15
InstruID : VOA9.i
LabSampID : HS24010611-05

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011229.D Page 1
Report Date: 17-Jan-2024 14:07

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011229.D
Lab Smp Id: HS24010611-04 Client Smp ID: HS24010611-04
Inj Date : 12-JAN-2024 21:12
Operator : PC Inst ID: VOA9.i
Smp Info : HS24010611-04;HS24010611-04;;;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240112.b\8260C.m
Meth Date : 17-Jan-2024 14:06 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 27
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0538-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

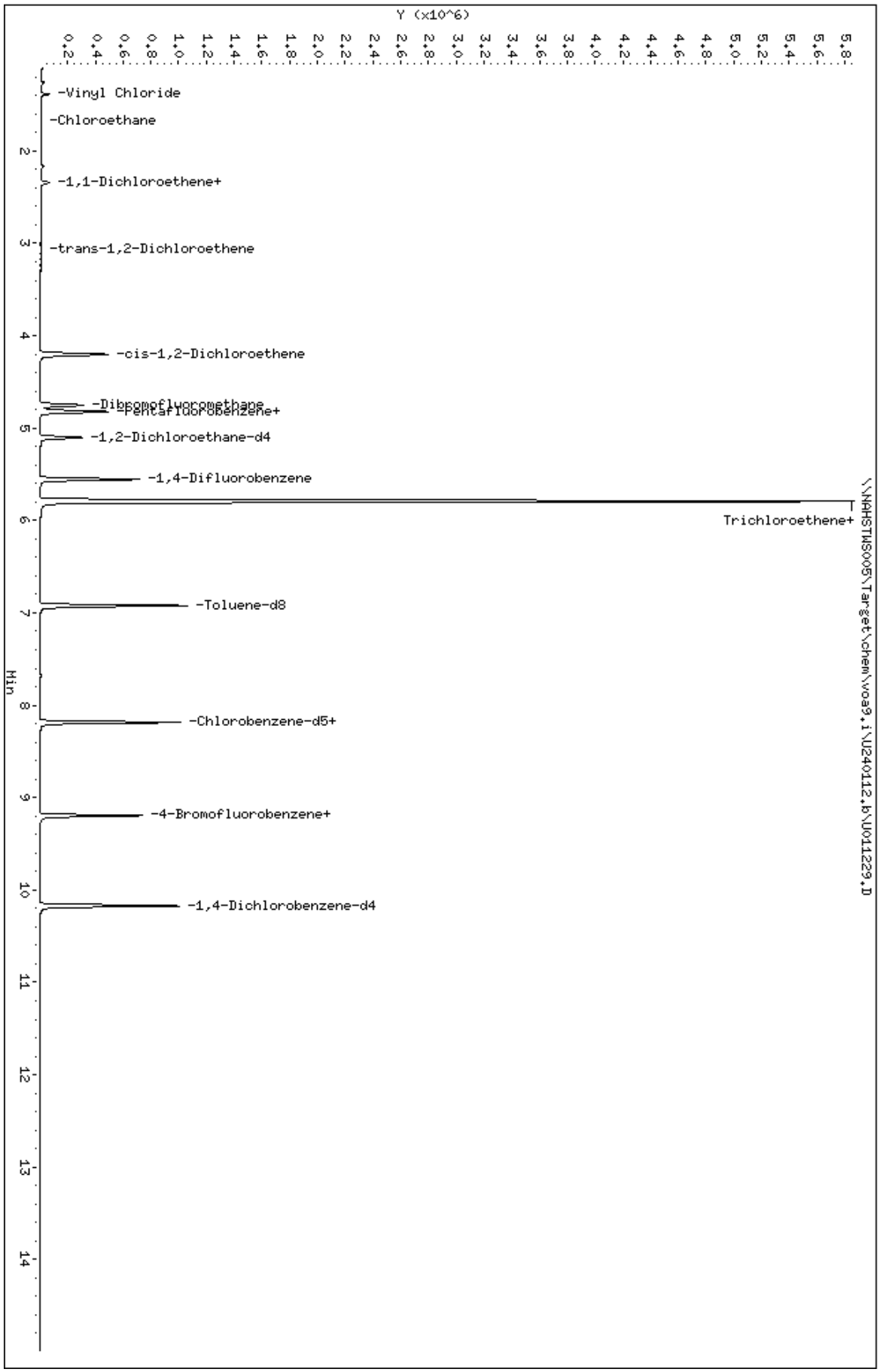
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.819	4.815	(1.000)	361751	50.0000	
$ 30 Dibromofluoromethane	113	4.751	4.748	(0.986)	188209	50.8544	50.85
$ 35 1,2-Dichloroethane-d4	65	5.100	5.096	(1.058)	201063	47.5062	47.50
* 36 1,4-Difluorobenzene	114	5.557	5.554	(1.000)	564448	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	567939	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	650772	49.7756	49.77
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	220909	44.4861	44.48
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	285025	50.0000	
5 Vinyl Chloride	62	1.385	1.378	(0.288)	36572	9.22537	9.22
11 1,1-Dichloroethene	96	2.341	2.334	(0.486)	6295	2.25618	2.25(a)
27 cis-1,2-Dichloroethene	96	4.204	4.197	(0.872)	248954	55.7184	55.71
38 Trichloroethene	130	5.790	5.786	(1.042)	1934466	456.783	456.78(A)
20 trans-1,2-Dichloroethene	96	3.068	3.057	(0.637)	1894	0.56785	0.56(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\U240112,b\U011229.D
Date : 12-JAN-2024 21:12
Client ID: HS240106l1-04
Sample Info: HS240106l1-04;HS240106l1-04;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011229.D Page 2

Date : 12-JAN-2024 21:12

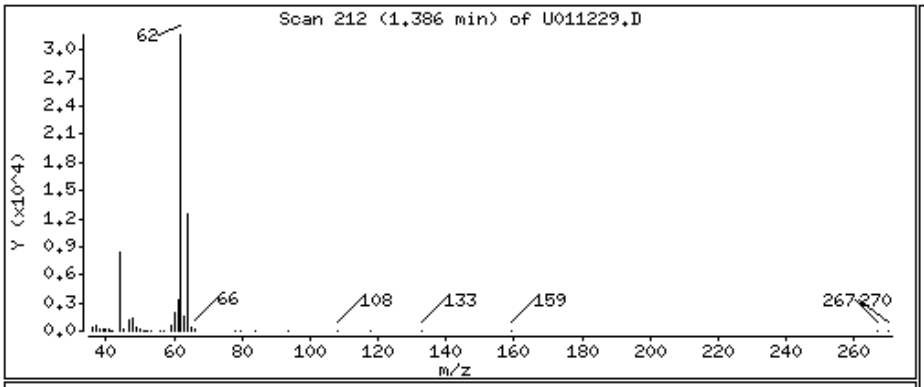
Client ID: HS24010611-04 Instrument: VOA9.i

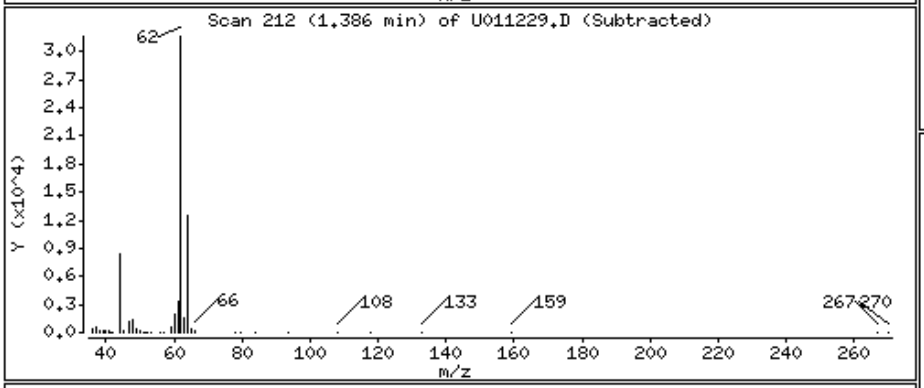
Sample Info: HS24010611-04;HS24010611-04;;;

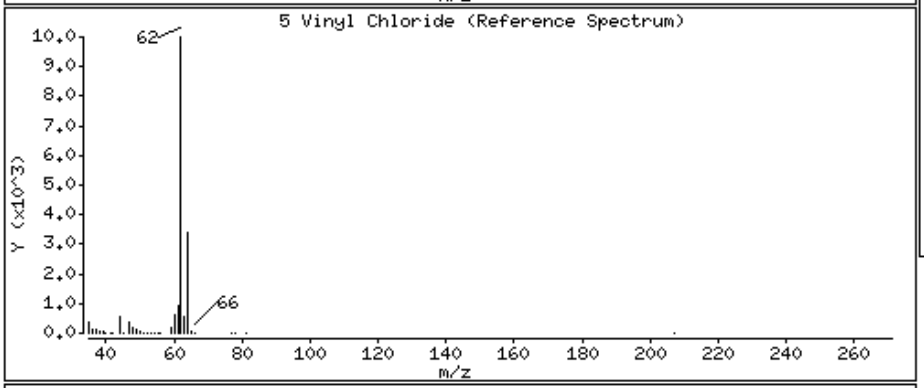
Purge Volume: 5.0 Operator: PC

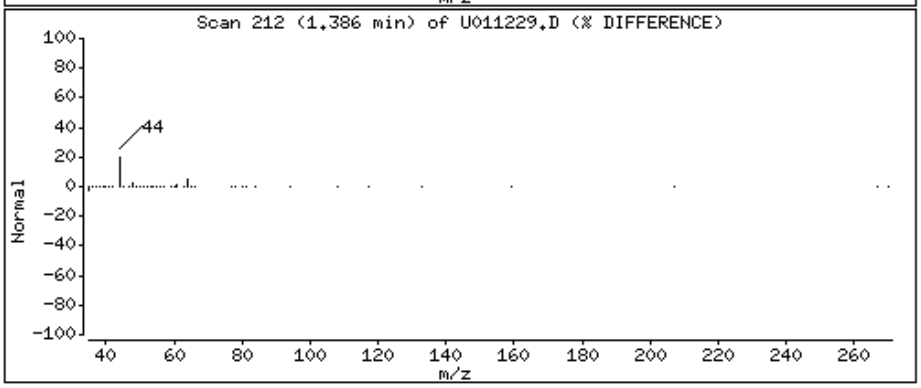
Column phase: DB624 Column diameter: 0.18

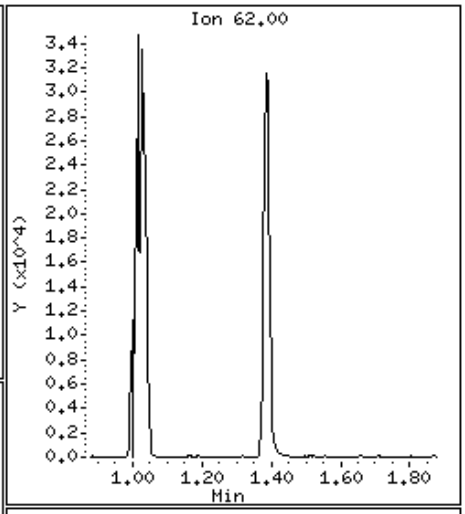
5 Vinyl Chloride Concentration: 9.22 ug/l

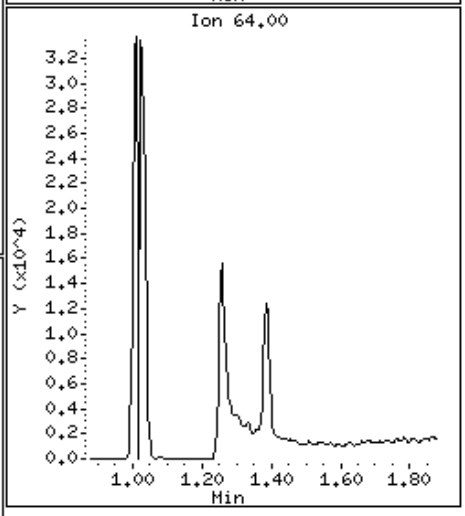












Data File: \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011229.D Page 3

Date : 12-JAN-2024 21:12

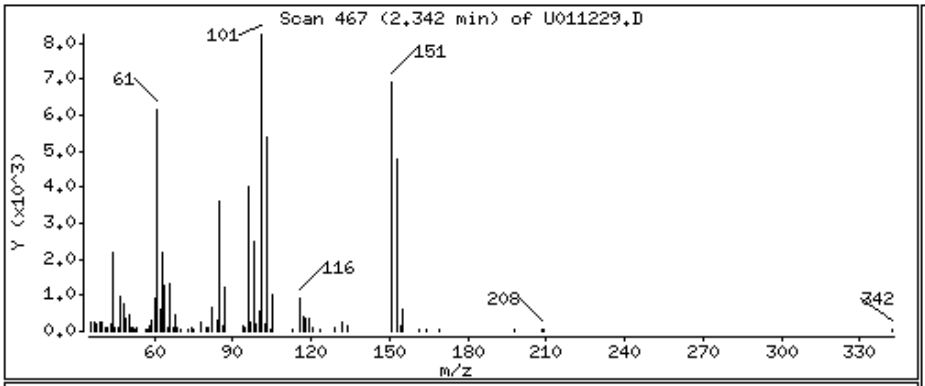
Client ID: HS24010611-04 Instrument: VOA9.i

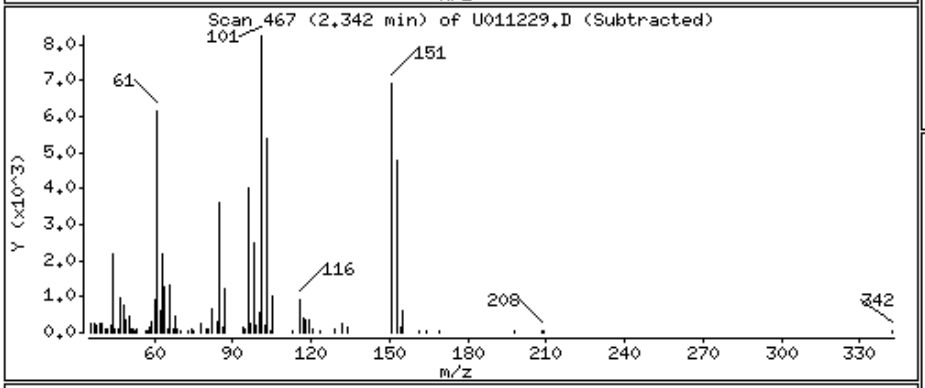
Sample Info: HS24010611-04;HS24010611-04;;;

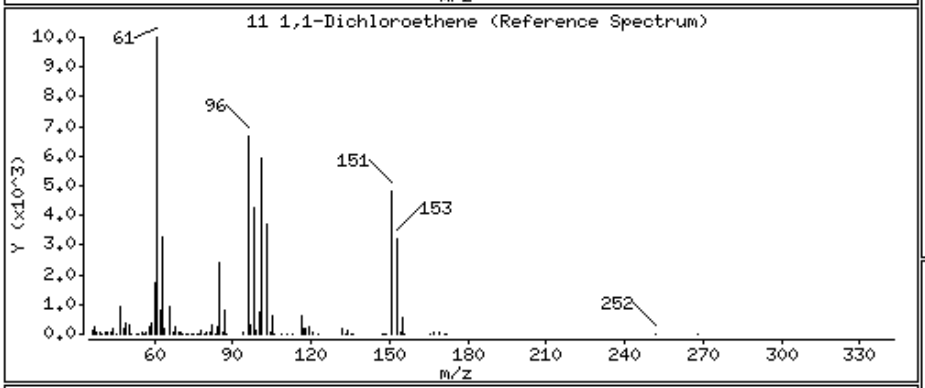
Purge Volume: 5.0 Operator: PC

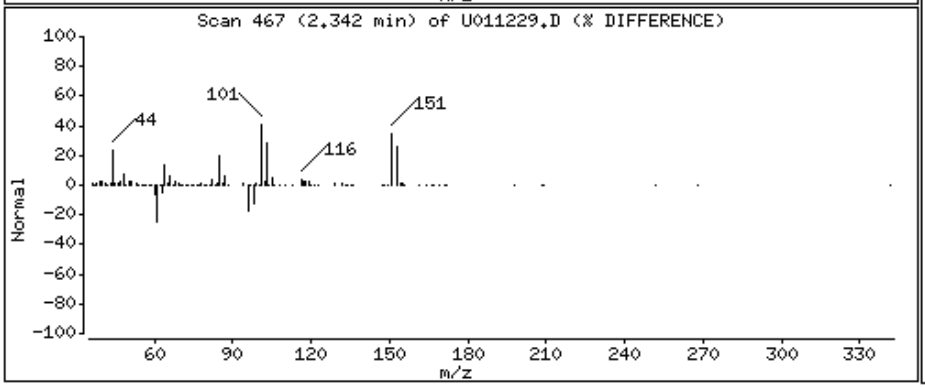
Column phase: DB624 Column diameter: 0.18

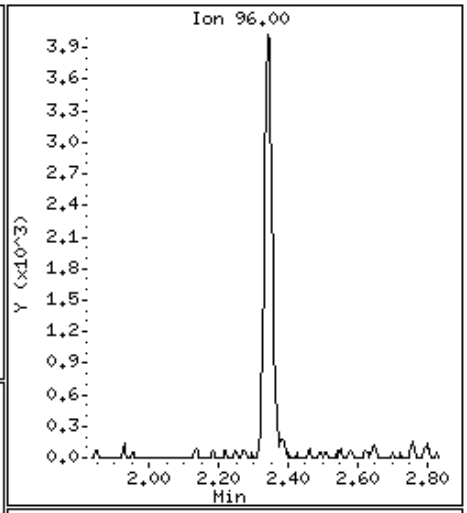
11 1,1-Dichloroethene Concentration: 2.25 ug/l

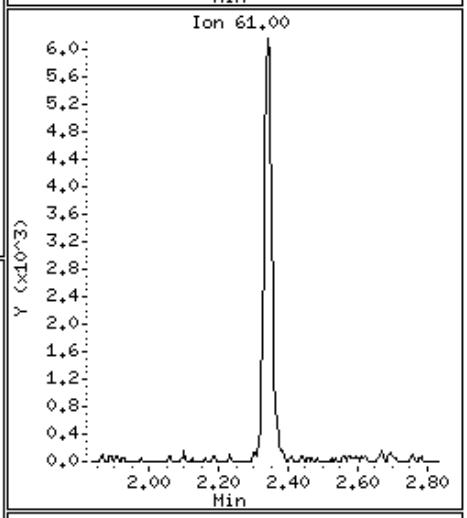


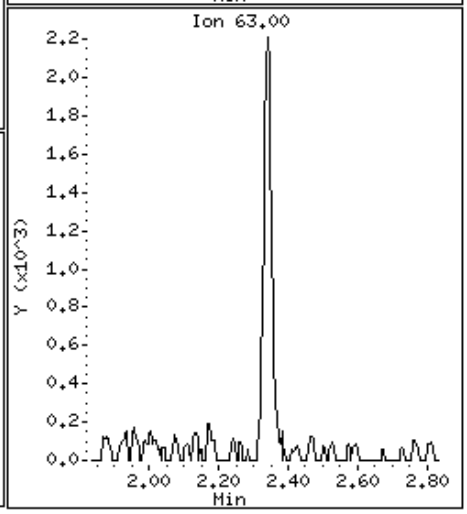












Data File: \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011229.D Page 4

Date : 12-JAN-2024 21:12

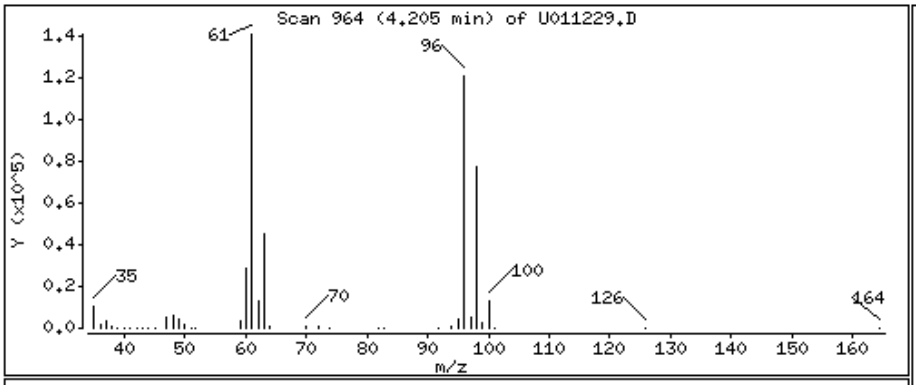
Client ID: HS24010611-04 Instrument: VOA9.i

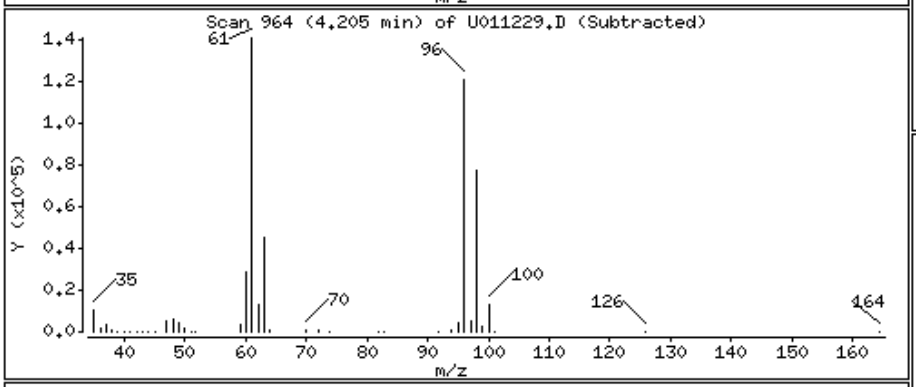
Sample Info: HS24010611-04;HS24010611-04;;;

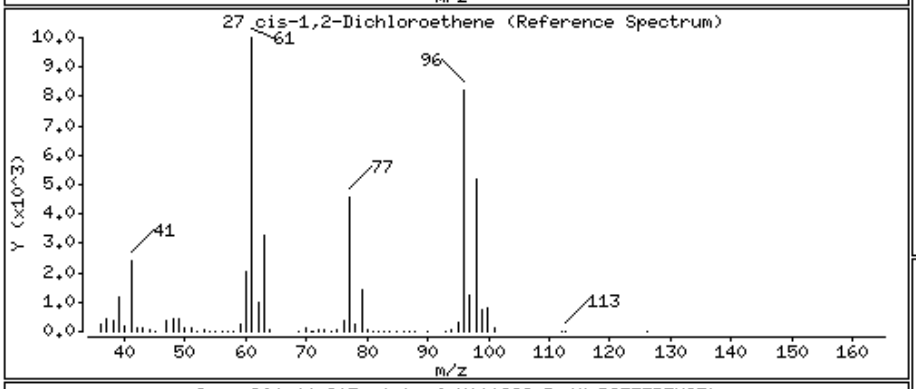
Purge Volume: 5.0 Operator: PC

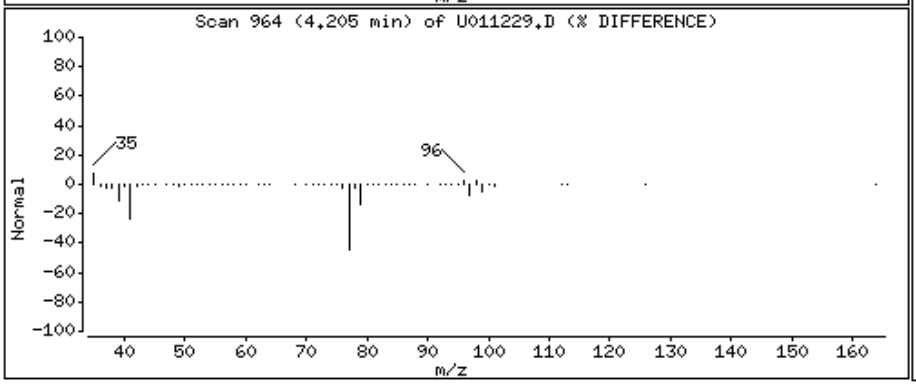
Column phase: DB624 Column diameter: 0.18

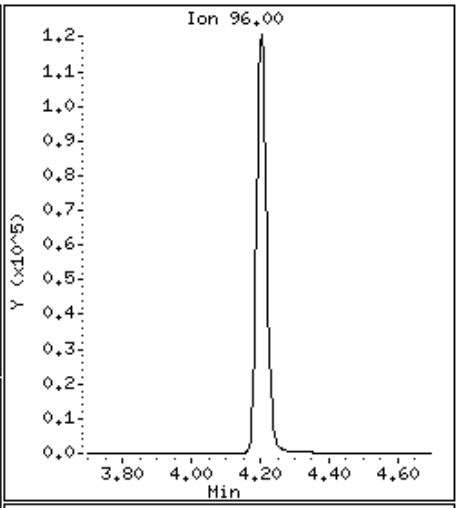
27 cis-1,2-Dichloroethene Concentration: 55.71 ug/l

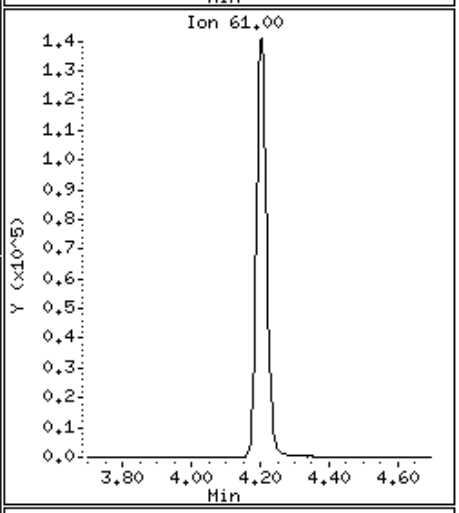


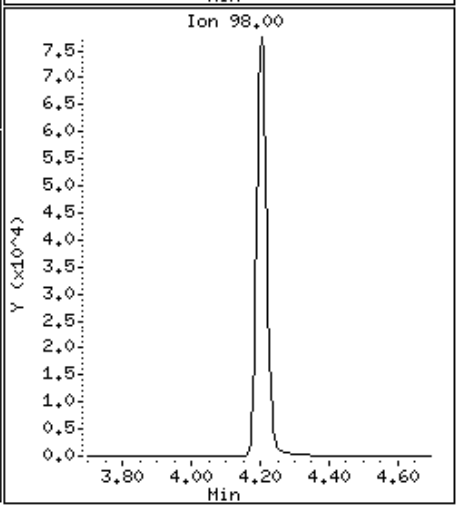












Data File: \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011229.D Page 5

Date : 12-JAN-2024 21:12

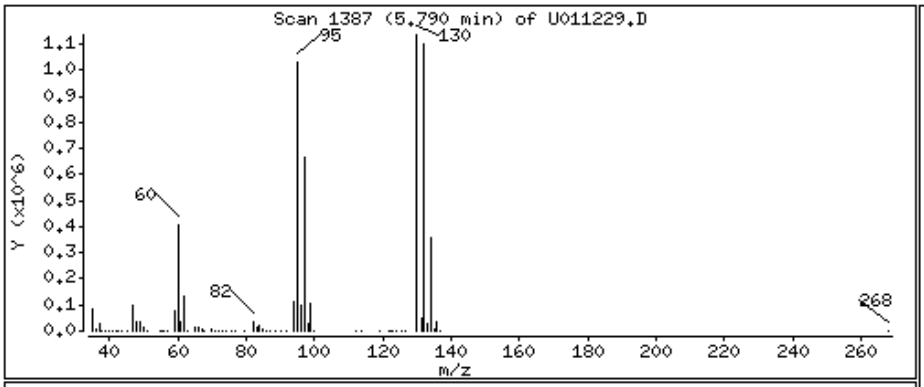
Client ID: HS24010611-04 Instrument: VOA9.i

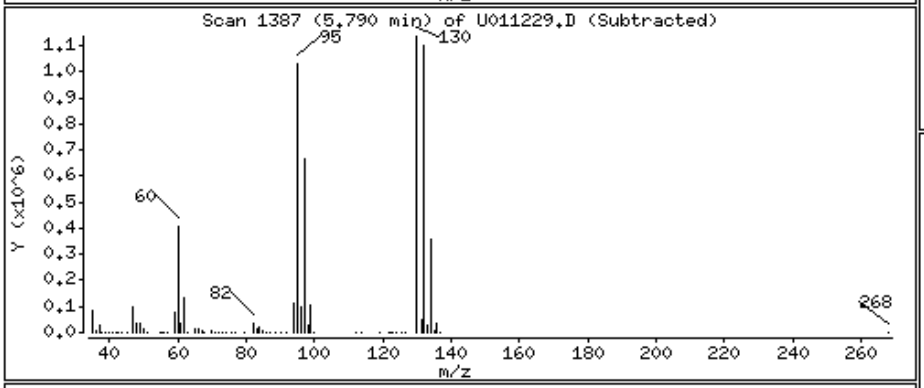
Sample Info: HS24010611-04;HS24010611-04;;;

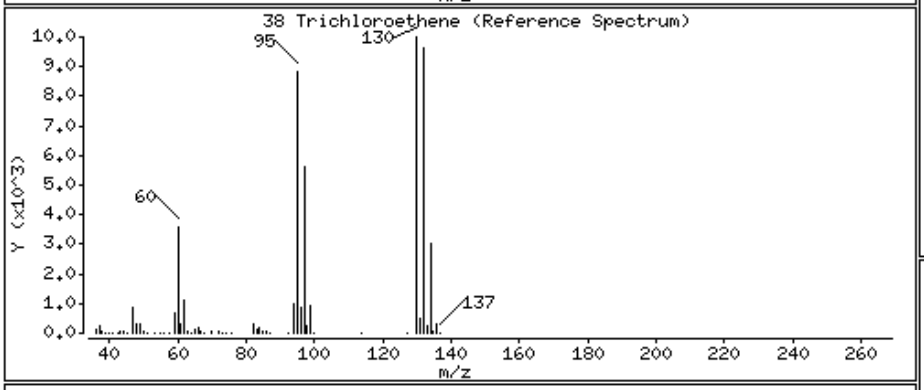
Purge Volume: 5.0 Operator: PC

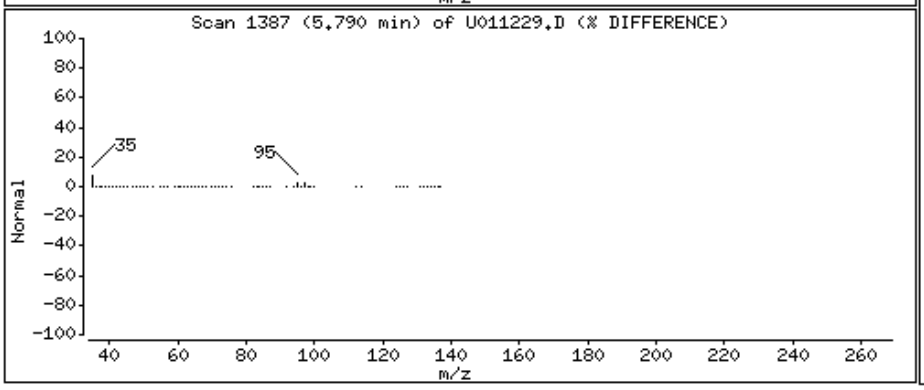
Column phase: DB624 Column diameter: 0.18

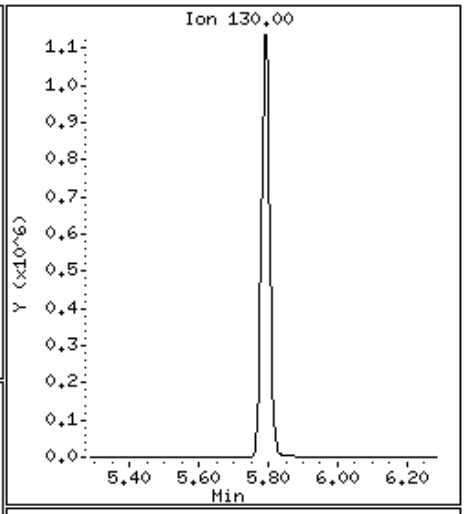
38 Trichloroethene Concentration: 456.78 ug/l

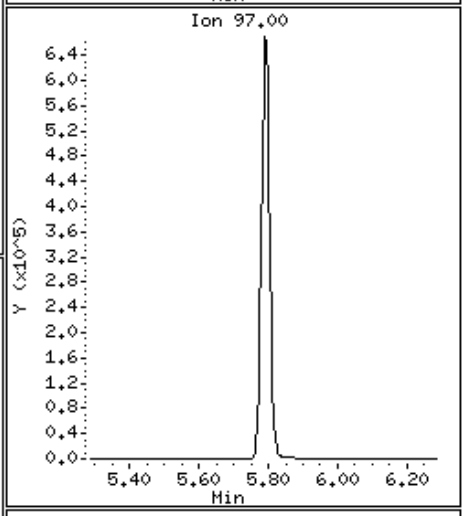


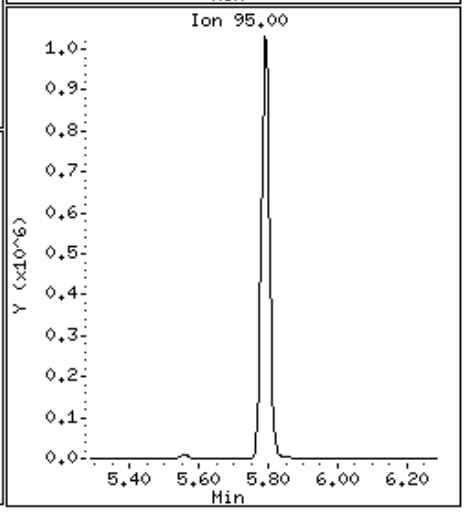












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Date : 12-JAN-2024 21:12

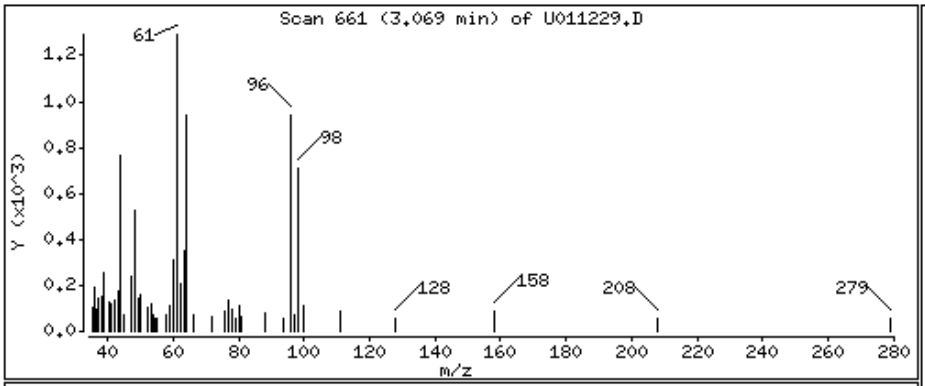
Client ID: HS24010611-04 Instrument: VOA9.i

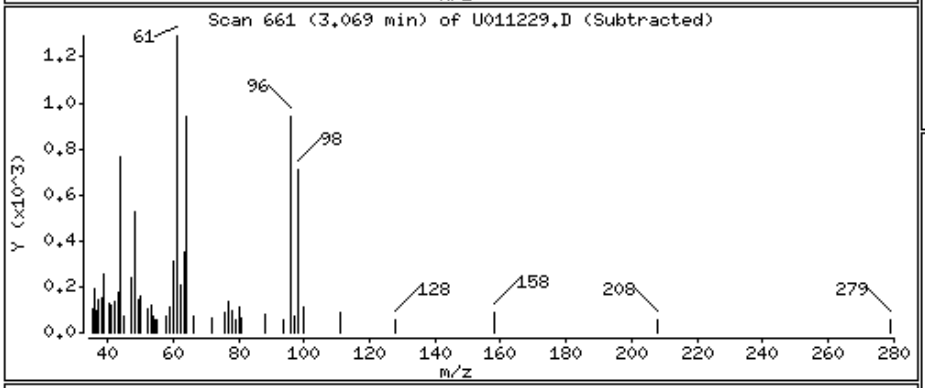
Sample Info: HS24010611-04;HS24010611-04;;;

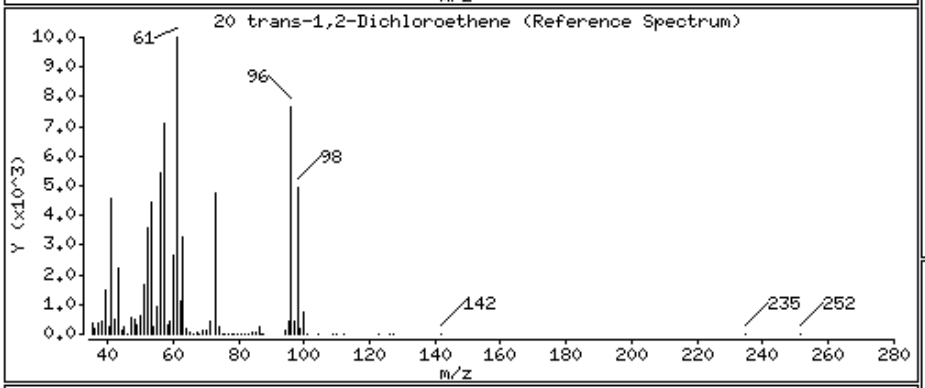
Purge Volume: 5.0 Operator: PC

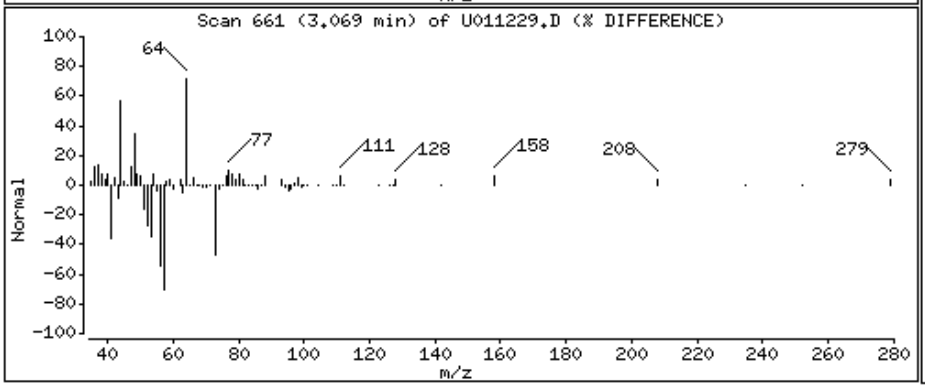
Column phase: DB624 Column diameter: 0.18

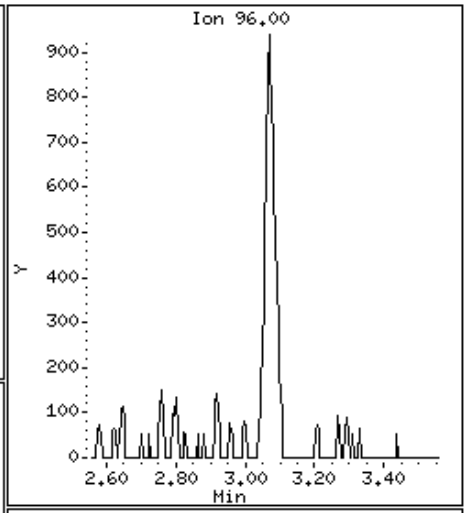
20 trans-1,2-Dichloroethene Concentration: 0.56 ug/l

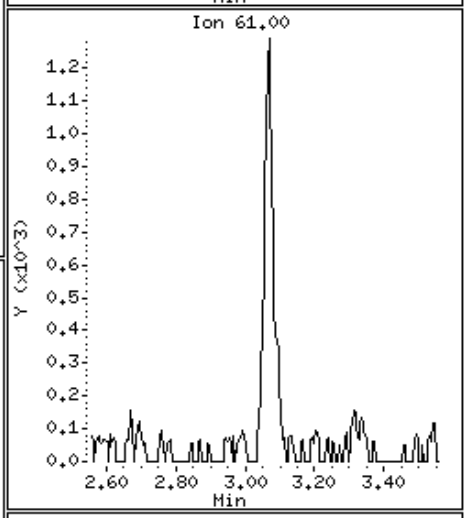


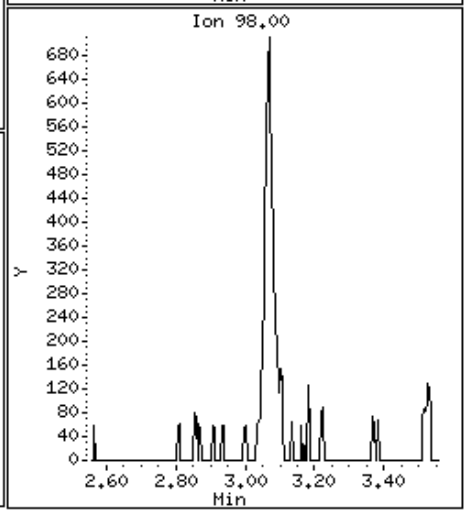












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InstruID : VOA9.i
LabSampID : HS24010611-04

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011230.D Page 1
Report Date: 17-Jan-2024 14:07

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240112.b\U011230.D
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Inj Date : 12-JAN-2024 21:34
Operator : PC Inst ID: VOA9.i
Smp Info : CCV-END;CCV-END;2;;;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240112.b\8260C.m
Meth Date : 17-Jan-2024 14:07 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 28 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1	Pentafluorobenzene	168	4.811	4.811	(1.000)	294184	50.0000	
2	Dichlorodifluoromethane	85	1.160	1.160	(0.241)	125253	50.0000	52.77
3	Chloromethane	50	1.295	1.295	(0.269)	148433	50.0000	43.98
5	Vinyl Chloride	62	1.374	1.374	(0.286)	161742	50.0000	50.17
6	Bromomethane	94	1.614	1.614	(0.335)	93485	50.0000	56.25
7	Chloroethane	64	1.696	1.696	(0.353)	117469	50.0000	54.11
8	Trichlorofluoromethane	101	1.891	1.891	(0.393)	227632	50.0000	55.70
9	Acrolein	56	2.259	2.259	(0.469)	11356	100.000	67.73
10	Acetone	43	2.405	2.405	(0.500)	100491	100.000	100.35
11	1,1-Dichloroethene	96	2.330	2.330	(0.484)	125971	50.0000	55.51
15	Iodomethane	142	2.465	2.465	(0.512)	320282	100.000	110.27
16	Acrylonitrile	53	3.061	3.061	(0.636)	121367	100.000	105.17
17	Methylene Chloride	84	2.791	2.791	(0.580)	163066	50.0000	56.98
18	Methyl tert-butyl ether	73	3.076	3.076	(0.639)	419514	50.0000	51.59
19	Carbon Disulfide	76	2.517	2.517	(0.523)	777886	100.000	116.35
20	trans-1,2-Dichloroethene	96	3.053	3.053	(0.635)	150830	50.0000	55.60
21	Vinyl Acetate	43	3.601	3.601	(0.748)	810346	100.000	98.79
22	1,1-Dichloroethane	63	3.511	3.511	(0.730)	270607	50.0000	48.91
24	2-Butanone	43	4.260	4.260	(0.885)	125545	100.000	87.11
26	2,2-Dichloropropane	77	4.178	4.178	(0.868)	169616	50.0000	43.60

27 cis-1,2-Dichloroethene	96	4.193	4.193 (0.871)	182565	50.0000	50.24
28 Chloroform	83	4.568	4.568 (0.949)	298829	50.0000	49.62

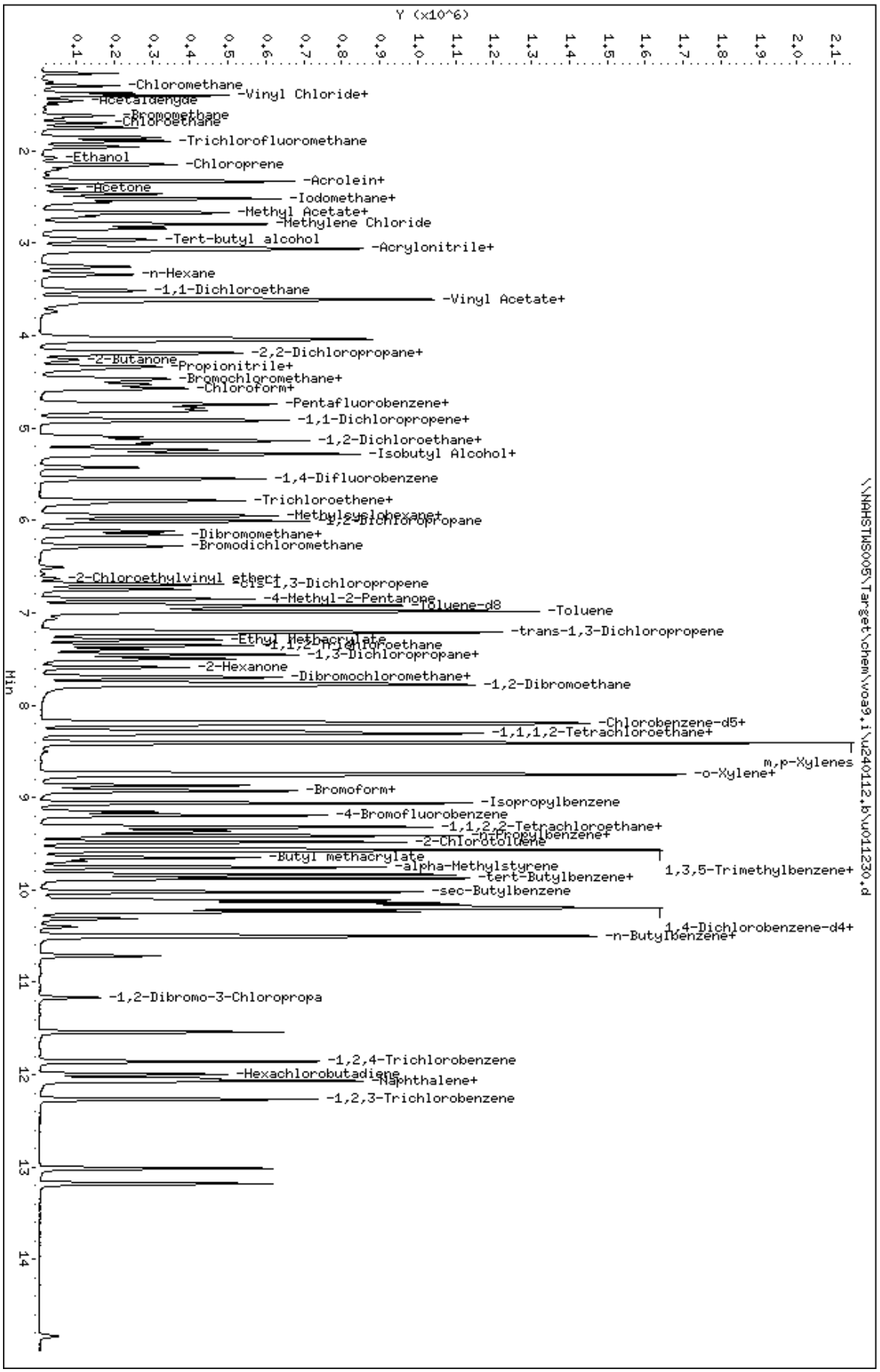
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	29 Bromochloromethane	128	4.466	4.466	(0.928)	99867	50.0000	53.11
$	30 Dibromofluoromethane	113	4.744	4.744	(0.986)	167573	50.0000	55.77
	31 1,1,1-Trichloroethane	97	4.740	4.740	(0.985)	237704	50.0000	51.94
	32 1,1-Dichloropropene	75	4.920	4.920	(0.887)	196333	50.0000	50.47
	33 1,2-Dichloroethane	62	5.171	5.171	(0.932)	215661	50.0000	47.60
	34 Carbon Tetrachloride	117	4.909	4.909	(0.885)	202913	50.0000	53.40
$	35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.059)	173630	50.0000	50.27
*	36 1,4-Difluorobenzene	114	5.550	5.550	(1.000)	464959	50.0000	
	37 Benzene	78	5.138	5.138	(0.926)	618086	50.0000	48.83
	38 Trichloroethene	130	5.786	5.786	(1.043)	180221	50.0000	51.66
	39 Bromodichloromethane	83	6.277	6.277	(1.131)	217840	50.0000	52.55
	41 2-Chloroethylvinyl ether	63	6.577	6.577	(1.185)	5698	100.000	138.86
	42 1,2-Dichloropropane	63	6.007	6.007	(1.082)	162919	50.0000	47.80
	44 Dibromomethane	93	6.116	6.116	(1.102)	109311	50.0000	49.58
	45 4-Methyl-2-Pentanone	43	6.851	6.851	(0.837)	323659	100.000	94.09
	46 cis-1,3-Dichloropropene	75	6.689	6.689	(1.205)	251643	50.0000	47.19
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	476945	50.0000	
$	48 Toluene-d8	98	6.918	6.918	(0.845)	578617	50.0000	52.70
	50 Toluene	91	6.978	6.978	(0.853)	679825	50.0000	51.12
	51 trans-1,3-Dichloropropene	75	7.196	7.196	(1.296)	212618	50.0000	47.38
	52 2-Hexanone	43	7.589	7.589	(0.927)	216791	100.000	90.07
	53 1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	131385	50.0000	51.70
	54 1,3-Dichloropropane	76	7.495	7.495	(0.916)	280495	50.0000	47.50
	55 Dibromochloromethane	129	7.690	7.690	(0.940)	193077	50.0000	54.43
	56 Tetrachloroethene	164	7.454	7.454	(0.911)	149792	50.0000	52.62
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	166562	50.0000	50.26
	58 1-Chlorohexane	55	8.196	8.196	(1.477)	127714	50.0000	48.98
	59 Chlorobenzene	112	8.208	8.208	(1.003)	476406	50.0000	49.17
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	176098	50.0000	51.96
	61 Ethylbenzene	106	8.305	8.305	(1.015)	228553	50.0000	50.39
	62 m,p-Xylenes	106	8.406	8.406	(1.027)	585949	100.000	107.46
	63 o-Xylene	106	8.747	8.747	(1.069)	292304	50.0000	52.12
	64 Styrene	104	8.759	8.759	(1.070)	509873	50.0000	54.61
	66 Bromoform	173	8.916	8.916	(1.089)	123105	50.0000	50.71
	67 Isopropylbenzene	105	9.062	9.062	(1.107)	713007	50.0000	52.57
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	218211	50.0000	49.65
$	69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	218061	50.0000	52.51
*	70 1,4-Dichlorobenzene-d4	152	10.168	10.168	(1.000)	269638	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.921)	219755	50.0000	42.93
	73 n-Propylbenzene	91	9.411	9.411	(0.926)	767986	50.0000	48.50
	74 Bromobenzene	156	9.317	9.317	(0.916)	214704	50.0000	47.41
	75 1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	578381	50.0000	51.39
	76 2-Chlorotoluene	91	9.482	9.482	(0.933)	494197	50.0000	46.37
	77 4-Chlorotoluene	91	9.576	9.576	(0.942)	579554	50.0000	47.95
	78 tert-Butylbenzene	119	9.835	9.835	(0.967)	509846	50.0000	50.44
	79 1,2,4-Trimethylbenzene	105	9.876	9.876	(0.971)	577471	50.0000	51.20
	81 sec-Butylbenzene	105	10.022	10.022	(0.986)	650310	50.0000	49.89
	82 p-Isopropyltoluene	119	10.146	10.146	(0.998)	593335	50.0000	52.60
	83 1,3-Dichlorobenzene	146	10.112	10.112	(0.994)	381613	50.0000	47.55
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	393528	50.0000	46.29
	87 n-Butylbenzene	91	10.491	10.491	(1.032)	470000	50.0000	49.65
	88 1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	377773	50.0000	46.79

89	1,2-Dibromo-3-Chloropropane	155	11.165	11.165 (1.098)	37005	50.0000	47.04
90	1,2,4-Trichlorobenzene	180	11.859	11.859 (1.166)	243600	50.0000	48.91

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
91	Hexachlorobutadiene	225	11.998	11.998	(1.180)	95968	50.0000	48.07
92	Naphthalene	128	12.065	12.065	(1.187)	607567	50.0000	50.58
93	1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	239057	50.0000	47.60
M 94	1,2-Dichloroethylene (total)	96				333395	100.000	(a)
135	1,4-Dioxane	88	6.161	6.161	(1.280)	44327	1000.00	949.70
141	Cyclohexane	56	4.781	4.781	(0.994)	190515	50.0000	44.94
138	Freon TF	101	2.330	2.330	(0.484)	129771	50.0000	59.53
140	1,3-Butadiene	54	1.400	1.400	(0.291)	139064	50.0000	47.06
147	Methylcyclohexane	55	5.943	5.943	(1.071)	335085	50.0000	48.62
146	Methyl Acetate	43	2.708	2.708	(0.563)	140440	50.0000	47.96
148	Tert-Butyl alcohol	59	2.960	2.960	(0.615)	345111	1000.00	1047.90
149	Isopropyl Alcohol	45	2.555	2.555	(0.531)	211100	1000.00	1134.82
72	trans-1,4-Dichloro-2-butene	53	9.377	9.377	(1.146)	42405	50.0000	49.40
12	Isobutyl Alcohol	43	5.284	5.284	(1.098)	407577	1000.00	923.77
13	Acetonitrile	39	2.667	2.667	(0.554)	163759	500.000	517.22
14	Allyl Chloride	41	2.667	2.667	(0.554)	374329	50.0000	51.75
25	Methacrylonitrile	41	4.489	4.489	(0.933)	95317	50.0000	45.37(M)
40	Methyl Methacrylate	41	6.153	6.153	(1.279)	135033	50.0000	46.50
4	Propionitrile	54	4.332	4.332	(0.900)	225882	500.000	463.09
136	n-Hexane	57	3.338	3.338	(0.694)	121571	50.0000	44.45
194	Acetaldehyde	44	1.456	1.456	(0.303)	66616	200.000	174.54(M)
131	Methyl Acrylate	55	4.365	4.365	(0.907)	183696	50.0000	47.53
23	Chloroprene	53	2.154	2.154	(0.448)	50600	50.0000	50.42(M)
49	Ethyl Methacrylate	69	7.289	7.289	(1.313)	228024	50.0000	49.96
166	1,2,3-Trimethylbenzene	105	10.236	10.236	(1.007)	529300	50.0000	47.56
167	Ethanol	45	2.075	2.075	(0.431)	38012	1000.00	1030.88
164	Dicyclopentadiene	66	10.198	10.198	(1.003)	637821	50.0000	44.37
145	alpha-Methylstyrene	118	9.752	9.752	(0.959)	260147	50.0000	47.67
142	Tetrahydrofuran	42	4.538	4.538	(0.943)	51816	100.000	82.97
156	Diisopropyl ether	45	3.616	3.616	(0.751)	453563	50.0000	44.25
162	Butyl acrylate	55	8.732	8.732	(1.067)	268252	50.0000	39.35
203	2-Ethylhexyl Acrylate	55	12.039	12.039	(1.184)	151098	50.0000	38.55
130	Ethyl Acetate	43	4.335	4.335	(0.901)	162435	50.0000	45.45
189	n-Butyl acetate	43	7.705	7.705	(0.941)	252218	50.0000	47.47
182	Epichlorohydrin	57	6.629	6.629	(1.195)	33340	200.000	184.58
132	n-Butanol	56	5.820	5.820	(1.210)	88423	1000.00	924.81
133	Ethyl Acrylate	55	5.943	5.943	(1.235)	335085	50.0000	47.38
163	Butyl methacrylate	41	9.647	9.647	(0.949)	134817	50.0000	37.08
187	n-Amyl acetate	43	8.931	8.931	(1.091)	254176	50.0000	42.04
188	Isopropyl acetate	43	5.284	5.284	(0.952)	408447	50.0000	47.61

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.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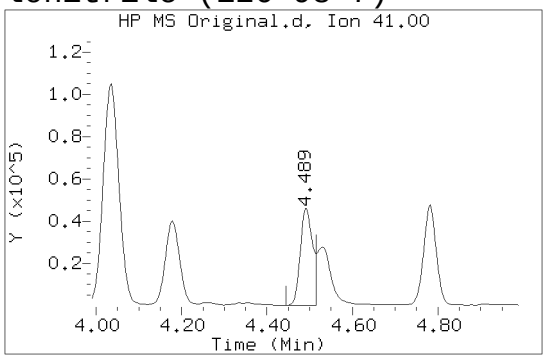
Sample Info: CCV-END,CCV-END,2,,,
Purge Volume: 5.0
Column phase: DB624
Instrument: VOA9.i
Operator: PC
Column diameter: 0.18
\\NAHSTMS005\Target\chem\voa9.i\u240112.b\u011230.d
Y (x10^6)
Min
-Chloromethane
-Vinyl Chloride+
-Acetaldehyde
-Bromomethane
-Chloroethane
-Trichlorofluoromethane
-Ethanol
-Chloroprene
-Acrolein+
-Acetone
-Iodomethane+
-Methyl Acetate+
-Methylene Chloride
-Tert-butyl alcohol
-Acrylonitrile+
-n-Hexane
-1,1-Dichloroethane
-Vinyl Acetate+
-2,2-Dichloropropane+
-2-Butanone
-Propionitrile+
-Bromochloromethane+
-Chloroform+
-Pentafluorobenzene+
-1,1-Dichloropropene+
-1,2-Dichloroethane+
-Isobutyl Alcohol+
-1,4-Difluorobenzene
-Trichloroethene+
-Methylcyclohexane+
1,2-Dichloropropane
-Dibromomethane+
-Bromodichloromethane
-2-Chloroethylvinyl ether
cis-1,3-Dichloropropene
-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+
-Bromoform+
-Isopropylbenzene
-4-Bromofluorobenzene
-1,1,2,2-Tetrachloroethane+
-n-Propylbenzene+
-2-Chlorotoluene
-Butyl methacrylate
-alpha-Methylstyrene
1,3,5-Trimethylbenzene+
-tert-Butylbenzene+
-sec-Butylbenzene
1,4-Dichlorobenzene-d4+
-n-Butylbenzene+
-1,2-Dibromo-3-Chloropropa
-1,2,4-Trichlorobenzene
-Hexachlorobutadiene
-Naphthalene+
-1,2,3-Trichlorobenzene
Page 1

Data File : \\nahstws005\target\chem\voa9.i\u240112.b\u011230.d
Inj Date : 12-JAN-2024 21:34
InstruID : VOA9.i
LabSampID : CCV-END

Methacrylonitrile (126-98-7)

Reason Code:

BEFORE
MASS
41
AREA
95317
HEIGHT
45701
17-Jan-2024
14:06
linh
pham



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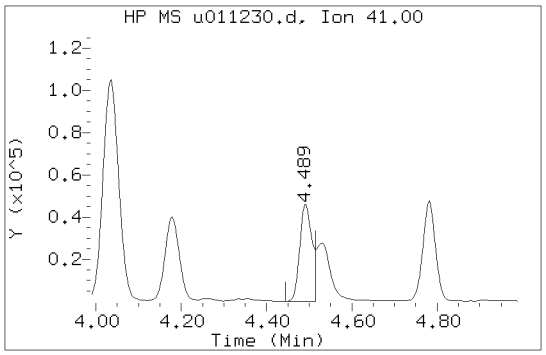
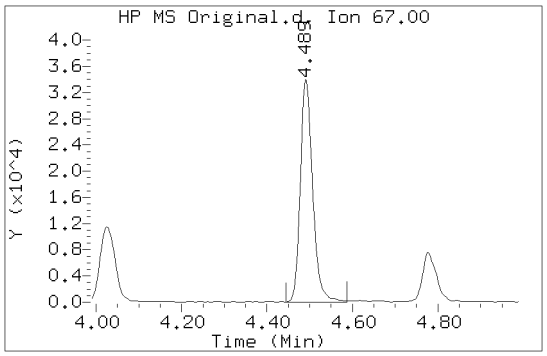


BEFORE
MASS
67
AREA
69477
HEIGHT
33920
17-Jan-2024
14:06
linh
pham



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AREA
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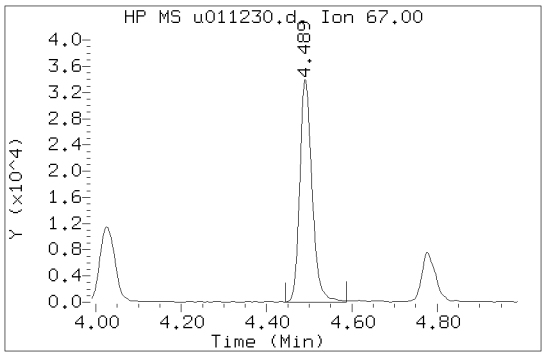

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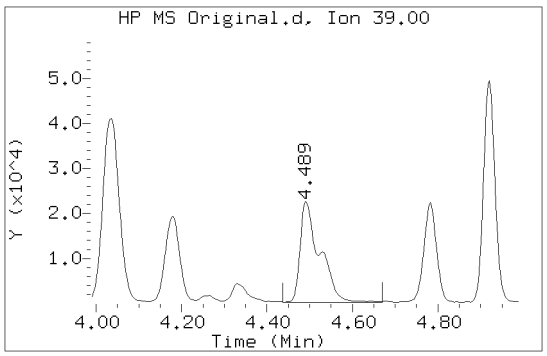

AFTER
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AREA
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HEIGHT
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17-Jan-2024
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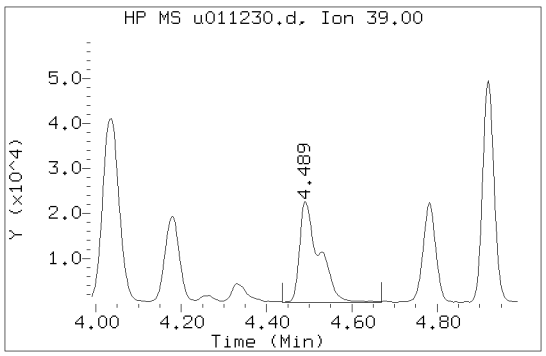

Chloroprene (126-99-8)

Reason Code:

BEFORE
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AREA
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HEIGHT
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17-Jan-2024
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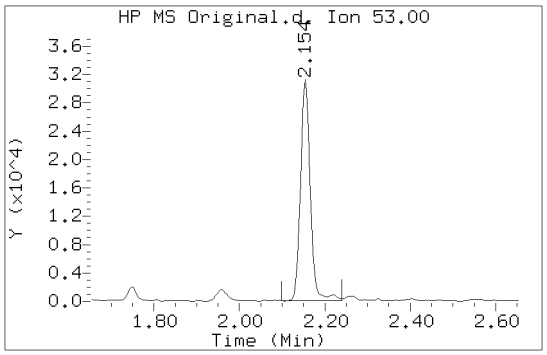
pham



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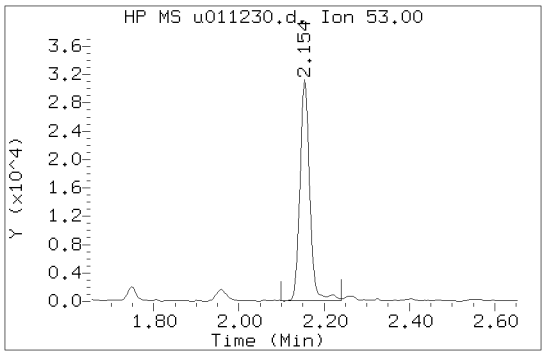

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Inj Date : 12-JAN-2024 21:34
InstruID : VOA9.i
LabSampID : CCV-END

Chloroprene (126-99-8)

Reason Code:

BEFORE

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0
HEIGHT
0
17-Jan-2024
14:06
linh
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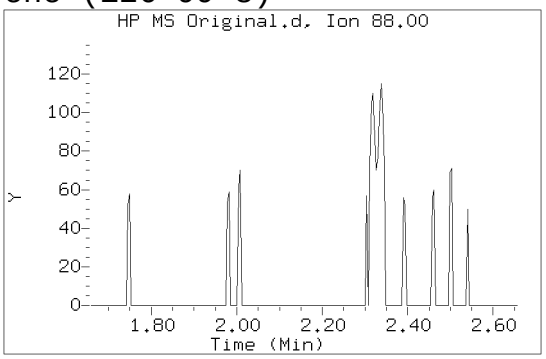

AFTER

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HEIGHT
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17-Jan-2024
14:06
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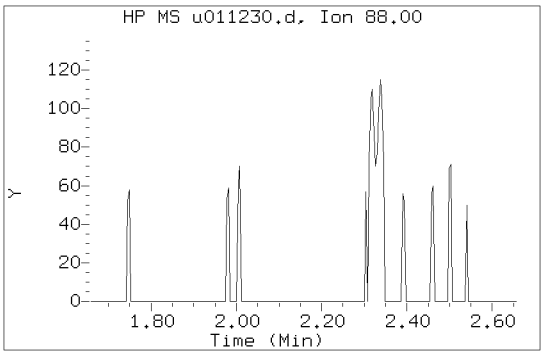

Acetaldehyde (75-07-0)

Reason Code:

BEFORE

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17-Jan-2024
14:06
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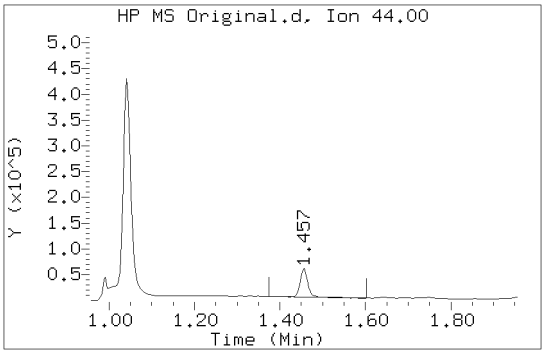

AFTER

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17-Jan-2024
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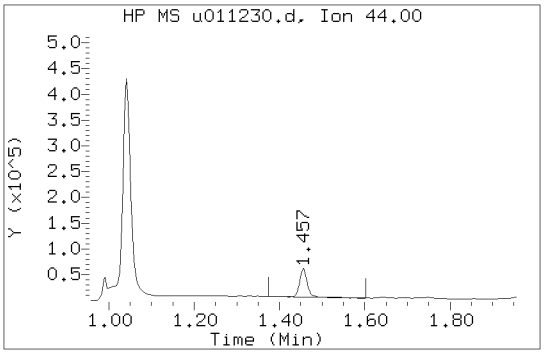

BEFORE

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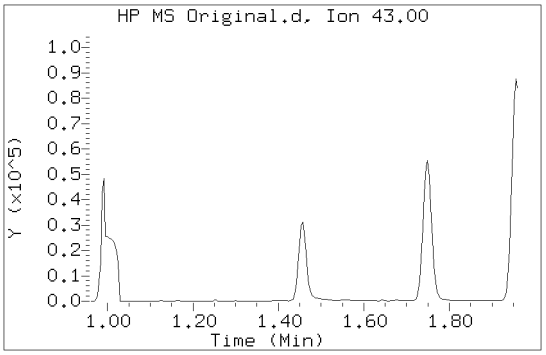

AFTER

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17-Jan-2024
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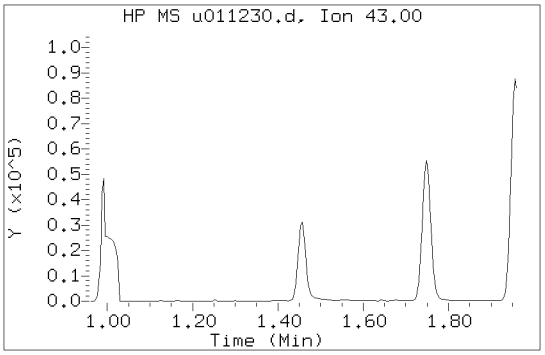

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17-Jan-2024
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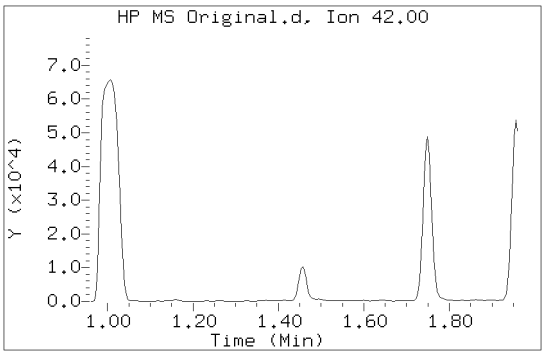

AFTER

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AREA
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HEIGHT
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17-Jan-2024
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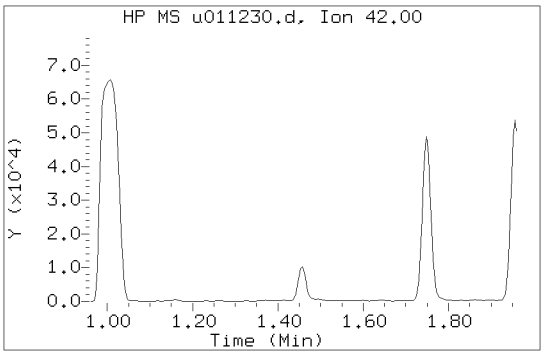


right solutions.
right partner.

RawData

Volatiles by EPA Volatiles Organics by Method 8260C

Workorder

HS24010611

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/29/2024

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

Data File: \\nahstws005\Target\chem\voa9.i\U240117.b\U011701.D Page 1
Report Date: 17-Jan-2024 07:31

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240117.b\U011701.D
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 17-JAN-2024 06:52
Operator : FT Inst ID: VOA9.i
Smp Info : BFB;BFB;3;;BFB
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240117.b\bfb.m
Meth Date : 27-Jan-2023 08:08 apoluri Quant Type: ISTD
Cal Date : 30-MAR-2018 18:09 Cal File: U033003.d
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: NAHSTW7066

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

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

					CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/l)		
RT	EXP RT	REL RT	MASS	RESPONSE			TARGET RANGE	RATIO
1 bfb							CAS #: 460-00-4	
9.194	9.180	(0.000)	95	120920			0.00- 100.00	100.00
9.194	9.180	(0.000)	50	20664			15.00- 40.00	17.09
9.194	9.180	(0.000)	75	58048			30.00- 60.00	48.01
9.194	9.180	(0.000)	96	8541			5.00- 9.00	7.06
9.194	9.180	(0.000)	173	0	0.0	0.0	0.00- 2.00	0.00
9.194	9.180	(0.000)	174	111368			50.00- 0.00	92.10
9.194	9.180	(0.000)	175	9916			5.00- 9.00	8.90
9.194	9.180	(0.000)	176	108600			95.00- 101.00	97.51
9.194	9.180	(0.000)	177	7237			5.00- 9.00	6.66

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	17.09
75	30.00 - 60.00% of mass 95	48.01
96	5.00 - 9.00% of mass 95	7.06
173	Less than 2.00% of mass 174	0.00 (0.00)
174	Greater than 50.00% of mass 95	92.10
175	5.00 - 9.00% of mass 174	8.20 (8.90)
176	95.00 - 101.00% of mass 174	89.81 (97.51)
177	5.00 - 9.00% of mass 176	5.98 (6.66)

Data File: U011701.D
Spectrum: Scan 2293 (9.19)
Location of Maximum: 95.05
Number of points: 104

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2178	65.10	769	96.10	8541	136.80	178
37.10	5478	66.00	63	97.00	313	141.00	1349
38.10	5045	67.10	518	103.90	395	142.90	1259
39.00	2028	68.00	10685	104.90	165	143.90	102
40.00	261	69.10	11048	105.90	537	144.90	265
40.90	60	70.00	929	106.90	186	146.00	246
41.90	84	71.20	66	109.90	89	146.90	124
43.20	165	72.00	631	110.70	53	147.90	352
44.00	821	73.10	5390	111.30	55	149.80	81
45.10	992	74.10	19832	112.00	129	153.00	51
46.00	202	75.10	58048	113.00	130	154.10	115
47.00	1505	76.00	5600	114.90	124	155.00	375
47.90	704	77.00	703	116.10	353	156.80	262
49.10	4684	78.10	482	117.00	780	158.80	115
50.10	20664	79.00	2792	117.80	421	161.00	96
51.00	6134	79.90	1051	118.90	631	167.50	67
52.00	296	81.00	2919	119.80	65	170.10	79
52.90	122	81.90	756	122.80	85	172.00	1707
55.00	312	83.00	117	123.90	87	174.00	111368
56.10	1628	84.60	67	127.00	62	175.10	9916
57.10	2755	87.00	4943	127.90	331	176.00	108600
58.10	179	88.00	5375	128.90	193	177.00	7237
60.00	1138	91.00	433	129.90	427	178.00	139
61.10	5300	92.00	3391	130.90	144		
62.10	4612	93.00	5836	131.80	80		
63.00	3847	94.10	15037	134.00	105		
64.10	580	95.10	120920	135.00	244		

Data File: \\NAHSTWS005\Target\chem\voa9.i\u240117.b\u011701.d Page 1

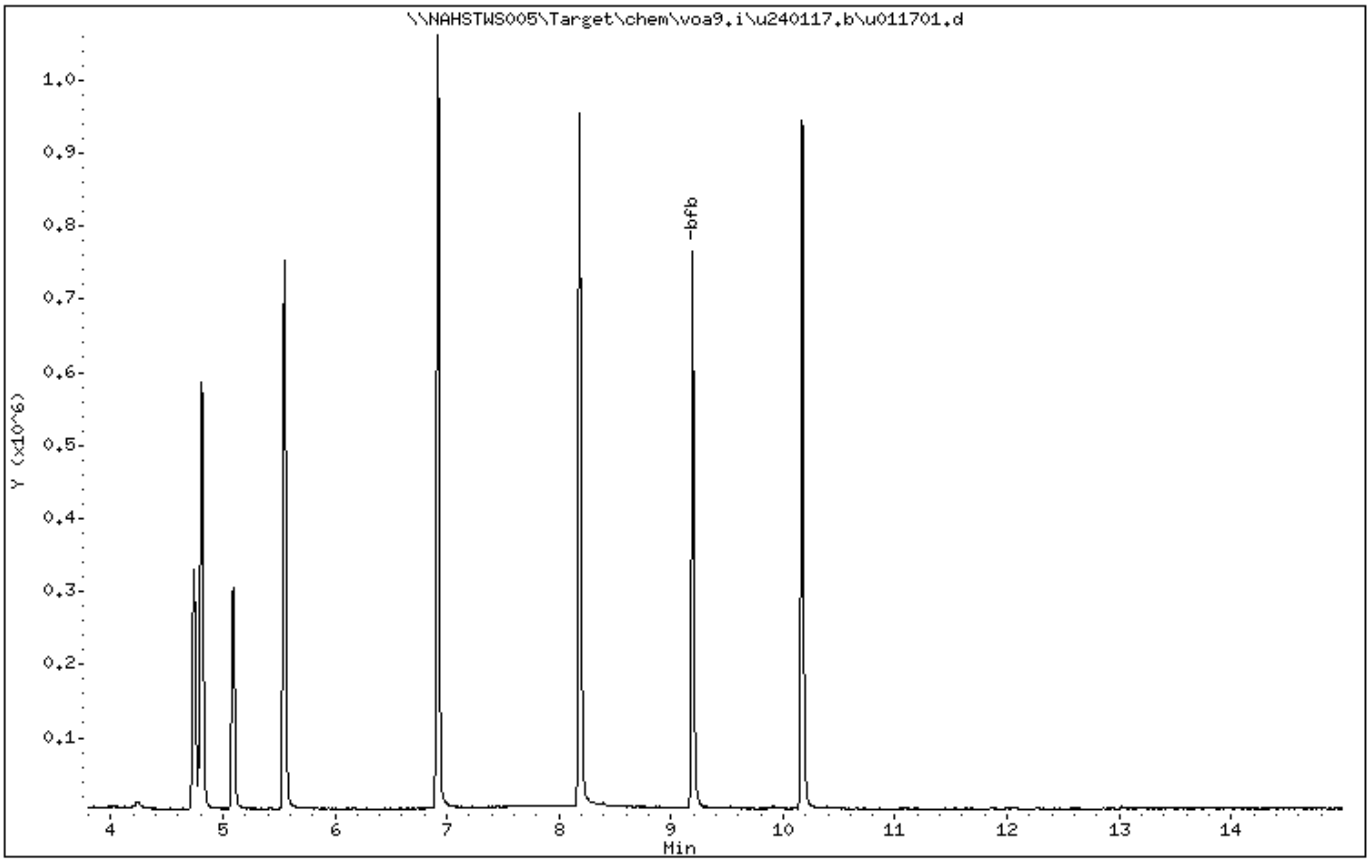
Date : 17-JAN-2024 06:52

Client ID: BFB Instrument: VOA9.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0 Operator: FT

Column phase: DB624 Column diameter: 0.25



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Inj Date : 17-JAN-2024 06:52
InstruID : VOA9.i
LabSampID : BFB

NO MANUAL INTEGRATIONS

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240117.b\U011702.D
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 17-JAN-2024 07:36
Operator : FT Inst ID: VOA9.i
Smp Info : CCV;CCV;2;;;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240117.b\8260C.m
Meth Date : 22-Jan-2024 17:33 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.815	4.815	(1.000)	306651	50.0000	
2 Dichlorodifluoromethane	85	1.168	1.168	(0.243)	68342	50.0000	28.03
3 Chloromethane	50	1.303	1.303	(0.271)	121541	50.0000	34.55
4 Propionitrile	54	4.335	4.335	(0.900)	208162	500.000	409.41
5 Vinyl Chloride	62	1.381	1.381	(0.287)	151362	50.0000	45.04
6 Bromomethane	94	1.625	1.625	(0.338)	96846	50.0000	55.92
7 Chloroethane	64	1.704	1.704	(0.354)	115159	50.0000	50.89
8 Trichlorofluoromethane	101	1.899	1.899	(0.394)	239666	50.0000	56.26
9 Acrolein	56	2.266	2.266	(0.471)	14247	100.000	81.52(M)
10 Acetone	43	2.409	2.409	(0.500)	105718	100.000	101.34
11 1,1-Dichloroethene	96	2.337	2.337	(0.485)	134389	50.0000	56.82
12 Isobutyl Alcohol	43	5.284	5.284	(1.097)	399397	1000.00	868.43
13 Acetonitrile	39	2.675	2.675	(0.556)	171782	500.000	520.50
14 Allyl Chloride	41	2.675	2.675	(0.556)	381960	50.0000	50.66
15 Iodomethane	142	2.472	2.472	(0.513)	346099	100.000	113.97
16 Acrylonitrile	53	3.065	3.065	(0.636)	114610	100.000	95.27
17 Methylene Chloride	84	2.798	2.798	(0.581)	170607	50.0000	57.19
18 Methyl tert-butyl ether	73	3.080	3.080	(0.640)	426741	50.0000	50.35
19 Carbon Disulfide	76	2.525	2.525	(0.524)	825016	100.000	118.38
20 trans-1,2-Dichloroethene	96	3.061	3.061	(0.636)	164198	50.0000	58.07

21 Vinyl Acetate	43	3.608	3.608 (0.749)	820776	100.000	95.99
22 1,1-Dichloroethane	63	3.514	3.514 (0.730)	285274	50.0000	49.46

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240117.b\U011702.D Page 2
Report Date: 22-Jan-2024 17:33

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	23 Chloroprene	53	2.161	2.161	(0.449)	53168	50.0000	50.82(M)
	24 2-Butanone	43	4.260	4.260	(0.885)	120338	100.000	80.11
	25 Methacrylonitrile	41	4.493	4.493	(0.933)	109988	50.0000	50.23(aM)
	26 2,2-Dichloropropane	77	4.185	4.185	(0.869)	228632	50.0000	56.39
	27 cis-1,2-Dichloroethene	96	4.197	4.197	(0.872)	190592	50.0000	50.32
	28 Chloroform	83	4.572	4.572	(0.949)	309697	50.0000	49.33
	29 Bromochloromethane	128	4.470	4.470	(0.928)	102776	50.0000	52.44
$	30 Dibromofluoromethane	113	4.748	4.748	(0.986)	169727	50.0000	54.16
	31 1,1,1-Trichloroethane	97	4.744	4.744	(0.985)	249926	50.0000	52.39
	32 1,1-Dichloropropene	75	4.924	4.924	(0.887)	214352	50.0000	54.99
	33 1,2-Dichloroethane	62	5.175	5.175	(0.932)	216791	50.0000	47.76
	34 Carbon Tetrachloride	117	4.913	4.913	(0.885)	223606	50.0000	58.73
$	35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	172623	50.0000	48.08
*	36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	465856	50.0000	
	37 Benzene	78	5.141	5.141	(0.926)	642367	50.0000	50.65
	38 Trichloroethene	130	5.786	5.786	(1.042)	191257	50.0000	54.71
	39 Bromodichloromethane	83	6.277	6.277	(1.130)	227645	50.0000	54.81
	40 Methyl Methacrylate	41	6.154	6.154	(1.278)	127415	50.0000	42.09
	41 2-Chloroethylvinyl ether	63	6.577	6.577	(1.184)	4201	100.000	104.33(M)
	42 1,2-Dichloropropane	63	6.007	6.007	(1.082)	168501	50.0000	49.35
	43 2-Nitropropane	43	6.506	6.506	(1.351)	33535	50.0000	42.59
	44 Dibromomethane	93	6.120	6.120	(1.102)	110346	50.0000	49.95
	45 4-Methyl-2-Pentanone	43	6.851	6.851	(0.837)	299165	100.000	87.60
	46 cis-1,3-Dichloropropene	75	6.690	6.690	(1.205)	279205	50.0000	52.10
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	473358	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	584257	50.0000	53.61
	49 Ethyl Methacrylate	69	7.289	7.289	(1.312)	220491	50.0000	48.22
	50 Toluene	91	6.978	6.978	(0.853)	714849	50.0000	54.16
	51 trans-1,3-Dichloropropene	75	7.196	7.196	(1.296)	235939	50.0000	52.28
	52 2-Hexanone	43	7.589	7.589	(0.927)	198455	100.000	83.07
	53 1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	134033	50.0000	53.18
	54 1,3-Dichloropropane	76	7.496	7.496	(0.916)	284760	50.0000	48.59
	55 Dibromochloromethane	129	7.691	7.691	(0.940)	196688	50.0000	55.87
	56 Tetrachloroethene	164	7.454	7.454	(0.911)	163468	50.0000	57.86
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	164471	50.0000	50.00
	58 1-Chlorohexane	55	8.197	8.197	(1.476)	142182	50.0000	54.42
	59 Chlorobenzene	112	8.208	8.208	(1.003)	509188	50.0000	52.95
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	184903	50.0000	54.97
	61 Ethylbenzene	106	8.305	8.305	(1.015)	243255	50.0000	54.04
	62 m,p-Xylenes	106	8.407	8.407	(1.027)	618413	100.000	114.28
	63 o-Xylene	106	8.744	8.744	(1.068)	309305	50.0000	55.57
	64 Styrene	104	8.759	8.759	(1.070)	537178	50.0000	57.98
	66 Bromoform	173	8.916	8.916	(1.089)	128316	50.0000	53.20
	67 Isopropylbenzene	105	9.059	9.059	(1.107)	775285	50.0000	57.60
	68 1,1,2,2-Tetrachloroethane	83	9.325	9.325	(0.917)	211832	50.0000	49.48
$	69 4-Bromofluorobenzene	95	9.190	9.190	(1.123)	214133	50.0000	51.94
*	70 1,4-Dichlorobenzene-d4	152	10.168	10.168	(1.000)	262624	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.921)	215823	50.0000	43.29
	72 trans-1,4-Dichloro-2-butene	53	9.377	9.377	(1.146)	40835	50.0000	47.93
	73 n-Propylbenzene	91	9.411	9.411	(0.926)	871510	50.0000	56.51
	74 Bromobenzene	156	9.314	9.314	(0.916)	221568	50.0000	50.23
	75 1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	630501	50.0000	57.52

76	2-Chlorotoluene	91	9.482	9.482 (0.933)	530007	50.0000	51.06
77	4-Chlorotoluene	91	9.572	9.572 (0.941)	619860	50.0000	52.65

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240117.b\U011702.D Page 3
Report Date: 22-Jan-2024 17:33

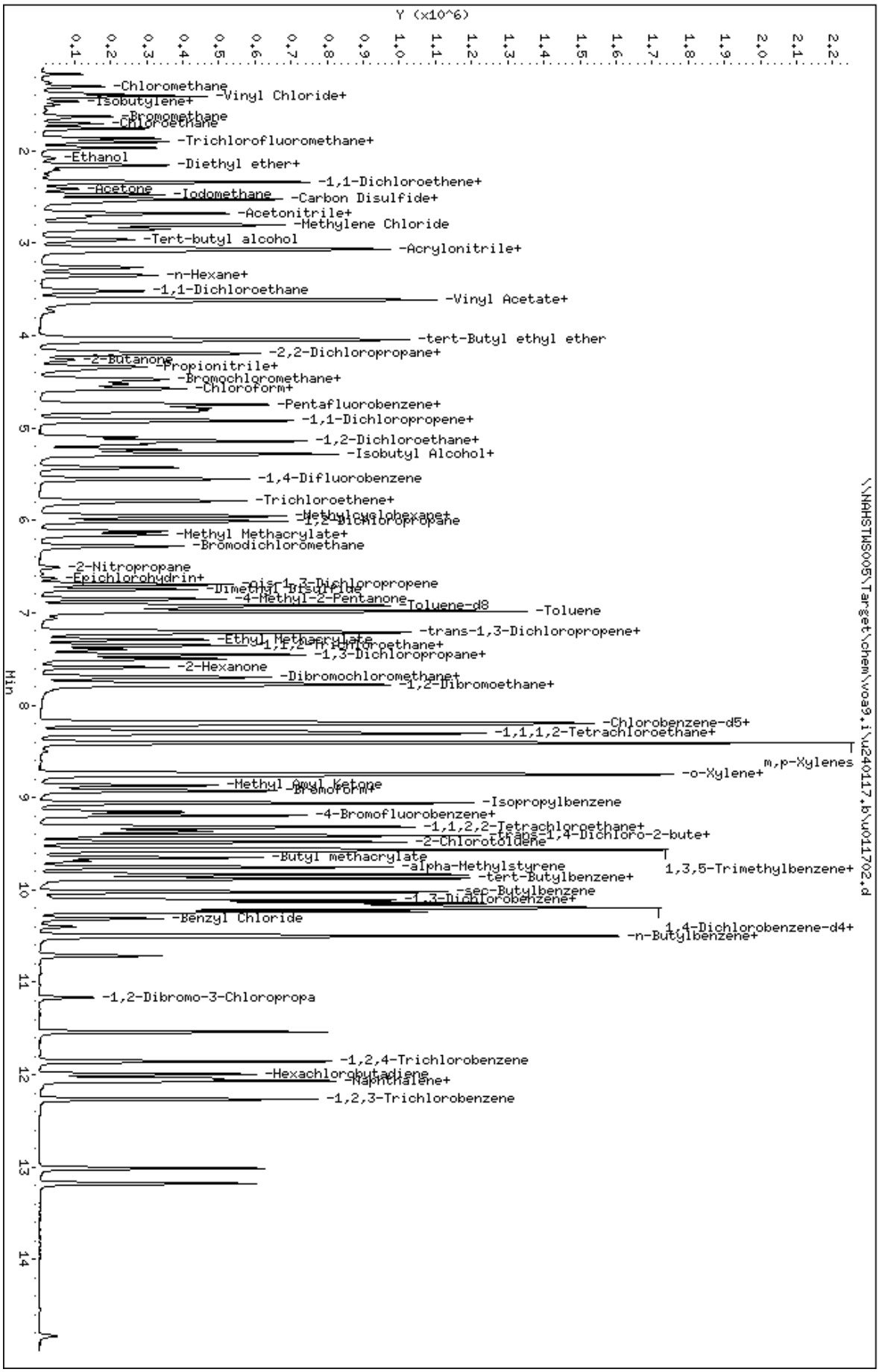
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
78	tert-Butylbenzene	119	9.835	9.835	(0.967)	549806	50.0000	55.84
79	1,2,4-Trimethylbenzene	105	9.876	9.876	(0.971)	628198	50.0000	57.18
81	sec-Butylbenzene	105	10.022	10.022	(0.986)	735105	50.0000	57.90
82	p-Isopropyltoluene	119	10.146	10.146	(0.998)	641321	50.0000	58.37(M)
83	1,3-Dichlorobenzene	146	10.112	10.112	(0.994)	406143	50.0000	51.96
84	1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	418968	50.0000	50.60
86	Benzyl Chloride	91	10.311	10.311	(1.260)	228194	50.0000	53.76
87	n-Butylbenzene	91	10.491	10.491	(1.032)	548404	50.0000	59.48
88	1,2-Dichlorobenzene	146	10.502	10.502	(1.033)	395015	50.0000	50.24
89	1,2-Dibromo-3-Chloropropane	155	11.166	11.166	(1.098)	35260	50.0000	46.06
90	1,2,4-Trichlorobenzene	180	11.855	11.855	(1.166)	263474	50.0000	54.31
91	Hexachlorobutadiene	225	11.998	11.998	(1.180)	118011	50.0000	60.69(M)
92	Naphthalene	128	12.065	12.065	(1.187)	593046	50.0000	50.69
93	1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	244949	50.0000	50.07
146	Methyl acetate	43	2.712	2.712	(0.563)	137626	50.0000	45.09
138	Freon TF	101	2.341	2.341	(0.486)	149532	50.0000	65.58
141	Cyclohexane	56	4.785	4.785	(0.994)	211099	50.0000	47.77
142	Tetrahydrofuran	42	4.538	4.538	(0.942)	53487	100.000	82.17(M)
147	Methylcyclohexane	55	5.947	5.947	(1.071)	353151	50.0000	51.14
135	1,4-Dioxane	88	6.165	6.165	(1.280)	41345	1000.00	849.79(M)
132	n-Butanol	56	5.816	5.816	(1.208)	83246	1000.00	835.27
136	n-Hexane	57	3.346	3.346	(0.695)	165730	50.0000	58.14
139	Diethyl ether	59	2.146	2.146	(0.446)	120983	50.0000	48.38
148	Tert-butyl alcohol	59	2.960	2.960	(0.615)	304949	1000.00	888.31
149	Isopropyl alcohol	45	2.559	2.559	(0.531)	190370	1000.00	980.77
152	Amyl alcohol	42	7.394	7.394	(0.903)	84317	1000.00	803.06
156	Diisopropyl ether	45	3.619	3.619	(0.752)	480090	50.0000	44.94
162	Butyl acrylate	55	8.733	8.733	(1.067)	272421	50.0000	40.19(M)
187	n-Amyl acetate	43	8.931	8.931	(1.091)	251372	50.0000	41.89
164	Dicyclopentadiene	66	10.198	10.198	(1.003)	666058	50.0000	47.57
166	1,2,3-Trimethylbenzene	105	10.232	10.232	(1.006)	547761	50.0000	50.54
167	Ethanol	45	2.079	2.079	(0.432)	36781	1000.00	956.82
172	tert-Butyl formate	59	5.235	5.235	(1.087)	200646	100.000	86.01
173	3,3-Dimethyl-1-butanol	57	7.777	7.777	(0.950)	298995	1000.00	765.62
174	tert-Amyl methyl ether	73	5.284	5.284	(1.097)	441284	50.0000	46.39
175	tert-Butyl ethyl ether	59	4.051	4.051	(0.841)	443165	50.0000	46.53
176	tert-Amyl alcohol	59	5.235	5.235	(1.087)	200646	1000.00	861.53
151	4-Methyl-2-pentanol	45	7.214	7.214	(1.299)	552728	1000.00	744.68
140	1,3-Butadiene	54	1.408	1.408	(0.292)	131245	50.0000	42.61
158	Dichlorofluoromethane	67	1.861	1.861	(0.387)	261533	50.0000	55.95
182	Epichlorohydrin	57	6.630	6.630	(1.194)	30947	200.000	171.00
M 94	1,2-Dichloroethylene (total)	96				354790	100.000	(a)
145	alpha-Methylstyrene	118	9.752	9.752	(0.959)	285139	50.0000	53.45
130	Ethyl Acetate	43	4.339	4.339	(0.901)	152648	50.0000	40.97
131	Methyl Acrylate	55	4.369	4.369	(0.907)	169262	50.0000	42.02
189	n-Butyl acetate	43	7.702	7.702	(0.941)	234826	50.0000	44.53
134	Cyclohexanone	55	9.153	9.153	(0.900)	155506	1000.00	894.94
185	Isoprene	39	2.161	2.161	(0.449)	42553	50.0000	59.60
188	Isopropyl acetate	43	5.284	5.284	(0.951)	399397	50.0000	46.47
150	Allyl alcohol	57	3.346	3.346	(0.695)	165730	1000.00	1162.81
194	Acetaldehyde	44	1.464	1.464	(0.304)	71503	200.000	179.97(M)
195	Methyl Amyl Ketone	43	8.868	8.868	(1.083)	259243	50.0000	35.41

200 Dimethyl Disulfide	94	6.746	6.746 (0.824)	217161	50.0000	51.71
202 Isobutylene	41	1.501	1.501 (0.312)	15957	50.0000	53.36(M)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
203 2-Ethylhexyl Acrylate	55	12.039	12.039	(1.184)	158035	50.0000	41.21
133 Ethyl Acrylate	55	5.947	5.947	(1.235)	353151	50.0000	47.91
163 Butyl methacrylate	41	9.647	9.647	(0.949)	144897	50.0000	40.64

QC Flag Legend

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



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Client ID: CCV
Sample Info: CCV;CCV;2;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File : \\nahstws005\target\chem\voa9.i\u240117.b\u011702.d
Inj Date : 17-JAN-2024 07:36
InstruID : VOA9.i
LabSampID : CCV

Acrolein (107-02-8)

Reason Code:

BEFORE

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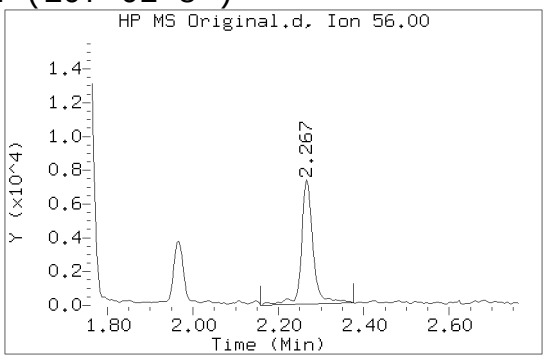
AREA
14247
HEIGHT
7387
22-Jan-2024
17:33
linh
pham



AFTER

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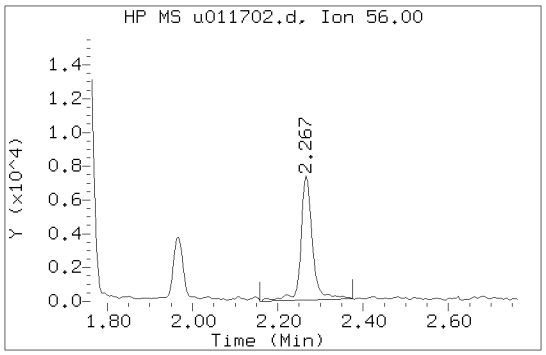

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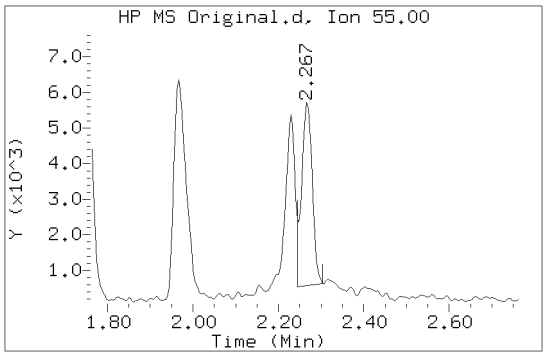

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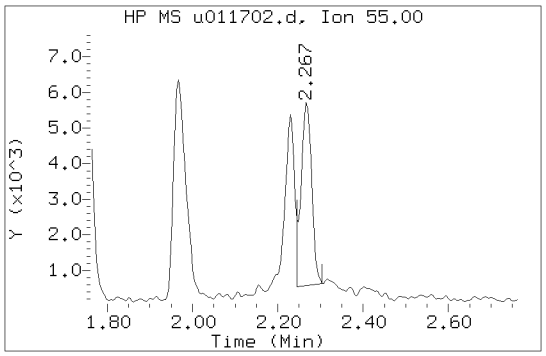

2-Chloroethylvinyl ether (110-75-8)

Reason Code:

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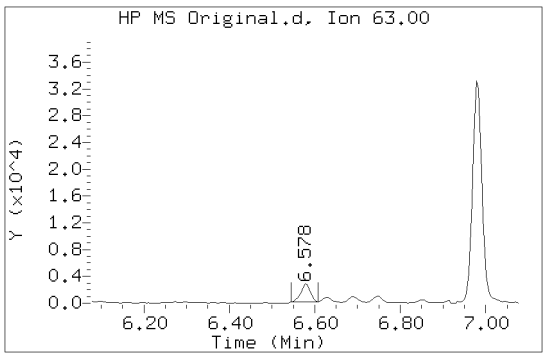

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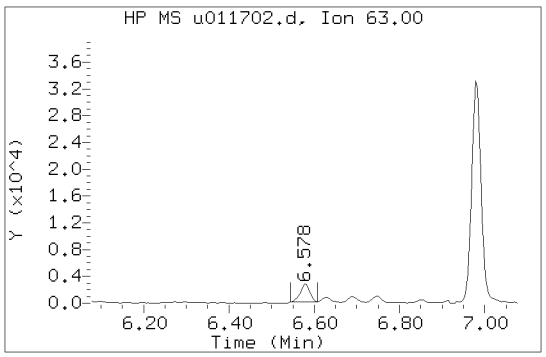

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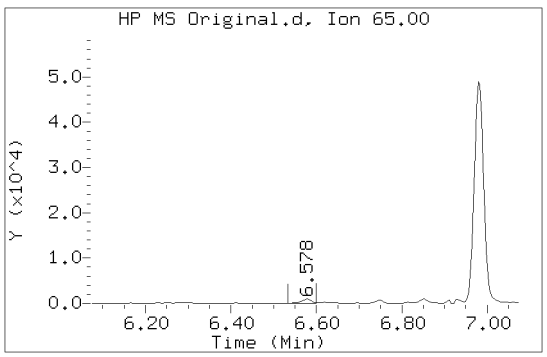

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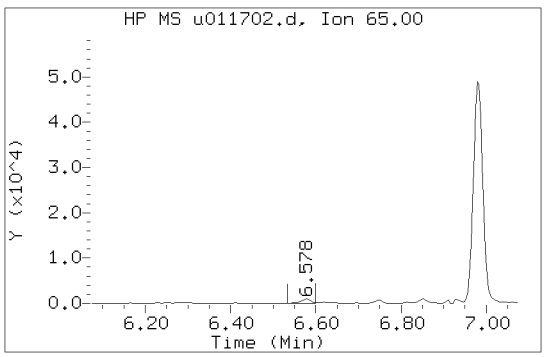

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InstruID : VOA9.i
LabSampID : CCV

2-Chloroethylvinyl ether (110-75-8)

Reason Code:

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17:33
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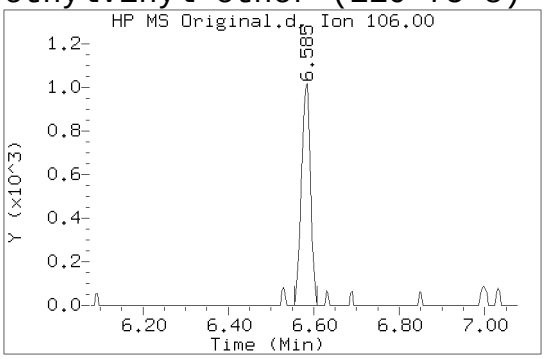

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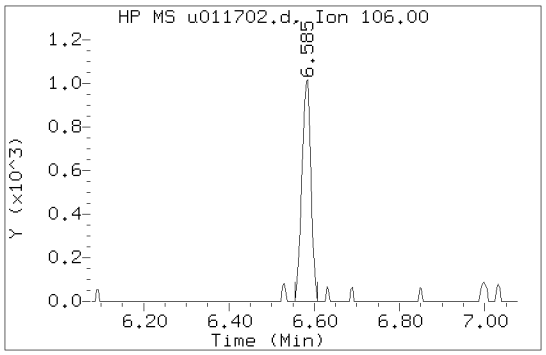

Methacrylonitrile (126-98-7)

Reason Code:

BEFORE

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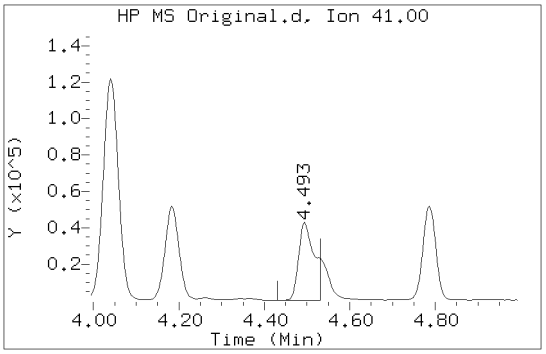

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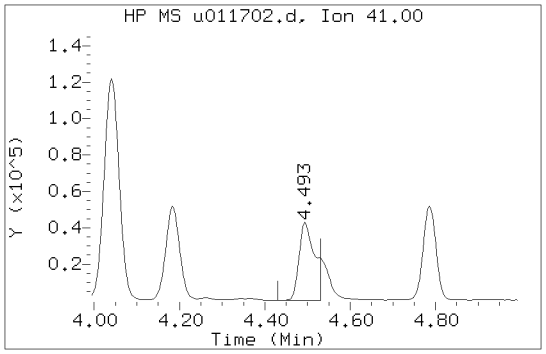

BEFORE

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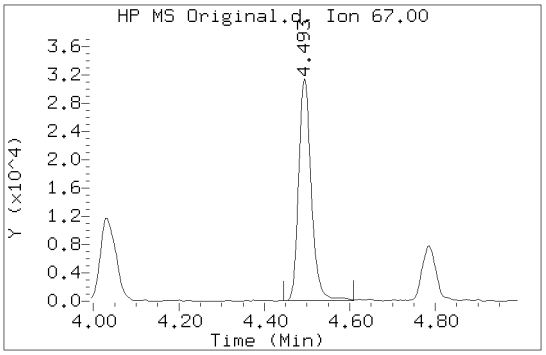

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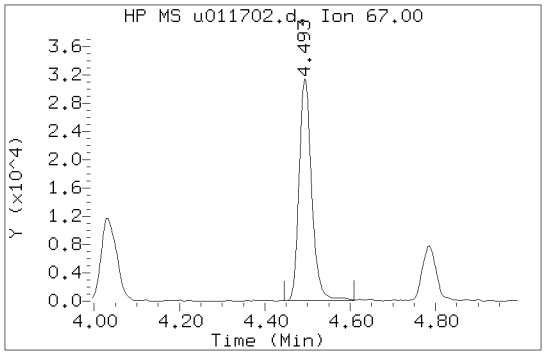

BEFORE

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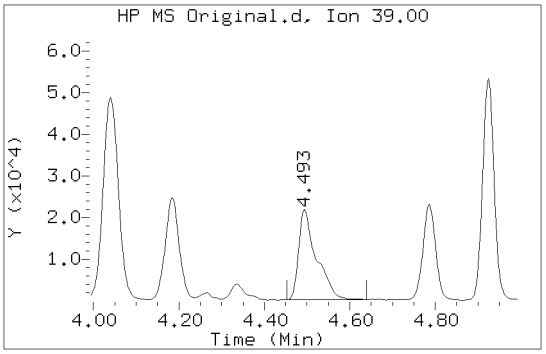

AFTER

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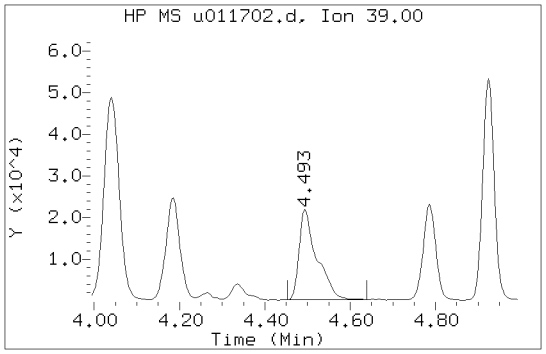

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Inj Date : 17-JAN-2024 07:36
InstruID : VOA9.i
LabSampID : CCV

p-Isopropyltoluene (99-87-6)

Reason Code:

BEFORE

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HEIGHT
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22-Jan-2024
17:33
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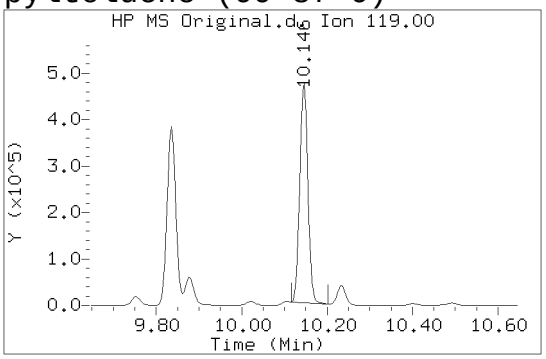

AFTER

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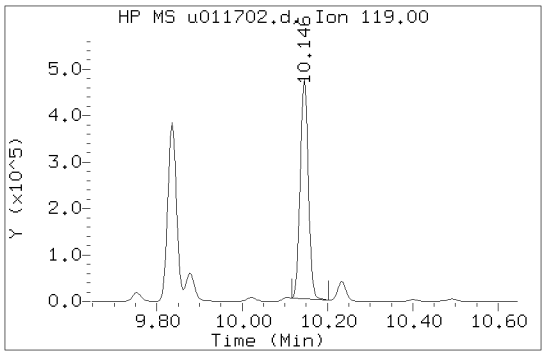

BEFORE

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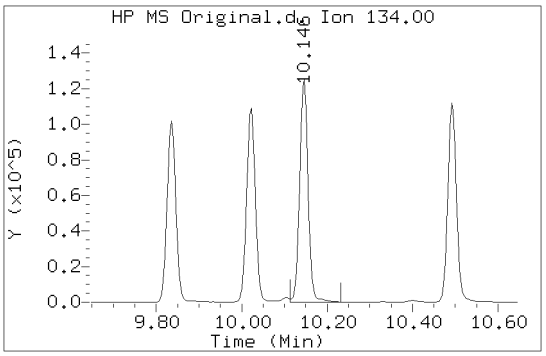

AFTER

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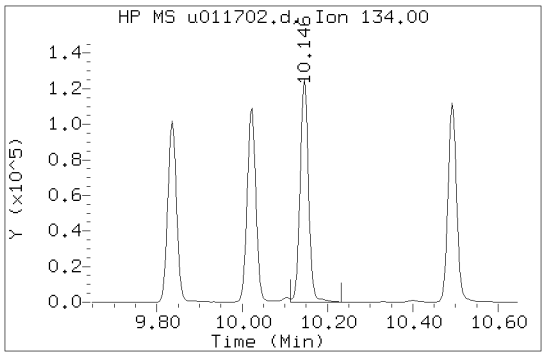

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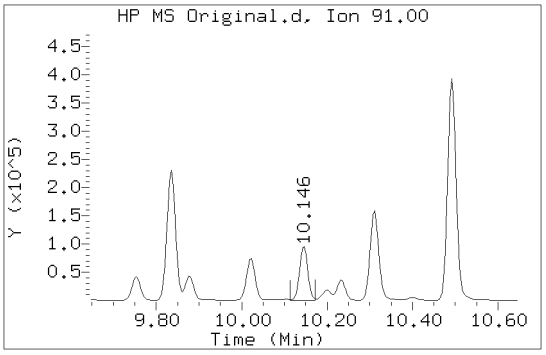

AFTER

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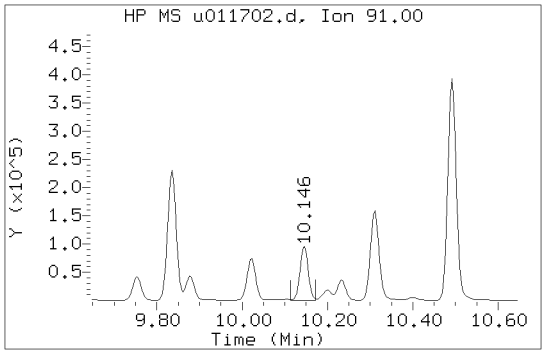

Hexachlorobutadiene (87-68-3)

Reason Code:

BEFORE

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22-Jan-2024
17:33
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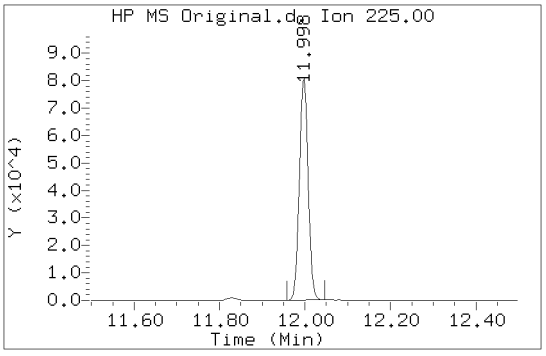

AFTER

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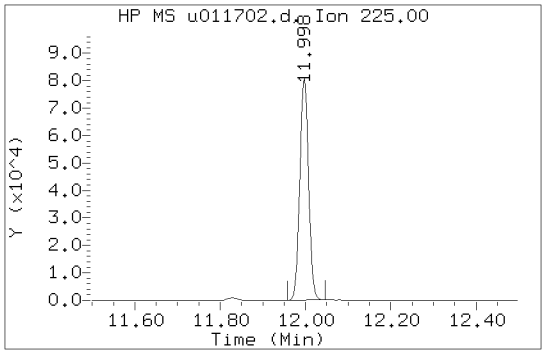

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Inj Date : 17-JAN-2024 07:36
InstruID : VOA9.i
LabSampID : CCV

Hexachlorobutadiene (87-68-3)

BEFORE

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17:33
linh
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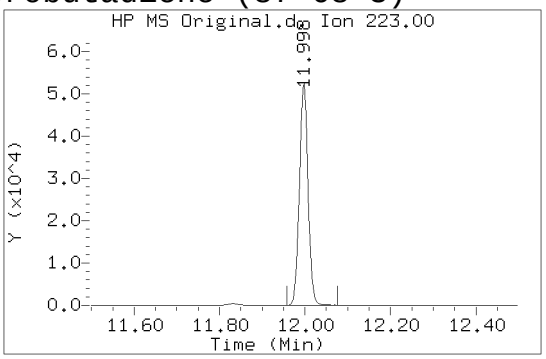

Reason Code:

AFTER

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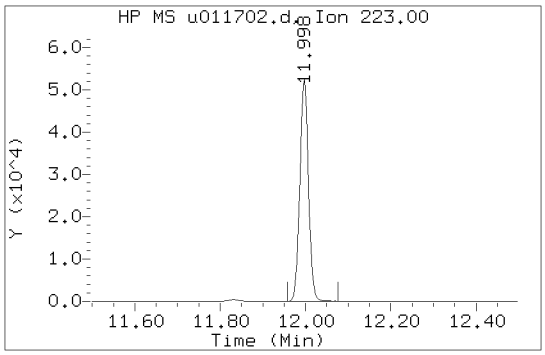
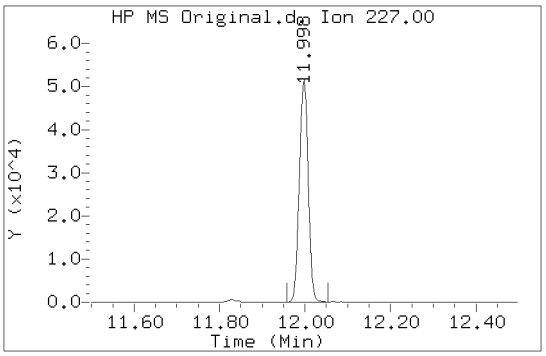


BEFORE

MASS
227
AREA
76304
HEIGHT
51528
22-Jan-2024
17:33
linh
pham



AFTER

MASS
227
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76304
HEIGHT
51528
22-Jan-2024
17:33
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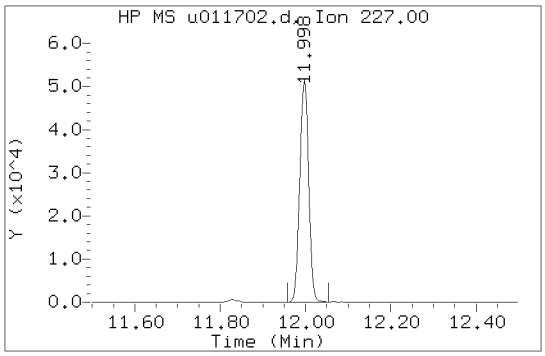

Chloroprene (126-99-8)

Reason Code:

BEFORE

MASS
53
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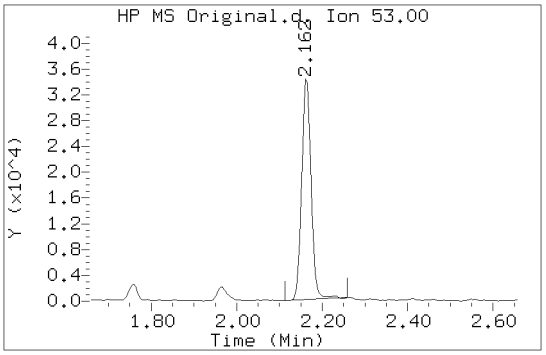
22-Jan-2024
17:33
linh
pham



AFTER

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22-Jan-2024
17:33
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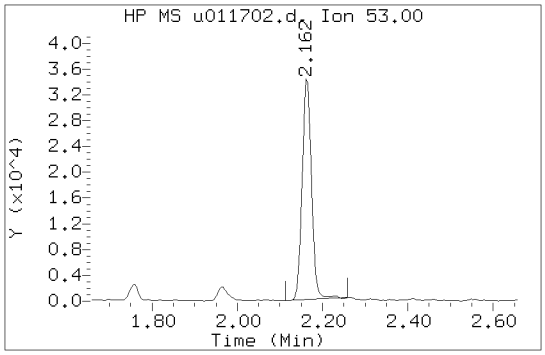

BEFORE

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22-Jan-2024
17:33
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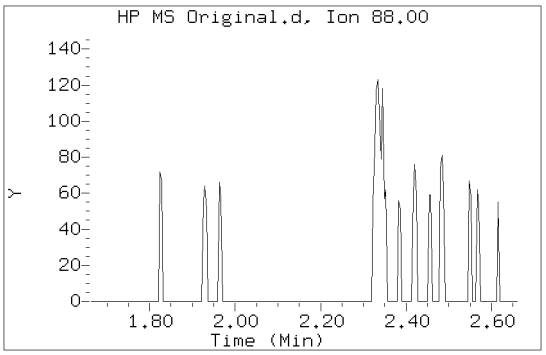

AFTER

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AREA
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17:33
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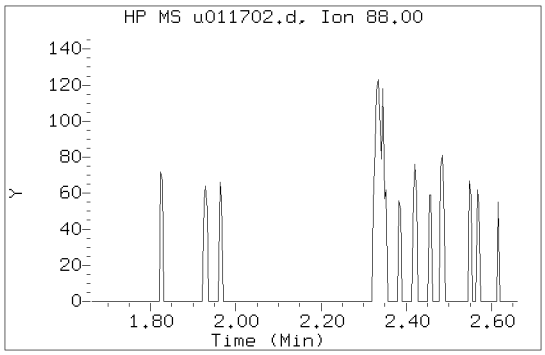

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Inj Date : 17-JAN-2024 07:36
InstruID : VOA9.i
LabSampID : CCV

1,4-Dioxane ()

Reason Code:

BEFORE

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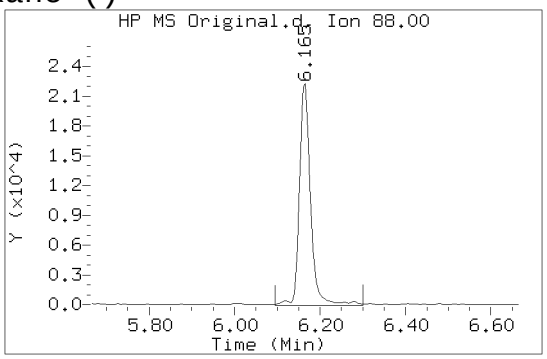
41345
HEIGHT
22307
22-Jan-2024
17:33
linh
pham



AFTER

MASS
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41345
HEIGHT
22307
22-Jan-2024
17:33
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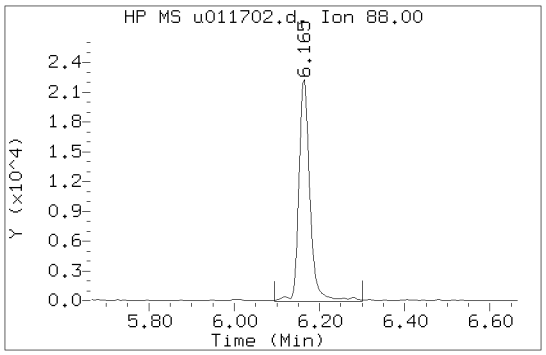
pham



BEFORE

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15433
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17:33
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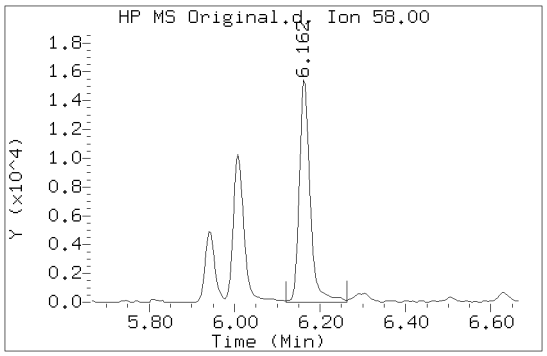

AFTER

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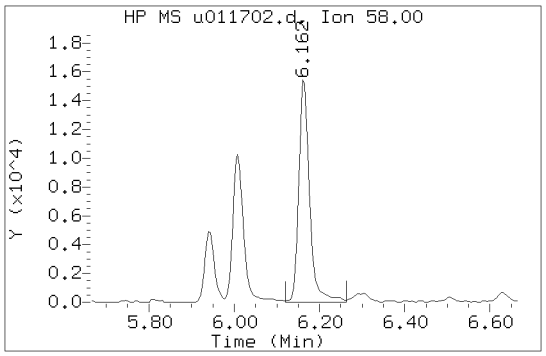

Tetrahydrofuran (109-99-9)

Reason Code:

BEFORE

MASS
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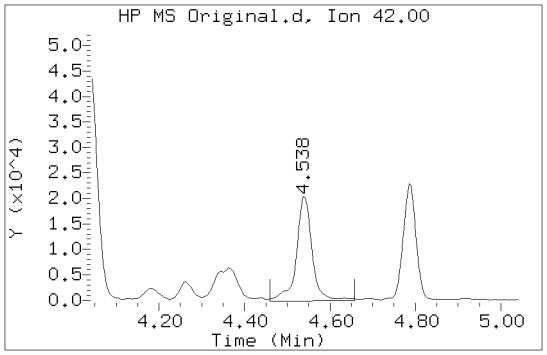
AREA
53487
HEIGHT
20481
22-Jan-2024
17:33
linh
pham



AFTER

MASS
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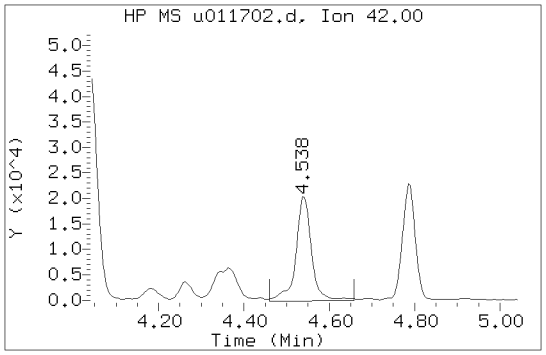
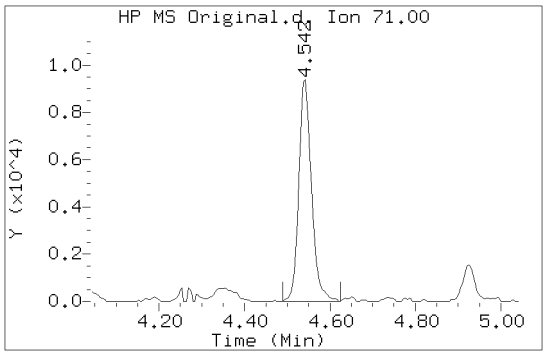
HEIGHT
20481
22-Jan-2024
17:33
linh
pham



BEFORE

MASS
71
AREA
19716
HEIGHT
9385
22-Jan-2024
17:33
linh
pham



AFTER

MASS
71
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19716
HEIGHT
9385
22-Jan-2024
17:33
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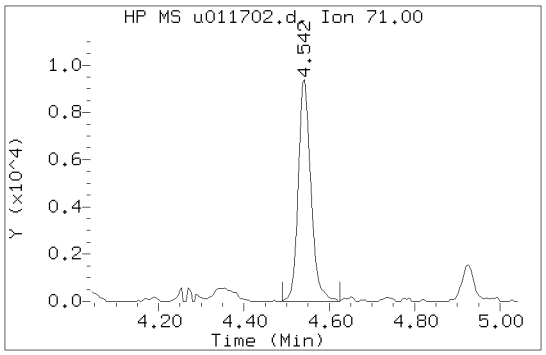
pham



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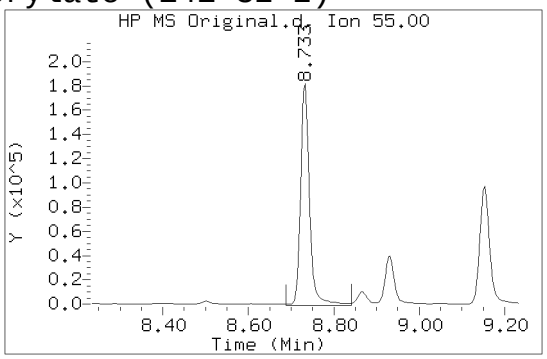
Inj Date : 17-JAN-2024 07:36
InstruID : VOA9.i
LabSampID : CCV

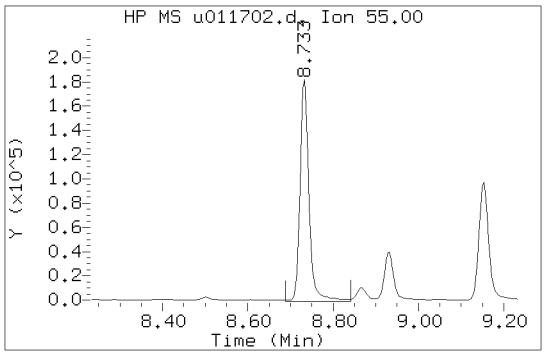
Butyl acrylate (141-32-2)

Reason Code:

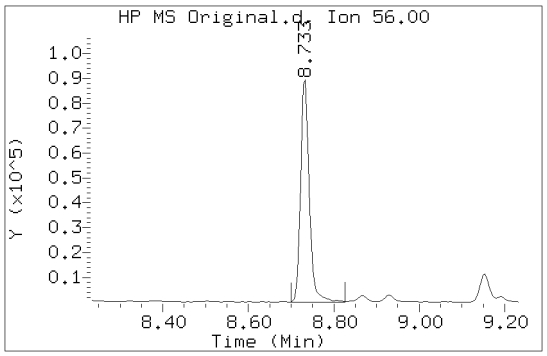
BEFORE
MASS
55
AREA
272421
HEIGHT
182620
22-Jan-2024
17:33
linh
pham



AFTER
MASS
55
AREA
272421
HEIGHT
182620
22-Jan-2024
17:33
linh
pham



BEFORE
MASS
56
AREA
129233
HEIGHT
89200
22-Jan-2024
17:33
linh
pham



AFTER
MASS
56
AREA
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HEIGHT
89200
22-Jan-2024
17:33
linh
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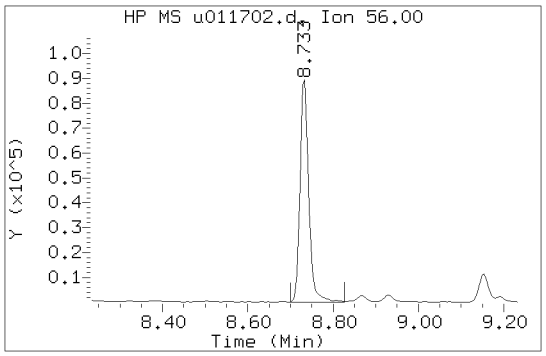

BEFORE
MASS
73
AREA
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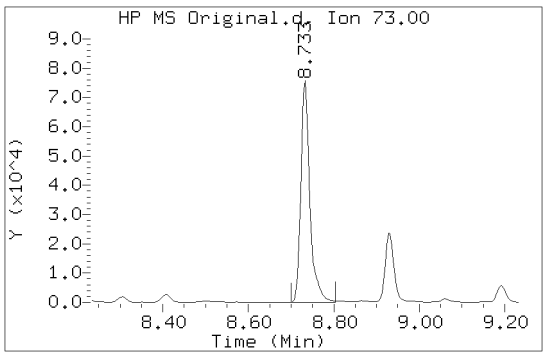
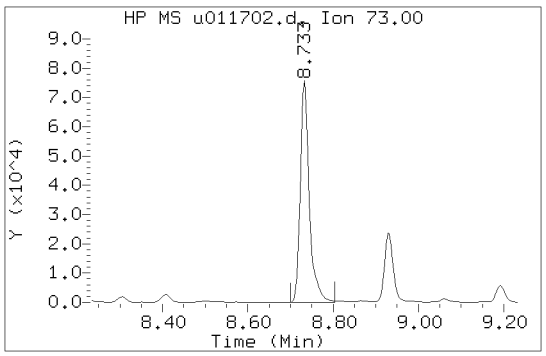
HEIGHT
75641
22-Jan-2024
17:33
linh
pham



AFTER
MASS
73
AREA
113092
HEIGHT
75641
22-Jan-2024
17:33
linh
pham



Acetaldehyde (75-07-0)

Reason Code:

BEFORE
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44
AREA
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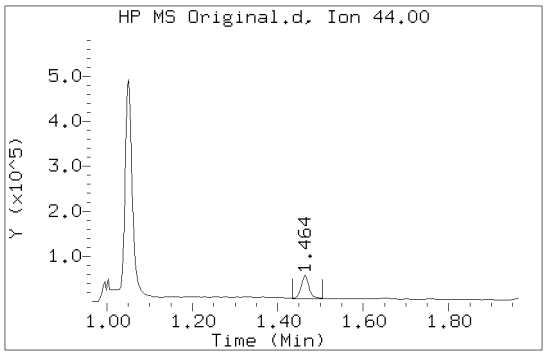
HEIGHT
52525
22-Jan-2024
17:33
linh
pham



AFTER
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17:33
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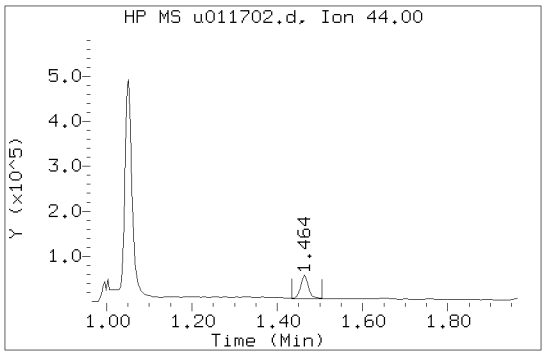

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Inj Date : 17-JAN-2024 07:36
InstruID : VOA9.i
LabSampID : CCV

Acetaldehyde (75-07-0)

Reason Code:

BEFORE

MASS
43
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38618
HEIGHT
29010
22-Jan-2024
17:33
linh
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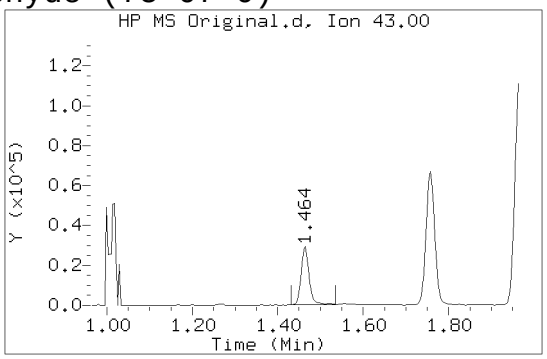

AFTER

MASS
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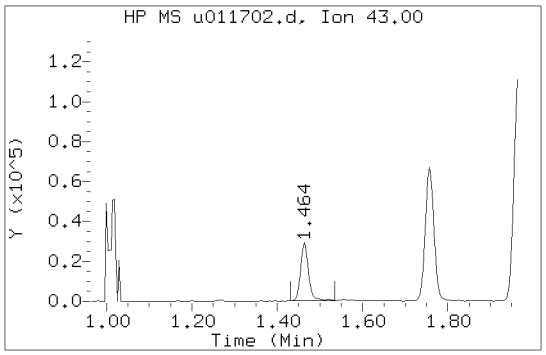

BEFORE

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AREA
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22-Jan-2024
17:33
linh
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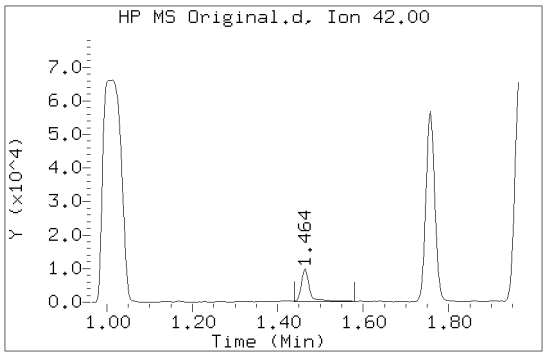

AFTER

MASS
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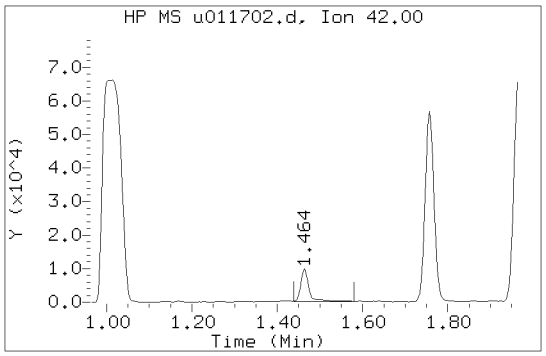
22-Jan-2024
17:33
linh
pham



Isobutylene (115-11-7)

Reason Code:

BEFORE

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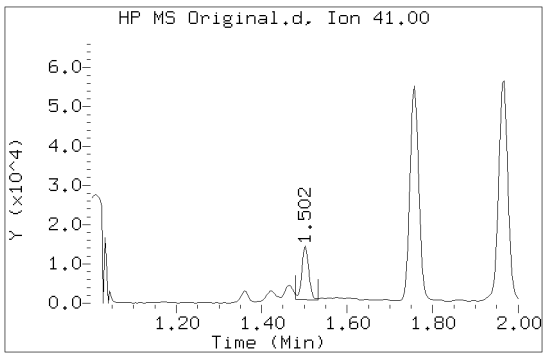
22-Jan-2024
17:33
linh
pham



AFTER

MASS
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AREA
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HEIGHT
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22-Jan-2024
17:33
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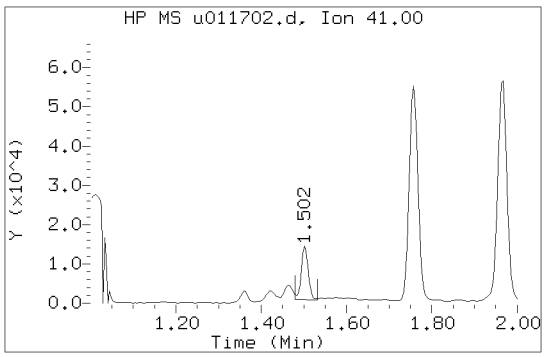

BEFORE

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HEIGHT
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22-Jan-2024
17:33
linh
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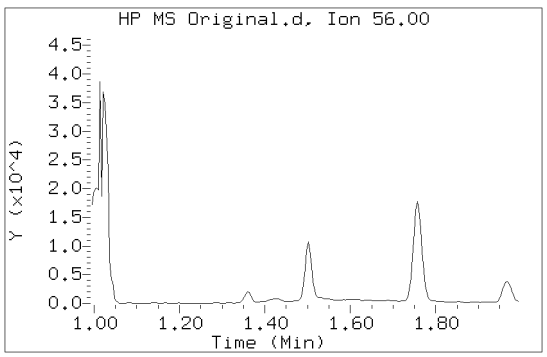

AFTER

MASS
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HEIGHT
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22-Jan-2024
17:33
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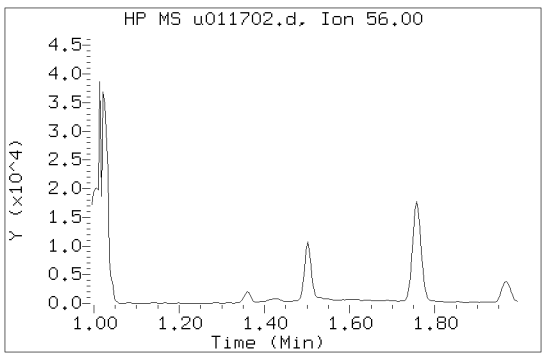

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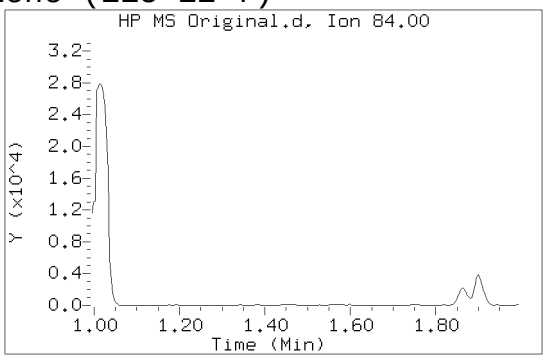
Inj Date : 17-JAN-2024 07:36
InstruID : VOA9.i
LabSampID : CCV

Isobutylene (115-11-7)

Reason Code:

BEFORE

MASS
84
AREA
0
HEIGHT
0
22-Jan-2024
17:33
linh
pham



AFTER

MASS
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HEIGHT
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22-Jan-2024
17:33
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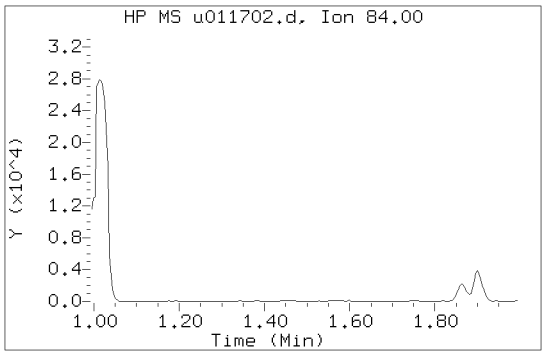

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240117.b\U011703.D Page 1
Report Date: 22-Jan-2024 17:33

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240117.b\U011703.D
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Inj Date : 17-JAN-2024 07:58
Operator : FT Inst ID: VOA9.i
Smp Info : VLCSW-240117;VLCSW-240117;3;;LCS
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240117.b\8260C.m
Meth Date : 22-Jan-2024 17:33 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 3 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1	Pentafluorobenzene	168	4.815	4.815	(1.000)	322070	50.0000	
2	Dichlorodifluoromethane	85	1.164	1.168	(0.242)	26048	10.7271	10.72
3	Chloromethane	50	1.299	1.303	(0.270)	50114	13.5643	13.56
4	Propionitrile	54	4.332	4.335	(0.900)	96917	181.491	181.49(a)
5	Vinyl Chloride	62	1.378	1.381	(0.286)	60768	17.2175	17.21
6	Bromomethane	94	1.621	1.625	(0.337)	42495	23.7189	23.71
7	Chloroethane	64	1.700	1.704	(0.353)	46424	19.5356	19.53
8	Trichlorofluoromethane	101	1.895	1.899	(0.394)	96005	21.4594	21.45
9	Acrolein	56	2.262	2.266	(0.470)	5556	30.2713	30.27
10	Acetone	43	2.405	2.409	(0.499)	41734	34.2913	34.29
11	1,1-Dichloroethene	96	2.333	2.337	(0.485)	54108	21.7821	21.78
12	Isobutyl Alcohol	43	5.284	5.284	(1.097)	163579	338.652	338.65(a)
13	Acetonitrile	39	2.671	2.675	(0.555)	77798	224.444	224.44(a)
14	Allyl Chloride	41	2.671	2.675	(0.555)	175584	22.1734	22.17(a)
15	Iodomethane	142	2.468	2.472	(0.513)	113329	38.6868	38.68
16	Acrylonitrile	53	3.064	3.065	(0.636)	51600	40.8432	40.84
17	Methylene Chloride	84	2.795	2.798	(0.580)	68800	21.7986	21.79
18	Methyl tert-butyl ether	73	3.076	3.080	(0.639)	198179	22.2650	22.26
19	Carbon Disulfide	76	2.521	2.525	(0.524)	328646	44.9005	44.90
20	trans-1,2-Dichloroethene	96	3.057	3.061	(0.635)	64148	21.6020	21.60

21 Vinyl Acetate	43	3.604	3.608 (0.749)	334600	37.2620	37.26
22 1,1-Dichloroethane	63	3.514	3.514 (0.730)	114481	18.9006	18.90

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240117.b\U011703.D Page 2
Report Date: 22-Jan-2024 17:33

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	23 Chloroprene	53	2.157	2.161	(0.448)	21293	19.3816	19.38(M)
	24 2-Butanone	43	4.264	4.260	(0.886)	48035	30.4466	30.44
	25 Methacrylonitrile	41	4.493	4.493	(0.933)	38428	16.7104	16.71(aM)
	26 2,2-Dichloropropane	77	4.182	4.185	(0.868)	86866	20.3995	20.39
	27 cis-1,2-Dichloroethene	96	4.197	4.197	(0.872)	75775	19.0487	19.04
	28 Chloroform	83	4.571	4.572	(0.949)	122315	18.5525	18.55
	29 Bromochloromethane	128	4.466	4.470	(0.928)	41228	20.0302	20.03
$	30 Dibromofluoromethane	113	4.748	4.748	(0.986)	173481	52.6865	52.68
	31 1,1,1-Trichloroethane	97	4.740	4.744	(0.984)	97382	19.4365	19.43
	32 1,1-Dichloropropene	75	4.920	4.924	(0.887)	85065	20.6389	20.63
	33 1,2-Dichloroethane	62	5.175	5.175	(0.932)	86144	17.9463	17.94
	34 Carbon Tetrachloride	117	4.909	4.913	(0.885)	85502	21.2373	21.23
$	35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	179741	47.6903	47.69
*	36 1,4-Difluorobenzene	114	5.550	5.554	(1.000)	492661	50.0000	
	37 Benzene	78	5.137	5.141	(0.926)	257292	19.1847	19.18
	38 Trichloroethene	130	5.786	5.786	(1.043)	75279	20.3657	20.36
	39 Bromodichloromethane	83	6.277	6.277	(1.131)	87441	19.9099	19.90
	40 Methyl Methacrylate	41	6.153	6.154	(1.278)	53837	16.9353	16.93(a)
	42 1,2-Dichloropropane	63	6.007	6.007	(1.082)	68938	19.0924	19.09
	43 2-Nitropropane	43	6.506	6.506	(1.351)	13489	16.3141	16.31
	44 Dibromomethane	93	6.120	6.120	(1.103)	44341	18.9808	18.98
	45 4-Methyl-2-Pentanone	43	6.851	6.851	(0.837)	115860	32.6918	32.69
	46 cis-1,3-Dichloropropene	75	6.689	6.690	(1.205)	103171	19.1700	19.17
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	487887	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	614136	54.6808	54.68
	49 Ethyl Methacrylate	69	7.289	7.289	(1.313)	96103	19.8748	19.87(a)
	50 Toluene	91	6.978	6.978	(0.853)	282726	20.7832	20.78
	51 trans-1,3-Dichloropropene	75	7.196	7.196	(1.297)	84743	18.9300	18.92
	52 2-Hexanone	43	7.589	7.589	(0.927)	78970	32.0740	32.07
	53 1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	54132	20.0236	20.02
	54 1,3-Dichloropropane	76	7.495	7.496	(0.916)	112641	18.6482	18.64
	55 Dibromochloromethane	129	7.690	7.691	(0.940)	73441	20.2400	20.23
	56 Tetrachloroethene	164	7.454	7.454	(0.911)	66726	22.9154	22.91
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	64830	19.1250	19.12
	58 1-Chlorohexane	55	8.196	8.197	(1.477)	58784	21.2786	21.27
	59 Chlorobenzene	112	8.208	8.208	(1.003)	201947	20.3786	20.37
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	70118	20.2277	20.22
	61 Ethylbenzene	106	8.305	8.305	(1.015)	96500	20.8021	20.80
	62 m,p-Xylenes	106	8.406	8.407	(1.027)	238940	42.8412	42.84
	63 o-Xylene	106	8.747	8.744	(1.069)	120734	21.0489	21.04
	64 Styrene	104	8.759	8.759	(1.070)	202835	21.2410	21.24
	66 Bromoform	173	8.916	8.916	(1.089)	46459	19.3864	19.38
	67 Isopropylbenzene	105	9.062	9.059	(1.107)	301513	21.7351	21.73
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.325	(0.917)	84812	18.6421	18.64
$	69 4-Bromofluorobenzene	95	9.190	9.190	(1.123)	220890	51.9936	51.99
*	70 1,4-Dichlorobenzene-d4	152	10.168	10.168	(1.000)	273131	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.921)	81928	15.8013	15.80
	72 trans-1,4-Dichloro-2-butene	53	9.377	9.377	(1.146)	15030	17.1184	17.11(a)
	73 n-Propylbenzene	91	9.411	9.411	(0.926)	335626	20.9268	20.92
	74 Bromobenzene	156	9.317	9.314	(0.916)	86543	18.8684	18.86
	75 1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	240968	21.1395	21.13
	76 2-Chlorotoluene	91	9.482	9.482	(0.933)	208872	19.3494	19.34

77	4-Chlorotoluene	91	9.576	9.572 (0.942)	237648	19.4119	19.41
78	tert-Butylbenzene	119	9.835	9.835 (0.967)	215826	21.0797	21.07

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Report Date: 22-Jan-2024 17:33

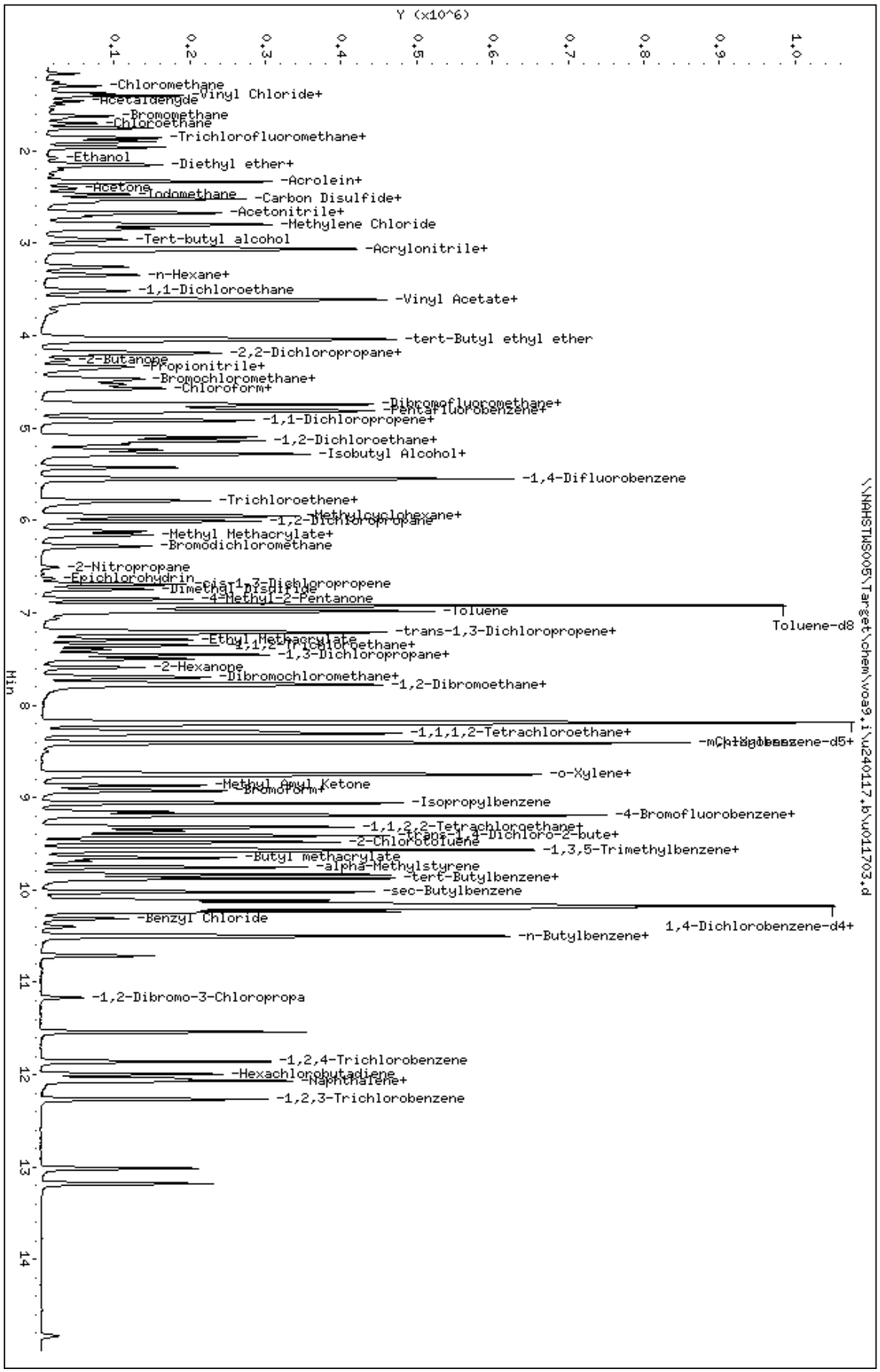
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
79	1,2,4-Trimethylbenzene	105	9.876	9.876	(0.971)	250519	21.9289	21.92
81	sec-Butylbenzene	105	10.022	10.022	(0.986)	283840	21.4990	21.49
82	p-Isopropyltoluene	119	10.146	10.146	(0.998)	251041	21.9717	21.97
83	1,3-Dichlorobenzene	146	10.116	10.112	(0.995)	156510	19.2561	19.25
84	1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	168659	19.5865	19.58
86	Benzyl Chloride	91	10.311	10.311	(1.260)	77368	19.6497	19.64
87	n-Butylbenzene	91	10.491	10.491	(1.032)	211639	22.0723	22.07
88	1,2-Dichlorobenzene	146	10.506	10.502	(1.033)	156729	19.1671	19.16
89	1,2-Dibromo-3-Chloropropane	155	11.165	11.166	(1.098)	13117	17.8394	17.83
90	1,2,4-Trichlorobenzene	180	11.859	11.855	(1.166)	101402	20.1011	20.10
91	Hexachlorobutadiene	225	11.998	11.998	(1.180)	46216	22.8551	22.85
92	Naphthalene	128	12.065	12.065	(1.187)	241127	19.8195	19.81
93	1,2,3-Trichlorobenzene	180	12.267	12.268	(1.206)	98823	19.4262	19.42
146	Methyl acetate	43	2.712	2.712	(0.563)	56632	17.6677	17.66
138	Freon TF	101	2.337	2.341	(0.485)	61352	26.1963	26.19
141	Cyclohexane	56	4.781	4.785	(0.993)	87478	18.8500	18.84
142	Tetrahydrofuran	42	4.541	4.538	(0.943)	23862	34.9044	34.90
147	Methylcyclohexane	55	5.947	5.947	(1.072)	162823	22.2979	22.29
135	1,4-Dioxane	88	6.165	6.165	(1.280)	14629	286.287	286.28
132	n-Butanol	56	5.820	5.816	(1.209)	32789	313.247	313.24(a)
136	n-Hexane	57	3.342	3.346	(0.694)	67315	22.4847	22.48
139	Diethyl ether	59	2.142	2.146	(0.445)	55137	20.9955	20.99
148	Tert-butyl alcohol	59	2.959	2.960	(0.615)	130641	362.336	362.33
149	Isopropyl alcohol	45	2.555	2.559	(0.531)	77743	376.772	376.77
152	Amyl alcohol	42	7.398	7.394	(0.904)	34155	315.617	315.61
156	Diisopropyl ether	45	3.619	3.619	(0.752)	217403	19.3764	19.37
162	Butyl acrylate	55	8.732	8.733	(1.067)	106147	17.2211	17.22
187	n-Amyl acetate	43	8.931	8.931	(1.091)	96926	15.6740	15.67
164	Dicyclopentadiene	66	10.198	10.198	(1.003)	316940	21.7677	21.76
166	1,2,3-Trimethylbenzene	105	10.232	10.232	(1.006)	251314	22.2966	22.29
167	Ethanol	45	2.075	2.079	(0.431)	14649	361.729	361.72
172	tert-Butyl formate	59	5.239	5.235	(1.088)	81319	35.5730	35.57
173	3,3-Dimethyl-1-butanol	57	7.780	7.777	(0.951)	148669	369.355	369.35
174	tert-Amyl methyl ether	73	5.284	5.284	(1.097)	206873	20.7070	20.70
175	tert-Butyl ethyl ether	59	4.047	4.051	(0.840)	202959	20.2912	20.29
176	tert-Amyl alcohol	59	5.239	5.235	(1.088)	81319	357.464	357.46
151	4-Methyl-2-pentanol	45	7.214	7.214	(1.300)	262128	359.221	359.22
140	1,3-Butadiene	54	1.400	1.408	(0.291)	50959	15.7539	15.75
158	Dichlorofluoromethane	67	1.857	1.861	(0.386)	122486	24.9520	24.95
182	Epichlorohydrin	57	6.633	6.630	(1.195)	13243	69.1959	69.19
M 94	1,2-Dichloroethylene (total)	96				139923	40.2801	40.28
M 95	Xylenes (total)	106				359674	63.0942	63.09
145	alpha-Methylstyrene	118	9.752	9.752	(0.959)	105162	19.9844	19.98
130	Ethyl Acetate	43	4.339	4.339	(0.901)	61755	15.7845	15.78
131	Methyl Acrylate	55	4.365	4.369	(0.907)	76497	18.0825	18.08
189	n-Butyl acetate	43	7.705	7.702	(0.941)	90152	16.5888	16.58
134	Cyclohexanone	55	9.152	9.153	(0.900)	69272	383.327	383.32(a)
185	Isoprene	39	2.157	2.161	(0.448)	19873	26.5033	26.50
188	Isopropyl acetate	43	5.284	5.284	(0.952)	165955	18.2594	18.25
150	Allyl alcohol	57	3.342	3.346	(0.694)	67315	449.694	449.69
194	Acetaldehyde	44	1.460	1.464	(0.303)	31377	70.4178	70.41(M)
195	Methyl Amyl Ketone	43	8.867	8.868	(1.083)	117506	16.7187	16.71

200 Dimethyl Disulfide	94	6.746	6.746 (0.824)	76520	20.2459	20.24
203 2-Ethylhexyl Acrylate	55	12.039	12.039 (1.184)	65226	17.8845	17.88

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
133 Ethyl Acrylate	55	5.947	5.947	(1.235)	162823	21.0324	21.03
163 Butyl methacrylate	41	9.647	9.647	(0.949)	62716	18.4948	18.49

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.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0.9
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Min
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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+
-Bromochloromethane+
-Chloroform+
-Dibromofluoromethane+
-Pentafluorobenzene+
-1,1-Dichloropropene+
-1,2-Dichloroethane+
-Isobutyl Alcohol+
-1,4-Difluorobenzene
-Trichloroethene+
-Methylcyclohexane+
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-Methyl Methacrylate+
-Bromodichloromethane
-2-Nitropropane
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-Dimethyl Disulfide
-4-Methyl-2-Pentanone
-Toluene
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-Ethyl Methacrylate
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-2-Hexanone
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-1,2-Dibromoethane+
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-Chlorobenzene-d5+
-o-Xylene+
-Methyl Amyl Ketone
-Bromoform+
-Isopropylbenzene
-4-Bromofluorobenzene+
-1,1,2,2-Tetrachloroethane+
-trans-1,4-Dichloro-2-bute+
-2-Chlorotoluene
-1,3,5-Trimethylbenzene+
-Butyl methacrylate
-alpha-Methylstyrene
-tert-Butylbenzene+
-sec-Butylbenzene
-Benzyl Chloride
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-n-Butylbenzene+
-1,2-Dibromo-3-Chloropropa
-1,2,4-Trichlorobenzene
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Methacrylonitrile (126-98-7)

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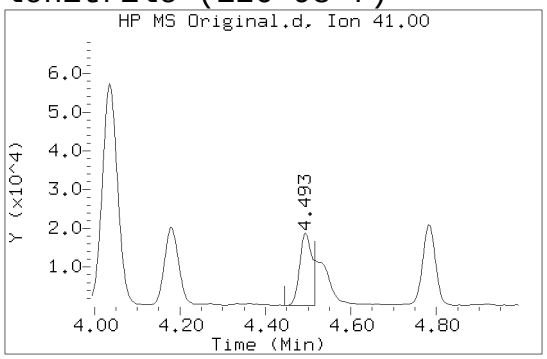

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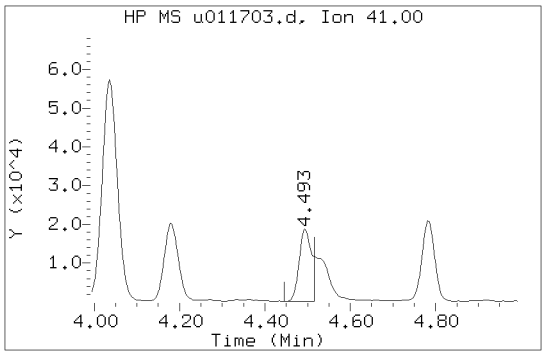

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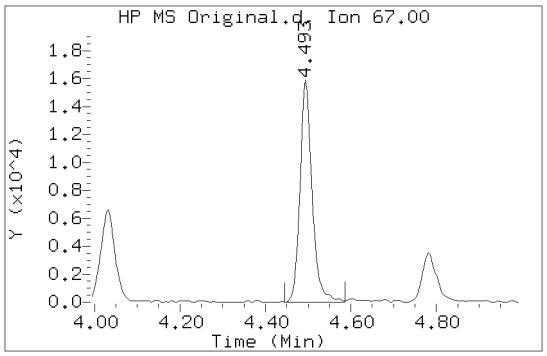

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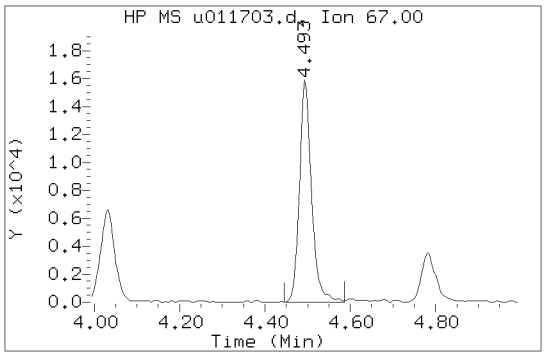

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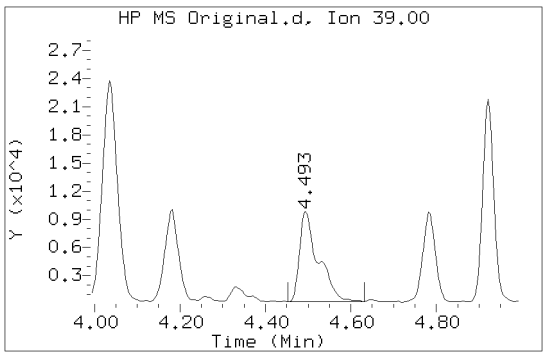

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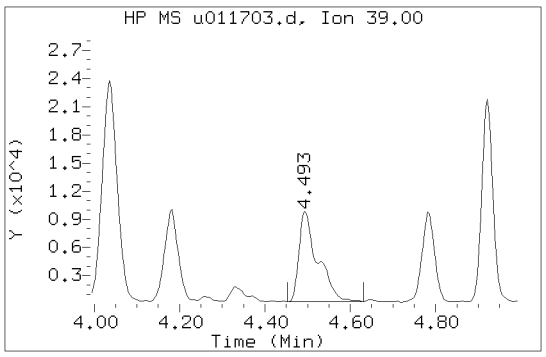

Chloroprene (126-99-8)

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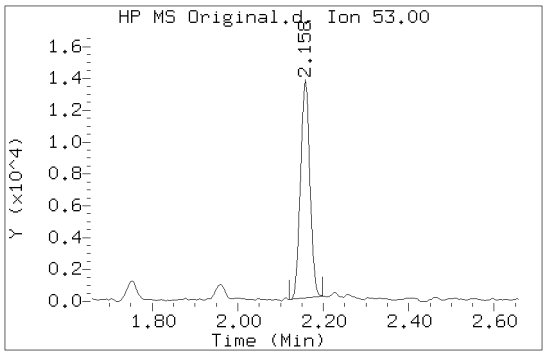

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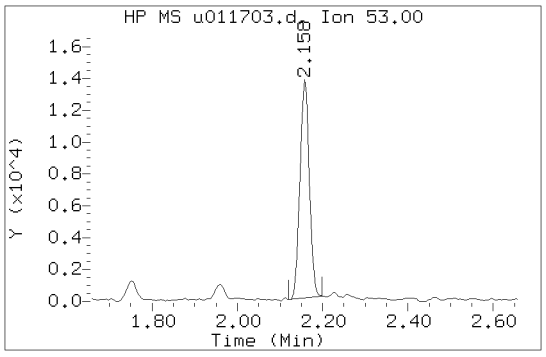

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Chloroprene (126-99-8)

Reason Code:

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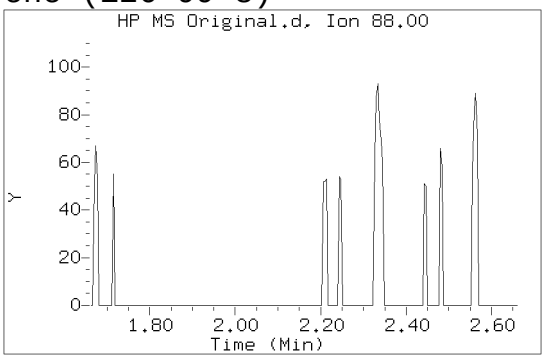

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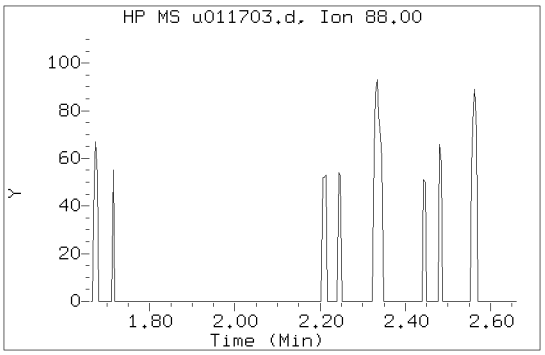

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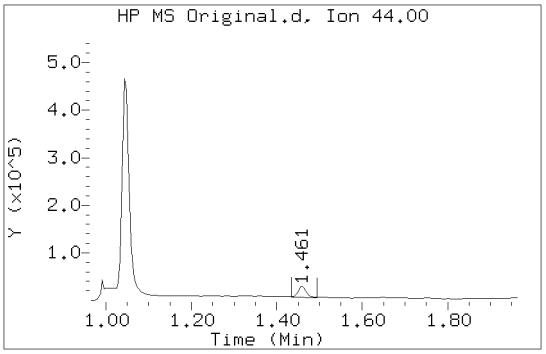

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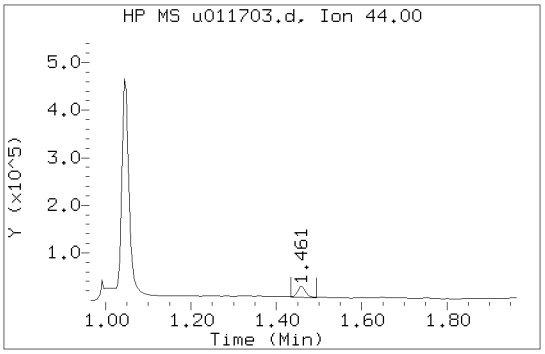

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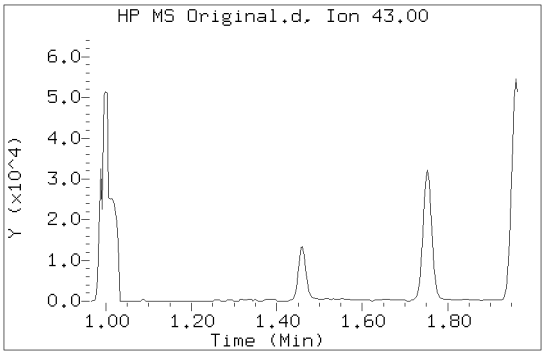

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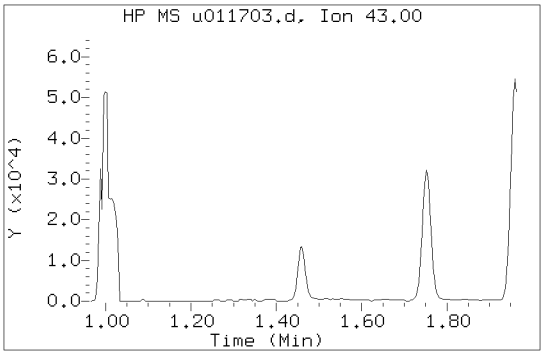

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HEIGHT
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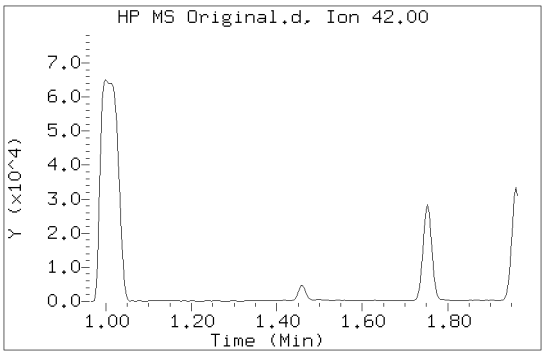
22-Jan-2024
17:33
linh
pham



AFTER

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HEIGHT
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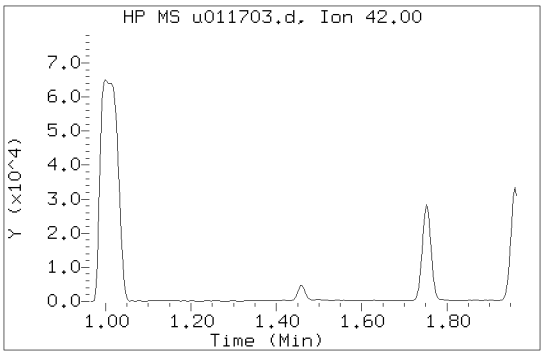
22-Jan-2024
17:33
linh
pham



Data File: \\NAHSTWS005\Target\chem\voa9.i\U240117.b\U011705.D Page 1
Report Date: 22-Jan-2024 17:33

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240117.b\U011705.D
Lab Smp Id: VBLKW-240117 Client Smp ID: VBLKW-240117
Inj Date : 17-JAN-2024 08:42
Operator : FT Inst ID: VOA9.i
Smp Info : VBLKW-240117;VBLKW-240117;3;;BLANK
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240117.b\8260C.m
Meth Date : 22-Jan-2024 17:33 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 5 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7056

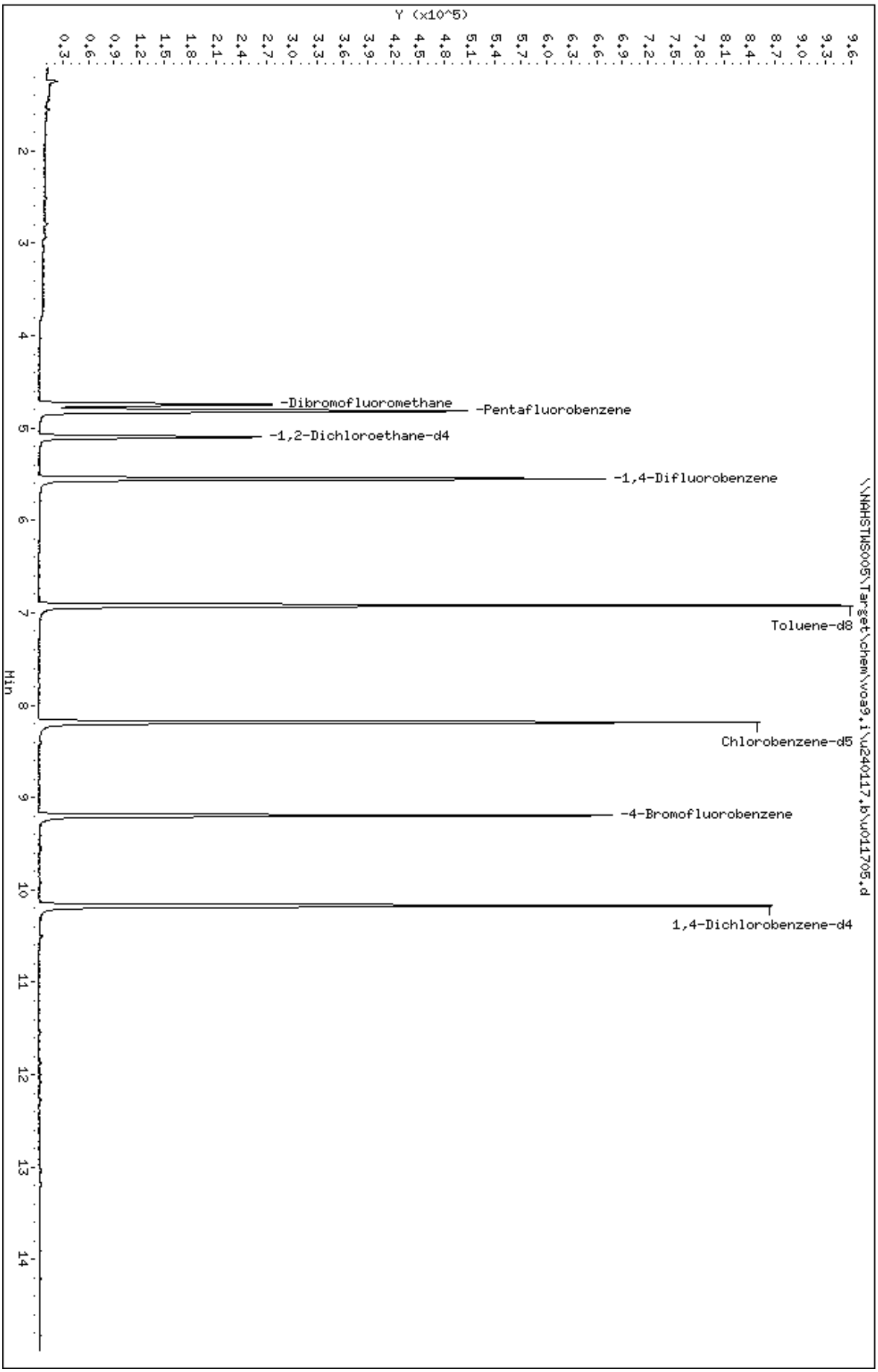
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.815	4.815	(1.000)	382509	50.0000	
$ 30 Dibromofluoromethane	113	4.744	4.748	(0.985)	166690	42.4287	42.42
$ 35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	183180	41.2229	41.22(M)
* 36 1,4-Difluorobenzene	114	5.550	5.554	(1.000)	534494	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	486876	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	593417	52.9457	52.94
$ 69 4-Bromofluorobenzene	95	9.194	9.190	(1.123)	206056	48.5181	48.51
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	249463	50.0000	

QC Flag Legend

M - Compound response manually integrated.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Date : 17-JAN-2024 08:42
Client ID: VBLKW-240117
Sample Info: VBLKW-240117;VBLKW-240117;3;;BLANK
Purge Volume: 5.0
Column phase: DB624
Instrument: VOA9.i
Operator: FT
Column diameter: 0.18
Page 1
Y (x10^5)
-Dibromofluoromethane
-Pentafluorobenzene
-1,2-Dichloroethane-d4
-1,4-Difluorobenzene
Toluene-d8
Chlorobenzene-d5
-4-Bromofluorobenzene
1,4-Dichlorobenzene-d4
\\NAHSTWS005\Target\chem\voa9,i\u240117,b\u011705.d
Min

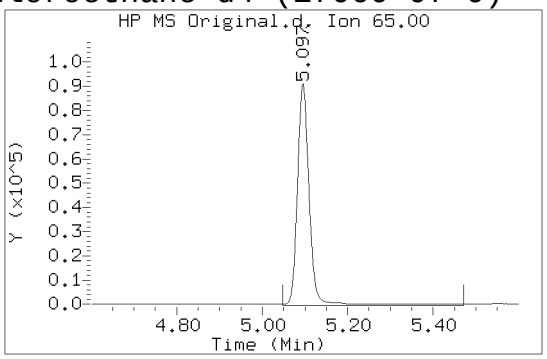
Data File : \\nahstws005\target\chem\voa9.i\u240117.b\u011705.d
Inj Date : 17-JAN-2024 08:42
InstruID : VOA9.i
LabSampID : VBLKW-240117

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

Reason Code:

BEFORE

MASS
65
AREA
183180
HEIGHT
91450
22-Jan-2024
17:33
linh
pham



AFTER

MASS
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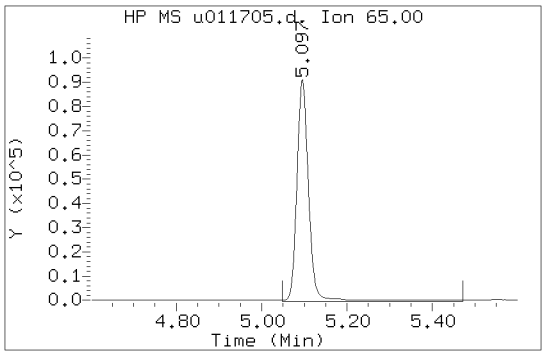
AREA
183180
HEIGHT
91450
22-Jan-2024
17:33
linh
pham



BEFORE

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AREA
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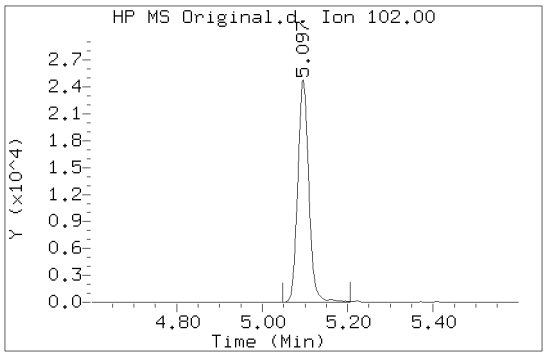
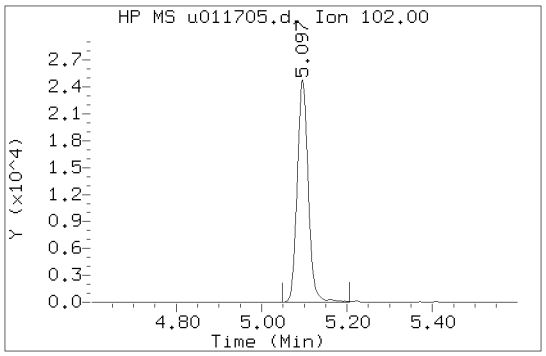
22-Jan-2024
17:33
linh
pham



AFTER

MASS
102
AREA
45585
HEIGHT
24784
22-Jan-2024
17:33
linh
pham



Data File: \\NAHSTWS005\Target\chem\voa9.i\U240117.b\U011713.D Page 1
Report Date: 22-Jan-2024 17:34

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240117.b\U011713.D
Lab Smp Id: HS24010611-01
Inj Date : 17-JAN-2024 11:41
Operator : FT   Inst ID: VOA9.i
Smp Info : HS24010611-01
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240117.b\8260C.m
Meth Date : 22-Jan-2024 17:33 VOA9.i   Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11   Cal File: U120608.D
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7056

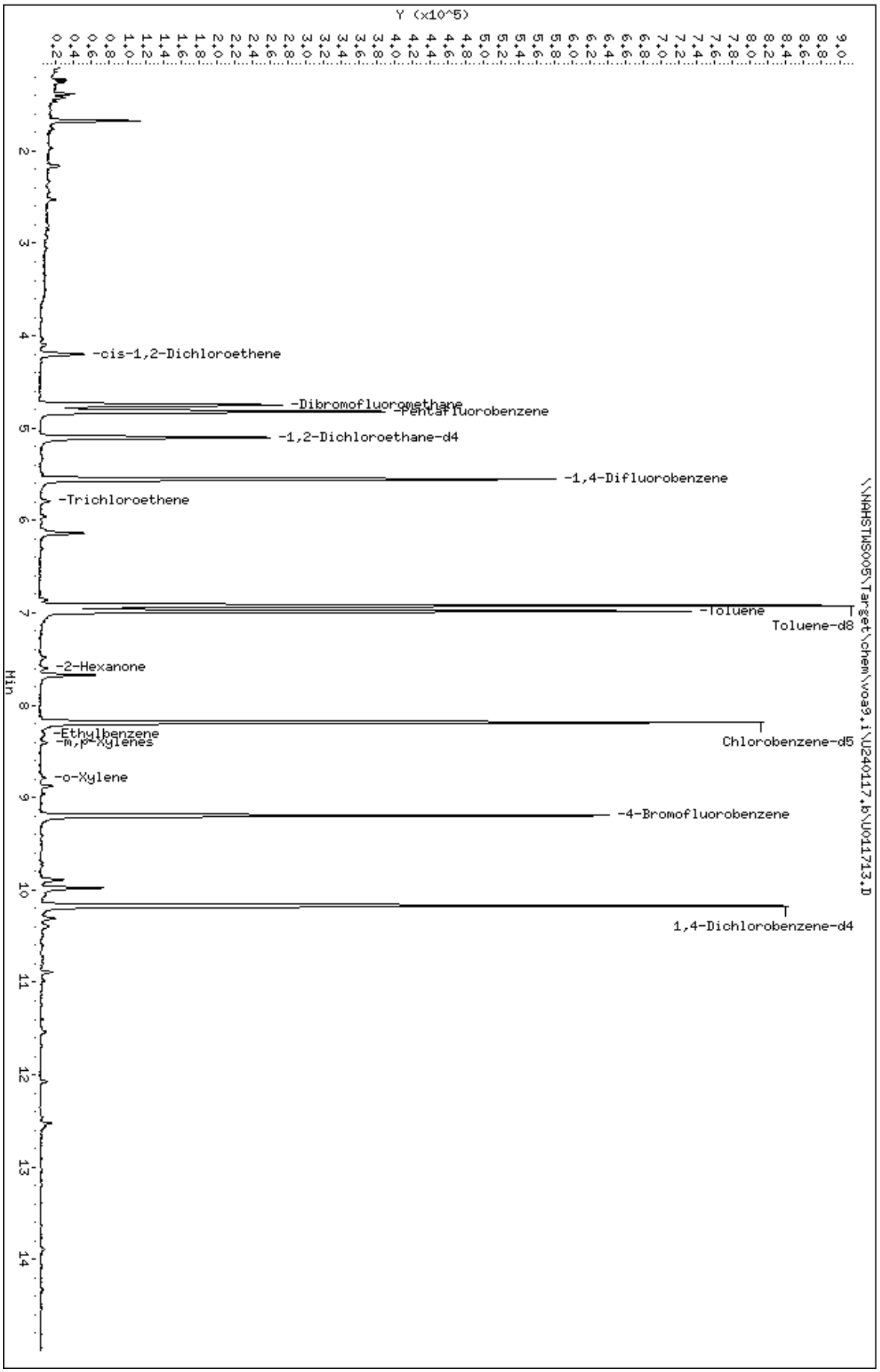
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
*	1 Pentafluorobenzene	168	4.819	4.815	(1.000)	288483	50.0000	
	27 cis-1,2-Dichloroethene	96	4.200	4.197	(0.872)	26119	7.33036	7.33
$	30 Dibromofluoromethane	113	4.751	4.748	(0.986)	164022	55.6705	55.67
$	35 1,2-Dichloroethane-d4	65	5.100	5.096	(1.058)	167528	49.5160	49.51
*	36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	465399	50.0000	
	38 Trichloroethene	130	5.794	5.786	(1.043)	3421	0.97972	0.97(a)
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	460000	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	570273	53.8535	53.85
	50 Toluene	91	6.982	6.978	(0.853)	499175	38.9190	38.91
	52 2-Hexanone	43	7.600	7.589	(0.929)	5795	2.49635	2.49(a)
	61 Ethylbenzene	106	8.305	8.305	(1.015)	890	0.20348	0.20(a)
	62 m,p-Xylenes	106	8.410	8.407	(1.027)	1916	0.36436	0.36(a)
	63 o-Xylene	106	8.748	8.744	(1.069)	766	0.14164	0.14(a)
$	69 4-Bromofluorobenzene	95	9.194	9.190	(1.123)	194784	48.5443	48.54
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	237667	50.0000	
M	94 1,2-Dichloroethylene (total)	96				26119	8.39437	8.39(a)
M	95 Xylenes (total)	106				2682	0.49804	0.49(a)

QC Flag Legend

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



Data File: \\NAHSTMS005\Target\chem\voa9.i\U240117.b\U011713.D
Date : 17-JAN-2024 11:41
Client ID:
Sample Info: HS24010611-01
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240117.b\U011713.D Page 2

Date : 17-JAN-2024 11:41

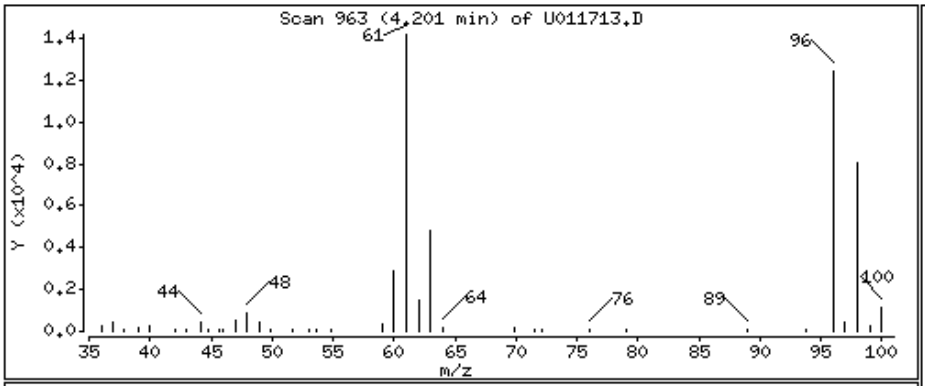
Client ID: Instrument: VOA9.i

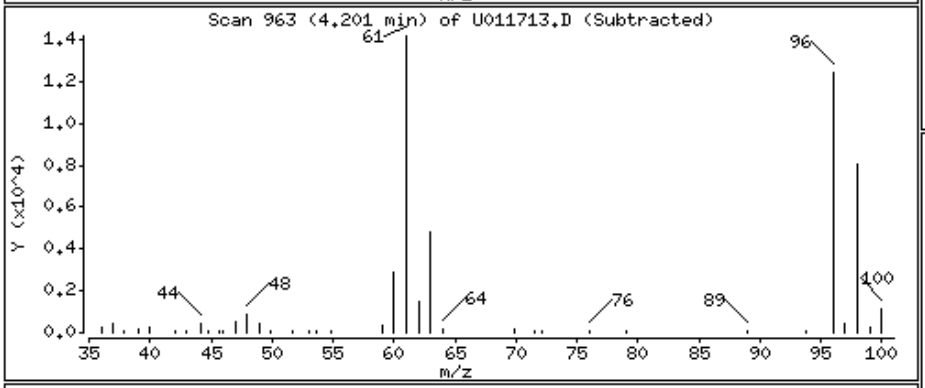
Sample Info: HS24010611-01

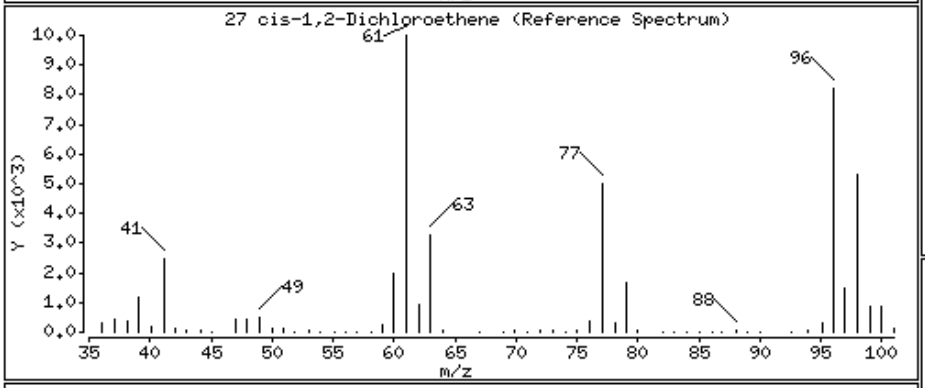
Purge Volume: 5.0 Operator: FT

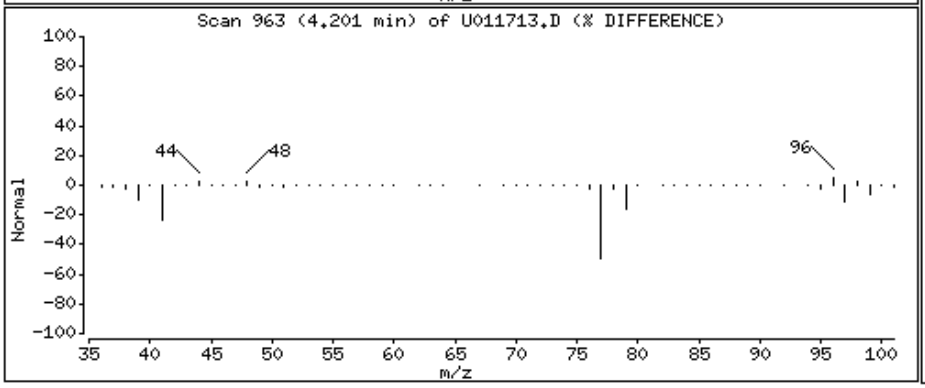
Column phase: DB624 Column diameter: 0.18

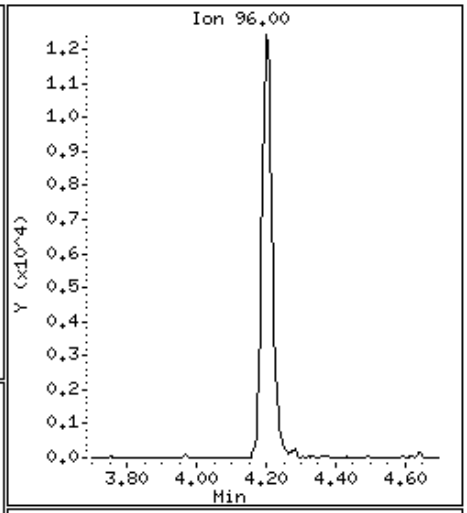
27 cis-1,2-Dichloroethene Concentration: 7.33 ug/l

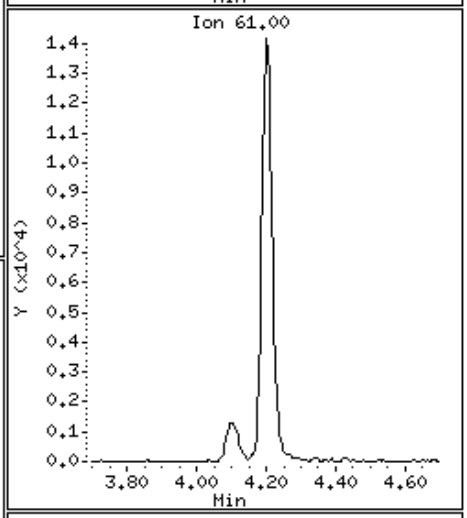


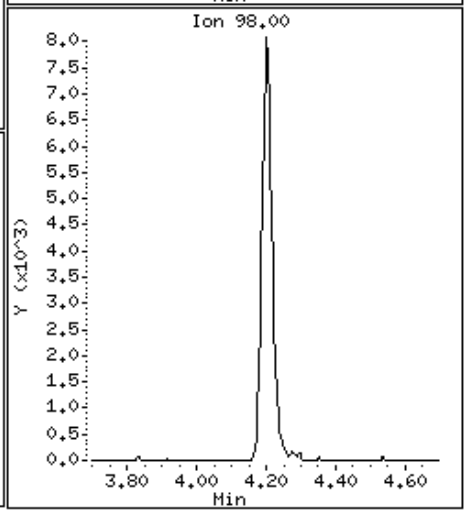












Data File: \\NAHSTWS005\Target\chem\voa9.i\U240117.b\U011713.D Page 3

Date : 17-JAN-2024 11:41

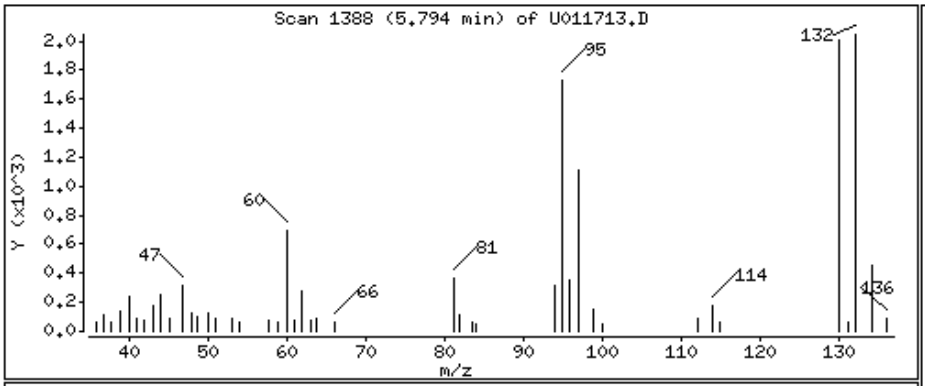
Client ID: Instrument: VOA9.i

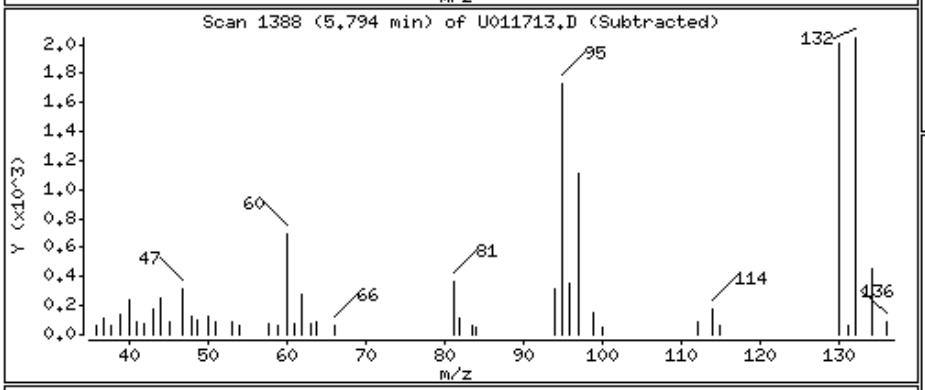
Sample Info: HS24010611-01

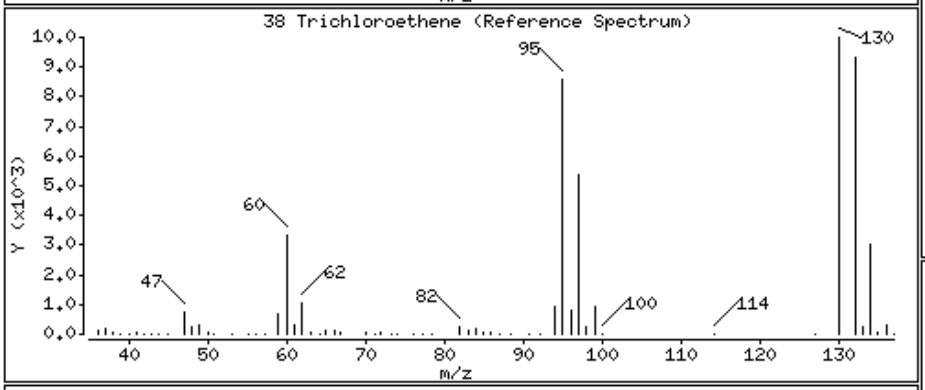
Purge Volume: 5.0 Operator: FT

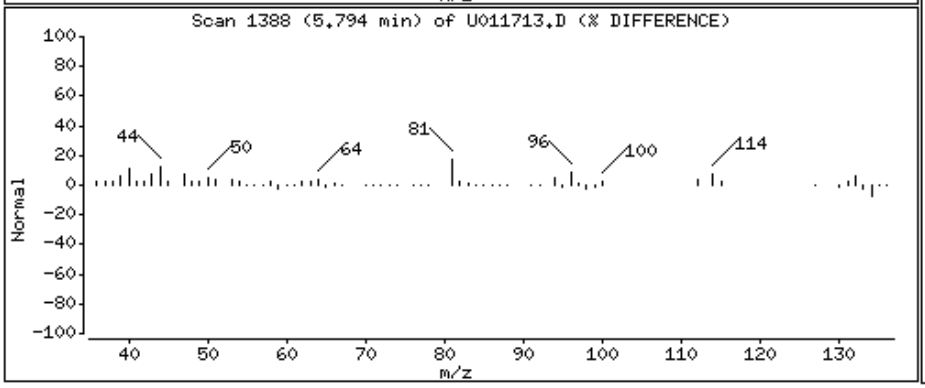
Column phase: DB624 Column diameter: 0.18

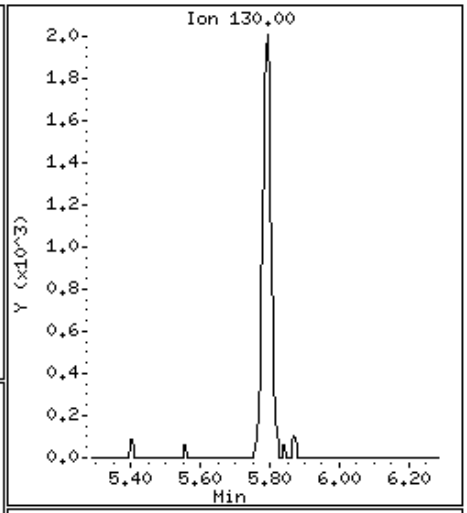
38 Trichloroethene Concentration: 0.97 ug/l

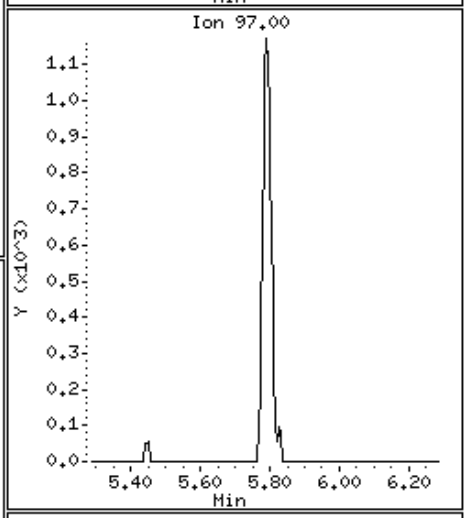


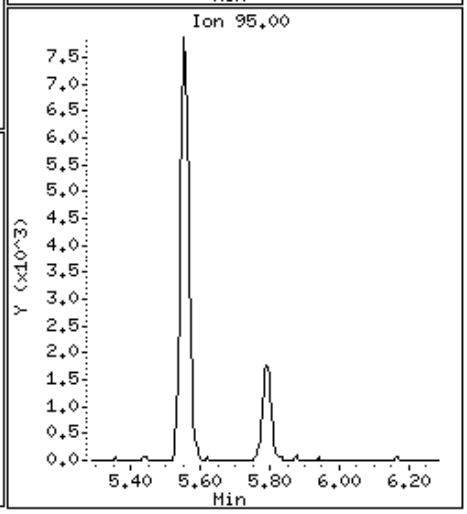












Data File: \\NAHSTWS005\Target\chem\voa9.i\U240117.b\U011713.D Page 4

Date : 17-JAN-2024 11:41

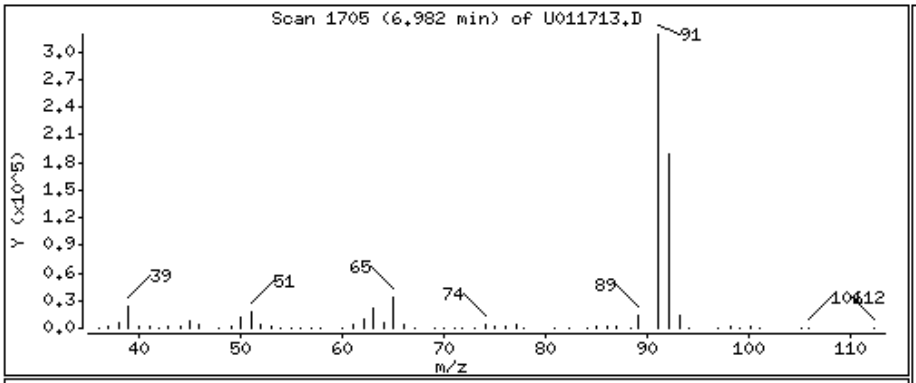
Client ID: Instrument: VOA9.i

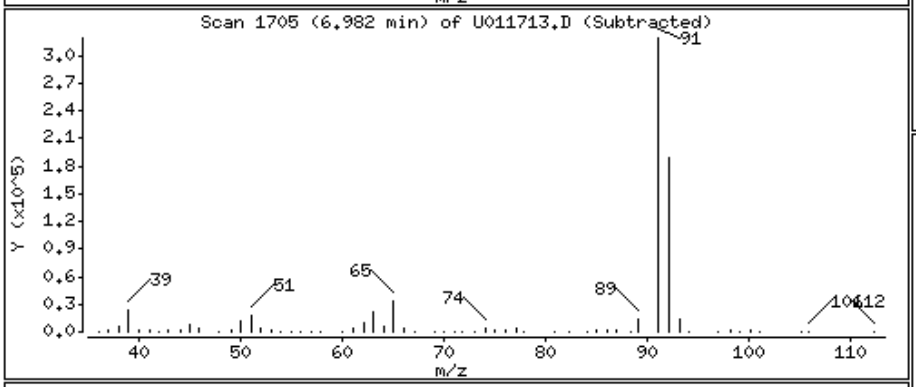
Sample Info: HS24010611-01

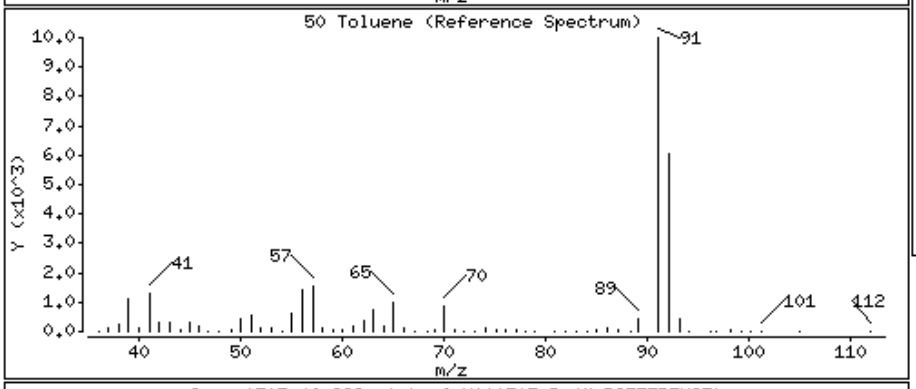
Purge Volume: 5.0 Operator: FT

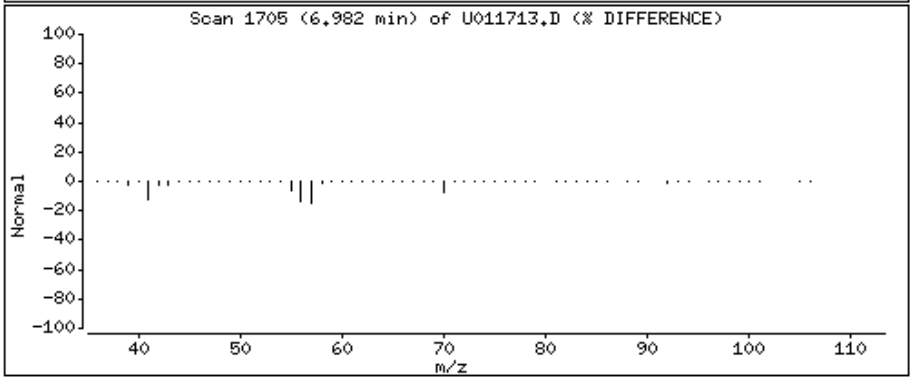
Column phase: DB624 Column diameter: 0.18

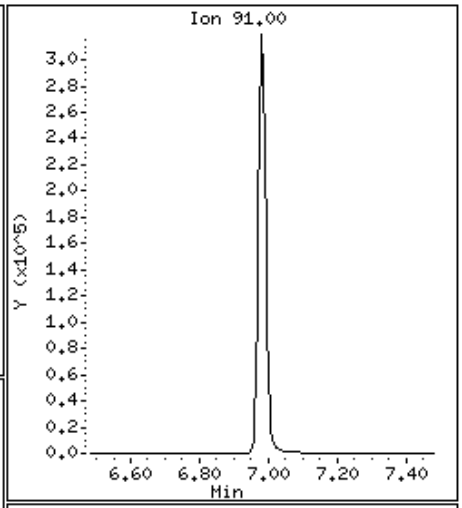
50 Toluene Concentration: 38.91 ug/l

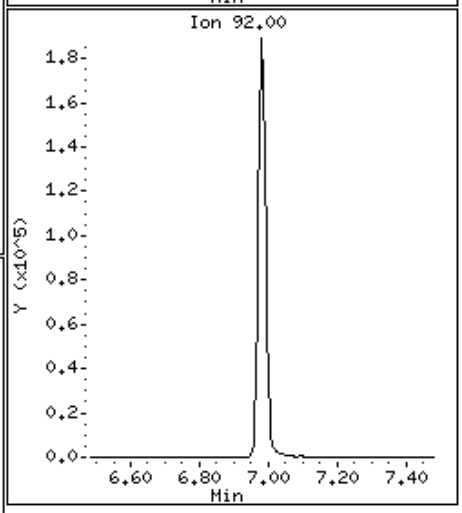












Data File: \\NAHSTWS005\Target\chem\voa9.i\U240117.b\U011713.D Page 5

Date : 17-JAN-2024 11:41

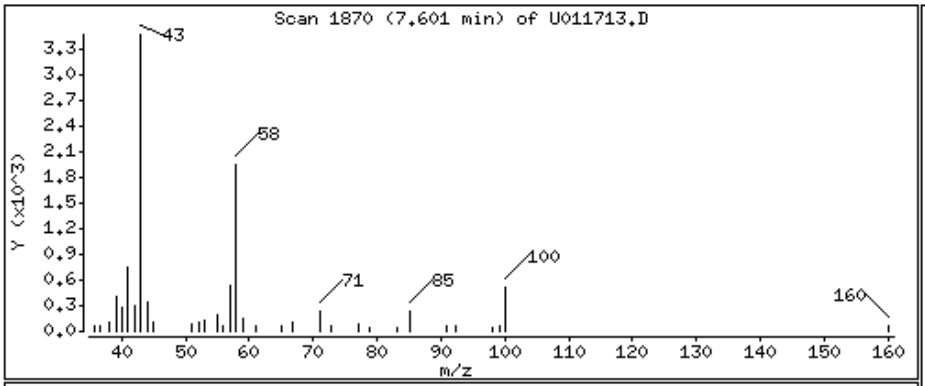
Client ID: Instrument: VOA9.i

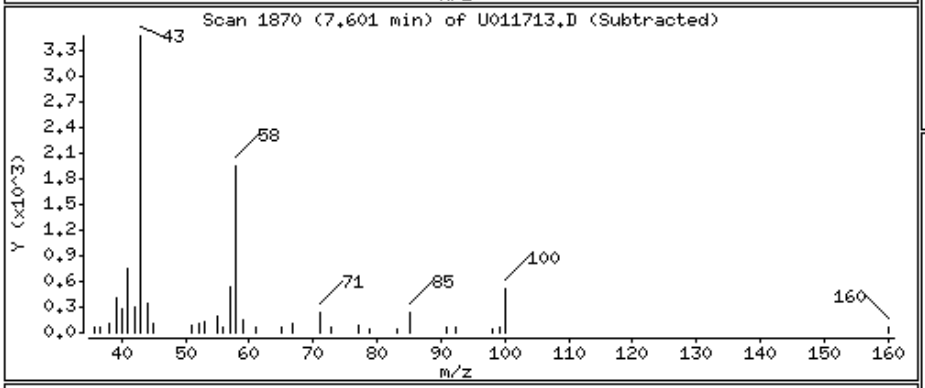
Sample Info: HS24010611-01

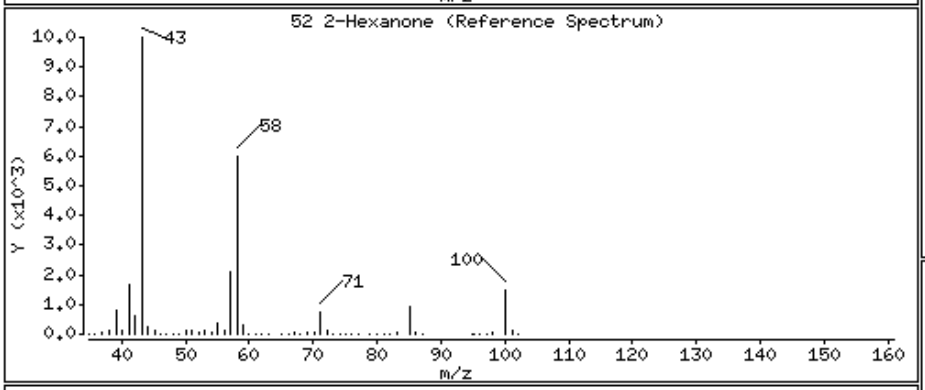
Purge Volume: 5.0 Operator: FT

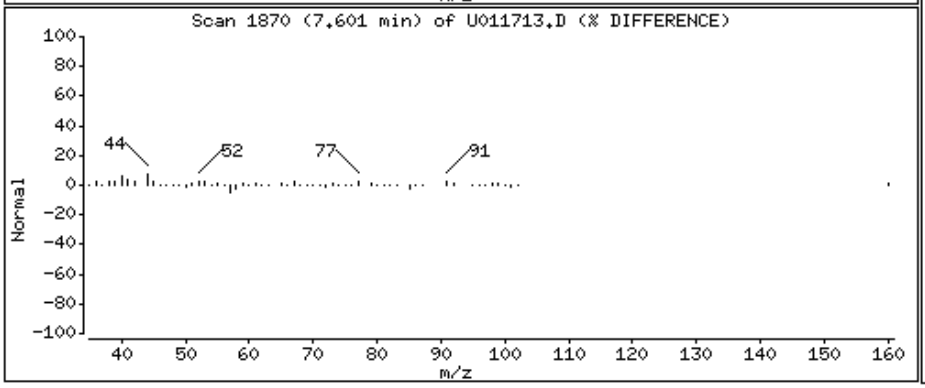
Column phase: DB624 Column diameter: 0.18

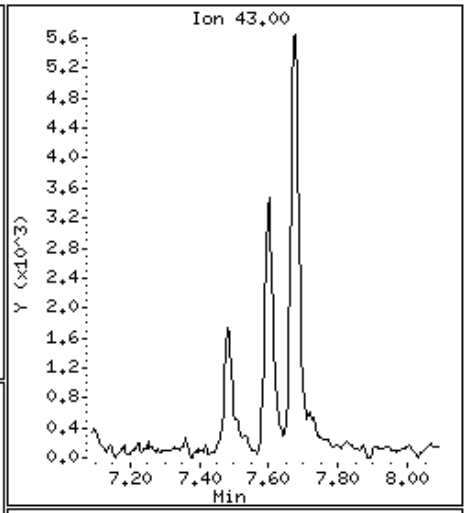
52 2-Hexanone Concentration: 2.49 ug/l

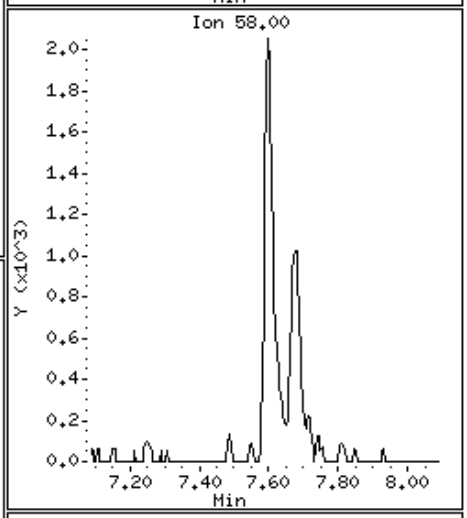


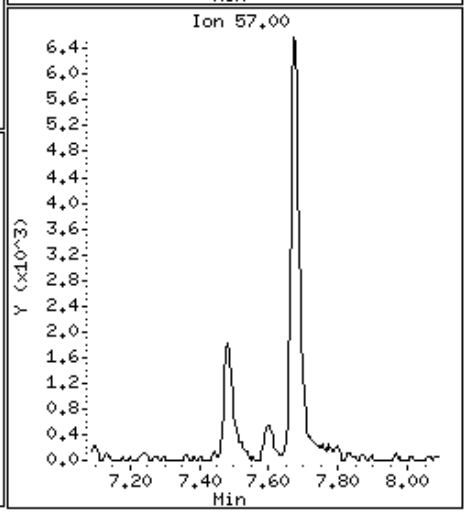












Data File: \\NAHSTWS005\Target\chem\voa9.i\U240117.b\U011713.D Page 6

Date : 17-JAN-2024 11:41

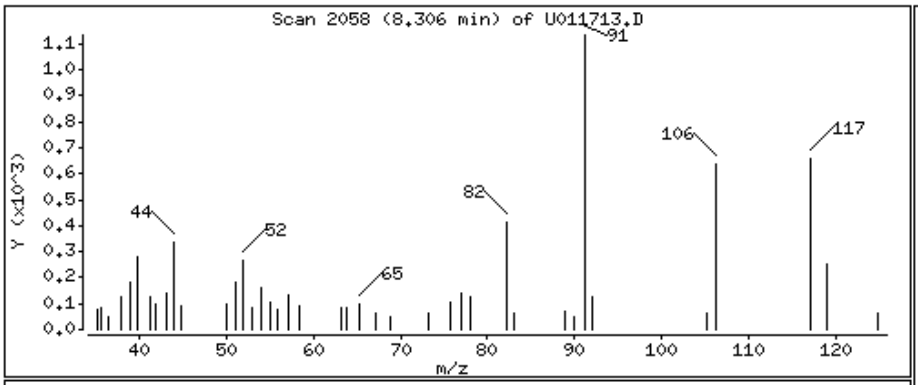
Client ID: Instrument: VOA9.i

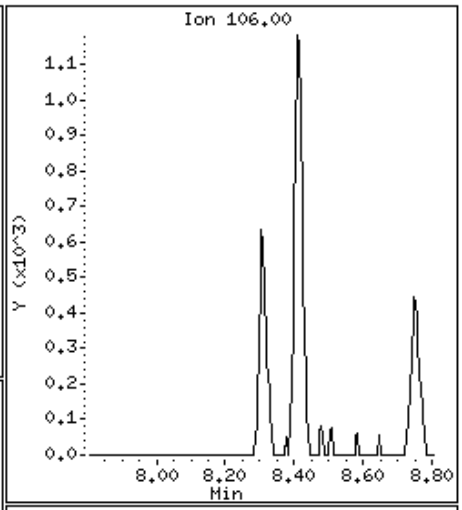
Sample Info: HS24010611-01

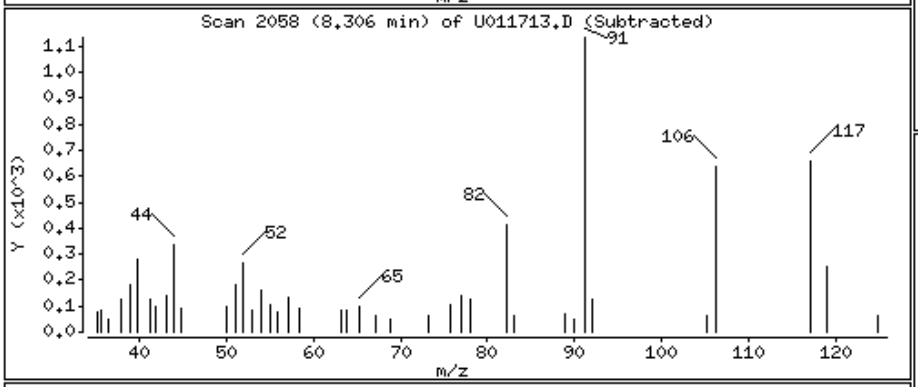
Purge Volume: 5.0 Operator: FT

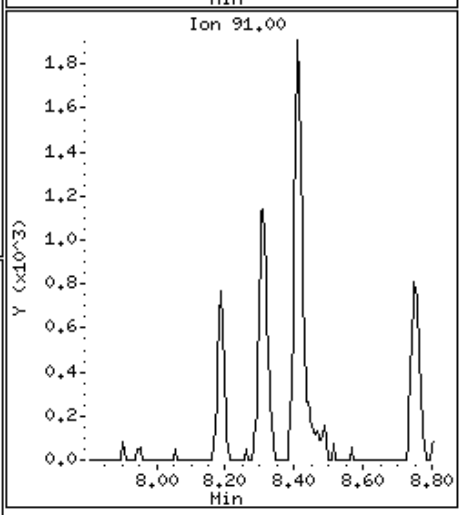
Column phase: DB624 Column diameter: 0.18

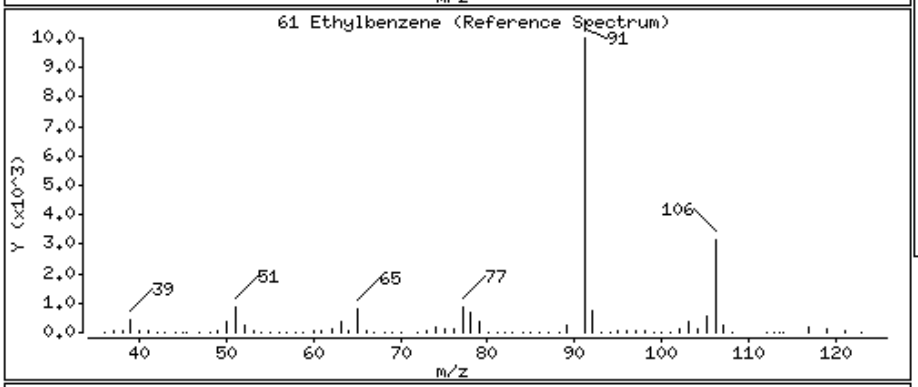
61 Ethylbenzene Concentration: 0.20 ug/l

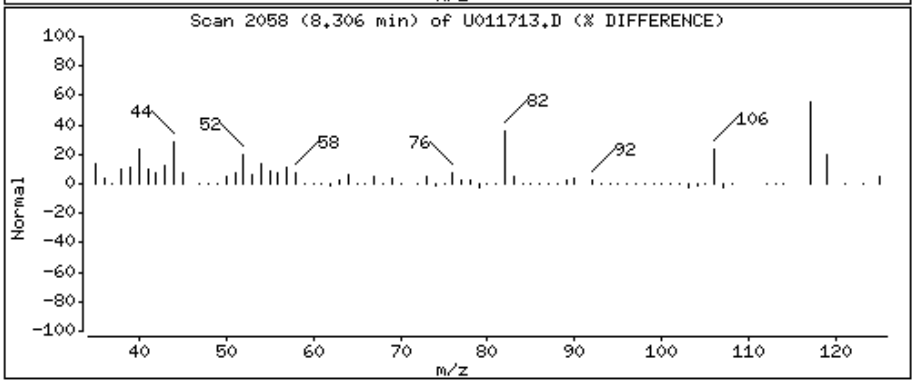












Data File: \\NAHSTWS005\Target\chem\voa9.i\U240117.b\U011713.D Page 7

Date : 17-JAN-2024 11:41

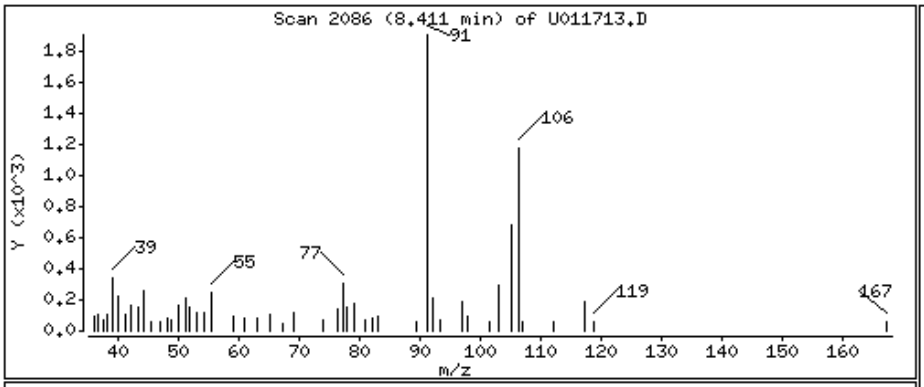
Client ID: Instrument: VOA9.i

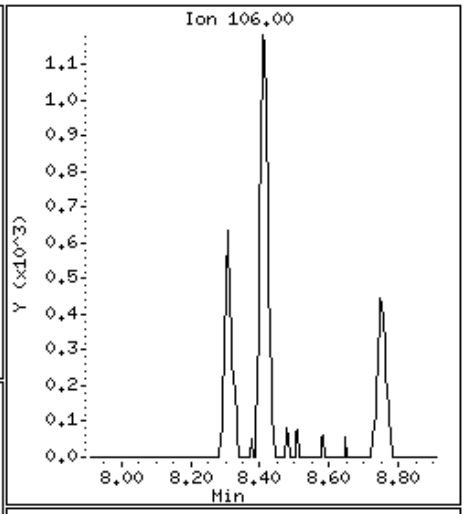
Sample Info: HS24010611-01

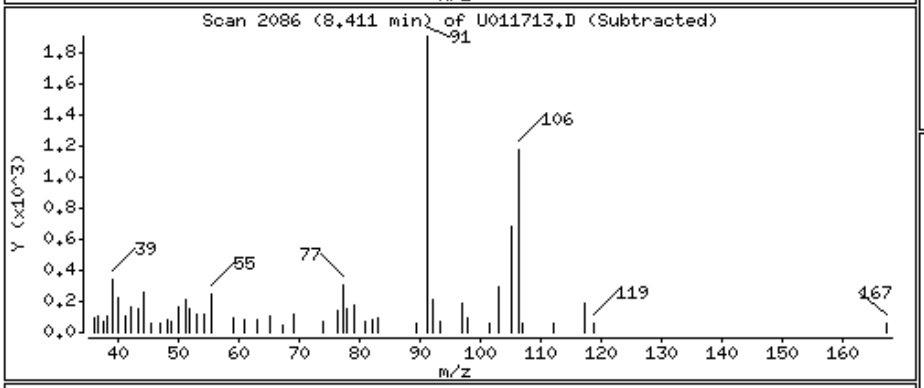
Purge Volume: 5.0 Operator: FT

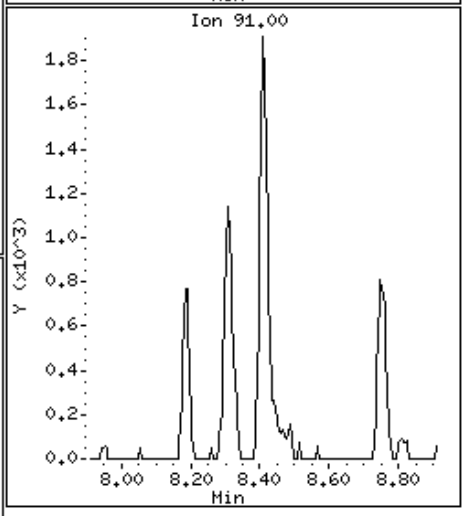
Column phase: DB624 Column diameter: 0.18

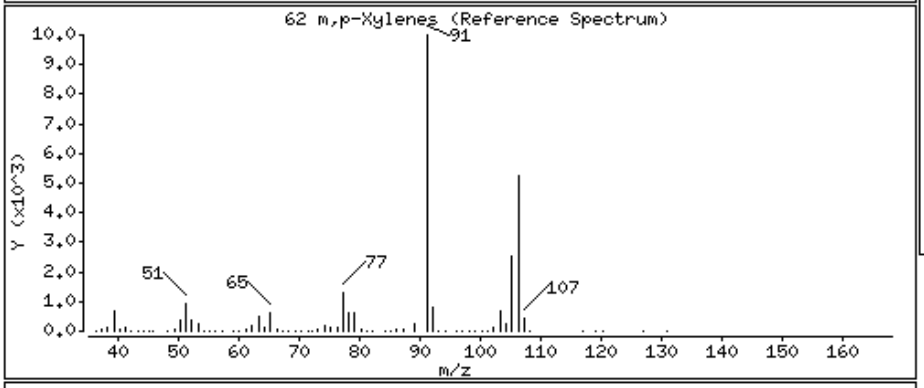
62 m,p-Xylenes Concentration: 0.36 ug/l

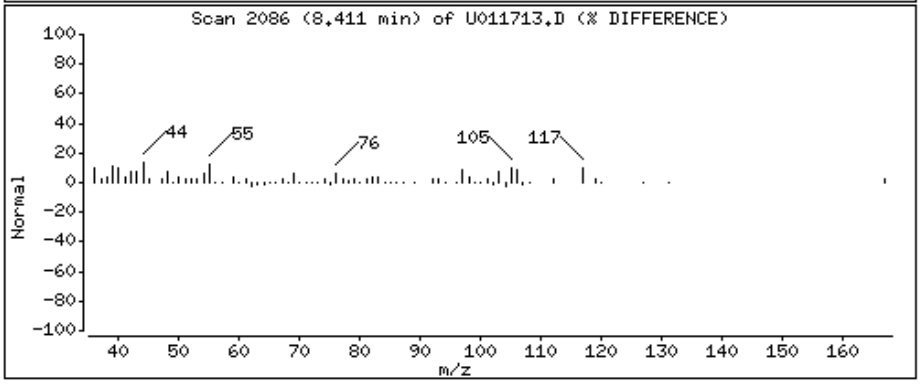












Data File: \\NAHSTWS005\Target\chem\voa9.i\U240117.b\U011713.D Page 8

Date : 17-JAN-2024 11:41

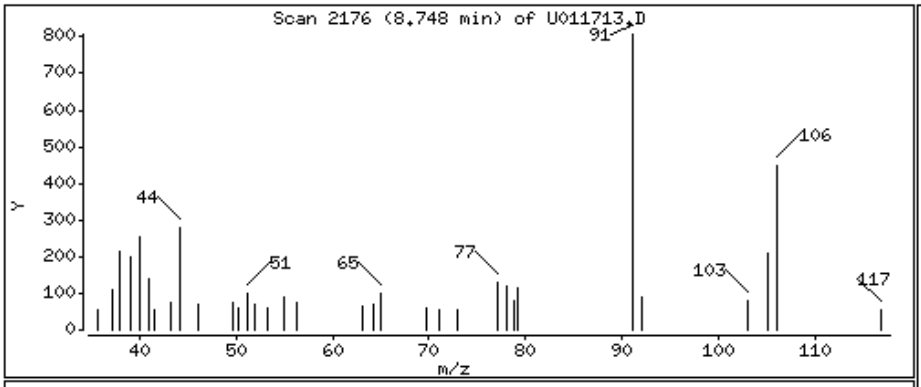
Client ID: Instrument: VOA9.i

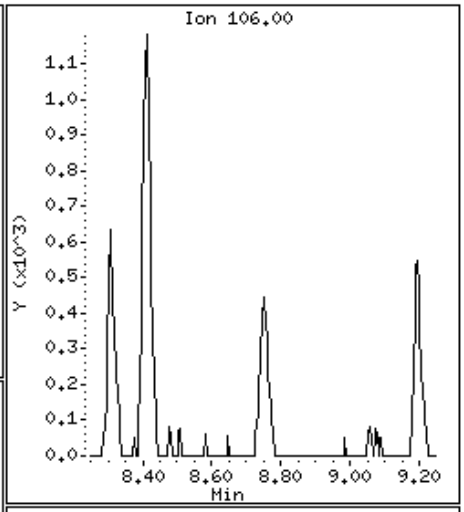
Sample Info: HS24010611-01

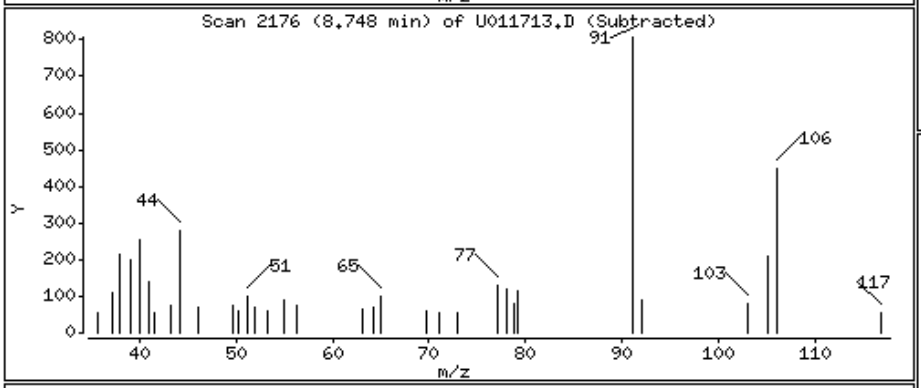
Purge Volume: 5.0 Operator: FT

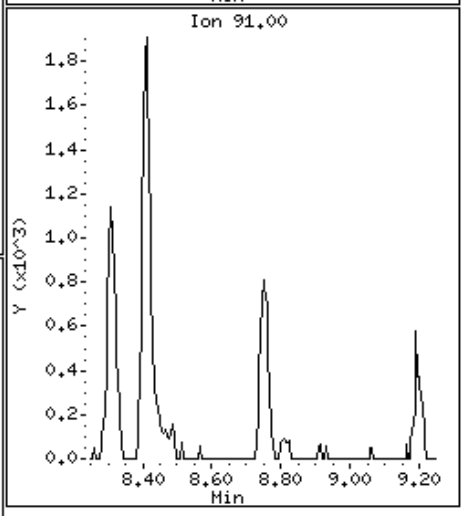
Column phase: DB624 Column diameter: 0.18

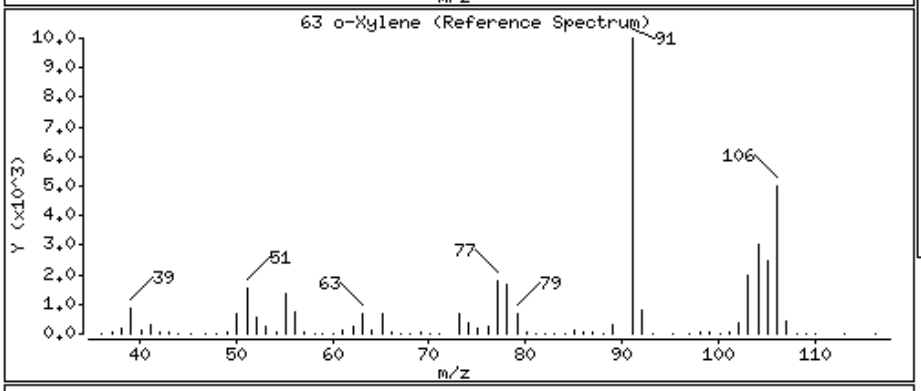
63 o-Xylene Concentration: 0.14 ug/l

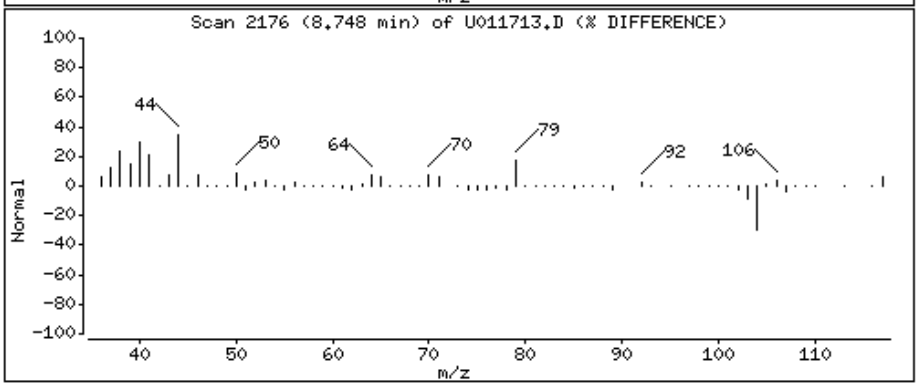












Data File : \\NAHSTWS005\Target\chem\voa9.i\U240117.b\U011713.D
Inj Date : 17-JAN-2024 11:41
InstruID : VOA9.i
LabSampID : HS24010611-01

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240117.b\U011714.D Page 1
Report Date: 22-Jan-2024 17:34

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240117.b\U011714.D
Lab Smp Id: HS24010611-01MS Client Smp ID: HS24010611-01MS
Inj Date : 17-JAN-2024 12:03
Operator : FT Inst ID: VOA9.i
Smp Info : HS24010611-01MS;HS24010611-01MS;3;;MS
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240117.b\8260C.m
Meth Date : 22-Jan-2024 17:33 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 14 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.815	4.815	(1.000)	292268	50.0000	
2 Dichlorodifluoromethane	85	1.164	1.168	(0.242)	25573	11.5343	11.53
3 Chloromethane	50	1.299	1.303	(0.270)	48248	14.3908	14.39
4 Propionitrile	54	4.335	4.335	(0.900)	82218	169.665	169.66(a)
5 Vinyl Chloride	62	1.378	1.381	(0.286)	69921	21.8309	21.83
6 Bromomethane	94	1.621	1.625	(0.337)	41517	25.5544	25.55
7 Chloroethane	64	1.666	1.704	(0.346)	2779	1.28867	1.28
8 Trichlorofluoromethane	101	1.895	1.899	(0.394)	91838	22.6212	22.62
9 Acrolein	56	2.262	2.266	(0.470)	4629	27.7923	27.79
10 Acetone	43	2.408	2.409	(0.500)	35839	32.1234	32.12
11 1,1-Dichloroethene	96	2.333	2.337	(0.485)	52307	23.2042	23.20
12 Isobutyl Alcohol	43	5.284	5.284	(1.097)	152122	347.046	347.04(a)
13 Acetonitrile	39	2.671	2.675	(0.555)	63888	203.108	203.10(a)
14 Allyl Chloride	41	2.671	2.675	(0.555)	145099	20.1921	20.19(a)
15 Iodomethane	142	2.468	2.472	(0.513)	115229	42.9726	42.97
16 Acrylonitrile	53	3.064	3.065	(0.636)	44456	38.7766	38.77
17 Methylene Chloride	84	2.795	2.798	(0.580)	65085	22.7355	22.73
18 Methyl tert-butyl ether	73	3.079	3.080	(0.640)	163478	20.2392	20.23
19 Carbon Disulfide	76	2.521	2.525	(0.524)	327616	49.3239	49.32
20 trans-1,2-Dichloroethene	96	3.057	3.061	(0.635)	62398	23.1554	23.15

21 Vinyl Acetate	43	3.608	3.608 (0.749)	291639	35.7894	35.78
22 1,1-Dichloroethane	63	3.511	3.514 (0.729)	107926	19.6352	19.63

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240117.b\U011714.D Page 2
Report Date: 22-Jan-2024 17:34

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
23	Chloroprene	53	2.157	2.161	(0.448)	18890	18.9476	18.94(M)
24	2-Butanone	43	4.264	4.260	(0.886)	45605	31.8538	31.85
25	Methacrylonitrile	41	4.496	4.493	(0.934)	54240	25.9913	25.99(a)
26	2,2-Dichloropropane	77	4.182	4.185	(0.868)	78231	20.2449	20.24
27	cis-1,2-Dichloroethene	96	4.197	4.197	(0.872)	97011	26.8738	26.87
28	Chloroform	83	4.571	4.572	(0.949)	117538	19.6458	19.64
29	Bromochloromethane	128	4.470	4.470	(0.928)	38732	20.7363	20.73
$ 30	Dibromofluoromethane	113	4.748	4.748	(0.986)	143445	47.9153	47.91
31	1,1,1-Trichloroethane	97	4.744	4.744	(0.985)	96946	21.3225	21.32
32	1,1-Dichloropropene	75	4.924	4.924	(0.887)	83256	22.1267	22.12
33	1,2-Dichloroethane	62	5.175	5.175	(0.932)	80649	18.4041	18.40
34	Carbon Tetrachloride	117	4.913	4.913	(0.885)	82759	22.5167	22.51
$ 35	1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	146572	43.0822	43.08
* 36	1,4-Difluorobenzene	114	5.554	5.554	(1.000)	449762	50.0000	
37	Benzene	78	5.137	5.141	(0.925)	253092	20.6715	20.67
38	Trichloroethene	130	5.790	5.786	(1.043)	75456	22.3606	22.36
39	Bromodichloromethane	83	6.277	6.277	(1.130)	80478	20.0723	20.07
40	Methyl Methacrylate	41	6.157	6.154	(1.279)	50606	17.5422	17.54(a)
42	1,2-Dichloropropane	63	6.007	6.007	(1.082)	61323	18.6034	18.60
43	2-Nitropropane	43	6.510	6.506	(1.352)	11915	15.8799	15.87
44	Dibromomethane	93	6.120	6.120	(1.102)	42023	19.7043	19.70
45	4-Methyl-2-Pentanone	43	6.854	6.851	(0.837)	125141	38.2993	38.29
46	cis-1,3-Dichloropropene	75	6.689	6.690	(1.205)	94244	19.1807	19.18
* 47	Chlorobenzene-d5	117	8.185	8.185	(1.000)	450536	50.0000	
$ 48	Toluene-d8	98	6.922	6.922	(0.846)	512090	49.3749	49.37
49	Ethyl Methacrylate	69	7.289	7.289	(1.312)	86915	19.6891	19.68(a)
50	Toluene	91	6.982	6.978	(0.853)	838292	66.7317	66.73
51	trans-1,3-Dichloropropene	75	7.196	7.196	(1.296)	76517	18.7422	18.74
52	2-Hexanone	43	7.593	7.589	(0.928)	84440	37.1389	37.13
53	1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	53038	21.3272	21.32
54	1,3-Dichloropropane	76	7.499	7.496	(0.916)	107088	19.1987	19.19
55	Dibromochloromethane	129	7.690	7.691	(0.940)	70022	20.8976	20.89
56	Tetrachloroethene	164	7.458	7.454	(0.911)	65455	24.3425	24.34
57	1,2-Dibromoethane	107	7.784	7.784	(0.951)	65254	20.8460	20.84
58	1-Chlorohexane	55	8.196	8.197	(1.476)	56156	22.2661	22.26
59	Chlorobenzene	112	8.208	8.208	(1.003)	197251	21.5549	21.55
60	1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	68255	21.3226	21.32
61	Ethylbenzene	106	8.305	8.305	(1.015)	93121	21.7379	21.73
62	m,p-Xylenes	106	8.410	8.407	(1.027)	239001	46.4047	46.40
63	o-Xylene	106	8.747	8.744	(1.069)	118469	22.3663	22.36
64	Styrene	104	8.762	8.759	(1.071)	198787	22.5429	22.54
66	Bromoform	173	8.920	8.916	(1.090)	45371	20.4403	20.44
67	Isopropylbenzene	105	9.062	9.059	(1.107)	296955	23.1812	23.18
68	1,1,2,2-Tetrachloroethane	83	9.329	9.325	(0.917)	89174	21.4081	21.40
$ 69	4-Bromofluorobenzene	95	9.194	9.190	(1.123)	188192	47.8691	47.86
* 70	1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	251189	50.0000	
71	1,2,3-Trichloropropane	75	9.362	9.362	(0.920)	84895	17.8038	17.80
72	trans-1,4-Dichloro-2-butene	53	9.377	9.377	(1.146)	15516	19.1369	19.13(a)
73	n-Propylbenzene	91	9.411	9.411	(0.925)	335414	22.7404	22.74
74	Bromobenzene	156	9.317	9.314	(0.916)	84145	19.9481	19.94
75	1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	237003	22.6079	22.60
76	2-Chlorotoluene	91	9.482	9.482	(0.932)	204585	20.6078	20.60

77 4-Chlorotoluene	91	9.576	9.572 (0.941)	231954	20.6018	20.60
78 tert-Butylbenzene	119	9.835	9.835 (0.967)	213748	22.7004	22.70

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240117.b\U011714.D Page 3
Report Date: 22-Jan-2024 17:34

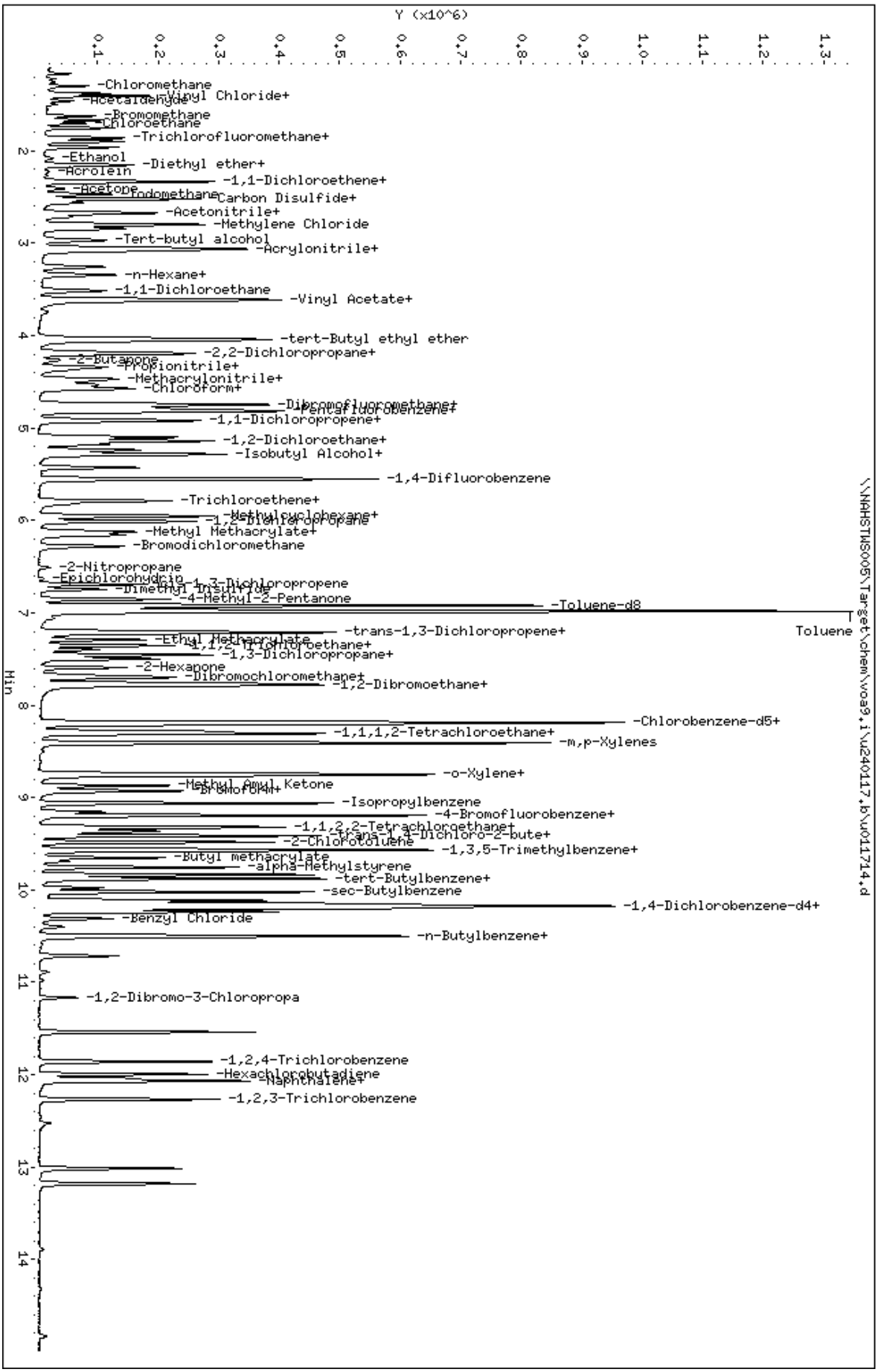
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
79	1,2,4-Trimethylbenzene	105	9.880	9.876	(0.971)	236214	22.4829	22.48
81	sec-Butylbenzene	105	10.022	10.022	(0.985)	289606	23.8519	23.85
82	p-Isopropyltoluene	119	10.146	10.146	(0.997)	253412	24.1166	24.11
83	1,3-Dichlorobenzene	146	10.116	10.112	(0.994)	152406	20.3891	20.38
84	1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	158731	20.0438	20.04
86	Benzyl Chloride	91	10.311	10.311	(1.260)	70164	19.3385	19.33
87	n-Butylbenzene	91	10.491	10.491	(1.031)	207739	23.5581	23.55
88	1,2-Dichlorobenzene	146	10.506	10.502	(1.033)	152887	20.3305	20.33
89	1,2-Dibromo-3-Chloropropane	155	11.165	11.166	(1.098)	14050	20.4285	20.42
90	1,2,4-Trichlorobenzene	180	11.859	11.855	(1.166)	96768	20.8582	20.85
91	Hexachlorobutadiene	225	11.998	11.998	(1.179)	52748	28.3639	28.36
92	Naphthalene	128	12.065	12.065	(1.186)	261182	23.3433	23.34
93	1,2,3-Trichlorobenzene	180	12.267	12.268	(1.206)	96092	20.5394	20.53
146	Methyl acetate	43	2.712	2.712	(0.563)	51117	17.5733	17.57
138	Freon TF	101	2.333	2.341	(0.485)	56413	26.5387	26.53
141	Cyclohexane	56	4.785	4.785	(0.994)	87068	20.6747	20.67
142	Tetrahydrofuran	42	4.541	4.538	(0.943)	20665	33.3102	33.31
147	Methylcyclohexane	55	5.947	5.947	(1.071)	139023	20.8546	20.85
135	1,4-Dioxane	88	6.165	6.165	(1.280)	16207	349.510	349.50
132	n-Butanol	56	5.820	5.816	(1.209)	31627	332.955	332.95(a)
136	n-Hexane	57	3.342	3.346	(0.694)	60815	22.3849	22.38
139	Diethyl ether	59	2.142	2.146	(0.445)	45055	18.9058	18.90
148	Tert-butyl alcohol	59	2.967	2.960	(0.616)	128642	393.173	393.17
149	Isopropyl alcohol	45	2.558	2.559	(0.531)	77272	413.390	413.38
152	Amyl alcohol	42	7.398	7.394	(0.904)	36145	361.696	361.69
156	Diisopropyl ether	45	3.619	3.619	(0.752)	180638	17.7413	17.74
162	Butyl acrylate	55	8.732	8.733	(1.067)	92835	16.4823	16.48
187	n-Amyl acetate	43	8.931	8.931	(1.091)	97769	17.1210	17.12
164	Dicyclopentadiene	66	10.198	10.198	(1.003)	260336	19.4420	19.44
166	1,2,3-Trimethylbenzene	105	10.236	10.232	(1.006)	214709	20.7130	20.71
167	Ethanol	45	2.082	2.079	(0.433)	13338	362.947	362.94
172	tert-Butyl formate	59	5.239	5.235	(1.088)	83919	39.9214	39.92
173	3,3-Dimethyl-1-butanol	57	7.780	7.777	(0.951)	155554	418.499	418.49
174	tert-Amyl methyl ether	73	5.284	5.284	(1.097)	165830	18.2913	18.29
175	tert-Butyl ethyl ether	59	4.050	4.051	(0.841)	164828	18.1593	18.15
176	tert-Amyl alcohol	59	5.239	5.235	(1.088)	83919	400.921	400.92
151	4-Methyl-2-pentanol	45	7.214	7.214	(1.299)	270225	399.717	399.71
140	1,3-Butadiene	54	1.400	1.408	(0.291)	50028	17.0431	17.04
158	Dichlorofluoromethane	67	1.857	1.861	(0.386)	103071	23.1379	23.13
182	Epichlorohydrin	57	6.633	6.630	(1.194)	6910	39.5492	39.54
M 94	1,2-Dichloroethylene (total)	96				159409	50.5689	50.56
M 95	Xylenes (total)	106				357470	68.6887	68.68
145	alpha-Methylstyrene	118	9.756	9.752	(0.959)	96932	20.0259	20.02
130	Ethyl Acetate	43	4.339	4.339	(0.901)	60239	16.9670	16.96
131	Methyl Acrylate	55	4.369	4.369	(0.907)	67248	17.5171	17.51
189	n-Butyl acetate	43	7.705	7.702	(0.941)	91932	18.3188	18.31
134	Cyclohexanone	55	9.152	9.153	(0.900)	42691	256.873	256.87(a)
185	Isoprene	39	2.157	2.161	(0.448)	13596	19.9809	19.98
188	Isopropyl acetate	43	5.284	5.284	(0.951)	152809	18.4167	18.41
150	Allyl alcohol	57	3.342	3.346	(0.694)	60815	447.698	447.69
194	Acetaldehyde	44	1.460	1.464	(0.303)	27428	67.5306	67.53(M)
195	Methyl Amyl Ketone	43	8.867	8.868	(1.083)	115605	17.6780	17.67

200 Dimethyl Disulfide	94	6.746	6.746 (0.824)	55856	16.6968	16.69
203 2-Ethylhexyl Acrylate	55	12.043	12.039 (1.184)	53143	16.1337	16.13

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
133 Ethyl Acrylate	55	5.947	5.947	(1.235)	139023	19.7892	19.78
163 Butyl methacrylate	41	9.651	9.647	(0.949)	49364	16.2189	16.21

QC Flag Legend

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



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Sample Info: HS2401611-01MS;HS2401611-01MS;3;;MS
Purge Volume: 5.0
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Instrument: VOA9,i
Operator: FT
Column diameter: 0.18

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Inj Date : 17-JAN-2024 12:03
InstruID : VOA9.i
LabSampID : HS24010611-01MS

Chloroprene (126-99-8)

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11769
22-Jan-2024
17:33
linh
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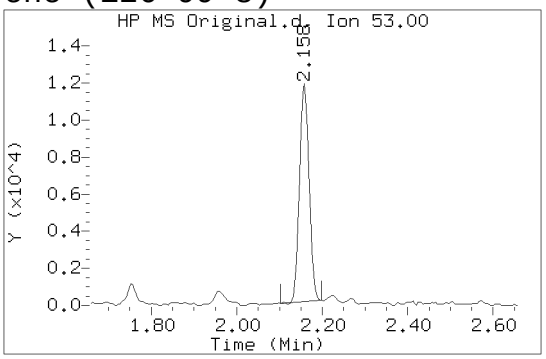

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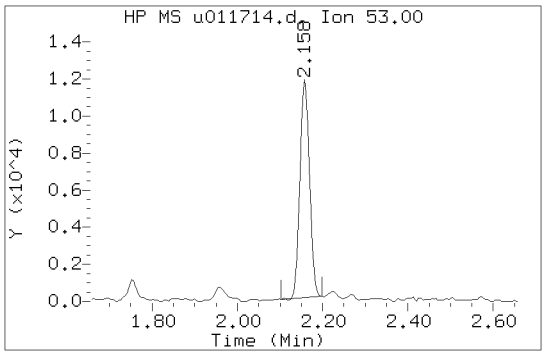

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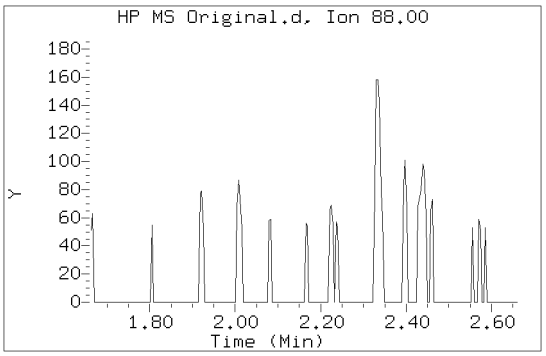

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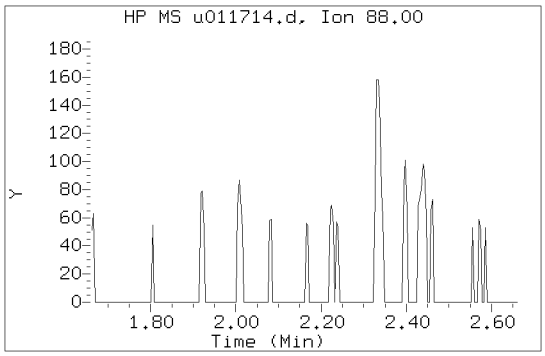

Acetaldehyde (75-07-0)

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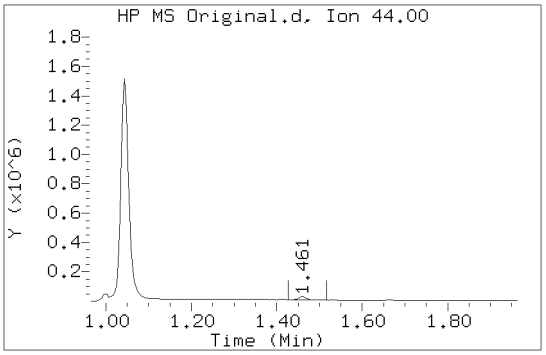

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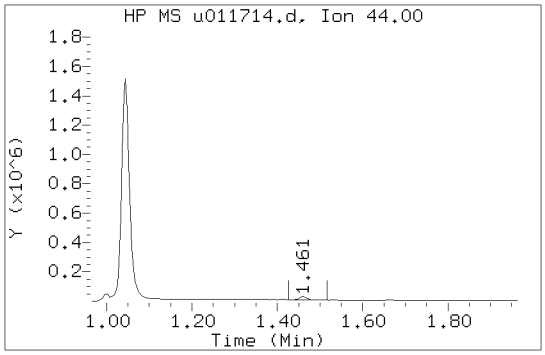

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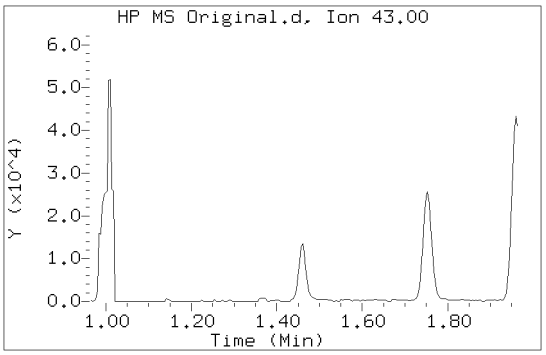

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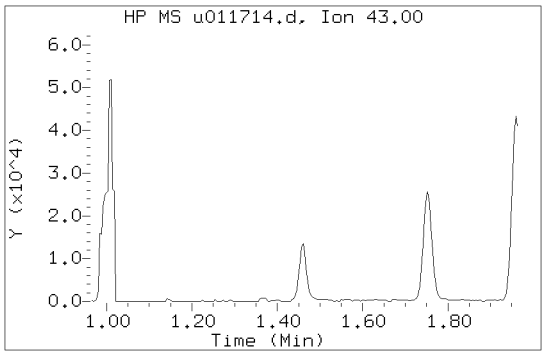

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Inj Date : 17-JAN-2024 12:03
InstruID : VOA9.i
LabSampID : HS24010611-01MS

Acetaldehyde (75-07-0)

Reason Code:

BEFORE

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HEIGHT
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22-Jan-2024
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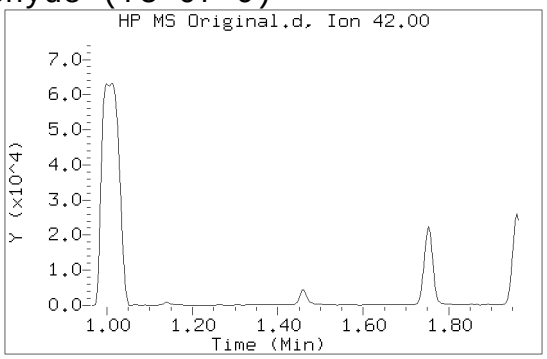
pham



AFTER

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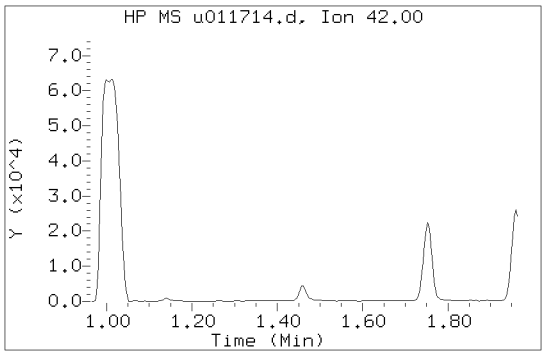

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Report Date: 22-Jan-2024 17:34

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240117.b\U011715.D
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Inj Date : 17-JAN-2024 12:25
Operator : FT Inst ID: VOA9.i
Smp Info : HS24010611-01MSD;HS24010611-01MSD;3;;MSD
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240117.b\8260C.m
Meth Date : 22-Jan-2024 17:33 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 14 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.819	4.815	(1.000)	289585	50.0000	
2 Dichlorodifluoromethane	85	1.168	1.168	(0.242)	25367	11.5464	11.54
3 Chloromethane	50	1.303	1.303	(0.270)	46580	14.0221	14.02
4 Propionitrile	54	4.339	4.335	(0.900)	80339	167.323	167.32(a)
5 Vinyl Chloride	62	1.378	1.381	(0.286)	69941	22.0395	22.03
6 Bromomethane	94	1.625	1.625	(0.337)	39328	24.4216	24.42
7 Chloroethane	64	1.704	1.704	(0.354)	47862	22.4001	22.40
8 Trichlorofluoromethane	101	1.899	1.899	(0.394)	87967	21.8685	21.86
9 Acrolein	56	2.266	2.266	(0.470)	5057	30.6433	30.64
10 Acetone	43	2.409	2.409	(0.500)	35538	32.1536	32.15
11 1,1-Dichloroethene	96	2.337	2.337	(0.485)	52238	23.3883	23.38
12 Isobutyl Alcohol	43	5.284	5.284	(1.096)	149728	344.750	344.74(a)
13 Acetonitrile	39	2.675	2.675	(0.555)	61715	198.018	198.01(a)
14 Allyl Chloride	41	2.675	2.675	(0.555)	145167	20.3887	20.38(a)
15 Iodomethane	142	2.472	2.472	(0.513)	127199	47.4995	47.49
16 Acrylonitrile	53	3.068	3.065	(0.637)	45523	40.0752	40.07
17 Methylene Chloride	84	2.795	2.798	(0.580)	64477	22.7317	22.73
18 Methyl tert-butyl ether	73	3.083	3.080	(0.640)	163166	20.3878	20.38
19 Carbon Disulfide	76	2.525	2.525	(0.524)	329615	50.0846	50.08
20 trans-1,2-Dichloroethene	96	3.061	3.061	(0.635)	62254	23.3160	23.31

21 Vinyl Acetate	43	3.608	3.608 (0.749)	292281	36.2005	36.20
22 1,1-Dichloroethane	63	3.514	3.514 (0.729)	110099	20.2162	20.21

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240117.b\U011715.D Page 2
Report Date: 22-Jan-2024 17:34

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	23 Chloroprene	53	2.161	2.161	(0.449)	19757	20.0008	20.00(M)
	24 2-Butanone	43	4.268	4.260	(0.886)	45044	31.7535	31.75
	25 Methacrylonitrile	41	4.497	4.493	(0.933)	54312	26.2669	26.26(a)
	26 2,2-Dichloropropane	77	4.185	4.185	(0.869)	77640	20.2782	20.27
	27 cis-1,2-Dichloroethene	96	4.197	4.197	(0.871)	94112	26.3123	26.31
	28 Chloroform	83	4.575	4.572	(0.949)	117398	19.8042	19.80
	29 Bromochloromethane	128	4.470	4.470	(0.928)	39417	21.2986	21.29
$	30 Dibromofluoromethane	113	4.748	4.748	(0.985)	144315	48.6684	48.66
	31 1,1,1-Trichloroethane	97	4.744	4.744	(0.984)	94182	20.9065	20.90
	32 1,1-Dichloropropene	75	4.924	4.924	(0.887)	80990	21.6590	21.65
	33 1,2-Dichloroethane	62	5.175	5.175	(0.932)	80828	18.5602	18.56
	34 Carbon Tetrachloride	117	4.913	4.913	(0.885)	82585	22.6097	22.60
$	35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	144275	42.8126	42.81
*	36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	446969	50.0000	
	37 Benzene	78	5.141	5.141	(0.926)	253192	20.8089	20.80
	38 Trichloroethene	130	5.790	5.786	(1.043)	75077	22.3873	22.38
	39 Bromodichloromethane	83	6.277	6.277	(1.130)	81230	20.3865	20.38
	40 Methyl Methacrylate	41	6.157	6.154	(1.278)	49400	17.2828	17.28(a)
	42 1,2-Dichloropropane	63	6.011	6.007	(1.082)	63956	19.5234	19.52
	43 2-Nitropropane	43	6.510	6.506	(1.351)	12416	16.7009	16.70
	44 Dibromomethane	93	6.120	6.120	(1.102)	42112	19.8694	19.86
	45 4-Methyl-2-Pentanone	43	6.855	6.851	(0.837)	120169	36.8569	36.85
	46 cis-1,3-Dichloropropene	75	6.690	6.690	(1.205)	95568	19.5415	19.54
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	449402	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	509314	49.2311	49.23
	49 Ethyl Methacrylate	69	7.289	7.289	(1.312)	85033	19.3831	19.38(a)
	50 Toluene	91	6.982	6.978	(0.853)	844147	67.3673	67.36
	51 trans-1,3-Dichloropropene	75	7.196	7.196	(1.296)	78462	19.2822	19.28
	52 2-Hexanone	43	7.593	7.589	(0.928)	84882	37.4275	37.42
	53 1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	51542	20.7434	20.74
	54 1,3-Dichloropropane	76	7.499	7.496	(0.916)	107491	19.3196	19.31
	55 Dibromochloromethane	129	7.690	7.691	(0.940)	69469	20.7849	20.78
	56 Tetrachloroethene	164	7.458	7.454	(0.911)	66015	24.6127	24.61
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	65823	21.0808	21.08
	58 1-Chlorohexane	55	8.197	8.197	(1.476)	53887	21.5000	21.49
	59 Chlorobenzene	112	8.208	8.208	(1.003)	198033	21.6950	21.69
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	67766	21.2233	21.22
	61 Ethylbenzene	106	8.305	8.305	(1.015)	92771	21.7108	21.71
	62 m,p-Xylenes	106	8.410	8.407	(1.027)	238821	46.4868	46.48
	63 o-Xylene	106	8.748	8.744	(1.069)	120604	22.8268	22.82
	64 Styrene	104	8.763	8.759	(1.071)	201578	22.9171	22.91
	66 Bromoform	173	8.920	8.916	(1.090)	45882	20.7078	20.70
	67 Isopropylbenzene	105	9.063	9.059	(1.107)	294594	23.0550	23.05
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.325	(0.917)	88024	21.5063	21.50
$	69 4-Bromofluorobenzene	95	9.194	9.190	(1.123)	185488	47.2849	47.28
*	70 1,4-Dichlorobenzene-d4	152	10.168	10.168	(1.000)	246852	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.921)	81915	17.4806	17.48
	72 trans-1,4-Dichloro-2-butene	53	9.377	9.377	(1.146)	15028	18.5818	18.58(a)
	73 n-Propylbenzene	91	9.411	9.411	(0.926)	322682	22.2616	22.26
	74 Bromobenzene	156	9.317	9.314	(0.916)	86780	20.9342	20.93
	75 1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	237319	23.0358	23.03
	76 2-Chlorotoluene	91	9.482	9.482	(0.933)	204378	20.9486	20.94

77	4-Chlorotoluene	91	9.576	9.572 (0.942)	232194	20.9855	20.98
78	tert-Butylbenzene	119	9.835	9.835 (0.967)	213164	23.0361	23.03

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240117.b\U011715.D Page 3
Report Date: 22-Jan-2024 17:34

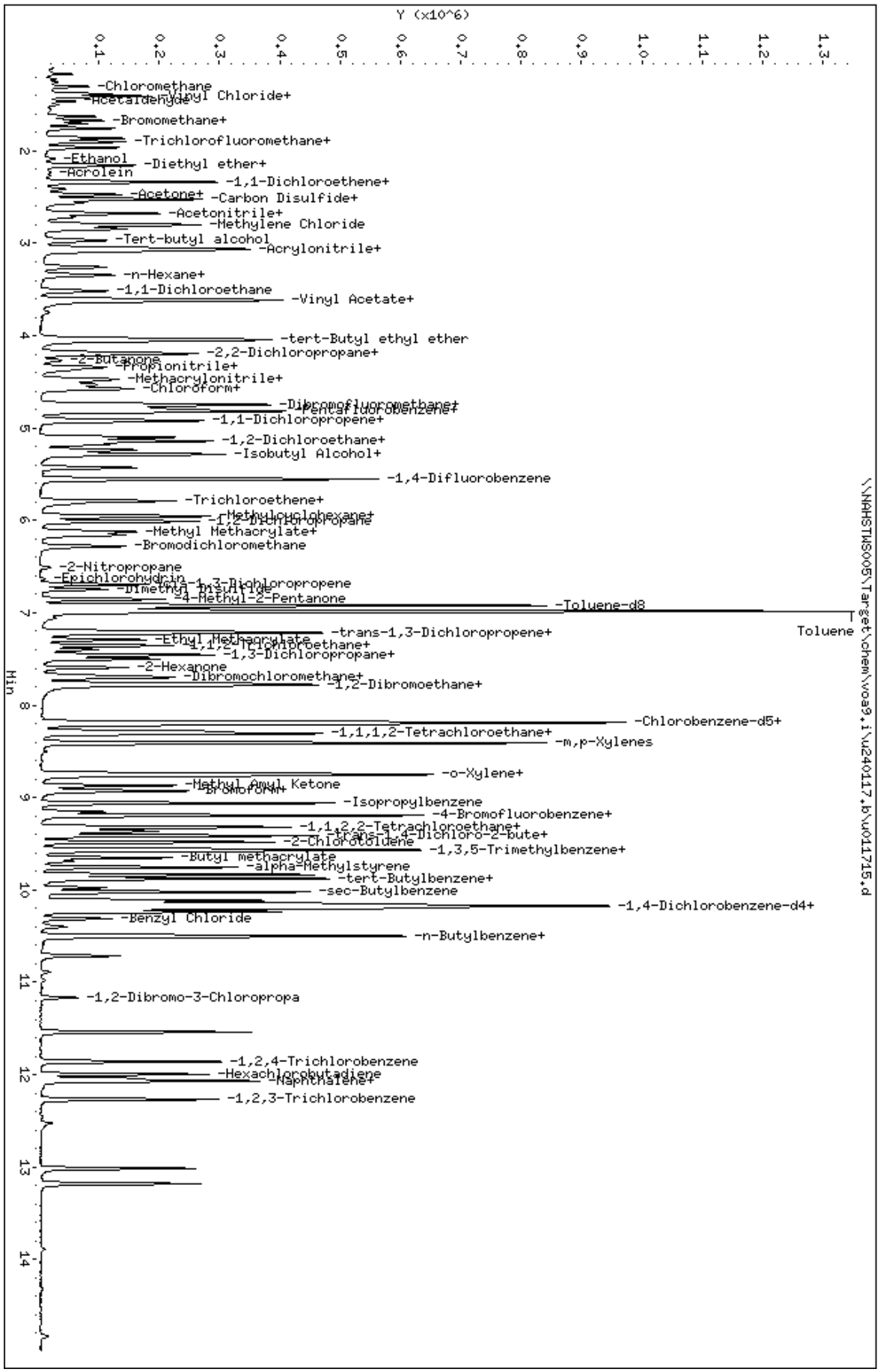
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
79	1,2,4-Trimethylbenzene	105	9.880	9.876	(0.972)	235433	22.8023	22.80
81	sec-Butylbenzene	105	10.022	10.022	(0.986)	285832	23.9547	23.95
82	p-Isopropyltoluene	119	10.146	10.146	(0.998)	250740	24.2816	24.28
83	1,3-Dichlorobenzene	146	10.116	10.112	(0.995)	153064	20.8369	20.83
84	1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	160633	20.6403	20.64
86	Benzyl Chloride	91	10.311	10.311	(1.260)	66408	18.4657	18.46
87	n-Butylbenzene	91	10.491	10.491	(1.032)	207028	23.8900	23.89
88	1,2-Dichlorobenzene	146	10.506	10.502	(1.033)	154672	20.9292	20.92
89	1,2-Dibromo-3-Chloropropane	155	11.166	11.166	(1.098)	14644	21.5378	21.53
90	1,2,4-Trichlorobenzene	180	11.859	11.855	(1.166)	95527	20.9524	20.95
91	Hexachlorobutadiene	225	11.998	11.998	(1.180)	53971	29.5314	29.53
92	Naphthalene	128	12.065	12.065	(1.187)	268908	24.4560	24.45
93	1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	96658	21.0234	21.02
146	Methyl acetate	43	2.716	2.712	(0.564)	52055	18.0616	18.06
138	Freon TF	101	2.337	2.341	(0.485)	57221	27.1591	27.15
141	Cyclohexane	56	4.785	4.785	(0.993)	84170	20.1718	20.17
142	Tetrahydrofuran	42	4.542	4.538	(0.942)	17380	28.2746	28.27
147	Methylcyclohexane	55	5.947	5.947	(1.071)	134270	20.2674	20.26
135	1,4-Dioxane	88	6.169	6.165	(1.280)	16050	349.331	349.33
132	n-Butanol	56	5.820	5.816	(1.208)	30566	324.767	324.76(a)
136	n-Hexane	57	3.342	3.346	(0.694)	60878	22.6157	22.61
139	Diethyl ether	59	2.146	2.146	(0.445)	45486	19.2634	19.26
148	Tert-butyl alcohol	59	2.967	2.960	(0.616)	125028	385.668	385.66
149	Isopropyl alcohol	45	2.562	2.559	(0.532)	70899	382.255	382.25
152	Amyl alcohol	42	7.398	7.394	(0.904)	36027	361.425	361.42
156	Diisopropyl ether	45	3.623	3.619	(0.752)	180726	17.9144	17.91
162	Butyl acrylate	55	8.733	8.733	(1.067)	99142	17.4164	17.41
187	n-Amyl acetate	43	8.931	8.931	(1.091)	96897	17.0111	17.01
164	Dicyclopentadiene	66	10.198	10.198	(1.003)	250207	19.0138	19.01
166	1,2,3-Trimethylbenzene	105	10.232	10.232	(1.006)	216524	21.2551	21.25
167	Ethanol	45	2.082	2.079	(0.432)	14494	398.229	398.22
172	tert-Butyl formate	59	5.239	5.235	(1.087)	77481	37.4647	37.46
173	3,3-Dimethyl-1-butanol	57	7.780	7.777	(0.951)	149742	403.879	403.87
174	tert-Amyl methyl ether	73	5.288	5.284	(1.097)	162684	18.1106	18.11
175	tert-Butyl ethyl ether	59	4.051	4.051	(0.841)	164168	18.2542	18.25
176	tert-Amyl alcohol	59	5.239	5.235	(1.087)	77481	376.369	376.36
151	4-Methyl-2-pentanol	45	7.214	7.214	(1.299)	260833	389.552	389.55
140	1,3-Butadiene	54	1.404	1.408	(0.291)	48482	16.6695	16.66
158	Dichlorofluoromethane	67	1.861	1.861	(0.386)	102271	23.1711	23.17
182	Epichlorohydrin	57	6.633	6.630	(1.194)	6355	36.5999	36.59
M 94	1,2-Dichloroethylene (total)	96				156366	50.0631	50.06
M 95	Xylenes (total)	106				359425	69.4959	69.49
145	alpha-Methylstyrene	118	9.756	9.752	(0.959)	97307	20.4223	20.42
130	Ethyl Acetate	43	4.343	4.339	(0.901)	59251	16.8434	16.84
131	Methyl Acrylate	55	4.373	4.369	(0.907)	65974	17.3444	17.34
189	n-Butyl acetate	43	7.705	7.702	(0.941)	88905	17.7603	17.76
134	Cyclohexanone	55	9.152	9.153	(0.900)	41109	251.700	251.69(a)
185	Isoprene	39	2.161	2.161	(0.449)	14809	21.9652	21.96
188	Isopropyl acetate	43	5.284	5.284	(0.951)	149728	18.1581	18.15
150	Allyl alcohol	57	3.342	3.346	(0.694)	60878	452.314	452.31
194	Acetaldehyde	44	1.460	1.464	(0.303)	28393	70.9216	70.92(M)
195	Methyl Amyl Ketone	43	8.868	8.868	(1.083)	120900	18.4353	18.43

200 Dimethyl Disulfide	94	6.746	6.746 (0.824)	55671	16.6861	16.68
203 2-Ethylhexyl Acrylate	55	12.043	12.039 (1.184)	53533	16.4741	16.47

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
133 Ethyl Acrylate	55	5.947	5.947	(1.234)	134270	19.2897	19.28
163 Butyl methacrylate	41	9.651	9.647	(0.949)	52467	17.3207	17.32

QC Flag Legend

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



Data File: \\NAHSTMS005\Target\chem\voa9.i\u240117.b\u011715.d
Date : 17-JAN-2024 12:25
Client ID: HS24010611-01MSD
Sample Info: HS24010611-01MSD;HS24010611-01MSD;3;;MSD
Purge Volume: 5.0
Column phase: DB624

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

\\NAHSTMS005\Target\chem\voa9.i\u240117.b\u011715.d

Data File : \\nahstws005\target\chem\voa9.i\u240117.b\u011715.d
Inj Date : 17-JAN-2024 12:25
InstruID : VOA9.i
LabSampID : HS24010611-01MSD

Chloroprene (126-99-8)

BEFORE
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53
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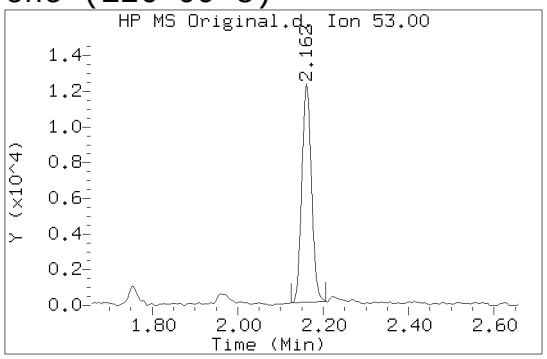
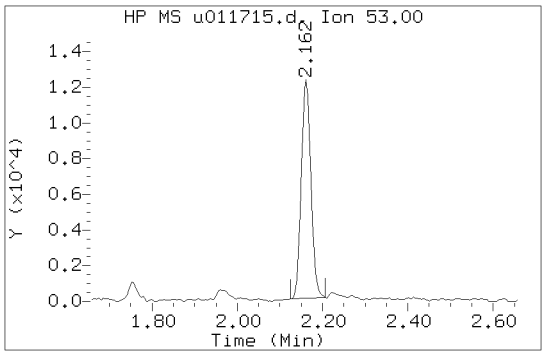
19757
HEIGHT
12264
22-Jan-2024
17:33
linh
pham



Reason Code:

AFTER
MASS
53
AREA
19757
HEIGHT
12264
22-Jan-2024
17:33
linh
pham



BEFORE
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AREA
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HEIGHT
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22-Jan-2024
17:33
linh
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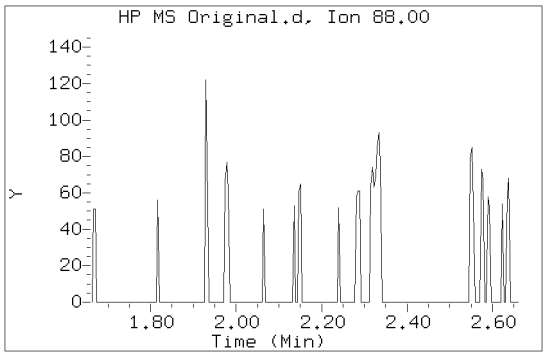

AFTER
MASS
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AREA
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22-Jan-2024
17:33
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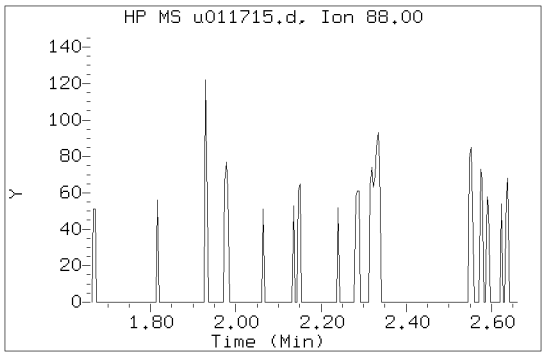

Acetaldehyde (75-07-0)

BEFORE
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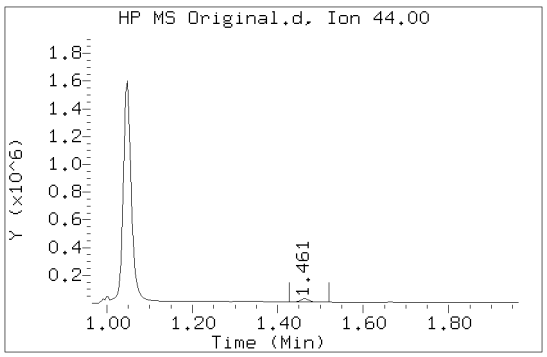
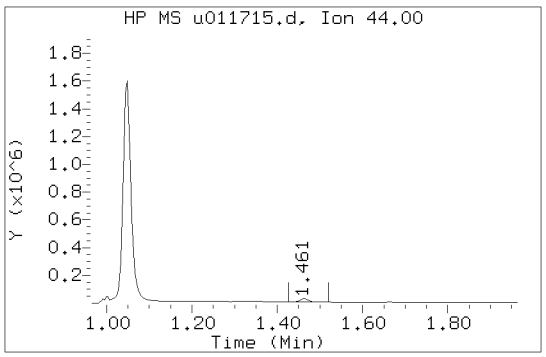
AREA
28393
HEIGHT
22039
22-Jan-2024
17:33
linh
pham



Reason Code:

AFTER
MASS
44
AREA
28393
HEIGHT
22039
22-Jan-2024
17:33
linh
pham



BEFORE
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22-Jan-2024
17:33
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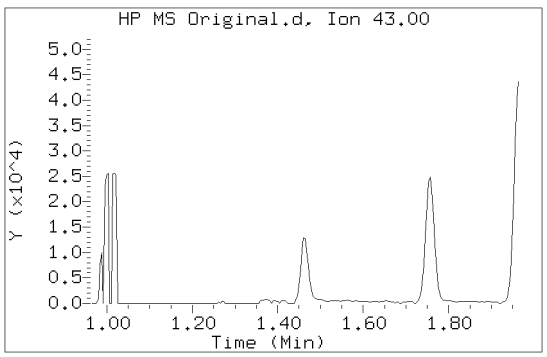
pham



AFTER
MASS
43
AREA
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HEIGHT
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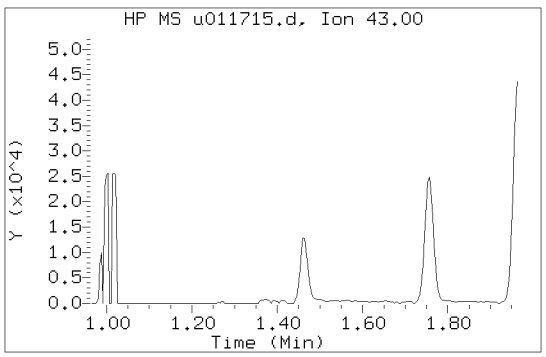
22-Jan-2024
17:33
linh
pham



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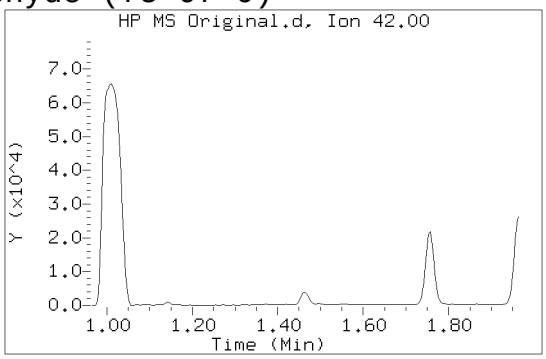
Inj Date : 17-JAN-2024 12:25
InstruID : VOA9.i
LabSampID : HS24010611-01MSD

Acetaldehyde (75-07-0)

Reason Code:

BEFORE

MASS
42
AREA
0
HEIGHT
0
22-Jan-2024
17:33
linh
pham



AFTER

MASS
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AREA
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HEIGHT
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22-Jan-2024
17:33
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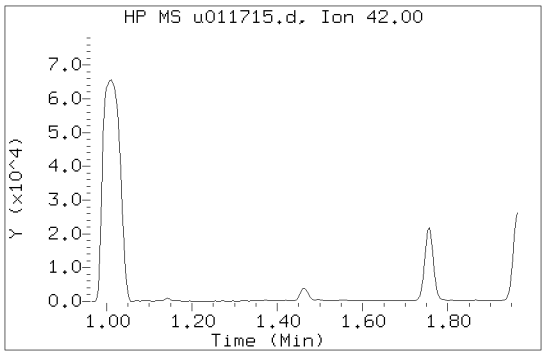


Data File: \\NAHSTWS005\Target\chem\voa9.i\U240117.b\U011718.D Page 1
Report Date: 22-Jan-2024 17:34

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240117.b\U011718.D
Lab Smp Id: HS24010611-04
Inj Date : 17-JAN-2024 13:32
Operator : RKG   Inst ID: VOA9.i
Smp Info : HS24010611-04
Misc Info : V9;WATER;0;10;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240117.b\8260C.m
Meth Date : 22-Jan-2024 17:33 VOA9.i   Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11   Cal File: U120608.D
Als bottle: 17
Dil Factor: 10.00000
Integrator: HP RTE   Compound Sublist: 193_tclp.sub
Target Version: 4.14
Processing Host: NAHSTW7056

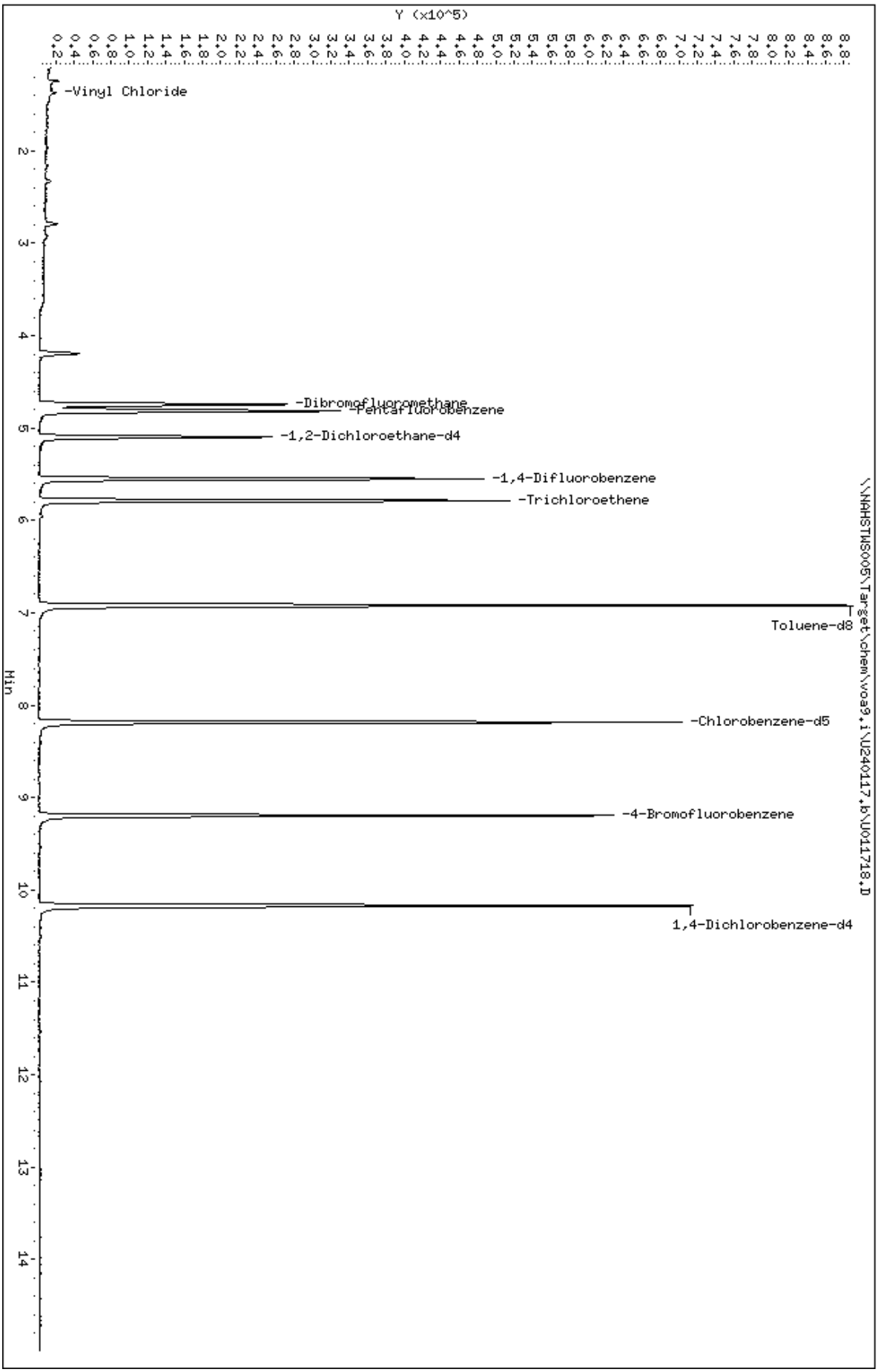
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	10.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.812	4.815	(1.000)	248255	50.0000	
* 36 1,4-Difluorobenzene	114	5.550	5.554	(1.000)	397228	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	401919	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	209111	50.0000	
$ 30 Dibromofluoromethane	113	4.744	4.748	(0.986)	162291	64.1628	64.16(R)
$ 35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.059)	166460	56.6558	56.65
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	565941	61.1677	61.16
$ 69 4-Bromofluorobenzene	95	9.194	9.190	(1.123)	190608	54.5239	54.52
38 Trichloroethene	130	5.786	5.786	(1.043)	180198	60.4621	604.62
5 Vinyl Chloride	62	1.370	1.381	(0.285)	3787	1.39201	13.92(a)

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\U240117,b\U011718.D
Date : 17-JAN-2024 13:32
Client ID:
Sample Info: HS24010611-04
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240117.b\U011718.D Page 2

Date : 17-JAN-2024 13:32

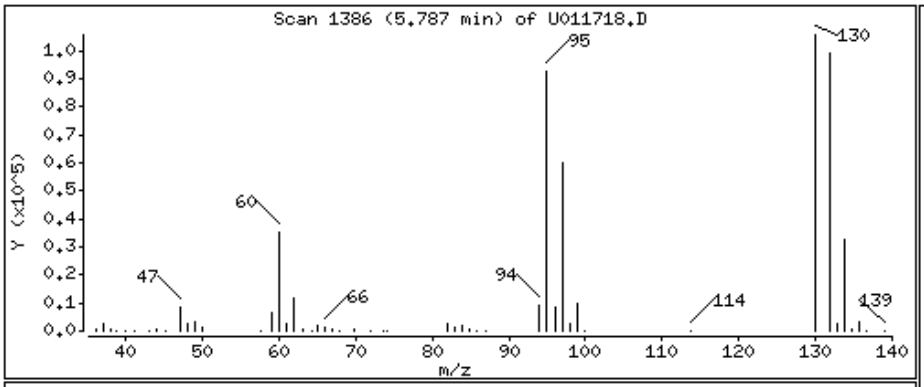
Client ID: Instrument: VOA9.i

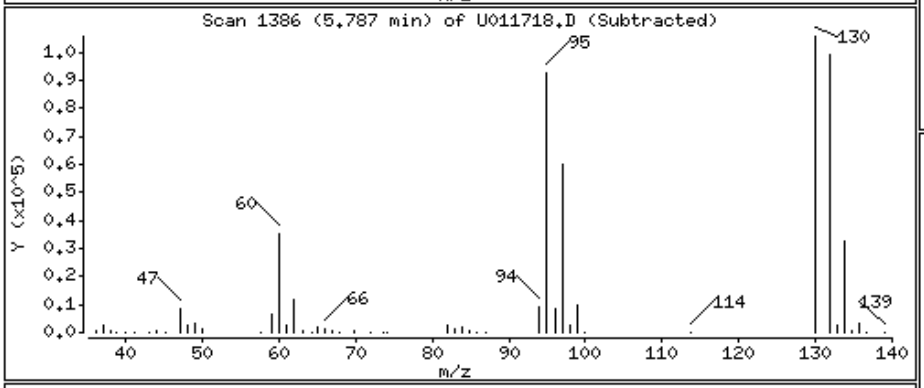
Sample Info: HS24010611-04

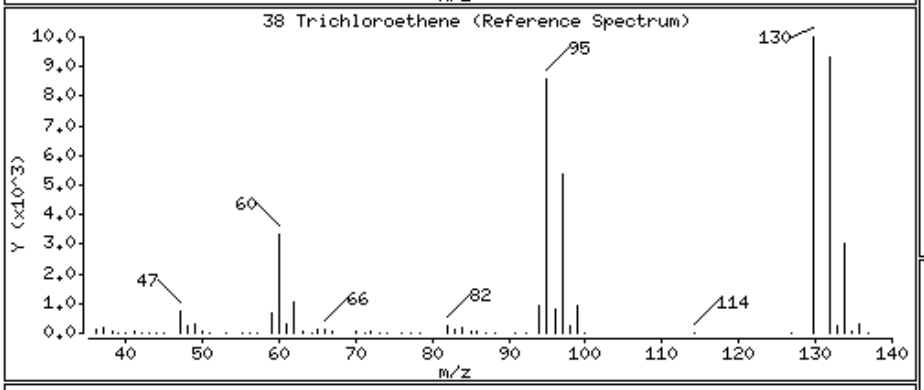
Purge Volume: 5.0 Operator: RKG

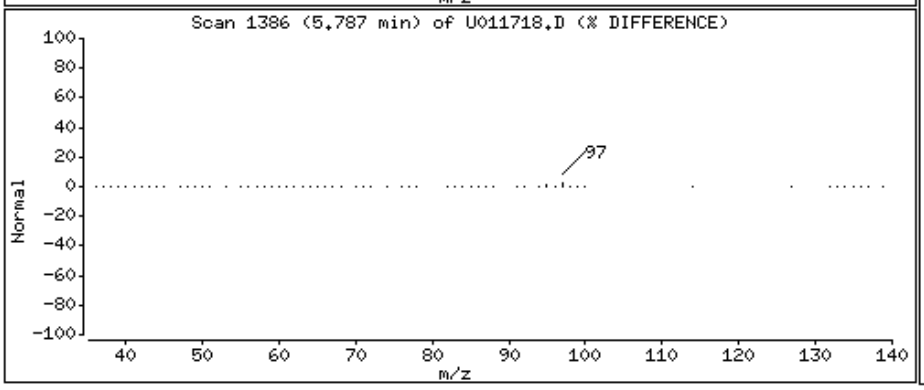
Column phase: DB624 Column diameter: 0.18

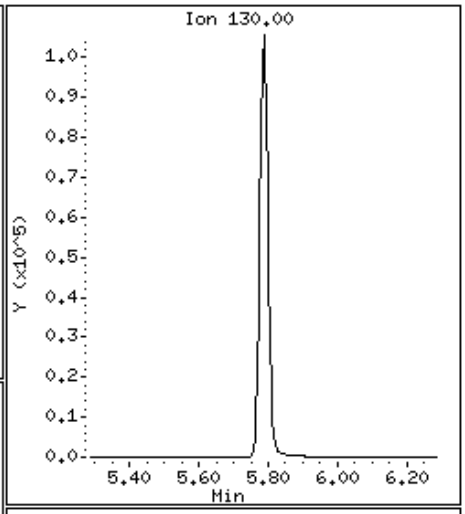
38 Trichloroethene Concentration: 604.62 ug/l

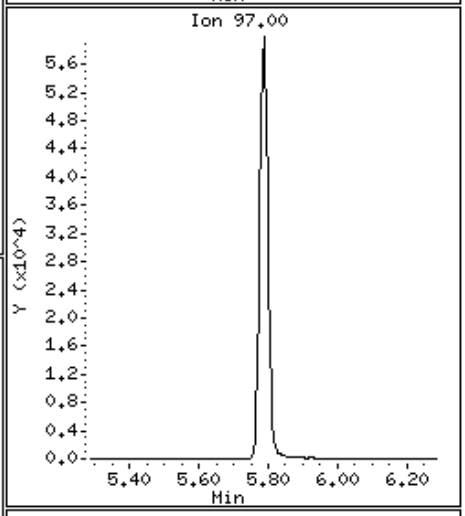


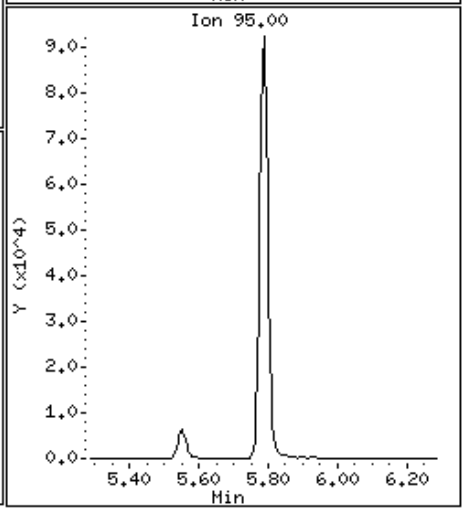












Data File: \\NAHSTWS005\Target\chem\voa9.i\U240117.b\U011718.D Page 3

Date : 17-JAN-2024 13:32

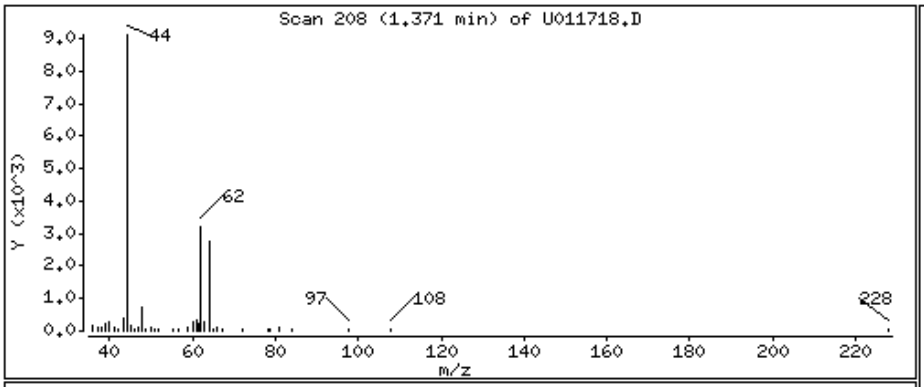
Client ID: Instrument: VOA9.i

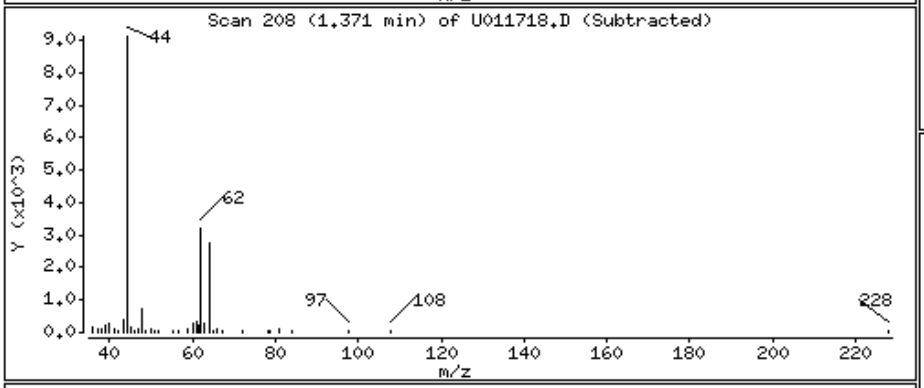
Sample Info: HS24010611-04

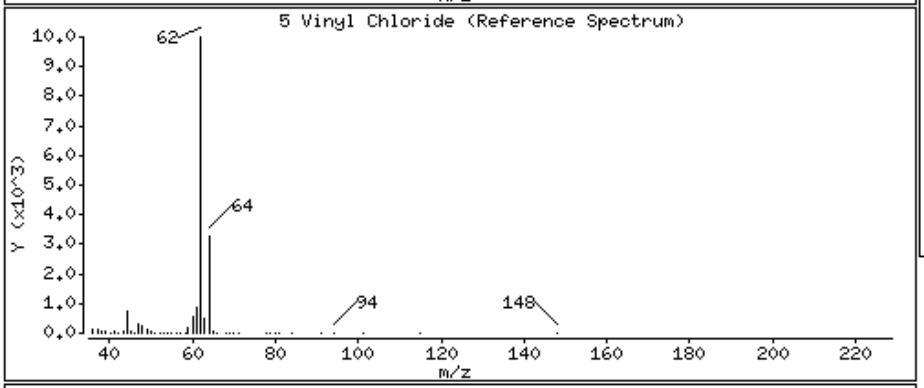
Purge Volume: 5.0 Operator: RKG

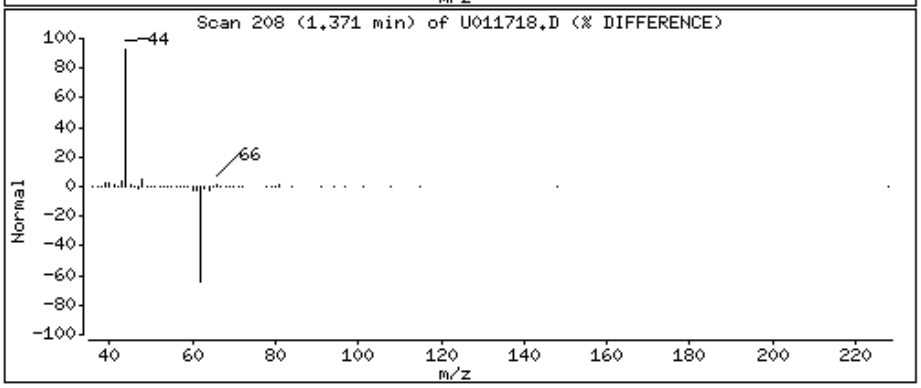
Column phase: DB624 Column diameter: 0.18

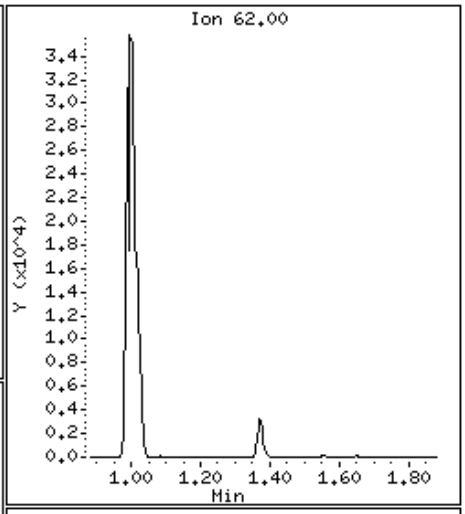
5 Vinyl Chloride Concentration: 13.92 ug/l

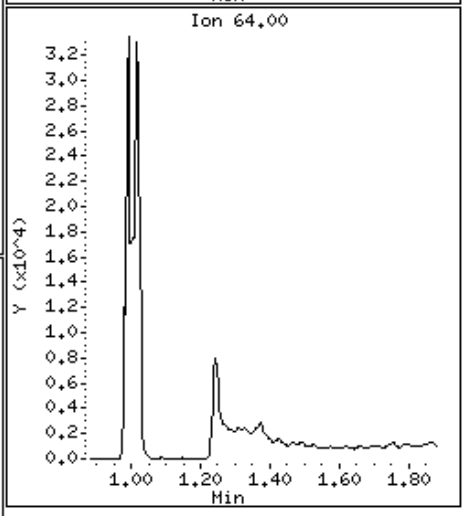












Data File : \\NAHSTWS005\Target\chem\voa9.i\U240117.b\U011718.D
Inj Date : 17-JAN-2024 13:32
InstruID : VOA9.i
LabSampID : HS24010611-04

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240117.b\U011728.D Page 1
Report Date: 22-Jan-2024 17:34

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240117.b\U011728.D
Lab Smp Id: CCV-END Client Smp ID: CCV-END
Inj Date : 17-JAN-2024 17:16
Operator : FT Inst ID: VOA9.i
Smp Info : CCV-END;CCV-END;2;;;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240117.b\8260C.m
Meth Date : 22-Jan-2024 17:34 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 27 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.815	4.815	(1.000)	301643	50.0000	
2 Dichlorodifluoromethane	85	1.164	1.164	(0.242)	62905	50.0000	26.29
3 Chloromethane	50	1.299	1.299	(0.270)	108432	50.0000	31.33
4 Propionitrile	54	4.335	4.335	(0.900)	217187	500.000	434.25
5 Vinyl Chloride	62	1.378	1.378	(0.286)	142957	50.0000	43.24
6 Bromomethane	94	1.618	1.618	(0.336)	87449	50.0000	51.53
7 Chloroethane	64	1.700	1.700	(0.353)	107631	50.0000	48.35
8 Trichlorofluoromethane	101	1.895	1.895	(0.394)	231325	50.0000	55.20
9 Acrolein	56	2.262	2.262	(0.470)	15836	100.000	92.12
10 Acetone	43	2.405	2.405	(0.499)	91536	100.000	88.47
11 1,1-Dichloroethene	96	2.330	2.330	(0.484)	126875	50.0000	54.53
12 Isobutyl Alcohol	43	5.284	5.284	(1.097)	394470	1000.00	871.96
13 Acetonitrile	39	2.671	2.671	(0.555)	163739	500.000	504.36
14 Allyl Chloride	41	2.671	2.671	(0.555)	375256	50.0000	50.59
15 Iodomethane	142	2.469	2.469	(0.513)	338193	100.000	113.28
16 Acrylonitrile	53	3.065	3.065	(0.636)	119340	100.000	100.85
17 Methylene Chloride	84	2.791	2.791	(0.580)	163543	50.0000	55.73
18 Methyl tert-butyl ether	73	3.080	3.080	(0.640)	424871	50.0000	50.96
19 Carbon Disulfide	76	2.521	2.521	(0.524)	758980	100.000	110.71
20 trans-1,2-Dichloroethene	96	3.057	3.057	(0.635)	155857	50.0000	56.03

21 Vinyl Acetate	43	3.604	3.604 (0.749)	734787	100.000	87.36
22 1,1-Dichloroethane	63	3.511	3.511 (0.729)	270191	50.0000	47.62

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240117.b\U011728.D Page 2
Report Date: 22-Jan-2024 17:34

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	23 Chloroprene	53	2.157	2.157	(0.448)	48091	50.0000	46.73(M)
	24 2-Butanone	43	4.260	4.260	(0.885)	123163	100.000	83.35
	25 Methacrylonitrile	41	4.493	4.493	(0.933)	150648	50.0000	69.94(a)
	26 2,2-Dichloropropane	77	4.182	4.182	(0.868)	191246	50.0000	47.95
	27 cis-1,2-Dichloroethene	96	4.197	4.197	(0.872)	184394	50.0000	49.49
	28 Chloroform	83	4.572	4.572	(0.949)	294818	50.0000	47.74
	29 Bromochloromethane	128	4.467	4.467	(0.928)	99597	50.0000	51.66
$	30 Dibromofluoromethane	113	4.748	4.748	(0.986)	159625	50.0000	51.74
	31 1,1,1-Trichloroethane	97	4.740	4.740	(0.984)	238860	50.0000	50.90
	32 1,1-Dichloropropene	75	4.920	4.920	(0.887)	202373	50.0000	51.99
	33 1,2-Dichloroethane	62	5.175	5.175	(0.932)	208305	50.0000	45.95
	34 Carbon Tetrachloride	117	4.913	4.913	(0.885)	209130	50.0000	55.00
$	35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	162734	50.0000	46.18
*	36 1,4-Difluorobenzene	114	5.550	5.550	(1.000)	465267	50.0000	
	37 Benzene	78	5.138	5.138	(0.926)	612426	50.0000	48.35
	38 Trichloroethene	130	5.786	5.786	(1.043)	187338	50.0000	53.66
	39 Bromodichloromethane	83	6.277	6.277	(1.131)	213651	50.0000	51.51
	40 Methyl Methacrylate	41	6.154	6.154	(1.278)	127976	50.0000	42.98
	41 2-Chloroethylvinyl ether	63	6.577	6.577	(1.185)	5849	100.000	142.13
	42 1,2-Dichloropropane	63	6.007	6.007	(1.082)	160608	50.0000	47.09
	43 2-Nitropropane	43	6.506	6.506	(1.351)	32439	50.0000	41.88
	44 Dibromomethane	93	6.120	6.120	(1.103)	107744	50.0000	48.83
	45 4-Methyl-2-Pentanone	43	6.851	6.851	(0.837)	310546	100.000	91.52
	46 cis-1,3-Dichloropropene	75	6.690	6.690	(1.205)	255738	50.0000	47.90
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	470401	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	551952	50.0000	50.97
	49 Ethyl Methacrylate	69	7.289	7.289	(1.313)	220608	50.0000	48.30
	50 Toluene	91	6.978	6.978	(0.853)	684536	50.0000	52.19
	51 trans-1,3-Dichloropropene	75	7.196	7.196	(1.296)	215014	50.0000	47.86
	52 2-Hexanone	43	7.589	7.589	(0.927)	204215	100.000	86.02
	53 1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	128415	50.0000	51.22
	54 1,3-Dichloropropane	76	7.499	7.499	(0.916)	279389	50.0000	47.97
	55 Dibromochloromethane	129	7.691	7.691	(0.940)	190358	50.0000	54.41
	56 Tetrachloroethene	164	7.458	7.458	(0.911)	157912	50.0000	56.24
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	167585	50.0000	51.27
	58 1-Chlorohexane	55	8.197	8.197	(1.477)	133844	50.0000	51.30
	59 Chlorobenzene	112	8.208	8.208	(1.003)	480737	50.0000	50.31
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	175434	50.0000	52.49
	61 Ethylbenzene	106	8.305	8.305	(1.015)	234335	50.0000	52.39
	62 m,p-Xylenes	106	8.407	8.407	(1.027)	592980	100.000	110.27
	63 o-Xylene	106	8.744	8.744	(1.068)	300429	50.0000	54.32
	64 Styrene	104	8.759	8.759	(1.070)	512390	50.0000	55.65
	66 Bromoform	173	8.916	8.916	(1.089)	123305	50.0000	51.48
	67 Isopropylbenzene	105	9.063	9.063	(1.107)	744508	50.0000	55.66
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	210022	50.0000	49.23
$	69 4-Bromofluorobenzene	95	9.190	9.190	(1.123)	203717	50.0000	49.67
*	70 1,4-Dichlorobenzene-d4	152	10.168	10.168	(1.000)	261657	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.921)	217237	50.0000	43.73
	72 trans-1,4-Dichloro-2-butene	53	9.377	9.377	(1.146)	40711	50.0000	48.09
	73 n-Propylbenzene	91	9.411	9.411	(0.926)	796689	50.0000	51.85
	74 Bromobenzene	156	9.317	9.317	(0.916)	215256	50.0000	48.98
	75 1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	591501	50.0000	54.16

76	2-Chlorotoluene	91	9.482	9.482 (0.933)	496865	50.0000	48.04
77	4-Chlorotoluene	91	9.576	9.576 (0.942)	582282	50.0000	49.64

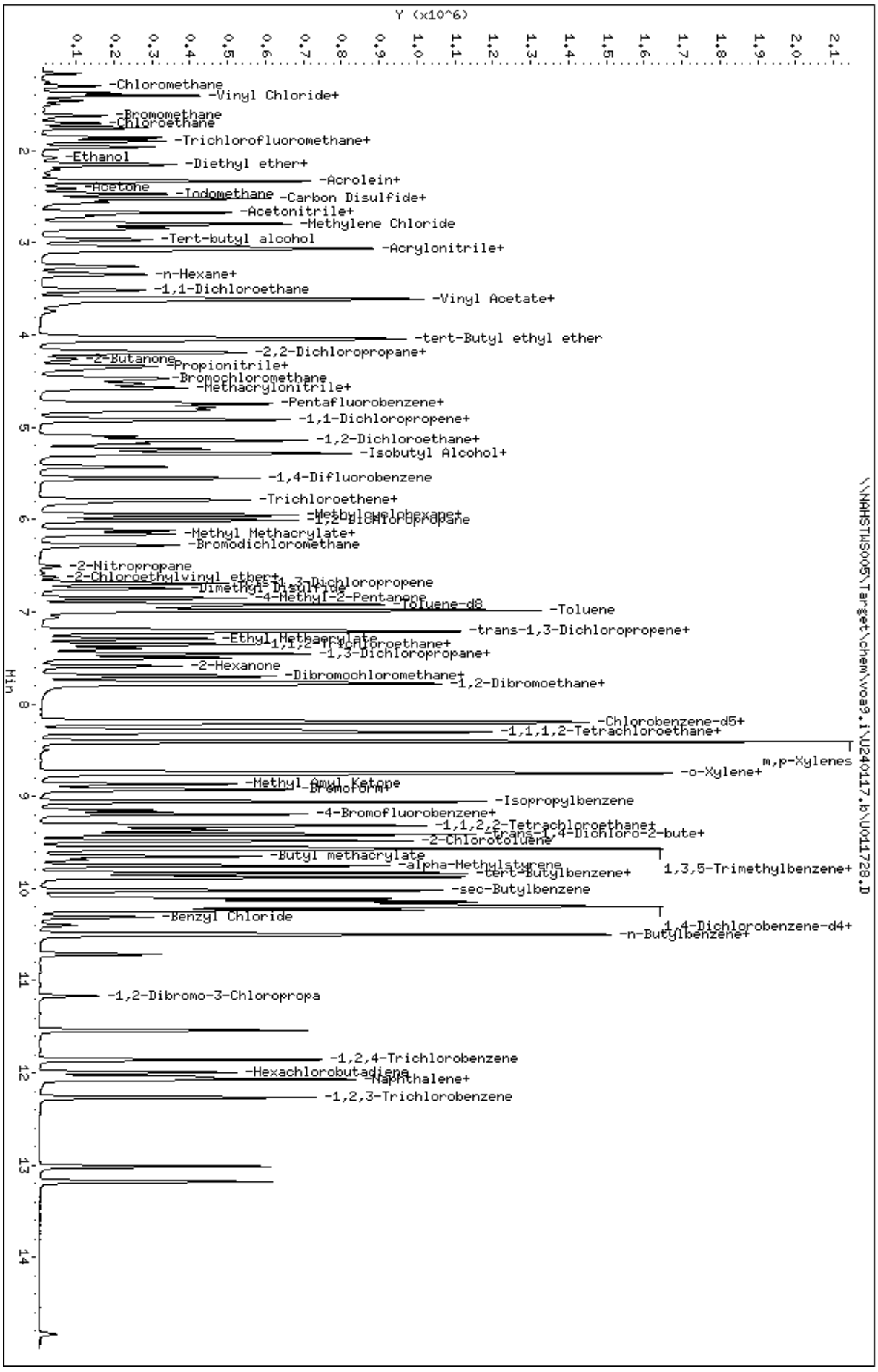
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	
78	tert-Butylbenzene	119	9.835	9.835	(0.967)	532797	50.0000	54.32	
79	1,2,4-Trimethylbenzene	105	9.876	9.876	(0.971)	583662	50.0000	53.33	
81	sec-Butylbenzene	105	10.022	10.022	(0.986)	685896	50.0000	54.23	
82	p-Isopropyltoluene	119	10.146	10.146	(0.998)	619635	50.0000	56.61	
83	1,3-Dichlorobenzene	146	10.112	10.112	(0.994)	383833	50.0000	49.29	
84	1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	401812	50.0000	48.70	
86	Benzyl Chloride	91	10.311	10.311	(1.260)	200424	50.0000	48.04	
87	n-Butylbenzene	91	10.491	10.491	(1.032)	499868	50.0000	54.41	
88	1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	385492	50.0000	49.21	
89	1,2-Dibromo-3-Chloropropane	155	11.166	11.166	(1.098)	36338	50.0000	47.57	
90	1,2,4-Trichlorobenzene	180	11.859	11.859	(1.166)	245555	50.0000	50.81	
91	Hexachlorobutadiene	225	11.998	11.998	(1.180)	102776	50.0000	53.05	
92	Naphthalene	128	12.065	12.065	(1.187)	603886	50.0000	51.81	
93	1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	239744	50.0000	49.19	
146	Methyl acetate	43	2.712	2.712	(0.563)	141489	50.0000	47.13	
138	Freon TF	101	2.334	2.334	(0.485)	141911	50.0000	63.35	
141	Cyclohexane	56	4.785	4.785	(0.994)	204226	50.0000	46.98	
142	Tetrahydrofuran	42	4.542	4.542	(0.943)	52881	100.000	82.59	
147	Methylcyclohexane	55	5.947	5.947	(1.072)	349178	50.0000	50.63	
135	1,4-Dioxane	88	6.165	6.165	(1.280)	44055	1000.00	920.53	
132	n-Butanol	56	5.816	5.816	(1.208)	88357	1000.00	901.27	
136	n-Hexane	57	3.342	3.342	(0.694)	137925	50.0000	49.18	
139	Diethyl ether	59	2.142	2.142	(0.445)	116698	50.0000	47.44	
148	Tert-butyl alcohol	59	2.963	2.963	(0.615)	341070	1000.00	1010.02	
149	Isopropyl alcohol	45	2.559	2.559	(0.531)	206666	1000.00	1083.18	
152	Amyl alcohol	42	7.394	7.394	(0.903)	92264	1000.00	884.27	
156	Diisopropyl ether	45	3.619	3.619	(0.752)	462307	50.0000	43.99	
162	Butyl acrylate	55	8.733	8.733	(1.067)	256547	50.0000	38.26	
187	n-Amyl acetate	43	8.931	8.931	(1.091)	245839	50.0000	41.23	
164	Dicyclopentadiene	66	10.198	10.198	(1.003)	657500	50.0000	47.13	
166	1,2,3-Trimethylbenzene	105	10.232	10.232	(1.006)	525291	50.0000	48.64	
167	Ethanol	45	2.079	2.079	(0.432)	37479	1000.00	991.22	
172	tert-Butyl formate	59	5.239	5.239	(1.088)	219897	100.000	95.38	
173	3,3-Dimethyl-1-butanol	57	7.780	7.780	(0.951)	324334	1000.00	835.73	
174	tert-Amyl methyl ether	73	5.284	5.284	(1.097)	424908	50.0000	45.41	
175	tert-Butyl ethyl ether	59	4.047	4.047	(0.840)	429465	50.0000	45.84	
176	tert-Amyl alcohol	59	5.239	5.239	(1.088)	219897	1000.00	955.22	
151	4-Methyl-2-pentanol	45	7.214	7.214	(1.300)	622880	1000.00	834.37	
140	1,3-Butadiene	54	1.404	1.404	(0.292)	121316	50.0000	40.04	
158	Dichlorofluoromethane	67	1.858	1.858	(0.386)	254222	50.0000	55.29	
182	Epichlorohydrin	57	6.630	6.630	(1.195)	34960	200.000	193.42	
M 94	1,2-Dichloroethylene (total)	96				340251	100.000	(a)	
145	alpha-Methylstyrene	118	9.752	9.752	(0.959)	268919	50.0000	50.68	
130	Ethyl Acetate	43	4.339	4.339	(0.901)	154814	50.0000	42.24	
131	Methyl Acrylate	55	4.369	4.369	(0.907)	175956	50.0000	44.40	
189	n-Butyl acetate	43	7.706	7.706	(0.941)	241969	50.0000	46.17	
134	Cyclohexanone	55	9.152	9.152	(0.900)	118733	1000.00	685.83	
185	Isoprene	39	2.157	2.157	(0.448)	38959	50.0000	55.47	
188	Isopropyl acetate	43	5.284	5.284	(0.952)	396181	50.0000	46.15	
150	Allyl alcohol	57	3.342	3.342	(0.694)	137925	1000.00	983.79	
195	Methyl Amyl Ketone	43	8.868	8.868	(1.083)	269031	50.0000	36.88	
200	Dimethyl Disulfide	94	6.746	6.746	(0.824)	191472	50.0000	46.46	

203 2-Ethylhexyl Acrylate	55	12.039	12.039 (1.184)	147185	50.0000	38.68
133 Ethyl Acrylate	55	5.947	5.947 (1.235)	349178	50.0000	48.15

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
163 Butyl methacrylate	41	9.647	9.647	(0.949)	136265	50.0000	38.51

QC Flag Legend

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



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Date : 17-JAN-2024 17:16
Client ID: CCV-END
Sample Info: CCV-END;CCV-END;2;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File : \\NAHSTWS005\Target\chem\voa9.i\U240117.b\U011728.D
Inj Date : 17-JAN-2024 17:16
InstruID : VOA9.i
LabSampID : CCV-END

Chloroprene (126-99-8)

Reason Code:

BEFORE

MASS
53
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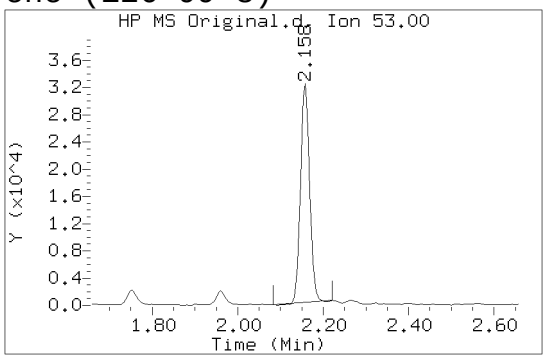
48091
HEIGHT
32110
22-Jan-2024
17:33
linh
pham



AFTER

MASS
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AREA
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22-Jan-2024
17:33
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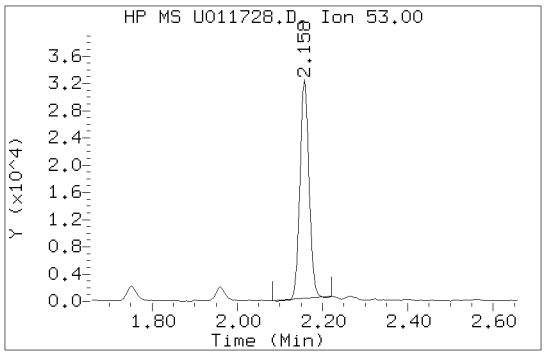

BEFORE

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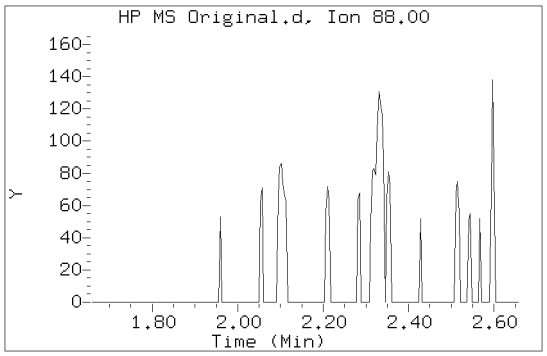

AFTER

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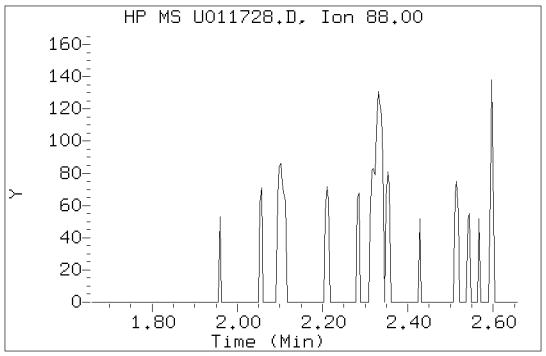


right solutions.
right partner.

RawData

Volatiles by EPA Volatiles Organics by Method 8260C

Workorder

HS24010611

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/29/2024

ALS Environmental–Houston Laboratory

10450 Stancliff Road, Suite 210, Houston, TX 77099

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

www.alsglobal.com

Data File: \\nahstws005\Target\chem\voa9.i\U240119.b\U011901.D Page 1
Report Date: 19-Jan-2024 10:00

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240119.b\U011901.D
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 19-JAN-2024 08:44
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\U240119.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	85136			0.00- 100.00	100.00
9.194	9.180	(0.000)	50	13426			15.00- 40.00	15.77
9.194	9.180	(0.000)	75	38280			30.00- 60.00	44.96
9.194	9.180	(0.000)	96	5829			5.00- 9.00	6.85
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	82232			50.00- 0.00	96.59
9.194	9.180	(0.000)	175	6944			5.00- 9.00	8.44
9.194	9.180	(0.000)	176	79128			95.00- 101.00	96.23
9.194	9.180	(0.000)	177	5219			5.00- 9.00	6.60

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	15.77
75	30.00 - 60.00% of mass 95	44.96
96	5.00 - 9.00% of mass 95	6.85
173	Less than 2.00% of mass 174	0.00 (0.00)
174	Greater than 50.00% of mass 95	96.59
175	5.00 - 9.00% of mass 174	8.16 (8.44)
176	95.00 - 101.00% of mass 174	92.94 (96.23)
177	5.00 - 9.00% of mass 176	6.13 (6.60)

Data File: U011901.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
36.00	561	62.00	3378	92.10	2452	140.20	145
37.10	3448	63.00	2809	93.10	3610	140.80	774
38.10	2815	63.90	303	94.10	10103	142.10	95
39.10	1350	65.00	753	95.10	85136	143.00	839
40.00	262	66.20	77	96.00	5829	143.90	53
41.60	65	67.00	217	97.00	196	144.90	244
42.00	84	68.00	7793	102.90	66	146.00	133
43.00	199	69.00	7822	103.90	355	147.00	57
44.10	505	70.10	728	104.80	56	147.90	233
45.00	835	70.90	86	105.90	273	148.80	61
46.00	124	72.00	487	107.10	68	149.60	140
47.10	970	73.00	3606	109.70	54	154.90	272
48.00	480	74.10	13170	112.70	65	160.70	90
49.00	3233	75.10	38280	114.80	143	161.20	108
50.10	13426	76.00	3293	115.90	289	169.50	71
51.00	4547	77.00	654	117.00	551	170.90	118
52.10	248	78.10	618	117.80	255	172.00	981
53.00	62	78.90	1848	118.90	471	174.00	82232
54.00	56	80.00	554	123.90	66	175.10	6944
55.20	267	81.00	1795	127.90	287	176.00	79128
56.00	924	82.00	462	128.90	135	177.00	5219
57.00	1933	83.00	137	129.90	288	177.90	132
58.10	152	85.90	263	130.80	147	205.20	67
58.90	68	87.00	3647	134.90	130		
60.00	880	87.90	3375	137.00	124		
61.10	3115	90.90	340	139.50	56		

Data File: \\NAHSTWS005\Target\chem\voa9.i\u240119.b\u011901.d Page 1

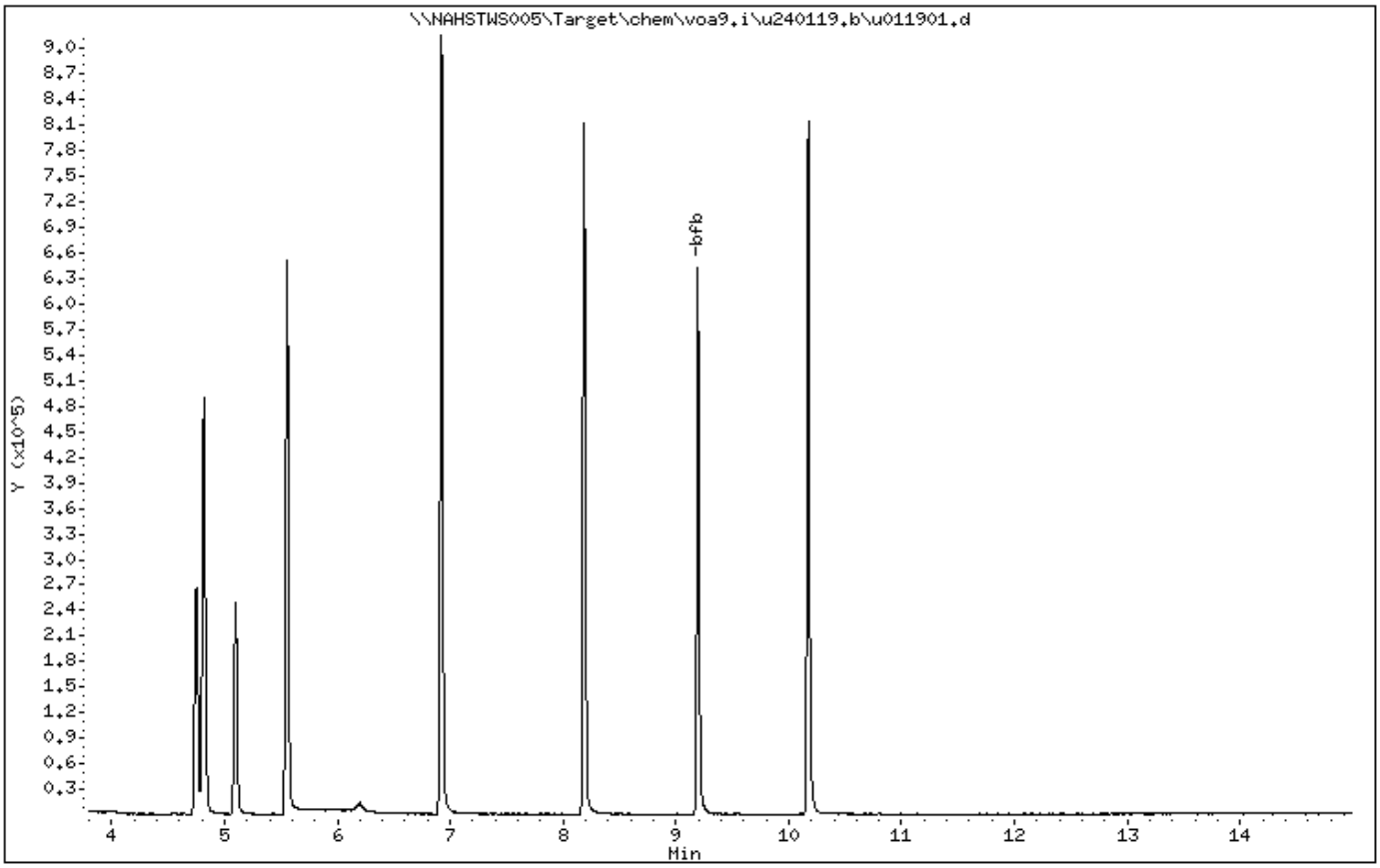
Date : 19-JAN-2024 08:44

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



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Inj Date : 19-JAN-2024 08:44
InstruID : VOA9.i
LabSampID : BFB

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240119.b\U011902.D Page 1
Report Date: 25-Jan-2024 11:54

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240119.b\U011902.D
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 19-JAN-2024 09:07
Operator : FT Inst ID: VOA9.i
Smp Info : CCV;CCV;2;;;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240119.b\8260C.m
Meth Date : 25-Jan-2024 11:54 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1	Pentafluorobenzene	168	4.815	4.815	(1.000)	317534	50.0000	
2	Dichlorodifluoromethane	85	1.164	1.164	(0.242)	55592	50.0000	22.21
3	Chloromethane	50	1.299	1.299	(0.270)	101455	50.0000	27.85
4	Propionitrile	54	4.332	4.332	(0.900)	218959	500.000	415.89
5	Vinyl Chloride	62	1.378	1.378	(0.286)	140557	50.0000	40.39(M)
6	Bromomethane	94	1.617	1.617	(0.336)	80255	50.0000	45.15
7	Chloroethane	64	1.700	1.700	(0.353)	101362	50.0000	43.26
8	Trichlorofluoromethane	101	1.895	1.895	(0.394)	215832	50.0000	48.93
9	Acrolein	56	2.262	2.262	(0.470)	15601	100.000	86.21(M)
10	Acetone	43	2.405	2.405	(0.499)	105657	100.000	97.60
11	1,1-Dichloroethene	96	2.333	2.333	(0.485)	124142	50.0000	50.68
12	Isobutyl Alcohol	43	5.284	5.284	(1.097)	383303	1000.00	804.87(M)
13	Acetonitrile	39	2.671	2.671	(0.555)	164990	500.000	482.78
14	Allyl Chloride	41	2.671	2.671	(0.555)	381777	50.0000	48.90
15	Iodomethane	142	2.468	2.468	(0.513)	343638	100.000	109.66
16	Acrylonitrile	53	3.061	3.061	(0.636)	121139	100.000	97.25
17	Methylene Chloride	84	2.795	2.795	(0.580)	156081	50.0000	50.50
18	Methyl tert-butyl ether	73	3.079	3.079	(0.640)	423143	50.0000	48.21
19	Carbon Disulfide	76	2.521	2.521	(0.524)	731332	100.000	101.34
20	trans-1,2-Dichloroethene	96	3.057	3.057	(0.635)	152062	50.0000	51.93

21 Vinyl Acetate	43	3.604	3.604 (0.749)	768005	100.000	86.74
22 1,1-Dichloroethane	63	3.514	3.514 (0.730)	257948	50.0000	43.19

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	23 Chloroprene	53	2.157	2.157	(0.448)	45177	50.0000	41.70(M)
	24 2-Butanone	43	4.260	4.260	(0.885)	125174	100.000	80.47(M)
	25 Methacrylonitrile	41	4.493	4.493	(0.933)	96468	50.0000	42.54(aM)
	26 2,2-Dichloropropane	77	4.182	4.182	(0.868)	199673	50.0000	47.56
	27 cis-1,2-Dichloroethene	96	4.197	4.197	(0.872)	174262	50.0000	44.43
	28 Chloroform	83	4.571	4.571	(0.949)	283411	50.0000	43.60
	29 Bromochloromethane	128	4.466	4.466	(0.928)	97635	50.0000	48.11
$	30 Dibromofluoromethane	113	4.748	4.748	(0.986)	161758	50.0000	49.77
	31 1,1,1-Trichloroethane	97	4.744	4.744	(0.985)	225249	50.0000	45.59
	32 1,1-Dichloropropene	75	4.920	4.920	(0.886)	193100	50.0000	48.33
	33 1,2-Dichloroethane	62	5.175	5.175	(0.932)	194775	50.0000	41.86
	34 Carbon Tetrachloride	117	4.909	4.909	(0.884)	199511	50.0000	51.12
$	35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	161491	50.0000	43.66
*	36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	477565	50.0000	
	37 Benzene	78	5.138	5.138	(0.925)	586551	50.0000	45.11
	38 Trichloroethene	130	5.786	5.786	(1.042)	183890	50.0000	51.32
	39 Bromodichloromethane	83	6.277	6.277	(1.130)	203545	50.0000	47.81
	40 Methyl Methacrylate	41	6.153	6.153	(1.278)	127474	50.0000	40.67
	41 2-Chloroethylvinyl ether	63	6.577	6.577	(1.184)	6023	100.000	142.55
	42 1,2-Dichloropropane	63	6.007	6.007	(1.082)	154304	50.0000	44.08
	43 2-Nitropropane	43	6.506	6.506	(1.351)	34175	50.0000	41.92
	44 Dibromomethane	93	6.120	6.120	(1.102)	103410	50.0000	45.66
	45 4-Methyl-2-Pentanone	43	6.851	6.851	(0.837)	293103	100.000	84.67
	46 cis-1,3-Dichloropropene	75	6.689	6.689	(1.205)	252305	50.0000	46.10
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	479768	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	567957	50.0000	51.42
	49 Ethyl Methacrylate	69	7.289	7.289	(1.312)	223574	50.0000	47.69
	50 Toluene	91	6.978	6.978	(0.853)	665530	50.0000	49.75
	51 trans-1,3-Dichloropropene	75	7.196	7.196	(1.296)	211993	50.0000	46.04
	52 2-Hexanone	43	7.589	7.589	(0.927)	202688	100.000	83.71
	53 1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	129872	50.0000	50.78
	54 1,3-Dichloropropane	76	7.495	7.495	(0.916)	267046	50.0000	44.95
	55 Dibromochloromethane	129	7.690	7.690	(0.940)	186500	50.0000	52.26
	56 Tetrachloroethene	164	7.458	7.458	(0.911)	162179	50.0000	56.63
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	165150	50.0000	49.54
	58 1-Chlorohexane	55	8.196	8.196	(1.476)	126833	50.0000	47.36
	59 Chlorobenzene	112	8.208	8.208	(1.003)	474449	50.0000	48.68
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	177442	50.0000	52.05
	61 Ethylbenzene	106	8.305	8.305	(1.015)	233262	50.0000	51.13
	62 m,p-Xylenes	106	8.406	8.406	(1.027)	585726	100.000	106.79
	63 o-Xylene	106	8.744	8.744	(1.068)	293814	50.0000	52.09
	64 Styrene	104	8.759	8.759	(1.070)	509848	50.0000	54.29
	66 Bromoform	173	8.916	8.916	(1.089)	124366	50.0000	50.92
	67 Isopropylbenzene	105	9.062	9.062	(1.107)	729514	50.0000	53.47
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	209826	50.0000	47.23
$	69 4-Bromofluorobenzene	95	9.190	9.190	(1.123)	206398	50.0000	49.34
*	70 1,4-Dichlorobenzene-d4	152	10.168	10.168	(1.000)	272353	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.921)	215443	50.0000	41.67
	72 trans-1,4-Dichloro-2-butene	53	9.377	9.377	(1.146)	42383	50.0000	49.08
	73 n-Propylbenzene	91	9.411	9.411	(0.926)	813833	50.0000	50.88
	74 Bromobenzene	156	9.317	9.317	(0.916)	216370	50.0000	47.30
	75 1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	584217	50.0000	51.39

76	2-Chlorotoluene	91	9.482	9.482 (0.933)	493274	50.0000	45.82
77	4-Chlorotoluene	91	9.576	9.576 (0.942)	575740	50.0000	47.16

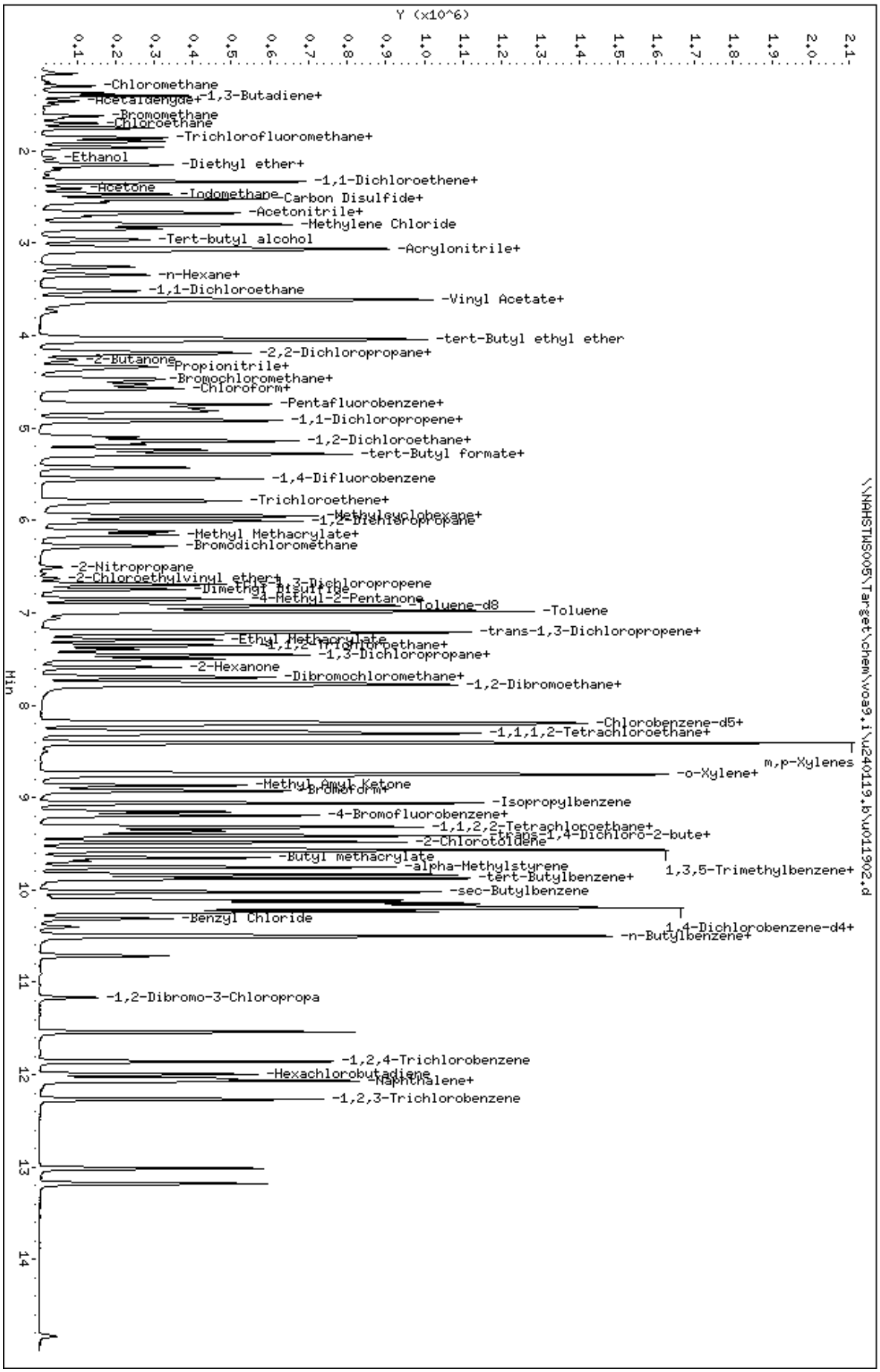
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
78	tert-Butylbenzene	119	9.835	9.835	(0.967)	517427	50.0000	50.68
79	1,2,4-Trimethylbenzene	105	9.876	9.876	(0.971)	585015	50.0000	51.35
81	sec-Butylbenzene	105	10.022	10.022	(0.986)	678377	50.0000	51.52
82	p-Isopropyltoluene	119	10.146	10.146	(0.998)	622395	50.0000	54.62
83	1,3-Dichlorobenzene	146	10.112	10.112	(0.994)	390324	50.0000	48.16
84	1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	411280	50.0000	47.89
86	Benzyl Chloride	91	10.311	10.311	(1.260)	228699	50.0000	53.22
87	n-Butylbenzene	91	10.491	10.491	(1.032)	497763	50.0000	52.06
88	1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	387526	50.0000	47.52
89	1,2-Dibromo-3-Chloropropane	155	11.165	11.165	(1.098)	35790	50.0000	45.13
90	1,2,4-Trichlorobenzene	180	11.859	11.859	(1.166)	252548	50.0000	50.20
91	Hexachlorobutadiene	225	11.998	11.998	(1.180)	112928	50.0000	56.00
92	Naphthalene	128	12.065	12.065	(1.187)	602505	50.0000	49.66
93	1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	241192	50.0000	47.54
146	Methyl acetate	43	2.712	2.712	(0.563)	128720	50.0000	40.73
138	Freon TF	101	2.333	2.333	(0.485)	136339	50.0000	58.00
141	Cyclohexane	56	4.785	4.785	(0.994)	190038	50.0000	41.53
142	Tetrahydrofuran	42	4.538	4.538	(0.942)	55864	100.000	82.88(M)
147	Methylcyclohexane	55	5.943	5.943	(1.070)	361566	50.0000	51.08
135	1,4-Dioxane	88	6.165	6.165	(1.280)	40821	1000.00	810.27
132	n-Butanol	56	5.820	5.820	(1.209)	84379	1000.00	817.62
136	n-Hexane	57	3.342	3.342	(0.694)	142062	50.0000	48.12
139	Diethyl ether	59	2.142	2.142	(0.445)	119942	50.0000	46.32
148	Tert-butyl alcohol	59	2.960	2.960	(0.615)	322845	1000.00	908.20
149	Isopropyl alcohol	45	2.555	2.555	(0.531)	196226	1000.00	976.25
152	Amyl alcohol	42	7.394	7.394	(0.903)	91080	1000.00	855.88
156	Diisopropyl ether	45	3.619	3.619	(0.752)	458298	50.0000	41.43
162	Butyl acrylate	55	8.732	8.732	(1.067)	274905	50.0000	40.03(M)
187	n-Amyl acetate	43	8.931	8.931	(1.091)	235375	50.0000	38.70
164	Dicyclopentadiene	66	10.198	10.198	(1.003)	667313	50.0000	45.96
166	1,2,3-Trimethylbenzene	105	10.236	10.236	(1.007)	549839	50.0000	48.92
167	Ethanol	45	2.079	2.079	(0.432)	36305	1000.00	911.98
172	tert-Butyl formate	59	5.235	5.235	(1.087)	213488	100.000	88.27
173	3,3-Dimethyl-1-butanol	57	7.780	7.780	(0.951)	345045	1000.00	871.73
174	tert-Amyl methyl ether	73	5.284	5.284	(1.097)	428726	50.0000	43.52
175	tert-Butyl ethyl ether	59	4.047	4.047	(0.840)	432541	50.0000	43.86
176	tert-Amyl alcohol	59	5.235	5.235	(1.087)	213488	1000.00	884.13
151	4-Methyl-2-pentanol	45	7.214	7.214	(1.299)	628704	1000.00	821.25
140	1,3-Butadiene	54	1.404	1.404	(0.292)	112124	50.0000	35.15
158	Dichlorofluoromethane	67	1.857	1.857	(0.386)	263246	50.0000	54.39
182	Epichlorohydrin	57	6.629	6.629	(1.194)	34901	200.000	188.12
M 94	1,2-Dichloroethylene (total)	96				326324	100.000	(a)
145	alpha-Methylstyrene	118	9.752	9.752	(0.959)	272479	50.0000	49.38
130	Ethyl Acetate	43	4.339	4.339	(0.901)	148870	50.0000	38.59
131	Methyl Acrylate	55	4.365	4.365	(0.907)	178478	50.0000	42.79
189	n-Butyl acetate	43	7.705	7.705	(0.941)	231013	50.0000	43.22
134	Cyclohexanone	55	9.152	9.152	(0.900)	185647	1000.00	1030.23
185	Isoprene	39	2.157	2.157	(0.448)	37212	50.0000	50.33
188	Isopropyl acetate	43	5.284	5.284	(0.951)	380222	50.0000	43.15
150	Allyl alcohol	57	3.342	3.342	(0.694)	142062	1000.00	962.59
194	Acetaldehyde	44	1.460	1.460	(0.303)	78915	200.000	192.36
195	Methyl Amyl Ketone	43	8.867	8.867	(1.083)	271704	50.0000	36.54

200 Dimethyl Disulfide	94	6.746	6.746 (0.824)	189628	50.0000	45.26
202 Isobutylene	41	1.498	1.498 (0.311)	13665	50.0000	44.13(M)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
203 2-Ethylhexyl Acrylate	55	12.039	12.039	(1.184)	161377	50.0000	40.61(M)
133 Ethyl Acrylate	55	5.943	5.943	(1.234)	361566	50.0000	47.37
163 Butyl methacrylate	41	9.647	9.647	(0.949)	136839	50.0000	37.25

QC Flag Legend

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



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Purge Volume: 5.0
Column phase: DB624

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

Data File : \\nahstws005\target\chem\voa9.i\u240119.b\u011902.d
Inj Date : 19-JAN-2024 09:07
InstruID : VOA9.i
LabSampID : CCV

Vinyl Chloride (75-01-4)

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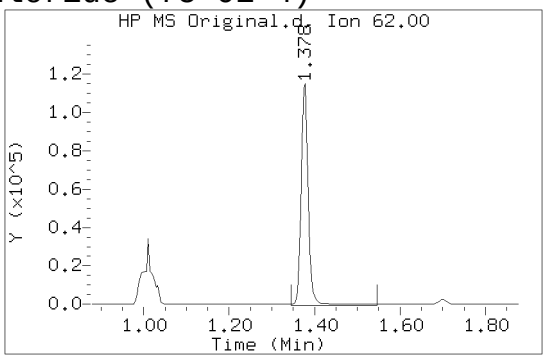

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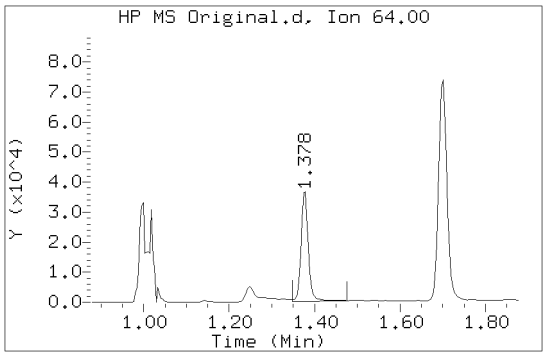

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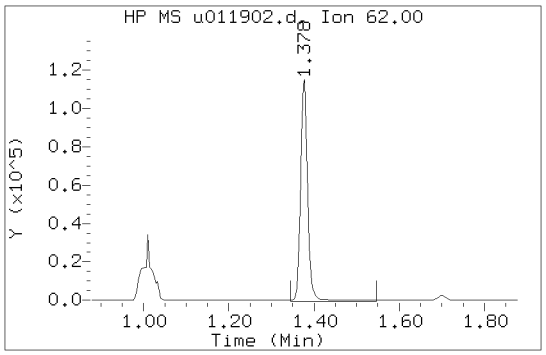

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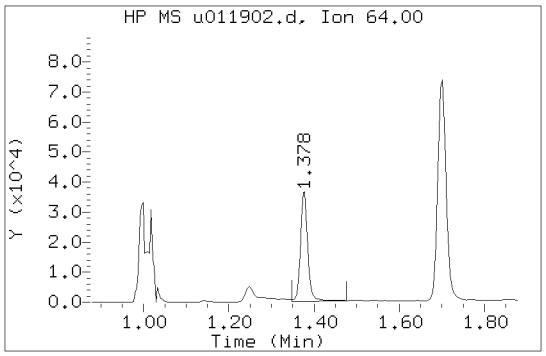

2-Butanone (78-93-3)

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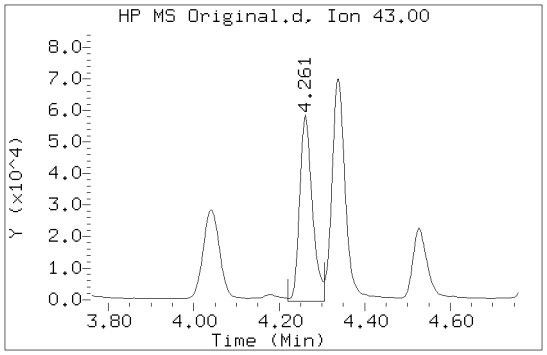

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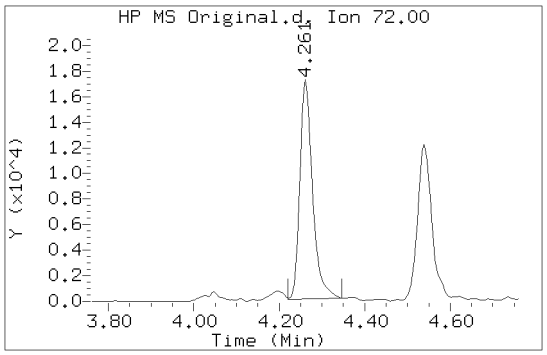

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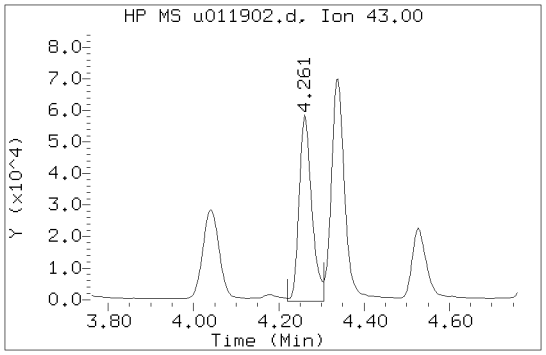

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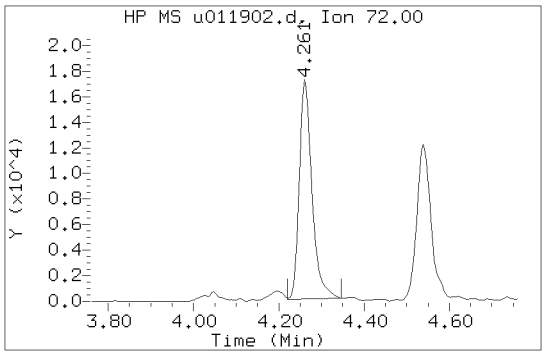

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Inj Date : 19-JAN-2024 09:07
InstruID : VOA9.i
LabSampID : CCV

Acrolein (107-02-8)

Reason Code:

BEFORE

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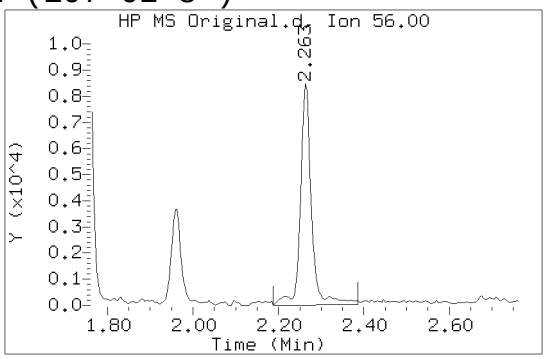

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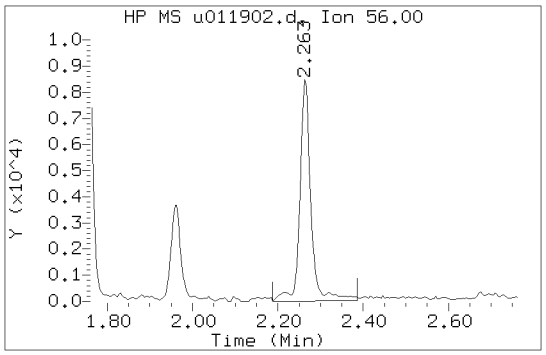

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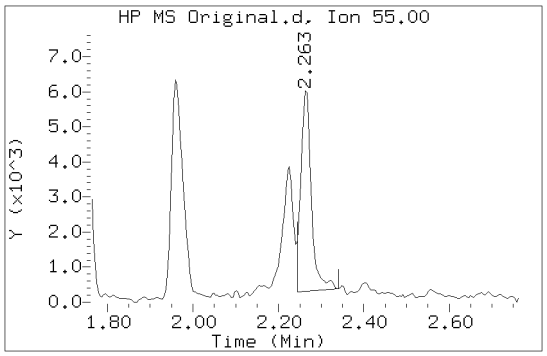

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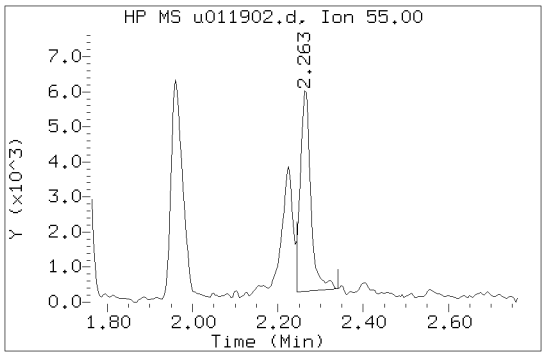

Methacrylonitrile (126-98-7)

Reason Code:

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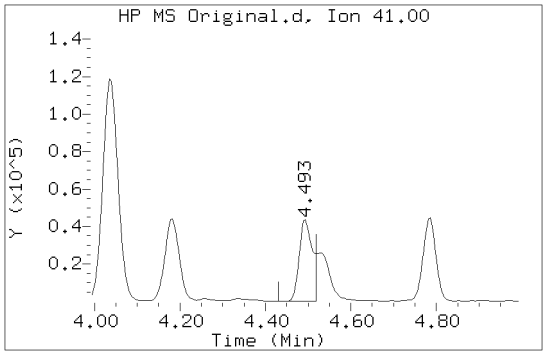

AFTER

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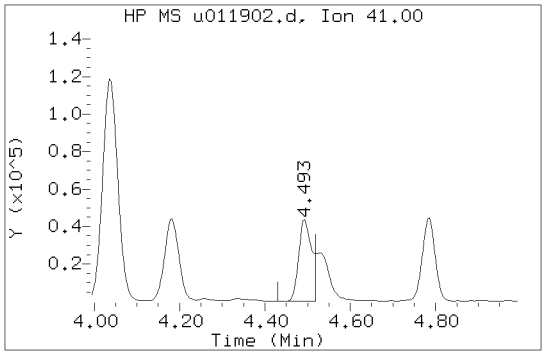
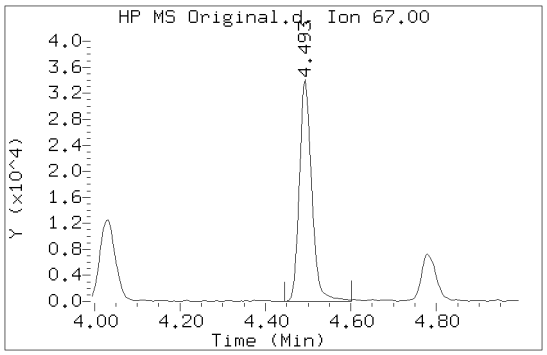


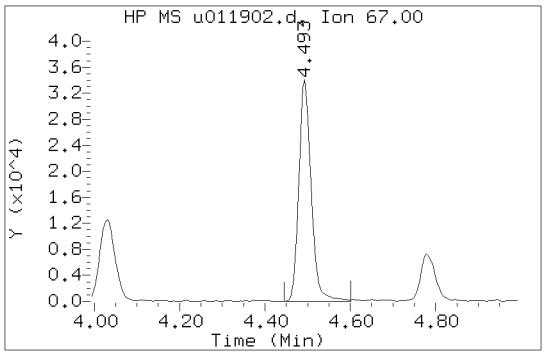
BEFORE

MASS
67
AREA
69629
HEIGHT
34088
25-Jan-2024
11:54
linh
pham



AFTER

MASS
67
AREA
69629
HEIGHT
34088
25-Jan-2024
11:54
linh
pham



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Inj Date : 19-JAN-2024 09:07
InstruID : VOA9.i
LabSampID : CCV

Methacrylonitrile (126-98-7)

Reason Code:

BEFORE

MASS
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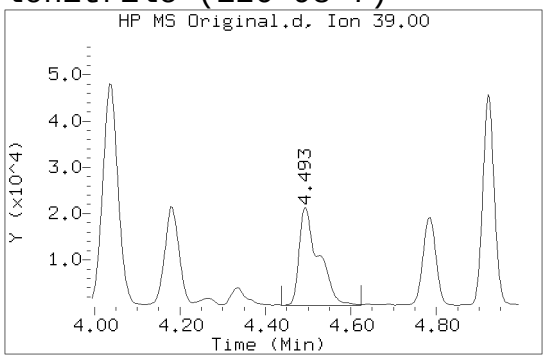
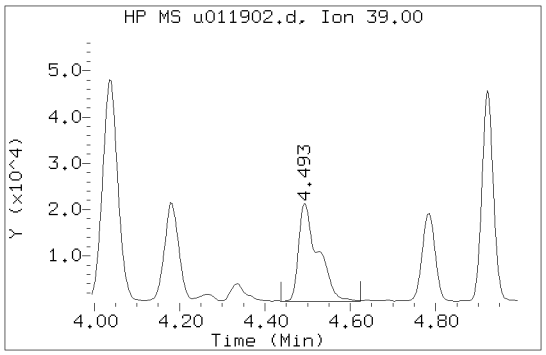
AREA
67569
HEIGHT
21191
25-Jan-2024
11:54
linh
pham



AFTER

MASS
39
AREA
67569
HEIGHT
21191
25-Jan-2024
11:54
linh
pham



Isobutyl Alcohol (78-83-1)

Reason Code:

BEFORE

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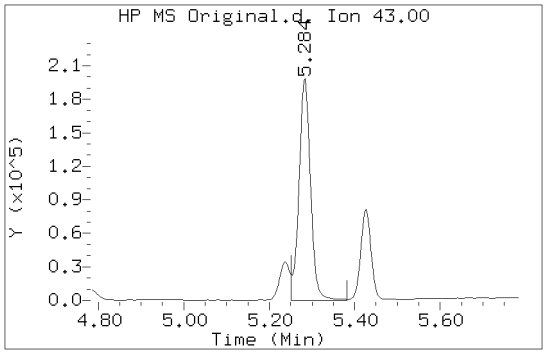
198479
25-Jan-2024
11:54
linh
pham



AFTER

MASS
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198479
25-Jan-2024
11:54
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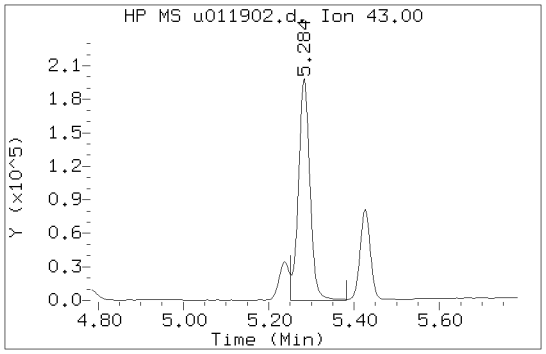

BEFORE

MASS
42
AREA
47344
HEIGHT
23544
25-Jan-2024
11:54
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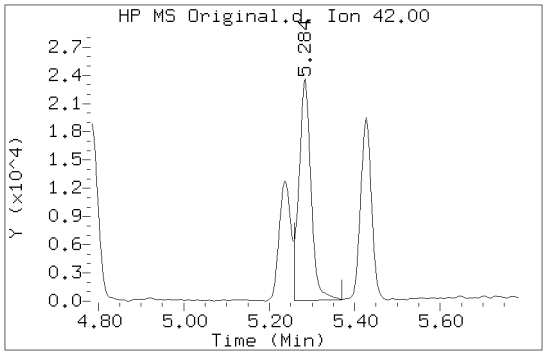
pham



AFTER

MASS
42
AREA
47344
HEIGHT
23544
25-Jan-2024
11:54
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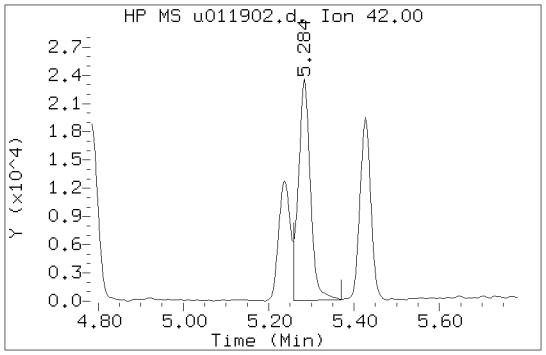
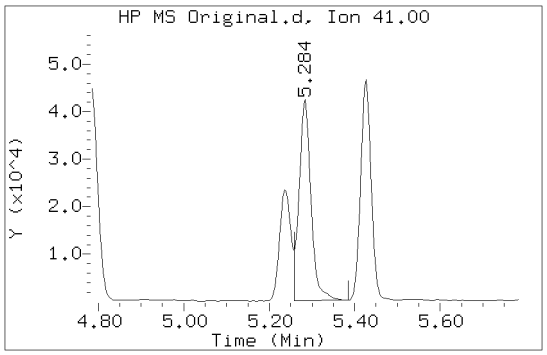


BEFORE

MASS
41
AREA
84569
HEIGHT
42299
25-Jan-2024
11:54
linh
pham



AFTER

MASS
41
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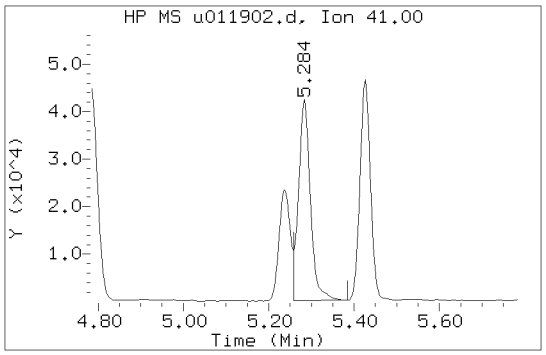
HEIGHT
42299
25-Jan-2024
11:54
linh
pham



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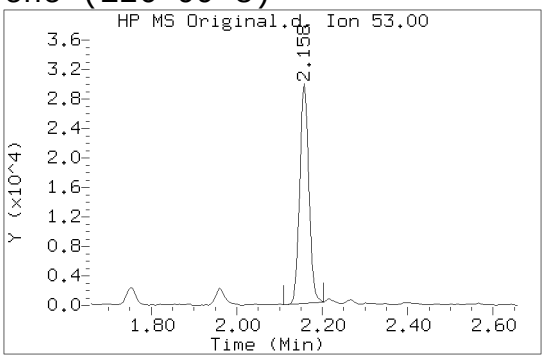
Inj Date : 19-JAN-2024 09:07
InstruID : VOA9.i
LabSampID : CCV

Chloroprene (126-99-8)

Reason Code:

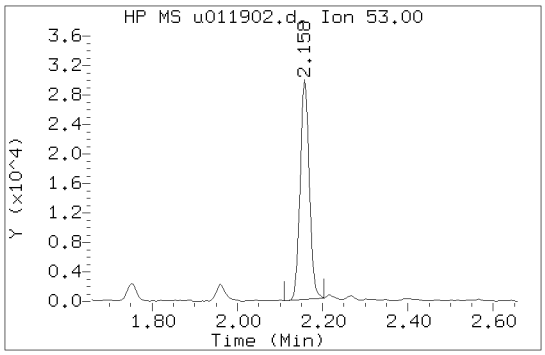
BEFORE

MASS
53
AREA
45177
HEIGHT
29803
25-Jan-2024
11:54
linh
pham



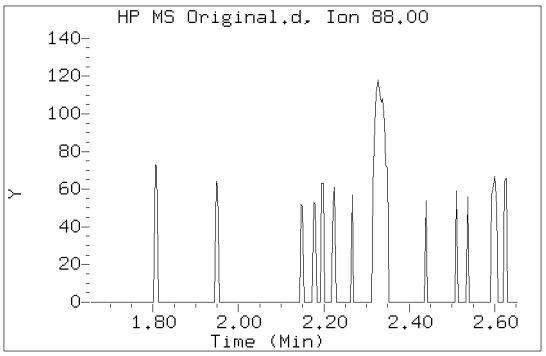
AFTER

MASS
53
AREA
45177
HEIGHT
29803
25-Jan-2024
11:54
linh
pham



BEFORE

MASS
88
AREA
0
HEIGHT
0
25-Jan-2024
11:54
linh
pham



AFTER

MASS
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AREA
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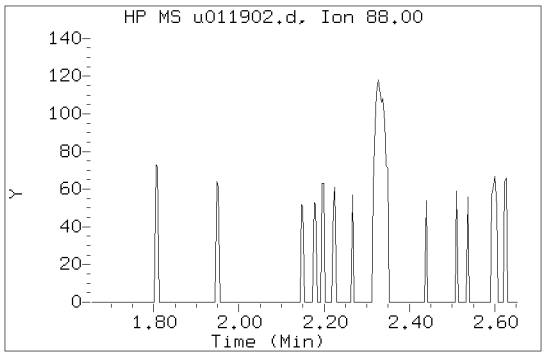
HEIGHT
0
25-Jan-2024
11:54
linh
pham

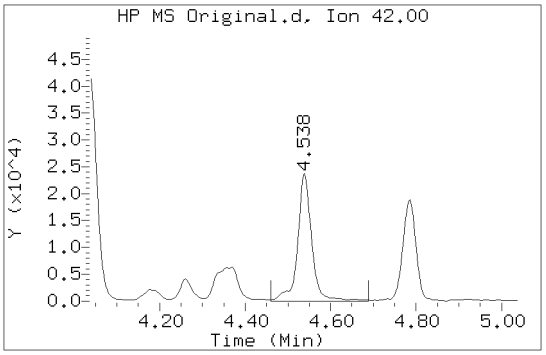


Tetrahydrofuran (109-99-9)

Reason Code:

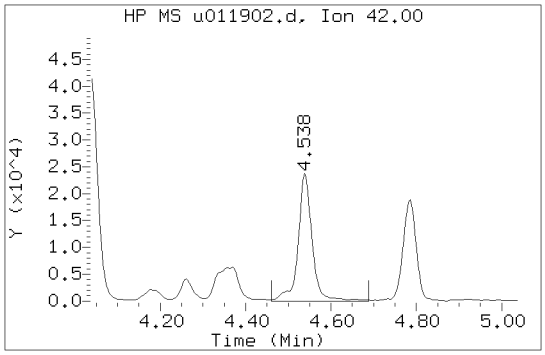
BEFORE

MASS
42
AREA
55864
HEIGHT
23881
25-Jan-2024
11:54
linh
pham



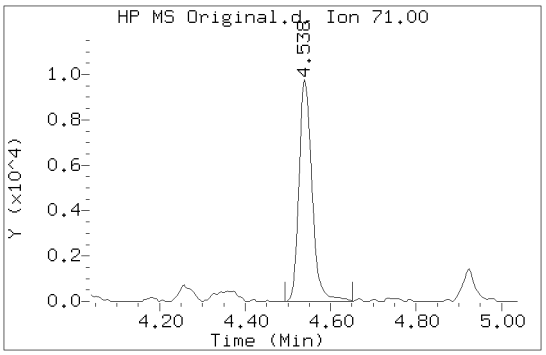
AFTER

MASS
42
AREA
55864
HEIGHT
23881
25-Jan-2024
11:54
linh
pham



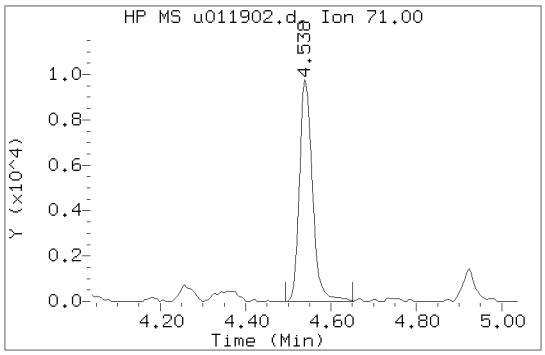
BEFORE

MASS
71
AREA
21038
HEIGHT
9772
25-Jan-2024
11:54
linh
pham



AFTER

MASS
71
AREA
21038
HEIGHT
9772
25-Jan-2024
11:54
linh
pham

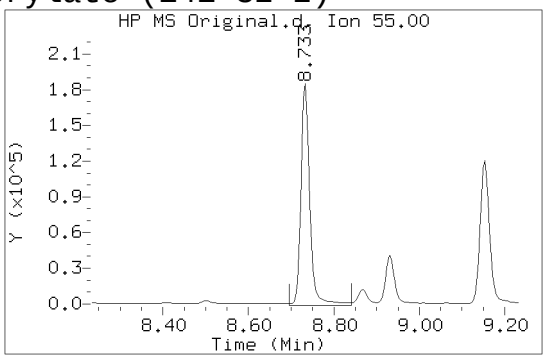


Data File : \\nahstws005\target\chem\voa9.i\u240119.b\u011902.d
Inj Date : 19-JAN-2024 09:07
InstruID : VOA9.i
LabSampID : CCV

Butyl acrylate (141-32-2)

Reason Code:

BEFORE
MASS
55
AREA
274905
HEIGHT
186256
25-Jan-2024
11:54
linh
pham



AFTER
MASS
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AREA
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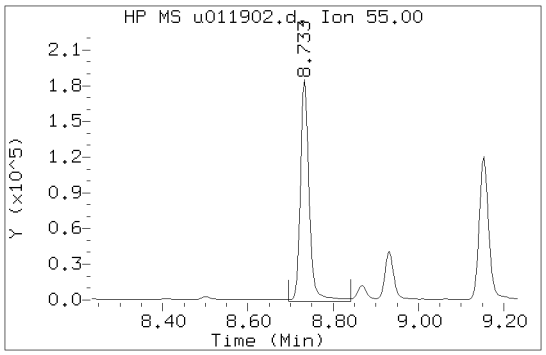
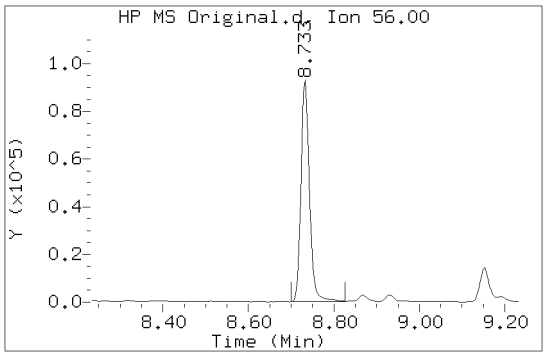
HEIGHT
186256
25-Jan-2024
11:54
linh
pham



BEFORE
MASS
56
AREA
132142
HEIGHT
93051
25-Jan-2024
11:54
linh
pham



AFTER
MASS
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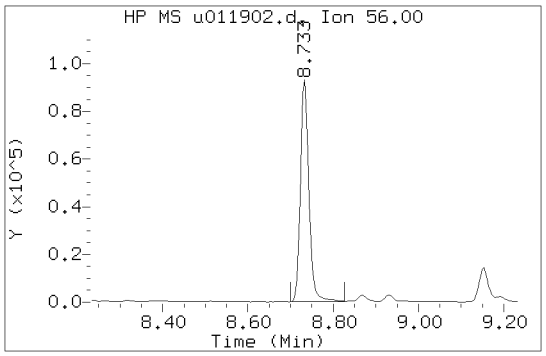
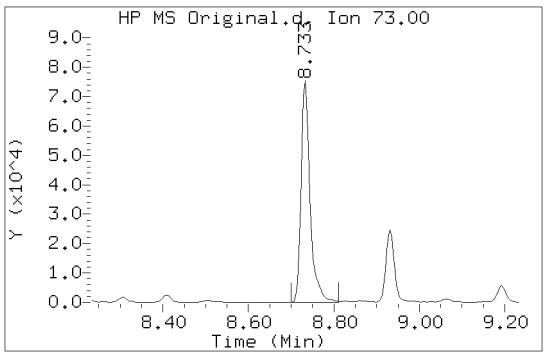
132142
HEIGHT
93051
25-Jan-2024
11:54
linh
pham



BEFORE
MASS
73
AREA
112631
HEIGHT
75424
25-Jan-2024
11:54
linh
pham



AFTER
MASS
73
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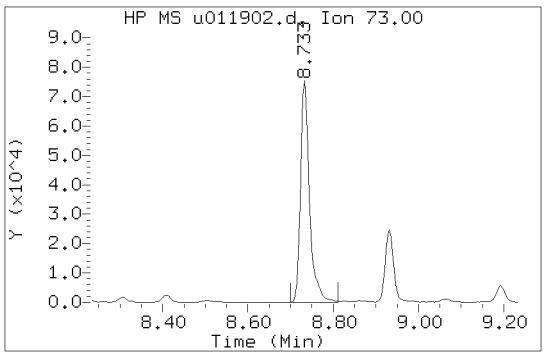
112631
HEIGHT
75424
25-Jan-2024
11:54
linh
pham



Isobutylene (115-11-7)

Reason Code:

BEFORE
MASS
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AREA
13665
HEIGHT
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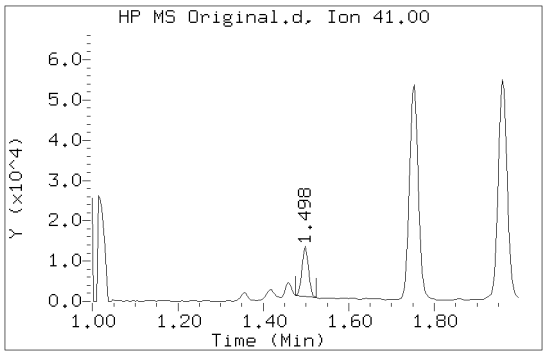
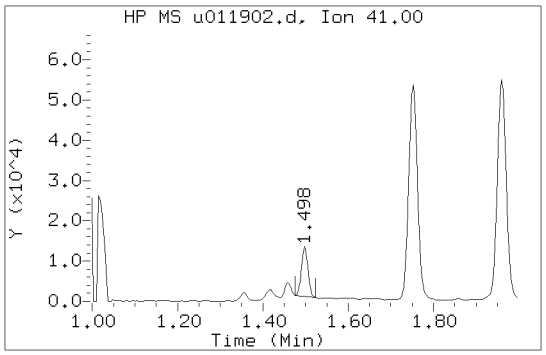
25-Jan-2024
11:54
linh
pham



AFTER
MASS
41
AREA
13665
HEIGHT
12459
25-Jan-2024
11:54
linh
pham



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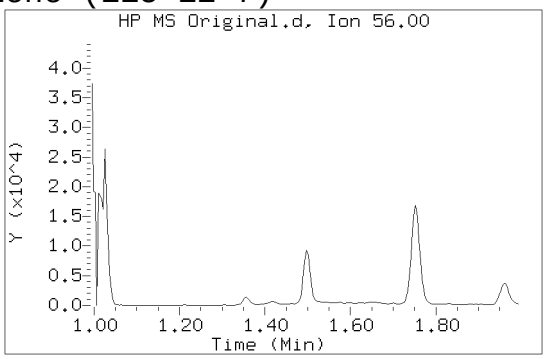
Inj Date : 19-JAN-2024 09:07
InstruID : VOA9.i
LabSampID : CCV

Isobutylene (115-11-7)

Reason Code:

BEFORE

MASS
56
AREA
0
HEIGHT
0
25-Jan-2024
11:54
linh
pham



AFTER

MASS
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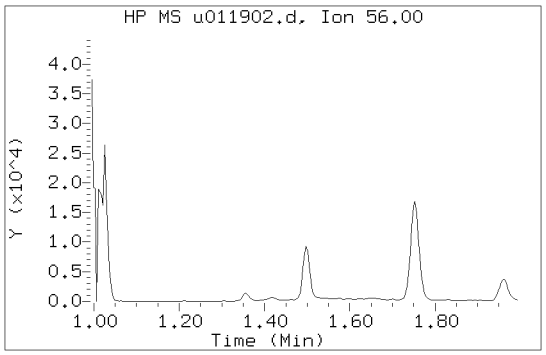
HEIGHT
0
25-Jan-2024
11:54
linh
pham



BEFORE

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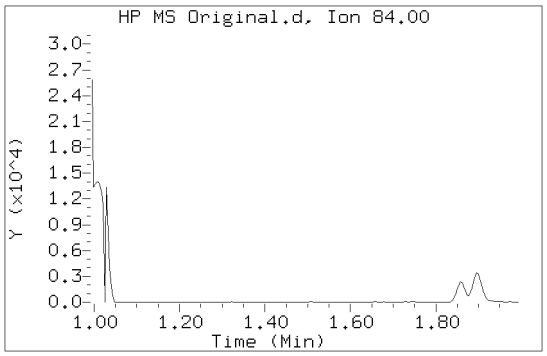
84
AREA
0
HEIGHT
0
25-Jan-2024
11:54
linh
pham



AFTER

MASS
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AREA
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25-Jan-2024
11:54
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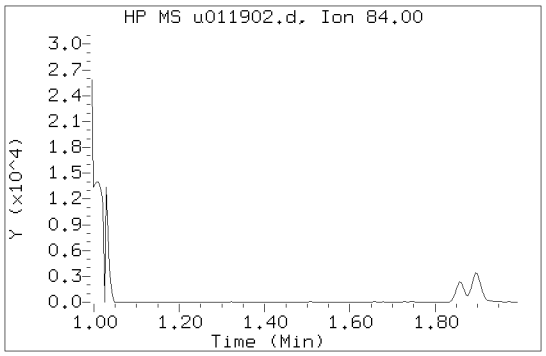
pham

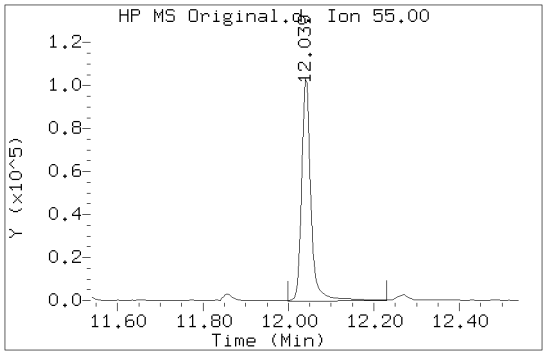


2-Ethylhexyl Acrylate (103-11-7)

Reason Code:

BEFORE

MASS
55
AREA
161377
HEIGHT
103300
25-Jan-2024
11:54
linh
pham



AFTER

MASS
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AREA
161377
HEIGHT
103300
25-Jan-2024
11:54
linh
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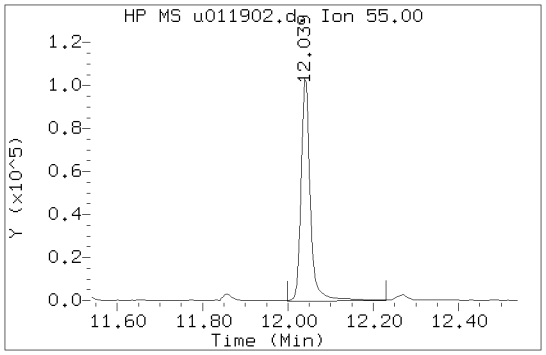
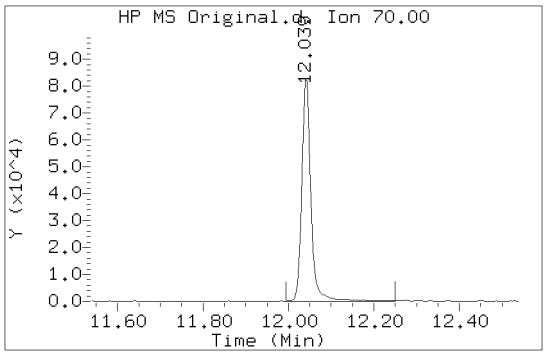


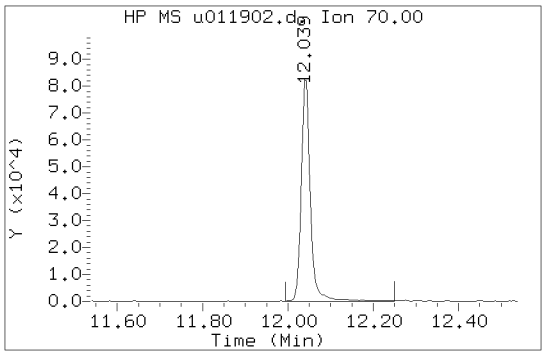
BEFORE

MASS
70
AREA
126601
HEIGHT
82400
25-Jan-2024
11:54
linh
pham



AFTER

MASS
70
AREA
126601
HEIGHT
82400
25-Jan-2024
11:54
linh
pham



Data File: \\NAHSTWS005\Target\chem\voa9.i\U240119.b\U011903.D Page 1
Report Date: 25-Jan-2024 11:54

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240119.b\U011903.D
Lab Smp Id: VLCSW-240119 Client Smp ID: VLCSW-240119
Inj Date : 19-JAN-2024 09:51
Operator : FT Inst ID: VOA9.i
Smp Info : VLCSW-240119;VLCSW-240119;3;;LCS
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240119.b\8260C.m
Meth Date : 25-Jan-2024 11:54 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 3 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1	Pentafluorobenzene	168	4.815	4.815	(1.000)	326587	50.0000	
2	Dichlorodifluoromethane	85	1.160	1.164	(0.241)	23742	9.72997	9.72
3	Chloromethane	50	1.295	1.299	(0.269)	48116	12.8434	12.84
4	Propionitrile	54	4.335	4.332	(0.900)	91287	168.584	168.58(a)
5	Vinyl Chloride	62	1.374	1.378	(0.285)	58133	16.2431	16.24
6	Bromomethane	94	1.618	1.617	(0.336)	41148	22.6350	22.63
7	Chloroethane	64	1.696	1.700	(0.352)	45012	18.6795	18.67
8	Trichlorofluoromethane	101	1.895	1.895	(0.394)	91035	20.0671	20.06
9	Acrolein	56	2.262	2.262	(0.470)	6351	34.1242	34.12(M)
10	Acetone	43	2.405	2.405	(0.499)	48007	39.7184	39.71
11	1,1-Dichloroethene	96	2.330	2.333	(0.484)	52919	21.0088	21.00
12	Isobutyl Alcohol	43	5.284	5.284	(1.097)	163502	333.811	333.81(a)
13	Acetonitrile	39	2.667	2.671	(0.554)	67825	192.966	192.96(a)
14	Allyl Chloride	41	2.671	2.671	(0.555)	154883	19.2887	19.28(a)
15	Iodomethane	142	2.465	2.468	(0.512)	127969	42.7284	42.72
16	Acrylonitrile	53	3.061	3.061	(0.636)	48647	37.9732	37.97
17	Methylene Chloride	84	2.791	2.795	(0.580)	67758	21.1639	21.16
18	Methyl tert-butyl ether	73	3.076	3.079	(0.639)	178030	19.7247	19.72
19	Carbon Disulfide	76	2.517	2.521	(0.523)	316501	42.6432	42.64
20	trans-1,2-Dichloroethene	96	3.057	3.057	(0.635)	64954	21.5709	21.57

21 Vinyl Acetate	43	3.604	3.604 (0.749)	331081	36.3602	36.36
22 1,1-Dichloroethane	63	3.511	3.514 (0.729)	113367	18.4578	18.45

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	23 Chloroprene	53	2.154	2.157	(0.447)	19876	17.8415	17.84(M)
	24 2-Butanone	43	4.264	4.260	(0.886)	50876	31.8013	31.80
	25 Methacrylonitrile	41	4.493	4.493	(0.933)	35540	15.2408	15.24(a)
	26 2,2-Dichloropropane	77	4.182	4.182	(0.868)	82012	18.9932	18.99
	27 cis-1,2-Dichloroethene	96	4.193	4.197	(0.871)	76629	18.9969	18.99
	28 Chloroform	83	4.572	4.571	(0.949)	122329	18.2980	18.29
	29 Bromochloromethane	128	4.467	4.466	(0.928)	42579	20.4004	20.40
$	30 Dibromofluoromethane	113	4.748	4.748	(0.986)	168162	50.3194	50.31
	31 1,1,1-Trichloroethane	97	4.740	4.744	(0.984)	98318	19.3519	19.35
	32 1,1-Dichloropropene	75	4.920	4.920	(0.887)	84646	20.5964	20.59
	33 1,2-Dichloroethane	62	5.175	5.175	(0.932)	84335	17.6201	17.62
	34 Carbon Tetrachloride	117	4.909	4.909	(0.885)	85216	21.2272	21.22
$	35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	164026	43.1432	43.14
*	36 1,4-Difluorobenzene	114	5.550	5.554	(1.000)	491247	50.0000	
	37 Benzene	78	5.138	5.138	(0.926)	259388	19.3967	19.39
	38 Trichloroethene	130	5.786	5.786	(1.043)	79313	21.5188	21.51
	39 Bromodichloromethane	83	6.277	6.277	(1.131)	85791	19.5905	19.59
	40 Methyl Methacrylate	41	6.154	6.153	(1.278)	50514	15.6703	15.67(a)
	41 2-Chloroethylvinyl ether	63	6.577	6.577	(1.185)	2363	56.5406	56.54
	42 1,2-Dichloropropane	63	6.007	6.007	(1.082)	67117	18.6416	18.64
	43 2-Nitropropane	43	6.506	6.506	(1.351)	12345	14.7240	14.72
	44 Dibromomethane	93	6.116	6.120	(1.102)	44968	19.3046	19.30
	45 4-Methyl-2-Pentanone	43	6.851	6.851	(0.837)	130605	36.7336	36.73
	46 cis-1,3-Dichloropropene	75	6.690	6.689	(1.205)	103385	19.2577	19.25
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	490054	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	582609	51.6443	51.64
	49 Ethyl Methacrylate	69	7.289	7.289	(1.313)	92637	19.2132	19.21(a)
	50 Toluene	91	6.978	6.978	(0.853)	285540	20.8973	20.89
	51 trans-1,3-Dichloropropene	75	7.196	7.196	(1.296)	86277	19.2908	19.29
	52 2-Hexanone	43	7.589	7.589	(0.927)	87933	35.5564	35.55
	53 1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	56208	20.7448	20.74
	54 1,3-Dichloropropane	76	7.496	7.495	(0.916)	116051	19.1278	19.12
	55 Dibromochloromethane	129	7.690	7.690	(0.940)	76359	20.9511	20.95
	56 Tetrachloroethene	164	7.454	7.458	(0.911)	68902	23.5581	23.55(M)
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	70659	20.7524	20.75
	58 1-Chlorohexane	55	8.197	8.196	(1.477)	57352	20.8200	20.81
	59 Chlorobenzene	112	8.208	8.208	(1.003)	209362	21.0335	21.03
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	73855	21.2115	21.21
	61 Ethylbenzene	106	8.305	8.305	(1.015)	101152	21.7085	21.70
	62 m,p-Xylenes	106	8.406	8.406	(1.027)	252406	45.0555	45.05
	63 o-Xylene	106	8.748	8.744	(1.069)	127341	22.1025	22.10
	64 Styrene	104	8.759	8.759	(1.070)	219708	22.9063	22.90
	66 Bromoform	173	8.916	8.916	(1.089)	49471	20.4875	20.48
	67 Isopropylbenzene	105	9.063	9.062	(1.107)	319671	22.9422	22.94
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	91914	20.2696	20.26
$	69 4-Bromofluorobenzene	95	9.194	9.190	(1.123)	210570	49.2792	49.27
*	70 1,4-Dichlorobenzene-d4	152	10.168	10.168	(1.000)	272989	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.921)	89070	17.1876	17.18
	72 trans-1,4-Dichloro-2-butene	53	9.377	9.377	(1.146)	17308	19.6257	19.62(a)
	73 n-Propylbenzene	91	9.411	9.411	(0.926)	356619	22.2473	22.24
	74 Bromobenzene	156	9.317	9.317	(0.916)	95069	20.7380	20.73
	75 1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	260757	22.8875	22.88

76	2-Chlorotoluene	91	9.482	9.482 (0.933)	217410	20.1508	20.15
77	4-Chlorotoluene	91	9.576	9.576 (0.942)	253266	20.6984	20.69

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240119.b\U011903.D Page 3
Report Date: 25-Jan-2024 11:54

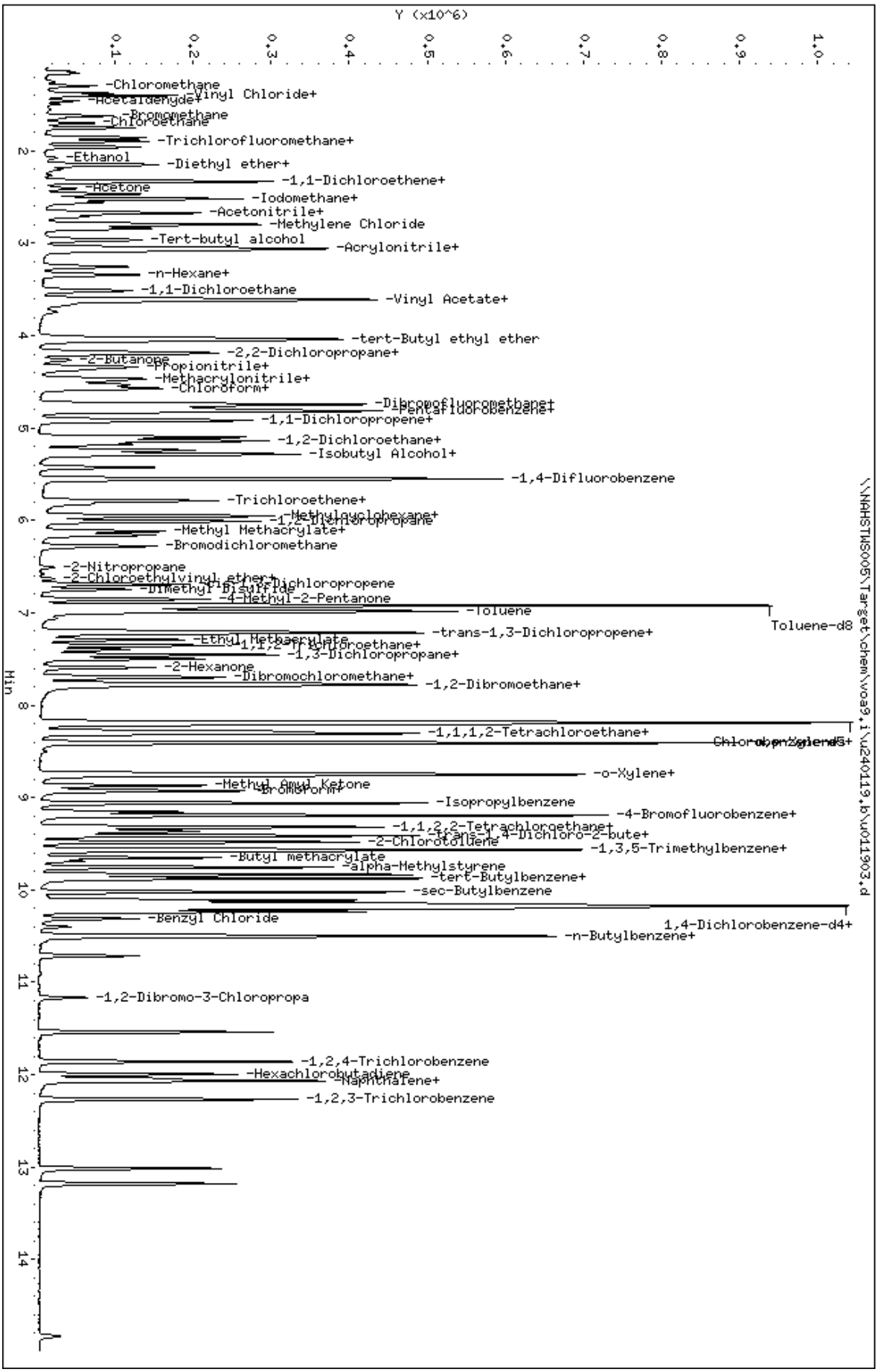
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
78	tert-Butylbenzene	119	9.835	9.835	(0.967)	232295	22.7000	22.70
79	1,2,4-Trimethylbenzene	105	9.876	9.876	(0.971)	260814	22.8419	22.84
81	sec-Butylbenzene	105	10.022	10.022	(0.986)	300320	22.7591	22.75
82	p-Isopropyltoluene	119	10.146	10.146	(0.998)	272008	23.8192	23.81
83	1,3-Dichlorobenzene	146	10.112	10.112	(0.994)	172003	21.1732	21.17
84	1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	180441	20.9657	20.96
86	Benzyl Chloride	91	10.311	10.311	(1.260)	84333	21.1259	21.12
87	n-Butylbenzene	91	10.491	10.491	(1.032)	215838	22.5220	22.52
88	1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	166423	20.3632	20.36
89	1,2-Dibromo-3-Chloropropane	155	11.166	11.165	(1.098)	14716	19.7649	19.76
90	1,2,4-Trichlorobenzene	180	11.859	11.859	(1.166)	110445	21.9051	21.90
91	Hexachlorobutadiene	225	11.998	11.998	(1.180)	50217	24.8466	24.84
92	Naphthalene	128	12.065	12.065	(1.187)	269913	22.1972	22.19
93	1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	110791	21.7902	21.79
146	Methyl acetate	43	2.708	2.712	(0.563)	56192	17.2880	17.28
138	Freon TF	101	2.334	2.333	(0.485)	61317	25.8245	25.82
141	Cyclohexane	56	4.782	4.785	(0.993)	86644	18.4120	18.41
142	Tetrahydrofuran	42	4.538	4.538	(0.942)	20526	29.6093	29.60
147	Methylcyclohexane	55	5.947	5.943	(1.072)	146695	20.1471	20.14
135	1,4-Dioxane	88	6.165	6.165	(1.280)	17935	346.131	346.13
132	n-Butanol	56	5.824	5.820	(1.209)	39635	373.413	373.41(a)
136	n-Hexane	57	3.338	3.342	(0.693)	63814	21.0205	21.02
139	Diethyl ether	59	2.142	2.142	(0.445)	49376	18.5417	18.54
148	Tert-butyl alcohol	59	2.963	2.960	(0.615)	150141	410.660	410.66
149	Isopropyl alcohol	45	2.559	2.555	(0.531)	89132	426.972	426.97
152	Amyl alcohol	42	7.398	7.394	(0.904)	42208	388.308	388.30
156	Diisopropyl ether	45	3.619	3.619	(0.752)	186015	16.3496	16.34
162	Butyl acrylate	55	8.733	8.732	(1.067)	97512	16.0284	16.02
187	n-Amyl acetate	43	8.931	8.931	(1.091)	102250	16.4618	16.46
164	Dicyclopentadiene	66	10.198	10.198	(1.003)	276455	18.9970	18.99
166	1,2,3-Trimethylbenzene	105	10.232	10.236	(1.006)	226154	20.0749	20.07
167	Ethanol	45	2.079	2.079	(0.432)	16017	390.179	390.17
172	tert-Butyl formate	59	5.239	5.235	(1.088)	112834	47.2476	47.24
173	3,3-Dimethyl-1-butanol	57	7.780	7.780	(0.951)	155575	384.803	384.80
174	tert-Amyl methyl ether	73	5.284	5.284	(1.097)	182207	17.9858	17.98
175	tert-Butyl ethyl ether	59	4.047	4.047	(0.840)	175858	17.3385	17.33
176	tert-Amyl alcohol	59	5.239	5.235	(1.088)	112834	474.136	474.13
151	4-Methyl-2-pentanol	45	7.214	7.214	(1.300)	274399	374.836	374.83
140	1,3-Butadiene	54	1.400	1.404	(0.291)	53362	16.2686	16.26(M)
158	Dichlorofluoromethane	67	1.854	1.857	(0.385)	104417	20.9769	20.97
182	Epichlorohydrin	57	6.630	6.629	(1.195)	13899	72.8326	72.83
M 94	1,2-Dichloroethylene (total)	96				141583	40.1942	40.19
M 95	Xylenes (total)	106				379747	66.8071	66.80
145	alpha-Methylstyrene	118	9.752	9.752	(0.959)	114537	21.6343	21.63
130	Ethyl Acetate	43	4.339	4.339	(0.901)	64075	16.1510	16.15
131	Methyl Acrylate	55	4.369	4.365	(0.907)	71805	16.7386	16.73
189	n-Butyl acetate	43	7.705	7.705	(0.941)	96344	17.6498	17.64
134	Cyclohexanone	55	9.152	9.152	(0.900)	72482	401.299	401.29(a)
185	Isoprene	39	2.154	2.157	(0.447)	13924	18.3126	18.31
188	Isopropyl acetate	43	5.284	5.284	(0.952)	164088	18.1060	18.10
150	Allyl alcohol	57	3.338	3.342	(0.693)	63814	420.410	420.40
194	Acetaldehyde	44	1.456	1.460	(0.303)	26314	56.8191	56.81(M)

195 Methyl Amyl Ketone	43	8.868	8.867 (1.083)	112691	16.0552	16.05
200 Dimethyl Disulfide	94	6.746	6.746 (0.824)	60973	16.7450	16.74

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
202 Isobutylene	41	1.494	1.498	(0.310)	5461	17.1485	17.14(M)
203 2-Ethylhexyl Acrylate	55	12.043	12.039	(1.184)	56337	15.7998	15.79
133 Ethyl Acrylate	55	5.947	5.943	(1.235)	146695	18.6870	18.68
163 Butyl methacrylate	41	9.647	9.647	(0.949)	55659	16.7254	16.72

QC Flag Legend

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



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Purge Volume: 5.0
Column phase: DB624

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

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Inj Date : 19-JAN-2024 09:51
InstruID : VOA9.i
LabSampID : VLCSW-240119

Tetrachloroethene (127-18-4)

Reason Code:

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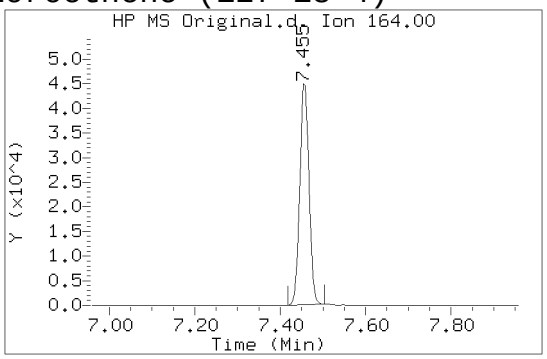

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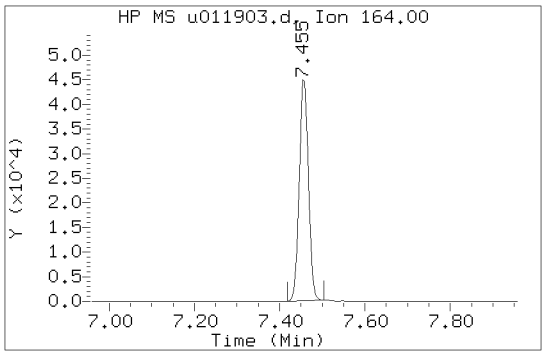

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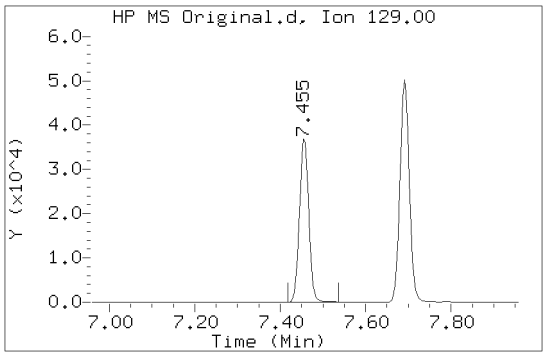

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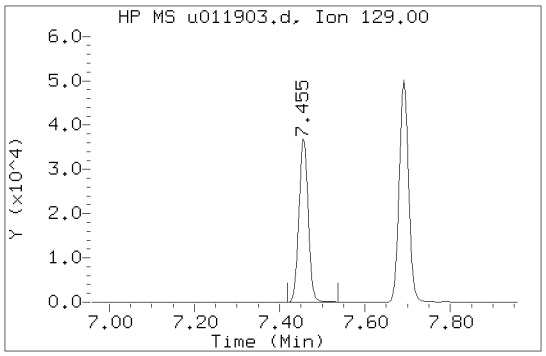

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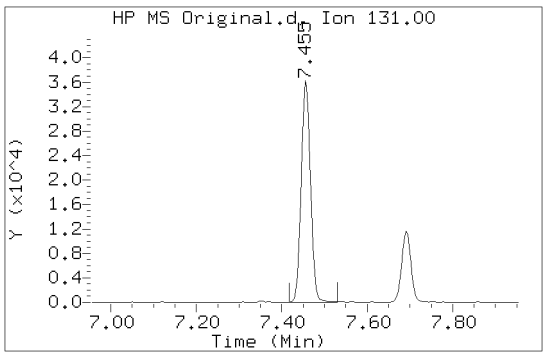

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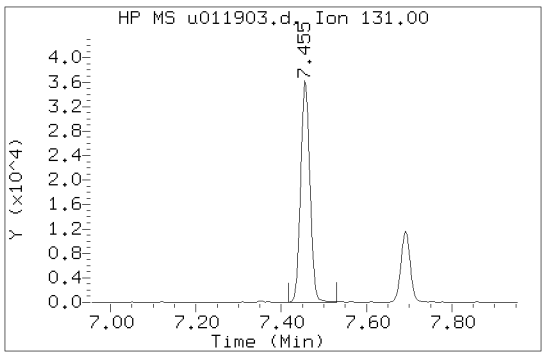

Acrolein (107-02-8)

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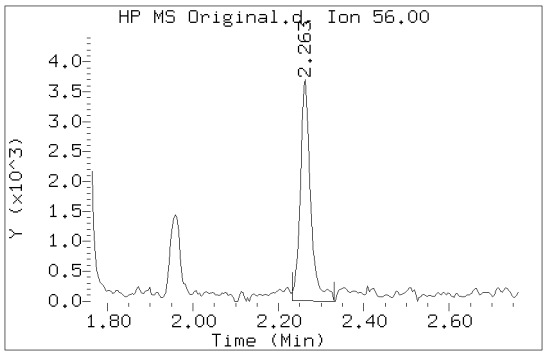

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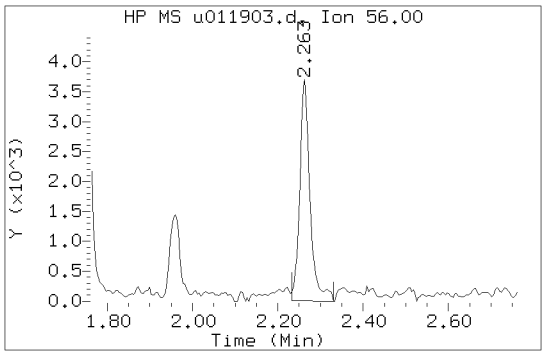

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LabSampID : VLCSW-240119

Acrolein (107-02-8)

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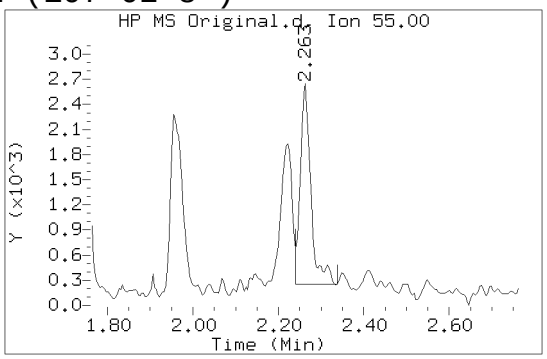

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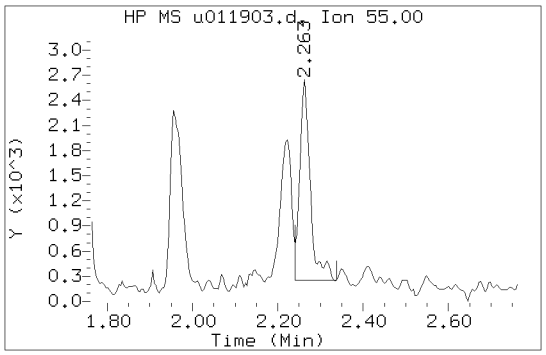

Chloroprene (126-99-8)

Reason Code:

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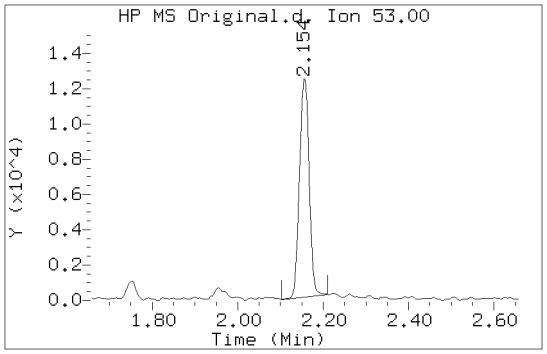

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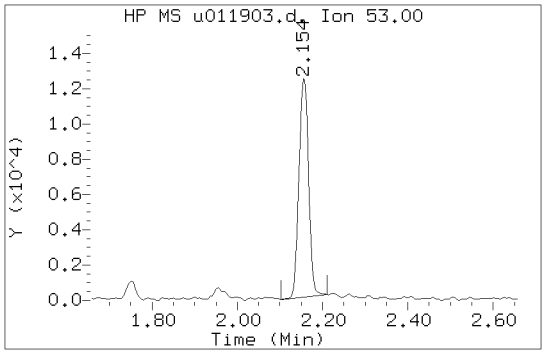

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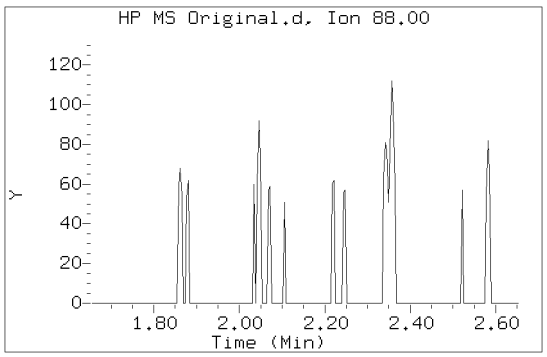

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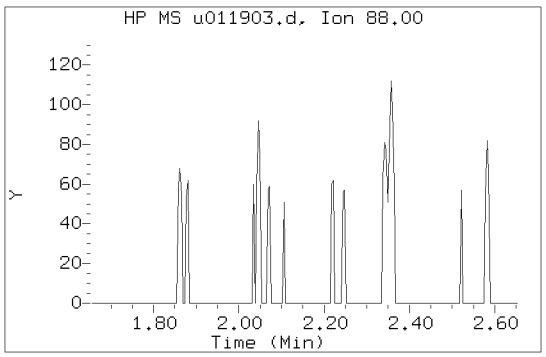

1,3-Butadiene (106-99-0)

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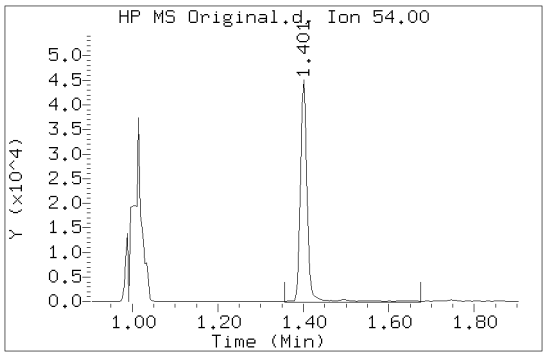

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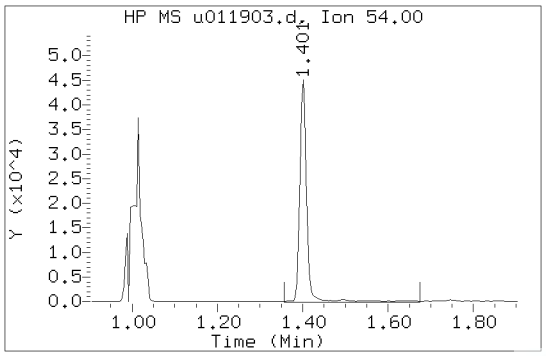


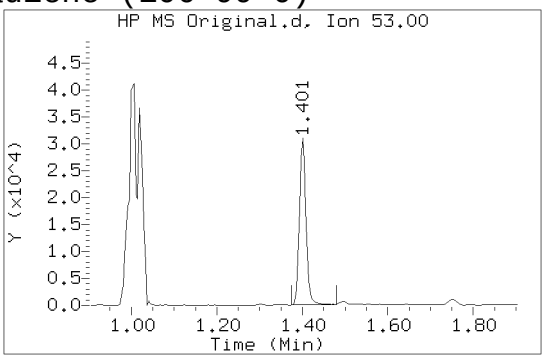
Data File : \\nahstws005\target\chem\voa9.i\u240119.b\u011903.d
Inj Date : 19-JAN-2024 09:51
InstruID : VOA9.i
LabSampID : VLCSW-240119

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

Reason Code:

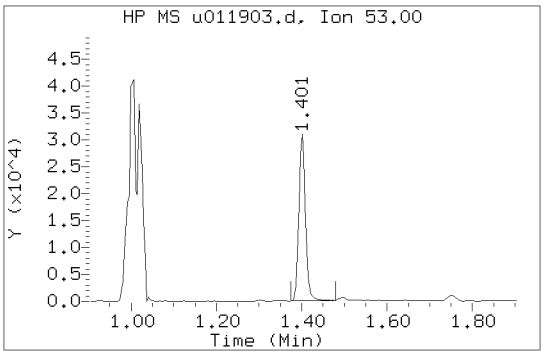
BEFORE

MASS
53
AREA
34549
HEIGHT
31014
25-Jan-2024
11:54
linh
pham



AFTER

MASS
53
AREA
34549
HEIGHT
31014
25-Jan-2024
11:54
linh
pham

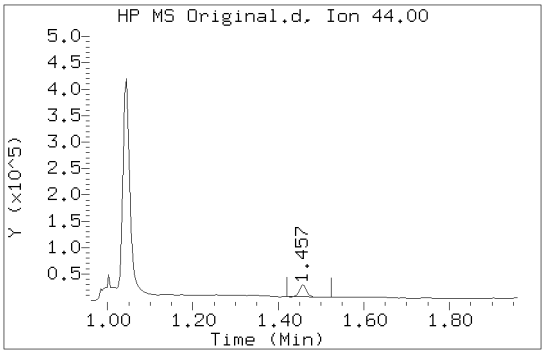


Acetaldehyde (75-07-0)

Reason Code:

BEFORE

MASS
44
AREA
26314
HEIGHT
22403
25-Jan-2024
11:54
linh
pham



AFTER

MASS
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AREA
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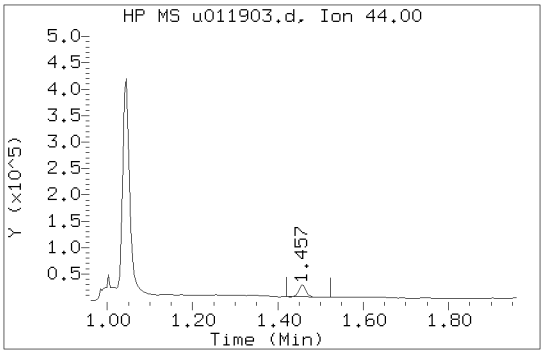
HEIGHT
22403
25-Jan-2024
11:54
linh
pham



BEFORE

MASS
43
AREA
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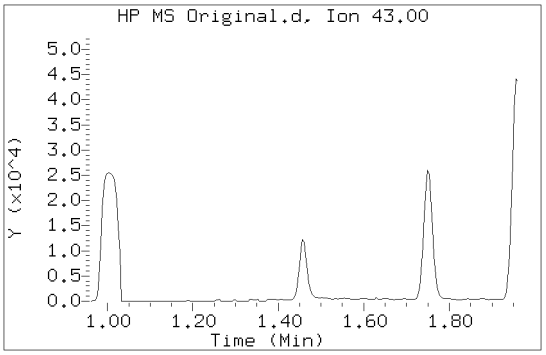
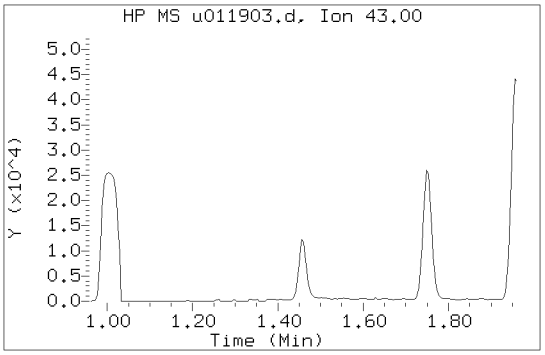
HEIGHT
0
25-Jan-2024
11:54
linh
pham



AFTER

MASS
43
AREA
0
HEIGHT
0
25-Jan-2024
11:54
linh
pham



BEFORE

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HEIGHT
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25-Jan-2024
11:54
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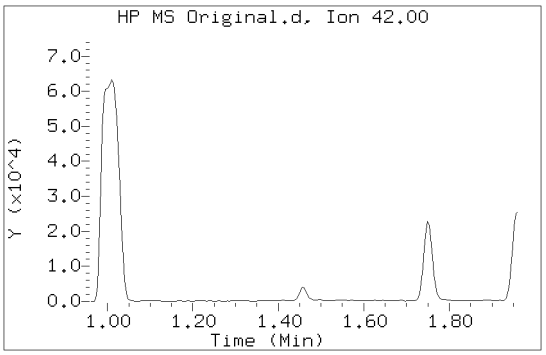
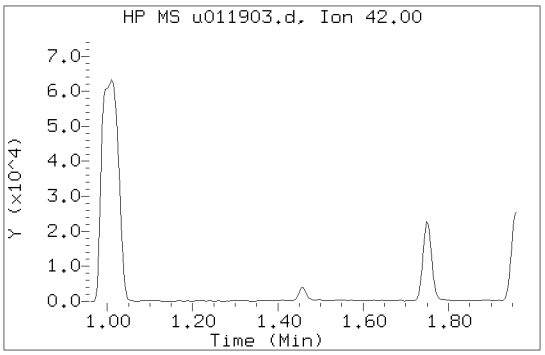


AFTER

MASS
42
AREA
0
HEIGHT
0
25-Jan-2024
11:54
linh
pham

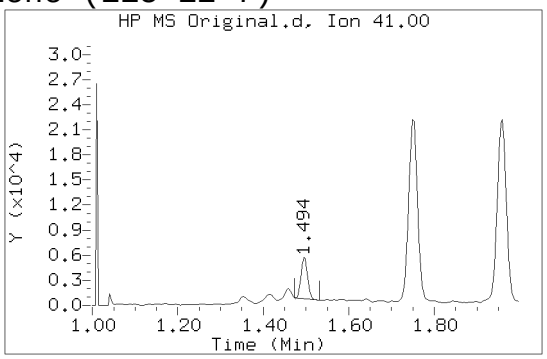


Data File : \\nahstws005\target\chem\voa9.i\u240119.b\u011903.d
Inj Date : 19-JAN-2024 09:51
InstruID : VOA9.i
LabSampID : VLCSW-240119

Isobutylene (115-11-7)

Reason Code:

BEFORE
MASS
41
AREA
5461
HEIGHT
4969
25-Jan-2024
11:54
linh
pham



AFTER
MASS
41
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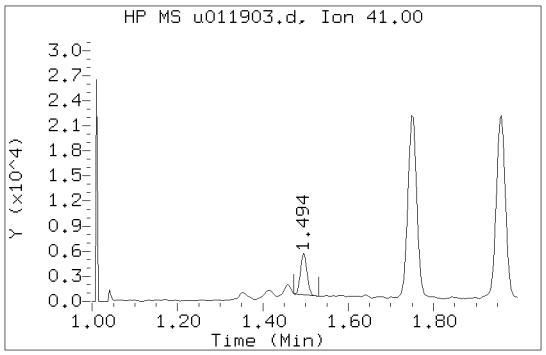
5461
HEIGHT
4969
25-Jan-2024
11:54
linh
pham



BEFORE
MASS
56
AREA
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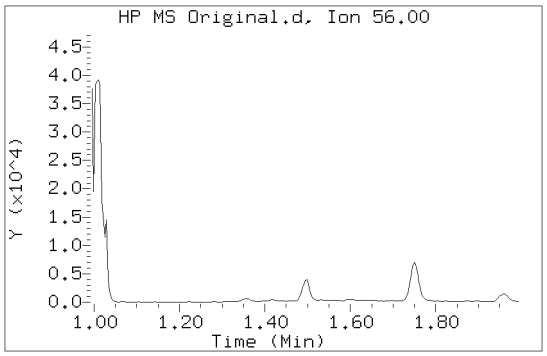
HEIGHT
0
25-Jan-2024
11:54
linh
pham



AFTER
MASS
56
AREA
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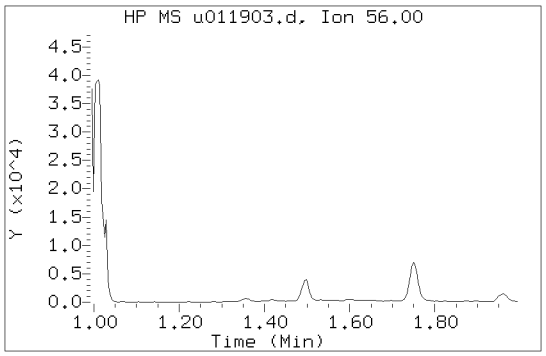
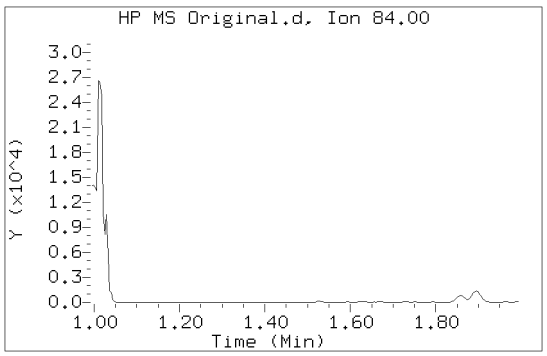
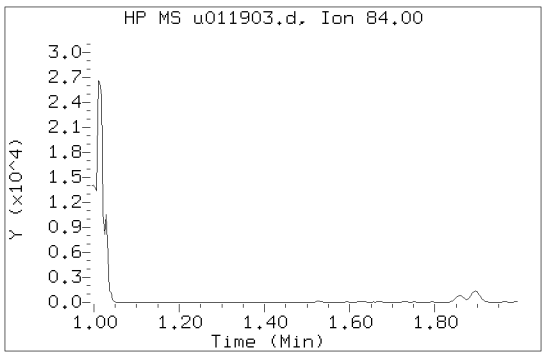
HEIGHT
0
25-Jan-2024
11:54
linh
pham



BEFORE
MASS
84
AREA
0
HEIGHT
0
25-Jan-2024
11:54
linh
pham



AFTER
MASS
84
AREA
0
HEIGHT
0
25-Jan-2024
11:54
linh
pham



Data File: \\NAHSTWS005\Target\chem\voa9.i\U240119.b\U011906.D Page 1
Report Date: 25-Jan-2024 11:54

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240119.b\U011906.D
Lab Smp Id: VBLKW-240119
Inj Date : 19-JAN-2024 10:58
Operator : FT   Inst ID: VOA9.i
Smp Info : VBLKW-240119
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240119.b\8260C.m
Meth Date : 25-Jan-2024 11:54 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: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7056

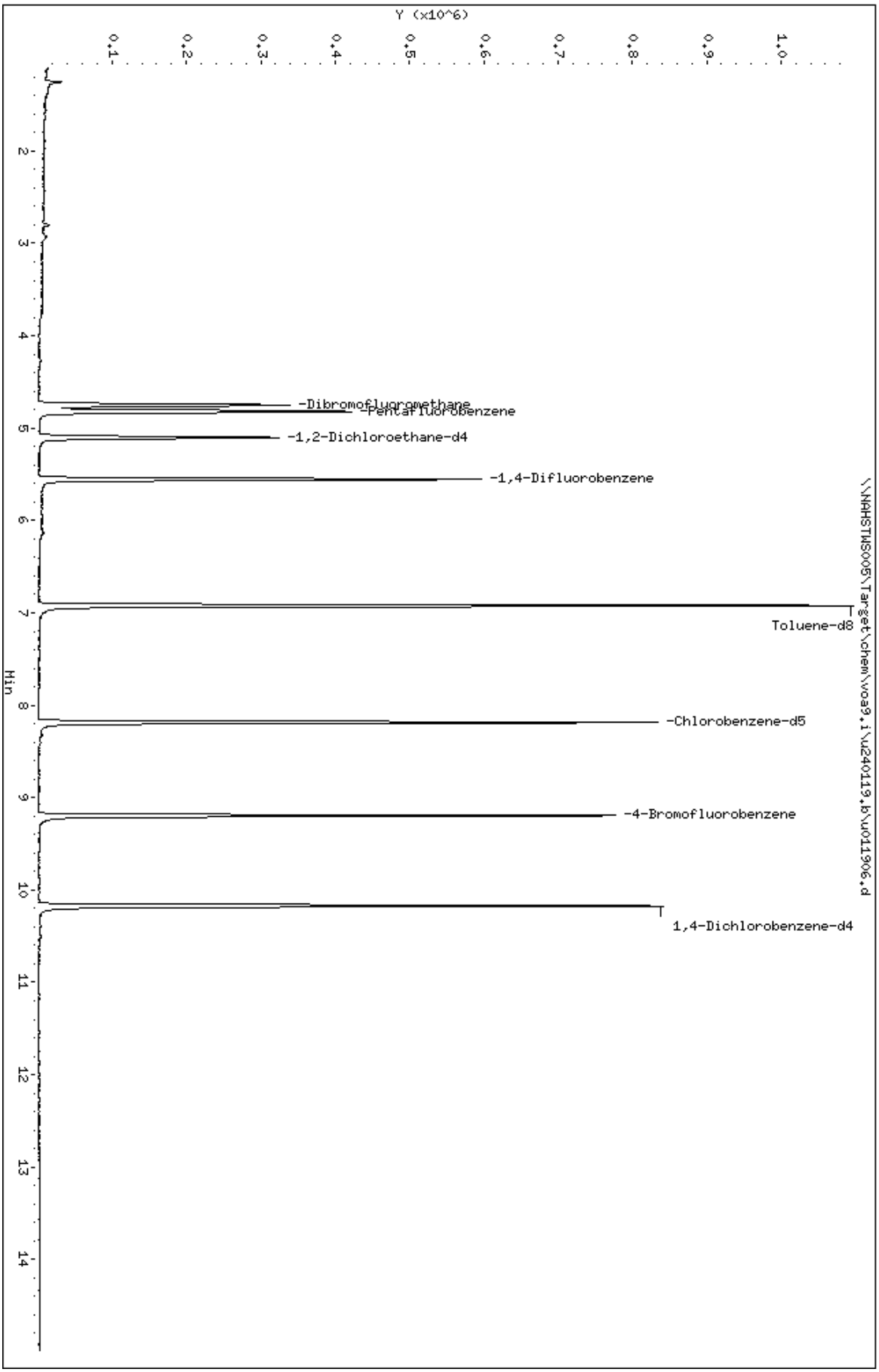
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.819	4.815	(1.000)	320054	50.0000	
$ 30 Dibromofluoromethane	113	4.751	4.748	(0.986)	194060	59.4368	59.43(M)
$ 35 1,2-Dichloroethane-d4	65	5.100	5.096	(1.058)	205146	54.3245	54.32
* 36 1,4-Difluorobenzene	114	5.553	5.554	(1.000)	481973	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	474234	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	690983	63.2942	63.29(R)
$ 69 4-Bromofluorobenzene	95	9.193	9.190	(1.123)	232539	56.4192	56.41
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	245605	50.0000	

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.


Data File: \\NAHSTWS005\Target\chem\voa9,i\u240119,b\u011906,d
Date : 19-JAN-2024 10:58
Client ID:
Sample Info: VBLKW-240119
Purge Volume: 5.0
Column phase: DB624
Instrument: VOA9,i
Operator: FT
Column diameter: 0.18
Page 1
Y (x10^6)
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
Min
2
3
4
5
6
7
8
9
10
11
12
13
14
-Dibromofluoromethane
-Pentafluorobenzene
-1,2-Dichloroethane-d4
-1,4-Difluorobenzene
Toluene-d8
-Chlorobenzene-d5
-4-Bromofluorobenzene
1,4-Dichlorobenzene-d4
\\NAHSTWS005\Target\chem\voa9,i\u240119,b\u011906,d

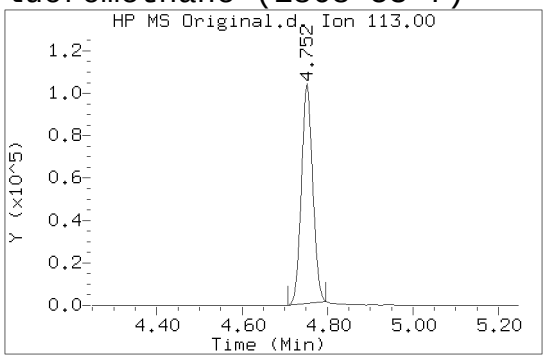
Data File : \\nahstws005\target\chem\voa9.i\u240119.b\u011906.d
Inj Date : 19-JAN-2024 10:58
InstruID : VOA9.i
LabSampID : VBLKW-240119

Dibromofluoromethane (1868-53-7)

Reason Code:

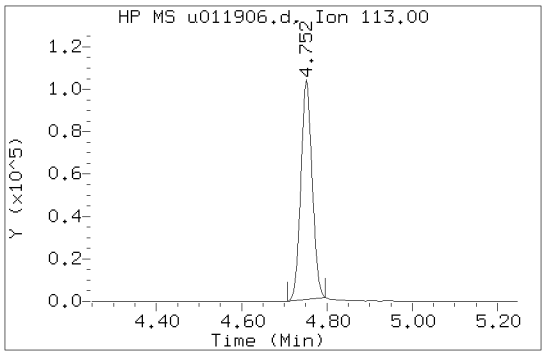
BEFORE

MASS
113
AREA
194060
HEIGHT
103581
25-Jan-2024
11:54
linh
pham



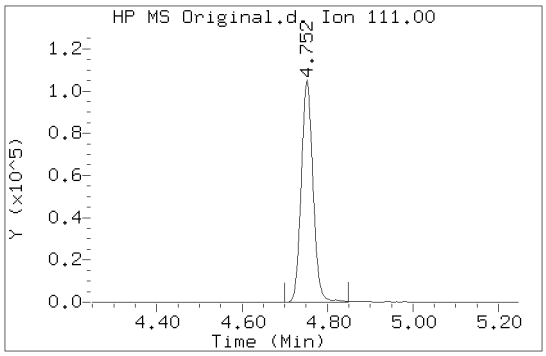
AFTER

MASS
113
AREA
194060
HEIGHT
103581
25-Jan-2024
11:54
linh
pham



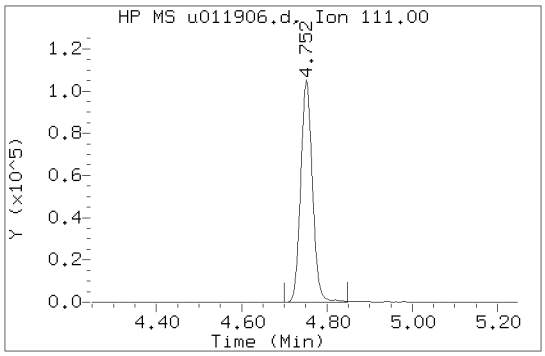
BEFORE

MASS
111
AREA
205417
HEIGHT
105288
25-Jan-2024
11:54
linh
pham



AFTER

MASS
111
AREA
205417
HEIGHT
105288
25-Jan-2024
11:54
linh
pham



Data File: \\nahstws005\Target\chem\voa9.i\U240119.b\U011914.D Page 1
Report Date: 19-Jan-2024 15:34

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240119.b\U011914.D
Lab Smp Id: HS24010611-02
Inj Date : 19-JAN-2024 13:59
Operator : FT   Inst ID: VOA9.i
Smp Info : HS24010611-02
Misc Info : V9;WATER;0;200;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240119.b\8260C.m
Meth Date : 19-Jan-2024 09:45   Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11   Cal File: U120608.D
Als bottle: 14
Dil Factor: 200.00000
Integrator: HP RTE   Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTWS005

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

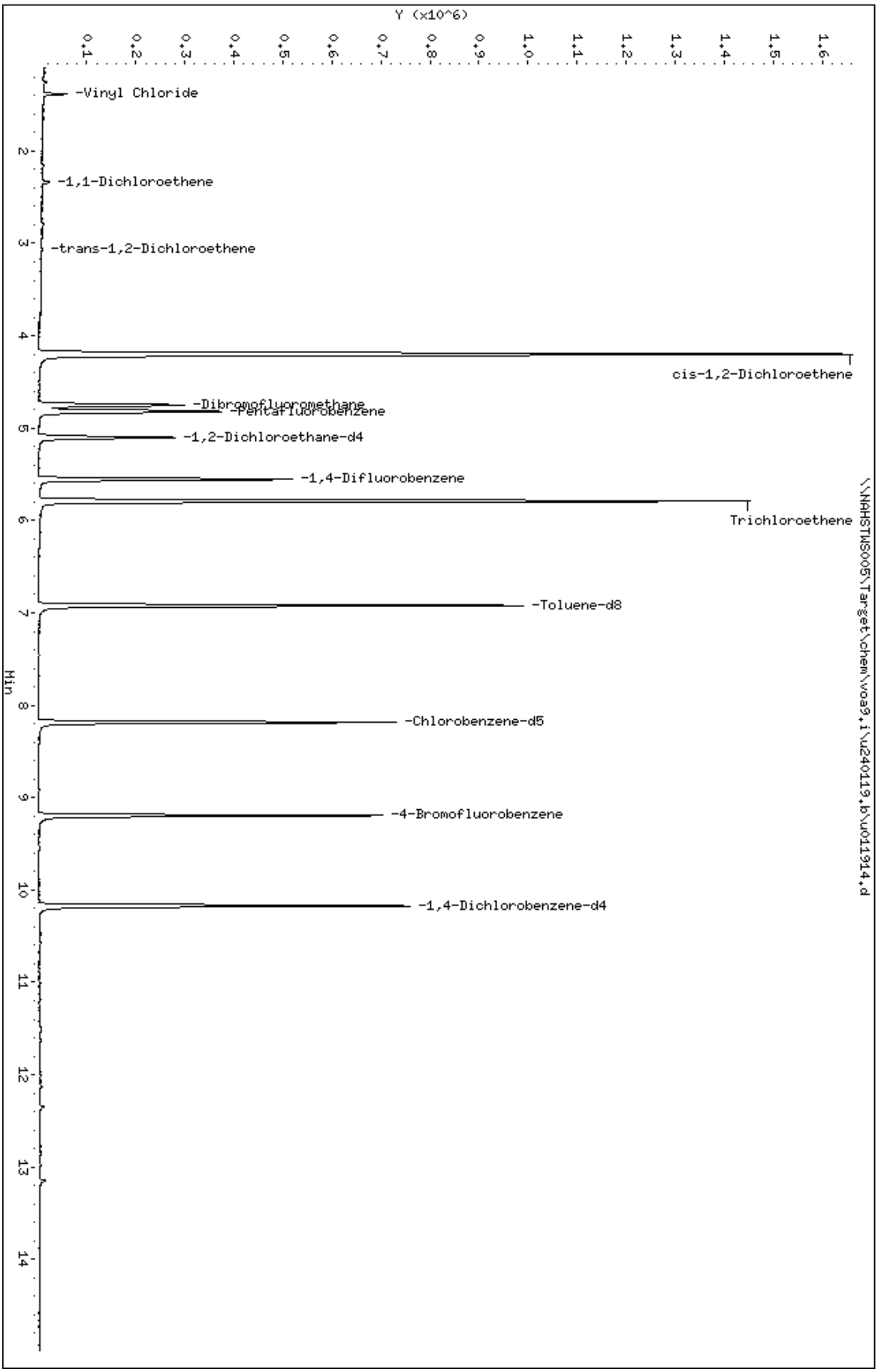
Name	Value	Description
DF	200.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.819	4.815	(1.000)	285049	50.0000	
5 Vinyl Chloride	62	1.385	1.378	(0.287)	32496	10.4029	2080.58
11 1,1-Dichloroethene	96	2.337	2.333	(0.485)	2813	1.27949	255.89
20 trans-1,2-Dichloroethene	96	3.064	3.057	(0.636)	1529	0.58177	116.35
27 cis-1,2-Dichloroethene	96	4.200	4.197	(0.872)	859484	244.122	48824.46(A)
$ 30 Dibromofluoromethane	113	4.751	4.748	(0.986)	172554	59.3384	59.33(M)
$ 35 1,2-Dichloroethane-d4	65	5.100	5.096	(1.058)	179835	53.5251	53.52
* 36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	427575	50.0000	
38 Trichloroethene	130	5.790	5.786	(1.043)	499605	155.735	31147.07
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	422441	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	625398	64.3102	64.31(R)
$ 69 4-Bromofluorobenzene	95	9.194	9.190	(1.123)	207935	56.6400	56.63(M)
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	220446	50.0000	
M 94 1,2-Dichloroethylene (total)	96				861013	280.054	56010.81

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\voa9.i\u240119.b\u011914.d
Date : 19-JAN-2024 13:59
Client ID:
Sample Info: HS24010611-02
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa9.i\u240119.b\u011914.d Page 2

Date : 19-JAN-2024 13:59

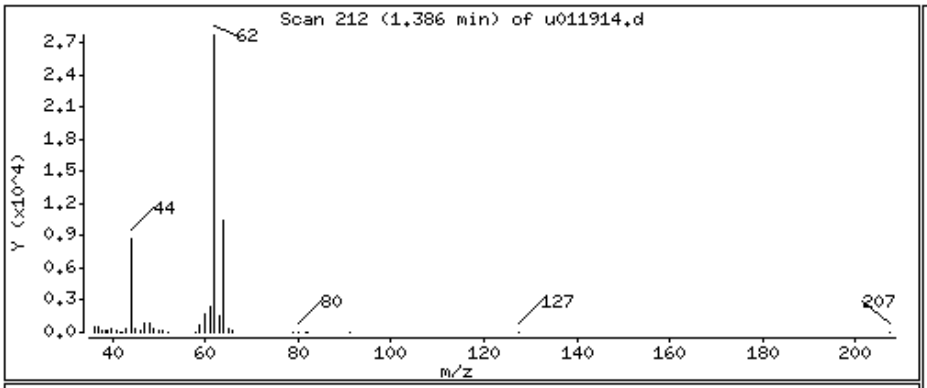
Client ID: Instrument: VOA9.i

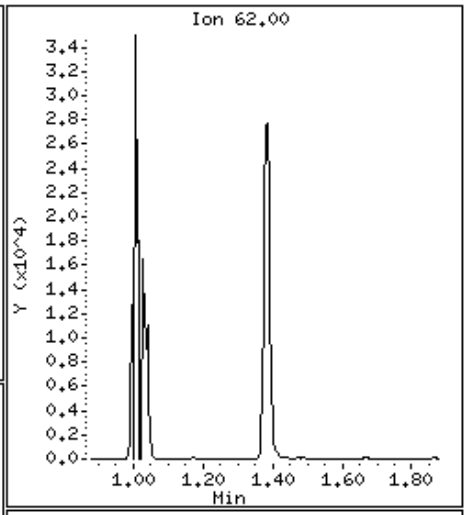
Sample Info: HS24010611-02

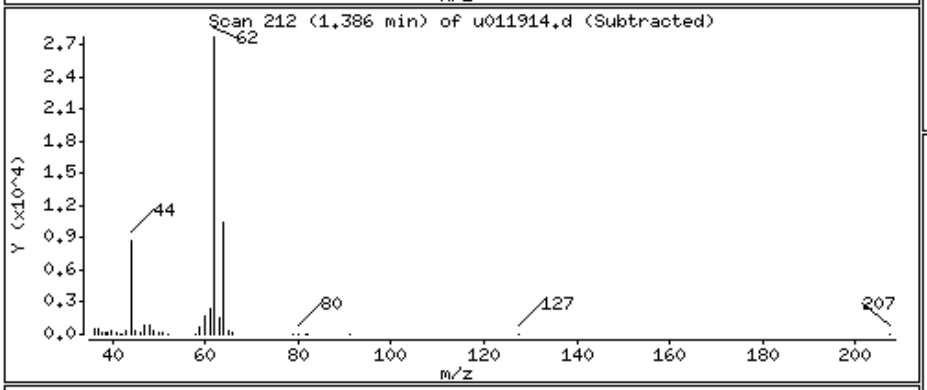
Purge Volume: 5.0 Operator: FT

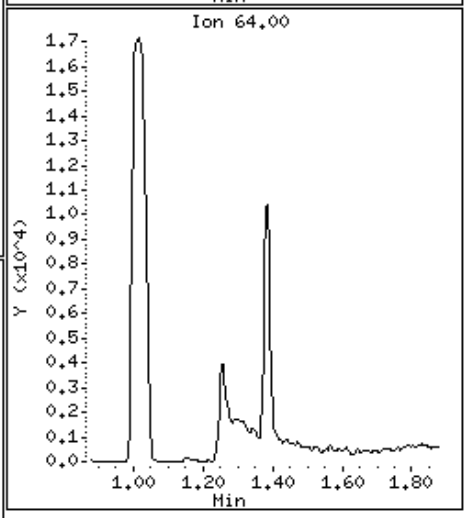
Column phase: DB624 Column diameter: 0.18

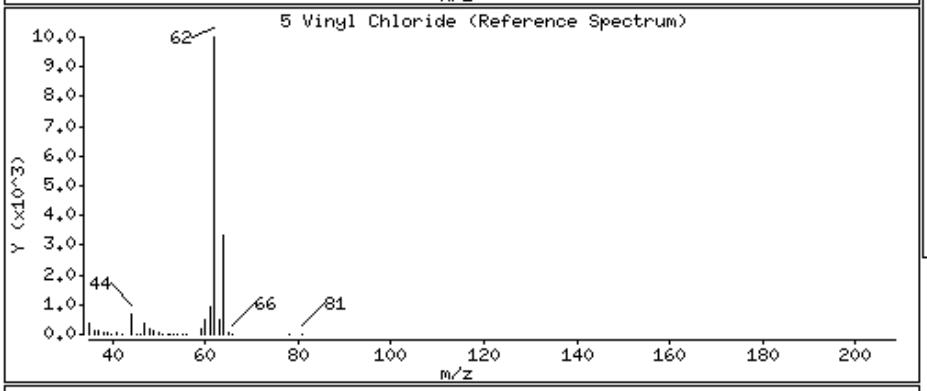
5 Vinyl Chloride Concentration: 2080.58 ug/l

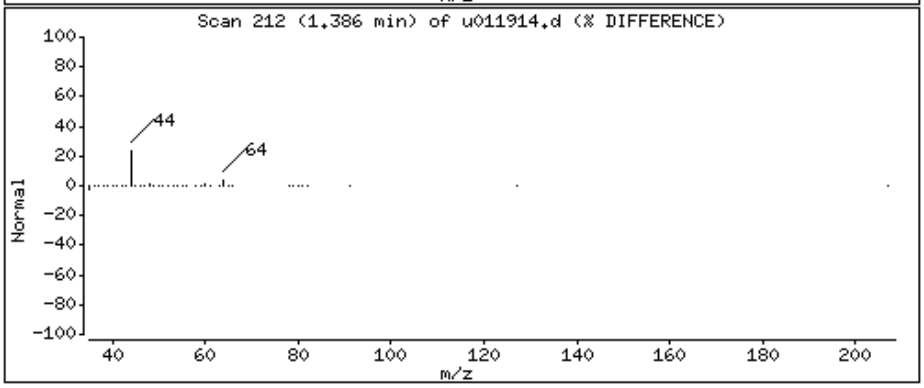












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240119.b\u011914.d Page 3

Date : 19-JAN-2024 13:59

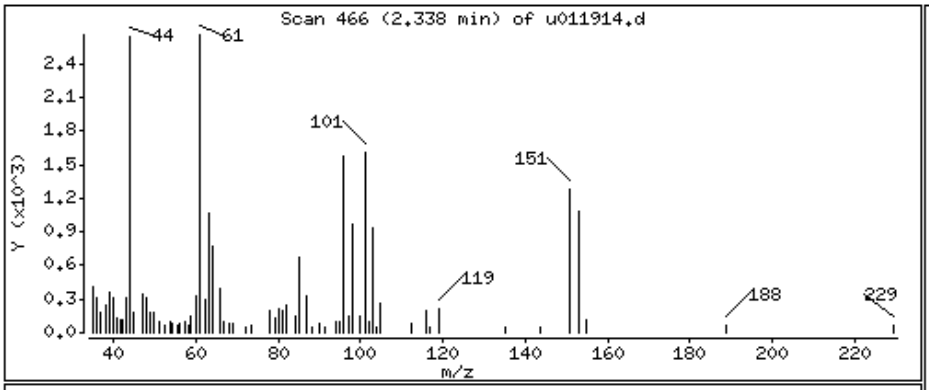
Client ID: Instrument: VOA9.i

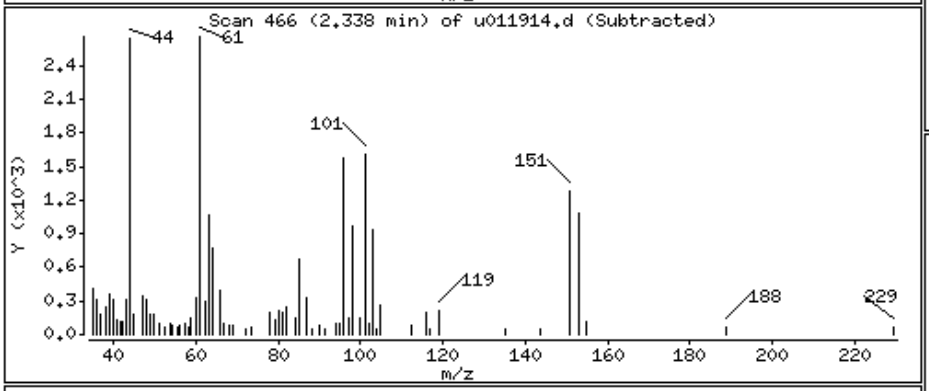
Sample Info: HS24010611-02

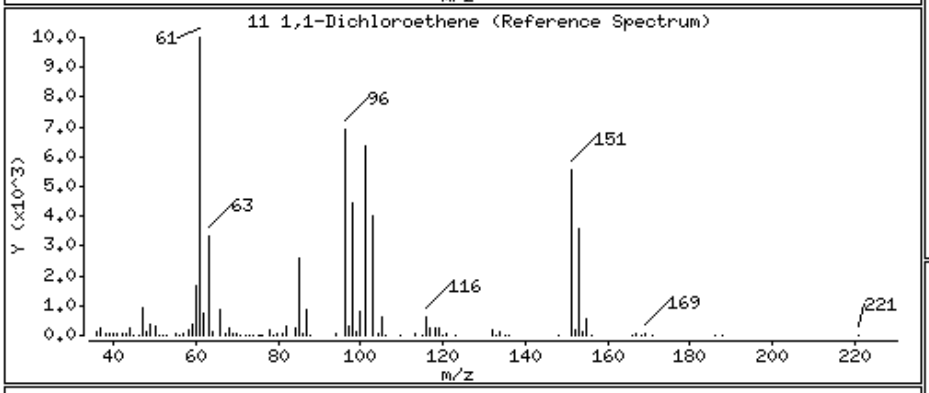
Purge Volume: 5.0 Operator: FT

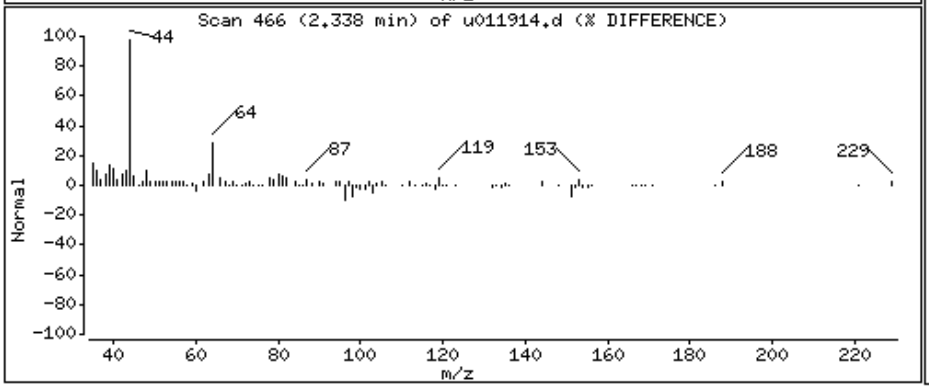
Column phase: DB624 Column diameter: 0.18

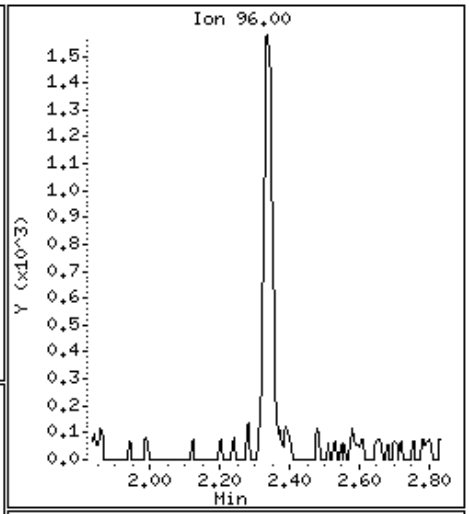
11 1,1-Dichloroethene Concentration: 255.89 ug/l

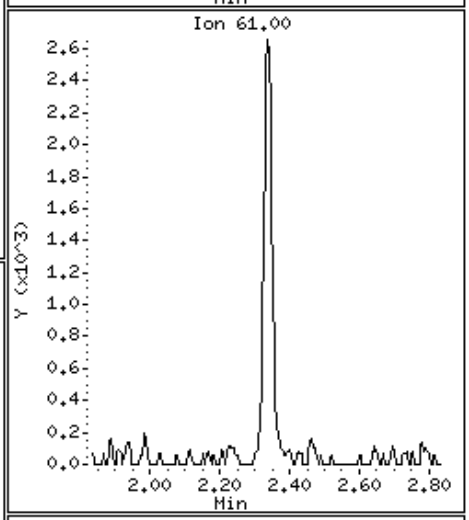


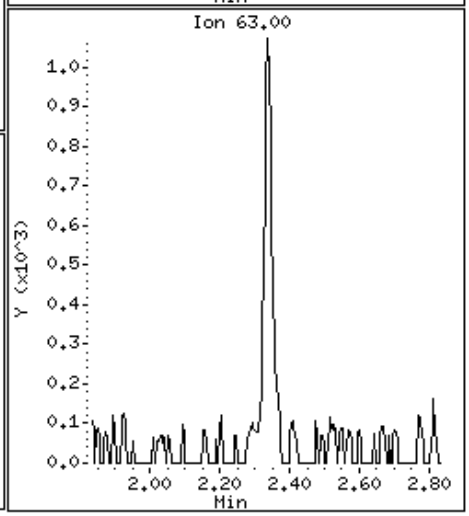












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240119.b\u011914.d Page 4

Date : 19-JAN-2024 13:59

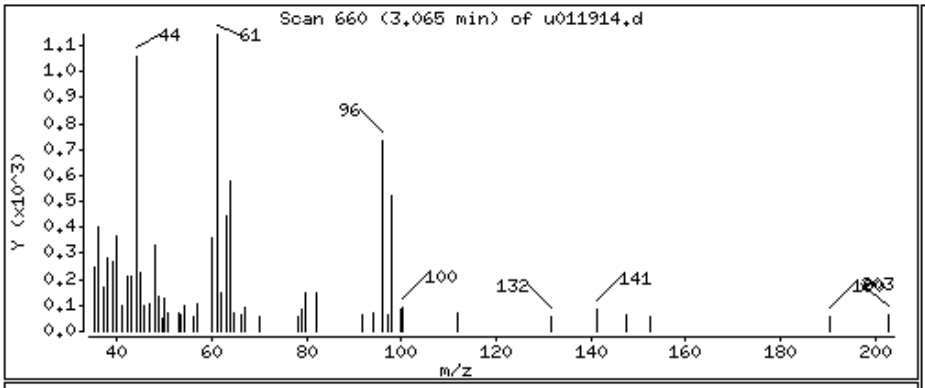
Client ID: Instrument: VOA9.i

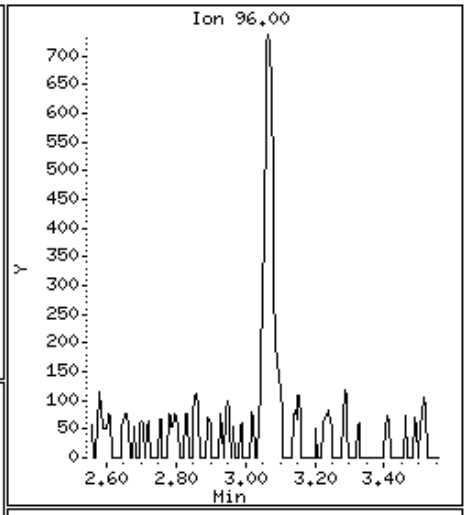
Sample Info: HS24010611-02

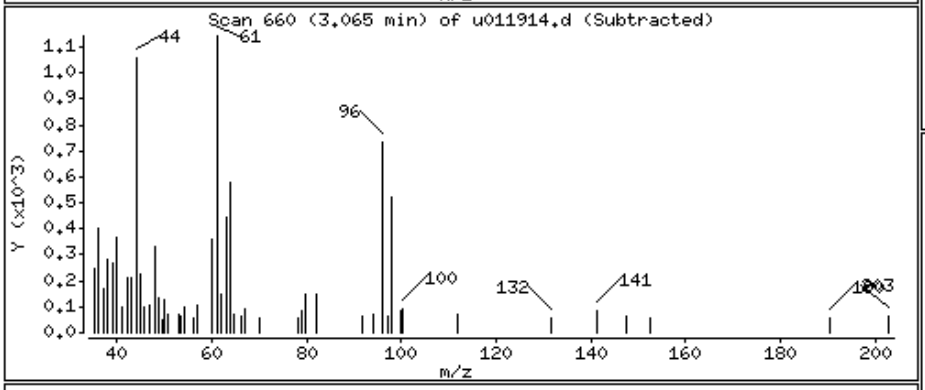
Purge Volume: 5.0 Operator: FT

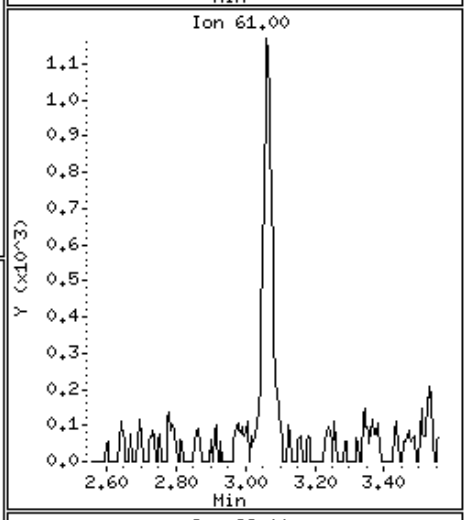
Column phase: DB624 Column diameter: 0.18

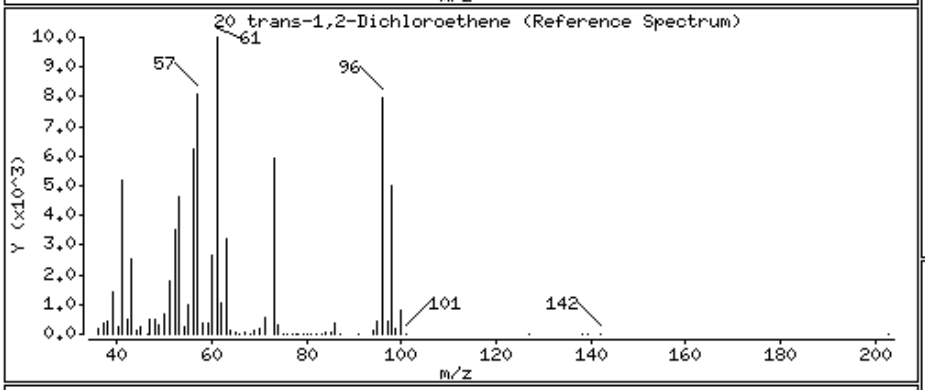
20 trans-1,2-Dichloroethene Concentration: 116.35 ug/l

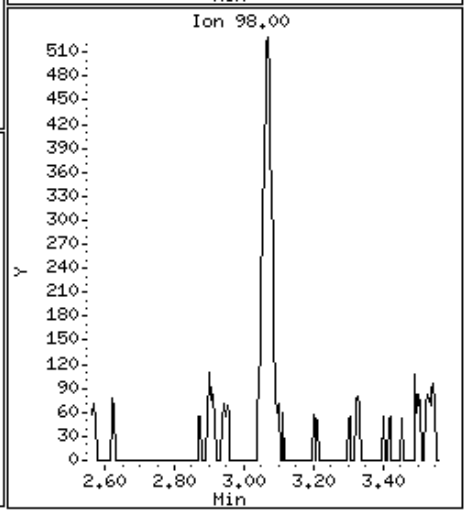


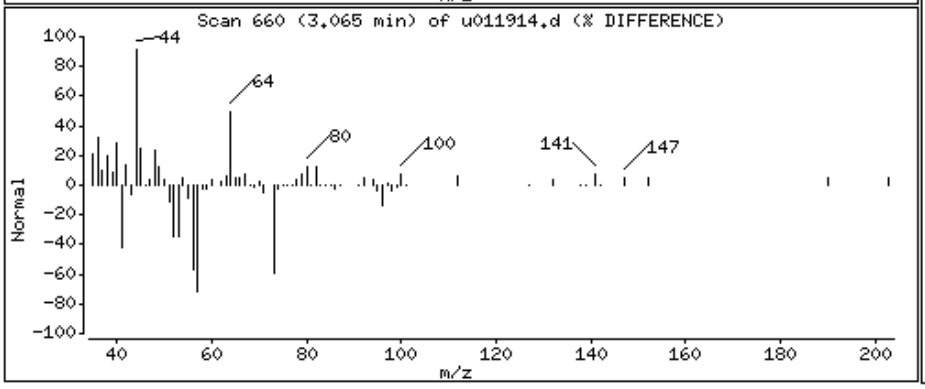












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240119.b\u011914.d Page 5

Date : 19-JAN-2024 13:59

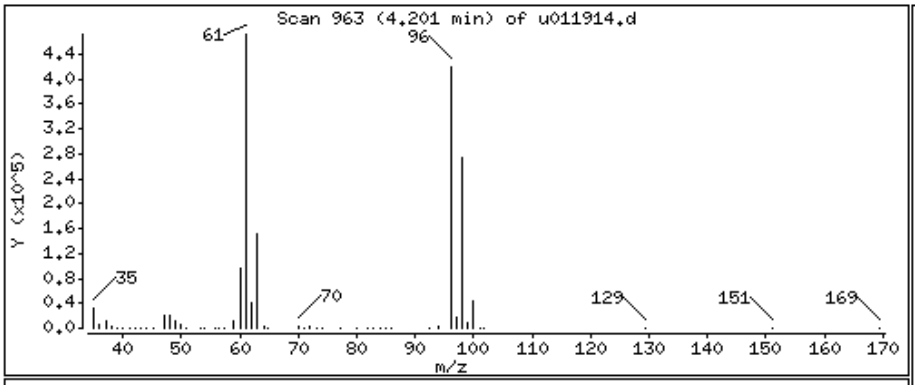
Client ID: Instrument: VOA9.i

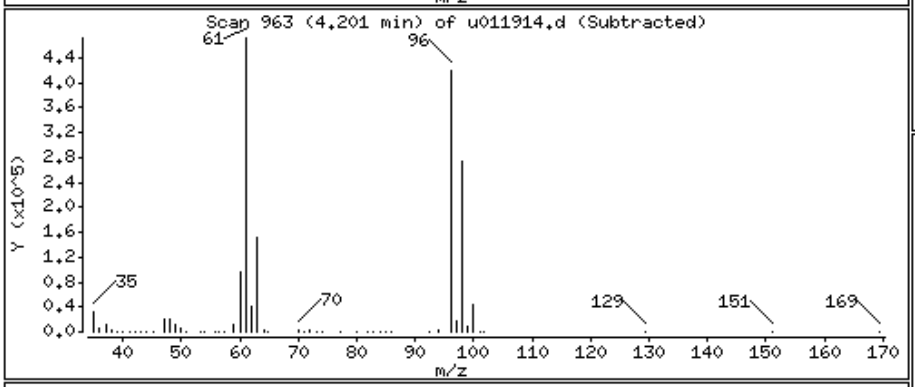
Sample Info: HS24010611-02

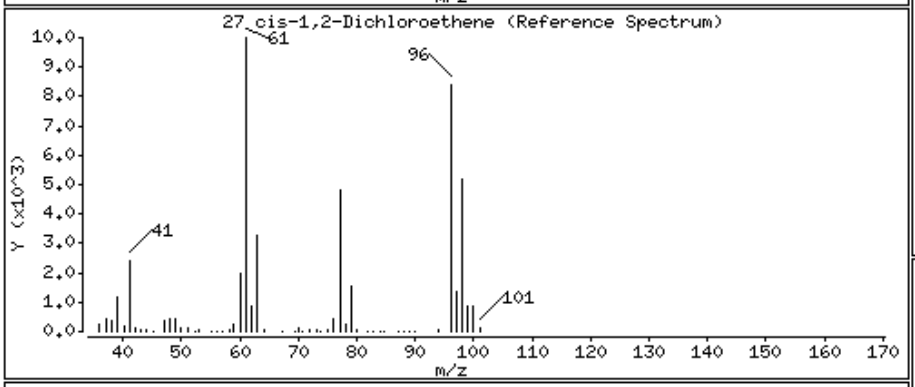
Purge Volume: 5.0 Operator: FT

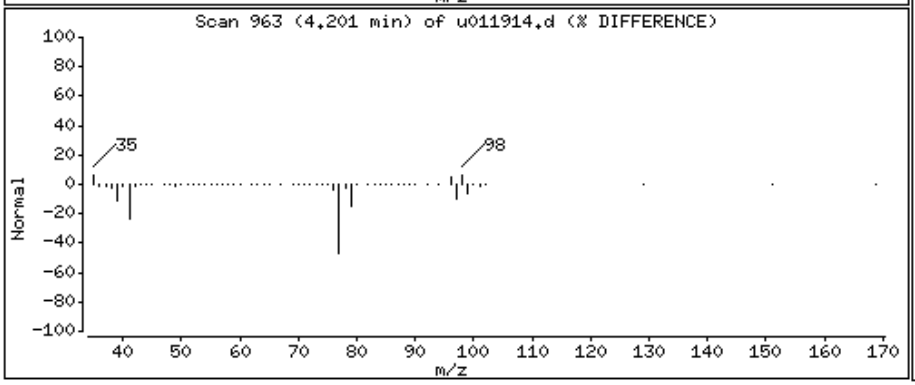
Column phase: DB624 Column diameter: 0.18

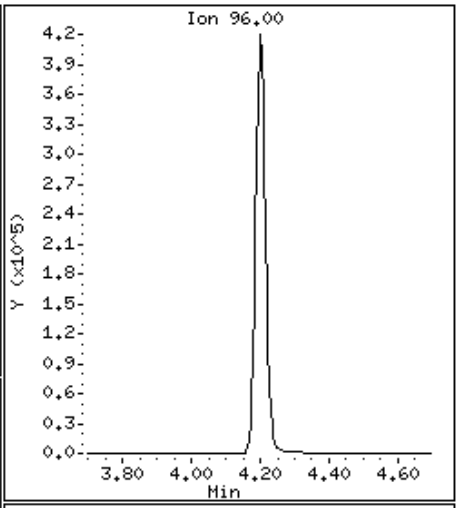
27 cis-1,2-Dichloroethene Concentration: 48824.46 ug/l

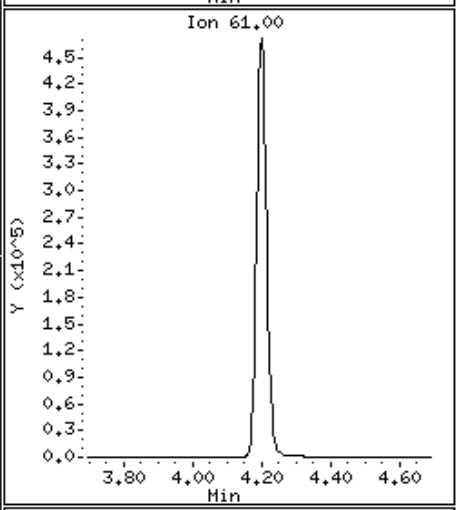


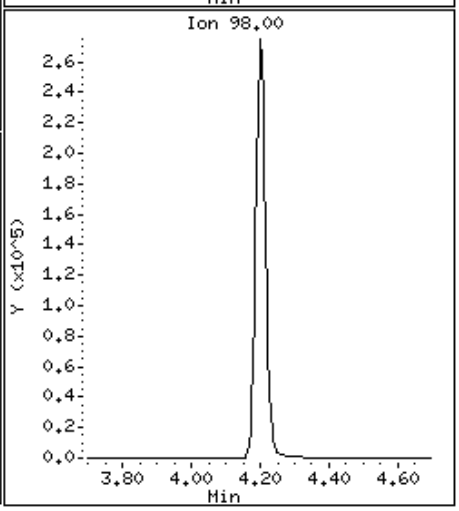












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240119.b\u011914.d Page 6

Date : 19-JAN-2024 13:59

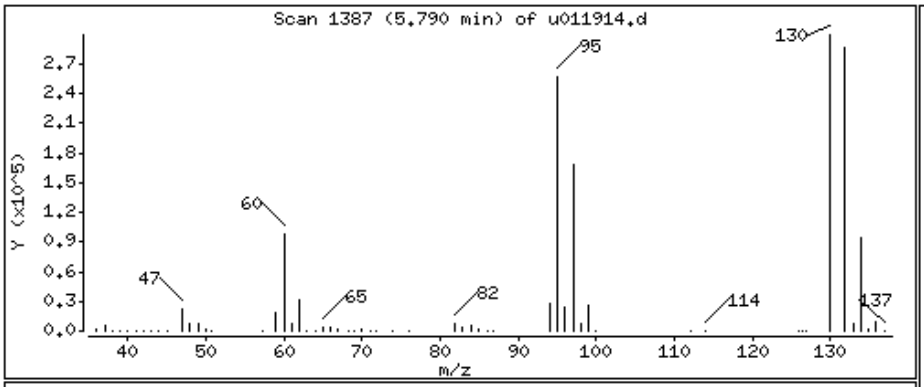
Client ID: Instrument: VOA9.i

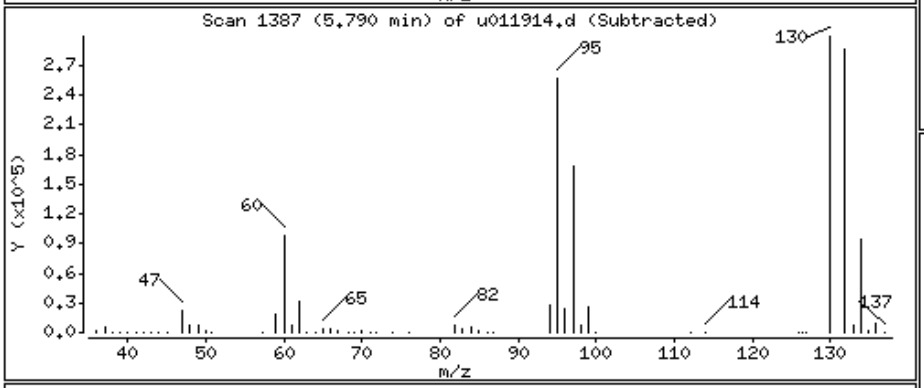
Sample Info: HS24010611-02

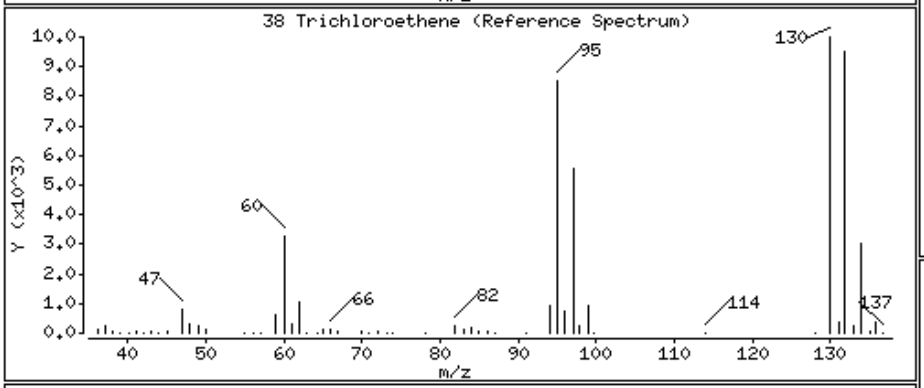
Purge Volume: 5.0 Operator: FT

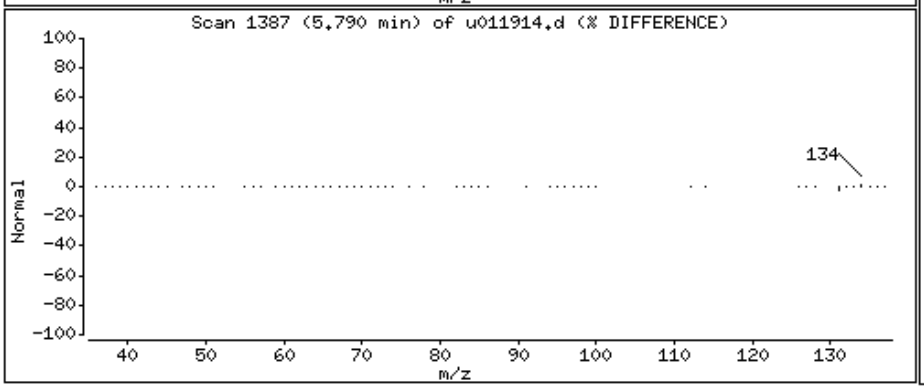
Column phase: DB624 Column diameter: 0.18

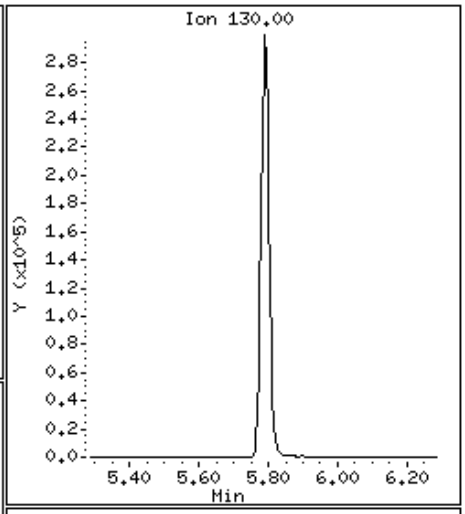
38 Trichloroethene Concentration: 31147.07 ug/l

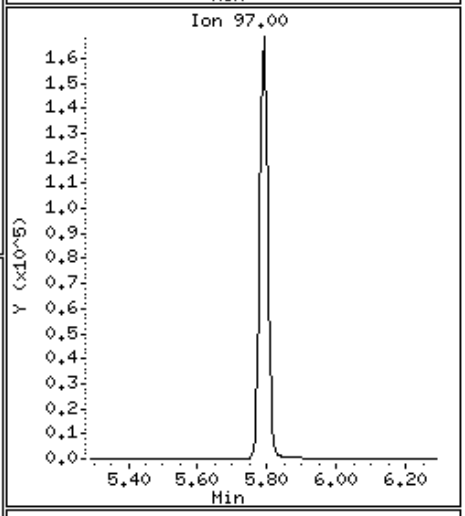


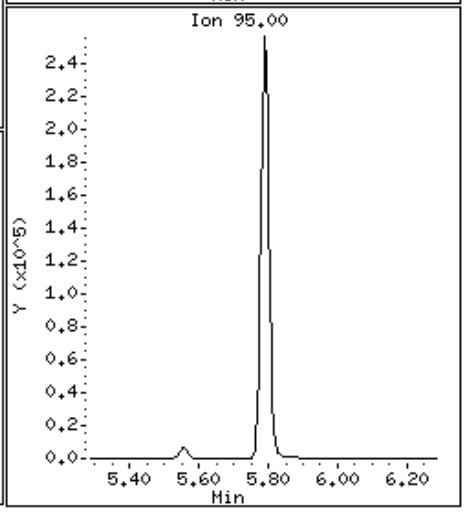












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Inj Date : 19-JAN-2024 13:59
InstruID : VOA9.i
LabSampID : HS24010611-02

Dibromofluoromethane (1868-53-7)

Reason Code:

BEFORE

MASS
113
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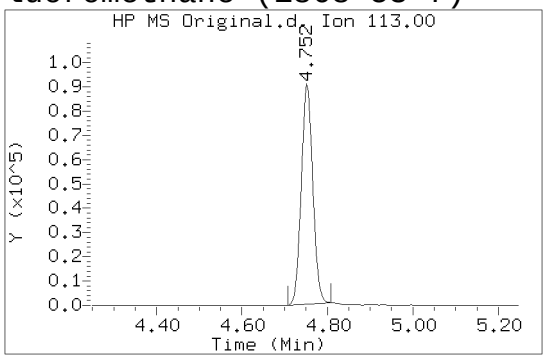
172554
HEIGHT
90720
19-Jan-2024
15:34
firat
tastan



AFTER

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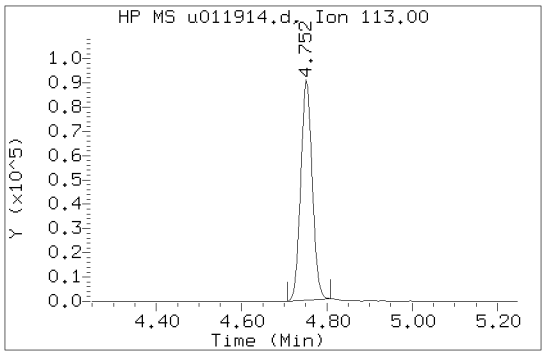

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19-Jan-2024
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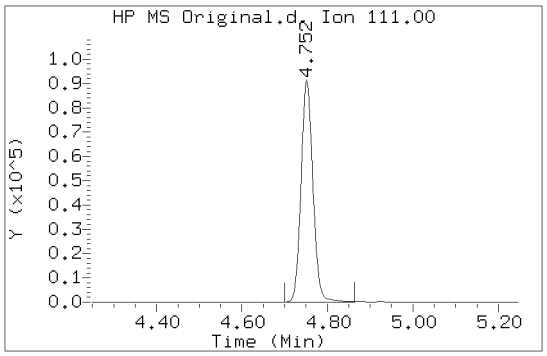

AFTER

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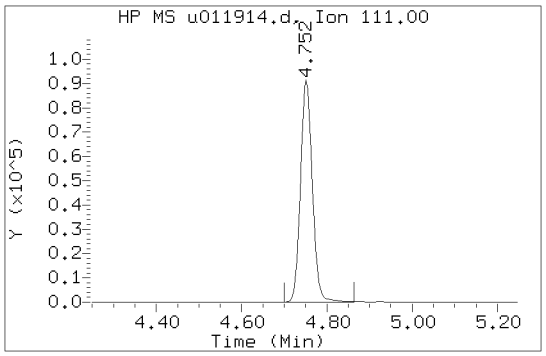

4-Bromofluorobenzene (460-00-4)

Reason Code:

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HEIGHT
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15:34
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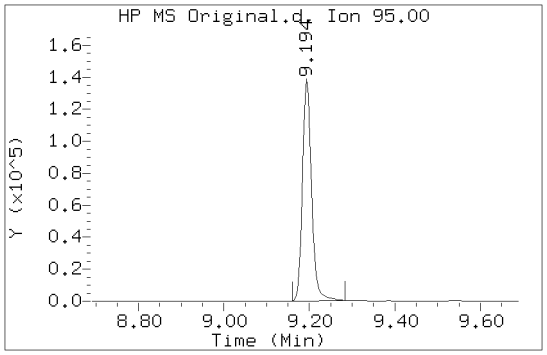

AFTER

MASS
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HEIGHT
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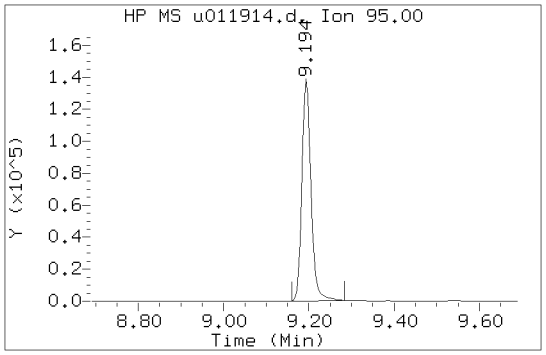
19-Jan-2024
15:34
firat
tastan



BEFORE

MASS
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19-Jan-2024
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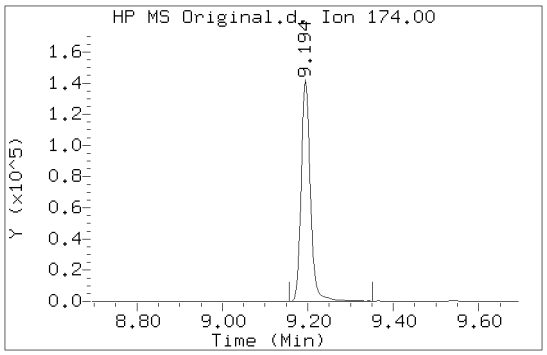

AFTER

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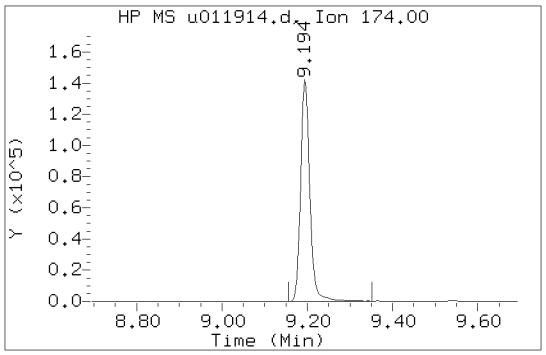

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Inj Date : 19-JAN-2024 13:59
InstruID : VOA9.i
LabSampID : HS24010611-02

4-Bromofluorobenzene (460-00-4)

Reason Code:

BEFORE

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19-Jan-2024
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firat
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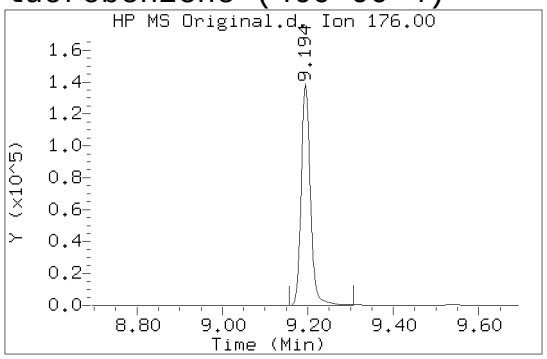

AFTER

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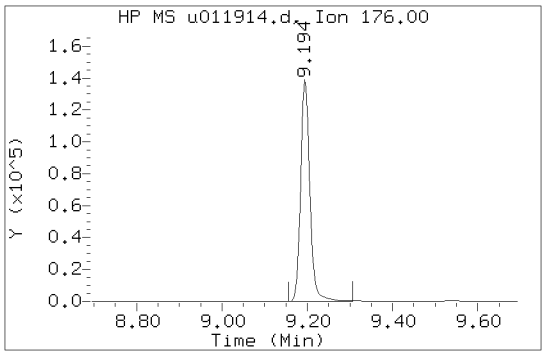


Data File: \\NAHSTWS005\Target\chem\voa9.i\U240119.b\U011915.D Page 1
Report Date: 25-Jan-2024 11:54

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240119.b\U011915.D
Lab Smp Id: HS24010611-02MS Client Smp ID: HS24010611-02MS
Inj Date : 19-JAN-2024 14:21
Operator : FT Inst ID: VOA9.i
Smp Info : HS24010611-02MS;HS24010611-02MS;3;;MS
Misc Info : V9;WATER;0;200;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240119.b\8260C.m
Meth Date : 25-Jan-2024 11:54 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 15 QC Sample: MS
Dil Factor: 200.00000
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	200.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.815	4.815	(1.000)	282869	50.0000	
2 Dichlorodifluoromethane	85	1.164	1.164	(0.242)	16554	8.00190	1600.38
3 Chloromethane	50	1.299	1.299	(0.270)	43355	13.3611	2672.21
4 Propionitrile	54	4.339	4.332	(0.901)	65704	140.092	28018.33(a)
5 Vinyl Chloride	62	1.378	1.378	(0.286)	71544	23.0798	4615.96
6 Bromomethane	94	1.621	1.617	(0.337)	31127	19.7155	3943.09
7 Chloroethane	64	1.700	1.700	(0.353)	31475	15.0805	3016.10
8 Trichlorofluoromethane	101	1.899	1.895	(0.394)	64743	16.4772	3295.43
9 Acrolein	56	2.262	2.262	(0.470)	3678	22.8163	4563.26
10 Acetone	43	2.409	2.405	(0.500)	27863	24.6063	4921.26
11 1,1-Dichloroethene	96	2.334	2.333	(0.485)	40336	18.4882	3697.64
12 Isobutyl Alcohol	43	5.284	5.284	(1.097)	102377	241.320	48264.06(a)
13 Acetonitrile	39	2.671	2.671	(0.555)	46997	154.374	30874.79(a)
14 Allyl Chloride	41	2.675	2.671	(0.556)	111173	15.9850	3196.99(a)
15 Iodomethane	142	2.469	2.468	(0.513)	42224	17.9142	3582.83
16 Acrylonitrile	53	3.065	3.061	(0.636)	34606	31.1879	6237.58
17 Methylene Chloride	84	2.795	2.795	(0.580)	46746	16.8035	3360.70
18 Methyl tert-butyl ether	73	3.080	3.079	(0.640)	117350	15.0111	3002.22
19 Carbon Disulfide	76	2.521	2.521	(0.524)	206415	32.1092	6421.83
20 trans-1,2-Dichloroethene	96	3.061	3.057	(0.636)	44275	16.9760	3395.19

21 Vinyl Acetate	43	3.608	3.604 (0.749)	207845	26.3539	5270.77
22 1,1-Dichloroethane	63	3.514	3.514 (0.730)	74050	13.9197	2783.94

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240119.b\U011915.D Page 2
Report Date: 25-Jan-2024 11:54

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
23	Chloroprene	53	2.157	2.157	(0.448)	14048	14.5590	2911.79(M)
24	2-Butanone	43	4.268	4.260	(0.886)	32369	23.3601	4672.01
25	Methacrylonitrile	41	4.497	4.493	(0.934)	22226	11.0044	2200.87(a)
26	2,2-Dichloropropane	77	4.182	4.182	(0.868)	54928	14.6868	2937.36
27	cis-1,2-Dichloroethene	96	4.197	4.197	(0.872)	928219	265.677	53135.44(A)
28	Chloroform	83	4.572	4.571	(0.949)	81366	14.0517	2810.34
29	Bromochloromethane	128	4.467	4.466	(0.928)	27335	15.1209	3024.17
$ 30	Dibromofluoromethane	113	4.748	4.748	(0.986)	152467	52.7222	52.72
31	1,1,1-Trichloroethane	97	4.744	4.744	(0.985)	64744	14.7131	2942.61
32	1,1-Dichloropropene	75	4.924	4.920	(0.887)	57894	16.4130	3282.59
33	1,2-Dichloroethane	62	5.175	5.175	(0.932)	55708	13.5609	2712.17
34	Carbon Tetrachloride	117	4.913	4.909	(0.885)	55545	16.1208	3224.16
$ 35	1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	148141	44.8987	44.89
* 36	1,4-Difluorobenzene	114	5.554	5.554	(1.000)	421628	50.0000	
37	Benzene	78	5.141	5.138	(0.926)	170650	14.8680	2973.60
38	Trichloroethene	130	5.786	5.786	(1.042)	557793	176.326	35265.20
39	Bromodichloromethane	83	6.277	6.277	(1.130)	54281	14.4418	2888.36
40	Methyl Methacrylate	41	6.157	6.153	(1.279)	33266	11.9146	2382.91(a)
42	1,2-Dichloropropane	63	6.011	6.007	(1.082)	44520	14.4071	2881.41
43	2-Nitropropane	43	6.510	6.506	(1.352)	8162	11.2395	2247.89
44	Dibromomethane	93	6.120	6.120	(1.102)	29777	14.8939	2978.78
45	4-Methyl-2-Pentanone	43	6.855	6.851	(0.837)	79819	26.4638	5292.76
46	cis-1,3-Dichloropropene	75	6.690	6.689	(1.205)	63787	14.2603	2852.06
* 47	Chlorobenzene-d5	117	8.185	8.185	(1.000)	414153	50.0000	
$ 48	Toluene-d8	98	6.922	6.922	(0.846)	538080	56.4385	56.43
49	Ethyl Methacrylate	69	7.289	7.289	(1.312)	60576	14.6381	2927.62(a)
50	Toluene	91	6.982	6.978	(0.853)	188988	16.3659	3273.17
51	trans-1,3-Dichloropropene	75	7.196	7.196	(1.296)	51981	14.0702	2814.04
52	2-Hexanone	43	7.593	7.589	(0.928)	51669	24.7217	4944.34
53	1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	37176	15.9437	3188.74
54	1,3-Dichloropropane	76	7.499	7.495	(0.916)	75889	14.8006	2960.11
55	Dibromochloromethane	129	7.691	7.690	(0.940)	47965	15.5724	3114.47
56	Tetrachloroethene	164	7.458	7.458	(0.911)	47801	19.3387	3867.74
57	1,2-Dibromoethane	107	7.784	7.784	(0.951)	45513	15.8168	3163.36
58	1-Chlorohexane	55	8.197	8.196	(1.476)	40659	17.1972	3439.44
59	Chlorobenzene	112	8.208	8.208	(1.003)	136817	16.2643	3252.86
60	1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	45991	15.6296	3125.92
61	Ethylbenzene	106	8.305	8.305	(1.015)	65856	16.7237	3344.74
62	m,p-Xylenes	106	8.407	8.406	(1.027)	165029	34.8571	6971.42
63	o-Xylene	106	8.748	8.744	(1.069)	81174	16.6715	3334.29
64	Styrene	104	8.763	8.759	(1.071)	138049	17.0304	3406.07
66	Bromoform	173	8.920	8.916	(1.090)	30177	15.0859	3017.17
67	Isopropylbenzene	105	9.063	9.062	(1.107)	209864	17.8219	3564.37
68	1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	58333	14.7706	2954.12
$ 69	4-Bromofluorobenzene	95	9.194	9.190	(1.123)	188527	52.2835	52.28
* 70	1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	234980	50.0000	
71	1,2,3-Trichloropropane	75	9.362	9.362	(0.920)	58691	13.1574	2631.48
72	trans-1,4-Dichloro-2-butene	53	9.377	9.377	(1.146)	10129	13.5903	2718.05(a)
73	n-Propylbenzene	91	9.411	9.411	(0.925)	233926	16.9537	3390.74
74	Bromobenzene	156	9.317	9.317	(0.916)	60539	15.3418	3068.36
75	1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	166572	16.9855	3397.09
76	2-Chlorotoluene	91	9.482	9.482	(0.932)	141037	15.1866	3037.31

77	4-Chlorotoluene	91	9.576	9.576 (0.941)	160004	15.1916	3038.32
78	tert-Butylbenzene	119	9.835	9.835 (0.967)	153423	17.4177	3483.54

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240119.b\U011915.D Page 3
Report Date: 25-Jan-2024 11:54

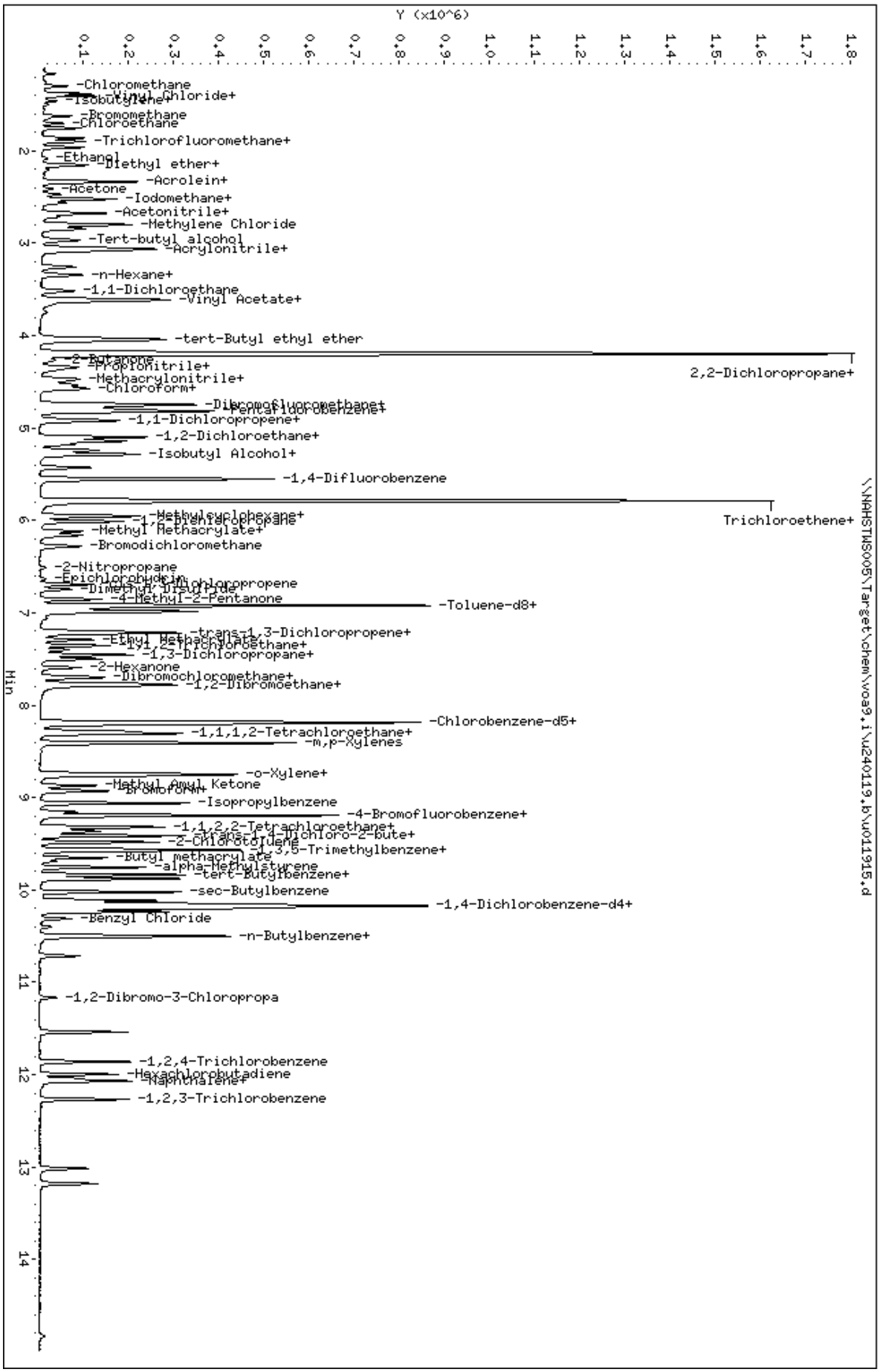
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
79	1,2,4-Trimethylbenzene	105	9.876	9.876	(0.971)	165814	16.8709	3374.17
81	sec-Butylbenzene	105	10.022	10.022	(0.985)	200867	17.6845	3536.90
82	p-Isopropyltoluene	119	10.146	10.146	(0.997)	179893	18.3010	3660.19
83	1,3-Dichlorobenzene	146	10.116	10.112	(0.994)	109341	15.6368	3127.36
84	1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	115935	15.6496	3129.91
86	Benzyl Chloride	91	10.311	10.311	(1.260)	45830	14.3787	2875.73
87	n-Butylbenzene	91	10.495	10.491	(1.032)	144005	17.4570	3491.40
88	1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	108332	15.3994	3079.88
89	1,2-Dibromo-3-Chloropropane	155	11.166	11.165	(1.098)	8578	14.0687	2813.74
90	1,2,4-Trichlorobenzene	180	11.859	11.859	(1.166)	68087	15.6884	3137.67
91	Hexachlorobutadiene	225	11.998	11.998	(1.179)	33475	19.2420	3848.40
92	Naphthalene	128	12.069	12.065	(1.186)	154444	14.7557	2951.13
93	1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	66679	15.2356	3047.11
146	Methyl acetate	43	2.712	2.712	(0.563)	37109	13.1814	2636.28
138	Freon TF	101	2.337	2.333	(0.485)	45165	22.0068	4401.36
141	Cyclohexane	56	4.785	4.785	(0.994)	61089	14.9879	2997.57
142	Tetrahydrofuran	42	4.542	4.538	(0.943)	15286	25.4584	5091.68
147	Methylcyclohexane	55	5.947	5.943	(1.071)	102581	16.4148	3282.95
135	1,4-Dioxane	88	6.169	6.165	(1.281)	13357	297.619	59523.88
132	n-Butanol	56	5.824	5.820	(1.209)	24147	262.656	52531.18(a)
136	n-Hexane	57	3.342	3.342	(0.694)	46144	17.5491	3509.82
139	Diethyl ether	59	2.146	2.142	(0.446)	33004	14.3091	2861.82
148	Tert-butyl alcohol	59	2.963	2.960	(0.615)	100911	318.666	63733.15
149	Isopropyl alcohol	45	2.562	2.555	(0.532)	61167	336.740	67347.94
152	Amyl alcohol	42	7.398	7.394	(0.904)	24811	270.090	54017.99
156	Diisopropyl ether	45	3.619	3.619	(0.752)	127395	12.9278	2585.56
162	Butyl acrylate	55	8.733	8.732	(1.067)	60008	12.5569	2511.38
187	n-Amyl acetate	43	8.931	8.931	(1.091)	63102	12.0210	2404.19
164	Dicyclopentadiene	66	10.198	10.198	(1.003)	190677	15.2221	3044.41
166	1,2,3-Trimethylbenzene	105	10.232	10.236	(1.006)	149936	15.4621	3092.42
167	Ethanol	45	2.079	2.079	(0.432)	10909	306.438	61287.51
172	tert-Butyl formate	59	5.239	5.235	(1.088)	71508	35.6115	7122.30
173	3,3-Dimethyl-1-butanol	57	7.780	7.780	(0.951)	97498	285.350	57069.92
174	tert-Amyl methyl ether	73	5.284	5.284	(1.097)	119496	13.6186	2723.71
175	tert-Butyl ethyl ether	59	4.051	4.047	(0.841)	117548	13.3807	2676.14
176	tert-Amyl alcohol	59	5.239	5.235	(1.088)	71508	357.849	71569.88
151	4-Methyl-2-pentanol	45	7.214	7.214	(1.299)	169394	282.470	56493.95
140	1,3-Butadiene	54	1.404	1.404	(0.292)	32969	11.6048	2320.96
158	Dichlorofluoromethane	67	1.861	1.857	(0.387)	73961	17.1548	3430.96
182	Epichlorohydrin	57	6.637	6.629	(1.195)	8794	53.6907	10738.13
M 94	1,2-Dichloroethylene (total)	96				972494	318.752	63750.45
M 95	Xylenes (total)	106				246203	50.4652	10093.04
145	alpha-Methylstyrene	118	9.756	9.752	(0.959)	71111	16.0488	3209.76
130	Ethyl Acetate	43	4.343	4.339	(0.902)	41177	11.9833	2396.66
131	Methyl Acrylate	55	4.369	4.365	(0.907)	49548	13.3353	2667.06
189	n-Butyl acetate	43	7.706	7.705	(0.941)	59290	12.8523	2570.45
134	Cyclohexanone	55	9.153	9.152	(0.900)	33364	214.600	42920.00(a)
185	Isoprene	39	2.157	2.157	(0.448)	8981	13.6372	2727.44
188	Isopropyl acetate	43	5.284	5.284	(0.951)	102046	13.1193	2623.86
150	Allyl alcohol	57	3.342	3.342	(0.694)	46144	350.982	70196.48
194	Acetaldehyde	44	1.460	1.460	(0.303)	18478	44.5124	8902.47(M)
195	Methyl Amyl Ketone	43	8.868	8.867	(1.083)	67837	12.0248	2404.96

200 Dimethyl Disulfide	94	6.746	6.746 (0.824)	36276	12.7388	2547.76
202 Isobutylene	41	1.498	1.498 (0.311)	4352	15.7781	3155.62(M)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
203 2-Ethylhexyl Acrylate	55	12.043	12.039	(1.184)	33329	11.6524	2330.48
133 Ethyl Acrylate	55	5.947	5.943	(1.235)	102581	15.0871	3017.41
163 Butyl methacrylate	41	9.651	9.647	(0.949)	35165	12.9960	2599.20

QC Flag Legend

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



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Sample Info: HS2401611-02MS;HS2401611-02MS;3;;MS
Purge Volume: 5.0
Column phase: DB624

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

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Inj Date : 19-JAN-2024 14:21
InstruID : VOA9.i
LabSampID : HS24010611-02MS

Chloroprene (126-99-8)

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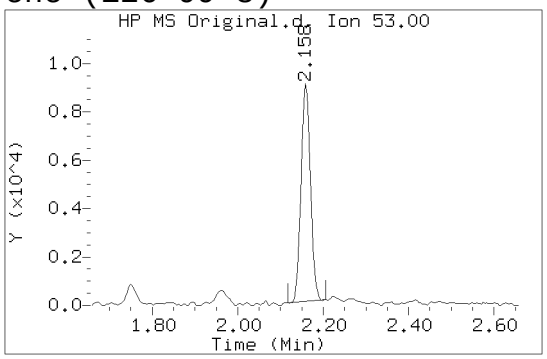

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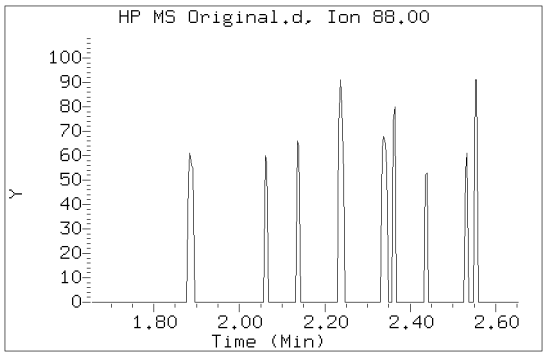

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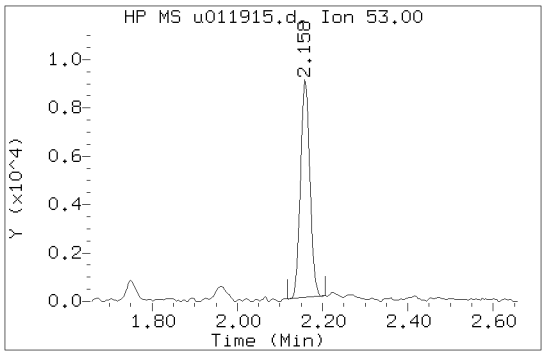

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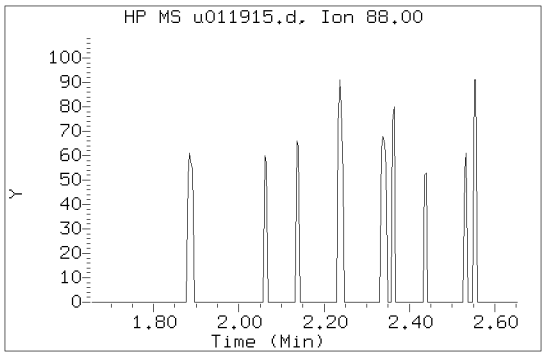

Acetaldehyde (75-07-0)

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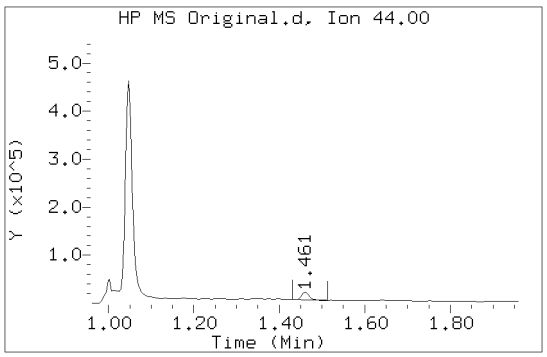

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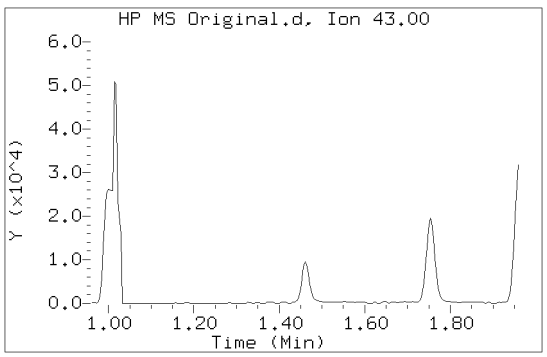

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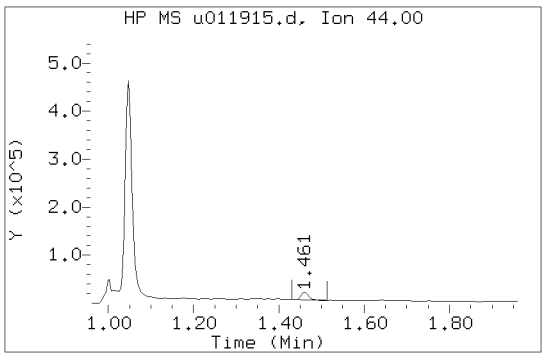

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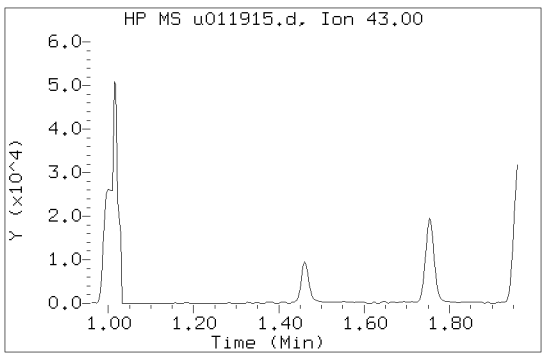

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InstruID : VOA9.i
LabSampID : HS24010611-02MS

Acetaldehyde (75-07-0)

Reason Code:

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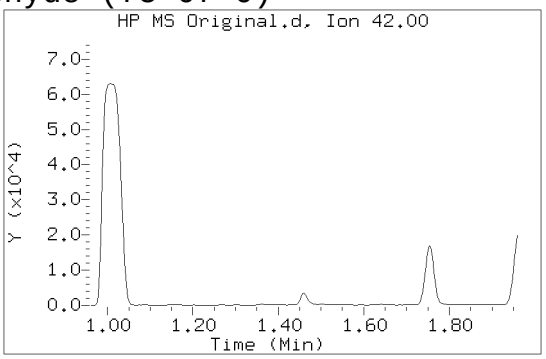

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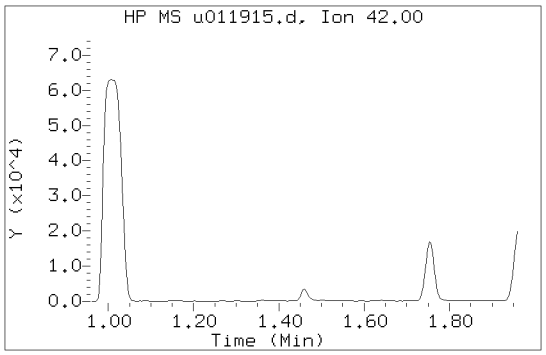

Isobutylene (115-11-7)

Reason Code:

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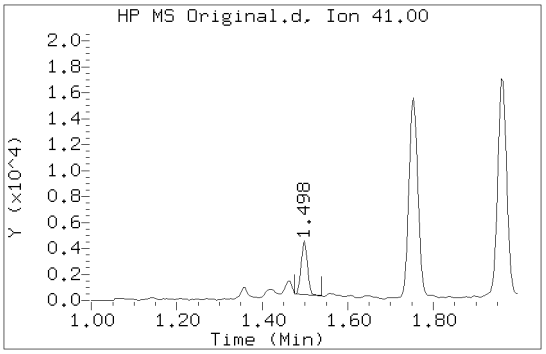

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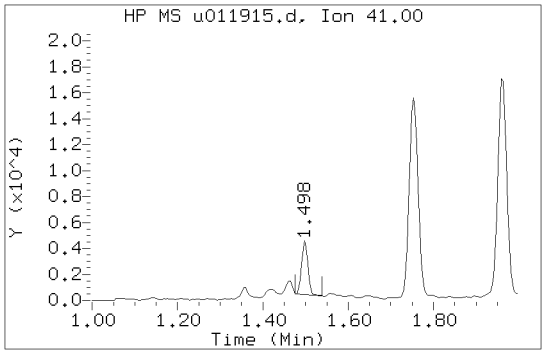

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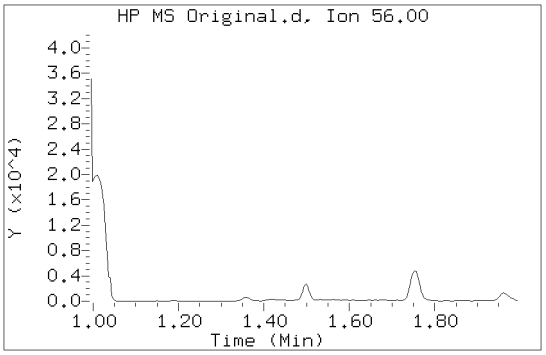

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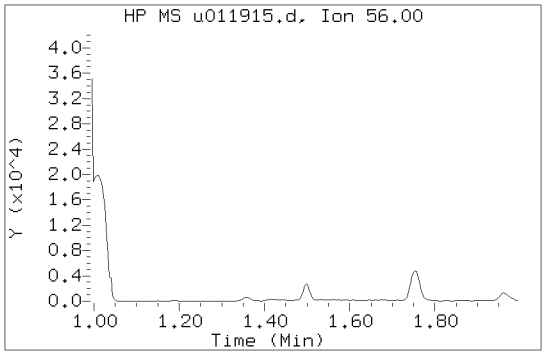

BEFORE

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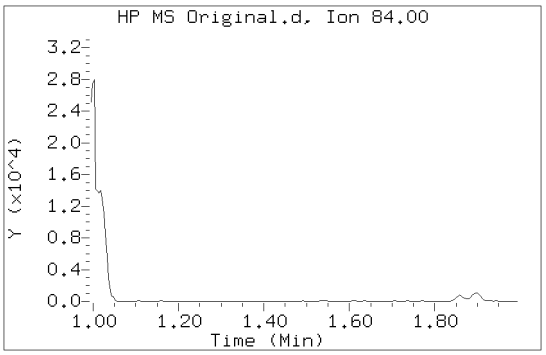

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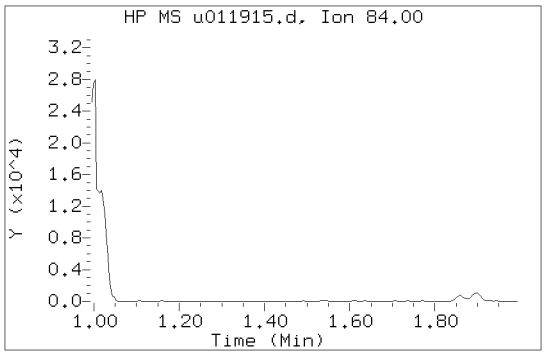

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Report Date: 25-Jan-2024 11:54

ALS Laboratory Group

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Operator : FT Inst ID: VOA9.i
Smp Info : HS24010611-02MSD;HS24010611-02MSD;3;;MSD
Misc Info : V9;WATER;0;200;
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Meth Date : 25-Jan-2024 11:54 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 15 QC Sample: MSD
Dil Factor: 200.00000
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
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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	4.819	4.815	(1.000)	348364	50.0000	
2 Dichlorodifluoromethane	85	1.168	1.164	(0.242)	19247	7.60302	1520.60
3 Chloromethane	50	1.303	1.299	(0.270)	47661	11.9266	2385.32
4 Propionitrile	54	4.339	4.332	(0.900)	78070	135.163	27032.53(a)
5 Vinyl Chloride	62	1.381	1.378	(0.287)	78251	20.4975	4099.50
6 Bromomethane	94	1.625	1.617	(0.337)	32806	16.7928	3358.55
7 Chloroethane	64	1.704	1.700	(0.354)	36036	14.0197	2803.94
8 Trichlorofluoromethane	101	1.899	1.895	(0.394)	76667	15.8435	3168.69
9 Acrolein	56	2.270	2.262	(0.471)	4152	20.9143	4182.86
10 Acetone	43	2.412	2.405	(0.501)	31972	22.5110	4502.20
11 1,1-Dichloroethene	96	2.337	2.333	(0.485)	46576	17.3347	3466.94
12 Isobutyl Alcohol	43	5.287	5.284	(1.097)	133909	256.303	51260.56(a)
13 Acetonitrile	39	2.675	2.671	(0.555)	53872	143.688	28737.51(a)
14 Allyl Chloride	41	2.675	2.671	(0.555)	133114	15.5413	3108.26(a)
15 Iodomethane	142	2.472	2.468	(0.513)	74454	24.5734	4914.68
16 Acrylonitrile	53	3.068	3.061	(0.637)	40895	29.9266	5985.32
17 Methylene Chloride	84	2.798	2.795	(0.581)	55926	16.3163	3263.25
18 Methyl tert-butyl ether	73	3.083	3.079	(0.640)	143826	14.9389	2987.78
19 Carbon Disulfide	76	2.525	2.521	(0.524)	253451	32.0136	6402.71
20 trans-1,2-Dichloroethene	96	3.061	3.057	(0.635)	54261	16.8934	3378.67

21 Vinyl Acetate	43	3.608	3.604 (0.749)	262442	27.0203	5404.06
22 1,1-Dichloroethane	63	3.518	3.514 (0.730)	90639	13.8348	2766.96

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240119.b\U011916.D Page 2
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	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
23	Chloroprene	53	2.161	2.157	(0.449)	18143	15.2679	3053.57(M)
24	2-Butanone	43	4.268	4.260	(0.886)	42222	24.7421	4948.41
25	Methacrylonitrile	41	4.497	4.493	(0.933)	27392	11.0123	2202.46(a)
26	2,2-Dichloropropane	77	4.185	4.182	(0.869)	66377	14.4113	2882.26
27	cis-1,2-Dichloroethene	96	4.197	4.197	(0.871)	883514	205.338	41067.60(A)
28	Chloroform	83	4.575	4.571	(0.949)	99860	14.0033	2800.65
29	Bromochloromethane	128	4.470	4.466	(0.928)	33586	15.0858	3017.15
$ 30	Dibromofluoromethane	113	4.751	4.748	(0.986)	190546	53.5172	53.51
31	1,1,1-Trichloroethane	97	4.744	4.744	(0.984)	78499	14.4851	2897.01
32	1,1-Dichloropropene	75	4.924	4.920	(0.887)	67673	15.2049	3040.98
33	1,2-Dichloroethane	62	5.179	5.175	(0.933)	70087	13.5214	2704.28
34	Carbon Tetrachloride	117	4.913	4.909	(0.885)	68289	15.7075	3141.50
$ 35	1,2-Dichloroethane-d4	65	5.100	5.096	(1.058)	188991	46.4286	46.42
* 36	1,4-Difluorobenzene	114	5.554	5.554	(1.000)	532004	50.0000	
37	Benzene	78	5.141	5.138	(0.926)	209123	14.4399	2887.97
38	Trichloroethene	130	5.790	5.786	(1.043)	529974	132.774	26554.76
39	Bromodichloromethane	83	6.277	6.277	(1.130)	70270	14.8169	2963.38
40	Methyl Methacrylate	41	6.157	6.153	(1.278)	41220	11.9878	2397.55(a)
42	1,2-Dichloropropane	63	6.011	6.007	(1.082)	54345	13.9378	2787.56
43	2-Nitropropane	43	6.510	6.506	(1.351)	10015	11.1983	2239.66
44	Dibromomethane	93	6.120	6.120	(1.102)	36610	14.5125	2902.49
45	4-Methyl-2-Pentanone	43	6.854	6.851	(0.837)	105225	27.4311	5486.21
46	cis-1,3-Dichloropropene	75	6.693	6.689	(1.205)	80601	14.2787	2855.73
* 47	Chlorobenzene-d5	117	8.185	8.185	(1.000)	526975	50.0000	
$ 48	Toluene-d8	98	6.922	6.922	(0.846)	657556	54.2041	54.20
49	Ethyl Methacrylate	69	7.289	7.289	(1.312)	72216	13.8303	2766.06(a)
50	Toluene	91	6.982	6.978	(0.853)	229778	15.6381	3127.62
51	trans-1,3-Dichloropropene	75	7.196	7.196	(1.296)	66557	14.2518	2850.35
52	2-Hexanone	43	7.593	7.589	(0.928)	69490	26.1302	5226.03
53	1,1,2-Trichloroethane	83	7.357	7.353	(0.899)	47969	16.1870	3237.39
54	1,3-Dichloropropane	76	7.499	7.495	(0.916)	95608	14.6543	2930.85
55	Dibromochloromethane	129	7.690	7.690	(0.940)	60379	15.4059	3081.17
56	Tetrachloroethene	164	7.458	7.458	(0.911)	57102	18.1557	3631.13
57	1,2-Dibromoethane	107	7.784	7.784	(0.951)	58426	15.9574	3191.47
58	1-Chlorohexane	55	8.196	8.196	(1.476)	46354	15.5383	3107.66
59	Chlorobenzene	112	8.208	8.208	(1.003)	170744	15.9519	3190.37
60	1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	59280	15.8327	3166.53
61	Ethylbenzene	106	8.305	8.305	(1.015)	81412	16.2479	3249.57
62	m,p-Xylenes	106	8.410	8.406	(1.027)	201328	33.4200	6683.99
63	o-Xylene	106	8.748	8.744	(1.069)	101308	16.3520	3270.40
64	Styrene	104	8.763	8.759	(1.071)	174756	16.9432	3388.63
66	Bromoform	173	8.920	8.916	(1.090)	38978	15.2977	3059.53
67	Isopropylbenzene	105	9.062	9.062	(1.107)	253675	16.9302	3386.04
68	1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	76334	15.5408	3108.15
$ 69	4-Bromofluorobenzene	95	9.194	9.190	(1.123)	232819	50.7053	50.70
* 70	1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	292878	50.0000	
71	1,2,3-Trichloropropane	75	9.362	9.362	(0.920)	73897	13.2914	2658.27
72	trans-1,4-Dichloro-2-butene	53	9.377	9.377	(1.146)	13880	14.6360	2927.19(a)
73	n-Propylbenzene	91	9.411	9.411	(0.925)	283100	16.4616	3292.31
74	Bromobenzene	156	9.317	9.317	(0.916)	76529	15.5601	3112.02
75	1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	202741	16.5868	3317.35
76	2-Chlorotoluene	91	9.482	9.482	(0.932)	169454	14.6394	2927.88

77	4-Chlorotoluene	91	9.576	9.576 (0.941)	199162	15.1714	3034.27
78	tert-Butylbenzene	119	9.835	9.835 (0.967)	182605	16.6325	3326.49

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240119.b\U011916.D Page 3
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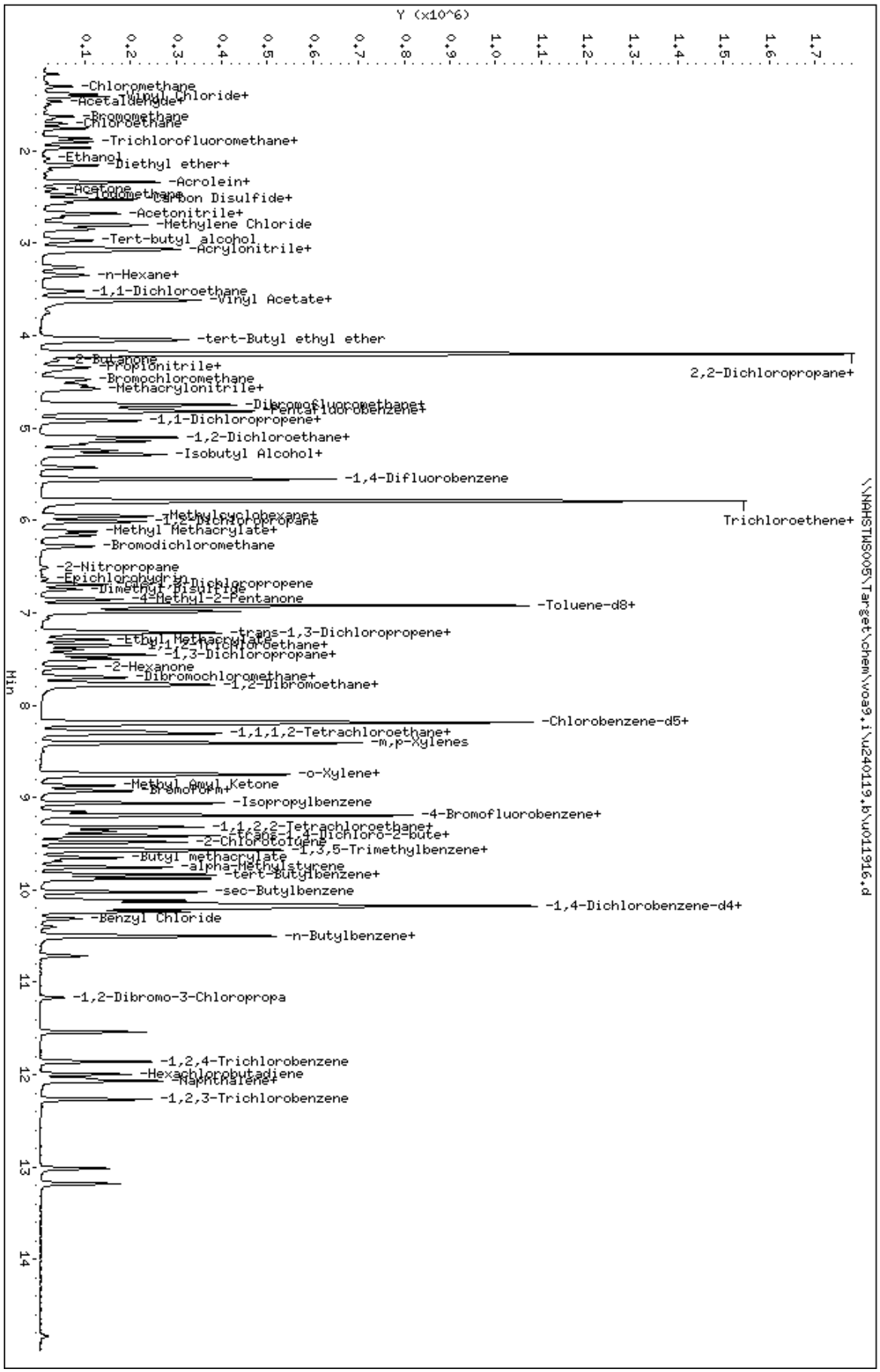
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
79	1,2,4-Trimethylbenzene	105	9.880	9.876	(0.971)	201313	16.4336	3286.71
81	sec-Butylbenzene	105	10.022	10.022	(0.985)	235982	16.6689	3333.78
82	p-Isopropyltoluene	119	10.146	10.146	(0.997)	214070	17.4727	3494.53
83	1,3-Dichlorobenzene	146	10.116	10.112	(0.994)	134833	15.4706	3094.11
84	1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	142170	15.3971	3079.42
86	Benzyl Chloride	91	10.311	10.311	(1.260)	62286	15.2113	3042.26
87	n-Butylbenzene	91	10.491	10.491	(1.031)	168130	16.3524	3270.48
88	1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	134067	15.2902	3058.04
89	1,2-Dibromo-3-Chloropropane	155	11.165	11.165	(1.098)	12091	15.6328	3126.55
90	1,2,4-Trichlorobenzene	180	11.859	11.859	(1.166)	81719	15.1071	3021.42
91	Hexachlorobutadiene	225	11.998	11.998	(1.179)	39533	18.2320	3646.39
92	Naphthalene	128	12.065	12.065	(1.186)	199585	15.2989	3059.77
93	1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	81953	15.0238	3004.75
146	Methyl acetate	43	2.716	2.712	(0.564)	46355	13.3700	2674.00
138	Freon TF	101	2.341	2.333	(0.486)	52091	20.6248	4124.96
141	Cyclohexane	56	4.785	4.785	(0.993)	71918	14.3274	2865.47
142	Tetrahydrofuran	42	4.545	4.538	(0.943)	19785	26.7563	5351.26
147	Methylcyclohexane	55	5.947	5.943	(1.071)	119288	15.1279	3025.58
135	1,4-Dioxane	88	6.168	6.165	(1.280)	15836	286.517	57303.34
132	n-Butanol	56	5.824	5.820	(1.208)	32821	289.886	57977.28(a)
136	n-Hexane	57	3.346	3.342	(0.694)	52641	16.2561	3251.21
139	Diethyl ether	59	2.150	2.142	(0.446)	39844	14.0269	2805.38
148	Tert-butyl alcohol	59	2.967	2.960	(0.616)	130702	335.144	67028.76
149	Isopropyl alcohol	45	2.562	2.555	(0.532)	75438	337.236	67447.10
152	Amyl alcohol	42	7.398	7.394	(0.904)	33276	284.686	56937.19
156	Diisopropyl ether	45	3.623	3.619	(0.752)	149662	12.3321	2466.41
162	Butyl acrylate	55	8.733	8.732	(1.067)	75054	12.3985	2479.69
187	n-Amyl acetate	43	8.931	8.931	(1.091)	80188	12.0054	2401.08
164	Dicyclopentadiene	66	10.198	10.198	(1.003)	222097	14.2253	2845.06
166	1,2,3-Trimethylbenzene	105	10.236	10.236	(1.006)	174991	14.4785	2895.69
167	Ethanol	45	2.082	2.079	(0.432)	14524	331.425	66284.90
172	tert-Butyl formate	59	5.243	5.235	(1.088)	94605	37.9681	7593.62
173	3,3-Dimethyl-1-butanol	57	7.780	7.780	(0.951)	124148	285.557	57111.31
174	tert-Amyl methyl ether	73	5.287	5.284	(1.097)	147766	13.6743	2734.85
175	tert-Butyl ethyl ether	59	4.054	4.047	(0.841)	145391	13.4386	2687.71
176	tert-Amyl alcohol	59	5.243	5.235	(1.088)	94605	381.400	76280.07
151	4-Methyl-2-pentanol	45	7.214	7.214	(1.299)	216812	285.872	57174.44
140	1,3-Butadiene	54	1.408	1.404	(0.292)	40424	11.5538	2310.75
158	Dichlorofluoromethane	67	1.861	1.857	(0.386)	86824	16.3522	3270.43
182	Epichlorohydrin	57	6.633	6.629	(1.194)	12068	58.3932	11678.64
M 94	1,2-Dichloroethylene (total)	96				937775	249.584	49916.83
M 95	Xylenes (total)	106				302636	49.1625	9832.50
145	alpha-Methylstyrene	118	9.756	9.752	(0.959)	87866	15.9238	3184.76
130	Ethyl Acetate	43	4.343	4.339	(0.901)	54437	12.8638	2572.76
131	Methyl Acrylate	55	4.373	4.365	(0.907)	60780	13.2828	2656.56
189	n-Butyl acetate	43	7.705	7.705	(0.941)	81275	13.8460	2769.20
134	Cyclohexanone	55	9.152	9.152	(0.900)	43233	223.106	44621.19(a)
185	Isoprene	39	2.161	2.157	(0.449)	13899	17.1371	3427.41
188	Isopropyl acetate	43	5.287	5.284	(0.952)	132681	13.5188	2703.76
150	Allyl alcohol	57	3.346	3.342	(0.694)	52641	325.122	65024.39
194	Acetaldehyde	44	1.464	1.460	(0.304)	22610	44.1733	8834.65(M)
195	Methyl Amyl Ketone	43	8.867	8.867	(1.083)	86482	12.0439	2408.77

200 Dimethyl Disulfide	94	6.746	6.746 (0.824)	44358	12.3657	2473.14
202 Isobutylene	41	1.501	1.498 (0.312)	4428	13.0355	2607.09(M)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
203 2-Ethylhexyl Acrylate	55	12.043	12.039	(1.184)	42554	11.8747	2374.93
133 Ethyl Acrylate	55	5.947	5.943	(1.234)	119288	14.2458	2849.15
163 Butyl methacrylate	41	9.651	9.647	(0.949)	48926	14.1926	2838.51

QC Flag Legend

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



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Column phase: DB624

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

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Inj Date : 19-JAN-2024 14:43
InstruID : VOA9.i
LabSampID : HS24010611-02MSD

Chloroprene (126-99-8)

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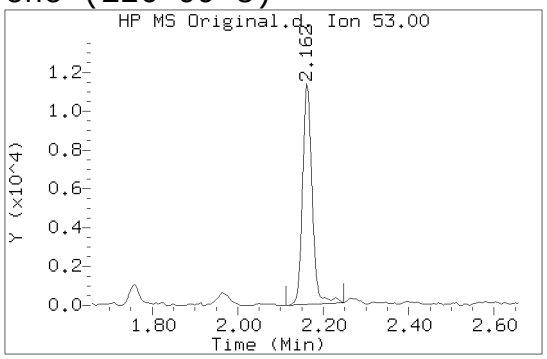

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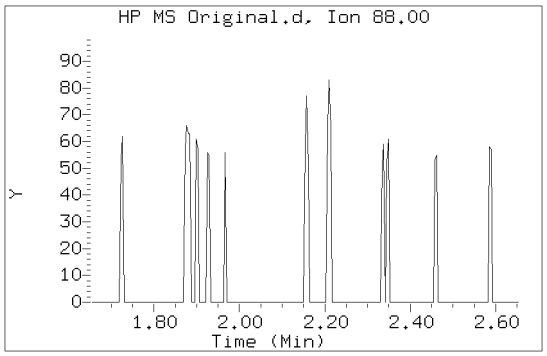

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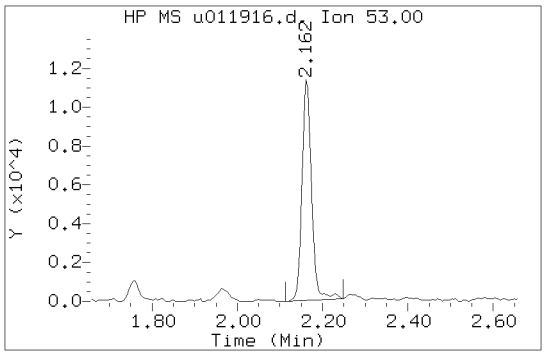

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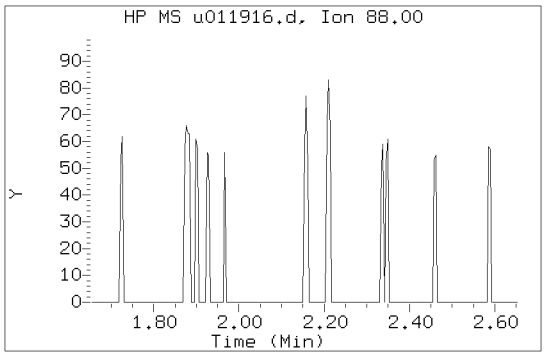

Acetaldehyde (75-07-0)

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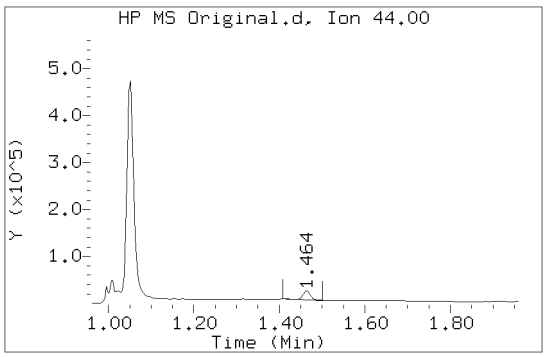

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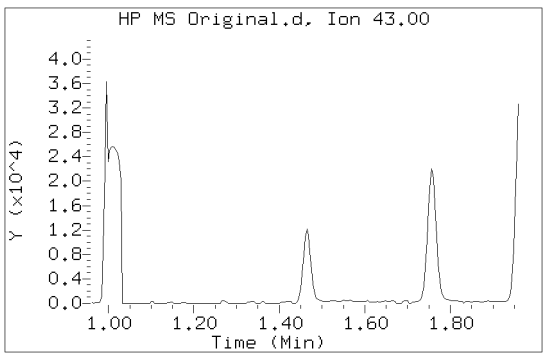

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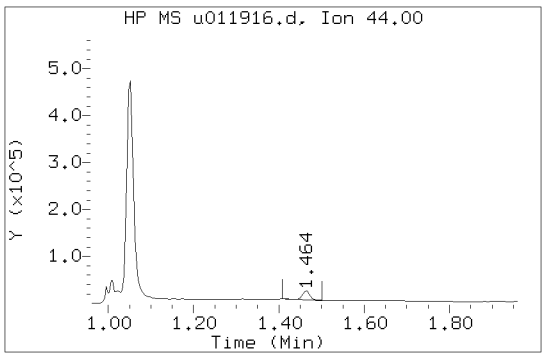

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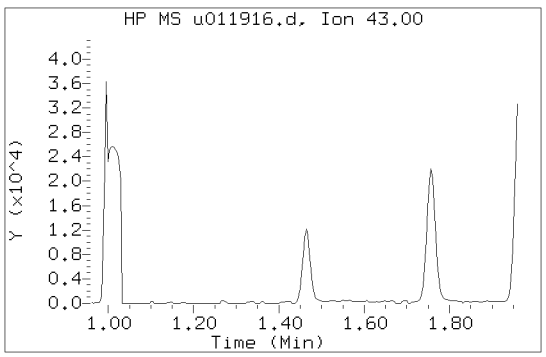

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LabSampID : HS24010611-02MSD

Acetaldehyde (75-07-0)

Reason Code:

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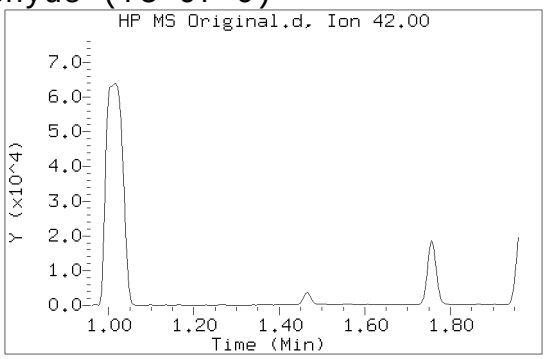

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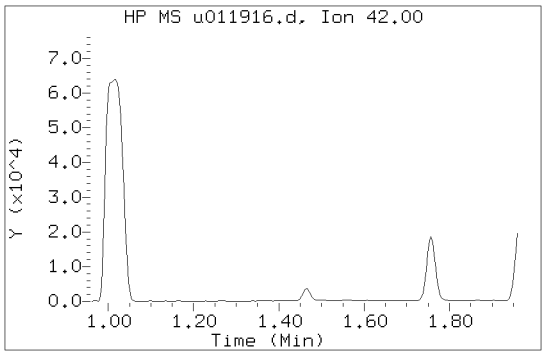

Isobutylene (115-11-7)

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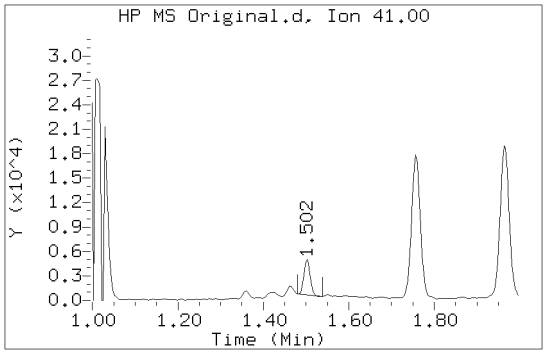

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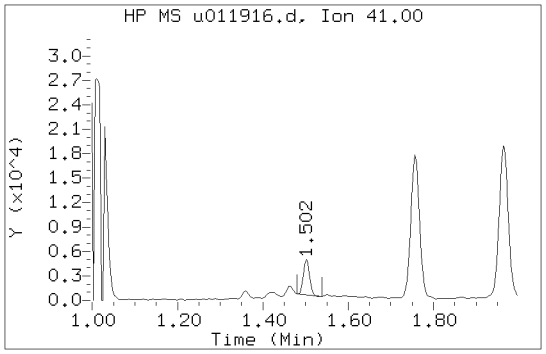

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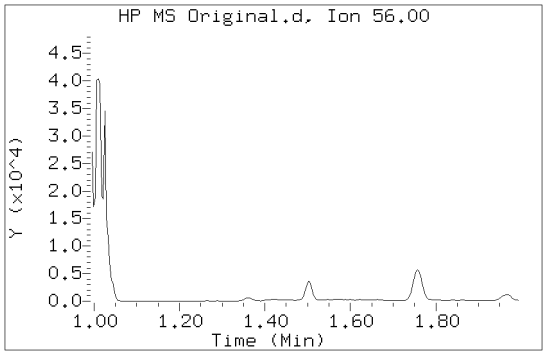

AFTER

MASS
56
AREA
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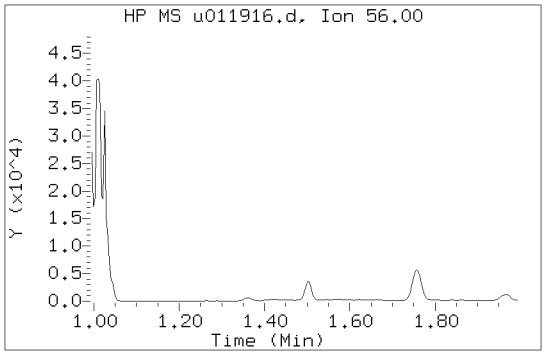
HEIGHT
0
25-Jan-2024
11:54
linh
pham



BEFORE

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AREA
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HEIGHT
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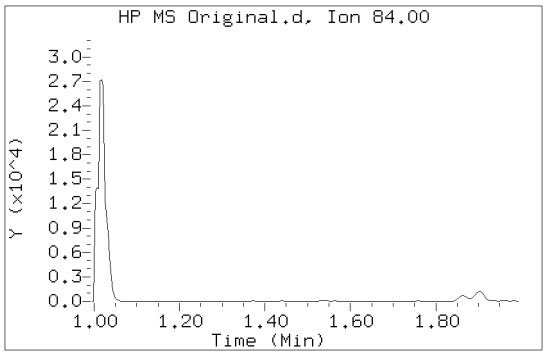
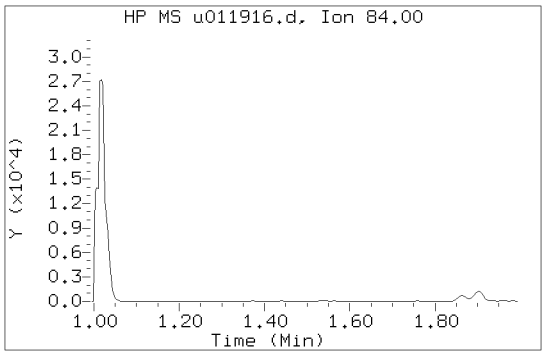
25-Jan-2024
11:54
linh
pham



AFTER

MASS
84
AREA
0
HEIGHT
0
25-Jan-2024
11:54
linh
pham



Data File: \\nahstws005\Target\chem\voa9.i\U240119.b\U011917.D Page 1
Report Date: 19-Jan-2024 15:25

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240119.b\U011917.D
Lab Smp Id: HS24010611-02
Inj Date : 19-JAN-2024 15:05
Operator : FT   Inst ID: VOA9.i
Smp Info : HS24010611-02
Misc Info : V9;WATER;0;500;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240119.b\8260C.m
Meth Date : 19-Jan-2024 09:45   Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11   Cal File: U120608.D
Als bottle: 16
Dil Factor: 500.00000
Integrator: HP RTE   Compound Sublist: 8260-dryclean.sub
Target Version: 4.14
Processing Host: NAHSTWS005

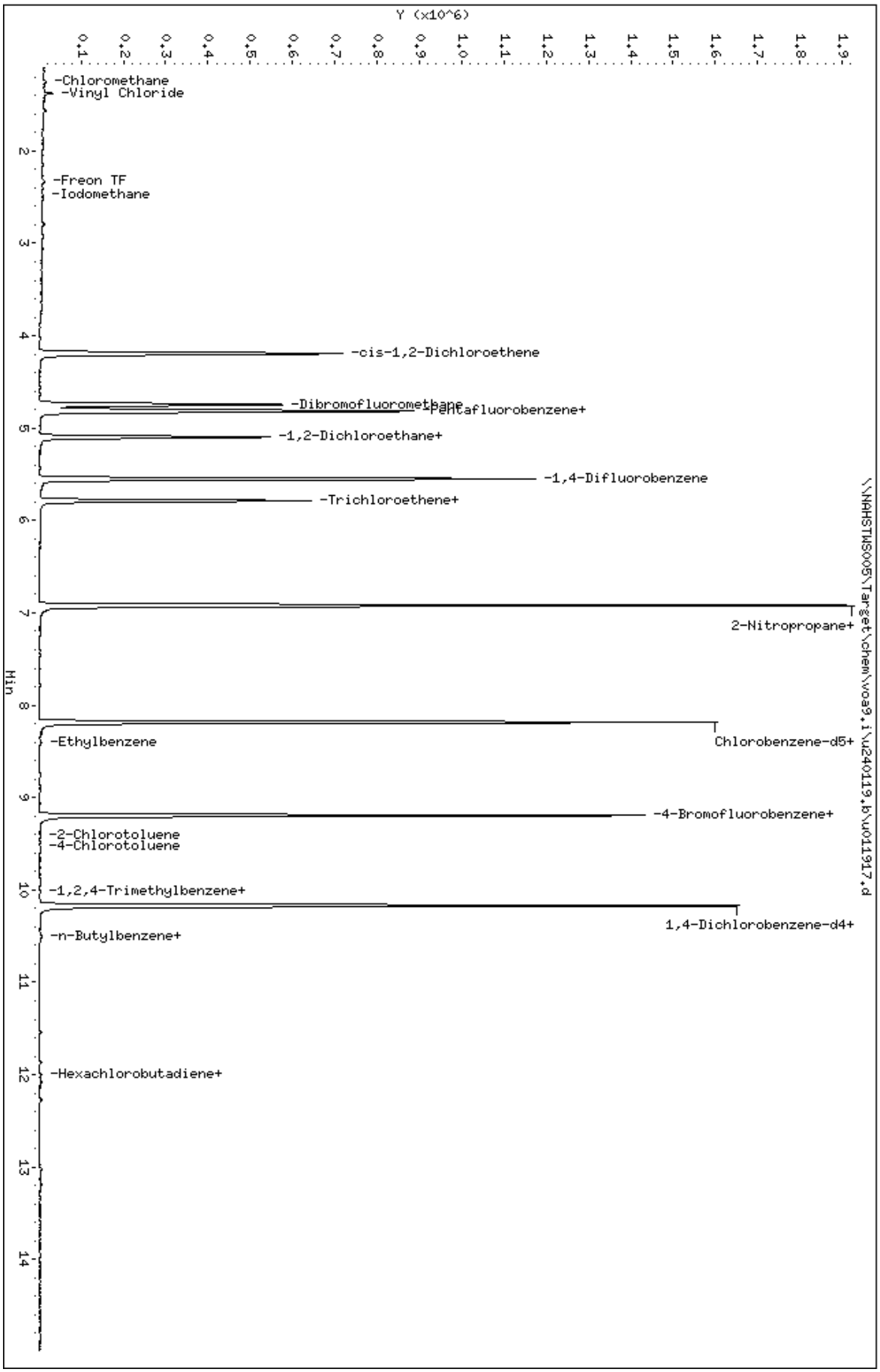
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	500.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.815	4.815	(1.000)	681121	50.0000	
$ 30 Dibromofluoromethane	113	4.748	4.748	(0.986)	340302	48.7950	48.79
$ 35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	344360	43.4166	43.41
* 36 1,4-Difluorobenzene	114	5.550	5.554	(1.000)	970821	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	912881	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	1195572	56.8919	56.89
$ 69 4-Bromofluorobenzene	95	9.194	9.190	(1.123)	419857	52.8384	52.83
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	478376	50.0000	
5 Vinyl Chloride	62	1.374	1.378	(0.285)	14579	1.95321	976.60(a)
27 cis-1,2-Dichloroethene	96	4.193	4.197	(0.871)	374009	44.4577	22228.84
38 Trichloroethene	130	5.786	5.786	(1.043)	217321	29.8356	14917.82

QC Flag Legend

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



Data File: \\NAHSTWS005\Target\chem\voa9.i\u240119.b\u011917.d
Date : 19-JAN-2024 15:05
Client ID:
Sample Info: HS24010611-02
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa9.i\u240119.b\u011917.d Page 2

Date : 19-JAN-2024 15:05

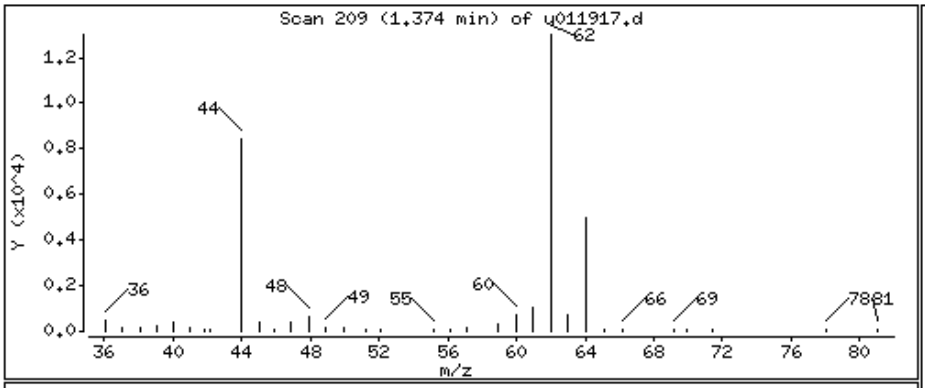
Client ID: Instrument: VOA9.i

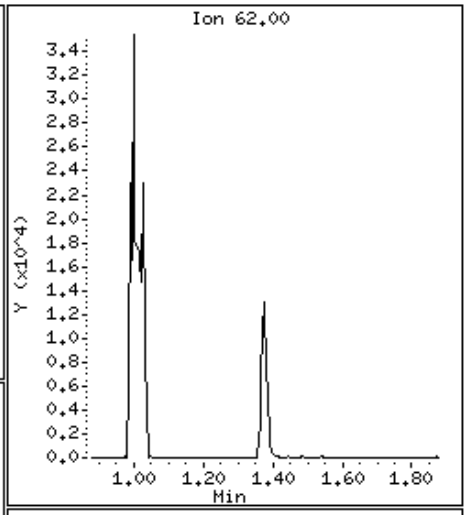
Sample Info: HS24010611-02

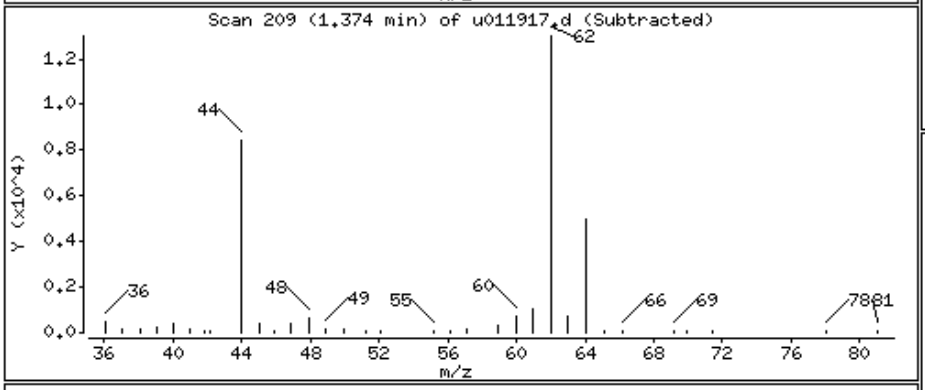
Purge Volume: 5.0 Operator: FT

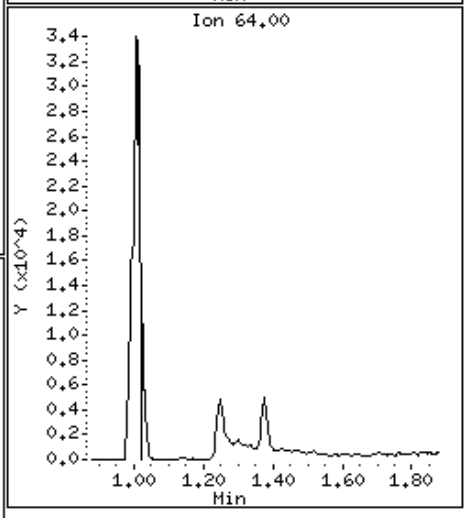
Column phase: DB624 Column diameter: 0.18

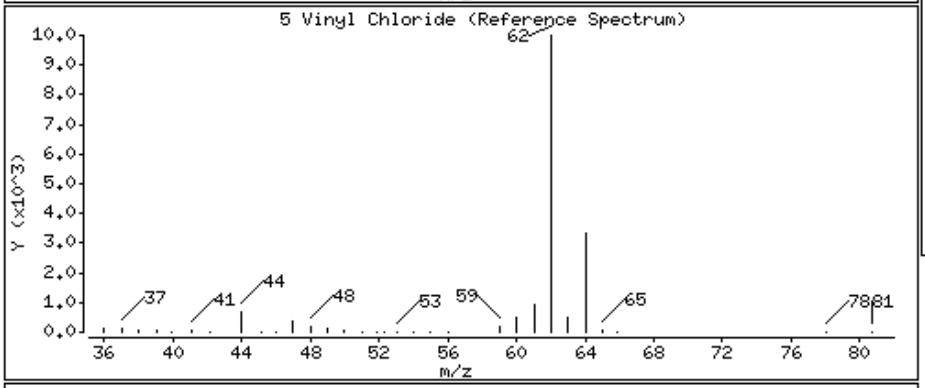
5 Vinyl Chloride Concentration: 976.60 ug/l

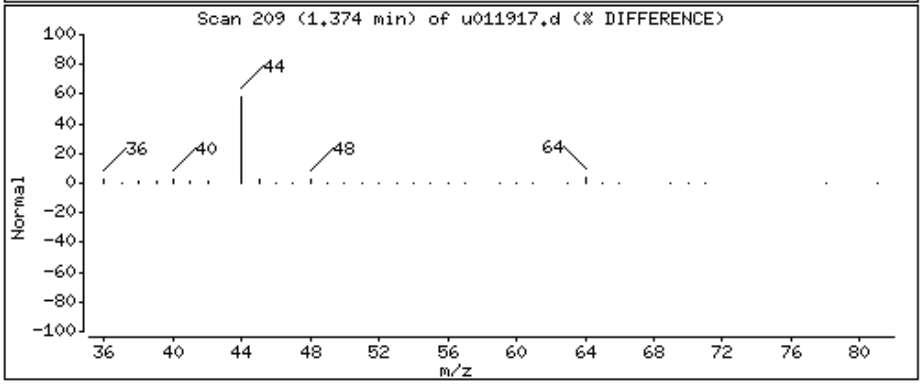












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240119.b\u011917.d Page 3

Date : 19-JAN-2024 15:05

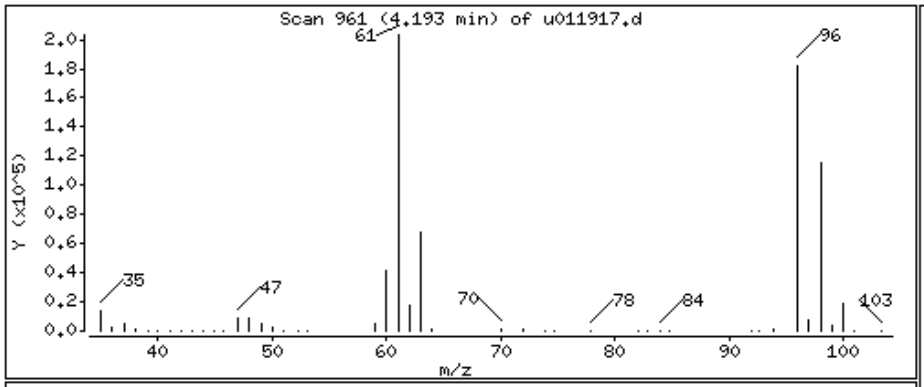
Client ID: Instrument: VOA9.i

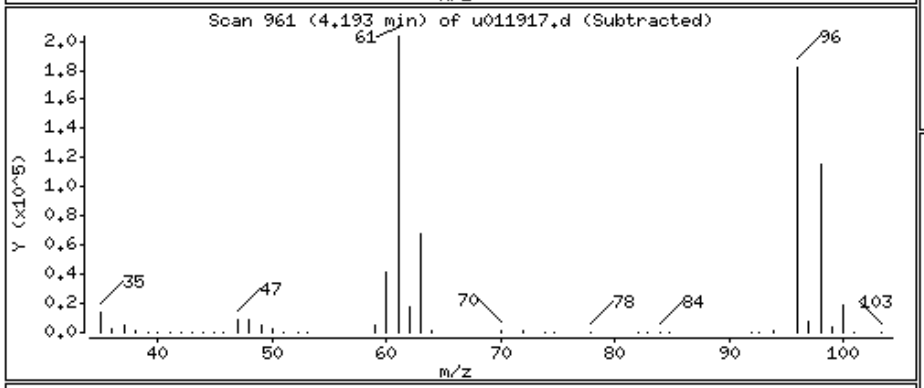
Sample Info: HS24010611-02

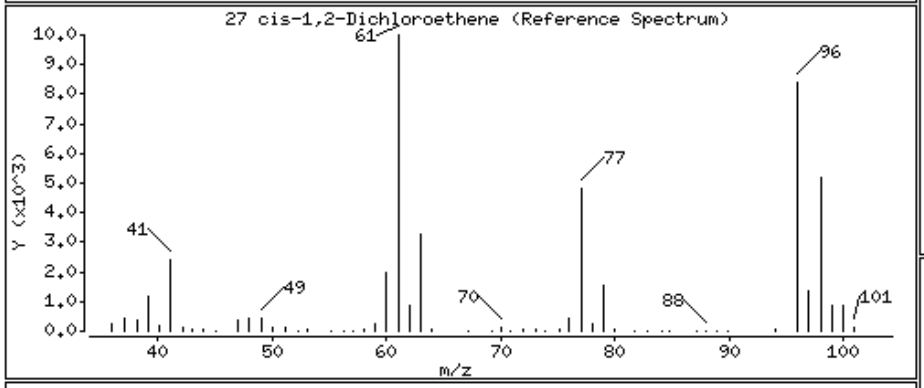
Purge Volume: 5.0 Operator: FT

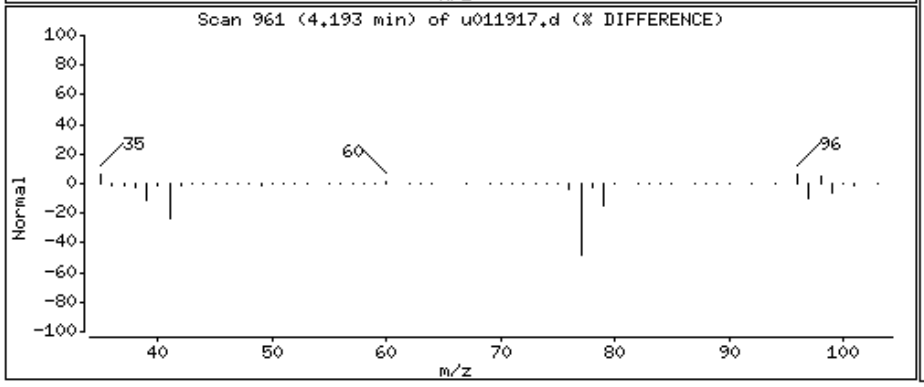
Column phase: DB624 Column diameter: 0.18

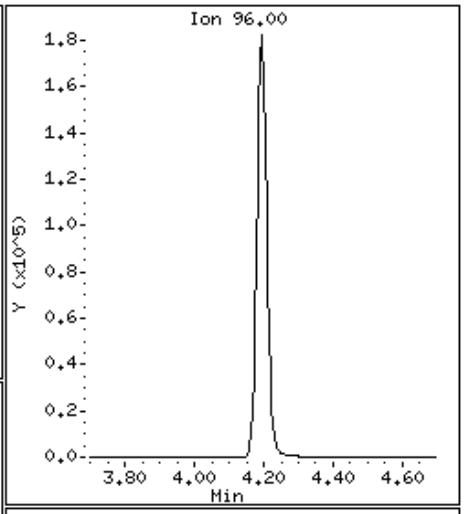
27 cis-1,2-Dichloroethene Concentration: 22228.84 ug/l

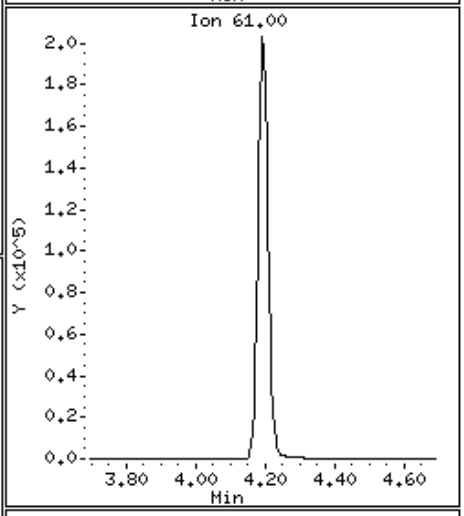


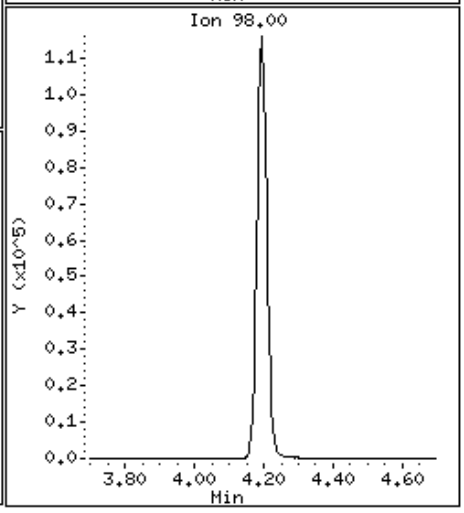












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240119.b\u011917.d Page 4

Date : 19-JAN-2024 15:05

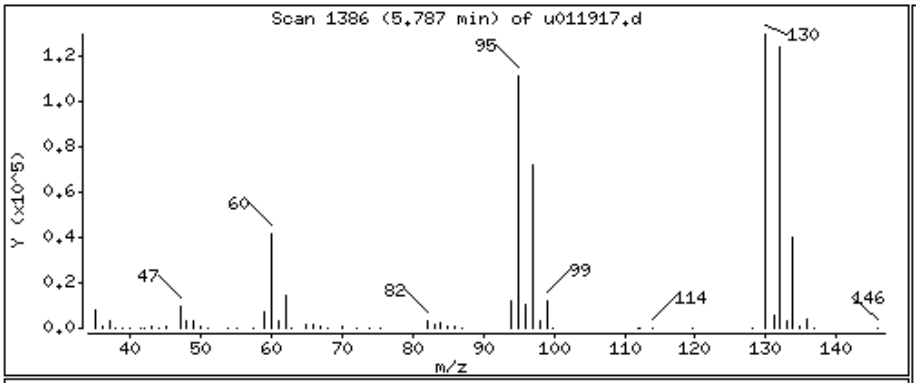
Client ID: Instrument: VOA9.i

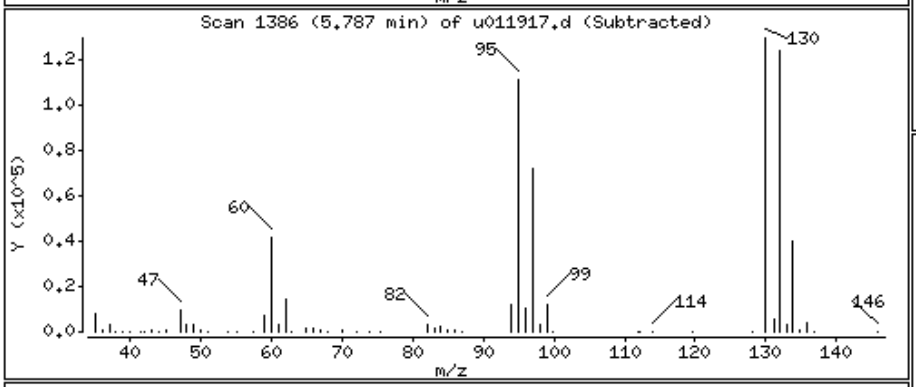
Sample Info: HS24010611-02

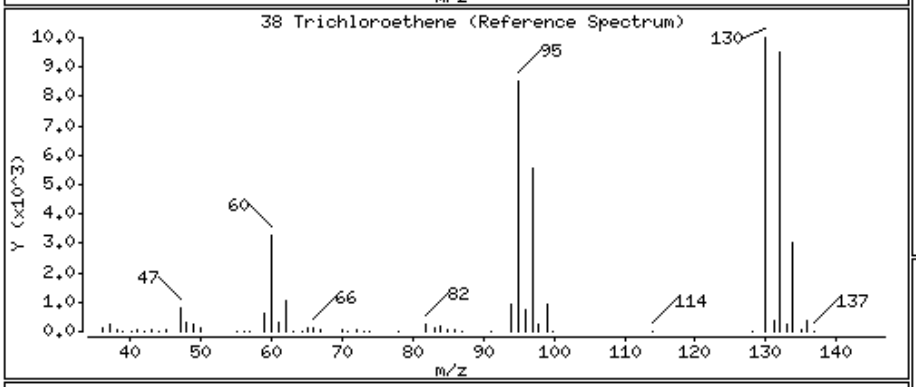
Purge Volume: 5.0 Operator: FT

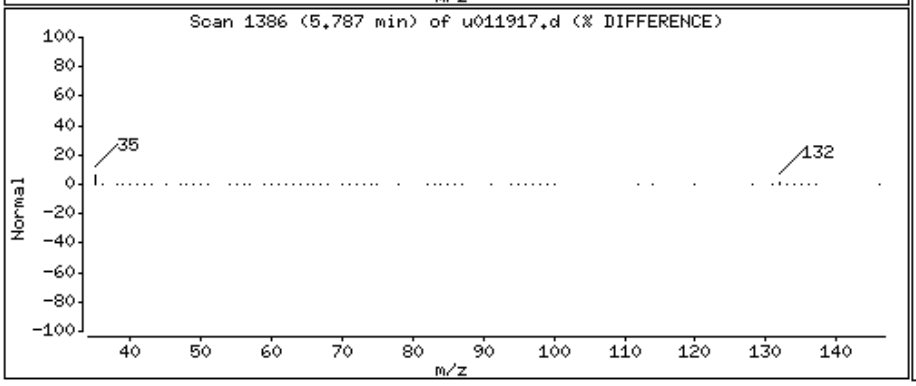
Column phase: DB624 Column diameter: 0.18

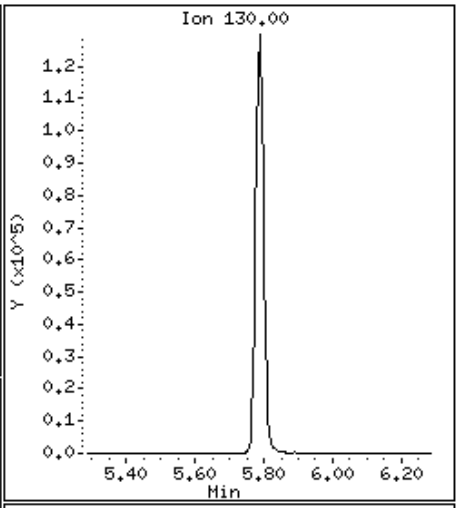
38 Trichloroethene Concentration: 14917.82 ug/l

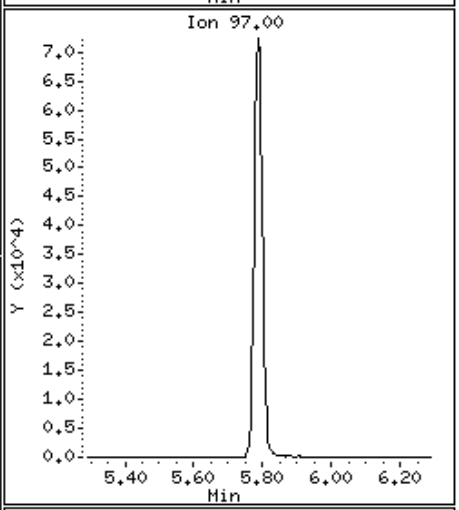


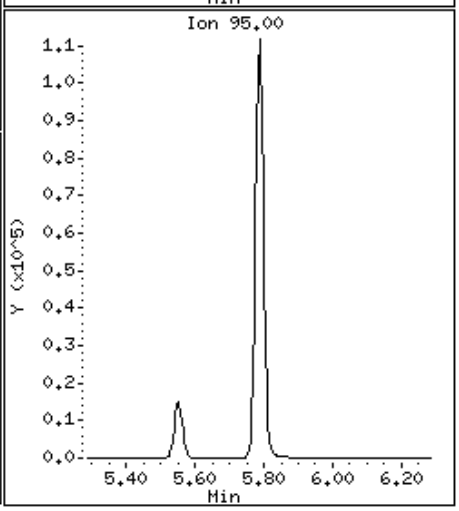












Data File : \\nahstws005\target\chem\voa9.i\u240119.b\u011917.d
Inj Date : 19-JAN-2024 15:05
InstruID : VOA9.i
LabSampID : HS24010611-02

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240119.b\U011921.D Page 1
Report Date: 19-Jan-2024 17:49

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240119.b\U011921.D
Lab Smp Id: HS24010611-09
Inj Date : 19-JAN-2024 16:35
Operator : FT   Inst ID: VOA9.i
Smp Info : HS24010611-09
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240119.b\8260C.m
Meth Date : 19-Jan-2024 09:45   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: 00000_8260.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)	268630	50.0000	
$ 30 Dibromofluoromethane	113	4.744	4.748	(0.986)	179600	65.6438	65.64(R)
$ 35 1,2-Dichloroethane-d4	65	5.093	5.096	(1.058)	182739	57.4207	57.42
* 36 1,4-Difluorobenzene	114	5.550	5.554	(1.000)	414431	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	411072	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	617600	65.2647	65.26(R)
$ 69 4-Bromofluorobenzene	95	9.194	9.190	(1.123)	203836	57.0686	57.06
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	205145	50.0000	

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\NAHSTWS005\Target\chem\voa9.i\u240119.b\u011921.d

Date : 19-JAN-2024 16:35

Client ID:

Instrument: VOA9.i

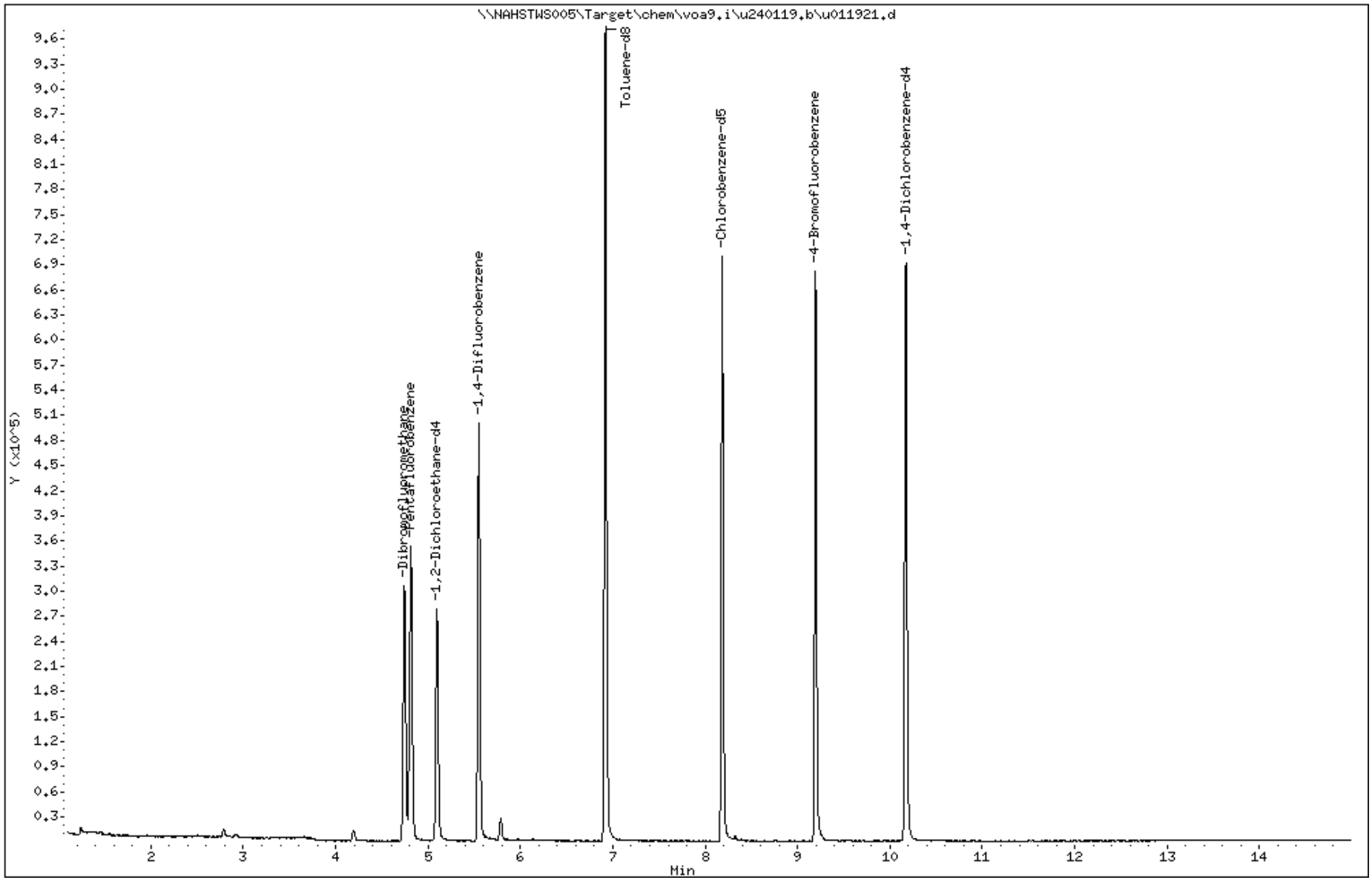
Sample Info: HS24010611-09

Purge Volume: 5.0

Operator: FT

Column phase: DB624

Column diameter: 0.18



Data File : \\nahstws005\target\chem\voa9.i\u240119.b\u011921.d
Inj Date : 19-JAN-2024 16:35
InstruID : VOA9.i
LabSampID : HS24010611-09

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240119.b\U011922.D Page 1
Report Date: 19-Jan-2024 17:50

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240119.b\U011922.D
Lab Smp Id: HS24010611-06
Inj Date : 19-JAN-2024 16:57
Operator : FT   Inst ID: VOA9.i
Smp Info : HS24010611-06
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240119.b\8260C.m
Meth Date : 19-Jan-2024 09:45   Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11   Cal File: U120608.D
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE   Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTWS005

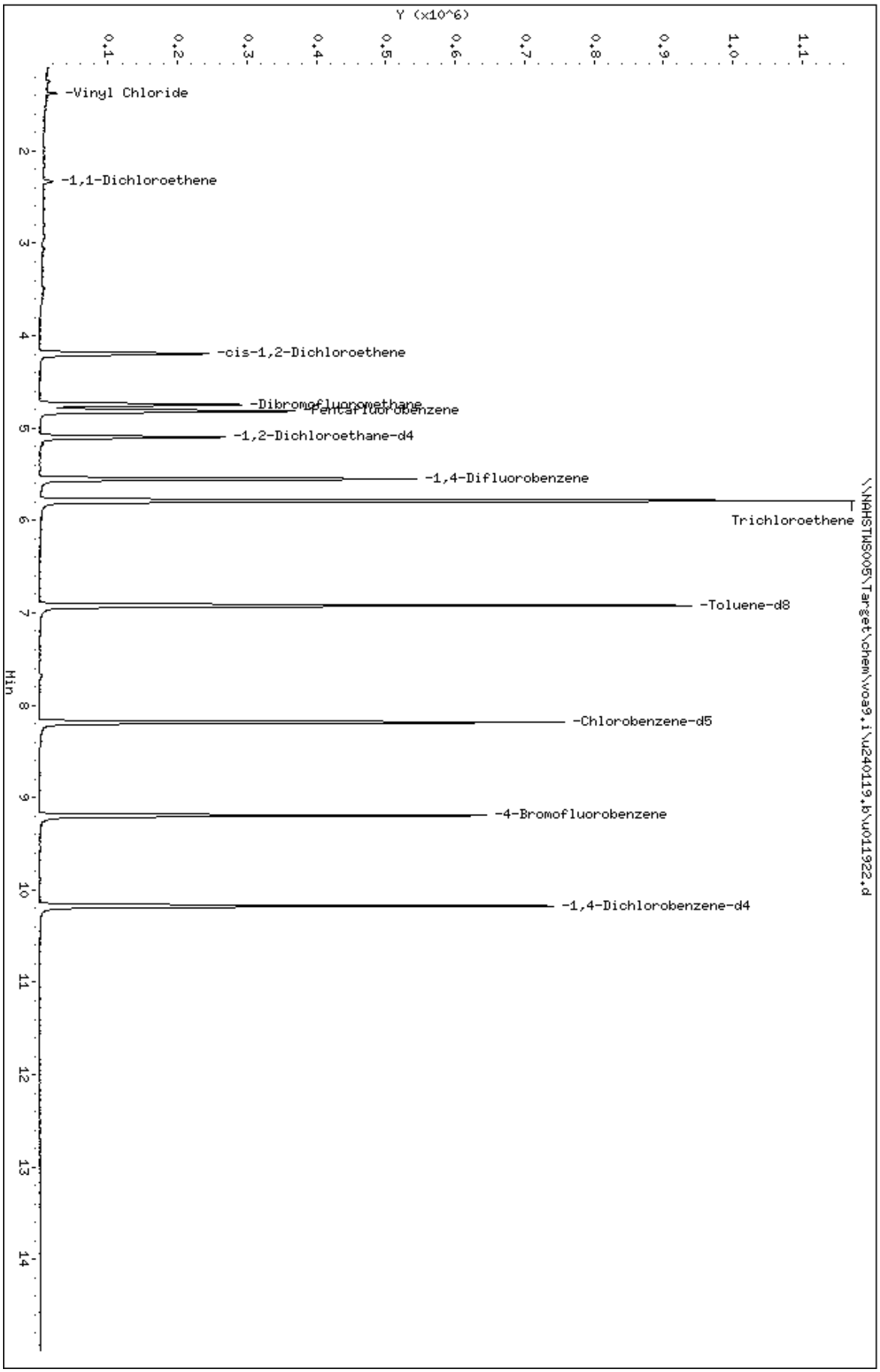
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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)	284237	50.0000	
	5 Vinyl Chloride	62	1.374	1.378	(0.285)	10357	3.32505	3.32
	11 1,1-Dichloroethene	96	2.334	2.333	(0.485)	3846	1.75435	1.75
	27 cis-1,2-Dichloroethene	96	4.197	4.197	(0.872)	129728	36.9524	36.95
$	30 Dibromofluoromethane	113	4.748	4.748	(0.986)	169689	58.5057	58.50(M)
$	35 1,2-Dichloroethane-d4	65	5.097	5.096	(1.058)	175730	52.5198	52.51
*	36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	448510	50.0000	
	38 Trichloroethene	130	5.786	5.786	(1.042)	401244	119.237	119.23
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	442188	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	591998	58.1571	58.15
$	69 4-Bromofluorobenzene	95	9.194	9.190	(1.123)	196346	50.9678	50.96
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	221635	50.0000	
M	94 1,2-Dichloroethylene (total)	96				129728	42.3160	42.31

QC Flag Legend

M - Compound response manually integrated.



Data File: \\NAHSTWS005\Target\chem\voa9.i\u240119.b\u011922.d
Date : 19-JAN-2024 16:57
Client ID:
Sample Info: HS24010611-06
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa9.i\u240119.b\u011922.d Page 2

Date : 19-JAN-2024 16:57

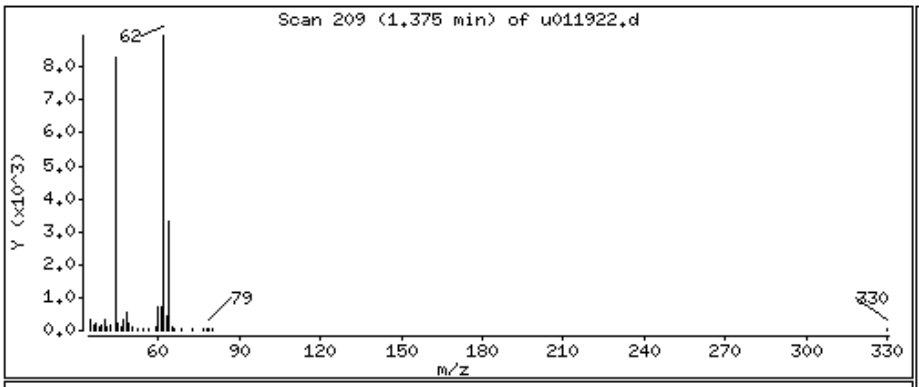
Client ID: Instrument: VOA9.i

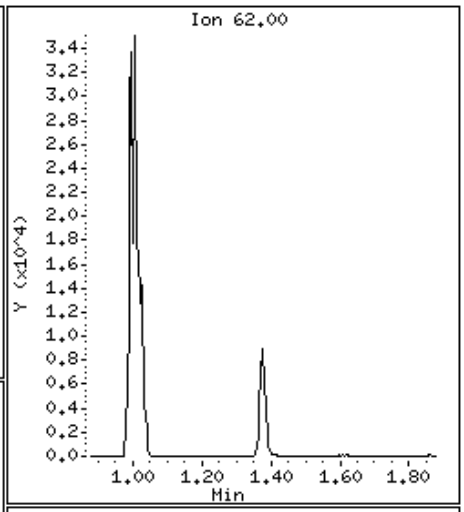
Sample Info: HS24010611-06

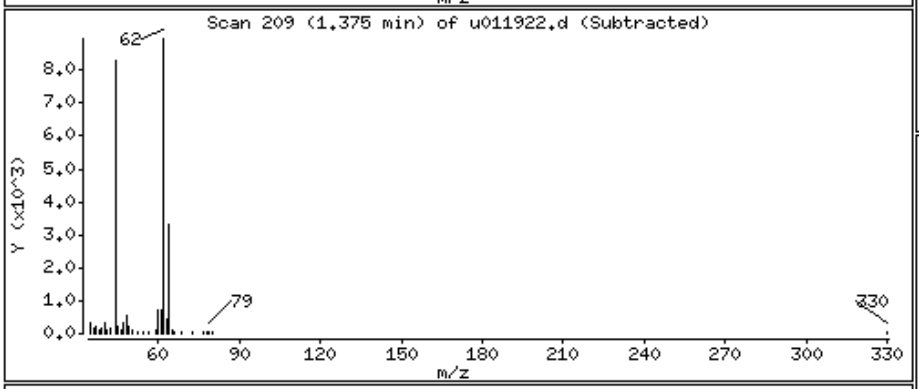
Purge Volume: 5.0 Operator: FT

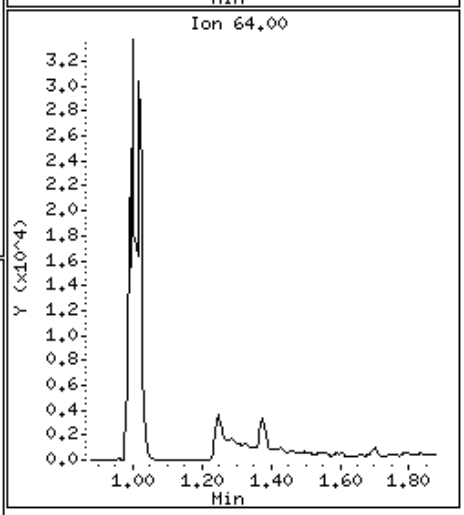
Column phase: DB624 Column diameter: 0.18

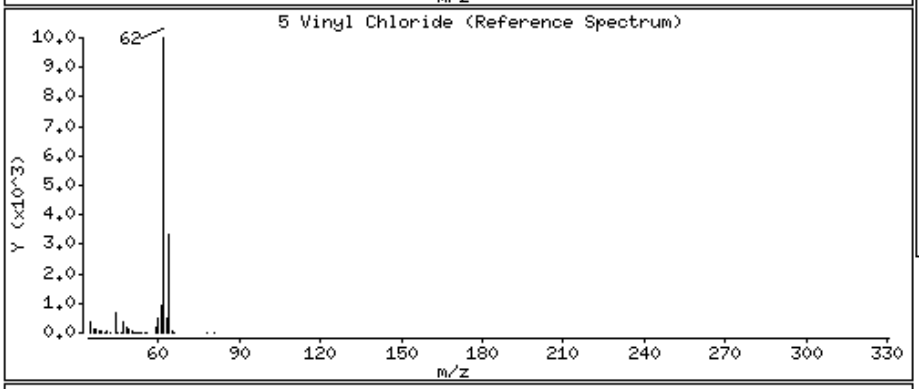
5 Vinyl Chloride Concentration: 3.32 ug/l

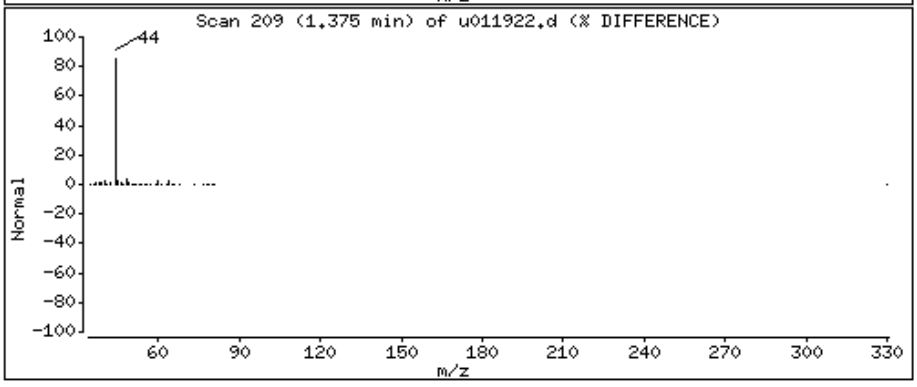












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240119.b\u011922.d Page 3

Date : 19-JAN-2024 16:57

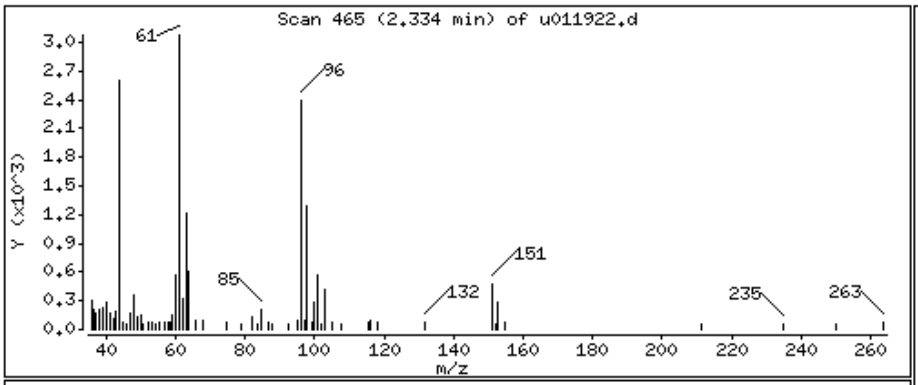
Client ID: Instrument: VOA9.i

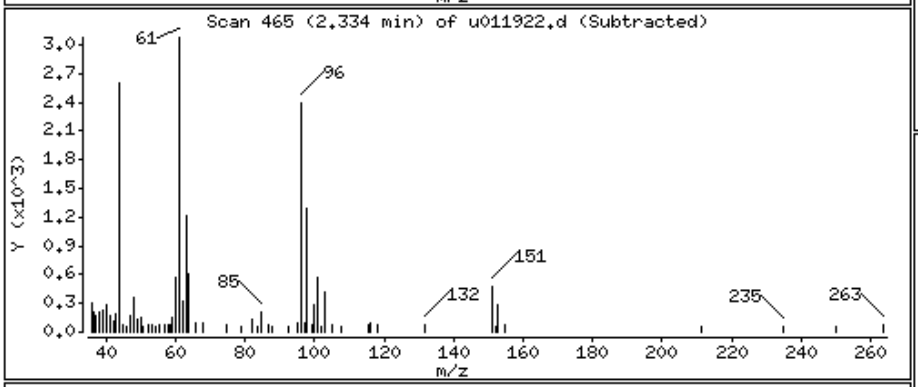
Sample Info: HS24010611-06

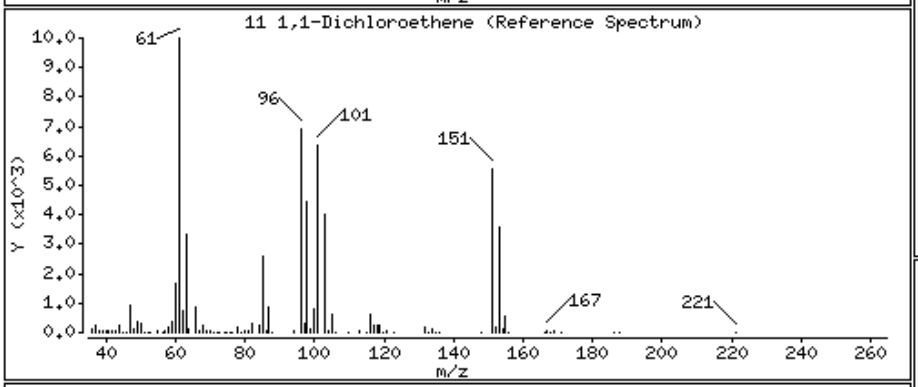
Purge Volume: 5.0 Operator: FT

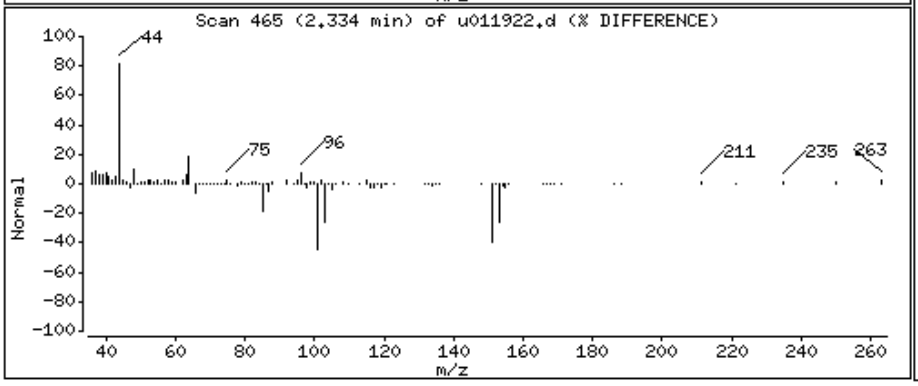
Column phase: DB624 Column diameter: 0.18

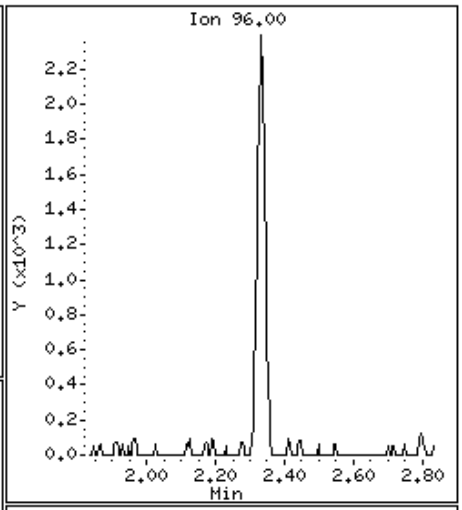
11 1,1-Dichloroethene Concentration: 1.75 ug/l

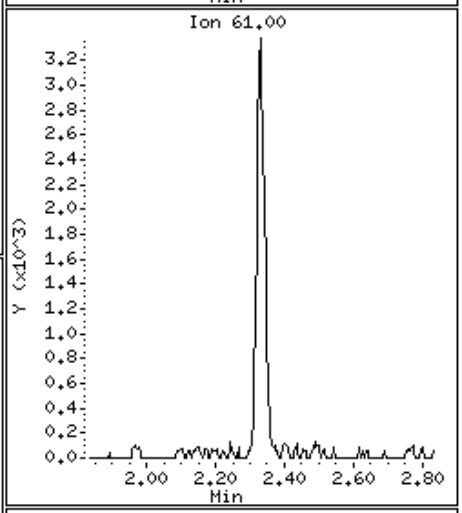


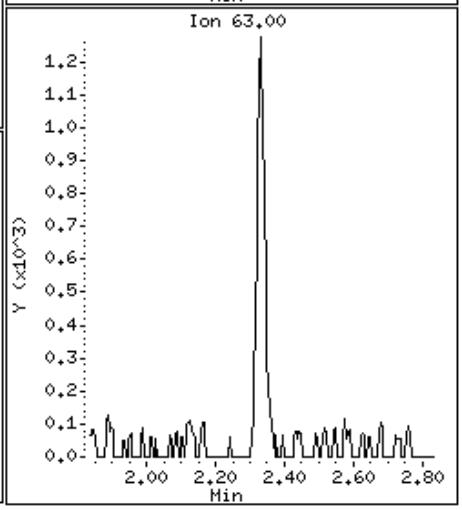












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240119.b\u011922.d Page 4

Date : 19-JAN-2024 16:57

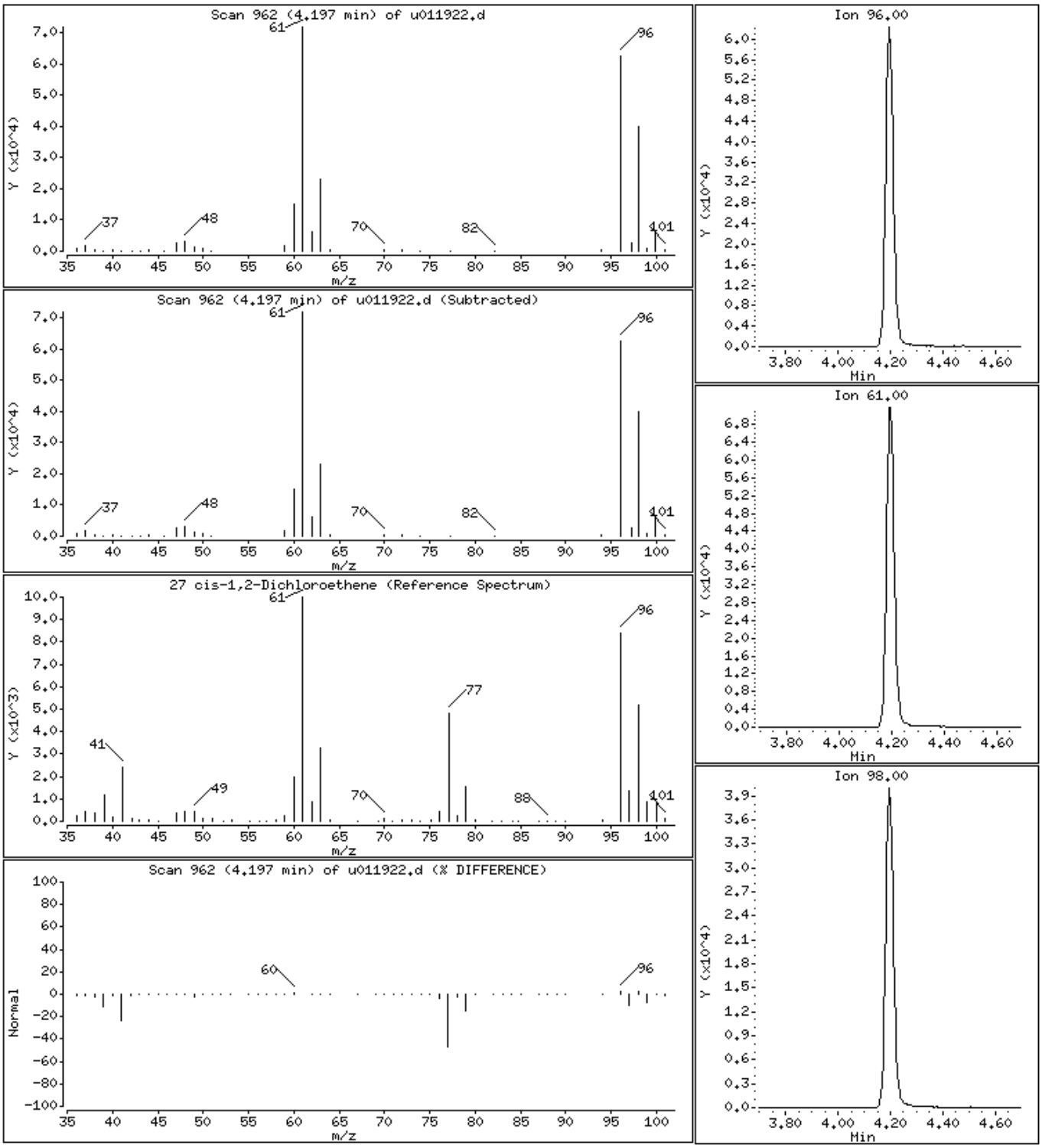
Client ID: Instrument: VOA9.i

Sample Info: HS24010611-06

Purge Volume: 5.0 Operator: FT

Column phase: DB624 Column diameter: 0.18

27 cis-1,2-Dichloroethene Concentration: 36.95 ug/l



Data File: \\NAHSTWS005\Target\chem\voa9.i\u240119.b\u011922.d Page 5

Date : 19-JAN-2024 16:57

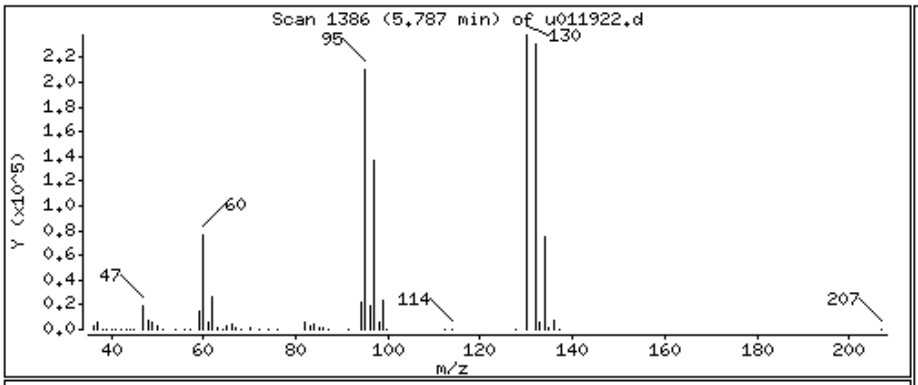
Client ID: Instrument: VOA9.i

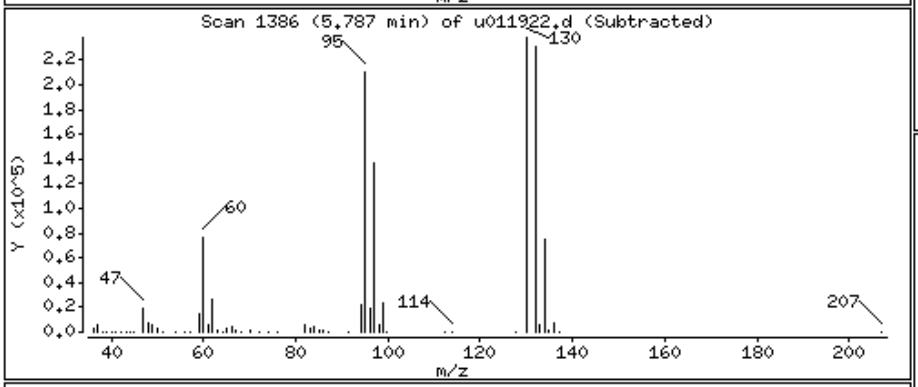
Sample Info: HS24010611-06

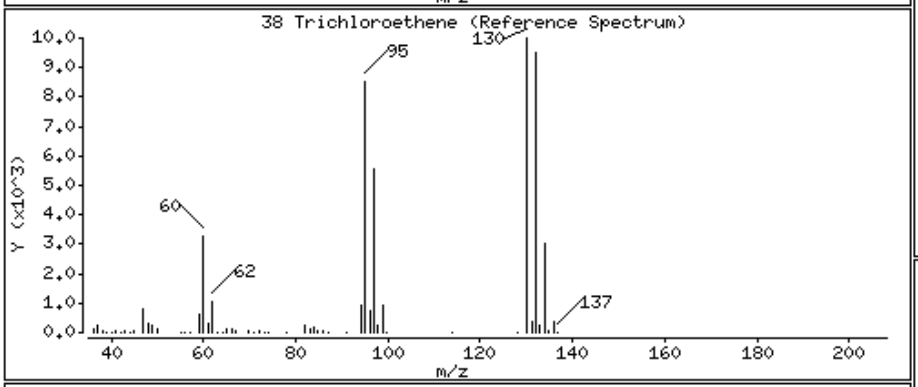
Purge Volume: 5.0 Operator: FT

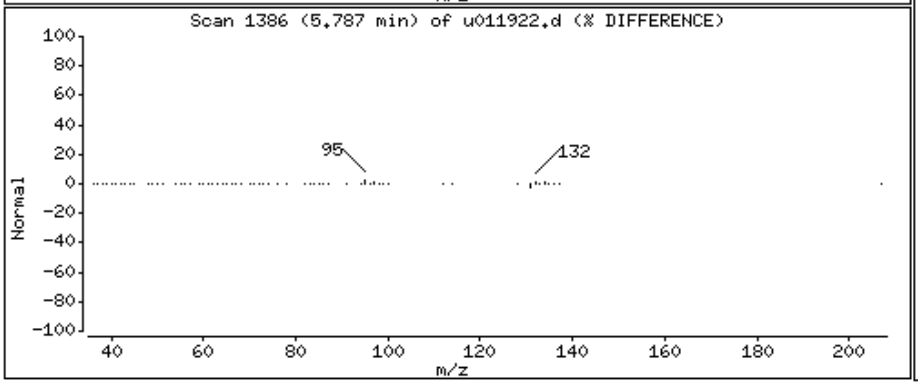
Column phase: DB624 Column diameter: 0.18

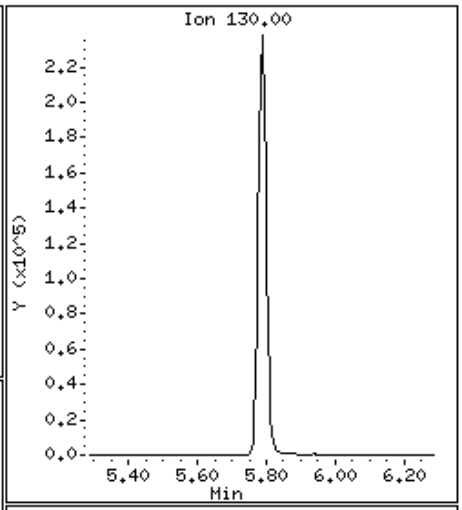
38 Trichloroethene Concentration: 119.23 ug/l

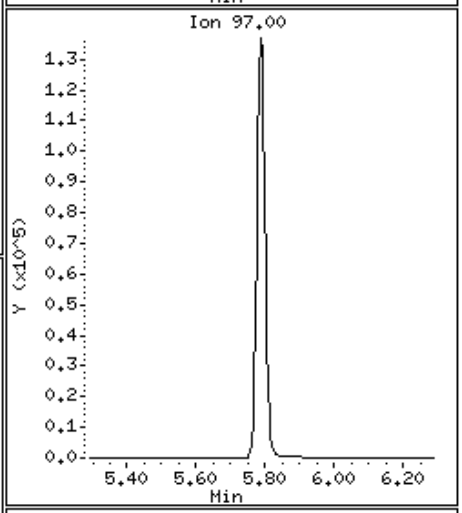


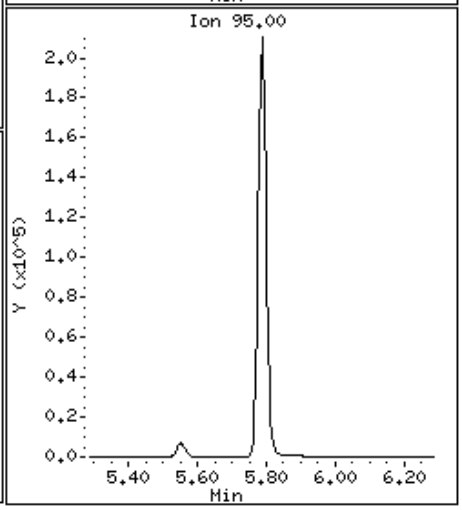












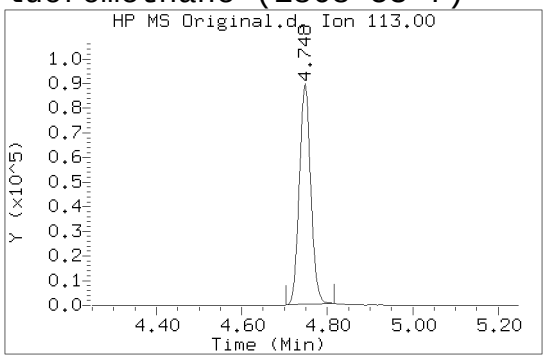
Data File : \\nahstws005\target\chem\voa9.i\u240119.b\u011922.d
Inj Date : 19-JAN-2024 16:57
InstruID : VOA9.i
LabSampID : HS24010611-06

Dibromofluoromethane (1868-53-7)

Reason Code:

BEFORE

MASS
113
AREA
169689
HEIGHT
89585
19-Jan-2024
17:50
firat
tastan



AFTER

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19-Jan-2024
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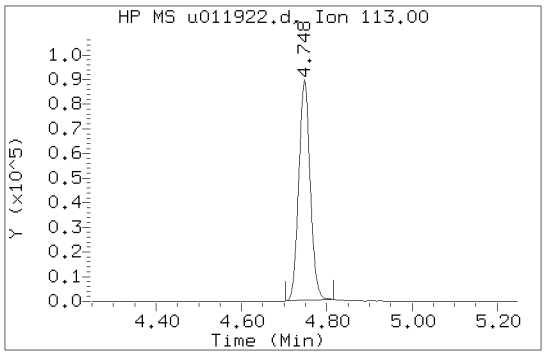

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HEIGHT
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19-Jan-2024
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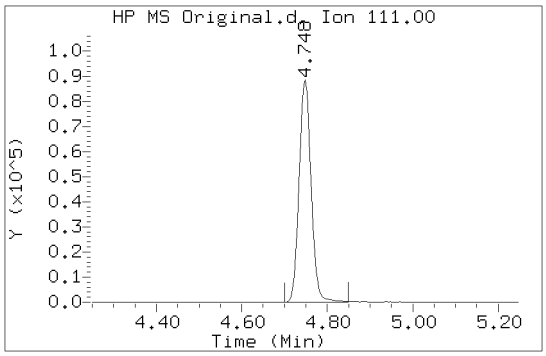

AFTER

MASS
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HEIGHT
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19-Jan-2024
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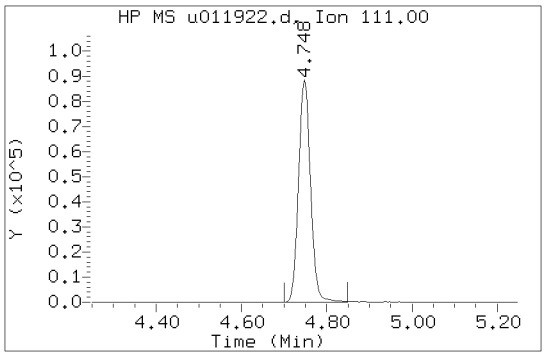


Data File: \\nahstws005\Target\chem\voa9.i\U240119.b\U011923.D Page 1
Report Date: 19-Jan-2024 17:51

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240119.b\U011923.D
Lab Smp Id: HS24010611-07
Inj Date : 19-JAN-2024 17:19
Operator : FT   Inst ID: VOA9.i
Smp Info : HS24010611-07
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240119.b\8260C.m
Meth Date : 19-Jan-2024 09:45   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: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTWS005

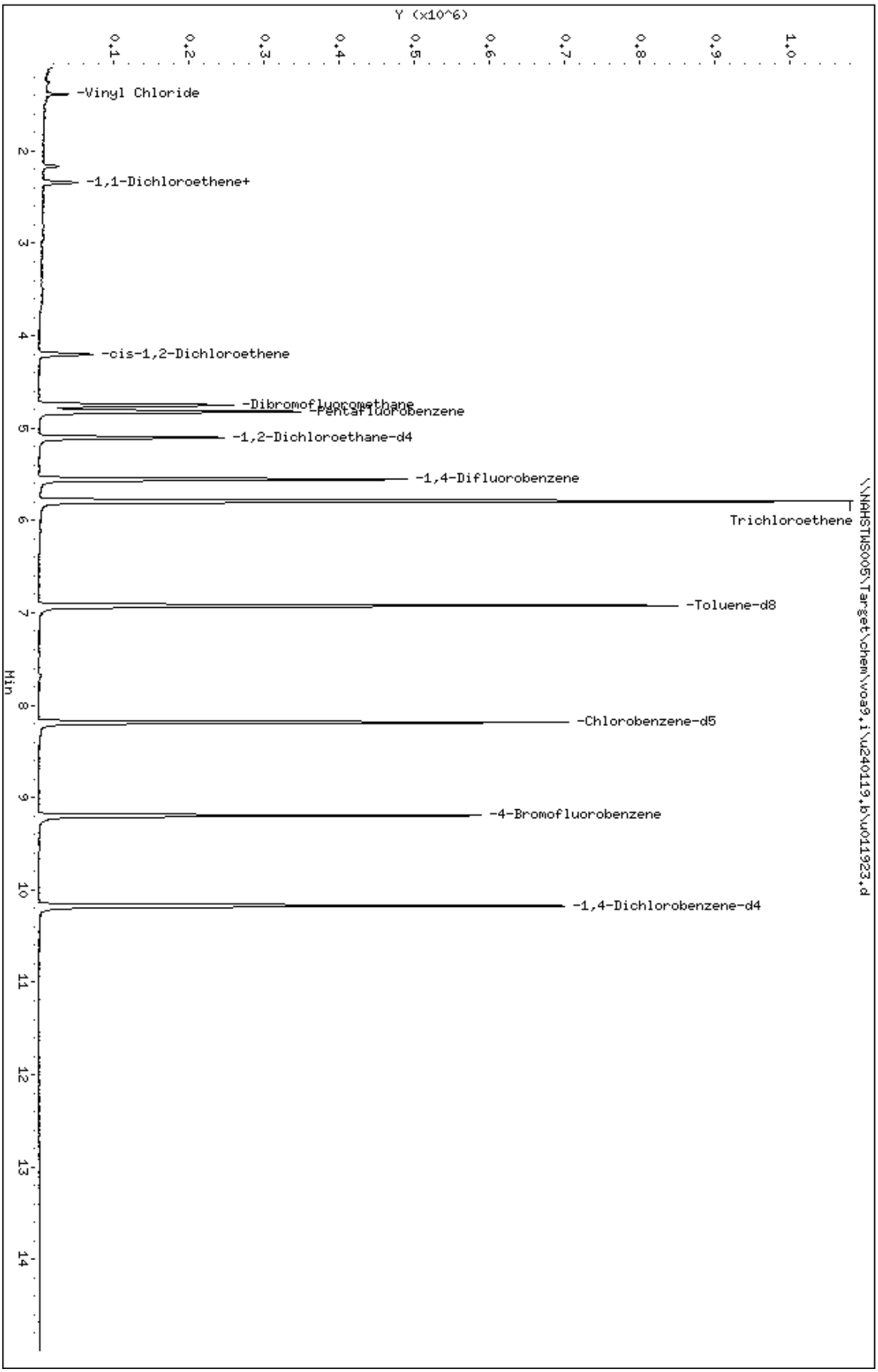
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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)	268122	50.0000	
5 Vinyl Chloride	62	1.385	1.378	(0.288)	19808	6.74145	6.74
11 1,1-Dichloroethene	96	2.345	2.333	(0.487)	3245	1.56917	1.56
27 cis-1,2-Dichloroethene	96	4.204	4.197	(0.872)	38116	11.5097	11.50
$ 30 Dibromofluoromethane	113	4.752	4.748	(0.986)	156568	57.2038	57.20
$ 35 1,2-Dichloroethane-d4	65	5.100	5.096	(1.058)	161358	51.2073	51.20
* 36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	409935	50.0000	
38 Trichloroethene	130	5.790	5.786	(1.043)	370629	120.503	120.50
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	407887	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	536713	57.1599	57.15
$ 69 4-Bromofluorobenzene	95	9.194	9.190	(1.123)	178426	50.1917	50.19
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	209318	50.0000	
138 Freon TF	101	2.345	2.333	(0.487)	15537	8.04415	8.04(H)
M 94 1,2-Dichloroethylene (total)	96				38116	13.1803	13.18

QC Flag Legend

H - Operator selected an alternate compound hit.



Data File: \\NAHSTWS005\Target\chem\voa9,i\u240119,b\u011923,d
Date : 19-JAN-2024 17:19
Client ID:
Sample Info: HS24010611-07
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa9.i\u240119.b\u011923.d Page 2

Date : 19-JAN-2024 17:19

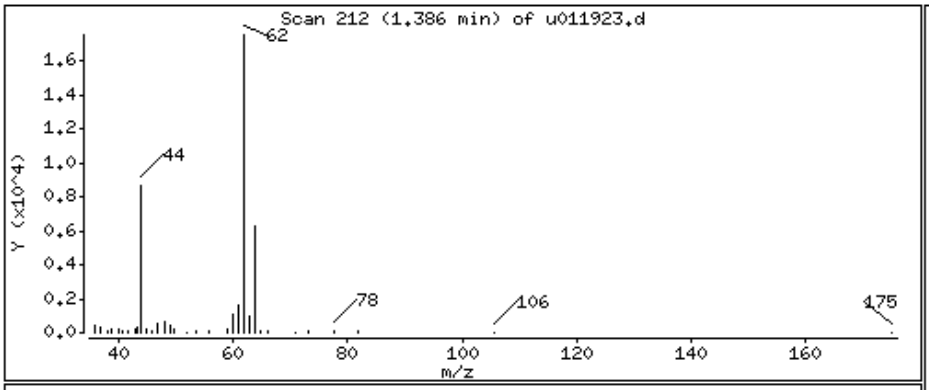
Client ID: Instrument: VOA9.i

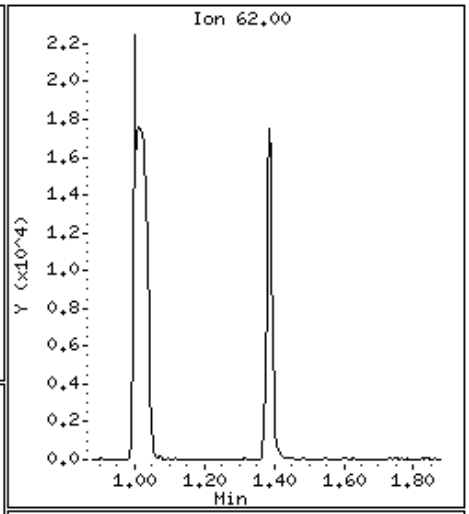
Sample Info: HS24010611-07

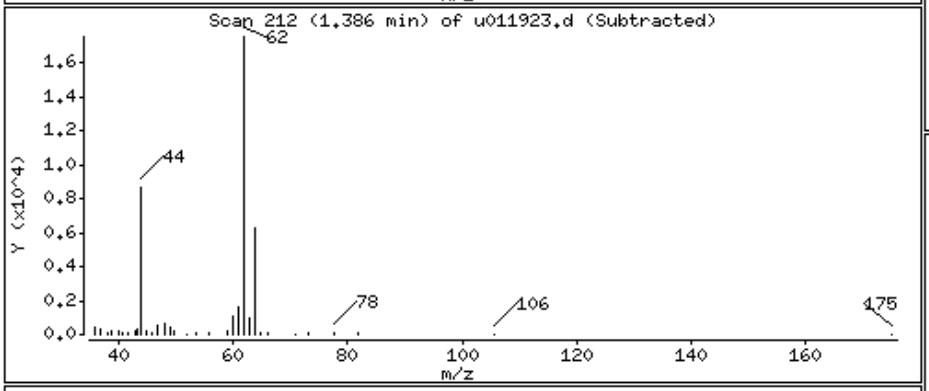
Purge Volume: 5.0 Operator: FT

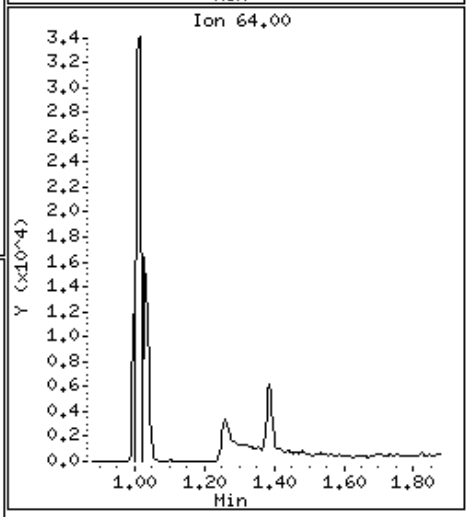
Column phase: DB624 Column diameter: 0.18

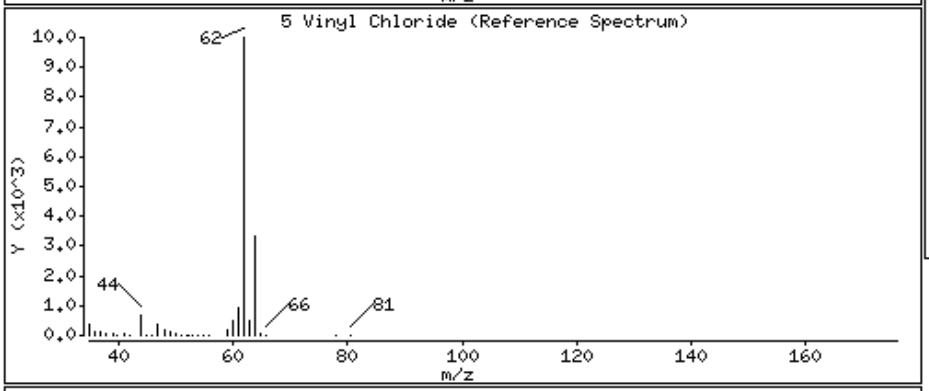
5 Vinyl Chloride Concentration: 6.74 ug/l

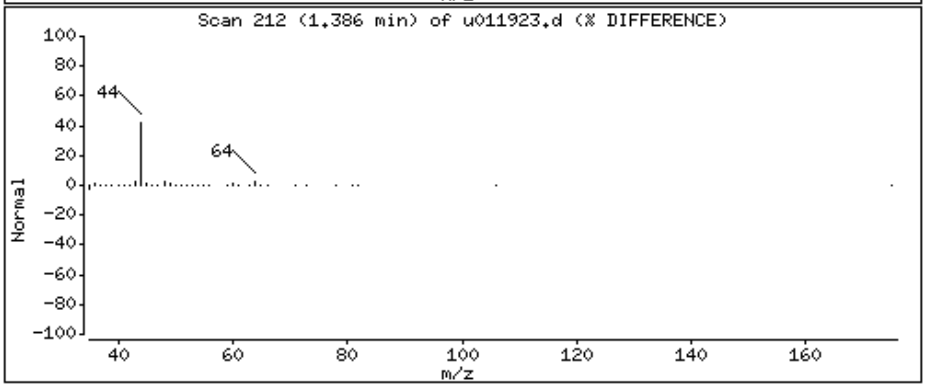












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240119.b\u011923.d Page 3

Date : 19-JAN-2024 17:19

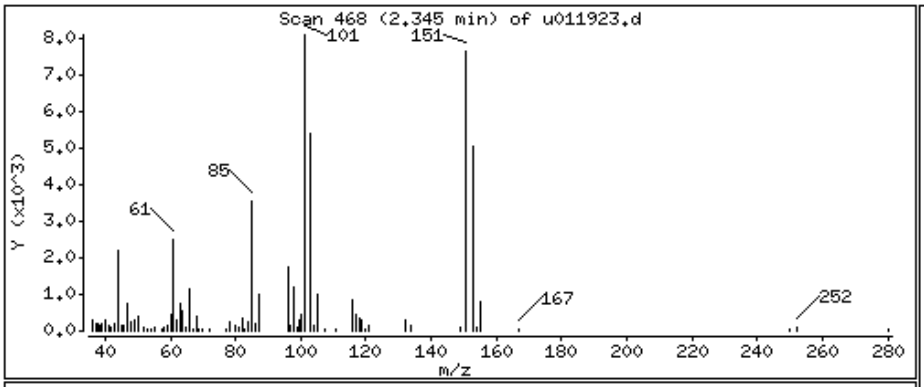
Client ID: Instrument: VOA9.i

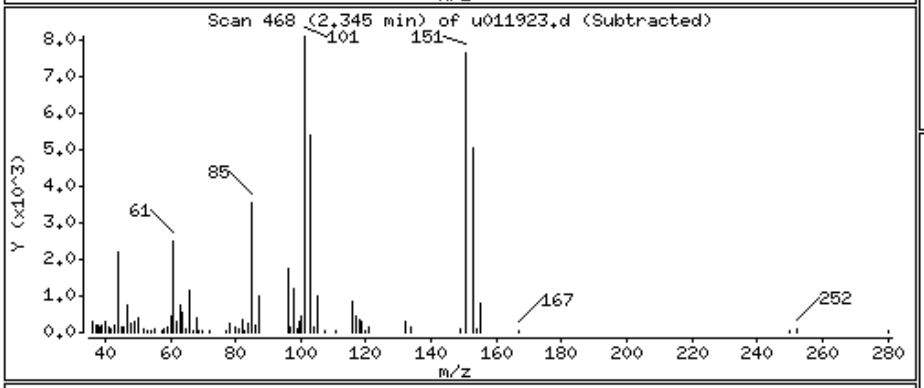
Sample Info: HS24010611-07

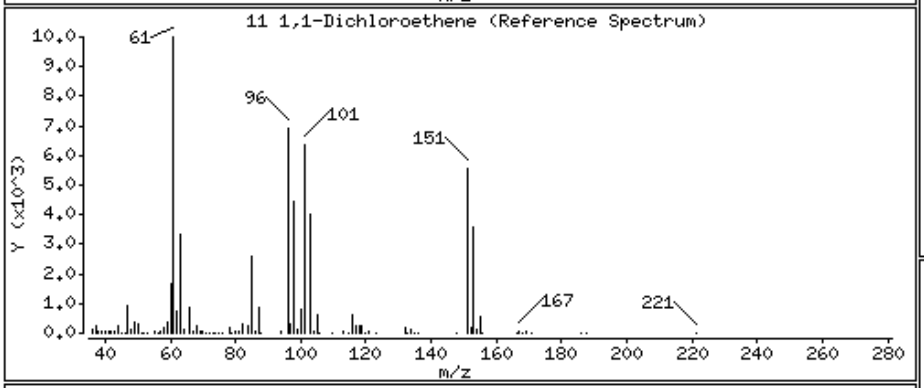
Purge Volume: 5.0 Operator: FT

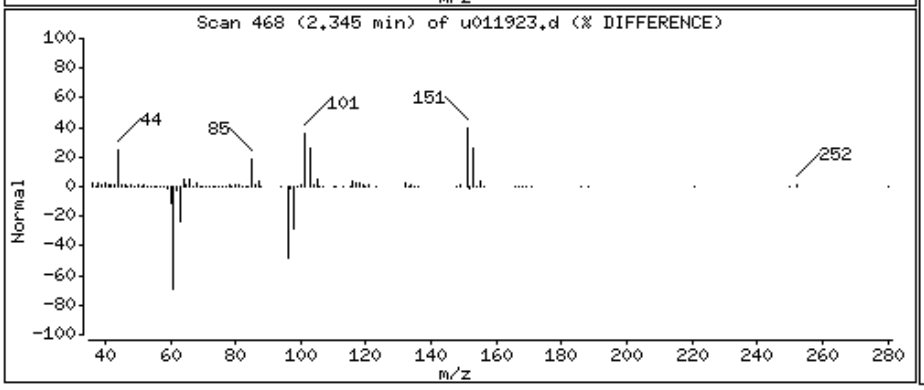
Column phase: DB624 Column diameter: 0.18

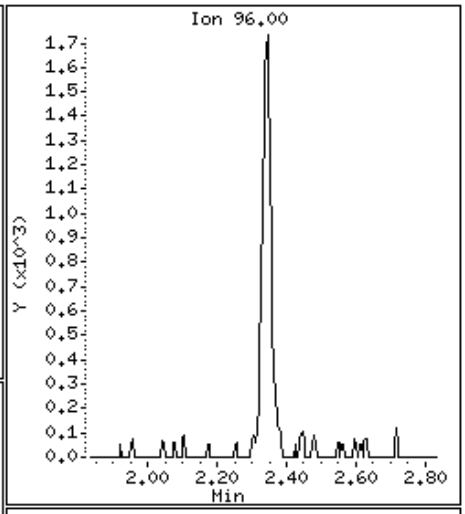
11 1,1-Dichloroethene Concentration: 1.56 ug/l

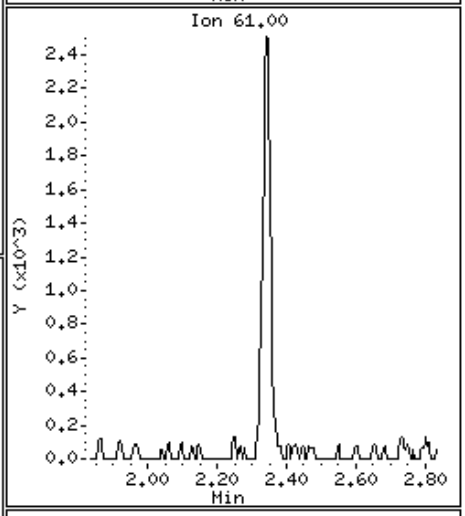


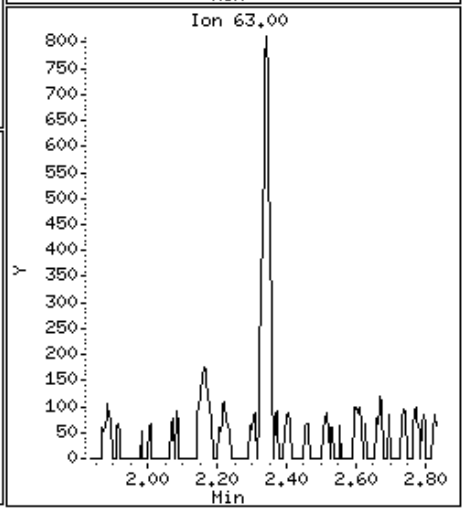












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240119.b\u011923.d Page 4

Date : 19-JAN-2024 17:19

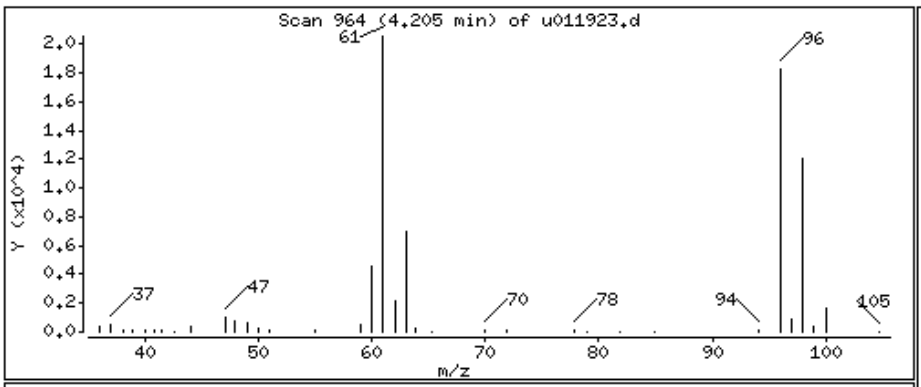
Client ID: Instrument: VOA9.i

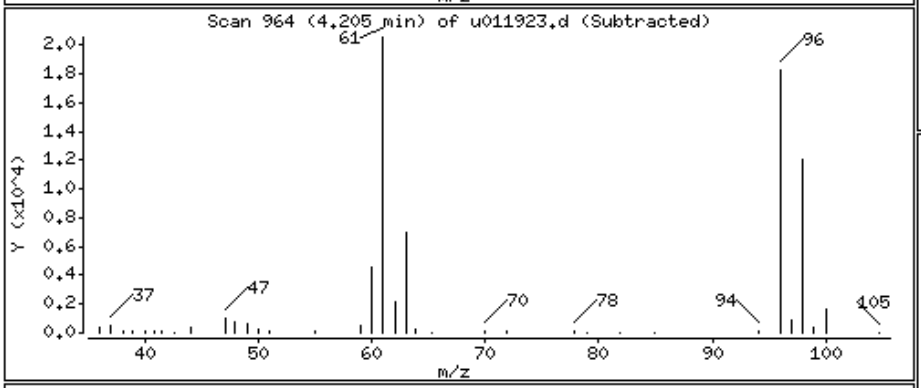
Sample Info: HS24010611-07

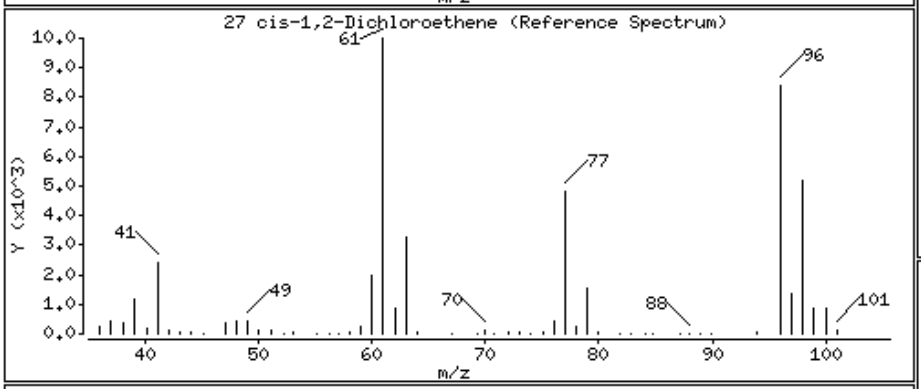
Purge Volume: 5.0 Operator: FT

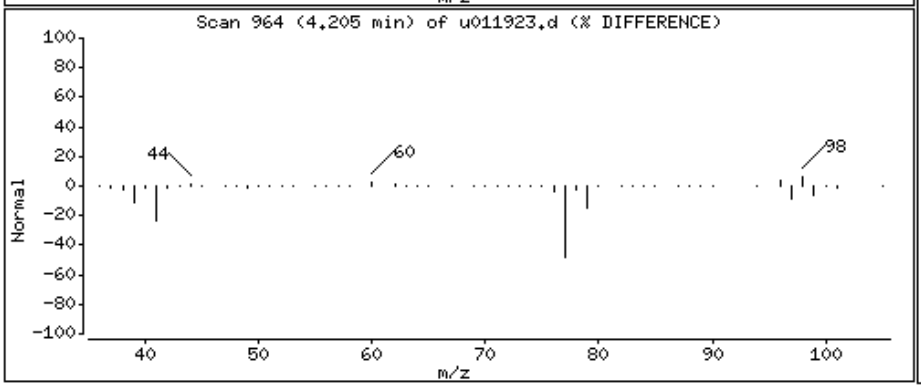
Column phase: DB624 Column diameter: 0.18

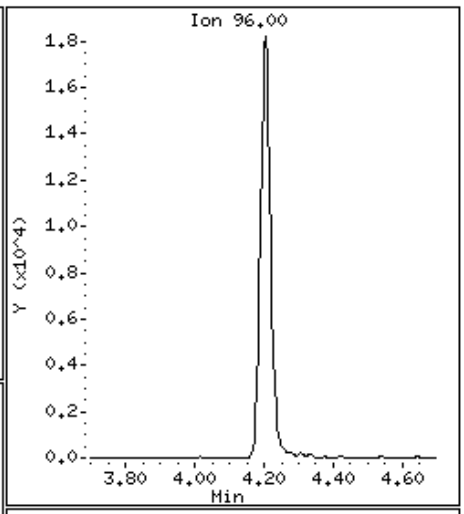
27 cis-1,2-Dichloroethene Concentration: 11.50 ug/l

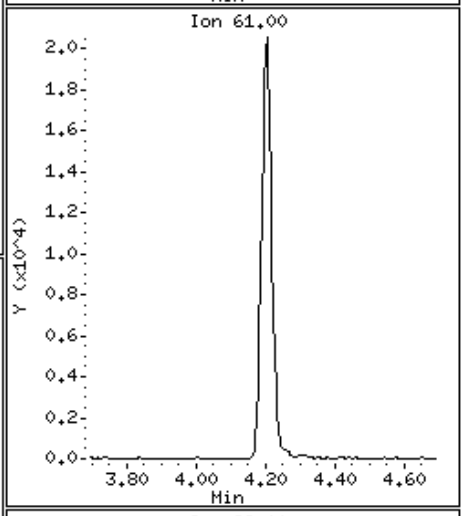


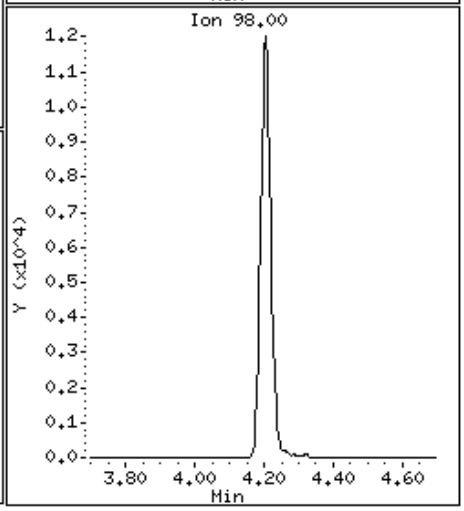












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240119.b\u011923.d Page 5

Date : 19-JAN-2024 17:19

Client ID:

Instrument: VOA9.i

Sample Info: HS24010611-07

Purge Volume: 5.0

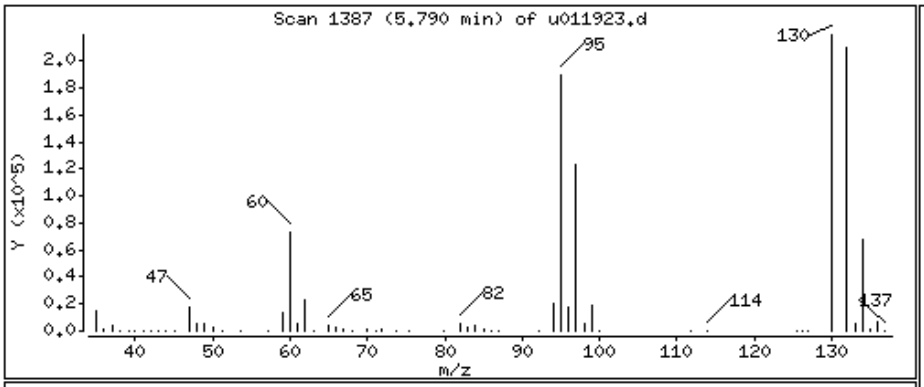
Operator: FT

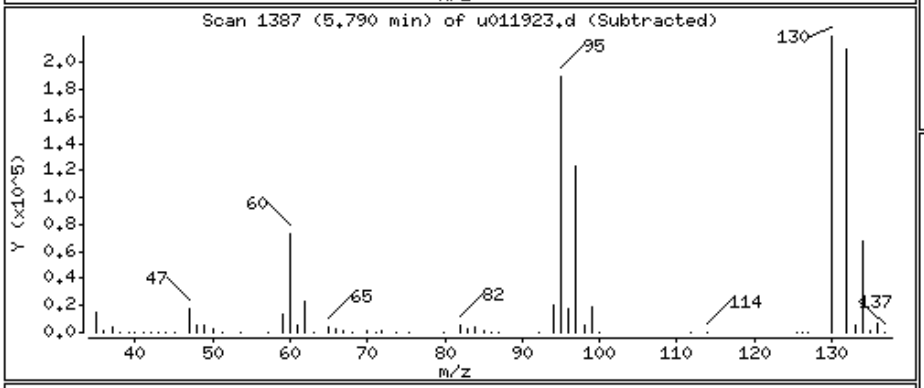
Column phase: DB624

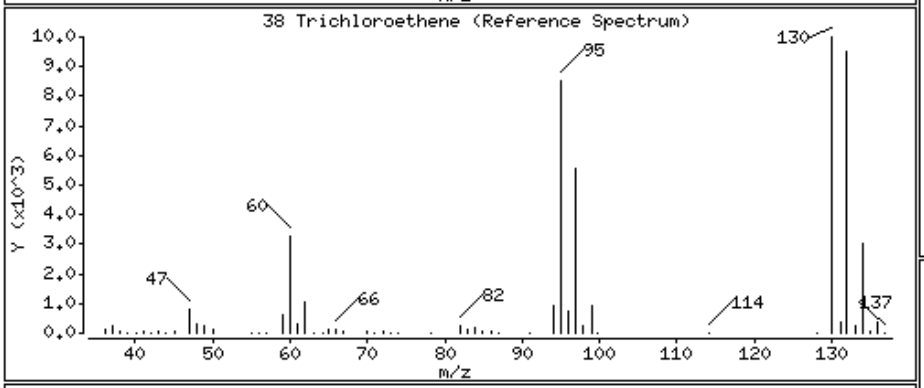
Column diameter: 0.18

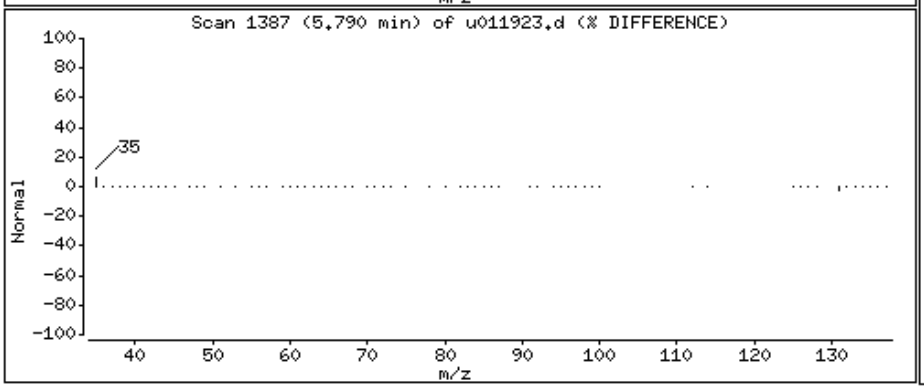
38 Trichloroethene

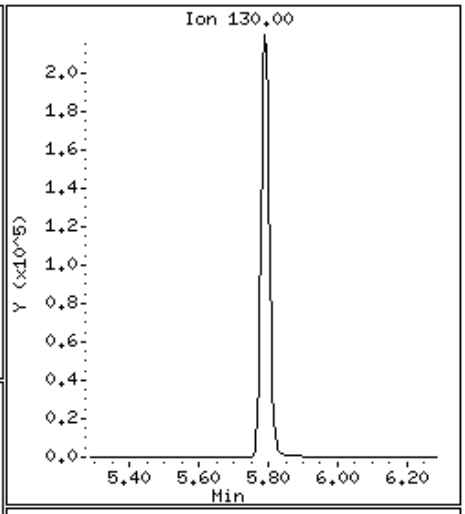
Concentration: 120.50 ug/l

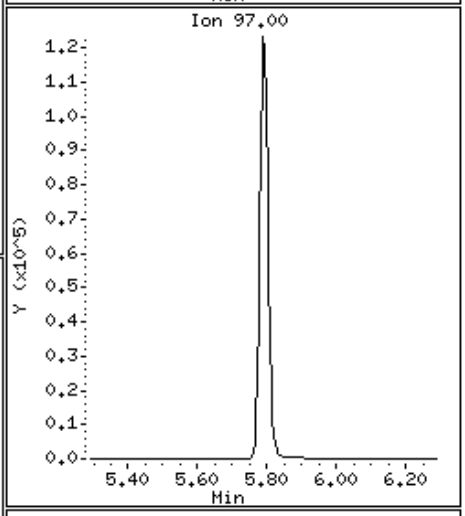


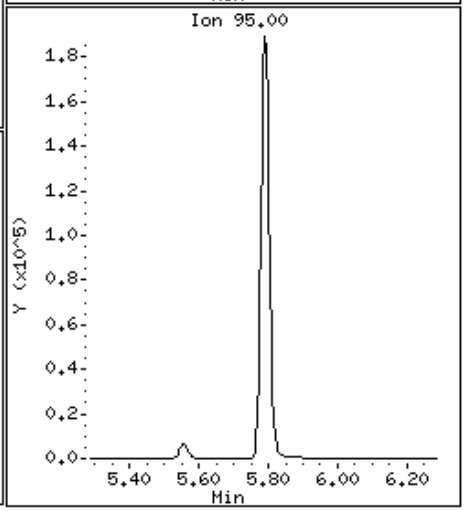












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240119.b\u011923.d Page 6

Date : 19-JAN-2024 17:19

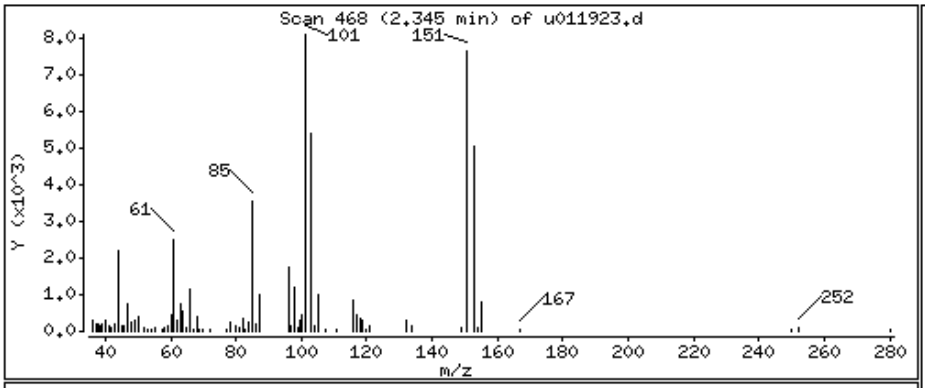
Client ID: Instrument: VOA9.i

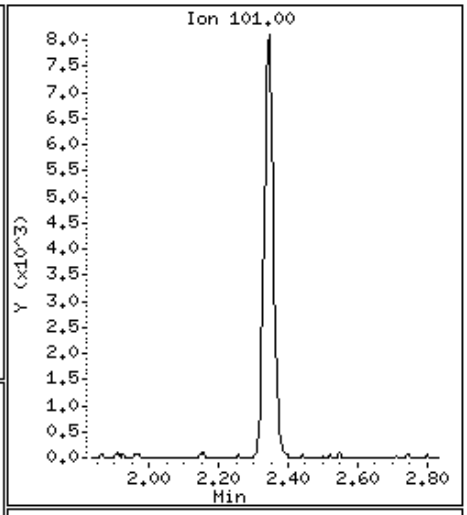
Sample Info: HS24010611-07

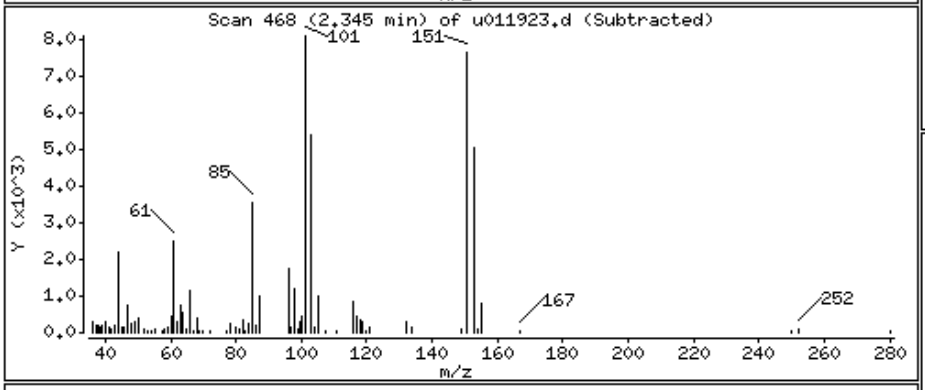
Purge Volume: 5.0 Operator: FT

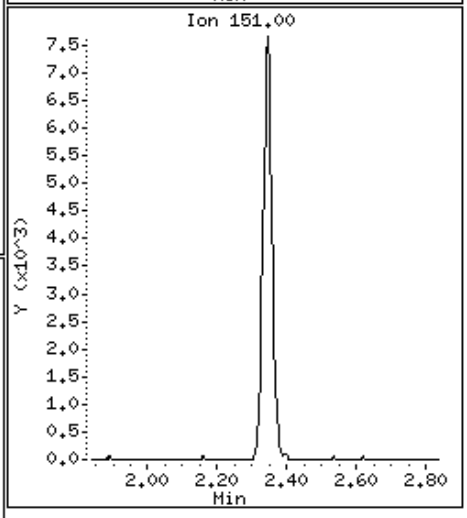
Column phase: DB624 Column diameter: 0.18

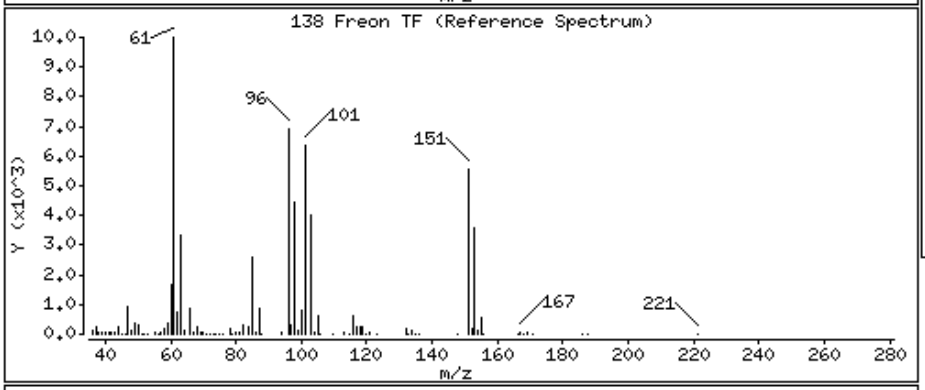
138 Freon TF Concentration: 8.04 ug/l

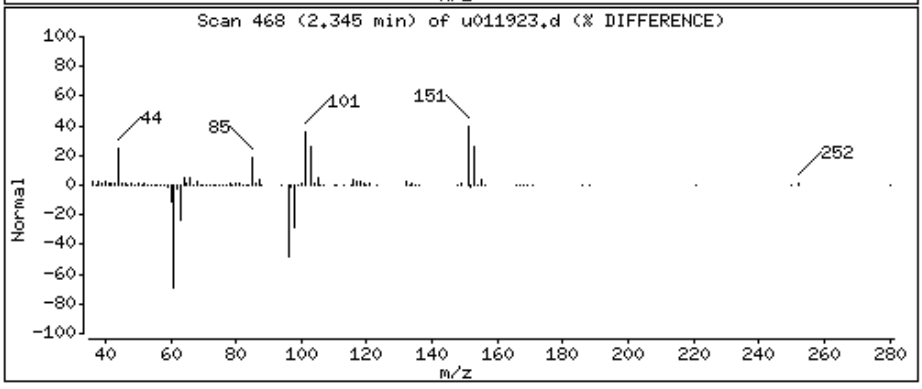












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Inj Date : 19-JAN-2024 17:19
InstruID : VOA9.i
LabSampID : HS24010611-07

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240119.b\U011924.D Page 1
Report Date: 19-Jan-2024 18:08

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240119.b\U011924.D
Lab Smp Id: HS24010611-08
Inj Date : 19-JAN-2024 17:41
Operator : FT   Inst ID: VOA9.i
Smp Info : HS24010611-08
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240119.b\8260C.m
Meth Date : 19-Jan-2024 09:45   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: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTWS005

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

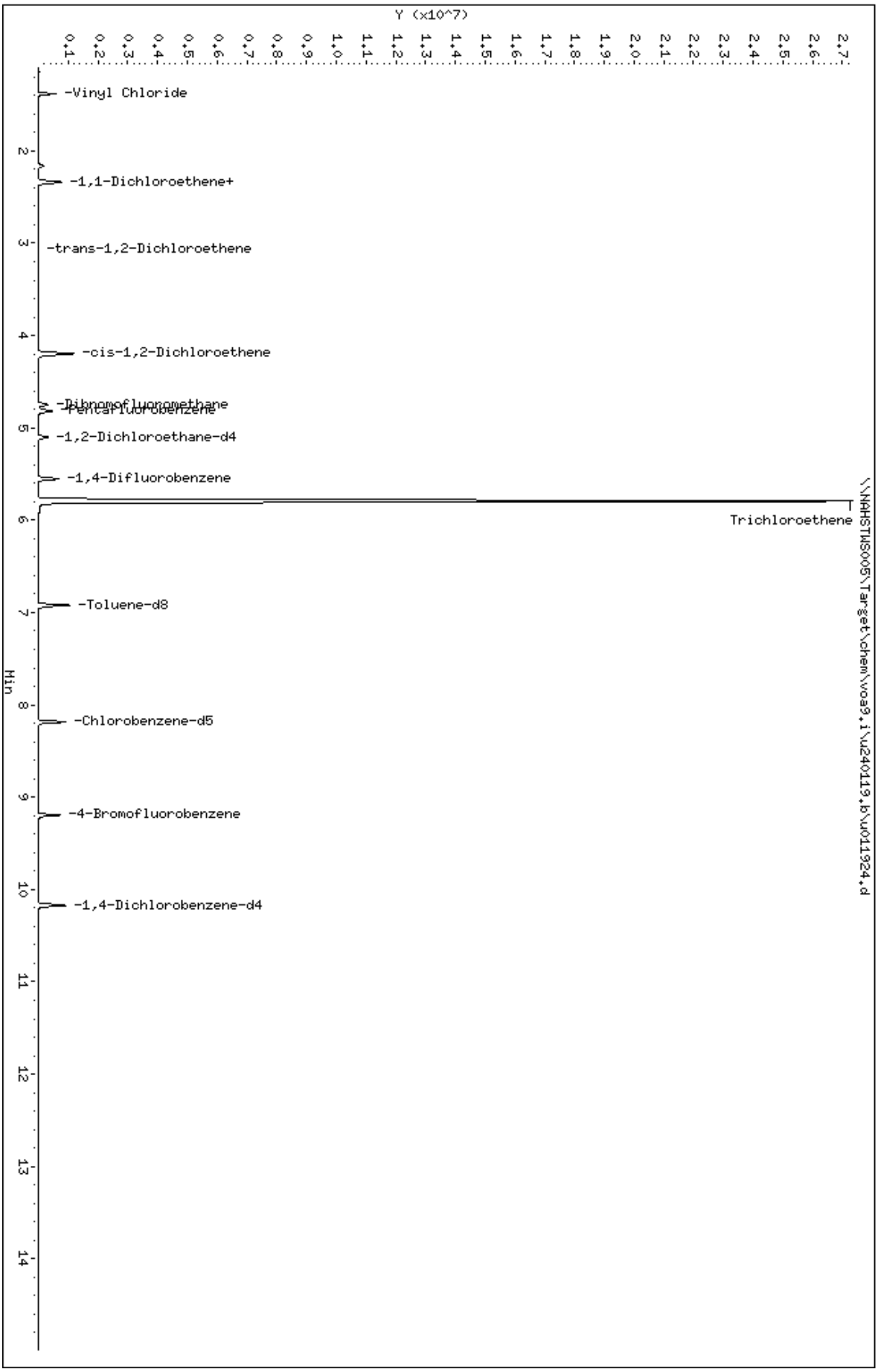
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

	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)	356244	50.0000	
	5 Vinyl Chloride	62	1.381	1.378	(0.287)	388047	99.3990	99.39
	11 1,1-Dichloroethene	96	2.337	2.333	(0.485)	46986	17.1005	17.10
	20 trans-1,2-Dichloroethene	96	3.061	3.057	(0.635)	2261	0.68836	0.68
	27 cis-1,2-Dichloroethene	96	4.197	4.197	(0.871)	611023	138.867	138.86
$	30 Dibromofluoromethane	113	4.751	4.748	(0.986)	193964	53.2674	53.26
$	35 1,2-Dichloroethane-d4	65	5.100	5.096	(1.058)	196903	47.2564	47.25
*	36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	542940	50.0000	
	38 Trichloroethene	130	5.794	5.786	(1.043)	9112418	2236.94	2236.94(A)
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	524939	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	653204	54.0542	54.05
$	69 4-Bromofluorobenzene	95	9.194	9.190	(1.123)	215028	46.9178	46.91
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	268329	50.0000	
	138 Freon TF	101	2.341	2.333	(0.486)	274713	101.487	101.48
M	94 1,2-Dichloroethylene (total)	96				613284	159.612	159.61

QC Flag Legend

A - Target compound detected but, quantitated amount

exceeded maximum amount.



Data File: \\NAHSTWS005\Target\chem\voa9,i\u240119,b\u011924.d
Date : 19-JAN-2024 17:41
Client ID:
Sample Info: HS24010611-08
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa9.i\u240119.b\u011924.d Page 2

Date : 19-JAN-2024 17:41

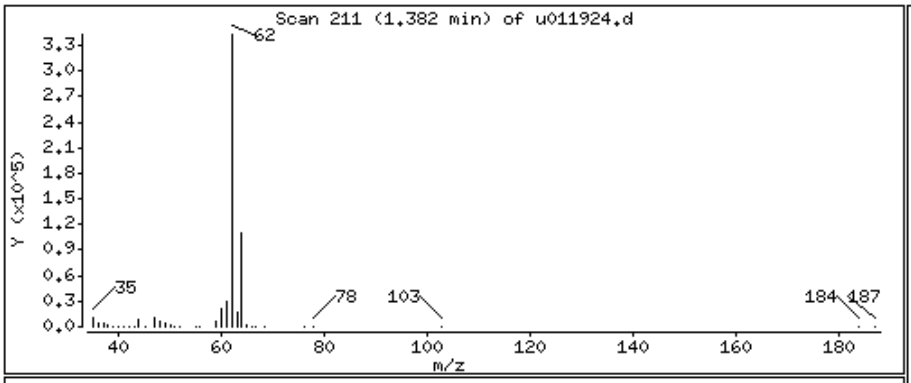
Client ID: Instrument: VOA9.i

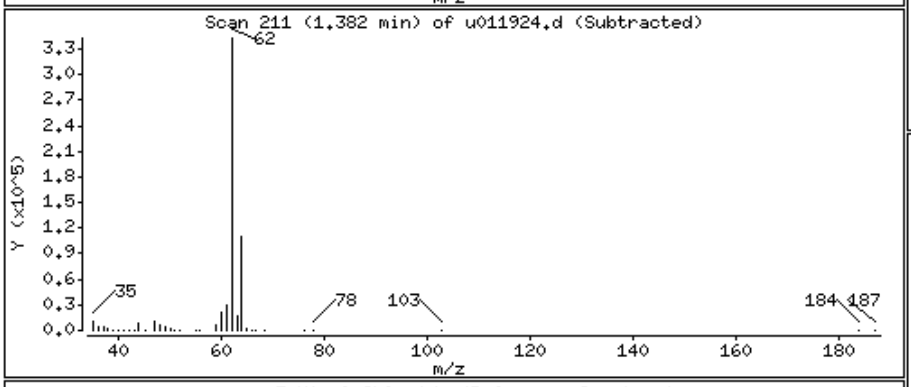
Sample Info: HS24010611-08

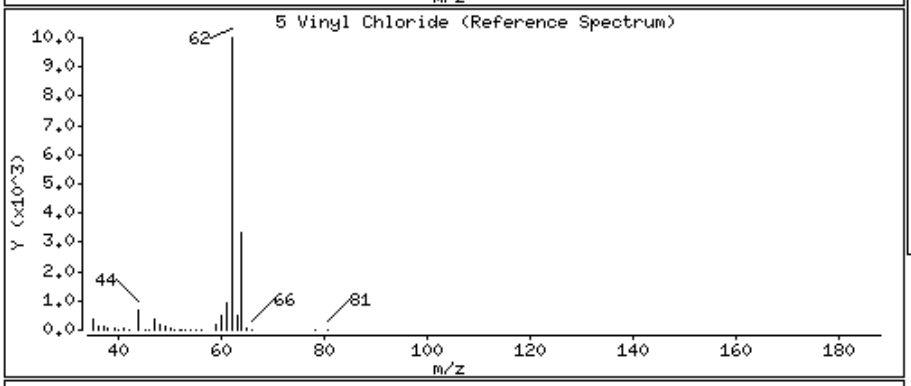
Purge Volume: 5.0 Operator: FT

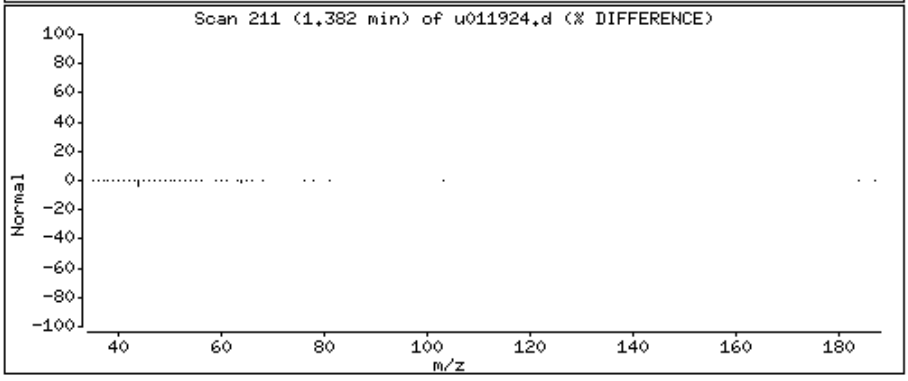
Column phase: DB624 Column diameter: 0.18

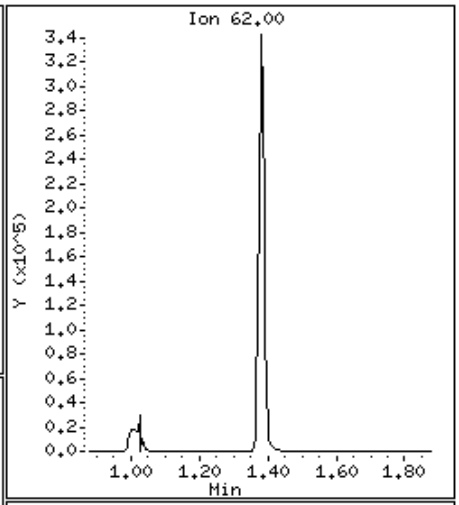
5 Vinyl Chloride Concentration: 99.39 ug/l

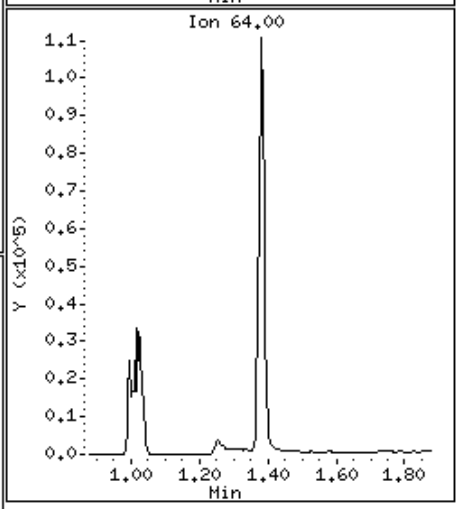












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240119.b\u011924.d Page 3

Date : 19-JAN-2024 17:41

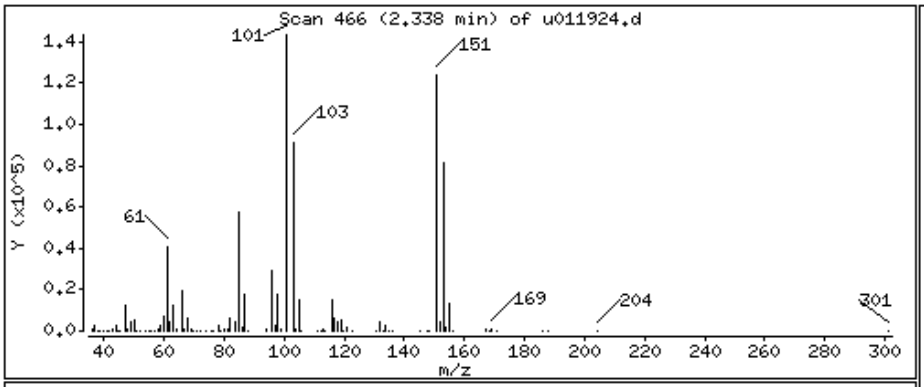
Client ID: Instrument: VOA9.i

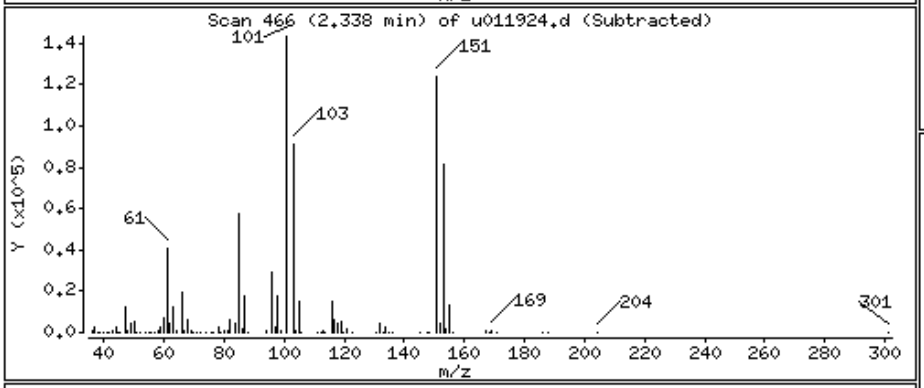
Sample Info: HS24010611-08

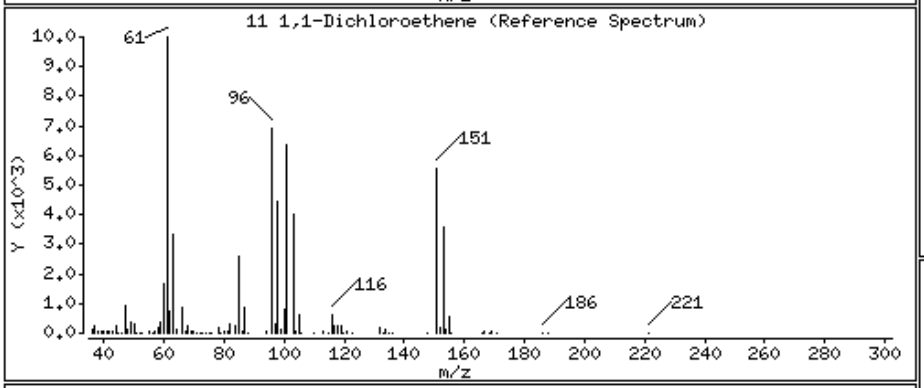
Purge Volume: 5.0 Operator: FT

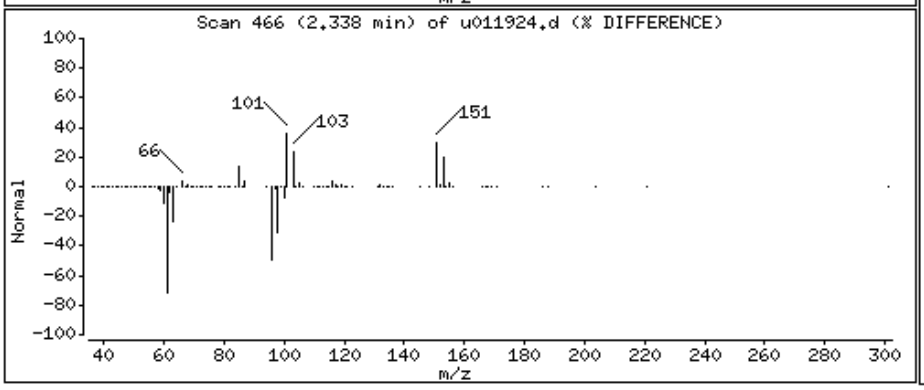
Column phase: DB624 Column diameter: 0.18

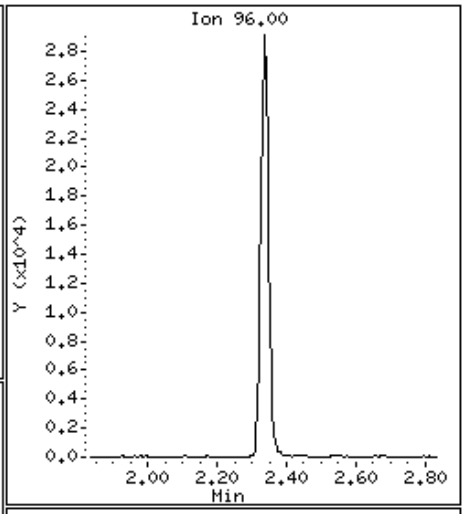
11 1,1-Dichloroethene Concentration: 17.10 ug/l

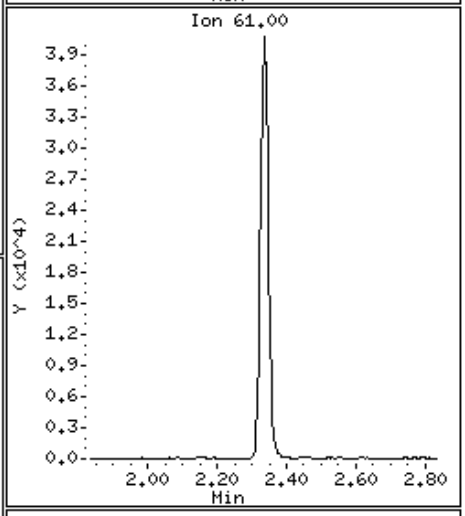


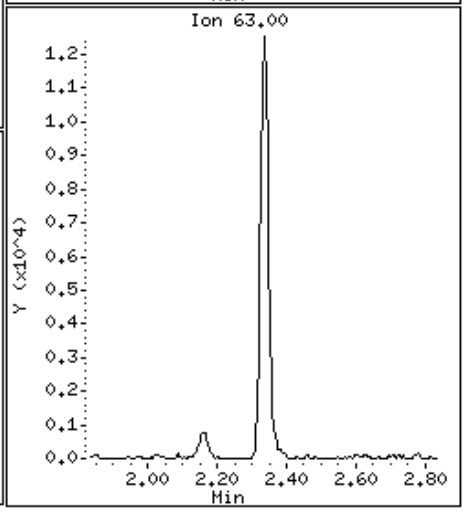












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240119.b\u011924.d Page 4

Date : 19-JAN-2024 17:41

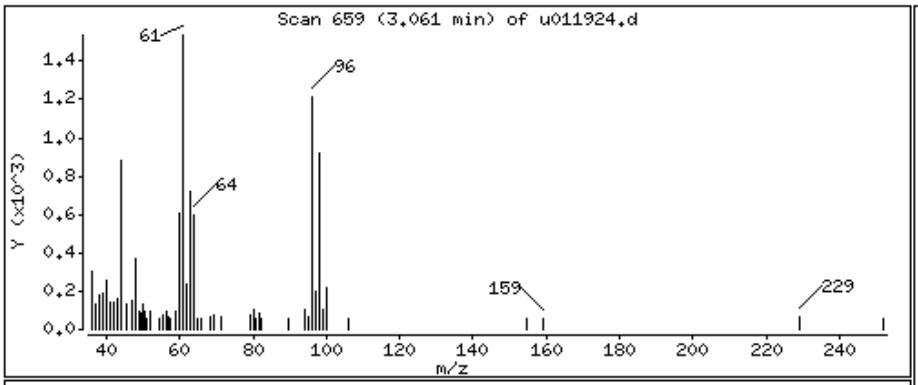
Client ID: Instrument: VOA9.i

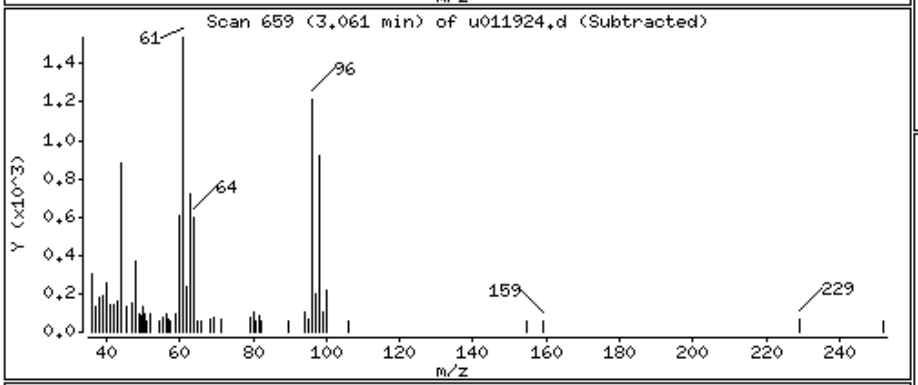
Sample Info: HS24010611-08

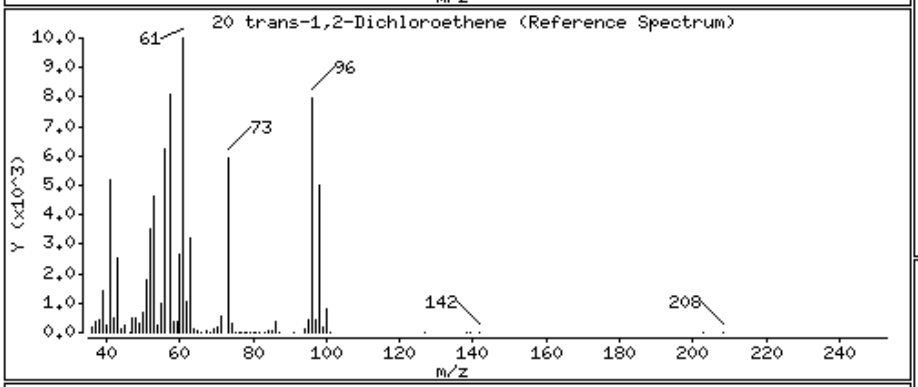
Purge Volume: 5.0 Operator: FT

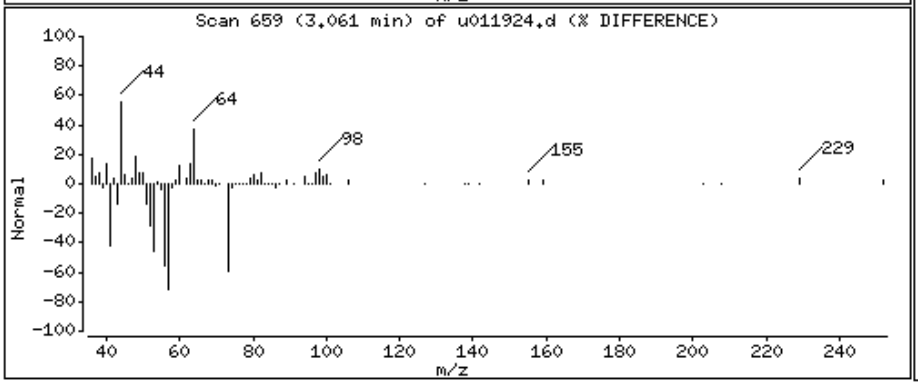
Column phase: DB624 Column diameter: 0.18

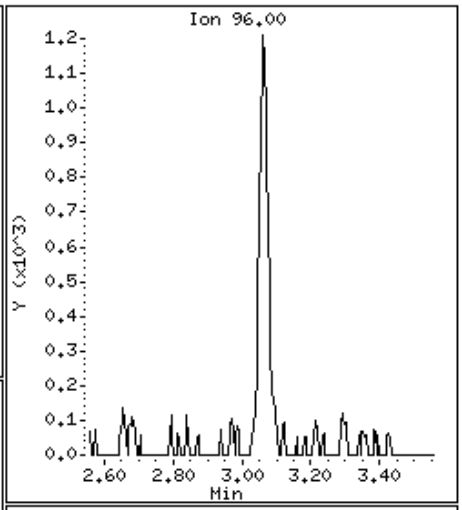
20 trans-1,2-Dichloroethene Concentration: 0.68 ug/l

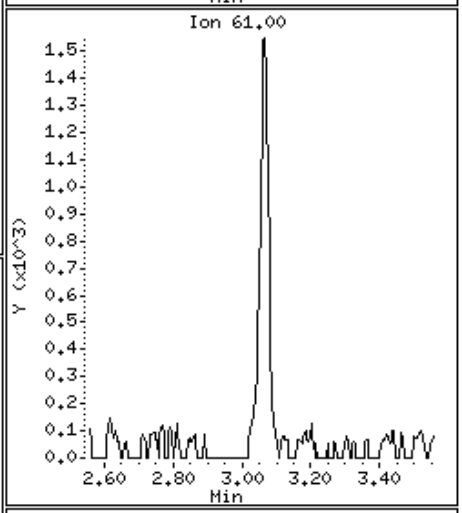


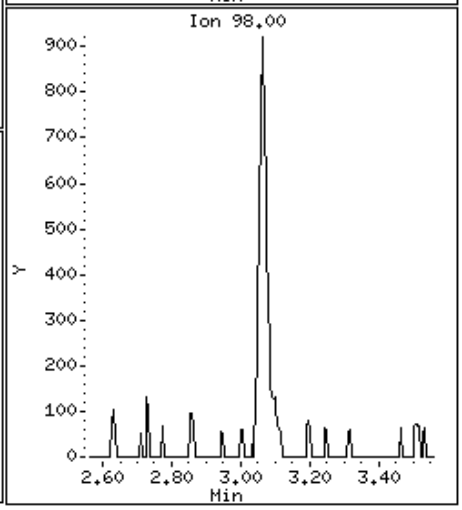












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240119.b\u011924.d Page 5

Date : 19-JAN-2024 17:41

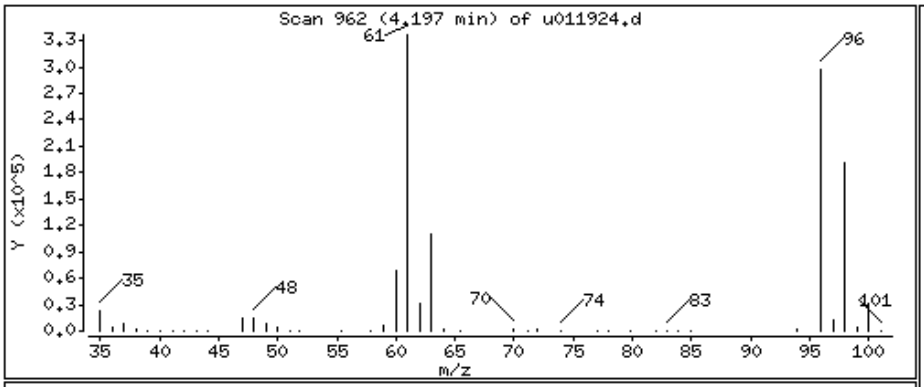
Client ID: Instrument: VOA9.i

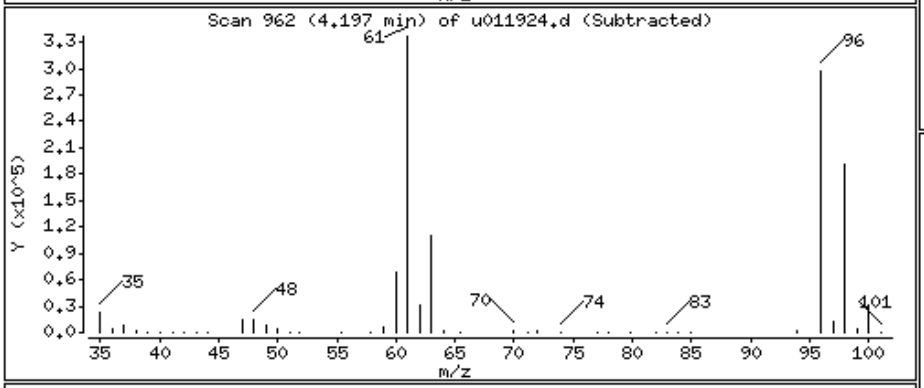
Sample Info: HS24010611-08

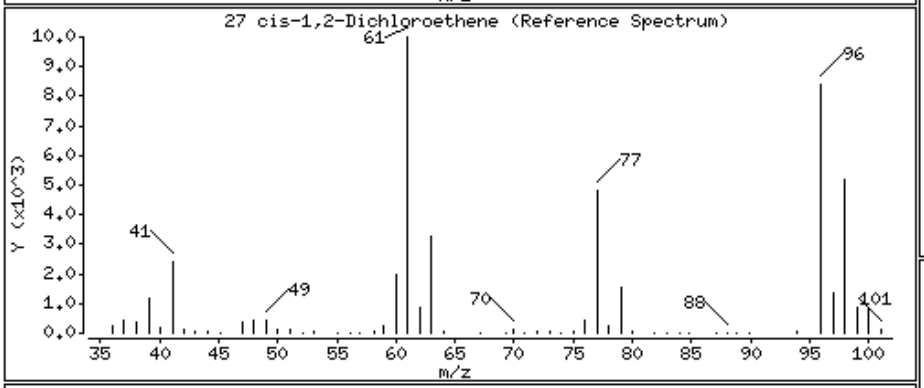
Purge Volume: 5.0 Operator: FT

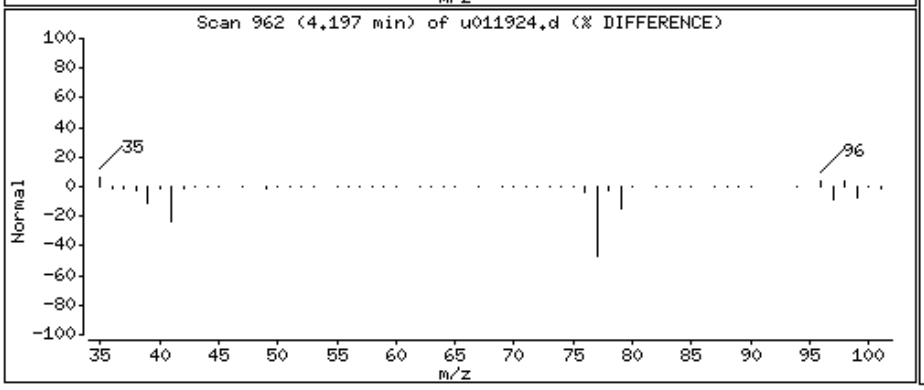
Column phase: DB624 Column diameter: 0.18

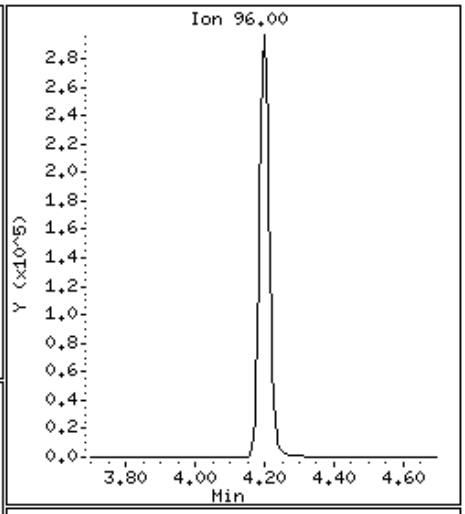
27 cis-1,2-Dichloroethene Concentration: 138.86 ug/l

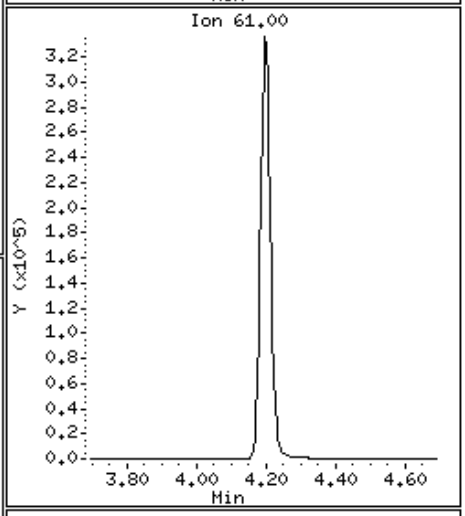


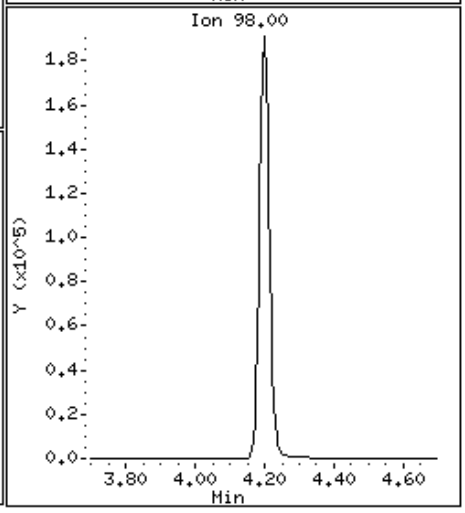












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240119.b\u011924.d Page 6

Date : 19-JAN-2024 17:41

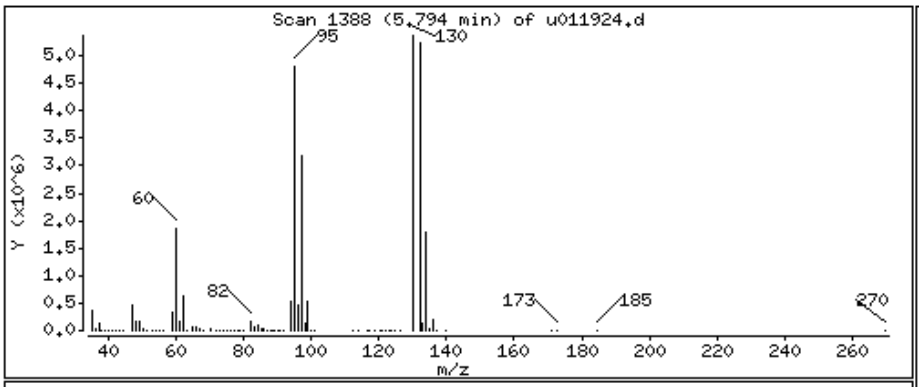
Client ID: Instrument: VOA9.i

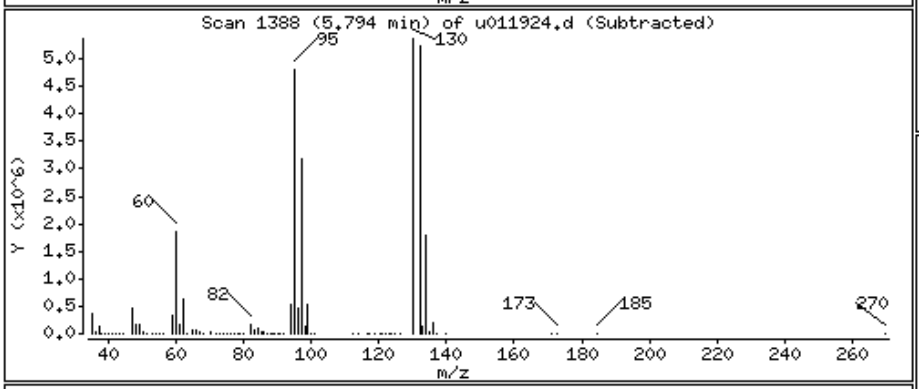
Sample Info: HS24010611-08

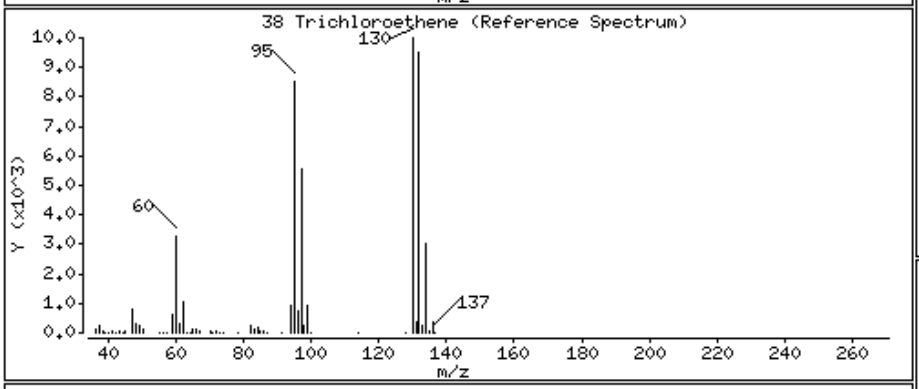
Purge Volume: 5.0 Operator: FT

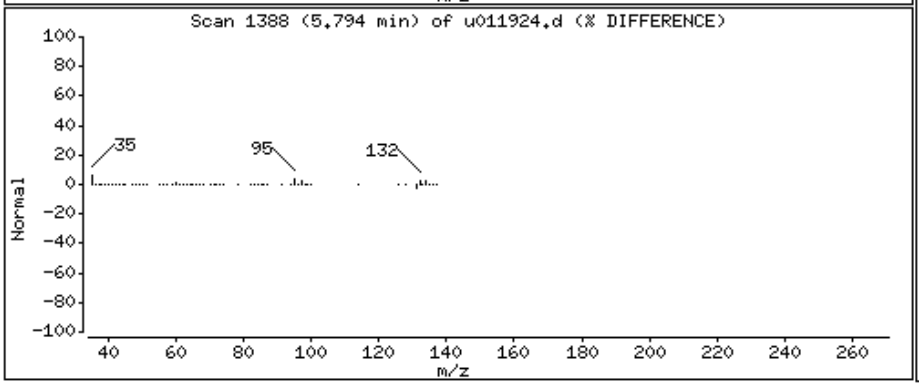
Column phase: DB624 Column diameter: 0.18

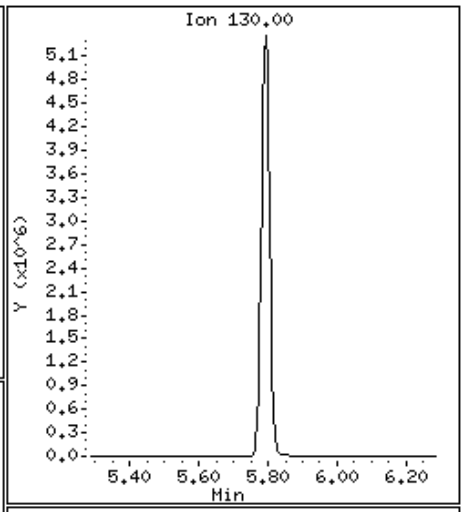
38 Trichloroethene Concentration: 2236.94 ug/l

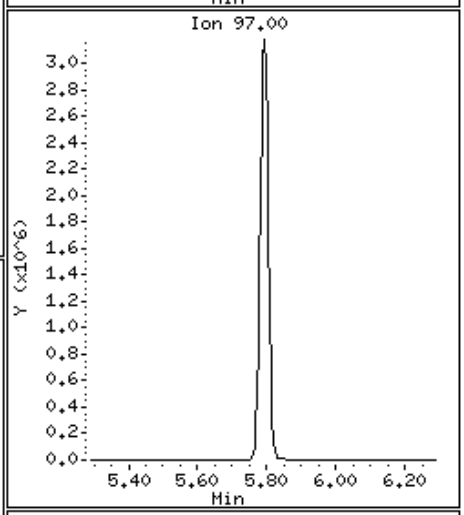


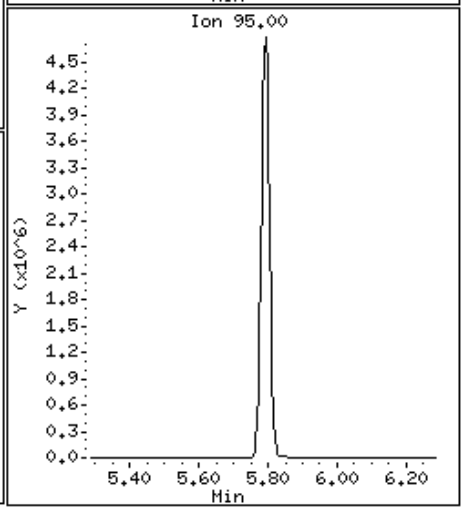












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240119.b\u011924.d Page 7

Date : 19-JAN-2024 17:41

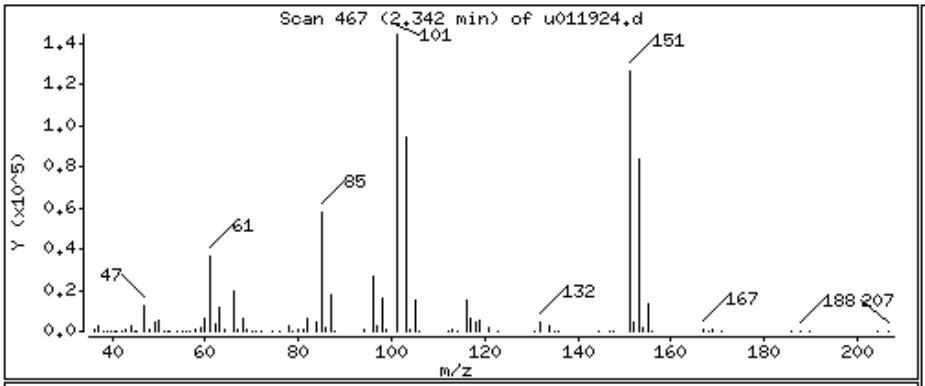
Client ID: Instrument: VOA9.i

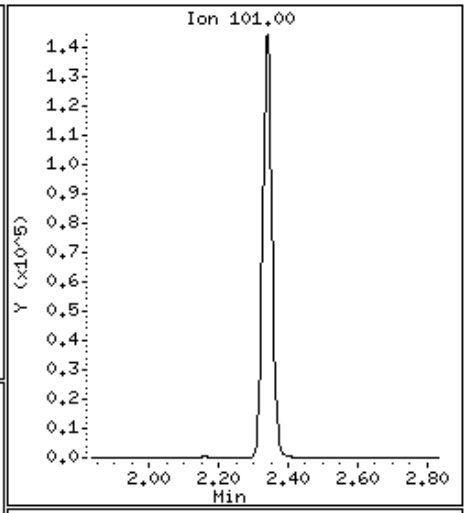
Sample Info: HS24010611-08

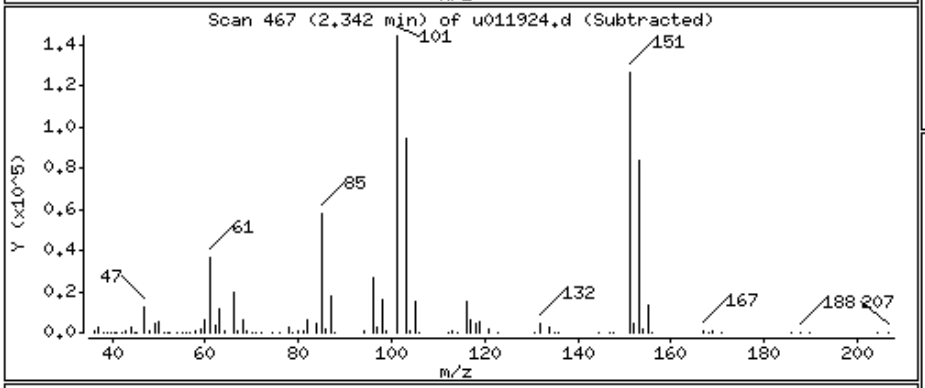
Purge Volume: 5.0 Operator: FT

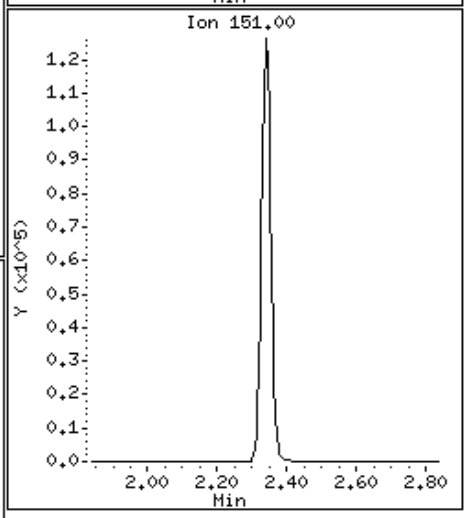
Column phase: DB624 Column diameter: 0.18

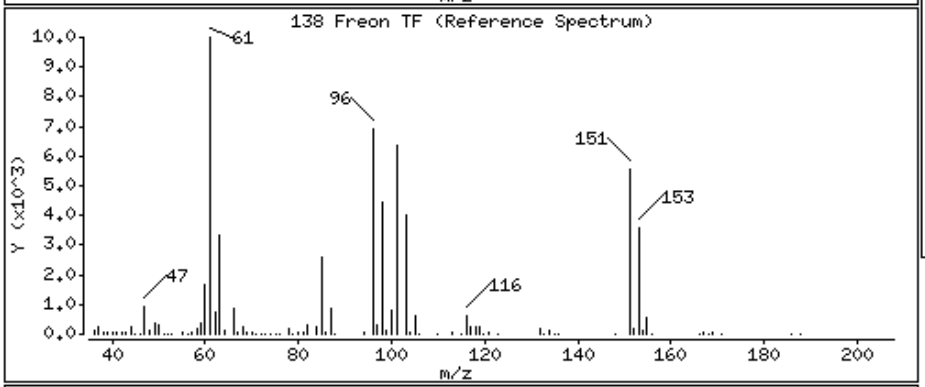
138 Freon TF Concentration: 101.48 ug/l

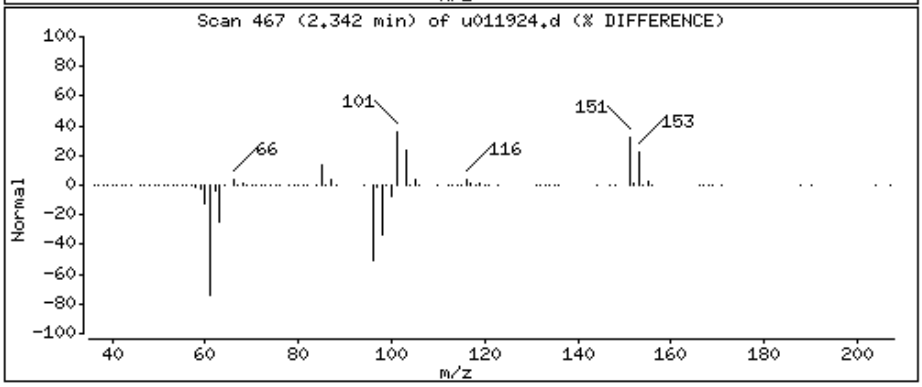












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Inj Date : 19-JAN-2024 17:41
InstruID : VOA9.i
LabSampID : HS24010611-08

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240119.b\U011925.D Page 1
Report Date: 19-Jan-2024 18:19

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240119.b\U011925.D
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Inj Date : 19-JAN-2024 18:03
Operator : FT Inst ID: VOA9.i
Smp Info : CCV-END;CCV-END;2;;;
Misc Info : V9;WATER;0;1;
Comment   :
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Meth Date : 19-Jan-2024 18:19 Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 24 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.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)	300561	50.0000	
2 Dichlorodifluoromethane	85	1.172	1.172	(0.243)	50207	50.0000	21.23
3 Chloromethane	50	1.307	1.307	(0.271)	109849	50.0000	31.86
4 Propionitrile	54	4.339	4.339	(0.900)	203046	500.000	407.44
5 Vinyl Chloride	62	1.385	1.385	(0.288)	128125	50.0000	38.89
6 Bromomethane	94	1.629	1.629	(0.338)	77694	50.0000	46.15
7 Chloroethane	64	1.708	1.708	(0.354)	96083	50.0000	43.32
8 Trichlorofluoromethane	101	1.903	1.903	(0.395)	207190	50.0000	49.62
9 Acrolein	56	2.270	2.270	(0.471)	13134	100.000	76.68
10 Acetone	43	2.412	2.412	(0.501)	85355	100.000	82.40
11 1,1-Dichloroethene	96	2.341	2.341	(0.486)	121052	50.0000	52.21
12 Isobutyl Alcohol	43	5.288	5.288	(1.097)	352116	1000.00	781.14
13 Acetonitrile	39	2.679	2.679	(0.556)	154841	500.000	478.67
14 Allyl Chloride	41	2.679	2.679	(0.556)	353911	50.0000	47.89
15 Iodomethane	142	2.476	2.476	(0.514)	301601	100.000	102.30
16 Acrylonitrile	53	3.068	3.068	(0.637)	110412	100.000	93.64
17 Methylene Chloride	84	2.799	2.799	(0.581)	154702	50.0000	52.89
18 Methyl tert-butyl ether	73	3.087	3.087	(0.641)	407950	50.0000	49.11
19 Carbon Disulfide	76	2.529	2.529	(0.525)	695440	100.000	101.81
20 trans-1,2-Dichloroethene	96	3.065	3.065	(0.636)	147896	50.0000	53.36

21 Vinyl Acetate	43	3.612	3.612 (0.750)	726506	100.000	86.69
22 1,1-Dichloroethane	63	3.518	3.518 (0.730)	251958	50.0000	44.57

Data File: \\nahstws005\Target\chem\voa9.i\U240119.b\U011925.D Page 2
Report Date: 19-Jan-2024 18:19

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	24 2-Butanone	43	4.268	4.268	(0.886)	107369	100.000	72.92
	25 Methacrylonitrile	41	4.497	4.497	(0.933)	134643	50.0000	62.73(a)
	26 2,2-Dichloropropane	77	4.186	4.186	(0.869)	163543	50.0000	41.15
	27 cis-1,2-Dichloroethene	96	4.201	4.201	(0.872)	176742	50.0000	47.60
	28 Chloroform	83	4.575	4.575	(0.949)	281027	50.0000	45.67
	29 Bromochloromethane	128	4.474	4.474	(0.928)	94901	50.0000	49.40
$	30 Dibromofluoromethane	113	4.752	4.752	(0.986)	160272	50.0000	52.14
	31 1,1,1-Trichloroethane	97	4.748	4.748	(0.985)	220197	50.0000	47.09
	32 1,1-Dichloropropene	75	4.928	4.928	(0.887)	186493	50.0000	49.17
	33 1,2-Dichloroethane	62	5.179	5.179	(0.933)	191071	50.0000	43.25
	34 Carbon Tetrachloride	117	4.917	4.917	(0.885)	190270	50.0000	51.36
$	35 1,2-Dichloroethane-d4	65	5.100	5.100	(1.058)	156255	50.0000	44.58
*	36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	453329	50.0000	
	37 Benzene	78	5.141	5.141	(0.926)	570451	50.0000	46.22
	38 Trichloroethene	130	5.790	5.790	(1.043)	199244	50.0000	58.57
	39 Bromodichloromethane	83	6.277	6.277	(1.130)	200674	50.0000	49.65
	40 Methyl Methacrylate	41	6.157	6.157	(1.278)	115465	50.0000	38.92
	41 2-Chloroethylvinyl ether	63	6.577	6.577	(1.184)	5150	100.000	129.51
	42 1,2-Dichloropropane	63	6.011	6.011	(1.082)	150796	50.0000	45.38
	43 2-Nitropropane	43	6.510	6.510	(1.351)	29484	50.0000	38.21
	44 Dibromomethane	93	6.120	6.120	(1.102)	99671	50.0000	46.36
	45 4-Methyl-2-Pentanone	43	6.855	6.855	(0.837)	277177	100.000	83.94
	46 cis-1,3-Dichloropropene	75	6.693	6.693	(1.205)	233386	50.0000	44.96
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	457611	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	550113	50.0000	52.22
	49 Ethyl Methacrylate	69	7.289	7.289	(1.312)	208331	50.0000	46.82
	50 Toluene	91	6.982	6.982	(0.853)	643427	50.0000	50.42
	51 trans-1,3-Dichloropropene	75	7.196	7.196	(1.296)	195170	50.0000	44.71
	52 2-Hexanone	43	7.589	7.589	(0.927)	180055	100.000	77.96
	53 1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	124934	50.0000	51.22
	54 1,3-Dichloropropane	76	7.499	7.499	(0.916)	255560	50.0000	45.10
	55 Dibromochloromethane	129	7.691	7.691	(0.940)	180465	50.0000	53.02
	56 Tetrachloroethene	164	7.458	7.458	(0.911)	151031	50.0000	55.29
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	157025	50.0000	49.38
	58 1-Chlorohexane	55	8.197	8.197	(1.476)	117405	50.0000	46.18
	59 Chlorobenzene	112	8.208	8.208	(1.003)	457537	50.0000	49.22
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	170557	50.0000	52.45
	61 Ethylbenzene	106	8.305	8.305	(1.015)	215089	50.0000	49.43
	62 m,p-Xylenes	106	8.407	8.407	(1.027)	553787	100.000	105.86
	63 o-Xylene	106	8.748	8.748	(1.069)	280999	50.0000	52.23
	64 Styrene	104	8.759	8.759	(1.070)	484000	50.0000	54.03
	66 Bromoform	173	8.916	8.916	(1.089)	118073	50.0000	50.69
	67 Isopropylbenzene	105	9.063	9.063	(1.107)	692788	50.0000	53.24
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	197973	50.0000	47.20
$	69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	194532	50.0000	48.73
*	70 1,4-Dichlorobenzene-d4	152	10.168	10.168	(1.000)	257117	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.921)	200659	50.0000	41.11
	72 trans-1,4-Dichloro-2-butene	53	9.377	9.377	(1.146)	35165	50.0000	42.70
	73 n-Propylbenzene	91	9.411	9.411	(0.926)	758237	50.0000	50.22
	74 Bromobenzene	156	9.317	9.317	(0.916)	212437	50.0000	49.20
	75 1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	552303	50.0000	51.46
	76 2-Chlorotoluene	91	9.482	9.482	(0.933)	476750	50.0000	46.91

77 4-Chlorotoluene	91	9.576	9.576 (0.942)	548147	50.0000	47.56
78 tert-Butylbenzene	119	9.835	9.835 (0.967)	487307	50.0000	50.55

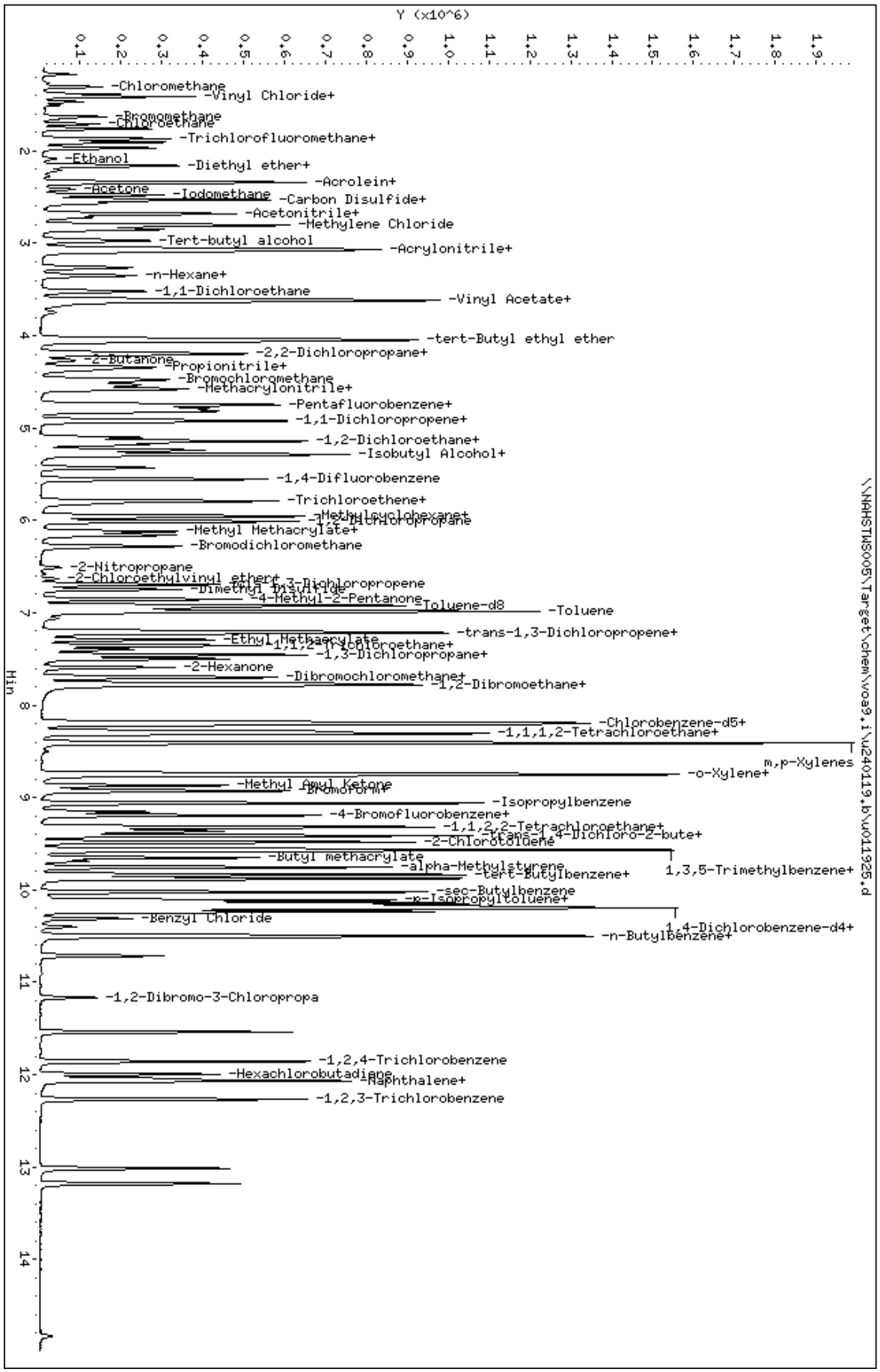
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
79	1,2,4-Trimethylbenzene	105	9.876	9.876	(0.971)	547189	50.0000	50.88
81	sec-Butylbenzene	105	10.022	10.022	(0.986)	621917	50.0000	50.04
82	p-Isopropyltoluene	119	10.146	10.146	(0.998)	565900	50.0000	52.61
83	1,3-Dichlorobenzene	146	10.112	10.112	(0.994)	363869	50.0000	47.55
84	1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	384359	50.0000	47.41
86	Benzyl Chloride	91	10.311	10.311	(1.260)	147471	50.0000	37.23
87	n-Butylbenzene	91	10.491	10.491	(1.032)	429015	50.0000	47.52
88	1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	366373	50.0000	47.59
89	1,2-Dibromo-3-Chloropropane	155	11.166	11.166	(1.098)	33768	50.0000	45.10
90	1,2,4-Trichlorobenzene	180	11.855	11.855	(1.166)	219581	50.0000	46.23
91	Hexachlorobutadiene	225	11.998	11.998	(1.180)	88093	50.0000	46.27
92	Naphthalene	128	12.065	12.065	(1.187)	550546	50.0000	48.07
93	1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	218480	50.0000	45.62
146	Methyl acetate	43	2.720	2.720	(0.564)	124680	50.0000	41.68
138	Freon TF	101	2.341	2.341	(0.486)	129551	50.0000	58.22
141	Cyclohexane	56	4.789	4.789	(0.994)	181801	50.0000	41.97
142	Tetrahydrofuran	42	4.542	4.542	(0.942)	48845	100.000	76.56
147	Methylcyclohexane	55	5.947	5.947	(1.071)	329213	50.0000	48.99
135	1,4-Dioxane	88	6.165	6.165	(1.279)	38574	1000.00	808.90
132	n-Butanol	56	5.820	5.820	(1.208)	75154	1000.00	769.35
136	n-Hexane	57	3.350	3.350	(0.695)	118197	50.0000	42.30
139	Diethyl ether	59	2.154	2.154	(0.447)	112409	50.0000	45.86
148	Tert-butyl alcohol	59	2.971	2.971	(0.617)	305658	1000.00	908.41
149	Isopropyl alcohol	45	2.566	2.566	(0.533)	182032	1000.00	956.63
152	Amyl alcohol	42	7.394	7.394	(0.903)	81589	1000.00	803.82
156	Diisopropyl ether	45	3.627	3.627	(0.753)	445787	50.0000	42.57
162	Butyl acrylate	55	8.733	8.733	(1.067)	233199	50.0000	35.96
187	n-Amyl acetate	43	8.931	8.931	(1.091)	219579	50.0000	37.85
164	Dicyclopentadiene	66	10.198	10.198	(1.003)	622451	50.0000	45.41
166	1,2,3-Trimethylbenzene	105	10.232	10.232	(1.006)	512314	50.0000	48.28
167	Ethanol	45	2.086	2.086	(0.433)	33969	1000.00	901.47
172	tert-Butyl formate	59	5.239	5.239	(1.087)	188712	100.000	82.69
173	3,3-Dimethyl-1-butanol	57	7.781	7.781	(0.951)	293148	1000.00	776.48
174	tert-Amyl methyl ether	73	5.288	5.288	(1.097)	408226	50.0000	43.78
175	tert-Butyl ethyl ether	59	4.054	4.054	(0.841)	399373	50.0000	42.78
176	tert-Amyl alcohol	59	5.239	5.239	(1.087)	188712	1000.00	828.35
151	4-Methyl-2-pentanol	45	7.214	7.214	(1.299)	541743	1000.00	749.72
140	1,3-Butadiene	54	1.412	1.412	(0.293)	107087	50.0000	35.47
158	Dichlorofluoromethane	67	1.865	1.865	(0.387)	250578	50.0000	54.69
182	Epichlorohydrin	57	6.630	6.630	(1.194)	28570	200.000	162.23
M 94	1,2-Dichloroethylene (total)	96				324638	100.000	100.14
M 95	Xylenes (total)	106				834786	150.000	159.14
145	alpha-Methylstyrene	118	9.752	9.752	(0.959)	252750	50.0000	48.54
130	Ethyl Acetate	43	4.343	4.343	(0.901)	139572	50.0000	38.22
131	Methyl Acrylate	55	4.373	4.373	(0.907)	164038	50.0000	41.55
189	n-Butyl acetate	43	7.706	7.706	(0.941)	215825	50.0000	42.34
134	Cyclohexanone	55	9.153	9.153	(0.900)	101751	1000.00	598.12
185	Isoprene	39	2.165	2.165	(0.449)	29969	50.0000	42.82
188	Isopropyl acetate	43	5.288	5.288	(0.952)	352116	50.0000	42.10
150	Allyl alcohol	57	3.350	3.350	(0.695)	118197	1000.00	846.11
195	Methyl Amyl Ketone	43	8.868	8.868	(1.083)	234995	50.0000	33.33
200	Dimethyl Disulfide	94	6.746	6.746	(0.824)	176049	50.0000	44.18

203 2-Ethylhexyl Acrylate	55	12.039	12.039 (1.184)	123953	50.0000	33.51
133 Ethyl Acrylate	55	5.947	5.947 (1.234)	329213	50.0000	45.56

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)	124399	50.0000	35.97

QC Flag Legend

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



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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\u240119.b\u011925.d
Inj Date : 19-JAN-2024 18:03
InstruID : VOA9.i
LabSampID : CCV-END

NO MANUAL INTEGRATIONS

right solutions.
right partner.

RawData

Volatiles by EPA Volatiles Organics by Method 8260C

Workorder

HS24010611

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/29/2024

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

Data File: \\NAHSTWS005\Target\chem\voa9.i\U240122.b\U012201.D Page 1
Report Date: 22-Jan-2024 12:01

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U240122.b\U012201.D
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Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U240122.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	95136			0.00- 100.00	100.00
9.194	9.180	(0.000)	50	15610			15.00- 40.00	16.41
9.194	9.180	(0.000)	75	43064			30.00- 60.00	45.27
9.194	9.180	(0.000)	96	6489			5.00- 9.00	6.82
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	90656			50.00- 0.00	95.29
9.194	9.180	(0.000)	175	7464			5.00- 9.00	8.23
9.194	9.180	(0.000)	176	87296			95.00- 101.00	96.29
9.194	9.180	(0.000)	177	6073			5.00- 9.00	6.96

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	16.41
75	30.00 - 60.00% of mass 95	45.27
96	5.00 - 9.00% of mass 95	6.82
173	Less than 2.00% of mass 174	0.00 (0.00)
174	Greater than 50.00% of mass 95	95.29
175	5.00 - 9.00% of mass 174	7.85 (8.23)
176	95.00 - 101.00% of mass 174	91.76 (96.29)
177	5.00 - 9.00% of mass 176	6.38 (6.96)

Data File: U012201.D
Spectrum: Scan 2293 (9.19)
Location of Maximum: 95.05
Number of points: 100

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.10	869	67.10	305	99.20	51	144.80	113
37.10	3910	68.00	9232	102.90	82	145.20	107
38.10	3119	69.00	8681	104.00	370	145.80	141
39.10	1673	70.10	827	104.90	114	147.20	53
40.00	1306	72.00	597	106.00	260	148.00	245
40.80	59	73.00	4325	107.00	92	149.90	129
42.90	134	74.10	14171	109.90	62	153.10	135
44.00	589	75.10	43064	111.90	70	153.80	64
45.00	772	76.10	3615	114.90	146	155.00	245
47.00	846	77.00	546	115.90	286	155.90	75
48.10	461	77.90	526	117.00	590	156.90	166
49.10	3561	78.90	2143	118.00	371	157.90	58
50.10	15610	80.00	708	118.90	550	158.80	135
51.10	4736	81.00	1935	124.00	64	160.90	74
52.10	306	82.00	610	127.90	419	169.80	84
53.10	70	83.00	116	129.00	152	170.90	60
55.10	211	85.70	85	130.10	300	171.90	854
56.10	1136	87.00	4304	131.00	173	174.00	90656
57.00	1987	88.00	4021	134.90	142	175.00	7464
57.90	83	90.90	282	136.90	178	176.00	87296
60.00	826	92.10	2428	139.50	60	177.00	6073
61.00	3871	93.10	3992	140.00	118	178.00	113
62.10	3593	94.10	11396	140.90	895		
63.00	2812	95.10	95136	142.00	108		
64.00	458	96.10	6489	143.00	961		
65.00	654	97.00	168	144.10	111		

Data File: \\NAHSTWS005\Target\chem\voa9.i\u240122.b\u012201.d Page 1

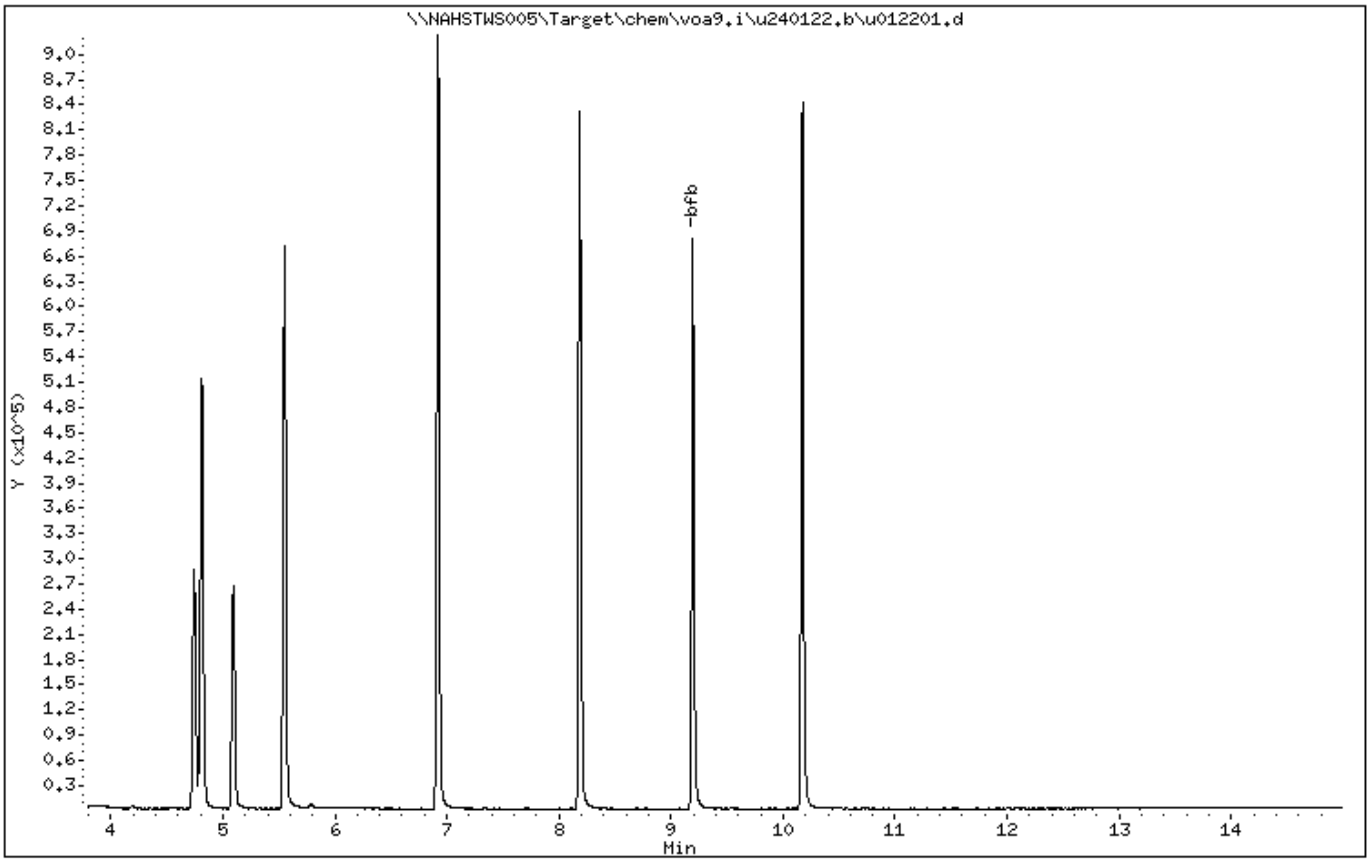
Date : 22-JAN-2024 11:28

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\u240122.b\u012201.d
Inj Date : 22-JAN-2024 11:28
InstruID : VOA9.i
LabSampID : BFB

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240122.b\U012203.D Page 1
Report Date: 29-Jan-2024 16:02

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240122.b\U012203.D
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 22-JAN-2024 12:12
Operator : PC Inst ID: VOA9.i
Smp Info : CCV;CCV;2;;;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240122.b\8260C.m
Meth Date : 29-Jan-2024 16:02 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	4.812	4.812	(1.000)	281296	50.0000	
2	Dichlorodifluoromethane	85	1.157	1.157	(0.240)	44674	50.0000	20.22
3	Chloromethane	50	1.292	1.292	(0.268)	99861	50.0000	30.94
5	Vinyl Chloride	62	1.370	1.370	(0.285)	117838	50.0000	38.22
6	Bromomethane	94	1.614	1.614	(0.335)	80741	50.0000	51.04
7	Chloroethane	64	1.693	1.693	(0.352)	94085	50.0000	45.33
8	Trichlorofluoromethane	101	1.891	1.891	(0.393)	193843	50.0000	49.60
9	Acrolein	56	2.259	2.259	(0.469)	13994	100.000	87.29
10	Acetone	43	2.401	2.401	(0.499)	95674	100.000	99.90
11	1,1-Dichloroethene	96	2.326	2.326	(0.484)	114318	50.0000	52.69
15	Iodomethane	142	2.461	2.461	(0.512)	309294	100.000	111.27
16	Acrylonitrile	53	3.057	3.057	(0.635)	117991	100.000	106.93
17	Methylene Chloride	84	2.787	2.787	(0.579)	152847	50.0000	55.85
18	Methyl tert-butyl ether	73	3.072	3.072	(0.639)	424065	50.0000	54.54
19	Carbon Disulfide	76	2.514	2.514	(0.522)	667365	100.000	104.39
20	trans-1,2-Dichloroethene	96	3.053	3.053	(0.635)	142642	50.0000	54.99
21	Vinyl Acetate	43	3.601	3.601	(0.748)	778677	100.000	99.28
22	1,1-Dichloroethane	63	3.507	3.507	(0.729)	252737	50.0000	47.77
24	2-Butanone	43	4.257	4.257	(0.885)	117335	100.000	85.15
26	2,2-Dichloropropane	77	4.178	4.178	(0.868)	194550	50.0000	52.31

27 cis-1,2-Dichloroethene	96	4.193	4.193 (0.871)	170659	50.0000	49.11
28 Chloroform	83	4.568	4.568 (0.949)	280386	50.0000	48.69

Data File: \\nahstws005\Target\chem\voa9.i\U240122.b\U012203.D Page 2
Report Date: 29-Jan-2024 16:02

		QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	Compounds							
	29 Bromochloromethane	128	4.467	4.467	(0.928)	96494	50.0000	53.67
$	30 Dibromofluoromethane	113	4.744	4.744	(0.986)	155518	50.0000	54.10
	31 1,1,1-Trichloroethane	97	4.740	4.740	(0.985)	217070	50.0000	49.60
	32 1,1-Dichloropropene	75	4.920	4.920	(0.887)	183898	50.0000	50.89
	33 1,2-Dichloroethane	62	5.171	5.171	(0.932)	199796	50.0000	47.47
	34 Carbon Tetrachloride	117	4.909	4.909	(0.885)	188391	50.0000	53.37
$	35 1,2-Dichloroethane-d4	65	5.093	5.093	(1.058)	158593	50.0000	48.15
*	36 1,4-Difluorobenzene	114	5.550	5.550	(1.000)	431915	50.0000	
	37 Benzene	78	5.138	5.138	(0.926)	568863	50.0000	48.38
	38 Trichloroethene	130	5.786	5.786	(1.043)	174231	50.0000	53.76
	39 Bromodichloromethane	83	6.277	6.277	(1.131)	211848	50.0000	55.02
	41 2-Chloroethylvinyl ether	63	6.577	6.577	(1.185)	5652	100.000	147.41
	42 1,2-Dichloropropane	63	6.007	6.007	(1.082)	154419	50.0000	48.78
	44 Dibromomethane	93	6.116	6.116	(1.102)	103371	50.0000	50.47
	45 4-Methyl-2-Pentanone	43	6.851	6.851	(0.837)	308704	100.000	99.07
	46 cis-1,3-Dichloropropene	75	6.690	6.690	(1.205)	259901	50.0000	52.30
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	432097	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	532269	50.0000	53.51
	50 Toluene	91	6.978	6.978	(0.853)	643243	50.0000	53.39
	51 trans-1,3-Dichloropropene	75	7.196	7.196	(1.296)	217446	50.0000	51.98
	52 2-Hexanone	43	7.589	7.589	(0.927)	211558	100.000	97.01
	53 1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	131604	50.0000	57.30
	54 1,3-Dichloropropane	76	7.496	7.496	(0.916)	272231	50.0000	50.88
	55 Dibromochloromethane	129	7.691	7.691	(0.940)	191658	50.0000	59.63
	56 Tetrachloroethene	164	7.454	7.454	(0.911)	151767	50.0000	58.85
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	163559	50.0000	54.48
	58 1-Chlorohexane	55	8.197	8.197	(1.477)	125074	50.0000	51.64
	59 Chlorobenzene	112	8.208	8.208	(1.003)	464342	50.0000	52.90
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	178673	50.0000	58.19
	61 Ethylbenzene	106	8.305	8.305	(1.015)	224434	50.0000	54.62
	62 m,p-Xylenes	106	8.407	8.407	(1.027)	566270	100.000	114.63
	63 o-Xylene	106	8.744	8.744	(1.068)	291564	50.0000	57.39
	64 Styrene	104	8.759	8.759	(1.070)	501992	50.0000	59.35
	66 Bromoform	173	8.916	8.916	(1.089)	128872	50.0000	58.43
	67 Isopropylbenzene	105	9.063	9.063	(1.107)	715732	50.0000	58.25
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	215204	50.0000	54.31
$	69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	194207	50.0000	51.60
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	243382	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.920)	219510	50.0000	47.51
	73 n-Propylbenzene	91	9.411	9.411	(0.925)	796138	50.0000	55.70
	74 Bromobenzene	156	9.317	9.317	(0.916)	216398	50.0000	52.94
	75 1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	579785	50.0000	57.08
	76 2-Chlorotoluene	91	9.482	9.482	(0.932)	491657	50.0000	51.11
	77 4-Chlorotoluene	91	9.576	9.576	(0.941)	564644	50.0000	51.75
	78 tert-Butylbenzene	119	9.835	9.835	(0.967)	507168	50.0000	55.58
	79 1,2,4-Trimethylbenzene	105	9.876	9.876	(0.971)	586677	50.0000	57.63
	81 sec-Butylbenzene	105	10.022	10.022	(0.985)	663983	50.0000	56.43
	82 p-Isopropyltoluene	119	10.146	10.146	(0.997)	611911	50.0000	60.10
	83 1,3-Dichlorobenzene	146	10.112	10.112	(0.994)	382755	50.0000	52.84
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	402324	50.0000	52.43
	87 n-Butylbenzene	91	10.491	10.491	(1.031)	491131	50.0000	57.48
	88 1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	386614	50.0000	53.06

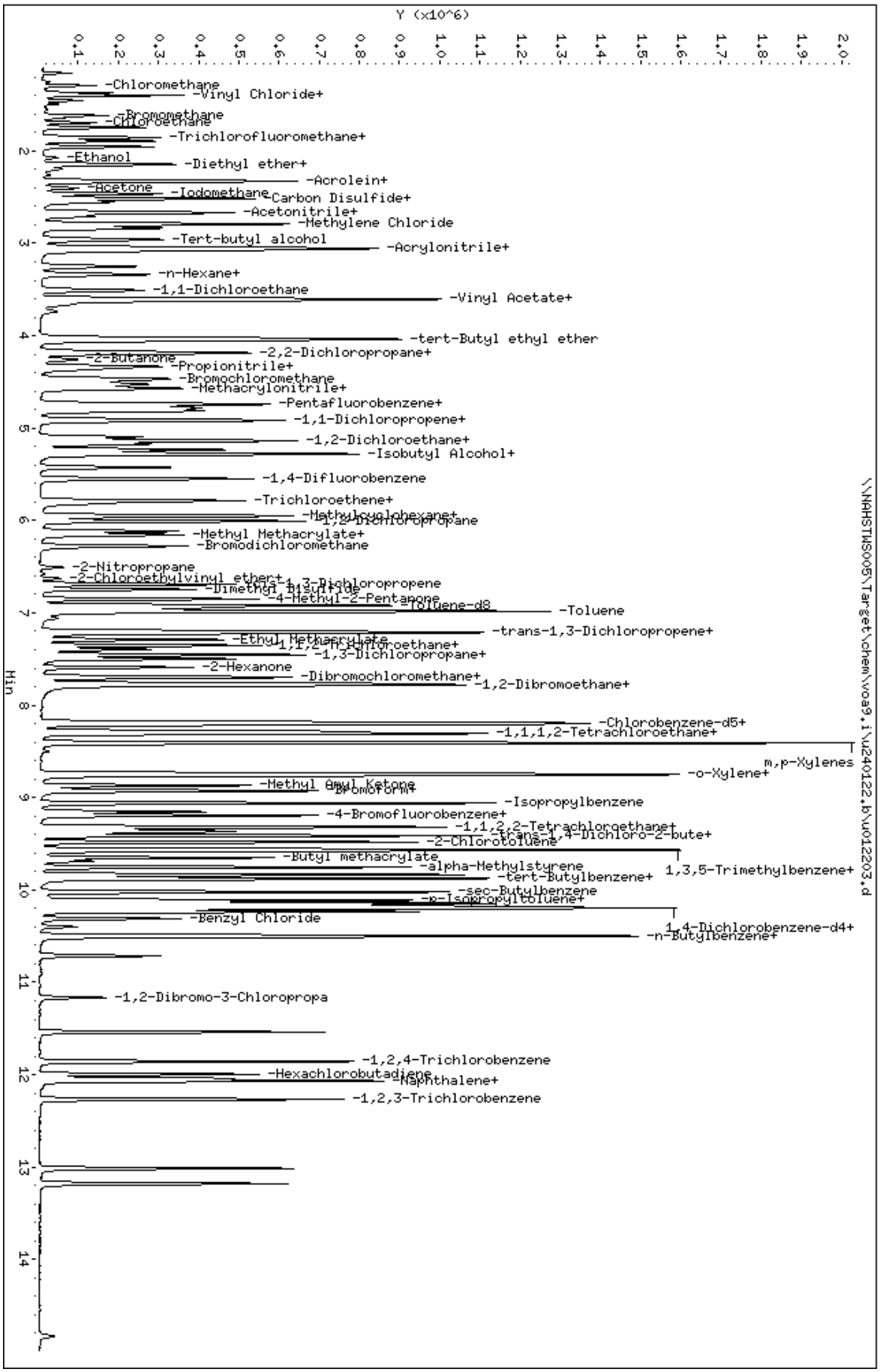
89	1,2-Dibromo-3-Chloropropane	155	11.166	11.166 (1.098)	38381	50.0000	53.73
90	1,2,4-Trichlorobenzene	180	11.855	11.855 (1.165)	255305	50.0000	56.79

Data File: \\nahstws005\Target\chem\voa9.i\U240122.b\U012203.D Page 3
Report Date: 29-Jan-2024 16:02

	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)	108642	50.0000	60.29
92	Naphthalene	128	12.065	12.065	(1.186)	621873	50.0000	57.36
93	1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	246077	50.0000	54.28
M 94	1,2-Dichloroethylene (total)	96				313301	100.000	(a)
135	1,4-Dioxane	88	6.165	6.165	(1.281)	41979	1000.00	940.60
141	Cyclohexane	56	4.782	4.782	(0.994)	182528	50.0000	45.03
138	Freon TF	101	2.330	2.330	(0.484)	129644	50.0000	62.11
140	1,3-Butadiene	54	1.396	1.396	(0.290)	99059	50.0000	35.06
147	Methylcyclohexane	55	5.944	5.944	(1.071)	332063	50.0000	51.87
146	Methyl Acetate	43	2.705	2.705	(0.562)	135298	50.0000	48.32
148	Tert-Butyl alcohol	59	2.956	2.956	(0.614)	356636	1000.00	1132.51
149	Isopropyl Alcohol	45	2.555	2.555	(0.531)	212911	1000.00	1197.41
72	trans-1,4-Dichloro-2-butene	53	9.377	9.377	(1.146)	43492	50.0000	55.93
12	Isobutyl Alcohol	43	5.280	5.280	(1.097)	389365	1000.00	922.93
13	Acetonitrile	39	2.667	2.667	(0.554)	156138	500.000	515.74
14	Allyl Chloride	41	2.667	2.667	(0.554)	365024	50.0000	52.77
25	Methacrylonitrile	41	4.489	4.489	(0.933)	147429	50.0000	73.40
40	Methyl Methacrylate	41	6.154	6.154	(1.279)	122963	50.0000	44.28
43	2-Nitropropane	43	6.506	6.506	(1.352)	34185	50.0000	47.33
4	Propionitrile	54	4.332	4.332	(0.900)	213442	500.000	457.63
136	n-Hexane	57	3.338	3.338	(0.694)	136729	50.0000	52.29
131	Methyl Acrylate	55	4.362	4.362	(0.907)	173869	50.0000	47.05
200	Dimethyl Disulfide	94	6.746	6.746	(0.824)	196532	50.0000	51.31
23	Chloroprene	53	2.154	2.154	(0.448)	45430	50.0000	47.34(M)
49	Ethyl Methacrylate	69	7.289	7.289	(1.313)	219800	50.0000	51.84
166	1,2,3-Trimethylbenzene	105	10.232	10.232	(1.006)	506464	50.0000	50.42
167	Ethanol	45	2.075	2.075	(0.431)	37444	1000.00	1062.06
164	Dicyclopentadiene	66	10.198	10.198	(1.003)	600686	50.0000	46.29
145	alpha-Methylstyrene	118	9.752	9.752	(0.959)	268294	50.0000	54.24
142	Tetrahydrofuran	42	4.538	4.538	(0.943)	53741	100.000	90.00
156	Diisopropyl ether	45	3.616	3.616	(0.751)	451611	50.0000	46.08
151	4-Methyl-2-pentanol	45	7.214	7.214	(1.300)	623358	1000.00	895.91
150	Allyl alcohol	57	3.338	3.338	(0.694)	136729	1000.00	1045.80
86	Benzyl Chloride	91	10.311	10.311	(1.260)	242678	50.0000	61.76
162	Butyl acrylate	55	8.733	8.733	(1.067)	257880	50.0000	41.56
139	Diethyl ether	59	2.139	2.139	(0.445)	117202	50.0000	51.09
203	2-Ethylhexyl Acrylate	55	12.039	12.039	(1.184)	149372	50.0000	41.98
134	Cyclohexanone	55	9.153	9.153	(0.900)	158587	1000.00	984.83
130	Ethyl Acetate	43	4.335	4.335	(0.901)	150627	50.0000	44.08
189	n-Butyl acetate	43	7.706	7.706	(0.941)	248117	50.0000	51.55
182	Epichlorohydrin	57	6.630	6.630	(1.195)	36802	200.000	219.33
132	n-Butanol	56	5.816	5.816	(1.209)	90630	1000.00	991.32
133	Ethyl Acrylate	55	5.944	5.944	(1.235)	332063	50.0000	49.11
163	Butyl methacrylate	41	9.647	9.647	(0.948)	136318	50.0000	41.21
174	tert-Amyl methyl ether	73	5.284	5.284	(1.098)	425856	50.0000	48.80
175	tert-Butyl ethyl ether	59	4.043	4.043	(0.840)	427251	50.0000	48.90
187	n-Amyl acetate	43	8.931	8.931	(1.091)	253088	50.0000	46.21
188	Isopropyl acetate	43	5.280	5.280	(0.951)	389365	50.0000	48.86

QC Flag Legend

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


Y (x10^6)
Min
-Chloromethane
-Vinyl Chloride+
-Bromomethane
-Chloroethane
-Trichlorofluoromethane+
-Ethanol
-Diethyl ether+
-Acrolein+
-Acetone
-Iodomethane
-Carbon Disulfide+
-Acetonitrile+
-Methylene Chloride
-Tert-butyl alcohol
-Acrylonitrile+
-n-Hexane+
-1,1-Dichloroethane
-Vinyl Acetate+
-tert-Butyl ethyl ether
-2,2-Dichloropropane+
-2-Butanone
-Propionitrile+
-Bromochloromethane
-Methacrylonitrile+
-Pentafluorobenzene+
-1,1-Dichloropropene+
-1,2-Dichloroethane+
-Isobutyl Alcohol+
-1,4-Difluorobenzene
-Trichloroethene+
-Methylcyclohexane+
-1,2-Dichloropropane
-Methyl Methacrylate+
-Bromodichloromethane
-2-Nitropropane
-2-Chloroethylvinyl ether+
-cis-1,3-Dichloropropene
-Dimethyl disulfide
-4-Methyl-2-Pentanone
-Toluene-d8
-Toluene
-trans-1,3-Dichloropropene+
-Ethyl Methacrylate
-1,1,2-Trichloroethane+
-1,3-Dichloropropane+
-2-Hexanone
-Dibromochloromethane+
-1,2-Dibromoethane+
-Chlorobenzene-d5+
-1,1,1,2-Tetrachloroethane+
m,p-Xylenes
-o-Xylene+
-Methyl Amyl Ketone
-Bromoform+
-Isopropylbenzene
-4-Bromofluorobenzene+
-1,1,2,2-Tetrachloroethane+
-trans-1,4-Dichloro-2-bute+
-2-Chlorotoluene
-Butyl methacrylate
-alpha-Methylstyrene
1,3,5-Trimethylbenzene+
-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
\\NAHSTWS005\Target\chem\voa9.i\u240122.b\u012203.d
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Client ID: CCV
Sample Info: CCV,CCV,2,,,
Purge Volume: 5.0
Column phase: DB624
Instrument: VOA9.i
Operator: PC
Column diameter: 0.18
Page 1

Data File : \\nahstws005\target\chem\voa9.i\u240122.b\u012203.d
Inj Date : 22-JAN-2024 12:12
InstruID : VOA9.i
LabSampID : CCV

Chloroprene (126-99-8)

Reason Code:

BEFORE

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HEIGHT
27376
29-Jan-2024
16:02
firat
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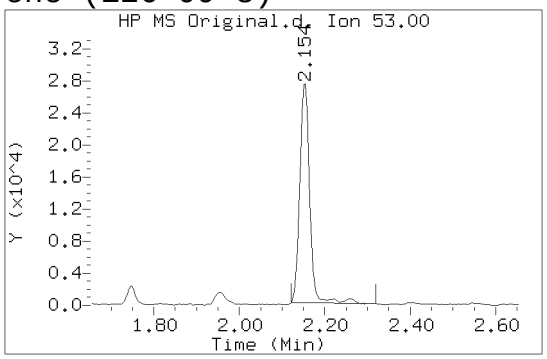

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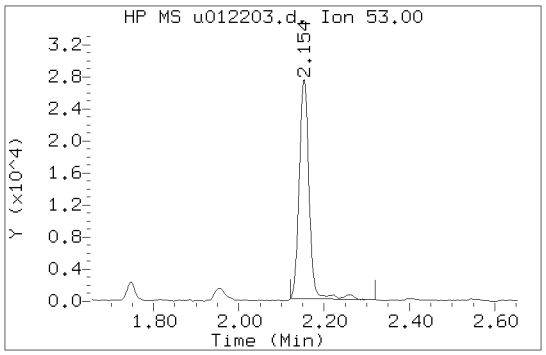

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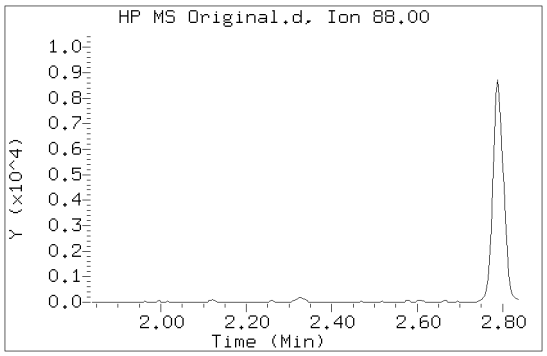

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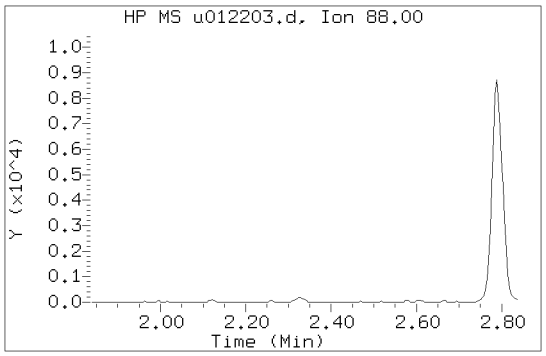

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Report Date: 29-Jan-2024 16:02

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240122.b\U012205.D
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Operator : PC Inst ID: VOA9.i
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Misc Info : V9;WATER;0;1;
Comment   :
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Meth Date : 29-Jan-2024 16:02 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 4 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.sub
Target Version: 4.14
Processing Host: 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	4.812	(1.000)	300975	50.0000	
2	Dichlorodifluoromethane	85	1.164	1.157	(0.242)	17825	8.08753	8.08
3	Chloromethane	50	1.299	1.292	(0.270)	44675	12.9396	12.93
5	Vinyl Chloride	62	1.378	1.370	(0.286)	50921	15.4387	15.43
6	Bromomethane	94	1.621	1.614	(0.337)	41699	24.9188	24.91
7	Chloroethane	64	1.700	1.693	(0.353)	40907	18.4206	18.42
8	Trichlorofluoromethane	101	1.895	1.891	(0.394)	89315	21.3633	21.36
9	Acrolein	56	2.266	2.259	(0.471)	6330	36.9056	36.90
10	Acetone	43	2.409	2.401	(0.500)	40438	35.7797	35.77
11	1,1-Dichloroethene	96	2.334	2.326	(0.485)	52036	22.4162	22.41
15	Iodomethane	142	2.469	2.461	(0.513)	106177	38.7780	38.77
16	Acrylonitrile	53	3.068	3.057	(0.637)	50219	42.5361	42.53
17	Methylene Chloride	84	2.795	2.787	(0.580)	66613	22.5945	22.59
18	Methyl tert-butyl ether	73	3.080	3.072	(0.640)	186394	22.4087	22.40
19	Carbon Disulfide	76	2.521	2.514	(0.524)	289345	42.3018	42.30
20	trans-1,2-Dichloroethene	96	3.061	3.053	(0.636)	64601	23.2793	23.27
21	Vinyl Acetate	43	3.608	3.601	(0.749)	319744	38.1033	38.10
22	1,1-Dichloroethane	63	3.514	3.507	(0.730)	109535	19.3515	19.35
24	2-Butanone	43	4.268	4.257	(0.886)	49394	33.5023	33.50
26	2,2-Dichloropropane	77	4.182	4.178	(0.868)	81312	20.4335	20.43

27 cis-1,2-Dichloroethene	96	4.197	4.193 (0.872)	74495	20.0395	20.03
28 Chloroform	83	4.572	4.568 (0.949)	122559	19.8924	19.89

Data File: \\nahstws005\Target\chem\voa9.i\U240122.b\U012205.D Page 2
Report Date: 29-Jan-2024 16:02

		QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	29 Bromochloromethane	128	4.470	4.467	(0.928)	41786	21.7242	21.72
$	30 Dibromofluoromethane	113	4.748	4.744	(0.986)	169121	55.0067	55.00
	31 1,1,1-Trichloroethane	97	4.744	4.740	(0.985)	94547	20.1933	20.19
	32 1,1-Dichloropropene	75	4.924	4.920	(0.887)	79431	20.4572	20.45
	33 1,2-Dichloroethane	62	5.175	5.171	(0.932)	86017	19.0220	19.02
	34 Carbon Tetrachloride	117	4.913	4.909	(0.885)	81467	21.4796	21.47
$	35 1,2-Dichloroethane-d4	65	5.096	5.093	(1.058)	173332	49.1283	49.12
*	36 1,4-Difluorobenzene	114	5.554	5.550	(1.000)	464117	50.0000	
	37 Benzene	78	5.138	5.138	(0.925)	245955	19.4673	19.46
	38 Trichloroethene	130	5.790	5.786	(1.043)	76135	21.8640	21.86
	39 Bromodichloromethane	83	6.277	6.277	(1.130)	86889	21.0010	21.00
	41 2-Chloroethylvinyl ether	63	6.581	6.577	(1.185)	2352	59.5599	59.55
	42 1,2-Dichloropropane	63	6.007	6.007	(1.082)	64225	18.8811	18.88
	44 Dibromomethane	93	6.120	6.116	(1.102)	44357	20.1554	20.15
	45 4-Methyl-2-Pentanone	43	6.854	6.851	(0.837)	122048	37.4159	37.41
	46 cis-1,3-Dichloropropene	75	6.690	6.690	(1.205)	100495	19.7709	19.77
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	449675	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	563074	54.3946	54.39
	50 Toluene	91	6.982	6.978	(0.853)	267035	21.2978	21.29
	51 trans-1,3-Dichloropropene	75	7.196	7.196	(1.296)	82508	19.5048	19.50
	52 2-Hexanone	43	7.593	7.589	(0.928)	80381	35.4213	35.42
	53 1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	54090	21.8210	21.82
	54 1,3-Dichloropropane	76	7.499	7.496	(0.916)	115493	20.7452	20.74
	55 Dibromochloromethane	129	7.690	7.691	(0.940)	74809	22.3690	22.36
	56 Tetrachloroethene	164	7.458	7.454	(0.911)	62827	23.4099	23.40
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	68103	21.7978	21.79
	58 1-Chlorohexane	55	8.197	8.197	(1.476)	52894	20.3241	20.32
	59 Chlorobenzene	112	8.208	8.208	(1.003)	199313	21.8219	21.82
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	73047	22.8633	22.86
	61 Ethylbenzene	106	8.305	8.305	(1.015)	94404	22.0796	22.07
	62 m,p-Xylenes	106	8.410	8.407	(1.027)	235543	45.8209	45.82
	63 o-Xylene	106	8.748	8.744	(1.069)	117697	22.2631	22.26
	64 Styrene	104	8.763	8.759	(1.071)	203958	23.1736	23.17
	66 Bromoform	173	8.920	8.916	(1.090)	49987	22.4516	22.45
	67 Isopropylbenzene	105	9.062	9.063	(1.107)	297286	23.2515	23.25
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	87684	21.1625	21.16
$	69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	205583	52.5154	52.51
*	70 1,4-Dichlorobenzene-d4	152	10.168	10.172	(1.000)	249772	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.921)	87967	18.5527	18.55
	73 n-Propylbenzene	91	9.411	9.411	(0.926)	328474	22.3962	22.39
	74 Bromobenzene	156	9.317	9.317	(0.916)	89513	21.3410	21.34
	75 1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	237473	22.7813	22.78
	76 2-Chlorotoluene	91	9.482	9.482	(0.933)	203626	20.6276	20.62
	77 4-Chlorotoluene	91	9.576	9.576	(0.942)	233197	20.8297	20.82
	78 tert-Butylbenzene	119	9.835	9.835	(0.967)	209382	22.3628	22.36
	79 1,2,4-Trimethylbenzene	105	9.876	9.876	(0.971)	239061	22.8830	22.88
	81 sec-Butylbenzene	105	10.022	10.022	(0.986)	273455	22.6495	22.64
	82 p-Isopropyltoluene	119	10.146	10.146	(0.998)	247070	23.6465	23.64
	83 1,3-Dichlorobenzene	146	10.116	10.112	(0.995)	160868	21.6432	21.64
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	166881	21.1925	21.19
	87 n-Butylbenzene	91	10.491	10.491	(1.032)	194929	22.2309	22.23
	88 1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	162165	21.6866	21.68

89	1,2-Dibromo-3-Chloropropane	155	11.169	11.166 (1.098)	14729	21.4222	21.42
90	1,2,4-Trichlorobenzene	180	11.859	11.855 (1.166)	101482	21.9984	21.99

Data File: \\nahstws005\Target\chem\voa9.i\U240122.b\U012205.D Page 3
Report Date: 29-Jan-2024 16:02

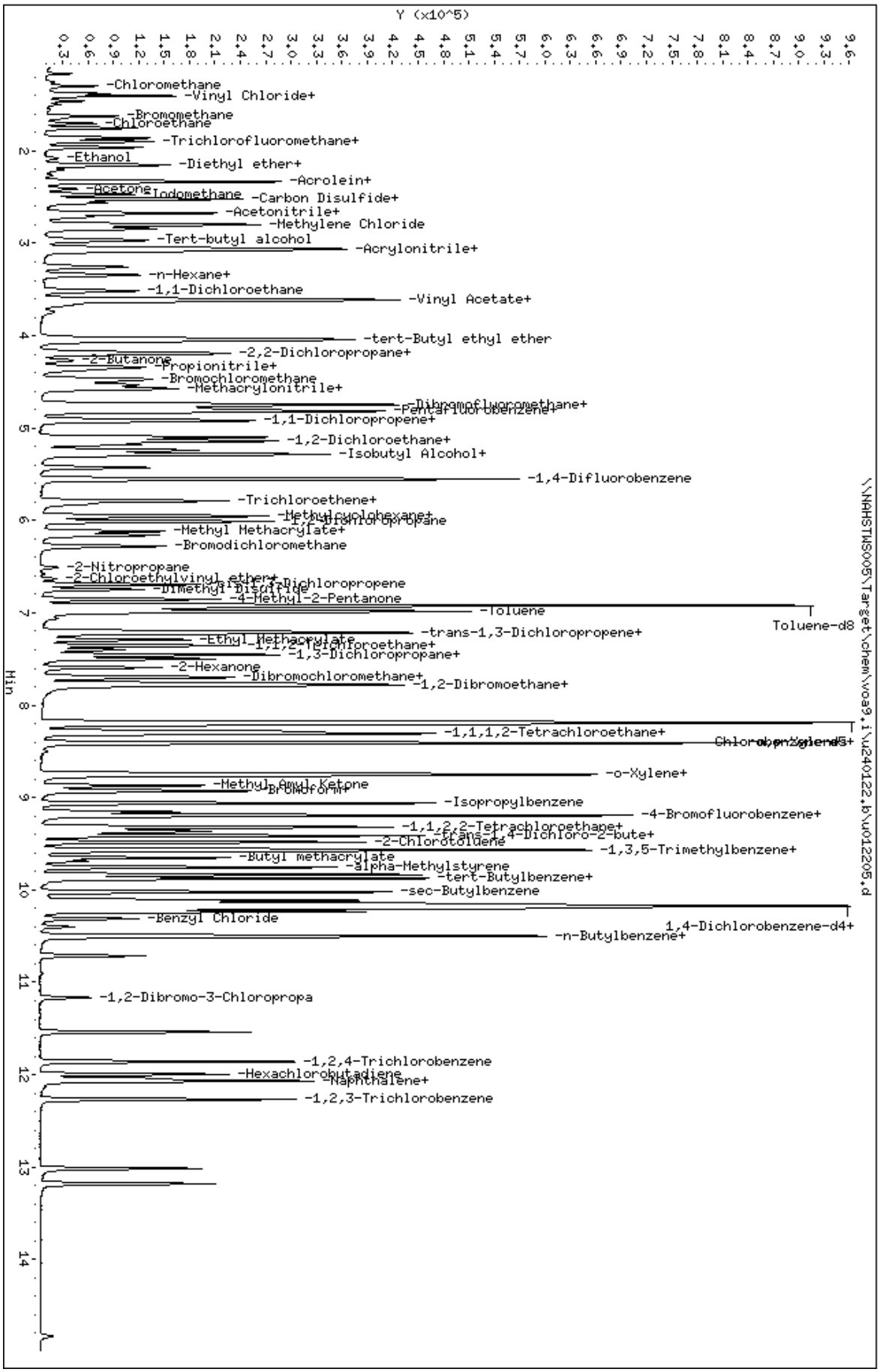
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	91 Hexachlorobutadiene	225	11.998	11.998	(1.180)	43939	23.7611	23.76
	92 Naphthalene	128	12.069	12.065	(1.187)	239983	21.5703	21.57
	93 1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	99093	21.3010	21.30
M	94 1,2-Dichloroethylene (total)	96				139096	42.8485	42.84
M	95 Xylenes (total)	106				353240	65.7765	65.77
	135 1,4-Dioxane	88	6.168	6.165	(1.281)	16825	352.340	352.34
	141 Cyclohexane	56	4.785	4.782	(0.994)	80736	18.6165	18.61
	138 Freon TF	101	2.337	2.330	(0.485)	58976	26.9360	26.93
	140 1,3-Butadiene	54	1.404	1.396	(0.292)	43914	14.5275	14.52
	147 Methylcyclohexane	55	5.947	5.944	(1.071)	137079	19.9269	19.92
	146 Methyl Acetate	43	2.712	2.705	(0.563)	56987	19.0245	19.02
	148 Tert-Butyl alcohol	59	2.963	2.956	(0.615)	149852	444.748	444.74
	149 Isopropyl Alcohol	45	2.558	2.555	(0.531)	87246	453.968	453.96
	72 trans-1,4-Dichloro-2-butene	53	9.377	9.377	(1.146)	17143	21.1841	21.18
	12 Isobutyl Alcohol	43	5.284	5.280	(1.097)	162698	360.436	360.43
	13 Acetonitrile	39	2.671	2.667	(0.555)	67281	207.707	207.70
	14 Allyl Chloride	41	2.671	2.667	(0.555)	154845	20.9250	20.92
	25 Methacrylonitrile	41	4.497	4.489	(0.934)	34262	15.9430	15.94
	40 Methyl Methacrylate	41	6.157	6.154	(1.279)	51711	17.4067	17.40
	43 2-Nitropropane	43	6.506	6.506	(1.351)	13728	17.7669	17.76
	4 Propionitrile	54	4.335	4.332	(0.900)	93641	187.647	187.64(a)
	136 n-Hexane	57	3.342	3.338	(0.694)	60623	21.6687	21.66
	131 Methyl Acrylate	55	4.369	4.362	(0.907)	73687	18.6390	18.63
	200 Dimethyl Disulfide	94	6.746	6.746	(0.824)	62086	18.2217	18.22
	23 Chloroprene	53	2.157	2.154	(0.448)	20663	20.1264	20.12(M)
	49 Ethyl Methacrylate	69	7.289	7.289	(1.312)	87766	19.2669	19.26
	166 1,2,3-Trimethylbenzene	105	10.232	10.232	(1.006)	204821	19.8712	19.87
	167 Ethanol	45	2.082	2.075	(0.433)	15156	400.670	400.67
	164 Dicyclopentadiene	66	10.198	10.198	(1.003)	250722	18.8302	18.83
	145 alpha-Methylstyrene	118	9.752	9.752	(0.959)	103230	21.3349	21.33
	142 Tetrahydrofuran	42	4.542	4.538	(0.943)	22312	34.9246	34.92
	156 Diisopropyl ether	45	3.619	3.616	(0.752)	190557	18.1741	18.17
	151 4-Methyl-2-pentanol	45	7.214	7.214	(1.299)	244831	356.544	356.54
	150 Allyl alcohol	57	3.342	3.338	(0.694)	60623	433.374	433.37
	86 Benzyl Chloride	91	10.311	10.311	(1.260)	78880	21.4886	21.48
	162 Butyl acrylate	55	8.733	8.733	(1.067)	92329	16.4354	16.43
	139 Diethyl ether	59	2.146	2.139	(0.446)	51738	21.0820	21.08
	203 2-Ethylhexyl Acrylate	55	12.043	12.039	(1.184)	51388	15.7593	15.75
	134 Cyclohexanone	55	9.152	9.153	(0.900)	62693	379.366	379.36(a)
	130 Ethyl Acetate	43	4.343	4.335	(0.902)	61108	16.7139	16.71
	189 n-Butyl acetate	43	7.705	7.706	(0.941)	92637	18.4946	18.49
	182 Epichlorohydrin	57	6.630	6.630	(1.194)	13853	76.8348	76.83
	132 n-Butanol	56	5.824	5.816	(1.209)	33510	342.573	342.57(a)
	133 Ethyl Acrylate	55	5.947	5.944	(1.235)	137079	18.9480	18.94
	163 Butyl methacrylate	41	9.651	9.647	(0.949)	60379	19.3280	19.32
	174 tert-Amyl methyl ether	73	5.288	5.284	(1.098)	181682	19.4601	19.46
	175 tert-Butyl ethyl ether	59	4.050	4.043	(0.841)	179026	19.1529	19.15
	187 n-Amyl acetate	43	8.931	8.931	(1.091)	96436	16.9199	16.91
	188 Isopropyl acetate	43	5.284	5.280	(0.951)	162108	18.9331	18.93

QC Flag Legend

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

QC Flag Legend

M - Compound response manually integrated.



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Sample Info: VLCSW-240122;VLCSW-240122;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\u240122.b\u012205.d
Inj Date : 22-JAN-2024 12:57
InstruID : VOA9.i
LabSampID : VLCSW-240122

Chloroprene (126-99-8)

Reason Code:

BEFORE

MASS
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HEIGHT
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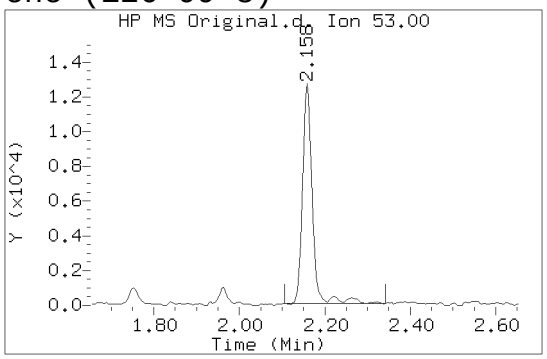
29-Jan-2024
16:02
firat
tastan



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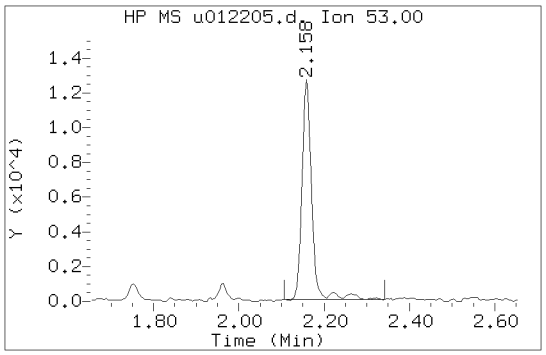

BEFORE

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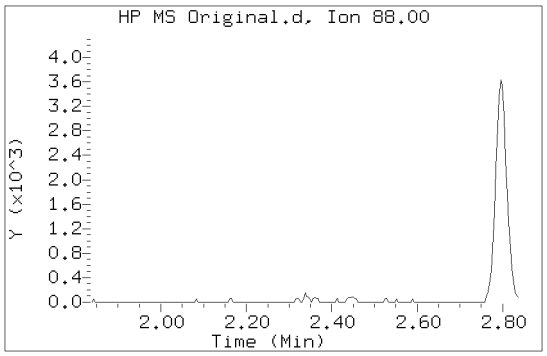

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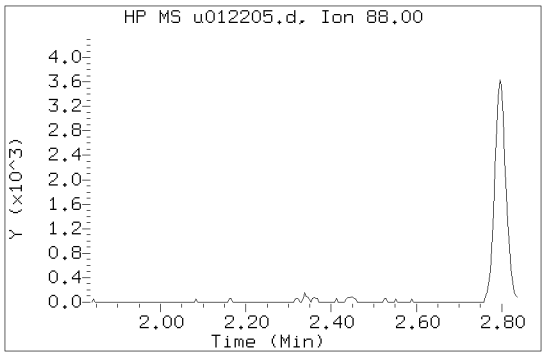

Data File: \\nahstws005\Target\chem\voa9.i\U240122.b\U012207.D Page 1
Report Date: 29-Jan-2024 16:02

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240122.b\U012207.D
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Inj Date : 22-JAN-2024 13:41
Operator : PC Inst ID: VOA9.i
Smp Info : VBLKW-240122;VBLKW-240122;3;;BLANK
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240122.b\8260C.m
Meth Date : 29-Jan-2024 16:02 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

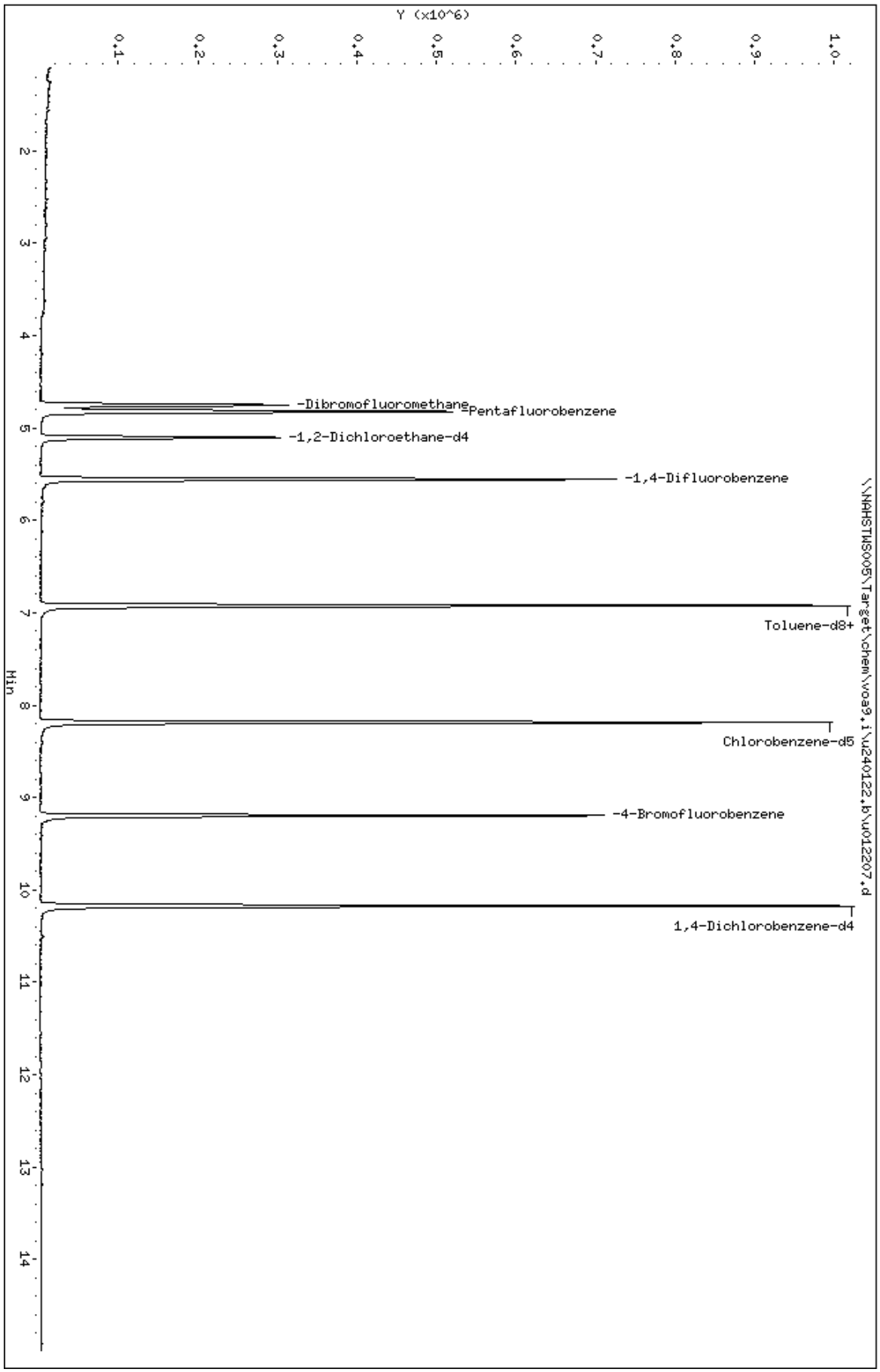
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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	4.819	4.812	(1.000)	391587	50.0000	
$ 30 Dibromofluoromethane	113	4.752	4.744	(0.986)	189311	47.1820	47.18
$ 35 1,2-Dichloroethane-d4	65	5.100	5.093	(1.058)	192473	42.2628	42.26
* 36 1,4-Difluorobenzene	114	5.554	5.550	(1.000)	592018	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	568454	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	639097	48.8383	48.83
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	213479	42.9062	42.90
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	295747	50.0000	
43 2-Nitropropane	43	6.922	6.506	(1.436)	2627	2.61316	2.61(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).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Client ID: VBLKW-240122
Sample Info: VBLKW-240122;VBLKW-240122;3;;BLANK
Purge Volume: 5.0
Column phase: DB624
Instrument: VOA9.i
Operator: PC
Column diameter: 0.18
Page 1
Y (x10^6)
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
Min
2
3
4
5
6
7
8
9
10
11
12
13
14
-Dibromofluoromethane
Pentafluorobenzene
-1,2-Dichloroethane-d4
-1,4-Difluorobenzene
Toluene-d8+
Chlorobenzene-d5
-4-Bromofluorobenzene
1,4-Dichlorobenzene-d4
\\NAHSTWS005\Target\chem\voa9.i\u240122.b\u012207.d

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InstruID : VOA9.i
LabSampID : VBLKW-240122

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240122.b\U012208.D Page 1
Report Date: 29-Jan-2024 16:02

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240122.b\U012208.D
Lab Smp Id: HS24010611-08 Client Smp ID: HS24010611-08
Inj Date : 22-JAN-2024 14:04
Operator : PC Inst ID: VOA9.i
Smp Info : HS24010611-08;HS24010611-08;;;
Misc Info : V9;WATER;0;50;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240122.b\8260C.m
Meth Date : 29-Jan-2024 16:02 VOA9.i 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: 8260_GB.sub
Target Version: 4.14
Processing Host: NAHSTW7066

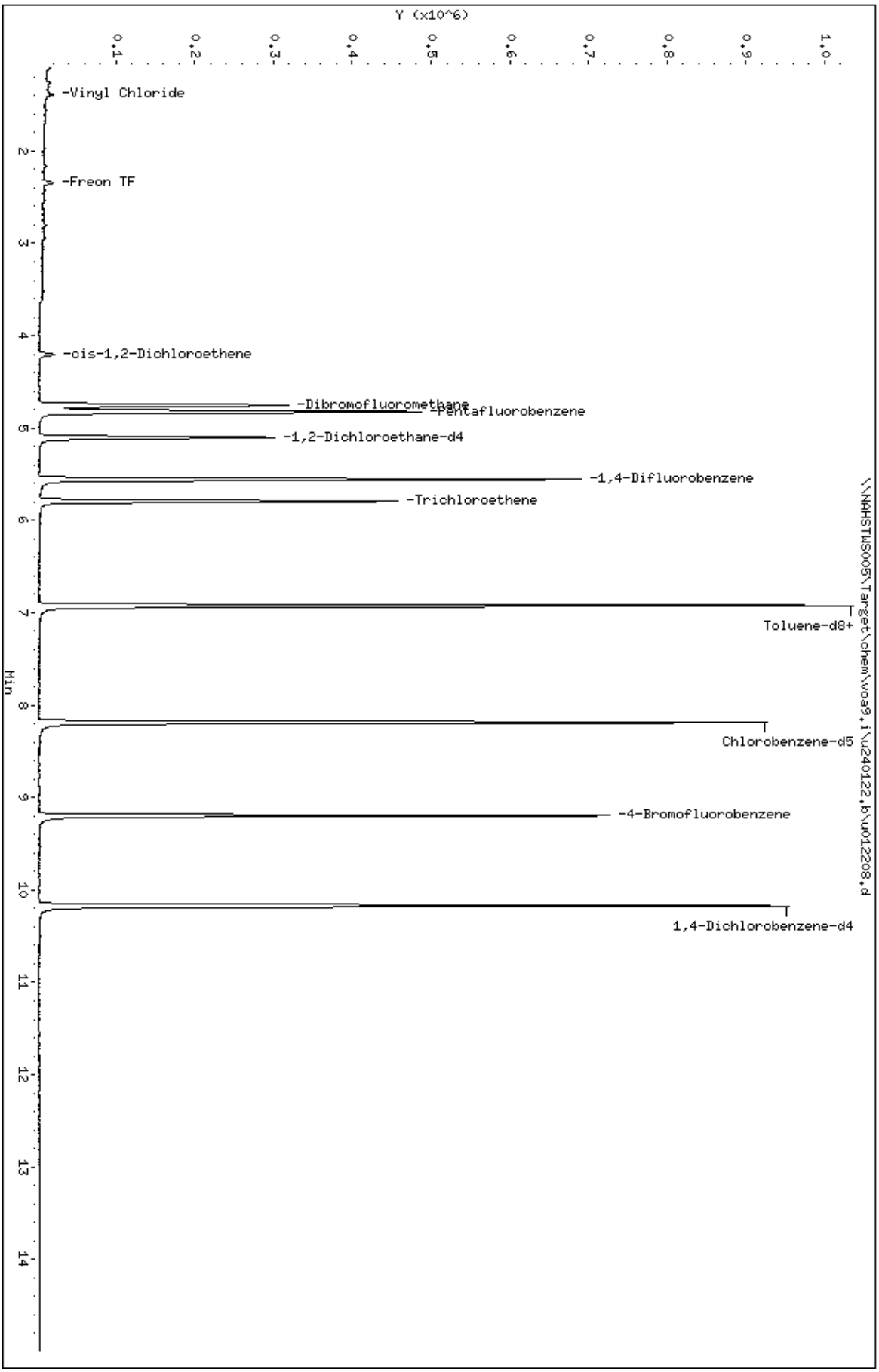
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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	4.823	4.812	(1.000)	371022	50.0000	
	5 Vinyl Chloride	62	1.385	1.370	(0.287)	5937	1.46020	73.01(a)
	27 cis-1,2-Dichloroethene	96	4.204	4.193	(0.872)	10705	2.33602	116.80(a)
$	30 Dibromofluoromethane	113	4.755	4.744	(0.986)	191381	50.4105	50.41
$	35 1,2-Dichloroethane-d4	65	5.100	5.093	(1.058)	195954	45.2604	45.26
*	36 1,4-Difluorobenzene	114	5.558	5.550	(1.000)	557491	50.0000	
	38 Trichloroethene	130	5.794	5.786	(1.042)	158907	37.9908	1899.53
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	535970	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	654027	53.0084	53.00
$	69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	218621	46.7145	46.71
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	280484	50.0000	
M	94 1,2-Dichloroethylene (total)	96				10705	2.67509	133.75(a)
	138 Freon TF	101	2.341	2.330	(0.485)	4743	1.77695	88.84(a)
	43 2-Nitropropane	43	6.922	6.506	(1.435)	2044	2.14593	107.29(a)

QC Flag Legend

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



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Date : 22-JAN-2024 14:04
Client ID: HS240106l1-08
Sample Info: HS240106l1-08;HS240106l1-08;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa9.i\u240122.b\u012208.d Page 2

Date : 22-JAN-2024 14:04

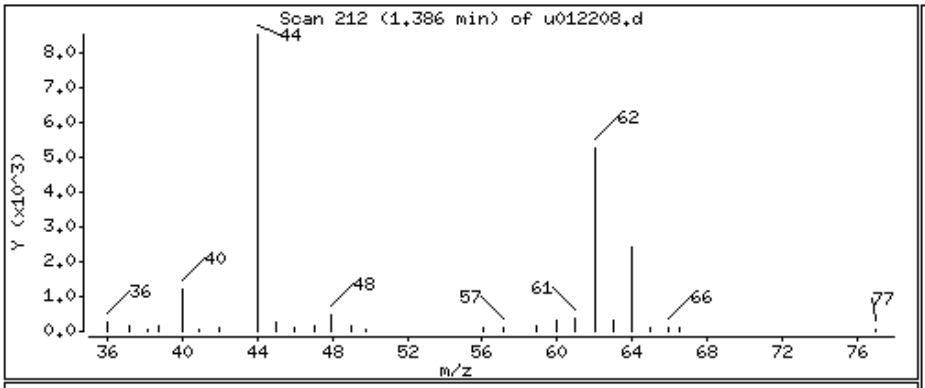
Client ID: HS24010611-08 Instrument: VOA9.i

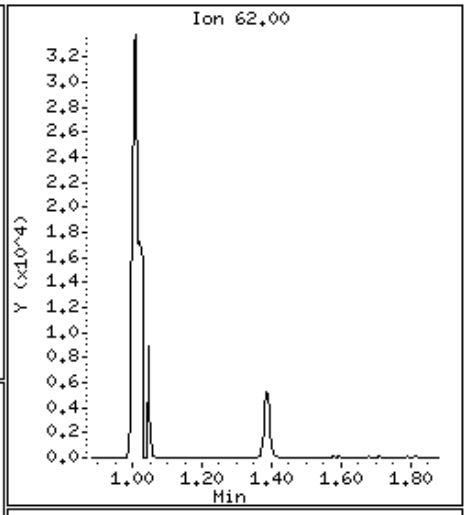
Sample Info: HS24010611-08;HS24010611-08;;;

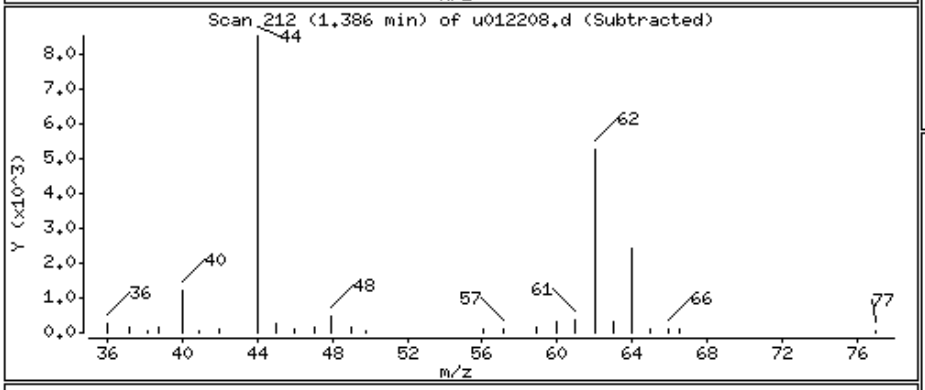
Purge Volume: 5.0 Operator: PC

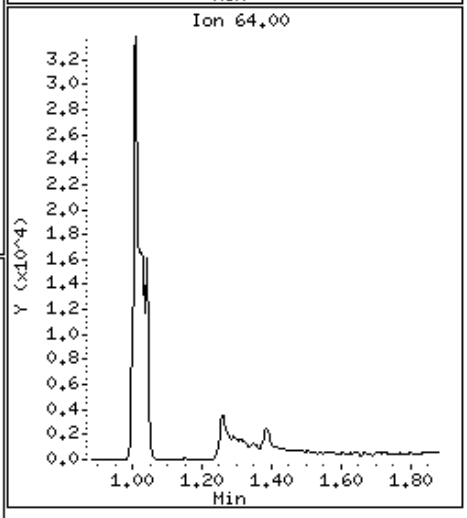
Column phase: DB624 Column diameter: 0.18

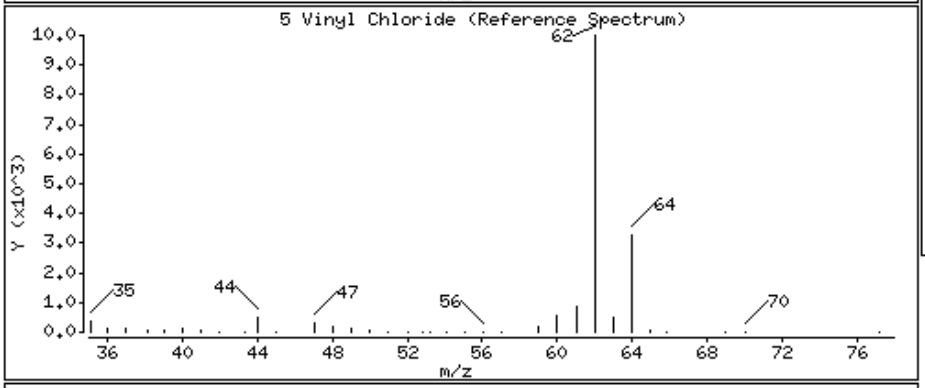
5 Vinyl Chloride Concentration: 73.01 ug/l

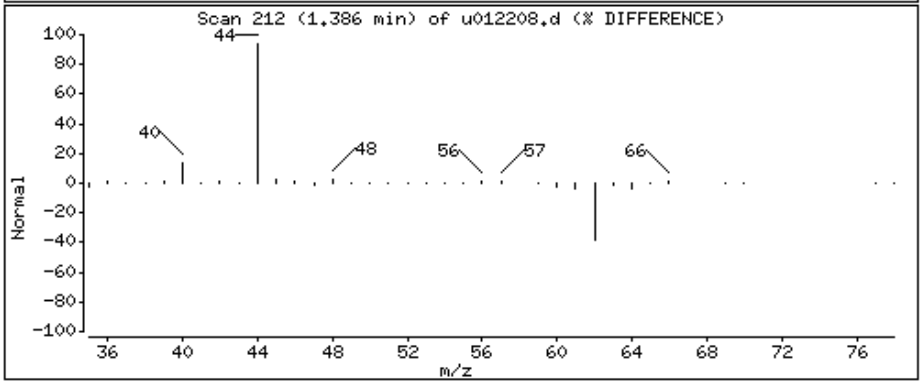












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240122.b\u012208.d Page 3

Date : 22-JAN-2024 14:04

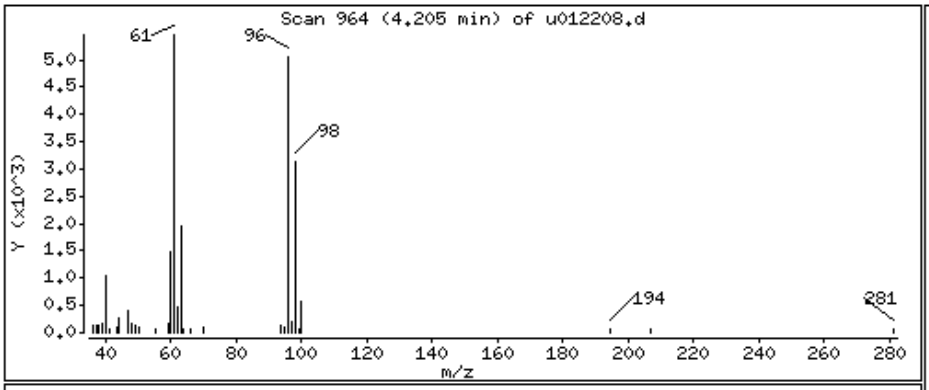
Client ID: HS24010611-08 Instrument: VOA9.i

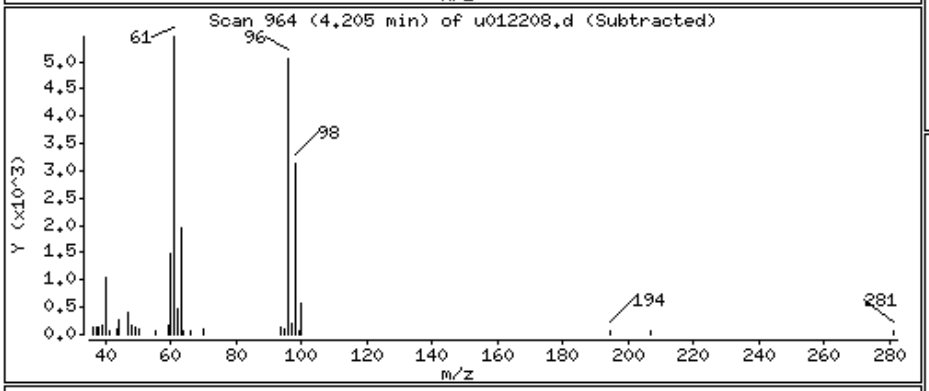
Sample Info: HS24010611-08;HS24010611-08;;;

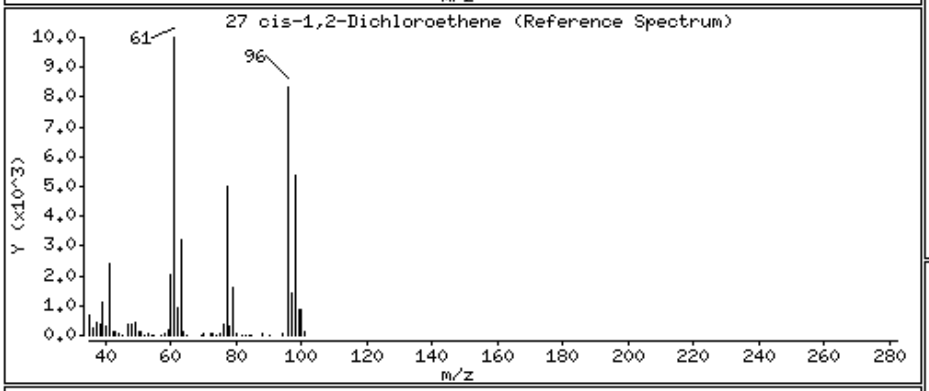
Purge Volume: 5.0 Operator: PC

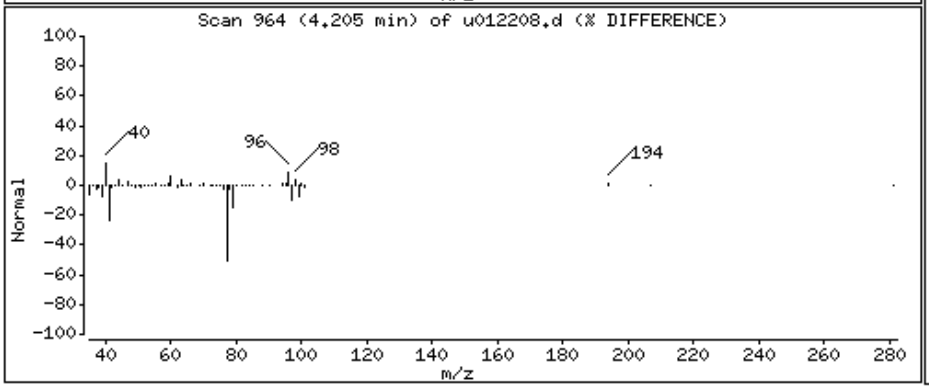
Column phase: DB624 Column diameter: 0.18

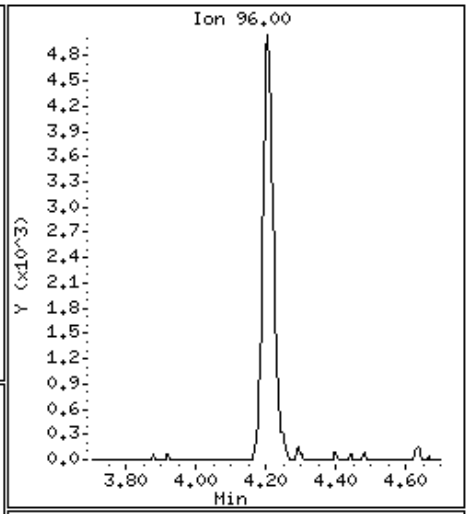
27 cis-1,2-Dichloroethene Concentration: 116.80 ug/l

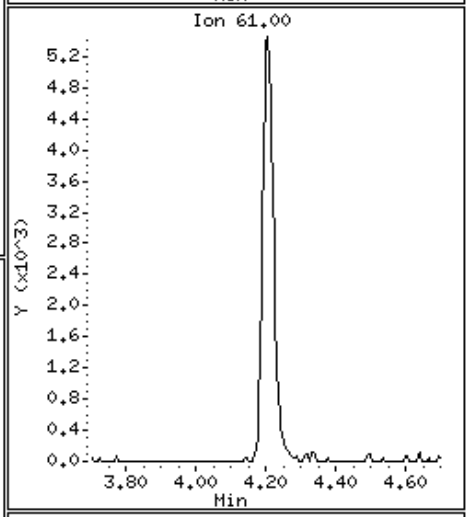


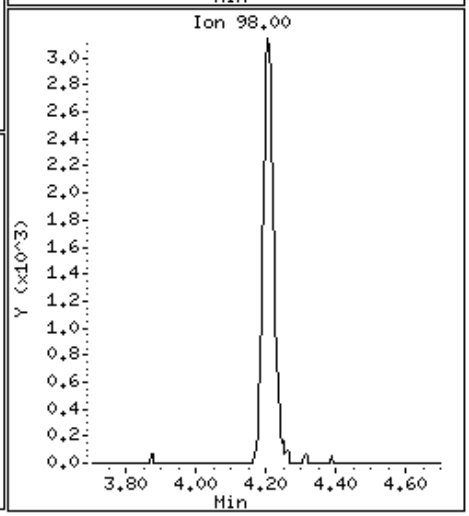












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240122.b\u012208.d Page 4

Date : 22-JAN-2024 14:04

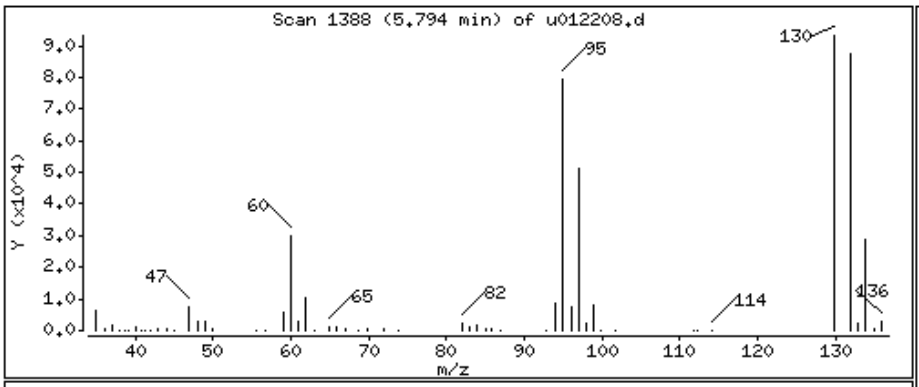
Client ID: HS24010611-08 Instrument: VOA9.i

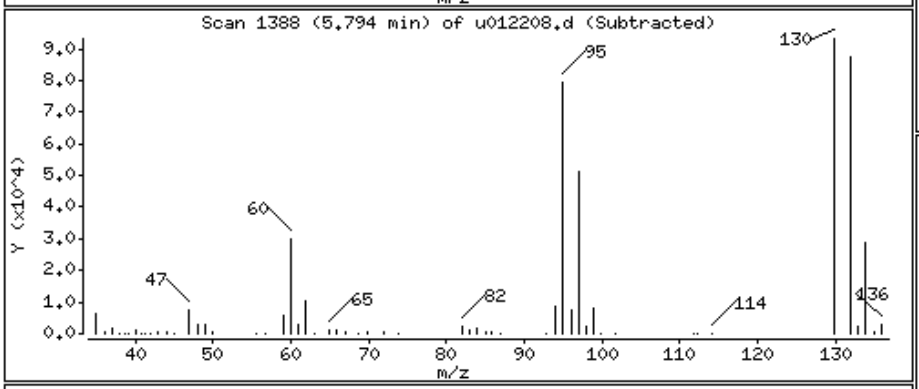
Sample Info: HS24010611-08;HS24010611-08;;;

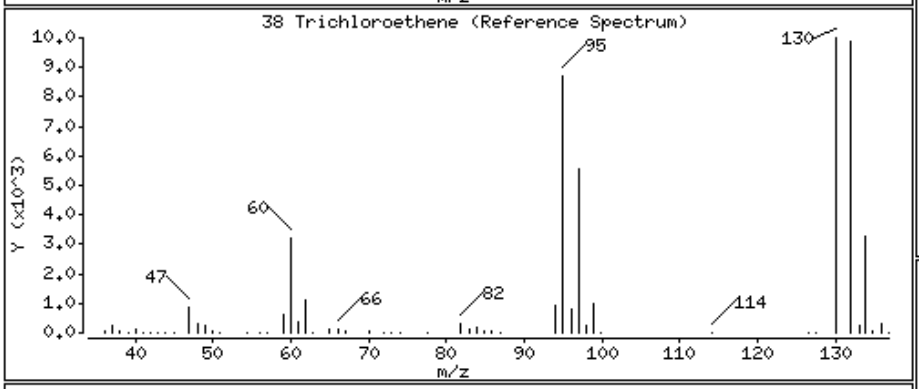
Purge Volume: 5.0 Operator: PC

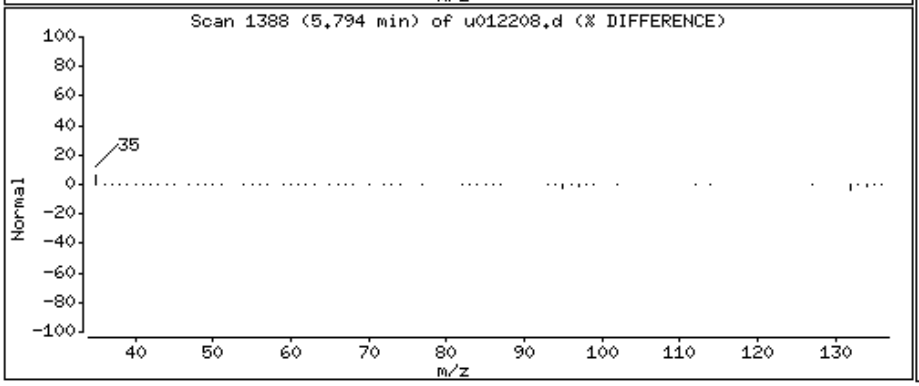
Column phase: DB624 Column diameter: 0.18

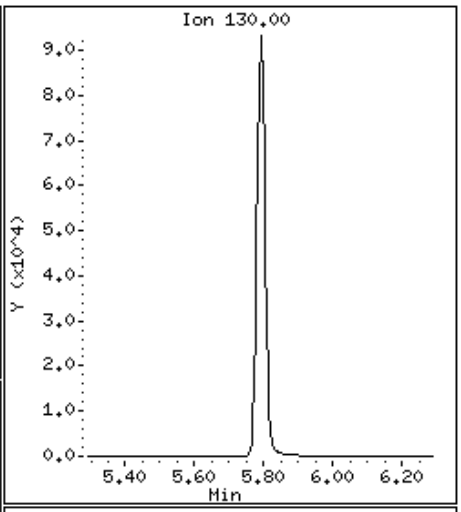
38 Trichloroethene Concentration: 1899.53 ug/l

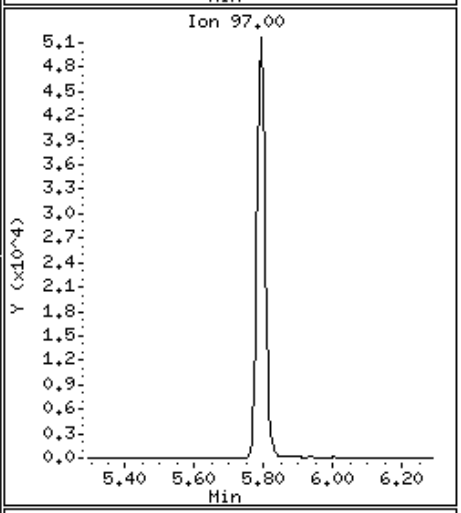


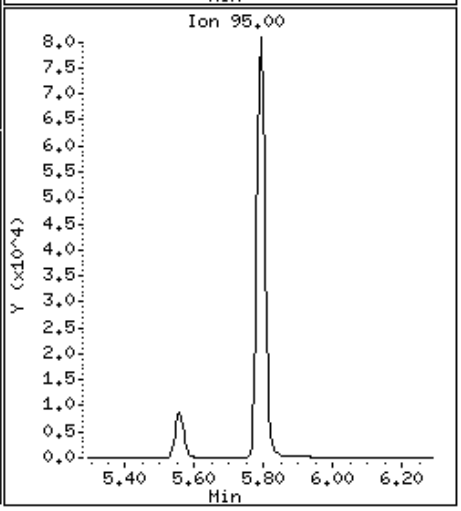












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240122.b\u012208.d Page 5

Date : 22-JAN-2024 14:04

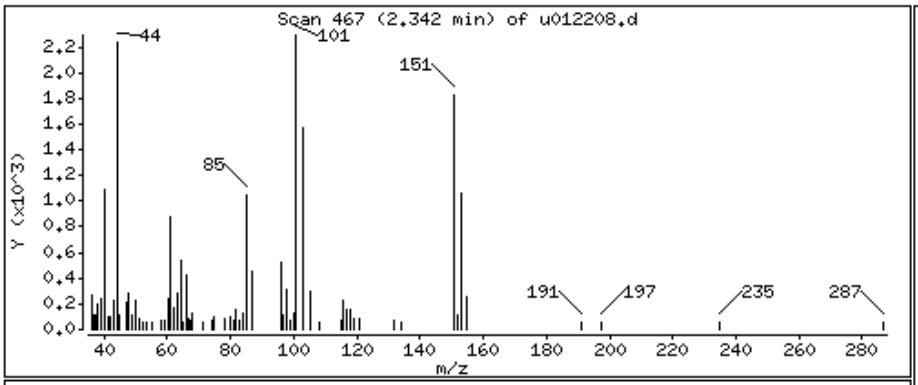
Client ID: HS24010611-08 Instrument: VOA9.i

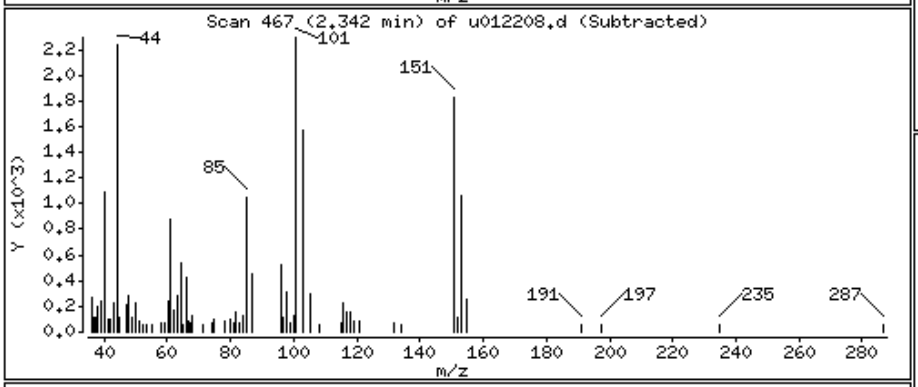
Sample Info: HS24010611-08;HS24010611-08;;;

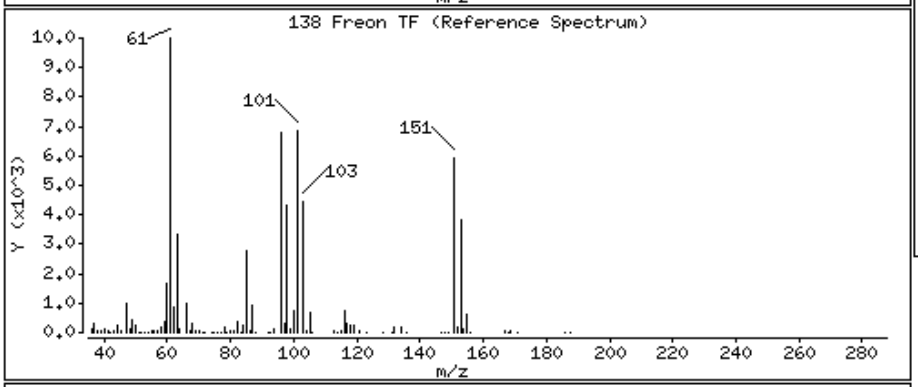
Purge Volume: 5.0 Operator: PC

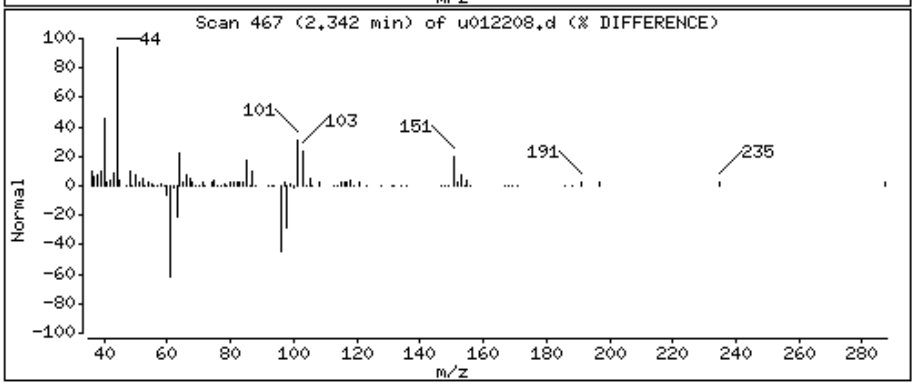
Column phase: DB624 Column diameter: 0.18

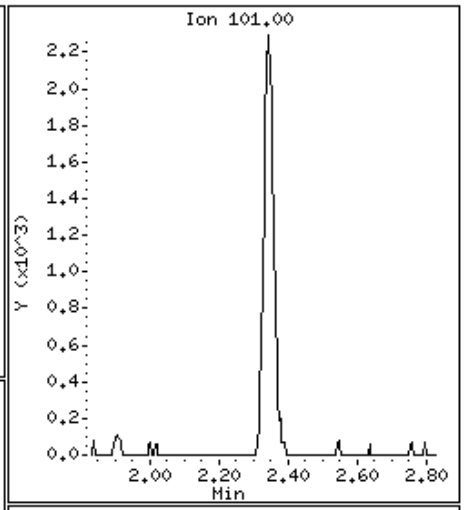
138 Freon TF Concentration: 88.84 ug/l

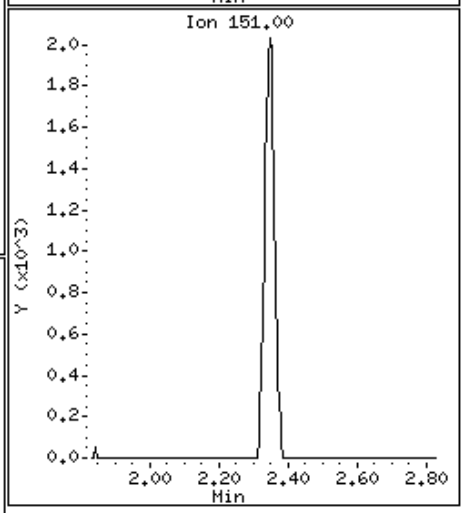












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240122.b\u012208.d Page 6

Date : 22-JAN-2024 14:04

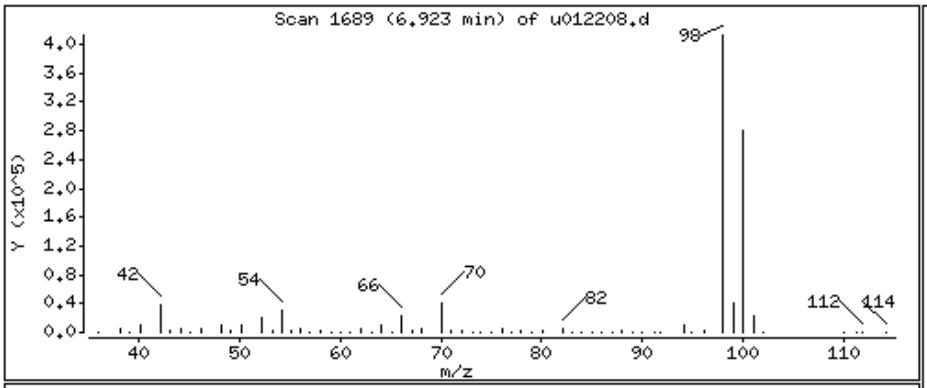
Client ID: HS24010611-08 Instrument: VOA9.i

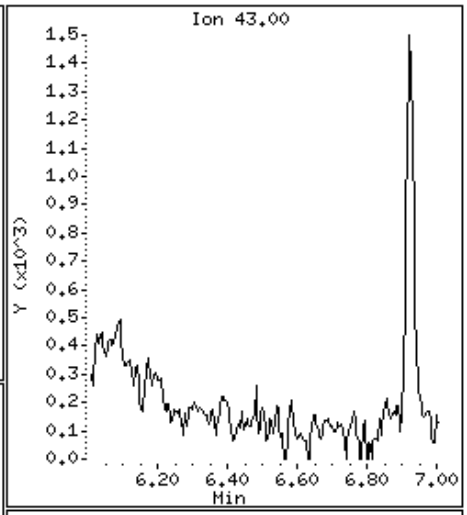
Sample Info: HS24010611-08;HS24010611-08;;;

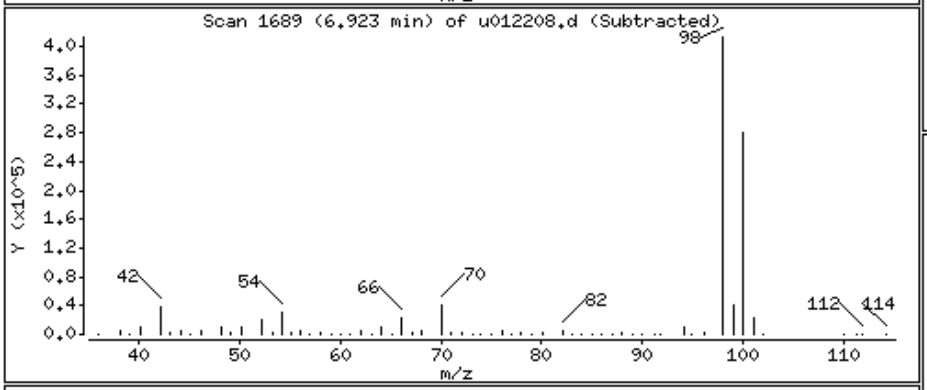
Purge Volume: 5.0 Operator: PC

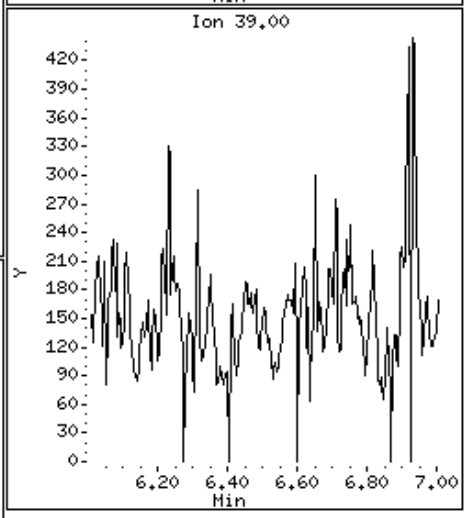
Column phase: DB624 Column diameter: 0.18

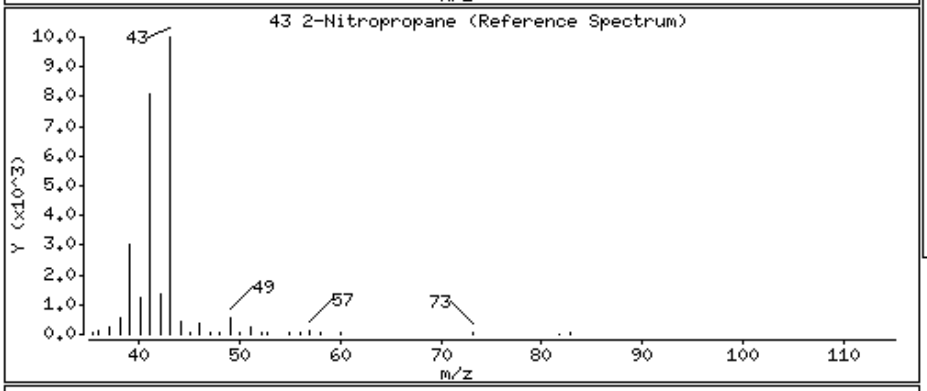
43 2-Nitropropane Concentration: 107.29 ug/l

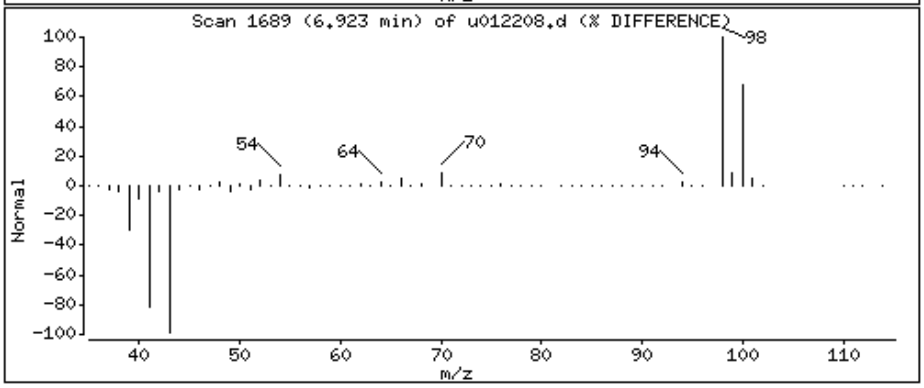












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Inj Date : 22-JAN-2024 14:04
InstruID : VOA9.i
LabSampID : HS24010611-08

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240122.b\U012209.D Page 1
Report Date: 29-Jan-2024 16:02

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240122.b\U012209.D
Lab Smp Id: HS24010611-08MS Client Smp ID: HS24010611-08MS
Inj Date : 22-JAN-2024 14:26
Operator : PC Inst ID: VOA9.i
Smp Info : HS24010611-08MS;HS24010611-08MS;3;;MS
Misc Info : V9;WATER;0;50;
Comment   :
Method   : \\nahstws005\Target\chem\voa9.i\U240122.b\8260C.m
Meth Date : 29-Jan-2024 16:02 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 8 QC Sample: MS
Dil Factor: 50.00000
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	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	4.812	(1.000)	407338	50.0000	
2 Dichlorodifluoromethane	85	1.168	1.157	(0.242)	39368	12.6496	632.47
3 Chloromethane	50	1.303	1.292	(0.270)	64288	13.7582	687.91
5 Vinyl Chloride	62	1.381	1.370	(0.287)	82526	18.4876	924.38
6 Bromomethane	94	1.625	1.614	(0.337)	47424	20.8860	1044.30
7 Chloroethane	64	1.704	1.693	(0.354)	53887	17.9294	896.46
8 Trichlorofluoromethane	101	1.899	1.891	(0.394)	116721	20.6286	1031.42
9 Acrolein	56	2.270	2.259	(0.471)	6015	25.9119	1295.59
10 Acetone	43	2.412	2.401	(0.501)	43077	26.8659	1343.29
11 1,1-Dichloroethene	96	2.337	2.326	(0.485)	65722	20.9191	1045.95
15 Iodomethane	142	2.472	2.461	(0.513)	154130	41.3697	2068.48
16 Acrylonitrile	53	3.068	3.057	(0.637)	56224	35.1874	1759.37
17 Methylene Chloride	84	2.798	2.787	(0.581)	76066	19.0224	951.11
18 Methyl tert-butyl ether	73	3.083	3.072	(0.640)	207574	18.4388	921.94
19 Carbon Disulfide	76	2.525	2.514	(0.524)	392835	42.4354	2121.77
20 trans-1,2-Dichloroethene	96	3.061	3.053	(0.635)	76671	20.4145	1020.72
21 Vinyl Acetate	43	3.612	3.601	(0.750)	360509	31.7433	1587.16
22 1,1-Dichloroethane	63	3.514	3.507	(0.729)	130687	17.0596	852.97
24 2-Butanone	43	4.268	4.257	(0.886)	50426	25.2715	1263.57
26 2,2-Dichloropropane	77	4.185	4.178	(0.869)	96802	17.9742	898.70

27 cis-1,2-Dichloroethene	96	4.200	4.193 (0.872)	97958	19.4704	973.51
28 Chloroform	83	4.575	4.568 (0.949)	137159	16.4491	822.45

Data File: \\nahstws005\Target\chem\voa9.i\U240122.b\U012209.D Page 2
Report Date: 29-Jan-2024 16:02

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
	29 Bromochloromethane	128	4.474	4.467	(0.928)	46520	17.8701	893.50
$	30 Dibromofluoromethane	113	4.751	4.744	(0.986)	197595	47.3458	47.34
	31 1,1,1-Trichloroethane	97	4.744	4.740	(0.984)	115360	18.2049	910.24
	32 1,1-Dichloropropene	75	4.924	4.920	(0.887)	98403	19.5079	975.39
	33 1,2-Dichloroethane	62	5.179	5.171	(0.933)	93173	15.8602	793.01
	34 Carbon Tetrachloride	117	4.913	4.909	(0.885)	100403	20.3769	1018.84
$	35 1,2-Dichloroethane-d4	65	5.100	5.093	(1.058)	200293	42.2786	42.27(M)
*	36 1,4-Difluorobenzene	114	5.554	5.550	(1.000)	602949	50.0000	
	37 Benzene	78	5.141	5.138	(0.926)	291954	17.7873	889.36
	38 Trichloroethene	130	5.790	5.786	(1.043)	249954	55.2526	2762.62
	39 Bromodichloromethane	83	6.281	6.277	(1.131)	94263	17.5373	876.86
	42 1,2-Dichloropropane	63	6.011	6.007	(1.082)	73750	16.6891	834.45
	44 Dibromomethane	93	6.120	6.116	(1.102)	48320	16.9007	845.03
	45 4-Methyl-2-Pentanone	43	6.854	6.851	(0.837)	124064	28.9505	1447.52
	46 cis-1,3-Dichloropropene	75	6.693	6.690	(1.205)	108889	16.7357	836.78
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	589116	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	687169	50.6701	50.67
	50 Toluene	91	6.982	6.978	(0.853)	310138	18.8808	944.03
	51 trans-1,3-Dichloropropene	75	7.196	7.196	(1.296)	90979	16.8234	841.17
	52 2-Hexanone	43	7.589	7.589	(0.927)	79784	26.8364	1341.82
	53 1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	57312	17.3919	869.59
	54 1,3-Dichloropropane	76	7.499	7.496	(0.916)	118790	16.2869	814.34
	55 Dibromochloromethane	129	7.690	7.691	(0.940)	78467	17.9092	895.46
	56 Tetrachloroethene	164	7.458	7.454	(0.911)	78022	22.1905	1109.52
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	73124	17.8650	893.25
	58 1-Chlorohexane	55	8.197	8.197	(1.476)	65881	19.4855	974.27
	59 Chlorobenzene	112	8.208	8.208	(1.003)	220501	18.4275	921.37
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	77407	18.4933	924.66
	61 Ethylbenzene	106	8.305	8.305	(1.015)	106635	19.0370	951.84
	62 m,p-Xylenes	106	8.410	8.407	(1.027)	270828	40.2147	2010.73
	63 o-Xylene	106	8.748	8.744	(1.069)	134696	19.4479	972.39
	64 Styrene	104	8.763	8.759	(1.071)	222634	19.3082	965.41
	66 Bromoform	173	8.920	8.916	(1.090)	50051	17.4121	870.60
	67 Isopropylbenzene	105	9.062	9.063	(1.107)	338887	20.2316	1011.57
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	88557	15.9675	798.37
$	69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	243436	47.3412	47.34
*	70 1,4-Dichlorobenzene-d4	152	10.168	10.172	(1.000)	331056	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.921)	87744	13.9620	698.09
	73 n-Propylbenzene	91	9.411	9.411	(0.926)	364340	18.7423	937.11
	74 Bromobenzene	156	9.317	9.317	(0.916)	96884	17.4271	871.35
	75 1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	272360	19.7128	985.64
	76 2-Chlorotoluene	91	9.482	9.482	(0.933)	227933	17.4206	871.03
	77 4-Chlorotoluene	91	9.576	9.576	(0.942)	260964	17.5867	879.33
	78 tert-Butylbenzene	119	9.838	9.835	(0.968)	242828	19.5672	978.35
	79 1,2,4-Trimethylbenzene	105	9.880	9.876	(0.972)	264605	19.1093	955.46
	81 sec-Butylbenzene	105	10.022	10.022	(0.986)	319655	19.9754	998.77
	82 p-Isopropyltoluene	119	10.146	10.146	(0.998)	282883	20.4266	1021.32
	83 1,3-Dichlorobenzene	146	10.116	10.112	(0.995)	176042	17.8695	893.47
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	182781	17.5125	875.62
	87 n-Butylbenzene	91	10.491	10.491	(1.032)	224977	19.3580	967.89
	88 1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	172195	17.3739	868.69
	89 1,2-Dibromo-3-Chloropropane	155	11.165	11.166	(1.098)	13873	15.8364	791.81

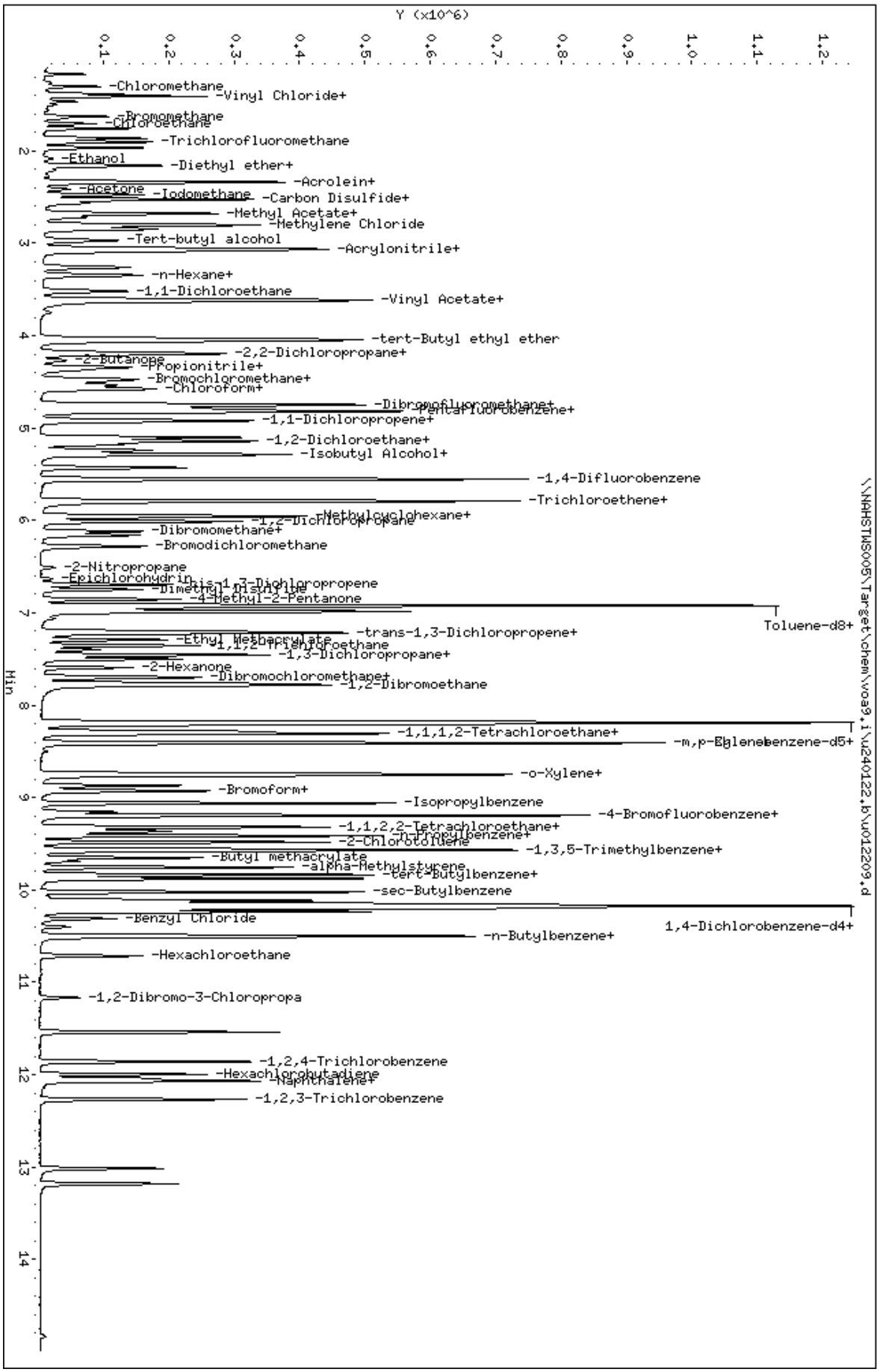
90 1,2,4-Trichlorobenzene	180	11.859	11.855 (1.166)	106570	17.4292	871.46	
91 Hexachlorobutadiene	225	11.998	11.998 (1.180)	50026	20.4106	1020.52	

Data File: \\nahstws005\Target\chem\voa9.i\U240122.b\U012209.D Page 3
Report Date: 29-Jan-2024 16:02

			QUANT SIG					CONCENTRATIONS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/l)	FINAL (ug/l)
	92	Naphthalene	128	12.069	12.065	(1.187)	246285	16.7015	835.07
	93	1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	103277	16.7496	837.47
M	94	1,2-Dichloroethylene (total)	96				174629	39.7478	1987.39
M	95	Xylenes (total)	106				405524	58.1252	2906.25
	135	1,4-Dioxane	88	6.168	6.165	(1.280)	17109	264.733	13236.63
	141	Cyclohexane	56	4.785	4.782	(0.993)	106722	18.1828	909.14
	138	Freon TF	101	2.341	2.330	(0.486)	76295	25.7635	1288.17
	140	1,3-Butadiene	54	1.408	1.396	(0.292)	71485	17.4734	873.66
	147	Methylcyclohexane	55	5.951	5.944	(1.072)	179651	20.1023	1005.11
	146	Methyl Acetate	43	2.716	2.705	(0.564)	67468	16.6422	832.11
	148	Tert-Butyl alcohol	59	2.967	2.956	(0.616)	136316	298.933	14946.66
	149	Isopropyl Alcohol	45	2.566	2.555	(0.533)	82400	314.534	15726.71
	72	trans-1,4-Dichloro-2-butene	53	9.377	9.377	(1.146)	16872	15.9143	795.71
	12	Isobutyl Alcohol	43	5.284	5.280	(1.096)	179228	293.378	14668.90
	13	Acetonitrile	39	2.675	2.667	(0.555)	89609	204.402	10220.12
	14	Allyl Chloride	41	2.675	2.667	(0.555)	193333	19.3041	965.20
	25	Methacrylonitrile	41	4.497	4.489	(0.933)	66306	22.7975	1139.87
	40	Methyl Methacrylate	41	6.157	6.154	(1.278)	55861	13.8937	694.68
	43	2-Nitropropane	43	6.510	6.506	(1.351)	14098	13.4815	674.07
	4	Propionitrile	54	4.339	4.332	(0.900)	101928	150.919	7545.95(a)
	136	n-Hexane	57	3.346	3.338	(0.694)	77509	20.4702	1023.51
	131	Methyl Acrylate	55	4.373	4.362	(0.907)	77647	14.5122	725.60
	200	Dimethyl Disulfide	94	6.746	6.746	(0.824)	79135	17.8174	890.86
	23	Chloroprene	53	2.161	2.154	(0.449)	26557	19.1129	955.64(M)
	49	Ethyl Methacrylate	69	7.289	7.289	(1.312)	96893	16.3729	818.64
	166	1,2,3-Trimethylbenzene	105	10.236	10.232	(1.007)	268348	19.6422	982.11
	167	Ethanol	45	2.086	2.075	(0.433)	14057	274.021	13701.03
	164	Dicyclopentadiene	66	10.198	10.198	(1.003)	326812	18.5184	925.91
	145	alpha-Methylstyrene	118	9.756	9.752	(0.959)	116091	18.3435	917.17
	142	Tetrahydrofuran	42	4.545	4.538	(0.943)	22539	26.0677	1303.38
	156	Diisopropyl ether	45	3.623	3.616	(0.752)	228236	16.0838	804.18
	151	4-Methyl-2-pentanol	45	7.214	7.214	(1.299)	253044	293.022	14651.11
	150	Allyl alcohol	57	3.346	3.338	(0.694)	77509	409.405	20470.22
	86	Benzyl Chloride	91	10.311	10.311	(1.260)	75889	16.3828	819.13
	162	Butyl acrylate	55	8.733	8.733	(1.067)	104667	14.6604	733.02
	139	Diethyl ether	59	2.150	2.139	(0.446)	57104	17.1927	859.63
	203	2-Ethylhexyl Acrylate	55	12.043	12.039	(1.184)	63133	14.7928	739.64
	134	Cyclohexanone	55	9.152	9.153	(0.900)	46092	210.430	10521.47(a)
	130	Ethyl Acetate	43	4.343	4.335	(0.901)	71610	14.4720	723.59
	189	n-Butyl acetate	43	7.705	7.706	(0.941)	96279	14.6720	733.60
	182	Epichlorohydrin	57	6.633	6.630	(1.194)	13583	57.9905	2899.52
	132	n-Butanol	56	5.824	5.816	(1.208)	30991	234.094	11704.69(a)
	133	Ethyl Acrylate	55	5.951	5.944	(1.235)	179651	18.3484	917.41
	163	Butyl methacrylate	41	9.651	9.647	(0.949)	57349	14.6174	730.86
	174	tert-Amyl methyl ether	73	5.288	5.284	(1.097)	209149	16.5525	827.62
	175	tert-Butyl ethyl ether	59	4.054	4.043	(0.841)	207242	16.3822	819.10
	187	n-Amyl acetate	43	8.931	8.931	(1.091)	100854	13.5067	675.33
	188	Isopropyl acetate	43	5.284	5.280	(0.951)	178689	16.0643	803.21

QC Flag Legend

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



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Purge Volume: 5.0
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Instrument: VOA9.i
Operator: PC
Column diameter: 0.18

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Inj Date : 22-JAN-2024 14:26
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Chloroprene (126-99-8)

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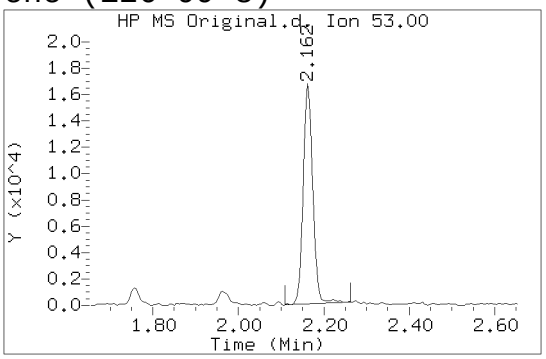

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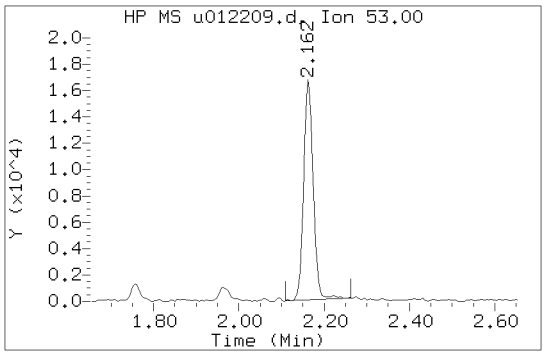

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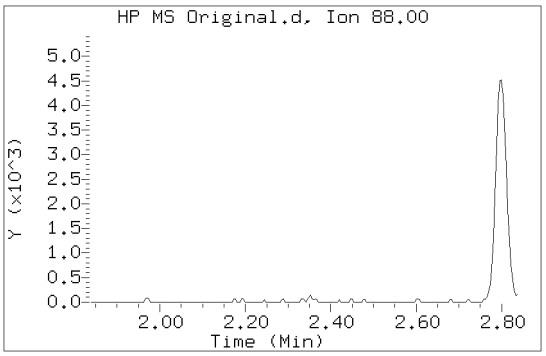

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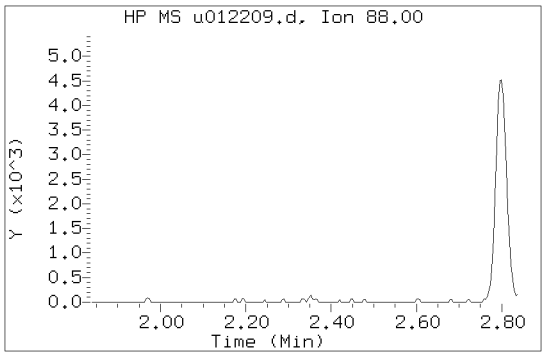

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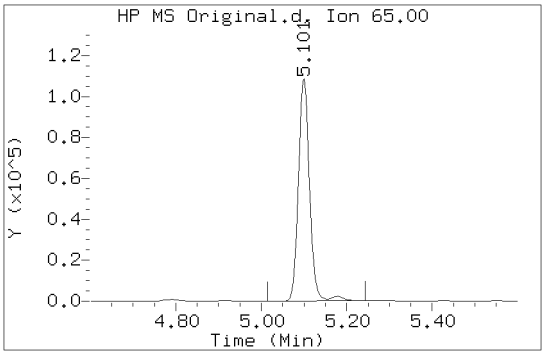

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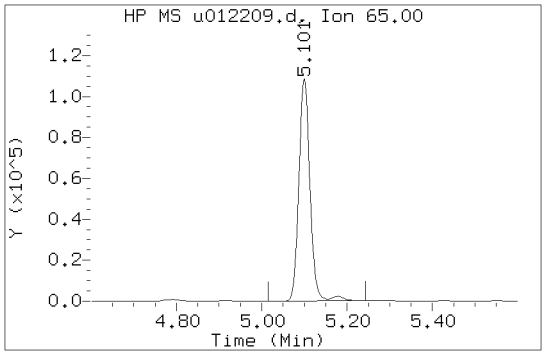

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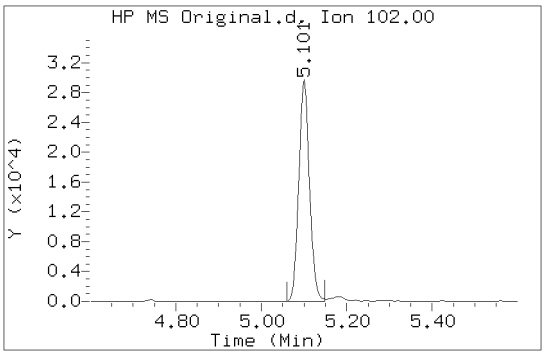

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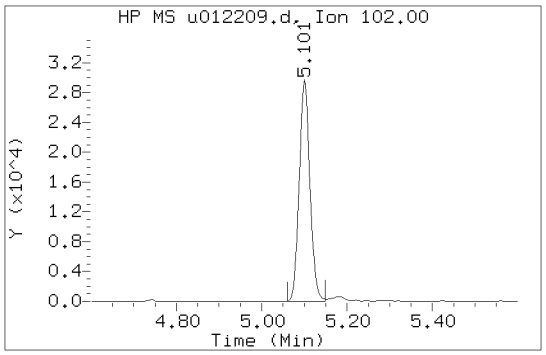

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Report Date: 29-Jan-2024 16:02

ALS Laboratory Group

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Als bottle: 8 QC Sample: MSD
Dil Factor: 50.00000
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	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	4.812	(1.000)	392693	50.0000	
2	Dichlorodifluoromethane	85	1.171	1.157	(0.243)	38751	12.8974	644.87
3	Chloromethane	50	1.306	1.292	(0.271)	59858	13.2879	664.39
5	Vinyl Chloride	62	1.385	1.370	(0.287)	78522	18.2467	912.33
6	Bromomethane	94	1.629	1.614	(0.338)	47598	21.7614	1088.06
7	Chloroethane	64	1.707	1.693	(0.354)	54031	18.6477	932.38
8	Trichlorofluoromethane	101	1.902	1.891	(0.395)	116806	21.4135	1070.67
9	Acrolein	56	2.270	2.259	(0.471)	8267	36.9415	1847.07
10	Acetone	43	2.416	2.401	(0.501)	41541	26.8761	1343.80
11	1,1-Dichloroethene	96	2.341	2.326	(0.486)	64595	21.3272	1066.36
15	Iodomethane	142	2.476	2.461	(0.514)	155029	43.0257	2151.28
16	Acrylonitrile	53	3.072	3.057	(0.638)	57560	37.3670	1868.34
17	Methylene Chloride	84	2.802	2.787	(0.582)	77492	20.1167	1005.83
18	Methyl tert-butyl ether	73	3.087	3.072	(0.641)	214019	19.7204	986.01
19	Carbon Disulfide	76	2.528	2.514	(0.525)	387886	43.4635	2173.17
20	trans-1,2-Dichloroethene	96	3.064	3.053	(0.636)	75743	20.9195	1045.97
21	Vinyl Acetate	43	3.612	3.601	(0.750)	368607	33.6667	1683.33
22	1,1-Dichloroethane	63	3.518	3.507	(0.730)	126514	17.1308	856.53
24	2-Butanone	43	4.268	4.257	(0.886)	51798	26.9272	1346.35
26	2,2-Dichloropropane	77	4.189	4.178	(0.869)	95555	18.4043	920.21

27 cis-1,2-Dichloroethene	96	4.204	4.193 (0.872)	95284	19.6452	982.25
28 Chloroform	83	4.575	4.568 (0.949)	135671	16.8774	843.87

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
	29 Bromochloromethane	128	4.474	4.467	(0.928)	46607	18.5712	928.56
$	30 Dibromofluoromethane	113	4.751	4.744	(0.986)	193879	48.2062	48.20
	31 1,1,1-Trichloroethane	97	4.748	4.740	(0.985)	115045	18.8323	941.61
	32 1,1-Dichloropropene	75	4.928	4.920	(0.887)	96982	19.5697	978.48
	33 1,2-Dichloroethane	62	5.179	5.171	(0.933)	94486	16.3710	818.54
	34 Carbon Tetrachloride	117	4.916	4.909	(0.885)	96019	19.8352	991.76
$	35 1,2-Dichloroethane-d4	65	5.100	5.093	(1.058)	197383	43.1757	43.17
*	36 1,4-Difluorobenzene	114	5.554	5.550	(1.000)	592368	50.0000	
	37 Benzene	78	5.141	5.138	(0.926)	282084	17.4930	874.64
	38 Trichloroethene	130	5.790	5.786	(1.043)	246665	55.4995	2774.97
	39 Bromodichloromethane	83	6.281	6.277	(1.131)	92050	17.4315	871.57
	42 1,2-Dichloropropane	63	6.011	6.007	(1.082)	70553	16.2508	812.53
	44 Dibromomethane	93	6.120	6.116	(1.102)	48003	17.0897	854.48
	45 4-Methyl-2-Pentanone	43	6.854	6.851	(0.837)	124898	29.8567	1492.83
	46 cis-1,3-Dichloropropene	75	6.693	6.690	(1.205)	110555	17.2457	862.28
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	575290	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	670490	50.6285	50.62
	50 Toluene	91	6.982	6.978	(0.853)	308976	19.2621	963.10
	51 trans-1,3-Dichloropropene	75	7.199	7.196	(1.296)	88244	16.6317	831.58
	52 2-Hexanone	43	7.593	7.589	(0.928)	81797	28.1748	1408.73
	53 1,1,2-Trichloroethane	83	7.357	7.353	(0.899)	56940	17.7176	885.87
	54 1,3-Dichloropropane	76	7.499	7.496	(0.916)	119794	16.8193	840.96
	55 Dibromochloromethane	129	7.690	7.691	(0.940)	79230	18.5180	925.89
	56 Tetrachloroethene	164	7.458	7.454	(0.911)	75939	22.1172	1105.85
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	72782	18.2088	910.44
	58 1-Chlorohexane	55	8.196	8.197	(1.476)	61547	18.5288	926.43
	59 Chlorobenzene	112	8.211	8.208	(1.003)	215256	18.4215	921.07
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	76219	18.6471	932.35
	61 Ethylbenzene	106	8.305	8.305	(1.015)	104189	19.0473	952.36
	62 m,p-Xylenes	106	8.410	8.407	(1.027)	262809	39.9618	1998.09
	63 o-Xylene	106	8.747	8.744	(1.069)	131328	19.4173	970.86
	64 Styrene	104	8.762	8.759	(1.071)	219998	19.5382	976.90
	66 Bromoform	173	8.920	8.916	(1.090)	50179	17.8476	892.37
	67 Isopropylbenzene	105	9.062	9.063	(1.107)	332259	20.3126	1015.63
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	90232	16.7364	836.82
$	69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	238135	47.4256	47.42
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	322412	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.920)	88200	14.4108	720.53
	73 n-Propylbenzene	91	9.411	9.411	(0.925)	368122	19.4446	972.22
	74 Bromobenzene	156	9.317	9.317	(0.916)	94686	17.4883	874.41
	75 1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	261779	19.4550	972.74
	76 2-Chlorotoluene	91	9.482	9.482	(0.932)	228607	17.9406	897.02
	77 4-Chlorotoluene	91	9.576	9.576	(0.941)	251668	17.4149	870.74
	78 tert-Butylbenzene	119	9.835	9.835	(0.967)	235613	19.4948	974.74
	79 1,2,4-Trimethylbenzene	105	9.880	9.876	(0.971)	259013	19.2069	960.34
	81 sec-Butylbenzene	105	10.022	10.022	(0.985)	307197	19.7116	985.57
	82 p-Isopropyltoluene	119	10.146	10.146	(0.997)	276491	20.5003	1025.01
	83 1,3-Dichlorobenzene	146	10.116	10.112	(0.994)	170364	17.7567	887.83
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	177261	17.4390	871.94
	87 n-Butylbenzene	91	10.494	10.491	(1.032)	218202	19.2784	963.92
	88 1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	166751	17.2757	863.78
	89 1,2-Dibromo-3-Chloropropane	155	11.165	11.166	(1.098)	13601	15.9280	796.39

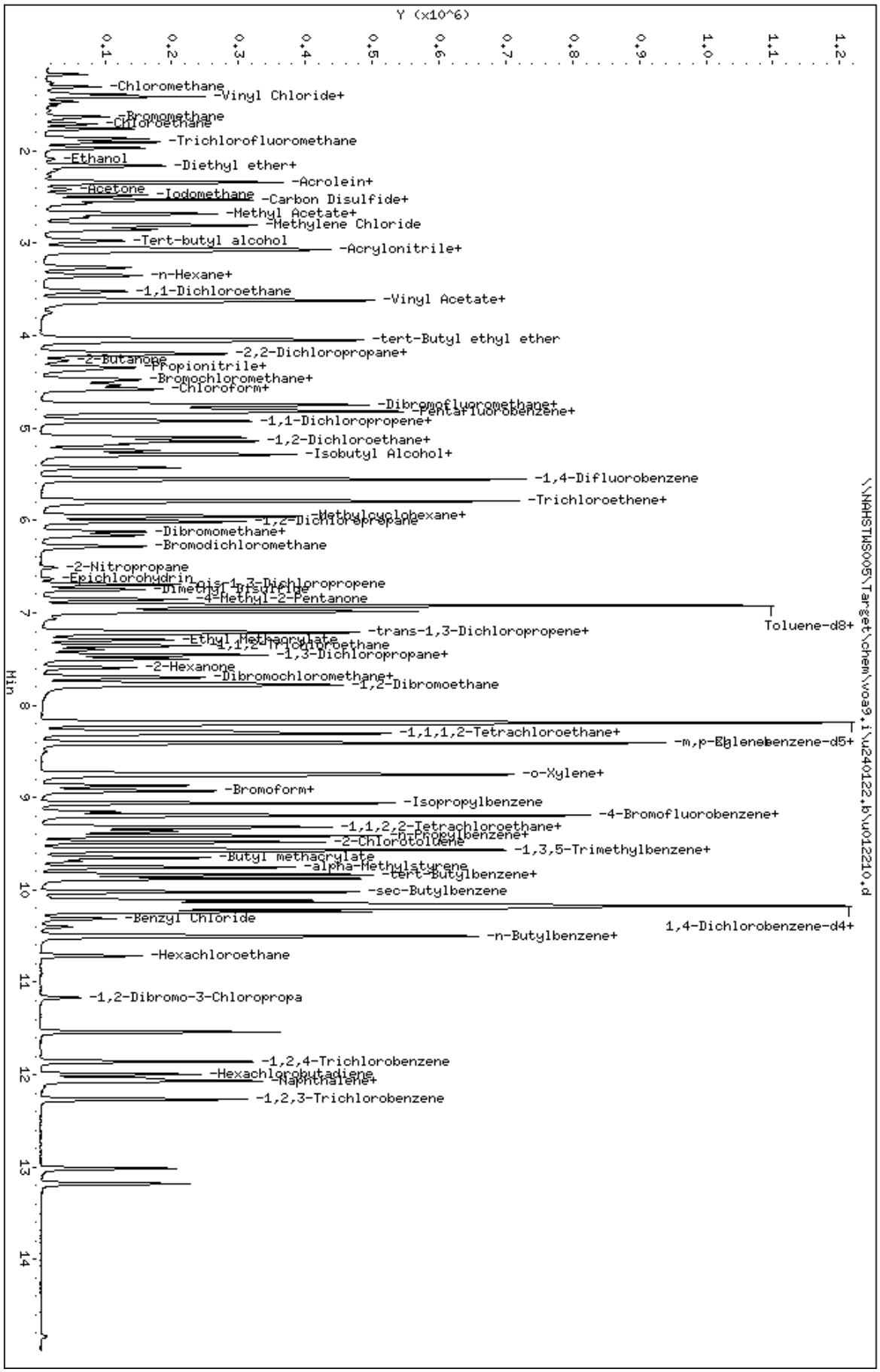
90 1,2,4-Trichlorobenzene	180	11.859	11.855 (1.166)	106977	17.9649	898.24	
91 Hexachlorobutadiene	225	11.998	11.998 (1.179)	48360	20.2598	1012.99	

Data File: \\nahstws005\Target\chem\voa9.i\U240122.b\U012210.D Page 3
Report Date: 29-Jan-2024 16:02

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
	92 Naphthalene	128	12.069	12.065	(1.186)	250208	17.4224	871.12
	93 1,2,3-Trichlorobenzene	180	12.267	12.268	(1.206)	102764	17.1132	855.65
M	94 1,2-Dichloroethylene (total)	96				171027	40.3797	2018.98
M	95 Xylenes (total)	106				394137	57.5021	2875.10
	135 1,4-Dioxane	88	6.168	6.165	(1.280)	16248	260.786	13039.30
	141 Cyclohexane	56	4.789	4.782	(0.994)	105707	18.6816	934.07
	138 Freon TF	101	2.341	2.330	(0.486)	74964	26.2512	1312.55
	140 1,3-Butadiene	54	1.411	1.396	(0.293)	69580	17.6420	882.10
	147 Methylcyclohexane	55	5.951	5.944	(1.072)	176906	20.1487	1007.43
	146 Methyl Acetate	43	2.720	2.705	(0.564)	67133	17.1772	858.85
	148 Tert-Butyl alcohol	59	2.971	2.956	(0.617)	142439	324.010	16200.48
	149 Isopropyl Alcohol	45	2.566	2.555	(0.532)	84548	335.252	16762.57
	72 trans-1,4-Dichloro-2-butene	53	9.377	9.377	(1.146)	17532	16.9343	846.71
	12 Isobutyl Alcohol	43	5.287	5.280	(1.097)	179435	304.671	15233.54
	13 Acetonitrile	39	2.678	2.667	(0.556)	88830	210.182	10509.10
	14 Allyl Chloride	41	2.678	2.667	(0.556)	191696	19.8544	992.72
	25 Methacrylonitrile	41	4.500	4.489	(0.934)	67063	23.9177	1195.88
	40 Methyl Methacrylate	41	6.157	6.154	(1.278)	53354	13.7650	688.25
	43 2-Nitropropane	43	6.509	6.506	(1.351)	14293	14.1777	708.88
	4 Propionitrile	54	4.343	4.332	(0.901)	104043	159.796	7989.79(a)
	136 n-Hexane	57	3.349	3.338	(0.695)	76619	20.9898	1049.49
	131 Methyl Acrylate	55	4.376	4.362	(0.908)	80596	15.6251	781.25
	200 Dimethyl Disulfide	94	6.746	6.746	(0.824)	81440	18.5992	929.95
	23 Chloroprene	53	2.165	2.154	(0.449)	27301	20.3811	1019.05(M)
	49 Ethyl Methacrylate	69	7.289	7.289	(1.313)	98144	16.8805	844.02
	166 1,2,3-Trimethylbenzene	105	10.236	10.232	(1.006)	262660	19.7413	987.06
	167 Ethanol	45	2.086	2.075	(0.433)	16136	326.618	16330.90
	164 Dicyclopentadiene	66	10.198	10.198	(1.003)	321108	18.6830	934.14
	145 alpha-Methylstyrene	118	9.756	9.752	(0.959)	114724	18.5901	929.50
	142 Tetrahydrofuran	42	4.545	4.538	(0.943)	25250	30.2923	1514.61
	156 Diisopropyl ether	45	3.627	3.616	(0.753)	229625	16.7851	839.25
	151 4-Methyl-2-pentanol	45	7.214	7.214	(1.299)	254938	299.321	14966.05
	150 Allyl alcohol	57	3.349	3.338	(0.695)	76619	419.796	20989.82
	86 Benzyl Chloride	91	10.311	10.311	(1.260)	76633	16.8660	843.29
	162 Butyl acrylate	55	8.732	8.733	(1.067)	103753	14.8325	741.62
	139 Diethyl ether	59	2.150	2.139	(0.446)	57799	18.0509	902.54
	203 2-Ethylhexyl Acrylate	55	12.043	12.039	(1.184)	63783	15.2510	762.54
	134 Cyclohexanone	55	9.152	9.153	(0.900)	46140	216.296	10814.81(a)
	130 Ethyl Acetate	43	4.347	4.335	(0.902)	73412	15.3894	769.47
	189 n-Butyl acetate	43	7.705	7.706	(0.941)	99127	15.4691	773.45
	182 Epichlorohydrin	57	6.633	6.630	(1.194)	13809	60.0085	3000.42
	132 n-Butanol	56	5.823	5.816	(1.208)	32144	251.858	12592.91(a)
	133 Ethyl Acrylate	55	5.951	5.944	(1.235)	176906	18.7419	937.09
	163 Butyl methacrylate	41	9.651	9.647	(0.949)	58645	15.2131	760.65
	174 tert-Amyl methyl ether	73	5.287	5.284	(1.097)	210719	17.2987	864.93
	175 tert-Butyl ethyl ether	59	4.054	4.043	(0.841)	208861	17.1259	856.29
	187 n-Amyl acetate	43	8.931	8.931	(1.091)	102735	14.0893	704.46
	188 Isopropyl acetate	43	5.287	5.280	(0.952)	180467	16.5139	825.69

QC Flag Legend

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



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Sample Info: HS24010611-08HSD;HS24010611-08HSD;3;;HSD
Purge Volume: 5.0
Column phase: DB624

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

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Inj Date : 22-JAN-2024 14:48
InstruID : VOA9.i
LabSampID : HS24010611-08MSD

Chloroprene (126-99-8)

Reason Code:

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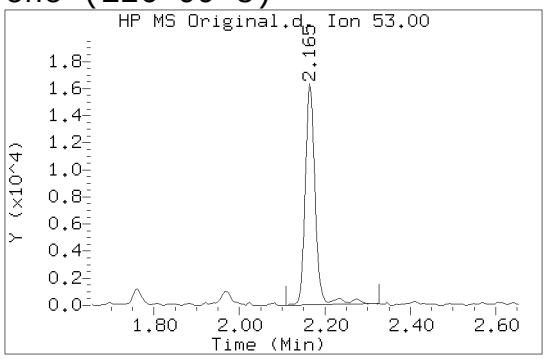
HEIGHT
16332
29-Jan-2024
16:02
firat
tastan



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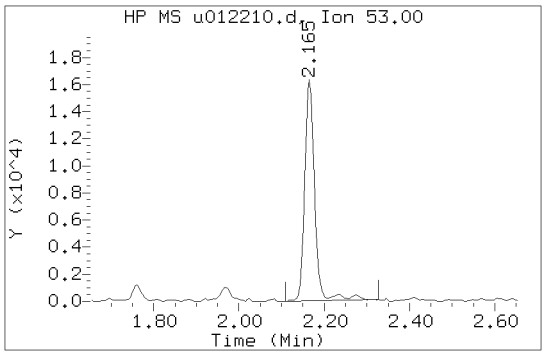

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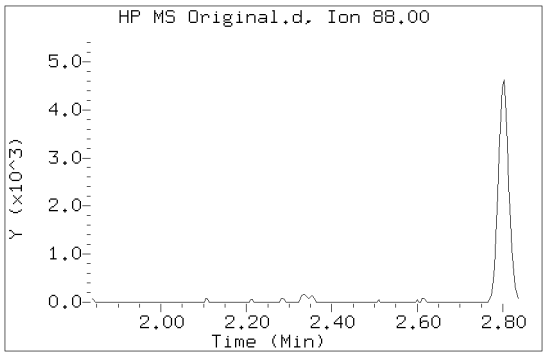

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29-Jan-2024
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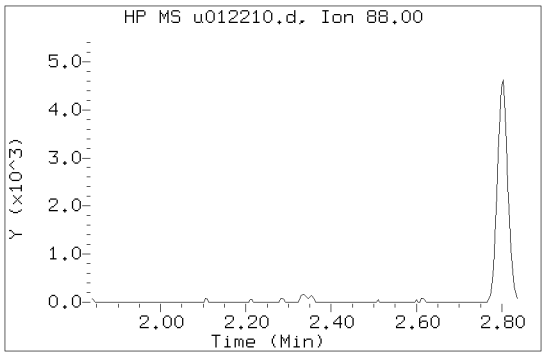

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Report Date: 29-Jan-2024 16:02

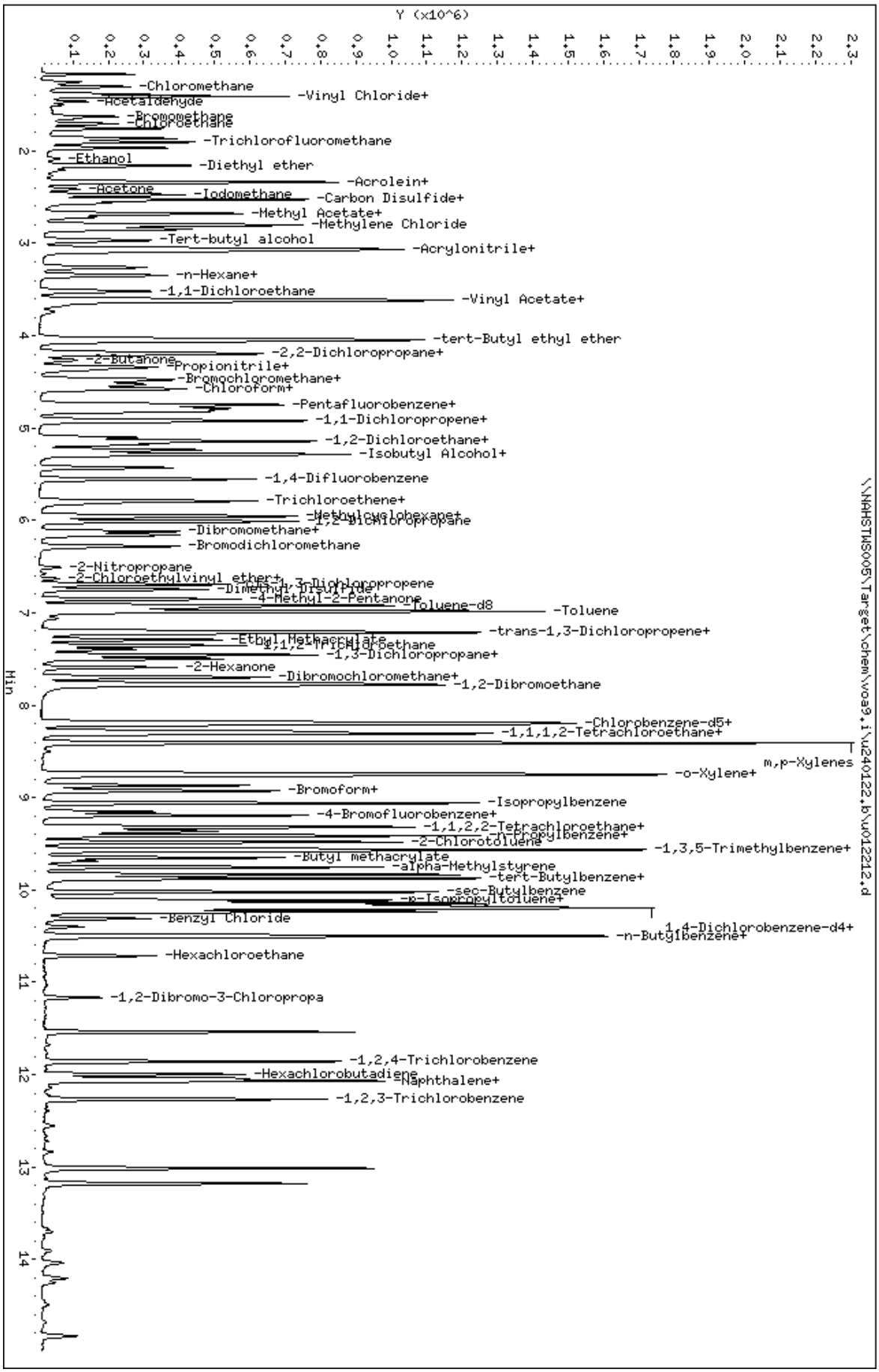
ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240122.b\U012212.D
Lab Smp Id: CCV-END Client Smp ID: CCV-END
Inj Date : 22-JAN-2024 15:33
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\U240122.b\8260C.m
Meth Date : 29-Jan-2024 16:02 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 10 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260-dryclean.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)	AMOUNTS ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.819	4.819	(1.000)	329925	50.0000	
$ 30 Dibromofluoromethane	113	4.751	4.751	(0.986)	176944	50.0000	52.45
$ 35 1,2-Dichloroethane-d4	65	5.100	5.100	(1.058)	176065	50.0000	45.70
* 36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	503574	50.0000	
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	504371	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	603773	50.0000	52.00
$ 69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	213843	50.0000	48.60
* 70 1,4-Dichlorobenzene-d4	152	10.168	10.168	(1.000)	272650	50.0000	
5 Vinyl Chloride	62	1.381	1.381	(0.287)	198420	50.0000	54.88
11 1,1-Dichloroethene	96	2.337	2.337	(0.485)	157679	50.0000	61.96
20 trans-1,2-Dichloroethene	96	3.065	3.065	(0.636)	186631	50.0000	61.35
27 cis-1,2-Dichloroethene	96	4.200	4.200	(0.872)	212326	50.0000	52.10
38 Trichloroethene	130	5.790	5.790	(1.043)	210375	50.0000	55.68
56 Tetrachloroethene	164	7.458	7.458	(0.911)	178898	50.0000	59.43



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Date : 22-JAN-2024 15:33
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\u240122.b\u012212.d
Inj Date : 22-JAN-2024 15:33
InstruID : VOA9.i
LabSampID : CCV-END

NO MANUAL INTEGRATIONS

HS24010611-GCSEMI-RSK-175 REV01

ALS WO# HS24010611

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Form 1

Organic Analysis Data Sheet

Dissolved Gasses by Dissolved Gases by RSK-175

Workorder

HS24010611

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/29/2024

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

Form 1 - Organic Analysis Data Sheet

Client	Bhate Environmental Associates, Inc.	Workorder	
Project	LHAAP Site 16	HS24010611	

Dissolved Gasses by Dissolved Gases by RSK-175

16IW10-240111	Collected	Received	Matrix	Basis
HS24010611-01	01/11/24 07:05	01/12/24 10:00	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
Ethane	mg/L	0.00264		0.00014	0.00100	0.00100	1	01/15/24 09:20	FID-4_456717	005.D
Ethene	mg/L	0.0227		0.00023	0.00100	0.00100	1	01/15/24 09:20	FID-4_456717	005.D
Methane	mg/L	2.82		0.0107	0.0500	0.0500	100	01/15/24 10:39	FID-4_456717	013.D

Form 1 - Organic Analysis Data Sheet

Client	Bhate Environmental Associates, Inc.	Workorder	
Project	LHAAP Site 16	**HS24010611**	

Dissolved Gasses by Dissolved Gases by RSK-175

16EW02-240111	Collected	Received	Matrix	Basis
HS24010611-02	01/11/24 08:05	01/12/24 10:00	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
Ethane	mg/L	0.0500	U	0.00720	0.0500	0.0500	50	01/18/24 15:33	FID-4_456717	008.D
Ethene	mg/L	1.09		0.0117	0.0500	0.0500	50	01/18/24 15:33	FID-4_456717	008.D
Methane	mg/L	1.25		0.00535	0.0250	0.0250	50	01/18/24 15:33	FID-4_456717	008.D

Form 1 - Organic Analysis Data Sheet

Client	Bhate Environmental Associates, Inc.	Workorder	
Project	LHAAP Site 16	HS24010611	

Dissolved Gasses by Dissolved Gases by RSK-175

16IW20-240111	Collected	Received	Matrix	Basis
HS24010611-03	01/11/24 09:05	01/12/24 10:00	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
Ethane	mg/L	0.00227		0.00014	0.00100	0.00100	1	01/15/24 10:30	FID-4_456717	012.D
Ethene	mg/L	0.0242		0.00023	0.00100	0.00100	1	01/15/24 10:30	FID-4_456717	012.D
Methane	mg/L	4.61		0.0214	0.100	0.100	200	01/15/24 11:07	FID-4_456717	015.D

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Form 3A

Matrix Spike/Spike Duplicate Recovery

Dissolved Gasses by Dissolved Gases by RSK-175

Workorder

HS24010611

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/29/2024

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

Form 3A - Matrix Spike/Spike Duplicate Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder **HS24010611**

SAMPLENUM HS24010611-01MS

Dissolved Gasses by Dissolved Gases by RSK-175

16IW10-240111 (HS24010611-01)			HS24010611-01MS		HS24010611-01MSD	
Spike Matrix Aqueous	Result Units mg/L		Run Date 01/15/24		Run Date 01/15/24	
Instrument ID FID4			Run Time 09:29		Run Time 09:38	
			Data File 006.D		Data File 007.D	

Analyte	%R Limits	DF	Sample Result	MS Result	Spike Added	%R	Q	MSD Result	Spike Added	%R	Q	RPD Limit	RPD	Q
Ethane	75-125	1	0.002635	0.025680	0.0180	128		0.024477	0.0180	121		20	4.8	
Ethene	75-125	1	0.02267	0.033080	0.0168	62		0.034182	0.0168	68		20	3.28	
Methane	75-125	1	3.435	3.72980	0.0096	3050		3.69162	0.0096	2660		20	1.03	

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

Form 3A - Matrix Spike/Spike Duplicate Recovery

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Workorder: HS24010611

SAMPLENUM: HS24010611-02MS

Dissolved Gasses by Dissolved Gases by RSK-175

16EW02-240111 (HS24010611-02)				HS24010611-02MS				HS24010611-02MSD						
Spike Matrix: Aqueous	Result Units: mg/L			Run Date: 01/18/24				Run Date: 01/18/24						
Instrument ID: FID4				Run Time: 15:11				Run Time: 15:19						
				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	50	0	1.32559	0.0180	7350		1.30023	0.0180	7210		20	1.93	
Ethene	75-125	50	1.088	2.26415	0.0168	7000		2.21609	0.0168	6720		20	2.15	
Methane	75-125	50	1.253	1.96930	0.0096	7430		1.95058	0.0096	7230		20	0.955	

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

right solutions.
right partner.

Form 3B

Laboratory Control Sample Recovery

Dissolved Gasses by Dissolved Gases by RSK-175

Workorder

HS24010611

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/29/2024

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

Form 3B - Laboratory Control Sample Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24010611

Dissolved Gasses by Dissolved Gases by RSK-175

SAMPLENUM LCS-240115

FID-4_456717			LCS-240115			LCSD-240115					
Spike Matrix Aqueous	Result Units mg/L		Run Date 01/15/24 Run Time 08:55			Run Date 01/15/24 Run Time 09:05					
Analyte	%Recovery Limits	Spike Added	LCS Result	%R	Q	LCSD Result	%R	Q	RPD Limit	RPD	Q
Ethane	75-125	0.01804	0.0205	114		0.0172	95		30	17.7	
Ethene	75-125	0.0168	0.0154	92		0.0144	86		30	6.62	
Methane	75-125	0.009647	0.0110	114		0.0100	104		30	9.49	

right solutions.
right partner.

Form 4

Method Blank Summary

Dissolved Gasses by Dissolved Gases by RSK-175

Workorder

HS24010611

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/29/2024

ALS Environmental–Houston Laboratory
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Phone (281) 530-5656 Fax (281) 530-5887
www.alsglobal.com

Form 4 - Method Blank Summary

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24010611

Dissolved Gasses by Dissolved Gases by RSK-175

METHOD BLANK	Matrix	Analysis Date	Analysis Batch	Inst ID
MBLK-240115	Aqueous	01/15/24 08:45	R456717	FID4

Client Sample ID	Lab Sample ID	Type	Analysis Date	Analysis Batch	Inst ID	FileID
LCS-240115	LCS-240115	LCS	01/15/24 08:55	R456717	FID4	003.D
LCSD-240115	LCSD-240115	LCSD	01/15/24 09:05	R456717	FID4	004.D
16IW10-240111	HS24010611-01	SAMP	01/15/24 09:20	R456717	FID4	005.D
16IW10-240111	HS24010611-01MS	MS	01/15/24 09:29	R456717	FID4	006.D
16IW10-240111	HS24010611-01MSD	MSD	01/15/24 09:38	R456717	FID4	007.D
16EW02-240111	HS24010611-02MS	MS	01/15/24 09:56	R456717	FID4	009.D
16EW02-240111	HS24010611-02MSD	MSD	01/15/24 10:04	R456717	FID4	010.D
16IW20-240111	HS24010611-03	SAMP	01/15/24 10:30	R456717	FID4	012.D
16IW10-240111	HS24010611-01	SAMP	01/15/24 10:39	R456717	FID4	013.D
16IW20-240111	HS24010611-03	SAMP	01/15/24 11:07	R456717	FID4	015.D
16EW02-240111	HS24010611-02MS	MS	01/18/24 15:11	R456717	FID4	006.D
16EW02-240111	HS24010611-02MSD	MSD	01/18/24 15:19	R456717	FID4	007.D
16EW02-240111	HS24010611-02	SAMP	01/18/24 15:33	R456717	FID4	008.D

right solutions.
right partner.

Form 6

Initial Calibration Data

Dissolved Gasses by Dissolved Gases by RSK-175

Workorder

HS24010611

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/29/2024

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

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	936	2034	3864	18446	42817						
	114164						QUAD	2.46870	0.00183	-5.537e-00	0.99808	
6 Pentane	115	3945	2080	950	501	412						
	488						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

HS24010611

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/29/2024

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

Form 6I Initial Calibration Verification (ICV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010611

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

HS24010611

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/29/2024

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www.alsglobal.com

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010611

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 15-JAN-2024 0819
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	1082	1082	0.010	-10.985	20.0	Averaged	
Ethene	586	570	570	0.010	2.69	20.0	Averaged	
Ethane	719	842	842	0.010	-17.072	20.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010611

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 15-JAN-2024 1012
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	1089	1089	0.010	-11.687	20.0	Averaged	
Ethene	586	476	476	0.010	18.8	20.0	Averaged	
Ethane	719	653	653	0.010	9.23	20.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010611

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 15-JAN-2024 1012
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	1089	1089	0.010	-11.687	20.0	Averaged	
Ethene	586	476	476	0.010	18.8	20.0	Averaged	
Ethane	719	653	653	0.010	9.23	20.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010611

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 15-JAN-2024 1242
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	802	802	0.010	17.8	20.0	Averaged	
Ethene	586	475	475	0.010	18.9	20.0	Averaged	
Ethane	719	661	661	0.010	8.09	20.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010611

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 15-JAN-2024 1435
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	824	824	0.010	15.5	20.0	Averaged	
Ethene	586	562	562	0.010	4.11	20.0	Averaged	
Ethane	719	800	800	0.010	-11.202	20.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010611

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 18-JAN-2024 1341
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	848	848	0.010	13.1	20.0	Averaged	
Ethene	586	519	519	0.010	11.5	20.0	Averaged	
Ethane	719	754	754	0.010	-4.739	20.0	Averaged	

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24010611

RunID 009.D

Dissolved Gasses by Dissolved Gases by RSK-175

Instrument ID FID-4.i
Lab File ID 009.D
Analysis Type WATER
Lab Sample ID RSK-CCV

Injection Date 18-JAN-2024 1545
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	846	846	0.010	13.2	20.0	Averaged	
Ethene	586	524	524	0.010	10.5	20.0	Averaged	
Ethane	719	783	783	0.010	-8.791	20.0	Averaged	

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right partner.

Analysis Run Log

Dissolved Gasses by Dissolved Gases by RSK-175

Workorder

HS24010611

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/29/2024

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

Form 13 - Analysis Run Log

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder **HS24010611**

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 HS24010611

Dissolved Gasses by Dissolved Gases by RSK-175

RUNID FID-4-456717

Run ID FID-4_456717 **Start Date** 01/15/24 **EndDate** 01/18/24

Inj. Time	Client Sample ID	Type	Lab Sample ID	File ID	Analysis Date	DF
08:19	RSK-CCV	CCV	RSK-CCV	001.D	01/15/24	1
08:45	MBLK-240115	MBLK	MBLK-240115	002.D	01/15/24	1
08:55	LCS-240115	LCS	LCS-240115	003.D	01/15/24	1
09:05	LCSD-240115	LCSD	LCSD-240115	004.D	01/15/24	1
09:20	HS24010611-01	SAMP	16IW10-240111	005.D	01/15/24	1
09:29	HS24010611-01MS	MS	HS24010611-01MS	006.D	01/15/24	1
09:38	HS24010611-01MSD	MSD	HS24010611-01MSD	007.D	01/15/24	1
10:12	RSK-CCV	CCV	RSK-CCV	011.D	01/15/24	1
10:30	HS24010611-03	SAMP	16IW20-240111	012.D	01/15/24	1
10:39	HS24010611-01	SAMP	16IW10-240111	013.D	01/15/24	100
11:07	HS24010611-03	SAMP	16IW20-240111	015.D	01/15/24	200
11:35	HS24010538-02	SAMP	ZZZZZZZZZZ	016.D	01/15/24	1
11:44	HS24010538-01	SAMP	ZZZZZZZZZZ	017.D	01/15/24	1
12:04	HS24010538-03	SAMP	ZZZZZZZZZZ	018.D	01/15/24	1
12:13	HS24010538-04	SAMP	ZZZZZZZZZZ	019.D	01/15/24	1
12:25	HS24010538-08	SAMP	ZZZZZZZZZZ	020.D	01/15/24	1
12:33	HS24010538-09	SAMP	ZZZZZZZZZZ	021.D	01/15/24	1
12:42	RSK-CCV	CCV	RSK-CCV	022.D	01/15/24	1
13:39	HS24010538-03	SAMP	ZZZZZZZZZZ	023.D	01/15/24	500
14:11	HS24010538-04	SAMP	ZZZZZZZZZZ	024.D	01/15/24	200
14:19	HS24010538-08	SAMP	ZZZZZZZZZZ	025.D	01/15/24	200
14:27	HS24010538-09	SAMP	ZZZZZZZZZZ	026.D	01/15/24	200
14:35	RSK-CCV	CCV	RSK-CCV	027.D	01/15/24	1
13:41	RSK-CCV	CCV	RSK-CCV	001.D	01/18/24	1
15:11	HS24010611-02MS	MS	HS24010611-02MS	006.D	01/18/24	50
15:19	HS24010611-02MSD	MSD	HS24010611-02MSD	007.D	01/18/24	50
15:33	HS24010611-02	SAMP	16EW02-240111	008.D	01/18/24	50
15:45	RSK-CCV	CCV	RSK-CCV	009.D	01/18/24	1

right solutions.
right partner.

RawData

Dissolved Gasses by Dissolved Gases by RSK-175

Workorder

HS24010611

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/29/2024

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

Data File: \\NAHSTWS005\Target\chem\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

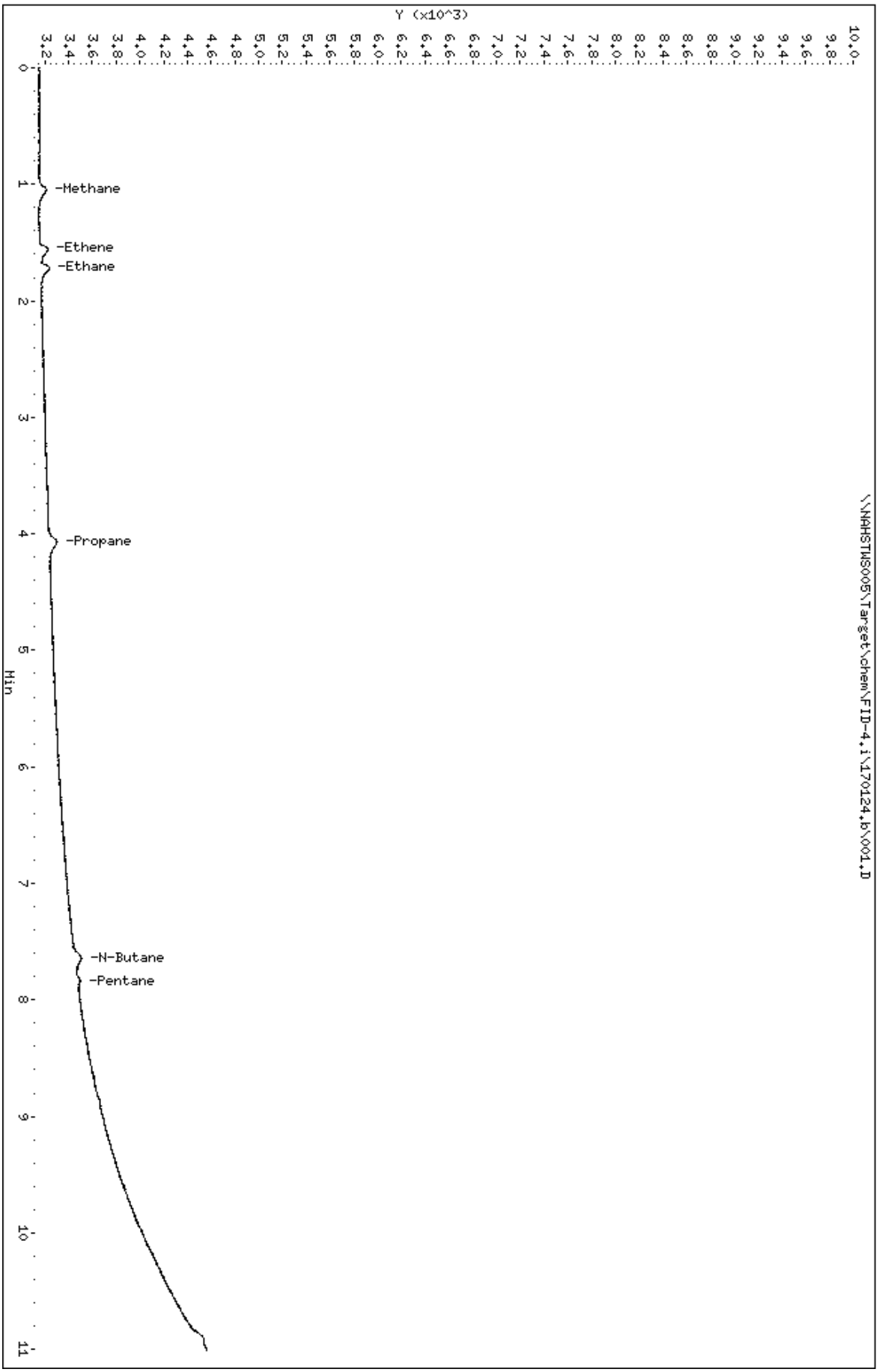
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Methane	1.043	1.043	0.000	374	0.38600	0.383(a)
2 Ethene	1.553	1.553	0.000	361	0.67400	0.615(a)
3 Ethane	1.716	1.716	0.000	435	0.72200	0.590(a)
4 Propane	4.073	4.073	0.000	500	1.05900	1.743
5 N-Butane	7.640	7.640	0.000	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
Sample Info: ICAL1;ICAL1;;;
Column phase: Rtx-PLOT

Instrument: FID-4.i
Operator: JA
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

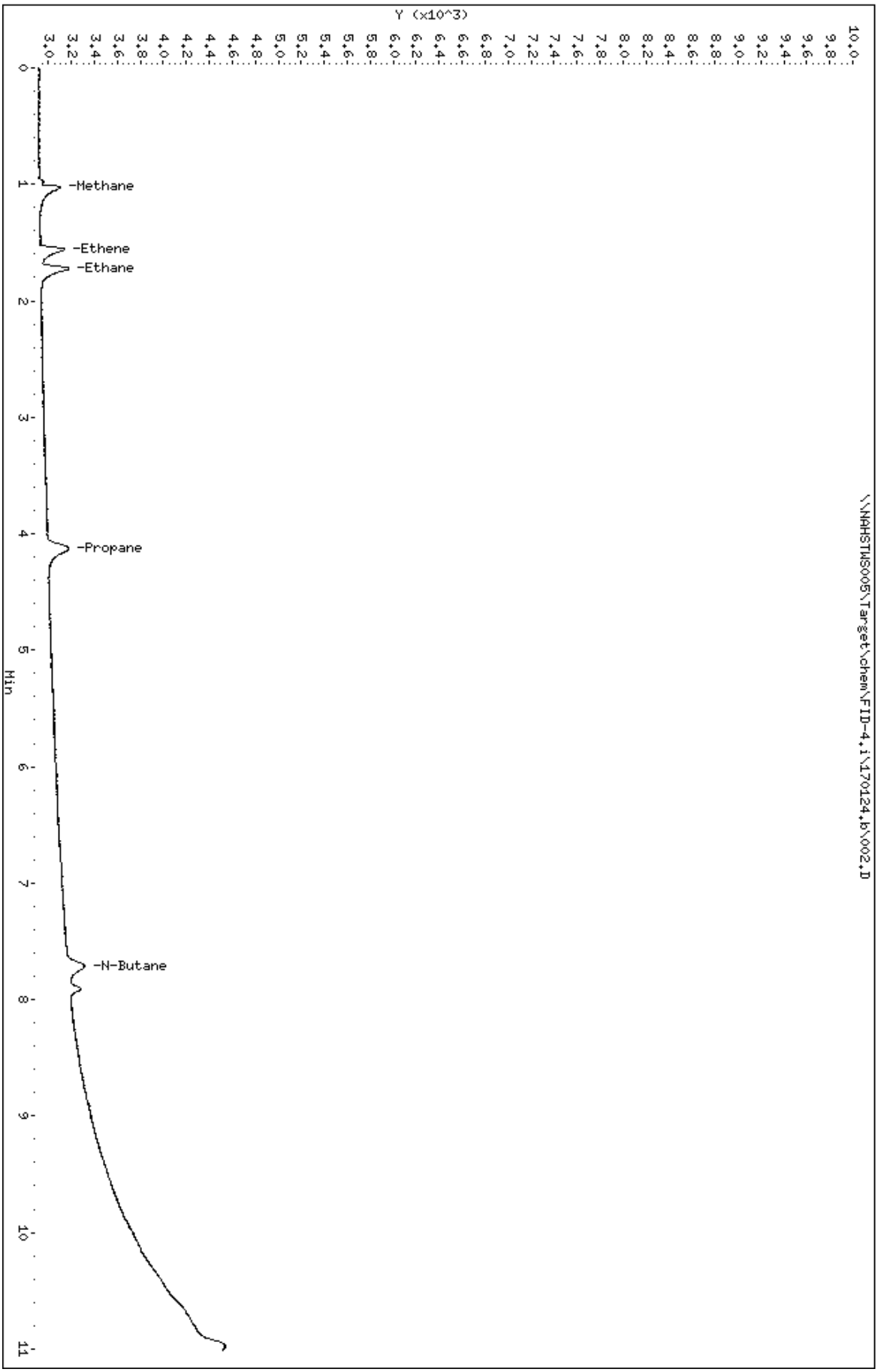
Data file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\002.D
Lab Smp Id: ICAL2 Client Smp ID: ICAL2
Inj Date : 24-JAN-2017 09:30
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL2;ICAL2;;;
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Meth Date : 28-Sep-2022 10:00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

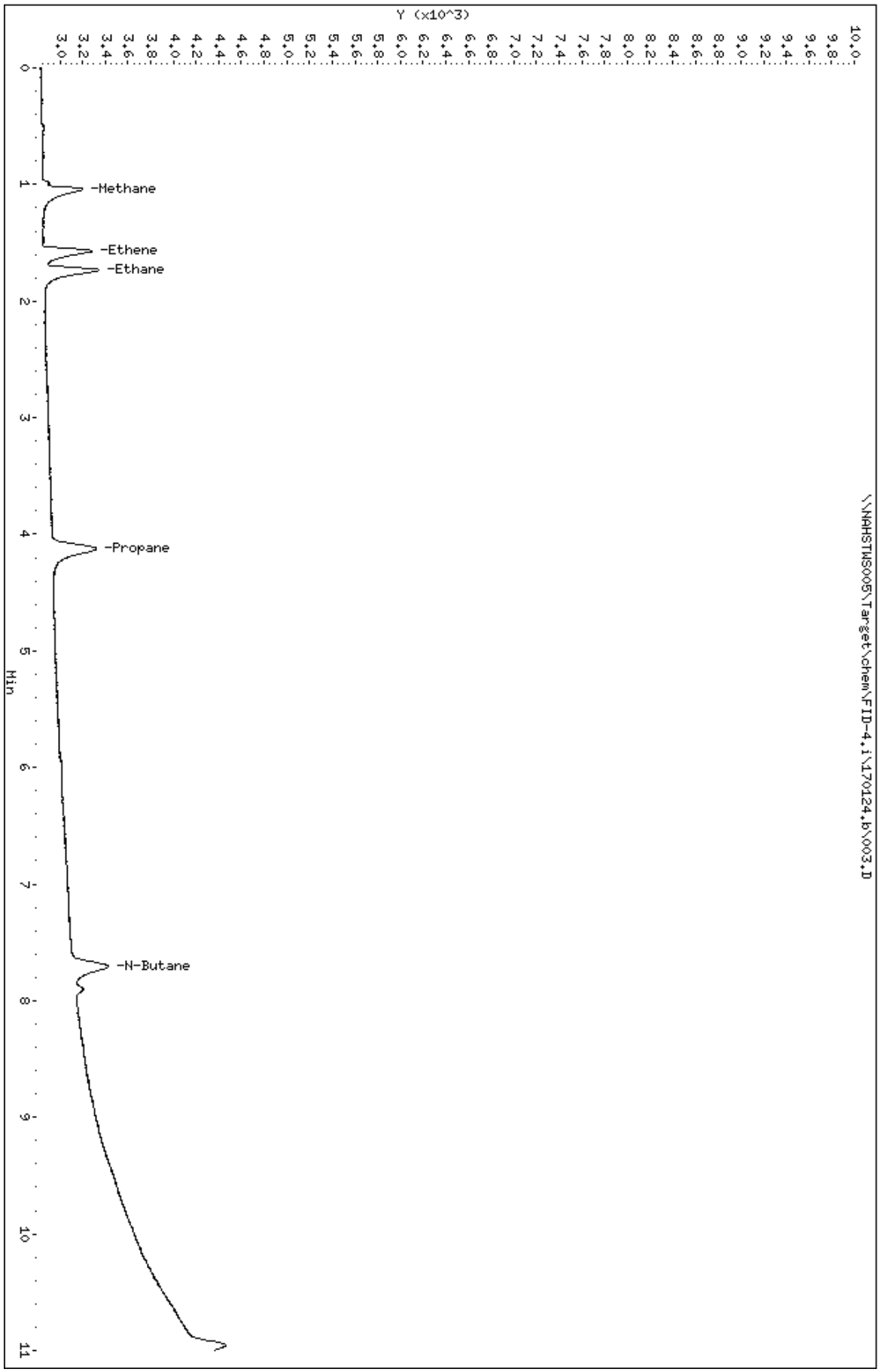
Data file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\003.D
Lab Smp Id: ICAL3 Client Smp ID: ICAL3
Inj Date : 24-JAN-2017 09:59
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL3;ICAL3;;;
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Meth Date : 28-Sep-2022 10:00 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)	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)	ON-COL (ug/L)
1 Methane	1.033	1.033	0.000	3399	3.85900	3.488
2 Ethene	1.563	1.563	0.000	3478	6.74000	5.932
3 Ethane	1.726	1.726	0.000	4310	7.21700	5.853
4 Propane	4.120	4.120	0.000	4785	10.5850	8.190
5 N-Butane	7.703	7.703	0.000	3864	13.9820	9.473(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\004.D

Date : 24-JAN-2017 10:15

Client ID: ICAL4

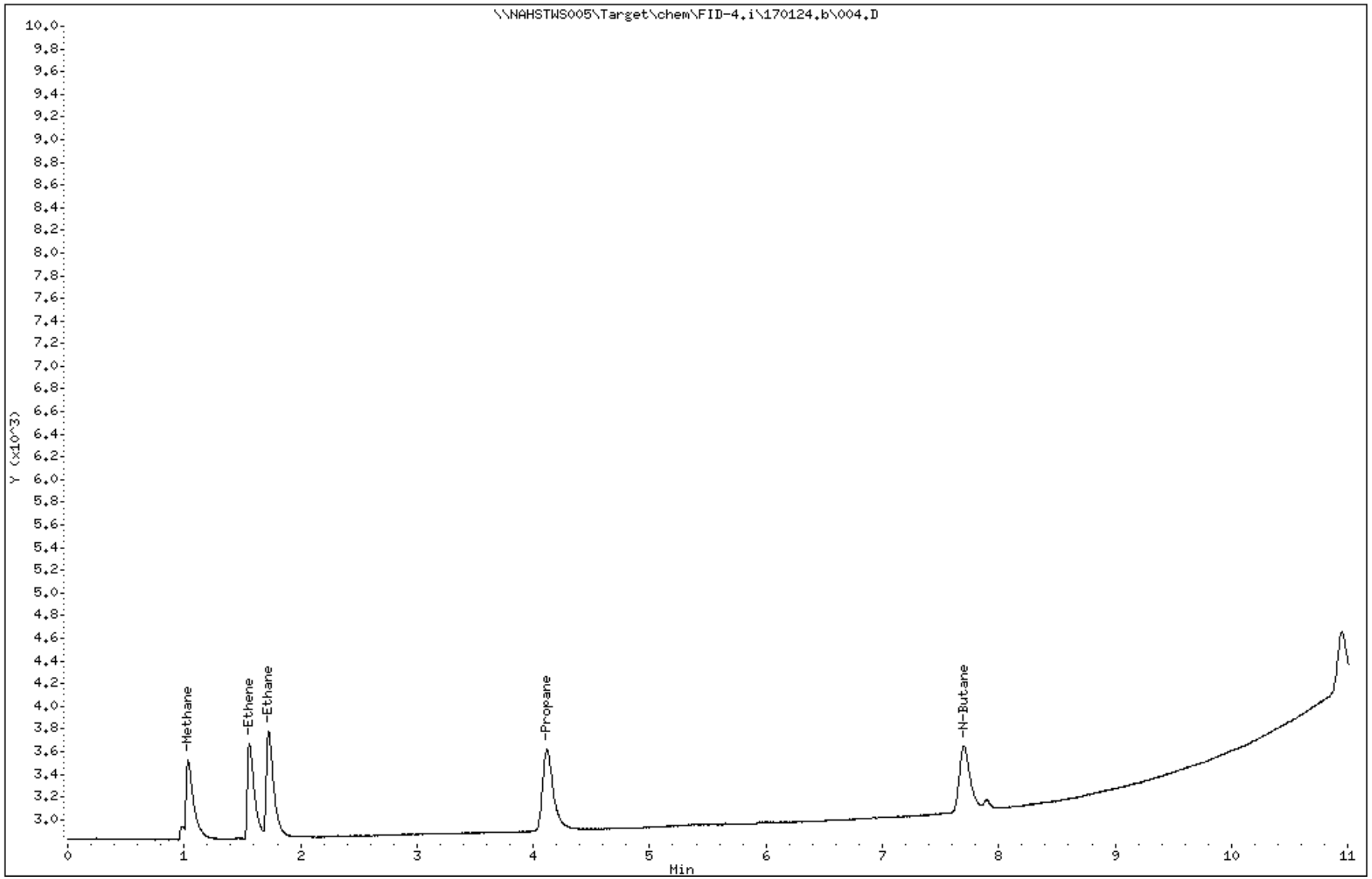
Instrument: FID-4.i

Sample Info: ICAL4;ICAL4;;;

Operator: MA

Column phase: Rtx-PLOT

Column diameter: 0.53



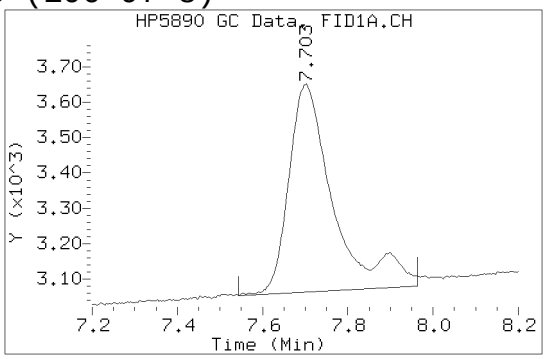
Data File : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\004.D
Inj Date : 24-JAN-2017 10:15
InstruID : FID-4.i
LabSampID : ICAL4

N-Butane (106-97-8)

Reason Code:

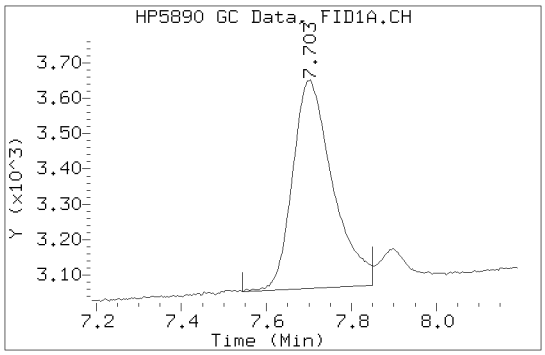
BEFORE

MASS
100
AREA
4292
HEIGHT
591
28-Sep-2022
10:02
linh
pham



AFTER

MASS
100
AREA
3864
HEIGHT
591
28-Sep-2022
10:02
linh
pham



Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\005.D Page 1
Report Date: 28-Sep-2022 10:02

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\005.D
Lab Smp Id: ICAL5 Client Smp ID: ICAL5
Inj Date : 24-JAN-2017 10:39
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL5;ICAL5;;;
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Meth Date : 28-Sep-2022 10:02 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 5 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

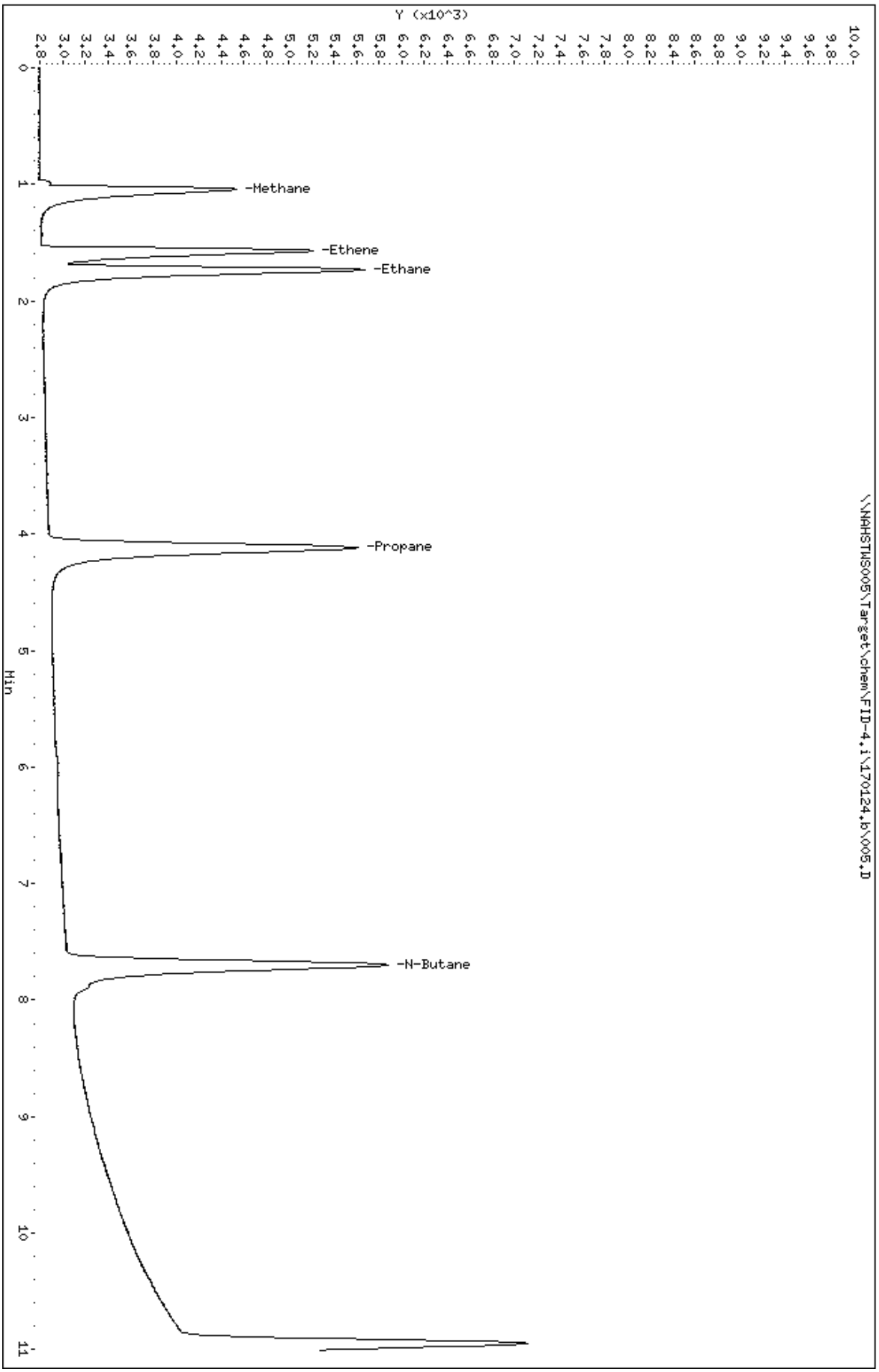
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Methane	1.043	1.043	0.000	9268	9.64700	9.511
2 Ethene	1.570	1.570	0.000	11210	16.8500	19.121
3 Ethane	1.733	1.733	0.000	14588	18.0430	19.811
4 Propane	4.120	4.120	0.000	18294	26.4630	27.415
5 N-Butane	7.700	7.700	0.000	18446	34.9550	34.419(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\005.D
Date : 24-JAN-2017 10:39
Client ID: ICAL5
Sample Info: ICAL5;ICAL5;;;
Column phase: Rtx-PLOT

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



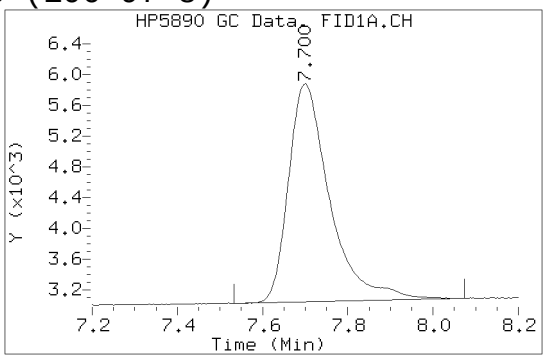
Data File : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\005.D
Inj Date : 24-JAN-2017 10:39
InstruID : FID-4.i
LabSampID : ICAL5

N-Butane (106-97-8)

Reason Code:

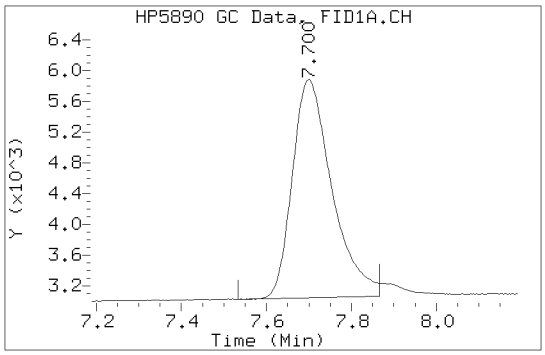
BEFORE

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

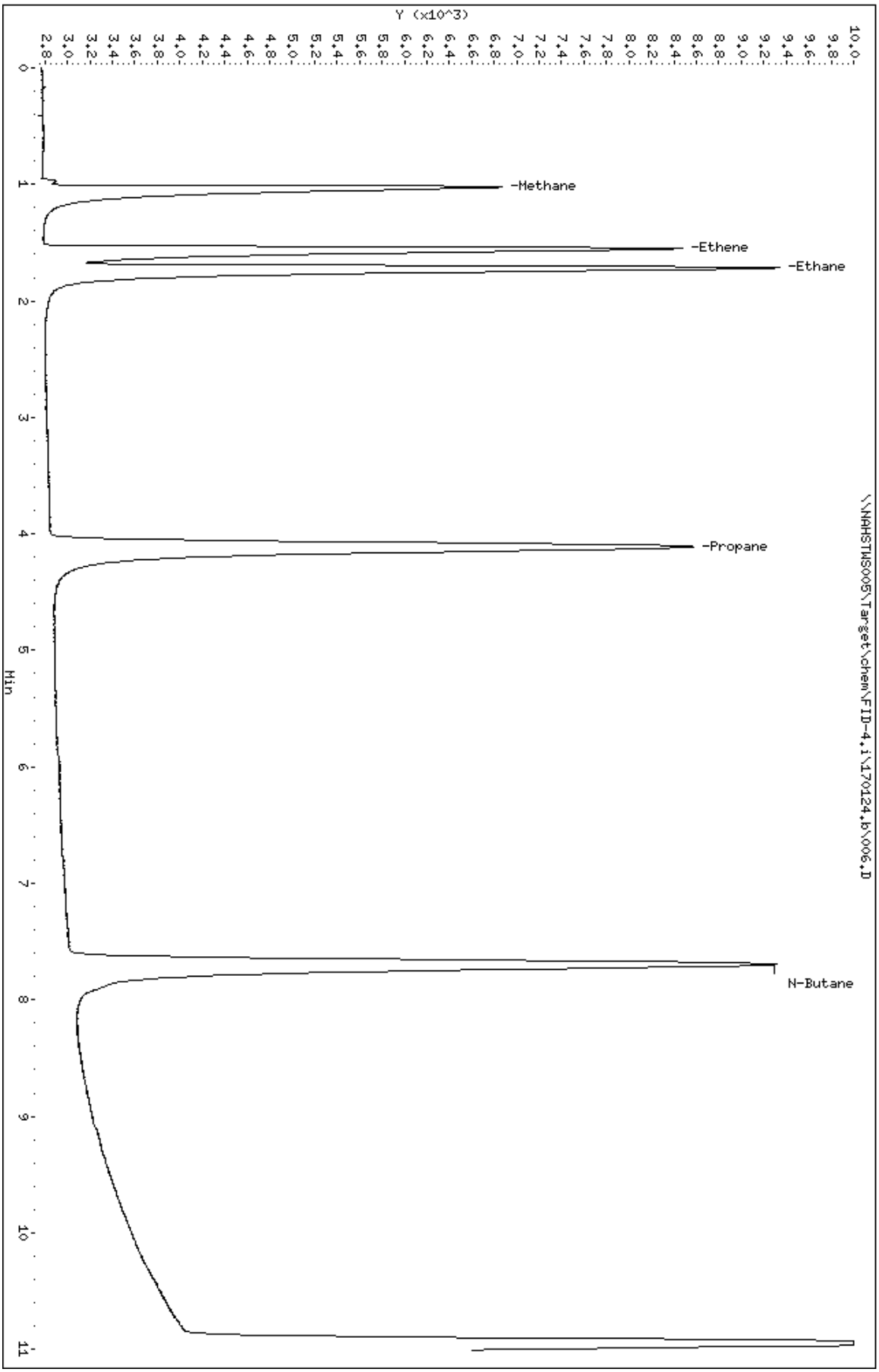
ALS Laboratory Group

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

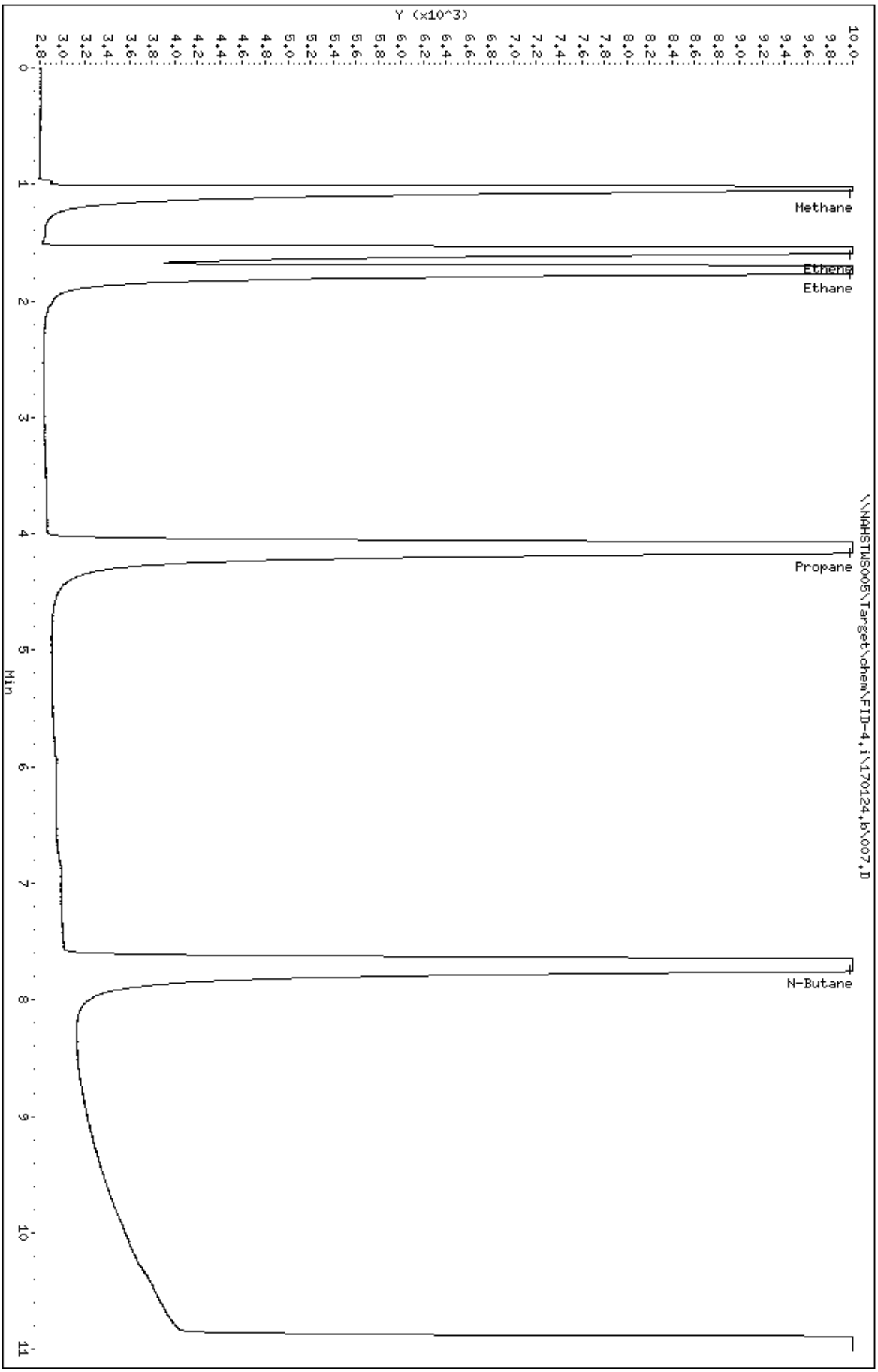
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Methane	1.030	1.030	0.000	41736	38.5880	42.833(A)
2 Ethene	1.556	1.556	0.000	55865	67.4000	95.291(A)
3 Ethane	1.723	1.723	0.000	72124	72.1720	97.951(A)
4 Propane	4.113	4.113	0.000	96509	105.852	105.844
5 N-Butane	7.690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

QC Flag Legend

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

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

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



Data File : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\007.D
Inj Date : 24-JAN-2017 11:13
InstruID : FID-4.i
LabSampID : ICAL7

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\008.D Page 1
Report Date: 28-Sep-2022 10:00

ALS Laboratory Group

Dissolved Gases Analysis

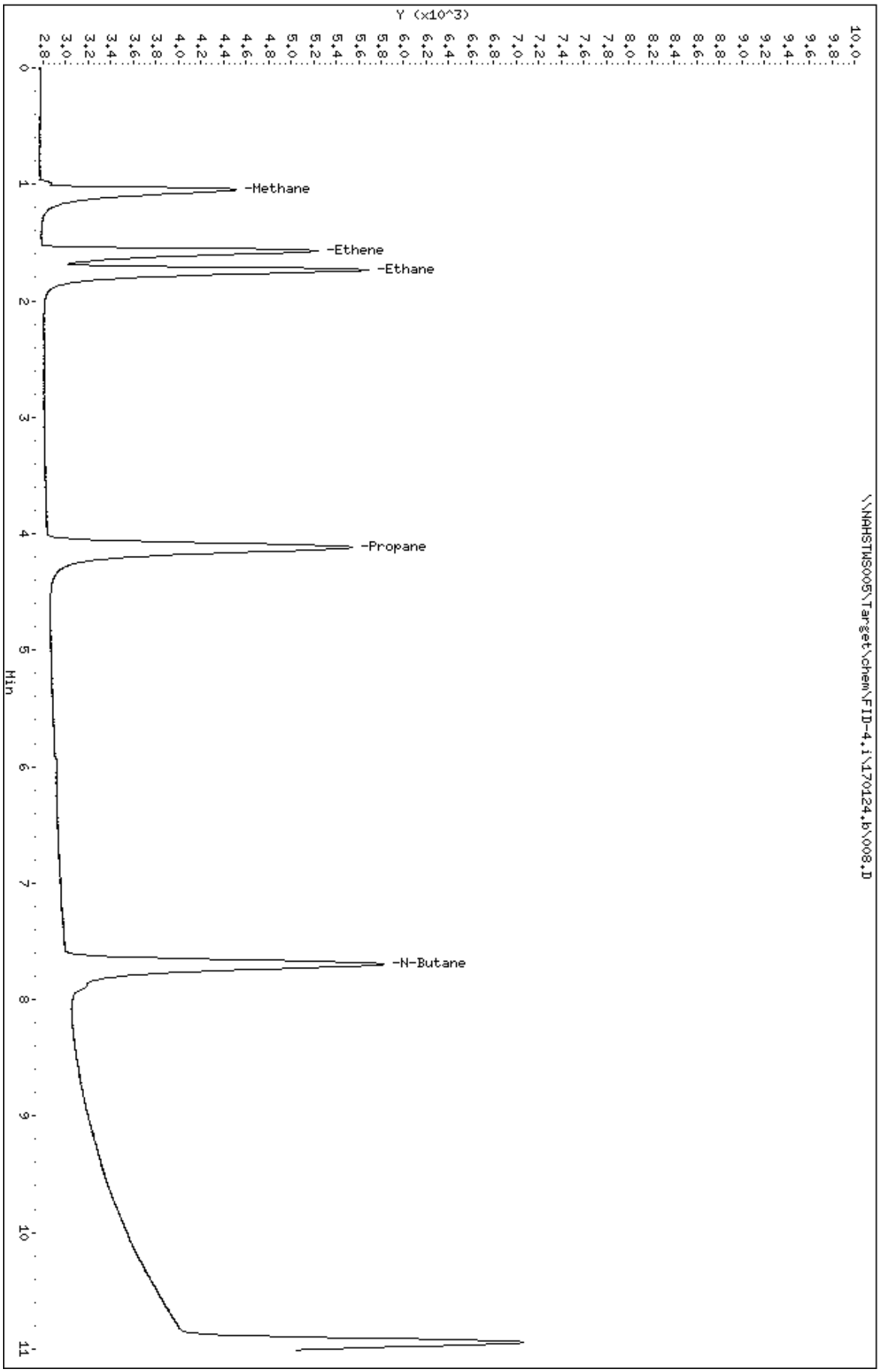
Data file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\008.D
Lab Smp Id: ICV Client Smp ID: ICV
Inj Date : 24-JAN-2017 12:05
Operator : MA Inst ID: FID-4.i
Smp Info : ICV;ICV;;;
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Meth Date : 28-Sep-2022 10:00 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 11:13 Cal File: 007.D
Als bottle: 8 QC Sample: METHSPIKE
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

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

Instrument: FID-4.i
Operator: HA
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

HS24010611

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

01/29/2024

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

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\001.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 15-JAN-2024 08:19
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\240115.b\RSKNI3.m
Meth Date : 15-Jan-2024 14:43 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: 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	10439	9.64700	10.706
2 Ethene	0.636	0.636	0.000	9605	16.8500	16.397(M)
3 Ethane	0.696	0.696	0.000	15198	18.0430	21.123(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240115.b\001.D

Date : 15-JAN-2024 08:19

Client ID: RSK-CCV

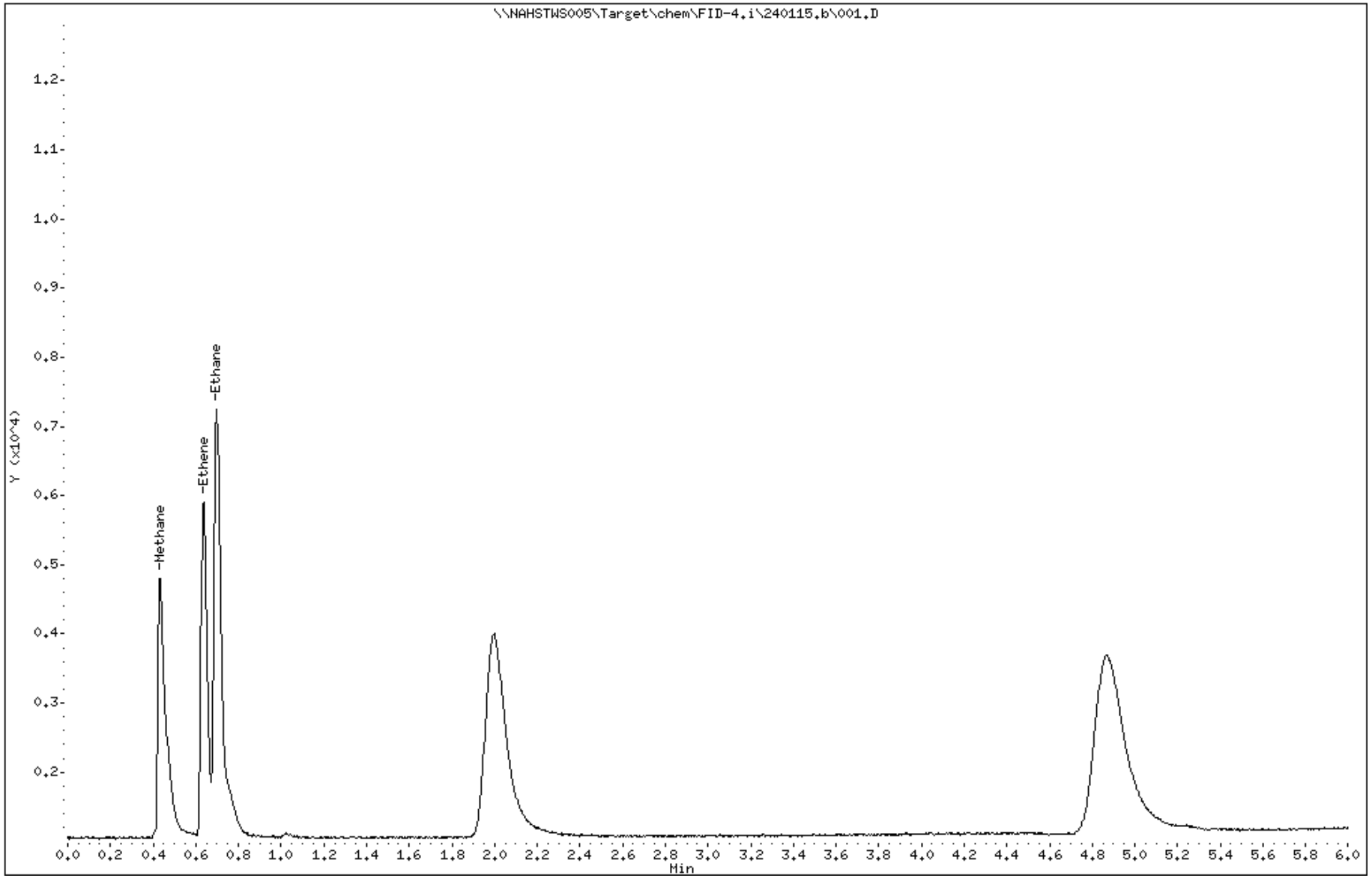
Instrument: FID-4.i

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

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



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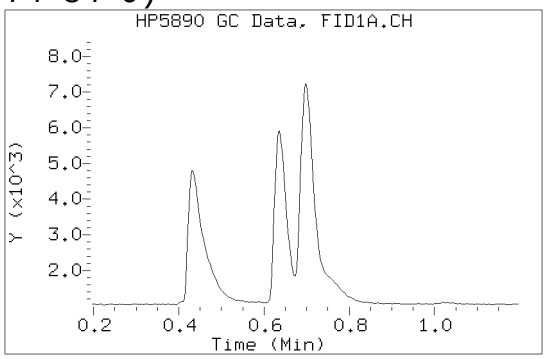
Inj Date : 15-JAN-2024 08:19
InstruID : FID-4.i
LabSampID : RSK-CCV

Ethane (74-84-0)

Reason Code:

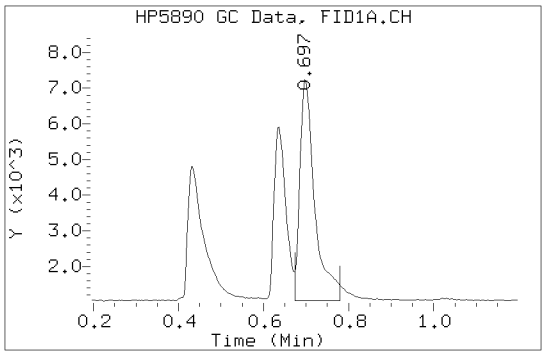
BEFORE

MASS
44
AREA
0
HEIGHT
0
15-Jan-2024
08:26
ALSHS
Server



AFTER

MASS
44
AREA
15198
HEIGHT
6193
19-Jan-2024
07:51
ALSHS
Server

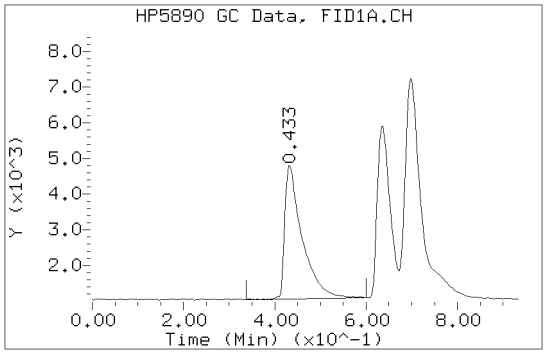


Ethene (74-85-1)

Reason Code:

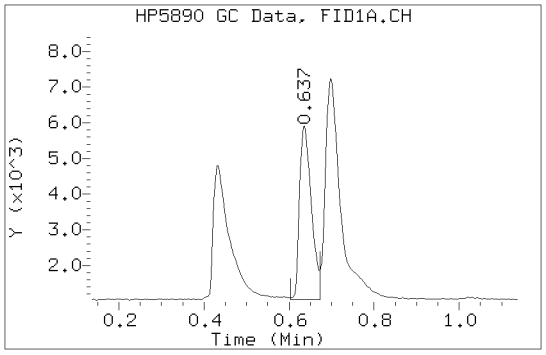
BEFORE

MASS
100
AREA
121
HEIGHT
31
15-Jan-2024
08:26
ALSHS
Server



AFTER

MASS
100
AREA
9605
HEIGHT
4863
19-Jan-2024
07:51
ALSHS
Server



Data File: \\NAHSTWS005\Target\chem\FID-4.i\240115.b\002.D Page 1
Report Date: 19-Jan-2024 07:52

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\002.D
Lab Smp Id: MBLK-240115 Client Smp ID: MBLK-240115
Inj Date : 15-JAN-2024 08:45
Operator : PL Inst ID: FID-4.i
Smp Info : MBLK-240115;MBLK-240115;3;;BLANK
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\RSKNI3.m
Meth Date : 15-Jan-2024 14:43 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 2 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: 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\240115.b\002.D

Date : 15-JAN-2024 08:45

Client ID: MBLK-240115

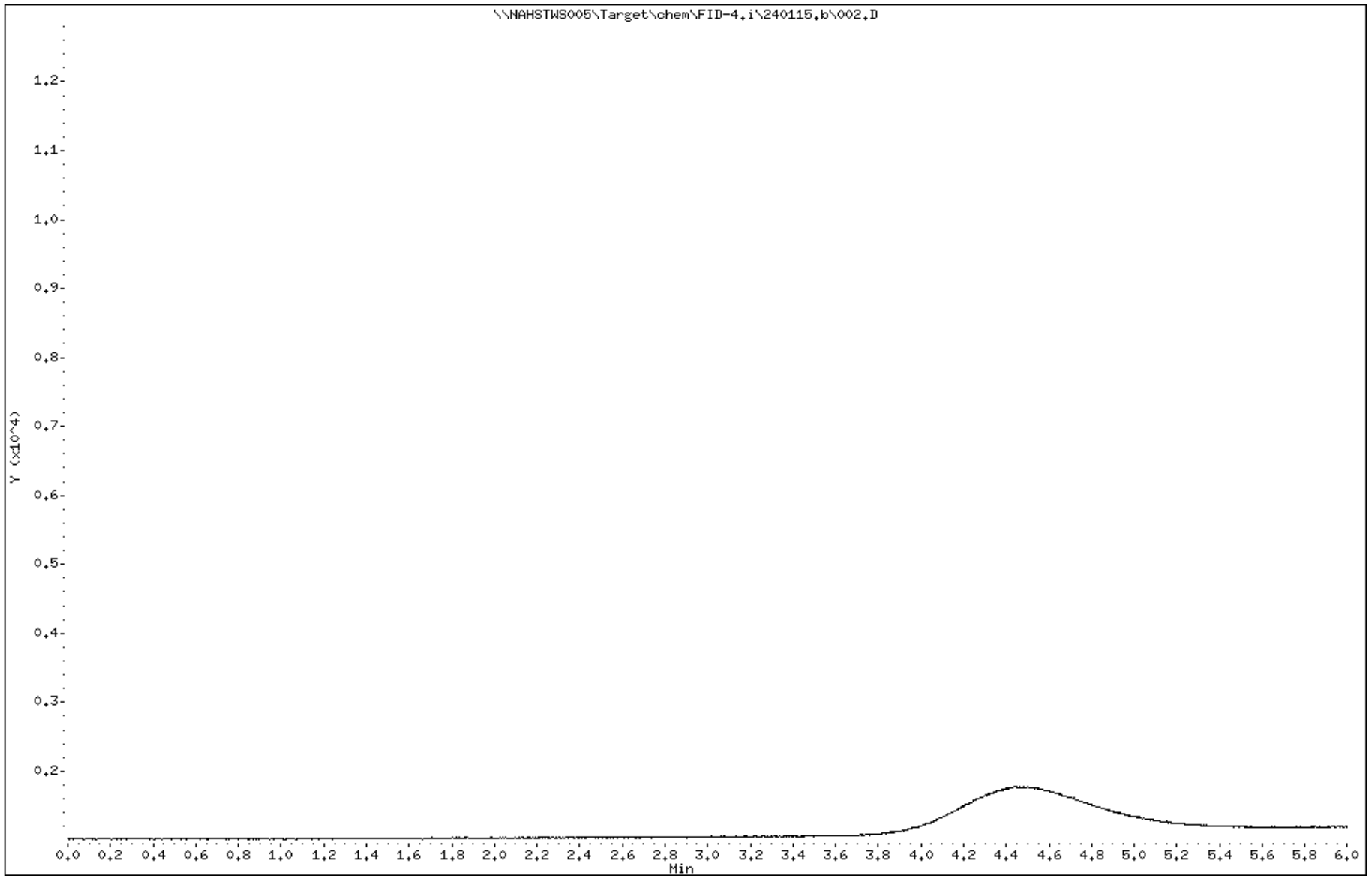
Instrument: FID-4.i

Sample Info: MBLK-240115;MBLK-240115;3;;BLANK

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\002.D
Inj Date : 15-JAN-2024 08:45
InstruID : FID-4.i
LabSampID : MBLK-240115

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240115.b\003.D Page 1
Report Date: 15-Jan-2024 09:05

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\003.D
Lab Smp Id: LCS-240115 Client Smp ID: LCS-240115
Inj Date : 15-JAN-2024 08:55
Operator : PL Inst ID: FID-4.i
Smp Info : LCS-240115;LCS-240115;3;;LCS
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\RSKNI3.m
Meth Date : 15-Jan-2024 08:43 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

					CONCENTRATIONS	
					ON-COLUMN	FINAL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	0.430	0.433	-0.003	10755	11.0309	11.030
2 Ethene	0.636	0.636	0.000	9031	15.4176	15.417
3 Ethane	0.700	0.696	0.004	14758	20.5118	20.511

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240115.b\003.D

Date : 15-JAN-2024 08:55

Client ID: LCS-240115

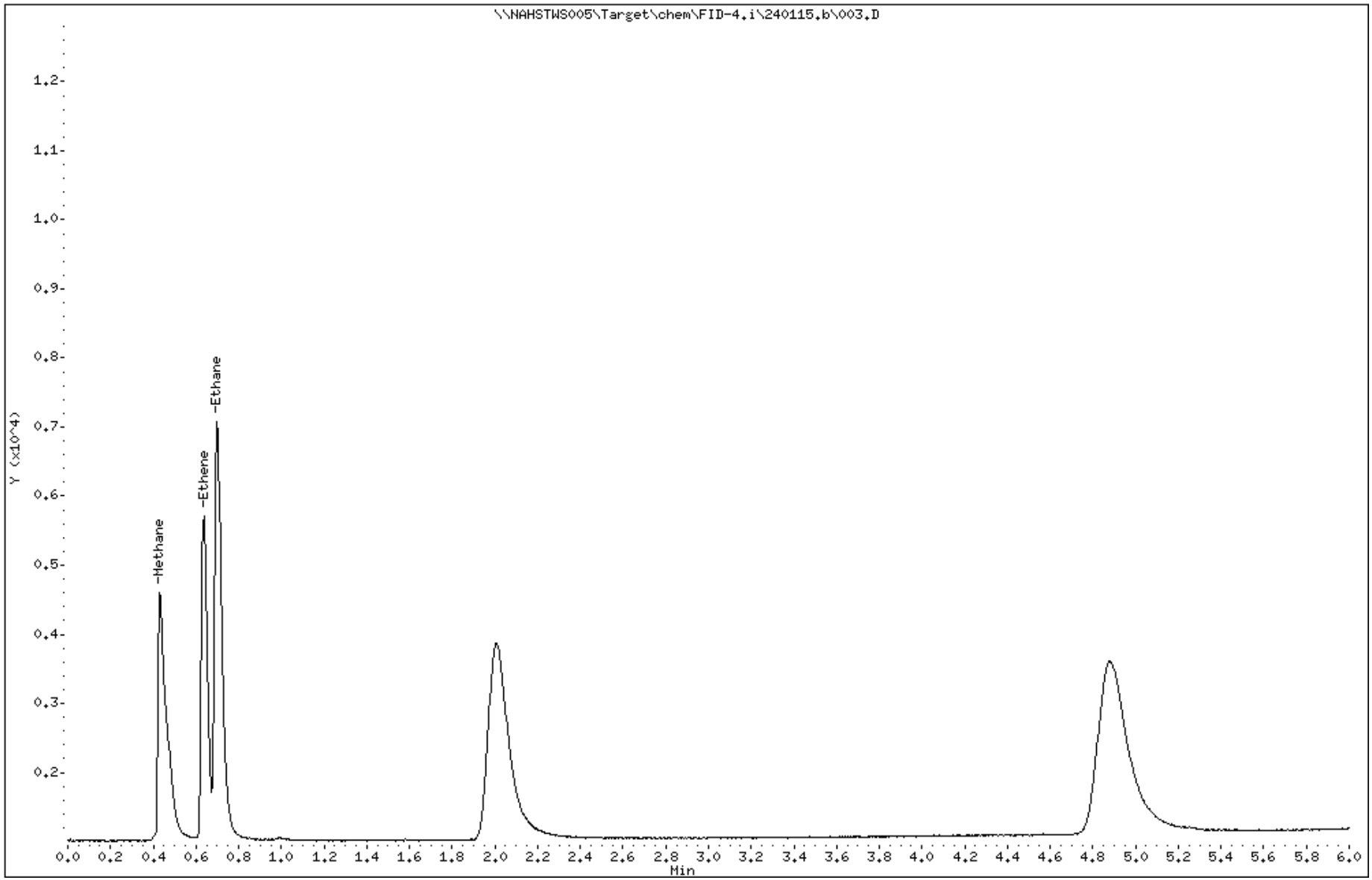
Instrument: FID-4.i

Sample Info: LCS-240115;LCS-240115;3;;LCS

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\003.D
Inj Date : 15-JAN-2024 08:55
InstruID : FID-4.i
LabSampID : LCS-240115

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240115.b\004.D Page 1
Report Date: 15-Jan-2024 09:18

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\004.D
Lab Smp Id: LCSD-240115 Client Smp ID: LCSD-240115
Inj Date : 15-JAN-2024 09:05
Operator : PL Inst ID: FID-4.i
Smp Info : LCSD-240115;LCSD-240115;3;;LCSD
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\RSKNI3.m
Meth Date : 15-Jan-2024 08:43 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

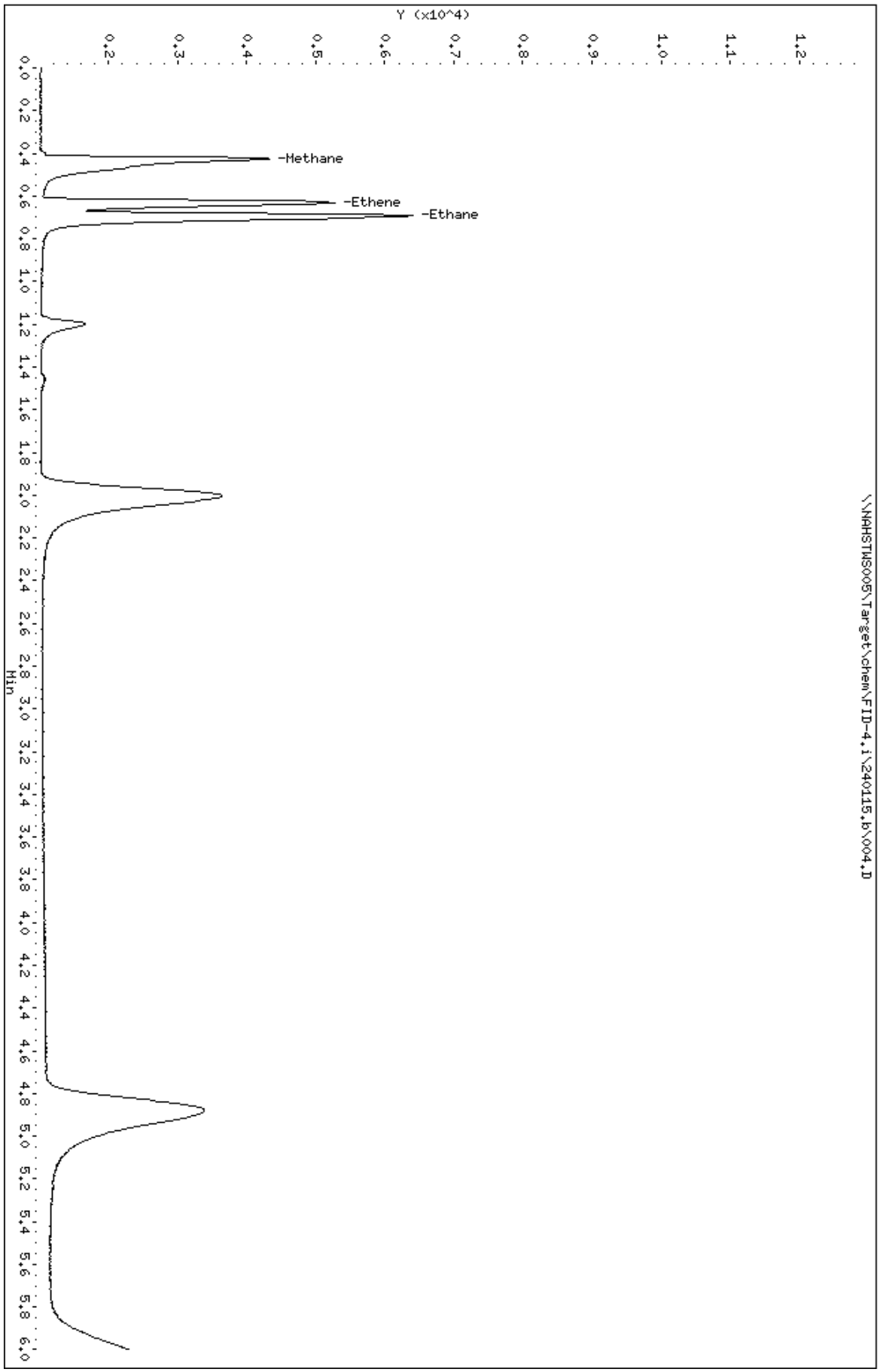
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
1 Methane	0.426	0.433	-0.007	9781	10.0319	10.031
2 Ethene	0.630	0.636	-0.006	8452	14.4291	14.429(M)
3 Ethane	0.693	0.696	-0.003	12363	17.1830	17.183(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4,i\240115,b\004,D
Date : 15-JAN-2024 09:05
Client ID: LCSD-240115
Sample Info: LCSD-240115;LCSD-240115;3;;LCSD
Column phase: Rtx-PLOT

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



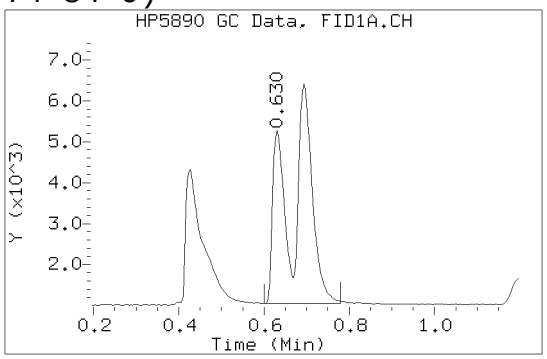
Data File : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\004.D
Inj Date : 15-JAN-2024 09:05
InstruID : FID-4.i
LabSampID : LCSD-240115

Ethane (74-84-0)

Reason Code:

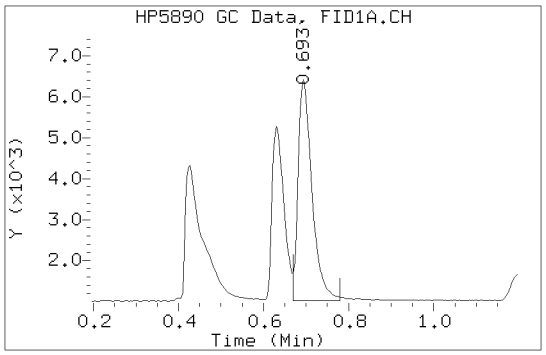
BEFORE

MASS
44
AREA
20344
HEIGHT
4229
15-Jan-2024
09:12
ALSHS
Server



AFTER

MASS
44
AREA
12363
HEIGHT
5401
15-Jan-2024
09:18
ALSHS
Server

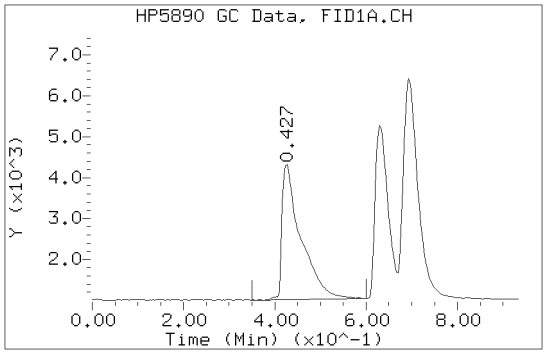


Ethene (74-85-1)

Reason Code:

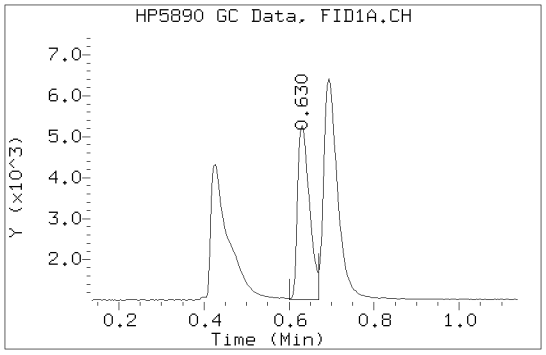
BEFORE

MASS
100
AREA
0
HEIGHT
0
15-Jan-2024
09:12
ALSHS
Server



AFTER

MASS
100
AREA
8452
HEIGHT
4260
15-Jan-2024
09:18
ALSHS
Server



Data File: \\NAHSTWS005\Target\chem\FID-4.i\240115.b\005.D Page 1
Report Date: 18-Jan-2024 12:44

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\005.D
Lab Smp Id: HS24010611-01 Client Smp ID: HS24010611-01
Inj Date : 15-JAN-2024 09:20
Operator : PL Inst ID: FID-4.i
Smp Info : HS24010611-01;HS24010611-01
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\RSKNI3.m
Meth Date : 15-Jan-2024 14:43 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: 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	3349446	3435.36	3435.356(AM)
2 Ethene	0.620	0.640	-0.020	13281	22.6731	22.673(M)
3 Ethane	0.700	0.703	-0.003	1896	2.63520	2.635(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\240115.b\005.D

Date : 15-JAN-2024 09:20

Client ID: HS24010611-01

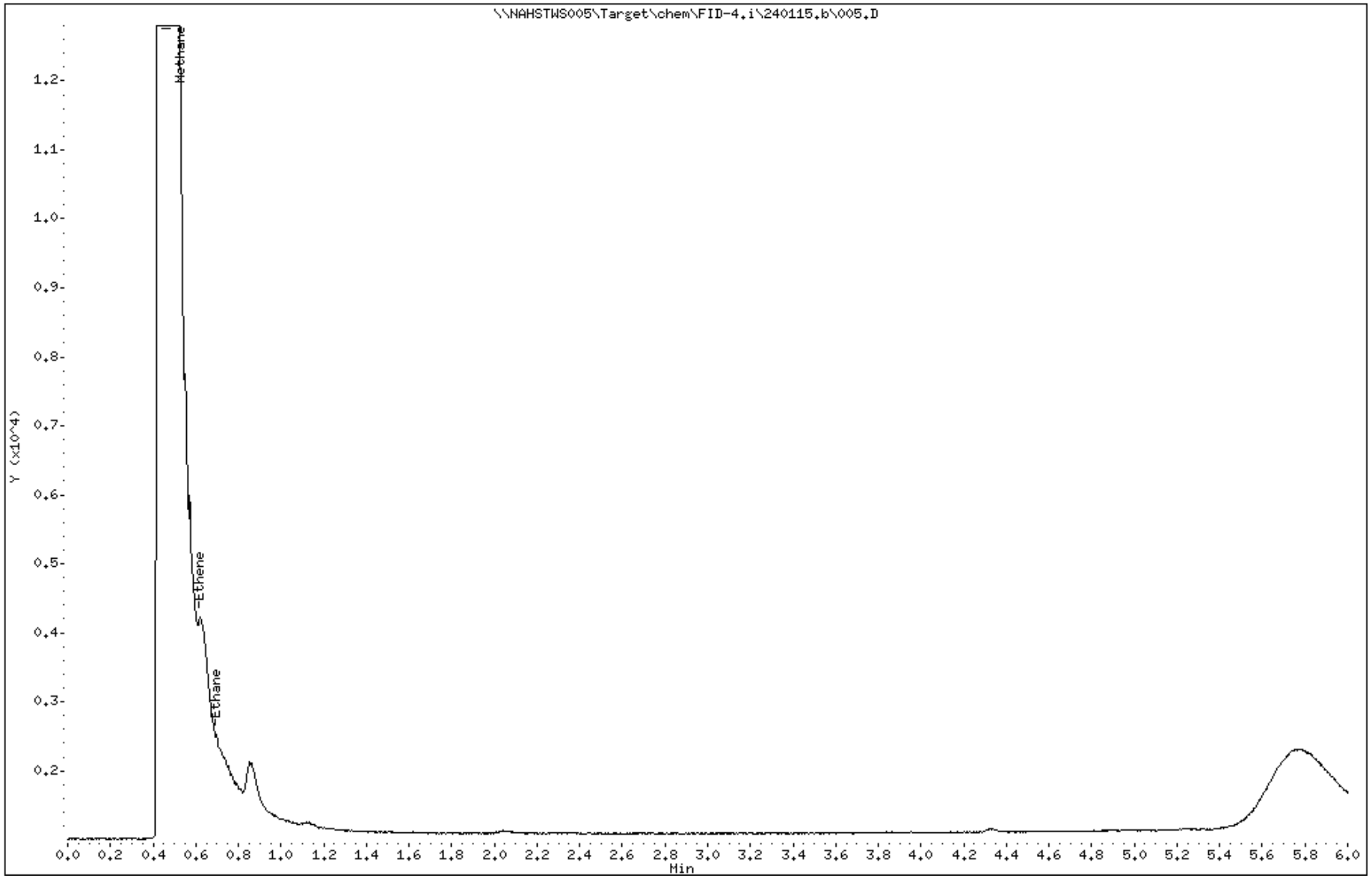
Instrument: FID-4.i

Sample Info: HS24010611-01;HS24010611-01

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



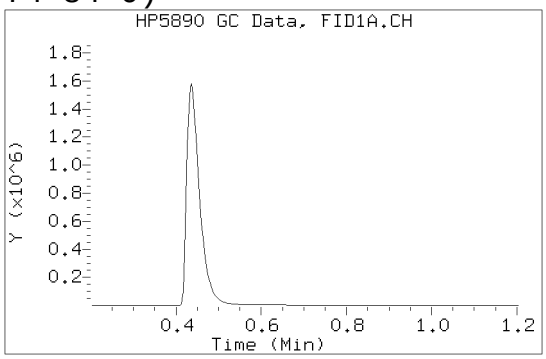
Data File : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\005.D
Inj Date : 15-JAN-2024 09:20
InstruID : FID-4.i
LabSampID : HS24010611-01

Ethane (74-84-0)

Reason Code:

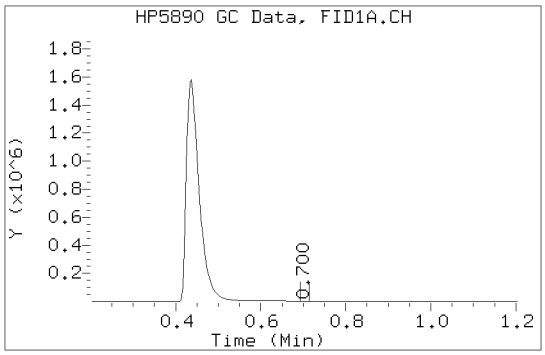
BEFORE

MASS
44
AREA
0
HEIGHT
0
15-Jan-2024
09:28
ALSHS
Server



AFTER

MASS
44
AREA
1896
HEIGHT
1467
18-Jan-2024
12:44
ALSHS
Server

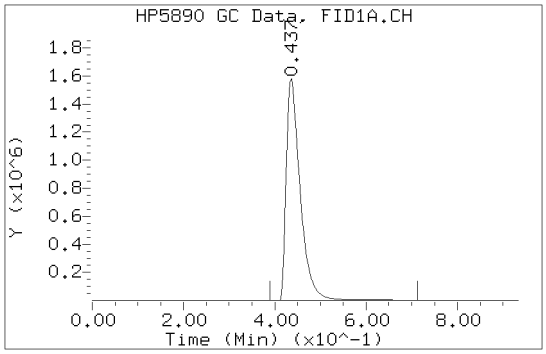


Methane (74-82-8)

Reason Code:

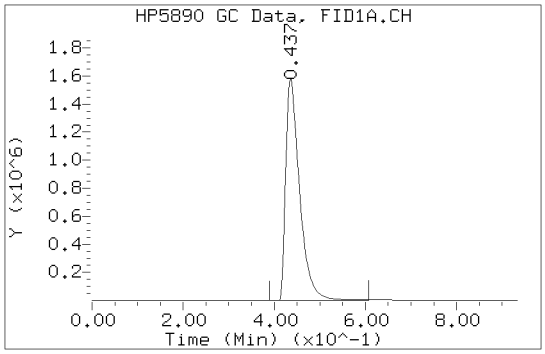
BEFORE

MASS
100
AREA
0
HEIGHT
0
15-Jan-2024
09:28
ALSHS
Server



AFTER

MASS
100
AREA
3349446
HEIGHT
1579381
18-Jan-2024
12:44
ALSHS
Server

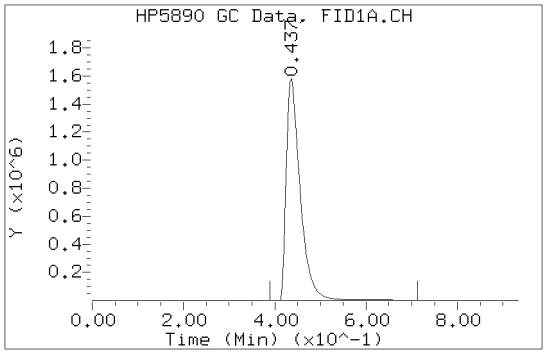


Ethene (74-85-1)

Reason Code:

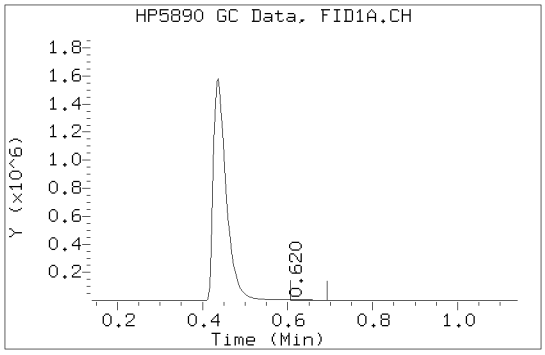
BEFORE

MASS
100
AREA
0
HEIGHT
0
15-Jan-2024
09:28
ALSHS
Server



AFTER

MASS
100
AREA
13281
HEIGHT
3200
18-Jan-2024
12:44
ALSHS
Server



Data File: \\NAHSTWS005\Target\chem\FID-4.i\240115.b\006.D Page 1
Report Date: 18-Jan-2024 12:43

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\006.D
Lab Smp Id: HS24010611-01MS Client Smp ID: HS24010611-01MS
Inj Date : 15-JAN-2024 09:29
Operator : PL Inst ID: FID-4.i
Smp Info : HS24010611-01MS;HS24010611-01MS
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\RSKNI3.m
Meth Date : 15-Jan-2024 14:43 samy.mata 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	0.436	0.433	0.003	3636522	3729.80	3729.795(ARM)
2 Ethene	0.623	0.640	-0.017	19377	33.0801	33.080(RM)
3 Ethane	0.696	0.703	-0.007	18477	25.6807	25.680(RM)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240115.b\006.D

Date : 15-JAN-2024 09:29

Client ID: HS24010611-01MS

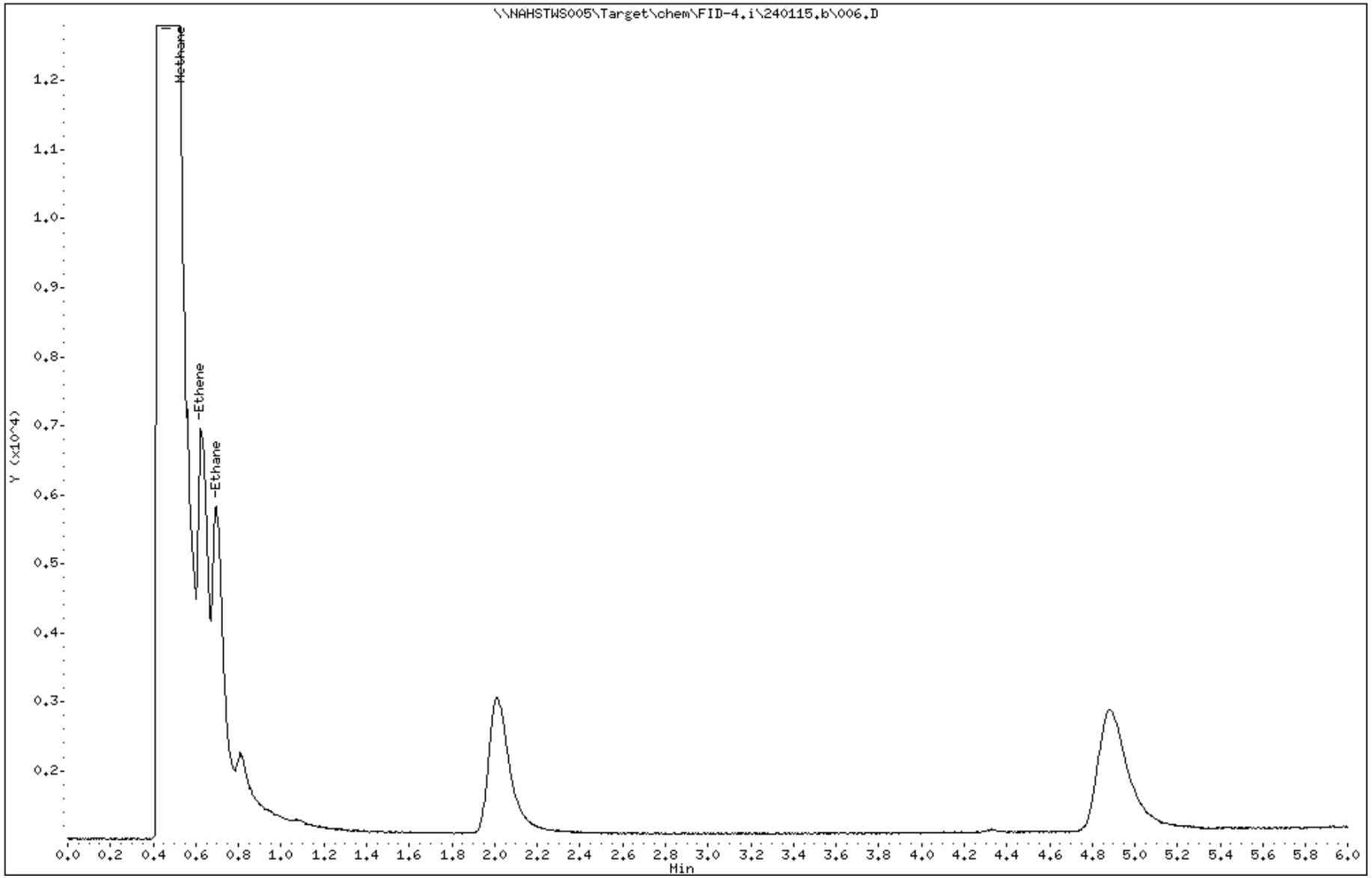
Instrument: FID-4.i

Sample Info: HS24010611-01MS;HS24010611-01MS

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53

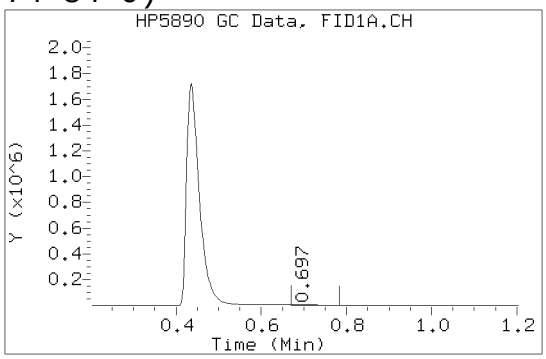


Data File : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\006.D
Inj Date : 15-JAN-2024 09:29
InstruID : FID-4.i
LabSampID : HS24010611-01MS

Ethane (74-84-0)

BEFORE

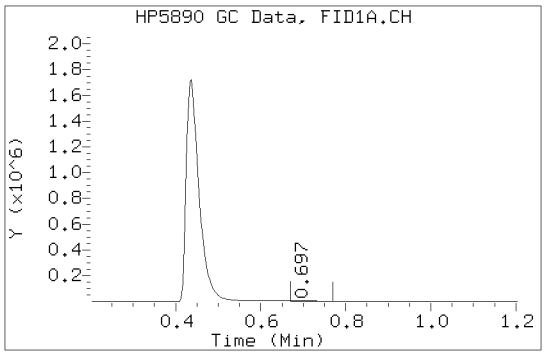
MASS
44
AREA
18658
HEIGHT
4785
15-Jan-2024
09:37
ALSHS
Server



AFTER

MASS
44
AREA
18477
HEIGHT
4809
18-Jan-2024
12:43
ALSHS
Server

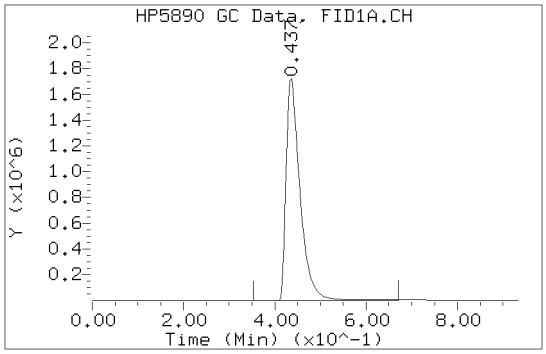
Reason Code:



Methane (74-82-8)

BEFORE

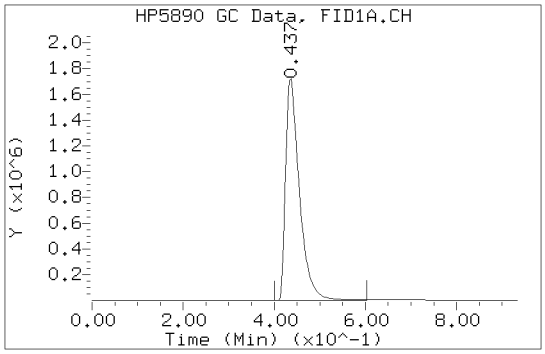
MASS
100
AREA
0
HEIGHT
0
15-Jan-2024
09:37
ALSHS
Server



AFTER

MASS
100
AREA
3636522
HEIGHT
1720873
18-Jan-2024
12:43
ALSHS
Server

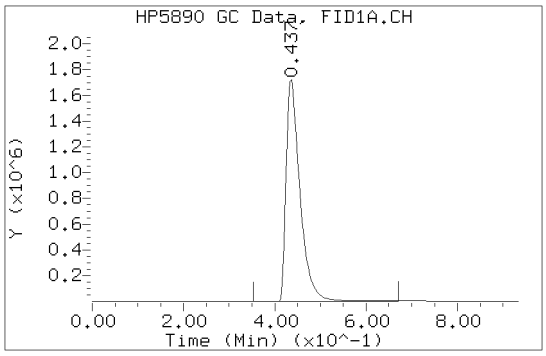
Reason Code:



Ethene (74-85-1)

BEFORE

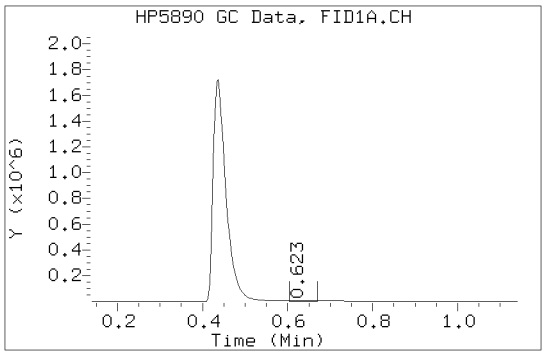
MASS
100
AREA
0
HEIGHT
0
15-Jan-2024
09:37
ALSHS
Server



AFTER

MASS
100
AREA
19377
HEIGHT
5929
18-Jan-2024
12:43
ALSHS
Server

Reason Code:



Data File: \\NAHSTWS005\Target\chem\FID-4.i\240115.b\007.D Page 1
Report Date: 19-Jan-2024 07:54

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\007.D
Lab Smp Id: HS24010611-01MSD Client Smp ID: HS24010611-01MSD
Inj Date : 15-JAN-2024 09:38
Operator : PL Inst ID: FID-4.i
Smp Info : HS24010611-01MSD;HS24010611-01MSD
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\RSKNI3.m
Meth Date : 15-Jan-2024 14:43 samy.mata 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

					CONCENTRATIONS	
					ON-COLUMN	FINAL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	0.433	0.433	0.000	3599305	3691.62	3691.623(ARM)
2 Ethene	0.626	0.636	-0.010	20023	34.1829	34.182(RM)
3 Ethane	0.693	0.696	-0.003	17611	24.4771	24.477(RM)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240115.b\007.D

Date : 15-JAN-2024 09:38

Client ID: HS24010611-01MSD

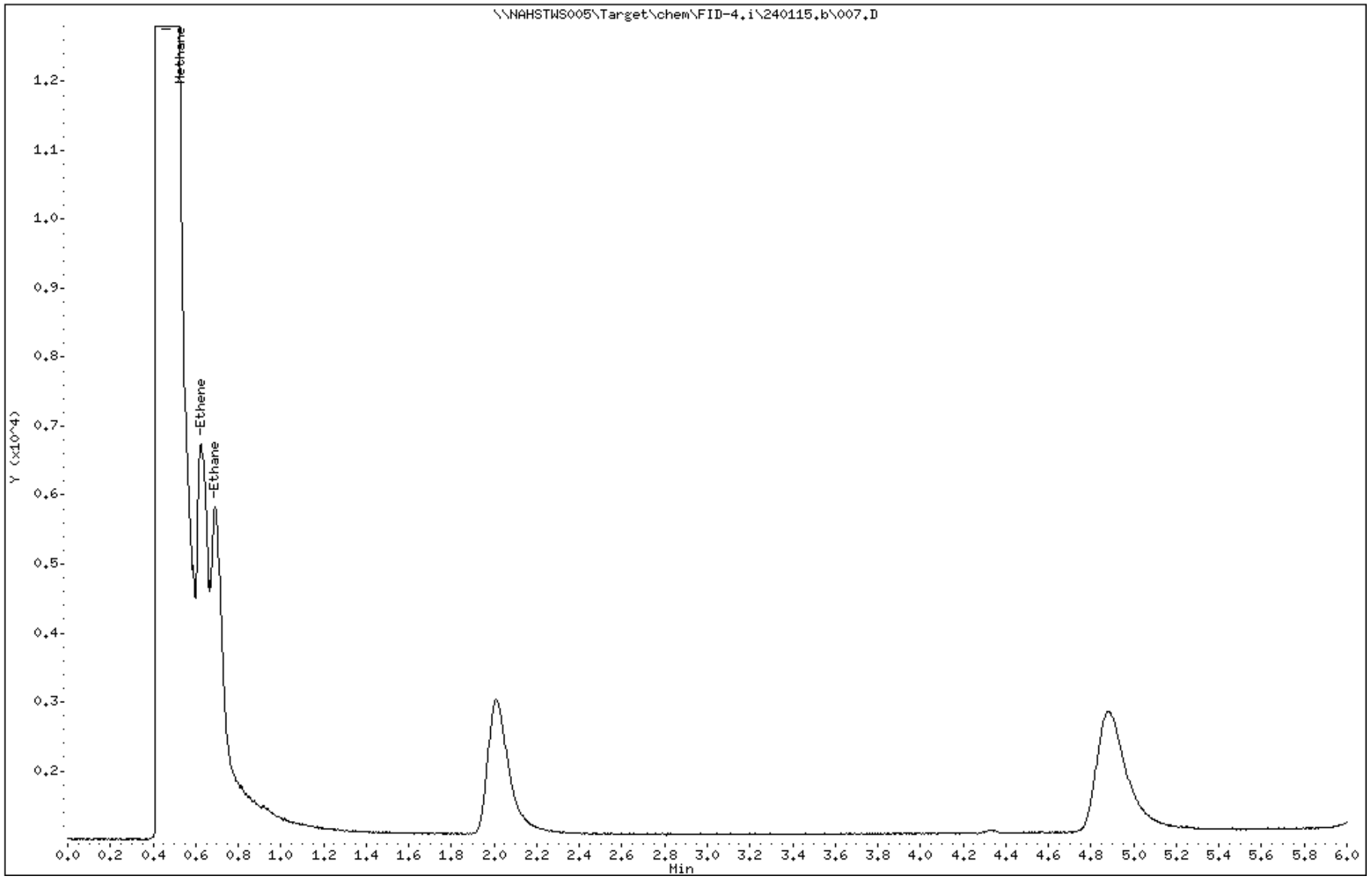
Instrument: FID-4.i

Sample Info: HS24010611-01MSD;HS24010611-01MSD

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



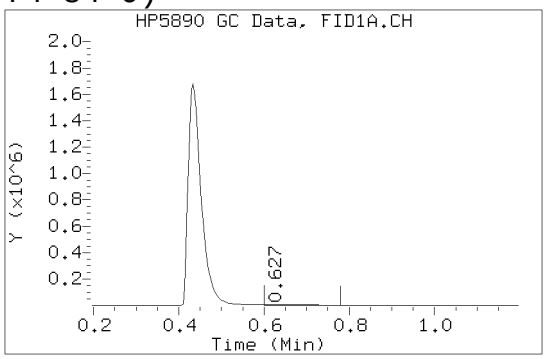
Data File : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\007.D
Inj Date : 15-JAN-2024 09:38
InstruID : FID-4.i
LabSampID : HS24010611-01MSD

Ethane (74-84-0)

Reason Code:

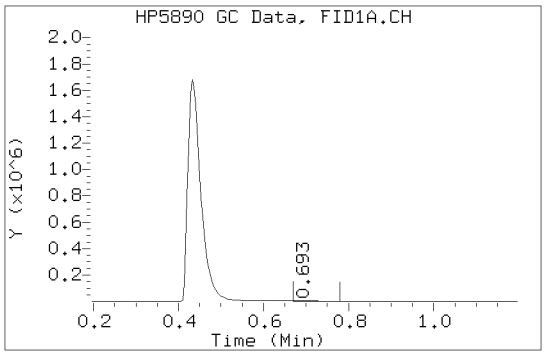
BEFORE

MASS
44
AREA
33066
HEIGHT
5247
15-Jan-2024
09:45
ALSHS
Server



AFTER

MASS
44
AREA
17611
HEIGHT
4646
19-Jan-2024
07:54
ALSHS
Server

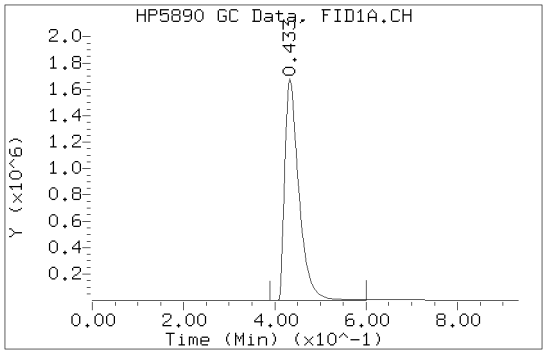


Methane (74-82-8)

Reason Code:

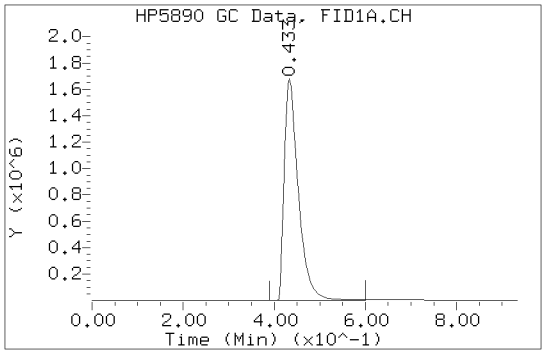
BEFORE

MASS
100
AREA
0
HEIGHT
0
15-Jan-2024
09:45
ALSHS
Server



AFTER

MASS
100
AREA
3599305
HEIGHT
1679653
19-Jan-2024
07:54
ALSHS
Server

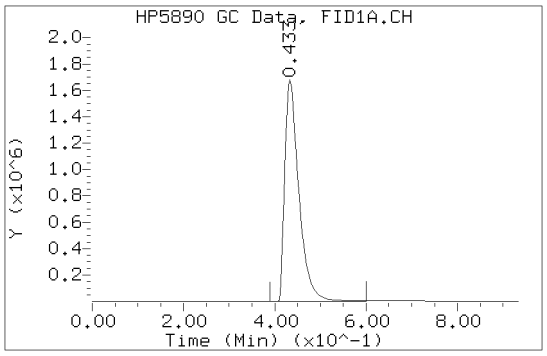


Ethene (74-85-1)

Reason Code:

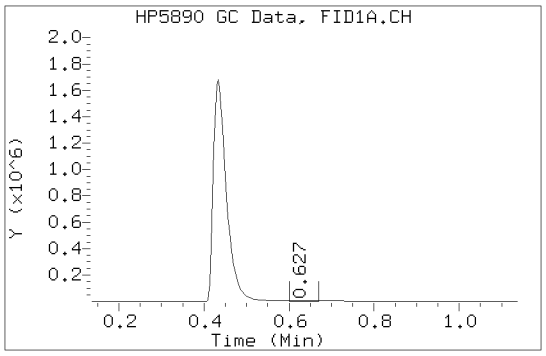
BEFORE

MASS
100
AREA
0
HEIGHT
0
15-Jan-2024
09:45
ALSHS
Server



AFTER

MASS
100
AREA
20023
HEIGHT
5593
19-Jan-2024
07:54
ALSHS
Server



Data File: \\NAHSTWS005\Target\chem\FID-4.i\240115.b\011.D Page 1
Report Date: 15-Jan-2024 10:25

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\011.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 15-JAN-2024 10:12
Operator : PL Inst ID: FID-4.i
Smp Info : RSK-CCV;RSK-CCV;2;4
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\RSKNI3.m
Meth Date : 15-Jan-2024 10:21 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	10505	9.64700	10.774
2 Ethene	0.636	0.636	0.000	8013	16.8500	13.679
3 Ethane	0.700	0.700	0.000	11783	18.0430	16.376

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240115.b\011.D

Date : 15-JAN-2024 10:12

Client ID: RSK-CCV

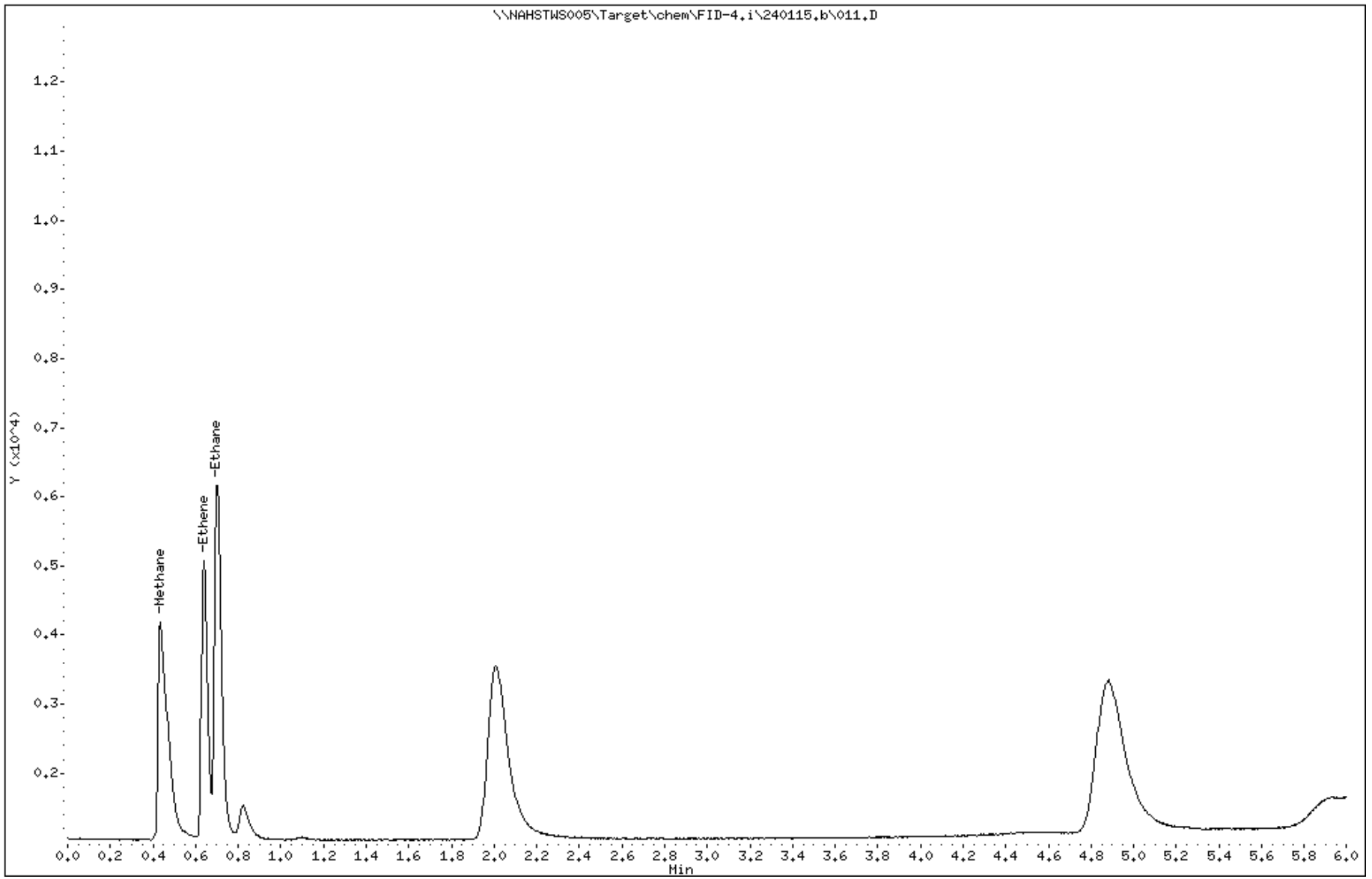
Instrument: FID-4.i

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

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\011.D
Inj Date : 15-JAN-2024 10:12
InstruID : FID-4.i
LabSampID : RSK-CCV

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240115.b\012.D Page 1
Report Date: 15-Jan-2024 10:41

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\012.D
Lab Smp Id: HS24010611-03 Client Smp ID: HS24010611-03
Inj Date : 15-JAN-2024 10:30
Operator : PL Inst ID: FID-4.i
Smp Info : HS24010611-03;HS24010611-03
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\RSKNI3.m
Meth Date : 15-Jan-2024 10:21 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	0.430	0.433	-0.003	4245711	4354.61	4354.609(A)

QC Flag Legend

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

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240115.b\012.D

Date : 15-JAN-2024 10:30

Client ID: HS24010611-03

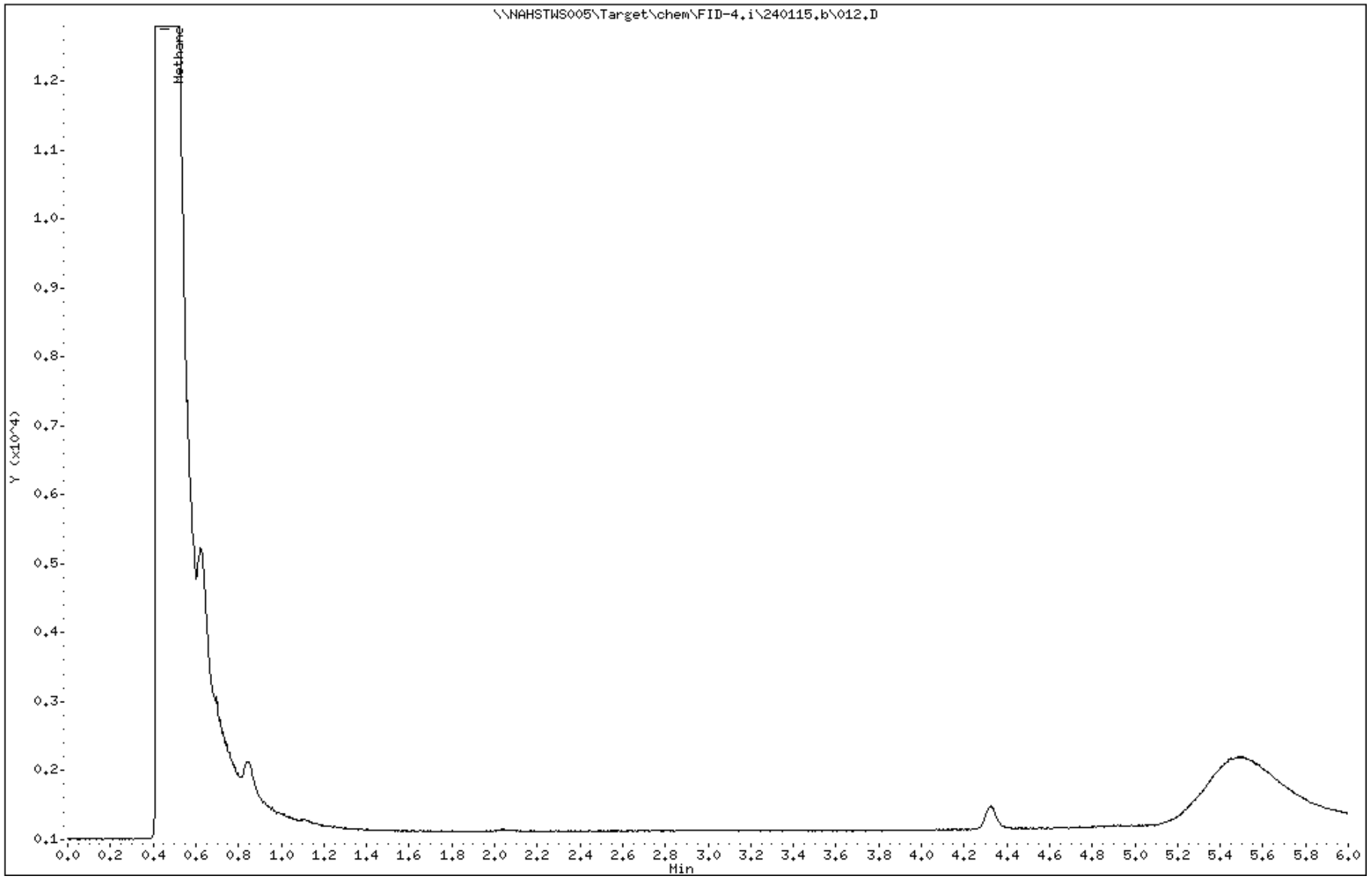
Instrument: FID-4.i

Sample Info: HS24010611-03;HS24010611-03

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\012.D
Inj Date : 15-JAN-2024 10:30
InstruID : FID-4.i
LabSampID : HS24010611-03

NO MANUAL INTEGRATIONS

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\013.D
Lab Smp Id: HS24010611-01 Client Smp ID: HS24010611-01
Inj Date : 15-JAN-2024 10:39
Operator : PL Inst ID: FID-4.i
Smp Info : HS24010611-01;HS24010611-01
Misc Info : ;1;0;100
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\RSKNI3.m
Meth Date : 15-Jan-2024 14:43 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 13
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

					CONCENTRATIONS	
					ON-COLUMN	FINAL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	0.443	0.433	0.010	27489	28.1941	2819.406(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240115.b\013.D

Date : 15-JAN-2024 10:39

Client ID: HS24010611-01

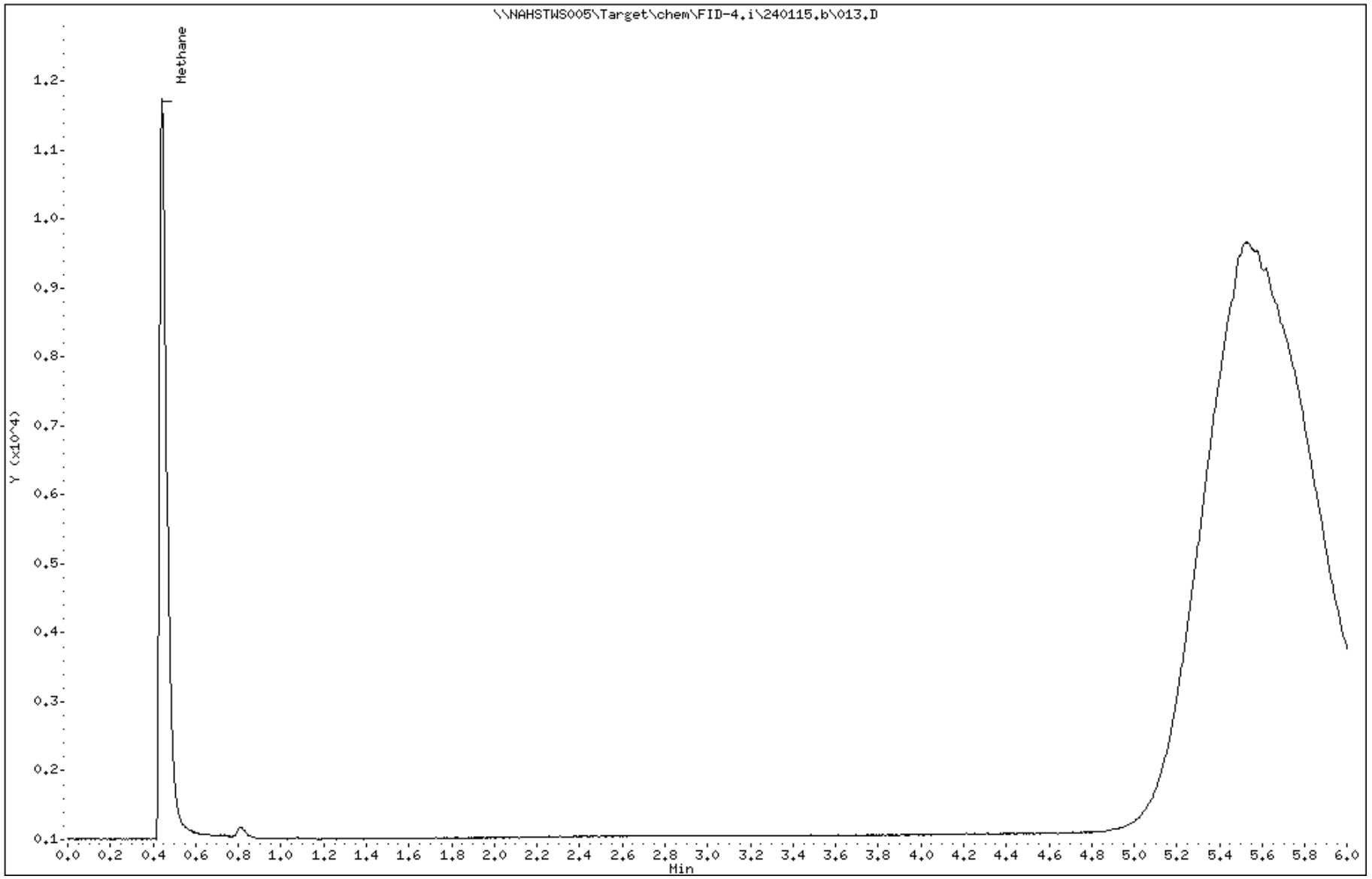
Instrument: FID-4.i

Sample Info: HS24010611-01;HS24010611-01

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



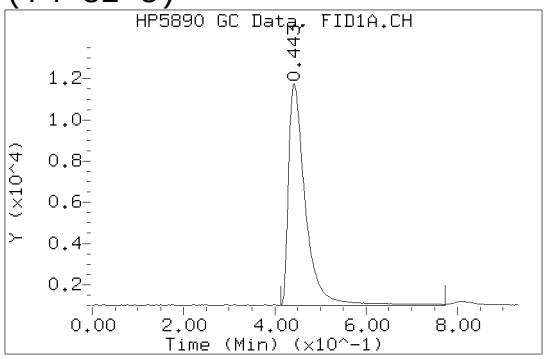
Data File : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\013.D
Inj Date : 15-JAN-2024 10:39
InstruID : FID-4.i
LabSampID : HS24010611-01

Methane (74-82-8)

Reason Code:

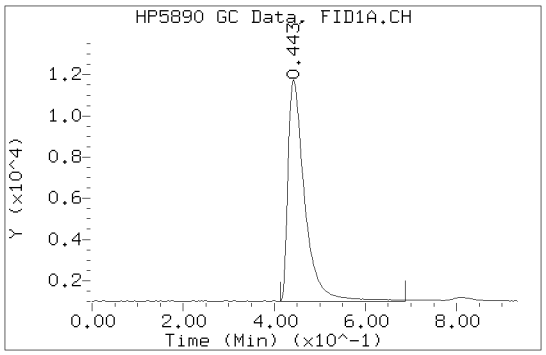
BEFORE

MASS
100
AREA
0
HEIGHT
0
15-Jan-2024
10:47
ALSHS
Server



AFTER

MASS
100
AREA
27489
HEIGHT
10753
19-Jan-2024
07:58
ALSHS
Server



Data File: \\NAHSTWS005\Target\chem\FID-4.i\240115.b\015.D Page 1
Report Date: 19-Jan-2024 07:59

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\015.D
Lab Smp Id: HS24010611-03 Client Smp ID: HS24010611-03
Inj Date : 15-JAN-2024 11:07
Operator : PL Inst ID: FID-4.i
Smp Info : HS24010611-03;HS24010611-03
Misc Info : ;1;0;200
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\RSKNI3.m
Meth Date : 15-Jan-2024 14:43 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 15
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	0.430	0.433	-0.003	22450	23.0258	4605.164
3 Ethane	0.726	0.696	0.030	398	0.55317	110.633(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\240115.b\015.D

Date : 15-JAN-2024 11:07

Client ID: HS24010611-03

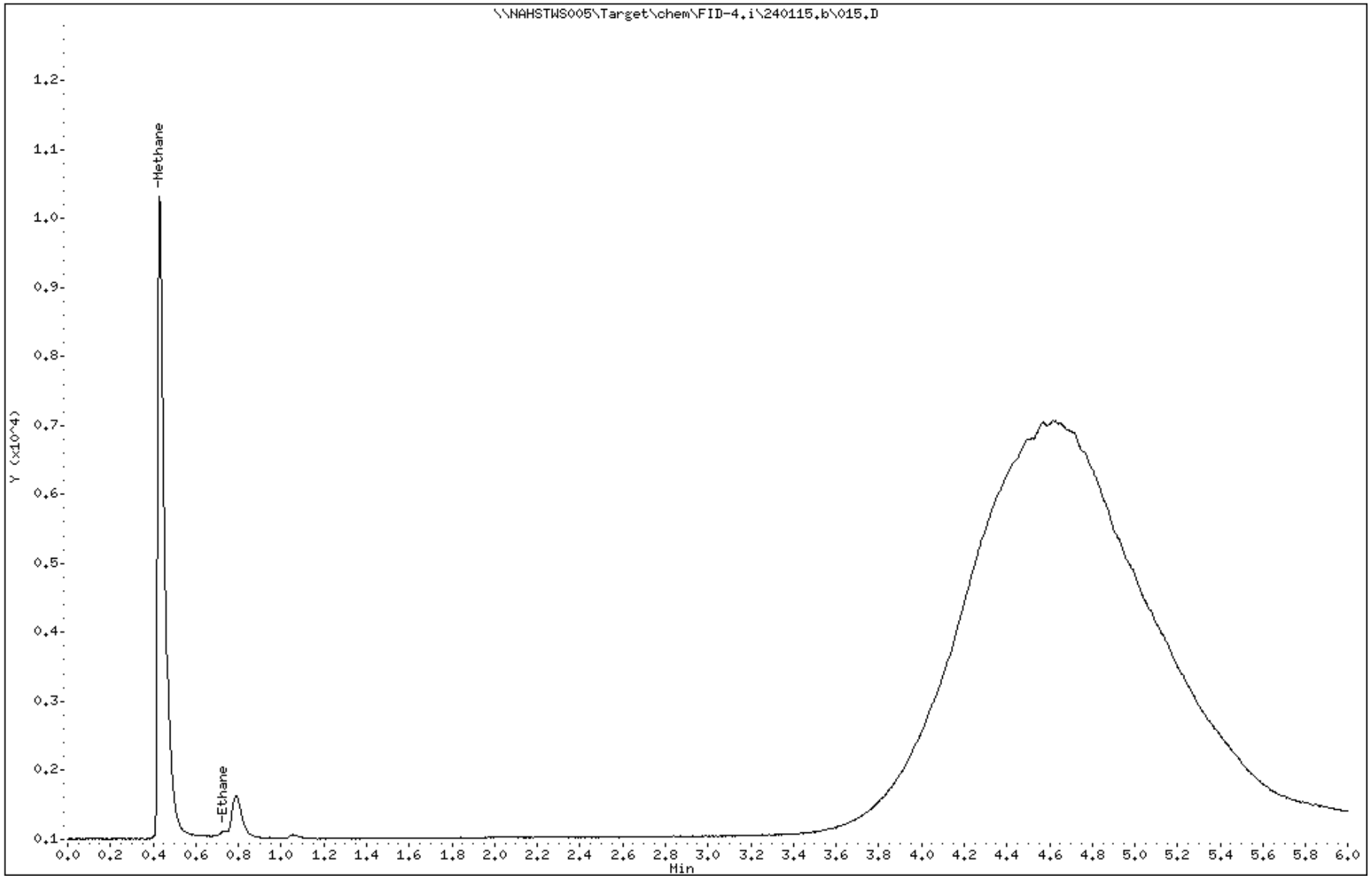
Instrument: FID-4.i

Sample Info: HS24010611-03;HS24010611-03

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



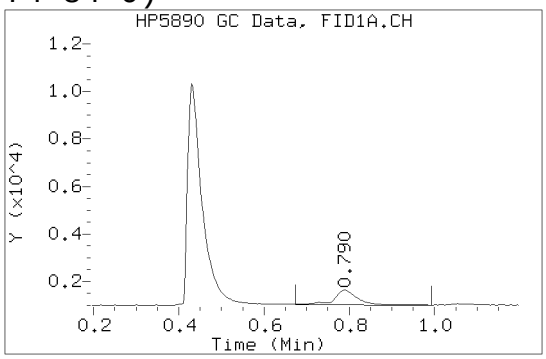
Data File : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\015.D
Inj Date : 15-JAN-2024 11:07
InstruID : FID-4.i
LabSampID : HS24010611-03

Ethane (74-84-0)

Reason Code:

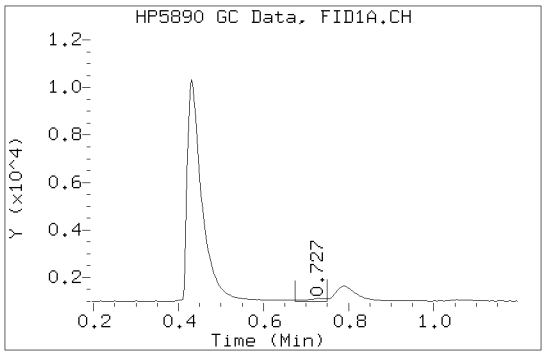
BEFORE

MASS
44
AREA
2457
HEIGHT
623
15-Jan-2024
11:15
ALSHS
Server



AFTER

MASS
44
AREA
398
HEIGHT
124
19-Jan-2024
07:59
ALSHS
Server



Data File: \\NAHSTWS005\Target\chem\FID-4.i\240115.b\022.D Page 1
Report Date: 19-Jan-2024 08:05

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\022.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 15-JAN-2024 12:42
Operator : JA Inst ID: FID-4.i
Smp Info : RSK-CCV;RSK-CCV;2;4
Misc Info : 1x
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\RSKNI3.m
Meth Date : 15-Jan-2024 14:43 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 22 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14

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

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Methane	0.426	0.426	0.000	7734	9.64700	7.932(M)
2 Ethene	0.633	0.633	0.000	8006	16.8500	13.667(M)
3 Ethane	0.696	0.696	0.000	11932	18.0430	16.583(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240115.b\022.D

Date : 15-JAN-2024 12:42

Client ID: RSK-CCV

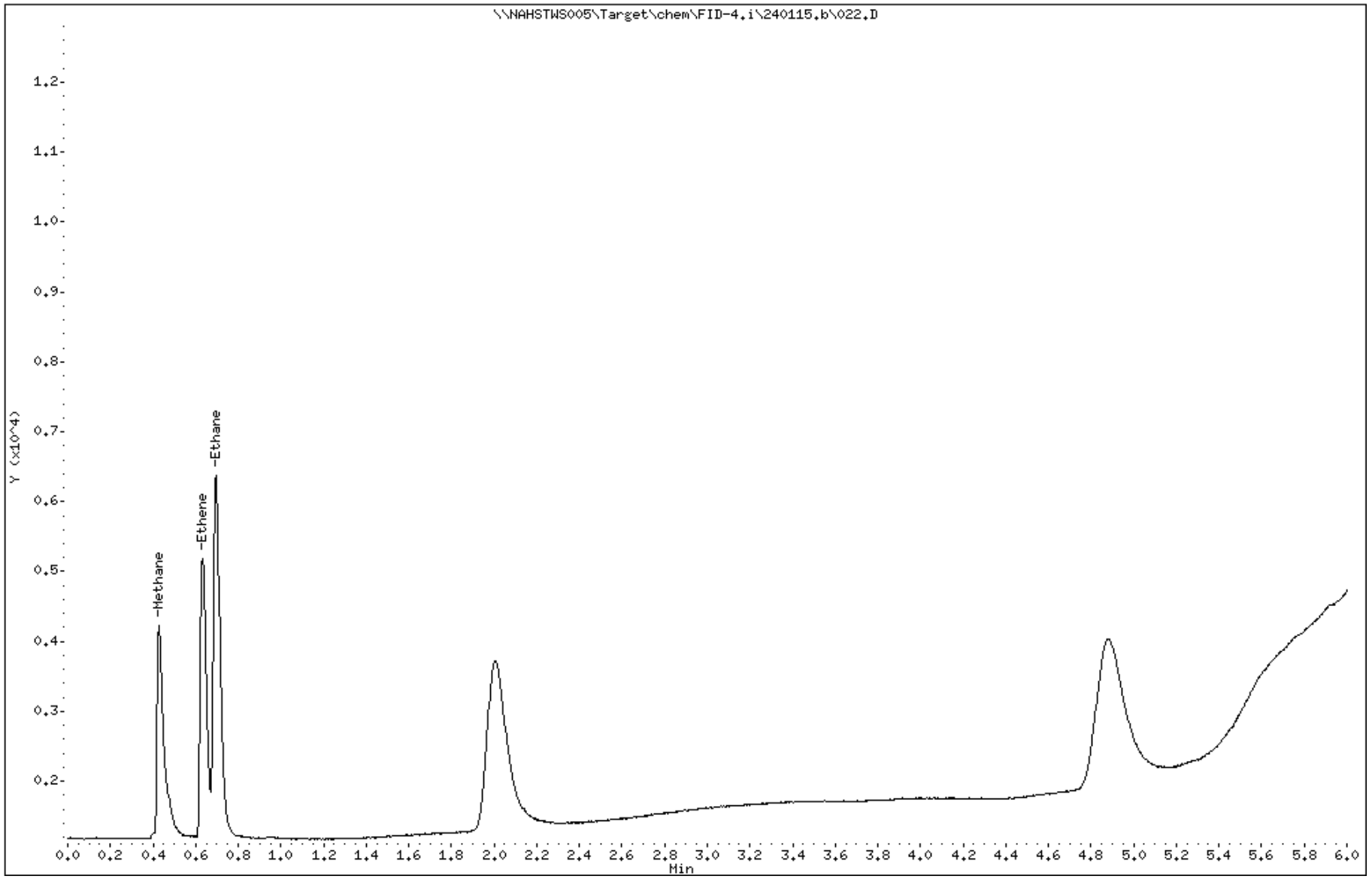
Instrument: FID-4.i

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

Operator: JA

Column phase: Rtx-PLOT

Column diameter: 0.53



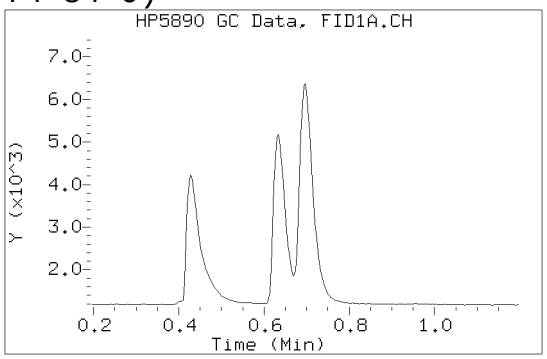
Data File : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\022.D
Inj Date : 15-JAN-2024 12:42
InstruID : FID-4.i
LabSampID : RSK-CCV

Ethane (74-84-0)

Reason Code:

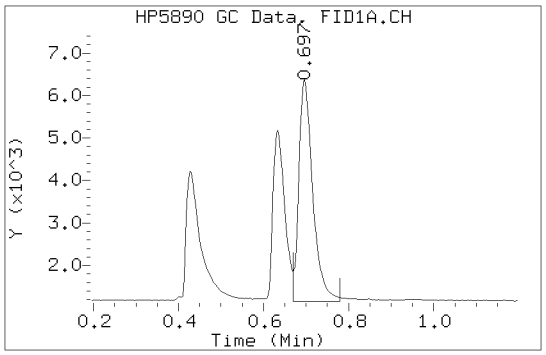
BEFORE

MASS
44
AREA
0
HEIGHT
0
15-Jan-2024
12:49
elona
hasani



AFTER

MASS
44
AREA
11932
HEIGHT
5216
19-Jan-2024
08:05
elona
hasani

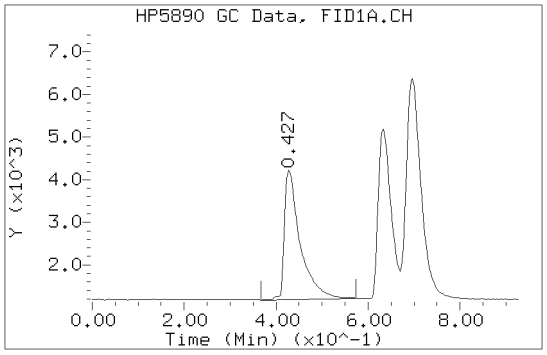


Methane (74-82-8)

Reason Code:

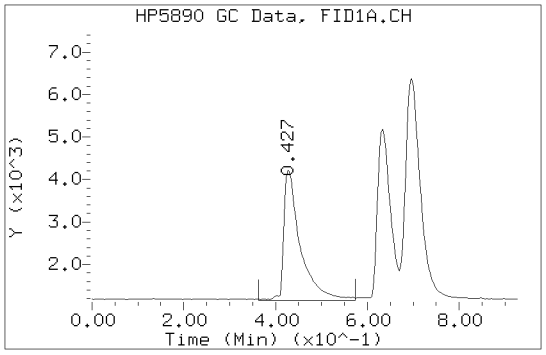
BEFORE

MASS
100
AREA
7281
HEIGHT
3041
15-Jan-2024
12:49
elona
hasani



AFTER

MASS
100
AREA
7734
HEIGHT
3069
19-Jan-2024
08:05
elona
hasani

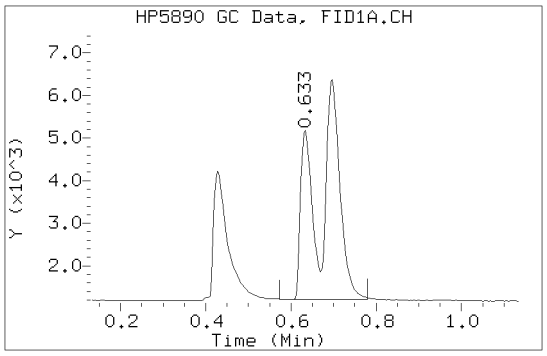


Ethene (74-85-1)

Reason Code:

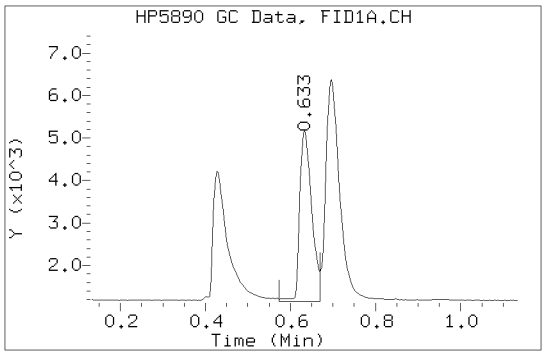
BEFORE

MASS
100
AREA
19116
HEIGHT
3981
15-Jan-2024
12:49
elona
hasani



AFTER

MASS
100
AREA
8006
HEIGHT
4034
19-Jan-2024
08:05
elona
hasani



Data File: \\NAHSTWS005\Target\chem\FID-4.i\240115.b\027.D Page 1
Report Date: 18-Jan-2024 12:39

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\027.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 15-JAN-2024 14:35
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\240115.b\RSKNI3.m
Meth Date : 15-Jan-2024 14:43 samy.mata 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: NAHSTW7022

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

					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	0.433	0.433	0.000	7952	9.64700	8.155(M)
2 Ethene	0.640	0.640	0.000	9464	16.8500	16.156(M)
3 Ethane	0.703	0.703	0.000	14436	18.0430	20.064(M)

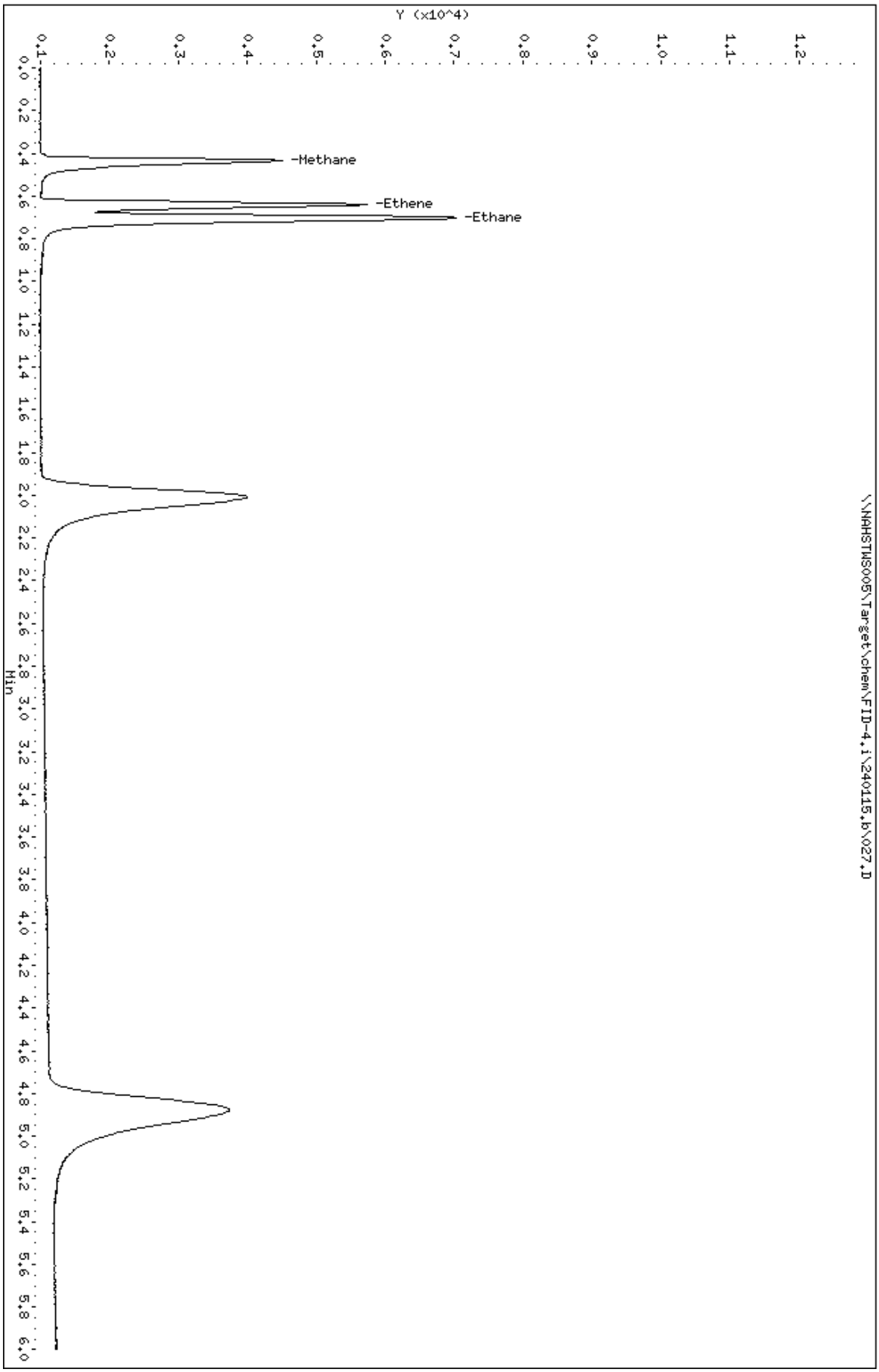
QC Flag Legend

M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240115.b\027.D
Date : 15-JAN-2024 14:35
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

Page 1

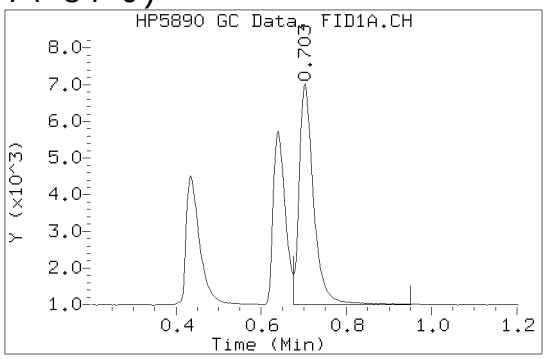


Data File : \\NAHSTWS005\Target\chem\FID-4.i\240115.b\027.D
Inj Date : 15-JAN-2024 14:35
InstruID : FID-4.i
LabSampID : RSK-CCV

Ethane (74-84-0)

BEFORE

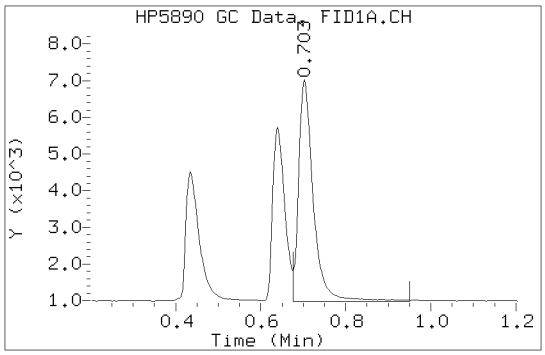
MASS
44
AREA
14165
HEIGHT
6024
15-Jan-2024
14:42
ALSHS
Server



Reason Code:

AFTER

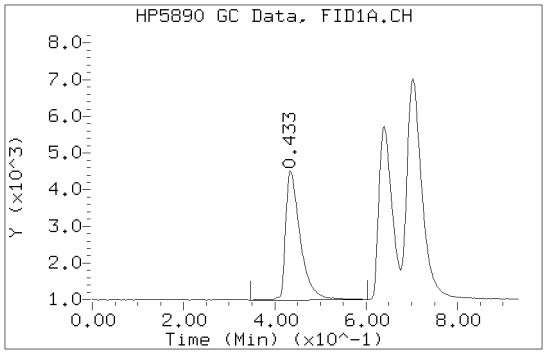
MASS
44
AREA
14436
HEIGHT
6035
18-Jan-2024
12:39
ALSHS
Server



Methane (74-82-8)

BEFORE

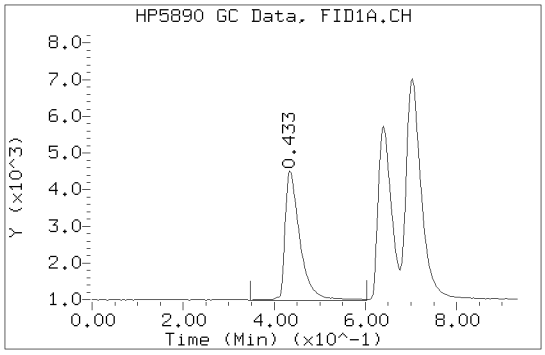
MASS
100
AREA
0
HEIGHT
0
15-Jan-2024
14:42
ALSHS
Server



Reason Code:

AFTER

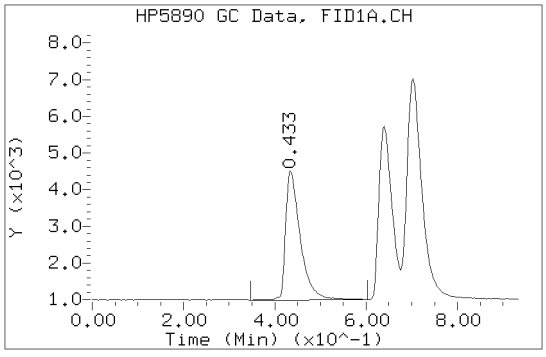
MASS
100
AREA
7952
HEIGHT
3526
18-Jan-2024
12:39
ALSHS
Server



Ethene (74-85-1)

BEFORE

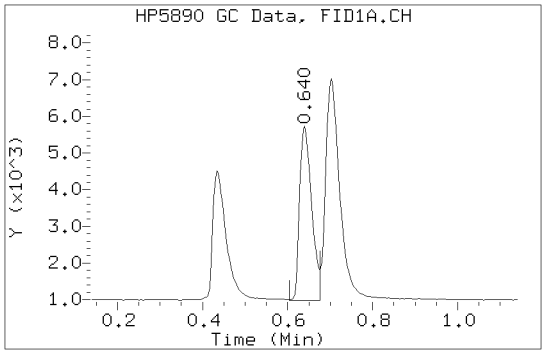
MASS
100
AREA
0
HEIGHT
0
15-Jan-2024
14:42
ALSHS
Server



Reason Code:

AFTER

MASS
100
AREA
9464
HEIGHT
4747
18-Jan-2024
12:39
ALSHS
Server



Data File: \\NAHSTWS005\Target\chem\FID-4.i\240118.b\001.D Page 1
Report Date: 18-Jan-2024 13:57

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240118.b\001.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 18-JAN-2024 13:41
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\240118.b\RSKNI3.m
Meth Date : 18-Jan-2024 13:57 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	8176	9.64700	8.385
2 Ethene	0.636	0.636	0.000	8737	16.8500	14.915
3 Ethane	0.700	0.700	0.000	13597	18.0430	18.898(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240118.b\001.D

Page 1

Date : 18-JAN-2024 13:41

Client ID: RSK-CCV

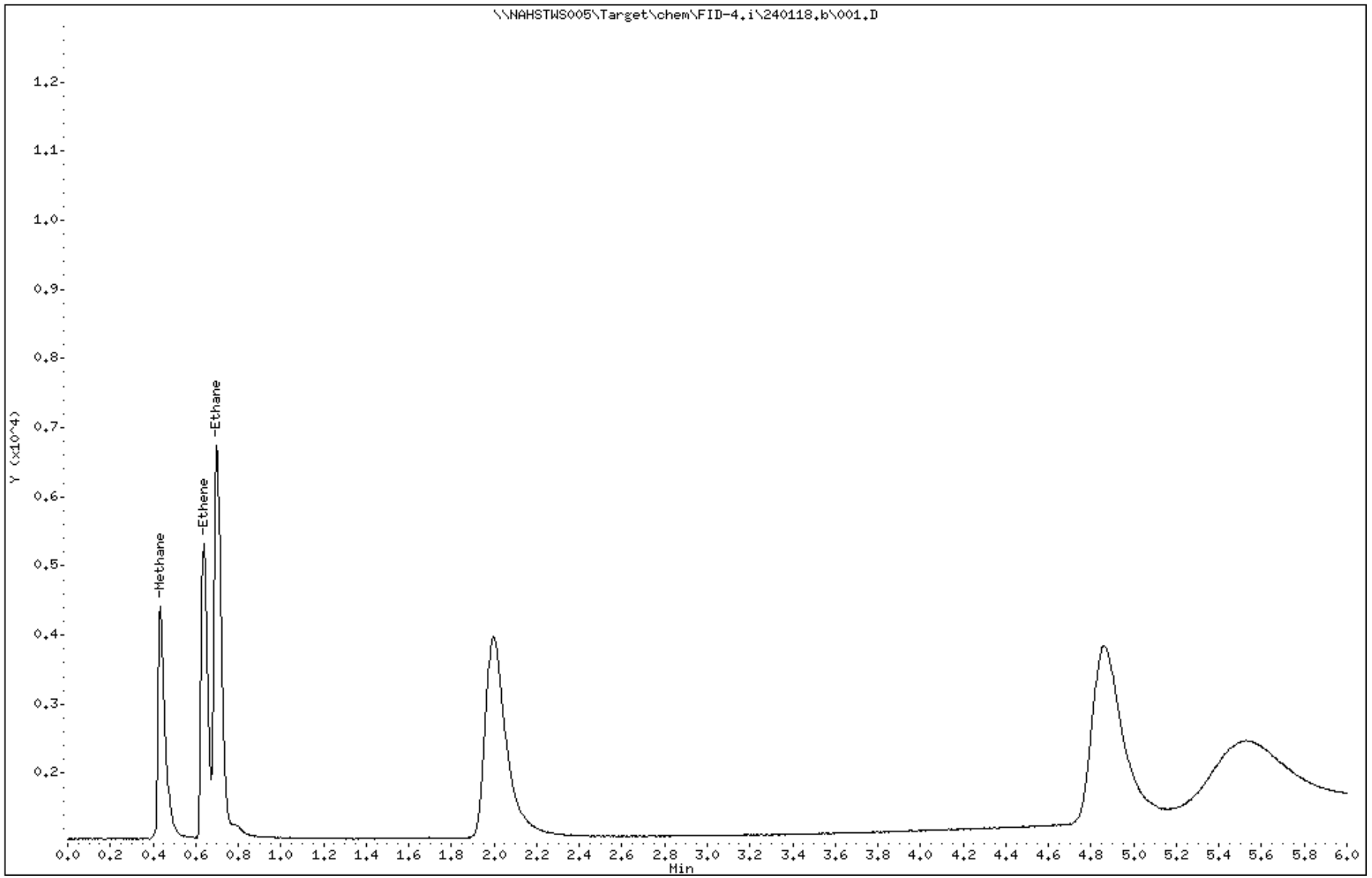
Instrument: FID-4.i

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

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



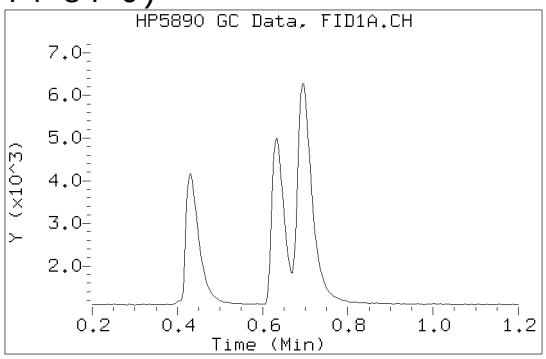
Data File : \\NAHSTWS005\Target\chem\FID-4.i\240118.b\001.D
Inj Date : 18-JAN-2024 13:41
InstruID : FID-4.i
LabSampID : RSK-CCV

Ethane (74-84-0)

Reason Code:

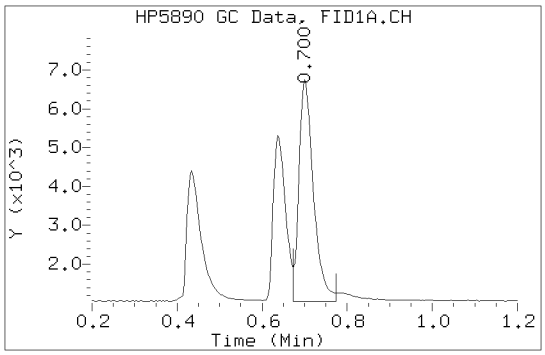
BEFORE

MASS
44
AREA
0
HEIGHT
0
18-Jan-2024
13:32
ALSHS
Server



AFTER

MASS
44
AREA
13597
HEIGHT
5702
18-Jan-2024
13:57
ALSHS
Server



Data File: \\NAHSTWS005\Target\chem\FID-4.i\240118.b\006.D Page 1
Report Date: 19-Jan-2024 07:48

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240118.b\006.D
Lab Smp Id: HS24010611-02MS Client Smp ID: HS24010611-02MS
Inj Date : 18-JAN-2024 15:11
Operator : PL Inst ID: FID-4.i
Smp Info : HS24010611-02MS;HS24010611-02MS
Misc Info : ;1;0;50
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\240118.b\RSKNI3.m
Meth Date : 18-Jan-2024 16:03 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 6 QC Sample: MS
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	0.433	0.433	0.000	38401	39.3860	1969.297(ARM)
2 Ethene	0.640	0.636	0.004	26525	45.2830	2264.150(RM)
3 Ethane	0.700	0.700	0.000	19075	26.5118	1325.592(RM)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240118.b\006.D

Date : 18-JAN-2024 15:11

Client ID: HS24010611-02MS

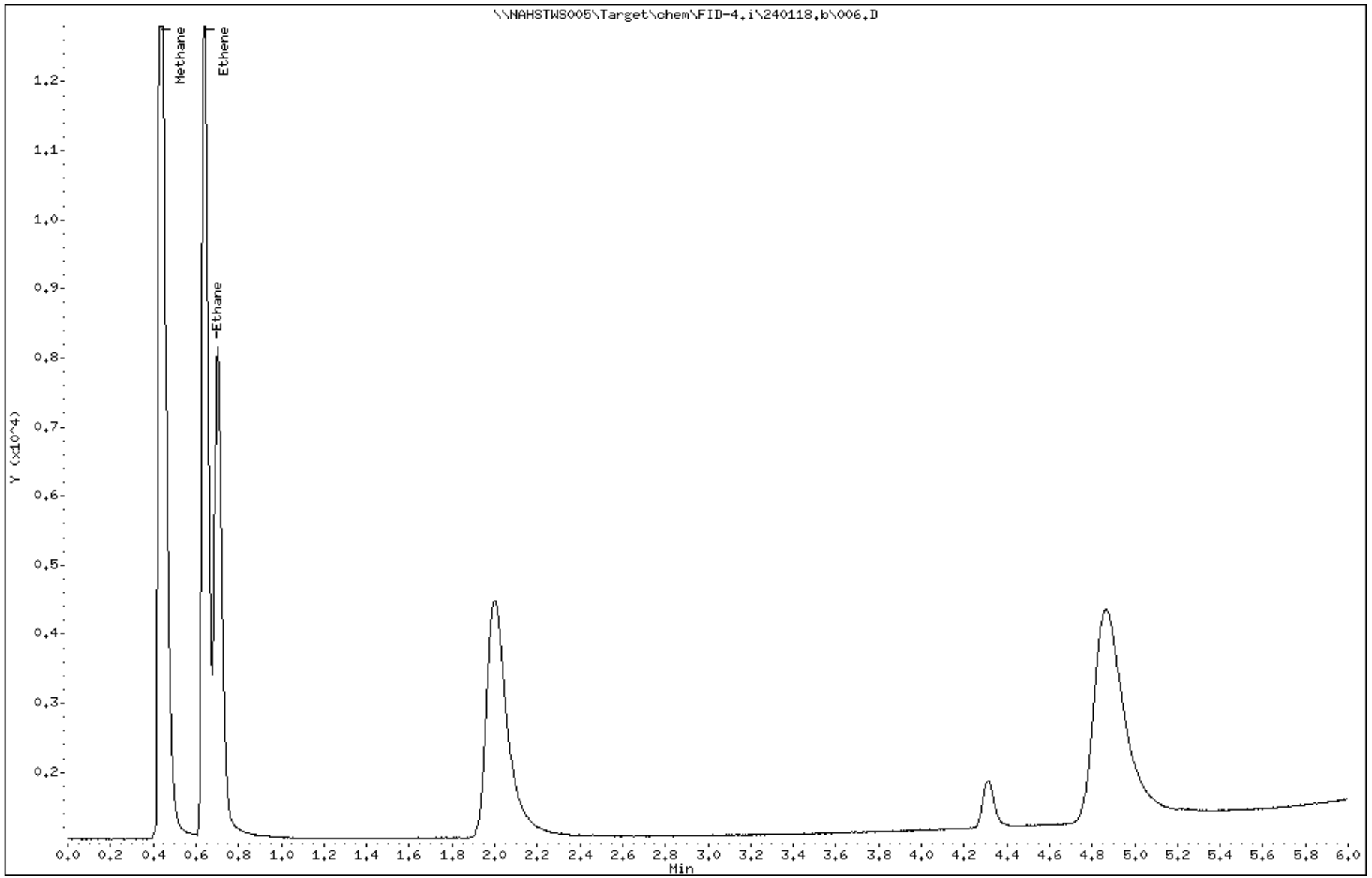
Instrument: FID-4.i

Sample Info: HS24010611-02MS;HS24010611-02MS

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53

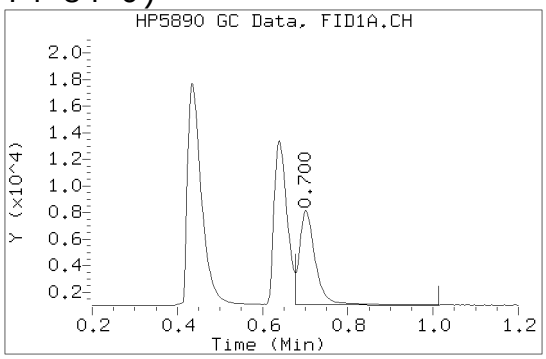


Data File : \\NAHSTWS005\Target\chem\FID-4.i\240118.b\006.D
Inj Date : 18-JAN-2024 15:11
InstruID : FID-4.i
LabSampID : HS24010611-02MS

Ethane (74-84-0)

BEFORE

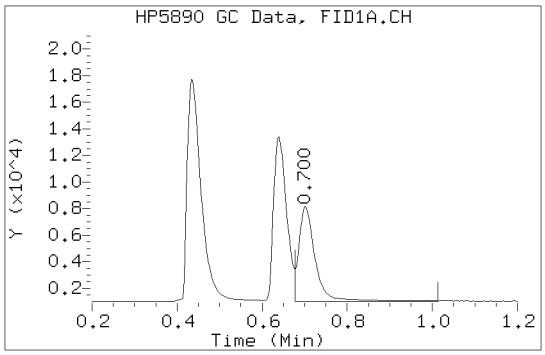
MASS
44
AREA
18433
HEIGHT
7090
18-Jan-2024
15:18
ALSHS
Server



Reason Code:

AFTER

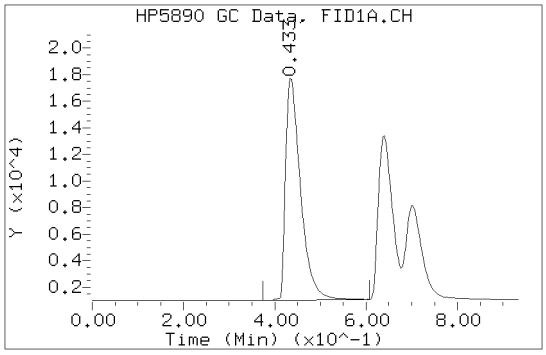
MASS
44
AREA
19075
HEIGHT
7120
19-Jan-2024
07:48
ALSHS
Server



Methane (74-82-8)

BEFORE

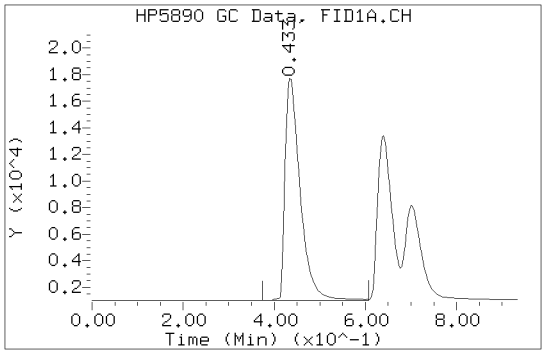
MASS
100
AREA
0
HEIGHT
0
18-Jan-2024
15:18
ALSHS
Server



Reason Code:

AFTER

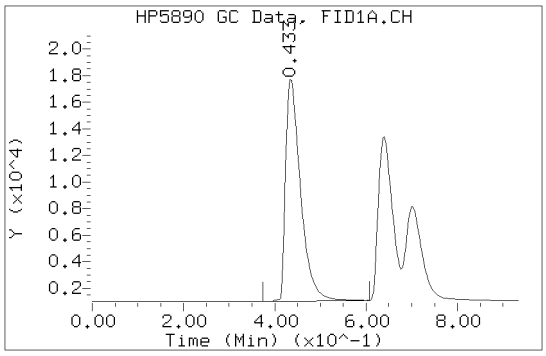
MASS
100
AREA
38401
HEIGHT
16658
19-Jan-2024
07:48
ALSHS
Server



Ethene (74-85-1)

BEFORE

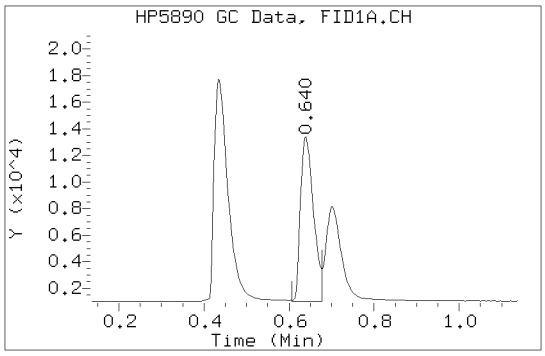
MASS
100
AREA
0
HEIGHT
0
18-Jan-2024
15:18
ALSHS
Server



Reason Code:

AFTER

MASS
100
AREA
26525
HEIGHT
12365
19-Jan-2024
07:48
ALSHS
Server



Data File: \\NAHSTWS005\Target\chem\FID-4.i\240118.b\007.D Page 1
Report Date: 19-Jan-2024 07:49

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240118.b\007.D
Lab Smp Id: HS24010611-02MSD Client Smp ID: HS24010611-02MSD
Inj Date : 18-JAN-2024 15:19
Operator : PL Inst ID: FID-4.i
Smp Info : HS24010611-02MSD;HS24010611-02MSD
Misc Info : ;1;0;50
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\240118.b\RSKNI3.m
Meth Date : 18-Jan-2024 16:03 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 7 QC Sample: MSD
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)	FINAL (ug/L)
1 Methane	0.436	0.433	0.003	38036	39.0116	1950.579(ARM)
2 Ethene	0.640	0.636	0.004	25962	44.3219	2216.093(RM)
3 Ethane	0.703	0.700	0.003	18710	26.0045	1300.227(RM)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240118.b\007.D

Page 1

Date : 18-JAN-2024 15:19

Client ID: HS24010611-02MSD

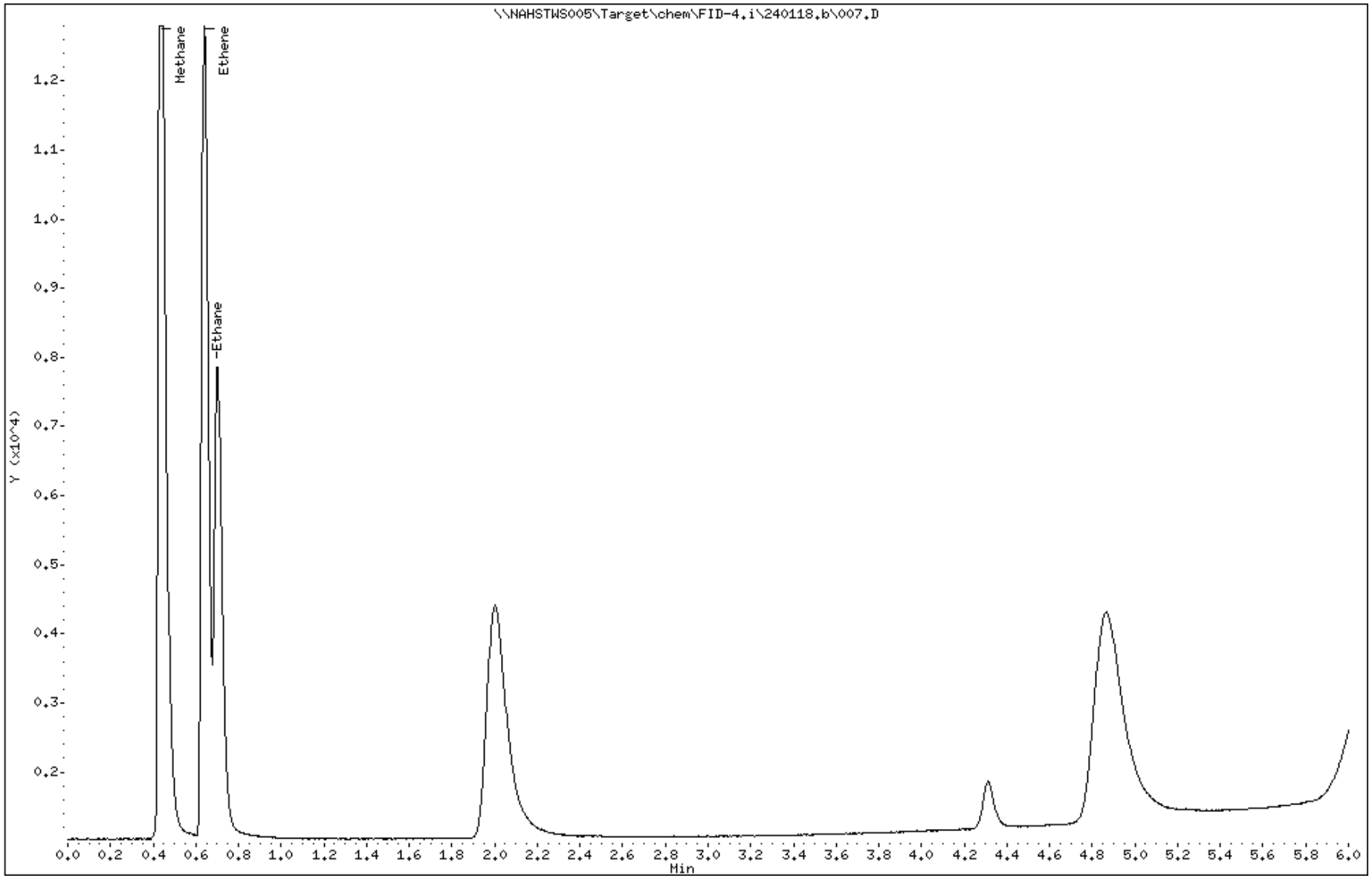
Instrument: FID-4.i

Sample Info: HS24010611-02MSD;HS24010611-02MSD

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53

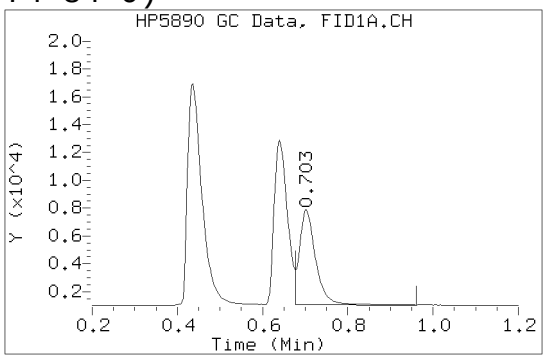


Data File : \\NAHSTWS005\Target\chem\FID-4.i\240118.b\007.D
Inj Date : 18-JAN-2024 15:19
InstruID : FID-4.i
LabSampID : HS24010611-02MSD

Ethane (74-84-0)

BEFORE

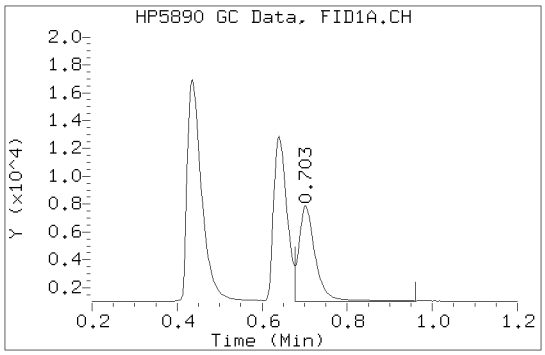
MASS
44
AREA
18048
HEIGHT
6812
18-Jan-2024
15:27
ALSHS
Server



AFTER

MASS
44
AREA
18710
HEIGHT
6843
19-Jan-2024
07:49
ALSHS
Server

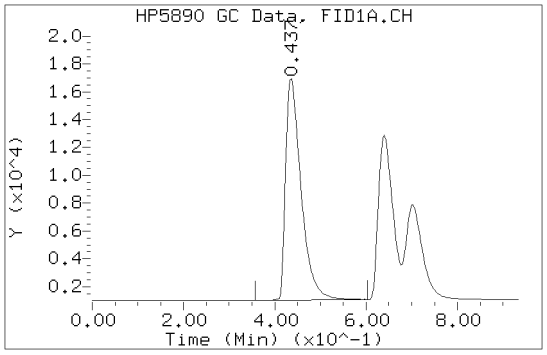
Reason Code:



Methane (74-82-8)

BEFORE

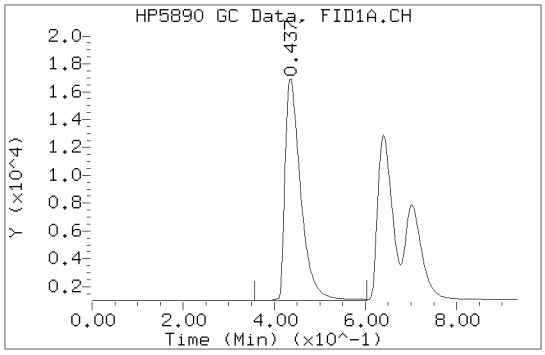
MASS
100
AREA
0
HEIGHT
0
18-Jan-2024
15:27
ALSHS
Server



AFTER

MASS
100
AREA
38036
HEIGHT
15914
19-Jan-2024
07:49
ALSHS
Server

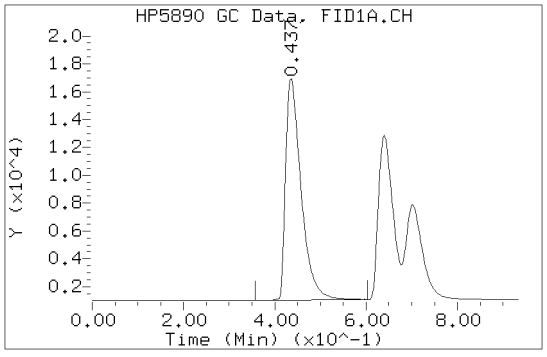
Reason Code:



Ethene (74-85-1)

BEFORE

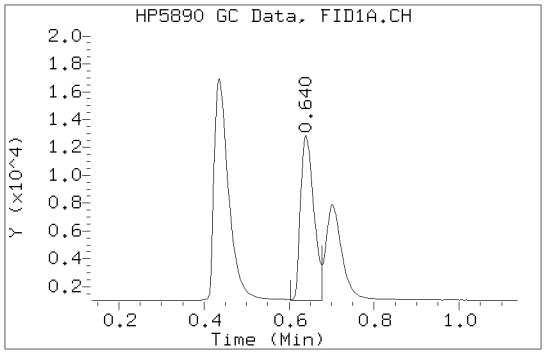
MASS
100
AREA
0
HEIGHT
0
18-Jan-2024
15:27
ALSHS
Server



AFTER

MASS
100
AREA
25962
HEIGHT
11876
19-Jan-2024
07:49
ALSHS
Server

Reason Code:



Data File: \\NAHSTWS005\Target\chem\FID-4.i\240118.b\008.D Page 1
Report Date: 19-Jan-2024 08:50

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240118.b\008.D
Lab Smp Id: HS24010611-02 Client Smp ID: HS24010611-02
Inj Date : 18-JAN-2024 15:33
Operator : PL Inst ID: FID-4.i
Smp Info : HS24010611-02;HS24010611-02
Misc Info : ;1;0;50
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\240118.b\RSKNI3.m
Meth Date : 18-Jan-2024 16:03 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 8
Dil Factor: 50.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7022

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

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.433	0.433	0.000	24432	25.0587	1252.932
2 Ethene	0.636	0.636	0.000	12744	21.7563	1087.816(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240118.b\008.D

Date : 18-JAN-2024 15:33

Client ID: HS24010611-02

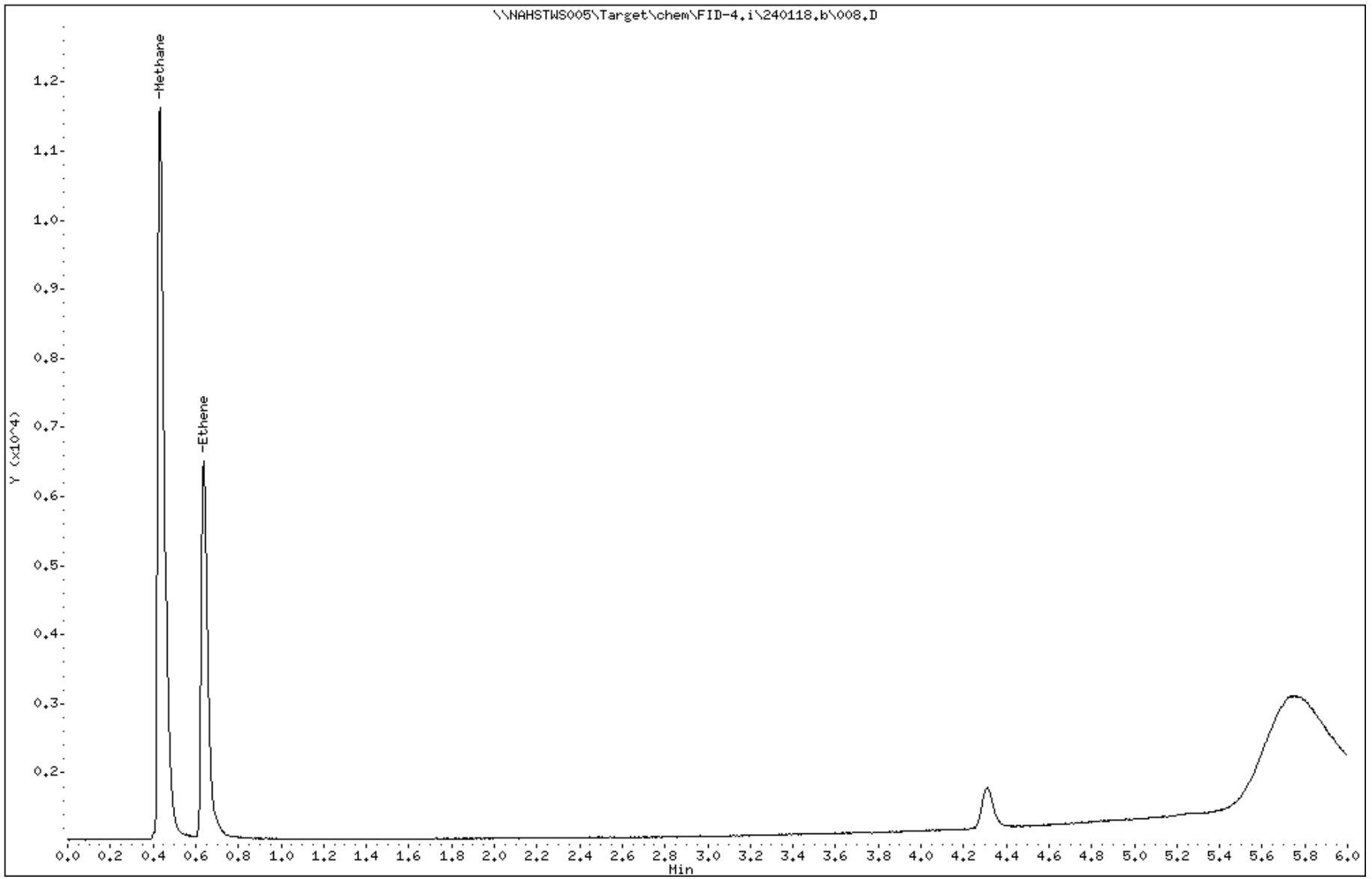
Instrument: FID-4.i

Sample Info: HS24010611-02;HS24010611-02

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



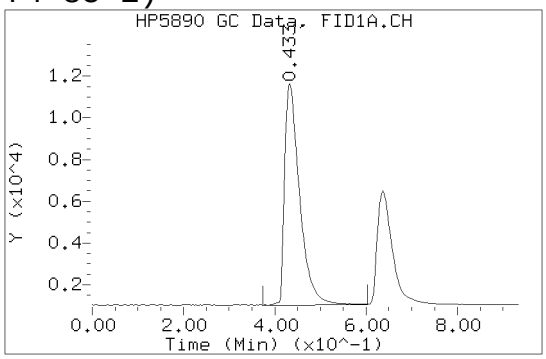
Data File : \\NAHSTWS005\Target\chem\FID-4.i\240118.b\008.D
Inj Date : 18-JAN-2024 15:33
InstruID : FID-4.i
LabSampID : HS24010611-02

Ethene (74-85-1)

Reason Code:

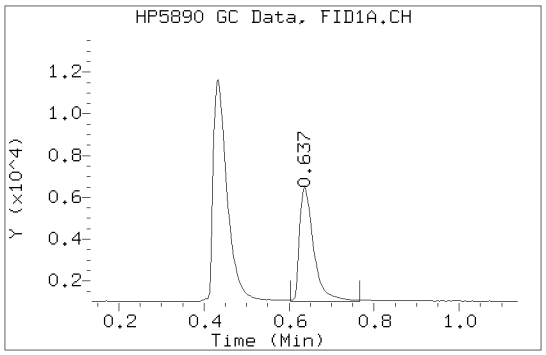
BEFORE

MASS
100
AREA
0
HEIGHT
0
18-Jan-2024
15:40
ALSHS
Server



AFTER

MASS
100
AREA
12744
HEIGHT
5478
19-Jan-2024
08:50
ALSHS
Server



Data File: \\NAHSTWS005\Target\chem\FID-4.i\240118.b\009.D Page 1
Report Date: 19-Jan-2024 07:50

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\240118.b\009.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 18-JAN-2024 15:45
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\240118.b\RSKNI3.m
Meth Date : 18-Jan-2024 16:03 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 9 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7022

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

					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	0.433	0.433	0.000	8160	9.64700	8.369(M)
2 Ethene	0.636	0.636	0.000	8836	16.8500	15.084(M)
3 Ethane	0.700	0.700	0.000	14123	18.0430	19.629(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\240118.b\009.D

Date : 18-JAN-2024 15:45

Client ID: RSK-CCV

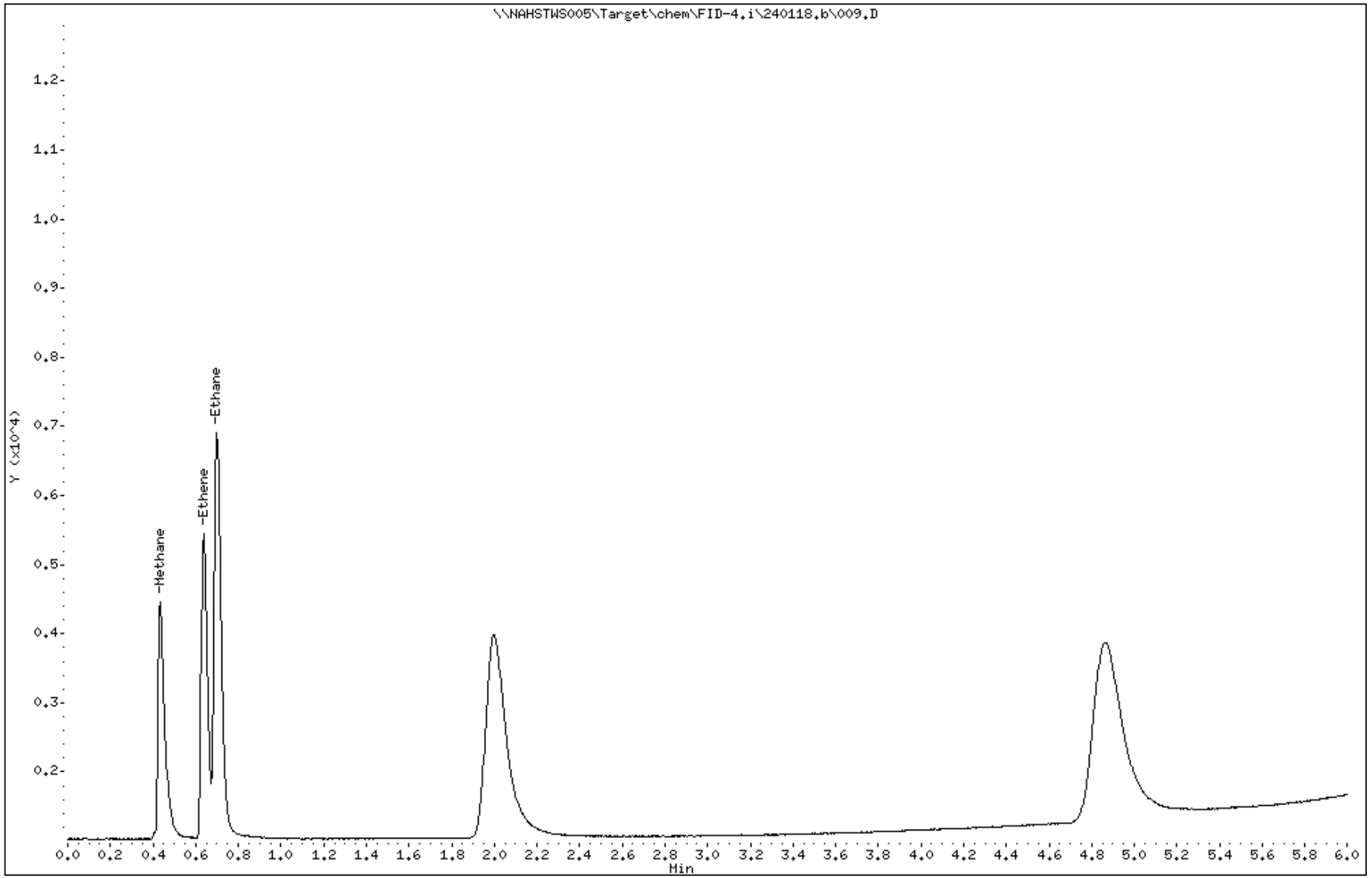
Instrument: FID-4.i

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

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



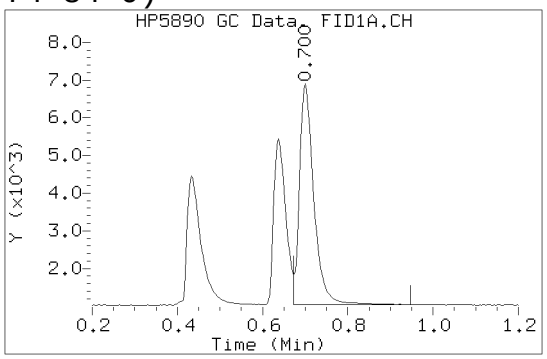
Data File : \\NAHSTWS005\Target\chem\FID-4.i\240118.b\009.D
Inj Date : 18-JAN-2024 15:45
InstruID : FID-4.i
LabSampID : RSK-CCV

Ethane (74-84-0)

Reason Code:

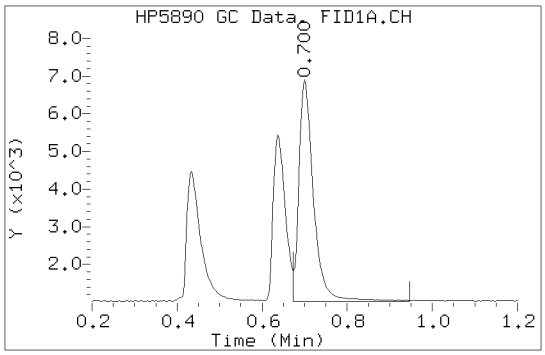
BEFORE

MASS
44
AREA
13778
HEIGHT
5868
18-Jan-2024
15:55
ALSHS
Server



AFTER

MASS
44
AREA
14123
HEIGHT
5883
19-Jan-2024
07:50
ALSHS
Server

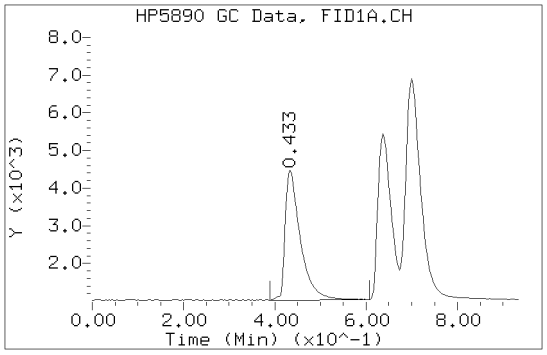


Methane (74-82-8)

Reason Code:

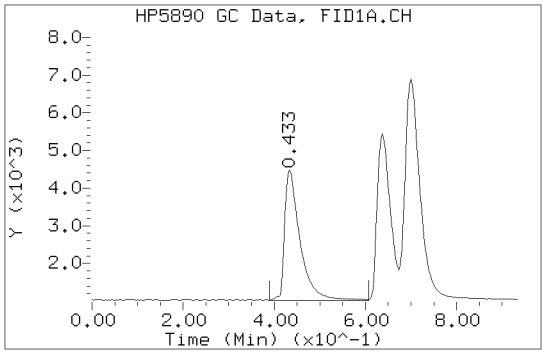
BEFORE

MASS
100
AREA
0
HEIGHT
0
18-Jan-2024
15:55
ALSHS
Server



AFTER

MASS
100
AREA
8160
HEIGHT
3447
19-Jan-2024
07:50
ALSHS
Server

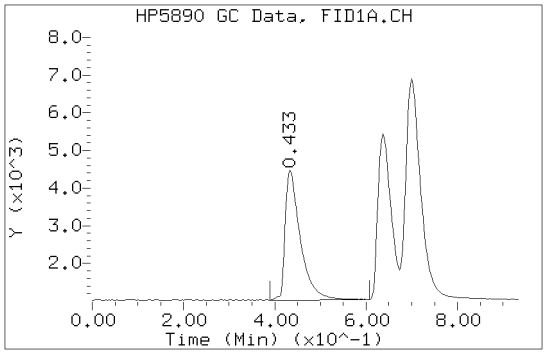


Ethene (74-85-1)

Reason Code:

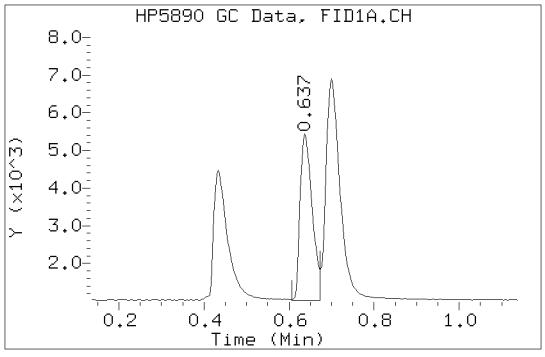
BEFORE

MASS
100
AREA
0
HEIGHT
0
18-Jan-2024
15:55
ALSHS
Server



AFTER

MASS
100
AREA
8836
HEIGHT
4427
19-Jan-2024
07:50
ALSHS
Server



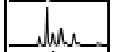
HS24010611 Wetchem 9056_W

ALS WO# HS24010611

Sequence: 011224
Last Update Operator: alshs.nouser

CD	Name	Comment	Type	Position	Dilution	Level	Instrument Method
	STD1		Calibratic	GA1	1.00	1	Anions Program ISO37mM 150mm short 0.4 Constant current
	STD2		Calibratic	GA2	1.00	2	Anions Program ISO37mM 150mm short 0.4 Constant current
	STD3		Calibratic	GA3	1.00	3	Anions Program ISO37mM 150mm short 0.4 Constant current
	STD4		Calibratic	GA4	1.00	4	Anions Program ISO37mM 150mm short 0.4 Constant current
	STD5		Calibratic	GA5	1.00	5	Anions Program ISO37mM 150mm short 0.4 Constant current
	STD6		Calibratic	GA6	1.00	6	Anions Program ISO37mM 150mm short 0.4 Constant current
	ICV		Unknowr	GA7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	ICB		Unknowr	R4	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
	MBLK	300-W-SH	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
	HS24010550-08		Unknowr	RA1	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010550-09		Unknowr	RA2	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010513-01		Unknowr	RA3	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010540-01		Unknowr	RA4	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010540-02		Unknowr	RA5	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010540-03		Unknowr	RA6	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010513-04DF5		Unknowr	RA7	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
	HS24010537-01DF20		Unknowr	RA8	20.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010537-01MSDF20		Unknowr	RB1	20.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010537-01MSDDF		Unknowr	RB2	20.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010537-02DF100		Unknowr	RB3	100.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010539-01DF20		Unknowr	RB4	20.00		Anions Program ISO37mM 150mm short 0.4 Constant current

Sequence: 011224
Last Update Operator: alshs.nouser

CD	Name	Comment	Type	Position	Dilution	Level	Instrument Method
	HS24010539-01MSDF2(		Unknown	RB5	20.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010539-01MSDDF		Unknown	RB6	20.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010539-02DF100		Unknown	RB7	100.00		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
	HS24010592-01DF2		Unknown	RB8	2.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010592-01DF40	300-W-SH	Unknown	RC1	40.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCV1		Unknown	R3	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCB		Unknown	R7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	MBLK	9056-W-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
	HS24010603-01		Unknown	RC2	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010603-01MS		Unknown	RC3	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010603-01MSD		Unknown	RC4	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010603-02		Unknown	RC5	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010603-03		Unknown	RC6	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010603-04DF2		Unknown	RC7	2.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010603-05		Unknown	RC8	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010603-06DF2		Unknown	RD1	2.00		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
	HS24010552-01		Unknown	RD2	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010552-01DF10		Unknown	RD3	10.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010603-07DF5		Unknown	RD4	5.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010603-08DF5		Unknown	RD5	5.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010603-09DF10		Unknown	RD6	10.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010603-10		Unknown	RD7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current

Sequence: 011224
Last Update Operator: alshs.nouser

CD	Name	Comment	Type	Position	Dilution	Level	Instrument Method
	HS24010603-11		Unknown	RD8	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010603-12		Unknown	RE1	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010603-13		Unknown	RE2	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010603-14		Unknown	RE3	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
	HS24010603-15DF5		Unknown	RE4	5.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010603-16DF5		Unknown	RE5	5.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010603-17DF5		Unknown	RE6	5.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010603-18DF5		Unknown	RE7	5.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010603-19DF50		Unknown	RE8	50.00		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	9056-W-SH-1	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
	HS24010611-01		Unknown	GA1	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010611-01MS		Unknown	GA2	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010611-01MSD		Unknown	GA3	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010611-01DF20		Unknown	GA4	20.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010611-02DF2		Unknown	GA5	2.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010611-02MSDF2		Unknown	GA6	2.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010611-02MSDDF		Unknown	GA7	2.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010611-02DF50		Unknown	GA8	50.00		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
	HS24010611-03		Unknown	GB1	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010611-03DF20		Unknown	GB2	20.00		Anions Program ISO37mM 150mm short 0.4 Constant current

Sequence: 011224
Last Update Operator: alshs.nouser

CD	Name	Comment	Type	Position	Dilution	Level	Instrument Method
	HS24010629-02DF10		Unknown	GB3	10.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010629-02DF200		Unknown	GB4	200.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010629-03		Unknown	GB5	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010487-01DF5		Unknown	GB6	5.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010467-01		Unknown	GB7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010467-01DF20		Unknown	GB8	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	R6	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	MBLK	300-W-SH-1	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
	LCSD		Unknown	G2	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010634-01		Unknown	GC1	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010634-01MS		Unknown	GC2	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010634-01MSD		Unknown	GC3	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010634-01DF10		Unknown	GC4	10.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010634-03		Unknown	GC5	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010634-03DF10		Unknown	GC6	10.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010463-02DF250		Unknown	GC7	250.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010463-03DF250		Unknown	GC8	250.00		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
	HS24010571-01		Unknown	GD1	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	LOQ		Unknown	GD3	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010463-01DF500		Unknown	GD4	500.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010463-01MSDF5(		Unknown	GD5	500.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010463-01MSDDF		Unknown	GD6	500.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010463-04DF10		Unknown	GD7	10.00		Anions Program ISO37mM 150mm short 0.4 Constant current

Sequence: 011224
Last Update Operator: alshs.nouser

CD	Name	Comment	Type	Position	Dilution	Level	Instrument Method
	HS24010463-05DF20		Unknown	GD8	20.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010463-06DF250		Unknown	GE1	250.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010463-07DF50		Unknown	GE2	50.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010463-08DF500		Unknown	GE3	500.00		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
	HS24010463-09DF20		Unknown	GE4	20.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010463-11DF500		Unknown	GE5	500.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010463-12DF50		Unknown	GE6	50.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS24010463-13DF100		Unknown	GE7	100.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCV1		Unknown	R3	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCB		Unknown	R7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current

Sequence: 011224
Last Update Operator: alshs.nouser

Processing Method	CD	Name	me	Status	Inject Time
Anions Processing Method ISO		STD1	5.0	Finished	12/14/2023 10:36:01 PM -06:00
Anions Processing Method ISO		STD2	5.0	Finished	12/14/2023 10:41:51 PM -06:00
Anions Processing Method ISO		STD3	5.0	Finished	12/14/2023 10:47:47 PM -06:00
Anions Processing Method ISO		STD4	5.0	Finished	12/14/2023 10:53:37 PM -06:00
Anions Processing Method ISO		STD5	5.0	Finished	12/14/2023 10:59:27 PM -06:00
Anions Processing Method ISO		STD6	5.0	Finished	12/14/2023 11:05:17 PM -06:00
Anions Processing Method ISO		ICV	5.0	Finished	12/14/2023 11:16:56 PM -06:00
Anions Processing Method ISO		ICB	5.0	Finished	12/14/2023 11:22:46 PM -06:00
Anions Processing Method ISO		CCV	5.0	Finished	1/12/2024 8:05:17 AM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/12/2024 8:16:57 AM -06:00
Anions Processing Method ISO		MBLK	5.0	Finished	1/12/2024 8:34:29 AM -06:00
Anions Processing Method ISO		LCS	5.0	Finished	1/12/2024 8:40:19 AM -06:00
Anions Processing Method ISO		HS24010550-08	5.0	Finished	1/12/2024 8:52:00 AM -06:00
Anions Processing Method ISO		HS24010550-09	5.0	Finished	1/12/2024 8:57:50 AM -06:00
Anions Processing Method ISO		HS24010513-01	5.0	Finished	1/12/2024 9:03:41 AM -06:00
Anions Processing Method ISO		HS24010540-01	5.0	Finished	1/12/2024 9:09:31 AM -06:00
Anions Processing Method ISO		HS24010540-02	5.0	Finished	1/12/2024 9:15:22 AM -06:00
Anions Processing Method ISO		HS24010540-03	5.0	Finished	1/12/2024 9:21:12 AM -06:00
Anions Processing Method ISO		HS24010513-04DF5	5.0	Finished	1/12/2024 9:44:34 AM -06:00
Anions Processing Method ISO		CCV1	5.0	Finished	1/12/2024 10:02:05 AM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/12/2024 10:07:55 AM -06:00
Anions Processing Method ISO		HS24010537-01DF20	5.0	Finished	1/12/2024 10:19:36 AM -06:00
Anions Processing Method ISO		HS24010537-01MSDF20	5.0	Finished	1/12/2024 10:25:27 AM -06:00
Anions Processing Method ISO		HS24010537-01MSDDF	5.0	Finished	1/12/2024 10:31:17 AM -06:00
Anions Processing Method ISO		HS24010537-02DF100	5.0	Finished	1/12/2024 10:37:07 AM -06:00
Anions Processing Method ISO		HS24010539-01DF20	5.0	Finished	1/12/2024 10:42:58 AM -06:00

Sequence: 011224
Last Update Operator: alshs.nouser

Processing Method	CD	Name	me	Status	Inject Time
Anions Processing Method ISO		HS24010539-01MSDF2(	5.0	Finished	1/12/2024 10:48:48 AM -06:00
Anions Processing Method ISO		HS24010539-01MSDDF.	5.0	Finished	1/12/2024 10:54:39 AM -06:00
Anions Processing Method ISO		HS24010539-02DF100	5.0	Finished	1/12/2024 11:00:29 AM -06:00
Anions Processing Method ISO		CCV	5.0	Finished	1/12/2024 11:18:00 AM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/12/2024 11:29:41 AM -06:00
Anions Processing Method ISO		HS24010592-01DF2	5.0	Finished	1/12/2024 11:53:59 AM -06:00
Anions Processing Method ISO		HS24010592-01DF40	5.0	Finished	1/12/2024 11:59:49 AM -06:00
Anions Processing Method ISO		CCV1	5.0	Finished	1/12/2024 12:20:55 PM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/12/2024 12:32:36 PM -06:00
Anions Processing Method ISO		MBLK	5.0	Finished	1/12/2024 12:44:17 PM -06:00
Anions Processing Method ISO		LCS	5.0	Finished	1/12/2024 12:55:57 PM -06:00
Anions Processing Method ISO		HS24010603-01	5.0	Finished	1/12/2024 1:15:21 PM -06:00
Anions Processing Method ISO		HS24010603-01MS	5.0	Finished	1/12/2024 1:21:12 PM -06:00
Anions Processing Method ISO		HS24010603-01MSD	5.0	Finished	1/12/2024 1:27:02 PM -06:00
Anions Processing Method ISO		HS24010603-02	5.0	Finished	1/12/2024 1:32:52 PM -06:00
Anions Processing Method ISO		HS24010603-03	5.0	Finished	1/12/2024 1:38:43 PM -06:00
Anions Processing Method ISO		HS24010603-04DF2	5.0	Finished	1/12/2024 1:44:33 PM -06:00
Anions Processing Method ISO		HS24010603-05	5.0	Finished	1/12/2024 1:50:24 PM -06:00
Anions Processing Method ISO		HS24010603-06DF2	5.0	Finished	1/12/2024 1:56:14 PM -06:00
Anions Processing Method ISO		CCV	5.0	Finished	1/12/2024 2:02:04 PM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/12/2024 2:13:45 PM -06:00
Anions Processing Method ISO		HS24010552-01	5.0	Finished	1/12/2024 2:25:26 PM -06:00
Anions Processing Method ISO		HS24010552-01DF10	5.0	Finished	1/12/2024 2:31:16 PM -06:00
Anions Processing Method ISO		HS24010603-07DF5	5.0	Finished	1/12/2024 2:37:06 PM -06:00
Anions Processing Method ISO		HS24010603-08DF5	5.0	Finished	1/12/2024 2:42:57 PM -06:00
Anions Processing Method ISO		HS24010603-09DF10	5.0	Finished	1/12/2024 2:48:47 PM -06:00
Anions Processing Method ISO		HS24010603-10	5.0	Finished	1/12/2024 2:54:38 PM -06:00

Sequence: 011224
Last Update Operator: alshs.nouser

Processing Method	CD	Name	me	Status	Inject Time
Anions Processing Method ISO		HS24010603-11	5.0	Finished	1/12/2024 3:00:28 PM -06:00
Anions Processing Method ISO		HS24010603-12	5.0	Finished	1/12/2024 3:06:18 PM -06:00
Anions Processing Method ISO		HS24010603-13	5.0	Finished	1/12/2024 3:12:09 PM -06:00
Anions Processing Method ISO		HS24010603-14	5.0	Finished	1/12/2024 3:17:59 PM -06:00
Anions Processing Method ISO		CCV1	5.0	Finished	1/12/2024 3:23:49 PM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/12/2024 3:35:30 PM -06:00
Anions Processing Method ISO		HS24010603-15DF5	5.0	Finished	1/12/2024 3:47:10 PM -06:00
Anions Processing Method ISO		HS24010603-16DF5	5.0	Finished	1/12/2024 3:53:12 PM -06:00
Anions Processing Method ISO		HS24010603-17DF5	5.0	Finished	1/12/2024 3:59:02 PM -06:00
Anions Processing Method ISO		HS24010603-18DF5	5.0	Finished	1/12/2024 4:04:53 PM -06:00
Anions Processing Method ISO		HS24010603-19DF50	5.0	Finished	1/12/2024 4:10:43 PM -06:00
Anions Processing Method ISO		CCV	5.0	Finished	1/12/2024 4:22:23 PM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/12/2024 4:34:15 PM -06:00
Anions Processing Method ISO		MBLK	5.0	Finished	1/12/2024 4:51:46 PM -06:00
Anions Processing Method ISO		LCS	5.0	Finished	1/12/2024 4:57:36 PM -06:00
Anions Processing Method ISO		HS24010611-01	5.0	Finished	1/12/2024 5:09:28 PM -06:00
Anions Processing Method ISO		HS24010611-01MS	5.0	Finished	1/12/2024 5:15:18 PM -06:00
Anions Processing Method ISO		HS24010611-01MSD	5.0	Finished	1/12/2024 5:21:08 PM -06:00
Anions Processing Method ISO		HS24010611-01DF20	5.0	Finished	1/12/2024 5:27:10 PM -06:00
Anions Processing Method ISO		HS24010611-02DF2	5.0	Finished	1/12/2024 5:33:11 PM -06:00
Anions Processing Method ISO		HS24010611-02MSDF2	5.0	Finished	1/12/2024 5:39:02 PM -06:00
Anions Processing Method ISO		HS24010611-02MSDDF	5.0	Finished	1/12/2024 5:44:52 PM -06:00
Anions Processing Method ISO		HS24010611-02DF50	5.0	Finished	1/12/2024 5:50:42 PM -06:00
Anions Processing Method ISO		CCV1	5.0	Finished	1/12/2024 6:02:22 PM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/12/2024 6:14:03 PM -06:00
Anions Processing Method ISO		HS24010611-03	5.0	Finished	1/12/2024 6:25:43 PM -06:00
Anions Processing Method ISO		HS24010611-03DF20	5.0	Finished	1/12/2024 6:31:33 PM -06:00

Sequence: 011224
Last Update Operator: alshs.nouser

Processing Method	CD	Name	me	Status	Inject Time
Anions Processing Method ISO		HS24010629-02DF10	5.0	Finished	1/12/2024 6:37:23 PM -06:00
Anions Processing Method ISO		HS24010629-02DF200	5.0	Finished	1/12/2024 6:43:13 PM -06:00
Anions Processing Method ISO		HS24010629-03	5.0	Finished	1/12/2024 6:49:03 PM -06:00
Anions Processing Method ISO		HS24010487-01DF5	5.0	Finished	1/12/2024 6:54:54 PM -06:00
Anions Processing Method ISO		HS24010467-01	5.0	Finished	1/12/2024 7:00:44 PM -06:00
Anions Processing Method ISO		HS24010467-01DF20	5.0	Finished	1/12/2024 7:06:34 PM -06:00
Anions Processing Method ISO		CCV	5.0	Finished	1/12/2024 7:18:14 PM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/12/2024 7:29:54 PM -06:00
Anions Processing Method ISO		MBLK	5.0	Finished	1/12/2024 7:47:24 PM -06:00
Anions Processing Method ISO		LCS	5.0	Finished	1/12/2024 7:53:14 PM -06:00
Anions Processing Method ISO		LCSD	5.0	Finished	1/12/2024 7:59:04 PM -06:00
Anions Processing Method ISO		HS24010634-01	5.0	Finished	1/12/2024 8:10:44 PM -06:00
Anions Processing Method ISO		HS24010634-01MS	5.0	Finished	1/12/2024 8:16:35 PM -06:00
Anions Processing Method ISO		HS24010634-01MSD	5.0	Finished	1/12/2024 8:22:24 PM -06:00
Anions Processing Method ISO		HS24010634-01DF10	5.0	Finished	1/12/2024 8:28:15 PM -06:00
Anions Processing Method ISO		HS24010634-03	5.0	Finished	1/12/2024 8:34:05 PM -06:00
Anions Processing Method ISO		HS24010634-03DF10	5.0	Finished	1/12/2024 8:39:55 PM -06:00
Anions Processing Method ISO		HS24010463-02DF250	5.0	Finished	1/12/2024 8:45:45 PM -06:00
Anions Processing Method ISO		HS24010463-03DF250	5.0	Finished	1/12/2024 8:51:35 PM -06:00
Anions Processing Method ISO		CCV1	5.0	Finished	1/12/2024 8:57:25 PM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/12/2024 9:09:05 PM -06:00
Anions Processing Method ISO		HS24010571-01	5.0	Finished	1/12/2024 9:20:45 PM -06:00
Anions Processing Method ISO		LOQ	5.0	Finished	1/12/2024 9:32:25 PM -06:00
Anions Processing Method ISO		HS24010463-01DF500	5.0	Finished	1/12/2024 9:38:15 PM -06:00
Anions Processing Method ISO		HS24010463-01MSDF5	5.0	Finished	1/12/2024 9:44:05 PM -06:00
Anions Processing Method ISO		HS24010463-01MSDDF	5.0	Finished	1/12/2024 9:49:55 PM -06:00
Anions Processing Method ISO		HS24010463-04DF10	5.0	Finished	1/12/2024 9:55:45 PM -06:00

Sequence: 011224
Last Update Operator: alshs.nouser

Processing Method	CD	Name	me	Status	Inject Time
Anions Processing Method ISO		HS24010463-05DF20	5.0	Finished	1/12/2024 10:01:35 PM -06:00
Anions Processing Method ISO		HS24010463-06DF250	5.0	Finished	1/12/2024 10:07:25 PM -06:00
Anions Processing Method ISO		HS24010463-07DF50	5.0	Finished	1/12/2024 10:13:15 PM -06:00
Anions Processing Method ISO		HS24010463-08DF500	5.0	Finished	1/12/2024 10:19:05 PM -06:00
Anions Processing Method ISO		CCV	5.0	Finished	1/12/2024 10:24:55 PM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/12/2024 10:36:46 PM -06:00
Anions Processing Method ISO		HS24010463-09DF20	5.0	Finished	1/12/2024 10:48:26 PM -06:00
Anions Processing Method ISO		HS24010463-11DF500	5.0	Finished	1/12/2024 10:54:16 PM -06:00
Anions Processing Method ISO		HS24010463-12DF50	5.0	Finished	1/12/2024 11:00:06 PM -06:00
Anions Processing Method ISO		HS24010463-13DF100	5.0	Finished	1/12/2024 11:05:56 PM -06:00
Anions Processing Method ISO		CCV1	5.0	Finished	1/12/2024 11:11:57 PM -06:00
Anions Processing Method ISO		CCB	5.0	Finished	1/12/2024 11:23:48 PM -06:00

Sequence: 121623
Injection #6: STD6

Calibration

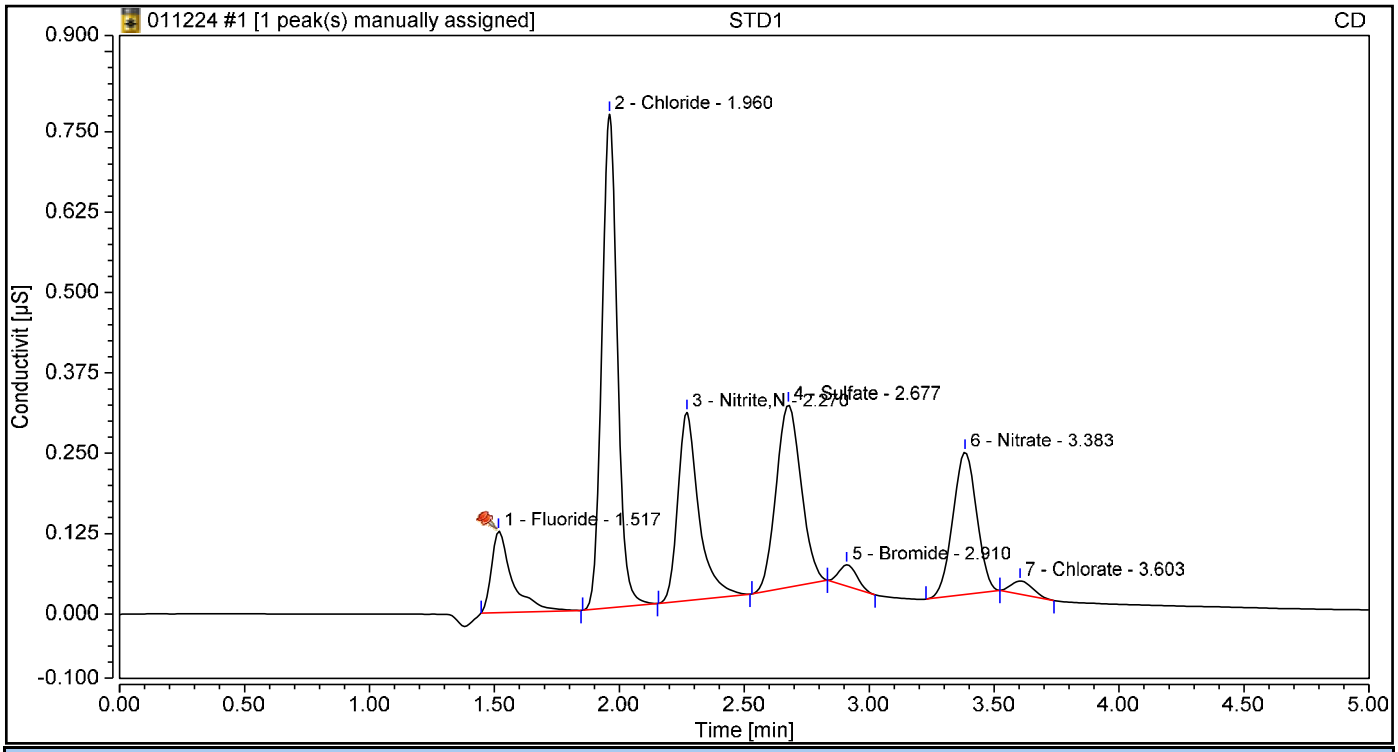
Peak No.	Peak Name	Cal.Type	Eval.Type	Number of Points	Rel.Std.Dev. %	Coeff.of Determination	C0 (Offset)	C1 (Slope)	C2 (Curve)
1	***Fluoride***	***Lin, WithOffset, 1/A***	***Area***	***6***	***11.9033***	***0.99943***	***-0.0119***	***0.2038***	***0.0000***
2	Chloride	Lin, WithOffset, 1/A	Area	6	4.2169	0.99992	-0.0204	0.1467	0.0000
3	Nitrite,N	Quad, WithOffset, 1/A	Area	6	7.6001	0.99974	-0.0035	0.3288	-0.0033
4	Sulfate	Quad, WithOffset, 1/A	Area	6	4.3557	0.99994	-0.0132	0.0896	0.0001
5	Bromide	Quad, WithOffset, 1/A	Area	6	13.7136	0.99952	-0.0004	0.0303	0.0008
6	Nitrate	Lin, WithOffset, 1/A	Area	6	3.8255	0.99993	-0.0106	0.3321	0.0000
7	Chlorate	Quad, WithOffset, 1/A	Area	6	8.5665	0.99976	-0.0016	0.0330	-0.0001
8	Phosphate	Lin, WithOffset, 1/A	Area	2	n.a.	1.00000	-0.6126	0.1265	0.0000
Maximum					**13.7136**	1.00000			
Minimum					3.8255	**0.99943**			

Chromatogram and Results

Injection Details

Injection Name:	**STD1**	*Run Time (min):*	**5.00**
Vial Number:	**GA1**	*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:	**14/Dec/23 22:36**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

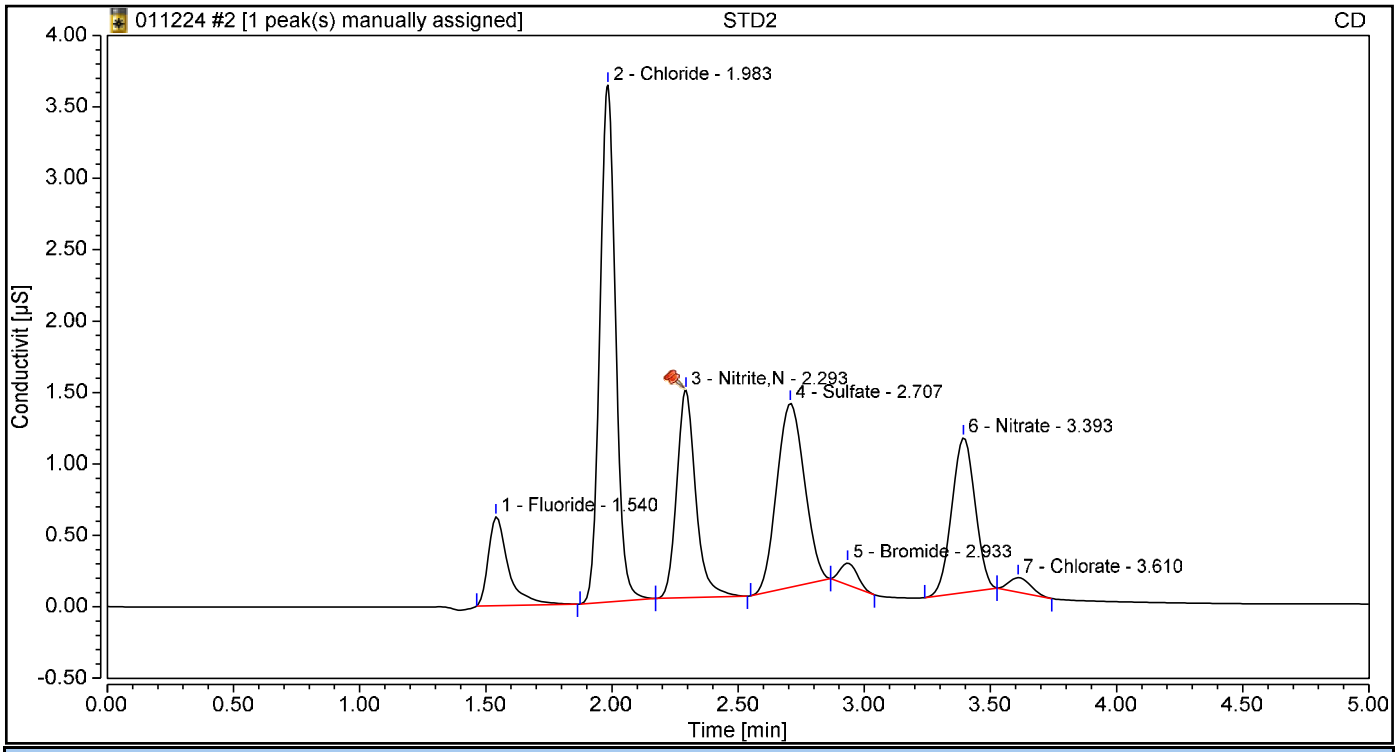
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.517	0.012	0.127	7.76	7.27	0.1185
2	Chloride	1.960	0.055	0.768	34.91	43.96	0.5164
3	Nitrite,N	2.270	0.029	0.293	18.01	16.76	0.0975
4	Sulfate	2.677	0.033	0.284	20.79	16.26	0.5150
5	Bromide	2.910	0.003	0.033	1.78	1.90	0.1043
6	Nitrate	3.383	0.024	0.221	15.44	12.68	0.1055
7	Chlorate	3.603	0.002	0.021	1.32	1.18	0.1115
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.158**	**1.747**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**STD2**	*Run Time (min):*	**5.00**
Vial Number:	**GA2**	*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:	**14/Dec/23 22:41**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

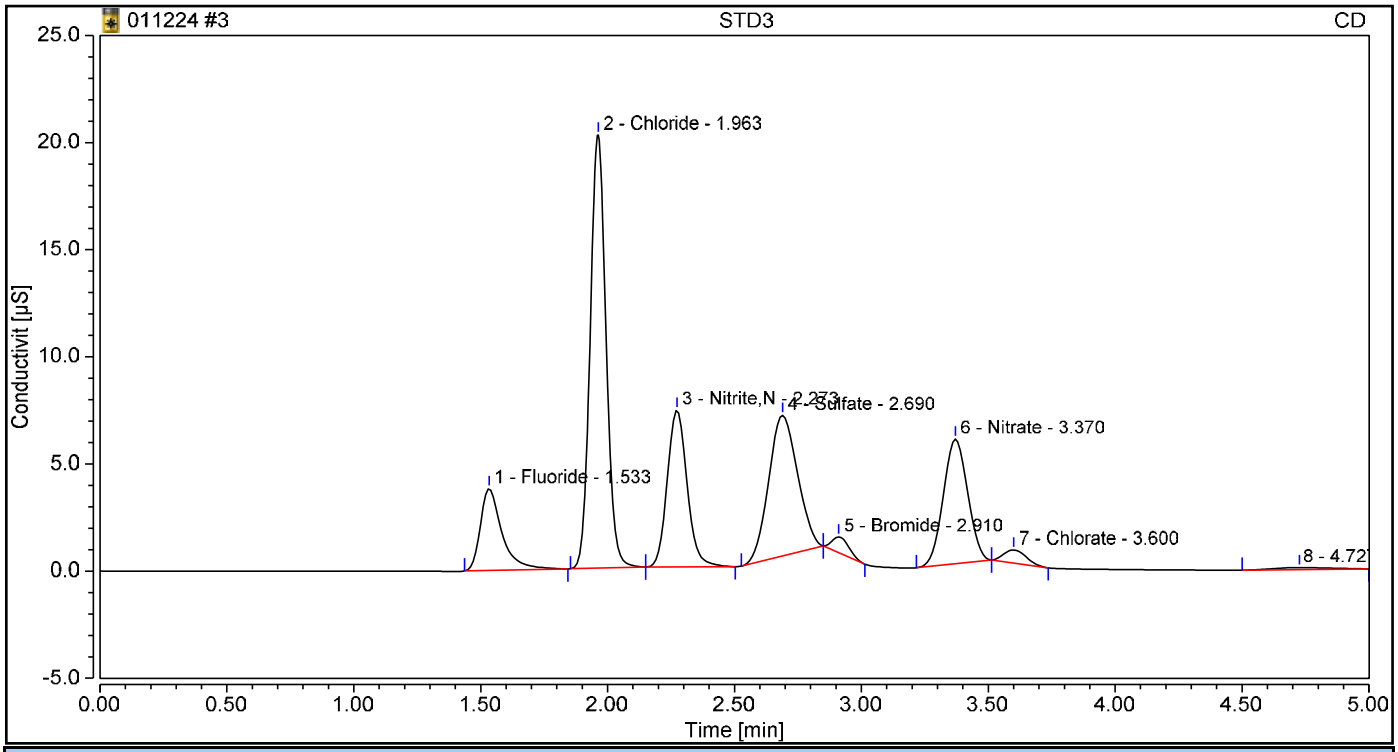
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.540	0.057	0.622	7.63	7.48	0.3379
2	Chloride	1.983	0.260	3.618	34.87	43.48	1.9144
3	Nitrite,N	2.293	0.127	1.454	16.98	17.48	0.3979
4	Sulfate	2.707	0.164	1.289	21.92	15.49	1.9706
5	Bromide	2.933	0.012	0.152	1.65	1.83	0.4125
6	Nitrate	3.393	0.116	1.084	15.58	13.03	0.3822
7	Chlorate	3.610	0.010	0.101	1.36	1.22	0.3557
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**0.747**	**8.321**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**STD3**	*Run Time (min):*	**5.00**
Vial Number:	**GA3**	*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:	**14/Dec/23 22:47**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

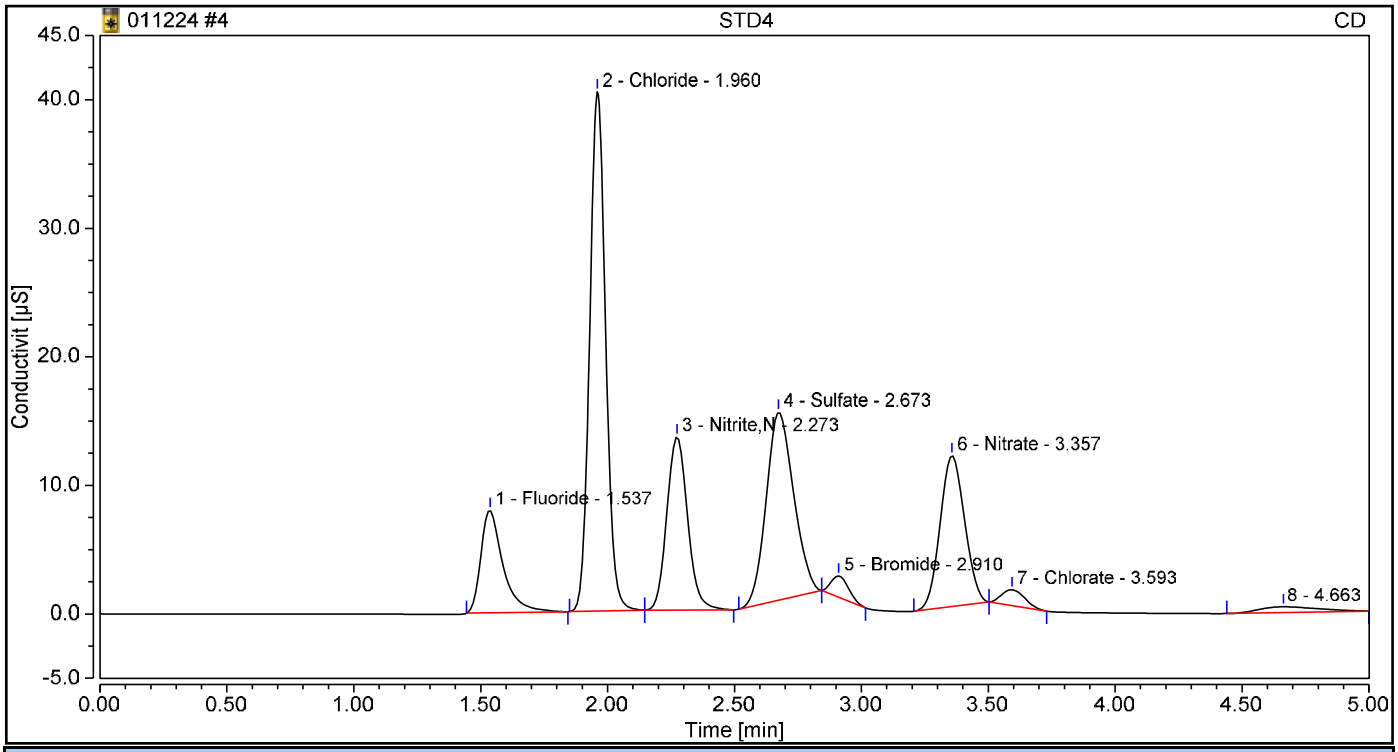
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.533	0.377	3.821	9.06	8.46	1.9075
2	Chloride	1.963	1.461	20.220	35.12	44.74	10.1020
3	Nitrite,N	2.273	0.662	7.317	15.91	16.19	2.0664
4	Sulfate	2.690	0.867	6.571	20.85	14.54	9.7231
5	Bromide	2.910	0.058	0.735	1.39	1.63	1.8267
6	Nitrate	3.370	0.648	5.824	15.58	12.89	1.9843
7	Chlorate	3.600	0.063	0.614	1.52	1.36	1.9670
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
8		4.727	0.024	0.092	0.58	0.20	n.a.
Total:			**4.161**	**45.194**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**STD4**	*Run Time (min):*	**5.00**
Vial Number:	**GA4**	*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:	**14/Dec/23 22:53**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

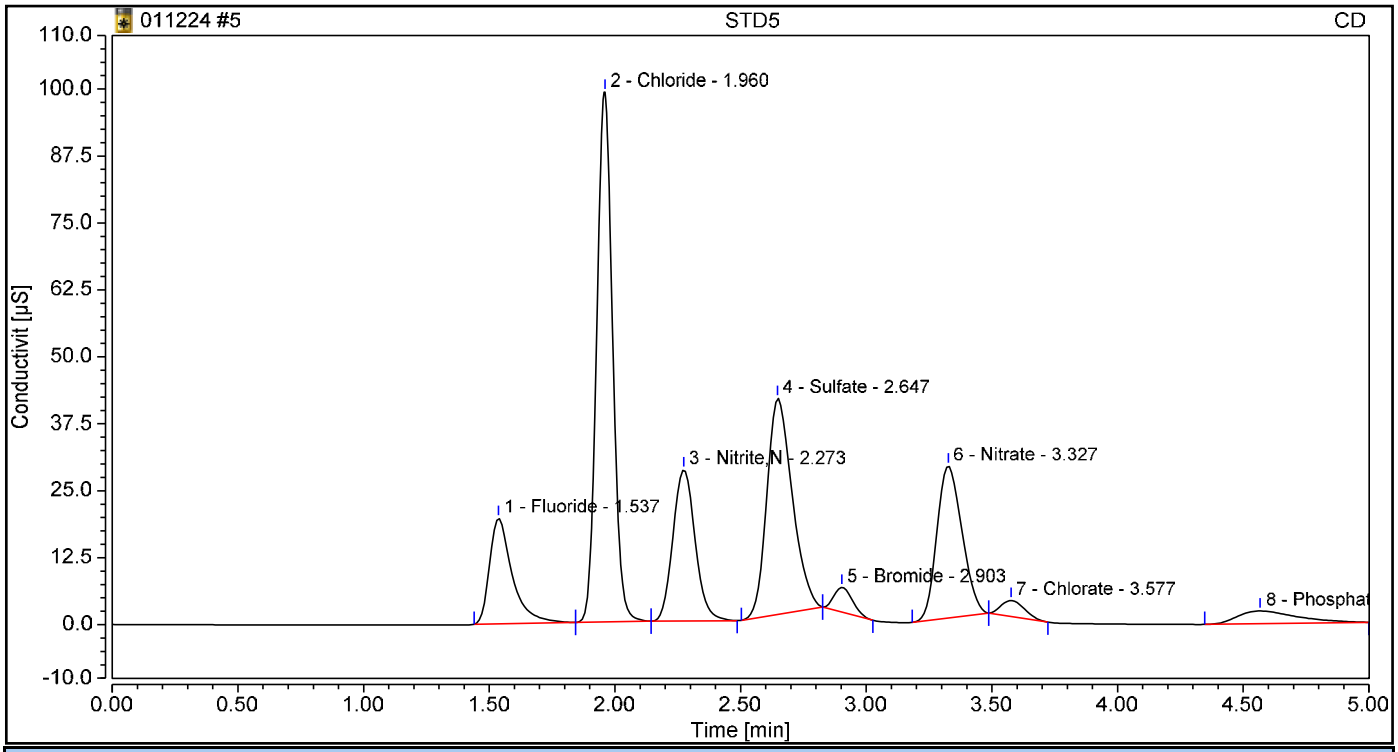
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.537	0.806	7.977	9.43	8.71	4.0156
2	Chloride	1.960	2.934	40.388	34.29	44.11	20.1409
3	Nitrite,N	2.273	1.275	13.474	14.91	14.72	4.0548
4	Sulfate	2.673	1.836	14.630	21.47	15.98	20.1831
5	Bromide	2.910	0.134	1.654	1.56	1.81	3.9776
6	Nitrate	3.357	1.316	11.738	15.39	12.82	3.9958
7	Chlorate	3.593	0.130	1.242	1.52	1.36	4.0261
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
8		4.663	0.123	0.452	1.43	0.49	n.a.
Total:			**8.555**	**91.554**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**STD5**	*Run Time (min):*	**5.00**
Vial Number:	**GA5**	*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:	**14/Dec/23 22:59**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

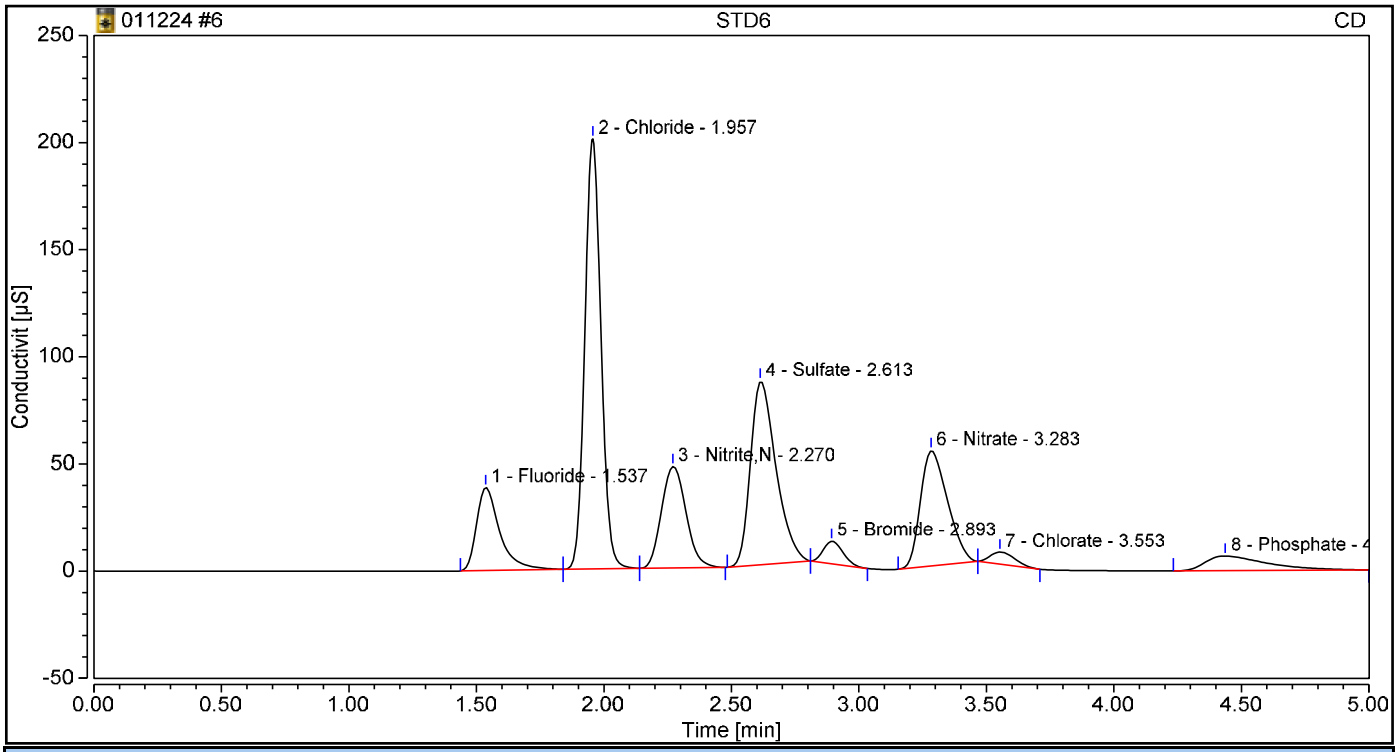
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.537	2.053	19.685	9.51	8.73	10.1343
2	Chloride	1.960	7.231	98.913	33.51	43.85	49.4399
3	Nitrite,N	2.273	2.893	28.253	13.41	12.53	9.7676
4	Sulfate	2.647	4.742	40.336	21.97	17.88	50.2072
5	Bromide	2.903	0.397	4.636	1.84	2.06	10.2281
6	Nitrate	3.327	3.287	28.359	15.23	12.57	9.9290
7	Chlorate	3.577	0.325	2.994	1.51	1.33	10.0850
8	Phosphate	4.567	0.653	2.388	3.02	1.06	10.0000
Total:			**21.581**	**225.564**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**STD6**	*Run Time (min):*	**5.00**
Vial Number:	**GA6**	*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:	**14/Dec/23 23:05**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

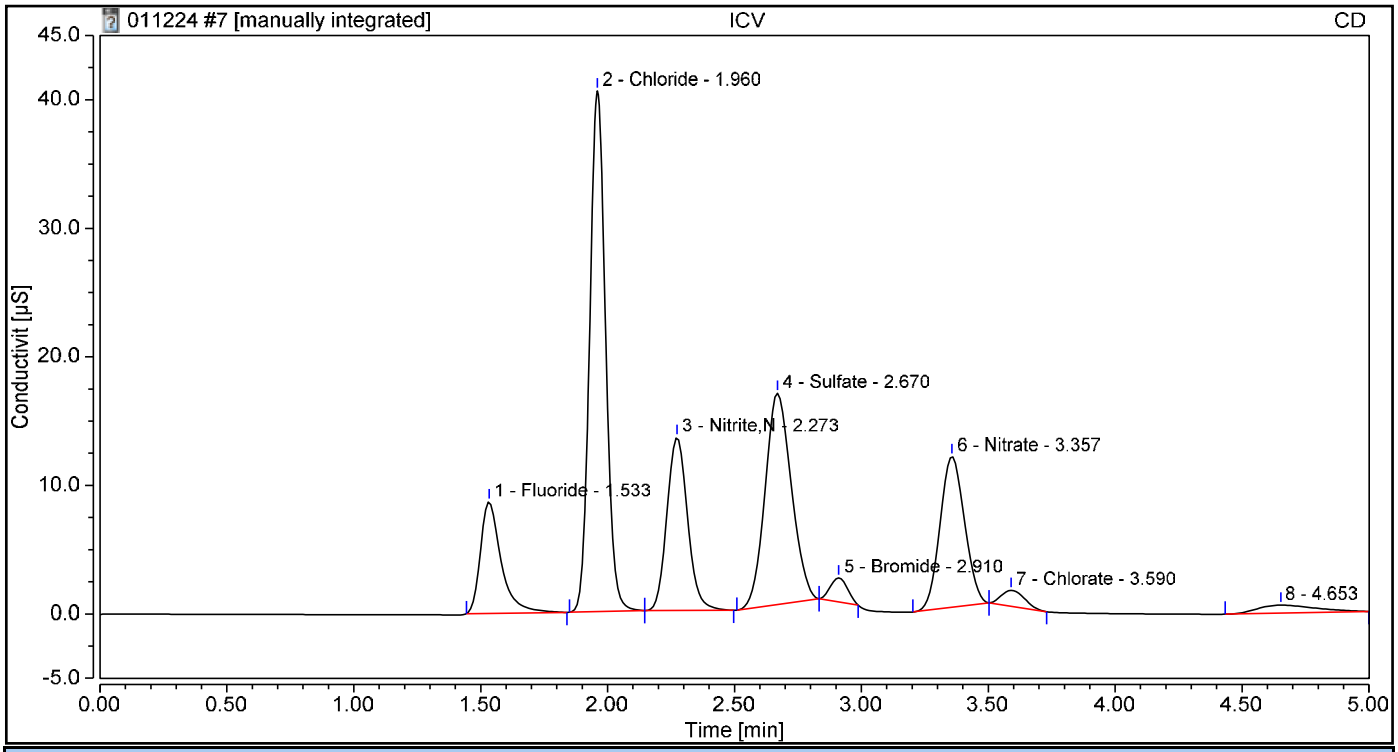
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.537	4.061	38.728	9.20	8.62	19.9862
2	Chloride	1.957	14.703	200.815	33.30	44.68	100.3863
3	Nitrite,N	2.270	5.278	47.425	11.95	10.55	20.1285
4	Sulfate	2.613	9.959	85.700	22.56	19.07	99.8983
5	Bromide	2.893	0.936	10.480	2.12	2.33	19.9270
6	Nitrate	3.283	6.665	53.831	15.10	11.98	20.1032
7	Chlorate	3.553	0.633	5.635	1.43	1.25	19.9547
8	Phosphate	4.437	1.918	6.848	4.34	1.52	20.0000
Total:			**44.153**	**449.460**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**ICV**	*Run Time (min):*	**5.00**
Vial Number:	**GA7**	*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:	**14/Dec/23 23:16**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

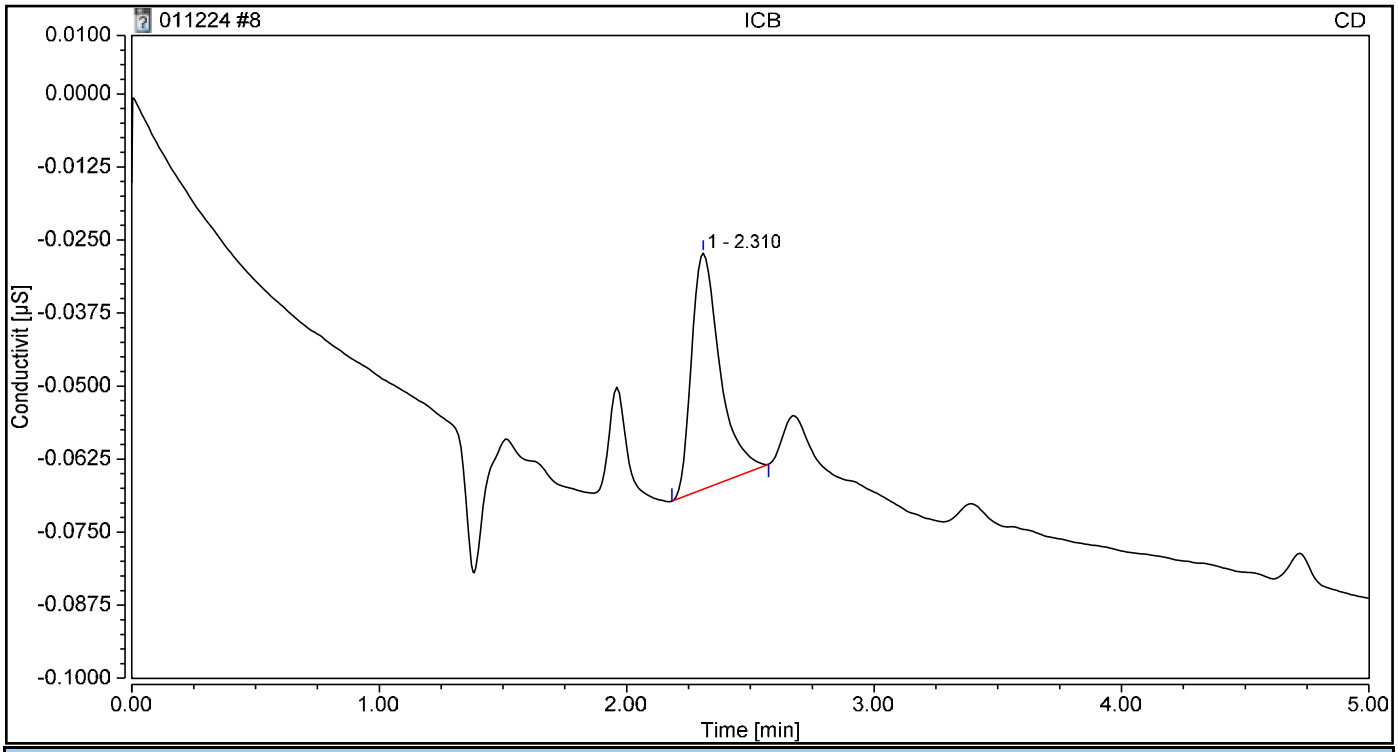
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.533	0.822	8.680	9.38	9.18	4.0915
2	Chloride	1.960	2.931	40.505	33.46	42.84	20.1253
3	Nitrite,N	2.273	1.271	13.471	14.51	14.25	4.0413
4	Sulfate	2.670	1.974	16.435	22.54	17.38	21.6553
5	Bromide	2.910	0.148	1.869	1.69	1.98	4.3666
6	Nitrate	3.357	1.316	11.735	15.03	12.41	3.9954
7	Chlorate	3.590	0.131	1.241	1.50	1.31	4.0538
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
8		4.653	0.166	0.623	1.89	0.66	n.a.
Total:			**8.760**	**94.559**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**ICB**	*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:	**14/Dec/23 23:22**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

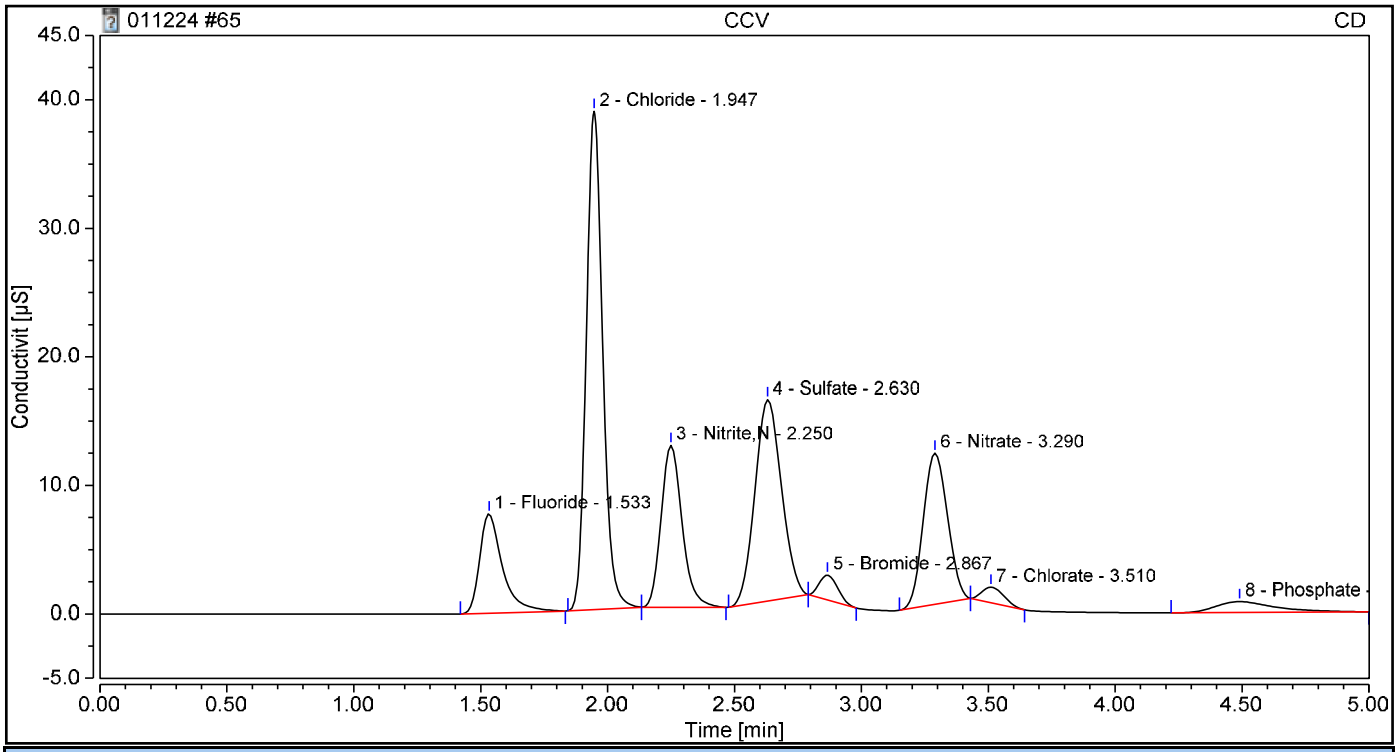
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1		2.310	0.005	0.040	100.00	100.00	n.a.
n.a.	Sulfate	n.a.	n.a.	n.a.	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:			**0.005**	**0.040**	**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:	**12/Jan/24 16:22**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

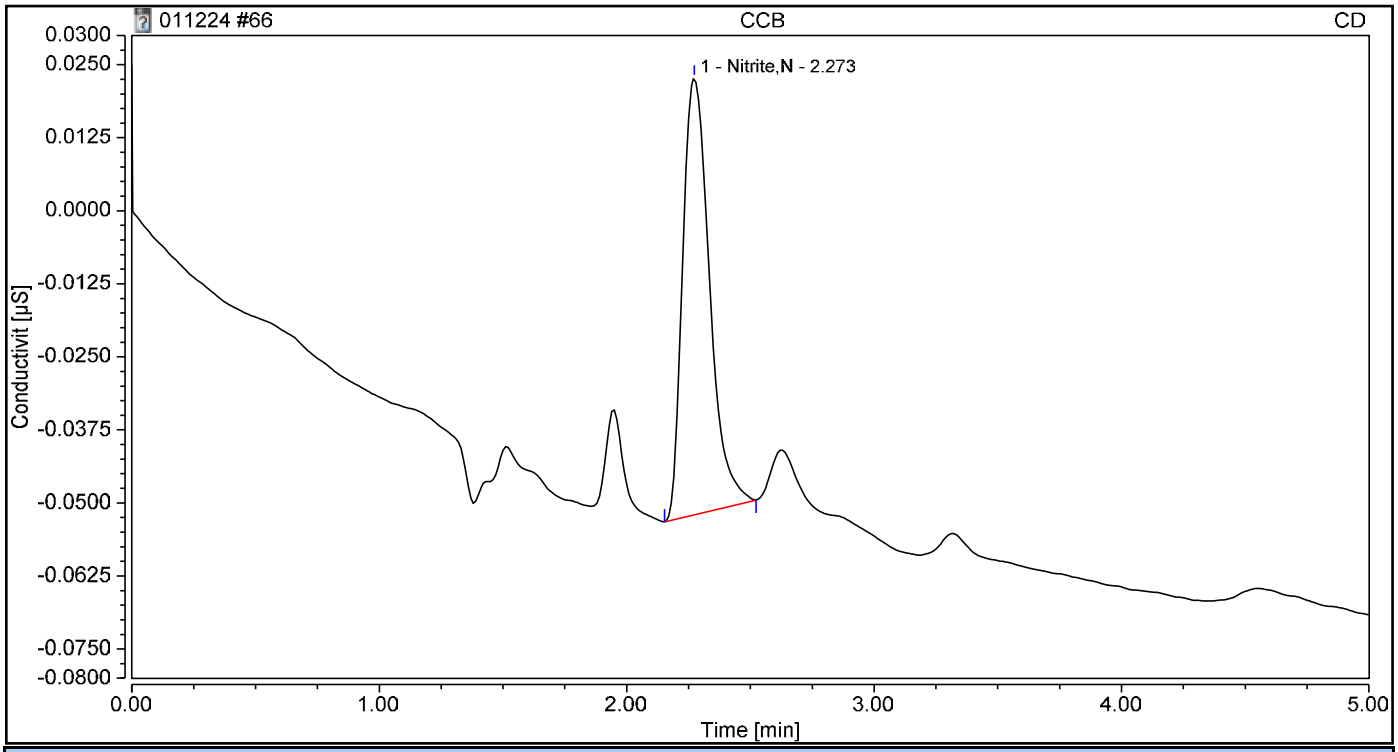
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.533	0.804	7.724	9.31	8.54	4.0045
2	Chloride	1.947	2.904	38.759	33.61	42.83	19.9385
3	Nitrite,N	2.250	1.213	12.592	14.03	13.91	3.8472
4	Sulfate	2.630	1.901	15.661	22.00	17.31	20.8712
5	Bromide	2.867	0.163	1.934	1.89	2.14	4.7667
6	Nitrate	3.290	1.301	11.768	15.05	13.00	3.9481
7	Chlorate	3.510	0.122	1.205	1.41	1.33	3.7647
8	Phosphate	4.490	0.234	0.856	2.71	0.95	6.6943
Total:			**8.641**	**90.498**	**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:	**12/Jan/24 16:34**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

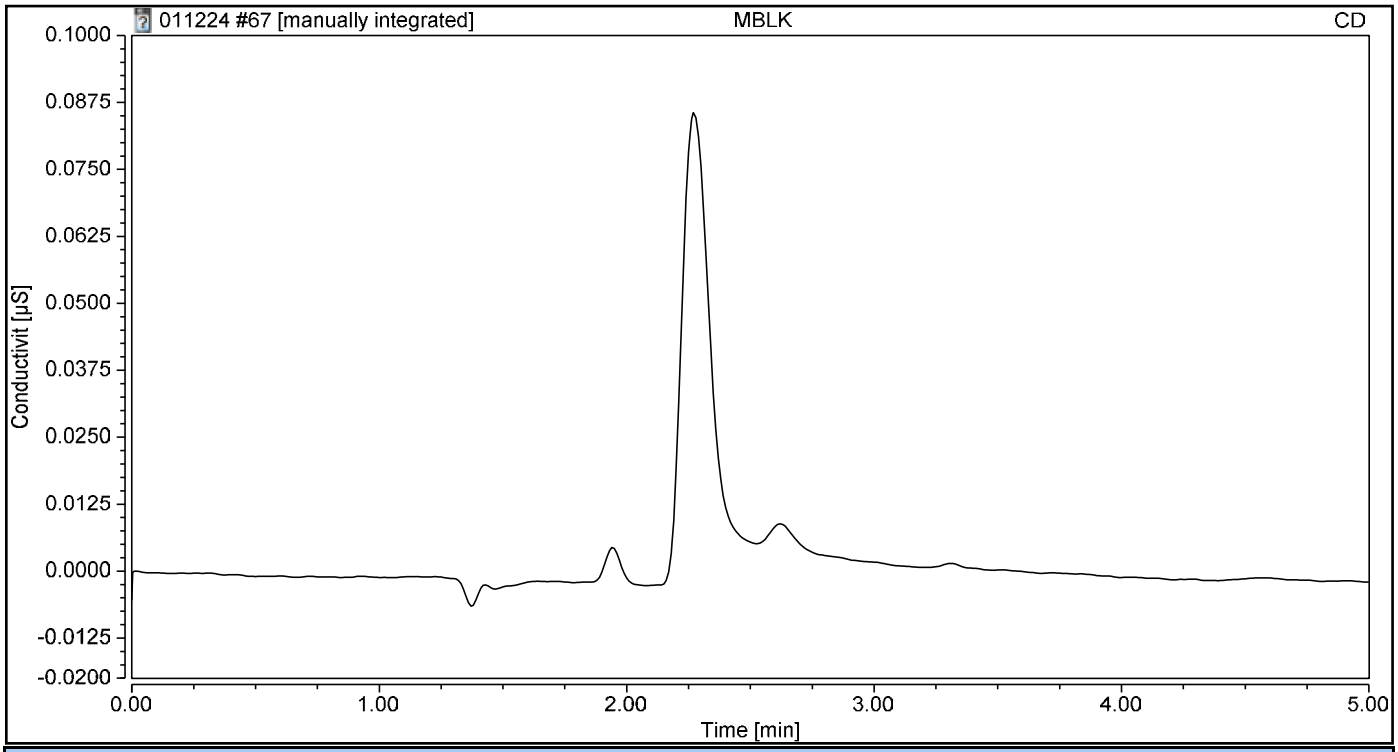
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	Nitrite,N	2.273	0.009	0.075	100.00	100.00	0.0394
n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide	n.a.	n.a.	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**	**0.075**	**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:	**12/Jan/24 16:51**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

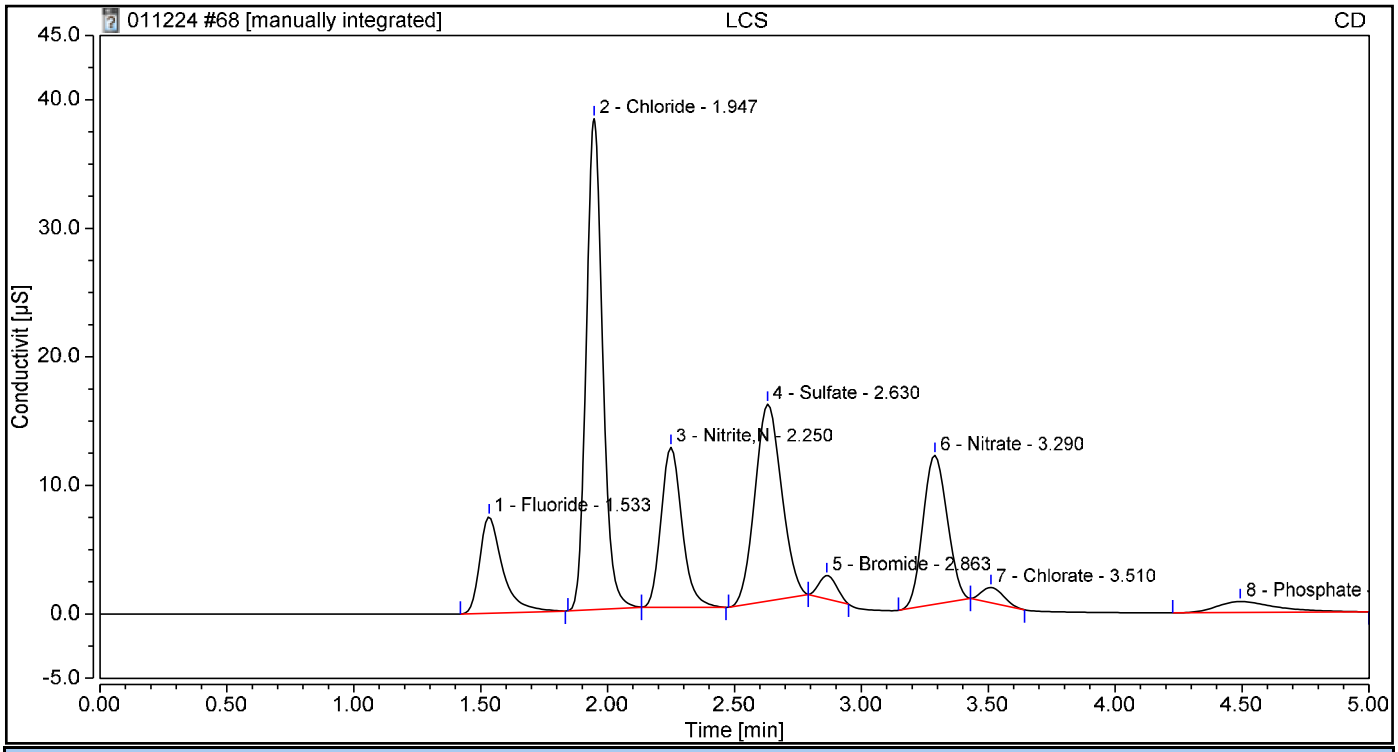
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
n.a.	Bromide	n.a.	n.a.	n.a.	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:	**12/Jan/24 16:57**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

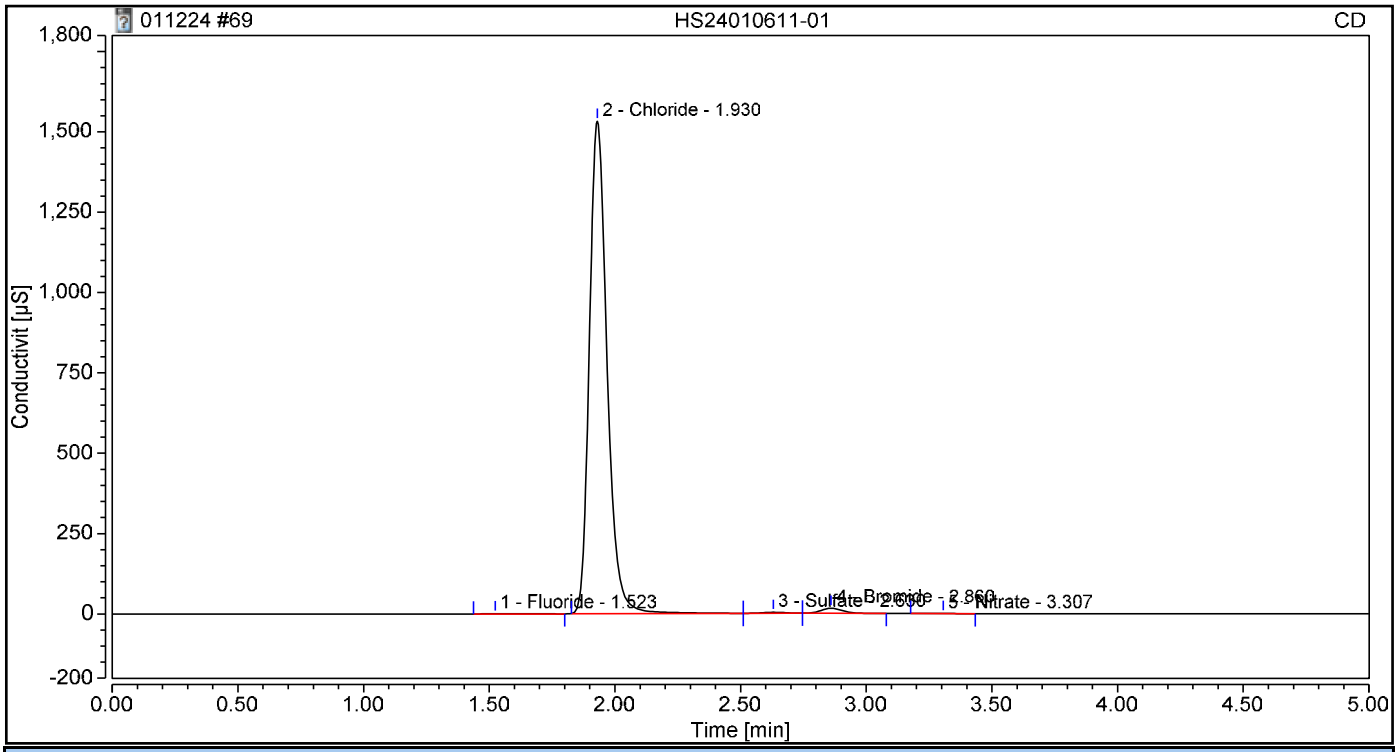
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.533	0.784	7.496	9.23	8.43	3.9042
2	Chloride	1.947	2.863	38.188	33.73	42.97	19.6613
3	Nitrite,N	2.250	1.198	12.449	14.11	14.01	3.7998
4	Sulfate	2.630	1.863	15.305	21.94	17.22	20.4636
5	Bromide	2.863	0.147	1.815	1.74	2.04	4.3495
6	Nitrate	3.290	1.281	11.583	15.09	13.03	3.8885
7	Chlorate	3.510	0.119	1.190	1.41	1.34	3.6942
8	Phosphate	4.493	0.234	0.854	2.76	0.96	6.6914
Total:			**8.489**	**88.879**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**HS24010611-01**	*Run Time (min):*	**5.00**
Vial Number:	**GA1**	*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:	**12/Jan/24 17:09**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

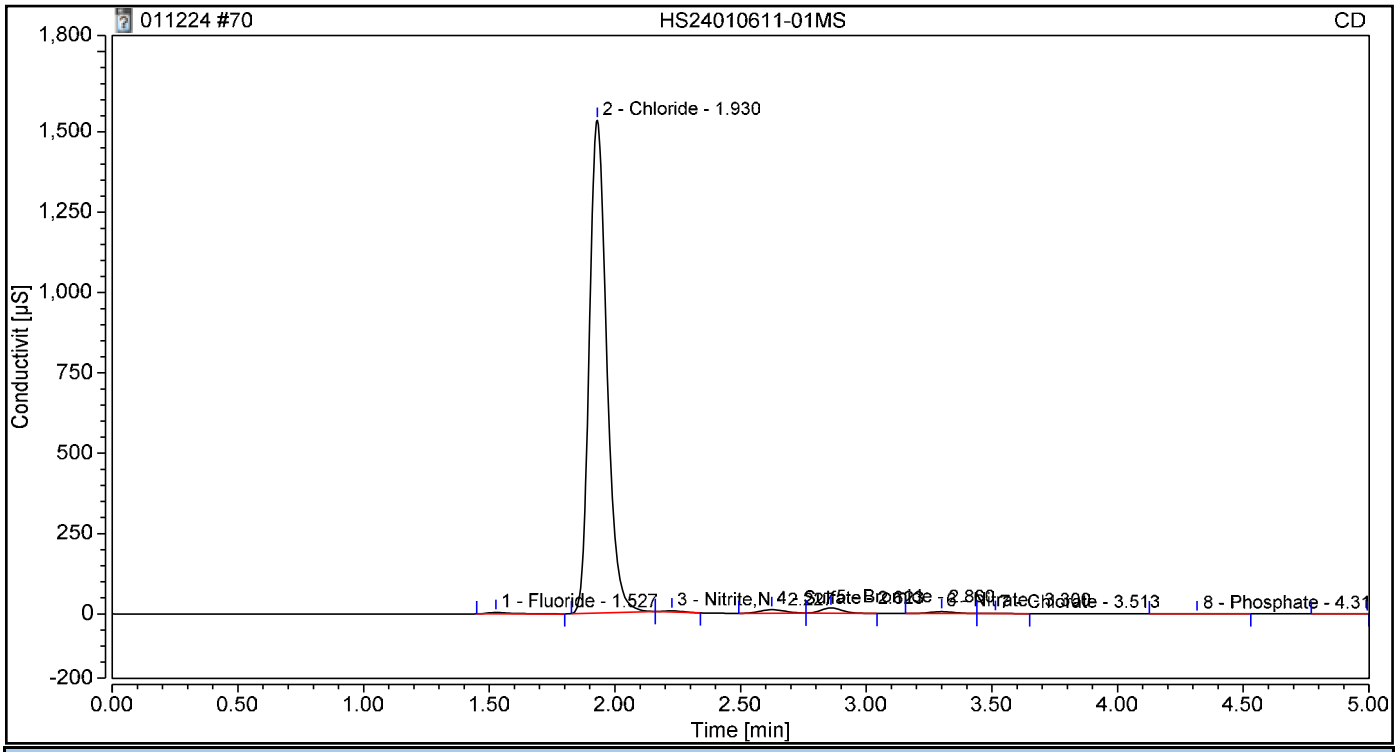
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.523	0.138	0.807	0.11	0.05	0.7344
2	Chloride	1.930	124.656	1531.922	98.40	98.72	850.0497
n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	Sulfate	2.630	0.320	3.046	0.25	0.20	3.7076
4	Bromide	2.860	1.559	15.923	1.23	1.03	28.7152
5	Nitrate	3.307	0.004	0.032	0.00	0.00	0.0425
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:			**126.677**	**1551.730**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**HS24010611-01MS**	*Run Time (min):*	**5.00**
Vial Number:	**GA2**	*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:	**12/Jan/24 17:15**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

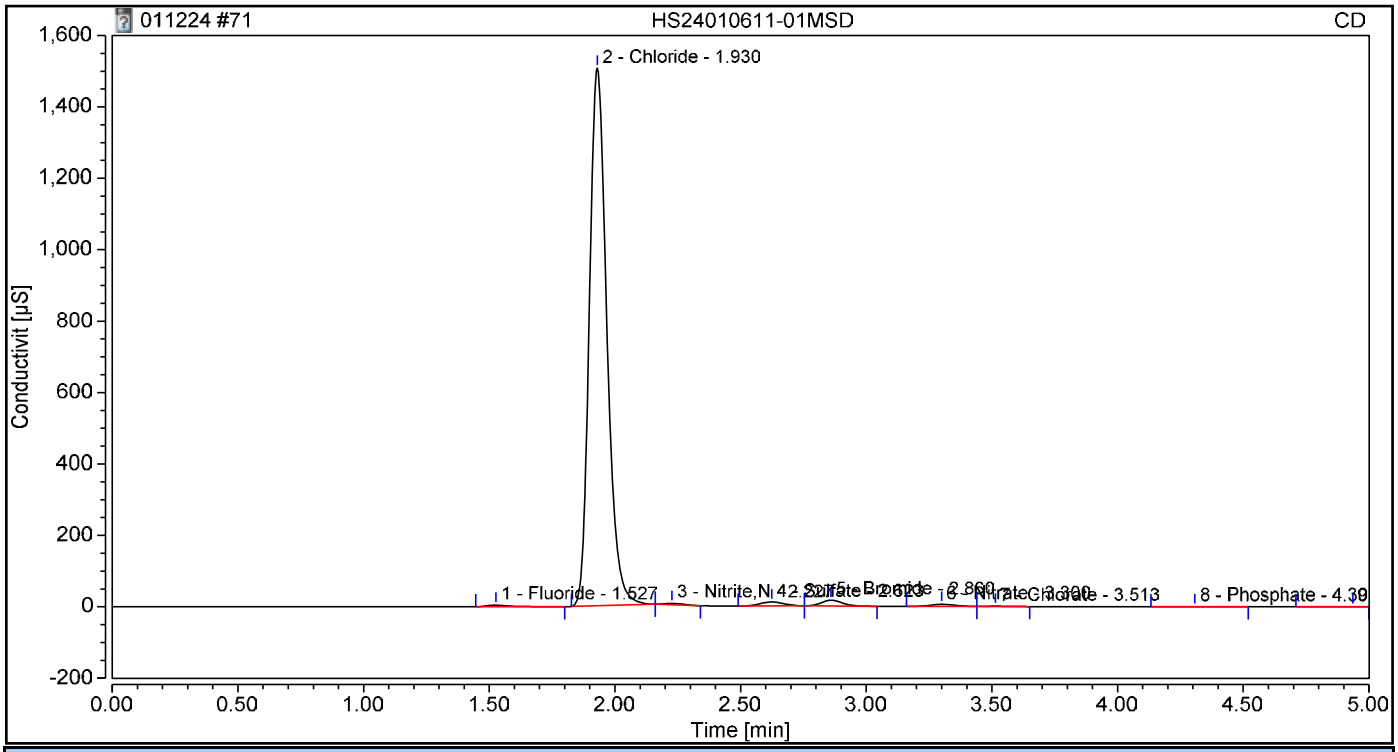
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.527	0.483	4.341	0.38	0.28	2.4273
2	Chloride	1.930	123.073	1532.849	96.63	97.34	839.2600
3	Nitrite,N	2.227	0.312	3.646	0.25	0.23	0.9696
4	Sulfate	2.623	1.228	11.080	0.96	0.70	13.6405
5	Bromide	2.860	1.566	16.381	1.23	1.04	28.8010
6	Nitrate	3.300	0.643	5.892	0.50	0.37	1.9668
7	Chlorate	3.513	0.060	0.592	0.05	0.04	1.8608
8	Phosphate	4.317	0.002	0.010	0.00	0.00	4.8581
9		4.993	0.002	0.002	0.00	0.00	n.a.
Total:			**127.368**	**1574.793**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**HS24010611-01MSD**	*Run Time (min):*	**5.00**
Vial Number:	**GA3**	*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:	**12/Jan/24 17:21**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

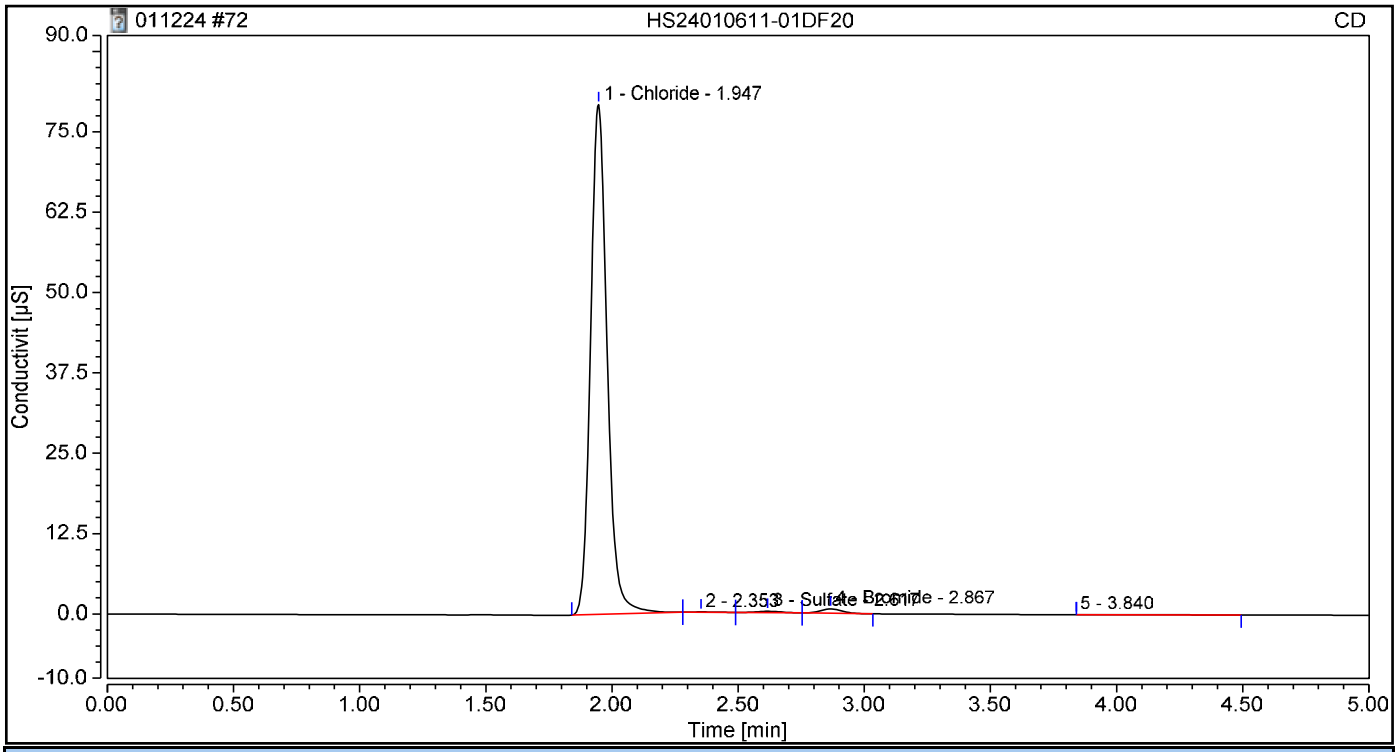
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.527	0.492	4.477	0.39	0.29	2.4750
2	Chloride	1.930	120.687	1505.185	96.56	97.29	822.9911
3	Nitrite,N	2.227	0.308	3.596	0.25	0.23	0.9565
4	Sulfate	2.623	1.241	11.250	0.99	0.73	13.7872
5	Bromide	2.860	1.556	16.213	1.24	1.05	28.6721
6	Nitrate	3.300	0.631	5.779	0.50	0.37	1.9305
7	Chlorate	3.513	0.059	0.583	0.05	0.04	1.8359
8	Phosphate	4.307	0.002	0.010	0.00	0.00	4.8577
9		4.937	0.006	0.028	0.00	0.00	n.a.
Total:			**124.982**	**1547.121**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**HS24010611-01DF20**	*Run Time (min):*	**5.00**
Vial Number:	**GA4**	*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:*	**20.0000**
Injection Date/Time:	**12/Jan/24 17:27**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

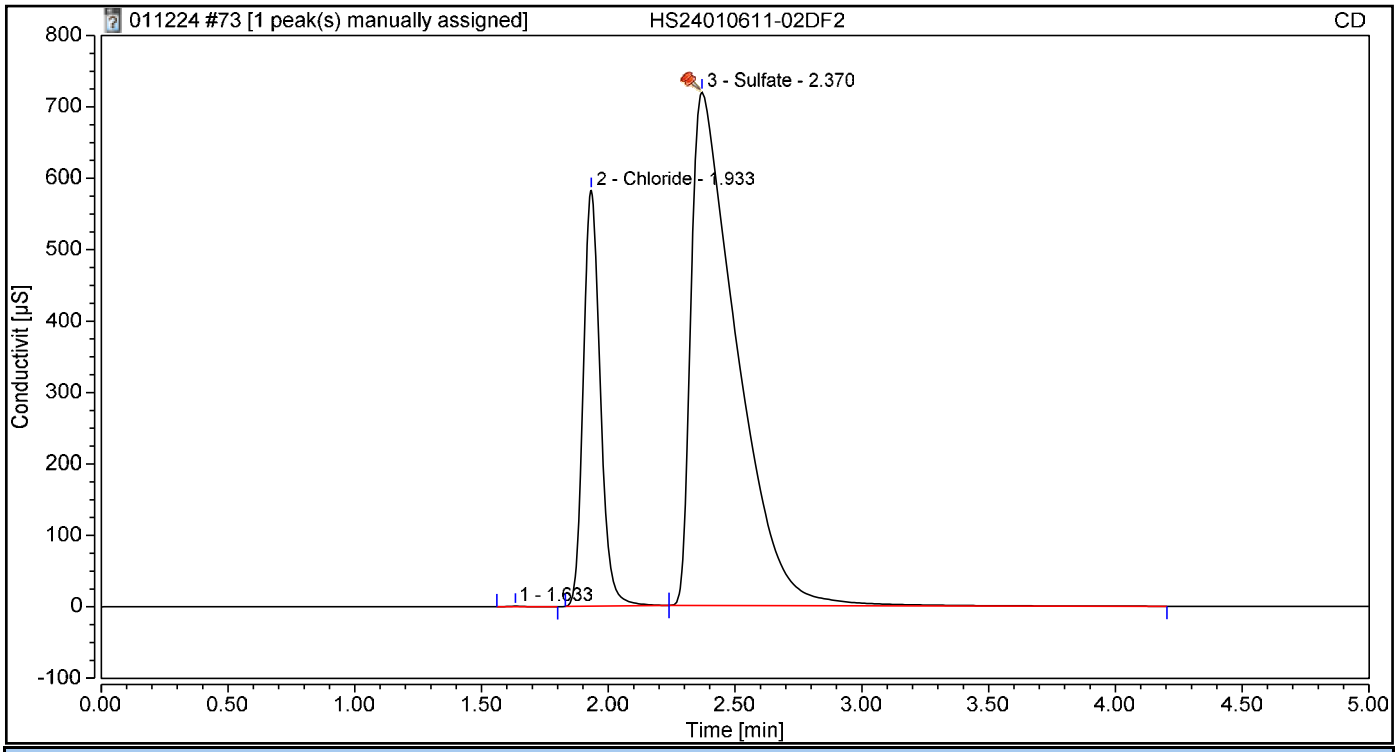
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	Chloride	1.947	6.035	79.292	98.40	98.85	825.6791
n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2		2.353	0.005	0.048	0.09	0.06	n.a.
3	Sulfate	2.617	0.023	0.205	0.37	0.26	7.9910
4	Bromide	2.867	0.064	0.668	1.04	0.83	40.1404
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.
5		3.840	0.006	0.000	0.10	0.00	n.a.
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**6.133**	**80.213**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**HS24010611-02DF2**	*Run Time (min):*	**5.00**
Vial Number:	**GA5**	*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:*	**2.0000**
Injection Date/Time:	**12/Jan/24 17:33**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

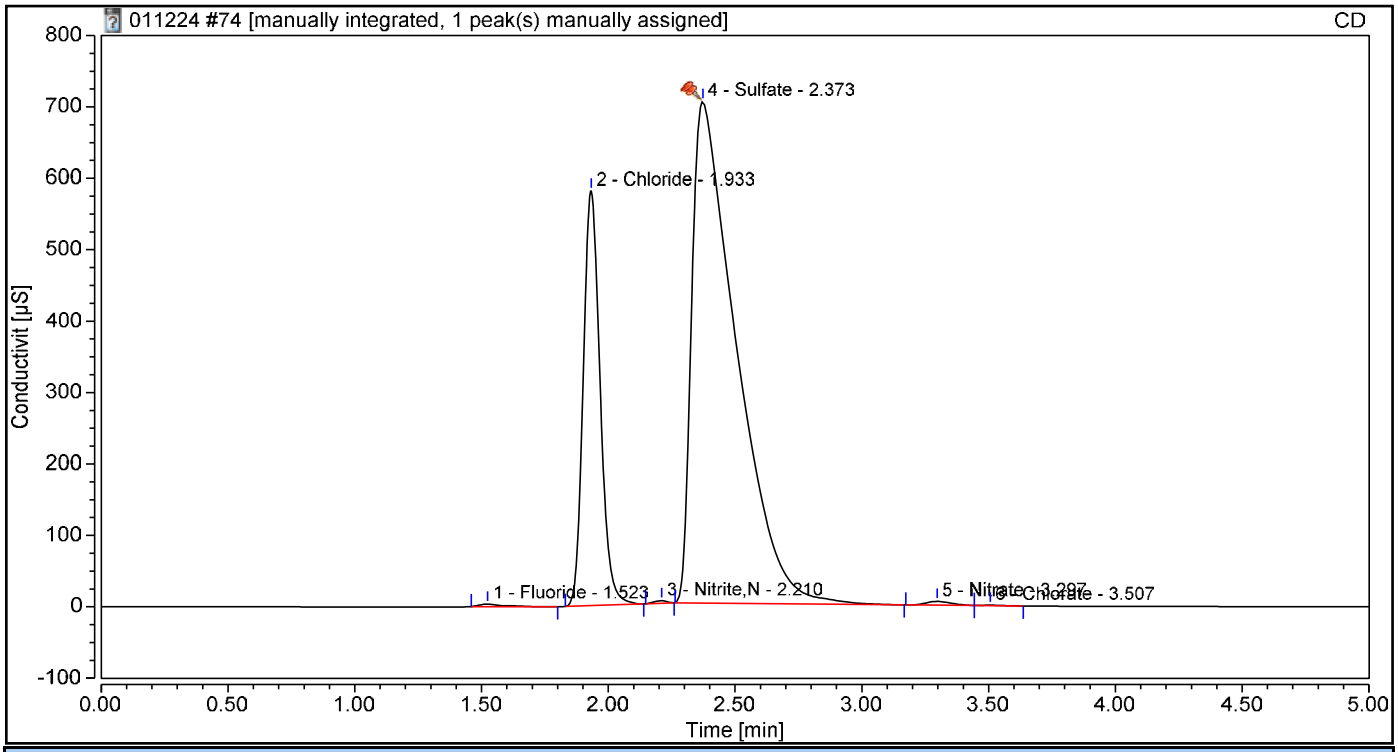
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1		1.633	0.054	0.783	0.03	0.06	n.a.
2	Chloride	1.933	45.221	582.129	23.22	44.71	616.9195
n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3	Sulfate	2.370	149.462	719.067	76.75	55.23	1693.3437
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:			**194.737**	**1301.978**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**HS24010611-02MSDF2**	*Run Time (min):*	**5.00**
Vial Number:	**GA6**	*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:*	**2.0000**
Injection Date/Time:	**12/Jan/24 17:39**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

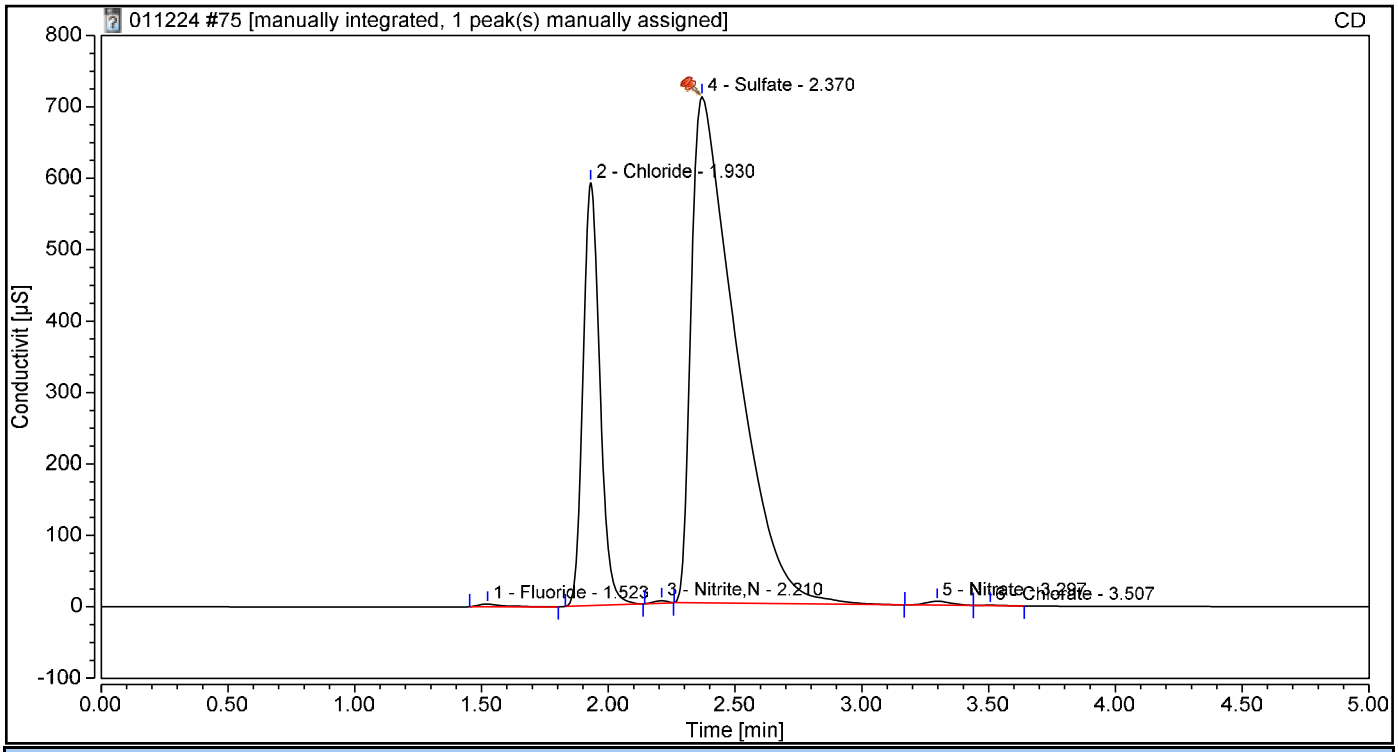
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.523	0.380	3.591	0.20	0.28	3.8468
2	Chloride	1.933	44.731	580.700	23.70	44.82	610.2371
3	Nitrite,N	2.210	0.215	3.550	0.11	0.27	1.3359
4	Sulfate	2.373	142.814	702.258	75.66	54.20	1642.3845
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	Nitrate	3.297	0.584	5.211	0.31	0.40	3.5812
6	Chlorate	3.507	0.045	0.445	0.02	0.03	2.8597
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**188.769**	**1295.756**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**HS24010611-02MSDDF2**	*Run Time (min):*	**5.00**
Vial Number:	**GA7**	*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:*	**2.0000**
Injection Date/Time:	**12/Jan/24 17:44**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

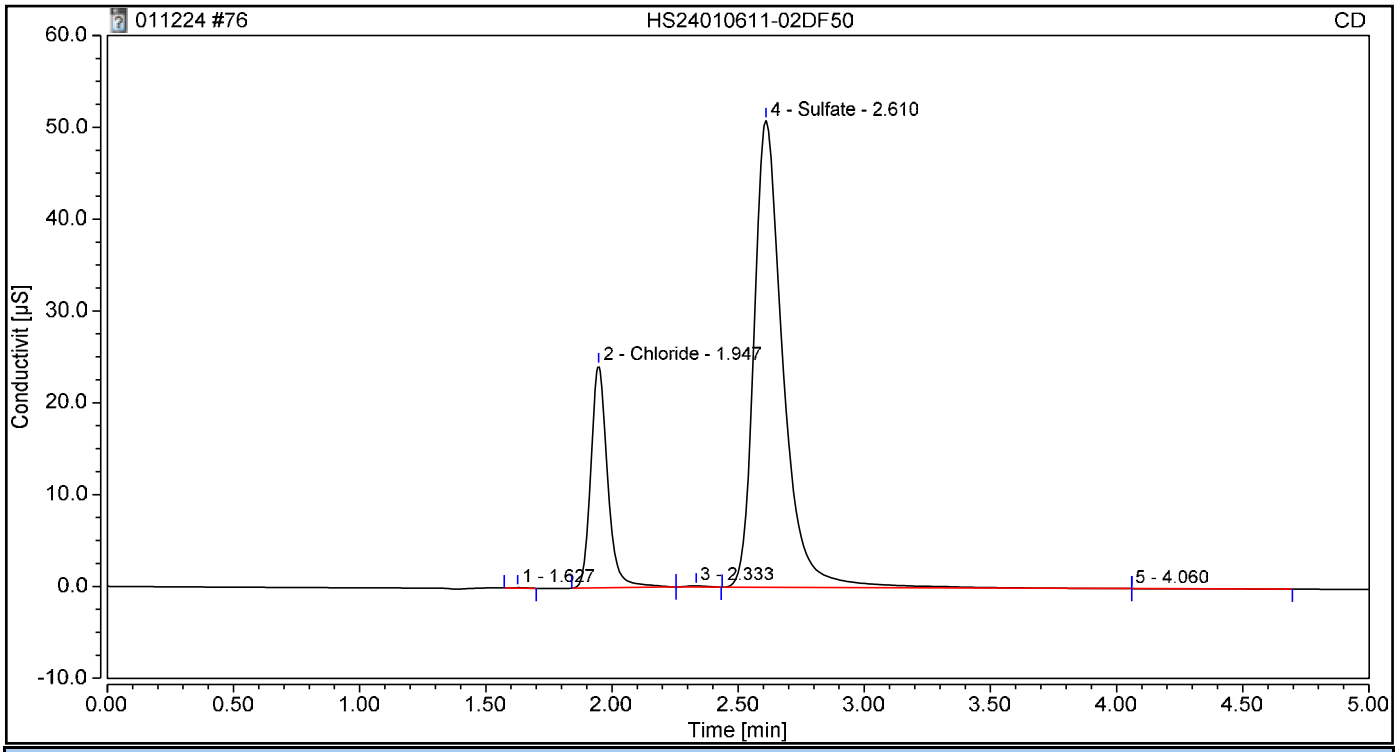
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.523	0.418	3.853	0.22	0.29	4.2213
2	Chloride	1.930	45.576	592.118	23.76	45.05	621.7531
3	Nitrite,N	2.210	0.214	3.540	0.11	0.27	1.3347
4	Sulfate	2.370	144.970	709.024	75.57	53.94	1659.0274
n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5	Nitrate	3.297	0.601	5.364	0.31	0.41	3.6831
6	Chlorate	3.507	0.049	0.476	0.03	0.04	3.0638
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**191.828**	**1314.375**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**HS24010611-02DF50**	*Run Time (min):*	**5.00**
Vial Number:	**GA8**	*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:*	**50.0000**
Injection Date/Time:	**12/Jan/24 17:50**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

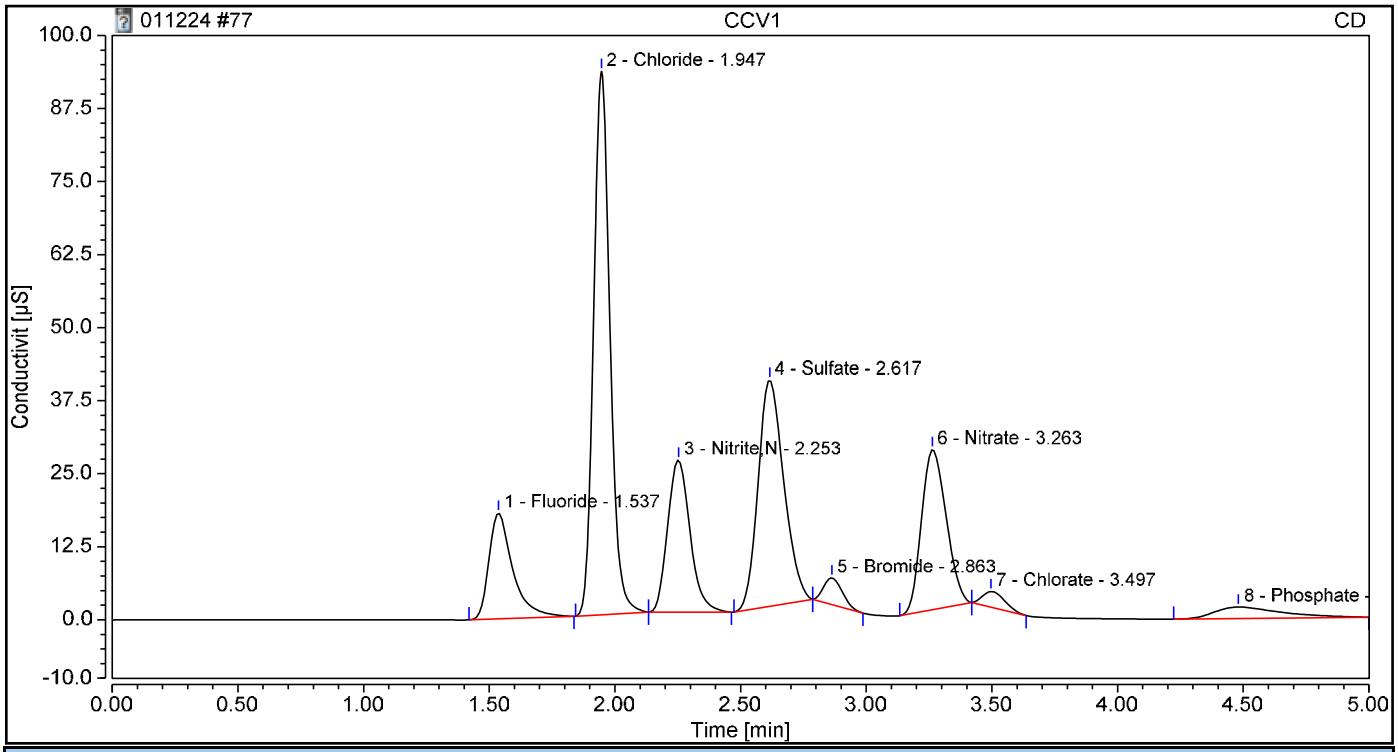
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1		1.627	0.003	0.045	0.03	0.06	n.a.
2	Chloride	1.947	1.861	24.194	21.48	32.17	641.2979
n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
3		2.333	0.012	0.132	0.14	0.18	n.a.
4	Sulfate	2.610	6.783	50.827	78.29	67.59	3511.3280
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.
5		4.060	0.006	0.000	0.07	0.00	n.a.
n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total:			**8.664**	**75.198**	**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:	**12/Jan/24 18:02**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

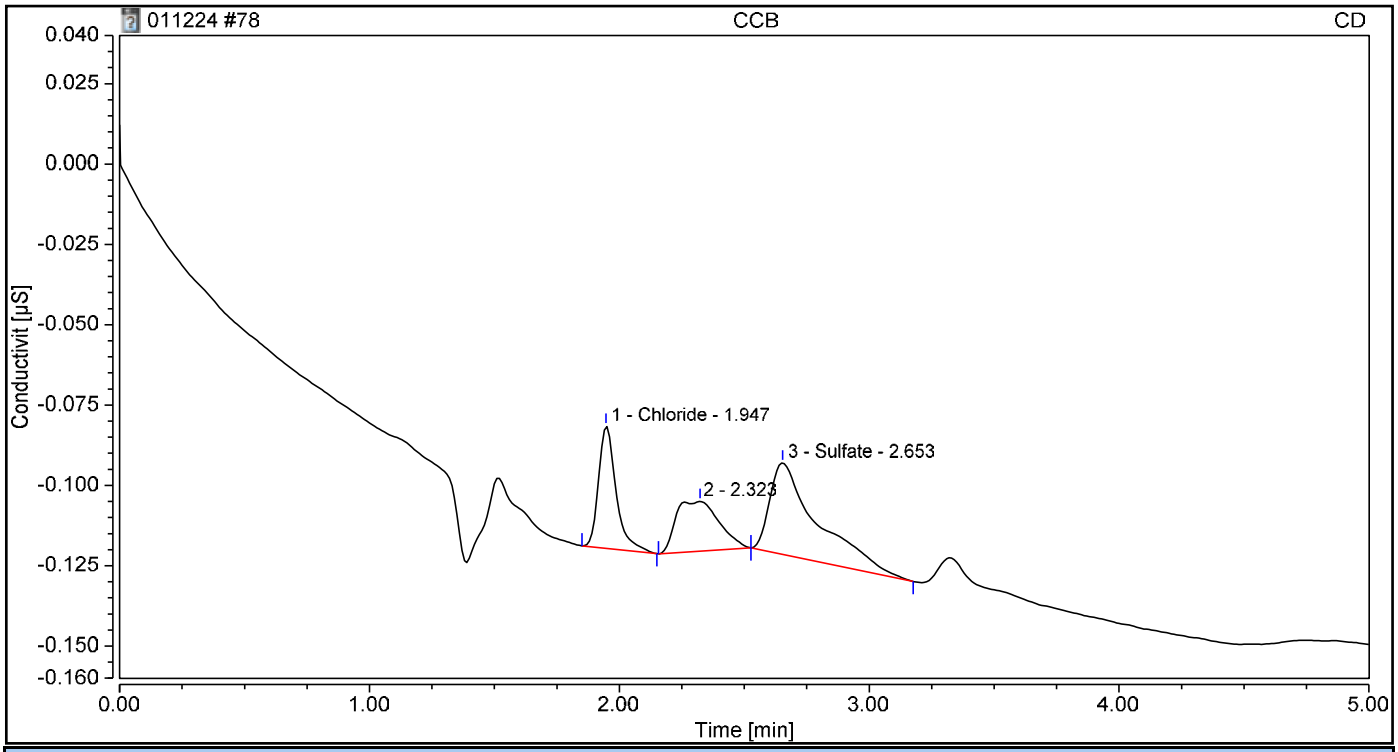
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.537	1.984	18.097	9.61	8.52	9.7964
2	Chloride	1.947	6.996	92.990	33.87	43.77	47.8364
3	Nitrite,N	2.253	2.688	26.023	13.01	12.25	9.0001
4	Sulfate	2.617	4.583	38.711	22.19	18.22	48.6086
5	Bromide	2.863	0.395	4.569	1.91	2.15	10.1779
6	Nitrate	3.263	3.124	27.424	15.12	12.91	9.4403
7	Chlorate	3.497	0.277	2.660	1.34	1.25	8.5775
8	Phosphate	4.480	0.610	1.972	2.95	0.93	9.6601
Total:			**20.657**	**212.445**	**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:	**12/Jan/24 18:14**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

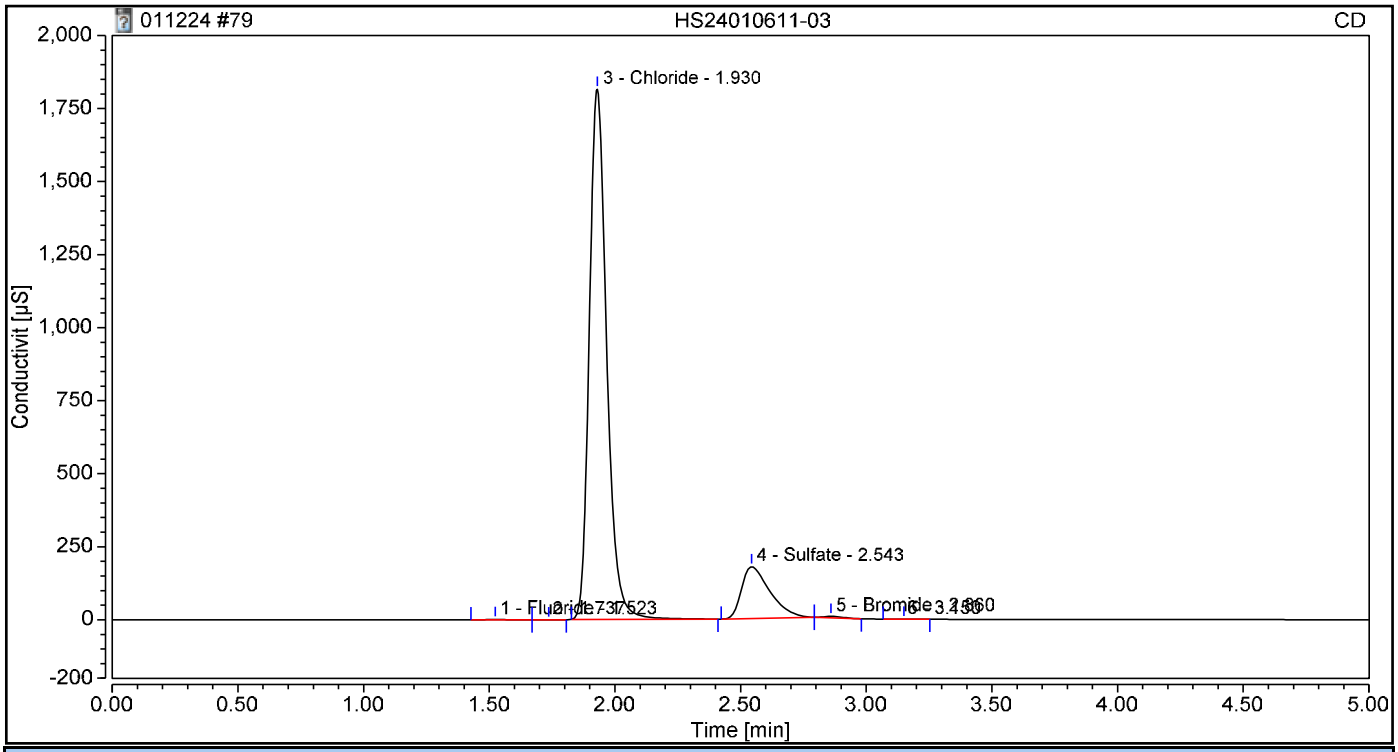
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	Chloride	1.947	0.003	0.038	24.76	46.39	0.1604
n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2		2.323	0.003	0.015	24.81	18.88	n.a.
3	Sulfate	2.653	0.006	0.028	50.42	34.73	0.2178
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:			**0.012**	**0.082**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**HS24010611-03**	*Run Time (min):*	**5.00**
Vial Number:	**GB1**	*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:	**12/Jan/24 18:25**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

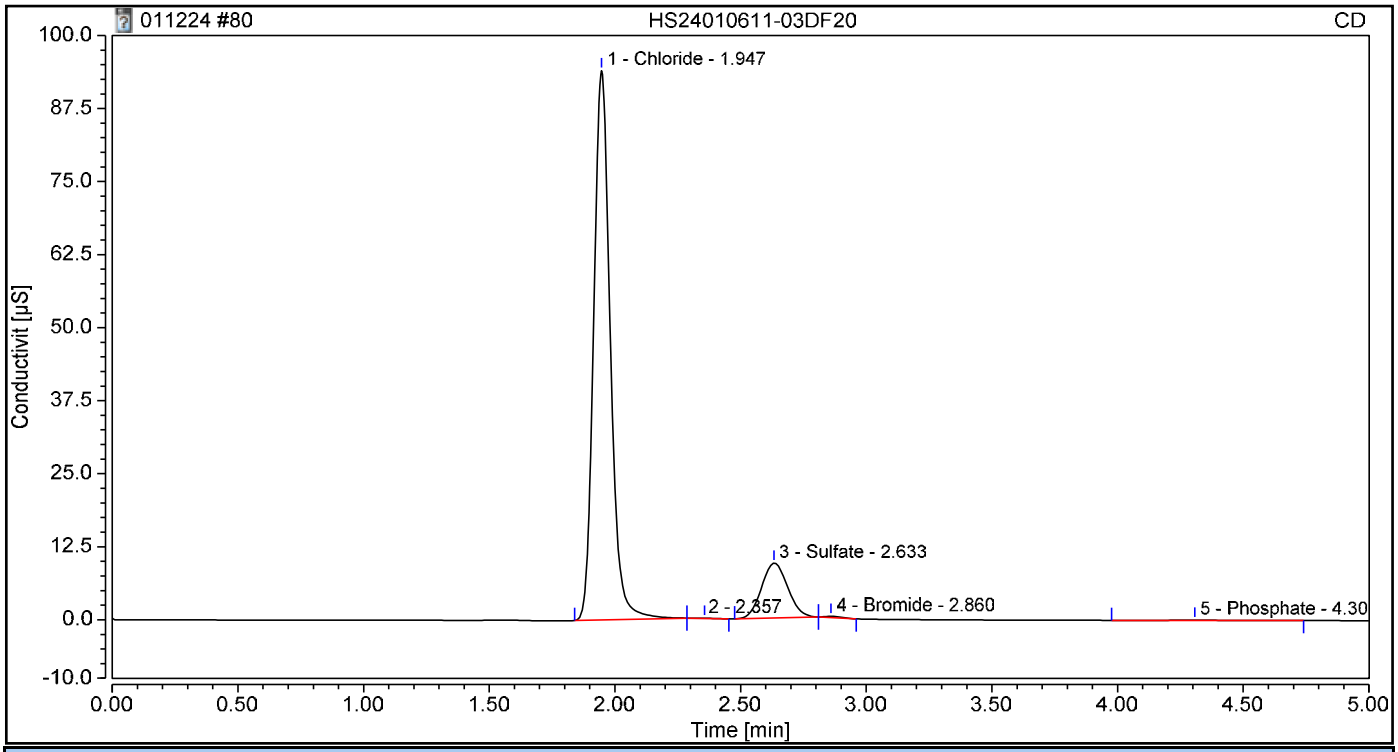
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.523	0.064	0.713	0.04	0.04	0.3734
2		1.737	0.015	0.238	0.01	0.01	n.a.
3	Chloride	1.930	144.944	1814.890	85.97	90.82	988.3736
n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	Sulfate	2.543	23.119	177.325	13.71	8.87	208.4453
5	Bromide	2.860	0.439	5.099	0.26	0.26	11.0913
6		3.150	0.012	0.131	0.01	0.01	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:			**168.593**	**1998.396**	**100.00**	**100.00**	

Chromatogram and Results

Injection Details

Injection Name:	**HS24010611-03DF20**	*Run Time (min):*	**5.00**
Vial Number:	**GB2**	*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:*	**20.0000**
Injection Date/Time:	**12/Jan/24 18:31**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

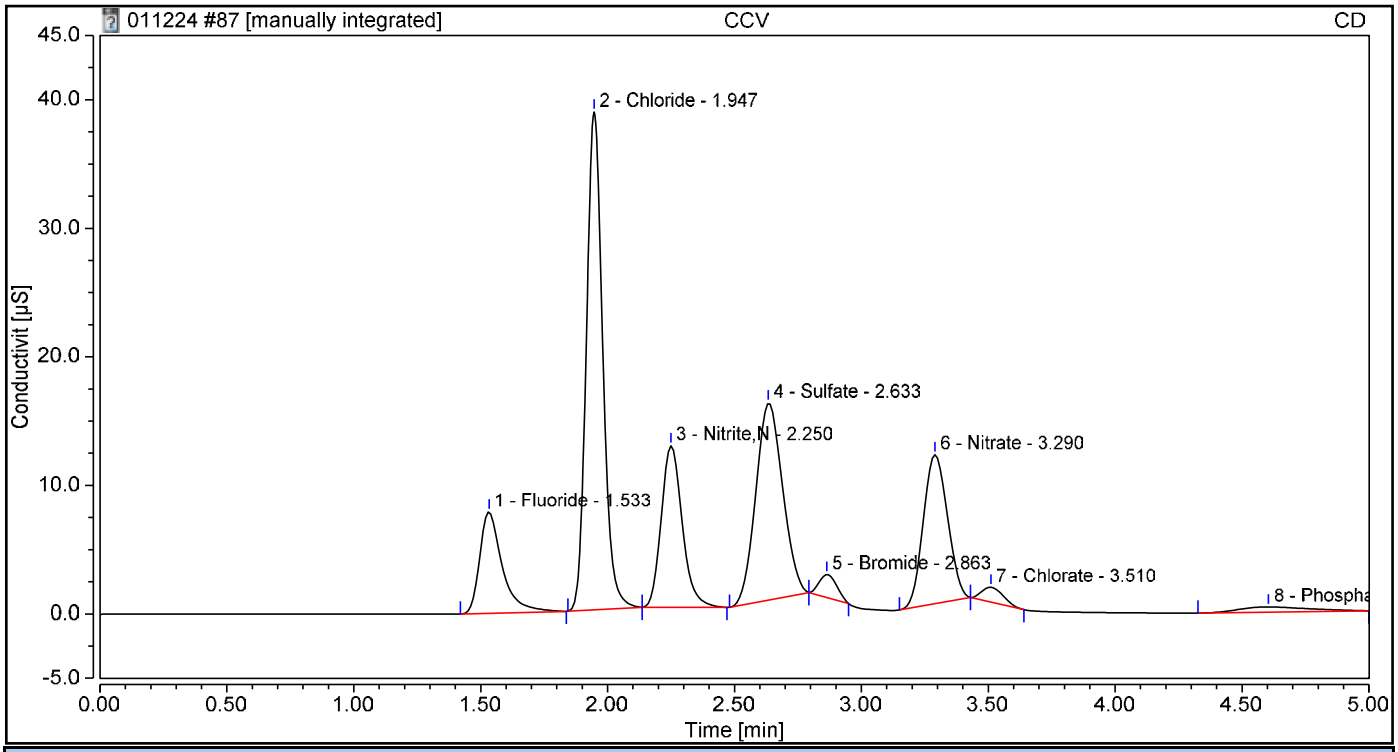
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	Chloride	1.947	7.183	94.006	86.09	90.67	982.2492
n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2		2.357	0.003	0.036	0.04	0.03	n.a.
3	Sulfate	2.633	1.132	9.401	13.57	9.07	252.1121
4	Bromide	2.860	0.016	0.210	0.20	0.20	10.8000
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.
5	Phosphate	4.307	0.009	0.028	0.11	0.03	98.3080
Total:			**8.344**	**103.681**	**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:	**12/Jan/24 19:18**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

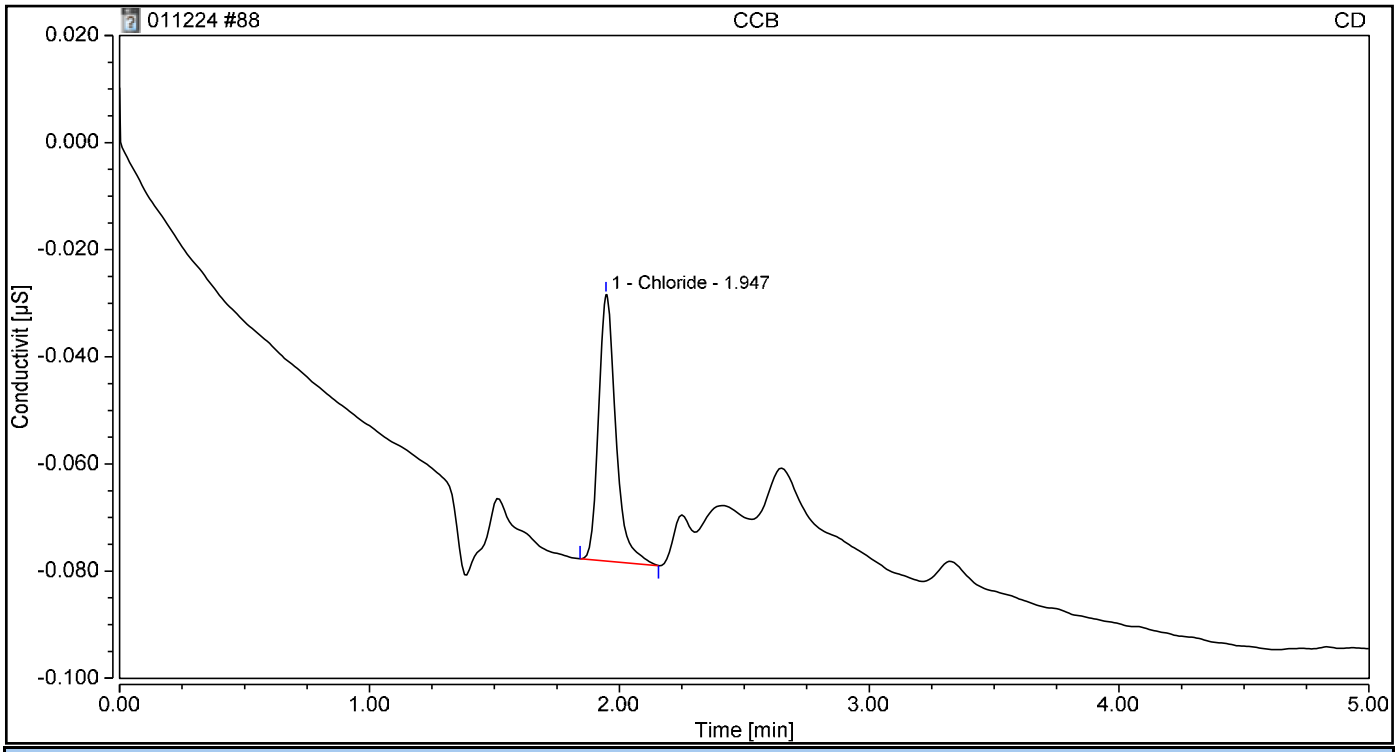
No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
1	Fluoride	1.533	0.812	7.882	9.59	8.81	4.0439
2	Chloride	1.947	2.898	38.729	34.22	43.29	19.9000
3	Nitrite,N	2.250	1.208	12.581	14.26	14.06	3.8326
4	Sulfate	2.633	1.882	15.332	22.21	17.14	20.6658
5	Bromide	2.863	0.144	1.787	1.70	2.00	4.2496
6	Nitrate	3.290	1.283	11.595	15.14	12.96	3.8939
7	Chlorate	3.510	0.115	1.162	1.36	1.30	3.5717
8	Phosphate	4.603	0.128	0.399	1.52	0.45	5.8570
Total:			**8.470**	**89.468**	**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:	**12/Jan/24 19:29**	*Sample Weight:*	**1.0000**

Chromatogram



Integration Results

No.	Peak Name	Retention Time min	Area µS*min	Height µS	Relative Area %	Relative Height %	Amount ppm
n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
1	Chloride	1.947	0.004	0.050	100.00	100.00	0.1664
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**	**0.050**	**100.00**	**100.00**	

HS24010611 Wetchem TOC_W

ALS WO# HS24010611

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

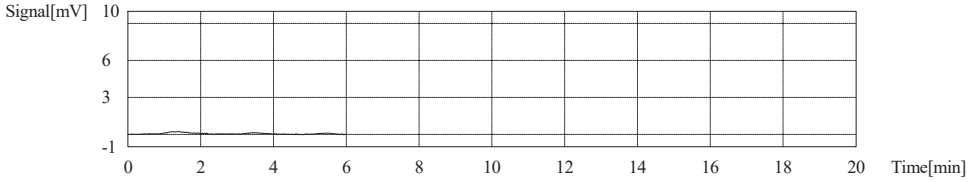
Sample Name:	CAL
Sample ID:	3100607917
Cal. Curve:	01.03.2024.2024_01_03_11_09_20.cal
Status	Completed

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

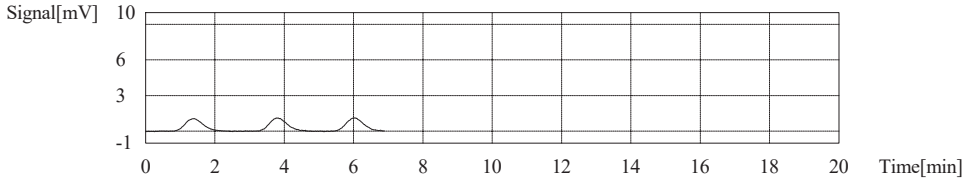
Acid Add.	1.500%
Sparge Gas Flow	80mL/min
Sp. Time	90.00sec
Mean Area	0.3419



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

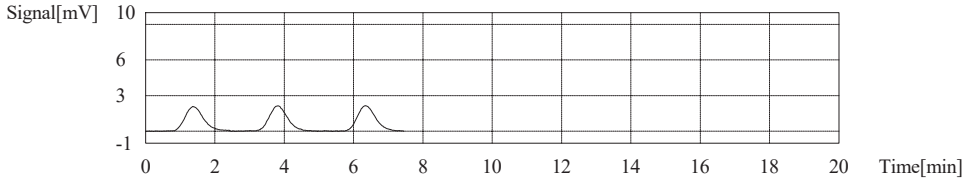
Acid Add.	1.500%
Sparge Gas Flow	80mL/min
Sp. Time	90.00sec
Mean Area	3.861



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



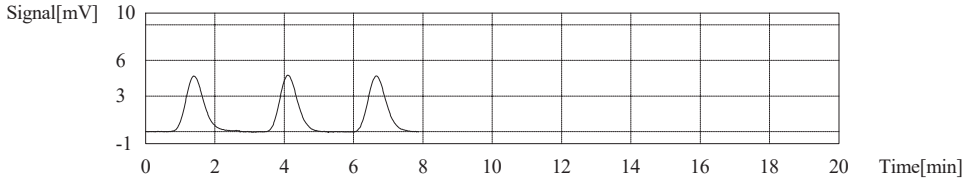
TOC-Control L Report

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

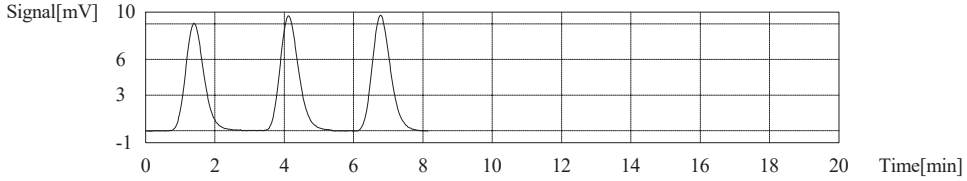
Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 90.00sec
Mean Area 17.28



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

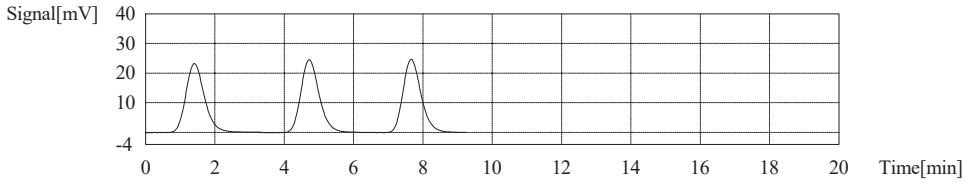
Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 90.00sec
Mean Area 35.31



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

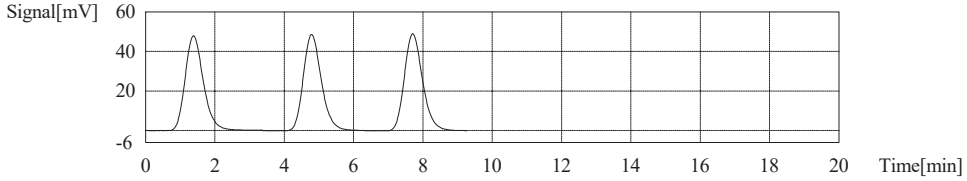
Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 90.00sec
Mean Area 89.91



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

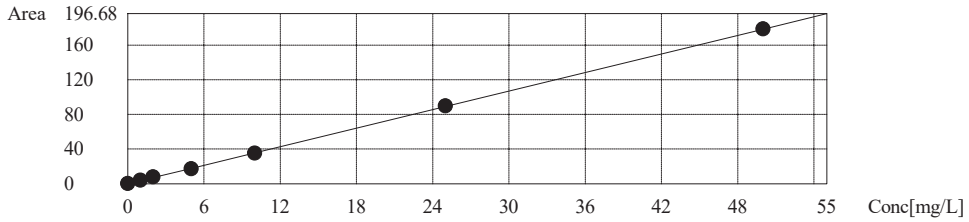
Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 90.00sec
Mean Area 178.8



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	

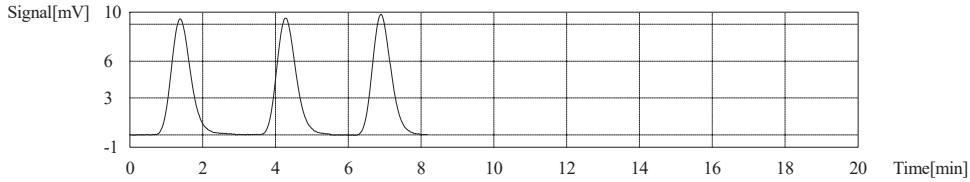
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.858mg/L

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

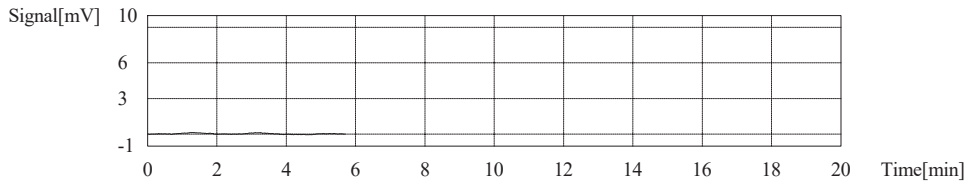
Anal.: NPOC

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_21_001.tlx

	Analysis	Sample Name	Sample ID	Origin	Result	Status	Date / Time	Vial
1	NPOC	CCV	324065402	01.03.2024.	NPOC:24.2	Completed	1/21/2024 11:09:56 A	1
2	NPOC	CCB		01.03.2024.	NPOC:0.08	Completed	1/21/2024 11:25:25 A	2
3	NPOC	MBLK-01212024		01.03.2024.	NPOC:0.10	Completed	1/21/2024 11:46:52 A	3
4	NPOC	LCS-01212024	3100607917	01.03.2024.	NPOC:10.9	Completed	1/21/2024 12:05:18 P	4
5	NPOC	LCSD-01212024		01.03.2024.	NPOC:11.1	Completed	1/21/2024 12:20:06 P	5
6	NPOC	HS24010513-01		01.03.2024.	NPOC:18.4	Completed	1/21/2024 12:35:35 P	6
7	NPOC	HS24010513-02		01.03.2024.	NPOC:4.07	Completed	1/21/2024 12:49:57 P	7
8	NPOC	HS24010635-01		01.03.2024.	NPOC:12.0	Completed	1/21/2024 1:04:39 PM	8
9	NPOC	HS24010550-02		01.03.2024.	NPOC:7.60	Completed	1/21/2024 1:18:58 PM	9
10	NPOC	HS24010550-06		01.03.2024.	NPOC:268.	Completed	1/21/2024 1:34:56 PM	10
11	NPOC	HS24010550-08		01.03.2024.	NPOC:5.23	Completed	1/21/2024 1:49:00 PM	11
12	NPOC	HS24010550-11		01.03.2024.	NPOC:259.	Completed	1/21/2024 2:05:07 PM	12
13	NPOC	CCV	324065402	01.03.2024.	NPOC:23.5	Completed	1/21/2024 2:20:37 PM	1
14	NPOC	CCB		01.03.2024.	NPOC:0.23	Completed	1/21/2024 2:33:08 PM	2
15	NPOC	HS24010611-01		01.03.2024.	NPOC:133.	Completed	1/21/2024 2:48:43 PM	13
16	NPOC	HS24010611-01MS		01.03.2024.	NPOC:145.	Completed	1/21/2024 3:04:09 PM	14
17	NPOC	HS24010611-02		01.03.2024.	NPOC:13.9	Completed	1/21/2024 3:19:03 PM	15
18	NPOC	HS24010611-02MS		01.03.2024.	NPOC:23.8	Completed	1/21/2024 3:34:17 PM	16
19	NPOC	HS24010611-03		01.03.2024.	NPOC:9.02	Completed	1/21/2024 3:48:58 PM	17
20	NPOC	CCV	324065402	01.03.2024.	NPOC:23.4	Completed	1/21/2024 4:04:26 PM	1
21	NPOC	CCB		01.03.2024.	NPOC:0.21	Completed	1/21/2024 4:17:04 PM	2
22	NPOC	MBLK-01212024		01.03.2024.	NPOC:0.13	Completed	1/21/2024 4:29:51 PM	3
23	NPOC	LCS-01212024	3100607917	01.03.2024.	NPOC:9.69	Completed	1/21/2024 4:44:48 PM	4
24	NPOC	LCSD-01212024		01.03.2024.	NPOC:9.53	Completed	1/21/2024 5:00:03 PM	5
25	NPOC	HS24010647-01		01.03.2024.	NPOC:7.99	Completed	1/21/2024 5:15:11 PM	18
26	NPOC	HS24010647-01MS		01.03.2024.	NPOC:18.9	Completed	1/21/2024 5:30:34 PM	19
27	NPOC	HS24010710-01		01.03.2024.	NPOC:4.67	Completed	1/21/2024 5:45:28 PM	20
28	NPOC	HS24010730-01		01.03.2024.	NPOC:22.2	Completed	1/21/2024 6:01:04 PM	21
29	NPOC	HS24010730-02		01.03.2024.	NPOC:0.75	Completed	1/21/2024 6:14:39 PM	22
30	NPOC	HS24010736-01		01.03.2024.	NPOC:5.43	Completed	1/21/2024 6:29:37 PM	23
31	NPOC	HS24010736-02		01.03.2024.	NPOC:3.25	Completed	1/21/2024 6:44:05 PM	24
32	NPOC	CCV	324065402	01.03.2024.	NPOC:22.5	Completed	1/21/2024 6:59:55 PM	25
33	NPOC	CCB		01.03.2024.	NPOC:0.05	Completed	1/21/2024 7:12:21 PM	26
34	NPOC	HS24010741-01		01.03.2024.	NPOC:86.6	Completed	1/21/2024 7:28:35 PM	27
35	NPOC	HS24010741-02		01.03.2024.	NPOC:9.92	Completed	1/21/2024 7:43:45 PM	28
36	NPOC	HS24010743-01		01.03.2024.	NPOC:4.71	Completed	1/21/2024 7:58:34 PM	29
37	NPOC	HS24010743-02		01.03.2024.	NPOC:2.40	Completed	1/21/2024 8:13:16 PM	30
38	NPOC	CCV	324065402	01.03.2024.	NPOC:22.7	Completed	1/21/2024 8:30:01 PM	25
39	NPOC	CCB		01.03.2024.	NPOC:0.03	Completed	1/21/2024 8:42:29 PM	26
40	NPOC	MBLK-01212024		01.03.2024.	NPOC:0.01	Completed	1/21/2024 8:54:58 PM	3
41	NPOC	LCS-01212024	3100607917	01.03.2024.	NPOC:9.72	Completed	1/21/2024 9:10:03 PM	4
42	NPOC	LCSD-01212024		01.03.2024.	NPOC:9.93	Completed	1/21/2024 9:25:24 PM	5
43	NPOC	HS24010743-03		01.03.2024.	NPOC:1.38	Completed	1/21/2024 9:39:31 PM	31
44	NPOC	HS24010743-04		01.03.2024.	NPOC:1.14	Completed	1/21/2024 9:53:42 PM	32
45	NPOC	HS24010538-01		01.03.2024.	NPOC:5.90	Completed	1/21/2024 10:08:48 P	33
46	NPOC	HS24010538-01MS		01.03.2024.	NPOC:16.4	Completed	1/21/2024 10:24:27 P	34
47	NPOC	HS24010538-02		01.03.2024.	NPOC:19.1	Completed	1/21/2024 10:40:11 P	35
48	NPOC	HS24010538-03		01.03.2024.	NPOC:111.	Completed	1/21/2024 10:56:35 P	36
49	NPOC	HS24010538-04		01.03.2024.	NPOC:80.4	Completed	1/21/2024 11:11:09 P	37
50	NPOC	CCV	324065402	01.03.2024.	NPOC:24.1	Completed	1/21/2024 11:27:37 P	25
51	NPOC	CCB		01.03.2024.	NPOC:0.25	Completed	1/21/2024 11:40:45 P	26
52	NPOC	HS24010538-08		01.03.2024.	NPOC:555.	Completed	1/21/2024 11:58:00 P	38
53	NPOC	HS24010538-09		01.03.2024.	NPOC:650.	Completed	1/22/2024 12:15:24 A	39

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	Analysis	Sample Name	Sample ID	Origin	Result	Status	Date / Time	Vial
54	NPOC	HS24010767-02		01.03.2024.	NPOC:9.26	Completed	1/22/2024 12:31:23 A	40
55	NPOC	CCV	324065402	01.03.2024.	NPOC:23.6	Completed	1/22/2024 12:47:46 A	25
56	NPOC	CCB		01.03.2024.	NPOC:0.41	Completed	1/22/2024 1:01:28 AM	26

TOC-Control L Report

Instr.Information

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

Sample

Sample Name: CCV
Sample ID: 324065402
Origin: 01.03.2024.cal
Status Completed
Chk. Result

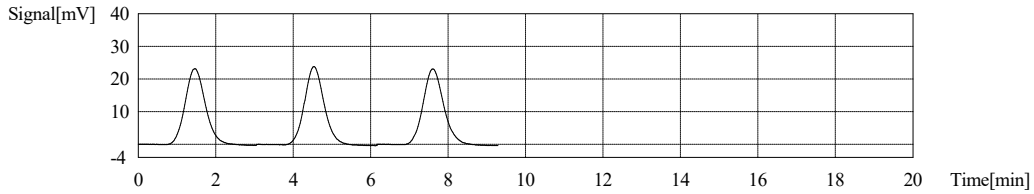
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.29mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	86.18	24.11mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 11:03:08 AM
2	86.33	24.15mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 11:06:30 AM
3	88.04	24.63mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 11:09:56 AM

Mean Area 86.85
Mean Conc. 24.29mg/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:0.08197mg/L

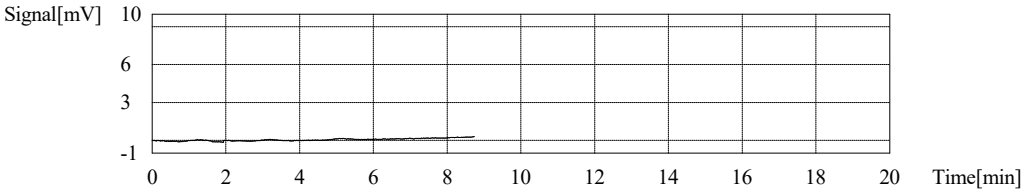
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.6096	0.1705mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 11:18:07 AM
2	0.2695	0.07539mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 11:20:17 AM
3	0.000	0.000mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 11:25:25 AM

TOC-Control L Report

Mean Area 0.2930
Mean Conc. 0.08197mg/L



Sample

Sample Name: MBLK-01212024
Sample ID:
Origin: 01.03.2024.cal
Status Completed
Chk. Result

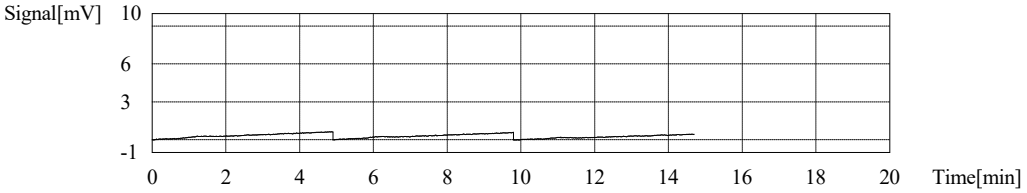
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1080mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.9075	0.2539mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 11:36:34 AM
2	0.03830	0.01071mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 11:41:43 AM
3	0.2122	0.05936mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 11:46:52 AM

Mean Area 0.3860
Mean Conc. 0.1080mg/L



Sample

Sample Name: LCS-01212024
Sample ID: 3100607917
Origin: 01.03.2024.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:10.99mg/L

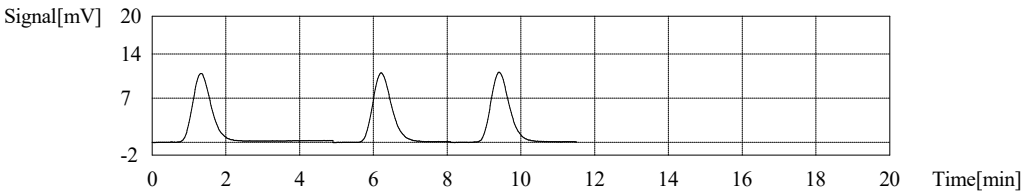
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	38.78	10.85mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 11:58:02 AM
2	39.48	11.04mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 12:01:37 PM
3	39.62	11.08mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 12:05:18 PM

TOC-Control L Report

Mean Area 39.29
Mean Conc. 10.99mg/L



Sample

Sample Name: LCSD-01212024
Sample ID:
Origin: 01.03.2024.cal
Status Completed
Chk. Result

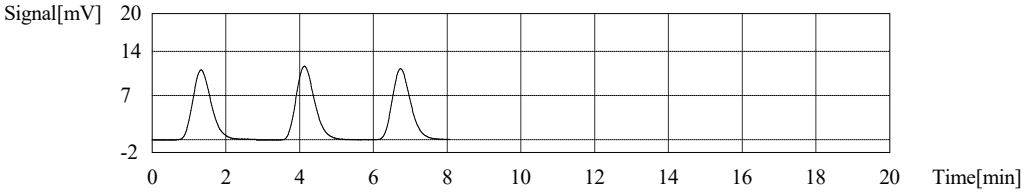
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:11.11mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	38.98	10.90mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 12:14:22 PM
2	41.19	11.52mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 12:17:13 PM
3	39.03	10.92mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 12:20:06 PM

Mean Area 39.73
Mean Conc. 11.11mg/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:23.54mg/L

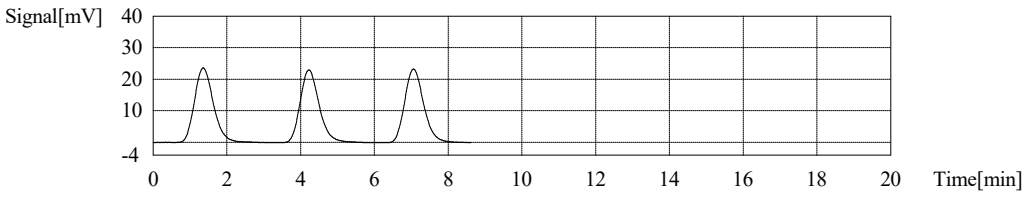
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	84.81	23.72mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 2:14:24 PM
2	82.84	23.17mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 2:17:28 PM
3	84.76	23.71mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 2:20:37 PM

TOC-Control L Report

Mean Area 84.14
Mean Conc. 23.54mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: 01.03.2024.cal
Status Completed
Chk. Result

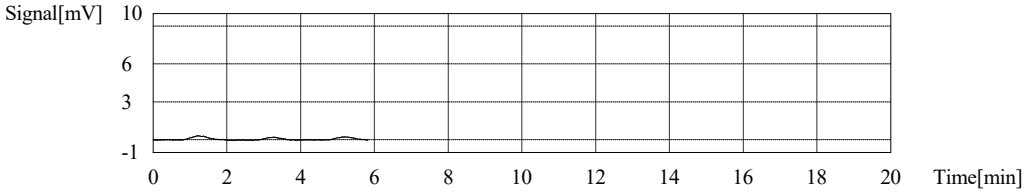
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2321mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.007	0.2817mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 2:28:52 PM
2	0.7317	0.2047mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 2:31:01 PM
3	0.7506	0.2100mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 2:33:08 PM

Mean Area 0.8298
Mean Conc. 0.2321mg/L



Sample

Sample Name: HS24010611-01
Sample ID:
Origin: 01.03.2024.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:133.1mg/L

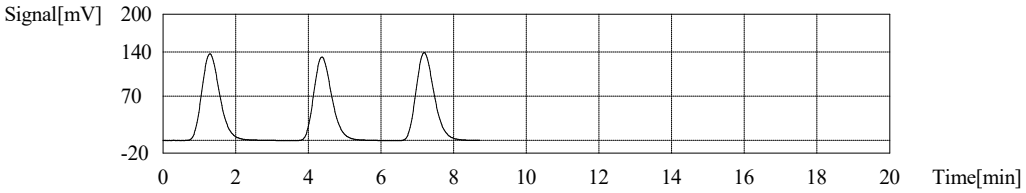
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	477.9	133.7mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 2:42:36 PM
2	460.8	128.9mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 2:45:39 PM
3	488.9	136.8mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 2:48:43 PM

TOC-Control L Report

Mean Area 475.9
Mean Conc. 133.1mg/L



Sample

Sample Name: HS24010611-01MS
Sample ID:
Origin: 01.03.2024.cal
Status Completed
Chk. Result

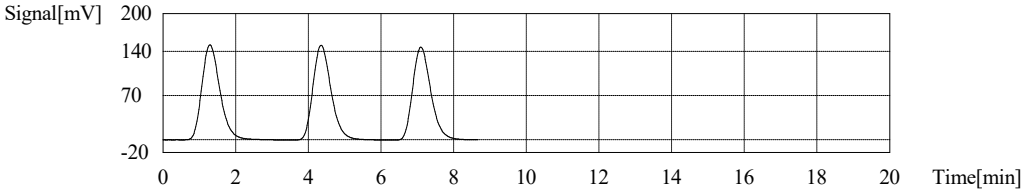
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:145.9mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	526.0	147.1mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 2:58:02 PM
2	523.2	146.4mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 3:01:03 PM
3	515.2	144.1mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 3:04:09 PM

Mean Area 521.5
Mean Conc. 145.9mg/L



Sample

Sample Name: HS24010611-02
Sample ID:
Origin: 01.03.2024.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:13.94mg/L

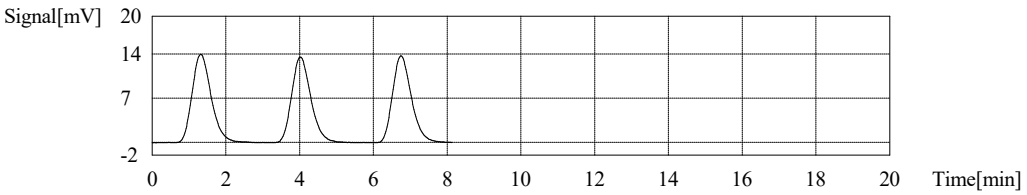
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	50.69	14.18mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 3:13:06 PM
2	49.49	13.84mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 3:16:07 PM
3	49.36	13.81mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 3:19:03 PM

TOC-Control L Report

Mean Area 49.85
Mean Conc. 13.94mg/L



Sample

Sample Name: HS24010611-02MS
Sample ID:
Origin: 01.03.2024.cal
Status Completed
Chk. Result

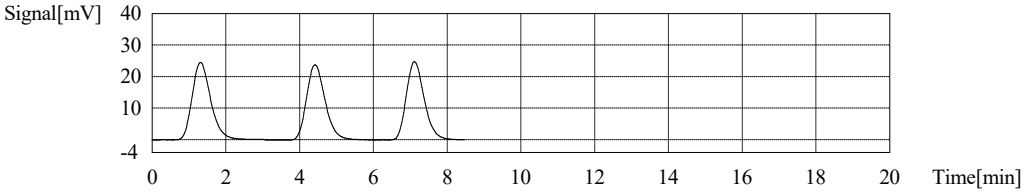
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:23.80mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	86.82	24.29mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 3:28:24 PM
2	83.78	23.44mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 3:31:22 PM
3	84.61	23.67mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 3:34:17 PM

Mean Area 85.07
Mean Conc. 23.80mg/L



Sample

Sample Name: HS24010611-03
Sample ID:
Origin: 01.03.2024.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.023mg/L

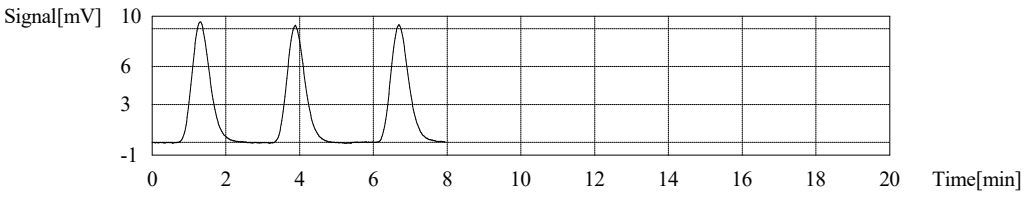
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	32.97	9.223mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 3:43:07 PM
2	31.97	8.943mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 3:46:11 PM
3	31.83	8.904mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 3:48:58 PM

TOC-Control L Report

Mean Area 32.26
Mean Conc. 9.023mg/L



Sample

Sample Name: CCV
Sample ID: 324065402
Origin: 01.03.2024.cal
Status Completed
Chk. Result

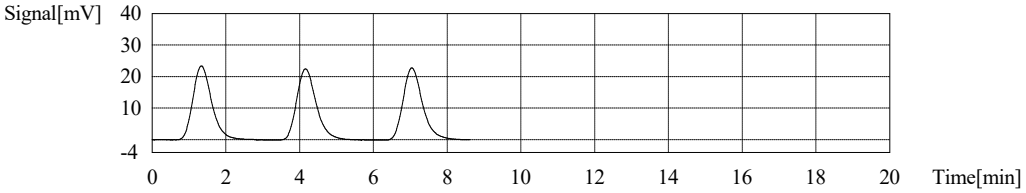
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:23.47mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	83.54	23.37mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 3:58:09 PM
2	83.73	23.42mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 4:01:16 PM
3	84.45	23.62mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 4:04:26 PM

Mean Area 83.91
Mean Conc. 23.47mg/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:0.2184mg/L

1. Det

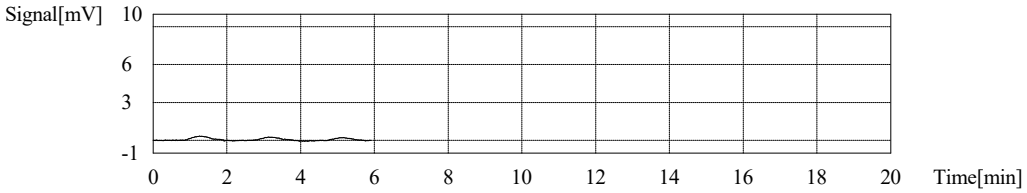
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.018	0.2848mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 4:12:37 PM
2	0.6204	0.1735mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 4:14:45 PM
3	0.7038	0.1969mg/L	50uL	1.000		01.03.2024.2024_01_03_11_09_20.cal	1/21/2024 4:17:04 PM

TOC-Control L Report

2024_01_21_001.tlx

Mean Area	0.7807
Mean Conc.	0.2184mg/L



HS24010611 E2400034 Perch Level IV Report

ALS WO# HS24010611

January 24, 2024 Service Request No:E2400034

James Guin
ALS Environmental - US
10450 Stancliff Rd #210
Houston, TX 77099

Laboratory Results for: HS24010611

Dear James,

Enclosed are the results of the sample(s) submitted to our laboratory January 12, 2024
For your reference, these analyses have been assigned our service request number **E2400034.**

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

Please contact me if you have any questions. My extension is 2190. You may also contact me via email at hussam.kelany@alsglobal.com.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

H Kelany

Hussam Kelany
Project Manager

ADDRESS 10450 Stancliff Rd., Suite 210, Houston, TX 77099
PHONE +1 281 530 5656 | FAX +1 281 530 5887
ALS Group USA, Corp.
dba ALS Environmental

Certificate of Analysis

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

Client:	ALS Environmental - US	**Service Request No.:**	E2400034
Project:	HS24010611	**Date Received:**	01/12/24
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

Eight samples were received for analysis at ALS Environmental in Houston on 01/12/24.

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:

EQ2400030: 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:**E2400034
Project: HS24010611

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
E2400034-001	16IW10-240111	1/11/2024	0705
E2400034-002	16EW02-240111	1/11/2024	0805
E2400034-003	16IW20-24011	1/11/2024	0905
E2400034-004	16WW39-240111	1/11/2024	0950
E2400034-005	16WW22-240111	1/11/2024	1035
E2400034-006	16WW56-240111	1/11/2024	1115
E2400034-007	16RW06-240111	1/11/2024	1155
E2400034-008	16RW07-240111	1/11/2024	1240

Service Request Summary

Folder #: **E2400034**
Client Name: ALS Environmental - US
Project Name: HS24010611
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: 01/12/24
Internal Due Date: 1/23/2024
QAP: LAB QAP
Qualifier Set: DOD
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number:
EDD: EQUIS APTIM
LONGHORN EFWEDD

12 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-WIC 4A
Pressure Gas:

Lab Samp No.	Client Samp No	Matrix	Collected	Semivoa GCMS ClO4 DOD/6850
E2400034-001	16IW10-240111	Ground Water	01/11/24 0705	**IV**
E2400034-002	16EW02-240111	Ground Water	01/11/24 0805	**IV**
E2400034-003	16IW20-24011	Ground Water	01/11/24 0905	**IV**
E2400034-004	16WW39-240111	Ground Water	01/11/24 0950	**IV**
E2400034-005	16WW22-240111	Ground Water	01/11/24 1035	**IV**
E2400034-006	16WW56-240111	Ground Water	01/11/24 1115	**IV**
E2400034-007	16RW06-240111	Ground Water	01/11/24 1155	**IV**
E2400034-008	16RW07-240111	Ground Water	01/11/24 1240	**IV**

Service Request Summary

Folder #: **E2400034**
Client Name: ALS Environmental - US
Project Name: HS24010611
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: 01/12/24
Internal Due Date: 1/23/2024
QAP: LAB QAP
Qualifier Set: DOD
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number:
EDD: EQUIS APTIM
LONGHORN EFWEDD

12 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-WIC 4A
Pressure Gas:

Data Qualifiers

DOD

B	Analyte found in the associated method blank as well as in the sample.
C	Result identification confirmed.
D	Compound identified in an analysis at a secondary dilution factor
E	Estimated value. Concentration above calibration range.
F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
I	(Auto) The reference ion ratio was outside acceptance criteria, which may indicate a potential bias to this result.
I	The reference ion ratio was outside acceptance criteria, which may indicate a potential bias to this result.
J	Estimated value. Concentration found below MRL.
K	A deflection in the QC ion may indicate interference with the quantitation of this ion. The concentration of this analyte should be considered as an estimate.
K	The reference ion ratio was outside acceptance criteria, which may indicate a potential bias to this result.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
P	Indicates chlorodiphenyl ether interference present at the retention time of the target compound.
Q	Pesticide/Aroclor target is not confirmed, >= 100% difference for the detected concentrations between the two GC columns
U	Compound was analyzed for, but was not detected (ND).
X	See case narrative.
Y	Recovery outside limits.
Y	The chromatogram resembles a petroleum product but does not match the calibration standard.
Z	The chromatogram does not resemble a petroleum product.
i	The MRL/MDL has been elevated due to a matrix interference.

ALS Laboratory Group

Acronyms

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

10450 Stancliff Rd, Houston, TX 77099 | 281-530-5656 | www.alsglobal.com

ALS Environmental

State Certifications, Accreditations, and Licenses

Agency	Number	Expire Date
Arizona Department of Health Services	AZ0793_2024	5/27/2024
Arkansas Department of Environmental Quality	88-00356	3/27/2024
California State Environmental Laboratory Accreditation Program	2919	4/30/2024
Department of Defense	L22-90	3/31/2024
Department of Defense	L23-358	5/31/2025
Florida Department of Health	E87611-38	6/30/2024
Illinois Environmental Protection Agency	2000322023-11	6/30/2024
Kansas Department of Health and Environment	E-10352 2023-2024	7/31/2024
Louisiana Department of Environmental Quality	03087-2023	6/30/2024
Louisiana Department of Health and Hospitals	LA028-2024	12/31/2024
Maine Department of Health and Human Services	2022017	6/5/2024
Maryland Department of the Environment	343-2023	6/30/2024
Michigan Depratment of Environmental Quality	9971-2023	4/30/2024
Minnesota Department of Health	2645386	12/31/2024
Nebraska Department of Health and Human Services	NE-OS-25-13	4/30/2024
Nevada Division of Environmental Protection	TX026932024-1	7/31/2024
New Hampshire Environmental Laboratory Accreditation Program	209423	4/24/2024
New Jersey Department of Environmental Protection	TX008-2024	6/30/2024
New York Department of Health	11707	3/31/2024
Oklahoma Department of Environmental Quality	2023-140	8/31/2024
Oregon Environmental Laboratory Accreditation Program	TX200002-011	5/15/2024
Pennsylvania Department of Environmental Protection	68-03441-017	6/30/2024
Perry Johnson Laboratory Accreditation	L22-91	3/31/2024
Tennessee Department of Environment and Concervation	TN04016-2023	4/30/2024
Texas Commision on Environmental Quality	T104704231-23-30	4/30/2024
Utah Department of Health Environmental Laboratory Certification	TX026932023-14	7/31/2024
Washington Department of Ecology	C819-23	11/14/2024

Chain of Custody

ALS Environmental - Houston Specialties Laboratory
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E2400034
ALS Group USA, Corp.
24010611

5

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Houston, TX 77099
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F: +1 281 530 5887
www.alsglobal.com

Subcontract Chain of Custody

SAMPLING STATE: **Dept of Defense** **COC ID: 24465**

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:	HS24010611
TSR:	Sonia West

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	**HS24010611-01**	**16IW10-240111**	**Groundwater**	**11 Jan 2024 07:05**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			26 Jan 2024
2.	**HS24010611-02**	**16EW02-240111**	**Groundwater**	**11 Jan 2024 08:05**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			26 Jan 2024
3.	**HS24010611-03**	**16IW20-240111**	**Groundwater**	**11 Jan 2024 09:05**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			26 Jan 2024
4.	**HS24010611-04**	**16WW39-240111**	**Groundwater**	**11 Jan 2024 09:50**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			26 Jan 2024
5.	**HS24010611-05**	**16WW22-240111**	**Groundwater**	**11 Jan 2024 10:35**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			26 Jan 2024
6.	**HS24010611-06**	**16WW56-240111**	**Groundwater**	**11 Jan 2024 11:15**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			26 Jan 2024
7.	**HS24010611-07**	**16RW06-240111**	**Groundwater**	**11 Jan 2024 11:55**
	Perchlorate Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			26 Jan 2024
8.	**HS24010611-08**	**16RW07-240111**	**Groundwater**	**11 Jan 2024 12:40**

Subcontract Chain of Custody

SAMPLING STATE: **Dept of Defense** **COC ID: 24465**

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.		26 Jan 2024

Comments: Please analyze for the analysis listed above.
Send report to the emails shown above.
HS24010611-01 & HS24010611-02 = MS/MSD

QC Level: DOD IV (DoD Data Package)

Relinquished By: _____ Date/Time: _____

Received By: JC Date/Time: 1/12/24 1308

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

E2400034 5
ALS Group USA, Corp.
24010611

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: HS24010611 **Date/Time received:** 12 Jan 2024 10:00
Client name: Bhate Environmental Associates, Inc. **Received by:** Paresh M. Giga

Completed/By: 12 Jan 2024 13:08 (Date/Time) Paresh M. Giga (eSignature) **Reviewed/By:** (Date/Time) (eSignature)

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

Shipping container/cooler in good condition?	☑ Yes	☐ No	☐ Not Present	
Custody seals intact on shipping container/cooler?	☑ Yes	☐ No	☐ Not Present	
Custody seals intact on Sample bottles?	☐ Yes	☐ No	☑ Not Present	
VOA/TX1005/TX1006 Solids in hermetically sealed vials?	☐ Yes	☐ No	☑ Not Present	
Chain of custody present?	☑ Yes	☐ No	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): 1.6C/1.5C U/C IR31
Cooler Information: 1 Cooler(s), Red
Date/Time sample(s) sent to storage: 1/12/24 13:30

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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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#: 432773 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 1/19/24 08:41

#	Lab Code	Client ID	B#	Method /Test	pH	Cl	Matrix	Amt. Ext.	Sample Description
1	E2400034-001	16IW10-240111	.02	6850/ClO4 DOD			Ground Water	10mL	
2	E2400034-002	16EW02-240111	.02	6850/ClO4 DOD			Ground Water	10mL	
3	E2400034-003	16IW20-24011	.01	6850/ClO4 DOD			Ground Water	10mL	
4	E2400034-004	16WW39-240111	.01	6850/ClO4 DOD			Ground Water	10mL	
5	E2400034-005	16WW22-240111	.01	6850/ClO4 DOD			Ground Water	10mL	
6	E2400034-006	16WW56-240111	.01	6850/ClO4 DOD			Ground Water	10mL	
7	E2400034-007	16RW06-240111	.01	6850/ClO4 DOD			Ground Water	10mL	
8	E2400034-008	16RW07-240111	.01	6850/ClO4 DOD			Ground Water	10mL	
9	E2400054-001	CTC-36_0124	.01	6850/ClO4			Water	10mL	
10	E2400054-002	EA-14_0124	.01	6850/ClO4			Water	10mL	
11	E2400054-003	EA-40_0124	.01	6850/ClO4			Water	10mL	
12	E2400054-004	CTC-43_0124	.01	6850/ClO4			Water	10mL	
13	E2400054-005	CTC-10_0124	.01	6850/ClO4			Water	10mL	
14	E2400054-006	CTC-23_0124	.01	6850/ClO4			Water	10mL	
15	E2400054-007	CTC-32_0124	.01	6850/ClO4			Water	10mL	
16	E2400054-008	CTC-35-0124	.01	6850/ClO4			Water	10mL	
17	E2400054-009	CTC-26_0124	.01	6850/ClO4			Water	10mL	
18	E2400054-010	EA-38_0124	.01	6850/ClO4			Water	10mL	
19	E2400054-011	CTC-9-0124	.01	6850/ClO4			Water	10mL	
20	E2400054-012	CTC-44-0124	.01	6850/ClO4			Water	10mL	
21	EQ2400030-01	MB		6850/ClO4			Liquid	10mL	
22	EQ2400030-02	LCS		6850/ClO4			Liquid	10mL	
23	EQ2400030-03	DLCS		6850/ClO4			Liquid	10mL	
24	EQ2400030-04	ICS		6850/ClO4			Liquid	10mL	
25	EQ2400030-05	16IW10-240111 MS	.02	6850/ClO4 DOD			Liquid	10mL	
26	EQ2400030-06	16IW10-240111 DMS	.02	6850/ClO4 DOD			Liquid	10mL	
27	EQ2400030-07	16EW02-240111 MS	.02	6850/ClO4 DOD			Liquid	10mL	
28	EQ2400030-08	16EW02-240111 DMS	.02	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

EQ2400030-02	10.00µL	EQ2400030-02	10.00µL	EQ2400030-03	10.00µL	EQ2400030-03	10.00µL	EQ2400030-04	10.00µL	EQ2400030-04	10.00µL
EQ2400030-05	10.00µL	EQ2400030-06	10.00µL	EQ2400030-07	10.00µL	EQ2400030-08	10.00µL				

Preparation Information Benchsheet

Prep Run#: 432773 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 1/19/24 08:41

Name: Perchlorate Internal Standard 1ug/mL Inventory ID 232015 Logbook Ref: Perchlorate Internal Standard Expires On: 04/30/2024

E2400034-001	100.00µL	E2400034-002	100.00µL	E2400034-003	100.00µL	E2400034-004	100.00µL	E2400034-005	100.00µL	E2400034-006	100.00µL
E2400034-007	100.00µL	E2400034-008	100.00µL	E2400054-001	100.00µL	E2400054-002	100.00µL	E2400054-003	100.00µL	E2400054-004	100.00µL
E2400054-005	100.00µL	E2400054-006	100.00µL	E2400054-007	100.00µL	E2400054-008	100.00µL	E2400054-009	100.00µL	E2400054-010	100.00µL
E2400054-011	100.00µL	E2400054-012	100.00µL	EQ2400030-01	100.00µL	EQ2400030-01	100.00µL	EQ2400030-02	100.00µL	EQ2400030-02	100.00µL
EQ2400030-03	100.00µL	EQ2400030-03	100.00µL	EQ2400030-04	100.00µL	EQ2400030-04	100.00µL	EQ2400030-05	100.00µL	EQ2400030-06	100.00µL
EQ2400030-07	100.00µL	EQ2400030-08	100.00µL								

Name: Perchlorate Anion Spiking Soln. 25,000 ppm Inventory ID 233096 Logbook Ref: Expires On: 02/04/2024

EQ2400030-04	20.00µL	EQ2400030-04	20.00µL

Preparation Materials

Water HPLC Grade	HPLC water 083124 (233144)	6850 Amber Glass screw vial	2mL Screw Top Vial (221894)	6850 0.45um syringe filters	6850 0.45 SYRING FILTER (229979)
6850 Luer-Lok Syringes	Luer Lok Syringes (231696)				

Preparation Steps

Step: Preparation
Started: 1/19/24 08:41
Finished: 1/19/24 13:54
By: XMI
Comments

Comments: _____

Reviewed By: _____ Date: _____

Chain of Custody

Relinquished By: _____ Date: _____ Extracts Examined

Received By: _____ Date: _____ Yes No

Analytical Results

ALS Environmental - Houston Specialties Laboratory
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ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400034
Project:	HS24010611	**Date Collected:**	1/11/24 0705
Sample Matrix:	Ground Water	**Date Received:**	1/12/24
Sample Name:	16IW10-240111	**Units:**	µg/L
Lab Code:	E2400034-001	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.0531**	J	0.100	0.0500	0.0250	1	1/19/24	1/22/24 16:26	432773	830337	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400034
Project:	HS24010611	**Date Collected:**	1/11/24 0805
Sample Matrix:	Ground Water	**Date Received:**	1/12/24
Sample Name:	16EW02-240111	**Units:**	µg/L
Lab Code:	E2400034-002	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	1/19/24	1/23/24 14:34	432773	830415	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400034
Project:	HS24010611	**Date Collected:**	1/11/24 0905
Sample Matrix:	Ground Water	**Date Received:**	1/12/24
Sample Name:	16IW20-24011	**Units:**	µg/L
Lab Code:	E2400034-003	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.0445**	J	0.100	0.0500	0.0250	1	1/19/24	1/22/24 16:37	432773	830337	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400034
Project:	HS24010611	**Date Collected:**	1/11/24 0950
Sample Matrix:	Ground Water	**Date Received:**	1/12/24
Sample Name:	16WW39-240111	**Units:**	µg/L
Lab Code:	E2400034-004	**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	**8.17**		0.100	0.0500	0.0250	1	1/19/24	1/22/24 16:42	432773	830337	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400034
Project:	HS24010611	**Date Collected:**	1/11/24 1035
Sample Matrix:	Ground Water	**Date Received:**	1/12/24
Sample Name:	16WW22-240111	**Units:**	µg/L
Lab Code:	E2400034-005	**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	**2.31**		0.100	0.0500	0.0250	1	1/19/24	1/22/24 16:48	432773	830337	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400034
Project:	HS24010611	**Date Collected:**	1/11/24 1115
Sample Matrix:	Ground Water	**Date Received:**	1/12/24
Sample Name:	16WW56-240111	**Units:**	µg/L
Lab Code:	E2400034-006	**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	**0.0476**	J	0.100	0.0500	0.0250	1	1/19/24	1/22/24 16:53	432773	830337	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400034
Project:	HS24010611	**Date Collected:**	1/11/24 1155
Sample Matrix:	Ground Water	**Date Received:**	1/12/24
Sample Name:	16RW06-240111	**Units:**	µg/L
Lab Code:	E2400034-007	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.0367**	J	0.100	0.0500	0.0250	1	1/19/24	1/22/24 16:59	432773	830337	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400034
Project:	HS24010611	**Date Collected:**	1/11/24 1240
Sample Matrix:	Ground Water	**Date Received:**	1/12/24
Sample Name:	16RW07-240111	**Units:**	µg/L
Lab Code:	E2400034-008	**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	**0.366**		0.100	0.0500	0.0250	1	1/19/24	1/22/24 17:04	432773	830337	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400034
Project:	HS24010611	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	EQ2400030-01	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	1/19/24	1/22/24 15:02	432773	830337	

Accuracy & Precision

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www.alsglobal.com

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2400034
Project:	HS24010611	**Date Analyzed:**	1/23/24 - 1/23/24
Sample Matrix:	Ground Water		

Lab Control Sample Summary

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

Analytical Method:	6850	**Units:**	µg/L
Prep Method:	Method	**Basis:**	NA
		Extraction Lot:	432773

	Lab Control Sample EQ2400030-02			Duplicate Lab Control Sample EQ2400030-03					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	0.109	0.100	109	0.104	0.100	104	84 - 119	4	15

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400034
Project:	HS24010611	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2400030-02	**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	**0.109**		0.100	0.0500	0.0250	1	1/19/24	1/23/24 14:18	432773	830415	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400034
Project:	HS24010611	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2400030-03	**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	**0.104**		0.100	0.0500	0.0250	1	1/19/24	1/22/24 15:13	432773	830337	

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2400034
Project:	HS24010611	**Date Collected:**	1/11/24
Sample Matrix:	Ground Water	**Date Received:**	1/12/24
		Date Analyzed:	1/22/24 - 1/23/24

Matrix Spike Summary

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

Sample Name:	16IW10-240111	**Units:**	µg/L
Lab Code:	E2400034-001	**Basis:**	NA

Analytical Method: 6850
Prep Method: Method

		16IW10-240111MS Matrix Spike EQ2400030-05					16IW10-240111DMS Duplicate Matrix Spike EQ2400030-06					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**		**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	0.0531	0.135	0.100	82	*	0.151	0.100	97	84 - 119	11	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:**	E2400034
Project:	HS24010611	**Date Collected:**	1/11/24 0705
Sample Matrix:	Ground Water	**Date Received:**	1/12/24
Sample Name:	16IW10-240111	**Units:**	µg/L
Lab Code:	EQ2400030-05	**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	**0.135**		0.100	0.0500	0.0250	1	1/19/24	1/22/24 15:24	432773	830337	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400034
Project:	HS24010611	**Date Collected:**	1/11/24 0705
Sample Matrix:	Ground Water	**Date Received:**	1/12/24
Sample Name:	16IW10-240111	**Units:**	µg/L
Lab Code:	EQ2400030-06	**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	**0.151**		0.100	0.0500	0.0250	1	1/19/24	1/23/24 14:12	432773	830415	

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2400034
Project:	HS24010611	**Date Collected:**	1/11/24
Sample Matrix:	Ground Water	**Date Received:**	1/12/24
		Date Analyzed:	1/22/24

Matrix Spike Summary

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

Sample Name:	16EW02-240111	**Units:**	µg/L
Lab Code:	E2400034-002	**Basis:**	NA

Analytical Method: 6850
Prep Method: Method

		16EW02-240111MS				16EW02-240111DMS					
		Matrix Spike				**Duplicate Matrix Spike**					
		EQ2400030-07				EQ2400030-08					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**		**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	ND	0.124	0.100	124	*	0.118	0.100	118	84 - 119	5	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:**	E2400034
Project:	HS24010611	**Date Collected:**	1/11/24 0805
Sample Matrix:	Ground Water	**Date Received:**	1/12/24
Sample Name:	16EW02-240111	**Units:**	µg/L
Lab Code:	EQ2400030-07	**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	**0.124**		0.100	0.0500	0.0250	1	1/19/24	1/22/24 15:47	432773	830337	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2400034
Project:	HS24010611	**Date Collected:**	1/11/24 0805
Sample Matrix:	Ground Water	**Date Received:**	1/12/24
Sample Name:	16EW02-240111	**Units:**	µg/L
Lab Code:	EQ2400030-08	**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	**0.118**		0.100	0.0500	0.0250	1	1/19/24	1/22/24 15:52	432773	830337	

Initial Calibration

ALS Environmental - Houston HRMS
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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

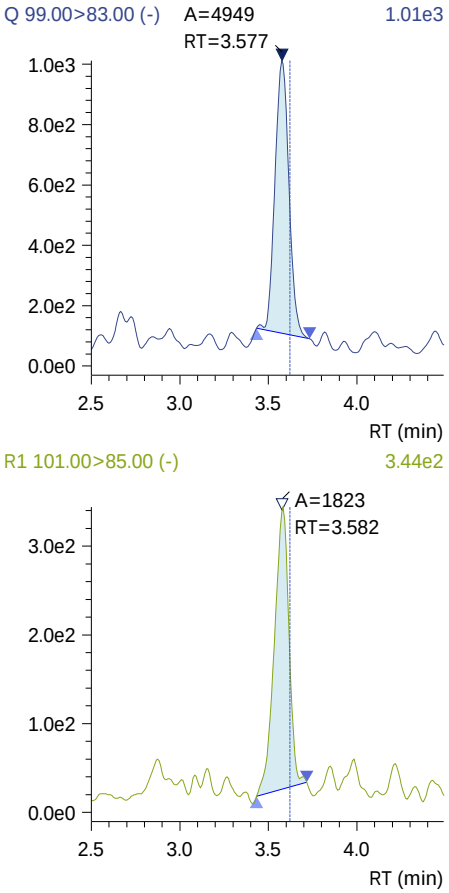
Perchlorate ICAL 1

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	----	----	

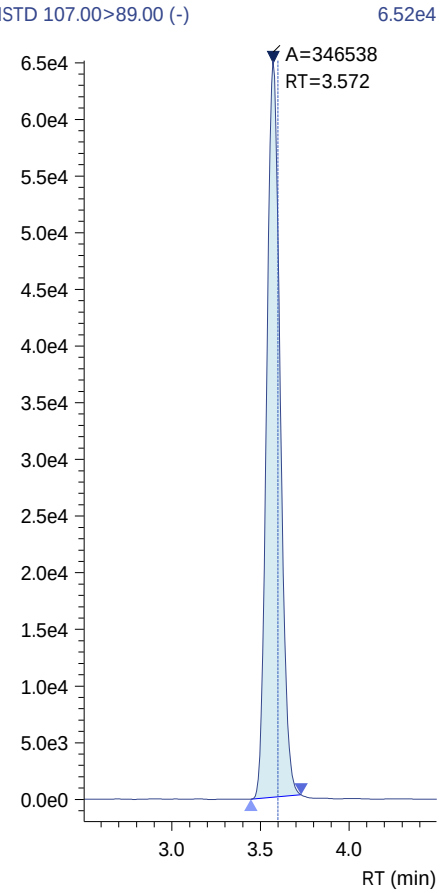
Perchlorate

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

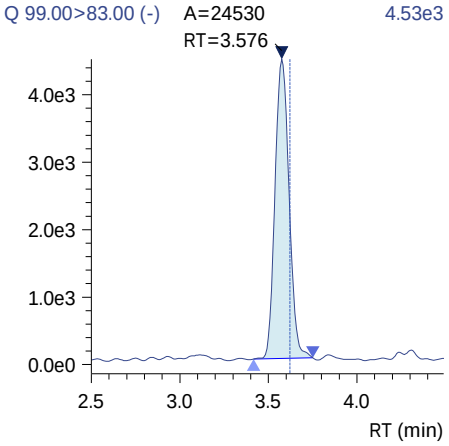
Perchlorate ICAL 2

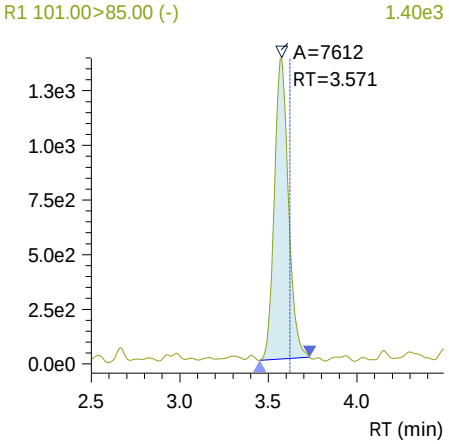
Sample ID: Perchlorate ICAL 2
Date Acquired: 8/2/2023 1:23:13 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-004.lcd
Vial: 2 | Inj. Volume: 10.0000uL | Tray: 1

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

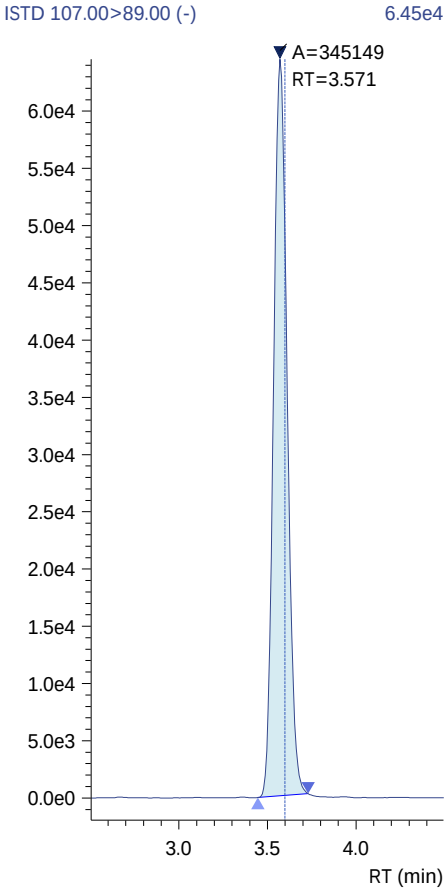
Conc 0.4820
R#1 31.03 (30.41)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/3/2023 9:30:46 AM

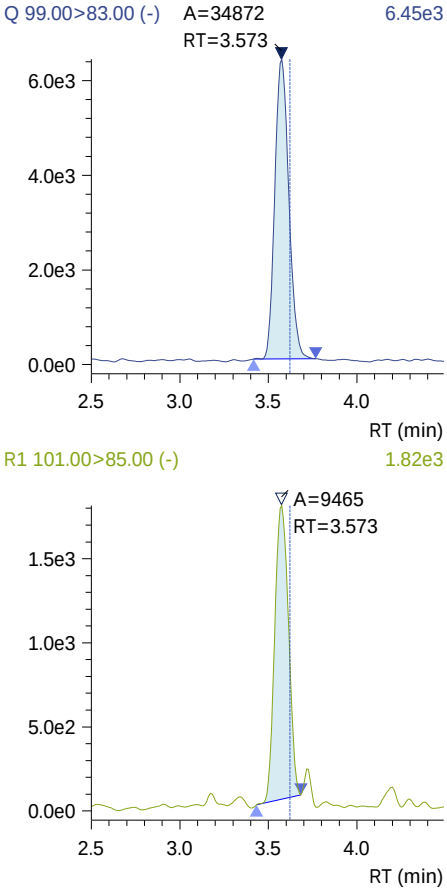
Perchlorate ICAL 3

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	----	----	

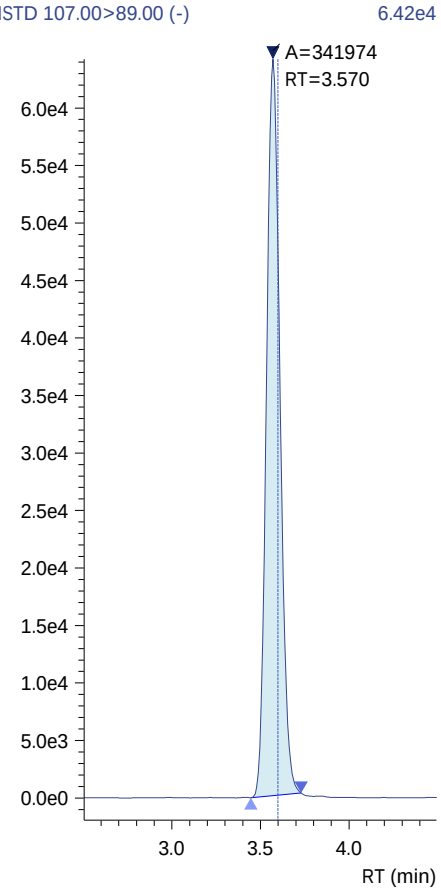
Perchlorate

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

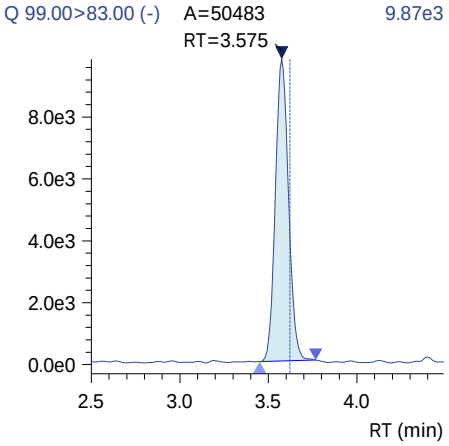
Perchlorate ICAL 4

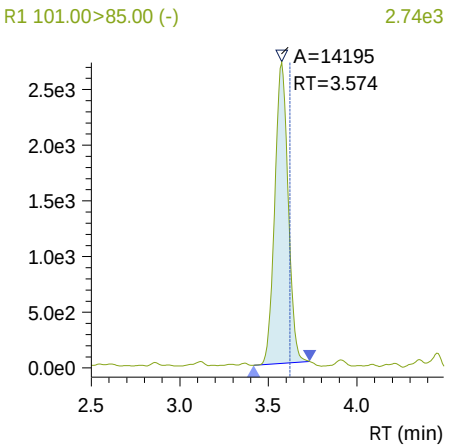
Sample ID: Perchlorate ICAL 4
Date Acquired: 8/2/2023 1:34:20 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-006.lcd
Vial: 4 | Inj. Volume: 10.0000uL | Tray: 1

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

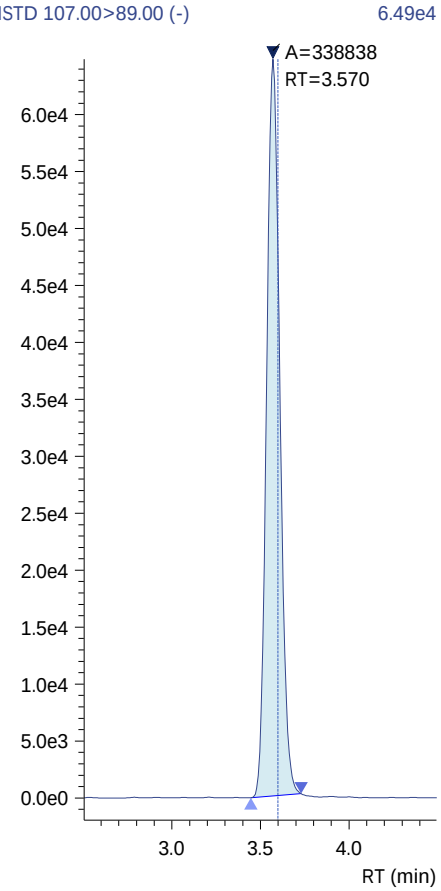
Conc 1.0104
R#1 28.12 (30.41)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/3/2023 9:30:46 AM

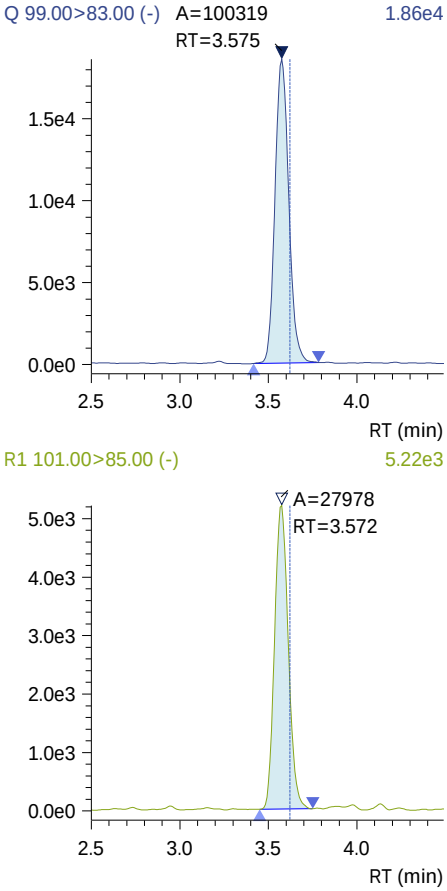
Perchlorate ICAL 5

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	----	----	

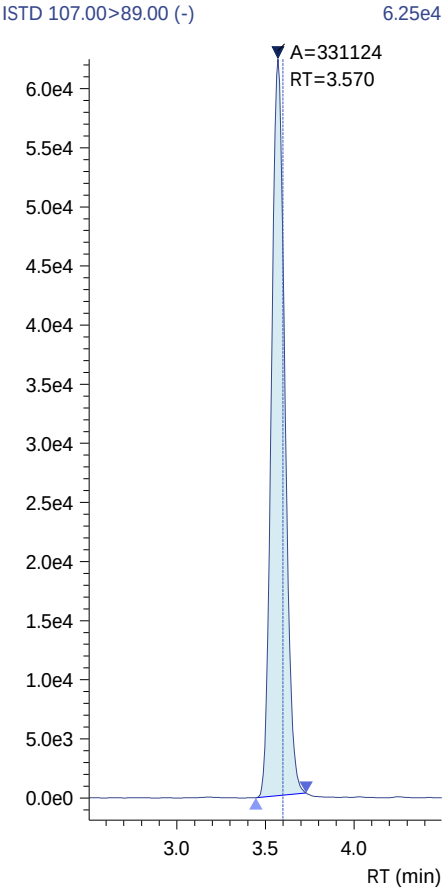
Perchlorate

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

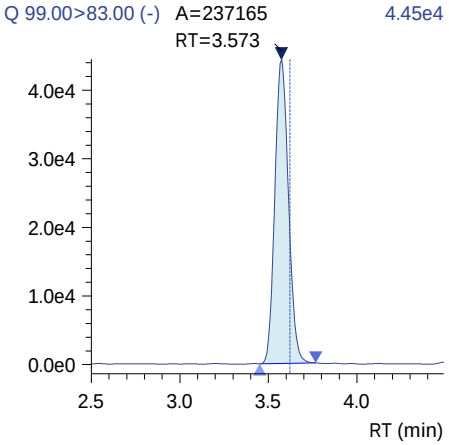
Perchlorate ICAL 6

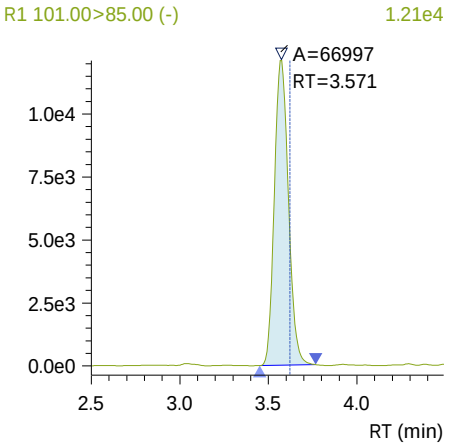
Sample ID: Perchlorate ICAL 6
Date Acquired: 8/2/2023 1:45:24 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-008.lcd
Vial: 6 | Inj. Volume: 10.0000uL | Tray: 1

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

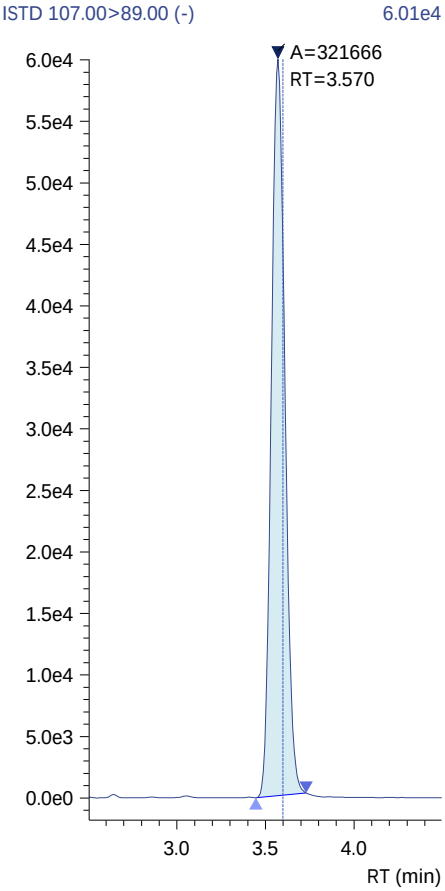
Conc 5.0000
R#1 28.25 (30.41)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 8/3/2023 9:30:46 AM

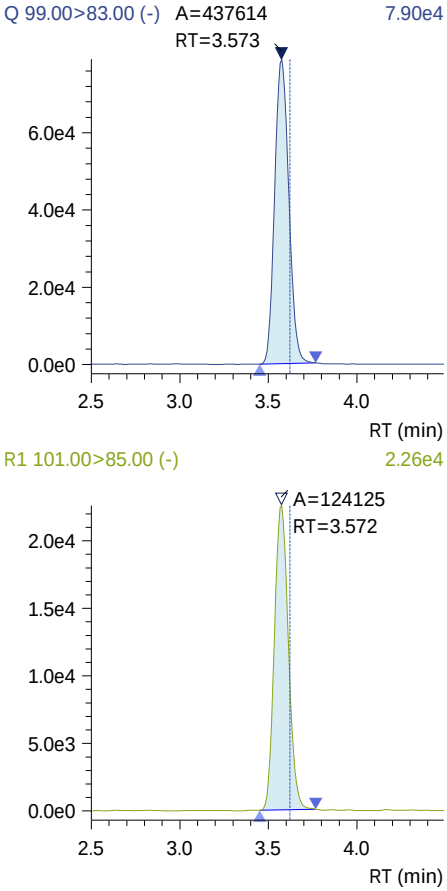
Perchlorate ICAL 7

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	----	----	

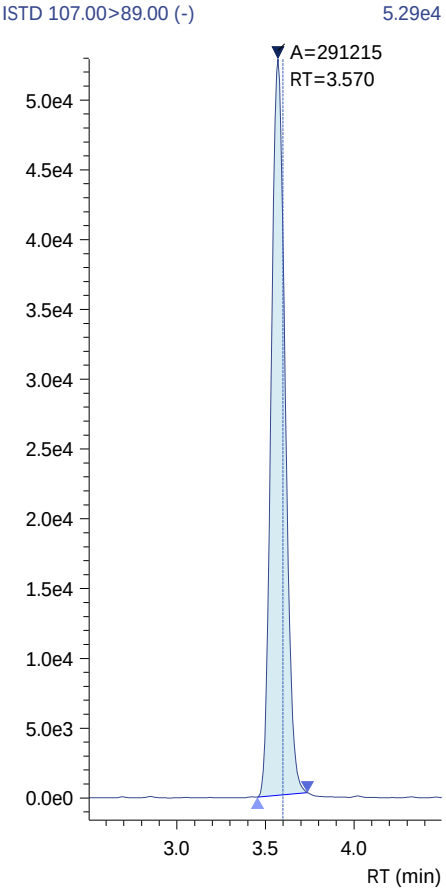
Perchlorate

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

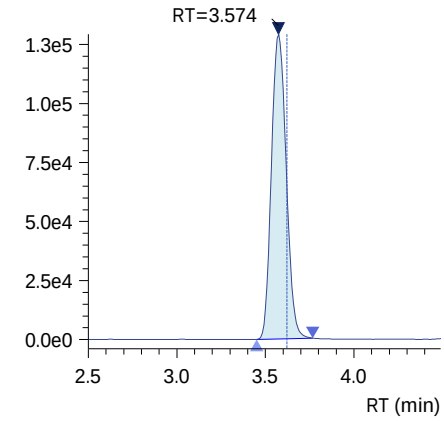
Sample ID: Perchlorate ICAL 8
Date Acquired: 8/2/2023 1:56:33 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-010.lcd
Vial: 8 | Inj. Volume: 10.0000uL | Tray: 1

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	----	----	

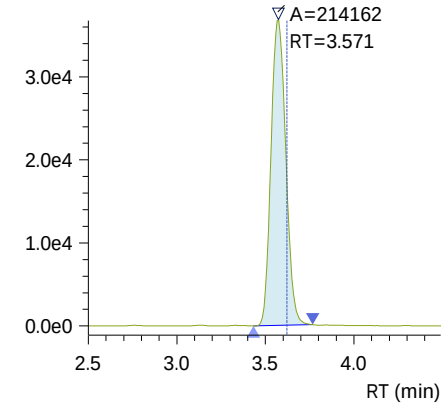
Perchlorate

Conc 20.0336
R#1 28.56 (30.41)

Q 99.00>83.00 (-) A=749856 1.29e5



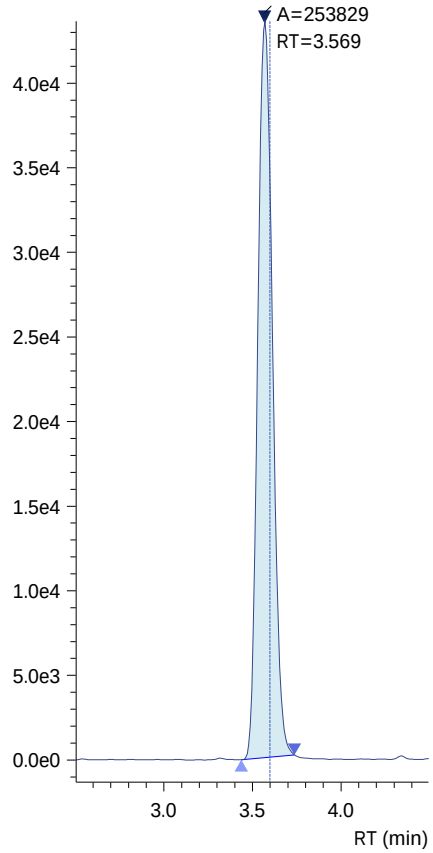
R1 101.00>85.00 (-) 3.68e4



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

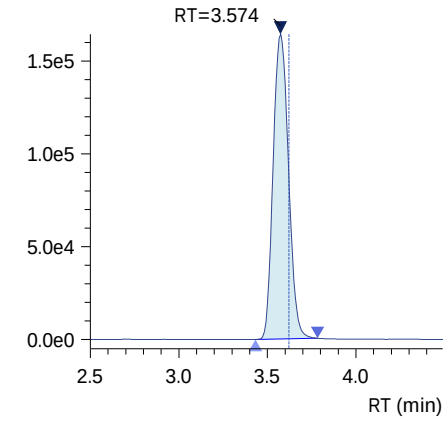
Sample ID: Perchlorate ICAL 9
Date Acquired: 8/2/2023 2:02:07 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-011.lcd
Vial: 9 | Inj. Volume: 10.0000uL | Tray: 1

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	----	----	

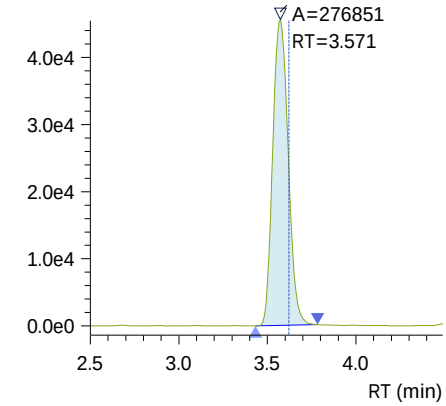
Perchlorate

Conc 30.2105
R#1 27.95 (30.41)

Q 99.00>83.00 (-) A=990671 1.64e5



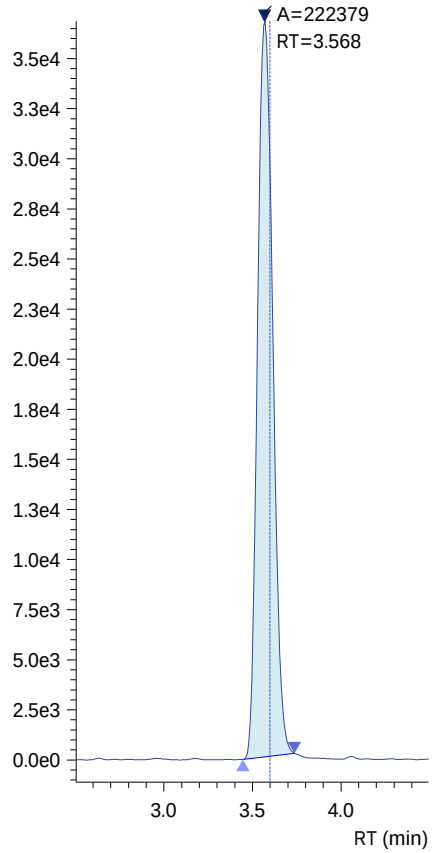
R1 101.00>85.00 (-) 4.55e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 3.69e4



Insight Report

Perchlorate ICAL 10

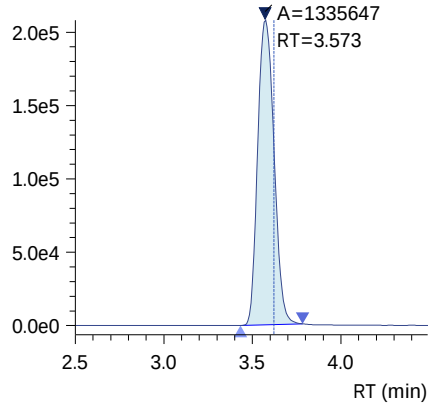
Sample ID: Perchlorate ICAL 10
Date Acquired: 8/2/2023 2:07:39 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230802\2230802-012.lcd
Vial: 10 | Inj. Volume: 10.0000uL | Tray: 1

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	----	----	

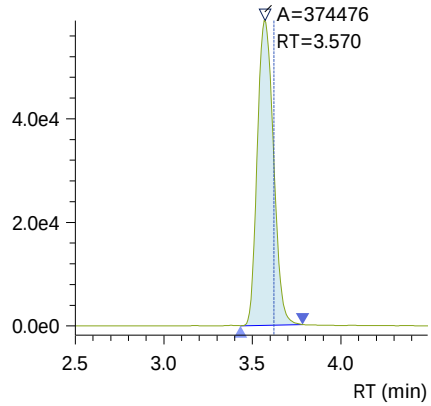
Perchlorate

Conc 50.7220
R#1 28.04 (30.41)

Q 99.00>83.00 (-) 2.08e5



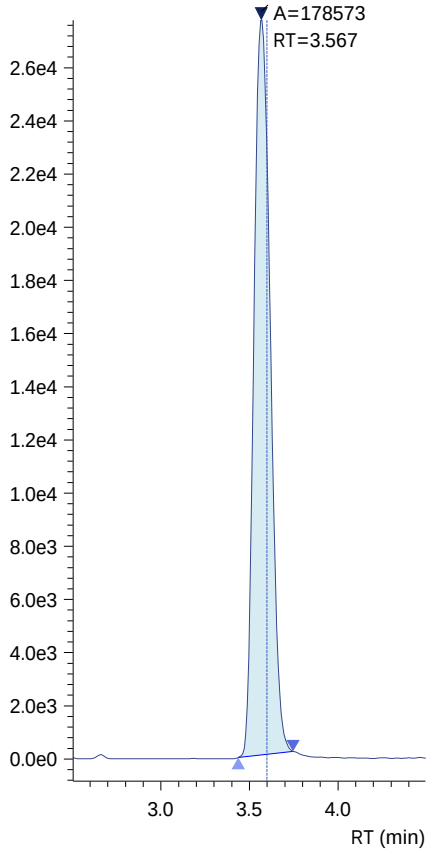
R1 101.00>85.00 (-) 5.90e4



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

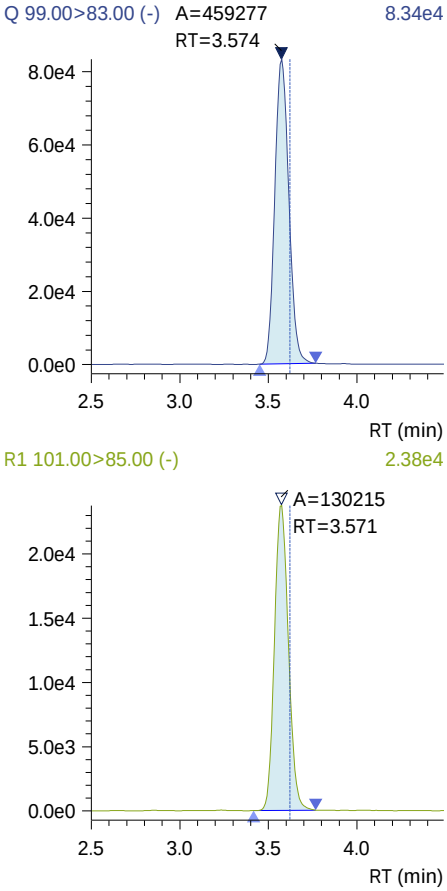
PerchlorateICV

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	----	----	

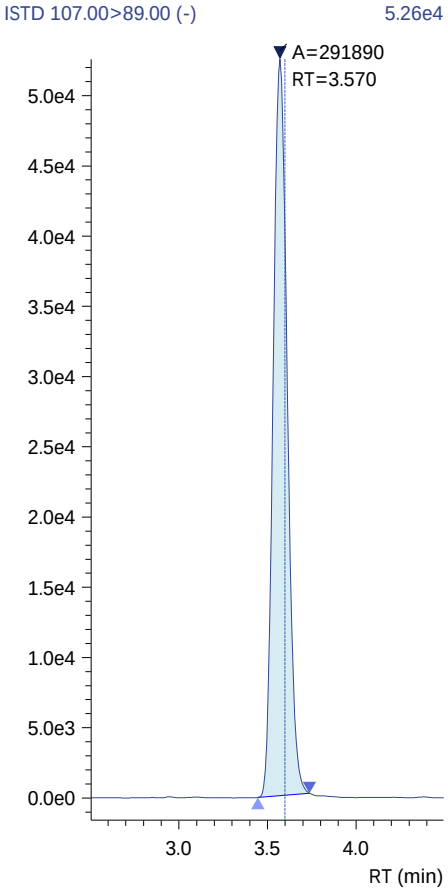
Perchlorate

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

20240122-830337

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 233216 **B:**Acetonitrile 229152
LODV: 230386 **CCV:**230380

	File Name	Sample Name	Acquisition Method	Dilution	Comments	Date/Time
1	20240122-001	IB	Perchlorate6850c.lcm	1x		1/22/2024 11:27
2	20240122-002	LODV	Perchlorate6850c.lcm	1x		1/22/2024 11:32
3	20240122-003	CCV	Perchlorate6850c.lcm	1x		1/22/2024 11:38
4	20240122-005	EQ2400031-01	Perchlorate6850c.lcm	1x		1/22/2024 12:27
5	20240122-006	EQ2400031-02	Perchlorate6850c.lcm	1x		1/22/2024 12:33
6	20240122-007	EQ2400031-03	Perchlorate6850c.lcm	1x		1/22/2024 12:38
7	20240122-008	EQ2400031-04	Perchlorate6850c.lcm	1x	DNU-RI	1/22/2024 12:44
8	20240122-009	E2400035-001	Perchlorate6850c.lcm	1x	DNU-RI	1/22/2024 12:49
9	20240122-010	E2400035-002	Perchlorate6850c.lcm	1x		1/22/2024 12:55
10	20240122-011	E2400035-003	Perchlorate6850c.lcm	1x		1/22/2024 13:01
11	20240122-012	E2400035-004	Perchlorate6850c.lcm	1x		1/22/2024 13:06
12	20240122-013	E2400035-005	Perchlorate6850c.lcm	1x		1/22/2024 13:12
13	20240122-014	E2400035-006	Perchlorate6850c.lcm	1x		1/22/2024 13:17
14	20240122-015	CCV	Perchlorate6850c.lcm	1x		1/22/2024 13:23
15	20240122-016	IB	Perchlorate6850c.lcm	1x		1/22/2024 13:28
16	20240122-017	E2400035-007	Perchlorate6850c.lcm	1x		1/22/2024 13:34
17	20240122-018	E2400035-008	Perchlorate6850c.lcm	1x		1/22/2024 13:39
18	20240122-019	E2400035-009	Perchlorate6850c.lcm	1x		1/22/2024 13:45
19	20240122-020	E2400038-001	Perchlorate6850c.lcm	1x		1/22/2024 13:50
20	20240122-021	E2400038-002	Perchlorate6850c.lcm	1x		1/22/2024 13:56
21	20240122-022	E2400038-003	Perchlorate6850c.lcm	1x		1/22/2024 14:01
22	20240122-023	E2400038-004	Perchlorate6850c.lcm	1x		1/22/2024 14:07
23	20240122-024	E2400038-005	Perchlorate6850c.lcm	1x	DNU-RI	1/22/2024 14:12
24	20240122-025	E2400038-006	Perchlorate6850c.lcm	1x		1/22/2024 14:18
25	20240122-026	E2400038-007	Perchlorate6850c.lcm	1x		1/22/2024 14:23
26	20240122-027	CCV	Perchlorate6850c.lcm	1x		1/22/2024 14:29
27	20240122-028	IB	Perchlorate6850c.lcm	1x		1/22/2024 14:34
28	20240122-029	E2400038-008	Perchlorate6850c.lcm	1x		1/22/2024 14:40
29	20240122-030	E2400038-009	Perchlorate6850c.lcm	1x		1/22/2024 14:46
30	20240122-031	E2400048-001	Perchlorate6850c.lcm	1x		1/22/2024 14:51
31	20240122-032	E2400048-002	Perchlorate6850c.lcm	1x		1/22/2024 14:57
32	20240122-033	EQ2400030-01	Perchlorate6850c.lcm	1x		1/22/2024 15:02
33	20240122-034	EQ2400030-02	Perchlorate6850c.lcm	1x	DNU-RI	1/22/2024 15:08
34	20240122-035	EQ2400030-03	Perchlorate6850c.lcm	1x		1/22/2024 15:13
35	20240122-036	EQ2400030-04	Perchlorate6850c.lcm	1x		1/22/2024 15:19
36	20240122-037	E2400034-001MS	Perchlorate6850c.lcm	1x		1/22/2024 15:24
37	20240122-038	E2400034-001DMS	Perchlorate6850c.lcm	1x	DNU-RI	1/22/2024 15:30
38	20240122-039	CCV	Perchlorate6850c.lcm	1x		1/22/2024 15:35

20240122-830337

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 233216 **B:**Acetonitrile 229152
LODV: 230386 **CCV:**230380

	File Name	Sample Name	Acquisition Method	Dilution	Comments	Date/Time
39	20240122-040	IB	Perchlorate6850c.lcm	1x		1/22/2024 15:41
40	20240122-041	E2400034-002MS	Perchlorate6850c.lcm	1x		1/22/2024 15:47
41	20240122-042	E2400034-002DMS	Perchlorate6850c.lcm	1x		1/22/2024 15:52
42	20240122-043	E2400034-001	Perchlorate6850c.lcm	1x		1/22/2024 16:26
43	20240122-044	E2400034-002	Perchlorate6850c.lcm	1x	DNU-RI	1/22/2024 16:31
44	20240122-045	E2400034-003	Perchlorate6850c.lcm	1x		1/22/2024 16:37
45	20240122-046	E2400034-004	Perchlorate6850c.lcm	1x		1/22/2024 16:42
46	20240122-047	E2400034-005	Perchlorate6850c.lcm	1x		1/22/2024 16:48
47	20240122-048	E2400034-006	Perchlorate6850c.lcm	1x		1/22/2024 16:53
48	20240122-049	E2400034-007	Perchlorate6850c.lcm	1x		1/22/2024 16:59
49	20240122-050	E2400034-008	Perchlorate6850c.lcm	1x		1/22/2024 17:04
50	20240122-051	CCV	Perchlorate6850c.lcm	1x		1/22/2024 17:10
51	20240122-052	IB	Perchlorate6850c.lcm	1x		1/22/2024 17:15
52	20240122-053	E2400054-001	Perchlorate6850c.lcm	1x		1/22/2024 17:21
53	20240122-054	E2400054-002	Perchlorate6850c.lcm	1x		1/22/2024 17:26
54	20240122-055	E2400054-003	Perchlorate6850c.lcm	1x		1/22/2024 17:32
55	20240122-056	E2400054-004	Perchlorate6850c.lcm	1x		1/22/2024 17:37
56	20240122-057	E2400054-005	Perchlorate6850c.lcm	1x	DNU-D	1/22/2024 17:43
57	20240122-058	E2400054-006	Perchlorate6850c.lcm	1x	DNU-D	1/22/2024 17:48
58	20240122-059	E2400054-007	Perchlorate6850c.lcm	1x	DNU-D	1/22/2024 17:54
59	20240122-060	E2400054-008	Perchlorate6850c.lcm	1x	DNU-D	1/22/2024 17:59
60	20240122-061	E2400054-009	Perchlorate6850c.lcm	1x		1/22/2024 18:05
61	20240122-062	E2400054-010	Perchlorate6850c.lcm	1x		1/22/2024 18:11
62	20240122-063	CCV	Perchlorate6850c.lcm	1x		1/22/2024 18:16
63	20240122-064	IB	Perchlorate6850c.lcm	1x		1/22/2024 18:22

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2400034
Project:	HS24010611	**Date Analyzed:**	1/22/24 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\20240122\20240122-003~2	**Lab Code:**	EQ2400039-01
Instrument ID:	E-LCMS-01	**Analysis Lot:**	830337
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	EQ2400039-01	171,557	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:**	E2400034
Project:	HS24010611	**Date Analyzed:**	1/22/24 13:23

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20240122\20240122-015	**Lab Code:**	EQ2400039-02
Instrument ID:	E-LCMS-01	**Analysis Lot:**	830337
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	EQ2400039-02	188,669	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
Project: HS24010611

Service Request: E2400034
Date Analyzed: 1/22/24 14:29

Internal Standard Area and RT Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

File ID: I:\LCMS01\DATA\20240122\20240122-027
Instrument ID: E-LCMS-01
Analytical Method: 6850

Lab Code: EQ2400039-03
Analysis Lot: 830337
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	EQ2400039-03	181,683	3.53
Method Blank	EQ2400030-01	181,694	3.53
Duplicate Lab Control Sample	EQ2400030-03	179,239	3.53
16IW10-240111MS	EQ2400030-05	196,276	3.53

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:**	E2400034
Project:	HS24010611	**Date Analyzed:**	1/22/24 15:35

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20240122\20240122-039	**Lab Code:**	EQ2400039-04
Instrument ID:	E-LCMS-01	**Analysis Lot:**	830337
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	EQ2400039-04	182,589	3.53
16EW02-240111MS	EQ2400030-07	218,260	3.54
16EW02-240111DMS	EQ2400030-08	219,864	3.53
16IW10-240111	E2400034-001	218,336	3.54
16IW20-24011	E2400034-003	203,504	3.53
16WW39-240111	E2400034-004	182,689	3.53
16WW22-240111	E2400034-005	157,423	3.53
16WW56-240111	E2400034-006	181,529	3.53
16RW06-240111	E2400034-007	168,863	3.53
16RW07-240111	E2400034-008	179,930	3.53

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:**	E2400034
Project:	HS24010611	**Date Analyzed:**	1/22/24 17:10

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20240122\20240122-051	**Lab Code:**	EQ2400039-05
Instrument ID:	E-LCMS-01	**Analysis Lot:**	830337
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	EQ2400039-05	165,414	3.53

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:**	E2400034
Project:	HS24010611	**Date Analyzed:**	1/22/24 18:16

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20240122\20240122-063	**Lab Code:**	EQ2400039-06
Instrument ID:	E-LCMS-01	**Analysis Lot:**	830337
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	EQ2400039-06	168,555	3.53

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: HS24010611

Service Request: E2400034
Date Analyzed: 1/23/24 13:12

Internal Standard Area and RT Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

File ID: I:\LCMS01\DATA\20240123\20240123-011
Instrument ID: E-LCMS-01
Analytical Method: 6850

Lab Code: EQ2400043-01
Analysis Lot: 830415
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	EQ2400043-01	198,363	3.54
16IW10-240111DMS	EQ2400030-06	250,458	3.54
Lab Control Sample	EQ2400030-02	260,263	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:**	E2400034
Project:	HS24010611	**Date Analyzed:**	1/23/24 14:23

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20240123\20240123-018	**Lab Code:**	EQ2400043-02
Instrument ID:	E-LCMS-01	**Analysis Lot:**	830415
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	EQ2400043-02	253,015	3.54
16EW02-240111	E2400034-002	252,689	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:**	E2400034
Project:	HS24010611	**Date Analyzed:**	1/23/24 15:30

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20240123\20240123-027	**Lab Code:**	EQ2400043-03
Instrument ID:	E-LCMS-01	**Analysis Lot:**	830415
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	EQ2400043-03	229,532	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:**	E2400034
Project:	HS24010611	**Date Analyzed:**	1/23/24 16:41

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20240123\20240123-039	**Lab Code:**	EQ2400043-04
Instrument ID:	E-LCMS-01	**Analysis Lot:**	830415
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	EQ2400043-04	238,877	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:**	E2400034
Project:	HS24010611	**Date Analyzed:**	1/23/24 17:42

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20240123\20240123-050	**Lab Code:**	EQ2400043-05
Instrument ID:	E-LCMS-01	**Analysis Lot:**	830415
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	EQ2400043-05	236,348	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
Project: HS24010611

Service Request: E2400034
Date Analyzed: 1/23/24 18:32

Internal Standard Area and RT Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

File ID: I:\LCMS01\DATA\20240123\20240123-054
Instrument ID: E-LCMS-01
Analytical Method: 6850

Lab Code: EQ2400043-06
Analysis Lot: 830415
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	EQ2400043-06	246,674	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
Project: HS24010611

Service Request: E2400034
Date Analyzed: 1/22/24

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\20240122\20240122-003~2

Calibration Date: 8/2/23
Calibration ID: EC2300012
Analysis Lot: 830337
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.37	0.1475	0.1381	-6.3	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS24010611

Service Request: E2400034
Date Analyzed: 1/22/24

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\20240122\20240122-015

Calibration Date: 8/2/23
Calibration ID: EC2300012
Analysis Lot: 830337
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.59	0.1475	0.1414	-4.1	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS24010611

Service Request: E2400034
Date Analyzed: 1/22/24

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\20240122\20240122-027

Calibration Date: 8/2/23
Calibration ID: EC2300012
Analysis Lot: 830337
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.0	0.1475	0.1478	0.2	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS24010611

Service Request: E2400034
Date Analyzed: 1/22/24

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\20240122\20240122-039

Calibration Date: 8/2/23
Calibration ID: EC2300012
Analysis Lot: 830337
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.1	0.1475	0.1496	1.5	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS24010611

Service Request: E2400034
Date Analyzed: 1/22/24

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\20240122\20240122-051

Calibration Date: 8/2/23
Calibration ID: EC2300012
Analysis Lot: 830337
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.88	0.1475	0.1457	-1.2	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS24010611

Service Request: E2400034
Date Analyzed: 1/22/24

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\20240122\20240122-063

Calibration Date: 8/2/23
Calibration ID: EC2300012
Analysis Lot: 830337
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.1	0.1475	0.1489	0.9	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS24010611

Service Request: E2400034
Date Analyzed: 1/23/24

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\20240123\20240123-011

Calibration Date: 8/2/23
Calibration ID: EC2300012
Analysis Lot: 830415
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.75	0.1475	0.1438	-2.5	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS24010611

Service Request: E2400034
Date Analyzed: 1/23/24

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\20240123\20240123-018

Calibration Date: 8/2/23
Calibration ID: EC2300012
Analysis Lot: 830415
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.1	0.1475	0.1493	1.2	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS24010611

Service Request: E2400034
Date Analyzed: 1/23/24

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\20240123\20240123-027

Calibration Date: 8/2/23
Calibration ID: EC2300012
Analysis Lot: 830415
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.5	0.1475	0.1548	4.9	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS24010611

Service Request: E2400034
Date Analyzed: 1/23/24

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\20240123\20240123-039

Calibration Date: 8/2/23
Calibration ID: EC2300012
Analysis Lot: 830415
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.4	0.1475	0.1532	3.9	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS24010611

Service Request: E2400034
Date Analyzed: 1/23/24

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\20240123\20240123-050

Calibration Date: 8/2/23
Calibration ID: EC2300012
Analysis Lot: 830415
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.4	0.1475	0.1529	3.7	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS24010611

Service Request: E2400034
Date Analyzed: 1/23/24

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\20240123\20240123-054

Calibration Date: 8/2/23
Calibration ID: EC2300012
Analysis Lot: 830415
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.5	0.1475	0.1552	5.3	NA	± 15 %	Average RF

Insight Report

Printed at 1/23/2024 2:22:49 PM

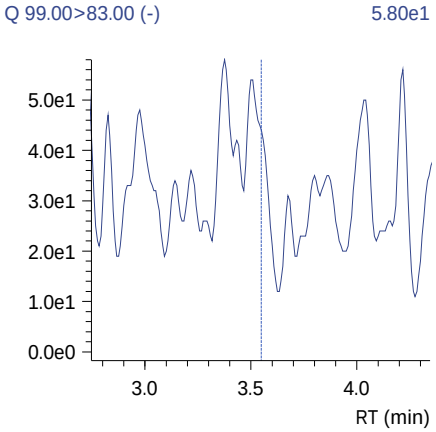
IB

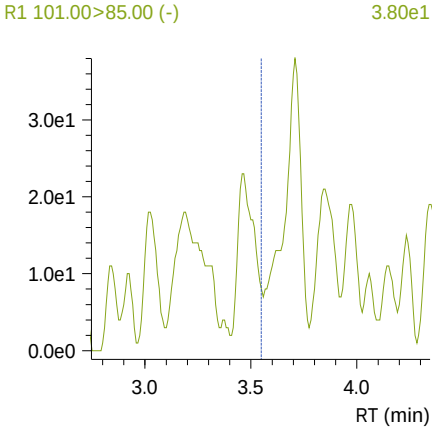
Sample ID: IB
Date Acquired: 1/22/2024 6:22:05 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240122\20240122-064.lcd
Vial: 1 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	186273	----	ng/mL	101.00 >85.00	0.00	23.7-44.02
Sodium Perchlorate-18O4_IS	Auto	3.531	186273	186273	1.0000	ng/mL	----	----	

Perchlorate

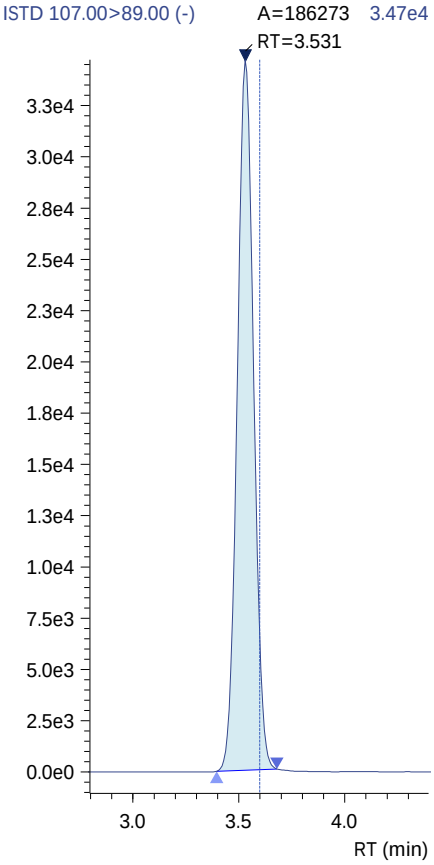
Conc ----
R#1 0.00 (33.86)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/23/2024 2:22:49 PM

Method File: I:\LCMS01\DATA\20240122\20240122.lcm
Project File: I:\LCMS01\DATA\20240122\20240122.damlp

IB

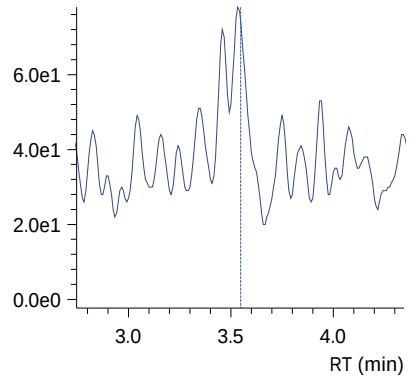
Sample ID: IB
Date Acquired: 1/22/2024 11:27:28 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240122\20240122-001~2.lcd
Vial: 1 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	193970	----	ng/mL	101.00 >85.00	0.00	23.7-44.02
Sodium Perchlorate-18O4_IS	Auto	3.549	193970	193970	1.0000	ng/mL	----	----	

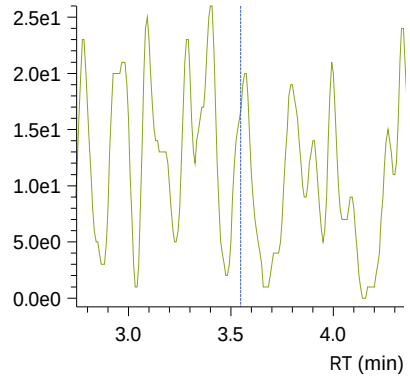
Perchlorate

Conc ----
R#1 0.00 (33.86)

Q 99.00>83.00 (-) 7.80e1



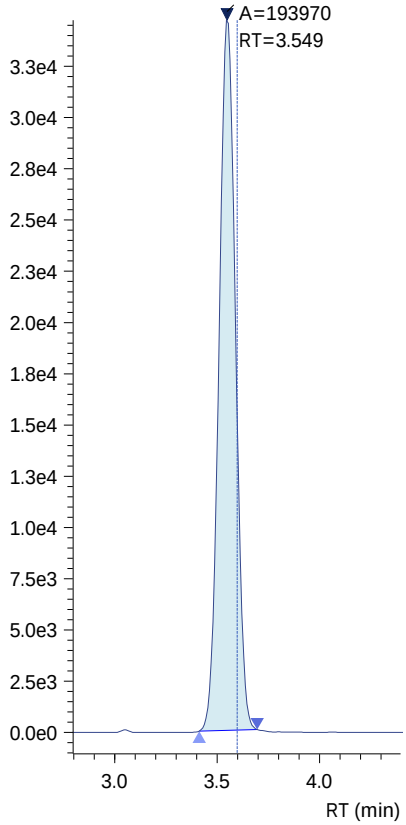
R1 101.00>85.00 (-) 2.60e1



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 3.48e4



Insight Report

Printed at 1/23/2024 2:22:49 PM

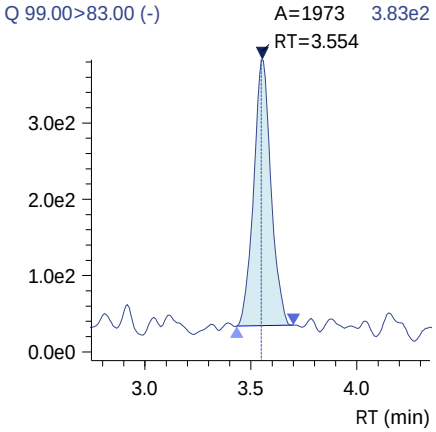
LODV

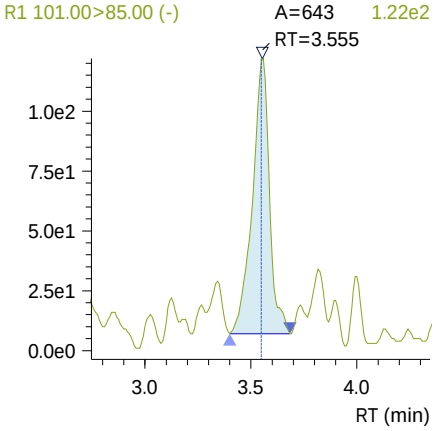
Sample ID: LODV
Date Acquired: 1/22/2024 11:32:59 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240122\20240122-002~2.lcd
Vial: 2 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.554	1973	229114	0.0584	ng/mL	101.00 >85.00	32.59	23.7-44.02
Sodium Perchlorate-18O4 _IS	Auto	3.550	229114	229114	1.0000	ng/mL	----	----	

Perchlorate

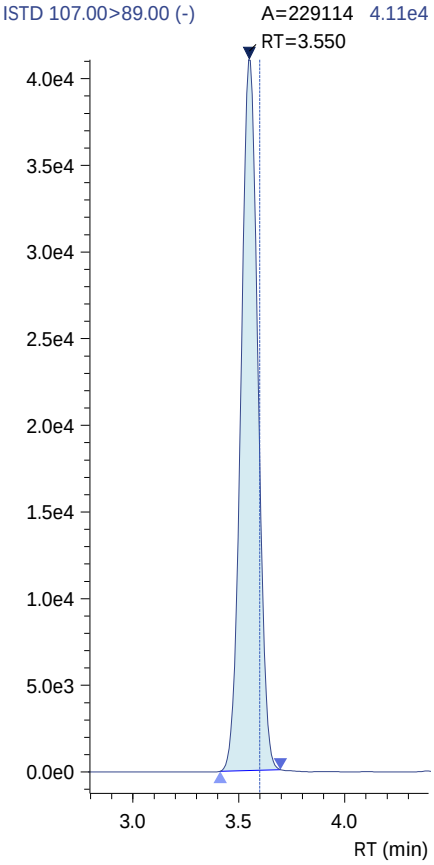
Conc 0.0584
R#1 32.59 (33.86)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/23/2024 2:22:49 PM

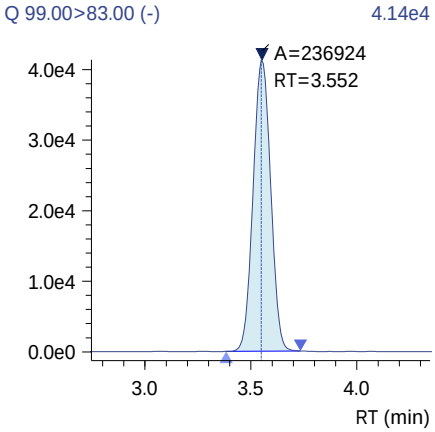
CCV

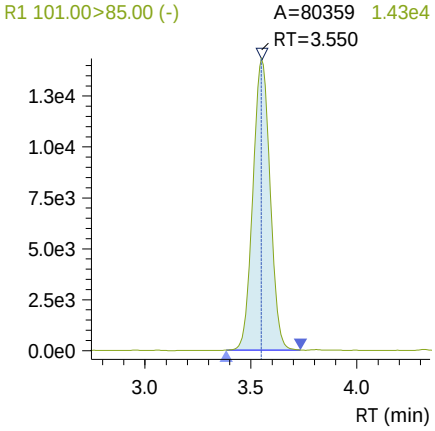
Sample ID: CCV
Date Acquired: 1/22/2024 11:38:30 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240122\20240122-003~2.lcd
Vial: 7 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.552	236924	171557	9.3653	ng/mL	101.00 >85.00	33.92	23.7-44.02
Sodium Perchlorate-18O4_IS	Auto	3.548	171557	171557	1.0000	ng/mL	----	----	

Perchlorate

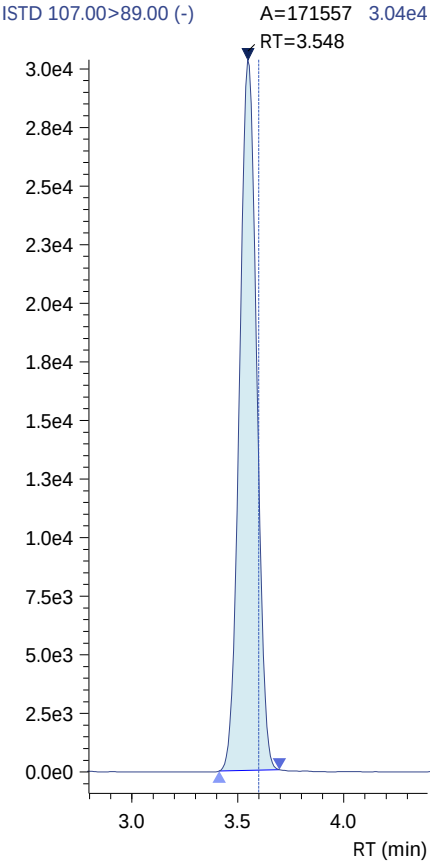
Conc 9.3653
R#1 33.92 (33.86)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/23/2024 2:22:49 PM

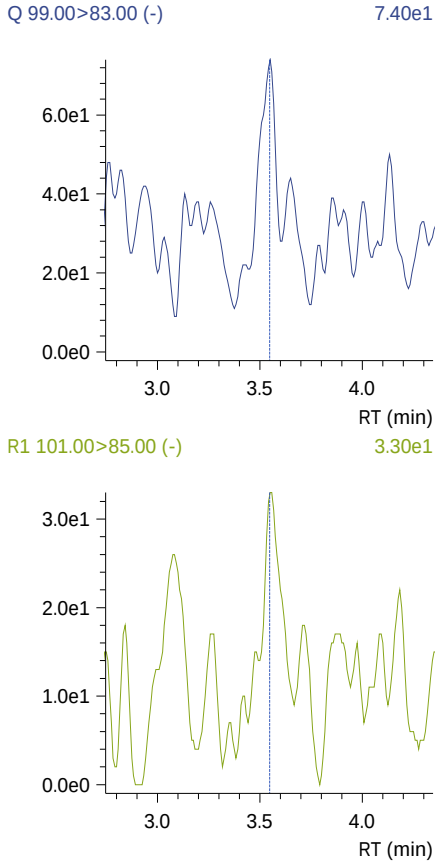
MB

Sample ID: EQ2400030-01
Date Acquired: 1/22/2024 3:02:39 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240122\20240122-033.lcd
Vial: 25 | 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)	----	----	181694	----	ng/mL	101.00 >85.00	0.00	23.7-44.02
Sodium Perchlorate-18O4_IS	Auto	3.531	181694	181694	1.0000	ng/mL	----	----	

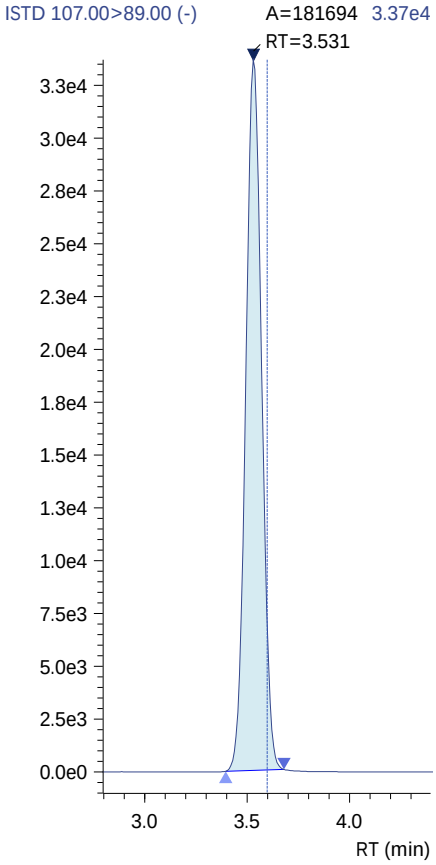
Perchlorate

Conc ----
R#1 0.00 (33.86)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/23/2024 2:22:49 PM

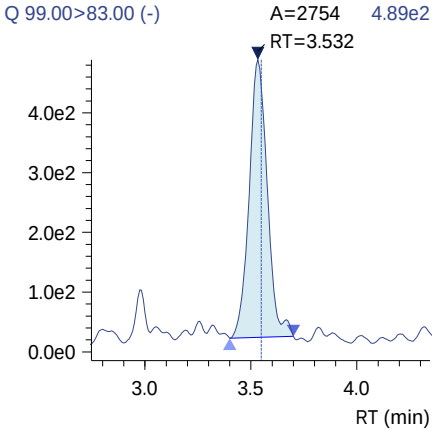
DLCS

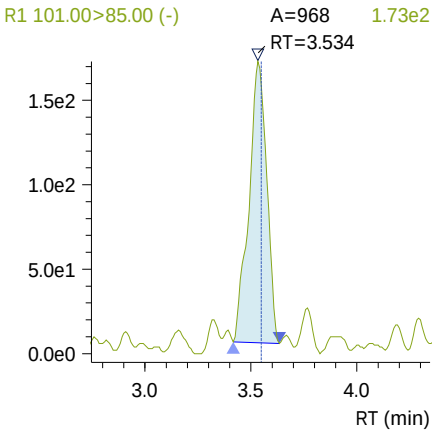
Sample ID: EQ2400030-03
Date Acquired: 1/22/2024 3:13:46 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240122\20240122-035.lcd
Vial: 27 | Inj. Volume: 10.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.532	2754	179239	0.1042	ng/mL	101.00 >85.00	35.14	23.7-44.02
Sodium Perchlorate-18O4 _IS	Auto	3.533	1792 39	179239	1.0000	ng/mL	----	----	

Perchlorate

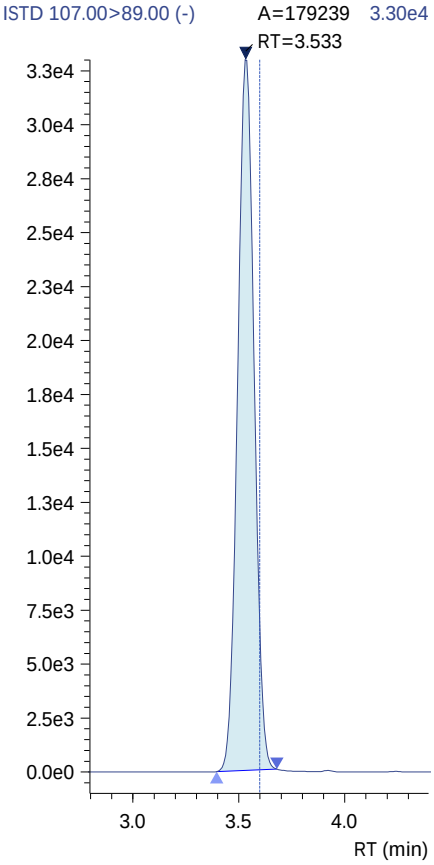
Conc 0.1042
R#1 35.14 (33.86)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/23/2024 2:22:49 PM

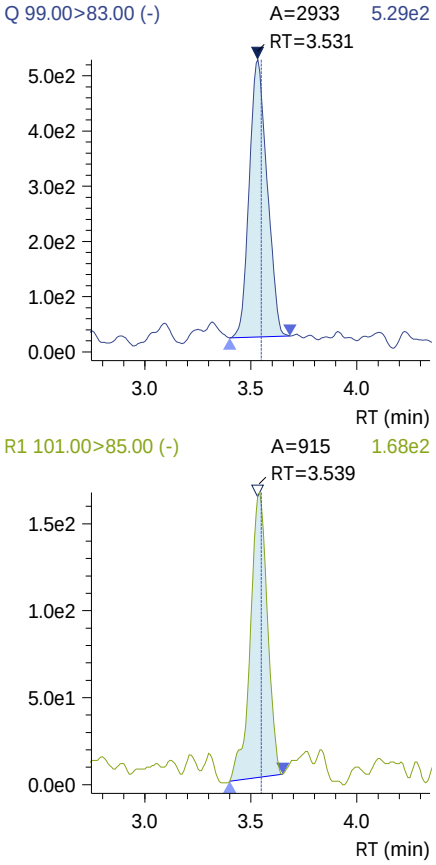
ICS

Sample ID: EQ2400030-04
Date Acquired: 1/22/2024 3:19:20 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240122\20240122-036.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	3.531	2933	182518	0.1090	ng/mL	101.00 >85.00	31.19	23.7-44.02
Sodium Perchlorate-18O4 _IS	Auto	3.532	1825 18	182518	1.0000	ng/mL	----	----	

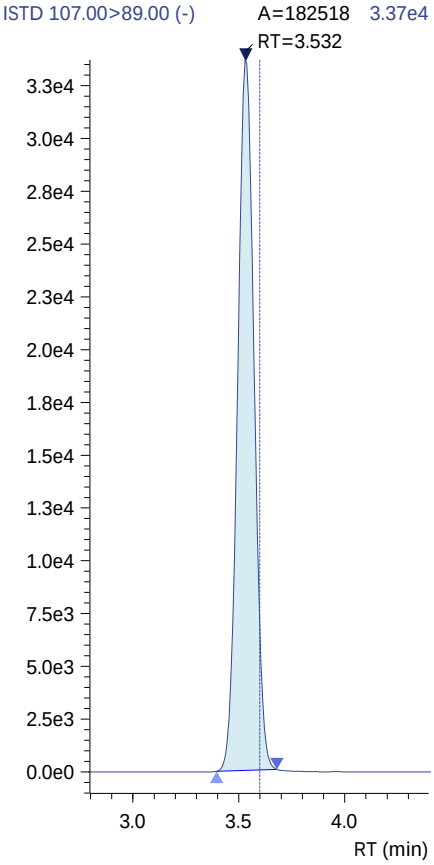
Perchlorate

Conc 0.1090
R#1 31.19 (33.86)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/24/2024 9:35:30 AM

Method File: I:\LCMS01\DATA\20240122\20240122.lcm
Project File: I:\LCMS01\DATA\20240122\20240122.damlp

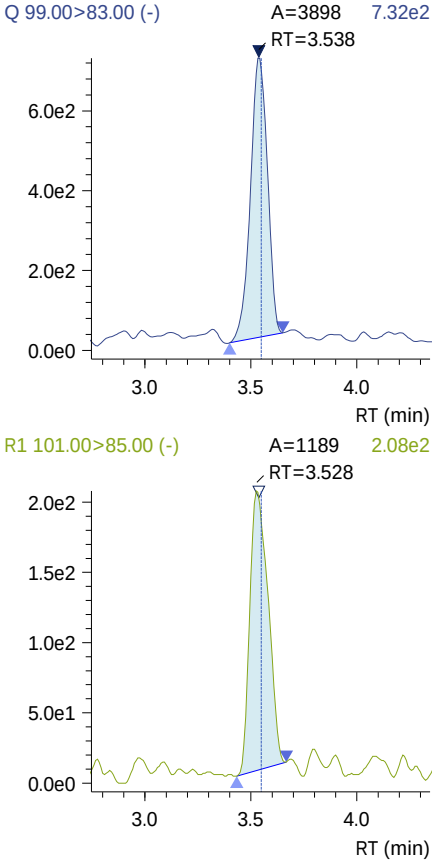
E2400034-001MS

Sample ID: EQ2400030-05
Date Acquired: 1/22/2024 3:24:50 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240122\20240122-037.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	Auto	3.538	3898	196276	0.1347	ng/mL	101.00 >85.00	30.49	23.7-44.02
Sodium Perchlorate-18O4 _IS	Auto	3.533	1962 76	196276	1.0000	ng/mL	----	----	

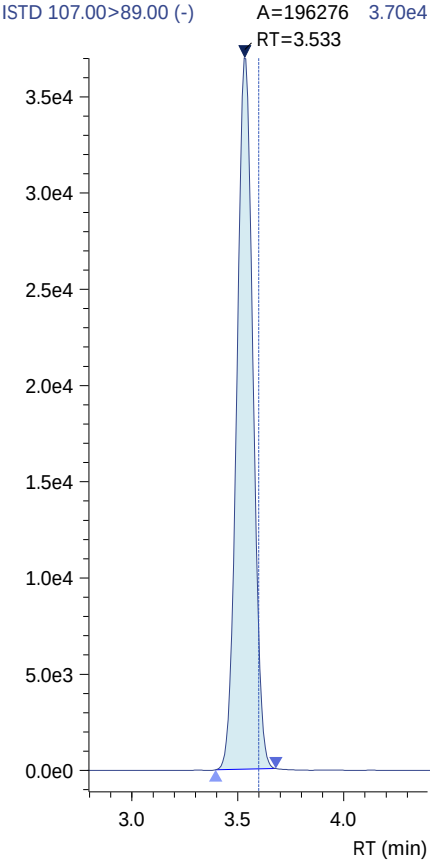
Perchlorate

Conc 0.1347
R#1 30.49 (33.86)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/23/2024 2:22:49 PM

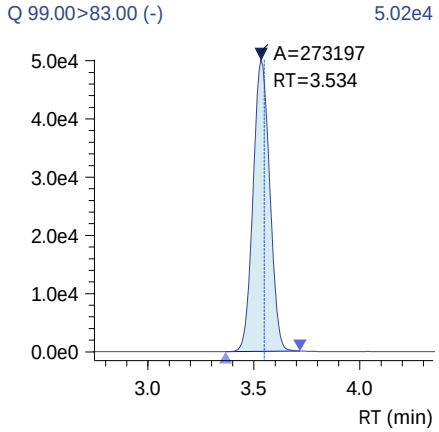
CCV

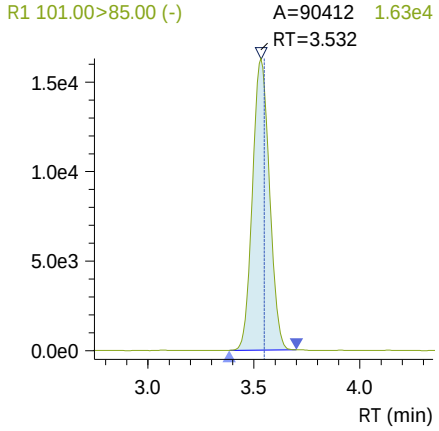
Sample ID: CCV
Date Acquired: 1/22/2024 3:35:55 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240122\20240122-039.lcd
Vial: 7 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.534	273197	182589	10.1467	ng/mL	101.00 >85.00	33.09	23.7-44.02
Sodium Perchlorate-18O4_IS	Auto	3.531	182589	182589	1.0000	ng/mL	----	----	

Perchlorate

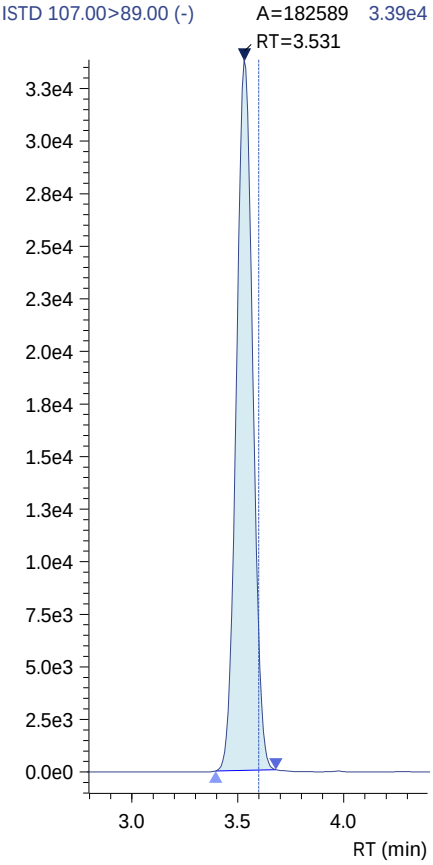
Conc 10.1467
R#1 33.09 (33.86)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/23/2024 2:22:49 PM

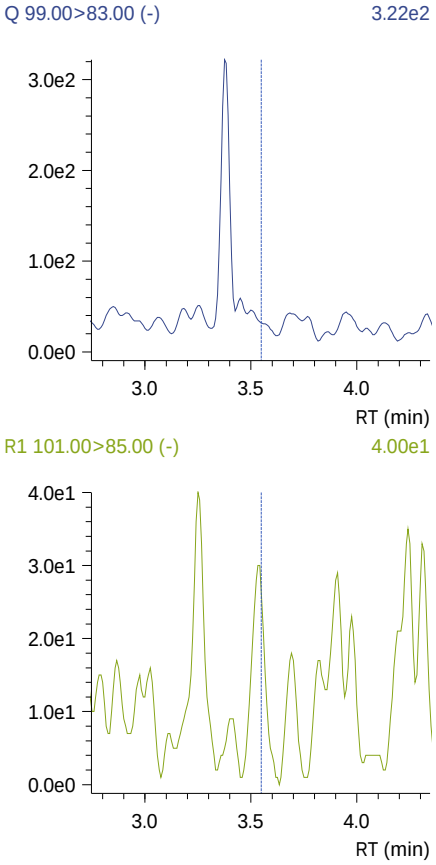
IB

Sample ID: IB
Date Acquired: 1/22/2024 3:41:28 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240122\20240122-040.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)	----	----	193546	----	ng/mL	101.00 >85.00	0.00	23.7-44.02
Sodium Perchlorate-18O4_IS	Auto	3.531	193546	193546	1.0000	ng/mL	----	----	

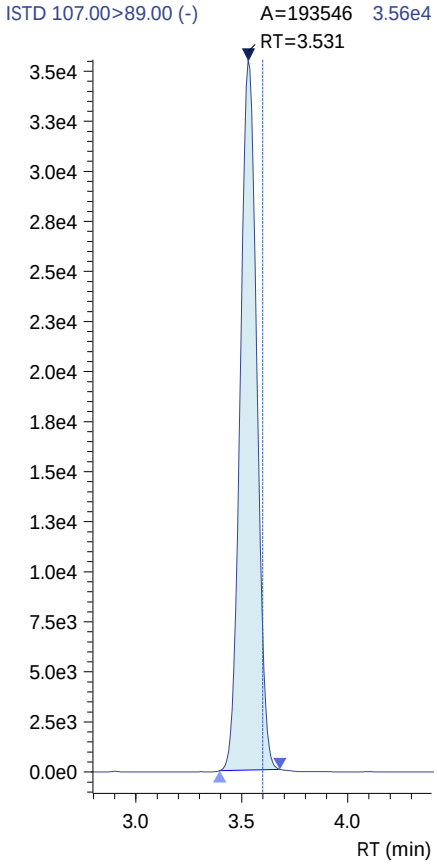
Perchlorate

Conc ----
R#1 0.00 (33.86)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/24/2024 9:35:30 AM

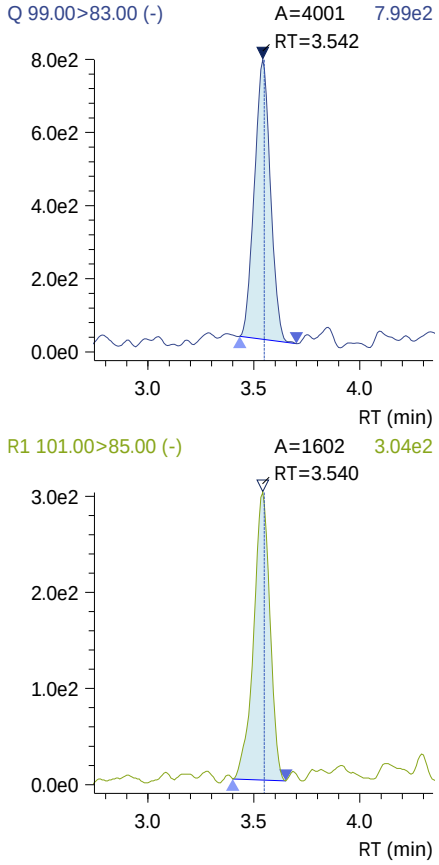
E2400034-002MS

Sample ID: EQ2400030-07
Date Acquired: 1/22/2024 3:47:02 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240122\20240122-041.lcd
Vial: 31 | 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	3.542	4001	218260	0.1243	ng/mL	101.00 >85.00	40.04	23.7-44.02
Sodium Perchlorate-18O4 _IS	Auto	3.535	2182 60	218260	1.0000	ng/mL	----	----	

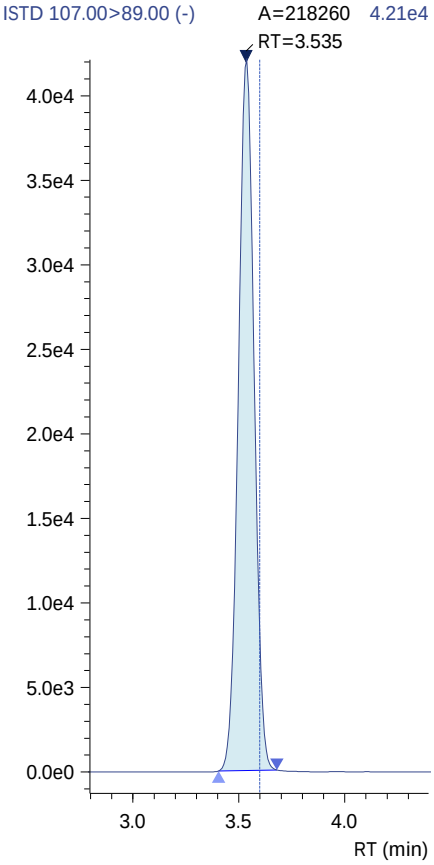
Perchlorate

Conc 0.1243
R#1 40.04 (33.86)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/24/2024 9:35:30 AM

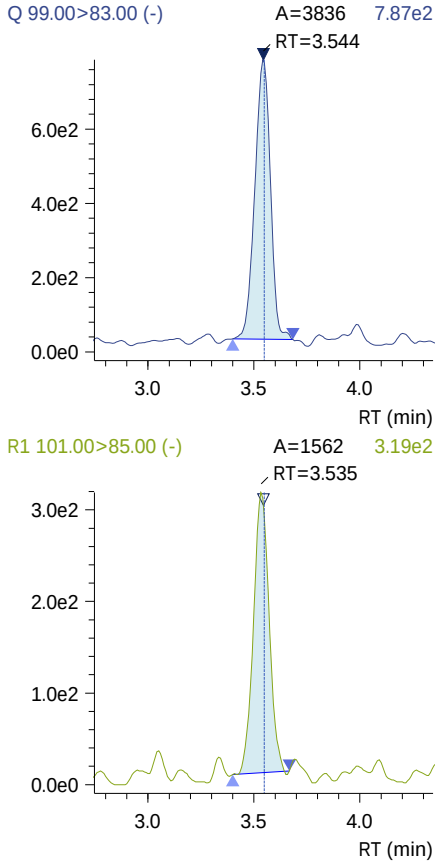
E2400034-002DMS

Sample ID: EQ2400030-08
Date Acquired: 1/22/2024 3:52:34 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240122\20240122-042.lcd
Vial: 32 | 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	3.544	3836	219864	0.1183	ng/mL	101.00 >85.00	40.71	23.7-44.02
Sodium Perchlorate-18O4 _IS	Auto	3.534	219864	219864	1.0000	ng/mL	----	----	

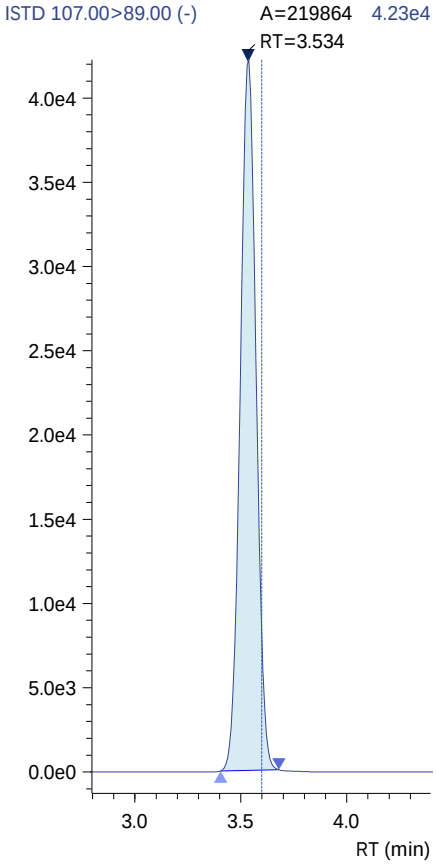
Perchlorate

Conc 0.1183
R#1 40.71 (33.86)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/24/2024 9:35:30 AM

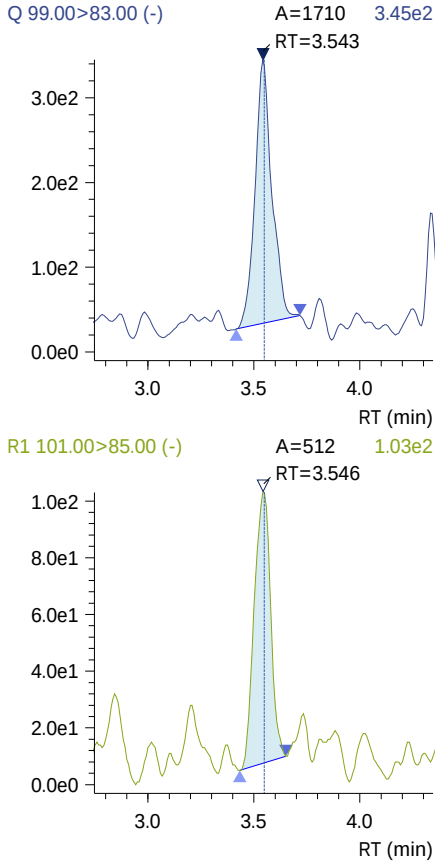
E2400034-001

Sample ID: E2400034-001
Date Acquired: 1/22/2024 4:26:02 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240122\20240122-043.lcd
Vial: 33 | 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	3.543	1710	218336	0.0531	ng/mL	101.00 >85.00	29.97	23.7-44.02
Sodium Perchlorate-18O4 _IS	Auto	3.536	2183 36	218336	1.0000	ng/mL	----	----	

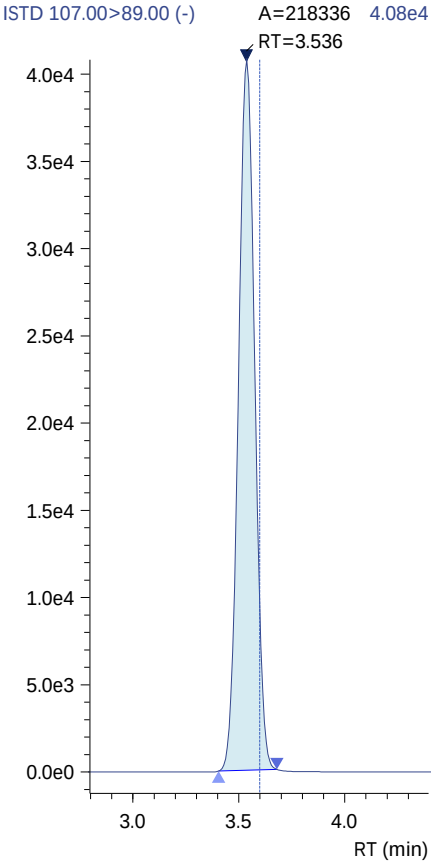
Perchlorate

Conc 0.0531
R#1 29.97 (33.86)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/23/2024 2:22:49 PM

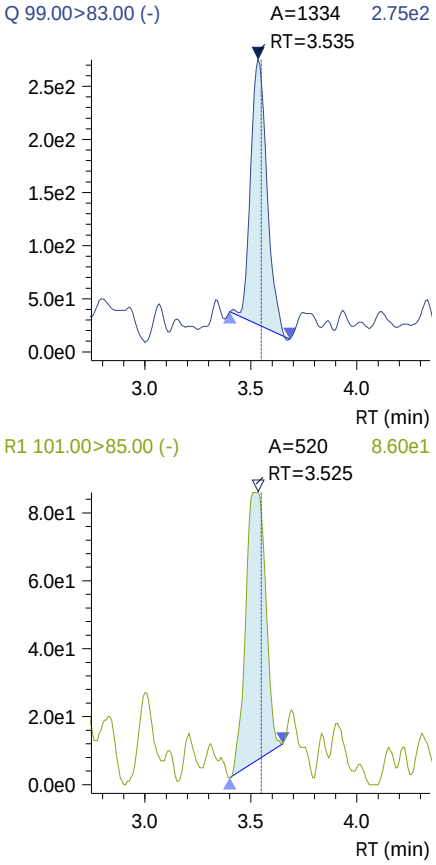
E2400034-003

Sample ID: E2400034-003
Date Acquired: 1/22/2024 4:37:04 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240122\20240122-045.lcd
Vial: 35 | 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	3.535	1334	203504	0.0445	ng/mL	101.00 >85.00	38.98	23.7-44.02
Sodium Perchlorate-18O4 _IS	Auto	3.533	203504	203504	1.0000	ng/mL	----	----	

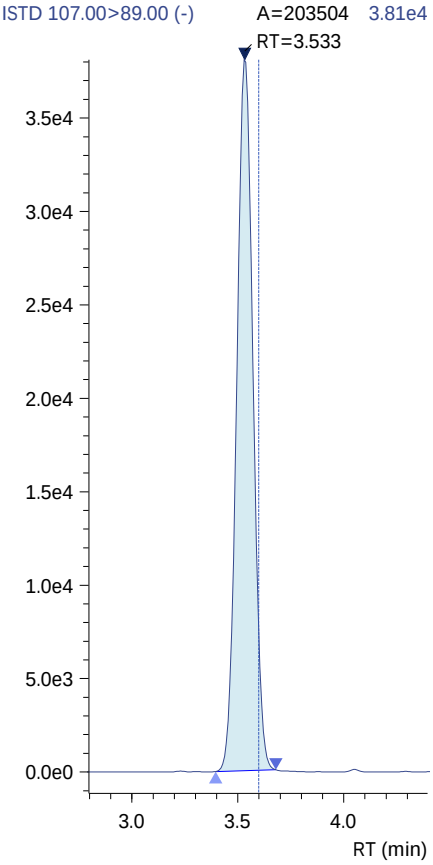
Perchlorate

Conc 0.0445
R#1 38.98 (33.86)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/23/2024 2:22:49 PM

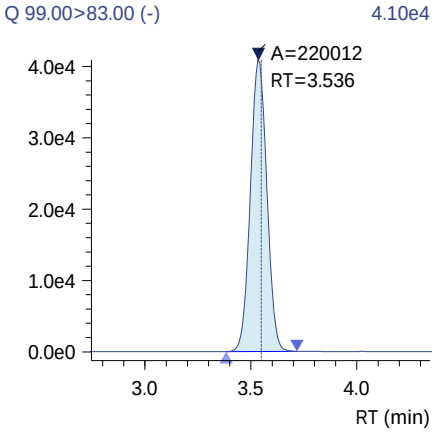
E2400034-004

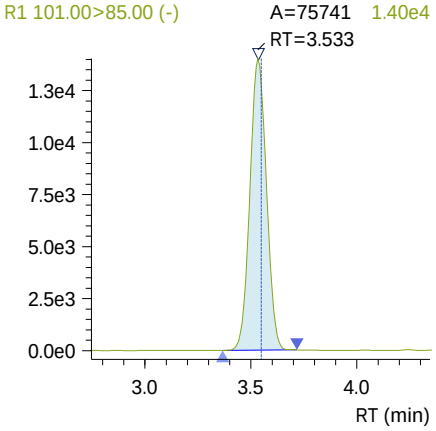
Sample ID: E2400034-004
Date Acquired: 1/22/2024 4:42:38 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240122\20240122-046.lcd
Vial: 36 | Inj. Volume: 10.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.536	220012	182689	8.1669	ng/mL	101.00 >85.00	34.43	23.7-44.02
Sodium Perchlorate-18O4_IS	Auto	3.533	182689	182689	1.0000	ng/mL	----	----	

Perchlorate

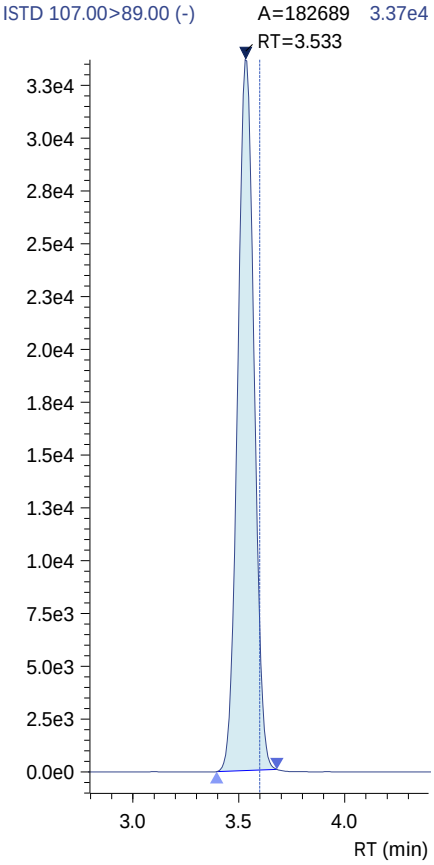
Conc 8.1669
R#1 34.43 (33.86)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/23/2024 2:22:49 PM

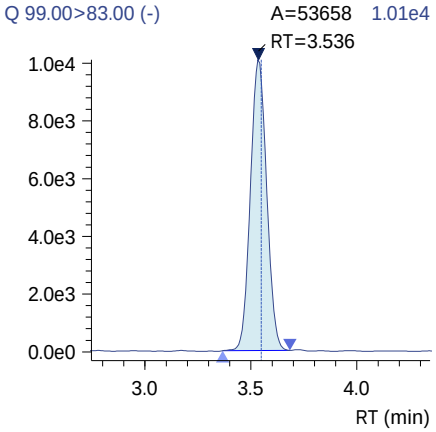
E2400034-005

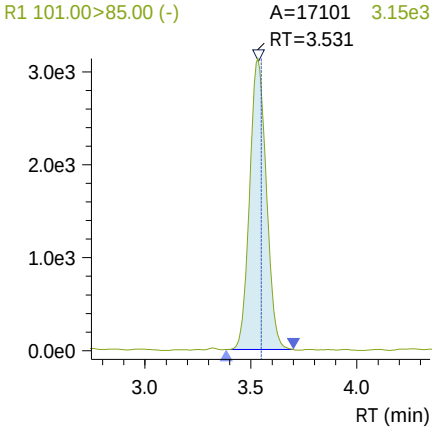
Sample ID: E2400034-005
Date Acquired: 1/22/2024 4:48:08 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240122\20240122-047.lcd
Vial: 37 | Inj. Volume: 10.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.536	53658	157423	2.3114	ng/mL	101.00 >85.00	31.87	23.7-44.02
Sodium Perchlorate-18O4 _IS	Auto	3.531	1574 23	157423	1.0000	ng/mL	----	----	

Perchlorate

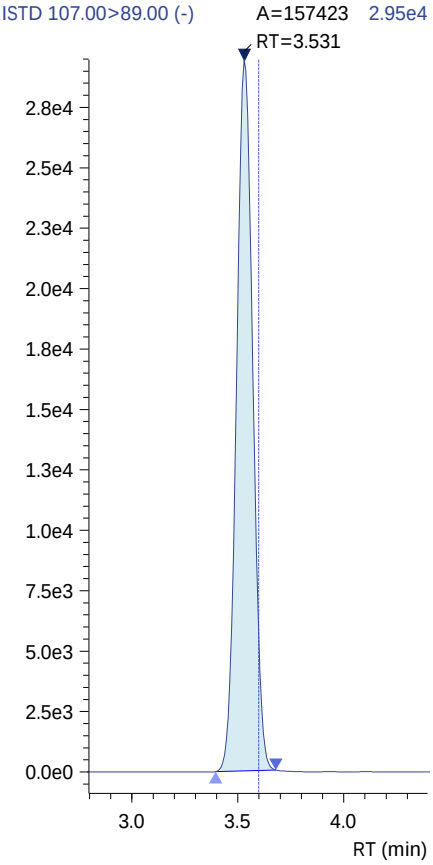
Conc 2.3114
R#1 31.87 (33.86)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/23/2024 2:22:49 PM

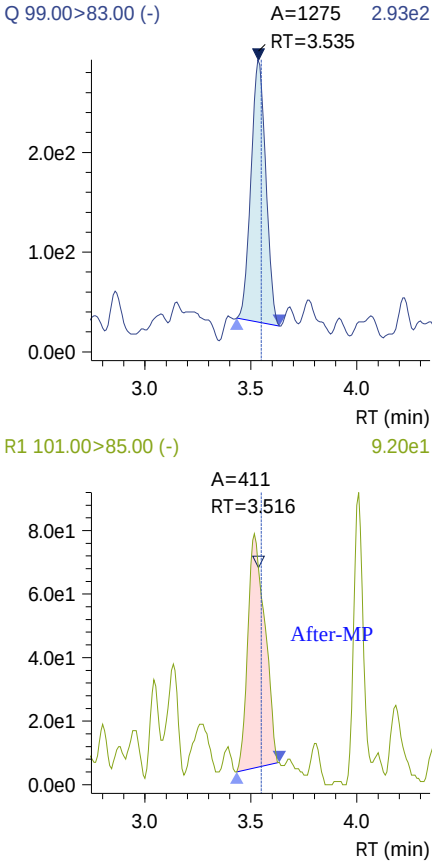
E2400034-006

Sample ID: E2400034-006
Date Acquired: 1/22/2024 4:53:37 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240122\20240122-048.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	MI R1	3.535	1275	181529	0.0476	ng/mL	101.00 >85.00	32.23	23.7-44.02
Sodium Perchlorate-18O4 _IS	Auto	3.532	1815 29	181529	1.0000	ng/mL	----	----	

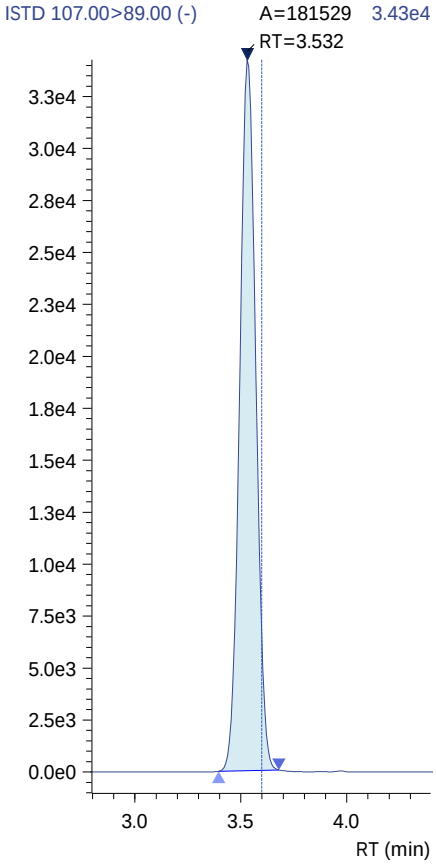
Perchlorate

Conc 0.0476
R#1 32.23 (33.86)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/23/2024 2:25:14 PM

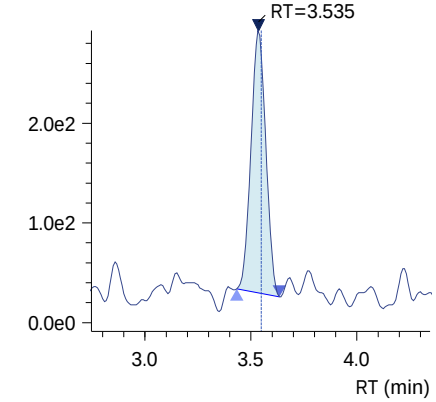
E2400034-006

Sample ID: E2400034-006
Date Acquired: 1/22/2024 4:53:37 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240122\20240122-048.lcd
Vial: 38 | Inj. Volume: 10.0000uL | Tray: 5

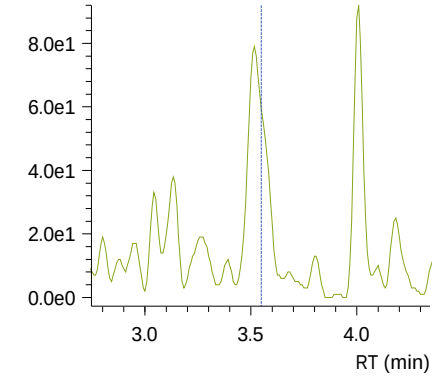
Perchlorate

Conc 0.0476
R#1 0.00 (33.86)

Q 99.00>83.00 (-) A=1275 2.93e2 RT=3.535



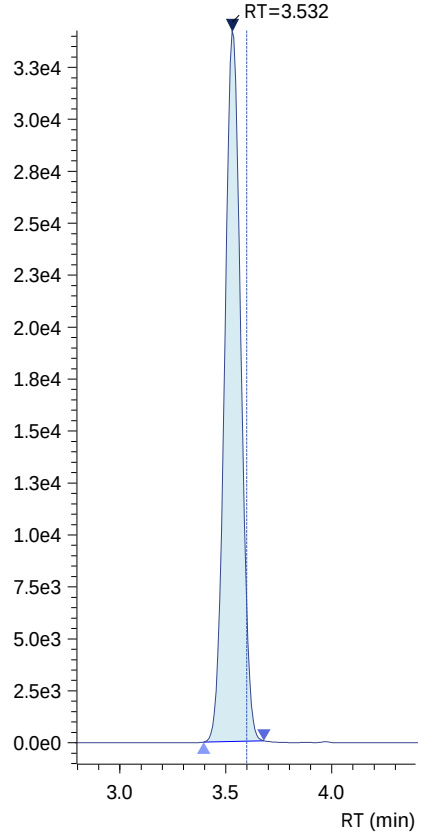
R1 101.00>85.00 (-) 9.20e1



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=181529 3.43e4 RT=3.532



Insight Report

Printed at 1/24/2024 9:08:17 AM

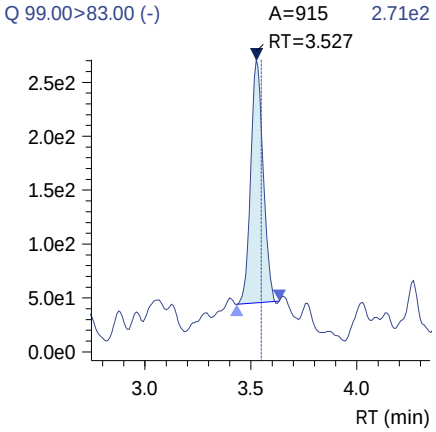
E2400034-007

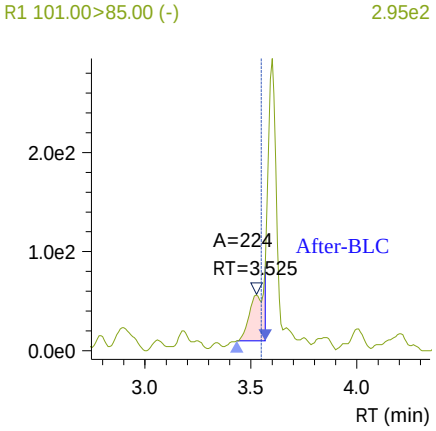
Sample ID: E2400034-007
Date Acquired: 1/22/2024 4:59:07 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240122\20240122-049.lcd
Vial: 39 | Inj. Volume: 10.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	MI R1	3.527	915	168863	0.0367	ng/mL	101.00 >85.00	24.46	23.7-44.02
Sodium Perchlorate-18O4 _IS	Auto	3.531	168863	168863	1.0000	ng/mL	----	----	

Perchlorate

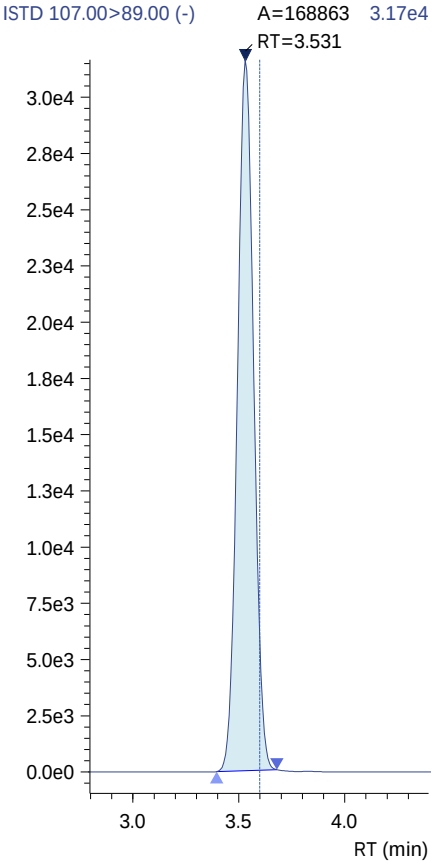
Conc 0.0367
R#1 24.46 (33.86)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/24/2024 9:08:58 AM

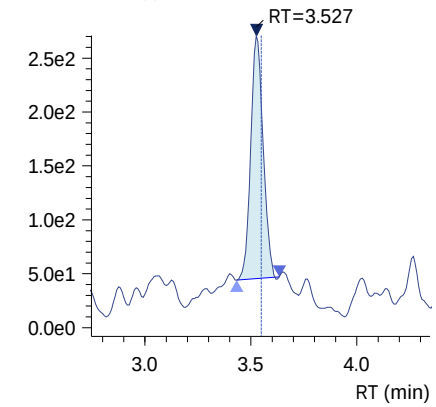
E2400034-007

Sample ID: E2400034-007
Date Acquired: 1/22/2024 4:59:07 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240122\20240122-049.lcd
Vial: 39 | Inj. Volume: 10.0000uL | Tray: 5

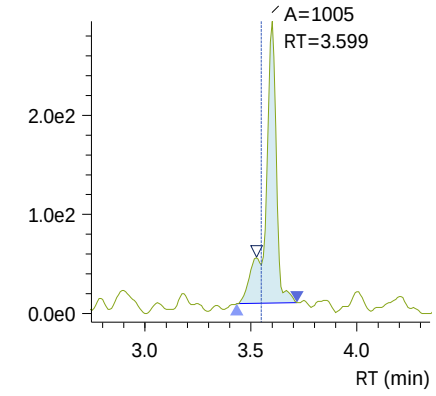
Perchlorate

Conc 0.0367
R#1 109.89 (33.86)

Q 99.00>83.00 (-) A=915 2.71e2



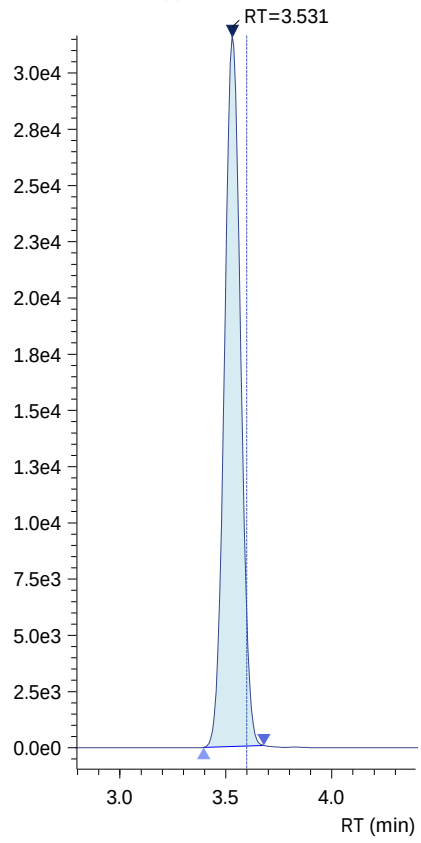
R1 101.00>85.00 (-) 2.95e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=168863 3.17e4



Insight Report

Printed at 1/23/2024 2:22:49 PM

E2400034-008

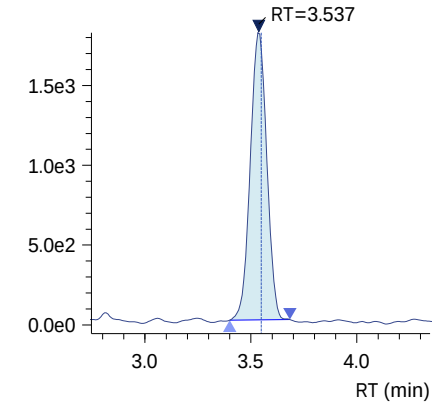
Sample ID: E2400034-008
Date Acquired: 1/22/2024 5:04:40 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240122\20240122-050.lcd
Vial: 40 | Inj. Volume: 10.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.537	9715	179930	0.3661	ng/mL	101.00 >85.00	32.86	23.7-44.02
Sodium Perchlorate-18O4 _IS	Auto	3.532	1799 30	179930	1.0000	ng/mL	----	----	

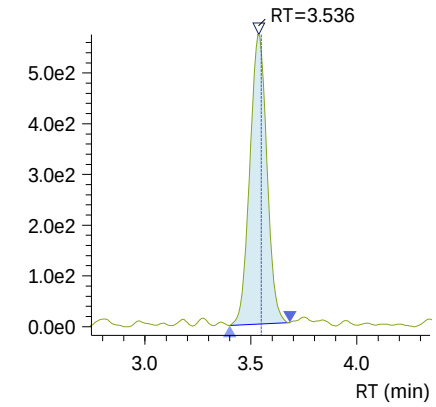
Perchlorate

Conc 0.3661
R#1 32.86 (33.86)

Q 99.00>83.00 (-) A=9715 1.83e3



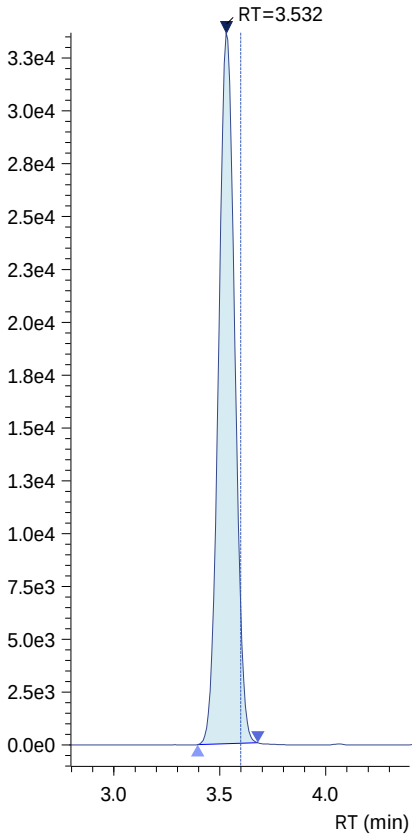
R1 101.00>85.00 (-) A=3192 5.76e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=179930 3.37e4



Insight Report

Printed at 1/23/2024 2:22:49 PM

CCV

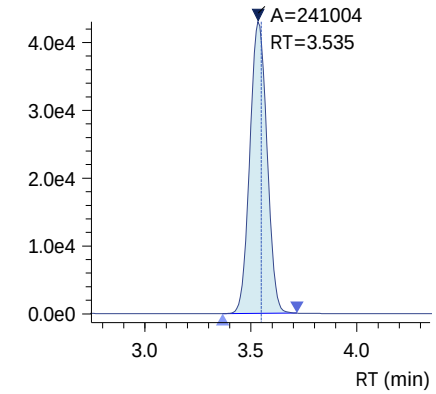
Sample ID: CCV
Date Acquired: 1/22/2024 5:10:14 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240122\20240122-051.lcd
Vial: 7 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.535	241004	165414	9.8804	ng/mL	101.00 >85.00	33.54	23.7-44.02
Sodium Perchlorate-18O4_IS	Auto	3.531	165414	165414	1.0000	ng/mL	----	----	

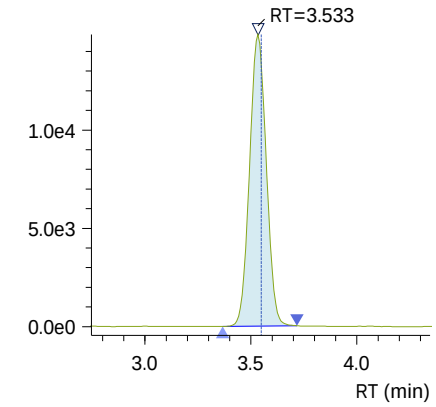
Perchlorate

Conc 9.8804
R#1 33.54 (33.86)

Q 99.00>83.00 (-) 4.31e4



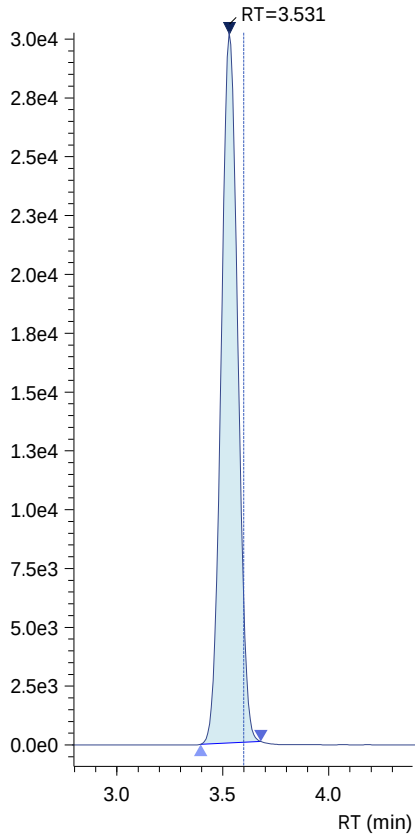
R1 101.00>85.00 (-) A=80824 1.49e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=165414 3.03e4



Insight Report

Printed at 1/23/2024 2:22:49 PM

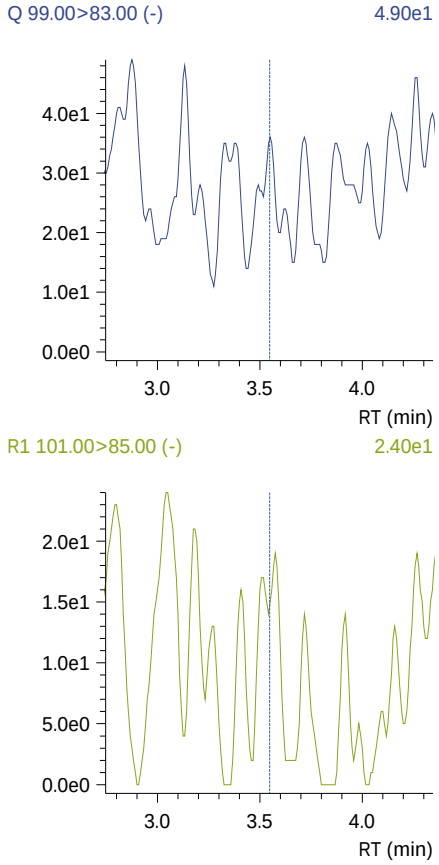
IB

Sample ID: IB
Date Acquired: 1/22/2024 5:15:47 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240122\20240122-052.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)	----	----	182295	----	ng/mL	101.00 >85.00	0.00	23.7-44.02
Sodium Perchlorate-18O4_IS	Auto	3.531	182295	182295	1.0000	ng/mL	----	----	

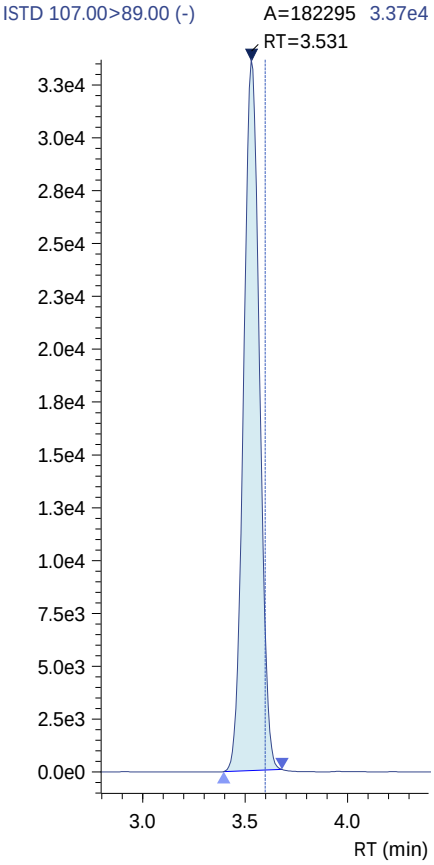
Perchlorate

Conc ----
R#1 0.00 (33.86)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/23/2024 2:22:49 PM

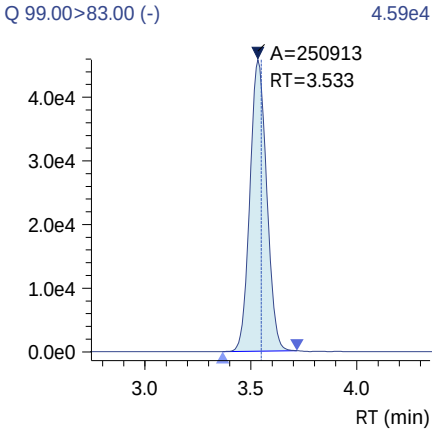
CCV

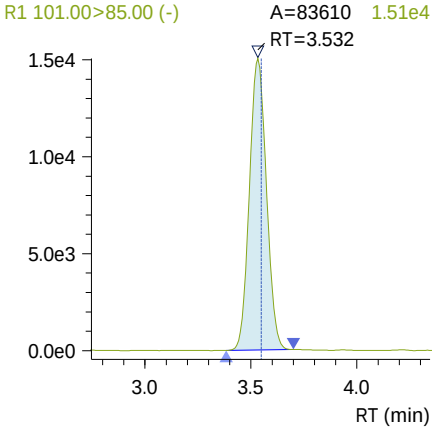
Sample ID: CCV
Date Acquired: 1/22/2024 6:16:35 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240122\20240122-063.lcd
Vial: 7 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.533	250913	168555	10.0949	ng/mL	101.00 >85.00	33.32	23.7-44.02
Sodium Perchlorate-18O4_IS	Auto	3.531	168555	168555	1.0000	ng/mL	----	----	

Perchlorate

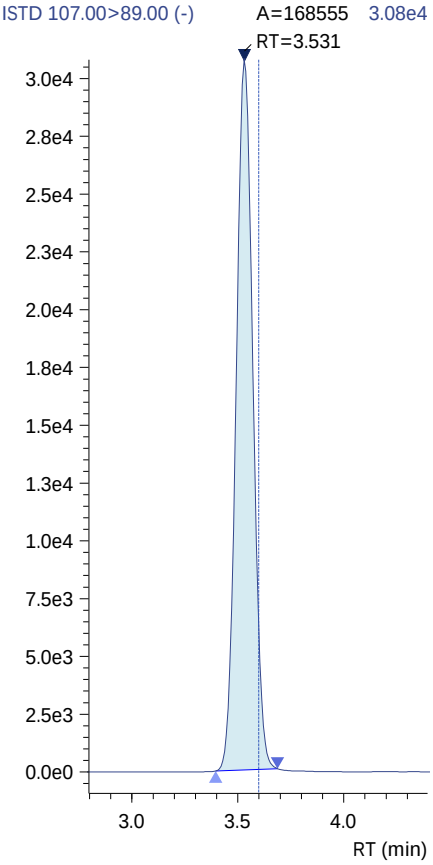
Conc 10.0949
R#1 33.32 (33.86)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/24/2024 9:35:30 AM

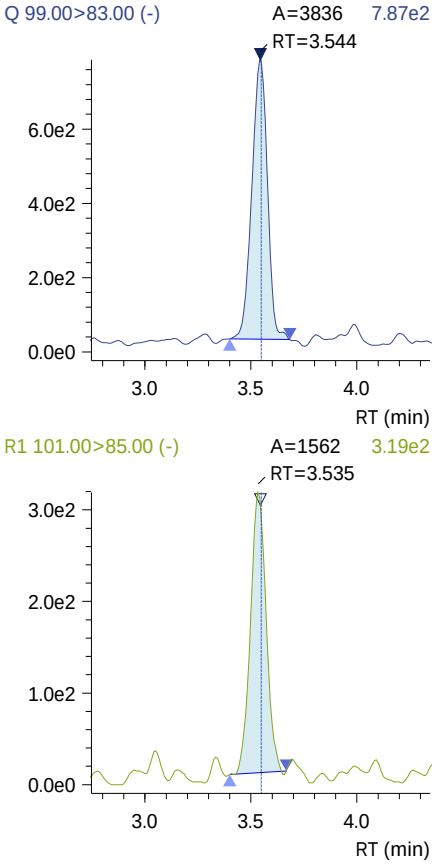
E2400034-002DMS

Sample ID: EQ2400030-08
Date Acquired: 1/22/2024 3:52:34 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240122\20240122-042.lcd
Vial: 32 | 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	3.544	3836	219864	0.1183	ng/mL	101.00 >85.00	40.71	23.7-44.02
Sodium Perchlorate-18O4 _IS	Auto	3.534	219864	219864	1.0000	ng/mL	----	----	

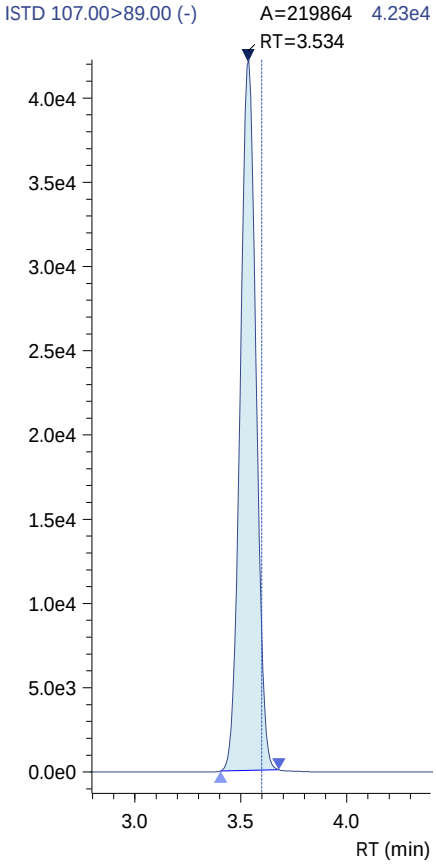
Perchlorate

Conc 0.1183
R#1 40.71 (33.86)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/24/2024 12:12:44 PM

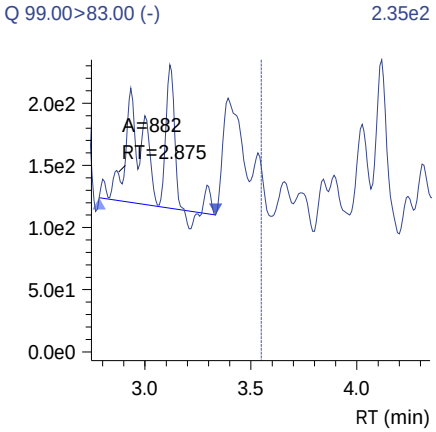
IB

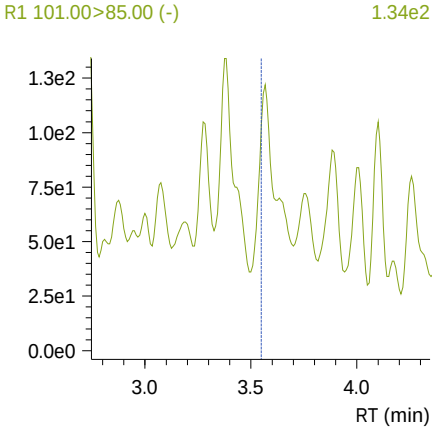
Sample ID: IB
Date Acquired: 1/23/2024 5:48:17 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240123\20240123-051.lcd
Vial: 1 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	253379	----	ng/mL	101.00 >85.00	0.00	23.37-43.4
Sodium Perchlorate -18O4_IS	Auto	3.536	253379	253379	1.0000	ng/mL	----	----	

Perchlorate

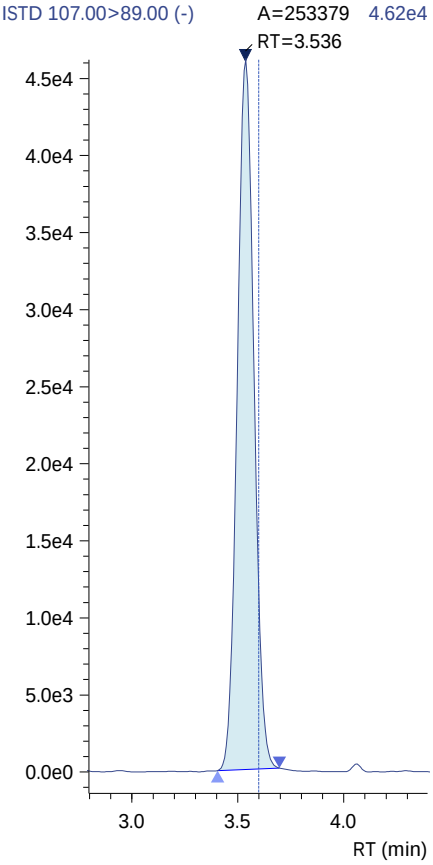
Conc ----
R#1 0.00 (33.38)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/24/2024 12:12:44 PM

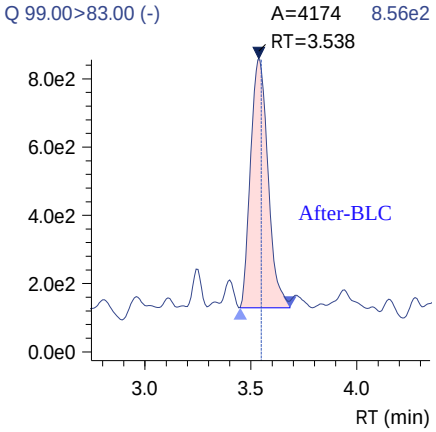
EQ2400030-02 LCS

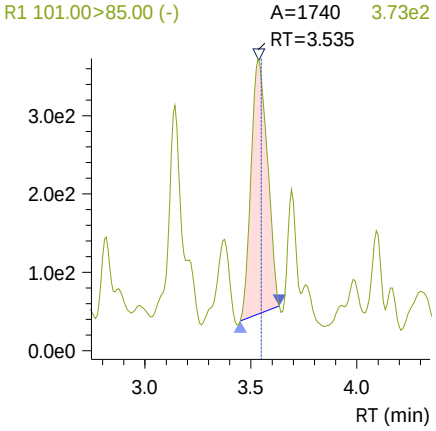
Sample ID: EQ2400030-02
Date Acquired: 1/23/2024 2:18:12 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240123\20240123-017.lcd
Vial: 30 | Inj. Volume: 10.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	M	3.538	4174	260263	0.1088	ng/mL	101.00 >85.00	41.68	23.37-43.4
Sodium Perchlorate -18O4_IS	Auto	3.537	260263	260263	1.0000	ng/mL	----	----	

Perchlorate

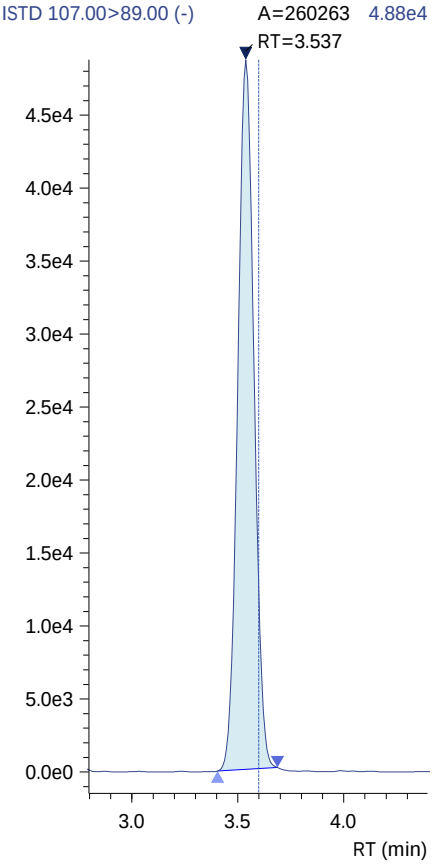
Conc 0.1088
R#1 41.68 (33.38)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

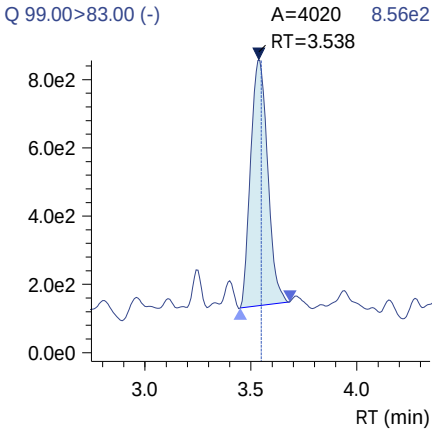
Printed at 1/24/2024 10:46:16 AM

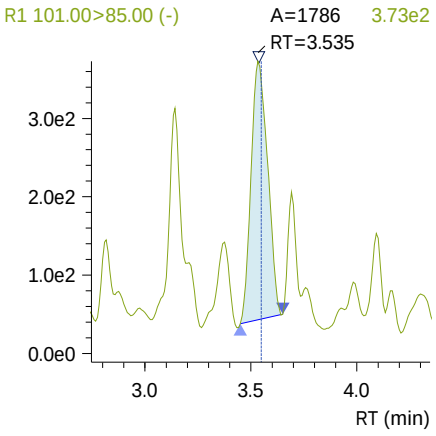
EQ2400030-02 LCS

Sample ID: EQ2400030-02
Date Acquired: 1/23/2024 2:18:12 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240123\20240123-017.lcd
Vial: 30 | Inj. Volume: 10.0000uL | Tray: 5

Perchlorate

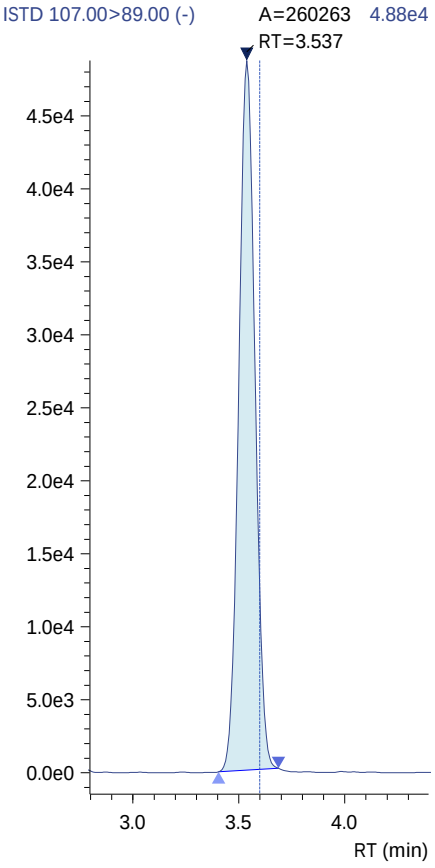
Conc 0.1047
R#1 44.42 (33.38)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/24/2024 12:12:44 PM

CCV

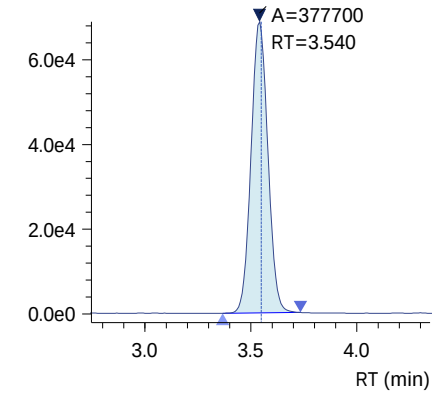
Sample ID: CCV
Date Acquired: 1/23/2024 2:23:43 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240123\20240123-018.lcd
Vial: 7 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.540	377700	253015	10.1233	ng/mL	101.00 >85.00	33.83	23.37-43.4
Sodium Perchlorate -18O4_IS	Auto	3.536	253015	253015	1.0000	ng/mL	----	----	

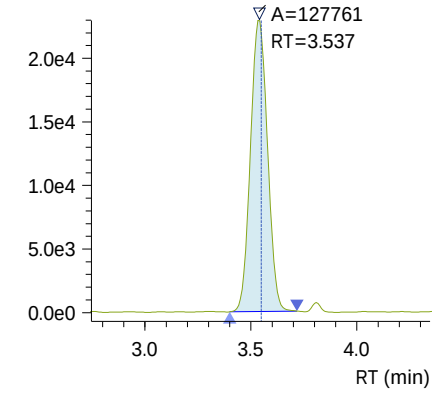
Perchlorate

Conc 10.1233
R#1 33.83 (33.38)

Q 99.00>83.00 (-) 6.90e4



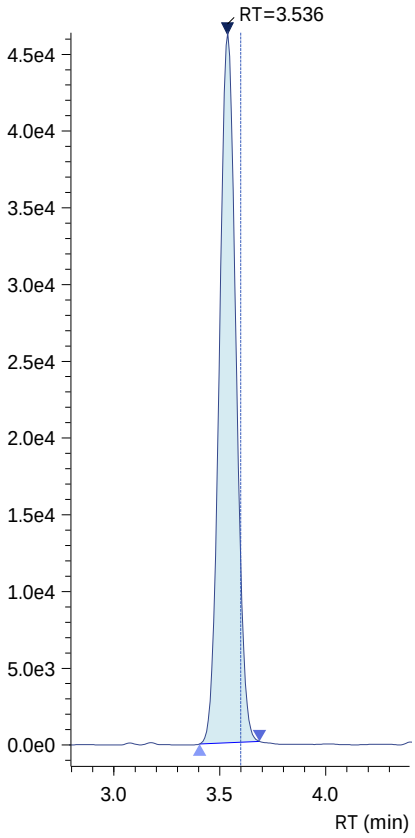
R1 101.00>85.00 (-) 2.30e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=253015 4.64e4



Insight Report

Printed at 1/24/2024 12:12:44 PM

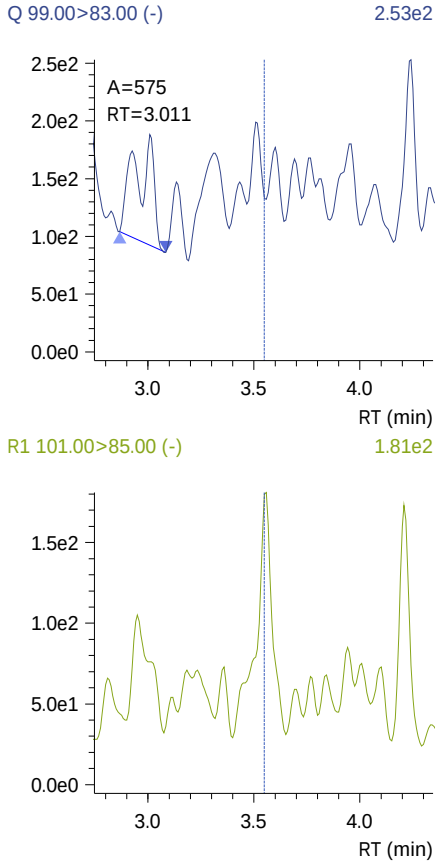
IB

Sample ID: IB
Date Acquired: 1/23/2024 2:29:12 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240123\20240123-019.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)	----	----	261034	----	ng/mL	101.00 >85.00	0.00	23.37-43.4
Sodium Perchlorate-18O4_IS	Auto	3.537	261034	261034	1.0000	ng/mL	----	----	

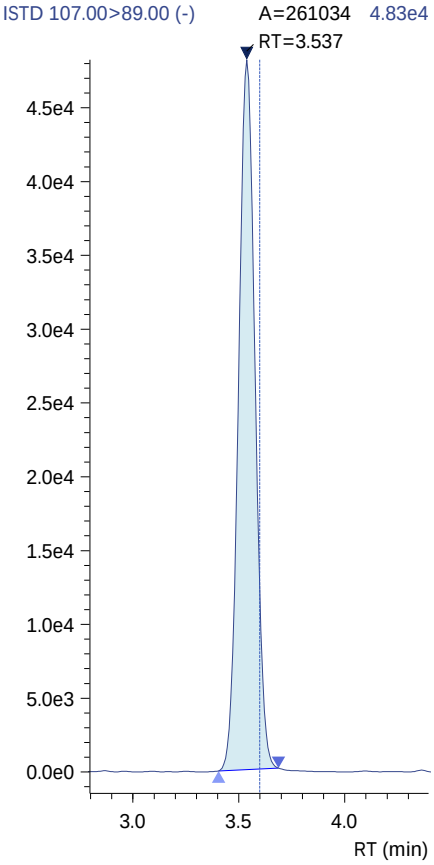
Perchlorate

Conc ----
R#1 0.00 (33.38)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/24/2024 12:12:44 PM

CCV

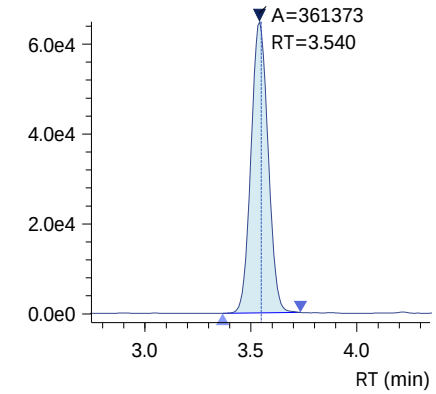
Sample ID: CCV
Date Acquired: 1/23/2024 5:42:47 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240123\20240123-050.lcd
Vial: 7 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.540	361373	236348	10.3687	ng/mL	101.00 >85.00	33.02	23.37-43.4
Sodium Perchlorate-18O4_IS	Auto	3.537	236348	236348	1.0000	ng/mL	----	----	

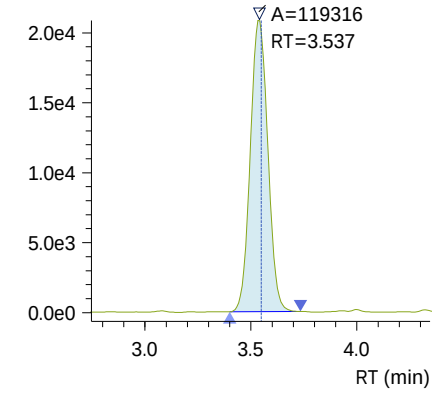
Perchlorate

Conc 10.3687
R#1 33.02 (33.38)

Q 99.00>83.00 (-) 6.50e4



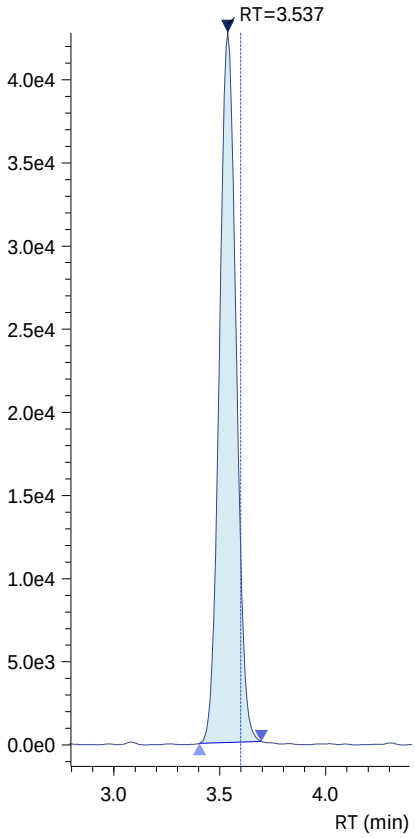
R1 101.00>85.00 (-) 2.09e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=236348 4.28e4



Insight Report

Printed at 1/23/2024 2:22:49 PM

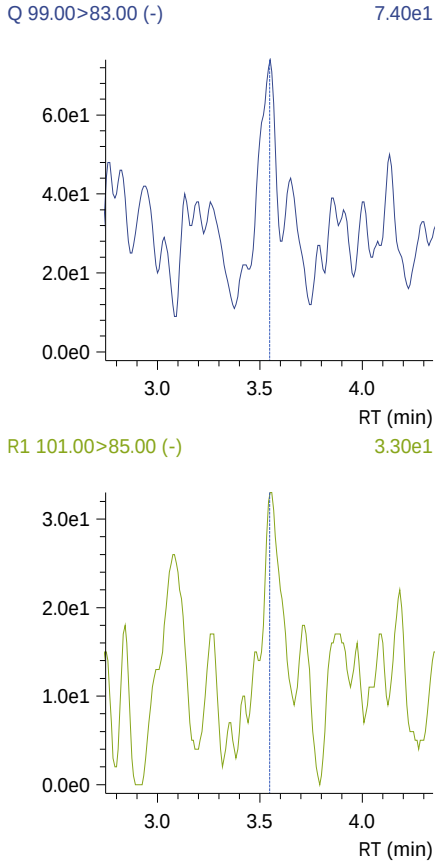
MB

Sample ID: EQ2400030-01
Date Acquired: 1/22/2024 3:02:39 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240122\20240122-033.lcd
Vial: 25 | 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)	----	----	181694	----	ng/mL	101.00 >85.00	0.00	23.7-44.02
Sodium Perchlorate-18O4_IS	Auto	3.531	181694	181694	1.0000	ng/mL	----	----	

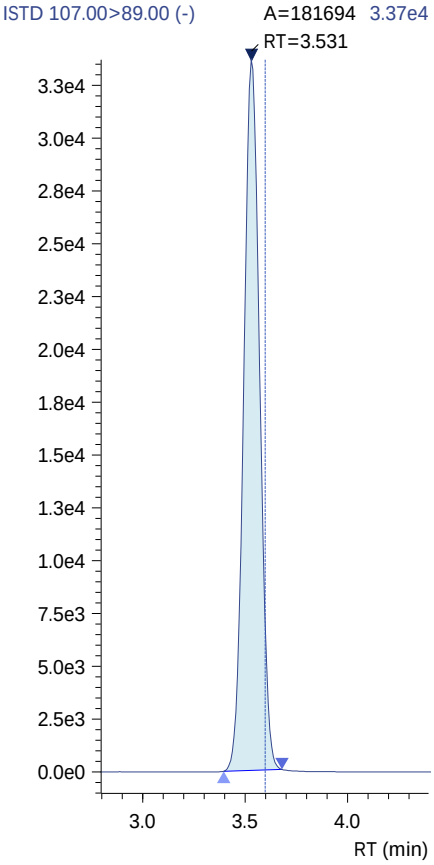
Perchlorate

Conc ----
R#1 0.00 (33.86)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/23/2024 2:22:49 PM

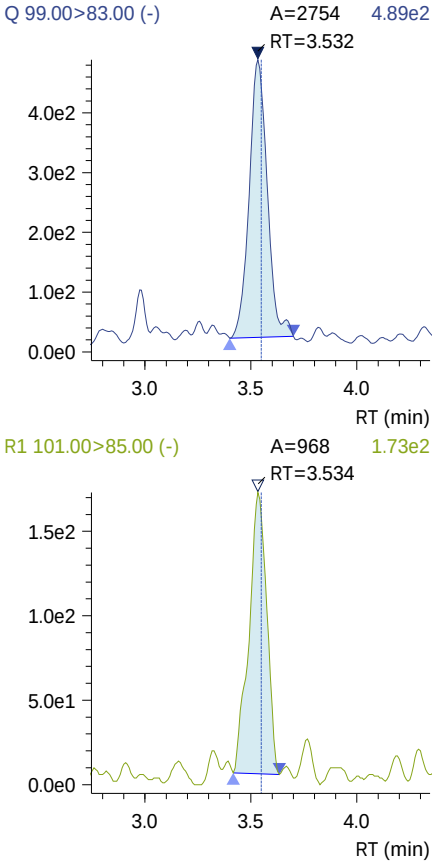
DLCS

Sample ID: EQ2400030-03
Date Acquired: 1/22/2024 3:13:46 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240122\20240122-035.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	3.532	2754	179239	0.1042	ng/mL	101.00 >85.00	35.14	23.7-44.02
Sodium Perchlorate-18O4 _IS	Auto	3.533	1792 39	179239	1.0000	ng/mL	----	----	

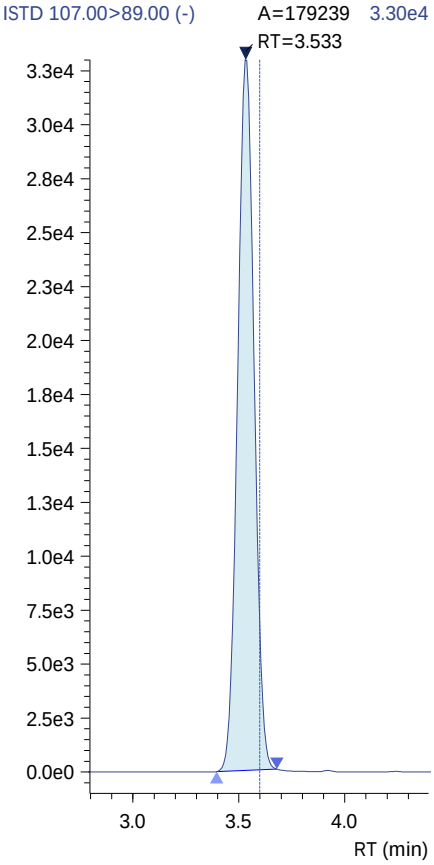
Perchlorate

Conc 0.1042
R#1 35.14 (33.86)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/24/2024 12:12:44 PM

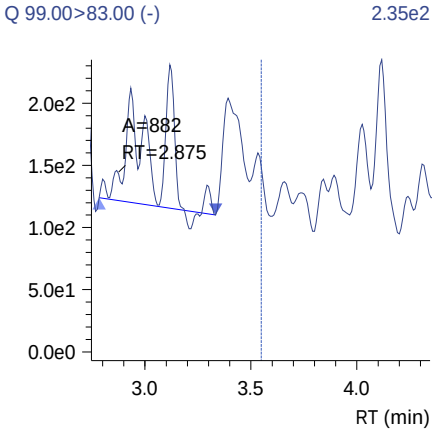
IB

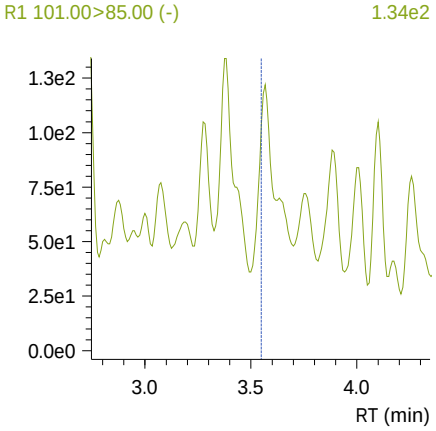
Sample ID: IB
Date Acquired: 1/23/2024 5:48:17 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240123\20240123-051.lcd
Vial: 1 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	253379	----	ng/mL	101.00 >85.00	0.00	23.37-43.4
Sodium Perchlorate-18O4_IS	Auto	3.536	253379	253379	1.0000	ng/mL	----	----	

Perchlorate

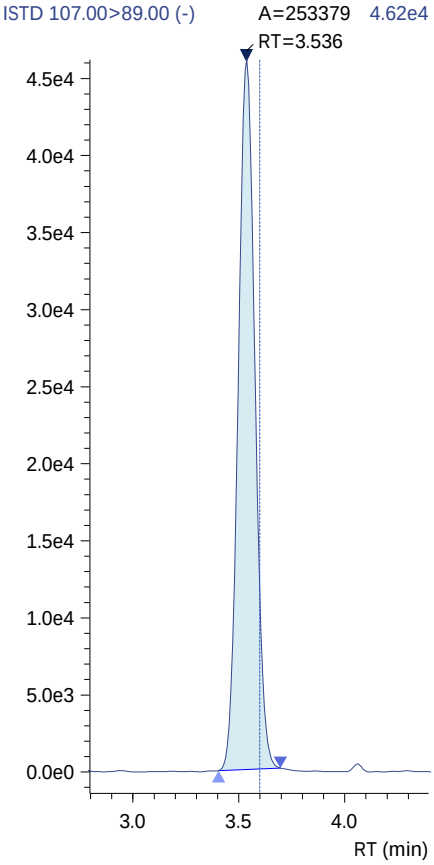
Conc ----
R#1 0.00 (33.38)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/24/2024 12:12:44 PM

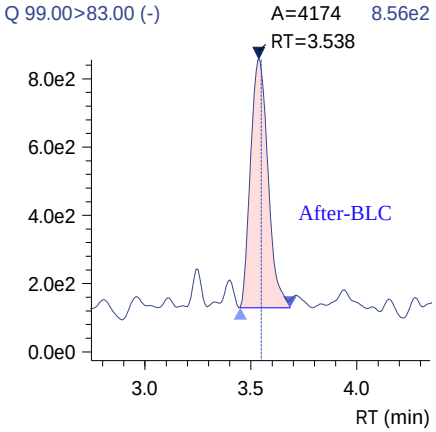
EQ2400030-02 LCS

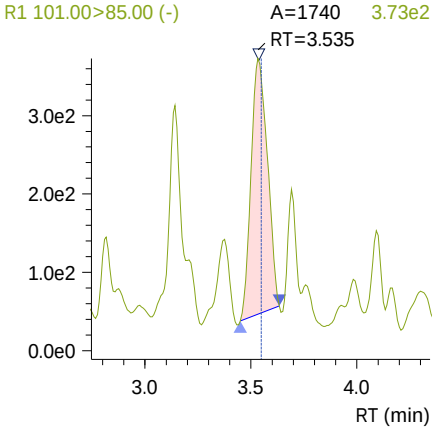
Sample ID: EQ2400030-02
Date Acquired: 1/23/2024 2:18:12 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240123\20240123-017.lcd
Vial: 30 | Inj. Volume: 10.0000uL | Tray: 5

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	M	3.538	4174	260263	0.1088	ng/mL	101.00 >85.00	41.68	23.37-43.4
Sodium Perchlorate -18O4_IS	Auto	3.537	260263	260263	1.0000	ng/mL	----	----	

Perchlorate

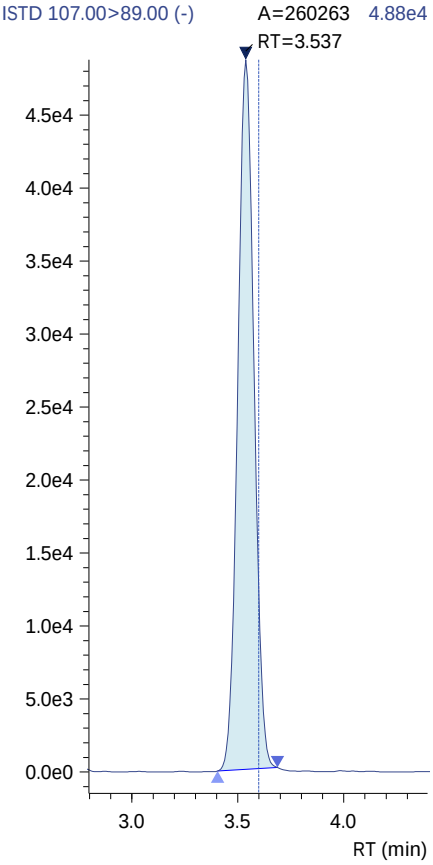
Conc 0.1088
R#1 41.68 (33.38)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

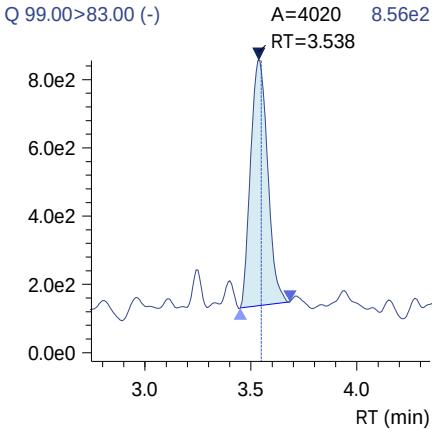
Printed at 1/24/2024 10:46:16 AM

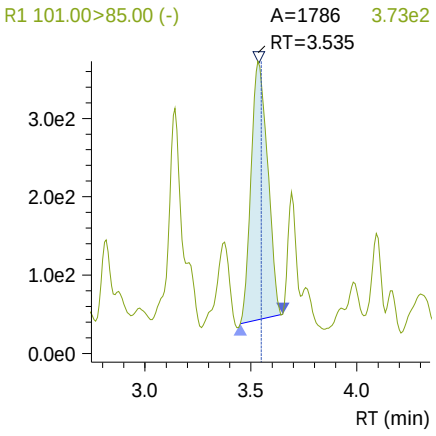
EQ2400030-02 LCS

Sample ID: EQ2400030-02
Date Acquired: 1/23/2024 2:18:12 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240123\20240123-017.lcd
Vial: 30 | Inj. Volume: 10.0000uL | Tray: 5

Perchlorate

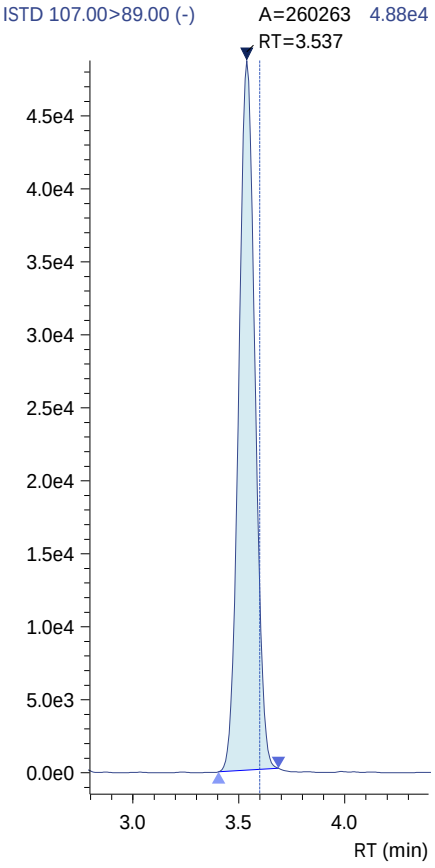
Conc 0.1047
R#1 44.42 (33.38)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/24/2024 12:12:44 PM

CCV

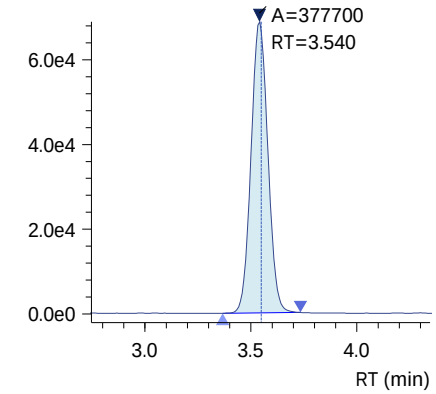
Sample ID: CCV
Date Acquired: 1/23/2024 2:23:43 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240123\20240123-018.lcd
Vial: 7 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.540	377700	253015	10.1 233	ng/mL	101.00 >85.00	33.83	23.37-43.4
Sodium Perchlorate -18O4_IS	Auto	3.536	253015	253015	1.0000	ng/mL	----	----	

Perchlorate

Conc 10.1233
R#1 33.83 (33.38)

Q 99.00>83.00 (-) 6.90e4



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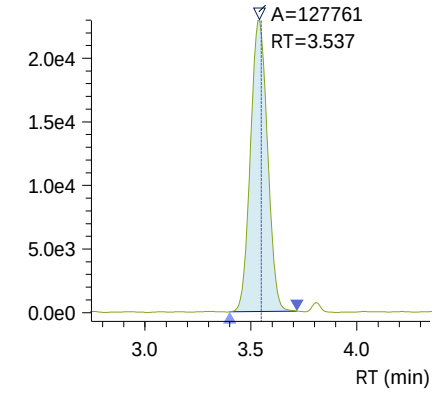
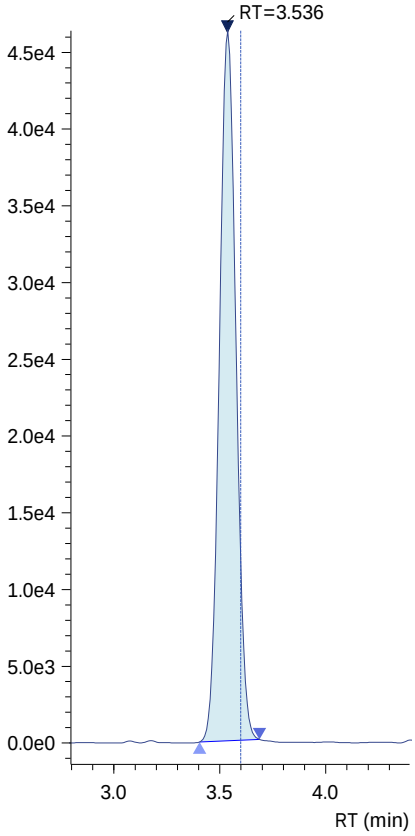


Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=253015 4.64e4



Insight Report

Printed at 1/24/2024 12:12:44 PM

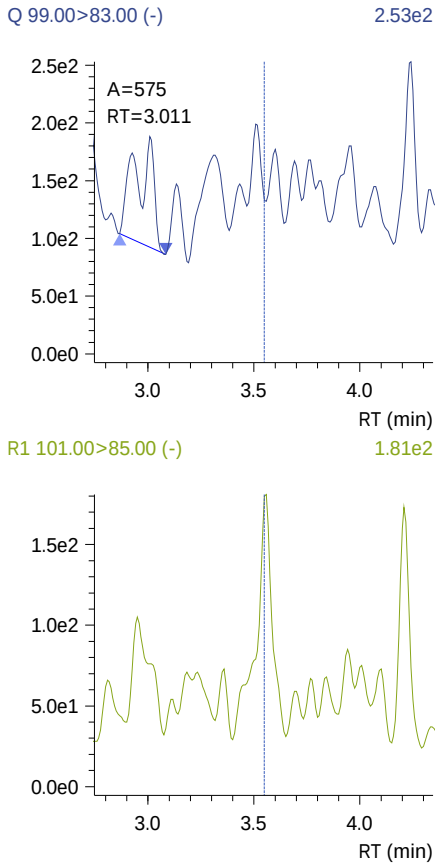
IB

Sample ID: IB
Date Acquired: 1/23/2024 2:29:12 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240123\20240123-019.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)	----	----	261034	----	ng/mL	101.00 >85.00	0.00	23.37-43.4
Sodium Perchlorate-18O4_IS	Auto	3.537	261034	261034	1.0000	ng/mL	----	----	

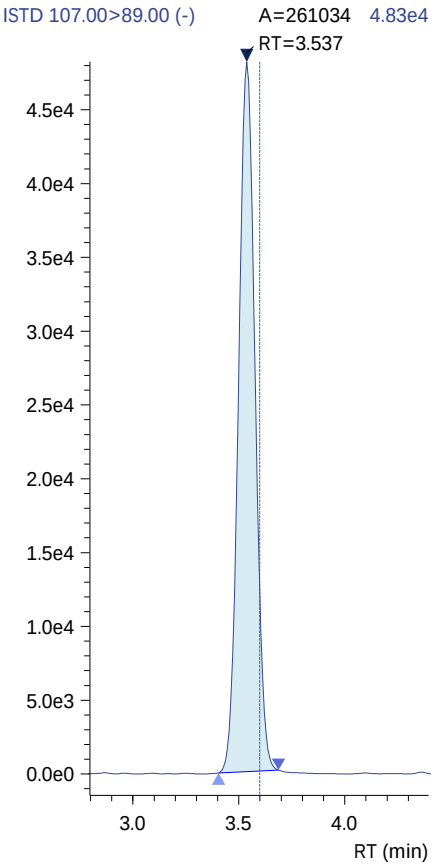
Perchlorate

Conc ----
R#1 0.00 (33.38)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 1/24/2024 12:12:44 PM

CCV

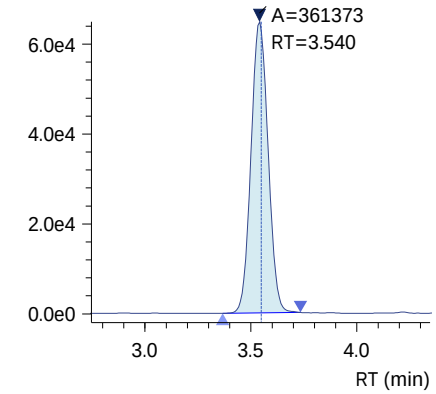
Sample ID: CCV
Date Acquired: 1/23/2024 5:42:47 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20240123\20240123-050.lcd
Vial: 7 | Inj. Volume: 10.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.540	361373	236348	10.3687	ng/mL	101.00 >85.00	33.02	23.37-43.4
Sodium Perchlorate -18O4_IS	Auto	3.537	236348	236348	1.0000	ng/mL	----	----	

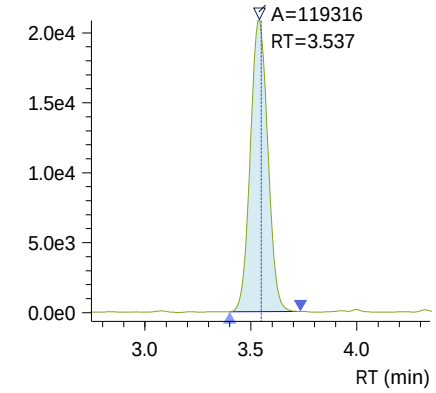
Perchlorate

Conc 10.3687
R#1 33.02 (33.38)

Q 99.00>83.00 (-) 6.50e4



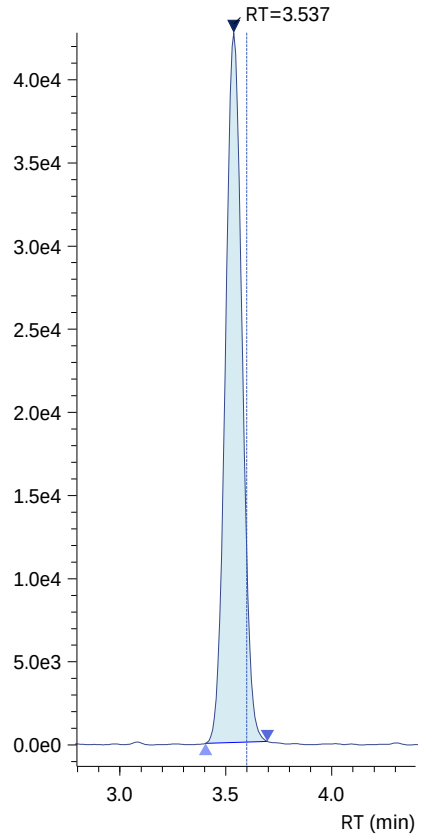
R1 101.00>85.00 (-) 2.09e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=236348 4.28e4



HS24010611 Eurofin Lab J157797-1 Std_Tal_L4 Rev(1) Final Report

ALS WO# HS24010611

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: James Guin
ALS Group USA, Corp
10450 Stancliff Rd.
Suite 210
Houston TX 77099

Generated 02/07/2024 Revision 1

JOB DESCRIPTION

HS24010611

JOB NUMBER

410-157797-1

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
02/07/2024
Revision 1

Authorized for release by
Bu Meh, Project Manager
bu.meh@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.

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

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Definitions/Glossary

Client: ALS Group USA, Corp
Job ID: 410-157797-1
Project/Site: HS24010611

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
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
J1	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
M	Manual integrated compound.
Q	One or more quality control criteria failed.
U	Undetected at the Limit of Detection.

Glossary

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

Job Narrative
410-157797-1

REVISION

The report being provided is a revision of the original report sent on 2/2/2024. The report (revision 1) is being revised due to removal of case narrative comment.

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 1/18/2024 1:55 PM and 1/25/2024 9:45 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 1.8°C and 2.4°C

GC VOA
Method RSK_175_CO2_D5: The software does not display the % Drift data to the whole number as is listed in the method (i.e. limit of 15 %). When the 15.2% drift is evaluated to the whole number, the continuing calibration verification (CCV) passes the method criteria for Carbon dioxide.

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: HS24010611

Job ID: 410-157797-1

Client Sample ID: 16EW02-240111 — Lab Sample ID: 410-157797-2

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	230000	M Q J1 cn	12000		5600	ug/L	1		RSK-175	Total/NA

Client Sample ID: 16IW20-240111 — Lab Sample ID: 410-157797-3

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	240000	M Q cn	12000		5600	ug/L	1		RSK-175	Total/NA

Client Sample ID: 16IW10-240111 — Lab Sample ID: 410-158493-1

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	210000	H M cn	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: HS24010611

Job ID: 410-157797-1

Client Sample ID: 16EW02-240111
Lab Sample ID: 410-157797-2

Date Collected: 01/11/24 08:05
Matrix: Water
Date Received: 01/18/24 13:55

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Carbon dioxide	230000	M Q J1 cn	12000		5600	ug/L		01/22/24 10:44	1

Client Sample ID: 16IW20-240111
Lab Sample ID: 410-157797-3

Date Collected: 01/11/24 09:05
Matrix: Water
Date Received: 01/18/24 13:55

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Carbon dioxide	240000	M Q cn	12000		5600	ug/L		01/22/24 11:07	1

Client Sample ID: 16IW10-240111
Lab Sample ID: 410-158493-1

Date Collected: 01/11/24 07:05
Matrix: Water
Date Received: 01/25/24 09:45

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Carbon dioxide	210000	H M cn	12000		5600	ug/L		01/31/24 13:20	1

Default Detection Limits

Client: ALS Group USA, Corp
Project/Site: HS24010611

Job ID: 410-157797-1

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: HS24010611

Job ID: 410-157797-1

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 410-465370/1-A
Matrix: Water
Analysis Batch: 465326

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 465370

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Carbon dioxide	5600	U M	12000		5600	ug/L		01/22/24 10:28	1

Lab Sample ID: LCS 410-465370/2-A
Matrix: Water
Analysis Batch: 465326

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 465370

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Carbon dioxide	35800	37600		ug/L		105	80 - 122

Lab Sample ID: 410-157797-2 MS
Matrix: Water
Analysis Batch: 465326

Client Sample ID: 16EW02-240111
Prep Type: Total/NA
Prep Batch: 465370

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Carbon dioxide	230000	M Q J1 cn	35800	232000	M 4 cn	ug/L		-2	80 - 122

Lab Sample ID: 410-157797-2 MSD
Matrix: Water
Analysis Batch: 465326

Client Sample ID: 16EW02-240111
Prep Type: Total/NA
Prep Batch: 465370

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Carbon dioxide	230000	M Q J1 cn	35800	217000	M 4 cn	ug/L		-44	80 - 122	7	20

Lab Sample ID: MB 410-468591/1-A
Matrix: Water
Analysis Batch: 468532

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 468591

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Carbon dioxide	5600	U M	12000		5600	ug/L		01/31/24 13:04	1

Lab Sample ID: LCS 410-468591/2-A
Matrix: Water
Analysis Batch: 468532

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 468591

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Carbon dioxide	35800	37900		ug/L		106	80 - 122

Lab Sample ID: 410-158493-1 MS
Matrix: Water
Analysis Batch: 468532

Client Sample ID: 16IW10-240111
Prep Type: Total/NA
Prep Batch: 468591

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Carbon dioxide	210000	H M cn	35800	256000	H M 4	ug/L		120	80 - 122

Lab Sample ID: 410-158493-1 MSD
Matrix: Water
Analysis Batch: 468532

Client Sample ID: 16IW10-240111
Prep Type: Total/NA
Prep Batch: 468591

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Carbon dioxide	210000	H M cn	35800	257000	H M 4	ug/L		122	80 - 122	0	20

QC Association Summary

Client: ALS Group USA, Corp
Project/Site: HS24010611

Job ID: 410-157797-1

GC VOA

Analysis Batch: 465326

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-157797-2	16EW02-240111	Total/NA	Water	RSK-175	465370
410-157797-3	16IW20-240111	Total/NA	Water	RSK-175	465370
MB 410-465370/1-A	Method Blank	Total/NA	Water	RSK-175	465370
LCS 410-465370/2-A	Lab Control Sample	Total/NA	Water	RSK-175	465370
410-157797-2 MS	16EW02-240111	Total/NA	Water	RSK-175	465370
410-157797-2 MSD	16EW02-240111	Total/NA	Water	RSK-175	465370

Prep Batch: 465370

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-157797-2	16EW02-240111	Total/NA	Water	RSK-175	
410-157797-3	16IW20-240111	Total/NA	Water	RSK-175	
MB 410-465370/1-A	Method Blank	Total/NA	Water	RSK-175	
LCS 410-465370/2-A	Lab Control Sample	Total/NA	Water	RSK-175	
410-157797-2 MS	16EW02-240111	Total/NA	Water	RSK-175	
410-157797-2 MSD	16EW02-240111	Total/NA	Water	RSK-175	

Analysis Batch: 468532

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-158493-1	16IW10-240111	Total/NA	Water	RSK-175	468591
MB 410-468591/1-A	Method Blank	Total/NA	Water	RSK-175	468591
LCS 410-468591/2-A	Lab Control Sample	Total/NA	Water	RSK-175	468591
410-158493-1 MS	16IW10-240111	Total/NA	Water	RSK-175	468591
410-158493-1 MSD	16IW10-240111	Total/NA	Water	RSK-175	468591

Prep Batch: 468591

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-158493-1	16IW10-240111	Total/NA	Water	RSK-175	
MB 410-468591/1-A	Method Blank	Total/NA	Water	RSK-175	
LCS 410-468591/2-A	Lab Control Sample	Total/NA	Water	RSK-175	
410-158493-1 MS	16IW10-240111	Total/NA	Water	RSK-175	
410-158493-1 MSD	16IW10-240111	Total/NA	Water	RSK-175	

Lab Chronicle

Client: ALS Group USA, Corp
Project/Site: HS24010611

Job ID: 410-157797-1

Client Sample ID: 16EW02-240111
Date Collected: 01/11/24 08:05
Date Received: 01/18/24 13:55

Lab Sample ID: 410-157797-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	RSK-175			465370	HQR6	ELLE	01/22/24 10:24
Total/NA	Analysis	RSK-175		1	465326	LXF2	ELLE	01/22/24 10:44

Client Sample ID: 16IW20-240111
Date Collected: 01/11/24 09:05
Date Received: 01/18/24 13:55

Lab Sample ID: 410-157797-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	RSK-175			465370	HQR6	ELLE	01/22/24 10:24
Total/NA	Analysis	RSK-175		1	465326	LXF2	ELLE	01/22/24 11:07

Client Sample ID: 16IW10-240111
Date Collected: 01/11/24 07:05
Date Received: 01/25/24 09:45

Lab Sample ID: 410-158493-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	RSK-175			468591	HQR6	ELLE	01/31/24 10:07
Total/NA	Analysis	RSK-175		1	468532	LXF2	ELLE	01/31/24 13:20

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: 410-157797-1
Project/Site: HS24010611

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: HS24010611

Job ID: 410-157797-1

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: HS24010611

Job ID: 410-157797-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
410-157797-2	16EW02-240111	Water	01/11/24 08:05	01/18/24 13:55
410-157797-3	16IW20-240111	Water	01/11/24 09:05	01/18/24 13:55
410-158493-1	16IW10-240111	Water	01/11/24 07:05	01/25/24 09:45

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-157797-1

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.: 410-157797-1

SDG No.:

Instrument ID: 19506-B Analysis Batch Number: 465326

Lab Sample ID: MB 410-465370/1-A Client Sample ID:

Date Analyzed: 01/22/24 10:28 Lab File ID: 312024_1_22BB.0003.d GC Column: HP Plot ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon dioxide	2.05	Peak not integrated	LXF2	01/23/24 03:32

Lab Sample ID: 410-157797-2 Client Sample ID: 16EW02-240111

Date Analyzed: 01/22/24 10:44 Lab File ID: 312024_1_22BB.0005.d GC Column: HP Plot ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon dioxide	1.99	Baseline Smoothing	LXF2	01/23/24 03:32

Lab Sample ID: 410-157797-2 MS Client Sample ID: 16EW02-240111 MS

Date Analyzed: 01/22/24 10:51 Lab File ID: 312024_1_22BB.0006.d GC Column: HP Plot ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon dioxide	1.99	Baseline Smoothing	LXF2	01/23/24 03:32

Lab Sample ID: 410-157797-2 MSD Client Sample ID: 16EW02-240111 MSD

Date Analyzed: 01/22/24 10:59 Lab File ID: 312024_1_22BB.0007.d GC Column: HP Plot ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon dioxide	1.99	Baseline Smoothing	LXF2	01/23/24 03:32

Lab Sample ID: 410-157797-3 Client Sample ID: 16IW20-240111

Date Analyzed: 01/22/24 11:07 Lab File ID: 312024_1_22BB.0008.d GC Column: HP Plot ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon dioxide	1.99	Baseline Smoothing	LXF2	01/23/24 03:32

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-157797-1

SDG No.:

Instrument ID: 19506-B Analysis Batch Number: 468532

Lab Sample ID: MB 410-468591/1-A Client Sample ID:

Date Analyzed: 01/31/24 13:04 Lab File ID: 312024_1_31BB.0022.d GC Column: 19809 ID: 1(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon dioxide	2.07	Baseline Smoothing	LXF2	02/01/24 03:17

Lab Sample ID: 410-158493-1 Client Sample ID: 16IW10-240111

Date Analyzed: 01/31/24 13:20 Lab File ID: 312024_1_31BB.0024.d GC Column: 19809 ID: 1(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon dioxide	2.03	Assign Peak	LXF2	02/01/24 03:17

Lab Sample ID: 410-158493-1 MS Client Sample ID: 16IW10-240111 MS

Date Analyzed: 01/31/24 13:27 Lab File ID: 312024_1_31BB.0025.d GC Column: 19809 ID: 1(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon dioxide	2.02	Assign Peak	LXF2	02/01/24 03:17

Lab Sample ID: 410-158493-1 MSD Client Sample ID: 16IW10-240111 MSD

Date Analyzed: 01/31/24 13:35 Lab File ID: 312024_1_31BB.0026.d GC Column: 19809 ID: 1(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon dioxide	2.02	Assign Peak	LXF2	02/01/24 03:17

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-157797-1

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.: 410-157797-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 312024_1_22BB.0004.d

Lab ID: LCS 410-465370/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Carbon dioxide	35800	37600	105	80-122	

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-157797-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 312024_1_31BB.0023.d

Lab ID: LCS 410-468591/2-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Carbon dioxide	35800	37900	106	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.: 410-157797-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 312024_1_22BB.0006.d

Lab ID: 410-157797-2 MS Client ID: 16EW02-240111 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Carbon dioxide	35800	230000	232000	-2	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 RECOVERY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-157797-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 312024_1_31BB.0025.d

Lab ID: 410-158493-1 MS Client ID: 16IW10-240111 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Carbon dioxide	35800	210000	256000	120	80-122	H M 4

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-157797-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 312024_1_22BB.0007.d

Lab ID: 410-157797-2 MSD Client ID: 16EW02-240111 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Carbon dioxide	35800	217000	-44	7	20	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.: 410-157797-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 312024_1_31BB.0026.d

Lab ID: 410-158493-1 MSD Client ID: 16IW10-240111 MSD

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Carbon dioxide	35800	257000	122	0	20	80-122	H M 4

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM IV
GC VOA METHOD BLANK SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-157797-1

SDG No.:

Lab File ID: 312024_1_22BB.0003.d Lab Sample ID: MB 410-465370/1-A

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: 19506-B Date Analyzed: 01/22/2024 10:28

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 410-465370/2-A	312024_1_22BB.0004.d	01/22/2024 10:35
16EW02-240111	410-157797-2	312024_1_22BB.0005.d	01/22/2024 10:44
16EW02-240111 MS	410-157797-2 MS	312024_1_22BB.0006.d	01/22/2024 10:51
16EW02-240111 MSD	410-157797-2 MSD	312024_1_22BB.0007.d	01/22/2024 10:59
16IW20-240111	410-157797-3	312024_1_22BB.0008.d	01/22/2024 11:07

FORM IV
GC VOA METHOD BLANK SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-157797-1

SDG No.:

Lab File ID: 312024_1_31BB.0022.d Lab Sample ID: MB 410-468591/1-A

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: 19506-B Date Analyzed: 01/31/2024 13:04

GC Column: 19809 ID: 1(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 410-468591/2-A	312024_1_31 BB.0023.d	01/31/2024 13:12
16IW10-240111	410-158493-1	312024_1_31 BB.0024.d	01/31/2024 13:20
16IW10-240111 MS	410-158493-1 MS	312024_1_31 BB.0025.d	01/31/2024 13:27
16IW10-240111 MSD	410-158493-1 MSD	312024_1_31 BB.0026.d	01/31/2024 13:35

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-157797-1

SDG No.:

Client Sample ID: 16EW02-240111 Lab Sample ID: 410-157797-2

Matrix: Water Lab File ID: 312024_1_22BB.0005.d

Analysis Method: RSK-175 Date Collected: 01/11/2024 08:05

Sample wt/vol: 5(mL) Date Analyzed: 01/22/2024 10:44

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: 6.0

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 465326 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	DL
124-38-9	Carbon dioxide	230000	M Q J1 cn	12000	5600

Report Date: 23-Jan-2024 03:33:27 Chrom Revision: 2.3 18-Jan-2024 13:39:22

Eurofins Lancaster Laboratories Environment Testing, LLC

Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20240122-104503.b\312024_1_22BB.0005.d				
Lims ID:	410-157797-A-2-A				
Client ID:	16EW02-240111				
Sample Type:	Client				
Inject. Date:	22-Jan-2024 10:44:00	ALS Bottle#:	0	Worklist Smp#:	5
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	410-0104503-005				
Operator ID:		Instrument ID:	19506-B		
Method:	\\chromfs\Lancaster\ChromData\19506-B\20240122-104503.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	23-Jan-2024 03:33:26	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:	CTX1668				
First Level Reviewer: LXF2		Date:	23-Jan-2024 03:32:42		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
1 Carbon dioxide	1.990	2.044	-0.054	765418905H	232641	Ma

QC Flag Legend

Processing Flags

H - Response Measured by Height

Review Flags

M - Manually Integrated

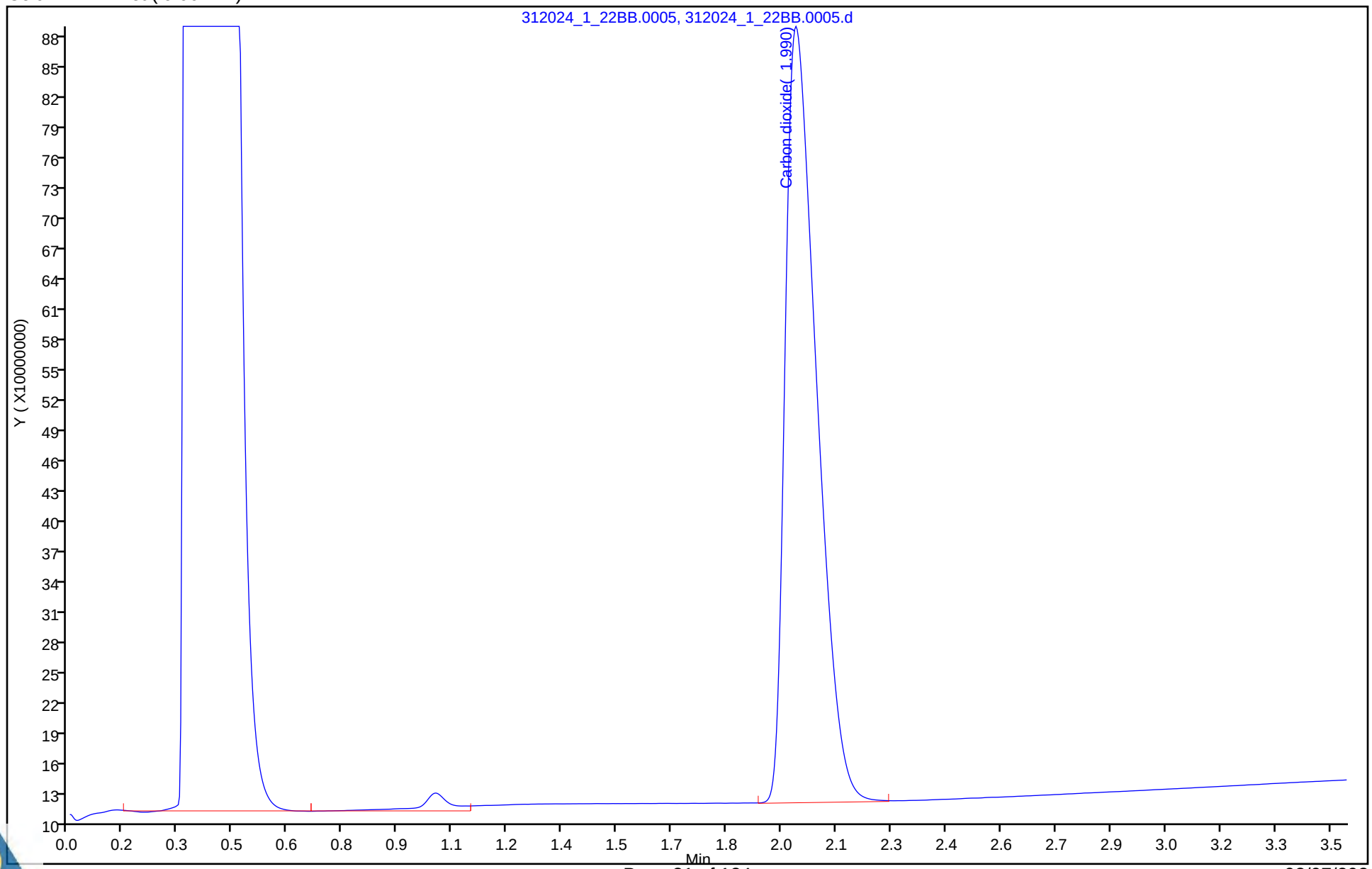
a - User Assigned ID

Report Date: 23-Jan-2024 03:33:27 Chrom Revision: 2.3 18-Jan-2024 13:39:22

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20240122-104503.b\312024_1_22BB.0005.d				
Injection Date:	22-Jan-2024 10:44:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	410-157797-A-2-A	Lab Sample ID:	410-157797-2	Worklist Smp#:	5
Client ID:	16EW02-240111				
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: 23-Jan-2024 03:33:27 Chrom Revision: 2.3 18-Jan-2024 13:39:22 Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

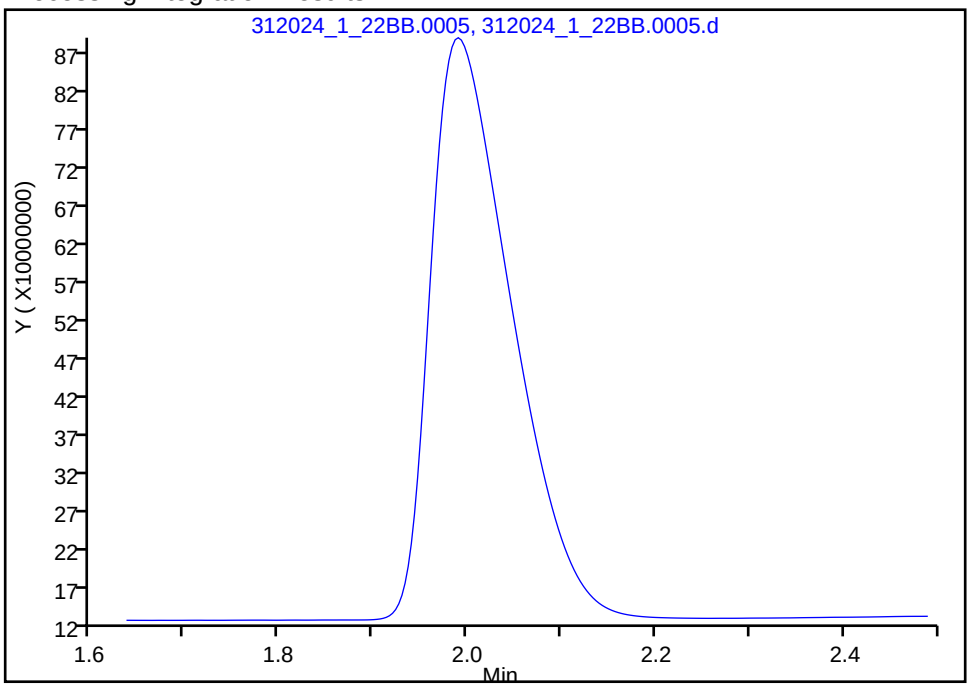
Data File:	\\chromfs\Lancaster\ChromData\19506-B\20240122-104503.b\312024_1_22BB.0005.d		
Injection Date:	22-Jan-2024 10:44:00	Instrument ID:	19506-B
Lims ID:	410-157797-A-2-A	Lab Sample ID:	410-157797-2
Client ID:	16EW02-240111		
Operator ID:		ALS Bottle#:	0 Worklist Smp#: 5
Purge Vol:	1.000 mL	Dil. 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

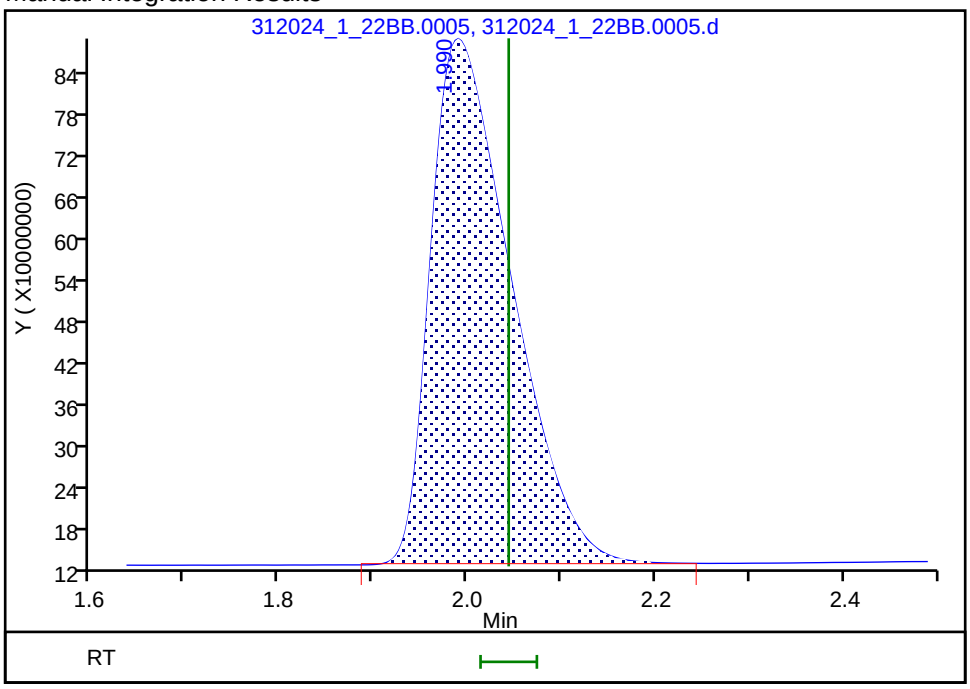
Not Detected
Expected RT: 2.04

Processing Integration Results



Manual Integration Results

RT: 1.99
Height: 765418905
Amount: 232641
Amount Units: ug/l



Reviewer: LXF2, 23-Jan-2024 03:32:38 -05:00:00 (UTC)
Audit Action: Manually Integrated
Audit Reason: Baseline Smoothing

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-157797-1

SDG No.:

Client Sample ID: 16IW20-240111 Lab Sample ID: 410-157797-3

Matrix: Water Lab File ID: 312024_1_22BB.0008.d

Analysis Method: RSK-175 Date Collected: 01/11/2024 09:05

Sample wt/vol: 5(mL) Date Analyzed: 01/22/2024 11:07

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP Plot ID: 0.53(mm)

Purge Volume: Heated Purge: (Y/N) N pH: 6.0

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 465326 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	DL
124-38-9	Carbon dioxide	240000	M Q cn	12000	5600

Report Date: 23-Jan-2024 03:33:28 Chrom Revision: 2.3 18-Jan-2024 13:39:22

Eurofins Lancaster Laboratories Environment Testing, LLC

Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20240122-104503.b\312024_1_22BB.0008.d				
Lims ID:	410-157797-A-3-A				
Client ID:	16IW20-240111				
Sample Type:	Client				
Inject. Date:	22-Jan-2024 11:07:00	ALS Bottle#:	0	Worklist Smp#:	8
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	410-0104503-008				
Operator ID:		Instrument ID:	19506-B		
Method:	\\chromfs\Lancaster\ChromData\19506-B\20240122-104503.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	23-Jan-2024 03:33:26	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:	CTX1668				
First Level Reviewer: LXF2		Date:	23-Jan-2024 03:33:00		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
1 Carbon dioxide	1.987	2.044	-0.057	773794448H	235187	Ma

QC Flag Legend

Processing Flags

H - Response Measured by Height

Review Flags

M - Manually Integrated

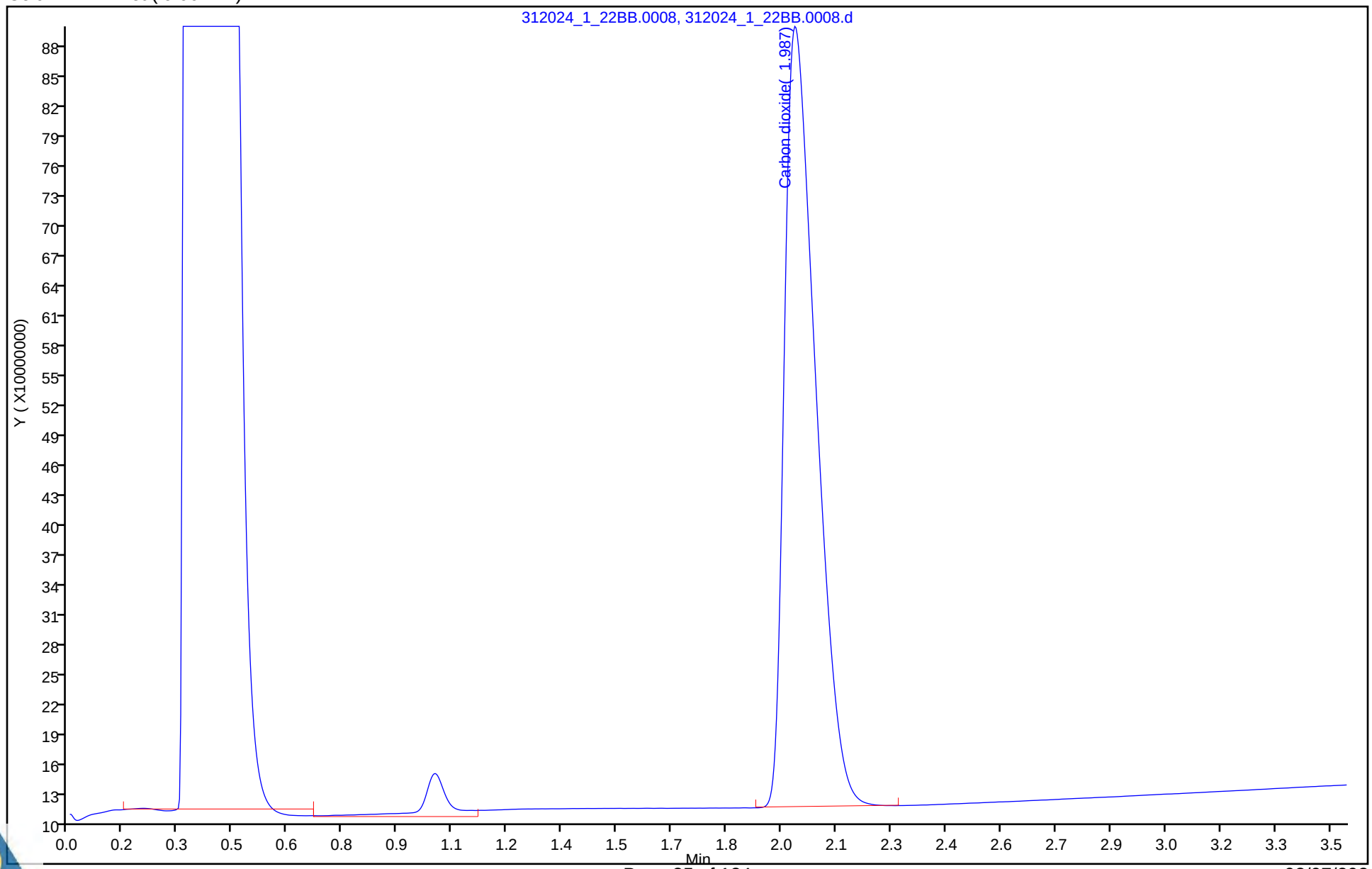
a - User Assigned ID

Report Date: 23-Jan-2024 03:33:28 Chrom Revision: 2.3 18-Jan-2024 13:39:22

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20240122-104503.b\312024_1_22BB.0008.d				
Injection Date:	22-Jan-2024 11:07:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	410-157797-A-3-A	Lab Sample ID:	410-157797-3	Worklist Smp#:	8
Client ID:	16IW20-240111				
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: 23-Jan-2024 03:33:28 Chrom Revision: 2.3 18-Jan-2024 13:39:22 Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

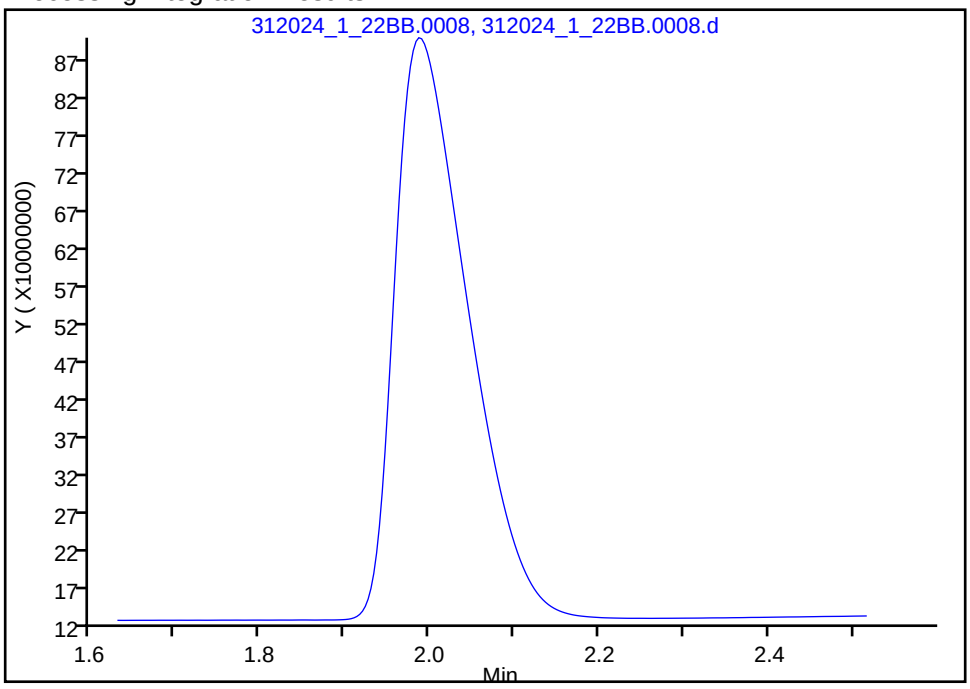
Data File:	\\chromfs\Lancaster\ChromData\19506-B\20240122-104503.b\312024_1_22BB.0008.d		
Injection Date:	22-Jan-2024 11:07:00	Instrument ID:	19506-B
Lims ID:	410-157797-A-3-A	Lab Sample ID:	410-157797-3
Client ID:	16IW20-240111		
Operator ID:		ALS Bottle#:	0 Worklist Smp#: 8
Purge Vol:	1.000 mL	Dil. Factor:	1.0000
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2
Column:	HP Plot (0.00 mm)	Detector	0FIDA

1 Carbon dioxide, CAS: 124-38-9

Signal: 1

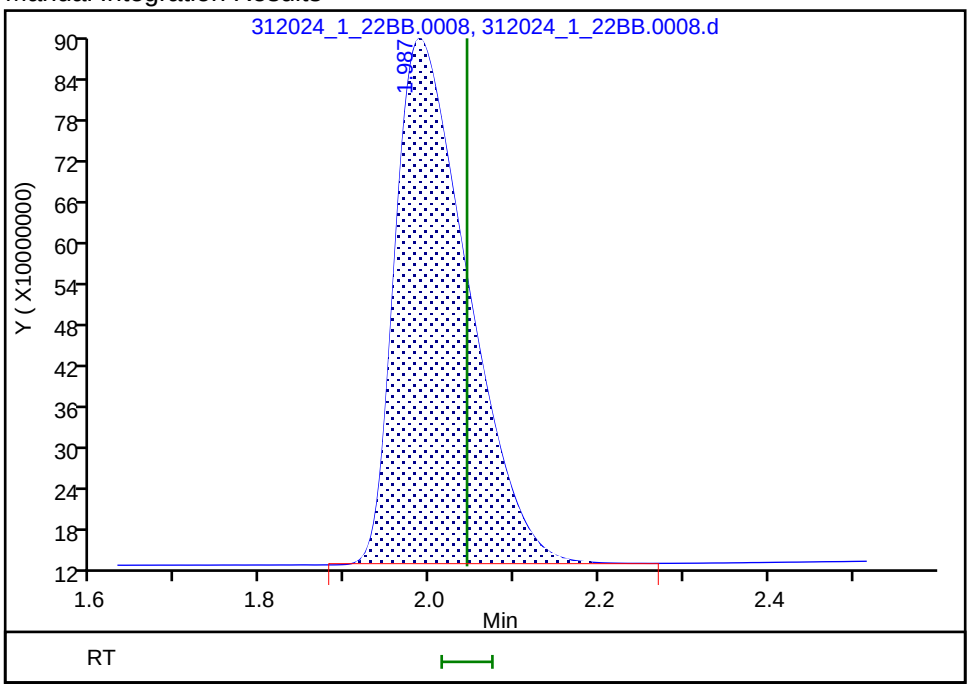
Not Detected
Expected RT: 2.04

Processing Integration Results



Manual Integration Results

RT: 1.99
Height: 773794448
Amount: 235187
Amount Units: ug/l



Reviewer: LXF2, 23-Jan-2024 03:32:59 -05:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-157797-1

SDG No.:

Client Sample ID: 16IW10-240111 Lab Sample ID: 410-158493-1

Matrix: Water Lab File ID: 312024_1_31BB.0024.d

Analysis Method: RSK-175 Date Collected: 01/11/2024 07:05

Sample wt/vol: 5(mL) Date Analyzed: 01/31/2024 13:20

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: 19809 ID: 1(mm)

Purge Volume: Heated Purge: (Y/N) N pH: 7.0

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 468532 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	DL
124-38-9	Carbon dioxide	210000	H M cn	12000	5600

Report Date: 01-Feb-2024 03:18:20 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\20240131-105219.b\312024_1_31BB.0024.d				
Lims ID:	410-158493-B-1-A RA				
Client ID:	16IW10-240111				
Sample Type:	Client				
Inject. Date:	31-Jan-2024 13:20:00	ALS Bottle#:	0	Worklist Smp#:	24
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	410-0105219-024				
Operator ID:		Instrument ID:	19506-B		
Method:	\\chromfs\Lancaster\ChromData\19506-B\20240131-105219.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	01-Feb-2024 03:18:19	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 :	ShinCarbon ST Microplacked GC (1.00 mm)		Det: 0FIDA		
Process Host:	CTX1615				

First Level Reviewer: LXF2 Date: 01-Feb-2024 03:17:07

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
1 Carbon dioxide	2.026	2.077	-0.051	702905963H	213641	a

QC Flag Legend

Processing Flags

H - Response Measured by Height

Review Flags

a - User Assigned ID

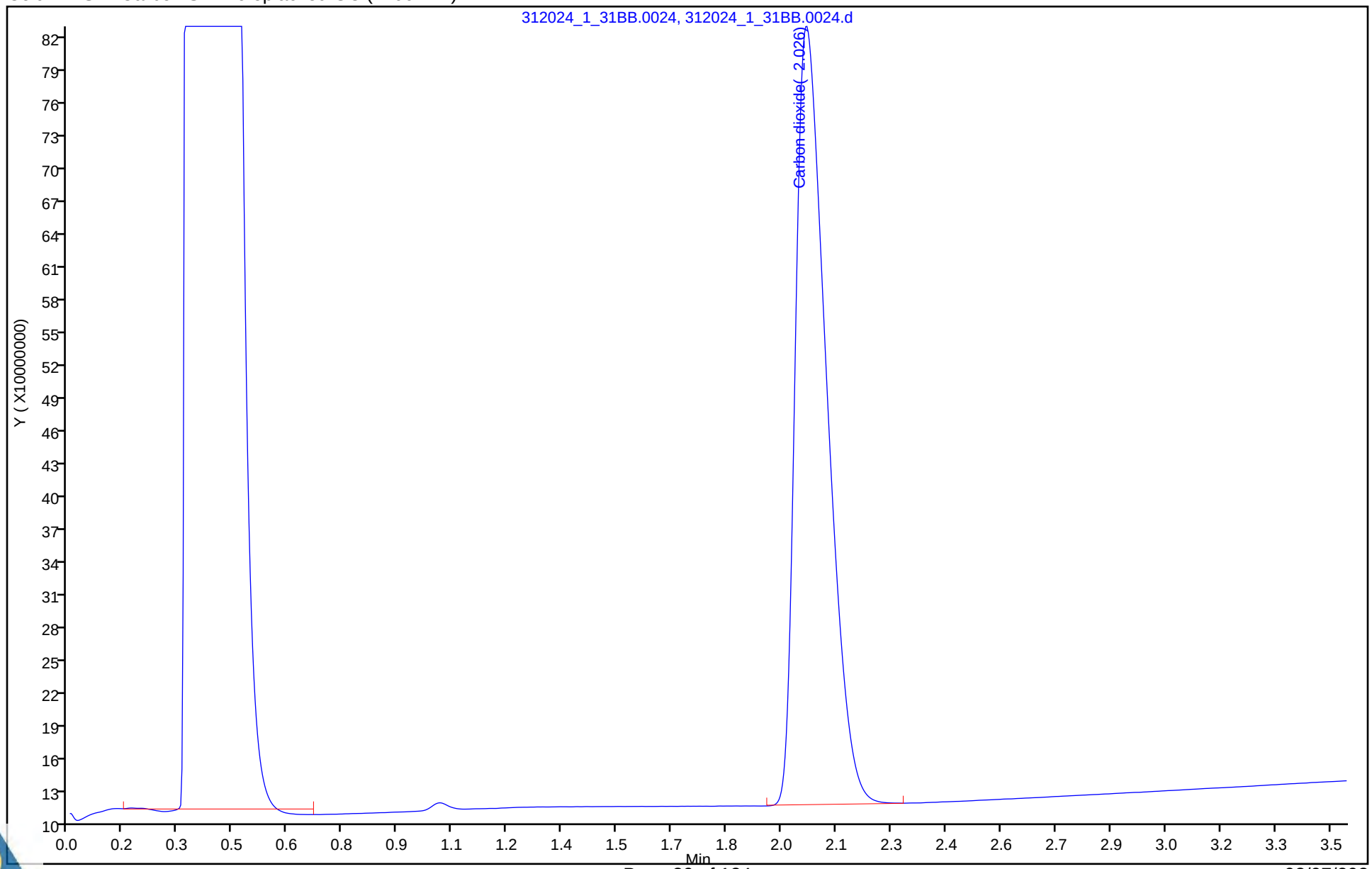
Report Date: 01-Feb-2024 03:18:20 Chrom Revision: 2.3 24-Jan-2024 12:19:54

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20240131-105219.b\312024_1_31BB.0024.d

Injection Date:	31-Jan-2024 13:20:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	410-158493-B-1-A RA	Lab Sample ID:	410-158493-1	Worklist Smp#:	24
Client ID:	16IW10-240111				
Purge Vol:	1.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2		

Column: ShinCarbon ST Microplacked GC (1.00 mm)



Report Date: 01-Feb-2024 03:18:20 Chrom Revision: 2.3 24-Jan-2024 12:19:54 Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

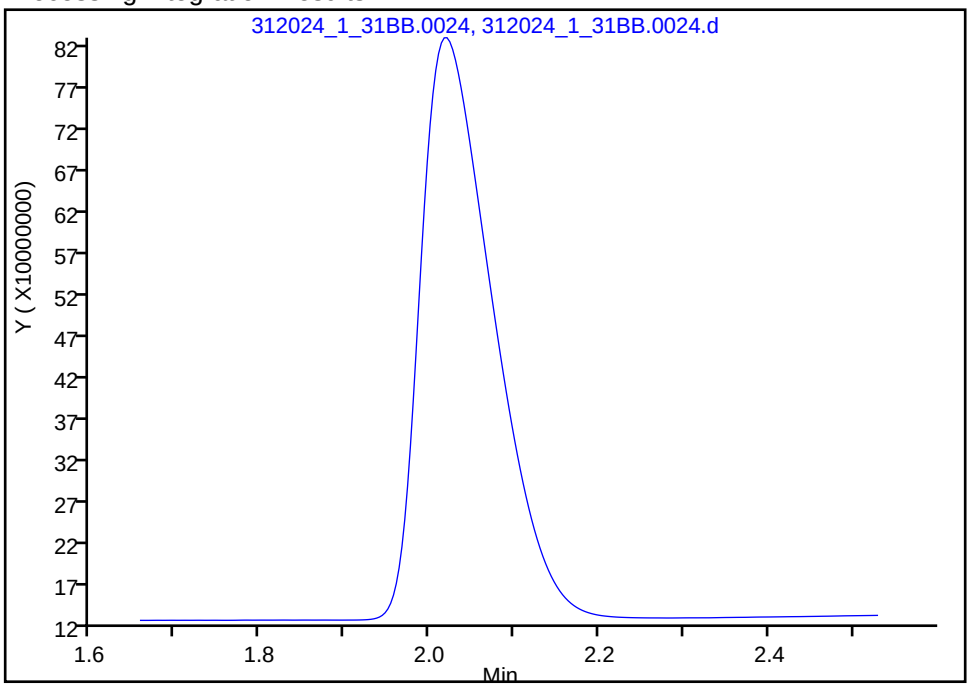
Data File:	\\chromfs\Lancaster\ChromData\19506-B\20240131-105219.b\312024_1_31BB.0024.d		
Injection Date:	31-Jan-2024 13:20:00	Instrument ID:	19506-B
Lims ID:	410-158493-B-1-A RA	Lab Sample ID:	410-158493-1
Client ID:	16IW10-240111		
Operator ID:		ALS Bottle#:	0 Worklist Smp#: 24
Purge Vol:	1.000 mL	Dil. Factor:	1.0000
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2
Column:	ShinCarbon ST Microplacked GC (1.00 mm)	Detector	0FIDA

1 Carbon dioxide, CAS: 124-38-9

Signal: 1

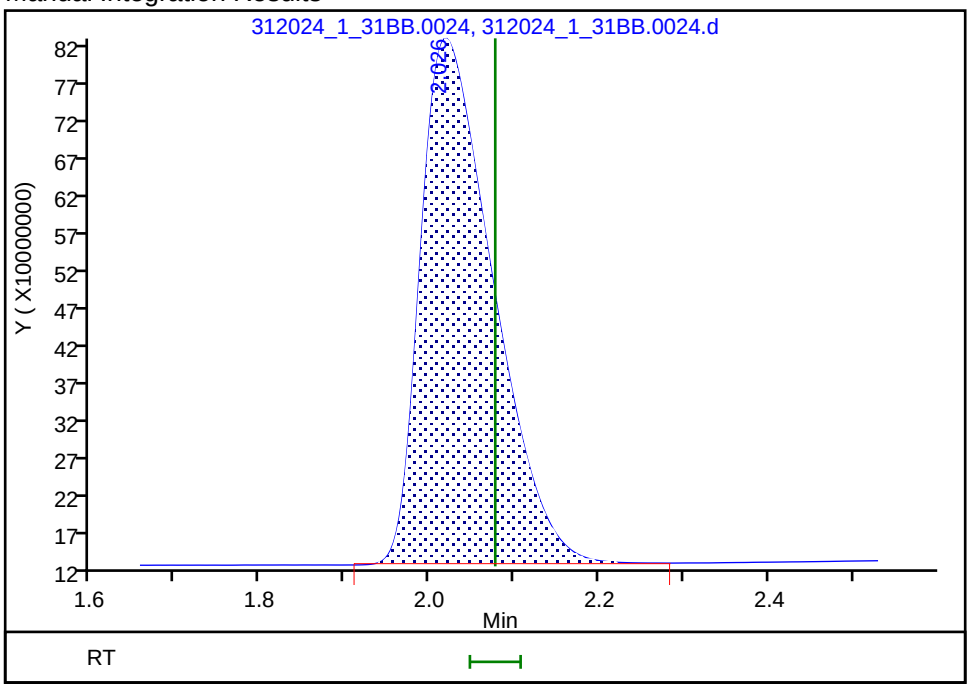
Not Detected
Expected RT: 2.08

Processing Integration Results



Manual Integration Results

RT: 2.03
Height: 702905963
Amount: 213641
Amount Units: ug/l



Reviewer: LXF2, 01-Feb-2024 03:17:44 -05:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-157797-1 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.: 410-157797-1 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.: 410-157797-1 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

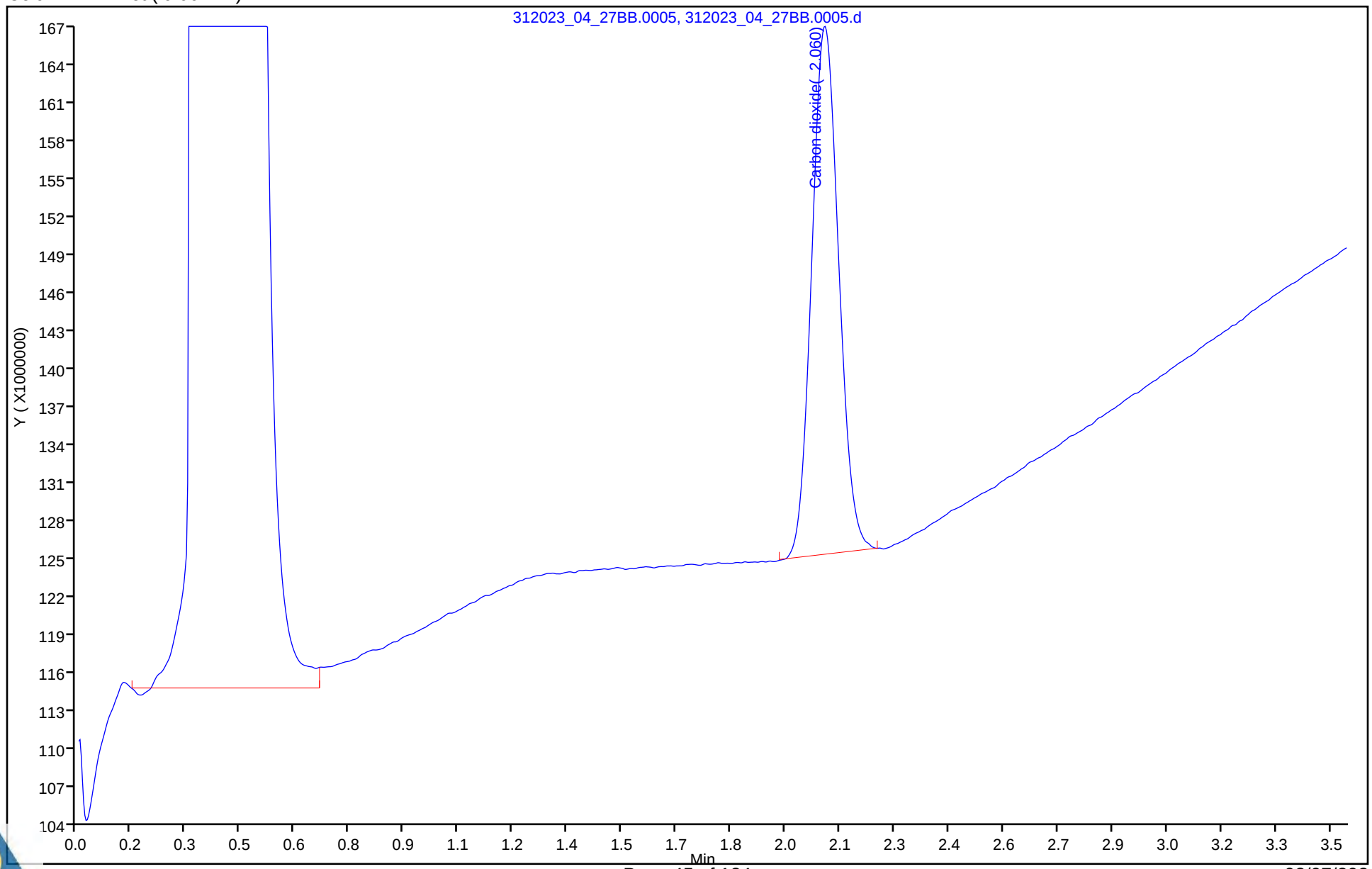
Report Date: 28-Apr-2023 07:19:05 Chrom Revision: 2.3 20-Apr-2023 08:27:48

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

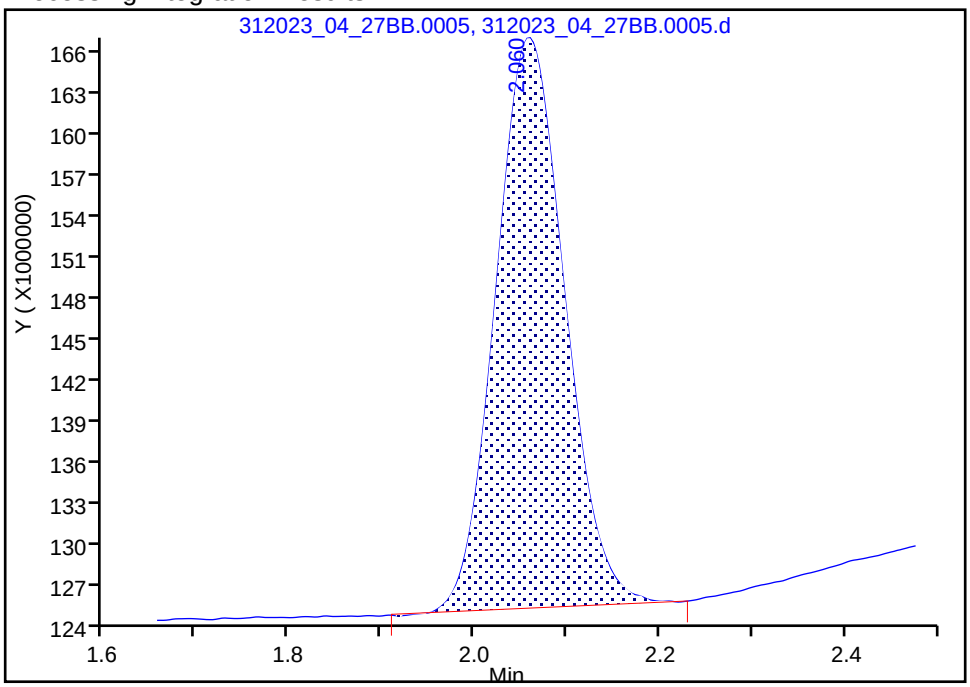
Data File:	\\chromfs\Lancaster\ChromData\19506-B\20230427-82537.b\312023_04_27BB.0005.d				
Injection Date:	27-Apr-2023 09:59:00	Instrument ID:	19506-B		
Lims ID:	ic				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	5
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2		
Column:	HP Plot (0.00 mm)	Detector	0FIDA		

1 Carbon dioxide, CAS: 124-38-9

Signal: 1

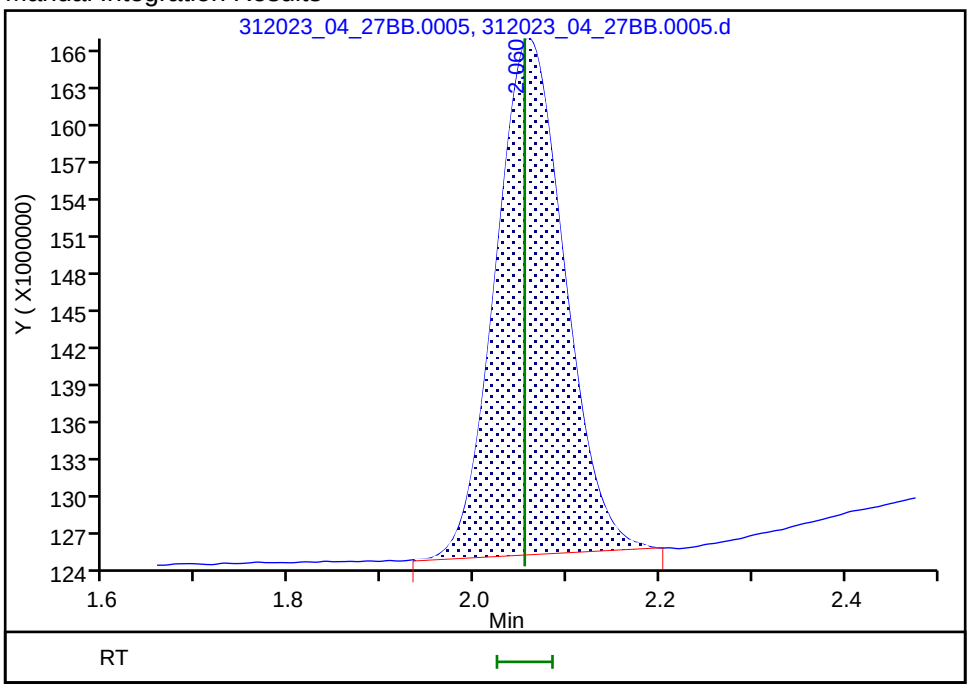
Processing Integration Results

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:

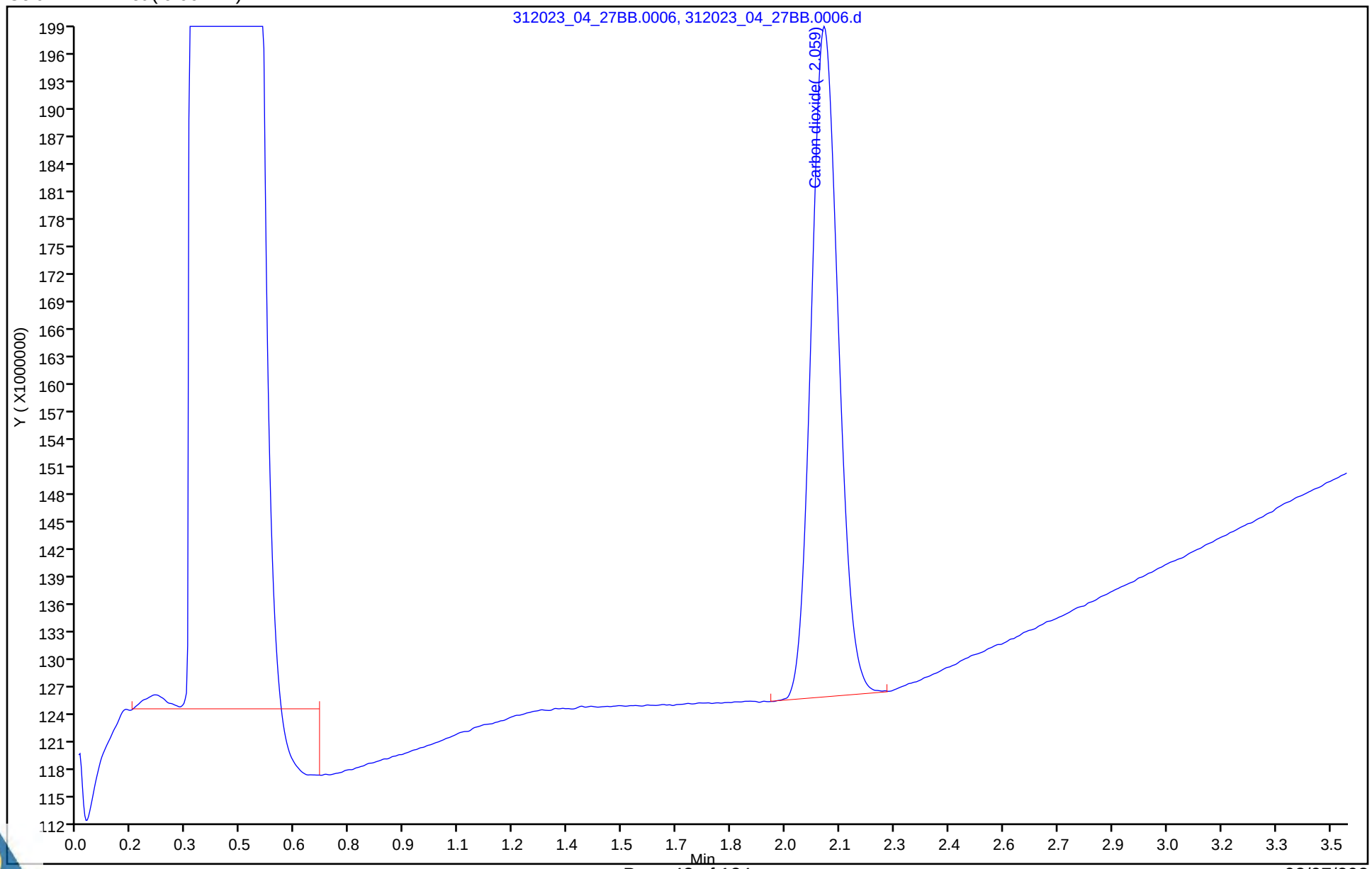
Lims ID: ic Worklist Smp#: 6

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

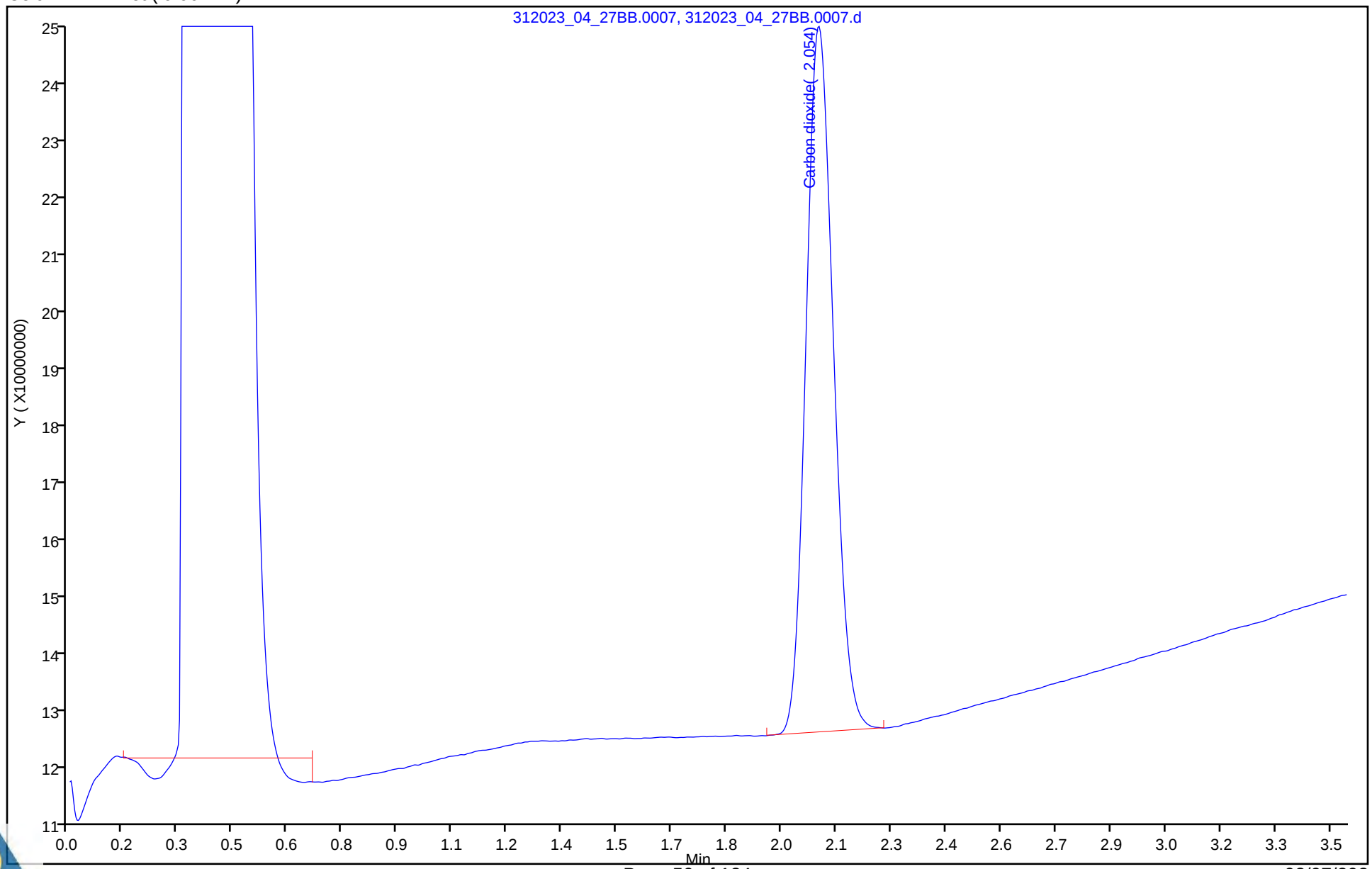
Report Date: 28-Apr-2023 07:19:08 Chrom Revision: 2.3 20-Apr-2023 08:27:48

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

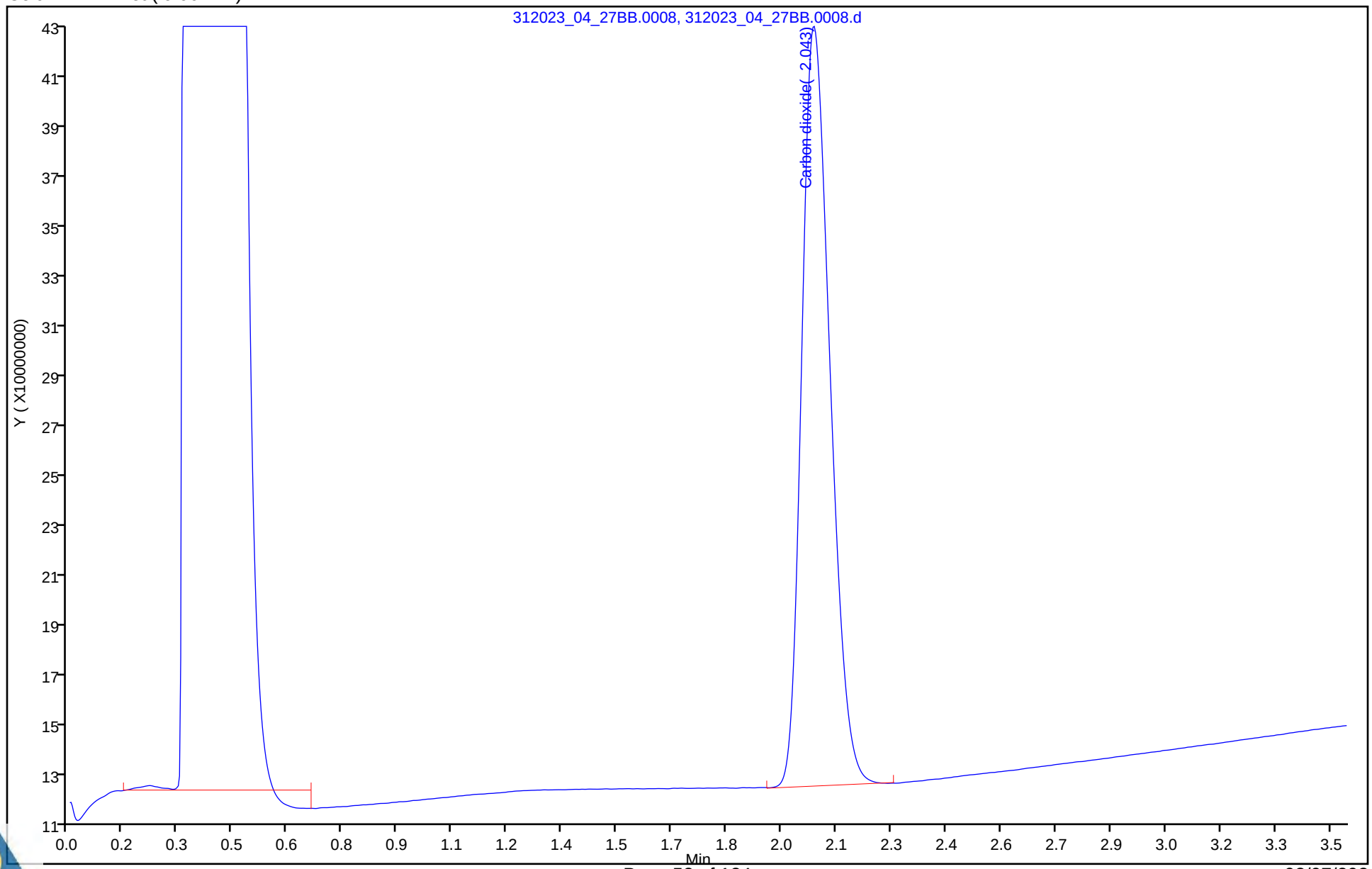
Report Date: 28-Apr-2023 07:19:09 Chrom Revision: 2.3 20-Apr-2023 08:27:48

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

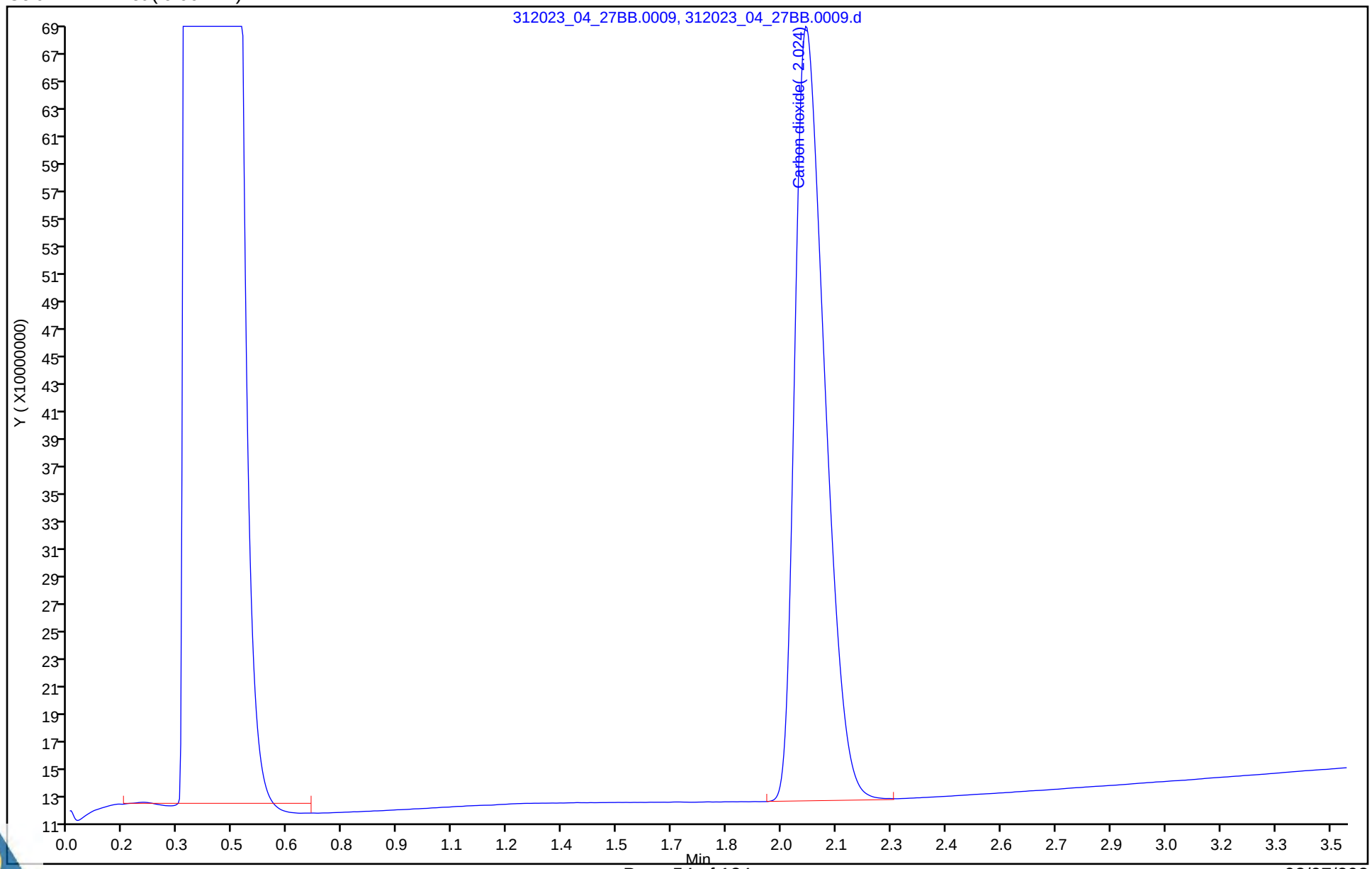
Report Date: 28-Apr-2023 07:19:10 Chrom Revision: 2.3 20-Apr-2023 08:27:48

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

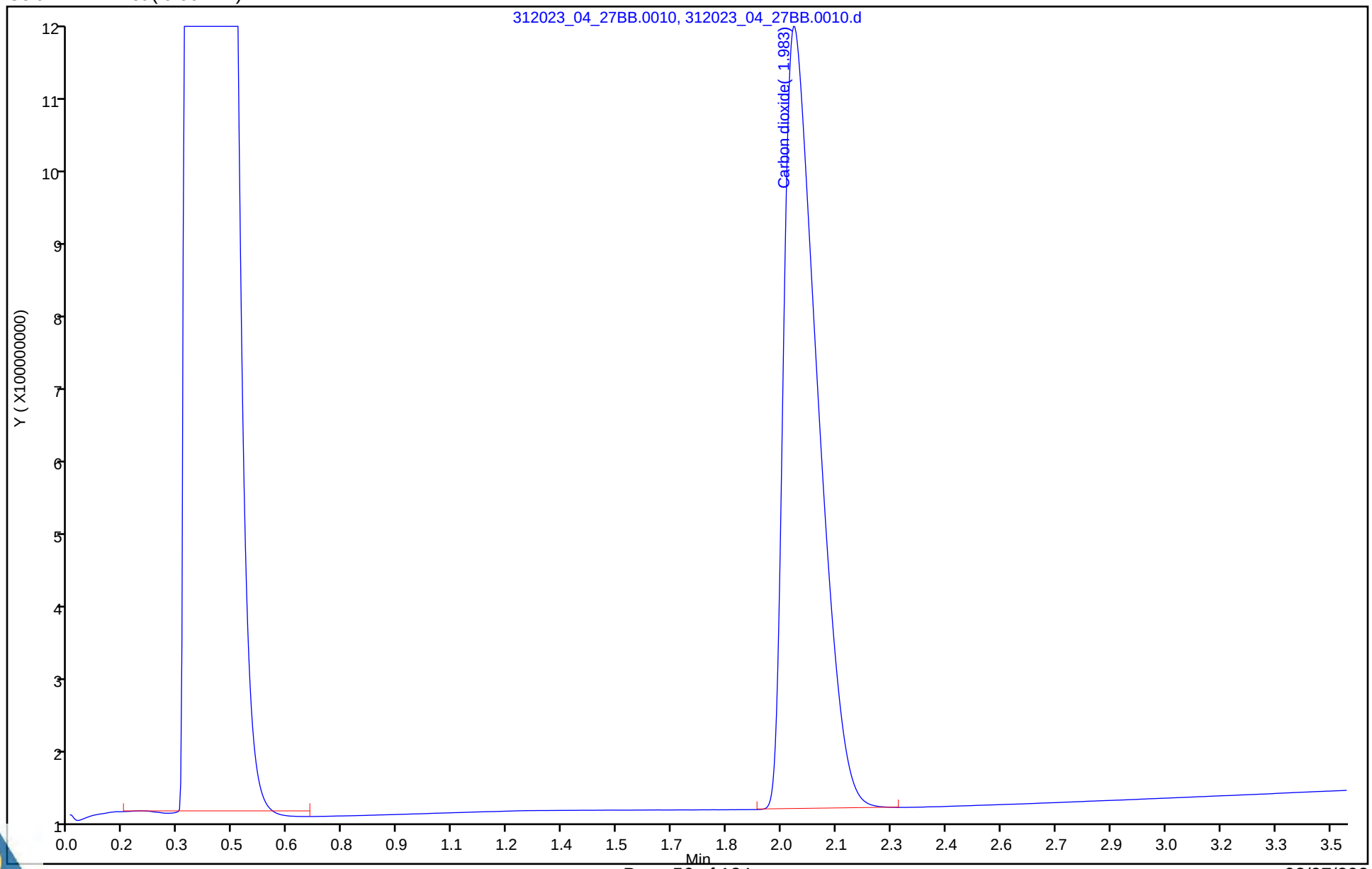
Report Date: 28-Apr-2023 07:19:12 Chrom Revision: 2.3 20-Apr-2023 08:27:48

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

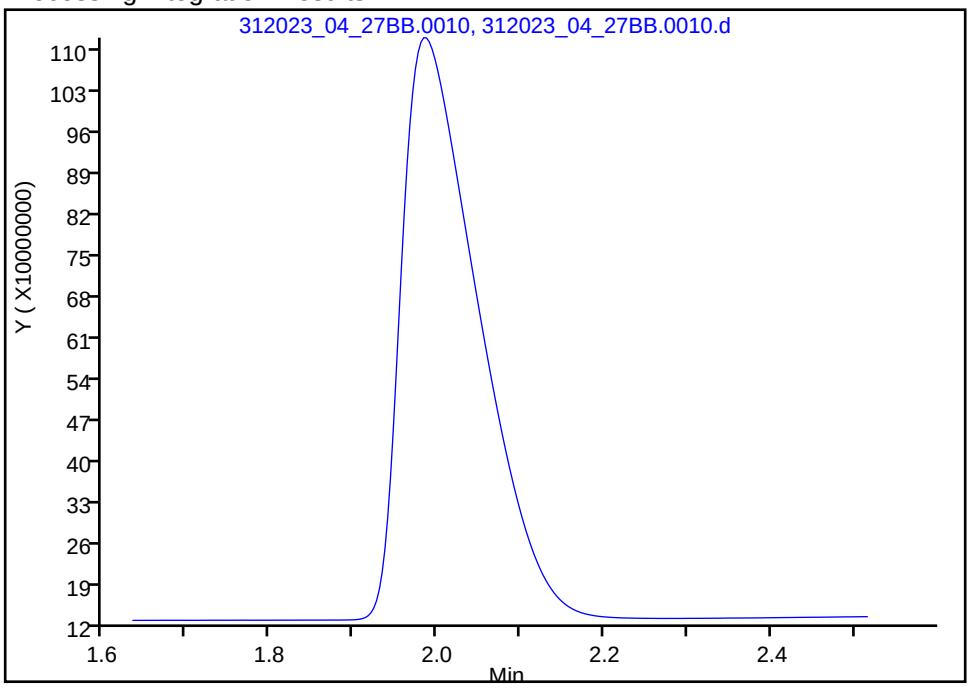
Data File:	\\chromfs\Lancaster\ChromData\19506-B\20230427-82537.b\312023_04_27BB.0010.d		
Injection Date:	27-Apr-2023 10:37:00	Instrument ID:	19506-B
Lims ID:	ic		
Client ID:			
Operator ID:		ALS Bottle#:	0 Worklist Smp#: 10
Purge Vol:	1.000 mL	Dil. Factor:	1.0000
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2
Column:	HP Plot (0.00 mm)	Detector	0FIDA

1 Carbon dioxide, CAS: 124-38-9

Signal: 1

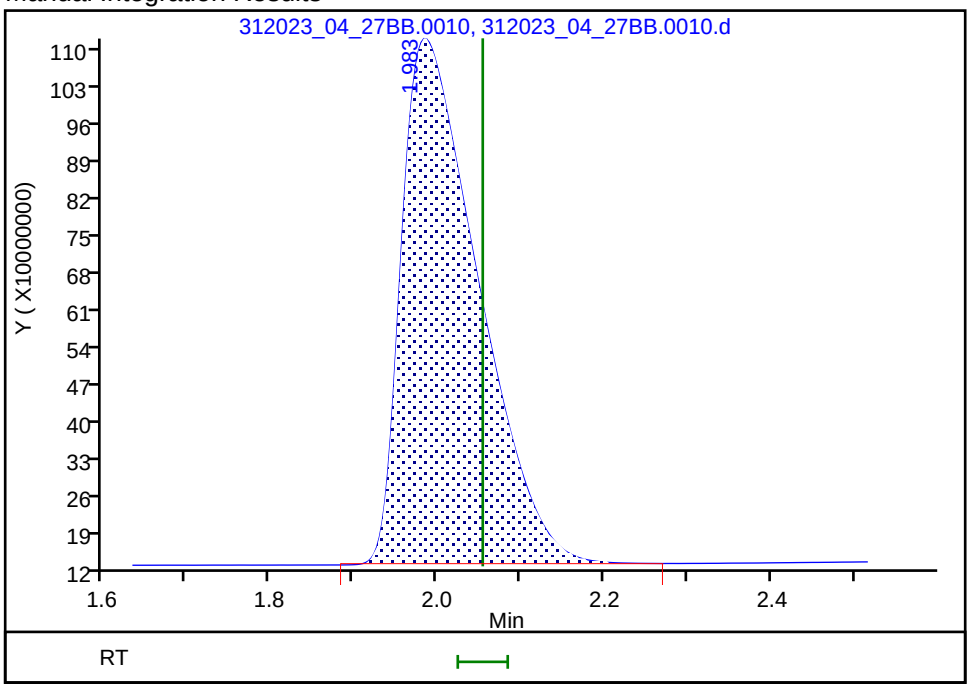
Not Detected
Expected RT: 2.05

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

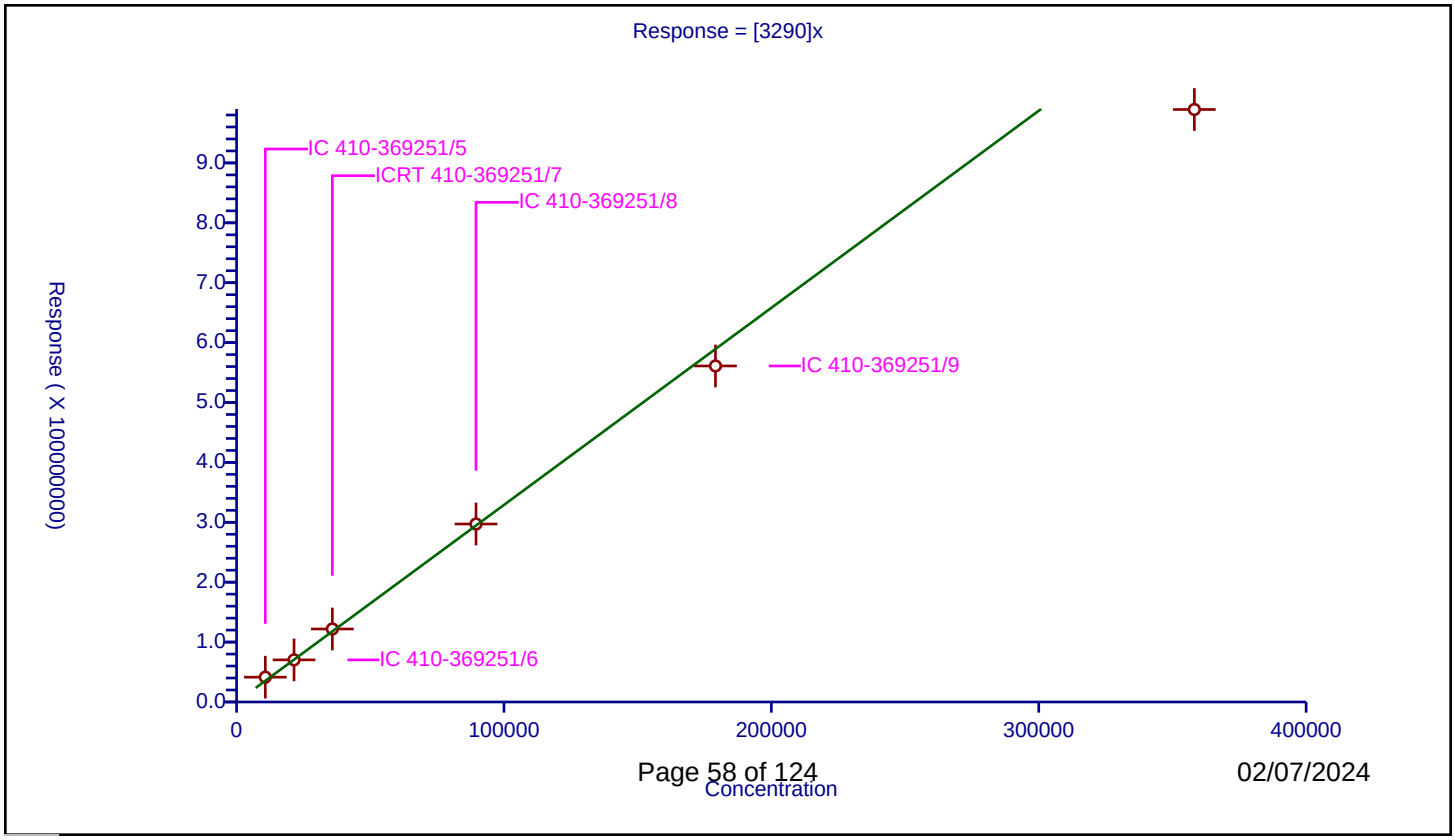
Curve Coefficients

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.: 410-157797-1

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.: 410-157797-1

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

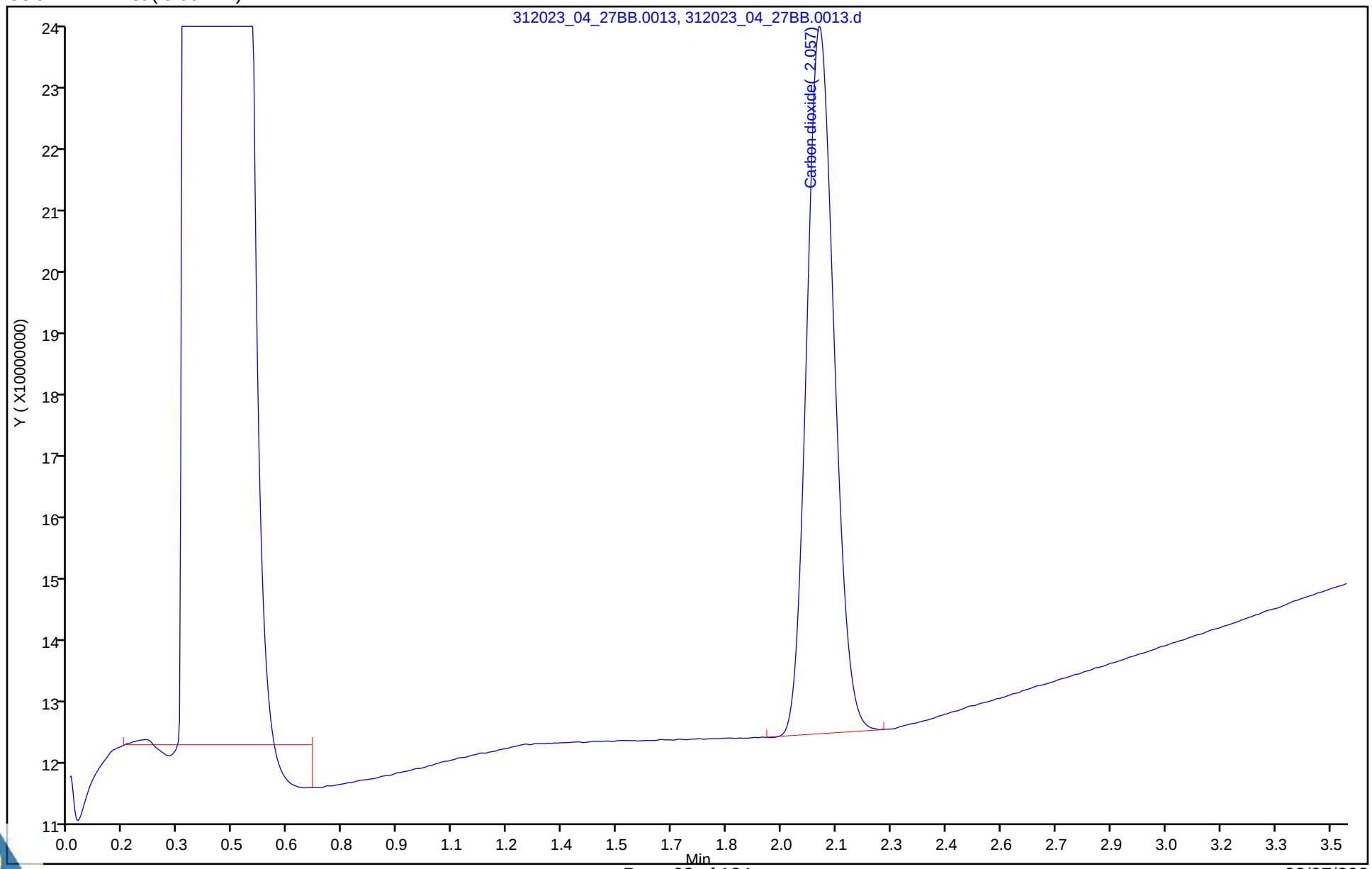
Report Date: 28-Apr-2023 08:51:00 Chrom Revision: 2.3 20-Apr-2023 08:27:48

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.: 410-157797-1

SDG No.:

Lab Sample ID: CCVRT 410-465326/2 Calibration Date: 01/22/2024 09:51

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_22BB.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	3791		41300	35800	15.2*	15.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-157797-1

SDG No.:

Lab Sample ID: CCVRT 410-465326/2
Calibration Date: 01/22/2024 09:51

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_22BB.0002.d
Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Carbon dioxide	2.04	2.01	2.07

Report Date: 23-Jan-2024 03:33:26 Chrom Revision: 2.3 18-Jan-2024 13:39:22

Eurofins Lancaster Laboratories Environment Testing, LLC

Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20240122-104503.b\312024_1_22BB.0002.d				
Lims ID:	ccvrt				
Client ID:					
Sample Type:	CCVRT				
Inject. Date:	22-Jan-2024 09:51:00	ALS Bottle#:	0	Worklist Smp#:	2
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:	ccvrt				
Misc. Info.:	410-0104503-002				
Operator ID:		Instrument ID:	19506-B		
Sublist:	chrom-RSK_CO2_19506B*sub1				
Method:	\\chromfs\Lancaster\ChromData\19506-B\20240122-104503.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	23-Jan-2024 03:33:26	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:	CTX1668				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Carbon dioxide	2.044	2.044	0.000	135801377H	35820	41275	

Reagents:

EPH_CO2MS_00006 Amount Added: 100.00 Units: uL

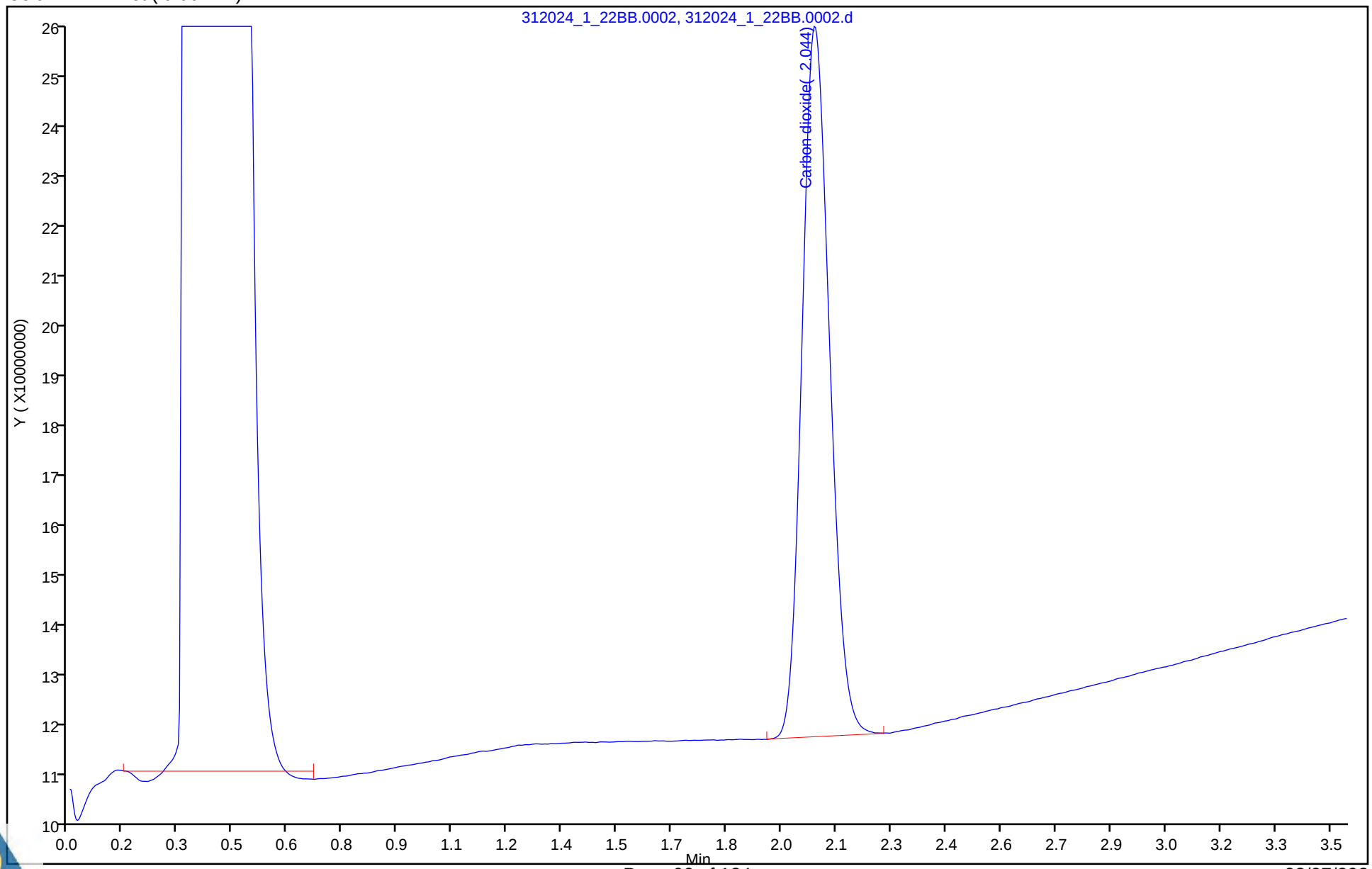
Report Date: 23-Jan-2024 03:33:26 Chrom Revision: 2.3 18-Jan-2024 13:39:22

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20240122-104503.b\312024_1_22BB.0002.d

Injection Date:	22-Jan-2024 09:51:00	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.: 410-157797-1

SDG No.:

Lab Sample ID: CCV 410-465326/9 Calibration Date: 01/22/2024 11:14

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_22BB.0009.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	3461		37700	35800	5.2	15.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-157797-1

SDG No.:

Lab Sample ID: CCV 410-465326/9
Calibration Date: 01/22/2024 11:14

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_22BB.0009.d
Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Carbon dioxide	2.04	2.01	2.07

Report Date: 23-Jan-2024 03:33:28 Chrom Revision: 2.3 18-Jan-2024 13:39:22

Eurofins Lancaster Laboratories Environment Testing, LLC

Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19506-B\20240122-104503.b\312024_1_22BB.0009.d
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 22-Jan-2024 11:14:00 ALS Bottle#: 0 Worklist Smp#: 9
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info:
Misc. Info.: 410-0104503-009
Operator ID: Instrument ID: 19506-B
Sublist: chrom-RSK_CO2_19506B*sub1

Method: \\chromfs\Lancaster\ChromData\19506-B\20240122-104503.b\RSK_CO2_19506B.m
Limit Group: GCV - RSK175 CO2
Last Update: 23-Jan-2024 03:33:28 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: CTX1668

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Carbon dioxide	2.040	2.044	-0.004	123986201	H 35820	37684	

Reagents:

EPH_CO2MS_00006 Amount Added: 100.00 Units: uL

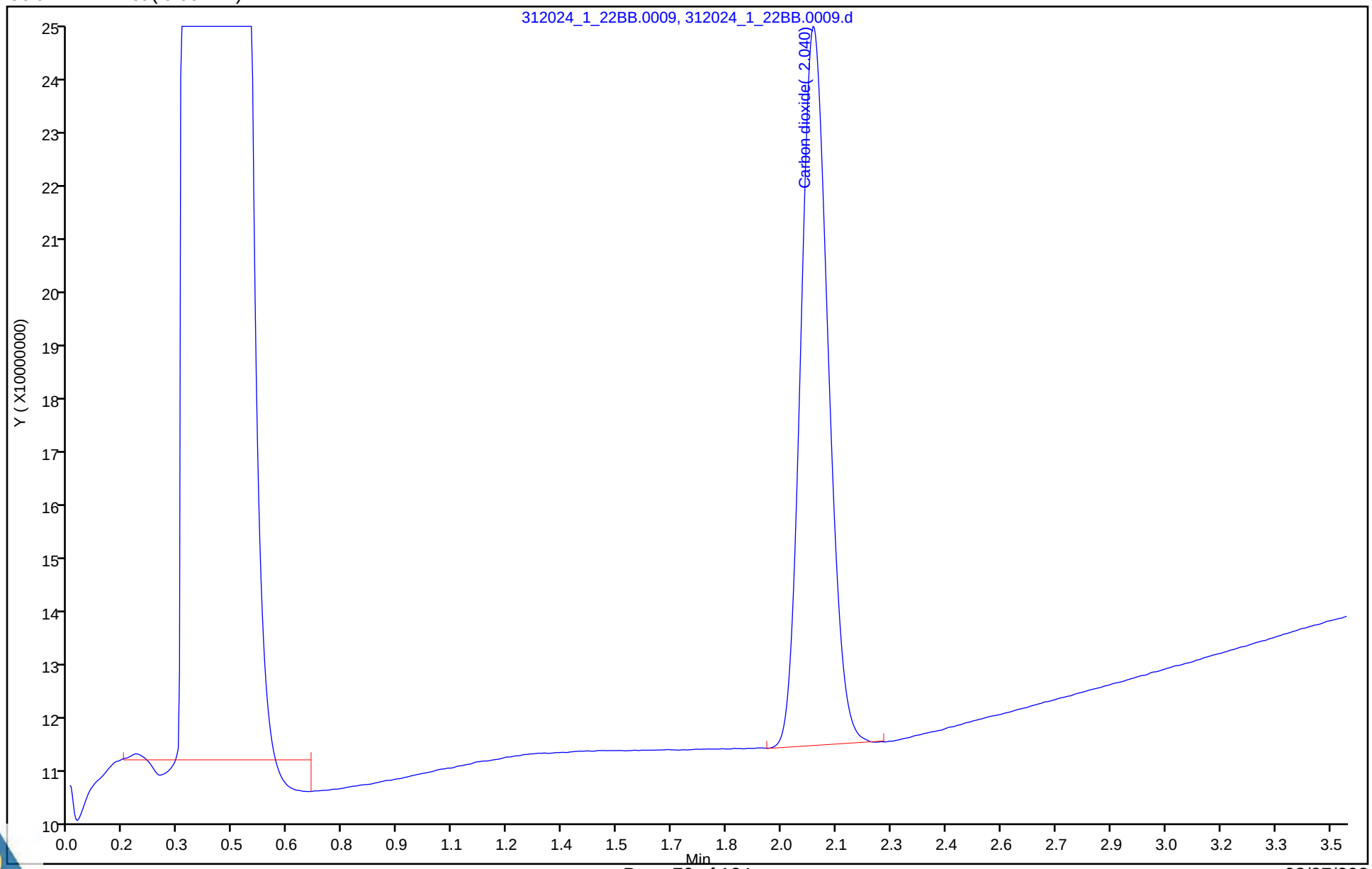
Report Date: 23-Jan-2024 03:33:28 Chrom Revision: 2.3 18-Jan-2024 13:39:22

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20240122-104503.b\312024_1_22BB.0009.d

Injection Date:	22-Jan-2024 11:14:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	ccv			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)



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-157797-1

SDG No.:

Lab Sample ID: CCVRT 410-468532/2 Calibration Date: 01/31/2024 09:44

Instrument ID: 19506-B Calib Start Date: 04/27/2023 09:59

GC Column: 19809 ID: 1.00(mm) Calib End Date: 04/27/2023 10:37

Lab File ID: 312024_1_31BB.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	3650		39700	35800	10.9	15.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-157797-1

SDG No.:

Lab Sample ID: CCVRT 410-468532/2
Calibration Date: 01/31/2024 09:44

Instrument ID: 19506-B
Calib Start Date: 04/27/2023 09:59

GC Column: 19809 ID: 1.00(mm)
Calib End Date: 04/27/2023 10:37

Lab File ID: 312024_1_31BB.0002.d
Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Carbon dioxide	2.08	2.05	2.11

Report Date: 01-Feb-2024 03:18:13 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\20240131-105219.b\312024_1_31BB.0002.d				
Lims ID:	ccvrt				
Client ID:					
Sample Type:	CCVRT				
Inject. Date:	31-Jan-2024 09:44:00	ALS Bottle#:	0	Worklist Smp#:	2
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:	ccvrt				
Misc. Info.:	410-0105219-002				
Operator ID:		Instrument ID:	19506-B		
Sublist:	chrom-RSK_CO2_19506B*sub1				
Method:	\\chromfs\Lancaster\ChromData\19506-B\20240131-105219.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	01-Feb-2024 03:18:13	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 :	ShinCarbon ST Microplacked GC (1.00 mm)		Det: 0FIDA		
Process Host:	CTX1615				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Carbon dioxide	2.077	2.077	0.000	130745396	H 35820	39739	

Reagents:

EPH_CO2MS_00006 Amount Added: 100.00 Units: uL

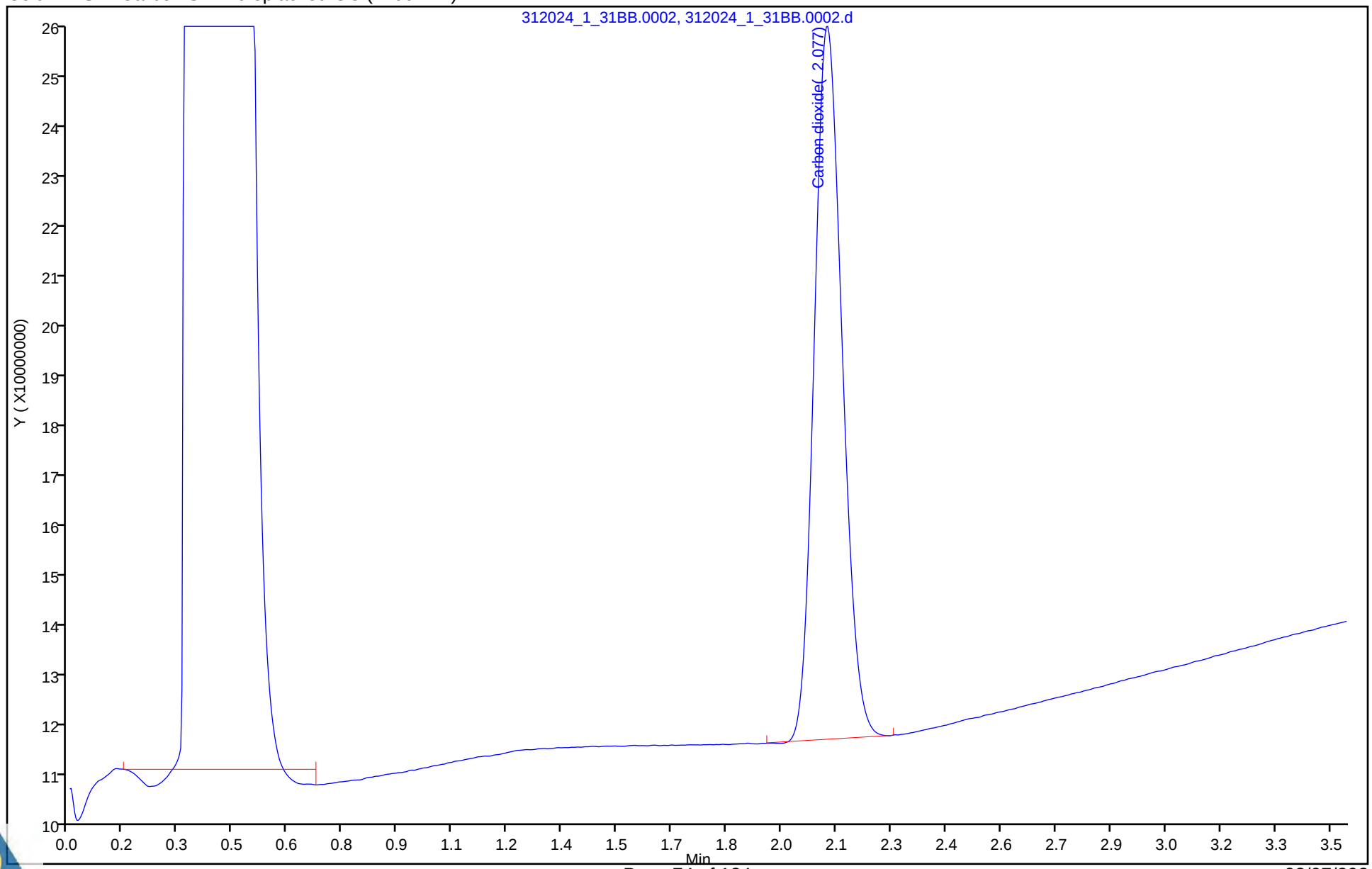
Report Date: 01-Feb-2024 03:18:13 Chrom Revision: 2.3 24-Jan-2024 12:19:54

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20240131-105219.b\312024_1_31BB.0002.d

Injection Date:	31-Jan-2024 09:44:00	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: ShinCarbon ST Microplacked GC (1.00 mm)



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-157797-1

SDG No.:

Lab Sample ID: CCV 410-468532/21 Calibration Date: 01/31/2024 12:57

Instrument ID: 19506-B Calib Start Date: 04/27/2023 09:59

GC Column: 19809 ID: 1.00(mm) Calib End Date: 04/27/2023 10:37

Lab File ID: 312024_1_31BB.0021.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	3512		38200	35800	6.7	15.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-157797-1

SDG No.:

Lab Sample ID: CCV 410-468532/21 Calibration Date: 01/31/2024 12:57

Instrument ID: 19506-B Calib Start Date: 04/27/2023 09:59

GC Column: 19809 ID: 1.00(mm) Calib End Date: 04/27/2023 10:37

Lab File ID: 312024_1_31BB.0021.d Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Carbon dioxide	2.07	2.05	2.11

Report Date: 01-Feb-2024 03:18:19 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\20240131-105219.b\312024_1_31BB.0021.d
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 31-Jan-2024 12:57:00 ALS Bottle#: 0 Worklist Smp#: 21
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info:
Misc. Info.: 410-0105219-021
Operator ID: Instrument ID: 19506-B
Sublist: chrom-RSK_CO2_19506B*sub1

Method: \\chromfs\Lancaster\ChromData\19506-B\20240131-105219.b\RSK_CO2_19506B.m
Limit Group: GCV - RSK175 CO2
Last Update: 01-Feb-2024 03:18:19 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 : ShinCarbon ST Microplacked GC (1.00 mm) Det: 0FIDA
Process Host: CTX1615

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Carbon dioxide	2.066	2.077	-0.011	125797663H	35820	38235	

Reagents:

EPH_CO2MS_00006 Amount Added: 100.00 Units: uL

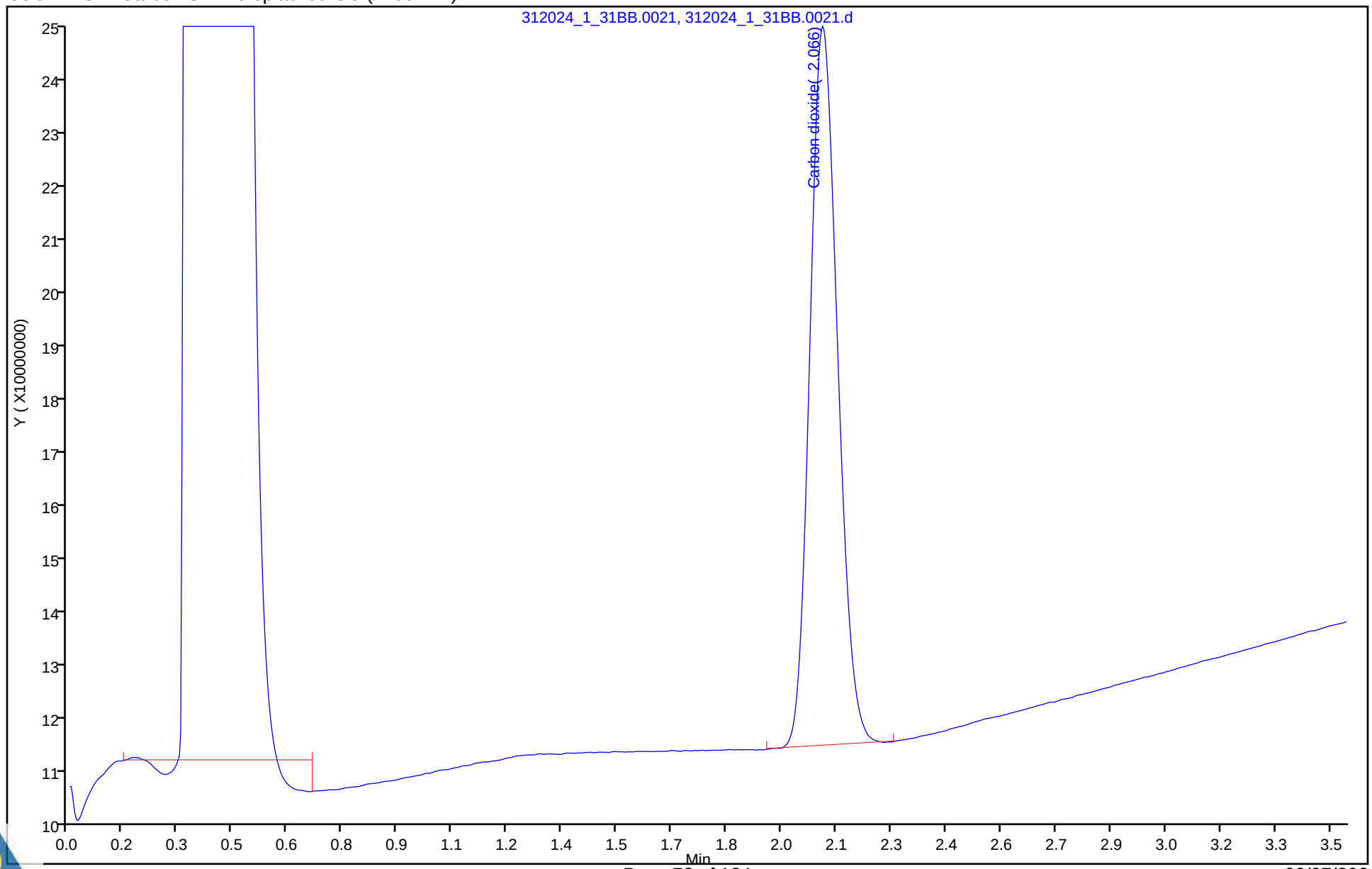
Report Date: 01-Feb-2024 03:18:19 Chrom Revision: 2.3 24-Jan-2024 12:19:54

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20240131-105219.b\312024_1_31BB.0021.d

Injection Date:	31-Jan-2024 12:57:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	ccv			Worklist Smp#:	21
Client ID:					
Purge Vol:	1.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2		

Column: ShinCarbon ST Microplacked GC (1.00 mm)



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-157797-1

SDG No.:

Lab Sample ID: CCV 410-468532/27 Calibration Date: 01/31/2024 13:43

Instrument ID: 19506-B Calib Start Date: 04/27/2023 09:59

GC Column: 19809 ID: 1.00(mm) Calib End Date: 04/27/2023 10:37

Lab File ID: 312024_1_31BB.0027.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	3287		35800	35800	-0.0	15.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-157797-1

SDG No.:

Lab Sample ID: CCV 410-468532/27
Calibration Date: 01/31/2024 13:43

Instrument ID: 19506-B
Calib Start Date: 04/27/2023 09:59

GC Column: 19809 ID: 1.00(mm)
Calib End Date: 04/27/2023 10:37

Lab File ID: 312024_1_31BB.0027.d
Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Carbon dioxide	2.07	2.05	2.11

Report Date: 01-Feb-2024 03:18:21 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\20240131-105219.b\312024_1_31BB.0027.d				
Lims ID:	ccv				
Client ID:					
Sample Type:	CCV				
Inject. Date:	31-Jan-2024 13:43:00	ALS Bottle#:	0	Worklist Smp#:	27
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	410-0105219-027				
Operator ID:		Instrument ID:	19506-B		
Sublist:	chrom-RSK_CO2_19506B*sub1				
Method:	\\chromfs\Lancaster\ChromData\19506-B\20240131-105219.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	01-Feb-2024 03:18:21	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 :	ShinCarbon ST Microplacked GC (1.00 mm)		Det: 0FIDA		
Process Host:	CTX1615				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Carbon dioxide	2.067	2.077	-0.010	117740236	H 35820	35786	

Reagents:

EPH_CO2MS_00006 Amount Added: 100.00 Units: uL

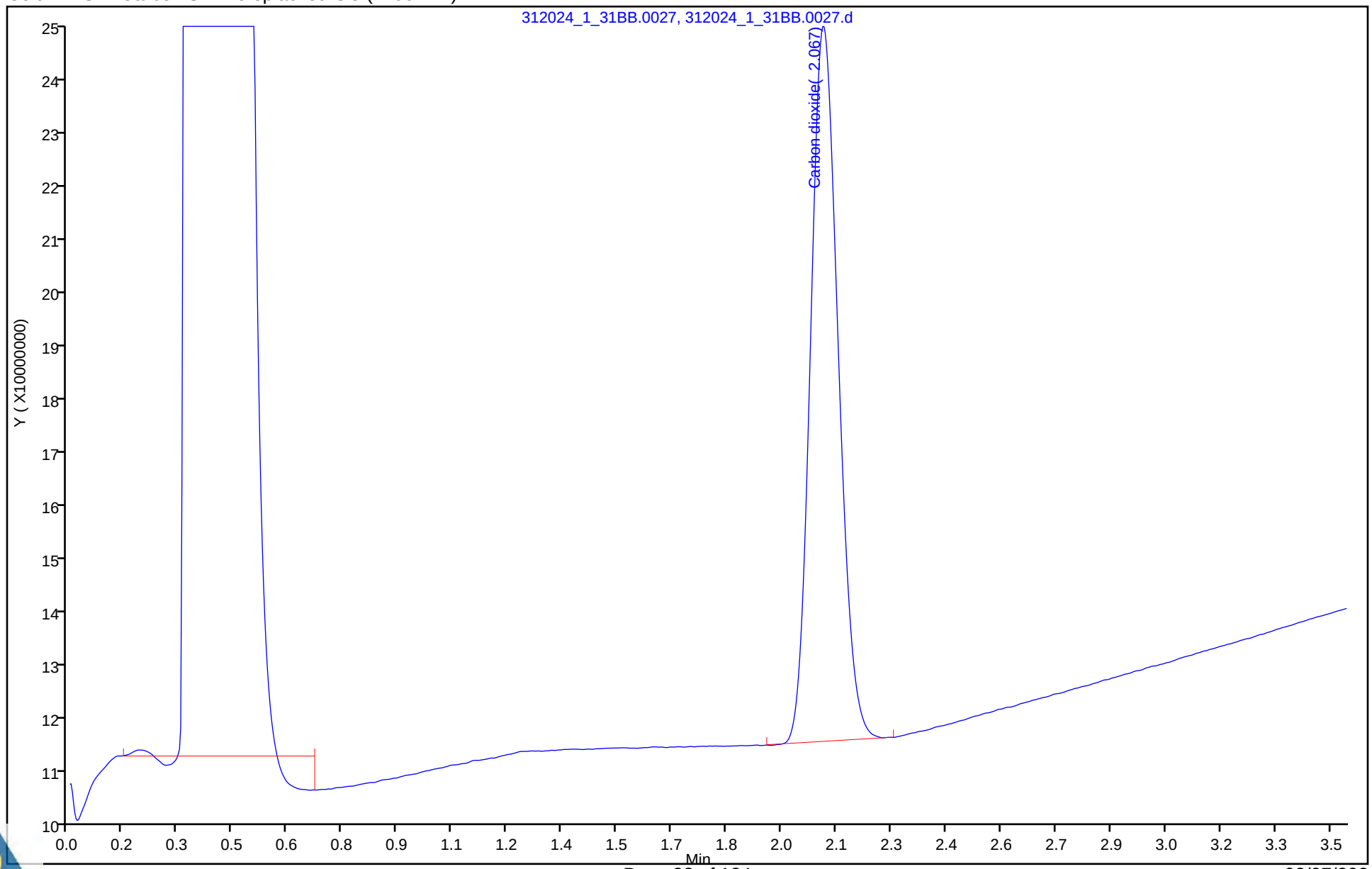
Report Date: 01-Feb-2024 03:18:21 Chrom Revision: 2.3 24-Jan-2024 12:19:54

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20240131-105219.b\312024_1_31BB.0027.d

Injection Date:	31-Jan-2024 13:43:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	ccv			Worklist Smp#:	27
Client ID:					
Purge Vol:	1.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2		

Column: ShinCarbon ST Microplacked GC (1.00 mm)



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-157797-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 410-465370/1-A

Matrix: Water Lab File ID: 312024_1_22BB.0003.d

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 01/22/2024 10:28

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:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 465326 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	DL
124-38-9	Carbon dioxide	5600	U M	12000	5600

Report Date: 23-Jan-2024 03:33:26 Chrom Revision: 2.3 18-Jan-2024 13:39:22

Eurofins Lancaster Laboratories Environment Testing, LLC

Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20240122-104503.b\312024_1_22BB.0003.d				
Lims ID:	MB 410-465370/1-A				
Client ID:					
Sample Type:	MB				
Inject. Date:	22-Jan-2024 10:28:00	ALS Bottle#:	0	Worklist Smp#:	3
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	410-0104503-003				
Operator ID:		Instrument ID:	19506-B		
Method:	\\chromfs\Lancaster\ChromData\19506-B\20240122-104503.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	23-Jan-2024 03:33:26	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:	CTX1668				
First Level Reviewer: LXF2		Date:	23-Jan-2024 03:32:25		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Carbon dioxide	2.047	2.044	0.003	807114H		245.3	Ma

QC Flag Legend

Processing Flags

H - Response Measured by Height

Review Flags

M - Manually Integrated

a - User Assigned ID

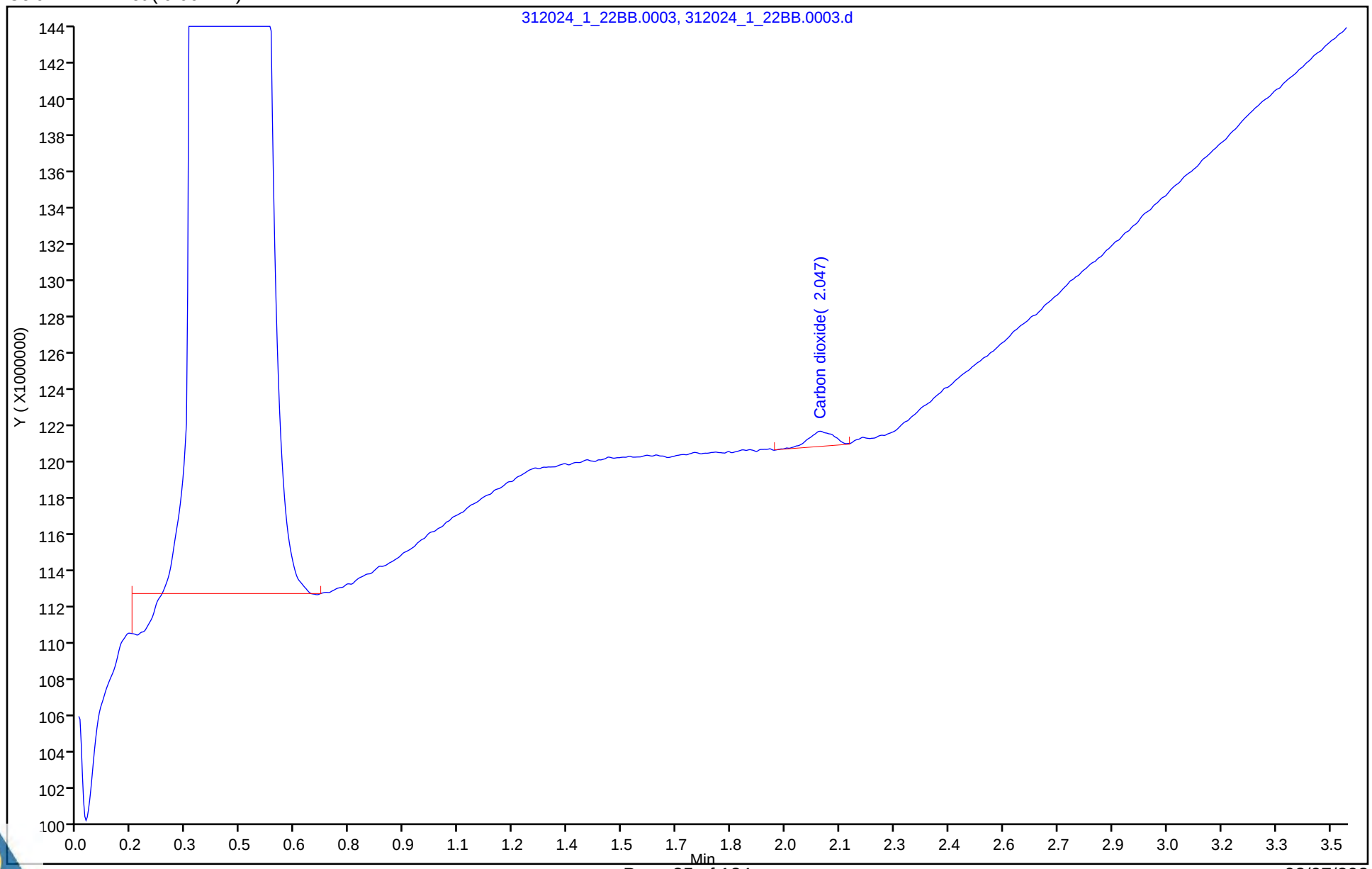
Report Date: 23-Jan-2024 03:33:26 Chrom Revision: 2.3 18-Jan-2024 13:39:22

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20240122-104503.b\312024_1_22BB.0003.d

Injection Date:	22-Jan-2024 10:28:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	MB 410-465370/1-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)



Report Date: 23-Jan-2024 03:33:26 Chrom Revision: 2.3 18-Jan-2024 13:39:22 Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

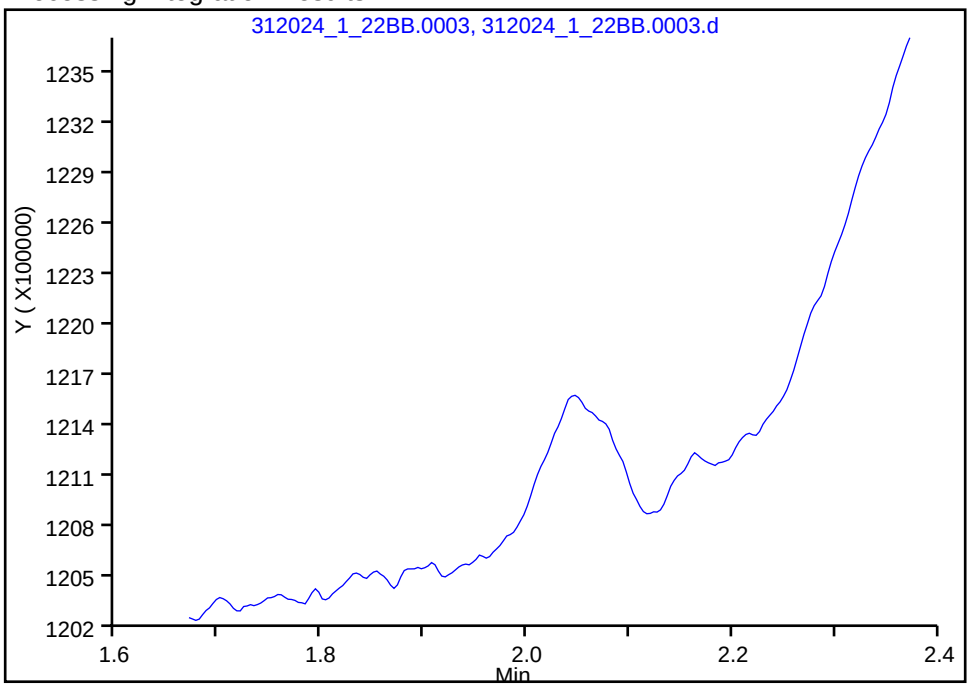
Data File:	\\chromfs\Lancaster\ChromData\19506-B\20240122-104503.b\312024_1_22BB.0003.d		
Injection Date:	22-Jan-2024 10:28:00	Instrument ID:	19506-B
Lims ID:	MB 410-465370/1-A		
Client ID:			
Operator ID:		ALS Bottle#:	0 Worklist Smp#: 3
Purge Vol:	1.000 mL	Dil. Factor:	1.0000
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2
Column:	HP Plot (0.00 mm)	Detector	0FIDA

1 Carbon dioxide, CAS: 124-38-9

Signal: 1

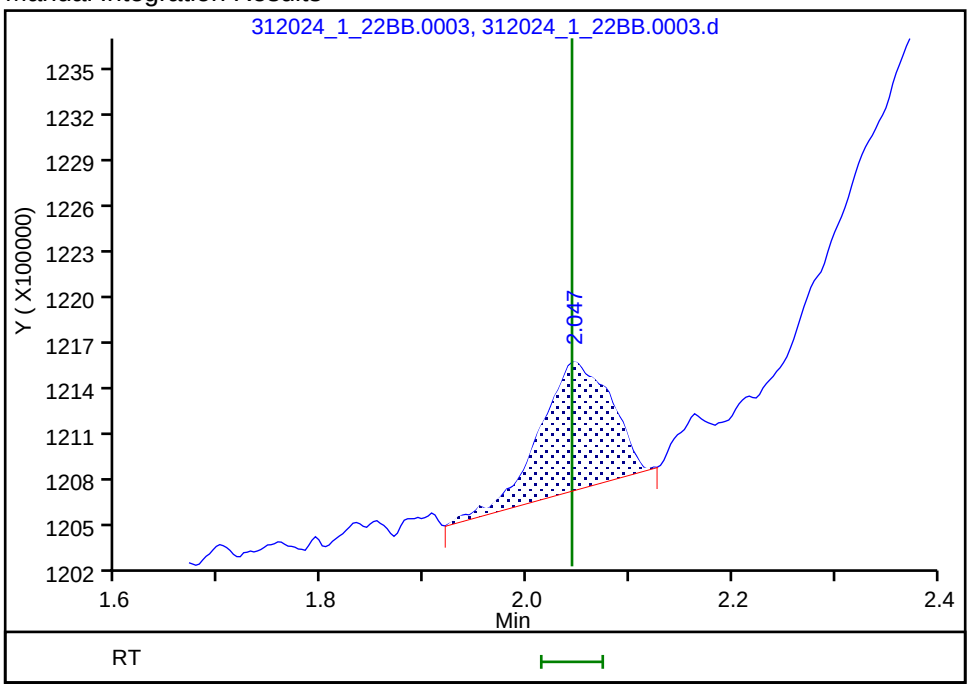
Not Detected
Expected RT: 2.04

Processing Integration Results



Manual Integration Results

RT: 2.05
Height: 807114
Amount: 245.3143
Amount Units: ug/l



Reviewer: LXF2, 23-Jan-2024 03:32:23 -05:00:00 (UTC)
Audit Action: Manually Integrated/Assigned Compound ID Audit Reason: Peak not integrated

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-157797-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 410-468591/1-A

Matrix: Water Lab File ID: 312024_1_31BB.0022.d

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 01/31/2024 13:04

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: 19809 ID: 1(mm)

Purge Volume: Heated Purge: (Y/N) N pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 468532 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	DL
124-38-9	Carbon dioxide	5600	U M	12000	5600

Report Date: 01-Feb-2024 03:18:20 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\20240131-105219.b\312024_1_31BB.0022.d				
Lims ID:	MB 410-468591/1-A				
Client ID:					
Sample Type:	MB				
Inject. Date:	31-Jan-2024 13:04:00	ALS Bottle#:	0	Worklist Smp#:	22
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	410-0105219-022				
Operator ID:		Instrument ID:	19506-B		
Method:	\\chromfs\Lancaster\ChromData\19506-B\20240131-105219.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	01-Feb-2024 03:18:19	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 :	ShinCarbon ST Microplacked GC (1.00 mm)		Det: 0FIDA		
Process Host:	CTX1615				
First Level Reviewer: LXF2		Date:	01-Feb-2024 03:17:02		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Carbon dioxide	2.070	2.077	-0.007	1006965H		306.1	M

QC Flag Legend

Processing Flags

H - Response Measured by Height

Review Flags

M - Manually Integrated

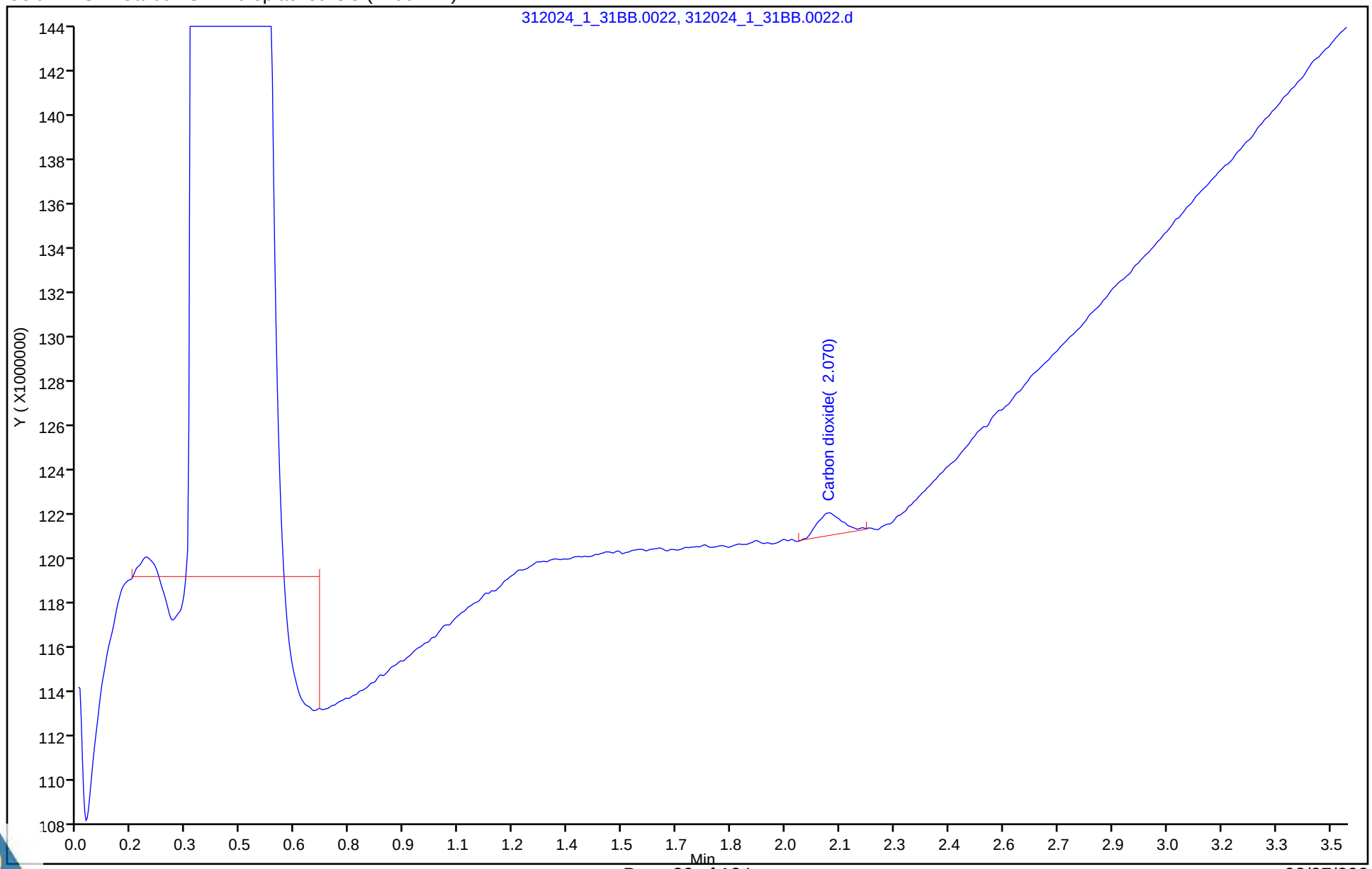
Report Date: 01-Feb-2024 03:18:20 Chrom Revision: 2.3 24-Jan-2024 12:19:54

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20240131-105219.b\312024_1_31BB.0022.d

Injection Date:	31-Jan-2024 13:04:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	MB 410-468591/1-A			Worklist Smp#:	22
Client ID:					
Purge Vol:	1.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2		

Column: ShinCarbon ST Microplacked GC (1.00 mm)



Report Date: 01-Feb-2024 03:18:20

Chrom Revision: 2.3 24-Jan-2024 12:19:54 Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

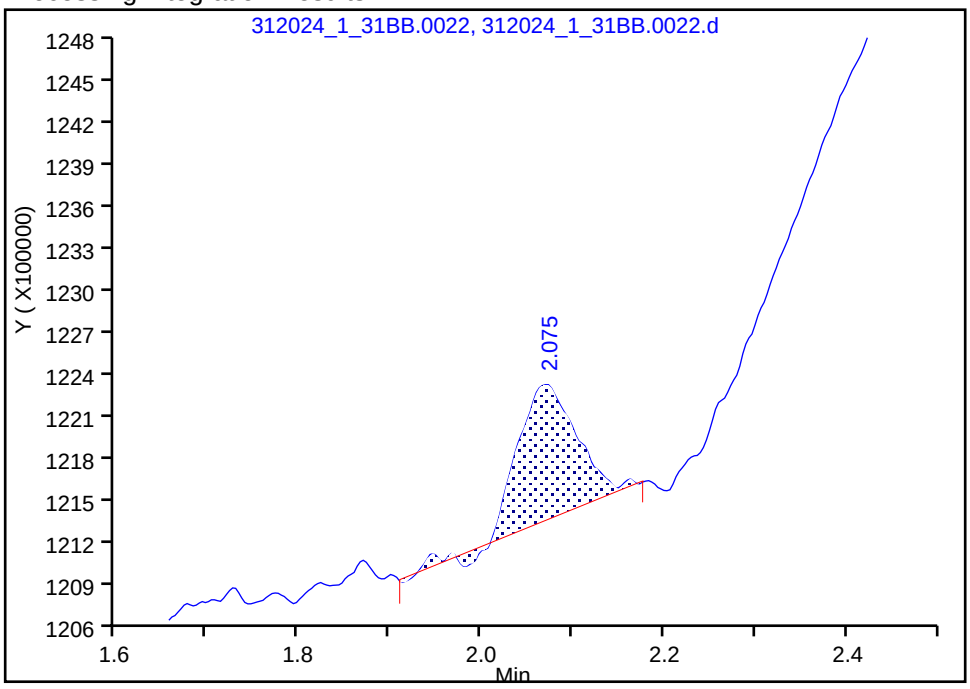
Data File:	\\chromfs\Lancaster\ChromData\19506-B\20240131-105219.b\312024_1_31BB.0022.d				
Injection Date:	31-Jan-2024 13:04:00	Instrument ID:	19506-B		
Lims ID:	MB 410-468591/1-A				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	22
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2		
Column:	ShinCarbon ST Microplacked GC (1.00 mm)	Detector	0FIDA		

1 Carbon dioxide, CAS: 124-38-9

Signal: 1

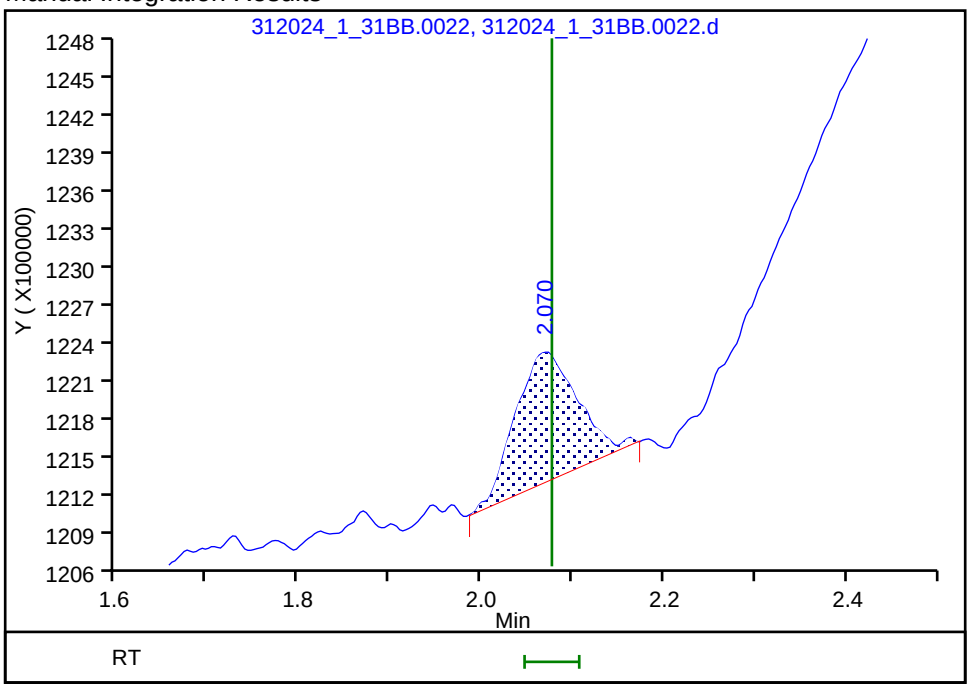
Processing Integration Results

RT: 2.08
Height: 912455
Amount: 277.3316
Amount Units: ug/l



Manual Integration Results

RT: 2.07
Height: 1006965
Amount: 306.0570
Amount Units: ug/l



Reviewer: LXF2, 01-Feb-2024 03:17:01 -05:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-157797-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 410-465370/2-A

Matrix: Water Lab File ID: 312024_1_22BB.0004.d

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 01/22/2024 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.: 465326 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	DL
124-38-9	Carbon dioxide	37600		12000	5600

Report Date: 23-Jan-2024 03:33:26 Chrom Revision: 2.3 18-Jan-2024 13:39:22

Eurofins Lancaster Laboratories Environment Testing, LLC

Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20240122-104503.b\312024_1_22BB.0004.d				
Lims ID:	LCS 410-465370/2-A				
Client ID:					
Sample Type:	LCS				
Inject. Date:	22-Jan-2024 10:35:00	ALS Bottle#:	0	Worklist Smp#:	4
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	410-0104503-004				
Operator ID:		Instrument ID:	19506-B		
Method:	\\chromfs\Lancaster\ChromData\19506-B\20240122-104503.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	23-Jan-2024 03:33:26	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:	CTX1668				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Carbon dioxide	2.042	2.044	-0.002	123806724	H 35820	37630	

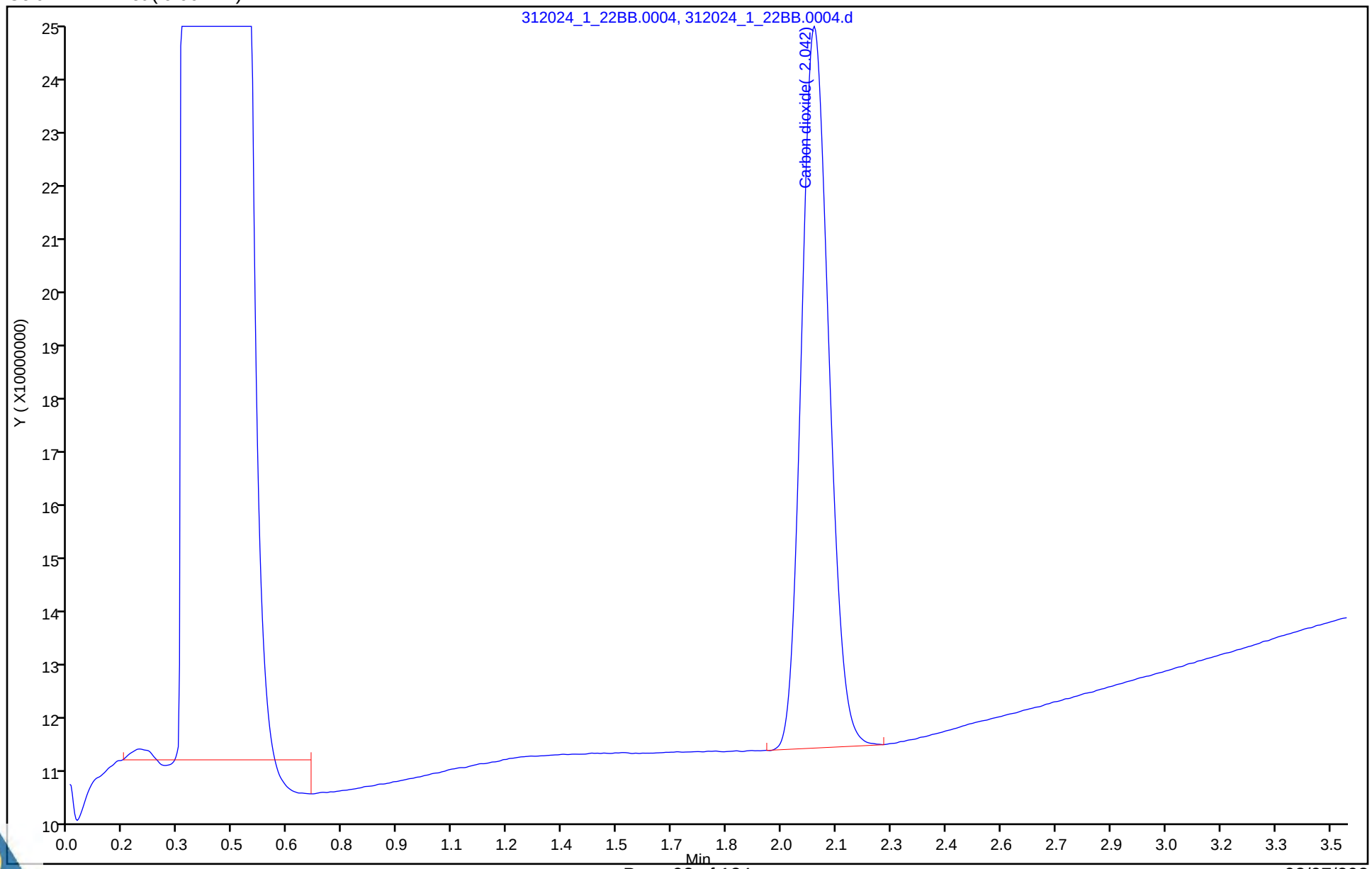
Report Date: 23-Jan-2024 03:33:26 Chrom Revision: 2.3 18-Jan-2024 13:39:22

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20240122-104503.b\312024_1_22BB.0004.d

Injection Date:	22-Jan-2024 10:35:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	LCS 410-465370/2-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.: 410-157797-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 410-468591/2-A

Matrix: Water Lab File ID: 312024_1_31BB.0023.d

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 01/31/2024 13:12

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: 19809 ID: 1(mm)

Purge Volume: Heated Purge: (Y/N) N pH:

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 468532 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	DL
124-38-9	Carbon dioxide	37900		12000	5600

Report Date: 01-Feb-2024 03:18:20 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\20240131-105219.b\312024_1_31BB.0023.d				
Lims ID:	LCS 410-468591/2-A				
Client ID:					
Sample Type:	LCS				
Inject. Date:	31-Jan-2024 13:12:00	ALS Bottle#:	0	Worklist Smp#:	23
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	410-0105219-023				
Operator ID:		Instrument ID:	19506-B		
Method:	\\chromfs\Lancaster\ChromData\19506-B\20240131-105219.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	01-Feb-2024 03:18:19	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 :	ShinCarbon ST Microplacked GC (1.00 mm)		Det: 0FIDA		
Process Host:	CTX1615				
First Level Reviewer: LXF2		Date:	01-Feb-2024 03:18:06		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Carbon dioxide	2.066	2.077	-0.011	124852363	H 35820	37948	

QC Flag Legend

Processing Flags

H - Response Measured by Height

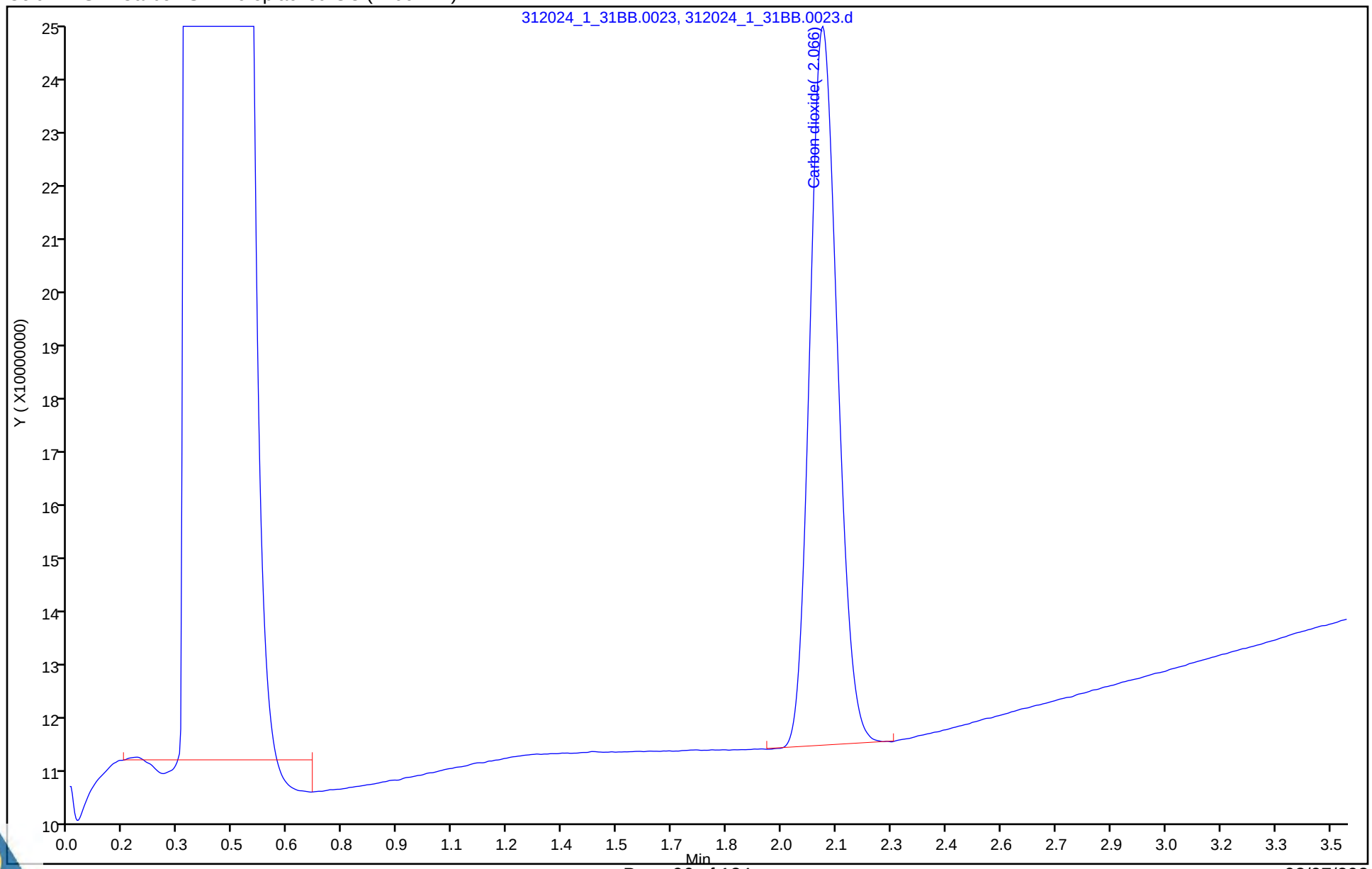
Report Date: 01-Feb-2024 03:18:20 Chrom Revision: 2.3 24-Jan-2024 12:19:54

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20240131-105219.b\312024_1_31BB.0023.d

Injection Date:	31-Jan-2024 13:12:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	LCS 410-468591/2-A			Worklist Smp#:	23
Client ID:					
Purge Vol:	1.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2		

Column: ShinCarbon ST Microplacked GC (1.00 mm)



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-157797-1

SDG No.:

Client Sample ID: 16EW02-240111 MS Lab Sample ID: 410-157797-2 MS

Matrix: Water Lab File ID: 312024_1_22BB.0006.d

Analysis Method: RSK-175 Date Collected: 01/11/2024 08:05

Sample wt/vol: 5(mL) Date Analyzed: 01/22/2024 10:51

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP Plot ID: 0.53(mm)

Purge Volume: Heated Purge: (Y/N) N pH: 6.0

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 465326 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	DL
124-38-9	Carbon dioxide	232000	M 4 cn	12000	5600

Report Date: 23-Jan-2024 03:33:27 Chrom Revision: 2.3 18-Jan-2024 13:39:22

Eurofins Lancaster Laboratories Environment Testing, LLC

Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19506-B\20240122-104503.b\312024_1_22BB.0006.d
Lims ID: 410-157797-A-2-B MS
Client ID: 16EW02-240111
Sample Type: MS
Inject. Date: 22-Jan-2024 10:51:00 ALS Bottle#: 0 Worklist Smp#: 6
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info:
Misc. Info.: 410-0104503-006
Operator ID: Instrument ID: 19506-B

Method: \\chromfs\Lancaster\ChromData\19506-B\20240122-104503.b\RSK_CO2_19506B.m
Limit Group: GCV - RSK175 CO2
Last Update: 23-Jan-2024 03:33:26 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: CTX1668

First Level Reviewer: LXF2 Date: 23-Jan-2024 03:32:49

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Carbon dioxide	1.987	2.044	-0.057	762555804H	35820	231771	Ma

QC Flag Legend

Processing Flags
H - Response Measured by Height
Review Flags
M - Manually Integrated
a - User Assigned ID

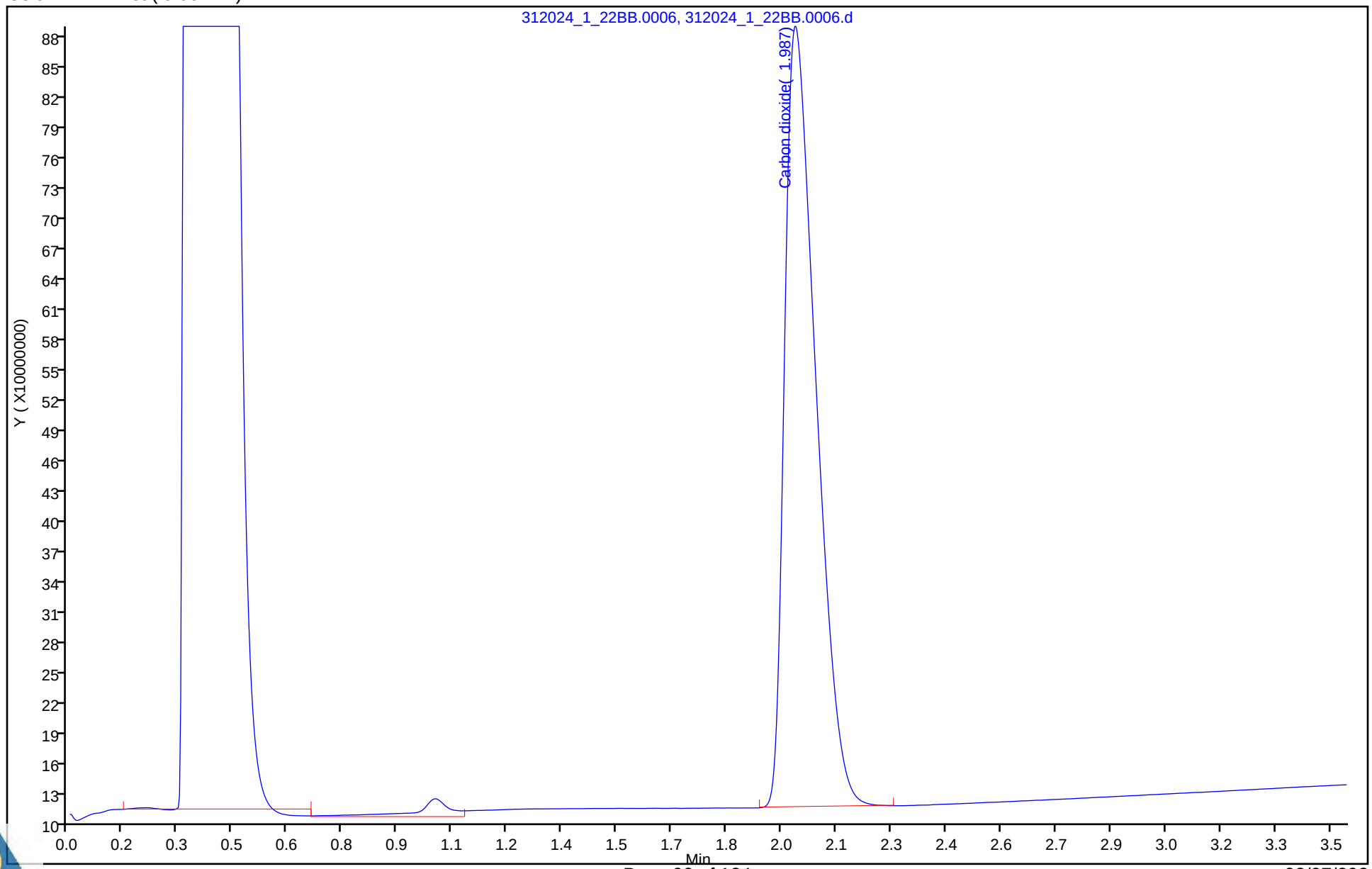
Report Date: 23-Jan-2024 03:33:27 Chrom Revision: 2.3 18-Jan-2024 13:39:22

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20240122-104503.b\312024_1_22BB.0006.d

Injection Date:	22-Jan-2024 10:51:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	410-157797-A-2-B MS			Worklist Smp#:	6
Client ID:	16EW02-240111				
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: 23-Jan-2024 03:33:27

Chrom Revision: 2.3 18-Jan-2024 13:39:22 Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

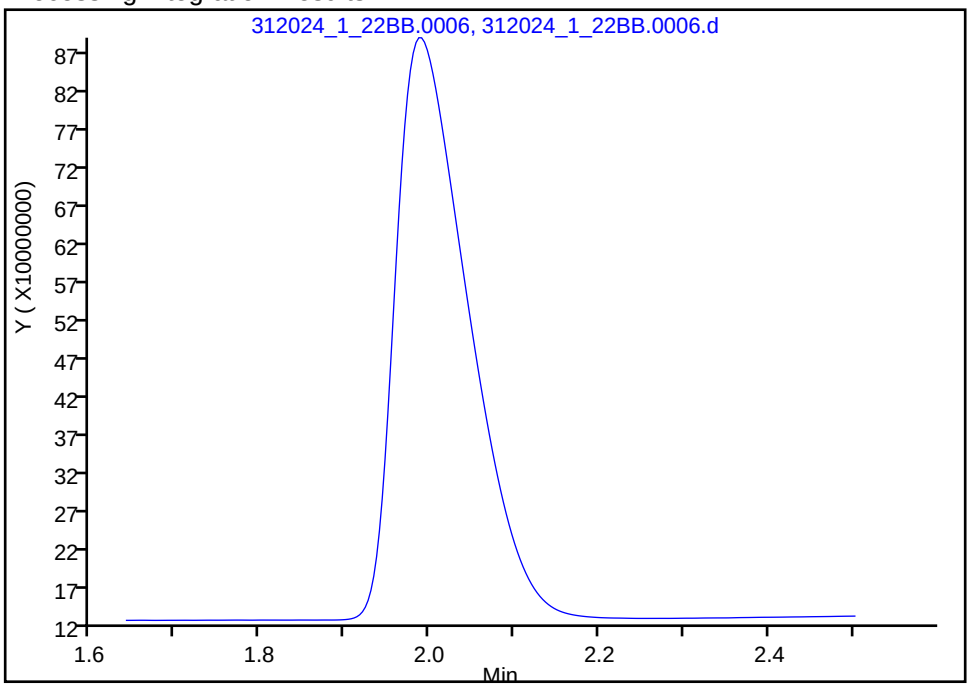
Data File:	\\chromfs\Lancaster\ChromData\19506-B\20240122-104503.b\312024_1_22BB.0006.d				
Injection Date:	22-Jan-2024 10:51:00	Instrument ID:	19506-B		
Lims ID:	410-157797-A-2-B MS				
Client ID:	16EW02-240111				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	6
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2		
Column:	HP Plot (0.00 mm)	Detector	0FIDA		

1 Carbon dioxide, CAS: 124-38-9

Signal: 1

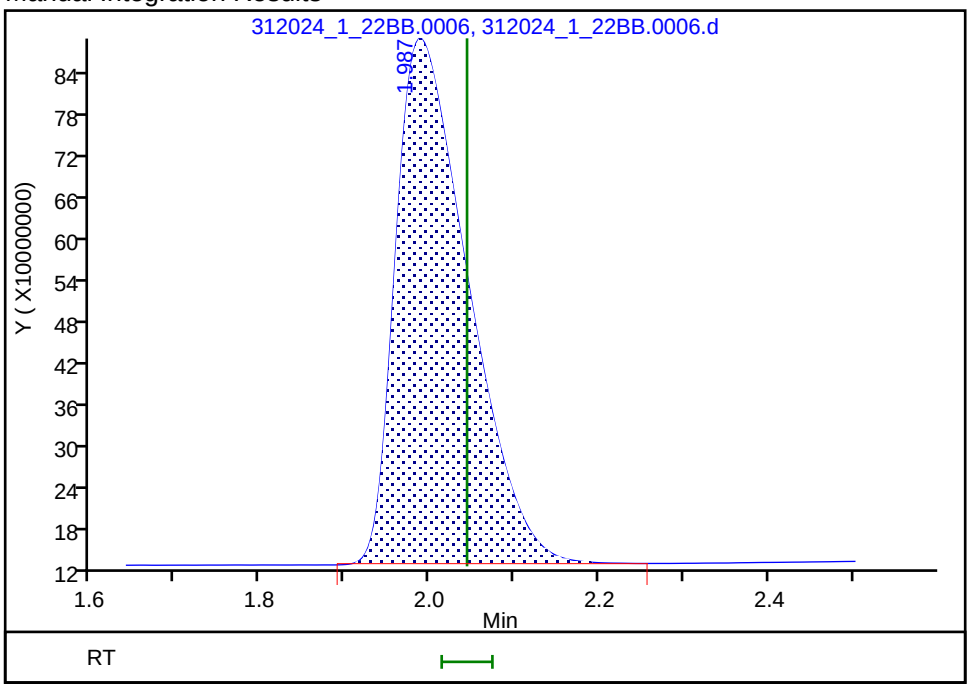
Not Detected
Expected RT: 2.04

Processing Integration Results



Manual Integration Results

RT: 1.99
Height: 762555804
Amount: 231771
Amount Units: ug/l



Reviewer: LXF2, 23-Jan-2024 03:32:48 -05:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-157797-1

SDG No.:

Client Sample ID: 16IW10-240111 MS Lab Sample ID: 410-158493-1 MS

Matrix: Water Lab File ID: 312024_1_31BB.0025.d

Analysis Method: RSK-175 Date Collected: 01/11/2024 07:05

Sample wt/vol: 5(mL) Date Analyzed: 01/31/2024 13:27

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: 19809 ID: 1(mm)

Purge Volume: Heated Purge: (Y/N) N pH: 7.0

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 468532 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	DL
124-38-9	Carbon dioxide	256000	H M 4	12000	5600

Report Date: 01-Feb-2024 03:18:21 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\20240131-105219.b\312024_1_31BB.0025.d				
Lims ID:	410-158493-B-1-B MS RA				
Client ID:	16IW10-240111				
Sample Type:	MS				
Inject. Date:	31-Jan-2024 13:27:00	ALS Bottle#:	0	Worklist Smp#:	25
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	410-0105219-025				
Operator ID:		Instrument ID:	19506-B		
Method:	\\chromfs\Lancaster\ChromData\19506-B\20240131-105219.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	01-Feb-2024 03:18:19	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 :	ShinCarbon ST Microplacked GC (1.00 mm)		Det: 0FIDA		
Process Host:	CTX1615				
First Level Reviewer: LXF2		Date:	01-Feb-2024 03:17:42		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Carbon dioxide	2.016	2.077	-0.061	843854433H	35820	256481	a

QC Flag Legend

Processing Flags

H - Response Measured by Height

Review Flags

a - User Assigned ID

Reagents:

EPH_CO2MS_00006 Amount Added: 100.00 Units: uL

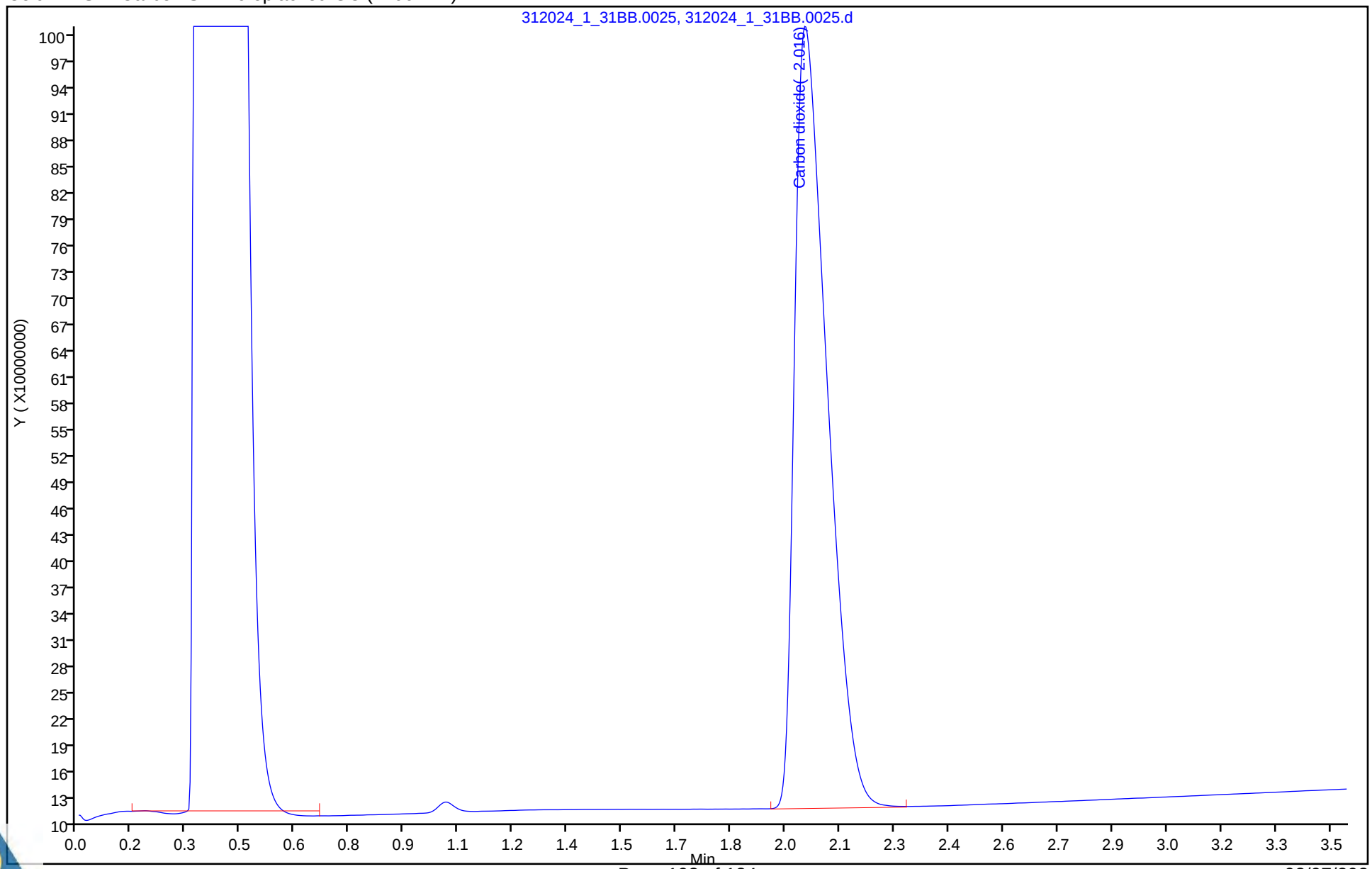
Report Date: 01-Feb-2024 03:18:21 Chrom Revision: 2.3 24-Jan-2024 12:19:54

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20240131-105219.b\312024_1_31BB.0025.d

Injection Date:	31-Jan-2024 13:27:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	410-158493-B-1-B MS RA			Worklist Smp#:	25
Client ID:	16IW10-240111				
Purge Vol:	1.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2		

Column: ShinCarbon ST Microplacked GC (1.00 mm)



Report Date: 01-Feb-2024 03:18:21 Chrom Revision: 2.3 24-Jan-2024 12:19:54 Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

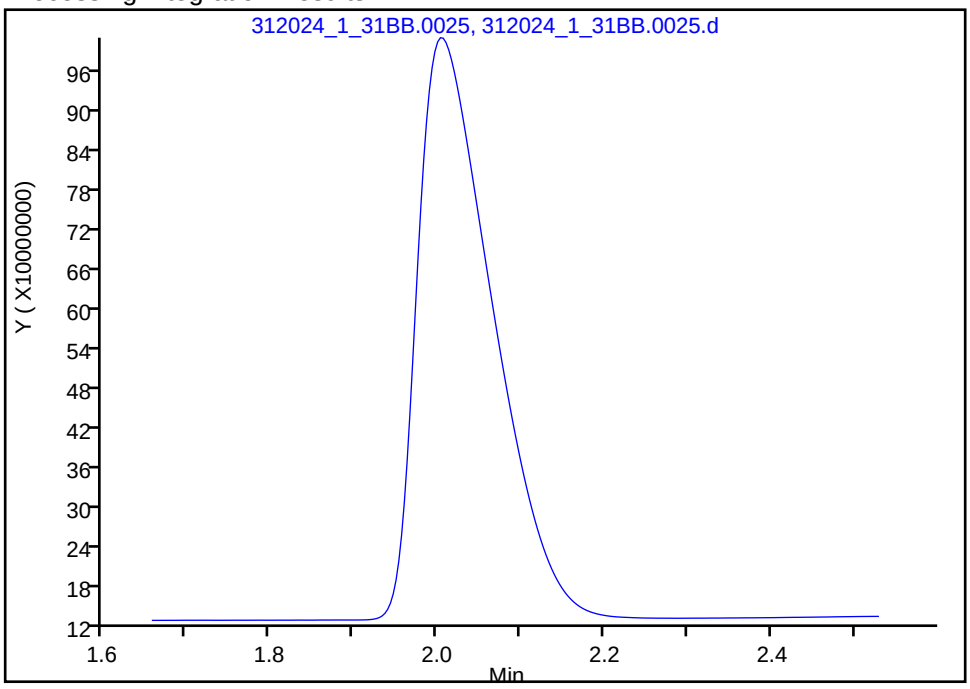
Data File:	\\chromfs\Lancaster\ChromData\19506-B\20240131-105219.b\312024_1_31BB.0025.d				
Injection Date:	31-Jan-2024 13:27:00	Instrument ID:	19506-B		
Lims ID:	410-158493-B-1-B MS RA				
Client ID:	16IW10-240111				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	25
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2		
Column:	ShinCarbon ST Microplacked GC (1.00 mm)	Detector	0FIDA		

1 Carbon dioxide, CAS: 124-38-9

Signal: 1

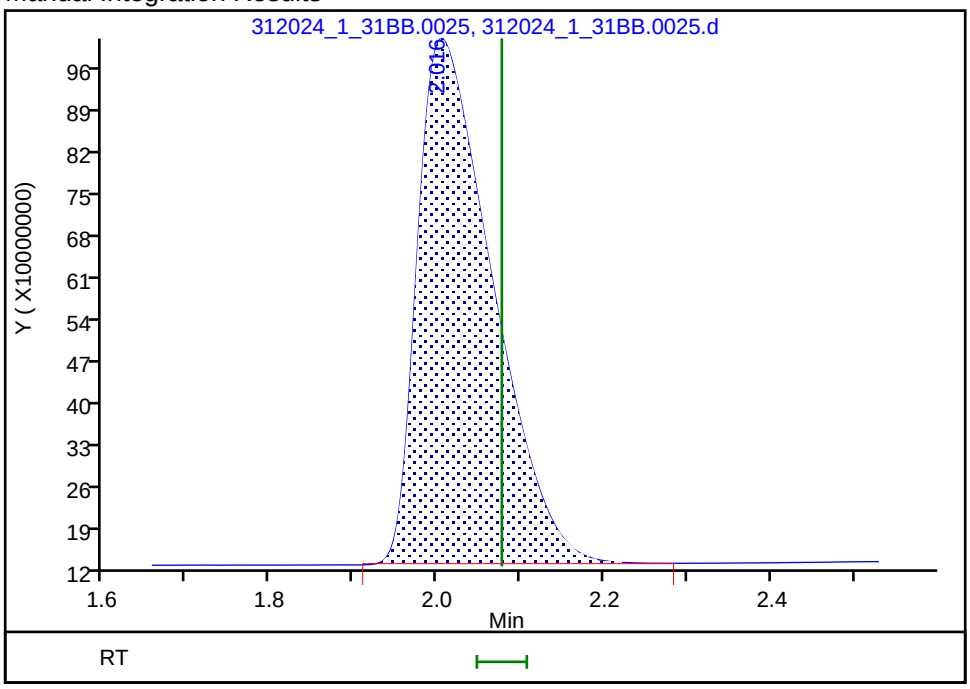
Not Detected
Expected RT: 2.08

Processing Integration Results



Manual Integration Results

RT: 2.02
Height: 843854433
Amount: 256481
Amount Units: ug/l



Reviewer: LXF2, 01-Feb-2024 03:17:41 -05:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-157797-1

SDG No.:

Client Sample ID: 16EW02-240111 MSD Lab Sample ID: 410-157797-2 MSD

Matrix: Water Lab File ID: 312024_1_22BB.0007.d

Analysis Method: RSK-175 Date Collected: 01/11/2024 08:05

Sample wt/vol: 5(mL) Date Analyzed: 01/22/2024 10:59

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP Plot ID: 0.53(mm)

Purge Volume: Heated Purge: (Y/N) N pH: 6.0

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 465326 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	DL
124-38-9	Carbon dioxide	217000	M 4 cn	12000	5600

Report Date: 23-Jan-2024 03:33:27 Chrom Revision: 2.3 18-Jan-2024 13:39:22

Eurofins Lancaster Laboratories Environment Testing, LLC

Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20240122-104503.b\312024_1_22BB.0007.d				
Lims ID:	410-157797-A-2-C MSD				
Client ID:	16EW02-240111				
Sample Type:	MSD				
Inject. Date:	22-Jan-2024 10:59:00	ALS Bottle#:	0	Worklist Smp#:	7
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	410-0104503-007				
Operator ID:		Instrument ID:	19506-B		
Method:	\\chromfs\Lancaster\ChromData\19506-B\20240122-104503.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	23-Jan-2024 03:33:26	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:	CTX1668				
First Level Reviewer: LXF2		Date:	23-Jan-2024 03:32:55		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Carbon dioxide	1.993	2.044	-0.051	714139958H	35820	217056	Ma

QC Flag Legend

Processing Flags

H - Response Measured by Height

Review Flags

M - Manually Integrated

a - User Assigned ID

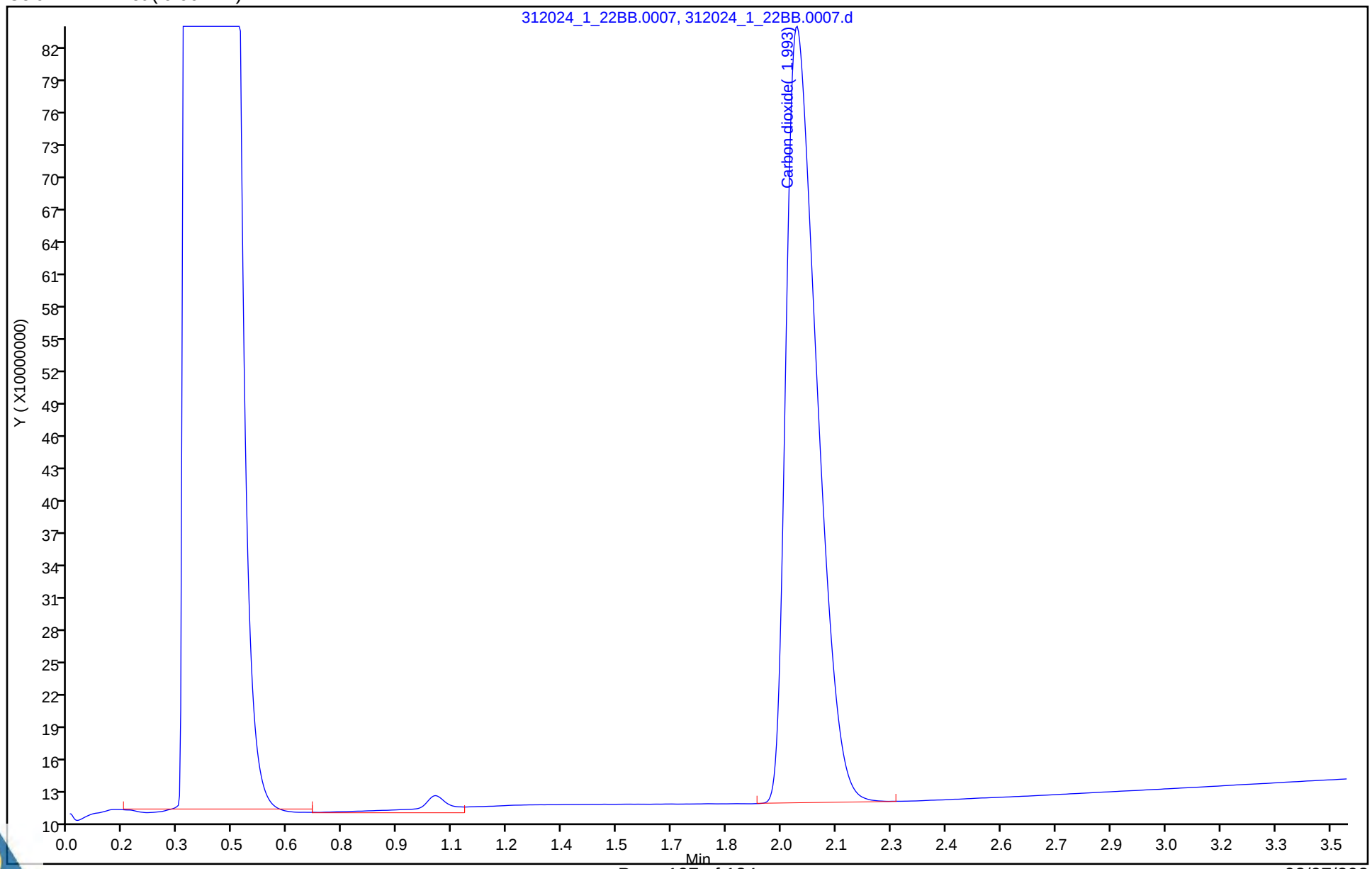
Report Date: 23-Jan-2024 03:33:27 Chrom Revision: 2.3 18-Jan-2024 13:39:22

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20240122-104503.b\312024_1_22BB.0007.d

Injection Date:	22-Jan-2024 10:59:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	410-157797-A-2-C MSD			Worklist Smp#:	7
Client ID:	16EW02-240111				
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: 23-Jan-2024 03:33:27

Chrom Revision: 2.3 18-Jan-2024 13:39:22 Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

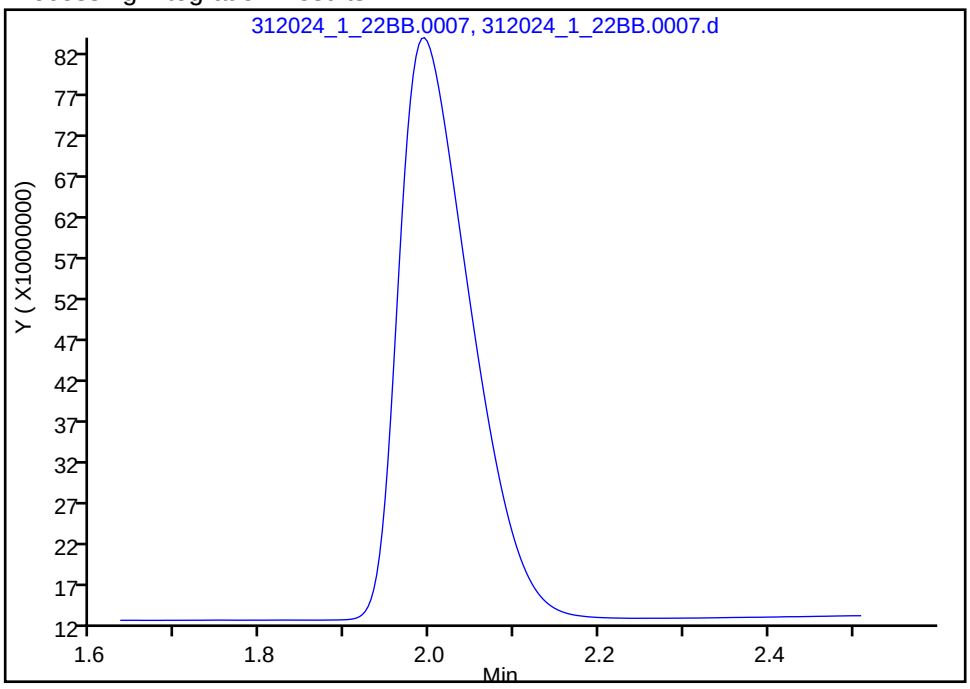
Data File:	\\chromfs\Lancaster\ChromData\19506-B\20240122-104503.b\312024_1_22BB.0007.d				
Injection Date:	22-Jan-2024 10:59:00	Instrument ID:	19506-B		
Lims ID:	410-157797-A-2-C MSD				
Client ID:	16EW02-240111				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	7
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
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

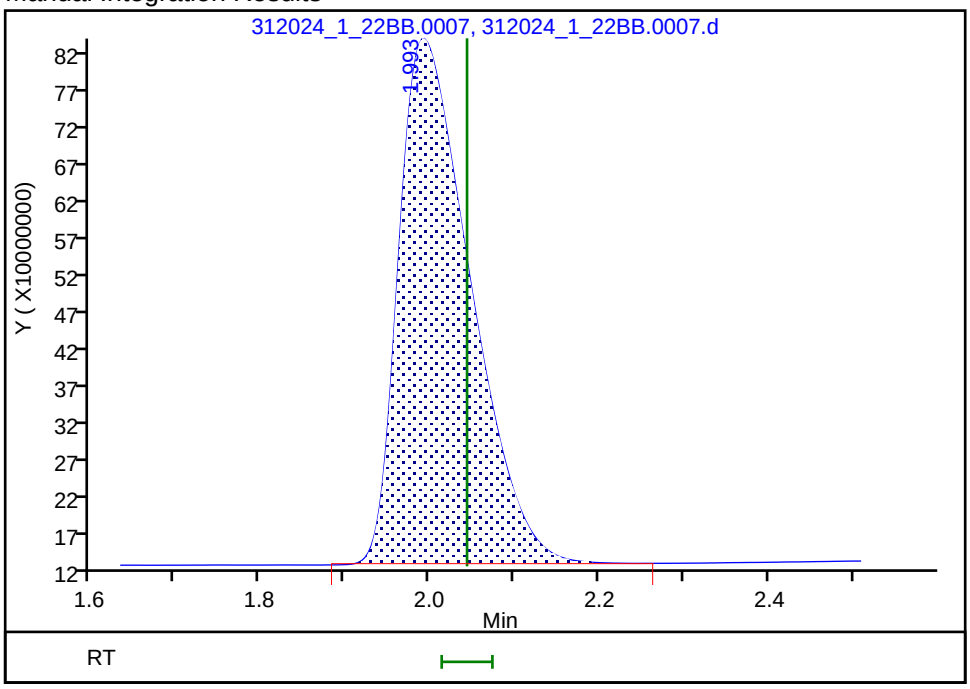
Not Detected
Expected RT: 2.04

Processing Integration Results



Manual Integration Results

RT: 1.99
Height: 714139958
Amount: 217056
Amount Units: ug/l



Reviewer: LXF2, 23-Jan-2024 03:32:54 -05:00:00 (UTC)
Audit Action: Manually Integrated Audit Reason: Baseline Smoothing

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-157797-1

SDG No.:

Client Sample ID: 16IW10-240111 MSD Lab Sample ID: 410-158493-1 MSD

Matrix: Water Lab File ID: 312024_1_31BB.0026.d

Analysis Method: RSK-175 Date Collected: 01/11/2024 07:05

Sample wt/vol: 5(mL) Date Analyzed: 01/31/2024 13:35

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: 19809 ID: 1(mm)

Purge Volume: Heated Purge: (Y/N) N pH: 7.0

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 468532 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	DL
124-38-9	Carbon dioxide	257000	H M 4	12000	5600

Report Date: 01-Feb-2024 03:18:21 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\20240131-105219.b\312024_1_31BB.0026.d
Lims ID: 410-158493-B-1-C MSD RA
Client ID: 16IW10-240111
Sample Type: MSD
Inject. Date: 31-Jan-2024 13:35:00 ALS Bottle#: 0 Worklist Smp#: 26
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info:
Misc. Info.: 410-0105219-026
Operator ID: Instrument ID: 19506-B

Method: \\chromfs\Lancaster\ChromData\19506-B\20240131-105219.b\RSK_CO2_19506B.m
Limit Group: GCV - RSK175 CO2
Last Update: 01-Feb-2024 03:18:19 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 : ShinCarbon ST Microplacked GC (1.00 mm) Det: 0FIDA
Process Host: CTX1615

First Level Reviewer: LXF2 Date: 01-Feb-2024 03:17:47

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Carbon dioxide	2.016	2.077	-0.061	846633416H	35820	257326	a

QC Flag Legend

Processing Flags
H - Response Measured by Height
Review Flags
a - User Assigned ID

Reagents:

EPH_CO2MS_00006 Amount Added: 100.00 Units: uL

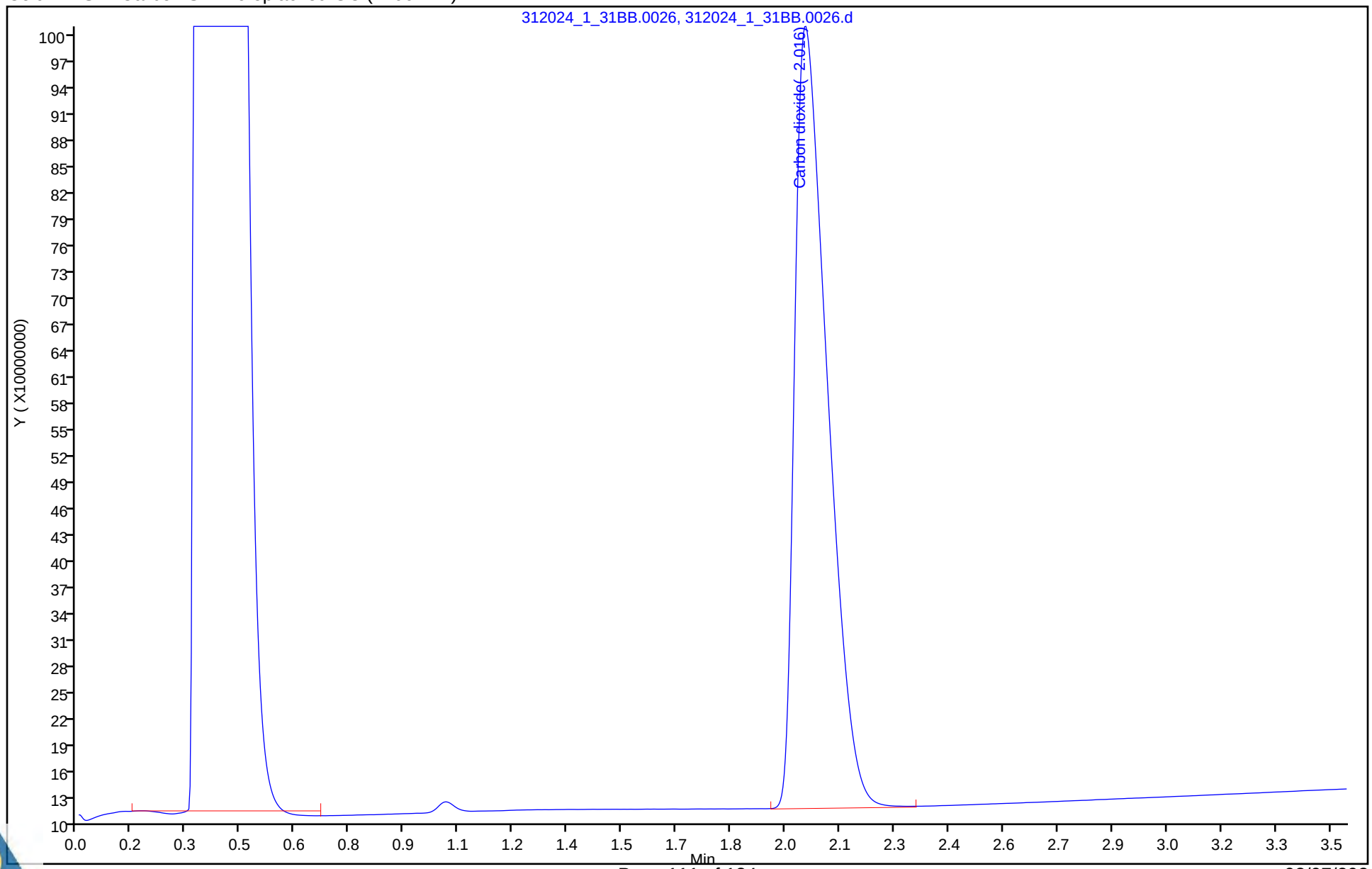
Report Date: 01-Feb-2024 03:18:21 Chrom Revision: 2.3 24-Jan-2024 12:19:54

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20240131-105219.b\312024_1_31BB.0026.d

Injection Date:	31-Jan-2024 13:35:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	410-158493-B-1-C MSD RA			Worklist Smp#:	26
Client ID:	16IW10-240111				
Purge Vol:	1.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2		

Column: ShinCarbon ST Microplacked GC (1.00 mm)



Report Date: 01-Feb-2024 03:18:21

Chrom Revision: 2.3 24-Jan-2024 12:19:54 Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

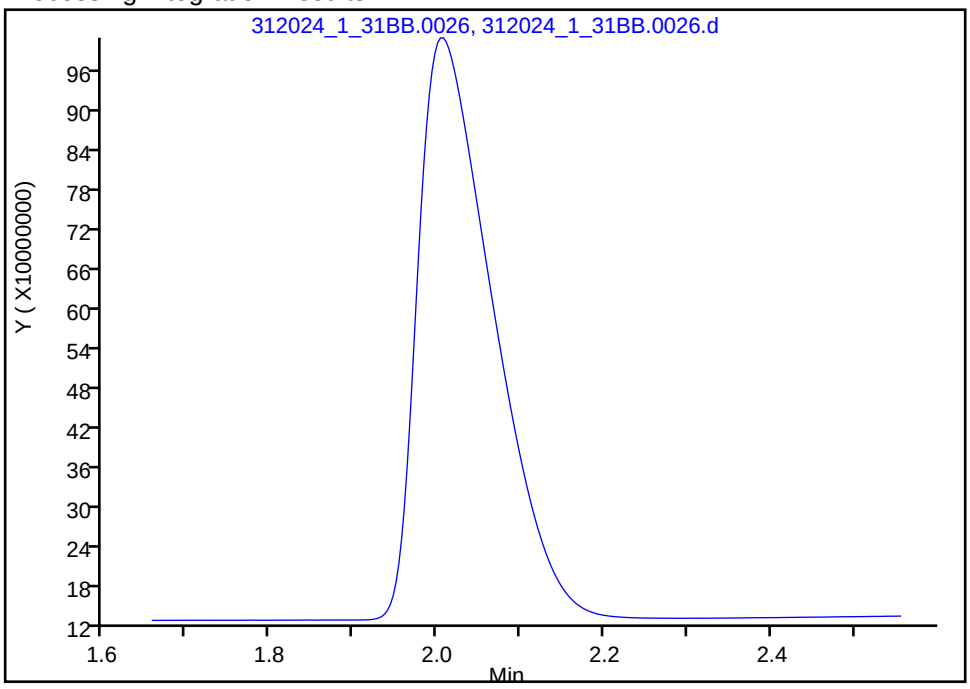
Data File:	\\chromfs\Lancaster\ChromData\19506-B\20240131-105219.b\312024_1_31BB.0026.d				
Injection Date:	31-Jan-2024 13:35:00	Instrument ID:	19506-B		
Lims ID:	410-158493-B-1-C MSD RA				
Client ID:	16IW10-240111				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	26
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2		
Column:	ShinCarbon ST Microplacked GC (1.00 mm)	Detector	0FIDA		

1 Carbon dioxide, CAS: 124-38-9

Signal: 1

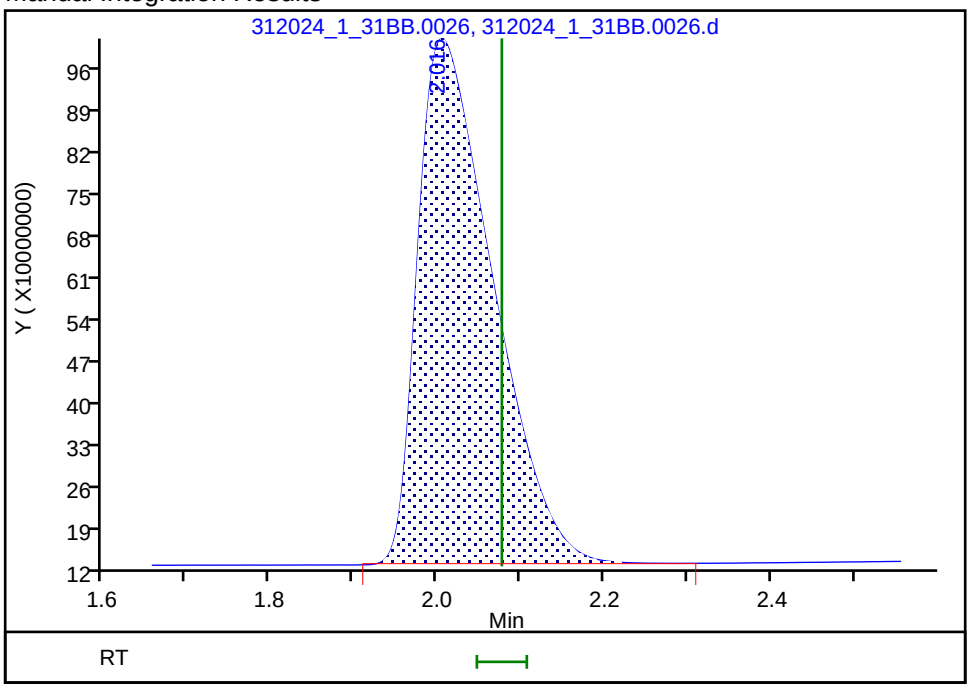
Not Detected
Expected RT: 2.08

Processing Integration Results



Manual Integration Results

RT: 2.02
Height: 846633416
Amount: 257326
Amount Units: ug/l



Reviewer: LXF2, 01-Feb-2024 03:17:47 -05:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Assign Peak

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC

Job No.: 410-157797-1

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.: 410-157797-1

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.: 410-157797-1

SDG No.:

Instrument ID: 19506-B

Start Date: 01/22/2024 09:51

Analysis Batch Number: 465326

End Date: 01/22/2024 12:45

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVRT 410-465326/2		01/22/2024 09:51	1	312024_1_22BB.0002.d	HP Plot 0.53(mm)
MB 410-465370/1-A		01/22/2024 10:28	1	312024_1_22BB.0003.d	HP Plot 0.53(mm)
LCS 410-465370/2-A		01/22/2024 10:35	1	312024_1_22BB.0004.d	HP Plot 0.53(mm)
410-157797-2	16EW02-240111	01/22/2024 10:44	1	312024_1_22BB.0005.d	HP Plot 0.53(mm)
410-157797-2 MS	16EW02-240111 MS	01/22/2024 10:51	1	312024_1_22BB.0006.d	HP Plot 0.53(mm)
410-157797-2 MSD	16EW02-240111 MSD	01/22/2024 10:59	1	312024_1_22BB.0007.d	HP Plot 0.53(mm)
410-157797-3	16IW20-240111	01/22/2024 11:07	1	312024_1_22BB.0008.d	HP Plot 0.53(mm)
CCV 410-465326/9		01/22/2024 11:14	1	312024_1_22BB.0009.d	HP Plot 0.53(mm)
ZZZZZ		01/22/2024 12:29	1		HP Plot 0.53(mm)
ZZZZZ		01/22/2024 12:37	1		HP Plot 0.53(mm)
CCV 410-465326/12		01/22/2024 12:45	1		HP Plot 0.53(mm)

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC

Job No.: 410-157797-1

SDG No.:

Instrument ID: 19506-B

Start Date: 01/31/2024 09:44

Analysis Batch Number: 468532

End Date: 01/31/2024 13:43

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVRT 410-468532/2		01/31/2024 09:44	1	312024_1_31BB.0002.d	19809 1(mm)
ZZZZZ		01/31/2024 09:59	1		19809 1(mm)
ZZZZZ		01/31/2024 10:06	1		19809 1(mm)
ZZZZZ		01/31/2024 10:54	1		19809 1(mm)
ZZZZZ		01/31/2024 11:01	1		19809 1(mm)
ZZZZZ		01/31/2024 11:10	1		19809 1(mm)
ZZZZZ		01/31/2024 11:17	1		19809 1(mm)
ZZZZZ		01/31/2024 11:25	1		19809 1(mm)
ZZZZZ		01/31/2024 11:32	1		19809 1(mm)
ZZZZZ		01/31/2024 11:40	1		19809 1(mm)
ZZZZZ		01/31/2024 11:48	1		19809 1(mm)
CCV 410-468532/13		01/31/2024 11:55	1		19809 1(mm)
ZZZZZ		01/31/2024 12:03	1		19809 1(mm)
ZZZZZ		01/31/2024 12:11	1		19809 1(mm)
ZZZZZ		01/31/2024 12:18	1		19809 1(mm)
ZZZZZ		01/31/2024 12:26	1		19809 1(mm)
ZZZZZ		01/31/2024 12:34	1		19809 1(mm)
ZZZZZ		01/31/2024 12:41	1		19809 1(mm)
ZZZZZ		01/31/2024 12:49	1		19809 1(mm)
CCV 410-468532/21		01/31/2024 12:57	1	312024_1_31BB.0021.d	19809 1(mm)
MB 410-468591/1-A		01/31/2024 13:04	1	312024_1_31BB.0022.d	19809 1(mm)
LCS 410-468591/2-A		01/31/2024 13:12	1	312024_1_31BB.0023.d	19809 1(mm)
410-158493-1	16IW10-240111	01/31/2024 13:20	1	312024_1_31BB.0024.d	19809 1(mm)
410-158493-1 MS	16IW10-240111 MS	01/31/2024 13:27	1	312024_1_31BB.0025.d	19809 1(mm)
410-158493-1 MSD	16IW10-240111 MSD	01/31/2024 13:35	1	312024_1_31BB.0026.d	19809 1(mm)
CCV 410-468532/27		01/31/2024 13:43	1	312024_1_31BB.0027.d	19809 1(mm)

GC VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-157797-1

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.: 410-157797-1

SDG No.:

Batch Number: 465370 Batch Start Date: 01/22/24 10:24 Batch Analyst: Omorogbe, Malachi

Batch Method: RSK-175 Batch End Date: 01/22/24 12:21

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	Headspace	EPH_CO2MS 00006	AnalysisComment
MB 410-465370/1		RSK-175, RSK-175			5 mL	5 mL			
LCS 410-465370/2		RSK-175, RSK-175			5 mL	5 mL		0.1 mL	
410-157797-A-2	16EW02-240111	RSK-175, RSK-175	T	6 SU	5 mL	5 mL	No		ph 6
410-157797-A-2 MS	16EW02-240111	RSK-175, RSK-175	T	6 SU	5 mL	5 mL	No	0.1 mL	ph 6
410-157797-A-2 MSD	16EW02-240111	RSK-175, RSK-175	T	6 SU	5 mL	5 mL	No	0.1 mL	ph 6
410-157797-A-3	16IW20-240111	RSK-175, RSK-175	T	6 SU	5 mL	5 mL	No		ph 6

Batch Notes	
Pipette/Syringe/Dispenser ID	7105
pH Indicator ID	10BDH2631

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.

GC VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-157797-1

SDG No.:

Batch Number: 468591 Batch Start Date: 01/31/24 10:07 Batch Analyst: Omorogbe, Malachi

Batch Method: RSK-175 Batch End Date: 01/31/24 10:45

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	Headspace	EPH_CO2MS 00006	AnalysisComment
MB 410-468591/1		RSK-175, RSK-175			5 mL	5 mL			
LCS 410-468591/2		RSK-175, RSK-175			5 mL	5 mL		0.1 mL	
410-158493-B-1	16IW10-240111	RSK-175, RSK-175	T	7 SU	5 mL	5 mL	No		DF1
410-158493-B-1 MS	16IW10-240111	RSK-175, RSK-175	T	7 SU	5 mL	5 mL	No		DF1
410-158493-B-1 MSD	16IW10-240111	RSK-175, RSK-175	T	7 SU	5 mL	5 mL	No		DF1

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

10450 Stancliff Rd, Ste 210
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F: +1 281 530 5887
www.alsglobal.com

Subcontract Chain of Custody

SAMPLING STATE: **Dept of Defense** **COC ID:** **24466**

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:	HS24010611
TSR:	Sonia West

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	**HS24010611-01**	**16IW10-240111**	**Groundwater**	**11 Jan 2024 07:05**
	RSK-CO2; Level II & IV, DoD, Equ_APTIM_GISKey (Aptim)			26 Jan 2024
2.	**HS24010611-02**	**16EW02-240111**	**Groundwater**	**11 Jan 2024 08:05**
	RSK-CO2; Level II & IV, DoD, Equ_APTIM_GISKey (Aptim)			26 Jan 2024
3.	**HS24010611-03**	**16IW20-240111**	**Groundwater**	**11 Jan 2024 09:05**
	RSK-CO2; Level II & IV, DoD, Equ_APTIM_GISKey (Aptim)			26 Jan 2024

Comments: Please analyze for the analysis listed above.
Send report to the emails shown above.
HS24010611-01 & HS24010611-02 = MS/MSD

QC Level: DOD IV (DoD Data Package)

Relinquished By: _____ Date/Time: 1/17/24 1800

Received By: _____ Date/Time: 1/18/24 1355

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

DAB

R: 2.3
C: 2.4

HM

R: 2.3
C: 2.4

410-158493 Chain of Custody

10450 Stancliff Rd, Ste 210
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www.alsglobal.com

Subcontract Chain of Custody

SAMPLING STATE: **Dept of Defense** **COC ID:** **24466**

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:	HS24010611
TSR:	Sonia West

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	**HS24010611-01**	**16IW10-240111**	**Groundwater**	**11 Jan 2024 07:05**
	RSK-CO2; Level II & IV, DoD, Equ_APTIM_GISKey (Aptim)			26 Jan 2024
2.	**HS24010611-02**	**16EW02-240111**	**Groundwater**	**11 Jan 2024 08:05**
	RSK-CO2; Level II & IV, DoD, Equ_APTIM_GISKey (Aptim)			26 Jan 2024
3.	**HS24010611-03**	**16IW20-240111**	**Groundwater**	**11 Jan 2024 09:05**
	RSK-CO2; Level II & IV, DoD, Equ_APTIM_GISKey (Aptim)			26 Jan 2024

Comments: Please analyze for the analysis listed above.
Send report to the emails shown above.
HS24010611-01 & HS24010611-02 = MS/MSD

QC Level: DOD IV (DoD Data Package)

Relinquished By: _____ Date/Time: 1/24/24 1800.

Received By: Debra A. Byrne Date/Time: 1-25-24 09:45

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

6 x vials for HS24010611-01 (ms/msd)

R: 2.4
C: 1.8

HA

CJ

Login Sample Receipt Checklist

Client: ALS Group USA, Corp

Job Number: 410-157797-1

Login Number: 157797
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.	False	Refer to Job Narrative for details.
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	

Login Sample Receipt Checklist

Client: ALS Group USA, Corp

Job Number: 410-157797-1

Login Number: 158493
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.	False	Refer to Job Narrative for details.
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	

HS24011040 LHAAP Site 16 Cover Page

ALS WO# HS24011040

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  - 16PM02-240118
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Certifications
SampleReceiptCheckList
COC
HS24011040 E2400067 Perch Level II Report Rev 01
HS24011040 Eurofins REVISED SUB Data_J158327-1 UDS Level 2 Report Rev(1) Final Report
HS24011040-MSVOA-SW8260
Form 1 - Sample Results
Form 2 - Surrogates
Form 3A - MS/MSD
Form 3B - LCS/LCSD
Form 4 - MB Assoc
Form 5 - Tune
Form 6 - ICAL
Form 6I - ICV
Form 7 - CCV
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Run Log
Raw Data VOA9_453430 U231206
Raw Data VOA9_457250 U240125
Raw Data VOA9_457361 U240126
HS24011040-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
HS24011040 Wetchem 9056_W-1
Sequence Overview
240117 ICAL
STD1

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right solutions.
right partner.

WorkOrder: HS24011040

LHAAP Site 16

Bhate Environmental Associates, Inc.

Marcia Olive
445 Union Blvd Ste 129
Lakewood CO 80228

07-Feb-2024

HS24011040 LHAAP Site 16 Final REV02

ALS WO# HS24011040

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February 09, 2024

Marcia Olive
Bhate Environmental Associates, Inc.
445 Union Blvd Ste 129
Lakewood, CO 80228

Work Order: **HS24011040**

Laboratory Results for: **LHAAP Site 16**

Dear Marcia Olive,

ALS Environmental received 13 sample(s) on Jan 19, 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: 09-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Work Order: HS24011040

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS24011040-01	16WW16-240118	Groundwater		18-Jan-2024 07:10	19-Jan-2024 09:35	☐
HS24011040-02	16WW16-240118-FD	Groundwater		18-Jan-2024 07:10	19-Jan-2024 09:35	☐
HS24011040-03	16WW35-240118	Groundwater		18-Jan-2024 08:15	19-Jan-2024 09:35	☐
HS24011040-04	16WW36-240118	Groundwater		18-Jan-2024 09:15	19-Jan-2024 09:35	☐
HS24011040-05	16WW36-240118-FD	Groundwater		18-Jan-2024 09:15	19-Jan-2024 09:35	☐
HS24011040-06	16PM02-240118	Groundwater		18-Jan-2024 10:05	19-Jan-2024 09:35	☐
HS24011040-07	16PM03-240118	Groundwater		18-Jan-2024 10:45	19-Jan-2024 09:35	☐
HS24011040-08	16PM14-240118	Groundwater		18-Jan-2024 11:30	19-Jan-2024 09:35	☐
HS24011040-09	16PM09-240118	Groundwater		18-Jan-2024 12:10	19-Jan-2024 09:35	☐
HS24011040-10	16PM06-240118	Groundwater		18-Jan-2024 12:50	19-Jan-2024 09:35	☐
HS24011040-11	16RW01-240118	Groundwater		18-Jan-2024 13:35	19-Jan-2024 09:35	☐
HS24011040-12	16RW04-240118	Groundwater		18-Jan-2024 14:15	19-Jan-2024 09:35	☐
HS24011040-13	Trip Blank-240118	Water	CG-111123-489	18-Jan-2024 00:00	19-Jan-2024 09:35	☐

Revision:2

ALS Houston, US Date: 09-Feb-24

Client: Bhate Environmental Associates, Inc. **CASE NARRATIVE**
Project: LHAAP Site 16
Work Order: HS24011040

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.

Work Order Comments

- The analysis for Carbon Dioxide was subcontracted to Eurofins Environmental Testing America l in Lancaster, PA . Final report attached
- The analysis for Perchlorate was subcontracted to ALS High Res Lab Houston, TX. Final report attached

Work Order Comments

- This report was revised 02/05/24 to update the subcontract reports.

GC Semivolatiles by Method RSK-175

Batch ID: R457054

Sample ID: 16WW35-240118 (HS24011040-03MS)

- The recovery of the Matrix Spike (MS) associated to this analyte was outside of the established control limits. However, the LCS was within control limits. The recovery of the MS may be due to sample matrix interference.

Sample ID: 16WW35-240118 (HS24011040-03MSD)

- The recovery of the Matrix Spike Duplicate (MSD) associated to this analyte was outside of the established control limits. However, the LCS was within control limits. The failed recovery of the MSD may be due to sample matrix interference.

GCMS Volatiles by Method SW8260

Batch ID: R457361

Sample ID: 16RW01-240118 (HS24011040-11)

- Surrogate failed outside control limits low. This was confirmed by reanalysis.

Sample ID: 16RW04-240118 (HS24011040-12)

- Surrogate failed outside control limits low. This was confirmed by reanalysis.

Sample ID: 16WW36-240118 (HS24011040-04)

- Surrogate failed outside control limits low. This was confirmed by reanalysis.

Sample ID: 16WW36-240118-FD (HS24011040-05)

- Surrogate failed outside control limits low. This was confirmed by reanalysis.

Sample ID: HS24011111-14MS

- MS and MSD are for an unrelated sample

ALS Houston, US Date: 09-Feb-24

Client: Bhate Environmental Associates, Inc. **CASE NARRATIVE**
Project: LHAAP Site 16
Work Order: HS24011040

GCMS Volatiles by Method SW8260

Batch ID: R457250

Sample ID: 16PM02-240118 (HS24011040-06)

- Lowest practical dilution due to matrix.

Sample ID: 16PM03-240118 (HS24011040-07)

- Lowest practical dilution due to matrix.

Sample ID: 16PM09-240118 (HS24011040-09)

- Lowest practical dilution due to matrix.

Sample ID: 16PM14-240118 (HS24011040-08)

- Lowest practical dilution due to matrix.

Sample ID: 16WW35-240118 (HS24011040-03)

- Lowest practical dilution due to matrix.

WetChemistry by Method SM5310B

Batch ID: R457121,R457122

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

WetChemistry by Method SW9056

Batch ID: R456810

Sample ID: 16WW35-240118 (HS24011040-03)

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

Sample ID: 16WW35-240118 (HS24011040-03MS)

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

Sample ID: HS24011010-01MS

- MS and MSD are for an unrelated sample (Sulfate)

Batch ID: R456956

Sample ID: 16WW35-240118 (HS24011040-03MS)

- The MS and/or MSD recovery was outside of the control limits; however, the result in the parent sample is greater than 4x the spike amount. (Sulfate)

ALS Houston, US Date: 09-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Sample ID: 16WW16-240118
Collection Date: 18-Jan-2024 07:10

ANALYTICAL REPORT
WorkOrder:HS24011040
Lab ID:HS24011040-01
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	100	U	30	100	100	ug/L	100	25-Jan-2024 15:32
1,1-Dichloroethene	100	U	20	100	100	ug/L	100	25-Jan-2024 15:32
1,2-Dichloroethane	100	U	20	100	100	ug/L	100	25-Jan-2024 15:32
cis-1,2-Dichloroethene	**20,000**		**20**	**100**	**100**	**ug/L**	100	25-Jan-2024 15:32
Methylene chloride	100	U	40	100	200	ug/L	100	25-Jan-2024 15:32
Trichloroethene	**40,000**		**200**	**1000**	**1000**	**ug/L**	1000	25-Jan-2024 17:01
Vinyl chloride	**380**		**20**	**100**	**100**	**ug/L**	100	25-Jan-2024 15:32
Surr: 1,2-Dichloroethane-d4	*90.3*			**0**	*81-118*	*%REC*	*100*	*25-Jan-2024 15:32*
Surr: 1,2-Dichloroethane-d4	*91.0*			**0**	*81-118*	*%REC*	*1000*	*25-Jan-2024 17:01*
Surr: 4-Bromofluorobenzene	*89.9*			**0**	*85-114*	*%REC*	*100*	*25-Jan-2024 15:32*
Surr: 4-Bromofluorobenzene	*89.4*			**0**	*85-114*	*%REC*	*1000*	*25-Jan-2024 17:01*
Surr: Dibromofluoromethane	*99.0*			**0**	*80-119*	*%REC*	*100*	*25-Jan-2024 15:32*
Surr: Dibromofluoromethane	*102*			**0**	*80-119*	*%REC*	*1000*	*25-Jan-2024 17:01*
Surr: Toluene-d8	*101*			**0**	*89-112*	*%REC*	*100*	*25-Jan-2024 15:32*
Surr: Toluene-d8	*104*			**0**	*89-112*	*%REC*	*1000*	*25-Jan-2024 17:01*
DISSOLVED GASES BY RSK-175		**Method:RSK-175**						Analyst: E.H.
Ethane	**0.00770**		**0.000144**	**0.000500**	**0.00100**	**mg/L**	1	23-Jan-2024 09:37
Ethene	**0.0172**		**0.000234**	**0.000500**	**0.00100**	**mg/L**	1	23-Jan-2024 09:37
Methane	**1.30**		**0.0107**	**0.0500**	**0.0500**	**mg/L**	100	23-Jan-2024 11:19
TOTAL ORGANIC CARBON - SM5310B-2011		**Method:SM5310B**						Analyst: DW
Organic Carbon, Total	**5.26**		**0.500**	**1.00**	**1.00**	**mg/L**	1	24-Jan-2024 17:27
ANIONS BY SW9056A		**Method:SW9056**						Analyst: TH
Nitrogen, Nitrate (As N)	**0.128**		**0.0300**	**0.0500**	**0.100**	**mg/L**	1	19-Jan-2024 19:56
Nitrogen, Nitrite (As N)	0.100	U	0.0300	0.100	0.100	mg/L	1	19-Jan-2024 19:56
Sulfate	**385**		**2.00**	**2.50**	**5.00**	**mg/L**	10	19-Jan-2024 20:02
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	30-Jan-2024 11:54
SUBCONTRACT ANALYSIS - RSK		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	30-Jan-2024 18:09

Note: See Qualifiers Page for a list of qualifiers and their explanation. **Revision:** 2

ALS Houston, US Date: 09-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Sample ID: 16WW16-240118-FD
Collection Date: 18-Jan-2024 07:10

ANALYTICAL REPORT
WorkOrder:HS24011040
Lab ID:HS24011040-02
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	100	U	30	100	100	ug/L	100	25-Jan-2024 15:54
1,1-Dichloroethene	100	U	20	100	100	ug/L	100	25-Jan-2024 15:54
1,2-Dichloroethane	100	U	20	100	100	ug/L	100	25-Jan-2024 15:54
cis-1,2-Dichloroethene	**22,000**		**200**	**1000**	**1000**	**ug/L**	1000	25-Jan-2024 17:23
Methylene chloride	100	U	40	100	200	ug/L	100	25-Jan-2024 15:54
Trichloroethene	**41,000**		**200**	**1000**	**1000**	**ug/L**	1000	25-Jan-2024 17:23
Vinyl chloride	**350**		**20**	**100**	**100**	**ug/L**	100	25-Jan-2024 15:54
Surr: 1,2-Dichloroethane-d4	*87.9*			**0**	*81-118*	*%REC*	*100*	*25-Jan-2024 15:54*
Surr: 1,2-Dichloroethane-d4	*90.3*			**0**	*81-118*	*%REC*	*1000*	*25-Jan-2024 17:23*
Surr: 4-Bromofluorobenzene	*89.1*			**0**	*85-114*	*%REC*	*1000*	*25-Jan-2024 17:23*
Surr: 4-Bromofluorobenzene	*91.5*			**0**	*85-114*	*%REC*	*100*	*25-Jan-2024 15:54*
Surr: Dibromofluoromethane	*104*			**0**	*80-119*	*%REC*	*100*	*25-Jan-2024 15:54*
Surr: Dibromofluoromethane	*99.3*			**0**	*80-119*	*%REC*	*1000*	*25-Jan-2024 17:23*
Surr: Toluene-d8	*103*			**0**	*89-112*	*%REC*	*1000*	*25-Jan-2024 17:23*
Surr: Toluene-d8	*106*			**0**	*89-112*	*%REC*	*100*	*25-Jan-2024 15:54*
DISSOLVED GASES BY RSK-175		**Method:RSK-175**						Analyst: E.H.
Ethane	**0.00995**		**0.000144**	**0.000500**	**0.00100**	**mg/L**	1	23-Jan-2024 09:46
Ethene	**0.0201**		**0.000234**	**0.000500**	**0.00100**	**mg/L**	1	23-Jan-2024 09:46
Methane	**1.61**		**0.0107**	**0.0500**	**0.0500**	**mg/L**	100	23-Jan-2024 11:30
TOTAL ORGANIC CARBON - SM5310B-2011		**Method:SM5310B**						Analyst: DW
Organic Carbon, Total	**4.63**		**0.500**	**1.00**	**1.00**	**mg/L**	1	24-Jan-2024 18:56
ANIONS BY SW9056A		**Method:SW9056**						Analyst: TH
Nitrogen, Nitrate (As N)	**0.108**		**0.0300**	**0.0500**	**0.100**	**mg/L**	1	19-Jan-2024 20:08
Nitrogen, Nitrite (As N)	0.100	U	0.0300	0.100	0.100	mg/L	1	19-Jan-2024 20:08
Sulfate	**406**		**2.00**	**2.50**	**5.00**	**mg/L**	10	19-Jan-2024 20:14
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	30-Jan-2024 11:54
SUBCONTRACT ANALYSIS - RSK		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	30-Jan-2024 18:09

Note: See Qualifiers Page for a list of qualifiers and their explanation. **Revision:** 2

ALS Houston, US Date: 09-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Sample ID: 16WW35-240118
Collection Date: 18-Jan-2024 08:15

ANALYTICAL REPORT
WorkOrder:HS24011040
Lab ID:HS24011040-03
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	100	U	30	100	100	ug/L	100	25-Jan-2024 15:10
1,1-Dichloroethene	**130**		**20**	**100**	**100**	**ug/L**	100	25-Jan-2024 15:10
1,2-Dichloroethane	100	U	20	100	100	ug/L	100	25-Jan-2024 15:10
cis-1,2-Dichloroethene	**1,300**		**20**	**100**	**100**	**ug/L**	100	25-Jan-2024 15:10
Methylene chloride	100	U	40	100	200	ug/L	100	25-Jan-2024 15:10
Trichloroethene	**10,000**		**20**	**100**	**100**	**ug/L**	100	25-Jan-2024 15:10
Vinyl chloride	**110**		**20**	**100**	**100**	**ug/L**	100	25-Jan-2024 15:10
Surr: 1,2-Dichloroethane-d4	*88.9*			**0**	*81-118*	*%REC*	*100*	*25-Jan-2024 15:10*
Surr: 4-Bromofluorobenzene	*90.7*			**0**	*85-114*	*%REC*	*100*	*25-Jan-2024 15:10*
Surr: Dibromofluoromethane	*98.6*			**0**	*80-119*	*%REC*	*100*	*25-Jan-2024 15:10*
Surr: Toluene-d8	*106*			**0**	*89-112*	*%REC*	*100*	*25-Jan-2024 15:10*
DISSOLVED GASES BY RSK-175		**Method:RSK-175**						Analyst: E.H.
Ethane	0.000500	U	0.000144	0.000500	0.00100	mg/L	1	23-Jan-2024 09:08
Ethene	**0.0144**		**0.000234**	**0.000500**	**0.00100**	**mg/L**	1	23-Jan-2024 09:08
Methane	**0.175**		**0.00107**	**0.00500**	**0.00500**	**mg/L**	10	23-Jan-2024 11:08
TOTAL ORGANIC CARBON - SM5310B-2011		**Method:SM5310B**						Analyst: DW
Organic Carbon, Total	**63.1**		**5.00**	**10.0**	**10.0**	**mg/L**	10	24-Jan-2024 19:11
ANIONS BY SW9056A		**Method:SW9056**						Analyst: TH
Nitrogen, Nitrate (As N)	0.500	U	0.300	0.500	1.00	mg/L	10	19-Jan-2024 20:20
Nitrogen, Nitrite (As N)	1.00	U	0.300	1.00	1.00	mg/L	10	19-Jan-2024 20:20
Sulfate	**9,710**		**40.0**	**50.0**	**100**	**mg/L**	200	22-Jan-2024 20:49
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	30-Jan-2024 11:54
SUBCONTRACT ANALYSIS - RSK		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	30-Jan-2024 18:09

Note: See Qualifiers Page for a list of qualifiers and their explanation. **Revision:** 2

ALS Houston, US Date: 09-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Sample ID: 16WW36-240118
Collection Date: 18-Jan-2024 09:15

ANALYTICAL REPORT
WorkOrder:HS24011040
Lab ID:HS24011040-04
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	50	U	15	50	50	ug/L	50	26-Jan-2024 13:48
1,1-Dichloroethene	**140**		**10**	**50**	**50**	**ug/L**	50	26-Jan-2024 13:48
1,2-Dichloroethane	50	U	10	50	50	ug/L	50	26-Jan-2024 13:48
cis-1,2-Dichloroethene	**8,700**		**10**	**50**	**50**	**ug/L**	50	26-Jan-2024 13:48
Methylene chloride	50	U	20	50	100	ug/L	50	26-Jan-2024 13:48
Trichloroethene	**12,000**		**50**	**250**	**250**	**ug/L**	250	26-Jan-2024 20:55
Vinyl chloride	**150**		**10**	**50**	**50**	**ug/L**	50	26-Jan-2024 13:48
Surr: 1,2-Dichloroethane-d4	*74.0*	*S*		**0**	*81-118*	*%REC*	*50*	*26-Jan-2024 13:48*
Surr: 1,2-Dichloroethane-d4	*76.2*	*S*		**0**	*81-118*	*%REC*	*250*	*26-Jan-2024 20:55*
Surr: 4-Bromofluorobenzene	*93.9*			**0**	*85-114*	*%REC*	*250*	*26-Jan-2024 20:55*
Surr: 4-Bromofluorobenzene	*97.2*			**0**	*85-114*	*%REC*	*50*	*26-Jan-2024 13:48*
Surr: Dibromofluoromethane	*83.8*			**0**	*80-119*	*%REC*	*250*	*26-Jan-2024 20:55*
Surr: Dibromofluoromethane	*85.0*			**0**	*80-119*	*%REC*	*50*	*26-Jan-2024 13:48*
Surr: Toluene-d8	*106*			**0**	*89-112*	*%REC*	*50*	*26-Jan-2024 13:48*
Surr: Toluene-d8	*103*			**0**	*89-112*	*%REC*	*250*	*26-Jan-2024 20:55*
TOTAL ORGANIC CARBON - SM5310B-2011		**Method:SM5310B**						Analyst: DW
Organic Carbon, Total	**17.9**		**0.500**	**1.00**	**1.00**	**mg/L**	1	24-Jan-2024 19:42
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: 09-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Sample ID: 16WW36-240118-FD
Collection Date: 18-Jan-2024 09:15

ANALYTICAL REPORT
WorkOrder:HS24011040
Lab ID:HS24011040-05
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	50	U	15	50	50	ug/L	50	26-Jan-2024 14:10
1,1-Dichloroethene	**120**		**10**	**50**	**50**	**ug/L**	50	26-Jan-2024 14:10
1,2-Dichloroethane	50	U	10	50	50	ug/L	50	26-Jan-2024 14:10
cis-1,2-Dichloroethene	**8,600**		**10**	**50**	**50**	**ug/L**	50	26-Jan-2024 14:10
Methylene chloride	50	U	20	50	100	ug/L	50	26-Jan-2024 14:10
Trichloroethene	**11,000**		**50**	**250**	**250**	**ug/L**	250	26-Jan-2024 21:20
Vinyl chloride	**140**		**10**	**50**	**50**	**ug/L**	50	26-Jan-2024 14:10
Surr: 1,2-Dichloroethane-d4	*77.0*	*S*		**0**	*81-118*	*%REC*	*250*	*26-Jan-2024 21:20*
Surr: 1,2-Dichloroethane-d4	*74.6*	*S*		**0**	*81-118*	*%REC*	*50*	*26-Jan-2024 14:10*
Surr: 4-Bromofluorobenzene	*95.0*			**0**	*85-114*	*%REC*	*250*	*26-Jan-2024 21:20*
Surr: 4-Bromofluorobenzene	*94.9*			**0**	*85-114*	*%REC*	*50*	*26-Jan-2024 14:10*
Surr: Dibromofluoromethane	*84.9*			**0**	*80-119*	*%REC*	*50*	*26-Jan-2024 14:10*
Surr: Dibromofluoromethane	*87.2*			**0**	*80-119*	*%REC*	*250*	*26-Jan-2024 21:20*
Surr: Toluene-d8	*105*			**0**	*89-112*	*%REC*	*50*	*26-Jan-2024 14:10*
Surr: Toluene-d8	*103*			**0**	*89-112*	*%REC*	*250*	*26-Jan-2024 21:20*
TOTAL ORGANIC CARBON - SM5310B-2011		**Method:SM5310B**						Analyst: DW
Organic Carbon, Total	**18.0**		**0.500**	**1.00**	**1.00**	**mg/L**	1	24-Jan-2024 19:57
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: 09-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Sample ID: 16PM02-240118
Collection Date: 18-Jan-2024 10:05

ANALYTICAL REPORT
WorkOrder:HS24011040
Lab ID:HS24011040-06
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	250	U	75	250	250	ug/L	250	25-Jan-2024 17:45
1,1-Dichloroethene	250	U	50	250	250	ug/L	250	25-Jan-2024 17:45
1,2-Dichloroethane	250	U	50	250	250	ug/L	250	25-Jan-2024 17:45
cis-1,2-Dichloroethene	**4,900**		**50**	**250**	**250**	**ug/L**	250	25-Jan-2024 17:45
Methylene chloride	250	U	100	250	500	ug/L	250	25-Jan-2024 17:45
Trichloroethene	**47,000**		**50**	**250**	**250**	**ug/L**	250	25-Jan-2024 17:45
Vinyl chloride	**150**	J	**50**	**250**	**250**	**ug/L**	250	25-Jan-2024 17:45
Surr: 1,2-Dichloroethane-d4	*91.3*			**0**	*81-118*	*%REC*	*250*	*25-Jan-2024 17:45*
Surr: 4-Bromofluorobenzene	*89.7*			**0**	*85-114*	*%REC*	*250*	*25-Jan-2024 17:45*
Surr: Dibromofluoromethane	*101*			**0**	*80-119*	*%REC*	*250*	*25-Jan-2024 17:45*
Surr: Toluene-d8	*103*			**0**	*89-112*	*%REC*	*250*	*25-Jan-2024 17:45*
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: 09-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Sample ID: 16PM03-240118
Collection Date: 18-Jan-2024 10:45

ANALYTICAL REPORT
WorkOrder:HS24011040
Lab ID:HS24011040-07
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	50	U	15	50	50	ug/L	50	25-Jan-2024 18:07
1,1-Dichloroethene	50	U	10	50	50	ug/L	50	25-Jan-2024 18:07
1,2-Dichloroethane	50	U	10	50	50	ug/L	50	25-Jan-2024 18:07
cis-1,2-Dichloroethene	**7,500**		**10**	**50**	**50**	**ug/L**	50	25-Jan-2024 18:07
Methylene chloride	50	U	20	50	100	ug/L	50	25-Jan-2024 18:07
Trichloroethene	**7,700**		**10**	**50**	**50**	**ug/L**	50	25-Jan-2024 18:07
Vinyl chloride	**200**		**10**	**50**	**50**	**ug/L**	50	25-Jan-2024 18:07
Surr: 1,2-Dichloroethane-d4	*91.4*			**0**	*81-118*	*%REC*	*50*	*25-Jan-2024 18:07*
Surr: 4-Bromofluorobenzene	*90.5*			**0**	*85-114*	*%REC*	*50*	*25-Jan-2024 18:07*
Surr: Dibromofluoromethane	*99.6*			**0**	*80-119*	*%REC*	*50*	*25-Jan-2024 18:07*
Surr: Toluene-d8	*104*			**0**	*89-112*	*%REC*	*50*	*25-Jan-2024 18:07*
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: 09-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Sample ID: 16PM14-240118
Collection Date: 18-Jan-2024 11:30

ANALYTICAL REPORT
WorkOrder:HS24011040
Lab ID:HS24011040-08
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	50	U	15	50	50	ug/L	50	25-Jan-2024 18:52
1,1-Dichloroethene	50	U	10	50	50	ug/L	50	25-Jan-2024 18:52
1,2-Dichloroethane	50	U	10	50	50	ug/L	50	25-Jan-2024 18:52
cis-1,2-Dichloroethene	**5,100**		**10**	**50**	**50**	**ug/L**	50	25-Jan-2024 18:52
Methylene chloride	50	U	20	50	100	ug/L	50	25-Jan-2024 18:52
Trichloroethene	**5,400**		**10**	**50**	**50**	**ug/L**	50	25-Jan-2024 18:52
Vinyl chloride	**190**		**10**	**50**	**50**	**ug/L**	50	25-Jan-2024 18:52
Surr: 1,2-Dichloroethane-d4	*93.5*			**0**	*81-118*	*%REC*	*50*	*25-Jan-2024 18:52*
Surr: 4-Bromofluorobenzene	*91.3*			**0**	*85-114*	*%REC*	*50*	*25-Jan-2024 18:52*
Surr: Dibromofluoromethane	*103*			**0**	*80-119*	*%REC*	*50*	*25-Jan-2024 18:52*
Surr: Toluene-d8	*105*			**0**	*89-112*	*%REC*	*50*	*25-Jan-2024 18:52*
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: 09-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Sample ID: 16PM09-240118
Collection Date: 18-Jan-2024 12:10

ANALYTICAL REPORT
WorkOrder:HS24011040
Lab ID:HS24011040-09
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	25	U	7.5	25	25	ug/L	25	25-Jan-2024 19:14
1,1-Dichloroethene	**24**	J	**5.0**	**25**	**25**	**ug/L**	25	25-Jan-2024 19:14
1,2-Dichloroethane	25	U	5.0	25	25	ug/L	25	25-Jan-2024 19:14
cis-1,2-Dichloroethene	**320**		**5.0**	**25**	**25**	**ug/L**	25	25-Jan-2024 19:14
Methylene chloride	25	U	10	25	50	ug/L	25	25-Jan-2024 19:14
Trichloroethene	**1,100**		**5.0**	**25**	**25**	**ug/L**	25	25-Jan-2024 19:14
Vinyl chloride	**13**	J	**5.0**	**25**	**25**	**ug/L**	25	25-Jan-2024 19:14
Surr: 1,2-Dichloroethane-d4	*96.4*			**0**	*81-118*	*%REC*	*25*	*25-Jan-2024 19:14*
Surr: 4-Bromofluorobenzene	*91.3*			**0**	*85-114*	*%REC*	*25*	*25-Jan-2024 19:14*
Surr: Dibromofluoromethane	*106*			**0**	*80-119*	*%REC*	*25*	*25-Jan-2024 19:14*
Surr: Toluene-d8	*105*			**0**	*89-112*	*%REC*	*25*	*25-Jan-2024 19:14*
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: 09-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Sample ID: 16PM06-240118
Collection Date: 18-Jan-2024 12:50

ANALYTICAL REPORT
WorkOrder:HS24011040
Lab ID:HS24011040-10
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	250	U	75	250	250	ug/L	250	25-Jan-2024 20:20
1,1-Dichloroethene	250	U	50	250	250	ug/L	250	25-Jan-2024 20:20
1,2-Dichloroethane	250	U	50	250	250	ug/L	250	25-Jan-2024 20:20
cis-1,2-Dichloroethene	**25,000**		**50**	**250**	**250**	**ug/L**	250	25-Jan-2024 20:20
Methylene chloride	250	U	100	250	500	ug/L	250	25-Jan-2024 20:20
Trichloroethene	**80,000**		**400**	**2000**	**2000**	**ug/L**	2000	25-Jan-2024 20:42
Vinyl chloride	**670**		**50**	**250**	**250**	**ug/L**	250	25-Jan-2024 20:20
Surr: 1,2-Dichloroethane-d4	*92.9*			**0**	*81-118*	*%REC*	*250*	*25-Jan-2024 20:20*
Surr: 1,2-Dichloroethane-d4	*93.9*			**0**	*81-118*	*%REC*	*2000*	*25-Jan-2024 20:42*
Surr: 4-Bromofluorobenzene	*88.3*			**0**	*85-114*	*%REC*	*250*	*25-Jan-2024 20:20*
Surr: 4-Bromofluorobenzene	*87.4*			**0**	*85-114*	*%REC*	*2000*	*25-Jan-2024 20:42*
Surr: Dibromofluoromethane	*103*			**0**	*80-119*	*%REC*	*250*	*25-Jan-2024 20:20*
Surr: Dibromofluoromethane	*103*			**0**	*80-119*	*%REC*	*2000*	*25-Jan-2024 20:42*
Surr: Toluene-d8	*104*			**0**	*89-112*	*%REC*	*250*	*25-Jan-2024 20:20*
Surr: Toluene-d8	*102*			**0**	*89-112*	*%REC*	*2000*	*25-Jan-2024 20:42*
DISSOLVED GASES BY RSK-175		**Method:RSK-175**						Analyst: E.H.
Ethane	**0.0300**	J	**0.00720**	**0.0250**	**0.0500**	**mg/L**	50	23-Jan-2024 11:53
Ethene	**0.192**		**0.0117**	**0.0250**	**0.0500**	**mg/L**	50	23-Jan-2024 11:53
Methane	**0.769**		**0.00535**	**0.0250**	**0.0250**	**mg/L**	50	23-Jan-2024 11:53
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: 09-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Sample ID: 16RW01-240118
Collection Date: 18-Jan-2024 13:35

ANALYTICAL REPORT
WorkOrder:HS24011040
Lab ID:HS24011040-11
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	5.0	U	1.5	5.0	5.0	ug/L	5	25-Jan-2024 19:36
1,1-Dichloroethene	5.0	U	1.0	5.0	5.0	ug/L	5	25-Jan-2024 19:36
1,2-Dichloroethane	5.0	U	1.0	5.0	5.0	ug/L	5	25-Jan-2024 19:36
cis-1,2-Dichloroethene	**72**		**1.0**	**5.0**	**5.0**	**ug/L**	5	25-Jan-2024 19:36
Methylene chloride	5.0	U	2.0	5.0	10	ug/L	5	25-Jan-2024 19:36
Trichloroethene	**2,200**		**10**	**50**	**50**	**ug/L**	50	26-Jan-2024 15:17
Vinyl chloride	**2.6**	J	**1.0**	**5.0**	**5.0**	**ug/L**	5	25-Jan-2024 19:36
Surr: 1,2-Dichloroethane-d4	*94.4*			**0**	*81-118*	*%REC*	*5*	*25-Jan-2024 19:36*
Surr: 1,2-Dichloroethane-d4	*75.6*	*S*		**0**	*81-118*	*%REC*	*50*	*26-Jan-2024 15:17*
Surr: 4-Bromofluorobenzene	*91.1*			**0**	*85-114*	*%REC*	*5*	*25-Jan-2024 19:36*
Surr: 4-Bromofluorobenzene	*95.8*			**0**	*85-114*	*%REC*	*50*	*26-Jan-2024 15:17*
Surr: Dibromofluoromethane	*104*			**0**	*80-119*	*%REC*	*5*	*25-Jan-2024 19:36*
Surr: Dibromofluoromethane	*85.2*			**0**	*80-119*	*%REC*	*50*	*26-Jan-2024 15:17*
Surr: Toluene-d8	*105*			**0**	*89-112*	*%REC*	*5*	*25-Jan-2024 19:36*
Surr: Toluene-d8	*104*			**0**	*89-112*	*%REC*	*50*	*26-Jan-2024 15:17*
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: 09-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Sample ID: 16RW04-240118
Collection Date: 18-Jan-2024 14:15

ANALYTICAL REPORT
WorkOrder:HS24011040
Lab ID:HS24011040-12
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	5.0	U	1.5	5.0	5.0	ug/L	5	25-Jan-2024 19:58
1,1-Dichloroethene	5.0	U	1.0	5.0	5.0	ug/L	5	25-Jan-2024 19:58
1,2-Dichloroethane	5.0	U	1.0	5.0	5.0	ug/L	5	25-Jan-2024 19:58
cis-1,2-Dichloroethene	**140**		**1.0**	**5.0**	**5.0**	**ug/L**	5	25-Jan-2024 19:58
Methylene chloride	5.0	U	2.0	5.0	10	ug/L	5	25-Jan-2024 19:58
Trichloroethene	**3,200**		**10**	**50**	**50**	**ug/L**	50	26-Jan-2024 15:40
Vinyl chloride	**5.8**		**1.0**	**5.0**	**5.0**	**ug/L**	5	25-Jan-2024 19:58
Surr: 1,2-Dichloroethane-d4	*93.7*			**0**	*81-118*	*%REC*	*5*	*25-Jan-2024 19:58*
Surr: 1,2-Dichloroethane-d4	*74.4*	*S*		**0**	*81-118*	*%REC*	*50*	*26-Jan-2024 15:40*
Surr: 4-Bromofluorobenzene	*86.9*			**0**	*85-114*	*%REC*	*5*	*25-Jan-2024 19:58*
Surr: 4-Bromofluorobenzene	*98.5*			**0**	*85-114*	*%REC*	*50*	*26-Jan-2024 15:40*
Surr: Dibromofluoromethane	*104*			**0**	*80-119*	*%REC*	*5*	*25-Jan-2024 19:58*
Surr: Dibromofluoromethane	*83.1*			**0**	*80-119*	*%REC*	*50*	*26-Jan-2024 15:40*
Surr: Toluene-d8	*104*			**0**	*89-112*	*%REC*	*5*	*25-Jan-2024 19:58*
Surr: Toluene-d8	*104*			**0**	*89-112*	*%REC*	*50*	*26-Jan-2024 15:40*
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 10:58
Ethene	**0.00423**		**0.000234**	**0.000500**	**0.00100**	**mg/L**	1	23-Jan-2024 10:58
Methane	**0.282**		**0.00107**	**0.00500**	**0.00500**	**mg/L**	10	23-Jan-2024 12:05
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: 09-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
Sample ID: Trip Blank-240118
Collection Date: 18-Jan-2024 00:00

ANALYTICAL REPORT
WorkOrder:HS24011040
Lab ID:HS24011040-13
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 14:25
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	25-Jan-2024 14:25
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	25-Jan-2024 14:25
cis-1,2-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	25-Jan-2024 14:25
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	25-Jan-2024 14:25
Trichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	25-Jan-2024 14:25
Vinyl chloride	1.0	U	0.20	1.0	1.0	ug/L	1	25-Jan-2024 14:25
Surr: 1,2-Dichloroethane-d4	*92.3*			**0**	*81-118*	*%REC*	*1*	*25-Jan-2024 14:25*
Surr: 4-Bromofluorobenzene	*91.8*			**0**	*85-114*	*%REC*	*1*	*25-Jan-2024 14:25*
Surr: Dibromofluoromethane	*102*			**0**	*80-119*	*%REC*	*1*	*25-Jan-2024 14:25*
Surr: Toluene-d8	*105*			**0**	*89-112*	*%REC*	*1*	*25-Jan-2024 14:25*

Note: See Qualifiers Page for a list of qualifiers and their explanation. **Revision:** 2

ALS Houston, US Date: 09-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24011040

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: R456810 (0)	**Test Name :** ANIONS BY SW9056A				**Matrix:** Groundwater	
HS24011040-01	16WW16-240118	18 Jan 2024 07:10			19 Jan 2024 20:02	10
HS24011040-01	16WW16-240118	18 Jan 2024 07:10			19 Jan 2024 19:56	1
HS24011040-02	16WW16-240118-FD	18 Jan 2024 07:10			19 Jan 2024 20:14	10
HS24011040-02	16WW16-240118-FD	18 Jan 2024 07:10			19 Jan 2024 20:08	1
HS24011040-03	16WW35-240118	18 Jan 2024 08:15			19 Jan 2024 20:20	10
Batch ID: R456956 (0)	**Test Name :** ANIONS BY SW9056A				**Matrix:** Groundwater	
HS24011040-03	16WW35-240118	18 Jan 2024 08:15			22 Jan 2024 20:49	200
Batch ID: R457054 (0)	**Test Name :** DISSOLVED GASES BY RSK-175				**Matrix:** Groundwater	
HS24011040-01	16WW16-240118	18 Jan 2024 07:10			23 Jan 2024 11:19	100
HS24011040-01	16WW16-240118	18 Jan 2024 07:10			23 Jan 2024 09:37	1
HS24011040-02	16WW16-240118-FD	18 Jan 2024 07:10			23 Jan 2024 11:30	100
HS24011040-02	16WW16-240118-FD	18 Jan 2024 07:10			23 Jan 2024 09:46	1
HS24011040-03	16WW35-240118	18 Jan 2024 08:15			23 Jan 2024 11:08	10
HS24011040-03	16WW35-240118	18 Jan 2024 08:15			23 Jan 2024 09:08	1
HS24011040-10	16PM06-240118	18 Jan 2024 12:50			23 Jan 2024 11:53	50
HS24011040-12	16RW04-240118	18 Jan 2024 14:15			23 Jan 2024 12:05	10
HS24011040-12	16RW04-240118	18 Jan 2024 14:15			23 Jan 2024 10:58	1
Batch ID: R457121 (0)	**Test Name :** TOTAL ORGANIC CARBON - SM5310B-2011				**Matrix:** Groundwater	
HS24011040-01	16WW16-240118	18 Jan 2024 07:10			24 Jan 2024 17:27	1
Batch ID: R457122 (0)	**Test Name :** TOTAL ORGANIC CARBON - SM5310B-2011				**Matrix:** Groundwater	
HS24011040-02	16WW16-240118-FD	18 Jan 2024 07:10			24 Jan 2024 18:56	1
HS24011040-03	16WW35-240118	18 Jan 2024 08:15			24 Jan 2024 19:11	10
HS24011040-04	16WW36-240118	18 Jan 2024 09:15			24 Jan 2024 19:42	1
HS24011040-05	16WW36-240118-FD	18 Jan 2024 09:15			24 Jan 2024 19:57	1
Batch ID: R457250 (0)	**Test Name :** VOLATILES ORGANICS BY METHOD 8260C				**Matrix:** Water	
HS24011040-13	Trip Blank-240118	18 Jan 2024 00:00			25 Jan 2024 14:25	1

Revision: 2

ALS Houston, US Date: 09-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24011040

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: R457250 (0)	**Test Name :** VOLATILES ORGANICS BY METHOD 8260C				**Matrix:** Groundwater	
HS24011040-01	16WW16-240118	18 Jan 2024 07:10			25 Jan 2024 17:01	1000
HS24011040-01	16WW16-240118	18 Jan 2024 07:10			25 Jan 2024 15:32	100
HS24011040-02	16WW16-240118-FD	18 Jan 2024 07:10			25 Jan 2024 17:23	1000
HS24011040-02	16WW16-240118-FD	18 Jan 2024 07:10			25 Jan 2024 15:54	100
HS24011040-03	16WW35-240118	18 Jan 2024 08:15			25 Jan 2024 15:10	100
HS24011040-06	16PM02-240118	18 Jan 2024 10:05			25 Jan 2024 17:45	250
HS24011040-07	16PM03-240118	18 Jan 2024 10:45			25 Jan 2024 18:07	50
HS24011040-08	16PM14-240118	18 Jan 2024 11:30			25 Jan 2024 18:52	50
HS24011040-09	16PM09-240118	18 Jan 2024 12:10			25 Jan 2024 19:14	25
HS24011040-10	16PM06-240118	18 Jan 2024 12:50			25 Jan 2024 20:42	2000
HS24011040-10	16PM06-240118	18 Jan 2024 12:50			25 Jan 2024 20:20	250
HS24011040-11	16RW01-240118	18 Jan 2024 13:35			25 Jan 2024 19:36	5
HS24011040-12	16RW04-240118	18 Jan 2024 14:15			25 Jan 2024 19:58	5
Batch ID: R457361 (0)	**Test Name :** VOLATILES ORGANICS BY METHOD 8260C				**Matrix:** Groundwater	
HS24011040-04	16WW36-240118	18 Jan 2024 09:15			26 Jan 2024 20:55	250
HS24011040-04	16WW36-240118	18 Jan 2024 09:15			26 Jan 2024 13:48	50
HS24011040-05	16WW36-240118-FD	18 Jan 2024 09:15			26 Jan 2024 21:20	250
HS24011040-05	16WW36-240118-FD	18 Jan 2024 09:15			26 Jan 2024 14:10	50
HS24011040-11	16RW01-240118	18 Jan 2024 13:35			26 Jan 2024 15:17	50
HS24011040-12	16RW04-240118	18 Jan 2024 14:15			26 Jan 2024 15:40	50
Batch ID: R457489 (0)	**Test Name :** SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)				**Matrix:** Groundwater	
HS24011040-01	16WW16-240118	18 Jan 2024 07:10			30 Jan 2024 11:54	1
HS24011040-02	16WW16-240118-FD	18 Jan 2024 07:10			30 Jan 2024 11:54	1
HS24011040-03	16WW35-240118	18 Jan 2024 08:15			30 Jan 2024 11:54	1
HS24011040-04	16WW36-240118	18 Jan 2024 09:15			30 Jan 2024 11:54	1
HS24011040-05	16WW36-240118-FD	18 Jan 2024 09:15			30 Jan 2024 11:54	1
HS24011040-06	16PM02-240118	18 Jan 2024 10:05			30 Jan 2024 11:54	1
HS24011040-07	16PM03-240118	18 Jan 2024 10:45			30 Jan 2024 11:54	1
HS24011040-08	16PM14-240118	18 Jan 2024 11:30			30 Jan 2024 11:54	1
HS24011040-09	16PM09-240118	18 Jan 2024 12:10			30 Jan 2024 11:54	1
HS24011040-10	16PM06-240118	18 Jan 2024 12:50			30 Jan 2024 11:54	1
HS24011040-11	16RW01-240118	18 Jan 2024 13:35			30 Jan 2024 11:54	1
HS24011040-12	16RW04-240118	18 Jan 2024 14:15			30 Jan 2024 11:54	1
Batch ID: R457568 (0)	**Test Name :** SUBCONTRACT ANALYSIS - RSK				**Matrix:** Groundwater	
HS24011040-01	16WW16-240118	18 Jan 2024 07:10			30 Jan 2024 18:09	1
HS24011040-02	16WW16-240118-FD	18 Jan 2024 07:10			30 Jan 2024 18:09	1
HS24011040-03	16WW35-240118	18 Jan 2024 08:15			30 Jan 2024 18:09	1

Revision: 2

ALS Houston, US Date: 09-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24011040

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: **16WW35-240118** 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: 09-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24011040

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: **16WW35-240118** 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: HS24011040-01 HS24011040-02 HS24011040-03 HS24011040-10 HS24011040-12

Revision: 2

ALS Houston, US Date: 09-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24011040

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: 09-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24011040

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: **16WW35-240118** 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: **16WW35-240118** 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:

HS24011040-01	HS24011040-02	HS24011040-03	HS24011040-06
HS24011040-07	HS24011040-08	HS24011040-09	HS24011040-10
HS24011040-11	HS24011040-12	HS24011040-13	

Revision: 2

ALS Houston, US Date: 09-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24011040

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: 09-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24011040

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: 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: 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: HS24011040-04 HS24011040-05 HS24011040-11 HS24011040-12

Revision: 2

ALS Houston, US Date: 09-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24011040

QC BATCH REPORT

Batch ID: R456810 (0) **Instrument:** ICS-Integrion **Method:** ANIONS BY SW9056A

MBLK Sample ID: **MBLK** Units: **mg/L** Analysis Date: **19-Jan-2024 11:20**
Client ID: Run ID: **ICS-Integrion_456810** SeqNo: **7787733** 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: **19-Jan-2024 11:32**
Client ID: Run ID: **ICS-Integrion_456810** SeqNo: **7787734** 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)	4.023	0.100	4	0	101	80 - 120				
Nitrogen, Nitrite (As N)	4.34	0.100	4	0	109	80 - 120				
Sulfate	20.28	0.500	20	0	101	80 - 120				

MS Sample ID: **HS24011040-03MS** Units: **mg/L** Analysis Date: **19-Jan-2024 20:25**
Client ID: **16WW35-240118** Run ID: **ICS-Integrion_456810** SeqNo: **7787768** PrepDate: DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrogen, Nitrate (As N)	19.12	1.00	20	0	95.6	80 - 120				
Nitrogen, Nitrite (As N)	16.03	1.00	20	0	80.1	80 - 120				
Sulfate	2.50	5.00	100	0	0	80 - 120				S U

MS Sample ID: **HS24011010-01MS** Units: **mg/L** Analysis Date: **19-Jan-2024 12:45**
Client ID: Run ID: **ICS-Integrion_456810** SeqNo: **7787736** 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)	4.385	0.100	2	2.602	89.1	80 - 120				
Nitrogen, Nitrite (As N)	1.876	0.100	2	0.0376	91.9	80 - 120				
Sulfate	48.27	0.500	10	40.85	74.2	80 - 120				SO

Revision: 2

ALS Houston, US Date: 09-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24011040

QC BATCH REPORT

Batch ID: R456810 (0) **Instrument:** ICS-Integrion **Method:** ANIONS BY SW9056A

MSD Sample ID: **HS24011040-03MSD** Units: **mg/L** Analysis Date: **19-Jan-2024 20:31**
Client ID: **16WW35-240118** Run ID: **ICS-Integrion_456810** SeqNo: **7787769** PrepDate: DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nitrogen, Nitrate (As N)	18.69	1.00	20	0	93.4	80 - 120	19.12	2.28	20	
Nitrogen, Nitrite (As N)	15.81	1.00	20	0	79.0	80 - 120	16.03	1.4	20	S
Sulfate	2.50	5.00	100	0	0	80 - 120	0	0	20	S U

MSD Sample ID: **HS24011010-01MSD** Units: **mg/L** Analysis Date: **19-Jan-2024 12:51**
Client ID: Run ID: **ICS-Integrion_456810** SeqNo: **7787737** 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)	4.411	0.100	2	2.602	90.4	80 - 120	4.385	0.598	20	
Nitrogen, Nitrite (As N)	1.888	0.100	2	0.0376	92.5	80 - 120	1.876	0.654	20	
Sulfate	48.64	0.500	10	40.85	77.9	80 - 120	48.27	0.763	20	SO

The following samples were analyzed in this batch: HS24011040-01 HS24011040-02 HS24011040-03

Revision: 2

ALS Houston, US Date: 09-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24011040

QC BATCH REPORT

Batch ID: R456956 (0) **Instrument:** ICS-Integrion **Method:** ANIONS BY SW9056A

MBLK Sample ID: **MBLK** Units: **mg/L** Analysis Date: **22-Jan-2024 20:26**
Client ID: Run ID: **ICS-Integrion_456956** SeqNo: **7790674** PrepDate: DF: **1**

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

LCS Sample ID: **LCS** Units: **mg/L** Analysis Date: **22-Jan-2024 20:43**
Client ID: Run ID: **ICS-Integrion_456956** SeqNo: **7790675** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sulfate	19.65	0.500	20	0	98.3	80 - 120				

MS Sample ID: **HS24011040-03MS** Units: **mg/L** Analysis Date: **22-Jan-2024 20:55**
Client ID: **16WW35-240118** Run ID: **ICS-Integrion_456956** SeqNo: **7790677** PrepDate: DF: **200**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sulfate	10590	100	2000	9706	44.2	80 - 120				SO

MSD Sample ID: **HS24011040-03MSD** Units: **mg/L** Analysis Date: **22-Jan-2024 21:01**
Client ID: **16WW35-240118** Run ID: **ICS-Integrion_456956** SeqNo: **7790678** PrepDate: DF: **200**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Sulfate	10570	100	2000	9706	43.2	80 - 120	10590	0.183	20	SO

The following samples were analyzed in this batch: HS24011040-03

Revision: 2

ALS Houston, US Date: 09-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24011040

QC BATCH REPORT

Batch ID: R457121 (0) **Instrument:** TOC_05 **Method:** TOTAL ORGANIC CARBON - SM5310B-2011

MBLK Sample ID: **MBLK-01232024** Units: **mg/L** Analysis Date: **24-Jan-2024 12:42**
Client ID: Run ID: **TOC_05_457121** SeqNo: **7794704** 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-01232024** Units: **mg/L** Analysis Date: **24-Jan-2024 12:57**
Client ID: Run ID: **TOC_05_457121** SeqNo: **7794707** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	9.251	1.00	10	0	92.5	85 - 115				

LCSD Sample ID: **LCSD-01232024** Units: **mg/L** Analysis Date: **24-Jan-2024 13:17**
Client ID: Run ID: **TOC_05_457121** SeqNo: **7794708** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	9.301	1.00	10	0	93.0	85 - 115	9.251	0.539	20	

MS Sample ID: **HS24011031-01MS** Units: **mg/L** Analysis Date: **24-Jan-2024 13:48**
Client ID: Run ID: **TOC_05_457121** SeqNo: **7794710** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	17.54	1.00	10	7.084	105	80 - 120				

The following samples were analyzed in this batch: HS24011040-01

Revision: 2

ALS Houston, US Date: 09-Feb-24

Client: Bhate Environmental Associates, Inc.
Project: LHAAP Site 16
WorkOrder: HS24011040

QC BATCH REPORT

Batch ID: R457122 (0) **Instrument:** TOC_05 **Method:** TOTAL ORGANIC CARBON - SM5310B-2011

MBLK Sample ID: **MBLK-01232024** Units: **mg/L** Analysis Date: **24-Jan-2024 18:09**
Client ID: Run ID: **TOC_05_457122** SeqNo: **7794726** 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-01232024** Units: **mg/L** Analysis Date: **24-Jan-2024 18:25**
Client ID: Run ID: **TOC_05_457122** SeqNo: **7794727** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	10.24	1.00	10	0	102	85 - 115				

LCSD Sample ID: **LCSD-01232024** Units: **mg/L** Analysis Date: **24-Jan-2024 18:41**
Client ID: Run ID: **TOC_05_457122** SeqNo: **7794728** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	10.53	1.00	10	0	105	85 - 115	10.24	2.79	20	

MS Sample ID: **HS24011040-03MS** Units: **mg/L** Analysis Date: **24-Jan-2024 19:26**
Client ID: **16WW35-240118** Run ID: **TOC_05_457122** SeqNo: **7794731** PrepDate: DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	157.9	10.0	100	63.06	94.8	80 - 120				

The following samples were analyzed in this batch: HS24011040-02 HS24011040-03 HS24011040-04 HS24011040-05

Revision: 2

ALS Houston, US Date: 09-Feb-24

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

QUALIFIERS, ACRONYMS, UNITS

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

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

Unit Reported	Description
mg/L	Milligrams per Liter

CERTIFICATIONS,ACCREDITATIONS & LICENSES

Agency	Number	Expire Date
Arkansas	88-00356	27-Mar-2024
California	2919; 2024	30-Apr-2024
Dept of Defense	~~L23-358~~ L22-90-R2	~~31-May-2025~~ 31 March 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: 09-Feb-24

Sample Receipt Checklist

Work Order ID: HS24011040 **Date/Time Received:** 19-Jan-2024 09:35

Client Name: Bhate Environmental **Received by:** Jacob Coronado

Completed By:	/S/ Paresh M. Giga	19-Jan-2024 16:55	**Reviewed by:**	/S/ James Guin	22-Jan-2024 08:42
	eSignature	Date/Time		eSignature	Date/Time

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

Shipping container/cooler in good condition?	Yes	☑	No	☐	Not Present	☐
Custody seals intact on shipping container/cooler?	Yes	☑	No	☐	Not Present	☐
Custody seals intact on sample bottles?	Yes	☐	No	☐	Not Present	☑
VOA/TX1005/TX1006 Solids in hermetically sealed vials?	Yes	☐	No	☐	Not Present	☑
Chain of custody present?	Yes	☑	No	☐	2 Page(s)	
Chain of custody signed when relinquished and received?	Yes	☑	No	☐	COC IDs:none	
Samplers name present on COC?	Yes	☑	No	☐		
Chain of custody agrees with sample labels?	Yes	☑	No	☐		
Samples in proper container/bottle?	Yes	☑	No	☐		
Sample containers intact?	Yes	☑	No	☐		
Sufficient sample volume for indicated test?	Yes	☑	No	☐		
All samples received within holding time?	Yes	☑	No	☐		
Container/Temp Blank temperature in compliance?	Yes	☑	No	☐		

Temperature(s)/Thermometer(s):	2.4C/2.3C U/C	IR31
Cooler(s)/Kit(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	☐	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):

LIMS Number:

Chain of Custody and Analytical Request

Facility/Base I.D.: LHAAP / BILL to PCI

Project/Site Name: LHAAP / Site 16

Client Name:

Collected by: Scott Beesinger

Sample Analysis Requested (5) | 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	Ambient Blank Lot Control Number	Equipment Blank Lot Control Number	Trip Blank Lot Control Number	Cooler ID
16mw16_240118	18 Jan 2024	0710	-	N		wg	13	X	X	X	X	X	X				
16mw16_240118_FD	18 Jan 2024	0710	-	FD		wg	13	X	X	X	X	X	X				
16mw35_240118	18 Jan 2024	0815	-	N		wg	13	X	X	X	X	X	X				
16mw35_240118_MS	18 Jan 2024	0815		MS		wg	13	X	X	X	X	X	X				
16mw35_240118_MSD	18 Jan 2024	0815		SD		wg	13	X	X	X	X	X	X				
16mw36_240118	18 Jan 2024	0915	-	N		wg	6	X		X			X				
16mw36_240118_FD	18 Jan 2024	0915	-	FD		wg	6	X		X			X				
16PM02_240118	18 Jan 2024	1005	-	N		wg	4	X					X				
16PM03_240118	18 Jan 2024	1045	-	N		wg	4	X					X				
16PM14_240118	18 Jan 2024	1130	-	N		wg	4	X					X				
16PM09_240118	18 Jan 2024	1210	-	N		wg	4	X					X				

HS24011040

Bhate Environmental Associates, Inc.
LHAAP Site 16

COMMENTS: STANDARD TAT

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. Scott Beesinger	1/18/24	1500	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 01/19/24 9:35
Blue 2.4 + 8.3
-IK-01

bhate

Page: of

Project/Phase

No: JVPCIBH.0001

1608 13th Avenue South, Suite 300
Birmingham Alabama 35205

Chain of Custody and Analytical Request

COC Number(1):

LIMS Number:

Facility/Base I.D.: LHAAP / BILL to PCI

Project/Site Name: LHAAP / Site 16

Client Name:

Collected by: Scott Beesinger

Field Sample ID (30 Characters Max)	Date Collected (dd-mmm-yyyy)	Time Collected (Military) (hhmm)	Sample Depth (beginning - ending)	SA Code (2)	Sample Number (3)	Sample Matrix (4)	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
16PMW6-240118	18-Jan-2024	1250	-	N		WG	7	X	X				X				
16RW01-240118	18-Jan-2024	1335	-	N		WG	4	X					X				
16RW14-240118	18-Jan-2024	1415	-	N		WG	7	X	X				X				
TRIP Blank-240118	18-Jan-2024			TB		W	2	X									
			-														
			-														
			-														
			-														
			-														
			-														

Sample Analysis Requested (5) | Quality Assurance Samples (6)

HS24011040

Bhate Environmental Associates, Inc.
LHAAP Site 16

COMMENTS: STANDARD TAT

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
1. Scott Beesinger	1/18/24	1530	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 Stanciff 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

JC

01/19/24
9:35 Blue
D.I. Jug
PLC-01

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

Blue

CUSTODY SEAL	Seal Broken By:
Date: 1/18/24 Time: 1500	Date: 01/19/24
Name: Scott Beebiner	
Company: BHATE	

Blue JAN 1 9 2024

Must Deliver Next Business Day
Time and Tempature Sensitive!

Blue

ORIGIN ID:SGRA (903) 930-6193
SCOTT BEEBINER
BHATE ENVIRONMENTAL ASSOCIATES
1203-B EAST GRAND AVE. PMB202

MARSHALL, TX 75670
UNITED STATES US

SHIP DATE: 21DEC23
ACTWGT: 1.00 LB MAN
CAD: 0221247/CAFE3755
DIMS: 28x14x14 IN

TO SAMPLE RECEIVING
ALS GROUP USA,CORP
10450 STANCLIFF ROAD
SUITE 210
HOUSTON TX 77099
(281) 530-5656
REF: LHAAP=16-BO 97804-JG

RMA:

FedEx Express

FedEx
TRK# 0221 6862 6800 5407

FRI - 19 JAN 10:30A
PRIORITY OVERNIGHT

AB SGRA

77099
TX-US IAH

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

H Kelany

Hussam Kelany
Project Manager

ADDRESS 10450 Stancliff Rd., Suite 210, Houston, TX 77099
PHONE +1 281 530 5656 | FAX +1 281 530 5887
ALS Group USA, Corp.
dba ALS Environmental

Certificate of Analysis

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

Client:	ALS Environmental - US	**Service Request No.:**	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	6WW35-240118	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	6WW35-240118	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
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HS24011040

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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 (Date/Time) Paresh M. Giga (eSignature) **Reviewed/By:** (Date/Time) (eSignature)

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

Shipping container/cooler in good condition?	☑ Yes	☐ No	☐ Not Present	
Custody seals intact on shipping container/cooler?	☑ Yes	☐ No	☐ Not Present	
Custody seals intact on Sample bottles?	☐ Yes	☐ No	☑ Not Present	
VOA/TX1005/TX1006 Solids in hermetically sealed vials?	☐ Yes	☐ No	☑ Not Present	
Chain of custody present?	☑ Yes	☐ No	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:

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Houston, TX 77099
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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
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Phone (281)530-5656 Fax (281)530-5887
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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	6WW35-240118	.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	6WW35-240118 MS	.02	6850/ClO4 DOD			Liquid	10mL	
25	EQ2400040-05	6WW35-240118 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

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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:	6WW35-240118	**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:	6WW35-240118	**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:	6WW35-240118	**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:	6WW35-240118	**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	*

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ANALYTICAL REPORT

PREPARED FOR

Attn: Jumoke Lawal
ALS Group USA, Corp
10450 Stancliff Rd.
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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.

my EOL

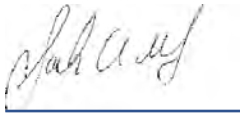
Eurofins Lancaster Laboratories Environment Testing, LLC

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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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
Project/Site: HS24011040

Job ID: 410-158327-1

Qualifiers

GC VOA

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
cn	Refer to Case Narrative for further detail
J1	Estimated: The quantitation is an estimation due to discrepancies in meeting certain analyte-specific quality control criteria.
M	Manual integrated compound.
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: HS24011040

Job ID: 410-158327-1

Job ID: 410-158327-1 Eurofins Lancaster Laboratories Environment

Job Narrative
410-158327-1

REVISION

The report being provided is a revision of the original report sent on 1/30/2024. The report (revision 1) is being revised due to sample IDs being updated to have a - (dash) instead of an _ (underscore) in their names.

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	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	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	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	DL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	160000		12000	5600	ug/L		01/25/24 10:08	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	DL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	150000		12000	5600	ug/L		01/25/24 10:08	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	DL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	200000	M J1	12000	5600	ug/L		01/25/24 10:08	01/25/24 11:28	1

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	DL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	5600	U	12000	5600	ug/L		01/25/24 10:08	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
Project/Site: HS24011040

Job ID: 410-158327-1

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: 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

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

410-158327 Chain of Custody

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): _____

CB

R: 1.2
C: 1.5

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	

HS24011040-MSVOA-SW8260

ALS WO# HS24011040

right solutions.
right partner.

Form 1

Organic Analysis Data Sheet

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

Form 1 - Organic Analysis Data Sheet

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

Volatiles by EPA Volatiles Organics by Method 8260C

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
1,1,2-Trichloroethane	ug/L	100	U	30	100	100	100	01/25/24 15:32	VOA9_457250	U012515.D
1,1-Dichloroethene	ug/L	100	U	20	100	100	100	01/25/24 15:32	VOA9_457250	U012515.D
1,2-Dichloroethane	ug/L	100	U	20	100	100	100	01/25/24 15:32	VOA9_457250	U012515.D
cis-1,2-Dichloroethene	ug/L	20,000		20	100	100	100	01/25/24 15:32	VOA9_457250	U012515.D
Methylene chloride	ug/L	200	U	40	200	200	100	01/25/24 15:32	VOA9_457250	U012515.D
Trichloroethene	ug/L	40,000		200	1000	1000	1000	01/25/24 17:01	VOA9_457250	U012519.D
Vinyl chloride	ug/L	380		20	100	100	100	01/25/24 15:32	VOA9_457250	U012515.D

Form 1 - Organic Analysis Data Sheet

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

Volatiles by EPA Volatiles Organics by Method 8260C

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
1,1,2-Trichloroethane	ug/L	100	U	30	100	100	100	01/25/24 15:54	VOA9_457250	U012516.D
1,1-Dichloroethene	ug/L	100	U	20	100	100	100	01/25/24 15:54	VOA9_457250	U012516.D
1,2-Dichloroethane	ug/L	100	U	20	100	100	100	01/25/24 15:54	VOA9_457250	U012516.D
cis-1,2-Dichloroethene	ug/L	22,000		200	1000	1000	1000	01/25/24 17:23	VOA9_457250	U012520.D
Methylene chloride	ug/L	200	U	40	200	200	100	01/25/24 15:54	VOA9_457250	U012516.D
Trichloroethene	ug/L	41,000		200	1000	1000	1000	01/25/24 17:23	VOA9_457250	U012520.D
Vinyl chloride	ug/L	350		20	100	100	100	01/25/24 15:54	VOA9_457250	U012516.D

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24011040

Volatiles by EPA Volatiles Organics by Method 8260C

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
1,1,2-Trichloroethane	ug/L	100	U	30	100	100	100	01/25/24 15:10	VOA9_457250	U012514.D
1,1-Dichloroethene	ug/L	130		20	100	100	100	01/25/24 15:10	VOA9_457250	U012514.D
1,2-Dichloroethane	ug/L	100	U	20	100	100	100	01/25/24 15:10	VOA9_457250	U012514.D
cis-1,2-Dichloroethene	ug/L	1,300		20	100	100	100	01/25/24 15:10	VOA9_457250	U012514.D
Methylene chloride	ug/L	200	U	40	200	200	100	01/25/24 15:10	VOA9_457250	U012514.D
Trichloroethene	ug/L	10,000		20	100	100	100	01/25/24 15:10	VOA9_457250	U012514.D
Vinyl chloride	ug/L	110		20	100	100	100	01/25/24 15:10	VOA9_457250	U012514.D

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder **HS24011040**

Volatiles by EPA Volatiles Organics by Method 8260C

16WW36-240118	Collected	Received	Matrix	Basis
HS24011040-04	01/18/24 09:15	01/19/24 09:35	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	50	U	15	50	50	50	01/26/24 13:48	VOA9_457361	U012607.D
1,1-Dichloroethene	ug/L	140		10	50	50	50	01/26/24 13:48	VOA9_457361	U012607.D
1,2-Dichloroethane	ug/L	50	U	10	50	50	50	01/26/24 13:48	VOA9_457361	U012607.D
cis-1,2-Dichloroethene	ug/L	8,700		10	50	50	50	01/26/24 13:48	VOA9_457361	U012607.D
Methylene chloride	ug/L	100	U	20	100	100	50	01/26/24 13:48	VOA9_457361	U012607.D
Trichloroethene	ug/L	12,000		50	250	250	250	01/26/24 20:55	VOA9_457361	U012626.D
Vinyl chloride	ug/L	150		10	50	50	50	01/26/24 13:48	VOA9_457361	U012607.D

Form 1 - Organic Analysis Data Sheet

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

Volatiles by EPA Volatiles Organics by Method 8260C

16WW36-240118-FD	Collected	Received	Matrix	Basis
HS24011040-05	01/18/24 09:15	01/19/24 09:35	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	50	U	15	50	50	50	01/26/24 14:10	VOA9_457361	U012608.D
1,1-Dichloroethene	ug/L	120		10	50	50	50	01/26/24 14:10	VOA9_457361	U012608.D
1,2-Dichloroethane	ug/L	50	U	10	50	50	50	01/26/24 14:10	VOA9_457361	U012608.D
cis-1,2-Dichloroethene	ug/L	8,600		10	50	50	50	01/26/24 14:10	VOA9_457361	U012608.D
Methylene chloride	ug/L	100	U	20	100	100	50	01/26/24 14:10	VOA9_457361	U012608.D
Trichloroethene	ug/L	11,000		50	250	250	250	01/26/24 21:20	VOA9_457361	U012627.D
Vinyl chloride	ug/L	140		10	50	50	50	01/26/24 14:10	VOA9_457361	U012608.D

Form 1 - Organic Analysis Data Sheet

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

Volatiles by EPA Volatiles Organics by Method 8260C

16PM02-240118	Collected	Received	Matrix	Basis
HS24011040-06	01/18/24 10:05	01/19/24 09:35	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	01/25/24 17:45	VOA9_457250	U012521.D
1,1-Dichloroethene	ug/L	250	U	50	250	250	250	01/25/24 17:45	VOA9_457250	U012521.D
1,2-Dichloroethane	ug/L	250	U	50	250	250	250	01/25/24 17:45	VOA9_457250	U012521.D
cis-1,2-Dichloroethene	ug/L	4,900		50	250	250	250	01/25/24 17:45	VOA9_457250	U012521.D
Methylene chloride	ug/L	500	U	100	500	500	250	01/25/24 17:45	VOA9_457250	U012521.D
Trichloroethene	ug/L	47,000		50	250	250	250	01/25/24 17:45	VOA9_457250	U012521.D
Vinyl chloride	ug/L	150	J	50	250	250	250	01/25/24 17:45	VOA9_457250	U012521.D

Form 1 - Organic Analysis Data Sheet

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

Volatiles by EPA Volatiles Organics by Method 8260C

16PM03-240118	Collected	Received	Matrix	Basis
HS24011040-07	01/18/24 10:45	01/19/24 09:35	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	50	U	15	50	50	50	01/25/24 18:07	VOA9_457250	U012522.D
1,1-Dichloroethene	ug/L	50	U	10	50	50	50	01/25/24 18:07	VOA9_457250	U012522.D
1,2-Dichloroethane	ug/L	50	U	10	50	50	50	01/25/24 18:07	VOA9_457250	U012522.D
cis-1,2-Dichloroethene	ug/L	7,500		10	50	50	50	01/25/24 18:07	VOA9_457250	U012522.D
Methylene chloride	ug/L	100	U	20	100	100	50	01/25/24 18:07	VOA9_457250	U012522.D
Trichloroethene	ug/L	7,700		10	50	50	50	01/25/24 18:07	VOA9_457250	U012522.D
Vinyl chloride	ug/L	200		10	50	50	50	01/25/24 18:07	VOA9_457250	U012522.D

Form 1 - Organic Analysis Data Sheet

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

Volatiles by EPA Volatiles Organics by Method 8260C

16PM14-240118	Collected	Received	Matrix	Basis
HS24011040-08	01/18/24 11:30	01/19/24 09:35	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	50	U	15	50	50	50	01/25/24 18:52	VOA9_457250	U012524.D
1,1-Dichloroethene	ug/L	50	U	10	50	50	50	01/25/24 18:52	VOA9_457250	U012524.D
1,2-Dichloroethane	ug/L	50	U	10	50	50	50	01/25/24 18:52	VOA9_457250	U012524.D
cis-1,2-Dichloroethene	ug/L	5,100		10	50	50	50	01/25/24 18:52	VOA9_457250	U012524.D
Methylene chloride	ug/L	100	U	20	100	100	50	01/25/24 18:52	VOA9_457250	U012524.D
Trichloroethene	ug/L	5,400		10	50	50	50	01/25/24 18:52	VOA9_457250	U012524.D
Vinyl chloride	ug/L	190		10	50	50	50	01/25/24 18:52	VOA9_457250	U012524.D

Form 1 - Organic Analysis Data Sheet

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

Volatiles by EPA Volatiles Organics by Method 8260C

16PM09-240118	Collected	Received	Matrix	Basis
HS24011040-09	01/18/24 12:10	01/19/24 09:35	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	25	U	7.5	25	25	25	01/25/24 19:14	VOA9_457250	U012525.D
1,1-Dichloroethene	ug/L	24	J	5.0	25	25	25	01/25/24 19:14	VOA9_457250	U012525.D
1,2-Dichloroethane	ug/L	25	U	5.0	25	25	25	01/25/24 19:14	VOA9_457250	U012525.D
cis-1,2-Dichloroethene	ug/L	320		5.0	25	25	25	01/25/24 19:14	VOA9_457250	U012525.D
Methylene chloride	ug/L	50	U	10	50	50	25	01/25/24 19:14	VOA9_457250	U012525.D
Trichloroethene	ug/L	1,100		5.0	25	25	25	01/25/24 19:14	VOA9_457250	U012525.D
Vinyl chloride	ug/L	13	J	5.0	25	25	25	01/25/24 19:14	VOA9_457250	U012525.D

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24011040

Volatiles by EPA Volatiles Organics by Method 8260C

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
1,1,2-Trichloroethane	ug/L	250	U	75	250	250	250	01/25/24 20:20	VOA9_457250	U012528.D
1,1-Dichloroethene	ug/L	250	U	50	250	250	250	01/25/24 20:20	VOA9_457250	U012528.D
1,2-Dichloroethane	ug/L	250	U	50	250	250	250	01/25/24 20:20	VOA9_457250	U012528.D
cis-1,2-Dichloroethene	ug/L	25,000		50	250	250	250	01/25/24 20:20	VOA9_457250	U012528.D
Methylene chloride	ug/L	500	U	100	500	500	250	01/25/24 20:20	VOA9_457250	U012528.D
Trichloroethene	ug/L	80,000		400	2000	2000	2000	01/25/24 20:42	VOA9_457250	U012529.D
Vinyl chloride	ug/L	670		50	250	250	250	01/25/24 20:20	VOA9_457250	U012528.D

Form 1 - Organic Analysis Data Sheet

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24011040

Volatiles by EPA Volatiles Organics by Method 8260C

16RW01-240118	Collected	Received	Matrix	Basis
HS24011040-11	01/18/24 13:35	01/19/24 09:35	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	5.0	U	1.5	5.0	5.0	5	01/25/24 19:36	VOA9_457250	U012526.D
1,1-Dichloroethene	ug/L	5.0	U	1.0	5.0	5.0	5	01/25/24 19:36	VOA9_457250	U012526.D
1,2-Dichloroethane	ug/L	5.0	U	1.0	5.0	5.0	5	01/25/24 19:36	VOA9_457250	U012526.D
cis-1,2-Dichloroethene	ug/L	72		1.0	5.0	5.0	5	01/25/24 19:36	VOA9_457250	U012526.D
Methylene chloride	ug/L	10	U	2.0	10	10	5	01/25/24 19:36	VOA9_457250	U012526.D
Trichloroethene	ug/L	2,200		10	50	50	50	01/26/24 15:17	VOA9_457361	U012611.D
Vinyl chloride	ug/L	2.6	J	1.0	5.0	5.0	5	01/25/24 19:36	VOA9_457250	U012526.D

Form 1 - Organic Analysis Data Sheet

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

Volatiles by EPA Volatiles Organics by Method 8260C

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
1,1,2-Trichloroethane	ug/L	5.0	U	1.5	5.0	5.0	5	01/25/24 19:58	VOA9_457250	U012527.D
1,1-Dichloroethene	ug/L	5.0	U	1.0	5.0	5.0	5	01/25/24 19:58	VOA9_457250	U012527.D
1,2-Dichloroethane	ug/L	5.0	U	1.0	5.0	5.0	5	01/25/24 19:58	VOA9_457250	U012527.D
cis-1,2-Dichloroethene	ug/L	140		1.0	5.0	5.0	5	01/25/24 19:58	VOA9_457250	U012527.D
Methylene chloride	ug/L	10	U	2.0	10	10	5	01/25/24 19:58	VOA9_457250	U012527.D
Trichloroethene	ug/L	3,200		10	50	50	50	01/26/24 15:40	VOA9_457361	U012612.D
Vinyl chloride	ug/L	5.8		1.0	5.0	5.0	5	01/25/24 19:58	VOA9_457250	U012527.D

Form 1 - Organic Analysis Data Sheet

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

Volatiles by EPA Volatiles Organics by Method 8260C

Trip Blank-240118

	Collected	Received	Matrix	Basis
HS24011040-13	01/18/24 00:00	01/19/24 09:35	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 14:25	VOA9_457250	U012512.D
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/25/24 14:25	VOA9_457250	U012512.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	01/25/24 14:25	VOA9_457250	U012512.D
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/25/24 14:25	VOA9_457250	U012512.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	01/25/24 14:25	VOA9_457250	U012512.D
Trichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	01/25/24 14:25	VOA9_457250	U012512.D
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	01/25/24 14:25	VOA9_457250	U012512.D

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Form 2

System Monitoring Compound Recovery

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

Form 2 - System Monitoring Compound Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder **HS24011040**

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

16WW16-240118

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24011040-01	Groundwater	01/25/24 15:32	%REC	100
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012515.D	4500	5000	90.3		81-118
4-Bromofluorobenzene	U012515.D	4500	5000	89.9		85-114
Dibromofluoromethane	U012515.D	4900	5000	99.0		80-119
Toluene-d8	U012515.D	5000	5000	101		89-112

16WW16-240118

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24011040-01	Groundwater	01/25/24 17:01	%REC	1000
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012519.D	45000	50000	91.0		81-118
4-Bromofluorobenzene	U012519.D	45000	50000	89.4		85-114
Dibromofluoromethane	U012519.D	51000	50000	102		80-119
Toluene-d8	U012519.D	52000	50000	104		89-112

Form 2 - System Monitoring Compound Recovery

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

Volatiles by EPA Volatiles Organics by Method 8260C

RUNID: VOA9-457250

16WW16-240118-FD

Lab Sample ID	Matrix	Analysis Date	Conc Units	Dilution
HS24011040-02	Groundwater	01/25/24 15:54	%REC	100

Instrument ID: VOA9

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012516.D	4400	5000	87.9		81-118
4-Bromofluorobenzene	U012516.D	4600	5000	91.5		85-114
Dibromofluoromethane	U012516.D	5200	5000	104		80-119
Toluene-d8	U012516.D	5300	5000	106		89-112

16WW16-240118-FD

Lab Sample ID	Matrix	Analysis Date	Conc Units	Dilution
HS24011040-02	Groundwater	01/25/24 17:23	%REC	1000

Instrument ID: VOA9

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012520.D	45000	50000	90.3		81-118
4-Bromofluorobenzene	U012520.D	45000	50000	89.1		85-114
Dibromofluoromethane	U012520.D	50000	50000	99.3		80-119
Toluene-d8	U012520.D	52000	50000	103		89-112

16WW35-240118

Lab Sample ID	Matrix	Analysis Date	Conc Units	Dilution
HS24011040-03	Groundwater	01/25/24 15:10	%REC	100

Instrument ID: VOA9

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012514.D	4400	5000	88.9		81-118
4-Bromofluorobenzene	U012514.D	4500	5000	90.7		85-114
Dibromofluoromethane	U012514.D	4900	5000	98.6		80-119
Toluene-d8	U012514.D	5300	5000	106		89-112

Form 2 - System Monitoring Compound Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder **HS24011040**

Volatiles by EPA Volatiles Organics by Method 8260C

RUNID VOA9-457250

16WW35-240118

		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

16WW35-240118

		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

16PM02-240118

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24011040-06	Groundwater	01/25/24 17:45	%REC	250
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012521.D	11000	12500	91.3		81-118
4-Bromofluorobenzene	U012521.D	11000	12500	89.7		85-114
Dibromofluoromethane	U012521.D	13000	12500	101		80-119
Toluene-d8	U012521.D	13000	12500	103		89-112

Form 2 - System Monitoring Compound Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder **HS24011040**

Volatiles by EPA Volatiles Organics by Method 8260C

RUNID VOA9-457250

16PM03-240118

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24011040-07	Groundwater	01/25/24 18:07	%REC	50
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012522.D	2300	2500	91.4		81-118
4-Bromofluorobenzene	U012522.D	2300	2500	90.5		85-114
Dibromofluoromethane	U012522.D	2500	2500	99.6		80-119
Toluene-d8	U012522.D	2600	2500	104		89-112

16PM14-240118

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24011040-08	Groundwater	01/25/24 18:52	%REC	50
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012524.D	2300	2500	93.5		81-118
4-Bromofluorobenzene	U012524.D	2300	2500	91.3		85-114
Dibromofluoromethane	U012524.D	2600	2500	103		80-119
Toluene-d8	U012524.D	2600	2500	105		89-112

16PM09-240118

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24011040-09	Groundwater	01/25/24 19:14	%REC	25
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012525.D	1200	1250	96.4		81-118
4-Bromofluorobenzene	U012525.D	1100	1250	91.3		85-114
Dibromofluoromethane	U012525.D	1300	1250	106		80-119
Toluene-d8	U012525.D	1300	1250	105		89-112

Form 2 - System Monitoring Compound Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder **HS24011040**

Volatiles by EPA Volatiles Organics by Method 8260C

RUNID VOA9-457250

16PM06-240118

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24011040-10	Groundwater	01/25/24 20:20	%REC	250
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012528.D	12000	12500	92.9		81-118
4-Bromofluorobenzene	U012528.D	11000	12500	88.3		85-114
Dibromofluoromethane	U012528.D	13000	12500	103		80-119
Toluene-d8	U012528.D	13000	12500	104		89-112

16PM06-240118

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24011040-10	Groundwater	01/25/24 20:42	%REC	2000
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012529.D	94000	100000	93.9		81-118
4-Bromofluorobenzene	U012529.D	87000	100000	87.4		85-114
Dibromofluoromethane	U012529.D	100000	100000	103		80-119
Toluene-d8	U012529.D	100000	100000	102		89-112

16RW01-240118

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24011040-11	Groundwater	01/25/24 19:36	%REC	5
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012526.D	240	250	94.4		81-118
4-Bromofluorobenzene	U012526.D	230	250	91.1		85-114
Dibromofluoromethane	U012526.D	260	250	104		80-119
Toluene-d8	U012526.D	260	250	105		89-112

Form 2 - System Monitoring Compound Recovery

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

Volatiles by EPA Volatiles Organics by Method 8260C

RUNID: VOA9-457250

16RW04-240118

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24011040-12	Groundwater	01/25/24 19:58	%REC	5
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012527.D	230	250	93.7		81-118
4-Bromofluorobenzene	U012527.D	220	250	86.9		85-114
Dibromofluoromethane	U012527.D	260	250	104		80-119
Toluene-d8	U012527.D	260	250	104		89-112

Trip Blank-240118

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24011040-13	Water	01/25/24 14:25	%REC	1
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012512.D	46	50	92.3		81-118
4-Bromofluorobenzene	U012512.D	46	50	91.8		85-114
Dibromofluoromethane	U012512.D	51	50	102		80-119
Toluene-d8	U012512.D	53	50	105		89-112

VBLKW-240125

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	VBLKW-240125	Aqueous	01/25/24 12:33	%REC	1
Instrument ID	VOA9				

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

Form 2 - System Monitoring Compound Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24011040

Volatiles by EPA Volatiles Organics by Method 8260C

RUNID VOA9-457250

VLCSW-240125

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	VLCSW-240125	Aqueous	01/25/24 11:49	%REC	1
Instrument ID	VOA9				

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 HS24011040

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

16WW36-240118

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24011040-04	Groundwater	01/26/24 13:48	%REC	50
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012607.D	1800	2500	74.0		81-118
4-Bromofluorobenzene	U012607.D	2400	2500	97.2		85-114
Dibromofluoromethane	U012607.D	2100	2500	85.0		80-119
Toluene-d8	U012607.D	2600	2500	106		89-112

16WW36-240118

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24011040-04	Groundwater	01/26/24 20:55	%REC	250
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012626.D	9500	12500	76.2		81-118
4-Bromofluorobenzene	U012626.D	12000	12500	93.9		85-114
Dibromofluoromethane	U012626.D	10000	12500	83.8		80-119
Toluene-d8	U012626.D	13000	12500	103		89-112

Form 2 - System Monitoring Compound Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder **HS24011040**

Volatiles by EPA Volatiles Organics by Method 8260C

RUNID VOA9-457361

16WW36-240118-FD

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24011040-05	Groundwater	01/26/24 14:10	%REC	50
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012608.D	1900	2500	74.6		81-118
4-Bromofluorobenzene	U012608.D	2400	2500	94.9		85-114
Dibromofluoromethane	U012608.D	2100	2500	84.9		80-119
Toluene-d8	U012608.D	2600	2500	105		89-112

16WW36-240118-FD

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24011040-05	Groundwater	01/26/24 21:20	%REC	250
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012627.D	9600	12500	77.0		81-118
4-Bromofluorobenzene	U012627.D	12000	12500	95.0		85-114
Dibromofluoromethane	U012627.D	11000	12500	87.2		80-119
Toluene-d8	U012627.D	13000	12500	103		89-112

16RW01-240118

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24011040-11	Groundwater	01/26/24 15:17	%REC	50
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012611.D	1900	2500	75.6		81-118
4-Bromofluorobenzene	U012611.D	2400	2500	95.8		85-114
Dibromofluoromethane	U012611.D	2100	2500	85.2		80-119
Toluene-d8	U012611.D	2600	2500	104		89-112

Form 2 - System Monitoring Compound Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder **HS24011040**

Volatiles by EPA Volatiles Organics by Method 8260C

RUNID VOA9-457361

16RW04-240118

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	HS24011040-12	Groundwater	01/26/24 15:40	%REC	50
Instrument ID	VOA9				

Surrogate	FileID	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	U012612.D	1900	2500	74.4		81-118
4-Bromofluorobenzene	U012612.D	2500	2500	98.5		85-114
Dibromofluoromethane	U012612.D	2100	2500	83.1		80-119
Toluene-d8	U012612.D	2600	2500	104		89-112

BatchQC

		Matrix	Analysis Date	Conc Units	Dilution
Lab Sample ID	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

BatchQC

		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

Form 2 - System Monitoring Compound Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder **HS24011040**

Volatiles by EPA Volatiles Organics by Method 8260C

RUNID VOA9-457361

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

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Form 3A

Matrix Spike/Spike Duplicate Recovery

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

Form 3A - Matrix Spike/Spike Duplicate Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder **HS24011040**

SAMPLENUM HS24011040-03MS

Volatiles by EPA Volatiles Organics by Method 8260C

16WW35-240118 (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 **HS24011040**

SAMPLENUM HS24011111-14MS

Volatiles by EPA Volatiles Organics by Method 8260C

BatchQC (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

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

Form 3B - Laboratory Control Sample Recovery

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24011040

SAMPLENUM VLCSW-240125

Volatiles by EPA Volatiles Organics by Method 8260C

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 HS24011040

SAMPLENUM VLCSW-240126

Volatiles by EPA Volatiles Organics by Method 8260C

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			

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Form 4

Method Blank Summary

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

Form 4 - Method Blank Summary

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder **HS24011040**

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-240118	HS24011040-13	SAMP	01/25/24 14:25	R457250	VOA9	U012512.D
16WW35-240118	HS24011040-03	SAMP	01/25/24 15:10	R457250	VOA9	U012514.D
16WW16-240118	HS24011040-01	SAMP	01/25/24 15:32	R457250	VOA9	U012515.D
16WW16-240118-FD	HS24011040-02	SAMP	01/25/24 15:54	R457250	VOA9	U012516.D
16WW35-240118	HS24011040-03MS	MS	01/25/24 16:16	R457250	VOA9	U012517.D
16WW35-240118	HS24011040-03MSD	MSD	01/25/24 16:38	R457250	VOA9	U012518.D
16WW16-240118	HS24011040-01	SAMP	01/25/24 17:01	R457250	VOA9	U012519.D
16WW16-240118-FD	HS24011040-02	SAMP	01/25/24 17:23	R457250	VOA9	U012520.D
16PM02-240118	HS24011040-06	SAMP	01/25/24 17:45	R457250	VOA9	U012521.D
16PM03-240118	HS24011040-07	SAMP	01/25/24 18:07	R457250	VOA9	U012522.D
16PM14-240118	HS24011040-08	SAMP	01/25/24 18:52	R457250	VOA9	U012524.D
16PM09-240118	HS24011040-09	SAMP	01/25/24 19:14	R457250	VOA9	U012525.D
16RW01-240118	HS24011040-11	SAMP	01/25/24 19:36	R457250	VOA9	U012526.D
16RW04-240118	HS24011040-12	SAMP	01/25/24 19:58	R457250	VOA9	U012527.D
16PM06-240118	HS24011040-10	SAMP	01/25/24 20:20	R457250	VOA9	U012528.D
16PM06-240118	HS24011040-10	SAMP	01/25/24 20:42	R457250	VOA9	U012529.D

Form 4 - Method Blank Summary

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder **HS24011040**

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
16WW36-240118	HS24011040-04	SAMP	01/26/24 13:48	R457361	VOA9	U012607.D
16WW36-240118-FD	HS24011040-05	SAMP	01/26/24 14:10	R457361	VOA9	U012608.D
BatchQC	HS24011111-14MS	MS	01/26/24 14:33	R457361	VOA9	U012609.D
BatchQC	HS24011111-14MSD	MSD	01/26/24 14:55	R457361	VOA9	U012610.D
16RW01-240118	HS24011040-11	SAMP	01/26/24 15:17	R457361	VOA9	U012611.D
16RW04-240118	HS24011040-12	SAMP	01/26/24 15:40	R457361	VOA9	U012612.D
16WW36-240118	HS24011040-04	SAMP	01/26/24 20:55	R457361	VOA9	U012626.D
16WW36-240118-FD	HS24011040-05	SAMP	01/26/24 21:20	R457361	VOA9	U012627.D

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Form 5

Instrument Performance Check

Volatiles by EPA Volatiles Organics by Method 8260C

Workorder

HS24011040

Client

Bhate Environmental Associates, Inc.

Project

LHAAP Site 16

02/02/2024

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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 **HS24011040**

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	HS24011040-	SAMP	1/25/2024	U012512	Trip Blank-240118
5	HS24011040-	SAMP	1/25/2024	U012514	16WW35-240118
6	HS24011040-	SAMP	1/25/2024	U012515	16WW16-240118
7	HS24011040-	SAMP	1/25/2024	U012516	16WW16-240118-FD
8	HS24011040-	MS	1/25/2024	U012517	HS24011040-03MS
9	HS24011040-	MSD	1/25/2024	U012518	HS24011040-03MSD
10	HS24011040-	SAMP	1/25/2024	U012519	16WW16-240118
11	HS24011040-	SAMP	1/25/2024	U012520	16WW16-240118-FD
12	HS24011040-	SAMP	1/25/2024	U012521	16PM02-240118
13	HS24011040-	SAMP	1/25/2024	U012522	16PM03-240118
14	HS24011040-	SAMP	1/25/2024	U012524	16PM14-240118
15	HS24011040-	SAMP	1/25/2024	U012525	16PM09-240118
16	HS24011040-	SAMP	1/25/2024	U012526	16RW01-240118
17	HS24011040-	SAMP	1/25/2024	U012527	16RW04-240118
18	HS24011040-	SAMP	1/25/2024	U012528	16PM06-240118
19	HS24011040-	SAMP	1/25/2024	U012529	16PM06-240118
20	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 **HS24011040**

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	HS24011040-	SAMP	1/26/2024	U012607	16WW36-240118
5	HS24011040-	SAMP	1/26/2024	U012608	16WW36-240118-FD
6	HS24011111-	MS	1/26/2024	U012609	ZZZZZZMS
7	HS24011111-	MSD	1/26/2024	U012610	ZZZZZZMSD
8	HS24011040-	SAMP	1/26/2024	U012611	16RW01-240118
9	HS24011040-	SAMP	1/26/2024	U012612	16RW04-240118
10	HS24011040-	SAMP	1/26/2024	U012626	16WW36-240118
11	HS24011040-	SAMP	1/26/2024	U012627	16WW36-240118-FD
12	CCV-END	CCV_EN	1/26/2024	U012628	CCV-END

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Form 6

Initial Calibration Data

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

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	+++++	1356	2370	5944	11260	61984					
	137759	297342	450623	628396			LINR	0.01736	0.41016		0.99952
3 Chloromethane	+++++	0.60765	0.67529	0.58774	0.51372	0.55086					
	0.54210	0.55111	0.55358	0.58002			AVRG		0.57356		8.21079
4 Propionitrile	+++++	0.08042	0.08383	0.08835	0.08153	0.08261					
	0.08620	0.08206	0.08100	0.08011			AVRG		0.08290		3.34979

Report Date : 14-Dec-2023 15:02 Page 2

ALS Laboratory Group

INITIAL CALIBRATION DATA

Start Cal Date : 06-DEC-2023 11:36
End Cal Date : 06-DEC-2023 15:18
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\8260C.m
Last Edit : 12-Dec-2023 09:44 VOA9.i

Compound	0.2500000 Level 1 / 50.0000 Level 7	0.5000000 Level 2 / 100.0000 Level 8	1.0000 Level 3 / 150.0000 Level 9	2.0000 Level 4 / 200.0000 Level 10	5.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
5 Vinyl Chloride	+++++	0.55587	0.61723	0.56266	0.46518	0.53420					
	0.52469	0.55584	0.55083	0.56486			AVRG		0.54793		7.36189
6 Bromomethane	+++++	1430	3158	6114	12339	41799					
	101286	220567	359673	+++++			QUAD	-0.01874	3.83540	-0.74314	0.99990
7 Chloroethane	+++++	0.35816	0.41332	0.39749	0.34723	0.36477					
	0.35630	0.35791	0.36028	0.36484			AVRG		0.36892		5.87872
8 Trichlorofluoromethane	+++++	0.63268	0.75900	0.78293	0.59845	0.71196					
	0.64859	0.70858	0.69884	0.70980			AVRG		0.69454		8.50131
9 Acrolein	+++++	0.03144	0.03185	0.02874	0.03295	0.03051					
	0.02630	0.02379	0.02495	0.02593			AVRG		0.02849		11.76525
10 Acetone	+++++	3182	5741	7963	15039	64015					
	141600	236750	361348	496605			LINR	-0.12178	0.16045		0.99800
11 1,1-Dichloroethene	+++++	0.41876	0.43897	0.39233	0.32202	0.38924					
	0.36693	0.37803	0.37669	0.38779			AVRG		0.38564		8.47183

ALS Laboratory Group

INITIAL CALIBRATION DATA

Start Cal Date : 06-DEC-2023 11:36
End Cal Date : 06-DEC-2023 15:18
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\8260C.m
Last Edit : 12-Dec-2023 09:44 VOA9.i

Compound	0.2500000 Level 1 / 50.0000 Level 7	0.5000000 Level 2 / 100.0000 Level 8	1.0000 Level 3 / 150.0000 Level 9	2.0000 Level 4 / 200.0000 Level 10	5.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
12 Isobutyl Alcohol	+++++	0.06025	0.09256	0.07598	0.06825	0.07045					
	0.07489	0.07672	0.07767	0.07812			AVRG		0.07499		11.67336
13 Acetonitrile	+++++	0.05343	0.05964	0.05843	0.04799	0.05018					
	0.05492	0.05526	0.05365	0.05081			AVRG		0.05381		7.04201
14 Allyl Chloride	+++++	1.37916	1.14075	1.27746	1.18123	1.17505					
	1.24952	1.23822	1.22682	1.19586			AVRG		1.22934		5.71471
15 Iodomethane	+++++	1035	2707	6285	19119	127779					
	363885	780690	+++++	+++++			QUAD	0.04619	2.10790	-0.11445	0.99961
16 Acrylonitrile	+++++	0.21421	0.19581	0.20958	0.18176	0.18548					
	0.19652	0.19516	0.19399	0.19267			AVRG		0.19613		5.24118
17 Methylene Chloride	+++++	2348	5310	9102	16803	72366					
	178723	355722	541571	738924			LINR	-0.00530	0.48410		0.99998
18 Methyl tert-butyl ether	+++++	1.40135	1.40371	1.49933	1.37308	1.28423					
	1.37244	1.36043	1.36592	1.37596			AVRG		1.38183		4.05374

Report Date : 14-Dec-2023 15:02 Page 4

ALS Laboratory Group

INITIAL CALIBRATION DATA

Start Cal Date : 06-DEC-2023 11:36
End Cal Date : 06-DEC-2023 15:18
Quant Method : ISTD
Target Version : 4.14
Integrator : HP RTE
Method file : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\8260C.m
Last Edit : 12-Dec-2023 09:44 VOA9.i

Compound	0.2500000 Level 1 / 50.0000 Level 7	0.5000000 Level 2 / 100.0000 Level 8	1.0000 Level 3 / 150.0000 Level 9	2.0000 Level 4 / 200.0000 Level 10	5.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
19 Carbon Disulfide	+++++ / 1.13229	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

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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
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

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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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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

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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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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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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							
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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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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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
89 1,2-Dibromo-3-Chloropropane	+++++ / 43056	428 / 92967	1017 / 145211	1816 / 206083	3694	16207	LINR	0.04238	0.15275		0.99804
90 1,2,4-Trichlorobenzene	+++++ / 0.89220	0.92569 / 0.96152	1.08308 / 0.95503	0.85656 / 0.97449	0.79800	0.86470	AVRG		0.92347		8.99319
91 Hexachlorobutadiene	+++++ / 0.32013	0.34890 / 0.38729	0.42882 / 0.37877	0.40756 / 0.38504	0.30282	0.37226	AVRG		0.37018		10.85772
92 Naphthalene	+++++ / 2.26601	1.86091 / 2.36539	2.22757 / 2.41669	2.26807 / 2.48309	1.96835	2.18835	AVRG		2.22716		9.06851
93 1,2,3-Trichlorobenzene	+++++ / 0.87022	0.97967 / 0.91485	1.09694 / 0.92546	0.95938 / 0.92308	0.83934	0.87236	AVRG		0.93126		8.19533
130 Ethyl Acetate	+++++ / 0.60823	0.62557 / 0.59929	0.61371 / 0.59188	0.67147 / 0.58416	0.56728	0.60482	AVRG		0.60738		4.84861
131 Methyl Acrylate	+++++ / 0.68830	0.73652 / 0.68196	0.53324 / 0.66471	0.69780 / 0.66876	0.60751	0.63203	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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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
146 Methyl Acetate	+++++	0.52117	0.57158	0.57924	0.48951	0.46823					
	0.47002	0.46297	0.46059	0.45532			AVRG		0.49762		9.72555
147 Methylcyclohexane	+++++	0.61021	0.66741	0.68546	0.66253	0.74881					
	0.80628	0.82105	0.82621	0.84188			AVRG		0.74109		11.67899
149 Isopropyl alcohol	+++++	2543	6719	10615	26635	91067					
	232846	469315	695746	961491			LINR	-0.14984	0.03141		0.99991
152 Amyl alcohol	+++++	0.01034	0.01304	0.01216	0.00963	0.01033					
	0.01037	0.01106	0.01137	0.01152			AVRG		0.01109		9.55870
150 Allyl alcohol	+++++	0.02169	0.02472	0.02511	0.01815	0.02361					
	0.01879	0.02305	0.02645	0.02757			AVRG		0.02324		13.86740
151 4-Methyl-2-pentanol	+++++	6106	13189	29170	71142	354355					
	842831	1866546	2986592	4203138			LINR	0.91650	0.08489		0.99821
148 Tert-butyl alcohol	+++++	0.06200	0.07026	0.06171	0.06116	0.04926					
	0.04918	0.04947	0.04996	0.05076			AVRG		0.05597		14.08200

ALS Laboratory Group

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							
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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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	
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 / 50.0000 Level 7	0.5000000 Level 2 / 100.0000 Level 8	1.0000 Level 3 / 150.0000 Level 9	2.0000 Level 4 / 200.0000 Level 10	5.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
160 2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	
161 3-Methyl-1-butanol	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	<-
162 Butyl acrylate	+++++	3857	5594	11163	26306	122126						
	370735	863117	1392486	1960531			LINR	0.06515	0.77905		0.99783	
163 Butyl methacrylate	+++++	1360	3261	5931	14661	67770						
	193469	444124	721496	+++++			LINR	0.05411	0.72714		0.99595	
164 Dicyclopentadiene	+++++	2.72946	2.69453	2.56436	2.53492	2.56821						
	2.73472	2.72122	2.68006	2.76120			AVRG		2.66541		3.22053	
165 4-Vinyl-1-cyclohexene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++	+++++	+++++	+++++			AVRG		0.000e+000		0.000e+000	
166 1,2,3-Trimethylbenzene	+++++	1.98121	1.76129	1.98244	1.91315	2.06886						
	2.23196	2.19460	2.21027	2.22652			AVRG		2.06337		8.05498	

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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							
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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Compound	0.2500000 Level 1 / 50.0000 Level 7	0.5000000 Level 2 / 100.0000 Level 8	1.0000 Level 3 / 150.0000 Level 9	2.0000 Level 4 / 200.0000 Level 10	5.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
176 tert-Amyl alcohol	+++++	2851	7701	13541	26979	98771						
	251714	544871	860896	1234680			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	+++++	0.01859	0.01839	0.01955	0.01516	0.01638						
	0.01974	0.02141	0.02245	0.02316			AVRG		0.01942		13.65916	

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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	
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	

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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	
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	

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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	
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	QUAD	0.06177	2.22322	-0.22531	0.99800	
	226129	585738	980385	1440923								
201 1-Butene(1)	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	
(2)	+++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-

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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
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

ALS Laboratory Group

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Compound	0.2500000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.0000 Level 4	5.0000 Level 5	20.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	50.0000 Level 7	100.0000 Level 8	150.0000 Level 9	200.0000 Level 10							
$ 69 4-Bromofluorobenzene	+++++ 257187	4583 539241	5567 784122	12602 1059633	28295	106137	LINR	-0.02595	0.42479		0.99901

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

right solutions.
right partner.

Form 6I

Initial Calibration Verification (ICV)

Volatiles by EPA Volatiles Organics by Method 8260C

Workorder

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

Form 6I Initial Calibration Verification (ICV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24011040

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
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 HS24011040

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
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 HS24011040

RunID U120614.D

Volatiles by EPA Volatiles Organics by Method 8260C

Sample Matrix	LIQUID	**Fraction**	VOA
Lab Smp Id	ICV	**Client Smp ID**	ICV
Data Type	MS DATA	**SampleType**	METHSPIKE
File ID	U120614.D	**Inj Date**	06-DEC-2023 1625

Compound	Conc Added	Conc Recovered	% Recovered	Limits	Q
n-Butylbenzene	50.0	53.6	107	80-120	
n-Propylbenzene	50.0	51.3	103	80-120	
Naphthalene	50.0	53.1	106	80-120	
o-Xylene	50.0	49.2	98.5	80-120	
sec-Butylbenzene	50.0	50.2	101	80-120	
Styrene	50.0	52.5	105	80-120	
tert-Butylbenzene	50.0	48.3	96.6	80-120	
Tetrachloroethene	50.0	48.2	96.5	80-120	
Toluene	50.0	49.2	98.4	80-120	
trans-1,2-Dichloroethene	50.0	47.0	94.0	80-120	
trans-1,3-Dichloropropene	50.0	47.4	94.8	80-120	
trans-1,4-Dichloro-2-butene	50.0	48.5	96.9	80-120	
Trichloroethene	50.0	45.9	91.8	80-120	
Trichlorofluoromethane	50.0	46.1	92.2	80-120	
Vinyl Acetate	100	103	103	80-120	
Vinyl Chloride	50.0	45.9	91.9	80-120	
Methyl Acrylate	50.0	48.6	97.2	80-120	
Ethyl Acrylate	50.0	49.8	99.7	80-120	
Butyl acrylate	50.0	44.8	89.6	80-120	
2-Ethylhexyl Acrylate	50.0	49.2	98.3	80-120	
1,2-Dichloroethylene (total)	100	92.9	92.9	80-120	
Xylenes (total)	150	147	98.0	80-120	
1,4-Dioxane	1000	866	86.6	80-120	
Dibromofluoromethane	50.0	50.8	102	71-125	
1,2-Dichloroethane-d4	50.0	49.0	98.0	70-125	
Toluene-d8	50.0	53.6	107	75-125	
4-Bromofluorobenzene	50.0	52.7	105	72-125	

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Form 7

Continuing Calibration Verification (CCV)

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

Form 7 Continuing Calibration Verification (CCV)

Client Bhate Environmental Associates, Inc.
Project LHAAP Site 16

Workorder HS24011040

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 HS24011040

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 HS24011040

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 HS24011040

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 HS24011040

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 HS24011040

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 HS24011040

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 HS24011040

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 HS24011040

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 HS24011040

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 HS24011040

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 HS24011040

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 HS24011040

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 HS24011040

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	

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Form 8

Internal Standard Area and RT Summary

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

Form 8 - Internal Standard Area and RT Summary

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder HS24011040

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	#
HS24011040-01	U012519.D	359962		4.82		551178		5.55		489240		8.19		250888		10.17	
HS24011040-01	U012515.D	341635		4.82		513492		5.55		486986		8.19		249379		10.17	
HS24011040-02	U012520.D	342188		4.82		513001		5.55		492716		8.19		253685		10.17	
HS24011040-02	U012516.D	347596		4.82		489470		5.55		468948		8.19		240198		10.17	
HS24011040-03	U012514.D	335194		4.82		492026		5.55		464113		8.19		236990		10.17	
HS24011040-03MS	U012517.D	341142		4.81		501673		5.55		489287		8.19		272833		10.17	
HS24011040-03MSD	U012518.D	331301		4.82		485985		5.55		478199		8.19		264821		10.17	
HS24011040-06	U012521.D	326725		4.82		499385		5.55		474585		8.19		238993		10.17	
HS24011040-07	U012522.D	323950		4.81		489789		5.55		470595		8.19		235347		10.17	
HS24011040-08	U012524.D	323887		4.82		488795		5.55		469844		8.19		237770		10.17	
HS24011040-09	U012525.D	316289		4.82		483341		5.55		465533		8.19		232235		10.17	
HS24011040-10	U012529.D	314617		4.82		483691		5.55		466125		8.19		237822		10.17	
HS24011040-10	U012528.D	323864		4.82		495028		5.55		471579		8.19		236711		10.17	
HS24011040-11	U012526.D	324548		4.82		495123		5.55		473903		8.19		237617		10.17	
HS24011040-12	U012527.D	322940		4.81		494973		5.55		475049		8.19		238624		10.17	
HS24011040-13	U012512.D	322944		4.82		489410		5.55		473379		8.19		239461		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	

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 HS24011040

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	#
HS24011040-04	U012626.D	266332		4.82		362842		5.55		346609		8.19		179896		10.17	
HS24011040-04	U012607.D	332392		4.82		454961		5.55		430678		8.19		223008		10.17	
HS24011040-05	U012627.D	264450		4.81		365662		5.55		348232		8.19		180288		10.17	
HS24011040-05	U012608.D	333255		4.82		459287		5.55		434145		8.19		223245		10.17	
HS24011040-11	U012611.D	333851		4.82		464219		5.55		439452		8.19		226001		10.17	
HS24011040-12	U012612.D	337482		4.82		458652		5.55		434739		8.19		230287		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	
MS-ZZZZZZMS	U012609.D	296077		4.82		438084		5.55		427475		8.19		244054		10.17	
ZZZZZZMSD	U012610.D	287371		4.81		425372		5.55		424844		8.19		239026		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

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

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

Form 13 - Analysis Run Log

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder **HS24011040**

Volatiles by EPA Volatiles Organics by Method 8260C

RUNID VOA9-457250

Run ID VOA9_457250 **Start Date** 01/25/24 **EndDate** 01/25/24

Inj. Time	Client Sample ID	Type	Lab Sample ID	File ID	Analysis Date	DF
11:04	CCV	CCV	CCV	U012503.D	01/25/24	1
11:49	VLCSW-240125	LCS	VLCSW-240125	U012505.D	01/25/24	1
12:33	VBLKW-240125	MBLK	VBLKW-240125	U012507.D	01/25/24	1
14:25	HS24011040-13	SAMP	Trip Blank-240118	U012512.D	01/25/24	1
14:47	HS24011111-15	SAMP	ZZZZZZZZZZ	U012513.D	01/25/24	1
15:10	HS24011040-03	SAMP	16WW35-240118	U012514.D	01/25/24	100
15:32	HS24011040-01	SAMP	16WW16-240118	U012515.D	01/25/24	100
15:54	HS24011040-02	SAMP	16WW16-240118-FD	U012516.D	01/25/24	100
16:16	HS24011040-03MS	MS	HS24011040-03MS	U012517.D	01/25/24	100
16:38	HS24011040-03MSD	MSD	HS24011040-03MSD	U012518.D	01/25/24	100
17:01	HS24011040-01	SAMP	16WW16-240118	U012519.D	01/25/24	1000
17:23	HS24011040-02	SAMP	16WW16-240118-FD	U012520.D	01/25/24	1000
17:45	HS24011040-06	SAMP	16PM02-240118	U012521.D	01/25/24	250
18:07	HS24011040-07	SAMP	16PM03-240118	U012522.D	01/25/24	50
18:52	HS24011040-08	SAMP	16PM14-240118	U012524.D	01/25/24	50
19:14	HS24011040-09	SAMP	16PM09-240118	U012525.D	01/25/24	25
19:36	HS24011040-11	SAMP	16RW01-240118	U012526.D	01/25/24	5
19:58	HS24011040-12	SAMP	16RW04-240118	U012527.D	01/25/24	5
20:20	HS24011040-10	SAMP	16PM06-240118	U012528.D	01/25/24	250
20:42	HS24011040-10	SAMP	16PM06-240118	U012529.D	01/25/24	2000
21:05	CCV-END	CCV_END	CCV-END	U012530.D	01/25/24	1

Form 13 - Analysis Run Log

Client Bhate Environmental Associates, Inc.

Project LHAAP Site 16

Workorder **HS24011040**

Volatiles by EPA Volatiles Organics by Method 8260C

RUNID VOA9-457361

Run ID VOA9_457361 **Start Date** 01/26/24 **EndDate** 01/26/24

Inj. Time	Client Sample ID	Type	Lab Sample ID	File ID	Analysis Date	DF
11:56	CCV	CCV	CCV	U012602.D	01/26/24	1
12:18	VLCSW-240126	LCS	VLCSW-240126	U012603.D	01/26/24	1
13:03	VBLKW-240126	MBLK	VBLKW-240126	U012605.D	01/26/24	1
13:26	HS24011111-14	SAMP	ZZZZZZZZZZ	U012606.D	01/26/24	1
13:48	HS24011040-04	SAMP	16WW36-240118	U012607.D	01/26/24	50
14:10	HS24011040-05	SAMP	16WW36-240118-FD	U012608.D	01/26/24	50
14:33	HS24011111-14MS	MS	ZZZZZZMS	U012609.D	01/26/24	1
14:55	HS24011111-14MSD	MSD	ZZZZZZMSD	U012610.D	01/26/24	1
15:17	HS24011040-11	SAMP	16RW01-240118	U012611.D	01/26/24	50
15:40	HS24011040-12	SAMP	16RW04-240118	U012612.D	01/26/24	50
16:02	HS24011111-01	SAMP	ZZZZZZZZZZ	U012613.D	01/26/24	1
16:24	HS24011111-02	SAMP	ZZZZZZZZZZ	U012614.D	01/26/24	1
16:47	HS24011111-03	SAMP	ZZZZZZZZZZ	U012615.D	01/26/24	1
17:09	HS24011111-04	SAMP	ZZZZZZZZZZ	U012616.D	01/26/24	1
17:31	HS24011111-05	SAMP	ZZZZZZZZZZ	U012617.D	01/26/24	1
17:54	HS24011111-06	SAMP	ZZZZZZZZZZ	U012618.D	01/26/24	1
18:16	HS24011111-07	SAMP	ZZZZZZZZZZ	U012619.D	01/26/24	1
18:39	HS24011111-08	SAMP	ZZZZZZZZZZ	U012620.D	01/26/24	1
19:01	HS24011111-09	SAMP	ZZZZZZZZZZ	U012621.D	01/26/24	1
19:46	HS24011111-11	SAMP	ZZZZZZZZZZ	U012623.D	01/26/24	1
20:08	HS24011111-12	SAMP	ZZZZZZZZZZ	U012624.D	01/26/24	1
20:31	HS24011111-13	SAMP	ZZZZZZZZZZ	U012625.D	01/26/24	1
20:55	HS24011040-04	SAMP	16WW36-240118	U012626.D	01/26/24	250
21:20	HS24011040-05	SAMP	16WW36-240118-FD	U012627.D	01/26/24	250
21:43	CCV-END	CCV_END	CCV-END	U012628.D	01/26/24	1

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\U231206.b\U120601.D Page 1
Report Date: 07-Dec-2023 10:08

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120601.D
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 06-DEC-2023 11:14
Operator : PC Inst ID: VOA9.i
Smp Info : BFB;BFB;3;;BFB
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\bfb.m
Meth Date : 27-Jan-2023 08:08 apoluri Quant Type: ISTD
Cal Date : 30-MAR-2018 18:09 Cal File: U033003.d
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: NAHSTW7051

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

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

					CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/l)		
RT	EXP RT	REL RT	MASS	RESPONSE			TARGET RANGE	RATIO
1 bfb							CAS #: 460-00-4	
9.197	9.180	(0.000)	95	70800			0.00- 100.00	100.00
9.197	9.180	(0.000)	50	12933			15.00- 40.00	18.27
9.197	9.180	(0.000)	75	34640			30.00- 60.00	48.93
9.197	9.180	(0.000)	96	4799			5.00- 9.00	6.78
9.197	9.180	(0.000)	173	0	0.0	0.0	0.00- 2.00	0.00
9.197	9.180	(0.000)	174	62608			50.00- 0.00	88.43
9.197	9.180	(0.000)	175	5227			5.00- 9.00	8.35
9.197	9.180	(0.000)	176	62160			95.00- 101.00	99.28
9.197	9.180	(0.000)	177	3938			5.00- 9.00	6.34

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	18.27
75	30.00 - 60.00% of mass 95	48.93
96	5.00 - 9.00% of mass 95	6.78
173	Less than 2.00% of mass 174	0.00 (0.00)
174	Greater than 50.00% of mass 95	88.43
175	5.00 - 9.00% of mass 174	7.38 (8.35)
176	95.00 - 101.00% of mass 174	87.80 (99.28)
177	5.00 - 9.00% of mass 176	5.56 (6.34)

Data File: U120601.D
Spectrum: Scan 2294 (9.19)
Location of Maximum: 95.10
Number of points: 109

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.10	672	64.00	389	95.10	70800	143.00	651
37.10	3196	65.00	563	96.10	4799	143.80	56
38.10	3144	65.90	92	97.00	209	144.90	127
39.10	1362	67.20	312	104.00	312	145.80	165
40.00	711	68.10	6883	104.60	133	147.00	102
41.20	184	69.00	7438	105.90	338	147.90	161
42.00	128	70.00	506	107.00	124	148.90	82
42.80	102	70.90	89	108.00	52	149.90	109
44.00	800	72.00	494	110.30	59	151.90	72
45.10	619	73.10	2968	111.90	52	153.00	96
45.80	184	74.10	12043	113.00	61	153.90	108
47.10	1050	75.10	34640	114.90	108	155.00	258
48.00	459	76.10	3228	116.00	230	158.80	121
49.10	2929	77.10	500	116.90	767	160.70	72
50.10	12933	78.00	528	117.90	289	169.60	61
51.10	3950	79.00	1680	118.90	454	171.00	127
52.10	292	79.90	570	123.90	81	171.90	699
52.80	140	80.90	1880	126.80	90	174.00	62608
53.90	84	81.90	317	127.90	321	175.00	5227
55.10	167	83.30	77	128.90	112	176.00	62160
56.00	930	86.10	145	129.80	309	177.00	3938
57.00	1888	87.00	3421	130.80	118	177.90	135
58.00	106	88.00	2987	132.10	62	218.50	58
58.80	66	90.30	87	134.90	141	262.20	52
60.10	741	91.00	213	136.90	95	328.30	63
61.00	3325	92.10	1915	140.20	85		
62.10	2880	93.00	3307	140.90	647		
63.10	2110	94.10	8223	141.90	133		

Data File: \\NAHSTWS005\Target\chem\voa9.i\u231206.b\u120601.d Page 1

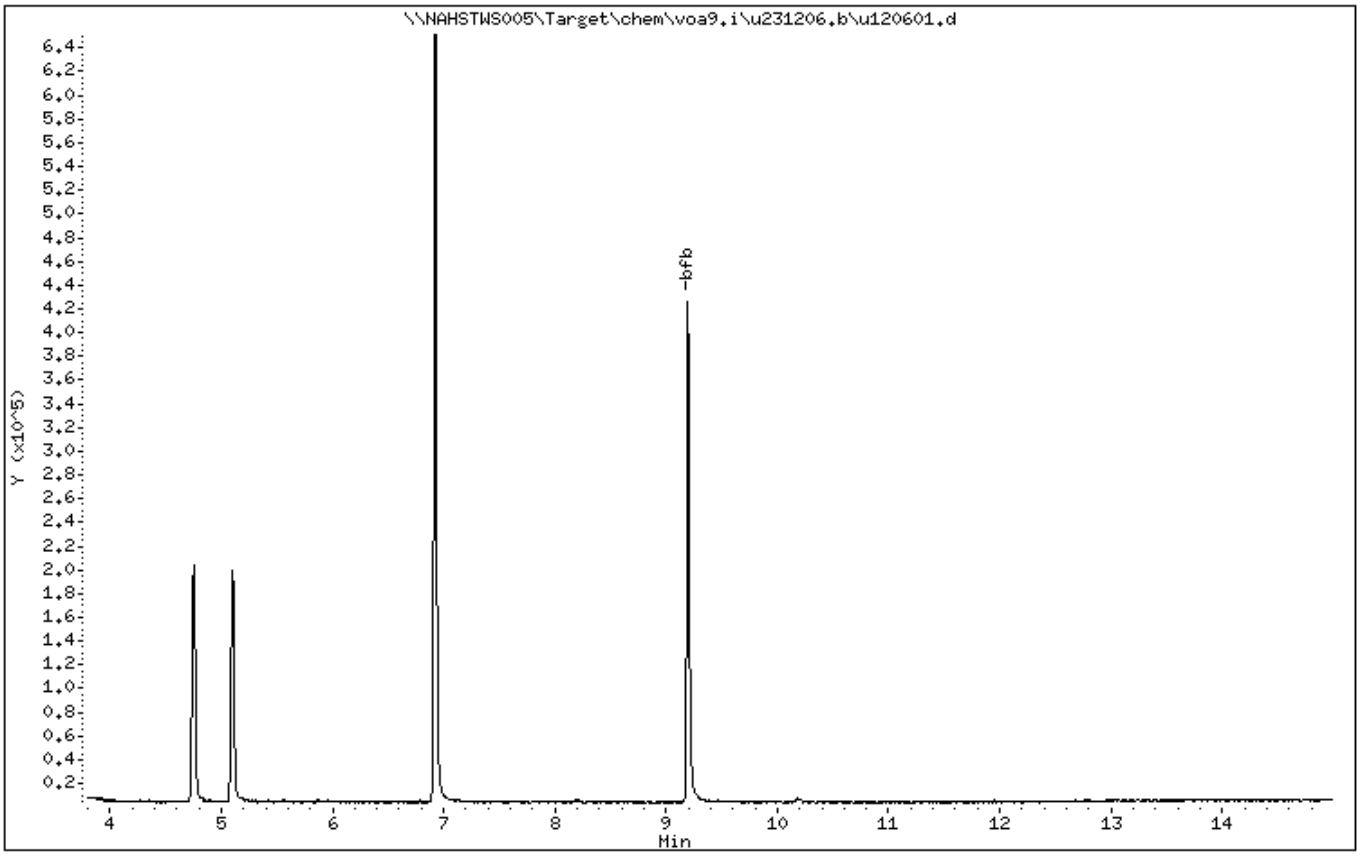
Date : 06-DEC-2023 11:14

Client ID: BFB Instrument: VOA9.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0 Operator: PC

Column phase: DB624 Column diameter: 0.25



Data File : \\nahstws005\target\chem\voa9.i\u231206.b\u120601.d
Inj Date : 06-DEC-2023 11:14
InstruID : VOA9.i
LabSampID : BFB

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120602.D Page 1
Report Date: 12-Dec-2023 09:43

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120602.D
Lab Smp Id: VSTD000.25 Client Smp ID: VSTD000.25
Inj Date : 06-DEC-2023 11:36
Operator : PC Inst ID: VOA9.i
Smp Info : VSTD000.25;VSTD000.25;1;1;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\8260C.m
Meth Date : 12-Dec-2023 09:43 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 11:36 Cal File: U120602.D
Als bottle: 2 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V9.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

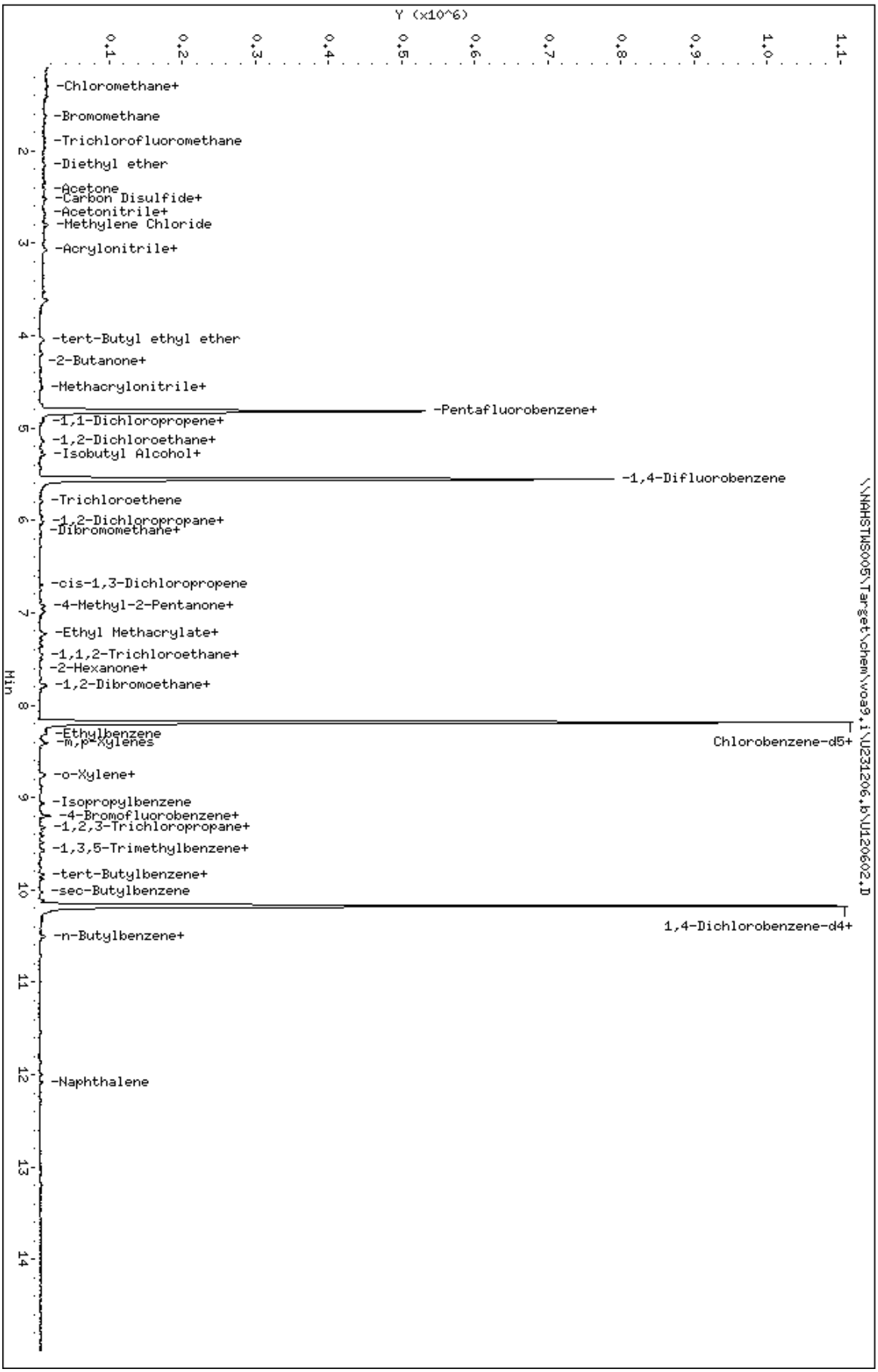
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
*	1 Pentafluorobenzene	168	4.815	4.815	(1.000)	385732	50.0000	
	2 Dichlorodifluoromethane	85	1.164	1.164	(0.242)	431	0.25000	1.00(M)
	3 Chloromethane	50	1.303	1.303	(0.271)	2053	0.25000	0.46
	5 Vinyl Chloride	62	1.378	1.378	(0.286)	867	0.25000	0.20
	6 Bromomethane	94	1.625	1.625	(0.338)	1498	0.25000	
	8 Trichlorofluoromethane	101	1.899	1.899	(0.394)	1165	0.25000	0.21
	10 Acetone	43	2.416	2.416	(0.502)	3178	0.50000	
	16 Acrylonitrile	53	3.068	3.068	(0.637)	1135	0.50000	0.75
	17 Methylene Chloride	84	2.799	2.799	(0.581)	2929	0.25000	0.51
	18 Methyl tert-butyl ether	73	3.076	3.076	(0.639)	3667	0.25000	0.34
	19 Carbon Disulfide	76	2.525	2.525	(0.524)	5260	0.50000	0.60
	20 trans-1,2-Dichloroethene	96	3.061	3.061	(0.636)	1120	0.25000	0.31
	24 2-Butanone	43	4.283	4.283	(0.889)	936	0.50000	0.49
	27 cis-1,2-Dichloroethene	96	4.197	4.197	(0.872)	1520	0.25000	0.31
	28 Chloroform	83	4.572	4.572	(0.949)	2329	0.25000	0.29
	29 Bromochloromethane	128	4.474	4.474	(0.929)	609	0.25000	0.24
$	30 Dibromofluoromethane	113	4.748	4.748	(0.986)	1739	0.25000	
	31 1,1,1-Trichloroethane	97	4.748	4.748	(0.986)	1675	0.25000	0.27
	32 1,1-Dichloropropene	75	4.924	4.924	(0.887)	1316	0.25000	0.25
	33 1,2-Dichloroethane	62	5.183	5.183	(0.933)	1828	0.25000	0.30

	34	Carbon Tetrachloride	117	4.913	4.913 (0.885)	1572	0.25000	0.31
$	35	1,2-Dichloroethane-d4	65	5.104	5.104 (1.060)	2115	0.25000	(T)

	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

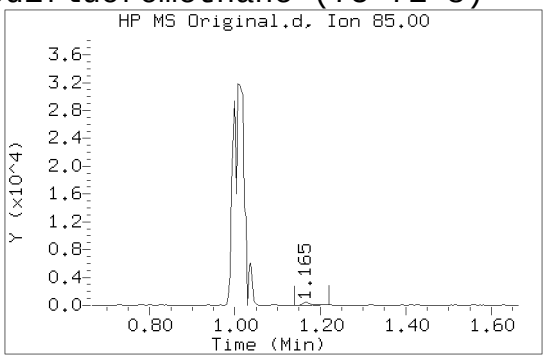
Instrument: VOA9,i
Operator: PC
Column diameter: 0.18

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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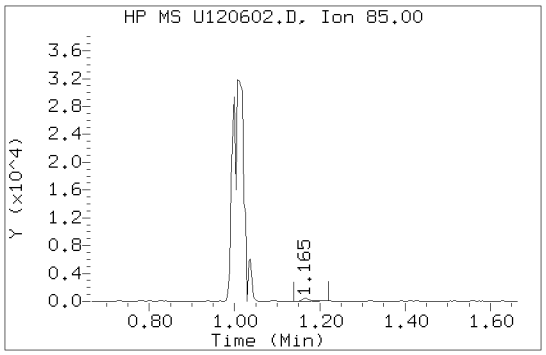
AREA
431
HEIGHT
467
12-Dec-2023
09:43
linh
pham



BEFORE
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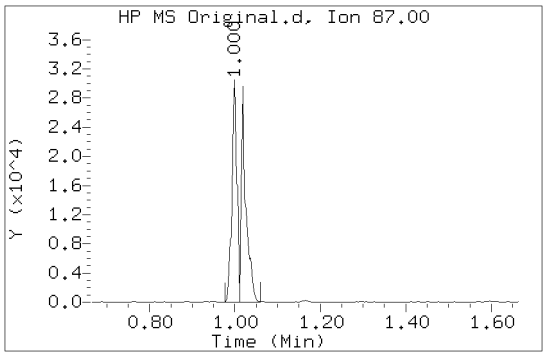
AREA
46717
HEIGHT
30487
11-Dec-2023
17:18
linh
pham



AFTER
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AREA
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HEIGHT
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12-Dec-2023
09:43
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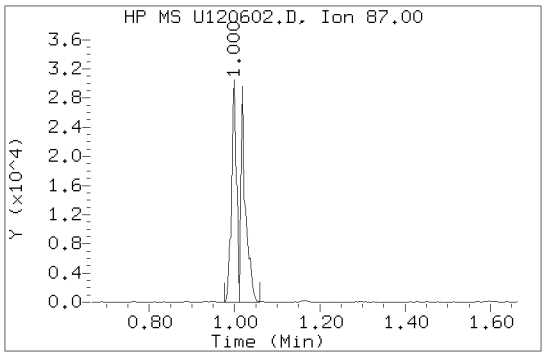
pham



1,4-Dioxane ()

Reason Code:

BEFORE
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AREA
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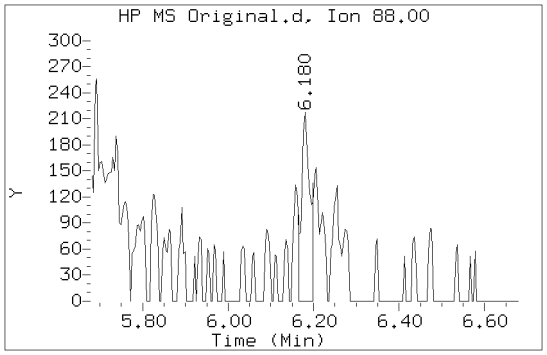
HEIGHT
218
11-Dec-2023
17:18
linh
pham



AFTER
MASS
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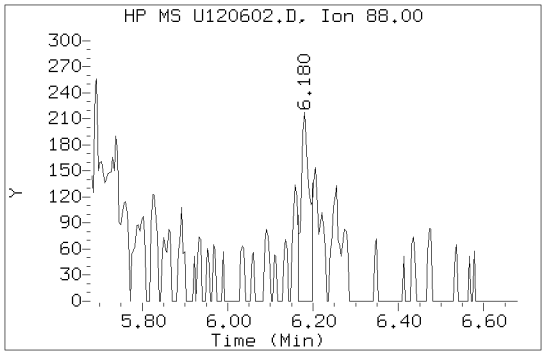
AREA
310
HEIGHT
218
12-Dec-2023
09:43
linh
pham



BEFORE
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AREA
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HEIGHT
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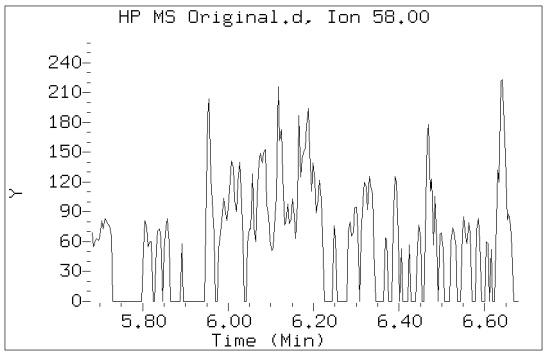
11-Dec-2023
17:18
linh
pham



AFTER
MASS
58
AREA
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HEIGHT
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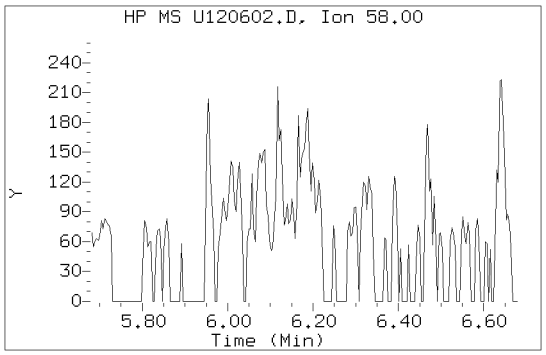
12-Dec-2023
09:43
linh
pham



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

Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120603.D Page 2
Report Date: 12-Dec-2023 09:43

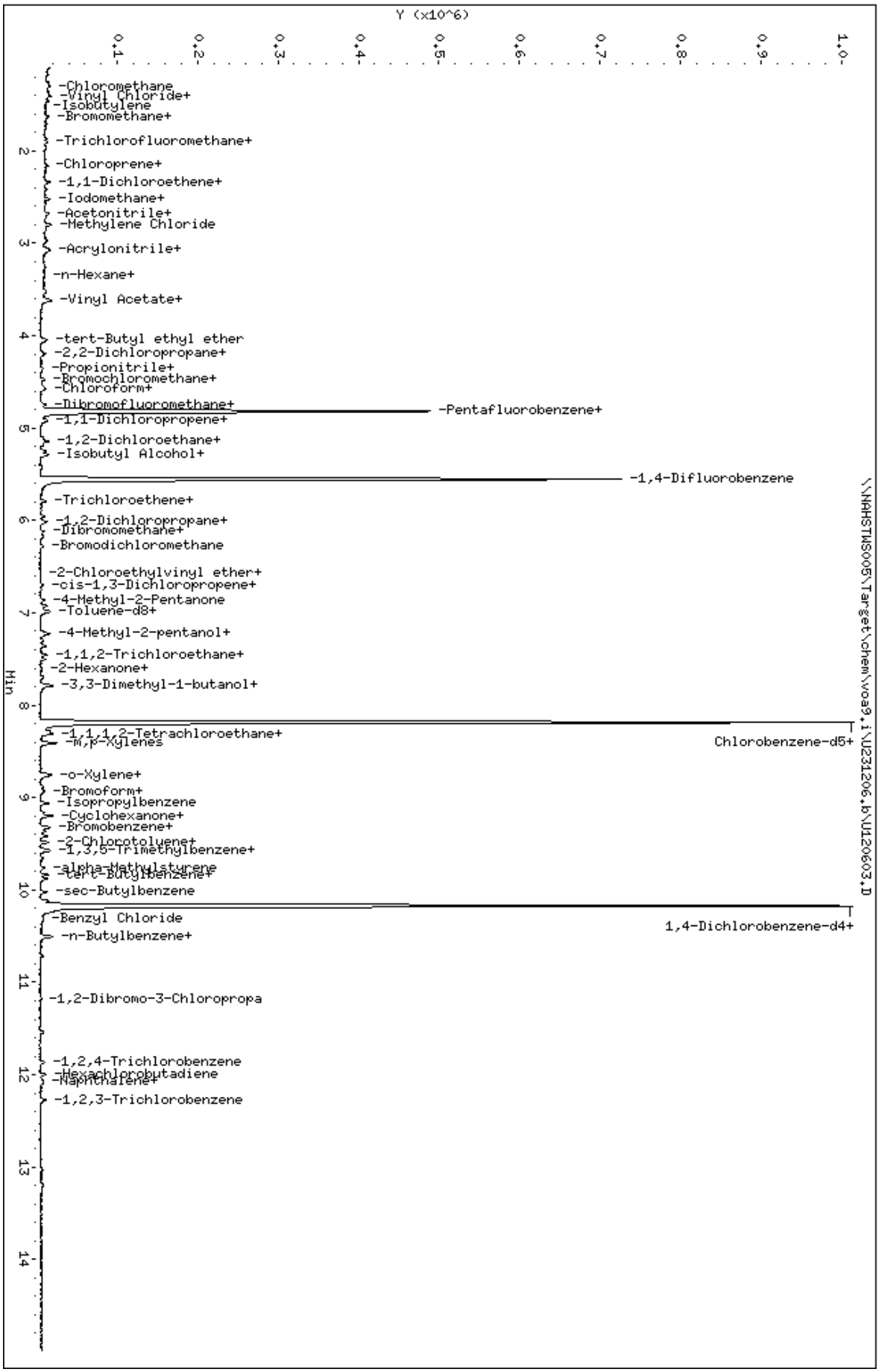
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	29 Bromochloromethane	128	4.470	4.470	(0.928)	1194	0.50000	0.53
$	30 Dibromofluoromethane	113	4.748	4.748	(0.985)	2084	0.50000	
	31 1,1,1-Trichloroethane	97	4.740	4.740	(0.984)	2774	0.50000	0.50
	32 1,1-Dichloropropene	75	4.924	4.924	(0.887)	2513	0.50000	0.53(M)
	33 1,2-Dichloroethane	62	5.179	5.179	(0.933)	3284	0.50000	0.59
	34 Carbon Tetrachloride	117	4.916	4.916	(0.885)	2241	0.50000	0.48(M)
$	35 1,2-Dichloroethane-d4	65	5.108	5.108	(1.060)	2783	0.50000	0.14(M)
*	36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	564889	50.0000	
	37 Benzene	78	5.145	5.145	(0.926)	8471	0.50000	0.55
	38 Trichloroethene	130	5.790	5.790	(1.043)	2145	0.50000	0.50
	39 Bromodichloromethane	83	6.281	6.281	(1.131)	2561	0.50000	0.50(M)
	41 2-Chloroethylvinyl ether	63	6.577	6.577	(1.184)	81	1.00000	(M)
	42 1,2-Dichloropropane	63	6.011	6.011	(1.082)	2365	0.50000	0.57
	44 Dibromomethane	93	6.120	6.120	(1.102)	1509	0.50000	0.56
	45 4-Methyl-2-Pentanone	43	6.858	6.858	(0.838)	3489	1.00000	0.51
	46 cis-1,3-Dichloropropene	75	6.697	6.697	(1.206)	2180	0.50000	1.80
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	556790	50.0000	
$	48 Toluene-d8	98	6.926	6.926	(0.846)	5743	0.50000	0.44
	50 Toluene	91	6.982	6.982	(0.853)	7719	0.50000	0.49
	51 trans-1,3-Dichloropropene	75	7.203	7.203	(1.297)	2266	0.50000	2.17(M)
	52 2-Hexanone	43	7.604	7.604	(0.929)	2124	1.00000	0.75
	53 1,1,2-Trichloroethane	83	7.361	7.361	(0.899)	2006	0.50000	
	54 1,3-Dichloropropane	76	7.499	7.499	(0.916)	3681	0.50000	0.53
	55 Dibromochloromethane	129	7.694	7.694	(0.940)	1891	0.50000	0.45
	56 Tetrachloroethene	164	7.458	7.458	(0.911)	1618	0.50000	0.48
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	2016	0.50000	0.52(M)
	58 1-Chlorohexane	55	8.197	8.197	(1.476)	1630	0.50000	0.51(M)
	59 Chlorobenzene	112	8.212	8.212	(1.003)	6178	0.50000	0.54
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	1886	0.50000	0.47
	61 Ethylbenzene	106	8.309	8.309	(1.015)	2673	0.50000	0.50(M)
	62 m,p-Xylenes	106	8.410	8.410	(1.027)	5585	1.00000	0.87
	63 o-Xylene	106	8.748	8.748	(1.069)	3316	0.50000	0.50
	64 Styrene	104	8.770	8.770	(1.071)	4395	0.50000	0.40(M)
	66 Bromoform	173	8.920	8.920	(1.090)	1087	0.50000	1.44(T)
	67 Isopropylbenzene	105	9.063	9.063	(1.107)	6642	0.50000	0.41
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	3009	0.50000	(M)
$	69 4-Bromofluorobenzene	95	9.197	9.197	(1.124)	4583	0.50000	(M)
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	283463	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.920)	3019	0.50000	0.56(M)
	73 n-Propylbenzene	91	9.415	9.415	(0.926)	6934	0.50000	0.41(M)
	74 Bromobenzene	156	9.321	9.321	(0.916)	2492	0.50000	0.52
	75 1,3,5-Trimethylbenzene	105	9.565	9.565	(0.940)	4609	0.50000	0.38
	76 2-Chlorotoluene	91	9.486	9.486	(0.933)	5799	0.50000	0.51
	77 4-Chlorotoluene	91	9.580	9.580	(0.942)	5828	0.50000	0.45
	78 tert-Butylbenzene	119	9.835	9.835	(0.967)	4379	0.50000	0.41
	79 1,2,4-Trimethylbenzene	105	9.880	9.880	(0.971)	5368	0.50000	0.45(M)
	81 sec-Butylbenzene	105	10.022	10.022	(0.985)	6329	0.50000	0.46(M)
	82 p-Isopropyltoluene	119	10.150	10.150	(0.998)	5327	0.50000	0.44(M)
	83 1,3-Dichlorobenzene	146	10.120	10.120	(0.995)	4068	0.50000	0.48(M)
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	4850	0.50000	0.54
	87 n-Butylbenzene	91	10.498	10.498	(1.032)	4072	0.50000	0.40
	88 1,2-Dichlorobenzene	146	10.510	10.510	(1.033)	4403	0.50000	0.51

89	1,2-Dibromo-3-Chloropropane	155	11.184	11.184 (1.099)	428	0.50000	2.61(M)
90	1,2,4-Trichlorobenzene	180	11.867	11.867 (1.167)	2624	0.50000	0.50

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	91 Hexachlorobutadiene	225	11.994	11.994	(1.179)	989	0.50000	0.47
	92 Naphthalene	128	12.076	12.076	(1.187)	5275	0.50000	0.41(M)
	93 1,2,3-Trichlorobenzene	180	12.271	12.271	(1.206)	2777	0.50000	0.52(M)
M	94 1,2-Dichloroethylene (total)	96				4345	1.00000	
M	95 Xylenes (total)	106				8901	1.50000	
	131 Methyl Acrylate	55	4.407	4.407	(0.914)	2589	0.50000	0.56(aM)
	135 1,4-Dioxane	88	6.176	6.176	(1.282)	631	10.0000	11.31(M)
	141 Cyclohexane	56	4.804	4.804	(0.997)	2806	0.50000	0.55(M)
	138 Freon TF	101	2.341	2.341	(0.486)	1239	0.50000	0.48
	140 1,3-Butadiene	54	1.408	1.408	(0.292)	1449	0.50000	0.41
	147 Methylcyclohexane	55	5.959	5.959	(1.073)	3447	0.50000	0.41
	146 Methyl Acetate	43	2.723	2.723	(0.565)	1832	0.50000	0.52(M)

QC Flag Legend

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



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Client ID: VSTD000.5
Sample Info: VSTD000.5;VSTD000.5;1;2;
Purge Volume: 5.0
Column phase: DB624

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

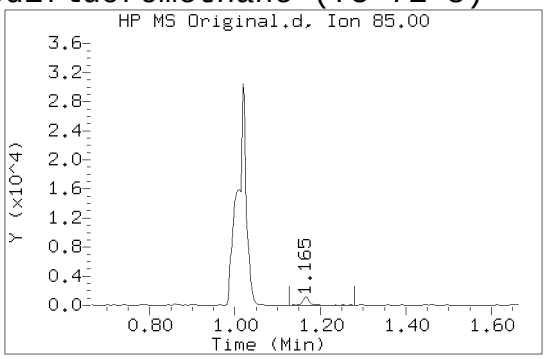
Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120603.D
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

Dichlorodifluoromethane (75-71-8)

Reason Code:

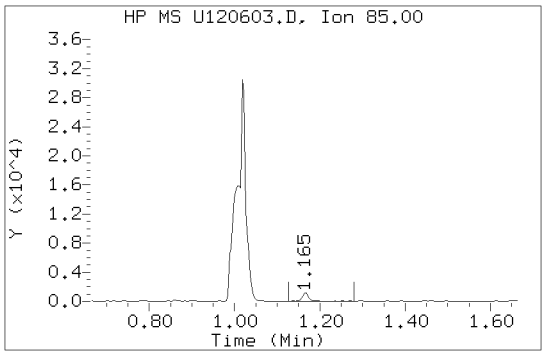
BEFORE

MASS
62
AREA
1954
HEIGHT
1706
06-Dec-2023
23:21



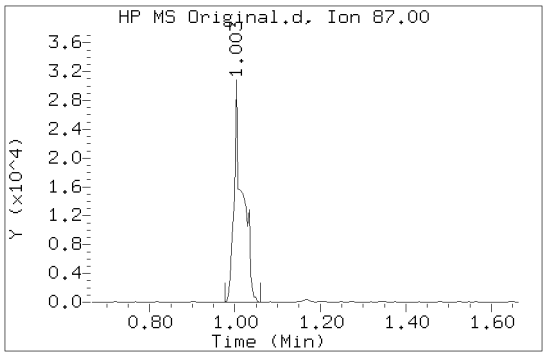
AFTER

MASS
85
AREA
1356
HEIGHT
1119
12-Dec-2023
09:43



BEFORE

MASS
64
AREA
1396
HEIGHT
809
06-Dec-2023
23:21



AFTER

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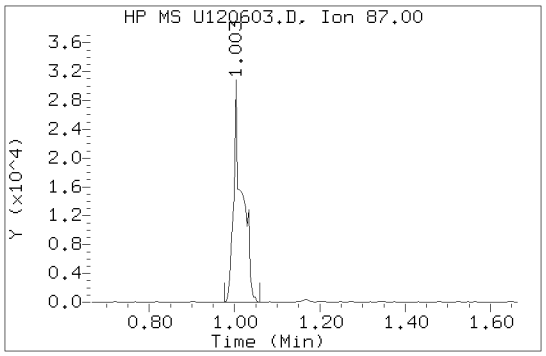
AREA
42464
HEIGHT
30843
12-Dec-2023
09:43

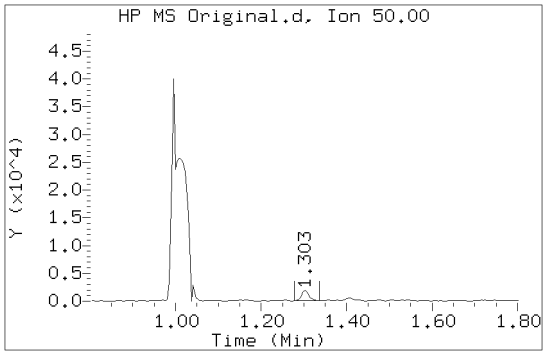


Chloromethane (74-87-3)

Reason Code:

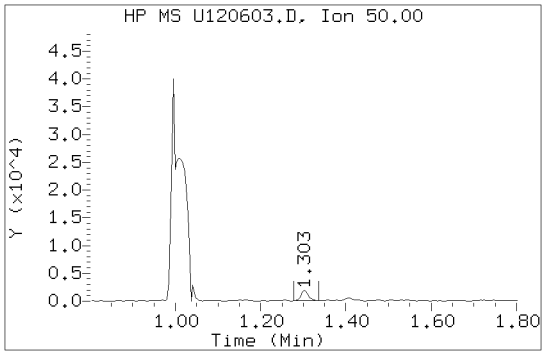
BEFORE

MASS
94
AREA
1430
HEIGHT
1441
06-Dec-2023
23:21



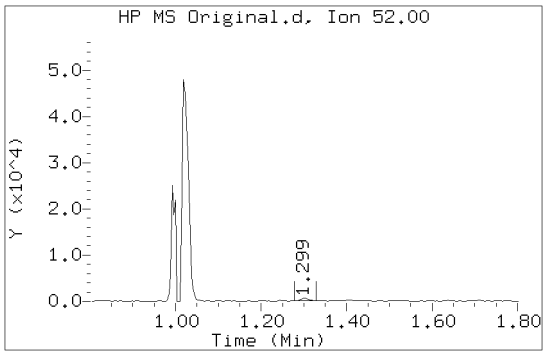
AFTER

MASS
50
AREA
2136
HEIGHT
1846
12-Dec-2023
09:43



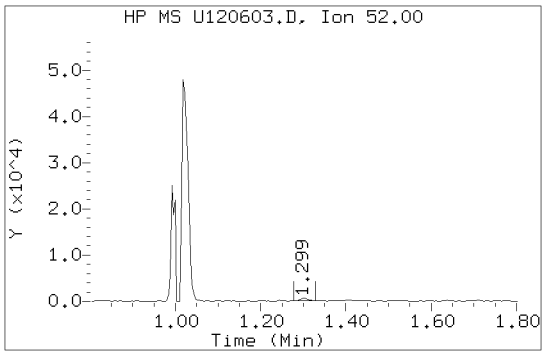
BEFORE

MASS
96
AREA
2090
HEIGHT
1549
06-Dec-2023
23:21



AFTER

MASS
52
AREA
810
HEIGHT
671
12-Dec-2023
09:43



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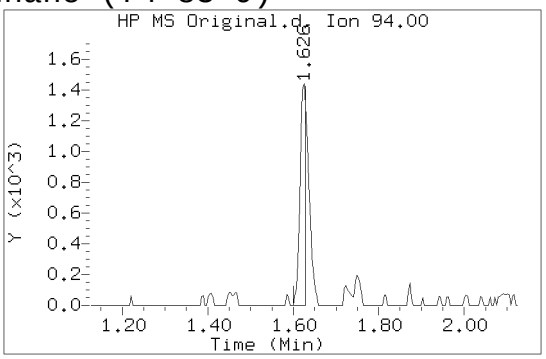
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

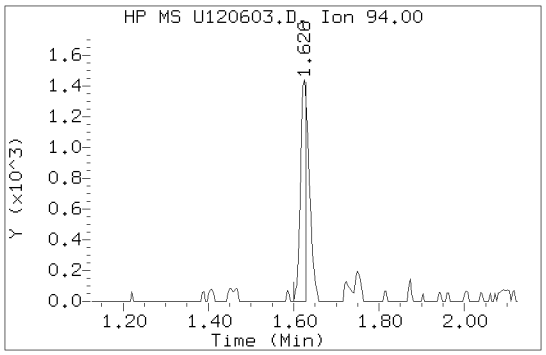
Bromomethane (74-83-9)

Reason Code:

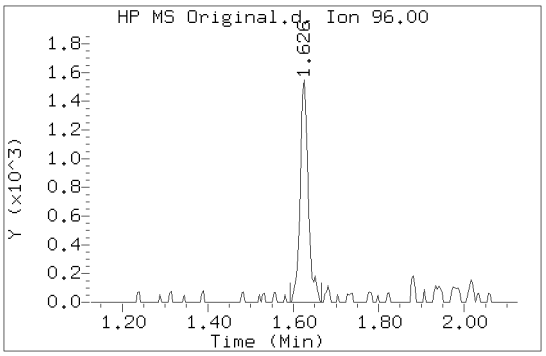
BEFORE
MASS
101
AREA
2224
HEIGHT
1410
06-Dec-2023
23:21



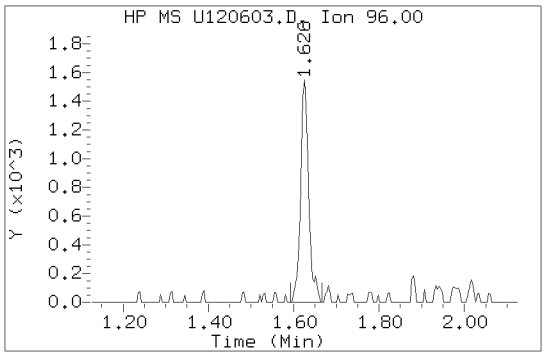
AFTER
MASS
94
AREA
1430
HEIGHT
1441
12-Dec-2023
09:43



BEFORE
MASS
103
AREA
1804
HEIGHT
1097
06-Dec-2023
23:21



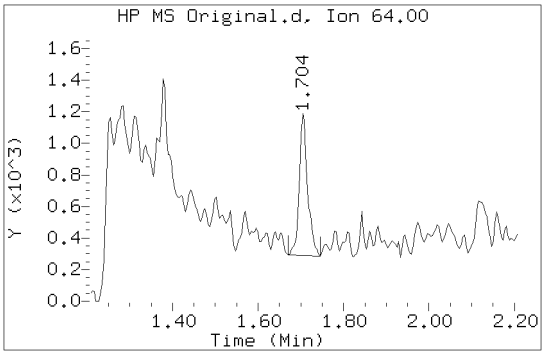
AFTER
MASS
96
AREA
2090
HEIGHT
1549
12-Dec-2023
09:43



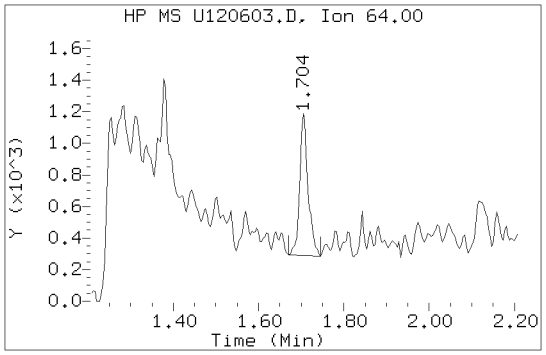
Chloroethane (75-00-3)

Reason Code:

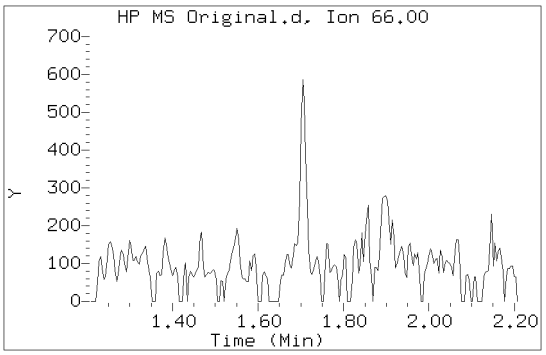
BEFORE
MASS
43
AREA
3182
HEIGHT
1596
06-Dec-2023
23:21



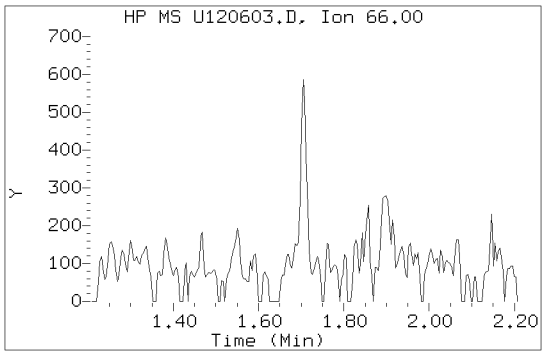
AFTER
MASS
64
AREA
1259
HEIGHT
899
12-Dec-2023
09:43



BEFORE
MASS
58
AREA
1171
HEIGHT
620
06-Dec-2023
23:21



AFTER
MASS
66
AREA
0
HEIGHT
0
12-Dec-2023
09:43



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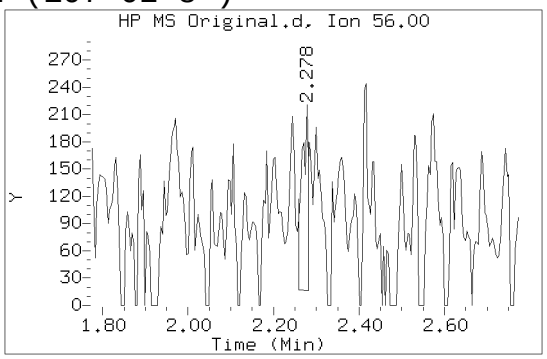
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

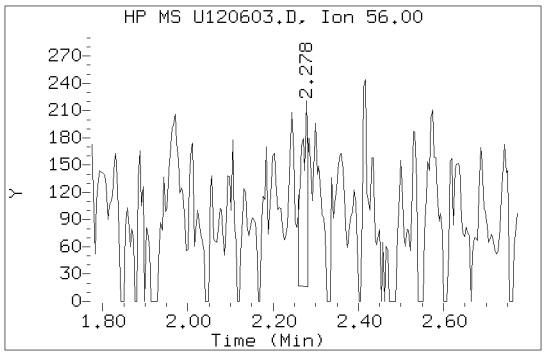
Acrolein (107-02-8)

Reason Code:

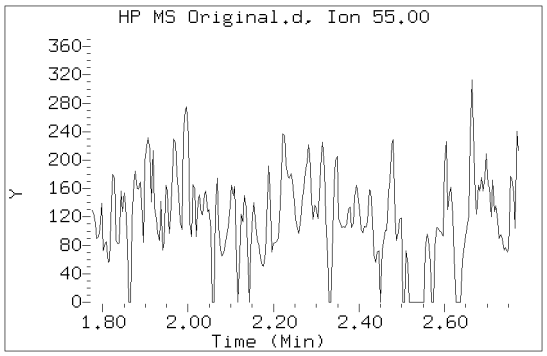
BEFORE
MASS
142
AREA
1035
HEIGHT
550
06-Dec-2023
23:21



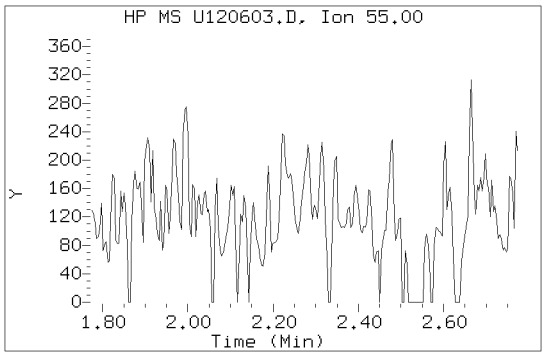
AFTER
MASS
56
AREA
221
HEIGHT
204
12-Dec-2023
09:43



BEFORE
MASS
127
AREA
625
HEIGHT
328
06-Dec-2023
23:21



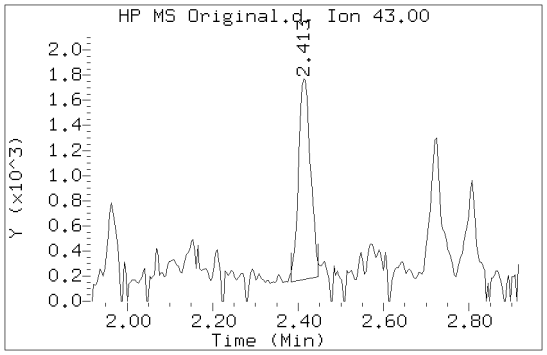
AFTER
MASS
55
AREA
0
HEIGHT
0
12-Dec-2023
09:43



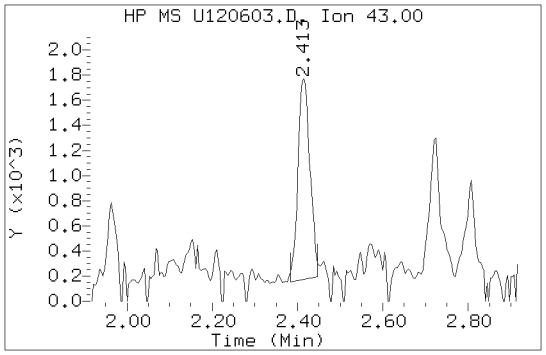
Acetone (67-64-1)

Reason Code:

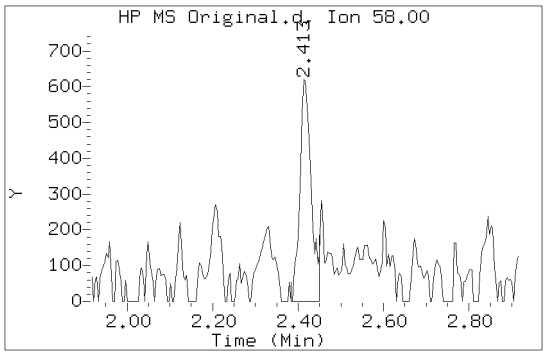
BEFORE
MASS
53
AREA
1506
HEIGHT
573
06-Dec-2023
23:21



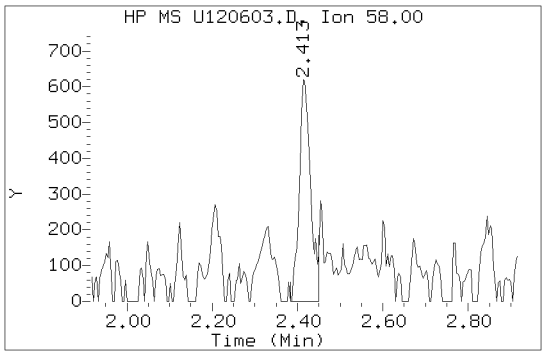
AFTER
MASS
43
AREA
3182
HEIGHT
1596
12-Dec-2023
09:43



BEFORE
MASS
52
AREA
1399
HEIGHT
626
06-Dec-2023
23:21



AFTER
MASS
58
AREA
1171
HEIGHT
620
12-Dec-2023
09:43



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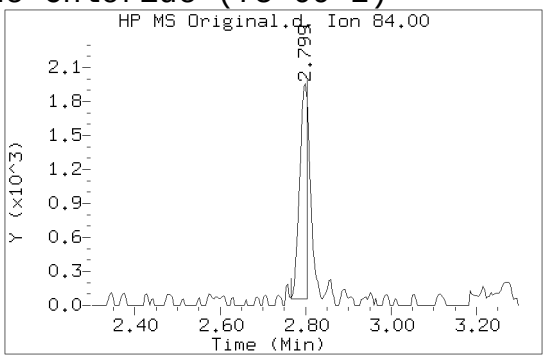
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

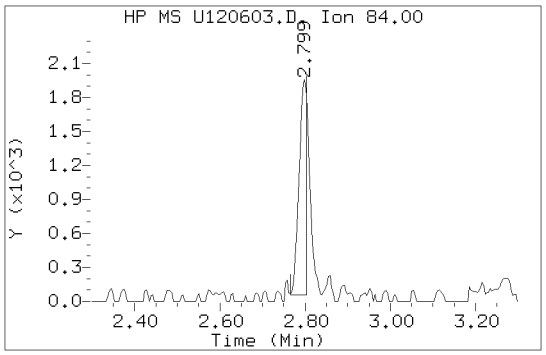
Methylene Chloride (75-09-2)

Reason Code:

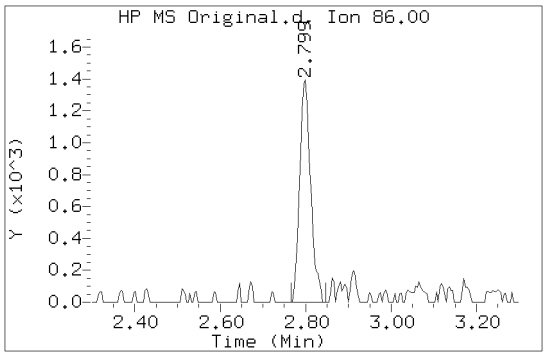
BEFORE
MASS
96
AREA
1948
HEIGHT
1118
06-Dec-2023
23:21



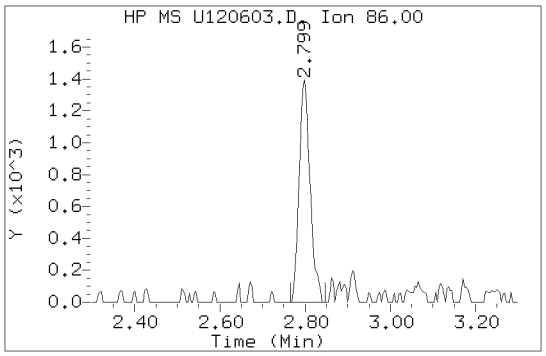
AFTER
MASS
84
AREA
2348
HEIGHT
1904
12-Dec-2023
09:43



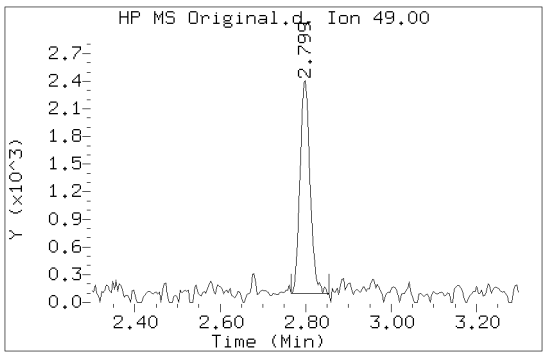
BEFORE
MASS
61
AREA
2182
HEIGHT
1143
06-Dec-2023
23:21



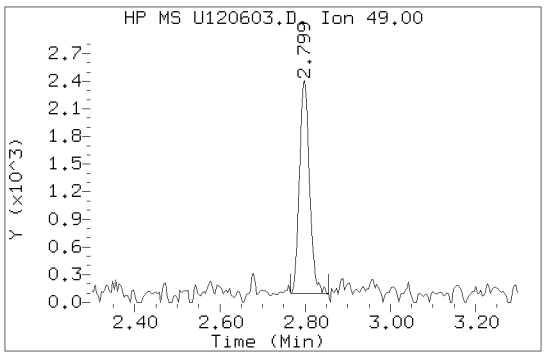
AFTER
MASS
86
AREA
2533
HEIGHT
1394
12-Dec-2023
09:43



BEFORE
MASS
98
AREA
1022
HEIGHT
586
06-Dec-2023
23:21



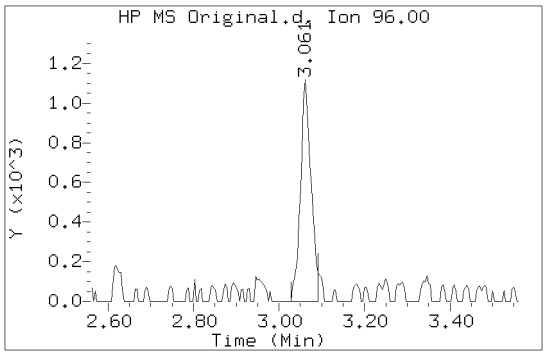
AFTER
MASS
49
AREA
3879
HEIGHT
2311
12-Dec-2023
09:43



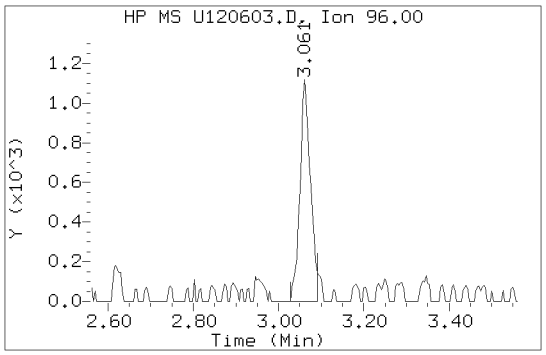
trans-1,2-Dichloroethene (156-60-5)

Reason Code:

BEFORE
MASS
77
AREA
2637
HEIGHT
1068
06-Dec-2023
23:21



AFTER
MASS
96
AREA
1948
HEIGHT
1118
12-Dec-2023
09:43



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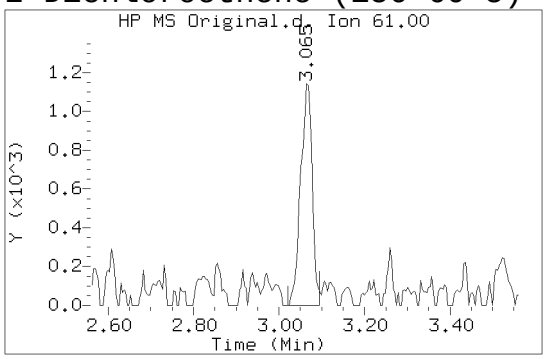
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

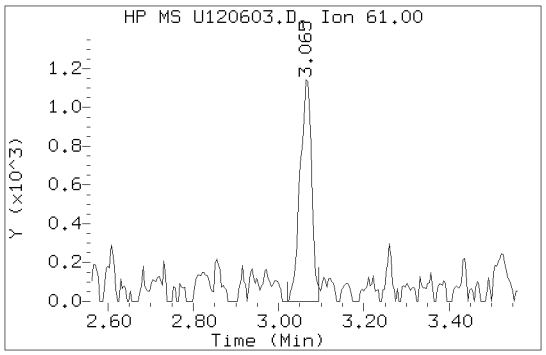
trans-1,2-Dichloroethene (156-60-5)

Reason Code:

BEFORE
MASS
97
AREA
675
HEIGHT
294
06-Dec-2023
23:21



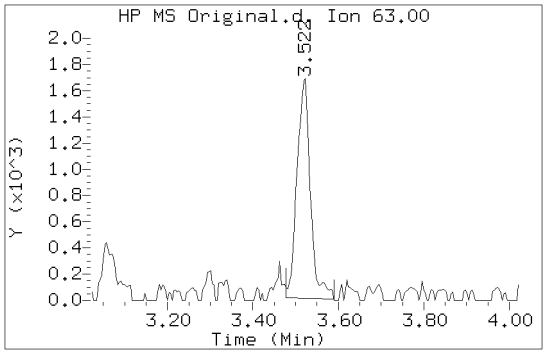
AFTER
MASS
61
AREA
2182
HEIGHT
1143
12-Dec-2023
09:43



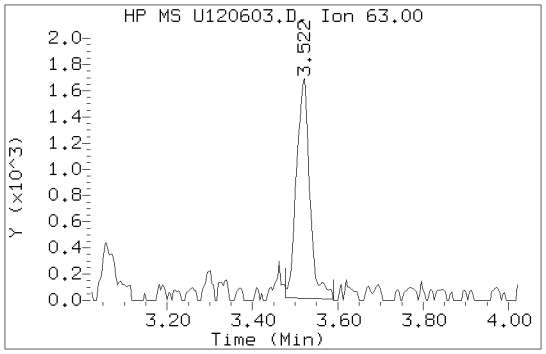
1,1-Dichloroethane (75-34-3)

Reason Code:

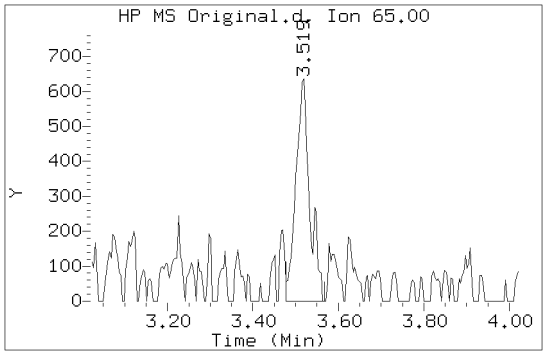
BEFORE
MASS
83
AREA
4075
HEIGHT
1886
06-Dec-2023
23:21



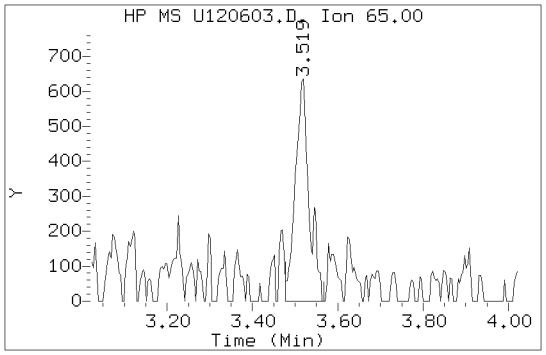
AFTER
MASS
63
AREA
3728
HEIGHT
1675
12-Dec-2023
09:43



BEFORE
MASS
85
AREA
2646
HEIGHT
1265
06-Dec-2023
23:21



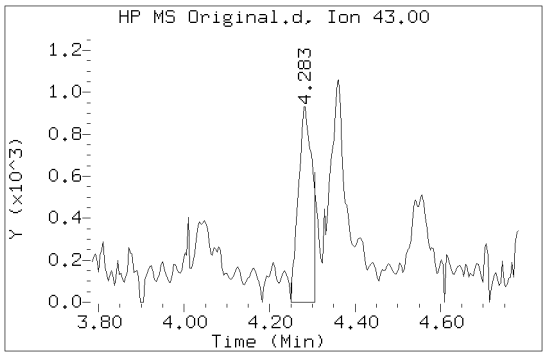
AFTER
MASS
65
AREA
1459
HEIGHT
636
12-Dec-2023
09:43



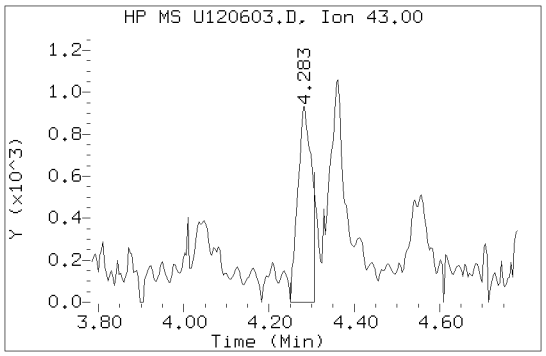
2-Butanone (78-93-3)

Reason Code:

BEFORE
MASS
128
AREA
1194
HEIGHT
533
06-Dec-2023
23:21



AFTER
MASS
43
AREA
2099
HEIGHT
932
12-Dec-2023
09:43



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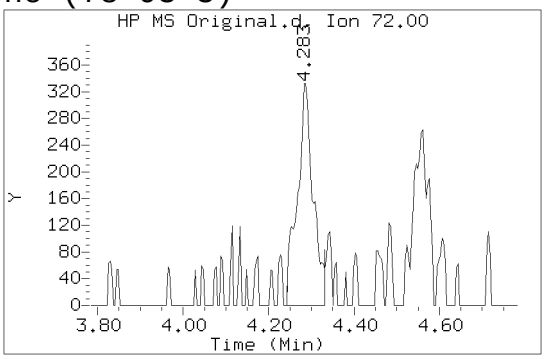
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

2-Butanone (78-93-3)

Reason Code:

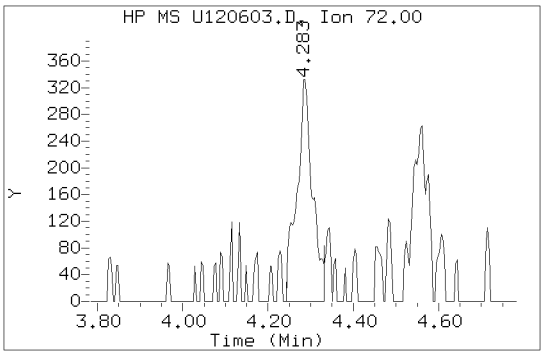
BEFORE

MASS
49
AREA
2419
HEIGHT
1056
06-Dec-2023
23:21



AFTER

MASS
72
AREA
868
HEIGHT
332
12-Dec-2023
09:43

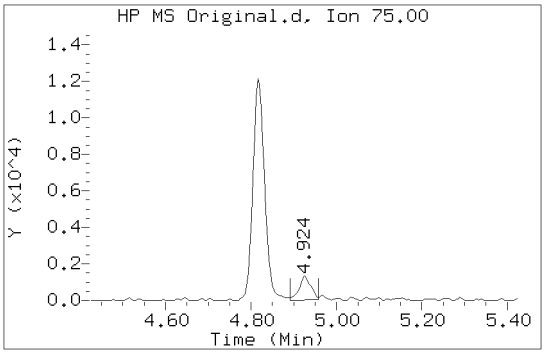


1,1-Dichloropropene (563-58-6)

Reason Code:

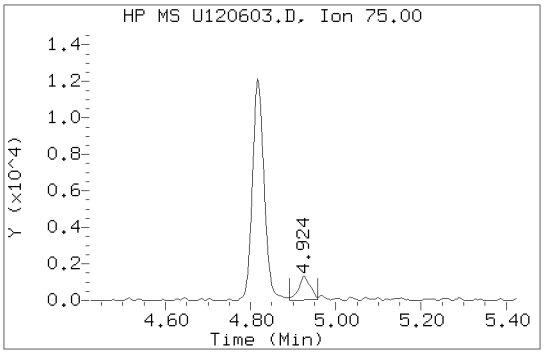
BEFORE

MASS
78
AREA
8471
HEIGHT
4567
06-Dec-2023
23:21



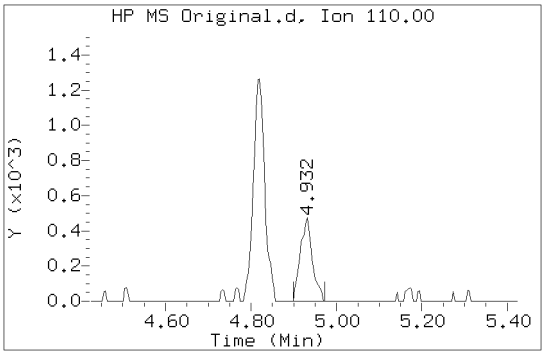
AFTER

MASS
75
AREA
2513
HEIGHT
1297
12-Dec-2023
09:43



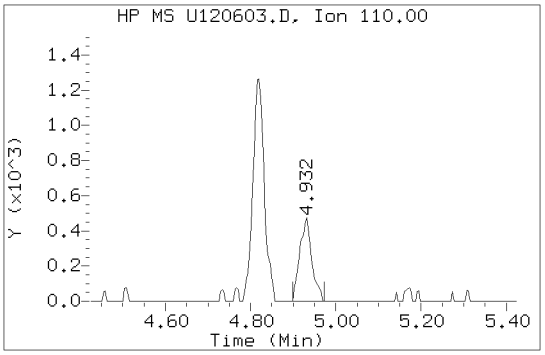
BEFORE

MASS
77
AREA
2577
HEIGHT
1507
06-Dec-2023
23:21



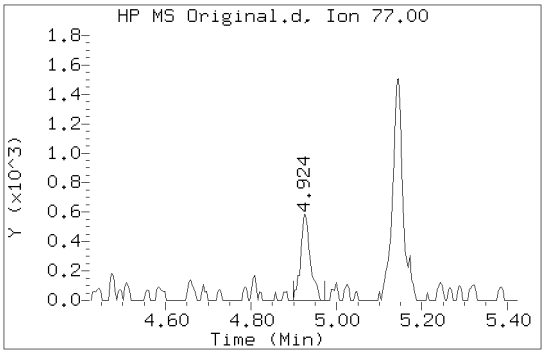
AFTER

MASS
110
AREA
946
HEIGHT
475
12-Dec-2023
09:43



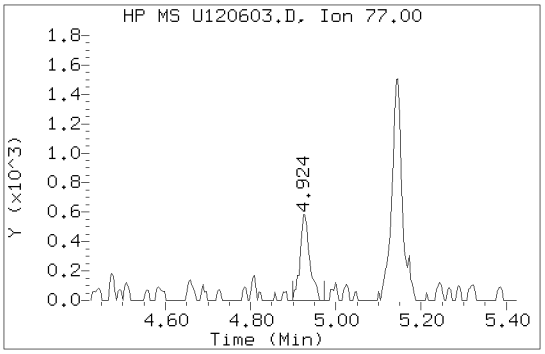
BEFORE

MASS
51
AREA
1201
HEIGHT
702
06-Dec-2023
23:21



AFTER

MASS
77
AREA
945
HEIGHT
584
12-Dec-2023
09:43



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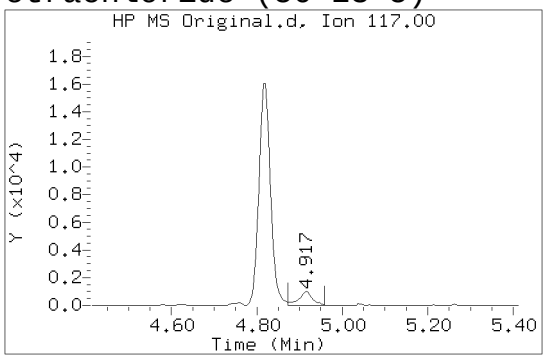
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

Carbon Tetrachloride (56-23-5)

Reason Code:

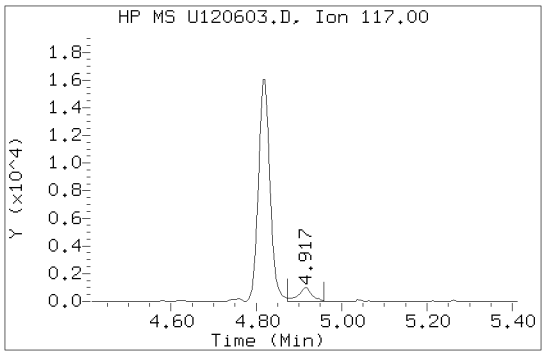
BEFORE

MASS
83
AREA
2561
HEIGHT
1370
06-Dec-2023
23:21



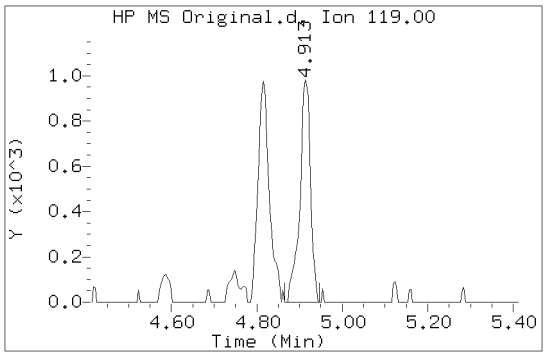
AFTER

MASS
117
AREA
2241
HEIGHT
1012
12-Dec-2023
09:43



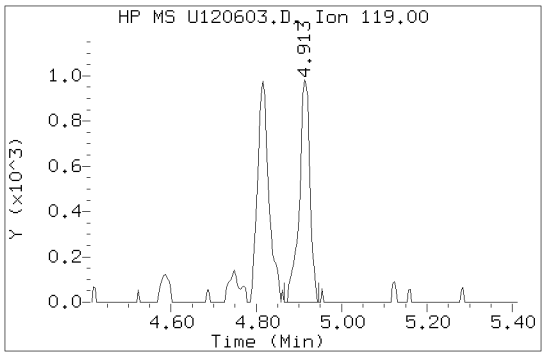
BEFORE

MASS
85
AREA
0
HEIGHT
0
06-Dec-2023
23:21



AFTER

MASS
119
AREA
1738
HEIGHT
982
12-Dec-2023
09:43

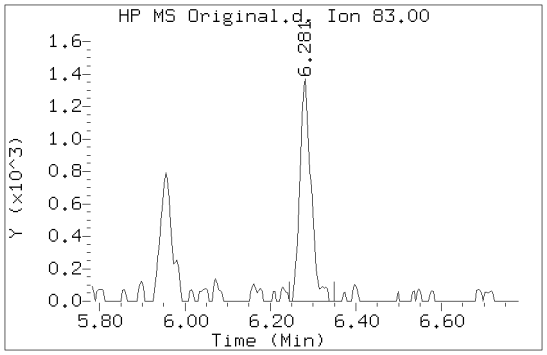


Bromodichloromethane (75-27-4)

Reason Code:

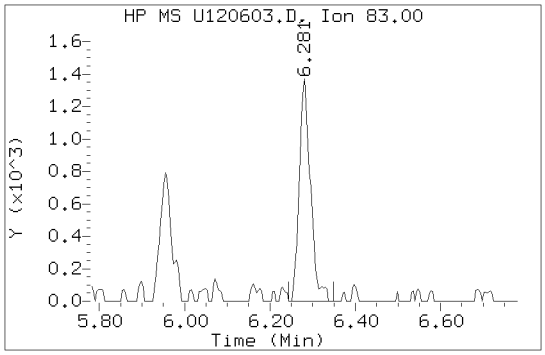
BEFORE

MASS
75
AREA
2180
HEIGHT
1317
06-Dec-2023
23:21



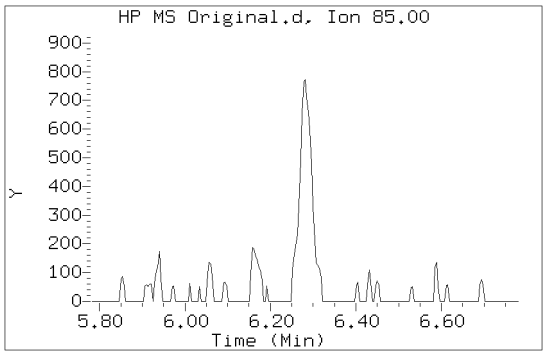
AFTER

MASS
83
AREA
2561
HEIGHT
1370
12-Dec-2023
09:43



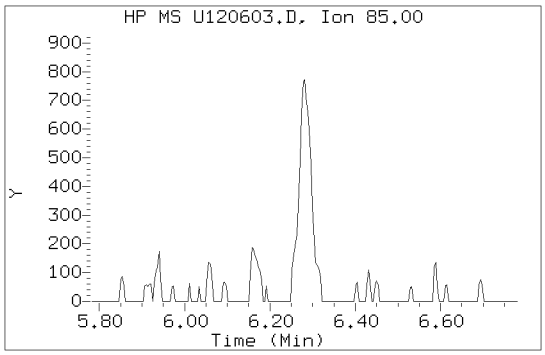
BEFORE

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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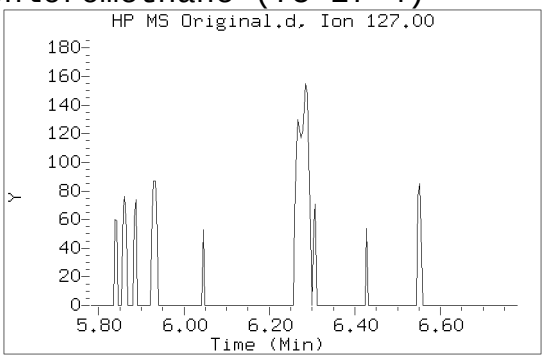
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

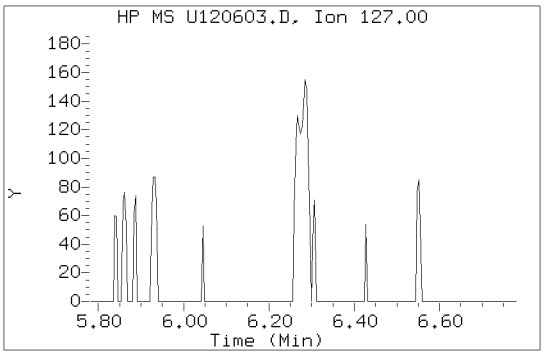
Bromodichloromethane (75-27-4)

BEFORE
MASS
39
AREA
987
HEIGHT
625
06-Dec-2023
23:21



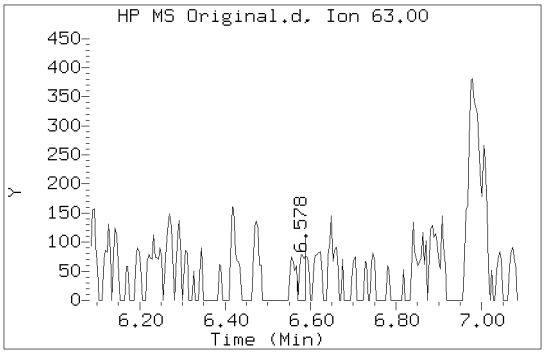
Reason Code:

AFTER
MASS
127
AREA
0
HEIGHT
0
12-Dec-2023
09:43



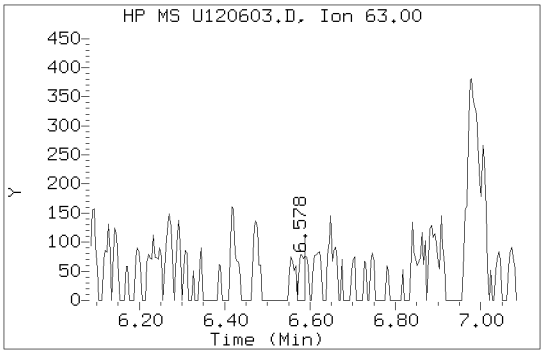
2-Chloroethylvinyl ether (110-75-8)

BEFORE
MASS
117
AREA
556790
HEIGHT
357308
06-Dec-2023
23:21



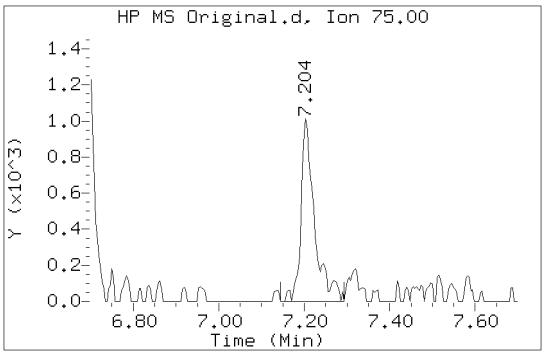
Reason Code:

AFTER
MASS
63
AREA
81
HEIGHT
78
12-Dec-2023
09:43



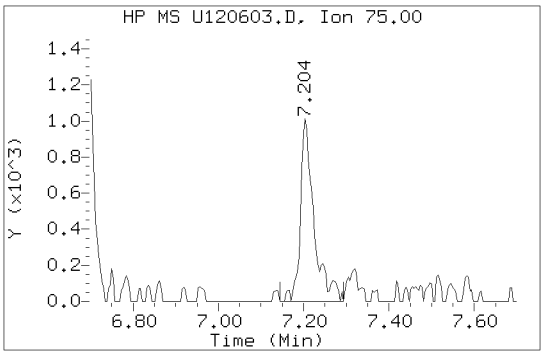
trans-1,3-Dichloropropene (10061-02-6)

BEFORE
MASS
43
AREA
8811
HEIGHT
3579
06-Dec-2023
23:21



Reason Code:

AFTER
MASS
75
AREA
2266
HEIGHT
1013
12-Dec-2023
09:43



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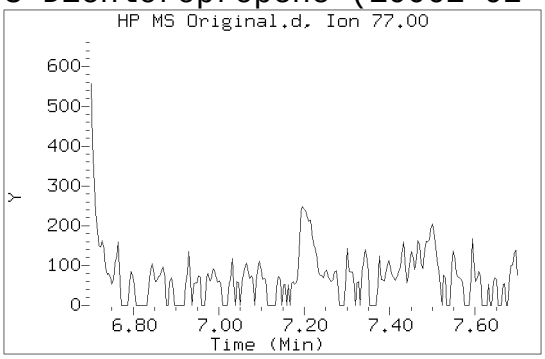
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

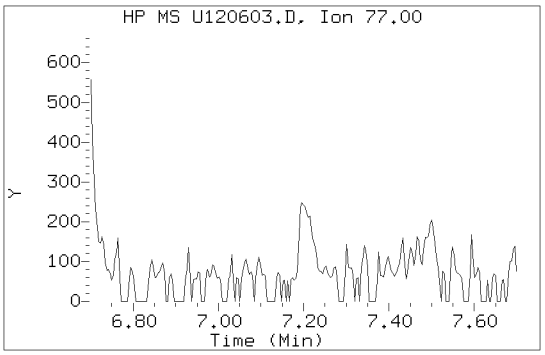
trans-1,3-Dichloropropene (10061-02-6)

Reason Code:

BEFORE
MASS
86
AREA
811
HEIGHT
369
06-Dec-2023
23:21



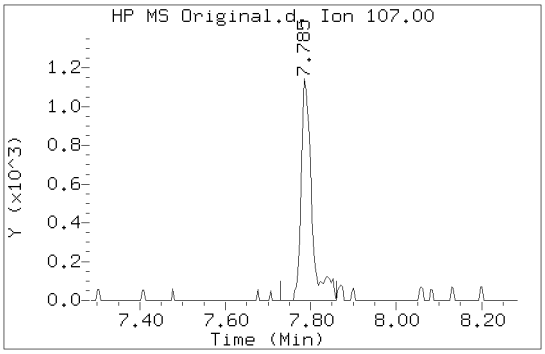
AFTER
MASS
77
AREA
0
HEIGHT
0
12-Dec-2023
09:43



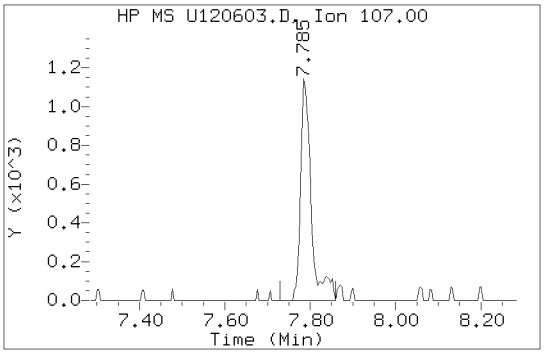
1,2-Dibromoethane (106-93-4)

Reason Code:

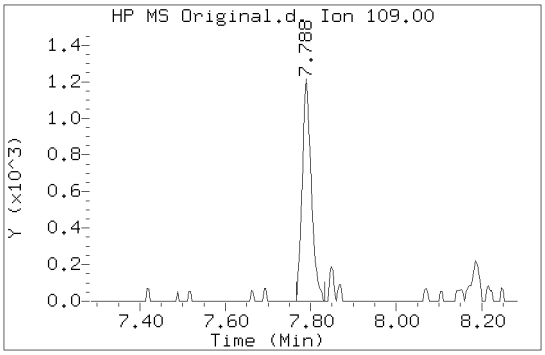
BEFORE
MASS
112
AREA
6178
HEIGHT
3872
06-Dec-2023
23:21



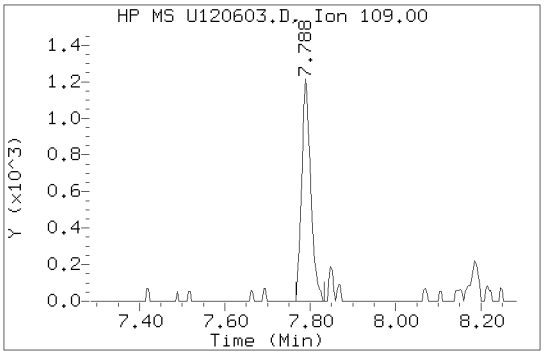
AFTER
MASS
107
AREA
2016
HEIGHT
1144
12-Dec-2023
09:43



BEFORE
MASS
77
AREA
8323
HEIGHT
3106
06-Dec-2023
23:21



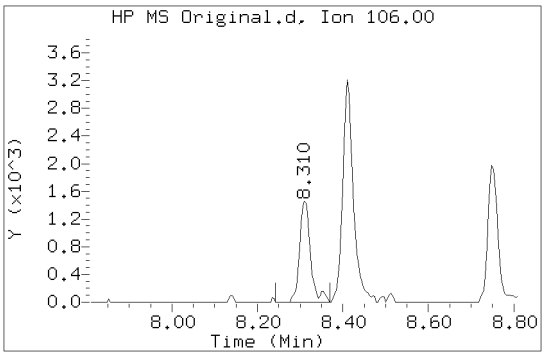
AFTER
MASS
109
AREA
1841
HEIGHT
1216
12-Dec-2023
09:43



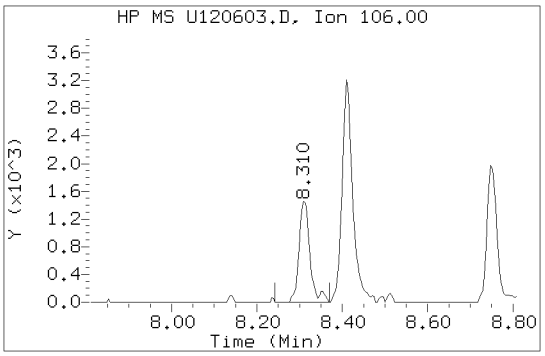
Ethylbenzene (100-41-4)

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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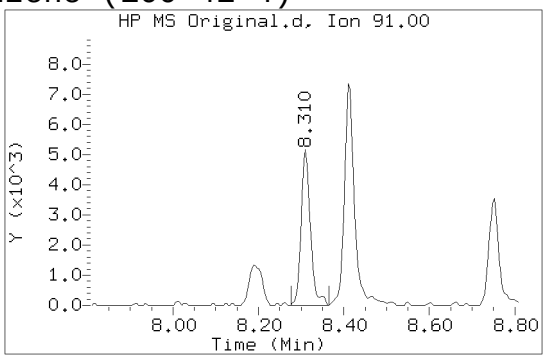
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

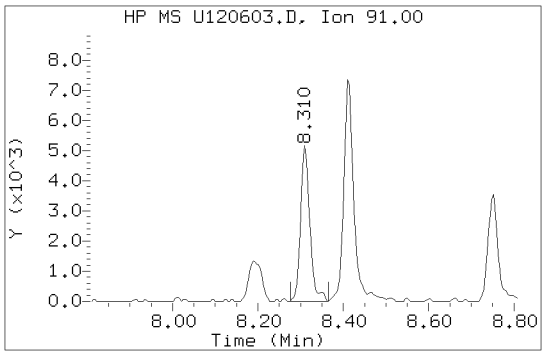
Ethylbenzene (100-41-4)

Reason Code:

BEFORE
MASS
91
AREA
11651
HEIGHT
7349
06-Dec-2023
23:21



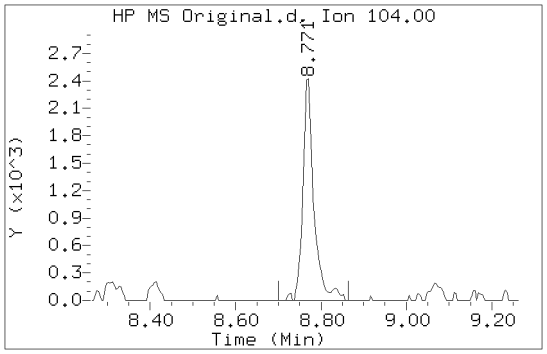
AFTER
MASS
91
AREA
7965
HEIGHT
5156
12-Dec-2023
09:43



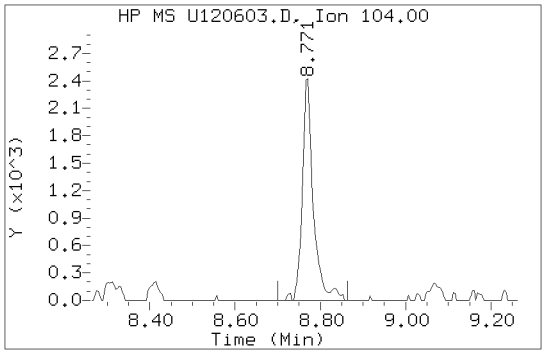
Styrene (100-42-5)

Reason Code:

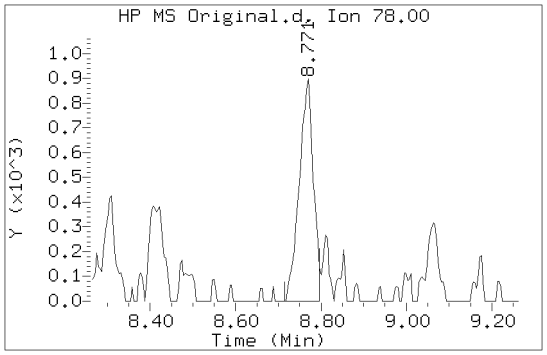
BEFORE
MASS
39
AREA
1878
HEIGHT
895
06-Dec-2023
23:21



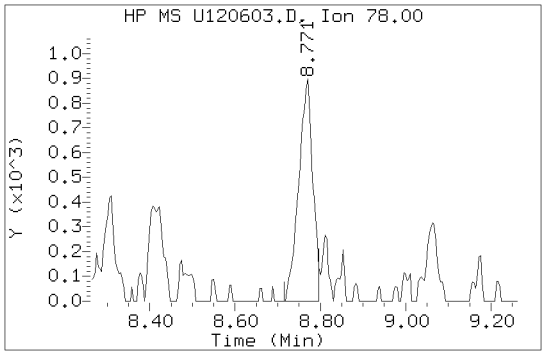
AFTER
MASS
104
AREA
4395
HEIGHT
2424
12-Dec-2023
09:43



BEFORE
MASS
40
AREA
2702
HEIGHT
1000
06-Dec-2023
23:21



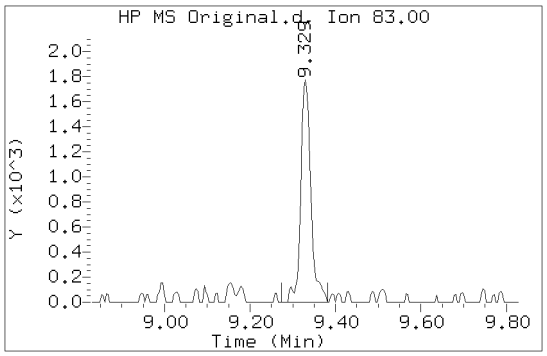
AFTER
MASS
78
AREA
2092
HEIGHT
898
12-Dec-2023
09:43



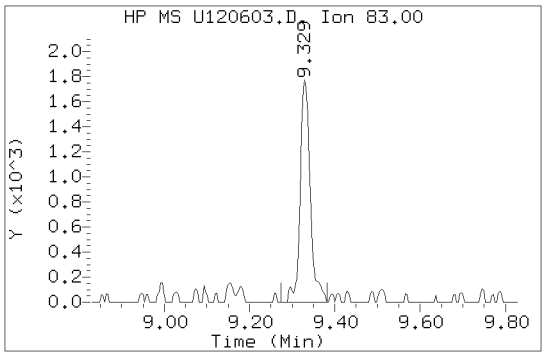
1,1,2,2-Tetrachloroethane (79-34-5)

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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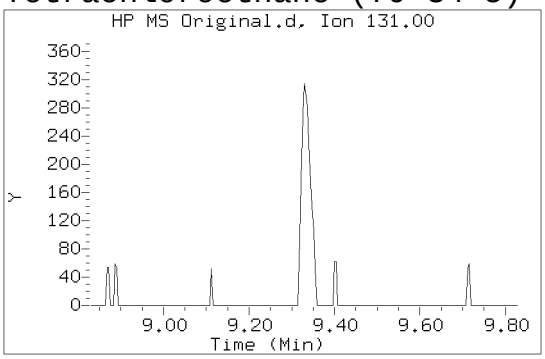
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

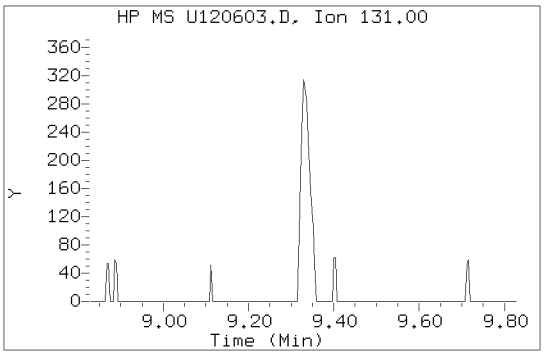
1,1,2,2-Tetrachloroethane (79-34-5)

Reason Code:

BEFORE
MASS
120
AREA
1897
HEIGHT
1147
06-Dec-2023
23:21



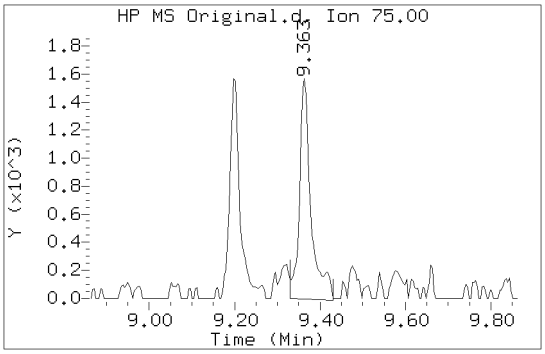
AFTER
MASS
131
AREA
0
HEIGHT
0
12-Dec-2023
09:43



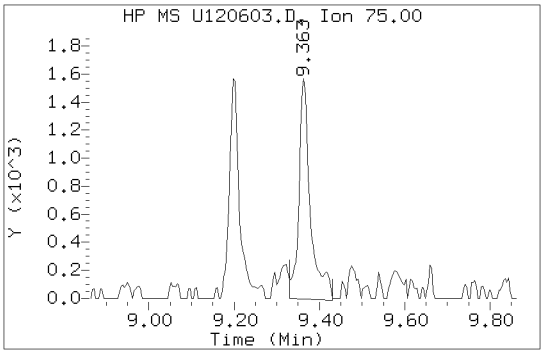
1,2,3-Trichloropropane (96-18-4)

Reason Code:

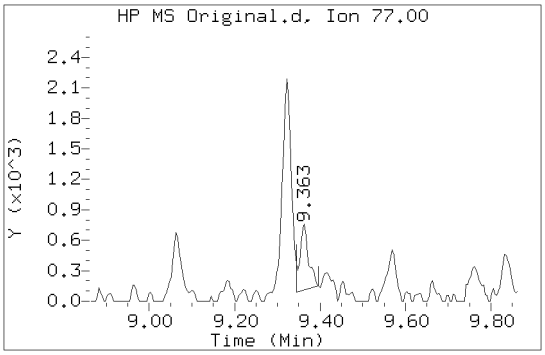
BEFORE
MASS
152
AREA
283463
HEIGHT
182528
06-Dec-2023
23:21



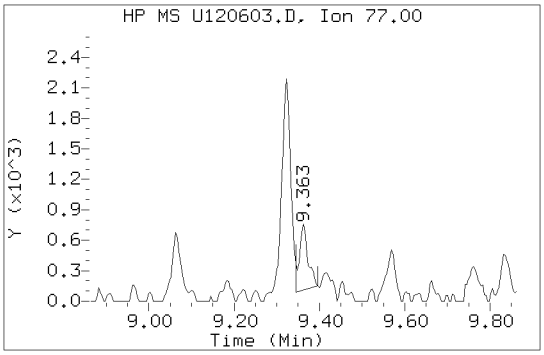
AFTER
MASS
75
AREA
3019
HEIGHT
1574
12-Dec-2023
09:43



BEFORE
MASS
115
AREA
153211
HEIGHT
96264
06-Dec-2023
23:21



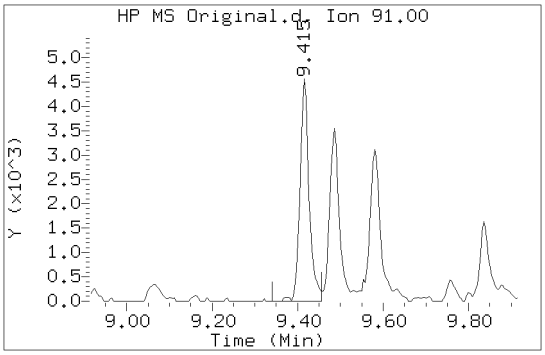
AFTER
MASS
77
AREA
958
HEIGHT
648
12-Dec-2023
09:43



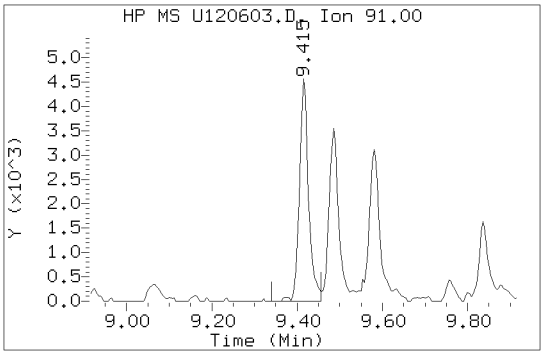
n-Propylbenzene (106-65-1)

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

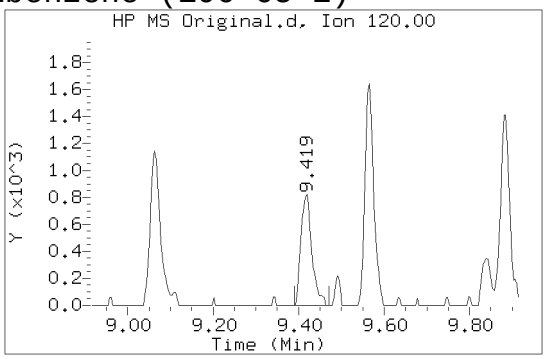


Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120603.D
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

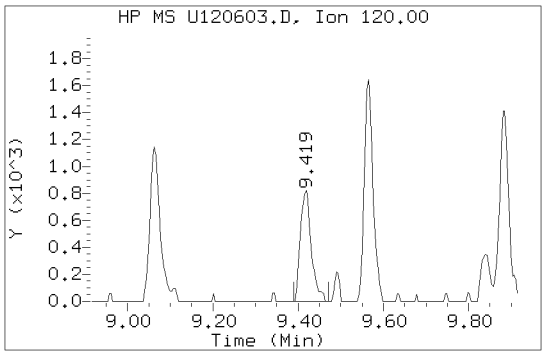
n-Propylbenzene (106-65-1)

Reason Code:

BEFORE
MASS
67
AREA
870
HEIGHT
457
06-Dec-2023
23:21



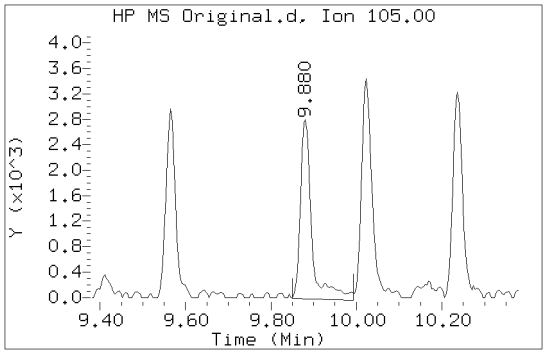
AFTER
MASS
120
AREA
1497
HEIGHT
820
12-Dec-2023
09:43



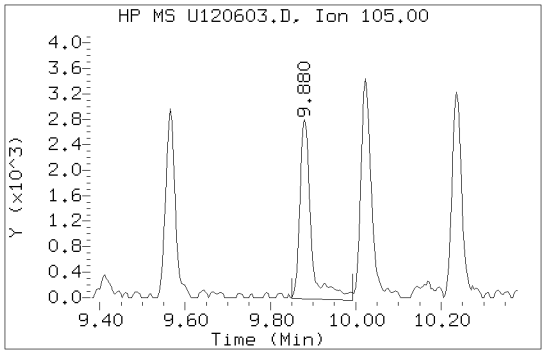
1,2,4-Trimethylbenzene (95-63-6)

Reason Code:

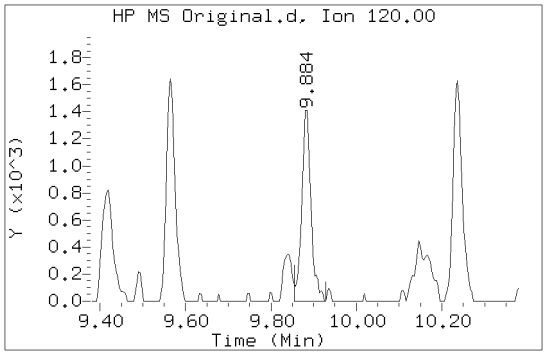
BEFORE
MASS
91
AREA
5799
HEIGHT
3547
06-Dec-2023
23:21



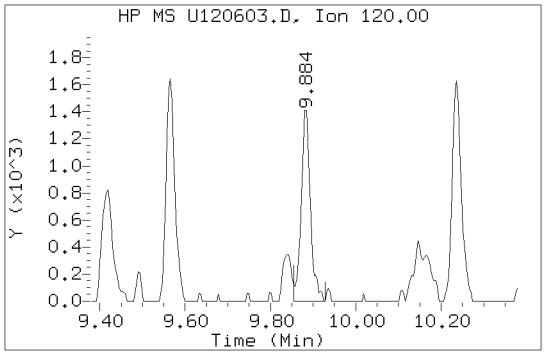
AFTER
MASS
105
AREA
5368
HEIGHT
2820
12-Dec-2023
09:43



BEFORE
MASS
126
AREA
1923
HEIGHT
1114
06-Dec-2023
23:21



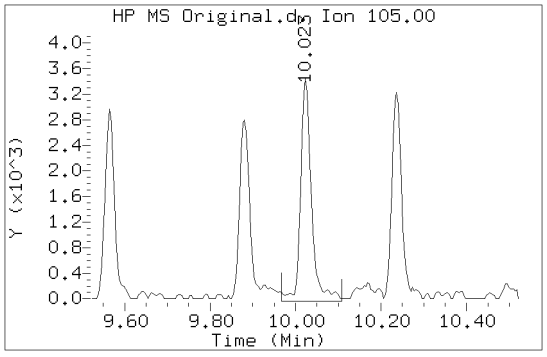
AFTER
MASS
120
AREA
2194
HEIGHT
1412
12-Dec-2023
09:43



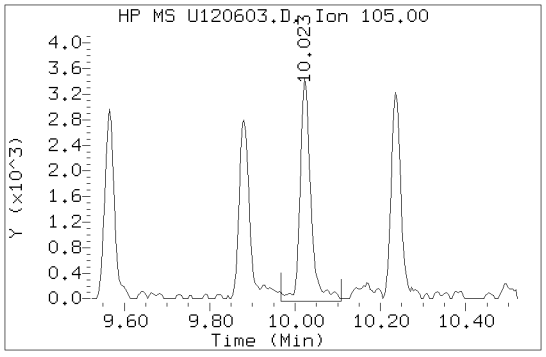
sec-Butylbenzene (135-98-8)

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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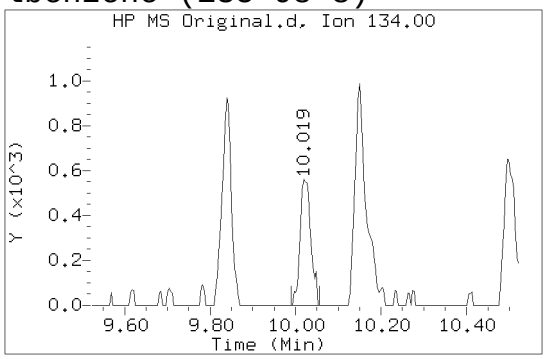
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

sec-Butylbenzene (135-98-8)

Reason Code:

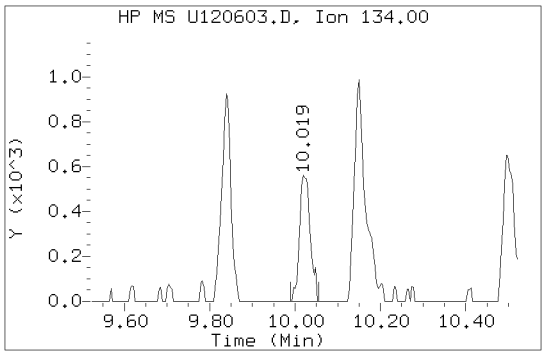
BEFORE

MASS
126
AREA
1785
HEIGHT
845
06-Dec-2023
23:21



AFTER

MASS
134
AREA
1010
HEIGHT
562
12-Dec-2023
09:43

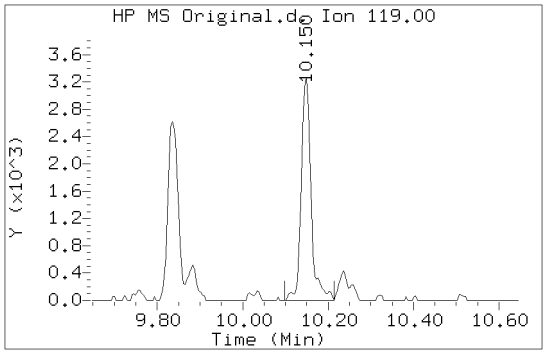


p-Isopropyltoluene (99-87-6)

Reason Code:

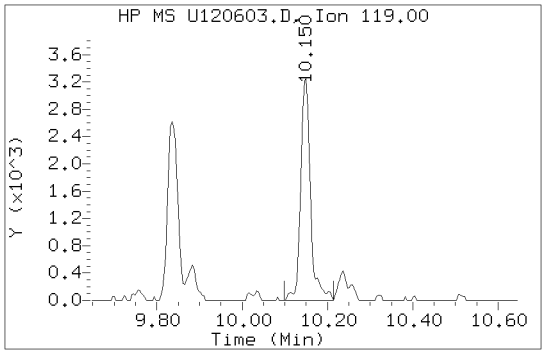
BEFORE

MASS
54
AREA
2827
HEIGHT
1063
06-Dec-2023
23:21



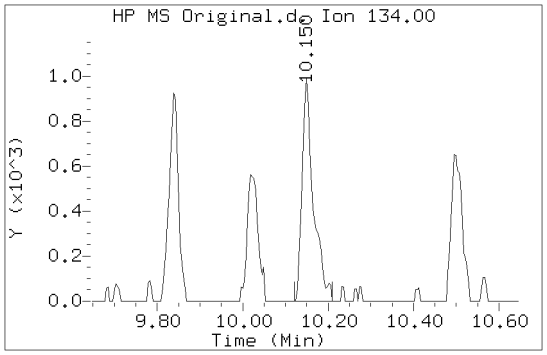
AFTER

MASS
119
AREA
5327
HEIGHT
3247
12-Dec-2023
09:43



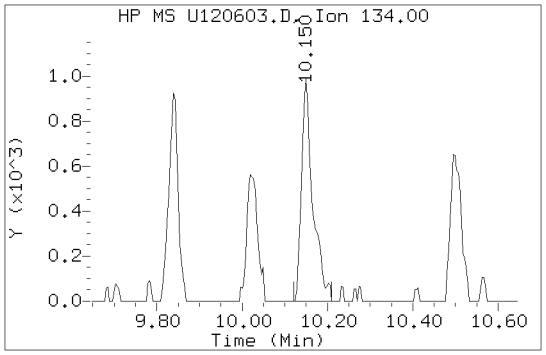
BEFORE

MASS
52
AREA
1029
HEIGHT
355
06-Dec-2023
23:21



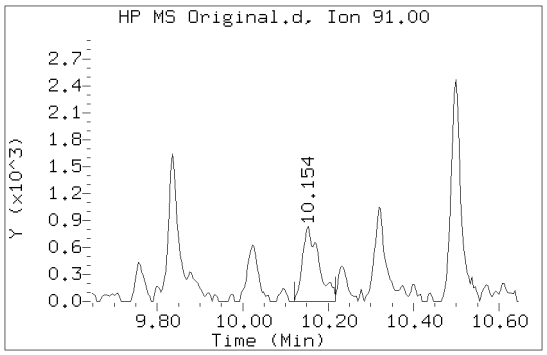
AFTER

MASS
134
AREA
1845
HEIGHT
988
12-Dec-2023
09:43



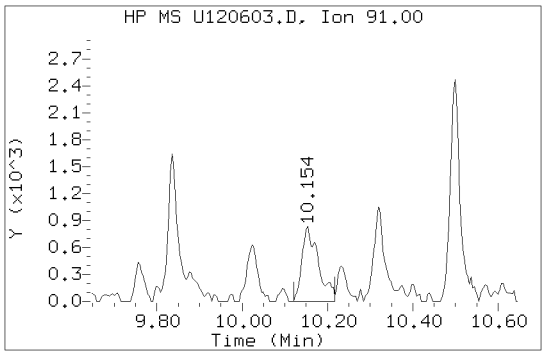
BEFORE

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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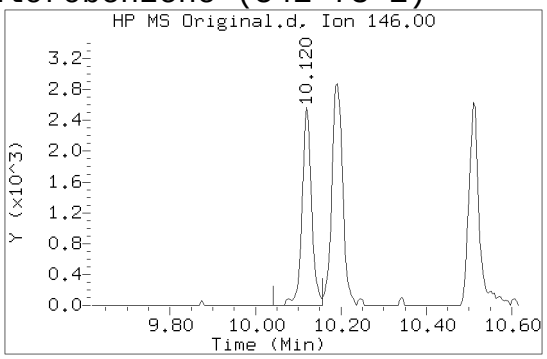
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

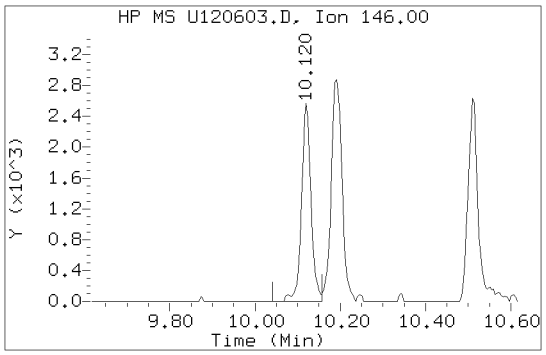
1,3-Dichlorobenzene (541-73-1)

Reason Code:

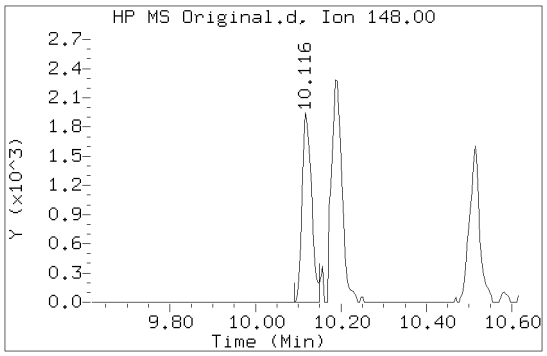
BEFORE
MASS
119
AREA
4379
HEIGHT
2623
06-Dec-2023
23:21



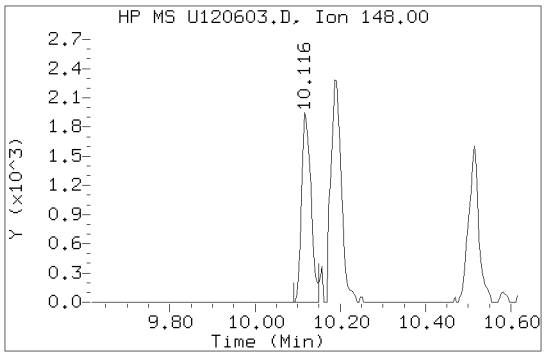
AFTER
MASS
146
AREA
4068
HEIGHT
2569
12-Dec-2023
09:43



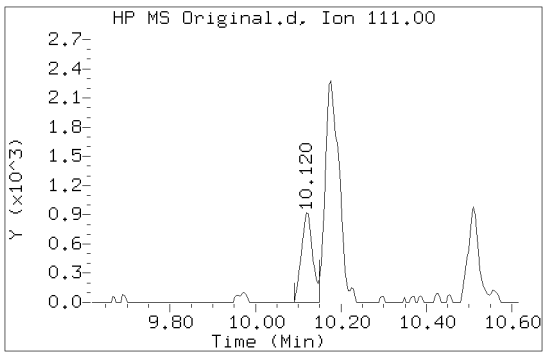
BEFORE
MASS
91
AREA
2568
HEIGHT
1643
06-Dec-2023
23:21



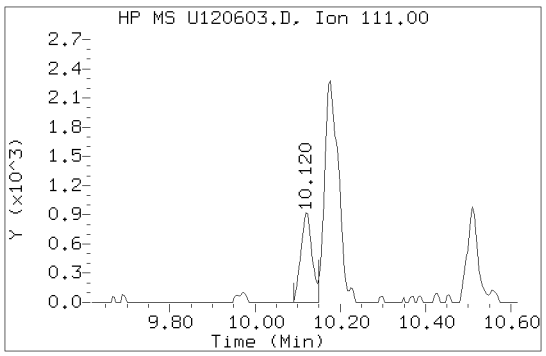
AFTER
MASS
148
AREA
3074
HEIGHT
1946
12-Dec-2023
09:43



BEFORE
MASS
134
AREA
1399
HEIGHT
925
06-Dec-2023
23:21



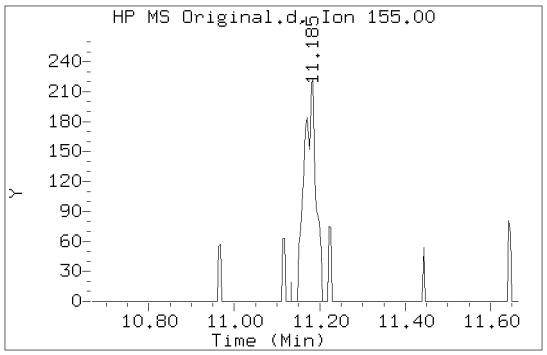
AFTER
MASS
111
AREA
1758
HEIGHT
922
12-Dec-2023
09:43



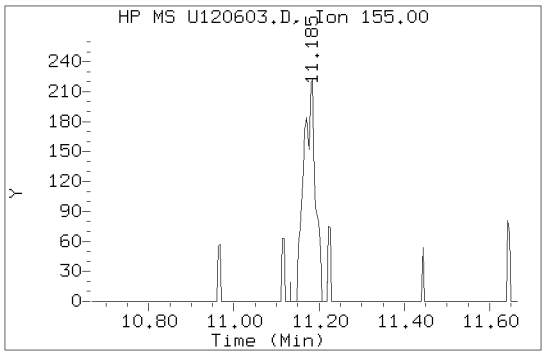
1,2-Dibromo-3-Chloropropane (96-12-8)

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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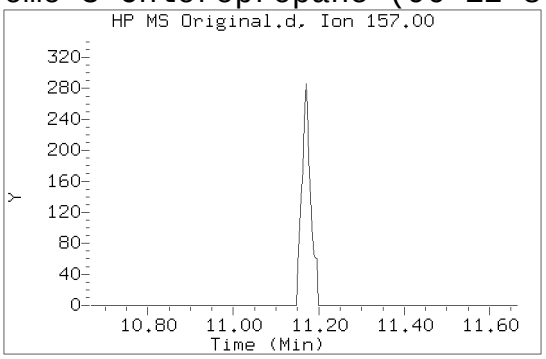
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

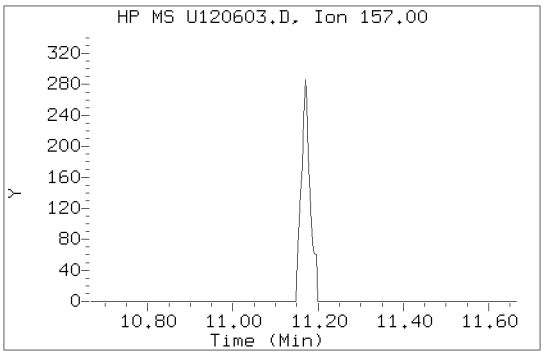
1,2-Dibromo-3-Chloropropane (96-12-8)

Reason Code:

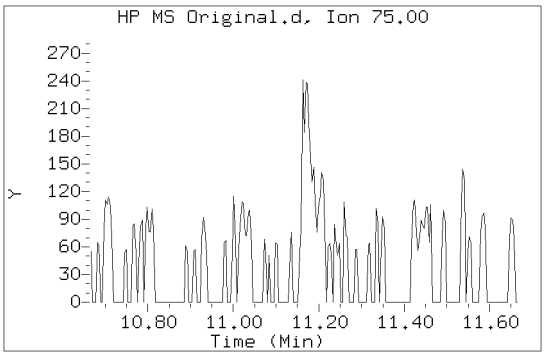
BEFORE
MASS
134
AREA
1845
HEIGHT
988
06-Dec-2023
23:21



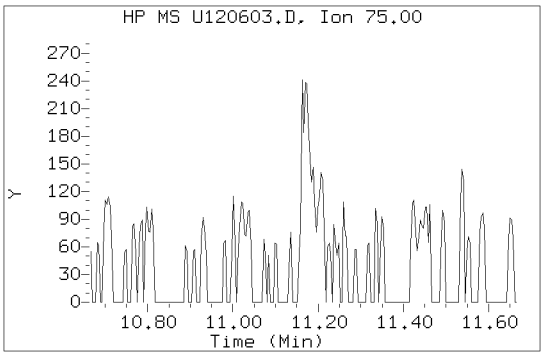
AFTER
MASS
157
AREA
0
HEIGHT
0
12-Dec-2023
09:43



BEFORE
MASS
91
AREA
2242
HEIGHT
834
06-Dec-2023
23:21



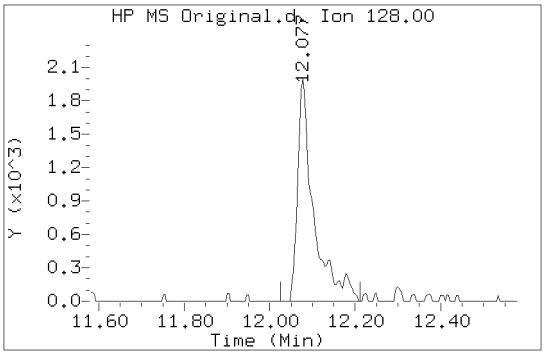
AFTER
MASS
75
AREA
0
HEIGHT
0
12-Dec-2023
09:43



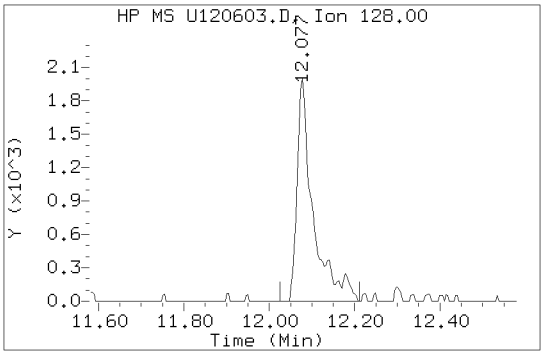
Naphthalene (91-20-3)

Reason Code:

BEFORE
MASS
43
AREA
498
HEIGHT
226
06-Dec-2023
23:21



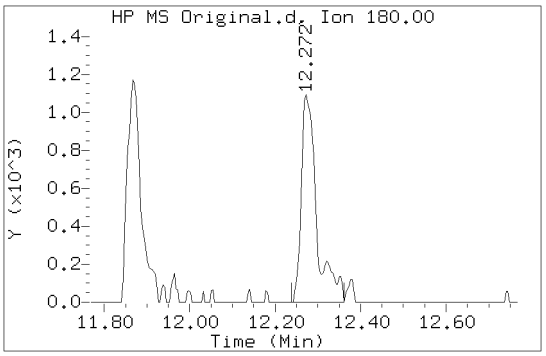
AFTER
MASS
128
AREA
5275
HEIGHT
1997
12-Dec-2023
09:43



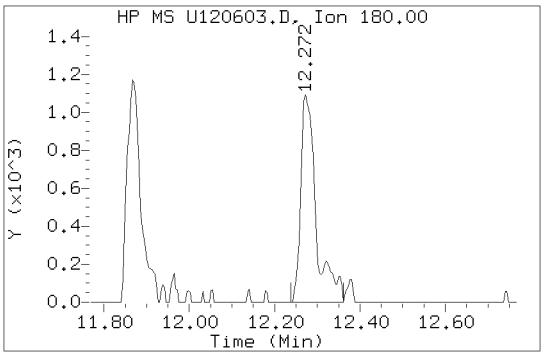
1,2,3-Trichlorobenzene (87-61-6)

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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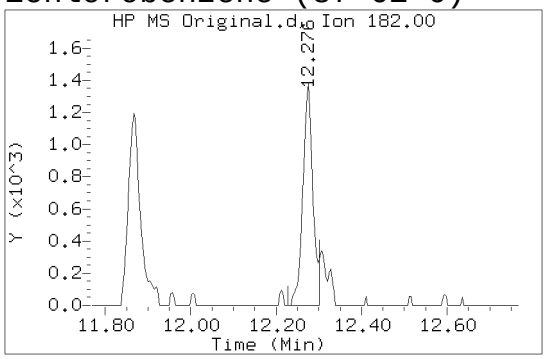
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

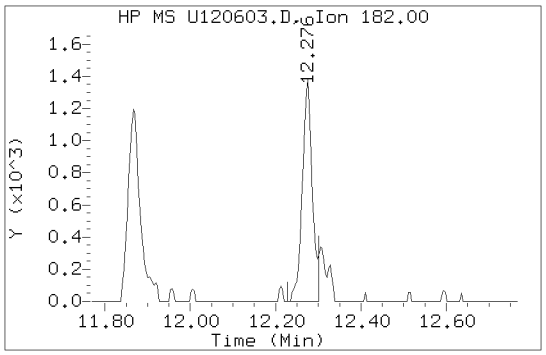
1,2,3-Trichlorobenzene (87-61-6)

Reason Code:

BEFORE
MASS
41
AREA
1454
HEIGHT
807
06-Dec-2023
23:21



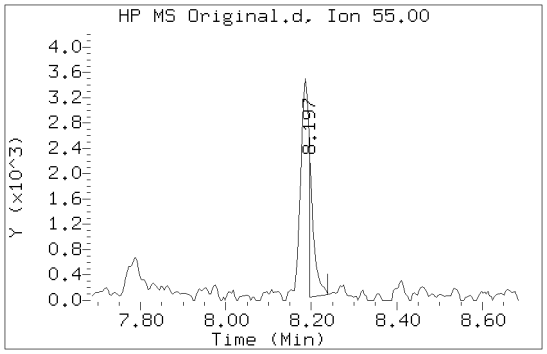
AFTER
MASS
182
AREA
2320
HEIGHT
1379
12-Dec-2023
09:43



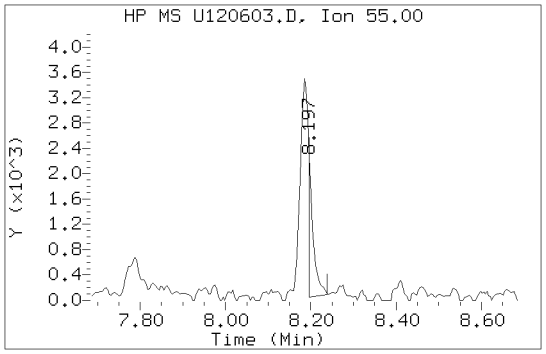
1-Chlorohexane (544-10-5)

Reason Code:

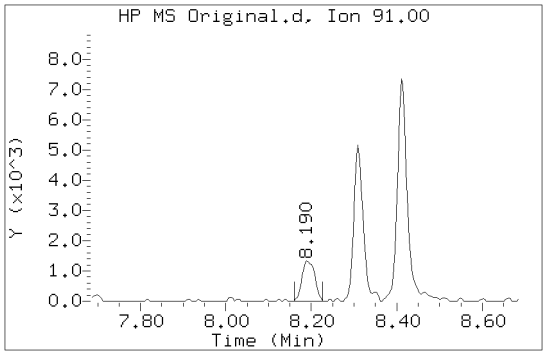
BEFORE
MASS
91
AREA
4072
HEIGHT
2467
06-Dec-2023
23:21



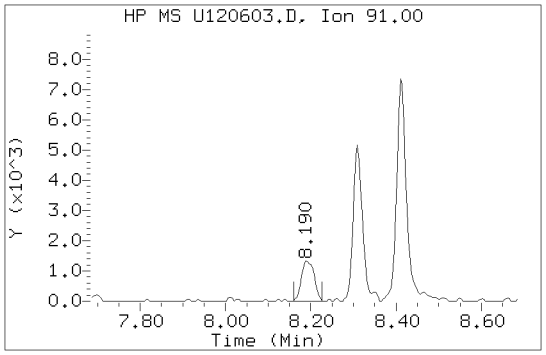
AFTER
MASS
55
AREA
1630
HEIGHT
2213
12-Dec-2023
09:43



BEFORE
MASS
92
AREA
2324
HEIGHT
1337
06-Dec-2023
23:21



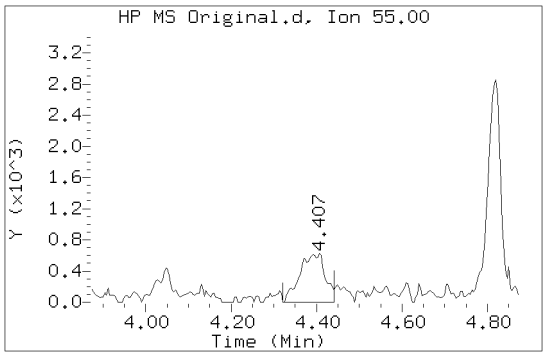
AFTER
MASS
91
AREA
2810
HEIGHT
1343
12-Dec-2023
09:43



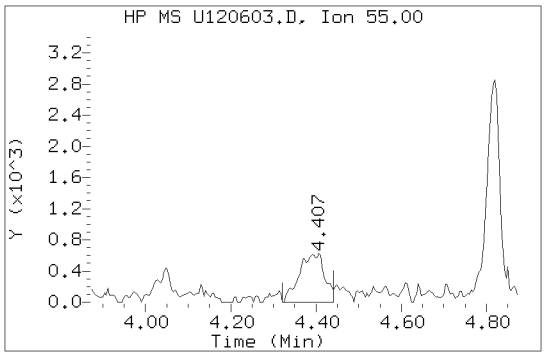
Methyl Acrylate (96-33-3)

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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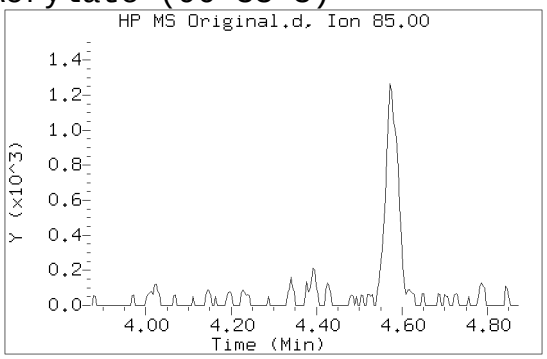
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

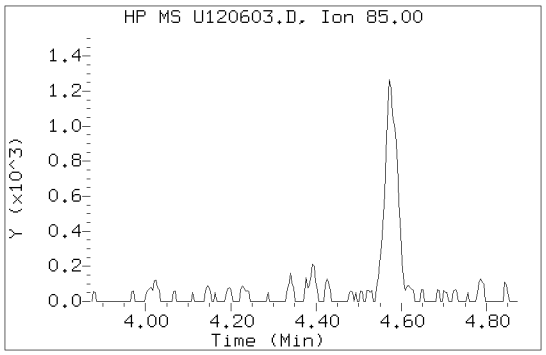
Methyl Acrylate (96-33-3)

Reason Code:

BEFORE
MASS
111
AREA
1683
HEIGHT
980
06-Dec-2023
23:21



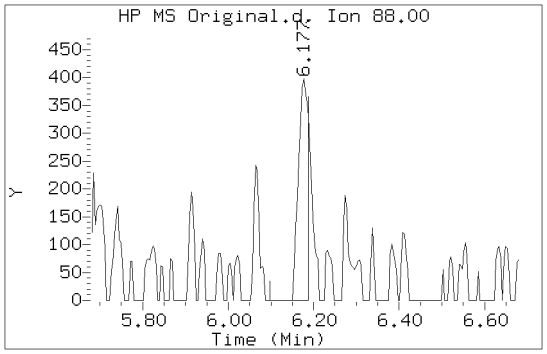
AFTER
MASS
85
AREA
0
HEIGHT
0
12-Dec-2023
09:43



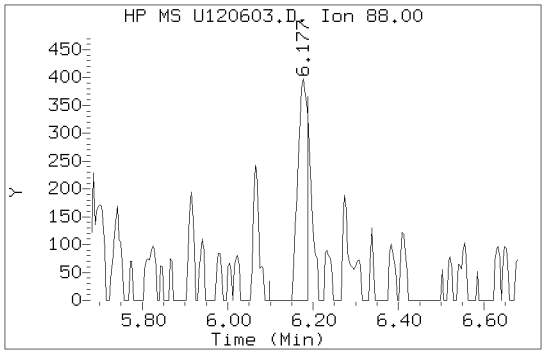
1,4-Dioxane ()

Reason Code:

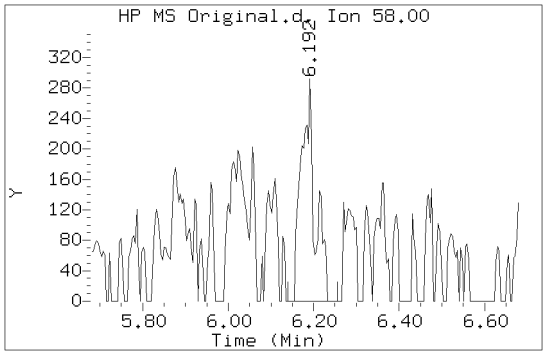
BEFORE
MASS
155
AREA
428
HEIGHT
222
06-Dec-2023
23:21



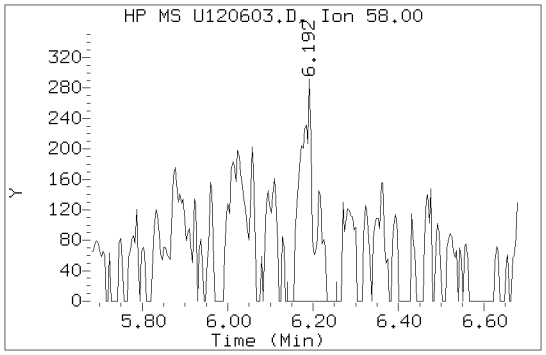
AFTER
MASS
88
AREA
631
HEIGHT
398
12-Dec-2023
09:43



BEFORE
MASS
157
AREA
0
HEIGHT
0
06-Dec-2023
23:21



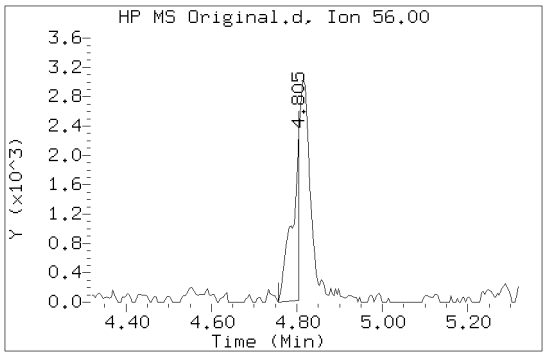
AFTER
MASS
58
AREA
659
HEIGHT
292
12-Dec-2023
09:43



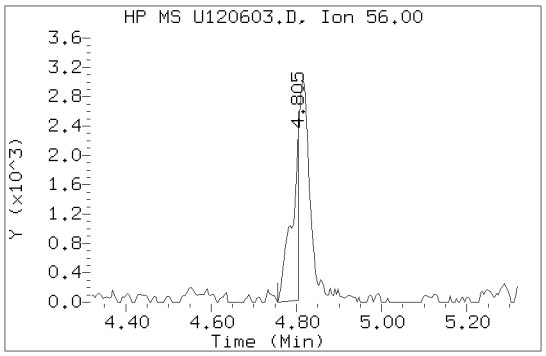
Cyclohexane (110-82-7)

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

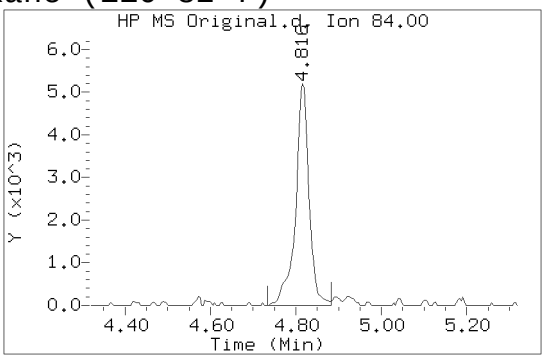


Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120603.D
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

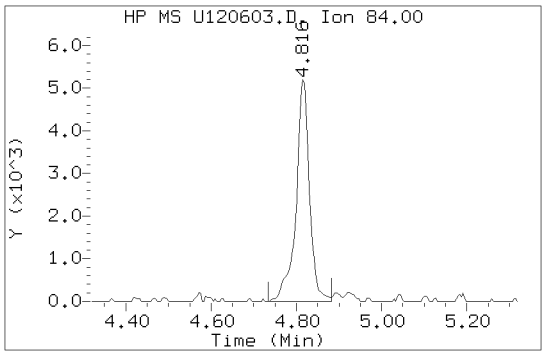
Cyclohexane (110-82-7)

Reason Code:

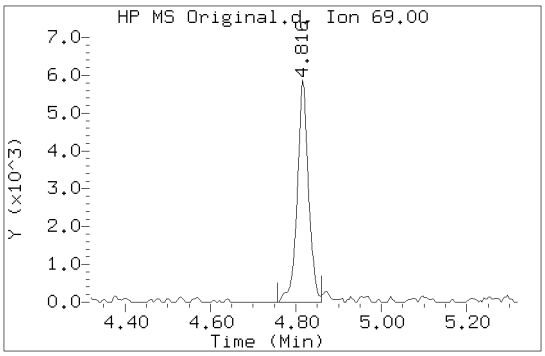
BEFORE
MASS
223
AREA
804
HEIGHT
596
06-Dec-2023
23:21



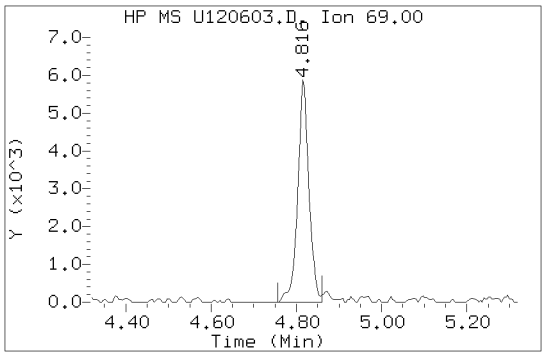
AFTER
MASS
84
AREA
11638
HEIGHT
5200
12-Dec-2023
09:43



BEFORE
MASS
227
AREA
867
HEIGHT
483
06-Dec-2023
23:21



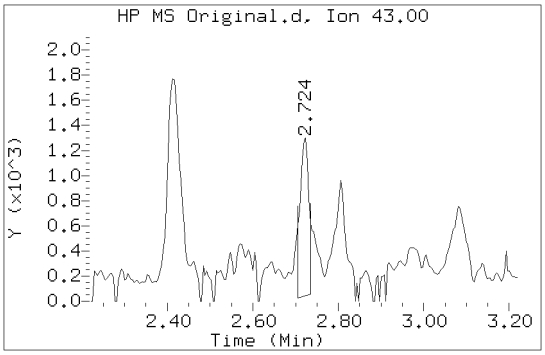
AFTER
MASS
69
AREA
10984
HEIGHT
5878
12-Dec-2023
09:43



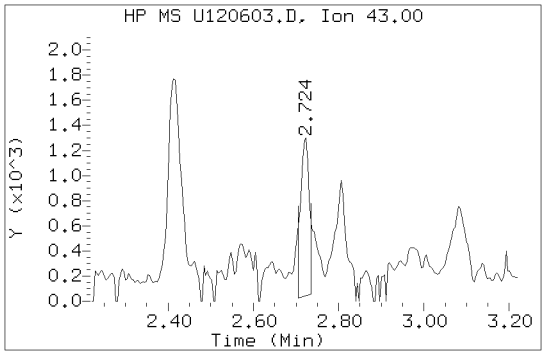
Methyl Acetate (79-20-9)

Reason Code:

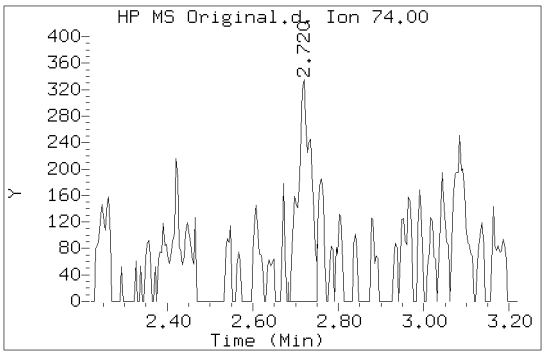
BEFORE
MASS
96
AREA
4345
HEIGHT
2092
06-Dec-2023
23:21



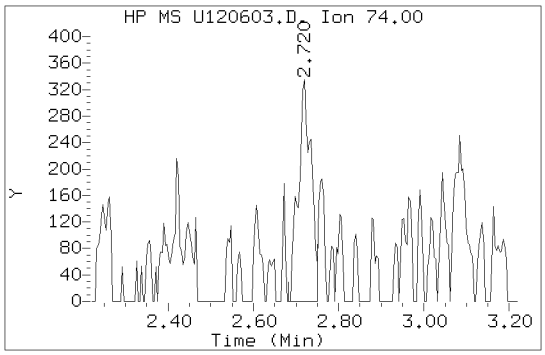
AFTER
MASS
43
AREA
1832
HEIGHT
1256
12-Dec-2023
09:43



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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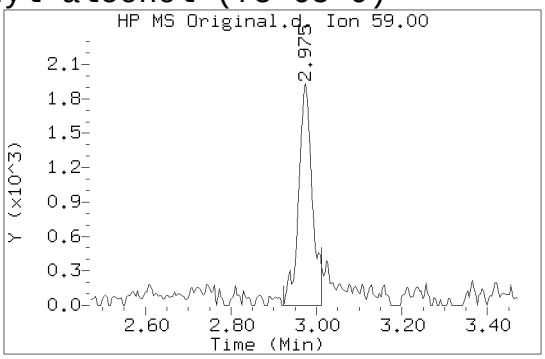
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

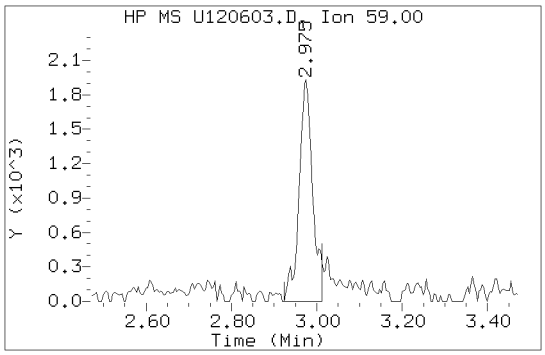
Tert-Butyl alcohol (75-65-0)

Reason Code:

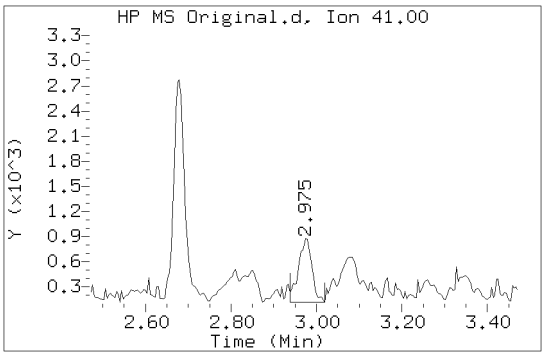
BEFORE
MASS
106
AREA
8901
HEIGHT
5189
06-Dec-2023
23:21



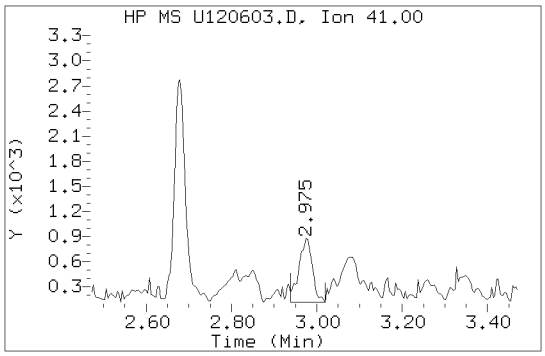
AFTER
MASS
59
AREA
4359
HEIGHT
1932
12-Dec-2023
09:43



BEFORE
MASS
91
AREA
0
HEIGHT
0
06-Dec-2023
23:21



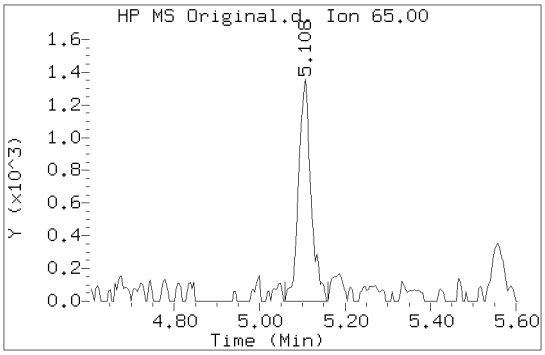
AFTER
MASS
41
AREA
1697
HEIGHT
762
12-Dec-2023
09:43



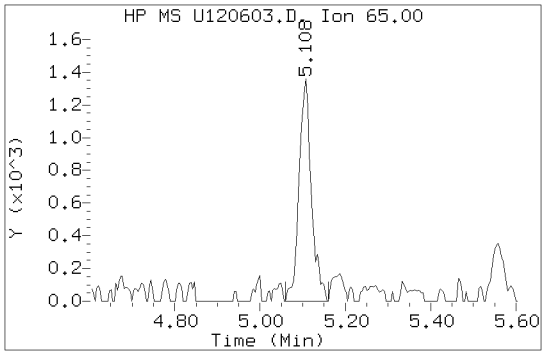
1,2-Dichloroethane-d4 (17060-07-0)

Reason Code:

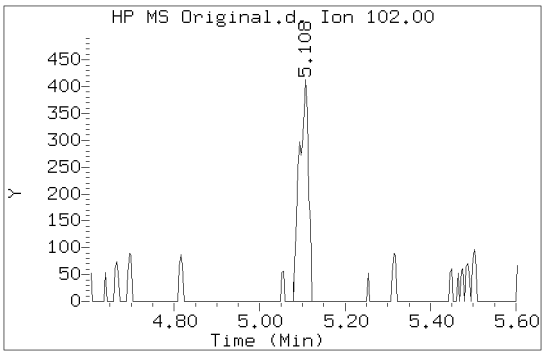
BEFORE
MASS
53
AREA
748
HEIGHT
511
06-Dec-2023
23:21



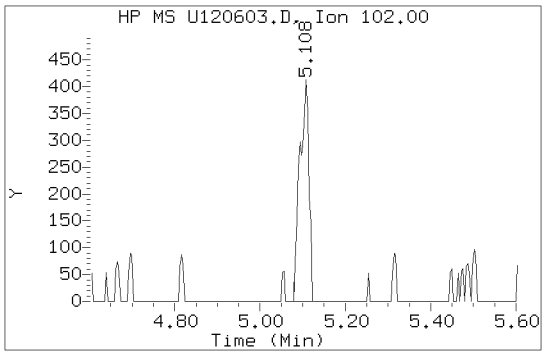
AFTER
MASS
65
AREA
2783
HEIGHT
1359
12-Dec-2023
09:43



BEFORE
MASS
88
AREA
0
HEIGHT
0
06-Dec-2023
23:21



AFTER
MASS
102
AREA
627
HEIGHT
413
12-Dec-2023
09:43



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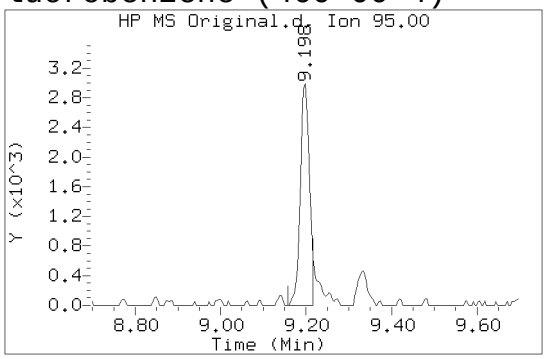
Inj Date : 06-DEC-2023 11:58
InstruID : VOA9.i
LabSampID : VSTD000.5

4-Bromofluorobenzene (460-00-4)

Reason Code:

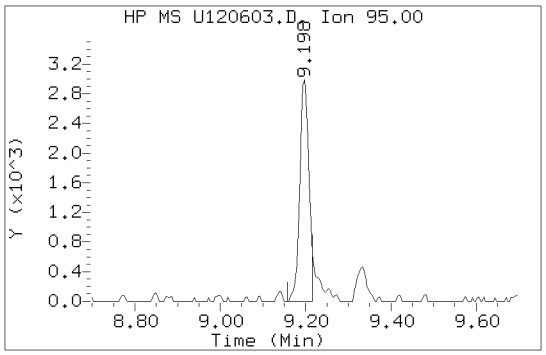
BEFORE

MASS
55
AREA
2589
HEIGHT
625
06-Dec-2023
23:21



AFTER

MASS
95
AREA
4583
HEIGHT
2990
12-Dec-2023
09:43



BEFORE

MASS
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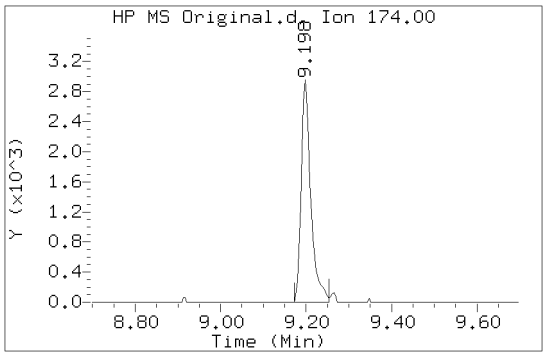
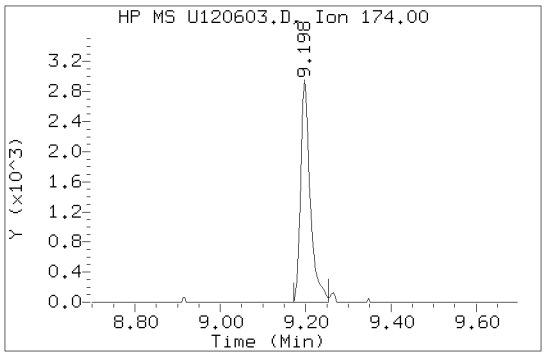
AREA
0
HEIGHT
0
06-Dec-2023
23:21



AFTER

MASS
174
AREA
4708
HEIGHT
2955
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
Lab Smp Id: VSTD001 Client Smp ID: VSTD001
Inj Date : 06-DEC-2023 12:43
Operator : PC Inst ID: VOA9.i
Smp Info : VSTD001;VSTD001;1;3;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\8260C.m
Meth Date : 12-Dec-2023 09:43 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 12:20 Cal File: U120603A.D
Als bottle: 5 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V9.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1	Pentafluorobenzene	168	4.823	4.823	(1.000)	354809	50.0000	
2	Dichlorodifluoromethane	85	1.172	1.172	(0.243)	2370	1.00000	1.68(M)
3	Chloromethane	50	1.310	1.310	(0.272)	4792	1.00000	1.17(M)
5	Vinyl Chloride	62	1.385	1.385	(0.287)	4380	1.00000	1.12
6	Bromomethane	94	1.633	1.633	(0.339)	3158	1.00000	0.76(M)
7	Chloroethane	64	1.711	1.711	(0.355)	2933	1.00000	1.12
8	Trichlorofluoromethane	101	1.906	1.906	(0.395)	5386	1.00000	1.09
9	Acrolein	56	2.274	2.274	(0.471)	452	2.00000	2.23(M)
10	Acetone	43	2.420	2.420	(0.502)	5741	2.00000	
11	1,1-Dichloroethene	96	2.341	2.341	(0.485)	3115	1.00000	1.13
15	Iodomethane	142	2.480	2.480	(0.514)	2707	2.00000	3.11(T)
16	Acrylonitrile	53	3.072	3.072	(0.637)	2779	2.00000	1.99
17	Methylene Chloride	84	2.806	2.806	(0.582)	5310	1.00000	1.28(M)
18	Methyl tert-butyl ether	73	3.091	3.091	(0.641)	9961	1.00000	1.01
19	Carbon Disulfide	76	2.532	2.532	(0.525)	15770	2.00000	1.95
20	trans-1,2-Dichloroethene	96	3.072	3.072	(0.637)	3410	1.00000	1.04
21	Vinyl Acetate	43	3.619	3.619	(0.751)	19132	2.00000	1.93
22	1,1-Dichloroethane	63	3.522	3.522	(0.730)	7235	1.00000	1.08
24	2-Butanone	43	4.283	4.283	(0.888)	3703	2.00000	2.13(M)
26	2,2-Dichloropropane	77	4.197	4.197	(0.870)	5002	1.00000	1.06

27 cis-1,2-Dichloroethene	96	4.204	4.204 (0.872)	5092	1.00000	1.16
28 Chloroform	83	4.583	4.583 (0.950)	8136	1.00000	1.12

Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120604.D Page 2
Report Date: 12-Dec-2023 09:43

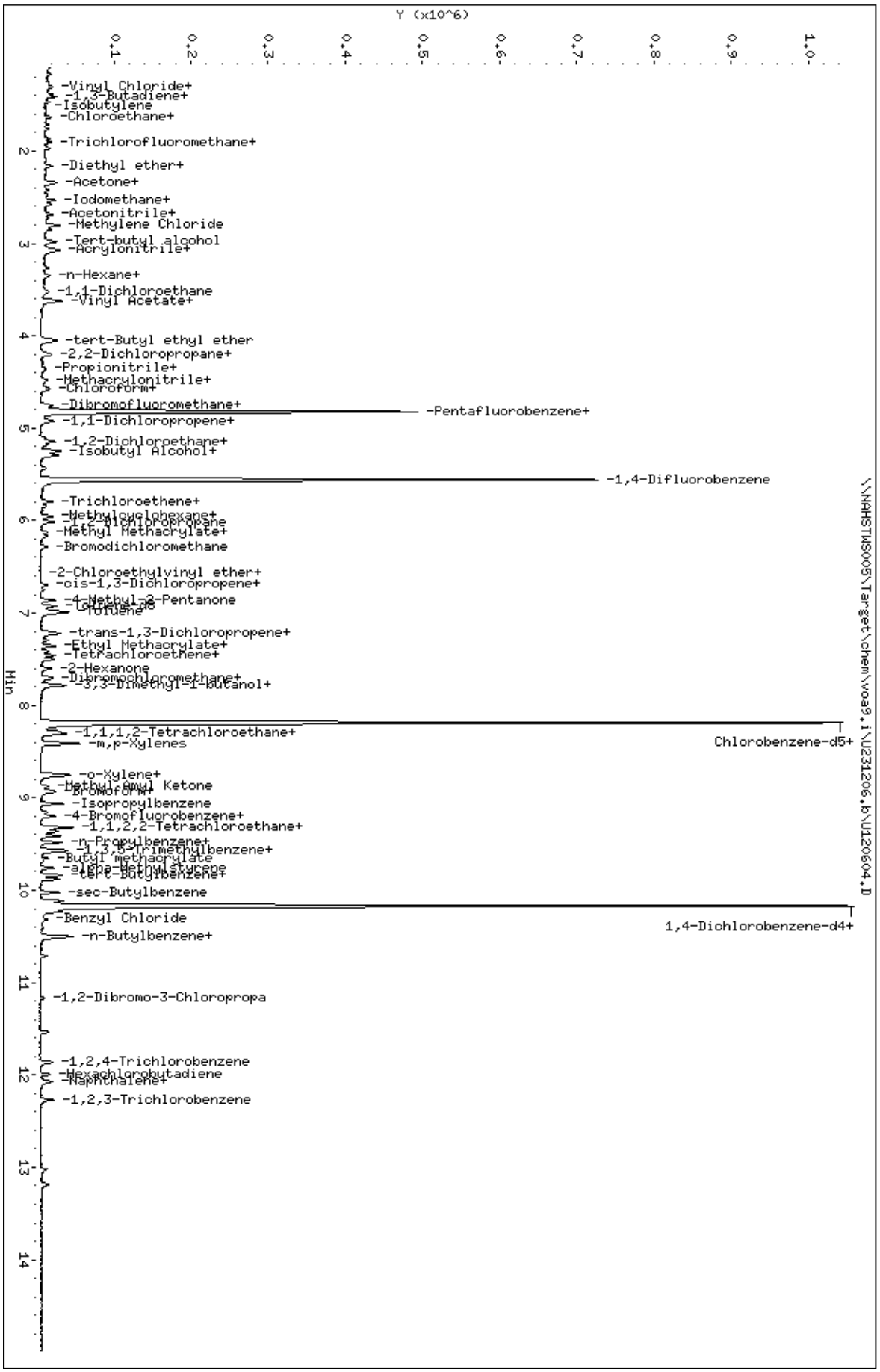
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	29 Bromochloromethane	128	4.474	4.474	(0.928)	2488	1.00000	1.09
$	30 Dibromofluoromethane	113	4.755	4.755	(0.986)	3773	1.00000	0.03
	31 1,1,1-Trichloroethane	97	4.748	4.748	(0.984)	5996	1.00000	1.08
	32 1,1-Dichloropropene	75	4.928	4.928	(0.887)	4846	1.00000	1.02
	33 1,2-Dichloroethane	62	5.183	5.183	(0.933)	5940	1.00000	1.08
	34 Carbon Tetrachloride	117	4.920	4.920	(0.885)	5152	1.00000	1.12
$	35 1,2-Dichloroethane-d4	65	5.104	5.104	(1.058)	4689	1.00000	0.63(M)
*	36 1,4-Difluorobenzene	114	5.558	5.558	(1.000)	562847	50.0000	
	37 Benzene	78	5.145	5.145	(0.926)	17110	1.00000	1.11
	38 Trichloroethene	130	5.797	5.797	(1.043)	5113	1.00000	1.21(M)
	39 Bromodichloromethane	83	6.281	6.281	(1.130)	5619	1.00000	1.11(M)
	41 2-Chloroethylvinyl ether	63	6.573	6.573	(1.183)	104	2.00000	0.20(M)
	42 1,2-Dichloropropane	63	6.015	6.015	(1.082)	4582	1.00000	1.11(M)
	44 Dibromomethane	93	6.127	6.127	(1.103)	3012	1.00000	1.12
	45 4-Methyl-2-Pentanone	43	6.858	6.858	(0.838)	12410	2.00000	2.72(M)
	46 cis-1,3-Dichloropropene	75	6.697	6.697	(1.205)	5439	1.00000	2.29
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	559222	50.0000	
$	48 Toluene-d8	98	6.926	6.926	(0.846)	13196	1.00000	1.02
	50 Toluene	91	6.986	6.986	(0.853)	16234	1.00000	1.04
	51 trans-1,3-Dichloropropene	75	7.203	7.203	(1.296)	4518	1.00000	2.57
	52 2-Hexanone	43	7.601	7.601	(0.929)	7475	2.00000	2.64(M)
	53 1,1,2-Trichloroethane	83	7.357	7.357	(0.899)	4469	1.00000	0.19
	54 1,3-Dichloropropane	76	7.499	7.499	(0.916)	8254	1.00000	1.19(M)
	55 Dibromochloromethane	129	7.694	7.694	(0.940)	5059	1.00000	1.21(M)
	56 Tetrachloroethene	164	7.458	7.458	(0.911)	3841	1.00000	1.15
	57 1,2-Dibromoethane	107	7.788	7.788	(0.951)	4790	1.00000	1.23(M)
	58 1-Chlorohexane	55	8.197	8.197	(1.475)	3275	1.00000	1.03(M)
	59 Chlorobenzene	112	8.212	8.212	(1.003)	13746	1.00000	1.21(M)
	60 1,1,1,2-Tetrachloroethane	131	8.287	8.287	(1.012)	4936	1.00000	1.24
	61 Ethylbenzene	106	8.305	8.305	(1.015)	6099	1.00000	1.14
	62 m,p-Xylenes	106	8.410	8.410	(1.027)	13585	2.00000	2.12
	63 o-Xylene	106	8.748	8.748	(1.069)	7030	1.00000	1.06
	64 Styrene	104	8.766	8.766	(1.071)	12128	1.00000	1.10
	66 Bromoform	173	8.924	8.924	(1.090)	4009	1.00000	2.45(TM)
	67 Isopropylbenzene	105	9.063	9.063	(1.107)	17436	1.00000	1.09
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	10887	1.00000	1.65
$	69 4-Bromofluorobenzene	95	9.198	9.198	(1.124)	5567	1.00000	
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	292314	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.920)	7225	1.00000	1.30(M)
	73 n-Propylbenzene	91	9.415	9.415	(0.926)	18576	1.00000	1.08
	74 Bromobenzene	156	9.321	9.321	(0.916)	6451	1.00000	1.31(M)
	75 1,3,5-Trimethylbenzene	105	9.565	9.565	(0.940)	13515	1.00000	1.10
	76 2-Chlorotoluene	91	9.486	9.486	(0.933)	13144	1.00000	1.13(M)
	77 4-Chlorotoluene	91	9.580	9.580	(0.942)	15217	1.00000	1.16(M)
	78 tert-Butylbenzene	119	9.835	9.835	(0.967)	13105	1.00000	1.19
	79 1,2,4-Trimethylbenzene	105	9.880	9.880	(0.971)	12864	1.00000	1.05
	81 sec-Butylbenzene	105	10.022	10.022	(0.985)	14821	1.00000	1.04
	82 p-Isopropyltoluene	119	10.146	10.146	(0.997)	12618	1.00000	1.03
	83 1,3-Dichlorobenzene	146	10.116	10.116	(0.994)	11762	1.00000	1.35(M)
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	11764	1.00000	1.27(M)
	87 n-Butylbenzene	91	10.495	10.495	(1.032)	10752	1.00000	1.04
	88 1,2-Dichlorobenzene	146	10.510	10.510	(1.033)	11314	1.00000	1.29(M)

89	1,2-Dibromo-3-Chloropropane	155	11.169	11.169 (1.098)	1017	1.00000	3.25(M)
90	1,2,4-Trichlorobenzene	180	11.863	11.863 (1.166)	6332	1.00000	1.17

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	91 Hexachlorobutadiene	225	11.994	11.994	(1.179)	2507	1.00000	1.15
	92 Naphthalene	128	12.073	12.073	(1.187)	13023	1.00000	1.00(M)
	93 1,2,3-Trichlorobenzene	180	12.271	12.271	(1.206)	6413	1.00000	1.17(M)
M	94 1,2-Dichloroethylene (total)	96				8502	2.00000	
M	95 Xylenes (total)	106				20615	3.00000	
	131 Methyl Acrylate	55	4.388	4.388	(0.910)	3784	1.00000	0.81(a)
	135 1,4-Dioxane	88	6.172	6.172	(1.280)	1303	20.0000	23.14(M)
	141 Cyclohexane	56	4.797	4.797	(0.995)	5330	1.00000	1.04(M)
	138 Freon TF	101	2.345	2.345	(0.486)	3267	1.00000	1.27
	140 1,3-Butadiene	54	1.411	1.411	(0.293)	3808	1.00000	1.06
	147 Methylcyclohexane	55	5.955	5.955	(1.071)	7513	1.00000	0.90
	146 Methyl Acetate	43	2.724	2.724	(0.565)	4056	1.00000	1.14
	148 Tert-Butyl alcohol	59	2.982	2.982	(0.618)	9972	20.0000	25.10(aM)
	149 Isopropyl Alcohol	45	2.577	2.577	(0.534)	6719	20.0000	22.65(M)

QC Flag Legend

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



Data File: \\NAHSTMS005\Target\chem\voa9.i\U231206.b\U120604.D
Date : 06-DEC-2023 12:43
Client ID: VSTD001
Sample Info: VSTD001;VSTD001;1;3;
Purge Volume: 5.0
Column phase: DB624

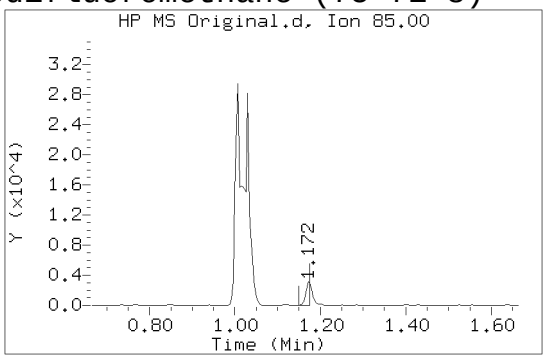
Instrument: VOA9.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120604.D
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

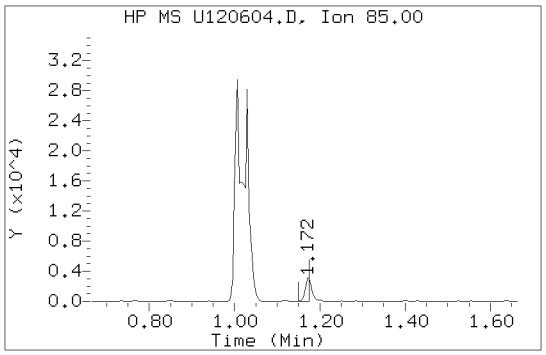
Dichlorodifluoromethane (75-71-8)

Reason Code:

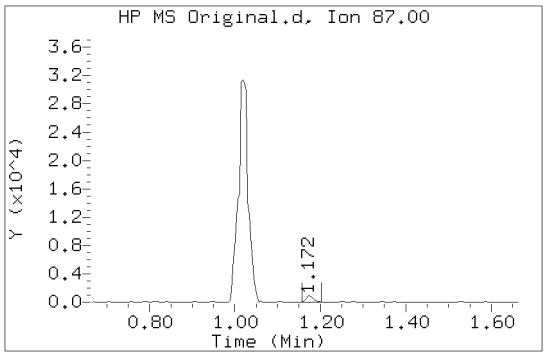
BEFORE
MASS
62
AREA
4380
HEIGHT
4000
06-Dec-2023
23:21



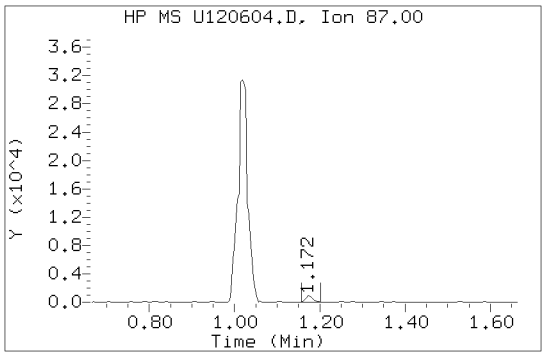
AFTER
MASS
85
AREA
2370
HEIGHT
3168
12-Dec-2023
09:43



BEFORE
MASS
64
AREA
2031
HEIGHT
1322
06-Dec-2023
23:21



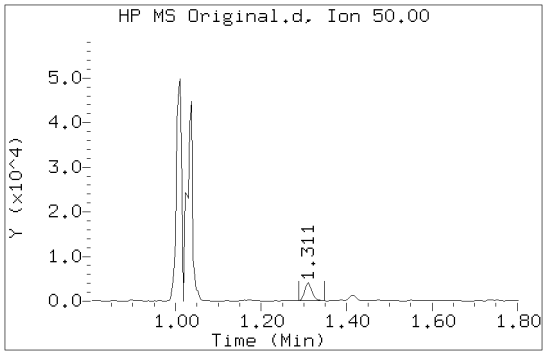
AFTER
MASS
87
AREA
1076
HEIGHT
877
12-Dec-2023
09:43



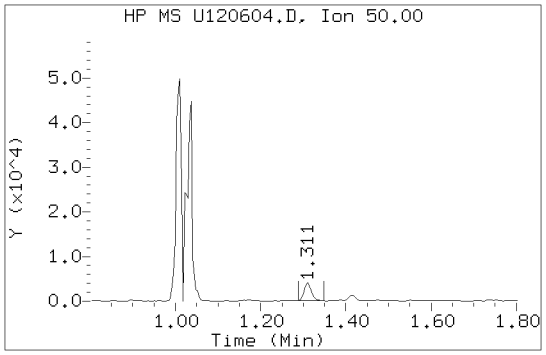
Chloromethane (74-87-3)

Reason Code:

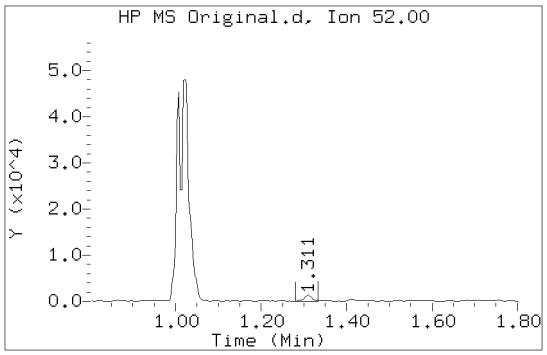
BEFORE
MASS
94
AREA
3158
HEIGHT
2771
06-Dec-2023
23:21



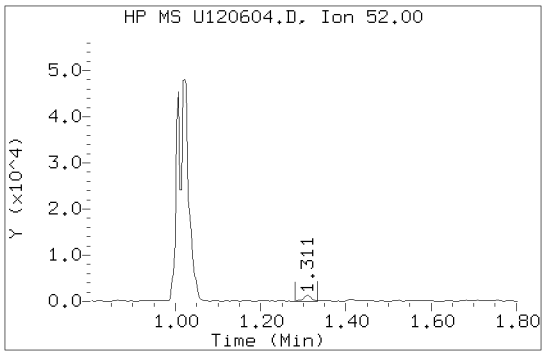
AFTER
MASS
50
AREA
4792
HEIGHT
4016
12-Dec-2023
09:43



BEFORE
MASS
96
AREA
4098
HEIGHT
3099
06-Dec-2023
23:21



AFTER
MASS
52
AREA
1772
HEIGHT
1412
12-Dec-2023
09:43

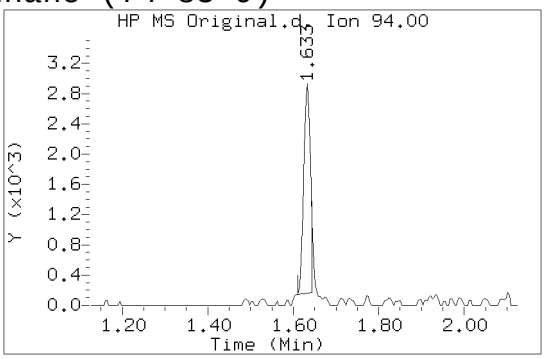


Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120604.D
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

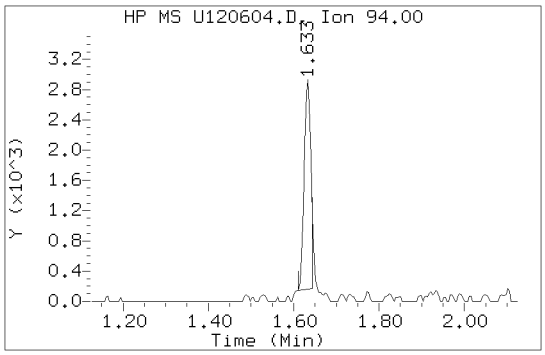
Bromomethane (74-83-9)

Reason Code:

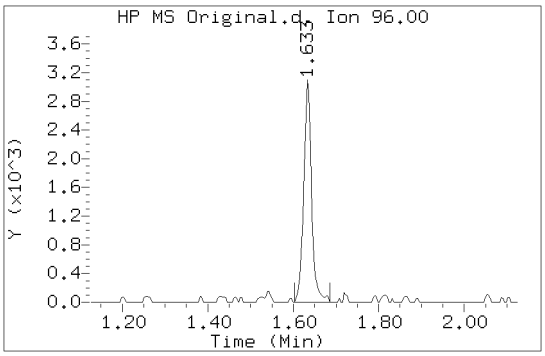
BEFORE
MASS
101
AREA
5386
HEIGHT
3672
06-Dec-2023
23:21



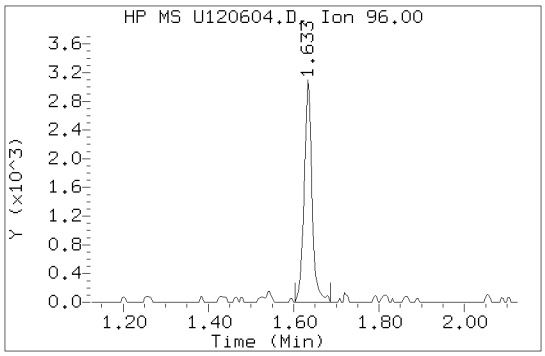
AFTER
MASS
94
AREA
3158
HEIGHT
2771
12-Dec-2023
09:43



BEFORE
MASS
103
AREA
3551
HEIGHT
2271
06-Dec-2023
23:21



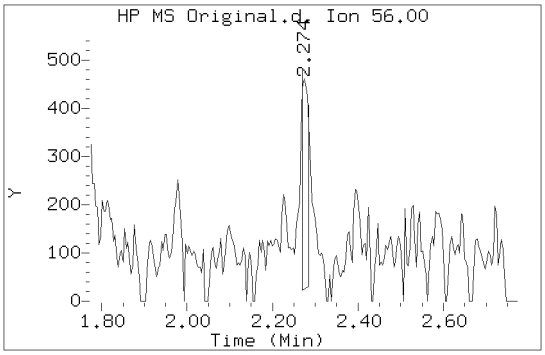
AFTER
MASS
96
AREA
4098
HEIGHT
3099
12-Dec-2023
09:43



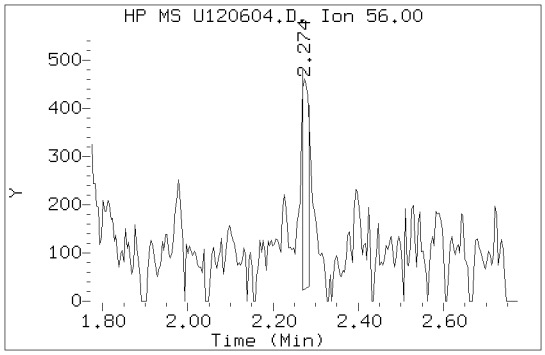
Acrolein (107-02-8)

Reason Code:

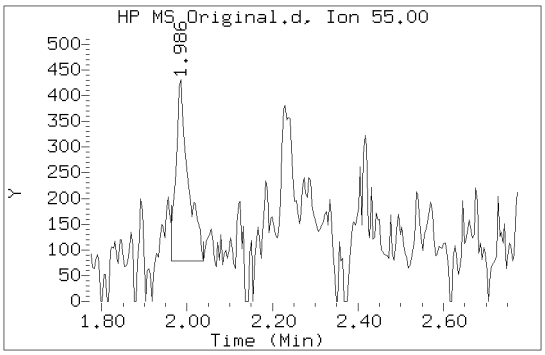
BEFORE
MASS
142
AREA
2707
HEIGHT
1556
06-Dec-2023
23:21



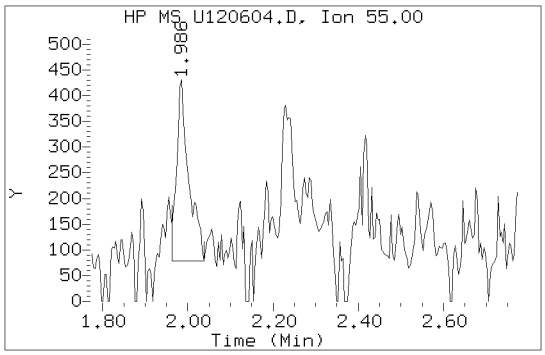
AFTER
MASS
56
AREA
452
HEIGHT
436
12-Dec-2023
09:43



BEFORE
MASS
127
AREA
1345
HEIGHT
757
06-Dec-2023
23:21



AFTER
MASS
55
AREA
701
HEIGHT
352
12-Dec-2023
09:43

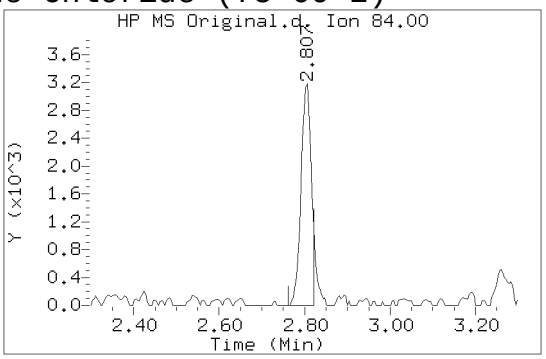


Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120604.D
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

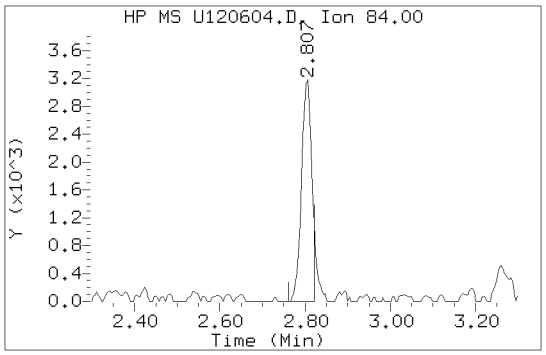
Methylene Chloride (75-09-2)

Reason Code:

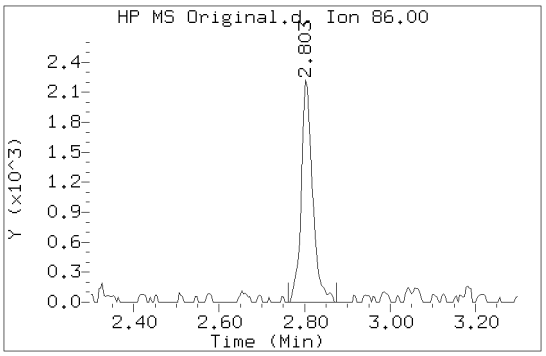
BEFORE
MASS
96
AREA
3410
HEIGHT
1769
06-Dec-2023
23:21



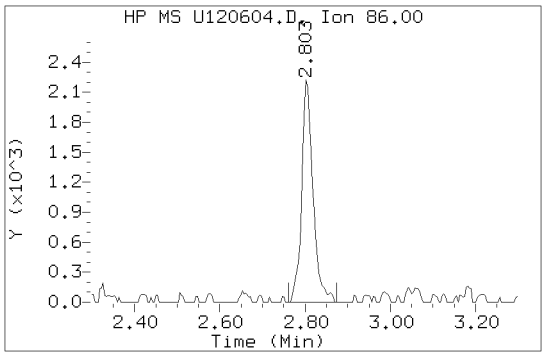
AFTER
MASS
84
AREA
5310
HEIGHT
3183
12-Dec-2023
09:43



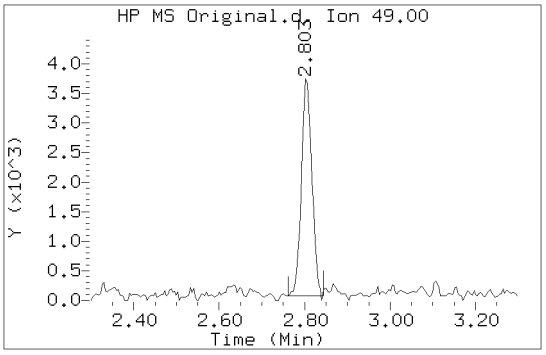
BEFORE
MASS
61
AREA
4667
HEIGHT
2499
06-Dec-2023
23:21



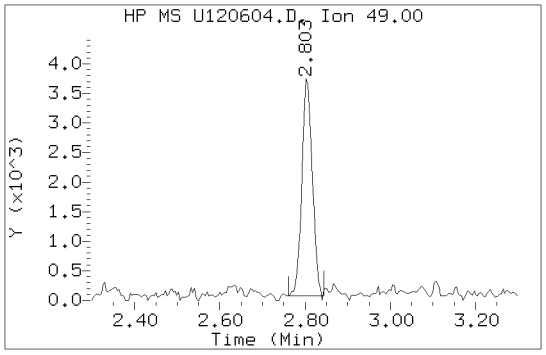
AFTER
MASS
86
AREA
4161
HEIGHT
2223
12-Dec-2023
09:43



BEFORE
MASS
98
AREA
2308
HEIGHT
1305
06-Dec-2023
23:21



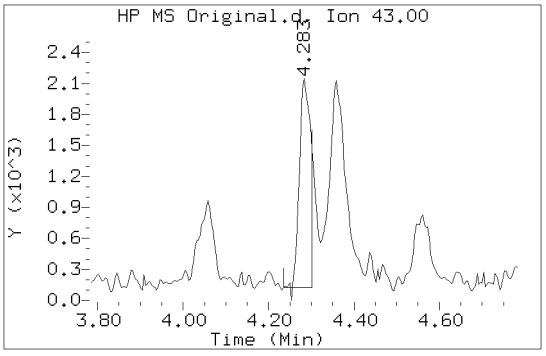
AFTER
MASS
49
AREA
6329
HEIGHT
3671
12-Dec-2023
09:43



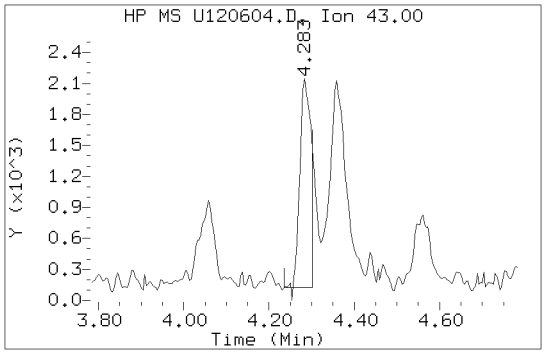
2-Butanone (78-93-3)

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

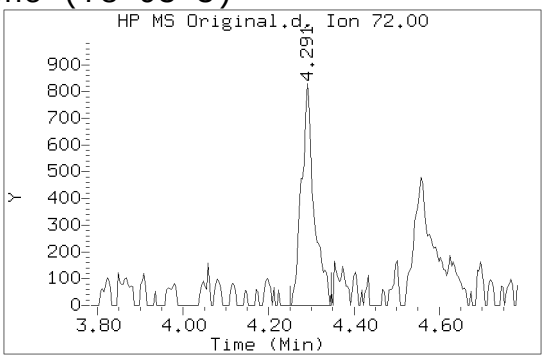


Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120604.D
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

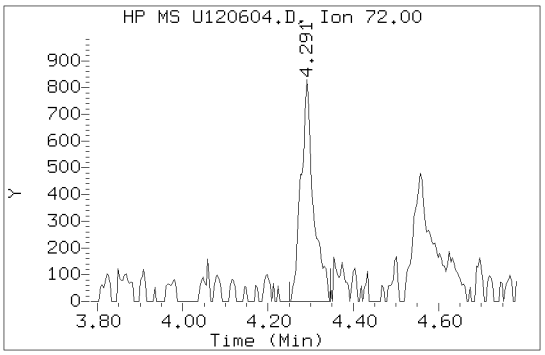
2-Butanone (78-93-3)

Reason Code:

BEFORE
MASS
49
AREA
4566
HEIGHT
2024
06-Dec-2023
23:21



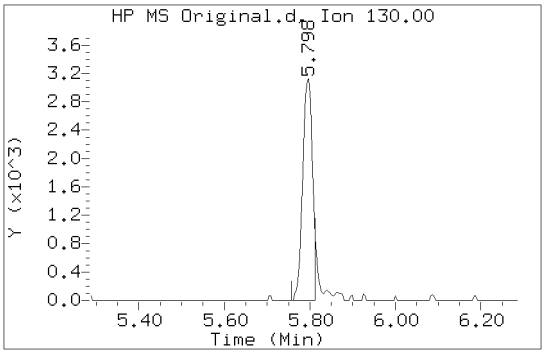
AFTER
MASS
72
AREA
1726
HEIGHT
829
12-Dec-2023
09:43



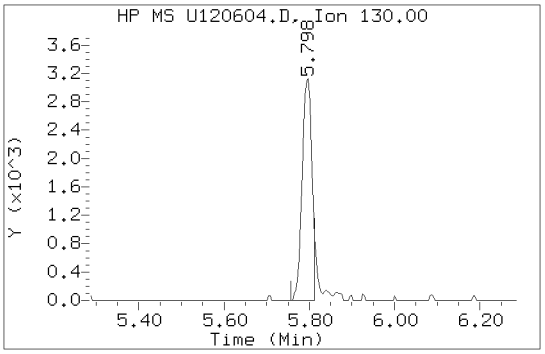
Trichloroethene (79-01-6)

Reason Code:

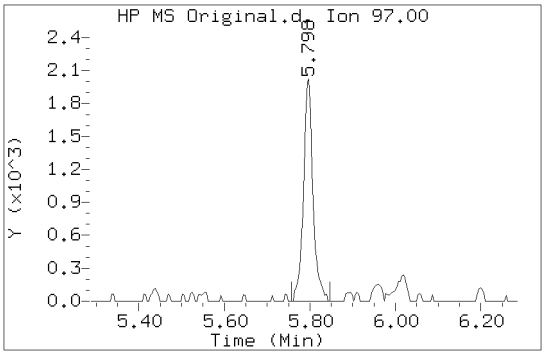
BEFORE
MASS
43
AREA
12410
HEIGHT
7604
06-Dec-2023
23:21



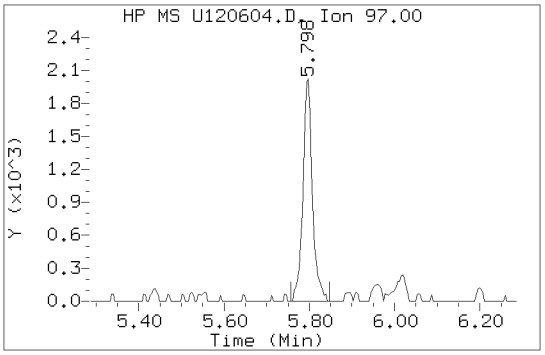
AFTER
MASS
130
AREA
5113
HEIGHT
3126
12-Dec-2023
09:43



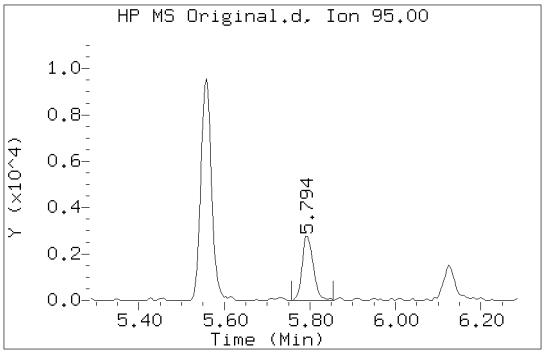
BEFORE
MASS
58
AREA
5581
HEIGHT
2850
06-Dec-2023
23:21



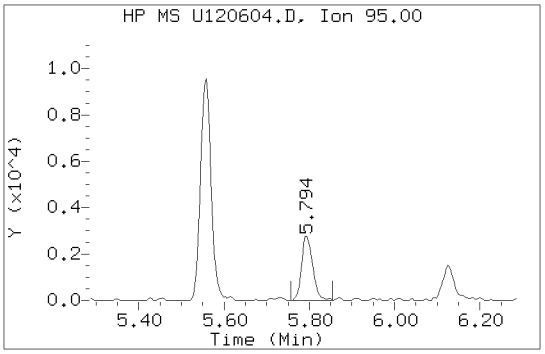
AFTER
MASS
97
AREA
3184
HEIGHT
2024
12-Dec-2023
09:43



BEFORE
MASS
100
AREA
2108
HEIGHT
1166
06-Dec-2023
23:21



AFTER
MASS
95
AREA
5146
HEIGHT
2773
12-Dec-2023
09:43

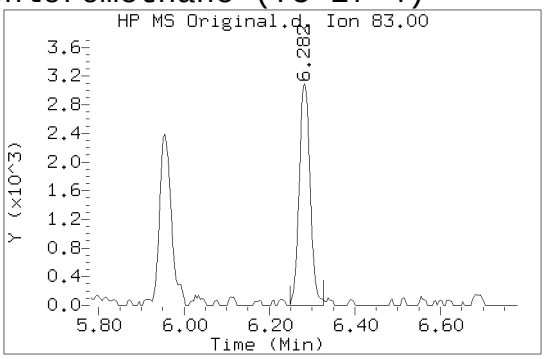


Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120604.D
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

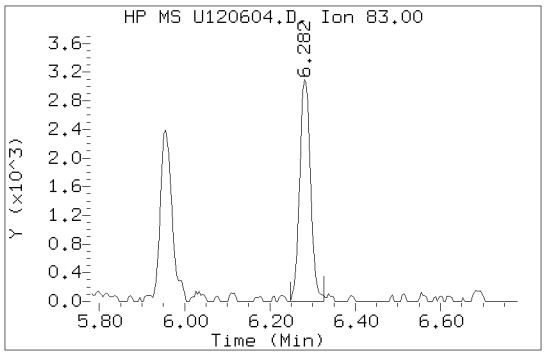
Bromodichloromethane (75-27-4)

Reason Code:

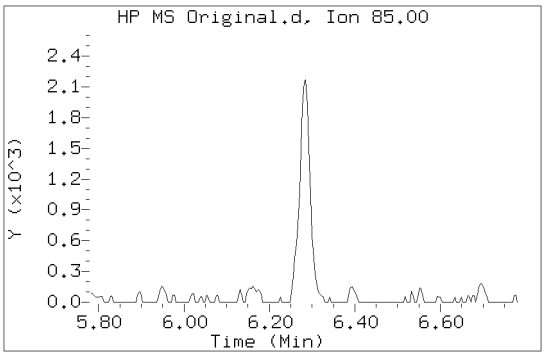
BEFORE
MASS
75
AREA
5439
HEIGHT
2909
06-Dec-2023
23:21



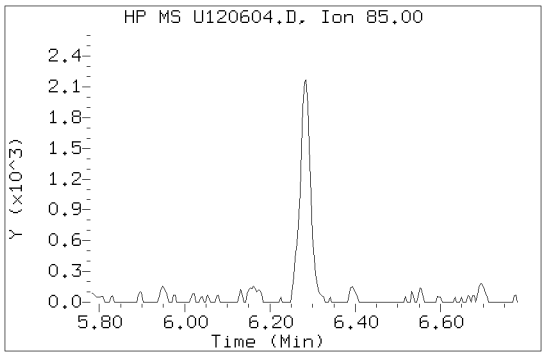
AFTER
MASS
83
AREA
5619
HEIGHT
3095
12-Dec-2023
09:43



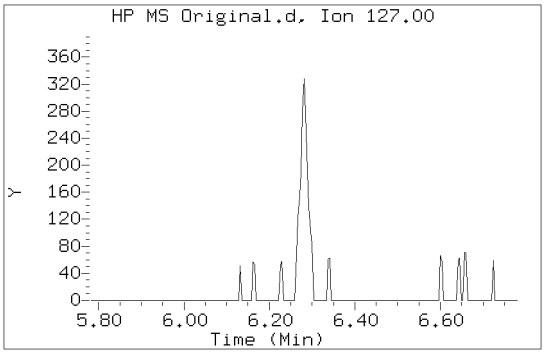
BEFORE
MASS
77
AREA
1996
HEIGHT
1030
06-Dec-2023
23:21



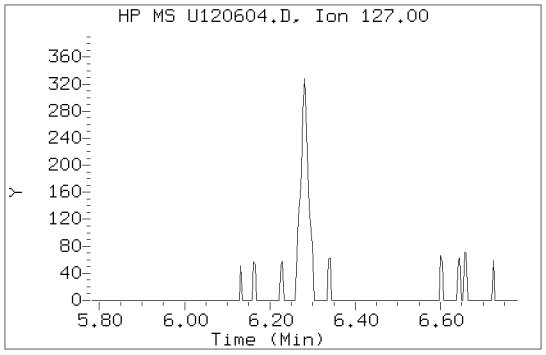
AFTER
MASS
85
AREA
0
HEIGHT
0
12-Dec-2023
09:43



BEFORE
MASS
39
AREA
2491
HEIGHT
1211
06-Dec-2023
23:21



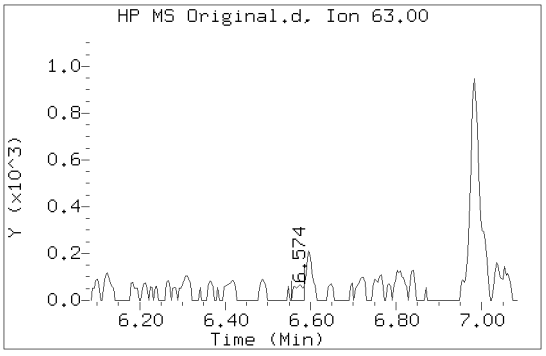
AFTER
MASS
127
AREA
0
HEIGHT
0
12-Dec-2023
09:43



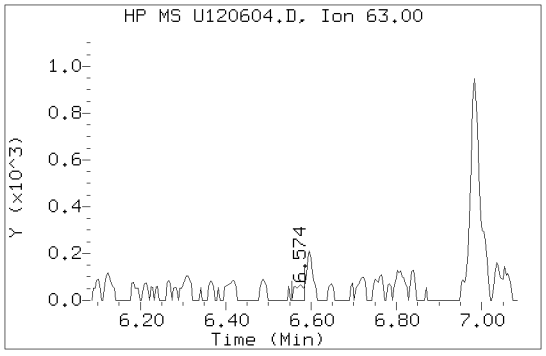
2-Chloroethylvinyl ether (110-75-8)

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



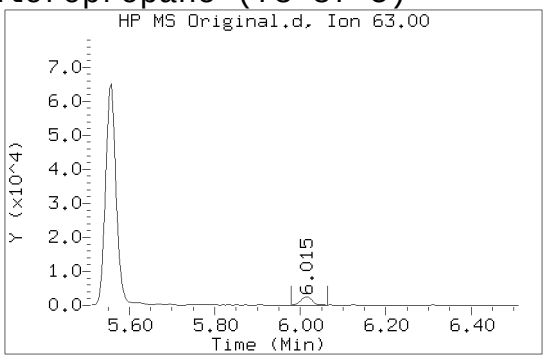
Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120604.D
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

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

Reason Code:

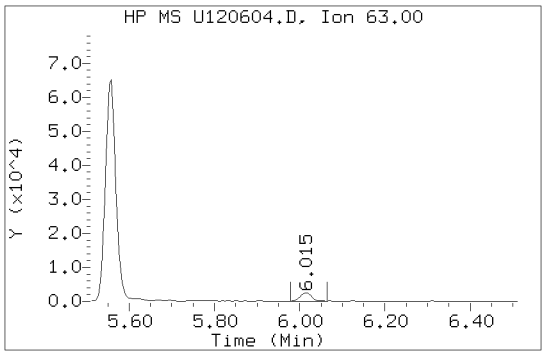
BEFORE

MASS
91
AREA
16234
HEIGHT
9383
06-Dec-2023
23:21



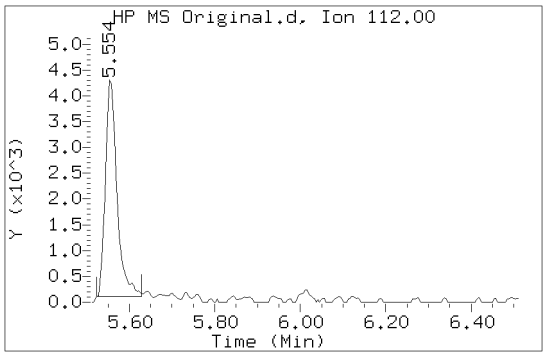
AFTER

MASS
63
AREA
4582
HEIGHT
2449
12-Dec-2023
09:43



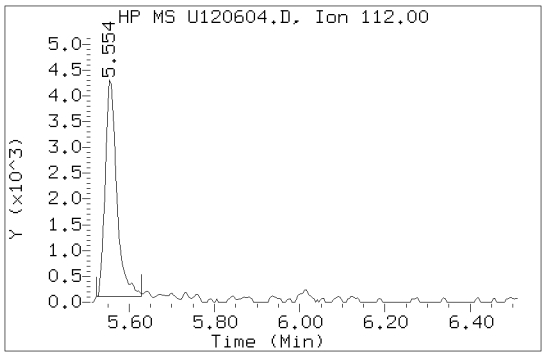
BEFORE

MASS
92
AREA
9713
HEIGHT
5645
06-Dec-2023
23:21



AFTER

MASS
112
AREA
7920
HEIGHT
4197
12-Dec-2023
09:43

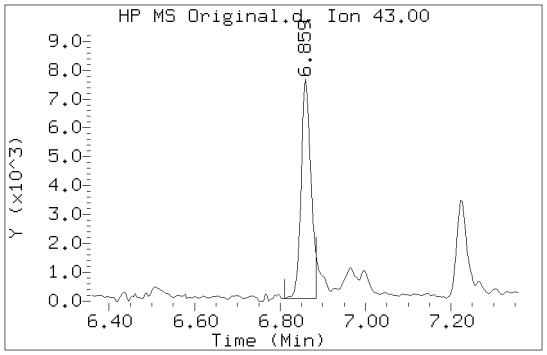


4-Methyl-2-Pentanone (108-10-1)

Reason Code:

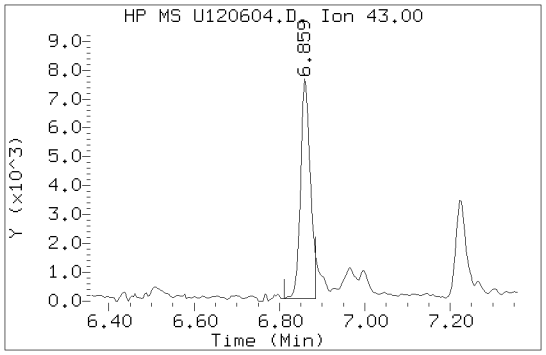
BEFORE

MASS
43
AREA
7475
HEIGHT
5102
06-Dec-2023
23:21



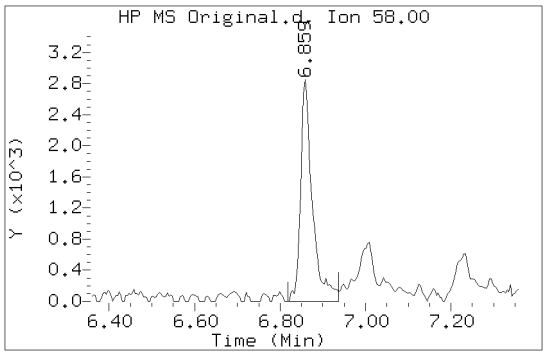
AFTER

MASS
43
AREA
12410
HEIGHT
7604
12-Dec-2023
09:43



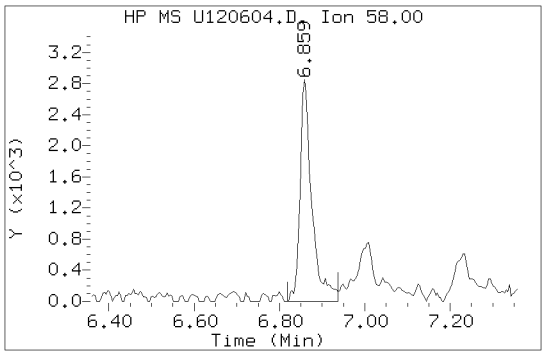
BEFORE

MASS
58
AREA
5297
HEIGHT
2649
06-Dec-2023
23:21



AFTER

MASS
58
AREA
5581
HEIGHT
2850
12-Dec-2023
09:43



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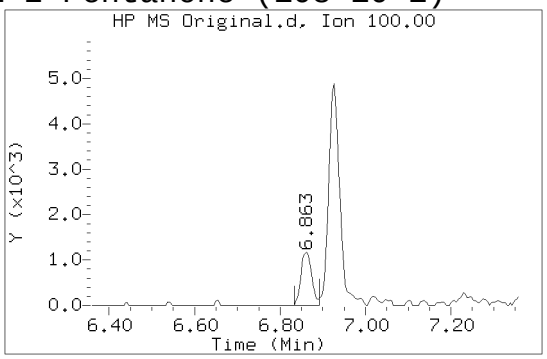
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

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

Reason Code:

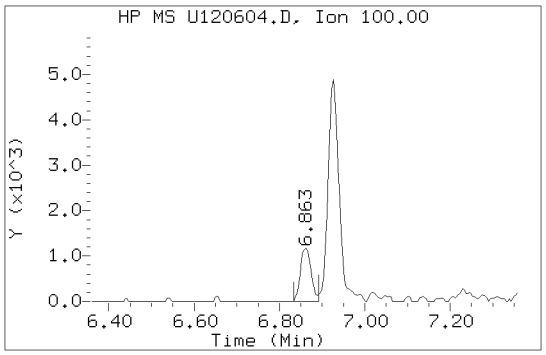
BEFORE

MASS
57
AREA
1979
HEIGHT
942
06-Dec-2023
23:21



AFTER

MASS
100
AREA
2108
HEIGHT
1166
12-Dec-2023
09:43

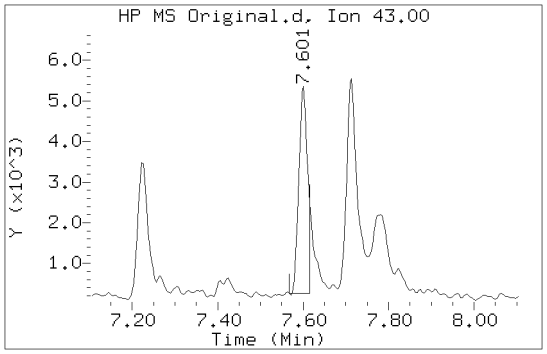


2-Hexanone (591-78-6)

Reason Code:

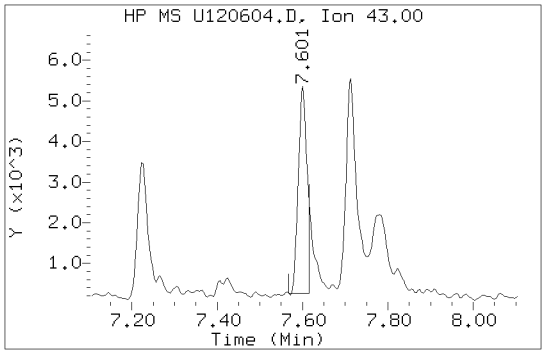
BEFORE

MASS
164
AREA
3841
HEIGHT
2495
06-Dec-2023
23:21



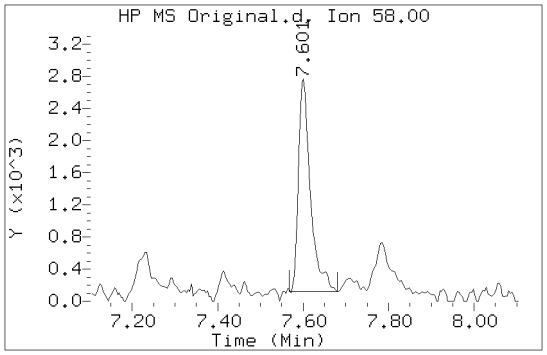
AFTER

MASS
43
AREA
7475
HEIGHT
5102
12-Dec-2023
09:43



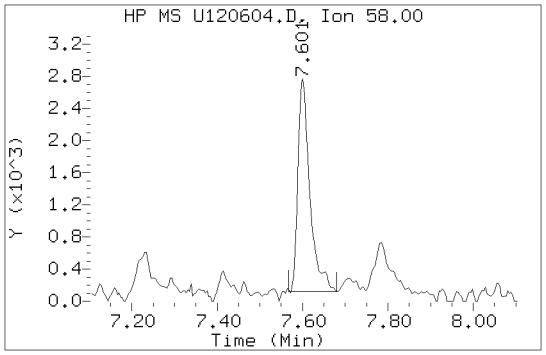
BEFORE

MASS
129
AREA
3164
HEIGHT
2200
06-Dec-2023
23:21



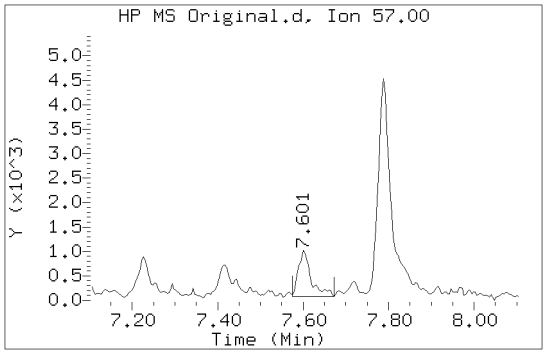
AFTER

MASS
58
AREA
5297
HEIGHT
2649
12-Dec-2023
09:43



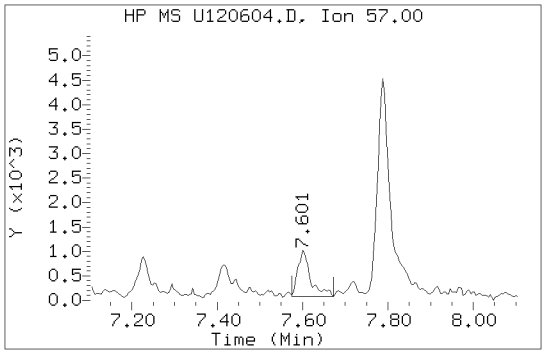
BEFORE

MASS
131
AREA
3251
HEIGHT
2212
06-Dec-2023
23:21



AFTER

MASS
57
AREA
1979
HEIGHT
942
12-Dec-2023
09:43

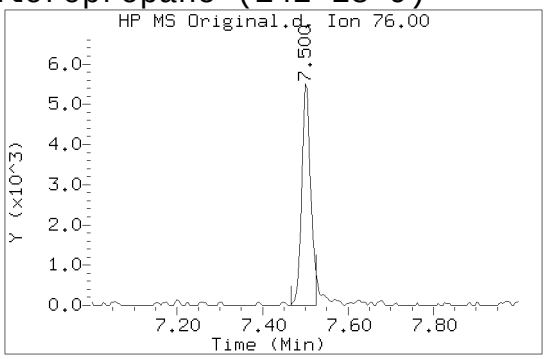


Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120604.D
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

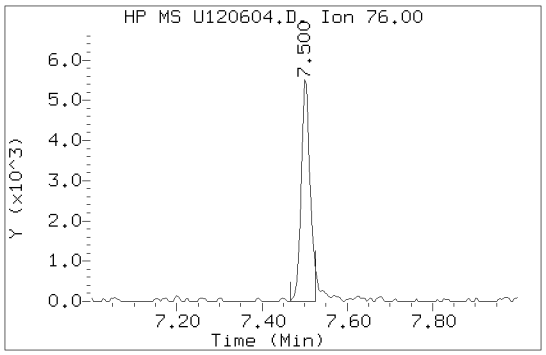
1,3-Dichloropropane (142-28-9)

Reason Code:

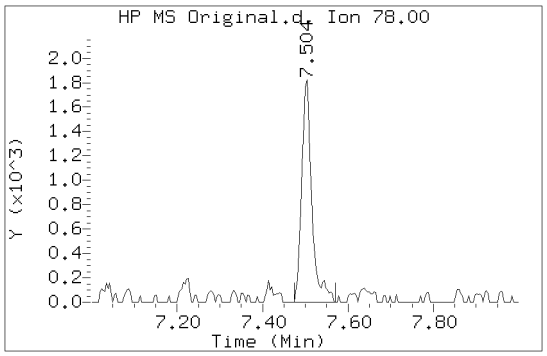
BEFORE
MASS
56
AREA
452
HEIGHT
436
06-Dec-2023
23:21



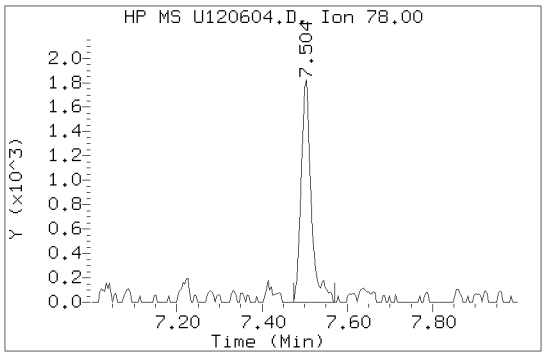
AFTER
MASS
76
AREA
8254
HEIGHT
5512
12-Dec-2023
09:43



BEFORE
MASS
55
AREA
701
HEIGHT
352
06-Dec-2023
23:21



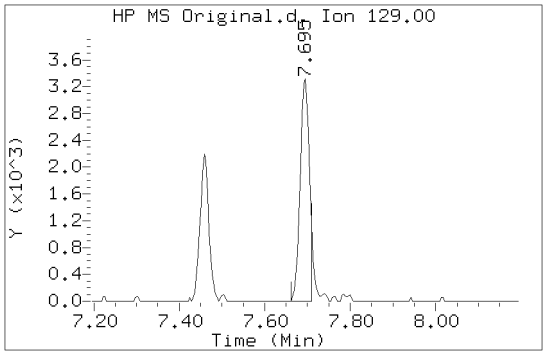
AFTER
MASS
78
AREA
3088
HEIGHT
1823
12-Dec-2023
09:43



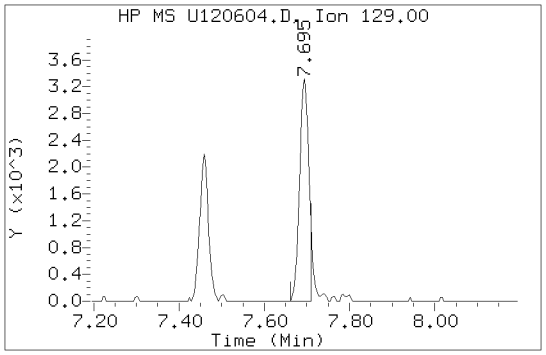
Dibromochloromethane (124-48-1)

Reason Code:

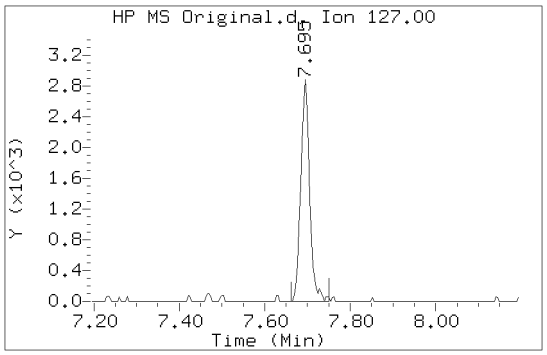
BEFORE
MASS
63
AREA
104
HEIGHT
66
06-Dec-2023
23:21



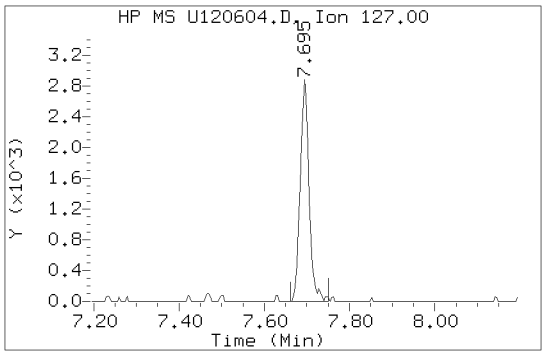
AFTER
MASS
129
AREA
5059
HEIGHT
3317
12-Dec-2023
09:43



BEFORE
MASS
65
AREA
0
HEIGHT
0
06-Dec-2023
23:21



AFTER
MASS
127
AREA
4291
HEIGHT
2880
12-Dec-2023
09:43



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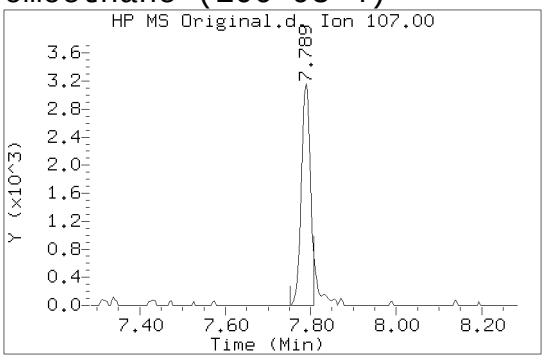
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

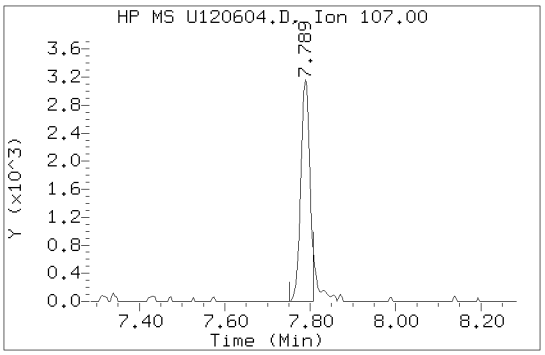
1,2-Dibromoethane (106-93-4)

Reason Code:

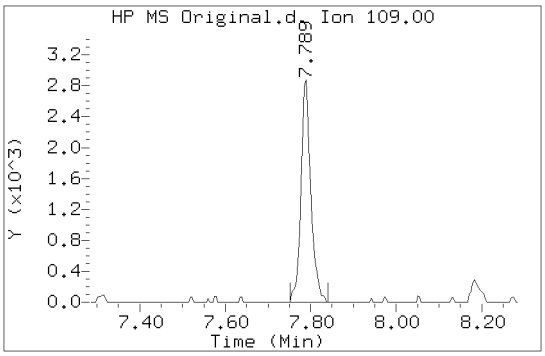
BEFORE
MASS
112
AREA
13746
HEIGHT
9169
06-Dec-2023
23:21



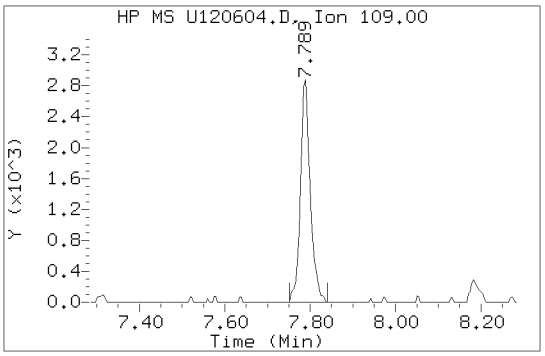
AFTER
MASS
107
AREA
4790
HEIGHT
3163
12-Dec-2023
09:43



BEFORE
MASS
77
AREA
14266
HEIGHT
5843
06-Dec-2023
23:21



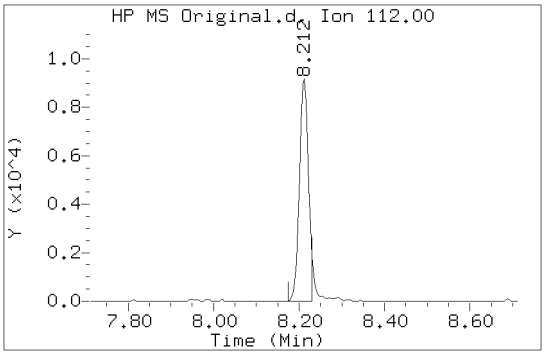
AFTER
MASS
109
AREA
4725
HEIGHT
2876
12-Dec-2023
09:43



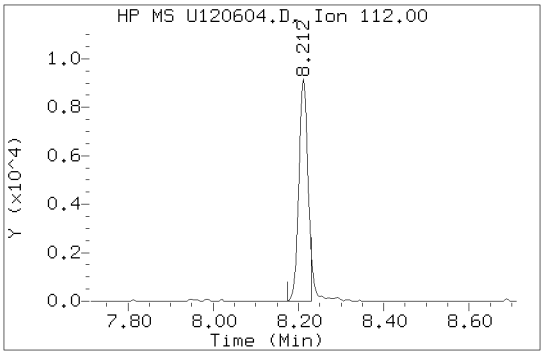
Chlorobenzene (108-90-7)

Reason Code:

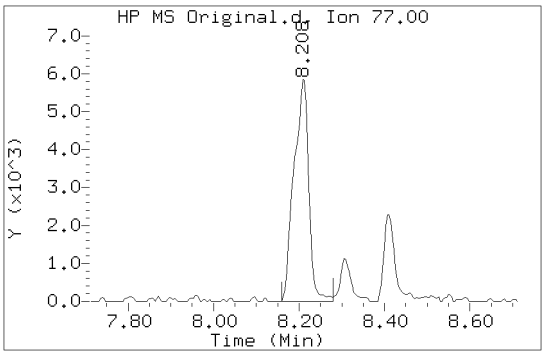
BEFORE
MASS
131
AREA
4936
HEIGHT
3097
06-Dec-2023
23:21



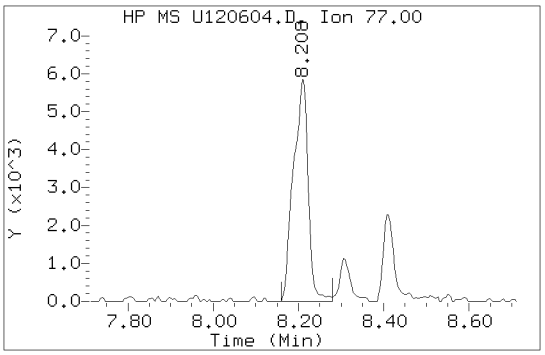
AFTER
MASS
112
AREA
13746
HEIGHT
9169
12-Dec-2023
09:43



BEFORE
MASS
133
AREA
5045
HEIGHT
3220
06-Dec-2023
23:21



AFTER
MASS
77
AREA
14266
HEIGHT
5843
12-Dec-2023
09:43

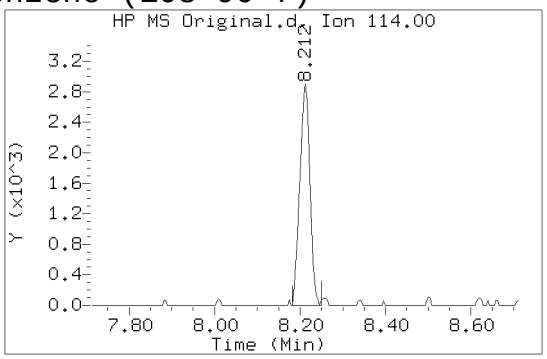


Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120604.D
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

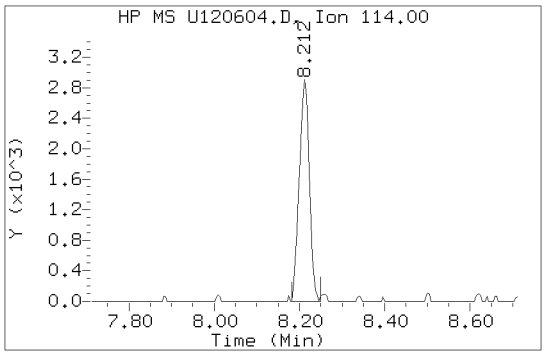
Chlorobenzene (108-90-7)

Reason Code:

BEFORE
MASS
119
AREA
4987
HEIGHT
2688
06-Dec-2023
23:21



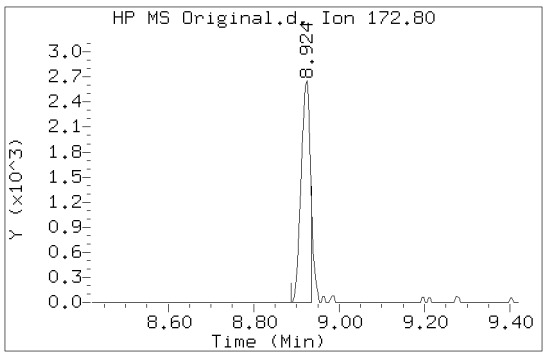
AFTER
MASS
114
AREA
4887
HEIGHT
2906
12-Dec-2023
09:43



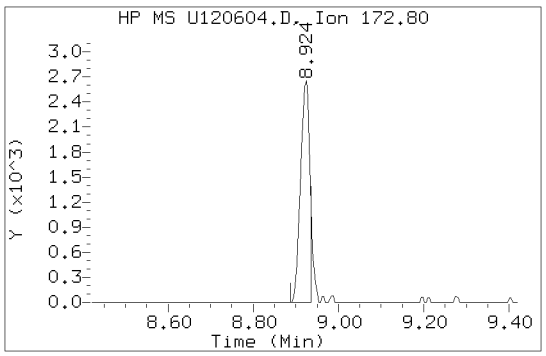
Bromoform (75-25-2)

Reason Code:

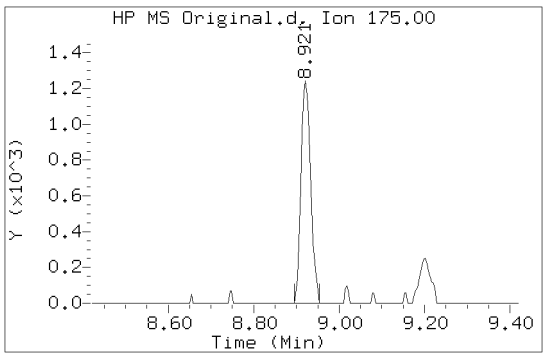
BEFORE
MASS
172.8
AREA
4009
HEIGHT
2655
06-Dec-2023
23:21



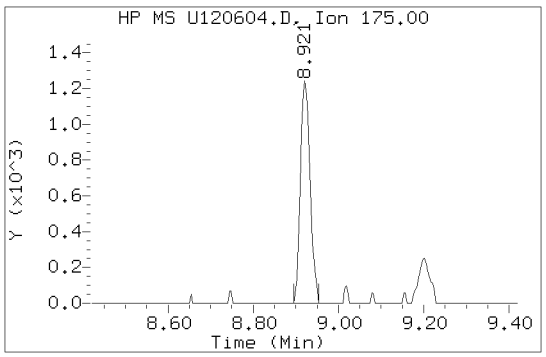
AFTER
MASS
172.8
AREA
4009
HEIGHT
2655
12-Dec-2023
09:43



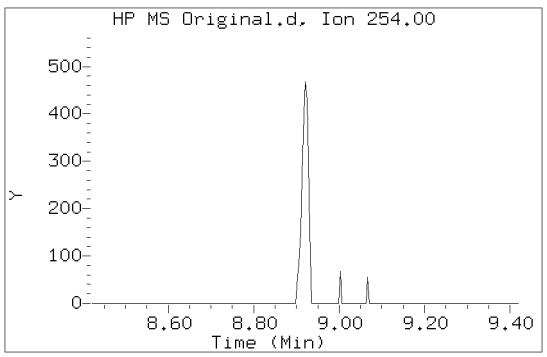
BEFORE
MASS
175
AREA
2010
HEIGHT
1243
06-Dec-2023
23:21



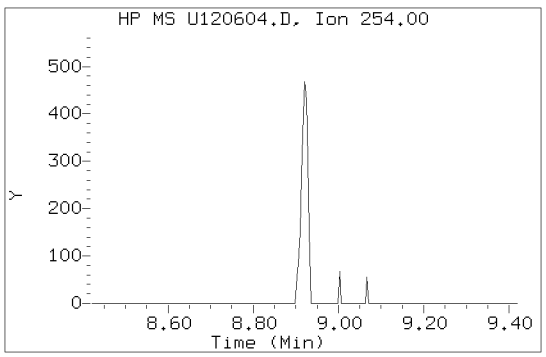
AFTER
MASS
175
AREA
2010
HEIGHT
1243
12-Dec-2023
09:43



BEFORE
MASS
254
AREA
0
HEIGHT
0
06-Dec-2023
23:21



AFTER
MASS
254
AREA
0
HEIGHT
0
12-Dec-2023
09:43

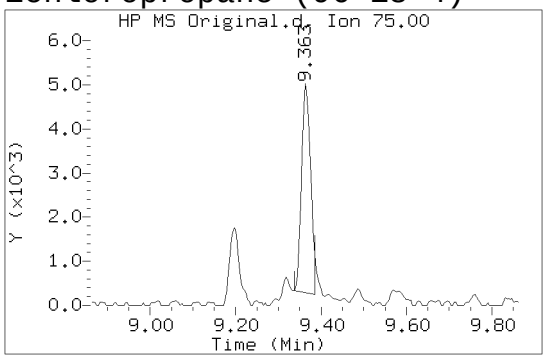


Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120604.D
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

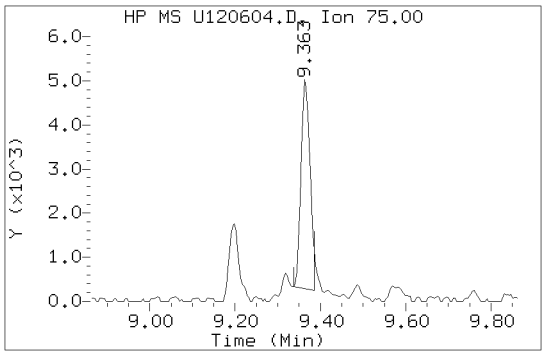
1,2,3-Trichloropropane (96-18-4)

Reason Code:

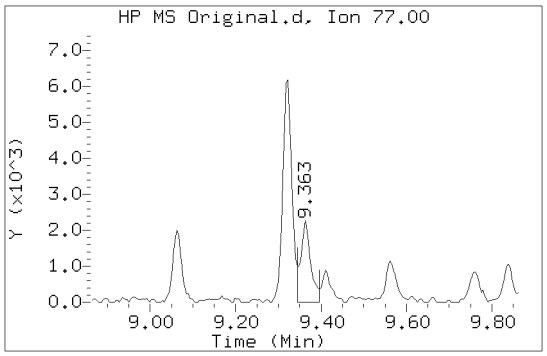
BEFORE
MASS
152
AREA
292314
HEIGHT
188877
06-Dec-2023
23:21



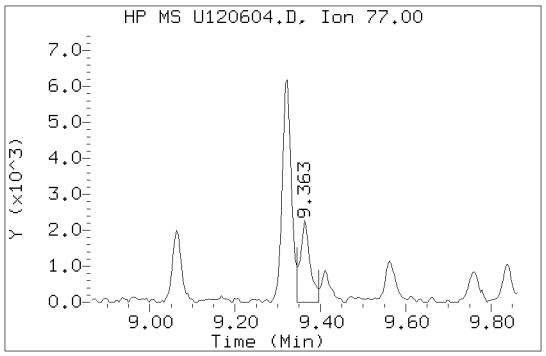
AFTER
MASS
75
AREA
7225
HEIGHT
4742
12-Dec-2023
09:43



BEFORE
MASS
115
AREA
159675
HEIGHT
100656
06-Dec-2023
23:21



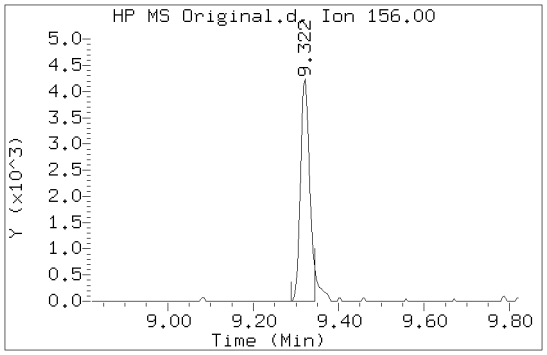
AFTER
MASS
77
AREA
3895
HEIGHT
2276
12-Dec-2023
09:43



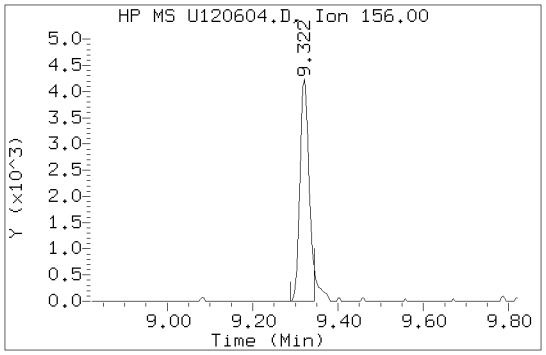
Bromobenzene (108-86-1)

Reason Code:

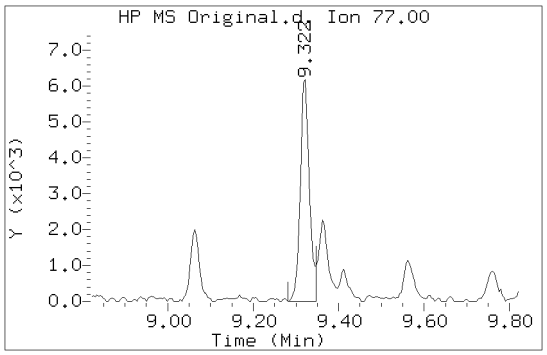
BEFORE
MASS
75
AREA
7225
HEIGHT
4742
06-Dec-2023
23:21



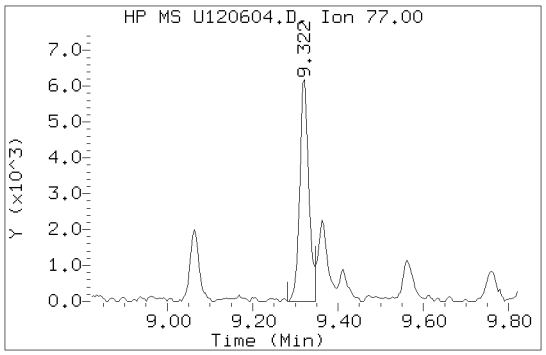
AFTER
MASS
156
AREA
6451
HEIGHT
4241
12-Dec-2023
09:43



BEFORE
MASS
77
AREA
3895
HEIGHT
2276
06-Dec-2023
23:21



AFTER
MASS
77
AREA
9489
HEIGHT
6181
12-Dec-2023
09:43



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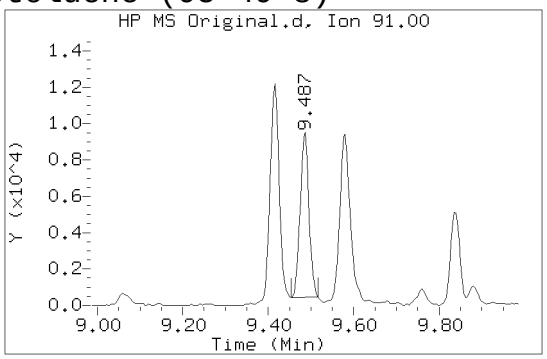
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

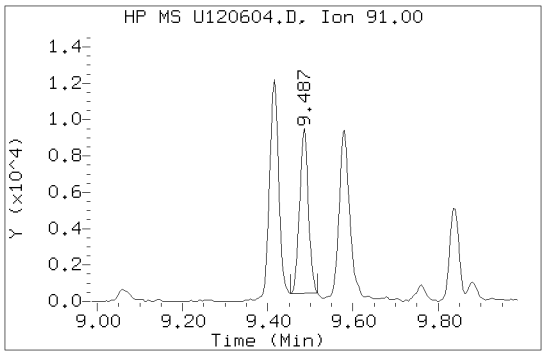
2-Chlorotoluene (95-49-8)

Reason Code:

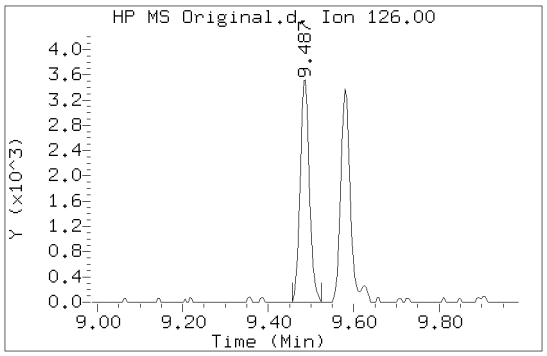
BEFORE
MASS
91
AREA
18576
HEIGHT
12131
06-Dec-2023
23:21



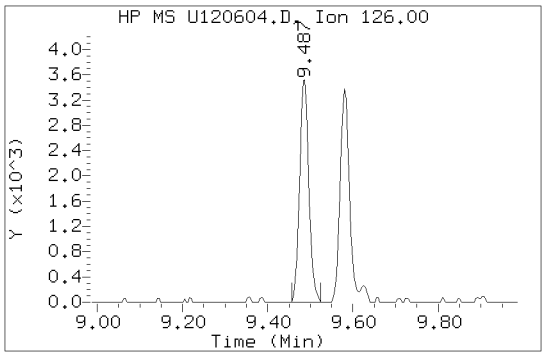
AFTER
MASS
91
AREA
13144
HEIGHT
9069
12-Dec-2023
09:43



BEFORE
MASS
120
AREA
4175
HEIGHT
2622
06-Dec-2023
23:21



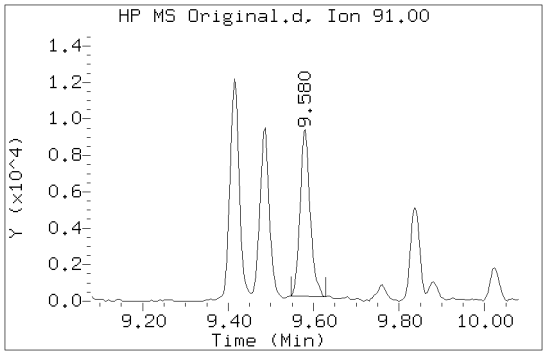
AFTER
MASS
126
AREA
5403
HEIGHT
3519
12-Dec-2023
09:43



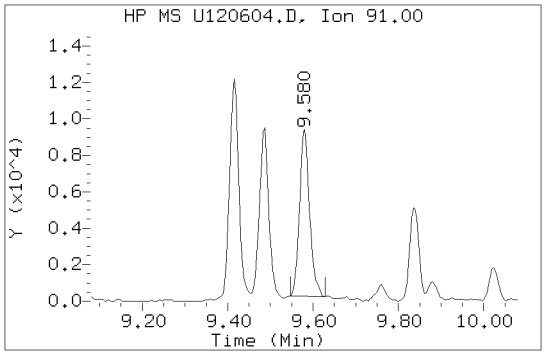
4-Chlorotoluene (106-43-4)

Reason Code:

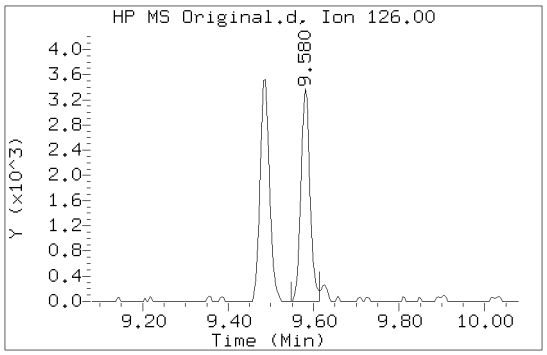
BEFORE
MASS
156
AREA
6451
HEIGHT
4241
06-Dec-2023
23:21



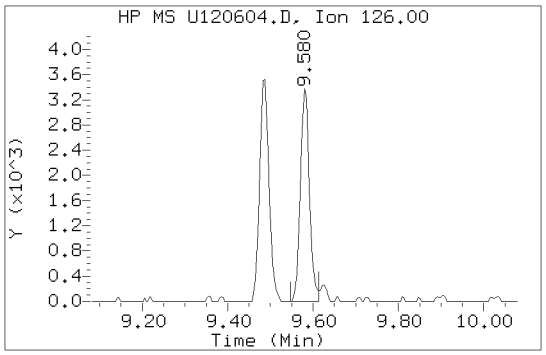
AFTER
MASS
91
AREA
15217
HEIGHT
9149
12-Dec-2023
09:43



BEFORE
MASS
77
AREA
9489
HEIGHT
6181
06-Dec-2023
23:21



AFTER
MASS
126
AREA
5101
HEIGHT
3378
12-Dec-2023
09:43



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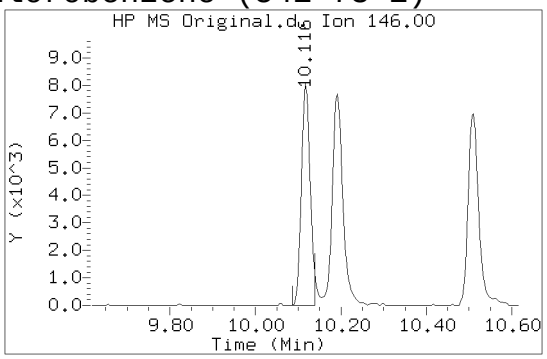
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

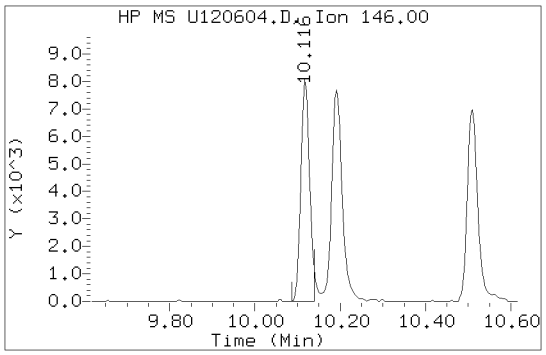
1,3-Dichlorobenzene (541-73-1)

Reason Code:

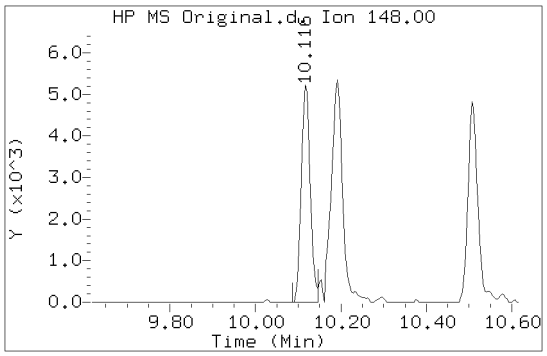
BEFORE
MASS
119
AREA
13105
HEIGHT
8645
06-Dec-2023
23:21



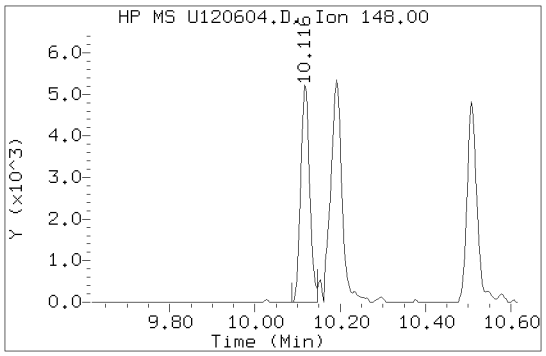
AFTER
MASS
146
AREA
11762
HEIGHT
8063
12-Dec-2023
09:43



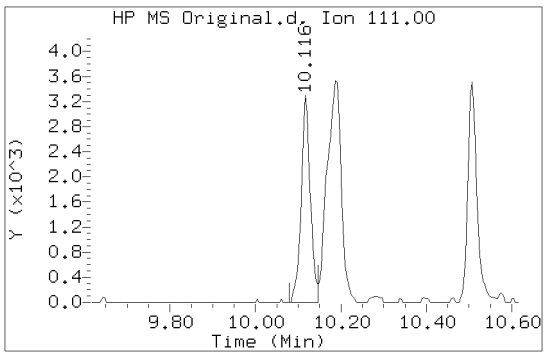
BEFORE
MASS
91
AREA
7970
HEIGHT
5113
06-Dec-2023
23:21



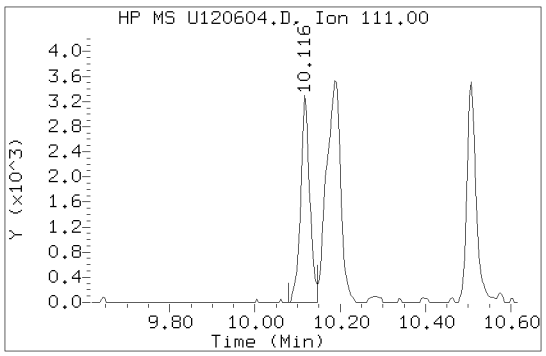
AFTER
MASS
148
AREA
7837
HEIGHT
5232
12-Dec-2023
09:43



BEFORE
MASS
134
AREA
3501
HEIGHT
2543
06-Dec-2023
23:21



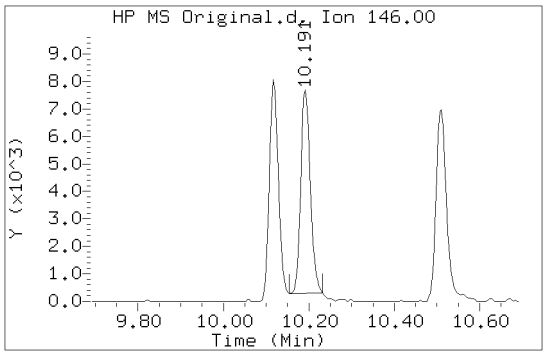
AFTER
MASS
111
AREA
4991
HEIGHT
3301
12-Dec-2023
09:43



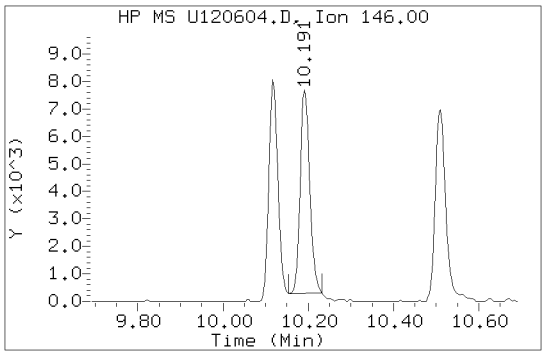
1,4-Dichlorobenzene (106-46-7)

Reason Code:

BEFORE
MASS
105
AREA
12864
HEIGHT
8289
06-Dec-2023
23:21



AFTER
MASS
146
AREA
11764
HEIGHT
7398
12-Dec-2023
09:43



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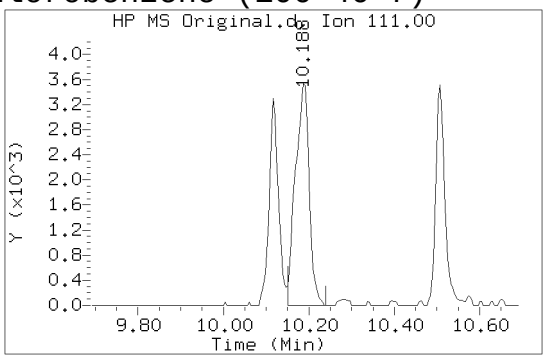
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

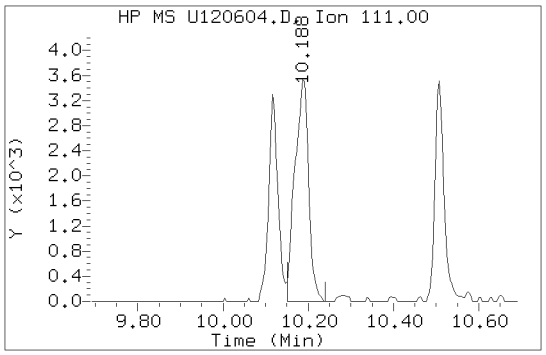
1,4-Dichlorobenzene (106-46-7)

Reason Code:

BEFORE
MASS
120
AREA
6131
HEIGHT
4307
06-Dec-2023
23:21



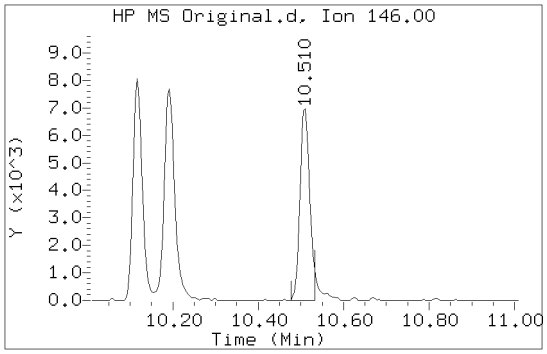
AFTER
MASS
111
AREA
8078
HEIGHT
3533
12-Dec-2023
09:43



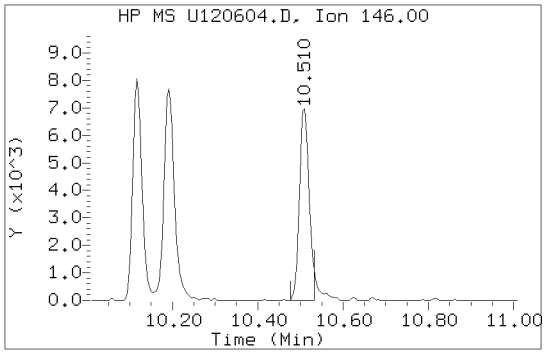
1,2-Dichlorobenzene (95-50-1)

Reason Code:

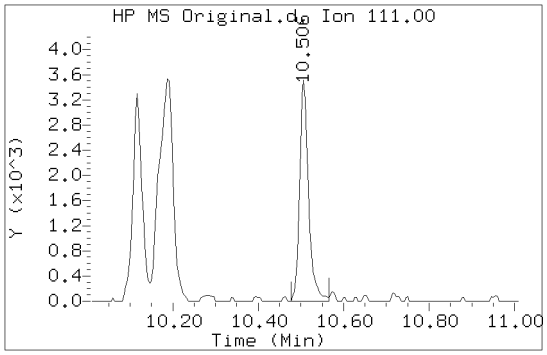
BEFORE
MASS
41
AREA
3181
HEIGHT
1500
06-Dec-2023
23:21



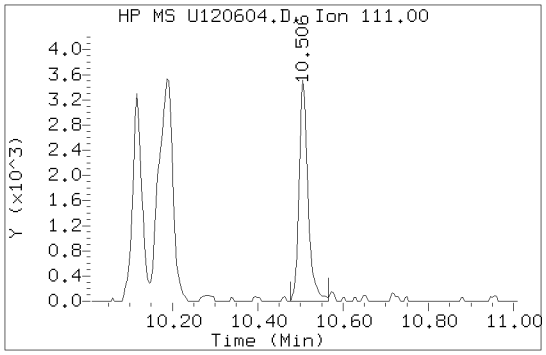
AFTER
MASS
146
AREA
11314
HEIGHT
6978
12-Dec-2023
09:43



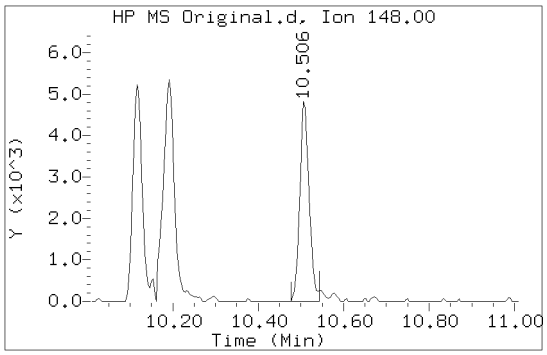
BEFORE
MASS
69
AREA
3138
HEIGHT
1288
06-Dec-2023
23:21



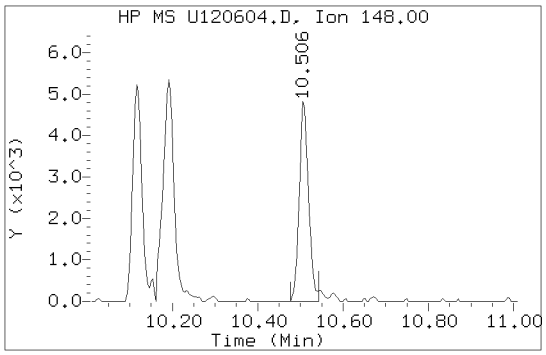
AFTER
MASS
111
AREA
5243
HEIGHT
3519
12-Dec-2023
09:43



BEFORE
MASS
100
AREA
1391
HEIGHT
767
06-Dec-2023
23:21



AFTER
MASS
148
AREA
7512
HEIGHT
4827
12-Dec-2023
09:43



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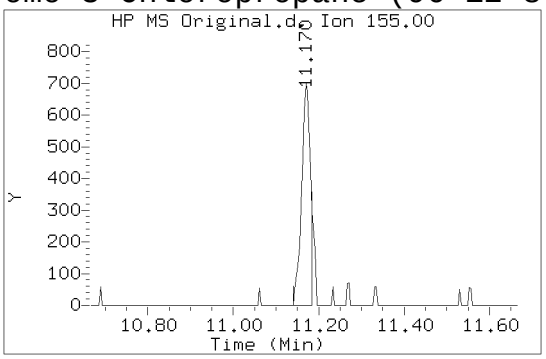
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

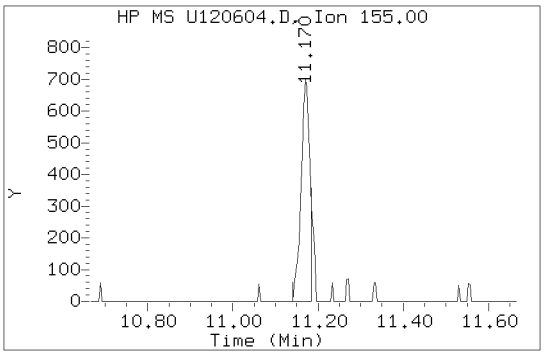
1,2-Dibromo-3-Chloropropane (96-12-8)

Reason Code:

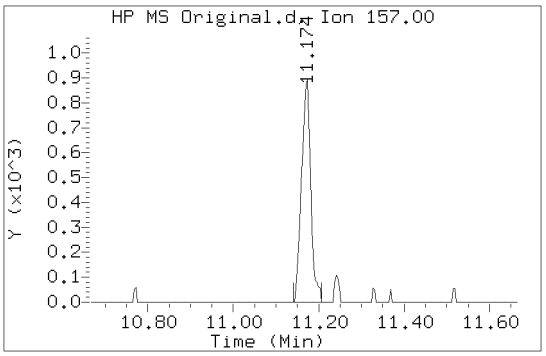
BEFORE
MASS
119
AREA
12618
HEIGHT
8526
06-Dec-2023
23:21



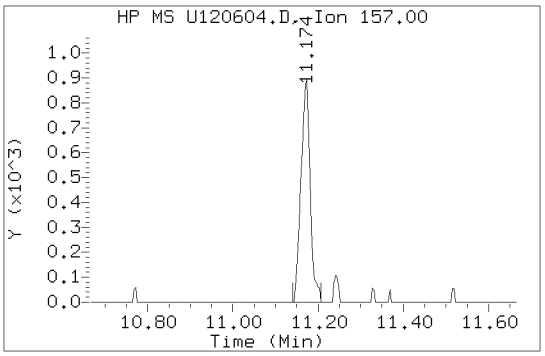
AFTER
MASS
155
AREA
1017
HEIGHT
699
12-Dec-2023
09:43



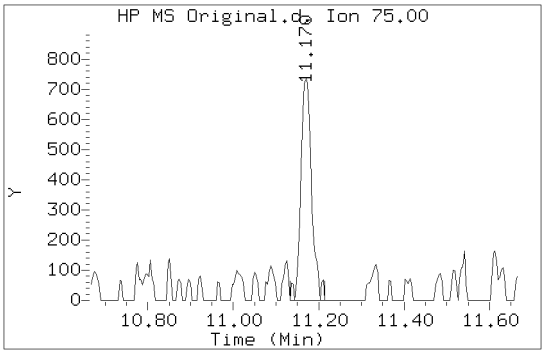
BEFORE
MASS
134
AREA
3443
HEIGHT
2049
06-Dec-2023
23:21



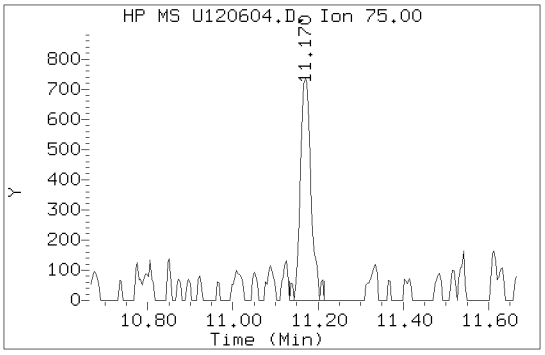
AFTER
MASS
157
AREA
1379
HEIGHT
892
12-Dec-2023
09:43



BEFORE
MASS
91
AREA
3724
HEIGHT
1712
06-Dec-2023
23:21



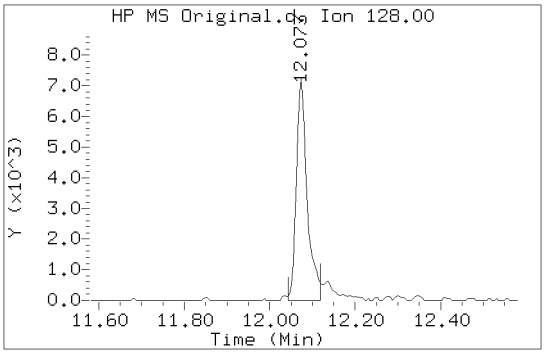
AFTER
MASS
75
AREA
1331
HEIGHT
735
12-Dec-2023
09:43



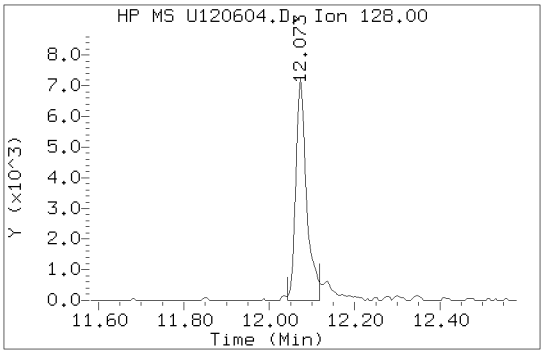
Naphthalene (91-20-3)

Reason Code:

BEFORE
MASS
43
AREA
825
HEIGHT
395
06-Dec-2023
23:21



AFTER
MASS
128
AREA
13023
HEIGHT
7233
12-Dec-2023
09:43



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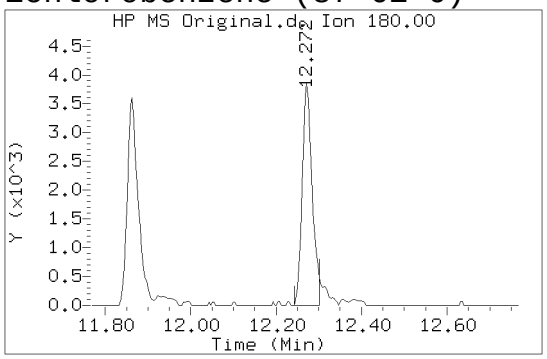
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

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

Reason Code:

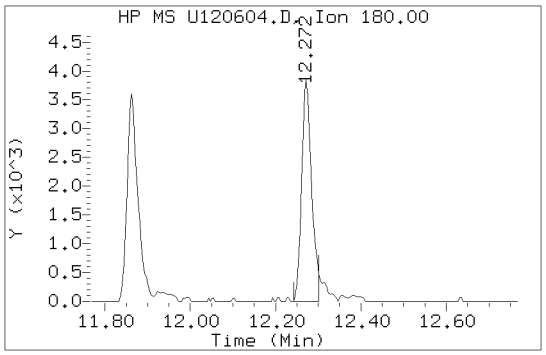
BEFORE

MASS
69
AREA
4516
HEIGHT
2548
06-Dec-2023
23:21



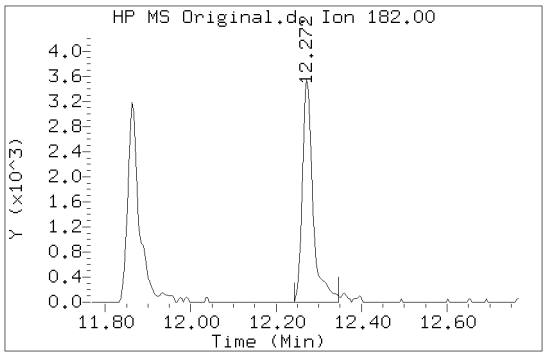
AFTER

MASS
180
AREA
6413
HEIGHT
3848
12-Dec-2023
09:43



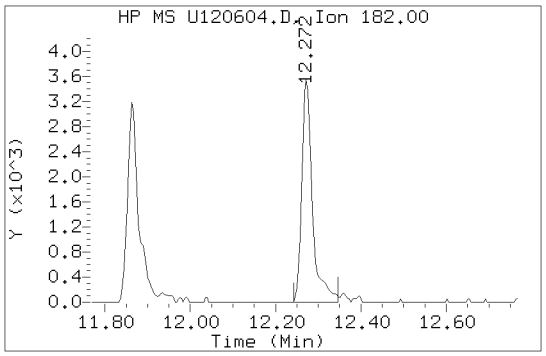
BEFORE

MASS
41
AREA
3380
HEIGHT
1662
06-Dec-2023
23:21



AFTER

MASS
182
AREA
6322
HEIGHT
3544
12-Dec-2023
09:43

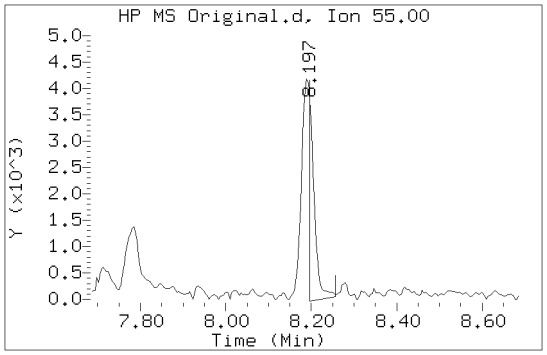


1-Chlorohexane (544-10-5)

Reason Code:

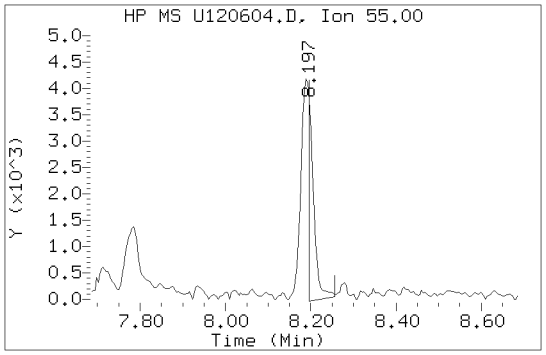
BEFORE

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
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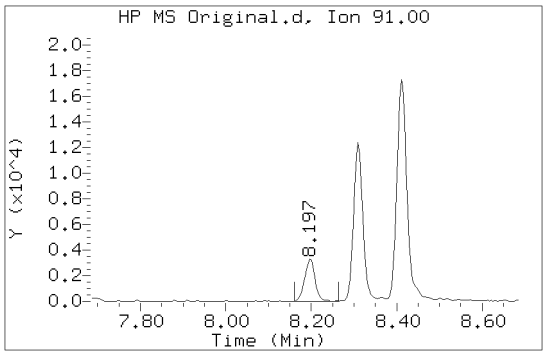
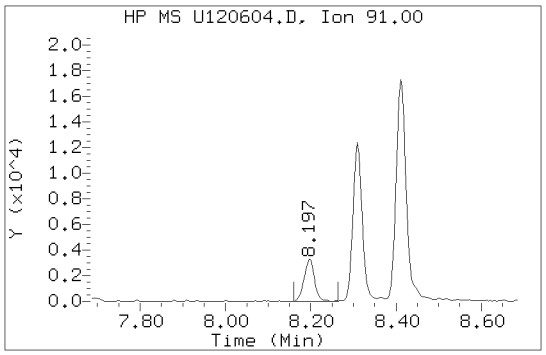
AREA
5866
HEIGHT
3298
06-Dec-2023
23:21



AFTER

MASS
91
AREA
5624
HEIGHT
3288
12-Dec-2023
09:43



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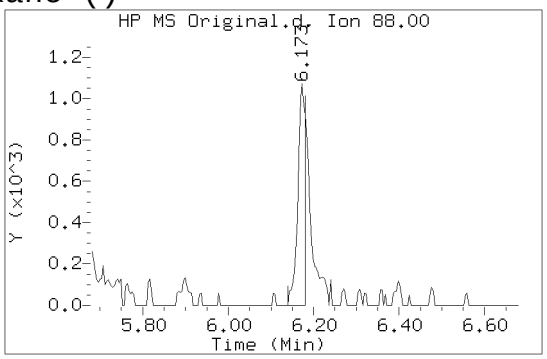
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

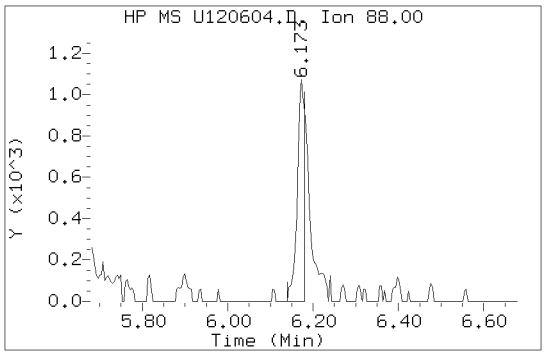
1,4-Dioxane ()

Reason Code:

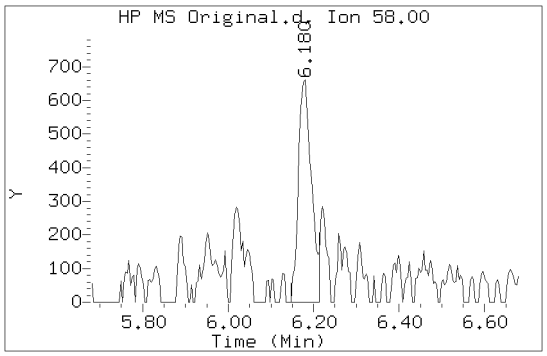
BEFORE
MASS
155
AREA
1017
HEIGHT
699
06-Dec-2023
23:21



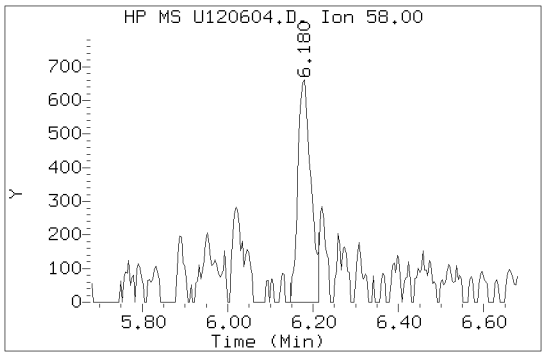
AFTER
MASS
88
AREA
1303
HEIGHT
1072
12-Dec-2023
09:43



BEFORE
MASS
157
AREA
1379
HEIGHT
892
06-Dec-2023
23:21



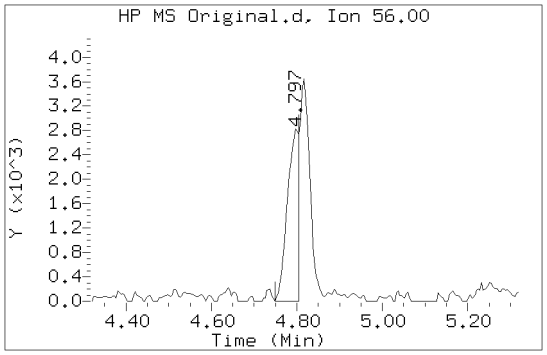
AFTER
MASS
58
AREA
1437
HEIGHT
661
12-Dec-2023
09:43



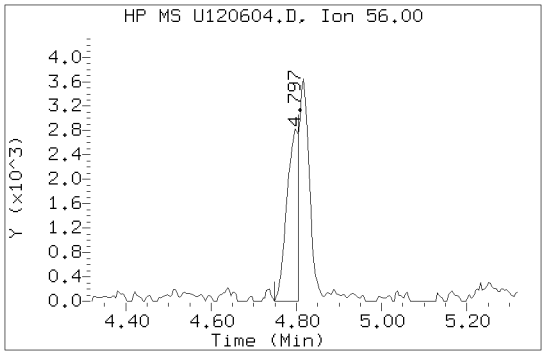
Cyclohexane (110-82-7)

Reason Code:

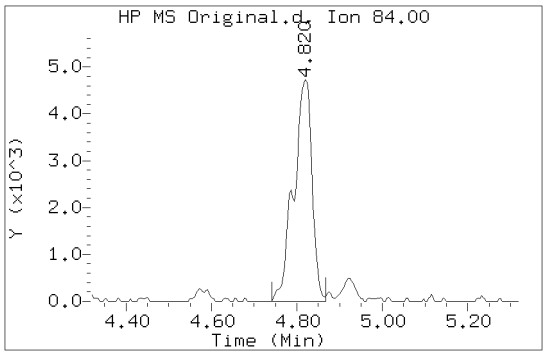
BEFORE
MASS
225
AREA
2507
HEIGHT
1544
06-Dec-2023
23:21



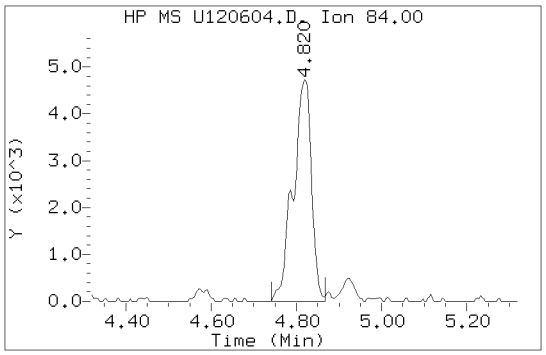
AFTER
MASS
56
AREA
5330
HEIGHT
2825
12-Dec-2023
09:43



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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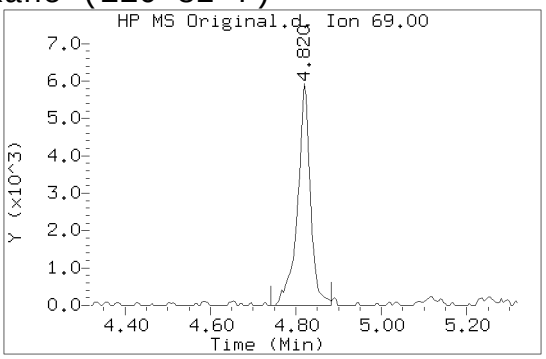
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

Cyclohexane (110-82-7)

Reason Code:

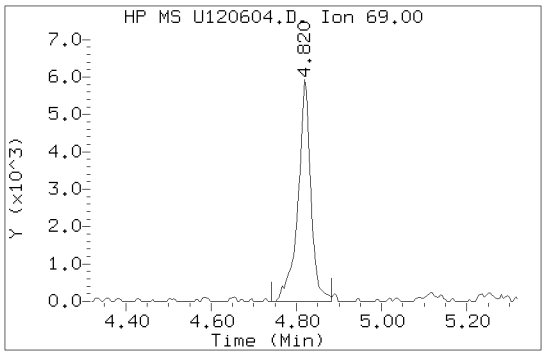
BEFORE

MASS
227
AREA
1694
HEIGHT
927
06-Dec-2023
23:21



AFTER

MASS
69
AREA
12632
HEIGHT
5931
12-Dec-2023
09:43

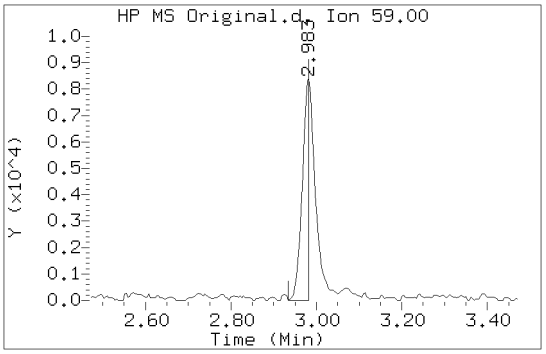


Tert-Butyl alcohol (75-65-0)

Reason Code:

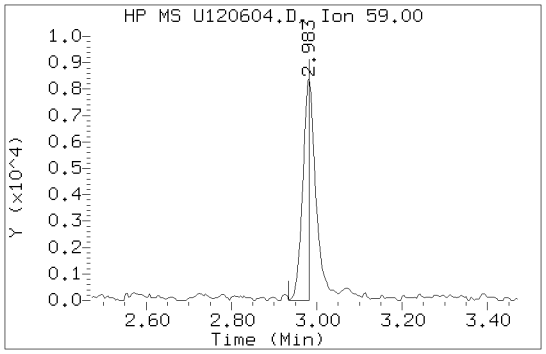
BEFORE

MASS
106
AREA
20615
HEIGHT
12759
06-Dec-2023
23:21



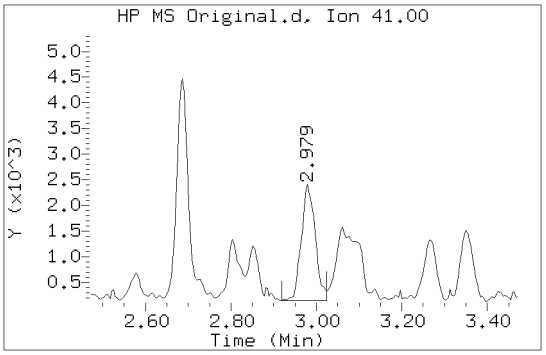
AFTER

MASS
59
AREA
9972
HEIGHT
8396
12-Dec-2023
09:43



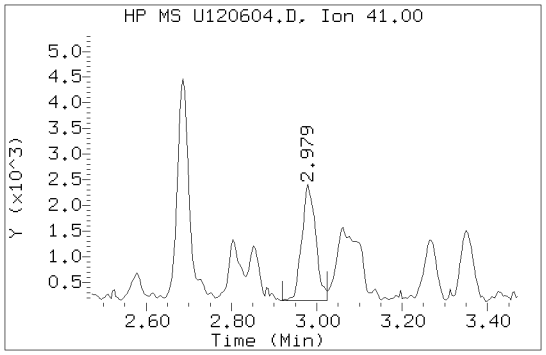
BEFORE

MASS
91
AREA
0
HEIGHT
0
06-Dec-2023
23:21



AFTER

MASS
41
AREA
5197
HEIGHT
2262
12-Dec-2023
09:43

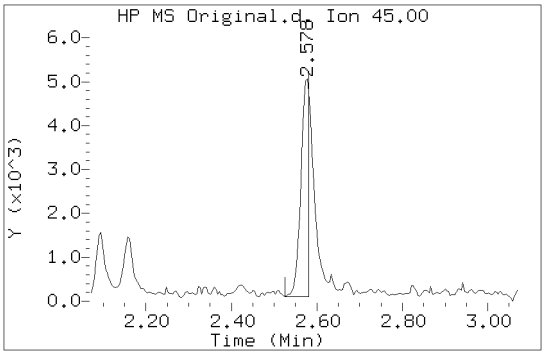


Isopropyl Alcohol (67-63-0)

Reason Code:

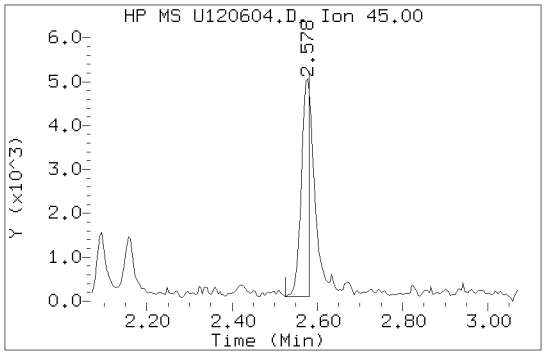
BEFORE

MASS
91
AREA
5233
HEIGHT
3126
06-Dec-2023
23:21



AFTER

MASS
45
AREA
6719
HEIGHT
4957
12-Dec-2023
09:43



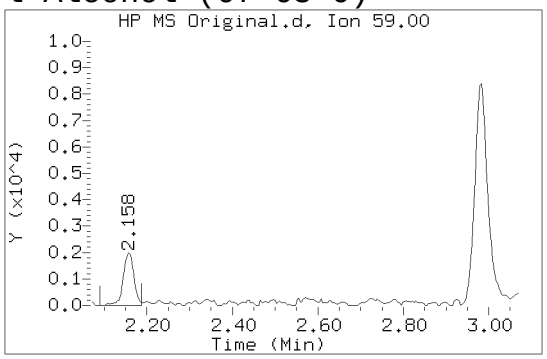
Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120604.D
Inj Date : 06-DEC-2023 12:43
InstruID : VOA9.i
LabSampID : VSTD001

Isopropyl Alcohol (67-63-0)

Reason Code:

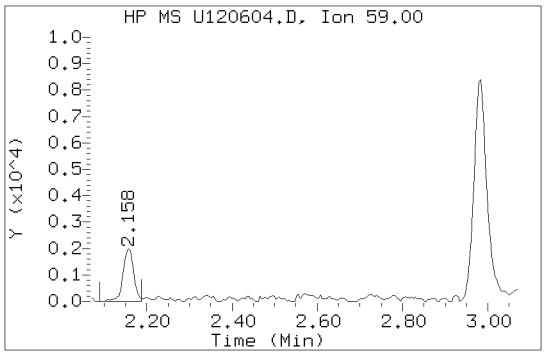
BEFORE

MASS
126
AREA
1016
HEIGHT
673
06-Dec-2023
23:21



AFTER

MASS
59
AREA
3472
HEIGHT
1986
12-Dec-2023
09:43

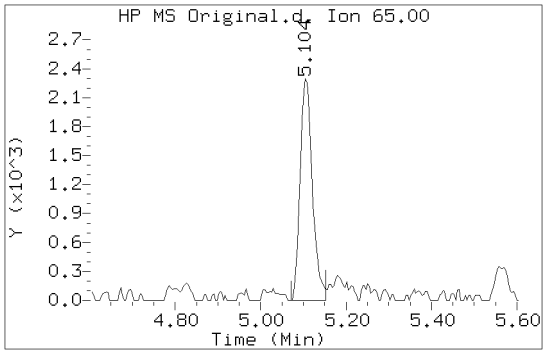


1,2-Dichloroethane-d4 (17060-07-0)

Reason Code:

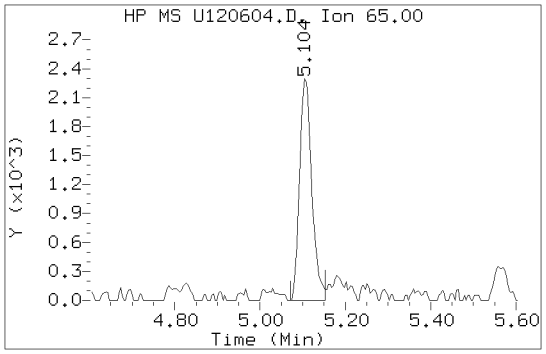
BEFORE

MASS
53
AREA
1465
HEIGHT
972
06-Dec-2023
23:21



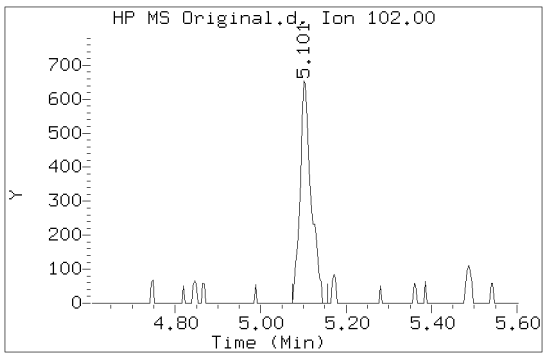
AFTER

MASS
65
AREA
4689
HEIGHT
2297
12-Dec-2023
09:43



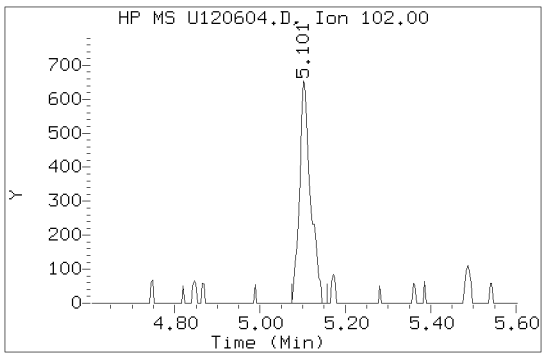
BEFORE

MASS
88
AREA
0
HEIGHT
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

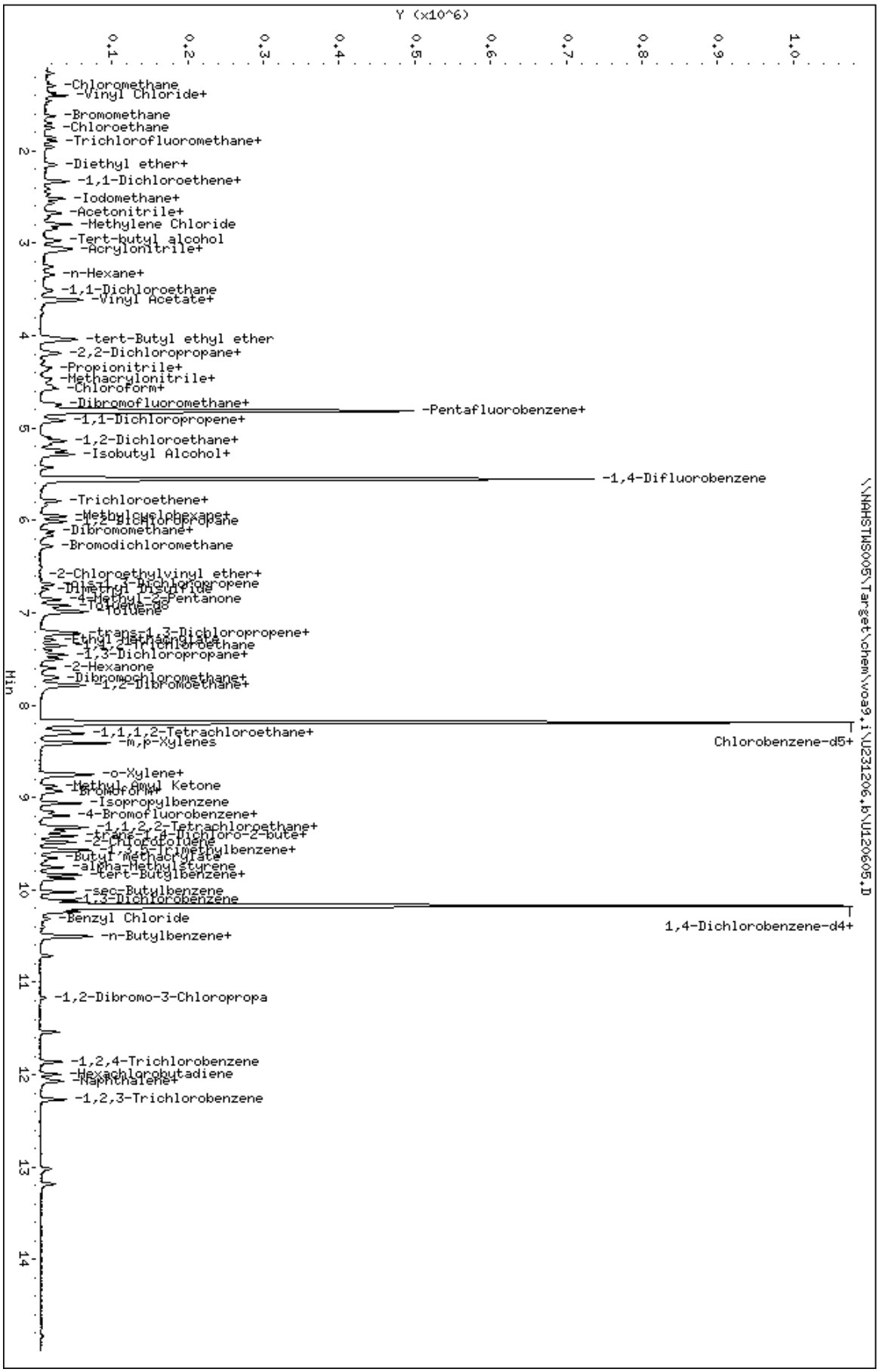
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	29 Bromochloromethane	128	4.466	4.466	(0.928)	5123	2.00000	2.23
$	30 Dibromofluoromethane	113	4.747	4.747	(0.986)	6940	2.00000	0.90
	31 1,1,1-Trichloroethane	97	4.744	4.744	(0.985)	11413	2.00000	2.04
	32 1,1-Dichloropropene	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.



Data File: \\NAHSTWS005\Target\chem\voa9,i\U231206,b\U120605,D
Date : 06-DEC-2023 13:05
Client ID: VSTD002
Sample Info: VSTD002;VSTD002;1;4;
Purge Volume: 5.0
Column phase: DB624

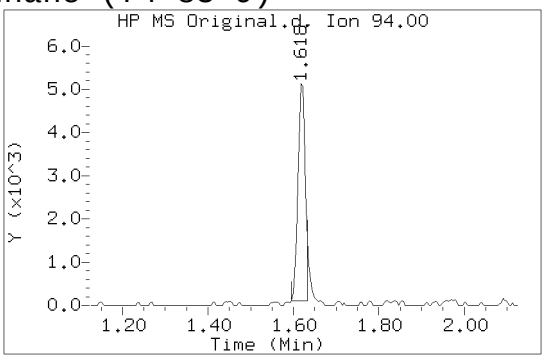
Instrument: VOA9,i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120605.D
Inj Date : 06-DEC-2023 13:05
InstruID : VOA9.i
LabSampID : VSTD002

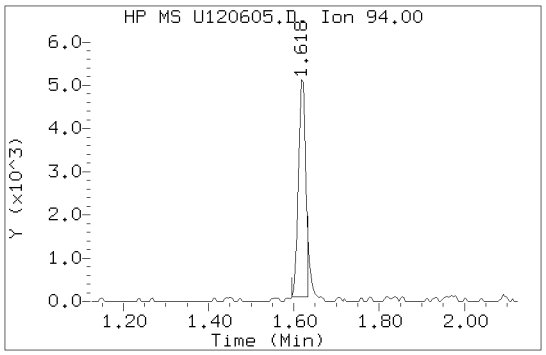
Bromomethane (74-83-9)

Reason Code:

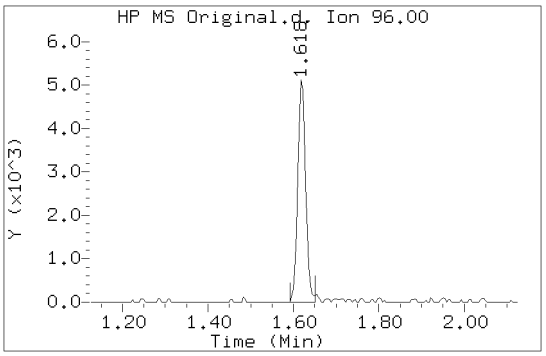
BEFORE
MASS
94
AREA
6114
HEIGHT
5031
11-Dec-2023
17:18
linh
pham



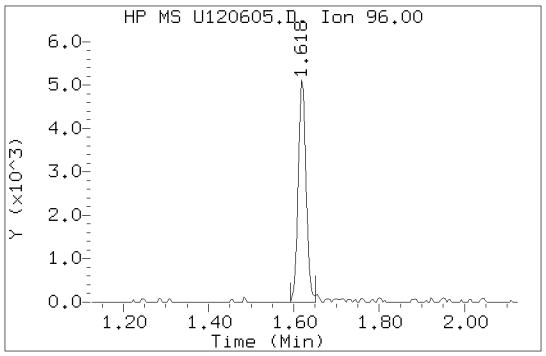
AFTER
MASS
94
AREA
6114
HEIGHT
5031
12-Dec-2023
09:43
linh
pham



BEFORE
MASS
96
AREA
6766
HEIGHT
5123
11-Dec-2023
17:18
linh
pham



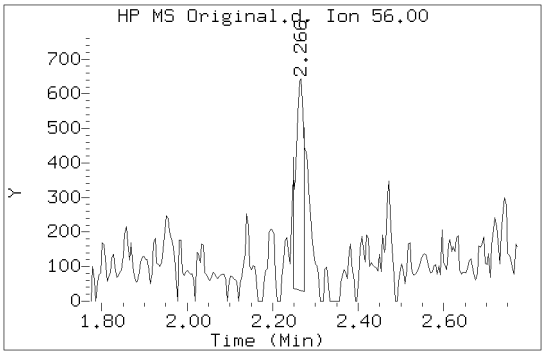
AFTER
MASS
96
AREA
6766
HEIGHT
5123
12-Dec-2023
09:43
linh
pham



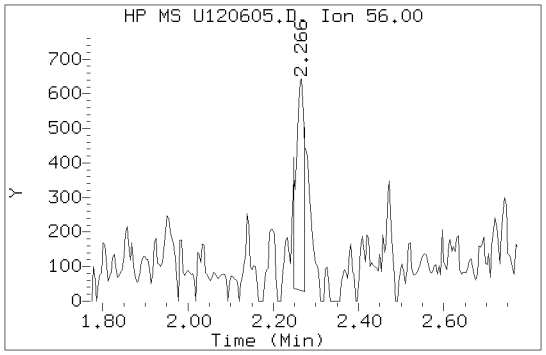
Acrolein (107-02-8)

Reason Code:

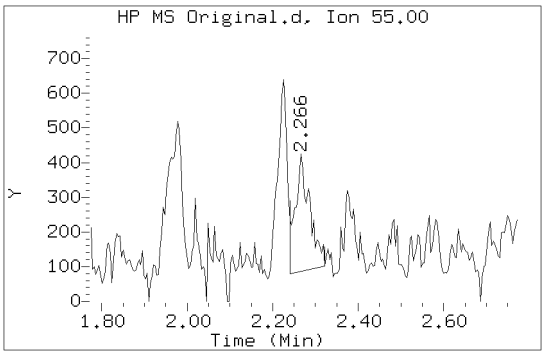
BEFORE
MASS
56
AREA
825
HEIGHT
612
11-Dec-2023
17:18
linh
pham



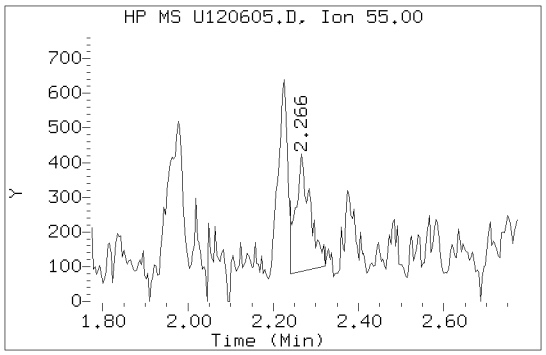
AFTER
MASS
56
AREA
825
HEIGHT
612
12-Dec-2023
09:43
linh
pham



BEFORE
MASS
55
AREA
819
HEIGHT
339
11-Dec-2023
17:18
linh
pham



AFTER
MASS
55
AREA
819
HEIGHT
339
12-Dec-2023
09:43
linh
pham



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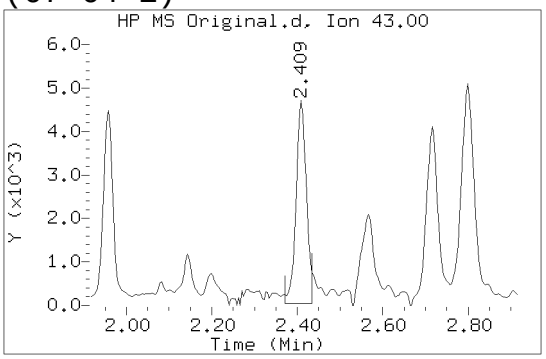
Inj Date : 06-DEC-2023 13:05
InstruID : VOA9.i
LabSampID : VSTD002

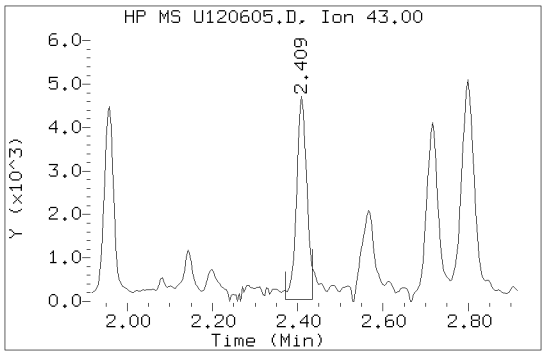
Acetone (67-64-1)

Reason Code:

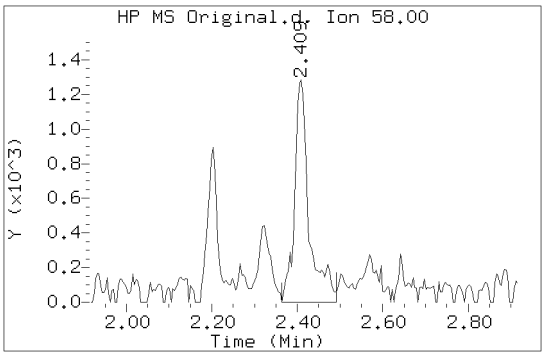
BEFORE
MASS
43
AREA
7963
HEIGHT
4678
11-Dec-2023
17:18
linh
pham



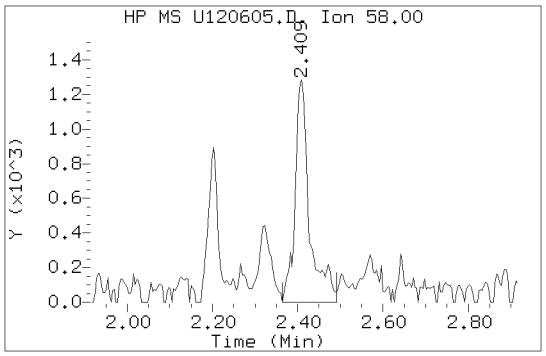
AFTER
MASS
43
AREA
7963
HEIGHT
4678
12-Dec-2023
09:43
linh
pham



BEFORE
MASS
58
AREA
3033
HEIGHT
1284
11-Dec-2023
17:18
linh
pham



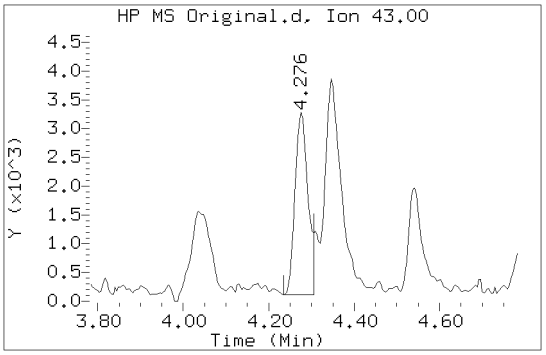
AFTER
MASS
58
AREA
3033
HEIGHT
1284
12-Dec-2023
09:43
linh
pham



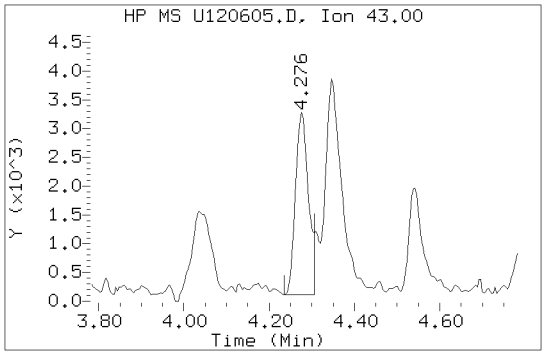
2-Butanone (78-93-3)

Reason Code:

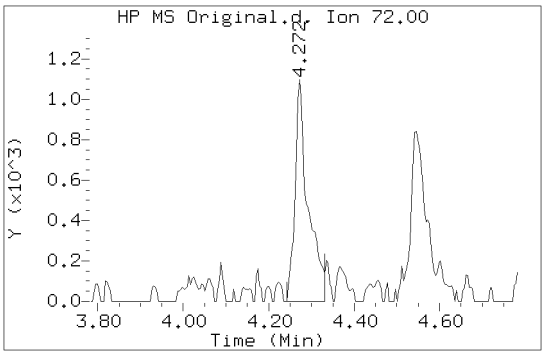
BEFORE
MASS
43
AREA
6824
HEIGHT
3175
11-Dec-2023
17:18
linh
pham



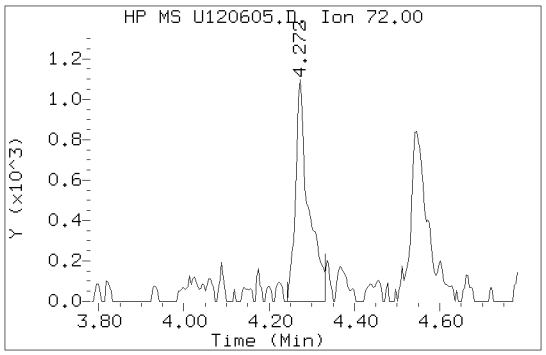
AFTER
MASS
43
AREA
6824
HEIGHT
3175
12-Dec-2023
09:43
linh
pham



BEFORE
MASS
72
AREA
2350
HEIGHT
1097
11-Dec-2023
17:18
linh
pham



AFTER
MASS
72
AREA
2350
HEIGHT
1097
12-Dec-2023
09:43
linh
pham



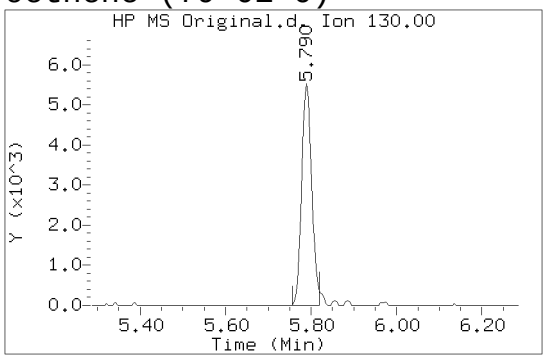
Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120605.D
Inj Date : 06-DEC-2023 13:05
InstruID : VOA9.i
LabSampID : VSTD002

Trichloroethene (79-01-6)

Reason Code:

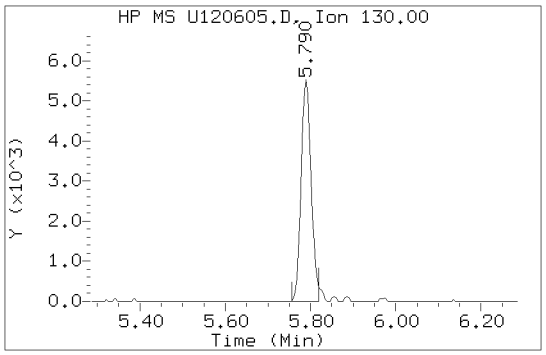
BEFORE

MASS
130
AREA
9201
HEIGHT
5527
11-Dec-2023
17:18
linh
pham



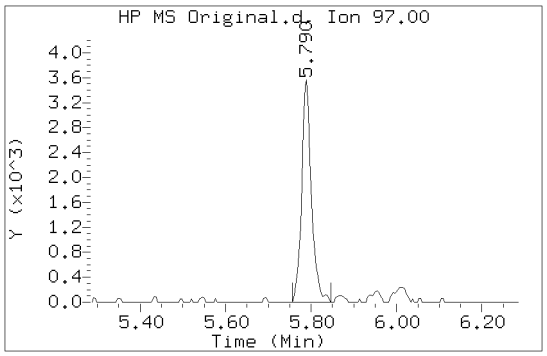
AFTER

MASS
130
AREA
9201
HEIGHT
5527
12-Dec-2023
09:43
linh
pham



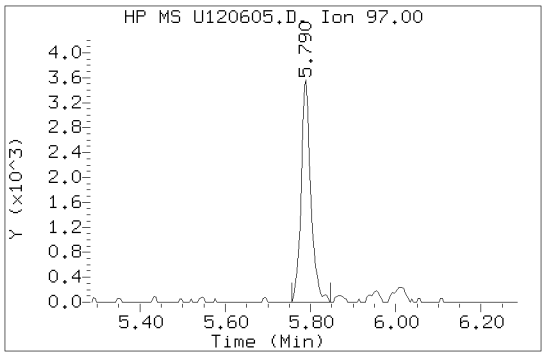
BEFORE

MASS
97
AREA
5731
HEIGHT
3565
11-Dec-2023
17:18
linh
pham



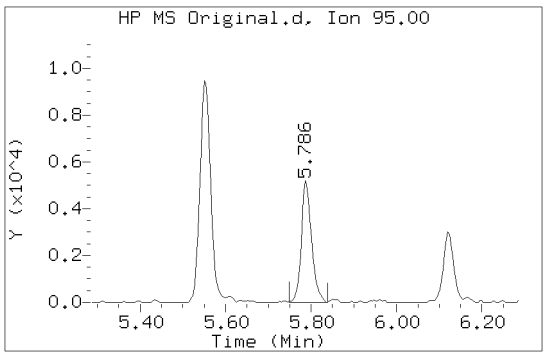
AFTER

MASS
97
AREA
5731
HEIGHT
3565
12-Dec-2023
09:43
linh
pham



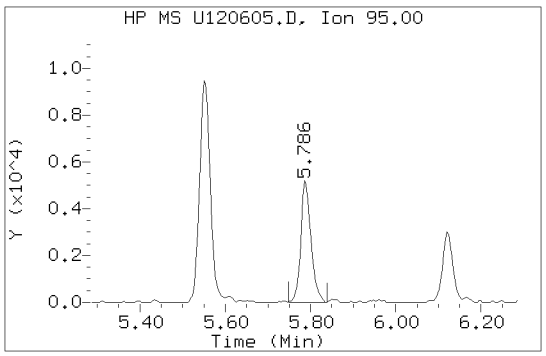
BEFORE

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

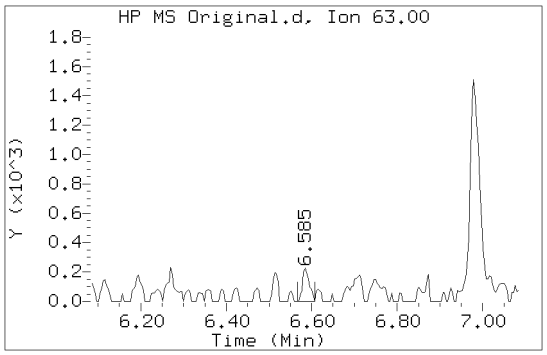


2-Chloroethylvinyl ether (110-75-8)

Reason Code:

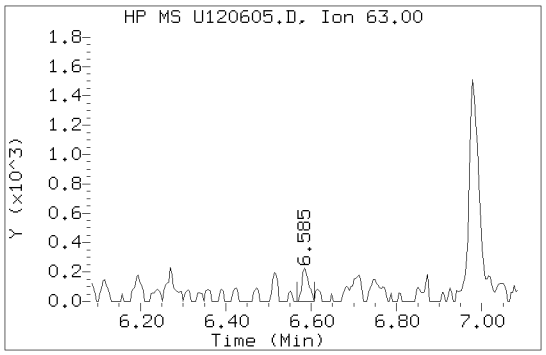
BEFORE

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



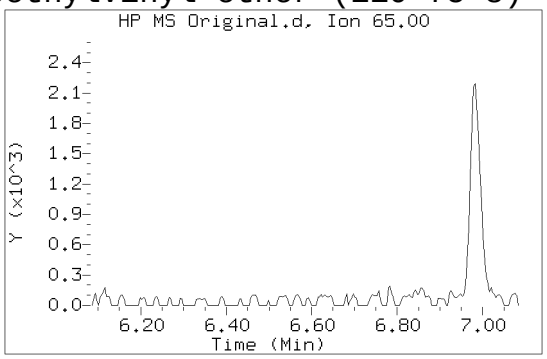
Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120605.D
Inj Date : 06-DEC-2023 13:05
InstruID : VOA9.i
LabSampID : VSTD002

2-Chloroethylvinyl ether (110-75-8)

Reason Code:

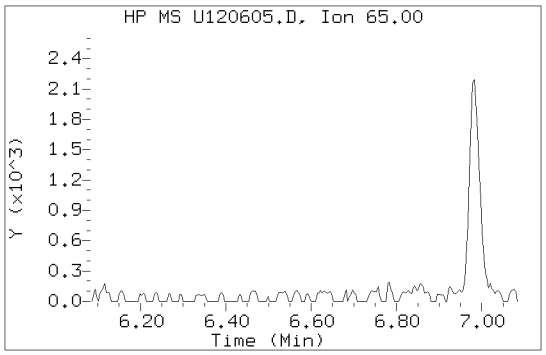
BEFORE

MASS
65
AREA
0
HEIGHT
0
11-Dec-2023
17:18
linh
pham



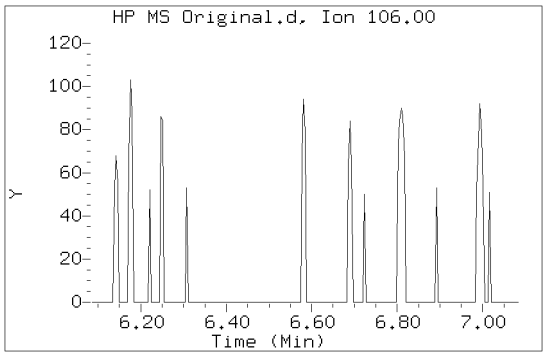
AFTER

MASS
65
AREA
0
HEIGHT
0
12-Dec-2023
09:43
linh
pham



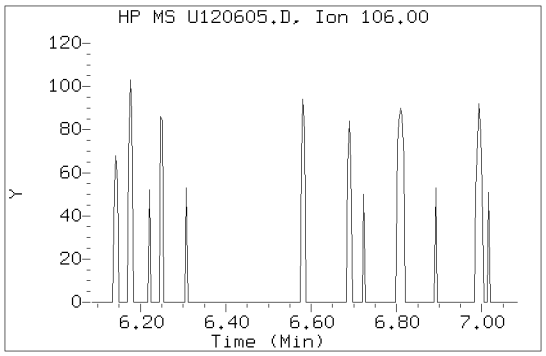
BEFORE

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

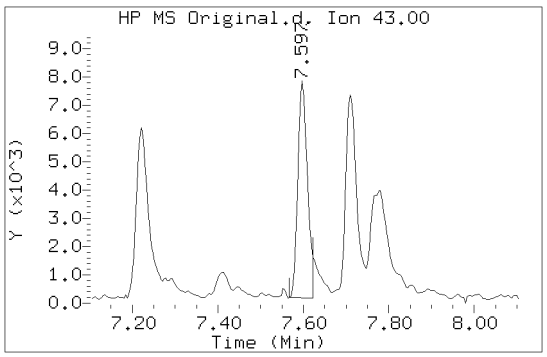


2-Hexanone (591-78-6)

Reason Code:

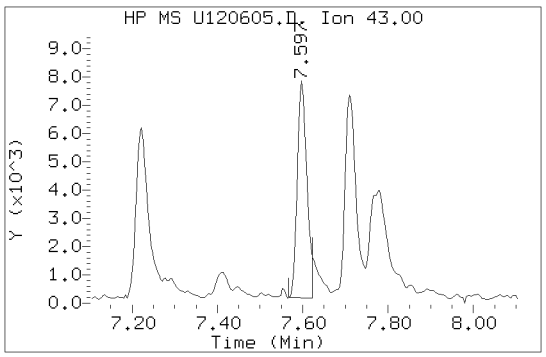
BEFORE

MASS
43
AREA
12214
HEIGHT
7667
11-Dec-2023
17:18
linh
pham



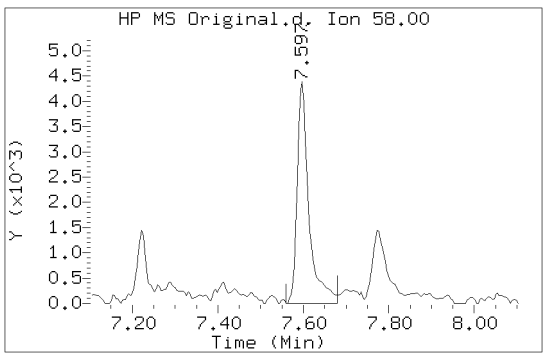
AFTER

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
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AREA
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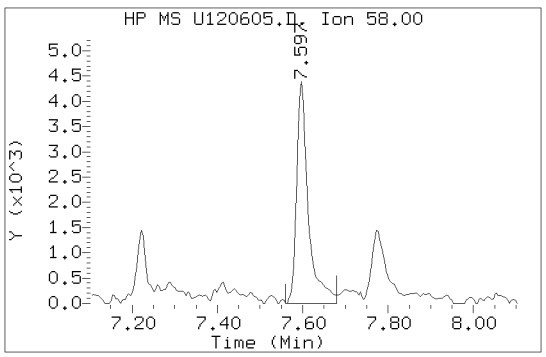
HEIGHT
4388
12-Dec-2023
09:43
linh
pham



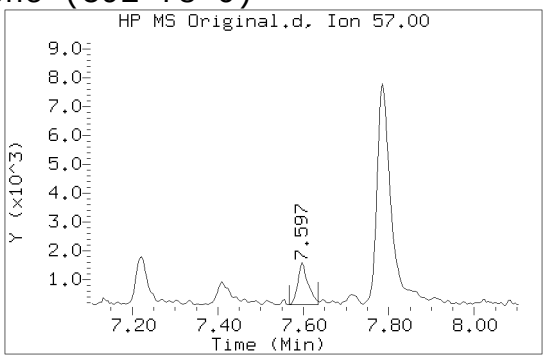
Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120605.D
Inj Date : 06-DEC-2023 13:05
InstruID : VOA9.i
LabSampID : VSTD002

2-Hexanone (591-78-6)

Reason Code:

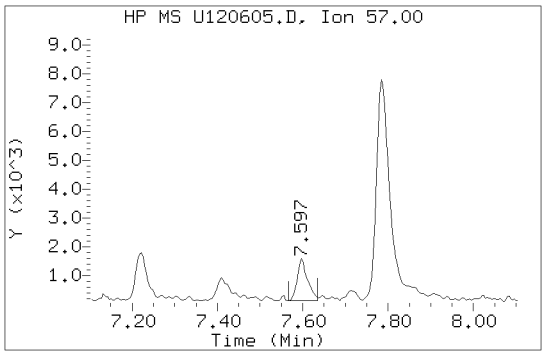
BEFORE

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

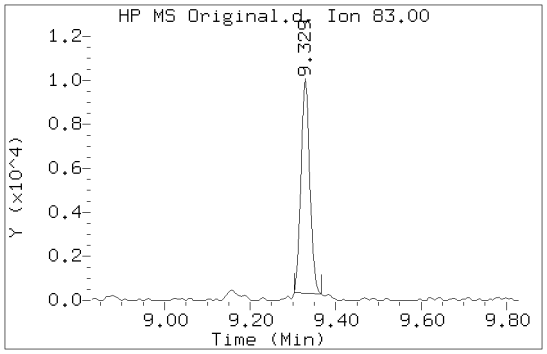


1,1,2,2-Tetrachloroethane (79-34-5)

Reason Code:

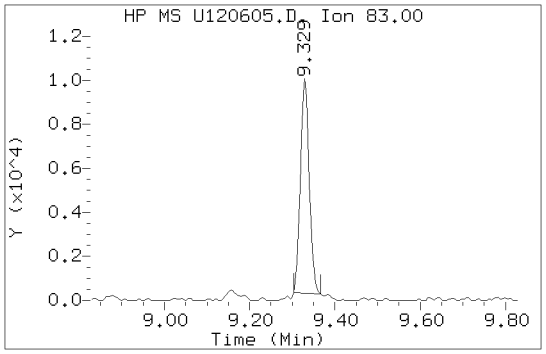
BEFORE

MASS
83
AREA
14293
HEIGHT
9756
11-Dec-2023
17:18
linh
pham



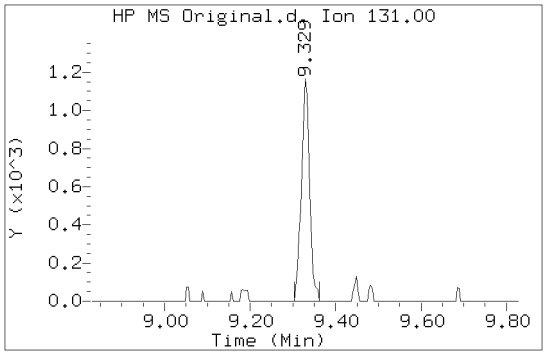
AFTER

MASS
83
AREA
14293
HEIGHT
9756
12-Dec-2023
09:43
linh
pham



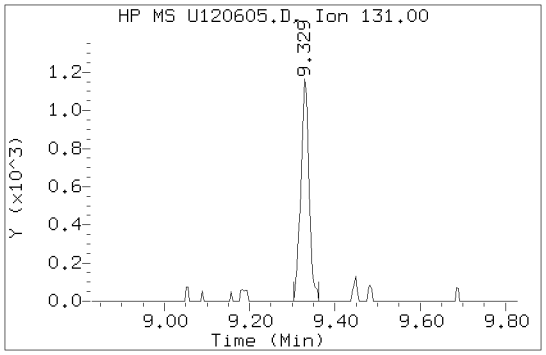
BEFORE

MASS
131
AREA
1599
HEIGHT
1165
11-Dec-2023
17:18
linh
pham



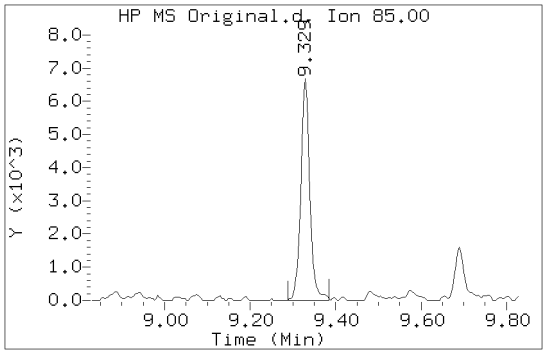
AFTER

MASS
131
AREA
1599
HEIGHT
1165
12-Dec-2023
09:43
linh
pham



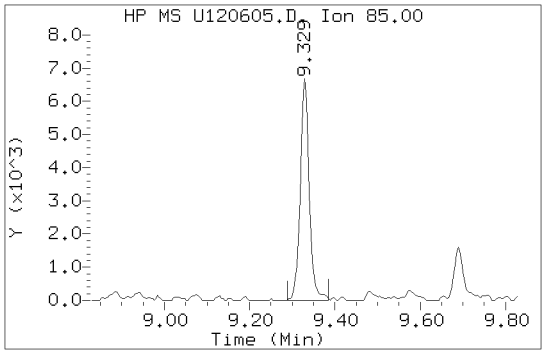
BEFORE

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



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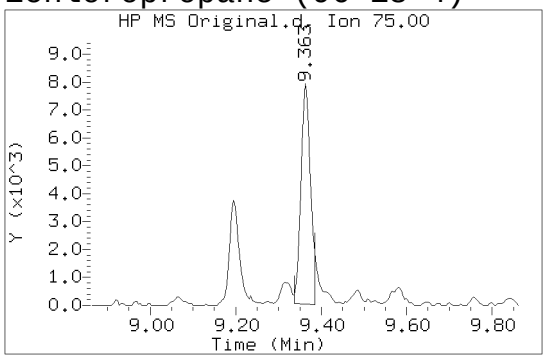
Inj Date : 06-DEC-2023 13:05
InstruID : VOA9.i
LabSampID : VSTD002

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

Reason Code:

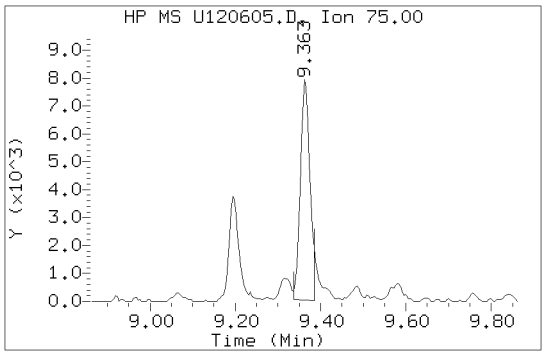
BEFORE

MASS
75
AREA
12628
HEIGHT
7893
11-Dec-2023
17:18
linh
pham



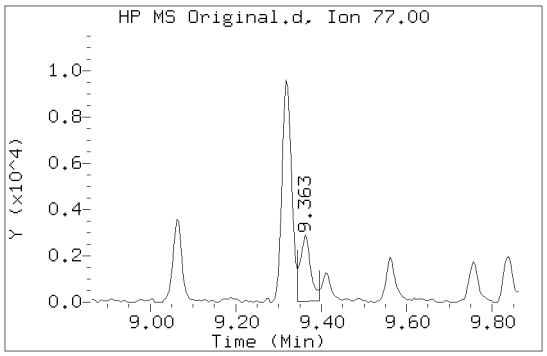
AFTER

MASS
75
AREA
12628
HEIGHT
7893
12-Dec-2023
09:43
linh
pham



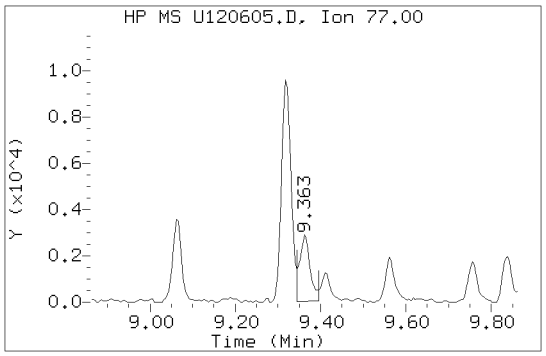
BEFORE

MASS
77
AREA
5160
HEIGHT
2862
11-Dec-2023
17:18
linh
pham



AFTER

MASS
77
AREA
5160
HEIGHT
2862
12-Dec-2023
09:43
linh
pham

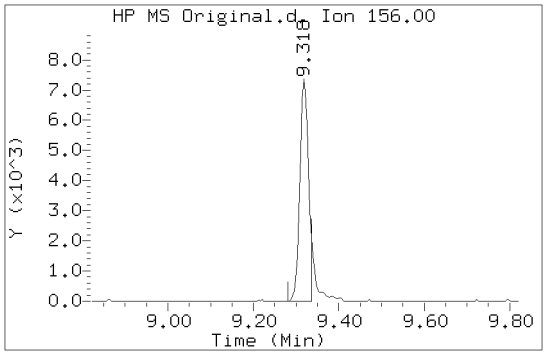


Bromobenzene (108-86-1)

Reason Code:

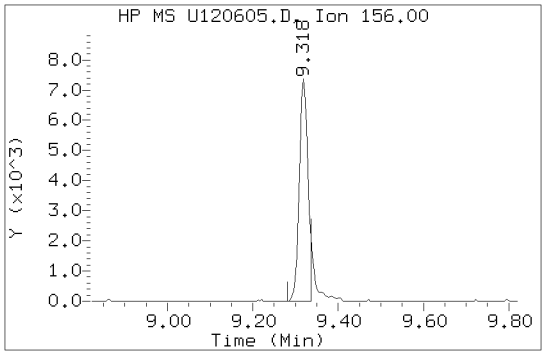
BEFORE

MASS
156
AREA
10570
HEIGHT
7371
11-Dec-2023
17:18
linh
pham



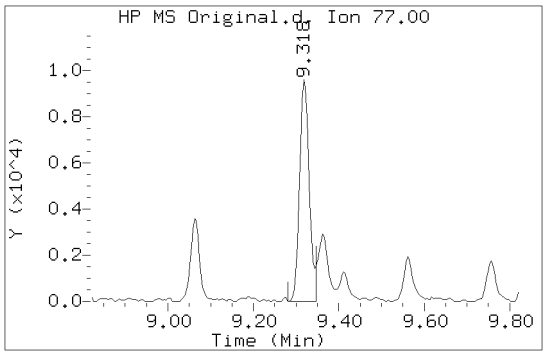
AFTER

MASS
156
AREA
10570
HEIGHT
7371
12-Dec-2023
09:43
linh
pham



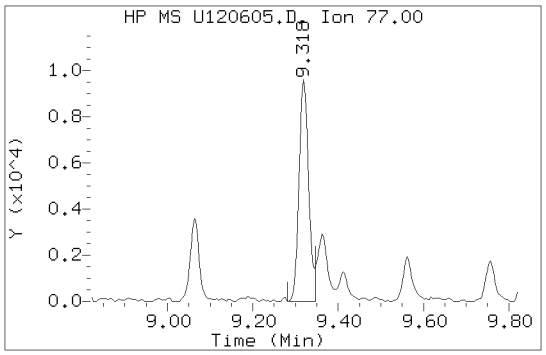
BEFORE

MASS
77
AREA
15530
HEIGHT
9603
11-Dec-2023
17:18
linh
pham



AFTER

MASS
77
AREA
15530
HEIGHT
9603
12-Dec-2023
09:43
linh
pham



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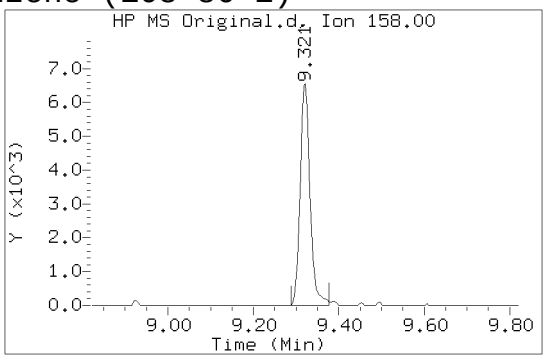
Inj Date : 06-DEC-2023 13:05
InstruID : VOA9.i
LabSampID : VSTD002

Bromobenzene (108-86-1)

Reason Code:

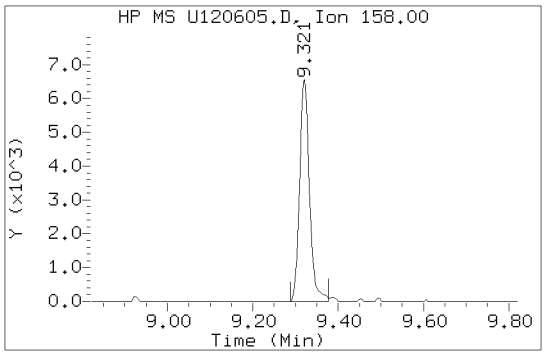
BEFORE

MASS
158
AREA
10716
HEIGHT
6555
11-Dec-2023
17:18
linh
pham



AFTER

MASS
158
AREA
10716
HEIGHT
6555
12-Dec-2023
09:43
linh
pham

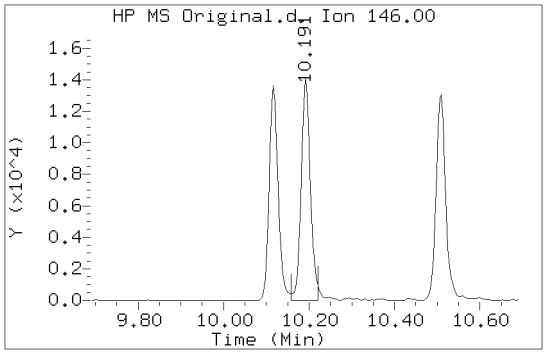


1,4-Dichlorobenzene (106-46-7)

Reason Code:

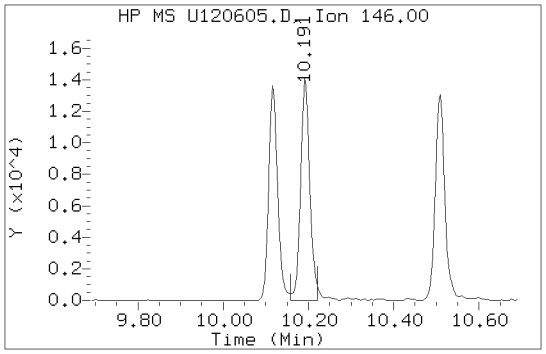
BEFORE

MASS
146
AREA
21680
HEIGHT
14068
11-Dec-2023
17:18
linh
pham



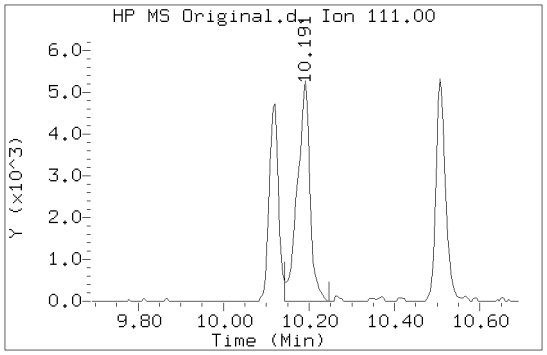
AFTER

MASS
146
AREA
21680
HEIGHT
14068
12-Dec-2023
09:43
linh
pham



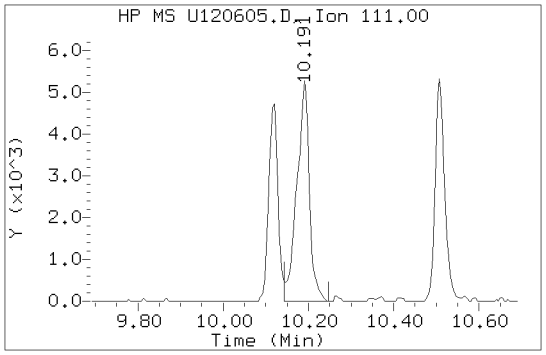
BEFORE

MASS
111
AREA
11017
HEIGHT
5266
11-Dec-2023
17:18
linh
pham



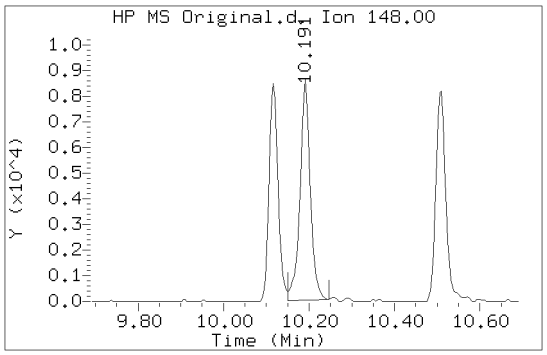
AFTER

MASS
111
AREA
11017
HEIGHT
5266
12-Dec-2023
09:43
linh
pham



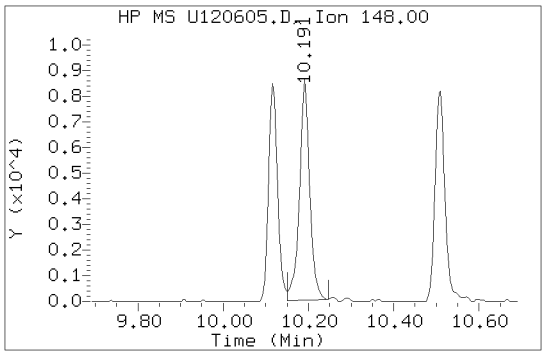
BEFORE

MASS
148
AREA
14680
HEIGHT
8595
11-Dec-2023
17:18
linh
pham



AFTER

MASS
148
AREA
14680
HEIGHT
8595
12-Dec-2023
09:43
linh
pham

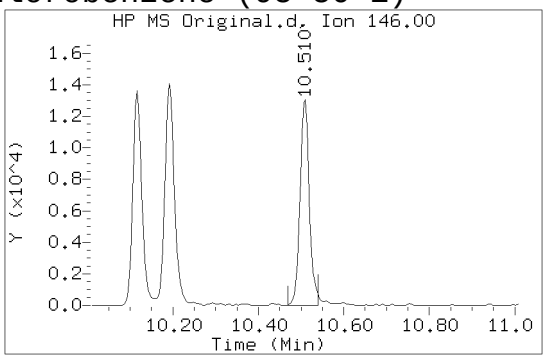


Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120605.D
Inj Date : 06-DEC-2023 13:05
InstruID : VOA9.i
LabSampID : VSTD002

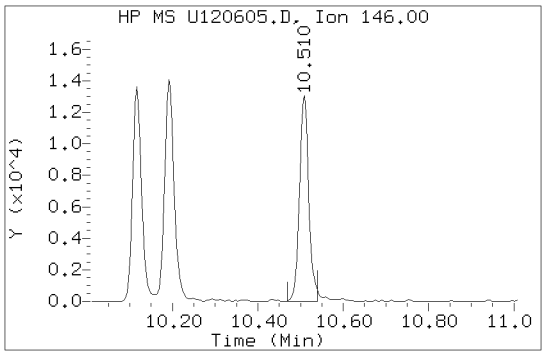
1,2-Dichlorobenzene (95-50-1)

Reason Code:

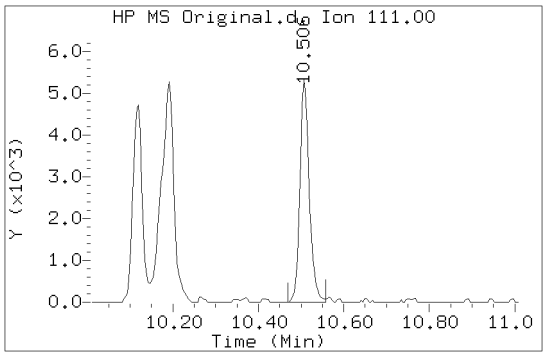
BEFORE
MASS
146
AREA
20103
HEIGHT
13043
11-Dec-2023
17:18
linh
pham



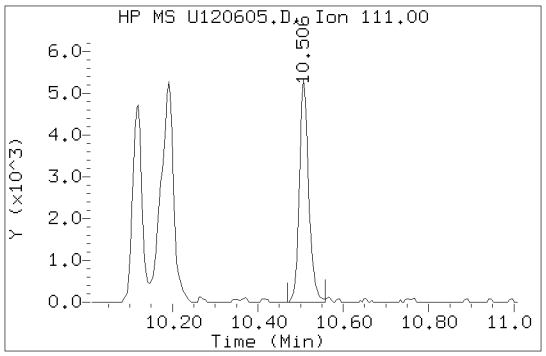
AFTER
MASS
146
AREA
20103
HEIGHT
13043
12-Dec-2023
09:43
linh
pham



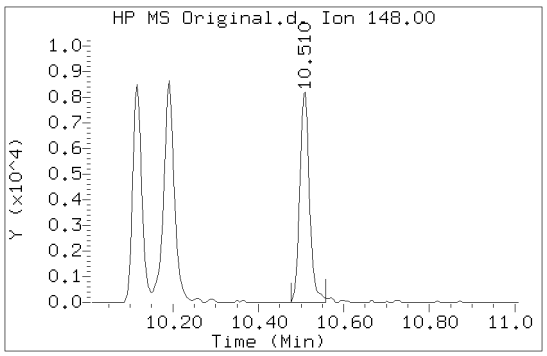
BEFORE
MASS
111
AREA
8235
HEIGHT
5315
11-Dec-2023
17:18
linh
pham



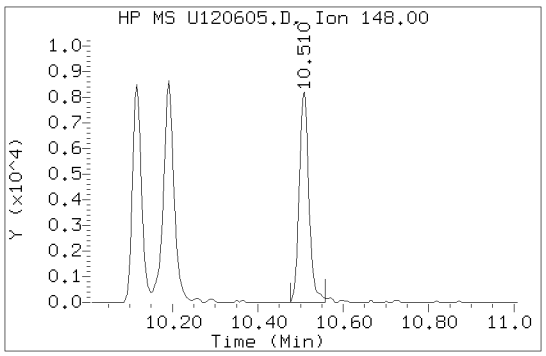
AFTER
MASS
111
AREA
8235
HEIGHT
5315
12-Dec-2023
09:43
linh
pham



BEFORE
MASS
148
AREA
13168
HEIGHT
8208
11-Dec-2023
17:18
linh
pham



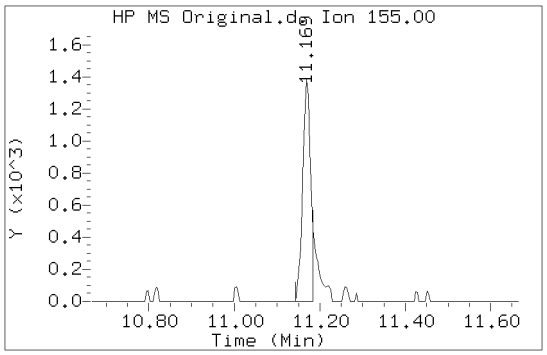
AFTER
MASS
148
AREA
13168
HEIGHT
8208
12-Dec-2023
09:43
linh
pham



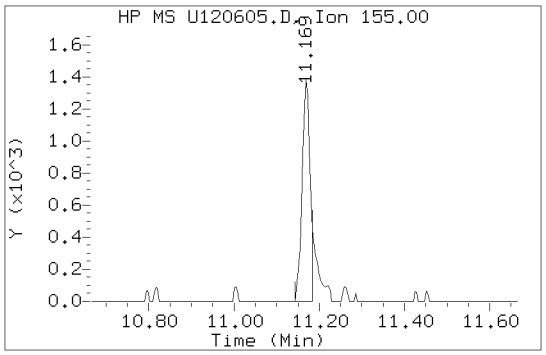
1,2-Dibromo-3-Chloropropane (96-12-8)

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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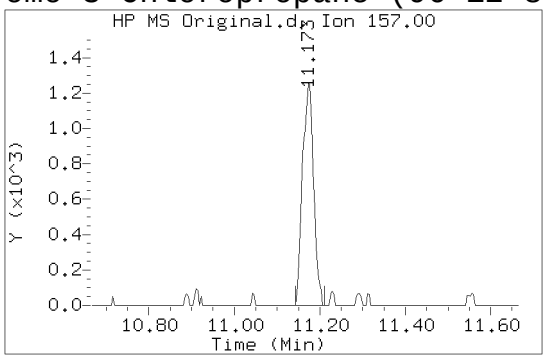
Inj Date : 06-DEC-2023 13:05
InstruID : VOA9.i
LabSampID : VSTD002

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

Reason Code:

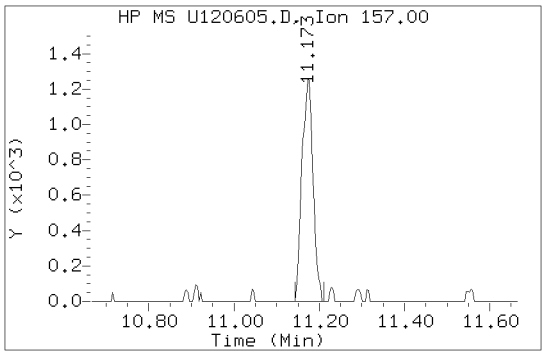
BEFORE

MASS
157
AREA
2298
HEIGHT
1253
11-Dec-2023
17:18
linh
pham



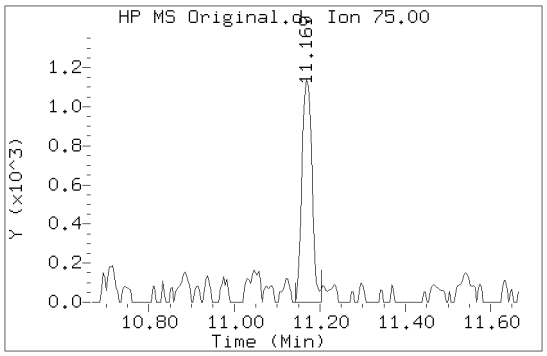
AFTER

MASS
157
AREA
2298
HEIGHT
1253
12-Dec-2023
09:43
linh
pham



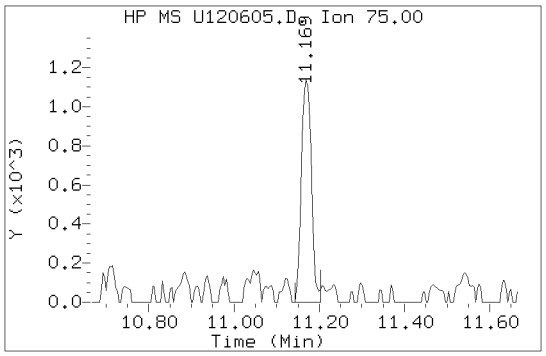
BEFORE

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

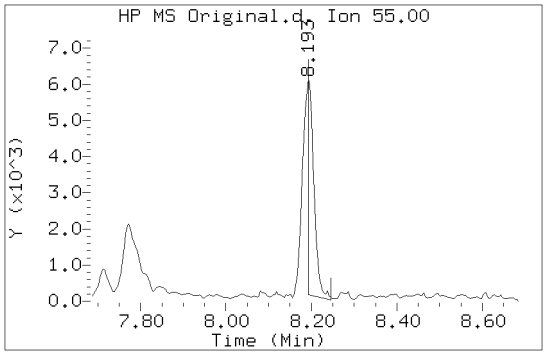


1-Chlorohexane (544-10-5)

Reason Code:

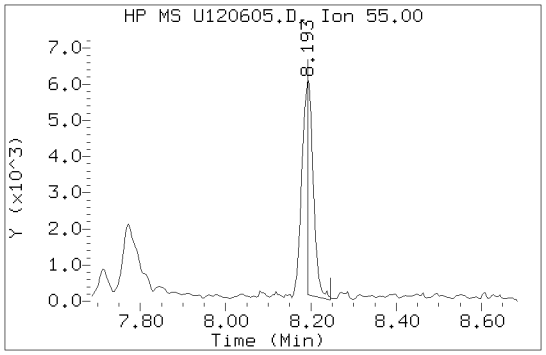
BEFORE

MASS
55
AREA
6133
HEIGHT
5975
11-Dec-2023
17:18
linh
pham



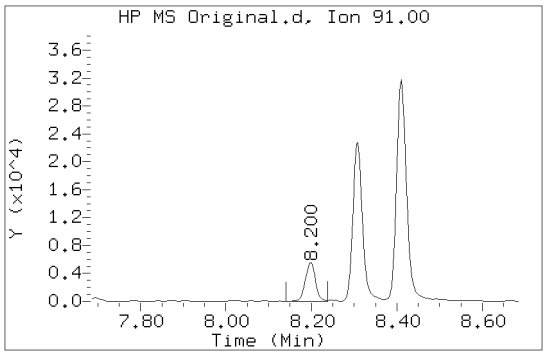
AFTER

MASS
55
AREA
6133
HEIGHT
5975
12-Dec-2023
09:43
linh
pham



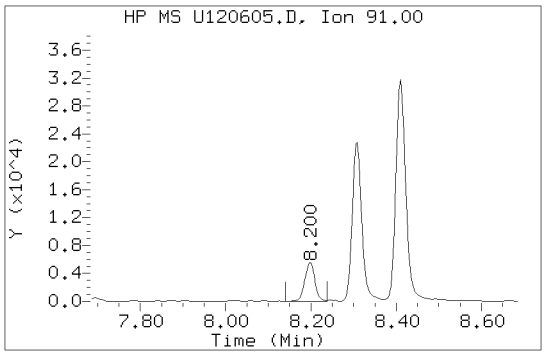
BEFORE

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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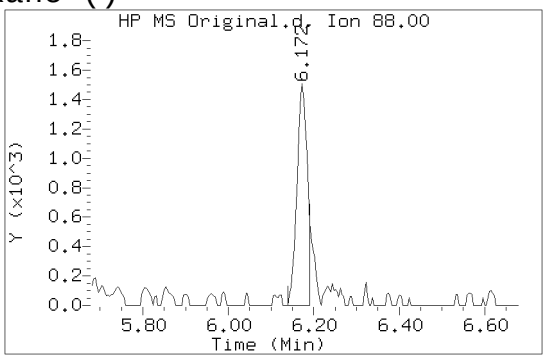
Inj Date : 06-DEC-2023 13:05
InstruID : VOA9.i
LabSampID : VSTD002

1,4-Dioxane ()

Reason Code:

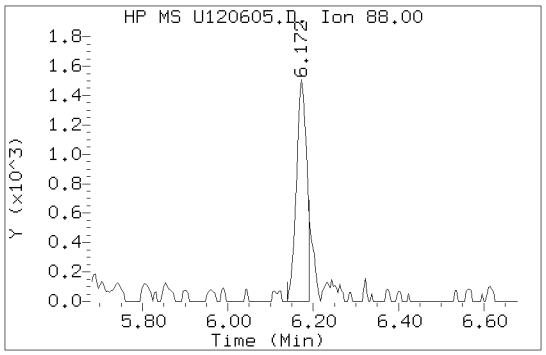
BEFORE

MASS
88
AREA
2559
HEIGHT
1508
11-Dec-2023
17:18
linh
pham



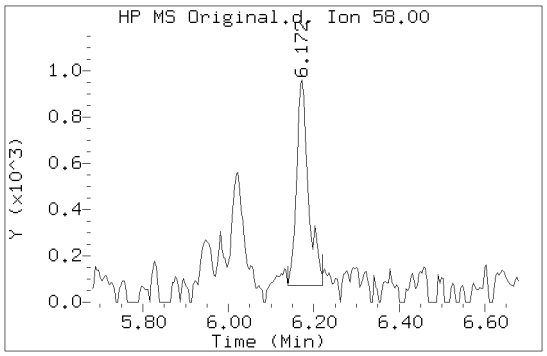
AFTER

MASS
88
AREA
2559
HEIGHT
1508
12-Dec-2023
09:43
linh
pham



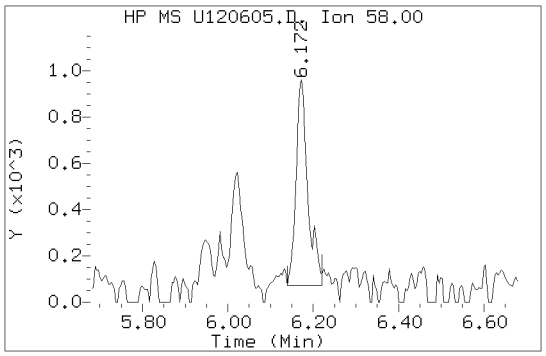
BEFORE

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

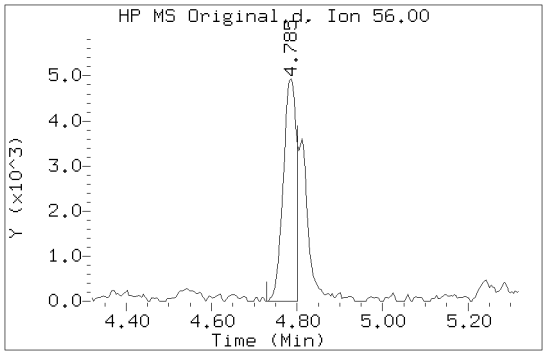


Cyclohexane (110-82-7)

Reason Code:

BEFORE

MASS
56
AREA
10415
HEIGHT
4933
11-Dec-2023
17:18
linh
pham



AFTER

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AREA
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12-Dec-2023
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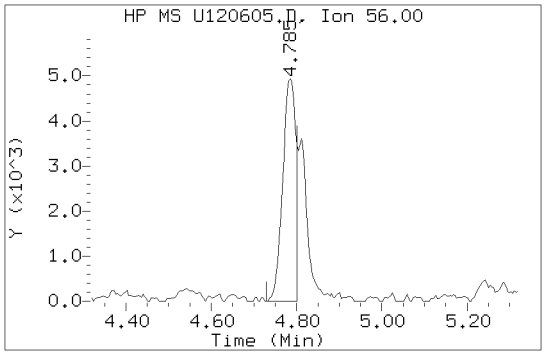

BEFORE

MASS
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HEIGHT
4977
11-Dec-2023
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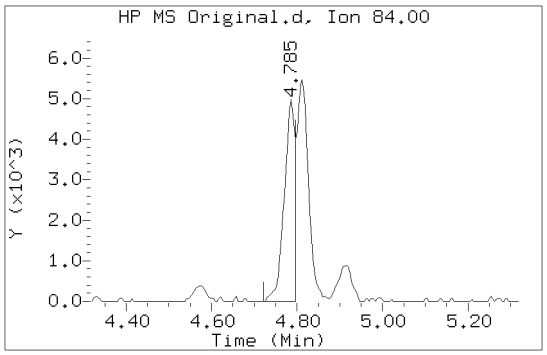

AFTER

MASS
84
AREA
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HEIGHT
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12-Dec-2023
09:43
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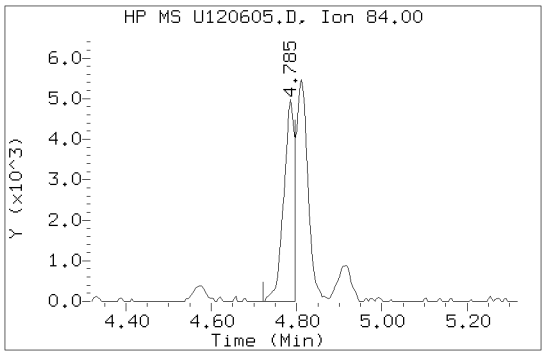

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Inj Date : 06-DEC-2023 13:05
InstruID : VOA9.i
LabSampID : VSTD002

Cyclohexane (110-82-7)

BEFORE

MASS
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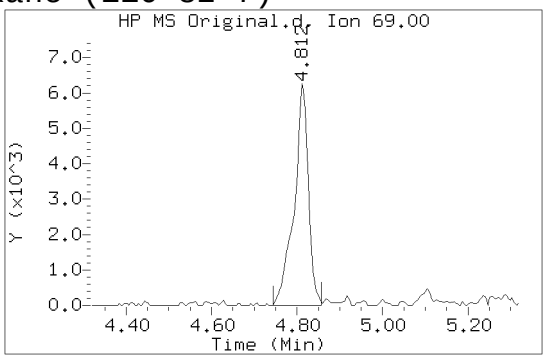
14726
HEIGHT
6260
11-Dec-2023
17:18
linh
pham



Reason Code:

AFTER

MASS
69
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HEIGHT
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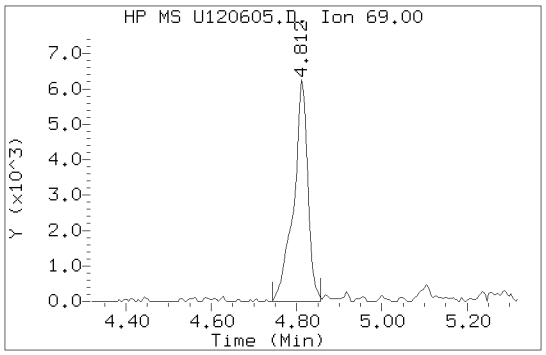
12-Dec-2023
09:43
linh
pham



Freon TF (76-13-1)

BEFORE

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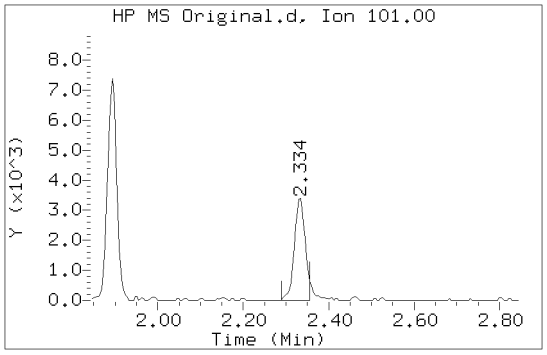
AREA
6155
HEIGHT
3393
11-Dec-2023
17:18
linh
pham



Reason Code:

AFTER

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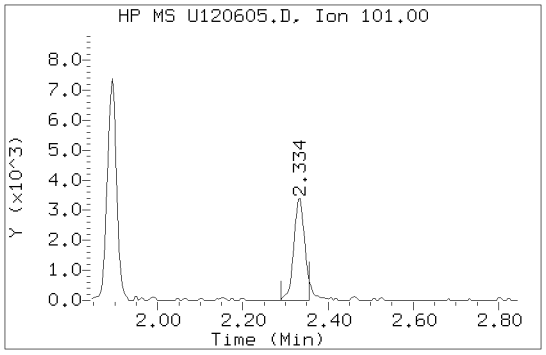
09:43
linh
pham



BEFORE

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151
AREA
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3131
11-Dec-2023
17:18
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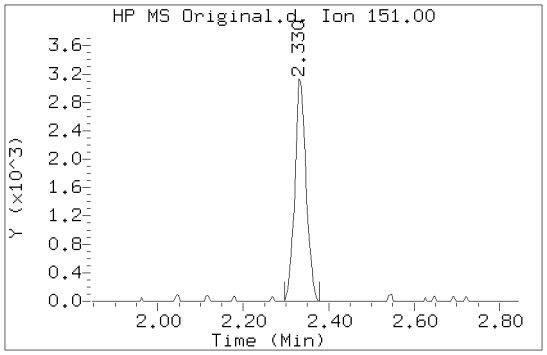

AFTER

MASS
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AREA
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12-Dec-2023
09:43
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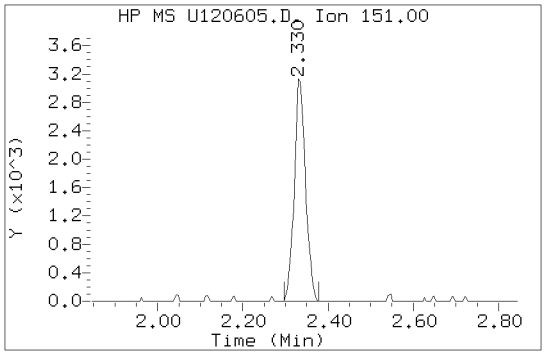
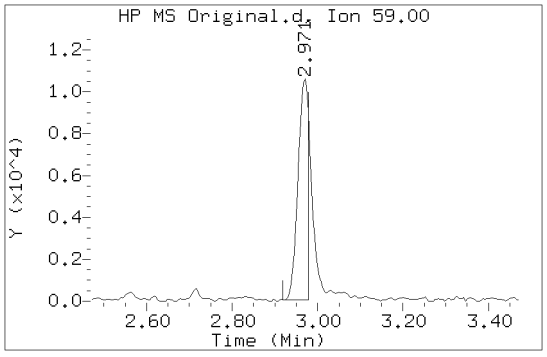


Tert-Butyl alcohol (75-65-0)

BEFORE

MASS
59
AREA
17716
HEIGHT
10555
11-Dec-2023
17:18
linh
pham



Reason Code:

AFTER

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59
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17716
HEIGHT
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12-Dec-2023
09:43
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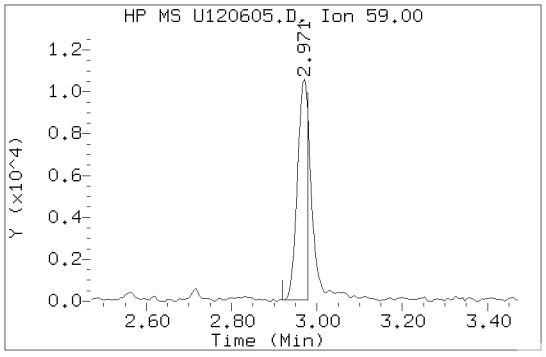
pham



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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
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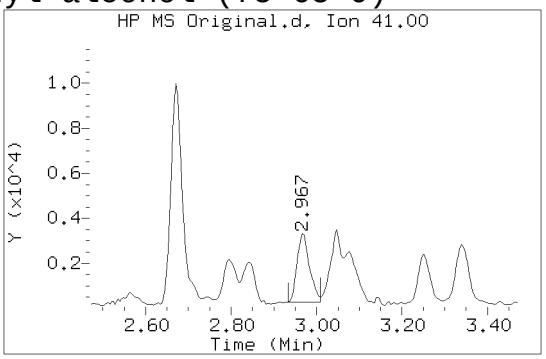
HEIGHT
3044
11-Dec-2023
17:18
linh
pham



AFTER

MASS
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3044
12-Dec-2023
09:43
linh
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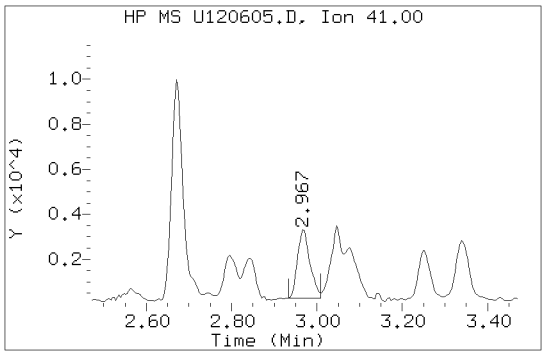

Isopropyl Alcohol (67-63-0)

Reason Code:

BEFORE

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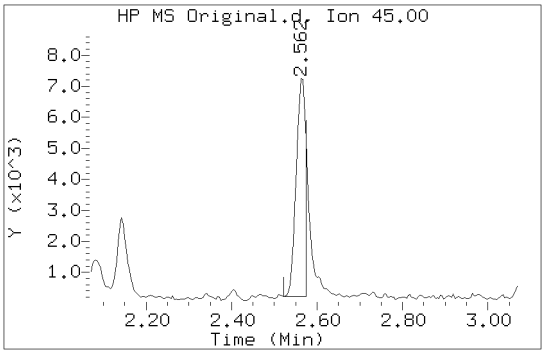
45
AREA
10615
HEIGHT
7018
11-Dec-2023
17:18
linh
pham



AFTER

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12-Dec-2023
09:43
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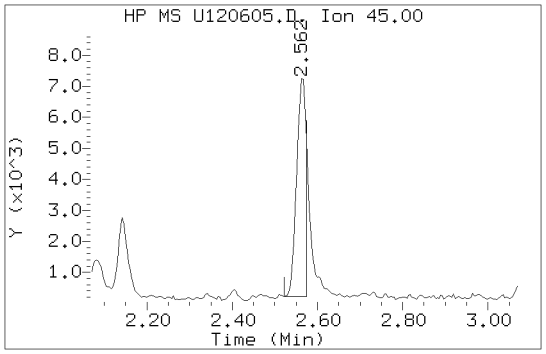
pham



BEFORE

MASS
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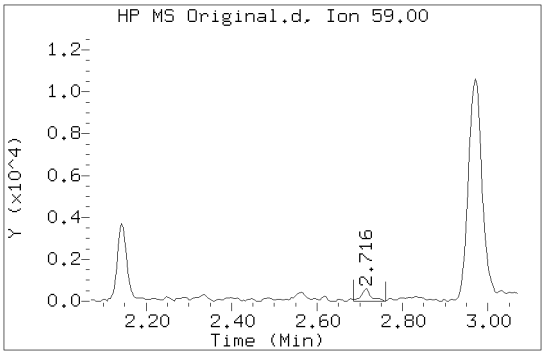
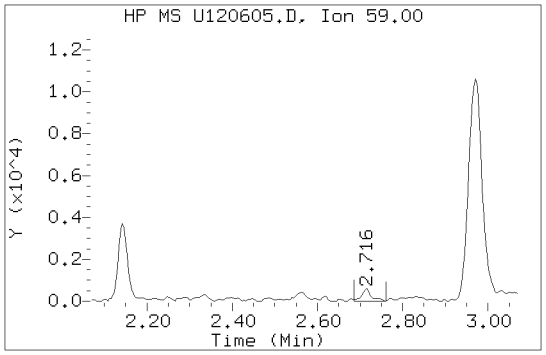
AREA
946
HEIGHT
599
11-Dec-2023
17:18
linh
pham



AFTER

MASS
59
AREA
946
HEIGHT
599
12-Dec-2023
09:43
linh
pham



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

Reason Code:

BEFORE

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17:18
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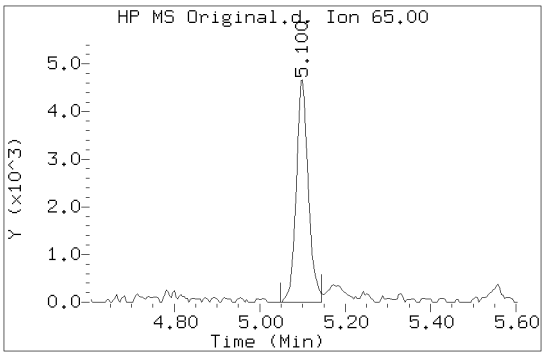
pham



AFTER

MASS
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AREA
9346
HEIGHT
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12-Dec-2023
09:43
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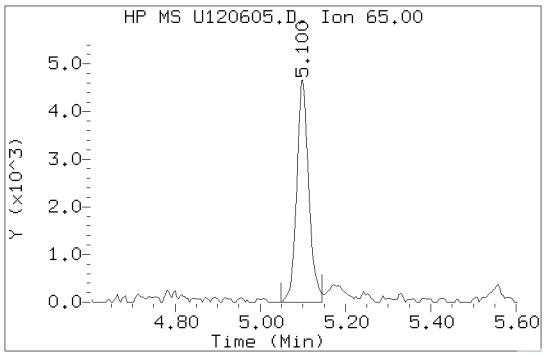

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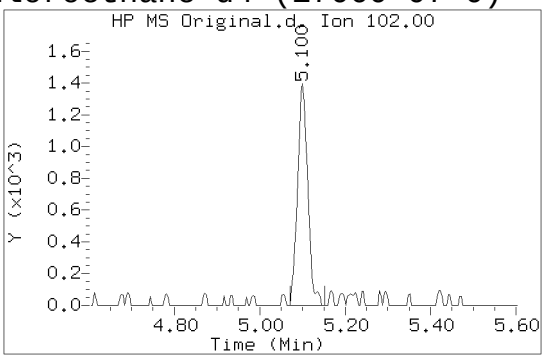
Inj Date : 06-DEC-2023 13:05
InstruID : VOA9.i
LabSampID : VSTD002

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

Reason Code:

BEFORE

MASS
102
AREA
2382
HEIGHT
1396
11-Dec-2023
17:18
linh
pham



AFTER

MASS
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2382
HEIGHT
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12-Dec-2023
09:43
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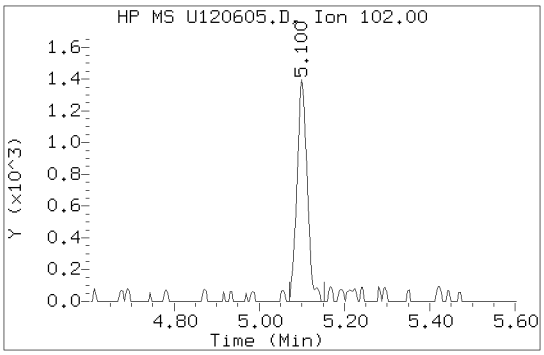


Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120606.D Page 1
Report Date: 12-Dec-2023 09:43

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

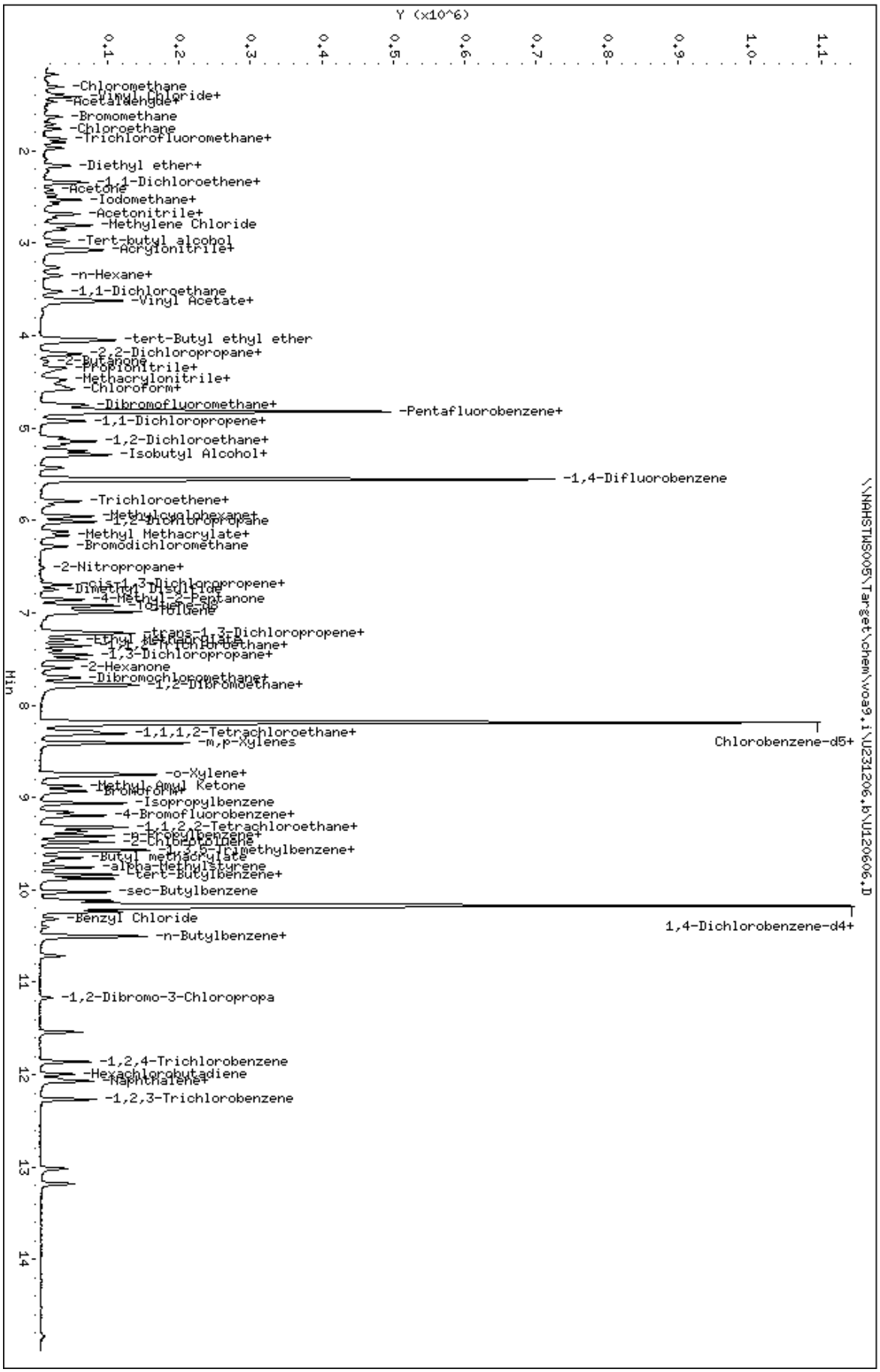
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	29 Bromochloromethane	128	4.478	4.478	(0.929)	10835	5.00000	4.83
$	30 Dibromofluoromethane	113	4.755	4.755	(0.987)	19773	5.00000	4.58
	31 1,1,1-Trichloroethane	97	4.748	4.748	(0.985)	22357	5.00000	4.09
	32 1,1-Dichloropropene	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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	91 Hexachlorobutadiene	225	11.998	11.998	(1.179)	9215	5.00000	4.09
	92 Naphthalene	128	12.069	12.069	(1.186)	59899	5.00000	4.41
	93 1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	25542	5.00000	4.50
M	94 1,2-Dichloroethylene (total)	96				32657	10.0000	
M	95 Xylenes (total)	106				85023	15.0000	
	131 Methyl Acrylate	55	4.380	4.380	(0.909)	21324	5.00000	4.62(a)
	135 1,4-Dioxane	88	6.172	6.172	(1.281)	5590	100.000	100.37
	141 Cyclohexane	56	4.789	4.789	(0.994)	21511	5.00000	4.25(M)
	138 Freon TF	101	2.345	2.345	(0.487)	11826	5.00000	4.68
	140 1,3-Butadiene	54	1.411	1.411	(0.293)	14067	5.00000	3.99
	147 Methylcyclohexane	55	5.951	5.951	(1.071)	37654	5.00000	4.46
	146 Methyl Acetate	43	2.723	2.723	(0.565)	17182	5.00000	4.91
	148 Tert-Butyl alcohol	59	2.978	2.978	(0.618)	42933	100.000	109.25
	149 Isopropyl Alcohol	45	2.573	2.573	(0.534)	26635	100.000	113.30(T)

QC Flag Legend

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



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Client ID: VSTD005
Sample Info: VSTD005;VSTD005;1;5;
Purge Volume: 5.0
Column phase: DB624

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

Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120606.D
Inj Date : 06-DEC-2023 13:27
InstruID : VOA9.i
LabSampID : VSTD005

Acrolein (107-02-8)

Reason Code:

BEFORE

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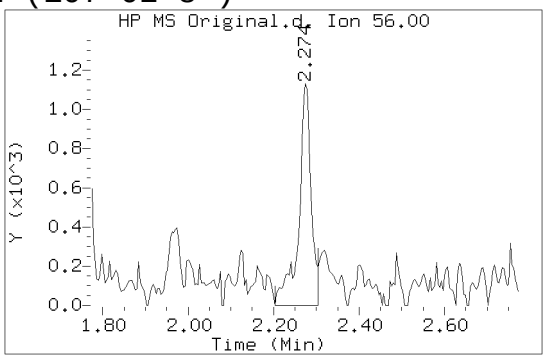
2313
HEIGHT
1131
11-Dec-2023
17:18
linh
pham



AFTER

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AREA
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HEIGHT
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12-Dec-2023
09:43
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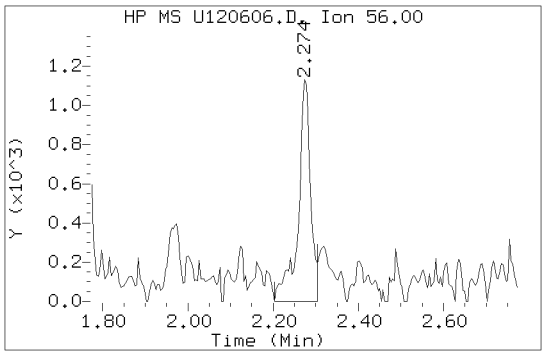

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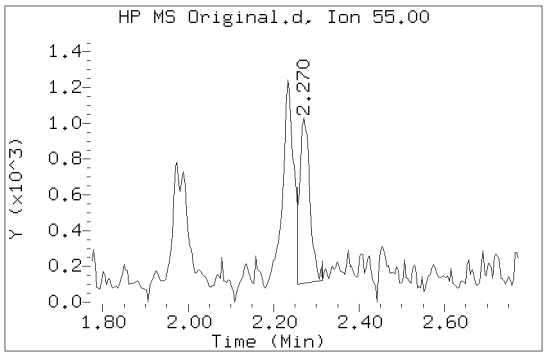

AFTER

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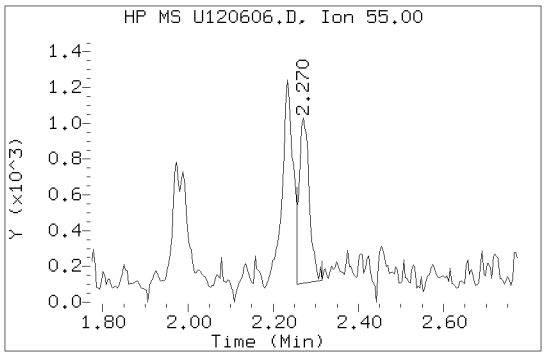

2-Chloroethylvinyl ether (110-75-8)

Reason Code:

BEFORE

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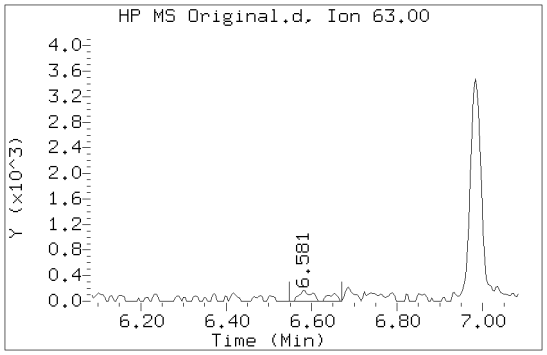

AFTER

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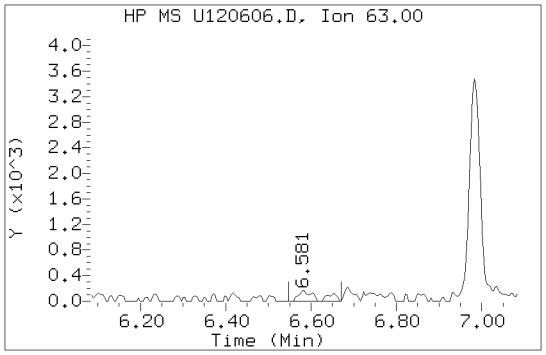

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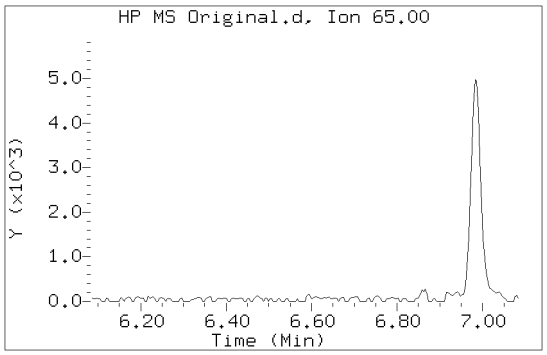

AFTER

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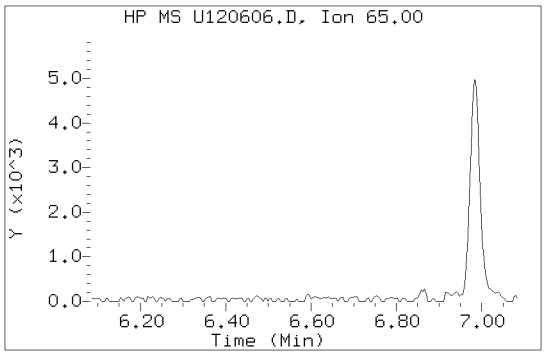

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Inj Date : 06-DEC-2023 13:27
InstruID : VOA9.i
LabSampID : VSTD005

2-Chloroethylvinyl ether (110-75-8)

BEFORE

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HEIGHT
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11-Dec-2023
17:18
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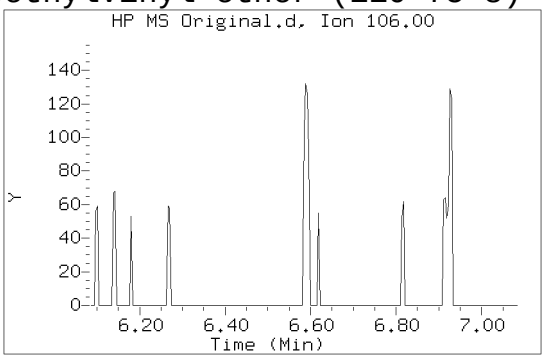
pham



AFTER

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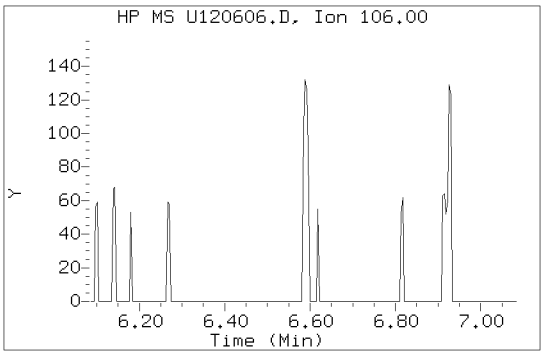
Reason Code:



Cyclohexane (110-82-7)

BEFORE

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11-Dec-2023
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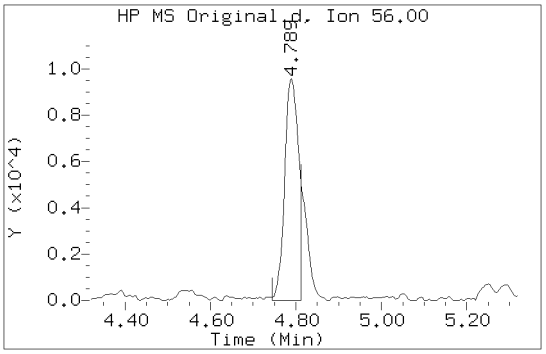
pham



AFTER

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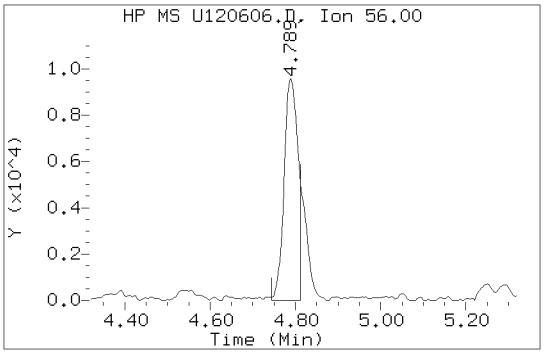
Reason Code:



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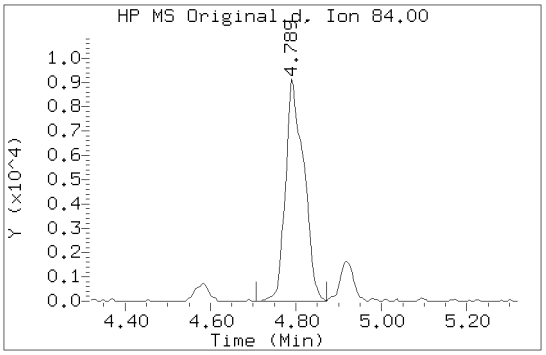

AFTER

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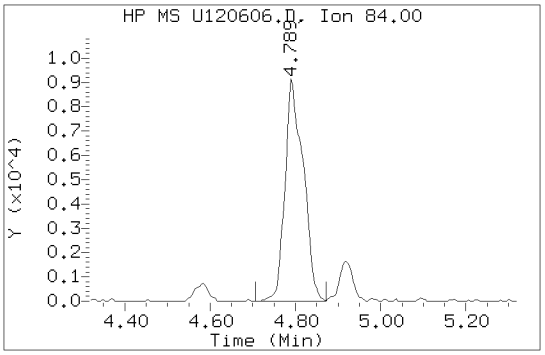

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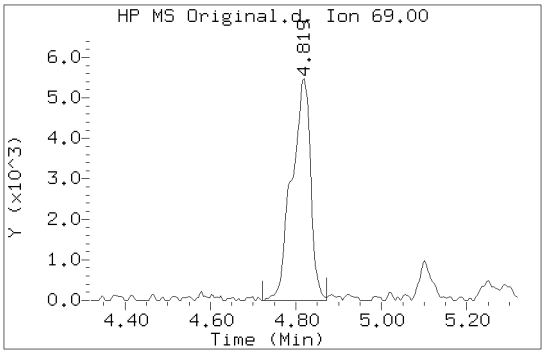

AFTER

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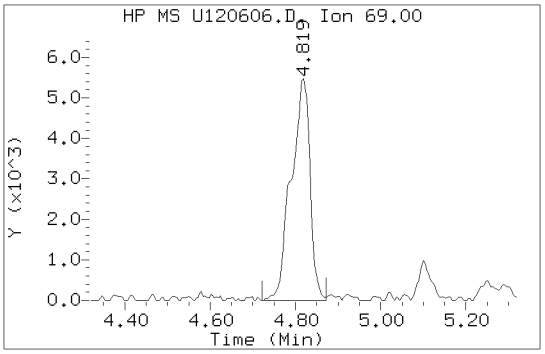

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Inj Date : 06-DEC-2023 13:27
InstruID : VOA9.i
LabSampID : VSTD005

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

Reason Code:

BEFORE

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11-Dec-2023
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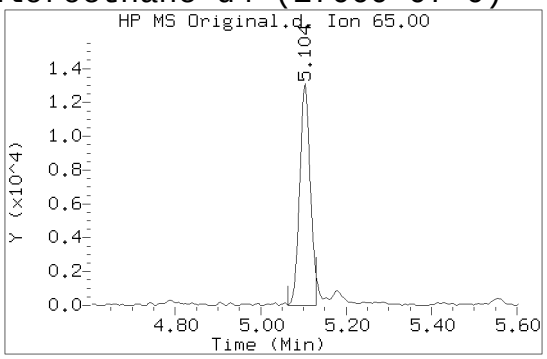

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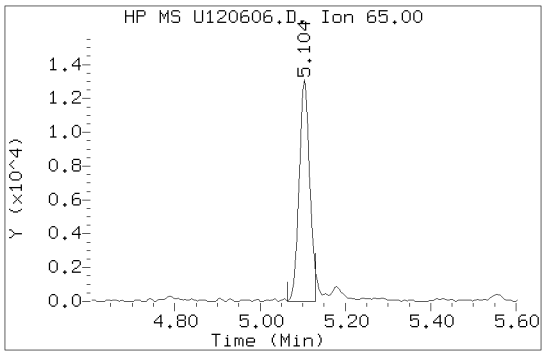

BEFORE

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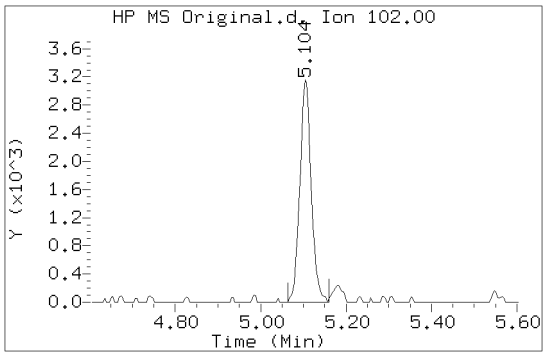

AFTER

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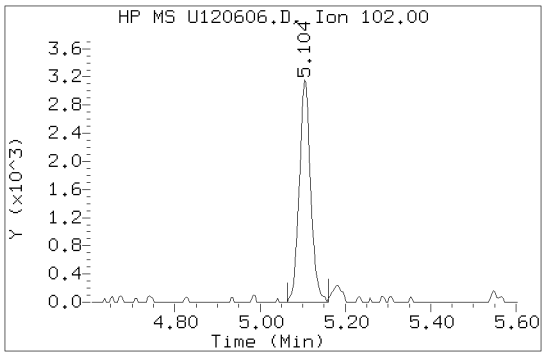


Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120607.D Page 1
Report Date: 12-Dec-2023 09:43

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120607.D
Lab Smp Id: VSTD020 Client Smp ID: VSTD020
Inj Date : 06-DEC-2023 13:49
Operator : PC Inst ID: VOA9.i
Smp Info : VSTD020;VSTD020;1;6;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\8260C.m
Meth Date : 12-Dec-2023 09:43 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 13:27 Cal File: U120606.D
Als bottle: 8 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V9.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1	Pentafluorobenzene	168	4.819	4.819	(1.000)	369517	50.0000	
2	Dichlorodifluoromethane	85	1.168	1.168	(0.242)	61984	20.0000	21.31
3	Chloromethane	50	1.303	1.303	(0.270)	81421	20.0000	19.20
5	Vinyl Chloride	62	1.378	1.378	(0.286)	78958	20.0000	19.49
6	Bromomethane	94	1.625	1.625	(0.337)	41799	20.0000	20.28
7	Chloroethane	64	1.704	1.704	(0.354)	53915	20.0000	19.77
8	Trichlorofluoromethane	101	1.899	1.899	(0.394)	105233	20.0000	20.50
9	Acrolein	56	2.270	2.270	(0.471)	9018	40.0000	42.82(M)
10	Acetone	43	2.412	2.412	(0.501)	64015	40.0000	47.89
11	1,1-Dichloroethene	96	2.337	2.337	(0.485)	57533	20.0000	20.18
15	Iodomethane	142	2.472	2.472	(0.513)	127779	40.0000	38.07
16	Acrylonitrile	53	3.068	3.068	(0.637)	54831	40.0000	37.82
17	Methylene Chloride	84	2.798	2.798	(0.581)	72366	20.0000	19.96
18	Methyl tert-butyl ether	73	3.083	3.083	(0.640)	189818	20.0000	18.58
19	Carbon Disulfide	76	2.525	2.525	(0.524)	335164	40.0000	39.91
20	trans-1,2-Dichloroethene	96	3.061	3.061	(0.635)	65484	20.0000	19.22
21	Vinyl Acetate	43	3.612	3.612	(0.750)	400374	40.0000	38.86
22	1,1-Dichloroethane	63	3.514	3.514	(0.729)	141518	20.0000	20.36
24	2-Butanone	43	4.268	4.268	(0.886)	71654	40.0000	39.58
26	2,2-Dichloropropane	77	4.185	4.185	(0.869)	93951	20.0000	19.23

27 cis-1,2-Dichloroethene	96	4.200	4.200 (0.872)	89869	20.0000	19.69
28 Chloroform	83	4.575	4.575 (0.949)	147735	20.0000	19.53

Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120607.D Page 2
Report Date: 12-Dec-2023 09:43

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	29 Bromochloromethane	128	4.470	4.470	(0.928)	49140	20.0000	20.80
$	30 Dibromofluoromethane	113	4.752	4.752	(0.986)	78610	20.0000	20.18
	31 1,1,1-Trichloroethane	97	4.744	4.744	(0.984)	115867	20.0000	20.15
	32 1,1-Dichloropropene	75	4.924	4.924	(0.887)	100335	20.0000	20.68
	33 1,2-Dichloroethane	62	5.179	5.179	(0.933)	112838	20.0000	19.97
	34 Carbon Tetrachloride	117	4.913	4.913	(0.885)	96798	20.0000	20.42
$	35 1,2-Dichloroethane-d4	65	5.100	5.100	(1.058)	89394	20.0000	21.11(M)
*	36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	579849	50.0000	
	37 Benzene	78	5.141	5.141	(0.926)	315779	20.0000	20.00
	38 Trichloroethene	130	5.790	5.790	(1.043)	85810	20.0000	19.72
	39 Bromodichloromethane	83	6.281	6.281	(1.131)	101029	20.0000	19.54
	41 2-Chloroethylvinyl ether	63	6.585	6.585	(1.186)	2163	40.0000	43.74(M)
	42 1,2-Dichloropropane	63	6.011	6.011	(1.082)	83165	20.0000	19.56
	44 Dibromomethane	93	6.120	6.120	(1.102)	55037	20.0000	20.01
	45 4-Methyl-2-Pentanone	43	6.855	6.855	(0.837)	166511	40.0000	39.46
	46 cis-1,3-Dichloropropene	75	6.693	6.693	(1.205)	118570	20.0000	18.75
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	581885	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	283330	20.0000	21.15
	50 Toluene	91	6.982	6.982	(0.853)	343935	20.0000	21.19
	51 trans-1,3-Dichloropropene	75	7.199	7.199	(1.296)	97024	20.0000	18.46
	52 2-Hexanone	43	7.593	7.593	(0.928)	111036	40.0000	37.81
	53 1,1,2-Trichloroethane	83	7.357	7.357	(0.899)	66320	20.0000	20.60
	54 1,3-Dichloropropane	76	7.499	7.499	(0.916)	141645	20.0000	19.66
	55 Dibromochloromethane	129	7.691	7.691	(0.940)	84329	20.0000	19.48
	56 Tetrachloroethene	164	7.458	7.458	(0.911)	72888	20.0000	20.98
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	77975	20.0000	19.28
	58 1-Chlorohexane	55	8.197	8.197	(1.476)	68345	20.0000	21.01
	59 Chlorobenzene	112	8.208	8.208	(1.003)	228536	20.0000	19.33
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	79680	20.0000	19.27
	61 Ethylbenzene	106	8.305	8.305	(1.015)	111588	20.0000	20.16
	62 m,p-Xylenes	106	8.410	8.410	(1.027)	281574	40.0000	42.32
	63 o-Xylene	106	8.748	8.748	(1.069)	140260	20.0000	20.50
	64 Styrene	104	8.763	8.763	(1.071)	236657	20.0000	20.77
	66 Bromoform	173	8.920	8.920	(1.090)	53027	20.0000	18.59
	67 Isopropylbenzene	105	9.063	9.063	(1.107)	349789	20.0000	21.14
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	105283	20.0000	19.75
$	69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	106137	20.0000	20.17
*	70 1,4-Dichlorobenzene-d4	152	10.168	10.168	(1.000)	320589	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.921)	103797	20.0000	17.05
	73 n-Propylbenzene	91	9.411	9.411	(0.926)	394967	20.0000	20.98
	74 Bromobenzene	156	9.317	9.317	(0.916)	102438	20.0000	19.02
	75 1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	280571	20.0000	20.97
	76 2-Chlorotoluene	91	9.482	9.482	(0.933)	254146	20.0000	20.05
	77 4-Chlorotoluene	91	9.576	9.576	(0.942)	285359	20.0000	19.85
	78 tert-Butylbenzene	119	9.835	9.835	(0.967)	250022	20.0000	20.80
	79 1,2,4-Trimethylbenzene	105	9.880	9.880	(0.972)	276998	20.0000	20.65
	81 sec-Butylbenzene	105	10.022	10.022	(0.986)	322694	20.0000	20.82
	82 p-Isopropyltoluene	119	10.146	10.146	(0.998)	280155	20.0000	20.89
	83 1,3-Dichlorobenzene	146	10.116	10.116	(0.995)	176237	20.0000	18.47
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	185919	20.0000	18.39
	87 n-Butylbenzene	91	10.491	10.491	(1.032)	229910	20.0000	20.42
	88 1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	177221	20.0000	18.46

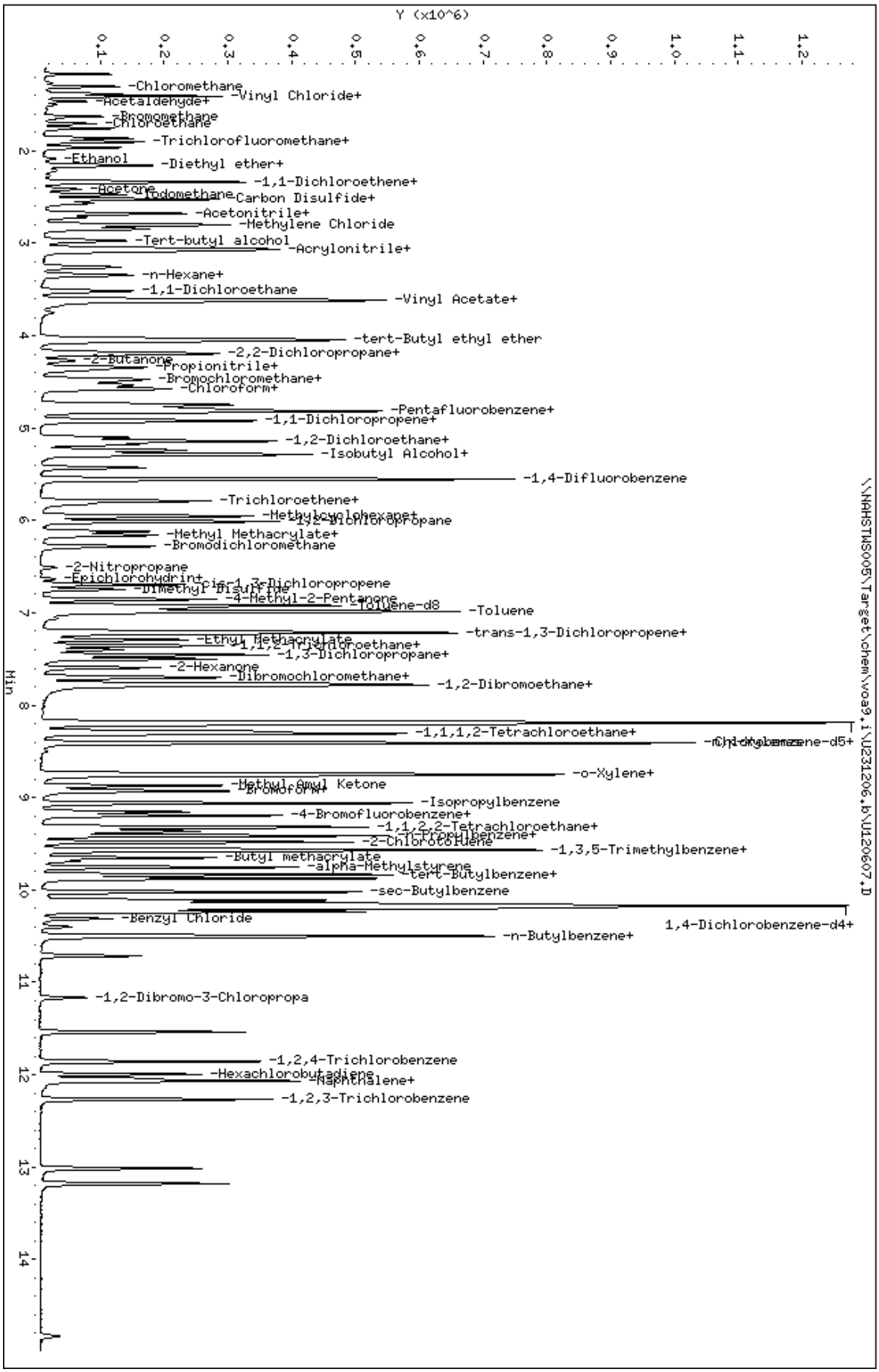
89	1,2-Dibromo-3-Chloropropane	155	11.166	11.166 (1.098)	16207	20.0000	18.66
90	1,2,4-Trichlorobenzene	180	11.855	11.855 (1.166)	110885	20.0000	18.72

Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120607.D Page 3
Report Date: 12-Dec-2023 09:43

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	91 Hexachlorobutadiene	225	11.998	11.998	(1.180)	47737	20.0000	20.11
	92 Naphthalene	128	12.065	12.065	(1.187)	280624	20.0000	19.65
	93 1,2,3-Trichlorobenzene	180	12.268	12.268	(1.206)	111868	20.0000	18.73
M	94 1,2-Dichloroethylene (total)	96				155353	40.0000	
M	95 Xylenes (total)	106				421834	60.0000	
	131 Methyl Acrylate	55	4.373	4.373	(0.907)	93419	20.0000	19.24
	135 1,4-Dioxane	88	6.169	6.169	(1.280)	20324	400.000	346.66
	141 Cyclohexane	56	4.785	4.785	(0.993)	116645	20.0000	21.90
	138 Freon TF	101	2.337	2.337	(0.485)	58269	20.0000	21.73
	140 1,3-Butadiene	54	1.408	1.408	(0.292)	78314	20.0000	21.10
	147 Methylcyclohexane	55	5.947	5.947	(1.071)	173678	20.0000	20.20
	146 Methyl Acetate	43	2.716	2.716	(0.564)	69207	20.0000	18.81
	148 Tert-Butyl alcohol	59	2.971	2.971	(0.617)	145628	400.000	352.04
	149 Isopropyl Alcohol	45	2.566	2.566	(0.533)	91067	400.000	384.83

QC Flag Legend

M - Compound response manually integrated.



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Client ID: VSTD020
Sample Info: VSTD020;VSTD020;1;6;
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 13:49
InstruID : VOA9.i
LabSampID : VSTD020

Acrolein (107-02-8)

Reason Code:

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11-Dec-2023
17:18
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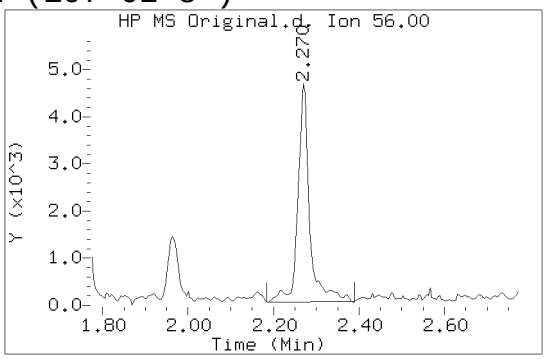

AFTER

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12-Dec-2023
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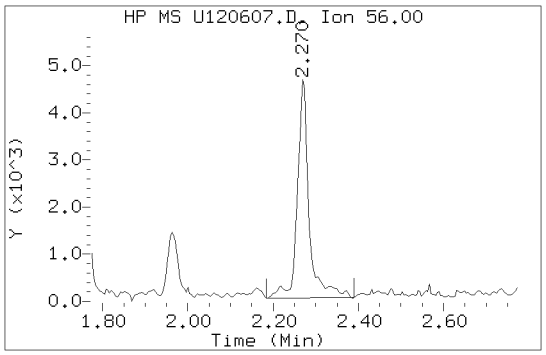

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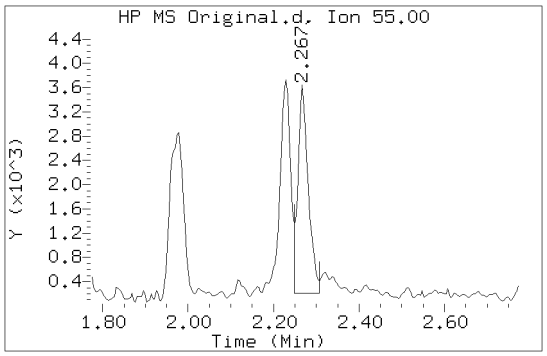

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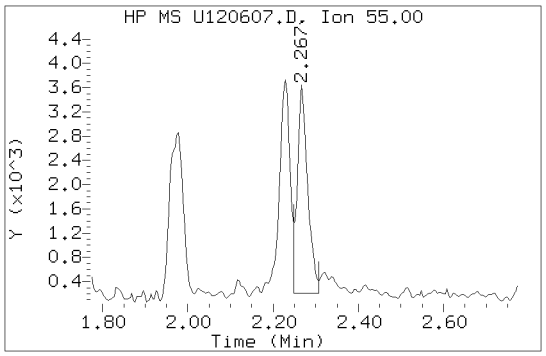

2-Chloroethylvinyl ether (110-75-8)

Reason Code:

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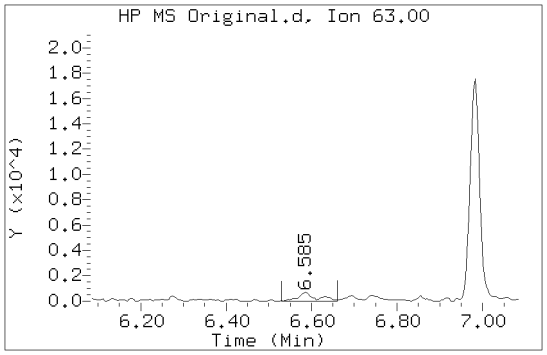

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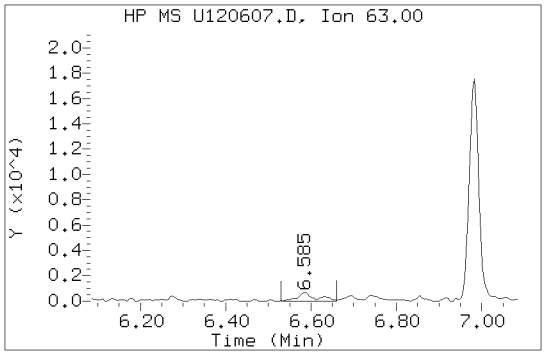

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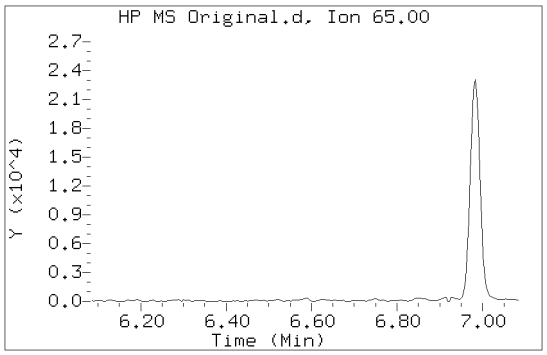

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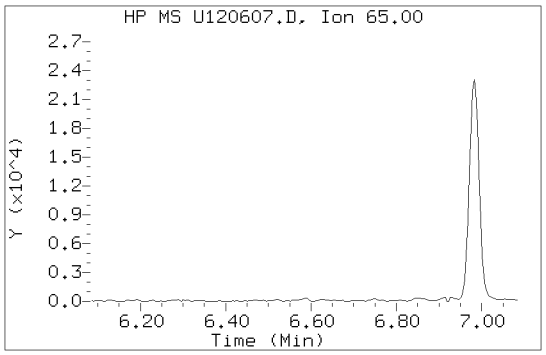

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Inj Date : 06-DEC-2023 13:49
InstruID : VOA9.i
LabSampID : VSTD020

2-Chloroethylvinyl ether (110-75-8)

BEFORE

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11-Dec-2023
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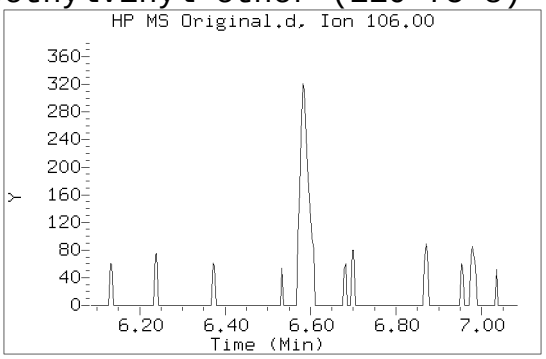

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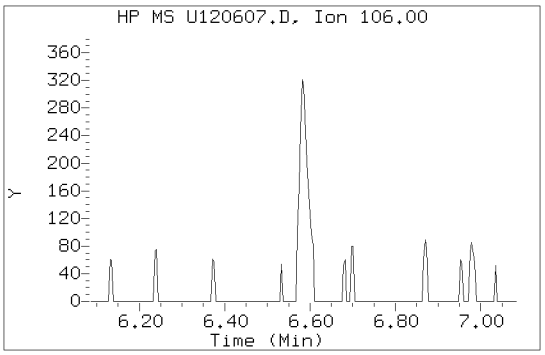

1,2-Dichloroethane-d4 (17060-07-0)

BEFORE

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11-Dec-2023
17:18
linh
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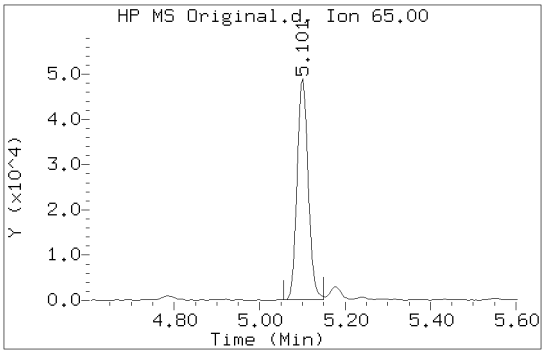

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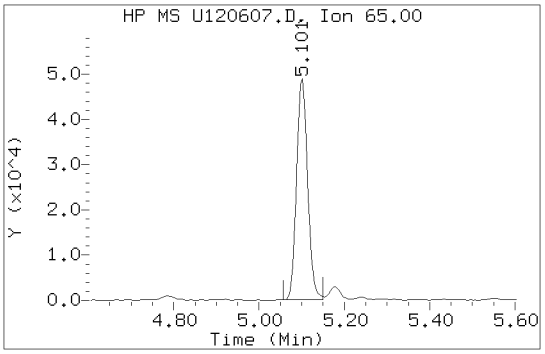

BEFORE

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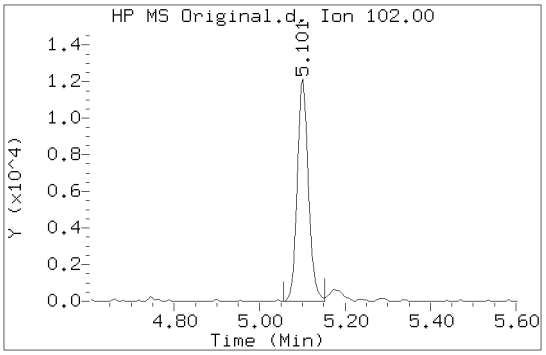

AFTER

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12-Dec-2023
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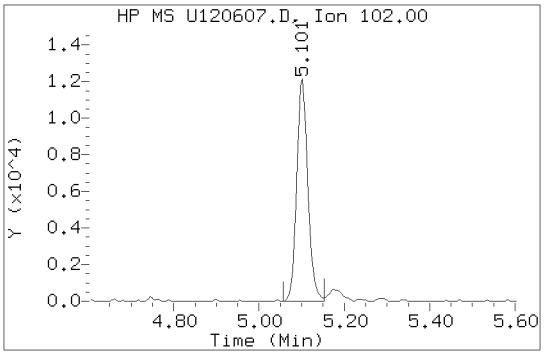

Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120608.D Page 1
Report Date: 12-Dec-2023 09:43

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120608.D
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Inj Date : 06-DEC-2023 14:11
Operator : PC Inst ID: VOA9.i
Smp Info : VSTD050;VSTD050;1;7;
Misc Info : V9;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\8260C.m
Meth Date : 12-Dec-2023 09:43 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 13:49 Cal File: U120607.D
Als bottle: 9 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V9.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1	Pentafluorobenzene	168	4.815	4.815	(1.000)	366831	50.0000	
2	Dichlorodifluoromethane	85	1.160	1.160	(0.241)	137759	50.0000	46.64
3	Chloromethane	50	1.295	1.295	(0.269)	198858	50.0000	47.25
5	Vinyl Chloride	62	1.374	1.374	(0.285)	192474	50.0000	47.87
6	Bromomethane	94	1.617	1.617	(0.336)	101286	50.0000	49.17
7	Chloroethane	64	1.696	1.696	(0.352)	130701	50.0000	48.28
8	Trichlorofluoromethane	101	1.895	1.895	(0.394)	237922	50.0000	46.69
9	Acrolein	56	2.262	2.262	(0.470)	19296	100.000	92.30
10	Acetone	43	2.405	2.405	(0.499)	141600	100.000	114.20
11	1,1-Dichloroethene	96	2.330	2.330	(0.484)	134600	50.0000	47.57
15	Iodomethane	142	2.465	2.465	(0.512)	363885	100.000	101.22
16	Acrylonitrile	53	3.064	3.064	(0.636)	144182	100.000	100.19
17	Methylene Chloride	84	2.791	2.791	(0.580)	178723	50.0000	50.05
18	Methyl tert-butyl ether	73	3.079	3.079	(0.640)	503453	50.0000	49.66
19	Carbon Disulfide	76	2.517	2.517	(0.523)	830715	100.000	99.64
20	trans-1,2-Dichloroethene	96	3.057	3.057	(0.635)	164779	50.0000	48.71
21	Vinyl Acetate	43	3.604	3.604	(0.749)	1082843	100.000	105.87
22	1,1-Dichloroethane	63	3.511	3.511	(0.729)	308894	50.0000	44.77
24	2-Butanone	43	4.260	4.260	(0.885)	176331	100.000	98.12
26	2,2-Dichloropropane	77	4.182	4.182	(0.868)	234552	50.0000	48.36

27 cis-1,2-Dichloroethene	96	4.193	4.193 (0.871)	222870	50.0000	49.18
28 Chloroform	83	4.571	4.571 (0.949)	363364	50.0000	48.38

Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120608.D Page 2
Report Date: 12-Dec-2023 09:43

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	29 Bromochloromethane	128	4.467	4.467	(0.928)	119341	50.0000	50.90
$	30 Dibromofluoromethane	113	4.748	4.748	(0.986)	189455	50.0000	50.47
	31 1,1,1-Trichloroethane	97	4.740	4.740	(0.984)	277100	50.0000	48.55
	32 1,1-Dichloropropene	75	4.920	4.920	(0.887)	241449	50.0000	49.00
	33 1,2-Dichloroethane	62	5.175	5.175	(0.932)	276143	50.0000	48.12
	34 Carbon Tetrachloride	117	4.909	4.909	(0.885)	232598	50.0000	48.32
$	35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	211870	50.0000	49.26(M)
*	36 1,4-Difluorobenzene	114	5.550	5.550	(1.000)	588962	50.0000	
	37 Benzene	78	5.138	5.138	(0.926)	777989	50.0000	48.52
	38 Trichloroethene	130	5.786	5.786	(1.043)	213155	50.0000	48.23
	39 Bromodichloromethane	83	6.277	6.277	(1.131)	258199	50.0000	49.17
	41 2-Chloroethylvinyl ether	63	6.581	6.581	(1.186)	5248	100.000	103.15
	42 1,2-Dichloropropane	63	6.007	6.007	(1.082)	205492	50.0000	47.60
	44 Dibromomethane	93	6.120	6.120	(1.103)	134471	50.0000	48.15
	45 4-Methyl-2-Pentanone	43	6.851	6.851	(0.837)	421109	100.000	99.77
	46 cis-1,3-Dichloropropene	75	6.689	6.689	(1.205)	322591	50.0000	47.74
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	585326	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	688161	50.0000	51.07
	50 Toluene	91	6.978	6.978	(0.853)	825618	50.0000	50.58
	51 trans-1,3-Dichloropropene	75	7.196	7.196	(1.296)	270774	50.0000	47.62
	52 2-Hexanone	43	7.589	7.589	(0.927)	284123	100.000	96.18
	53 1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	162935	50.0000	52.25
	54 1,3-Dichloropropane	76	7.499	7.499	(0.916)	347309	50.0000	47.92
	55 Dibromochloromethane	129	7.690	7.690	(0.940)	221256	50.0000	50.82
	56 Tetrachloroethene	164	7.454	7.454	(0.911)	165847	50.0000	47.47
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	200095	50.0000	49.20
	58 1-Chlorohexane	55	8.196	8.196	(1.477)	149444	50.0000	45.25
	59 Chlorobenzene	112	8.208	8.208	(1.003)	554780	50.0000	46.66
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	203091	50.0000	48.83
	61 Ethylbenzene	106	8.305	8.305	(1.015)	267891	50.0000	48.13
	62 m,p-Xylenes	106	8.406	8.406	(1.027)	682174	100.000	101.95
	63 o-Xylene	106	8.748	8.748	(1.069)	345583	50.0000	50.21
	64 Styrene	104	8.759	8.759	(1.070)	602189	50.0000	52.56
	66 Bromoform	173	8.920	8.920	(1.090)	142982	50.0000	48.05
	67 Isopropylbenzene	105	9.062	9.062	(1.107)	836214	50.0000	50.24
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	257467	50.0000	49.42
$	69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	257187	50.0000	50.42
*	70 1,4-Dichlorobenzene-d4	152	10.168	10.168	(1.000)	319548	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.921)	269676	50.0000	44.45
	73 n-Propylbenzene	91	9.411	9.411	(0.926)	950507	50.0000	50.65
	74 Bromobenzene	156	9.317	9.317	(0.916)	244856	50.0000	45.62
	75 1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	684053	50.0000	51.29
	76 2-Chlorotoluene	91	9.482	9.482	(0.933)	609247	50.0000	48.24
	77 4-Chlorotoluene	91	9.576	9.576	(0.942)	695361	50.0000	48.54
	78 tert-Butylbenzene	119	9.835	9.835	(0.967)	573100	50.0000	47.84
	79 1,2,4-Trimethylbenzene	105	9.876	9.876	(0.971)	683706	50.0000	51.15
	81 sec-Butylbenzene	105	10.022	10.022	(0.986)	741751	50.0000	48.02
	82 p-Isopropyltoluene	119	10.146	10.146	(0.998)	675300	50.0000	50.51
	83 1,3-Dichlorobenzene	146	10.116	10.116	(0.995)	433413	50.0000	45.57
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	447745	50.0000	44.44
	87 n-Butylbenzene	91	10.491	10.491	(1.032)	556242	50.0000	49.58
	88 1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	431690	50.0000	45.12

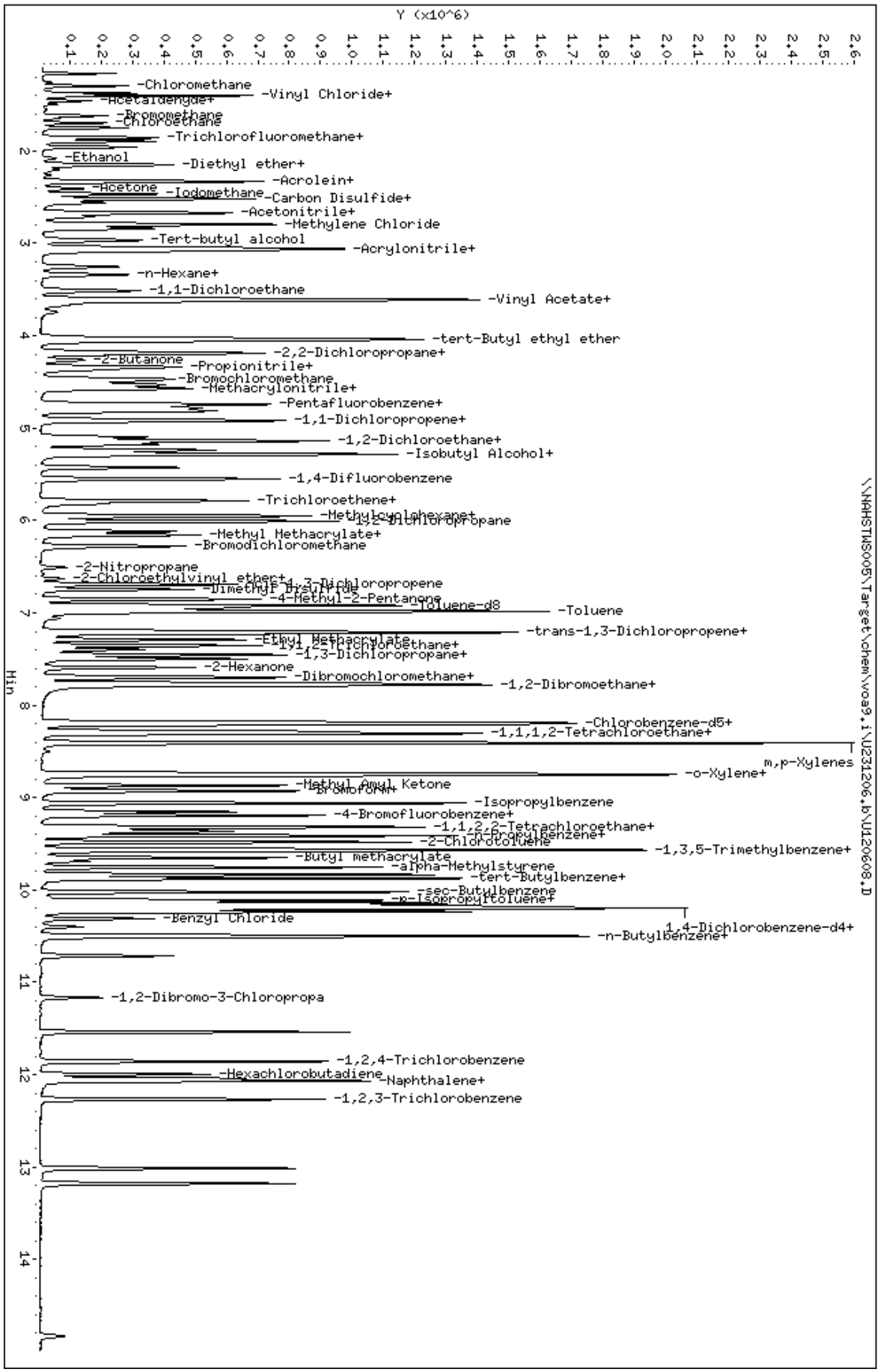
89	1,2-Dibromo-3-Chloropropane	155	11.165	11.165 (1.098)	43056	50.0000	46.22
90	1,2,4-Trichlorobenzene	180	11.855	11.855 (1.166)	285101	50.0000	48.30

Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120608.D Page 3
Report Date: 12-Dec-2023 09:43

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	91 Hexachlorobutadiene	225	11.998	11.998	(1.180)	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+
-cis-1,3-Dichloropropene
-Dimethyl Disulfide
-4-Methyl-2-Pentanone
-Toluene-d8
-Toluene
-trans-1,3-Dichloropropene+
-Ethyl Methacrylate
-1,1,2-Trichloroethane+
-1,3-Dichloropropane+
-2-Hexanone
-Dibromochloromethane+
-1,2-Dibromoethane+
-Chlorobenzene-d5+
-1,1,1,2-Tetrachloroethane+
m,p-Xylenes
-o-Xylene+
-Methyl Amyl Ketone
-Bromoform+
-Isopropylbenzene
-4-Bromofluorobenzene+
-1,1,2,2-Tetrachloroethane+
-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
\\NAHSTMS005\Target\chem\voa9.i\U231206.b\U120608.D
Data File: \\NAHSTMS005\Target\chem\voa9.i\U231206.b\U120608.D
Date : 06-DEC-2023 14:11
Client ID: VSTD050
Sample Info: VSTD050;VSTD050;1;7;
Purge Volume: 5.0
Column phase: DB624
Instrument: VOA9.i
Operator: PC
Column diameter: 0.18
Page 1

Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120608.D
Inj Date : 06-DEC-2023 14:11
InstruID : VOA9.i
LabSampID : VSTD050

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

Reason Code:

BEFORE

MASS
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AREA
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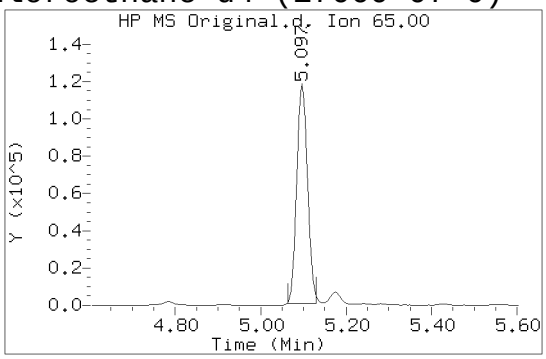
HEIGHT
36364
06-Dec-2023
23:48



AFTER

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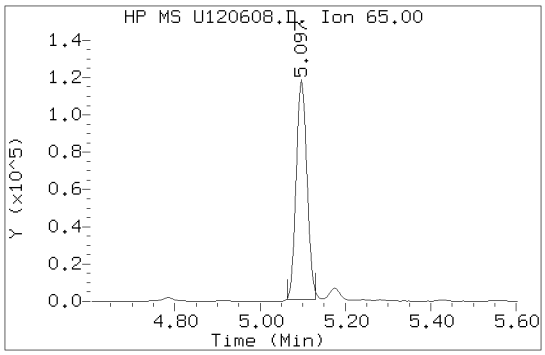
12-Dec-2023
09:43



BEFORE

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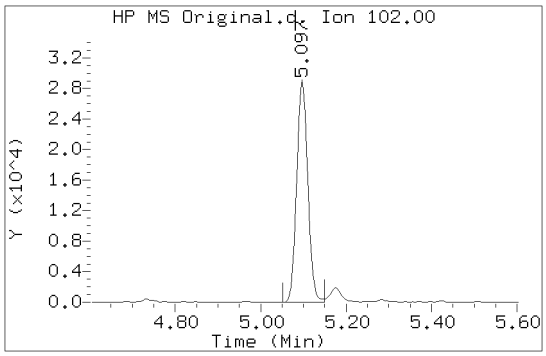
06-Dec-2023
23:48



AFTER

MASS
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AREA
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HEIGHT
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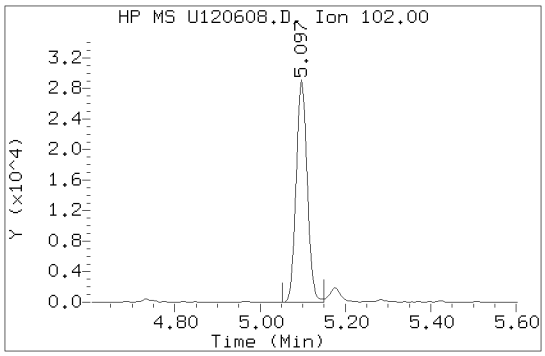
12-Dec-2023
09:43



Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120609.D Page 1
Report Date: 12-Dec-2023 09:44

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120609.D
Lab Smp Id: VSTD100 Client Smp ID: VSTD100
Inj Date : 06-DEC-2023 14:34
Operator : PC Inst ID: VOA9.i
Smp Info : VSTD100;VSTD100;1;8;
Misc Info : V9;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\8260C.m
Meth Date : 12-Dec-2023 09:44 VOA9.i Quant Type: ISTD
Cal Date : 06-DEC-2023 14:11 Cal File: U120608.D
Als bottle: 10 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 08260V9.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1	Pentafluorobenzene	168	4.815	4.815	(1.000)	368772	50.0000	
2	Dichlorodifluoromethane	85	1.164	1.164	(0.242)	297342	100.000	99.16
3	Chloromethane	50	1.299	1.299	(0.270)	406471	100.000	96.08
5	Vinyl Chloride	62	1.378	1.378	(0.286)	409953	100.000	101.44
6	Bromomethane	94	1.617	1.617	(0.336)	220567	100.000	100.47
7	Chloroethane	64	1.700	1.700	(0.353)	263977	100.000	97.01
8	Trichlorofluoromethane	101	1.899	1.899	(0.394)	522606	100.000	102.02
9	Acrolein	56	2.266	2.266	(0.471)	35096	200.000	167.00
10	Acetone	43	2.408	2.408	(0.500)	236750	200.000	193.97
11	1,1-Dichloroethene	96	2.333	2.333	(0.485)	278813	100.000	98.02
15	Iodomethane	142	2.468	2.468	(0.513)	780690	200.000	199.78
16	Acrylonitrile	53	3.064	3.064	(0.636)	287882	200.000	199.01
17	Methylene Chloride	84	2.795	2.795	(0.580)	355722	100.000	99.36
18	Methyl tert-butyl ether	73	3.083	3.083	(0.640)	1003375	100.000	98.45
19	Carbon Disulfide	76	2.521	2.521	(0.524)	1747418	200.000	208.50
20	trans-1,2-Dichloroethene	96	3.061	3.061	(0.636)	334344	100.000	98.33
21	Vinyl Acetate	43	3.608	3.608	(0.749)	2245220	200.000	218.36
22	1,1-Dichloroethane	63	3.514	3.514	(0.730)	710227	100.000	102.40
24	2-Butanone	43	4.264	4.264	(0.886)	341195	200.000	188.87
26	2,2-Dichloropropane	77	4.185	4.185	(0.869)	494484	100.000	101.41

27 cis-1,2-Dichloroethene	96	4.197	4.197 (0.872)	440325	100.000	96.67
28 Chloroform	83	4.575	4.575 (0.950)	723369	100.000	95.82

Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120609.D Page 2
Report Date: 12-Dec-2023 09:44

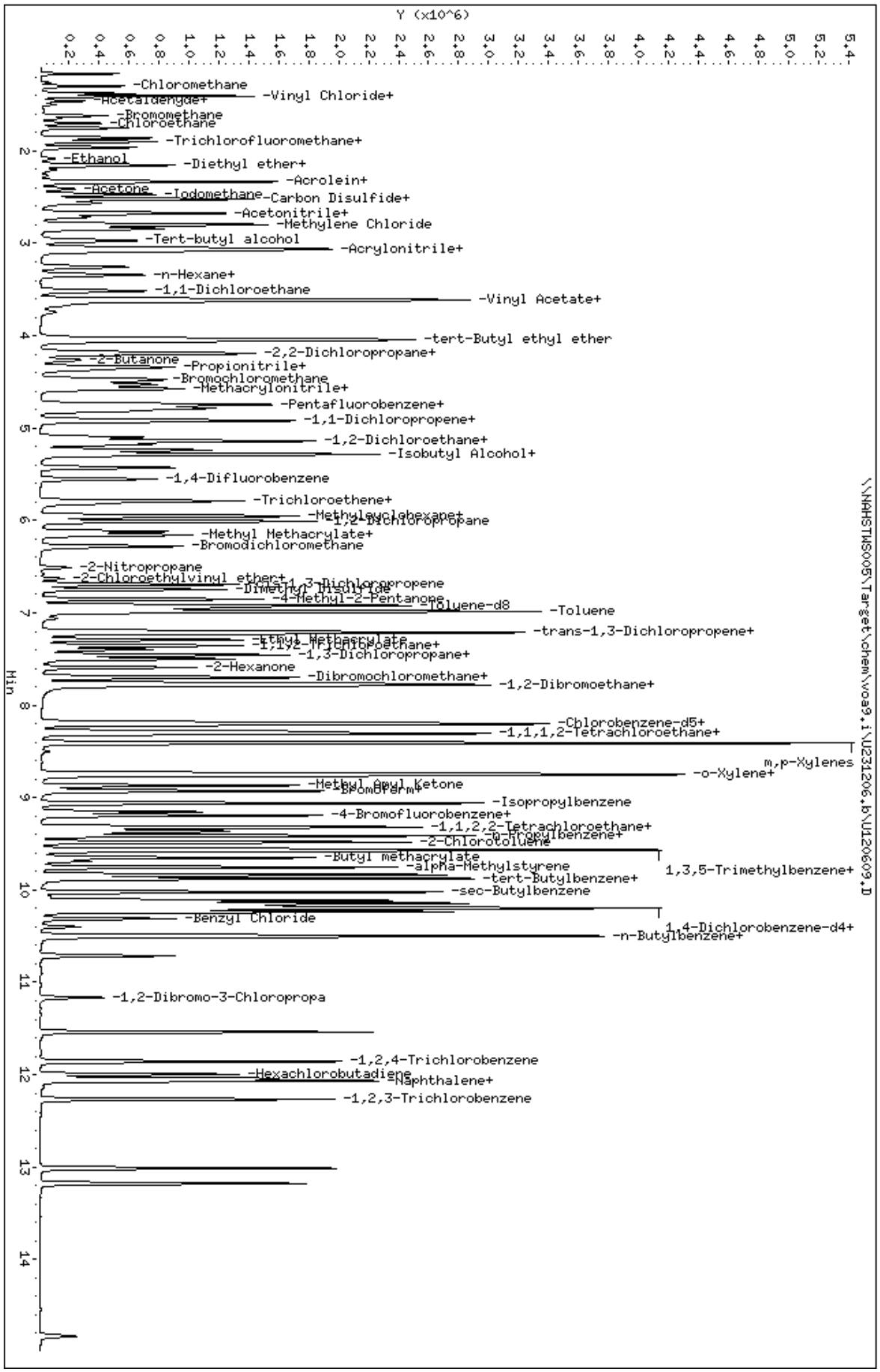
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	29 Bromochloromethane	128	4.470	4.470	(0.928)	217538	100.000	92.30
$	30 Dibromofluoromethane	113	4.748	4.748	(0.986)	396102	100.000	106.08
	31 1,1,1-Trichloroethane	97	4.744	4.744	(0.985)	593935	100.000	103.53
	32 1,1-Dichloropropene	75	4.924	4.924	(0.887)	513783	100.000	103.77
	33 1,2-Dichloroethane	62	5.175	5.175	(0.932)	536406	100.000	93.03
	34 Carbon Tetrachloride	117	4.913	4.913	(0.885)	508728	100.000	105.19
$	35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	468113	100.000	100.11(M)
*	36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	591773	50.0000	
	37 Benzene	78	5.137	5.137	(0.925)	1562743	100.000	97.00
	38 Trichloroethene	130	5.790	5.790	(1.043)	427509	100.000	96.28
	39 Bromodichloromethane	83	6.277	6.277	(1.130)	539233	100.000	102.21
	41 2-Chloroethylvinyl ether	63	6.577	6.577	(1.184)	10683	200.000	195.84
	42 1,2-Dichloropropane	63	6.011	6.011	(1.082)	408313	100.000	94.14
	44 Dibromomethane	93	6.120	6.120	(1.102)	263977	100.000	94.07
	45 4-Methyl-2-Pentanone	43	6.854	6.854	(0.837)	859659	200.000	201.05
	46 cis-1,3-Dichloropropene	75	6.689	6.689	(1.205)	679057	100.000	98.40
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	594065	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	1451360	100.000	106.12
	50 Toluene	91	6.982	6.982	(0.853)	1683894	100.000	101.65
	51 trans-1,3-Dichloropropene	75	7.195	7.195	(1.296)	568417	100.000	97.57
	52 2-Hexanone	43	7.589	7.589	(0.927)	589218	200.000	196.54
	53 1,1,2-Trichloroethane	83	7.353	7.353	(0.898)	317502	100.000	101.57
	54 1,3-Dichloropropane	76	7.499	7.499	(0.916)	688725	100.000	93.64
	55 Dibromochloromethane	129	7.690	7.690	(0.940)	452519	100.000	102.42
	56 Tetrachloroethene	164	7.458	7.458	(0.911)	359308	100.000	101.34
	57 1,2-Dibromoethane	107	7.784	7.784	(0.951)	401348	100.000	97.23
	58 1-Chlorohexane	55	8.196	8.196	(1.476)	332886	100.000	100.31
	59 Chlorobenzene	112	8.208	8.208	(1.003)	1142106	100.000	94.65
	60 1,1,1,2-Tetrachloroethane	131	8.283	8.283	(1.012)	418859	100.000	99.23
	61 Ethylbenzene	106	8.305	8.305	(1.015)	573872	100.000	101.59
	62 m,p-Xylenes	106	8.410	8.410	(1.027)	1428236	200.000	210.30
	63 o-Xylene	106	8.747	8.747	(1.069)	717054	100.000	102.66
	64 Styrene	104	8.762	8.762	(1.071)	1247814	100.000	107.31
	66 Bromoform	173	8.920	8.920	(1.090)	300664	100.000	98.41
	67 Isopropylbenzene	105	9.062	9.062	(1.107)	1797558	100.000	106.42
	68 1,1,2,2-Tetrachloroethane	83	9.329	9.329	(0.917)	527580	100.000	99.75
$	69 4-Bromofluorobenzene	95	9.194	9.194	(1.123)	539241	100.000	105.54
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.172	(1.000)	326639	50.0000	
	71 1,2,3-Trichloropropane	75	9.362	9.362	(0.920)	559877	100.000	90.29
	73 n-Propylbenzene	91	9.411	9.411	(0.925)	1990476	100.000	103.77
	74 Bromobenzene	156	9.317	9.317	(0.916)	507624	100.000	92.54
	75 1,3,5-Trimethylbenzene	105	9.561	9.561	(0.940)	1467962	100.000	107.68
	76 2-Chlorotoluene	91	9.482	9.482	(0.932)	1250856	100.000	96.89
	77 4-Chlorotoluene	91	9.576	9.576	(0.941)	1459624	100.000	99.69
	78 tert-Butylbenzene	119	9.838	9.838	(0.967)	1256628	100.000	102.62
	79 1,2,4-Trimethylbenzene	105	9.880	9.880	(0.971)	1472785	100.000	107.79
	81 sec-Butylbenzene	105	10.022	10.022	(0.985)	1683936	100.000	106.65
	82 p-Isopropyltoluene	119	10.146	10.146	(0.997)	1513618	100.000	110.77
	83 1,3-Dichlorobenzene	146	10.116	10.116	(0.994)	909175	100.000	93.53
	84 1,4-Dichlorobenzene	146	10.191	10.191	(1.002)	929084	100.000	90.22
	87 n-Butylbenzene	91	10.491	10.491	(1.031)	1271526	100.000	110.88
	88 1,2-Dichlorobenzene	146	10.506	10.506	(1.033)	884103	100.000	90.40

89	1,2-Dibromo-3-Chloropropane	155	11.165	11.165 (1.098)	92967	100.000	95.28
90	1,2,4-Trichlorobenzene	180	11.855	11.855 (1.165)	628138	100.000	104.11

		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)	253011	100.000	104.62
	92 Naphthalene	128	12.065	12.065	(1.186)	1545256	100.000	106.20
	93 1,2,3-Trichlorobenzene	180	12.267	12.267	(1.206)	597649	100.000	98.23
M	94 1,2-Dichloroethylene (total)	96				774669	200.000	
M	95 Xylenes (total)	106				2145290	300.000	
	131 Methyl Acrylate	55	4.369	4.369	(0.907)	502976	100.000	103.83
	135 1,4-Dioxane	88	6.165	6.165	(1.280)	109750	2000.00	1875.79
	141 Cyclohexane	56	4.785	4.785	(0.994)	541235	100.000	101.85
	138 Freon TF	101	2.337	2.337	(0.485)	287842	100.000	102.64
	140 1,3-Butadiene	54	1.404	1.404	(0.292)	389528	100.000	105.17
	147 Methylcyclohexane	55	5.943	5.943	(1.070)	971750	100.000	110.78(A)
	146 Methyl Acetate	43	2.716	2.716	(0.564)	341463	100.000	93.03
	148 Tert-Butyl alcohol	59	2.967	2.967	(0.616)	729703	2000.00	1767.54
	149 Isopropyl Alcohol	45	2.566	2.566	(0.533)	469315	2000.00	2018.44

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.



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Client ID: VSTD100
Sample Info: VSTD100;VSTD100;1;8;
Purge Volume: 5.0
Column phase: DB624

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

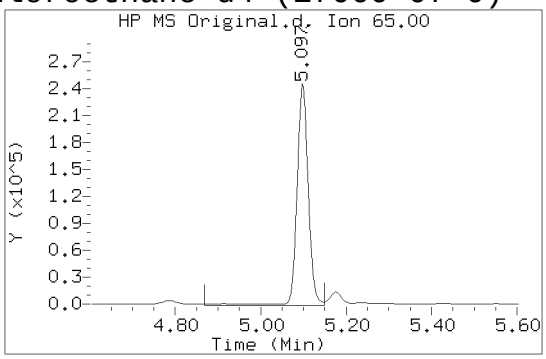
Data File : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120609.D
Inj Date : 06-DEC-2023 14:34
InstruID : VOA9.i
LabSampID : VSTD100

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

Reason Code:

BEFORE

MASS
65
AREA
468113
HEIGHT
246960
11-Dec-2023
17:18
linh
pham



AFTER

MASS
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AREA
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HEIGHT
246960
12-Dec-2023
09:43
linh
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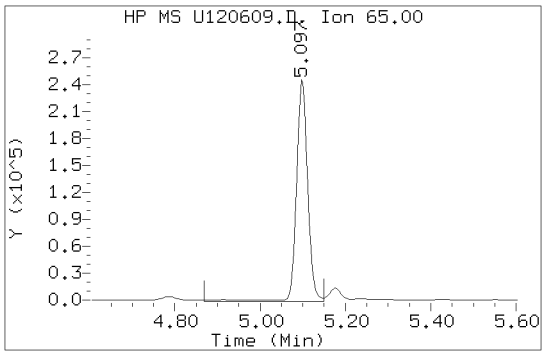

BEFORE

MASS
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AREA
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HEIGHT
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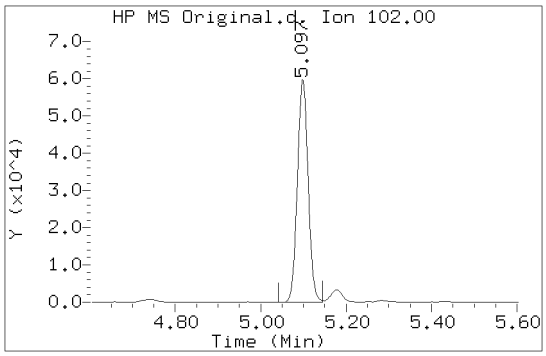
11-Dec-2023
17:18
linh
pham



AFTER

MASS
102
AREA
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HEIGHT
59680
12-Dec-2023
09:43
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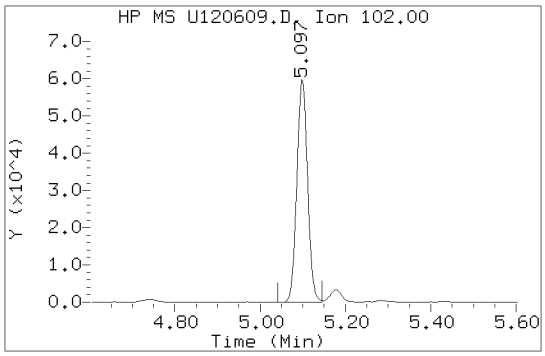

Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120610.D Page 1
Report Date: 12-Dec-2023 09:44

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120610.D
Lab Smp Id: VSTD150 Client Smp ID: VSTD150
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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

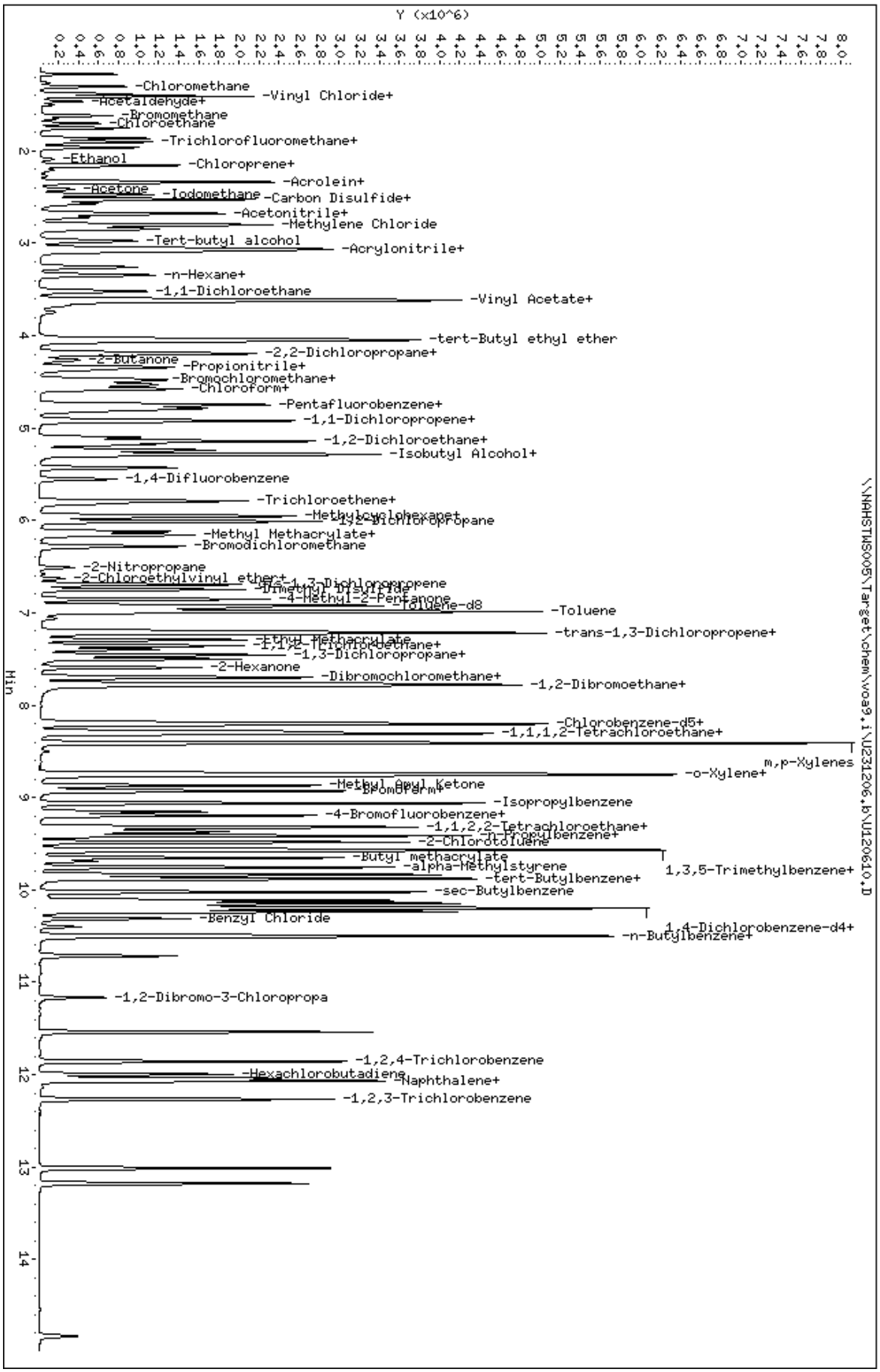
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	29 Bromochloromethane	128	4.474	4.474	(0.928)	319815	150.000	134.68
$	30 Dibromofluoromethane	113	4.752	4.752	(0.986)	564100	150.000	150.37
	31 1,1,1-Trichloroethane	97	4.744	4.744	(0.984)	880243	150.000	152.28
	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.



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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 14:56
InstruID : VOA9.i
LabSampID : VSTD150

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

Reason Code:

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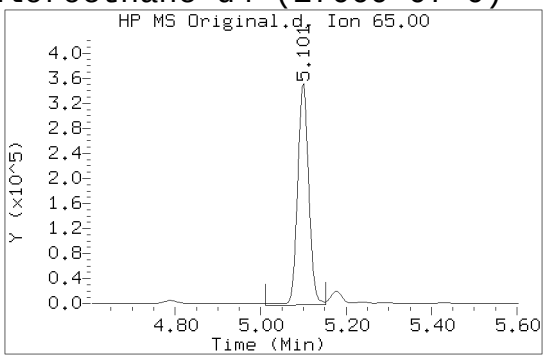
06-Dec-2023
23:21



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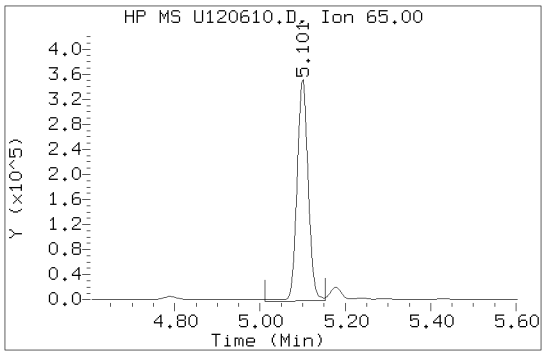

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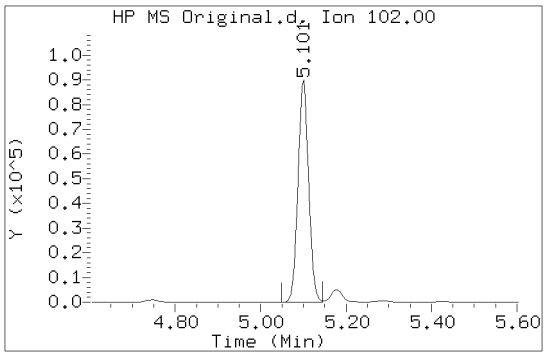

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12-Dec-2023
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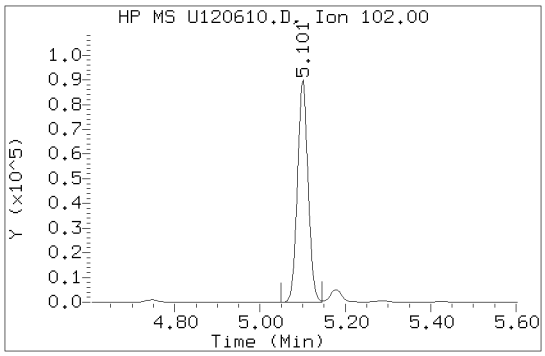

Data File: \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120611.D Page 1
Report Date: 12-Dec-2023 09:44

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa9.i\U231206.b\U120611.D
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Inj Date : 06-DEC-2023 15:18
Operator : PC Inst ID: VOA9.i
Smp Info : VSTD200;VSTD200;1;10;
Misc Info : V9;WATER;0;1;
Comment   :
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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

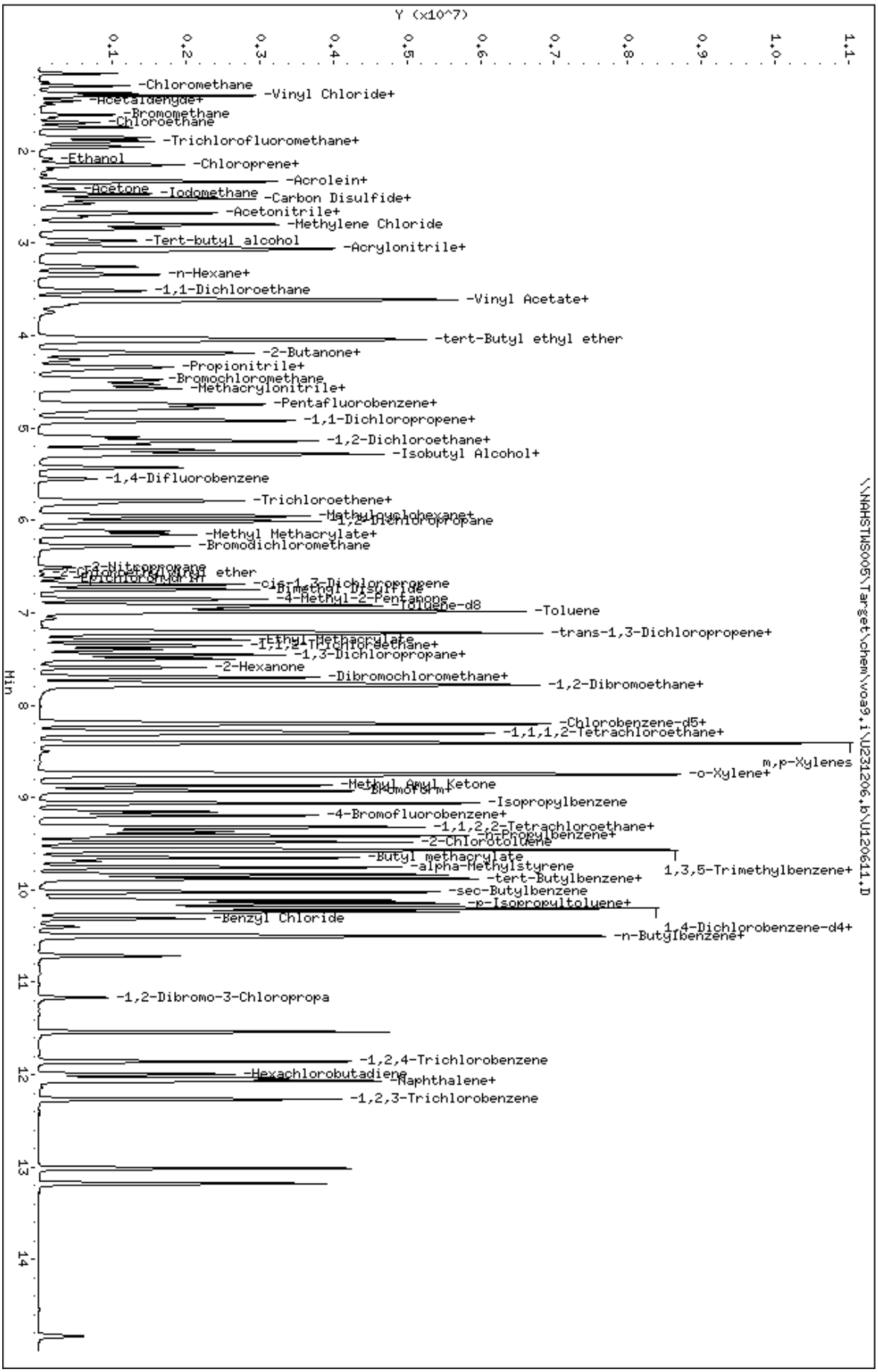
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	29 Bromochloromethane	128	4.470	4.470	(0.928)	427192	200.000	175.48
$	30 Dibromofluoromethane	113	4.748	4.748	(0.986)	753738	200.000	196.29
	31 1,1,1-Trichloroethane	97	4.744	4.744	(0.985)	1218967	200.000	205.70(A)
	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.



Data File: \\NAHSTMS005\Target\chem\voa9,i\U231206,b\U120611.D
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
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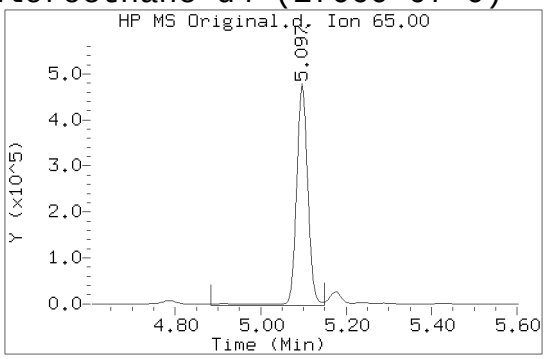
912175
HEIGHT
481644
11-Dec-2023
17:18
linh
pham



AFTER

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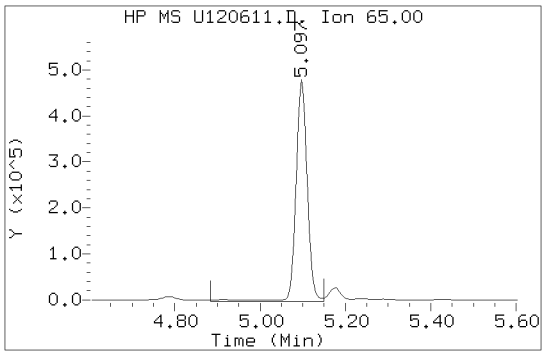
12-Dec-2023
09:43
linh
pham



BEFORE

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117888
11-Dec-2023
17:18
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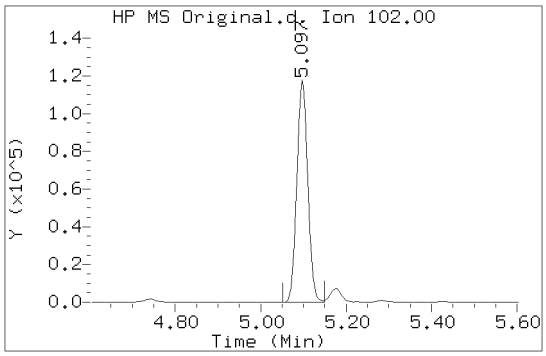
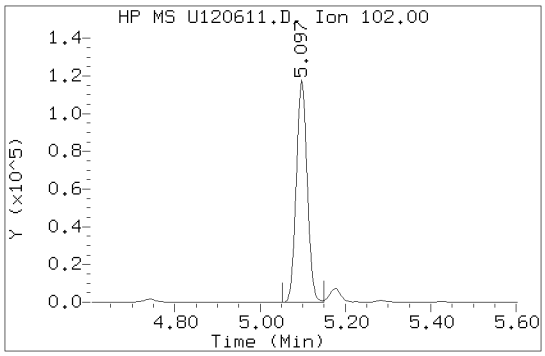


AFTER

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

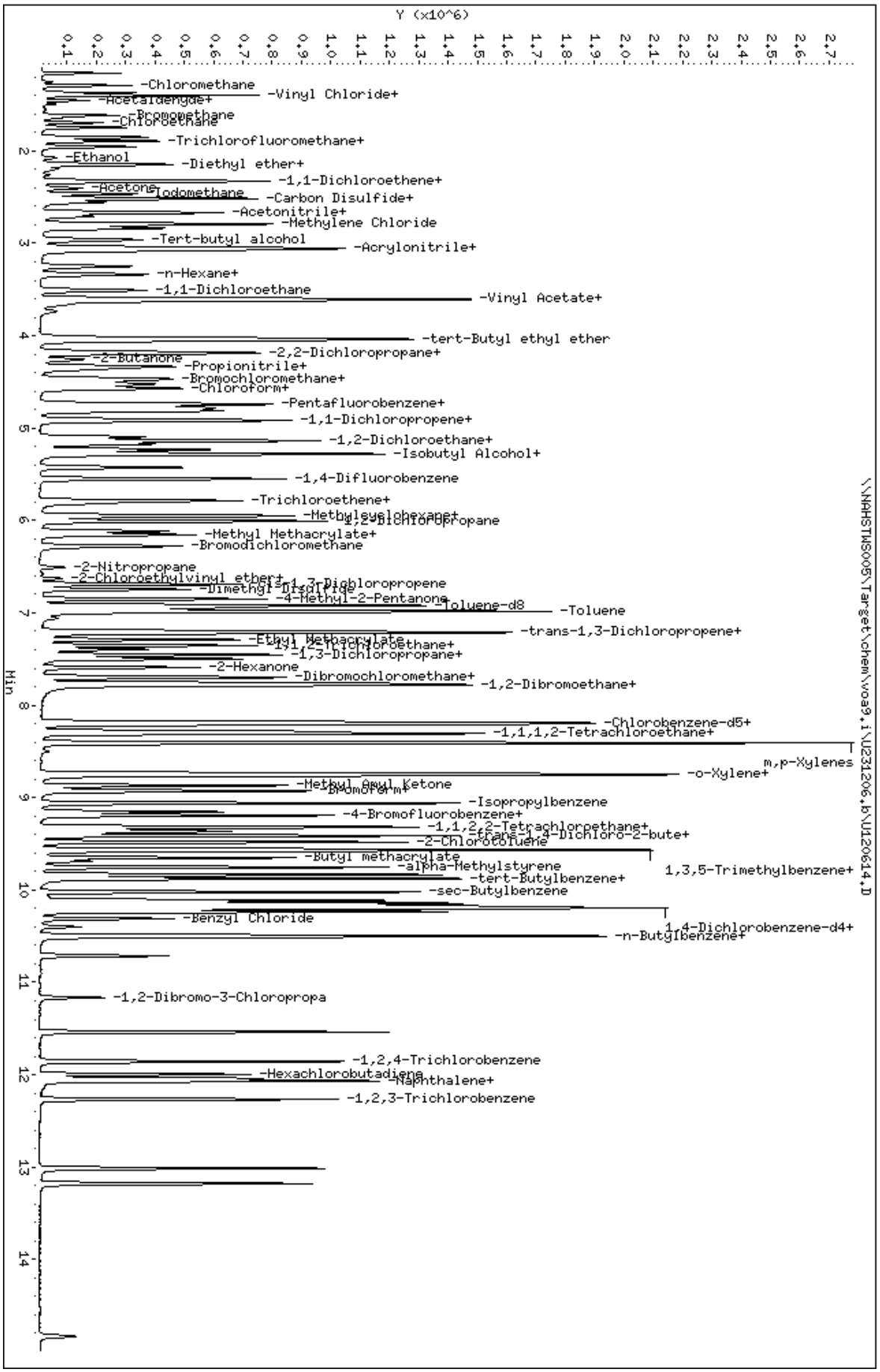
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
	29 Bromochloromethane	128	4.467	4.470	(0.928)	126029	48.3267	48.32
$	30 Dibromofluoromethane	113	4.744	4.748	(0.986)	212050	50.7925	50.79
	31 1,1,1-Trichloroethane	97	4.740	4.744	(0.985)	296257	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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS 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.



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Client ID: ICV
Sample Info: CCV;CCV;2;;;ICV
Purge Volume: 5.0
Column phase: DB624

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

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
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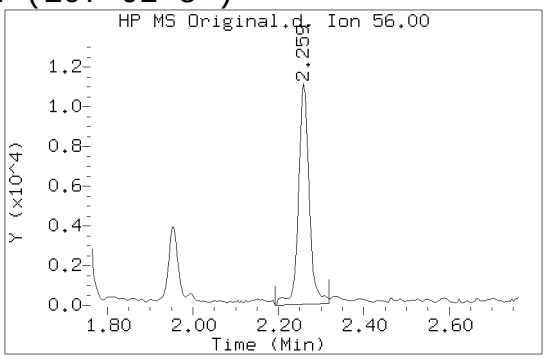
339458
HEIGHT
190528
06-Dec-2023
23:36



AFTER

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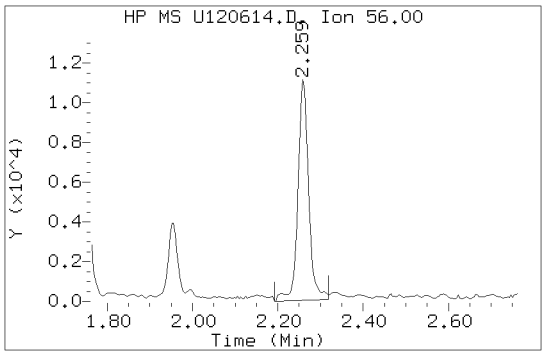
12-Dec-2023
09:51



BEFORE

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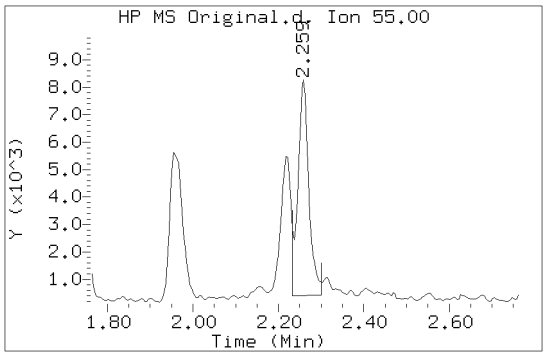
06-Dec-2023
23:36



AFTER

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AREA
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HEIGHT
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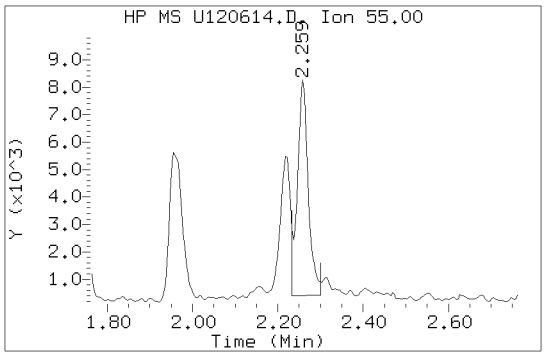
12-Dec-2023
09:51



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\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

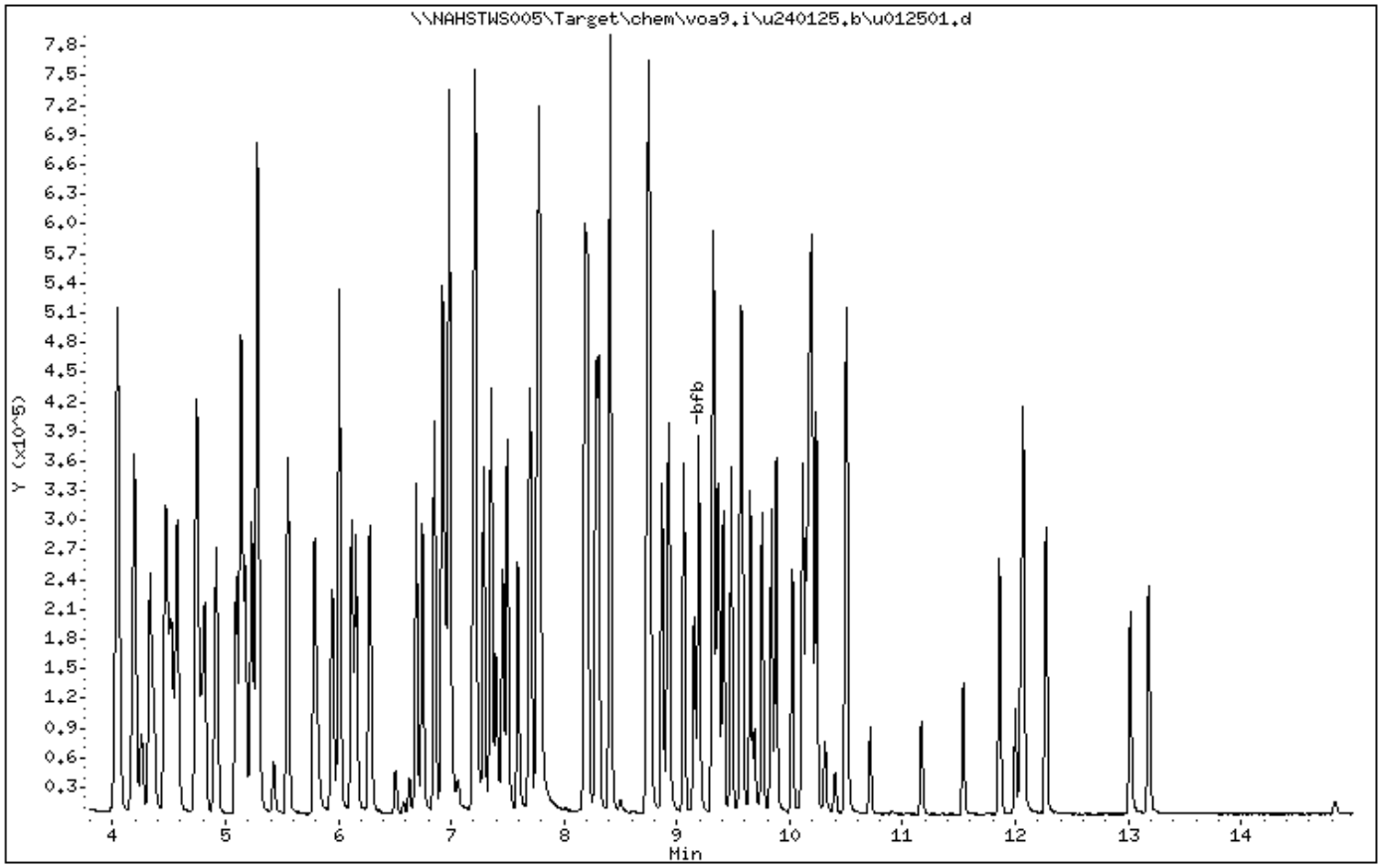
Date : 25-JAN-2024 10:20

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



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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

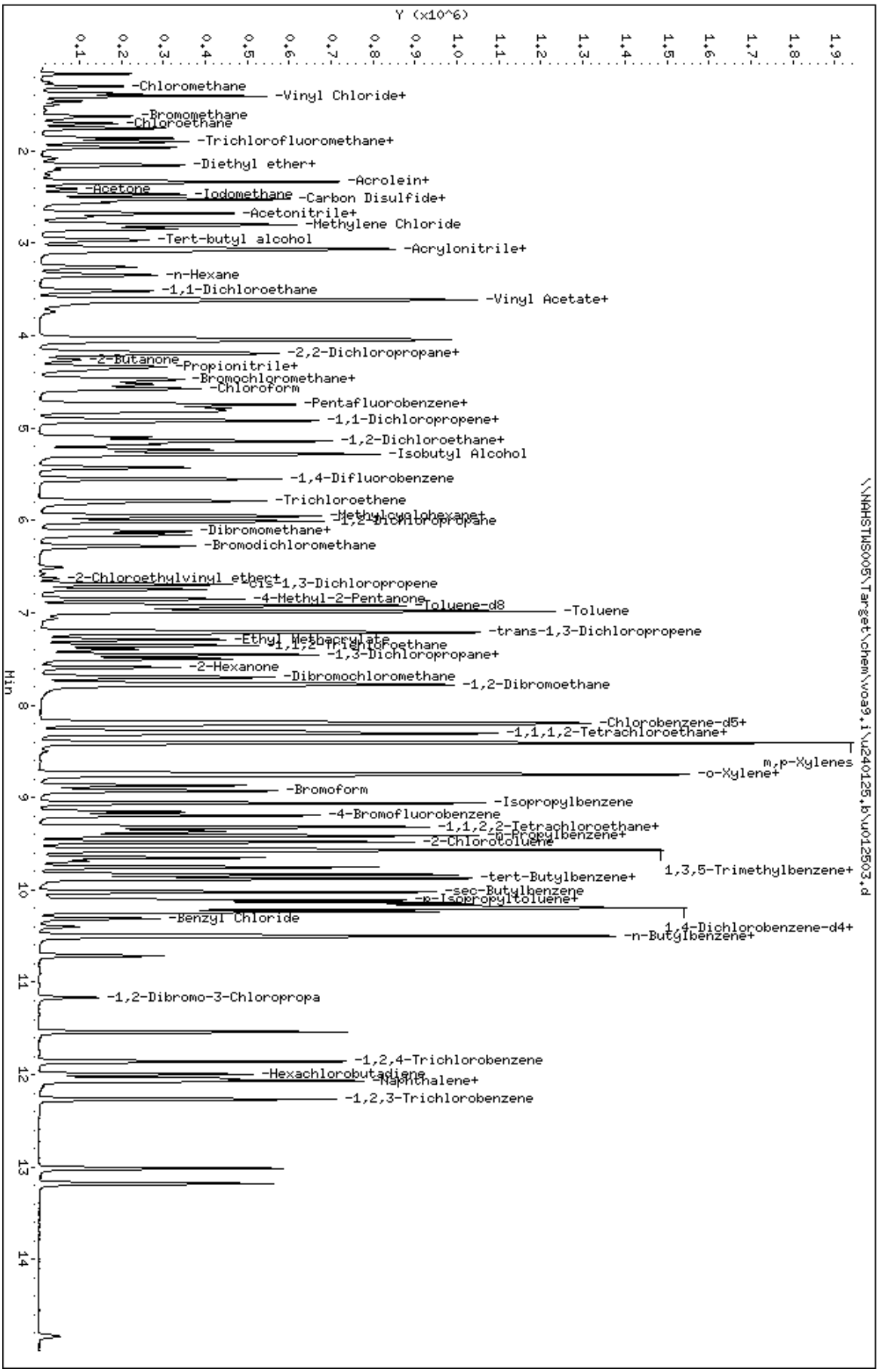
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	29 Bromochloromethane	128	4.470	4.470	(0.928)	103339	50.0000	52.77
$	30 Dibromofluoromethane	113	4.748	4.748	(0.986)	165370	50.0000	52.79
	31 1,1,1-Trichloroethane	97	4.744	4.744	(0.985)	237155	50.0000	49.75
	32 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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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\u240125.b\u012503.d
Inj Date : 25-JAN-2024 11:04
InstruID : VOA9.i
LabSampID : CCV

Methacrylonitrile (126-98-7)

Reason Code:

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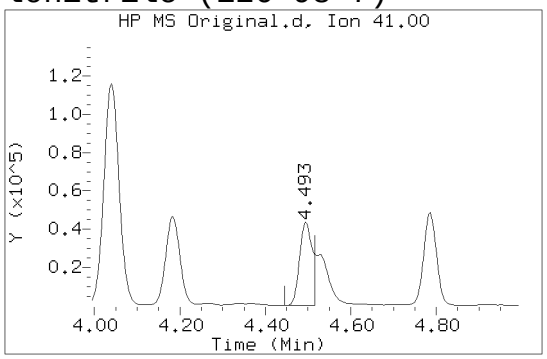
MASS
41
AREA
91172
HEIGHT
43590
25-Jan-2024
22:07



AFTER
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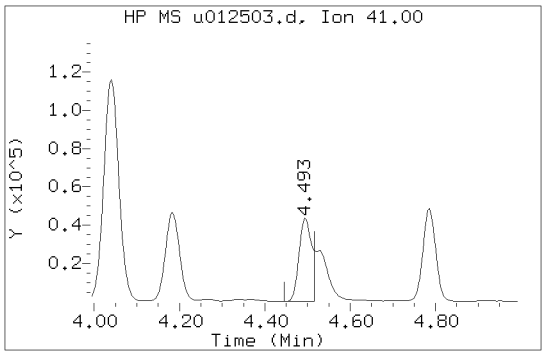
AREA
91172
HEIGHT
43590
25-Jan-2024
22:07



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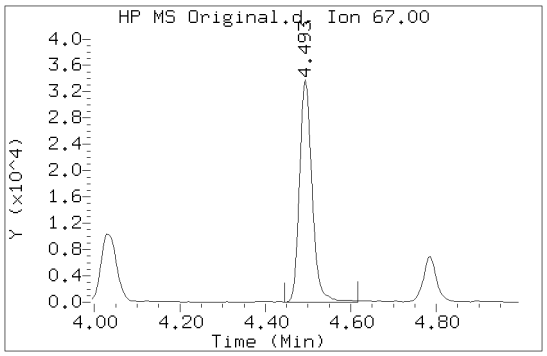
33784
25-Jan-2024
22:07



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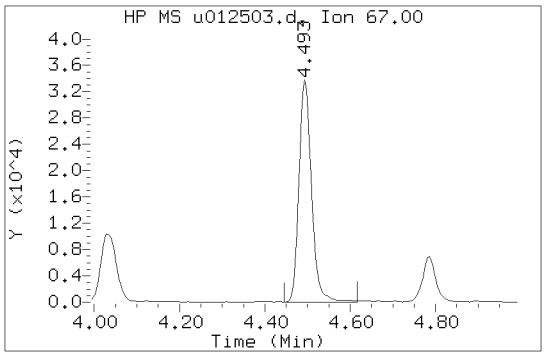
25-Jan-2024
22:07



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AREA
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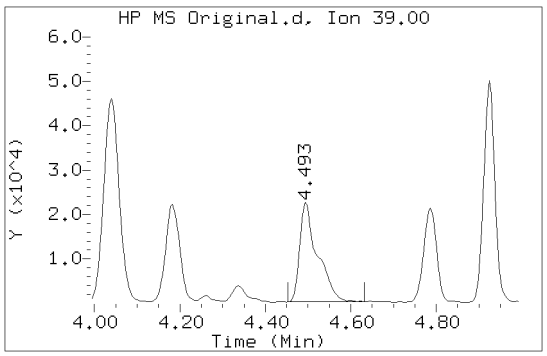
25-Jan-2024
22:07



AFTER
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AREA
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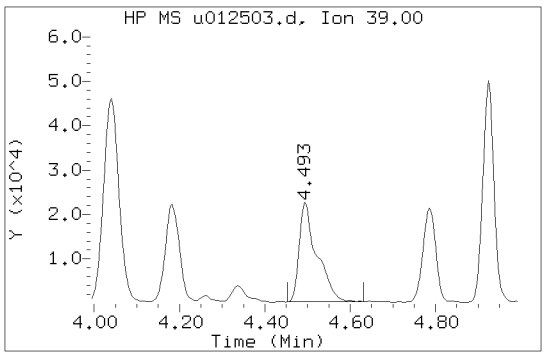
22364
25-Jan-2024
22:07



Benzyl Chloride (100-44-7)

Reason Code:

BEFORE
MASS
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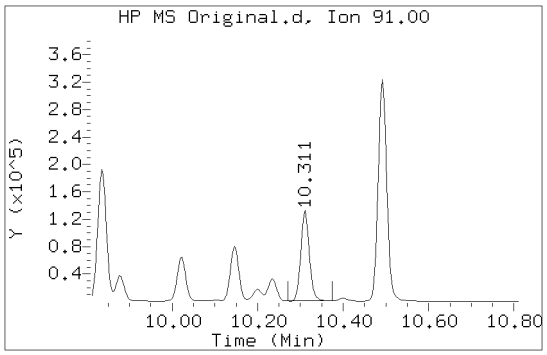
AREA
188068
HEIGHT
132256
25-Jan-2024
22:07



AFTER
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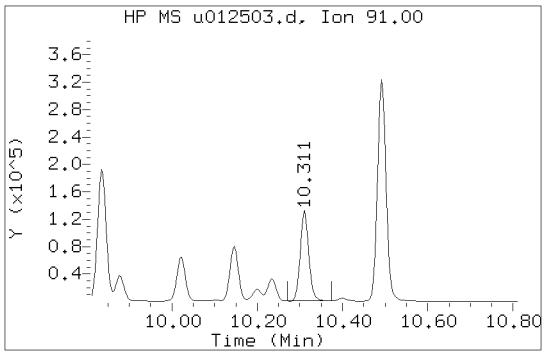
188068
HEIGHT
132256
25-Jan-2024
22:07



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Inj Date : 25-JAN-2024 11:04
InstruID : VOA9.i
LabSampID : CCV

Benzyl Chloride (100-44-7)

Reason Code:

BEFORE
MASS
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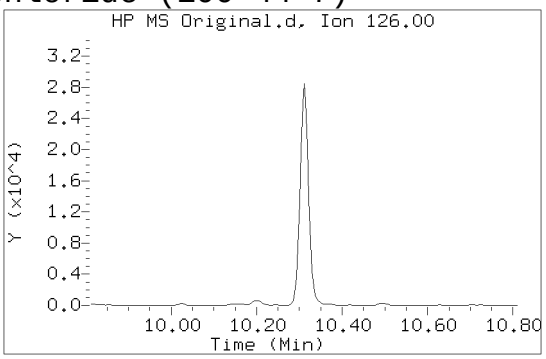
AREA
0
HEIGHT
0
25-Jan-2024
22:07



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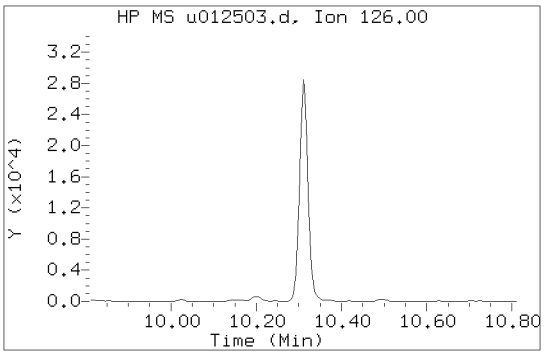
0
25-Jan-2024
22:07



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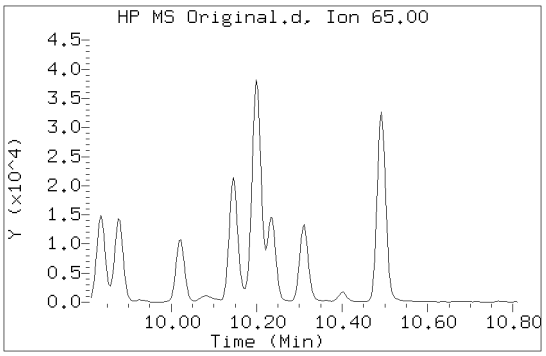
25-Jan-2024
22:07



AFTER
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HEIGHT
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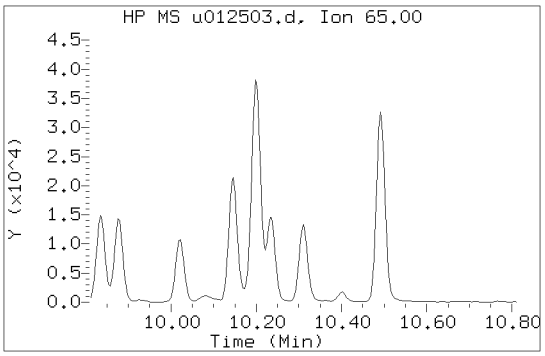
25-Jan-2024
22:07



Methyl Acetate (79-20-9)

Reason Code:

BEFORE
MASS
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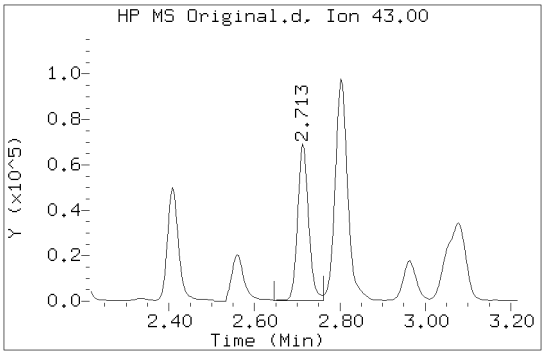
AREA
125194
HEIGHT
68895
25-Jan-2024
22:07



AFTER
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25-Jan-2024
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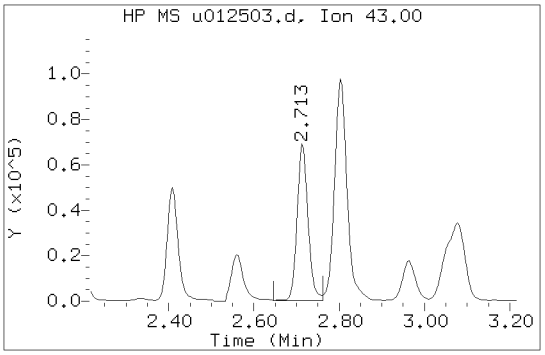

BEFORE
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74
AREA
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18498
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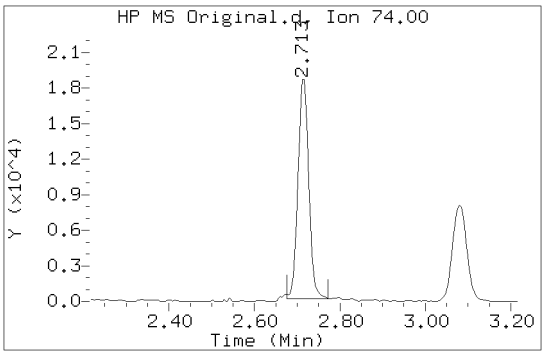

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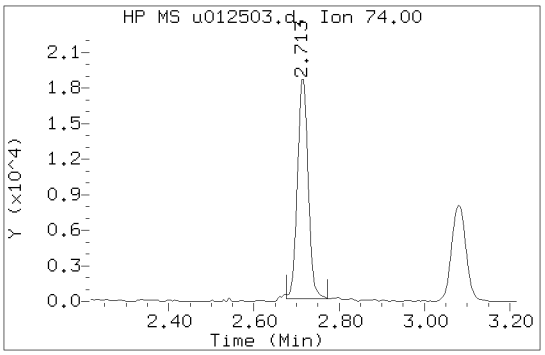

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Inj Date : 25-JAN-2024 11:04
InstruID : VOA9.i
LabSampID : CCV

Dichlorofluoromethane (75-43-4)

Reason Code:

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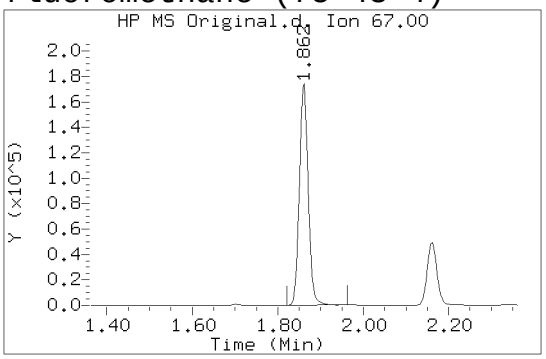
25-Jan-2024
22:07



AFTER
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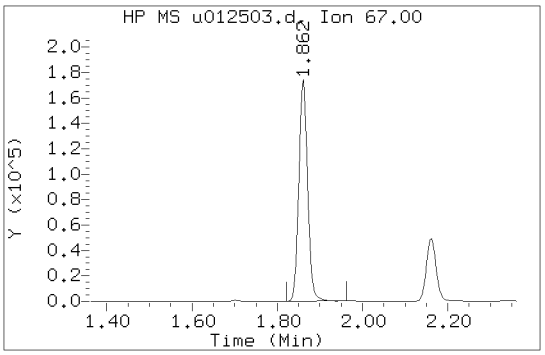

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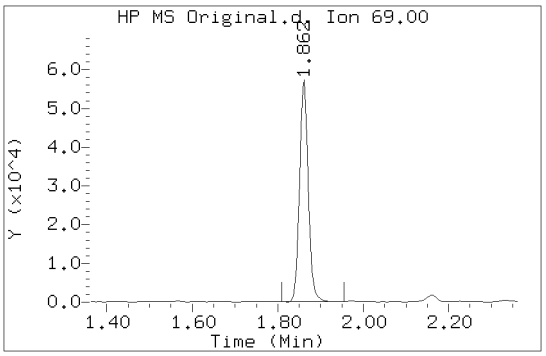

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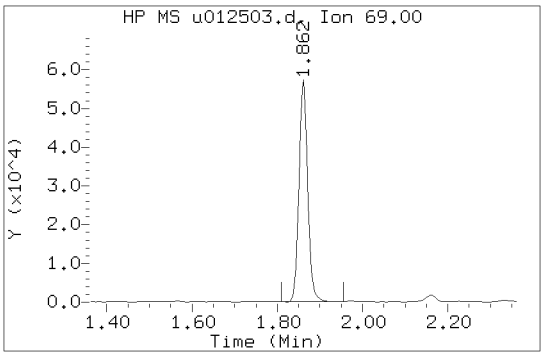

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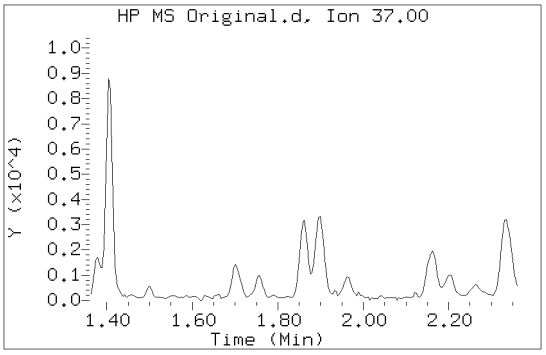

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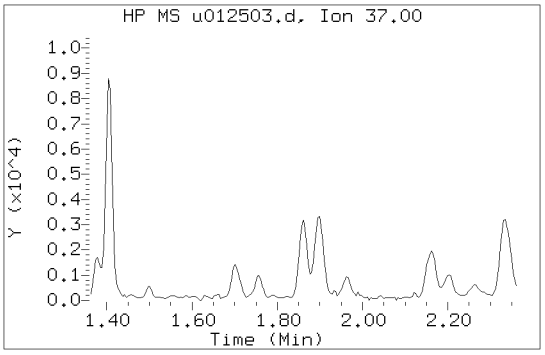

Propylene oxide ()

Reason Code:

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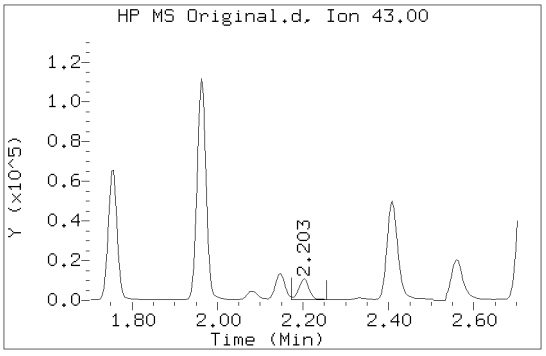

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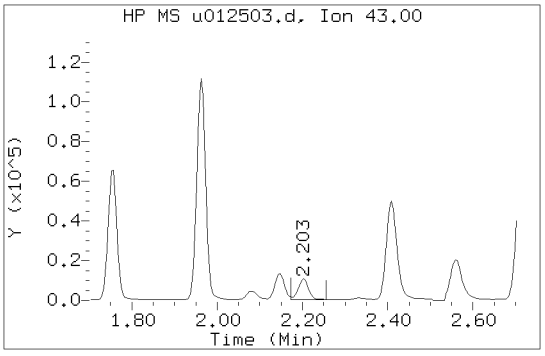

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Inj Date : 25-JAN-2024 11:04
InstruID : VOA9.i
LabSampID : CCV

Propylene oxide ()

Reason Code:

BEFORE

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25-Jan-2024
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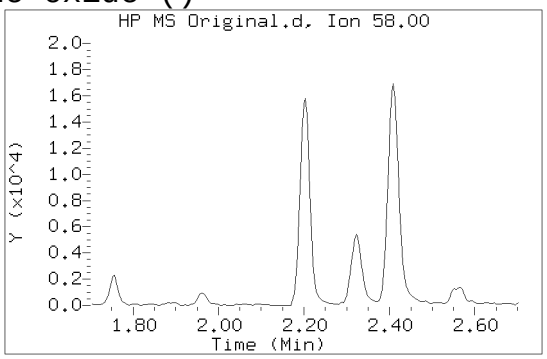

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25-Jan-2024
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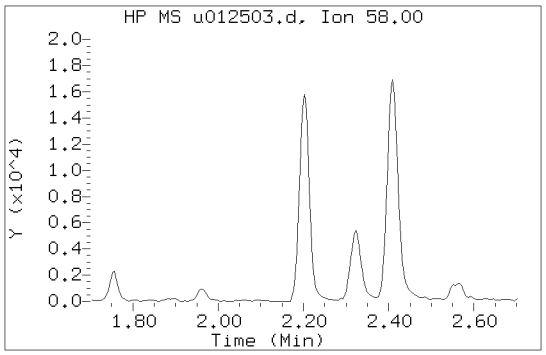

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Report Date: 01-Feb-2024 14:20

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240125.b\U012505.D
Lab Smp Id: VLCSW-240125 Client Smp ID: VLCSW-240125
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
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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
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local 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

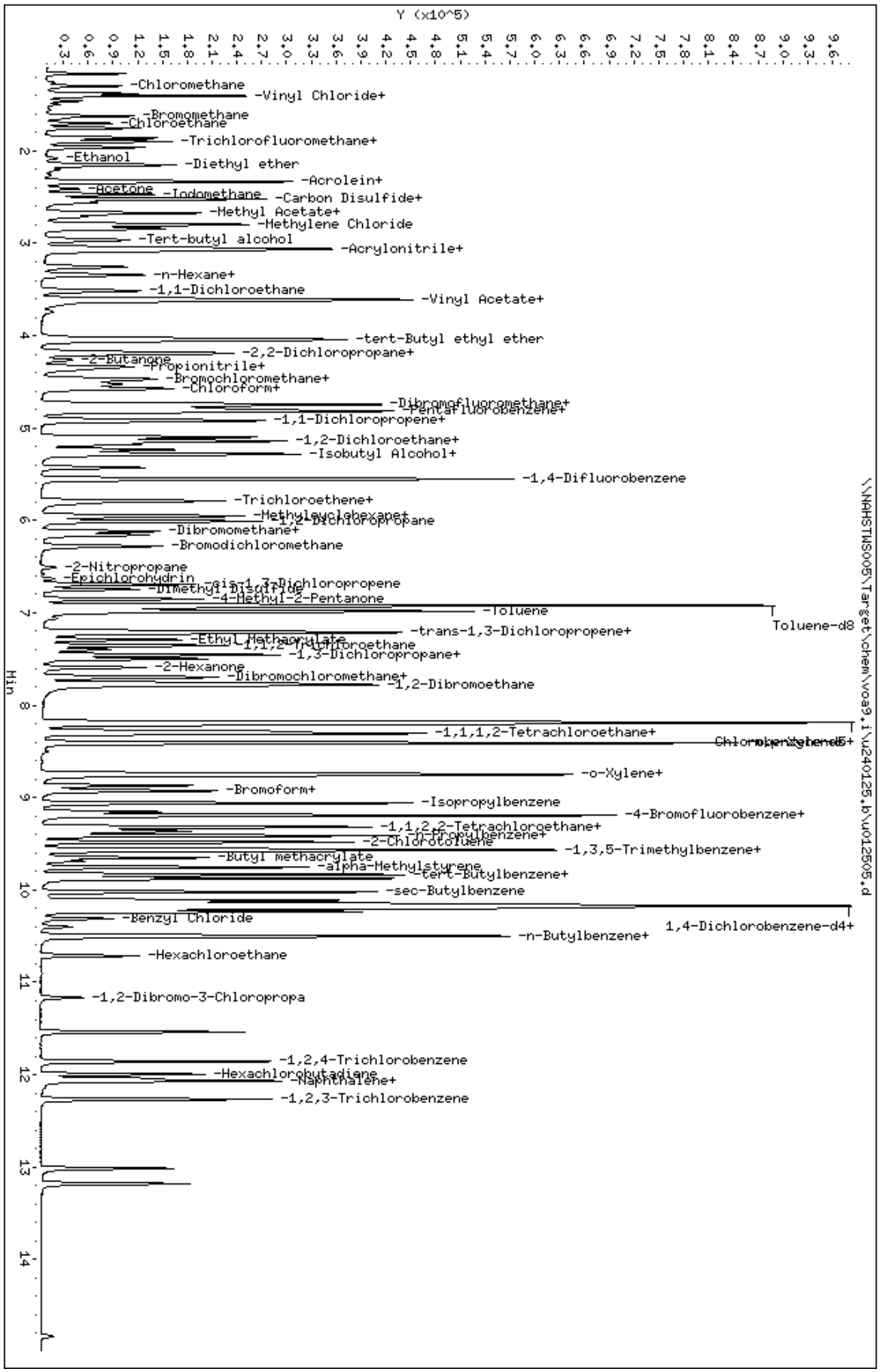
Data File: \\nahstws005\Target\chem\voa9.i\U240125.b\U012505.D Page 3
Report Date: 01-Feb-2024 14:20

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS 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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Sample Info: VLCSW-240125;VLCSW-240125;3;;LCS
Purge Volume: 5.0
Column phase: DB624

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

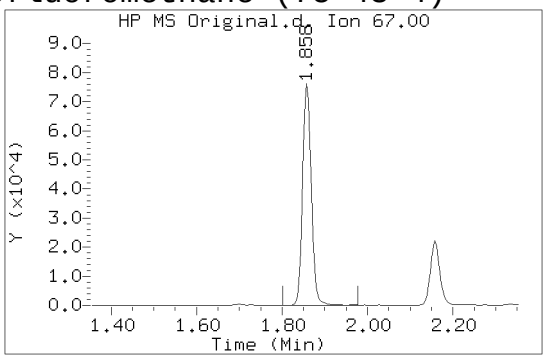
Data File : \\nahstws005\target\chem\voa9.i\u240125.b\u012505.d
Inj Date : 25-JAN-2024 11:49
InstruID : VOA9.i
LabSampID : VLCSW-240125

Dichlorofluoromethane (75-43-4)

Reason Code:

BEFORE

MASS
67
AREA
109236
HEIGHT
76158
25-Jan-2024
22:07



AFTER

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HEIGHT
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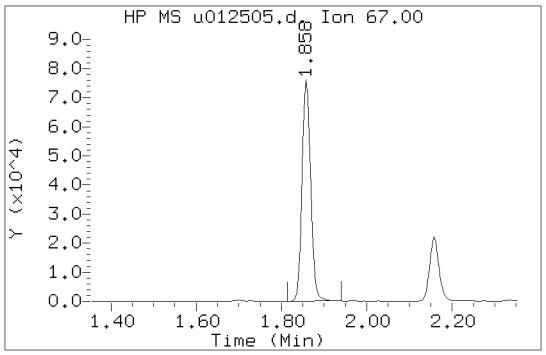
14:20



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25-Jan-2024
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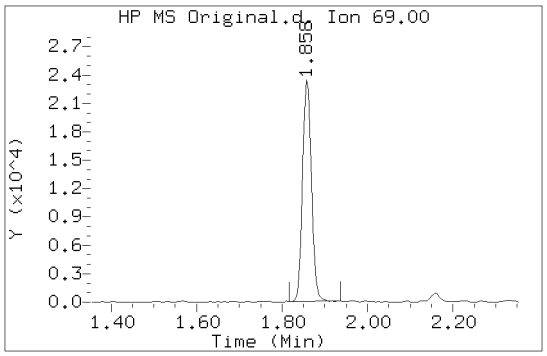

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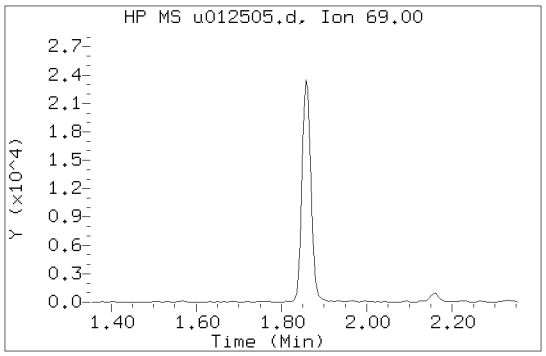

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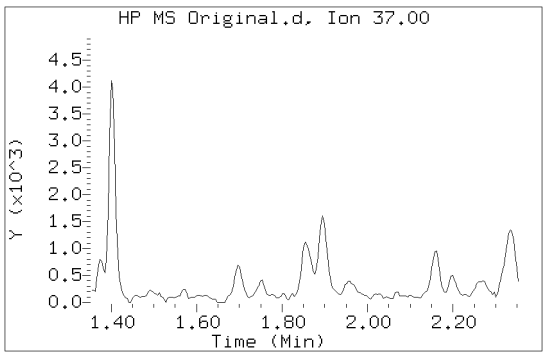

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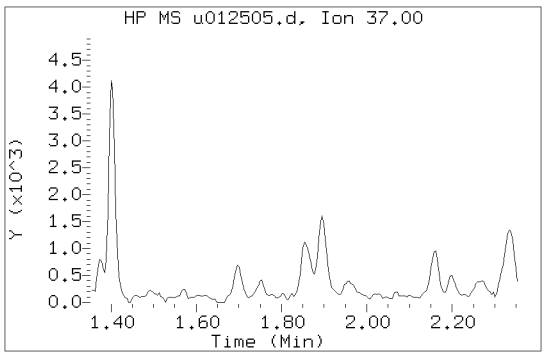


Data File: \\nahstws005\Target\chem\voa9.i\U240125.b\U012507.D Page 1
Report Date: 01-Feb-2024 14:20

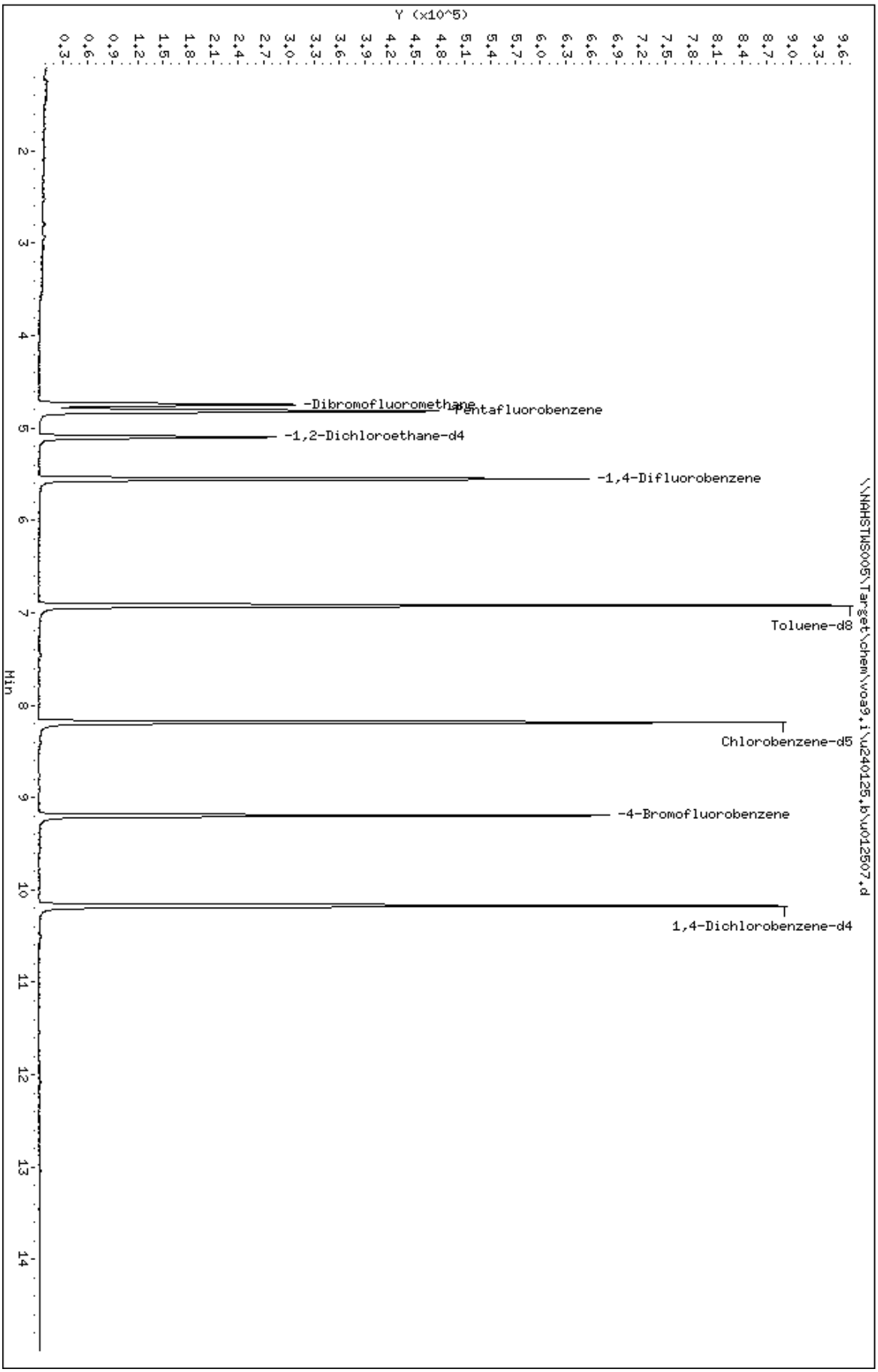
ALS Laboratory Group

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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Date : 25-JAN-2024 12:33
Client ID: VBLKW-240125
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\U012512.D Page 1
Report Date: 01-Feb-2024 14:20

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240125.b\U012512.D
Lab Smp Id: HS24011040-13 Client Smp ID: HS24011040-13
Inj Date : 25-JAN-2024 14:25
Operator : PC Inst ID: VOA9.i
Smp Info : HS24011040-13;HS24011040-13;;;
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: 11
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

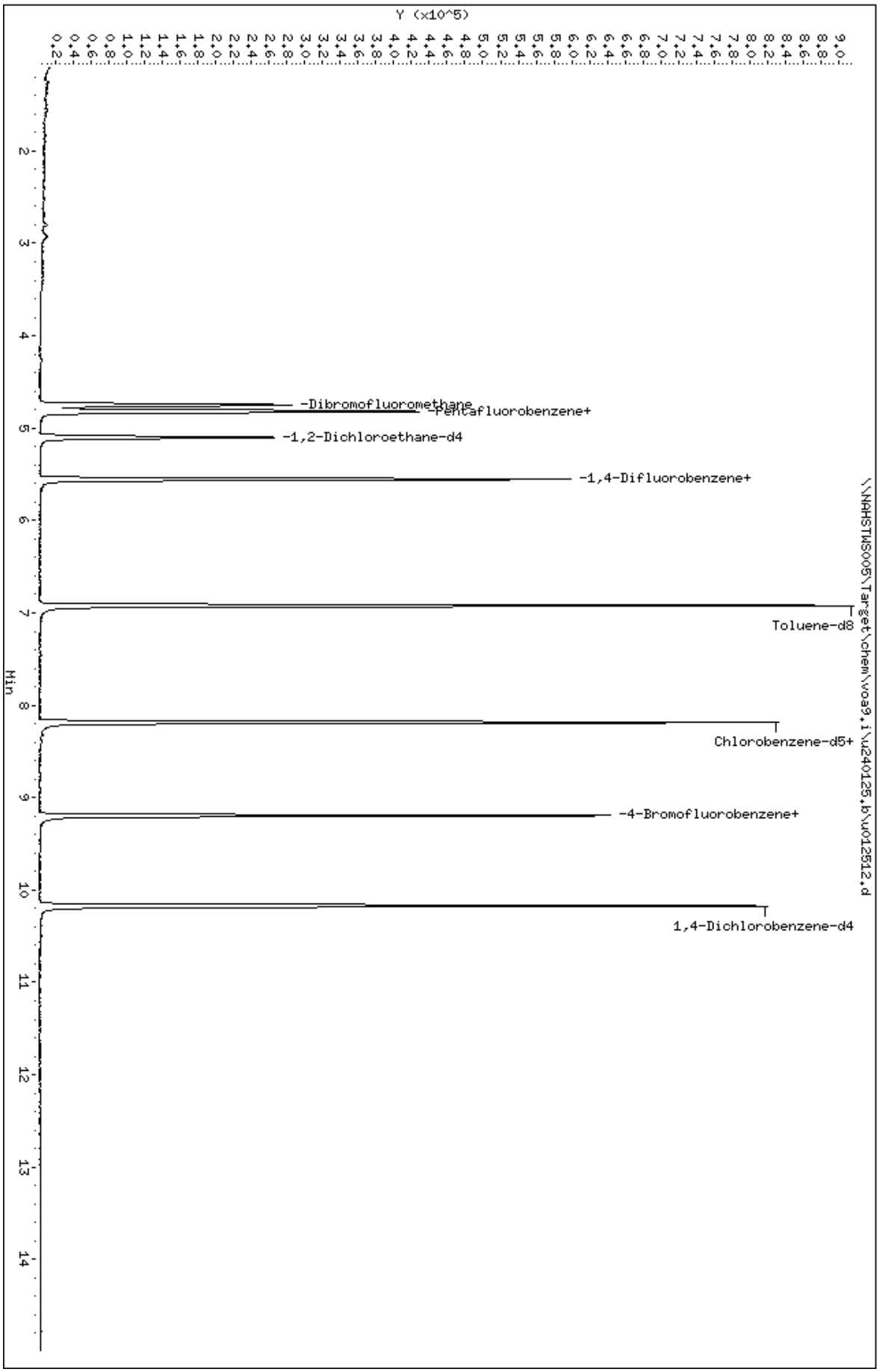
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

	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)	322944	50.0000	
	2 Dichlorodifluoromethane	85	1.017	1.164	(0.211)	19659	8.28869	8.28
	3 Chloromethane	50	1.006	1.303	(0.209)	90595	24.4549	24.45
$	30 Dibromofluoromethane	113	4.751	4.748	(0.986)	168339	50.9533	50.95(R)
	34 Carbon Tetrachloride	117	4.819	4.913	(0.868)	26681	6.67115	6.67
$	35 1,2-Dichloroethane-d4	65	5.100	5.096	(1.058)	174131	46.1597	46.15(R)
*	36 1,4-Difluorobenzene	114	5.553	5.554	(1.000)	489410	50.0000	
	42 1,2-Dichloropropane	63	5.553	6.007	(1.000)	81515	22.7256	22.72
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	473379	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	574515	52.7207	52.72(R)
	58 1-Chlorohexane	55	8.185	8.197	(1.474)	3784	1.37883	1.37(a)
$	69 4-Bromofluorobenzene	95	9.193	9.190	(1.123)	189741	45.8817	45.88(R)
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	239461	50.0000	
	71 1,2,3-Trichloropropane	75	9.193	9.362	(0.904)	85681	18.8486	18.84
	141 Cyclohexane	56	4.811	4.785	(0.998)	4051	0.87056	0.87(a)

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 14:25
Client ID: HS24011040-13
Sample Info: HS24011040-13;HS24011040-13;;;
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\u240125.b\u012512.d Page 2

Date : 25-JAN-2024 14:25

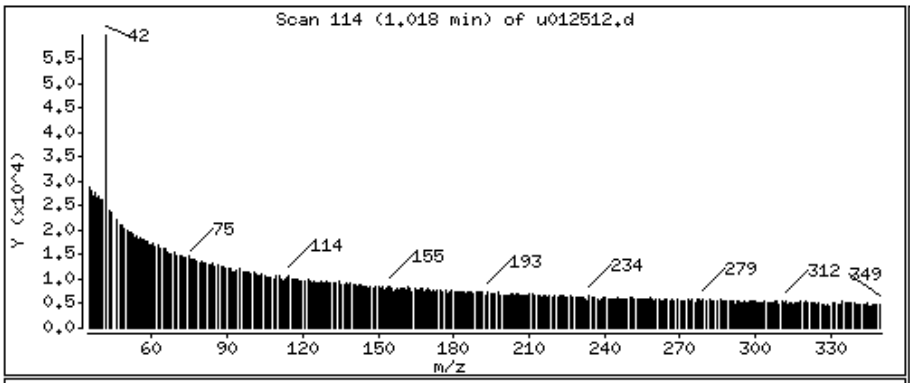
Client ID: HS24011040-13 Instrument: VOA9.i

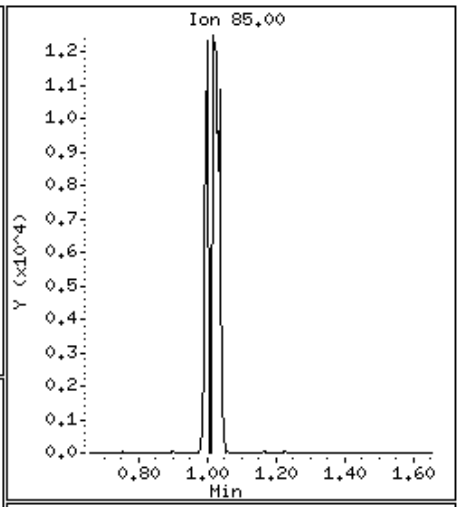
Sample Info: HS24011040-13;HS24011040-13;;;

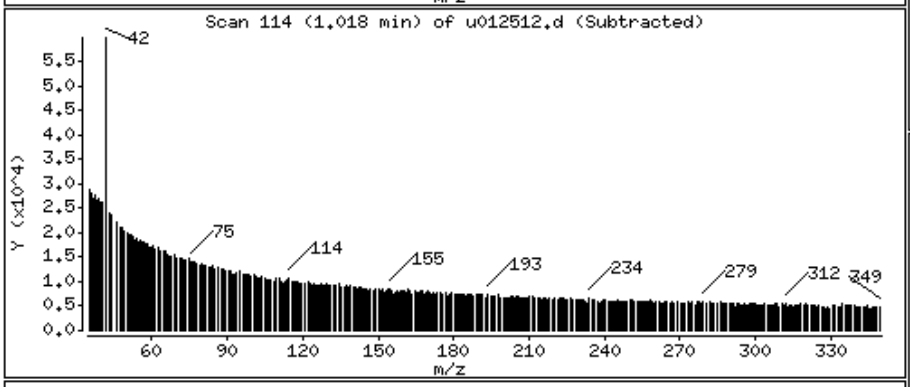
Purge Volume: 5.0 Operator: PC

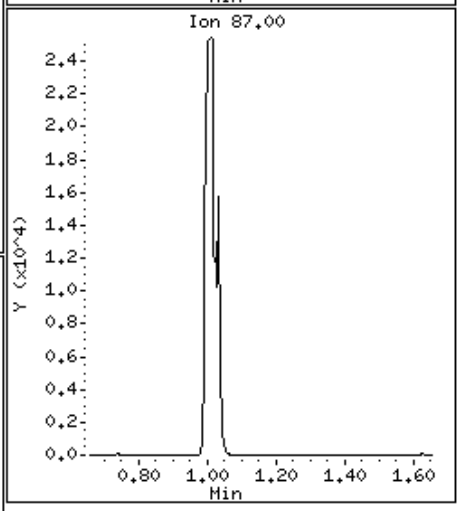
Column phase: DB624 Column diameter: 0.18

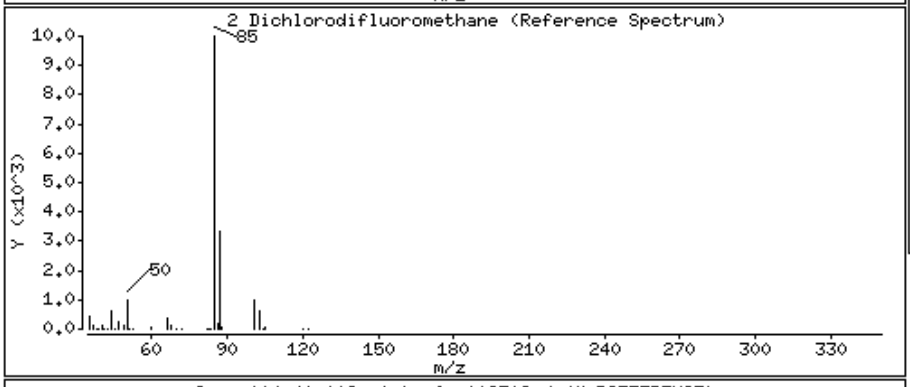
2 Dichlorodifluoromethane Concentration: 8.28 ug/l

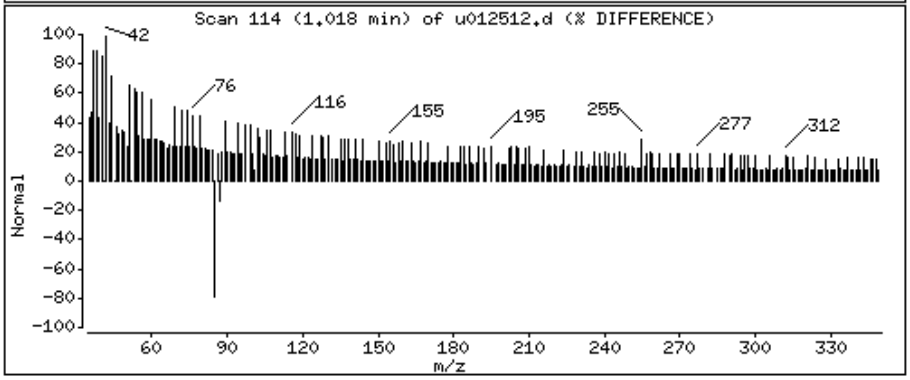












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012512.d Page 3

Date : 25-JAN-2024 14:25

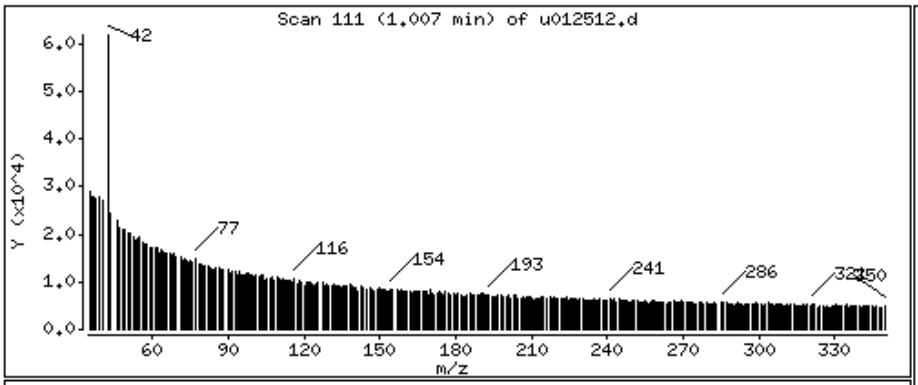
Client ID: HS24011040-13 Instrument: VOA9.i

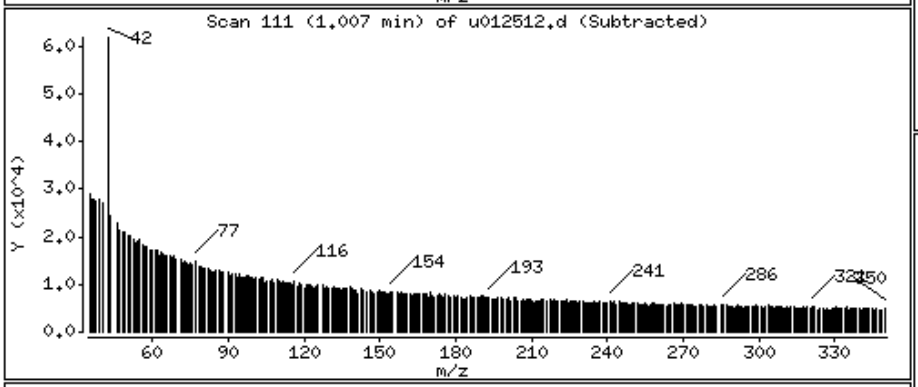
Sample Info: HS24011040-13;HS24011040-13;;;

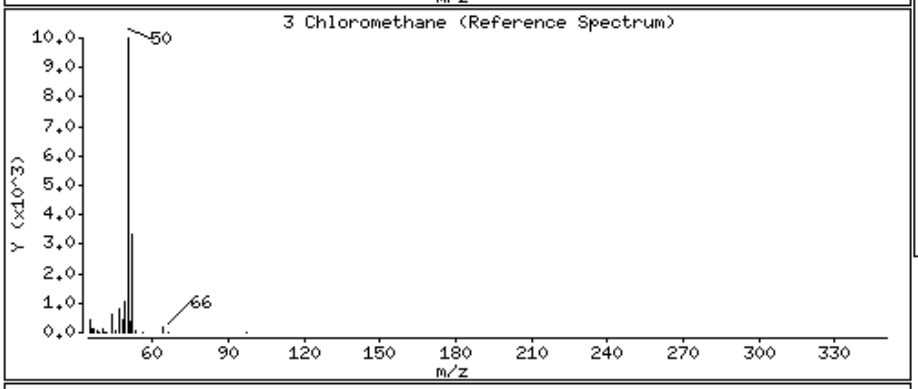
Purge Volume: 5.0 Operator: PC

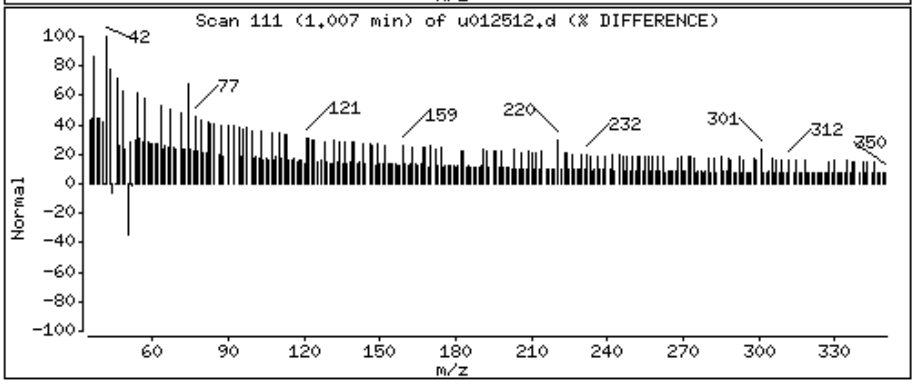
Column phase: DB624 Column diameter: 0.18

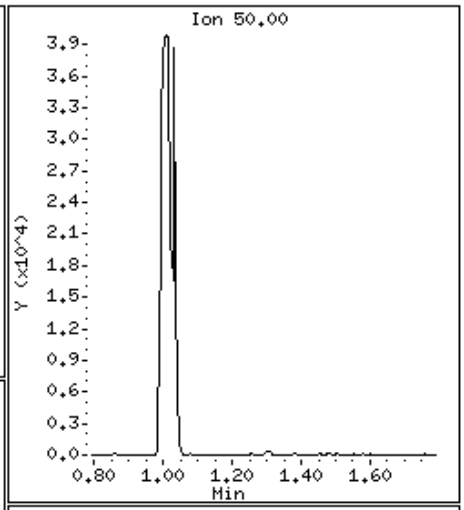
3 Chloromethane Concentration: 24.45 ug/l

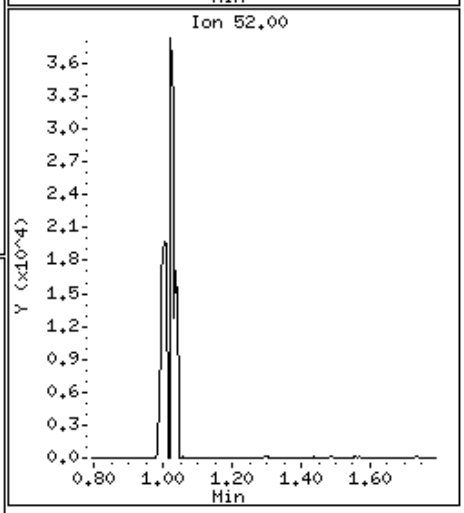












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012512.d Page 4

Date : 25-JAN-2024 14:25

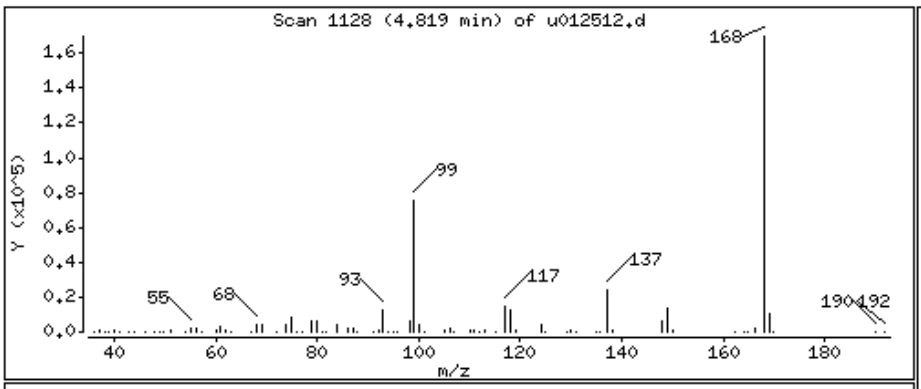
Client ID: HS24011040-13 Instrument: VOA9.i

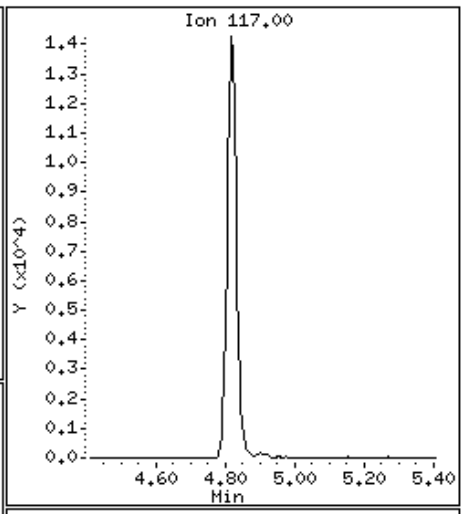
Sample Info: HS24011040-13;HS24011040-13;;;

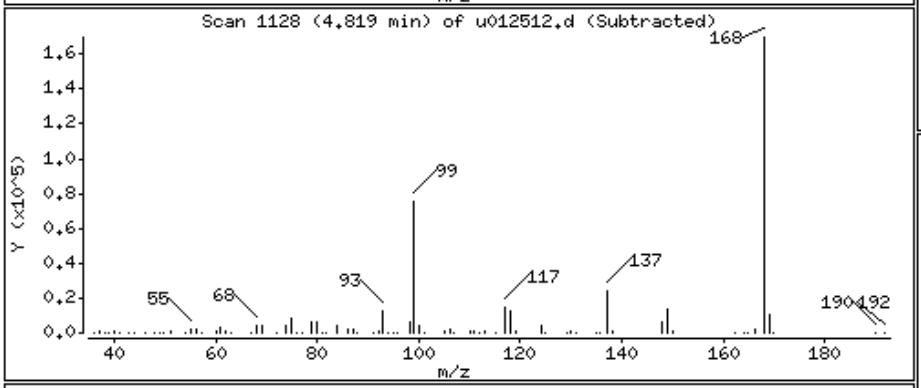
Purge Volume: 5.0 Operator: PC

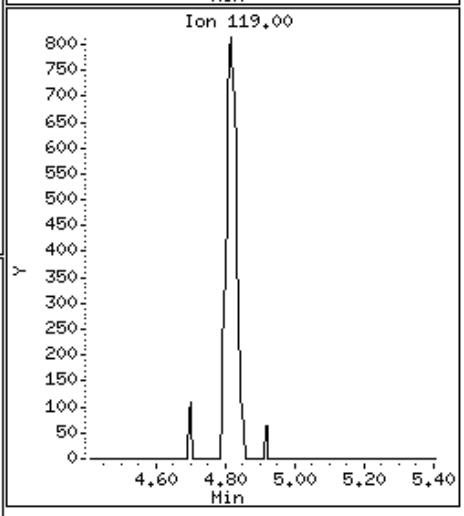
Column phase: DB624 Column diameter: 0.18

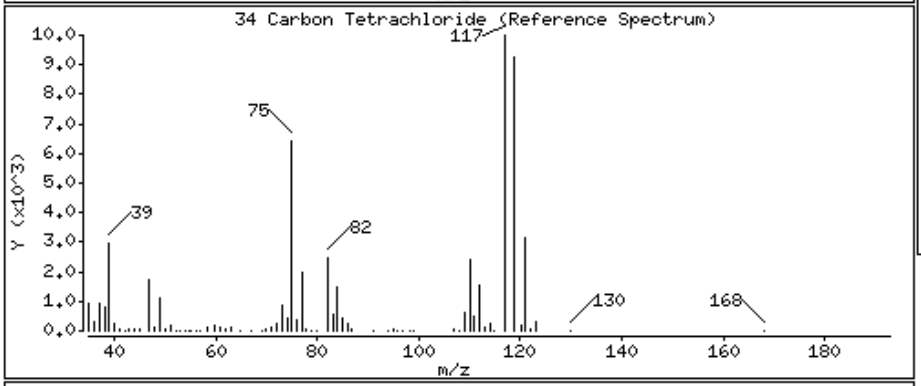
34 Carbon Tetrachloride Concentration: 6.67 ug/l

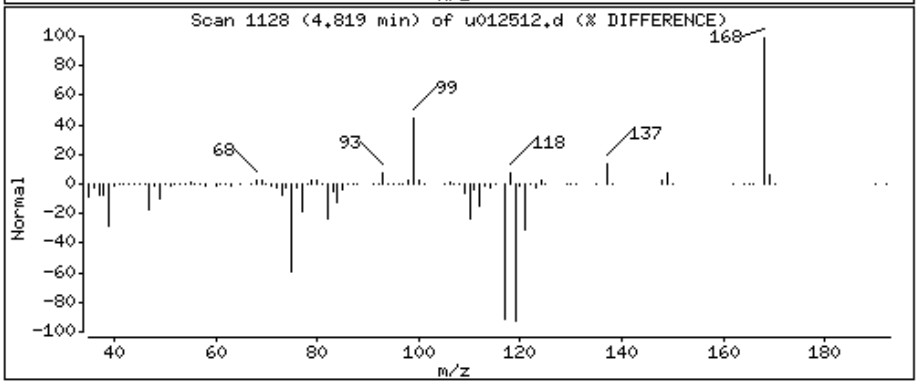












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012512.d Page 5

Date : 25-JAN-2024 14:25

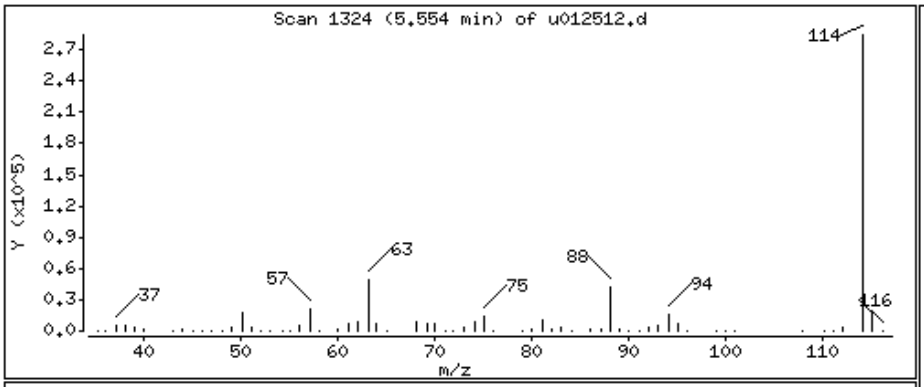
Client ID: HS24011040-13 Instrument: VOA9.i

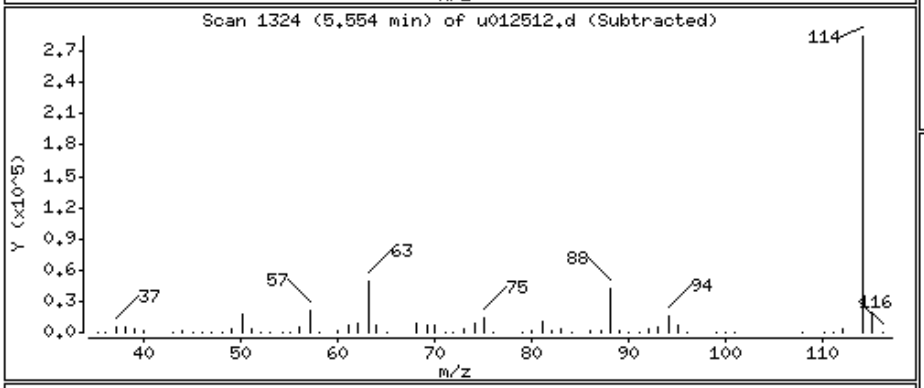
Sample Info: HS24011040-13;HS24011040-13;;;

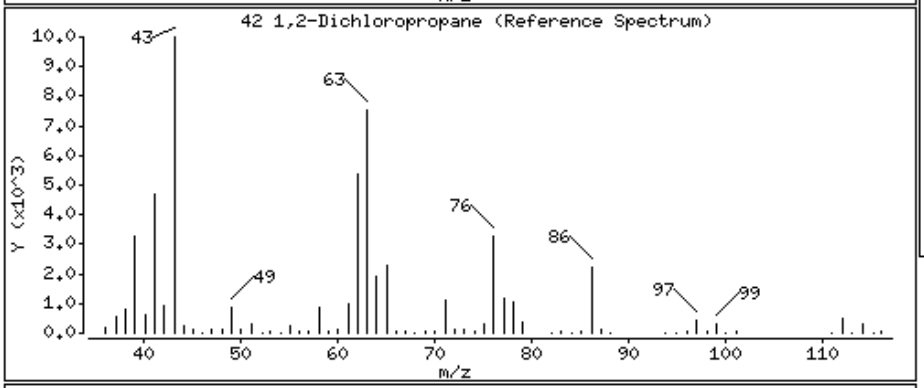
Purge Volume: 5.0 Operator: PC

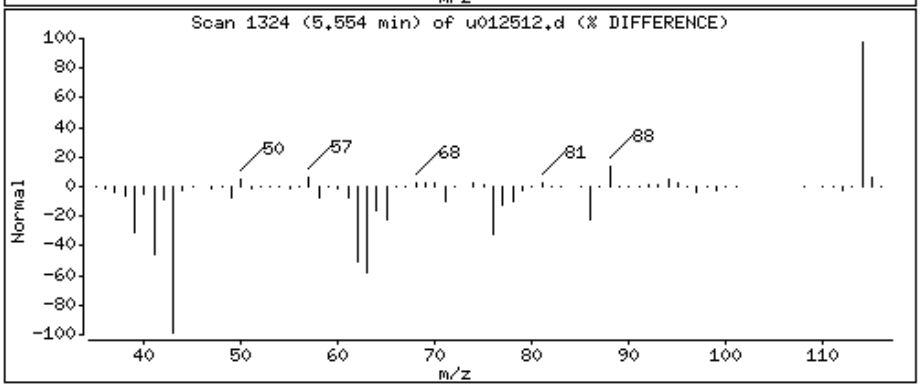
Column phase: DB624 Column diameter: 0.18

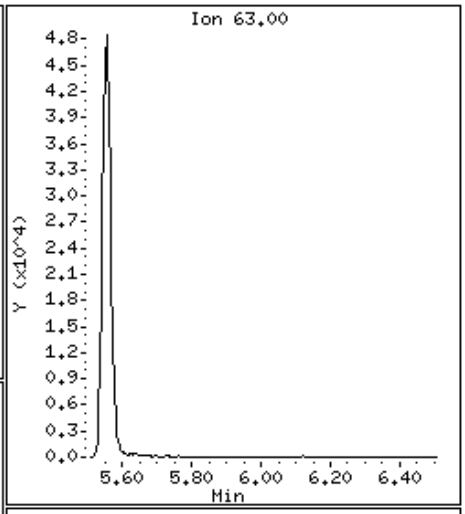
42 1,2-Dichloropropane Concentration: 22.72 ug/l

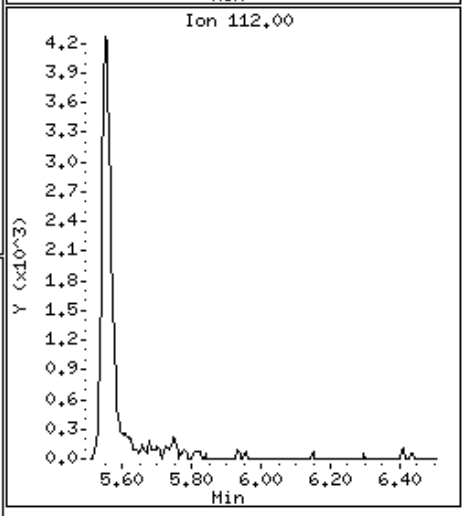












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012512.d Page 6

Date : 25-JAN-2024 14:25

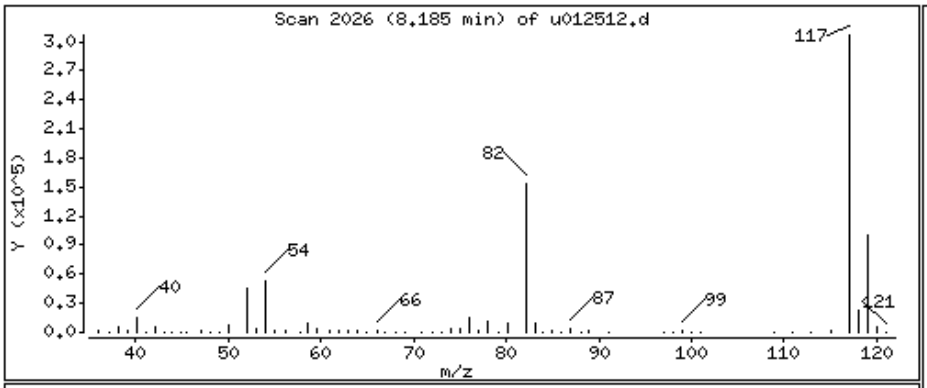
Client ID: HS24011040-13 Instrument: VOA9.i

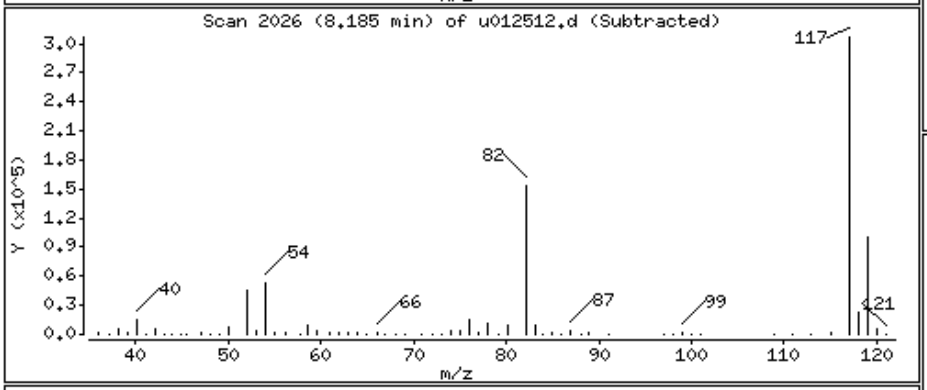
Sample Info: HS24011040-13;HS24011040-13;;;

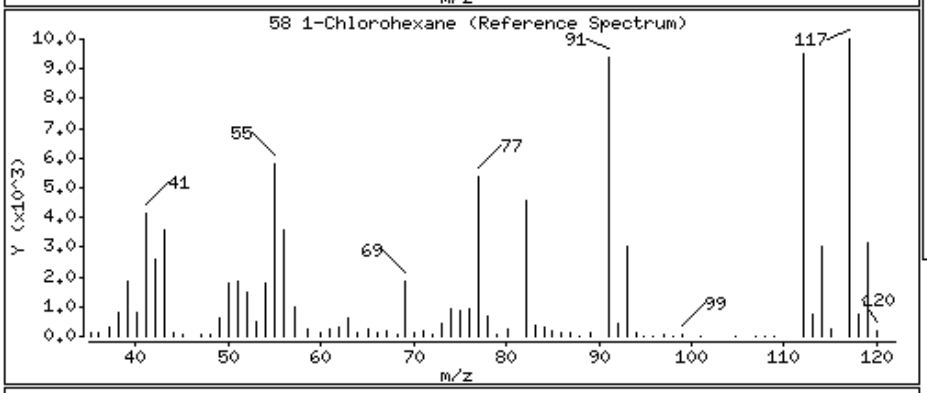
Purge Volume: 5.0 Operator: PC

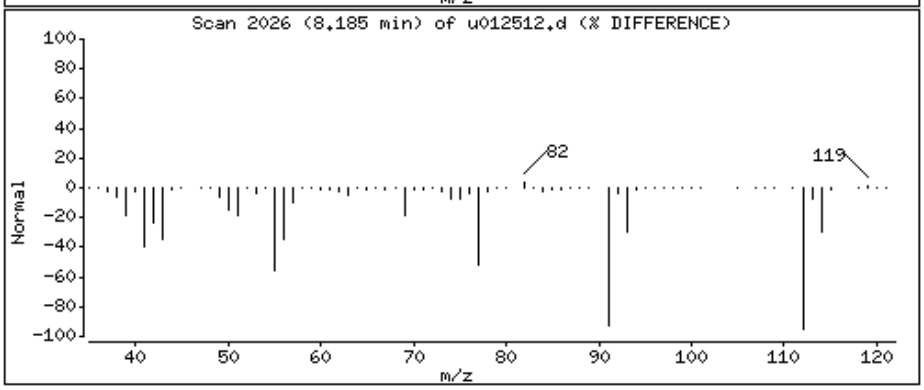
Column phase: DB624 Column diameter: 0.18

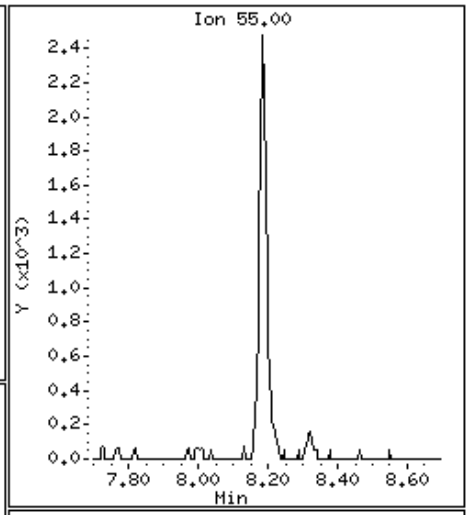
58 1-Chlorohexane Concentration: 1.37 ug/l

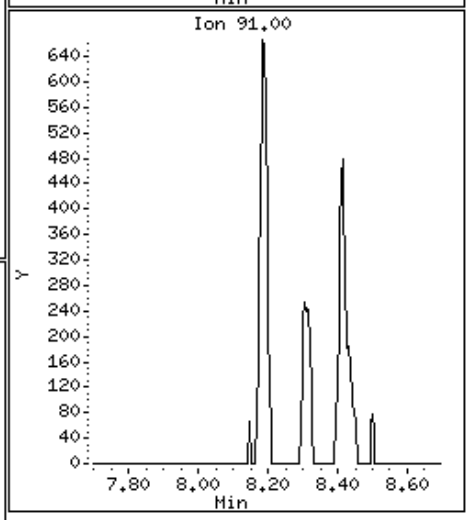












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012512.d Page 7

Date : 25-JAN-2024 14:25

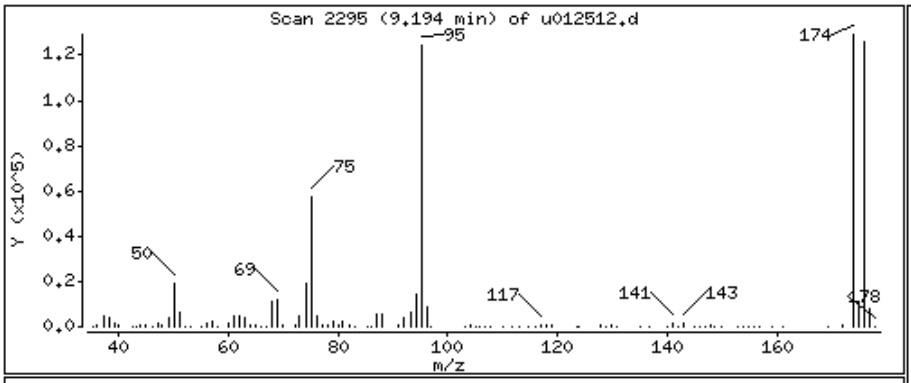
Client ID: HS24011040-13 Instrument: VOA9.i

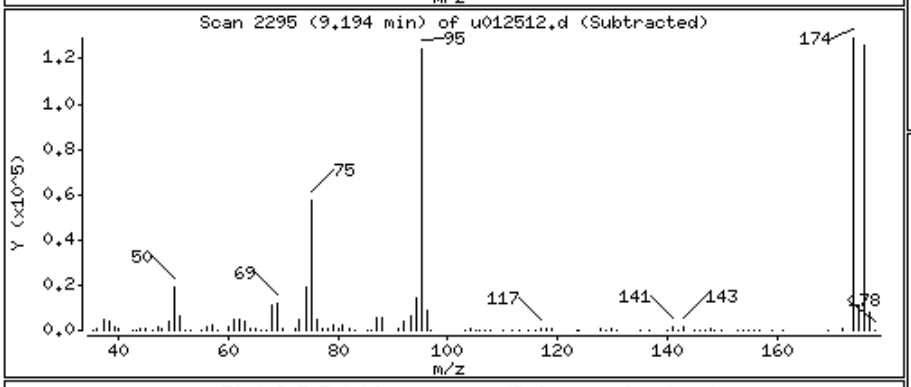
Sample Info: HS24011040-13;HS24011040-13;;;

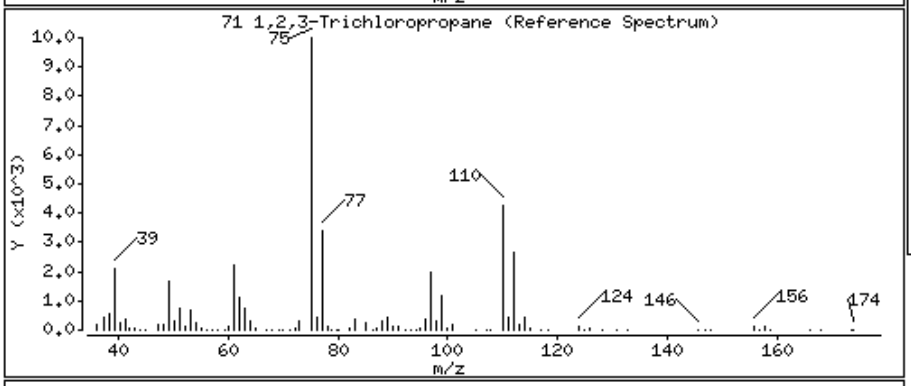
Purge Volume: 5.0 Operator: PC

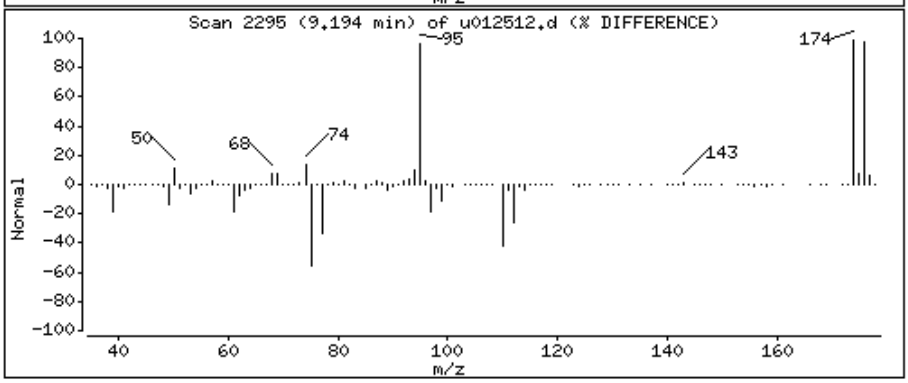
Column phase: DB624 Column diameter: 0.18

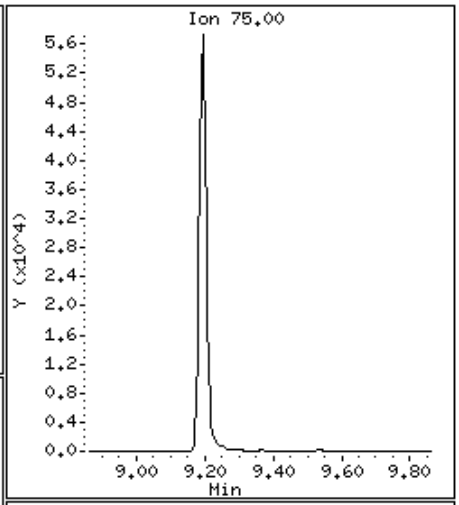
71 1,2,3-Trichloropropane Concentration: 18.84 ug/l

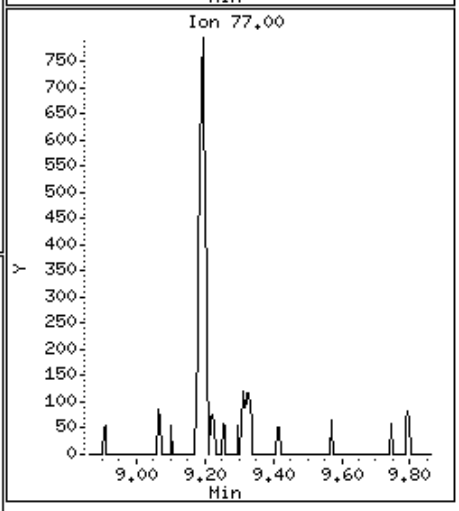












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012512.d Page 8

Date : 25-JAN-2024 14:25

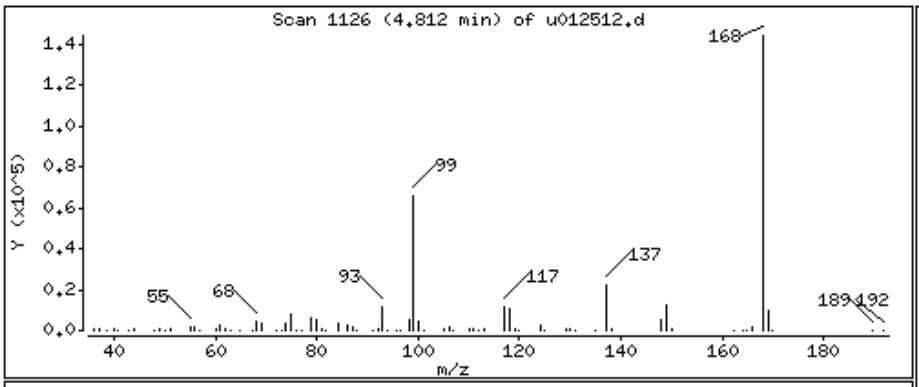
Client ID: HS24011040-13 Instrument: VOA9.i

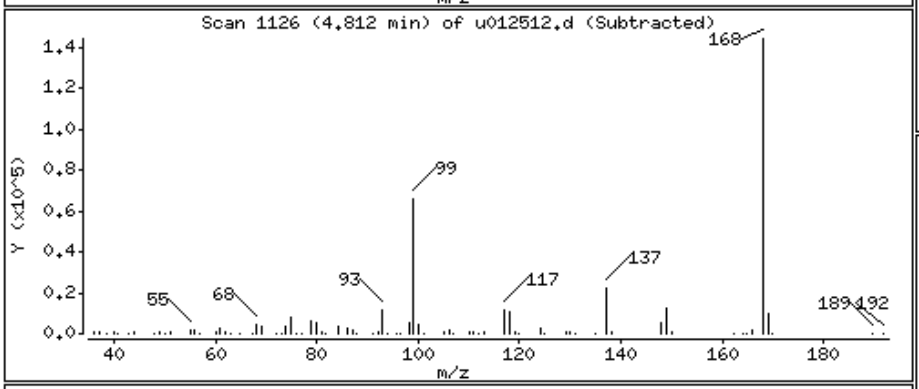
Sample Info: HS24011040-13;HS24011040-13;;;

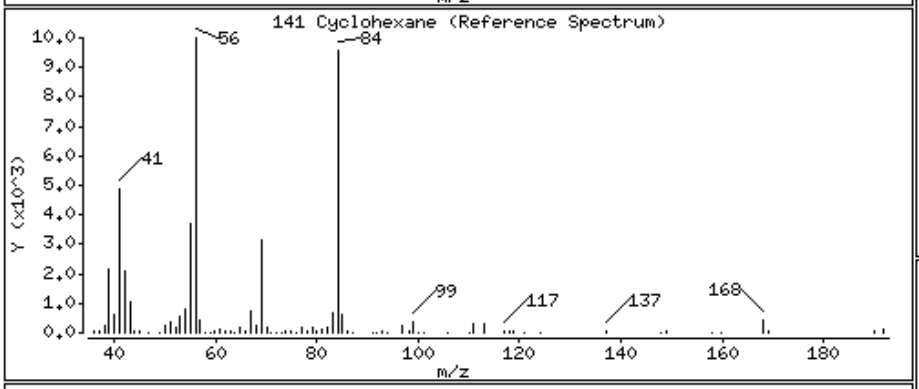
Purge Volume: 5.0 Operator: PC

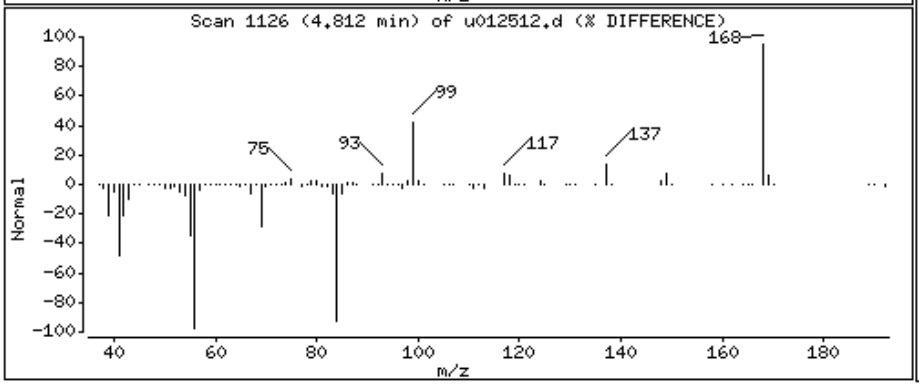
Column phase: DB624 Column diameter: 0.18

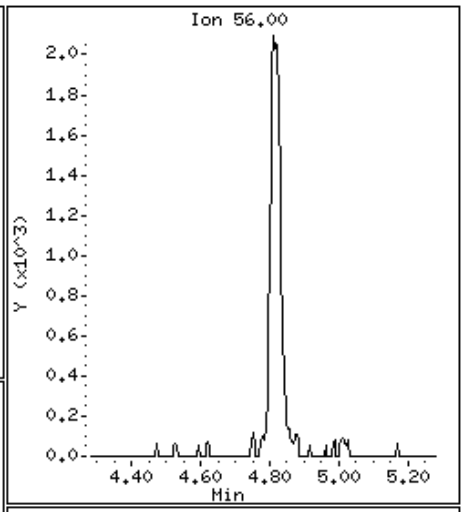
141 Cyclohexane Concentration: 0.87 ug/l

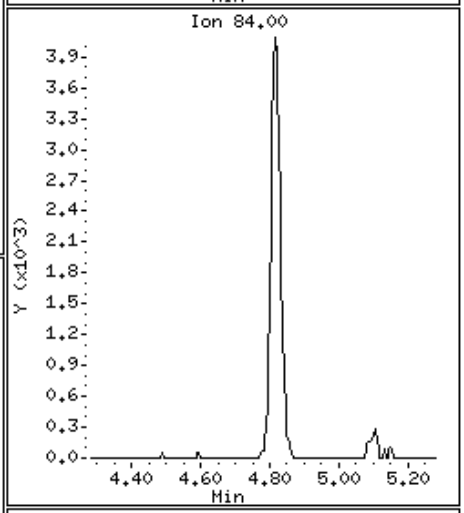


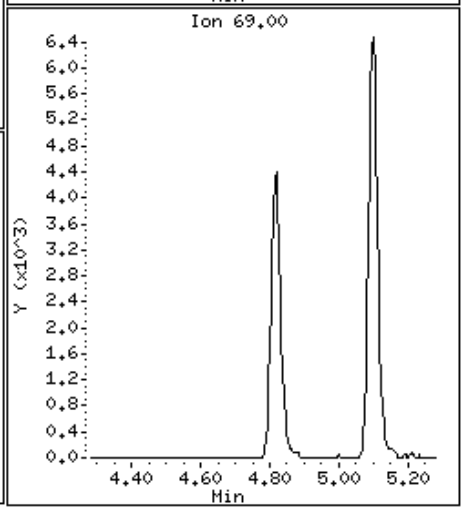












Data File : \\nahstws005\target\chem\voa9.i\u240125.b\u012512.d
Inj Date : 25-JAN-2024 14:25
InstruID : VOA9.i
LabSampID : HS24011040-13

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240125.b\U012514.D Page 1
Report Date: 01-Feb-2024 14:20

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240125.b\U012514.D
Lab Smp Id: HS24011040-03 Client Smp ID: HS24011040-03
Inj Date : 25-JAN-2024 15:10
Operator : PC Inst ID: VOA9.i
Smp Info : HS24011040-03;HS24011040-03;;;
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: 13
Dil Factor: 100.00000
Integrator: HP RTE Compound Sublist: 8260_GB.sub
Target Version: 4.14
Processing Host: NAHSTW7066

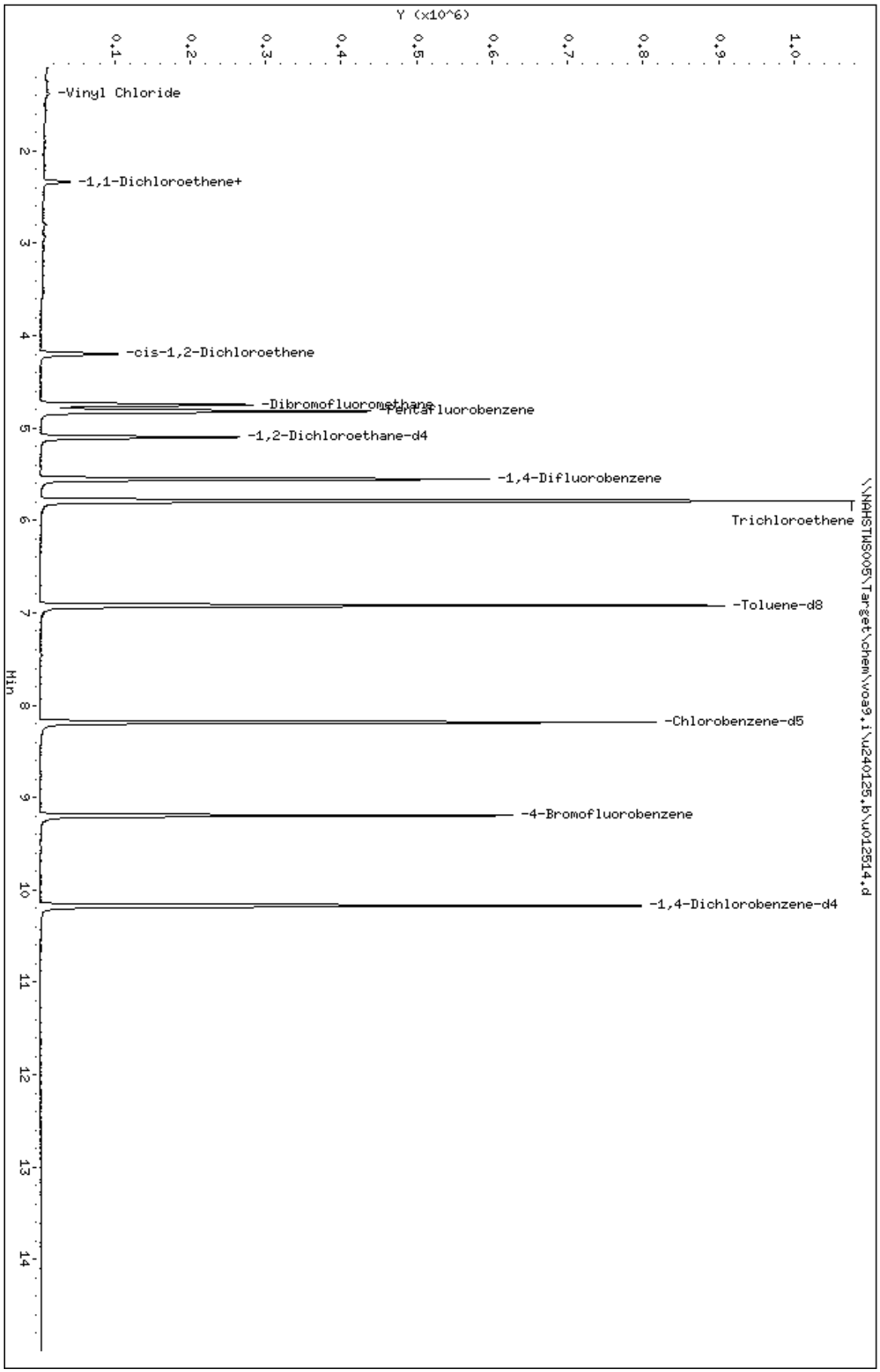
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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	4.819	4.815	(1.000)	335194	50.0000	
	5 Vinyl Chloride	62	1.378	1.378	(0.286)	3906	1.06336	106.33(a)
	11 1,1-Dichloroethene	96	2.334	2.334	(0.484)	3437	1.32945	132.94(a)
	27 cis-1,2-Dichloroethene	96	4.197	4.197	(0.871)	55007	13.2865	1328.65
$	30 Dibromofluoromethane	113	4.748	4.748	(0.985)	169112	49.2835	49.28
$	35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	173744	44.4604	44.46
*	36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	492026	50.0000	
	38 Trichloroethene	130	5.790	5.790	(1.043)	377410	102.235	10223.46
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	464113	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	564187	52.8066	52.80
$	69 4-Bromofluorobenzene	95	9.194	9.190	(1.123)	184027	45.3745	45.37
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	236990	50.0000	
M	94 1,2-Dichloroethylene (total)	96				55007	15.2151	1521.50
	138 Freon TF	101	2.337	2.337	(0.485)	11832	4.90651	490.65(a)

QC Flag Legend

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



Data File: \\NAHSTWS005\Target\chem\voa9,i\u240125,b\u012514,d
Date : 25-JAN-2024 15:10
Client ID: HS24011040-03
Sample Info: HS24011040-03;HS24011040-03;;;
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\u012514.d Page 2

Date : 25-JAN-2024 15:10

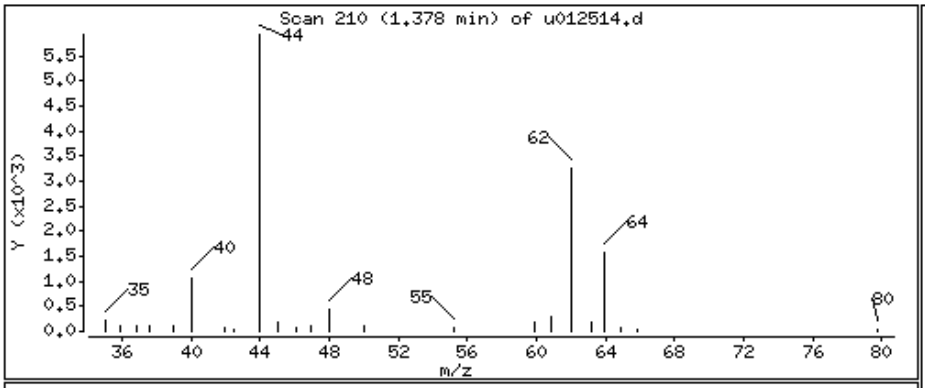
Client ID: HS24011040-03 Instrument: VOA9.i

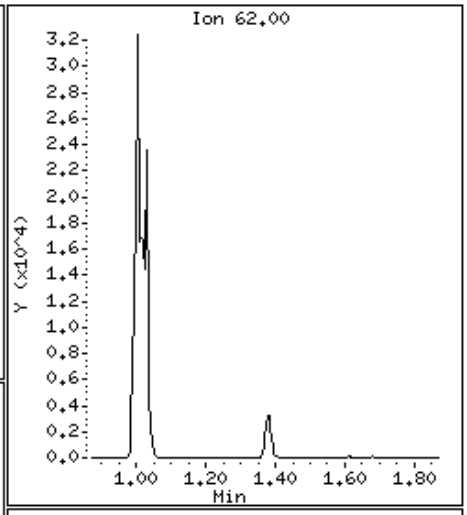
Sample Info: HS24011040-03;HS24011040-03;;;

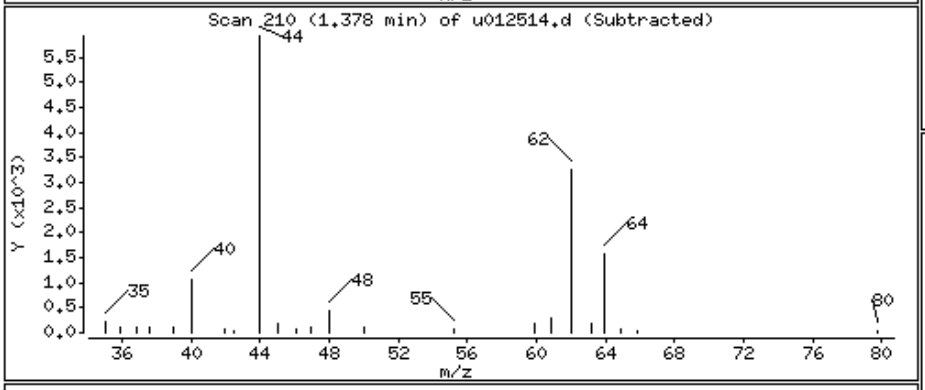
Purge Volume: 5.0 Operator: PC

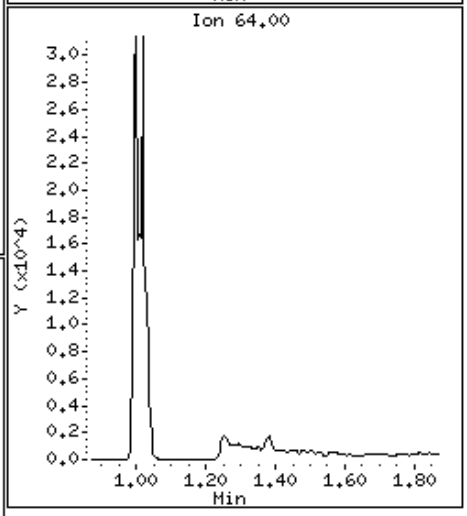
Column phase: DB624 Column diameter: 0.18

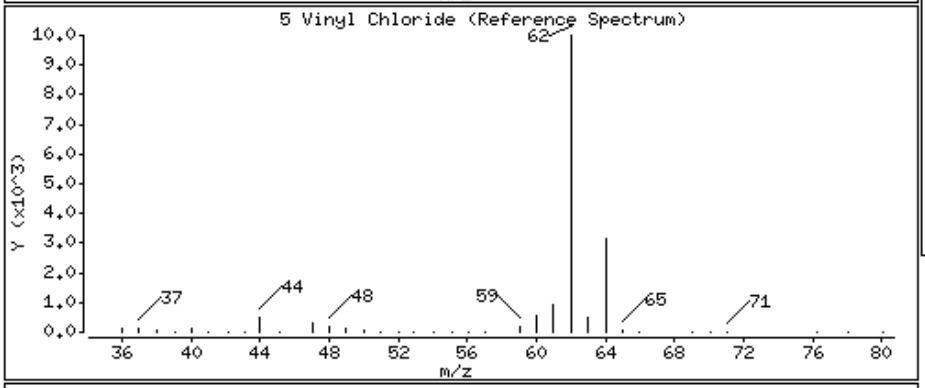
5 Vinyl Chloride Concentration: 106.33 ug/l

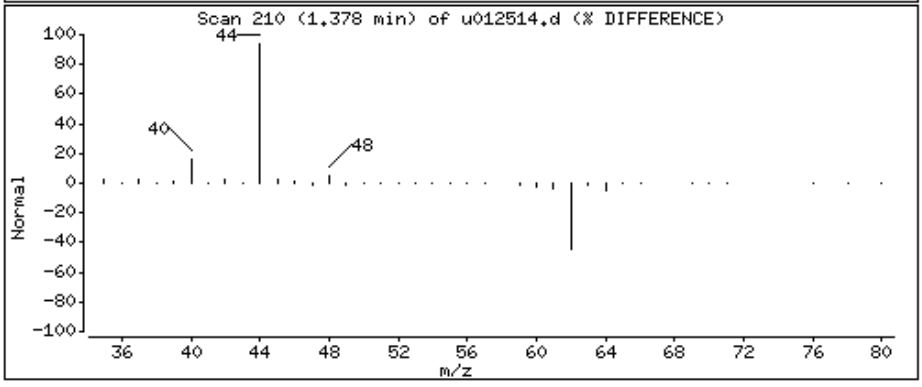












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012514.d Page 3

Date : 25-JAN-2024 15:10

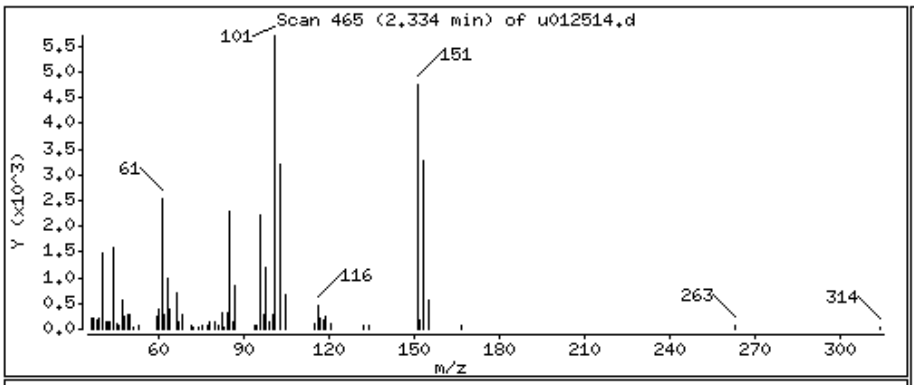
Client ID: HS24011040-03 Instrument: VOA9.i

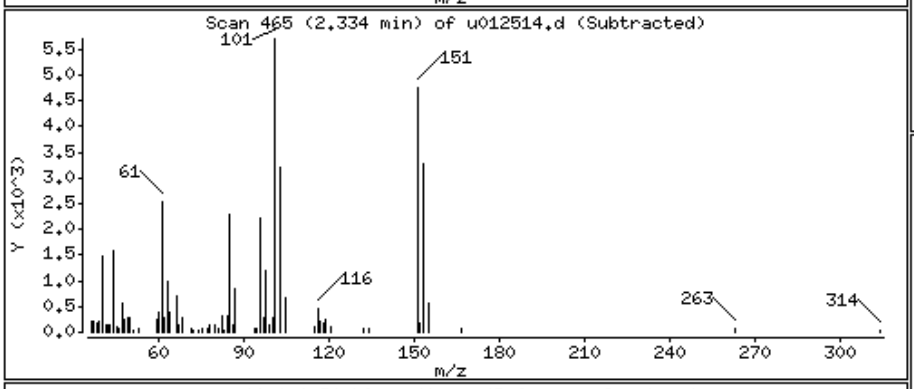
Sample Info: HS24011040-03;HS24011040-03;;;

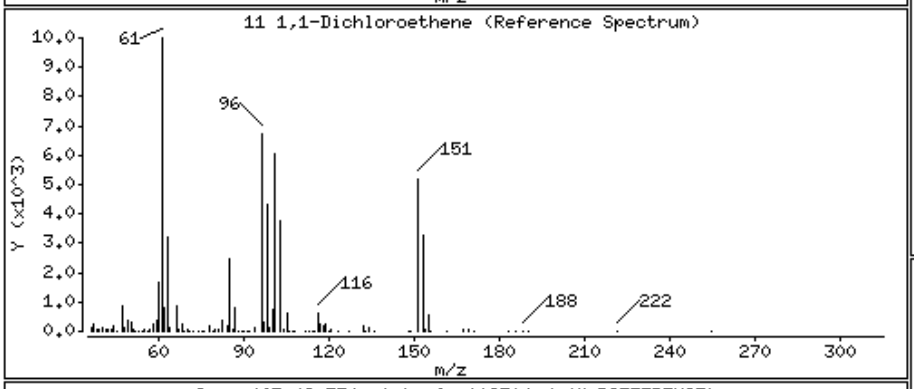
Purge Volume: 5.0 Operator: PC

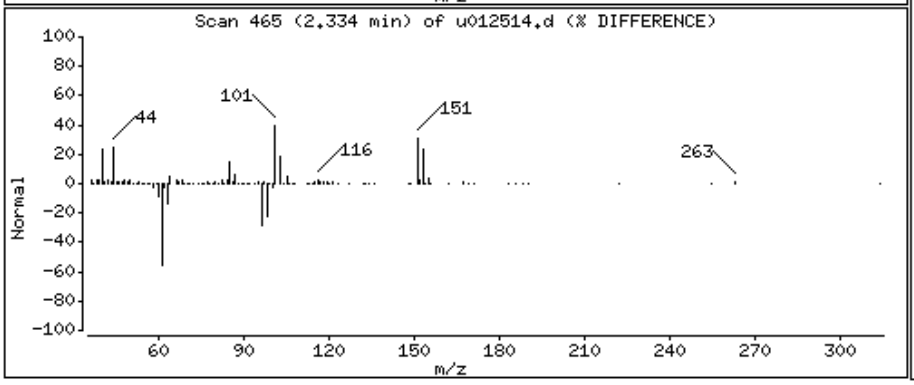
Column phase: DB624 Column diameter: 0.18

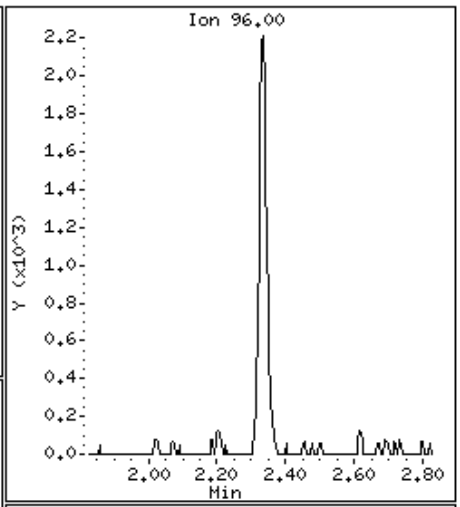
11 1,1-Dichloroethene Concentration: 132.94 ug/l

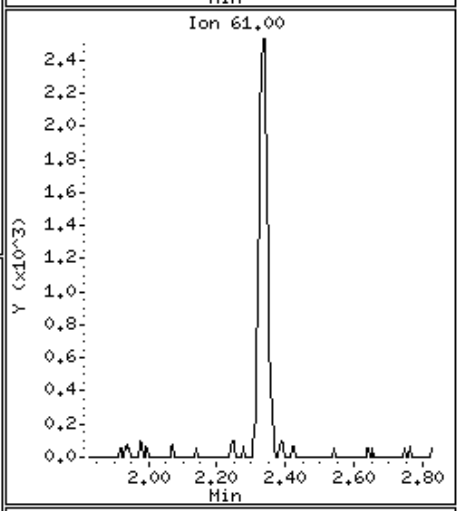


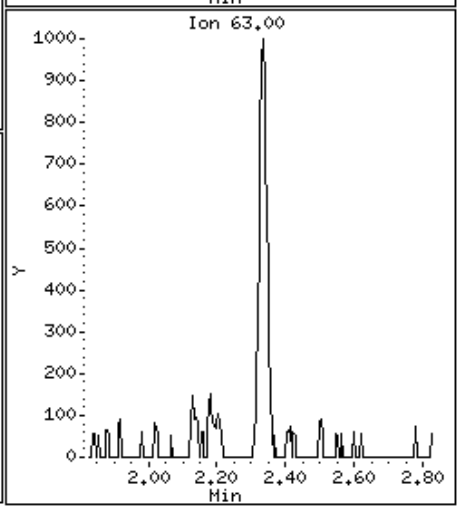












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012514.d Page 4

Date : 25-JAN-2024 15:10

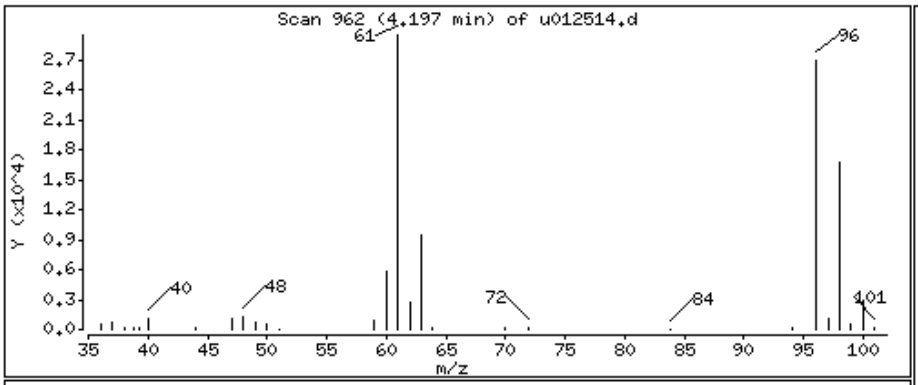
Client ID: HS24011040-03 Instrument: VOA9.i

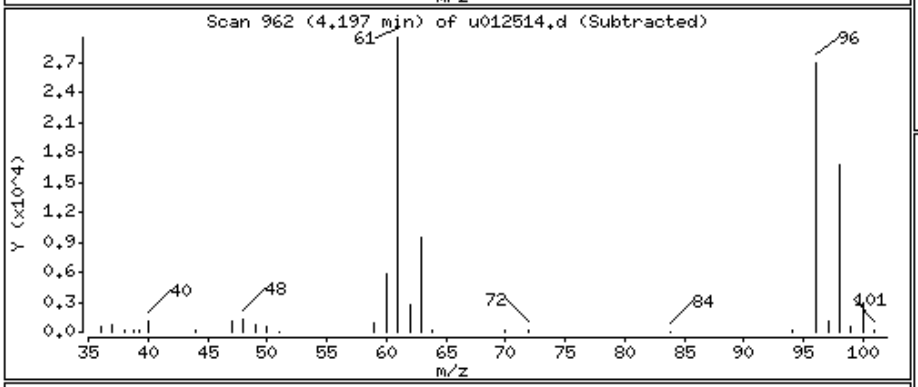
Sample Info: HS24011040-03;HS24011040-03;;;

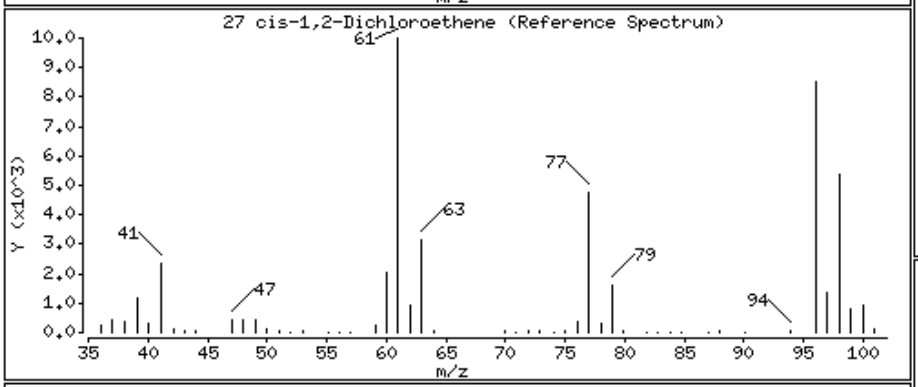
Purge Volume: 5.0 Operator: PC

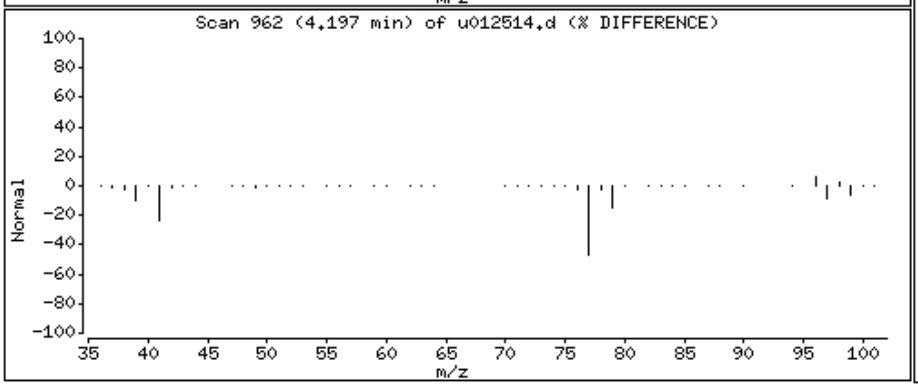
Column phase: DB624 Column diameter: 0.18

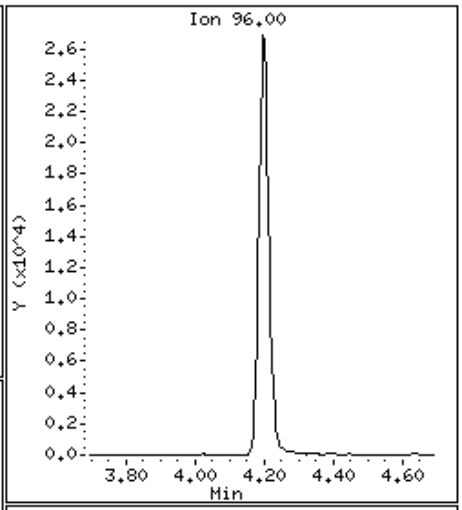
27 cis-1,2-Dichloroethene Concentration: 1328.65 ug/l

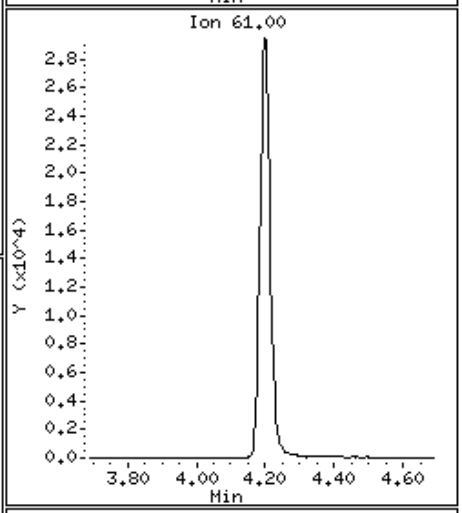


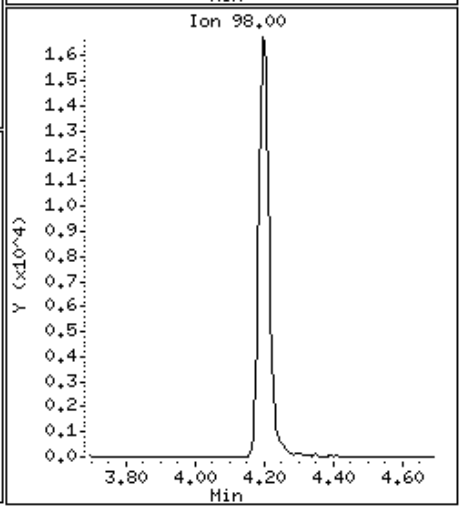












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012514.d Page 5

Date : 25-JAN-2024 15:10

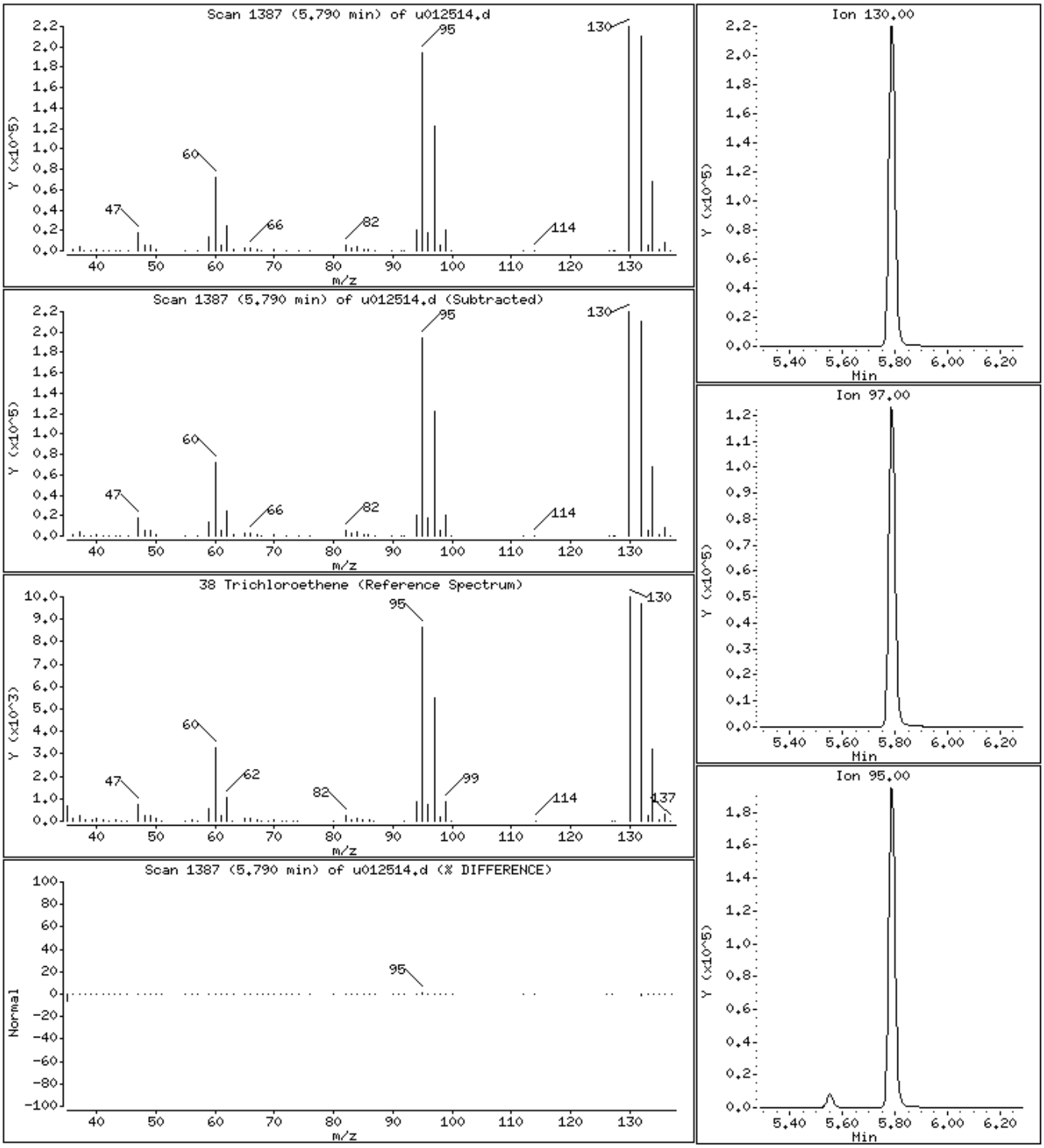
Client ID: HS24011040-03 Instrument: VOA9.i

Sample Info: HS24011040-03;HS24011040-03;;;

Purge Volume: 5.0 Operator: PC

Column phase: DB624 Column diameter: 0.18

38 Trichloroethene Concentration: 10223.46 ug/l



Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012514.d Page 6

Date : 25-JAN-2024 15:10

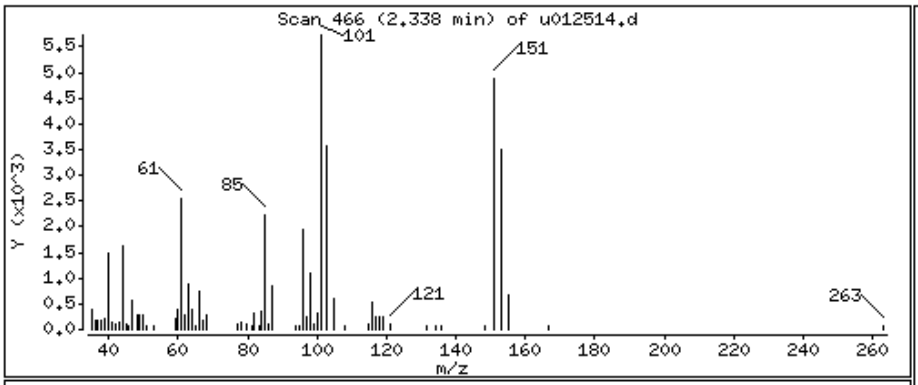
Client ID: HS24011040-03 Instrument: VOA9.i

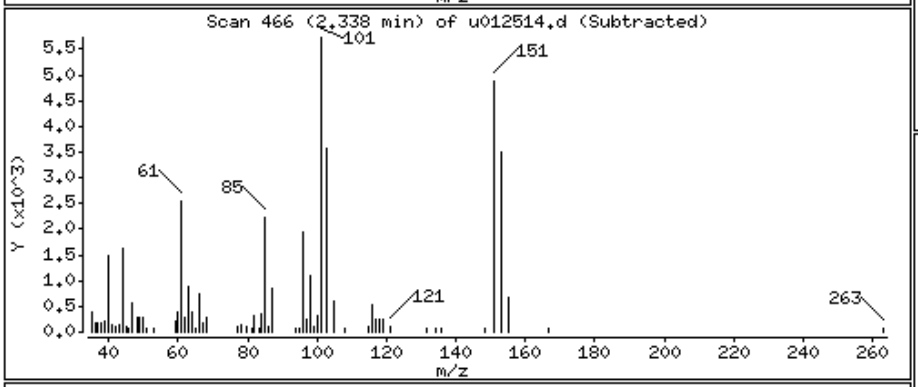
Sample Info: HS24011040-03;HS24011040-03;;;

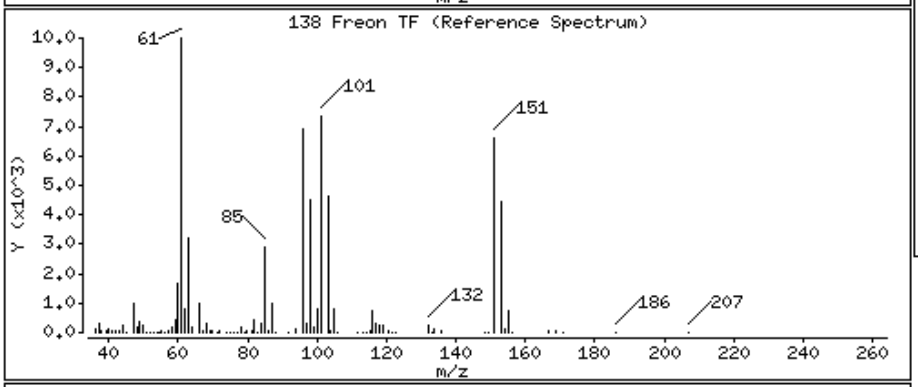
Purge Volume: 5.0 Operator: PC

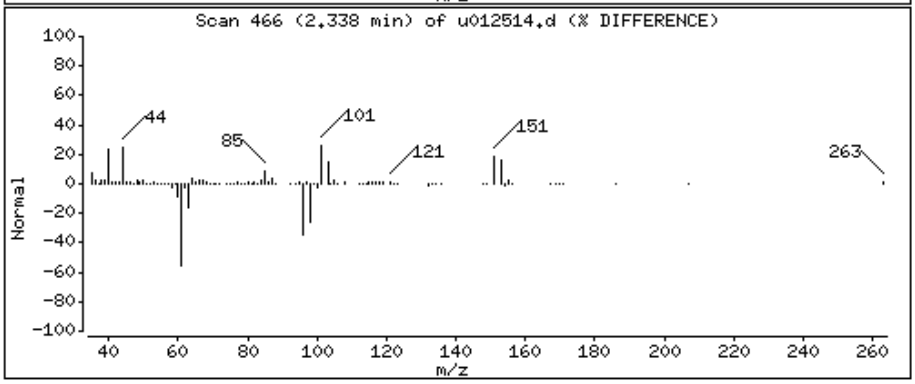
Column phase: DB624 Column diameter: 0.18

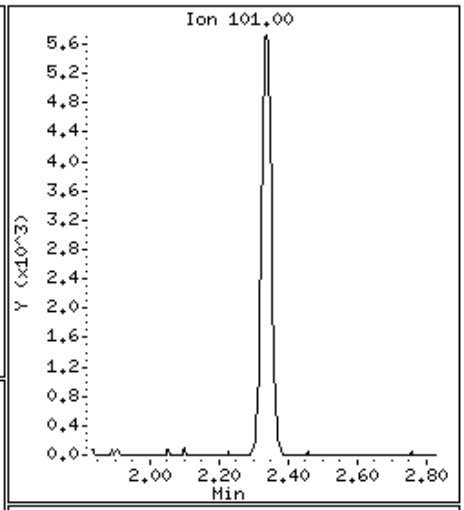
138 Freon TF Concentration: 490.65 ug/l

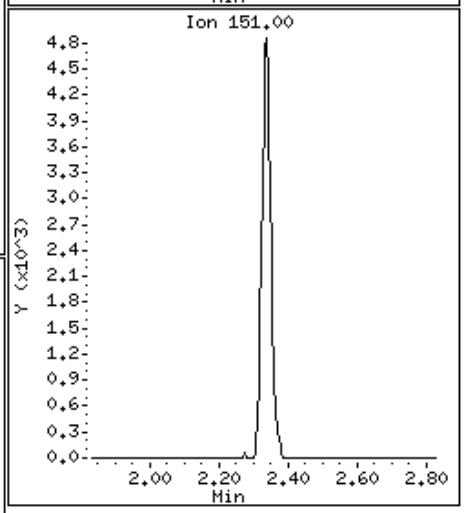












Data File : \\nahstws005\target\chem\voa9.i\u240125.b\u012514.d
Inj Date : 25-JAN-2024 15:10
InstruID : VOA9.i
LabSampID : HS24011040-03

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240125.b\U012515.D Page 1
Report Date: 01-Feb-2024 14:20

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240125.b\U012515.D
Lab Smp Id: HS24011040-01 Client Smp ID: HS24011040-01
Inj Date : 25-JAN-2024 15:32
Operator : PC Inst ID: VOA9.i
Smp Info : HS24011040-01;HS24011040-01;;;
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: 14
Dil Factor: 100.00000
Integrator: HP RTE Compound Sublist: 1040-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7066

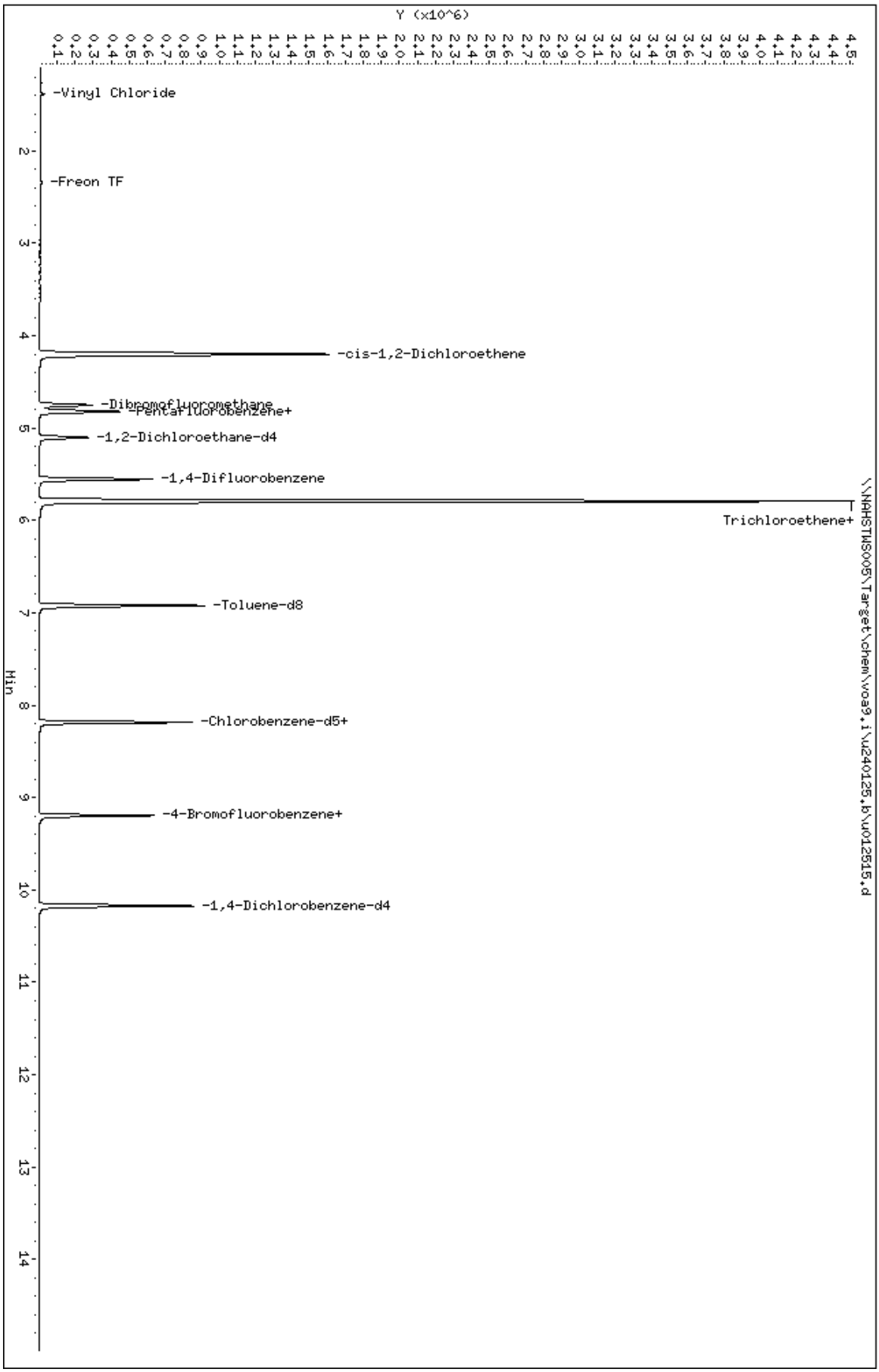
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	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)	341635	50.0000	
	2 Dichlorodifluoromethane	85	1.029	1.164	(0.214)	15893	6.53888	653.88
	3 Chloromethane	50	1.003	1.303	(0.208)	59996	15.3090	1530.90
	5 Vinyl Chloride	62	1.381	1.378	(0.287)	14070	3.75817	375.81(a)
	27 cis-1,2-Dichloroethene	96	4.200	4.197	(0.872)	842297	199.615	19961.45
$	30 Dibromofluoromethane	113	4.751	4.748	(0.986)	173041	49.4819	49.48(R)
	34 Carbon Tetrachloride	117	4.815	4.913	(0.867)	27170	6.47482	647.48
$	35 1,2-Dichloroethane-d4	65	5.100	5.096	(1.058)	179971	45.1502	45.15(R)
*	36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	513492	50.0000	
	38 Trichloroethene	130	5.790	5.790	(1.043)	1520238	394.594	39459.42(A)
	42 1,2-Dichloropropane	63	5.786	6.007	(1.042)	4178	1.11016	111.01(a)
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	486986	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	565779	50.4684	50.46(R)
	58 1-Chlorohexane	55	8.185	8.197	(1.474)	3626	1.25929	125.92(a)
$	69 4-Bromofluorobenzene	95	9.194	9.190	(1.123)	191317	44.9444	44.94(R)
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	249379	50.0000	
	71 1,2,3-Trichloropropane	75	9.194	9.362	(0.904)	86627	18.2988	1829.88
	138 Freon TF	101	2.337	2.337	(0.485)	3307	1.34473	134.47(a)
	141 Cyclohexane	56	4.819	4.785	(1.000)	4502	0.91455	91.45(a)
M	94 1,2-Dichloroethylene (total)	96				842297	228.589	22858.86

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\u012515.d
Date : 25-JAN-2024 15:32
Client ID: HS24011040-01
Sample Info: HS24011040-01;HS24011040-01;;;
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\u012515.d Page 2

Date : 25-JAN-2024 15:32

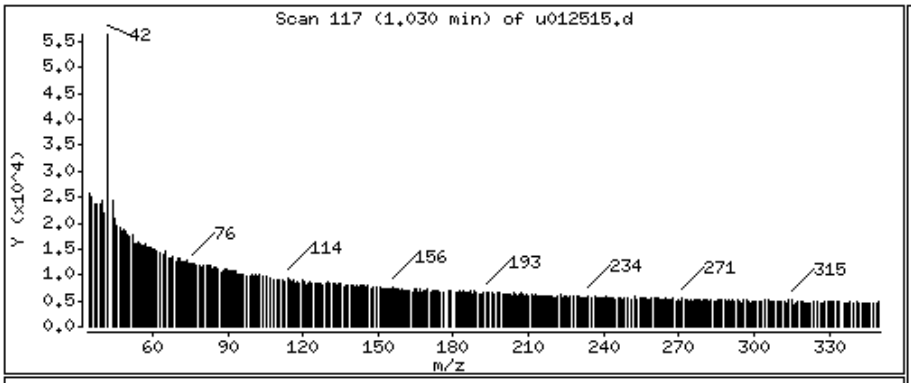
Client ID: HS24011040-01 Instrument: VOA9.i

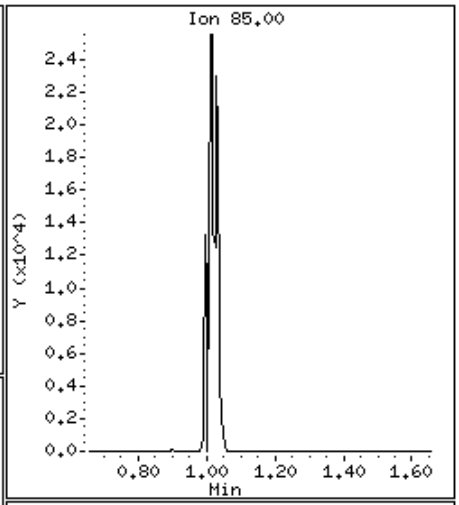
Sample Info: HS24011040-01;HS24011040-01;;;

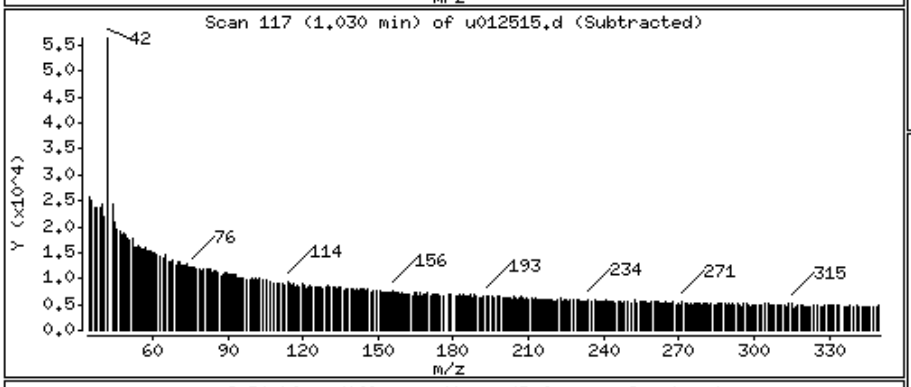
Purge Volume: 5.0 Operator: PC

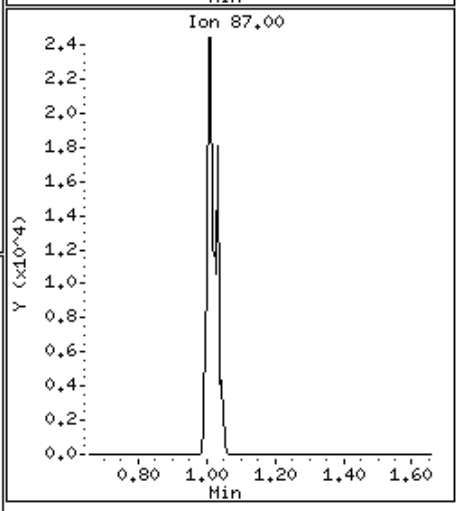
Column phase: DB624 Column diameter: 0.18

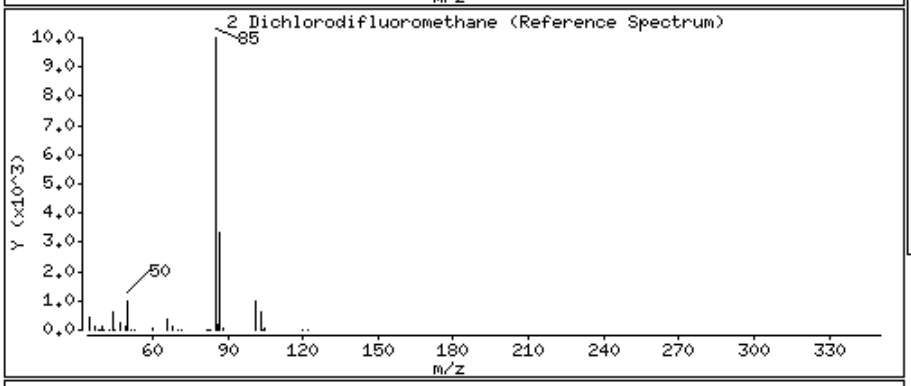
2 Dichlorodifluoromethane Concentration: 653.88 ug/l

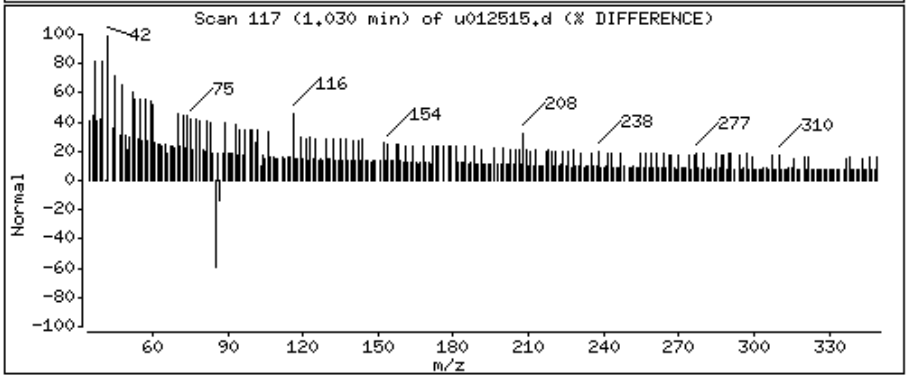












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012515.d Page 3

Date : 25-JAN-2024 15:32

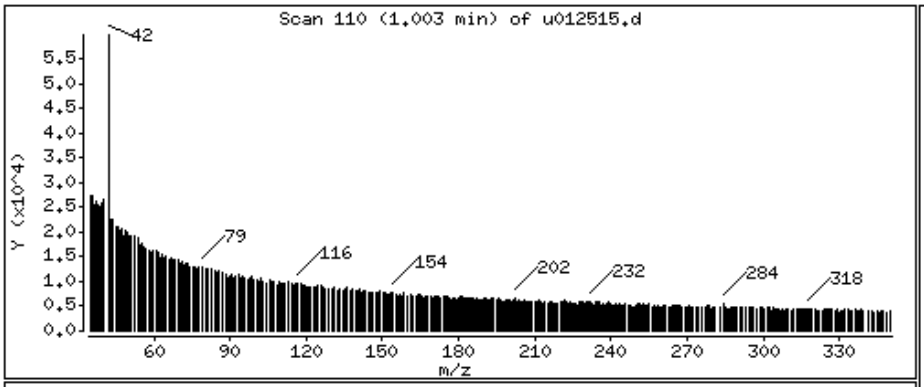
Client ID: HS24011040-01 Instrument: VOA9.i

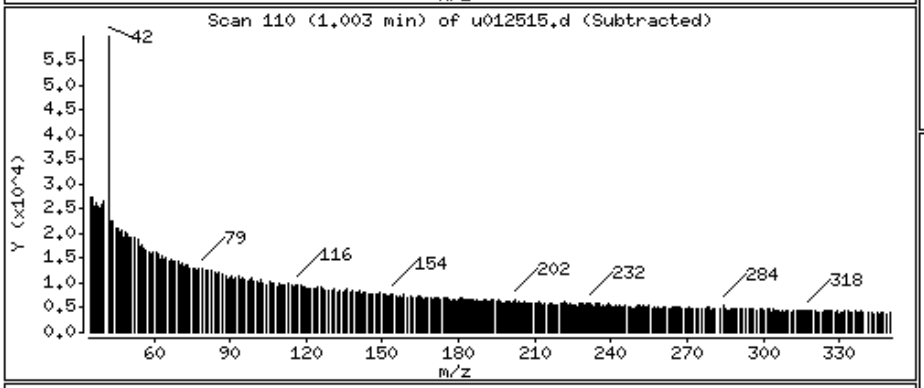
Sample Info: HS24011040-01;HS24011040-01;;;

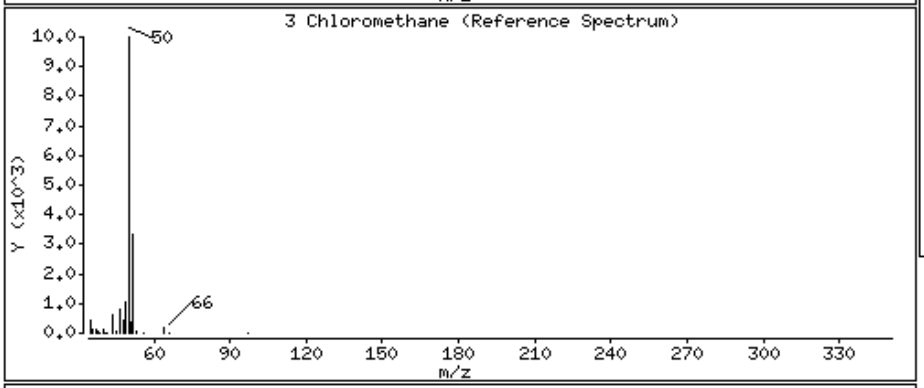
Purge Volume: 5.0 Operator: PC

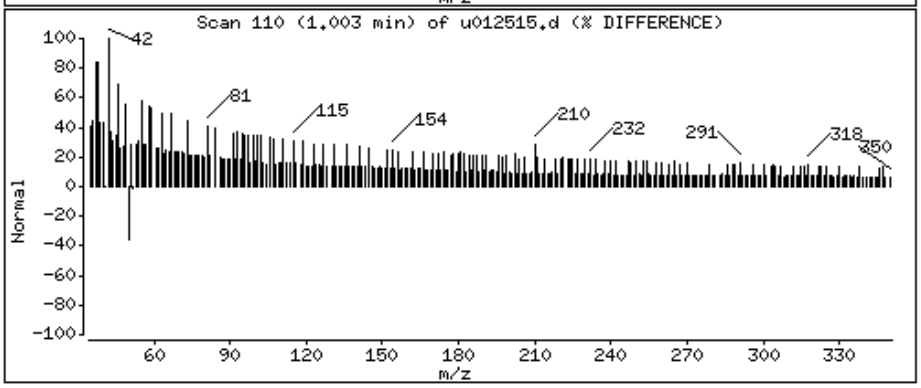
Column phase: DB624 Column diameter: 0.18

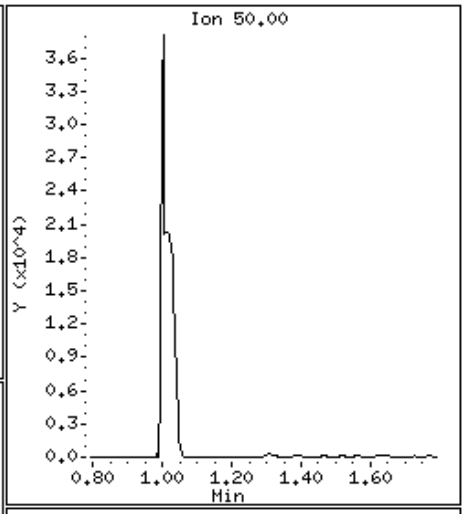
3 Chloromethane Concentration: 1530.90 ug/l

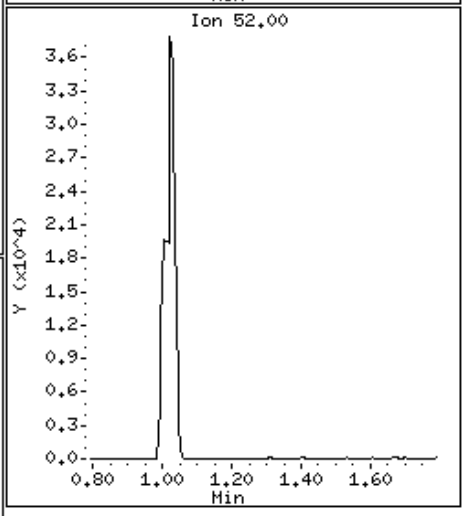












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012515.d Page 4

Date : 25-JAN-2024 15:32

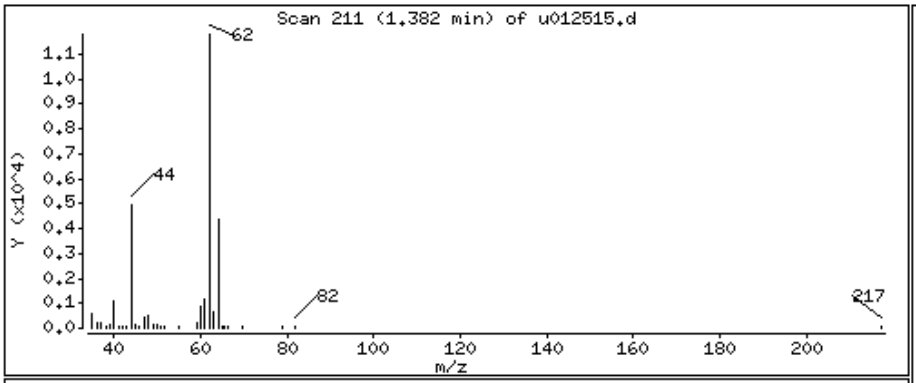
Client ID: HS24011040-01 Instrument: VOA9.i

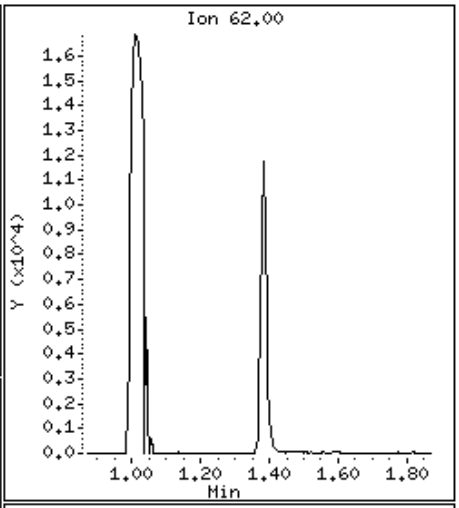
Sample Info: HS24011040-01;HS24011040-01;;;

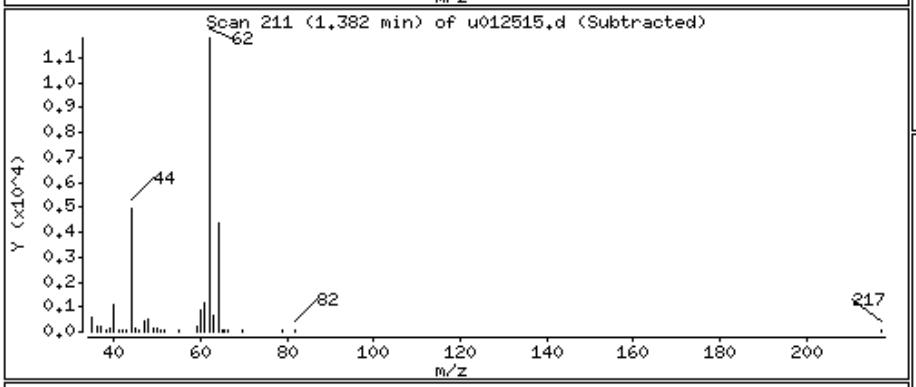
Purge Volume: 5.0 Operator: PC

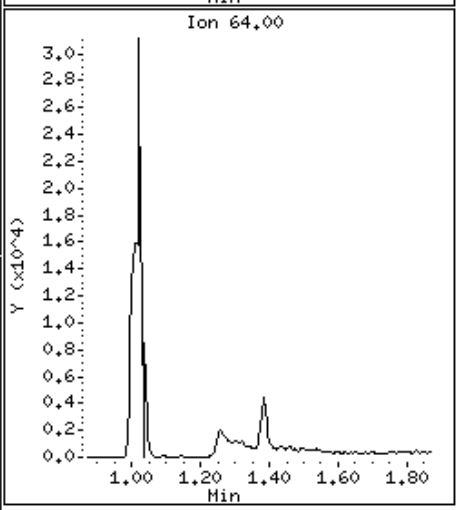
Column phase: DB624 Column diameter: 0.18

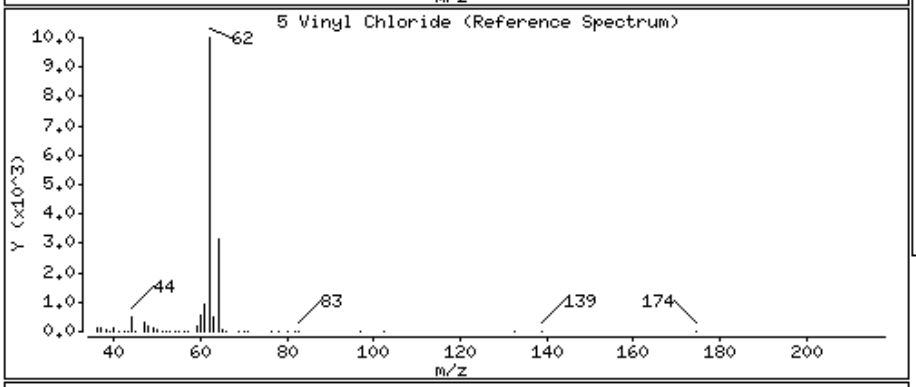
5 Vinyl Chloride Concentration: 375.81 ug/l

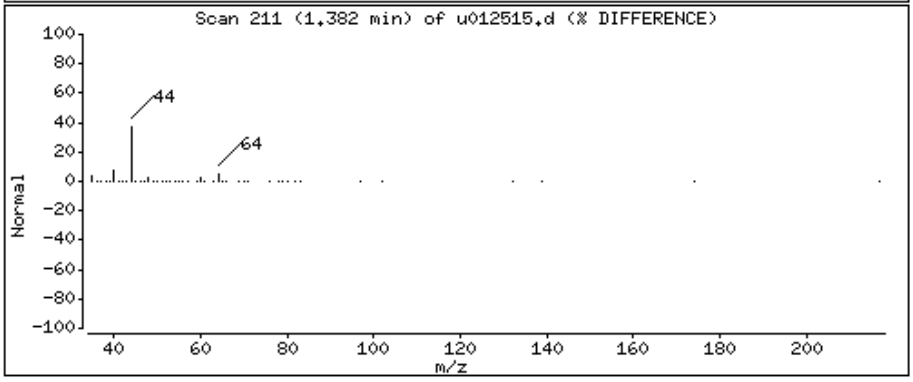












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012515.d Page 5

Date : 25-JAN-2024 15:32

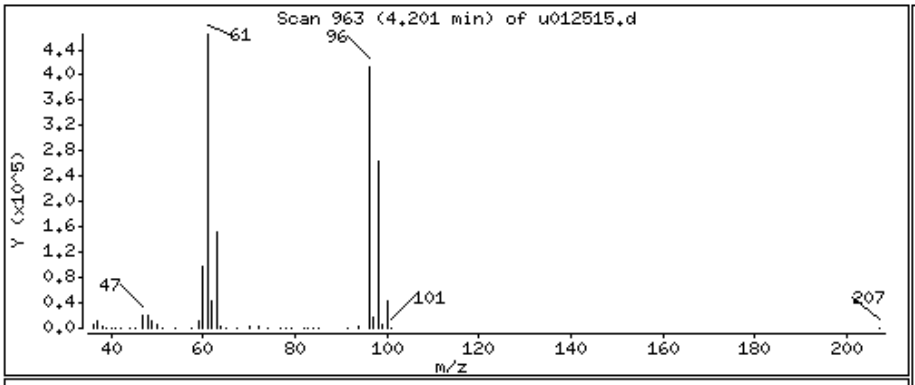
Client ID: HS24011040-01 Instrument: VOA9.i

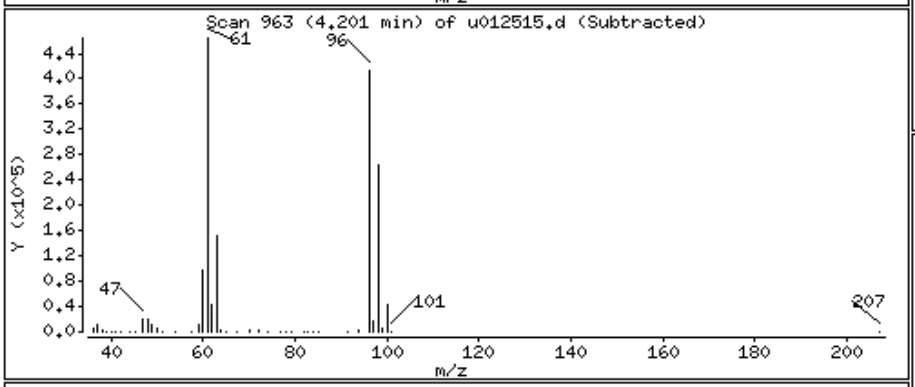
Sample Info: HS24011040-01;HS24011040-01;;;

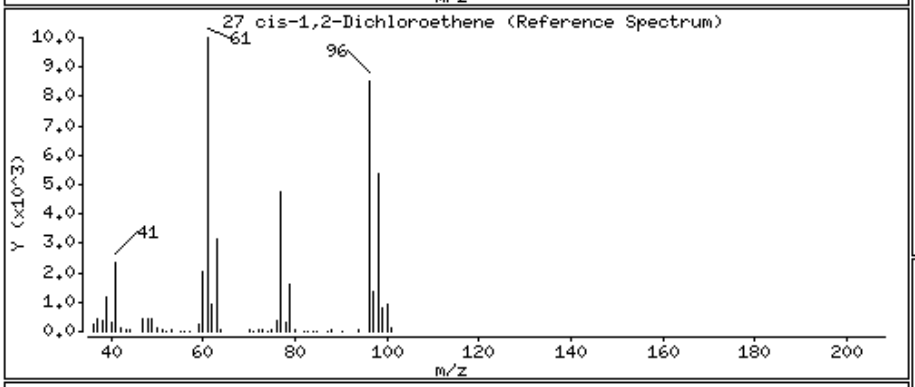
Purge Volume: 5.0 Operator: PC

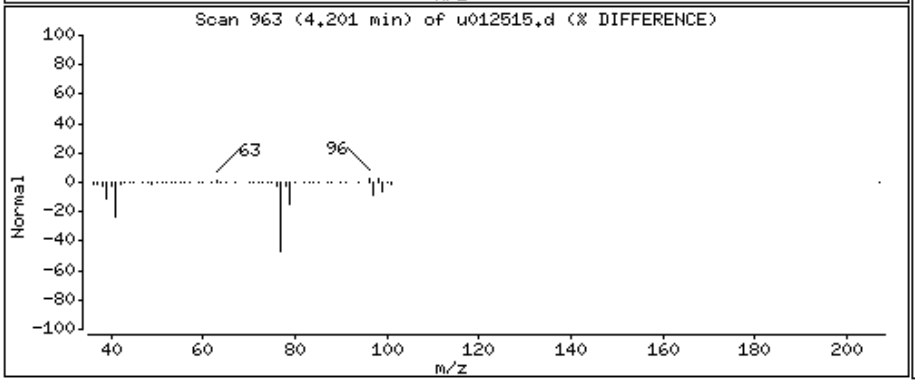
Column phase: DB624 Column diameter: 0.18

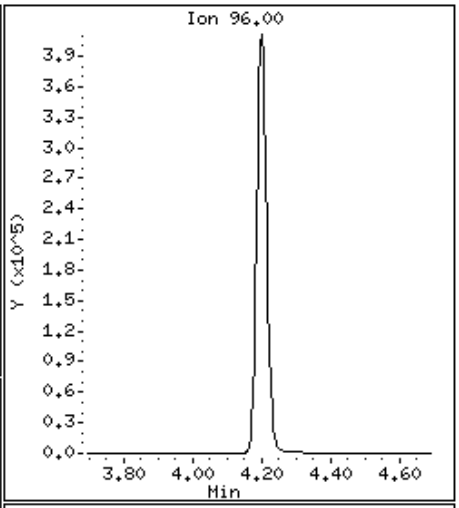
27 cis-1,2-Dichloroethene Concentration: 19961.45 ug/l

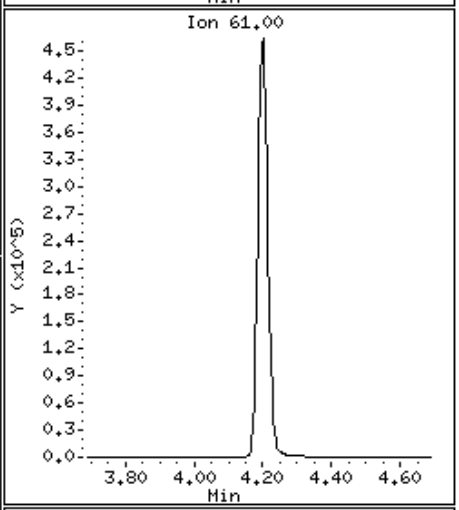


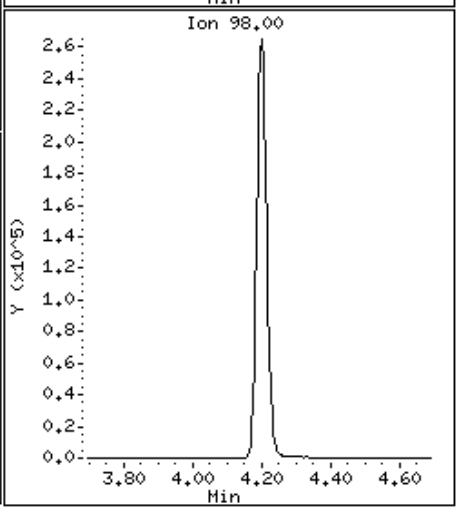












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012515.d Page 6

Date : 25-JAN-2024 15:32

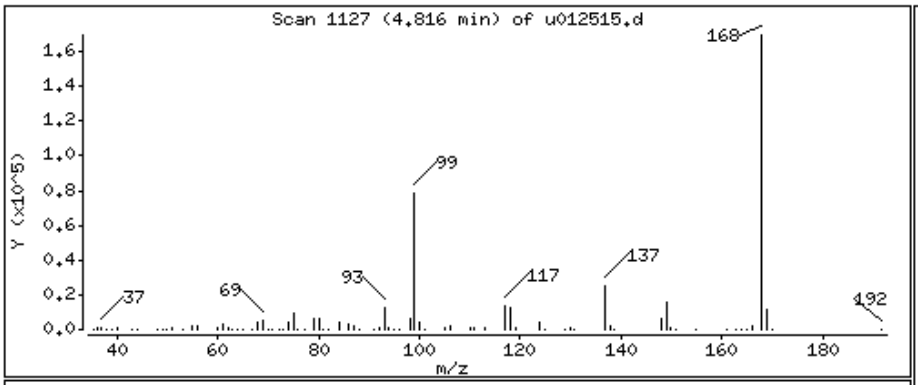
Client ID: HS24011040-01 Instrument: VOA9.i

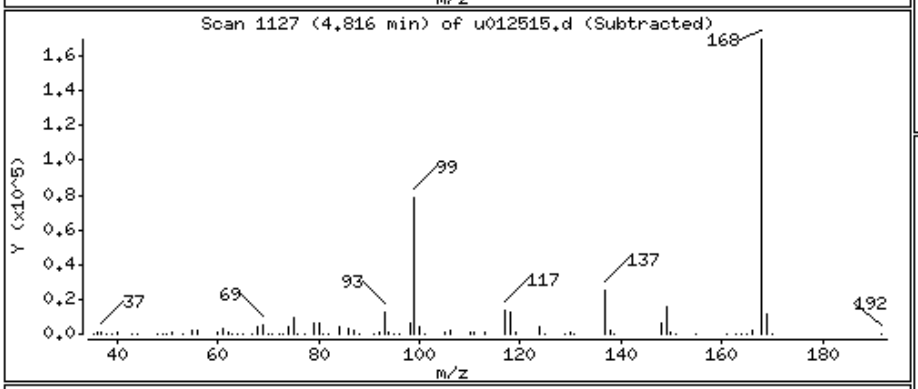
Sample Info: HS24011040-01;HS24011040-01;;;

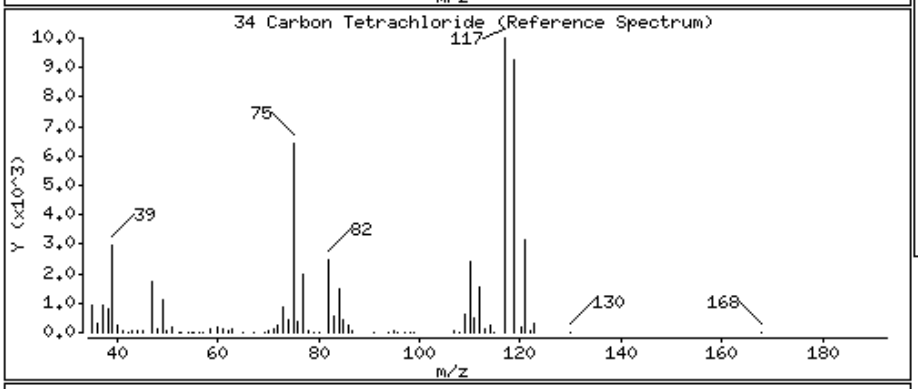
Purge Volume: 5.0 Operator: PC

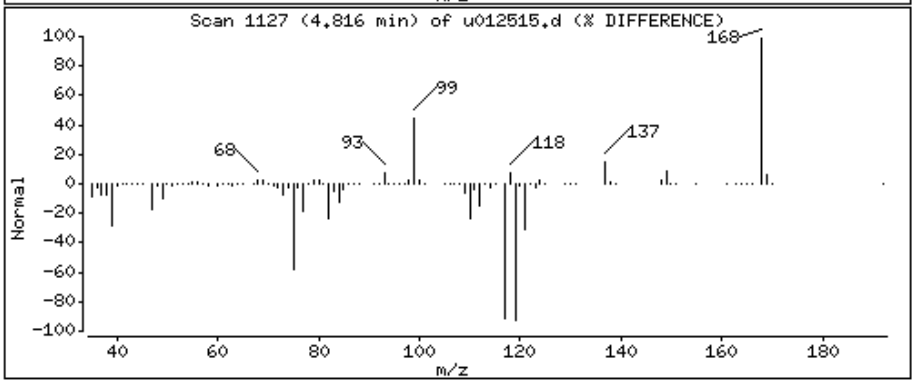
Column phase: DB624 Column diameter: 0.18

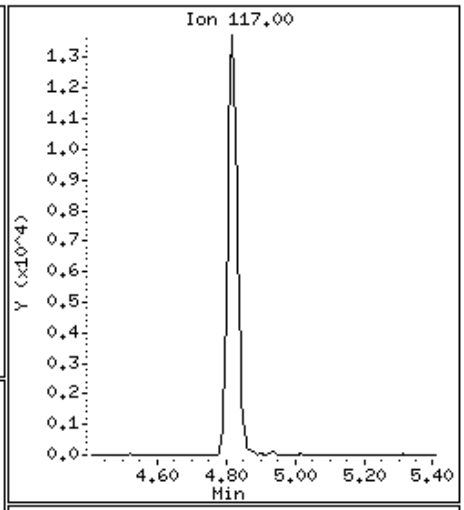
34 Carbon Tetrachloride Concentration: 647.48 ug/l

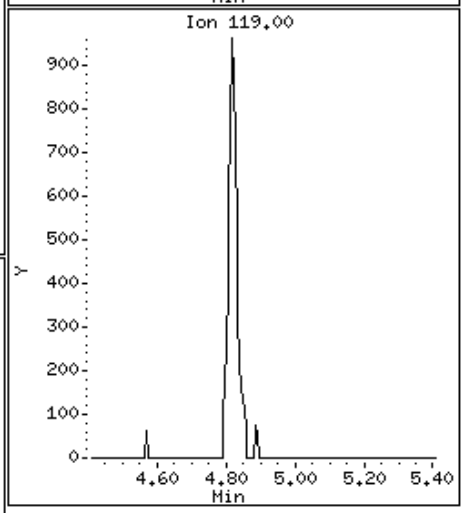












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012515.d Page 7

Date : 25-JAN-2024 15:32

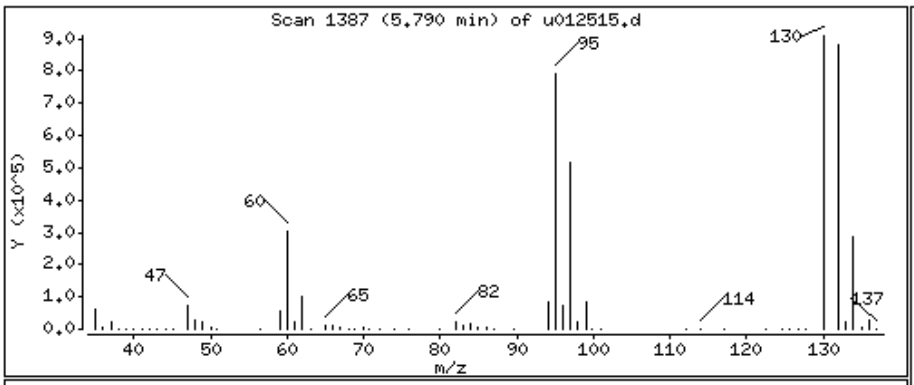
Client ID: HS24011040-01 Instrument: VOA9.i

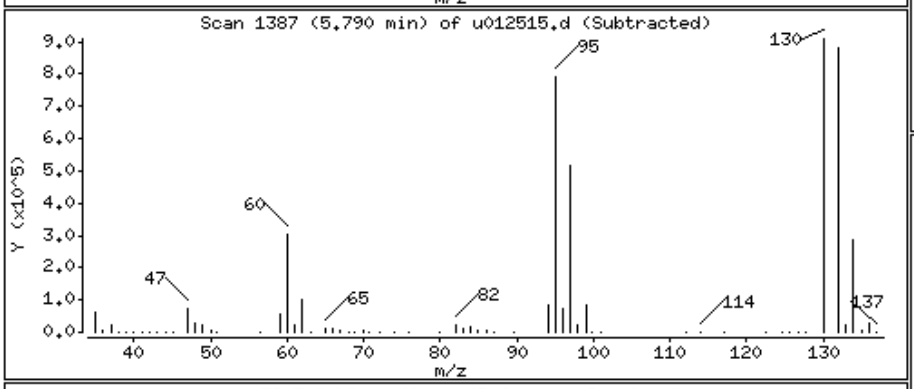
Sample Info: HS24011040-01;HS24011040-01;;;

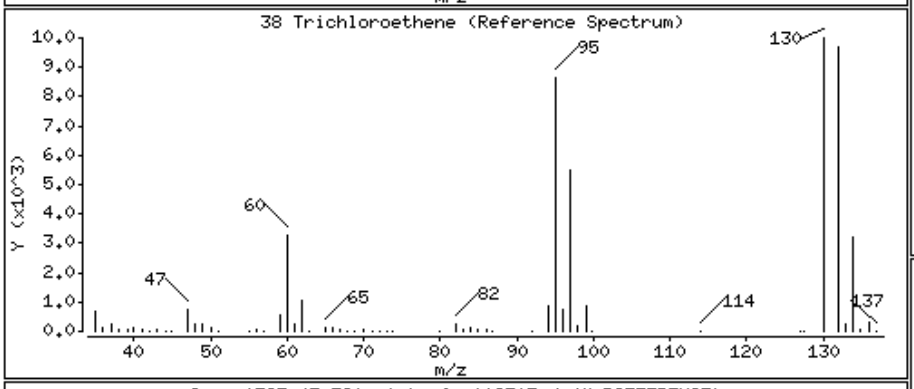
Purge Volume: 5.0 Operator: PC

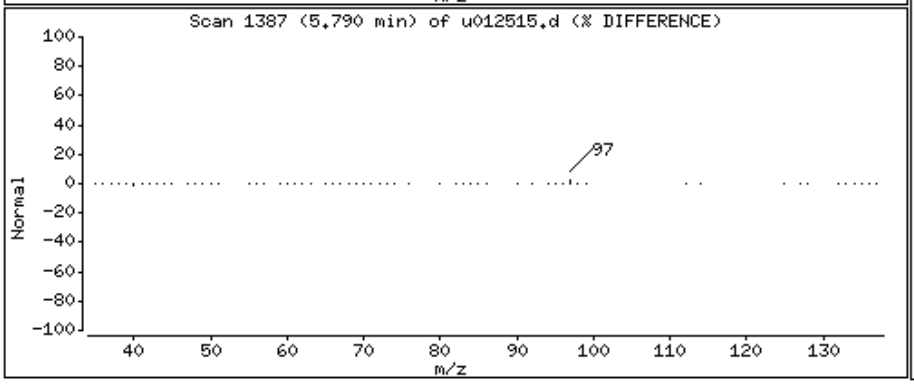
Column phase: DB624 Column diameter: 0.18

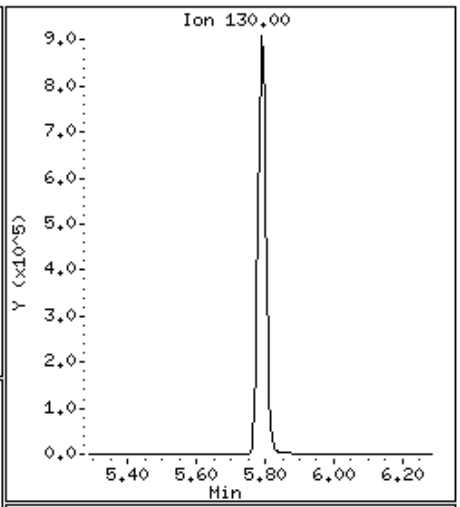
38 Trichloroethene Concentration: 39459.42 ug/l

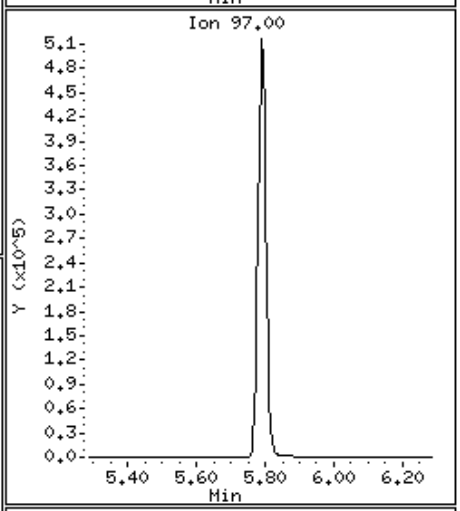


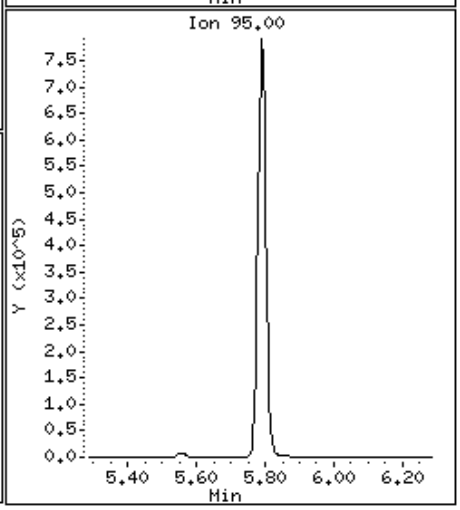












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012515.d Page 8

Date : 25-JAN-2024 15:32

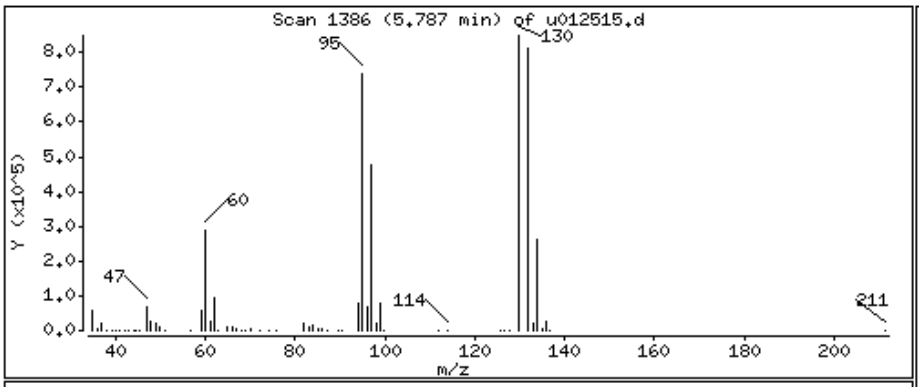
Client ID: HS24011040-01 Instrument: VOA9.i

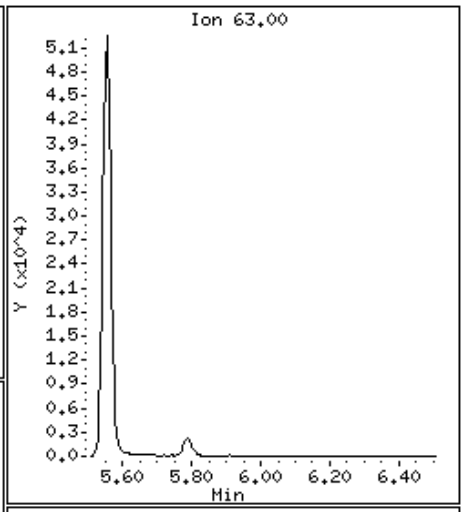
Sample Info: HS24011040-01;HS24011040-01;;;

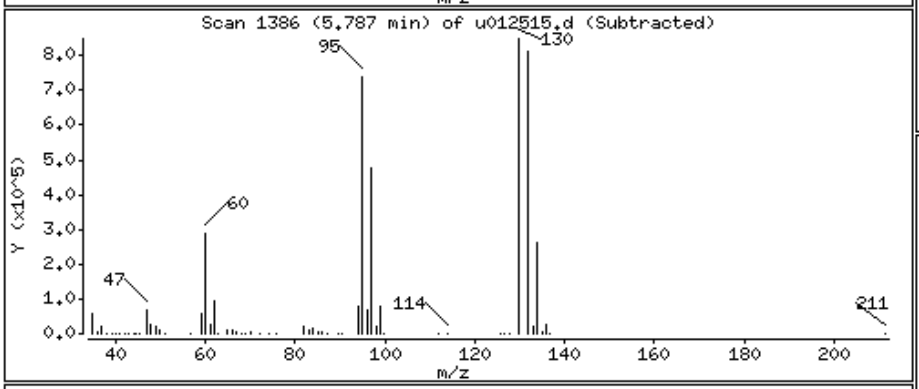
Purge Volume: 5.0 Operator: PC

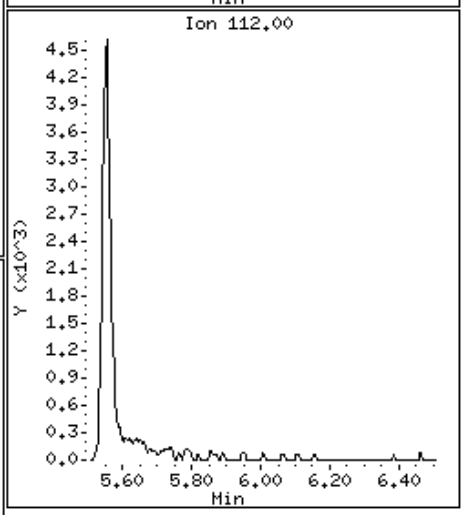
Column phase: DB624 Column diameter: 0.18

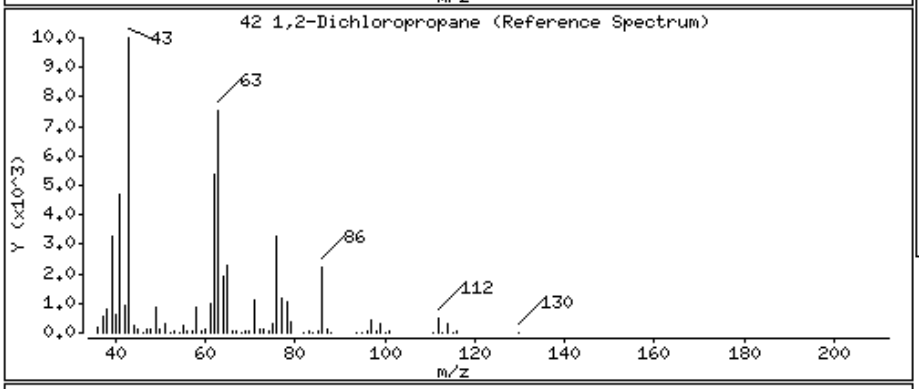
42 1,2-Dichloropropane Concentration: 111.01 ug/l

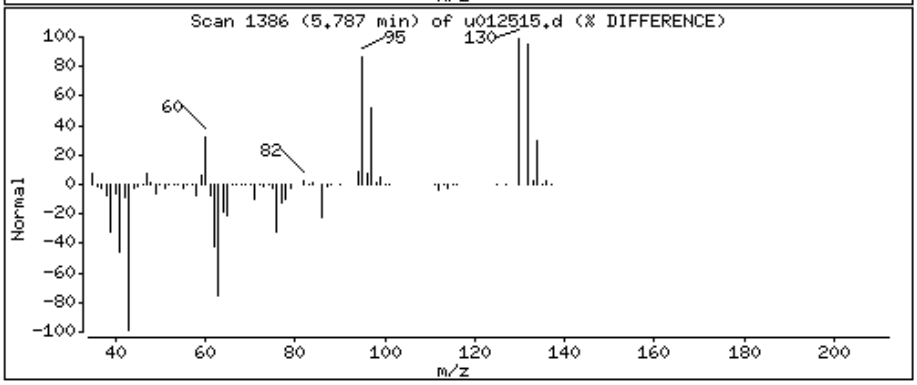












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012515.d Page 9

Date : 25-JAN-2024 15:32

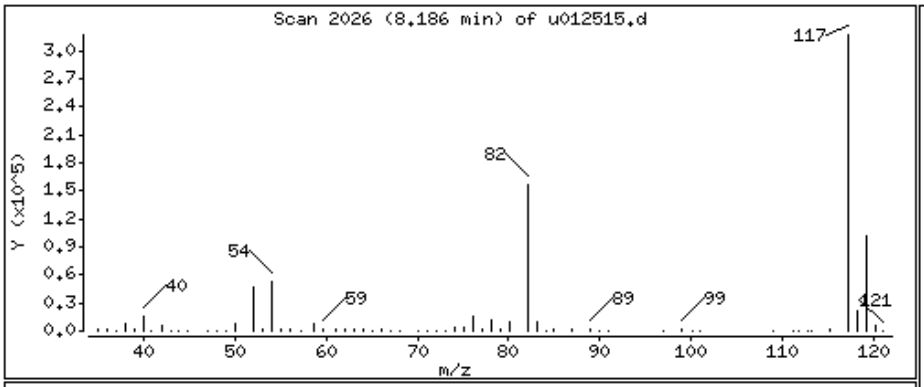
Client ID: HS24011040-01 Instrument: VOA9.i

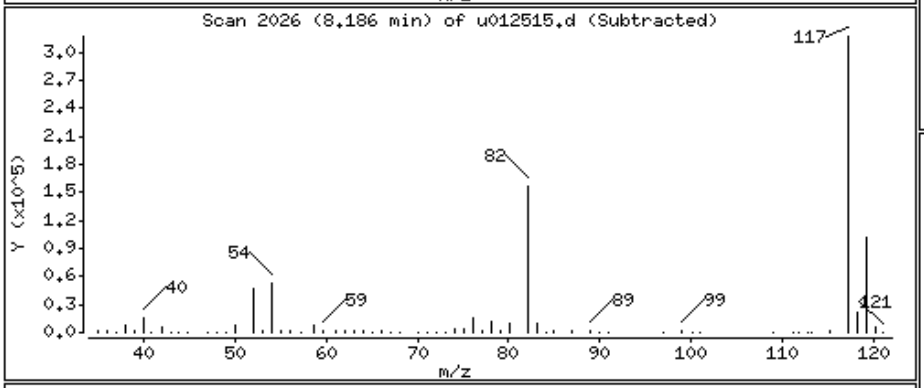
Sample Info: HS24011040-01;HS24011040-01;;;

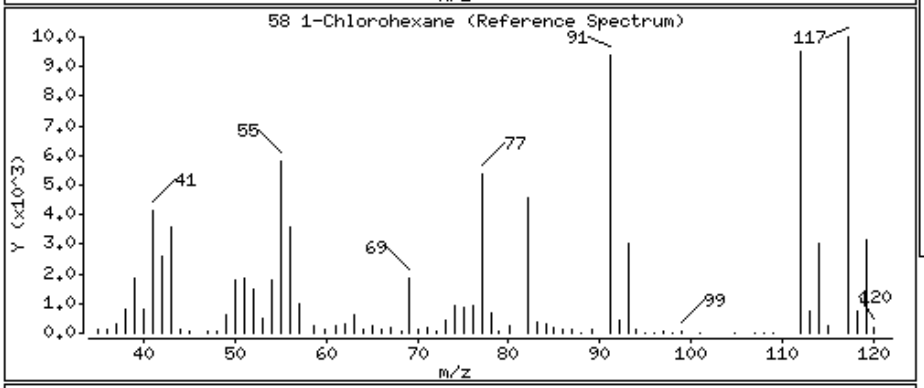
Purge Volume: 5.0 Operator: PC

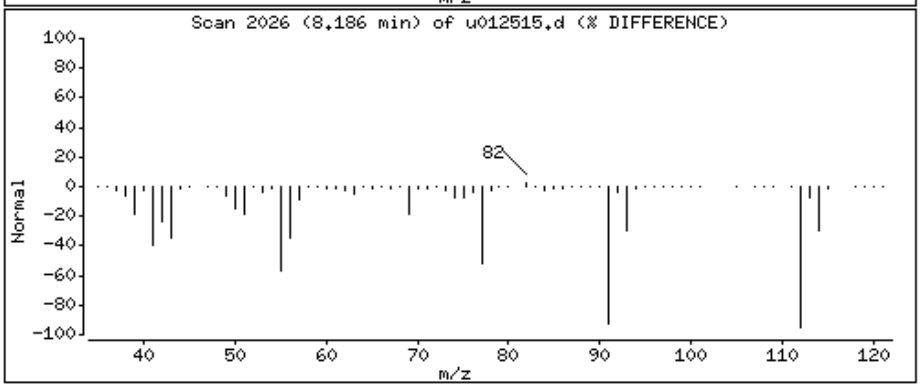
Column phase: DB624 Column diameter: 0.18

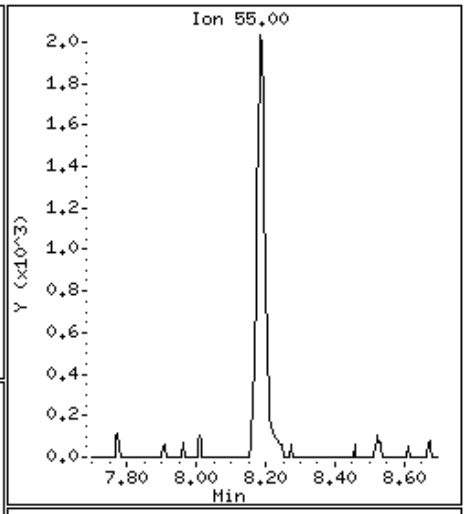
58 1-Chlorohexane Concentration: 125.92 ug/l

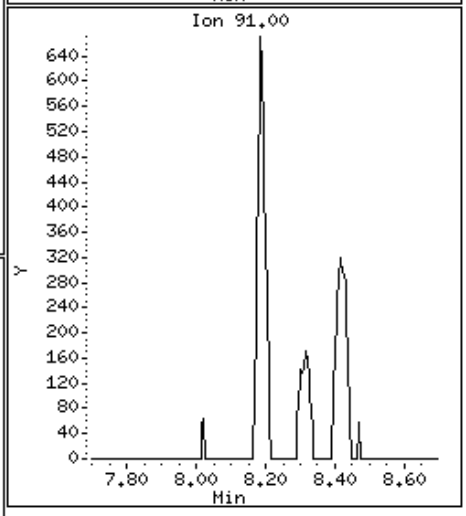












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012515.d Page 10

Date : 25-JAN-2024 15:32

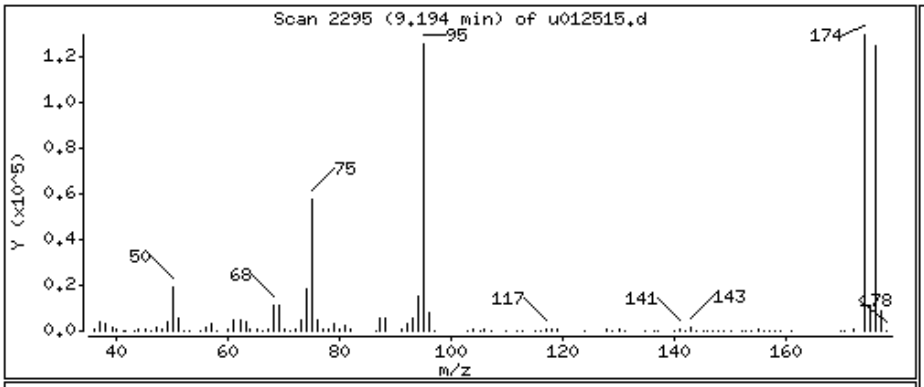
Client ID: HS24011040-01 Instrument: VOA9.i

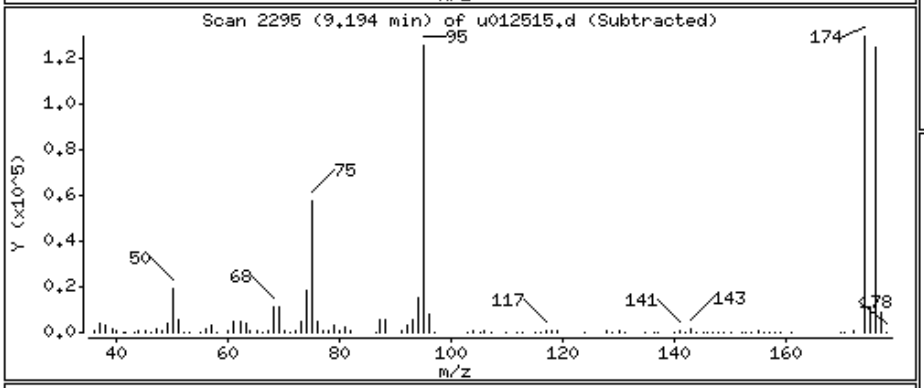
Sample Info: HS24011040-01;HS24011040-01;;;

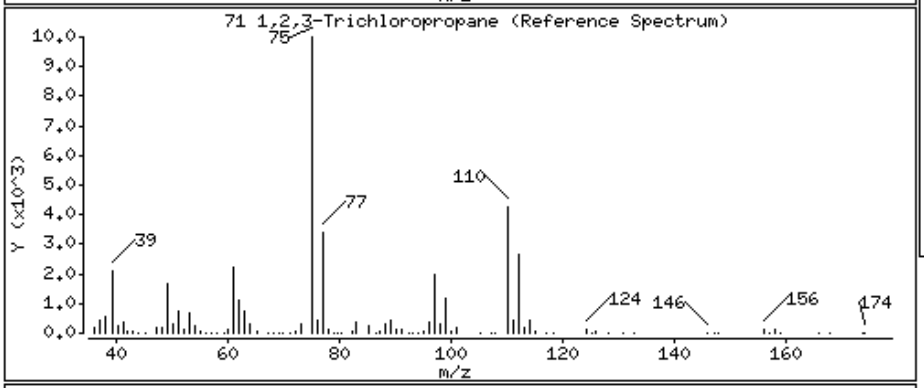
Purge Volume: 5.0 Operator: PC

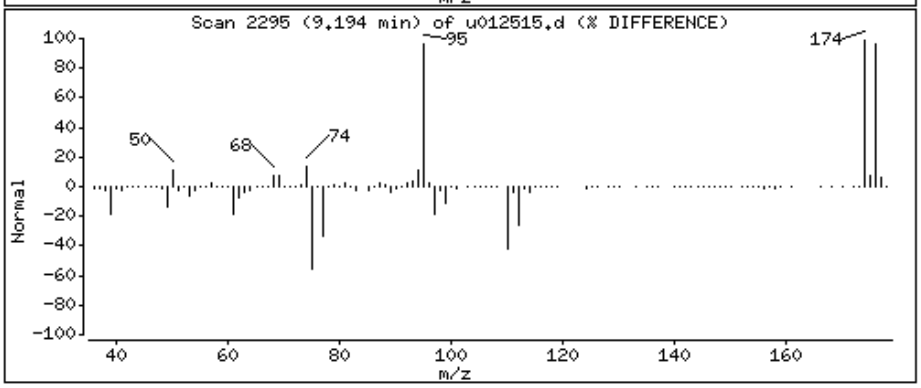
Column phase: DB624 Column diameter: 0.18

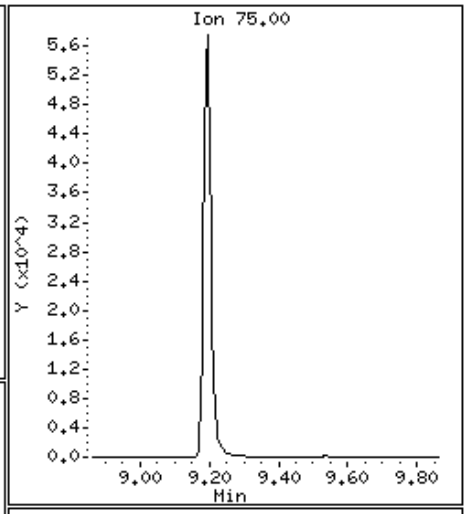
71 1,2,3-Trichloropropane Concentration: 1829.88 ug/l

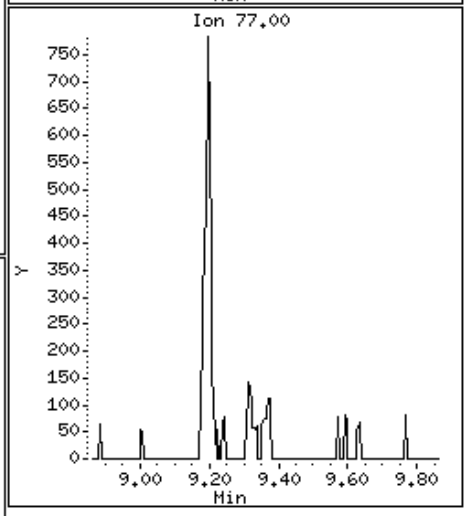












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012515.d Page 11

Date : 25-JAN-2024 15:32

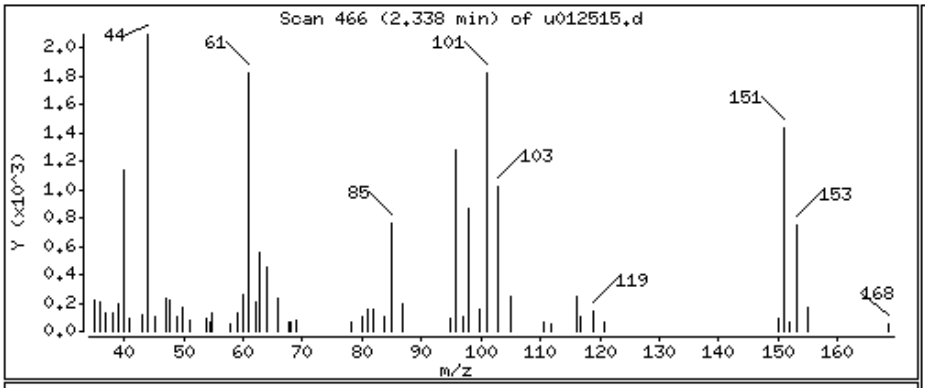
Client ID: HS24011040-01 Instrument: VOA9.i

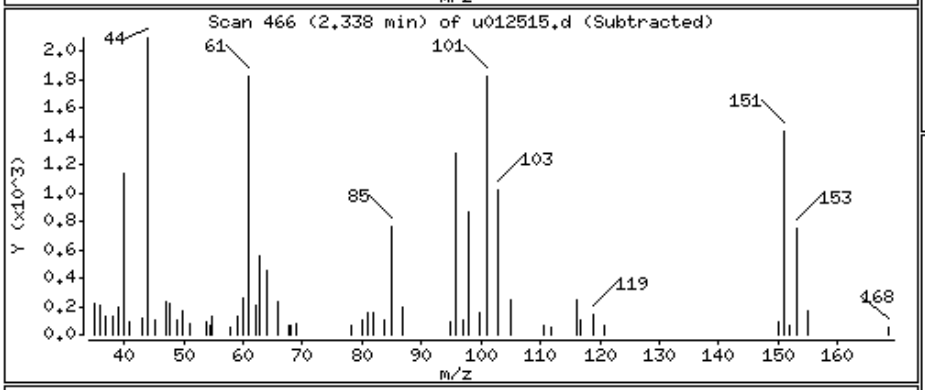
Sample Info: HS24011040-01;HS24011040-01;;;

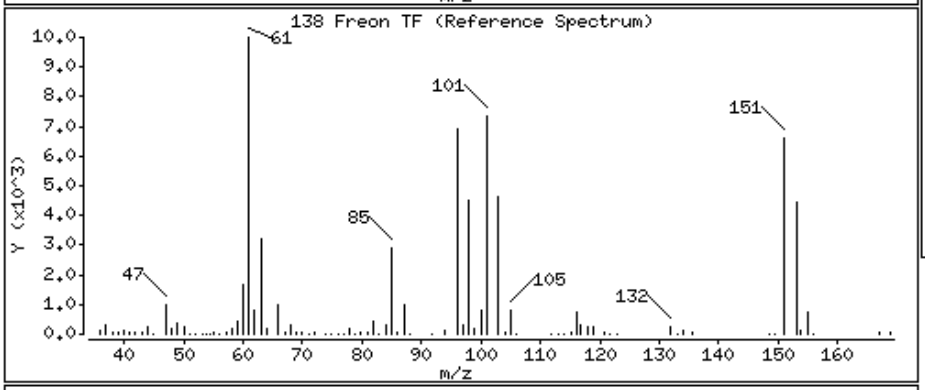
Purge Volume: 5.0 Operator: PC

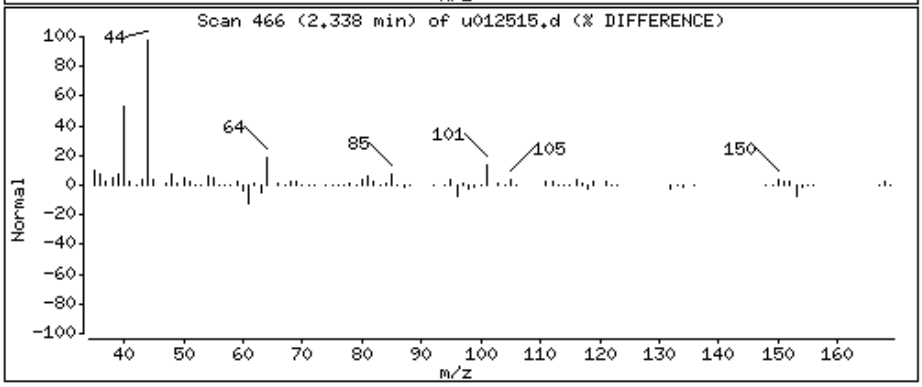
Column phase: DB624 Column diameter: 0.18

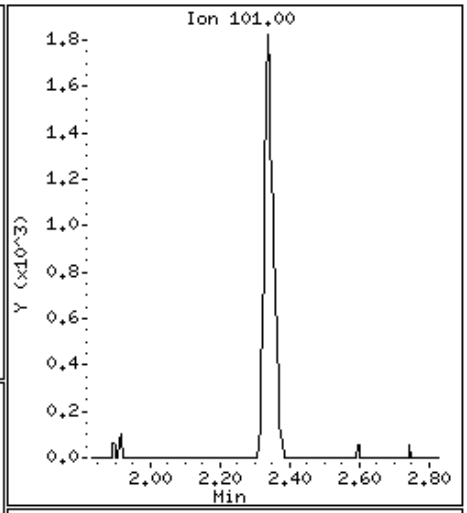
138 Freon TF Concentration: 134.47 ug/l

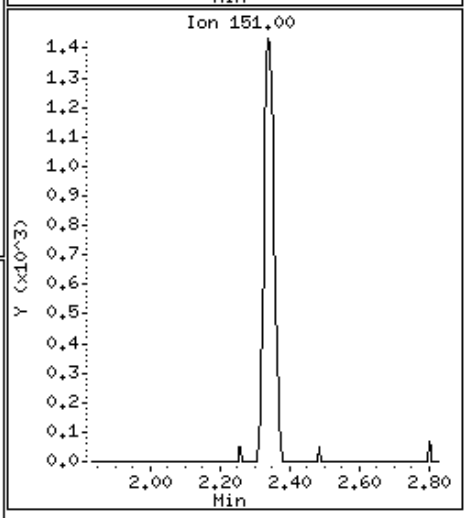












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012515.d Page 12

Date : 25-JAN-2024 15:32

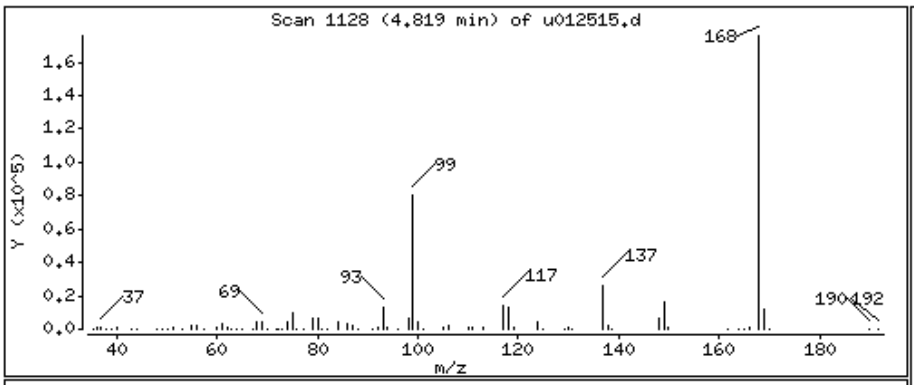
Client ID: HS24011040-01 Instrument: VOA9.i

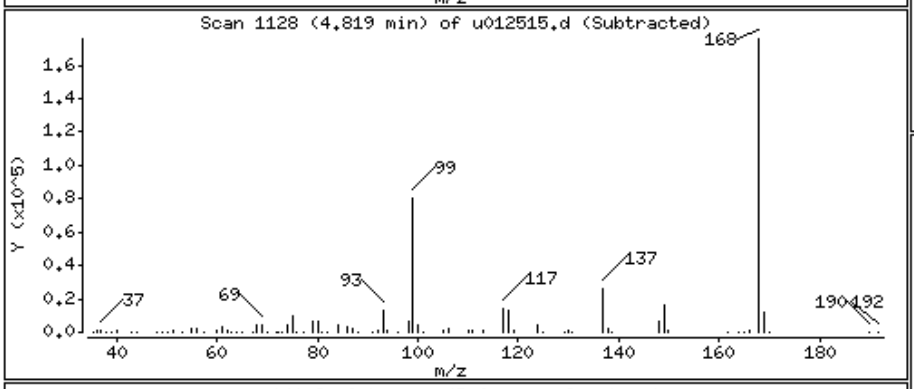
Sample Info: HS24011040-01;HS24011040-01;;;

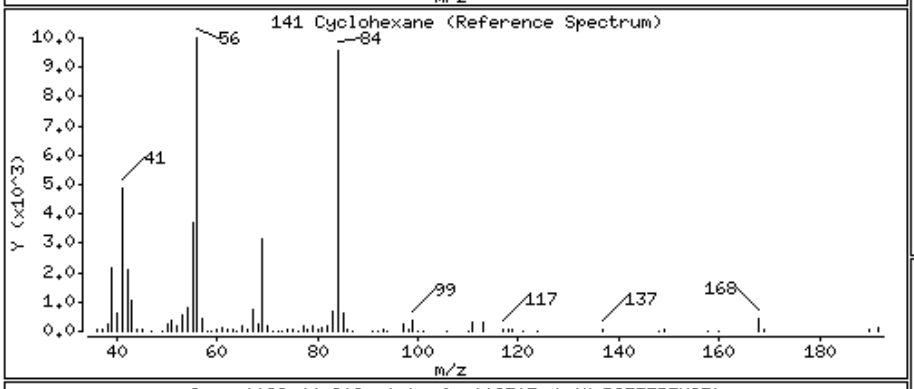
Purge Volume: 5.0 Operator: PC

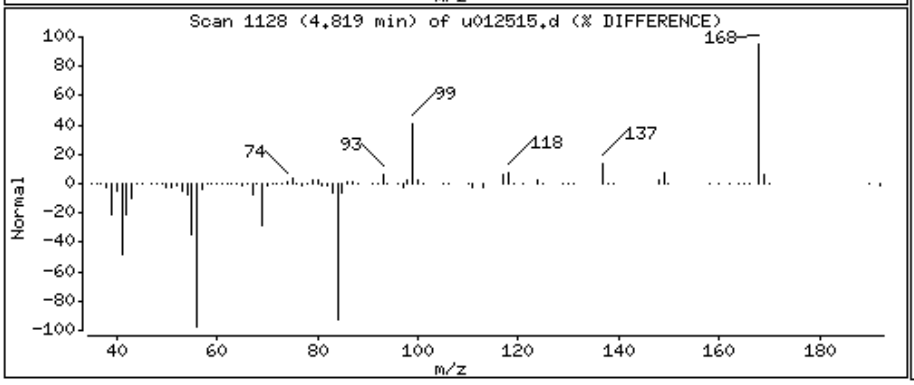
Column phase: DB624 Column diameter: 0.18

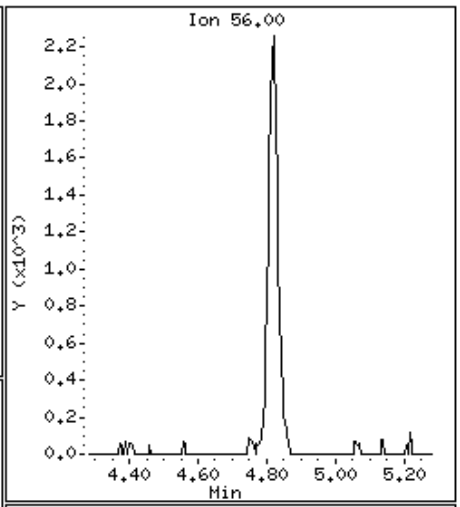
141 Cyclohexane Concentration: 91.45 ug/l

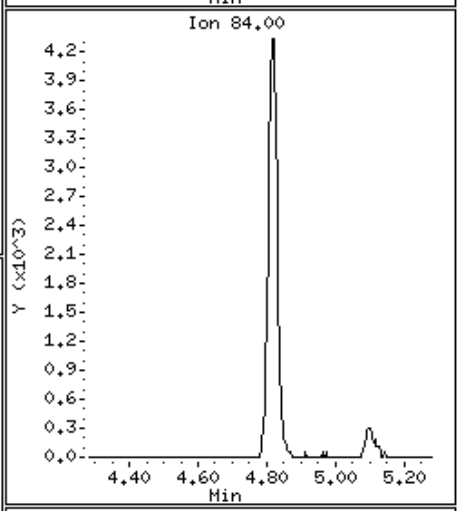


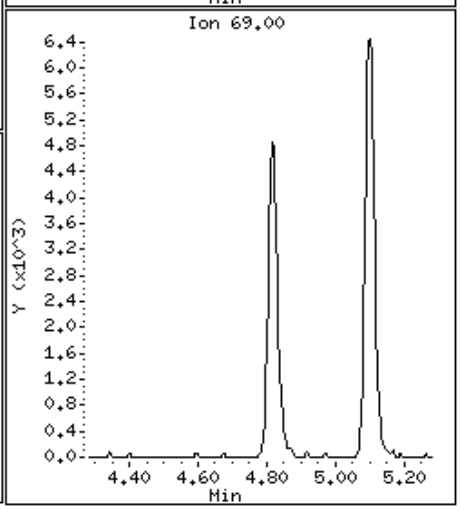












Data File : \\nahstws005\target\chem\voa9.i\u240125.b\u012515.d
Inj Date : 25-JAN-2024 15:32
InstruID : VOA9.i
LabSampID : HS24011040-01

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240125.b\U012516.D Page 1
Report Date: 01-Feb-2024 14:20

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240125.b\U012516.D
Lab Smp Id: HS24011040-02 Client Smp ID: HS24011040-02
Inj Date : 25-JAN-2024 15:54
Operator : PC Inst ID: VOA9.i
Smp Info : HS24011040-02;HS24011040-02;;;
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: 15
Dil Factor: 100.00000
Integrator: HP RTE Compound Sublist: 1040-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7066

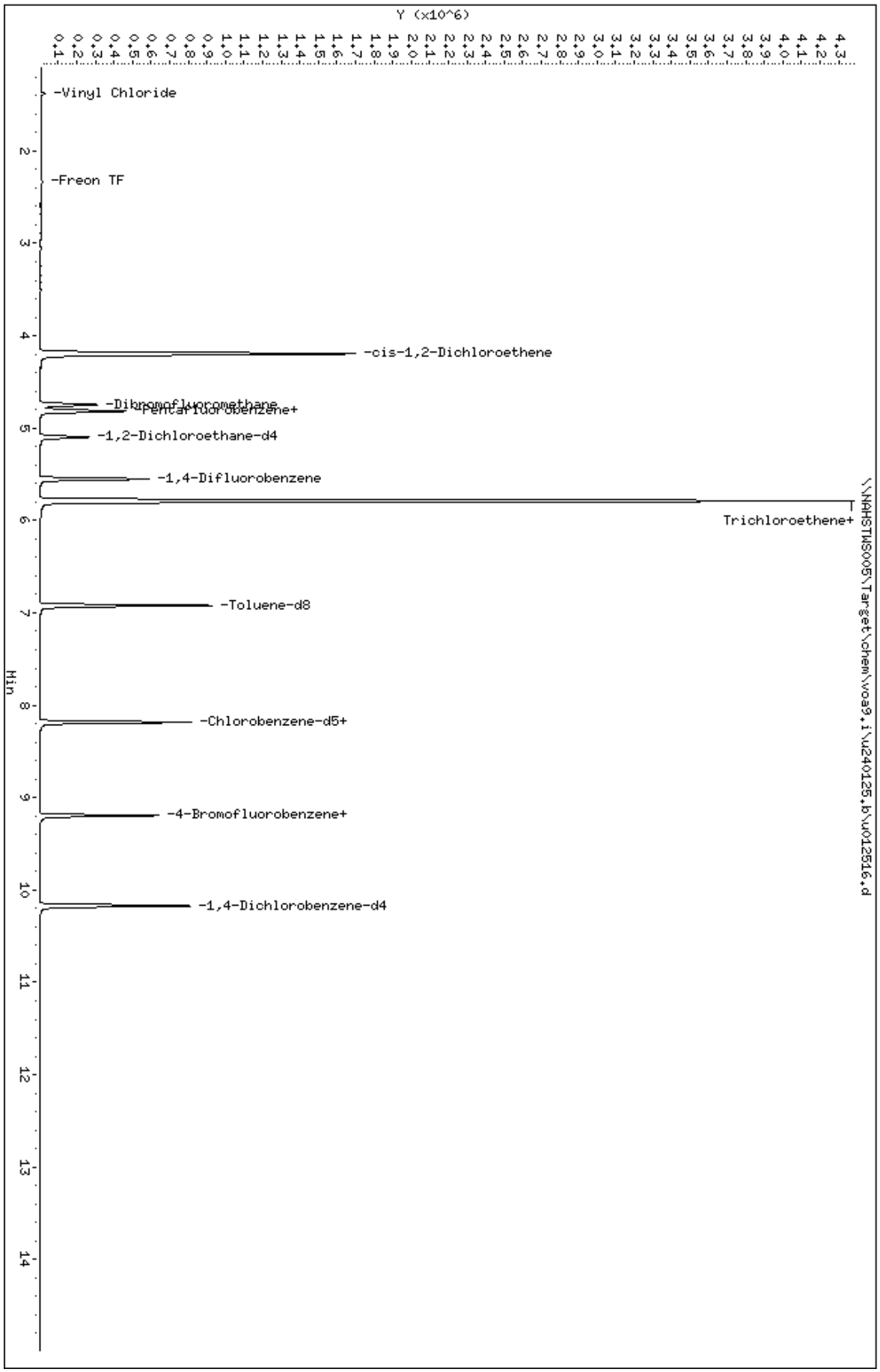
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	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)	347596	50.0000	
	2 Dichlorodifluoromethane	85	0.999	1.164	(0.208)	45249	16.7370	1673.70
	3 Chloromethane	50	0.999	1.303	(0.208)	65980	16.5472	1654.72
	5 Vinyl Chloride	62	1.378	1.378	(0.286)	13506	3.54566	354.56(a)
	27 cis-1,2-Dichloroethene	96	4.197	4.197	(0.872)	894550	208.362	20836.22(A)
$	30 Dibromofluoromethane	113	4.748	4.748	(0.986)	184022	51.7660	51.76(R)
	34 Carbon Tetrachloride	117	4.815	4.913	(0.867)	27979	6.99484	699.48
$	35 1,2-Dichloroethane-d4	65	5.096	5.096	(1.058)	178075	43.9672	43.96(R)
*	36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	489470	50.0000	
	38 Trichloroethene	130	5.790	5.790	(1.043)	1530921	416.869	41686.89(A)
	42 1,2-Dichloropropane	63	5.786	6.007	(1.042)	4268	1.18973	118.97(a)
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	468948	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	572938	53.0728	53.07(R)
	58 1-Chlorohexane	55	8.185	8.197	(1.474)	3790	1.38084	138.08(a)
$	69 4-Bromofluorobenzene	95	9.194	9.190	(1.123)	187488	45.7620	45.76(R)
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	240198	50.0000	
	71 1,2,3-Trichloropropane	75	9.194	9.362	(0.904)	85056	18.6537	1865.37
	138 Freon TF	101	2.337	2.337	(0.485)	2984	1.19216	119.21(a)
	141 Cyclohexane	56	4.815	4.785	(1.000)	4760	0.95037	95.03(a)
M	94 1,2-Dichloroethylene (total)	96				894550	238.606	23860.61

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\u012516.d
Date : 25-JAN-2024 15:54
Client ID: HS24011040-02
Sample Info: HS24011040-02;HS24011040-02;;;
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\u012516.d Page 2

Date : 25-JAN-2024 15:54

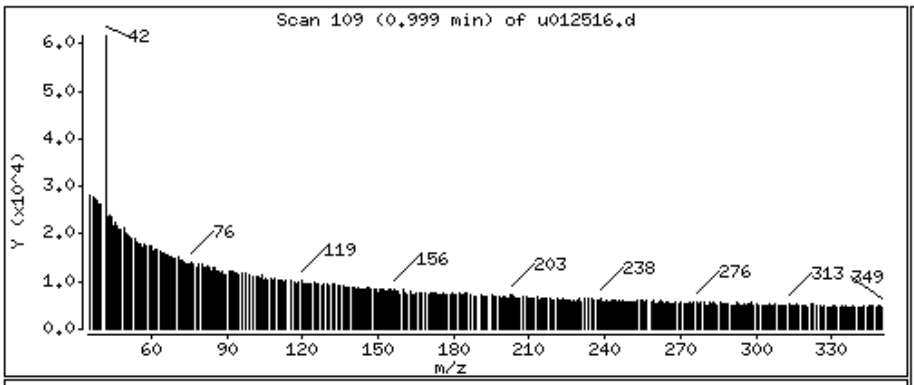
Client ID: HS24011040-02 Instrument: VOA9.i

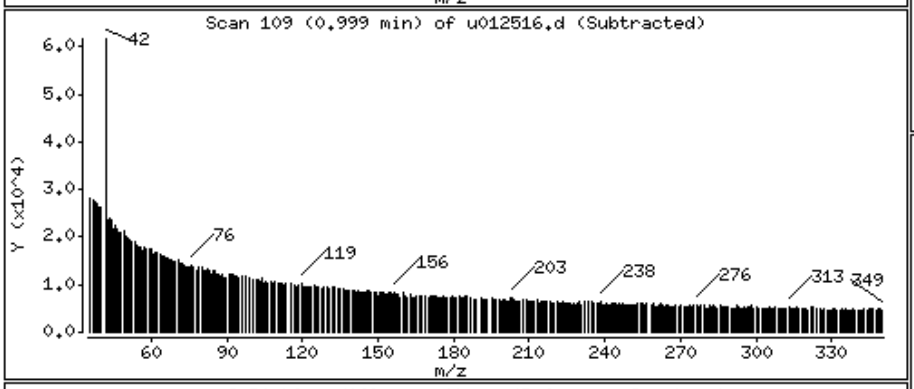
Sample Info: HS24011040-02;HS24011040-02;;;

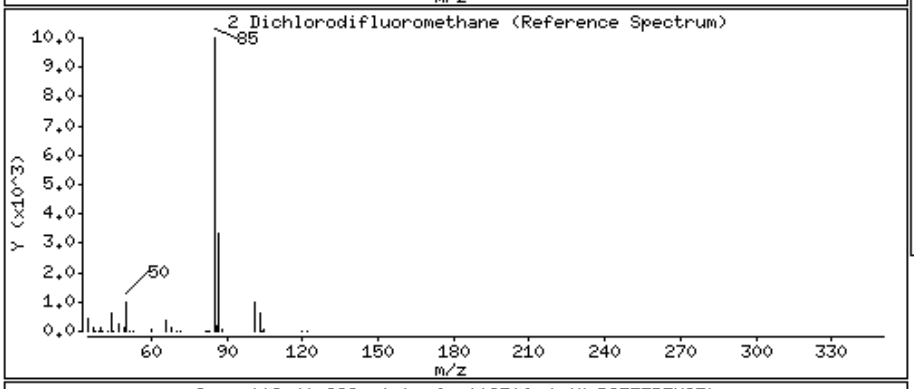
Purge Volume: 5.0 Operator: PC

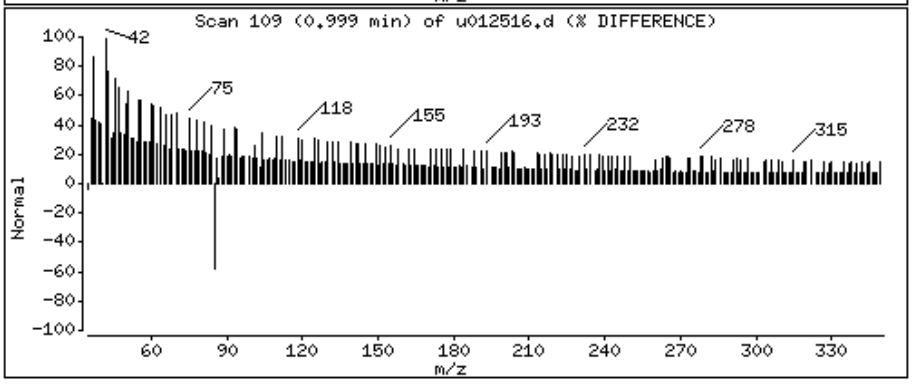
Column phase: DB624 Column diameter: 0.18

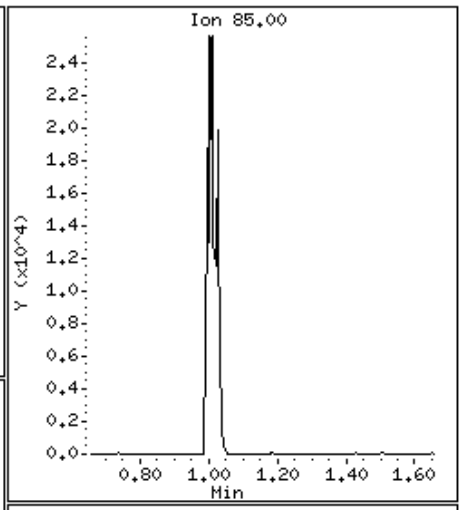
2 Dichlorodifluoromethane Concentration: 1673.70 ug/l

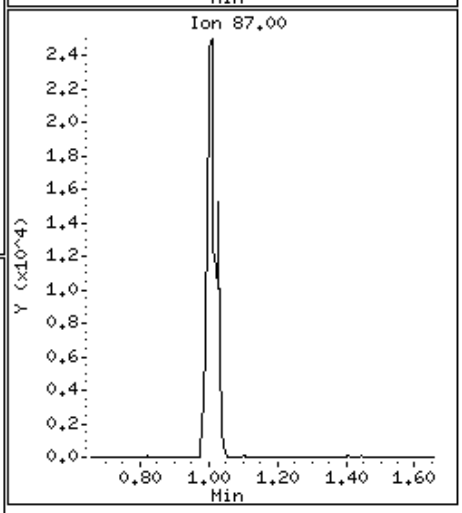












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012516.d Page 3

Date : 25-JAN-2024 15:54

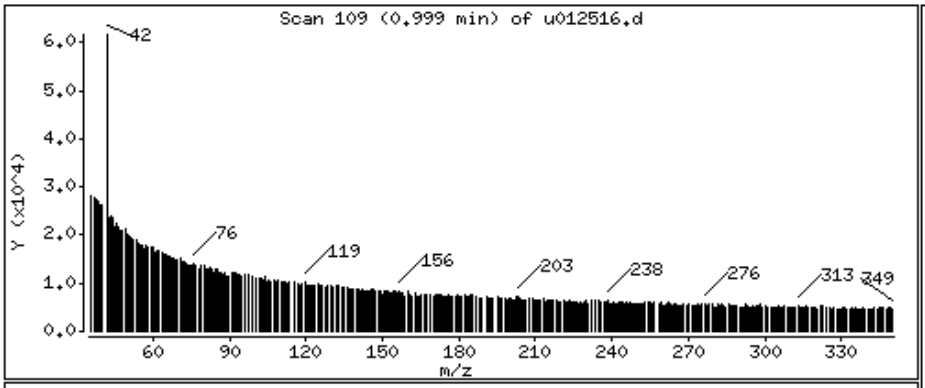
Client ID: HS24011040-02 Instrument: VOA9.i

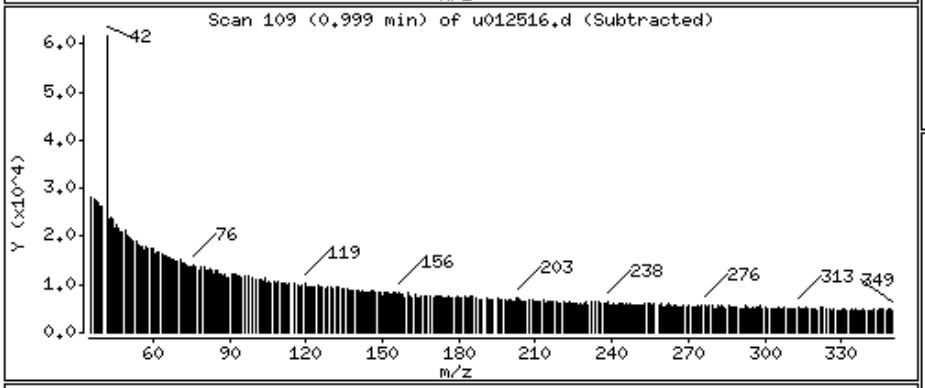
Sample Info: HS24011040-02;HS24011040-02;;;

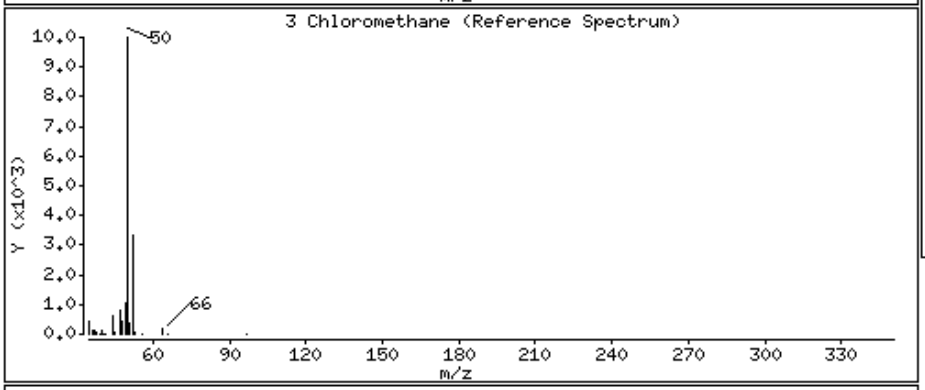
Purge Volume: 5.0 Operator: PC

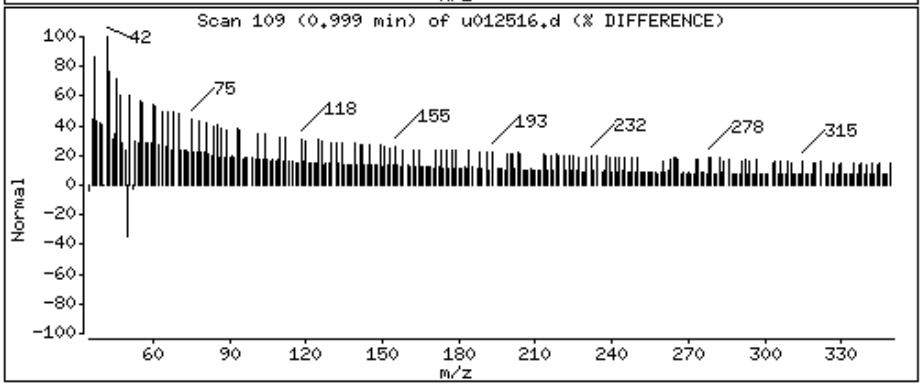
Column phase: DB624 Column diameter: 0.18

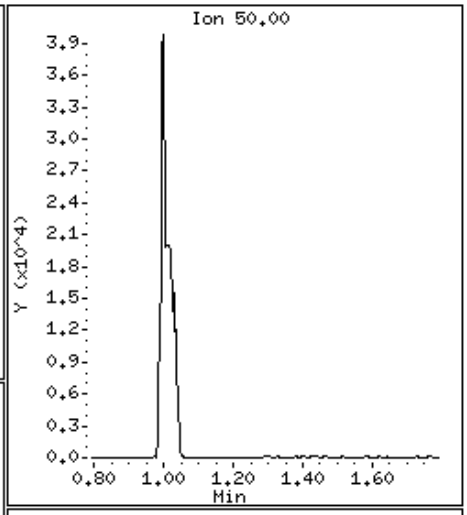
3 Chloromethane Concentration: 1654.72 ug/l

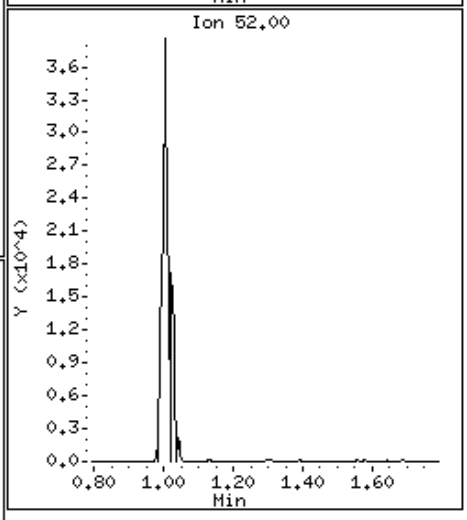












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012516.d Page 4

Date : 25-JAN-2024 15:54

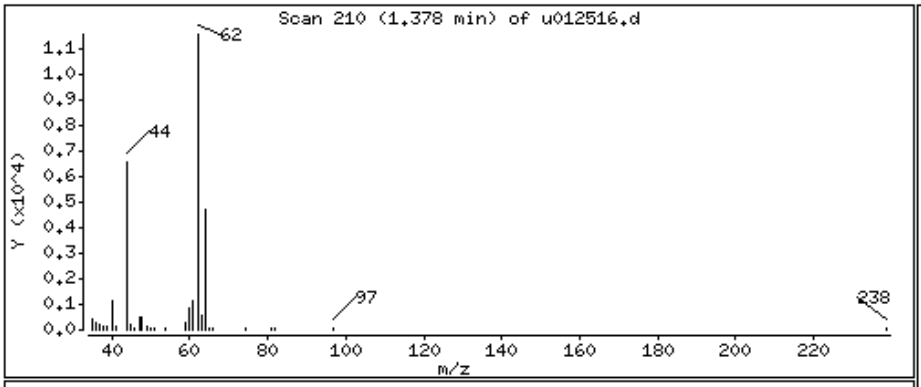
Client ID: HS24011040-02 Instrument: VOA9.i

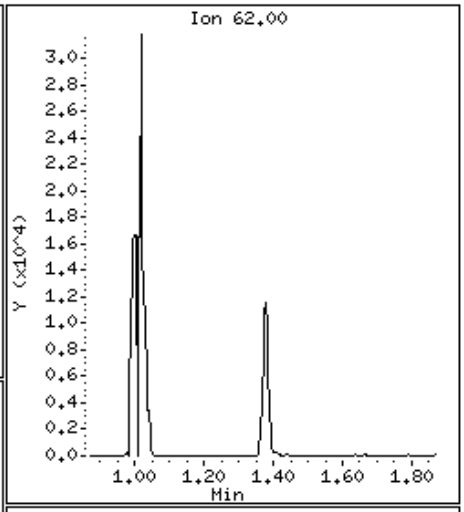
Sample Info: HS24011040-02;HS24011040-02;;;

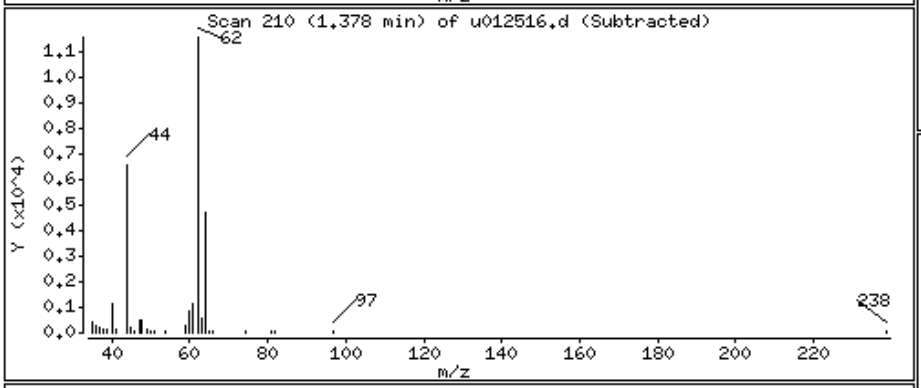
Purge Volume: 5.0 Operator: PC

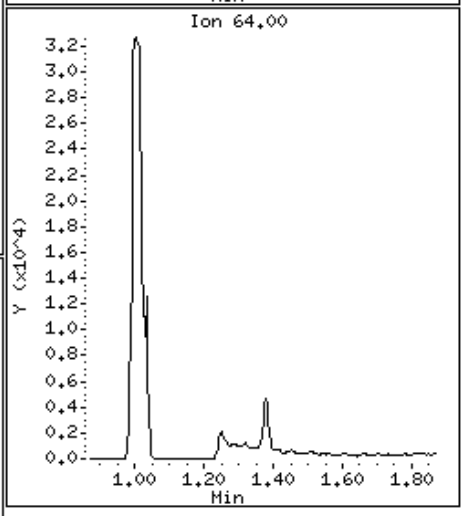
Column phase: DB624 Column diameter: 0.18

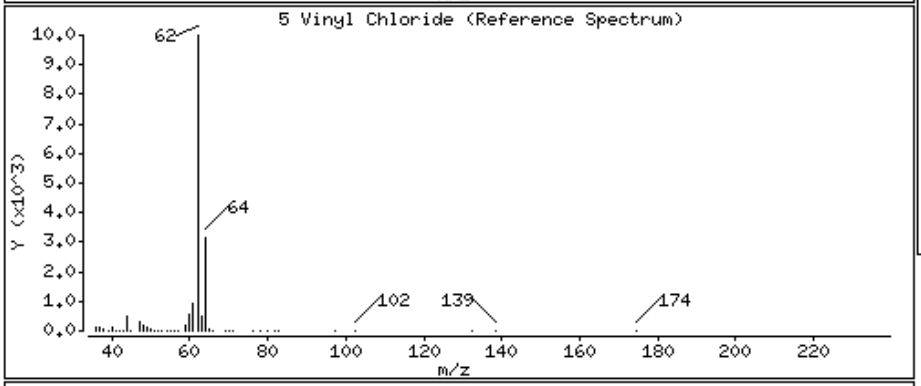
5 Vinyl Chloride Concentration: 354.56 ug/l

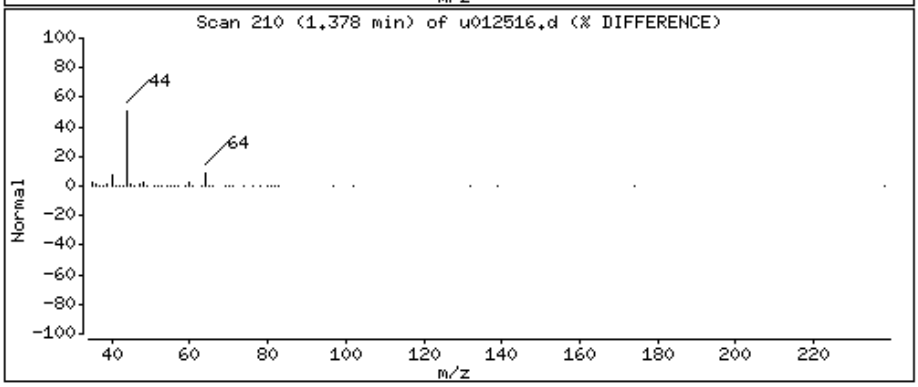












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012516.d Page 5

Date : 25-JAN-2024 15:54

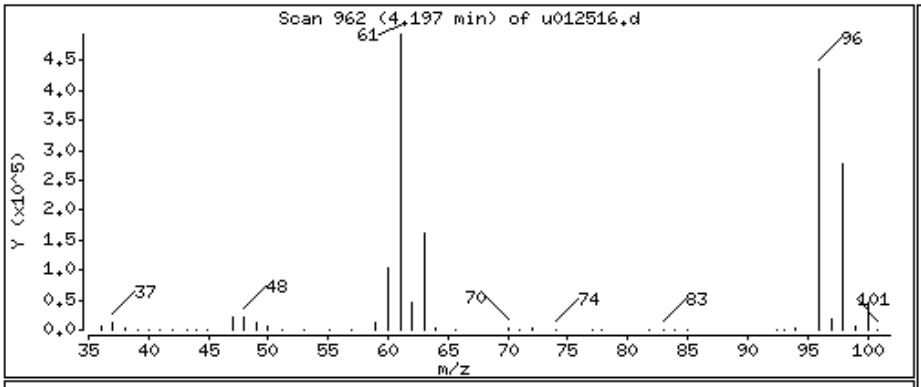
Client ID: HS24011040-02 Instrument: VOA9.i

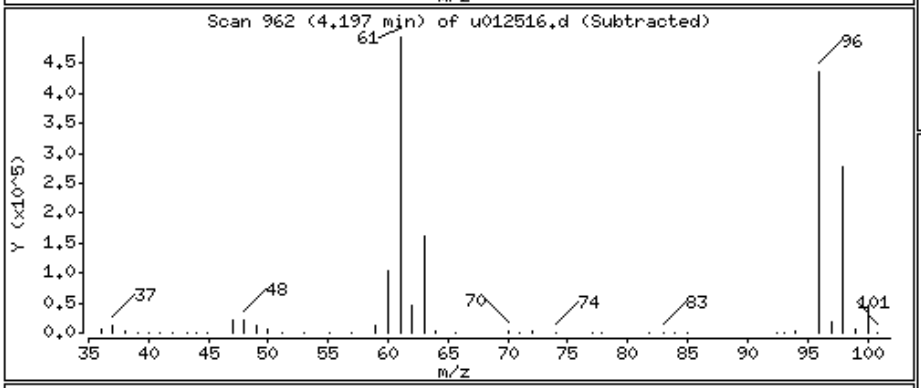
Sample Info: HS24011040-02;HS24011040-02;;;

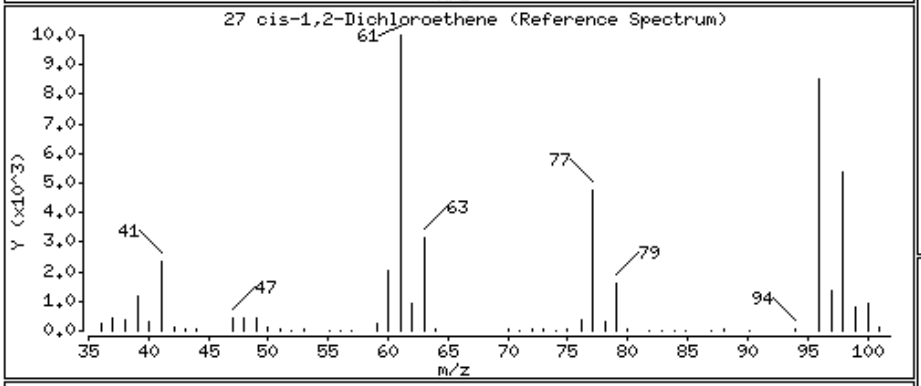
Purge Volume: 5.0 Operator: PC

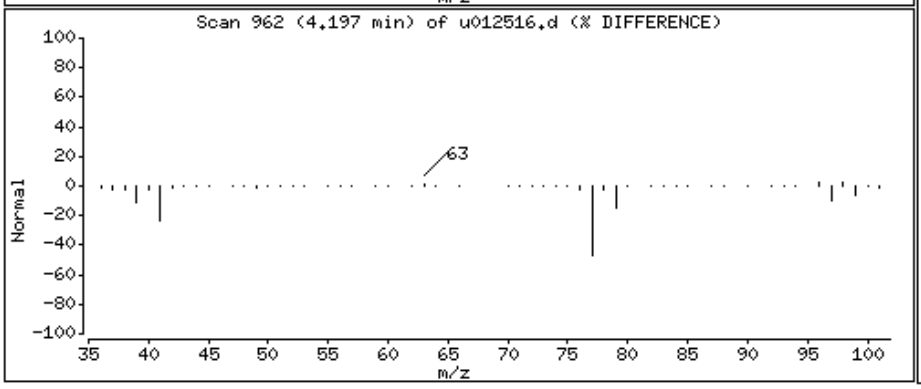
Column phase: DB624 Column diameter: 0.18

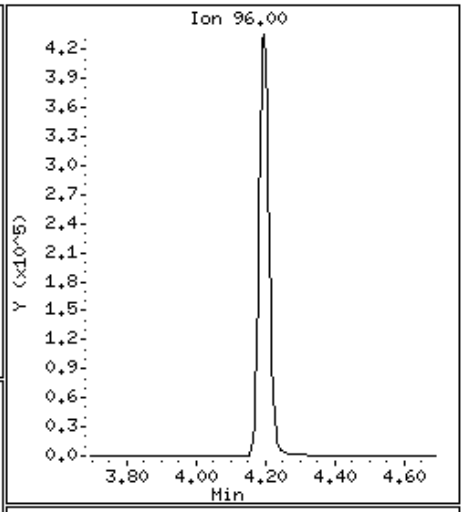
27 cis-1,2-Dichloroethene Concentration: 20836.22 ug/l

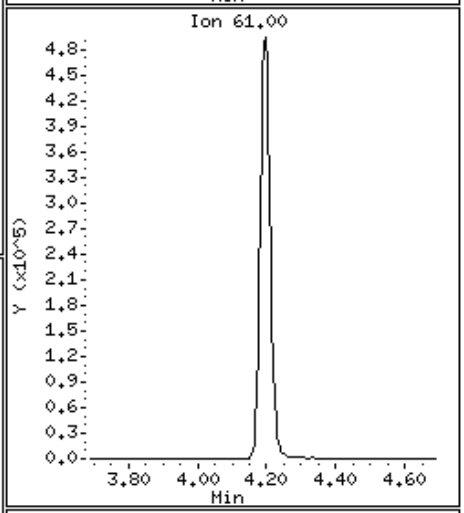


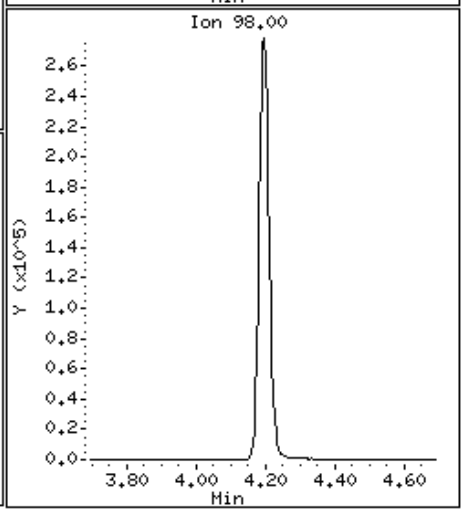












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012516.d Page 6

Date : 25-JAN-2024 15:54

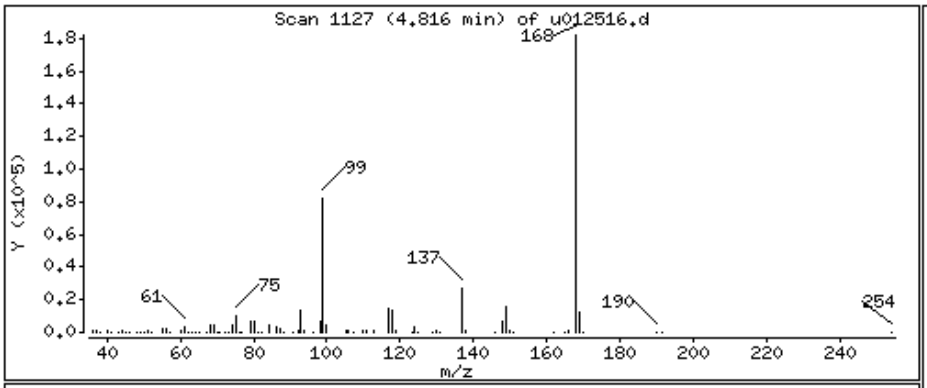
Client ID: HS24011040-02 Instrument: VOA9.i

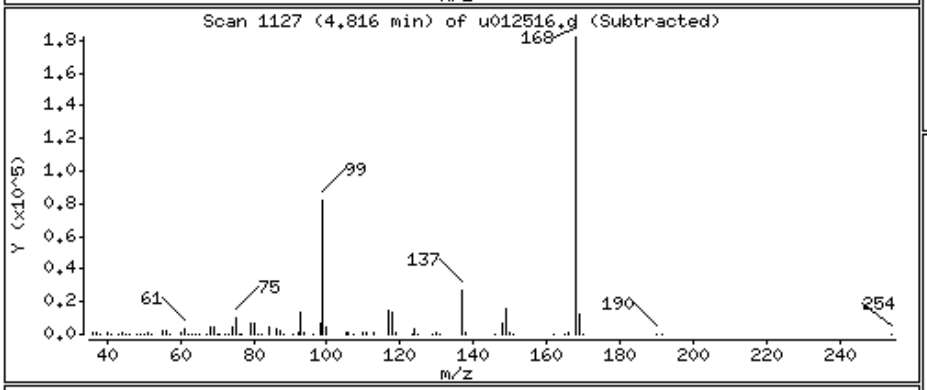
Sample Info: HS24011040-02;HS24011040-02;;;

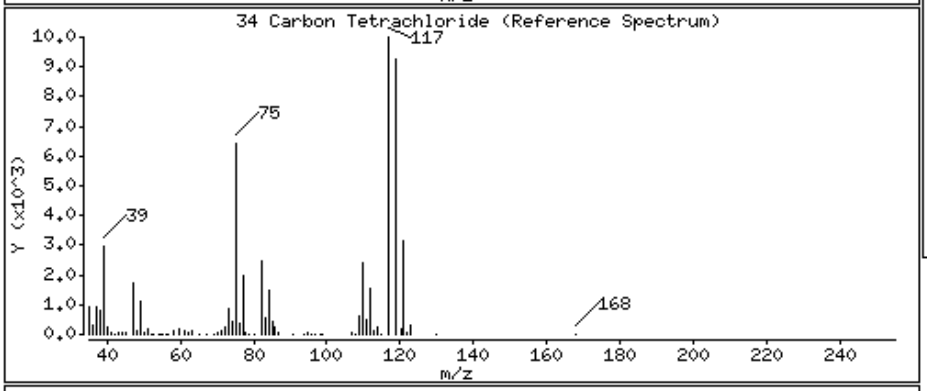
Purge Volume: 5.0 Operator: PC

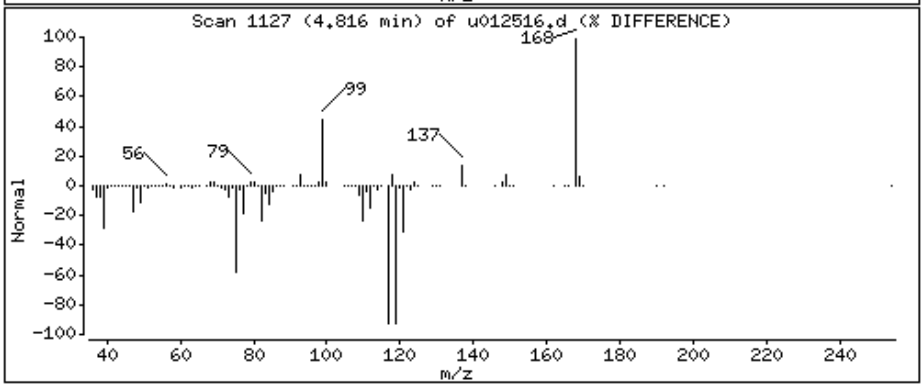
Column phase: DB624 Column diameter: 0.18

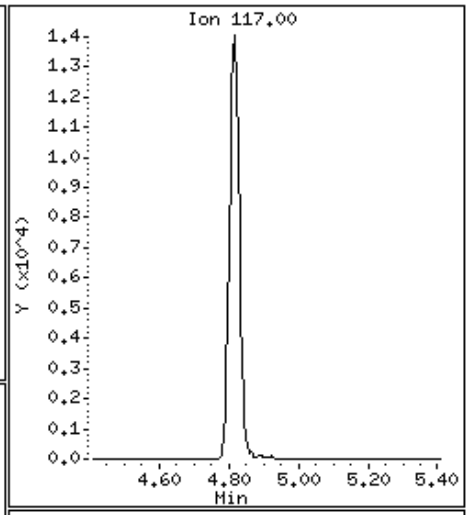
34 Carbon Tetrachloride Concentration: 699.48 ug/l

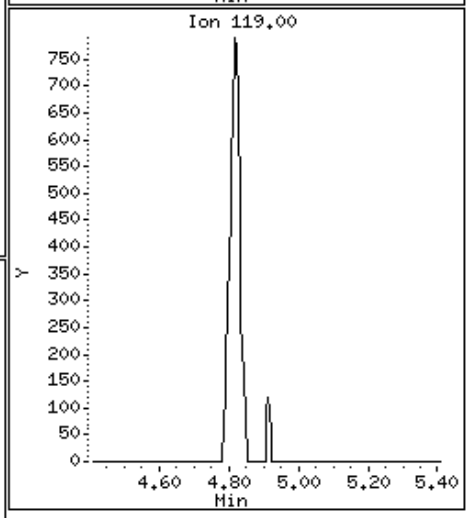












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012516.d Page 7

Date : 25-JAN-2024 15:54

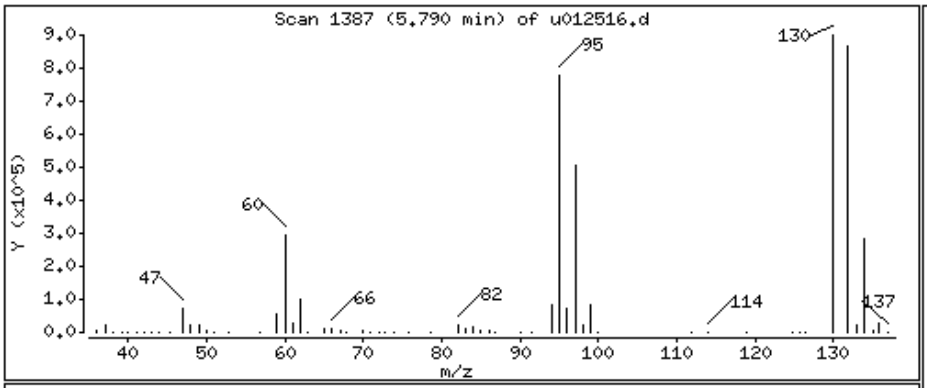
Client ID: HS24011040-02 Instrument: VOA9.i

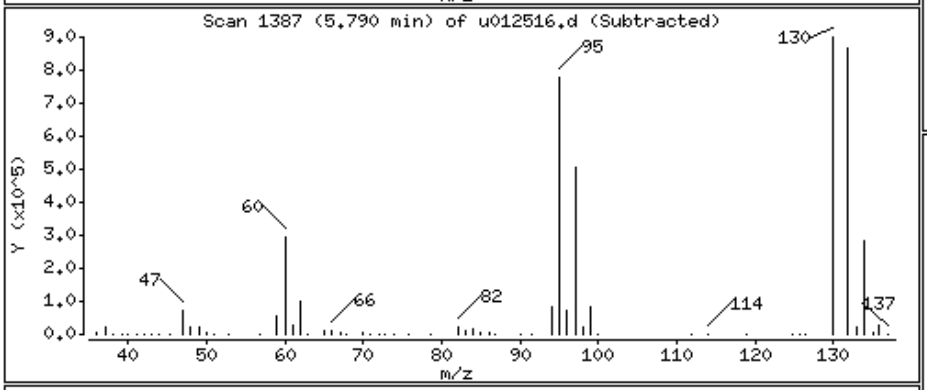
Sample Info: HS24011040-02;HS24011040-02;;;

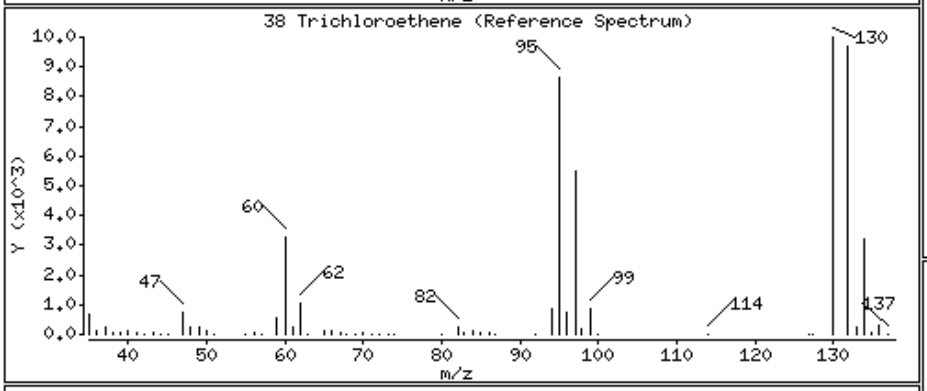
Purge Volume: 5.0 Operator: PC

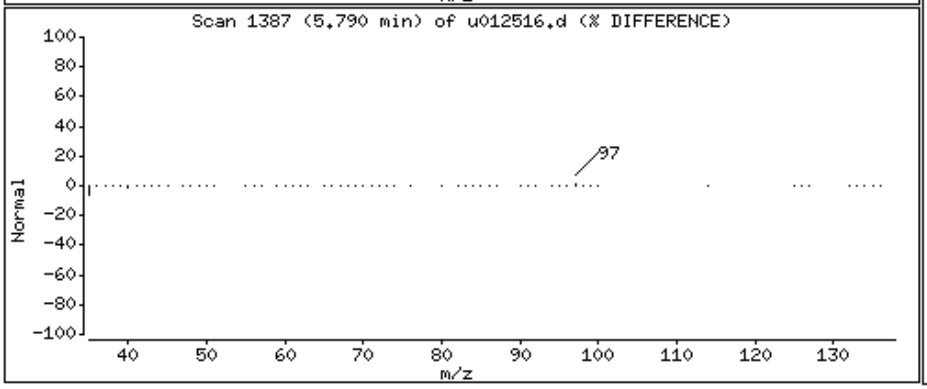
Column phase: DB624 Column diameter: 0.18

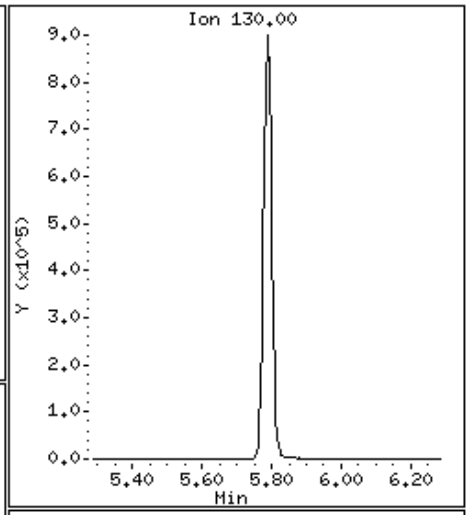
38 Trichloroethene Concentration: 41686.89 ug/l

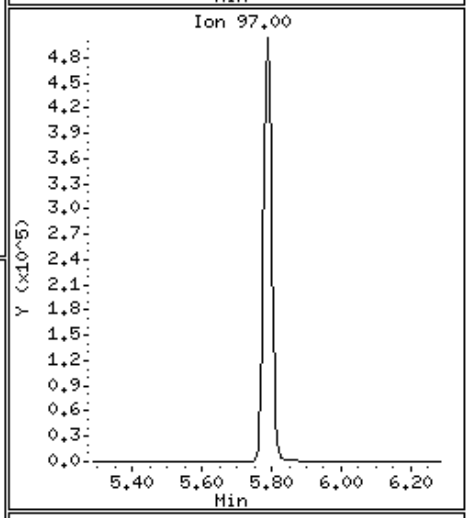


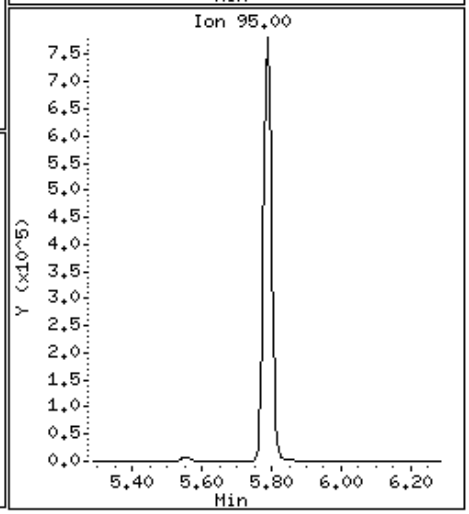












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012516.d Page 8

Date : 25-JAN-2024 15:54

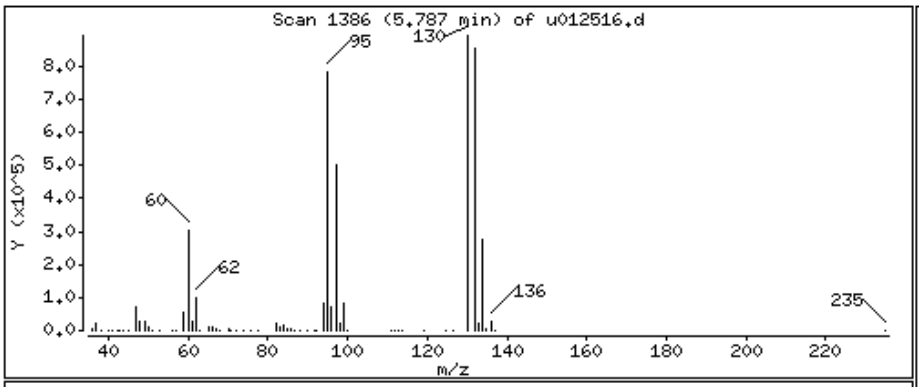
Client ID: HS24011040-02 Instrument: VOA9.i

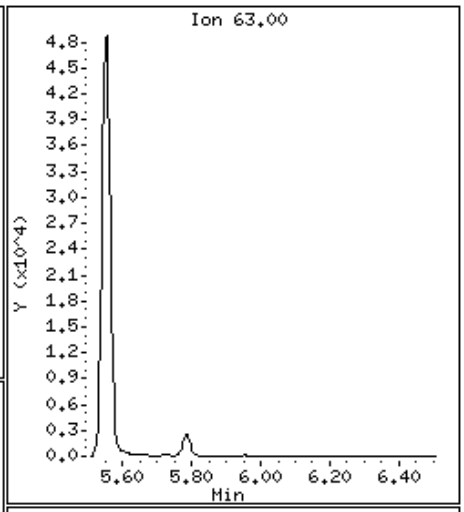
Sample Info: HS24011040-02;HS24011040-02;;;

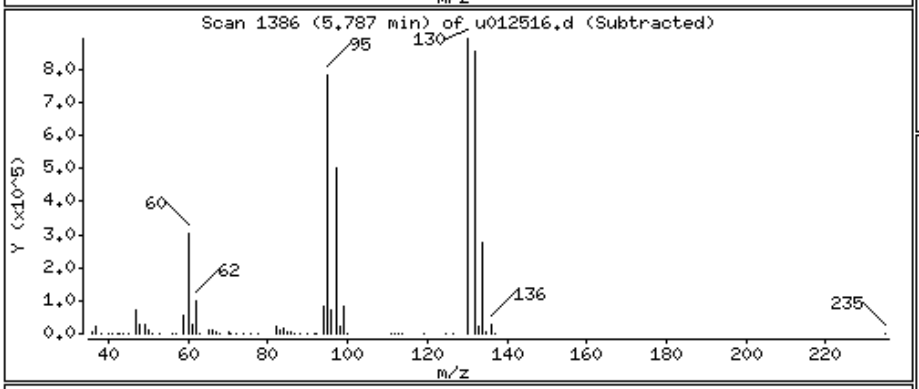
Purge Volume: 5.0 Operator: PC

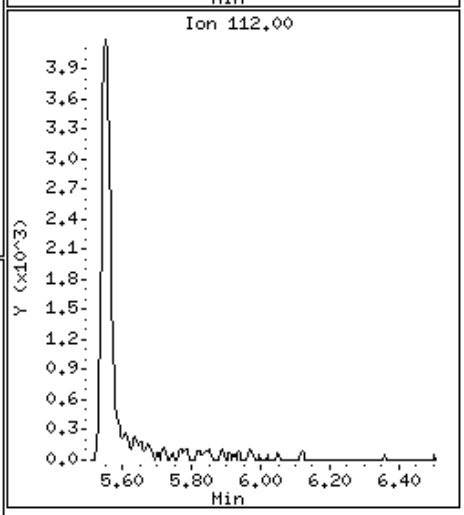
Column phase: DB624 Column diameter: 0.18

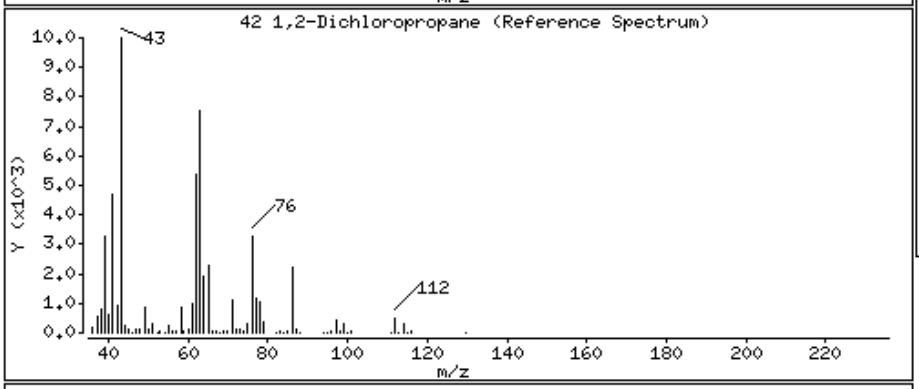
42 1,2-Dichloropropane Concentration: 118.97 ug/l

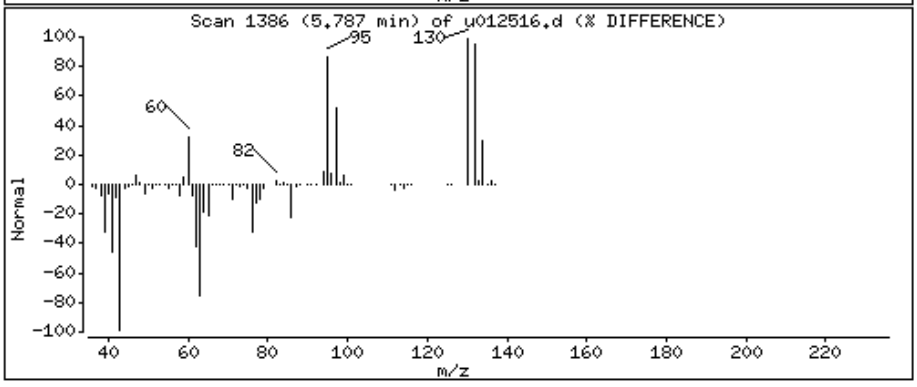












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012516.d Page 9

Date : 25-JAN-2024 15:54

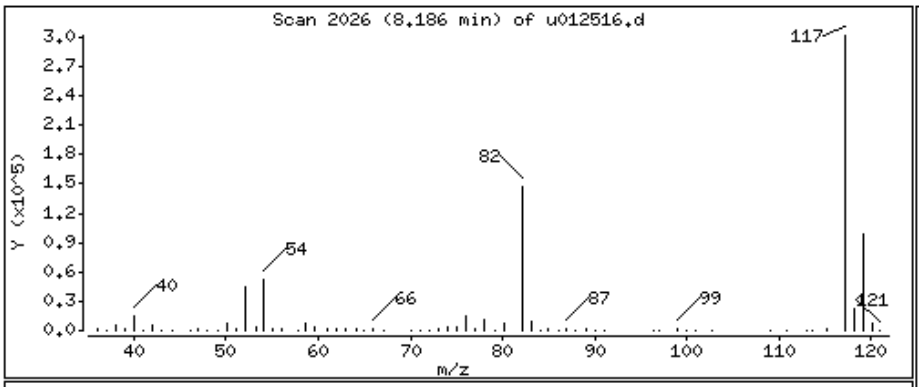
Client ID: HS24011040-02 Instrument: VOA9.i

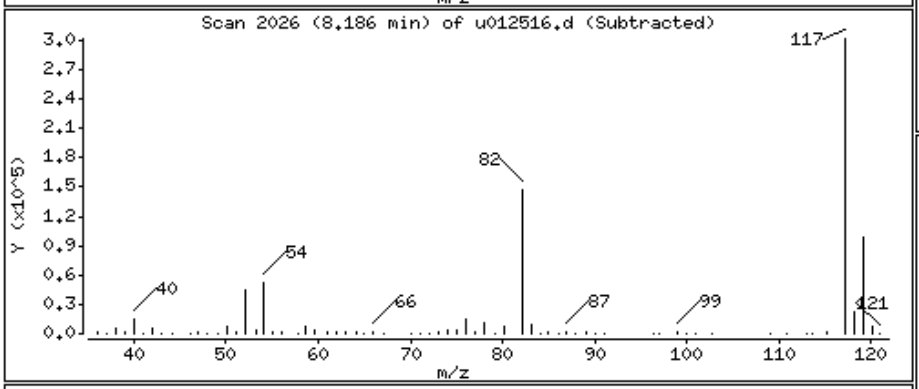
Sample Info: HS24011040-02;HS24011040-02;;;

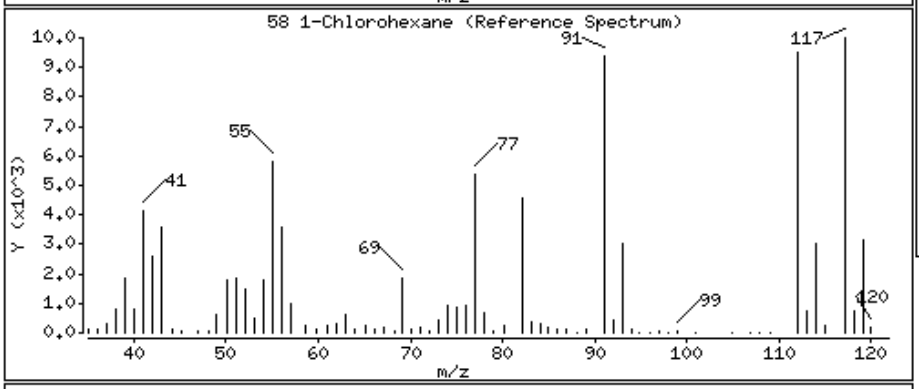
Purge Volume: 5.0 Operator: PC

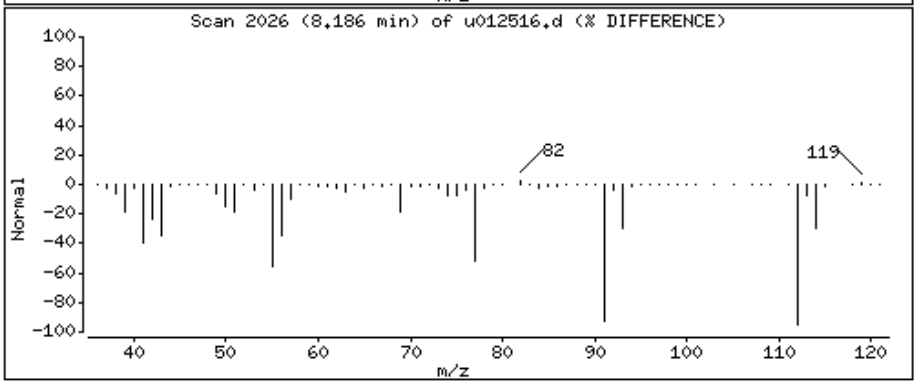
Column phase: DB624 Column diameter: 0.18

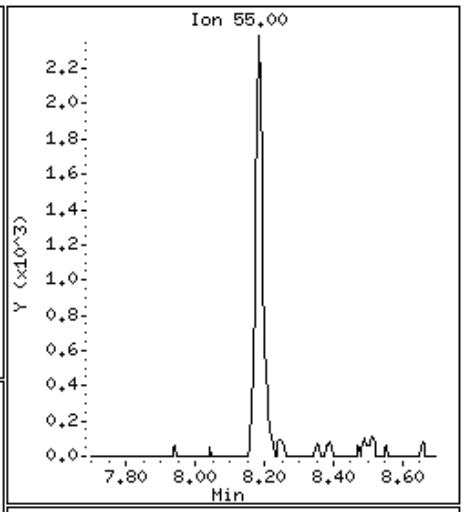
58 1-Chlorohexane Concentration: 138.08 ug/l

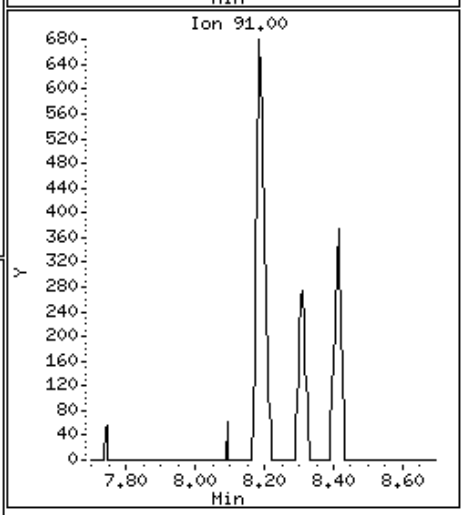












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012516.d Page 10

Date : 25-JAN-2024 15:54

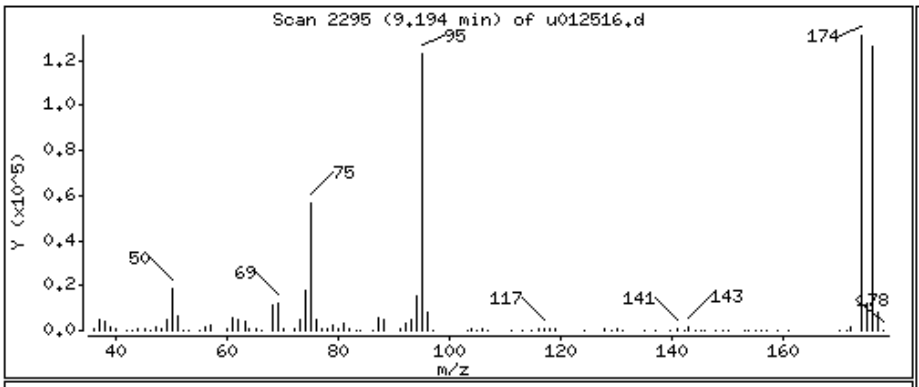
Client ID: HS24011040-02 Instrument: VOA9.i

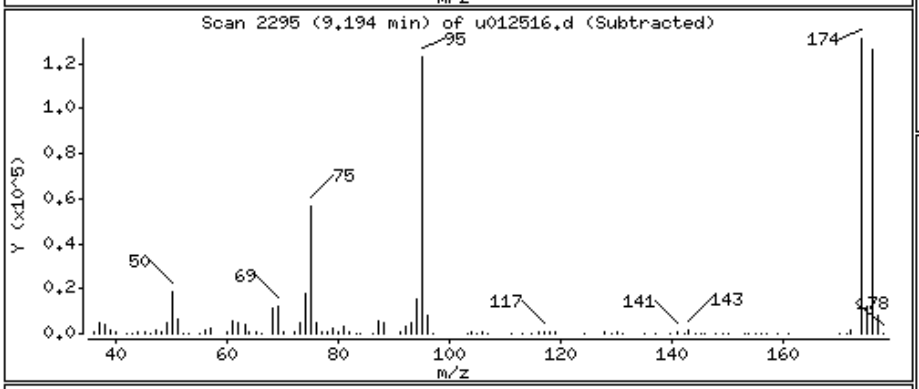
Sample Info: HS24011040-02;HS24011040-02;;;

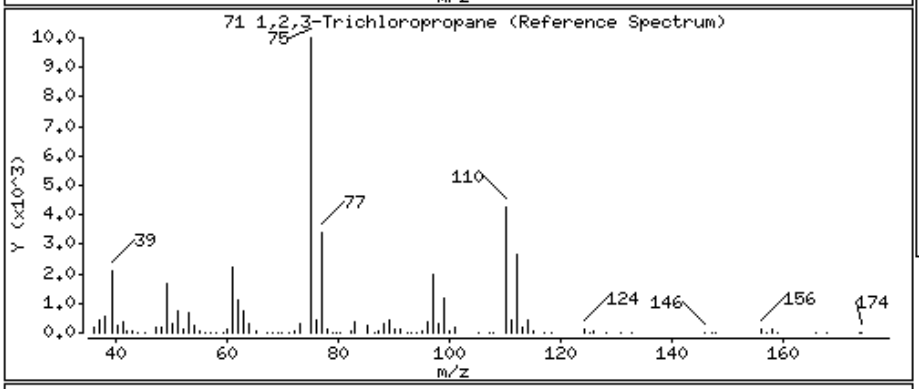
Purge Volume: 5.0 Operator: PC

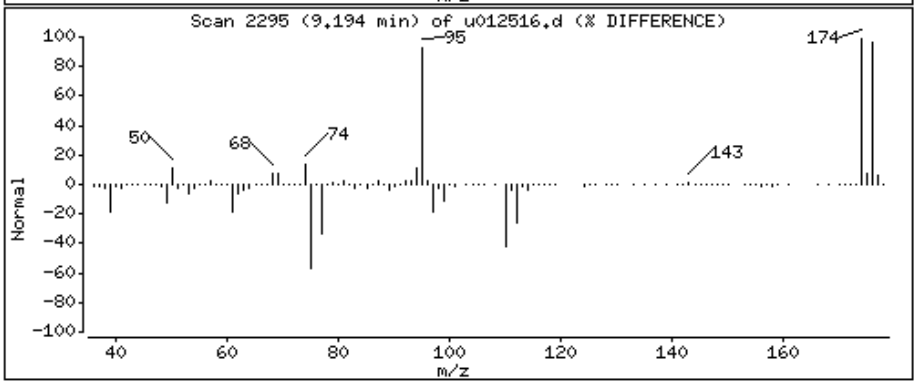
Column phase: DB624 Column diameter: 0.18

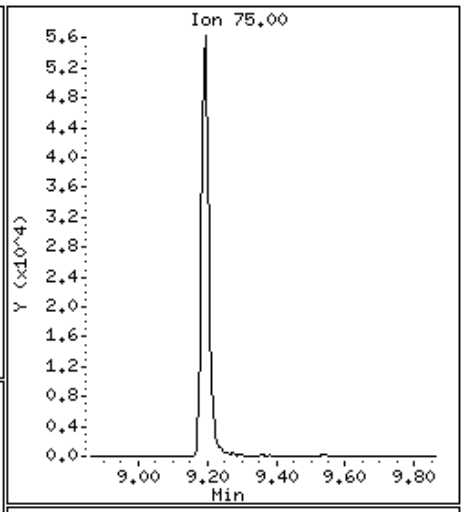
71 1,2,3-Trichloropropane Concentration: 1865.37 ug/l

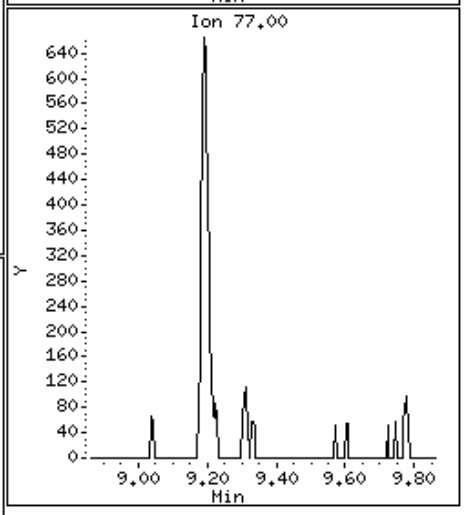












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012516.d Page 11

Date : 25-JAN-2024 15:54

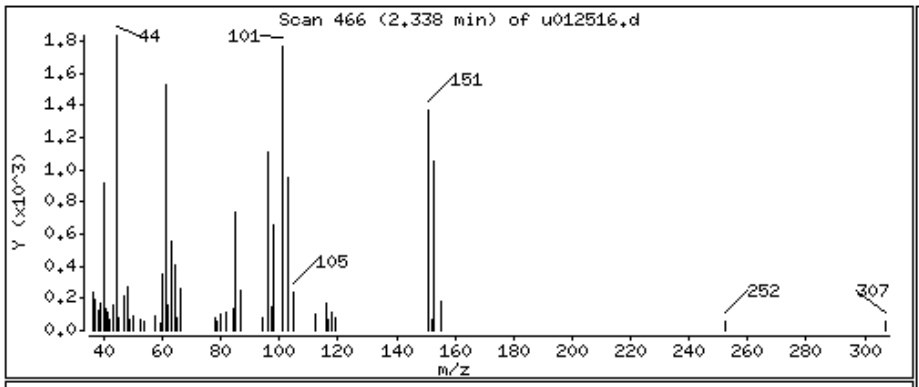
Client ID: HS24011040-02 Instrument: VOA9.i

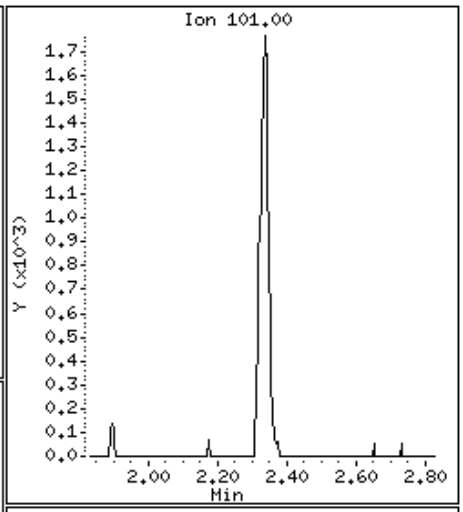
Sample Info: HS24011040-02;HS24011040-02;;;

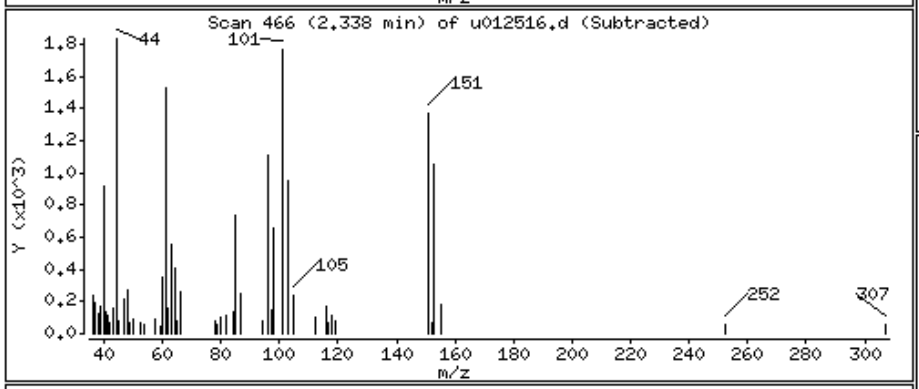
Purge Volume: 5.0 Operator: PC

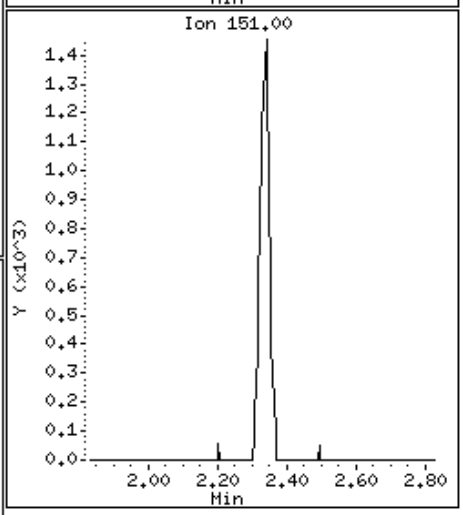
Column phase: DB624 Column diameter: 0.18

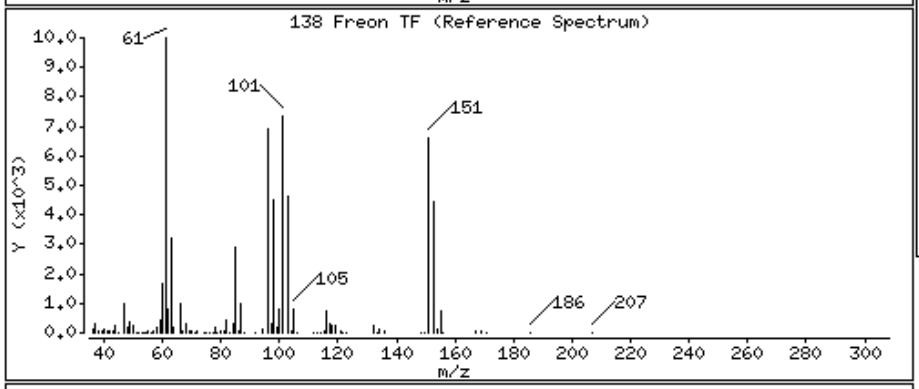
138 Freon TF Concentration: 119.21 ug/l

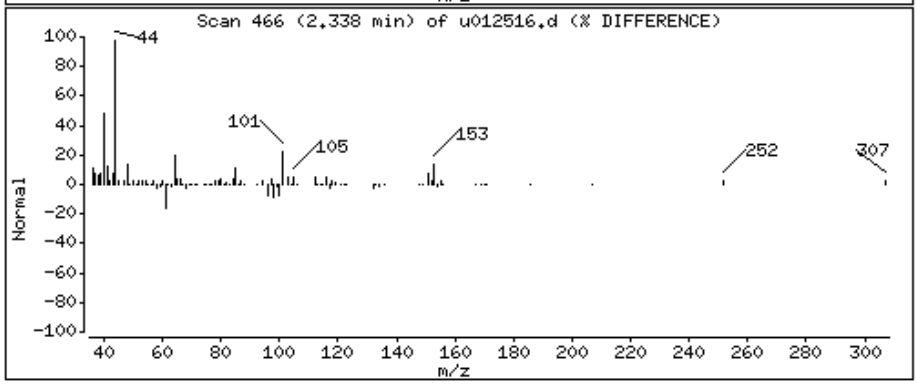












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012516.d Page 12

Date : 25-JAN-2024 15:54

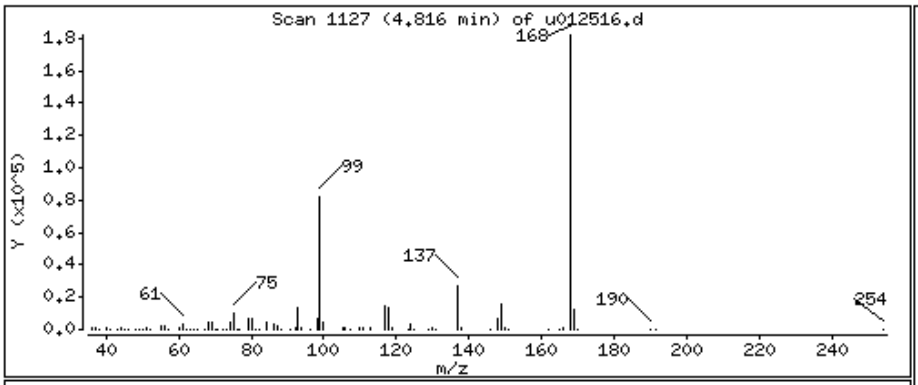
Client ID: HS24011040-02 Instrument: VOA9.i

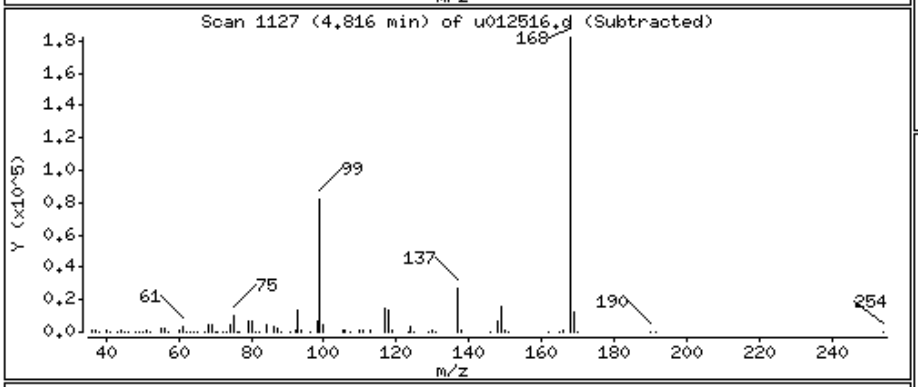
Sample Info: HS24011040-02;HS24011040-02;;;

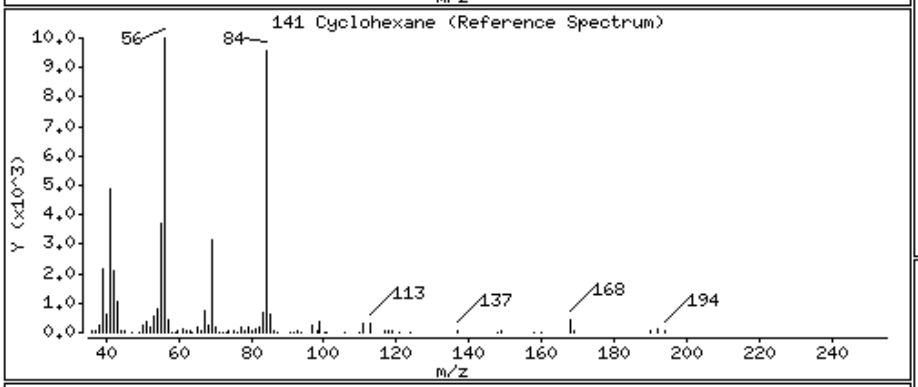
Purge Volume: 5.0 Operator: PC

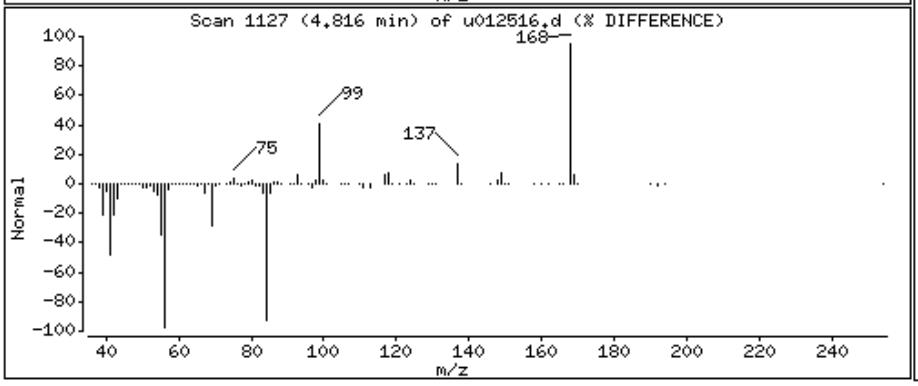
Column phase: DB624 Column diameter: 0.18

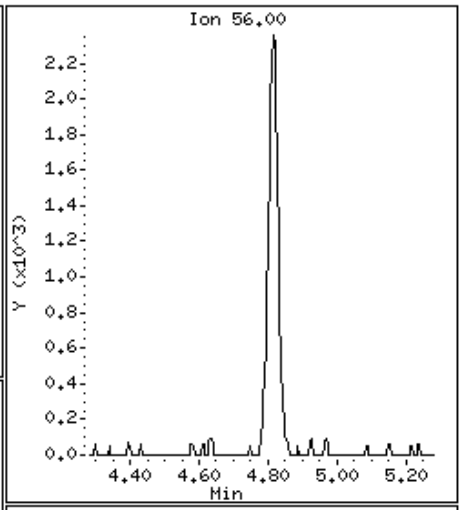
141 Cyclohexane Concentration: 95.03 ug/l

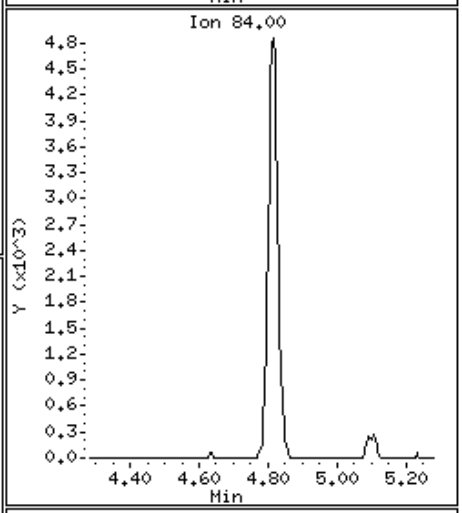


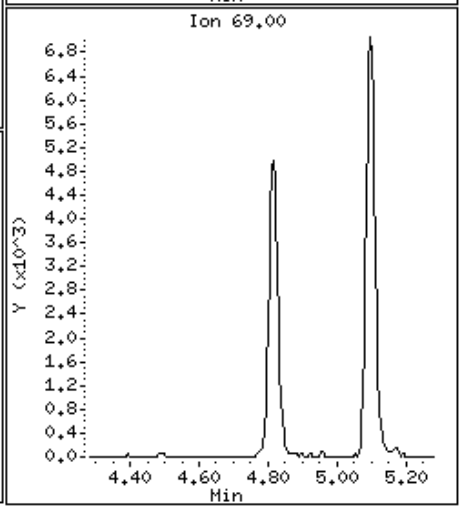












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InstruID : VOA9.i
LabSampID : HS24011040-02

NO MANUAL INTEGRATIONS

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
Operator : PC Inst ID: VOA9.i
Smp Info : HS24011040-03MS;HS24011040-03MS;3;;MS
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: 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)	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

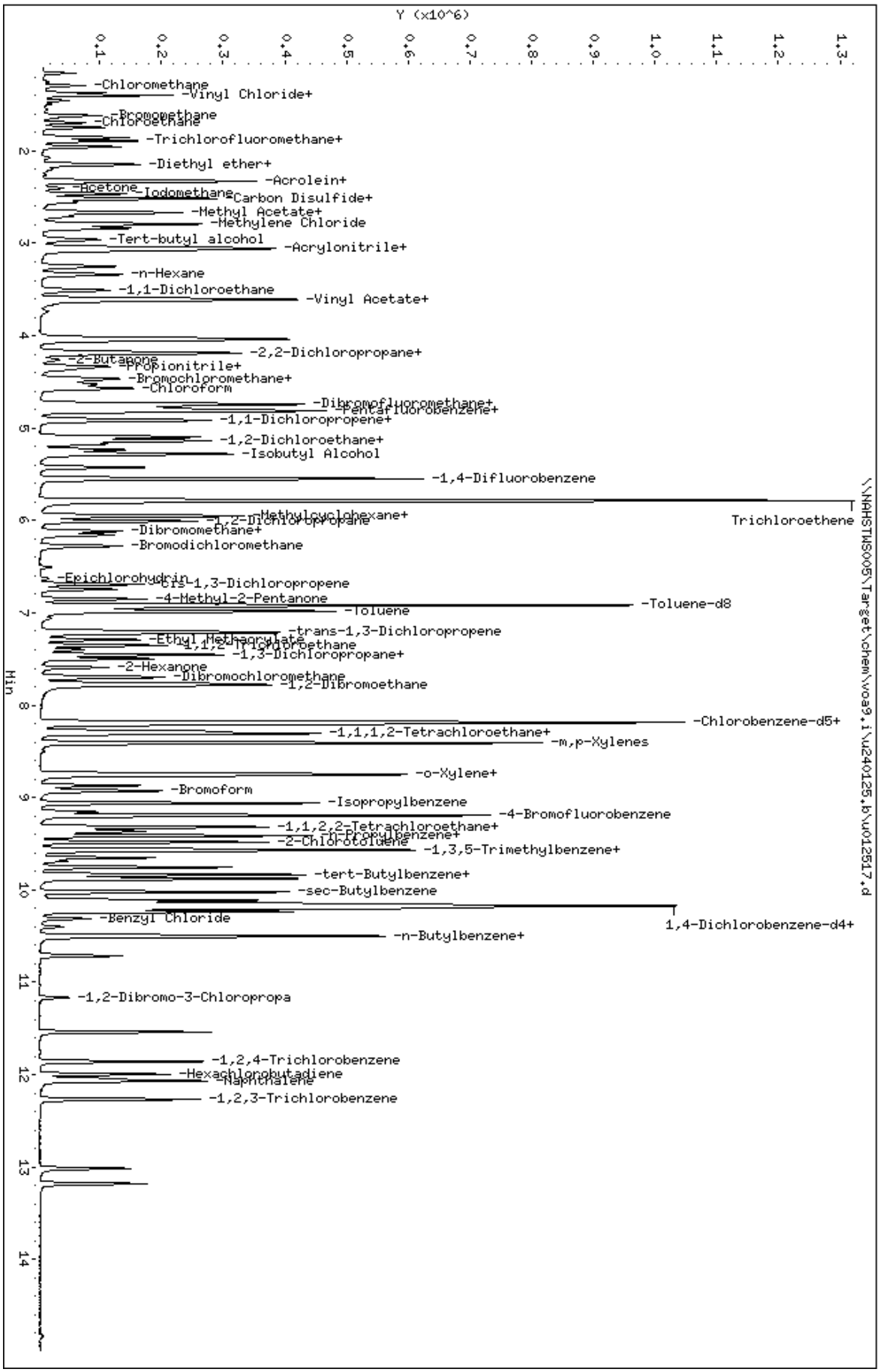
90 1,2,4-Trichlorobenzene	180	11.859	11.855 (1.166)	90686	17.9965	1799.65
91 Hexachlorobutadiene	225	11.998	11.998 (1.180)	43210	21.3918	2139.18

Data File: \\nahstws005\Target\chem\voa9.i\U240125.b\U012517.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)	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

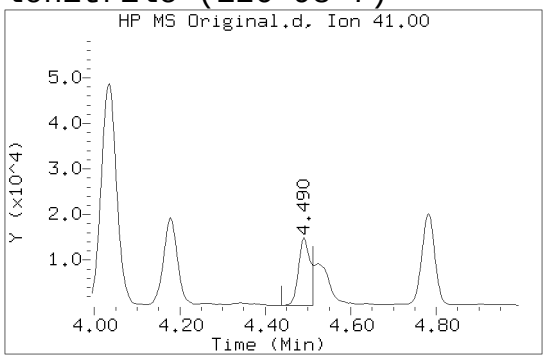
Page 1

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:

BEFORE
MASS
41
AREA
29239
HEIGHT
14912
25-Jan-2024
22:08



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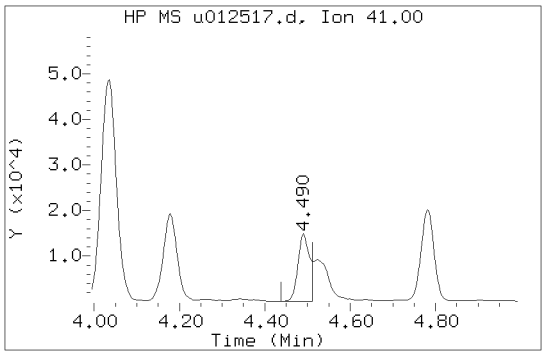

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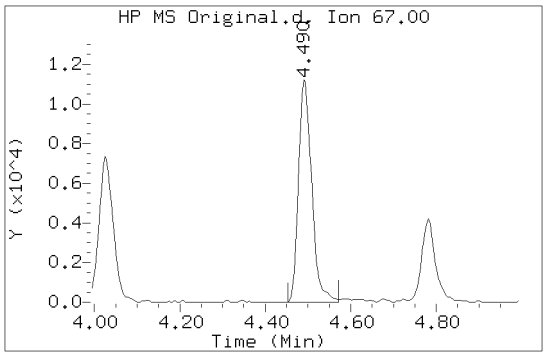

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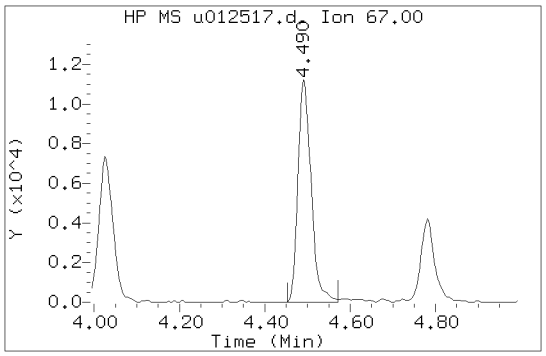

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25-Jan-2024
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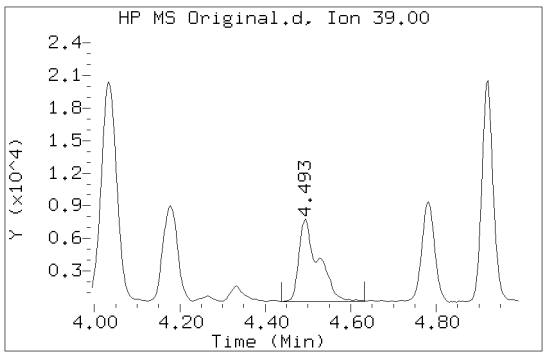

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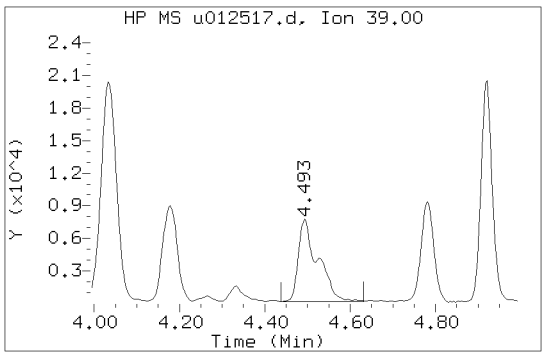

Dichlorofluoromethane (75-43-4)

Reason Code:

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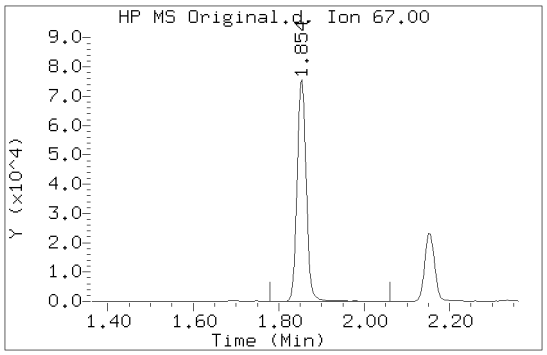

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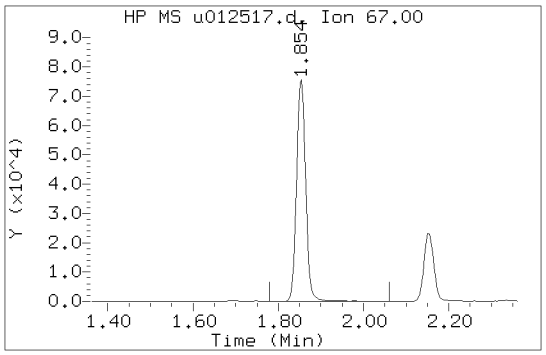

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Inj Date : 25-JAN-2024 16:16
InstruID : VOA9.i
LabSampID : HS24011040-03MS

Dichlorofluoromethane (75-43-4)

Reason Code:

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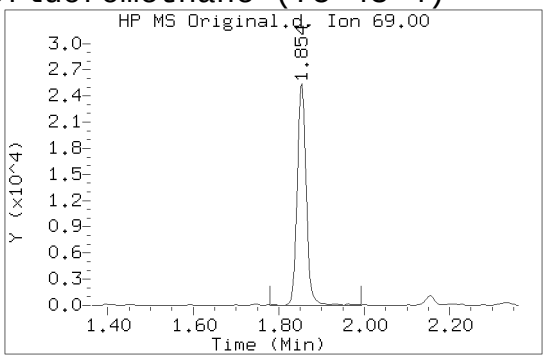

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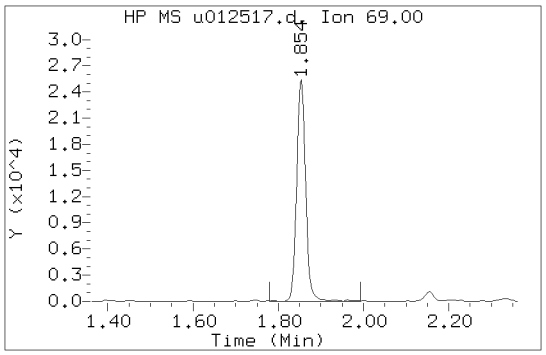

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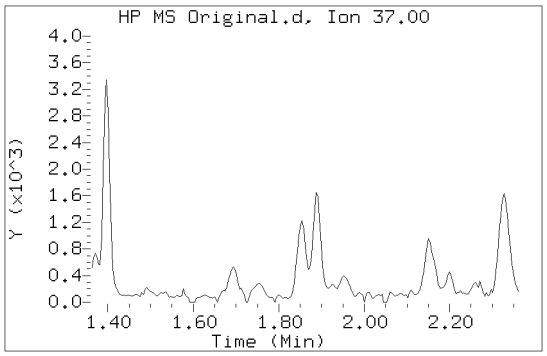

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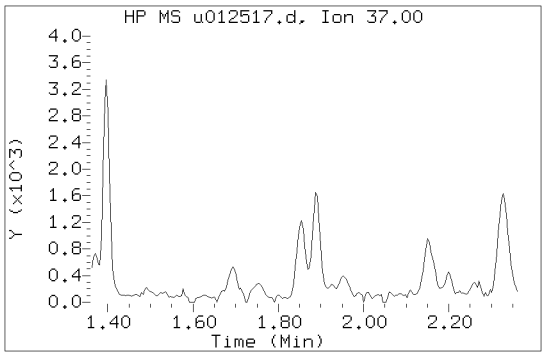

Data File: \\nahstws005\Target\chem\voa9.i\U240125.b\U012518.D Page 1
Report Date: 01-Feb-2024 14:20

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
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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: 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

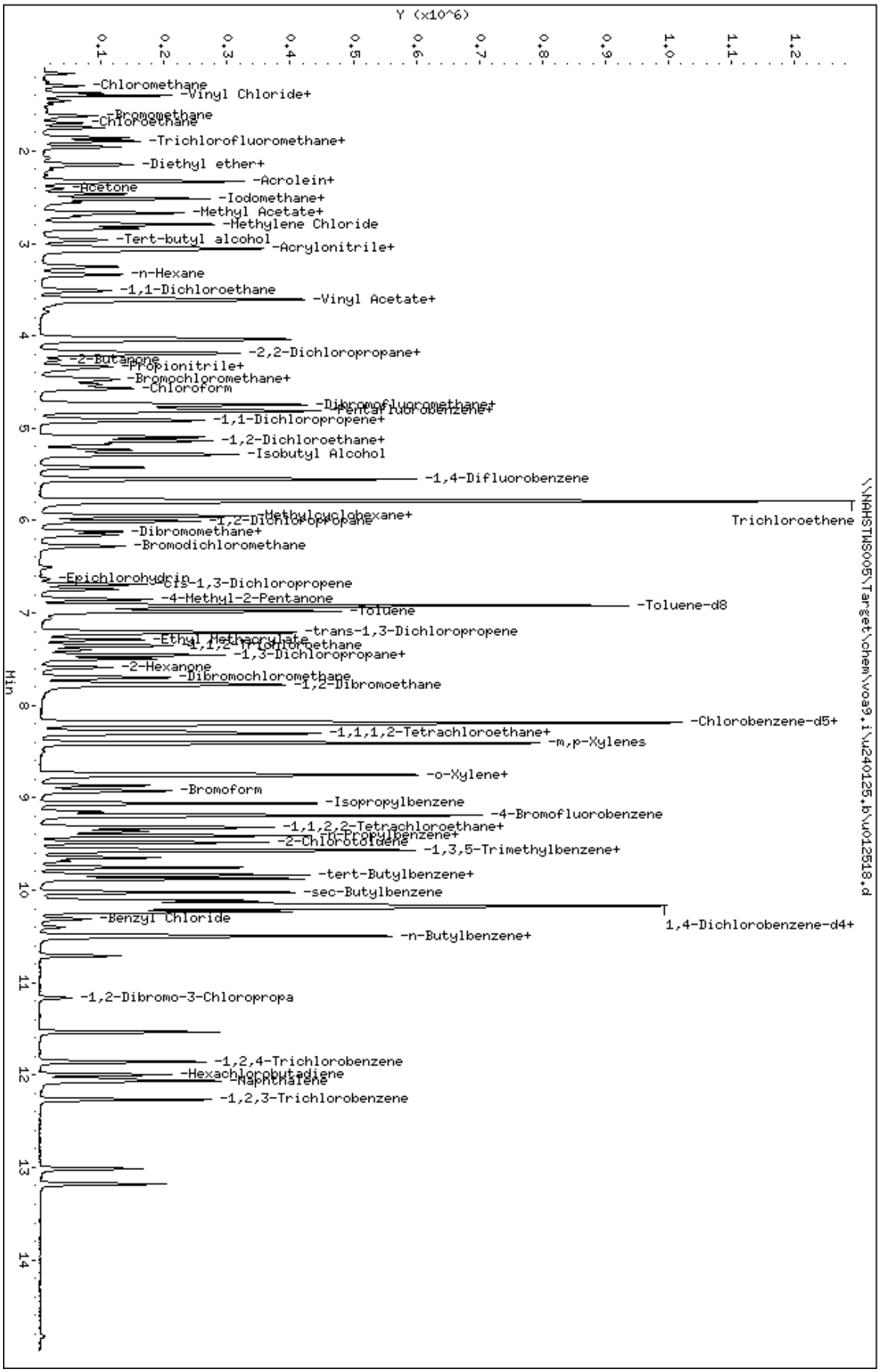
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
	29 Bromochloromethane	128	4.467	4.470	(0.928)	39183	18.5062	1850.62
$	30 Dibromofluoromethane	113	4.744	4.748	(0.985)	166863	49.1978	49.19
	31 1,1,1-Trichloroethane	97	4.740	4.744	(0.984)	95985	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

	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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Purge Volume: 5.0
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Instrument: VOA9.i
Operator: PC
Column diameter: 0.18

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Inj Date : 25-JAN-2024 16:38
InstruID : VOA9.i
LabSampID : HS24011040-03MSD

Methacrylonitrile (126-98-7)

Reason Code:

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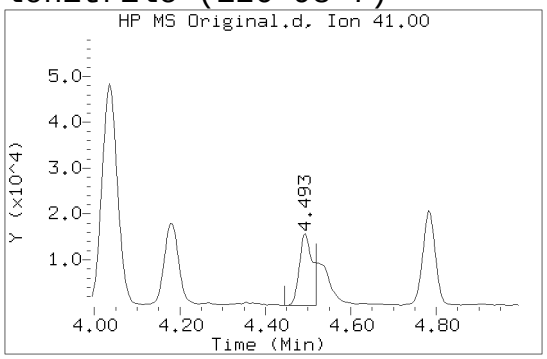
25-Jan-2024
22:09



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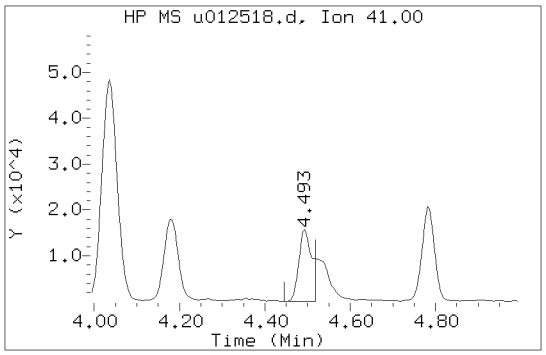

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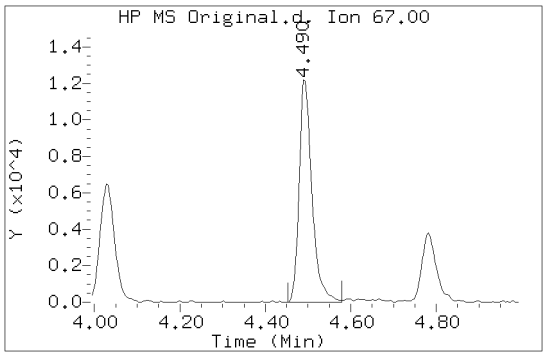

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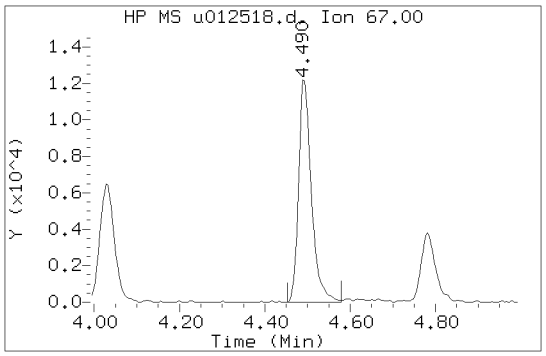

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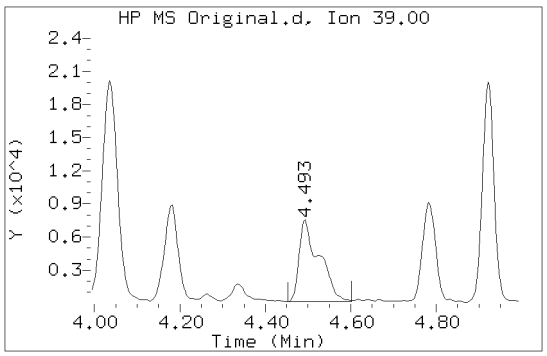

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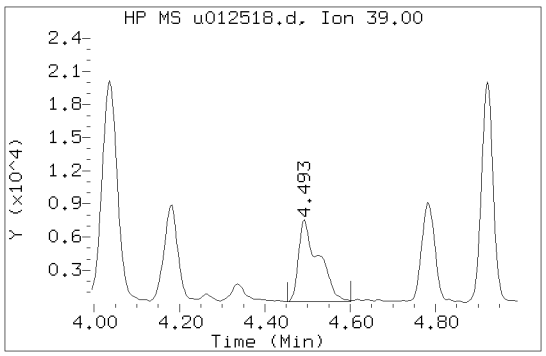

Dichlorofluoromethane (75-43-4)

Reason Code:

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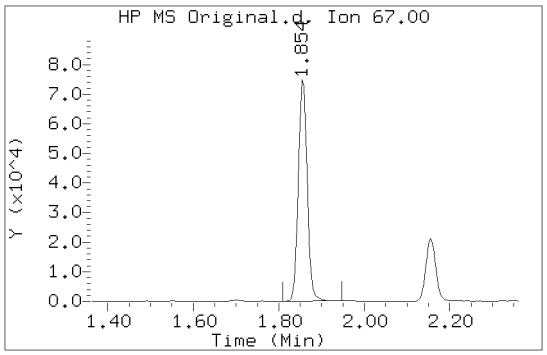

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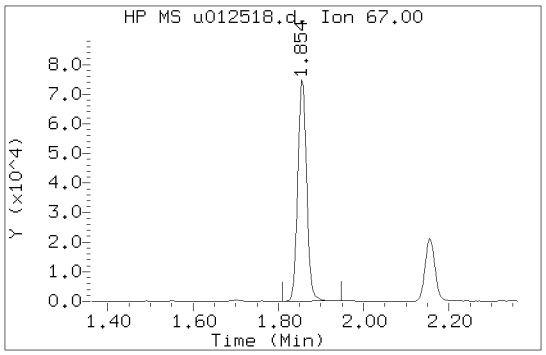

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Inj Date : 25-JAN-2024 16:38
InstruID : VOA9.i
LabSampID : HS24011040-03MSD

Dichlorofluoromethane (75-43-4)

Reason Code:

BEFORE

MASS
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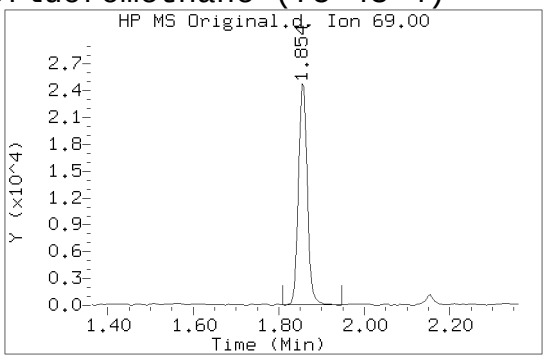
35896
HEIGHT
24727
25-Jan-2024
22:09



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25-Jan-2024
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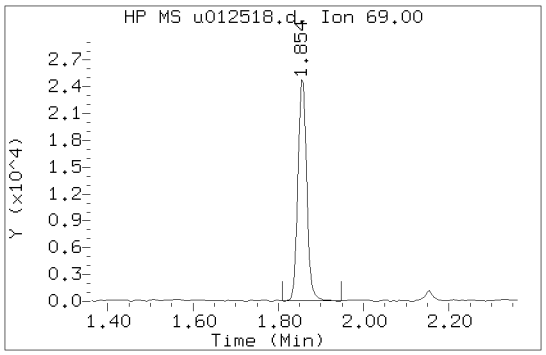

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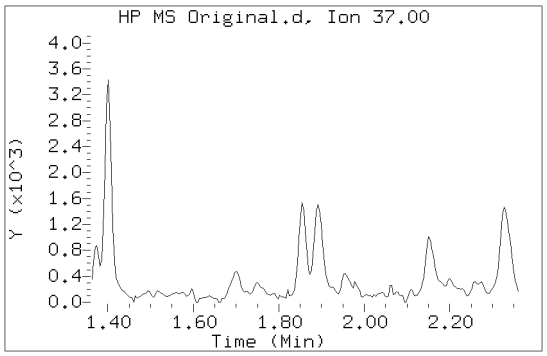

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25-Jan-2024
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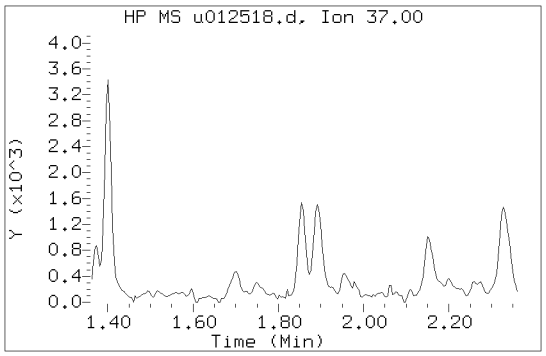


Data File: \\nahstws005\Target\chem\voa9.i\U240125.b\U012519.D Page 1
Report Date: 01-Feb-2024 14:20

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240125.b\U012519.D
Lab Smp Id: HS24011040-01 Client Smp ID: HS24011040-01
Inj Date : 25-JAN-2024 17:01
Operator : PC Inst ID: VOA9.i
Smp Info : HS24011040-01;HS24011040-01;;;
Misc Info : V9;WATER;0;1000;
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: 17
Dil Factor: 1000.00000
Integrator: HP RTE Compound Sublist: 1040-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7066

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

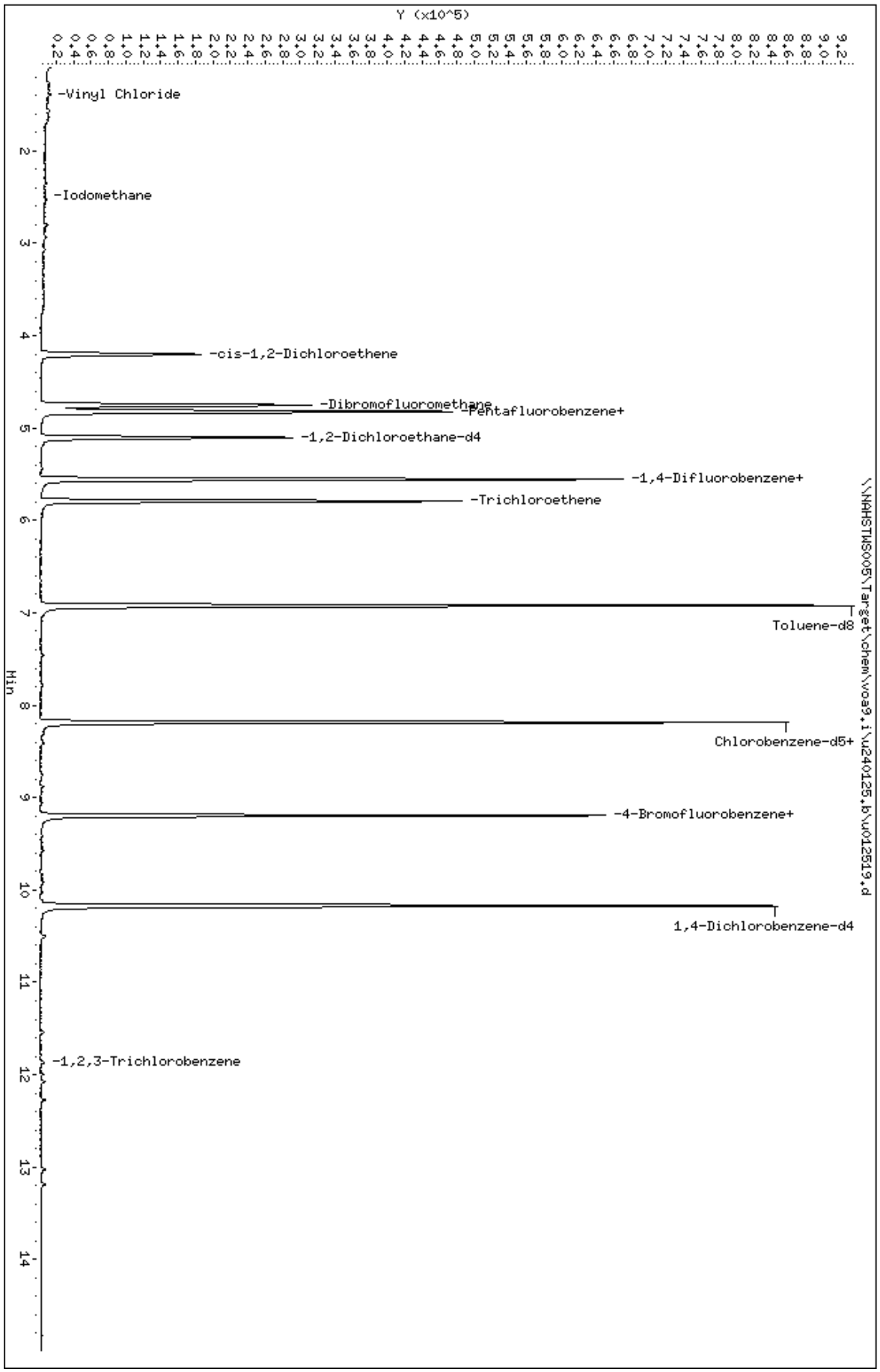
Name	Value	Description
DF	1000.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.819	4.815	(1.000)	359962	50.0000	
2 Dichlorodifluoromethane	85	1.029	1.164	(0.214)	36093	13.0911	13091.08
3 Chloromethane	50	1.044	1.303	(0.217)	4743	1.14864	1148.64(a)
5 Vinyl Chloride	62	1.389	1.378	(0.288)	1749	0.44338	443.38(a)
15 Iodomethane	142	2.484	2.469	(0.515)	1026	2.60971	2609.70(a)
27 cis-1,2-Dichloroethene	96	4.204	4.197	(0.872)	98309	22.1119	22111.88
$ 30 Dibromofluoromethane	113	4.751	4.748	(0.986)	186929	50.7577	50.75(R)
34 Carbon Tetrachloride	117	4.819	4.913	(0.868)	29275	6.49945	6499.44
$ 35 1,2-Dichloroethane-d4	65	5.100	5.096	(1.058)	191152	45.4956	45.49(R)
* 36 1,4-Difluorobenzene	114	5.554	5.554	(1.000)	551178	50.0000	
38 Trichloroethene	130	5.790	5.790	(1.043)	166127	40.1718	40171.79
42 1,2-Dichloropropane	63	5.554	6.007	(1.000)	94688	23.4398	23439.78
* 47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	489240	50.0000	
$ 48 Toluene-d8	98	6.922	6.922	(0.846)	583068	51.7710	51.77(R)
58 1-Chlorohexane	55	8.185	8.197	(1.474)	4087	1.32234	1322.34(a)
$ 69 4-Bromofluorobenzene	95	9.194	9.190	(1.123)	191127	44.6856	44.68(R)
* 70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	250888	50.0000	
71 1,2,3-Trichloropropane	75	9.194	9.362	(0.904)	88300	18.5401	18540.05
93 1,2,3-Trichlorobenzene	180	11.866	12.268	(1.167)	2030	0.43443	434.42(a)
141 Cyclohexane	56	4.819	4.785	(1.000)	5112	0.98559	985.59(a)

M	94	1,2-Dichloroethylene (total)	96			98309	25.3214	25321.43

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\u012519,d
Date : 25-JAN-2024 17:01
Client ID: HS24011040-01
Sample Info: HS24011040-01;HS24011040-01;;;
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\u012519.d Page 2

Date : 25-JAN-2024 17:01

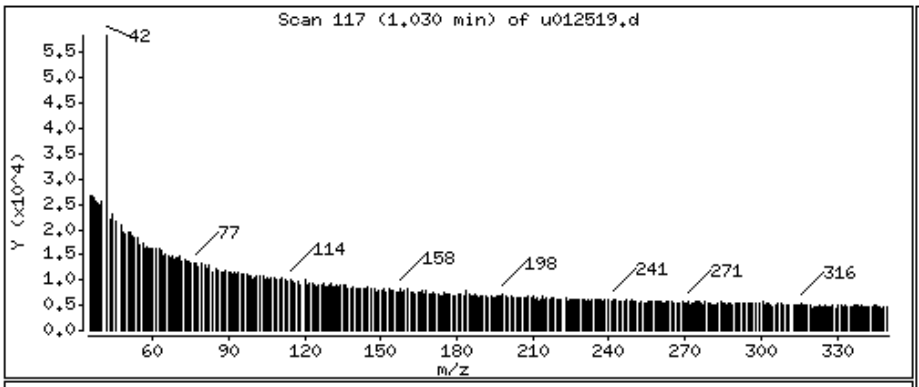
Client ID: HS24011040-01 Instrument: VOA9.i

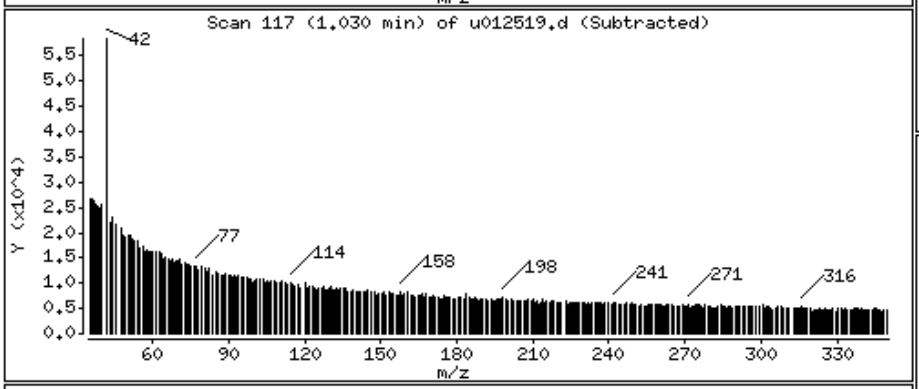
Sample Info: HS24011040-01;HS24011040-01;;;

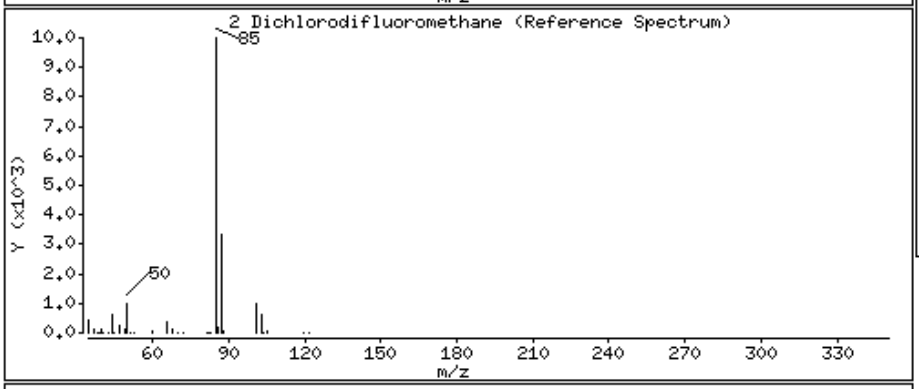
Purge Volume: 5.0 Operator: PC

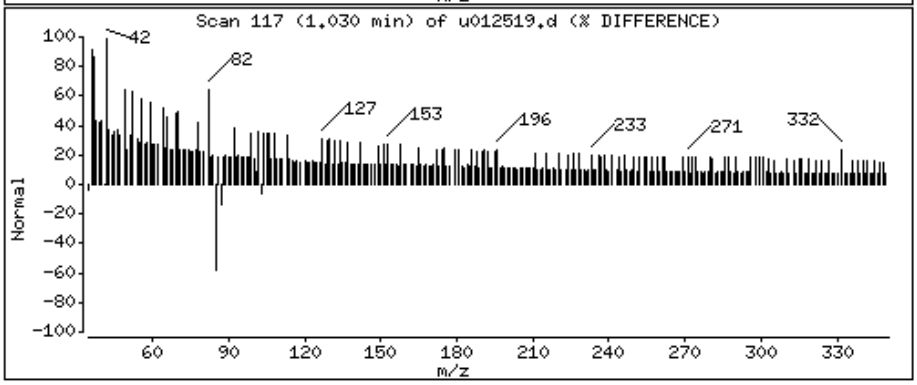
Column phase: DB624 Column diameter: 0.18

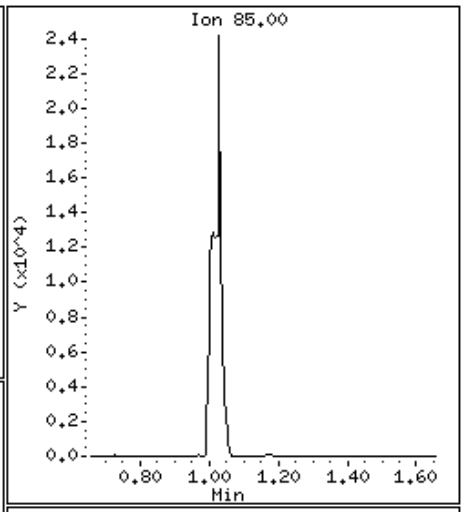
2 Dichlorodifluoromethane Concentration: 13091.08 ug/l

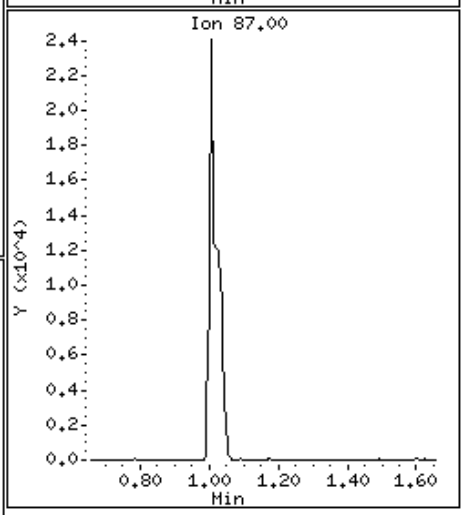












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012519.d Page 3

Date : 25-JAN-2024 17:01

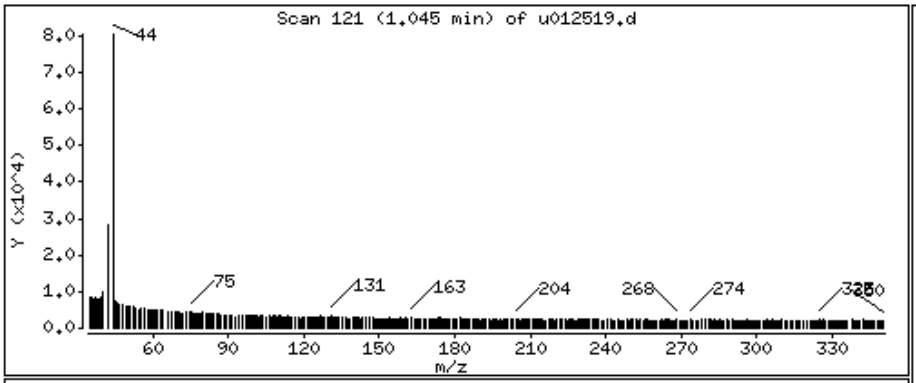
Client ID: HS24011040-01 Instrument: VOA9.i

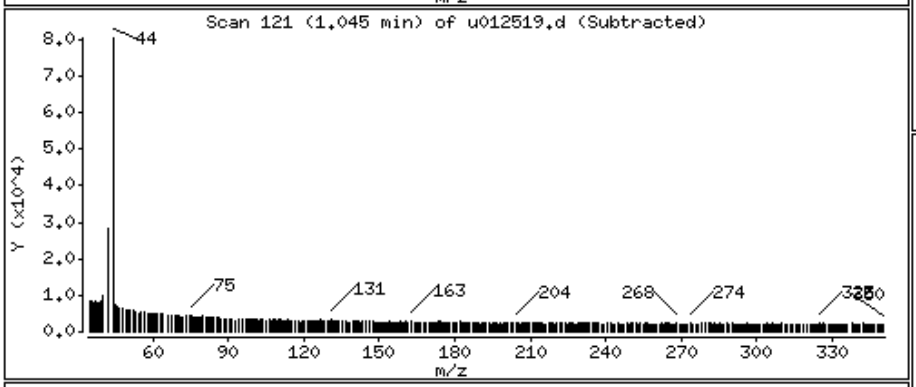
Sample Info: HS24011040-01;HS24011040-01;;;

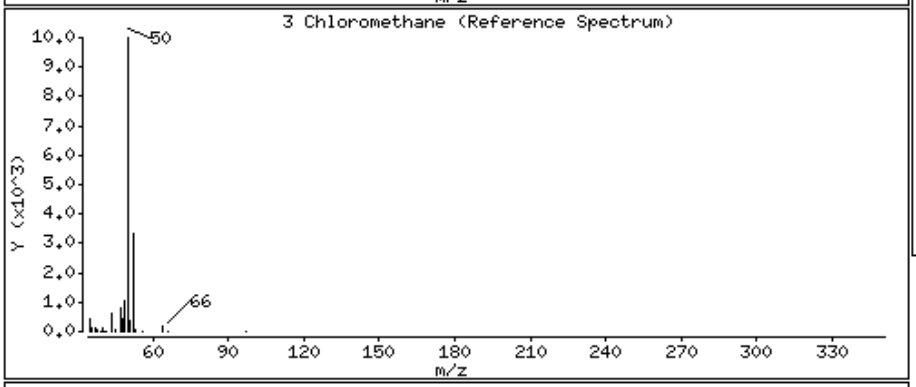
Purge Volume: 5.0 Operator: PC

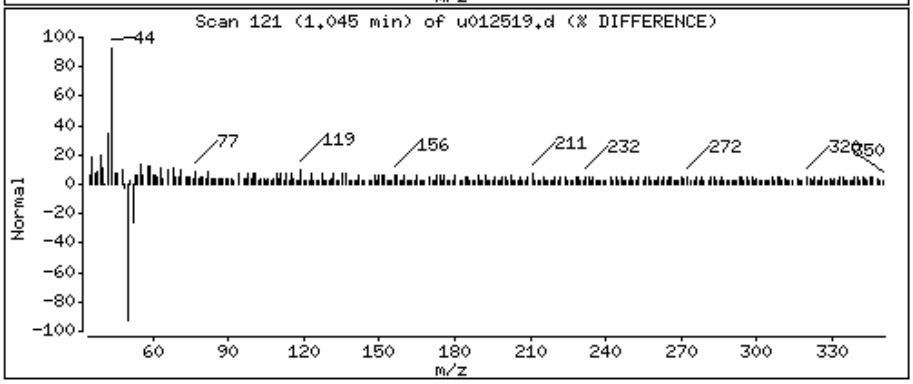
Column phase: DB624 Column diameter: 0.18

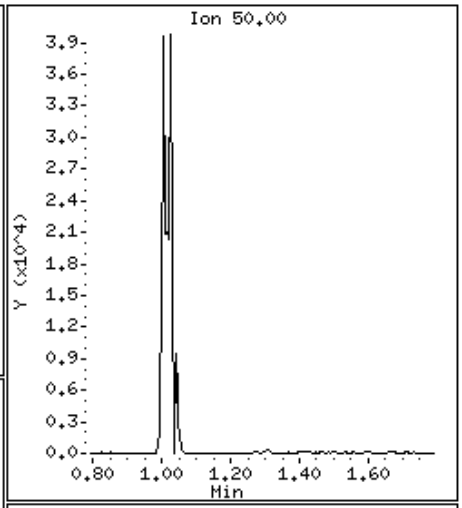
3 Chloromethane Concentration: 1148.64 ug/l

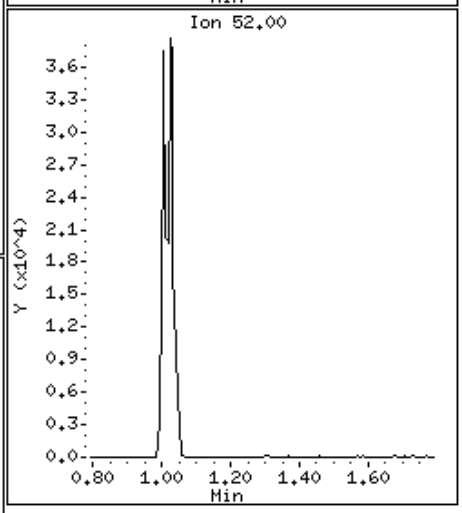












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012519.d Page 4

Date : 25-JAN-2024 17:01

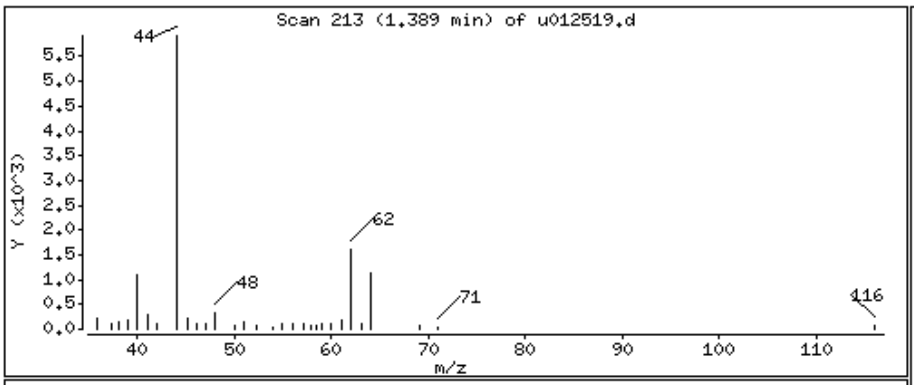
Client ID: HS24011040-01 Instrument: VOA9.i

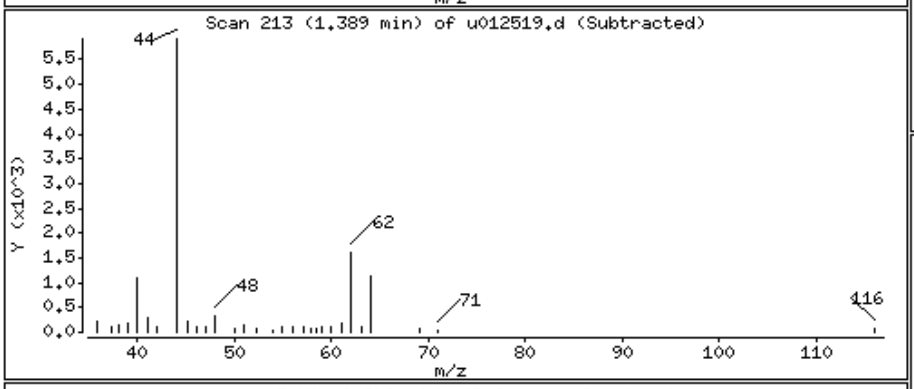
Sample Info: HS24011040-01;HS24011040-01;;;

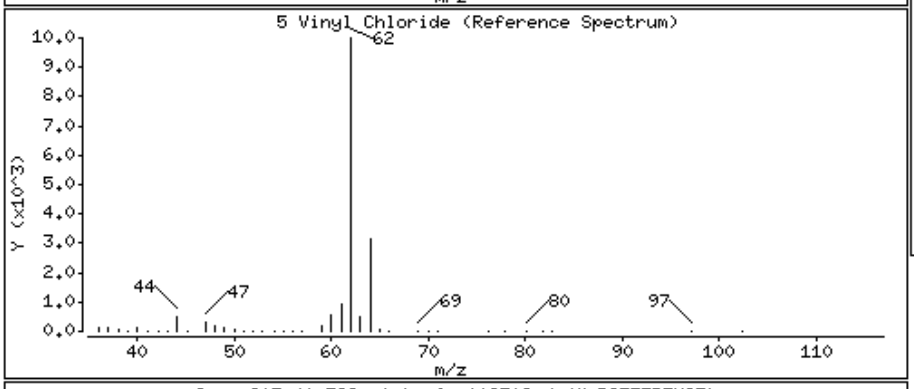
Purge Volume: 5.0 Operator: PC

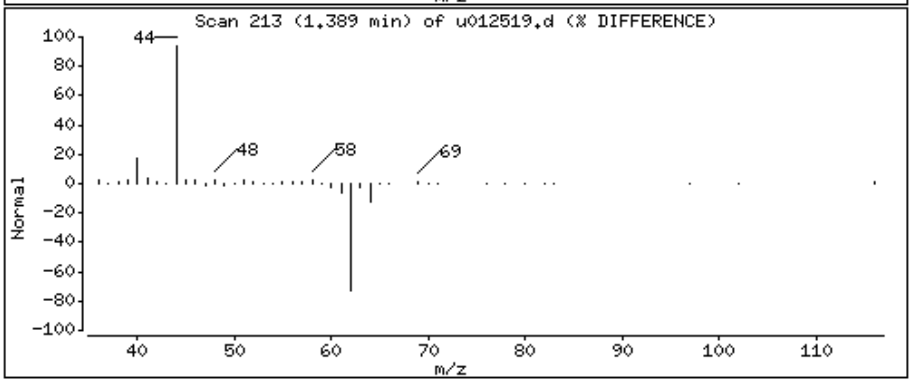
Column phase: DB624 Column diameter: 0.18

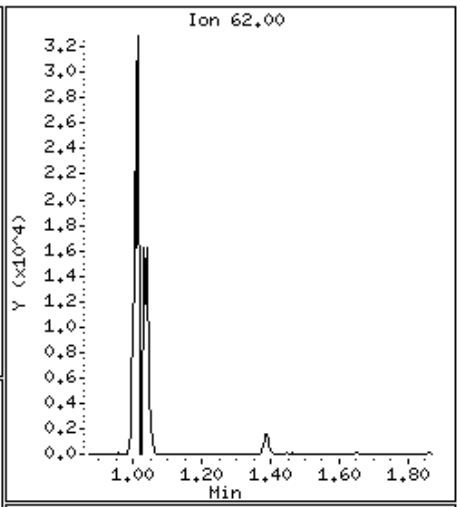
5 Vinyl Chloride Concentration: 443.38 ug/l

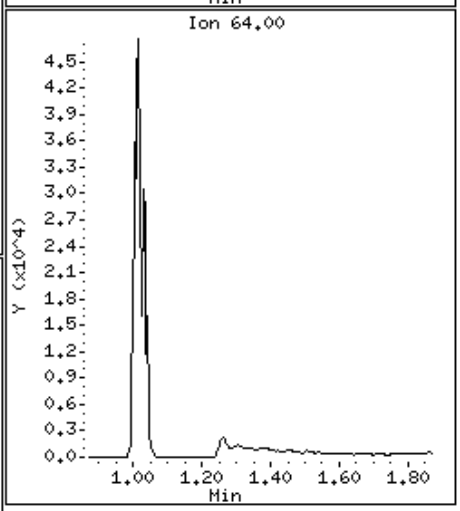












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012519.d Page 5

Date : 25-JAN-2024 17:01

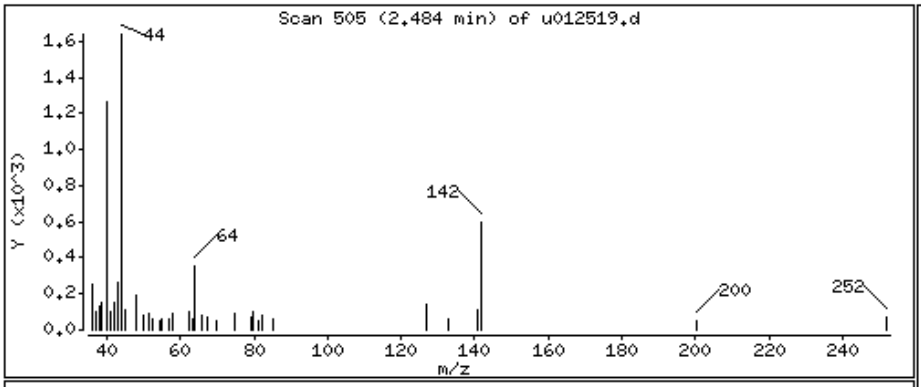
Client ID: HS24011040-01 Instrument: VOA9.i

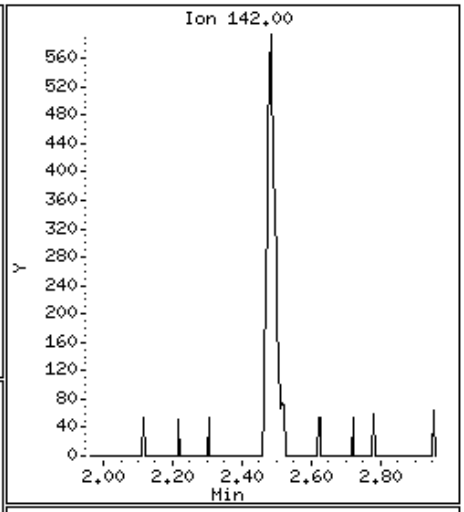
Sample Info: HS24011040-01;HS24011040-01;;;

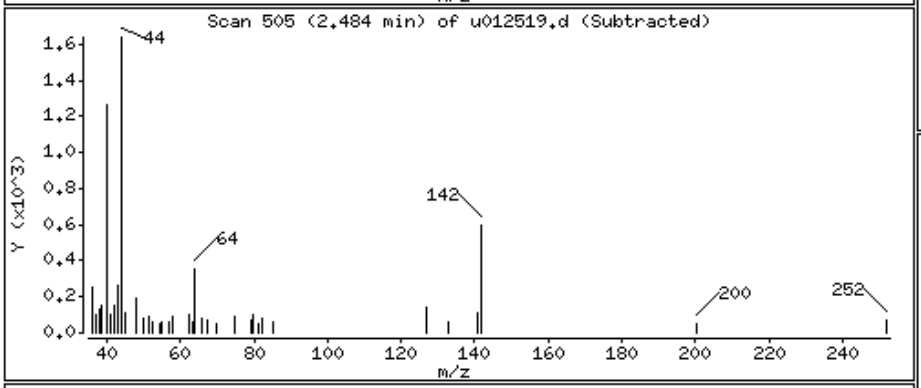
Purge Volume: 5.0 Operator: PC

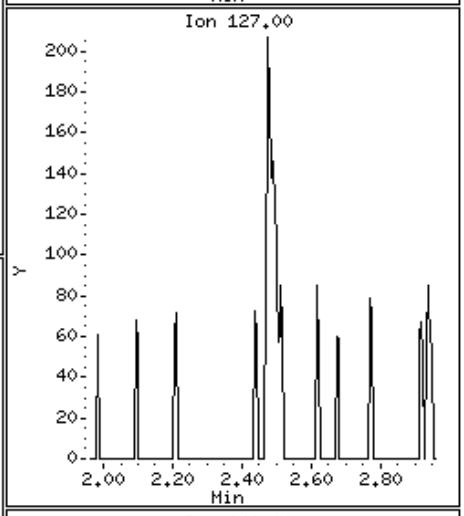
Column phase: DB624 Column diameter: 0.18

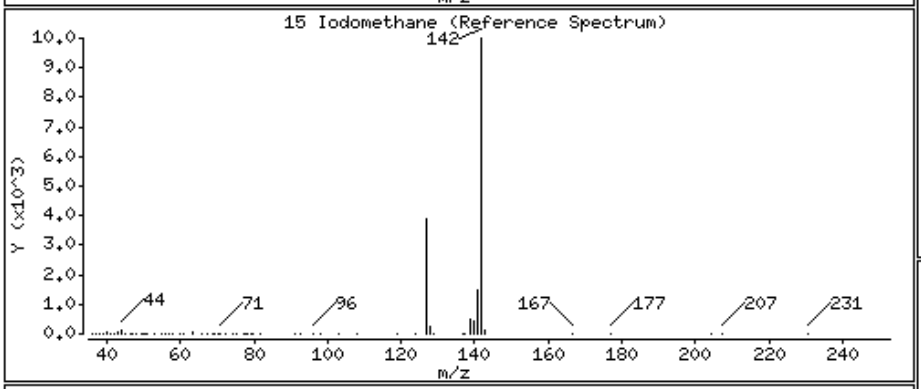
15 Iodomethane Concentration: 2609.70 ug/l

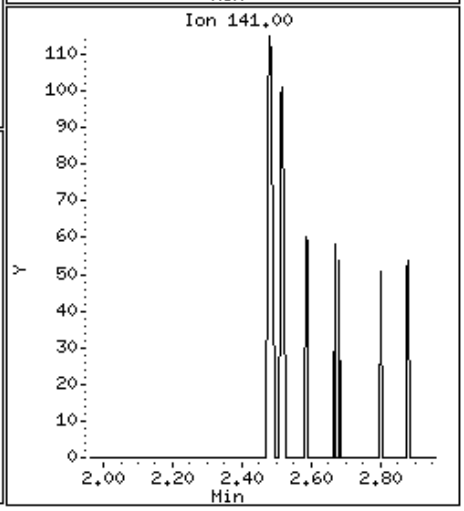


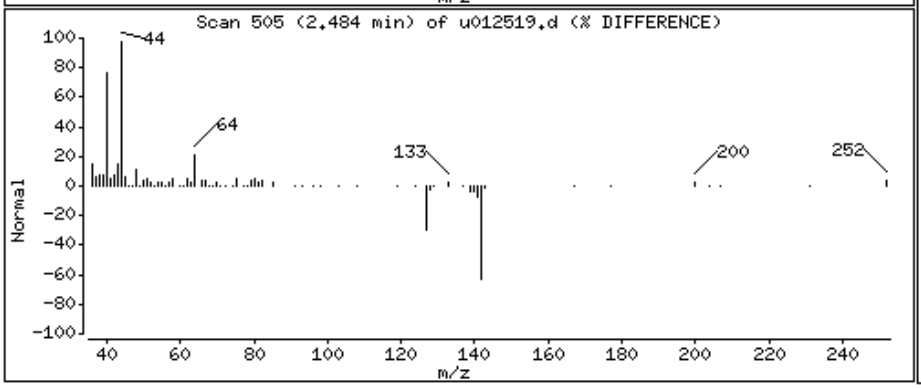












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012519.d Page 6

Date : 25-JAN-2024 17:01

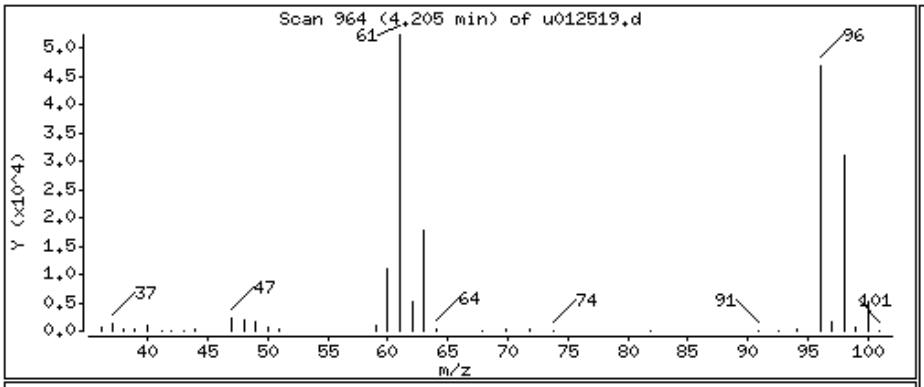
Client ID: HS24011040-01 Instrument: VOA9.i

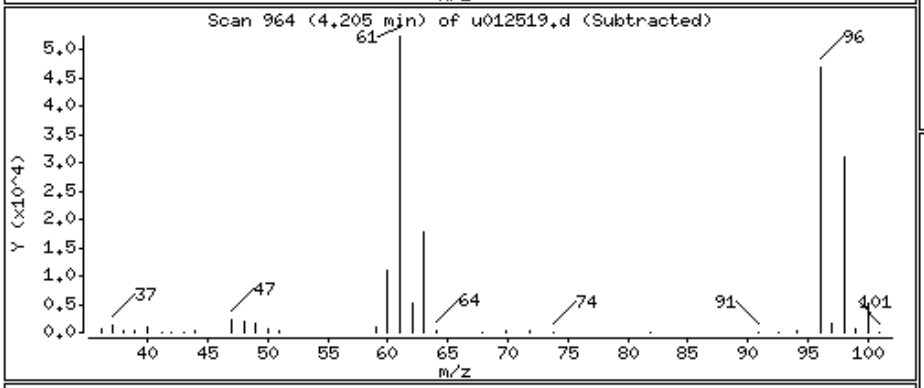
Sample Info: HS24011040-01;HS24011040-01;;;

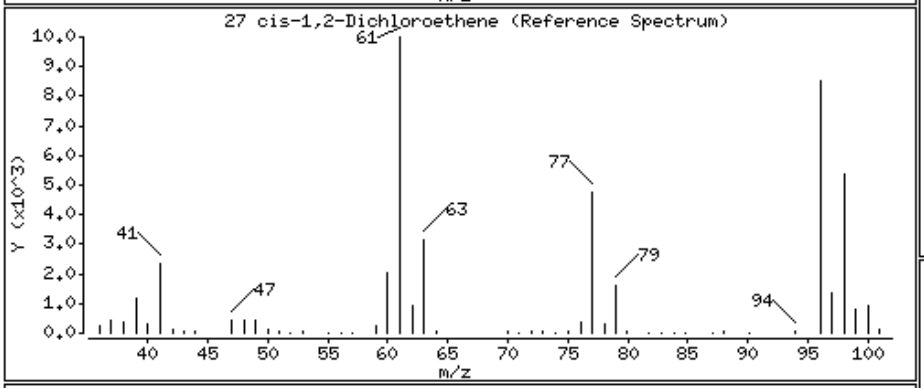
Purge Volume: 5.0 Operator: PC

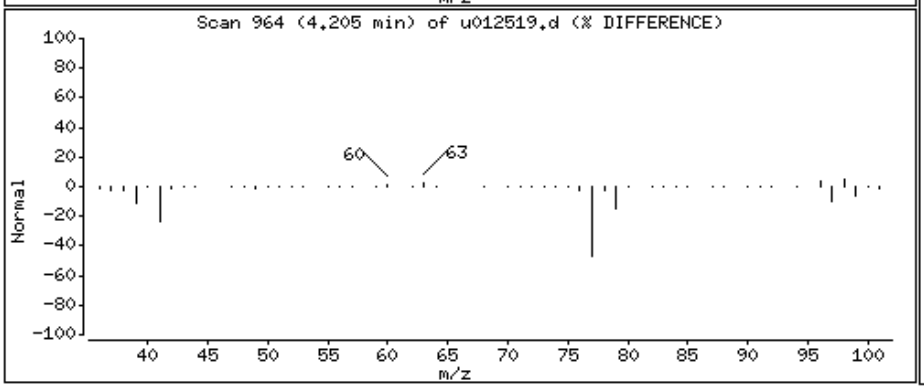
Column phase: DB624 Column diameter: 0.18

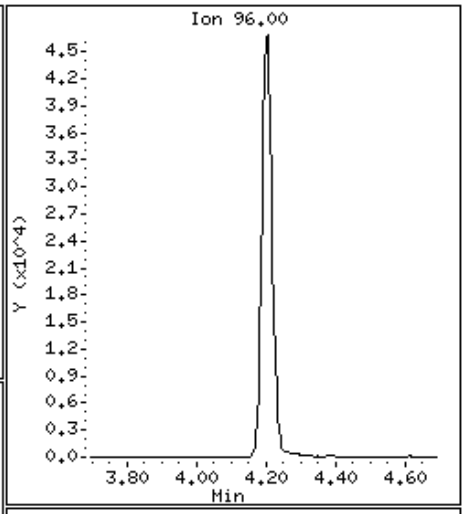
27 cis-1,2-Dichloroethene Concentration: 22111.88 ug/l

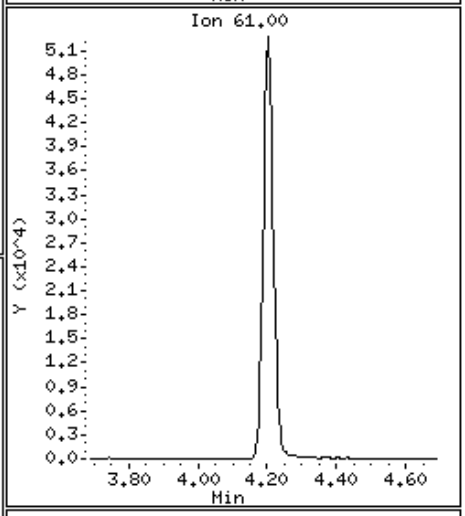


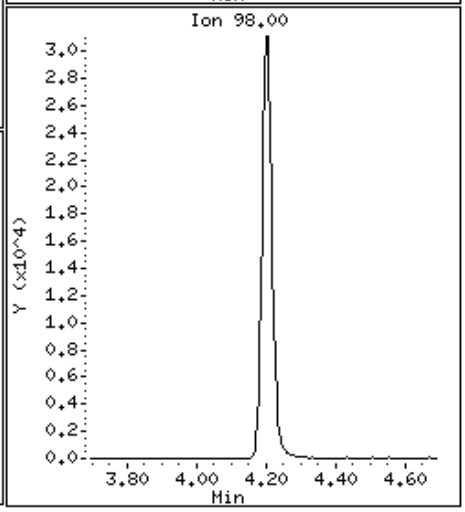












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012519.d Page 7

Date : 25-JAN-2024 17:01

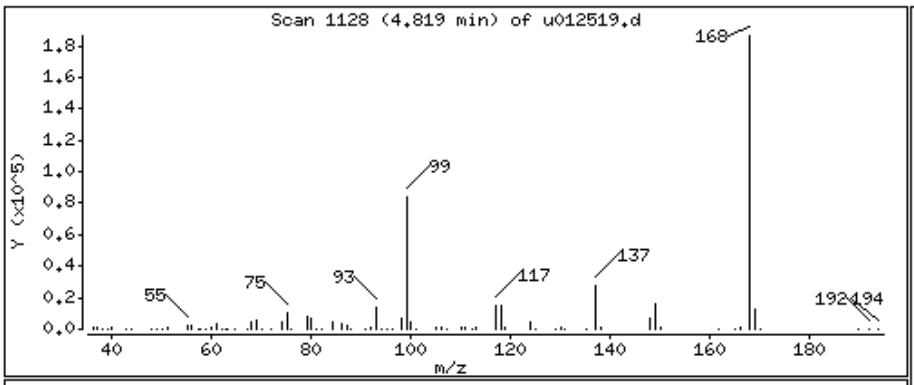
Client ID: HS24011040-01 Instrument: VOA9.i

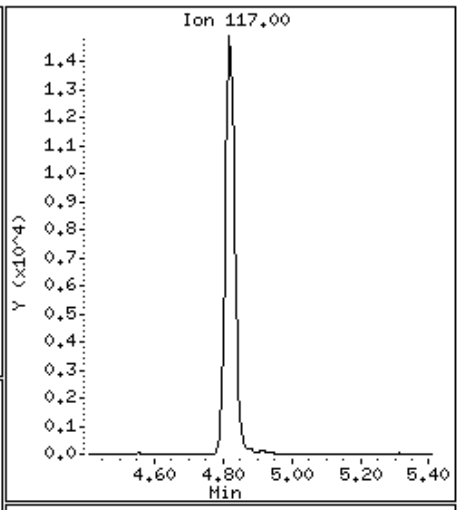
Sample Info: HS24011040-01;HS24011040-01;;;

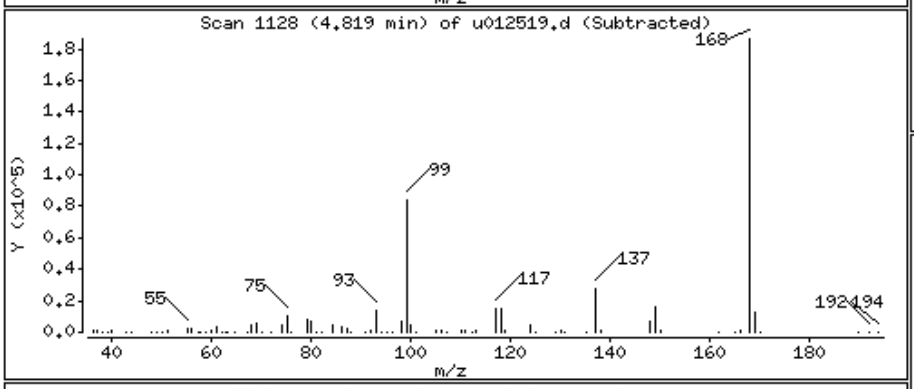
Purge Volume: 5.0 Operator: PC

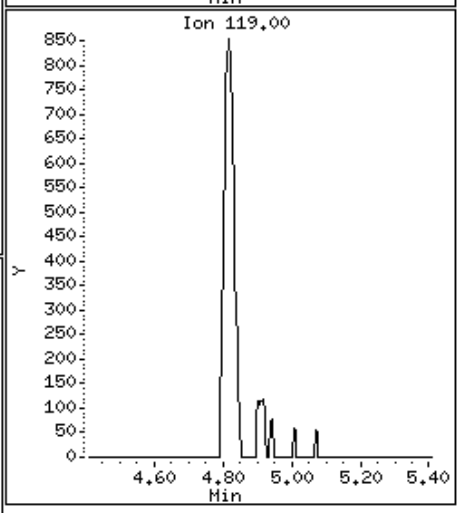
Column phase: DB624 Column diameter: 0.18

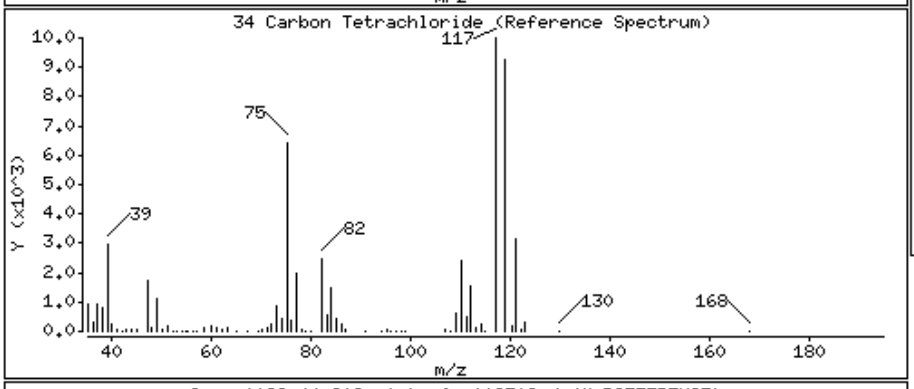
34 Carbon Tetrachloride Concentration: 6499.44 ug/l

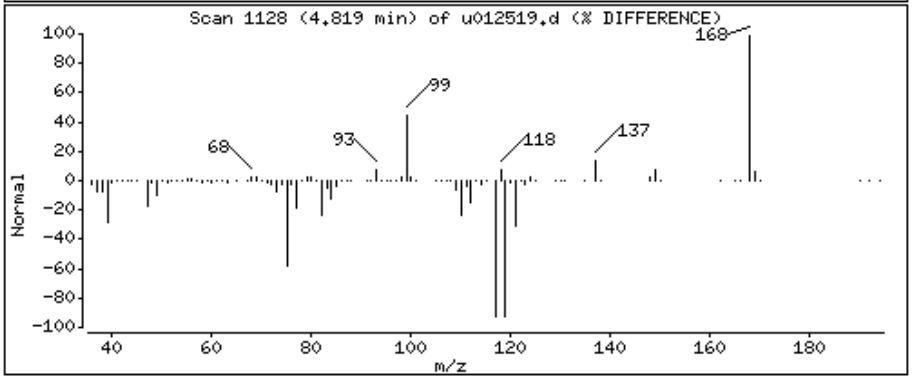












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012519.d Page 8

Date : 25-JAN-2024 17:01

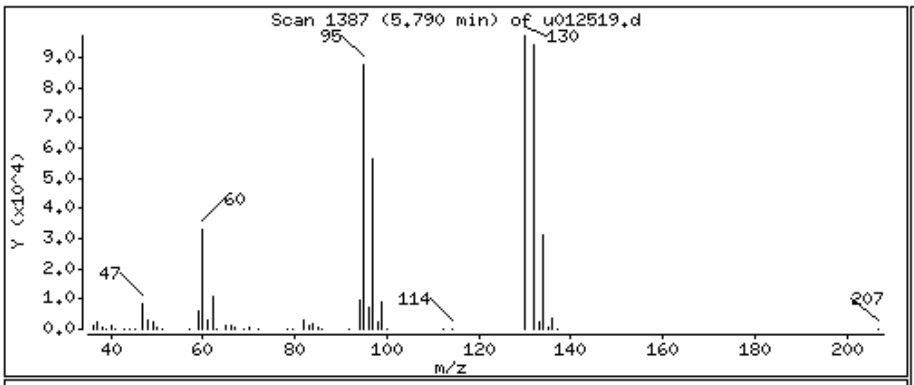
Client ID: HS24011040-01 Instrument: VOA9.i

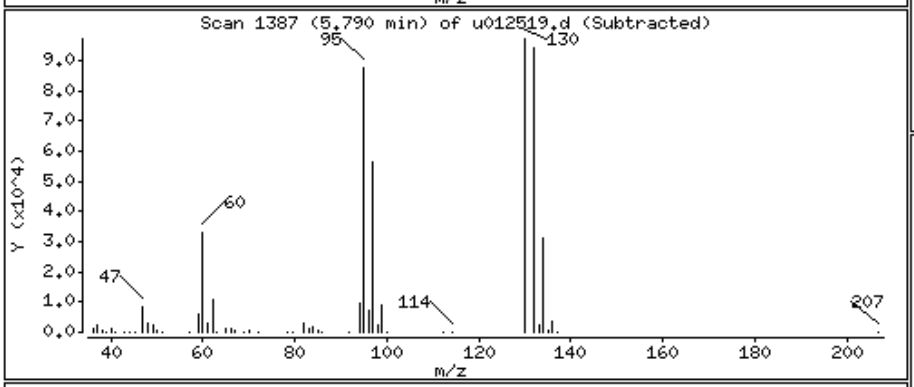
Sample Info: HS24011040-01;HS24011040-01;;;

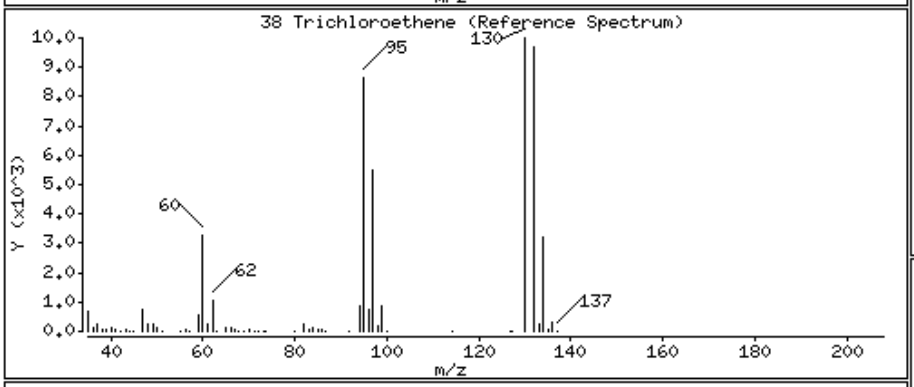
Purge Volume: 5.0 Operator: PC

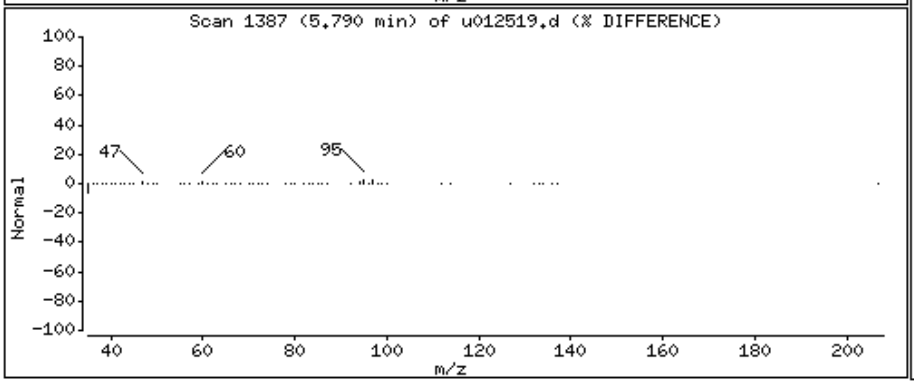
Column phase: DB624 Column diameter: 0.18

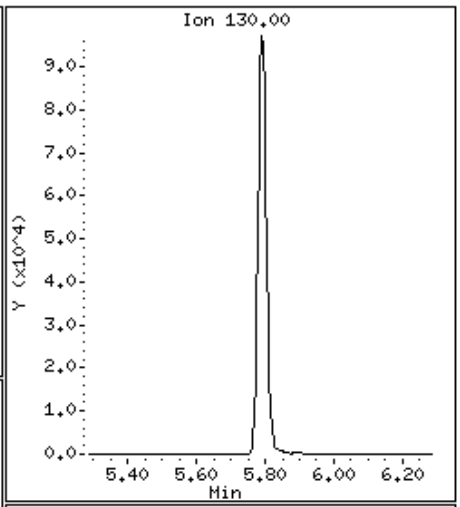
38 Trichloroethene Concentration: 40171.79 ug/l

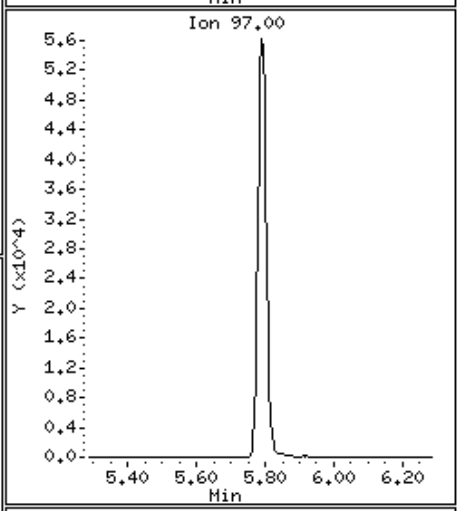


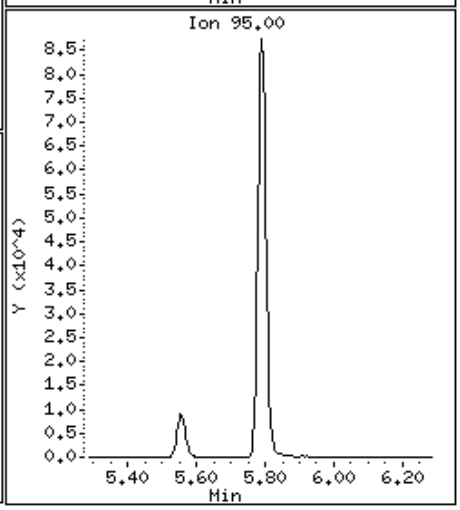












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012519.d Page 9

Date : 25-JAN-2024 17:01

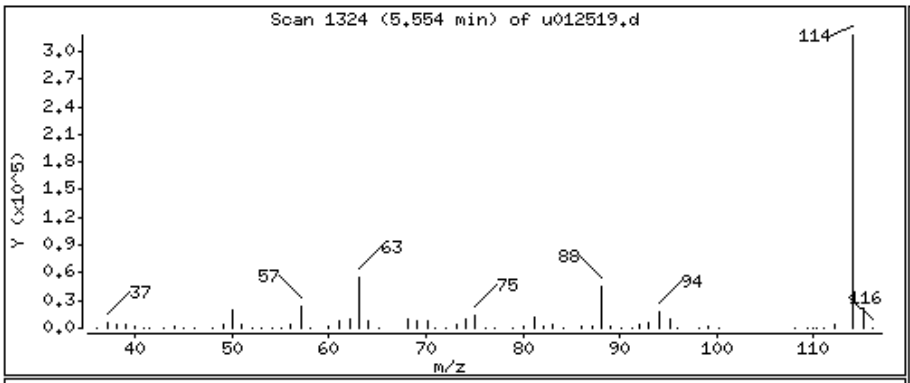
Client ID: HS24011040-01 Instrument: VOA9.i

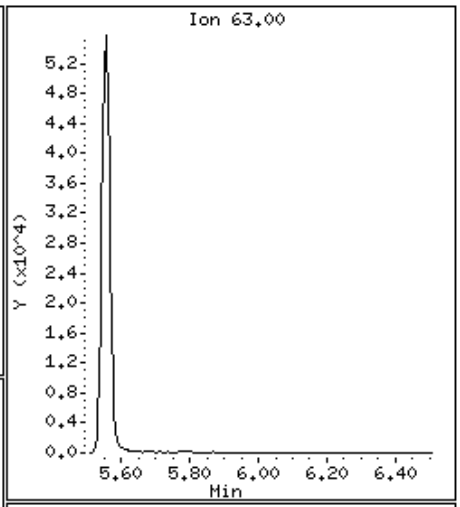
Sample Info: HS24011040-01;HS24011040-01;;;

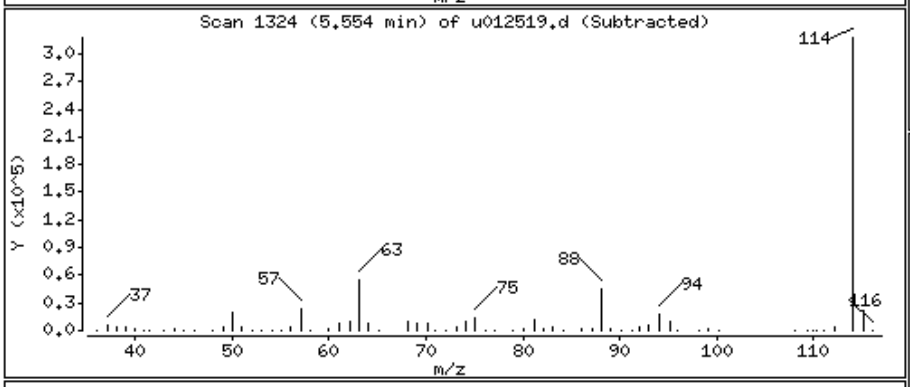
Purge Volume: 5.0 Operator: PC

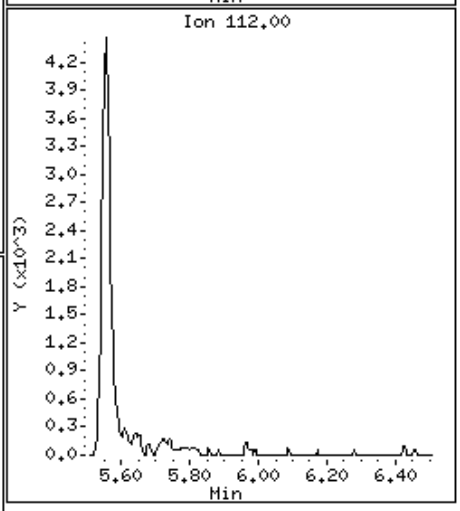
Column phase: DB624 Column diameter: 0.18

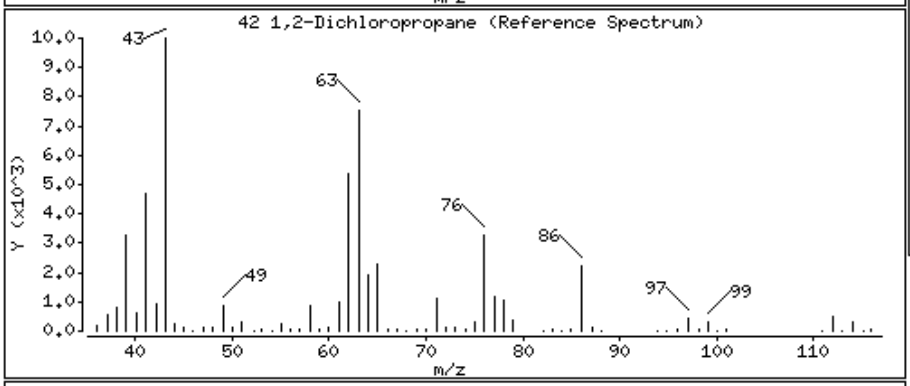
42 1,2-Dichloropropane Concentration: 23439.78 ug/l

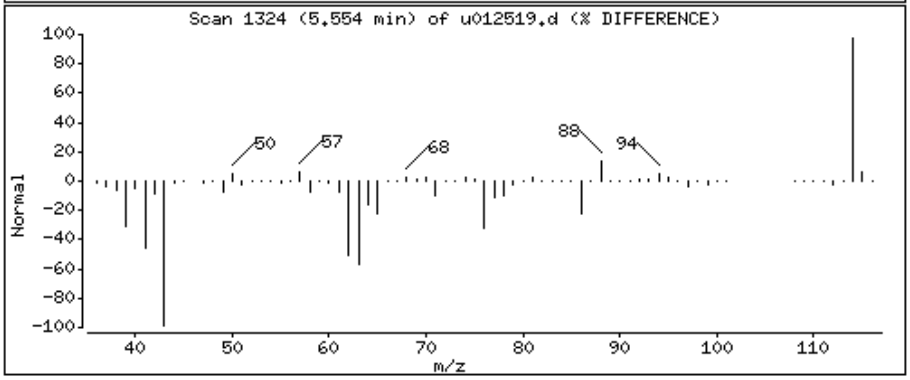












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012519.d Page 10

Date : 25-JAN-2024 17:01

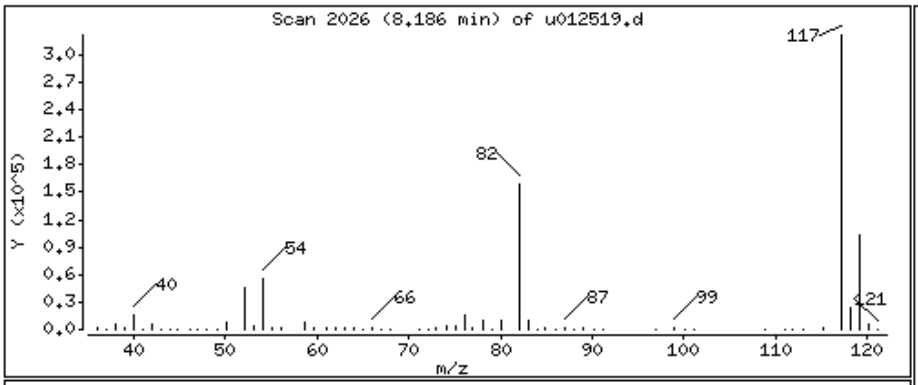
Client ID: HS24011040-01 Instrument: VOA9.i

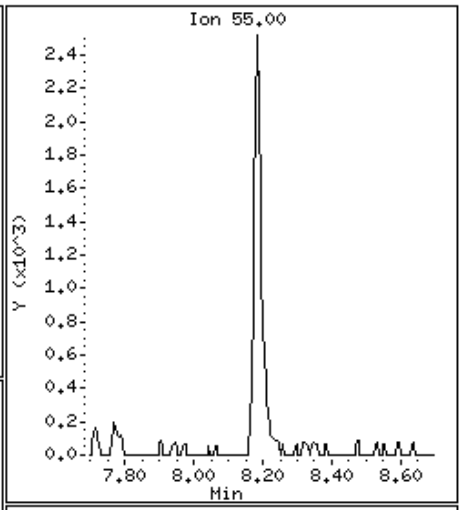
Sample Info: HS24011040-01;HS24011040-01;;;

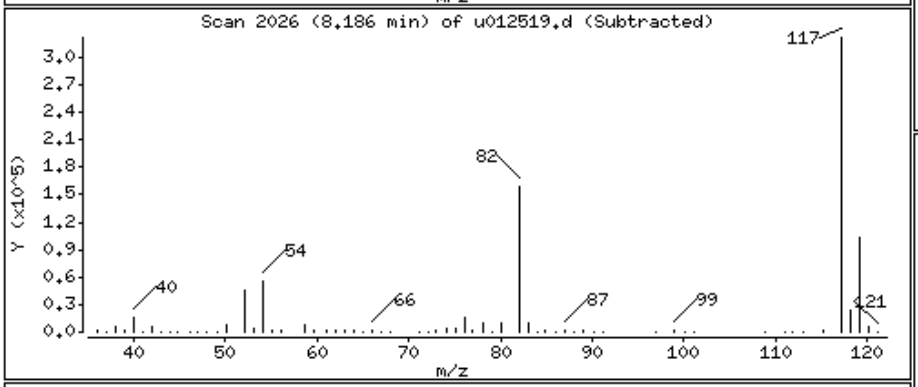
Purge Volume: 5.0 Operator: PC

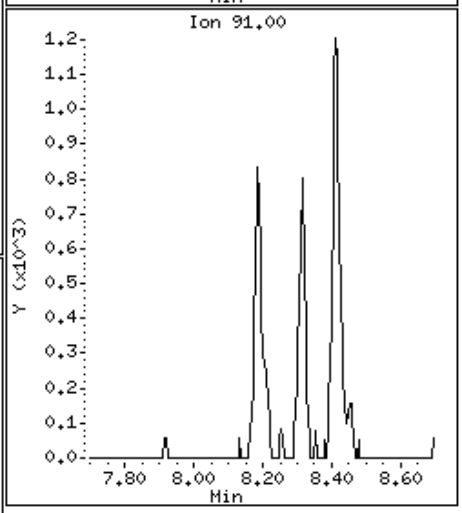
Column phase: DB624 Column diameter: 0.18

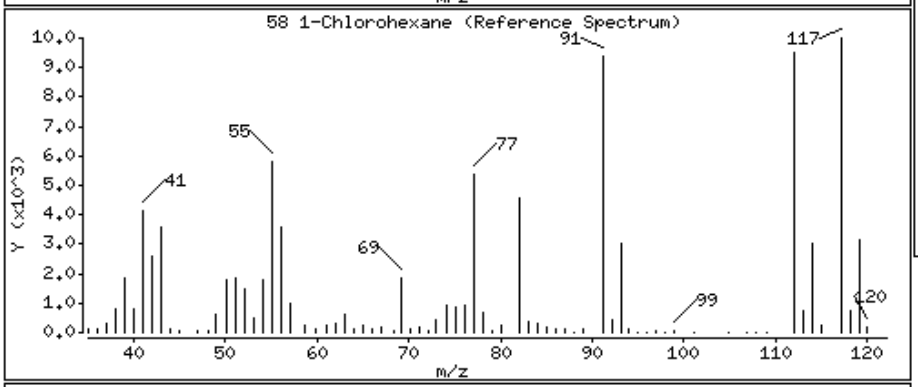
58 1-Chlorohexane Concentration: 1322.34 ug/l

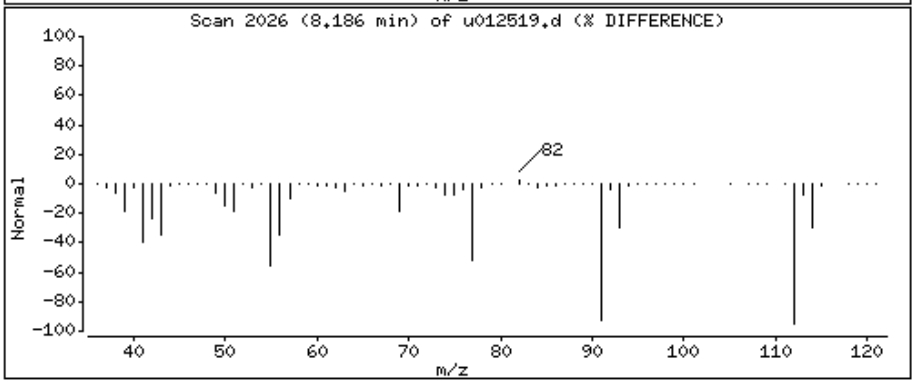












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012519.d Page 11

Date : 25-JAN-2024 17:01

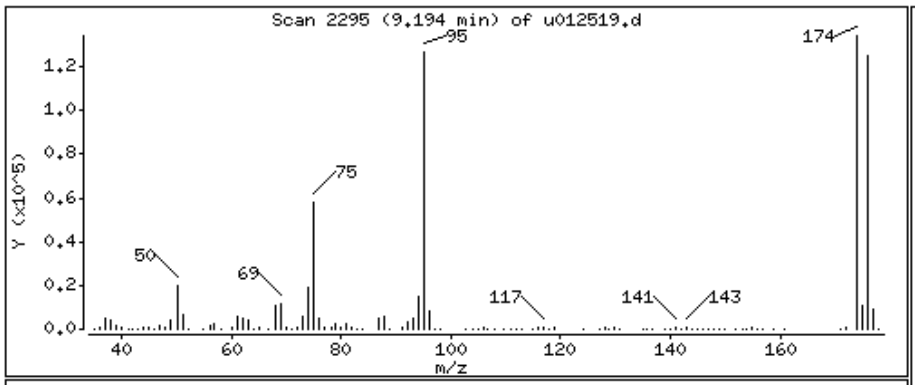
Client ID: HS24011040-01 Instrument: VOA9.i

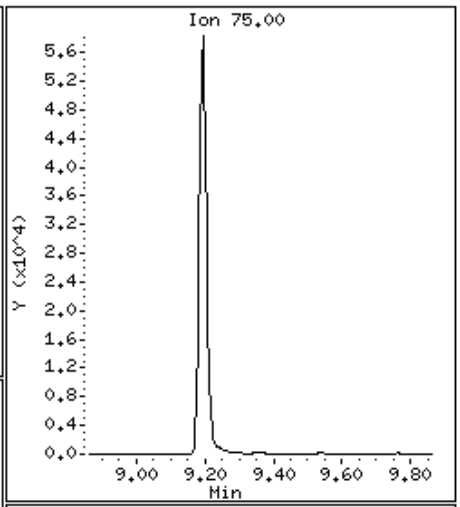
Sample Info: HS24011040-01;HS24011040-01;;;

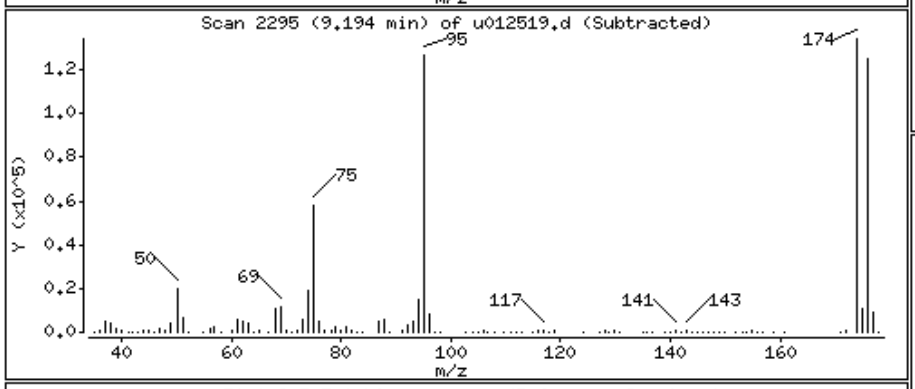
Purge Volume: 5.0 Operator: PC

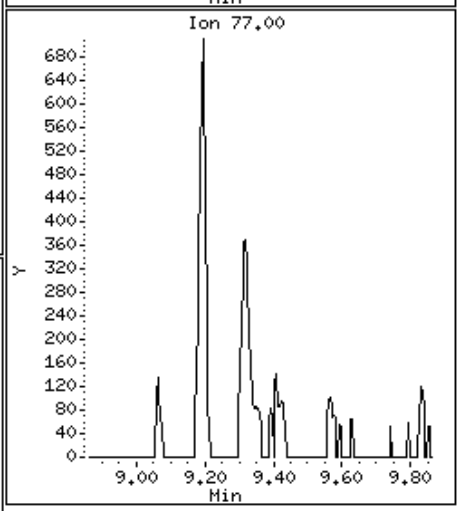
Column phase: DB624 Column diameter: 0.18

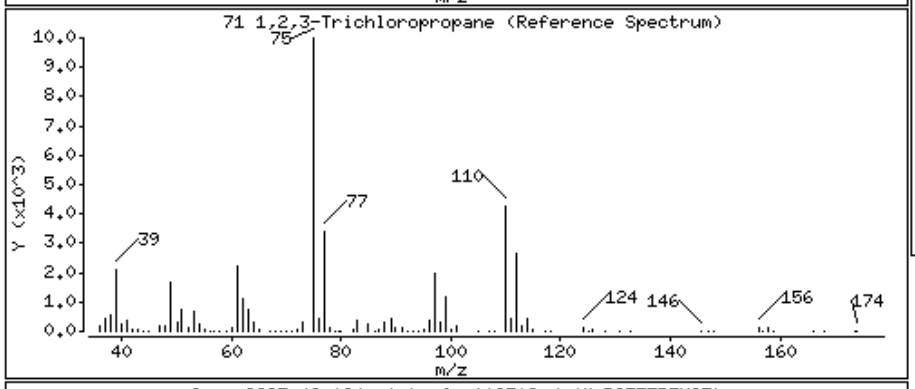
71 1,2,3-Trichloropropane Concentration: 18540.05 ug/l

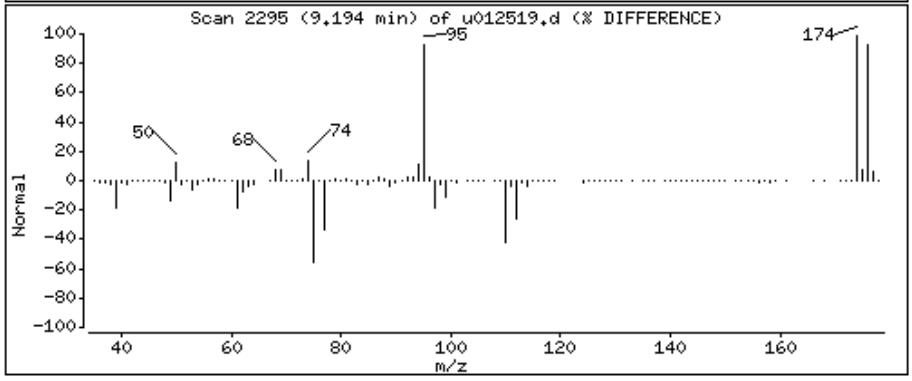












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012519.d Page 12

Date : 25-JAN-2024 17:01

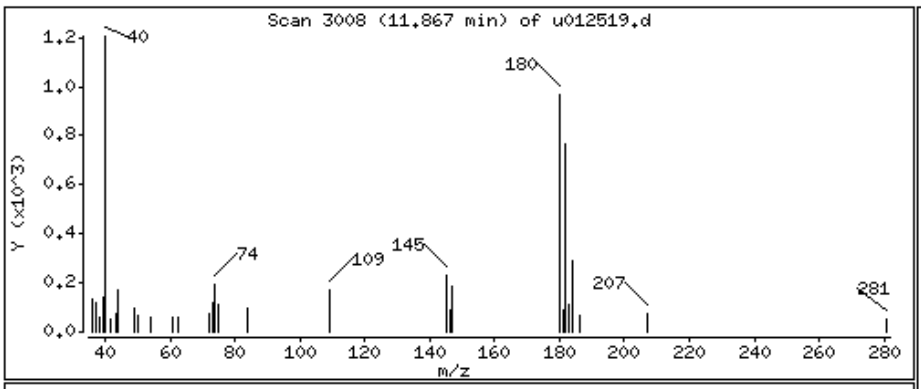
Client ID: HS24011040-01 Instrument: VOA9.i

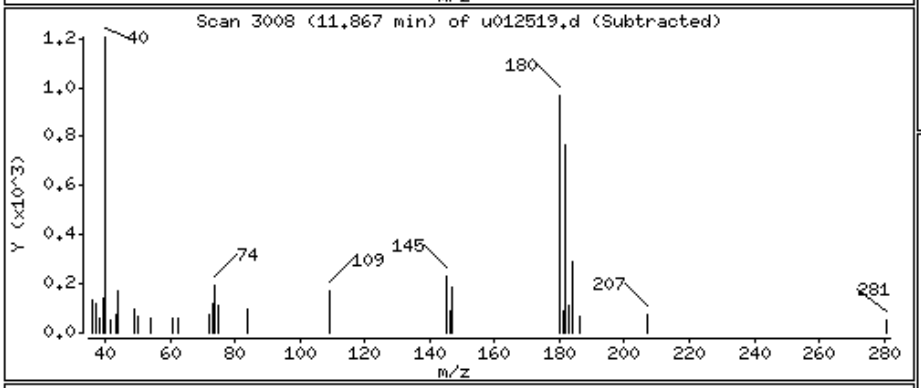
Sample Info: HS24011040-01;HS24011040-01;;;

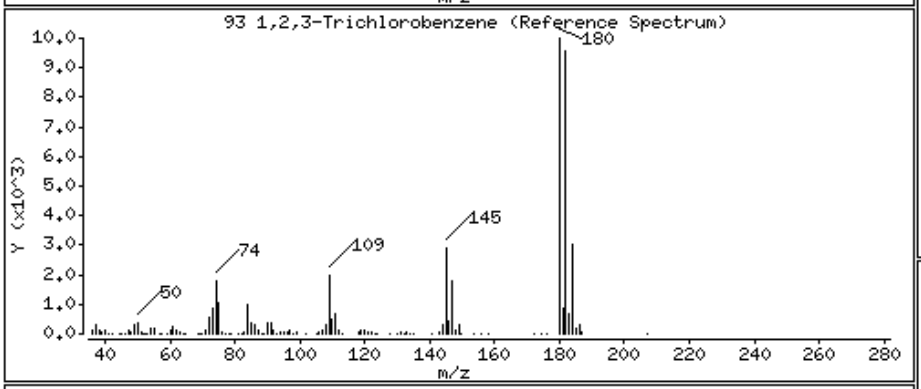
Purge Volume: 5.0 Operator: PC

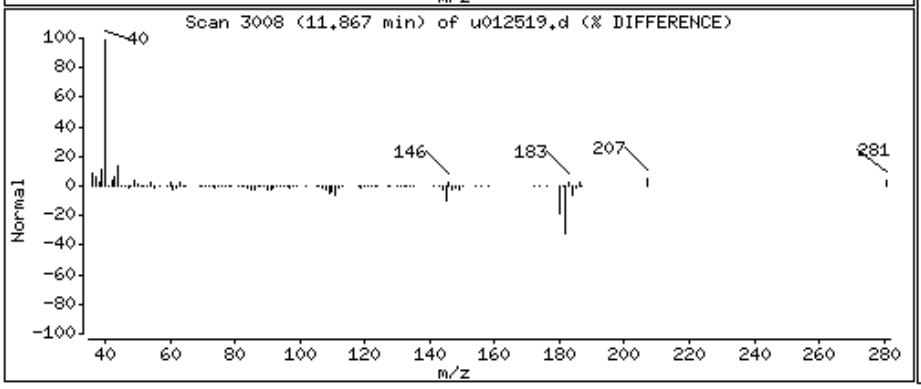
Column phase: DB624 Column diameter: 0.18

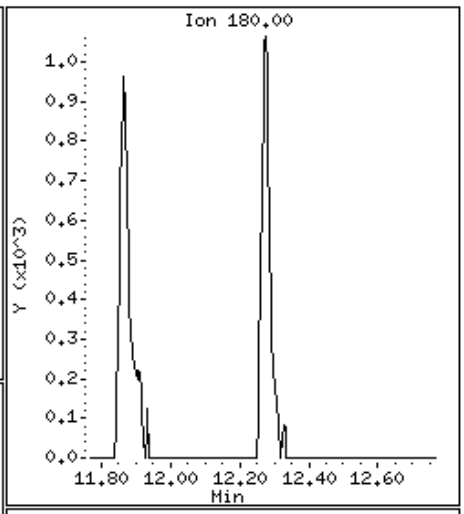
93 1,2,3-Trichlorobenzene Concentration: 434.42 ug/l

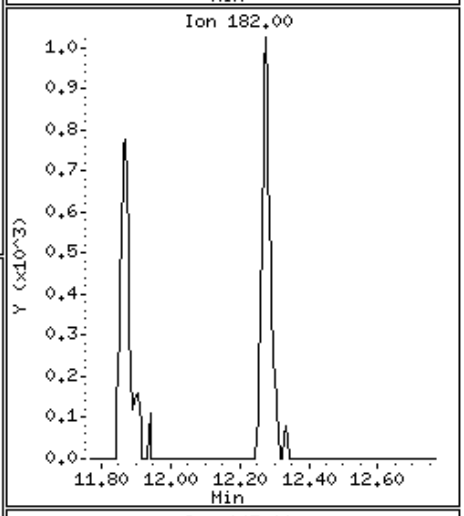


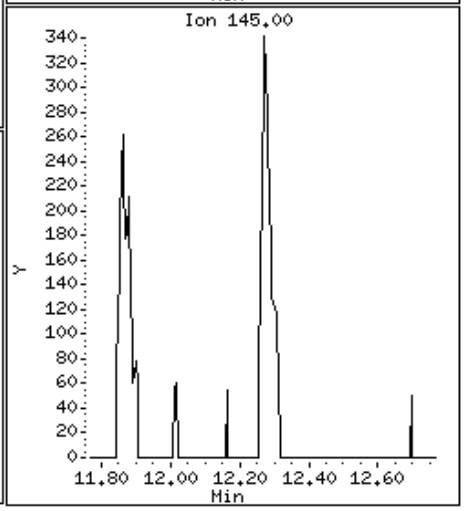












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012519.d Page 13

Date : 25-JAN-2024 17:01

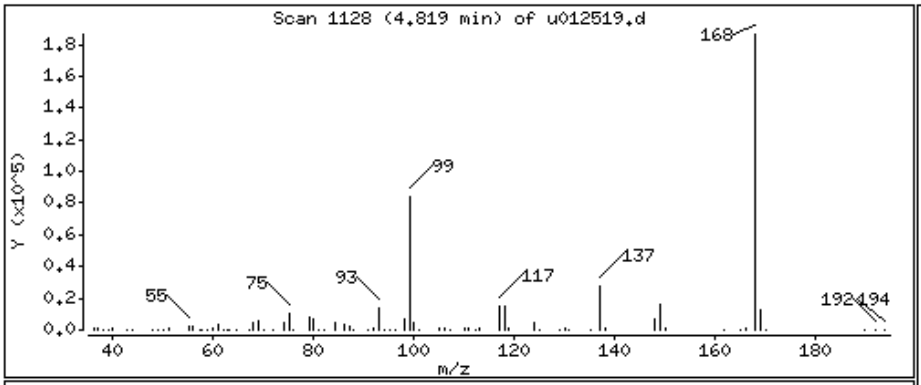
Client ID: HS24011040-01 Instrument: VOA9.i

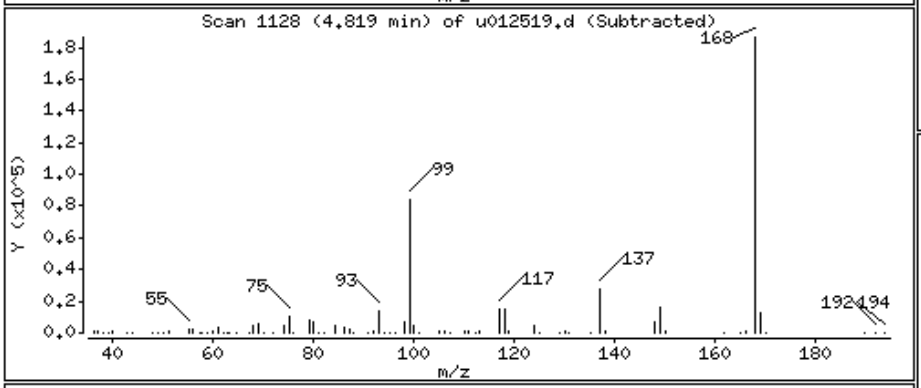
Sample Info: HS24011040-01;HS24011040-01;;;

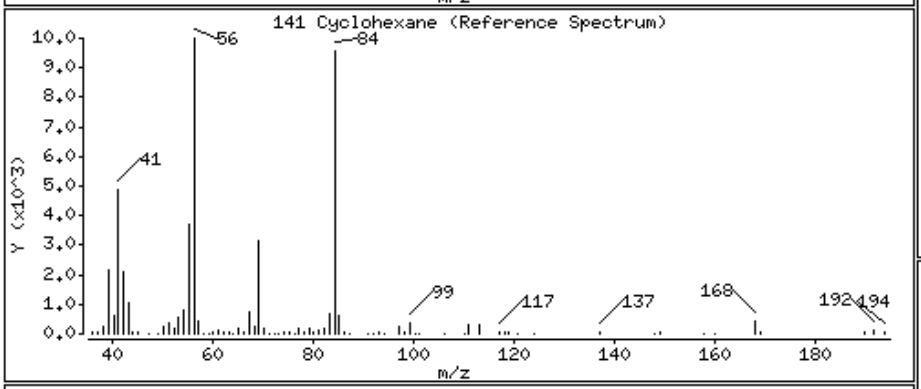
Purge Volume: 5.0 Operator: PC

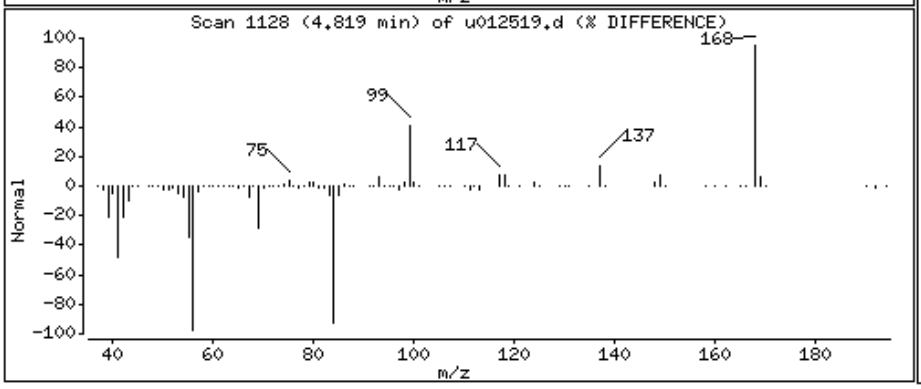
Column phase: DB624 Column diameter: 0.18

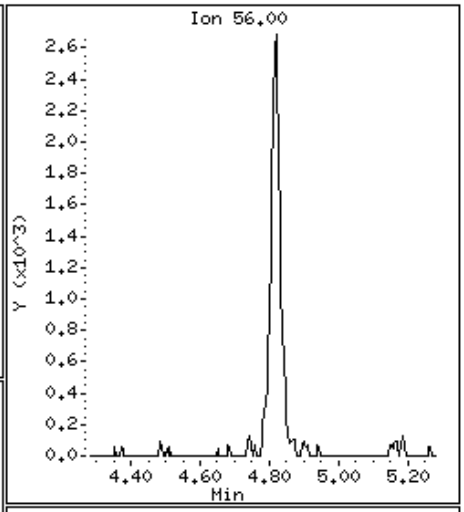
141 Cyclohexane Concentration: 985.59 ug/l

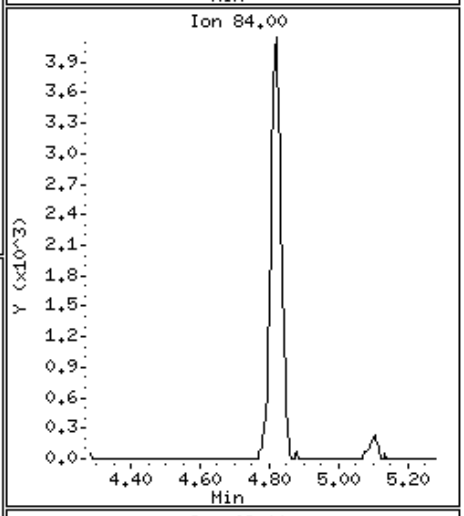


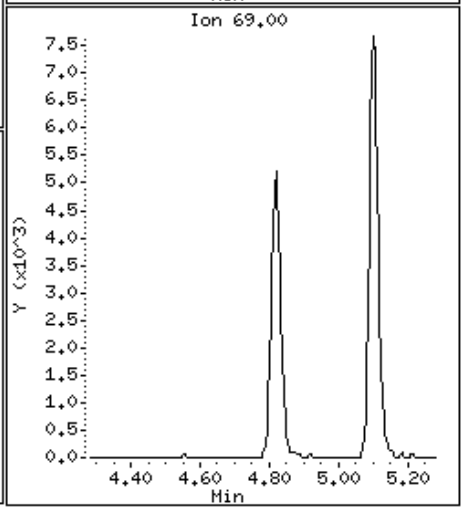












Data File : \\nahstws005\target\chem\voa9.i\u240125.b\u012519.d
Inj Date : 25-JAN-2024 17:01
InstruID : VOA9.i
LabSampID : HS24011040-01

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa9.i\U240125.b\U012520.D Page 1
Report Date: 01-Feb-2024 14:20

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa9.i\U240125.b\U012520.D
Lab Smp Id: HS24011040-02 Client Smp ID: HS24011040-02
Inj Date : 25-JAN-2024 17:23
Operator : PC Inst ID: VOA9.i
Smp Info : HS24011040-02;HS24011040-02;;;
Misc Info : V9;WATER;0;1000;
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: 18
Dil Factor: 1000.00000
Integrator: HP RTE Compound Sublist: 1040-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7066

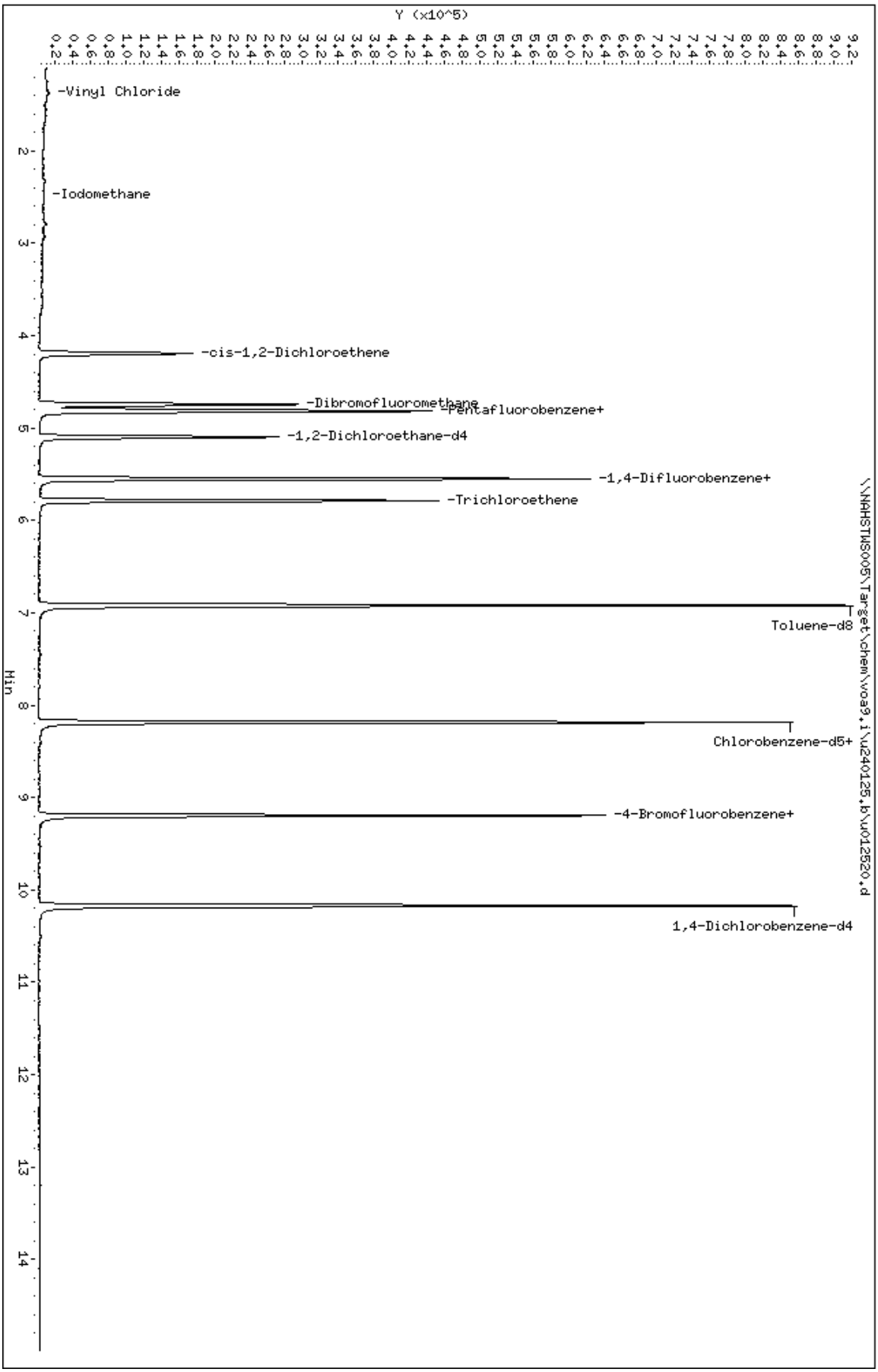
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1000.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
*	1 Pentafluorobenzene	168	4.815	4.815	(1.000)	342188	50.0000	
	2 Dichlorodifluoromethane	85	1.010	1.164	(0.210)	46122	17.2988	17298.83
	3 Chloromethane	50	1.022	1.303	(0.212)	6787	1.72902	1729.02(a)
	5 Vinyl Chloride	62	1.374	1.378	(0.285)	1756	0.46828	468.27(a)
	15 Iodomethane	142	2.472	2.469	(0.513)	752	2.54094	2540.93(a)
	27 cis-1,2-Dichloroethene	96	4.193	4.197	(0.871)	91618	21.6773	21677.30
$	30 Dibromofluoromethane	113	4.744	4.748	(0.985)	173865	49.6404	49.64(R)
	34 Carbon Tetrachloride	117	4.812	4.913	(0.867)	27717	6.61149	6611.49
$	35 1,2-Dichloroethane-d4	65	5.093	5.096	(1.058)	180332	45.1668	45.16(R)
*	36 1,4-Difluorobenzene	114	5.550	5.554	(1.000)	513001	50.0000	
	38 Trichloroethene	130	5.786	5.790	(1.043)	157253	40.8558	40855.78
	42 1,2-Dichloropropane	63	5.550	6.007	(1.000)	88796	23.6171	23617.05
*	47 Chlorobenzene-d5	117	8.185	8.185	(1.000)	492716	50.0000	
$	48 Toluene-d8	98	6.922	6.922	(0.846)	586030	51.6669	51.66(R)
	58 1-Chlorohexane	55	8.185	8.197	(1.475)	3818	1.32724	1327.23(a)
$	69 4-Bromofluorobenzene	95	9.194	9.190	(1.123)	191835	44.5304	44.53(R)
*	70 1,4-Dichlorobenzene-d4	152	10.172	10.168	(1.000)	253685	50.0000	
	71 1,2,3-Trichloropropane	75	9.194	9.362	(0.904)	86962	18.0578	18057.80
	141 Cyclohexane	56	4.812	4.785	(0.999)	4288	0.86967	869.66(a)
M	94 1,2-Dichloroethylene (total)	96				91618	24.8238	24823.76

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\u012520.d
Date : 25-JAN-2024 17:23
Client ID: HS24011040-02
Sample Info: HS24011040-02;HS24011040-02;;;
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\u012520.d Page 2

Date : 25-JAN-2024 17:23

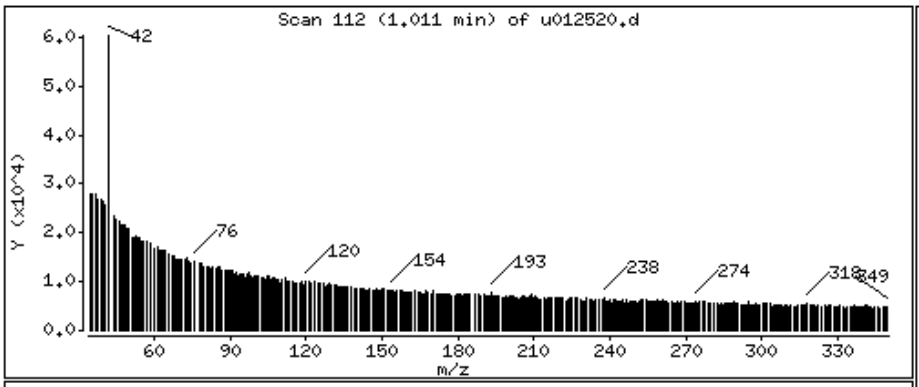
Client ID: HS24011040-02 Instrument: VOA9.i

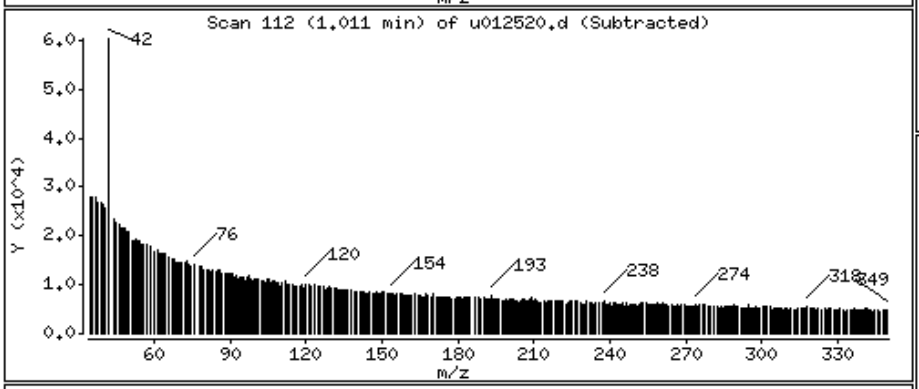
Sample Info: HS24011040-02;HS24011040-02;;;

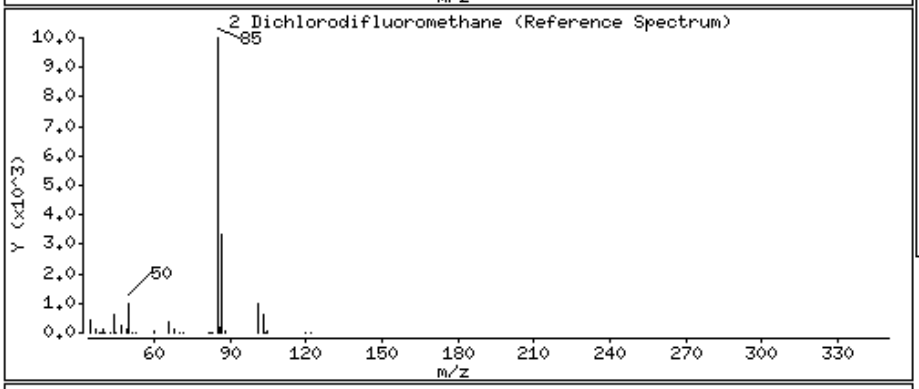
Purge Volume: 5.0 Operator: PC

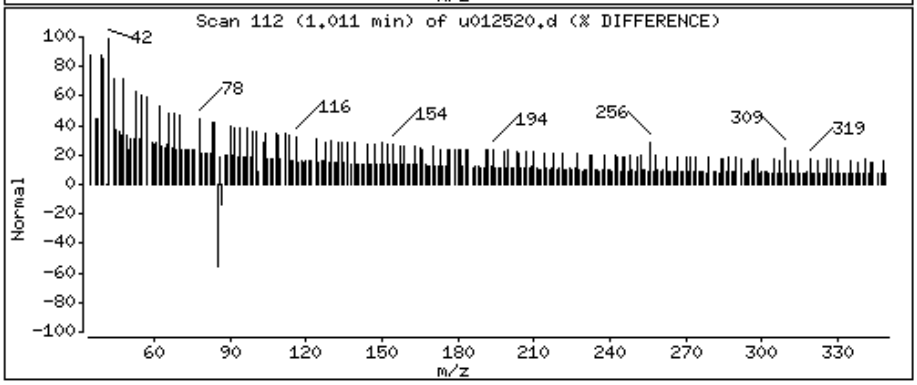
Column phase: DB624 Column diameter: 0.18

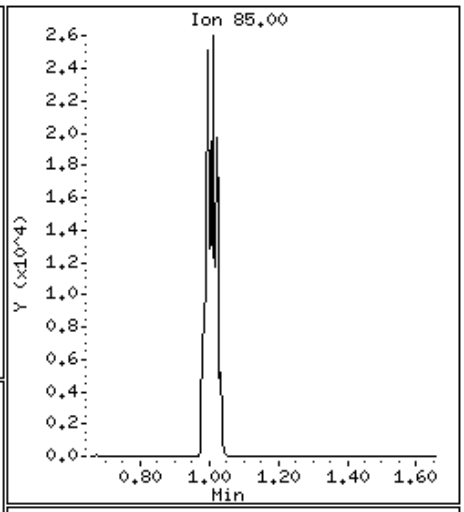
2 Dichlorodifluoromethane Concentration: 17298.83 ug/l

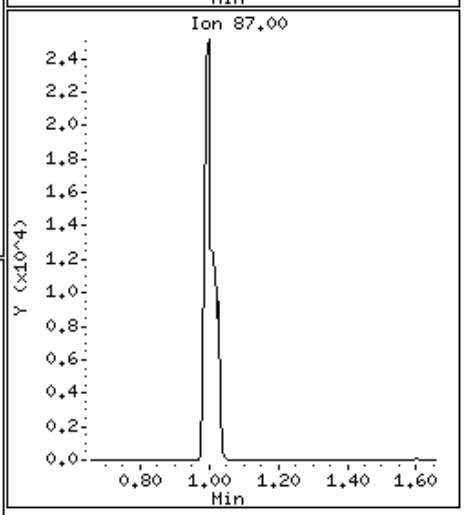












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012520.d Page 3

Date : 25-JAN-2024 17:23

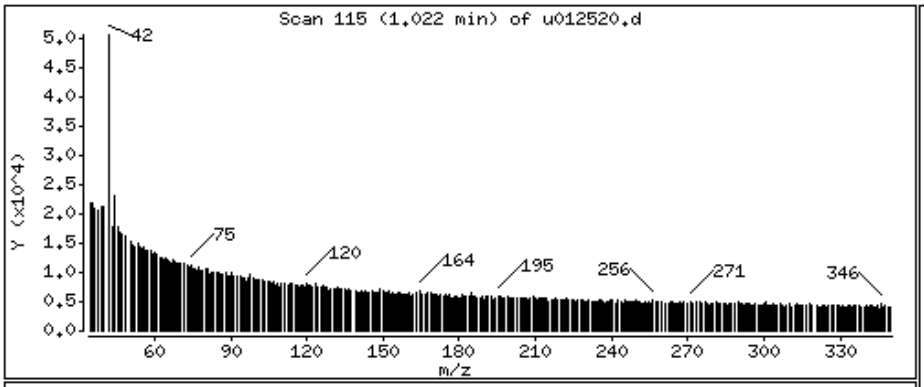
Client ID: HS24011040-02 Instrument: VOA9.i

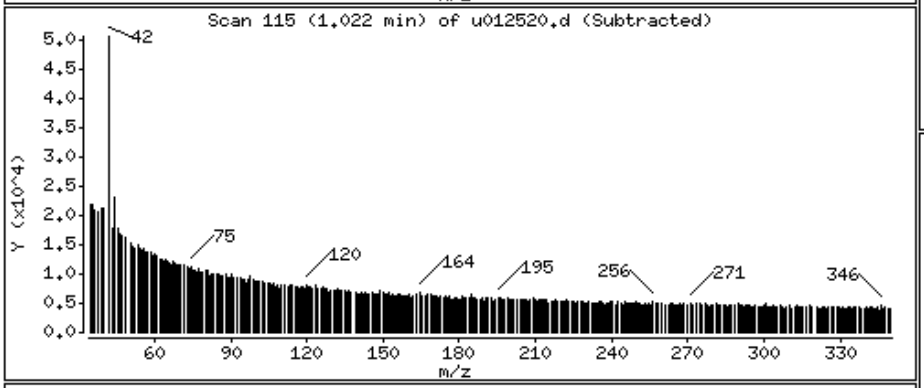
Sample Info: HS24011040-02;HS24011040-02;;;

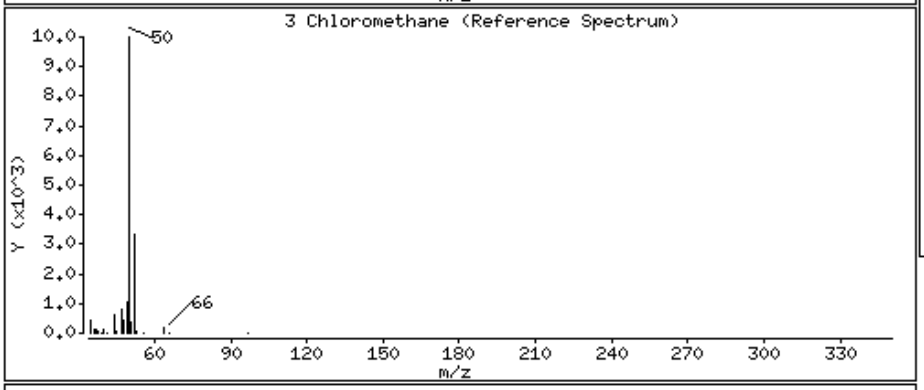
Purge Volume: 5.0 Operator: PC

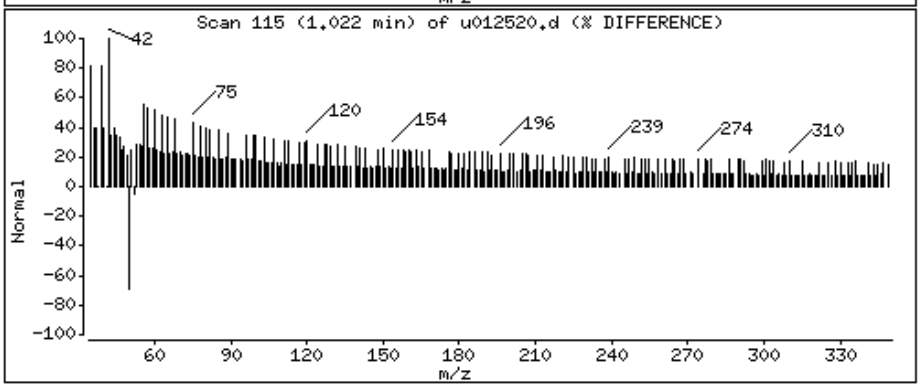
Column phase: DB624 Column diameter: 0.18

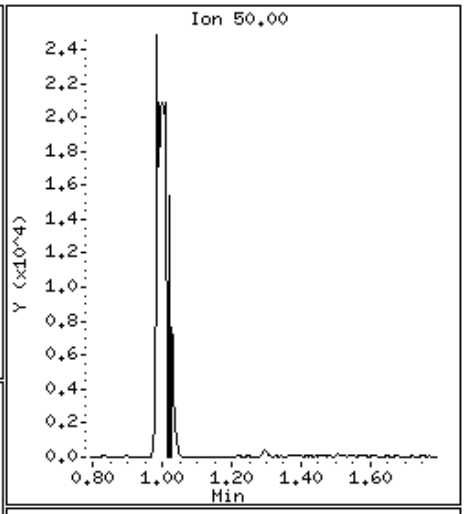
3 Chloromethane Concentration: 1729.02 ug/l

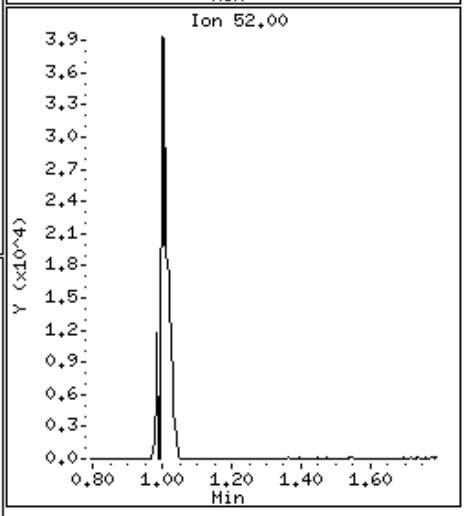












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012520.d Page 4

Date : 25-JAN-2024 17:23

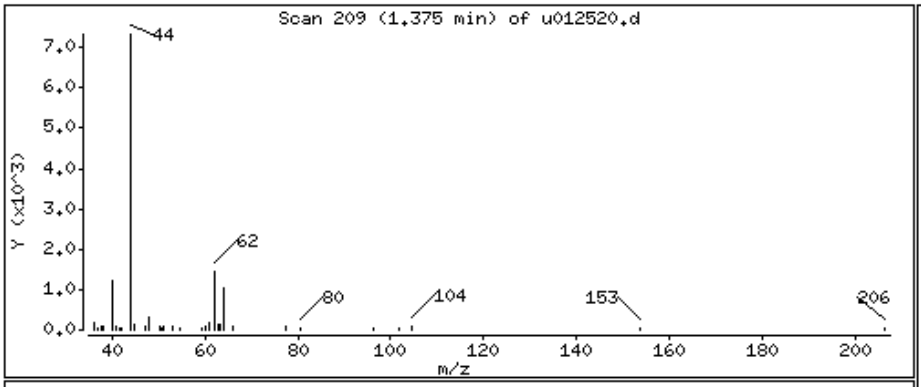
Client ID: HS24011040-02 Instrument: VOA9.i

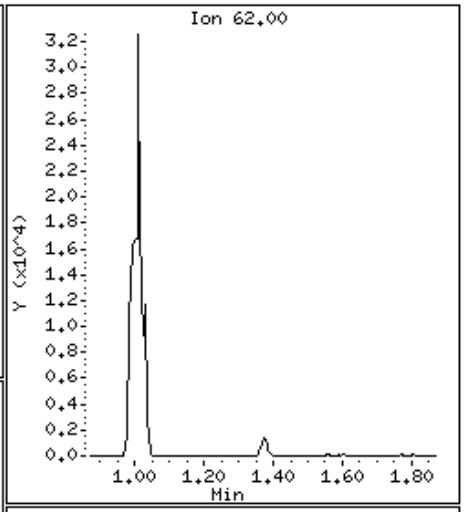
Sample Info: HS24011040-02;HS24011040-02;;;

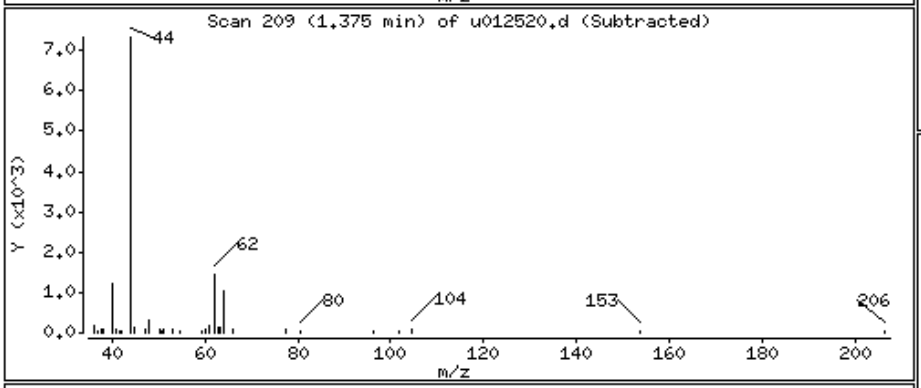
Purge Volume: 5.0 Operator: PC

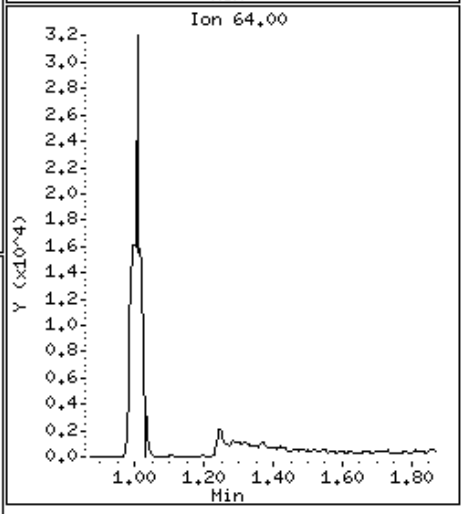
Column phase: DB624 Column diameter: 0.18

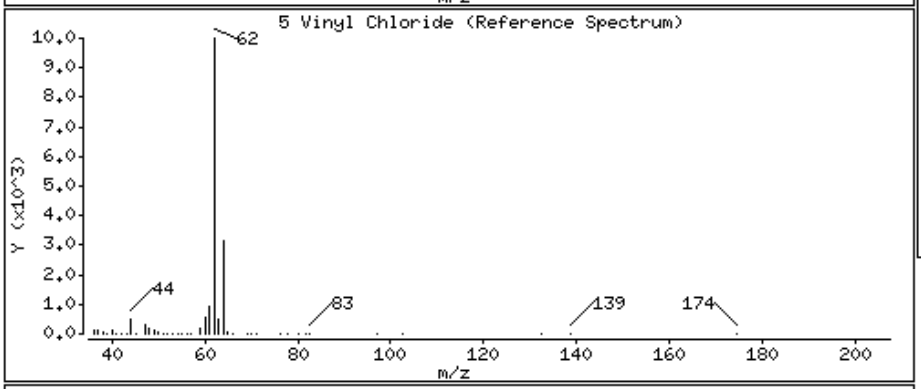
5 Vinyl Chloride Concentration: 468.27 ug/l

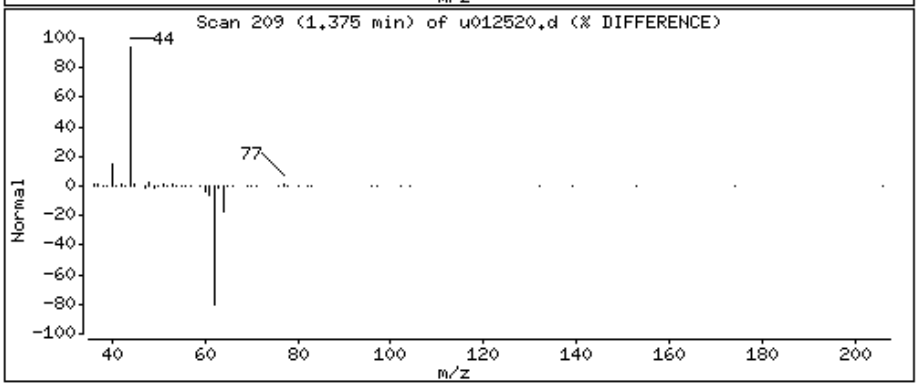












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012520.d Page 5

Date : 25-JAN-2024 17:23

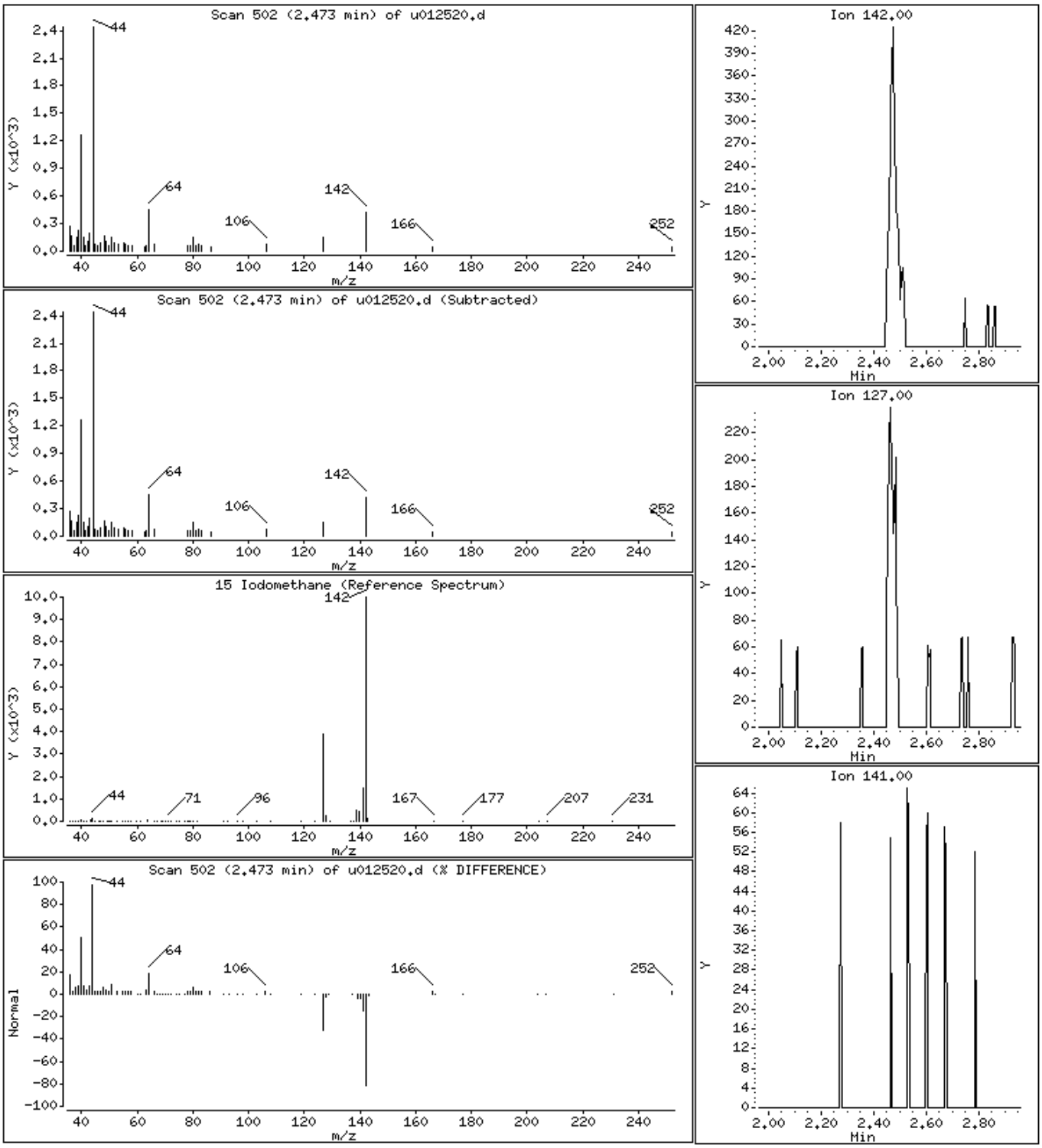
Client ID: HS24011040-02 Instrument: VOA9.i

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

Purge Volume: 5.0 Operator: PC

Column phase: DB624 Column diameter: 0.18

15 Iodomethane Concentration: 2540.93 ug/l



Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012520.d Page 6

Date : 25-JAN-2024 17:23

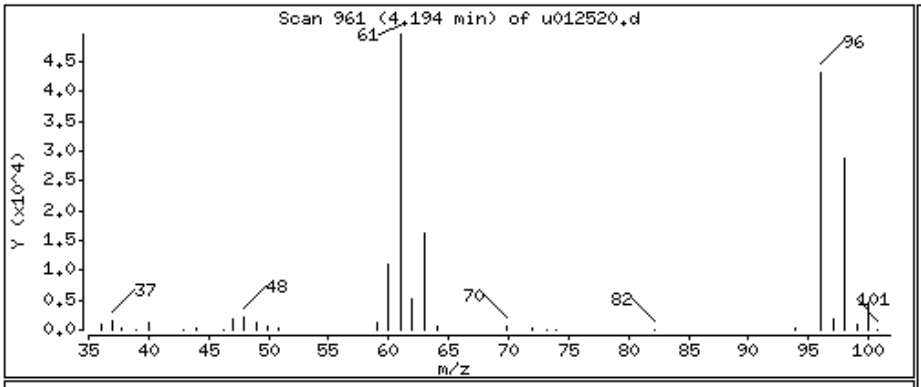
Client ID: HS24011040-02 Instrument: VOA9.i

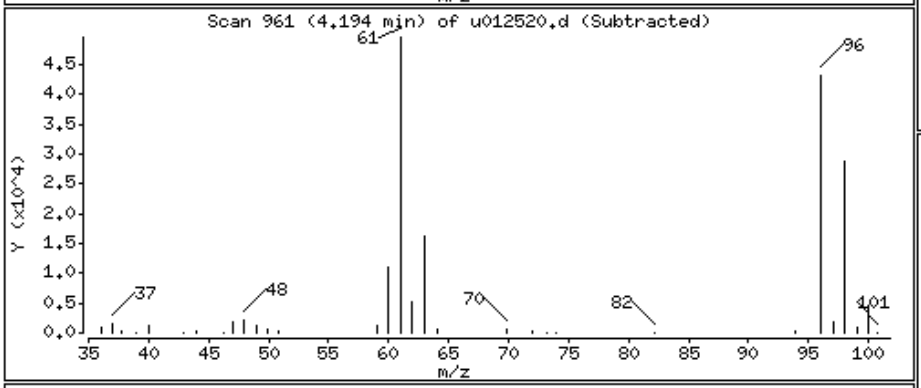
Sample Info: HS24011040-02;HS24011040-02;;;

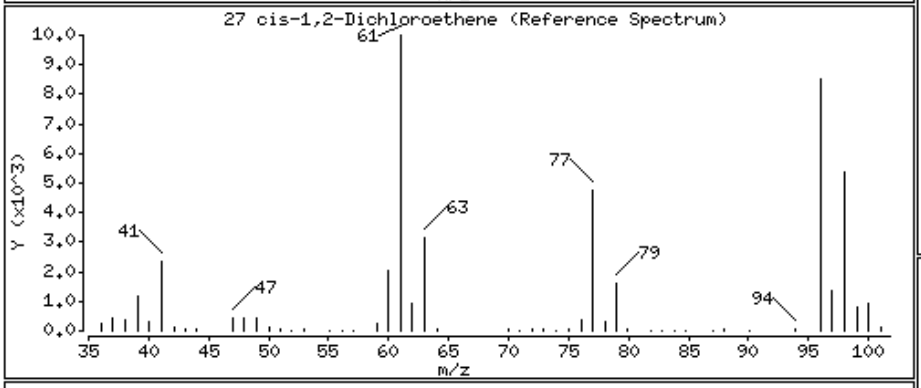
Purge Volume: 5.0 Operator: PC

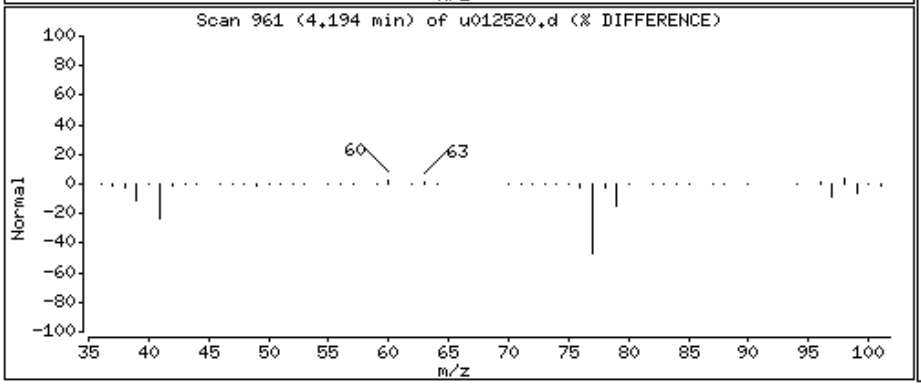
Column phase: DB624 Column diameter: 0.18

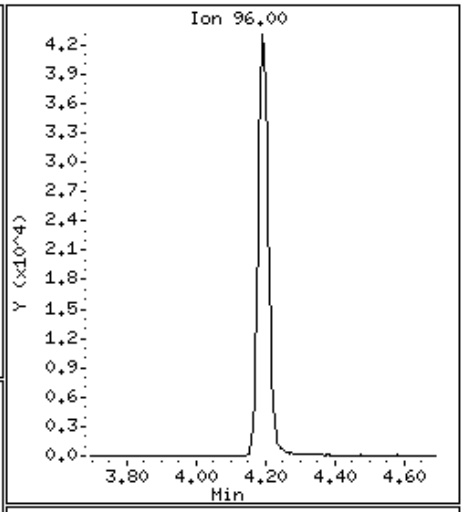
27 cis-1,2-Dichloroethene Concentration: 21677.30 ug/l

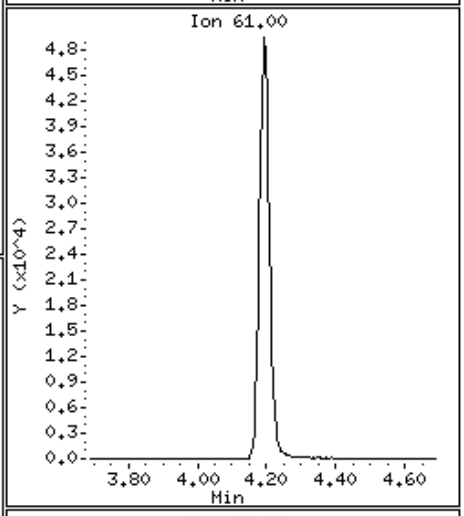


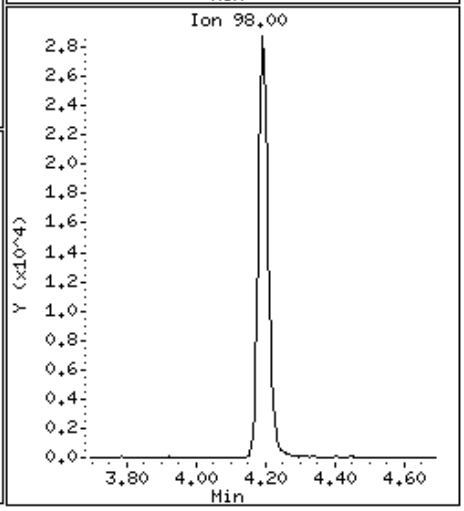












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012520.d Page 7

Date : 25-JAN-2024 17:23

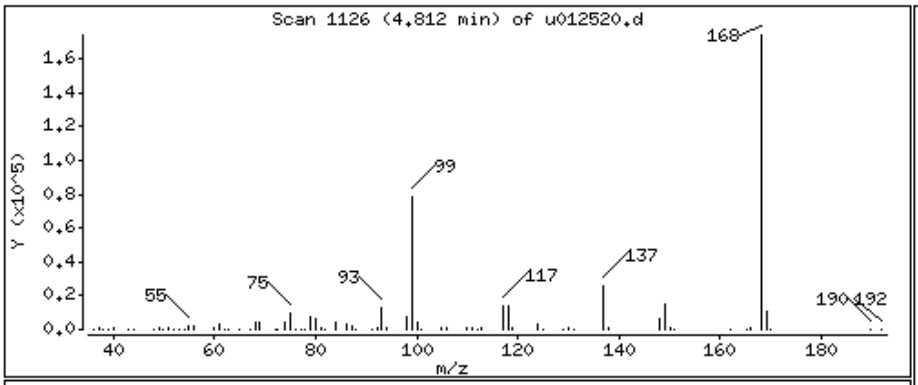
Client ID: HS24011040-02 Instrument: VOA9.i

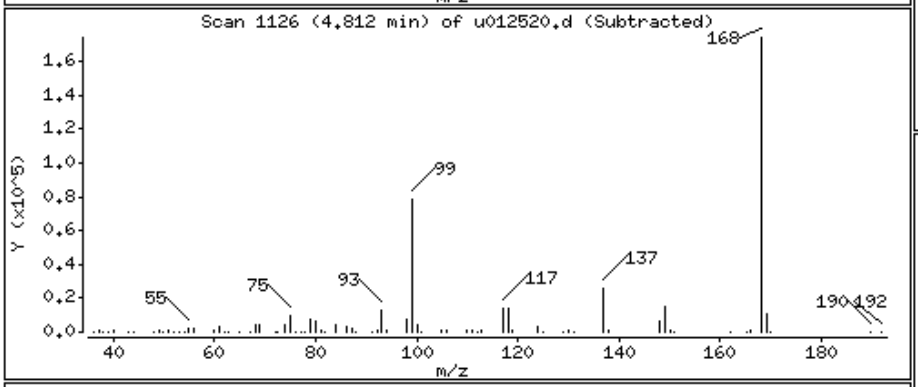
Sample Info: HS24011040-02;HS24011040-02;;;

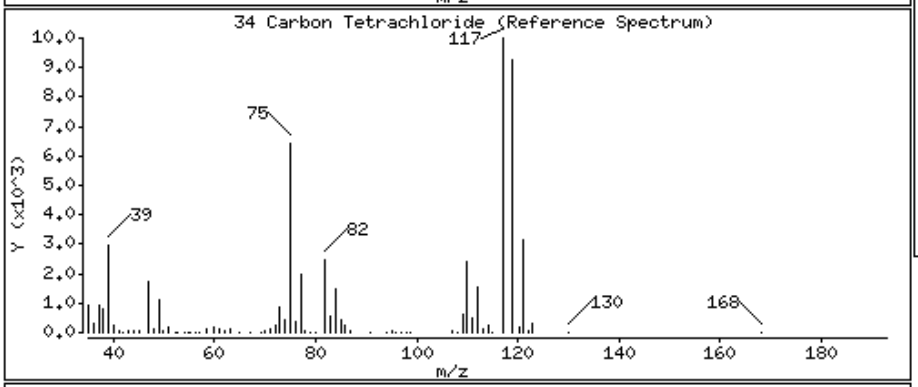
Purge Volume: 5.0 Operator: PC

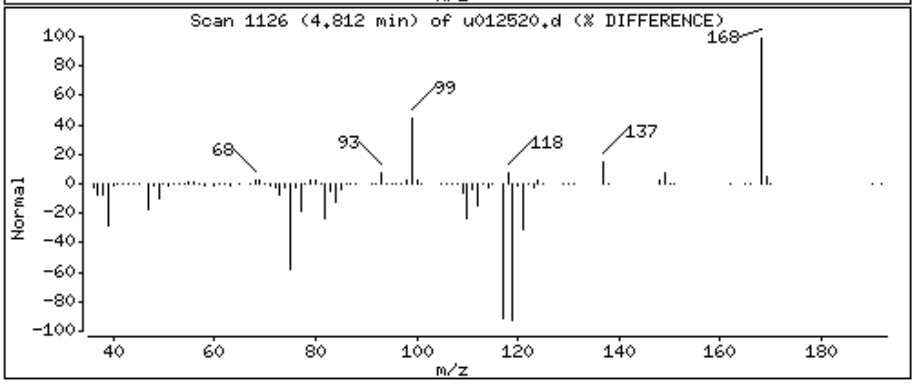
Column phase: DB624 Column diameter: 0.18

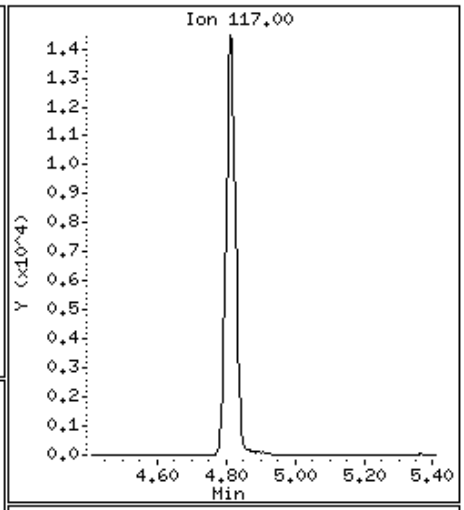
34 Carbon Tetrachloride Concentration: 6611.49 ug/l

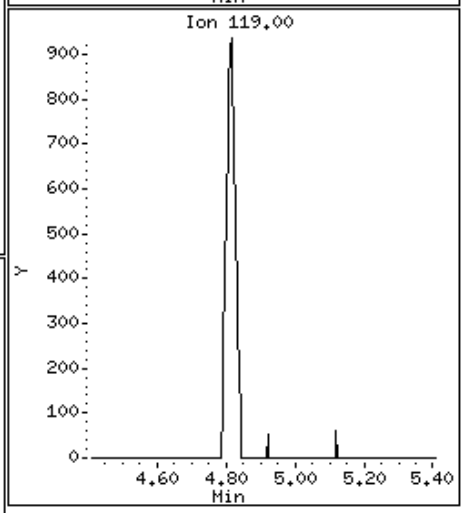












Data File: \\NAHSTWS005\Target\chem\voa9.i\u240125.b\u012520.d Page 8

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

38 Trichloroethene Concentration: 40855.78 ug/l