LONGHORN ARMY AMMUNITION PLANT KARNACK, TEXAS

ADMINISTRATIVE RECORD

Volume 18

2025

Bate Stamp Numbers
01321356 – 01323300

Prepared for

Department of the Army
Longhorn Army Ammunition Plant

1976–2025

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

VOLUME 18

2025

A.	Title:	(Cont'd) Report – Level IV DoD File No. 1 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:	01321356–01321640

B.	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:	01321641–01323300

01321356

Data File: \\nahstws005\Target\chem\FID-4.i\230713.b\059.D

Page 1

Date : 13-JUL-2023 19:31

Client ID: HS23070658-03

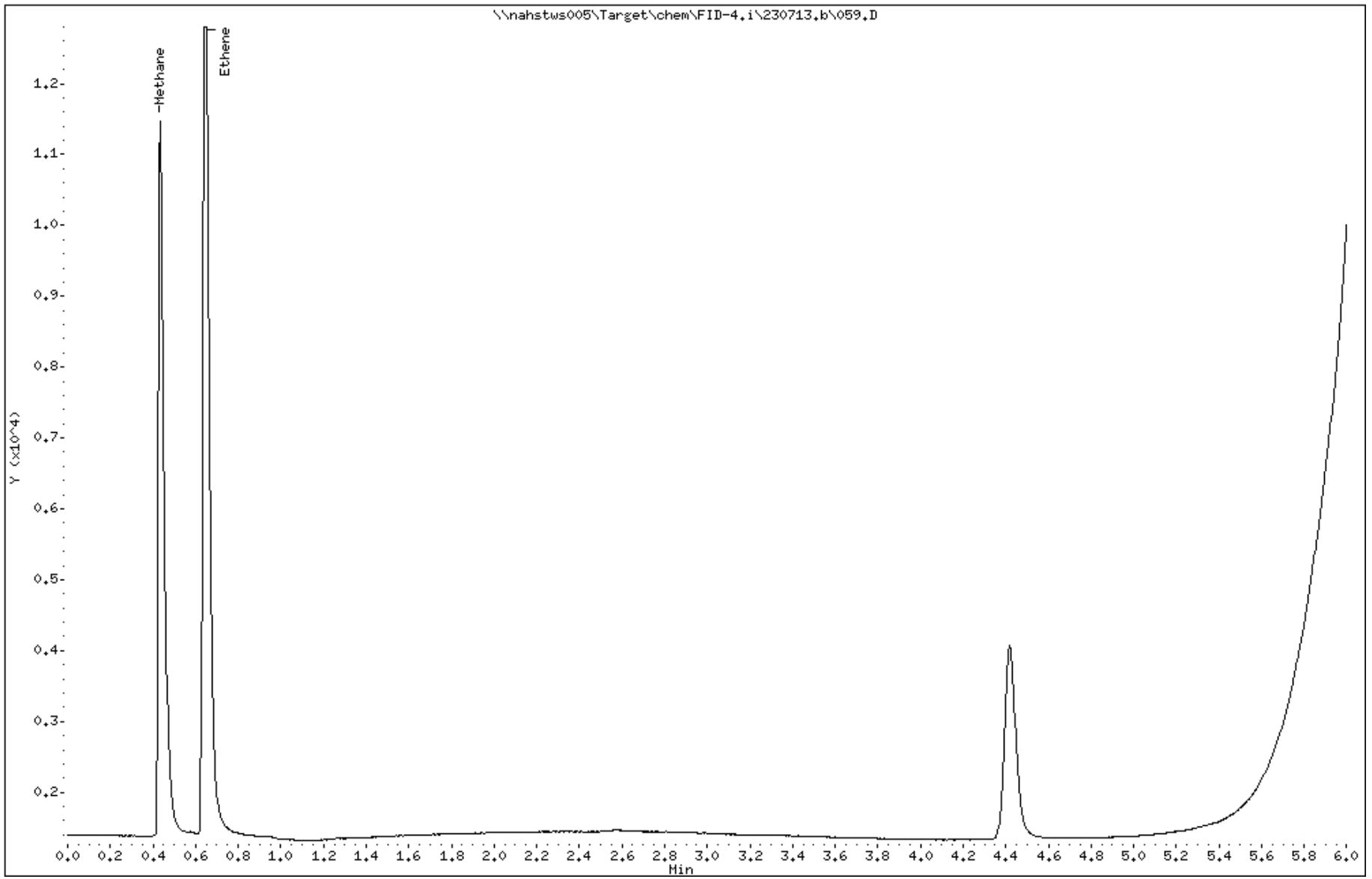
Instrument: FID-4.i

Sample Info: HS23070658-03;HS23070658-03

Operator: JA

Column phase: Rtx-PLOT

Column diameter: 0.53



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InstruID : FID-4.i
LabSampID : HS23070658-03

Methane (74-82-8)

Reason Code:

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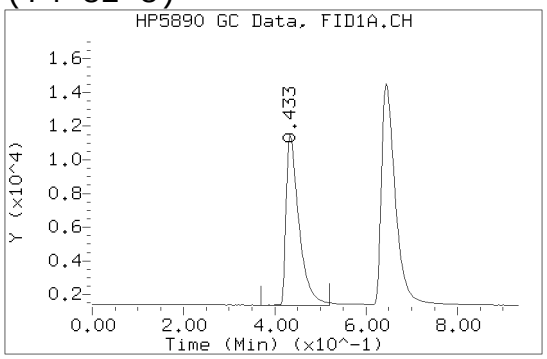
13-Jul-2023
19:43
samy
mata



AFTER

MASS
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AREA
19770
HEIGHT
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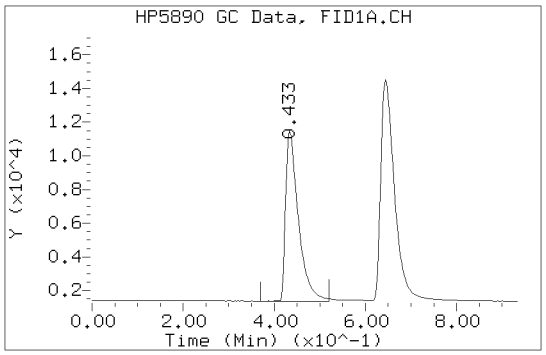
13-Jul-2023
19:43
samy
mata



Ethene (74-85-1)

Reason Code:

BEFORE

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13-Jul-2023
19:43
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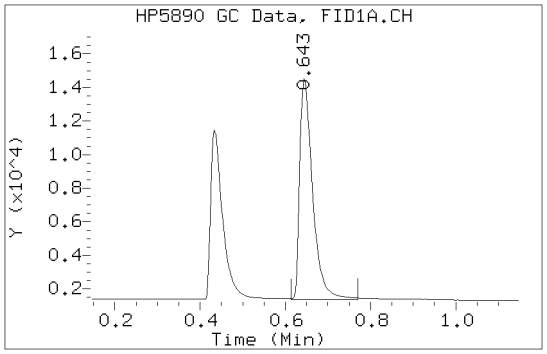
mata



AFTER

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HEIGHT
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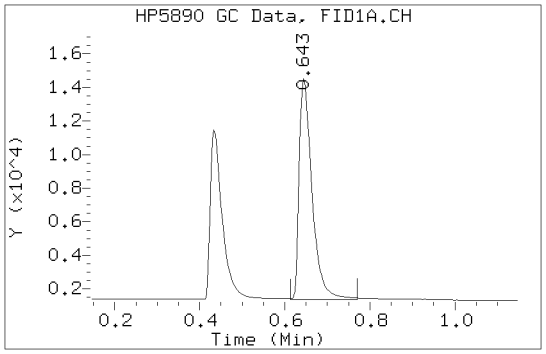
13-Jul-2023
19:43
samy
mata



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Report Date: 13-Jul-2023 19:52

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\230713.b\060.D
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Inj Date : 13-JUL-2023 19:40
Operator : JA Inst ID: FID-4.i
Smp Info : HS23070658-04;HS23070658-04
Misc Info : X5
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\230713.b\RSKNI3.m
Meth Date : 13-Jul-2023 19:00 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 60
Dil Factor: 5.00000
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	0.426	0.433	-0.007	19265	19.7591	98.795(M)
2 Ethene	0.640	0.646	-0.006	27266	46.5480	232.740(M)

QC Flag Legend

M - Compound response manually integrated.

01321359

Data File: \\nahstws005\Target\chem\FID-4.i\230713.b\060.D

Page 1

Date : 13-JUL-2023 19:40

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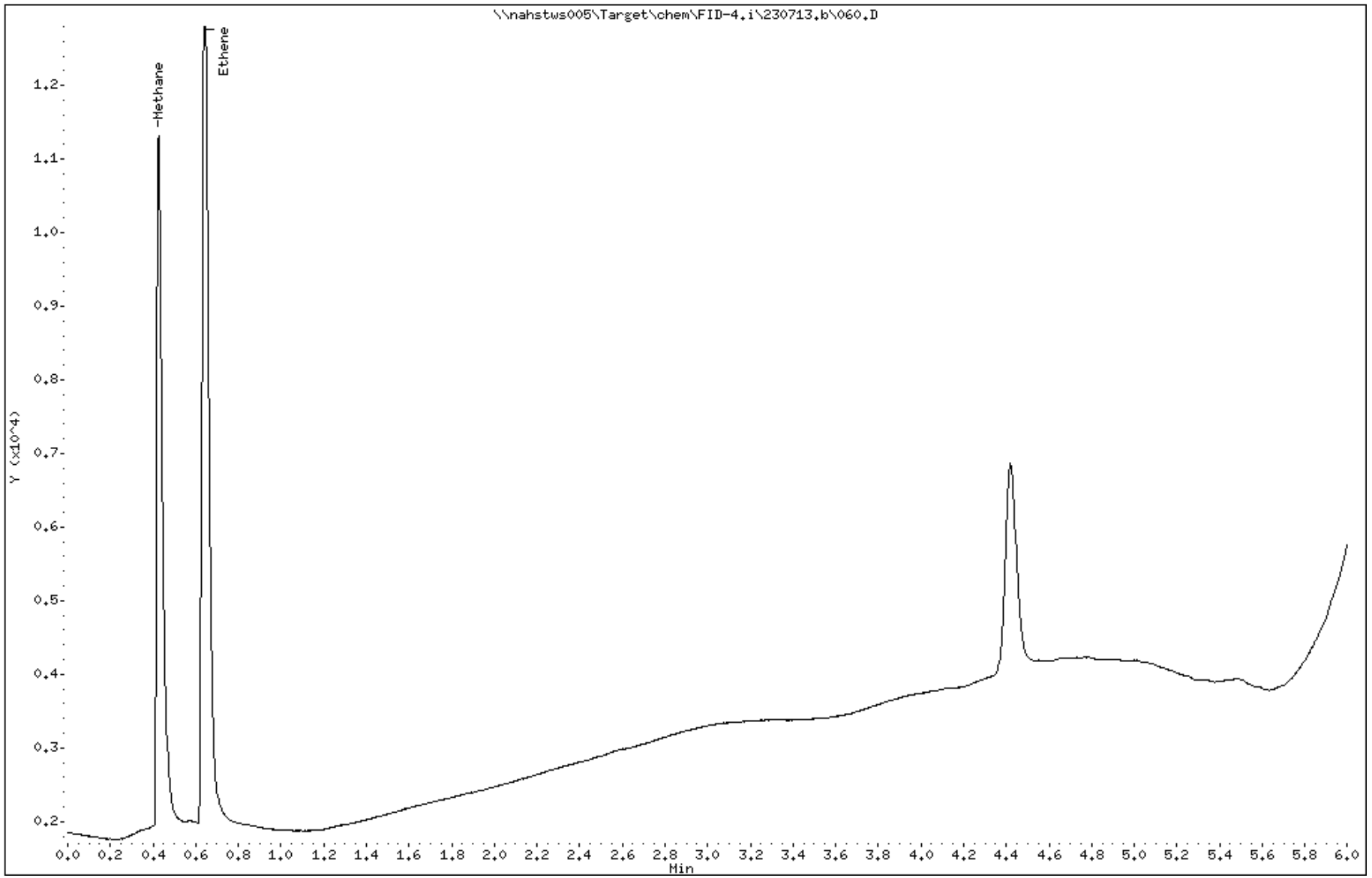
Instrument: FID-4.i

Sample Info: HS23070658-04;HS23070658-04

Operator: JA

Column phase: Rtx-PLOT

Column diameter: 0.53



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Inj Date : 13-JUL-2023 19:40
InstruID : FID-4.i
LabSampID : HS23070658-04

Methane (74-82-8)

BEFORE

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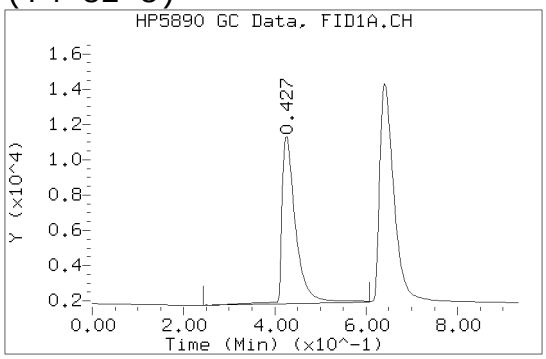
13-Jul-2023
19:50
samy
mata



Reason Code:

AFTER

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AREA
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HEIGHT
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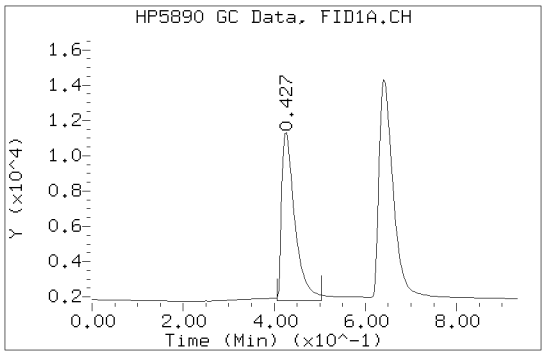
13-Jul-2023
19:52
samy
mata



Ethene (74-85-1)

BEFORE

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HEIGHT
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19:50
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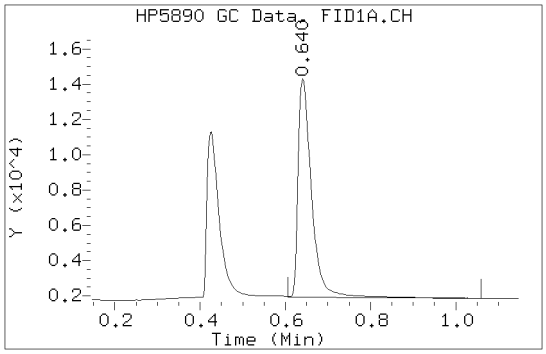

Reason Code:

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19:52
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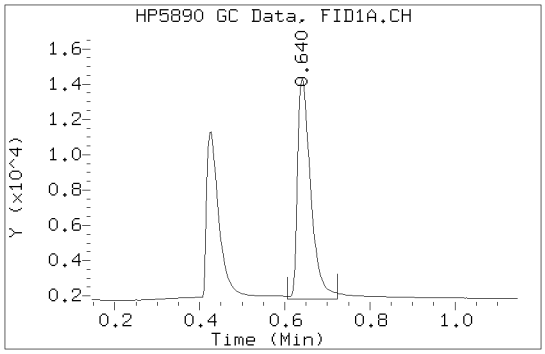


Data File: \\nahstws005\Target\chem\FID-4.i\230713.b\061.D Page 1
Report Date: 13-Jul-2023 19:57

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\230713.b\061.D
Lab Smp Id: HS23070658-05 Client Smp ID: HS23070658-05
Inj Date : 13-JUL-2023 19:48
Operator : JA Inst ID: FID-4.i
Smp Info : HS23070658-05;HS23070658-05
Misc Info : X100
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\230713.b\RSKNI3.m
Meth Date : 13-Jul-2023 19:00 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 61
Dil Factor: 100.00000
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	0.443	0.433	0.010	33758	34.6239	3462.386(M)
2 Ethene	0.660	0.646	0.014	2247	3.83604	383.603(M)

QC Flag Legend

M - Compound response manually integrated.

01321362

Data File: \\nahstws005\Target\chem\FID-4.i\230713.b\061.D

Page 1

Date : 13-JUL-2023 19:48

Client ID: HS23070658-05

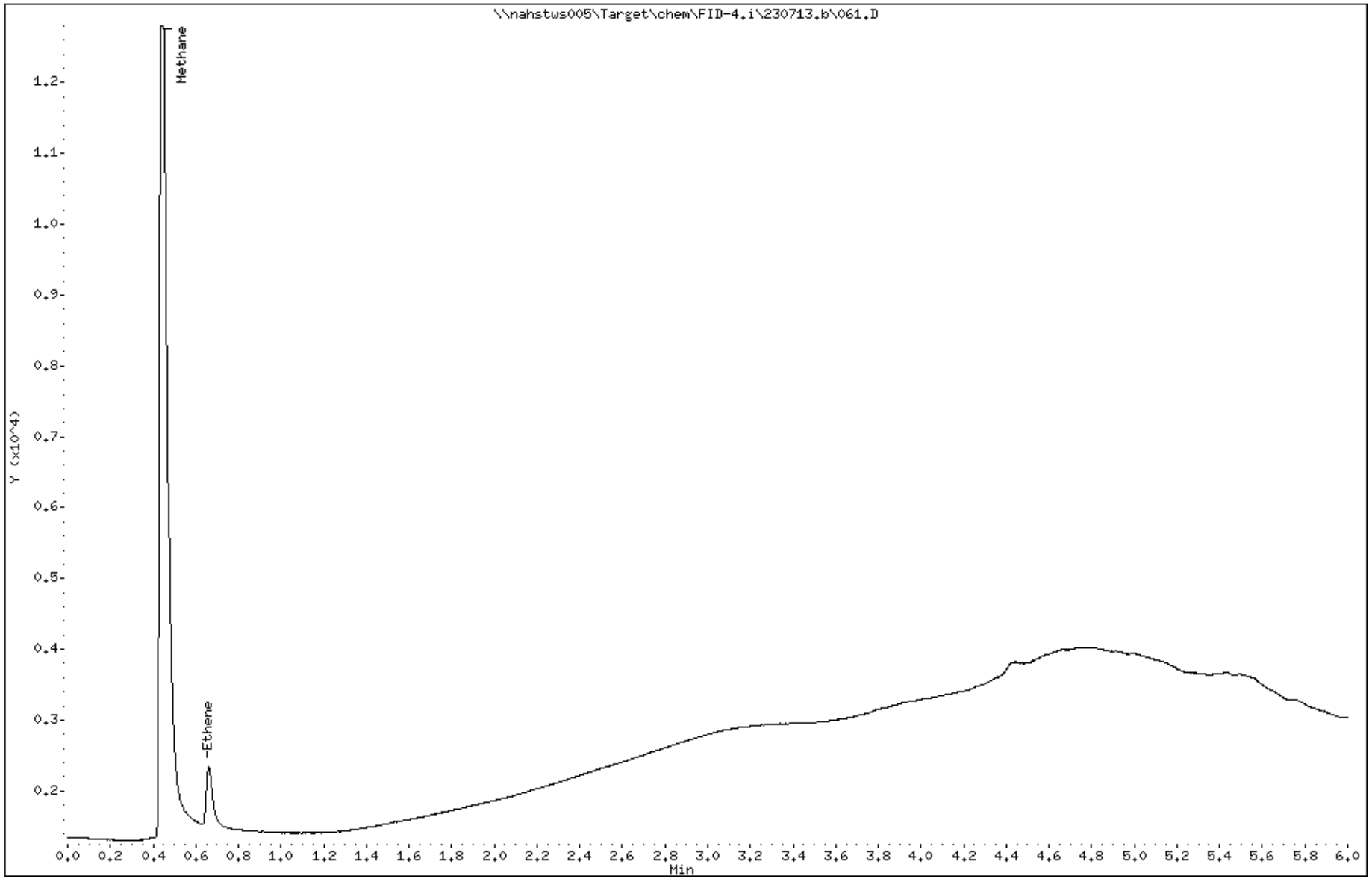
Instrument: FID-4.i

Sample Info: HS23070658-05;HS23070658-05

Operator: JA

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\nahstws005\Target\chem\FID-4.i\230713.b\061.D
Inj Date : 13-JUL-2023 19:48
InstruID : FID-4.i
LabSampID : HS23070658-05

Methane (74-82-8)

BEFORE

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AREA
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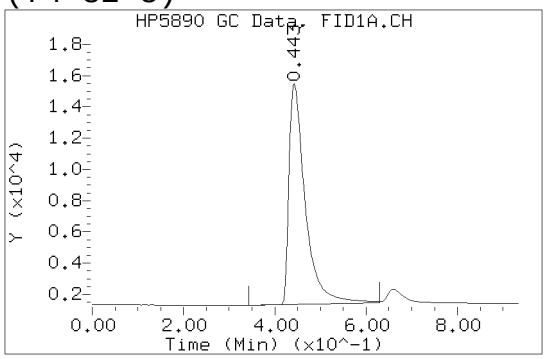
HEIGHT
14126
13-Jul-2023
19:55
samy
mata



AFTER

MASS
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AREA
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HEIGHT
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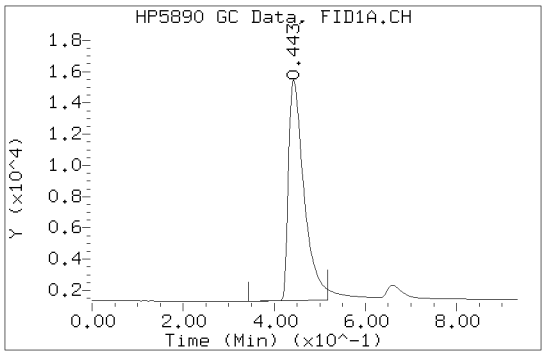
13-Jul-2023
19:57
samy
mata



Reason Code:

Ethene (74-85-1)

BEFORE

MASS
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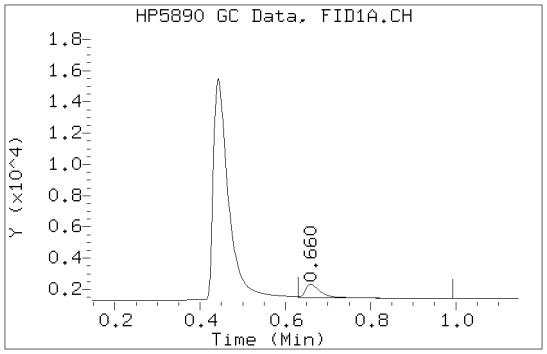
AREA
2213
HEIGHT
877
13-Jul-2023
19:55
samy
mata



AFTER

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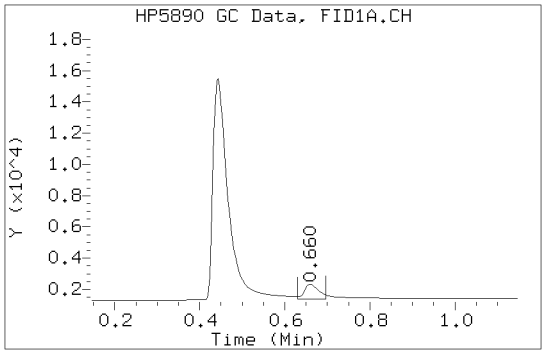
13-Jul-2023
19:57
samy
mata



Reason Code:

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\230713.b\062.D
Lab Smp Id: HS23070658-06 Client Smp ID: HS23070658-06
Inj Date : 13-JUL-2023 19:58
Operator : JA Inst ID: FID-4.i
Smp Info : HS23070658-06;HS23070658-06
Misc Info : X10
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\230713.b\RSKNI3.m
Meth Date : 13-Jul-2023 19:00 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 62
Dil Factor: 10.00000
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	0.436	0.433	0.003	19556	20.0576	200.575(M)
2 Ethene	0.650	0.646	0.004	808	1.37940	13.794(M)

QC Flag Legend

M - Compound response manually integrated.

01321365

Data File: \\nahstws005\Target\chem\FID-4.i\230713.b\062.D

Page 1

Date : 13-JUL-2023 19:58

Client ID: HS23070658-06

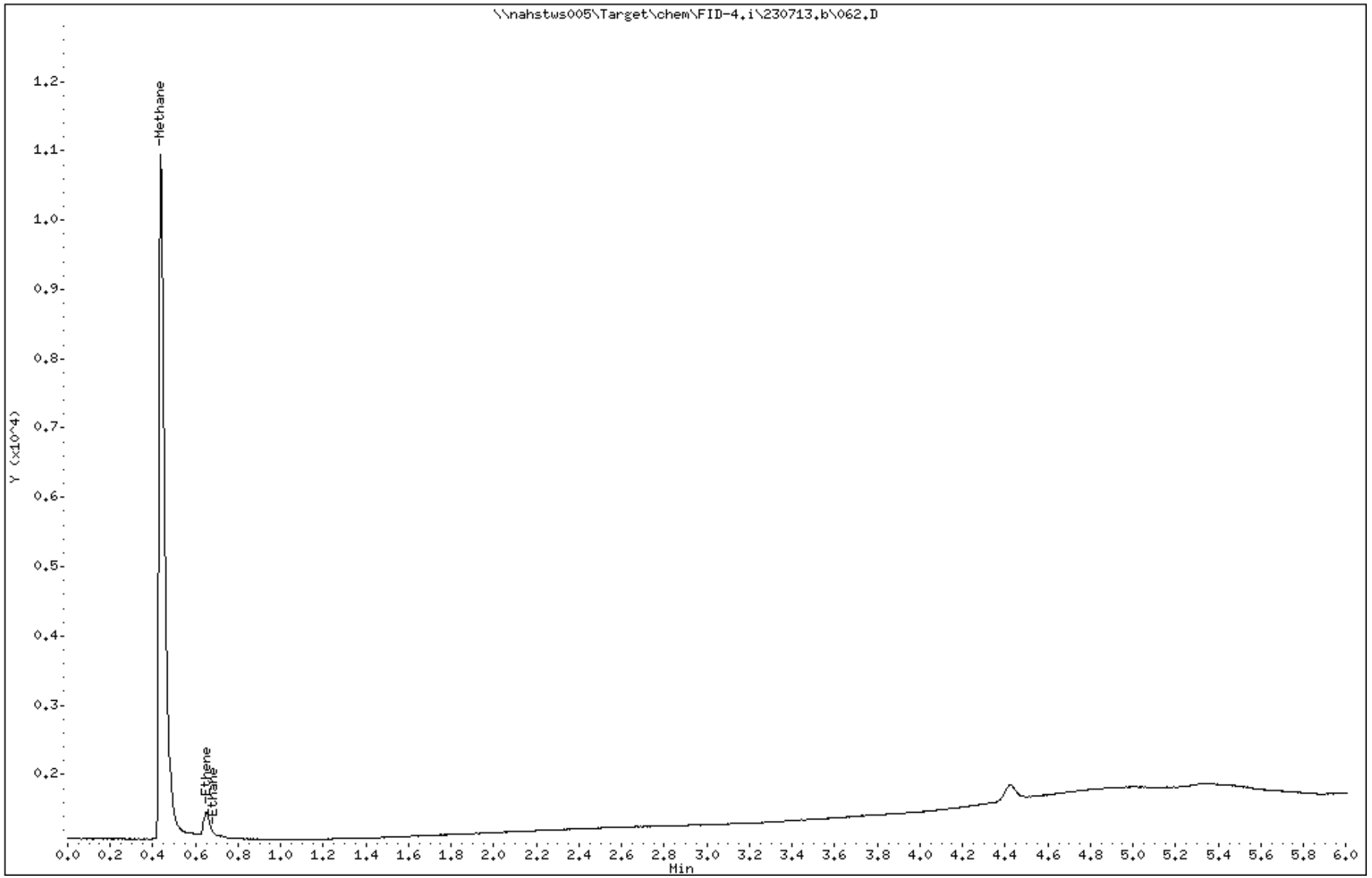
Instrument: FID-4.i

Sample Info: HS23070658-06;HS23070658-06

Operator: JA

Column phase: Rtx-PLOT

Column diameter: 0.53



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Inj Date : 13-JUL-2023 19:58
InstruID : FID-4.i
LabSampID : HS23070658-06

Ethane (74-84-0)

Reason Code:

BEFORE

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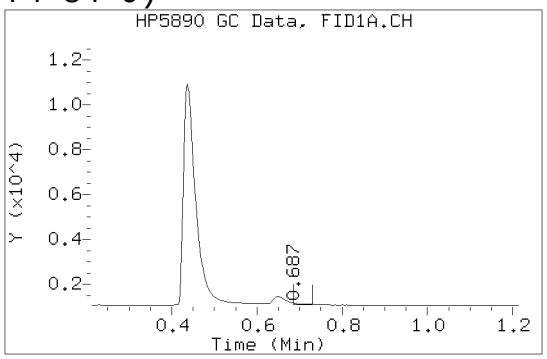
AREA
101
HEIGHT
72
13-Jul-2023
20:08
samy
mata



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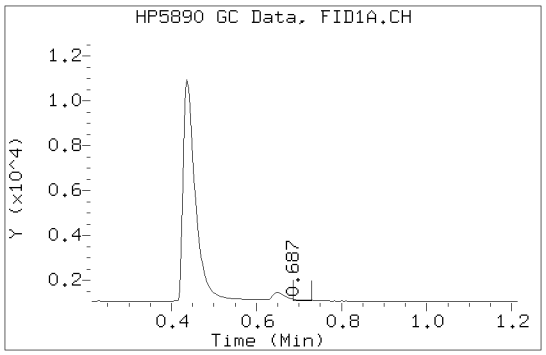

Methane (74-82-8)

Reason Code:

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13-Jul-2023
20:08
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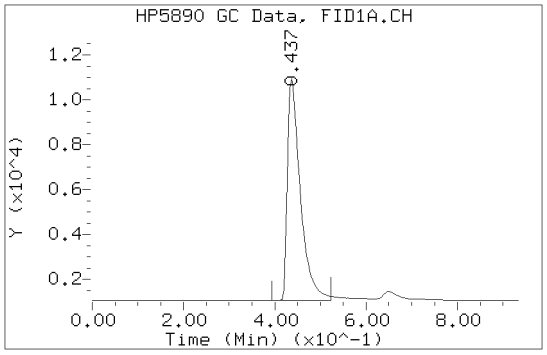

AFTER

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13-Jul-2023
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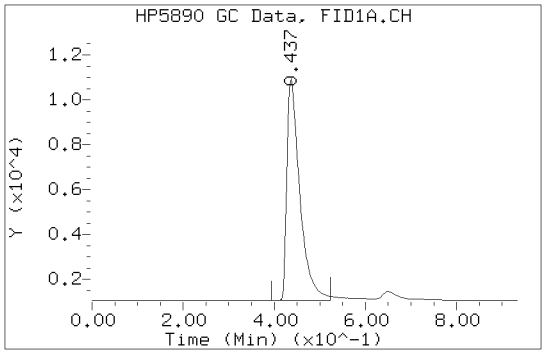

Ethene (74-85-1)

Reason Code:

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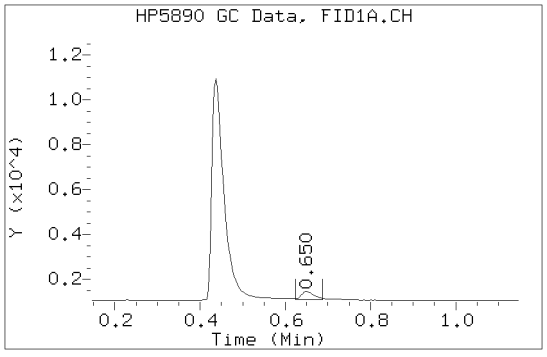

AFTER

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HEIGHT
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13-Jul-2023
20:08
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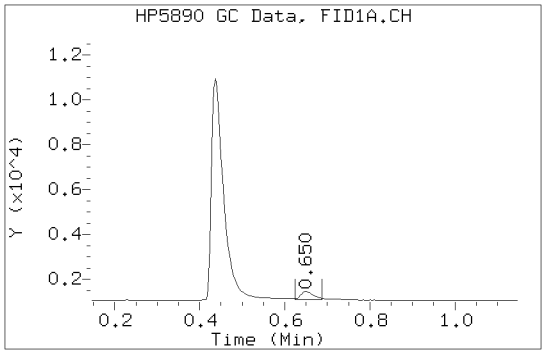
mata



Data File: \\nahstws005\Target\chem\FID-4.i\230713.b\063.D Page 1
Report Date: 13-Jul-2023 20:15

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\230713.b\063.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 13-JUL-2023 20:06
Operator : JA Inst ID: FID-4.i
Smp Info : RSK-CCV;RSK-CCV;2;4
Misc Info :
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\230713.b\RSKNI3.m
Meth Date : 13-Jul-2023 20:15 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 63 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	0.430	0.430	0.000	8430	9.64700	8.646
2 Ethene	0.646	0.646	0.000	8799	16.8500	15.021(M)
3 Ethane	0.716	0.716	0.000	12964	18.0430	18.018(M)

QC Flag Legend

M - Compound response manually integrated.

01321368

Data File: \\nahstws005\Target\chem\FID-4.i\230713.b\063.D

Page 1

Date : 13-JUL-2023 20:06

Client ID: RSK-CCV

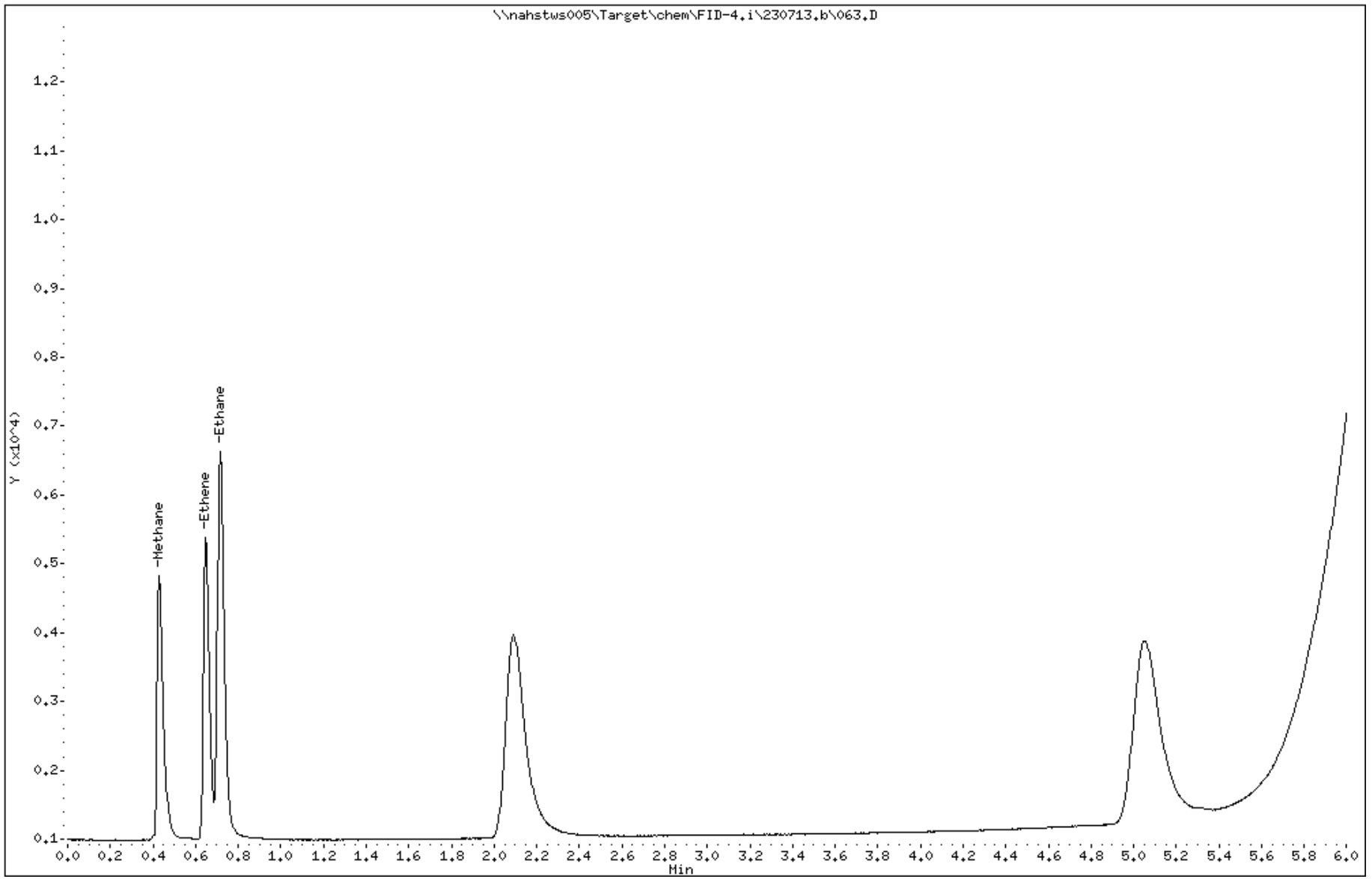
Instrument: FID-4.i

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

Operator: JA

Column phase: Rtx-PLOT

Column diameter: 0.53



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Inj Date : 13-JUL-2023 20:06
InstruID : FID-4.i
LabSampID : RSK-CCV

Ethane (74-84-0)

Reason Code:

BEFORE

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13-Jul-2023
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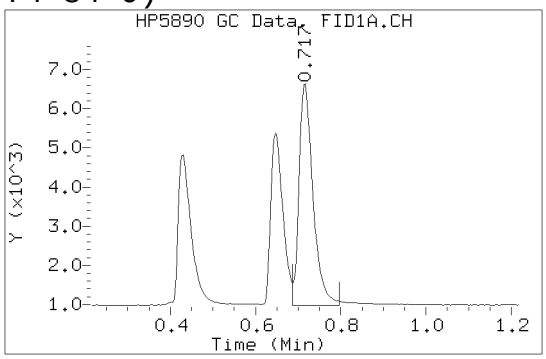

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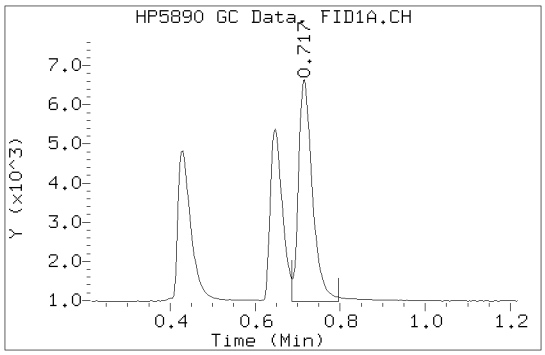

Ethene (74-85-1)

Reason Code:

BEFORE

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13-Jul-2023
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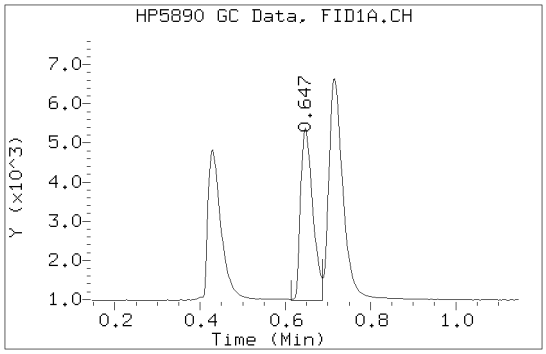

AFTER

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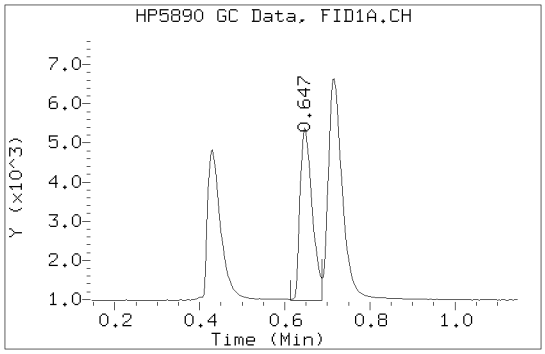
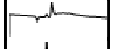


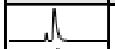
HS23070658 Wetchem 9056_W

ALS WO# HS23070658

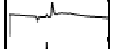
Sequence: 071323
Last Update Operator: alshs.nouser

CD	Name	Comment	Type	Position	Dilution	Level	Instrument Method
	STD1		Calibratio	RA1	1.00	1	Anions Program ISO37mM 150mm short 0.4 Constant current
	STD2		Calibratio	RA2	1.00	2	Anions Program ISO37mM 150mm short 0.4 Constant current
	STD3		Calibratio	RA3	1.00	3	Anions Program ISO37mM 150mm short 0.4 Constant current
	STD4		Calibratio	RA4	1.00	4	Anions Program ISO37mM 150mm short 0.4 Constant current
	STD5		Calibratio	RA5	1.00	5	Anions Program ISO37mM 150mm short 0.4 Constant current
	STD6		Calibratio	RA6	1.00	6	Anions Program ISO37mM 150mm short 0.4 Constant current
	ICV		Unknown	RA7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	ICB		Unknown	RA8	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCV		Unknown	G1	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	REP	Unknown	R5	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	LCS	REP	Unknown	R2	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS23061952-11DF10	REP	Unknown	RE5	10.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS23061952-11MSDF1(	REP	Unknown	RE6	10.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS23061952-11MSDDF	REP	Unknown	RE7	10.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCV1		Unknown	R3	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCB		Unknown	R7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS23070658-01	REP	Unknown	GB3	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS23070658-01DF20	REP	Unknown	GB4	20.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS23070658-02DF10	REP	Unknown	GB5	10.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS23070658-02DF200	REP	Unknown	GB6	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
	HS23070658-03DF2	REP	Unknown	GB7	2.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS23070658-03DF50	REP	Unknown	GB8	50.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS23070658-04DF2	REP	Unknown	GC1	2.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS23070658-04DF50	REP	Unknown	GC2	50.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS23070658-05DF2	REP	Unknown	GC3	2.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS23070658-05DF50	REP	Unknown	GC4	50.00		Anions Program ISO37mM 150mm short 0.4 Constant current

Sequence: 071323
Last Update Operator: alshs.nouser

CD	Name	Comment	Type	Position	Dilution	Level	Instrument Method
	HS23070658-06DF10	REP	Unknown	GC5	10.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	HS23070658-06DF200	REP	Unknown	GC6	200.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCV1		Unknown	R3	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current
	CCB		Unknown	R7	1.00		Anions Program ISO37mM 150mm short 0.4 Constant current

Sequence: 071323
Last Update Operator: alshs.nouser

Processing Method	CD	Name	me	Status	Inject Time
Anions Processing Method ISO		STD1	5.0	Finished	7/6/2023 6:45:00 AM -05:00
Anions Processing Method ISO		STD2	5.0	Finished	7/6/2023 6:50:47 AM -05:00
Anions Processing Method ISO		STD3	5.0	Finished	7/6/2023 6:56:35 AM -05:00
Anions Processing Method ISO		STD4	5.0	Finished	7/6/2023 7:02:22 AM -05:00
Anions Processing Method ISO		STD5	5.0	Finished	7/6/2023 7:08:09 AM -05:00
Anions Processing Method ISO		STD6	5.0	Finished	7/6/2023 7:13:57 AM -05:00
Anions Processing Method ISO		ICV	5.0	Finished	7/6/2023 7:19:44 AM -05:00
Anions Processing Method ISO		ICB	5.0	Finished	7/6/2023 7:37:06 AM -05:00
Anions Processing Method ISO		CCV	5.0	Finished	7/13/2023 9:29:56 PM -05:00
Anions Processing Method ISO		CCB	5.0	Finished	7/13/2023 9:47:20 PM -05:00
Anions Processing Method ISO		MBLK	5.0	Finished	7/13/2023 9:58:56 PM -05:00
Anions Processing Method ISO		LCS	5.0	Finished	7/13/2023 10:04:44 PM -05:00
Anions Processing Method ISO		HS23061952-11DF10	5.0	Finished	7/13/2023 10:16:20 PM -05:00
Anions Processing Method ISO		HS23061952-11MSDF1(	5.0	Finished	7/13/2023 10:22:08 PM -05:00
Anions Processing Method ISO		HS23061952-11MSDDF	5.0	Finished	7/13/2023 10:27:56 PM -05:00
Anions Processing Method ISO		CCV1	5.0	Finished	7/13/2023 11:08:43 PM -05:00
Anions Processing Method ISO		CCB	5.0	Finished	7/13/2023 11:20:20 PM -05:00
Anions Processing Method ISO		HS23070658-01	5.0	Finished	7/14/2023 12:06:44 AM -05:00
Anions Processing Method ISO		HS23070658-01DF20	5.0	Finished	7/14/2023 12:12:32 AM -05:00
Anions Processing Method ISO		HS23070658-02DF10	5.0	Finished	7/14/2023 12:18:20 AM -05:00
Anions Processing Method ISO		HS23070658-02DF200	5.0	Finished	7/14/2023 12:24:08 AM -05:00
Anions Processing Method ISO		CCV	5.0	Finished	7/14/2023 12:41:31 AM -05:00
Anions Processing Method ISO		CCB	5.0	Finished	7/14/2023 12:58:55 AM -05:00
Anions Processing Method ISO		HS23070658-03DF2	5.0	Finished	7/14/2023 1:10:31 AM -05:00
Anions Processing Method ISO		HS23070658-03DF50	5.0	Finished	7/14/2023 1:16:19 AM -05:00
Anions Processing Method ISO		HS23070658-04DF2	5.0	Finished	7/14/2023 1:22:06 AM -05:00
Anions Processing Method ISO		HS23070658-04DF50	5.0	Finished	7/14/2023 1:27:54 AM -05:00
Anions Processing Method ISO		HS23070658-05DF2	5.0	Finished	7/14/2023 1:33:42 AM -05:00
Anions Processing Method ISO		HS23070658-05DF50	5.0	Finished	7/14/2023 1:39:30 AM -05:00

Sequence: 071323
Last Update Operator: alshs.nouser

Processing Method	CD	Name	me	Status	Inject Time
Anions Processing Method ISO		HS23070658-06DF10	5.0	Finished	7/14/2023 1:45:17 AM -05:00
Anions Processing Method ISO		HS23070658-06DF200	5.0	Finished	7/14/2023 1:51:05 AM -05:00
Anions Processing Method ISO		CCV1	5.0	Finished	7/14/2023 2:20:04 AM -05:00
Anions Processing Method ISO		CCB	5.0	Finished	7/14/2023 2:31:39 AM -05:00

Sequence: 070623
Injection #6: STD6

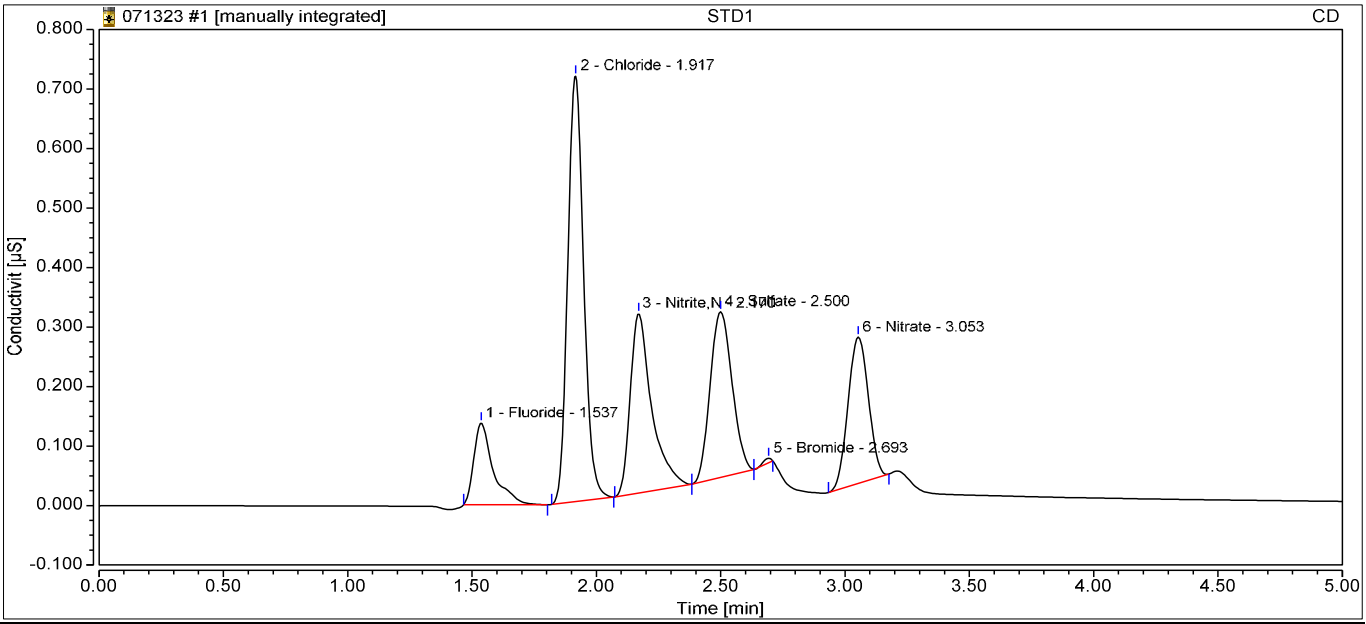
Calibration

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***	***16.1046***	***0.99894***	***-0.0117***	***0.2181***	***0.0000***
2	Chloride	Lin, WithOffset, 1/A	Area	6	5.4881	0.99987	-0.0288	0.1531	0.0000
3	Nitrite,N	Quad, WithOffset, 1/A	Area	6	3.8577	0.99993	-0.0046	0.3420	-0.0043
4	Sulfate	Lin, WithOffset, 1/A	Area	6	16.1910	0.99884	-0.0173	0.0909	0.0000
5	Bromide	Lin, WithOffset, 1/A	Area	6	36.0201	0.99638	-0.0043	0.0350	0.0000
6	Nitrate	Lin, WithOffset, 1/A	Area	6	5.0733	0.99988	-0.0086	0.3135	0.0000
7	Chlorate	Quad, WithOffset, 1/A	Area	5	10.6394	0.99821	-0.0003	0.0136	-0.0003
n.a.	Phosphate	Lin, WithOffset, 1/A	Area	0	n.a.	n.a.	n.a.	n.a.	n.a.
Maximum					**36.0201**	0.99993			
Minimum					3.8577	**0.99638**			

1 STD1

Sample Name:	**STD1**	*Injection Volume:*	**5.00**
Vial Number:	**RA1**	*Channel:*	**CD**
Sample Type:	**Calibration Standard**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**07/06/2023 06:45**	*Sample Weight:*	**1.0000**

Run Time:



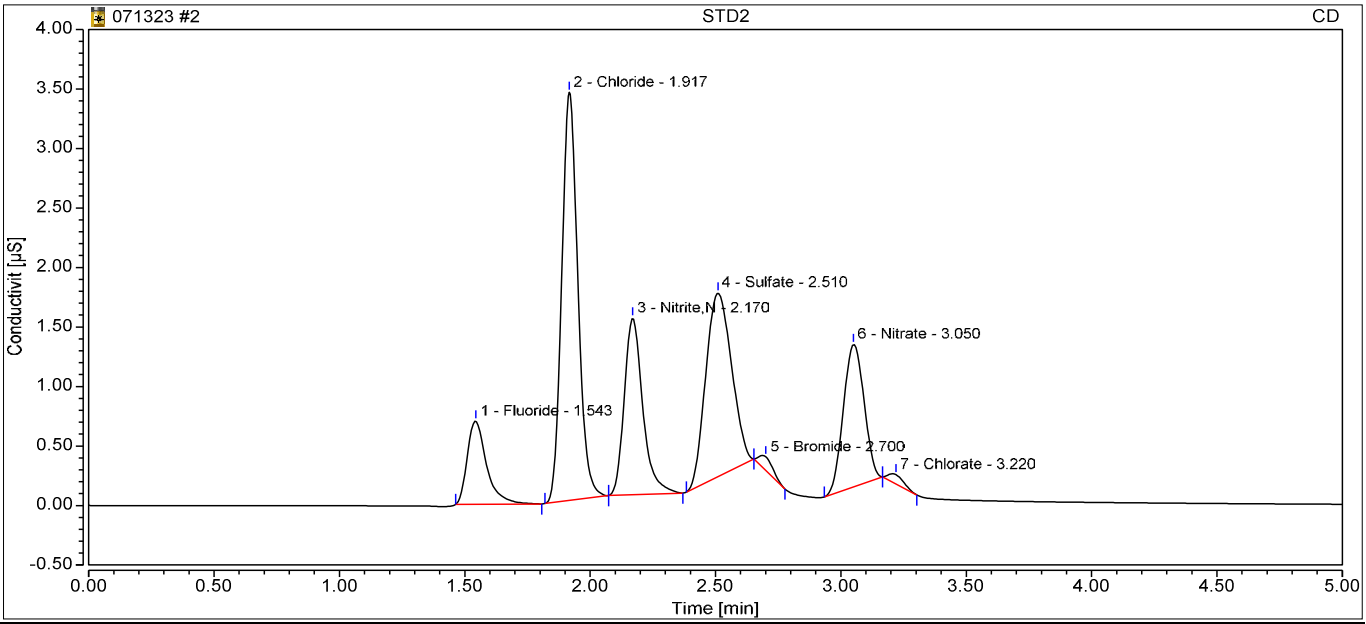
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.54	Fluoride	BMB	0.012	0.1106	0.1106	1.0000
2	1.92	Chloride	BMB	0.053	0.5350	0.5350	1.0000
3	2.17	Nitrite,N	BMb*	0.030	0.1015	0.1015	1.0000
4	2.50	Sulfate	bMb*	0.028	0.5036	0.5036	1.0000
5	2.69	Bromide	bMB*	0.000	0.1304	0.1304	1.0000
6	3.05	Nitrate	BMB	0.023	0.1018	0.1018	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.148**		**1.48**	

2 STD2

Sample Name:	**STD2**	*Injection Volume:*	**5.00**
Vial Number:	**RA2**	*Channel:*	**CD**
Sample Type:	**Calibration Standard**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**07/06/2023 06:50**	*Sample Weight:*	**1.0000**

Run Time:

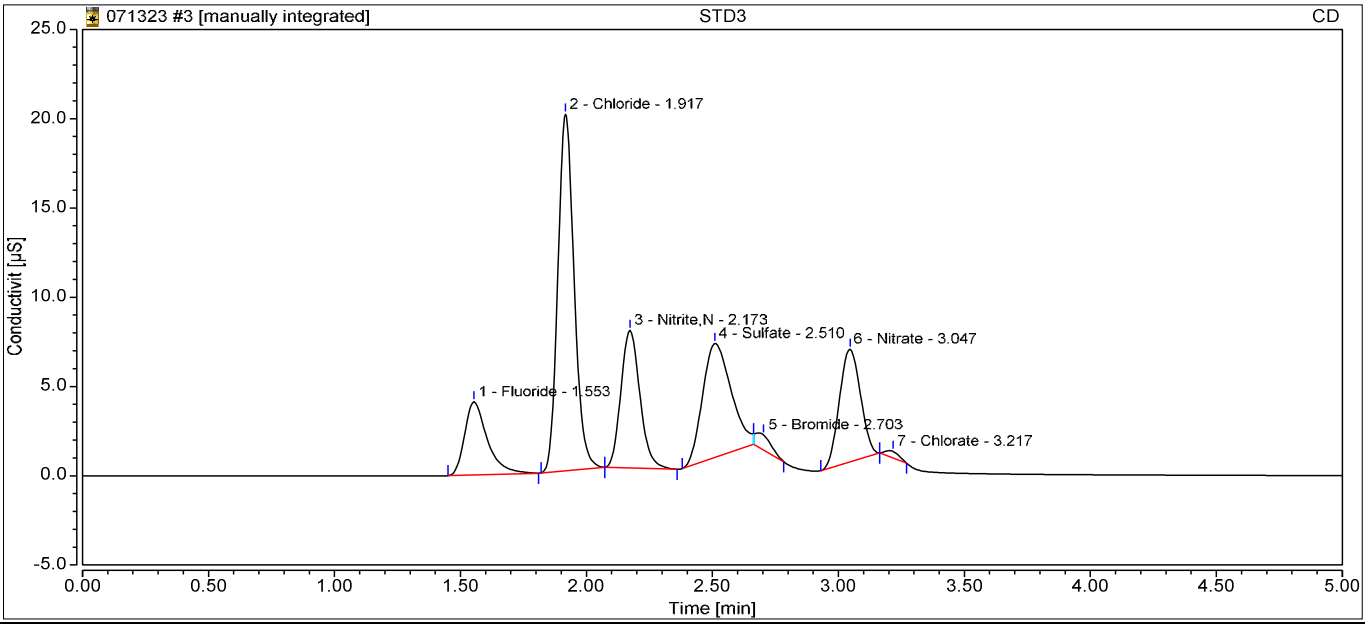


Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.54	Fluoride	BMB	0.063	0.3419	0.3419	1.0000
2	1.92	Chloride	BMB	0.255	1.8536	1.8536	1.0000
3	2.17	Nitrite,N	BMB	0.127	0.3872	0.3872	1.0000
4	2.51	Sulfate	BMB	0.184	2.2136	2.2136	1.0000
5	2.70	Bromide	BMB	0.007	0.3261	0.3261	1.0000
6	3.05	Nitrate	BMB	0.115	0.3940	0.3940	1.0000
7	3.22	Chlorate	BMB	0.005	0.4259	0.4259	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.757**		**5.94**	

3 STD3			
Sample Name:	**STD3**	*Injection Volume:*	**5.00**
Vial Number:	**RA3**	*Channel:*	**CD**
Sample Type:	**Calibration Standard**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**07/06/2023 06:56**	*Sample Weight:*	**1.0000**

Run Time:



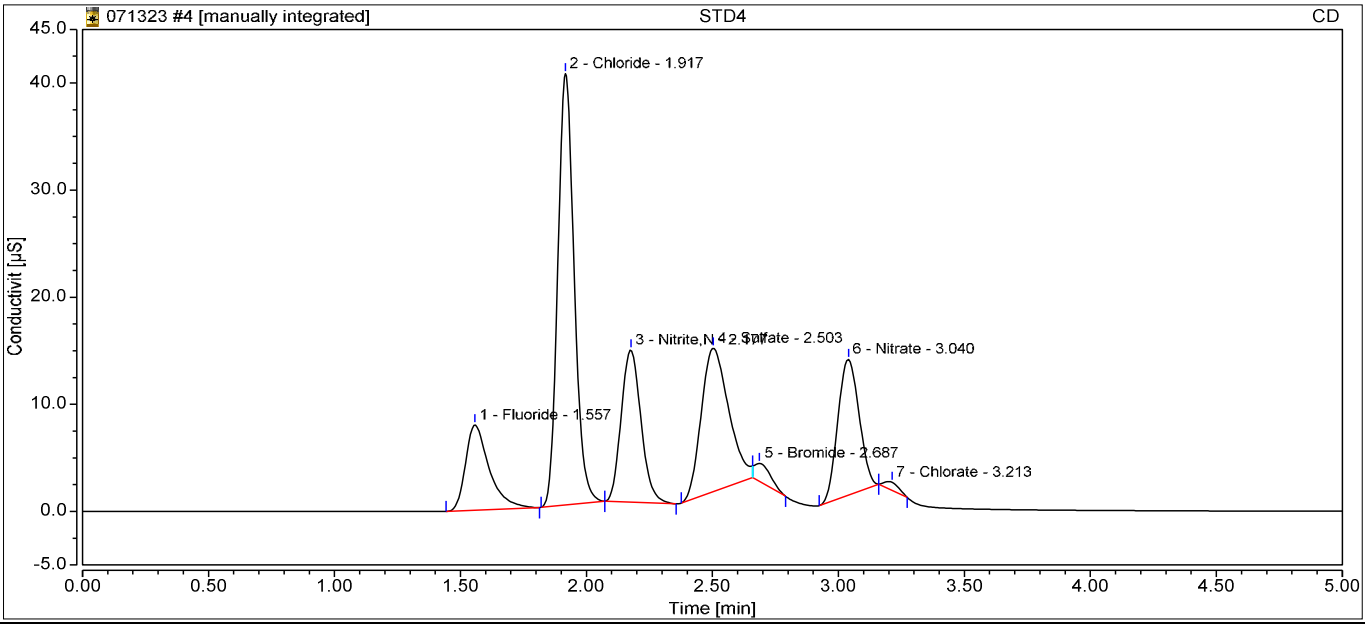
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.55	Fluoride	BMB	0.428	2.0174	2.0174	1.0000
2	1.92	Chloride	BMB	1.496	9.9564	9.9564	1.0000
3	2.17	Nitrite,N	BMB	0.675	2.0398	2.0398	1.0000
4	2.51	Sulfate	BM *	0.835	9.3752	9.3752	1.0000
5	2.70	Bromide	MB*	0.062	1.8791	1.8791	1.0000
6	3.05	Nitrate	BMb*	0.613	1.9817	1.9817	1.0000
7	3.22	Chlorate	bMB*	0.023	1.8102	1.8102	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**4.132**		**29.06**	

4 STD4

Sample Name:	**STD4**	*Injection Volume:*	**5.00**
Vial Number:	**RA4**	*Channel:*	**CD**
Sample Type:	**Calibration Standard**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**07/06/2023 07:02**	*Sample Weight:*	**1.0000**

Run Time:

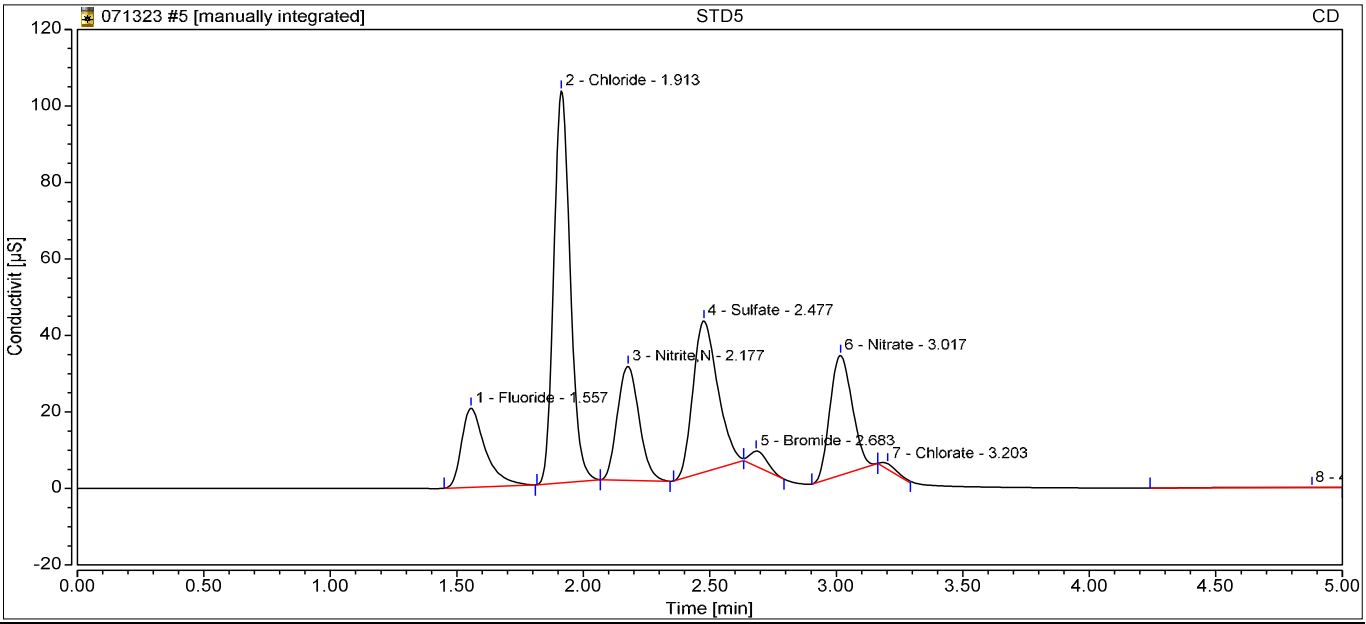


Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.56	Fluoride	BMB	0.870	4.0428	4.0428	1.0000
2	1.92	Chloride	BMB	3.034	20.0024	20.0024	1.0000
3	2.18	Nitrite,N	BMB	1.299	4.0118	4.0118	1.0000
4	2.50	Sulfate	BM *	1.688	18.7633	18.7633	1.0000
5	2.69	Bromide	MB*	0.130	3.8216	3.8216	1.0000
6	3.04	Nitrate	BMb*	1.240	3.9829	3.9829	1.0000
7	3.21	Chlorate	bMB*	0.049	4.0279	4.0279	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**8.311**		**58.65**	

5 STD5			
Sample Name:	**STD5**	*Injection Volume:*	**5.00**
Vial Number:	**RA5**	*Channel:*	**CD**
Sample Type:	**Calibration Standard**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**07/06/2023 07:08**	*Sample Weight:*	**1.0000**

Run Time:

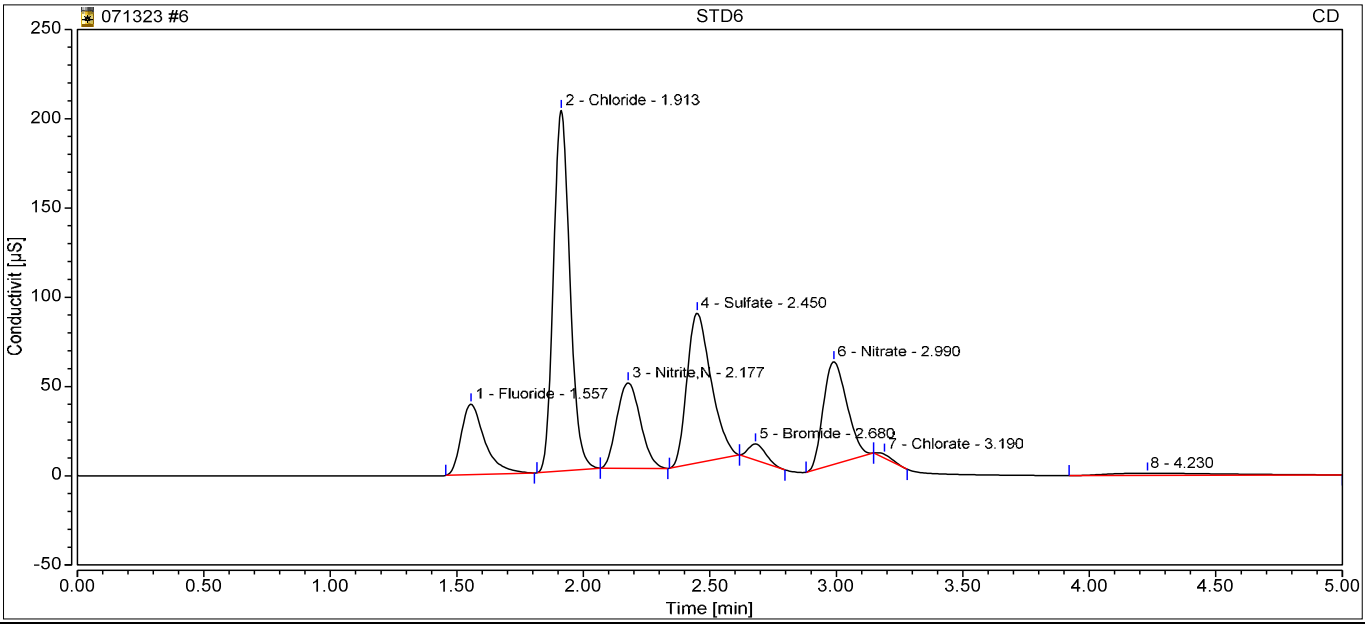


Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.56	Fluoride	BMB	2.259	10.4106	10.4106	1.0000
2	1.91	Chloride	BMB	7.720	50.6021	50.6021	1.0000
3	2.18	Nitrite,N	BMB	2.968	9.9159	9.9159	1.0000
4	2.48	Sulfate	BM *	4.473	49.3909	49.3909	1.0000
5	2.68	Bromide	MB*	0.324	9.3800	9.3800	1.0000
6	3.02	Nitrate	BMb*	3.180	10.1692	10.1692	1.0000
7	3.20	Chlorate	bM *	0.108	10.4157	10.4157	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**21.032**		**150.28**	

6	*STD6*		
Sample Name:	**STD6**	*Injection Volume:*	**5.00**
Vial Number:	**RA6**	*Channel:*	**CD**
Sample Type:	**Calibration Standard**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**07/06/2023 07:13**	*Sample Weight:*	**1.0000**

Run Time:



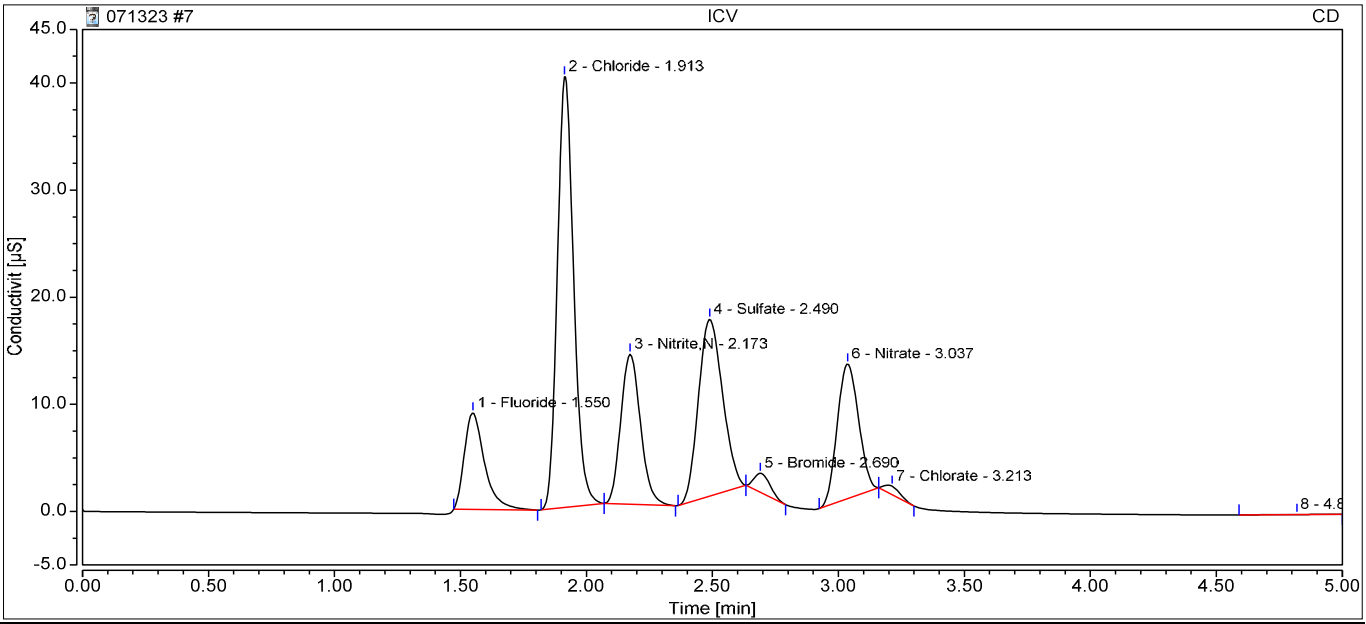
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.56	Fluoride	BMB	4.258	19.5766	19.5766	1.0000
2	1.91	Chloride	BMB	15.216	99.5506	99.5506	1.0000
3	2.18	Nitrite,N	BMB	5.143	20.0517	20.0517	1.0000
4	2.45	Sulfate	BMB	9.278	102.2534	102.2534	1.0000
5	2.68	Bromide	BMB	0.730	20.9628	20.9628	1.0000
6	2.99	Nitrate	BMB	6.221	19.8704	19.8704	1.0000
7	3.19	Chlorate	BMB	0.149	19.1935	19.1935	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**40.994**		**301.46**	

7 ICV

Sample Name:	**ICV**	*Injection Volume:*	**5.00**
Vial Number:	**RA7**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**07/06/2023 07:19**	*Sample Weight:*	**1.0000**

Run Time:



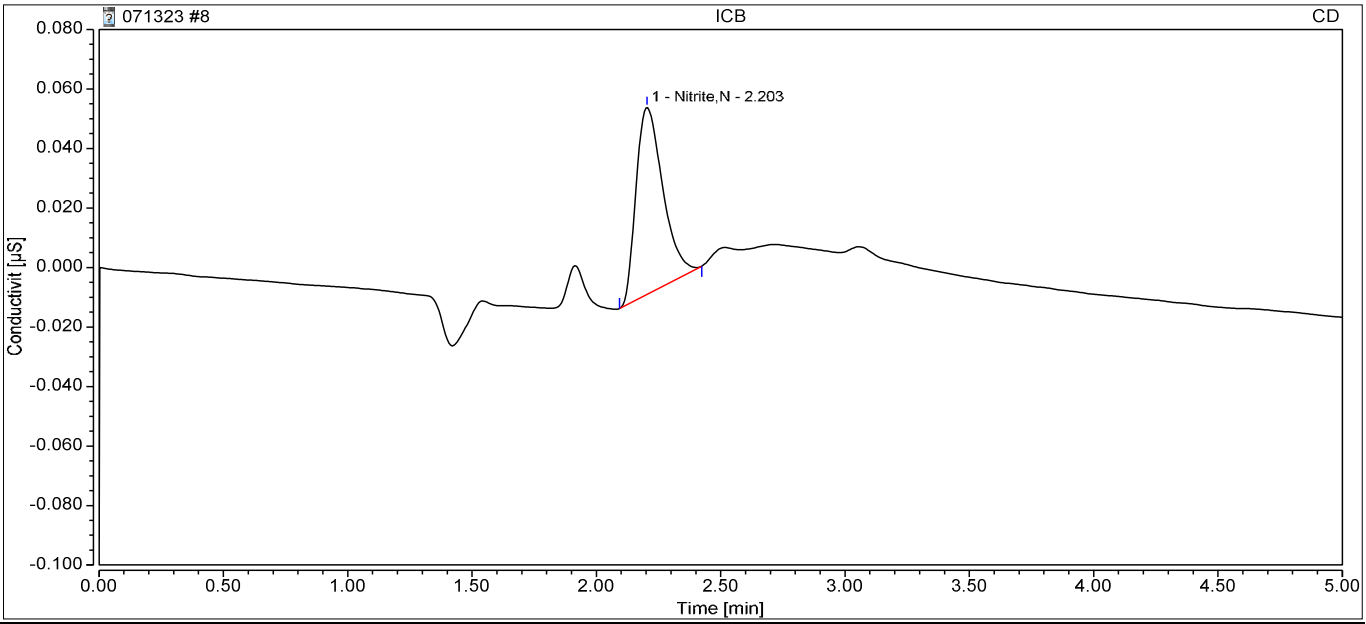
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.55	Fluoride	BMB	0.840	3.9052	3.9052	1.0000
2	1.91	Chloride	BMB	3.009	19.8372	19.8372	1.0000
3	2.17	Nitrite,N	BMB	1.272	3.9248	3.9248	1.0000
4	2.49	Sulfate	BMB	1.829	20.3121	20.3121	1.0000
5	2.69	Bromide	BMB	0.134	3.9406	3.9406	1.0000
6	3.04	Nitrate	BMB	1.230	3.9518	3.9518	1.0000
7	3.21	Chlorate	BMB	0.056	4.5813	4.5813	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**8.370**		**60.45**	

8 ICB

Sample Name:	**ICB**	*Injection Volume:*	**5.00**
Vial Number:	**RA8**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**07/06/2023 07:37**	*Sample Weight:*	**1.0000**

Run Time:



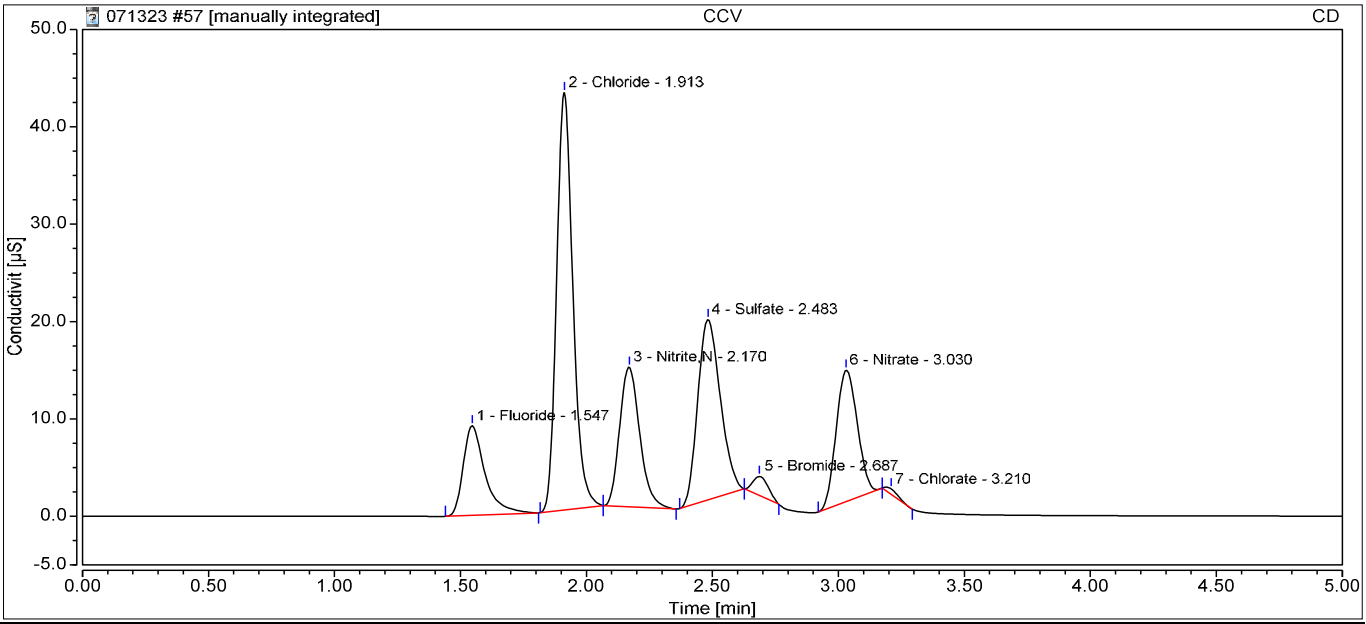
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	1.0000
1	2.20	Nitrite,N	BMB	0.008	0.0364	0.0364	1.0000
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.008**		**0.04**	

57 CCV

Sample Name:	**CCV**	*Injection Volume:*	**5.00**
Vial Number:	**G1**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**07/13/2023 21:29**	*Sample Weight:*	**1.0000**

Run Time:



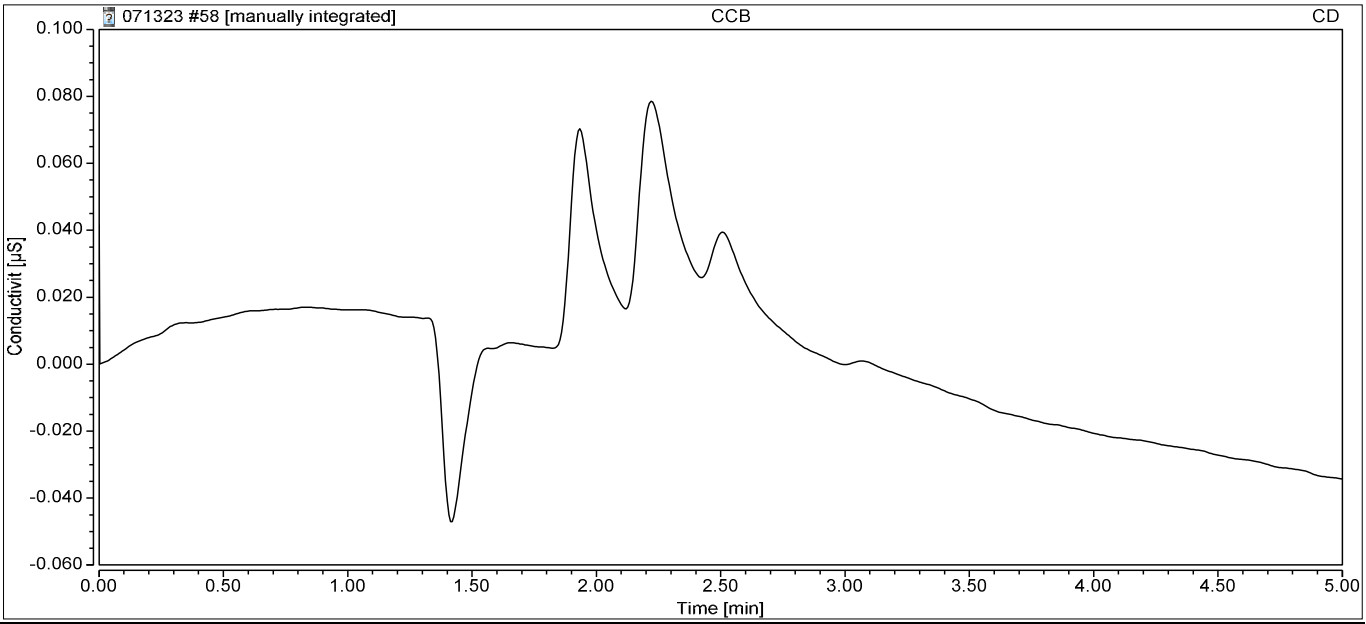
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.55	Fluoride	BMB	0.923	4.2871	4.2871	1.0000
2	1.91	Chloride	BMB	3.202	21.0979	21.0979	1.0000
3	2.17	Nitrite,N	BMB	1.326	4.0997	4.0997	1.0000
4	2.48	Sulfate	BMb*	1.923	21.3479	21.3479	1.0000
5	2.69	Bromide	bMB*	0.142	4.1741	4.1741	1.0000
6	3.03	Nitrate	BMB	1.309	4.2036	4.2036	1.0000
7	3.21	Chlorate	BMB	0.032	2.4867	2.4867	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**8.858**		**61.70**	

58 CCB

Sample Name:	**CCB**	*Injection Volume:*	**5.00**
Vial Number:	**R6**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**07/13/2023 21:47**	*Sample Weight:*	**1.0000**

Run Time:



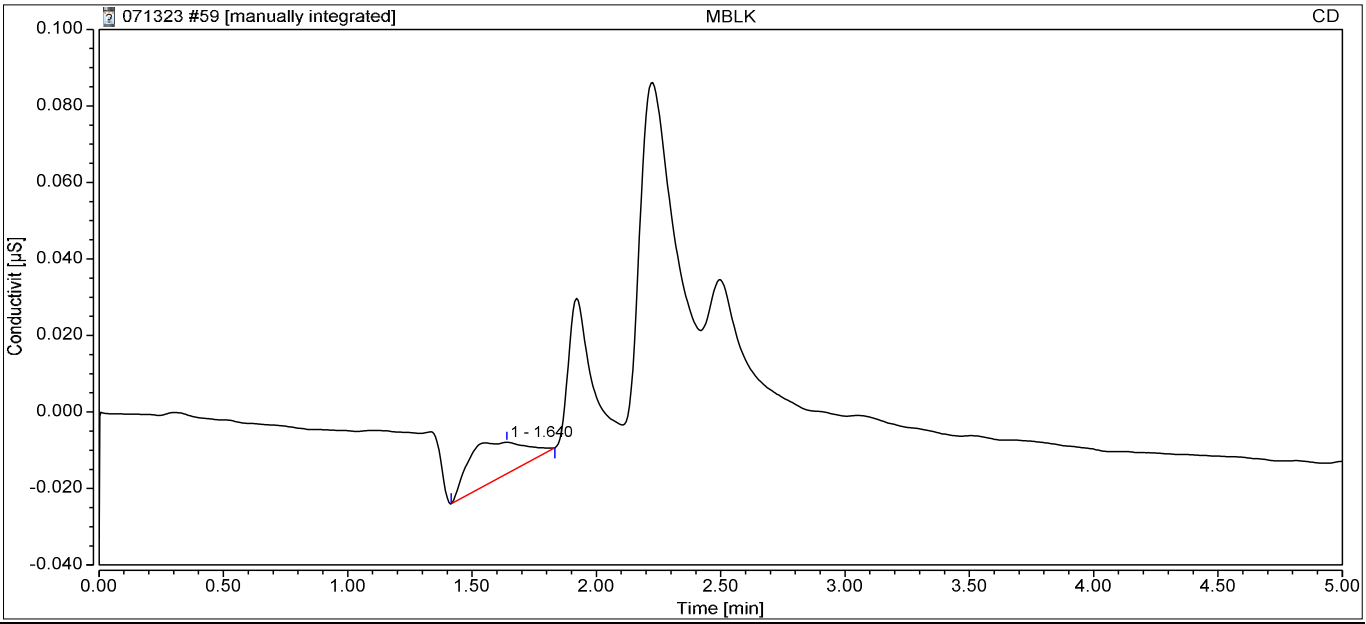
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.000**		**0.00**	

59 MBLK

Sample Name:	**MBLK**	*Injection Volume:*	**5.00**
Vial Number:	**R5**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**07/13/2023 21:58**	*Sample Weight:*	**1.0000**

Run Time:



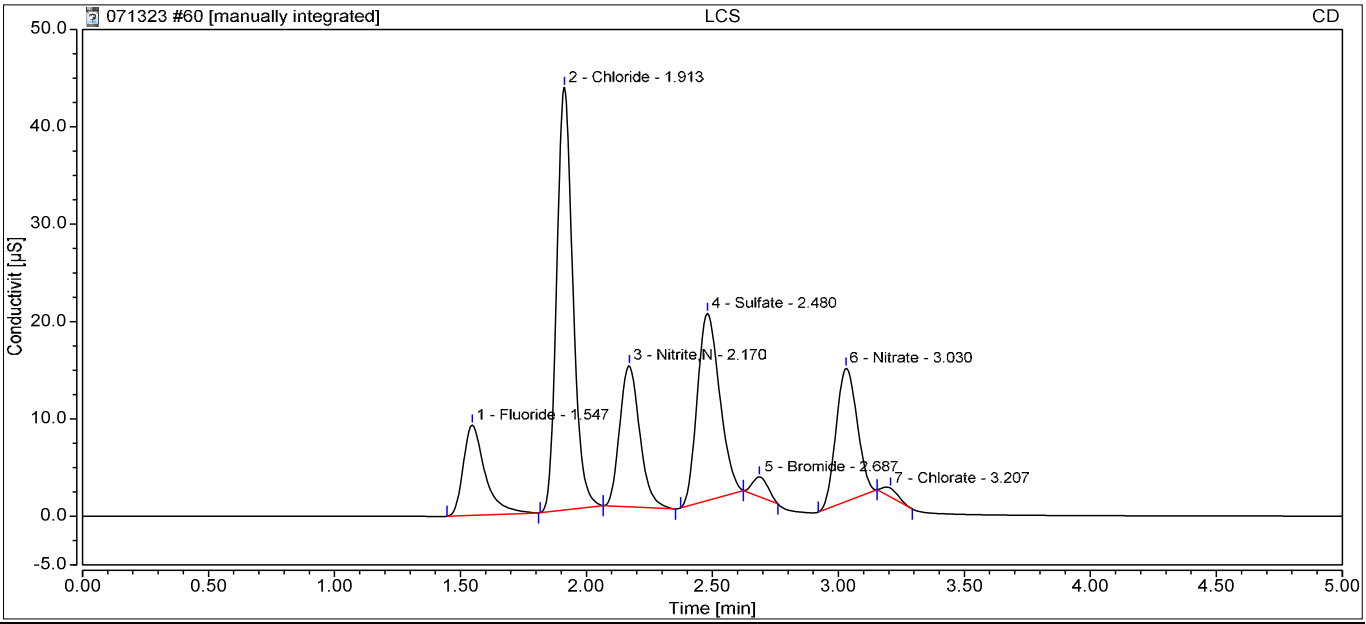
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.000**		**0.00**	

60 LCS

Sample Name:	**LCS**	*Injection Volume:*	**5.00**
Vial Number:	**R2**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**07/13/2023 22:04**	*Sample Weight:*	**1.0000**

Run Time:



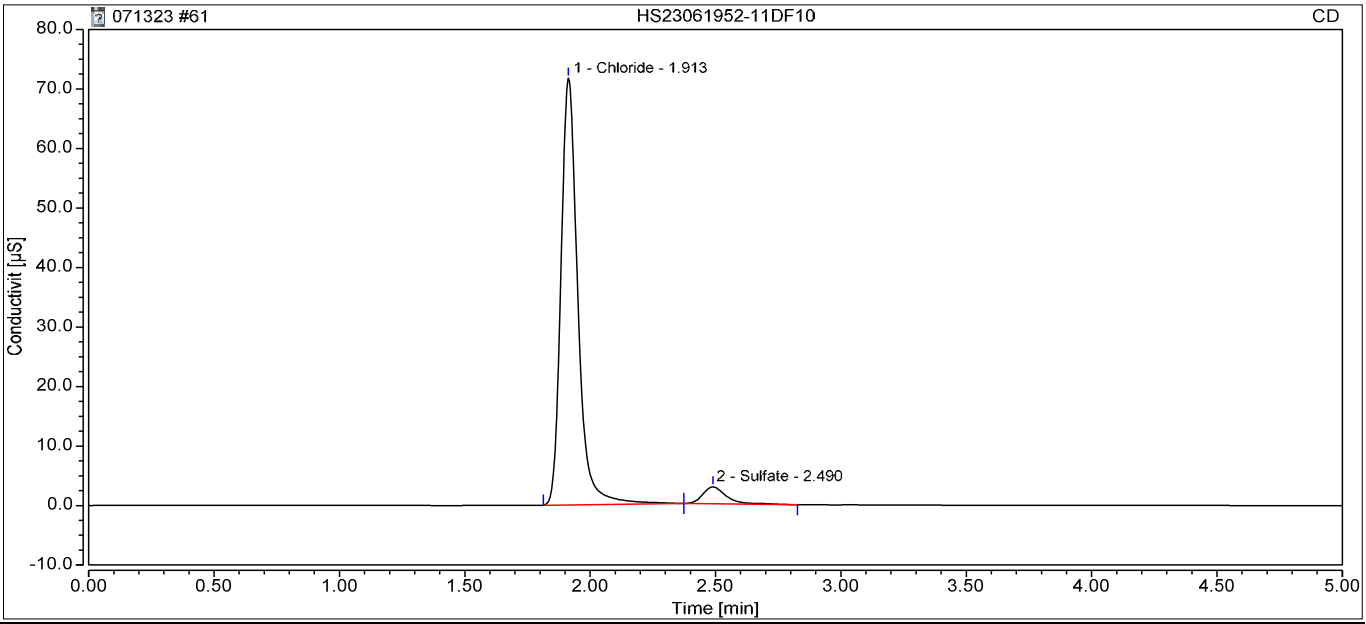
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.55	Fluoride	BMB	0.930	4.3183	4.3183	1.0000
2	1.91	Chloride	BMB	3.229	21.2774	21.2774	1.0000
3	2.17	Nitrite,N	BMB	1.339	4.1410	4.1410	1.0000
4	2.48	Sulfate	BMb*	1.979	21.9555	21.9555	1.0000
5	2.69	Bromide	bMB*	0.146	4.3023	4.3023	1.0000
6	3.03	Nitrate	BMB	1.325	4.2537	4.2537	1.0000
7	3.21	Chlorate	BMB	0.064	5.3934	5.3934	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**9.013**		**65.64**	

61 HS23061952-11DF10

Sample Name:	**HS23061952-11DF10**	*Injection Volume:*	**5.00**
Vial Number:	**RE5**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**10.0000**
Recording Time:	**07/13/2023 22:16**	*Sample Weight:*	**1.0000**

Run Time:



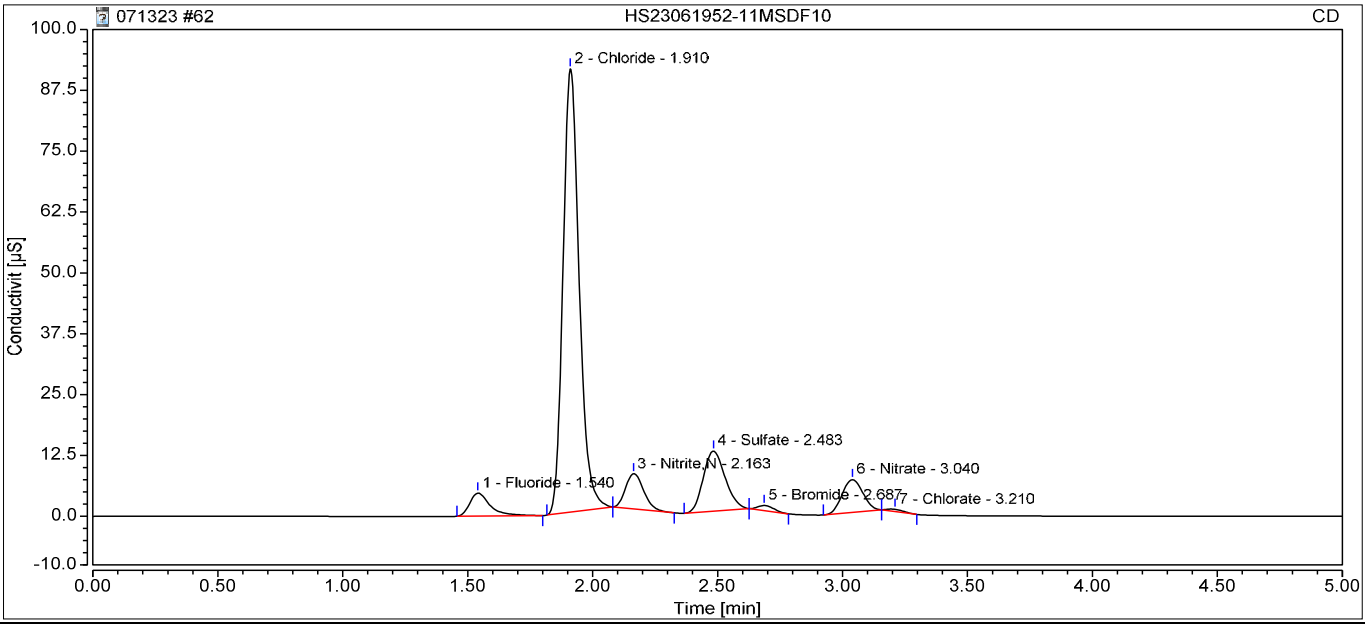
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	10.0000
1	1.91	Chloride	BMB	5.574	36.5864	365.8642	10.0000
n.a.	n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	10.0000
2	2.49	Sulfate	BMB	0.310	3.6051	36.0514	10.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	10.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	10.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	10.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	10.0000
Total:			**0.000**	**5.884**		**401.92**	

62 HS23061952-11MSDF10

Sample Name:	**HS23061952-11MSDF10**	*Injection Volume:*	**5.00**
Vial Number:	**RE6**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**10.0000**
Recording Time:	**07/13/2023 22:22**	*Sample Weight:*	**1.0000**

Run Time:



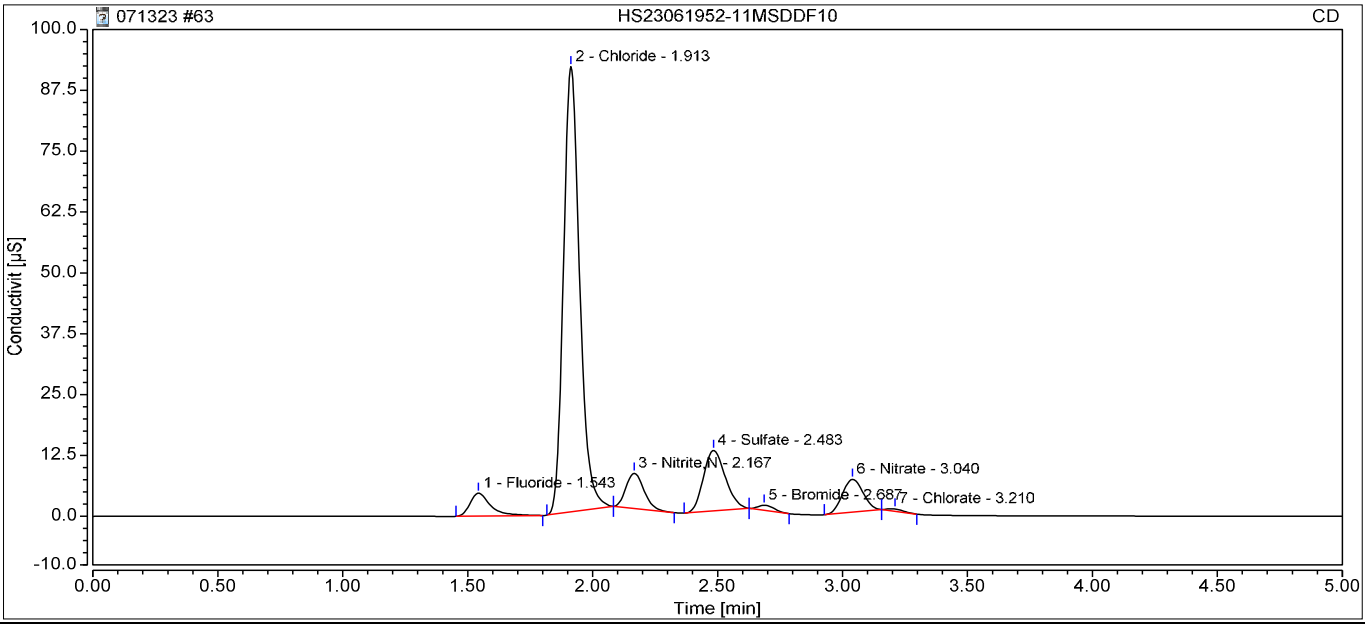
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.54	Fluoride	BMB	0.449	2.1112	21.1116	10.0000
2	1.91	Chloride	BMB	6.832	44.8047	448.0468	10.0000
3	2.16	Nitrite,N	BMB	0.611	1.8408	18.4082	10.0000
4	2.48	Sulfate	BMB	1.256	14.0040	140.0398	10.0000
5	2.69	Bromide	BMB	0.079	2.3681	23.6807	10.0000
6	3.04	Nitrate	BMB	0.645	2.0846	20.8455	10.0000
7	3.21	Chlorate	BMB	0.032	2.5287	25.2873	10.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	10.0000
Total:			**0.000**	**9.903**		**697.42**	

63 HS23061952-11MSDDF10

Sample Name:	**HS23061952-11MSDDF10**	*Injection Volume:*	**5.00**
Vial Number:	**RE7**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**10.0000**
Recording Time:	**07/13/2023 22:27**	*Sample Weight:*	**1.0000**

Run Time:

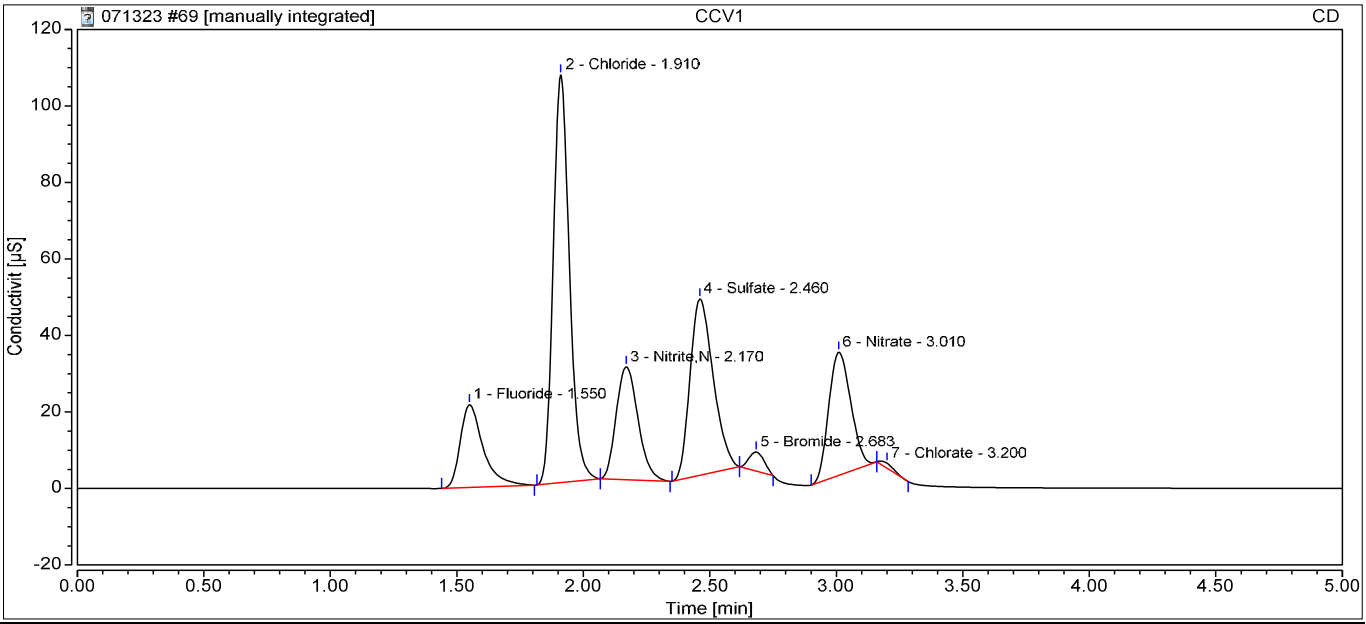


Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.54	Fluoride	BMB	0.449	2.1109	21.1089	10.0000
2	1.91	Chloride	BMB	6.866	45.0221	450.2206	10.0000
3	2.17	Nitrite,N	BMB	0.607	1.8293	18.2925	10.0000
4	2.48	Sulfate	BMB	1.266	14.1140	141.1400	10.0000
5	2.69	Bromide	BMB	0.079	2.3855	23.8546	10.0000
6	3.04	Nitrate	BMB	0.644	2.0827	20.8274	10.0000
7	3.21	Chlorate	BMB	0.033	2.5810	25.8102	10.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	10.0000
Total:			**0.000**	**9.943**		**701.25**	

69 CCV1			
Sample Name:	**CCV1**	*Injection Volume:*	**5.00**
Vial Number:	**R3**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**07/13/2023 23:08**	*Sample Weight:*	**1.0000**

Run Time:



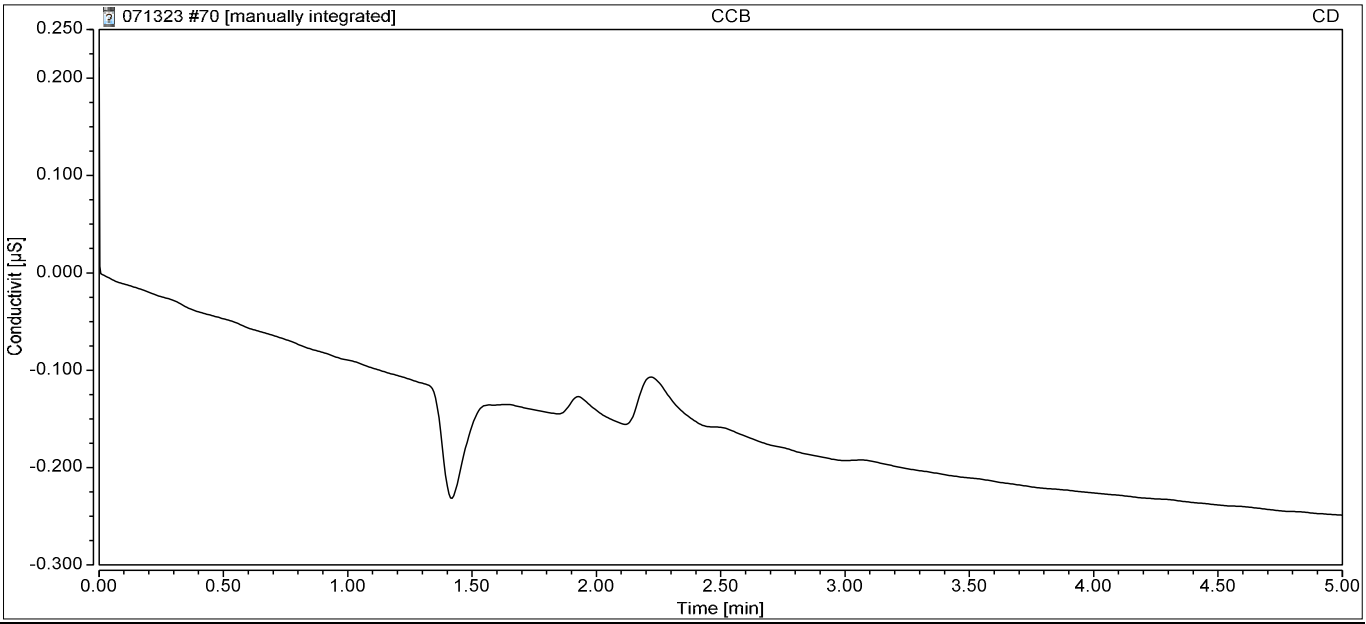
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.55	Fluoride	BMB	2.277	10.4922	10.4922	1.0000
2	1.91	Chloride	BMB	7.917	51.8854	51.8854	1.0000
3	2.17	Nitrite,N	BMB	2.957	9.8730	9.8730	1.0000
4	2.46	Sulfate	BMb*	4.898	54.0684	54.0684	1.0000
5	2.68	Bromide	bMB*	0.351	10.1345	10.1345	1.0000
6	3.01	Nitrate	BMB	3.243	10.3710	10.3710	1.0000
7	3.20	Chlorate	BMB	0.078	6.7697	6.7697	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**21.720**		**153.59**	

70 CCB

Sample Name:	**CCB**	*Injection Volume:*	**5.00**
Vial Number:	**R7**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**07/13/2023 23:20**	*Sample Weight:*	**1.0000**

Run Time:



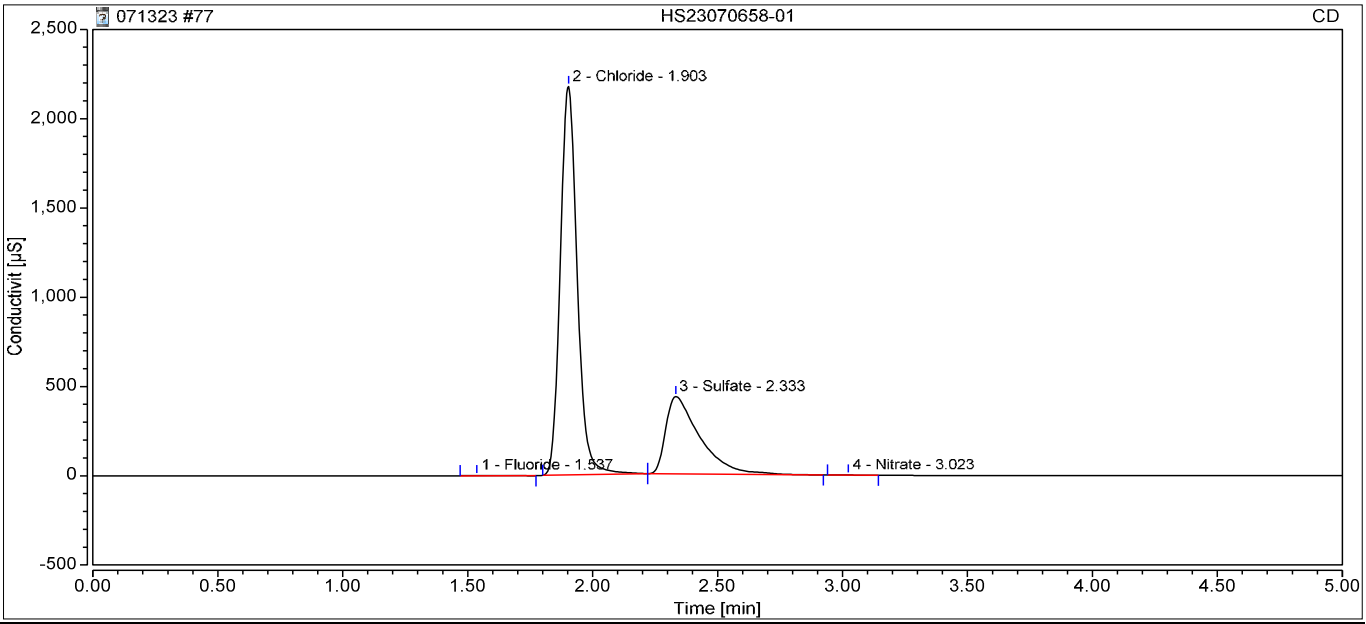
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.000**		**0.00**	

77 HS23070658-01

Sample Name:	**HS23070658-01**	*Injection Volume:*	**5.00**
Vial Number:	**GB3**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**07/14/2023 00:06**	*Sample Weight:*	**1.0000**

Run Time:



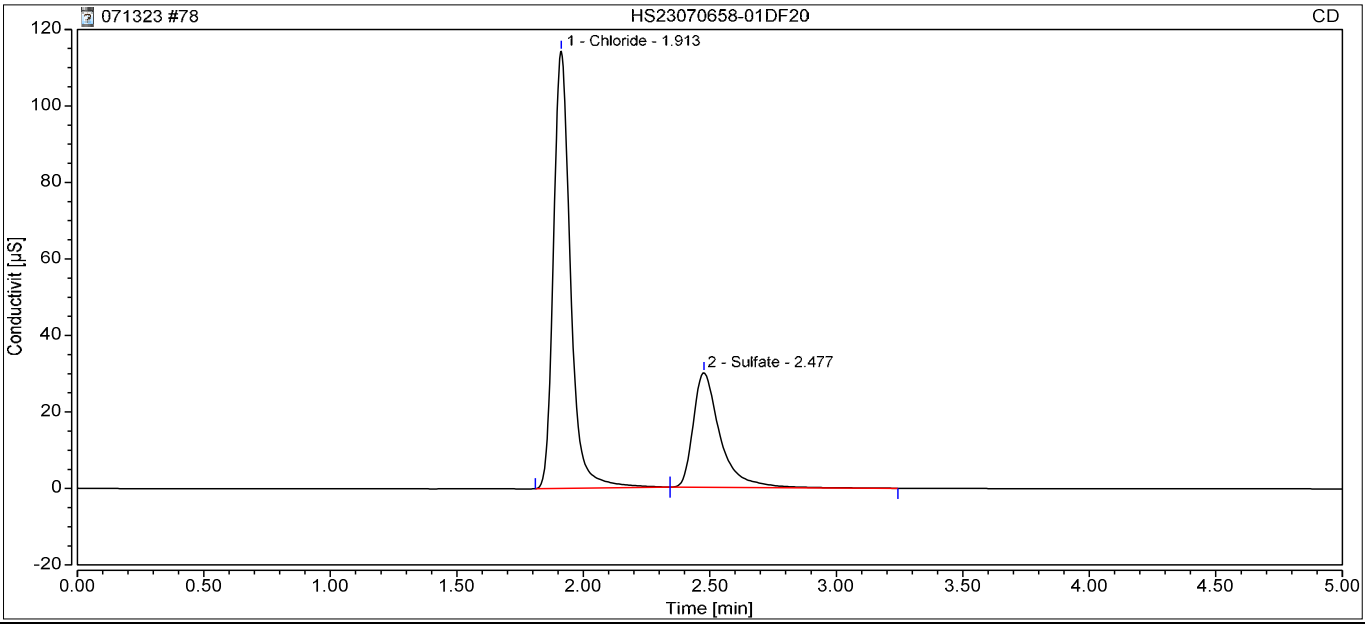
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.54	Fluoride	BMB	0.058	0.3204	0.3204	1.0000
2	1.90	Chloride	BMB	170.726	1115.0681	1115.0681	1.0000
n.a.	n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	1.0000
3	2.33	Sulfate	BMB	68.224	750.6901	750.6901	1.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	1.0000
4	3.02	Nitrate	BMB	0.018	0.0836	0.0836	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**239.026**		**1866.16**	

78 HS23070658-01DF20

Sample Name:	**HS23070658-01DF20**	*Injection Volume:*	**5.00**
Vial Number:	**GB4**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**20.0000**
Recording Time:	**07/14/2023 00:12**	*Sample Weight:*	**1.0000**

Run Time:



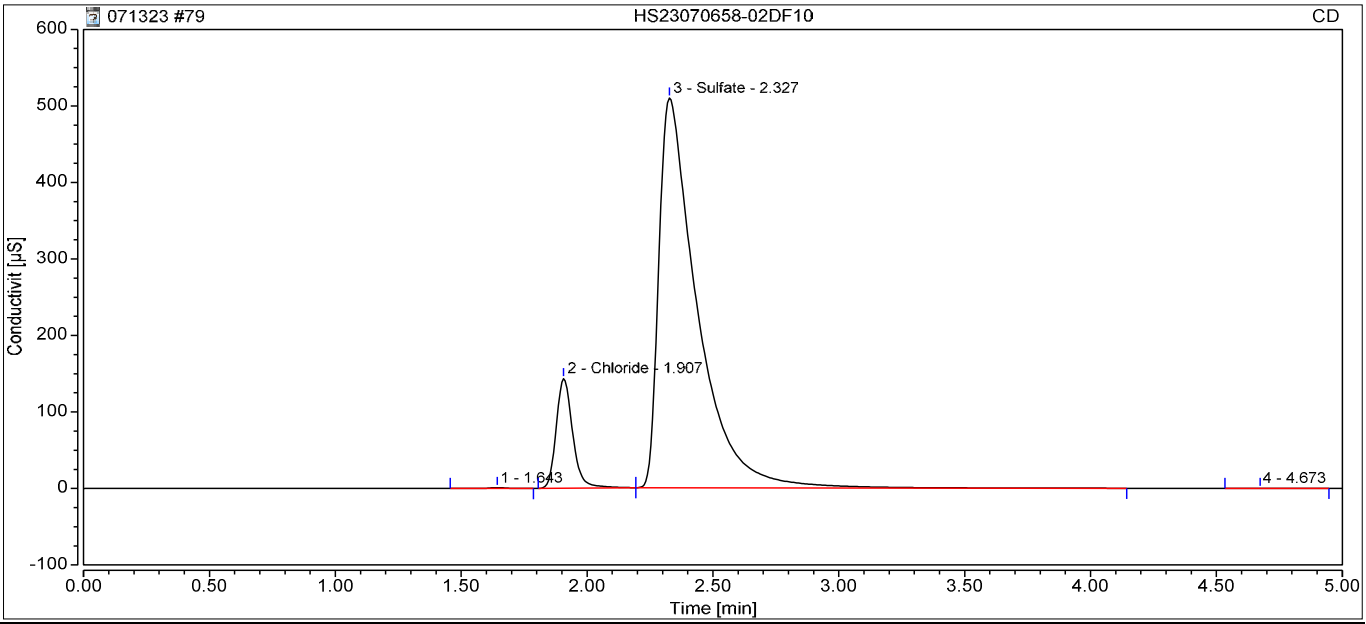
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	20.0000
1	1.91	Chloride	BMB	8.927	58.4847	1169.6946	20.0000
n.a.	n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	20.0000
2	2.48	Sulfate	BMB	3.677	40.6423	812.8462	20.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	20.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	20.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	20.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	20.0000
Total:			**0.000**	**12.604**		**1982.54**	

79 HS23070658-02DF10

Sample Name:	**HS23070658-02DF10**	*Injection Volume:*	**5.00**
Vial Number:	**GB5**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**10.0000**
Recording Time:	**07/14/2023 00:18**	*Sample Weight:*	**1.0000**

Run Time:



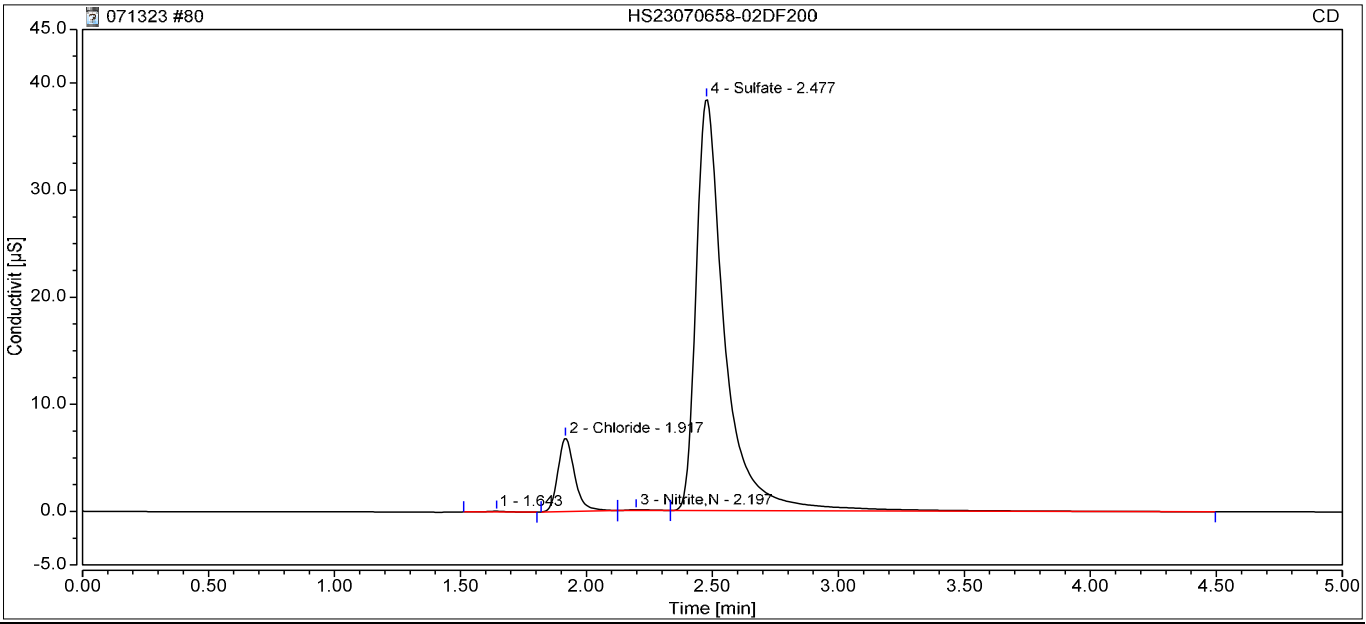
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	10.0000
2	1.91	Chloride	BMB	10.872	71.1839	711.8392	10.0000
n.a.	n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	10.0000
3	2.33	Sulfate	BMB	89.672	986.6235	9866.2350	10.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	10.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	10.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	10.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	10.0000
Total:			**0.000**	**100.544**		**10578.07**	

80 HS23070658-02DF200

Sample Name:	**HS23070658-02DF200**	*Injection Volume:*	**5.00**
Vial Number:	**GB6**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**200.0000**
Recording Time:	**07/14/2023 00:24**	*Sample Weight:*	**1.0000**

Run Time:



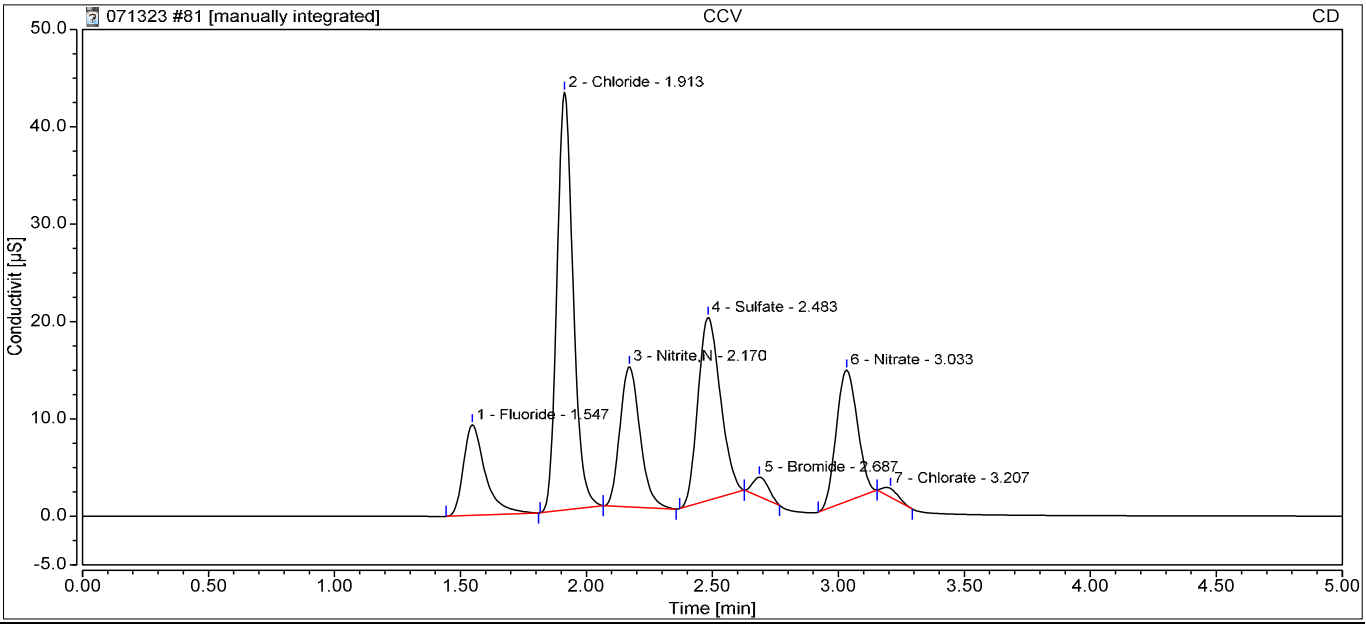
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	200.0000
2	1.92	Chloride	BMB	0.525	3.6163	723.2632	200.0000
3	2.20	Nitrite,N	BMB	0.008	0.0368	7.3594	200.0000
4	2.48	Sulfate	BMB	5.077	56.0392	11207.8466	200.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	200.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	200.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	200.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	200.0000
Total:			**0.000**	**5.610**		**11938.47**	

81 CCV

Sample Name:	**CCV**	*Injection Volume:*	**5.00**
Vial Number:	**R1**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**07/14/2023 00:41**	*Sample Weight:*	**1.0000**

Run Time:



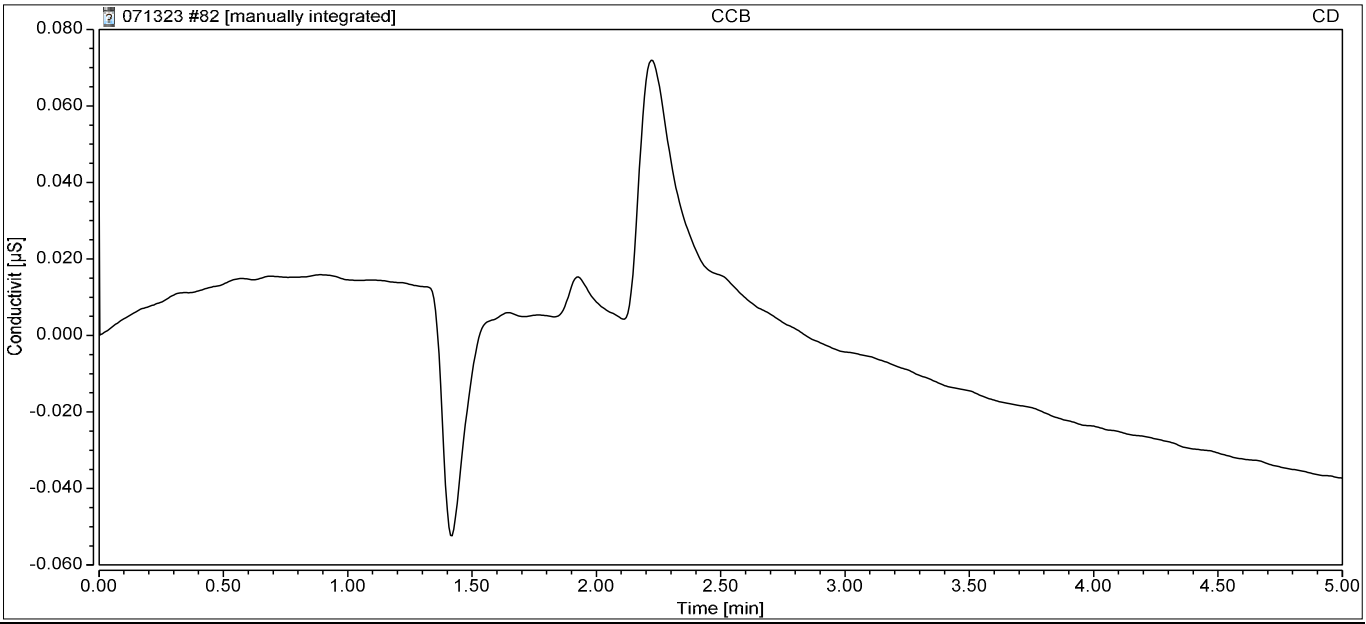
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.55	Fluoride	BMB	0.931	4.3207	4.3207	1.0000
2	1.91	Chloride	BMB	3.191	21.0231	21.0231	1.0000
3	2.17	Nitrite,N	BMB	1.330	4.1135	4.1135	1.0000
4	2.48	Sulfate	BMb*	1.942	21.5562	21.5562	1.0000
5	2.69	Bromide	bMB*	0.147	4.3154	4.3154	1.0000
6	3.03	Nitrate	BMB	1.308	4.1993	4.1993	1.0000
7	3.21	Chlorate	BMB	0.064	5.4072	5.4072	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**8.913**		**64.94**	

82 CCB

Sample Name:	**CCB**	*Injection Volume:*	**5.00**
Vial Number:	**R6**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**07/14/2023 00:58**	*Sample Weight:*	**1.0000**

Run Time:



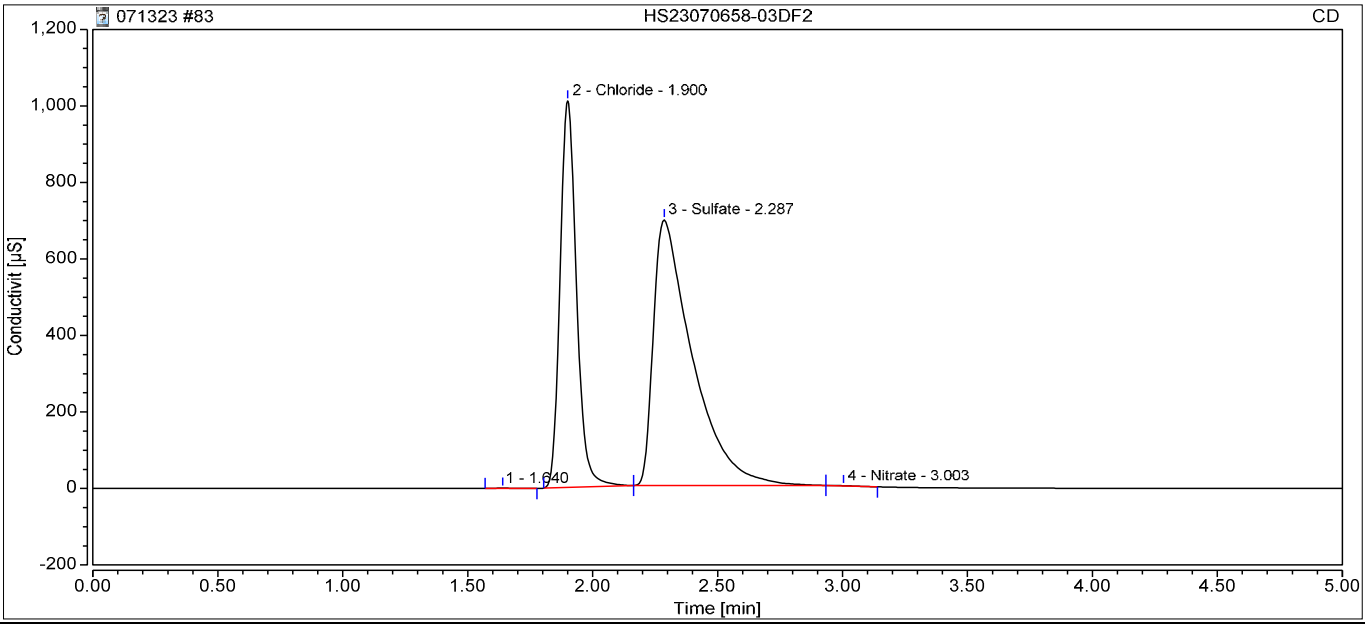
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.000**		**0.00**	

83 HS23070658-03DF2

Sample Name:	**HS23070658-03DF2**	*Injection Volume:*	**5.00**
Vial Number:	**GB7**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**2.0000**
Recording Time:	**07/14/2023 01:10**	*Sample Weight:*	**1.0000**

Run Time:



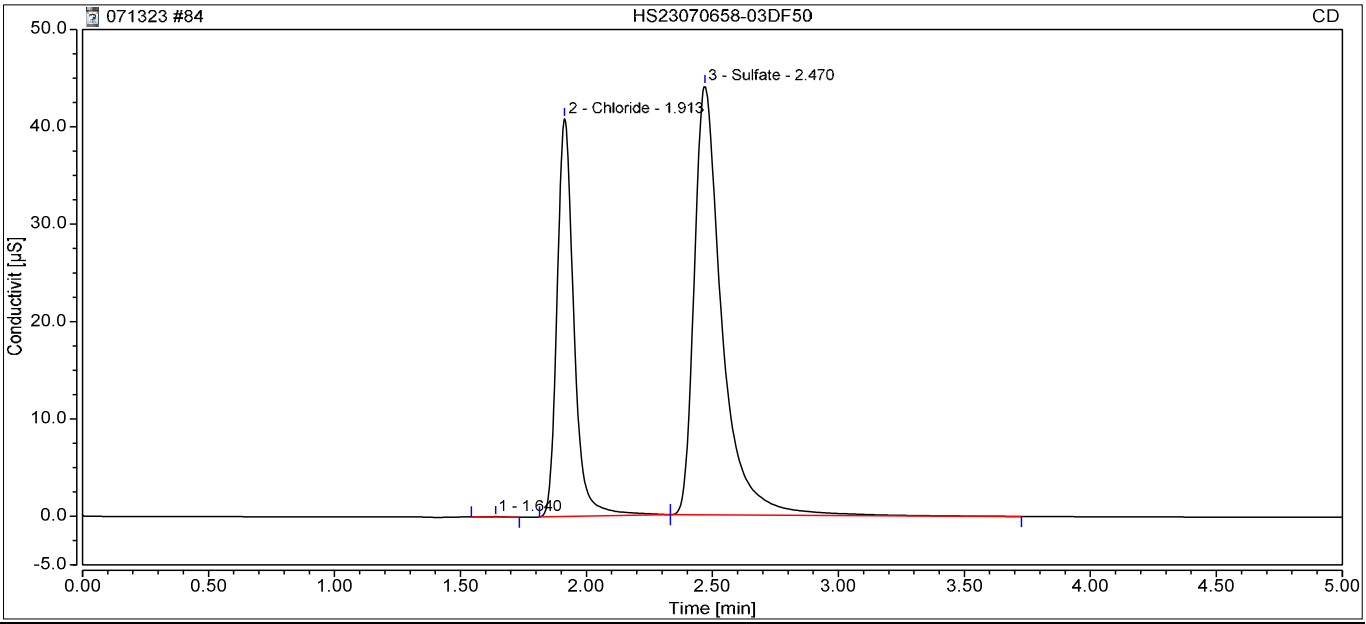
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	2.0000
2	1.90	Chloride	BMB	76.943	502.6445	1005.2889	2.0000
n.a.	n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	2.0000
3	2.29	Sulfate	BMB	125.408	1379.7426	2759.4853	2.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	2.0000
4	3.00	Nitrate	BMB	0.059	0.2164	0.4328	2.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	2.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	2.0000
Total:			**0.000**	**202.411**		**3765.21**	

84 HS23070658-03DF50

Sample Name:	**HS23070658-03DF50**	*Injection Volume:*	**5.00**
Vial Number:	**GB8**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**50.0000**
Recording Time:	**07/14/2023 01:16**	*Sample Weight:*	**1.0000**

Run Time:



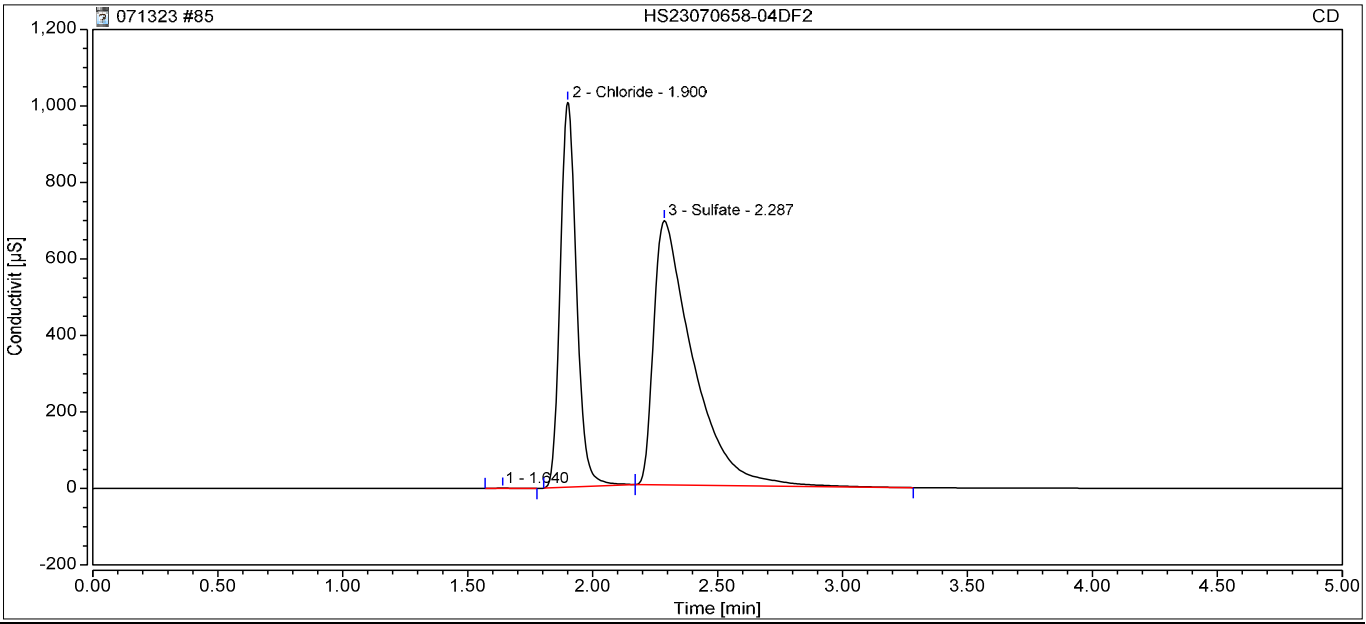
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	50.0000
2	1.91	Chloride	BMB	3.172	20.9048	1045.2400	50.0000
n.a.	n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	50.0000
3	2.47	Sulfate	BMB	5.607	61.8739	3093.6931	50.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	50.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	50.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	50.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	50.0000
Total:			**0.000**	**8.780**		**4138.93**	

85 HS23070658-04DF2

Sample Name:	**HS23070658-04DF2**	*Injection Volume:*	**5.00**
Vial Number:	**GC1**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**2.0000**
Recording Time:	**07/14/2023 01:22**	*Sample Weight:*	**1.0000**

Run Time:



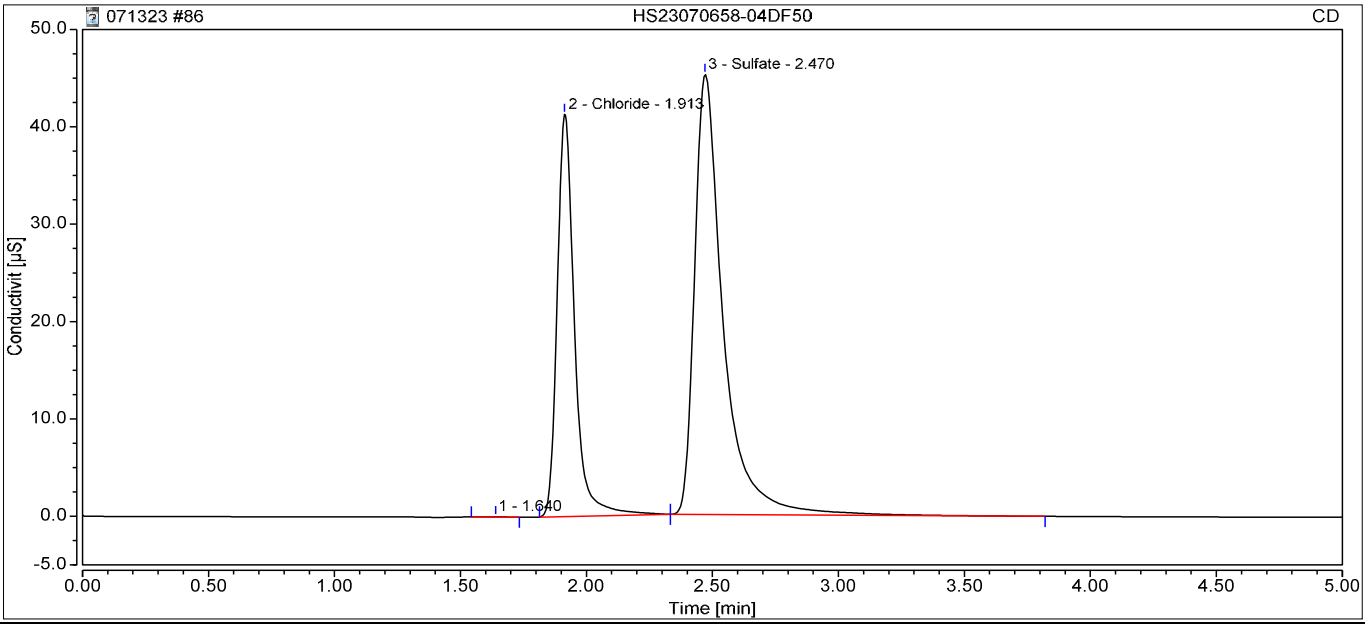
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	2.0000
2	1.90	Chloride	BMB	76.358	498.8247	997.6494	2.0000
n.a.	n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	2.0000
3	2.29	Sulfate	BMB	125.516	1380.9243	2761.8487	2.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	2.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	2.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	2.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	2.0000
Total:			**0.000**	**201.874**		**3759.50**	

86 HS23070658-04DF50

Sample Name:	**HS23070658-04DF50**	*Injection Volume:*	**5.00**
Vial Number:	**GC2**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**50.0000**
Recording Time:	**07/14/2023 01:27**	*Sample Weight:*	**1.0000**

Run Time:



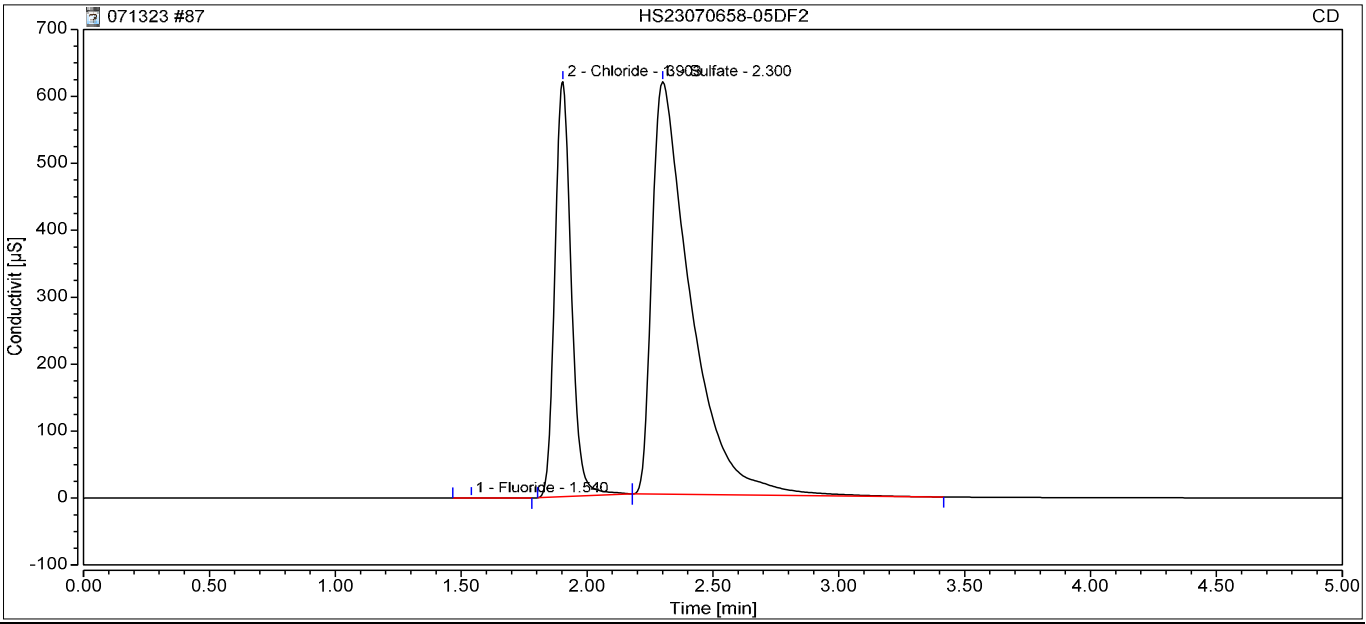
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	50.0000
2	1.91	Chloride	BMB	3.292	21.6828	1084.1407	50.0000
n.a.	n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	50.0000
3	2.47	Sulfate	BMB	5.959	65.7414	3287.0680	50.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	50.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	50.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	50.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	50.0000
Total:			**0.000**	**9.250**		**4371.21**	

87 HS23070658-05DF2

Sample Name:	**HS23070658-05DF2**	*Injection Volume:*	**5.00**
Vial Number:	**GC3**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**2.0000**
Recording Time:	**07/14/2023 01:33**	*Sample Weight:*	**1.0000**

Run Time:



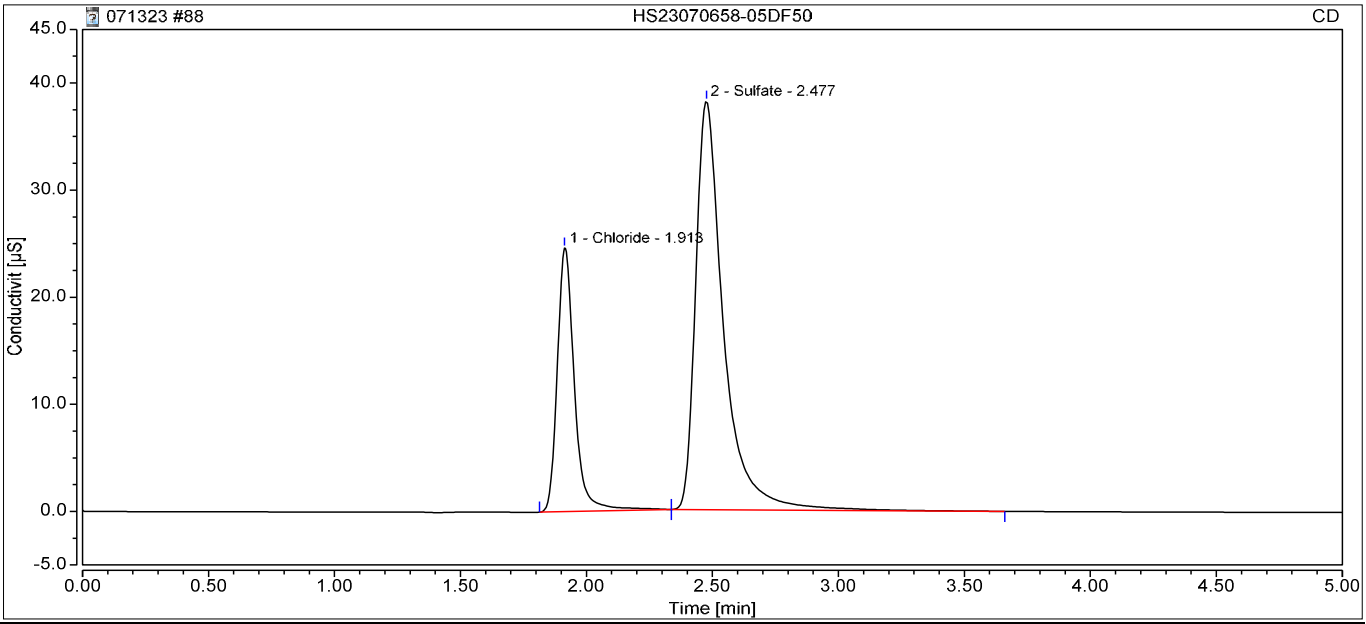
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.54	Fluoride	BMB	0.029	0.1882	0.3765	2.0000
2	1.90	Chloride	BMB	46.971	306.9200	613.8400	2.0000
n.a.	n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	2.0000
3	2.30	Sulfate	BMB	109.578	1205.6001	2411.2001	2.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	2.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	2.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	2.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	2.0000
Total:			**0.000**	**156.578**		**3025.42**	

88 HS23070658-05DF50

Sample Name:	**HS23070658-05DF50**	*Injection Volume:*	**5.00**
Vial Number:	**GC4**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**50.0000**
Recording Time:	**07/14/2023 01:39**	*Sample Weight:*	**1.0000**

Run Time:



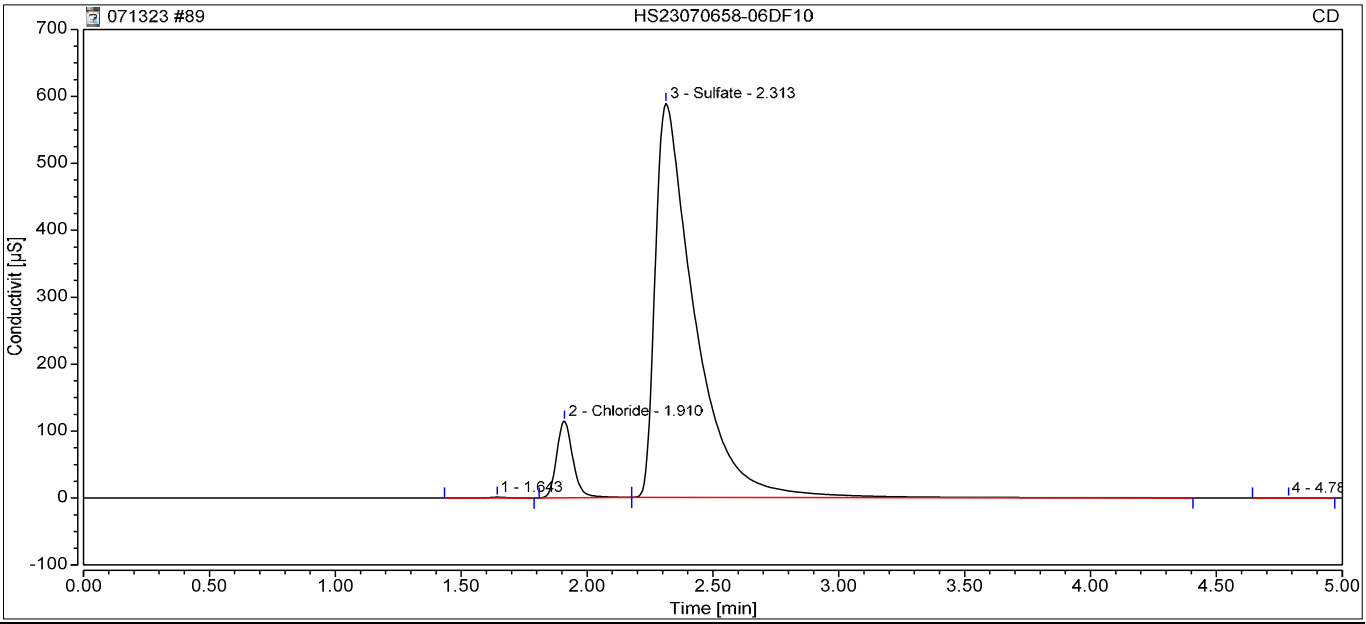
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	50.0000
1	1.91	Chloride	BMB	1.942	12.8673	643.3642	50.0000
n.a.	n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	50.0000
2	2.48	Sulfate	BMB	4.896	54.0503	2702.5133	50.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	50.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	50.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	50.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	50.0000
Total:			**0.000**	**6.838**		**3345.88**	

89 HS23070658-06DF10

Sample Name:	**HS23070658-06DF10**	*Injection Volume:*	**5.00**
Vial Number:	**GC5**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**10.0000**
Recording Time:	**07/14/2023 01:45**	*Sample Weight:*	**1.0000**

Run Time:



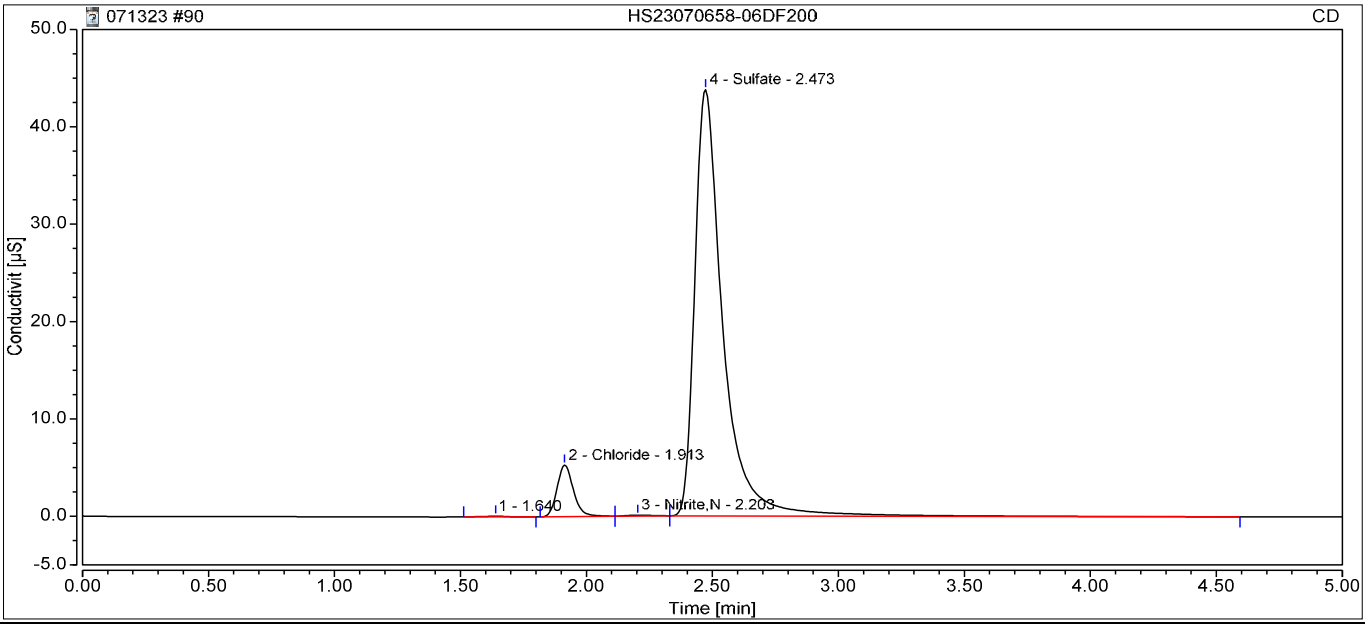
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	10.0000
2	1.91	Chloride	BMB	8.587	56.2653	562.6533	10.0000
n.a.	n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	10.0000
3	2.31	Sulfate	BMB	106.594	1172.7766	11727.7660	10.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	10.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	10.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	10.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	10.0000
Total:			**0.000**	**115.181**		**12290.42**	

90 HS23070658-06DF200

Sample Name:	**HS23070658-06DF200**	*Injection Volume:*	**5.00**
Vial Number:	**GC6**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**200.0000**
Recording Time:	**07/14/2023 01:51**	*Sample Weight:*	**1.0000**

Run Time:

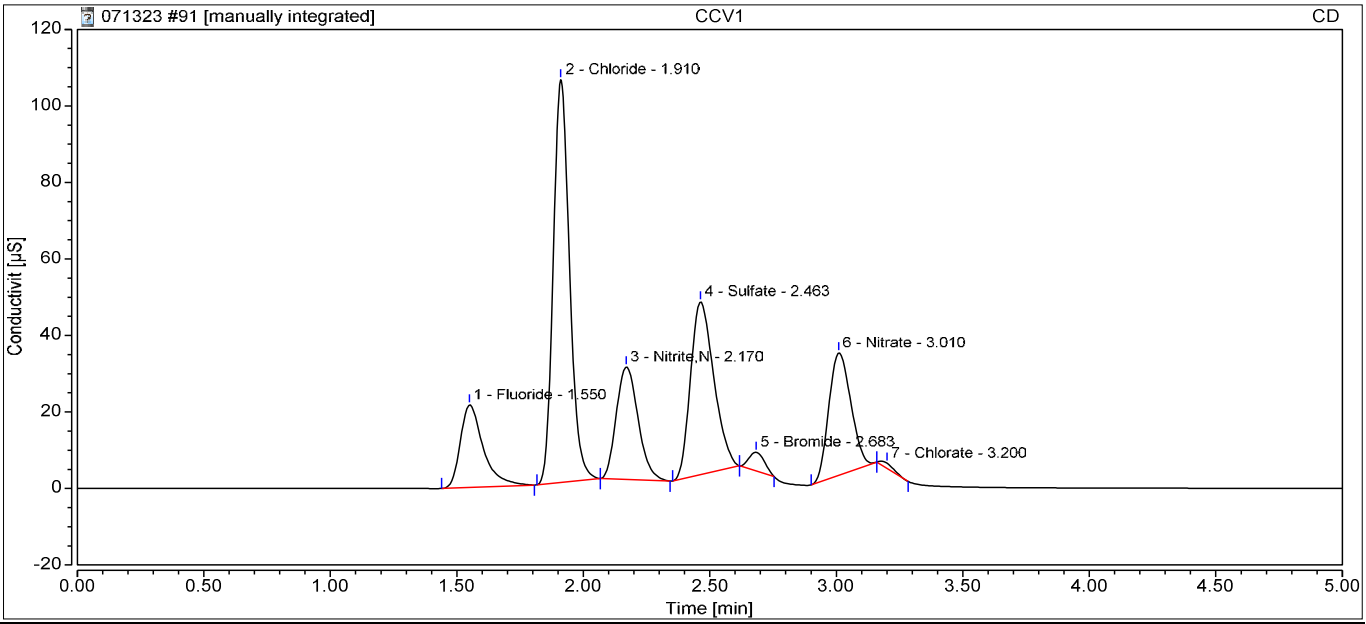


Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	200.0000
2	1.91	Chloride	BMB	0.399	2.7942	558.8309	200.0000
3	2.20	Nitrite,N	BMB	0.010	0.0413	8.2652	200.0000
4	2.47	Sulfate	BMB	5.682	62.6912	12538.2500	200.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	200.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	200.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	200.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	200.0000
Total:			**0.000**	**6.090**		**13105.35**	

91 CCV1			
Sample Name:	**CCV1**	*Injection Volume:*	**5.00**
Vial Number:	**R3**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**07/14/2023 02:20**	*Sample Weight:*	**1.0000**

Run Time:



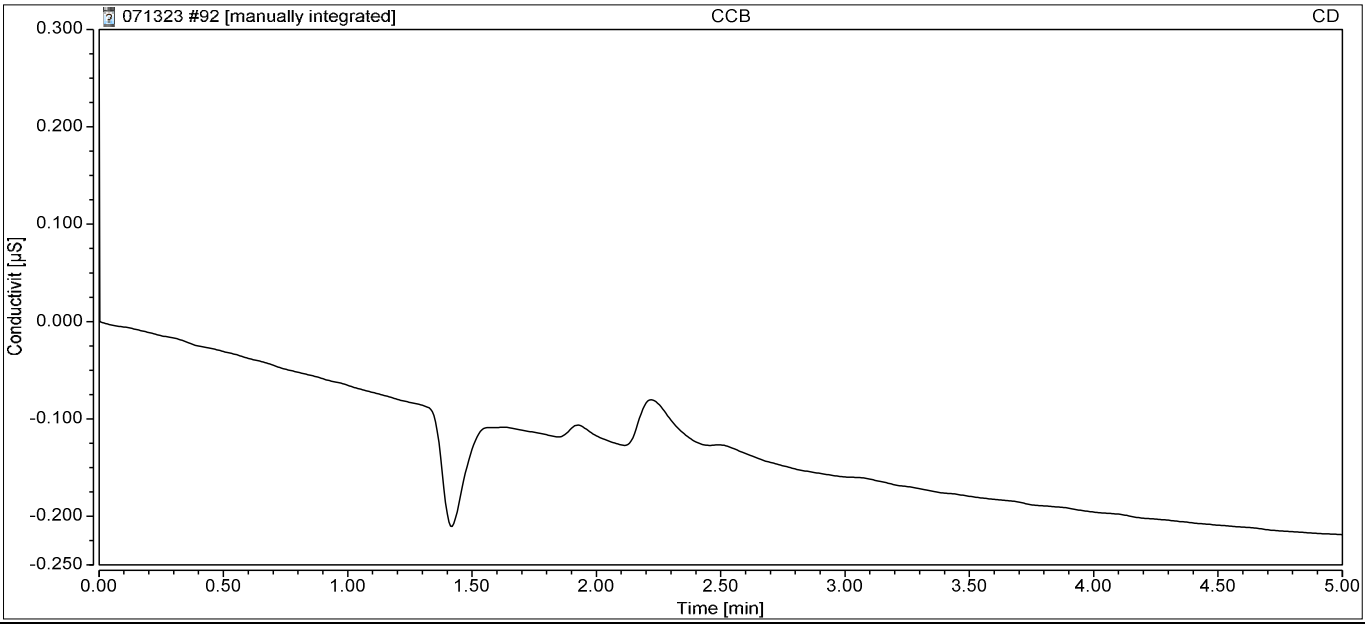
Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
1	1.55	Fluoride	BMB	2.270	10.4617	10.4617	1.0000
2	1.91	Chloride	BMB	7.846	51.4245	51.4245	1.0000
3	2.17	Nitrite,N	BMB	2.947	9.8336	9.8336	1.0000
4	2.46	Sulfate	BMb*	4.824	53.2550	53.2550	1.0000
5	2.68	Bromide	bMB*	0.350	10.1271	10.1271	1.0000
6	3.01	Nitrate	BMB	3.226	10.3161	10.3161	1.0000
7	3.20	Chlorate	BMB	0.079	6.9168	6.9168	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**21.542**		**152.33**	

92 CCB

Sample Name:	**CCB**	*Injection Volume:*	**5.00**
Vial Number:	**R7**	*Channel:*	**CD**
Sample Type:	**Unknown**	*Wavelength:*	**n.a.**
Control Program:	**Anions Program ISO37mM 150mm short 0.4 Constant current**	*Bandwidth:*	**n.a.**
Quantif. Method:	**Anions Processing Method ISO**	*Dilution Factor:*	**1.0000**
Recording Time:	**07/14/2023 02:31**	*Sample Weight:*	**1.0000**

Run Time:



Integration Results

No.	Retention min	Peak Name	Peak Type	Area µS*min	Amount ppm	Concentration ppm	Dilution
n.a.	n.a.	Fluoride	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chloride	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Nitrite,N	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Sulfate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Bromide	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Nitrate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Chlorate	n.a.	n.a.	n.a.	n.a.	1.0000
n.a.	n.a.	Phosphate	n.a.	n.a.	n.a.	n.a.	1.0000
Total:			**0.000**	**0.000**		**0.00**	

HS23070658 Wetchem TOC_W

ALS WO# HS23070658

C:\TOC-L\Data\2023_06_21_002.tlx

	Type	Analysis	Sample Name	Sample ID	Origin	Manual Diluti	Result	Notes
1	Standard	NPOC	CALIBRATION		06_21_2023	1.000		
2	Unknown	NPOC	ICV		06_21_2023	1.000	NPOC:7.789mg/L	
3	Unknown	NPOC	ICB		06_21_2023	1.000	NPOC:0.1521mg/L	

C:\TOC-L\Data\2023_06_21_002.tlx

	Status	Date / Time	Vial
1	Completed	6/21/2023 6:	50, 51, 52, 5
2	Completed	6/21/2023 7:	57
3	Completed	6/21/2023 7:	58

TOC-Control L Report

2023_06_21_002.tlx

Instr.Information

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

Cal. Curve

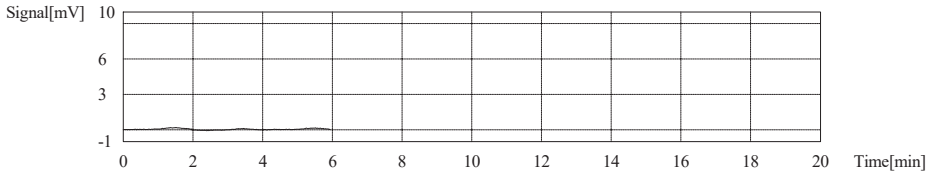
Sample Name:	CALIBRATION
Sample ID:	
Cal. Curve:	06_21_2023B.2023_06_21_17_09_19.cal
Status	Completed

Type	Anal.
Standard	NPOC

Conc: 0.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	0.3456	50uL	1.000	*******		6/21/2023 5:18:00 PM
2	0.2872	50uL	1.000	*******		6/21/2023 5:20:19 PM
3	0.1081	50uL	1.000	*******		6/21/2023 5:22:27 PM

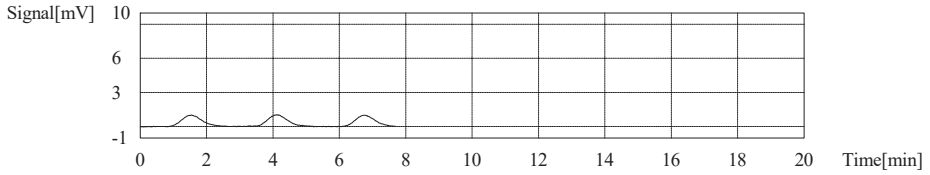
Acid Add.	1.500%
Sparge Gas Flow	80mL/min
Sp. Time	120.0sec
Mean Area	0.2470



Conc: 1.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	4.170	50uL	1.000	*******		6/21/2023 5:31:50 PM
2	4.088	50uL	1.000	*******		6/21/2023 5:34:43 PM
3	3.977	50uL	1.000	*******		6/21/2023 5:37:25 PM

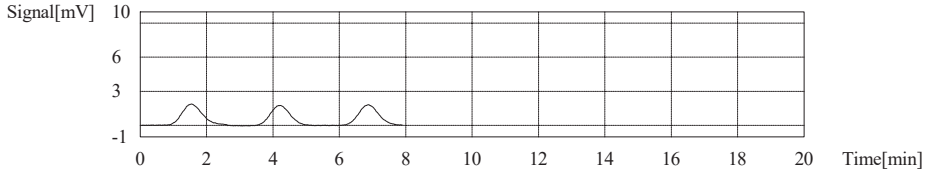
Acid Add.	1.500%
Sparge Gas Flow	80mL/min
Sp. Time	120.0sec
Mean Area	4.078



Conc: 2.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	7.677	50uL	1.000	*******		6/21/2023 5:46:50 PM
2	7.596	50uL	1.000	*******		6/21/2023 5:49:44 PM
3	7.710	50uL	1.000	*******		6/21/2023 5:52:35 PM

Acid Add.	1.500%
Sparge Gas Flow	80mL/min
Sp. Time	120.0sec
Mean Area	7.661



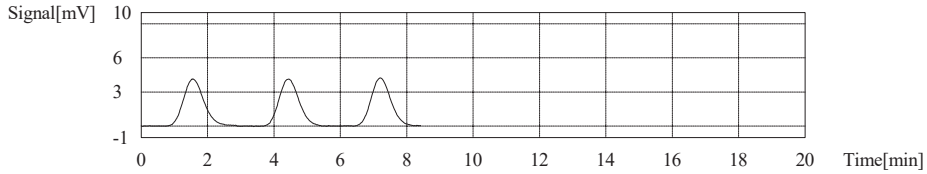
TOC-Control L Report

2023_06_21_002.tlx

Conc: 5.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	17.78	50uL	1.000	*******		6/21/2023 6:02:16 PM
2	17.59	50uL	1.000	*******		6/21/2023 6:05:16 PM
3	17.72	50uL	1.000	*******		6/21/2023 6:08:17 PM

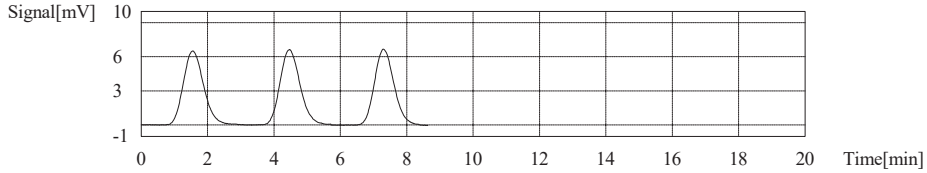
Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 120.0sec
Mean Area 17.70



Conc: 10.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	27.66	50uL	1.000	*******		6/21/2023 6:18:00 PM
2	27.76	50uL	1.000	*******		6/21/2023 6:21:02 PM
3	27.86	50uL	1.000	*******		6/21/2023 6:24:11 PM

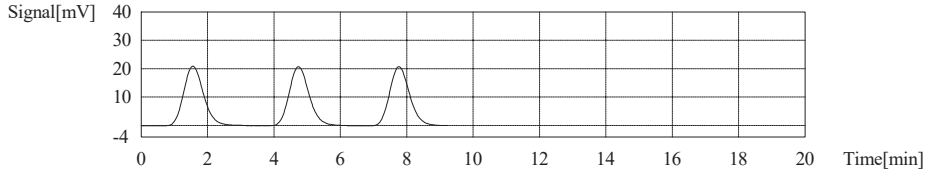
Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 120.0sec
Mean Area 27.76



Conc: 25.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	87.98	50uL	1.000	*******		6/21/2023 6:34:09 PM
2	87.22	50uL	1.000	*******		6/21/2023 6:37:26 PM
3	87.78	50uL	1.000	*******		6/21/2023 6:40:41 PM

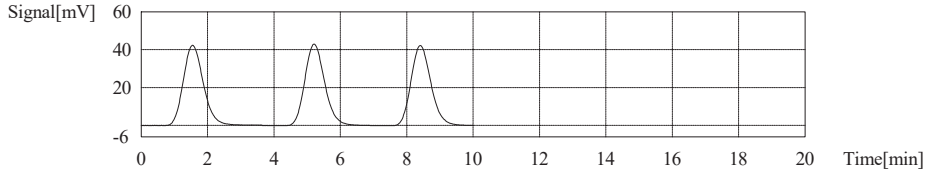
Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 120.0sec
Mean Area 87.66



Conc: 50.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	179.6	50uL	1.000	*******		6/21/2023 6:51:07 PM
2	180.8	50uL	1.000	*******		6/21/2023 6:54:35 PM
3	177.8	50uL	1.000	*******		6/21/2023 6:57:57 PM

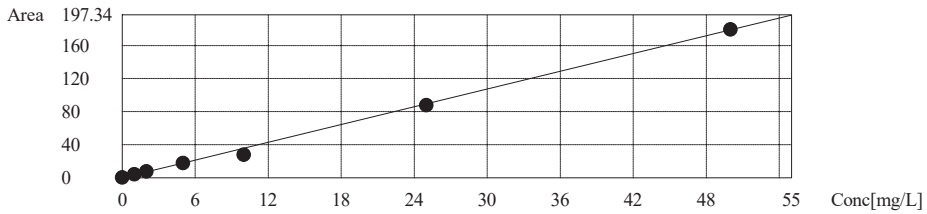
Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 120.0sec
Mean Area 179.4



TOC-Control L Report

2023_06_21_002.tlx

Slope:	3.583
Intercept	0.000
r^2	0.9977
r	0.9989
RSE(%)	N/A
Zero Shift	Yes



Sample

Sample Name:	ICV
Sample ID:	
Origin:	06_21_2023B.cal
Status	Completed
Chk. Result	

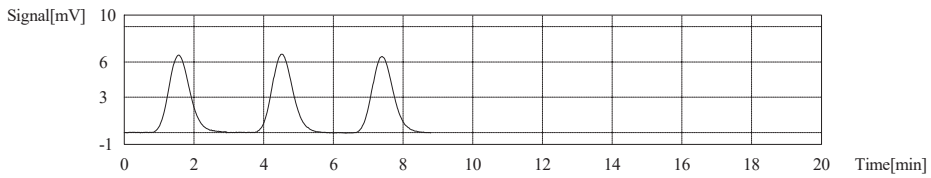
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:7.789mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	27.72	7.736mg/L	50uL	1.000		06_21_2023B.2023_06_21_17_09_19.cal	6/21/2023 7:07:41 PM
2	28.05	7.829mg/L	50uL	1.000		06_21_2023B.2023_06_21_17_09_19.cal	6/21/2023 7:10:48 PM
3	27.95	7.801mg/L	50uL	1.000		06_21_2023B.2023_06_21_17_09_19.cal	6/21/2023 7:14:01 PM

Mean Area	27.91
Mean Conc.	7.789mg/L



Sample

Sample Name:	ICB
Sample ID:	
Origin:	06_21_2023B.cal
Status	Completed
Chk. Result	

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1521mg/L

1. Det

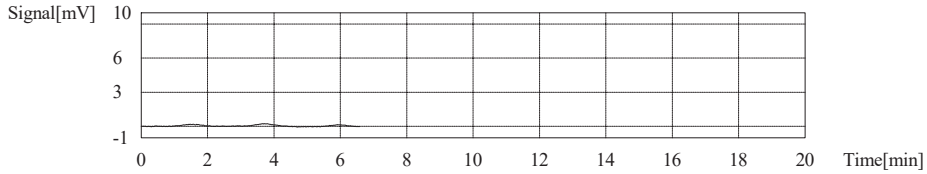
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.4802	0.1340mg/L	50uL	1.000		06_21_2023B.2023_06_21_17_09_19.cal	6/21/2023 7:23:00 PM
2	0.6284	0.1754mg/L	50uL	1.000		06_21_2023B.2023_06_21_17_09_19.cal	6/21/2023 7:25:29 PM
3	0.5263	0.1469mg/L	50uL	1.000		06_21_2023B.2023_06_21_17_09_19.cal	6/21/2023 7:27:52 PM

TOC-Control L Report

2023_06_21_002.tlx

Mean Area	0.5450
Mean Conc.	0.1521mg/L



C:\TOC-L\Data\2023_07_26_002.tlx

	Sample Name	Sample ID	Result	Status	Date / Time	Vial
1	CCV		NPOC:25.87mg/L	Complet	7/26/2023 4:30:58 PM	1
2	CCB		NPOC:0.5326mg/L	Complet	7/26/2023 5:03:49 PM	2
3	MBLK-07262023		NPOC:0.2923mg/L	Complet	7/26/2023 5:17:25 PM	3
4	LCS-07262023		NPOC:9.626mg/L	Complet	7/26/2023 5:33:25 PM	4
5	LCSD-07262023		NPOC:9.663mg/L	Complet	7/26/2023 5:49:37 PM	5
6	HS23070546-01DF10	TOC_W	NPOC:0.9834mg/L	Complet	7/26/2023 6:04:12 PM	6
7	HS23070546-02DF10		NPOC:2.945mg/L	Complet	7/26/2023 6:19:42 PM	7
8	HS23070546-03DF10		NPOC:0.7587mg/L	Complet	7/26/2023 6:34:10 PM	8
9	HS23070546-03MS		NPOC:10.43mg/L	Complet	7/26/2023 6:50:21 PM	9
10	HS23070644-01		NPOC:3.582mg/L	Complet	7/26/2023 7:05:56 PM	10
11	HS23070658-01DF20		NPOC:0.5254mg/L	Complet	7/26/2023 7:20:35 PM	11
12	HS23070658-02DF10		NPOC:6.011mg/L	Complet	7/26/2023 7:36:31 PM	12
13	CCV		NPOC:24.94mg/L	Complet	7/26/2023 7:53:43 PM	1
14	CCB		NPOC:0.5538mg/L	Complet	7/26/2023 8:08:03 PM	2
15	HS23070658-05DF10		NPOC:2.375mg/L	Complet	7/26/2023 8:23:16 PM	13
16	HS23070658-06DF10		NPOC:8.480mg/L	Complet	7/26/2023 8:39:37 PM	14
17	HS23070658-07DF10	TOC_W 5310B	NPOC:2.927mg/L	Complet	7/26/2023 8:54:56 PM	15
18	HS23070658-09DF10		NPOC:0.5824mg/L	Complet	7/26/2023 9:09:32 PM	16
19	CCV		NPOC:24.72mg/L	Complet	7/26/2023 9:26:32 PM	1
20	CCB		NPOC:0.5025mg/L	Complet	7/26/2023 9:40:54 PM	2
21	MBLK-07262023		NPOC:0.1884mg/L	Complet	7/26/2023 9:54:28 PM	3
22	LCS-07262023		NPOC:9.469mg/L	Complet	7/26/2023 10:10:52 P	4
23	LCSD-07262023		NPOC:9.475mg/L	Complet	7/26/2023 10:27:06 P	5
24	HS23070658-10DF10	TOC_W 5310B	NPOC:0.5982mg/L	Complet	7/26/2023 10:41:36 P	17
25	HS23070651-02		NPOC:2.255mg/L	Complet	7/26/2023 10:56:44 P	18
26	HS23070651-04		NPOC:3.110mg/L	Complet	7/26/2023 11:14:13 P	19
27	HS23070659-01DF100		NPOC:0.7403mg/L	Complet	7/26/2023 11:28:22 P	20
28	HS23070659-01MS		NPOC:9.971mg/L	Complet	7/26/2023 11:44:19 P	21
29	HS23070659-04DF100		NPOC:0.4757mg/L	Complet	7/26/2023 11:58:26 P	22
30	HS23070659-05DF100		NPOC:0.2729mg/L	Complet	7/27/2023 12:12:16 A	23
31	CCV		NPOC:25.06mg/L	Complet	7/27/2023 12:29:02 A	32
32	CCB		NPOC:0.4280mg/L	Complet	7/27/2023 12:43:09 A	33
33	HS23071115-04		NPOC:195.8mg/L	Complet	7/27/2023 1:00:50 AM	24
34	HS23071115-06		NPOC:2.760mg/L	Complet	7/27/2023 1:16:03 AM	25
35	HS23071353-01		NPOC:2.753mg/L	Complet	7/27/2023 1:31:28 AM	26
36	HS23070647-01DF1000		NPOC:0.4430mg/L	Complet	7/27/2023 1:45:20 AM	27
37	CCV		NPOC:25.40mg/L	Complet	7/27/2023 2:02:26 AM	32
38	CCB		NPOC:0.2421mg/L	Complet	7/27/2023 2:16:19 AM	33
39	MBLK-07262023		NPOC:0.1746mg/L	Complet	7/27/2023 2:30:22 AM	3
40	LCS-07262023		NPOC:9.340mg/L	Complet	7/27/2023 2:46:29 AM	4
41	LCSD-07262023		NPOC:9.482mg/L	Complet	7/27/2023 3:02:39 AM	5
42	HS23070647-02DF1000		NPOC:0.5667mg/L	Complet	7/27/2023 3:17:08 AM	28
43	HS23070647-03DF1000		NPOC:0.8598mg/L	Complet	7/27/2023 3:31:26 AM	29
44	HS23070728-01DF100		NPOC:0.9769mg/L	Complet	7/27/2023 3:45:42 AM	30
45	HS23070728-01MS		NPOC:10.20mg/L	Complet	7/27/2023 4:01:59 AM	31
46	CCV		NPOC:25.43mg/L	Complet	7/27/2023 4:19:14 AM	32
47	CCB		NPOC:0.4344mg/L	Complet	7/27/2023 4:33:34 AM	33

TOC-Control L Report

2023_07_26_002.tlx

Instr.Information

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

Sample

Sample Name: CCV
Sample ID:
Origin: 06_21_2023B.cal
Status: Completed
Chk. Result

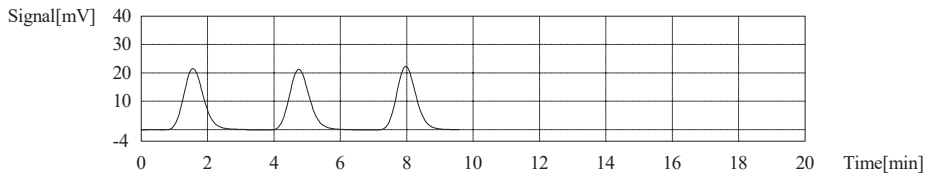
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.87mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	90.63	25.65mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 4:24:05 PM
2	91.15	25.80mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 4:27:32 PM
3	92.49	26.18mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 4:30:58 PM

Mean Area: 91.42
Mean Conc.: 25.87mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: 06 21 2023B.cal
Status: Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.5326mg/L

1. Det

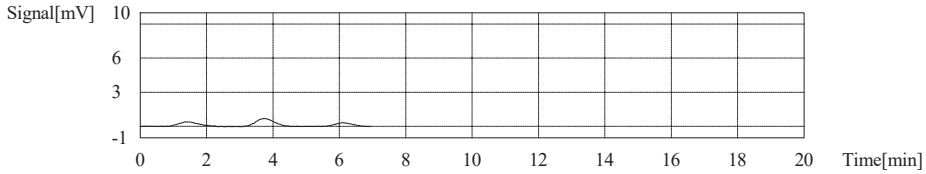
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.630	0.4613mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 4:58:41 PM
2	2.801	0.7927mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 5:01:20 PM
3	1.215	0.3439mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 5:03:49 PM

TOC-Control L Report

2023_07_26_002.tlx

Mean Area 1.882
Mean Conc. 0.5326mg/L



Sample

Sample Name: MBLK-07262023
Sample ID:
Origin: 06_21_2023B.cal
Status Completed
Chk. Result

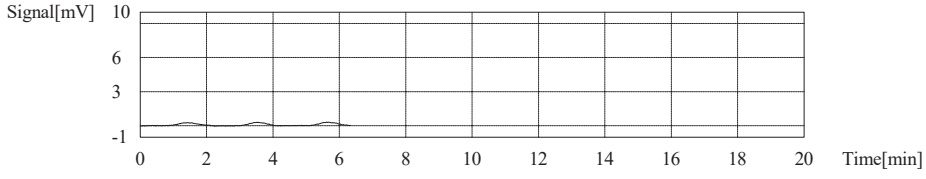
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2923mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.9136	0.2586mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 5:12:42 PM
2	1.094	0.3096mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 5:15:05 PM
3	1.091	0.3088mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 5:17:25 PM

Mean Area 1.033
Mean Conc. 0.2923mg/L



Sample

Sample Name: LCS-07262023
Sample ID:
Origin: 06_21_2023B.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.626mg/L

1. Det

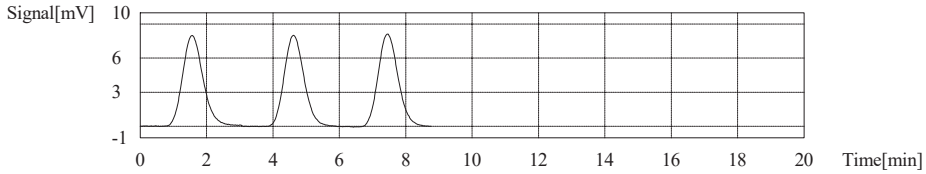
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	34.21	9.682mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 5:27:14 PM
2	33.31	9.427mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 5:30:19 PM
3	34.52	9.770mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 5:33:25 PM

TOC-Control L Report

2023_07_26_002.tlx

Mean Area 34.01
Mean Conc. 9.626mg/L



Sample

Sample Name: LCSD-07262023
Sample ID:
Origin: 06_21_2023B.cal
Status Completed
Chk. Result

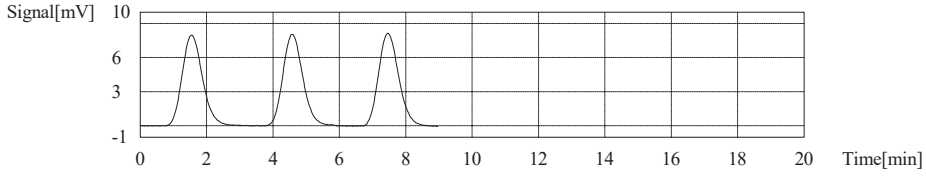
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.663mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	34.05	9.637mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 5:43:11 PM
2	33.71	9.540mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 5:46:20 PM
3	34.67	9.812mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 5:49:37 PM

Mean Area 34.14
Mean Conc. 9.663mg/L



Sample

Sample Name: HS23070546-03DF10
Sample ID:
Origin: 06_21_2023B.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.7587mg/L

1. Det

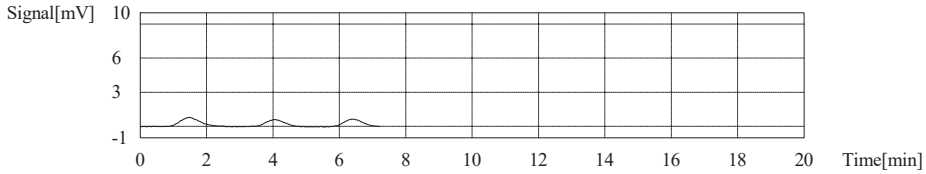
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.114	0.8813mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 6:29:01 PM
2	2.310	0.6538mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 6:31:37 PM
3	2.618	0.7409mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 6:34:10 PM

TOC-Control L Report

2023_07_26_002.tlx

Mean Area 2.681
Mean Conc. 0.7587mg/L



Sample

Sample Name: HS23070546-03MS
Sample ID:
Origin: 06_21_2023B.cal
Status Completed
Chk. Result

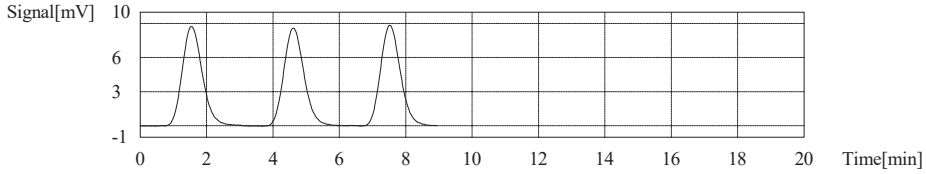
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:10.43mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	36.89	10.44mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 6:43:58 PM
2	36.49	10.33mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 6:47:08 PM
3	37.18	10.52mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 6:50:21 PM

Mean Area 36.85
Mean Conc. 10.43mg/L



Sample

Sample Name: HS23070658-01DF20
Sample ID:
Origin: 06_21_2023B.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.5254mg/L

1. Det

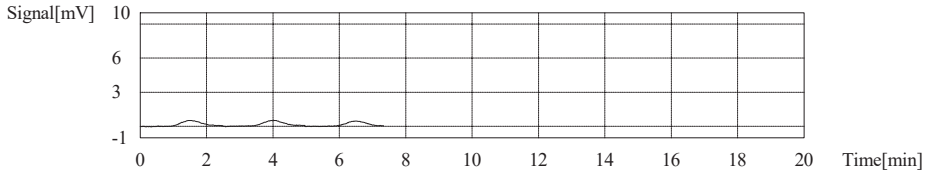
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.097	0.5935mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 7:15:11 PM
2	1.958	0.5541mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 7:17:56 PM
3	1.514	0.4285mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 7:20:35 PM

TOC-Control L Report

2023_07_26_002.tlx

Mean Area 1.856
Mean Conc. 0.5254mg/L



Sample

Sample Name: HS23070658-02DF10
Sample ID:
Origin: 06_21_2023B.cal
Status Completed
Chk. Result

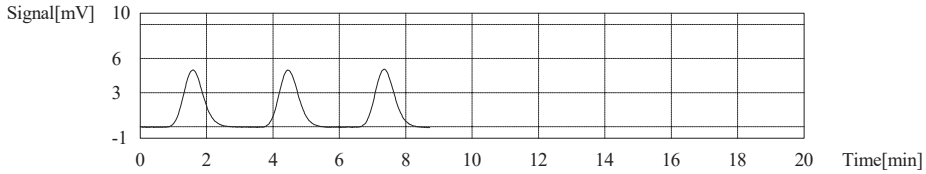
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:6.011mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	21.16	5.989mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 7:30:12 PM
2	21.08	5.966mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 7:33:19 PM
3	21.48	6.079mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 7:36:31 PM

Mean Area 21.24
Mean Conc. 6.011mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: 06_21_2023B.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.94mg/L

1. Det

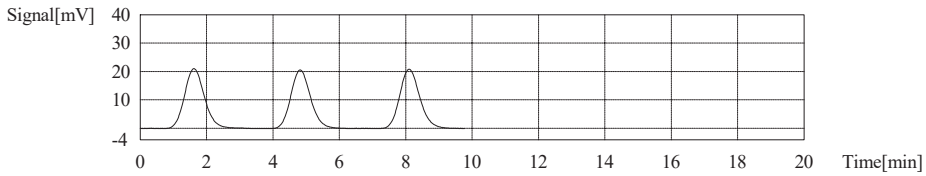
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	88.69	25.10mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 7:46:39 PM
2	86.61	24.51mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 7:50:11 PM
3	89.04	25.20mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 7:53:43 PM

TOC-Control L Report

2023_07_26_002.tlx

Mean Area 88.11
Mean Conc. 24.94mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: 06_21_2023B.cal
Status Completed
Chk. Result

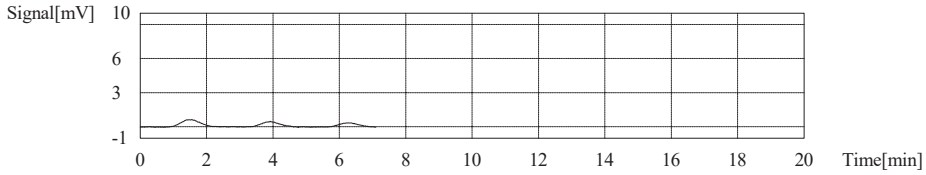
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.5538mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.538	0.7183mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 8:02:53 PM
2	1.797	0.5086mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 8:05:29 PM
3	1.535	0.4344mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 8:08:03 PM

Mean Area 1.957
Mean Conc. 0.5538mg/L



Sample

Sample Name: HS23070658-05DF10
Sample ID:
Origin: 06_21_2023B.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.375mg/L

1. Det

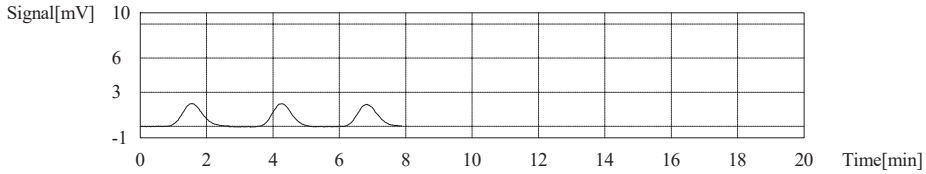
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.555	2.421mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 8:17:37 PM
2	8.548	2.419mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 8:20:27 PM
3	8.068	2.283mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 8:23:16 PM

TOC-Control L Report

2023_07_26_002.tlx

Mean Area 8.390
Mean Conc. 2.375mg/L



Sample

Sample Name: HS23070658-06DF10
Sample ID:
Origin: 06_21_2023B.cal
Status Completed
Chk. Result

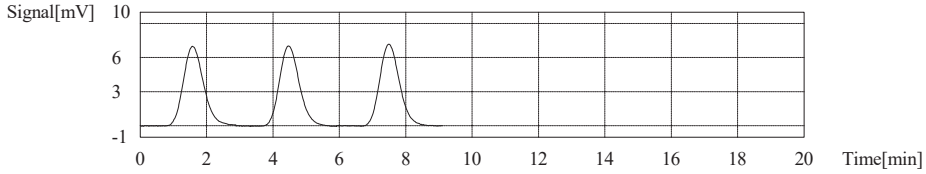
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:8.480mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	29.55	8.363mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 8:32:55 PM
2	29.96	8.479mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 8:36:12 PM
3	30.38	8.598mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 8:39:37 PM

Mean Area 29.96
Mean Conc. 8.480mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: 06_21_2023B.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.72mg/L

1. Det

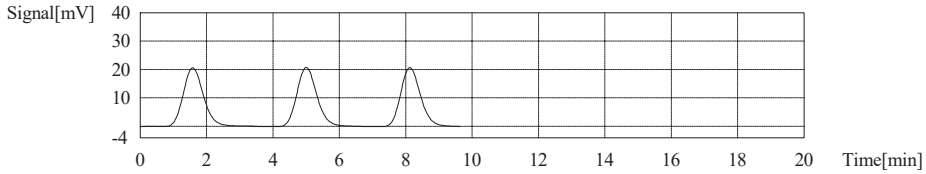
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	87.52	24.77mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 9:19:50 PM
2	87.58	24.79mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 9:23:13 PM
3	86.89	24.59mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 9:26:32 PM

TOC-Control L Report

2023_07_26_002.tlx

Mean Area 87.33
Mean Conc. 24.72mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: 06_21_2023B.cal
Status Completed
Chk. Result

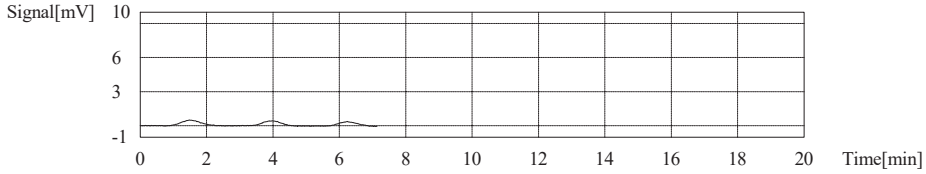
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.5025mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.041	0.5776mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 9:35:44 PM
2	1.707	0.4831mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 9:38:16 PM
3	1.579	0.4469mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 9:40:54 PM

Mean Area 1.776
Mean Conc. 0.5025mg/L



HS23070658 Wetchem TOC_W 5310B

ALS WO# HS23070658

C:\TOC-L\Data\2023_06_21_002.tlx

	Type	Analysis	Sample Name	Sample ID	Origin	Manual Diluti	Result	Notes
1	Standard	NPOC	CALIBRATION		06_21_2023	1.000		
2	Unknown	NPOC	ICV		06_21_2023	1.000	NPOC:7.789mg/L	
3	Unknown	NPOC	ICB		06_21_2023	1.000	NPOC:0.1521mg/L	

C:\TOC-L\Data\2023_06_21_002.tlx

	Status	Date / Time	Vial
1	Completed	6/21/2023 6:	50, 51, 52, 5
2	Completed	6/21/2023 7:	57
3	Completed	6/21/2023 7:	58

TOC-Control L Report

2023_06_21_002.tlx

Instr.Information

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

Cal. Curve

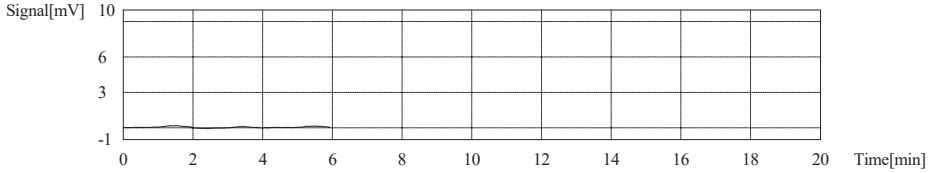
Sample Name:	CALIBRATION
Sample ID:	
Cal. Curve:	06_21_2023B.2023_06_21_17_09_19.cal
Status	Completed

Type	Anal.
Standard	NPOC

Conc: 0.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	0.3456	50uL	1.000	*******		6/21/2023 5:18:00 PM
2	0.2872	50uL	1.000	*******		6/21/2023 5:20:19 PM
3	0.1081	50uL	1.000	*******		6/21/2023 5:22:27 PM

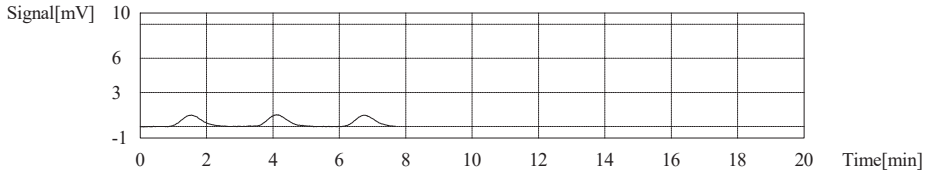
Acid Add.	1.500%
Sparge Gas Flow	80mL/min
Sp. Time	120.0sec
Mean Area	0.2470



Conc: 1.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	4.170	50uL	1.000	*******		6/21/2023 5:31:50 PM
2	4.088	50uL	1.000	*******		6/21/2023 5:34:43 PM
3	3.977	50uL	1.000	*******		6/21/2023 5:37:25 PM

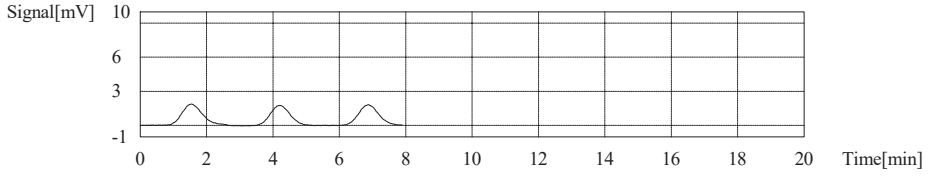
Acid Add.	1.500%
Sparge Gas Flow	80mL/min
Sp. Time	120.0sec
Mean Area	4.078



Conc: 2.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	7.677	50uL	1.000	*******		6/21/2023 5:46:50 PM
2	7.596	50uL	1.000	*******		6/21/2023 5:49:44 PM
3	7.710	50uL	1.000	*******		6/21/2023 5:52:35 PM

Acid Add.	1.500%
Sparge Gas Flow	80mL/min
Sp. Time	120.0sec
Mean Area	7.661



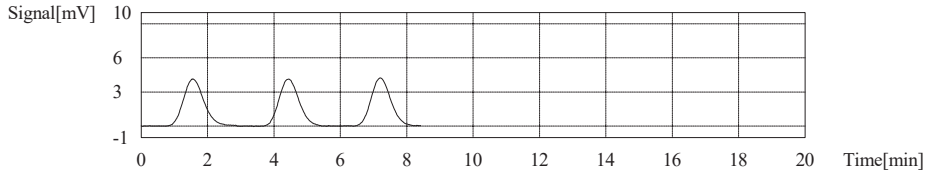
TOC-Control L Report

2023_06_21_002.tlx

Conc: 5.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	17.78	50uL	1.000	*******		6/21/2023 6:02:16 PM
2	17.59	50uL	1.000	*******		6/21/2023 6:05:16 PM
3	17.72	50uL	1.000	*******		6/21/2023 6:08:17 PM

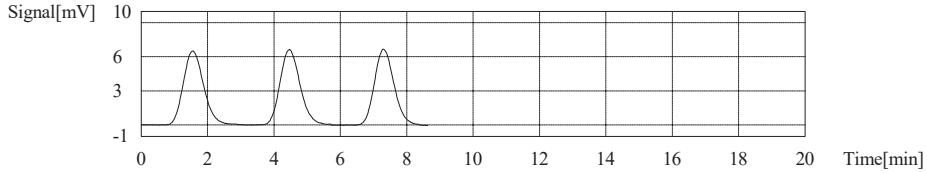
Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 120.0sec
Mean Area 17.70



Conc: 10.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	27.66	50uL	1.000	*******		6/21/2023 6:18:00 PM
2	27.76	50uL	1.000	*******		6/21/2023 6:21:02 PM
3	27.86	50uL	1.000	*******		6/21/2023 6:24:11 PM

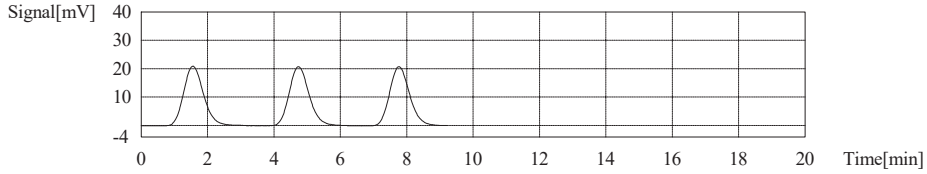
Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 120.0sec
Mean Area 27.76



Conc: 25.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	87.98	50uL	1.000	*******		6/21/2023 6:34:09 PM
2	87.22	50uL	1.000	*******		6/21/2023 6:37:26 PM
3	87.78	50uL	1.000	*******		6/21/2023 6:40:41 PM

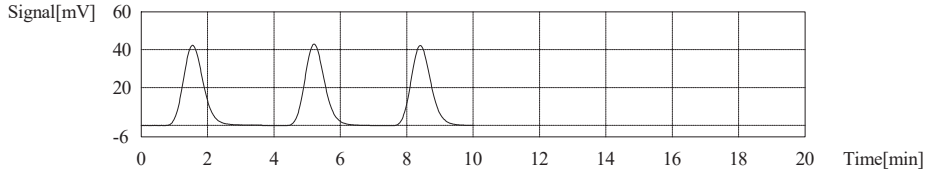
Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 120.0sec
Mean Area 87.66



Conc: 50.00mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	179.6	50uL	1.000	*******		6/21/2023 6:51:07 PM
2	180.8	50uL	1.000	*******		6/21/2023 6:54:35 PM
3	177.8	50uL	1.000	*******		6/21/2023 6:57:57 PM

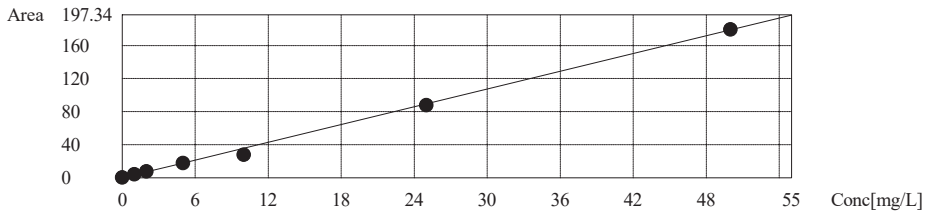
Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 120.0sec
Mean Area 179.4



TOC-Control L Report

2023_06_21_002.tlx

Slope:	3.583
Intercept	0.000
r^2	0.9977
r	0.9989
RSE(%)	N/A
Zero Shift	Yes



Sample

Sample Name:	ICV
Sample ID:	
Origin:	06_21_2023B.cal
Status	Completed
Chk. Result	

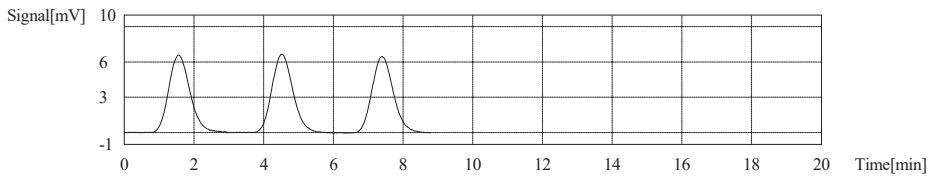
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:7.789mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	27.72	7.736mg/L	50uL	1.000		06_21_2023B.2023_06_21_17_09_19.cal	6/21/2023 7:07:41 PM
2	28.05	7.829mg/L	50uL	1.000		06_21_2023B.2023_06_21_17_09_19.cal	6/21/2023 7:10:48 PM
3	27.95	7.801mg/L	50uL	1.000		06_21_2023B.2023_06_21_17_09_19.cal	6/21/2023 7:14:01 PM

Mean Area	27.91
Mean Conc.	7.789mg/L



Sample

Sample Name:	ICB
Sample ID:	
Origin:	06_21_2023B.cal
Status	Completed
Chk. Result	

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1521mg/L

1. Det

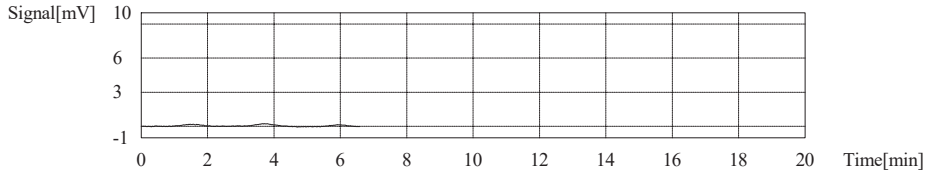
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.4802	0.1340mg/L	50uL	1.000		06_21_2023B.2023_06_21_17_09_19.cal	6/21/2023 7:23:00 PM
2	0.6284	0.1754mg/L	50uL	1.000		06_21_2023B.2023_06_21_17_09_19.cal	6/21/2023 7:25:29 PM
3	0.5263	0.1469mg/L	50uL	1.000		06_21_2023B.2023_06_21_17_09_19.cal	6/21/2023 7:27:52 PM

TOC-Control L Report

2023_06_21_002.tlx

Mean Area	0.5450
Mean Conc.	0.1521mg/L



C:\TOC-L\Data\2023_07_26_002.tlx

	Sample Name	Sample ID	Result	Status	Date / Time	Vial
1	CCV		NPOC:25.87mg/L	Complet	7/26/2023 4:30:58 PM	1
2	CCB		NPOC:0.5326mg/L	Complet	7/26/2023 5:03:49 PM	2
3	MBLK-07262023		NPOC:0.2923mg/L	Complet	7/26/2023 5:17:25 PM	3
4	LCS-07262023		NPOC:9.626mg/L	Complet	7/26/2023 5:33:25 PM	4
5	LCSD-07262023		NPOC:9.663mg/L	Complet	7/26/2023 5:49:37 PM	5
6	HS23070546-01DF10	TOC_W	NPOC:0.9834mg/L	Complet	7/26/2023 6:04:12 PM	6
7	HS23070546-02DF10		NPOC:2.945mg/L	Complet	7/26/2023 6:19:42 PM	7
8	HS23070546-03DF10		NPOC:0.7587mg/L	Complet	7/26/2023 6:34:10 PM	8
9	HS23070546-03MS		NPOC:10.43mg/L	Complet	7/26/2023 6:50:21 PM	9
10	HS23070644-01		NPOC:3.582mg/L	Complet	7/26/2023 7:05:56 PM	10
11	HS23070658-01DF20		NPOC:0.5254mg/L	Complet	7/26/2023 7:20:35 PM	11
12	HS23070658-02DF10		NPOC:6.011mg/L	Complet	7/26/2023 7:36:31 PM	12
13	CCV		NPOC:24.94mg/L	Complet	7/26/2023 7:53:43 PM	1
14	CCB		NPOC:0.5538mg/L	Complet	7/26/2023 8:08:03 PM	2
15	HS23070658-05DF10		NPOC:2.375mg/L	Complet	7/26/2023 8:23:16 PM	13
16	HS23070658-06DF10		NPOC:8.480mg/L	Complet	7/26/2023 8:39:37 PM	14
17	HS23070658-07DF10	TOC_W 5310B	NPOC:2.927mg/L	Complet	7/26/2023 8:54:56 PM	15
18	HS23070658-09DF10		NPOC:0.5824mg/L	Complet	7/26/2023 9:09:32 PM	16
19	CCV		NPOC:24.72mg/L	Complet	7/26/2023 9:26:32 PM	1
20	CCB		NPOC:0.5025mg/L	Complet	7/26/2023 9:40:54 PM	2
21	MBLK-07262023		NPOC:0.1884mg/L	Complet	7/26/2023 9:54:28 PM	3
22	LCS-07262023		NPOC:9.469mg/L	Complet	7/26/2023 10:10:52 P	4
23	LCSD-07262023		NPOC:9.475mg/L	Complet	7/26/2023 10:27:06 P	5
24	HS23070658-10DF10	TOC_W 5310B	NPOC:0.5982mg/L	Complet	7/26/2023 10:41:36 P	17
25	HS23070651-02		NPOC:2.255mg/L	Complet	7/26/2023 10:56:44 P	18
26	HS23070651-04		NPOC:3.110mg/L	Complet	7/26/2023 11:14:13 P	19
27	HS23070659-01DF100		NPOC:0.7403mg/L	Complet	7/26/2023 11:28:22 P	20
28	HS23070659-01MS		NPOC:9.971mg/L	Complet	7/26/2023 11:44:19 P	21
29	HS23070659-04DF100		NPOC:0.4757mg/L	Complet	7/26/2023 11:58:26 P	22
30	HS23070659-05DF100		NPOC:0.2729mg/L	Complet	7/27/2023 12:12:16 A	23
31	CCV		NPOC:25.06mg/L	Complet	7/27/2023 12:29:02 A	32
32	CCB		NPOC:0.4280mg/L	Complet	7/27/2023 12:43:09 A	33
33	HS23071115-04		NPOC:195.8mg/L	Complet	7/27/2023 1:00:50 AM	24
34	HS23071115-06		NPOC:2.760mg/L	Complet	7/27/2023 1:16:03 AM	25
35	HS23071353-01		NPOC:2.753mg/L	Complet	7/27/2023 1:31:28 AM	26
36	HS23070647-01DF1000		NPOC:0.4430mg/L	Complet	7/27/2023 1:45:20 AM	27
37	CCV		NPOC:25.40mg/L	Complet	7/27/2023 2:02:26 AM	32
38	CCB		NPOC:0.2421mg/L	Complet	7/27/2023 2:16:19 AM	33
39	MBLK-07262023		NPOC:0.1746mg/L	Complet	7/27/2023 2:30:22 AM	3
40	LCS-07262023		NPOC:9.340mg/L	Complet	7/27/2023 2:46:29 AM	4
41	LCSD-07262023		NPOC:9.482mg/L	Complet	7/27/2023 3:02:39 AM	5
42	HS23070647-02DF1000		NPOC:0.5667mg/L	Complet	7/27/2023 3:17:08 AM	28
43	HS23070647-03DF1000		NPOC:0.8598mg/L	Complet	7/27/2023 3:31:26 AM	29
44	HS23070728-01DF100		NPOC:0.9769mg/L	Complet	7/27/2023 3:45:42 AM	30
45	HS23070728-01MS		NPOC:10.20mg/L	Complet	7/27/2023 4:01:59 AM	31
46	CCV		NPOC:25.43mg/L	Complet	7/27/2023 4:19:14 AM	32
47	CCB		NPOC:0.4344mg/L	Complet	7/27/2023 4:33:34 AM	33

TOC-Control L Report

2023_07_26_002.tlx

Instr.Information

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

Sample

Sample Name: CCV
Sample ID:
Origin: 06_21_2023B.cal
Status Completed
Chk. Result

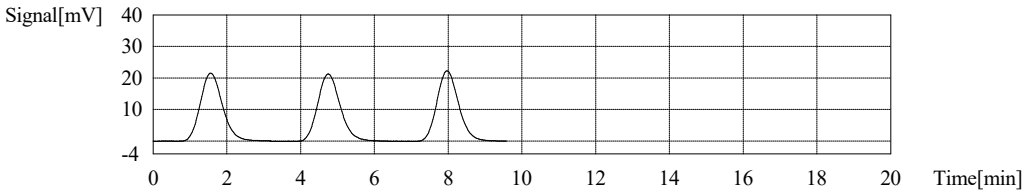
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.87mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	90.63	25.65mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 4:24:05 PM
2	91.15	25.80mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 4:27:32 PM
3	92.49	26.18mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 4:30:58 PM

Mean Area 91.42
Mean Conc. 25.87mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: 06_21_2023B.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.5326mg/L

1. Det

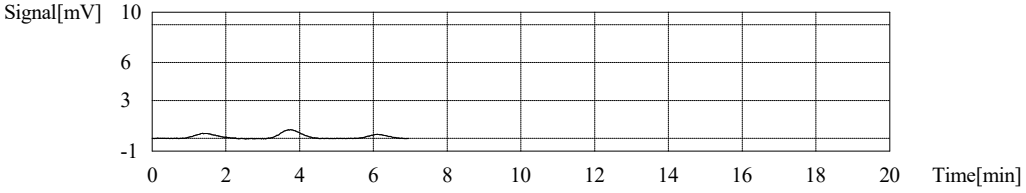
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	1.630	0.4613mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 4:58:41 PM
2	2.801	0.7927mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 5:01:20 PM
3	1.215	0.3439mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 5:03:49 PM

TOC-Control L Report

2023_07_26_002.tlx

Mean Area 1.882
Mean Conc. 0.5326mg/L



Sample

Sample Name: MBLK-07262023
Sample ID:
Origin: 06_21_2023B.cal
Status Completed
Chk. Result

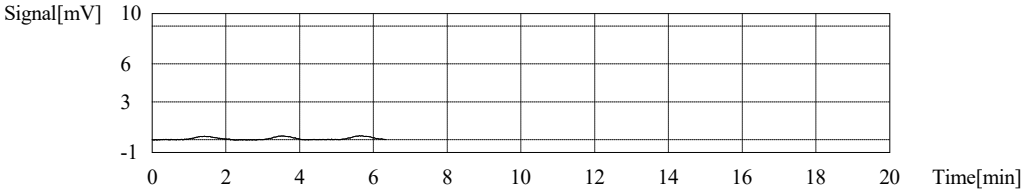
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2923mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.9136	0.2586mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 5:12:42 PM
2	1.094	0.3096mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 5:15:05 PM
3	1.091	0.3088mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 5:17:25 PM

Mean Area 1.033
Mean Conc. 0.2923mg/L



Sample

Sample Name: LCS-07262023
Sample ID:
Origin: 06_21_2023B.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.626mg/L

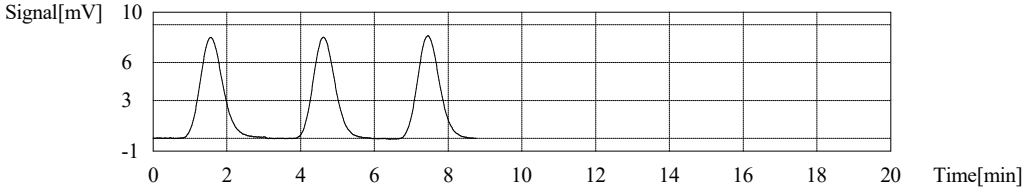
1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	34.21	9.682mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 5:27:14 PM
2	33.31	9.427mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 5:30:19 PM
3	34.52	9.770mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 5:33:25 PM

TOC-Control L Report

Mean Area 34.01
Mean Conc. 9.626mg/L



Sample

Sample Name: LCSD-07262023
Sample ID:
Origin: 06_21_2023B.cal
Status Completed
Chk. Result

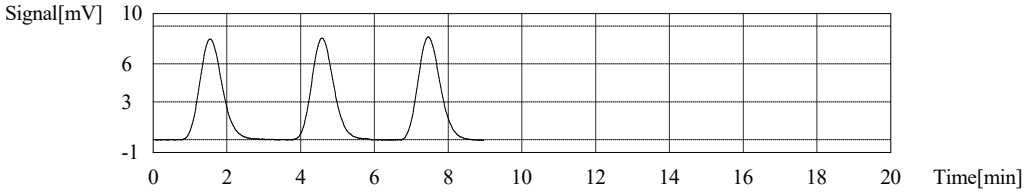
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.663mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	34.05	9.637mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 5:43:11 PM
2	33.71	9.540mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 5:46:20 PM
3	34.67	9.812mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 5:49:37 PM

Mean Area 34.14
Mean Conc. 9.663mg/L



Sample

Sample Name: HS23070546-03DF10
Sample ID:
Origin: 06_21_2023B.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.7587mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.114	0.8813mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 6:29:01 PM
2	2.310	0.6538mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 6:31:37 PM
3	2.618	0.7409mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 6:34:10 PM

TOC-Control L Report

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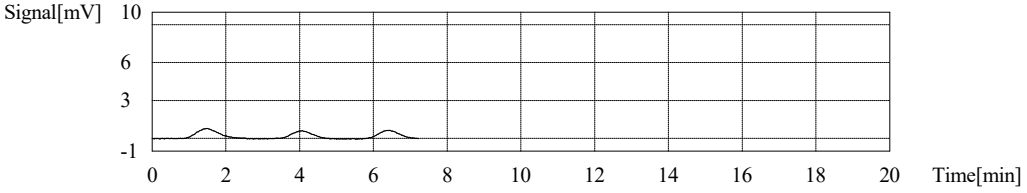
Mean Area 2.681
Mean Conc. 0.7587mg/L



Sample

Sample Name: HS23070546-03MS
Sample ID:
Origin: 06_21_2023B.cal
Status Completed
Chk. Result

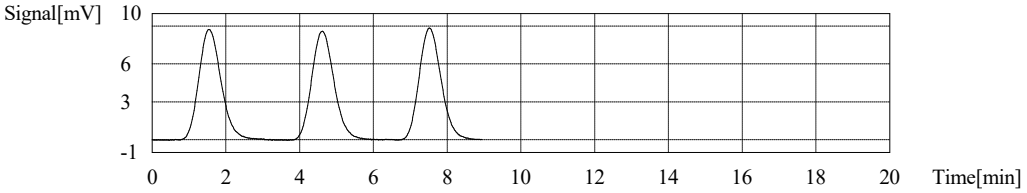
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:10.43mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	36.89	10.44mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 6:43:58 PM
2	36.49	10.33mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 6:47:08 PM
3	37.18	10.52mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 6:50:21 PM

Mean Area 36.85
Mean Conc. 10.43mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: 06_21_2023B.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.94mg/L

1. Det

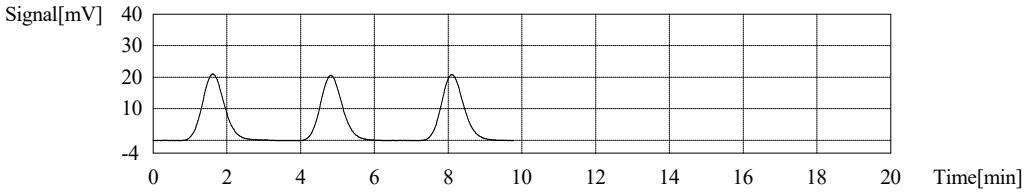
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	88.69	25.10mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 7:46:39 PM
2	86.61	24.51mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 7:50:11 PM
3	89.04	25.20mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 7:53:43 PM

TOC-Control L Report

2023_07_26_002.tlx

Mean Area 88.11
Mean Conc. 24.94mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: 06_21_2023B.cal
Status Completed
Chk. Result

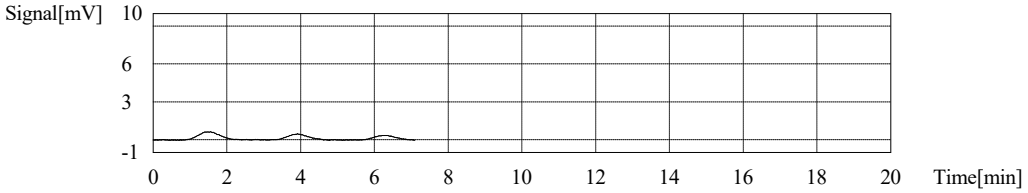
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.5538mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.538	0.7183mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 8:02:53 PM
2	1.797	0.5086mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 8:05:29 PM
3	1.535	0.4344mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 8:08:03 PM

Mean Area 1.957
Mean Conc. 0.5538mg/L



Sample

Sample Name: HS23070658-07DF10
Sample ID: TOC_W 5310B
Origin: 06_21_2023B.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.927mg/L

1. Det

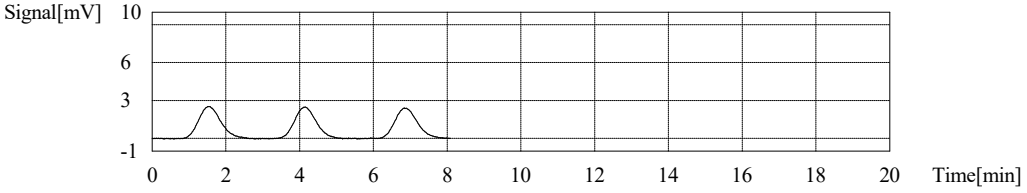
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	10.51	2.974mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 8:48:57 PM
2	10.21	2.890mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 8:51:56 PM
3	10.31	2.918mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 8:54:56 PM

TOC-Control L Report

2023_07_26_002.tlx

Mean Area 10.34
Mean Conc. 2.927mg/L



Sample

Sample Name: HS23070658-09DF10
Sample ID:
Origin: 06_21_2023B.cal
Status Completed
Chk. Result

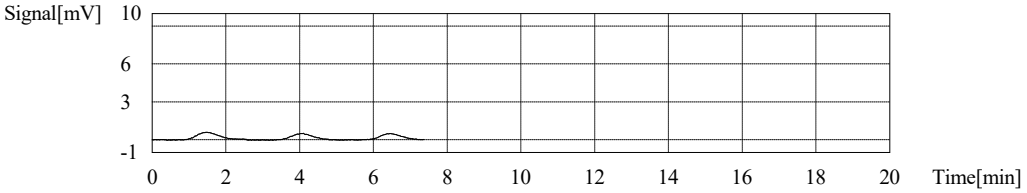
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.5824mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.452	0.6940mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 9:04:16 PM
2	1.894	0.5360mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 9:06:54 PM
3	1.827	0.5171mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 9:09:32 PM

Mean Area 2.058
Mean Conc. 0.5824mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: 06_21_2023B.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.72mg/L

1. Det

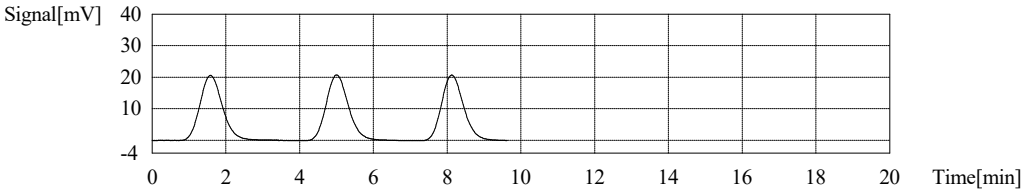
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	87.52	24.77mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 9:19:50 PM
2	87.58	24.79mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 9:23:13 PM
3	86.89	24.59mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 9:26:32 PM

TOC-Control L Report

2023_07_26_002.tlx

Mean Area 87.33
Mean Conc. 24.72mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: 06_21_2023B.cal
Status Completed
Chk. Result

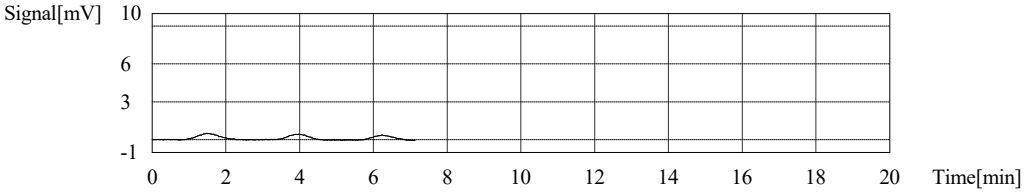
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.5025mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.041	0.5776mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 9:35:44 PM
2	1.707	0.4831mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 9:38:16 PM
3	1.579	0.4469mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 9:40:54 PM

Mean Area 1.776
Mean Conc. 0.5025mg/L



TOC-Control L Report

2023_07_26_002.tlx

Instr.Information

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

Sample

Sample Name: CCV
Sample ID:
Origin: 06_21_2023B.cal
Status: Completed
Chk. Result

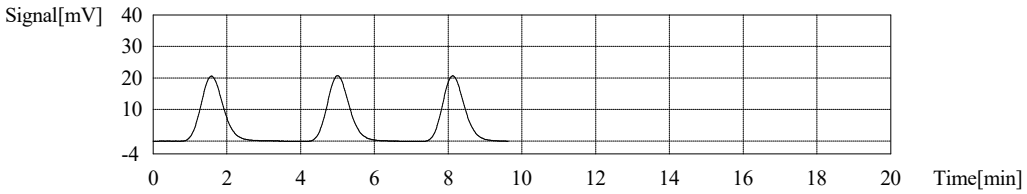
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.72mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	87.52	24.77mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 9:19:50 PM
2	87.58	24.79mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 9:23:13 PM
3	86.89	24.59mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 9:26:32 PM

Mean Area: 87.33
Mean Conc.: 24.72mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: 06_21_2023B.cal
Status: Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.5025mg/L

1. Det

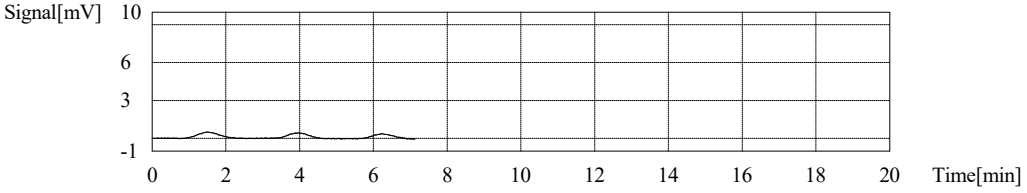
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.041	0.5776mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 9:35:44 PM
2	1.707	0.4831mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 9:38:16 PM
3	1.579	0.4469mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 9:40:54 PM

TOC-Control L Report

2023_07_26_002.tlx

Mean Area 1.776
Mean Conc. 0.5025mg/L



Sample

Sample Name: MBLK-07262023
Sample ID:
Origin: 06_21_2023B.cal
Status Completed
Chk. Result

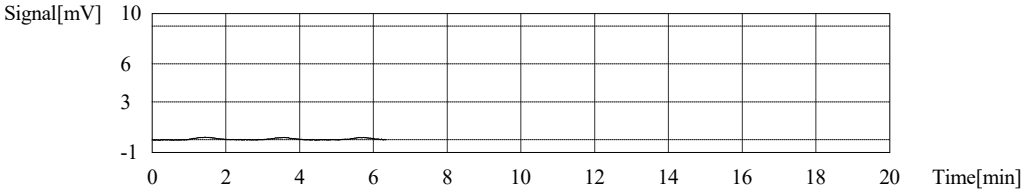
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1884mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.7028	0.1989mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 9:49:45 PM
2	0.6058	0.1715mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 9:52:10 PM
3	0.6880	0.1947mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 9:54:28 PM

Mean Area 0.6655
Mean Conc. 0.1884mg/L



Sample

Sample Name: LCS-07262023
Sample ID:
Origin: 06_21_2023B.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.469mg/L

1. Det

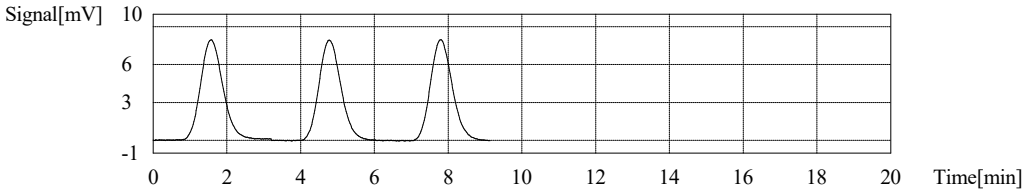
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	33.60	9.509mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 10:04:26 PM
2	33.28	9.419mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 10:07:43 PM
3	33.49	9.478mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 10:10:52 PM

TOC-Control L Report

2023_07_26_002.tlx

Mean Area 33.46
Mean Conc. 9.469mg/L



Sample

Sample Name: LCSD-07262023
Sample ID:
Origin: 06_21_2023B.cal
Status Completed
Chk. Result

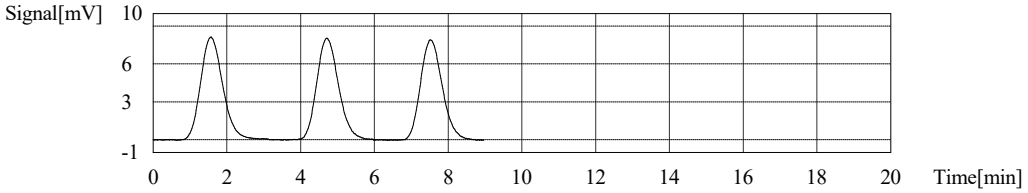
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.475mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	34.30	9.707mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 10:20:46 PM
2	33.17	9.388mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 10:23:52 PM
3	32.97	9.331mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 10:27:06 PM

Mean Area 33.48
Mean Conc. 9.475mg/L



Sample

Sample Name: HS23070658-10DF10
Sample ID: TOC_W 5310B
Origin: 06_21_2023B.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.5982mg/L

1. Det

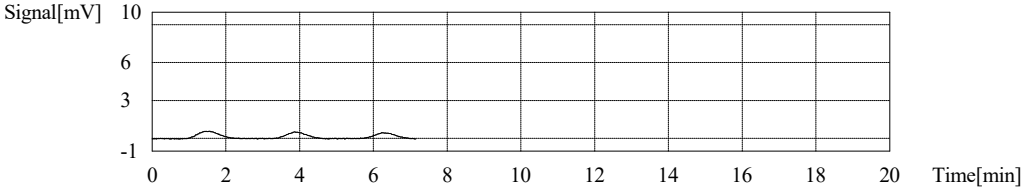
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.375	0.6722mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 10:36:23 PM
2	2.066	0.5847mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 10:39:02 PM
3	1.900	0.5377mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 10:41:36 PM

TOC-Control L Report

2023_07_26_002.tlx

Mean Area 2.114
Mean Conc. 0.5982mg/L



Sample

Sample Name: HS23070659-01DF100
Sample ID:
Origin: 06_21_2023B.cal
Status Completed
Chk. Result

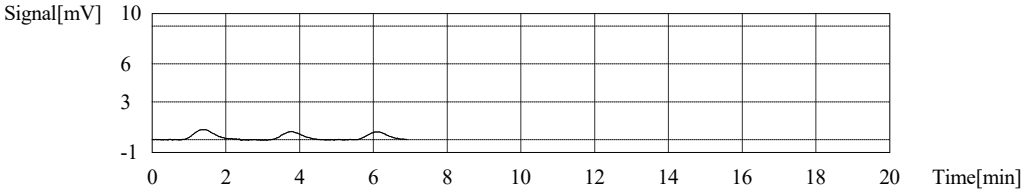
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.7403mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	3.049	0.8629mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 11:23:22 PM
2	2.558	0.7240mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 11:25:55 PM
3	2.240	0.6340mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 11:28:22 PM

Mean Area 2.616
Mean Conc. 0.7403mg/L



Sample

Sample Name: HS23070659-01MS
Sample ID:
Origin: 06_21_2023B.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.971mg/L

1. Det

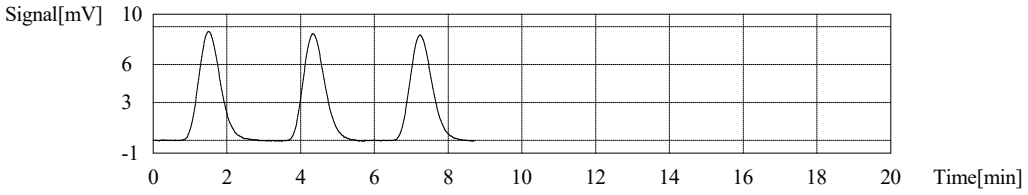
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	35.52	10.05mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 11:37:59 PM
2	34.97	9.897mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 11:41:06 PM
3	35.20	9.962mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/26/2023 11:44:19 PM

TOC-Control L Report

2023_07_26_002.tlx

Mean Area 35.23
Mean Conc. 9.971mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: 06_21_2023B.cal
Status Completed
Chk. Result

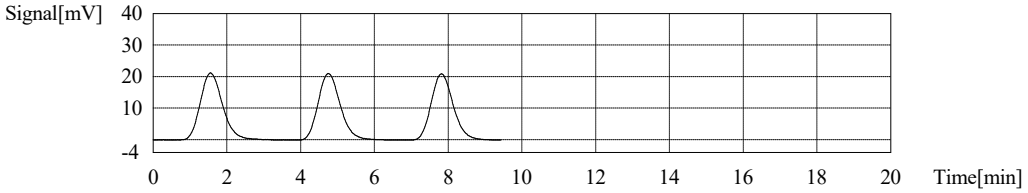
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.06mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	89.41	25.30mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/27/2023 12:22:20 AM
2	88.31	24.99mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/27/2023 12:25:37 AM
3	87.93	24.89mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/27/2023 12:29:02 AM

Mean Area 88.55
Mean Conc. 25.06mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: 06_21_2023B.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.4280mg/L

1. Det

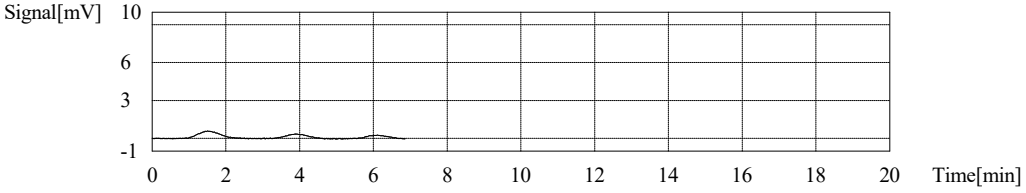
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	2.123	0.6008mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/27/2023 12:38:13 AM
2	1.408	0.3985mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/27/2023 12:40:40 AM
3	1.006	0.2847mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/27/2023 12:43:09 AM

TOC-Control L Report

2023_07_26_002.tlx

Mean Area 1.512
Mean Conc. 0.4280mg/L



Sample

Sample Name: CCV
Sample ID:
Origin: 06_21_2023B.cal
Status Completed
Chk. Result

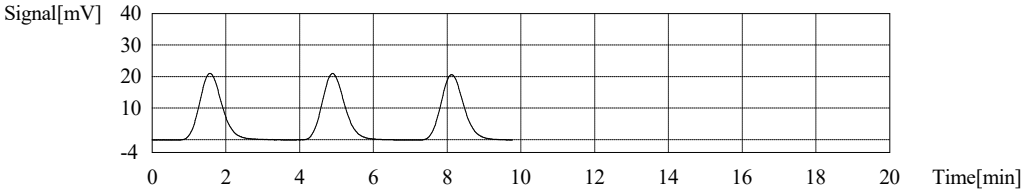
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:25.40mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	89.50	25.33mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/27/2023 1:55:29 AM
2	89.86	25.43mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/27/2023 1:58:59 AM
3	89.86	25.43mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/27/2023 2:02:26 AM

Mean Area 89.74
Mean Conc. 25.40mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: 06_21_2023B.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.2421mg/L

1. Det

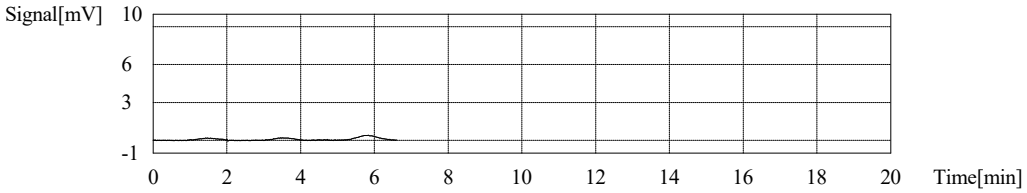
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.4564	0.1292mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/27/2023 2:11:14 AM
2	0.6682	0.1891mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/27/2023 2:13:45 AM
3	1.442	0.4081mg/L	50uL	1.000		06_21_2023B.2023_06_22_09_52_42.cal	7/27/2023 2:16:19 AM

TOC-Control L Report

2023_07_26_002.tlx

Mean Area	0.8555
Mean Conc.	0.2421mg/L



HS23070658 E2300641-IV

ALS WO# HS23070658

July 24, 2023 Service Request No:E2300641

Bernadette Fini
ALS Laboratory Group
10450 Stancliff Road
Suite 210
Houston, TX 77099-4338

Laboratory Results for: HS23070658

Dear Bernadette,

Enclosed are the results of the sample(s) submitted to our laboratory July 19, 2023
For your reference, these analyses have been assigned our service request number **E2300641.**

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

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

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

James Guin

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

Certificate of Analysis

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

ALS Environmental

Client:	ALS Environmental – US	**Service Request No.:**	E2300641
Project:	HS23070658	**Date Received:**	07/19/2023
Sample Matrix:	Ground Water		

CASE NARRATIVE

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

Sample Receipt

Ten samples were received for analysis at ALS Environmental in Houston on 07/19/2023.

The sample were received in good condition and is 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:

EQ2300351: Laboratory Control Spike/Duplicate Laboratory Control Spike (LCS/DLCS) samples were analyzed and reported in lieu of 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:**E2300641
Project: HS23070658

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
E2300641-001	16WW55-230712	7/12/2023	0705
E2300641-002	16WW41-230712	7/12/2023	0705
E2300641-003	16WW48-230712	7/12/2023	0705
E2300641-004	16WW48-230712-FD	7/12/2023	0705
E2300641-005	16EW03-230712	7/12/2023	0705
E2300641-006	16WW35-230712	7/12/2023	0705
E2300641-007	16WW36-230712	7/12/2023	0705
E2300641-008	16WW25-230712	7/12/2023	0705
E2300641-009	16WW26-230712	7/12/2023	0705
E2300641-010	16WW66-230712-FD	7/12/2023	0705

Service Request Summary

Folder #: **E2300641**
Client Name: ALS Environmental - US
Project Name: HS23070658
Project Number:

Report To: Bernadette Fini
ALS Laboratory Group
10450 Stancliff Road
Houston, TX 77099-4338
USA
Phone Number: 281-530-5656
Cell Number:
Fax Number: 281-530-5887
E-mail: bernadette.fini@alsglobal.com

Project Chemist: James Guin
Originating Lab: HOUSTON
Logged By: XMI
Date Received: 07/19/23
Internal Due Date: 7/27/2023
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS23070658
EDD: No EDD Specified

10 120 mL-Plastic Bottle Natural WM Unpreserved
Location: SUBBED
Pressure Gas:

Lab Samp No.	Client Samp No	Matrix	Collected	HOUSTON ClO4 DOD/6850
E2300641-001	16WW55-230712	Ground Water	07/12/23 0705	**IV**
E2300641-002	16WW41-230712	Ground Water	07/12/23 0705	**IV**
E2300641-003	16WW48-230712	Ground Water	07/12/23 0705	**IV**
E2300641-004	16WW48-230712-FD	Ground Water	07/12/23 0705	**IV**
E2300641-005	16EW03-230712	Ground Water	07/12/23 0705	**IV**
E2300641-006	16WW35-230712	Ground Water	07/12/23 0705	**IV**
E2300641-007	16WW36-230712	Ground Water	07/12/23 0705	**IV**
E2300641-008	16WW25-230712	Ground Water	07/12/23 0705	**IV**
E2300641-009	16WW26-230712	Ground Water	07/12/23 0705	**IV**
E2300641-010	16WW66-230712-FD	Ground Water	07/12/23 0705	**IV**

Service Request Summary

Folder #: **E2300641**
Client Name: ALS Environmental - US
Project Name: HS23070658
Project Number:

Report To: Bernadette Fini
ALS Laboratory Group
10450 Stancliff Road
Houston, TX 77099-4338
USA
Phone Number: 281-530-5656
Cell Number:
Fax Number: 281-530-5887
E-mail: bernadette.fini@alsglobal.com

Project Chemist: James Guin
Originating Lab: HOUSTON
Logged By: XMI
Date Received: 07/19/23
Internal Due Date: 7/27/2023
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS23070658
EDD: No EDD Specified

10 120 mL-Plastic Bottle Natural WM Unpreserved
Location: SUBBED
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

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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 2022-2023	7/31/2023
Louisiana Department of Environmental Quality	03087-2023	6/30/2024
Louisiana Department of Health and Hospitals	LA028-2023	12/31/2023
Maine Department of Health and Human Services	2022017	6/5/2024
Maryland Department of the Environment	343	7/31/2023
Michigan Depratment of Environmental Quality	9971-2023	4/30/2024
Minnesota Department of Health	2368363	12/31/2023
Nebraska Department of Health and Human Services	NE-OS-25-13	4/30/2024
Nevada Department of Conservation and Natural Resources	TX026932023-1	7/31/2023
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	2022-141	8/31/2023
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	TX026932022-13	7/31/2023
Washington Department of Ecology	C819-22	11/14/2023

ALS

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

As Rec'd.

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Subcontract Chain of Custody

E2300641

SAMPLING STATE: **Dept of Defense**

COC ID: 22372 5

E2300641
ALS Laboratory Group
HS23070658

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:	HS23070658
TSR:	Ron Martino

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	**HS23070658-01**	**16WW55-230712**	**Groundwater**	**12 Jul 2023 07:05**
	6850 Perchlorate; separte Level II & Level IV PDF; EQUIS EDD LHAAP			27 Jul 2023
2.	**HS23070658-02**	**16WW41-230712**	**Groundwater**	**12 Jul 2023 07:50**
	6850 Perchlorate; separte Level II & Level IV PDF; EQUIS EDD LHAAP			27 Jul 2023
3.	**HS23070658-03**	**16WW48-230712**	**Groundwater**	**12 Jul 2023 08:35**
	6850 Perchlorate; separte Level II & Level IV PDF; EQUIS EDD LHAAP			27 Jul 2023
4.	**HS23070658-04**	**16WW48-230712-FD**	**Groundwater**	**12 Jul 2023 08:35**
	6850 Perchlorate; separte Level II & Level IV PDF; EQUIS EDD LHAAP			27 Jul 2023
5.	**HS23070658-05**	**16EW03-230712**	**Groundwater**	**12 Jul 2023 09:25**
	6850 Perchlorate; separte Level II & Level IV PDF; EQUIS EDD LHAAP			27 Jul 2023
6.	**HS23070658-06**	**16WW35-230712**	**Groundwater**	**12 Jul 2023 10:15**
	6850 Perchlorate; separte Level II & Level IV PDF; EQUIS EDD LHAAP			27 Jul 2023
7.	**HS23070658-07**	**16WW36-230712**	**Groundwater**	**12 Jul 2023 11:00**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			27 Jul 2023
8.	**HS23070658-08**	**16WW25-230712**	**Groundwater**	**12 Jul 2023 11:45**

Subcontract Chain of Custody

SAMPLING STATE: **Dept of Defense** **COC ID: 22372**

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			27 Jul 2023
9.	**HS23070658-09**	**16WW26-230712**	**Groundwater**	**12 Jul 2023 12:25**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			27 Jul 2023
10.	**HS23070658-10**	**16WW66-230712-FD**	**Groundwater**	**12 Jul 2023 12:25**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			27 Jul 2023

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

QC Level: DOD IV (DoD Data Package)

Relinquished By: _____ Date/Time: _____

Received By: _____ Date/Time: 7.19.23 1410

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

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Houston, TX 77099
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Client: ALS Date: 7-14-23 WO#:

Time Received: 1400 Received by: CG BO#:

Matrices: Solid/Sludge Water Oil Wipes Hydrocarbon Liquid Other

Kit ID/Cooler ID	Trip Blank ID	Cooler Temp (C) Observed/Corrected	IR #	Temp BLI Present?
-		4.1 / 4.0	31	Y N
		/		Y N
		/		Y N
		/		Y N
		/		Y N

Delivery Method: FedEx UPS Greyhound ALS Client Other

Date/Time of Unpacking: 7-14-23 Unpacked by: CG

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~~
Chain of Custody present?	~~Yes~~	No	
Chain of Custody signed when relinquished and received?	~~Yes~~	No	
Chain of Custody – Sampler's name present?	Yes	~~No~~	
Chain of Custody agrees with sample labels?	~~Yes~~	No	
Samples in proper container/bottle?	~~Yes~~	No	
VOA/TX1005/1006 Solids in hermetically Sealed Vials:	Yes	No	No VOA/TX1005/1006 Solid
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	
Water - VOA vials have zero headspace?	Yes	No	N/A ~~No VOA submitted~~
Non-VOA waters preserved with HCl, H2SO4, HNO3 are pH <2?			Yes No N/A
Waters preserved with NaOH/Ascorbic acid are pH>12?	Yes	No	~~N/A~~
pH adjusted?	Yes*	No	~~N/A~~ *See Preservation Logbook
pH adjusted by: _____	**pH Paper Lot:** _____		

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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#: 423453 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 7/20/23 10:26

#	Lab Code	Client ID	B#	Method /Test	pH	Cl	Matrix	Amt. Ext.	Sample Description
1	E2300640-001	16WW58-230711	.01	6850/ClO4 DOD			Ground Water	10mL	
2	E2300640-002	16WW57-230711	.01	6850/ClO4 DOD			Ground Water	10mL	
3	E2300640-003	16WW16-230711	.01	6850/ClO4 DOD			Ground Water	10mL	
4	E2300640-004	16WW34-230711	.01	6850/ClO4 DOD			Ground Water	10mL	
5	E2300640-005	16WW33-230711	.01	6850/ClO4 DOD			Ground Water	10mL	
6	E2300640-006	16WW32-230711	.01	6850/ClO4 DOD			Ground Water	10mL	
7	E2300640-007	16WW31-230711	.01	6850/ClO4 DOD			Ground Water	10mL	
8	E2300640-008	16WW56-230711	.01	6850/ClO4 DOD			Ground Water	10mL	
9	E2300641-001	16WW55-230712	.01	6850/ClO4 DOD			Ground Water	10mL	
10	E2300641-002	16WW41-230712	.01	6850/ClO4 DOD			Ground Water	10mL	
11	E2300641-003	16WW48-230712	.01	6850/ClO4 DOD			Ground Water	10mL	
12	E2300641-004	16WW48-230712-FD	.01	6850/ClO4 DOD			Ground Water	10mL	
13	E2300641-005	16EW03-230712	.01	6850/ClO4 DOD			Ground Water	10mL	
14	E2300641-006	16WW35-230712	.01	6850/ClO4 DOD			Ground Water	10mL	
15	E2300641-007	16WW36-230712	.01	6850/ClO4 DOD			Ground Water	10mL	
16	E2300641-008	16WW25-230712	.01	6850/ClO4 DOD			Ground Water	10mL	
17	E2300641-009	16WW26-230712	.01	6850/ClO4 DOD			Ground Water	10mL	
18	E2300641-010	16WW66-230712-FD	.01	6850/ClO4 DOD			Ground Water	10mL	
19	EQ2300351-01	MB		6850/ClO4 DOD			Liquid	10mL	
20	EQ2300351-02	LCS		6850/ClO4 DOD			Liquid	10mL	
21	EQ2300351-03	DLCS		6850/ClO4 DOD			Liquid	10mL	
22	EQ2300351-04	16WW16-230711 MS	.01	6850/ClO4 DOD			Liquid	10mL	
23	EQ2300351-05	16WW16-230711 DMS	.01	6850/ClO4 DOD			Liquid	10mL	

Spiking Solutions

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

EQ2300351-02 1.00µL EQ2300351-03 1.00µL EQ2300351-04 1.00µL EQ2300351-05 1.00µL

Name: Perchlorate Internal Standard 1ug/mL Inventory ID 227244 Logbook Ref: Perchlorate Internal Standard Expires On: 07/31/2023

E2300640-001	100.00µL	E2300640-002	100.00µL	E2300640-003	100.00µL	E2300640-004	100.00µL	E2300640-005	100.00µL	E2300640-006	100.00µL
E2300640-007	100.00µL	E2300640-008	100.00µL	E2300641-001	100.00µL	E2300641-002	100.00µL	E2300641-003	100.00µL	E2300641-004	100.00µL
E2300641-005	100.00µL	E2300641-006	100.00µL	E2300641-007	100.00µL	E2300641-008	100.00µL	E2300641-009	100.00µL	E2300641-010	100.00µL
EQ2300351-01	100.00µL	EQ2300351-02	100.00µL	EQ2300351-03	100.00µL	EQ2300351-04	100.00µL	EQ2300351-05	100.00µL		

Preparation Information Benchsheet

Prep Run#: 423453 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 7/20/23 10:26

Preparation Materials

Water HPLC Grade	HPLC water 5/18/23CG (229315)	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-lock syringes (228116)				

Preparation Steps

Step: Preparation
Started: 7/20/23 10:26
Finished: 7/20/23 11:30
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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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:**	E2300641
Project:	HS23070658	**Date Collected:**	7/12/23 0705
Sample Matrix:	Ground Water	**Date Received:**	7/19/23
Sample Name:	16WW55-230712	**Units:**	µg/L
Lab Code:	E2300641-001	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**45.9**		0.100	0.0500	0.0250	1	7/20/23	7/21/23 14:37	423453	811523	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300641
Project:	HS23070658	**Date Collected:**	7/12/23 0705
Sample Matrix:	Ground Water	**Date Received:**	7/19/23
Sample Name:	16WW41-230712	**Units:**	µg/L
Lab Code:	E2300641-002	**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	**52.5**		0.200	0.100	0.0500	2	7/20/23	7/21/23 15:50	423453	811523	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300641
Project:	HS23070658	**Date Collected:**	7/12/23 0705
Sample Matrix:	Ground Water	**Date Received:**	7/19/23
Sample Name:	16WW48-230712	**Units:**	µg/L
Lab Code:	E2300641-003	**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	**1.20**		0.100	0.0500	0.0250	1	7/20/23	7/21/23 14:48	423453	811523	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300641
Project:	HS23070658	**Date Collected:**	7/12/23 0705
Sample Matrix:	Ground Water	**Date Received:**	7/19/23
Sample Name:	16WW48-230712-FD	**Units:**	µg/L
Lab Code:	E2300641-004	**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	**1.27**		0.100	0.0500	0.0250	1	7/20/23	7/21/23 15:39	423453	811523	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300641
Project:	HS23070658	**Date Collected:**	7/12/23 0705
Sample Matrix:	Ground Water	**Date Received:**	7/19/23
Sample Name:	16EW03-230712	**Units:**	µg/L
Lab Code:	E2300641-005	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	7/20/23	7/21/23 15:55	423453	811523	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300641
Project:	HS23070658	**Date Collected:**	7/12/23 0705
Sample Matrix:	Ground Water	**Date Received:**	7/19/23
Sample Name:	16WW35-230712	**Units:**	µg/L
Lab Code:	E2300641-006	**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	**478**		2.00	1.00	0.500	20	7/20/23	7/21/23 16:01	423453	811523	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300641
Project:	HS23070658	**Date Collected:**	7/12/23 0705
Sample Matrix:	Ground Water	**Date Received:**	7/19/23
Sample Name:	16WW36-230712	**Units:**	µg/L
Lab Code:	E2300641-007	**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	7/20/23	7/21/23 16:06	423453	811523	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300641
Project:	HS23070658	**Date Collected:**	7/12/23 0705
Sample Matrix:	Ground Water	**Date Received:**	7/19/23
Sample Name:	16WW25-230712	**Units:**	µg/L
Lab Code:	E2300641-008	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	7/20/23	7/21/23 16:12	423453	811523	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300641
Project:	HS23070658	**Date Collected:**	7/12/23 0705
Sample Matrix:	Ground Water	**Date Received:**	7/19/23
Sample Name:	16WW26-230712	**Units:**	µg/L
Lab Code:	E2300641-009	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	7/20/23	7/21/23 16:17	423453	811523	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300641
Project:	HS23070658	**Date Collected:**	7/12/23 0705
Sample Matrix:	Ground Water	**Date Received:**	7/19/23
Sample Name:	16WW66-230712-FD	**Units:**	µg/L
Lab Code:	E2300641-010	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	7/20/23	7/21/23 16:23	423453	811523	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300641
Project:	HS23070658	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	EQ2300351-01	**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	7/20/23	7/21/23 13:14	423453	811523	

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: HS23070658
Sample Matrix: Ground Water

Service Request: E2300641
Date Analyzed: 7/21/23

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

Analytical Method: 6850
Prep Method: Method

Units: µg/L
Basis: NA

Extraction Lot: 423453

	Lab Control Sample EQ2300351-02			Duplicate Lab Control Sample EQ2300351-03					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	0.0922	0.100	92	0.0959	0.100	96	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:**	E2300641
Project:	HS23070658	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2300351-02	**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	**0.0922**	J	0.100	0.0500	0.0250	1	7/20/23	7/21/23 13:20	423453	811523	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300641
Project:	HS23070658	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2300351-03	**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	**0.0959**	J	0.100	0.0500	0.0250	1	7/20/23	7/21/23 13:25	423453	811523	

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

20230629-809329

Injection Log

LCMS01 -Shimadzu 8050

1st Review: XM
2nd Review: GC

ICAL Date: 6/29/2023
Cal. Std. xp: 06/29/2023
ICAL ID: EC2300011

Mobile Phases : A:20mM ammonium acetate in water 32103046 **B:**Acetonitrile 226552

	Sample Name		File Name	Acquisition Method	Dilution	Comments	Date/Time
1	PERCHLORATE1		20230629-001	Perchlorate6850c.lcm	1x	227245	6/29/2023 12:59
2	PERCHLORATE2		20230629-002	Perchlorate6850c.lcm	1x	227246	6/29/2023 13:05
3	PERCHLORATE3		20230629-003	Perchlorate6850c.lcm	1x	227247	6/29/2023 13:10
4	PERCHLORATE4		20230629-004	Perchlorate6850c.lcm	1x	227248	6/29/2023 13:16
5	PERCHLORATE5		20230629-005	Perchlorate6850c.lcm	1x	227249	6/29/2023 13:21
6	PERCHLORATE6		20230629-006	Perchlorate6850c.lcm	1x	227250	6/29/2023 13:27
7	PERCHLORATE7		20230629-007	Perchlorate6850c.lcm	1x	227251	6/29/2023 13:32
8	PERCHLORATE8		20230629-008	Perchlorate6850c.lcm	1x	227252	6/29/2023 13:38
9	PERCHLORATE9		20230629-009	Perchlorate6850c.lcm	1x	227253	6/29/2023 13:43
10	PERCHLORATE10		20230629-010	Perchlorate6850c.lcm	1x	227254	6/29/2023 13:49
11	PERCHLORATEICV		20230629-011	Perchlorate6850c.lcm	1x	227256	6/29/2023 13:55
12	IB		20230629-012	Perchlorate6850c.lcm	1x		6/29/2023 14:00
13	LODV		20230629-013	Perchlorate6850c.lcm	1x	227501	6/29/2023 14:06
14	ICS		20230629-014	Perchlorate6850c.lcm	1x	32103024	6/29/2023 14:11
15	CCV		20230629-015	Perchlorate6850c.lcm	1x	227251	6/29/2023 14:17
16	EQ2300312-01		20230629-016	Perchlorate6850c.lcm	1x		6/29/2023 14:22
17	EQ2300312-02		20230629-017	Perchlorate6850c.lcm	1x	DNU-RR	6/29/2023 14:28
18	EQ2300312-03		20230629-018	Perchlorate6850c.lcm	1x		6/29/2023 14:33
19	E2300606-001		20230629-019	Perchlorate6850c.lcm	10x		6/29/2023 14:39
20	EQ2300312-04		20230629-020	Perchlorate6850c.lcm	1x		6/29/2023 14:44
21	EQ2300312-05		20230629-021	Perchlorate6850c.lcm	1x		6/29/2023 14:50
22	E2300606-002		20230629-022	Perchlorate6850c.lcm	5x		6/29/2023 14:55
23	E2300606-003		20230629-023	Perchlorate6850c.lcm	10x		6/29/2023 15:01
24	E2300606-004		20230629-024	Perchlorate6850c.lcm	10x		6/29/2023 15:06
25	E2300606-005		20230629-025	Perchlorate6850c.lcm	1x		6/29/2023 15:12
26	CCV		20230629-026	Perchlorate6850c.lcm	1x	227251	6/29/2023 15:17
27	E2300606-006		20230629-027	Perchlorate6850c.lcm	1x		6/29/2023 15:23
28	E2300606-007		20230629-028	Perchlorate6850c.lcm	500x		6/29/2023 15:28
29	E2300606-008		20230629-029	Perchlorate6850c.lcm	100x		6/29/2023 15:34
30	EQ2300312-06		20230629-030	Perchlorate6850c.lcm	100x		6/29/2023 15:40
31	EQ2300312-07		20230629-031	Perchlorate6850c.lcm	100x		6/29/2023 15:45
32	E2300606-009		20230629-032	Perchlorate6850c.lcm	1x		6/29/2023 15:53
33	E2300610-001		20230629-033	Perchlorate6850c.lcm	10000x		6/29/2023 15:58
34	E2300610-002		20230629-034	Perchlorate6850c.lcm	1x		6/29/2023 16:04
35	E2300610-003		20230629-035	Perchlorate6850c.lcm	1x		6/29/2023 16:09
36	E2300610-004		20230629-036	Perchlorate6850c.lcm	1x		6/29/2023 16:15
37	CCV		20230629-037	Perchlorate6850c.lcm	1x	227251	6/29/2023 16:21

20230629-809329

Injection Log

LCMS01 -Shimadzu 8050

1st Review: XM
2nd Review: GC

ICAL Date: 6/29/2023
Cal. Std. xp: 06/29/2023
ICAL ID: EC2300011

Mobile Phases : A:20mM ammonium acetate in water 32103046 **B:**Acetonitrile 226552

	Sample Name		File Name	Acquisition Method	Dilution	Comments	Date/Time
38	E2300610-005		20230629-038	Perchlorate6850c.lcm	1x		6/29/2023 16:26
39	E2300610-006		20230629-039	Perchlorate6850c.lcm	1x		6/29/2023 16:32
40	E2300610-007		20230629-040	Perchlorate6850c.lcm	1x		6/29/2023 16:37
41	E2300610-008		20230629-041	Perchlorate6850c.lcm	1x	DNU-D	6/29/2023 16:43
42	EQ2300312-08		20230629-042	Perchlorate6850c.lcm	1x		6/29/2023 16:48
43	EQ2300312-09		20230629-043	Perchlorate6850c.lcm	1x		6/29/2023 16:54
44	E2300611-001		20230629-044	Perchlorate6850c.lcm	1x		6/29/2023 16:59
45	E2300611-002		20230629-045	Perchlorate6850c.lcm	1x		6/29/2023 17:05
46	E2300611-003		20230629-046	Perchlorate6850c.lcm	1x		6/29/2023 17:10
47	E2300611-004		20230629-047	Perchlorate6850c.lcm	1x	DNU-D	6/29/2023 17:16
48	CCV		20230629-048	Perchlorate6850c.lcm	1x	227251	6/29/2023 17:21
49	E2300611-005		20230629-049	Perchlorate6850c.lcm	1x		6/29/2023 17:27
50	E2300611-006		20230629-050	Perchlorate6850c.lcm	1x	DNU-D	6/29/2023 17:32
51	E2300611-007		20230629-051	Perchlorate6850c.lcm	1x	DNU-D	6/29/2023 17:38
52	E2300611-008		20230629-052	Perchlorate6850c.lcm	1x		6/29/2023 17:43
53	E2300611-009		20230629-053	Perchlorate6850c.lcm	1x		6/29/2023 17:49
54	E2300611-010		20230629-054	Perchlorate6850c.lcm	1x		6/29/2023 17:55
55	CCV		20230629-055	Perchlorate6850c.lcm	1x	227251	6/29/2023 18:06

Initial Calibration - Detailed Report

Calibration ID: EC2300011 **Instrument ID:** E-LCMS-01
Column Name: 1

#	Lab Code	Sample Name	File Location	Aquisition Date
01	EC2300011-01	PERCHLORATE1	20230629-001	06/29/2023 12:59
02	EC2300011-02	PERCHLORATE2	20230629-002	06/29/2023 13:05
03	EC2300011-03	PERCHLORATE3	20230629-003	06/29/2023 13:10
04	EC2300011-04	PERCHLORATE4	20230629-004	06/29/2023 13:16
05	EC2300011-05	PERCHLORATE5	20230629-005	06/29/2023 13:21
06	EC2300011-06	PERCHLORATE6	20230629-006	06/29/2023 13:27
07	EC2300011-07	PERCHLORATE7	20230629-007	06/29/2023 13:32
08	EC2300011-08	PERCHLORATE8	20230629-008	06/29/2023 13:38
09	EC2300011-09	PERCHLORATE9	20230629-009	06/29/2023 13:43
10	EC2300011-10	PERCHLORATE10	20230629-010	06/29/2023 13:49

Analyte **Curve Fit** **Weighting**

Perchlorate **Average RF** **RSD = 2.809** **Average RF = 0.1625**

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.1000	0.1678	02	0.5000	0.1574	03	0.7000	0.1599	04	1.0000	0.1567
05	2.0000	0.1596	06	5.0000	0.1641	07	10.0000	0.1704	08	20.0000	0.1667
09	30.0000	0.1608	10	50.0000	0.1619						

Analyte

Perchlorate RSE = 2.81

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.1000	0.103	3.2	02	0.5000	0.484	-3.1	03	0.7000	0.689	-1.6
04	1.0000	0.964	-3.6	05	2.0000	1.96	-1.8	06	5.0000	5.05	1.0
07	10.0000	10.5	4.8	08	20.0000	20.5	2.6	09	30.0000	29.7	-1.1
10	50.0000	49.8	-0.4								

Initial Calibration Verification Summary Report

Calibration ID:	EC2300011	**Instrument ID:**	E-LCMS-01
Datafile ID:	20230629-011	**Column Name:**	1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
Perchlorate	EC2300011-11	T	Average RF	10	9.913	ng/mL	-0.9	<= 15

Insight Report

Printed at 6/29/2023 2:17:05 PM

Method File: I:\LCMS01\DATA\20230628\06282023.lcm
Project File: I:\LCMS01\DATA\20230628\06282023.damlp

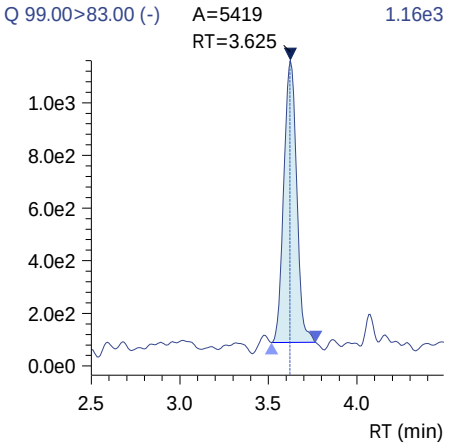
PERCHLORATE1

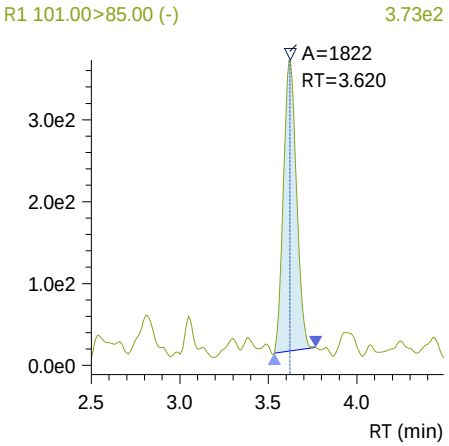
Sample ID: PERCHLORATE1
Date Acquired: 6/29/2023 12:59:40 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-001.lcd
Vial: 1 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.625	5419	323018	0.1032	ng/mL	101.00 >85.00	33.63	22.41-41.62
Sodium Perchlorate-18O4 _IS	Auto	3.617	323018	323018	1.0000	ng/mL	----	----	

Perchlorate

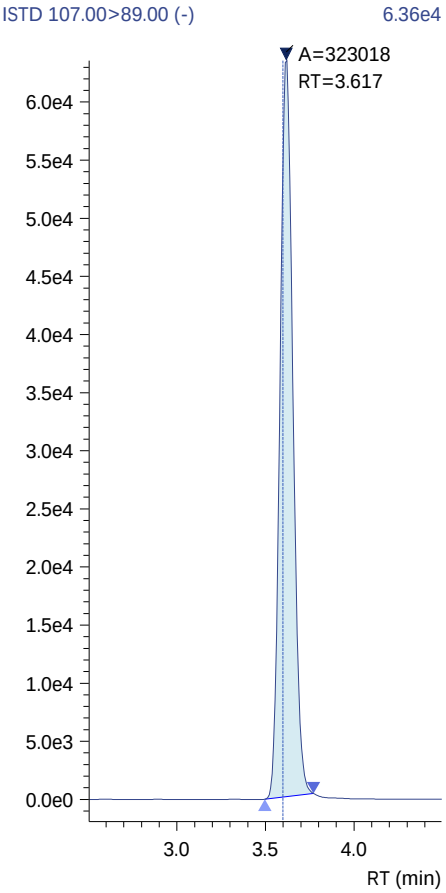
Conc 0.1032
R#1 33.63 (32.02)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/29/2023 2:17:05 PM

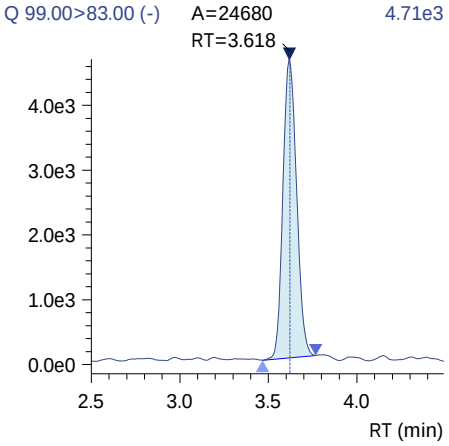
PERCHLORATE2

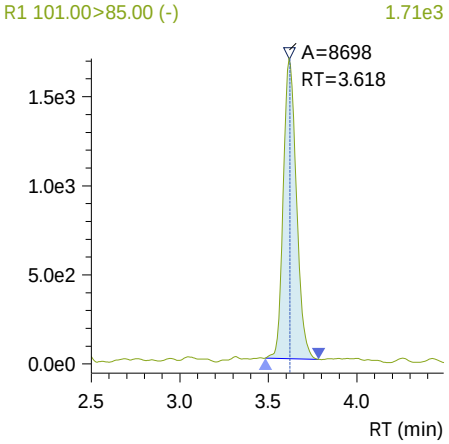
Sample ID: PERCHLORATE2
Date Acquired: 6/29/2023 1:05:11 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-002.lcd
Vial: 2 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.618	24680	313519	0.4844	ng/mL	101.00 >85.00	35.24	22.41-41.62
Sodium Perchlorate-18O4 _IS	Auto	3.618	313519	313519	1.0000	ng/mL	----	----	

Perchlorate

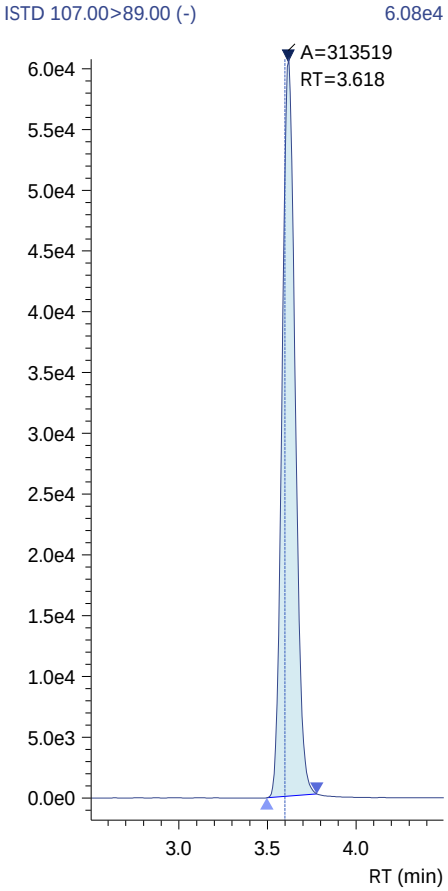
Conc 0.4844
R#1 35.24 (32.02)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/29/2023 2:17:05 PM

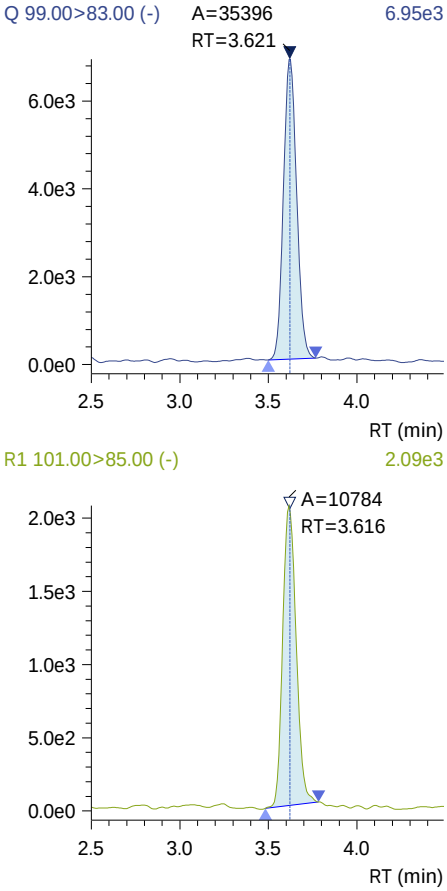
PERCHLORATE3

Sample ID: PERCHLORATE3
Date Acquired: 6/29/2023 1:10:46 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-003.lcd
Vial: 3 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.621	35396	316311	0.6886	ng/mL	101.00 >85.00	30.47	22.41-41.62
Sodium Perchlorate-18O4 _IS	Auto	3.618	316311	316311	1.0000	ng/mL	----	----	

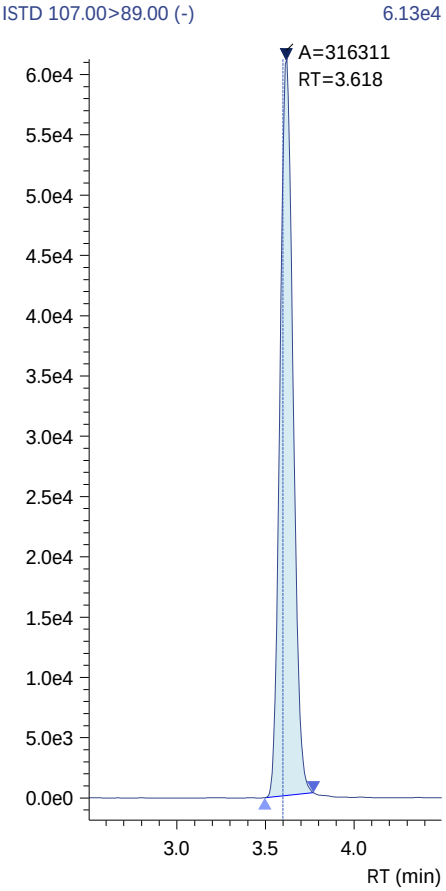
Perchlorate

Conc 0.6886
R#1 30.47 (32.02)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/29/2023 2:17:05 PM

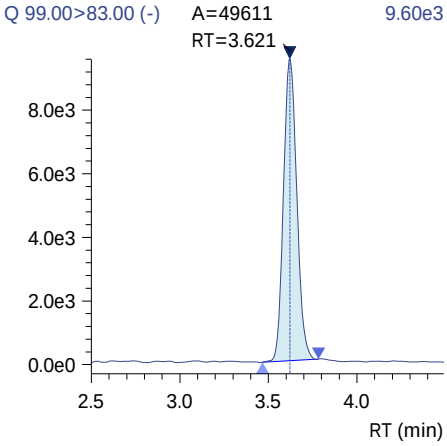
PERCHLORATE4

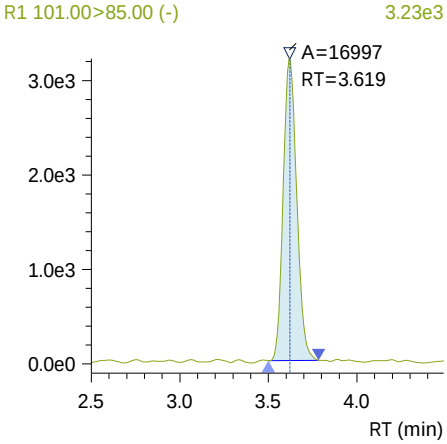
Sample ID: PERCHLORATE4
Date Acquired: 6/29/2023 1:16:19 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-004.lcd
Vial: 4 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.621	49611	316580	0.9643	ng/mL	101.00 >85.00	34.26	22.41-41.62
Sodium Perchlorate-18O4 _IS	Auto	3.618	316580	316580	1.0000	ng/mL	----	----	

Perchlorate

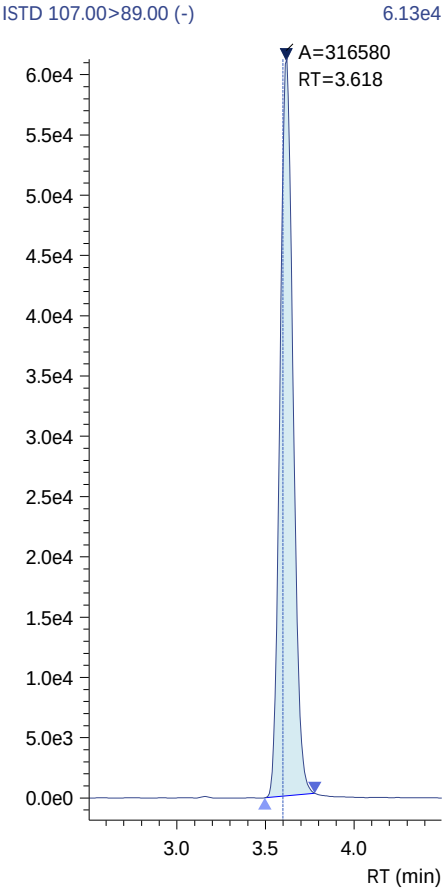
Conc 0.9643
R#1 34.26 (32.02)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/29/2023 2:17:05 PM

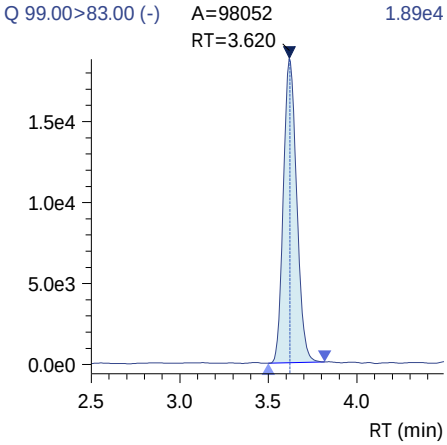
PERCHLORATE5

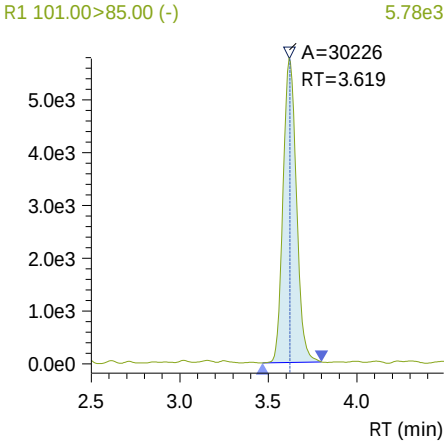
Sample ID: PERCHLORATE5
Date Acquired: 6/29/2023 1:21:50 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-005.lcd
Vial: 5 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.620	98052	307162	1.9642	ng/mL	101.00 >85.00	30.83	22.41-41.62
Sodium Perchlorate-18O4 _IS	Auto	3.617	307162	307162	1.0000	ng/mL	----	----	

Perchlorate

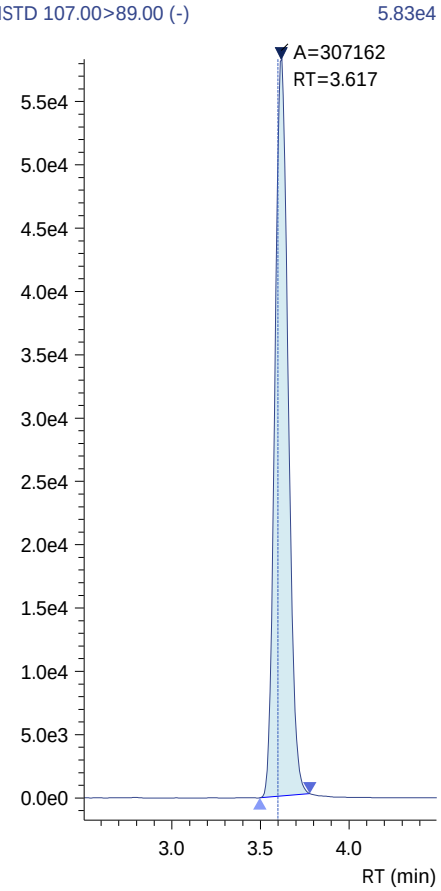
Conc 1.9642
R#1 30.83 (32.02)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/29/2023 2:17:05 PM

PERCHLORATE6

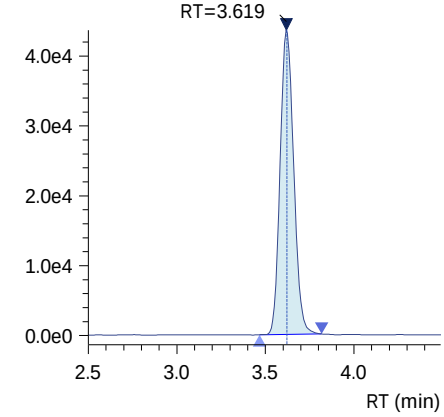
Sample ID: PERCHLORATE6
Date Acquired: 6/29/2023 1:27:22 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-006.lcd
Vial: 6 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.619	232011	282827	5.0477	ng/mL	101.00 >85.00	31.17	22.41-41.62
Sodium Perchlorate-18O4 _IS	Auto	3.617	282827	282827	1.0000	ng/mL	----	----	

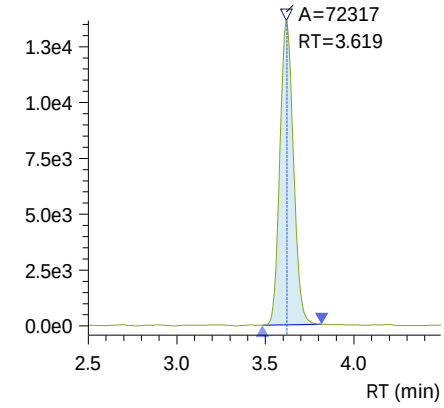
Perchlorate

Conc 5.0477
R#1 31.17 (32.02)

Q 99.00>83.00 (-) A=232011 RT=3.619 4.37e4



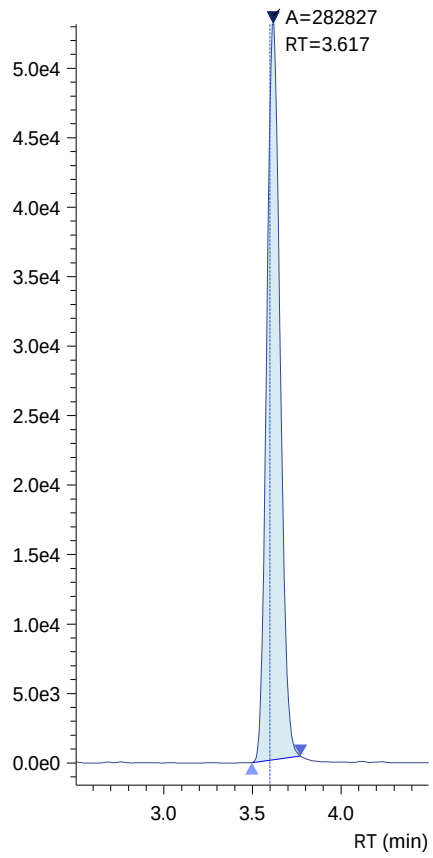
R1 101.00>85.00 (-) 1.37e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 5.32e4



Insight Report

Printed at 6/29/2023 2:17:05 PM

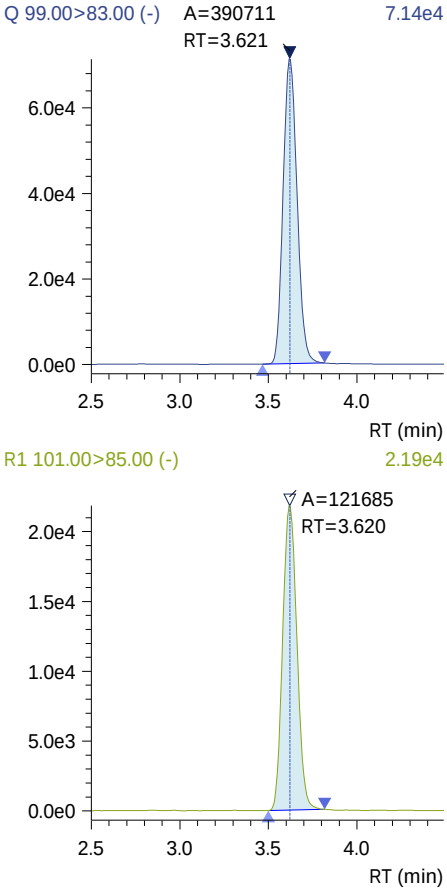
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 6/29/2023 1:32:51 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-007.lcd
Vial: 3 | 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	3.621	390711	229327	10.48 35	ng/mL	101.00 >85.00	31.14	22.41-41.62
Sodium Perchlorate-18O4 _IS	Auto	3.616	229327	229327	1.0000	ng/mL	----	----	

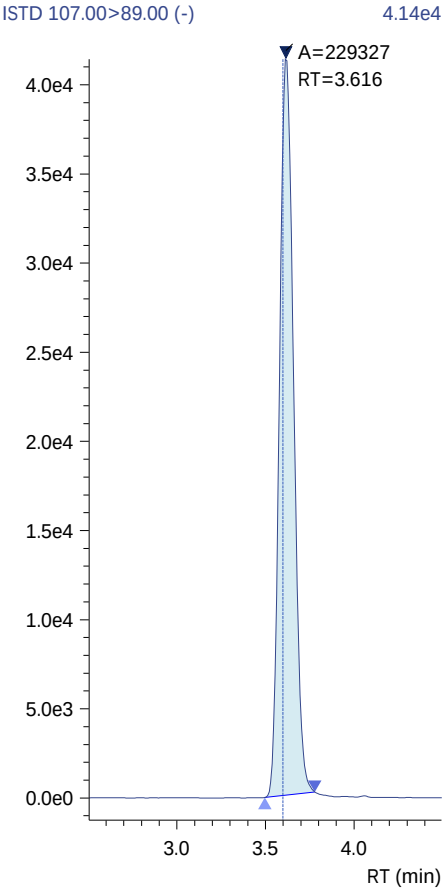
Perchlorate

Conc 10.4835
R#1 31.14 (32.02)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/29/2023 2:17:05 PM

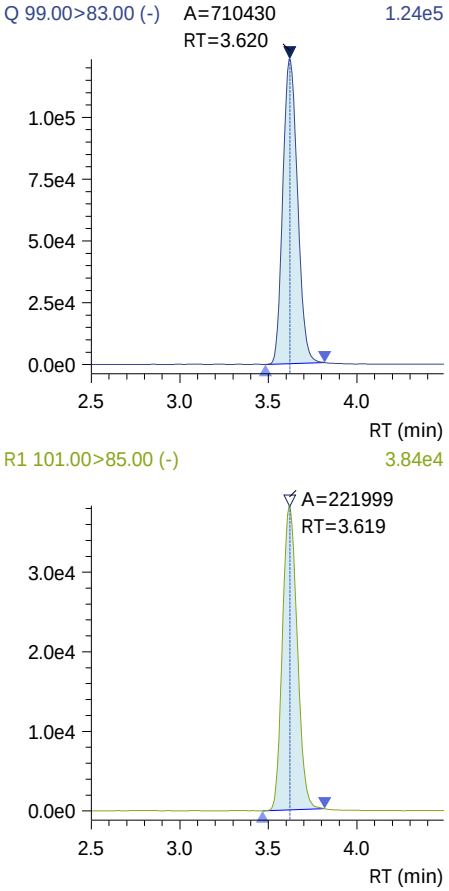
PERCHLORATE8

Sample ID: PERCHLORATE8
Date Acquired: 6/29/2023 1:38:22 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-008.lcd
Vial: 8 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.620	710430	213093	20.5144	ng/mL	101.00 >85.00	31.25	22.41-41.62
Sodium Perchlorate-18O4_IS	Auto	3.615	213093	213093	1.0000	ng/mL	----	----	

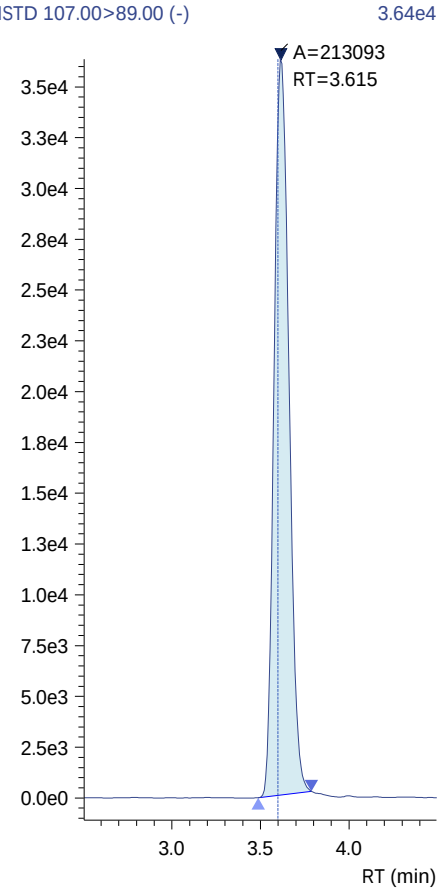
Perchlorate

Conc 20.5144
R#1 31.25 (32.02)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/29/2023 2:17:05 PM

PERCHLORATE9

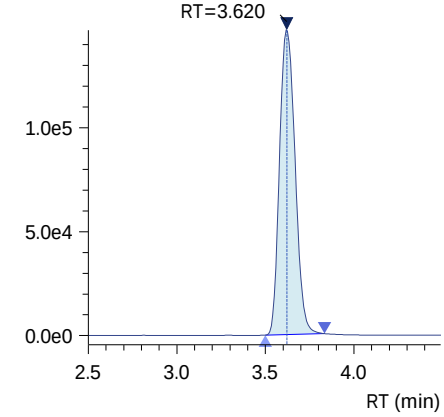
Sample ID: PERCHLORATE9
Date Acquired: 6/29/2023 1:43:53 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-009.lcd
Vial: 9 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.620	896468	185851	29.6808	ng/mL	101.00 >85.00	31.06	22.41-41.62
Sodium Perchlorate-18O4_IS	Auto	3.614	185851	185851	1.0000	ng/mL	----	----	

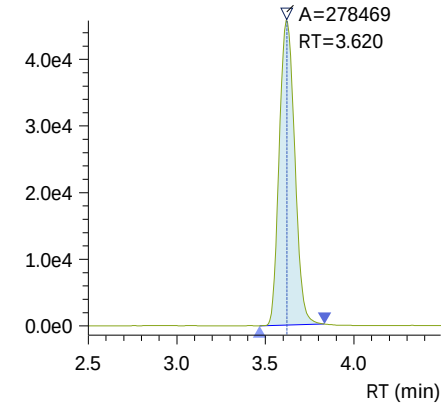
Perchlorate

Conc 29.6808
R#1 31.06 (32.02)

Q 99.00>83.00 (-) A=896468 1.47e5



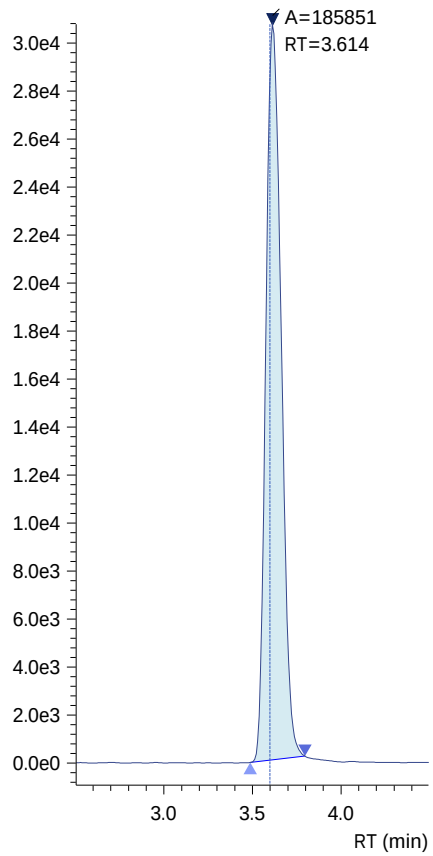
R1 101.00>85.00 (-) 4.58e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 3.08e4



Insight Report

Printed at 6/29/2023 2:17:05 PM

PERCHLORATE10

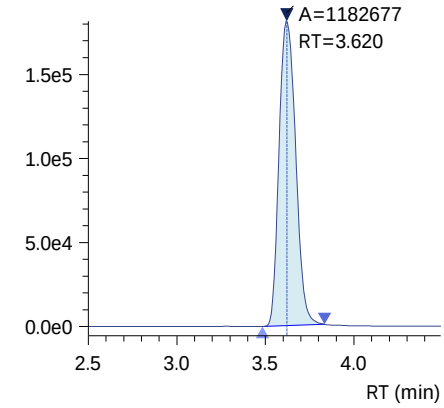
Sample ID: PERCHLORATE10
Date Acquired: 6/29/2023 1:49:27 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-010.lcd
Vial: 10 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.620	1182677	146135	49.79 86	ng/mL	101.00 >85.00	30.89	22.41-41.62
Sodium Perchlorate-18O4 _IS	Auto	3.614	146135	146135	1.0000	ng/mL	----	----	

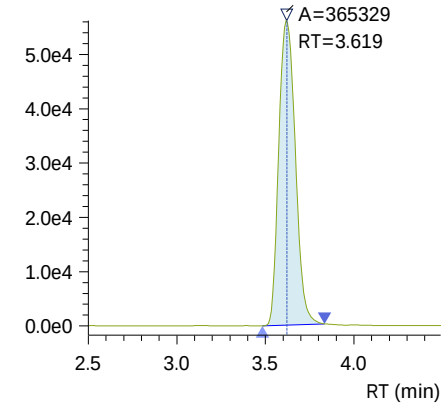
Perchlorate

Conc 49.7986
R#1 30.89 (32.02)

Q 99.00>83.00 (-) 1.82e5



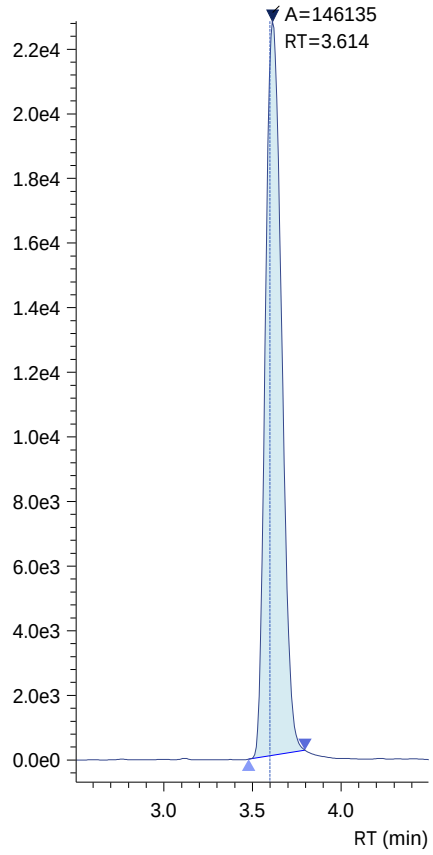
R1 101.00>85.00 (-) 5.62e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 2.29e4



Insight Report

Printed at 6/29/2023 2:17:05 PM

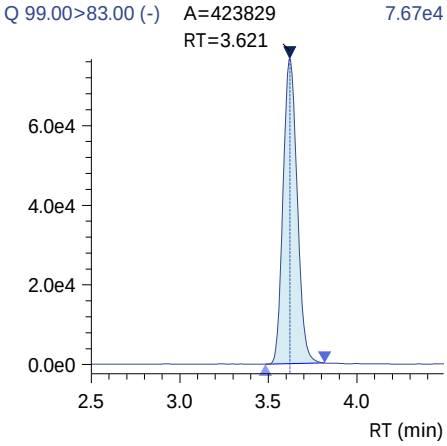
PERCHLORATEICV

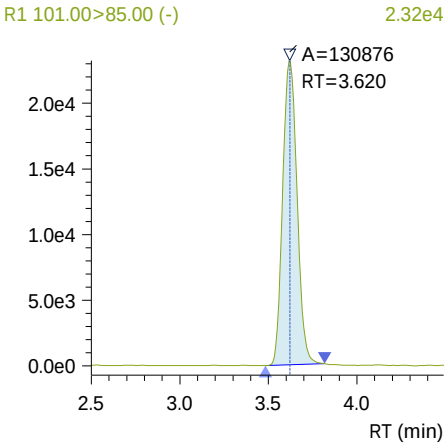
Sample ID: PERCHLORATEICV
Date Acquired: 6/29/2023 1:55:00 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-011.lcd
Vial: 11 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.621	423829	263091	9.9127	ng/mL	101.00 >85.00	30.88	22.41-41.62
Sodium Perchlorate-18O4 _IS	Auto	3.617	263091	263091	1.0000	ng/mL	----	----	

Perchlorate

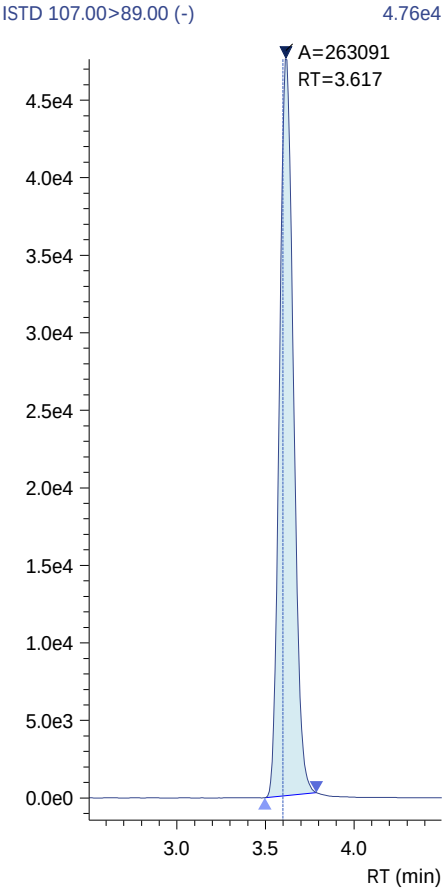
Conc 9.9127
R#1 30.88 (32.02)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Chromatograms and Selected Ion Monitoring

ALS Environmental - Houston HRMS
10450 Stancliff Rd., Suite 320, Houston TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

20230721-811523

Injection Log

LCMS01 -Shimadzu 8050

1st Review: XM
2nd Review: GC

ICAL Date: 6/29/2023
Cal. Std. xp: 07/31/2023
ICAL ID: EC2300011

Mobile Phases : A:20mM ammonium acetate in water 230388 **B:**Acetonitrile 229152

	Sample Name		File Name	Acquisition Method	Dilution	Comments	Date/Time
1	IB		20230721-013	Perchlorate6850c.lcm	1x		7/21/2023 10:27
2	LODV		20230721-014	Perchlorate6850c.lcm	1x	230386	7/21/2023 10:32
3	ICS		20230721-015	Perchlorate6850c.lcm	1x	32103024	7/21/2023 10:39
4	CCV		20230721-016	Perchlorate6850c.lcm	1x	227251	7/21/2023 10:45
5	EQ2300349-01		20230721-017	Perchlorate6850c.lcm	1x		7/21/2023 10:50
6	EQ2300349-02		20230721-018	Perchlorate6850c.lcm	1x		7/21/2023 10:56
7	EQ2300349-03		20230721-019	Perchlorate6850c.lcm	1x		7/21/2023 11:01
8	E2300635-001		20230721-020	Perchlorate6850c.lcm	1x		7/21/2023 11:08
9	E2300635-002		20230721-021	Perchlorate6850c.lcm	1x		7/21/2023 11:14
10	E2300635-003		20230721-022	Perchlorate6850c.lcm	1x		7/21/2023 11:20
11	E2300635-004		20230721-023	Perchlorate6850c.lcm	1x		7/21/2023 11:25
12	E2300635-005		20230721-024	Perchlorate6850c.lcm	5x		7/21/2023 11:31
13	E2300635-006		20230721-025	Perchlorate6850c.lcm	1x		7/21/2023 11:36
14	E2300635-007		20230721-026	Perchlorate6850c.lcm	1x		7/21/2023 11:42
15	CCV		20230721-027	Perchlorate6850c.lcm	1x	227251	7/21/2023 11:47
16	E2300635-008		20230721-028	Perchlorate6850c.lcm	1x		7/21/2023 11:53
17	E2300638-001		20230721-029	Perchlorate6850c.lcm	1x		7/21/2023 11:58
18	E2300638-002		20230721-030	Perchlorate6850c.lcm	1x		7/21/2023 12:04
19	E2300638-003		20230721-031	Perchlorate6850c.lcm	1x		7/21/2023 12:15
20	E2300638-004		20230721-032	Perchlorate6850c.lcm	1x		7/21/2023 12:21
21	EQ2300349-04		20230721-033	Perchlorate6850c.lcm	1x		7/21/2023 12:26
22	EQ2300349-05		20230721-034	Perchlorate6850c.lcm	1x		7/21/2023 12:32
23	E2300638-005		20230721-035	Perchlorate6850c.lcm	1x		7/21/2023 12:38
24	E2300638-006		20230721-036	Perchlorate6850c.lcm	1x		7/21/2023 12:43
25	E2300638-007		20230721-037	Perchlorate6850c.lcm	1x		7/21/2023 12:49
26	CCV		20230721-038	Perchlorate6850c.lcm	1x	227251	7/21/2023 12:54
27	E2300638-008		20230721-039	Perchlorate6850c.lcm	1x		7/21/2023 13:00
28	E2300638-009		20230721-040	Perchlorate6850c.lcm	10x		7/21/2023 13:06
29	EQ2300351-01		20230721-041	Perchlorate6850c.lcm	1x		7/21/2023 13:14
30	EQ2300351-02		20230721-042	Perchlorate6850c.lcm	1x		7/21/2023 13:20
31	EQ2300351-03		20230721-043	Perchlorate6850c.lcm	1x		7/21/2023 13:25
32	E2300640-001		20230721-044	Perchlorate6850c.lcm	1x		7/21/2023 13:31
33	E2300640-002		20230721-045	Perchlorate6850c.lcm	1x		7/21/2023 13:36
34	E2300640-003		20230721-046	Perchlorate6850c.lcm	20x		7/21/2023 13:42
35	EQ2300351-04		20230721-047	Perchlorate6850c.lcm	1x		7/21/2023 13:47
36	EQ2300351-05		20230721-048	Perchlorate6850c.lcm	1x		7/21/2023 13:53
37	CCV		20230721-049	Perchlorate6850c.lcm	1x	227251	7/21/2023 13:58

20230721-811523

Injection Log

LCMS01 -Shimadzu 8050

1st Review: XM
2nd Review: GC

ICAL Date: 6/29/2023
Cal. Std. xp: 07/31/2023
ICAL ID: EC2300011

Mobile Phases : **A:**20mM ammonium acetate in water 230388 **B:**Acetonitrile 229152

	Sample Name		File Name	Acquisition Method	Dilution	Comments	Date/Time
38	IB		20230721-050	Perchlorate6850c.lcm	1x		7/21/2023 14:04
39	E2300640-004		20230721-051	Perchlorate6850c.lcm	1x		7/21/2023 14:09
40	E2300640-005		20230721-052	Perchlorate6850c.lcm	1x		7/21/2023 14:15
41	E2300640-006		20230721-053	Perchlorate6850c.lcm	1x		7/21/2023 14:20
42	E2300640-007		20230721-054	Perchlorate6850c.lcm	1x		7/21/2023 14:26
43	E2300640-008		20230721-055	Perchlorate6850c.lcm	1x		7/21/2023 14:31
44	E2300641-001		20230721-056	Perchlorate6850c.lcm	1x		7/21/2023 14:37
45	E2300641-002		20230721-057	Perchlorate6850c.lcm	1x	DNU-D	7/21/2023 14:42
46	E2300641-003		20230721-058	Perchlorate6850c.lcm	1x		7/21/2023 14:48
47	E2300641-004		20230721-059	Perchlorate6850c.lcm	1x		7/21/2023 15:39
48	CCV		20230721-060	Perchlorate6850c.lcm	1x	227251	7/21/2023 15:44
49	E2300641-002		20230721-061	Perchlorate6850c.lcm	2x		7/21/2023 15:50
50	E2300641-005		20230721-062	Perchlorate6850c.lcm	1x		7/21/2023 15:55
51	E2300641-006		20230721-063	Perchlorate6850c.lcm	20x		7/21/2023 16:01
52	E2300641-007		20230721-064	Perchlorate6850c.lcm	1x		7/21/2023 16:06
53	E2300641-008		20230721-065	Perchlorate6850c.lcm	1x		7/21/2023 16:12
54	E2300641-009		20230721-066	Perchlorate6850c.lcm	1x		7/21/2023 16:17
55	E2300641-010		20230721-067	Perchlorate6850c.lcm	1x		7/21/2023 16:23
56	CCV		20230721-071	Perchlorate6850c.lcm	1x	227251	7/21/2023 16:45

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2300641
Project:	HS23070658	**Date Analyzed:**	7/21/23 10:45

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20230721\20230721-016	**Lab Code:**	EQ2300353-01
Instrument ID:	E-LCMS-01	**Analysis Lot:**	811523
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	263,382	3.62
	Upper Limit ==>	395,073	5.62
	Lower Limit ==>	131,691	1.62
Associated Analyses			
Continuing Calibration Verification	EQ2300353-01	247,548	3.59

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:**	E2300641
Project:	HS23070658	**Date Analyzed:**	7/21/23 11:47

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20230721\20230721-027	**Lab Code:**	EQ2300353-02
Instrument ID:	E-LCMS-01	**Analysis Lot:**	811523
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	263,382	3.62
	Upper Limit ==>	395,073	5.62
	Lower Limit ==>	131,691	1.62
Associated Analyses			
Continuing Calibration Verification	EQ2300353-02	259,013	3.59

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: HS23070658

Service Request: E2300641
Date Analyzed: 7/21/23 12:54

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

File ID: I:\LCMS01\DATA\20230721\20230721-038
Instrument ID: E-LCMS-01
Analytical Method: 6850

Lab Code: EQ2300353-03
Analysis Lot: 811523
Signal ID: 1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	263,382	3.62
	Upper Limit ==>	395,073	5.62
	Lower Limit ==>	131,691	1.62
Associated Analyses			
Continuing Calibration Verification	EQ2300353-03	270,621	3.59
Method Blank	EQ2300351-01	343,574	3.59
Lab Control Sample	EQ2300351-02	354,039	3.59
Duplicate Lab Control Sample	EQ2300351-03	330,441	3.59

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: HS23070658

Service Request: E2300641
Date Analyzed: 7/21/23 13:58

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

File ID: I:\LCMS01\DATA\20230721\20230721-049
Instrument ID: E-LCMS-01
Analytical Method: 6850

Lab Code: EQ2300353-04
Analysis Lot: 811523
Signal ID: 1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	263,382	3.62
	Upper Limit ==>	395,073	5.62
	Lower Limit ==>	131,691	1.62
Associated Analyses			
Continuing Calibration Verification	EQ2300353-04	254,344	3.59
16WW55-230712	E2300641-001	182,418	3.58
16WW48-230712	E2300641-003	338,351	3.59
16WW48-230712-FD	E2300641-004	349,311	3.59

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:**	E2300641
Project:	HS23070658	**Date Analyzed:**	7/21/23 15:44

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20230721\20230721-060	**Lab Code:**	EQ2300353-05
Instrument ID:	E-LCMS-01	**Analysis Lot:**	811523
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	263,382	3.62
	Upper Limit ==>	395,073	5.62
	Lower Limit ==>	131,691	1.62
Associated Analyses			
Continuing Calibration Verification	EQ2300353-05	253,306	3.59
16WW41-230712	E2300641-002	220,741	3.58
16EW03-230712	E2300641-005	342,111	3.59
16WW35-230712	E2300641-006	227,986	3.58
16WW36-230712	E2300641-007	340,616	3.59
16WW25-230712	E2300641-008	325,279	3.59
16WW26-230712	E2300641-009	321,562	3.59
16WW66-230712-FD	E2300641-010	325,676	3.59

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:**	E2300641
Project:	HS23070658	**Date Analyzed:**	7/21/23 16:45

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20230721\20230721-071	**Lab Code:**	EQ2300353-06
Instrument ID:	E-LCMS-01	**Analysis Lot:**	811523
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	263,382	3.62
	Upper Limit ==>	395,073	5.62
	Lower Limit ==>	131,691	1.62
Associated Analyses			
Continuing Calibration Verification	EQ2300353-06	242,404	3.59

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: HS23070658

Service Request: E2300641
Date Analyzed: 7/21/23

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20230721\20230721-016

Calibration Date: 6/29/23
Calibration ID: EC2300011
Analysis Lot: 811523
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.4	0.1625	0.1692	4.1	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23070658

Service Request: E2300641
Date Analyzed: 7/21/23

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20230721\20230721-027

Calibration Date: 6/29/23
Calibration ID: EC2300011
Analysis Lot: 811523
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.1	0.1625	0.1640	0.9	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23070658

Service Request: E2300641
Date Analyzed: 7/21/23

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20230721\20230721-038

Calibration Date: 6/29/23
Calibration ID: EC2300011
Analysis Lot: 811523
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.3	0.1625	0.1674	3.0	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23070658

Service Request: E2300641
Date Analyzed: 7/21/23

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20230721\20230721-049

Calibration Date: 6/29/23
Calibration ID: EC2300011
Analysis Lot: 811523
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.1	0.1625	0.1634	0.6	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23070658

Service Request: E2300641
Date Analyzed: 7/21/23

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20230721\20230721-060

Calibration Date: 6/29/23
Calibration ID: EC2300011
Analysis Lot: 811523
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.1	0.1625	0.1649	1.5	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23070658

Service Request: E2300641
Date Analyzed: 7/21/23

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20230721\20230721-071

Calibration Date: 6/29/23
Calibration ID: EC2300011
Analysis Lot: 811523
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.87	0.1625	0.1603	-1.3	NA	± 15 %	Average RF

Insight Report

Printed at 7/24/2023 9:31:17 AM

Method File: I:\LCMS01\DATA\20230721\20230721-2.lcm
Project File: I:\LCMS01\DATA\20230721\20230721-2.damlp

IB

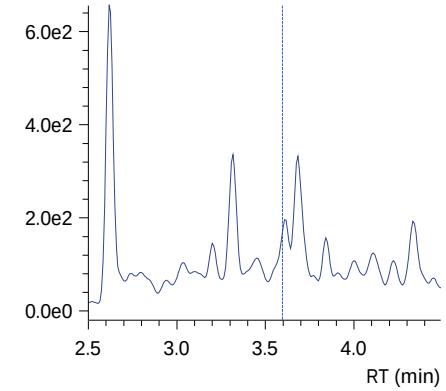
Sample ID: IB
Date Acquired: 7/21/2023 10:27:05 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230721\20230721-013.lcd
Vial: 4 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	330784	----	ng/mL	101.00 >85.00	0.00	19.95-37.04
Sodium Perchlorate-18O4_IS	Auto	3.588	330784	330784	1.0000	ng/mL	----	----	

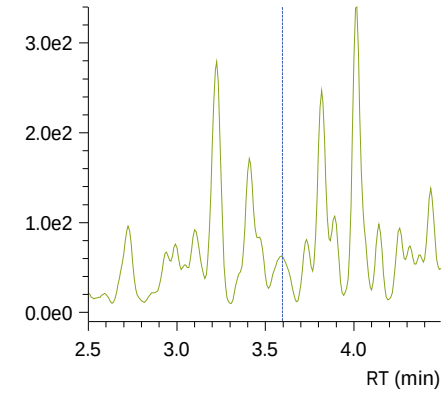
Perchlorate

Conc ----
R#1 0.00 (28.49)

Q 99.00>83.00 (-) 6.56e2



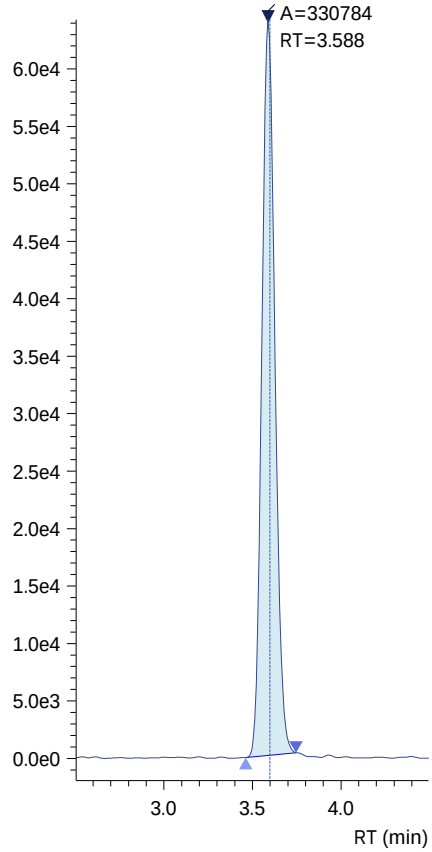
R1 101.00>85.00 (-) 3.40e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 6.43e4



Insight Report

Printed at 7/24/2023 9:31:17 AM

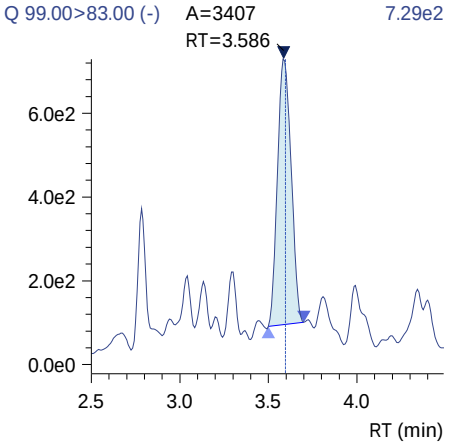
LODV

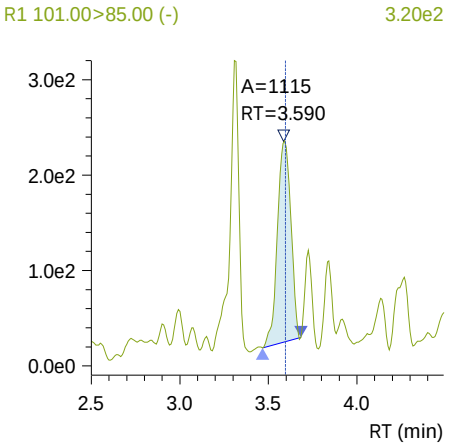
Sample ID: LODV
Date Acquired: 7/21/2023 10:32:38 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230721\20230721-014.lcd
Vial: 1 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.586	3407	352407	0.0595	ng/mL	101.00 >85.00	32.72	19.95-37.04
Sodium Perchlorate-18O4 _IS	Auto	3.588	352407	352407	1.0000	ng/mL	----	----	

Perchlorate

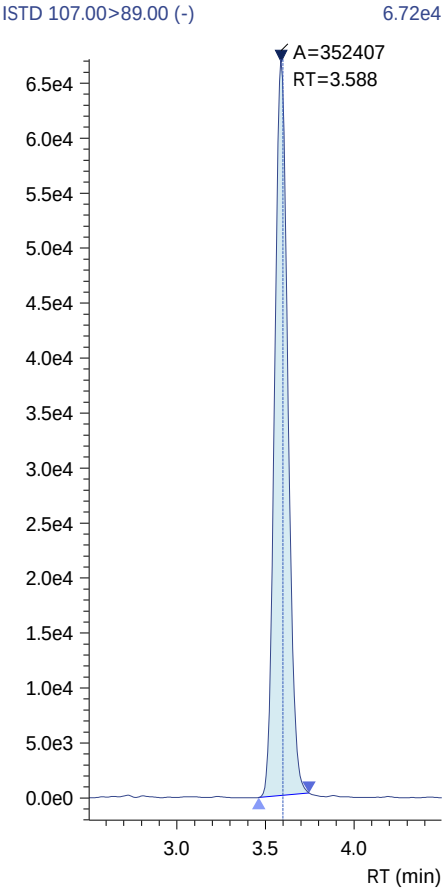
Conc 0.0595
R#1 32.72 (28.49)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/24/2023 9:31:17 AM

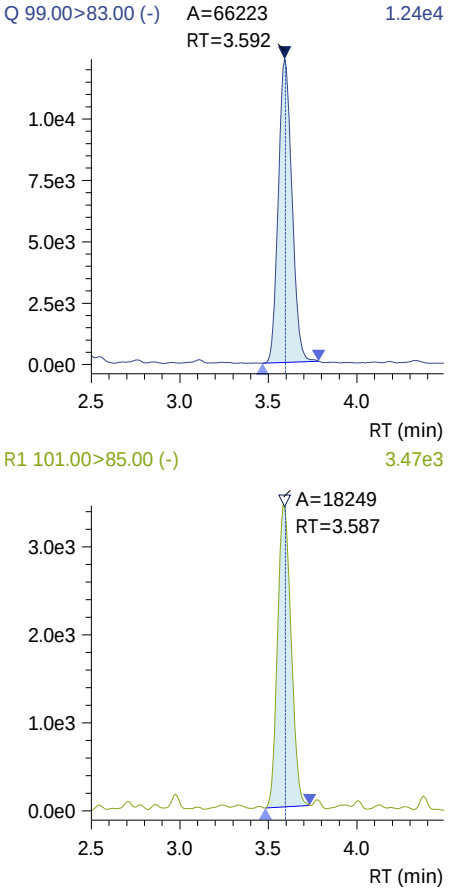
ICS

Sample ID: ICS
Date Acquired: 7/21/2023 10:39:51 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230721\20230721-015.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	3.592	66223	367153	1.1099	ng/mL	101.00 >85.00	27.56	19.95-37.04
Sodium Perchlorate-18O4 _IS	Auto	3.588	367153	367153	1.0000	ng/mL	----	----	

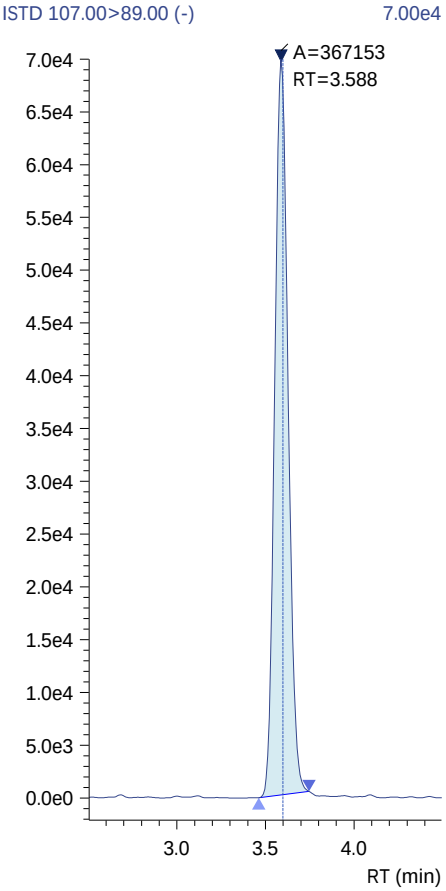
Perchlorate

Conc 1.1099
R#1 27.56 (28.49)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/24/2023 9:31:17 AM

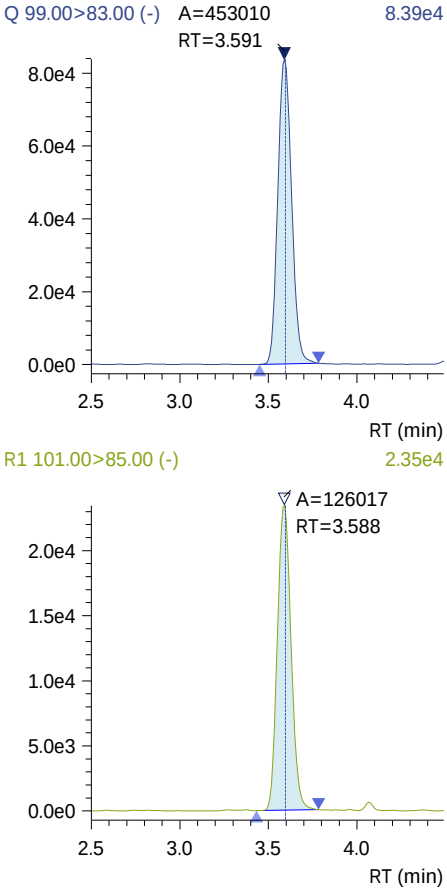
CCV

Sample ID: CCV
Date Acquired: 7/21/2023 12:54:33 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230721\20230721-038.lcd
Vial: 3 | 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	3.591	453010	270621	10.3003	ng/mL	101.00 >85.00	27.82	19.95-37.04
Sodium Perchlorate-18O4 _IS	Auto	3.586	270621	270621	1.0000	ng/mL	----	----	

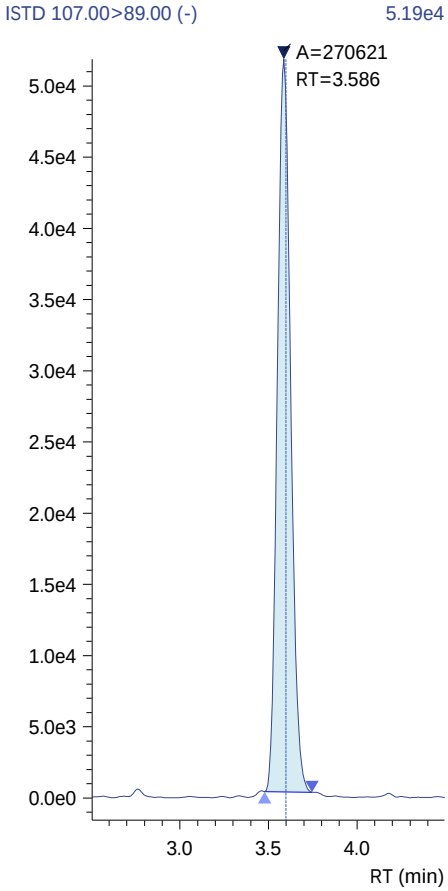
Perchlorate

Conc 10.3003
R#1 27.82 (28.49)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/24/2023 9:31:17 AM

EQ2300351-01

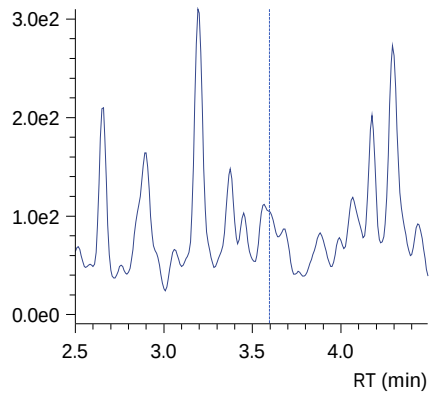
Sample ID: EQ2300351-01
Date Acquired: 7/21/2023 1:14:34 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230721\20230721-041.lcd
Vial: 4 | Inj. Volume: 10.0000uL | Tray: 4

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	343574	----	ng/mL	101.00 >85.00	0.00	19.95-37.04
Sodium Perchlorate-18O4_IS	Auto	3.587	343574	343574	1.0000	ng/mL	----	----	

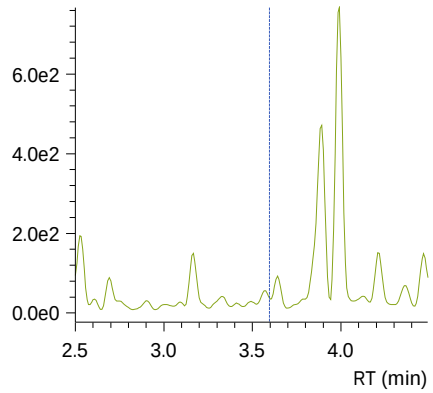
Perchlorate

Conc ----
R#1 0.00 (28.49)

Q 99.00>83.00 (-) 3.10e2



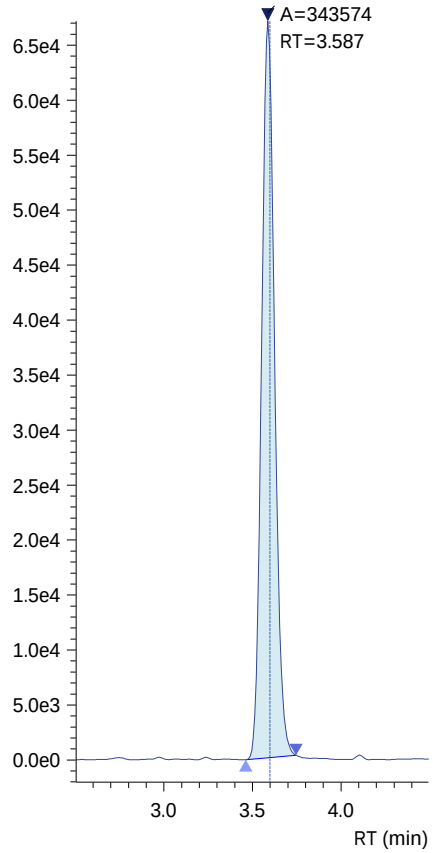
R1 101.00>85.00 (-) 7.67e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 6.72e4



Insight Report

Printed at 7/24/2023 9:31:17 AM

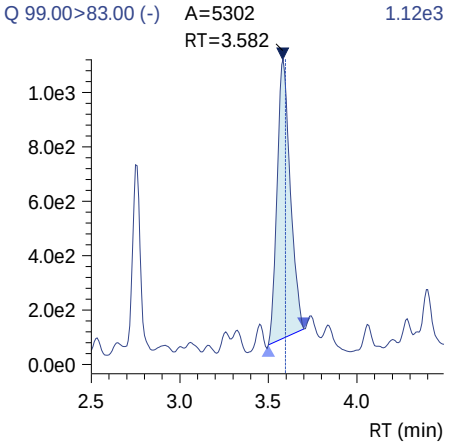
EQ2300351-02

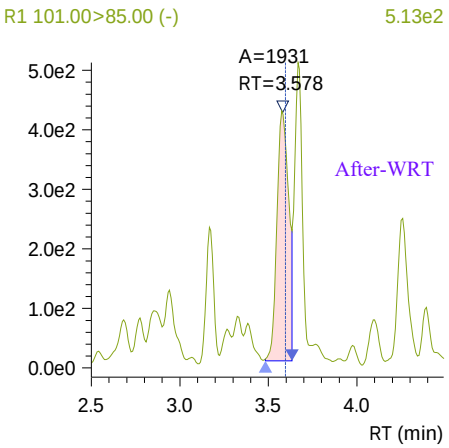
Sample ID: EQ2300351-02
Date Acquired: 7/21/2023 1:20:03 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230721\20230721-042.lcd
Vial: 5 | Inj. Volume: 10.0000uL | Tray: 4

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	MI R1	3.582	5302	354039	0.0922	ng/mL	101.00 >85.00	36.41	19.95-37.04
Sodium Perchlorate-18O4_IS	Auto	3.585	354039	354039	1.0000	ng/mL	----	----	

Perchlorate

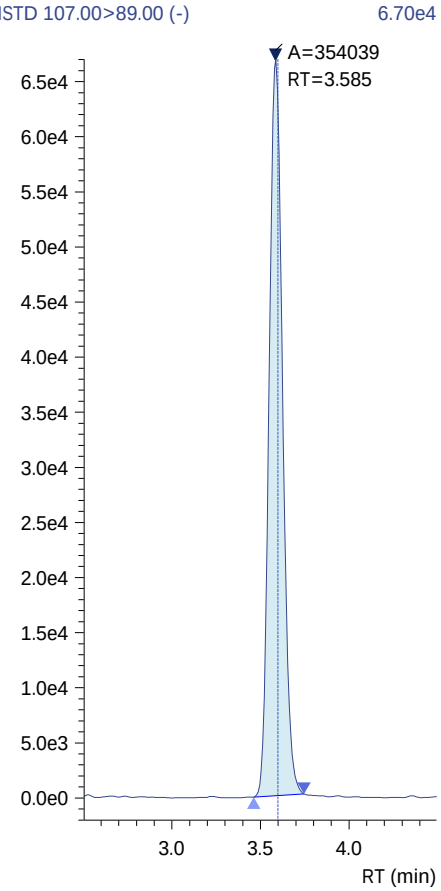
Conc 0.0922
R#1 36.41 (28.49)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

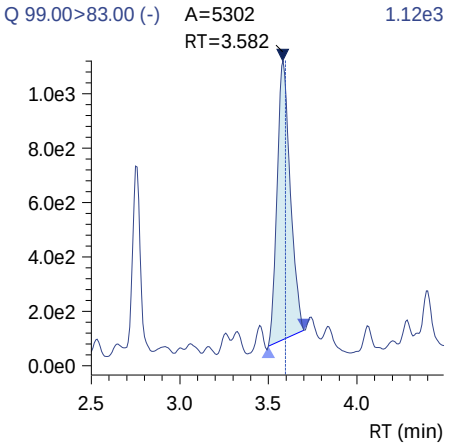
Method File: I:\LCMS01\DATA\20230721\20230721-2.lcm
Project File: I:\LCMS01\DATA\20230721\20230721-2.damlp

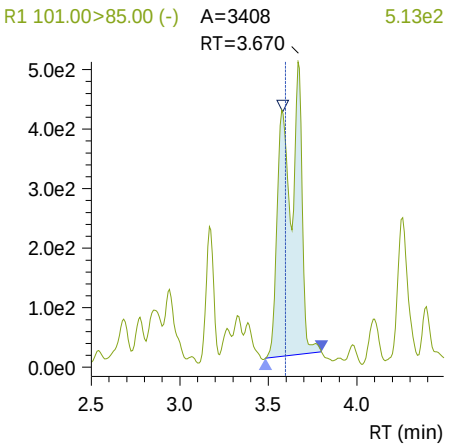
EQ2300351-02

Sample ID: EQ2300351-02
Date Acquired: 7/21/2023 1:20:03 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230721\20230721-042.lcd
Vial: 5 | Inj. Volume: 10.0000uL | Tray: 4

Perchlorate

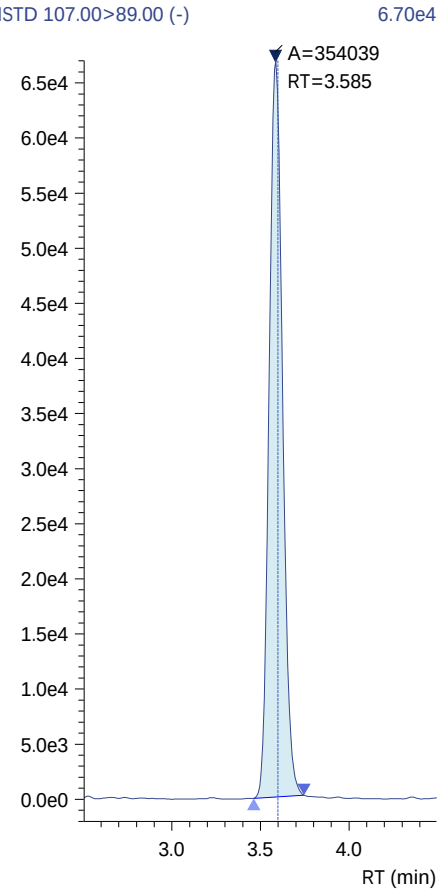
Conc 0.0922
R#1 64.27 (28.49)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/24/2023 9:31:17 AM

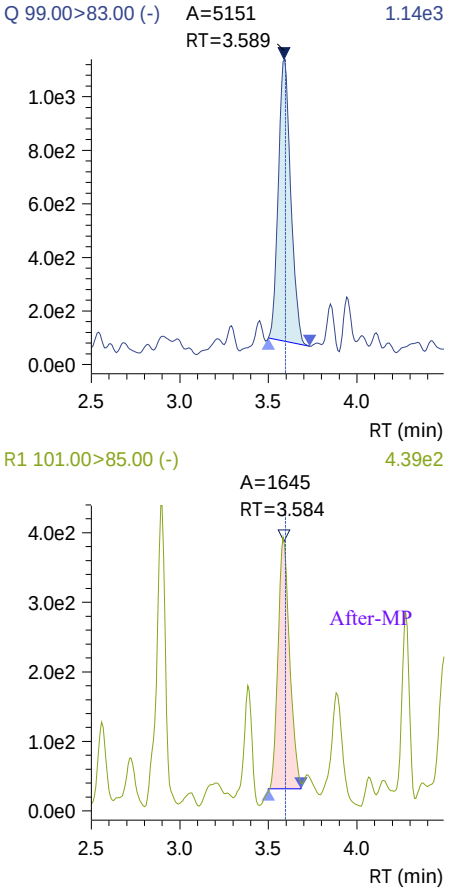
EQ2300351-03

Sample ID: EQ2300351-03
Date Acquired: 7/21/2023 1:25:35 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230721\20230721-043.lcd
Vial: 6 | Inj. Volume: 10.0000uL | Tray: 4

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	MI R1	3.589	5151	330441	0.0959	ng/mL	101.00 >85.00	31.94	19.95-37.04
Sodium Perchlorate-18O4 _IS	Auto	3.585	330441	330441	1.0000	ng/mL	----	----	

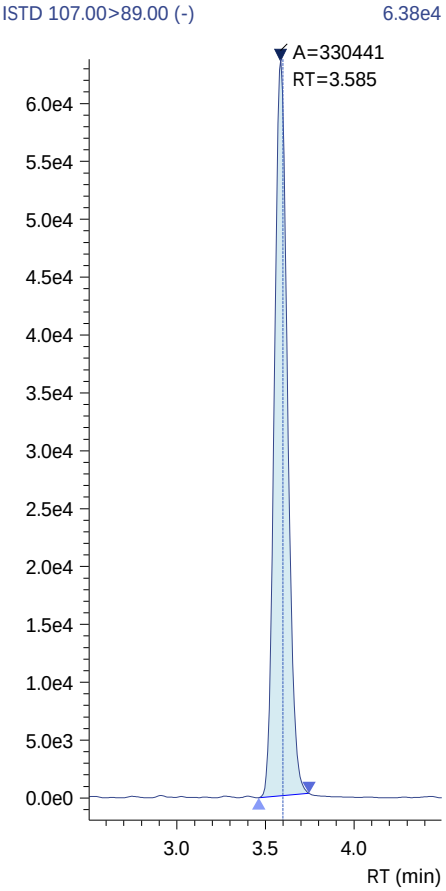
Perchlorate

Conc 0.0959
R#1 31.94 (28.49)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/24/2023 9:32:54 AM

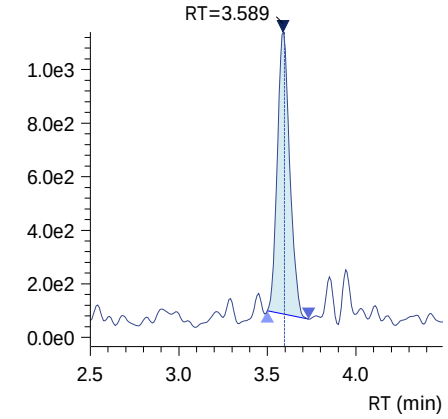
EQ2300351-03

Sample ID: EQ2300351-03
Date Acquired: 7/21/2023 1:25:35 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230721\20230721-043.lcd
Vial: 6 | Inj. Volume: 10.0000uL | Tray: 4

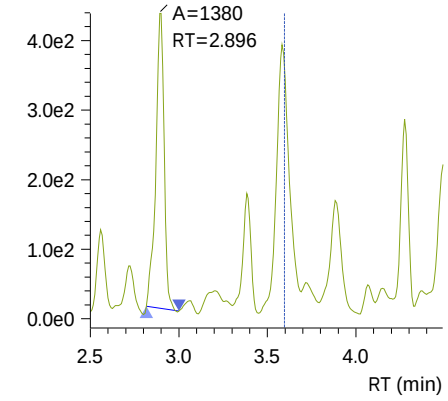
Perchlorate

Conc 0.0959
R#1 0.00 (28.49)

Q 99.00>83.00 (-) A=5151 1.14e3



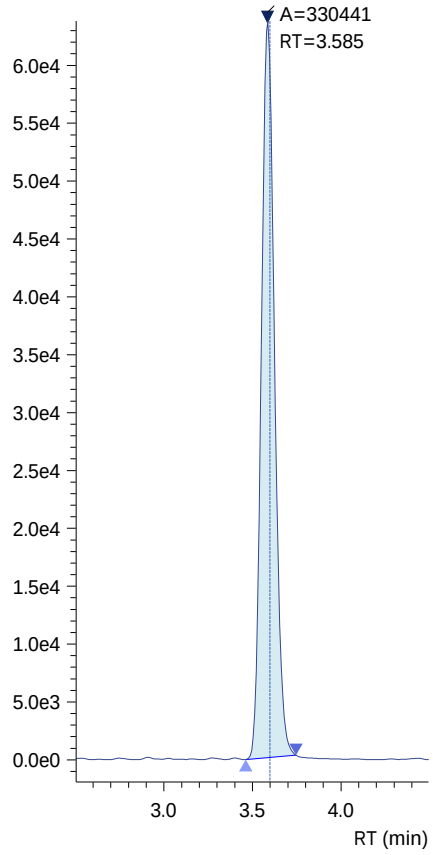
R1 101.00>85.00 (-) 4.39e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 6.38e4



Insight Report

Printed at 7/24/2023 9:31:17 AM

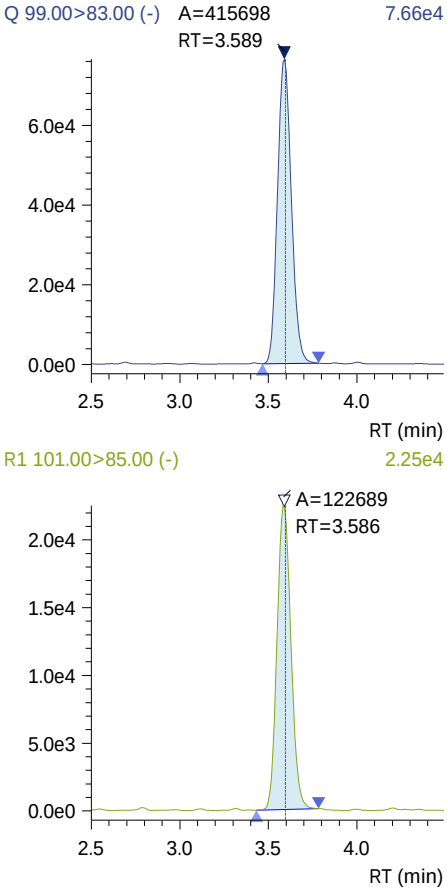
CCV

Sample ID: CCV
Date Acquired: 7/21/2023 1:58:39 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230721\20230721-049.lcd
Vial: 3 | 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	3.589	415698	254344	10.0568	ng/mL	101.00 >85.00	29.51	19.95-37.04
Sodium Perchlorate-18O4_IS	Auto	3.585	254344	254344	1.0000	ng/mL	----	----	

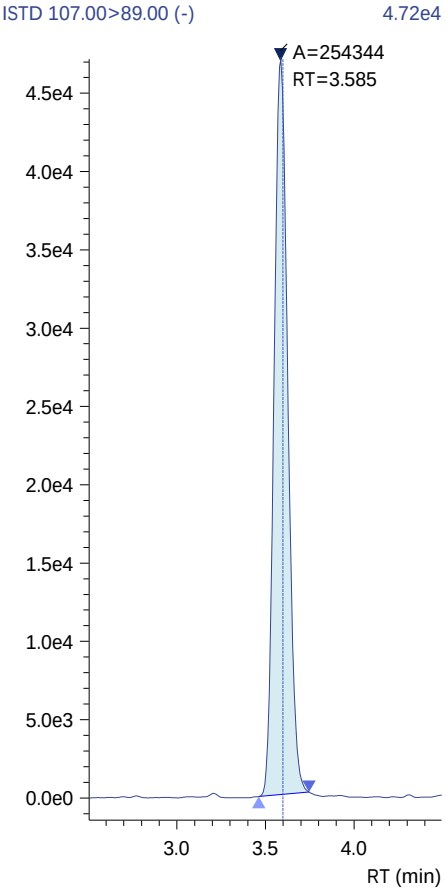
Perchlorate

Conc 10.0568
R#1 29.51 (28.49)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/24/2023 9:31:17 AM

E2300641-001

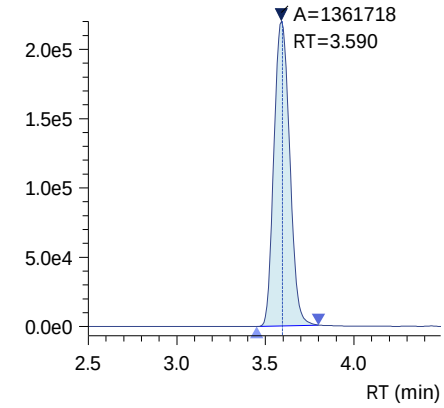
Sample ID: E2300641-001
Date Acquired: 7/21/2023 2:37:18 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230721\20230721-056.lcd
Vial: 36 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.590	1361718	182418	45.9330	ng/mL	101.00 >85.00	28.27	19.95-37.04
Sodium Perchlorate-18O4 _IS	Auto	3.582	182418	182418	1.0000	ng/mL	----	----	

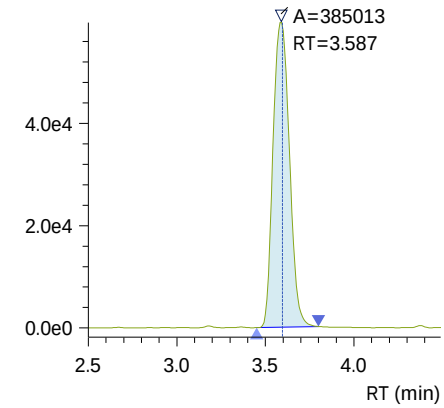
Perchlorate

Conc 45.9330
R#1 28.27 (28.49)

Q 99.00>83.00 (-) 2.20e5



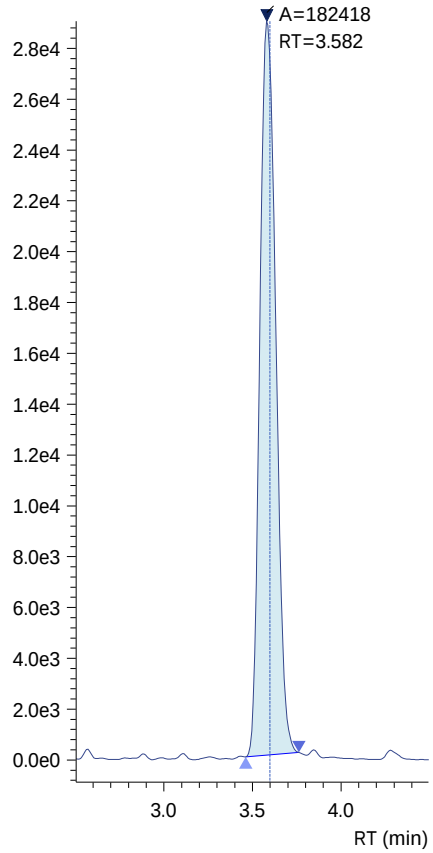
R1 101.00>85.00 (-) 5.97e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 2.91e4



Insight Report

Printed at 7/24/2023 9:31:17 AM

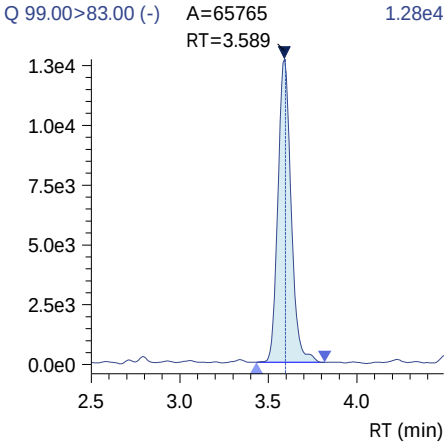
E2300641-003

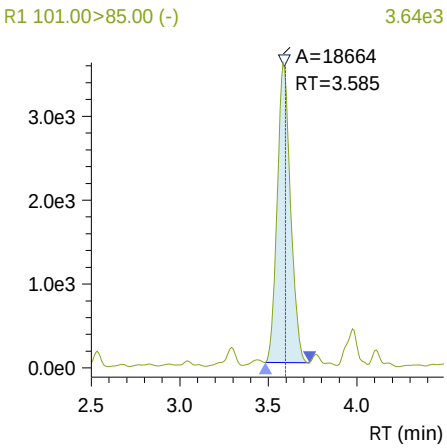
Sample ID: E2300641-003
Date Acquired: 7/21/2023 2:48:22 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230721\20230721-058.lcd
Vial: 38 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.589	65765	338351	1.1960	ng/mL	101.00 >85.00	28.38	19.95-37.04
Sodium Perchlorate-18O4_IS	Auto	3.586	338351	338351	1.0000	ng/mL	----	----	

Perchlorate

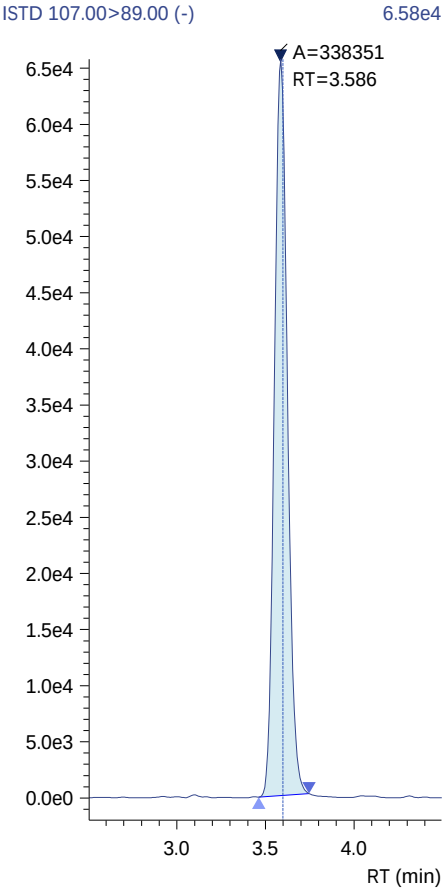
Conc 1.1960
R#1 28.38 (28.49)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/24/2023 9:31:17 AM

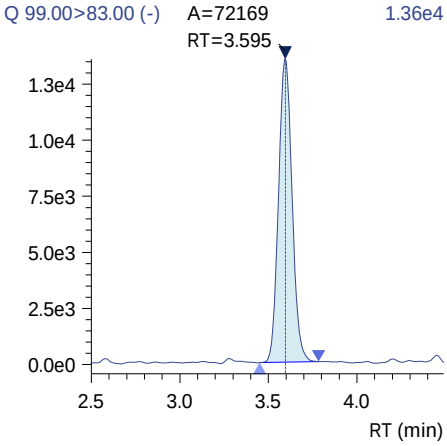
E2300641-004

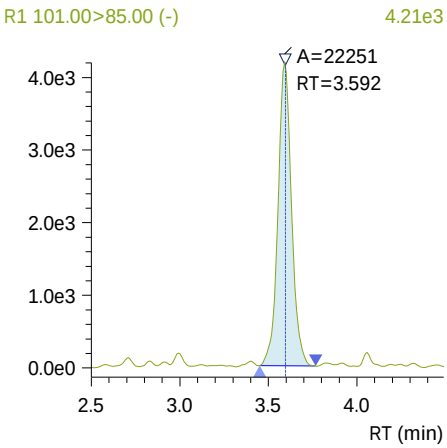
Sample ID: E2300641-004
Date Acquired: 7/21/2023 3:39:11 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230721\20230721-059.lcd
Vial: 39 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.595	72169	349311	1.2713	ng/mL	101.00 >85.00	30.83	19.95-37.04
Sodium Perchlorate-18O4_IS	Auto	3.590	349311	349311	1.0000	ng/mL	----	----	

Perchlorate

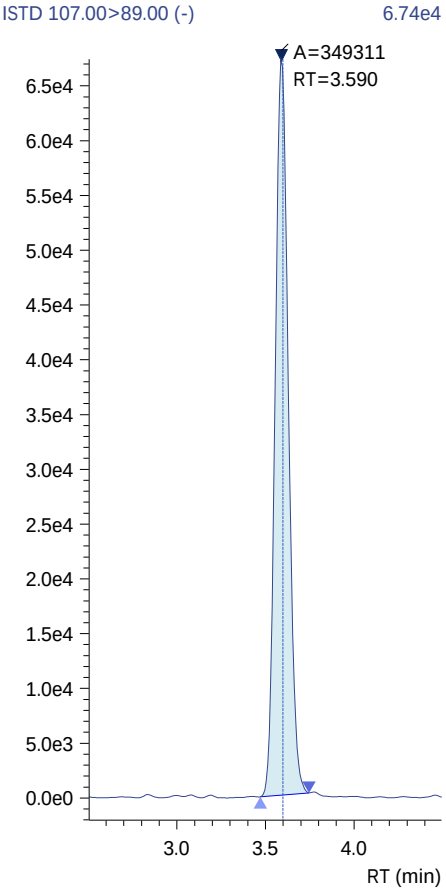
Conc 1.2713
R#1 30.83 (28.49)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/24/2023 9:31:17 AM

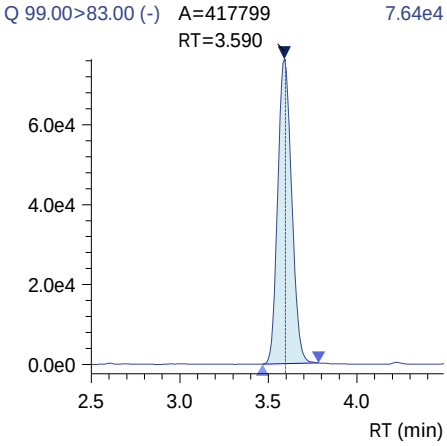
CCV

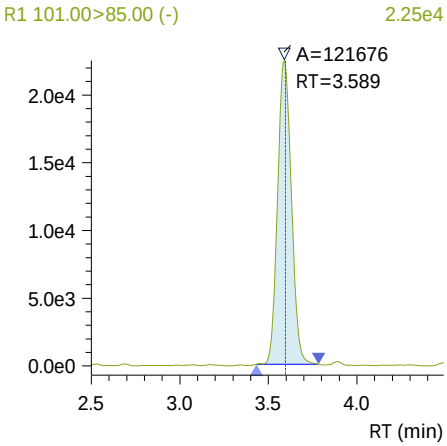
Sample ID: CCV
Date Acquired: 7/21/2023 3:44:45 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230721\20230721-060.lcd
Vial: 3 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.590	417799	253306	10.1491	ng/mL	101.00 >85.00	29.12	19.95-37.04
Sodium Perchlorate-18O4 _IS	Auto	3.588	253306	253306	1.0000	ng/mL	----	----	

Perchlorate

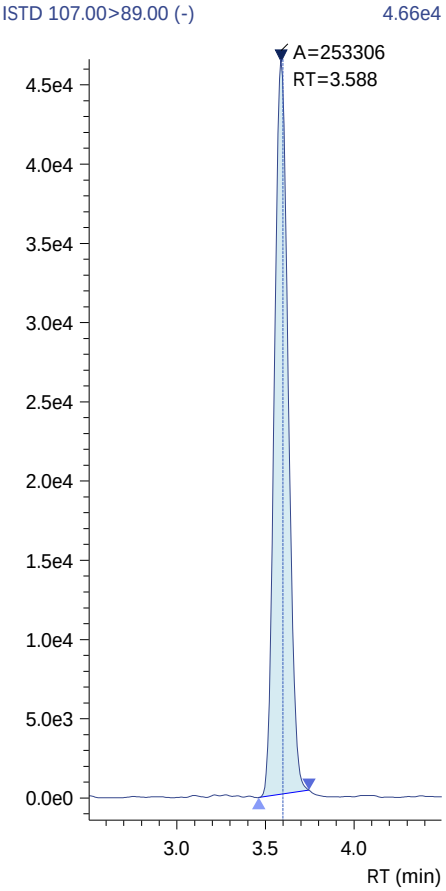
Conc 10.1491
R#1 29.12 (28.49)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/24/2023 9:31:17 AM

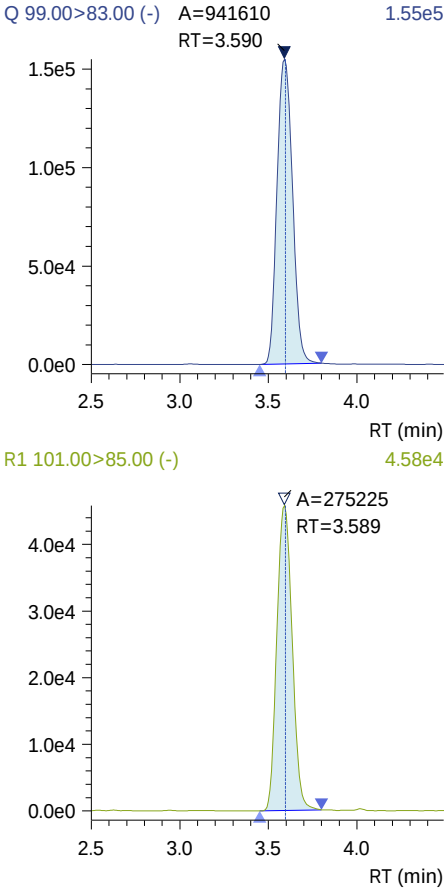
E2300641-002X2

Sample ID: E2300641-002
Date Acquired: 7/21/2023 3:50:18 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230721\20230721-061.lcd
Vial: 37 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.590	941610	220741	26.2478	ng/mL	101.00 >85.00	29.23	19.95-37.04
Sodium Perchlorate-18O4_IS	Auto	3.583	220741	220741	1.0000	ng/mL	----	----	

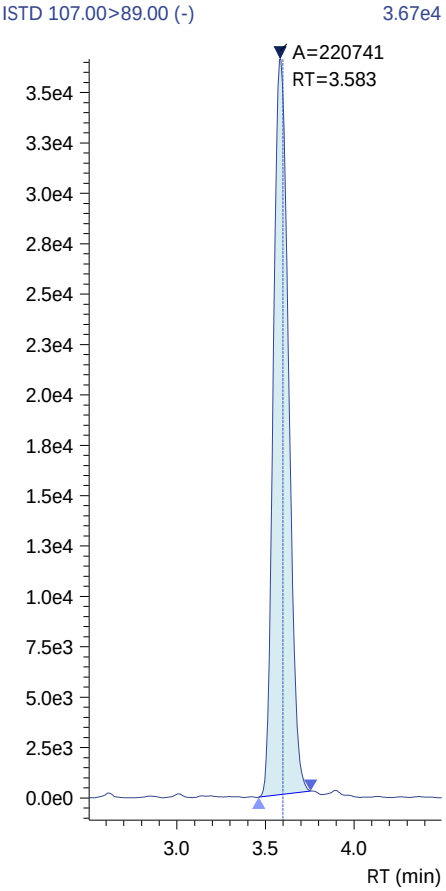
Perchlorate

Conc 26.2478
R#1 29.23 (28.49)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/24/2023 9:31:17 AM

E2300641-005

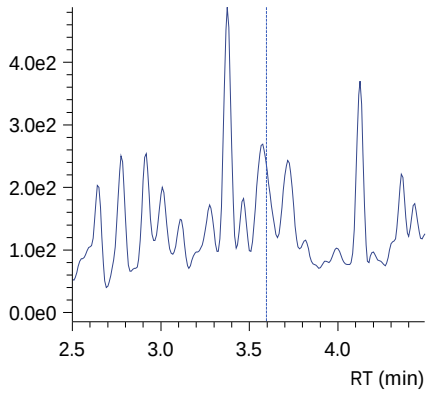
Sample ID: E2300641-005
Date Acquired: 7/21/2023 3:55:50 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230721\20230721-062.lcd
Vial: 40 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	342111	----	ng/mL	101.00 >85.00	0.00	19.95-37.04
Sodium Perchlorate-18O4_IS	Auto	3.586	342111	342111	1.0000	ng/mL	----	----	

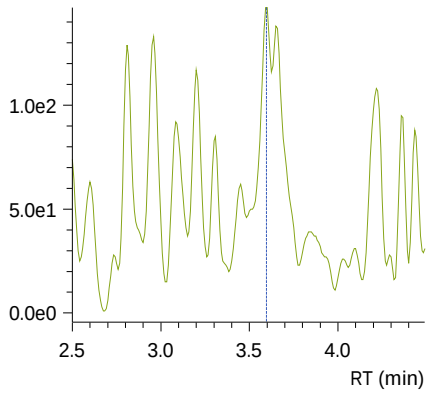
Perchlorate

Conc ----
R#1 0.00 (28.49)

Q 99.00>83.00 (-) 4.88e2



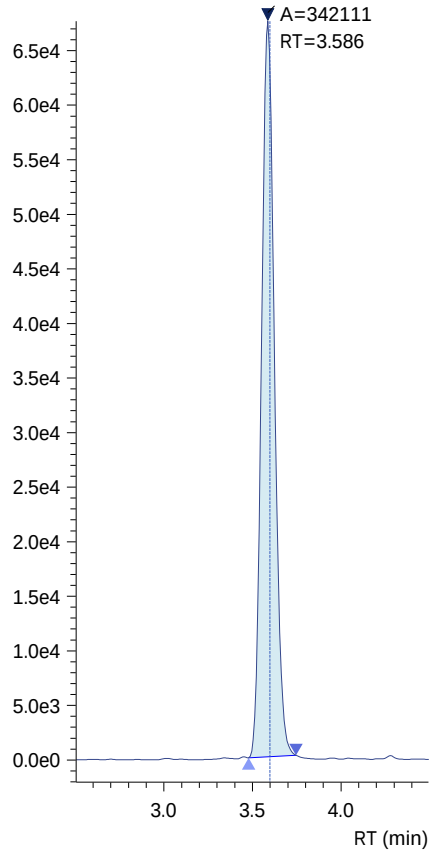
R1 101.00>85.00 (-) 1.47e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 6.77e4



Insight Report

Printed at 7/24/2023 9:31:17 AM

E2300641-006X20

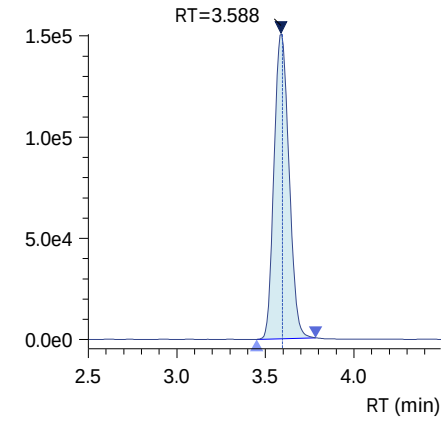
Sample ID: E2300641-006
Date Acquired: 7/21/2023 4:01:22 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230721\20230721-063.lcd
Vial: 41 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.588	886210	227986	23.9185	ng/mL	101.00 >85.00	28.37	19.95-37.04
Sodium Perchlorate-18O4_IS	Auto	3.584	227986	227986	1.0000	ng/mL	----	----	

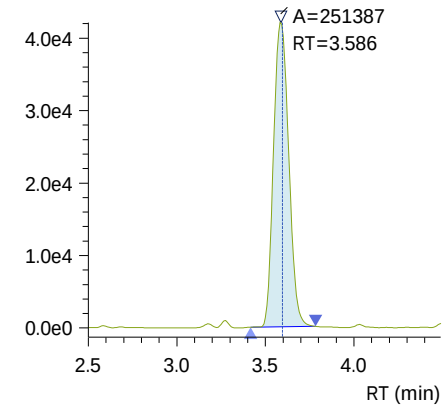
Perchlorate

Conc 23.9185
R#1 28.37 (28.49)

Q 99.00>83.00 (-) A=886210 1.51e5



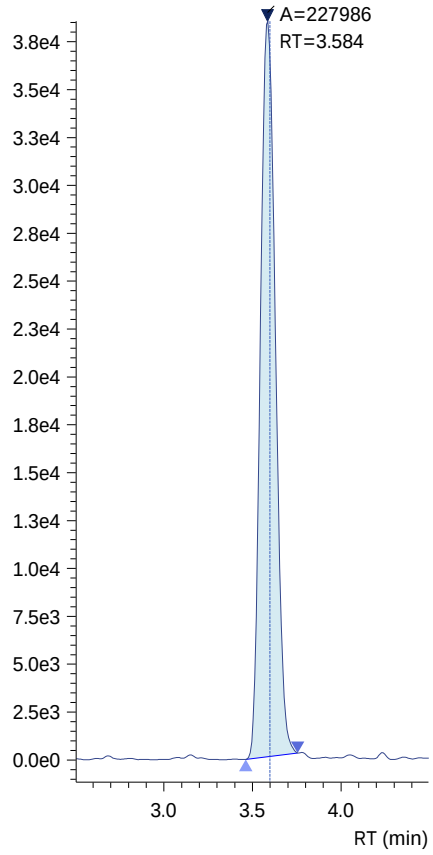
R1 101.00>85.00 (-) 4.21e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 3.86e4



Insight Report

Printed at 7/24/2023 9:31:17 AM

E2300641-007

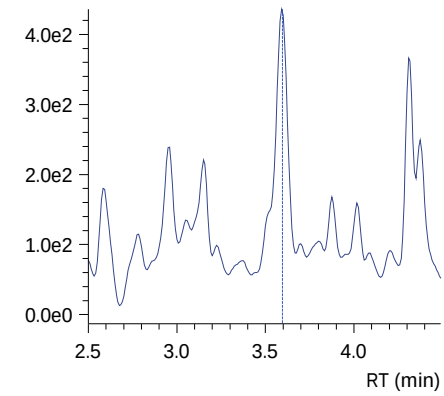
Sample ID: E2300641-007
Date Acquired: 7/21/2023 4:06:52 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230721\20230721-064.lcd
Vial: 42 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	340616	----	ng/mL	101.00 >85.00	0.00	19.95-37.04
Sodium Perchlorate-18O4_IS	Auto	3.586	340616	340616	1.0000	ng/mL	----	----	

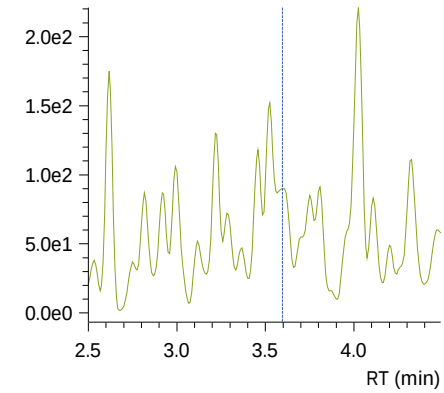
Perchlorate

Conc ----
R#1 0.00 (28.49)

Q 99.00>83.00 (-) 4.36e2



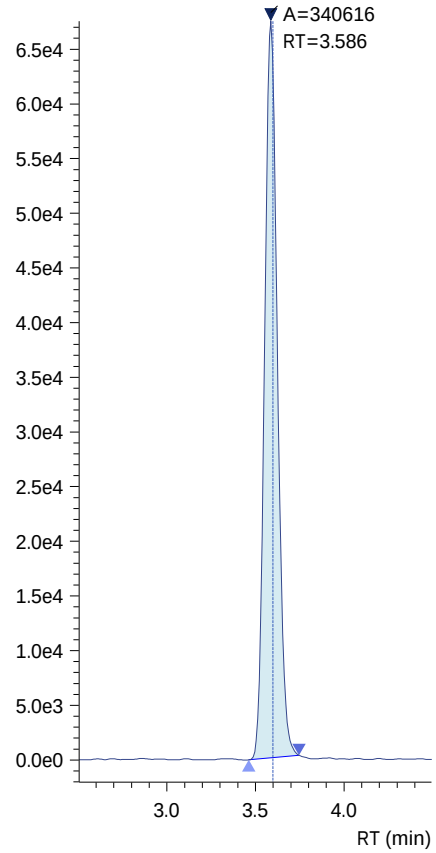
R1 101.00>85.00 (-) 2.21e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 6.76e4



Insight Report

Printed at 7/24/2023 9:31:17 AM

E2300641-008

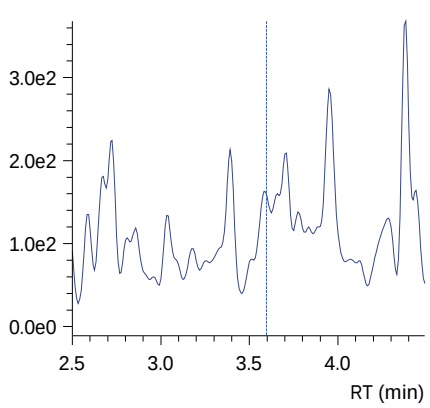
Sample ID: E2300641-008
Date Acquired: 7/21/2023 4:12:24 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230721\20230721-065.lcd
Vial: 43 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	325279	----	ng/mL	101.00 >85.00	0.00	19.95-37.04
Sodium Perchlorate-18O4_IS	Auto	3.587	325279	325279	1.0000	ng/mL	----	----	

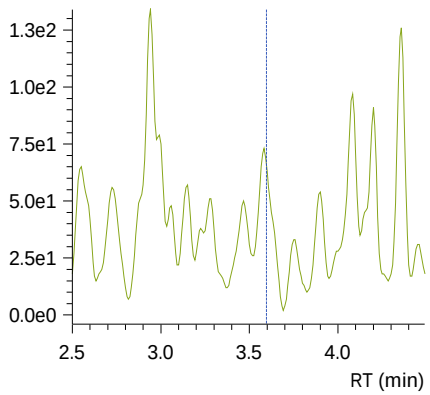
Perchlorate

Conc ----
R#1 0.00 (28.49)

Q 99.00>83.00 (-) 3.68e2



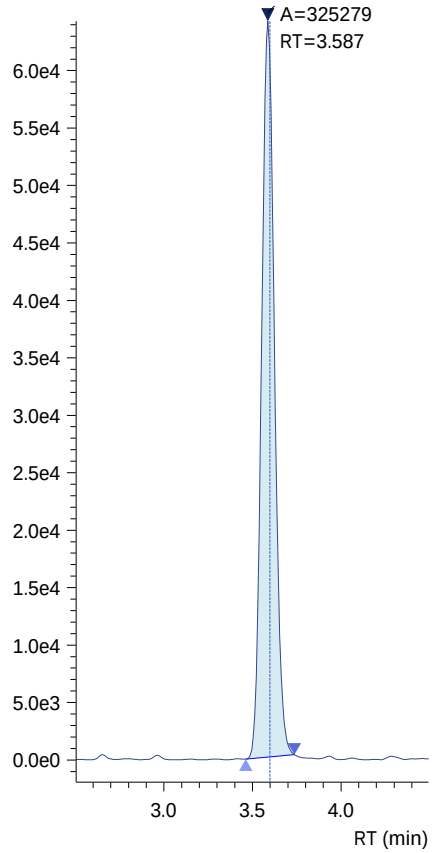
R1 101.00>85.00 (-) 1.34e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 6.43e4



Insight Report

Printed at 7/24/2023 9:31:17 AM

E2300641-009

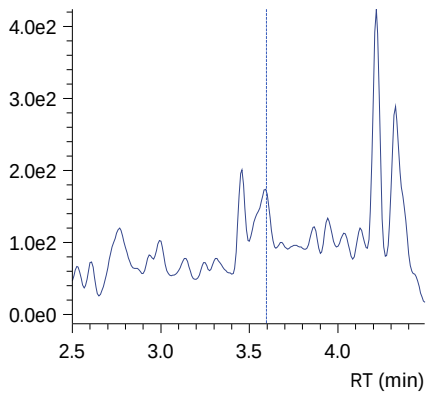
Sample ID: E2300641-009
Date Acquired: 7/21/2023 4:17:57 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230721\20230721-066.lcd
Vial: 44 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	321562	----	ng/mL	101.00 >85.00	0.00	19.95-37.04
Sodium Perchlorate-18O4_IS	Auto	3.585	321562	321562	1.0000	ng/mL	----	----	

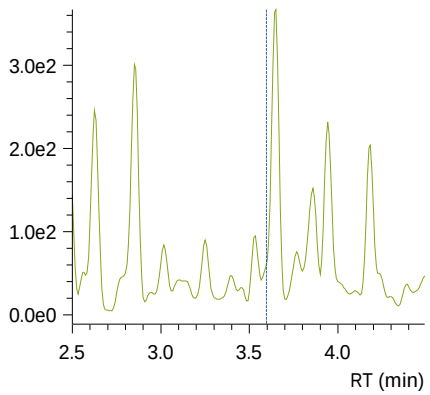
Perchlorate

Conc ----
R#1 0.00 (28.49)

Q 99.00>83.00 (-) 4.24e2



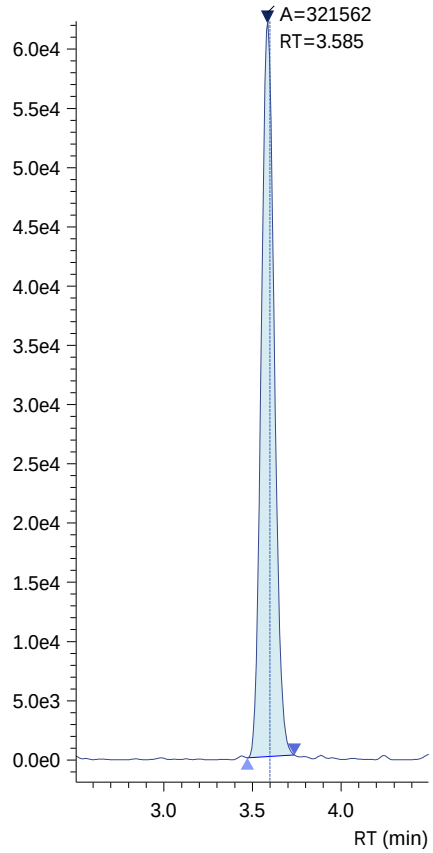
R1 101.00>85.00 (-) 3.67e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 6.24e4



Insight Report

Printed at 7/24/2023 9:31:17 AM

E2300641-010

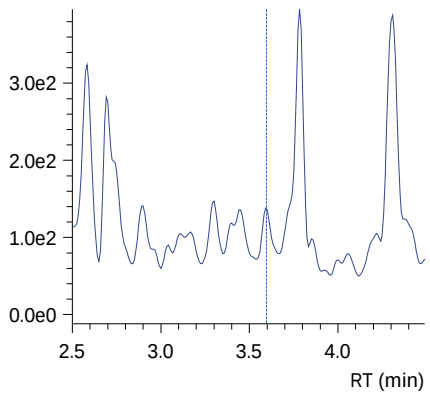
Sample ID: E2300641-010
Date Acquired: 7/21/2023 4:23:29 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230721\20230721-067.lcd
Vial: 45 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	325676	----	ng/mL	101.00 >85.00	0.00	19.95-37.04
Sodium Perchlorate-18O4_IS	Auto	3.586	325676	325676	1.0000	ng/mL	----	----	

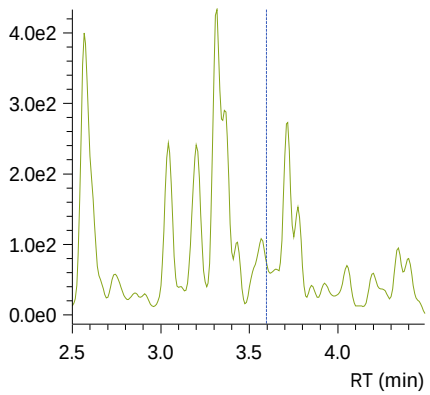
Perchlorate

Conc ----
R#1 0.00 (28.49)

Q 99.00>83.00 (-) 3.96e2



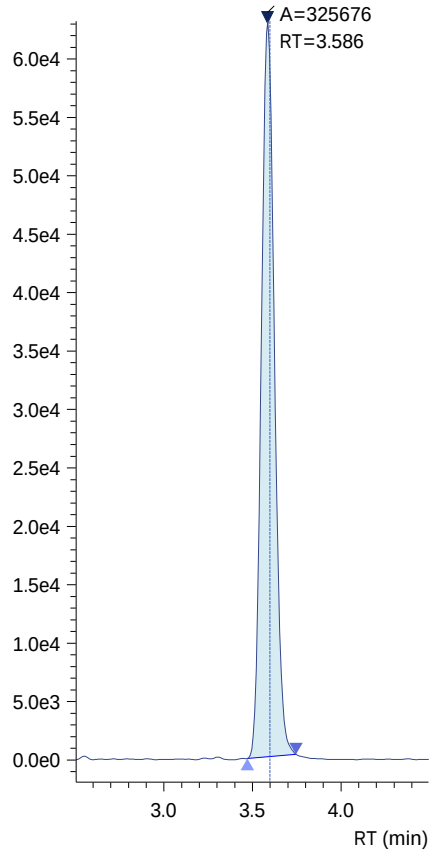
R1 101.00>85.00 (-) 4.33e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 6.32e4



Insight Report

Printed at 7/24/2023 9:31:17 AM

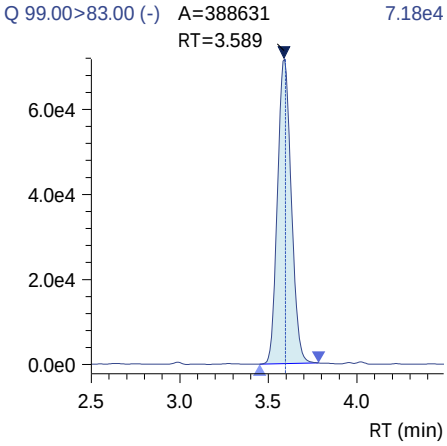
CCV

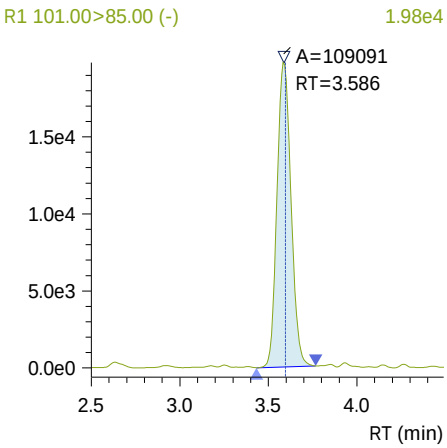
Sample ID: CCV
Date Acquired: 7/21/2023 4:45:33 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230721\20230721-071.lcd
Vial: 3 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.589	388631	242404	9.8652	ng/mL	101.00 >85.00	28.07	19.95-37.04
Sodium Perchlorate-18O4_IS	Auto	3.585	242404	242404	1.0000	ng/mL	----	----	

Perchlorate

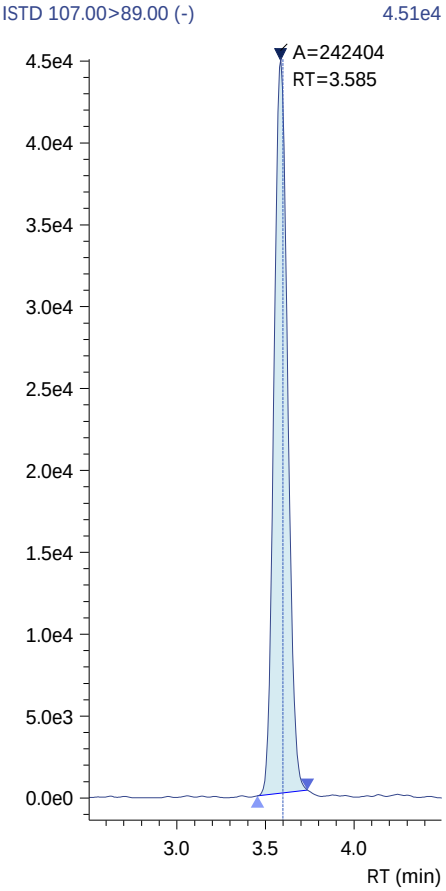
Conc 9.8652
R#1 28.07 (28.49)





Sodium Perchlorate-18O4_IS

Conc 1.0000



HS23070658 Eurofin Lab J134801-1 Std_Tal_L4 Final Report

ALS WO# HS23070658

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 7/19/2023 4:52 PM

JOB DESCRIPTION

HS23070658

JOB NUMBER

410-134801-1

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
7/19/2023 4:52 PM

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

Eurofins Lancaster Laboratories Environment Testing, LLC

Compliance Statement

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

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

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

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

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Definitions/Glossary

Client: ALS Group USA, Corp
Project/Site: HS23070658

Job ID: 410-134801-1

Qualifiers

GC VOA

Qualifier	Qualifier Description
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
410-134801-1

Receipt
The samples were received on 7/14/2023 9:52 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 1.8°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: HS23070658

Job ID: 410-134801-1

Client Sample ID: 16WW55-230712 — Lab Sample ID: 410-134801-1

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	120000		12000		2600	ug/L	1		RSK-175	Total/NA

Client Sample ID: 16WW41-230712 — Lab Sample ID: 410-134801-2

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	220000	M	12000		2600	ug/L	1		RSK-175	Total/NA

Client Sample ID: 16WW48-230712 — Lab Sample ID: 410-134801-3

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	220000	M	12000		2600	ug/L	1		RSK-175	Total/NA

Client Sample ID: 16WW48-230712-FD — Lab Sample ID: 410-134801-4

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	220000	M	12000		2600	ug/L	1		RSK-175	Total/NA

Client Sample ID: 16EW03-230712 — Lab Sample ID: 410-134801-5

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	220000	M	12000		2600	ug/L	1		RSK-175	Total/NA

Client Sample ID: 16WW35-230712 — Lab Sample ID: 410-134801-6

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	190000	M	12000		2600	ug/L	1		RSK-175	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: ALS Group USA, Corp
Project/Site: HS23070658

Job ID: 410-134801-1

Client Sample ID: 16WW55-230712
Lab Sample ID: 410-134801-1
Date Collected: 07/12/23 07:05
Matrix: Water
Date Received: 07/14/23 09:52

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Carbon dioxide	120000		12000		2600	ug/L		07/18/23 18:08	1

Client Sample ID: 16WW41-230712
Lab Sample ID: 410-134801-2
Date Collected: 07/12/23 07:50
Matrix: Water
Date Received: 07/14/23 09:52

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Carbon dioxide	220000	M	12000		2600	ug/L		07/18/23 18:16	1

Client Sample ID: 16WW48-230712
Lab Sample ID: 410-134801-3
Date Collected: 07/12/23 08:35
Matrix: Water
Date Received: 07/14/23 09:52

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Carbon dioxide	220000	M	12000		2600	ug/L		07/18/23 18:24	1

Client Sample ID: 16WW48-230712-FD
Lab Sample ID: 410-134801-4
Date Collected: 07/12/23 08:35
Matrix: Water
Date Received: 07/14/23 09:52

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Carbon dioxide	220000	M	12000		2600	ug/L		07/18/23 18:32	1

Client Sample ID: 16EW03-230712
Lab Sample ID: 410-134801-5
Date Collected: 07/12/23 09:25
Matrix: Water
Date Received: 07/14/23 09:52

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Carbon dioxide	220000	M	12000		2600	ug/L		07/18/23 18:41	1

Client Sample ID: 16WW35-230712
Lab Sample ID: 410-134801-6
Date Collected: 07/12/23 10:15
Matrix: Water
Date Received: 07/14/23 09:52

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Carbon dioxide	190000	M	12000		2600	ug/L		07/18/23 18:49	1

Default Detection Limits

Client: ALS Group USA, Corp
Project/Site: HS23070658

Job ID: 410-134801-1

Method: RSK-175 - Dissolved Gases (GC)

Prep: RSK-175

Analyte	LOQ	DL	Units
Carbon dioxide	12000	2600	ug/L

QC Sample Results

Client: ALS Group USA, Corp
Project/Site: HS23070658

Job ID: 410-134801-1

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 410-398043/1-A
Matrix: Water
Analysis Batch: 397918

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 398043

Analyte	MB Result	MB Qualifier	LOQ	LOD	DL	Unit	D	Analyzed	Dil Fac
Carbon dioxide	2600	U M	12000		2600	ug/L		07/18/23 11:02	1

Lab Sample ID: LCS 410-398043/2-A
Matrix: Water
Analysis Batch: 397918

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 398043

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Carbon dioxide			35800	37600		ug/L		105	80 - 122		

Lab Sample ID: LCSD 410-398043/3-A
Matrix: Water
Analysis Batch: 397918

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 398043

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Carbon dioxide			35800	37400		ug/L		104	80 - 122	1	20

QC Association Summary

Client: ALS Group USA, Corp
Project/Site: HS23070658

Job ID: 410-134801-1

GC VOA

Analysis Batch: 397918

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-134801-1	16WW55-230712	Total/NA	Water	RSK-175	398043
410-134801-2	16WW41-230712	Total/NA	Water	RSK-175	398043
410-134801-3	16WW48-230712	Total/NA	Water	RSK-175	398043
410-134801-4	16WW48-230712-FD	Total/NA	Water	RSK-175	398043
410-134801-5	16EW03-230712	Total/NA	Water	RSK-175	398043
410-134801-6	16WW35-230712	Total/NA	Water	RSK-175	398043
MB 410-398043/1-A	Method Blank	Total/NA	Water	RSK-175	398043
LCS 410-398043/2-A	Lab Control Sample	Total/NA	Water	RSK-175	398043
LCSD 410-398043/3-A	Lab Control Sample Dup	Total/NA	Water	RSK-175	398043

Prep Batch: 398043

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-134801-1	16WW55-230712	Total/NA	Water	RSK-175	
410-134801-2	16WW41-230712	Total/NA	Water	RSK-175	
410-134801-3	16WW48-230712	Total/NA	Water	RSK-175	
410-134801-4	16WW48-230712-FD	Total/NA	Water	RSK-175	
410-134801-5	16EW03-230712	Total/NA	Water	RSK-175	
410-134801-6	16WW35-230712	Total/NA	Water	RSK-175	
MB 410-398043/1-A	Method Blank	Total/NA	Water	RSK-175	
LCS 410-398043/2-A	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 410-398043/3-A	Lab Control Sample Dup	Total/NA	Water	RSK-175	

Lab Chronicle

Client: ALS Group USA, Corp
Project/Site: HS23070658

Job ID: 410-134801-1

Client Sample ID: 16WW55-230712
Lab Sample ID: 410-134801-1
Date Collected: 07/12/23 07:05
Matrix: Water
Date Received: 07/14/23 09:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	RSK-175			398043	HQR6	ELLE	07/18/23 11:00
Total/NA	Analysis	RSK-175		1	397918	LXF2	ELLE	07/18/23 18:08

Client Sample ID: 16WW41-230712
Lab Sample ID: 410-134801-2
Date Collected: 07/12/23 07:50
Matrix: Water
Date Received: 07/14/23 09:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	RSK-175			398043	HQR6	ELLE	07/18/23 11:00
Total/NA	Analysis	RSK-175		1	397918	LXF2	ELLE	07/18/23 18:16

Client Sample ID: 16WW48-230712
Lab Sample ID: 410-134801-3
Date Collected: 07/12/23 08:35
Matrix: Water
Date Received: 07/14/23 09:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	RSK-175			398043	HQR6	ELLE	07/18/23 11:00
Total/NA	Analysis	RSK-175		1	397918	LXF2	ELLE	07/18/23 18:24

Client Sample ID: 16WW48-230712-FD
Lab Sample ID: 410-134801-4
Date Collected: 07/12/23 08:35
Matrix: Water
Date Received: 07/14/23 09:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	RSK-175			398043	HQR6	ELLE	07/18/23 11:00
Total/NA	Analysis	RSK-175		1	397918	LXF2	ELLE	07/18/23 18:32

Client Sample ID: 16EW03-230712
Lab Sample ID: 410-134801-5
Date Collected: 07/12/23 09:25
Matrix: Water
Date Received: 07/14/23 09:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	RSK-175			398043	HQR6	ELLE	07/18/23 11:00
Total/NA	Analysis	RSK-175		1	397918	LXF2	ELLE	07/18/23 18:41

Client Sample ID: 16WW35-230712
Lab Sample ID: 410-134801-6
Date Collected: 07/12/23 10:15
Matrix: Water
Date Received: 07/14/23 09:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	RSK-175			398043	HQR6	ELLE	07/18/23 11:00
Total/NA	Analysis	RSK-175		1	397918	LXF2	ELLE	07/18/23 18:49

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: 410-134801-1
Project/Site: HS23070658

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: HS23070658

Job ID: 410-134801-1

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: HS23070658

Job ID: 410-134801-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
410-134801-1	16WW55-230712	Water	07/12/23 07:05	07/14/23 09:52
410-134801-2	16WW41-230712	Water	07/12/23 07:50	07/14/23 09:52
410-134801-3	16WW48-230712	Water	07/12/23 08:35	07/14/23 09:52
410-134801-4	16WW48-230712-FD	Water	07/12/23 08:35	07/14/23 09:52
410-134801-5	16EW03-230712	Water	07/12/23 09:25	07/14/23 09:52
410-134801-6	16WW35-230712	Water	07/12/23 10:15	07/14/23 09:52

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-134801-1

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 Laborator Job No.: 410-134801-1

SDG No.:

Instrument ID: 19506-B Analysis Batch Number: 397918

Lab Sample ID: MB 410-398043/1-A Client Sample ID:

Date Analyzed: 07/18/23 11:02 Lab File ID: 312023_07_18BB.0005.d GC Column: HP Plot ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon dioxide	2.07	Peak not integrated	LXF2	07/19/23 03:20

Lab Sample ID: 410-134801-2 Client Sample ID: 16WW41-230712

Date Analyzed: 07/18/23 18:16 Lab File ID: 312023_07_18BB.0040.d GC Column: HP Plot ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon dioxide	2.02	Peak not integrated	LXF2	07/19/23 03:22

Lab Sample ID: 410-134801-3 Client Sample ID: 16WW48-230712

Date Analyzed: 07/18/23 18:24 Lab File ID: 312023_07_18BB.0041.d GC Column: HP Plot ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon dioxide	2.01	Peak not integrated	LXF2	07/19/23 03:22

Lab Sample ID: 410-134801-4 Client Sample ID: 16WW48-230712-FD

Date Analyzed: 07/18/23 18:32 Lab File ID: 312023_07_18BB.0042.d GC Column: HP Plot ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon dioxide	2.01	Peak not integrated	LXF2	07/19/23 03:22

Lab Sample ID: 410-134801-5 Client Sample ID: 16EW03-230712

Date Analyzed: 07/18/23 18:41 Lab File ID: 312023_07_18BB.0043.d GC Column: HP Plot ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon dioxide	2.01	Peak not integrated	LXF2	07/19/23 03:22

GC VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins Lancaster Laborator Job No.: 410-134801-1

SDG No.:

Instrument ID: 19506-B Analysis Batch Number: 397918

Lab Sample ID: 410-134801-6 Client Sample ID: 16WW35-230712

Date Analyzed: 07/18/23 18:49 Lab File ID: 312023_07_18BB.0044.d GC Column: HP Plot ID: 0.53(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Carbon dioxide	2.02	Peak not integrated	LXF2	07/19/23 03:23

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-134801-1

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.: 410-134801-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 312023_07_18BB.0006.d

Lab ID: LCS 410-398043/2-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 DUPLICATE RECOVERY

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-134801-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 312023_07_18BB.0007.d

Lab ID: LCSD 410-398043/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Carbon dioxide	35800	37400	104	1	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.: 410-134801-1

SDG No.:

Lab File ID: 312023_07_18BB.0005.d Lab Sample ID: MB 410-398043/1-A

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: 19506-B Date Analyzed: 07/18/2023 11:02

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 410-398043/2-A	312023_07_18BB.0006.d	07/18/2023 11:10
	LCSD 410-398043/3-A	312023_07_18BB.0007.d	07/18/2023 11:18
16WW55-230712	410-134801-1	312023_07_18BB.0039.d	07/18/2023 18:08
16WW41-230712	410-134801-2	312023_07_18BB.0040.d	07/18/2023 18:16
16WW48-230712	410-134801-3	312023_07_18BB.0041.d	07/18/2023 18:24
16WW48-230712-FD	410-134801-4	312023_07_18BB.0042.d	07/18/2023 18:32
16EW03-230712	410-134801-5	312023_07_18BB.0043.d	07/18/2023 18:41
16WW35-230712	410-134801-6	312023_07_18BB.0044.d	07/18/2023 18:49

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-134801-1

SDG No.:

Client Sample ID: 16WW55-230712
Lab Sample ID: 410-134801-1

Matrix: Water
Lab File ID: 312023_07_18BB.0039.d

Analysis Method: RSK-175
Date Collected: 07/12/2023 07:05

Sample wt/vol: 5(mL)
Date Analyzed: 07/18/2023 18:08

Soil Aliquot Vol:
Dilution Factor: 1

Soil Extract Vol.:
GC Column: HP Plot ID: 0.53(mm)

Purge Volume:
Heated Purge: (Y/N) N pH: 7.0

% Moisture: % Solids:
Level: (low/med) Low

Analysis Batch No.: 397918
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	DL
124-38-9	Carbon dioxide	120000		12000	2600

Report Date: 19-Jul-2023 03:23:41 Chrom Revision: 2.3 11-Jul-2023 11:49:10

Eurofins Lancaster Laboratories Environment Testing, LLC

Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20230718-89205.b\312023_07_18BB.0039.d				
Lims ID:	410-134801-A-1-A				
Client ID:	16WW55-230712				
Sample Type:	Client				
Inject. Date:	18-Jul-2023 18:08:00	ALS Bottle#:	0	Worklist Smp#:	39
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	410-0089205-039				
Operator ID:		Instrument ID:	19506-B		
Method:	\\chromfs\Lancaster\ChromData\19506-B\20230718-89205.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	19-Jul-2023 03:23:39	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:	CTX1624				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
1 Carbon dioxide	2.037	2.054	-0.017	385308193	117111	H

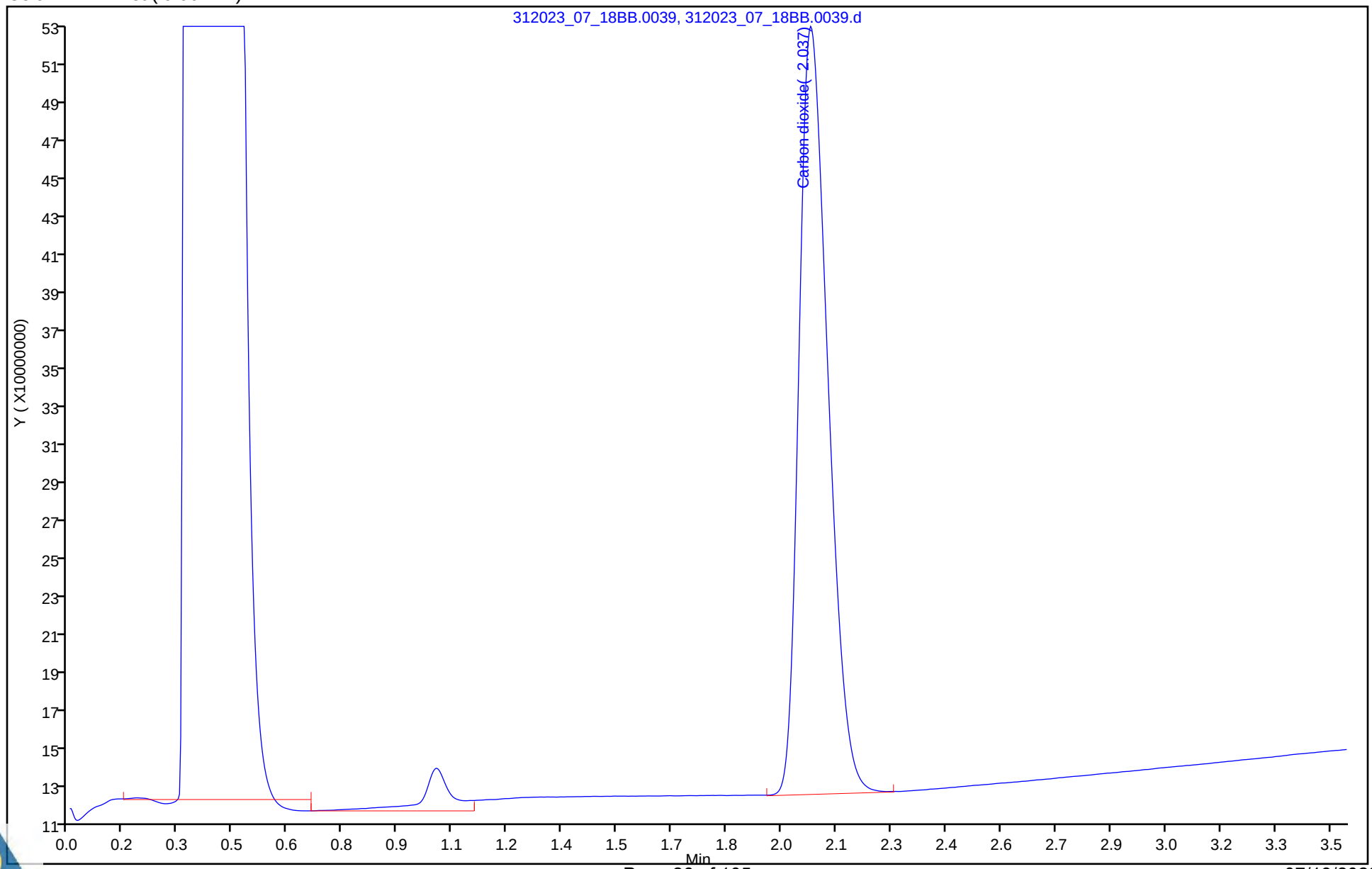
Report Date: 19-Jul-2023 03:23:41 Chrom Revision: 2.3 11-Jul-2023 11:49:10

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20230718-89205.b\312023_07_18BB.0039.d

Injection Date:	18-Jul-2023 18:08:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	410-134801-A-1-A	Lab Sample ID:	410-134801-1	Worklist Smp#:	39
Client ID:	16WW55-230712				
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.: 410-134801-1

SDG No.:

Client Sample ID: 16WW41-230712
Lab Sample ID: 410-134801-2

Matrix: Water
Lab File ID: 312023_07_18BB.0040.d

Analysis Method: RSK-175
Date Collected: 07/12/2023 07:50

Sample wt/vol: 5(mL)
Date Analyzed: 07/18/2023 18:16

Soil Aliquot Vol:
Dilution Factor: 1

Soil Extract Vol.:
GC Column: HP Plot ID: 0.53(mm)

Purge Volume:
Heated Purge: (Y/N) N pH: 7.0

% Moisture: % Solids:
Level: (low/med) Low

Analysis Batch No.: 397918
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	DL
124-38-9	Carbon dioxide	220000	M	12000	2600

Report Date: 19-Jul-2023 03:23:41 Chrom Revision: 2.3 11-Jul-2023 11:49:10

Eurofins Lancaster Laboratories Environment Testing, LLC

Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20230718-89205.b\312023_07_18BB.0040.d				
Lims ID:	410-134801-A-2-A				
Client ID:	16WW41-230712				
Sample Type:	Client				
Inject. Date:	18-Jul-2023 18:16:00	ALS Bottle#:	0	Worklist Smp#:	40
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	410-0089205-040				
Operator ID:		Instrument ID:	19506-B		
Method:	\\chromfs\Lancaster\ChromData\19506-B\20230718-89205.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	19-Jul-2023 03:23:39	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:	CTX1624				
First Level Reviewer: LXF2		Date:	19-Jul-2023 03:22:51		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
1 Carbon dioxide	2.015	2.054	-0.039	710766138H	216030	a

QC Flag Legend

Processing Flags

H - Response Measured by Height

Review Flags

a - User Assigned ID

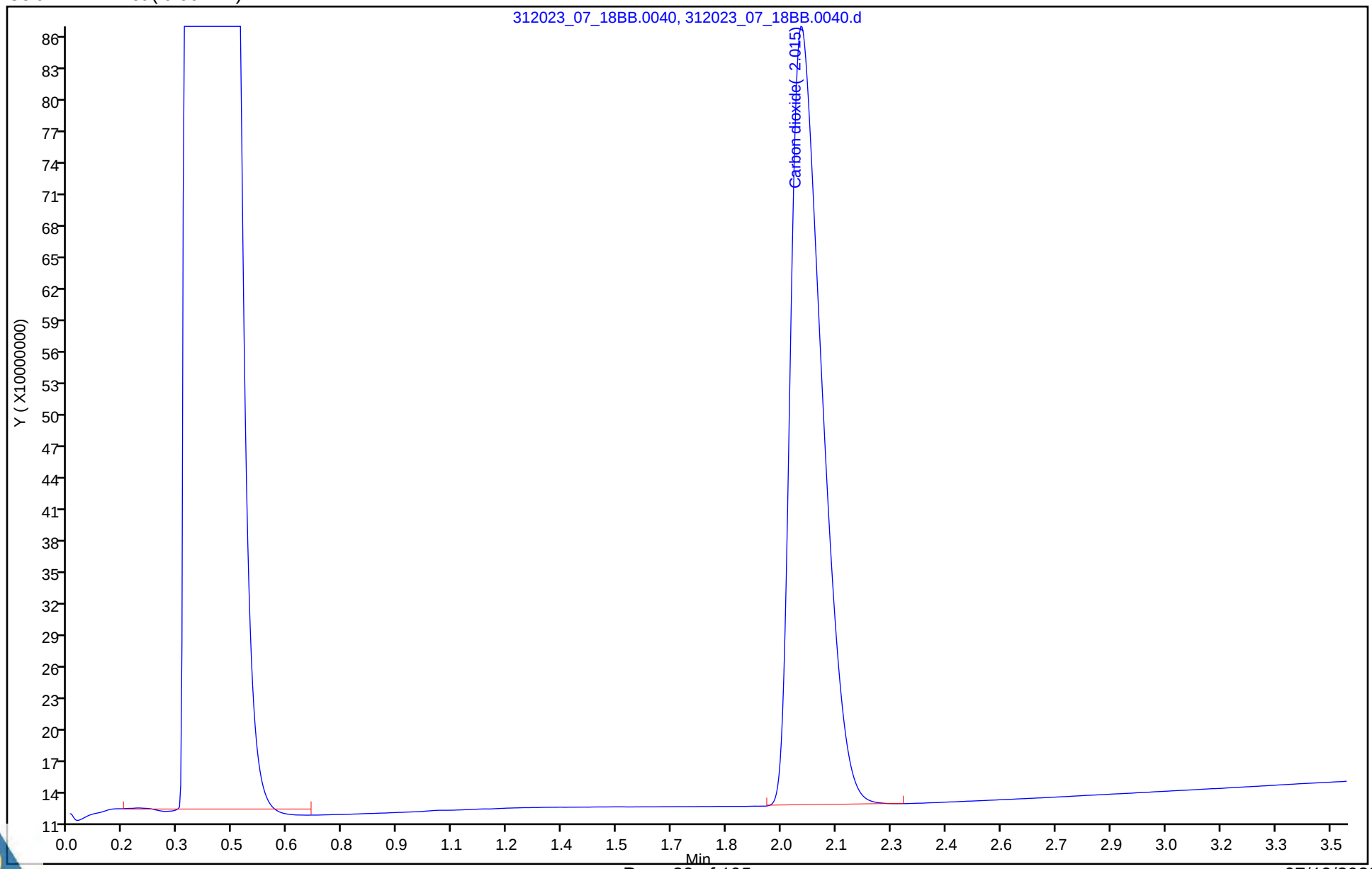
Report Date: 19-Jul-2023 03:23:41 Chrom Revision: 2.3 11-Jul-2023 11:49:10

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20230718-89205.b\312023_07_18BB.0040.d

Injection Date:	18-Jul-2023 18:16:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	410-134801-A-2-A	Lab Sample ID:	410-134801-2	Worklist Smp#:	40
Client ID:	16WW41-230712				
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-Jul-2023 03:23:41 Chrom Revision: 2.3 11-Jul-2023 11:49:10 Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

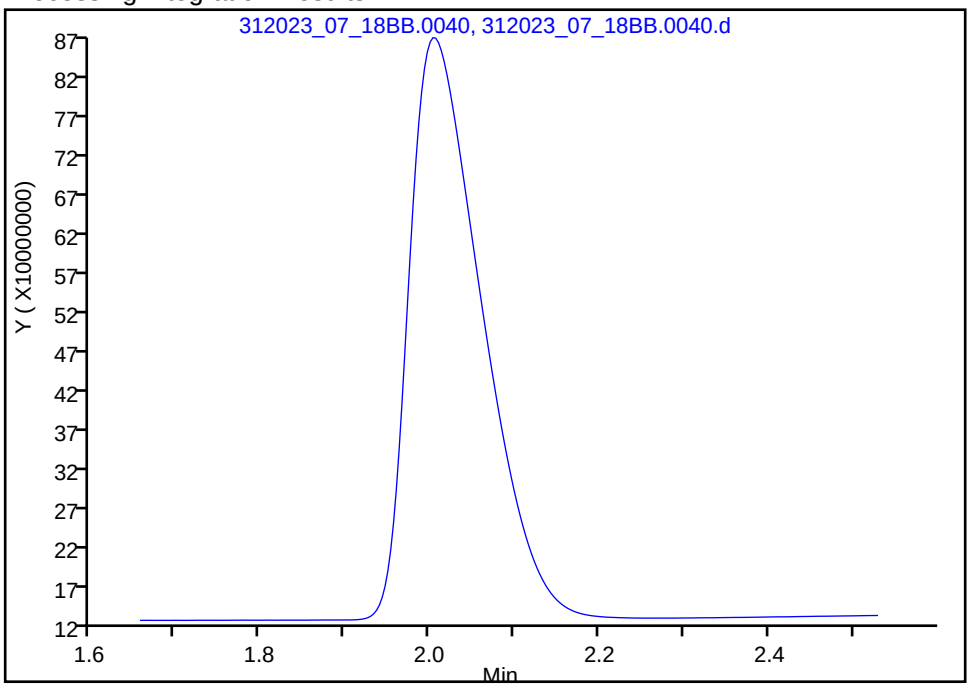
Data File:	\\chromfs\Lancaster\ChromData\19506-B\20230718-89205.b\312023_07_18BB.0040.d		
Injection Date:	18-Jul-2023 18:16:00	Instrument ID:	19506-B
Lims ID:	410-134801-A-2-A	Lab Sample ID:	410-134801-2
Client ID:	16WW41-230712		
Operator ID:		ALS Bottle#:	0 Worklist Smp#: 40
Purge Vol:	1.000 mL	Dil. Factor:	1.0000
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2
Column:	HP Plot (0.00 mm)	Detector	0FIDA

1 Carbon dioxide, CAS: 124-38-9

Signal: 1

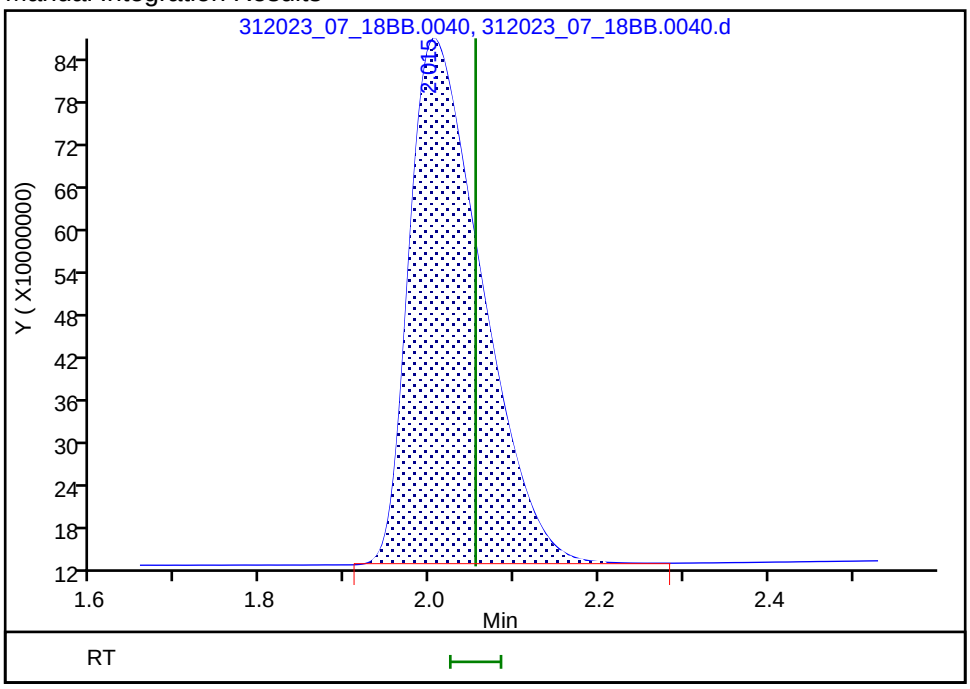
Not Detected
Expected RT: 2.05

Processing Integration Results



Manual Integration Results

RT: 2.01
Height: 710766138
Amount: 216030
Amount Units: ug/l



Reviewer: LXF2, 19-Jul-2023 03:22:49 -04:00:00 (UTC)
Audit Action: 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.: 410-134801-1

SDG No.:

Client Sample ID: 16WW48-230712
Lab Sample ID: 410-134801-3

Matrix: Water
Lab File ID: 312023_07_18BB.0041.d

Analysis Method: RSK-175
Date Collected: 07/12/2023 08:35

Sample wt/vol: 5(mL)
Date Analyzed: 07/18/2023 18:24

Soil Aliquot Vol:
Dilution Factor: 1

Soil Extract Vol.:
GC Column: HP Plot ID: 0.53(mm)

Purge Volume:
Heated Purge: (Y/N) N pH: 7.0

% Moisture: % Solids:
Level: (low/med) Low

Analysis Batch No.: 397918
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	DL
124-38-9	Carbon dioxide	220000	M	12000	2600

Report Date: 19-Jul-2023 03:23:42 Chrom Revision: 2.3 11-Jul-2023 11:49:10

Eurofins Lancaster Laboratories Environment Testing, LLC

Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20230718-89205.b\312023_07_18BB.0041.d				
Lims ID:	410-134801-A-3-A				
Client ID:	16WW48-230712				
Sample Type:	Client				
Inject. Date:	18-Jul-2023 18:24:00	ALS Bottle#:	0	Worklist Smp#:	41
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	410-0089205-041				
Operator ID:		Instrument ID:	19506-B		
Method:	\\chromfs\Lancaster\ChromData\19506-B\20230718-89205.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	19-Jul-2023 03:23:39	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:	CTX1624				
First Level Reviewer: LXF2		Date:	19-Jul-2023 03:22:54		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
1 Carbon dioxide	2.013	2.054	-0.041	713496927H	216860	a

QC Flag Legend

Processing Flags

H - Response Measured by Height

Review Flags

a - User Assigned ID

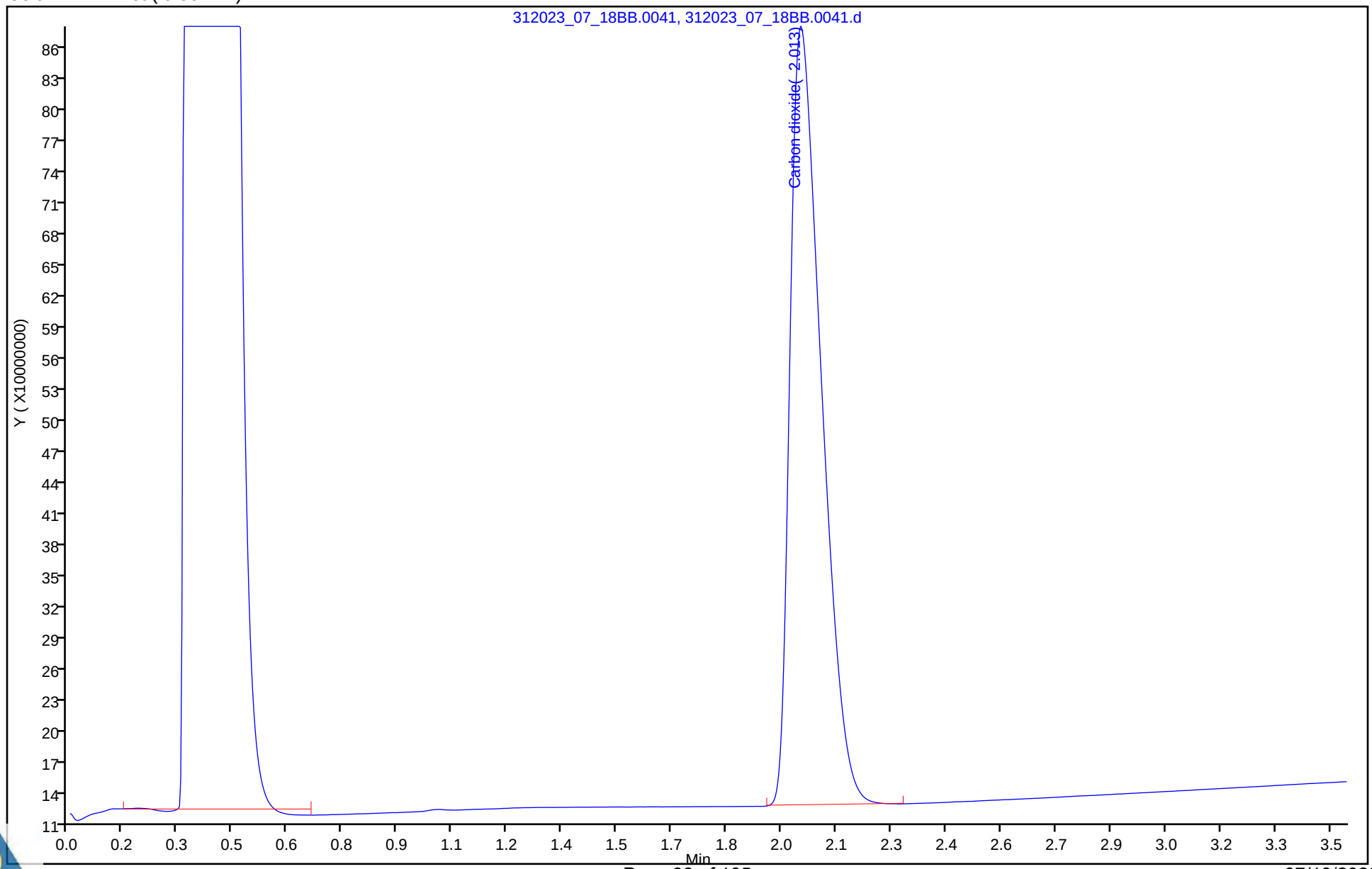
Report Date: 19-Jul-2023 03:23:42 Chrom Revision: 2.3 11-Jul-2023 11:49:10

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20230718-89205.b\312023_07_18BB.0041.d

Injection Date:	18-Jul-2023 18:24:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	410-134801-A-3-A	Lab Sample ID:	410-134801-3	Worklist Smp#:	41
Client ID:	16WW48-230712				
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-Jul-2023 03:23:42

Chrom Revision: 2.3 11-Jul-2023 11:49:10 Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

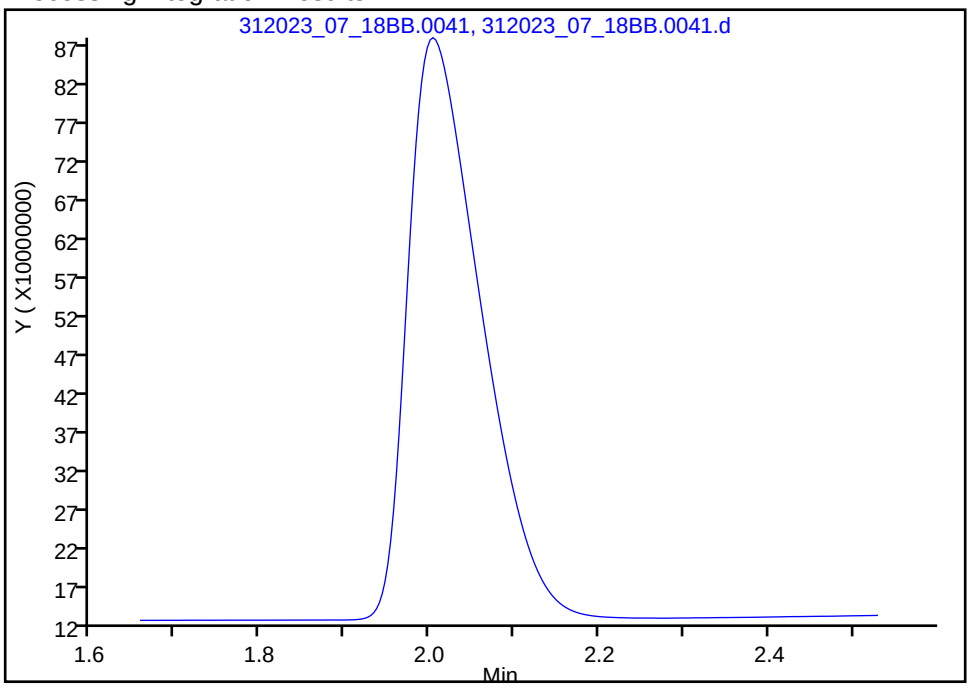
Data File:	\\chromfs\Lancaster\ChromData\19506-B\20230718-89205.b\312023_07_18BB.0041.d		
Injection Date:	18-Jul-2023 18:24:00	Instrument ID:	19506-B
Lims ID:	410-134801-A-3-A	Lab Sample ID:	410-134801-3
Client ID:	16WW48-230712		
Operator ID:		ALS Bottle#:	0 Worklist Smp#: 41
Purge Vol:	1.000 mL	Dil. Factor:	1.0000
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2
Column:	HP Plot (0.00 mm)	Detector	0FIDA

1 Carbon dioxide, CAS: 124-38-9

Signal: 1

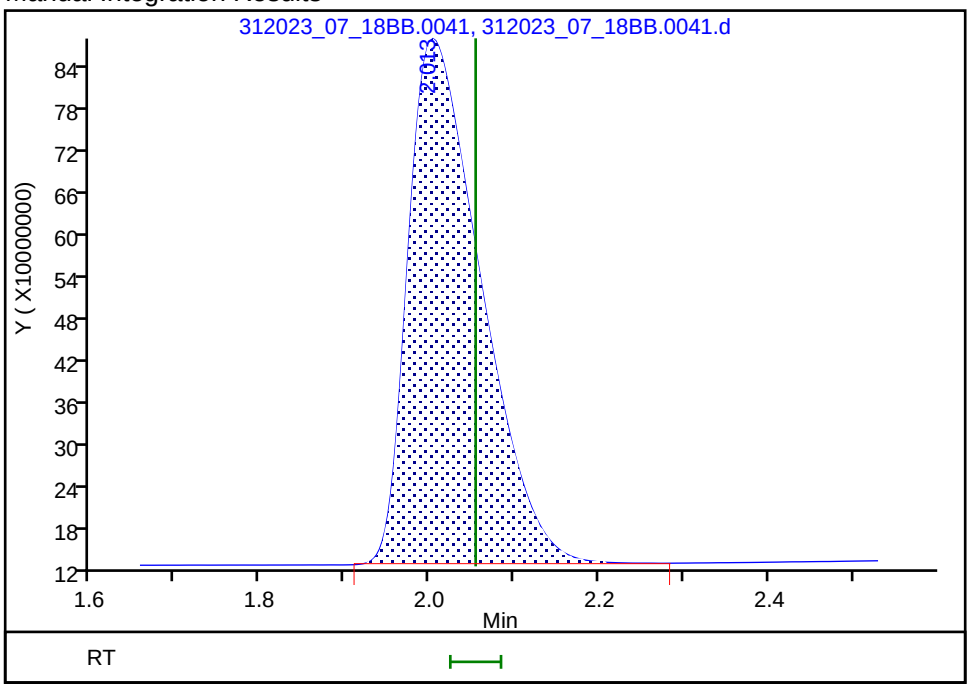
Not Detected
Expected RT: 2.05

Processing Integration Results



Manual Integration Results

RT: 2.01
Height: 713496927
Amount: 216860
Amount Units: ug/l



Reviewer: LXF2, 19-Jul-2023 03:22:54 -04:00:00 (UTC)
Audit Action: 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.: 410-134801-1

SDG No.:

Client Sample ID: 16WW48-230712-FD
Lab Sample ID: 410-134801-4

Matrix: Water
Lab File ID: 312023_07_18BB.0042.d

Analysis Method: RSK-175
Date Collected: 07/12/2023 08:35

Sample wt/vol: 5(mL)
Date Analyzed: 07/18/2023 18:32

Soil Aliquot Vol:
Dilution Factor: 1

Soil Extract Vol.:
GC Column: HP Plot ID: 0.53(mm)

Purge Volume:
Heated Purge: (Y/N) N pH: 7.0

% Moisture: % Solids:
Level: (low/med) Low

Analysis Batch No.: 397918
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	DL
124-38-9	Carbon dioxide	220000	M	12000	2600

Report Date: 19-Jul-2023 03:23:42 Chrom Revision: 2.3 11-Jul-2023 11:49:10

Eurofins Lancaster Laboratories Environment Testing, LLC

Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20230718-89205.b\312023_07_18BB.0042.d				
Lims ID:	410-134801-A-4-A				
Client ID:	16WW48-230712-FD				
Sample Type:	Client				
Inject. Date:	18-Jul-2023 18:32:00	ALS Bottle#:	0	Worklist Smp#:	42
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	410-0089205-042				
Operator ID:		Instrument ID:	19506-B		
Method:	\\chromfs\Lancaster\ChromData\19506-B\20230718-89205.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	19-Jul-2023 03:23:39	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:	CTX1624				
First Level Reviewer: LXF2		Date:	19-Jul-2023 03:22:57		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
1 Carbon dioxide	2.012	2.054	-0.042	733042911H	222801	a

QC Flag Legend

Processing Flags

H - Response Measured by Height

Review Flags

a - User Assigned ID

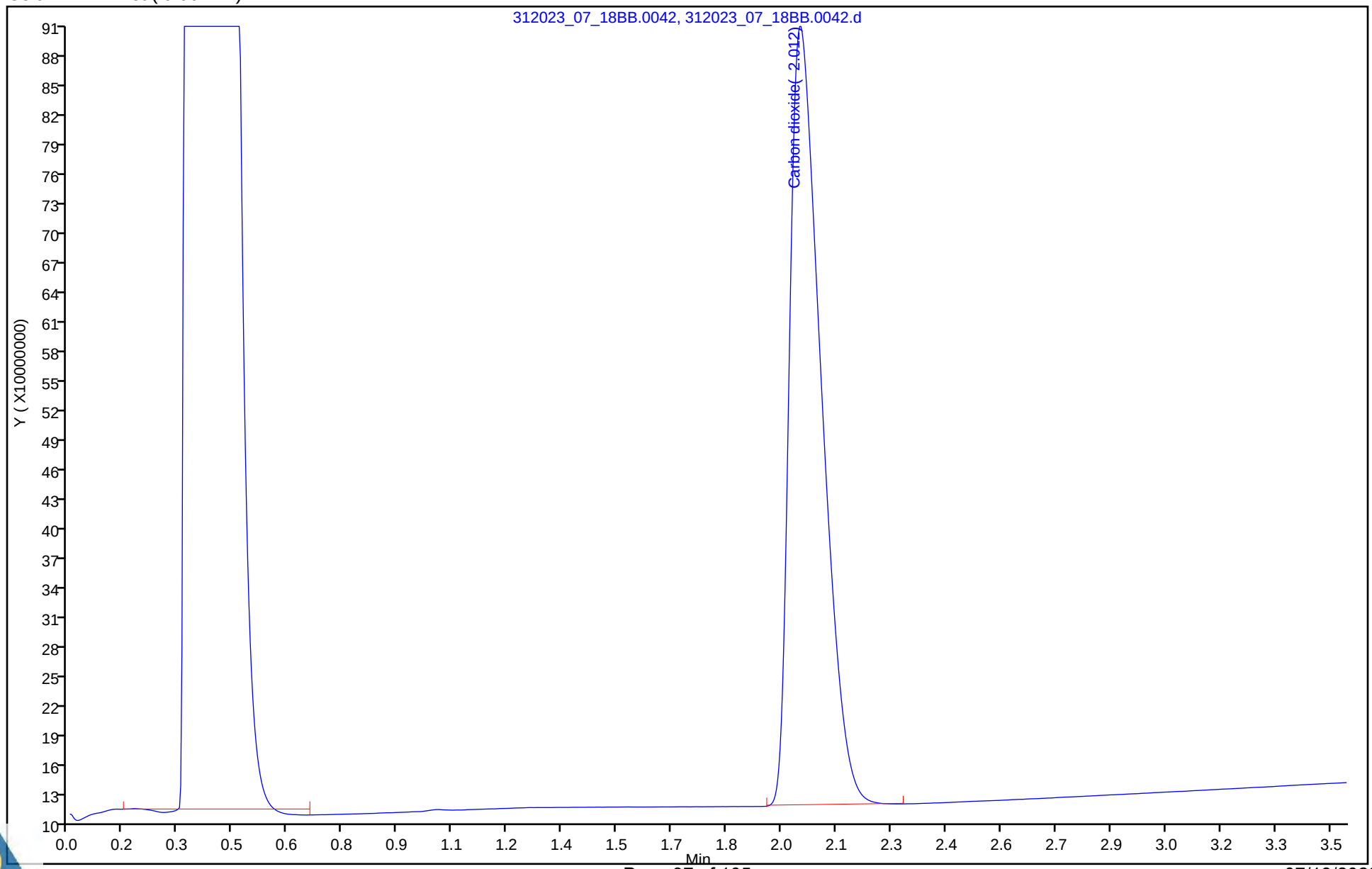
Report Date: 19-Jul-2023 03:23:42 Chrom Revision: 2.3 11-Jul-2023 11:49:10

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20230718-89205.b\312023_07_18BB.0042.d

Injection Date:	18-Jul-2023 18:32:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	410-134801-A-4-A	Lab Sample ID:	410-134801-4	Worklist Smp#:	42
Client ID:	16WW48-230712-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: 19-Jul-2023 03:23:42 Chrom Revision: 2.3 11-Jul-2023 11:49:10 Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

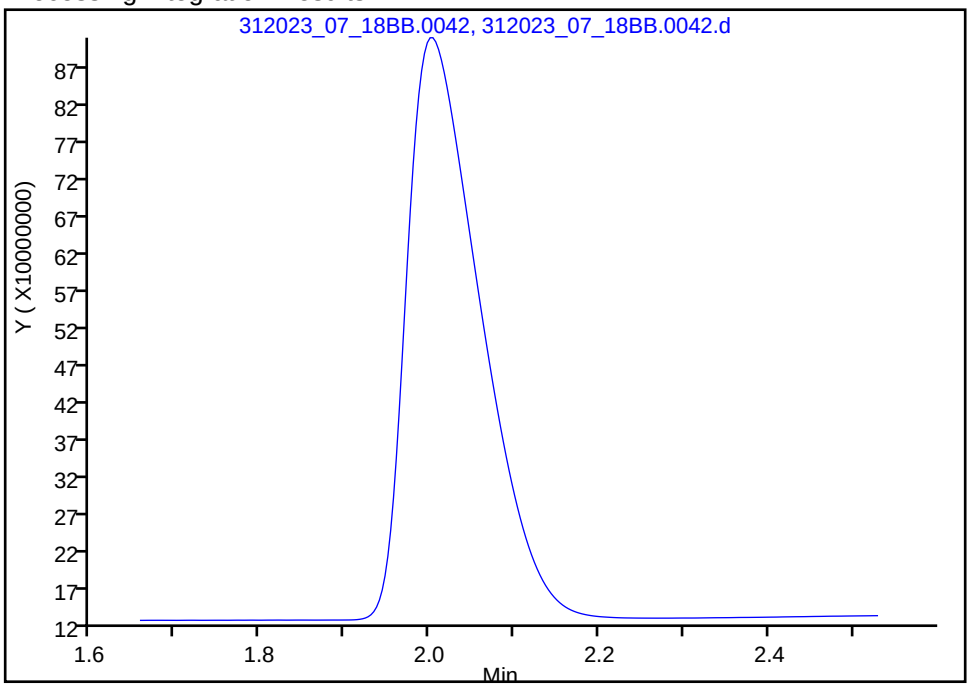
Data File:	\\chromfs\Lancaster\ChromData\19506-B\20230718-89205.b\312023_07_18BB.0042.d				
Injection Date:	18-Jul-2023 18:32:00	Instrument ID:	19506-B		
Lims ID:	410-134801-A-4-A	Lab Sample ID:	410-134801-4		
Client ID:	16WW48-230712-FD				
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	42
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2		
Column:	HP Plot (0.00 mm)	Detector	0FIDA		

1 Carbon dioxide, CAS: 124-38-9

Signal: 1

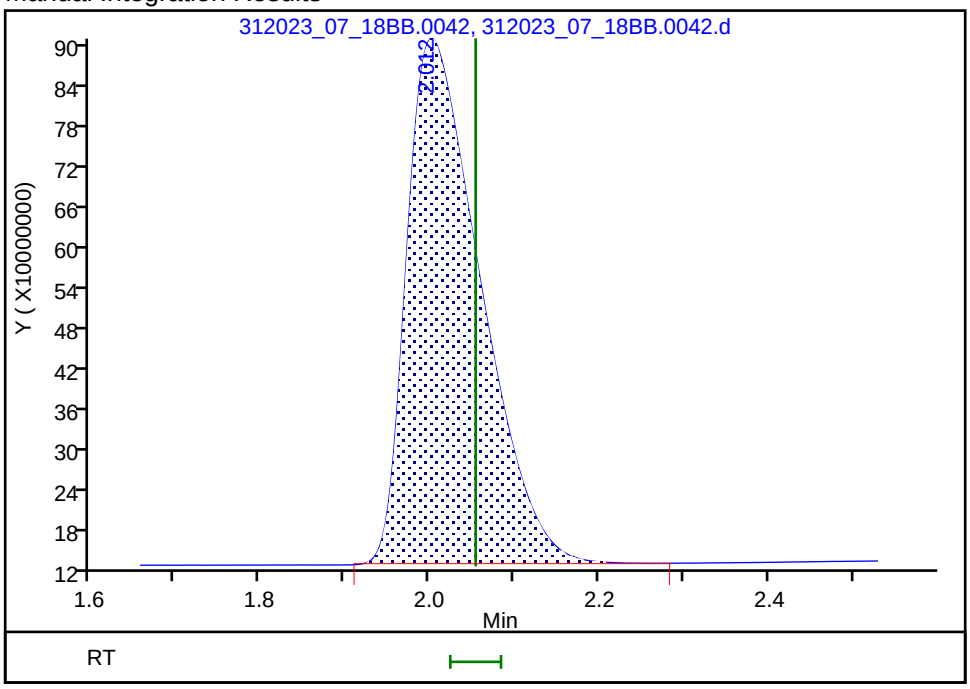
Not Detected
Expected RT: 2.05

Processing Integration Results



Manual Integration Results

RT: 2.01
Height: 733042911
Amount: 222801
Amount Units: ug/l



Reviewer: LXF2, 19-Jul-2023 03:22:56 -04:00:00 (UTC)
Audit Action: 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.: 410-134801-1

SDG No.:

Client Sample ID: 16EW03-230712 Lab Sample ID: 410-134801-5

Matrix: Water Lab File ID: 312023_07_18BB.0043.d

Analysis Method: RSK-175 Date Collected: 07/12/2023 09:25

Sample wt/vol: 5(mL) Date Analyzed: 07/18/2023 18:41

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP Plot ID: 0.53(mm)

Purge Volume: Heated Purge: (Y/N) N pH: 7.0

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 397918 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	DL
124-38-9	Carbon dioxide	220000	M	12000	2600

Report Date: 19-Jul-2023 03:23:42 Chrom Revision: 2.3 11-Jul-2023 11:49:10

Eurofins Lancaster Laboratories Environment Testing, LLC

Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20230718-89205.b\312023_07_18BB.0043.d				
Lims ID:	410-134801-A-5-A				
Client ID:	16EW03-230712				
Sample Type:	Client				
Inject. Date:	18-Jul-2023 18:41:00	ALS Bottle#:	0	Worklist Smp#:	43
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	410-0089205-043				
Operator ID:		Instrument ID:	19506-B		
Method:	\\chromfs\Lancaster\ChromData\19506-B\20230718-89205.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	19-Jul-2023 03:23:39	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:	CTX1624				
First Level Reviewer: LXF2		Date:	19-Jul-2023 03:23:00		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/l	Flags
1 Carbon dioxide	2.012	2.054	-0.042	720906030H	219112	a

QC Flag Legend

Processing Flags

H - Response Measured by Height

Review Flags

a - User Assigned ID

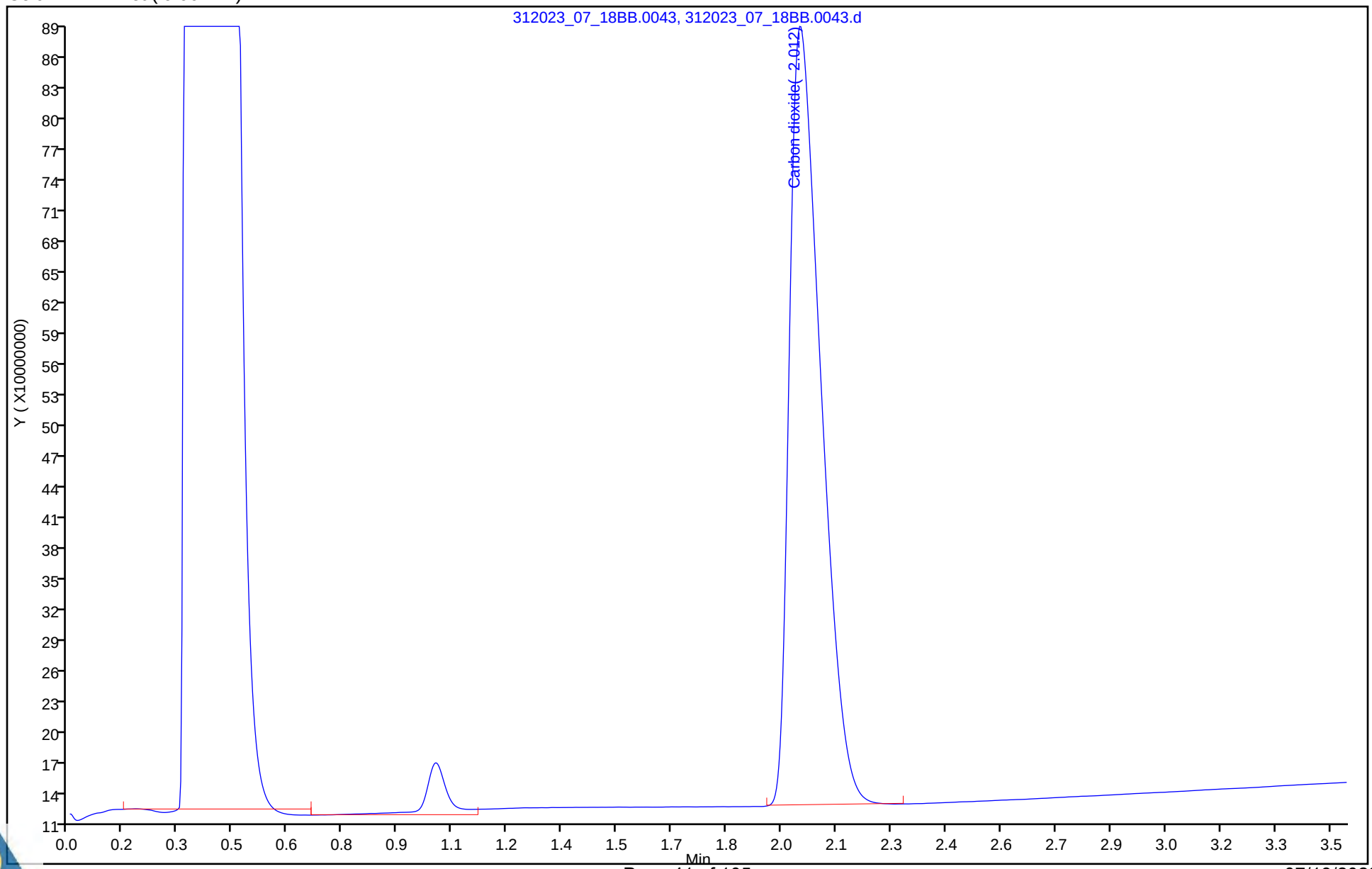
Report Date: 19-Jul-2023 03:23:42 Chrom Revision: 2.3 11-Jul-2023 11:49:10

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20230718-89205.b\312023_07_18BB.0043.d

Injection Date:	18-Jul-2023 18:41:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	410-134801-A-5-A	Lab Sample ID:	410-134801-5	Worklist Smp#:	43
Client ID:	16EW03-230712				
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-Jul-2023 03:23:42

Chrom Revision: 2.3 11-Jul-2023 11:49:10 Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

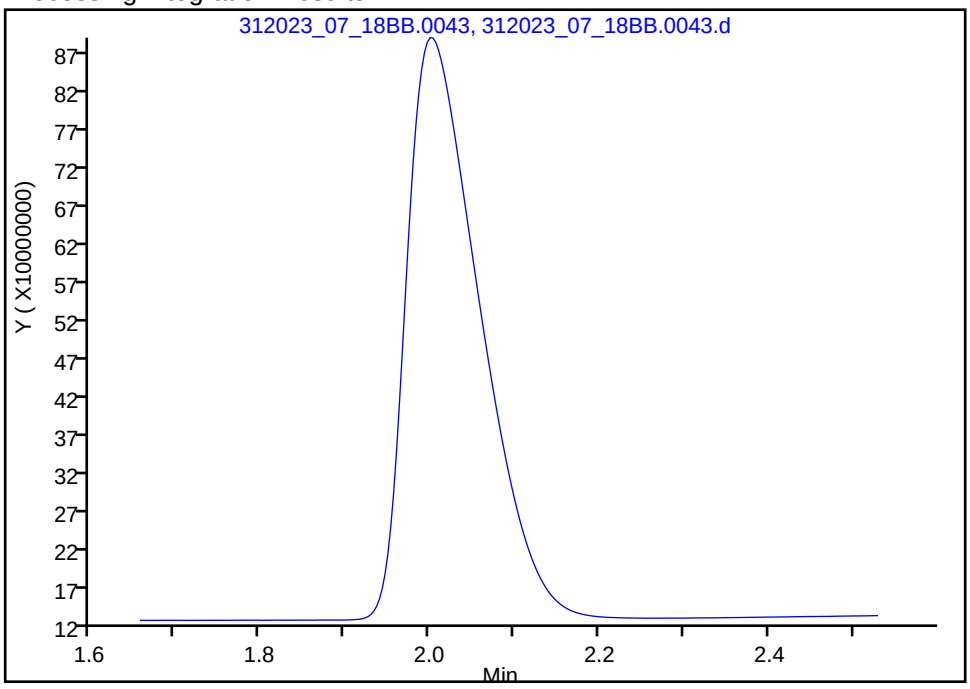
Data File:	\\chromfs\Lancaster\ChromData\19506-B\20230718-89205.b\312023_07_18BB.0043.d		
Injection Date:	18-Jul-2023 18:41:00	Instrument ID:	19506-B
Lims ID:	410-134801-A-5-A	Lab Sample ID:	410-134801-5
Client ID:	16EW03-230712		
Operator ID:		ALS Bottle#:	0 Worklist Smp#: 43
Purge Vol:	1.000 mL	Dil. Factor:	1.0000
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2
Column:	HP Plot (0.00 mm)	Detector	0FIDA

1 Carbon dioxide, CAS: 124-38-9

Signal: 1

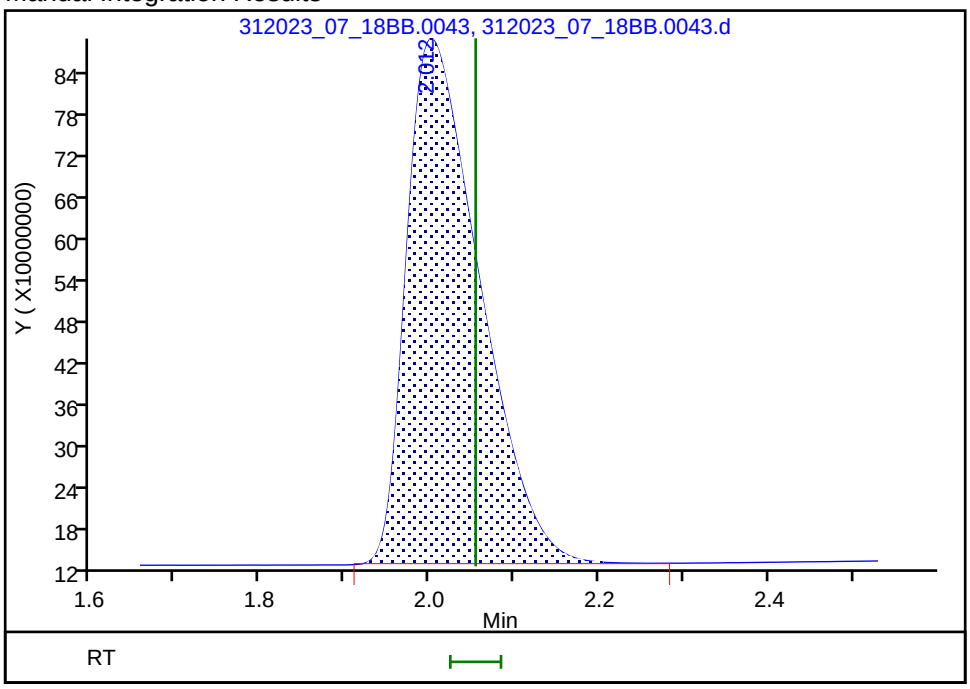
Not Detected
Expected RT: 2.05

Processing Integration Results



Manual Integration Results

RT: 2.01
Height: 720906030
Amount: 219112
Amount Units: ug/l



Reviewer: LXF2, 19-Jul-2023 03:22:59 -04:00:00 (UTC)
Audit Action: 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.: 410-134801-1

SDG No.:

Client Sample ID: 16WW35-230712 Lab Sample ID: 410-134801-6

Matrix: Water Lab File ID: 312023_07_18BB.0044.d

Analysis Method: RSK-175 Date Collected: 07/12/2023 10:15

Sample wt/vol: 5(mL) Date Analyzed: 07/18/2023 18:49

Soil Aliquot Vol: Dilution Factor: 1

Soil Extract Vol.: GC Column: HP Plot ID: 0.53(mm)

Purge Volume: Heated Purge: (Y/N) N pH: 7.0

% Moisture: % Solids: Level: (low/med) Low

Analysis Batch No.: 397918 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	DL
124-38-9	Carbon dioxide	190000	M	12000	2600

Report Date: 19-Jul-2023 03:23:43 Chrom Revision: 2.3 11-Jul-2023 11:49:10

Eurofins Lancaster Laboratories Environment Testing, LLC

Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20230718-89205.b\312023_07_18BB.0044.d				
Lims ID:	410-134801-A-6-A				
Client ID:	16WW35-230712				
Sample Type:	Client				
Inject. Date:	18-Jul-2023 18:49:00	ALS Bottle#:	0	Worklist Smp#:	44
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	410-0089205-044				
Operator ID:		Instrument ID:	19506-B		
Method:	\\chromfs\Lancaster\ChromData\19506-B\20230718-89205.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	19-Jul-2023 03:23:39	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:	CTX1624				
First Level Reviewer: LXF2		Date:	19-Jul-2023 03:23:03		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response		OnCol Amt ug/l	Flags
1 Carbon dioxide	2.020	2.054	-0.034	615116624	H	186959	a

QC Flag Legend

Processing Flags

H - Response Measured by Height

Review Flags

a - User Assigned ID

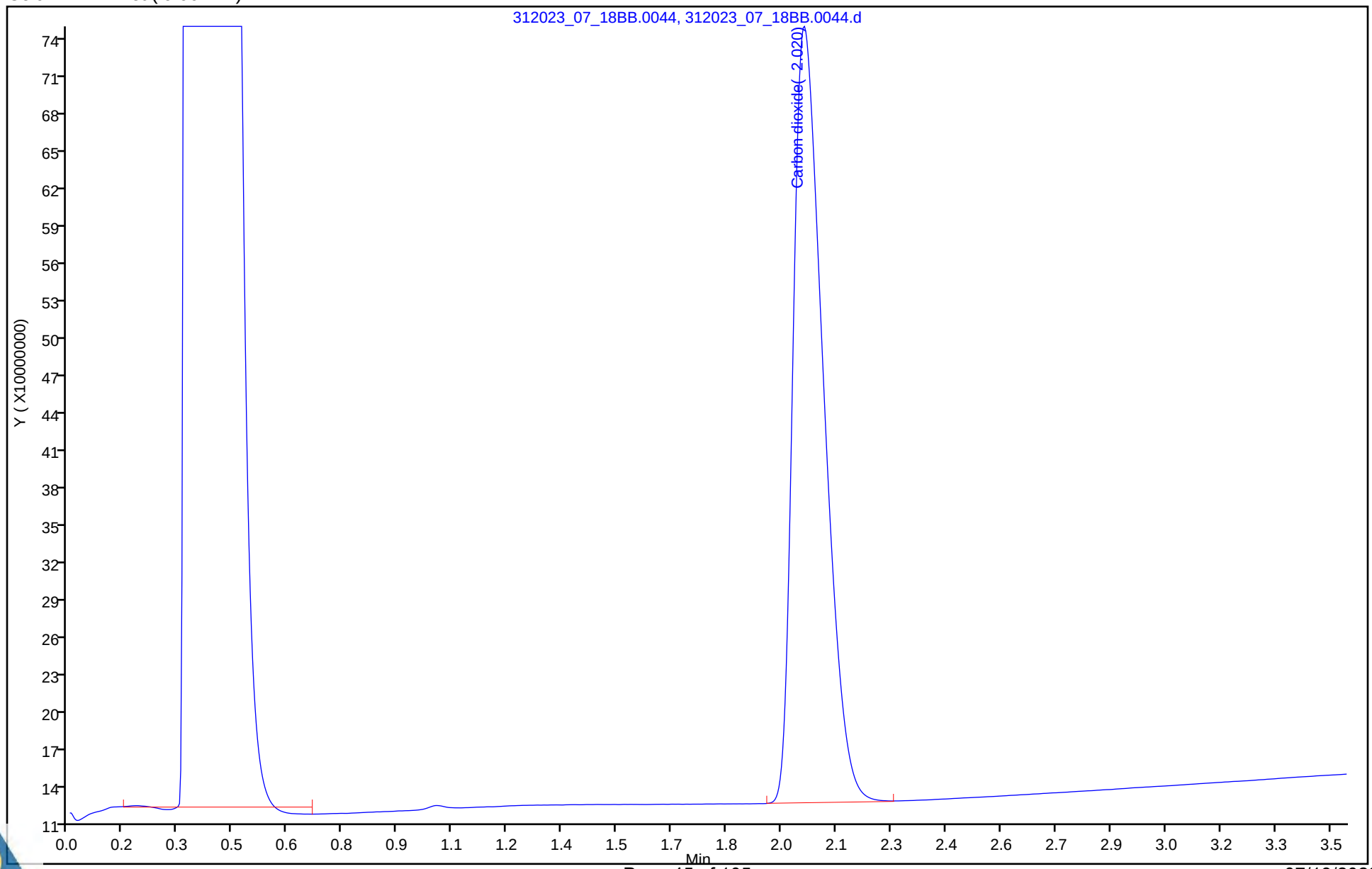
Report Date: 19-Jul-2023 03:23:43 Chrom Revision: 2.3 11-Jul-2023 11:49:10

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20230718-89205.b\312023_07_18BB.0044.d

Injection Date:	18-Jul-2023 18:49:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	410-134801-A-6-A	Lab Sample ID:	410-134801-6	Worklist Smp#:	44
Client ID:	16WW35-230712				
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-Jul-2023 03:23:43

Chrom Revision: 2.3 11-Jul-2023 11:49:10 Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

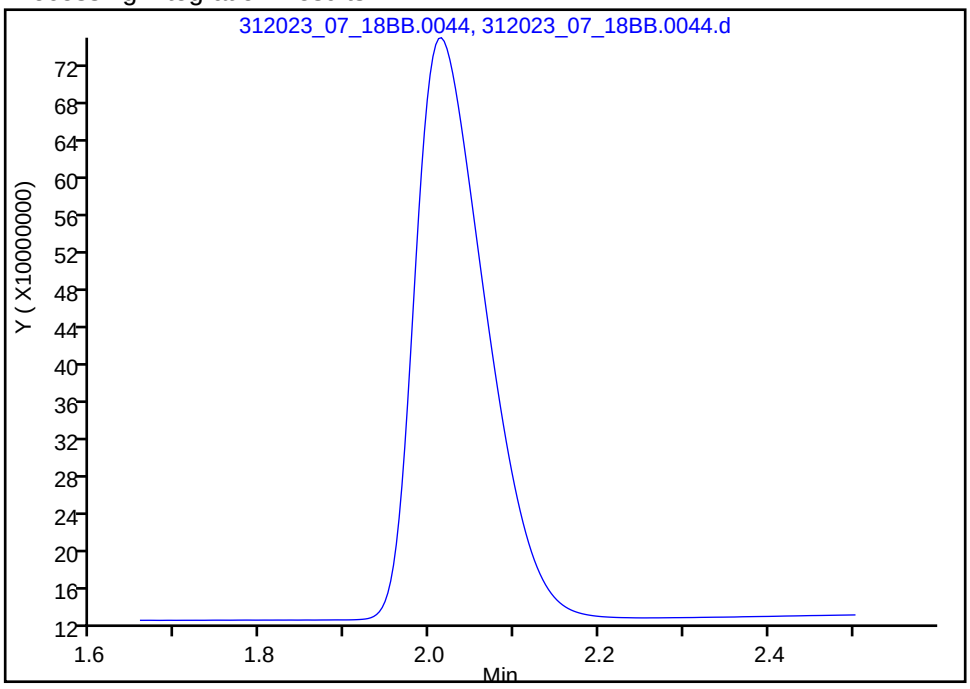
Data File:	\\chromfs\Lancaster\ChromData\19506-B\20230718-89205.b\312023_07_18BB.0044.d		
Injection Date:	18-Jul-2023 18:49:00	Instrument ID:	19506-B
Lims ID:	410-134801-A-6-A	Lab Sample ID:	410-134801-6
Client ID:	16WW35-230712		
Operator ID:		ALS Bottle#:	0 Worklist Smp#: 44
Purge Vol:	1.000 mL	Dil. Factor:	1.0000
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2
Column:	HP Plot (0.00 mm)	Detector	0FIDA

1 Carbon dioxide, CAS: 124-38-9

Signal: 1

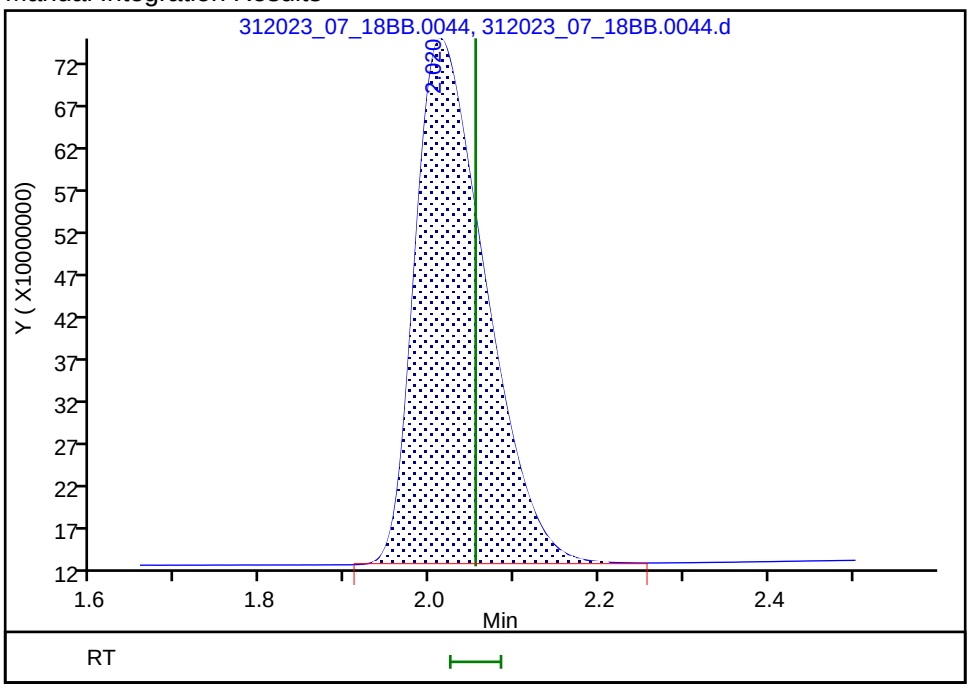
Not Detected
Expected RT: 2.05

Processing Integration Results



Manual Integration Results

RT: 2.02
Height: 615116624
Amount: 186959
Amount Units: ug/l



Reviewer: LXF2, 19-Jul-2023 03:23:02 -04:00:00 (UTC)
Audit Action: Assigned Compound ID Audit Reason: Peak not integrated

FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Env Job No.: 410-134801-1 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.: 410-134801-1 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 Env Job No.: 410-134801-1 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

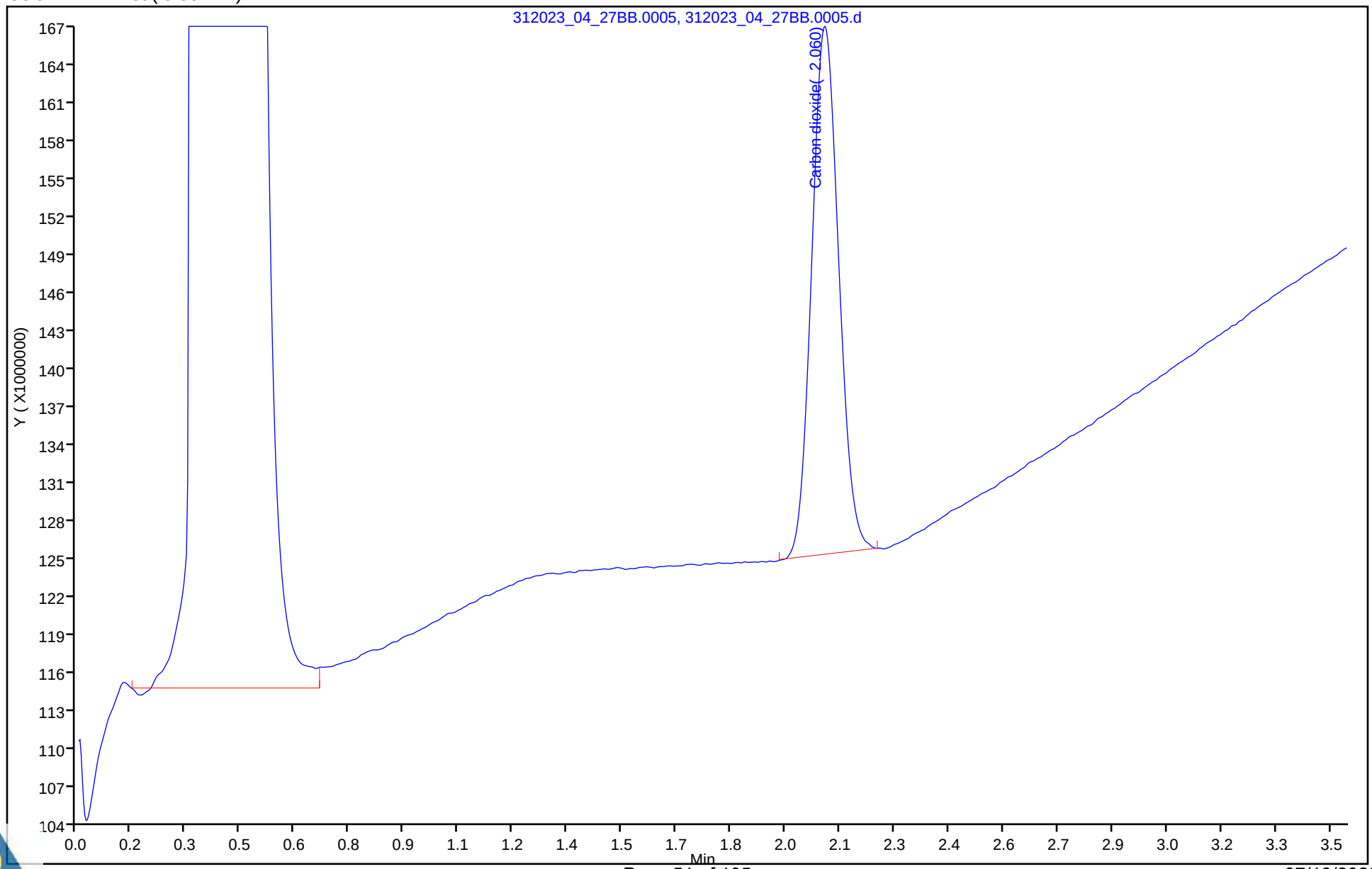
Report Date: 28-Apr-2023 07:19:05 Chrom Revision: 2.3 20-Apr-2023 08:27:48

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

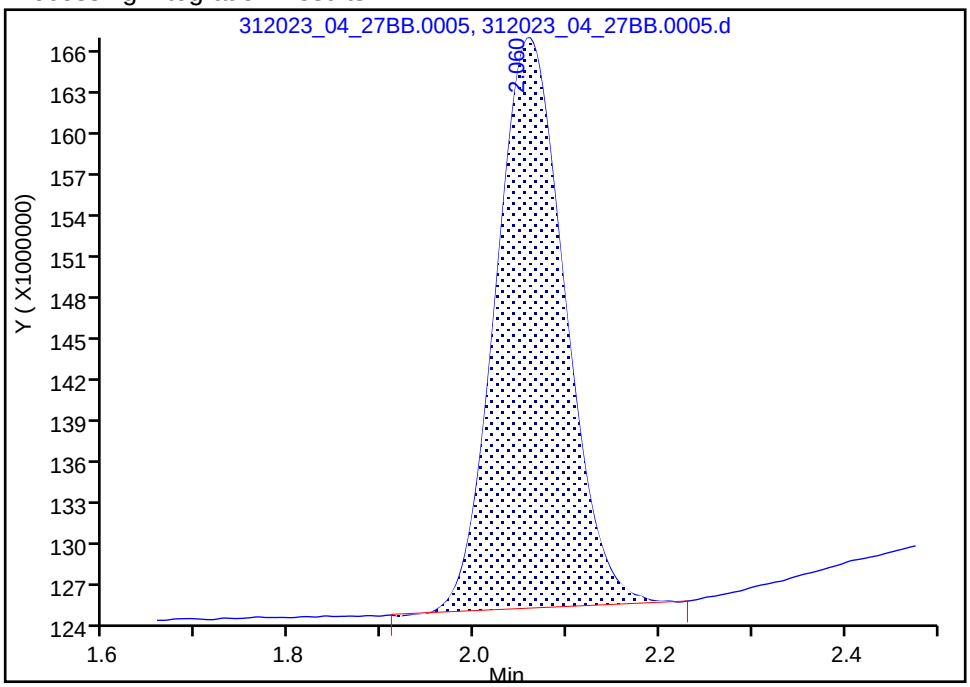
Data File:	\\chromfs\Lancaster\ChromData\19506-B\20230427-82537.b\312023_04_27BB.0005.d		
Injection Date:	27-Apr-2023 09:59:00	Instrument ID:	19506-B
Lims ID:	ic		
Client ID:			
Operator ID:		ALS Bottle#:	0 Worklist Smp#: 5
Purge Vol:	1.000 mL	Dil. Factor:	1.0000
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2
Column:	HP Plot (0.00 mm)	Detector	0FIDA

1 Carbon dioxide, CAS: 124-38-9

Signal: 1

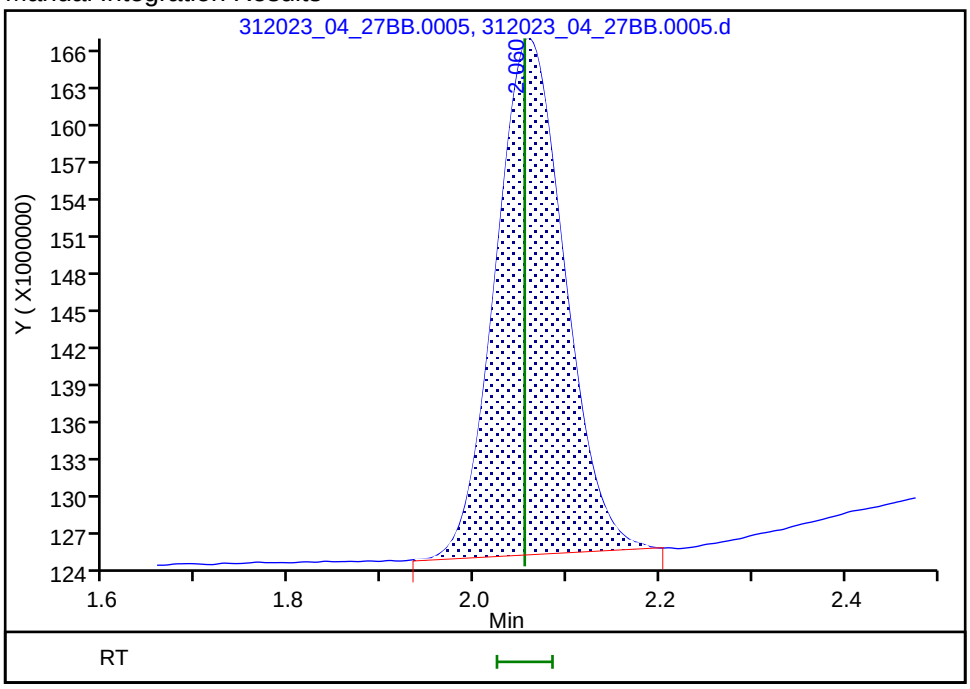
Processing Integration Results

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

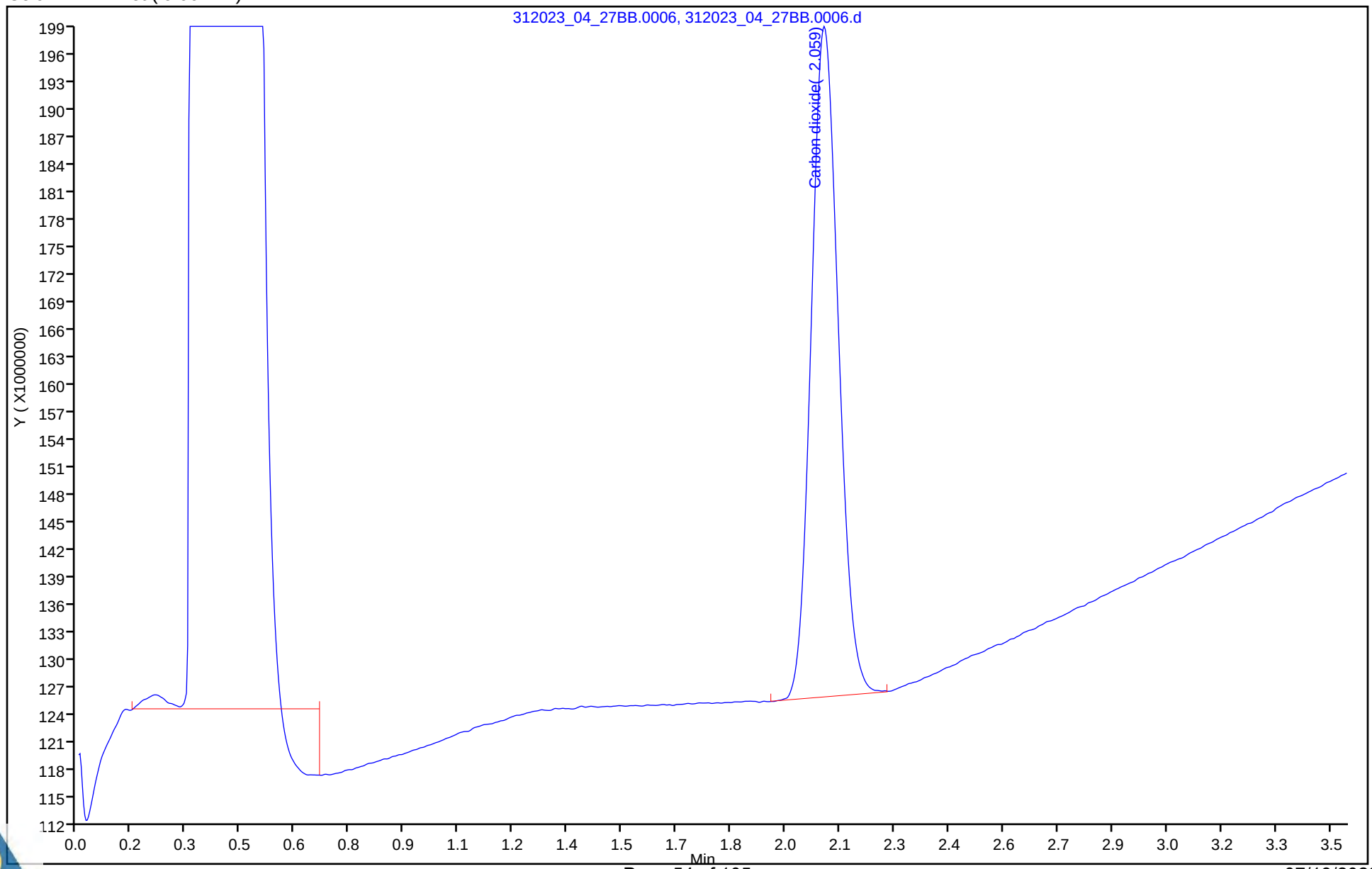
Report Date: 28-Apr-2023 07:19:06 Chrom Revision: 2.3 20-Apr-2023 08:27:48

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

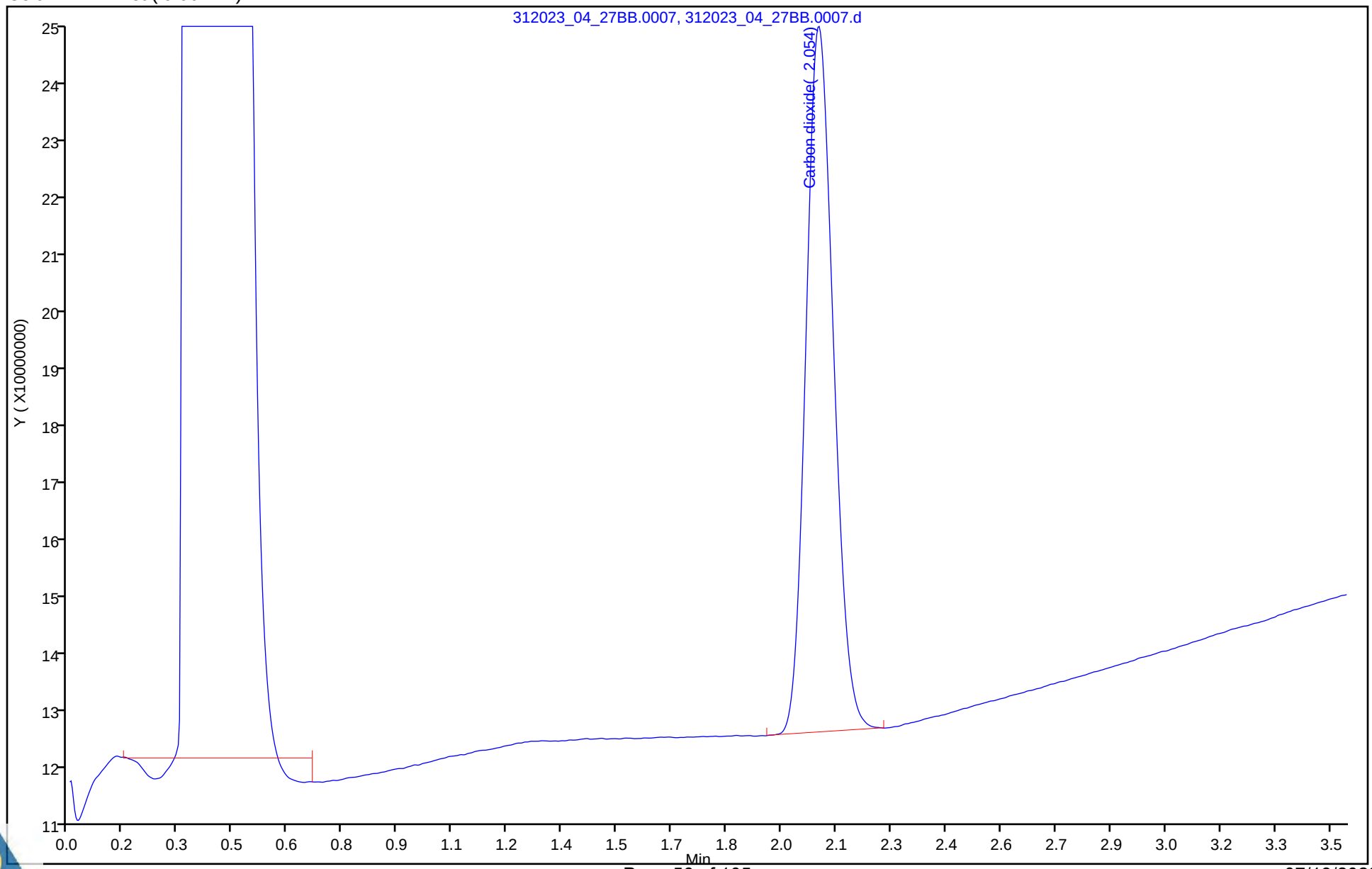
Report Date: 28-Apr-2023 07:19:08 Chrom Revision: 2.3 20-Apr-2023 08:27:48

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

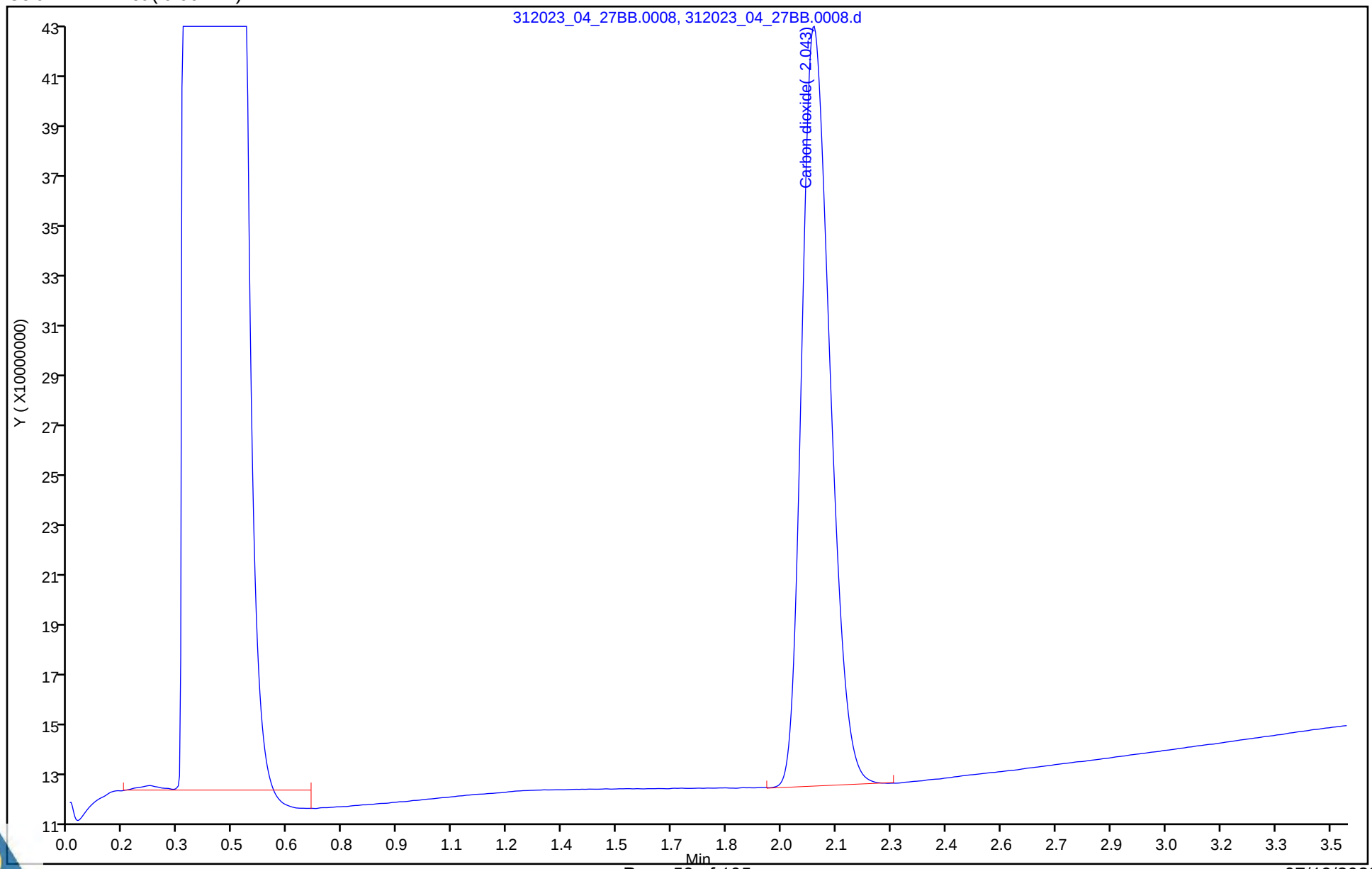
Report Date: 28-Apr-2023 07:19:09 Chrom Revision: 2.3 20-Apr-2023 08:27:48

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

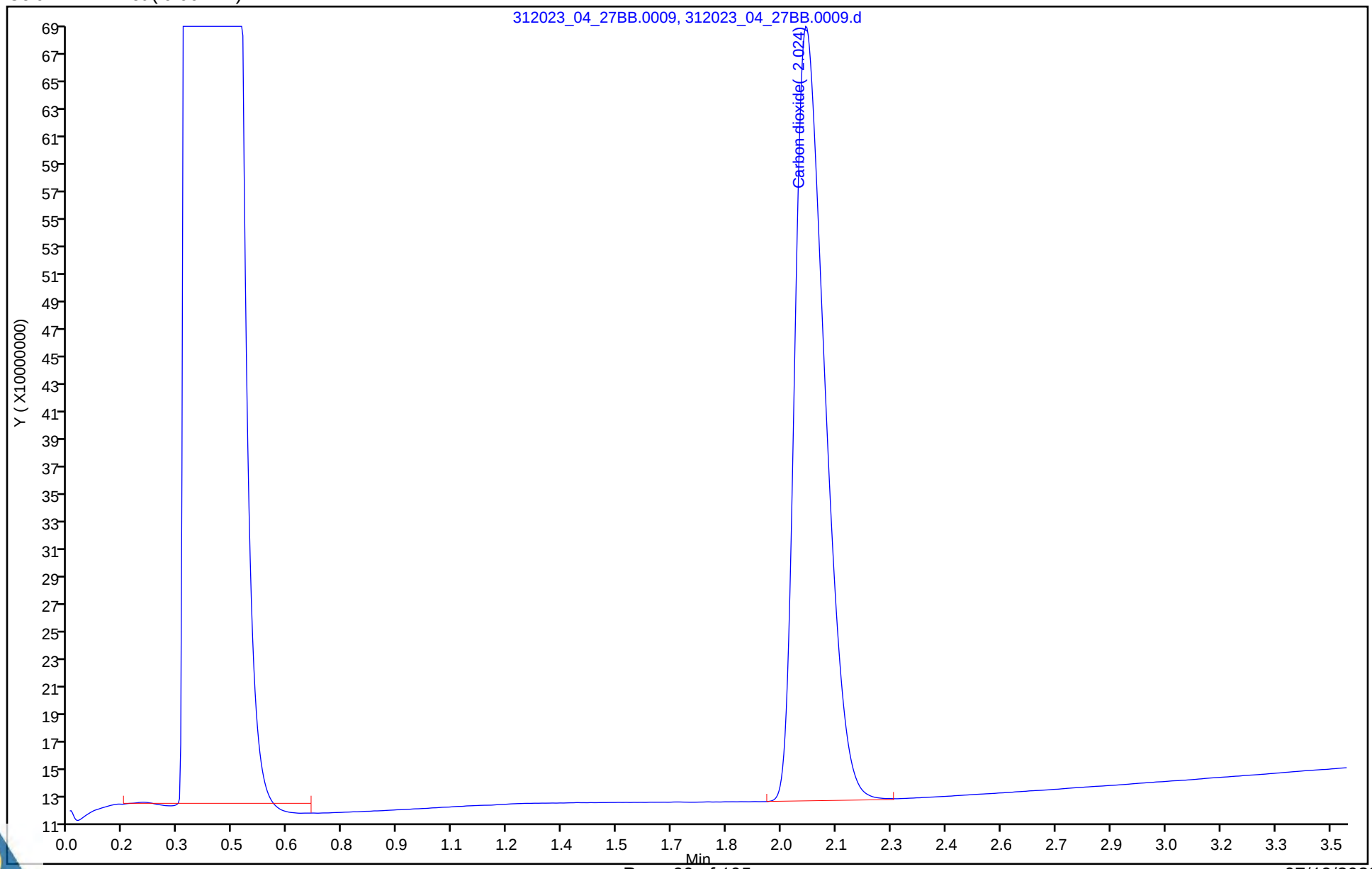
Report Date: 28-Apr-2023 07:19:10 Chrom Revision: 2.3 20-Apr-2023 08:27:48

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

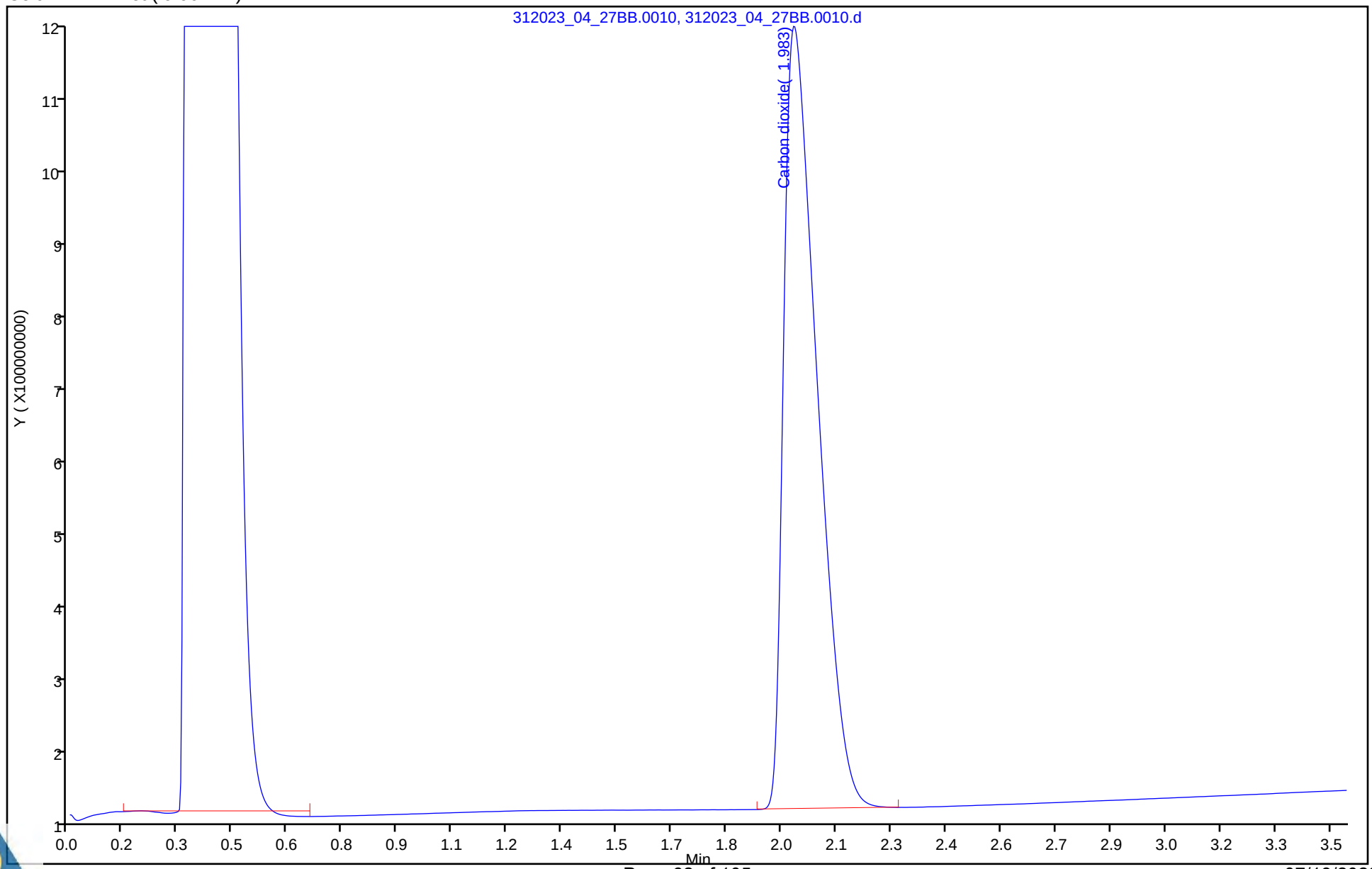
Report Date: 28-Apr-2023 07:19:12 Chrom Revision: 2.3 20-Apr-2023 08:27:48

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

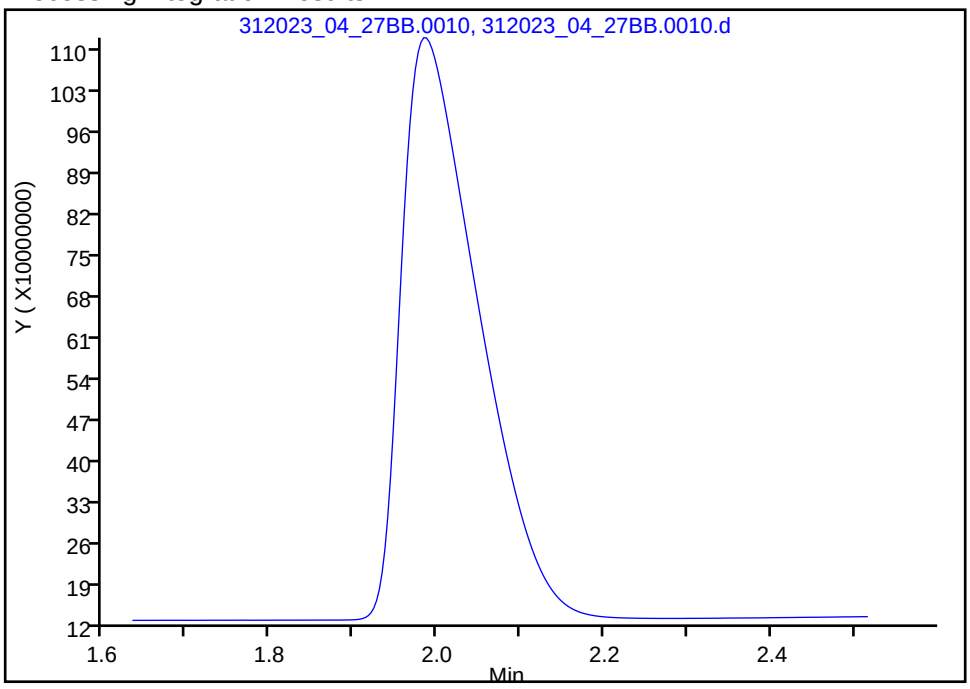
Data File:	\\chromfs\Lancaster\ChromData\19506-B\20230427-82537.b\312023_04_27BB.0010.d		
Injection Date:	27-Apr-2023 10:37:00	Instrument ID:	19506-B
Lims ID:	ic		
Client ID:			
Operator ID:		ALS Bottle#:	0 Worklist Smp#: 10
Purge Vol:	1.000 mL	Dil. Factor:	1.0000
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2
Column:	HP Plot (0.00 mm)	Detector	0FIDA

1 Carbon dioxide, CAS: 124-38-9

Signal: 1

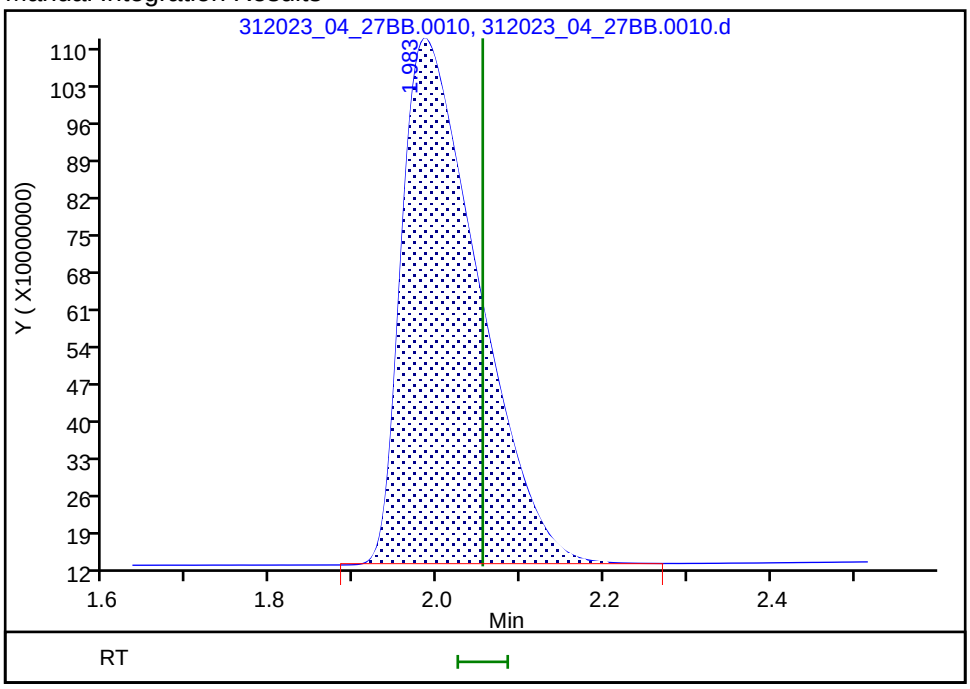
Not Detected
Expected RT: 2.05

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

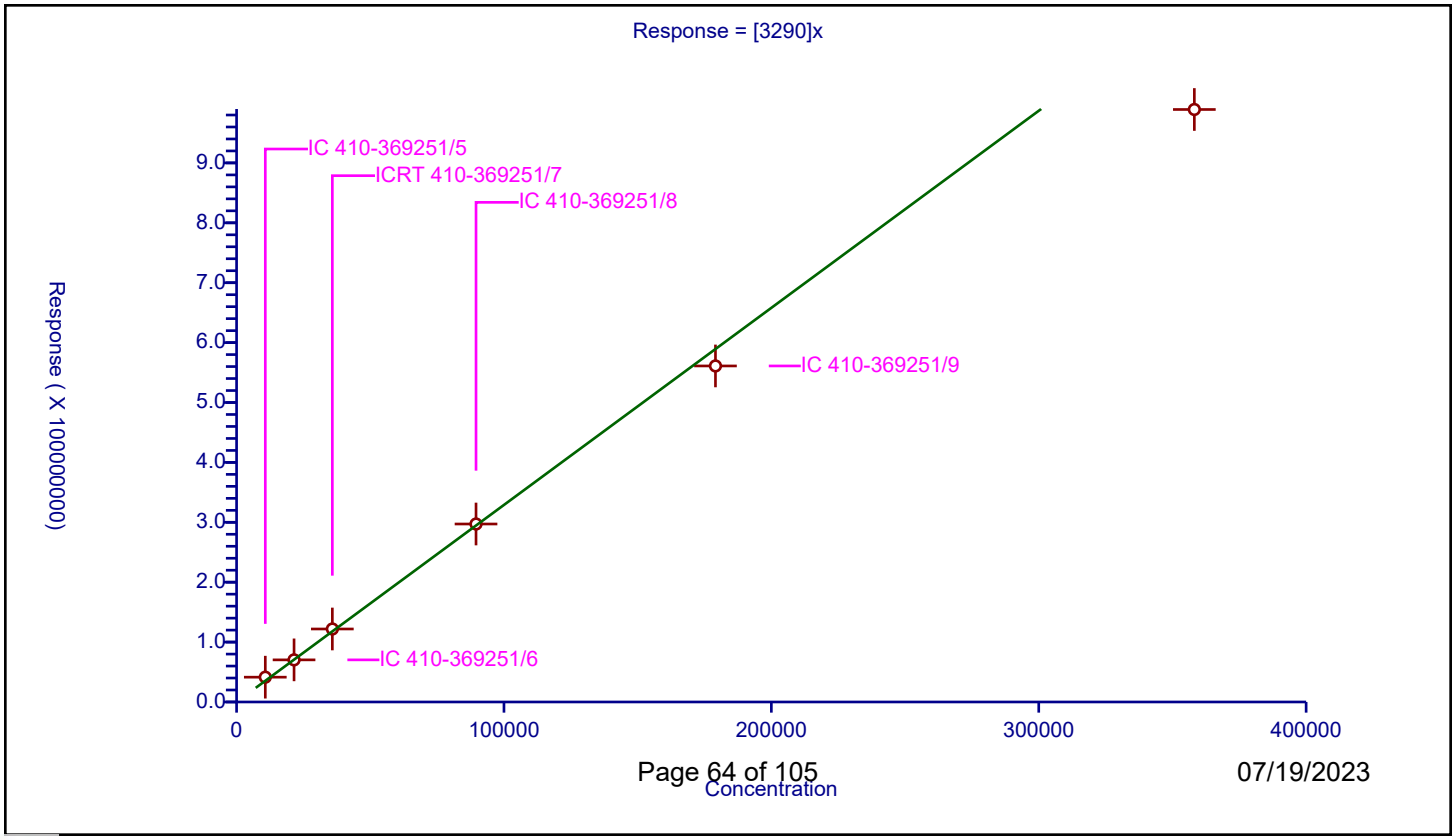
Curve Coefficients

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 Envi Job No.: 410-134801-1

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 Envi Job No.: 410-134801-1

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

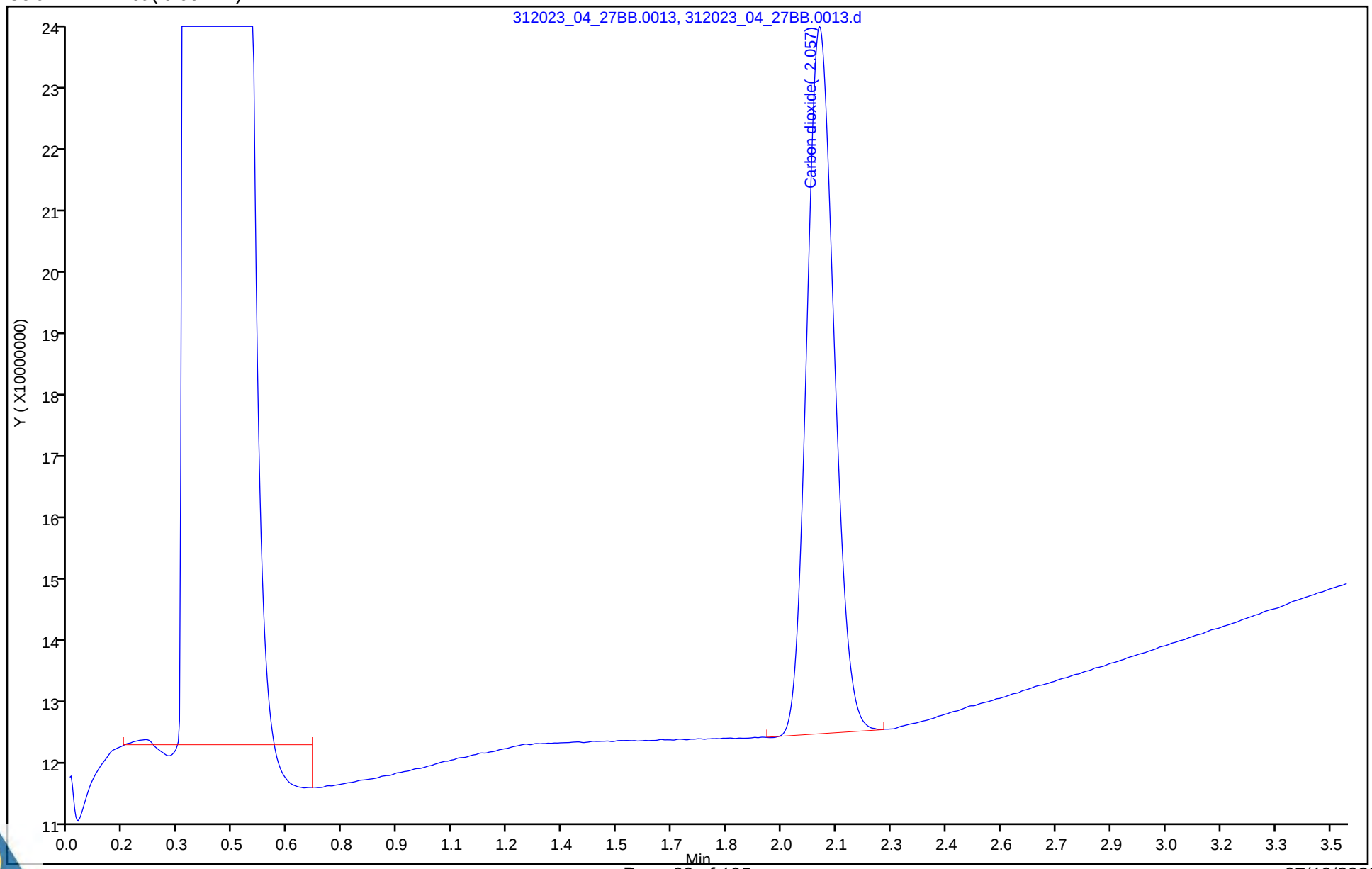
Report Date: 28-Apr-2023 08:51:00 Chrom Revision: 2.3 20-Apr-2023 08:27:48

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 Envi Job No.: 410-134801-1

SDG No.:

Lab Sample ID: CCVRT 410-397918/2 Calibration Date: 07/18/2023 10:18

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_07_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	3654		39800	35800	11.1	15.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Envi Job No.: 410-134801-1

SDG No.:

Lab Sample ID: CCVRT 410-397918/2 Calibration Date: 07/18/2023 10:18

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_07_18BB.0002.d Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Carbon dioxide	2.05	2.02	2.08

Report Date: 19-Jul-2023 03:23:28 Chrom Revision: 2.3 11-Jul-2023 11:49:10

Eurofins Lancaster Laboratories Environment Testing, LLC

Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20230718-89205.b\312023_07_18BB.0002.d				
Lims ID:	ccvrt				
Client ID:					
Sample Type:	CCVRT				
Inject. Date:	18-Jul-2023 10:18:00	ALS Bottle#:	0	Worklist Smp#:	2
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:	ccvrt				
Misc. Info.:	410-0089205-002				
Operator ID:		Instrument ID:	19506-B		
Sublist:	chrom-RSK_CO2_19506B*sub1				
Method:	\\chromfs\Lancaster\ChromData\19506-B\20230718-89205.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	19-Jul-2023 03:23:28	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:	CTX1624				

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	130875039H	35820	39778	

Reagents:

EPH_CO2MS_00006 Amount Added: 100.00 Units: uL

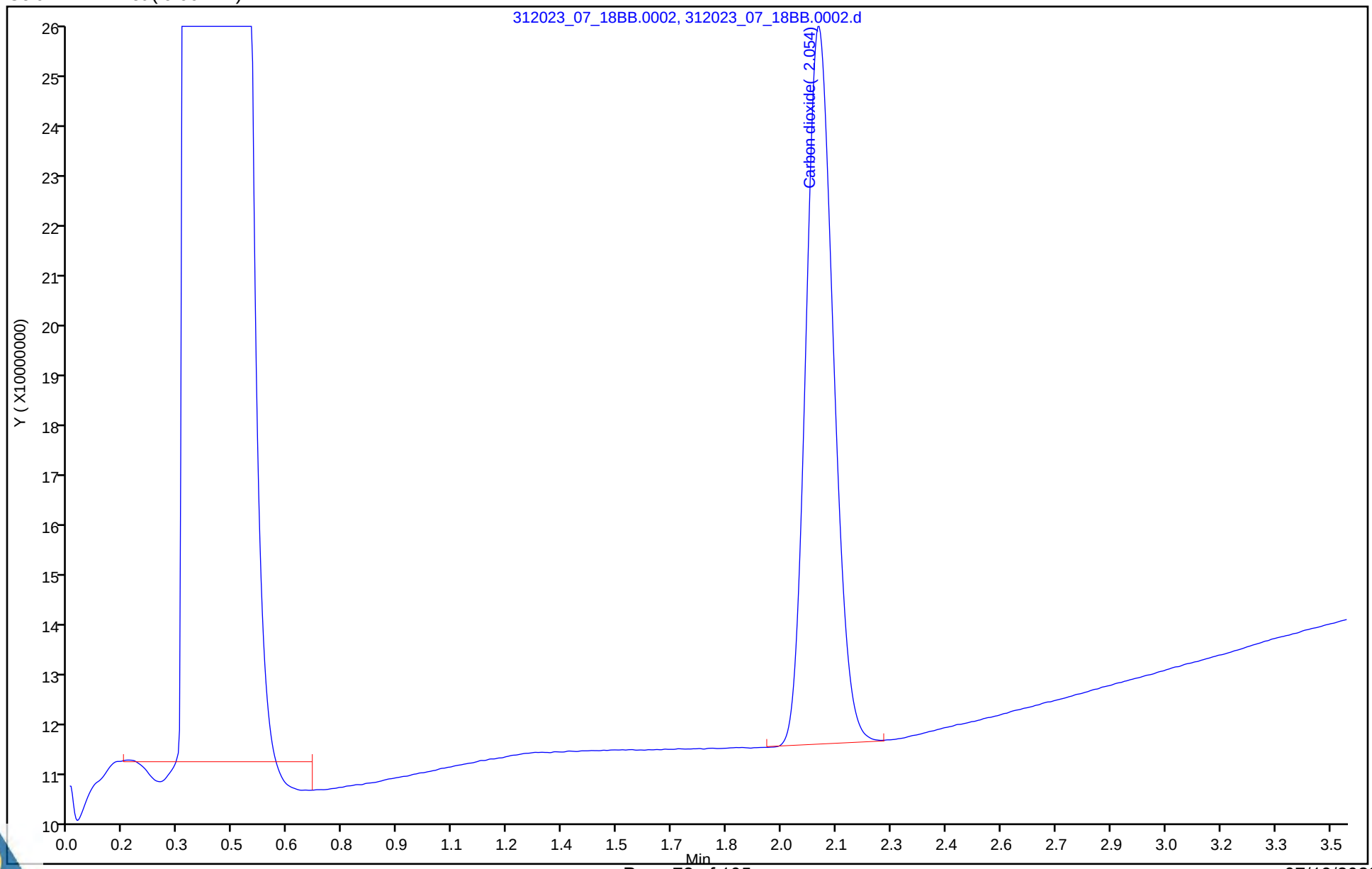
Report Date: 19-Jul-2023 03:23:28 Chrom Revision: 2.3 11-Jul-2023 11:49:10

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20230718-89205.b\312023_07_18BB.0002.d

Injection Date:	18-Jul-2023 10:18:00	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 Envi Job No.: 410-134801-1

SDG No.:

Lab Sample ID: CCV 410-397918/13 Calibration Date: 07/18/2023 14:37

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_07_18BB.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	3195		34800	35800	-2.9	15.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Envi Job No.: 410-134801-1

SDG No.:

Lab Sample ID: CCV 410-397918/13 Calibration Date: 07/18/2023 14:37

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_07_18BB.0013.d Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Carbon dioxide	2.06	2.02	2.08

Report Date: 19-Jul-2023 03:23:32 Chrom Revision: 2.3 11-Jul-2023 11:49:10

Eurofins Lancaster Laboratories Environment Testing, LLC

Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19506-B\20230718-89205.b\312023_07_18BB.0013.d
Lims ID: ccv
Client ID:
Sample Type: CCV
Inject. Date: 18-Jul-2023 14:37:00 ALS Bottle#: 0 Worklist Smp#: 13
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info:
Misc. Info.: 410-0089205-013
Operator ID: Instrument ID: 19506-B
Sublist: chrom-RSK_CO2_19506B*sub1

Method: \\chromfs\Lancaster\ChromData\19506-B\20230718-89205.b\RSK_CO2_19506B.m
Limit Group: GCV - RSK175 CO2
Last Update: 19-Jul-2023 03:23:32 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: CTX1624

First Level Reviewer: LXF2 Date: 19-Jul-2023 03:18:11

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Carbon dioxide	2.056	2.054	0.002	114461234	H 35820	34789	

QC Flag Legend

Processing Flags

H - Response Measured by Height

Reagents:

EPH_CO2MS_00006 Amount Added: 100.00 Units: uL

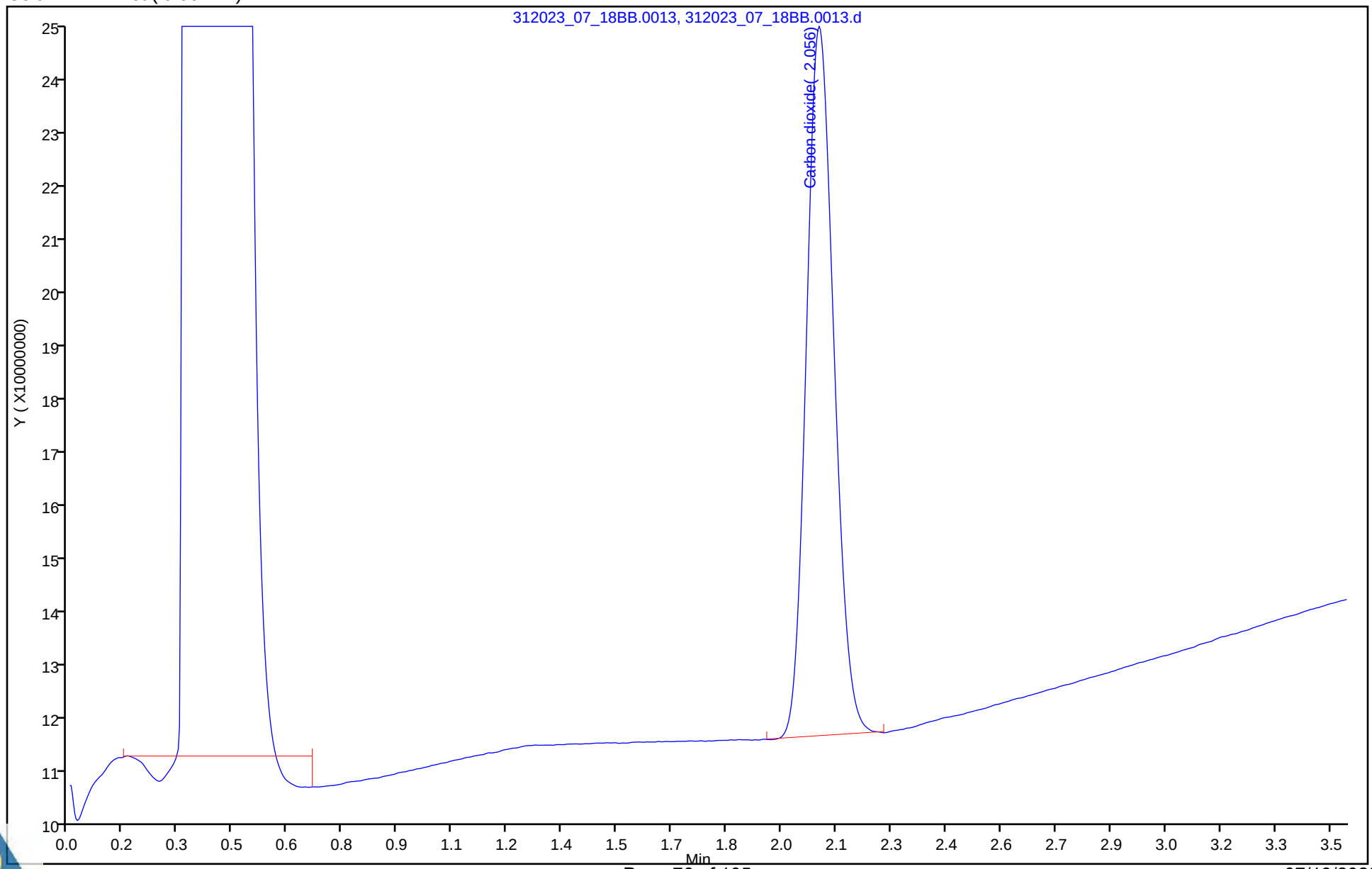
Report Date: 19-Jul-2023 03:23:32 Chrom Revision: 2.3 11-Jul-2023 11:49:10

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20230718-89205.b\312023_07_18BB.0013.d

Injection Date:	18-Jul-2023 14:37:00	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 Envi Job No.: 410-134801-1

SDG No.:

Lab Sample ID: CCV 410-397918/35 Calibration Date: 07/18/2023 17:35

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_07_18BB.0035.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	2961		32200	35800	-10.0	15.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Envi Job No.: 410-134801-1

SDG No.:

Lab Sample ID: CCV 410-397918/35 Calibration Date: 07/18/2023 17:35

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_07_18BB.0035.d Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Carbon dioxide	2.06	2.02	2.08

Report Date: 19-Jul-2023 03:23:40 Chrom Revision: 2.3 11-Jul-2023 11:49:10

Eurofins Lancaster Laboratories Environment Testing, LLC

Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20230718-89205.b\312023_07_18BB.0035.d				
Lims ID:	ccv				
Client ID:					
Sample Type:	CCV				
Inject. Date:	18-Jul-2023 17:35:00	ALS Bottle#:	0	Worklist Smp#:	35
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	410-0089205-035				
Operator ID:		Instrument ID:	19506-B		
Sublist:	chrom-RSK_CO2_19506B*sub1				
Method:	\\chromfs\Lancaster\ChromData\19506-B\20230718-89205.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	19-Jul-2023 03:23:39	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:	CTX1624				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Carbon dioxide	2.056	2.054	0.002	106059852	H 35820	32236	

Reagents:

EPH_CO2MS_00006 Amount Added: 100.00 Units: uL

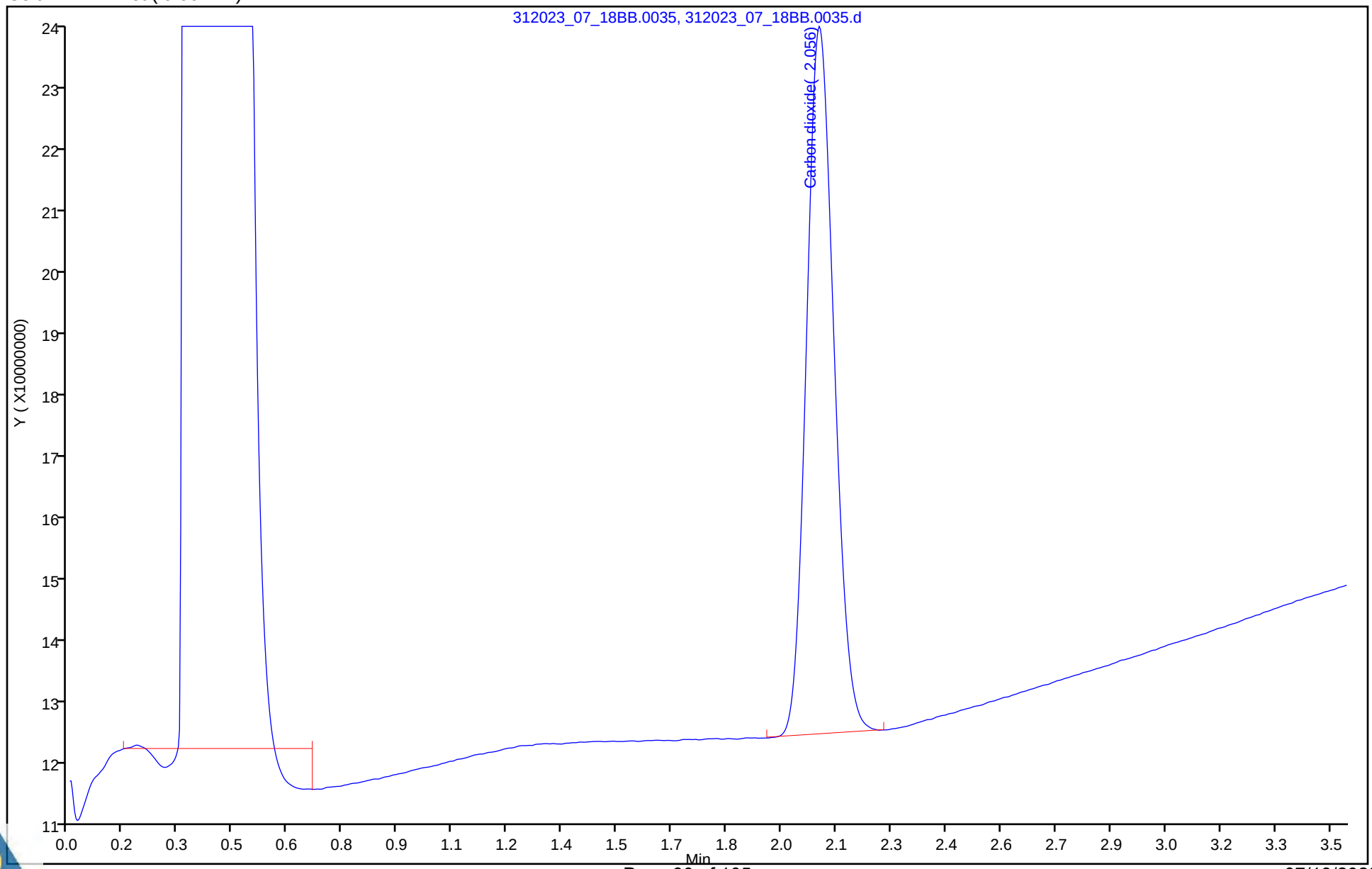
Report Date: 19-Jul-2023 03:23:40 Chrom Revision: 2.3 11-Jul-2023 11:49:10

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20230718-89205.b\312023_07_18BB.0035.d

Injection Date:	18-Jul-2023 17:35:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	ccv			Worklist Smp#:	35
Client ID:					
Purge Vol:	1.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2		

Column: HP Plot (0.00 mm)



FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins Lancaster Laboratories Envi Job No.: 410-134801-1

SDG No.:

Lab Sample ID: CCV 410-397918/46 Calibration Date: 07/18/2023 19:05

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_07_18BB.0046.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	3120		34000	35800	-5.2	15.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: Eurofins Lancaster Laboratories Envi Job No.: 410-134801-1

SDG No.:

Lab Sample ID: CCV 410-397918/46 Calibration Date: 07/18/2023 19:05

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_07_18BB.0046.d Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Carbon dioxide	2.05	2.02	2.08

Report Date: 19-Jul-2023 03:23:43 Chrom Revision: 2.3 11-Jul-2023 11:49:10

Eurofins Lancaster Laboratories Environment Testing, LLC

Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20230718-89205.b\312023_07_18BB.0046.d				
Lims ID:	ccv				
Client ID:					
Sample Type:	CCV				
Inject. Date:	18-Jul-2023 19:05:00	ALS Bottle#:	0	Worklist Smp#:	46
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	410-0089205-046				
Operator ID:		Instrument ID:	19506-B		
Sublist:	chrom-RSK_CO2_19506B*sub1				
Method:	\\chromfs\Lancaster\ChromData\19506-B\20230718-89205.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	19-Jul-2023 03:23:43	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:	CTX1624				

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	111764320	H 35820	33970	

Reagents:

EPH_CO2MS_00006 Amount Added: 100.00 Units: uL

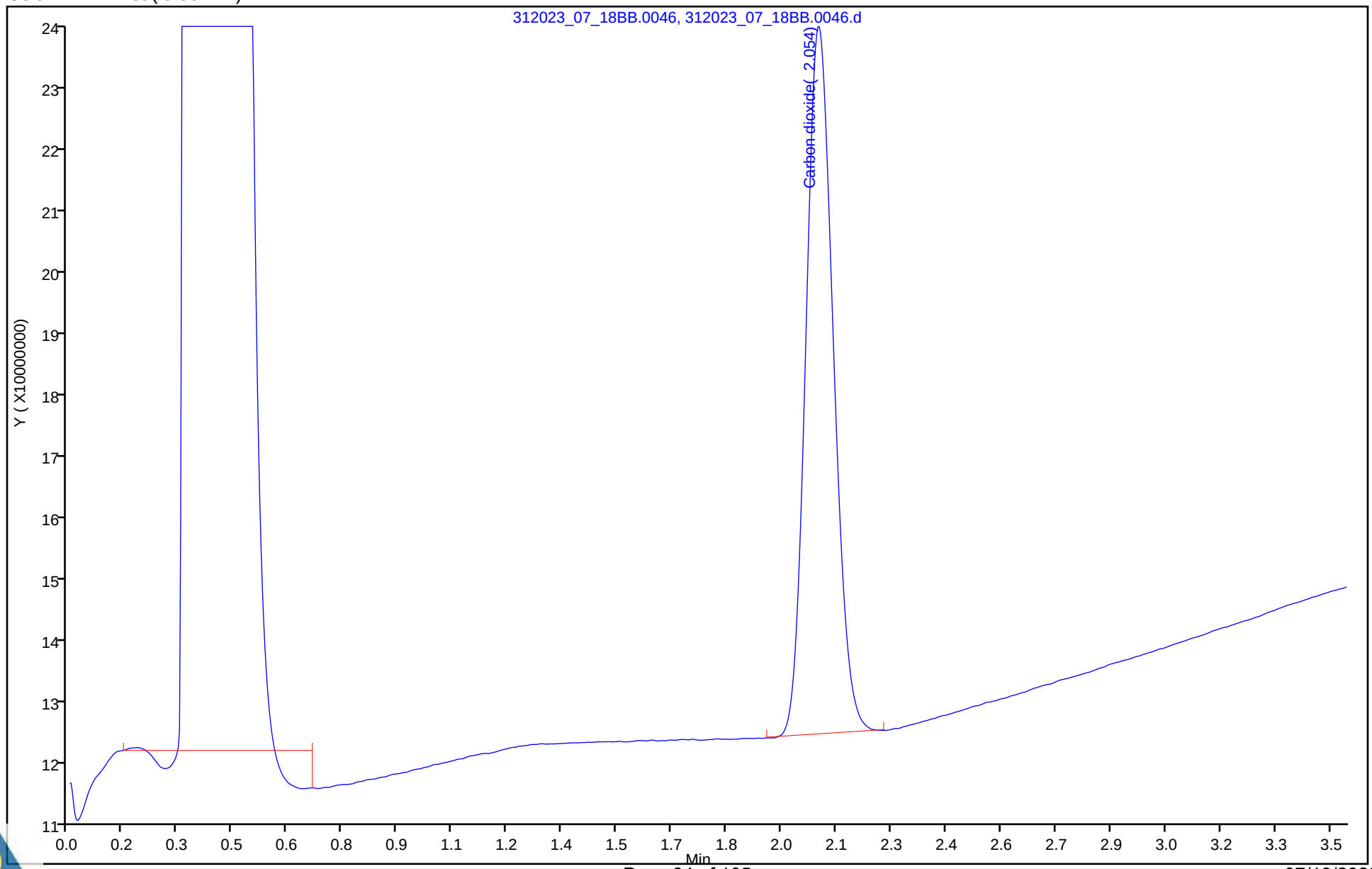
Report Date: 19-Jul-2023 03:23:43 Chrom Revision: 2.3 11-Jul-2023 11:49:10

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20230718-89205.b\312023_07_18BB.0046.d

Injection Date:	18-Jul-2023 19:05:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	ccv			Worklist Smp#:	46
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.: 410-134801-1

SDG No.:

Client Sample ID:
Lab Sample ID: MB 410-398043/1-A

Matrix: Water
Lab File ID: 312023_07_18BB.0005.d

Analysis Method: RSK-175
Date Collected:

Sample wt/vol: 5(mL)
Date Analyzed: 07/18/2023 11:02

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.: 397918
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	DL
124-38-9	Carbon dioxide	2600	U M	12000	2600

Report Date: 19-Jul-2023 03:23:29 Chrom Revision: 2.3 11-Jul-2023 11:49:10

Eurofins Lancaster Laboratories Environment Testing, LLC

Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20230718-89205.b\312023_07_18BB.0005.d				
Lims ID:	MB 410-398043/1-A				
Client ID:					
Sample Type:	MB				
Inject. Date:	18-Jul-2023 11:02:00	ALS Bottle#:	0	Worklist Smp#:	5
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	410-0089205-005				
Operator ID:		Instrument ID:	19506-B		
Method:	\\chromfs\Lancaster\ChromData\19506-B\20230718-89205.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	19-Jul-2023 03:23:28	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:	CTX1624				
First Level Reviewer: LXF2		Date:	19-Jul-2023 03:18:24		

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Carbon dioxide	2.067	2.054	0.013	1812877H		551.0	M

QC Flag Legend

Processing Flags

H - Response Measured by Height

Review Flags

M - Manually Integrated

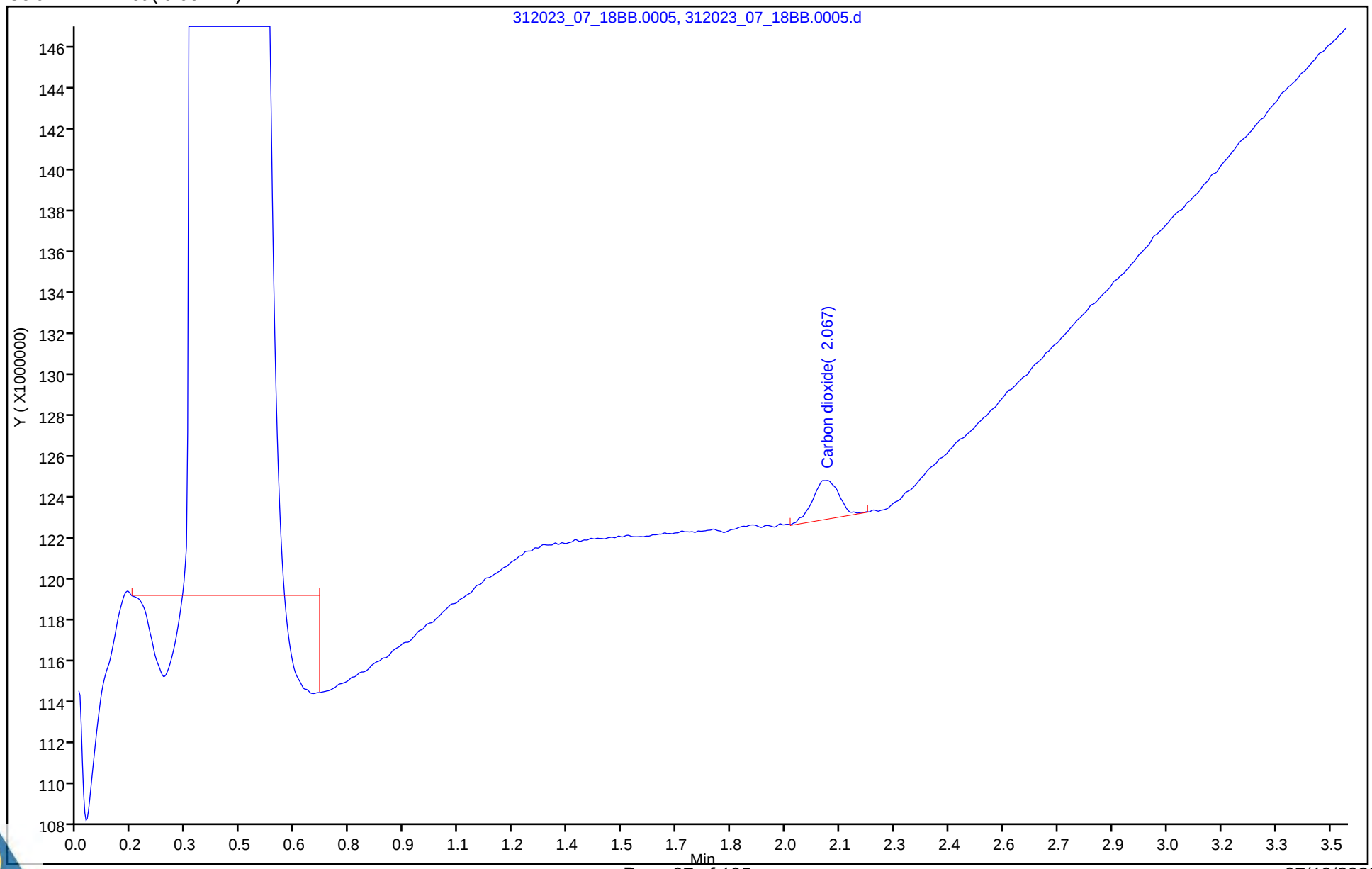
Report Date: 19-Jul-2023 03:23:29 Chrom Revision: 2.3 11-Jul-2023 11:49:10

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20230718-89205.b\312023_07_18BB.0005.d

Injection Date:	18-Jul-2023 11:02:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	MB 410-398043/1-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)



Report Date: 19-Jul-2023 03:23:29

Chrom Revision: 2.3 11-Jul-2023 11:49:10 Manual Integration/User Assign Peak Report

Eurofins Lancaster Laboratories Environment Testing, LLC

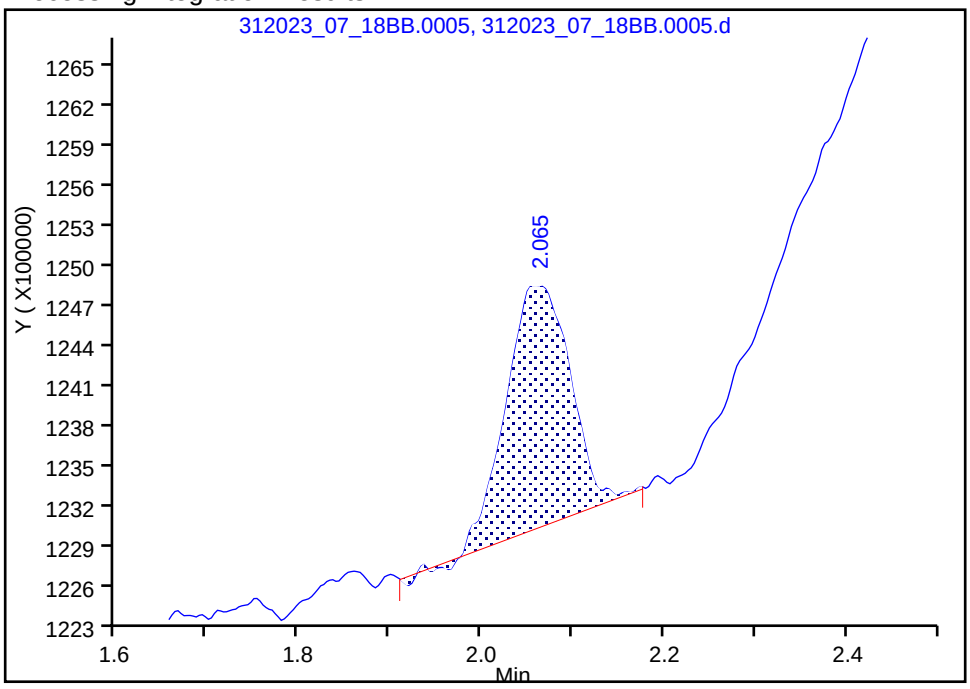
Data File:	\\chromfs\Lancaster\ChromData\19506-B\20230718-89205.b\312023_07_18BB.0005.d				
Injection Date:	18-Jul-2023 11:02:00	Instrument ID:	19506-B		
Lims ID:	MB 410-398043/1-A				
Client ID:					
Operator ID:		ALS Bottle#:	0	Worklist Smp#:	5
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2		
Column:	HP Plot (0.00 mm)	Detector	0FIDA		

1 Carbon dioxide, CAS: 124-38-9

Signal: 1

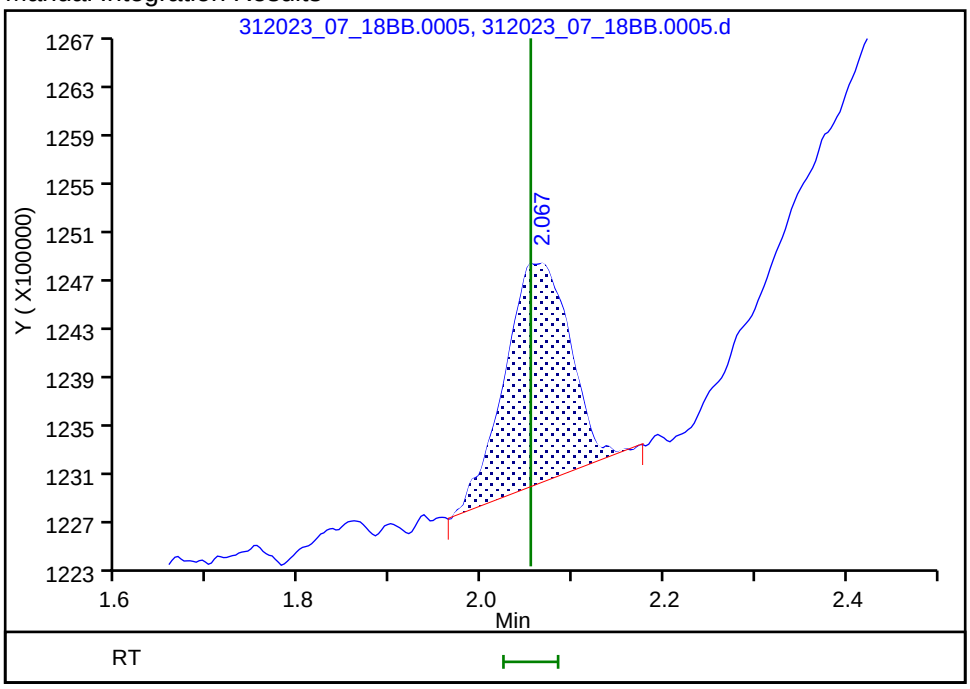
Processing Integration Results

RT: 2.07
Height: 1762920
Amount: 535.8221
Amount Units: ug/l



Manual Integration Results

RT: 2.07
Height: 1812877
Amount: 551.0060
Amount Units: ug/l



Reviewer: LXF2, 19-Jul-2023 03:20:21 -04:00:00 (UTC)

Audit Action: Manually Integrated Audit Reason: Peak not integrated

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC Job No.: 410-134801-1

SDG No.:

Client Sample ID: Lab Sample ID: LCS 410-398043/2-A

Matrix: Water Lab File ID: 312023_07_18BB.0006.d

Analysis Method: RSK-175 Date Collected:

Sample wt/vol: 5(mL) Date Analyzed: 07/18/2023 11:10

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.: 397918 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	DL
124-38-9	Carbon dioxide	37600		12000	2600

Report Date: 19-Jul-2023 03:23:30 Chrom Revision: 2.3 11-Jul-2023 11:49:10

Eurofins Lancaster Laboratories Environment Testing, LLC

Target Compound Quantitation Report

Data File: \\chromfs\Lancaster\ChromData\19506-B\20230718-89205.b\312023_07_18BB.0006.d
Lims ID: LCS 410-398043/2-A
Client ID:
Sample Type: LCS
Inject. Date: 18-Jul-2023 11:10:00 ALS Bottle#: 0 Worklist Smp#: 6
Purge Vol: 1.000 mL Dil. Factor: 1.0000
Sample Info:
Misc. Info.: 410-0089205-006
Operator ID: Instrument ID: 19506-B

Method: \\chromfs\Lancaster\ChromData\19506-B\20230718-89205.b\RSK_CO2_19506B.m
Limit Group: GCV - RSK175 CO2
Last Update: 19-Jul-2023 03:23:28 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: CTX1624

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Carbon dioxide	2.053	2.054	-0.001	123864175	H 35820	37647	

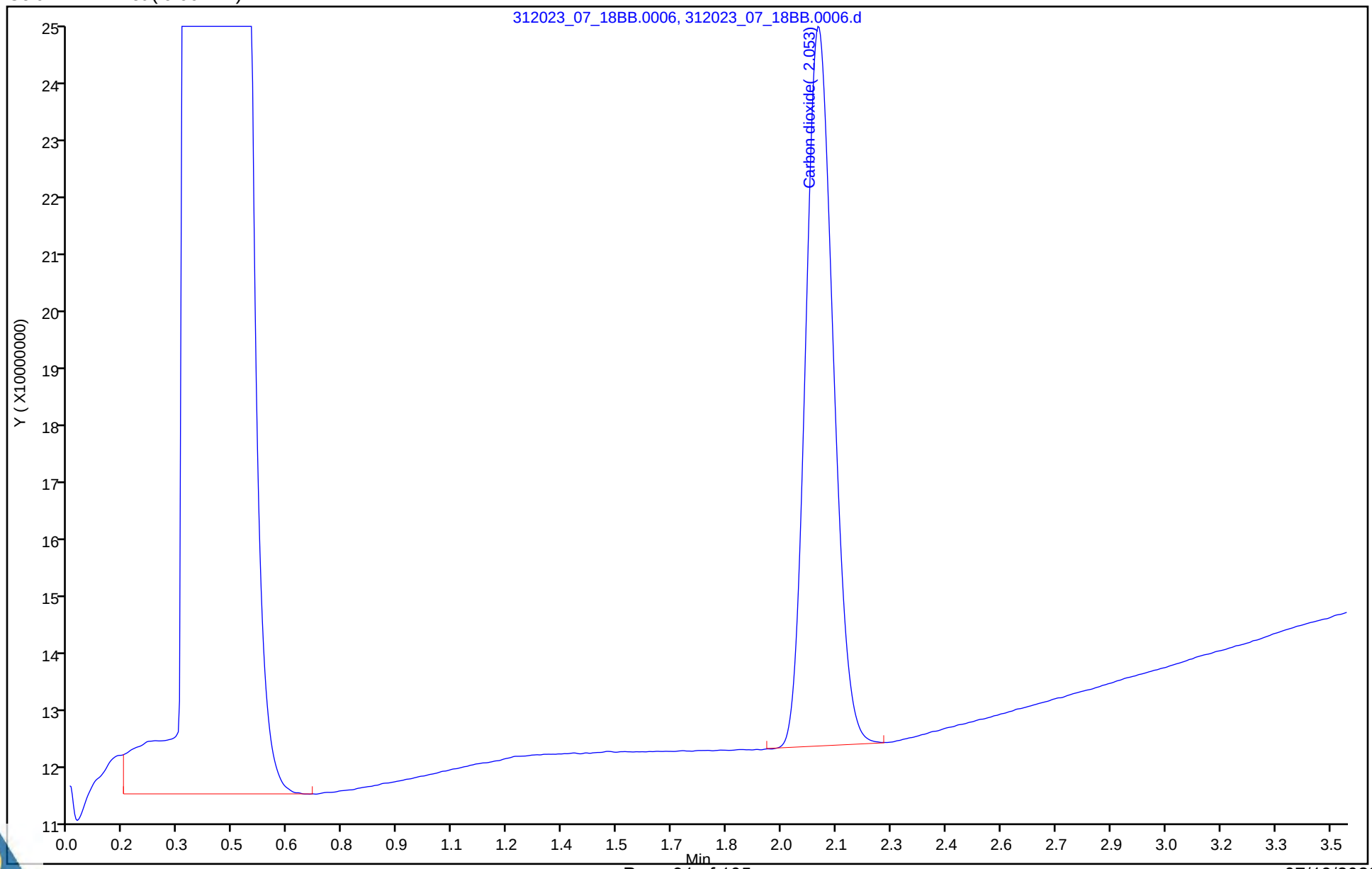
Report Date: 19-Jul-2023 03:23:30 Chrom Revision: 2.3 11-Jul-2023 11:49:10

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20230718-89205.b\312023_07_18BB.0006.d

Injection Date:	18-Jul-2023 11:10:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	LCS 410-398043/2-A			Worklist Smp#:	6
Client ID:					
Purge Vol:	1.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2		

Column: HP Plot (0.00 mm)



FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins Lancaster Laboratories Environment Testing, LLC
Job No.: 410-134801-1

SDG No.:

Client Sample ID:
Lab Sample ID: LCSD 410-398043/3-A

Matrix: Water
Lab File ID: 312023_07_18BB.0007.d

Analysis Method: RSK-175
Date Collected:

Sample wt/vol: 5(mL)
Date Analyzed: 07/18/2023 11:18

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.: 397918
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	LOQ	DL
124-38-9	Carbon dioxide	37400		12000	2600

Report Date: 19-Jul-2023 03:23:30 Chrom Revision: 2.3 11-Jul-2023 11:49:10

Eurofins Lancaster Laboratories Environment Testing, LLC

Target Compound Quantitation Report

Data File:	\\chromfs\Lancaster\ChromData\19506-B\20230718-89205.b\312023_07_18BB.0007.d				
Lims ID:	LCSD 410-398043/3-A				
Client ID:					
Sample Type:	LCSD				
Inject. Date:	18-Jul-2023 11:18:00	ALS Bottle#:	0	Worklist Smp#:	7
Purge Vol:	1.000 mL	Dil. Factor:	1.0000		
Sample Info:					
Misc. Info.:	410-0089205-007				
Operator ID:		Instrument ID:	19506-B		
Method:	\\chromfs\Lancaster\ChromData\19506-B\20230718-89205.b\RSK_CO2_19506B.m				
Limit Group:	GCV - RSK175 CO2				
Last Update:	19-Jul-2023 03:23:28	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:	CTX1624				

Compound	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/l	OnCol Amt ug/l	Flags
1 Carbon dioxide	2.053	2.054	-0.001	123088058	H 35820	37411	

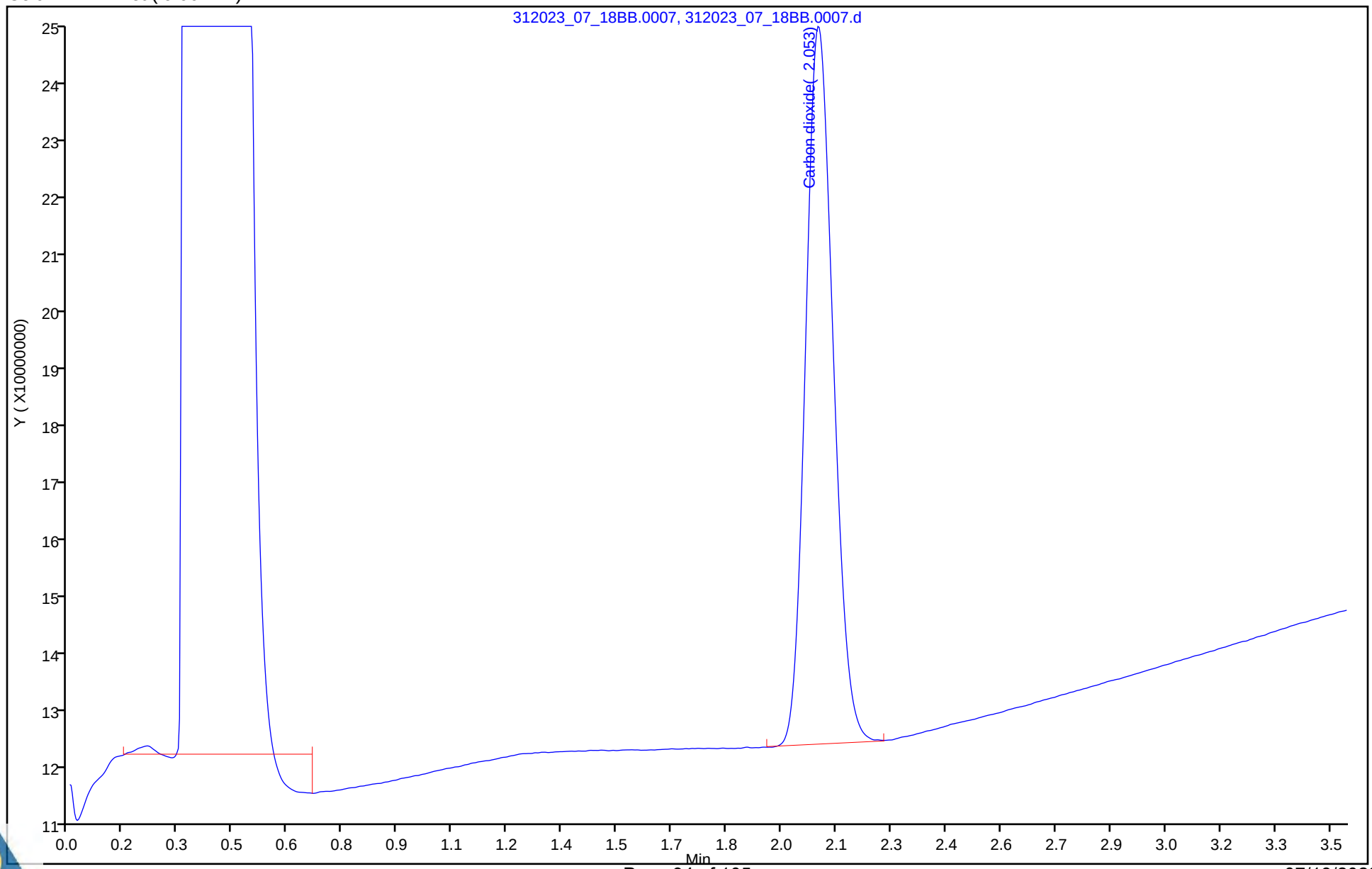
Report Date: 19-Jul-2023 03:23:30 Chrom Revision: 2.3 11-Jul-2023 11:49:10

Eurofins Lancaster Laboratories Environment Testing, LLC

Data File: \\chromfs\Lancaster\ChromData\19506-B\20230718-89205.b\312023_07_18BB.0007.d

Injection Date:	18-Jul-2023 11:18:00	Instrument ID:	19506-B	Operator ID:	
Lims ID:	LCSD 410-398043/3-A			Worklist Smp#:	7
Client ID:					
Purge Vol:	1.000 mL	Dil. Factor:	1.0000	ALS Bottle#:	0
Method:	RSK_CO2_19506B	Limit Group:	GCV - RSK175 CO2		

Column: HP Plot (0.00 mm)



GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Envi Job No.: 410-134801-1

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)
ZZZZZ		04/27/2023 16:28	1		HP Plot 0.53(mm)

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Envi Job No.: 410-134801-1

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 16:37	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 Envi Job No.: 410-134801-1

SDG No.:

Instrument ID: 19506-B Start Date: 07/18/2023 10:18

Analysis Batch Number: 397918 End Date: 07/18/2023 19:38

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCVRT 410-397918/2		07/18/2023 10:18	1	312023_07_18BB.0002.d	HP Plot 0.53(mm)
ZZZZZ		07/18/2023 10:47	1		HP Plot 0.53(mm)
ZZZZZ		07/18/2023 10:54	1		HP Plot 0.53(mm)
MB 410-398043/1-A		07/18/2023 11:02	1	312023_07_18BB.0005.d	HP Plot 0.53(mm)
LCS 410-398043/2-A		07/18/2023 11:10	1	312023_07_18BB.0006.d	HP Plot 0.53(mm)
LCSD 410-398043/3-A		07/18/2023 11:18	1	312023_07_18BB.0007.d	HP Plot 0.53(mm)
ZZZZZ		07/18/2023 11:26	1		HP Plot 0.53(mm)
ZZZZZ		07/18/2023 11:33	1		HP Plot 0.53(mm)
ZZZZZ		07/18/2023 11:41	1		HP Plot 0.53(mm)
ZZZZZ		07/18/2023 14:21	1		HP Plot 0.53(mm)
ZZZZZ		07/18/2023 14:29	1		HP Plot 0.53(mm)
CCV 410-397918/13		07/18/2023 14:37	1	312023_07_18BB.0013.d	HP Plot 0.53(mm)
ZZZZZ		07/18/2023 14:45	1		HP Plot 0.53(mm)
ZZZZZ		07/18/2023 14:52	1		HP Plot 0.53(mm)
ZZZZZ		07/18/2023 15:00	1		HP Plot 0.53(mm)
ZZZZZ		07/18/2023 15:08	1		HP Plot 0.53(mm)
ZZZZZ		07/18/2023 15:16	1		HP Plot 0.53(mm)
ZZZZZ		07/18/2023 15:24	1		HP Plot 0.53(mm)
ZZZZZ		07/18/2023 15:32	1		HP Plot 0.53(mm)
ZZZZZ		07/18/2023 15:39	1		HP Plot 0.53(mm)
ZZZZZ		07/18/2023 15:47	1		HP Plot 0.53(mm)
ZZZZZ		07/18/2023 15:55	1		HP Plot 0.53(mm)
CCV 410-397918/24		07/18/2023 16:03	1		HP Plot 0.53(mm)
ZZZZZ		07/18/2023 16:11	1		HP Plot 0.53(mm)
ZZZZZ		07/18/2023 16:19	1		HP Plot 0.53(mm)
ZZZZZ		07/18/2023 16:27	1		HP Plot 0.53(mm)
ZZZZZ		07/18/2023 16:34	1		HP Plot 0.53(mm)
ZZZZZ		07/18/2023 16:42	1		HP Plot 0.53(mm)
ZZZZZ		07/18/2023 16:50	1		HP Plot 0.53(mm)
ZZZZZ		07/18/2023 16:58	1		HP Plot 0.53(mm)
ZZZZZ		07/18/2023 17:06	1		HP Plot 0.53(mm)
ZZZZZ		07/18/2023 17:19	1		HP Plot 0.53(mm)
ZZZZZ		07/18/2023 17:27	1		HP Plot 0.53(mm)
CCV 410-397918/35		07/18/2023 17:35	1	312023_07_18BB.0035.d	HP Plot 0.53(mm)
ZZZZZ		07/18/2023 17:43	1		HP Plot 0.53(mm)
ZZZZZ		07/18/2023 17:51	1		HP Plot 0.53(mm)
ZZZZZ		07/18/2023 18:00	1		HP Plot 0.53(mm)
410-134801-1	16WW55-230712	07/18/2023 18:08	1	312023_07_18BB.0039.d	HP Plot 0.53(mm)
410-134801-2	16WW41-230712	07/18/2023 18:16	1	312023_07_18BB.0040.d	HP Plot 0.53(mm)
410-134801-3	16WW48-230712	07/18/2023 18:24	1	312023_07_18BB.0041.d	HP Plot 0.53(mm)
410-134801-4	16WW48-230712-FD	07/18/2023 18:32	1	312023_07_18BB.0042.d	HP Plot 0.53(mm)

GC VOA ANALYSIS RUN LOG

Lab Name: Eurofins Lancaster Laboratories Envi Job No.: 410-134801-1

SDG No.:

Instrument ID: 19506-B Start Date: 07/18/2023 10:18

Analysis Batch Number: 397918 End Date: 07/18/2023 19:38

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
410-134801-5	16EW03-230712	07/18/2023 18:41	1	312023_07_18BB.0043.d	HP Plot 0.53(mm)
410-134801-6	16WW35-230712	07/18/2023 18:49	1	312023_07_18BB.0044.d	HP Plot 0.53(mm)
ZZZZZ		07/18/2023 18:57	1		HP Plot 0.53(mm)
CCV 410-397918/46		07/18/2023 19:05	1	312023_07_18BB.0046.d	HP Plot 0.53(mm)
ZZZZZ		07/18/2023 19:13	1		HP Plot 0.53(mm)
ZZZZZ		07/18/2023 19:22	1		HP Plot 0.53(mm)
ZZZZZ		07/18/2023 19:30	1		HP Plot 0.53(mm)
CCV 410-397918/50		07/18/2023 19:38	1		HP Plot 0.53(mm)

GC VOA BATCH WORKSHEET

Lab Name: Eurofins Lancaster Laboratorie Job No.: 410-134801-1

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.: 410-134801-1

SDG No.:

Batch Number: 398043 Batch Start Date: 07/18/23 11:00 Batch Analyst: Omorogbe, Malachi

Batch Method: RSK-175 Batch End Date: 07/18/23 12:07

Lab Sample ID	Client Sample ID	Method Chain	Basis	Initial pH	InitialAmount	FinalAmount	Headspace	EPH_CO2MS 00006	
MB 410-398043/1		RSK-175, RSK-175			5 mL	5 mL			
LCS 410-398043/2		RSK-175, RSK-175			5 mL	5 mL		0.1 mL	
LCSD 410-398043/3		RSK-175, RSK-175			5 mL	5 mL		0.1 mL	
410-134801-A-1	16WW55-230712	RSK-175, RSK-175	T	7 SU	5 mL	5 mL	No		
410-134801-A-2	16WW41-230712	RSK-175, RSK-175	T	7 SU	5 mL	5 mL	No		
410-134801-A-3	16WW48-230712	RSK-175, RSK-175	T	7 SU	5 mL	5 mL	No		
410-134801-A-4	16WW48-230712-FD	RSK-175, RSK-175	T	7 SU	5 mL	5 mL	No		
410-134801-A-5	16EW03-230712	RSK-175, RSK-175	T	7 SU	5 mL	5 mL	No		
410-134801-A-6	16WW35-230712	RSK-175, RSK-175	T	7 SU	5 mL	5 mL	No		

Batch Notes	
Pipette/Syringe/Dispenser ID	7105
pH Indicator ID	10BDH3021

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

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

Subcontract Chain of Custody

SAMPLING STATE: **Dept of Defense** **COC ID:** **22371**

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:	HS23070658
TSR:	Ron Martino

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	**HS23070658-01**	**16WW55-230712**	**Groundwater**	**12 Jul 2023 07:05**
	RSK-CO2; DoD Level II & IV, Equ_APTIM_GISKey			27 Jul 2023
2.	**HS23070658-02**	**16WW41-230712**	**Groundwater**	**12 Jul 2023 07:50**
	RSK-CO2; DoD Level II & IV, Equ_APTIM_GISKey			27 Jul 2023
3.	**HS23070658-03**	**16WW48-230712**	**Groundwater**	**12 Jul 2023 08:35**
	RSK-CO2; DoD Level II & IV, Equ_APTIM_GISKey			27 Jul 2023
4.	**HS23070658-04**	**16WW48-230712-FD**	**Groundwater**	**12 Jul 2023 08:35**
	RSK-CO2; DoD Level II & IV, Equ_APTIM_GISKey			27 Jul 2023
5.	**HS23070658-05**	**16EW03-230712**	**Groundwater**	**12 Jul 2023 09:25**
	RSK-CO2; DoD Level II & IV, Equ_APTIM_GISKey			27 Jul 2023
6.	**HS23070658-06**	**16WW35-230712**	**Groundwater**	**12 Jul 2023 10:15**
	RSK-CO2; DoD Level II & IV, Equ_APTIM_GISKey			27 Jul 2023

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

QC Level: DOD IV (DoD Data Package)

Rec 1.8oC 1.8

Subcontract Chain of Custody

SAMPLING STATE: **Dept of Defense** **COC ID:** **22371**

Relinquished By:		Date/Time:	7/13/23 1800.
Received By:		Date/Time:	7/14/23 0952
Cooler ID(s):		Temperature(s):	

Rad 1.8
coll 1.8

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

Purchase Order

PO: HS23070658

VENDOR:

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:	22371
TSR:	Ron Martino

Item	Catalog No	Unit Price	Quantity	Ext Price
1. RSK-CO2; DoD Level II & IV, Equ_APTIM_GISKey	NA		6	

Order Total:

Raw 1.8
COC 1.8

Login Sample Receipt Checklist

Client: ALS Group USA, Corp

Job Number: 410-134801-1

Login Number: 134801
List Number: 1
Creator: Hollinger, Zane T

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

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

HS23070993 LHAAP 16 January 2023 Cover Page

ALS WO# HS23070993

ALS Environmental
ALS Group USA, Corp
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Houston, TX 77099
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HS23070993 Perch Sub Data E2300657-IV

HS23070993-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 VOA6 441456

Raw Data VOA6 442002

HS23070993-GCSEMI-RSK-175

Form 1 - Sample Results

Form 4 - MB Assoc

Form 6 - ICAL

Form 6I - ICV

Form 7 - CCV

Run Log

Raw Data FID 4 322102

Raw Data FID 4 442303

HS23070993 Perch Sub Data E2300657-IV

CoverLetter

Certificate of Analysis

Chain of Custody

Preparation Sheets

Analytical Results

Accuracy and Precision

Initial Calibration

Chromatograms and Selected Ion Monitoring

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F: +1 281 530 5887
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right solutions.
right partner.

WorkOrder: HS23070993

LHAAP 16 January 2023

Aptim Environmental & Infrastucture, Inc.

Vicki Graves
10333 Richmond Ave Ste 1030
Houston TX 77042

27-Jul-2023

HS23070993 LHAAP 16 January 2023 Final

ALS WO# HS23070993

10450 Stancliff Rd. Suite 210
Houston, TX 77099
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July 28, 2023

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

Work Order: **HS23070993**

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

Dear Vicki Graves ,

ALS Environmental received 11 sample(s) on Jul 14, 2023 for the analysis presented in the following report.

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

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

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

Sincerely,

Generated By: DAYNA.FISHER
James Guin

ALS Houston, US Date: 28-Jul-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Work Order: HS23070993

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS23070993-01	16WW37-230713	Water		13-Jul-2023 07:00	14-Jul-2023 09:40	☐
HS23070993-02	16WW37-230713-FD	Water		13-Jul-2023 07:00	14-Jul-2023 09:40	☐
HS23070993-03	16WW38-230713	Water		13-Jul-2023 07:45	14-Jul-2023 09:40	☐
HS23070993-04	16WW44-230713	Water		13-Jul-2023 08:25	14-Jul-2023 09:40	☐
HS23070993-05	16RW07-230713	Water		13-Jul-2023 09:05	14-Jul-2023 09:40	☐
HS23070993-06	16RW06-230713	Water		13-Jul-2023 09:45	14-Jul-2023 09:40	☐
HS23070993-07	16WW46-230713	Water		13-Jul-2023 10:30	14-Jul-2023 09:40	☐
HS23070993-08	16PM09-230713	Water		13-Jul-2023 11:15	14-Jul-2023 09:40	☐
HS23070993-09	16PM06-230713	Water		13-Jul-2023 11:55	14-Jul-2023 09:40	☐
HS23070993-10	16PM14-230713	Water		13-Jul-2023 12:40	14-Jul-2023 09:40	☐
HS23070993-11	Trip Blank-230713	Water		13-Jul-2023 00:00	14-Jul-2023 09:40	☐

ALS Houston, US Date: 28-Jul-23

Client: Aptim Environmental & Infrastucture, Inc. **CASE NARRATIVE**
Project: LHAAP 16 January 2023
Work Order: HS23070993

Work Order Comments

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

GC Semivolatiles by Method RSK-175

Batch ID: R442303

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

GCMS Volatiles by Method SW8260

Batch ID: R442002

Sample ID: 16PM09-230713 (HS23070993-08)

• Lowest practical dilution due to matrix.

Sample ID: 16PM14-230713 (HS23070993-10)

• Lowest practical dilution due to matrix.

Sample ID: 16WW38-230713 (HS23070993-03)

• Lowest practical dilution due to matrix.

Sample ID: HS23071109-01MSD

• MSD is for an unrelated sample

ALS Houston, US Date: 28-Jul-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16WW37-230713
Collection Date: 13-Jul-2023 07:00

ANALYTICAL REPORT
WorkOrder:HS23070993
Lab ID:HS23070993-01
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	21-Jul-2023 15:41
1,1-Dichloroethene	**3.7**		**0.20**	**1.0**	**1.0**	**ug/L**	1	21-Jul-2023 15:41
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	21-Jul-2023 15:41
cis-1,2-Dichloroethene	**24**		**0.20**	**1.0**	**1.0**	**ug/L**	1	21-Jul-2023 15:41
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	21-Jul-2023 15:41
Trichloroethene	**360**		**2.0**	**10**	**10**	**ug/L**	10	21-Jul-2023 17:03
Vinyl chloride	**20**		**0.20**	**1.0**	**1.0**	**ug/L**	1	21-Jul-2023 15:41
Surr: 1,2-Dichloroethane-d4	*107*			**0**	*81-118*	*%REC*	*1*	*21-Jul-2023 15:41*
Surr: 1,2-Dichloroethane-d4	*114*			**0**	*81-118*	*%REC*	*10*	*21-Jul-2023 17:03*
Surr: 4-Bromofluorobenzene	*95.0*			**0**	*85-114*	*%REC*	*1*	*21-Jul-2023 15:41*
Surr: 4-Bromofluorobenzene	*94.0*			**0**	*85-114*	*%REC*	*10*	*21-Jul-2023 17:03*
Surr: Dibromofluoromethane	*107*			**0**	*80-119*	*%REC*	*1*	*21-Jul-2023 15:41*
Surr: Dibromofluoromethane	*108*			**0**	*80-119*	*%REC*	*10*	*21-Jul-2023 17:03*
Surr: Toluene-d8	*102*			**0**	*89-112*	*%REC*	*1*	*21-Jul-2023 15:41*
Surr: Toluene-d8	*104*			**0**	*89-112*	*%REC*	*10*	*21-Jul-2023 17:03*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	27-Jul-2023 20:10

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

ALS Houston, US Date: 28-Jul-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16WW37-230713-FD
Collection Date: 13-Jul-2023 07:00

ANALYTICAL REPORT
WorkOrder:HS23070993
Lab ID:HS23070993-02
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	21-Jul-2023 16:01
1,1-Dichloroethene	**3.2**		**0.20**	**1.0**	**1.0**	**ug/L**	1	21-Jul-2023 16:01
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	21-Jul-2023 16:01
cis-1,2-Dichloroethene	**26**		**0.20**	**1.0**	**1.0**	**ug/L**	1	21-Jul-2023 16:01
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	21-Jul-2023 16:01
Trichloroethene	**370**		**2.0**	**10**	**10**	**ug/L**	10	21-Jul-2023 17:23
Vinyl chloride	**23**		**0.20**	**1.0**	**1.0**	**ug/L**	1	21-Jul-2023 16:01
Surr: 1,2-Dichloroethane-d4	*113*			**0**	*81-118*	*%REC*	*1*	*21-Jul-2023 16:01*
Surr: 1,2-Dichloroethane-d4	*114*			**0**	*81-118*	*%REC*	*10*	*21-Jul-2023 17:23*
Surr: 4-Bromofluorobenzene	*95.7*			**0**	*85-114*	*%REC*	*1*	*21-Jul-2023 16:01*
Surr: 4-Bromofluorobenzene	*94.5*			**0**	*85-114*	*%REC*	*10*	*21-Jul-2023 17:23*
Surr: Dibromofluoromethane	*112*			**0**	*80-119*	*%REC*	*1*	*21-Jul-2023 16:01*
Surr: Dibromofluoromethane	*112*			**0**	*80-119*	*%REC*	*10*	*21-Jul-2023 17:23*
Surr: Toluene-d8	*102*			**0**	*89-112*	*%REC*	*1*	*21-Jul-2023 16:01*
Surr: Toluene-d8	*104*			**0**	*89-112*	*%REC*	*10*	*21-Jul-2023 17:23*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	27-Jul-2023 20:10

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

ALS Houston, US Date: 28-Jul-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16WW38-230713
Collection Date: 13-Jul-2023 07:45

ANALYTICAL REPORT
WorkOrder:HS23070993
Lab ID:HS23070993-03
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	20	U	6.0	20	20	ug/L	20	21-Jul-2023 19:26
1,1-Dichloroethene	**24**		**4.0**	**20**	**20**	**ug/L**	20	21-Jul-2023 19:26
1,2-Dichloroethane	20	U	4.0	20	20	ug/L	20	21-Jul-2023 19:26
cis-1,2-Dichloroethene	**830**		**4.0**	**20**	**20**	**ug/L**	20	21-Jul-2023 19:26
Methylene chloride	20	U	8.0	20	40	ug/L	20	21-Jul-2023 19:26
Trichloroethene	**3,700**		**4.0**	**20**	**20**	**ug/L**	20	21-Jul-2023 19:26
Vinyl chloride	**64**		**4.0**	**20**	**20**	**ug/L**	20	21-Jul-2023 19:26
Surr: 1,2-Dichloroethane-d4	*114*			**0**	*81-118*	*%REC*	*20*	*21-Jul-2023 19:26*
Surr: 4-Bromofluorobenzene	*95.9*			**0**	*85-114*	*%REC*	*20*	*21-Jul-2023 19:26*
Surr: Dibromofluoromethane	*111*			**0**	*80-119*	*%REC*	*20*	*21-Jul-2023 19:26*
Surr: Toluene-d8	*104*			**0**	*89-112*	*%REC*	*20*	*21-Jul-2023 19:26*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	27-Jul-2023 20:10

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

ALS Houston, US Date: 28-Jul-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16WW44-230713
Collection Date: 13-Jul-2023 08:25

ANALYTICAL REPORT
WorkOrder:HS23070993
Lab ID:HS23070993-04
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	21-Jul-2023 18:25
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	21-Jul-2023 18:25
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	21-Jul-2023 18:25
cis-1,2-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	21-Jul-2023 18:25
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	21-Jul-2023 18:25
Trichloroethene	**1.1**		**0.20**	**1.0**	**1.0**	**ug/L**	1	21-Jul-2023 18:25
Vinyl chloride	1.0	U	0.20	1.0	1.0	ug/L	1	21-Jul-2023 18:25
Surr: 1,2-Dichloroethane-d4	*113*			**0**	*81-118*	*%REC*	*1*	*21-Jul-2023 18:25*
Surr: 4-Bromofluorobenzene	*92.0*			**0**	*85-114*	*%REC*	*1*	*21-Jul-2023 18:25*
Surr: Dibromofluoromethane	*110*			**0**	*80-119*	*%REC*	*1*	*21-Jul-2023 18:25*
Surr: Toluene-d8	*104*			**0**	*89-112*	*%REC*	*1*	*21-Jul-2023 18:25*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	27-Jul-2023 20:10

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

ALS Houston, US Date: 28-Jul-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16RW07-230713
Collection Date: 13-Jul-2023 09:05

ANALYTICAL REPORT
WorkOrder:HS23070993
Lab ID:HS23070993-05
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	5.0	U	1.5	5.0	5.0	ug/L	5	21-Jul-2023 20:28
1,1-Dichloroethene	**8.8**		**1.0**	**5.0**	**5.0**	**ug/L**	5	21-Jul-2023 20:28
1,2-Dichloroethane	5.0	U	1.0	5.0	5.0	ug/L	5	21-Jul-2023 20:28
cis-1,2-Dichloroethene	**61**		**1.0**	**5.0**	**5.0**	**ug/L**	5	21-Jul-2023 20:28
Methylene chloride	5.0	U	2.0	5.0	10	ug/L	5	21-Jul-2023 20:28
Trichloroethene	**1,300**		**10**	**50**	**50**	**ug/L**	50	21-Jul-2023 20:48
Vinyl chloride	**49**		**1.0**	**5.0**	**5.0**	**ug/L**	5	21-Jul-2023 20:28
Surr: 1,2-Dichloroethane-d4	*116*			**0**	*81-118*	*%REC*	*5*	*21-Jul-2023 20:28*
Surr: 1,2-Dichloroethane-d4	*113*			**0**	*81-118*	*%REC*	*50*	*21-Jul-2023 20:48*
Surr: 4-Bromofluorobenzene	*96.4*			**0**	*85-114*	*%REC*	*50*	*21-Jul-2023 20:48*
Surr: 4-Bromofluorobenzene	*96.7*			**0**	*85-114*	*%REC*	*5*	*21-Jul-2023 20:28*
Surr: Dibromofluoromethane	*113*			**0**	*80-119*	*%REC*	*5*	*21-Jul-2023 20:28*
Surr: Dibromofluoromethane	*107*			**0**	*80-119*	*%REC*	*50*	*21-Jul-2023 20:48*
Surr: Toluene-d8	*102*			**0**	*89-112*	*%REC*	*50*	*21-Jul-2023 20:48*
Surr: Toluene-d8	*103*			**0**	*89-112*	*%REC*	*5*	*21-Jul-2023 20:28*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	27-Jul-2023 20:10

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

ALS Houston, US Date: 28-Jul-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16RW06-230713
Collection Date: 13-Jul-2023 09:45

ANALYTICAL REPORT
WorkOrder:HS23070993
Lab ID:HS23070993-06
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	21-Jul-2023 19:06
1,1-Dichloroethene	**1.1**		**0.20**	**1.0**	**1.0**	**ug/L**	1	21-Jul-2023 19:06
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	21-Jul-2023 19:06
cis-1,2-Dichloroethene	**11**		**0.20**	**1.0**	**1.0**	**ug/L**	1	21-Jul-2023 19:06
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	21-Jul-2023 19:06
Trichloroethene	**100**		**0.20**	**1.0**	**1.0**	**ug/L**	1	21-Jul-2023 19:06
Vinyl chloride	**5.8**		**0.20**	**1.0**	**1.0**	**ug/L**	1	21-Jul-2023 19:06
Surr: 1,2-Dichloroethane-d4	*110*			**0**	*81-118*	*%REC*	*1*	*21-Jul-2023 19:06*
Surr: 4-Bromofluorobenzene	*95.8*			**0**	*85-114*	*%REC*	*1*	*21-Jul-2023 19:06*
Surr: Dibromofluoromethane	*108*			**0**	*80-119*	*%REC*	*1*	*21-Jul-2023 19:06*
Surr: Toluene-d8	*103*			**0**	*89-112*	*%REC*	*1*	*21-Jul-2023 19:06*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	27-Jul-2023 20:10

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

ALS Houston, US Date: 28-Jul-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16WW46-230713
Collection Date: 13-Jul-2023 10:30

ANALYTICAL REPORT
WorkOrder:HS23070993
Lab ID:HS23070993-07
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	21-Jul-2023 18:45
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	21-Jul-2023 18:45
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	21-Jul-2023 18:45
cis-1,2-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	21-Jul-2023 18:45
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	21-Jul-2023 18:45
Trichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	21-Jul-2023 18:45
Vinyl chloride	1.0	U	0.20	1.0	1.0	ug/L	1	21-Jul-2023 18:45
Surr: 1,2-Dichloroethane-d4	*114*			**0**	*81-118*	*%REC*	*1*	*21-Jul-2023 18:45*
Surr: 4-Bromofluorobenzene	*98.1*			**0**	*85-114*	*%REC*	*1*	*21-Jul-2023 18:45*
Surr: Dibromofluoromethane	*114*			**0**	*80-119*	*%REC*	*1*	*21-Jul-2023 18:45*
Surr: Toluene-d8	*103*			**0**	*89-112*	*%REC*	*1*	*21-Jul-2023 18:45*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	27-Jul-2023 20:10

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

ALS Houston, US Date: 28-Jul-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16PM09-230713
Collection Date: 13-Jul-2023 11:15

ANALYTICAL REPORT
WorkOrder:HS23070993
Lab ID:HS23070993-08
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	25	U	7.5	25	25	ug/L	25	21-Jul-2023 19:47
1,1-Dichloroethene	**24**	J	**5.0**	**25**	**25**	**ug/L**	25	21-Jul-2023 19:47
1,2-Dichloroethane	25	U	5.0	25	25	ug/L	25	21-Jul-2023 19:47
cis-1,2-Dichloroethene	**400**		**5.0**	**25**	**25**	**ug/L**	25	21-Jul-2023 19:47
Methylene chloride	25	U	10	25	50	ug/L	25	21-Jul-2023 19:47
Trichloroethene	**1,200**		**5.0**	**25**	**25**	**ug/L**	25	21-Jul-2023 19:47
Vinyl chloride	**22**	J	**5.0**	**25**	**25**	**ug/L**	25	21-Jul-2023 19:47
Surr: 1,2-Dichloroethane-d4	*111*			**0**	*81-118*	*%REC*	*25*	*21-Jul-2023 19:47*
Surr: 4-Bromofluorobenzene	*96.0*			**0**	*85-114*	*%REC*	*25*	*21-Jul-2023 19:47*
Surr: Dibromofluoromethane	*108*			**0**	*80-119*	*%REC*	*25*	*21-Jul-2023 19:47*
Surr: Toluene-d8	*104*			**0**	*89-112*	*%REC*	*25*	*21-Jul-2023 19:47*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	27-Jul-2023 20:10

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

ALS Houston, US Date: 28-Jul-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16PM06-230713
Collection Date: 13-Jul-2023 11:55

ANALYTICAL REPORT
WorkOrder:HS23070993
Lab ID:HS23070993-09
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	250	U	75	250	250	ug/L	250	21-Jul-2023 21:09
1,1-Dichloroethene	250	U	50	250	250	ug/L	250	21-Jul-2023 21:09
1,2-Dichloroethane	250	U	50	250	250	ug/L	250	21-Jul-2023 21:09
cis-1,2-Dichloroethene	**31,000**		**50**	**250**	**250**	**ug/L**	250	21-Jul-2023 21:09
Methylene chloride	250	U	100	250	500	ug/L	250	21-Jul-2023 21:09
Trichloroethene	**89,000**		**400**	**2000**	**2000**	**ug/L**	2000	21-Jul-2023 21:29
Vinyl chloride	**850**		**50**	**250**	**250**	**ug/L**	250	21-Jul-2023 21:09
Surr: 1,2-Dichloroethane-d4	*111*			**0**	*81-118*	*%REC*	*250*	*21-Jul-2023 21:09*
Surr: 1,2-Dichloroethane-d4	*113*			**0**	*81-118*	*%REC*	*2000*	*21-Jul-2023 21:29*
Surr: 4-Bromofluorobenzene	*94.1*			**0**	*85-114*	*%REC*	*250*	*21-Jul-2023 21:09*
Surr: 4-Bromofluorobenzene	*94.8*			**0**	*85-114*	*%REC*	*2000*	*21-Jul-2023 21:29*
Surr: Dibromofluoromethane	*107*			**0**	*80-119*	*%REC*	*250*	*21-Jul-2023 21:09*
Surr: Dibromofluoromethane	*110*			**0**	*80-119*	*%REC*	*2000*	*21-Jul-2023 21:29*
Surr: Toluene-d8	*101*			**0**	*89-112*	*%REC*	*250*	*21-Jul-2023 21:09*
Surr: Toluene-d8	*102*			**0**	*89-112*	*%REC*	*2000*	*21-Jul-2023 21:29*
DISSOLVED GASES BY RSK-175		**Method:RSK-175**						Analyst: SAM
Ethane	0.000500	U	0.000144	0.000500	0.00100	mg/L	1	21-Jul-2023 14:56
Ethene	**0.182**		**0.00468**	**0.0100**	**0.0200**	**mg/L**	20	21-Jul-2023 15:16
Methane	**0.597**		**0.00214**	**0.0100**	**0.0100**	**mg/L**	20	21-Jul-2023 15:16
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	27-Jul-2023 20:10

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

ALS Houston, US Date: 28-Jul-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16PM14-230713
Collection Date: 13-Jul-2023 12:40

ANALYTICAL REPORT
WorkOrder:HS23070993
Lab ID:HS23070993-10
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	50	U	15	50	50	ug/L	50	21-Jul-2023 20:07
1,1-Dichloroethene	**35**	J	**10**	**50**	**50**	**ug/L**	50	21-Jul-2023 20:07
1,2-Dichloroethane	**30**	J	**10**	**50**	**50**	**ug/L**	50	21-Jul-2023 20:07
cis-1,2-Dichloroethene	**7,400**		**10**	**50**	**50**	**ug/L**	50	21-Jul-2023 20:07
Methylene chloride	50	U	20	50	100	ug/L	50	21-Jul-2023 20:07
Trichloroethene	**6,600**		**10**	**50**	**50**	**ug/L**	50	21-Jul-2023 20:07
Vinyl chloride	**280**		**10**	**50**	**50**	**ug/L**	50	21-Jul-2023 20:07
Surr: 1,2-Dichloroethane-d4	*113*			**0**	*81-118*	*%REC*	*50*	*21-Jul-2023 20:07*
Surr: 4-Bromofluorobenzene	*98.0*			**0**	*85-114*	*%REC*	*50*	*21-Jul-2023 20:07*
Surr: Dibromofluoromethane	*110*			**0**	*80-119*	*%REC*	*50*	*21-Jul-2023 20:07*
Surr: Toluene-d8	*103*			**0**	*89-112*	*%REC*	*50*	*21-Jul-2023 20:07*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	27-Jul-2023 20:10

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

ALS Houston, US Date: 28-Jul-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: Trip Blank-230713
Collection Date: 13-Jul-2023 00:00

ANALYTICAL REPORT
WorkOrder:HS23070993
Lab ID:HS23070993-11
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	21-Jul-2023 17:44
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	21-Jul-2023 17:44
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	21-Jul-2023 17:44
cis-1,2-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	21-Jul-2023 17:44
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	21-Jul-2023 17:44
Trichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	21-Jul-2023 17:44
Vinyl chloride	1.0	U	0.20	1.0	1.0	ug/L	1	21-Jul-2023 17:44
Surr: 1,2-Dichloroethane-d4	*111*			**0**	*81-118*	*%REC*	*1*	*21-Jul-2023 17:44*
Surr: 4-Bromofluorobenzene	*95.1*			**0**	*85-114*	*%REC*	*1*	*21-Jul-2023 17:44*
Surr: Dibromofluoromethane	*111*			**0**	*80-119*	*%REC*	*1*	*21-Jul-2023 17:44*
Surr: Toluene-d8	*102*			**0**	*89-112*	*%REC*	*1*	*21-Jul-2023 17:44*

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

ALS Houston, US Date: 28-Jul-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23070993

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: R442002 (0)	**Test Name :** VOLATILES ORGANICS BY METHOD 8260C				**Matrix:** Water	
HS23070993-01	16WW37-230713	13 Jul 2023 07:00			21 Jul 2023 17:03	10
HS23070993-01	16WW37-230713	13 Jul 2023 07:00			21 Jul 2023 15:41	1
HS23070993-02	16WW37-230713-FD	13 Jul 2023 07:00			21 Jul 2023 17:23	10
HS23070993-02	16WW37-230713-FD	13 Jul 2023 07:00			21 Jul 2023 16:01	1
HS23070993-03	16WW38-230713	13 Jul 2023 07:45			21 Jul 2023 19:26	20
HS23070993-04	16WW44-230713	13 Jul 2023 08:25			21 Jul 2023 18:25	1
HS23070993-05	16RW07-230713	13 Jul 2023 09:05			21 Jul 2023 20:48	50
HS23070993-05	16RW07-230713	13 Jul 2023 09:05			21 Jul 2023 20:28	5
HS23070993-06	16RW06-230713	13 Jul 2023 09:45			21 Jul 2023 19:06	1
HS23070993-07	16WW46-230713	13 Jul 2023 10:30			21 Jul 2023 18:45	1
HS23070993-08	16PM09-230713	13 Jul 2023 11:15			21 Jul 2023 19:47	25
HS23070993-09	16PM06-230713	13 Jul 2023 11:55			21 Jul 2023 21:29	2000
HS23070993-09	16PM06-230713	13 Jul 2023 11:55			21 Jul 2023 21:09	250
HS23070993-10	16PM14-230713	13 Jul 2023 12:40			21 Jul 2023 20:07	50
HS23070993-11	Trip Blank-230713	13 Jul 2023 00:00			21 Jul 2023 17:44	1
Batch ID: R442303 (1)	**Test Name :** DISSOLVED GASES BY RSK-175				**Matrix:** Water	
HS23070993-09	16PM06-230713	13 Jul 2023 11:55			21 Jul 2023 15:16	20
HS23070993-09	16PM06-230713	13 Jul 2023 11:55			21 Jul 2023 14:56	1
Batch ID: R442554 (0)	**Test Name :** SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)				**Matrix:** Water	
HS23070993-01	16WW37-230713	13 Jul 2023 07:00			27 Jul 2023 20:10	1
HS23070993-02	16WW37-230713-FD	13 Jul 2023 07:00			27 Jul 2023 20:10	1
HS23070993-03	16WW38-230713	13 Jul 2023 07:45			27 Jul 2023 20:10	1
HS23070993-04	16WW44-230713	13 Jul 2023 08:25			27 Jul 2023 20:10	1
HS23070993-05	16RW07-230713	13 Jul 2023 09:05			27 Jul 2023 20:10	1
HS23070993-06	16RW06-230713	13 Jul 2023 09:45			27 Jul 2023 20:10	1
HS23070993-07	16WW46-230713	13 Jul 2023 10:30			27 Jul 2023 20:10	1
HS23070993-08	16PM09-230713	13 Jul 2023 11:15			27 Jul 2023 20:10	1
HS23070993-09	16PM06-230713	13 Jul 2023 11:55			27 Jul 2023 20:10	1
HS23070993-10	16PM14-230713	13 Jul 2023 12:40			27 Jul 2023 20:10	1

ALS Houston, US Date: 28-Jul-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23070993

QC BATCH REPORT

Batch ID: R442303 (1) **Instrument:** FID-4 **Method:** DISSOLVED GASES BY RSK-175

MBLK Sample ID: **MBLK-230721** Units: **mg/L** Analysis Date: **21-Jul-2023 14:22**
Client ID: Run ID: **FID-4_442303** SeqNo: **7450742** 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-230721** Units: **mg/L** Analysis Date: **21-Jul-2023 14:32**
Client ID: Run ID: **FID-4_442303** SeqNo: **7450743** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	0.0204	0.00100	0.01804	0	113	75 - 125				
Ethene	0.0181	0.00100	0.0168	0	108	75 - 125				
Methane	0.00786	0.000500	0.009647	0	81.5	75 - 125				

LCSD Sample ID: **LCSD-230721** Units: **mg/L** Analysis Date: **21-Jul-2023 14:47**
Client ID: Run ID: **FID-4_442303** SeqNo: **7450744** 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	113	75 - 125	0.02041	0.245	30	
Ethene	0.0185	0.00100	0.0168	0	110	75 - 125	0.01810	2.18	30	
Methane	0.00806	0.000500	0.009647	0	83.5	75 - 125	0.007860	2.47	30	

DUP Sample ID: **HS23071069-04DUP** Units: **mg/L** Analysis Date: **21-Jul-2023 19:32**
Client ID: Run ID: **FID-4_442303** SeqNo: **7450769** 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					0	0	30	U
Ethene	0.000500	0.00100					0	0	30	U
Methane	0.0156	0.000500					0.01558	0.335	30	

The following samples were analyzed in this batch: HS23070993-09

ALS Houston, US Date: 28-Jul-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23070993

QC BATCH REPORT

Batch ID: R442002 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MBLK Sample ID: **VBLKW-230721** Units: **ug/L** Analysis Date: **21-Jul-2023 14:19**
Client ID: Run ID: **VOA6_442002** SeqNo: **7443755** 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	*54.53*	*1.0*	*50*	*0*	*109*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*46.89*	*1.0*	*50*	*0*	*93.8*	*85 - 114*				
Surr: Dibromofluoromethane	*54.29*	*1.0*	*50*	*0*	*109*	*80 - 119*				
Surr: Toluene-d8	*51.49*	*1.0*	*50*	*0*	*103*	*89 - 112*				

LCS Sample ID: **VLCSW-230721** Units: **ug/L** Analysis Date: **21-Jul-2023 13:38**
Client ID: Run ID: **VOA6_442002** SeqNo: **7443754** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	19.65	1.0	20	0	98.2	80 - 119				
1,1-Dichloroethene	20.98	1.0	20	0	105	71 - 131				
1,2-Dichloroethane	18.24	1.0	20	0	91.2	73 - 128				
cis-1,2-Dichloroethene	19.18	1.0	20	0	95.9	78 - 123				
Methylene chloride	19.61	2.0	20	0	98.1	74 - 124				
Trichloroethene	18.59	1.0	20	0	92.9	79 - 123				
Vinyl chloride	21.3	1.0	20	0	106	58 - 137				
Surr: 1,2-Dichloroethane-d4	*50.42*	*1.0*	*50*	*0*	*101*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*50.57*	*1.0*	*50*	*0*	*101*	*85 - 114*				
Surr: Dibromofluoromethane	*52.13*	*1.0*	*50*	*0*	*104*	*80 - 119*				
Surr: Toluene-d8	*45.82*	*1.0*	*50*	*0*	*91.6*	*89 - 112*				

ALS Houston, US Date: 28-Jul-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23070993

QC BATCH REPORT

Batch ID: R442002 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MS Sample ID: **HS23071109-01MS** Units: **ug/L** Analysis Date: **21-Jul-2023 16:22**
Client ID: Run ID: **VOA6_442002** SeqNo: **7443761** 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	23.33	1.0	20	0	117	80 - 119				
1,1-Dichloroethene	25.92	1.0	20	0	130	71 - 131				
1,2-Dichloroethane	22.8	1.0	20	0	114	73 - 128				
cis-1,2-Dichloroethene	23.7	1.0	20	0	119	78 - 123				
Methylene chloride	23.92	2.0	20	0	120	74 - 124				
Trichloroethene	24.53	1.0	20	0	123	79 - 123				
Vinyl chloride	26.09	1.0	20	0	130	58 - 137				
Surr: 1,2-Dichloroethane-d4	*56.93*	*1.0*	*50*	*0*	*114*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*49.4*	*1.0*	*50*	*0*	*98.8*	*85 - 114*				
Surr: Dibromofluoromethane	*55.55*	*1.0*	*50*	*0*	*111*	*80 - 119*				
Surr: Toluene-d8	*52.44*	*1.0*	*50*	*0*	*105*	*89 - 112*				

MSD Sample ID: **HS23071109-01MSD** Units: **ug/L** Analysis Date: **21-Jul-2023 16:42**
Client ID: Run ID: **VOA6_442002** SeqNo: **7443762** 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	22.72	1.0	20	0	114	80 - 119	23.33	2.65	20	
1,1-Dichloroethene	24.48	1.0	20	0	122	71 - 131	25.92	5.71	20	
1,2-Dichloroethane	21.56	1.0	20	0	108	73 - 128	22.8	5.59	20	
cis-1,2-Dichloroethene	18.11	1.0	20	0	90.5	78 - 123	23.7	26.8	20	R
Methylene chloride	19.77	2.0	20	0	98.9	74 - 124	23.92	19	20	
Trichloroethene	22.9	1.0	20	0	114	79 - 123	24.53	6.88	20	
Vinyl chloride	24.83	1.0	20	0	124	58 - 137	26.09	4.91	20	
Surr: 1,2-Dichloroethane-d4	*56.46*	*1.0*	*50*	*0*	*113*	*81 - 118*	*56.93*	*0.818*	*20*	
Surr: 4-Bromofluorobenzene	*49.84*	*1.0*	*50*	*0*	*99.7*	*85 - 114*	*49.4*	*0.89*	*20*	
Surr: Dibromofluoromethane	*55.08*	*1.0*	*50*	*0*	*110*	*80 - 119*	*55.55*	*0.84*	*20*	
Surr: Toluene-d8	*52.07*	*1.0*	*50*	*0*	*104*	*89 - 112*	*52.44*	*0.721*	*20*	

The following samples were analyzed in this batch:

HS23070993-01	HS23070993-02	HS23070993-03	HS23070993-04
HS23070993-05	HS23070993-06	HS23070993-07	HS23070993-08
HS23070993-09	HS23070993-10	HS23070993-11	

ALS Houston, US Date: 28-Jul-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: **HS23070993**

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

ALS Houston, US Date: 28-Jul-23

CERTIFICATIONS,ACCREDITATIONS & LICENSES

Agency	Number	Expire Date
Arkansas	88-00356	27-Mar-2024
California	2919; 2024	30-Apr-2024
Dept of Defense	L23-358	31-May-2025
Florida	E87611-38	30-Jun-2024
Illinois	2000322023-11	30-Jun-2024
Kansas	E-10352; 2022-2023	31-Jul-2023
Louisiana	03087-2023	30-Jun-2024
Maryland	343; 2023-2024	30-Jun-2024
North Carolina	624-2023	31-Dec-2023
North Dakota	R-193 2023-2024	30-Apr-2024
Oklahoma	2022-141	31-Aug-2023
Texas	T104704231-23-31	30-Apr-2024
Utah	TX026932023-14	31-Jul-2024

ALS Houston, US Date: 28-Jul-23

Sample Receipt Checklist

Work Order ID: HS23070993 **Date/Time Received:** 14-Jul-2023 09:40

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

Completed By: /S/ Nelson D. Dusara (eSignature) 19-Jul-2023 19:06 (Date/Time) **Reviewed by:** (eSignature) (Date/Time)

Matrices: **WATER** Carrier name: **FedEx**

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
VOA/TX1005/TX1006 Solids in hermetically sealed vials?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	1 Page(s)
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	COC IDs:n/a
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):	3.7/3.6 C UC/C	IR 31	
Cooler(s)/Kit(s):	51124		
Date/Time sample(s) sent to storage:	07/19/2023 13:00		
Water - VOA vials have zero headspace?	Yes ☑	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑
pH adjusted?	Yes ☐	No ☐	N/A ☑
pH adjusted by:			

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

Corrective Action:

01321667

bhate

1608 13th Avenue South, Suite 300
Birmingham Alabama 35205

Chain of Custody and Analytical Request

Page: _____ of

Project/Phase

No: JVPCIBH.0001

COC Number(1):

LIMS Number: _____

Facility/Base I.D.: LHAAP

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
16WW37-230713	13 Jul 2023	0700	-	N		WG	4	X					X				
16WW37-230713-FD	13 Jul 2023	0700	-	FD		WG	4	X					X				
16WW38-230713	13 Jul 2023	0745	-	N		WG	4	X					X				
16WW44-230713	13 Jul 2023	0825		N		WG	4	X					X				
16RW07-230713	13 Jul 2023	0905		N		WG	4	X					X				
16RW06-230713	13 Jul 2023	0945	-	N		WG	4	X					X				
16WW46-230713	13 Jul 2023	1030	-	N		WG	4	X					X				
16PM04-230713	13 Jul 2023	1115	-	N		WG	4	X					X				
16PM06-230713	13 Jul 2023	1155	-	N		WG	7	X	X				X				
16PM14-230713	13 Jul 2023	1240	-	N		WG	4	X					X				
TRIP BLANK-230713	13 Jul 2023		-	TB		W	2	X									

Sample Analysis Requested (5) | Quality Assurance Samples (6)

HS23070993

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	7/13/23	1330	1. [signature]	7/14/23	0746
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 Wagner 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.)

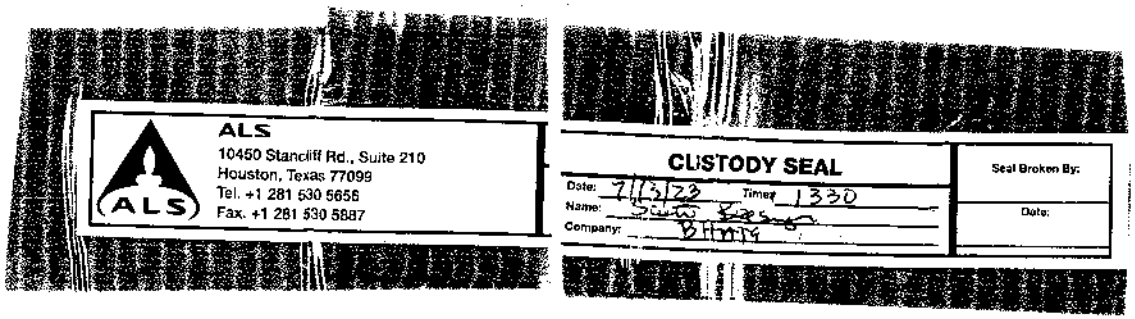
4.) Matrix Codes: GS = Soil Gas, WG = Groundwater, WS = Surface Water, SO = Soil, SE = Sediment, SL = Sludge, SS = Surface Soil Samples, WQ = Aqueous Blank Samples (trip, equipment, ambient, etc), SQ = Soil Blanks

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 1G109901 in the Equipment Blank Lot Control

Cooler temp 3.7°C
IR 3
CF -0.1°C

ALS



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

CUSTODY SEAL
Date: 7/13/23 Time: 1330
Name:
Company:

Seal Broken By:
Date:

REF: LHAAP 16 = 80 94022 - JG
RMA:

FedEx Express

TRK# 6230 3002 0470

RETURNS MON - SAT
PRIORITY OVERNIGHT

FedEx
TRK# 6230 3002 0470

FRI - 14 JUL AA
PRIORITY OVERNIGHT

XA SGRA

77099
TX-US
IAH

July 26, 2023 Service Request No:E2300657

Bernadette Fini
ALS Laboratory Group
10450 Stancliff Road
Suite 210
Houston, TX 77099-4338

Laboratory Results for: HS23070993

Dear Bernadette,

Enclosed are the results of the sample(s) submitted to our laboratory July 20, 2023
For your reference, these analyses have been assigned our service request number **E2300657.**

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

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

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

James Guin

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

Certificate of Analysis

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

ALS Environmental

Client:	ALS Environmental – US	**Service Request No.:**	E2300657
Project:	HS23070993	**Date Received:**	07/20/2023
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

Ten samples were received for analysis at ALS Environmental in Houston on 07/20/2023.

The sample were received in good condition and is 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:

EQ2300354: Laboratory Control Spike/Duplicate Laboratory Control Spike (LCS/DLCS) samples were analyzed and reported in lieu of 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:**E2300657
Project: HS23070993

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
E2300657-001	16WW37-230713	7/13/2023	0700
E2300657-002	16WW37-230713-FD	7/13/2023	0700
E2300657-003	16WW38-230713	7/13/2023	0745
E2300657-004	16WW44-230713	7/13/2023	0825
E2300657-005	16RW07-230713	7/13/2023	0905
E2300657-006	16RW06-230713	7/13/2023	0945
E2300657-007	16WW46-230713	7/13/2023	1030
E2300657-008	16PM09-230713	7/13/2023	1115
E2300657-009	16PM06-230713	7/13/2023	1155
E2300657-010	16PM14-230713	7/13/2023	1240

Service Request Summary

Folder #: **E2300657**
Client Name: ALS Environmental - US
Project Name: HS23070993
Project Number:

Report To: Bernadette Fini
ALS Laboratory Group
10450 Stancliff Road
Houston, TX 77099-4338
USA
Phone Number: 281-530-5656
Cell Number:
Fax Number: 281-530-5887
E-mail: bernadette.fini@alsglobal.com

Project Chemist: James Guin
Originating Lab: HOUSTON
Logged By: XMI
Date Received: 07/20/23
Internal Due Date: 7/28/2023
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS23070993
EDD: No EDD Specified

10 120 mL-Plastic Bottle Natural WM Unpreserved
Location: SUBBED
Pressure Gas:

Lab Samp No.	Client Samp No	Matrix	Collected	HOUSTON ClO4 DOD/6850
E2300657-001	16WW37-230713	Water	07/13/23 0700	**IV**
E2300657-002	16WW37-230713-FD	Water	07/13/23 0700	**IV**
E2300657-003	16WW38-230713	Water	07/13/23 0745	**IV**
E2300657-004	16WW44-230713	Water	07/13/23 0825	**IV**
E2300657-005	16RW07-230713	Water	07/13/23 0905	**IV**
E2300657-006	16RW06-230713	Water	07/13/23 0945	**IV**
E2300657-007	16WW46-230713	Water	07/13/23 1030	**IV**
E2300657-008	16PM09-230713	Water	07/13/23 1115	**IV**
E2300657-009	16PM06-230713	Water	07/13/23 1155	**IV**
E2300657-010	16PM14-230713	Water	07/13/23 1240	**IV**

Service Request Summary

Folder #: **E2300657**
Client Name: ALS Environmental - US
Project Name: HS23070993
Project Number:

Report To: Bernadette Fini
ALS Laboratory Group
10450 Stancliff Road
Houston, TX 77099-4338
USA
Phone Number: 281-530-5656
Cell Number:
Fax Number: 281-530-5887
E-mail: bernadette.fini@alsglobal.com

Project Chemist: James Guin
Originating Lab: HOUSTON
Logged By: XMI
Date Received: 07/20/23
Internal Due Date: 7/28/2023
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS23070993
EDD: No EDD Specified

10 120 mL-Plastic Bottle Natural WM Unpreserved
Location: SUBBED
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

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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 2022-2023	7/31/2023
Louisiana Department of Environmental Quality	03087-2023	6/30/2024
Louisiana Department of Health and Hospitals	LA028-2023	12/31/2023
Maine Department of Health and Human Services	2022017	6/5/2024
Maryland Department of the Environment	343	7/31/2023
Maryland Department of the Environment	343-2023	6/30/2024
Michigan Depratment of Environmental Quality	9971-2023	4/30/2024
Minnesota Department of Health	2368363	12/31/2023
Nebraska Department of Health and Human Services	NE-OS-25-13	4/30/2024
Nevada Department of Conservation and Natural Resources	TX026932023-1	7/31/2023
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	2022-141	8/31/2023
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
Utah Department of Health Environmental Laboratory Certification	TX026932022-13	7/31/2023
Washington Department of Ecology	C819-22	11/14/2023

ALS

Chain of Custody

ALS Environmental - Houston Specialties Laboratory
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Subcontract Chain of Custody

SAMPLING STATE: **Dept of Defense**

COC ID: 22428

E2300657 5

ALS Laboratory Group
HS23070993

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:	HS23070993
TSR:	Ron Martino

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	**HS23070993-01**	**16WW37-230713**	**Water**	**13 Jul 2023 07:00**
	Perchlorate Level II and Level IV reports on a seperate pdf.			28 Jul 2023
2.	**HS23070993-02**	**16WW37-230713-FD**	**Water**	**13 Jul 2023 07:00**
	Perchlorate Level II and Level IV reports on a seperate pdf.			28 Jul 2023
3.	**HS23070993-03**	**16WW38-230713**	**Water**	**13 Jul 2023 07:45**
	Perchlorate Level II and Level IV reports on a seperate pdf.			28 Jul 2023
4.	**HS23070993-04**	**16WW44-230713**	**Water**	**13 Jul 2023 08:25**
	Perchlorate Level II and Level IV reports on a seperate pdf.			28 Jul 2023
5.	**HS23070993-05**	**16RW07-230713**	**Water**	**13 Jul 2023 09:05**
	Perchlorate Level II and Level IV reports on a seperate pdf.			28 Jul 2023
6.	**HS23070993-06**	**16RW06-230713**	**Water**	**13 Jul 2023 09:45**
	Perchlorate Level II and Level IV reports on a seperate pdf.			28 Jul 2023
7.	**HS23070993-07**	**16WW46-230713**	**Water**	**13 Jul 2023 10:30**
	Perchlorate Level II and Level IV reports on a seperate pdf.			28 Jul 2023
8.	**HS23070993-08**	**16PM09-230713**	**Water**	**13 Jul 2023 11:15**
	Perchlorate Level II and Level IV reports on a seperate pdf.			28 Jul 2023
9.	**HS23070993-09**	**16PM06-230713**	**Water**	**13 Jul 2023 11:55**

Subcontract Chain of Custody

SAMPLING STATE: **Dept of Defense** **COC ID: 22428**

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
	Perchlorate Level II and Level IV reports on a seperate pdf.			28 Jul 2023
10.	**HS23070993-10**	**16PM14-230713**	**Water**	**13 Jul 2023 12:40**
	Perchlorate Level II and Level IV reports on a seperate pdf.			28 Jul 2023

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

QC Level: DOD IV (DoD Data Package)

Relinquished By: _____ Date/Time: _____

Received By: _____ Date/Time: 7-14-23 1400

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

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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#: 423531 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 7/24/23 10:30

#	Lab Code	Client ID	B#	Method /Test	pH	Cl	Matrix	Amt. Ext.	Sample Description
1	E2300657-001	16WW37-230713	.01	6850/ClO4 DOD			Water	10mL	
2	E2300657-002	16WW37-230713-FD	.01	6850/ClO4 DOD			Water	10mL	
3	E2300657-003	16WW38-230713	.01	6850/ClO4 DOD			Water	10mL	
4	E2300657-004	16WW44-230713	.01	6850/ClO4 DOD			Water	10mL	
5	E2300657-005	16RW07-230713	.01	6850/ClO4 DOD			Water	10mL	
6	E2300657-006	16RW06-230713	.01	6850/ClO4 DOD			Water	10mL	
7	E2300657-007	16WW46-230713	.01	6850/ClO4 DOD			Water	10mL	
8	E2300657-008	16PM09-230713	.01	6850/ClO4 DOD			Water	10mL	
9	E2300657-009	16PM06-230713	.01	6850/ClO4 DOD			Water	10mL	
10	E2300657-010	16PM14-230713	.01	6850/ClO4 DOD			Water	10mL	
11	E2300671-001	EA-15-0323	.01	6850/ClO4			Water	10mL	
12	E2300671-002	CTC 51 0323	.01	6850/ClO4			Water	10mL	
13	E2300671-003	CTC 46 0323	.01	6850/ClO4			Water	10mL	
14	E2300671-004	CTC 3 0323	.01	6850/ClO4			Water	10mL	
15	E2300671-005	EA 50 0323	.01	6850/ClO4			Water	10mL	
16	E2300671-006	CTC 2 0323	.01	6850/ClO4			Water	10mL	
17	E2300671-007	CTC 10 0323	.01	6850/ClO4			Water	10mL	
18	E2300671-008	CTC 23 0323	.01	6850/ClO4			Water	10mL	
19	E2300687-001	LH18/24-SP650_072423_AIX	.01	6850/ClO4 DOD			Water	10mL	
20	E2300687-002	LH18/24-SP650_072423_BIX	.01	6850/ClO4 DOD			Water	10mL	
21	EQ2300354-01	MB		6850/ClO4			Liquid	10mL	
22	EQ2300354-02	LCS		6850/ClO4			Liquid	10mL	
23	EQ2300354-03	DLCS		6850/ClO4			Liquid	10mL	

Spiking Solutions

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

EQ2300354-02	1.00µL	EQ2300354-02	1.00µL	EQ2300354-03	1.00µL	EQ2300354-03	1.00µL

Name: Perchlorate Internal Standard 1ug/mL Inventory ID 227244 Logbook Ref: Perchlorate Internal Standard Expires On: 07/31/2023

E2300657-001	100.00µL	E2300657-002	100.00µL	E2300657-003	100.00µL	E2300657-004	100.00µL	E2300657-005	100.00µL	E2300657-006	100.00µL
E2300657-007	100.00µL	E2300657-008	100.00µL	E2300657-009	100.00µL	E2300657-010	100.00µL	E2300671-001	100.00µL	E2300671-002	100.00µL
E2300671-003	100.00µL	E2300671-004	100.00µL	E2300671-005	100.00µL	E2300671-006	100.00µL	E2300671-007	100.00µL	E2300671-008	100.00µL
E2300687-001	100.00µL	E2300687-002	100.00µL	EQ2300354-01	100.00µL	EQ2300354-01	100.00µL	EQ2300354-02	100.00µL	EQ2300354-02	100.00µL
EQ2300354-03	100.00µL	EQ2300354-03	100.00µL								

Preparation Information Benchsheet

Prep Run#: 423531 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 7/24/23 10:30

Preparation Materials

Water HPLC Grade	HPLC water 5/18/23CG (229315)	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-lock syringes (228116)				

Preparation Steps

Step: Preparation
Started: 7/24/23 10:30
Finished: 7/25/23 09:20
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:**	E2300657
Project:	HS23070993	**Date Collected:**	7/13/23 0700
Sample Matrix:	Water	**Date Received:**	7/20/23
Sample Name:	16WW37-230713	**Units:**	µg/L
Lab Code:	E2300657-001	**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	**164**		1.00	0.500	0.250	10	7/24/23	7/25/23 10:50	423531	811716	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300657
Project:	HS23070993	**Date Collected:**	7/13/23 0700
Sample Matrix:	Water	**Date Received:**	7/20/23
Sample Name:	16WW37-230713-FD	**Units:**	µg/L
Lab Code:	E2300657-002	**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	**172**		1.00	0.500	0.250	10	7/24/23	7/25/23 10:55	423531	811716	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300657
Project:	HS23070993	**Date Collected:**	7/13/23 0745
Sample Matrix:	Water	**Date Received:**	7/20/23
Sample Name:	16WW38-230713	**Units:**	µg/L
Lab Code:	E2300657-003	**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	**0.203**		0.100	0.0500	0.0250	1	7/24/23	7/25/23 11:01	423531	811716	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300657
Project:	HS23070993	**Date Collected:**	7/13/23 0825
Sample Matrix:	Water	**Date Received:**	7/20/23
Sample Name:	16WW44-230713	**Units:**	µg/L
Lab Code:	E2300657-004	**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	**0.169**		0.100	0.0500	0.0250	1	7/24/23	7/25/23 11:06	423531	811716	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300657
Project:	HS23070993	**Date Collected:**	7/13/23 0905
Sample Matrix:	Water	**Date Received:**	7/20/23
Sample Name:	16RW07-230713	**Units:**	µg/L
Lab Code:	E2300657-005	**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	**0.448**		0.100	0.0500	0.0250	1	7/24/23	7/25/23 11:12	423531	811716	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300657
Project:	HS23070993	**Date Collected:**	7/13/23 0945
Sample Matrix:	Water	**Date Received:**	7/20/23
Sample Name:	16RW06-230713	**Units:**	µg/L
Lab Code:	E2300657-006	**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	**0.281**		0.100	0.0500	0.0250	1	7/24/23	7/25/23 11:17	423531	811716	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300657
Project:	HS23070993	**Date Collected:**	7/13/23 1030
Sample Matrix:	Water	**Date Received:**	7/20/23
Sample Name:	16WW46-230713	**Units:**	µg/L
Lab Code:	E2300657-007	**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	**0.239**		0.100	0.0500	0.0250	1	7/24/23	7/25/23 11:23	423531	811716	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300657
Project:	HS23070993	**Date Collected:**	7/13/23 1115
Sample Matrix:	Water	**Date Received:**	7/20/23
Sample Name:	16PM09-230713	**Units:**	µg/L
Lab Code:	E2300657-008	**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	**0.186**		0.100	0.0500	0.0250	1	7/24/23	7/25/23 11:34	423531	811716	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300657
Project:	HS23070993	**Date Collected:**	7/13/23 1155
Sample Matrix:	Water	**Date Received:**	7/20/23
Sample Name:	16PM06-230713	**Units:**	µg/L
Lab Code:	E2300657-009	**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	**0.193**		0.100	0.0500	0.0250	1	7/24/23	7/25/23 11:40	423531	811716	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300657
Project:	HS23070993	**Date Collected:**	7/13/23 1240
Sample Matrix:	Water	**Date Received:**	7/20/23
Sample Name:	16PM14-230713	**Units:**	µg/L
Lab Code:	E2300657-010	**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	**0.194**		0.100	0.0500	0.0250	1	7/24/23	7/25/23 11:45	423531	811716	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300657
Project:	HS23070993	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	EQ2300354-01	**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	7/24/23	7/25/23 10:33	423531	811716	

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: HS23070993
Sample Matrix: Water

Service Request: E2300657
Date Analyzed: 7/25/23

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

Analytical Method: 6850
Prep Method: Method

Units: µg/L
Basis: NA

Extraction Lot: 423531

	Lab Control Sample EQ2300354-02			Duplicate Lab Control Sample EQ2300354-03					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	0.0948	0.100	95	0.0899	0.100	90	84 - 119	5	15

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

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

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300657
Project:	HS23070993	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2300354-02	**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	**0.0948**	J	0.100	0.0500	0.0250	1	7/24/23	7/25/23 10:39	423531	811716	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300657
Project:	HS23070993	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2300354-03	**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	**0.0899**	J	0.100	0.0500	0.0250	1	7/24/23	7/25/23 10:44	423531	811716	

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

20230629-809329

Injection Log

LCMS01 -Shimadzu 8050

1st Review: XM
2nd Review: GC

ICAL Date: 6/29/2023
Cal. Std. xp: 06/29/2023
ICAL ID: EC2300011

Mobile Phases : A:20mM ammonium acetate in water 32103046 **B:**Acetonitrile 226552

	Sample Name		File Name	Acquisition Method	Dilution	Comments	Date/Time
1	PERCHLORATE1		20230629-001	Perchlorate6850c.lcm	1x	227245	6/29/2023 12:59
2	PERCHLORATE2		20230629-002	Perchlorate6850c.lcm	1x	227246	6/29/2023 13:05
3	PERCHLORATE3		20230629-003	Perchlorate6850c.lcm	1x	227247	6/29/2023 13:10
4	PERCHLORATE4		20230629-004	Perchlorate6850c.lcm	1x	227248	6/29/2023 13:16
5	PERCHLORATE5		20230629-005	Perchlorate6850c.lcm	1x	227249	6/29/2023 13:21
6	PERCHLORATE6		20230629-006	Perchlorate6850c.lcm	1x	227250	6/29/2023 13:27
7	PERCHLORATE7		20230629-007	Perchlorate6850c.lcm	1x	227251	6/29/2023 13:32
8	PERCHLORATE8		20230629-008	Perchlorate6850c.lcm	1x	227252	6/29/2023 13:38
9	PERCHLORATE9		20230629-009	Perchlorate6850c.lcm	1x	227253	6/29/2023 13:43
10	PERCHLORATE10		20230629-010	Perchlorate6850c.lcm	1x	227254	6/29/2023 13:49
11	PERCHLORATEICV		20230629-011	Perchlorate6850c.lcm	1x	227256	6/29/2023 13:55
12	IB		20230629-012	Perchlorate6850c.lcm	1x		6/29/2023 14:00
13	LODV		20230629-013	Perchlorate6850c.lcm	1x	227501	6/29/2023 14:06
14	ICS		20230629-014	Perchlorate6850c.lcm	1x	32103024	6/29/2023 14:11
15	CCV		20230629-015	Perchlorate6850c.lcm	1x	227251	6/29/2023 14:17
16	EQ2300312-01		20230629-016	Perchlorate6850c.lcm	1x		6/29/2023 14:22
17	EQ2300312-02		20230629-017	Perchlorate6850c.lcm	1x	DNU-RR	6/29/2023 14:28
18	EQ2300312-03		20230629-018	Perchlorate6850c.lcm	1x		6/29/2023 14:33
19	E2300606-001		20230629-019	Perchlorate6850c.lcm	10x		6/29/2023 14:39
20	EQ2300312-04		20230629-020	Perchlorate6850c.lcm	1x		6/29/2023 14:44
21	EQ2300312-05		20230629-021	Perchlorate6850c.lcm	1x		6/29/2023 14:50
22	E2300606-002		20230629-022	Perchlorate6850c.lcm	5x		6/29/2023 14:55
23	E2300606-003		20230629-023	Perchlorate6850c.lcm	10x		6/29/2023 15:01
24	E2300606-004		20230629-024	Perchlorate6850c.lcm	10x		6/29/2023 15:06
25	E2300606-005		20230629-025	Perchlorate6850c.lcm	1x		6/29/2023 15:12
26	CCV		20230629-026	Perchlorate6850c.lcm	1x	227251	6/29/2023 15:17
27	E2300606-006		20230629-027	Perchlorate6850c.lcm	1x		6/29/2023 15:23
28	E2300606-007		20230629-028	Perchlorate6850c.lcm	500x		6/29/2023 15:28
29	E2300606-008		20230629-029	Perchlorate6850c.lcm	100x		6/29/2023 15:34
30	EQ2300312-06		20230629-030	Perchlorate6850c.lcm	100x		6/29/2023 15:40
31	EQ2300312-07		20230629-031	Perchlorate6850c.lcm	100x		6/29/2023 15:45
32	E2300606-009		20230629-032	Perchlorate6850c.lcm	1x		6/29/2023 15:53
33	E2300610-001		20230629-033	Perchlorate6850c.lcm	10000x		6/29/2023 15:58
34	E2300610-002		20230629-034	Perchlorate6850c.lcm	1x		6/29/2023 16:04
35	E2300610-003		20230629-035	Perchlorate6850c.lcm	1x		6/29/2023 16:09
36	E2300610-004		20230629-036	Perchlorate6850c.lcm	1x		6/29/2023 16:15
37	CCV		20230629-037	Perchlorate6850c.lcm	1x	227251	6/29/2023 16:21

20230629-809329

Injection Log

LCMS01 -Shimadzu 8050

1st Review: XM
2nd Review: GC

ICAL Date: 6/29/2023
Cal. Std. xp: 06/29/2023
ICAL ID: EC2300011

Mobile Phases : A:20mM ammonium acetate in water 32103046 **B:**Acetonitrile 226552

	Sample Name		File Name	Acquisition Method	Dilution	Comments	Date/Time
38	E2300610-005		20230629-038	Perchlorate6850c.lcm	1x		6/29/2023 16:26
39	E2300610-006		20230629-039	Perchlorate6850c.lcm	1x		6/29/2023 16:32
40	E2300610-007		20230629-040	Perchlorate6850c.lcm	1x		6/29/2023 16:37
41	E2300610-008		20230629-041	Perchlorate6850c.lcm	1x	DNU-D	6/29/2023 16:43
42	EQ2300312-08		20230629-042	Perchlorate6850c.lcm	1x		6/29/2023 16:48
43	EQ2300312-09		20230629-043	Perchlorate6850c.lcm	1x		6/29/2023 16:54
44	E2300611-001		20230629-044	Perchlorate6850c.lcm	1x		6/29/2023 16:59
45	E2300611-002		20230629-045	Perchlorate6850c.lcm	1x		6/29/2023 17:05
46	E2300611-003		20230629-046	Perchlorate6850c.lcm	1x		6/29/2023 17:10
47	E2300611-004		20230629-047	Perchlorate6850c.lcm	1x	DNU-D	6/29/2023 17:16
48	CCV		20230629-048	Perchlorate6850c.lcm	1x	227251	6/29/2023 17:21
49	E2300611-005		20230629-049	Perchlorate6850c.lcm	1x		6/29/2023 17:27
50	E2300611-006		20230629-050	Perchlorate6850c.lcm	1x	DNU-D	6/29/2023 17:32
51	E2300611-007		20230629-051	Perchlorate6850c.lcm	1x	DNU-D	6/29/2023 17:38
52	E2300611-008		20230629-052	Perchlorate6850c.lcm	1x		6/29/2023 17:43
53	E2300611-009		20230629-053	Perchlorate6850c.lcm	1x		6/29/2023 17:49
54	E2300611-010		20230629-054	Perchlorate6850c.lcm	1x		6/29/2023 17:55
55	CCV		20230629-055	Perchlorate6850c.lcm	1x	227251	6/29/2023 18:06

Initial Calibration - Detailed Report

Calibration ID: EC2300011 **Instrument ID:** E-LCMS-01
Column Name: 1

#	Lab Code	Sample Name	File Location	Aquisition Date
01	EC2300011-01	PERCHLORATE1	20230629-001	06/29/2023 12:59
02	EC2300011-02	PERCHLORATE2	20230629-002	06/29/2023 13:05
03	EC2300011-03	PERCHLORATE3	20230629-003	06/29/2023 13:10
04	EC2300011-04	PERCHLORATE4	20230629-004	06/29/2023 13:16
05	EC2300011-05	PERCHLORATE5	20230629-005	06/29/2023 13:21
06	EC2300011-06	PERCHLORATE6	20230629-006	06/29/2023 13:27
07	EC2300011-07	PERCHLORATE7	20230629-007	06/29/2023 13:32
08	EC2300011-08	PERCHLORATE8	20230629-008	06/29/2023 13:38
09	EC2300011-09	PERCHLORATE9	20230629-009	06/29/2023 13:43
10	EC2300011-10	PERCHLORATE10	20230629-010	06/29/2023 13:49

Analyte **Curve Fit** **Weighting**

Perchlorate **Average RF** **RSD = 2.809** **Average RF = 0.1625**

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.1000	0.1678	02	0.5000	0.1574	03	0.7000	0.1599	04	1.0000	0.1567
05	2.0000	0.1596	06	5.0000	0.1641	07	10.0000	0.1704	08	20.0000	0.1667
09	30.0000	0.1608	10	50.0000	0.1619						

Analyte

Perchlorate RSE = 2.81

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.1000	0.103	3.2	02	0.5000	0.484	-3.1	03	0.7000	0.689	-1.6
04	1.0000	0.964	-3.6	05	2.0000	1.96	-1.8	06	5.0000	5.05	1.0
07	10.0000	10.5	4.8	08	20.0000	20.5	2.6	09	30.0000	29.7	-1.1
10	50.0000	49.8	-0.4								

Initial Calibration Verification Summary Report

Calibration ID:	EC2300011	**Instrument ID:**	E-LCMS-01
Datafile ID:	20230629-011	**Column Name:**	1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
Perchlorate	EC2300011-11	T	Average RF	10	9.913	ng/mL	-0.9	<= 15

Insight Report

Printed at 6/29/2023 2:17:05 PM

Method File: I:\LCMS01\DATA\20230628\06282023.lcm
Project File: I:\LCMS01\DATA\20230628\06282023.damlp

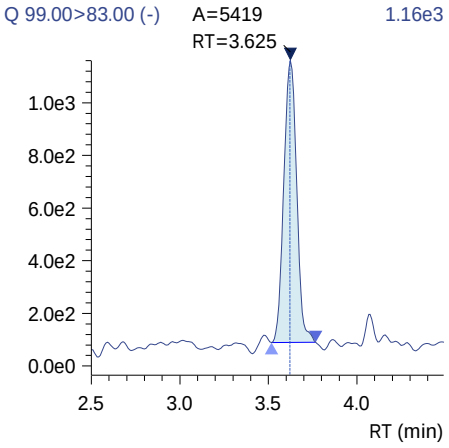
PERCHLORATE1

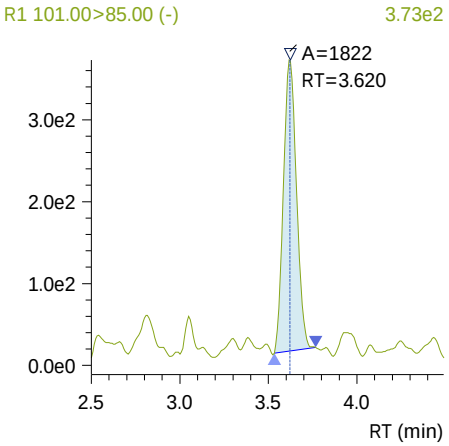
Sample ID: PERCHLORATE1
Date Acquired: 6/29/2023 12:59:40 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-001.lcd
Vial: 1 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.625	5419	323018	0.1032	ng/mL	101.00 >85.00	33.63	22.41-41.62
Sodium Perchlorate-18O4 _IS	Auto	3.617	323018	323018	1.0000	ng/mL	----	----	

Perchlorate

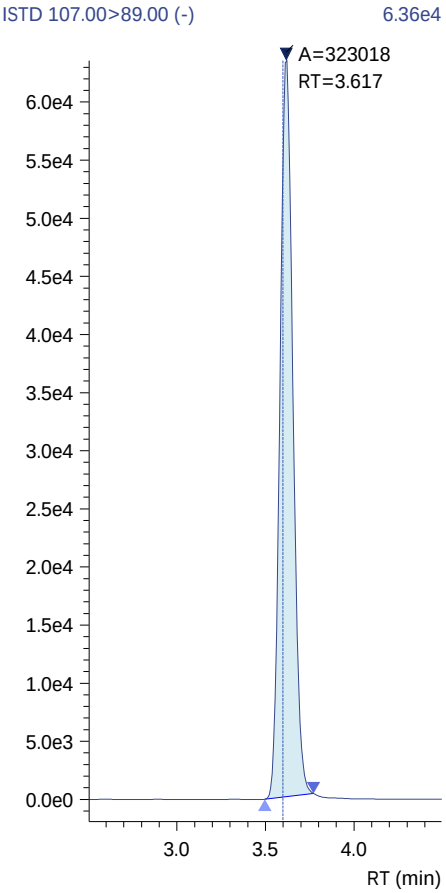
Conc 0.1032
R#1 33.63 (32.02)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/29/2023 2:17:05 PM

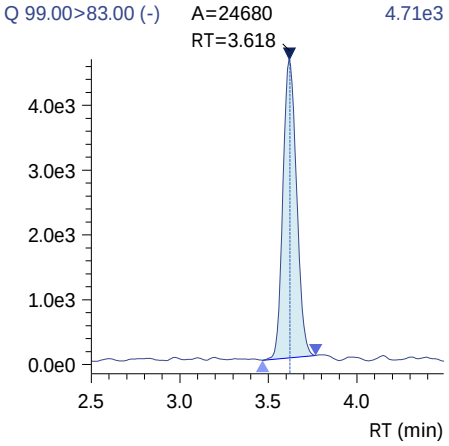
PERCHLORATE2

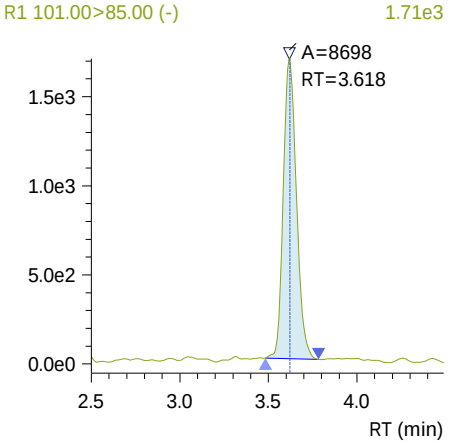
Sample ID: PERCHLORATE2
Date Acquired: 6/29/2023 1:05:11 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-002.lcd
Vial: 2 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.618	24680	313519	0.4844	ng/mL	101.00 >85.00	35.24	22.41-41.62
Sodium Perchlorate-18O4 _IS	Auto	3.618	313519	313519	1.0000	ng/mL	----	----	

Perchlorate

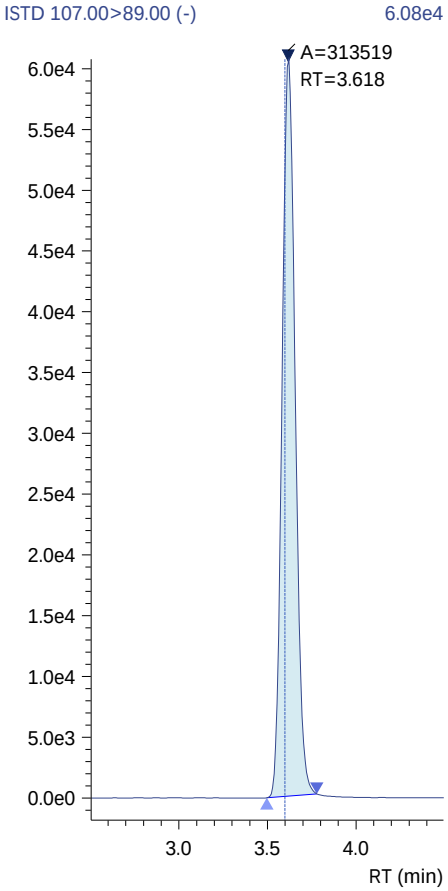
Conc 0.4844
R#1 35.24 (32.02)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/29/2023 2:17:05 PM

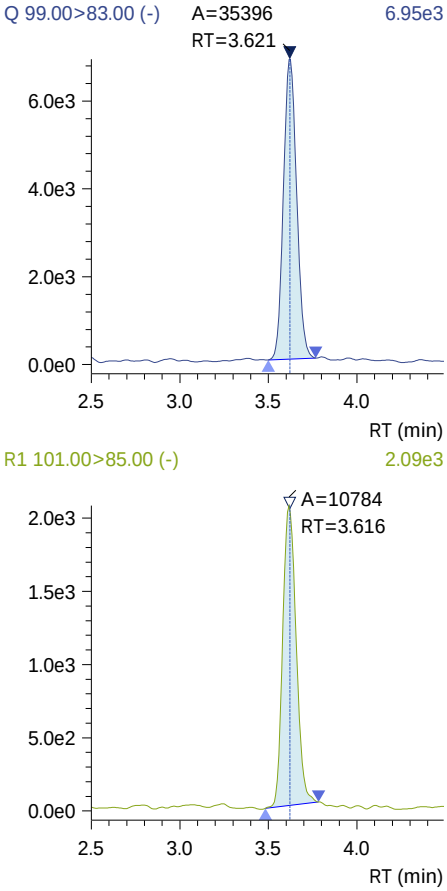
PERCHLORATE3

Sample ID: PERCHLORATE3
Date Acquired: 6/29/2023 1:10:46 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-003.lcd
Vial: 3 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.621	35396	316311	0.6886	ng/mL	101.00 >85.00	30.47	22.41-41.62
Sodium Perchlorate-18O4 _IS	Auto	3.618	316311	316311	1.0000	ng/mL	----	----	

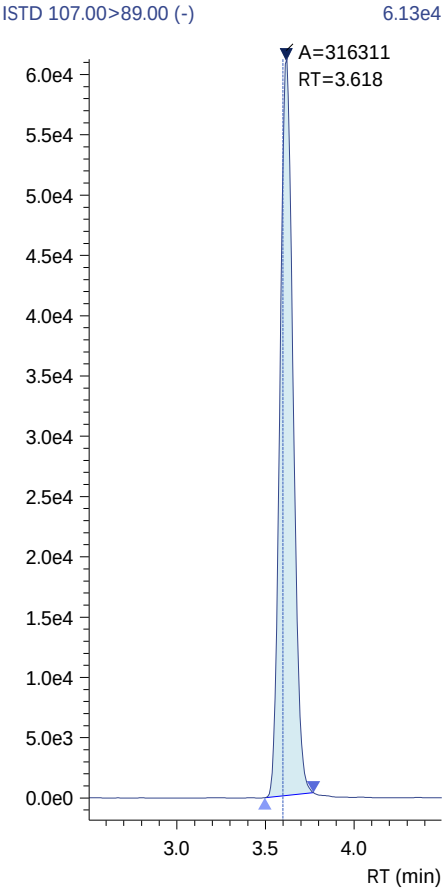
Perchlorate

Conc 0.6886
R#1 30.47 (32.02)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/29/2023 2:17:05 PM

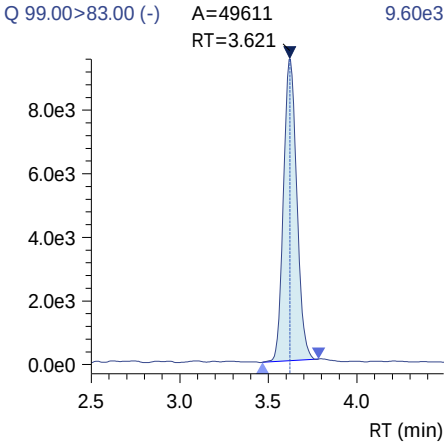
PERCHLORATE4

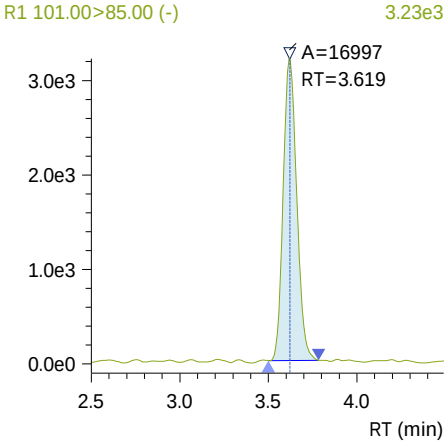
Sample ID: PERCHLORATE4
Date Acquired: 6/29/2023 1:16:19 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-004.lcd
Vial: 4 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.621	49611	316580	0.9643	ng/mL	101.00 >85.00	34.26	22.41-41.62
Sodium Perchlorate-18O4 _IS	Auto	3.618	316580	316580	1.0000	ng/mL	----	----	

Perchlorate

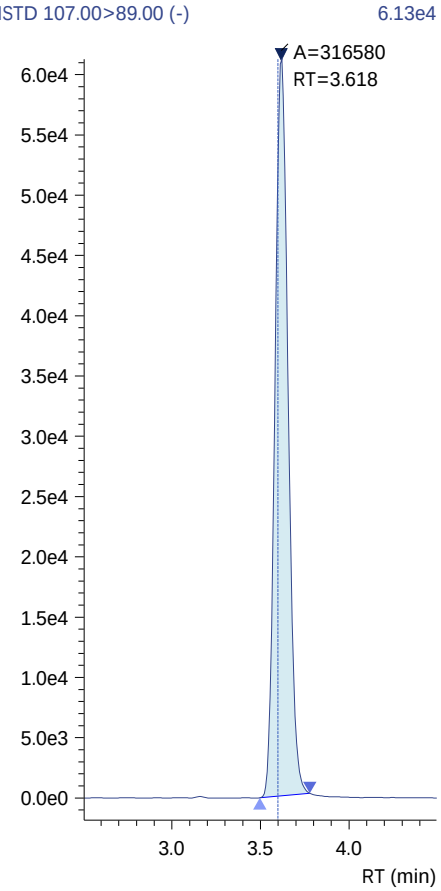
Conc 0.9643
R#1 34.26 (32.02)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/29/2023 2:17:05 PM

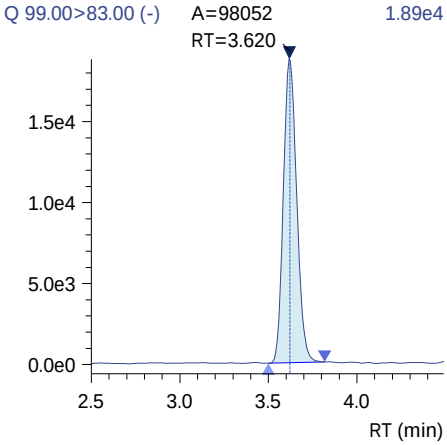
PERCHLORATE5

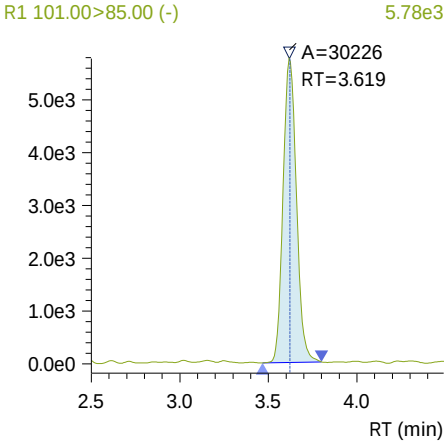
Sample ID: PERCHLORATE5
Date Acquired: 6/29/2023 1:21:50 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-005.lcd
Vial: 5 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.620	98052	307162	1.9642	ng/mL	101.00 >85.00	30.83	22.41-41.62
Sodium Perchlorate-18O4 _IS	Auto	3.617	307162	307162	1.0000	ng/mL	----	----	

Perchlorate

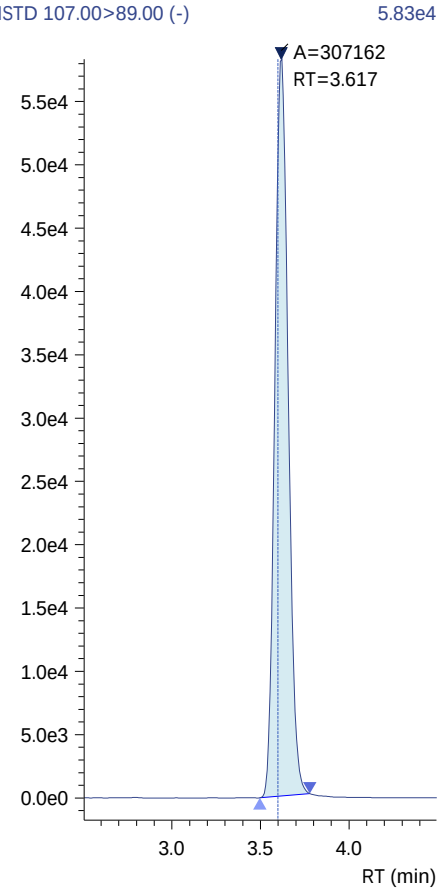
Conc 1.9642
R#1 30.83 (32.02)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/29/2023 2:17:05 PM

PERCHLORATE6

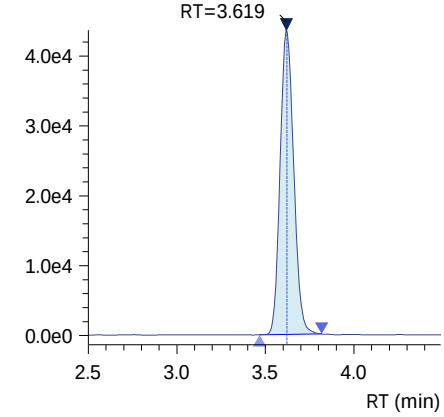
Sample ID: PERCHLORATE6
Date Acquired: 6/29/2023 1:27:22 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-006.lcd
Vial: 6 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.619	232011	282827	5.0477	ng/mL	101.00 >85.00	31.17	22.41-41.62
Sodium Perchlorate-18O4 _IS	Auto	3.617	282827	282827	1.0000	ng/mL	----	----	

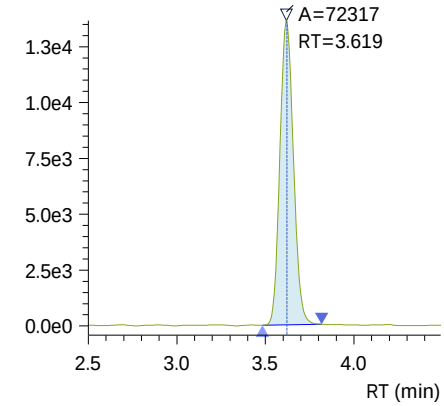
Perchlorate

Conc 5.0477
R#1 31.17 (32.02)

Q 99.00>83.00 (-) A=232011 RT=3.619 4.37e4



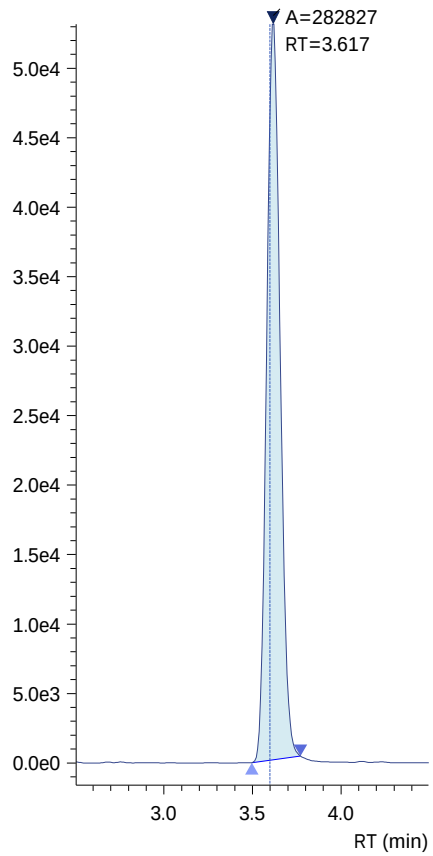
R1 101.00>85.00 (-) 1.37e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 5.32e4



Insight Report

Printed at 6/29/2023 2:17:05 PM

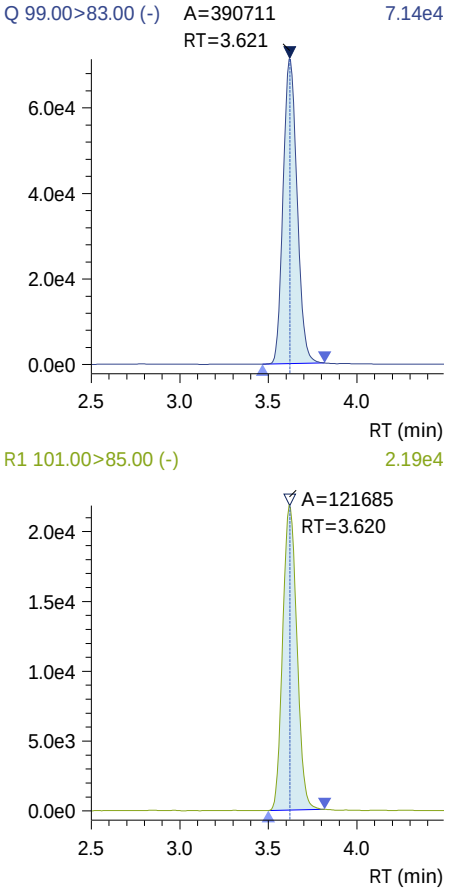
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 6/29/2023 1:32:51 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-007.lcd
Vial: 3 | 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	3.621	390711	229327	10.48 35	ng/mL	101.00 >85.00	31.14	22.41-41.62
Sodium Perchlorate-18O4_IS	Auto	3.616	229327	229327	1.0000	ng/mL	----	----	

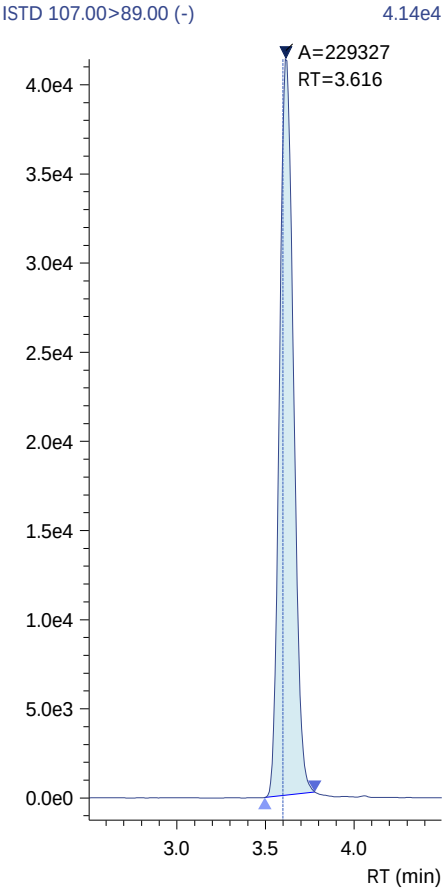
Perchlorate

Conc 10.4835
R#1 31.14 (32.02)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/29/2023 2:17:05 PM

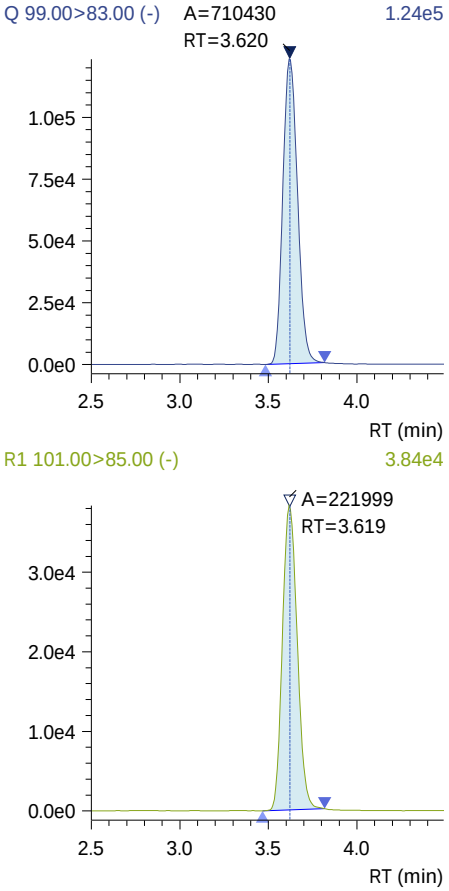
PERCHLORATE8

Sample ID: PERCHLORATE8
Date Acquired: 6/29/2023 1:38:22 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-008.lcd
Vial: 8 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.620	710430	213093	20.5144	ng/mL	101.00 >85.00	31.25	22.41-41.62
Sodium Perchlorate-18O4_IS	Auto	3.615	213093	213093	1.0000	ng/mL	----	----	

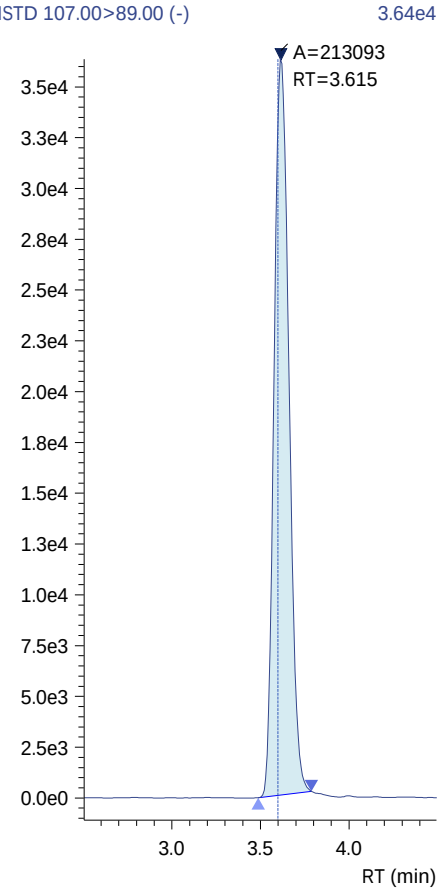
Perchlorate

Conc 20.5144
R#1 31.25 (32.02)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/29/2023 2:17:05 PM

PERCHLORATE9

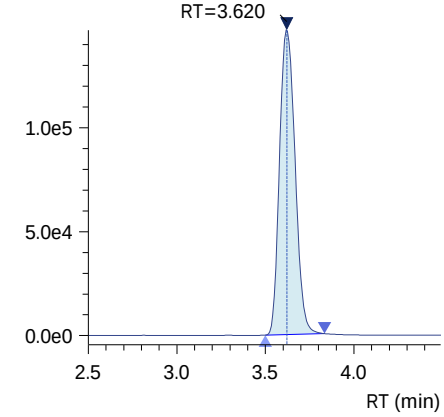
Sample ID: PERCHLORATE9
Date Acquired: 6/29/2023 1:43:53 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-009.lcd
Vial: 9 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.620	896468	185851	29.6808	ng/mL	101.00 >85.00	31.06	22.41-41.62
Sodium Perchlorate-18O4_IS	Auto	3.614	185851	185851	1.0000	ng/mL	----	----	

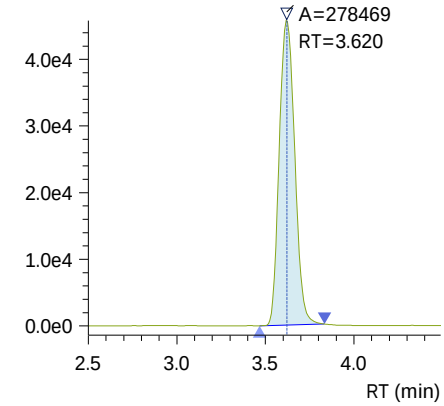
Perchlorate

Conc 29.6808
R#1 31.06 (32.02)

Q 99.00>83.00 (-) A=896468 RT=3.620 1.47e5



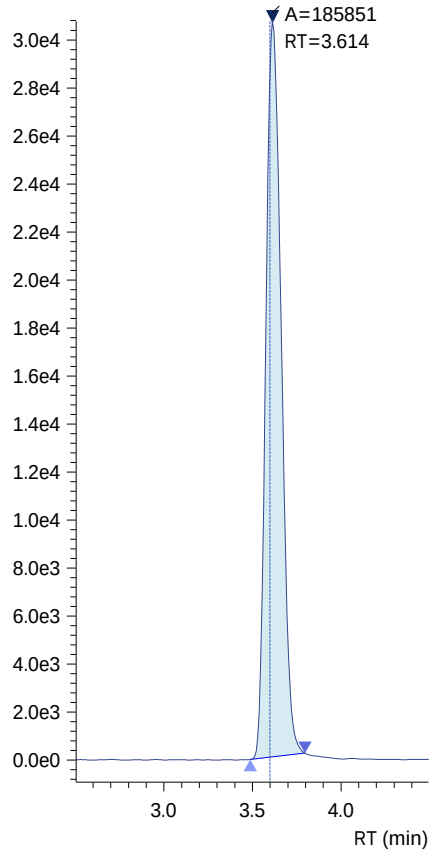
R1 101.00>85.00 (-) 4.58e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 3.08e4



Insight Report

Printed at 6/29/2023 2:17:05 PM

PERCHLORATE10

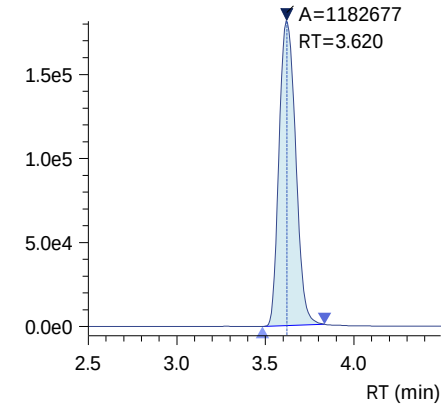
Sample ID: PERCHLORATE10
Date Acquired: 6/29/2023 1:49:27 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-010.lcd
Vial: 10 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.620	1182677	146135	49.79 86	ng/mL	101.00 >85.00	30.89	22.41-41.62
Sodium Perchlorate-18O4 _IS	Auto	3.614	146135	146135	1.0000	ng/mL	----	----	

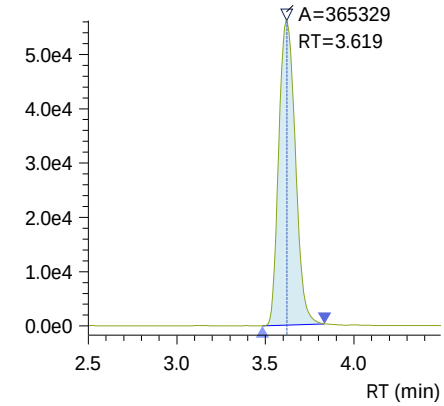
Perchlorate

Conc 49.7986
R#1 30.89 (32.02)

Q 99.00>83.00 (-) 1.82e5



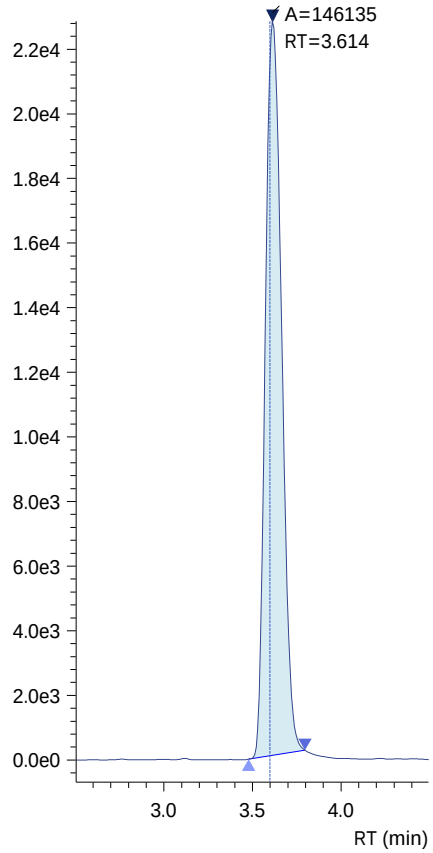
R1 101.00>85.00 (-) 5.62e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 2.29e4



Insight Report

Printed at 6/29/2023 2:17:05 PM

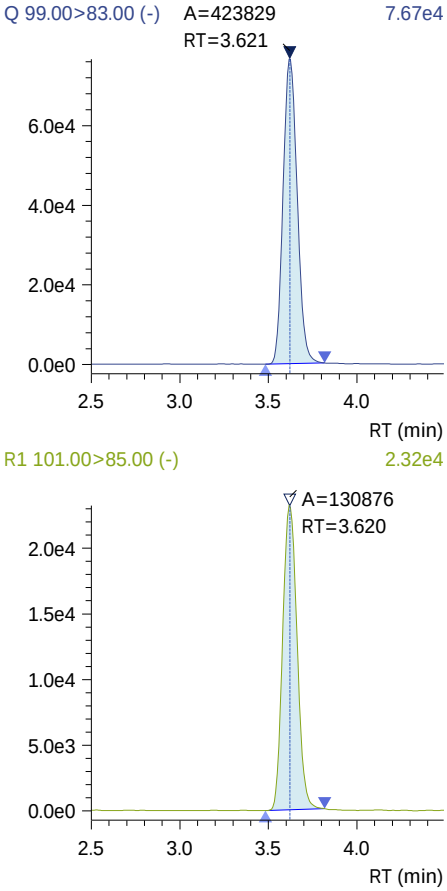
PERCHLORATEICV

Sample ID: PERCHLORATEICV
Date Acquired: 6/29/2023 1:55:00 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-011.lcd
Vial: 11 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.621	423829	263091	9.9127	ng/mL	101.00 >85.00	30.88	22.41-41.62
Sodium Perchlorate-18O4 _IS	Auto	3.617	263091	263091	1.0000	ng/mL	----	----	

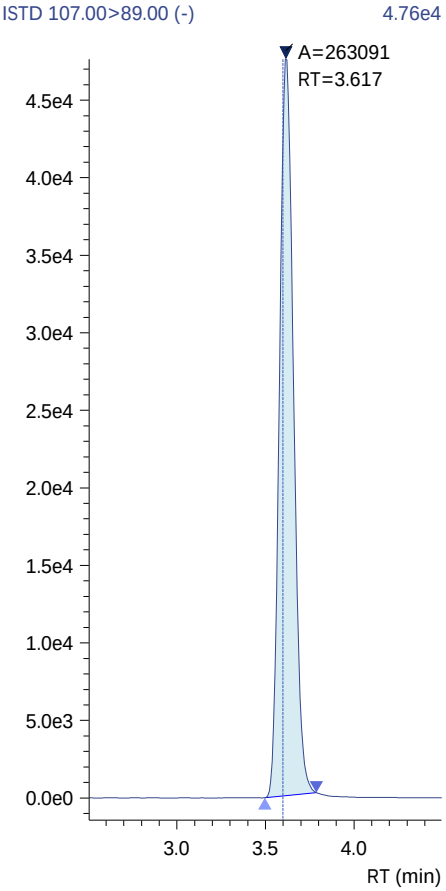
Perchlorate

Conc 9.9127
R#1 30.88 (32.02)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Chromatograms and Selected Ion Monitoring

ALS Environmental - Houston HRMS
10450 Stancliff Rd., Suite 320, Houston TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

20230725-811716

Injection Log

LCMS01 -Shimadzu 8050

1st Review: XM
2nd Review: GC

ICAL Date: 6/29/2023
Cal. Std. xp: 07/31/2023
ICAL ID: EC2300011

Mobile Phases : A:20mM ammonium acetate in water 230388 **B:**Acetonitrile 229152

	Sample Name		File Name	Acquisition Method	Dilution	Comments	Date/Time
1	IB		20230725-001	Perchlorate6850c.lcm	1x		7/25/2023 9:25
2	LODV		20230725-002~1	Perchlorate6850c.lcm	1x	230386	7/25/2023 10:16
3	ICS		20230725-003	Perchlorate6850c.lcm	1x	32103024	7/25/2023 10:22
4	CCV		20230725-004	Perchlorate6850c.lcm	1x	227251	7/25/2023 10:28
5	EQ2300354-01		20230725-005	Perchlorate6850c.lcm	1x		7/25/2023 10:33
6	EQ2300354-02		20230725-006	Perchlorate6850c.lcm	1x		7/25/2023 10:39
7	EQ2300354-03		20230725-007	Perchlorate6850c.lcm	1x		7/25/2023 10:44
8	E2300657-001		20230725-008	Perchlorate6850c.lcm	10x		7/25/2023 10:50
9	E2300657-002		20230725-009	Perchlorate6850c.lcm	10x		7/25/2023 10:55
10	E2300657-003		20230725-010	Perchlorate6850c.lcm	1x		7/25/2023 11:01
11	E2300657-004		20230725-011	Perchlorate6850c.lcm	1x		7/25/2023 11:06
12	E2300657-005		20230725-012	Perchlorate6850c.lcm	1x		7/25/2023 11:12
13	E2300657-006		20230725-013	Perchlorate6850c.lcm	1x		7/25/2023 11:17
14	E2300657-007		20230725-014	Perchlorate6850c.lcm	1x		7/25/2023 11:23
15	CCV		20230725-015	Perchlorate6850c.lcm	1x	227251	7/25/2023 11:28
16	E2300657-008		20230725-016	Perchlorate6850c.lcm	1x		7/25/2023 11:34
17	E2300657-009		20230725-017	Perchlorate6850c.lcm	1x		7/25/2023 11:40
18	E2300657-010		20230725-018	Perchlorate6850c.lcm	1x		7/25/2023 11:45
19	E2300671-001		20230725-019	Perchlorate6850c.lcm	5x		7/25/2023 11:51
20	E2300671-002		20230725-020	Perchlorate6850c.lcm	1x		7/25/2023 11:56
21	E2300671-003		20230725-021	Perchlorate6850c.lcm	1x		7/25/2023 12:02
22	E2300671-004		20230725-022	Perchlorate6850c.lcm	5x		7/25/2023 12:07
23	E2300671-005		20230725-023	Perchlorate6850c.lcm	1x		7/25/2023 12:13
24	E2300671-006		20230725-024	Perchlorate6850c.lcm	5x		7/25/2023 12:18
25	E2300671-007		20230725-025	Perchlorate6850c.lcm	1x	DNU-RR	7/25/2023 12:24
26	CCV		20230725-026	Perchlorate6850c.lcm	1x	227251	7/25/2023 12:29
27	E2300671-008		20230725-027	Perchlorate6850c.lcm	5x		7/25/2023 12:35
28	E2300687-001		20230725-028	Perchlorate6850c.lcm	1x		7/25/2023 12:53
29	E2300687-002		20230725-029	Perchlorate6850c.lcm	1x		7/25/2023 12:58
30	EQ2300355-01		20230725-030	Perchlorate6850c.lcm	1x		7/25/2023 13:04
31	EQ2300355-02		20230725-031	Perchlorate6850c.lcm	1x		7/25/2023 13:10
32	EQ2300355-03		20230725-032	Perchlorate6850c.lcm	1x	DNU-IR	7/25/2023 13:15
33	E2300672-001		20230725-033	Perchlorate6850c.lcm	1x		7/25/2023 13:21
34	E2300672-002		20230725-034	Perchlorate6850c.lcm	1x		7/25/2023 13:26
35	E2300672-003		20230725-035	Perchlorate6850c.lcm	1x		7/25/2023 13:32
36	E2300673-001		20230725-036	Perchlorate6850c.lcm	1x		7/25/2023 13:37
37	CCV		20230725-037	Perchlorate6850c.lcm	1x	227251	7/25/2023 13:43

20230725-811716

Injection Log

LCMS01 -Shimadzu 8050

1st Review: XM
2nd Review: GC

ICAL Date: 6/29/2023
Cal. Std. xp: 07/31/2023
ICAL ID: EC2300011

Mobile Phases : A:20mM ammonium acetate in water 230388 **B:**Acetonitrile 229152

	Sample Name		File Name	Acquisition Method	Dilution	Comments	Date/Time
38	E2300673-002		20230725-038	Perchlorate6850c.lcm	1x		7/25/2023 13:48
39	E2300673-003		20230725-039	Perchlorate6850c.lcm	1x		7/25/2023 13:54
40	E2300673-004		20230725-040	Perchlorate6850c.lcm	1x		7/25/2023 13:59
41	E2300673-005		20230725-041	Perchlorate6850c.lcm	5x		7/25/2023 14:05
42	E2300673-006		20230725-042	Perchlorate6850c.lcm	1x		7/25/2023 14:11
43	E2300673-007		20230725-043	Perchlorate6850c.lcm	2000x		7/25/2023 14:16
44	E2300673-008		20230725-044	Perchlorate6850c.lcm	2000x		7/25/2023 14:22
45	E2300674-001		20230725-045	Perchlorate6850c.lcm	1x		7/25/2023 14:27
46	E2300674-002		20230725-046	Perchlorate6850c.lcm	1x		7/25/2023 14:33
47	E2300674-003		20230725-047	Perchlorate6850c.lcm	1x		7/25/2023 14:38
48	CCV		20230725-048	Perchlorate6850c.lcm	1x	227251	7/25/2023 14:44
49	E2300674-004		20230725-049	Perchlorate6850c.lcm	1x		7/25/2023 14:49
50	E2300674-005		20230725-050	Perchlorate6850c.lcm	1x		7/25/2023 14:55
51	E2300674-006		20230725-051	Perchlorate6850c.lcm	1x		7/25/2023 15:00
52	E2300674-007		20230725-052	Perchlorate6850c.lcm	1x		7/25/2023 15:06
53	E2300674-008		20230725-053	Perchlorate6850c.lcm	1x		7/25/2023 15:12
54	E2300674-009		20230725-054	Perchlorate6850c.lcm	1x		7/25/2023 15:17
55	EQ2300355-03		20230725-055	Perchlorate6850c.lcm	1x		7/25/2023 15:23
56	E2300671-007		20230725-056	Perchlorate6850c.lcm	1x		7/25/2023 15:38
57	CCV		20230725-057	Perchlorate6850c.lcm	1x	227251	7/25/2023 15:43

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23070993

Service Request: E2300657
Date Analyzed: 7/25/23 10:28

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

File ID: I:\LCMS01\DATA\20230725\20230725-004
Instrument ID: E-LCMS-01
Analytical Method: 6850

Lab Code: EQ2300360-01
Analysis Lot: 811716
Signal ID: 1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	263,382	3.62
	Upper Limit ==>	395,073	5.62
	Lower Limit ==>	131,691	1.62
Associated Analyses			
Continuing Calibration Verification	EQ2300360-01	239,575	3.57
Method Blank	EQ2300354-01	328,600	3.57
Lab Control Sample	EQ2300354-02	326,269	3.57
Duplicate Lab Control Sample	EQ2300354-03	323,362	3.57
16WW37-230713	E2300657-001	230,869	3.57
16WW37-230713-FD	E2300657-002	228,637	3.57
16WW38-230713	E2300657-003	349,362	3.57
16WW44-230713	E2300657-004	330,111	3.57
16RW07-230713	E2300657-005	347,175	3.57
16RW06-230713	E2300657-006	326,949	3.57
16WW46-230713	E2300657-007	358,872	3.57

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

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23070993

Service Request: E2300657
Date Analyzed: 7/25/23 11:28

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

File ID: I:\LCMS01\DATA\20230725\20230725-015
Instrument ID: E-LCMS-01
Analytical Method: 6850

Lab Code: EQ2300360-02
Analysis Lot: 811716
Signal ID: 1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	263,382	3.62
	Upper Limit ==>	395,073	5.62
	Lower Limit ==>	131,691	1.62
Associated Analyses			
Continuing Calibration Verification	EQ2300360-02	243,256	3.57
16PM09-230713	E2300657-008	339,236	3.57
16PM06-230713	E2300657-009	350,641	3.57
16PM14-230713	E2300657-010	374,449	3.57

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

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2300657
Project:	HS23070993	**Date Analyzed:**	7/25/23 12:29

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20230725\20230725-026	**Lab Code:**	EQ2300360-03
Instrument ID:	E-LCMS-01	**Analysis Lot:**	811716
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	263,382	3.62
	Upper Limit ==>	395,073	5.62
	Lower Limit ==>	131,691	1.62
Associated Analyses			
Continuing Calibration Verification	EQ2300360-03	238,049	3.57

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

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23070993

Service Request: E2300657
Date Analyzed: 7/25/23 13:43

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

File ID: I:\LCMS01\DATA\20230725\20230725-037
Instrument ID: E-LCMS-01
Analytical Method: 6850

Lab Code: EQ2300360-04
Analysis Lot: 811716
Signal ID: 1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	263,382	3.62
	Upper Limit ==>	395,073	5.62
	Lower Limit ==>	131,691	1.62
Associated Analyses			
Continuing Calibration Verification	EQ2300360-04	234,296	3.57

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

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2300657
Project:	HS23070993	**Date Analyzed:**	7/25/23 14:44

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20230725\20230725-048	**Lab Code:**	EQ2300360-05
Instrument ID:	E-LCMS-01	**Analysis Lot:**	811716
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	263,382	3.62
	Upper Limit ==>	395,073	5.62
	Lower Limit ==>	131,691	1.62
Associated Analyses			
Continuing Calibration Verification	EQ2300360-05	236,851	3.57

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

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2300657
Project:	HS23070993	**Date Analyzed:**	7/25/23 15:43

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20230725\20230725-057	**Lab Code:**	EQ2300360-06
Instrument ID:	E-LCMS-01	**Analysis Lot:**	811716
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	263,382	3.62
	Upper Limit ==>	395,073	5.62
	Lower Limit ==>	131,691	1.62
Associated Analyses			
Continuing Calibration Verification	EQ2300360-06	225,280	3.57

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

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23070993

Service Request: E2300657
Date Analyzed: 7/25/23

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20230725\20230725-004

Calibration Date: 6/29/23
Calibration ID: EC2300011
Analysis Lot: 811716
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.0	0.1625	0.1627	0.1	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23070993

Service Request: E2300657
Date Analyzed: 7/25/23

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20230725\20230725-015

Calibration Date: 6/29/23
Calibration ID: EC2300011
Analysis Lot: 811716
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.1	0.1625	0.1646	1.3	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23070993

Service Request: E2300657
Date Analyzed: 7/25/23

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20230725\20230725-026

Calibration Date: 6/29/23
Calibration ID: EC2300011
Analysis Lot: 811716
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.1	0.1625	0.1634	0.5	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23070993

Service Request: E2300657
Date Analyzed: 7/25/23

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20230725\20230725-037

Calibration Date: 6/29/23
Calibration ID: EC2300011
Analysis Lot: 811716
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.1	0.1625	0.1642	1.1	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23070993

Service Request: E2300657
Date Analyzed: 7/25/23

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20230725\20230725-048

Calibration Date: 6/29/23
Calibration ID: EC2300011
Analysis Lot: 811716
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.93	0.1625	0.1613	-0.7	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23070993

Service Request: E2300657
Date Analyzed: 7/25/23

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20230725\20230725-057

Calibration Date: 6/29/23
Calibration ID: EC2300011
Analysis Lot: 811716
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.1	0.1625	0.1639	0.9	NA	± 15 %	Average RF

Insight Report

Printed at 7/25/2023 4:00:31 PM

Method File: I:\LCMS01\DATA\20230725\20230725.lcm
Project File: I:\LCMS01\DATA\20230725\20230725.damlp

IB

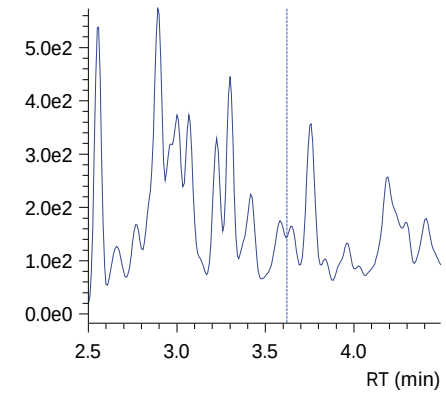
Sample ID: IB
Date Acquired: 7/25/2023 9:25:10 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-001.lcd
Vial: 4 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	382468	----	ng/mL	101.00 >85.00	0.00	19.68-36.55
Sodium Perchlorate-18O4_IS	Auto	3.580	382468	382468	1.0000	ng/mL	----	----	

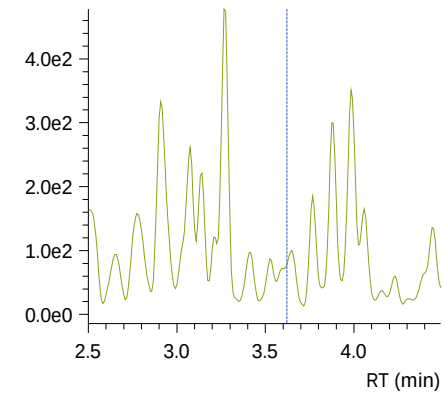
Perchlorate

Conc ----
R#1 0.00 (28.11)

Q 99.00>83.00 (-) 5.73e2



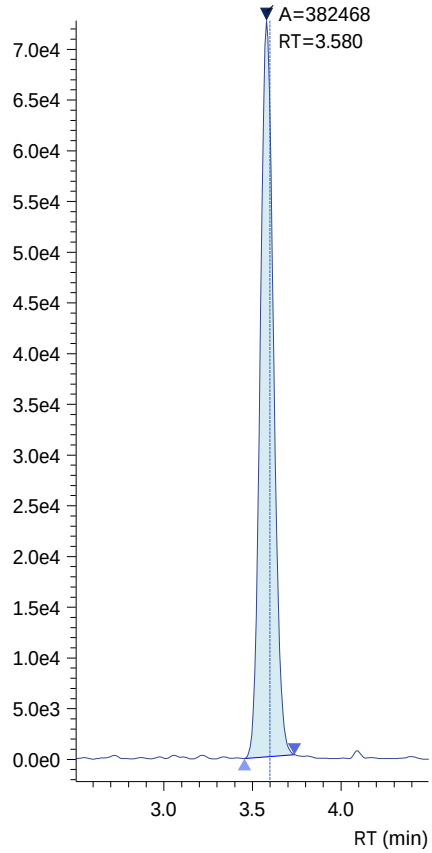
R1 101.00>85.00 (-) 4.78e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 7.28e4



Insight Report

Printed at 7/25/2023 4:00:31 PM

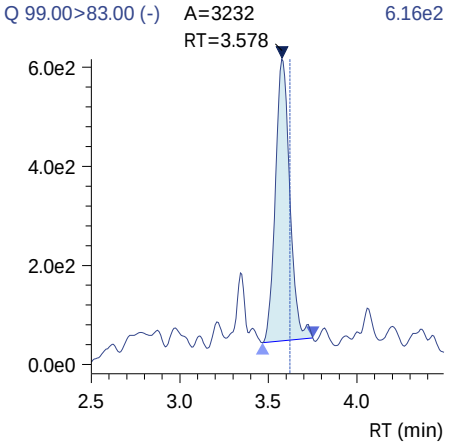
LODV

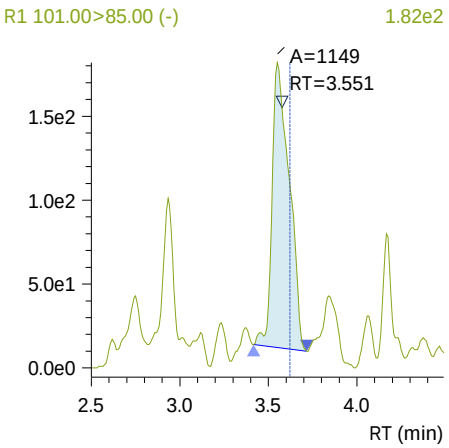
Sample ID: LODV
Date Acquired: 7/25/2023 10:16:49 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-002~1.lcd
Vial: 1 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.578	3232	357182	0.0557	ng/mL	101.00 >85.00	35.56	19.68-36.55
Sodium Perchlorate-18O4 _IS	Auto	3.571	357182	357182	1.0000	ng/mL	----	----	

Perchlorate

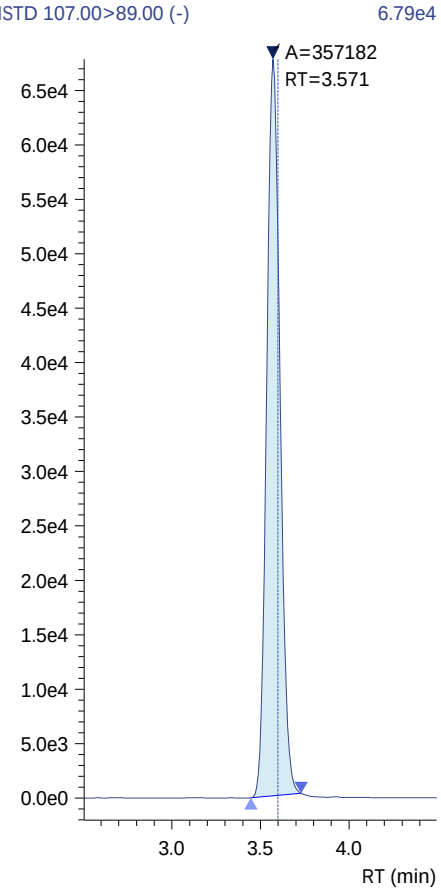
Conc 0.0557
R#1 35.56 (28.11)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/25/2023 4:00:31 PM

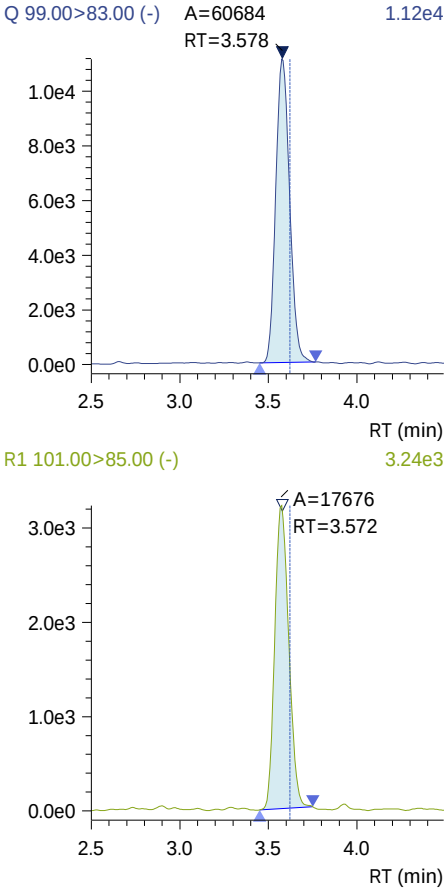
ICS

Sample ID: ICS
Date Acquired: 7/25/2023 10:22:35 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-003.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	3.578	60684	373050	1.0010	ng/mL	101.00 >85.00	29.13	19.68-36.55
Sodium Perchlorate-18O4 _IS	Auto	3.574	373050	373050	1.0000	ng/mL	----	----	

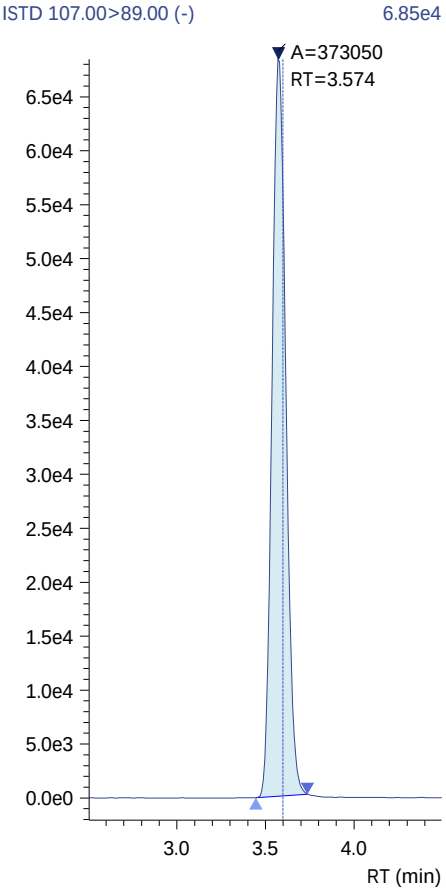
Perchlorate

Conc 1.0010
R#1 29.13 (28.11)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/25/2023 4:00:31 PM

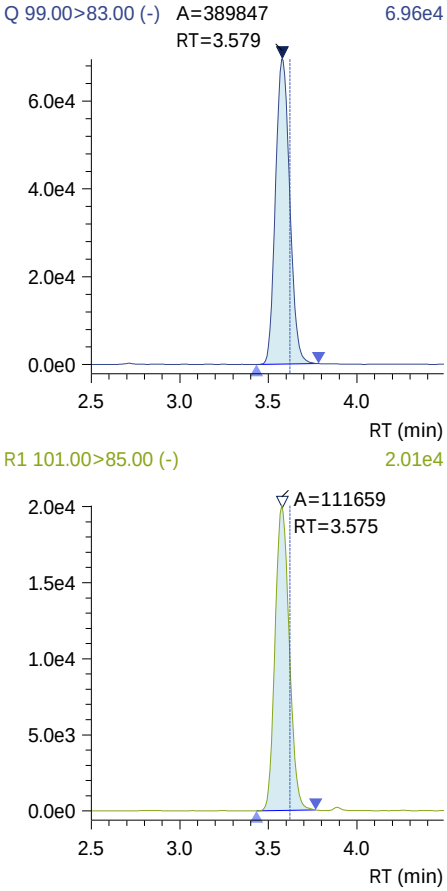
CCV

Sample ID: CCV
Date Acquired: 7/25/2023 10:28:08 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-004.lcd
Vial: 3 | 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	3.579	389847	239575	10.01 29	ng/mL	101.00 >85.00	28.64	19.68-36.55
Sodium Perchlorate-18O4_IS	Auto	3.573	239575	239575	1.0000	ng/mL	----	----	

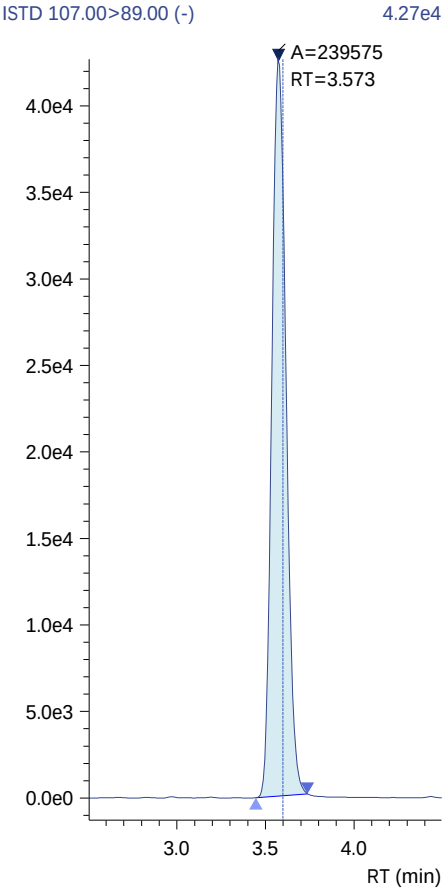
Perchlorate

Conc 10.0129
R#1 28.64 (28.11)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/25/2023 4:00:31 PM

EQ2300354-01

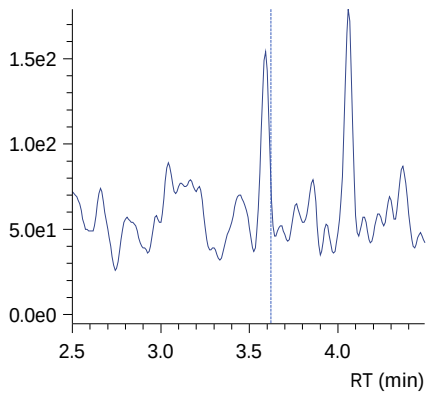
Sample ID: EQ2300354-01
Date Acquired: 7/25/2023 10:33:40 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-005.lcd
Vial: 11 | Inj. Volume: 10.0000uL | Tray: 4

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	328600	----	ng/mL	101.00 >85.00	0.00	19.68-36.55
Sodium Perchlorate-18O4_IS	Auto	3.573	328600	328600	1.0000	ng/mL	----	----	

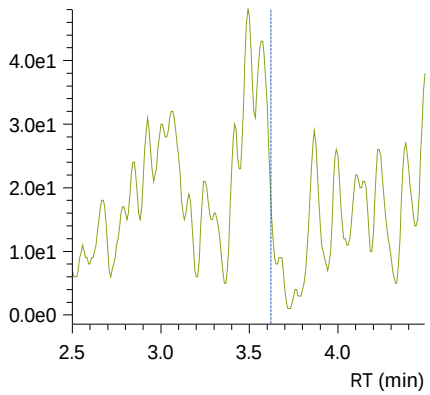
Perchlorate

Conc ----
R#1 0.00 (28.11)

Q 99.00>83.00 (-) 1.79e2



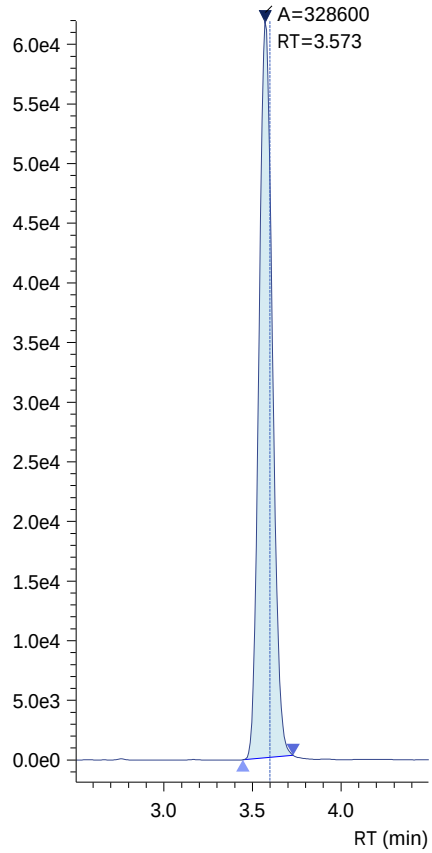
R1 101.00>85.00 (-) 4.80e1



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 6.19e4



Insight Report

Printed at 7/25/2023 4:00:31 PM

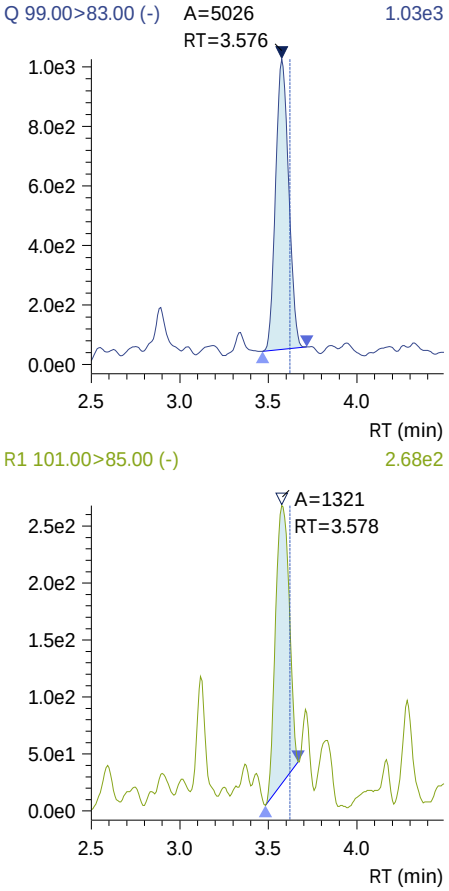
EQ2300354-02

Sample ID: EQ2300354-02
Date Acquired: 7/25/2023 10:39:12 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-006.lcd
Vial: 12 | Inj. Volume: 10.0000uL | Tray: 4

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.576	5026	326269	0.0948	ng/mL	101.00 >85.00	26.28	19.68-36.55
Sodium Perchlorate-18O4 _IS	Auto	3.574	326269	326269	1.0000	ng/mL	----	----	

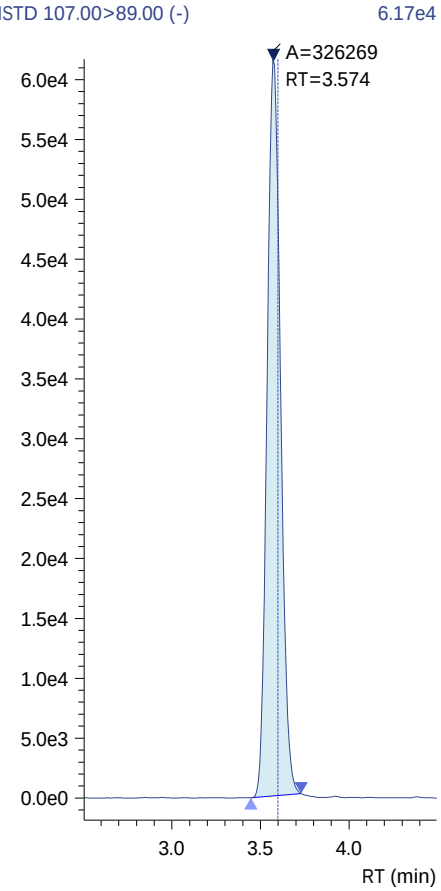
Perchlorate

Conc 0.0948
R#1 26.28 (28.11)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/25/2023 4:00:31 PM

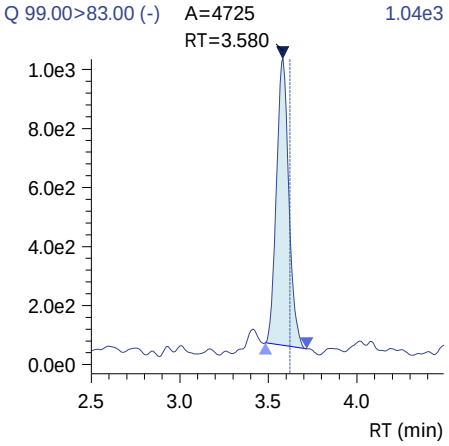
EQ2300354-03

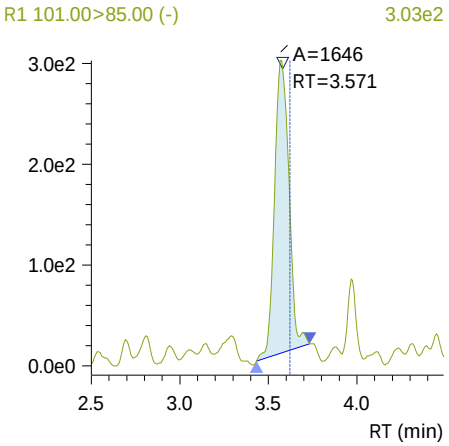
Sample ID: EQ2300354-03
Date Acquired: 7/25/2023 10:44:44 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-007.lcd
Vial: 13 | Inj. Volume: 10.0000uL | Tray: 4

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.580	4725	323362	0.0899	ng/mL	101.00 >85.00	34.84	19.68-36.55
Sodium Perchlorate-18O4 _IS	Auto	3.573	323362	323362	1.0000	ng/mL	----	----	

Perchlorate

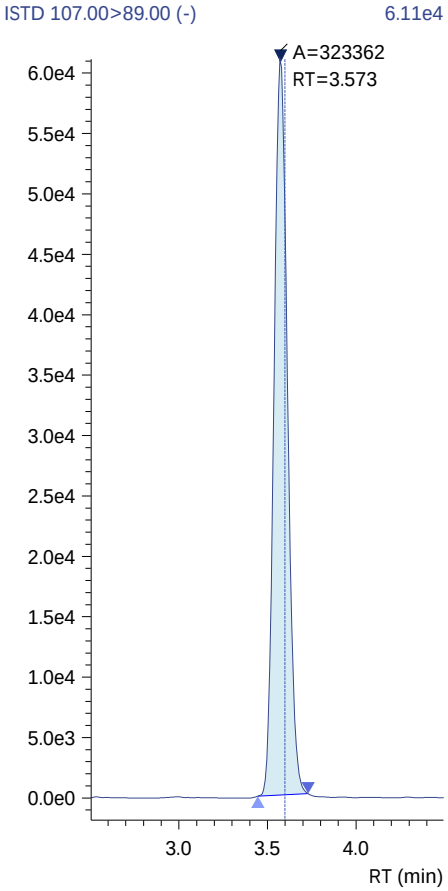
Conc 0.0899
R#1 34.84 (28.11)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/25/2023 4:00:31 PM

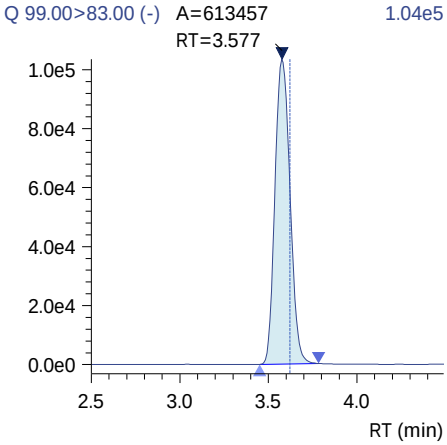
E2300657-001X10

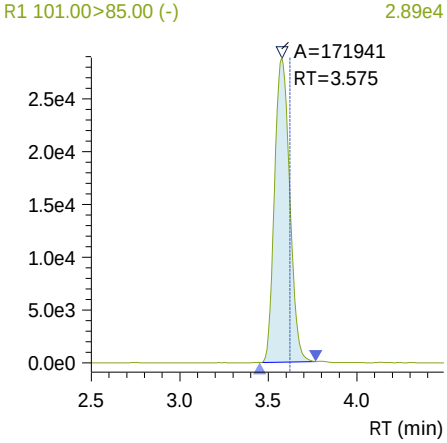
Sample ID: E2300657-001
Date Acquired: 7/25/2023 10:50:17 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-008.lcd
Vial: 14 | Inj. Volume: 10.0000uL | Tray: 4

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.577	613457	230869	16.3503	ng/mL	101.00 >85.00	28.03	19.68-36.55
Sodium Perchlorate-18O4_IS	Auto	3.573	230869	230869	1.0000	ng/mL	----	----	

Perchlorate

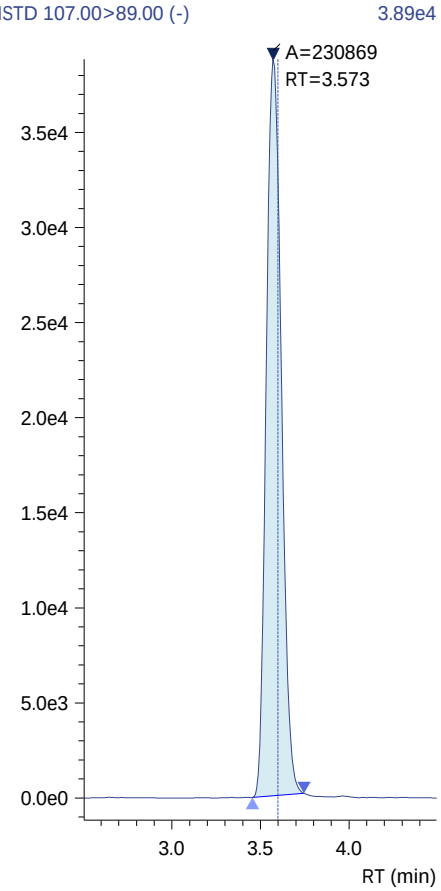
Conc 16.3503
R#1 28.03 (28.11)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/25/2023 4:00:31 PM

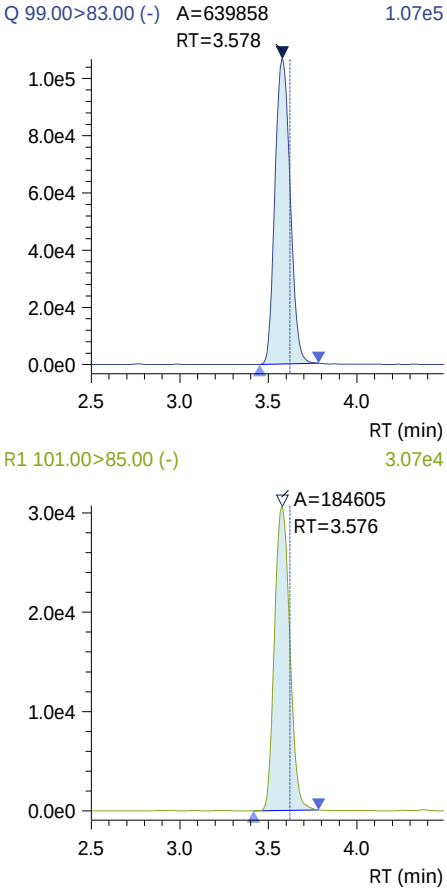
E2300657-002X10

Sample ID: E2300657-002
Date Acquired: 7/25/2023 10:55:49 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-009.lcd
Vial: 15 | Inj. Volume: 10.0000uL | Tray: 4

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.578	639858	228637	17.2204	ng/mL	101.00 >85.00	28.85	19.68-36.55
Sodium Perchlorate-18O4_IS	Auto	3.571	228637	228637	1.0000	ng/mL	----	----	

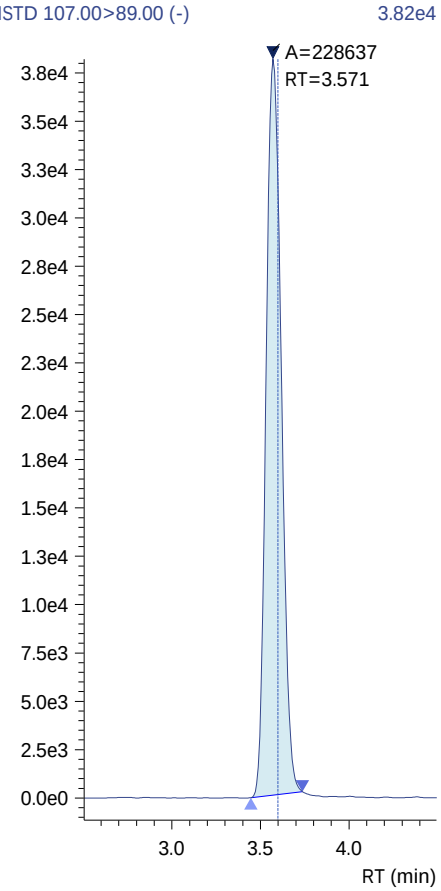
Perchlorate

Conc 17.2204
R#1 28.85 (28.11)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/25/2023 4:00:31 PM

E2300657-003

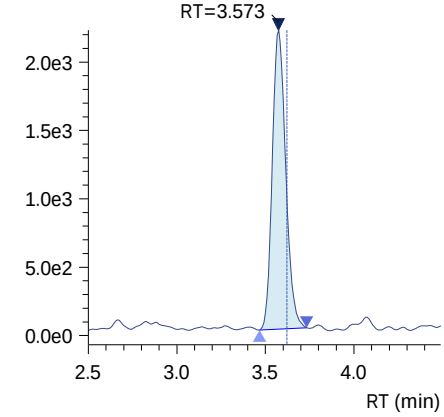
Sample ID: E2300657-003
Date Acquired: 7/25/2023 11:01:20 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-010.lcd
Vial: 16 | Inj. Volume: 10.0000uL | Tray: 4

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.573	11546	349362	0.2033	ng/mL	101.00 >85.00	26.79	19.68-36.55
Sodium Perchlorate-18O4 _IS	Auto	3.573	349362	349362	1.0000	ng/mL	----	----	

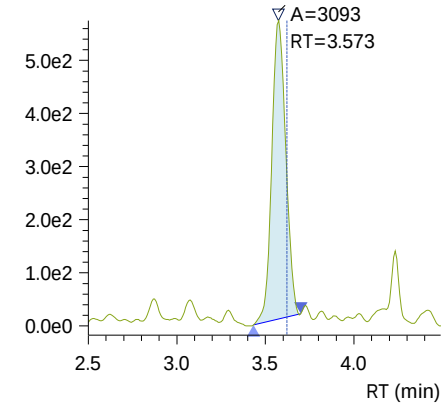
Perchlorate

Conc 0.2033
R#1 26.79 (28.11)

Q 99.00>83.00 (-) A=11546 2.23e3



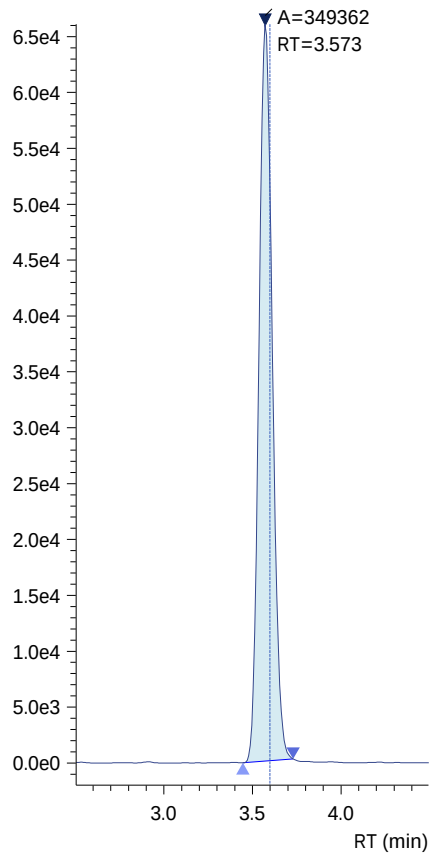
R1 101.00>85.00 (-) 5.75e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 6.61e4



Insight Report

Printed at 7/25/2023 4:00:31 PM

E2300657-004

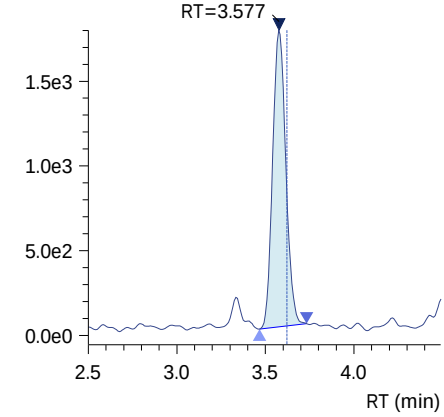
Sample ID: E2300657-004
Date Acquired: 7/25/2023 11:06:51 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-011.lcd
Vial: 17 | Inj. Volume: 10.0000uL | Tray: 4

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.577	9065	330111	0.1690	ng/mL	101.00 >85.00	30.99	19.68-36.55
Sodium Perchlorate-18O4 _IS	Auto	3.573	330111	330111	1.0000	ng/mL	----	----	

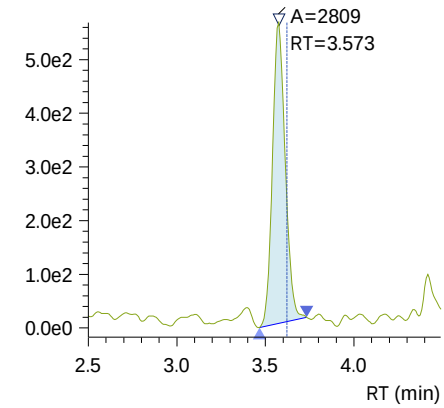
Perchlorate

Conc 0.1690
R#1 30.99 (28.11)

Q 99.00>83.00 (-) A=9065 1.80e3



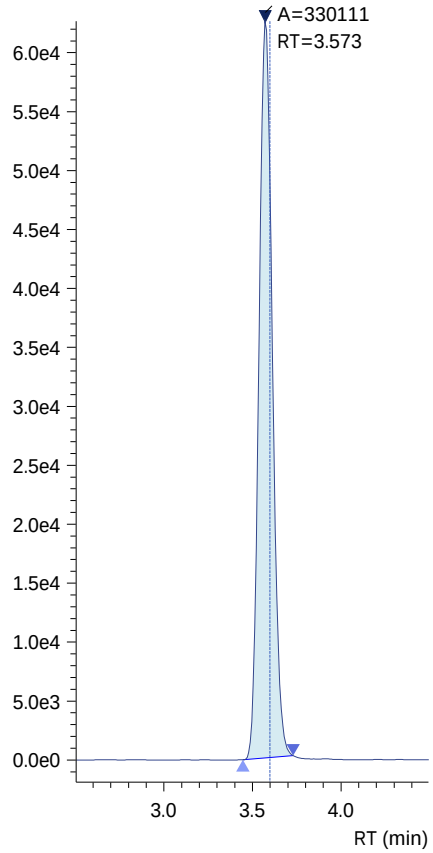
R1 101.00>85.00 (-) 5.69e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 6.27e4



Insight Report

Printed at 7/25/2023 4:00:31 PM

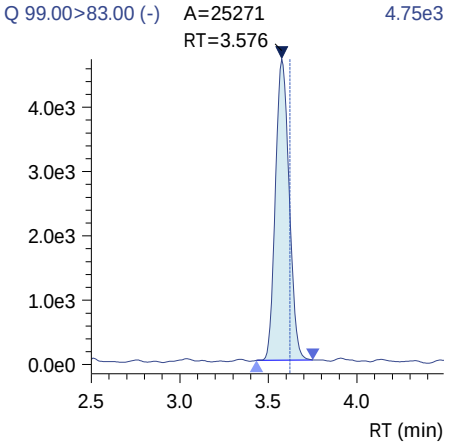
E2300657-005

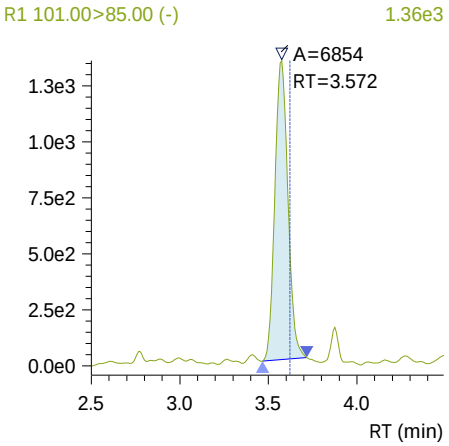
Sample ID: E2300657-005
Date Acquired: 7/25/2023 11:12:24 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-012.lcd
Vial: 18 | Inj. Volume: 10.0000uL | Tray: 4

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.576	25271	347175	0.4479	ng/mL	101.00 >85.00	27.12	19.68-36.55
Sodium Perchlorate-18O4 _IS	Auto	3.572	347175	347175	1.0000	ng/mL	----	----	

Perchlorate

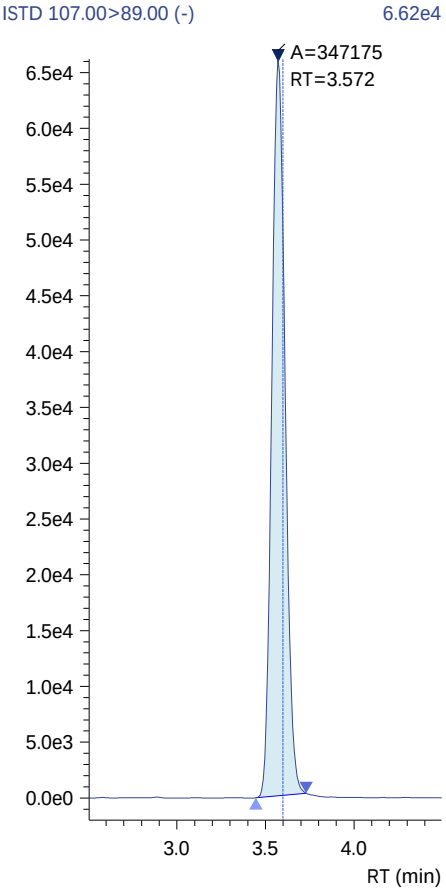
Conc 0.4479
R#1 27.12 (28.11)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/25/2023 4:00:31 PM

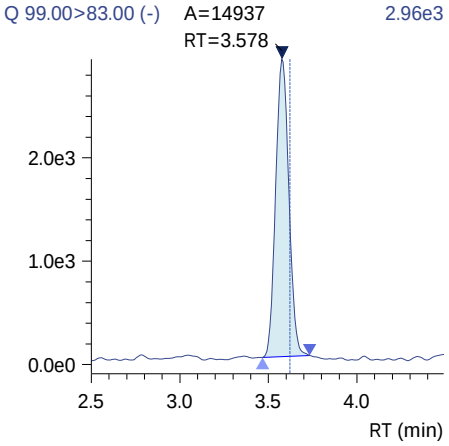
E2300657-006

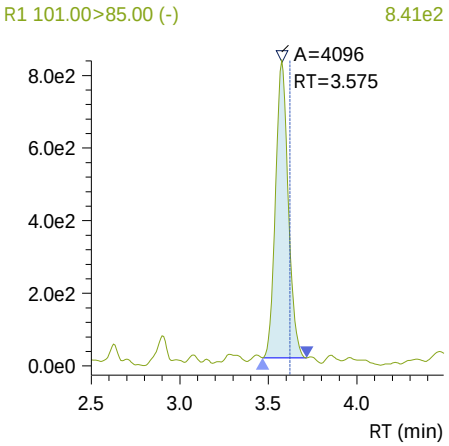
Sample ID: E2300657-006
Date Acquired: 7/25/2023 11:17:54 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-013.lcd
Vial: 19 | Inj. Volume: 10.0000uL | Tray: 4

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.578	14937	326949	0.2811	ng/mL	101.00 >85.00	27.42	19.68-36.55
Sodium Perchlorate-18O4 _IS	Auto	3.573	326949	326949	1.0000	ng/mL	----	----	

Perchlorate

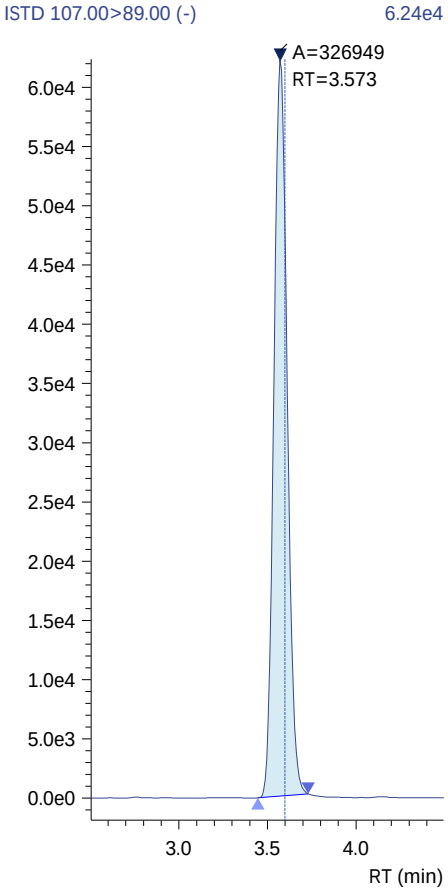
Conc 0.2811
R#1 27.42 (28.11)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/25/2023 4:00:31 PM

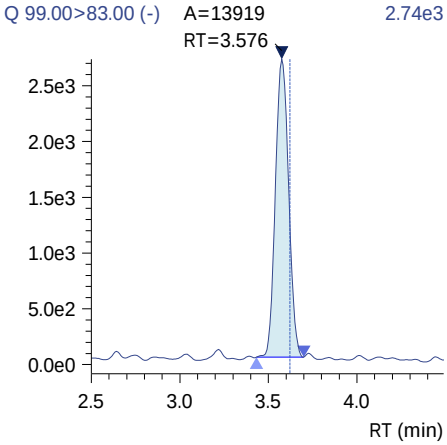
E2300657-007

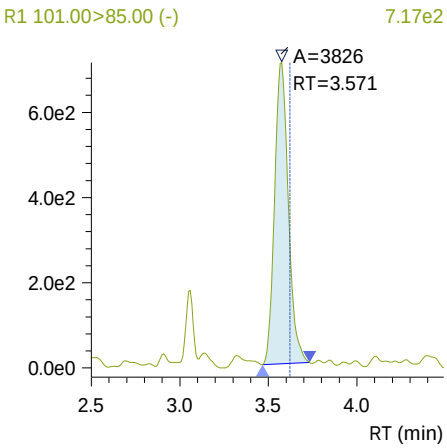
Sample ID: E2300657-007
Date Acquired: 7/25/2023 11:23:27 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-014.lcd
Vial: 20 | Inj. Volume: 10.0000uL | Tray: 4

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.576	13919	358872	0.2387	ng/mL	101.00 >85.00	27.49	19.68-36.55
Sodium Perchlorate-18O4 _IS	Auto	3.572	358872	358872	1.0000	ng/mL	----	----	

Perchlorate

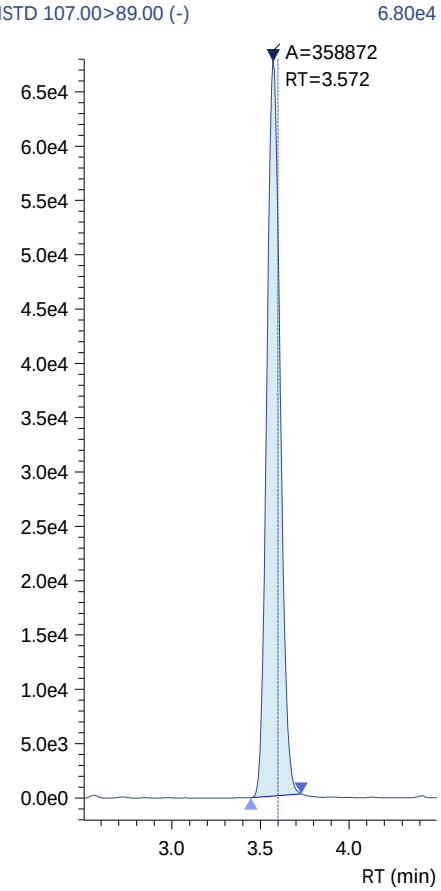
Conc 0.2387
R#1 27.49 (28.11)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/25/2023 4:00:31 PM

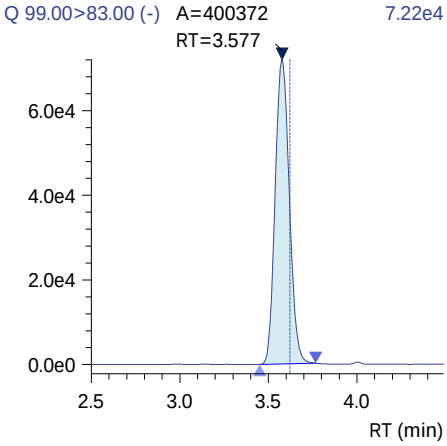
CCV

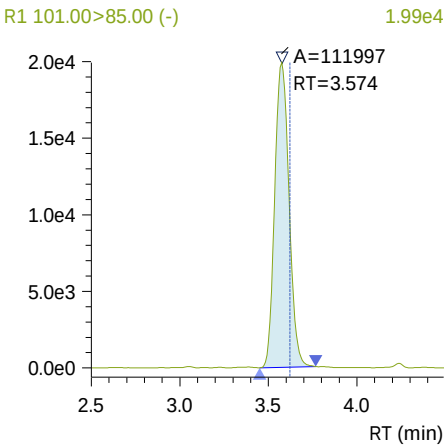
Sample ID: CCV
Date Acquired: 7/25/2023 11:28:58 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-015.lcd
Vial: 3 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.577	400372	243256	10.12 76	ng/mL	101.00 >85.00	27.97	19.68-36.55
Sodium Perchlorate-18O4_IS	Auto	3.572	243256	243256	1.0000	ng/mL	----	----	

Perchlorate

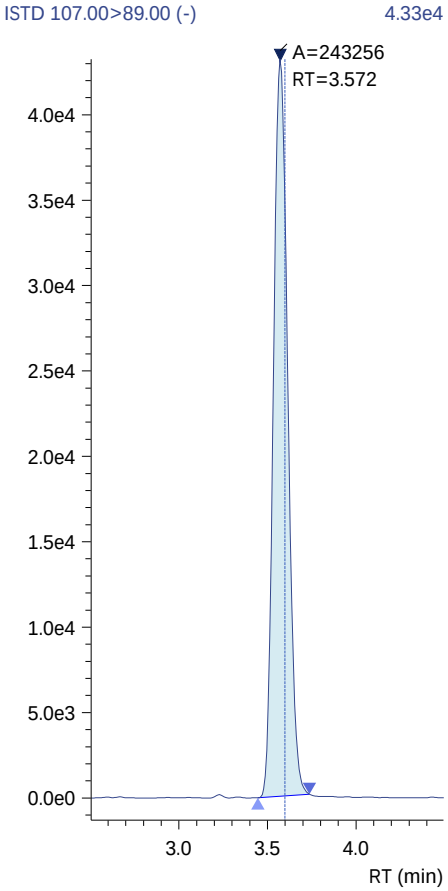
Conc 10.1276
R#1 27.97 (28.11)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/25/2023 4:00:31 PM

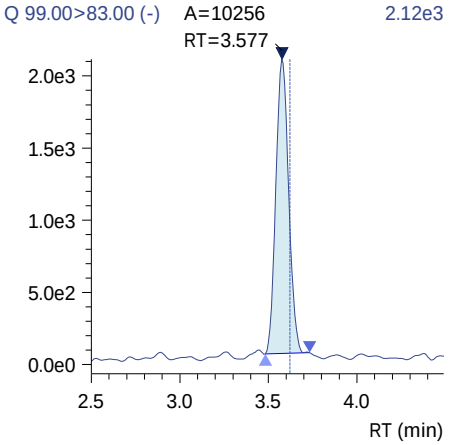
E2300657-008

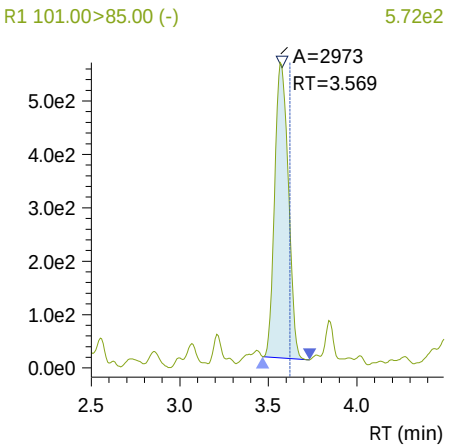
Sample ID: E2300657-008
Date Acquired: 7/25/2023 11:34:30 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-016.lcd
Vial: 21 | Inj. Volume: 10.0000uL | Tray: 4

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.577	10256	339236	0.1860	ng/mL	101.00 >85.00	28.98	19.68-36.55
Sodium Perchlorate-18O4 _IS	Auto	3.573	339236	339236	1.0000	ng/mL	----	----	

Perchlorate

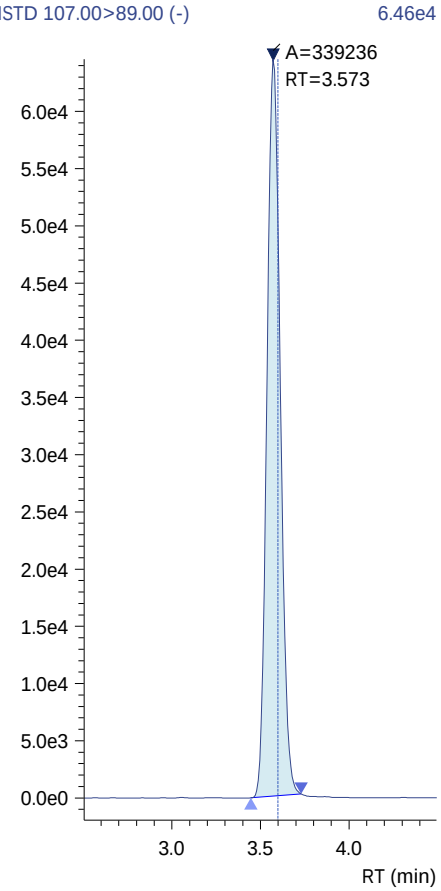
Conc 0.1860
R#1 28.98 (28.11)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/25/2023 4:00:31 PM

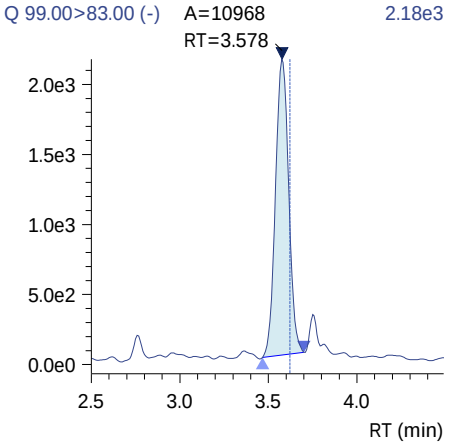
E2300657-009

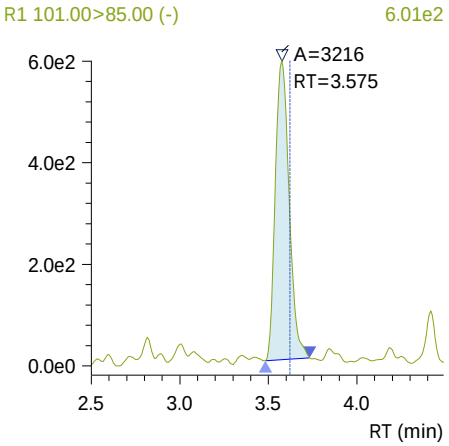
Sample ID: E2300657-009
Date Acquired: 7/25/2023 11:40:00 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-017.lcd
Vial: 22 | Inj. Volume: 10.0000uL | Tray: 4

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.578	10968	350641	0.1925	ng/mL	101.00 >85.00	29.32	19.68-36.55
Sodium Perchlorate-18O4 _IS	Auto	3.573	350641	350641	1.0000	ng/mL	----	----	

Perchlorate

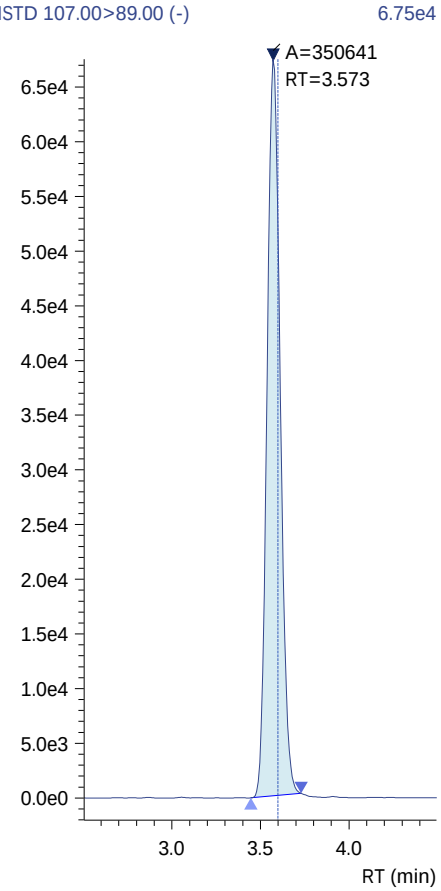
Conc 0.1925
R#1 29.32 (28.11)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/25/2023 4:00:31 PM

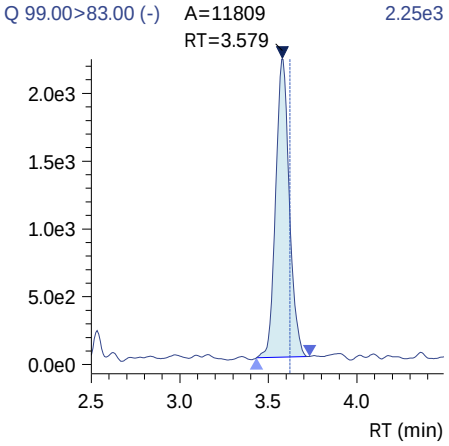
E2300657-010

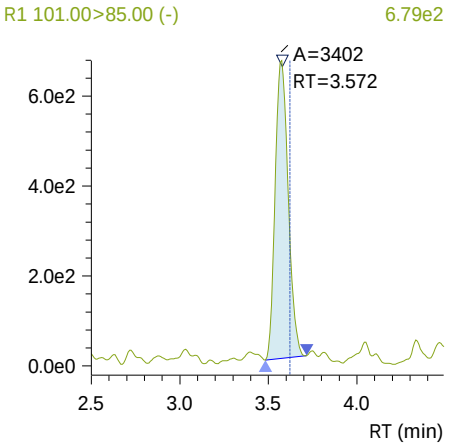
Sample ID: E2300657-010
Date Acquired: 7/25/2023 11:45:34 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-018.lcd
Vial: 23 | Inj. Volume: 10.0000uL | Tray: 4

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.579	11809	374449	0.1941	ng/mL	101.00 >85.00	28.80	19.68-36.55
Sodium Perchlorate-18O4 _IS	Auto	3.574	374449	374449	1.0000	ng/mL	----	----	

Perchlorate

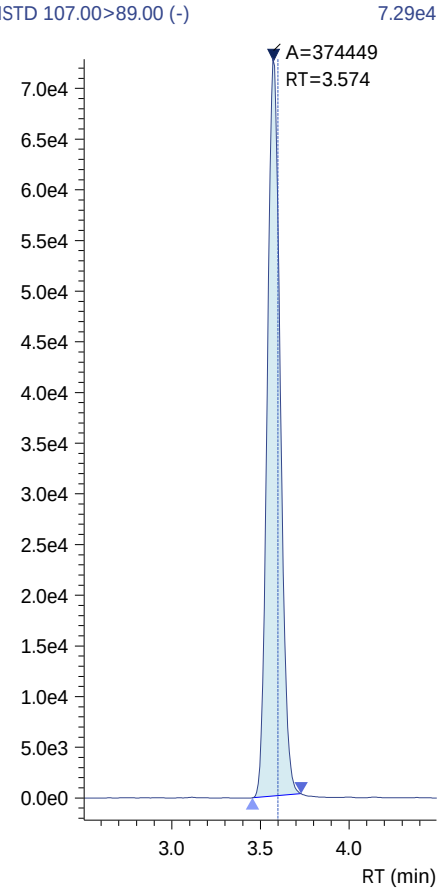
Conc 0.1941
R#1 28.80 (28.11)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/25/2023 4:00:31 PM

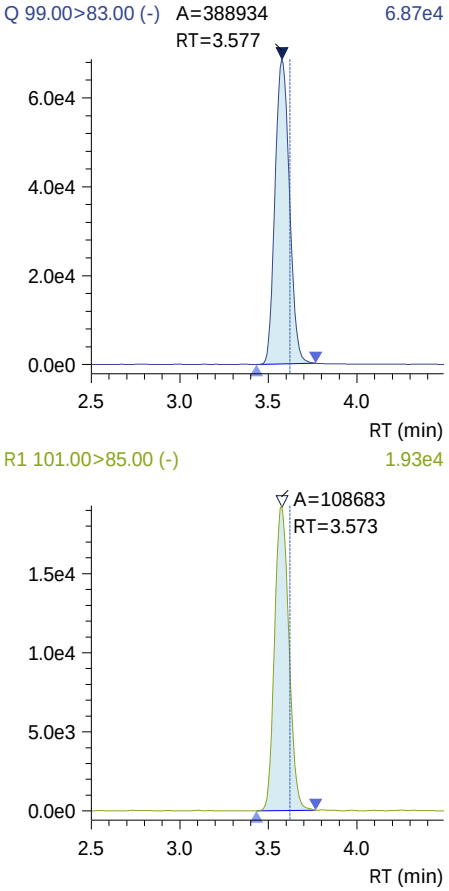
CCV

Sample ID: CCV
Date Acquired: 7/25/2023 12:29:50 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-026.lcd
Vial: 3 | 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	3.577	388934	238049	10.05 34	ng/mL	101.00 >85.00	27.94	19.68-36.55
Sodium Perchlorate-18O4 _IS	Auto	3.571	238049	238049	1.0000	ng/mL	----	----	

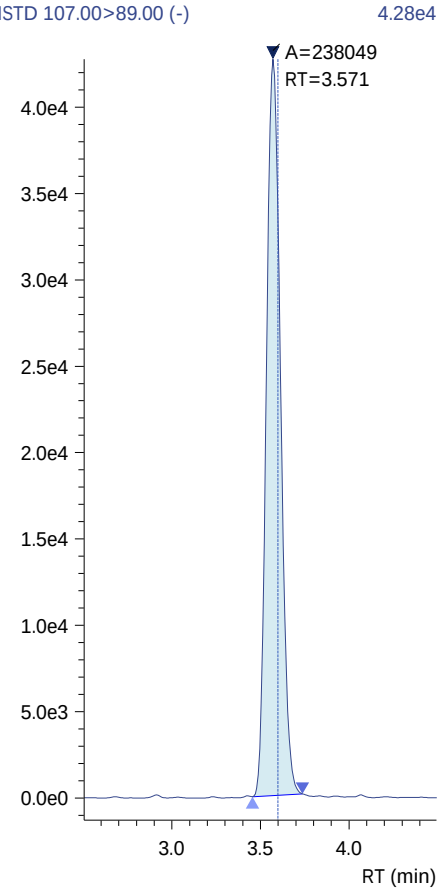
Perchlorate

Conc 10.0534
R#1 27.94 (28.11)



Sodium Perchlorate-18O4_IS

Conc 1.0000



HS23070993-MSVOA-SW8260

ALS WO# HS23070993

01321753

right solutions.
right partner.

Form 1

Organic Analysis Data Sheet

Volatiles by EPA 8260

Workorder

HS23070993

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23070993

Volatiles by EPA 8260

HS23070993-01
16WW37-230713

Collected	Received	Matrix	Basis
07/13/23 07:00	07/14/23 09:40	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	07/21/23 15:41	VOA6_442002	X072111.D
1,1-Dichloroethene	ug/L	3.7		0.20	1.0	1.0	1	07/21/23 15:41	VOA6_442002	X072111.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	07/21/23 15:41	VOA6_442002	X072111.D
cis-1,2-Dichloroethene	ug/L	24		0.20	1.0	1.0	1	07/21/23 15:41	VOA6_442002	X072111.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	07/21/23 15:41	VOA6_442002	X072111.D
Trichloroethene	ug/L	360		2.0	10	10	10	07/21/23 17:03	VOA6_442002	X072115.D
Vinyl chloride	ug/L	20		0.20	1.0	1.0	1	07/21/23 15:41	VOA6_442002	X072111.D

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23070993**

Volatiles by EPA 8260

HS23070993-02

16WW37-230713-FD

Collected	Received	Matrix	Basis
07/13/23 07:00	07/14/23 09:40	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	07/21/23 16:01	VOA6_442002	X072112.D
1,1-Dichloroethene	ug/L	3.2		0.20	1.0	1.0	1	07/21/23 16:01	VOA6_442002	X072112.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	07/21/23 16:01	VOA6_442002	X072112.D
cis-1,2-Dichloroethene	ug/L	26		0.20	1.0	1.0	1	07/21/23 16:01	VOA6_442002	X072112.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	07/21/23 16:01	VOA6_442002	X072112.D
Trichloroethene	ug/L	370		2.0	10	10	10	07/21/23 17:23	VOA6_442002	X072116.D
Vinyl chloride	ug/L	23		0.20	1.0	1.0	1	07/21/23 16:01	VOA6_442002	X072112.D

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23070993**

Volatiles by EPA 8260

HS23070993-03 | **16WW38-230713**

Collected	Received	Matrix	Basis
07/13/23 07:45	07/14/23 09:40	Water	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	20	U	6.0	20	20	20	07/21/23 19:26	VOA6_442002	X072122.D
1,1-Dichloroethene	ug/L	24		4.0	20	20	20	07/21/23 19:26	VOA6_442002	X072122.D
1,2-Dichloroethane	ug/L	20	U	4.0	20	20	20	07/21/23 19:26	VOA6_442002	X072122.D
cis-1,2-Dichloroethene	ug/L	830		4.0	20	20	20	07/21/23 19:26	VOA6_442002	X072122.D
Methylene chloride	ug/L	40	U	8.0	40	40	20	07/21/23 19:26	VOA6_442002	X072122.D
Trichloroethene	ug/L	3,700		4.0	20	20	20	07/21/23 19:26	VOA6_442002	X072122.D
Vinyl chloride	ug/L	64		4.0	20	20	20	07/21/23 19:26	VOA6_442002	X072122.D

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23070993**

Volatiles by EPA 8260

HS23070993-04 | **Collected** | **Received** | **Matrix** | **Basis**

16WW44-230713 | 07/13/23 08:25 | 07/14/23 09:40 | 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	07/21/23 18:25	VOA6_442002	X072119.D
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/21/23 18:25	VOA6_442002	X072119.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	07/21/23 18:25	VOA6_442002	X072119.D
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/21/23 18:25	VOA6_442002	X072119.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	07/21/23 18:25	VOA6_442002	X072119.D
Trichloroethene	ug/L	1.1		0.20	1.0	1.0	1	07/21/23 18:25	VOA6_442002	X072119.D
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	07/21/23 18:25	VOA6_442002	X072119.D

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23070993**

Volatiles by EPA 8260

HS23070993-05 | **16RW07-230713**

Collected	Received	Matrix	Basis
07/13/23 09:05	07/14/23 09:40	Water	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	07/21/23 20:28	VOA6_442002	X072125.D
1,1-Dichloroethene	ug/L	8.8		1.0	5.0	5.0	5	07/21/23 20:28	VOA6_442002	X072125.D
1,2-Dichloroethane	ug/L	5.0	U	1.0	5.0	5.0	5	07/21/23 20:28	VOA6_442002	X072125.D
cis-1,2-Dichloroethene	ug/L	61		1.0	5.0	5.0	5	07/21/23 20:28	VOA6_442002	X072125.D
Methylene chloride	ug/L	10	U	2.0	10	10	5	07/21/23 20:28	VOA6_442002	X072125.D
Trichloroethene	ug/L	1,300		10	50	50	50	07/21/23 20:48	VOA6_442002	X072126.D
Vinyl chloride	ug/L	49		1.0	5.0	5.0	5	07/21/23 20:28	VOA6_442002	X072125.D

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23070993**

Volatiles by EPA 8260

HS23070993-06

16RW06-230713

Collected	Received	Matrix	Basis
07/13/23 09:45	07/14/23 09:40	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	07/21/23 19:06	VOA6_442002	X072121.D
1,1-Dichloroethene	ug/L	1.1		0.20	1.0	1.0	1	07/21/23 19:06	VOA6_442002	X072121.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	07/21/23 19:06	VOA6_442002	X072121.D
cis-1,2-Dichloroethene	ug/L	11		0.20	1.0	1.0	1	07/21/23 19:06	VOA6_442002	X072121.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	07/21/23 19:06	VOA6_442002	X072121.D
Trichloroethene	ug/L	100		0.20	1.0	1.0	1	07/21/23 19:06	VOA6_442002	X072121.D
Vinyl chloride	ug/L	5.8		0.20	1.0	1.0	1	07/21/23 19:06	VOA6_442002	X072121.D

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23070993**

Volatiles by EPA 8260

HS23070993-07

16WW46-230713

Collected	Received	Matrix	Basis
07/13/23 10:30	07/14/23 09:40	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	07/21/23 18:45	VOA6_442002	X072120.D
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/21/23 18:45	VOA6_442002	X072120.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	07/21/23 18:45	VOA6_442002	X072120.D
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/21/23 18:45	VOA6_442002	X072120.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	07/21/23 18:45	VOA6_442002	X072120.D
Trichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/21/23 18:45	VOA6_442002	X072120.D
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	07/21/23 18:45	VOA6_442002	X072120.D

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23070993**

Volatiles by EPA 8260

HS23070993-08 | **Collected** | **Received** | **Matrix** | **Basis**

16PM09-230713 | 07/13/23 11:15 | 07/14/23 09:40 | Water | 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	07/21/23 19:47	VOA6_442002	X072123.D
1,1-Dichloroethene	ug/L	24	J	5.0	25	25	25	07/21/23 19:47	VOA6_442002	X072123.D
1,2-Dichloroethane	ug/L	25	U	5.0	25	25	25	07/21/23 19:47	VOA6_442002	X072123.D
cis-1,2-Dichloroethene	ug/L	400		5.0	25	25	25	07/21/23 19:47	VOA6_442002	X072123.D
Methylene chloride	ug/L	50	U	10	50	50	25	07/21/23 19:47	VOA6_442002	X072123.D
Trichloroethene	ug/L	1,200		5.0	25	25	25	07/21/23 19:47	VOA6_442002	X072123.D
Vinyl chloride	ug/L	22	J	5.0	25	25	25	07/21/23 19:47	VOA6_442002	X072123.D

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23070993**

Volatiles by EPA 8260

HS23070993-09 | **Collected** | **Received** | **Matrix** | **Basis**

16PM06-230713 | 07/13/23 11:55 | 07/14/23 09:40 | Water | 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	07/21/23 21:09	VOA6_442002	X072127.D
1,1-Dichloroethene	ug/L	250	U	50	250	250	250	07/21/23 21:09	VOA6_442002	X072127.D
1,2-Dichloroethane	ug/L	250	U	50	250	250	250	07/21/23 21:09	VOA6_442002	X072127.D
cis-1,2-Dichloroethene	ug/L	31,000		50	250	250	250	07/21/23 21:09	VOA6_442002	X072127.D
Methylene chloride	ug/L	500	U	100	500	500	250	07/21/23 21:09	VOA6_442002	X072127.D
Trichloroethene	ug/L	89,000		400	2000	2000	2000	07/21/23 21:29	VOA6_442002	X072128.D
Vinyl chloride	ug/L	850		50	250	250	250	07/21/23 21:09	VOA6_442002	X072127.D

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23070993**

Volatiles by EPA 8260

HS23070993-10

16PM14-230713

Collected	Received	Matrix	Basis
07/13/23 12:40	07/14/23 09:40	Water	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	07/21/23 20:07	VOA6_442002	X072124.D
1,1-Dichloroethene	ug/L	35	J	10	50	50	50	07/21/23 20:07	VOA6_442002	X072124.D
1,2-Dichloroethane	ug/L	30	J	10	50	50	50	07/21/23 20:07	VOA6_442002	X072124.D
cis-1,2-Dichloroethene	ug/L	7,400		10	50	50	50	07/21/23 20:07	VOA6_442002	X072124.D
Methylene chloride	ug/L	100	U	20	100	100	50	07/21/23 20:07	VOA6_442002	X072124.D
Trichloroethene	ug/L	6,600		10	50	50	50	07/21/23 20:07	VOA6_442002	X072124.D
Vinyl chloride	ug/L	280		10	50	50	50	07/21/23 20:07	VOA6_442002	X072124.D

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23070993**

Volatiles by EPA 8260

HS23070993-11

Trip Blank-230713

Collected	Received	Matrix	Basis
07/13/23 00:00	07/14/23 09:40	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	07/21/23 17:44	VOA6_442002	X072117.D
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/21/23 17:44	VOA6_442002	X072117.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	07/21/23 17:44	VOA6_442002	X072117.D
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/21/23 17:44	VOA6_442002	X072117.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	07/21/23 17:44	VOA6_442002	X072117.D
Trichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/21/23 17:44	VOA6_442002	X072117.D
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	07/21/23 17:44	VOA6_442002	X072117.D

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23070993**

Volatiles by EPA 8260

VBLKW-230721	Collected	Received	Matrix	Basis
VBLKW-230721	NA	NA	Aqueous	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	07/21/23 14:19	VOA6_442002	X072107.D
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/21/23 14:19	VOA6_442002	X072107.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	07/21/23 14:19	VOA6_442002	X072107.D
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/21/23 14:19	VOA6_442002	X072107.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	07/21/23 14:19	VOA6_442002	X072107.D
Trichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/21/23 14:19	VOA6_442002	X072107.D
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	07/21/23 14:19	VOA6_442002	X072107.D

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Form 2

System Monitoring Compound Recovery

Volatiles by EPA 8260

Workorder

HS23070993

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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

Form 2 - System Monitoring Compound Recovery

Client: Aptim Environmental & Infrastucture, Inc.

Project: LHAAP 16 January 2023

Workorder: HS23070993

RunID: VOA6-442002

Volatiles by EPA 8260

CCB-CCB	Analyzed	Conc Units	Dilution
CCB	07/21/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	52.24	50	104		80-120
4-Bromofluorobenzene	48.53	50	97.1		80-120
Dibromofluoromethane	54.13	50	108		80-120
Toluene-d8	50.78	50	102		80-120

CCV-CCV	Analyzed	Conc Units	Dilution
CCV	07/21/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	53.06	50	106		80-120
4-Bromofluorobenzene	50.79	50	102		80-120
Dibromofluoromethane	54.79	50	110		80-120
Toluene-d8	44.89	50	89.8		80-120

HS23070993-01	Analyzed	Conc Units	Dilution
16WW37-230713	07/21/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	54	50	107		81-118
4-Bromofluorobenzene	48	50	95.0		85-114
Dibromofluoromethane	54	50	107		80-119
Toluene-d8	51	50	102		89-112
1,2-Dichloroethane-d4	570	500	114		81-118
4-Bromofluorobenzene	470	500	94.0		85-114
Dibromofluoromethane	540	500	108		80-119
Toluene-d8	520	500	104		89-112

Form 2 - System Monitoring Compound Recovery

Client: Aptim Environmental & Infrastucture, Inc.

Project: LHAAP 16 January 2023

Workorder: HS23070993

RunID: VOA6-442002

Volatiles by EPA 8260

HS23070993-02	Analyzed	Conc Units	Dilution
16WW37-230713-FD	07/21/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	56	50	113		81-118
4-Bromofluorobenzene	48	50	95.7		85-114
Dibromofluoromethane	56	50	112		80-119
Toluene-d8	51	50	102		89-112
1,2-Dichloroethane-d4	570	500	114		81-118
4-Bromofluorobenzene	470	500	94.5		85-114
Dibromofluoromethane	560	500	112		80-119
Toluene-d8	520	500	104		89-112

HS23070993-03	Analyzed	Conc Units	Dilution
16WW38-230713	07/21/23	%REC	20

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	1100	1000	114		81-118
4-Bromofluorobenzene	960	1000	95.9		85-114
Dibromofluoromethane	1100	1000	111		80-119
Toluene-d8	1000	1000	104		89-112

HS23070993-04	Analyzed	Conc Units	Dilution
16WW44-230713	07/21/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	57	50	113		81-118
4-Bromofluorobenzene	46	50	92.0		85-114
Dibromofluoromethane	55	50	110		80-119
Toluene-d8	52	50	104		89-112

Form 2 - System Monitoring Compound Recovery

Client: Aptim Environmental & Infrastucture, Inc.

Project: LHAAP 16 January 2023

Workorder: HS23070993

RunID: VOA6-442002

Volatiles by EPA 8260

HS23070993-05	Analyzed	Conc Units	Dilution
16RW07-230713	07/21/23	%REC	5

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	290	250	116		81-118
4-Bromofluorobenzene	240	250	96.7		85-114
Dibromofluoromethane	280	250	113		80-119
Toluene-d8	260	250	103		89-112
1,2-Dichloroethane-d4	2800	2500	113		81-118
4-Bromofluorobenzene	2400	2500	96.4		85-114
Dibromofluoromethane	2700	2500	107		80-119
Toluene-d8	2600	2500	102		89-112

HS23070993-06	Analyzed	Conc Units	Dilution
16RW06-230713	07/21/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	55	50	110		81-118
4-Bromofluorobenzene	48	50	95.8		85-114
Dibromofluoromethane	54	50	108		80-119
Toluene-d8	52	50	103		89-112

HS23070993-07	Analyzed	Conc Units	Dilution
16WW46-230713	07/21/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	57	50	114		81-118
4-Bromofluorobenzene	49	50	98.1		85-114
Dibromofluoromethane	57	50	114		80-119
Toluene-d8	52	50	103		89-112

Form 2 - System Monitoring Compound Recovery

Client: Aptim Environmental & Infrastucture, Inc.

Project: LHAAP 16 January 2023

Workorder: HS23070993

RunID: VOA6-442002

Volatiles by EPA 8260

HS23070993-08	Analyzed	Conc Units	Dilution
16PM09-230713	07/21/23	%REC	25

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	1400	1250	111		81-118
4-Bromofluorobenzene	1200	1250	96.0		85-114
Dibromofluoromethane	1400	1250	108		80-119
Toluene-d8	1300	1250	104		89-112

HS23070993-09	Analyzed	Conc Units	Dilution
16PM06-230713	07/21/23	%REC	250

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	14000	12500	111		81-118
4-Bromofluorobenzene	12000	12500	94.1		85-114
Dibromofluoromethane	13000	12500	107		80-119
Toluene-d8	13000	12500	101		89-112
1,2-Dichloroethane-d4	110000	100000	113		81-118
4-Bromofluorobenzene	95000	100000	94.8		85-114
Dibromofluoromethane	110000	100000	110		80-119
Toluene-d8	100000	100000	102		89-112

HS23070993-10	Analyzed	Conc Units	Dilution
16PM14-230713	07/21/23	%REC	50

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	2800	2500	113		81-118
4-Bromofluorobenzene	2500	2500	98.0		85-114
Dibromofluoromethane	2800	2500	110		80-119
Toluene-d8	2600	2500	103		89-112

Form 2 - System Monitoring Compound Recovery

Client: Aptim Environmental & Infrastucture, Inc.

Project: LHAAP 16 January 2023

Workorder: HS23070993

RunID: VOA6-442002

Volatiles by EPA 8260

HS23070993-11	Analyzed	Conc Units	Dilution
Trip Blank-230713	07/21/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	56	50	111		81-118
4-Bromofluorobenzene	48	50	95.1		85-114
Dibromofluoromethane	56	50	111		80-119
Toluene-d8	51	50	102		89-112

HS23071109-01MS	Analyzed	Conc Units	Dilution
BatchQC	07/21/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	56.93	50	114		81-118
4-Bromofluorobenzene	49.4	50	98.8		85-114
Dibromofluoromethane	55.55	50	111		80-119
Toluene-d8	52.44	50	105		89-112

HS23071109-01MSD	Analyzed	Conc Units	Dilution
BatchQC	07/21/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	56.46	50	113		81-118
4-Bromofluorobenzene	49.84	50	99.7		85-114
Dibromofluoromethane	55.08	50	110		80-119
Toluene-d8	52.07	50	104		89-112

Form 2 - System Monitoring Compound Recovery

Client: Aptim Environmental & Infrastucture, Inc.

Project: LHAAP 16 January 2023

Workorder: HS23070993

RunID: VOA6-442002

Volatiles by EPA 8260

VBLKW-230721	Analyzed	Conc Units	Dilution
VBLKW-230721	07/21/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	54.53	50	109		81-118
4-Bromofluorobenzene	46.89	50	93.8		85-114
Dibromofluoromethane	54.29	50	109		80-119
Toluene-d8	51.49	50	103		89-112

VLCSW-230721	Analyzed	Conc Units	Dilution
VLCSW-230721	07/21/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	50.42	50	101		81-118
4-Bromofluorobenzene	50.57	50	101		85-114
Dibromofluoromethane	52.13	50	104		80-119
Toluene-d8	45.82	50	91.6		89-112

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Form 3A

Matrix Spike/Spike Duplicate Recovery

Volatiles by EPA 8260

Workorder

HS23070993

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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

Form 3A - Matrix Spike/Spike Duplicate Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23070993**

RunID VOA6-442002

Volatiles by EPA 8260

BatchQC (HS23071109-01)				HS23071109-01MS				HS23071109-01MSD						
Sample Matrix Aqueous			**Run Date**	07/21/23				07/21/23						
Result Units ug/L			**Run Time**	16:22				16:42						
			Data File	X072113.D				X072114.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	23.33	20	117		22.72	20	114		20	2.65	
1,1-Dichloroethene	71-131	1	0	25.92	20	130		24.48	20	122		20	5.71	
1,2-Dichloroethane	73-128	1	0	22.8	20	114		21.56	20	108		20	5.59	
cis-1,2-Dichloroethene	78-123	1	0	23.7	20	119		18.11	20	90		20	26.8	
Methylene chloride	74-124	1	0	23.92	20	120		19.77	20	99		20	19	
Trichloroethene	79-123	1	0	24.53	20	123		22.9	20	114		20	6.88	
Vinyl chloride	58-137	1	0	26.09	20	130		24.83	20	124		20	4.91	

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 8260

Workorder

HS23070993

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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

Form 3B - Laboratory Control Sample Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23070993

SAMPLENUM
VLCSW-230721

Volatiles by EPA 8260

VOA6_442002			VLCSW-230721			
Spike Matrix Aqueous		**Run Date**	07/21/23			
Result Units ug/L		**Run Time**	13:38			
		Data File	X072105.D			
Analyte	%Recovery Limits	Spike Added	LCS Result	%R	Q	
1,1,2-Trichloroethane	80-119	20	19.65	98		
1,1-Dichloroethene	71-131	20	20.98	105		
1,2-Dichloroethane	73-128	20	18.24	91		
cis-1,2-Dichloroethene	78-123	20	19.18	96		
Methylene chloride	74-124	20	19.61	98		
Trichloroethene	79-123	20	18.59	93		
Vinyl chloride	58-137	20	21.3	106		

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

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Form 4

Method Blank Summary

Volatiles by EPA 8260

Workorder

HS23070993

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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

Form 4 - Method Blank Summary

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23070993

Volatiles by EPA 8260

Client Sample ID	Type	Lab Sample ID	File ID	Date Analyzed	Run ID
METHOD BLANK	MBLK	VBLKW-230721	X072107.D	07/21/23 14:19	VOA6_442002
VLCSW-230721	LCS	VLCSW-230721	X072105.D	07/21/23 13:38	VOA6_442002
16WW37-230713	SAMP	HS23070993-01	X072111.D	07/21/23 15:41	VOA6_442002
16WW37-230713-FD	SAMP	HS23070993-02	X072112.D	07/21/23 16:01	VOA6_442002
BatchQC	MS	HS23071109-01MS	X072113.D	07/21/23 16:22	VOA6_442002
BatchQC	MSD	HS23071109-01MSD	X072114.D	07/21/23 16:42	VOA6_442002
16WW37-230713	SAMP	HS23070993-01	X072115.D	07/21/23 17:03	VOA6_442002
16WW37-230713-FD	SAMP	HS23070993-02	X072116.D	07/21/23 17:23	VOA6_442002
Trip Blank-230713	SAMP	HS23070993-11	X072117.D	07/21/23 17:44	VOA6_442002
16WW44-230713	SAMP	HS23070993-04	X072119.D	07/21/23 18:25	VOA6_442002
16WW46-230713	SAMP	HS23070993-07	X072120.D	07/21/23 18:45	VOA6_442002
16RW06-230713	SAMP	HS23070993-06	X072121.D	07/21/23 19:06	VOA6_442002
16WW38-230713	SAMP	HS23070993-03	X072122.D	07/21/23 19:26	VOA6_442002
16PM09-230713	SAMP	HS23070993-08	X072123.D	07/21/23 19:47	VOA6_442002
16PM14-230713	SAMP	HS23070993-10	X072124.D	07/21/23 20:07	VOA6_442002
16RW07-230713	SAMP	HS23070993-05	X072125.D	07/21/23 20:28	VOA6_442002
16RW07-230713	SAMP	HS23070993-05	X072126.D	07/21/23 20:48	VOA6_442002
16PM06-230713	SAMP	HS23070993-09	X072127.D	07/21/23 21:09	VOA6_442002
16PM06-230713	SAMP	HS23070993-09	X072128.D	07/21/23 21:29	VOA6_442002

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Form 5

Instrument Performance Check

Volatiles by EPA 8260

Workorder

HS23070993

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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

Form 5 - Instrument Performance Check

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23070993**

RunID **VOA6-441456**

Volatiles by EPA 8260

Tune File X071401.D 07/14/23 7/14/2023

m / e	Ion Abundance Criterion	%RA
50	15.0 - 40.0% of mass 95	25.9 (25.9)
75	30.0 - 60.0% of mass 95	52 (52)
95	Base peak, 100% RA	100 (100)
96	5.0 - 9.0% of mass 95	5.6 (5.63)
173	Less than 2.0% of mass 174	0.8 (0.926) 1
174	50.0 - 120.0% of mass 95	82.2 (82.2)
175	4.0 - 9.0% of mass 174	5.4 (6.56) 1
176	93.0 - 101.0% of mass 174	79.3 (96.5) 1
177	5.0 - 9.0% of mass 176	4.5 (5.64) 2

%RA - Percent Relative Abundance

This check applies to the following analyses

	Lab Samp ID	Type	Date Analyzed	Lab File ID	Sample ID
1	VSTD000.25	ICAL1	7/14/2023	X071402	VSTD000.25
2	VSTD000.5	ICAL2	7/14/2023	X071403	VSTD000.5
3	VSTD001	ICAL3	7/14/2023	X071404	VSTD001
4	VSTD002	ICAL4	7/14/2023	X071405	VSTD002
5	VSTD005	ICAL5	7/14/2023	X071406	VSTD005
6	VSTD020	ICAL6	7/14/2023	X071407	VSTD020
7	VSTD050	ICAL7	7/14/2023	X071408	VSTD050
8	VSTD100	ICAL8	7/14/2023	X071409	VSTD100
9	VSTD150	ICAL9	7/14/2023	X071410	VSTD150
10	VSTD200	ICAL	7/14/2023	X071411	VSTD200
11	CCV	ICV	7/14/2023	X071413	CCV

Form 5 - Instrument Performance Check

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23070993**

RunID **VOA6-442002**

Volatiles by EPA 8260

Tune File X072101.D 07/21/23 7/21/2023

m / e	Ion Abundance Criterion	%RA
50	15.0 - 40.0% of mass 95	26.6 (26.6)
75	30.0 - 60.0% of mass 95	49.3 (49.3)
95	Base peak, 100% RA	100 (100)
96	5.0 - 9.0% of mass 95	6.6 (6.59)
173	Less than 2.0% of mass 174	1.1 (1.38) 1
174	50.0 - 120.0% of mass 95	76.7 (76.7)
175	4.0 - 9.0% of mass 174	6.3 (8.18) 1
176	93.0 - 101.0% of mass 174	76.8 (100) 1
177	5.0 - 9.0% of mass 176	5 (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	7/21/2023	X072102	CCV
2	CCB	CCB	7/21/2023	X072104	CCB
3	VLCSW-	LCS	7/21/2023	X072105	VLCSW-230721
4	VBLKW-	MBLK	7/21/2023	X072107	VBLKW-230721
5	HS23070993-	SAMP	7/21/2023	X072111	16WW37-230713
6	HS23070993-	SAMP	7/21/2023	X072112	16WW37-230713-FD
7	HS23071109-	MS	7/21/2023	X072113	ZZZZZZMS
8	HS23071109-	MSD	7/21/2023	X072114	ZZZZZZMSD
9	HS23070993-	SAMP	7/21/2023	X072115	16WW37-230713
10	HS23070993-	SAMP	7/21/2023	X072116	16WW37-230713-FD
11	HS23070993-	SAMP	7/21/2023	X072117	Trip Blank-230713
12	HS23070993-	SAMP	7/21/2023	X072119	16WW44-230713
13	HS23070993-	SAMP	7/21/2023	X072120	16WW46-230713
14	HS23070993-	SAMP	7/21/2023	X072121	16RW06-230713
15	HS23070993-	SAMP	7/21/2023	X072122	16WW38-230713
16	HS23070993-	SAMP	7/21/2023	X072123	16PM09-230713
17	HS23070993-	SAMP	7/21/2023	X072124	16PM14-230713
18	HS23070993-	SAMP	7/21/2023	X072125	16RW07-230713
19	HS23070993-	SAMP	7/21/2023	X072126	16RW07-230713
20	HS23070993-	SAMP	7/21/2023	X072127	16PM06-230713
21	HS23070993-	SAMP	7/21/2023	X072128	16PM06-230713
22	CCV-END	CCV_EN	7/21/2023	X072130	CCV-END

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Form 6

Initial Calibration Data

Volatiles by EPA 8260

Workorder

HS23070993

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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

Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder HS23070993

RunID VOA6_441456

Volatiles by EPA 8260

Compound	50.00 Level 7 0.250 Level 1	100.00 Level 8 0.500 Level 2	150.00 Level 9 1.00 Level 3	200.00 Level 10 2.00 Level 4	5.00 Level 5	20.00 Level 6	Curve	b	m1	m2	%RSD or R2	Q
Dichlorodifluoromethane	NE 235300	1663 576963	3668 822037	9210 1105119	21541	94710	LINR	0.02191	0.52294		0.99807	
Chloromethane	NE 0.67753	0.84001 0.79824	0.66306 0.81227	0.83928 0.82447	0.68468	0.65730	AVRG		0.75520		10.80318	
Propionitrile	NE 0.09423	0.10390 0.10017	0.09941 0.10114	0.09874 0.09819	0.09448	0.10115	AVRG		0.09905		3.16658	
Vinyl Chloride	NE 0.60823	0.69203 0.70202	0.53140 0.67183	0.72188 0.65918	0.61204	0.62458	AVRG		0.64702		9.14675	
Bromomethane	NE 0.25218	0.27789 0.28534	0.24476 0.29658	0.27563 0.28725	0.25296	0.23720	AVRG		0.26775		7.93201	
Chloroethane	NE 0.34475	0.43063 0.37168	0.35796 0.36290	0.40526 0.34794	0.34800	0.35515	AVRG		0.36936		7.97570	
Trichlorofluoromethane	NE 0.60292	0.58636 0.75016	0.55773 0.71606	0.73670 0.70274	0.59809	0.65059	AVRG		0.65570		11.03396	
Acrolein	NE 19251	268 38657	510 60619	917 82636	2341	6957	LINR	0.02257	0.01915		0.99956	
Acetone	NE 210033	7150 413238	8098 616513	15631 806431	26152	92232	LINR	-0.09778	0.18861		0.99933	
1,1-Dichloroethene	NE 0.35132	0.34284 0.39971	0.33390 0.37449	0.40741 0.37144	0.35652	0.35911	AVRG		0.36630		6.73637	

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

Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder HS23070993

RunID VOA6_441456

Volatiles by EPA 8260

ICAL Summary Page 2 / 12

Compound	50.00 Level 7 0.250 Level 1	100.00 Level 8 0.500 Level 2	150.00 Level 9 1.00 Level 3	200.00 Level 10 2.00 Level 4	5.00 Level 5	20.00 Level 6	Curve	b	m1	m2	%RSD or R2	Q
Isobutyl Alcohol	NE 0.09486	0.09915 0.10064	0.08022 0.09926	0.09038 0.09480	0.09479	0.09891	AVRG		0.09478		6.69321	
Acetonitrile	NE 0.06830	0.07163 0.06960	0.07422 0.07051	0.07419 0.06805	0.06612	0.06841	AVRG		0.07011		3.98876	
Allyl Chloride	NE 1.52604	1.95513 1.56199	1.82721 1.56589	1.62093 1.51692	1.61860	1.58159	AVRG		1.64159		9.09372	
Iodomethane	NE 473625	2897 1101288	4792 1666204	11682 2365259	29645	147770	QUAD	0.07604	2.04557	-0.05646	0.99916	
Acrylonitrile	NE 0.22535	0.30341 0.23200	0.22558 0.23458	0.25182 0.22663	0.25615	0.23734	AVRG		0.24365		10.26343	
Methylene Chloride	NE 228969	3115 461890	7389 679924	11880 893552	25734	93705	LINR	-0.02821	0.42039		0.99928	
Methyl tert-butyl ether	NE 1.28013	1.42757 1.32509	1.50562 1.32040	1.44539 1.27025	1.34304	1.34355	AVRG		1.36234		5.84889	
Carbon Disulfide	NE 1.09141	1.19715 1.22733	1.02400 1.19261	1.26579 1.18678	1.08532	1.09253	AVRG		1.15144		6.97191	
trans-1,2-Dichloroethene	NE 0.40397	0.50790 0.43050	0.34716 0.41204	0.45461 0.41226	0.43607	0.40889	AVRG		0.42371		10.21222	
Vinyl Acetate	NE 1.67574	1.80993 1.76700	1.71245 1.76631	1.79630 1.74491	1.73508	1.76334	AVRG		1.75234		2.35224	
1,1-Dichloroethane	NE 0.89937	1.04282 0.93166	0.87723 0.90417	1.03426 0.88702	0.90313	0.88859	AVRG		0.92980		6.83106	
Chloroprene	NE 0.19474	0.25663 0.23640	0.22753 0.23331	0.21787 0.23204	0.21758	0.20725	AVRG		0.22482		8.00705	

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

Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder HS23070993

RunID VOA6_441456

Volatiles by EPA 8260

ICAL Summary Page 3 / 12

Compound	50.00 Level 7 0.250 Level 1	100.00 Level 8 0.500 Level 2	150.00 Level 9 1.00 Level 3	200.00 Level 10 2.00 Level 4	5.00 Level 5	20.00 Level 6	Curve	b	m1	m2	%RSD or R2	Q
2-Butanone	NE 0.25660	0.28077 0.28522	0.26281 0.27741	0.24974 0.28148	0.24863	0.25377	AVRG		0.26627		5.58805	
Methacrylonitrile	NE 0.62768	0.71944 0.66925	0.58681 0.67273	0.61854 0.65439	0.59811	0.66152	AVRG		0.64539		6.44560	
2,2-Dichloropropane	NE 357279	3703 797830	7001 1150093	15882 1535535	34523	136770	LINR	0.00416	0.72480		0.99899	
cis-1,2-Dichloroethene	NE 0.52561	0.58080 0.55258	0.55205 0.52870	0.55103 0.51702	0.52518	0.52498	AVRG		0.53977		3.81784	
Chloroform	NE 0.90021	1.12088 0.94131	0.94789 0.91371	1.04563 0.88871	0.89046	0.91369	AVRG		0.95139		8.37790	
Bromochloromethane	NE 0.28615	0.34105 0.29492	0.28436 0.28865	0.36073 0.28298	0.29741	0.28625	AVRG		0.30250		9.34540	
1,1,1-Trichloroethane	NE 0.70136	0.76811 0.80905	0.60604 0.78046	0.76445 0.77179	0.67544	0.71465	AVRG		0.73237		8.70697	
1,1-Dichloropropene	NE 0.37472	0.46667 0.45240	0.37410 0.42446	0.41961 0.42714	0.34598	0.38546	AVRG		0.40784		9.80634	
1,2-Dichloroethane	NE 0.52114	0.65388 0.55719	0.55646 0.54137	0.52020 0.54393	0.51464	0.54481	AVRG		0.55040		7.59848	
Carbon Tetrachloride	NE 0.35583	0.45034 0.44940	0.42963 0.42389	0.40208 0.42272	0.37338	0.39061	AVRG		0.41088		7.99245	
Benzene	NE 1.14556	1.30726 1.25702	1.13102 1.18986	1.22322 1.19963	1.12620	1.18395	AVRG		1.19597		5.00630	
Trichloroethene	NE 0.32325	0.36259 0.36148	0.29151 0.34333	0.38072 0.34832	0.30457	0.32879	AVRG		0.33829		8.55214	

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

Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder HS23070993

RunID VOA6_441456

Volatiles by EPA 8260

ICAL Summary Page 4 / 12

Compound	50.00 Level 7 0.250 Level 1	100.00 Level 8 0.500 Level 2	150.00 Level 9 1.00 Level 3	200.00 Level 10 2.00 Level 4	5.00 Level 5	20.00 Level 6	Curve	b	m1	m2	%RSD or R2	Q
Bromodichloromethane	NE 0.43234	0.56576 0.45884	0.42748 0.45203	0.45204 0.46018	0.42979	0.44442	AVRG		0.45810		9.21563	
Methyl Methacrylate	NE 0.55557	0.64774 0.60054	0.67348 0.60150	0.61013 0.58254	0.58540	0.57437	AVRG		0.60347		6.09532	
2-Chloroethylvinyl ether	NE 0.13958	0.13748 0.15371	0.12812 0.14777	0.12943 0.15040	0.13129	0.14103	AVRG		0.13987		6.65248	
1,2-Dichloropropane	NE 0.37714	0.43289 0.40397	0.31618 0.38726	0.39071 0.39014	0.37483	0.38801	AVRG		0.38457		8.02856	
2-Nitropropane	NE 0.18456	0.23319 0.19499	0.19456 0.20657	0.22145 0.20342	0.16115	0.18784	AVRG		0.19864		10.60581	
Dibromomethane	NE 0.20339	0.24779 0.21844	0.21543 0.20650	0.23770 0.20862	0.20762	0.21371	AVRG		0.21769		6.96902	
4-Methyl-2-Pentanone	NE 0.46063	0.58655 0.48903	0.46075 0.48195	0.49135 0.48645	0.48596	0.48555	AVRG		0.49202		7.57687	
cis-1,3-Dichloropropene	NE 0.51175	0.61537 0.55605	0.45166 0.53397	0.53404 0.54067	0.47196	0.51998	AVRG		0.52616		8.99460	
Ethyl Methacrylate	NE 0.26930	0.34651 0.30905	0.35275 0.33292	0.35012 0.34232	0.32495	0.31920	AVRG		0.32746		8.05273	
Toluene	NE 1.35355	1.36539 1.44404	1.14100 1.39074	1.37686 1.39027	1.31689	1.33460	AVRG		1.34593		6.32428	
trans-1,3-Dichloropropene	NE 0.42358	0.49608 0.46734	0.38674 0.45302	0.44837 0.46834	0.41009	0.43827	AVRG		0.44354		7.48885	
2-Hexanone	NE 0.30067	0.30395 0.32110	0.33705 0.32372	0.32917 0.32526	0.33286	0.33513	AVRG		0.32321		4.01955	

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Initial Calibration Data

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Workorder HS23070993

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Compound	50.00 Level 7 0.250 Level 1	100.00 Level 8 0.500 Level 2	150.00 Level 9 1.00 Level 3	200.00 Level 10 2.00 Level 4	5.00 Level 5	20.00 Level 6	Curve	b	m1	m2	%RSD or R2	Q
1,1,2-Trichloroethane	NE 0.27496	0.30232 0.28103	0.28933 0.27111	0.30515 0.27281	0.28408	0.28886	AVRG		0.28552		4.28271	
1,3-Dichloropropane	NE 0.56268	0.68555 0.57784	0.56076 0.55478	0.58546 0.55874	0.58510	0.57884	AVRG		0.58331		6.87413	
Dibromochloromethane	NE 0.40608	0.42594 0.43396	0.39216 0.42165	0.41047 0.42582	0.38971	0.40387	AVRG		0.41218		3.79175	
Tetrachloroethene	NE 0.26863	0.24343 0.31076	0.22414 0.29395	0.32780 0.29098	0.27159	0.27129	AVRG		0.27806		11.54647	
1,2-Dibromoethane	NE 0.30967	0.35535 0.31558	0.31873 0.30475	0.33131 0.31110	0.34997	0.33995	AVRG		0.32627		5.69357	
1-Chlorohexane	NE 0.33296	0.43114 0.42814	0.40883 0.40776	0.43814 0.41598	0.36414	0.38805	AVRG		0.40168		8.58201	
Chlorobenzene	NE 0.90189	1.07531 0.96048	0.86917 0.93481	0.96582 0.94343	0.89774	0.91892	AVRG		0.94084		6.30233	
1,1,1,2-Tetrachloroethane	NE 0.36189	0.40907 0.38531	0.32801 0.37705	0.36574 0.37837	0.34420	0.36531	AVRG		0.36833		6.36041	
Ethylbenzene	NE 0.45381	0.53160 0.50085	0.40783 0.48317	0.49648 0.48539	0.44109	0.44588	AVRG		0.47179		7.99221	
m,p-Xylenes	NE 0.58355	0.58138 0.63520	0.51291 0.61039	0.66213 0.61758	0.54279	0.58097	AVRG		0.59188		7.73323	
o-Xylene	NE 0.54985	0.60028 0.59157	0.50413 0.57426	0.58077 0.58210	0.50944	0.55204	AVRG		0.56049		6.17548	
Styrene	NE 0.97719	1.10605 1.02091	0.86982 0.99759	0.96217 1.01131	0.89239	0.96159	AVRG		0.97767		7.16726	

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Compound	50.00 Level 7 0.250 Level 1	100.00 Level 8 0.500 Level 2	150.00 Level 9 1.00 Level 3	200.00 Level 10 2.00 Level 4	5.00 Level 5	20.00 Level 6	Curve	b	m1	m2	%RSD or R2	Q
Bromoform	NE 0.26395	0.26832 0.27994	0.21153 0.27771	0.29273 0.28394	0.24404	0.25796	AVRG		0.26446		9.32941	
Isopropylbenzene	NE 1.36958	1.45474 1.59321	1.15694 1.51601	1.62659 1.55523	1.31430	1.37984	AVRG		1.44071		10.47090	
1,1,2,2-Tetrachloroethane	NE 0.78472	0.94445 0.81779	0.83194 0.80619	0.90896 0.80829	0.84185	0.81425	AVRG		0.83983		6.25761	
1,2,3-Trichloropropane	NE 0.62245	0.70743 0.65589	0.66768 0.64581	0.66994 0.64574	0.70648	0.67647	AVRG		0.66643		4.21060	
trans-1,4-Dichloro-2-butene	NE 0.15148	0.15286 0.16770	0.12745 0.16789	0.14444 0.16922	0.13548	0.15209	AVRG		0.15207		9.66771	
n-Propylbenzene	NE 2.91361	2.94838 3.40683	2.53997 3.24372	3.16964 3.29645	2.67171	3.00288	AVRG		3.02147		9.55626	
Bromobenzene	NE 0.73926	0.82736 0.79512	0.75995 0.76647	0.82086 0.78754	0.76608	0.77520	AVRG		0.78198		3.67998	
1,3,5-Trimethylbenzene	NE 2.12204	2.47615 2.50410	1.87986 2.44372	2.39387 2.46514	1.97150	2.11509	AVRG		2.26350		10.68239	
2-Chlorotoluene	NE 1.91345	2.19364 2.08147	2.04515 2.01122	2.15846 2.03095	1.86416	2.04541	AVRG		2.03821		5.12320	
4-Chlorotoluene	NE 2.19714	2.25128 2.40271	1.82096 2.33521	2.37563 2.37480	2.11635	2.28352	AVRG		2.23973		8.15437	
tert-Butylbenzene	NE 1.75584	2.09594 2.12022	1.61179 2.04664	2.20774 2.05649	1.74066	1.83461	AVRG		1.94110		10.71222	
1,2,4-Trimethylbenzene	NE 2.11967	2.62916 2.46832	1.84573 2.41069	2.42858 2.45093	1.92871	2.14683	AVRG		2.26985		11.86510	

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Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.

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Volatiles by EPA 8260

Compound	50.00 Level 7 0.250 Level 1	100.00 Level 8 0.500 Level 2	150.00 Level 9 1.00 Level 3	200.00 Level 10 2.00 Level 4	5.00 Level 5	20.00 Level 6	Curve	b	m1	m2	%RSD or R2	Q
sec-Butylbenzene	NE 2.38650	2.39008 2.98896	2.08647 2.87301	2.89395 2.88374	2.26832	2.51515	AVRG		2.58735		12.68595	
p-Isopropyltoluene	NE 2.17688	2.52552 2.69684	1.93671 2.58444	2.48463 2.61384	2.04517	2.20747	AVRG		2.36350		11.64663	
1,3-Dichlorobenzene	NE 1.28863	1.54565 1.44980	1.17676 1.41160	1.40461 1.40967	1.24164	1.33205	AVRG		1.36227		8.33210	
1,4-Dichlorobenzene	NE 1.38557	1.65292 1.53566	1.32318 1.45287	1.69562 1.48161	1.44532	1.46978	AVRG		1.49361		7.97047	
Benzyl Chloride	NE 558112	6245 1321247	10259 2041719	17851 2751633	45616	196200	LINR	0.04694	0.89268		0.99874	
n-Butylbenzene	NE 1.83535	1.84574 2.37633	1.70944 2.27255	1.96808 2.30080	1.70778	1.79924	AVRG		1.97948		13.42128	
1,2-Dichlorobenzene	NE 1.27471	1.35749 1.42525	1.25645 1.37391	1.38320 1.38665	1.26217	1.33374	AVRG		1.33929		4.58000	
1,2-Dibromo-3-Chloropropane	NE 51434	675 119154	831 181917	1953 242707	5268	19568	LINR	0.02176	0.14112		0.99931	
1,2,4-Trichlorobenzene	NE 0.80524	1.05947 0.97476	0.91279 0.95753	0.94981 0.97711	0.85502	0.78698	AVRG		0.91986		9.65852	
Hexachlorobutadiene	NE 139894	1357 382401	2109 564457	6844 760294	13714	52647	LINR	0.04709	0.44481		0.99698	
Naphthalene	NE 2.02307	2.67698 2.35582	2.32669 2.27389	2.26771 2.32875	2.16067	2.07687	AVRG		2.27672		8.35550	
1,2,3-Trichlorobenzene	NE 0.74794	0.99382 0.88744	0.89482 0.86237	0.93334 0.87314	0.76923	0.78029	AVRG		0.86027		9.42402	

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Initial Calibration Data

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Ethyl Acetate	NE 0.70402	0.85233 0.73854	0.68267 0.71854	0.73966 0.71045	0.76533	0.77227	AVRG		0.74265		6.75864	
Methyl Acrylate	NE 0.62114	0.66840 0.77600	0.54731 0.78843	0.64052 0.76129	0.64695	0.66691	AVRG		0.67966		11.81743	
n-Butanol	NE 0.01560	0.01615 0.01818	0.01470 0.01945	0.01778 0.01980	0.01318	0.01496	AVRG		0.01664		13.67270	
Ethyl Acrylate	NE 1.56849	1.63514 1.70663	1.72358 1.77502	1.50263 1.75049	1.60242	1.64950	AVRG		1.65710		5.42882	
Cyclohexanone	NE 0.03949	0.05394 0.03979	0.05115 0.03982	0.04786 0.03661	0.04626	0.04568	AVRG		0.04451		13.30149	
1,4-Dioxane	0.00529 0.00540	0.00687 0.00595	0.00611 0.00600	0.00555 0.00602	0.00636	0.00586	AVRG		0.00594		7.82889	
n-Hexane	NE 244351	2320 700280	5000 NE	11984 NE	26276	106667	QUAD	-0.01727	2.41947	-0.68015	0.99837	
Freon TF	NE 154547	1274 422615	2818 NE	7195 NE	16656	67796	QUAD	-0.01499	3.77998	-1.58677	0.99832	
Methyl Acetate	NE 0.42203	0.46559 0.43221	0.47286 0.43028	0.45346 0.42016	0.45829	0.45001	AVRG		0.44499		4.35037	
Methylcyclohexane	NE 0.98734	1.14273 1.10411	0.96842 1.12748	0.95973 1.14019	1.03867	1.02958	AVRG		1.05536		7.08148	
Isopropyl alcohol	NE 0.03536	0.04517 0.03638	0.04439 0.03714	0.04149 0.03689	0.03687	0.03873	AVRG		0.03916		9.28018	
Amyl alcohol	NE 0.01277	0.01442 0.01513	0.01288 0.01573	0.01448 0.01580	0.01462	0.01358	AVRG		0.01438		7.75370	

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Volatiles by EPA 8260

Compound	50.00 Level 7 0.250 Level 1	100.00 Level 8 0.500 Level 2	150.00 Level 9 1.00 Level 3	200.00 Level 10 2.00 Level 4	5.00 Level 5	20.00 Level 6	Curve	b	m1	m2	%RSD or R2	Q
Allyl alcohol	NE 244351	2068 700280	5000 NE	14314 NE	26276	106667	QUAD	-0.39232	48.54112	-13.69022	0.99834	
4-Methyl-2-pentanol	NE 0.08687	0.12600 0.10145	0.10791 0.10473	0.11127 0.10925	0.11234	0.10455	AVRG		0.10715		9.67860	
Tert-butyl alcohol	NE 0.05636	0.07802 0.05963	0.06140 0.05977	0.06995 0.05928	0.06161	0.06194	AVRG		0.06311		10.61812	
Diethyl ether	NE 0.43908	0.51744 0.44851	0.49360 0.44689	0.51199 0.43020	0.45058	0.45793	AVRG		0.46625		6.99240	
1,3-Butadiene	NE 0.58528	0.63622 0.71010	0.57213 0.67222	0.73345 0.66543	0.59805	0.60945	AVRG		0.64248		8.80211	
Cyclohexane	NE 0.73558	0.85829 1.03245	0.72681 0.97434	0.92986 0.96744	0.75844	0.81693	AVRG		0.86668		13.16994	
Tetrahydrofuran	NE 0.12218	0.14083 0.12495	0.13332 0.12609	0.13514 0.12108	0.12274	0.13136	AVRG		0.12863		5.31484	
alpha-Methylstyrene	NE 1.02454	1.23006 1.16376	0.99517 1.14646	1.09377 1.14475	0.99115	1.02796	AVRG		1.09085		7.81543	
Diisopropyl ether	NE 1.95747	2.14800 2.03902	2.34506 2.05555	2.06794 1.95720	1.91324	2.06344	AVRG		2.06077		6.23686	
Dichlorofluoromethane	NE 0.76153	0.85332 0.78724	0.92289 0.78703	0.84028 0.76192	0.75366	0.78256	AVRG		0.80560		6.93852	
Propylene oxide	NE 0.05692	0.06108 0.05582	0.06673 0.05455	0.06684 0.04985	0.07410	0.06618	AVRG		0.06134		12.54653	
3-Methyl-1-butanol	NE 0.01195	0.01323 0.01394	0.01183 0.01419	0.00888 0.01408	0.01158	0.01110	AVRG		0.01231		14.14320	

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Butyl acrylate	NE 0.95529	0.92245 1.02517	0.88753 1.04707	0.86138 1.05297	0.86060	0.94857	AVRG		0.95123		7.98920	
Butyl methacrylate	NE 1.15197	1.22102 1.29239	1.20704 1.21819	1.20789 1.18934	1.13145	1.15942	AVRG		1.19763		3.97564	
Dicyclopentadiene	NE 2.75252	2.80389 2.95979	3.12078 3.02021	2.84202 2.97202	2.58546	2.86391	AVRG		2.88007		5.53053	
1,2,3-Trimethylbenzene	NE 2.26318	2.33141 2.44349	2.44039 2.48171	2.00963 2.47220	2.11668	2.24288	AVRG		2.31129		7.26158	
Ethanol	NE 72445	1082 150451	1613 220615	3219 291912	7997	30252	LINR	-0.37330	0.00686		0.99938	
tert-Butyl formate	NE 0.46269	0.60414 0.51460	0.54120 0.53820	0.56992 0.54329	0.53335	0.49959	AVRG		0.53411		7.55066	
3,3-Dimethyl-1-butanol	NE 0.04382	0.07070 0.04890	0.05527 0.05244	0.05594 0.05101	0.05364	0.05224	AVRG		0.05377		13.60012	
tert-Amyl methyl ether	NE 1.60911	1.86257 1.58140	1.86766 1.64949	1.49761 1.54826	1.62072	1.56664	AVRG		1.64483		8.04479	
tert-Butyl ethyl ether	NE 1.97744	2.48449 2.04789	2.24930 2.06704	2.05003 2.01150	2.12663	2.03642	AVRG		2.11675		7.49756	
tert-Amyl alcohol	NE 0.04627	0.06041 0.05146	0.05141 0.05382	0.06972 0.05433	0.05333	0.05084	AVRG		0.05462		12.42201	
Epichlorohydrin	NE 0.03559	0.03842 0.03914	0.03655 0.03819	0.03704 0.03863	0.03577	0.03679	AVRG		0.03735		3.45493	
Isoprene	NE 0.14969	0.16745 0.17829	0.14351 0.17017	0.16283 0.16423	0.17487	0.17231	AVRG		0.16482		6.98920	

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n-Amyl acetate	NE 0.81039	1.01275 0.90629	1.04196 0.91309	0.90756 0.92294	0.85545	0.87675	AVRG		0.91635		7.88906	
Isopropyl acetate	NE 1.19423	1.44350 1.30224	1.45714 1.26100	1.48440 1.24685	1.21182	1.26381	AVRG		1.31833		8.51827	
n-Butyl acetate	NE 0.73443	0.87010 0.79624	0.63987 0.80262	0.70296 0.81276	0.74526	0.79294	AVRG		0.76635		8.91130	
Acetaldehyde	NE 101552	NE 189053	5117 265471	8114 347350	20987	39093	LINR	-0.45320	0.04030		0.99713	
Methyl Amyl Ketone	NE 0.96318	1.20532 1.04745	0.94521 1.08877	0.97102 1.09326	1.04102	1.05023	AVRG		1.04505		7.72385	
Dimethyl Disulfide	NE 0.69887	0.66624 0.73618	0.61152 0.73656	0.60301 0.73622	0.60088	0.68043	AVRG		0.67444		8.55931	
Isobutylene	NE 0.07008	0.09932 0.08656	0.08288 0.08198	0.07903 0.07923	0.07898	0.08593	AVRG		0.08267		9.56800	
2-Ethylhexyl Acrylate	NE 1.36334	1.09488 1.47049	1.12671 1.45960	1.14640 1.46017	1.06053	1.31158	AVRG		1.27708		13.35344	
94 1,2-Dichloroethylene (total)	NE 0.46479	0.54435 0.49154	0.44960 0.47037	0.50282 0.46464	0.48062	0.46694	AVRG		0.48174		5.88171	
95 Xylenes (total)	NE 0.51459	0.53863 0.58017	0.47900 0.55693	0.57974 0.56971	0.47946	0.52696	AVRG		0.53613		7.35273	
30 Dibromofluoromethane	NE 227290	3536 502644	5859 719790	10131 959895	26145	100577	LINR	-0.01526	0.45137		0.99889	
35 1,2-Dichloroethane-d4	NE 282994	5342 615043	7805 911155	14667 1203985	31653	125030	LINR	-0.01246	0.56601		0.99932	

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48 Toluene-d8	NE 1.07891	1.41149 1.19952	1.42719 NE	1.38594 NE	1.29623	1.21214	AVRG		1.28735		10.10735	
69 4-Bromofluorobenzene	NE 355682	7819 767493	11517 1135204	17835 1538168	40007	153161	LINR	-0.00857	0.49361		0.99967	

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

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Form 6I

Initial Calibration Verification (ICV)

Volatiles by EPA 8260

Workorder

HS23070993

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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

Initial Calibration Verification (ICV)

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

Workorder HS23070993

RunID VOA6_441456

Volatiles by EPA 8260

Sample Matrix LIQUID
Lab Smp Id ICV
Level LOW
Fraction VOA
Client Smp ID ICV
Operator PC

Compound	Conc Added	Conc Recovered	% Recovered	Limits	Q
1,1,1,2-Tetrachloroethane	50.00	49.01	98.02	80-120	
1,1,1-Trichloroethane	50.00	46.46	92.93	80-120	
1,1,2,2-Tetrachloroethane	50.00	48.23	96.47	80-120	
Freon TF	50.00	50.73	101.47	80-120	
Methyl acetate	50.00	48.60	97.20	80-120	
Cyclohexane	50.00	43.28	86.57	80-120	
Methylcyclohexane	50.00	47.44	94.90	80-120	
Carbon Disulfide	100.00	92.54	92.54	80-120	
2-Hexanone	100.00	100.41	100.42	80-120	
1,1,2-Trichloroethane	50.00	48.51	97.03	80-120	
1,1-Dichloroethane	50.00	46.83	93.66	80-120	
1,1-Dichloroethene	50.00	45.26	90.53	80-120	
1,1-Dichloropropene	50.00	45.59	91.20	80-120	
1,2,3-Trichlorobenzene	50.00	43.05	86.12	80-120	
1,2,3-Trichloropropane	50.00	48.09	96.20	80-120	
1,2,4-Trichlorobenzene	50.00	43.35	86.72	80-120	
1,2,4-Trimethylbenzene	50.00	44.77	89.55	80-120	
1,2-Dibromo-3-Chloropropane	50.00	48.27	96.54	80-120	
1,2-Dibromoethane	50.00	47.85	95.71	80-120	
Acrolein	100.00	95.33	95.34	80-120	
Acrylonitrile	100.00	96.95	96.95	80-120	
1,2-Dichlorobenzene	50.00	47.75	95.52	80-120	
1,2-Dichloroethane	50.00	47.45	94.92	80-120	
1,2-Dichloropropane	50.00	49.01	98.02	80-120	
1,3,5-Trimethylbenzene	50.00	44.65	89.31	80-120	
1,3-Dichlorobenzene	50.00	46.44	92.88	80-120	
1,3-Dichloropropane	50.00	48.46	96.93	80-120	
1,4-Dichlorobenzene	50.00	45.87	91.75	80-120	
1-Chlorohexane	50.00	40.17	80.36	80-120	
2,2-Dichloropropane	50.00	47.06	94.14	80-120	
2-Butanone	100.00	105.06	105.06	80-120	
2-Chloroethylvinyl ether	100.00	103.48	103.49	80-120	
2-Chlorotoluene	50.00	45.07	90.16	80-120	
4-Chlorotoluene	50.00	47.10	94.21	80-120	

Initial Calibration Verification (ICV)

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

Workorder HS23070993

RunID VOA6_441456

Volatiles by EPA 8260

Sample Matrix LIQUID
Lab Smp Id ICV
Level LOW
Fraction VOA
Client Smp ID ICV
Operator PC

Compound	Conc Added	Conc Recovered	% Recovered	Limits	Q
p-Isopropyltoluene	50.00	42.46	84.92	80-120	
4-Methyl-2-Pentanone	100.00	96.77	96.78	80-120	
Acetone	100.00	109.68	109.69	80-120	
Acetonitrile	500.00	477.86	95.57	80-120	
Allyl Chloride	50.00	46.25	92.52	80-120	
Benzene	50.00	47.17	94.35	80-120	
Bromobenzene	50.00	47.14	94.28	80-120	
Bromochloromethane	50.00	47.57	95.15	80-120	
Bromodichloromethane	50.00	47.04	94.09	80-120	
Bromoform	50.00	50.48	100.97	80-120	
Bromomethane	50.00	52.69	105.40	80-120	
Carbon Tetrachloride	50.00	43.89	87.80	80-120	
Chlorobenzene	50.00	47.93	95.88	80-120	
Chloroethane	50.00	45.13	90.26	80-120	
Chloroform	50.00	45.97	91.96	80-120	
Chloromethane	50.00	46.75	93.50	80-120	
Chloroprene	50.00	45.07	90.15	80-120	
cis-1,2-Dichloroethene	50.00	47.65	95.31	80-120	
cis-1,3-Dichloropropene	50.00	49.60	99.21	80-120	
Dibromochloromethane	50.00	50.99	101.99	80-120	
Dibromomethane	50.00	47.45	94.92	80-120	
Dichlorodifluoromethane	50.00	44.13	88.28	80-120	
Ethylbenzene	50.00	46.22	92.44	80-120	
Ethyl Methacrylate	50.00	42.56	85.14	80-120	
Iodomethane	100.00	85.27	85.27	80-120	
Isobutyl Alcohol	1000.00	1037.79	103.78	70-130	
Propionitrile	500.00	495.72	99.15	70-130	
Hexachlorobutadiene	50.00	40.81	81.63	80-120	
Isopropylbenzene	50.00	44.80	89.60	80-120	
m,p-Xylenes	100.00	94.37	94.38	80-120	
Methyl tert-butyl ether	50.00	48.10	96.20	80-120	
Methylene Chloride	50.00	48.91	97.83	80-120	
Methacrylonitrile	50.00	51.28	102.56	80-120	
Methyl Methacrylate	50.00	48.63	97.28	80-120	

Initial Calibration Verification (ICV)

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

Workorder HS23070993

RunID VOA6_441456

Volatiles by EPA 8260

Sample Matrix LIQUID
Lab Smp Id ICV
Level LOW
Fraction VOA
Client Smp ID ICV
Operator PC

Compound	Conc Added	Conc Recovered	% Recovered	Limits	Q
n-Butylbenzene	50.00	43.07	86.14	80-120	
n-Propylbenzene	50.00	44.93	89.87	80-120	
Naphthalene	50.00	45.05	90.10	80-120	
o-Xylene	50.00	47.84	95.69	80-120	
sec-Butylbenzene	50.00	42.83	85.66	80-120	
Styrene	50.00	49.01	98.02	80-120	
tert-Butylbenzene	50.00	42.55	85.10	80-120	
Tetrachloroethene	50.00	47.18	94.38	80-120	
Toluene	50.00	48.91	97.82	80-120	
trans-1,2-Dichloroethene	50.00	45.43	90.87	80-120	
trans-1,3-Dichloropropene	50.00	49.09	98.19	80-120	
trans-1,4-Dichloro-2-butene	50.00	53.16	106.34	80-120	
Trichloroethene	50.00	46.63	93.27	80-120	
Trichlorofluoromethane	50.00	46.87	93.76	80-120	
Vinyl Acetate	100.00	100.31	100.31	80-120	
Vinyl Chloride	50.00	46.46	92.92	80-120	
1,2-Dichloroethylene (total)	100.00	93.08	93.09	80-120	
Xylenes (total)	150.00	142.22	94.81	80-120	
1,4-Dioxane	1000.00	988.21	98.82	80-120	
Dibromofluoromethane	50.00	52.53	105.08	71-125	
1,2-Dichloroethane-d4	50.00	52.09	104.19	70-125	
Toluene-d8	50.00	48.16	96.34	75-125	

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Form 7

Continuing Calibration Verification (CCV)

Volatiles by EPA 8260

Workorder

HS23070993

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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

Continuing Calibration Verification (CCV)

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

Workorder HS23070993

RunID VOA6_442002

Volatiles by EPA 8260

Instrument ID VOA6.I
Lab File ID X072102.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date :36
ICAL Date(s) 14-JUL-2023 14-JUL-2023
ICAL Times :41 15:25
Quant Type ISTD

Compound	$\overline{RRF}$ / Conc	RF50 / Conc	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
1,4-Dioxane	0.00594	0.00595	0.00595	0.001	-0.16988	20.0	Averaged	
1,3-Butadiene	0.64248	0.77286	0.77286	0.100	-20.29317	20.0	Averaged	*
Methacrylonitrile	0.64539	0.78096	0.78096	0.100	-21.00662	20.0	Averaged	*
Isobutyl Alcohol	0.09478	0.11339	0.11339	0.005	-19.64067	20.0	Averaged	
Acetonitrile	0.07011	0.07155	0.07155	0.005	-2.05102	20.0	Averaged	
Allyl Chloride	1.64159	1.70110	1.70110	0.100	-3.62504	20.0	Averaged	
Propionitrile	0.09905	0.11583	0.11583	0.010	-16.94947	20.0	Averaged	
trans-1,4-Dichloro-2-butene	0.15207	0.16535	0.16535	0.050	-8.73059	20.0	Averaged	
Ethyl Acetate	0.74265	0.87080	0.87080	0.100	-17.25653	20.0	Averaged	
Methyl Methacrylate	0.60347	0.70315	0.70315	0.100	-16.51693	20.0	Averaged	
Ethyl Methacrylate	0.32746	0.30321	0.30321	0.100	7.40533	20.0	Averaged	
Dichlorodifluoromethane	50.0	43.90212	0.44771	0.100	12.19575	20.0	Linear	
Chloromethane	0.75520	0.88784	0.88784	0.100	-17.56306	20.0	Averaged	
Vinyl Chloride	0.64702	0.74105	0.74105	0.100	-14.53307	20.0	Averaged	
Bromomethane	0.26775	0.29910	0.29910	0.100	-11.70696	20.0	Averaged	
Chloroethane	0.36936	0.43016	0.43016	0.100	-16.46064	20.0	Averaged	
Trichlorofluoromethane	0.65570	0.69040	0.69040	0.100	-5.29164	20.0	Averaged	
Acrolein	100	132	0.02506	0.010	-32.00452	20.0	Linear	*
Acetone	100	120	0.23505	0.100	-19.73513	20.0	Linear	
1,1-Dichloroethene	0.36630	0.39845	0.39845	0.100	-8.77548	20.0	Averaged	
Iodomethane	100	86.78202	0.41517	0.100	13.21798	20.0	Quadratic	
Acrylonitrile	0.24365	0.28544	0.28544	0.050	-17.15086	20.0	Averaged	
Methylene Chloride	50.0	42.82619	0.37193	0.100	14.34762	20.0	Linear	
Methyl tert-butyl ether	1.36234	1.39822	1.39822	0.100	-2.63416	20.0	Averaged	
Carbon Disulfide	1.15144	1.12300	1.12300	0.100	2.46941	20.0	Averaged	
trans-1,2-Dichloroethene	0.42371	0.40257	0.40257	0.100	4.99067	20.0	Averaged	
Vinyl Acetate	1.75234	2.10008	2.10008	0.010	-19.84428	20.0	Averaged	
1,1-Dichloroethane	0.92980	0.96670	0.96670	0.200	-3.96796	20.0	Averaged	
2-Butanone	0.26627	0.31164	0.31164	0.100	-17.03866	20.0	Averaged	
2,2-Dichloropropane	50.0	51.62370	0.74532	0.100	-3.24741	20.0	Linear	
cis-1,2-Dichloroethene	0.53977	0.56338	0.56338	0.100	-4.37351	20.0	Averaged	
Chloroform	0.95139	0.92703	0.92703	0.200	2.56062	20.0	Averaged	
Bromochloromethane	0.30250	0.30756	0.30756	0.100	-1.67265	20.0	Averaged	
30 Dibromofluoromethane	50.0	54.79294	0.50152	0.100	-9.58587	20.0	Linear	

Continuing Calibration Verification (CCV)

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

Workorder HS23070993

RunID VOA6_442002

Volatiles by EPA 8260

Instrument ID VOA6.I
Lab File ID X072102.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date :36
ICAL Date(s) 14-JUL-2023 14-JUL-2023
ICAL Times :41 15:25
Quant Type ISTD

Compound	$\overline{RRF}$ / Conc	RF50 / Conc	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
1,1,1-Trichloroethane	0.73237	0.72745	0.72745	0.100	0.67186	20.0	Averaged	
1,1-Dichloropropene	0.40784	0.37950	0.37950	0.100	6.94938	20.0	Averaged	
1,2-Dichloroethane	0.55040	0.52568	0.52568	0.100	4.49222	20.0	Averaged	
Carbon Tetrachloride	0.41088	0.36520	0.36520	0.100	11.11776	20.0	Averaged	
35 1,2-Dichloroethane-d4	50.0	53.05775	0.60768	0.100	-6.11549	20.0	Linear	
Benzene	1.19597	1.17441	1.17441	0.500	1.80281	20.0	Averaged	
Trichloroethene	0.33829	0.32421	0.32421	0.200	4.16211	20.0	Averaged	
Bromodichloromethane	0.45810	0.43143	0.43143	0.200	5.82204	20.0	Averaged	
2-Chloroethylvinyl ether	0.13987	0.13716	0.13716	0.001	1.93616	20.0	Averaged	
1,2-Dichloropropane	0.38457	0.40350	0.40350	0.100	-4.92197	20.0	Averaged	
Dibromomethane	0.21769	0.21147	0.21147	0.100	2.85758	20.0	Averaged	
4-Methyl-2-Pentanone	0.49202	0.51219	0.51219	0.100	-4.09846	20.0	Averaged	
cis-1,3-Dichloropropene	0.52616	0.52393	0.52393	0.200	0.42317	20.0	Averaged	
48 Toluene-d8	1.28735	1.15574	1.15574	0.100	10.22311	20.0	Averaged	
Toluene	1.34593	1.31644	1.31644	0.400	2.19086	20.0	Averaged	
trans-1,3-Dichloropropene	0.44354	0.43555	0.43555	0.100	1.79984	20.0	Averaged	
2-Hexanone	0.32321	0.33847	0.33847	0.100	-4.72144	20.0	Averaged	
1,1,2-Trichloroethane	0.28552	0.27323	0.27323	0.100	4.30373	20.0	Averaged	
1,3-Dichloropropane	0.58331	0.56582	0.56582	0.100	2.99738	20.0	Averaged	
Dibromochloromethane	0.41218	0.40534	0.40534	0.100	1.66010	20.0	Averaged	
Tetrachloroethene	0.27806	0.26270	0.26270	0.200	5.52476	20.0	Averaged	
1,2-Dibromoethane	0.32627	0.31249	0.31249	0.100	4.22245	20.0	Averaged	
1-Chlorohexane	0.40168	0.38099	0.38099	0.100	5.15087	20.0	Averaged	
Chlorobenzene	0.94084	0.91224	0.91224	0.500	3.04015	20.0	Averaged	
1,1,1,2-Tetrachloroethane	0.36833	0.36018	0.36018	0.100	2.21176	20.0	Averaged	
Ethylbenzene	0.47179	0.44907	0.44907	0.100	4.81569	20.0	Averaged	
m,p-Xylenes	0.59188	0.58632	0.58632	0.100	0.93851	20.0	Averaged	
o-Xylene	0.56049	0.55498	0.55498	0.300	0.98444	20.0	Averaged	
Styrene	0.97767	0.97587	0.97587	0.300	0.18399	20.0	Averaged	
Bromoform	0.26446	0.26006	0.26006	0.100	1.66347	20.0	Averaged	
Isopropylbenzene	1.44071	1.40861	1.40861	0.100	2.22807	20.0	Averaged	
1,1,2,2-Tetrachloroethane	0.83983	0.84156	0.84156	0.300	-0.20593	20.0	Averaged	
1,2,3-Trichloropropane	0.66643	0.62206	0.62206	0.100	6.65796	20.0	Averaged	
n-Propylbenzene	3.02147	3.14584	3.14584	0.100	-4.11646	20.0	Averaged	

Continuing Calibration Verification (CCV)

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

Workorder HS23070993

RunID VOA6_442002

Volatiles by EPA 8260

Instrument ID VOA6.I
Lab File ID X072102.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date :36
ICAL Date(s) 14-JUL-2023 14-JUL-2023
ICAL Times :41 15:25
Quant Type ISTD

Compound	$\overline{RRF}$ / Conc	RF50 / Conc	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
Bromobenzene	0.78198	0.75337	0.75337	0.100	3.65856	20.0	Averaged	
1,3,5-Trimethylbenzene	2.26350	2.18752	2.18752	0.100	3.35666	20.0	Averaged	
2-Chlorotoluene	2.03821	1.95197	1.95197	0.100	4.23112	20.0	Averaged	
4-Chlorotoluene	2.23973	2.23382	2.23382	0.100	0.26392	20.0	Averaged	
tert-Butylbenzene	1.94110	1.88394	1.88394	0.100	2.94467	20.0	Averaged	
1,2,4-Trimethylbenzene	2.26985	2.22629	2.22629	0.100	1.91912	20.0	Averaged	
sec-Butylbenzene	2.58735	2.62700	2.62700	0.100	-1.53243	20.0	Averaged	
p-Isopropyltoluene	2.36350	2.34491	2.34491	0.100	0.78668	20.0	Averaged	
1,3-Dichlorobenzene	1.36227	1.37973	1.37973	0.600	-1.28165	20.0	Averaged	
1,4-Dichlorobenzene	1.49361	1.45094	1.45094	0.400	2.85734	20.0	Averaged	
n-Butylbenzene	1.97948	2.10900	2.10900	0.500	-6.54309	20.0	Averaged	
1,2-Dichlorobenzene	1.33929	1.34885	1.34885	0.400	-0.71434	20.0	Averaged	
1,2-Dibromo-3-Chloropropane	50.0	49.77097	0.13740	0.040	0.45806	20.0	Linear	
1,2,4-Trichlorobenzene	0.91986	0.89701	0.89701	0.100	2.48352	20.0	Averaged	
Hexachlorobutadiene	50.0	46.55155	0.39319	0.100	6.89691	20.0	Linear	
Naphthalene	2.27672	2.26399	2.26399	0.200	0.55925	20.0	Averaged	
1,2,3-Trichlorobenzene	0.86027	0.81915	0.81915	0.010	4.77915	20.0	Averaged	
94 1,2-Dichloroethylene (total	0.48174	0.48297	0.48297	0.200	-0.25542	20.0	Averaged	
95 Xylenes (total)	0.53613	0.53366	0.53366	0.100	0.46142	20.0	Averaged	
Cyclohexane	0.86668	0.92803	0.92803	0.100	-7.07873	20.0	Averaged	
Freon TF	50.0	59.33891	0.37787	0.100	-18.67781	20.0	Quadratic	
Methylcyclohexane	1.05536	1.14183	1.14183	0.100	-8.19345	20.0	Averaged	
Methyl Acetate	0.44499	0.46467	0.46467	0.100	-4.42212	20.0	Averaged	
Tert-butyl alcohol	0.06311	0.05685	0.05685	0.005	9.92130	20.0	Averaged	
Isopropyl alcohol	0.03916	0.04209	0.04209	0.005	-7.49308	20.0	Averaged	

Continuing Calibration Verification (CCV)

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

Workorder HS23070993

RunID VOA6_442002

Volatiles by EPA 8260

Instrument ID VOA6.I
Lab File ID X072130.D
Analysis Type WATER
Lab Sample ID CCV-END

Injection Date :10
ICAL Date(s) 14-JUL-2023 14-JUL-2023
ICAL Times :41 15:25
Quant Type ISTD

Compound	$\overline{RRF}$ / Conc	RF50 / Conc	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
1,4-Dioxane	0.00594	0.00653	0.00653	0.001	-9.95072	50.0	Averaged	
1,3-Butadiene	0.64248	0.78520	0.78520	0.100	-22.21307	50.0	Averaged	
Methacrylonitrile	0.64539	0.84699	0.84699	0.100	-31.23848	50.0	Averaged	
Isobutyl Alcohol	0.09478	0.12036	0.12036	0.005	-26.98986	50.0	Averaged	
Acetonitrile	0.07011	0.07785	0.07785	0.005	-11.04115	50.0	Averaged	
Allyl Chloride	1.64159	1.88707	1.88707	0.100	-14.95398	50.0	Averaged	
Propionitrile	0.09905	0.11687	0.11687	0.010	-17.99281	50.0	Averaged	
trans-1,4-Dichloro-2-butene	0.15207	0.16096	0.16096	0.050	-5.84656	50.0	Averaged	
Ethyl Acetate	0.74265	0.91829	0.91829	0.100	-23.65103	50.0	Averaged	
Methyl Methacrylate	0.60347	0.73982	0.73982	0.100	-22.59335	50.0	Averaged	
Ethyl Methacrylate	0.32746	0.30740	0.30740	0.100	6.12537	50.0	Averaged	
Dichlorodifluoromethane	50.0	46.33453	0.47315	0.100	7.33094	50.0	Linear	
Chloromethane	0.75520	0.84607	0.84607	0.100	-12.03242	50.0	Averaged	
Vinyl Chloride	0.64702	0.77089	0.77089	0.100	-19.14413	50.0	Averaged	
Bromomethane	0.26775	0.28366	0.28366	0.100	-5.94122	50.0	Averaged	
Chloroethane	0.36936	0.42504	0.42504	0.100	-15.07511	50.0	Averaged	
Trichlorofluoromethane	0.65570	0.68622	0.68622	0.100	-4.65438	50.0	Averaged	
Acrolein	100	174	0.03310	0.010	-73.95968	50.0	Linear	
Acetone	100	127	0.24800	0.100	-26.60299	50.0	Linear	
1,1-Dichloroethene	0.36630	0.40320	0.40320	0.100	-10.07166	50.0	Averaged	
Iodomethane	100	92.37625	0.44388	0.100	7.62375	50.0	Quadratic	
Acrylonitrile	0.24365	0.27209	0.27209	0.050	-11.67318	50.0	Averaged	
Methylene Chloride	50.0	53.49118	0.46160	0.100	-6.98237	50.0	Linear	
Methyl tert-butyl ether	1.36234	1.29908	1.29908	0.100	4.64355	50.0	Averaged	
Carbon Disulfide	1.15144	1.15967	1.15967	0.100	-0.71482	50.0	Averaged	
trans-1,2-Dichloroethene	0.42371	0.40623	0.40623	0.100	4.12625	50.0	Averaged	
Vinyl Acetate	1.75234	2.12914	2.12914	0.010	-21.50284	50.0	Averaged	
1,1-Dichloroethane	0.92980	0.91006	0.91006	0.200	2.12391	50.0	Averaged	
2-Butanone	0.26627	0.33096	0.33096	0.100	-24.29631	50.0	Averaged	
2,2-Dichloropropane	50.0	46.44832	0.67030	0.100	7.10335	50.0	Linear	
cis-1,2-Dichloroethene	0.53977	0.57796	0.57796	0.100	-7.07427	50.0	Averaged	
Chloroform	0.95139	0.97164	0.97164	0.200	-2.12921	50.0	Averaged	
Bromochloromethane	0.30250	0.31262	0.31262	0.100	-3.34462	50.0	Averaged	
30 Dibromofluoromethane	50.0	56.40084	0.51604	0.100	-12.80169	50.0	Linear	

Continuing Calibration Verification (CCV)

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

Workorder HS23070993

RunID VOA6_442002

Volatiles by EPA 8260

Instrument ID VOA6.I
Lab File ID X072130.D
Analysis Type WATER
Lab Sample ID CCV-END

Injection Date :10
ICAL Date(s) 14-JUL-2023 14-JUL-2023
ICAL Times :41 15:25
Quant Type ISTD

Compound	$\overline{RRF}$ / Conc	RF50 / Conc	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
1,1,1-Trichloroethane	0.73237	0.75373	0.75373	0.100	-2.91602	50.0	Averaged	
1,1-Dichloropropene	0.40784	0.40023	0.40023	0.100	1.86625	50.0	Averaged	
1,2-Dichloroethane	0.55040	0.55686	0.55686	0.100	-1.17427	50.0	Averaged	
Carbon Tetrachloride	0.41088	0.36462	0.36462	0.100	11.25852	50.0	Averaged	
35 1,2-Dichloroethane-d4	50.0	56.13138	0.64247	0.100	-12.26275	50.0	Linear	
Benzene	1.19597	1.26104	1.26104	0.500	-5.44049	50.0	Averaged	
Trichloroethene	0.33829	0.34089	0.34089	0.200	-0.76921	50.0	Averaged	
Bromodichloromethane	0.45810	0.44172	0.44172	0.200	3.57556	50.0	Averaged	
2-Chloroethylvinyl ether	0.13987	0.14302	0.14302	0.001	-2.25686	50.0	Averaged	
1,2-Dichloropropane	0.38457	0.42118	0.42118	0.100	-9.52017	50.0	Averaged	
Dibromomethane	0.21769	0.21365	0.21365	0.100	1.85581	50.0	Averaged	
4-Methyl-2-Pentanone	0.49202	0.54764	0.54764	0.100	-11.30377	50.0	Averaged	
cis-1,3-Dichloropropene	0.52616	0.52447	0.52447	0.200	0.32083	50.0	Averaged	
48 Toluene-d8	1.28735	1.20630	1.20630	0.100	6.29536	50.0	Averaged	
Toluene	1.34593	1.38839	1.38839	0.400	-3.15520	50.0	Averaged	
trans-1,3-Dichloropropene	0.44354	0.43659	0.43659	0.100	1.56633	50.0	Averaged	
2-Hexanone	0.32321	0.36596	0.36596	0.100	-13.22590	50.0	Averaged	
1,1,2-Trichloroethane	0.28552	0.28211	0.28211	0.100	1.19345	50.0	Averaged	
1,3-Dichloropropane	0.58331	0.59026	0.59026	0.100	-1.19150	50.0	Averaged	
Dibromochloromethane	0.41218	0.40048	0.40048	0.100	2.83870	50.0	Averaged	
Tetrachloroethene	0.27806	0.25773	0.25773	0.200	7.31171	50.0	Averaged	
1,2-Dibromoethane	0.32627	0.31791	0.31791	0.100	2.56313	50.0	Averaged	
1-Chlorohexane	0.40168	0.37316	0.37316	0.100	7.10128	50.0	Averaged	
Chlorobenzene	0.94084	0.92429	0.92429	0.500	1.75945	50.0	Averaged	
1,1,1,2-Tetrachloroethane	0.36833	0.35554	0.35554	0.100	3.47348	50.0	Averaged	
Ethylbenzene	0.47179	0.45919	0.45919	0.100	2.66975	50.0	Averaged	
m,p-Xylenes	0.59188	0.58913	0.58913	0.100	0.46384	50.0	Averaged	
o-Xylene	0.56049	0.56796	0.56796	0.300	-1.33295	50.0	Averaged	
Styrene	0.97767	0.99367	0.99367	0.300	-1.63664	50.0	Averaged	
Bromoform	0.26446	0.26014	0.26014	0.100	1.63231	50.0	Averaged	
Isopropylbenzene	1.44071	1.40467	1.40467	0.100	2.50159	50.0	Averaged	
1,1,2,2-Tetrachloroethane	0.83983	0.85769	0.85769	0.300	-2.12699	50.0	Averaged	
1,2,3-Trichloropropane	0.66643	0.67650	0.67650	0.100	-1.51049	50.0	Averaged	
n-Propylbenzene	3.02147	3.07548	3.07548	0.100	-1.78780	50.0	Averaged	

Continuing Calibration Verification (CCV)

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

Workorder HS23070993

RunID VOA6_442002

Volatiles by EPA 8260

Instrument ID VOA6.I
Lab File ID X072130.D
Analysis Type WATER
Lab Sample ID CCV-END

Injection Date :10
ICAL Date(s) 14-JUL-2023 14-JUL-2023
ICAL Times :41 15:25
Quant Type ISTD

Compound	$\overline{RRF}$ / Conc	RF50 / Conc	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
Bromobenzene	0.78198	0.76000	0.76000	0.100	2.81170	50.0	Averaged	
1,3,5-Trimethylbenzene	2.26350	2.17353	2.17353	0.100	3.97474	50.0	Averaged	
2-Chlorotoluene	2.03821	1.97553	1.97553	0.100	3.07525	50.0	Averaged	
4-Chlorotoluene	2.23973	2.23722	2.23722	0.100	0.11204	50.0	Averaged	
tert-Butylbenzene	1.94110	1.86957	1.86957	0.100	3.68497	50.0	Averaged	
1,2,4-Trimethylbenzene	2.26985	2.24428	2.24428	0.100	1.12654	50.0	Averaged	
sec-Butylbenzene	2.58735	2.53076	2.53076	0.100	2.18738	50.0	Averaged	
p-Isopropyltoluene	2.36350	2.21846	2.21846	0.100	6.13675	50.0	Averaged	
1,3-Dichlorobenzene	1.36227	1.33837	1.33837	0.600	1.75399	50.0	Averaged	
1,4-Dichlorobenzene	1.49361	1.40910	1.40910	0.400	5.65856	50.0	Averaged	
n-Butylbenzene	1.97948	1.93385	1.93385	0.500	2.30520	50.0	Averaged	
1,2-Dichlorobenzene	1.33929	1.32564	1.32564	0.400	1.01857	50.0	Averaged	
1,2-Dibromo-3-Chloropropane	50.0	45.48574	0.12531	0.040	9.02851	50.0	Linear	
1,2,4-Trichlorobenzene	0.91986	0.80663	0.80663	0.100	12.30954	50.0	Averaged	
Hexachlorobutadiene	50.0	37.80782	0.31540	0.100	24.38435	50.0	Linear	
Naphthalene	2.27672	2.15226	2.15226	0.200	5.46659	50.0	Averaged	
1,2,3-Trichlorobenzene	0.86027	0.74844	0.74844	0.010	12.99909	50.0	Averaged	
94 1,2-Dichloroethylene (total	0.48174	0.49209	0.49209	0.200	-2.14861	50.0	Averaged	
95 Xylenes (total)	0.53613	0.54236	0.54236	0.100	-1.16198	50.0	Averaged	
Cyclohexane	0.86668	0.90881	0.90881	0.100	-4.86144	50.0	Averaged	
Freon TF	50.0	54.59913	0.34193	0.100	-9.19826	50.0	Quadratic	
Methylcyclohexane	1.05536	1.09850	1.09850	0.100	-4.08707	50.0	Averaged	
Methyl Acetate	0.44499	0.56004	0.56004	0.100	-25.85559	50.0	Averaged	
Tert-butyl alcohol	0.06311	0.06304	0.06304	0.005	0.11190	50.0	Averaged	
Isopropyl alcohol	0.03916	0.04523	0.04523	0.005	-15.49544	50.0	Averaged	

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Form 8

Internal Standard Area and RT Summary

Volatiles by EPA 8260

Workorder

HS23070993

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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

Form 8 - Internal Standard Area and RT Summary

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23070993**

Volatiles by EPA 8260

VOA6_442002		Pentafluorobenzene				1,4-Difluorobenzene				Chlorobenzene				1,4-Dichlorobenze			
Sample ID	File ID	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
12-HOUR STD (CCV)	X072102.D	603321	#	4.18	#	1004251	#	4.97	#	930634	#	7.67	#	500527	#	9.66	#
HS23070993-01	X072115.D	610427		4.18		959443		4.97		833199		7.67		415972		9.66	
HS23070993-01	X072111.D	604115		4.18		913803		4.97		814287		7.67		421780		9.66	
HS23070993-02	X072116.D	610778		4.18		960663		4.97		842173		7.67		422600		9.66	
HS23070993-02	X072112.D	599836		4.18		950189		4.97		827279		7.67		417609		9.66	
HS23070993-03	X072122.D	589616		4.18		926889		4.97		798949		7.67		389610		9.66	
HS23070993-04	X072119.D	617670		4.18		951869		4.97		839817		7.67		428328		9.66	
HS23070993-05	X072126.D	636593		4.18		1002903		4.97		871875		7.67		451001		9.66	
HS23070993-05	X072125.D	584649		4.18		911885		4.97		796890		7.67		402246		9.66	
HS23070993-06	X072121.D	612859		4.18		938586		4.97		816895		7.67		400601		9.66	
HS23070993-07	X072120.D	593582		4.18		950934		4.97		831930		7.67		422331		9.66	
HS23070993-08	X072123.D	609840		4.18		941366		4.97		819608		7.67		387115		9.66	
HS23070993-09	X072128.D	595908		4.18		933817		4.97		827140		7.67		409285		9.66	
HS23070993-09	X072127.D	606148		4.18		937641		4.97		833797		7.67		428790		9.66	
HS23070993-10	X072124.D	606582		4.18		957581		4.97		836652		7.67		438357		9.66	
HS23070993-11	X072117.D	617577		4.18		952567		4.97		849361		7.67		446573		9.66	
VBLKW-230721	X072107.D	632804		4.18		969596		4.97		851711		7.67		411177		9.66	
VLCSW-230721	X072105.D	622769		4.18		989887		4.97		908700		7.67		482129		9.66	
MS-ZZZZZZMS	X072113.D	608243		4.18		921382		4.97		793372		7.67		432702		9.66	
ZZZZZZMSD	X072114.D	605716		4.18		973608		4.97		849774		7.67		446503		9.66	

AREA UPPER LIMIT = +100% of 12H STD IS Area
AREA LOWER LIMIT = - 50% of 12H STD IS Area
RT - Retention IS - Internal StandardTime

RT UPPER LIMIT = + 0.50 of 12H STD IS RT
RT LOWER LIMIT = - 0.50 of 12H STD IS RT
CCV - Continuing Calibration Verification

- Area or RT Limit Flag
* - Value Outside Area or RT limits
H - Hour STD - Standard

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Analysis Run Log

Volatiles by EPA 8260

Workorder

HS23070993

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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

Form 13 - Analysis Run Log

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23070993

RunID
VOA6-441456

Volatiles by EPA 8260

Run ID VOA6_441456 **Start Date** 07/14/23 **EndDate** 07/14/23

Inj. Time	Client Sample ID	Type	Lab Sample ID	File ID	Analysis Date	DF
11:20	BFB	TUNE	BFB	X071401.D	07/14/23	1
12:01	VSTD000.25	ICAL1	VSTD000.25	X071402.D	07/14/23	1
12:22	VSTD000.5	ICAL2	VSTD000.5	X071403.D	07/14/23	1
13:02	VSTD001	ICAL3	VSTD001	X071404.D	07/14/23	1
13:23	VSTD002	ICAL4	VSTD002	X071405.D	07/14/23	1
13:43	VSTD005	ICAL5	VSTD005	X071406.D	07/14/23	1
14:04	VSTD020	ICAL6	VSTD020	X071407.D	07/14/23	1
14:24	VSTD050	ICAL7	VSTD050	X071408.D	07/14/23	1
14:44	VSTD100	ICAL8	VSTD100	X071409.D	07/14/23	1
15:05	VSTD150	ICAL9	VSTD150	X071410.D	07/14/23	1
15:25	VSTD200	ICAL	VSTD200	X071411.D	07/14/23	1
16:06	CCV	ICV	CCV	X071413.D	07/14/23	1

Form 13 - Analysis Run Log

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23070993**

Volatiles by EPA 8260

RunID VOA6-442002

Run ID VOA6_442002 **Start Date** 07/21/23 **EndDate** 07/21/23

Inj. Time	Client Sample ID	Type	Lab Sample ID	File ID	Analysis Date	DF
12:16	BFB	TUNE	BFB	X072101.D	07/21/23	1
12:36	CCV	CCV	CCV	X072102.D	07/21/23	1
13:17	CCB	CCB	CCB	X072104.D	07/21/23	1
13:38	VLCSW-230721	LCS	VLCSW-230721	X072105.D	07/21/23	1
14:19	VBLKW-230721	MBLK	VBLKW-230721	X072107.D	07/21/23	1
14:39	HS23071109-03	SAMP	ZZZZZZZZZZ	X072108.D	07/21/23	1
15:00	HS23071109-02	SAMP	ZZZZZZZZZZ	X072109.D	07/21/23	1
15:20	HS23071109-01	SAMP	ZZZZZZZZZZ	X072110.D	07/21/23	1
15:41	HS23070993-01	SAMP	16WW37-230713	X072111.D	07/21/23	1
16:01	HS23070993-02	SAMP	16WW37-230713-FD	X072112.D	07/21/23	1
16:22	HS23071109-01MS	MS	ZZZZZZMS	X072113.D	07/21/23	1
16:42	HS23071109-01MSD	MSD	ZZZZZZMSD	X072114.D	07/21/23	1
17:03	HS23070993-01	SAMP	16WW37-230713	X072115.D	07/21/23	10
17:23	HS23070993-02	SAMP	16WW37-230713-FD	X072116.D	07/21/23	10
17:44	HS23070993-11	SAMP	Trip Blank-230713	X072117.D	07/21/23	1
18:04	HS23071113-10	SAMP	ZZZZZZZZZZ	X072118.D	07/21/23	1
18:25	HS23070993-04	SAMP	16WW44-230713	X072119.D	07/21/23	1
18:45	HS23070993-07	SAMP	16WW46-230713	X072120.D	07/21/23	1
19:06	HS23070993-06	SAMP	16RW06-230713	X072121.D	07/21/23	1
19:26	HS23070993-03	SAMP	16WW38-230713	X072122.D	07/21/23	20
19:47	HS23070993-08	SAMP	16PM09-230713	X072123.D	07/21/23	25
20:07	HS23070993-10	SAMP	16PM14-230713	X072124.D	07/21/23	50
20:28	HS23070993-05	SAMP	16RW07-230713	X072125.D	07/21/23	5
20:48	HS23070993-05	SAMP	16RW07-230713	X072126.D	07/21/23	50
21:09	HS23070993-09	SAMP	16PM06-230713	X072127.D	07/21/23	250
21:29	HS23070993-09	SAMP	16PM06-230713	X072128.D	07/21/23	2000
21:50	HS23071113-01	SAMP	ZZZZZZZZZZ	X072129.D	07/21/23	5
22:10	CCV-END	CCV_END	CCV-END	X072130.D	07/21/23	1

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Raw Data VOA6 441456

Volatiles by EPA 8260

Workorder

HS23070993

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

ALS Environmental–Houston Laboratory
10450 Stancliff Road, Suite 210, Houston, TX 77099
Phone (281) 530-5656 Fax (281) 530-5887
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Data File: \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071401.D Page 1
Report Date: 14-Jul-2023 12:16

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071401.D
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 14-JUL-2023 11:20
Operator : PC Inst ID: voa6.i
Smp Info : BFB;BFB;3;;BFB
Misc Info : V6;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\bfb.m
Meth Date : 14-Mar-2023 15:45 Linh.Pham Quant Type: ISTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: NAHSTW7051

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

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

					CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/l)		
RT	EXP RT	REL RT	MASS	RESPONSE			TARGET RANGE	RATIO
1 bfb							CAS #: 460-00-4	
8.687	8.889	(0.000)	95	75584			0.00- 100.00	100.00
8.687	8.889	(0.000)	50	19544			15.00- 40.00	25.86
8.687	8.889	(0.000)	75	39336			30.00- 60.00	52.04
8.687	8.889	(0.000)	96	4254			5.00- 9.00	5.63
8.687	8.889	(0.000)	173	575			0.00- 2.00	0.93
8.687	8.889	(0.000)	174	62120			50.00- 0.00	82.19
8.687	8.889	(0.000)	175	4074			5.00- 9.00	6.56
8.687	8.889	(0.000)	176	59920			95.00- 101.00	96.46
8.687	8.889	(0.000)	177	3382			5.00- 9.00	5.64

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	25.86
75	30.00 - 60.00% of mass 95	52.04
96	5.00 - 9.00% of mass 95	5.63
173	Less than 2.00% of mass 174	0.76 (0.93)
174	Greater than 50.00% of mass 95	82.19
175	5.00 - 9.00% of mass 174	5.39 (6.56)
176	95.00 - 101.00% of mass 174	79.28 (96.46)
177	5.00 - 9.00% of mass 176	4.47 (5.64)

Data File: X071401.D
Spectrum: Scan 2159 (8.68)
Location of Maximum: 95.10
Number of points: 86

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36.00	1001	59.90	684	88.00	3732	134.80	342
37.00	4000	61.00	4199	91.20	205	137.00	155
38.10	3490	62.10	4176	92.00	2613	140.00	79
39.20	1334	63.00	2135	93.00	3158	140.80	1031
39.90	3559	64.10	319	94.00	8834	142.20	140
40.70	64	67.00	413	95.10	75584	142.90	753
42.00	125	68.10	6971	96.00	4254	145.70	149
43.00	148	69.10	7538	97.30	71	147.80	317
44.10	2032	70.10	1203	104.00	361	148.70	68
45.10	1709	72.20	463	105.00	140	155.00	115
46.10	218	73.20	3048	105.90	261	156.90	305
47.00	2031	74.00	11989	107.00	78	158.60	77
47.80	299	75.00	39336	114.80	122	167.70	60
48.30	315	76.10	3185	115.70	131	169.70	59
49.00	4410	76.90	966	116.70	450	172.20	197
50.00	19544	78.10	384	118.00	134	173.00	575
51.00	6014	78.90	2349	118.90	176	174.00	62120
52.20	624	79.90	148	127.80	434	175.00	4074
55.10	243	80.80	1499	128.50	116	176.00	59920
55.90	1173	82.00	347	129.50	194	177.00	3382
57.00	2234	85.90	194	129.90	123		
57.80	62	87.00	3285	131.00	91		

Data File: \\nahstws005\target\chem\voa6.i\x230714.b\x071401.d Page 1

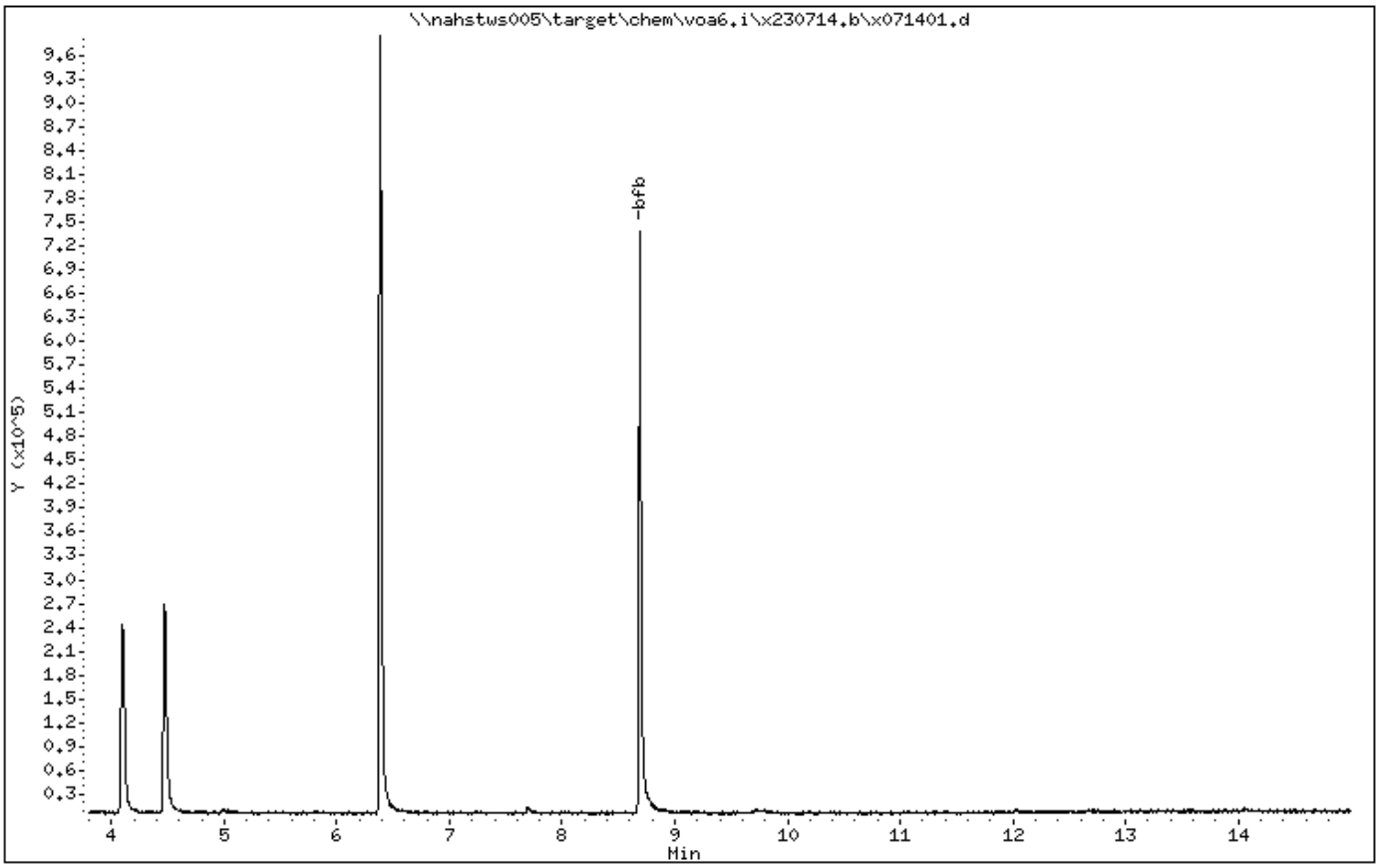
Date : 14-JUL-2023 11:20

Client ID: BFB Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0 Operator: PC

Column phase: DB624 Column diameter: 0.25



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InstruID : voa6.i
LabSampID : BFB

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071402.D Page 1
Report Date: 20-Jul-2023 15:04

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071402.D
Lab Smp Id: VSTD000.25 Client Smp ID: VSTD000.25
Inj Date : 14-JUL-2023 12:01
Operator : PC Inst ID: voa6.i
Smp Info : VSTD000.25;VSTD000.25;1;1;
Misc Info : V6;WATER;0;1;
Comment   :
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Meth Date : 20-Jul-2023 15:04 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 3 Calibration Sample, Level: 1
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

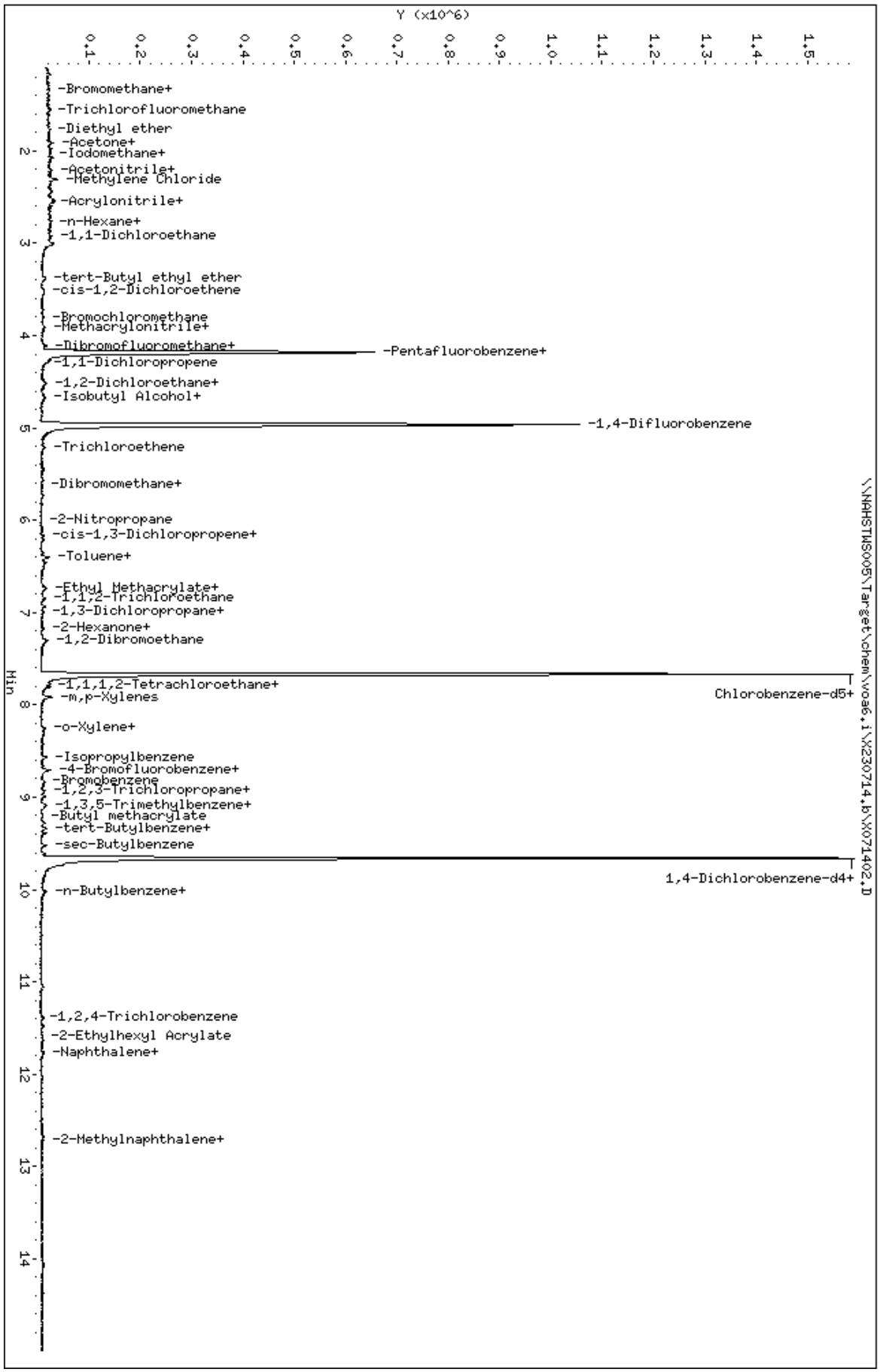
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
*	1 Pentafluorobenzene	168	4.177	4.177	(1.000)	513772	50.0000	
	2 Dichlorodifluoromethane	85	0.972	0.972	(0.233)	1327	0.25000	1.34
	6 Bromomethane	94	1.344	1.344	(0.322)	1426	0.25000	0.51
	7 Chloroethane	64	1.404	1.404	(0.336)	2235	0.25000	0.58
	13 Acetonitrile	39	2.206	2.206	(0.528)	1743	2.50000	2.41(a)
	15 Iodomethane	142	2.026	2.026	(0.485)	1361	0.50000	4.07(T)
	34 Carbon Tetrachloride	117	4.177	4.177	(0.841)	45277	0.25000	6.79
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	810653	50.0000	
	43 2-Nitropropane	43	5.992	5.992	(1.434)	882	0.25000	0.43(a)
	44 Dibromomethane	93	5.557	5.557	(1.119)	982	0.25000	0.27(a)
	46 cis-1,3-Dichloropropene	75	6.164	6.164	(1.242)	2135	0.25000	0.25(a)
*	47 Chlorobenzene-d5	117	7.667	7.667	(1.000)	750028	50.0000	
$	48 Toluene-d8	98	6.400	6.400	(0.835)	9790	0.25000	0.50(aM)
	49 Ethyl Methacrylate	69	6.738	6.738	(1.357)	1122	0.25000	0.21(a)
	50 Toluene	91	6.457	6.457	(0.842)	5493	0.25000	0.27(a)
	53 1,1,2-Trichloroethane	83	6.847	6.847	(0.893)	800	0.25000	0.18(a)
	54 1,3-Dichloropropane	76	6.993	6.993	(0.912)	2465	0.25000	0.28(a)
	55 Dibromochloromethane	129	7.180	7.180	(0.936)	1520	0.25000	0.24(a)
	56 Tetrachloroethene	164	6.940	6.940	(0.905)	1306	0.25000	0.31(a)
	57 1,2-Dibromoethane	107	7.285	7.285	(0.950)	1533	0.25000	0.31(a)

58 1-Chlorohexane	55	7.667	7.667 (1.544)	8221	0.25000	1.26(a)
59 Chlorobenzene	112	7.694	7.694 (1.003)	4381	0.25000	0.31(a)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
60	1,1,1,2-Tetrachloroethane	131	7.780	7.780	(1.015)	1432	0.25000	0.25(a)
61	Ethylbenzene	106	7.810	7.810	(1.019)	1916	0.25000	0.27(a)
62	m,p-Xylenes	106	7.915	7.915	(1.032)	4768	0.50000	0.53(a)
63	o-Xylene	106	8.252	8.252	(1.076)	2524	0.25000	0.30(a)
64	Styrene	104	8.316	8.316	(1.085)	2747	0.25000	0.18(a)
67	Isopropylbenzene	105	8.567	8.567	(1.117)	5899	0.25000	0.27(a)
$ 69	4-Bromofluorobenzene	95	8.710	8.710	(1.136)	5758	0.25000	0.34(a)
* 70	1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	386421	50.0000	
71	1,2,3-Trichloropropane	75	8.871	8.871	(0.918)	2014	0.25000	0.39(a)
73	n-Propylbenzene	91	8.927	8.927	(0.924)	5784	0.25000	0.24(a)
74	Bromobenzene	156	8.818	8.818	(0.913)	1741	0.25000	0.28(a)
75	1,3,5-Trimethylbenzene	105	9.081	9.081	(0.940)	5918	0.25000	0.33(a)
76	2-Chlorotoluene	91	8.991	8.991	(0.931)	3339	0.25000	0.21(a)
77	4-Chlorotoluene	91	9.114	9.114	(0.943)	4046	0.25000	0.23(a)
78	tert-Butylbenzene	119	9.339	9.339	(0.967)	4275	0.25000	0.28(a)
79	1,2,4-Trimethylbenzene	105	9.392	9.392	(0.972)	5781	0.25000	0.32(a)
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	5830	0.25000	0.29(a)
82	p-Isopropyltoluene	119	9.654	9.654	(0.999)	5470	0.25000	0.29(a)
83	1,3-Dichlorobenzene	146	9.624	9.624	(0.996)	3790	0.25000	0.35(a)
84	1,4-Dichlorobenzene	146	9.684	9.684	(1.002)	4376	0.25000	0.37(a)
88	1,2-Dichlorobenzene	146	10.018	10.018	(1.037)	2842	0.25000	0.27(a)
93	1,2,3-Trichlorobenzene	180	11.780	11.780	(1.219)	1828	0.25000	0.27(a)
141	Cyclohexane	56	4.174	4.174	(0.999)	9736	0.25000	1.09(a)
135	1,4-Dioxane	88	5.621	5.621	(1.345)	272	5.00000	4.45(aM)
136	n-Hexane	57	2.772	2.772	(0.664)	1827	0.25000	(a)
139	Diethyl ether	59	1.760	1.760	(0.421)	1325	0.25000	0.27(a)
149	Isopropyl alcohol	45	2.097	2.097	(0.502)	2990	5.00000	7.43(T)
166	1,2,3-Trimethylbenzene	105	9.737	9.737	(1.008)	3283	0.25000	0.18(a)
174	tert-Amyl methyl ether	73	4.665	4.665	(1.117)	5098	0.25000	0.30(Ta)
175	tert-Butyl ethyl ether	59	3.379	3.379	(0.809)	5067	0.25000	0.23(a)
176	tert-Amyl alcohol	59	4.646	4.646	(1.112)	1684	5.00000	3.00(a)
151	4-Methyl-2-pentanol	45	6.734	6.734	(1.356)	10871	5.00000	6.25
180	1-Methylnaphthalene	142	12.672	12.672	(1.312)	2289	0.25000	(a)
140	1,3-Butadiene	54	1.171	1.171	(0.280)	1955	0.25000	0.29(a)
M 94	1,2-Dichloroethylene (total)	96				3006	0.50000	(a)
134	Cyclohexanone	55	8.653	8.653	(0.896)	2370	5.00000	6.88(a)
150	Allyl alcohol	57	2.772	2.772	(0.664)	1827	5.00000	(a)
200	Dimethyl Disulfide	94	6.202	6.202	(0.809)	2328	0.25000	0.23(a)

QC Flag Legend

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



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Sample Info: VSTD000,25;VSTD000,25;1;1;
Purge Volume: 5.0
Column phase: DB624

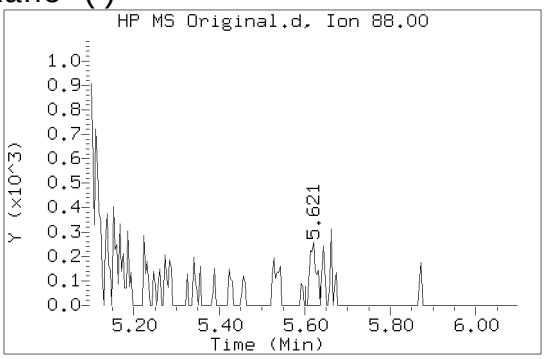
Instrument: voa6,i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071402.D
Inj Date : 14-JUL-2023 12:01
InstruID : voa6.i
LabSampID : VSTD000.25

1,4-Dioxane ()

Reason Code:

BEFORE
MASS
88
AREA
272
HEIGHT
259
20-Jul-2023
15:04
linh
pham



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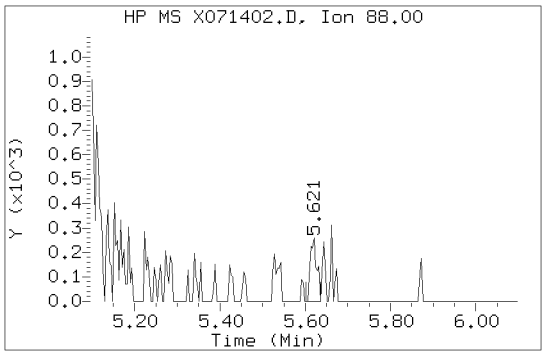

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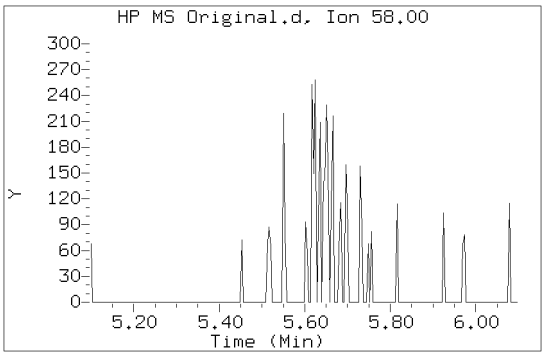

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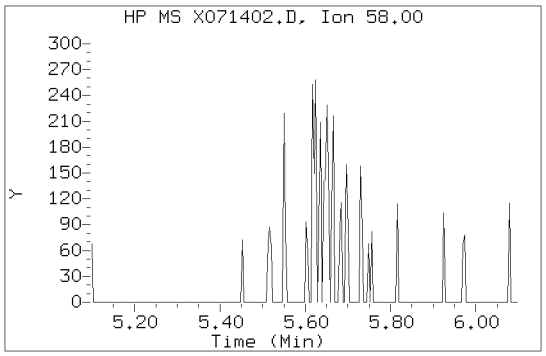

Toluene-d8 (2037-26-5)

Reason Code:

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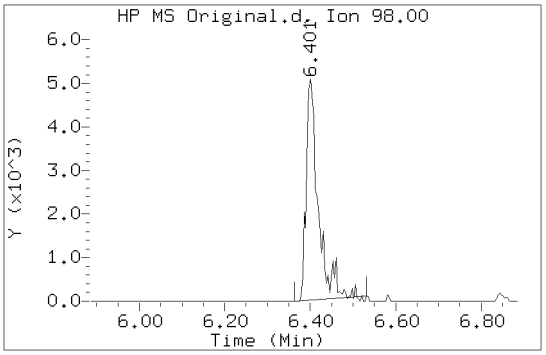

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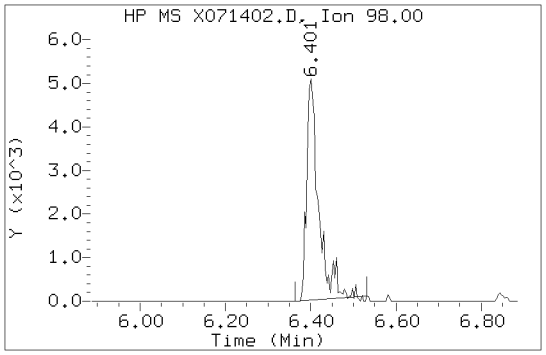

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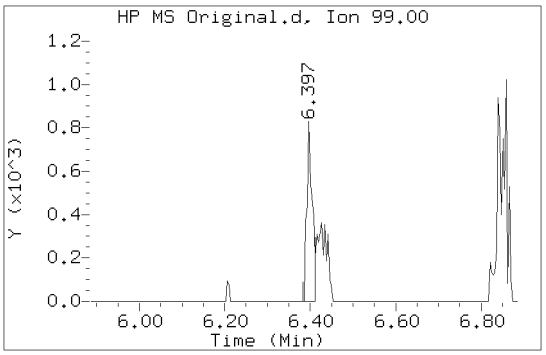

AFTER
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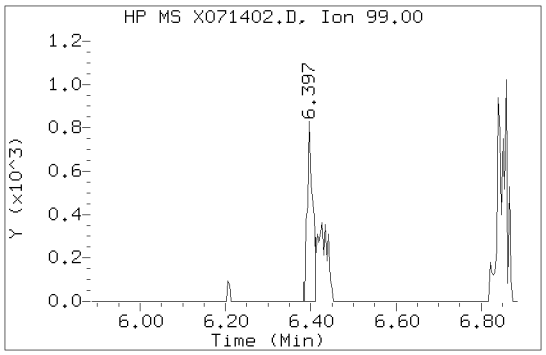

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Inj Date : 14-JUL-2023 12:01
InstruID : voa6.i
LabSampID : VSTD000.25

Toluene-d8 (2037-26-5)

Reason Code:

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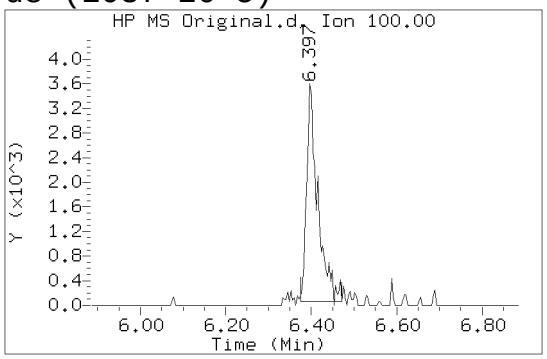

AFTER

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20-Jul-2023
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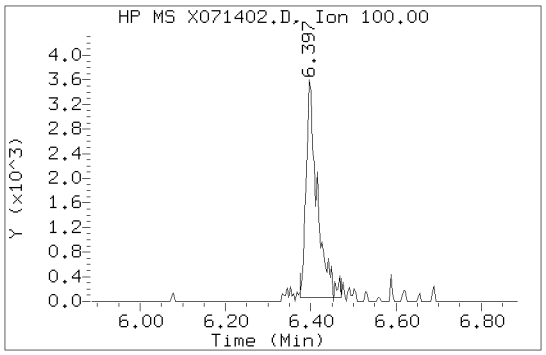

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Report Date: 20-Jul-2023 15:04

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
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Inj Date : 14-JUL-2023 12:22
Operator : PC Inst ID: voa6.i
Smp Info : VSTD000.5;VSTD000.5;1;2;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\8260W.m
Meth Date : 20-Jul-2023 15:04 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 12:01 Cal File: X071402.D
Als bottle: 3 Calibration Sample, Level: 2
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	4.181	4.181	(1.000)	503444	50.0000	
	2 Dichlorodifluoromethane	85	0.976	0.976	(0.234)	1663	0.50000	1.41
	3 Chloromethane	50	1.081	1.081	(0.259)	4229	0.50000	0.55
	4 Propionitrile	54	3.701	3.701	(0.885)	5231	5.00000	5.24(aM)
	5 Vinyl Chloride	62	1.145	1.145	(0.274)	3484	0.50000	0.53
	6 Bromomethane	94	1.340	1.340	(0.321)	1399	0.50000	0.51(M)
	7 Chloroethane	64	1.407	1.407	(0.337)	2168	0.50000	0.58(M)
	9 Acrolein	56	1.868	1.868	(0.447)	268	1.00000	2.51(aM)
	12 Isobutyl Alcohol	43	4.695	4.695	(1.123)	9983	10.0000	10.46(a)
	13 Acetonitrile	39	2.213	2.213	(0.529)	3606	5.00000	5.10(aM)
	14 Allyl Chloride	41	2.202	2.202	(0.527)	9843	0.50000	0.59(a)
	15 Iodomethane	142	2.026	2.026	(0.485)	2897	1.00000	4.39(TM)
	16 Acrylonitrile	53	2.539	2.539	(0.607)	3055	1.00000	1.24(M)
	18 Methyl tert-butyl ether	73	2.539	2.539	(0.607)	7187	0.50000	0.52(M)
	19 Carbon Disulfide	76	2.078	2.078	(0.497)	12054	1.00000	1.03
	20 trans-1,2-Dichloroethene	96	2.543	2.543	(0.608)	2557	0.50000	0.59
	21 Vinyl Acetate	43	3.019	3.019	(0.722)	18224	1.00000	1.03(M)
	22 1,1-Dichloroethane	63	2.929	2.929	(0.701)	5250	0.50000	0.56(TM)
	23 Chloroprene	53	1.786	1.786	(0.427)	1292	0.50000	0.57(aM)
	24 2-Butanone	43	3.675	3.675	(0.879)	2827	1.00000	1.05(M)

25 Methacrylonitrile	41	3.893	3.893 (0.931)	3622	0.50000	0.55(aM)
26 2,2-Dichloropropane	77	3.506	3.506 (0.839)	3703	0.50000	0.71(M)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	27 cis-1,2-Dichloroethene	96	3.540	3.540	(0.847)	2924	0.50000	0.53(M)
	28 Chloroform	83	3.911	3.911	(0.935)	5643	0.50000	0.58(M)
	29 Bromochloromethane	128	3.810	3.810	(0.911)	1717	0.50000	0.56(M)
	31 1,1,1-Trichloroethane	97	4.080	4.080	(0.976)	3867	0.50000	0.52
	32 1,1-Dichloropropene	75	4.286	4.286	(0.863)	3744	0.50000	0.57(M)
	33 1,2-Dichloroethane	62	4.564	4.564	(0.919)	5246	0.50000	0.59(M)
	34 Carbon Tetrachloride	117	4.256	4.256	(0.857)	3613	0.50000	0.54(M)
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	802287	50.0000	
	37 Benzene	78	4.526	4.526	(0.912)	10488	0.50000	0.54
	38 Trichloroethene	130	5.216	5.216	(1.051)	2909	0.50000	0.53(a)
	39 Bromodichloromethane	83	5.737	5.737	(1.156)	4539	0.50000	0.61(aM)
	40 Methyl Methacrylate	41	5.636	5.636	(1.348)	3261	0.50000	0.53(aM)
	41 2-Chloroethylvinyl ether	63	6.082	6.082	(1.225)	2206	1.00000	0.98(aM)
	42 1,2-Dichloropropane	63	5.448	5.448	(1.097)	3473	0.50000	0.56(aM)
	43 2-Nitropropane	43	5.984	5.984	(1.431)	1174	0.50000	0.58(aM)
	44 Dibromomethane	93	5.568	5.568	(1.122)	1988	0.50000	0.56(a)
	45 4-Methyl-2-Pentanone	43	6.348	6.348	(0.828)	8626	1.00000	1.19(a)
	46 cis-1,3-Dichloropropene	75	6.168	6.168	(1.242)	4937	0.50000	0.58(a)
*	47 Chlorobenzene-d5	117	7.667	7.667	(1.000)	735322	50.0000	
$	48 Toluene-d8	98	6.400	6.400	(0.835)	10379	0.50000	0.54(aM)
	49 Ethyl Methacrylate	69	6.727	6.727	(1.355)	2780	0.50000	0.52(aM)
	50 Toluene	91	6.453	6.453	(0.842)	10040	0.50000	0.50(a)
	51 trans-1,3-Dichloropropene	75	6.700	6.700	(1.350)	3980	0.50000	0.55(a)
	52 2-Hexanone	43	7.113	7.113	(0.928)	4470	1.00000	0.94(aM)
	53 1,1,2-Trichloroethane	83	6.843	6.843	(0.892)	2223	0.50000	0.52(aM)
	54 1,3-Dichloropropane	76	6.993	6.993	(0.912)	5041	0.50000	0.58(a)
	55 Dibromochloromethane	129	7.184	7.184	(0.937)	3132	0.50000	0.51(aM)
	56 Tetrachloroethene	164	6.933	6.933	(0.904)	1790	0.50000	0.43(a)
	57 1,2-Dibromoethane	107	7.270	7.270	(0.948)	2613	0.50000	0.54(a)
	58 1-Chlorohexane	55	7.701	7.701	(1.551)	3459	0.50000	0.53(aM)
	59 Chlorobenzene	112	7.694	7.694	(1.003)	7907	0.50000	0.57(aM)
	60 1,1,1,2-Tetrachloroethane	131	7.776	7.776	(1.014)	3008	0.50000	0.55(aM)
	61 Ethylbenzene	106	7.802	7.802	(1.018)	3909	0.50000	0.56(aM)
	62 m,p-Xylenes	106	7.907	7.907	(1.031)	8550	1.00000	0.98(a)
	63 o-Xylene	106	8.256	8.256	(1.077)	4414	0.50000	0.53(aM)
	64 Styrene	104	8.290	8.290	(1.081)	8133	0.50000	0.56(aM)
	66 Bromoform	173	8.417	8.417	(1.098)	1973	0.50000	0.50(Ta)
	67 Isopropylbenzene	105	8.563	8.563	(1.117)	10697	0.50000	0.50(a)
	68 1,1,2,2-Tetrachloroethane	83	8.848	8.848	(0.916)	3654	0.50000	0.56(aM)
$	69 4-Bromofluorobenzene	95	8.702	8.702	(1.135)	7819	0.50000	0.64(aM)
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	386891	50.0000	
	71 1,2,3-Trichloropropane	75	8.871	8.871	(0.918)	2737	0.50000	0.53(aM)
	72 trans-1,4-Dichloro-2-butene	53	8.927	8.927	(1.164)	1124	0.50000	0.50(aM)
	73 n-Propylbenzene	91	8.927	8.927	(0.924)	11407	0.50000	0.48(a)
	74 Bromobenzene	156	8.818	8.818	(0.913)	3201	0.50000	0.52(aM)
	75 1,3,5-Trimethylbenzene	105	9.077	9.077	(0.939)	9580	0.50000	0.54(a)
	76 2-Chlorotoluene	91	8.983	8.983	(0.930)	8487	0.50000	0.53(aM)
	77 4-Chlorotoluene	91	9.088	9.088	(0.941)	8710	0.50000	0.50(a)
	78 tert-Butylbenzene	119	9.339	9.339	(0.967)	8109	0.50000	0.53(a)
	79 1,2,4-Trimethylbenzene	105	9.392	9.392	(0.972)	10172	0.50000	0.57(aM)
	81 sec-Butylbenzene	105	9.523	9.523	(0.986)	9247	0.50000	0.46(aM)
	82 p-Isopropyltoluene	119	9.651	9.651	(0.999)	9771	0.50000	0.53(aM)

83 1,3-Dichlorobenzene	146	9.609	9.609 (0.995)	5980	0.50000	0.56(a)
84 1,4-Dichlorobenzene	146	9.681	9.681 (1.002)	6395	0.50000	0.55(a)

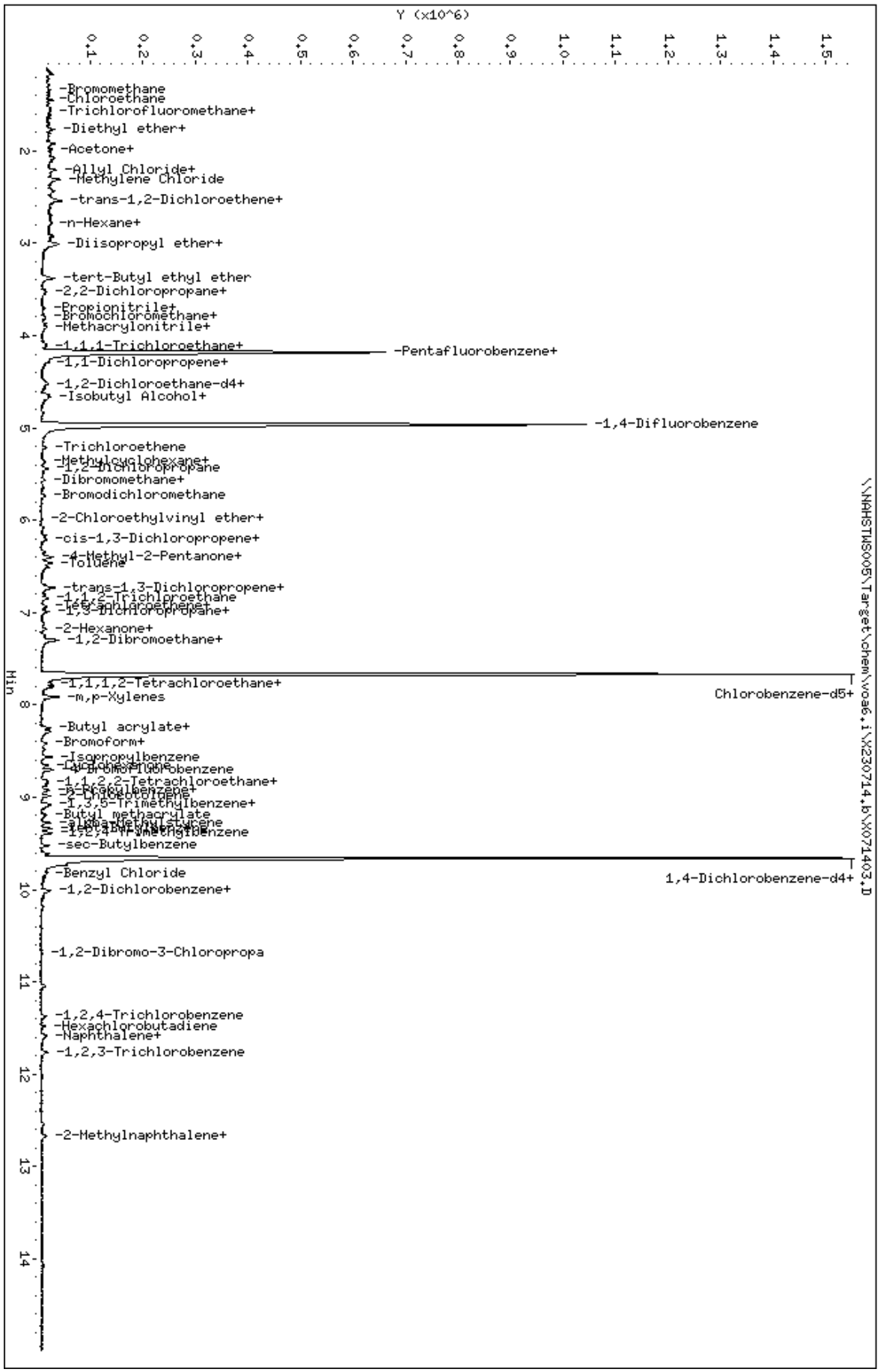
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
86	Benzyl Chloride	91	9.827	9.827	(1.282)	6245	0.50000	2.82(aM)
87	n-Butylbenzene	91	10.014	10.014	(1.036)	7141	0.50000	0.46(aM)
88	1,2-Dichlorobenzene	146	10.010	10.010	(1.036)	5252	0.50000	0.50(a)
89	1,2-Dibromo-3-Chloropropane	155	10.681	10.681	(1.106)	675	0.50000	1.70(aM)
90	1,2,4-Trichlorobenzene	180	11.371	11.371	(1.177)	4099	0.50000	0.57(aM)
91	Hexachlorobutadiene	225	11.484	11.484	(1.189)	1357	0.50000	2.74(aM)
92	Naphthalene	128	11.574	11.574	(1.198)	10357	0.50000	0.58(aM)
93	1,2,3-Trichlorobenzene	180	11.761	11.761	(1.217)	3845	0.50000	0.57(aM)
146	Methyl acetate	43	2.232	2.232	(0.534)	2344	0.50000	0.52(aM)
141	Cyclohexane	56	4.163	4.163	(0.996)	4321	0.50000	0.49(aM)
142	Tetrahydrofuran	42	3.870	3.870	(0.926)	1418	1.00000	1.09(aM)
147	Methylcyclohexane	55	5.366	5.366	(1.081)	9168	0.50000	0.54(aM)
135	1,4-Dioxane	88	5.624	5.624	(1.345)	692	10.0000	11.56(aM)
132	n-Butanol	56	5.355	5.355	(1.281)	1626	10.0000	9.70(aM)
131	Methyl Acrylate	55	3.750	3.750	(0.897)	3365	0.50000	0.49(aM)
133	Ethyl Acrylate	55	5.366	5.366	(1.283)	8232	0.50000	0.49(aM)
136	n-Hexane	57	2.787	2.787	(0.667)	2320	0.50000	(aM)
139	Diethyl ether	59	1.767	1.767	(0.423)	2605	0.50000	0.55(a)
148	Tert-butyl alcohol	59	2.442	2.442	(0.584)	7856	10.0000	12.36(M)
149	Isopropyl alcohol	45	2.105	2.105	(0.503)	4548	10.0000	11.53(T)
156	Diisopropyl ether	45	3.008	3.008	(0.719)	10814	0.50000	0.52(Ta)
166	1,2,3-Trimethylbenzene	105	9.737	9.737	(1.008)	9020	0.50000	0.50(a)
167	Ethanol	45	1.696	1.696	(0.406)	1082	10.0000	(aM)
172	tert-Butyl formate	59	4.646	4.646	(1.111)	6083	1.00000	1.13(aM)
173	3,3-Dimethyl-1-butanol	57	7.296	7.296	(0.952)	10397	10.0000	13.14(M)
174	tert-Amyl methyl ether	73	4.669	4.669	(1.117)	9377	0.50000	0.56(TaM)
175	tert-Butyl ethyl ether	59	3.390	3.390	(0.811)	12508	0.50000	0.58(a)
176	tert-Amyl alcohol	59	4.646	4.646	(1.111)	6083	10.0000	11.06(M)
151	4-Methyl-2-pentanol	45	6.723	6.723	(1.354)	20217	10.0000	11.75(M)
180	1-Methylnaphthalene	142	12.672	12.672	(1.312)	3667	0.50000	(a)
140	1,3-Butadiene	54	1.167	1.167	(0.279)	3203	0.50000	0.49(a)
152	Amyl alcohol	42	6.970	6.970	(0.909)	2120	10.0000	10.02(M)
158	Dichlorofluoromethane	67	1.538	1.538	(0.368)	4296	0.50000	0.52(M)
159	Propylene oxide	43	1.801	1.801	(0.431)	615	1.00000	0.99(aM)
161	3-Methyl-1-butanol	55	6.948	6.948	(0.906)	1945	10.0000	10.74(M)
162	Butyl acrylate	55	8.286	8.286	(1.081)	6783	0.50000	0.48(a)
163	Butyl methacrylate	41	9.182	9.182	(0.950)	4724	0.50000	0.50(aM)
182	Epichlorohydrin	57	6.127	6.127	(1.234)	1233	2.00000	2.05(aM)
M 94	1,2-Dichloroethylene (total)	96				5481	1.00000	(a)
130	Ethyl Acetate	43	3.690	3.690	(0.883)	4291	0.50000	0.57(aM)
134	Cyclohexanone	55	8.653	8.653	(0.896)	4174	10.0000	12.11(aM)
185	Isoprene	39	1.756	1.756	(0.420)	843	0.50000	0.50(aM)
188	Isopropyl acetate	43	4.695	4.695	(0.946)	11581	0.50000	0.54(a)
187	n-Amyl acetate	43	8.477	8.477	(1.106)	7447	0.50000	0.55(aM)
189	n-Butyl acetate	43	7.248	7.248	(0.945)	6398	0.50000	0.56(aM)
150	Allyl alcohol	57	2.787	2.787	(0.667)	2068	10.0000	(aM)
194	Acetaldehyde	44	1.212	1.212	(0.290)	32460	2.00000	57.33
195	Methyl Amyl Ketone	43	8.413	8.413	(1.097)	8863	0.50000	0.57(a)
200	Dimethyl Disulfide	94	6.213	6.213	(0.810)	4899	0.50000	0.49(a)

QC Flag Legend

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

QC Flag Legend

M - Compound response manually integrated.



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Sample Info: VSTD000.5;VSTD000.5;1;2;
Purge Volume: 5.0
Column phase: DB624

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

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Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Bromomethane (74-83-9)

Reason Code:

BEFORE
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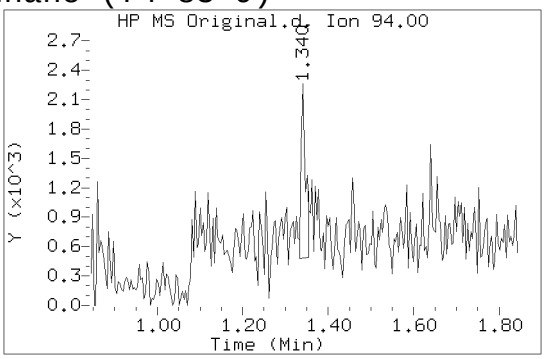
1399
HEIGHT
1780
20-Jul-2023
15:04
linh
pham



AFTER
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20-Jul-2023
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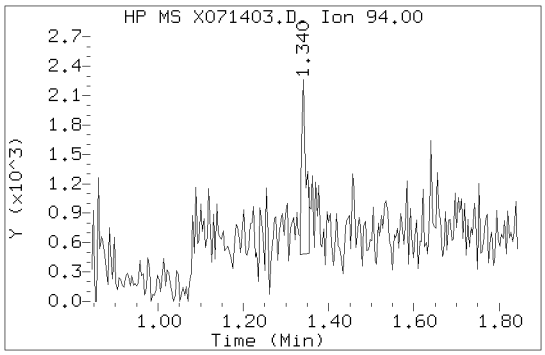

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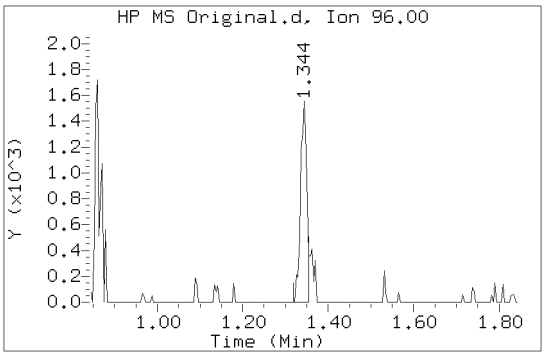

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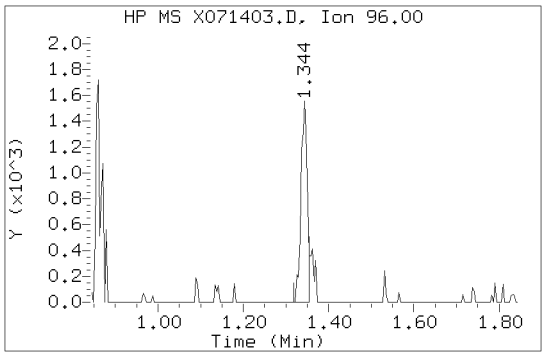

Chloroethane (75-00-3)

Reason Code:

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20-Jul-2023
15:04
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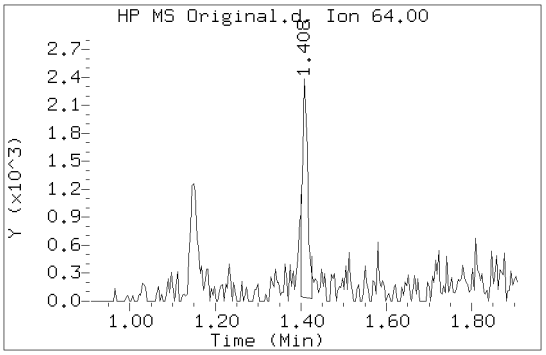
pham



AFTER
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20-Jul-2023
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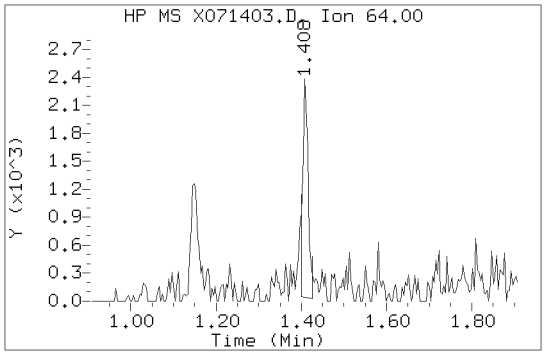

BEFORE
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704
20-Jul-2023
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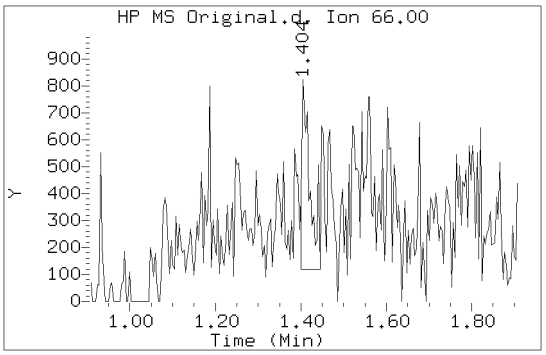

AFTER
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20-Jul-2023
15:04
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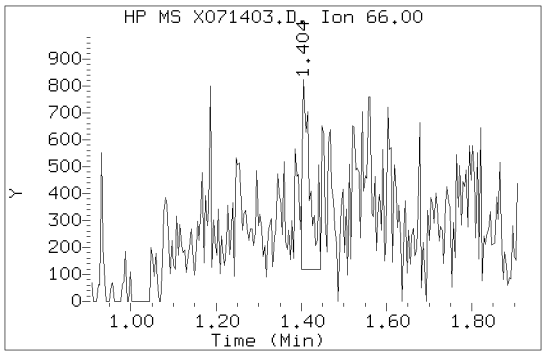

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InstruID : voa6.i
LabSampID : VSTD000.5

Iodomethane (74-88-4)

Reason Code:

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AREA
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HEIGHT
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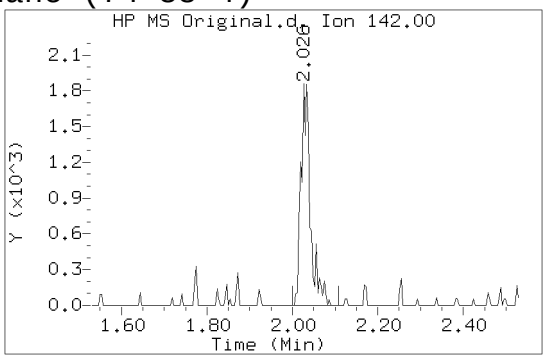
20-Jul-2023
15:04
linh
pham



AFTER
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20-Jul-2023
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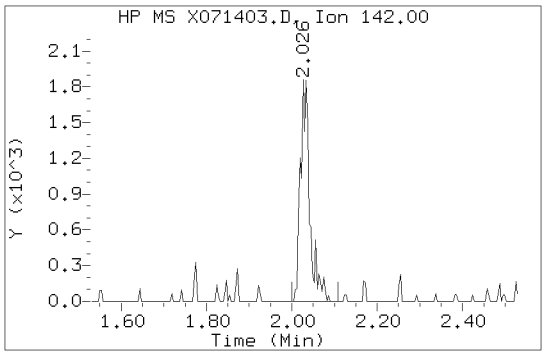

BEFORE
MASS
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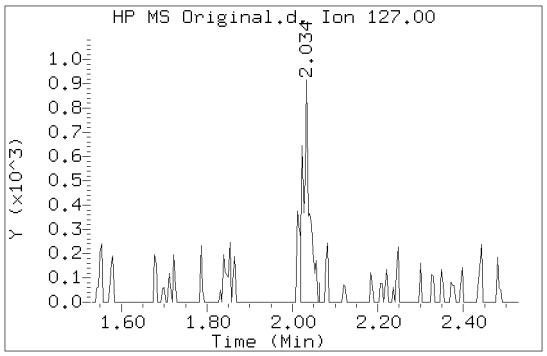
AREA
955
HEIGHT
916
20-Jul-2023
15:04
linh
pham



AFTER
MASS
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HEIGHT
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20-Jul-2023
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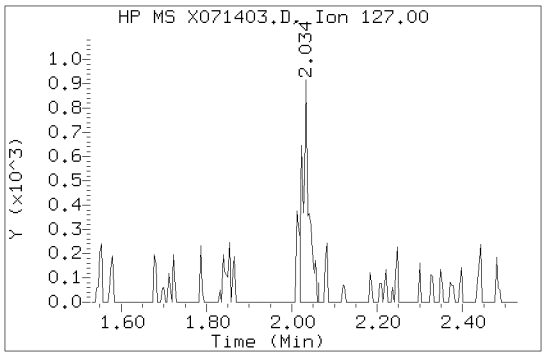

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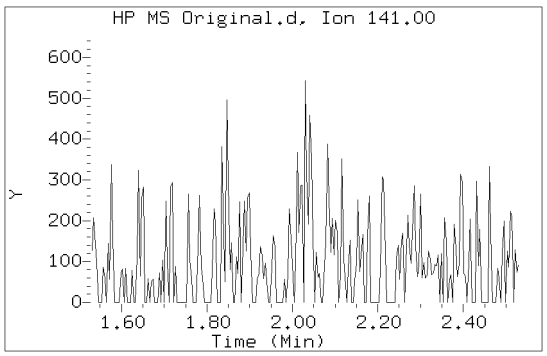

AFTER
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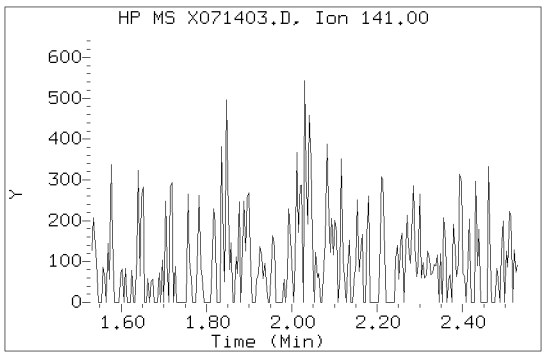

Acrylonitrile (107-13-1)

Reason Code:

BEFORE
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HEIGHT
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20-Jul-2023
15:04
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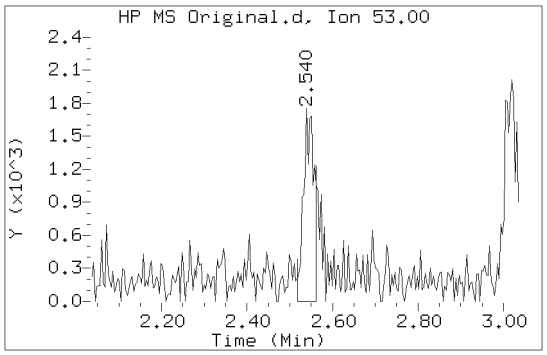

AFTER
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20-Jul-2023
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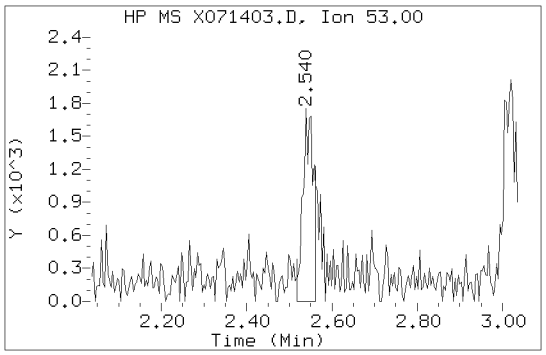

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Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Acrylonitrile (107-13-1)

Reason Code:

BEFORE

MASS
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AREA
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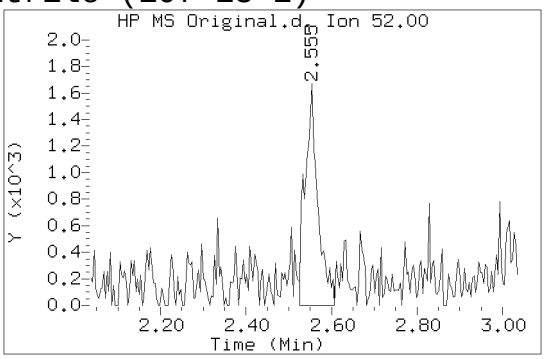
HEIGHT
1670
20-Jul-2023
15:04
linh
pham



AFTER

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20-Jul-2023
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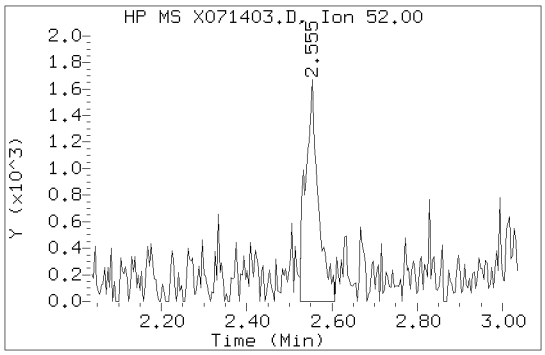

BEFORE

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20-Jul-2023
15:04
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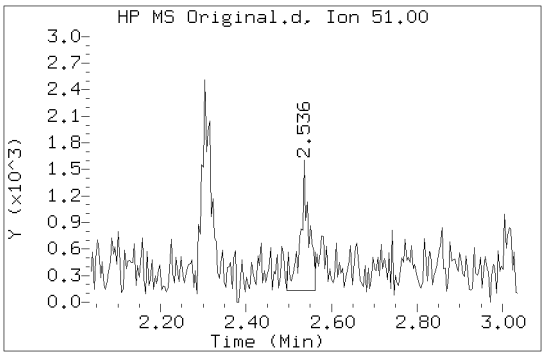

AFTER

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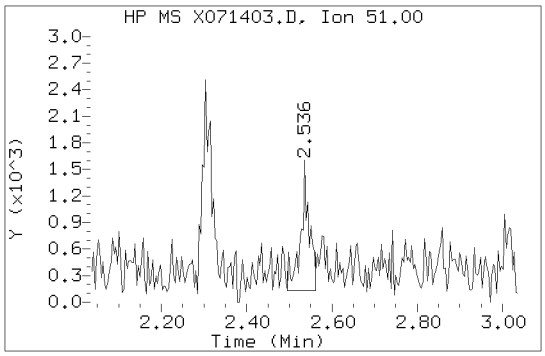
HEIGHT
1479
20-Jul-2023
15:04
linh
pham

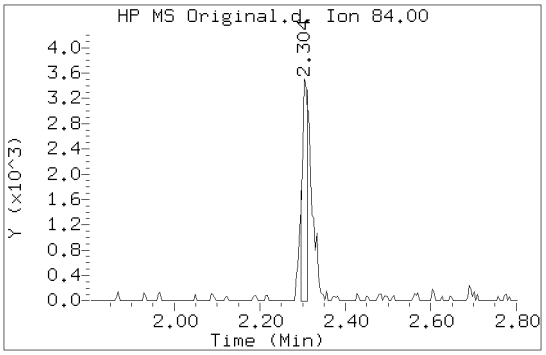


Methylene Chloride (75-09-2)

Reason Code:

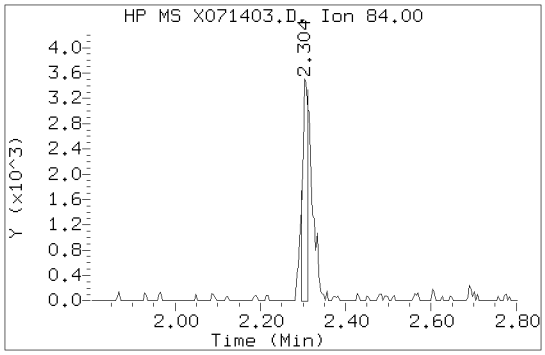
BEFORE

MASS
84
AREA
3115
HEIGHT
3513
20-Jul-2023
15:04
linh
pham



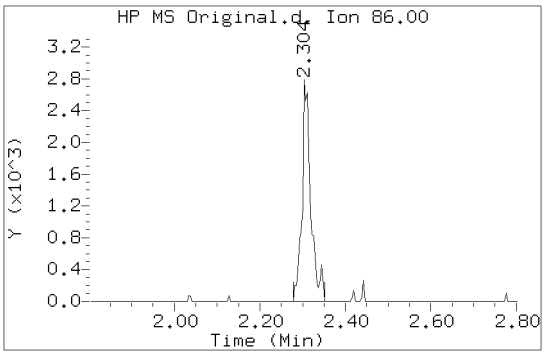
AFTER

MASS
84
AREA
3115
HEIGHT
3513
20-Jul-2023
15:04
linh
pham



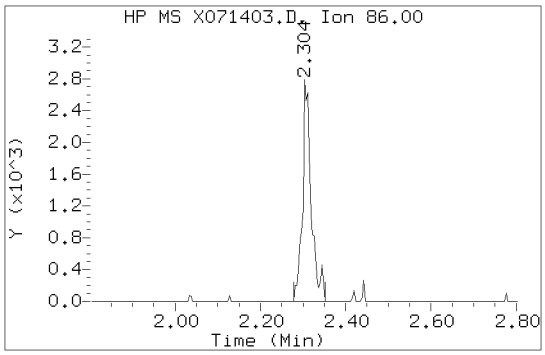
BEFORE

MASS
86
AREA
4061
HEIGHT
2789
20-Jul-2023
15:04
linh
pham



AFTER

MASS
86
AREA
4061
HEIGHT
2789
20-Jul-2023
15:04
linh
pham



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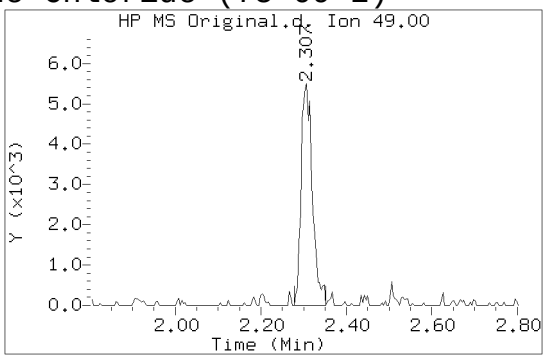
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Methylene Chloride (75-09-2)

BEFORE

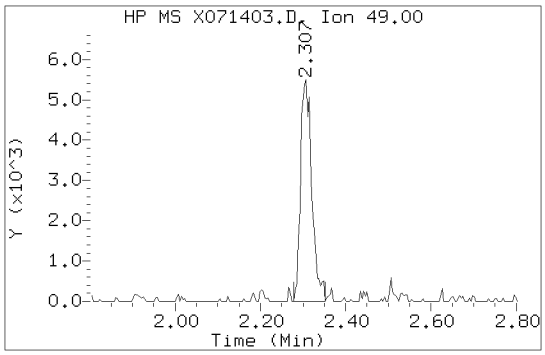
MASS
49
AREA
10268
HEIGHT
5500
20-Jul-2023
15:04
linh
pham



Reason Code:

AFTER

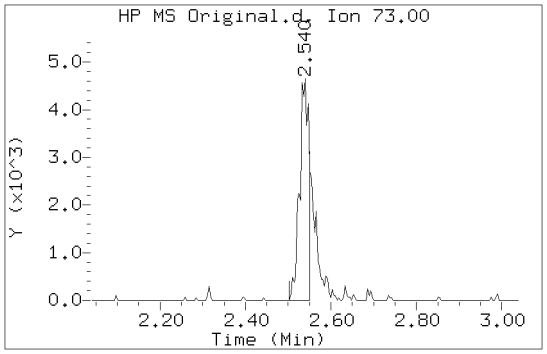
MASS
49
AREA
10268
HEIGHT
5500
20-Jul-2023
15:04
linh
pham



Methyl tert-butyl ether (1634-04-4)

BEFORE

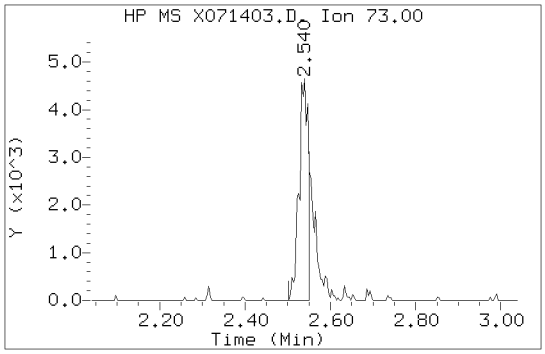
MASS
73
AREA
7187
HEIGHT
4650
20-Jul-2023
15:04
linh
pham



Reason Code:

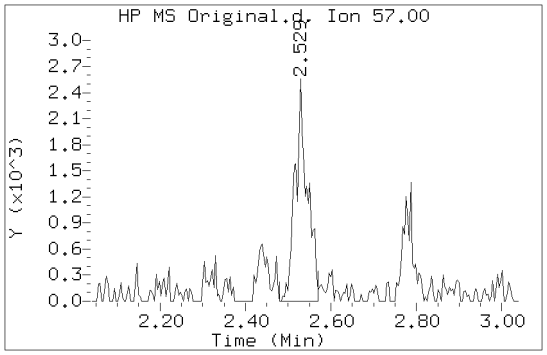
AFTER

MASS
73
AREA
7187
HEIGHT
4650
20-Jul-2023
15:04
linh
pham



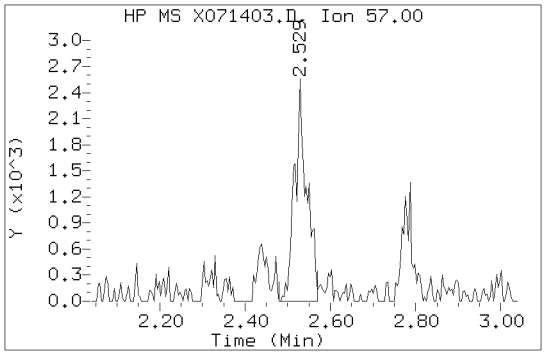
BEFORE

MASS
57
AREA
5084
HEIGHT
2558
20-Jul-2023
15:04
linh
pham



AFTER

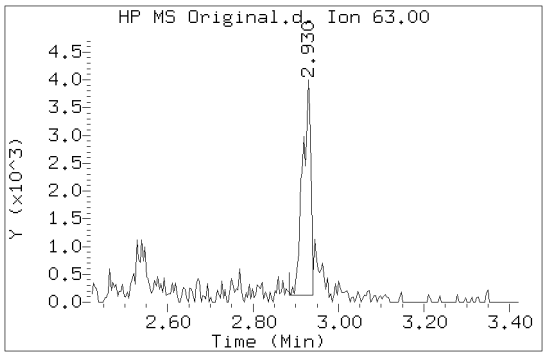
MASS
57
AREA
5084
HEIGHT
2558
20-Jul-2023
15:04
linh
pham



1,1-Dichloroethane (75-34-3)

BEFORE

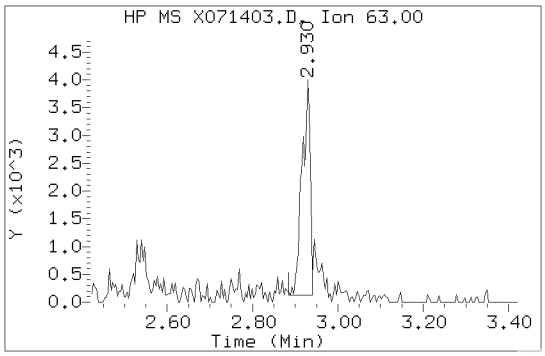
MASS
63
AREA
5250
HEIGHT
3871
20-Jul-2023
15:04
linh
pham



Reason Code:

AFTER

MASS
63
AREA
5250
HEIGHT
3871
20-Jul-2023
15:04
linh
pham



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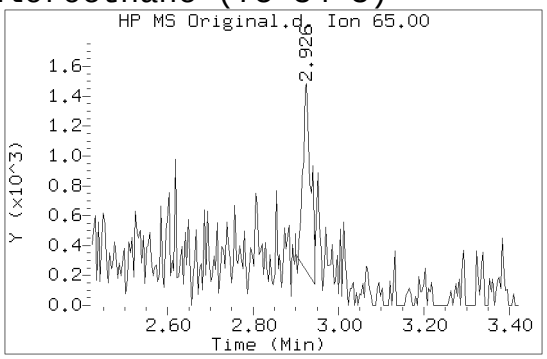
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

1,1-Dichloroethane (75-34-3)

Reason Code:

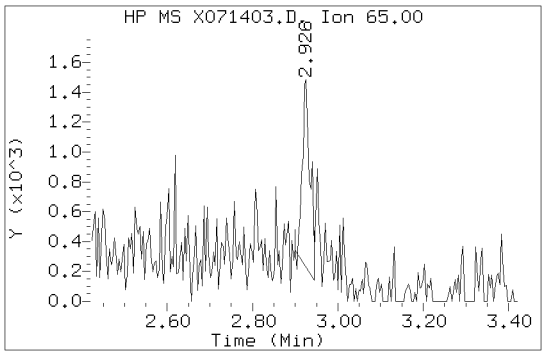
BEFORE

MASS
65
AREA
1602
HEIGHT
1258
20-Jul-2023
15:04
linh
pham



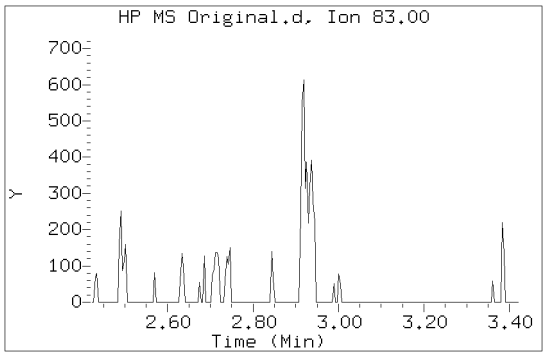
AFTER

MASS
65
AREA
1602
HEIGHT
1258
20-Jul-2023
15:04
linh
pham



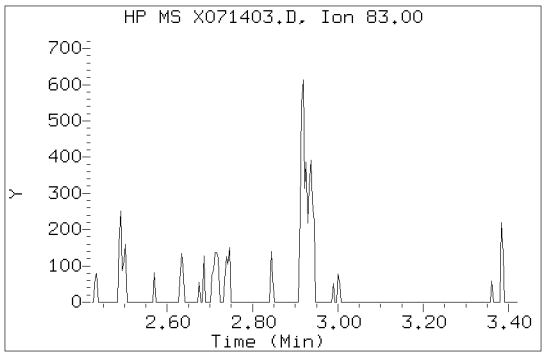
BEFORE

MASS
83
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
83
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

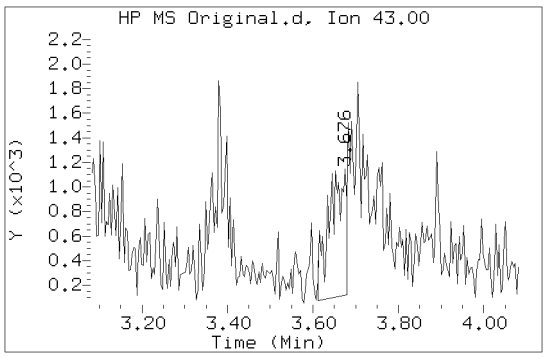


2-Butanone (78-93-3)

Reason Code:

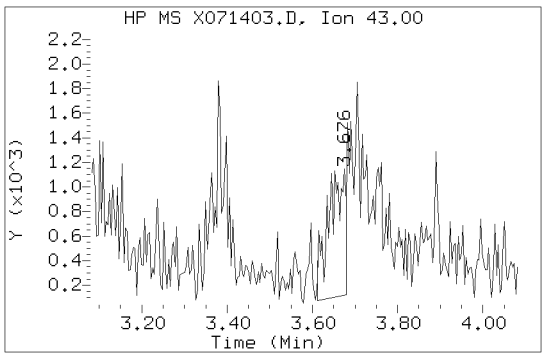
BEFORE

MASS
43
AREA
2827
HEIGHT
1024
20-Jul-2023
15:04
linh
pham



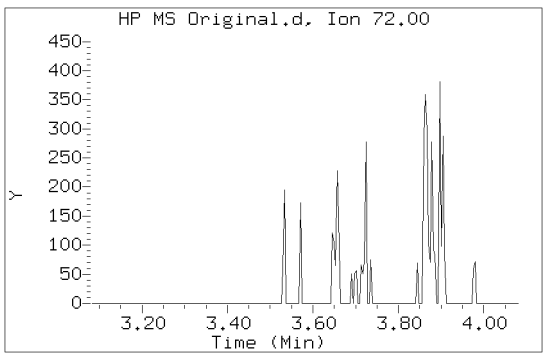
AFTER

MASS
43
AREA
2827
HEIGHT
1024
20-Jul-2023
15:04
linh
pham



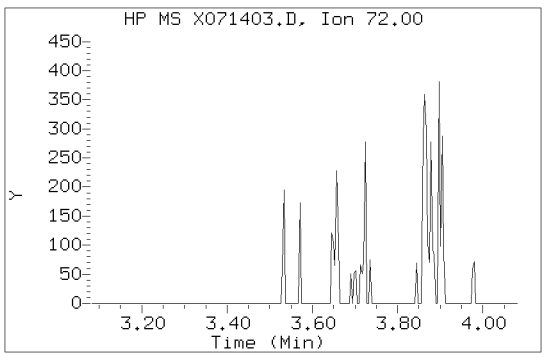
BEFORE

MASS
72
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
72
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



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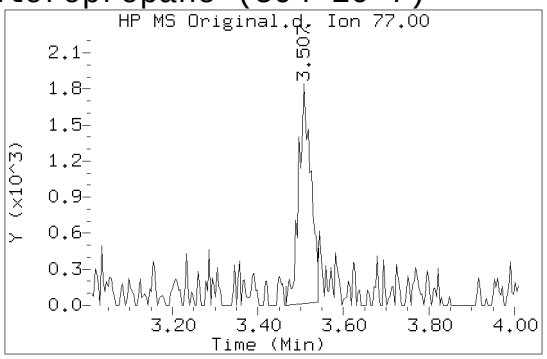
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

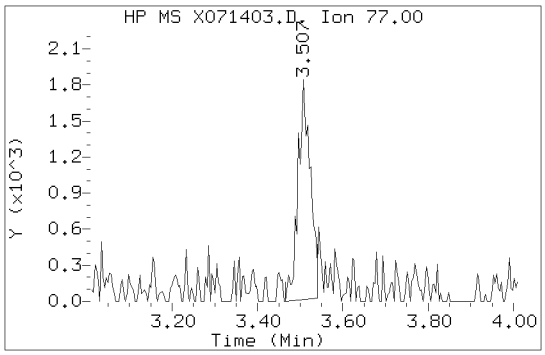
2,2-Dichloropropane (594-20-7)

Reason Code:

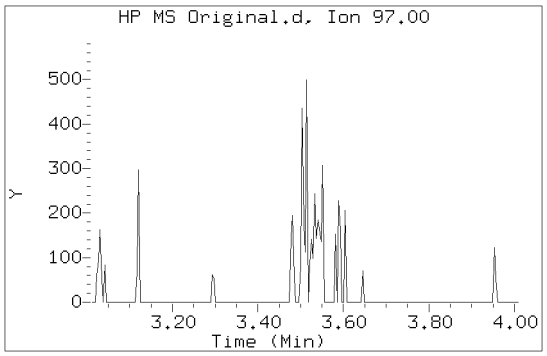
BEFORE
MASS
77
AREA
3703
HEIGHT
1829
20-Jul-2023
15:04
linh
pham



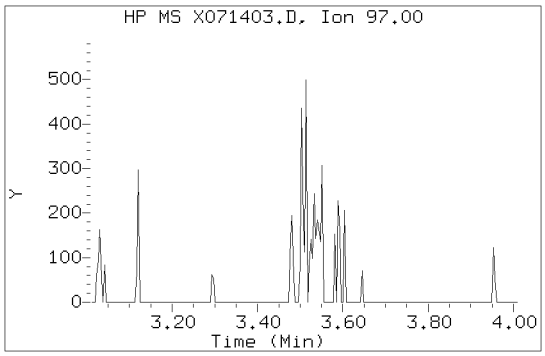
AFTER
MASS
77
AREA
3703
HEIGHT
1829
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
97
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



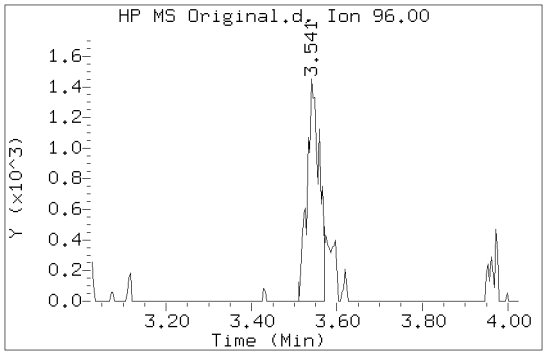
AFTER
MASS
97
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



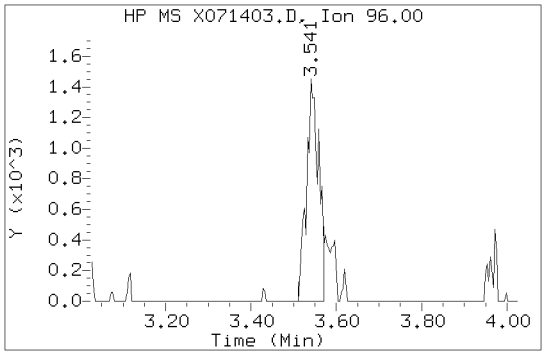
cis-1,2-Dichloroethene (156-59-2)

Reason Code:

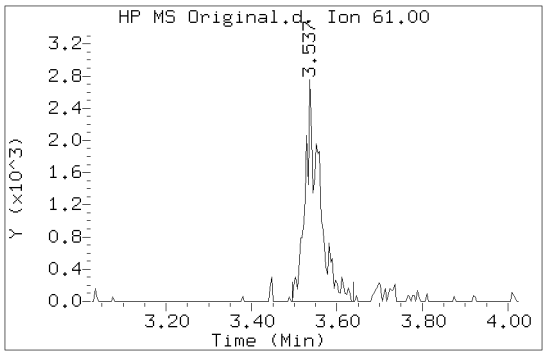
BEFORE
MASS
96
AREA
2924
HEIGHT
1452
20-Jul-2023
15:04
linh
pham



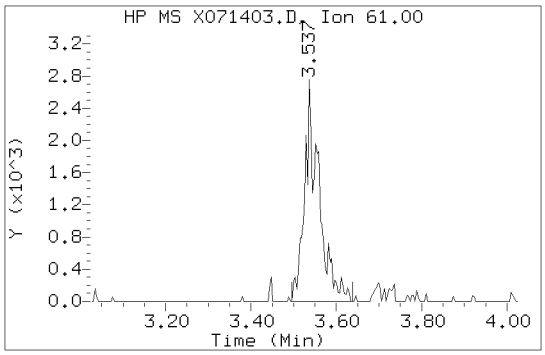
AFTER
MASS
96
AREA
2924
HEIGHT
1452
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
61
AREA
6464
HEIGHT
2755
20-Jul-2023
15:04
linh
pham



AFTER
MASS
61
AREA
6464
HEIGHT
2755
20-Jul-2023
15:04
linh
pham



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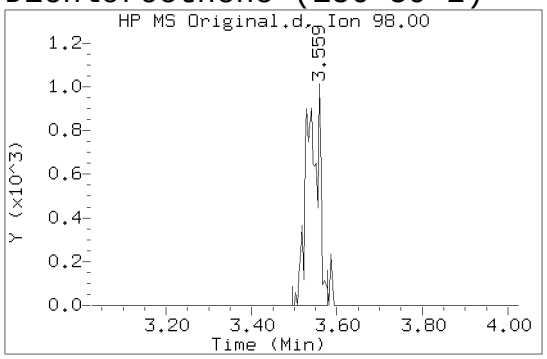
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

cis-1,2-Dichloroethene (156-59-2)

Reason Code:

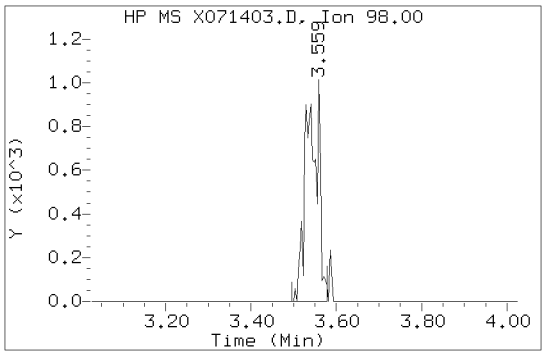
BEFORE

MASS
98
AREA
2118
HEIGHT
1014
20-Jul-2023
15:04
linh
pham



AFTER

MASS
98
AREA
2118
HEIGHT
1014
20-Jul-2023
15:04
linh
pham

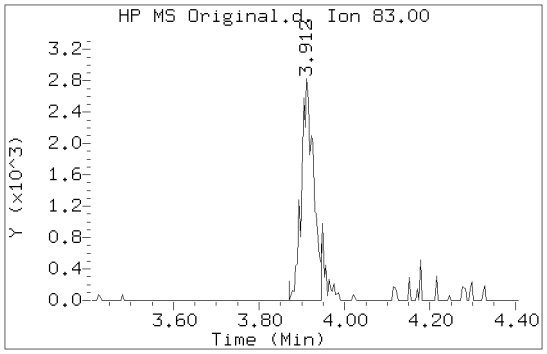


Chloroform (67-66-3)

Reason Code:

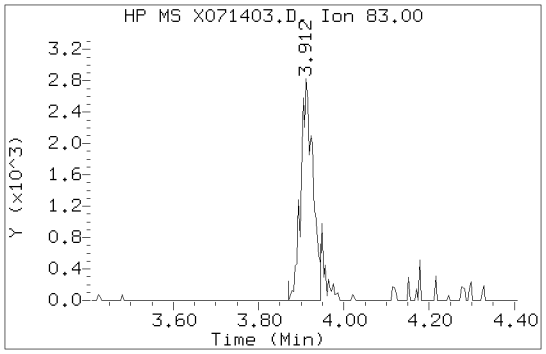
BEFORE

MASS
83
AREA
5643
HEIGHT
2826
20-Jul-2023
15:04
linh
pham



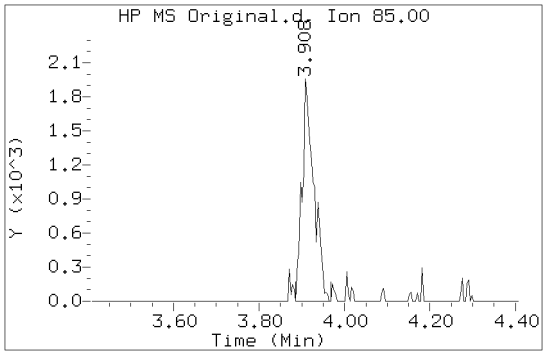
AFTER

MASS
83
AREA
5643
HEIGHT
2826
20-Jul-2023
15:04
linh
pham



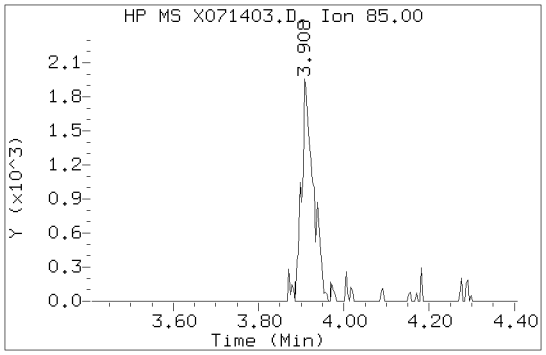
BEFORE

MASS
85
AREA
3815
HEIGHT
1958
20-Jul-2023
15:04
linh
pham



AFTER

MASS
85
AREA
3815
HEIGHT
1958
20-Jul-2023
15:04
linh
pham

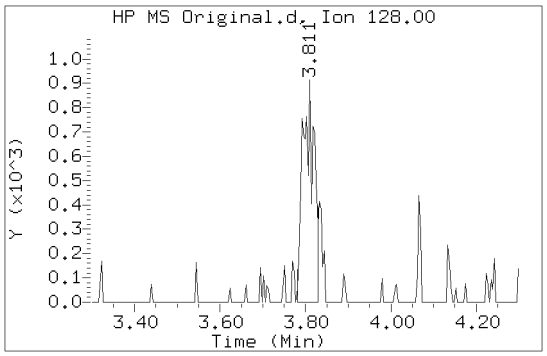


Bromochloromethane (74-97-5)

Reason Code:

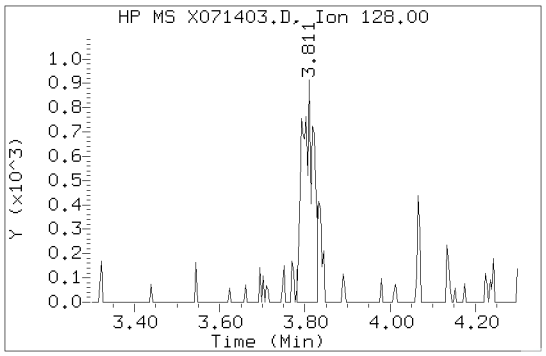
BEFORE

MASS
128
AREA
1717
HEIGHT
914
20-Jul-2023
15:04
linh
pham



AFTER

MASS
128
AREA
1717
HEIGHT
914
20-Jul-2023
15:04
linh
pham



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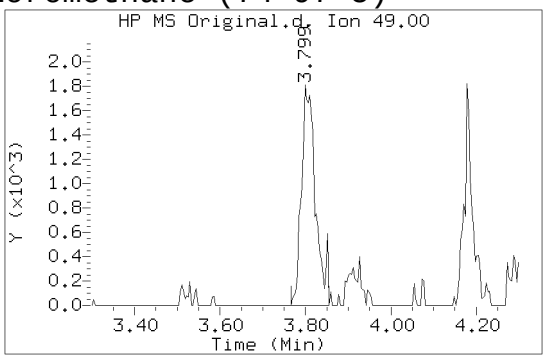
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Bromochloromethane (74-97-5)

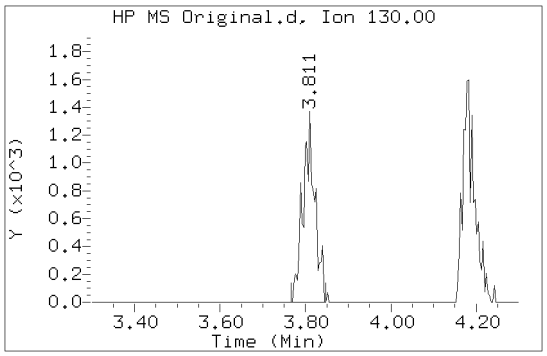
BEFORE

MASS
49
AREA
4173
HEIGHT
1811
20-Jul-2023
15:04
linh
pham



BEFORE

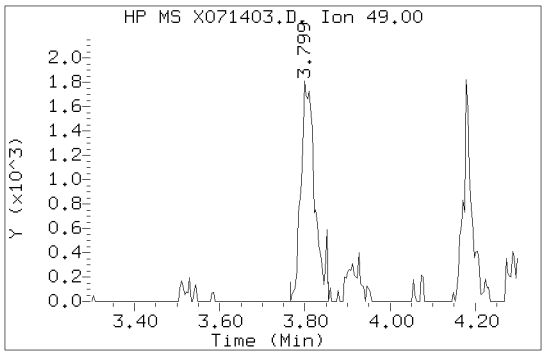
MASS
130
AREA
2643
HEIGHT
1372
20-Jul-2023
15:04
linh
pham



Reason Code:

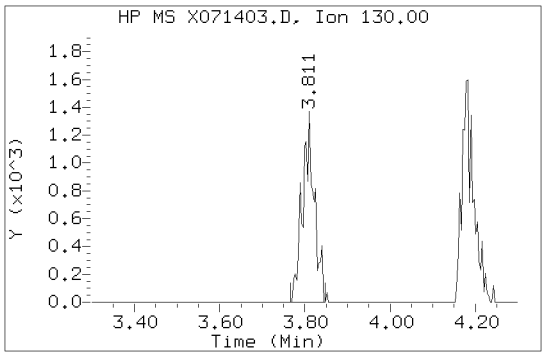
AFTER

MASS
49
AREA
4173
HEIGHT
1811
20-Jul-2023
15:04
linh
pham



AFTER

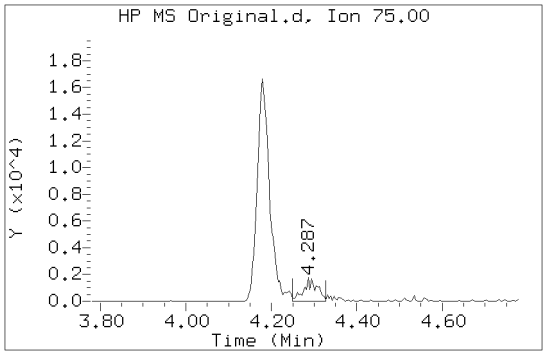
MASS
130
AREA
2643
HEIGHT
1372
20-Jul-2023
15:04
linh
pham



1,1-Dichloropropene (563-58-6)

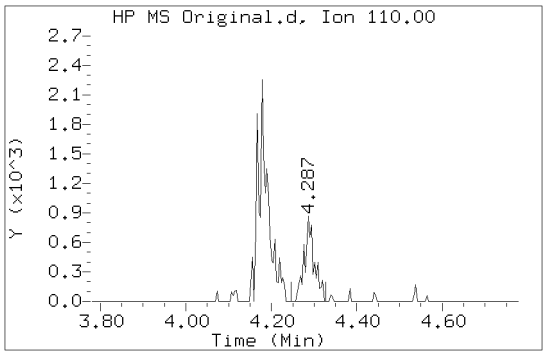
BEFORE

MASS
75
AREA
3744
HEIGHT
1770
20-Jul-2023
15:04
linh
pham



BEFORE

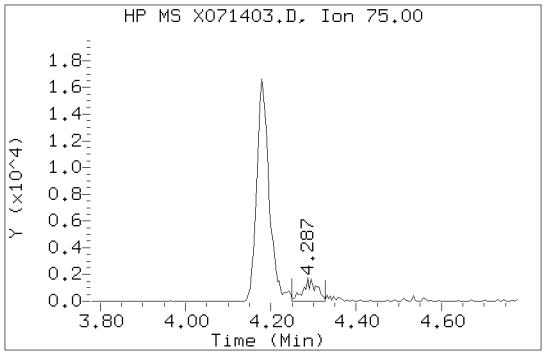
MASS
110
AREA
1389
HEIGHT
866
20-Jul-2023
15:04
linh
pham



Reason Code:

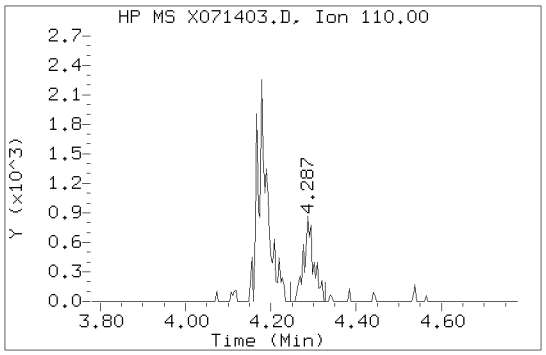
AFTER

MASS
75
AREA
3744
HEIGHT
1770
20-Jul-2023
15:04
linh
pham



AFTER

MASS
110
AREA
1389
HEIGHT
866
20-Jul-2023
15:04
linh
pham



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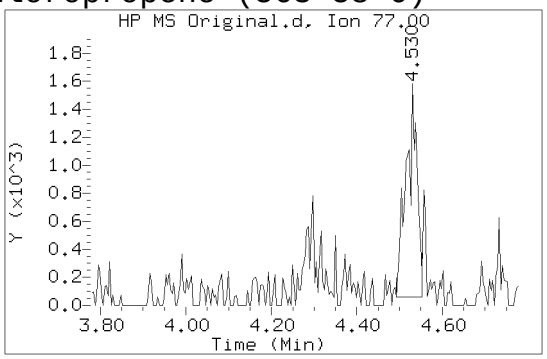
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

1,1-Dichloropropene (563-58-6)

Reason Code:

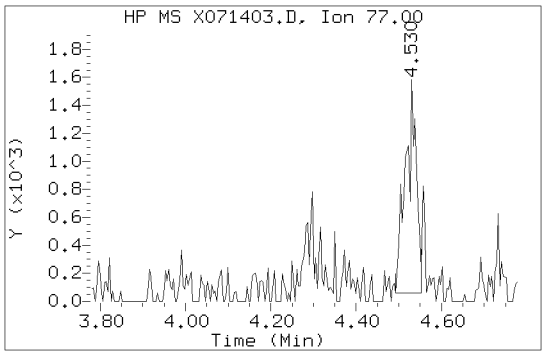
BEFORE

MASS
77
AREA
2714
HEIGHT
1524
20-Jul-2023
15:04
linh
pham



AFTER

MASS
77
AREA
2714
HEIGHT
1524
20-Jul-2023
15:04
linh
pham

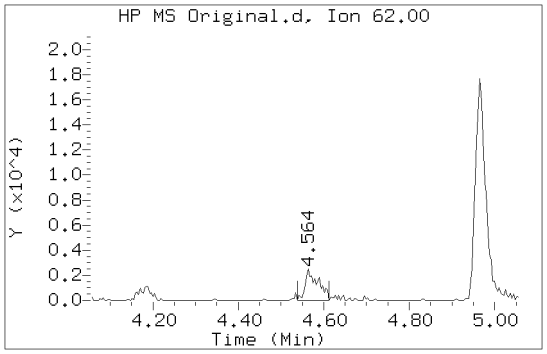


1,2-Dichloroethane (107-06-2)

Reason Code:

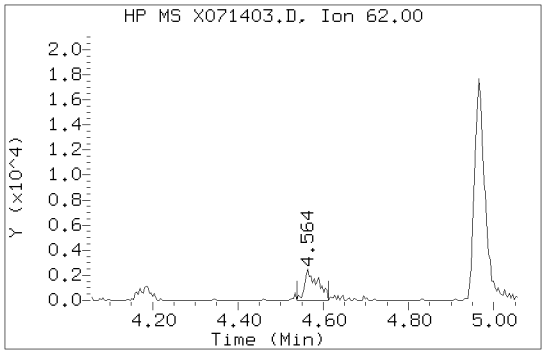
BEFORE

MASS
62
AREA
5246
HEIGHT
2498
20-Jul-2023
15:04
linh
pham



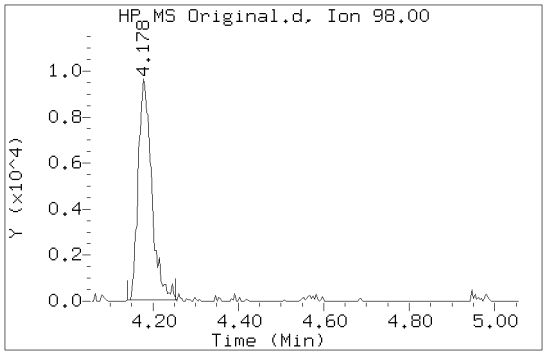
AFTER

MASS
62
AREA
5246
HEIGHT
2498
20-Jul-2023
15:04
linh
pham



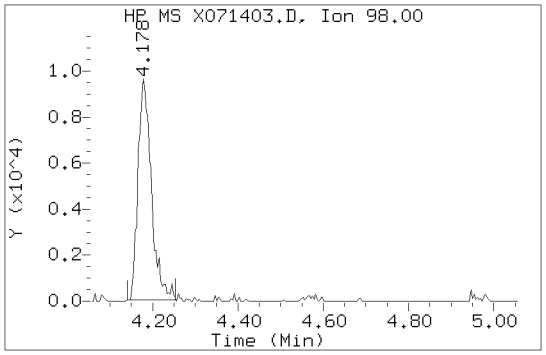
BEFORE

MASS
98
AREA
20890
HEIGHT
9608
20-Jul-2023
15:04
linh
pham



AFTER

MASS
98
AREA
20890
HEIGHT
9608
20-Jul-2023
15:04
linh
pham

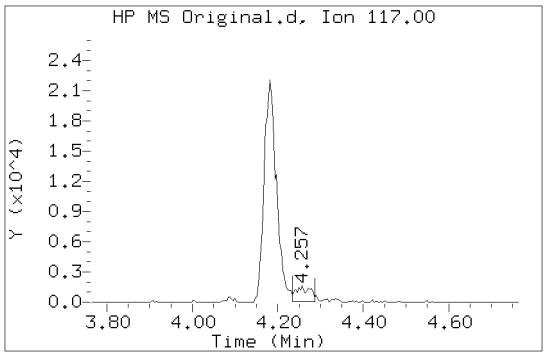


Carbon Tetrachloride (56-23-5)

Reason Code:

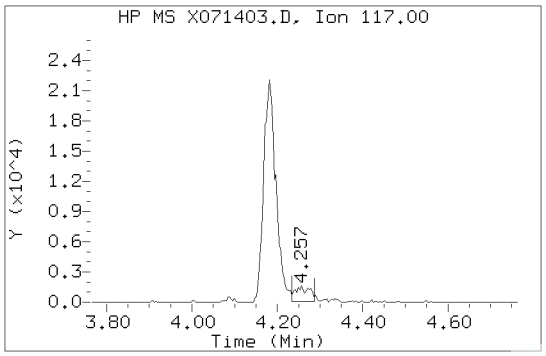
BEFORE

MASS
117
AREA
3613
HEIGHT
1577
20-Jul-2023
15:04
linh
pham



AFTER

MASS
117
AREA
3613
HEIGHT
1577
20-Jul-2023
15:04
linh
pham



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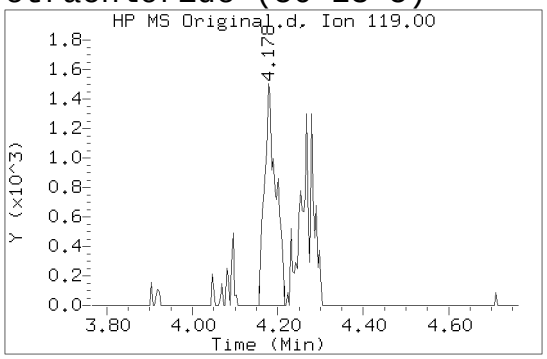
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Carbon Tetrachloride (56-23-5)

Reason Code:

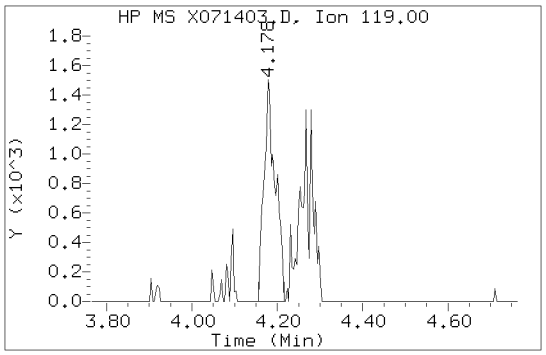
BEFORE

MASS
119
AREA
2769
HEIGHT
1504
20-Jul-2023
15:04
linh
pham



AFTER

MASS
119
AREA
2769
HEIGHT
1504
20-Jul-2023
15:04
linh
pham

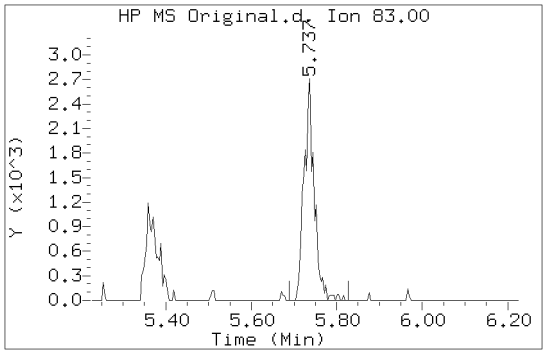


Bromodichloromethane (75-27-4)

Reason Code:

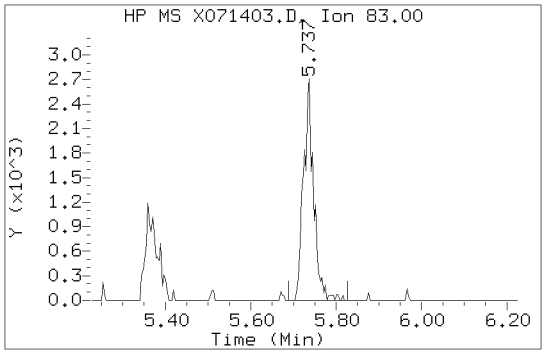
BEFORE

MASS
83
AREA
4539
HEIGHT
2709
20-Jul-2023
15:04
linh
pham



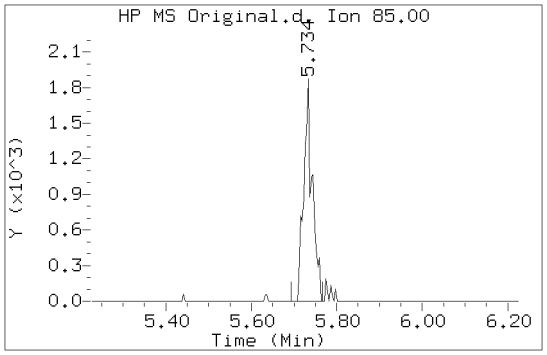
AFTER

MASS
83
AREA
4539
HEIGHT
2709
20-Jul-2023
15:04
linh
pham



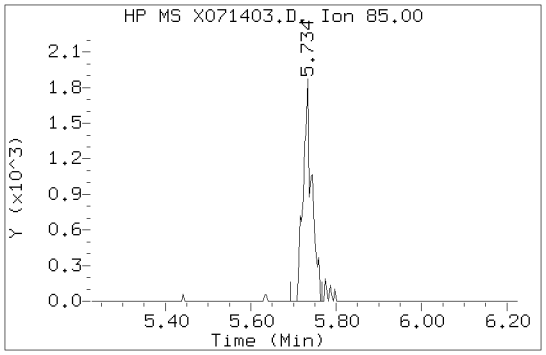
BEFORE

MASS
85
AREA
2648
HEIGHT
1873
20-Jul-2023
15:04
linh
pham



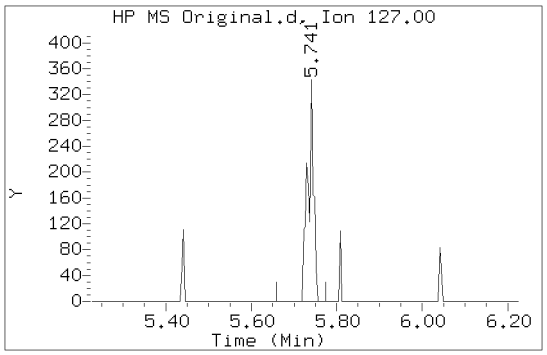
AFTER

MASS
85
AREA
2648
HEIGHT
1873
20-Jul-2023
15:04
linh
pham



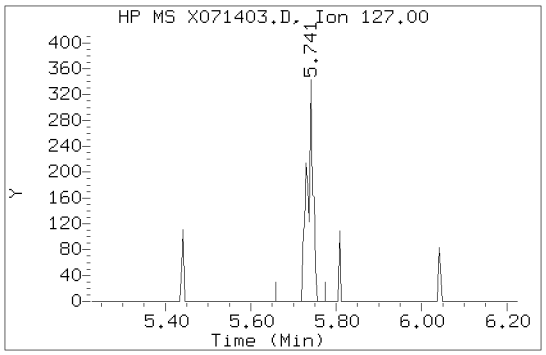
BEFORE

MASS
127
AREA
328
HEIGHT
343
20-Jul-2023
15:04
linh
pham



AFTER

MASS
127
AREA
328
HEIGHT
343
20-Jul-2023
15:04
linh
pham



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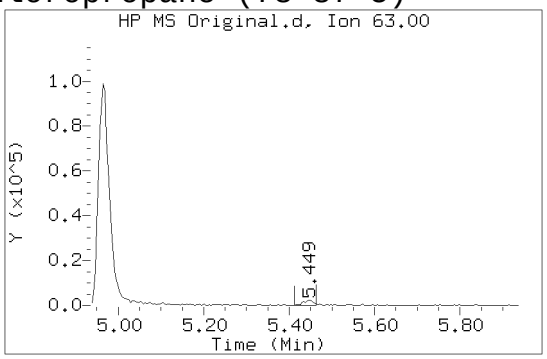
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

1,2-Dichloropropane (78-87-5)

Reason Code:

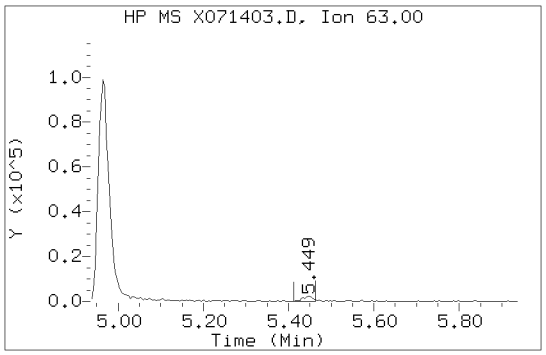
BEFORE

MASS
63
AREA
3473
HEIGHT
2209
20-Jul-2023
15:04
linh
pham



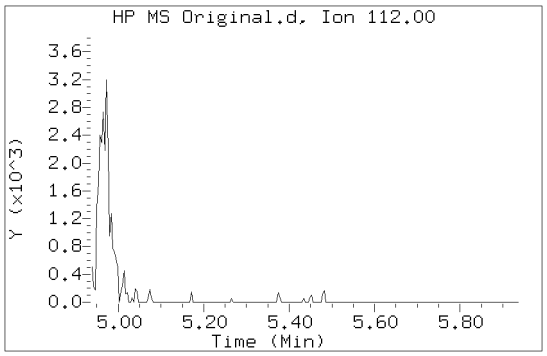
AFTER

MASS
63
AREA
3473
HEIGHT
2209
20-Jul-2023
15:04
linh
pham



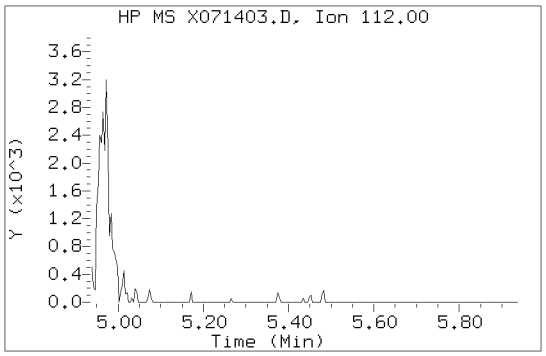
BEFORE

MASS
112
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
112
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

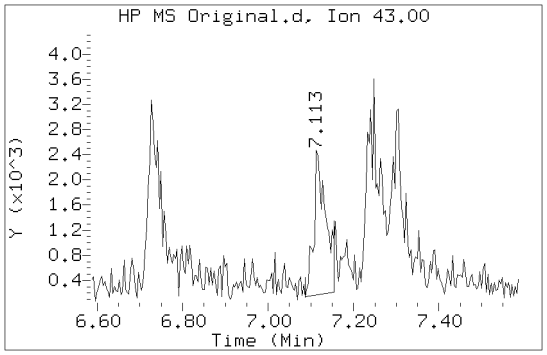


2-Hexanone (591-78-6)

Reason Code:

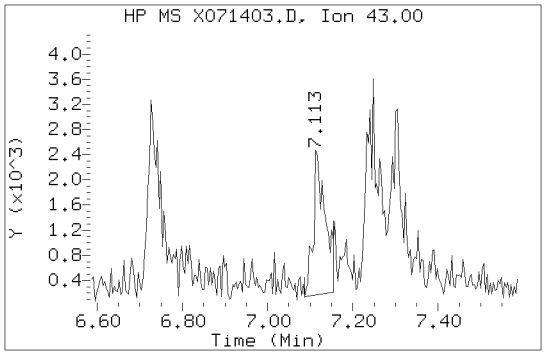
BEFORE

MASS
43
AREA
4470
HEIGHT
2301
20-Jul-2023
15:04
linh
pham



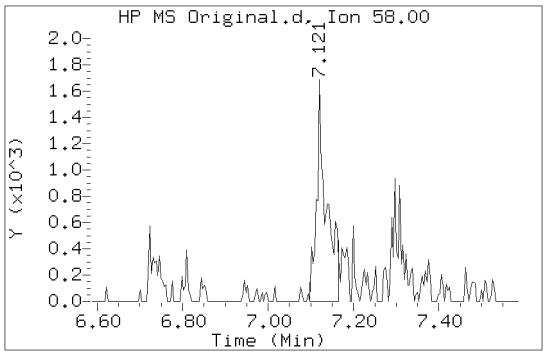
AFTER

MASS
43
AREA
4470
HEIGHT
2301
20-Jul-2023
15:04
linh
pham



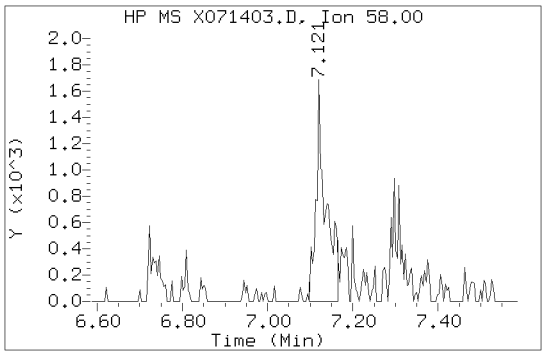
BEFORE

MASS
58
AREA
2664
HEIGHT
1687
20-Jul-2023
15:04
linh
pham



AFTER

MASS
58
AREA
2664
HEIGHT
1687
20-Jul-2023
15:04
linh
pham



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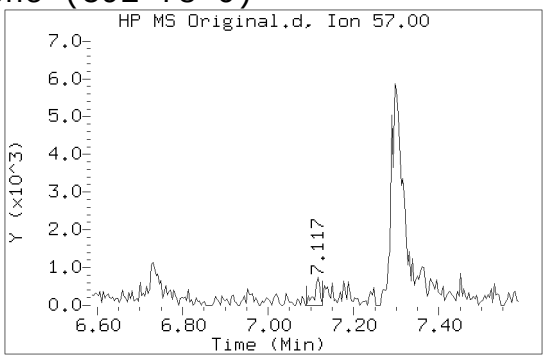
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

2-Hexanone (591-78-6)

Reason Code:

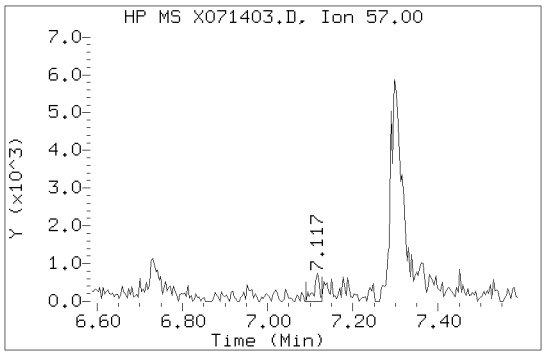
BEFORE

MASS
57
AREA
683
HEIGHT
740
20-Jul-2023
15:04
linh
pham



AFTER

MASS
57
AREA
683
HEIGHT
740
20-Jul-2023
15:04
linh
pham

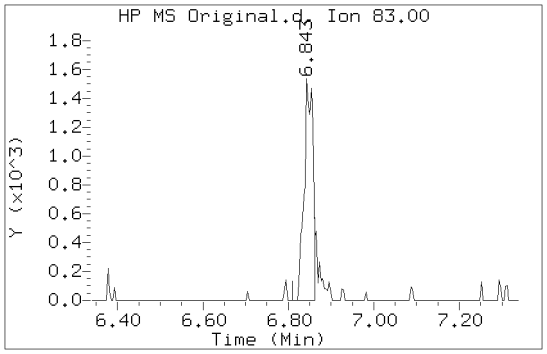


1,1,2-Trichloroethane (79-00-5)

Reason Code:

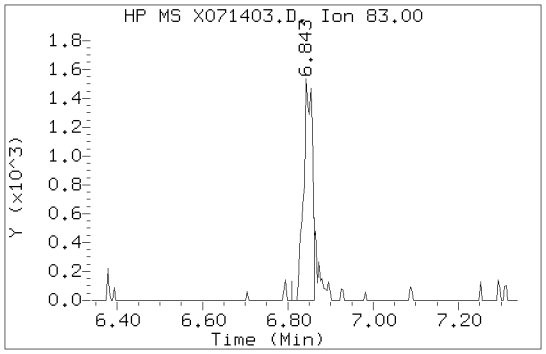
BEFORE

MASS
83
AREA
2223
HEIGHT
1536
20-Jul-2023
15:04
linh
pham



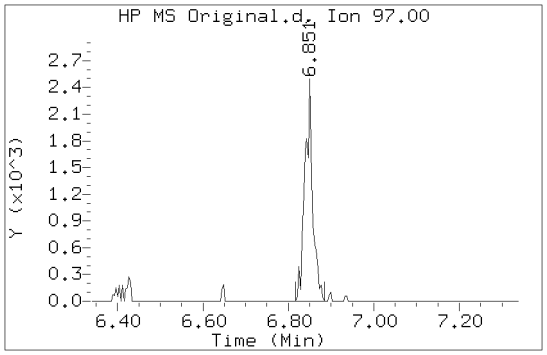
AFTER

MASS
83
AREA
2223
HEIGHT
1536
20-Jul-2023
15:04
linh
pham



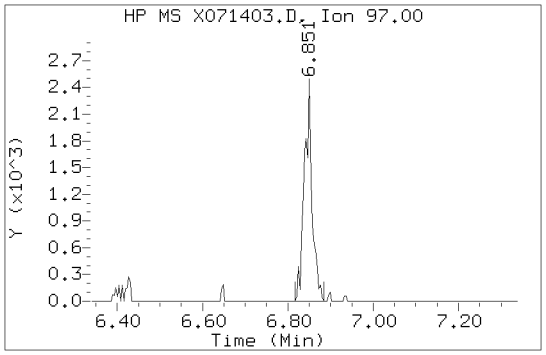
BEFORE

MASS
97
AREA
3209
HEIGHT
2495
20-Jul-2023
15:04
linh
pham



AFTER

MASS
97
AREA
3209
HEIGHT
2495
20-Jul-2023
15:04
linh
pham

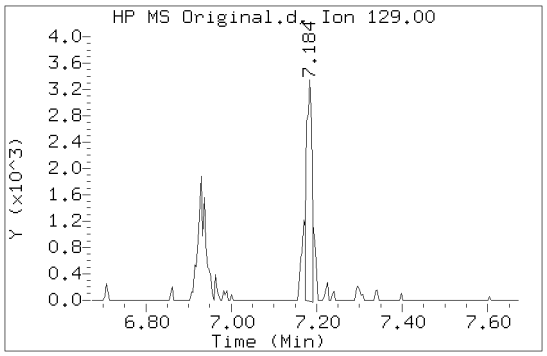


Dibromochloromethane (124-48-1)

Reason Code:

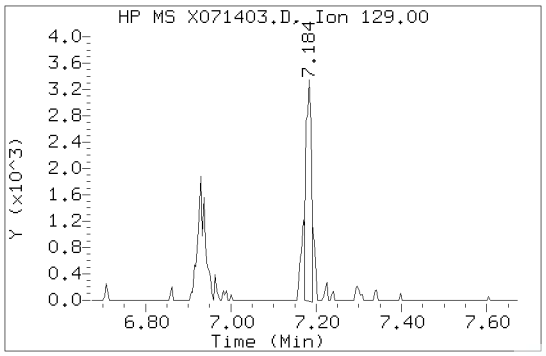
BEFORE

MASS
129
AREA
3132
HEIGHT
3366
20-Jul-2023
15:04
linh
pham



AFTER

MASS
129
AREA
3132
HEIGHT
3366
20-Jul-2023
15:04
linh
pham



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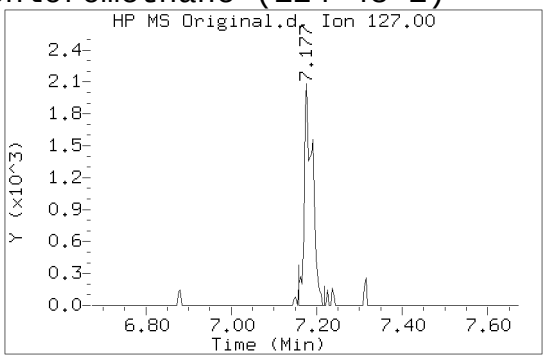
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Dibromochloromethane (124-48-1)

Reason Code:

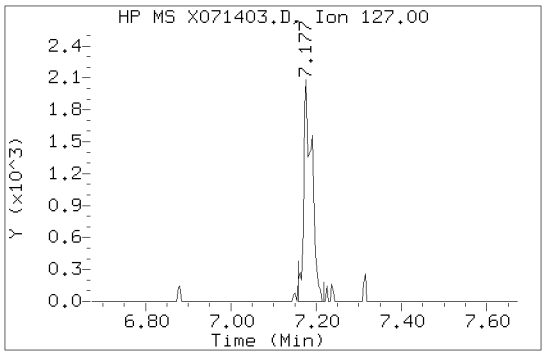
BEFORE

MASS
127
AREA
2854
HEIGHT
2083
20-Jul-2023
15:04
linh
pham



AFTER

MASS
127
AREA
2854
HEIGHT
2083
20-Jul-2023
15:04
linh
pham

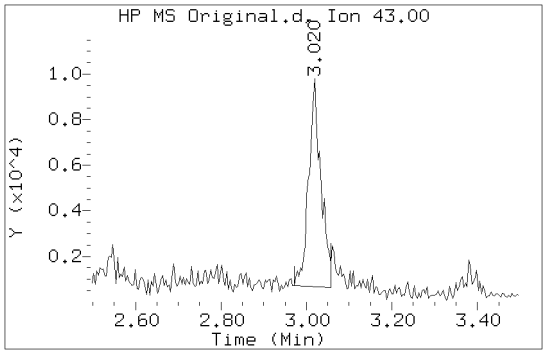


Vinyl Acetate (108-05-4)

Reason Code:

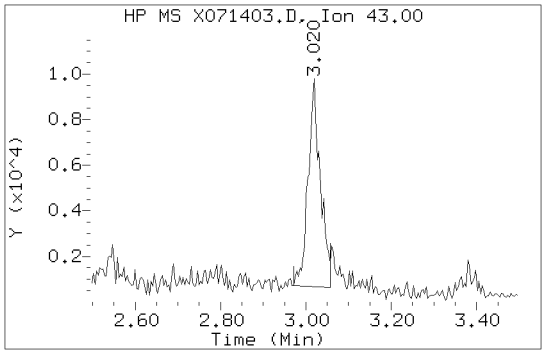
BEFORE

MASS
43
AREA
18224
HEIGHT
9126
20-Jul-2023
15:04
linh
pham



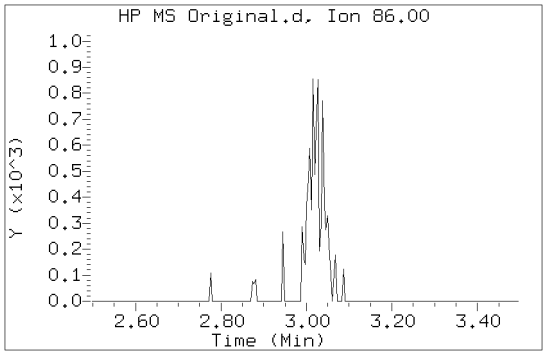
AFTER

MASS
43
AREA
18224
HEIGHT
9126
20-Jul-2023
15:04
linh
pham



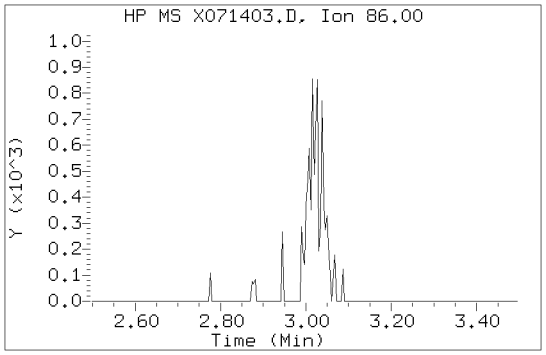
BEFORE

MASS
86
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
86
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

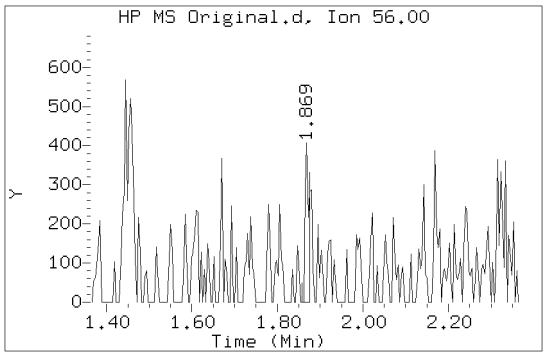


Acrolein (107-02-8)

Reason Code:

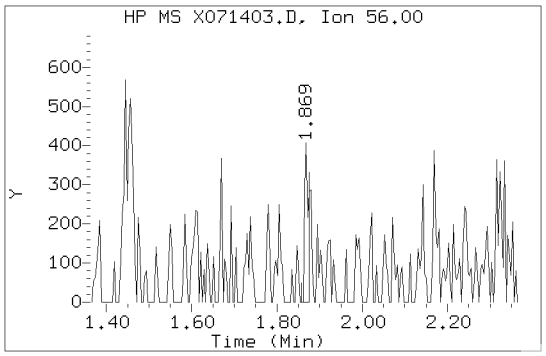
BEFORE

MASS
56
AREA
268
HEIGHT
407
20-Jul-2023
15:04
linh
pham



AFTER

MASS
56
AREA
268
HEIGHT
407
20-Jul-2023
15:04
linh
pham



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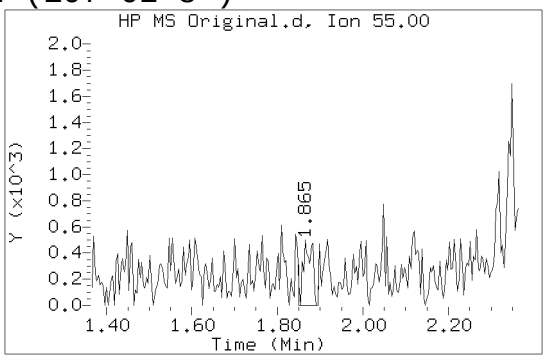
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Acrolein (107-02-8)

Reason Code:

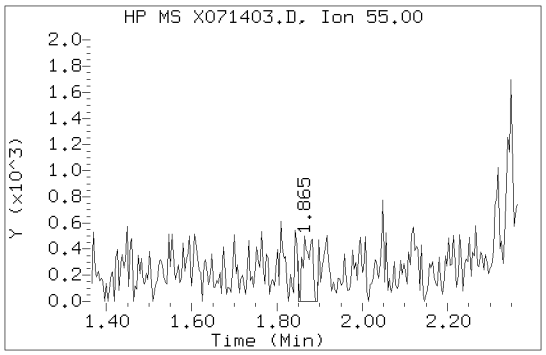
BEFORE

MASS
55
AREA
759
HEIGHT
500
20-Jul-2023
15:04
linh
pham



AFTER

MASS
55
AREA
759
HEIGHT
500
20-Jul-2023
15:04
linh
pham

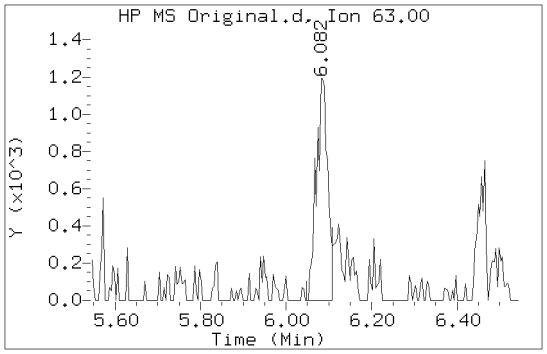


2-Chloroethylvinyl ether (110-75-8)

Reason Code:

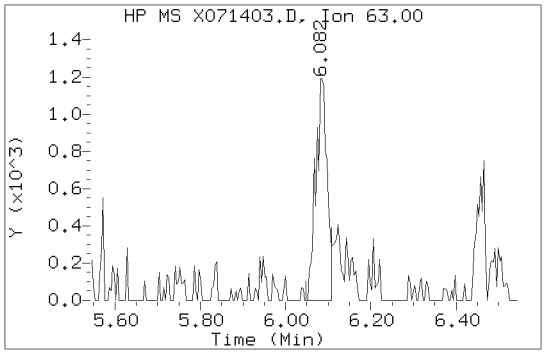
BEFORE

MASS
63
AREA
2206
HEIGHT
1191
20-Jul-2023
15:04
linh
pham



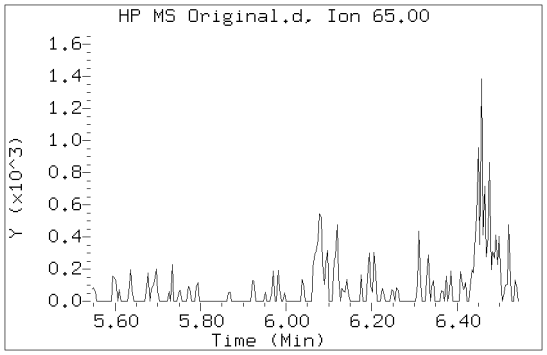
AFTER

MASS
63
AREA
2206
HEIGHT
1191
20-Jul-2023
15:04
linh
pham



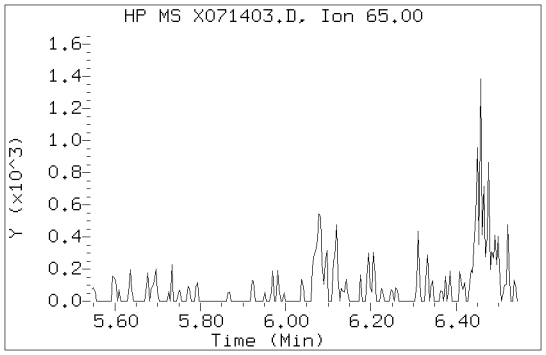
BEFORE

MASS
65
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



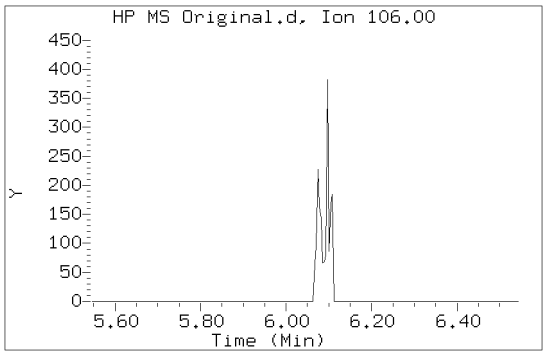
AFTER

MASS
65
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



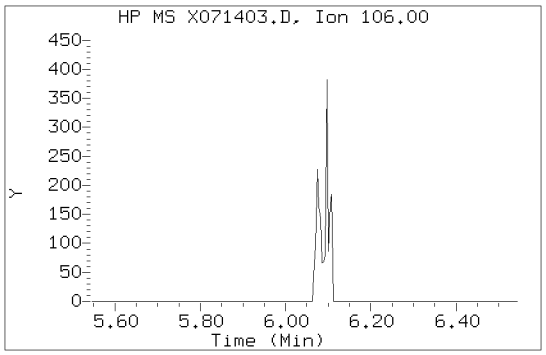
BEFORE

MASS
106
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
106
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



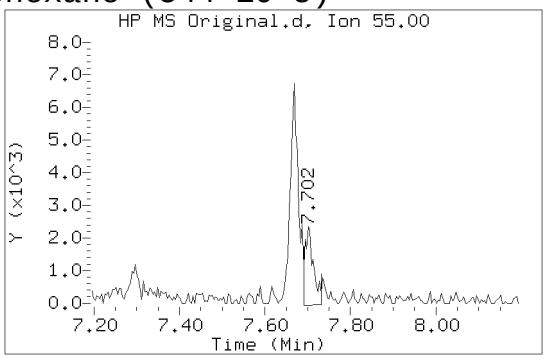
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

1-Chlorohexane (544-10-5)

Reason Code:

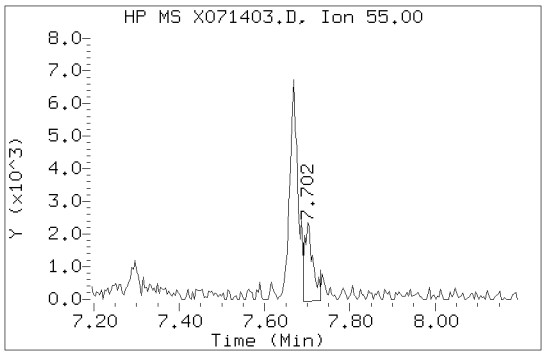
BEFORE

MASS
55
AREA
3459
HEIGHT
2414
20-Jul-2023
15:04
linh
pham



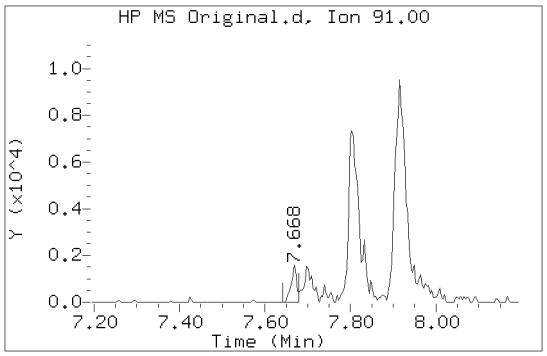
AFTER

MASS
55
AREA
3459
HEIGHT
2414
20-Jul-2023
15:04
linh
pham



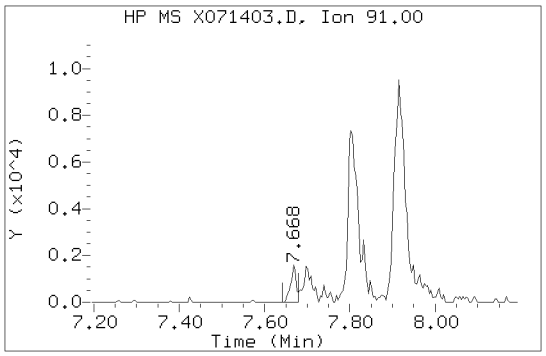
BEFORE

MASS
91
AREA
1435
HEIGHT
1592
20-Jul-2023
15:04
linh
pham



AFTER

MASS
91
AREA
1435
HEIGHT
1592
20-Jul-2023
15:04
linh
pham

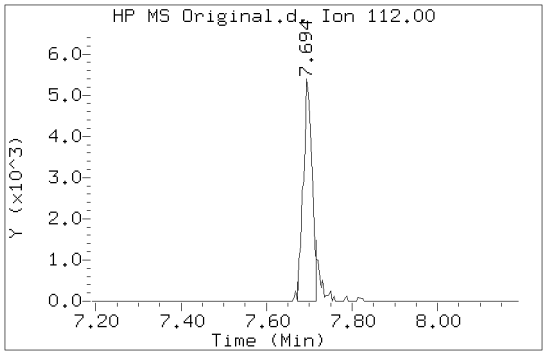


Chlorobenzene (108-90-7)

Reason Code:

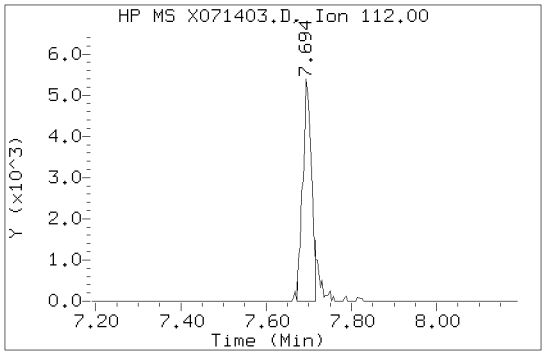
BEFORE

MASS
112
AREA
7907
HEIGHT
5398
20-Jul-2023
15:04
linh
pham



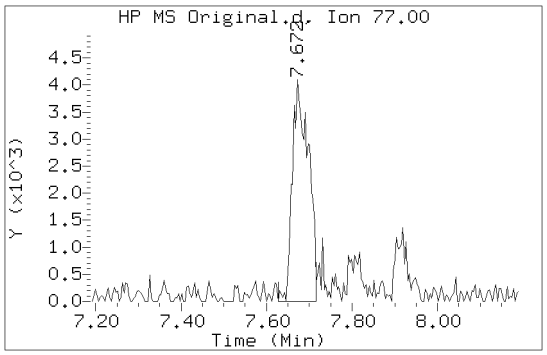
AFTER

MASS
112
AREA
7907
HEIGHT
5398
20-Jul-2023
15:04
linh
pham



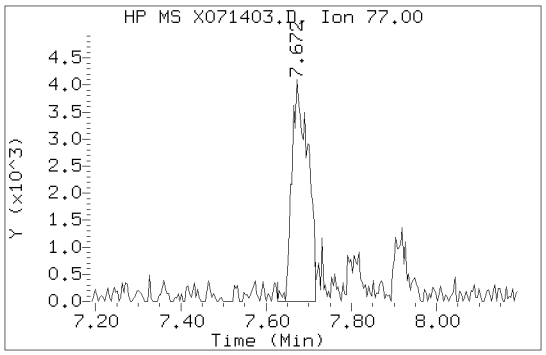
BEFORE

MASS
77
AREA
10872
HEIGHT
4098
20-Jul-2023
15:04
linh
pham



AFTER

MASS
77
AREA
10872
HEIGHT
4098
20-Jul-2023
15:04
linh
pham



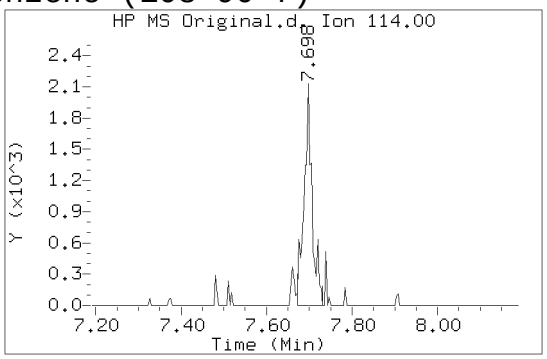
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Chlorobenzene (108-90-7)

Reason Code:

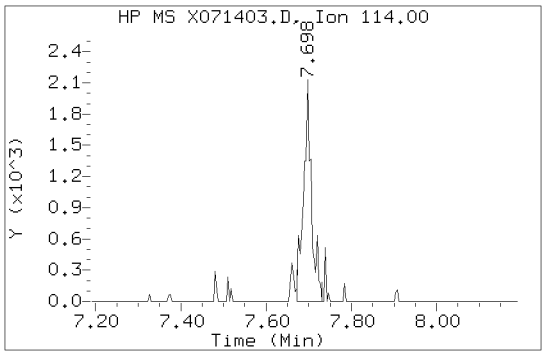
BEFORE

MASS
114
AREA
2819
HEIGHT
2130
20-Jul-2023
15:04
linh
pham



AFTER

MASS
114
AREA
2819
HEIGHT
2130
20-Jul-2023
15:04
linh
pham

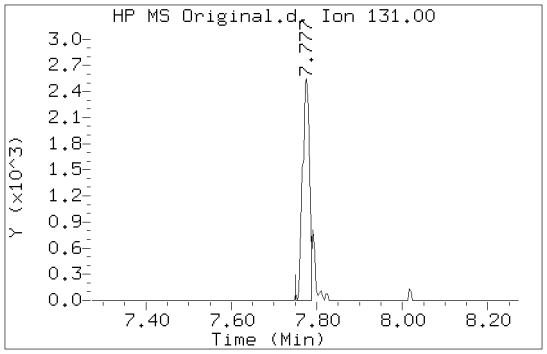


1,1,1,2-Tetrachloroethane (630-20-6)

Reason Code:

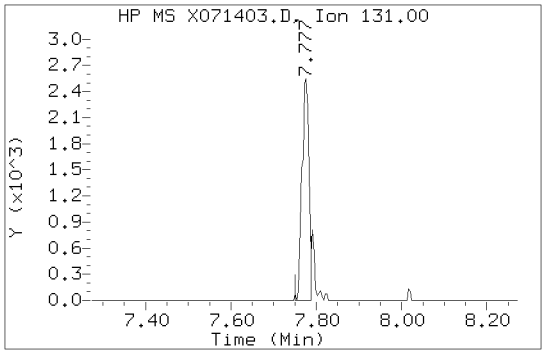
BEFORE

MASS
131
AREA
3008
HEIGHT
2547
20-Jul-2023
15:04
linh
pham



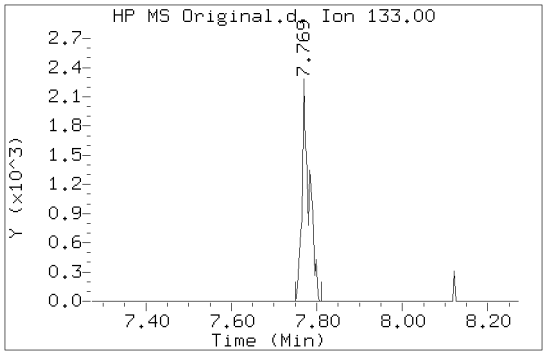
AFTER

MASS
131
AREA
3008
HEIGHT
2547
20-Jul-2023
15:04
linh
pham



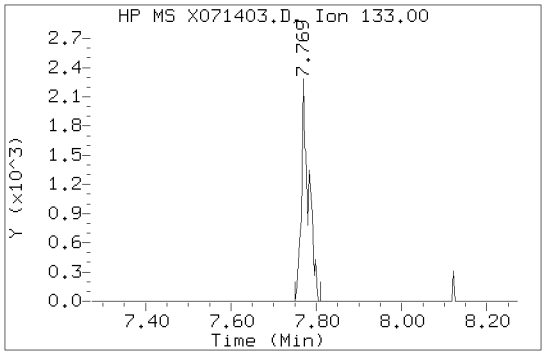
BEFORE

MASS
133
AREA
2774
HEIGHT
2284
20-Jul-2023
15:04
linh
pham



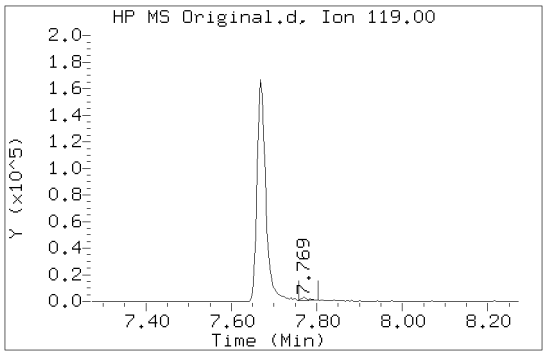
AFTER

MASS
133
AREA
2774
HEIGHT
2284
20-Jul-2023
15:04
linh
pham



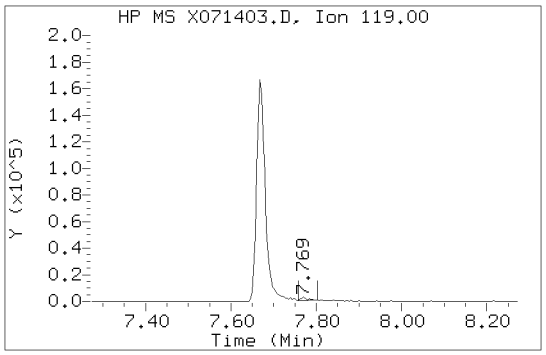
BEFORE

MASS
119
AREA
2799
HEIGHT
2519
20-Jul-2023
15:04
linh
pham



AFTER

MASS
119
AREA
2799
HEIGHT
2519
20-Jul-2023
15:04
linh
pham



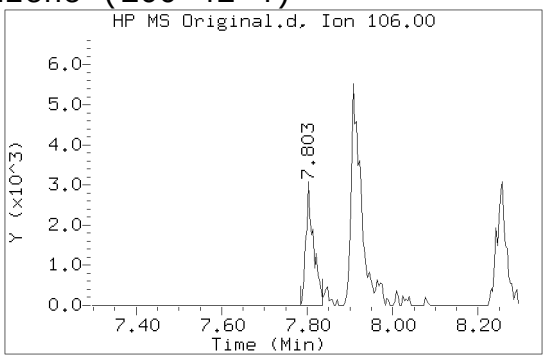
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Ethylbenzene (100-41-4)

Reason Code:

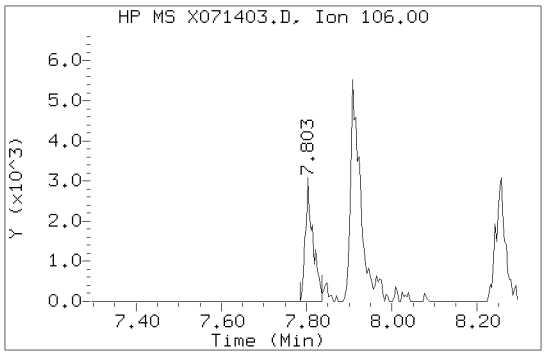
BEFORE

MASS
106
AREA
3909
HEIGHT
3078
20-Jul-2023
15:04
linh
pham



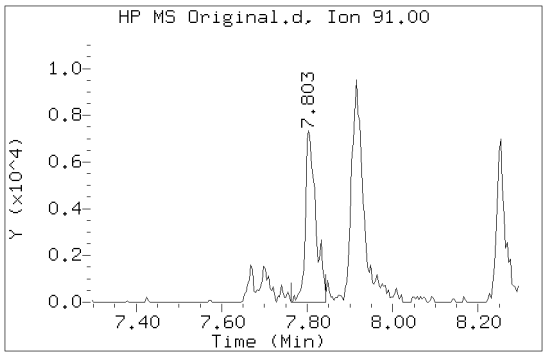
AFTER

MASS
106
AREA
3909
HEIGHT
3078
20-Jul-2023
15:04
linh
pham



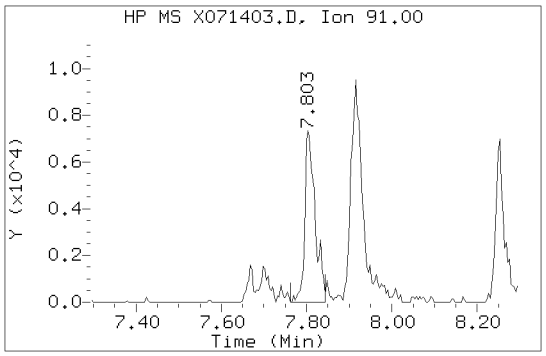
BEFORE

MASS
91
AREA
12659
HEIGHT
7347
20-Jul-2023
15:04
linh
pham



AFTER

MASS
91
AREA
12659
HEIGHT
7347
20-Jul-2023
15:04
linh
pham

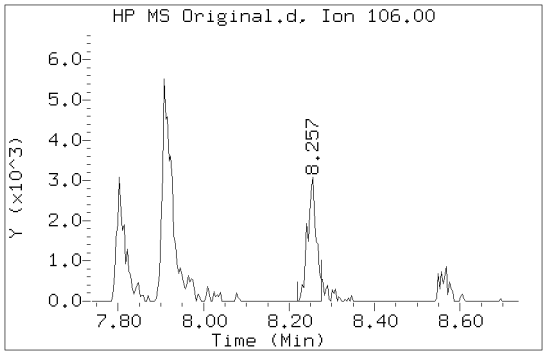


o-Xylene (95-47-6)

Reason Code:

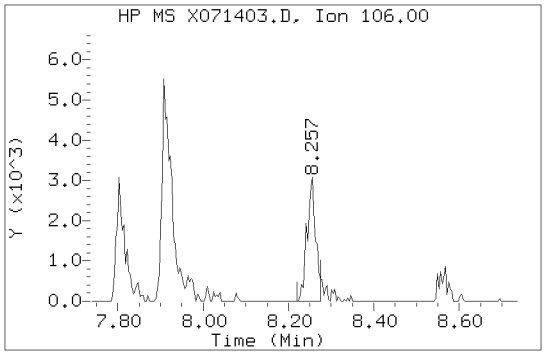
BEFORE

MASS
106
AREA
4414
HEIGHT
3089
20-Jul-2023
15:04
linh
pham



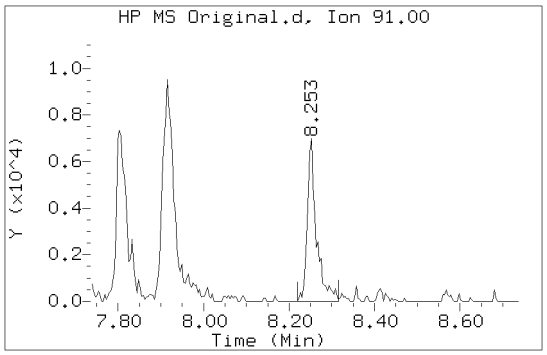
AFTER

MASS
106
AREA
4414
HEIGHT
3089
20-Jul-2023
15:04
linh
pham



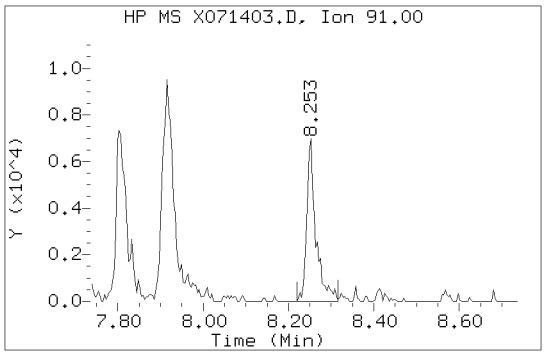
BEFORE

MASS
91
AREA
10415
HEIGHT
7000
20-Jul-2023
15:04
linh
pham



AFTER

MASS
91
AREA
10415
HEIGHT
7000
20-Jul-2023
15:04
linh
pham

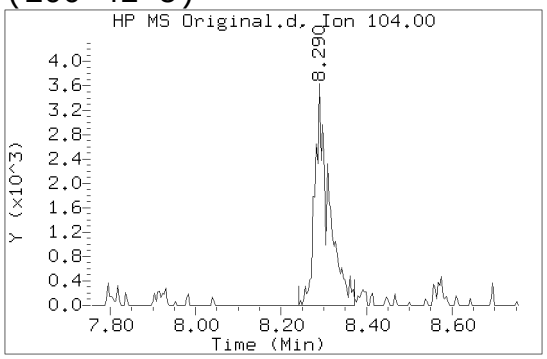


Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

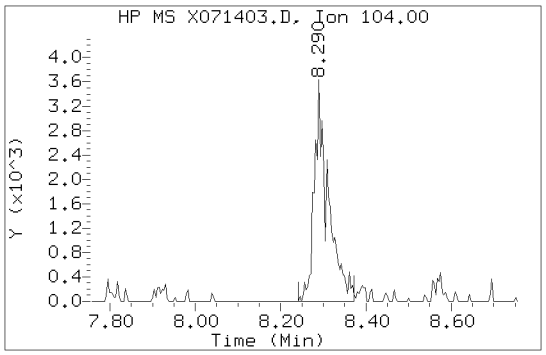
Styrene (100-42-5)

Reason Code:

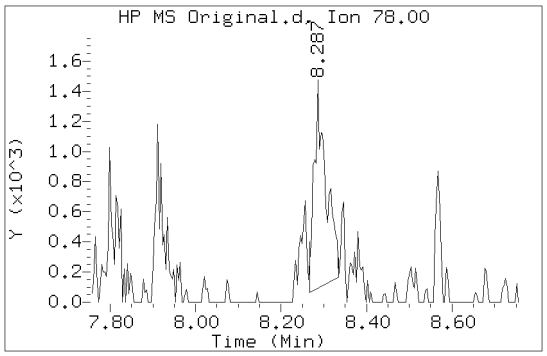
BEFORE
MASS
104
AREA
8133
HEIGHT
3635
20-Jul-2023
15:04
linh
pham



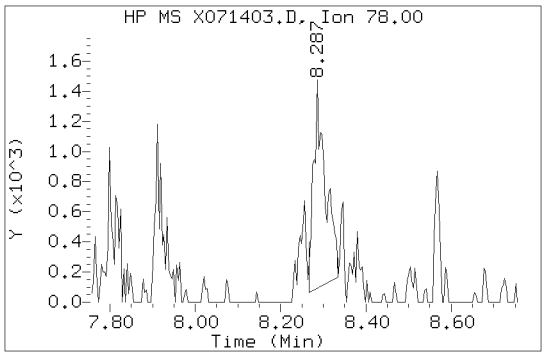
AFTER
MASS
104
AREA
8133
HEIGHT
3635
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
78
AREA
2633
HEIGHT
1381
20-Jul-2023
15:04
linh
pham



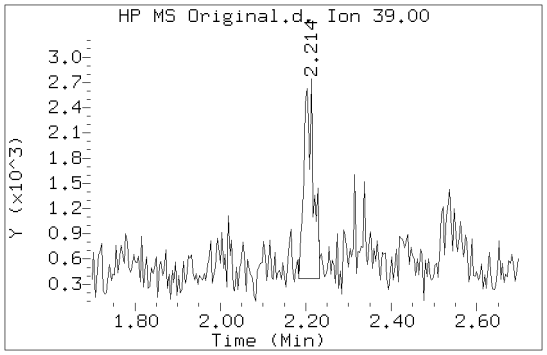
AFTER
MASS
78
AREA
2633
HEIGHT
1381
20-Jul-2023
15:04
linh
pham



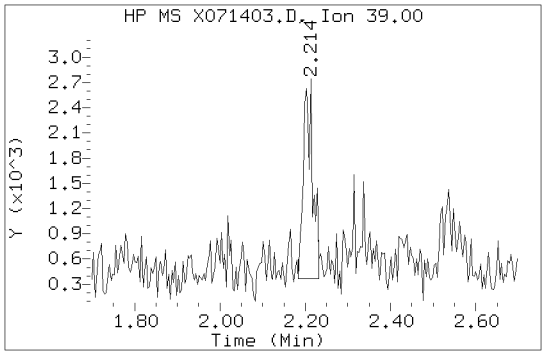
Acetonitrile (75-05-8)

Reason Code:

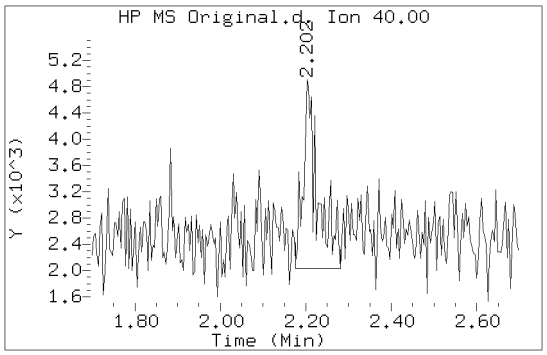
BEFORE
MASS
39
AREA
3606
HEIGHT
2378
20-Jul-2023
15:04
linh
pham



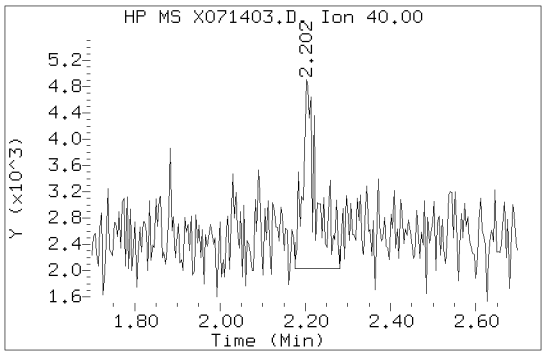
AFTER
MASS
39
AREA
3606
HEIGHT
2378
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
40
AREA
6842
HEIGHT
2874
20-Jul-2023
15:04
linh
pham



AFTER
MASS
40
AREA
6842
HEIGHT
2874
20-Jul-2023
15:04
linh
pham



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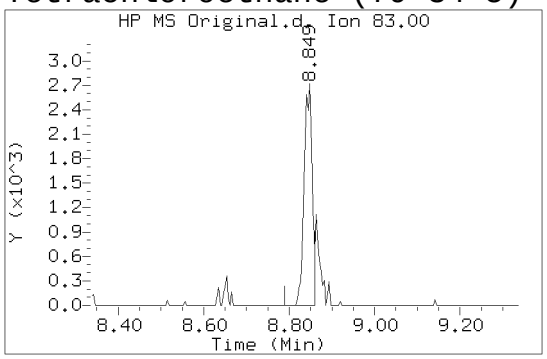
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

1,1,2,2-Tetrachloroethane (79-34-5)

Reason Code:

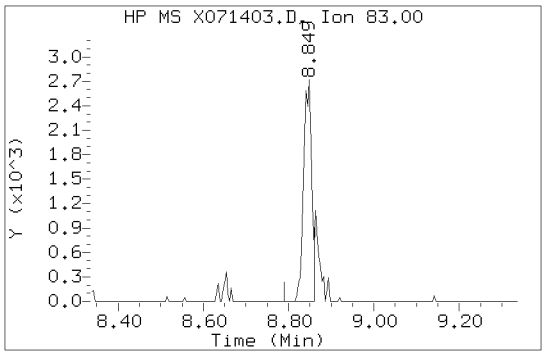
BEFORE

MASS
83
AREA
3654
HEIGHT
2720
20-Jul-2023
15:04
linh
pham



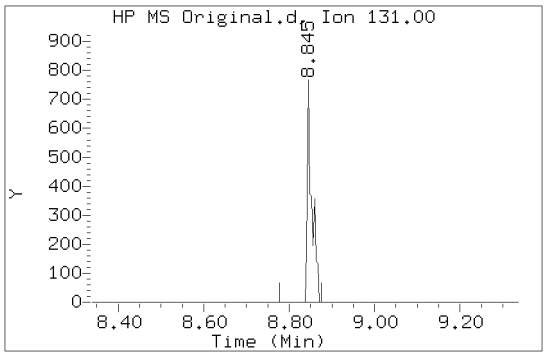
AFTER

MASS
83
AREA
3654
HEIGHT
2720
20-Jul-2023
15:04
linh
pham



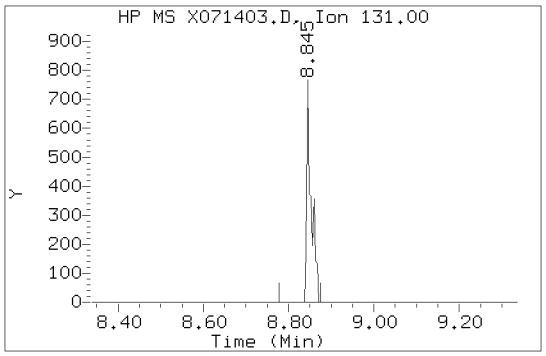
BEFORE

MASS
131
AREA
565
HEIGHT
767
20-Jul-2023
15:04
linh
pham



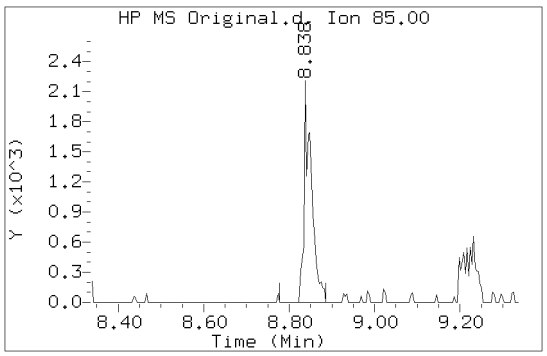
AFTER

MASS
131
AREA
565
HEIGHT
767
20-Jul-2023
15:04
linh
pham



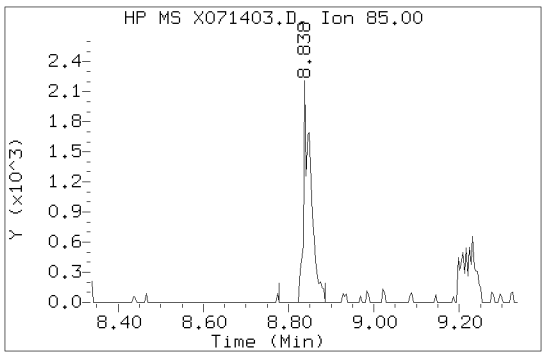
BEFORE

MASS
85
AREA
2735
HEIGHT
2209
20-Jul-2023
15:04
linh
pham



AFTER

MASS
85
AREA
2735
HEIGHT
2209
20-Jul-2023
15:04
linh
pham

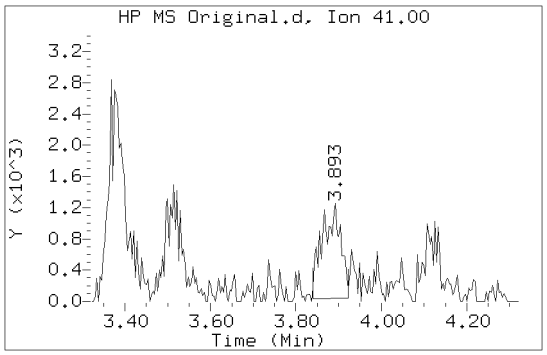


Methacrylonitrile (126-98-7)

Reason Code:

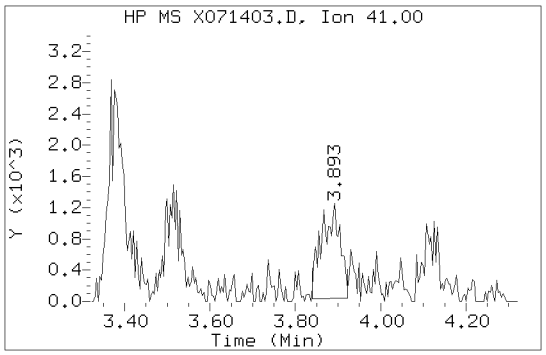
BEFORE

MASS
41
AREA
3622
HEIGHT
1212
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
3622
HEIGHT
1212
20-Jul-2023
15:04
linh
pham

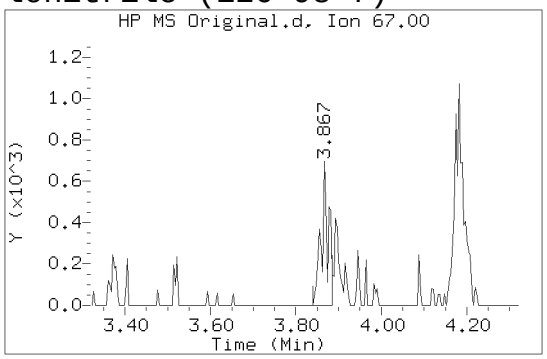


Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

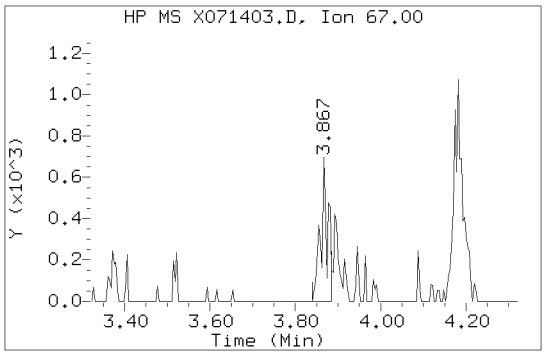
Methacrylonitrile (126-98-7)

Reason Code:

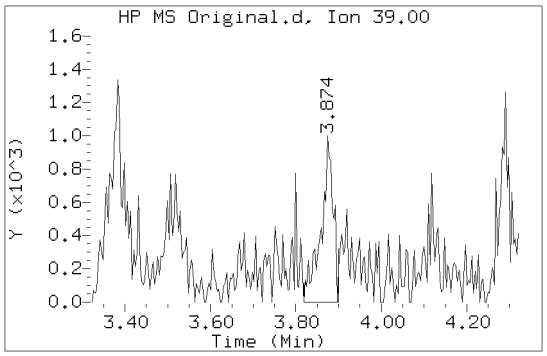
BEFORE
MASS
67
AREA
806
HEIGHT
697
20-Jul-2023
15:04
linh
pham



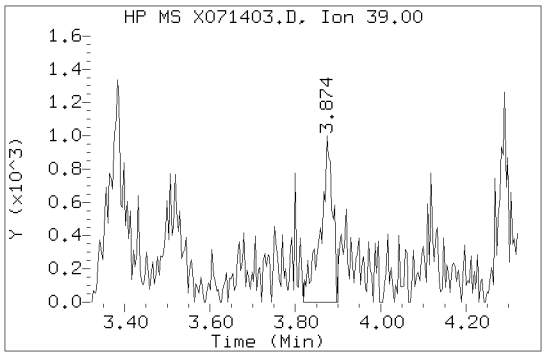
AFTER
MASS
67
AREA
806
HEIGHT
697
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
39
AREA
1986
HEIGHT
1000
20-Jul-2023
15:04
linh
pham



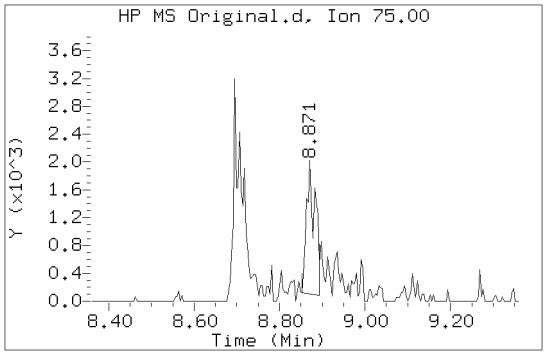
AFTER
MASS
39
AREA
1986
HEIGHT
1000
20-Jul-2023
15:04
linh
pham



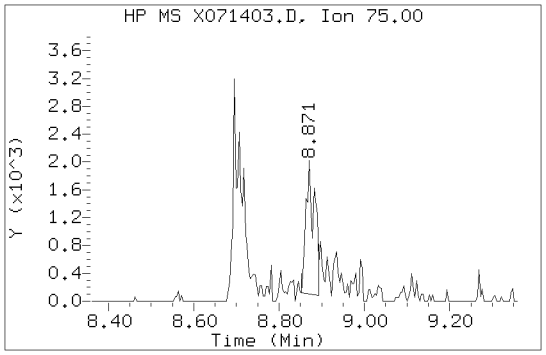
1,2,3-Trichloropropane (96-18-4)

Reason Code:

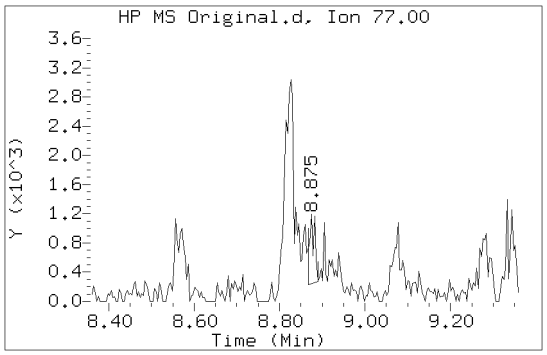
BEFORE
MASS
75
AREA
2737
HEIGHT
1922
20-Jul-2023
15:04
linh
pham



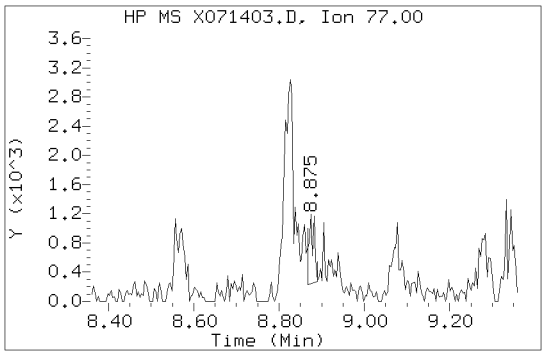
AFTER
MASS
75
AREA
2737
HEIGHT
1922
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
77
AREA
813
HEIGHT
948
20-Jul-2023
15:04
linh
pham



AFTER
MASS
77
AREA
813
HEIGHT
948
20-Jul-2023
15:04
linh
pham

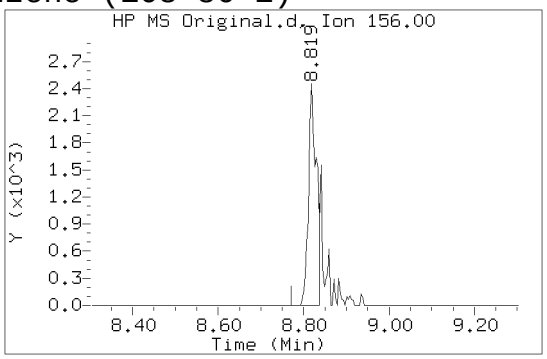


Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

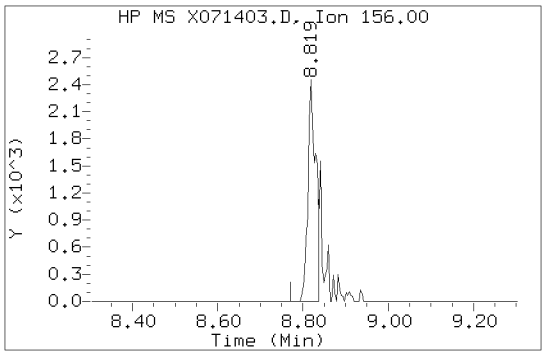
Bromobenzene (108-86-1)

Reason Code:

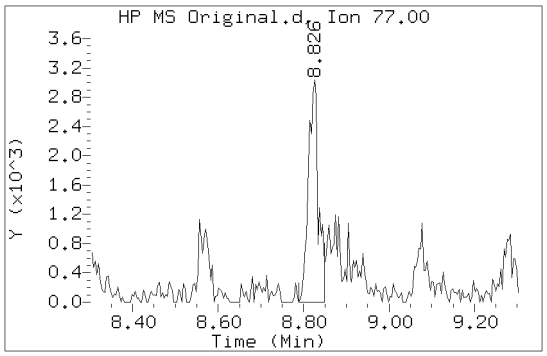
BEFORE
MASS
156
AREA
3201
HEIGHT
2455
20-Jul-2023
15:04
linh
pham



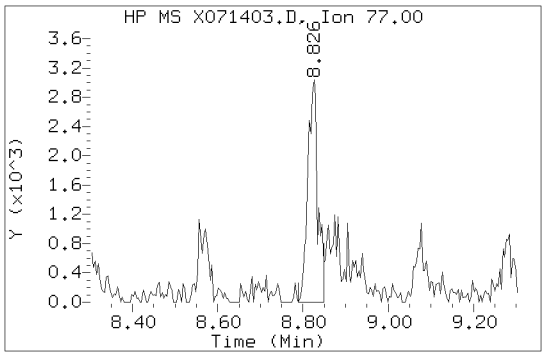
AFTER
MASS
156
AREA
3201
HEIGHT
2455
20-Jul-2023
15:04
linh
pham



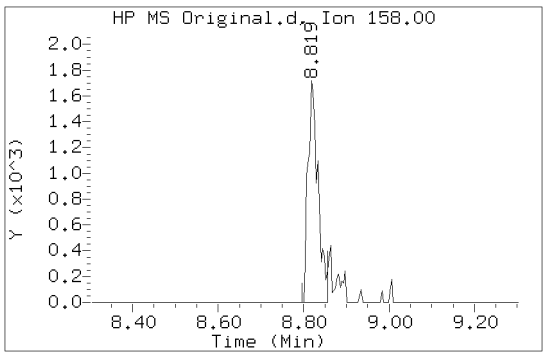
BEFORE
MASS
77
AREA
5003
HEIGHT
3037
20-Jul-2023
15:04
linh
pham



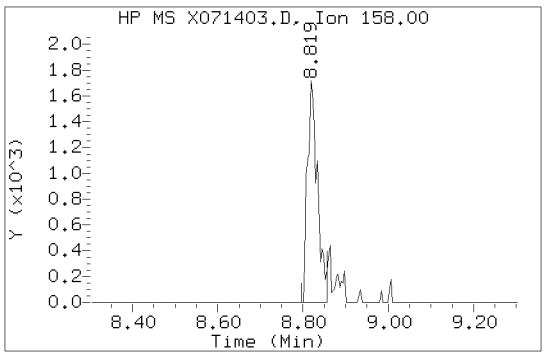
AFTER
MASS
77
AREA
5003
HEIGHT
3037
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
158
AREA
2823
HEIGHT
1718
20-Jul-2023
15:04
linh
pham



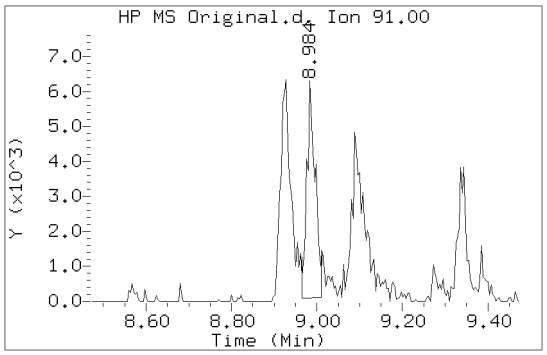
AFTER
MASS
158
AREA
2823
HEIGHT
1718
20-Jul-2023
15:04
linh
pham



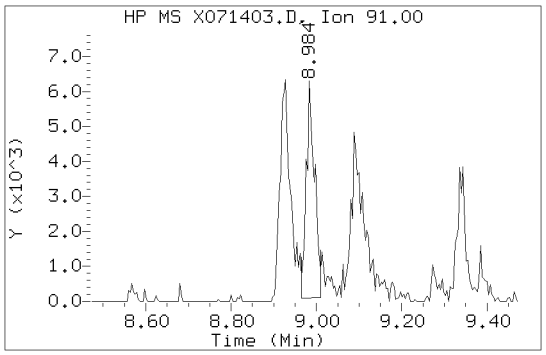
2-Chlorotoluene (95-49-8)

Reason Code:

BEFORE
MASS
91
AREA
8487
HEIGHT
6195
20-Jul-2023
15:04
linh
pham



AFTER
MASS
91
AREA
8487
HEIGHT
6195
20-Jul-2023
15:04
linh
pham



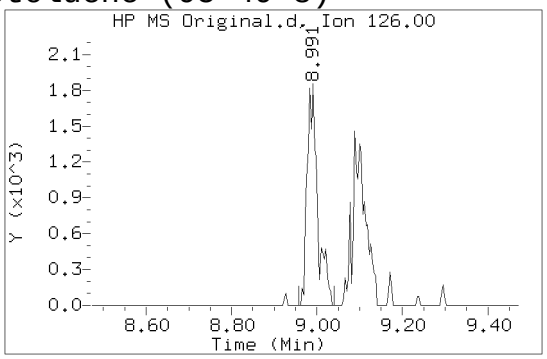
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

2-Chlorotoluene (95-49-8)

Reason Code:

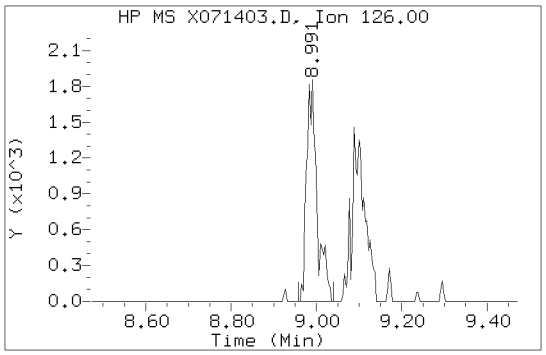
BEFORE

MASS
126
AREA
3192
HEIGHT
1856
20-Jul-2023
15:04
linh
pham



AFTER

MASS
126
AREA
3192
HEIGHT
1856
20-Jul-2023
15:04
linh
pham

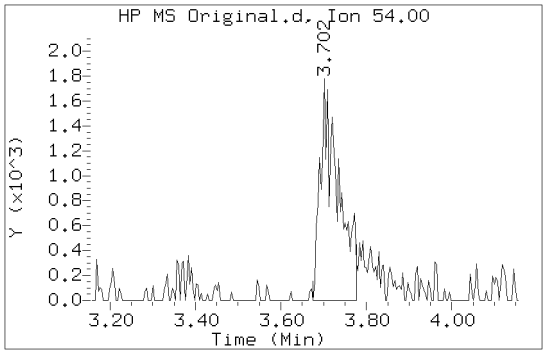


Propionitrile (107-12-0)

Reason Code:

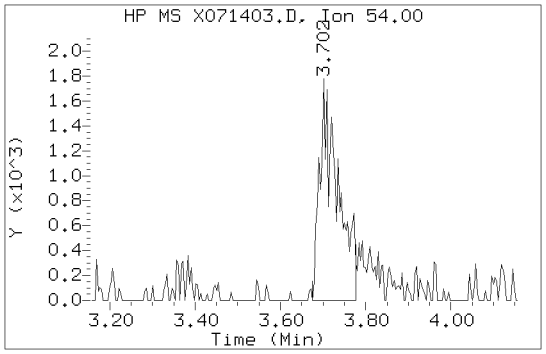
BEFORE

MASS
54
AREA
5231
HEIGHT
1779
20-Jul-2023
15:04
linh
pham



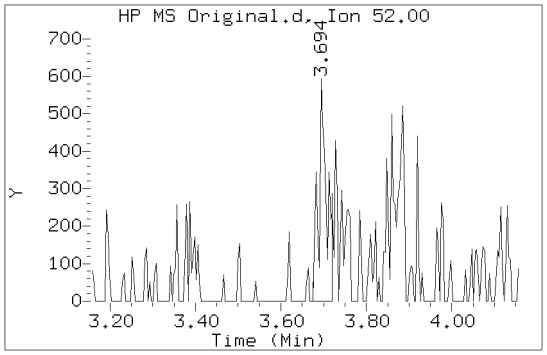
AFTER

MASS
54
AREA
5231
HEIGHT
1779
20-Jul-2023
15:04
linh
pham



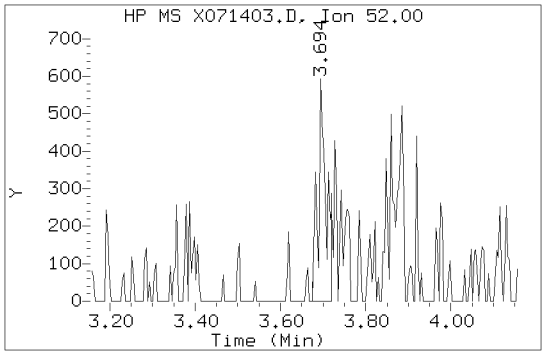
BEFORE

MASS
52
AREA
779
HEIGHT
593
20-Jul-2023
15:04
linh
pham



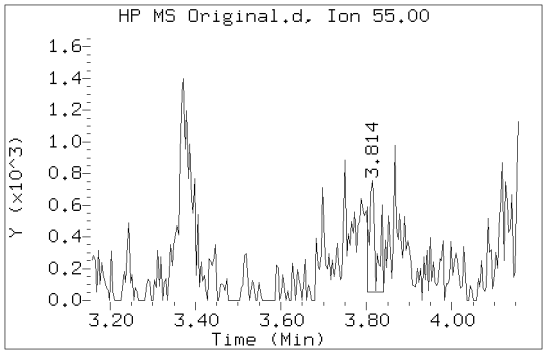
AFTER

MASS
52
AREA
779
HEIGHT
593
20-Jul-2023
15:04
linh
pham



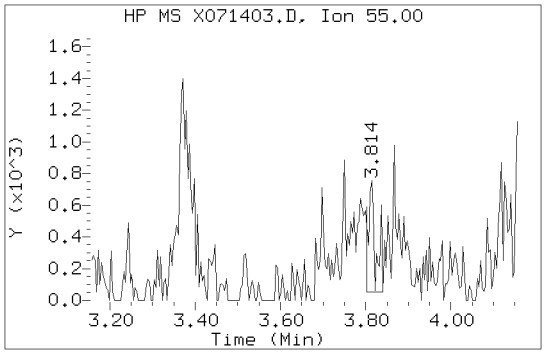
BEFORE

MASS
55
AREA
826
HEIGHT
704
20-Jul-2023
15:04
linh
pham



AFTER

MASS
55
AREA
826
HEIGHT
704
20-Jul-2023
15:04
linh
pham

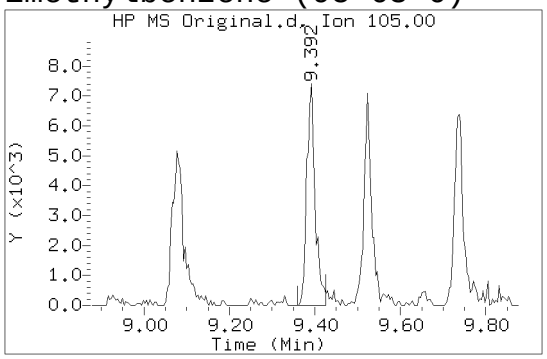


Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

1,2,4-Trimethylbenzene (95-63-6)

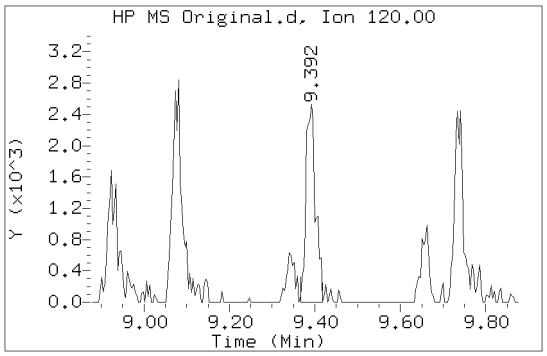
BEFORE

MASS
105
AREA
10172
HEIGHT
7414
20-Jul-2023
15:04
linh
pham



BEFORE

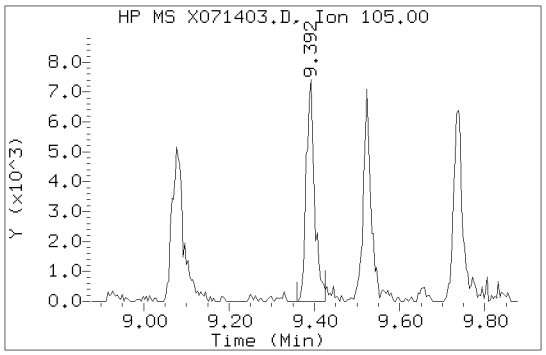
MASS
120
AREA
3980
HEIGHT
2527
20-Jul-2023
15:04
linh
pham



Reason Code:

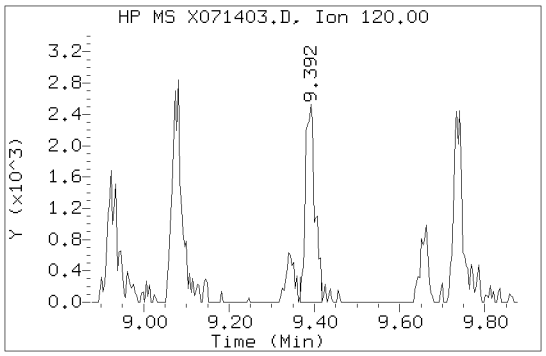
AFTER

MASS
105
AREA
10172
HEIGHT
7414
20-Jul-2023
15:04
linh
pham



AFTER

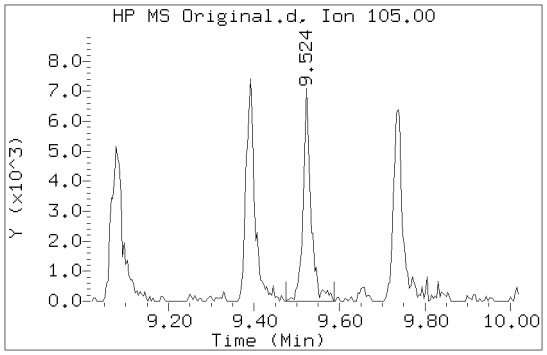
MASS
120
AREA
3980
HEIGHT
2527
20-Jul-2023
15:04
linh
pham



sec-Butylbenzene (135-98-8)

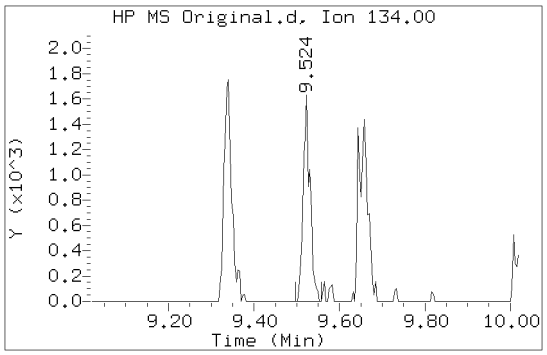
BEFORE

MASS
105
AREA
9247
HEIGHT
7103
20-Jul-2023
15:04
linh
pham



BEFORE

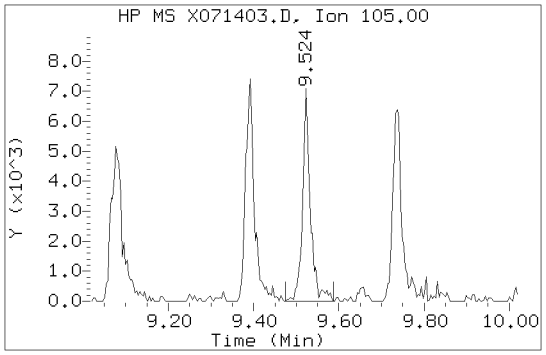
MASS
134
AREA
1861
HEIGHT
1631
20-Jul-2023
15:04
linh
pham



Reason Code:

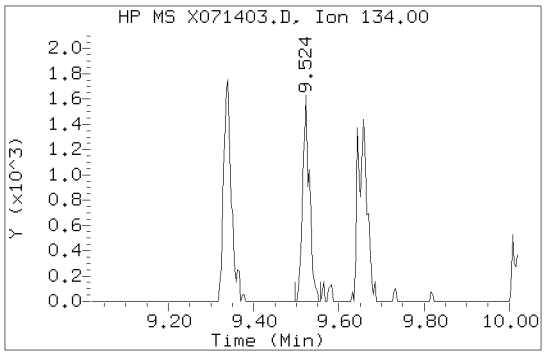
AFTER

MASS
105
AREA
9247
HEIGHT
7103
20-Jul-2023
15:04
linh
pham



AFTER

MASS
134
AREA
1861
HEIGHT
1631
20-Jul-2023
15:04
linh
pham

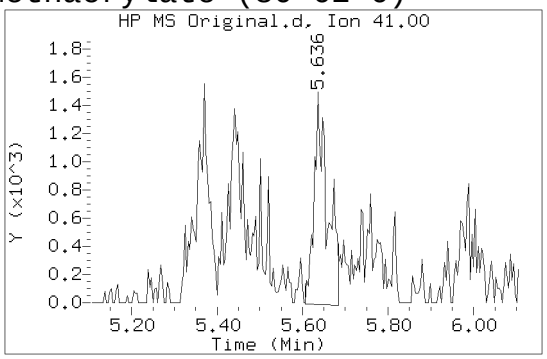


Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

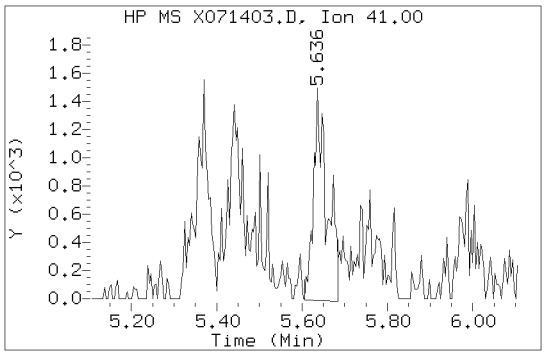
Methyl Methacrylate (80-62-6)

Reason Code:

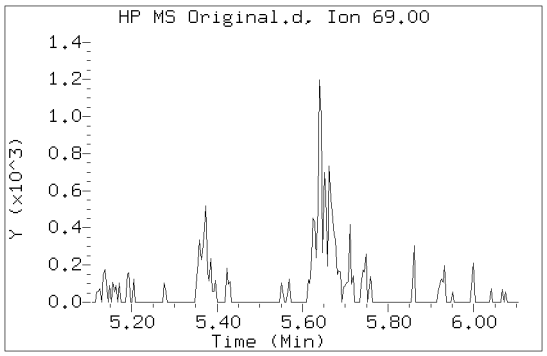
BEFORE
MASS
41
AREA
3261
HEIGHT
1505
20-Jul-2023
15:04
linh
pham



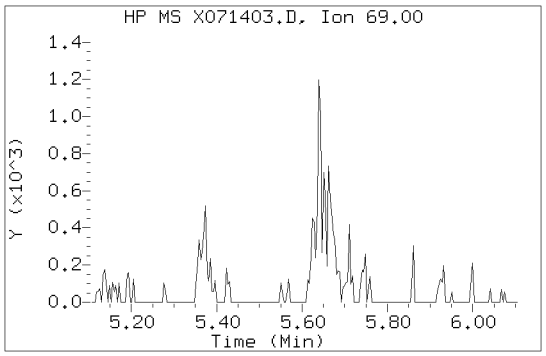
AFTER
MASS
41
AREA
3261
HEIGHT
1505
20-Jul-2023
15:04
linh
pham



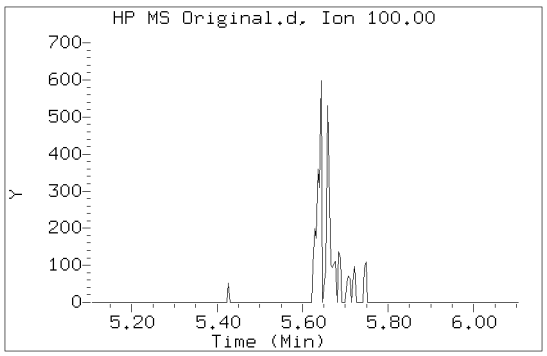
BEFORE
MASS
69
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



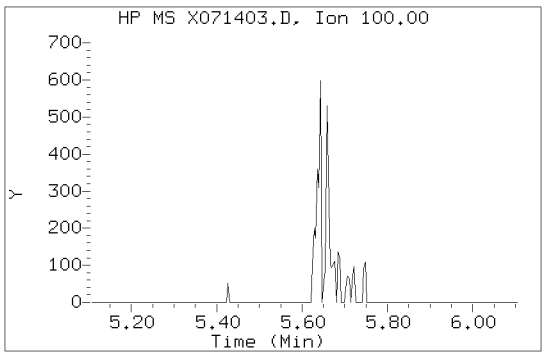
AFTER
MASS
69
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
100
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



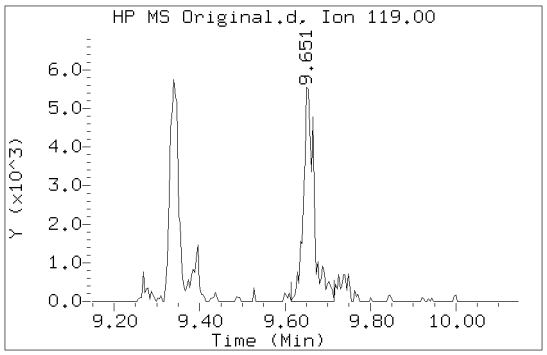
AFTER
MASS
100
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



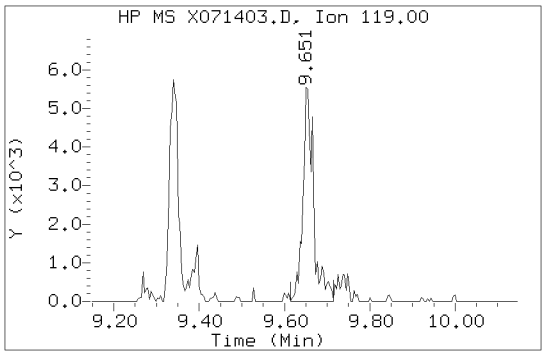
p-Isopropyltoluene (99-87-6)

Reason Code:

BEFORE
MASS
119
AREA
9771
HEIGHT
5556
20-Jul-2023
15:04
linh
pham



AFTER
MASS
119
AREA
9771
HEIGHT
5556
20-Jul-2023
15:04
linh
pham



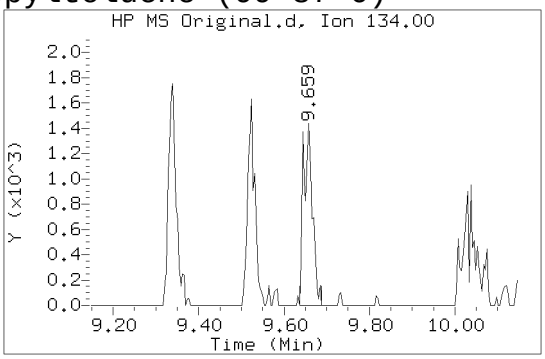
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

p-Isopropyltoluene (99-87-6)

Reason Code:

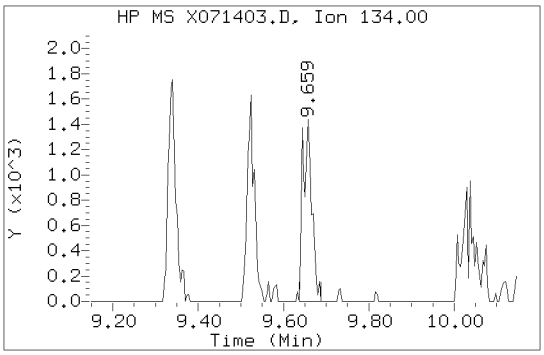
BEFORE

MASS
134
AREA
2131
HEIGHT
1438
20-Jul-2023
15:04
linh
pham



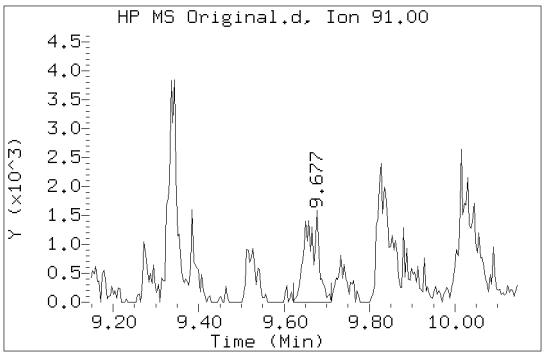
AFTER

MASS
134
AREA
2131
HEIGHT
1438
20-Jul-2023
15:04
linh
pham



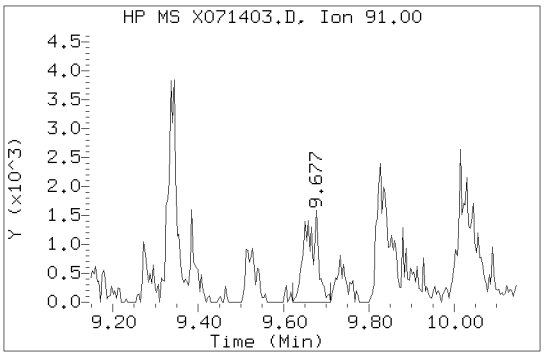
BEFORE

MASS
91
AREA
3352
HEIGHT
1591
20-Jul-2023
15:04
linh
pham



AFTER

MASS
91
AREA
3352
HEIGHT
1591
20-Jul-2023
15:04
linh
pham

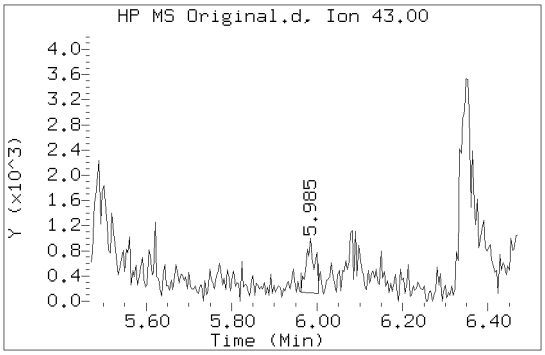


2-Nitropropane (79-46-9)

Reason Code:

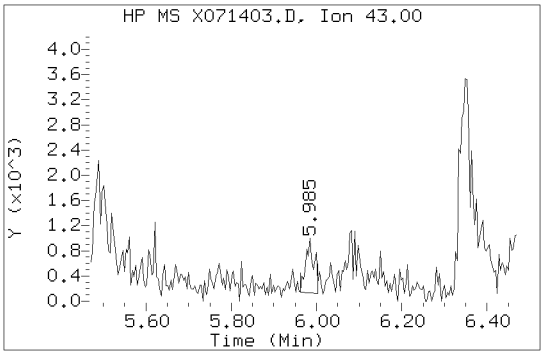
BEFORE

MASS
43
AREA
1174
HEIGHT
872
20-Jul-2023
15:04
linh
pham



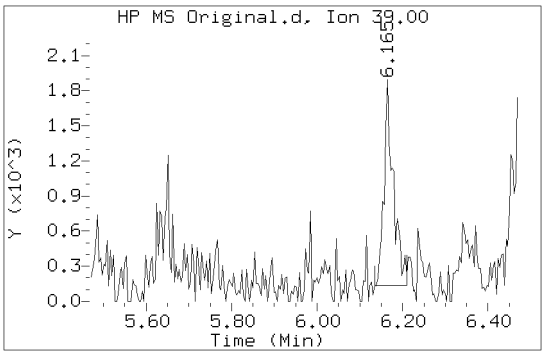
AFTER

MASS
43
AREA
1174
HEIGHT
872
20-Jul-2023
15:04
linh
pham



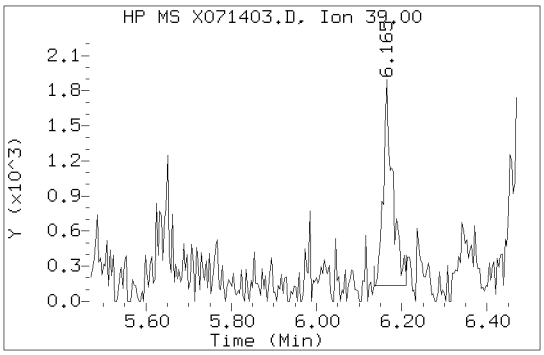
BEFORE

MASS
39
AREA
2649
HEIGHT
1759
20-Jul-2023
15:04
linh
pham



AFTER

MASS
39
AREA
2649
HEIGHT
1759
20-Jul-2023
15:04
linh
pham



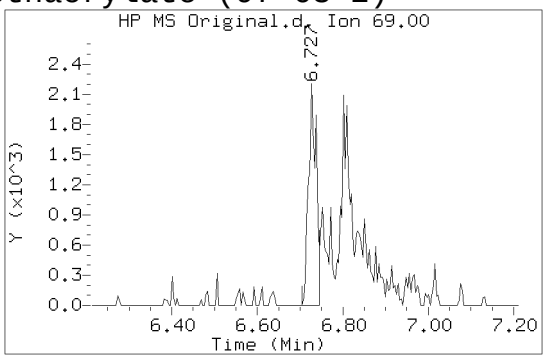
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Ethyl Methacrylate (97-63-2)

Reason Code:

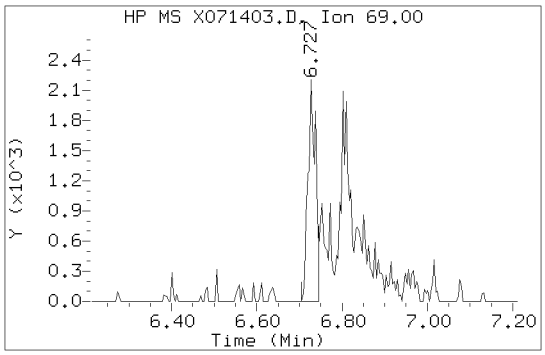
BEFORE

MASS
69
AREA
2780
HEIGHT
2206
20-Jul-2023
15:04
linh
pham



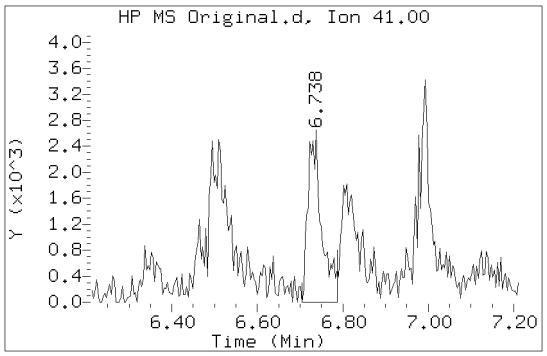
AFTER

MASS
69
AREA
2780
HEIGHT
2206
20-Jul-2023
15:04
linh
pham



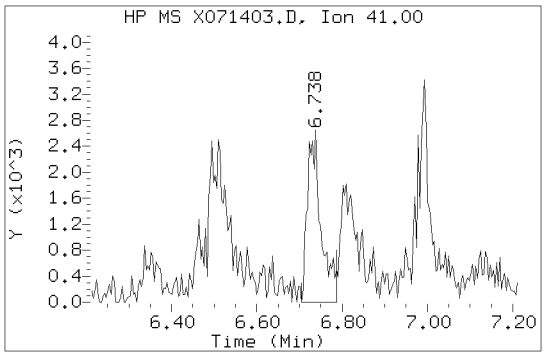
BEFORE

MASS
41
AREA
5900
HEIGHT
2651
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
5900
HEIGHT
2651
20-Jul-2023
15:04
linh
pham

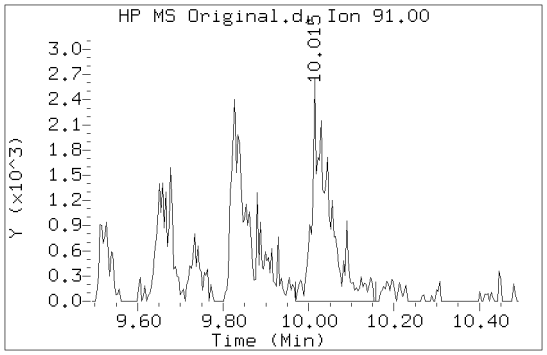


n-Butylbenzene (104-51-8)

Reason Code:

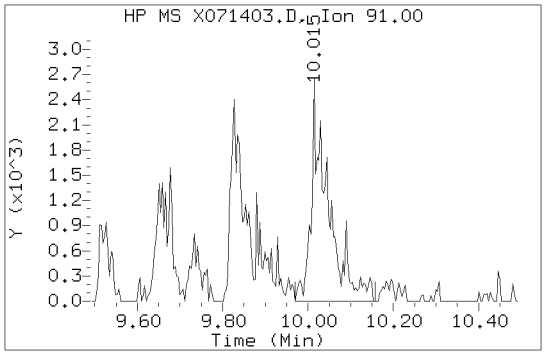
BEFORE

MASS
91
AREA
7141
HEIGHT
2647
20-Jul-2023
15:04
linh
pham



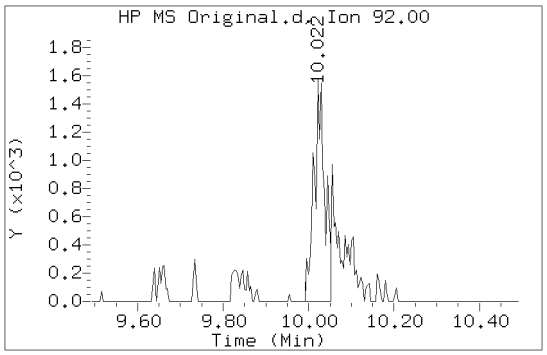
AFTER

MASS
91
AREA
7141
HEIGHT
2647
20-Jul-2023
15:04
linh
pham



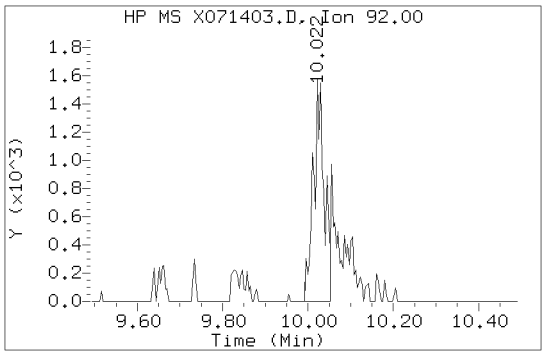
BEFORE

MASS
92
AREA
2733
HEIGHT
1571
20-Jul-2023
15:04
linh
pham



AFTER

MASS
92
AREA
2733
HEIGHT
1571
20-Jul-2023
15:04
linh
pham



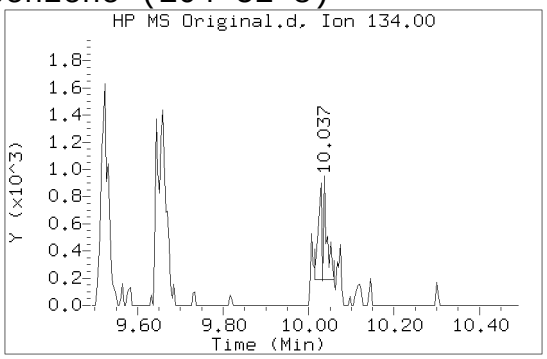
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

n-Butylbenzene (104-51-8)

Reason Code:

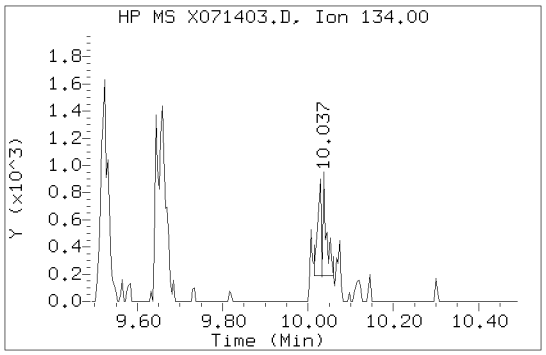
BEFORE

MASS
134
AREA
825
HEIGHT
766
20-Jul-2023
15:04
linh
pham



AFTER

MASS
134
AREA
825
HEIGHT
766
20-Jul-2023
15:04
linh
pham

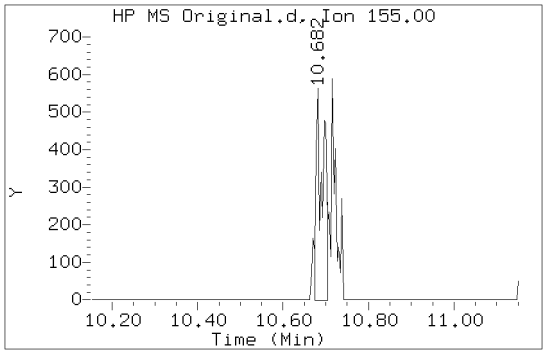


1,2-Dibromo-3-Chloropropane (96-12-8)

Reason Code:

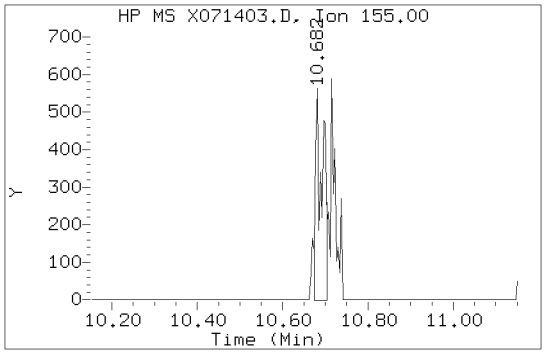
BEFORE

MASS
155
AREA
675
HEIGHT
564
20-Jul-2023
15:04
linh
pham



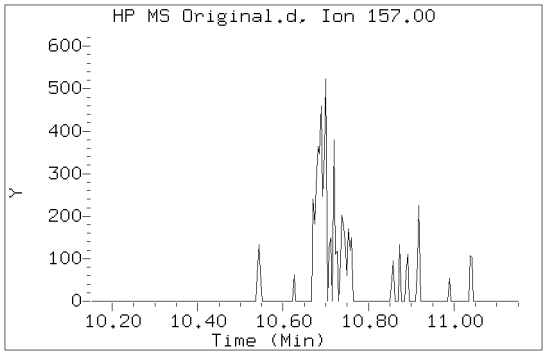
AFTER

MASS
155
AREA
675
HEIGHT
564
20-Jul-2023
15:04
linh
pham



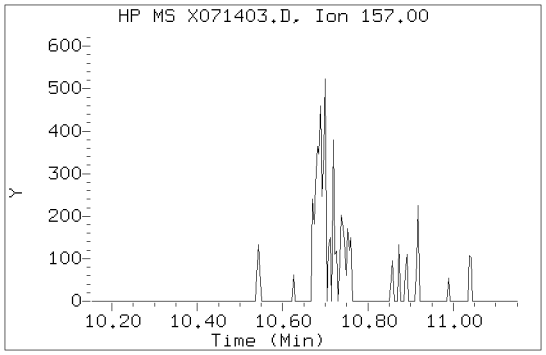
BEFORE

MASS
157
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



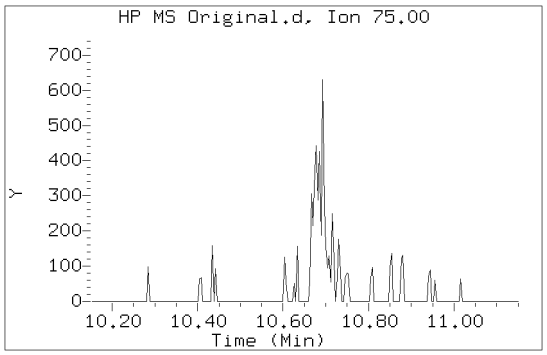
AFTER

MASS
157
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



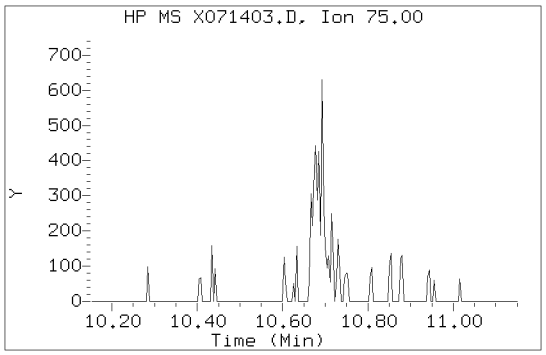
BEFORE

MASS
75
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
75
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



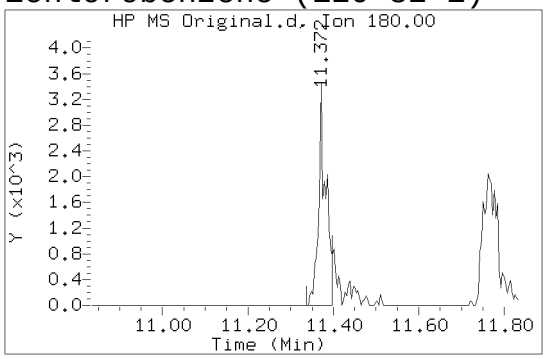
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

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

Reason Code:

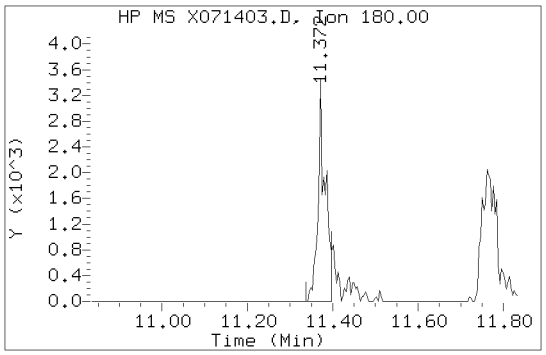
BEFORE

MASS
180
AREA
4099
HEIGHT
3445
20-Jul-2023
15:04
linh
pham



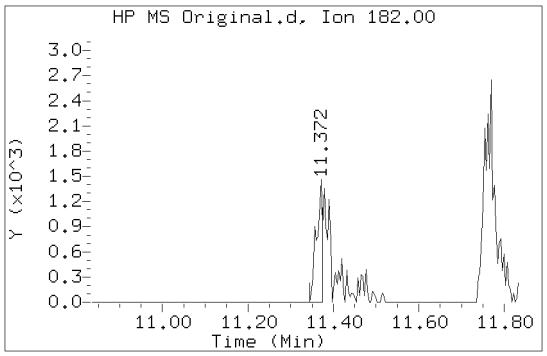
AFTER

MASS
180
AREA
4099
HEIGHT
3445
20-Jul-2023
15:04
linh
pham



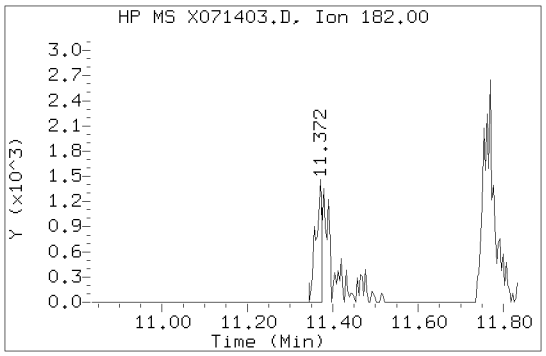
BEFORE

MASS
182
AREA
1413
HEIGHT
1466
20-Jul-2023
15:04
linh
pham



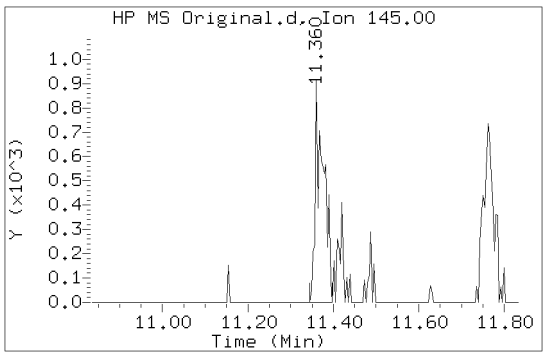
AFTER

MASS
182
AREA
1413
HEIGHT
1466
20-Jul-2023
15:04
linh
pham



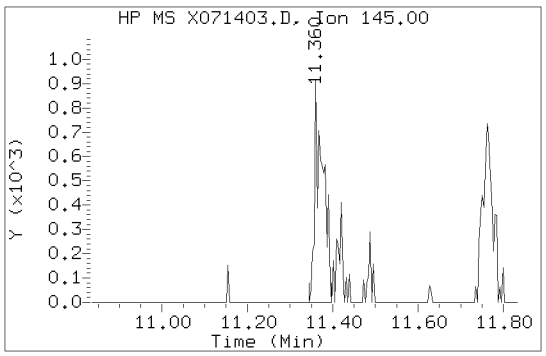
BEFORE

MASS
145
AREA
1239
HEIGHT
912
20-Jul-2023
15:04
linh
pham



AFTER

MASS
145
AREA
1239
HEIGHT
912
20-Jul-2023
15:04
linh
pham

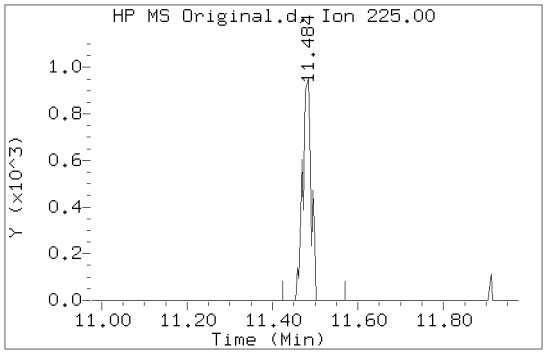


Hexachlorobutadiene (87-68-3)

Reason Code:

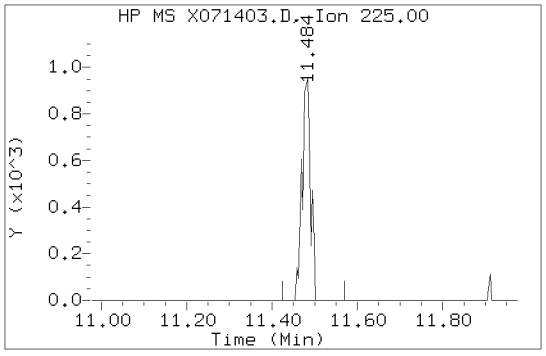
BEFORE

MASS
225
AREA
1357
HEIGHT
951
20-Jul-2023
15:04
linh
pham



AFTER

MASS
225
AREA
1357
HEIGHT
951
20-Jul-2023
15:04
linh
pham



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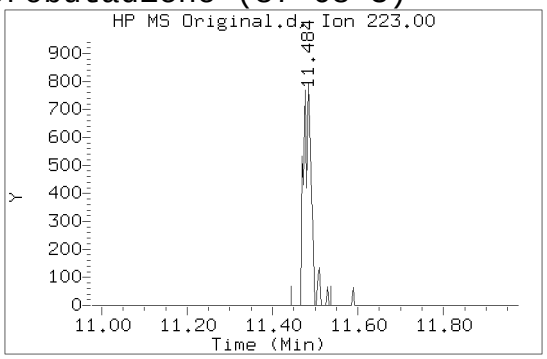
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Hexachlorobutadiene (87-68-3)

Reason Code:

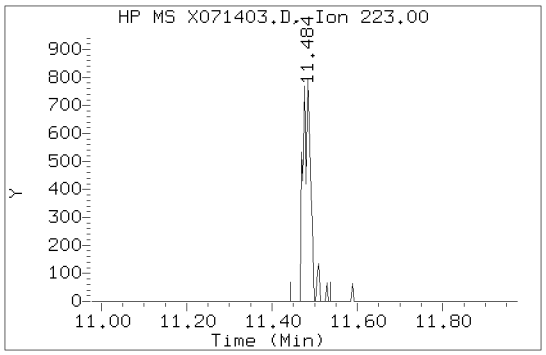
BEFORE

MASS
223
AREA
1025
HEIGHT
792
20-Jul-2023
15:04
linh
pham



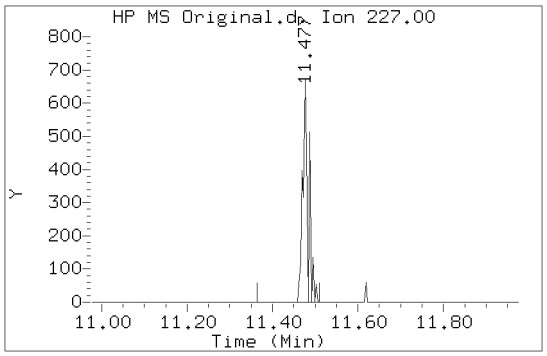
AFTER

MASS
223
AREA
1025
HEIGHT
792
20-Jul-2023
15:04
linh
pham



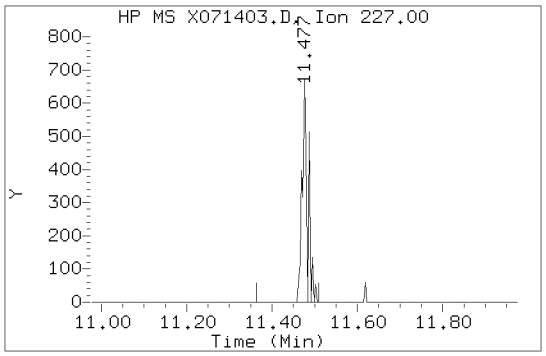
BEFORE

MASS
227
AREA
611
HEIGHT
670
20-Jul-2023
15:04
linh
pham



AFTER

MASS
227
AREA
611
HEIGHT
670
20-Jul-2023
15:04
linh
pham

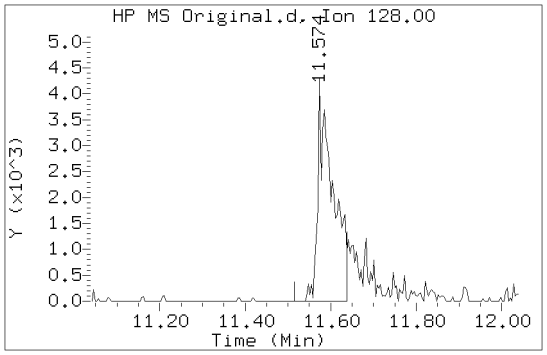


Naphthalene (91-20-3)

Reason Code:

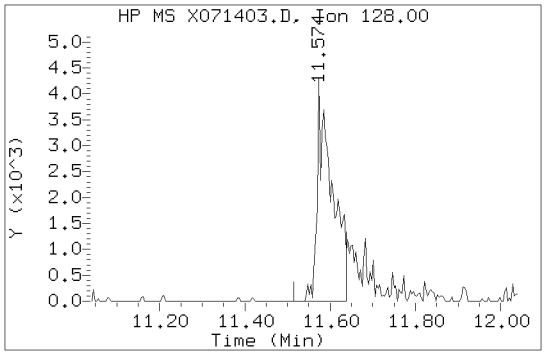
BEFORE

MASS
128
AREA
10357
HEIGHT
4289
20-Jul-2023
15:04
linh
pham



AFTER

MASS
128
AREA
10357
HEIGHT
4289
20-Jul-2023
15:04
linh
pham

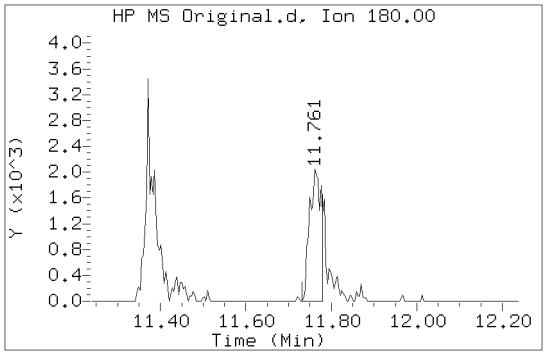


1,2,3-Trichlorobenzene (87-61-6)

Reason Code:

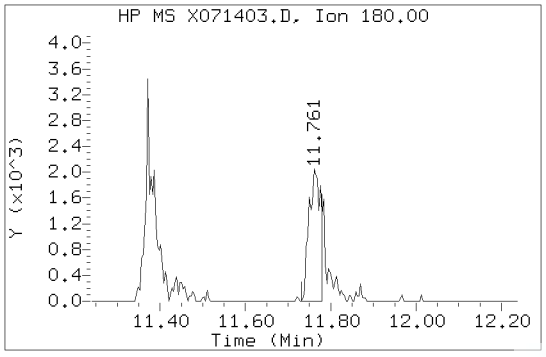
BEFORE

MASS
180
AREA
3845
HEIGHT
2053
20-Jul-2023
15:04
linh
pham



AFTER

MASS
180
AREA
3845
HEIGHT
2053
20-Jul-2023
15:04
linh
pham



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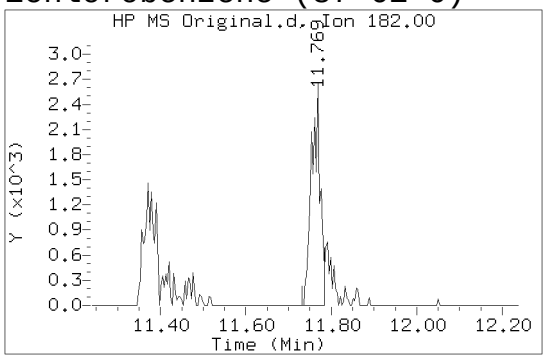
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

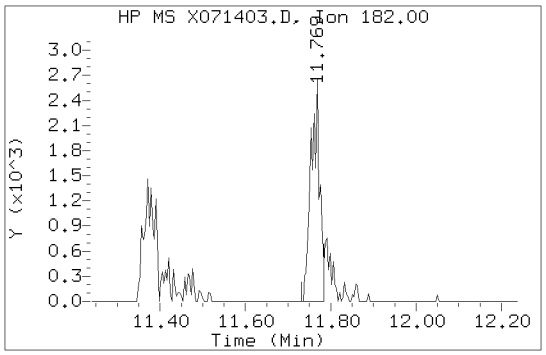
1,2,3-Trichlorobenzene (87-61-6)

Reason Code:

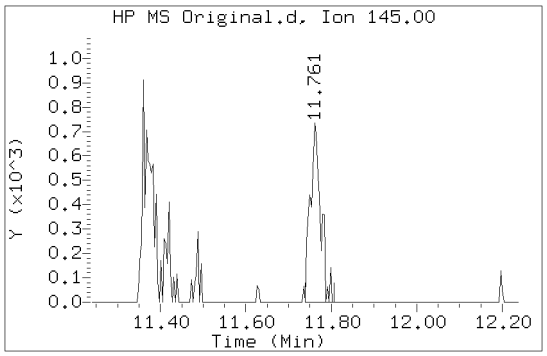
BEFORE
MASS
182
AREA
3757
HEIGHT
2648
20-Jul-2023
15:04
linh
pham



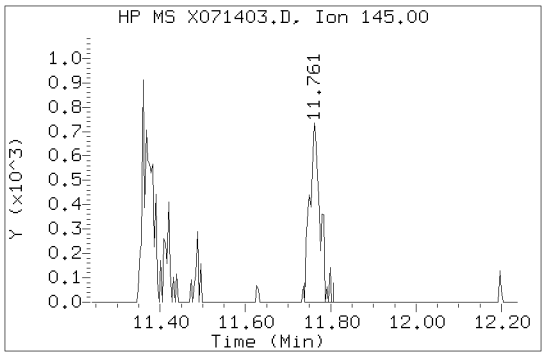
AFTER
MASS
182
AREA
3757
HEIGHT
2648
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
145
AREA
1239
HEIGHT
737
20-Jul-2023
15:04
linh
pham



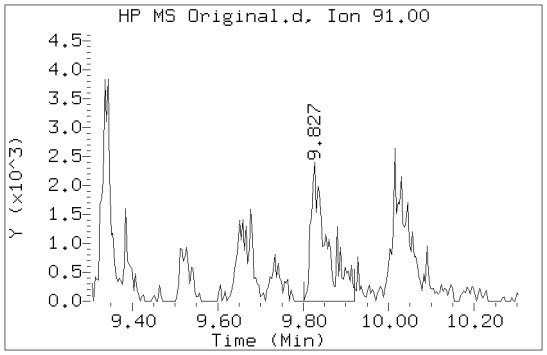
AFTER
MASS
145
AREA
1239
HEIGHT
737
20-Jul-2023
15:04
linh
pham



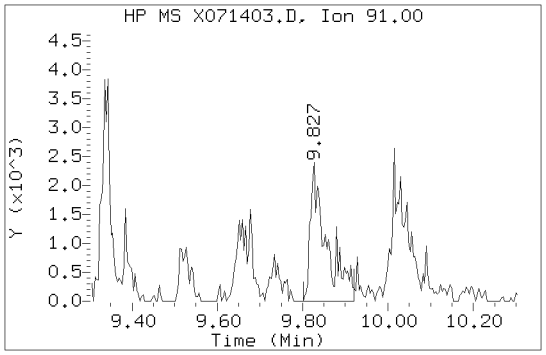
Benzyl Chloride (100-44-7)

Reason Code:

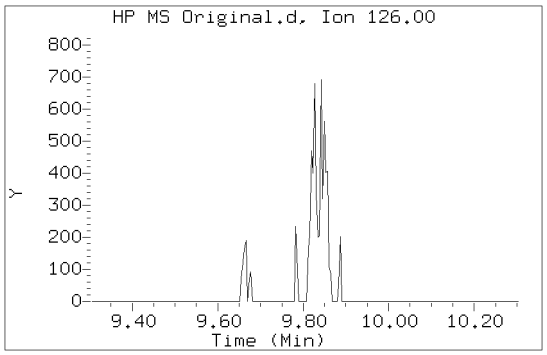
BEFORE
MASS
91
AREA
6245
HEIGHT
2401
20-Jul-2023
15:04
linh
pham



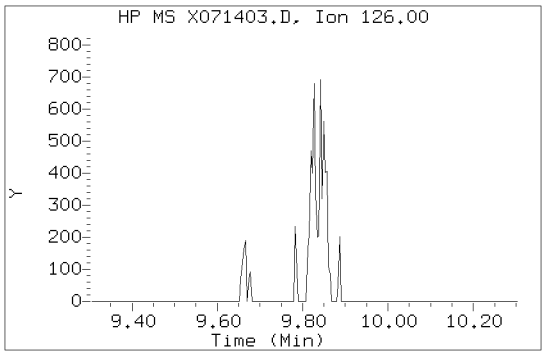
AFTER
MASS
91
AREA
6245
HEIGHT
2401
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
126
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER
MASS
126
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



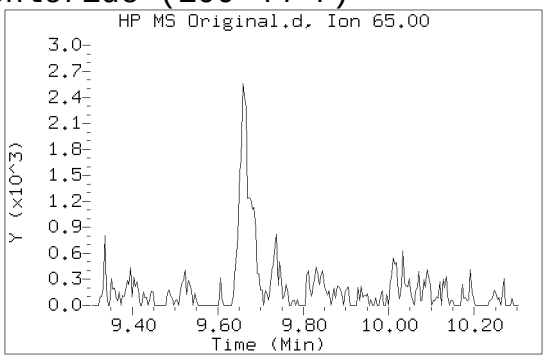
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Benzyl Chloride (100-44-7)

Reason Code:

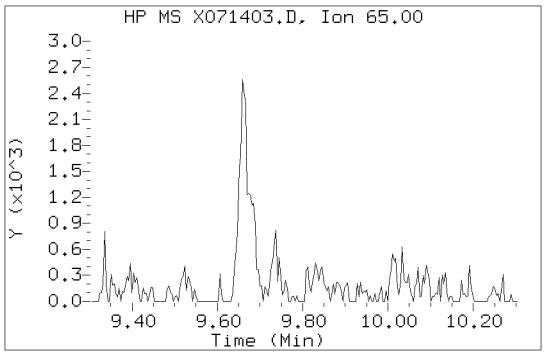
BEFORE

MASS
65
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
65
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

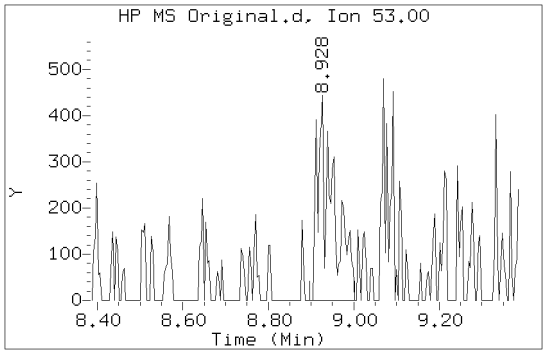


trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code:

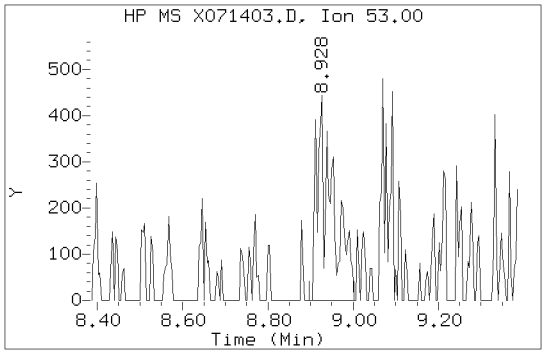
BEFORE

MASS
53
AREA
1124
HEIGHT
444
20-Jul-2023
15:04
linh
pham



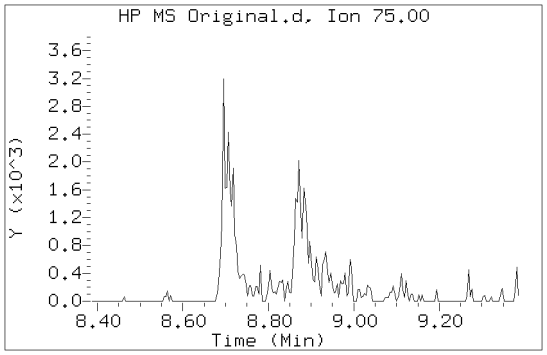
AFTER

MASS
53
AREA
1124
HEIGHT
444
20-Jul-2023
15:04
linh
pham



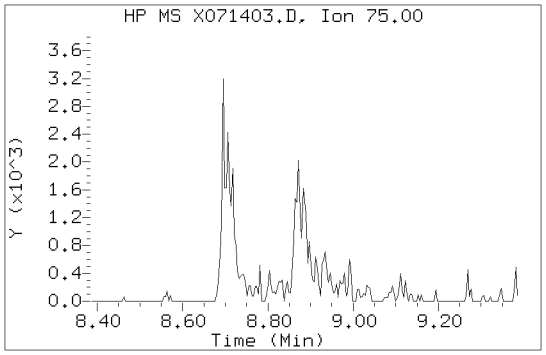
BEFORE

MASS
75
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
75
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

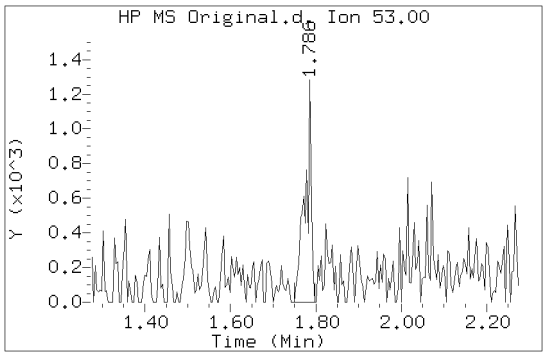


Chloroprene (126-99-8)

Reason Code:

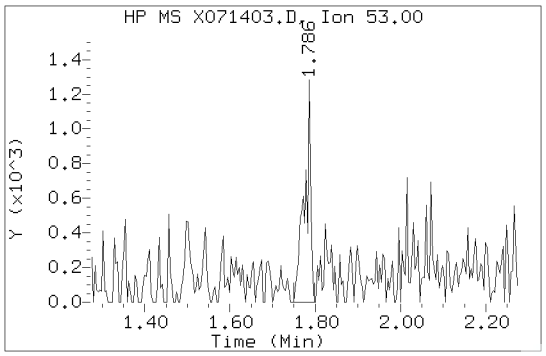
BEFORE

MASS
53
AREA
1292
HEIGHT
1283
20-Jul-2023
15:04
linh
pham



AFTER

MASS
53
AREA
1292
HEIGHT
1283
20-Jul-2023
15:04
linh
pham



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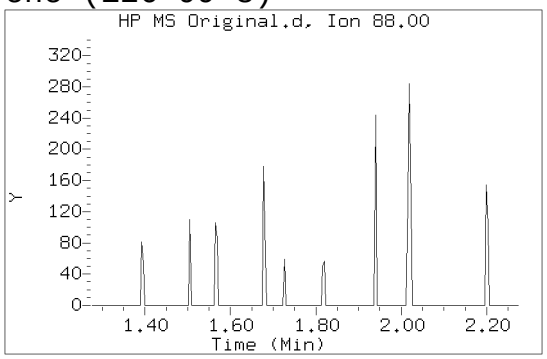
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Chloroprene (126-99-8)

Reason Code:

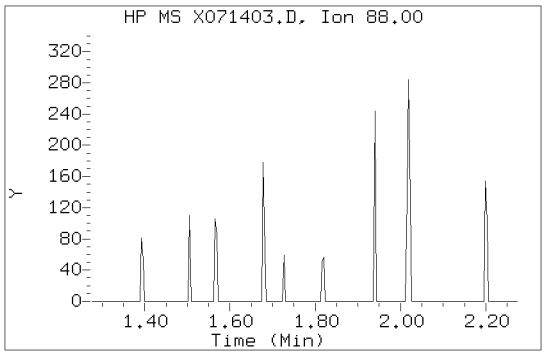
BEFORE

MASS
88
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
88
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

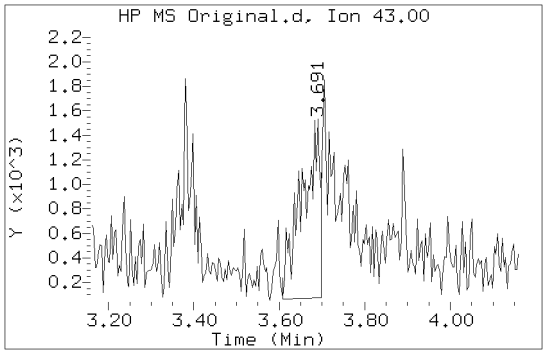


Ethyl Acetate (141-78-6)

Reason Code:

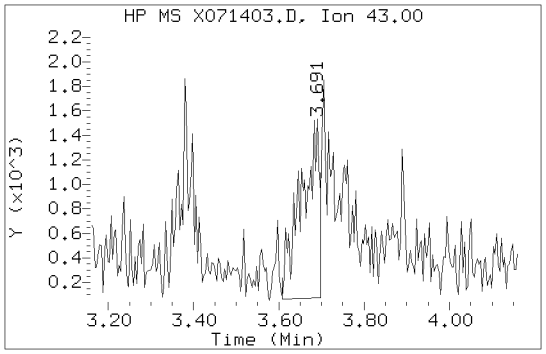
BEFORE

MASS
43
AREA
4291
HEIGHT
1463
20-Jul-2023
15:04
linh
pham



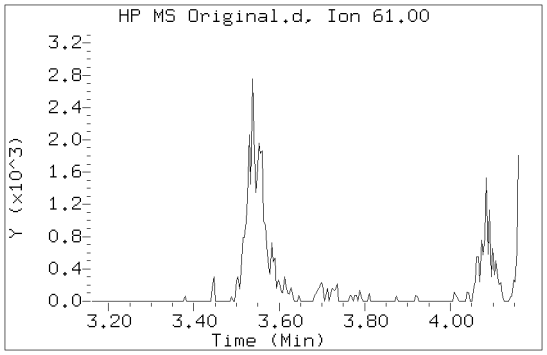
AFTER

MASS
43
AREA
4291
HEIGHT
1463
20-Jul-2023
15:04
linh
pham



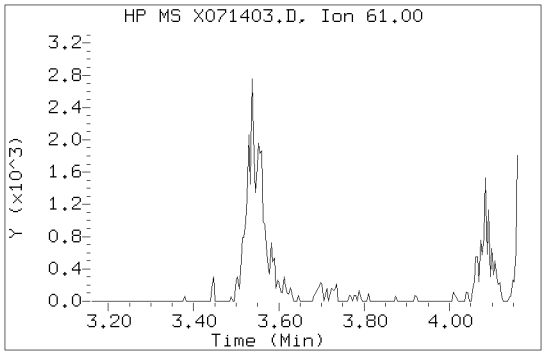
BEFORE

MASS
61
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



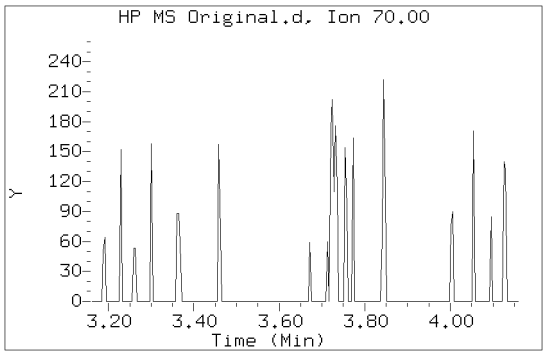
AFTER

MASS
61
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



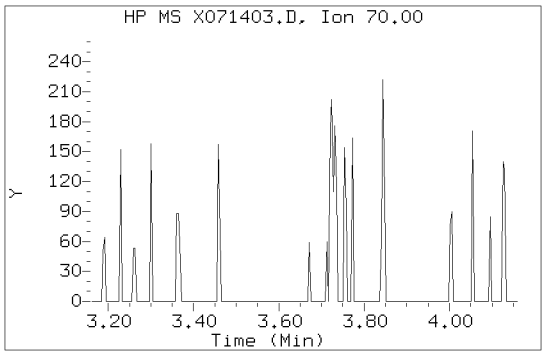
BEFORE

MASS
70
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
70
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

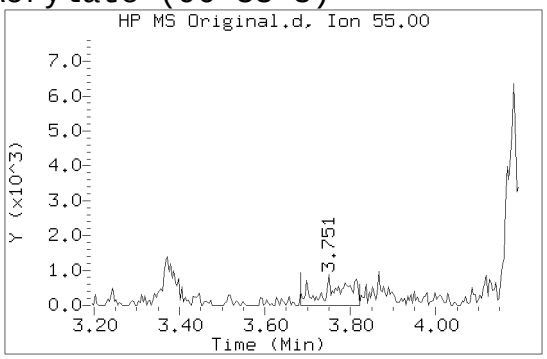


Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Methyl Acrylate (96-33-3)

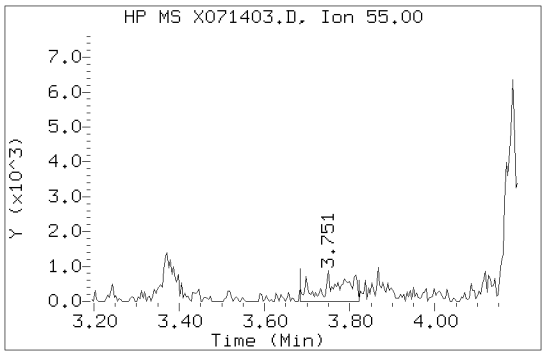
BEFORE

MASS
55
AREA
3365
HEIGHT
887
20-Jul-2023
15:04
linh
pham



AFTER

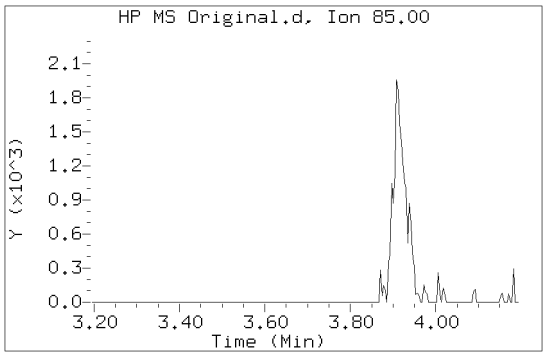
MASS
55
AREA
3365
HEIGHT
887
20-Jul-2023
15:04
linh
pham



Reason Code:

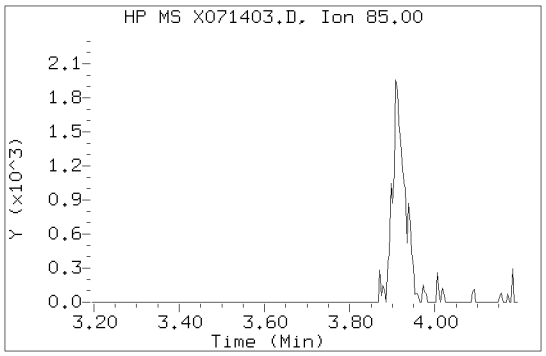
BEFORE

MASS
85
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
85
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

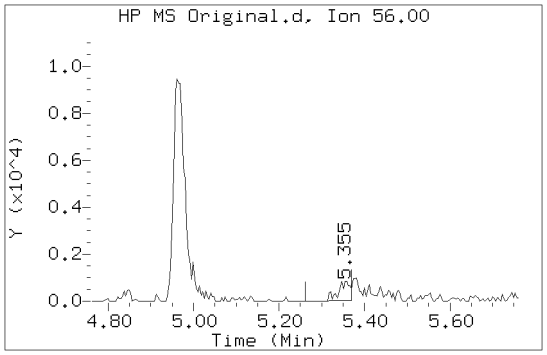


Reason Code:

n-Butanol (71-36-3)

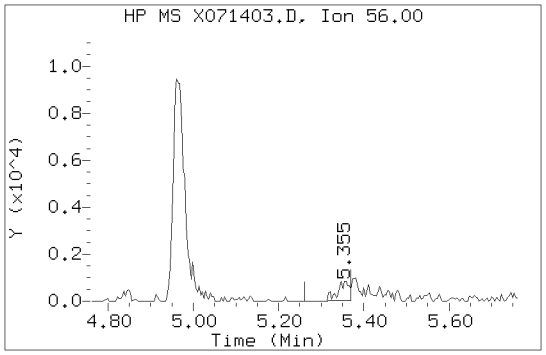
BEFORE

MASS
56
AREA
1626
HEIGHT
848
20-Jul-2023
15:04
linh
pham



AFTER

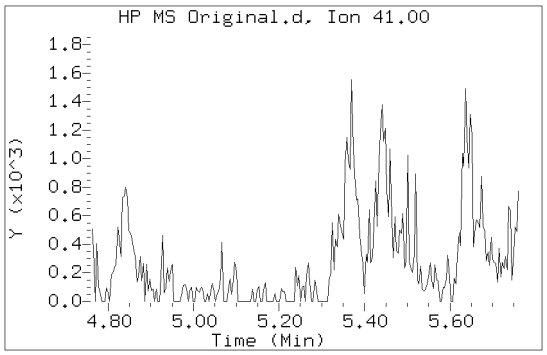
MASS
56
AREA
1626
HEIGHT
848
20-Jul-2023
15:04
linh
pham



Reason Code:

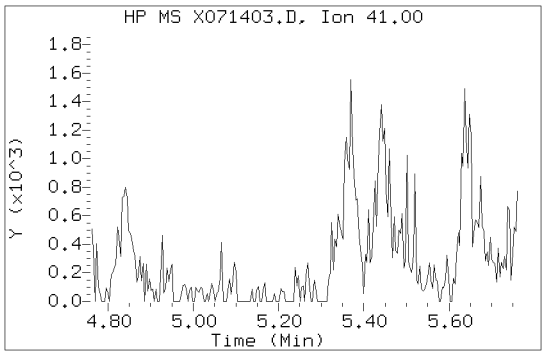
BEFORE

MASS
41
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



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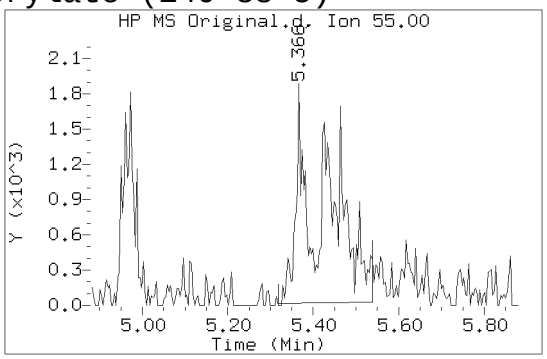
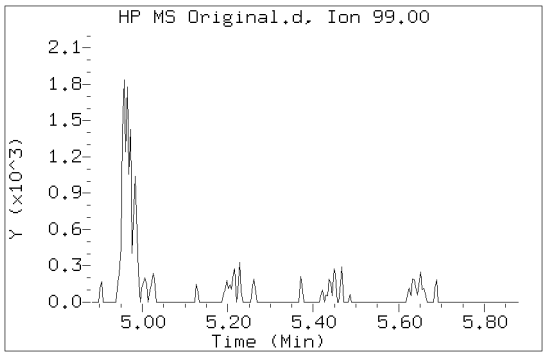
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Ethyl Acrylate (140-88-5)

BEFORE
MASS
55
AREA
8232
HEIGHT
1867
20-Jul-2023
15:04
linh
pham

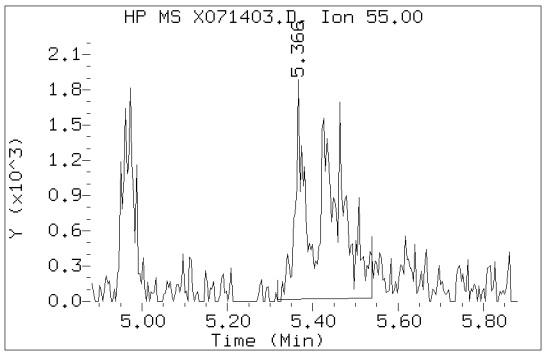


BEFORE
MASS
99
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

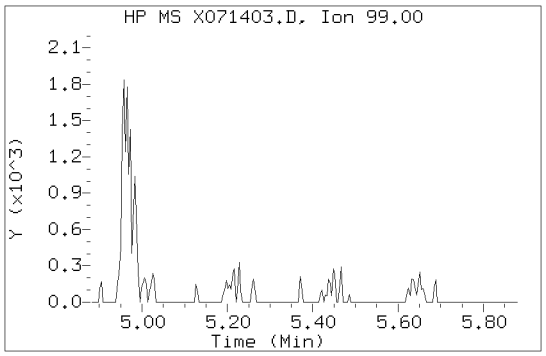


Reason Code:

AFTER
MASS
55
AREA
8232
HEIGHT
1867
20-Jul-2023
15:04
linh
pham

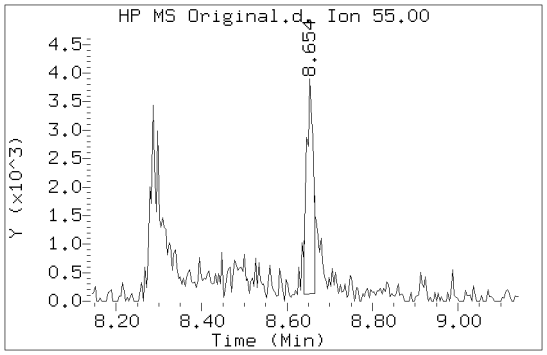


AFTER
MASS
99
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

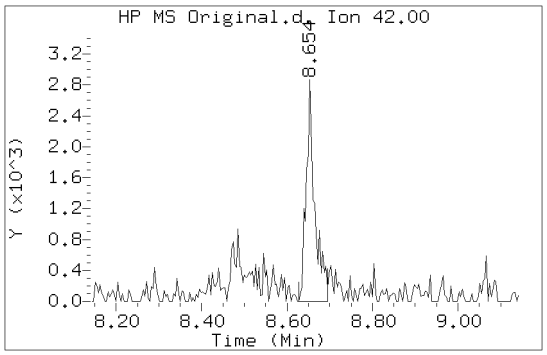


Cyclohexanone (108-94-1)

BEFORE
MASS
55
AREA
4174
HEIGHT
3766
20-Jul-2023
15:04
linh
pham

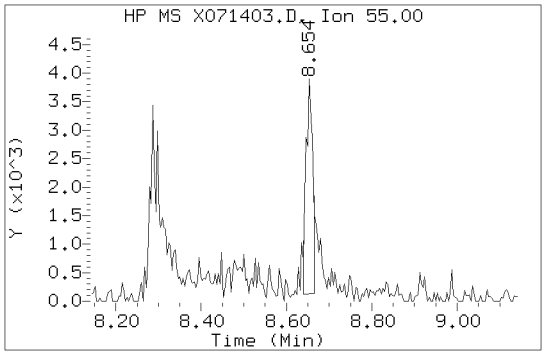


BEFORE
MASS
42
AREA
4022
HEIGHT
2868
20-Jul-2023
15:04
linh
pham

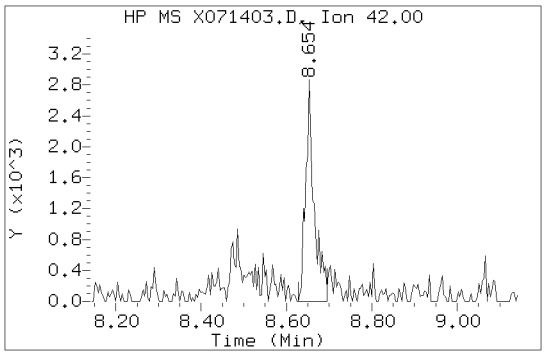


Reason Code:

AFTER
MASS
55
AREA
4174
HEIGHT
3766
20-Jul-2023
15:04
linh
pham



AFTER
MASS
42
AREA
4022
HEIGHT
2868
20-Jul-2023
15:04
linh
pham



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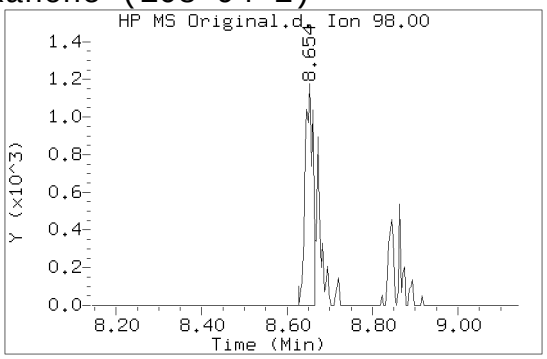
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Cyclohexanone (108-94-1)

Reason Code:

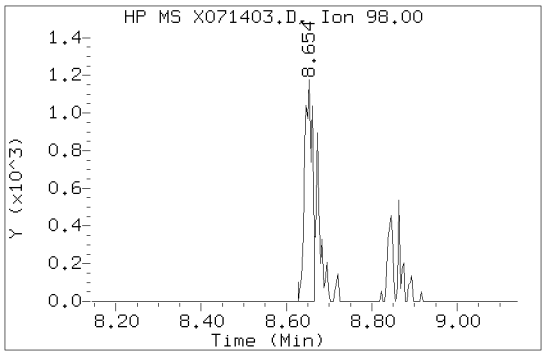
BEFORE

MASS
98
AREA
1506
HEIGHT
1177
20-Jul-2023
15:04
linh
pham



AFTER

MASS
98
AREA
1506
HEIGHT
1177
20-Jul-2023
15:04
linh
pham

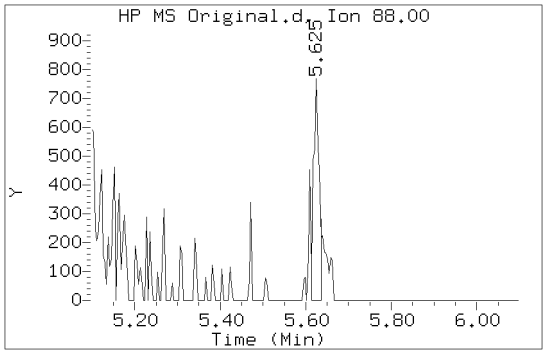


1,4-Dioxane ()

Reason Code:

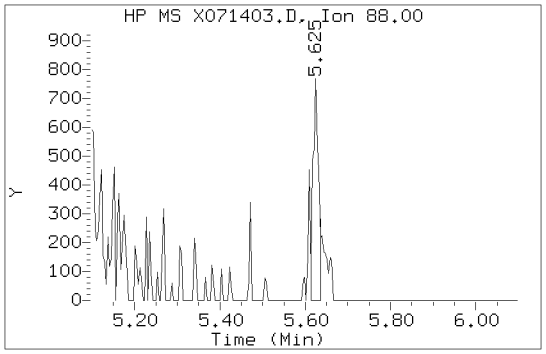
BEFORE

MASS
88
AREA
692
HEIGHT
769
20-Jul-2023
15:04
linh
pham



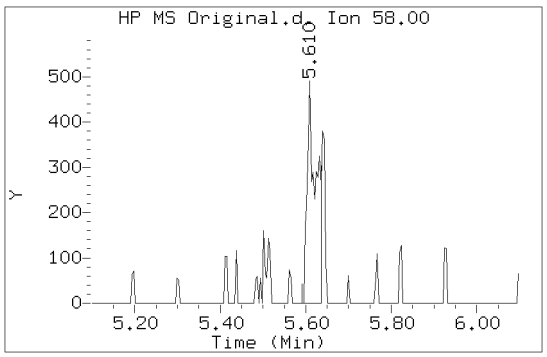
AFTER

MASS
88
AREA
692
HEIGHT
769
20-Jul-2023
15:04
linh
pham



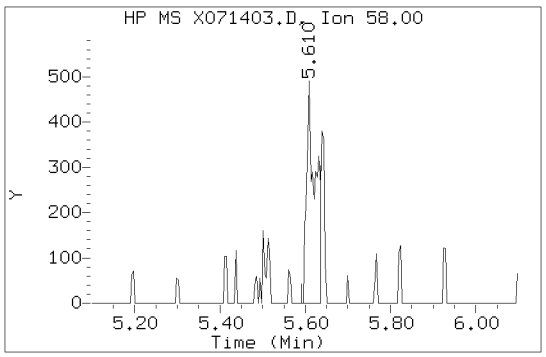
BEFORE

MASS
58
AREA
715
HEIGHT
491
20-Jul-2023
15:04
linh
pham



AFTER

MASS
58
AREA
715
HEIGHT
491
20-Jul-2023
15:04
linh
pham

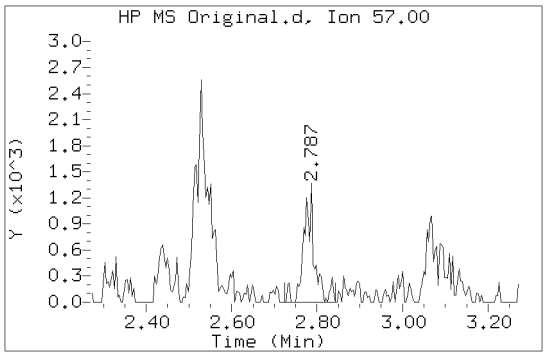


n-Hexane (110-54-3)

Reason Code:

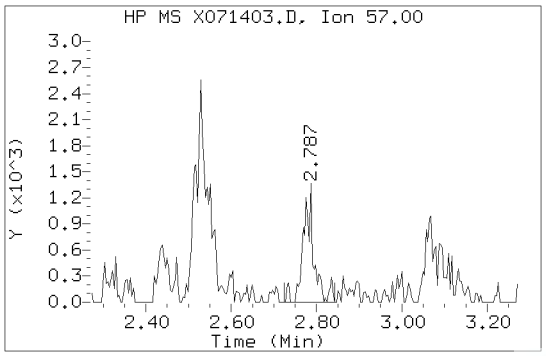
BEFORE

MASS
57
AREA
2320
HEIGHT
1372
20-Jul-2023
15:04
linh
pham



AFTER

MASS
57
AREA
2320
HEIGHT
1372
20-Jul-2023
15:04
linh
pham

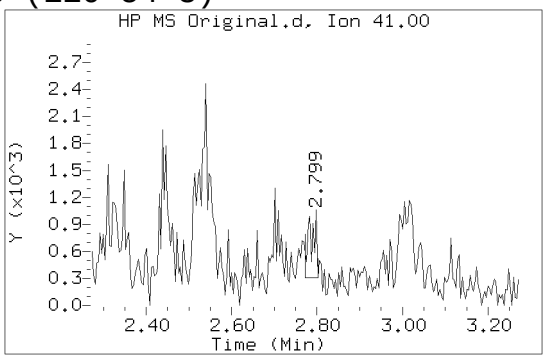


Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

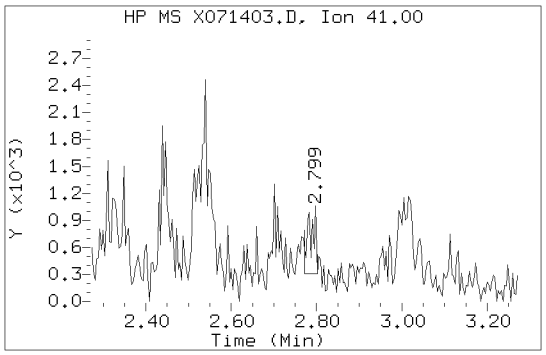
n-Hexane (110-54-3)

Reason Code:

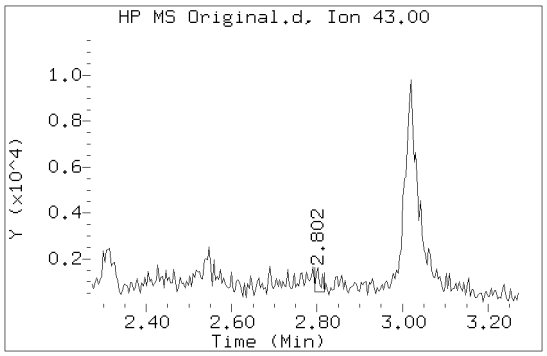
BEFORE
MASS
41
AREA
798
HEIGHT
755
20-Jul-2023
15:04
linh
pham



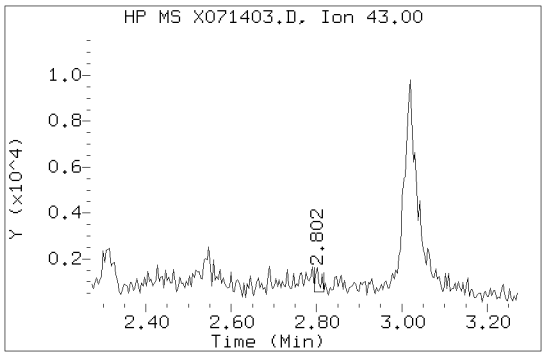
AFTER
MASS
41
AREA
798
HEIGHT
755
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
43
AREA
753
HEIGHT
1069
20-Jul-2023
15:04
linh
pham



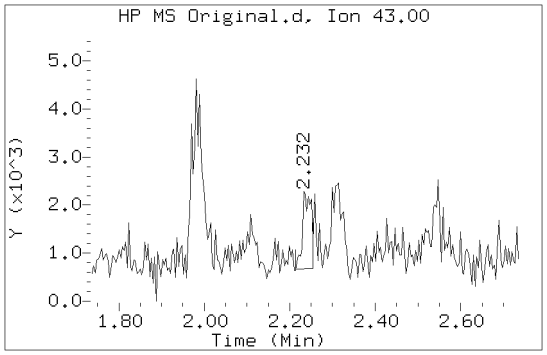
AFTER
MASS
43
AREA
753
HEIGHT
1069
20-Jul-2023
15:04
linh
pham



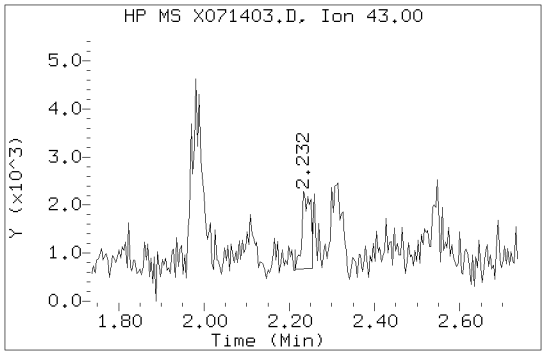
Methyl acetate (79-20-9)

Reason Code:

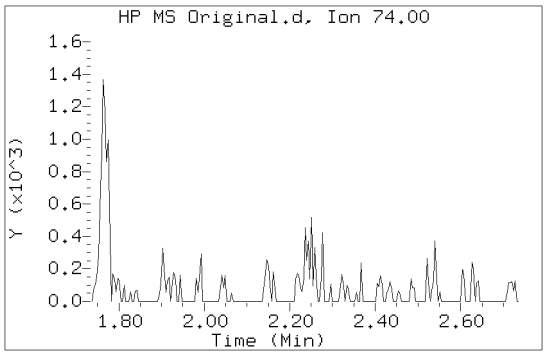
BEFORE
MASS
43
AREA
2344
HEIGHT
1617
20-Jul-2023
15:04
linh
pham



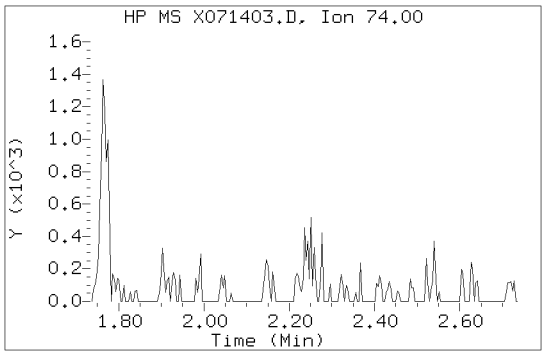
AFTER
MASS
43
AREA
2344
HEIGHT
1617
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
74
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER
MASS
74
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



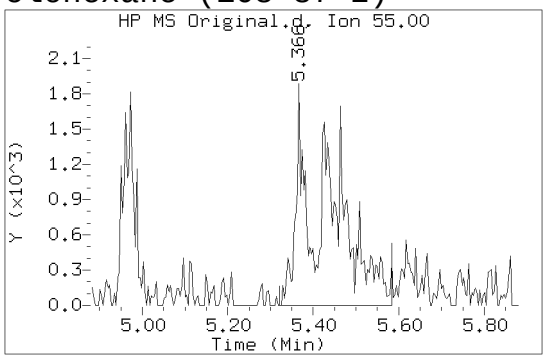
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Methylcyclohexane (108-87-2)

Reason Code:

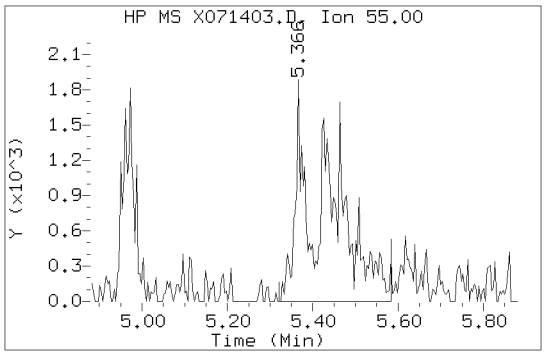
BEFORE

MASS
55
AREA
9168
HEIGHT
1886
20-Jul-2023
15:04
linh
pham



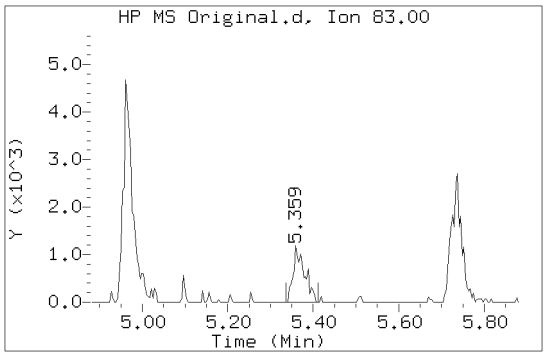
AFTER

MASS
55
AREA
9168
HEIGHT
1886
20-Jul-2023
15:04
linh
pham



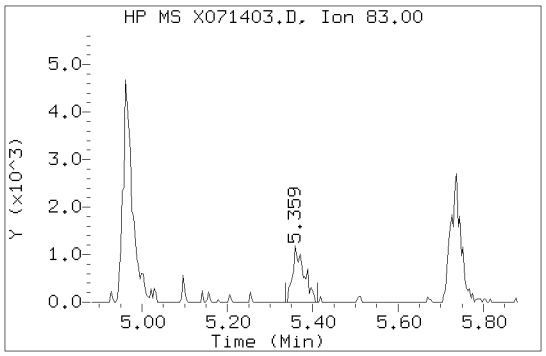
BEFORE

MASS
83
AREA
2193
HEIGHT
1189
20-Jul-2023
15:04
linh
pham



AFTER

MASS
83
AREA
2193
HEIGHT
1189
20-Jul-2023
15:04
linh
pham

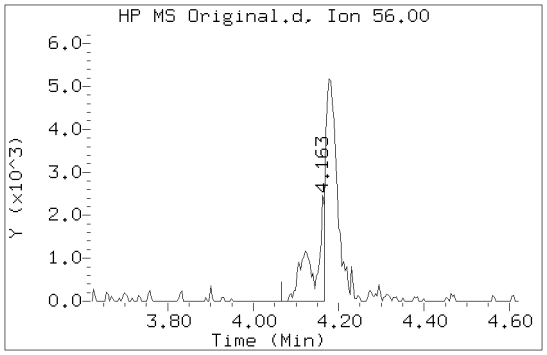


Cyclohexane (110-82-7)

Reason Code:

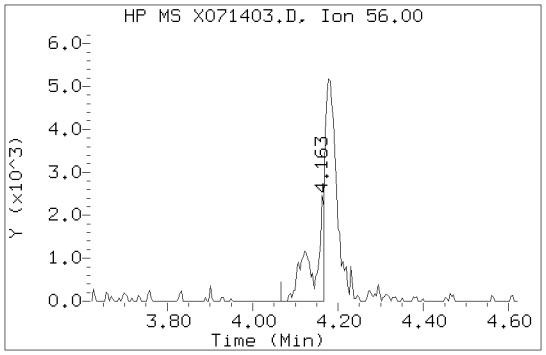
BEFORE

MASS
56
AREA
4321
HEIGHT
2474
20-Jul-2023
15:04
linh
pham



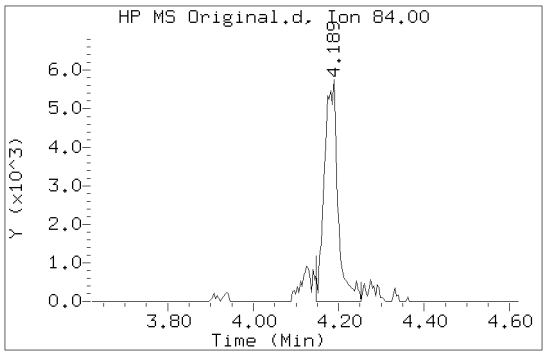
AFTER

MASS
56
AREA
4321
HEIGHT
2474
20-Jul-2023
15:04
linh
pham



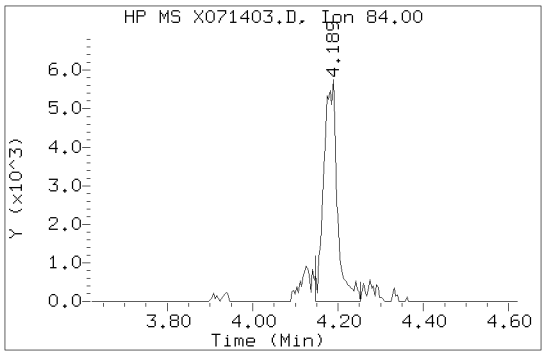
BEFORE

MASS
84
AREA
12654
HEIGHT
5754
20-Jul-2023
15:04
linh
pham



AFTER

MASS
84
AREA
12654
HEIGHT
5754
20-Jul-2023
15:04
linh
pham



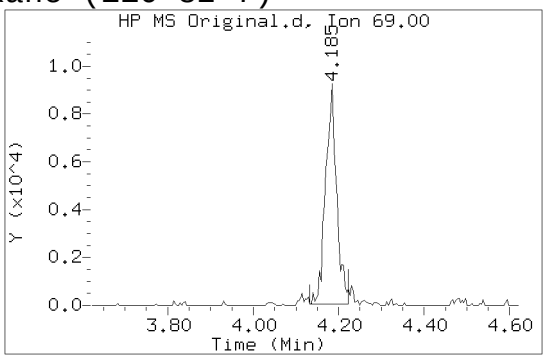
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Cyclohexane (110-82-7)

Reason Code:

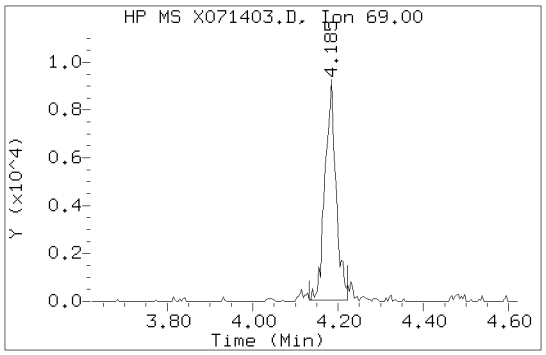
BEFORE

MASS
69
AREA
16448
HEIGHT
9203
20-Jul-2023
15:04
linh
pham



AFTER

MASS
69
AREA
16448
HEIGHT
9203
20-Jul-2023
15:04
linh
pham

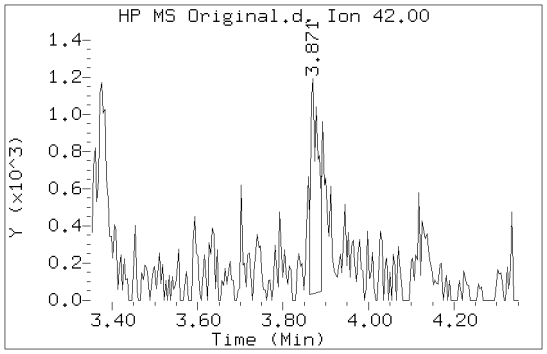


Tetrahydrofuran (109-99-9)

Reason Code:

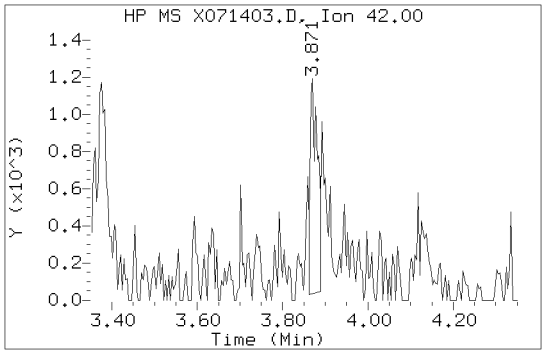
BEFORE

MASS
42
AREA
1418
HEIGHT
1157
20-Jul-2023
15:04
linh
pham



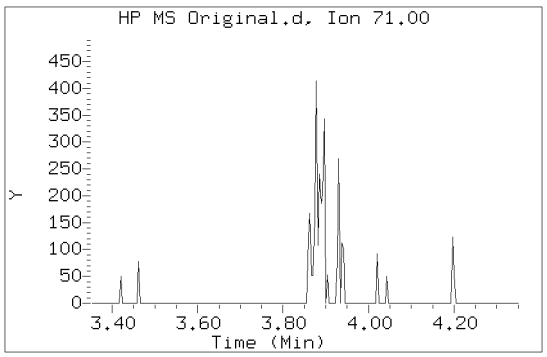
AFTER

MASS
42
AREA
1418
HEIGHT
1157
20-Jul-2023
15:04
linh
pham



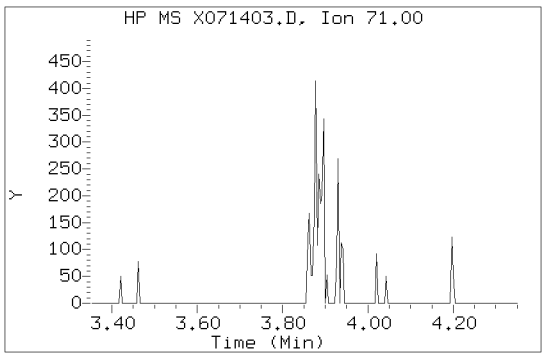
BEFORE

MASS
71
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
71
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

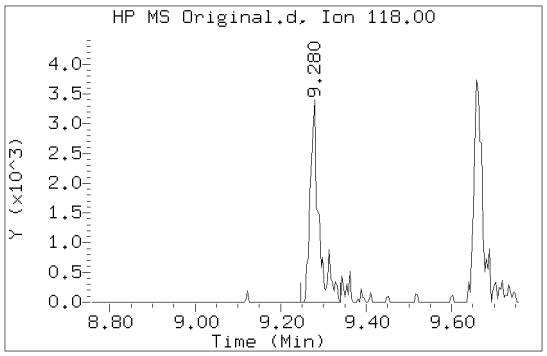


alpha-Methylstyrene (98-83-9)

Reason Code:

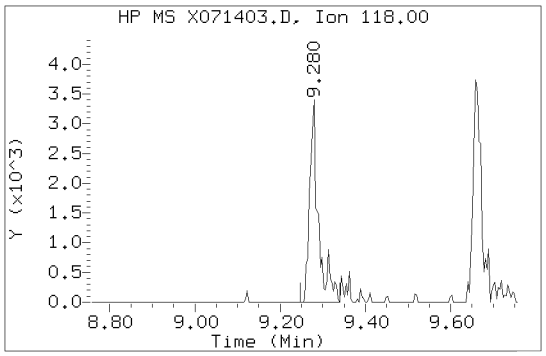
BEFORE

MASS
118
AREA
4759
HEIGHT
3401
20-Jul-2023
15:04
linh
pham



AFTER

MASS
118
AREA
4759
HEIGHT
3401
20-Jul-2023
15:04
linh
pham



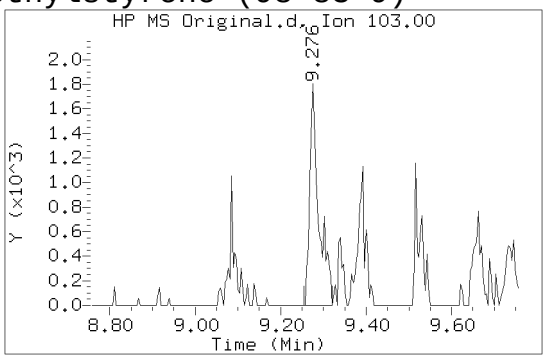
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

alpha-Methylstyrene (98-83-9)

Reason Code:

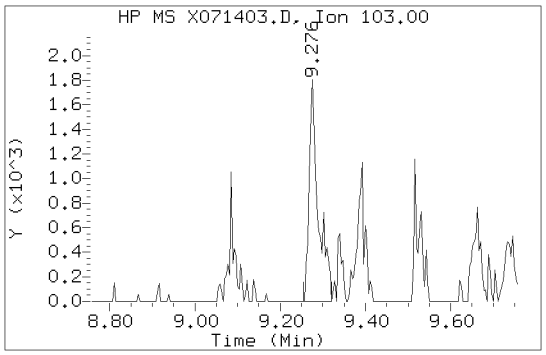
BEFORE

MASS
103
AREA
2652
HEIGHT
1804
20-Jul-2023
15:04
linh
pham



AFTER

MASS
103
AREA
2652
HEIGHT
1804
20-Jul-2023
15:04
linh
pham

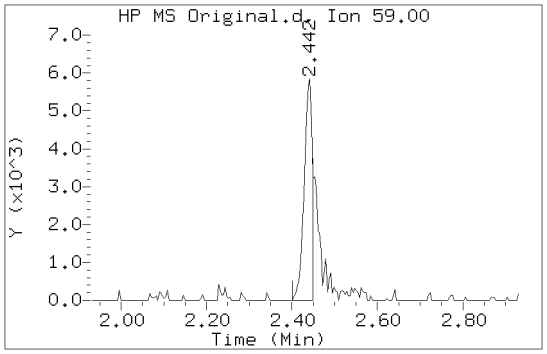


Tert-butyl alcohol (75-65-0)

Reason Code:

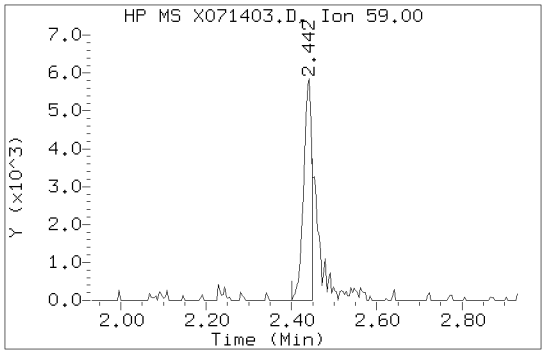
BEFORE

MASS
59
AREA
7856
HEIGHT
5851
20-Jul-2023
15:04
linh
pham



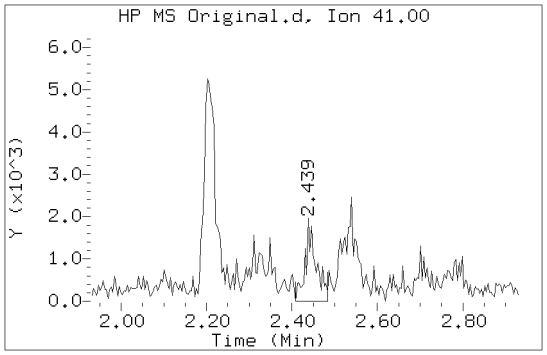
AFTER

MASS
59
AREA
7856
HEIGHT
5851
20-Jul-2023
15:04
linh
pham



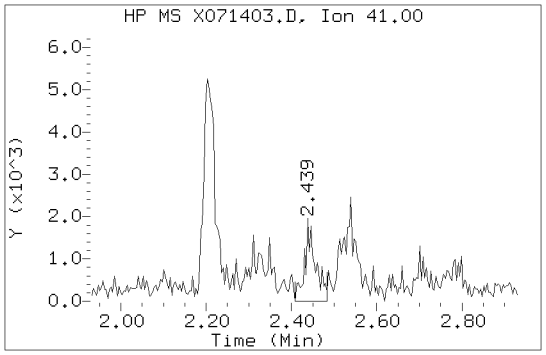
BEFORE

MASS
41
AREA
3380
HEIGHT
1954
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
3380
HEIGHT
1954
20-Jul-2023
15:04
linh
pham

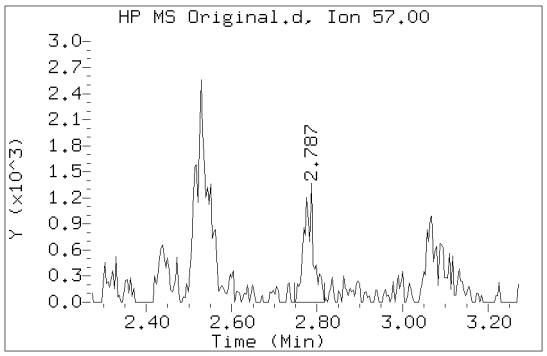


Allyl alcohol (107-18-6)

Reason Code:

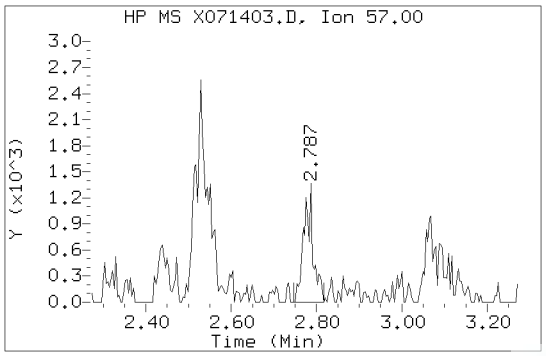
BEFORE

MASS
57
AREA
2068
HEIGHT
1372
20-Jul-2023
15:04
linh
pham



AFTER

MASS
57
AREA
2068
HEIGHT
1372
20-Jul-2023
15:04
linh
pham



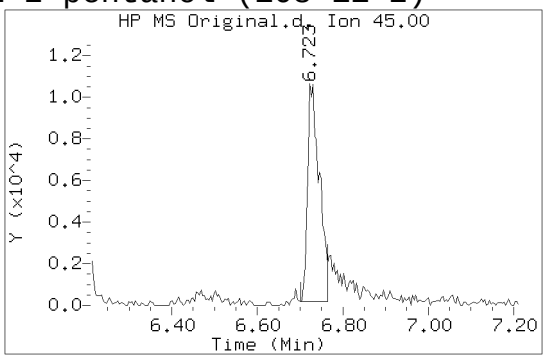
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

4-Methyl-2-pentanol (108-11-2)

Reason Code:

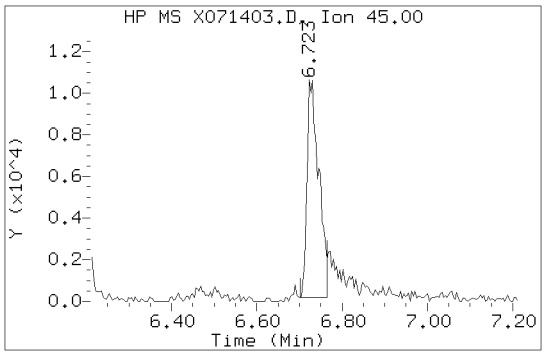
BEFORE

MASS
45
AREA
20217
HEIGHT
10478
20-Jul-2023
15:04
linh
pham



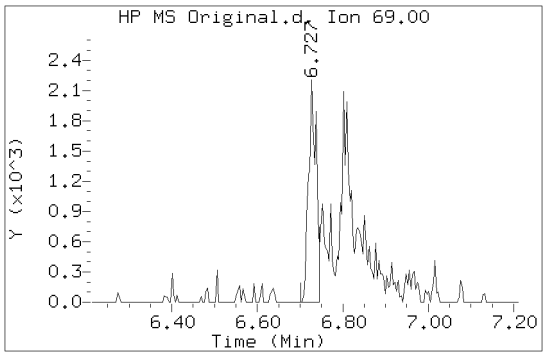
AFTER

MASS
45
AREA
20217
HEIGHT
10478
20-Jul-2023
15:04
linh
pham



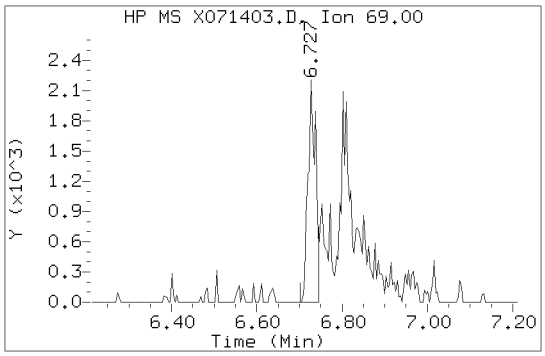
BEFORE

MASS
69
AREA
2780
HEIGHT
2206
20-Jul-2023
15:04
linh
pham



AFTER

MASS
69
AREA
2780
HEIGHT
2206
20-Jul-2023
15:04
linh
pham

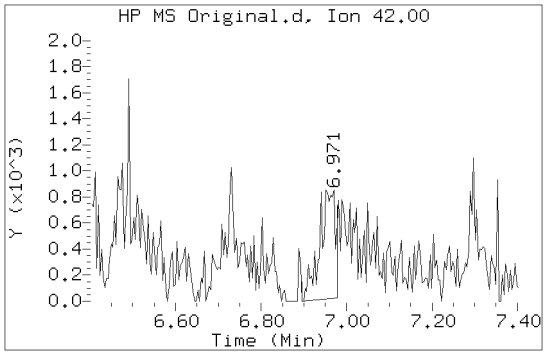


Amyl alcohol (71-41-0)

Reason Code:

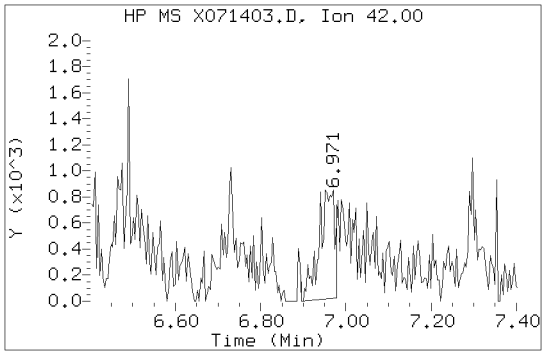
BEFORE

MASS
42
AREA
2120
HEIGHT
829
20-Jul-2023
15:04
linh
pham



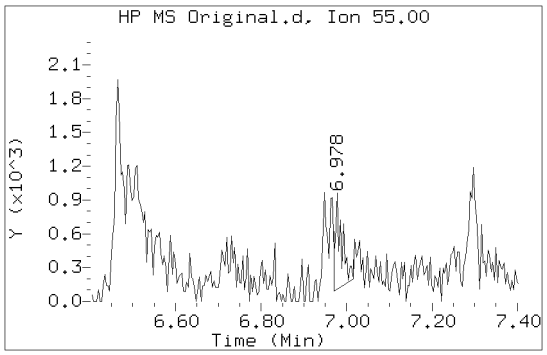
AFTER

MASS
42
AREA
2120
HEIGHT
829
20-Jul-2023
15:04
linh
pham



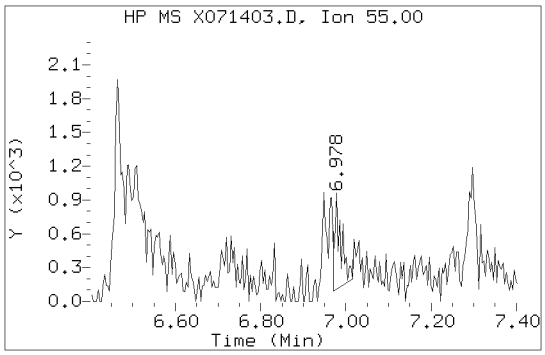
BEFORE

MASS
55
AREA
884
HEIGHT
854
20-Jul-2023
15:04
linh
pham



AFTER

MASS
55
AREA
884
HEIGHT
854
20-Jul-2023
15:04
linh
pham



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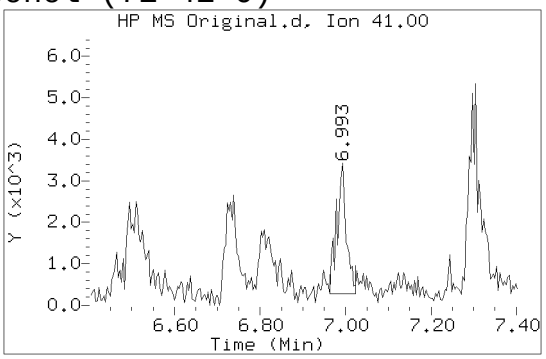
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Amyl alcohol (71-41-0)

Reason Code:

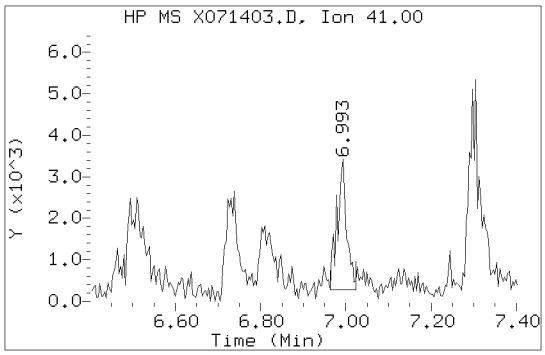
BEFORE

MASS
41
AREA
4891
HEIGHT
3144
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
4891
HEIGHT
3144
20-Jul-2023
15:04
linh
pham

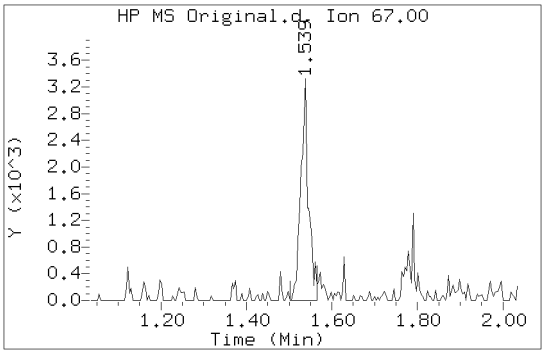


Dichlorofluoromethane (75-43-4)

Reason Code:

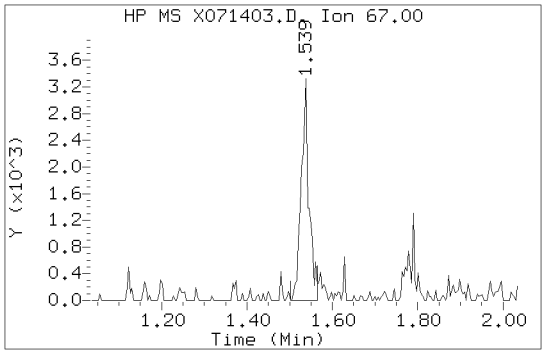
BEFORE

MASS
67
AREA
4296
HEIGHT
3324
20-Jul-2023
15:04
linh
pham



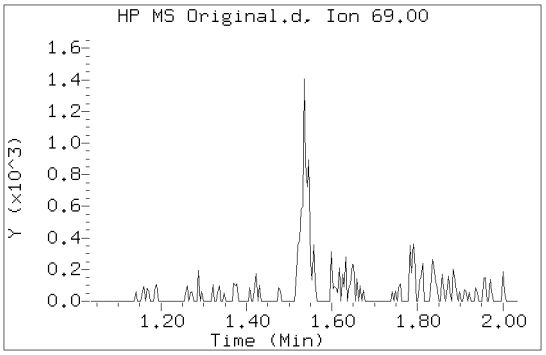
AFTER

MASS
67
AREA
4296
HEIGHT
3324
20-Jul-2023
15:04
linh
pham



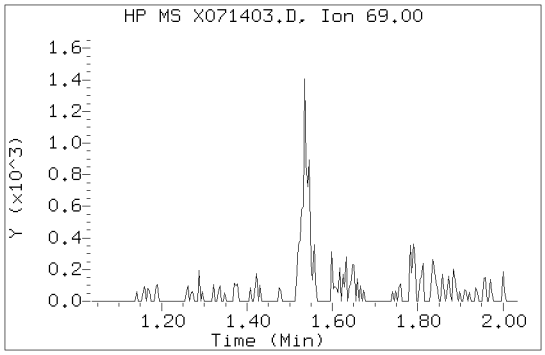
BEFORE

MASS
69
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



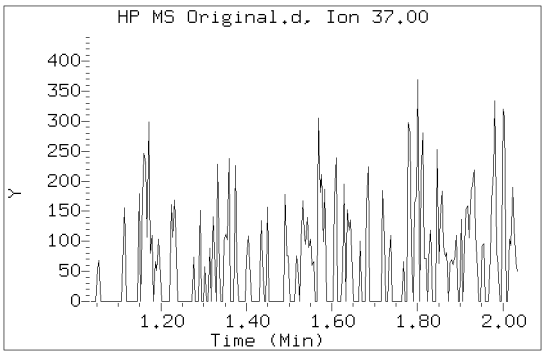
AFTER

MASS
69
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



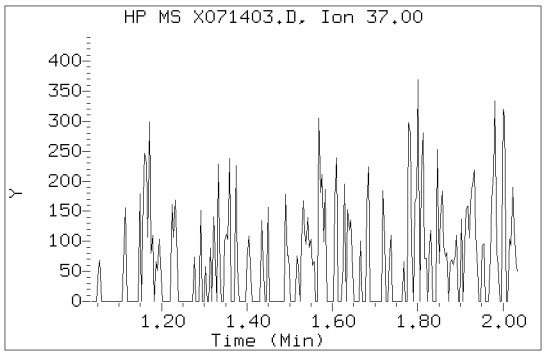
BEFORE

MASS
37
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
37
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



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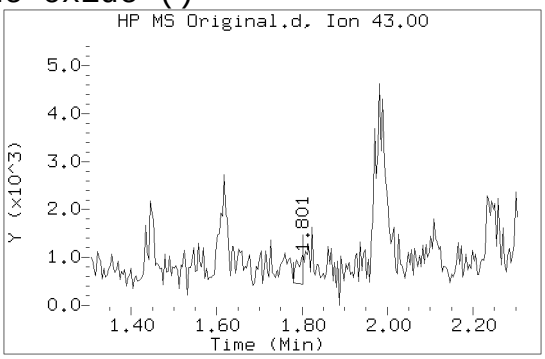
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

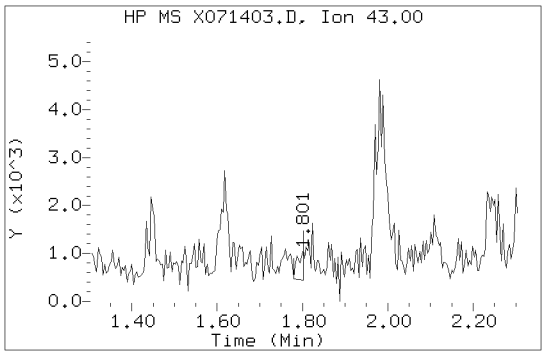
Propylene oxide ()

Reason Code:

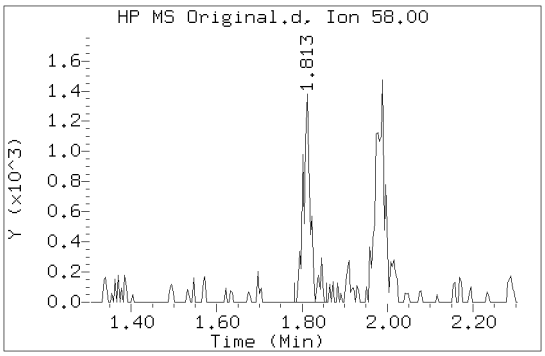
BEFORE
MASS
43
AREA
615
HEIGHT
640
20-Jul-2023
15:04
linh
pham



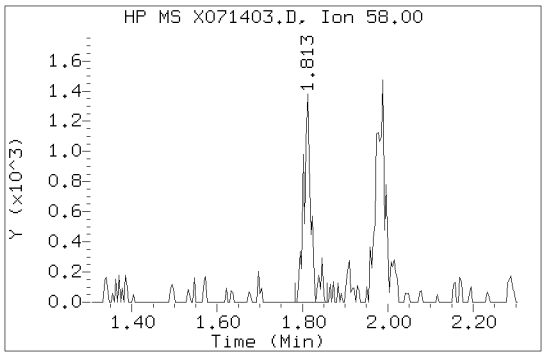
AFTER
MASS
43
AREA
615
HEIGHT
640
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
58
AREA
1675
HEIGHT
1380
20-Jul-2023
15:04
linh
pham



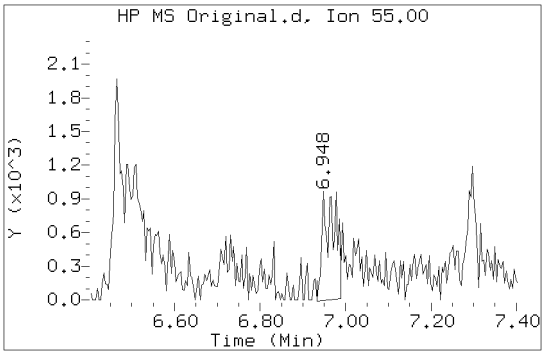
AFTER
MASS
58
AREA
1675
HEIGHT
1380
20-Jul-2023
15:04
linh
pham



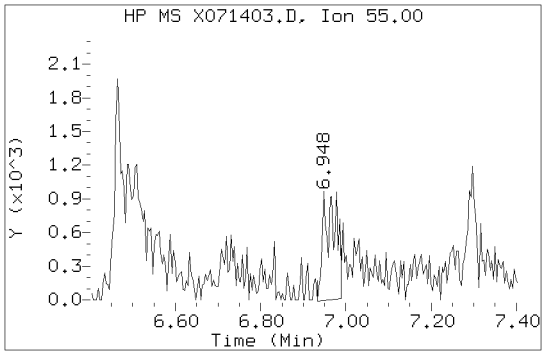
3-Methyl-1-butanol (123-51-3)

Reason Code:

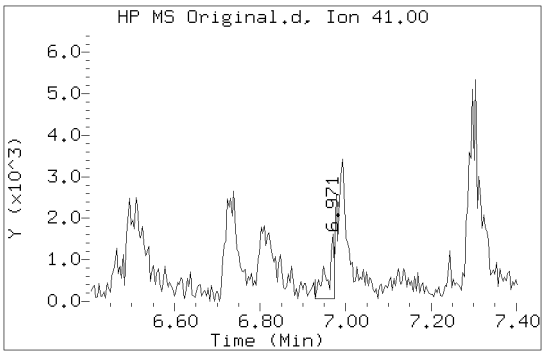
BEFORE
MASS
55
AREA
1945
HEIGHT
970
20-Jul-2023
15:04
linh
pham



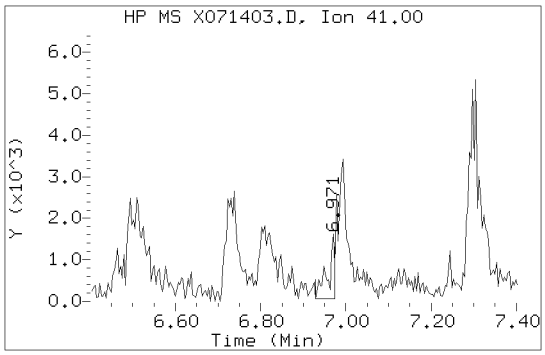
AFTER
MASS
55
AREA
1945
HEIGHT
970
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
41
AREA
1621
HEIGHT
1554
20-Jul-2023
15:04
linh
pham



AFTER
MASS
41
AREA
1621
HEIGHT
1554
20-Jul-2023
15:04
linh
pham



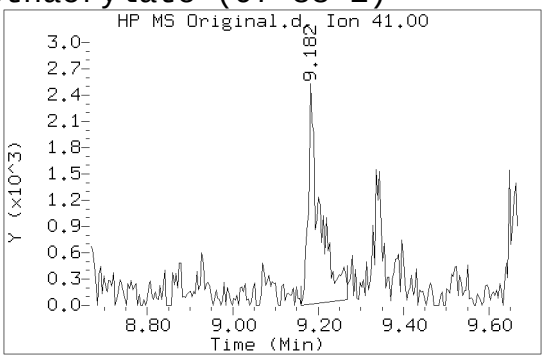
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Butyl methacrylate (97-88-1)

Reason Code:

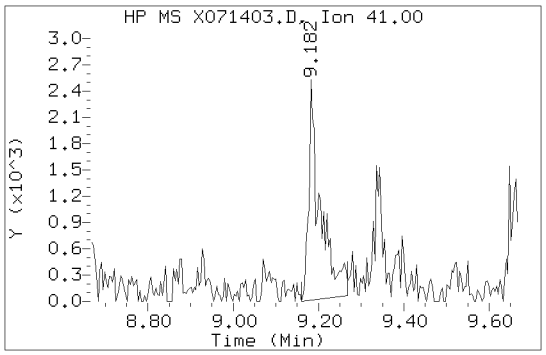
BEFORE

MASS
41
AREA
4724
HEIGHT
2516
20-Jul-2023
15:04
linh
pham



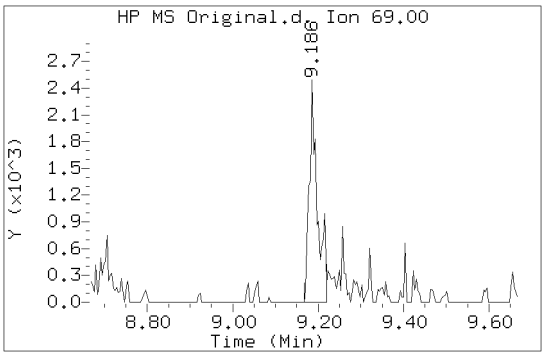
AFTER

MASS
41
AREA
4724
HEIGHT
2516
20-Jul-2023
15:04
linh
pham



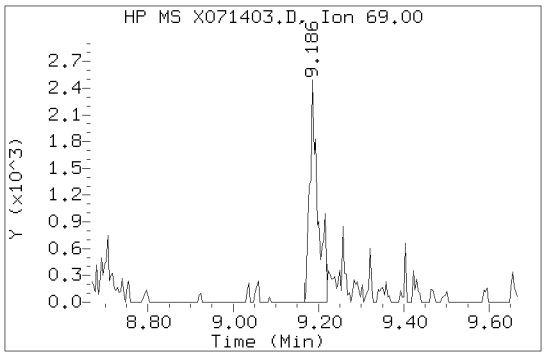
BEFORE

MASS
69
AREA
3258
HEIGHT
2492
20-Jul-2023
15:04
linh
pham



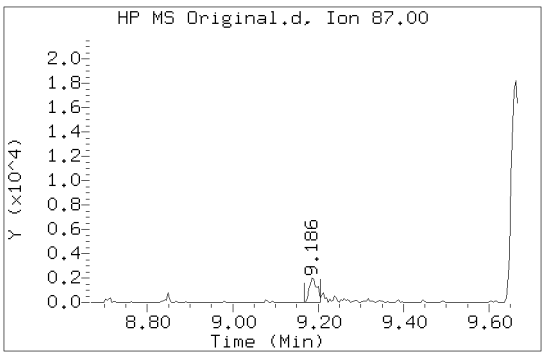
AFTER

MASS
69
AREA
3258
HEIGHT
2492
20-Jul-2023
15:04
linh
pham



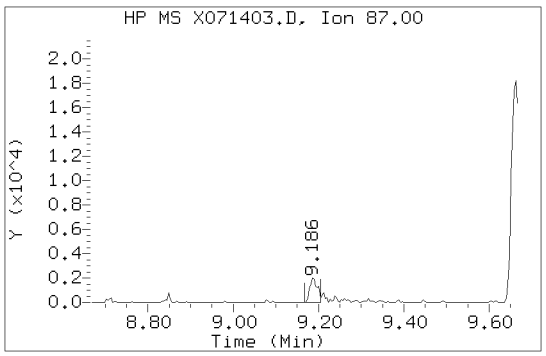
BEFORE

MASS
87
AREA
2479
HEIGHT
2026
20-Jul-2023
15:04
linh
pham



AFTER

MASS
87
AREA
2479
HEIGHT
2026
20-Jul-2023
15:04
linh
pham

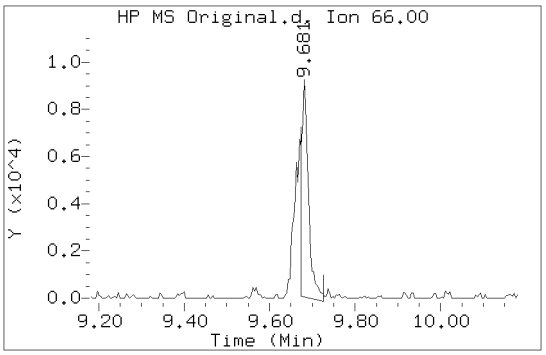


Dicyclopentadiene (77-73-6)

Reason Code:

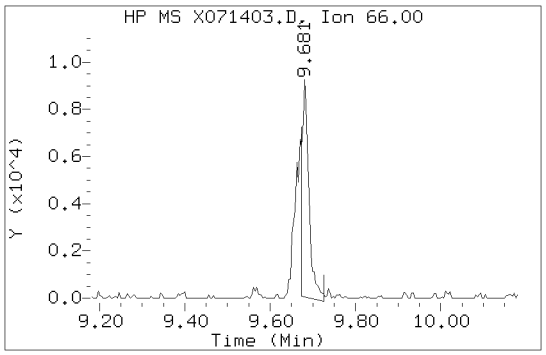
BEFORE

MASS
66
AREA
10848
HEIGHT
9195
20-Jul-2023
15:04
linh
pham



AFTER

MASS
66
AREA
10848
HEIGHT
9195
20-Jul-2023
15:04
linh
pham



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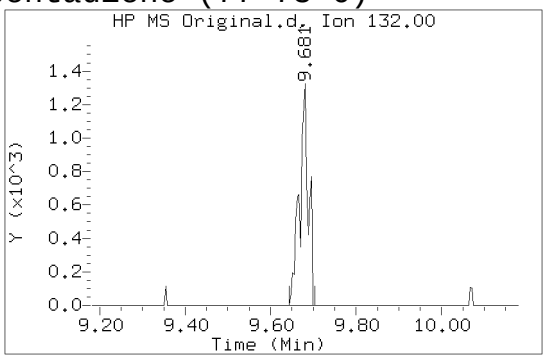
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Dicyclopentadiene (77-73-6)

Reason Code:

BEFORE

MASS
132
AREA
1955
HEIGHT
1325
20-Jul-2023
15:04
linh
pham



AFTER

MASS
132
AREA
1955
HEIGHT
1325
20-Jul-2023
15:04
linh
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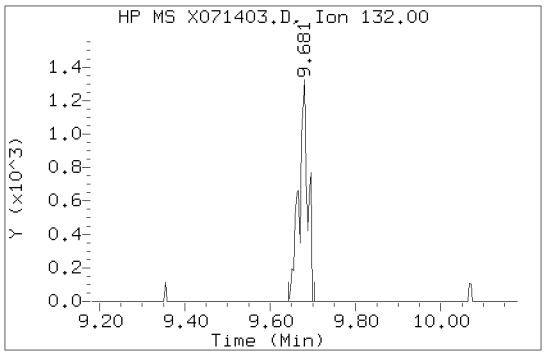

Ethanol (64-17-5)

Reason Code:

BEFORE

MASS
45
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1082
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20-Jul-2023
15:04
linh
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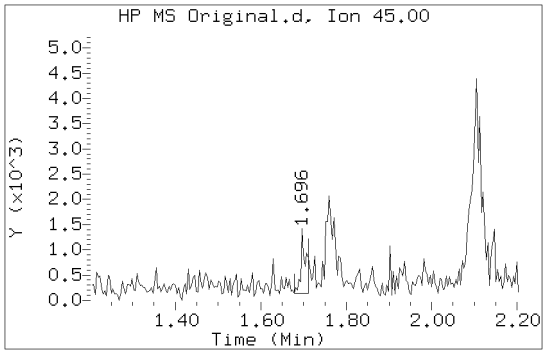

AFTER

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15:04
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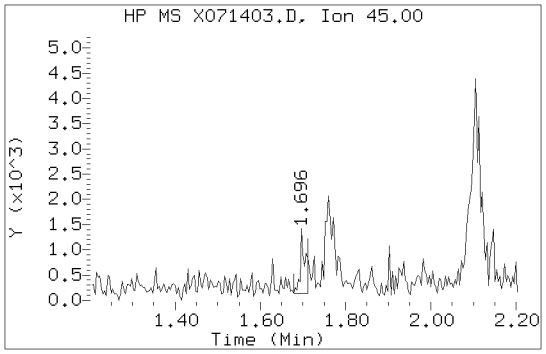

BEFORE

MASS
46
AREA
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HEIGHT
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20-Jul-2023
15:04
linh
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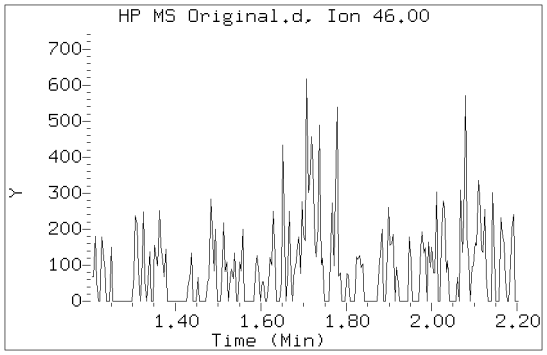

AFTER

MASS
46
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HEIGHT
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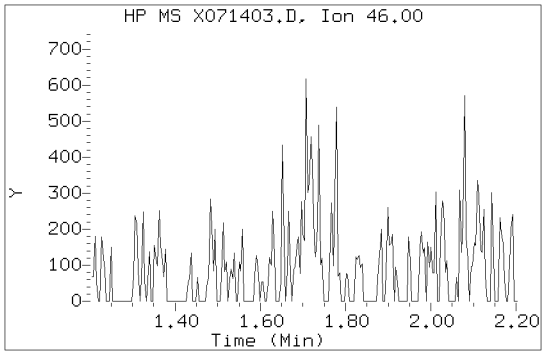
20-Jul-2023
15:04
linh
pham



BEFORE

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43
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20-Jul-2023
15:04
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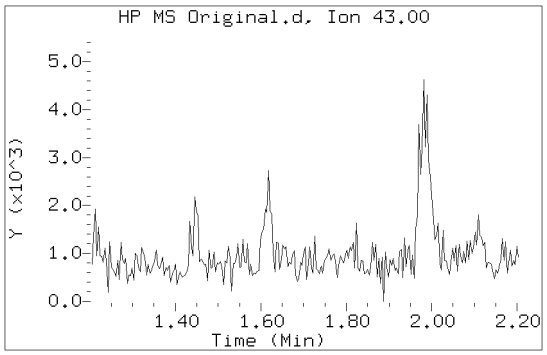
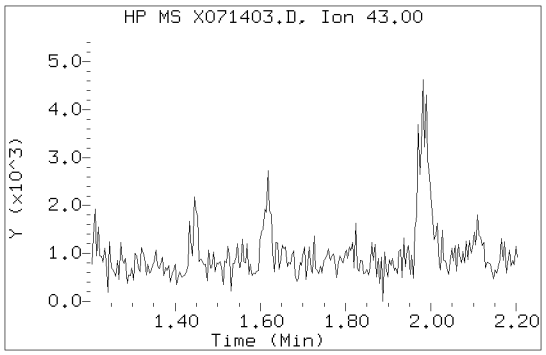


AFTER

MASS
43
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



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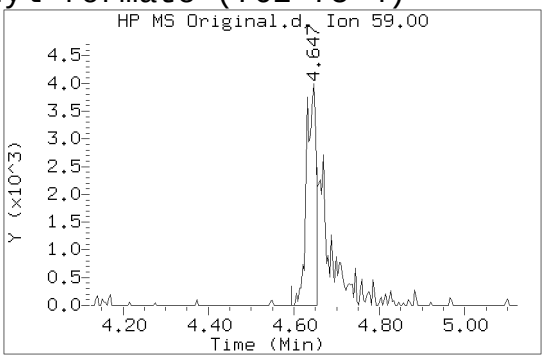
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

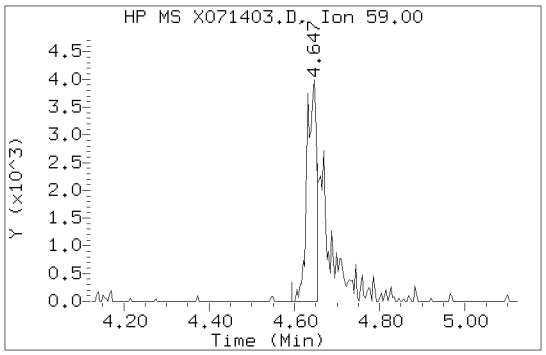
tert-Butyl formate (762-75-4)

Reason Code:

BEFORE
MASS
59
AREA
6083
HEIGHT
3995
20-Jul-2023
15:04
linh
pham



AFTER
MASS
59
AREA
6083
HEIGHT
3995
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
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AREA
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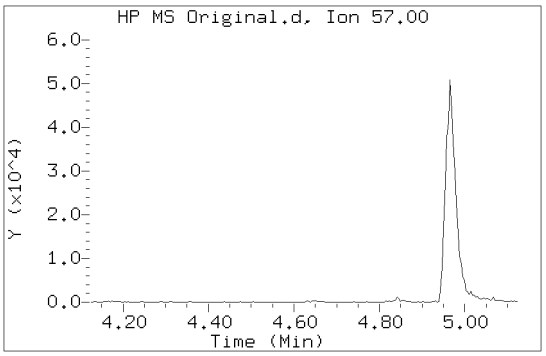
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER
MASS
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AREA
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HEIGHT
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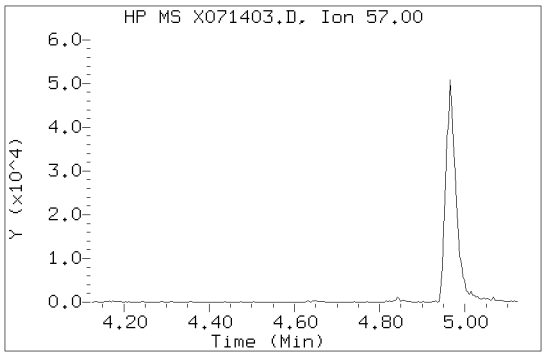
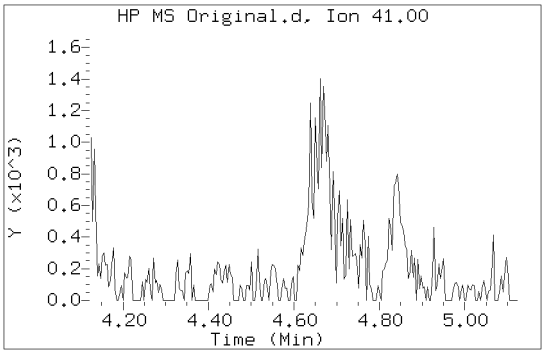
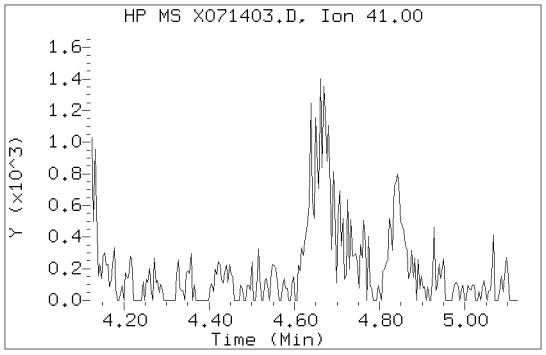
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
41
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



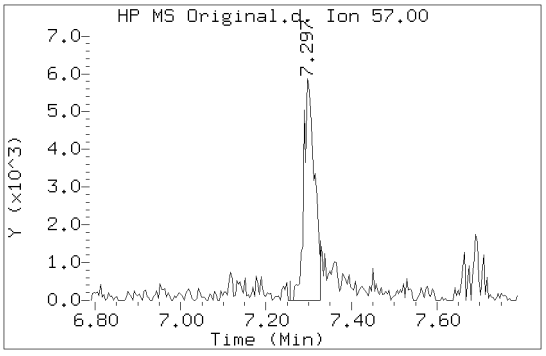
AFTER
MASS
41
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



3,3-Dimethyl-1-butanol (624-95-3)

Reason Code:

BEFORE
MASS
57
AREA
10397
HEIGHT
5870
20-Jul-2023
15:04
linh
pham



AFTER
MASS
57
AREA
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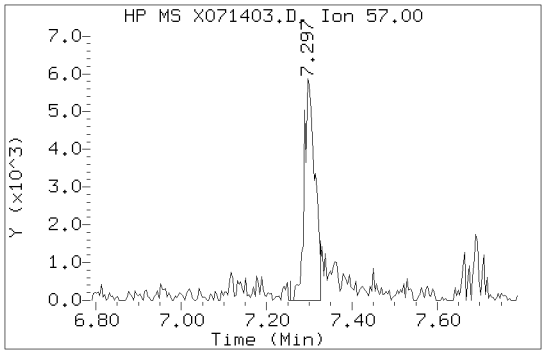
HEIGHT
5870
20-Jul-2023
15:04
linh
pham



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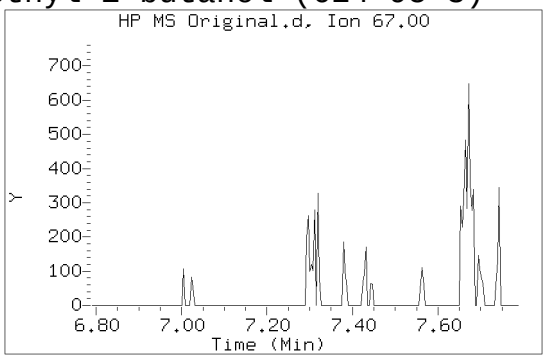
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

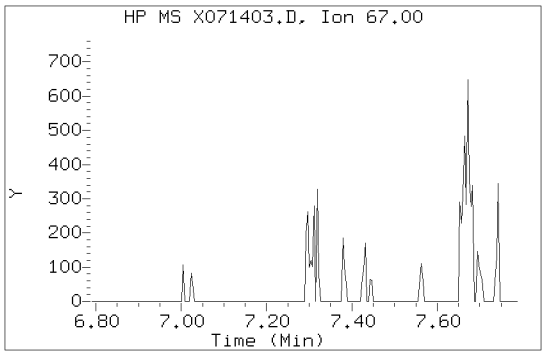
3,3-Dimethyl-1-butanol (624-95-3)

Reason Code:

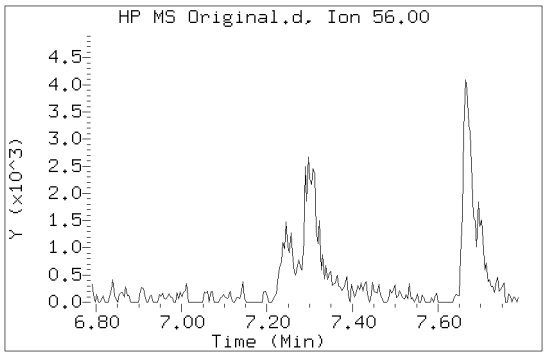
BEFORE
MASS
67
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



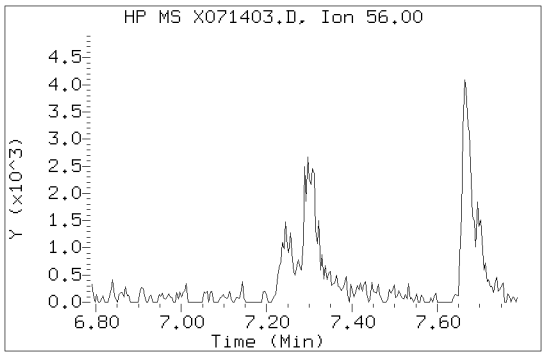
AFTER
MASS
67
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
56
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



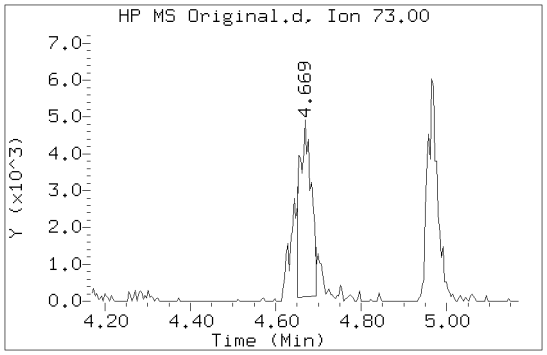
AFTER
MASS
56
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



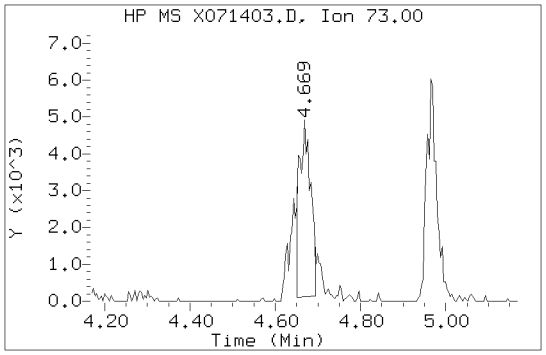
tert-Amyl methyl ether (974-05-08)

Reason Code:

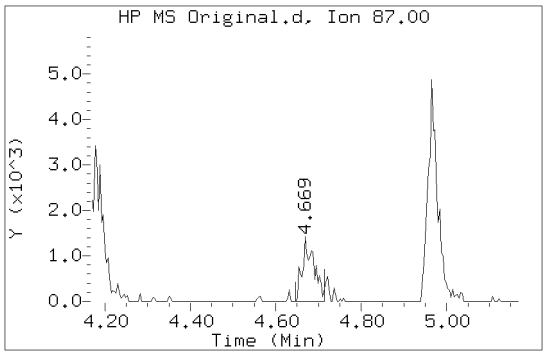
BEFORE
MASS
73
AREA
9377
HEIGHT
4800
20-Jul-2023
15:04
linh
pham



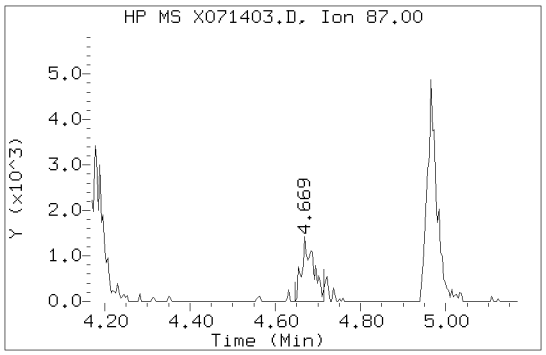
AFTER
MASS
73
AREA
9377
HEIGHT
4800
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
87
AREA
2769
HEIGHT
1423
20-Jul-2023
15:04
linh
pham



AFTER
MASS
87
AREA
2769
HEIGHT
1423
20-Jul-2023
15:04
linh
pham



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Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

tert-Amyl methyl ether (974-05-08)

Reason Code:

BEFORE

MASS
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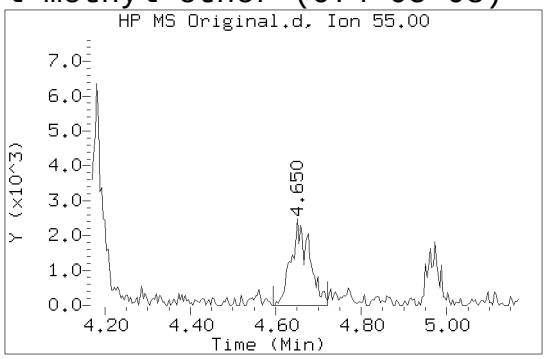
AREA
7426
HEIGHT
2483
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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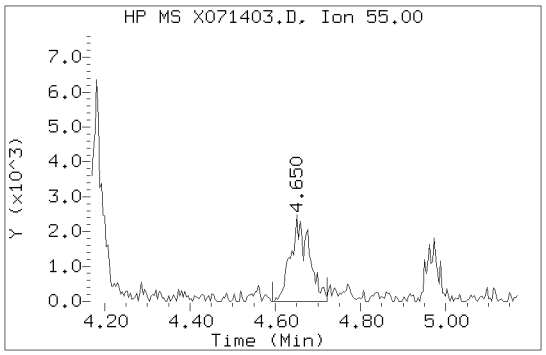
AREA
7426
HEIGHT
2483
20-Jul-2023
15:04
linh
pham



tert-Amyl alcohol (75-85-4)

Reason Code:

BEFORE

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59
AREA
6083
HEIGHT
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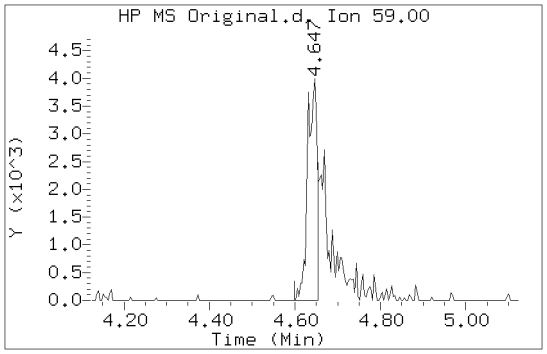
20-Jul-2023
15:04
linh
pham



AFTER

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HEIGHT
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20-Jul-2023
15:04
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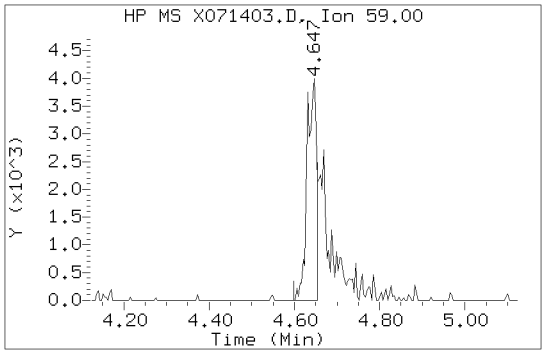
pham



BEFORE

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AREA
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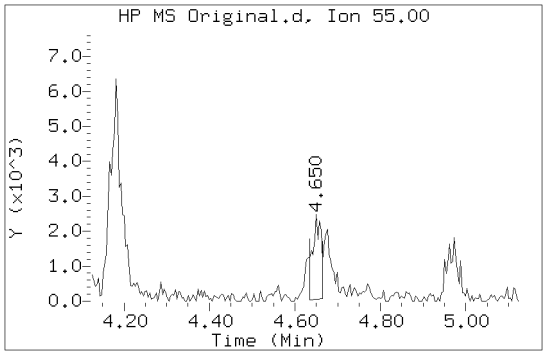
2424
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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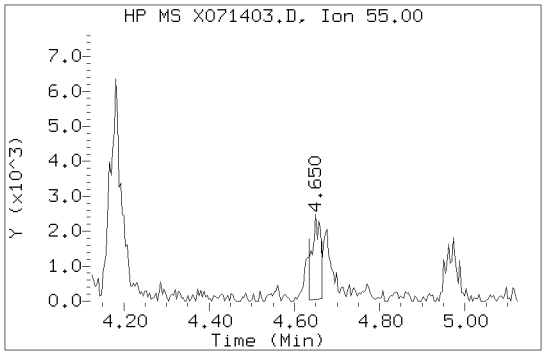
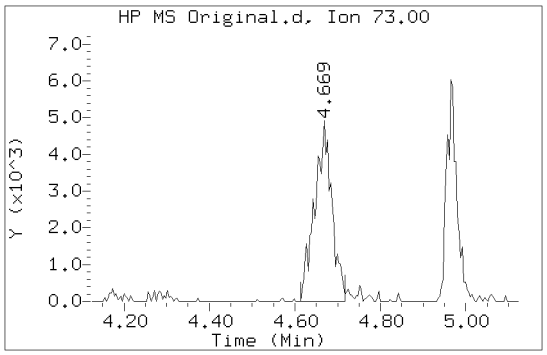
AREA
3364
HEIGHT
2424
20-Jul-2023
15:04
linh
pham



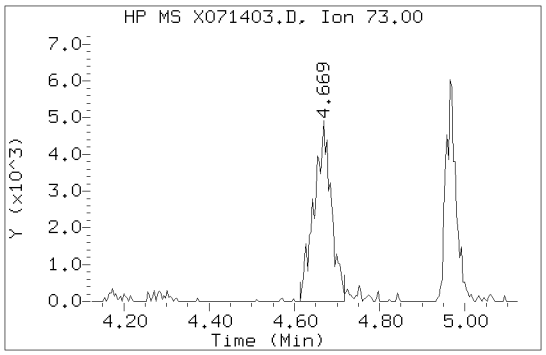
BEFORE

MASS
73
AREA
13761
HEIGHT
4914
20-Jul-2023
15:04
linh
pham



AFTER

MASS
73
AREA
13761
HEIGHT
4914
20-Jul-2023
15:04
linh
pham



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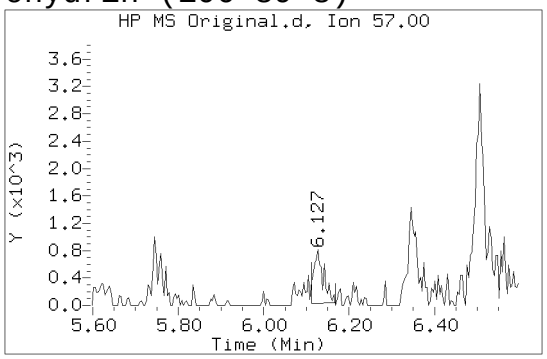
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

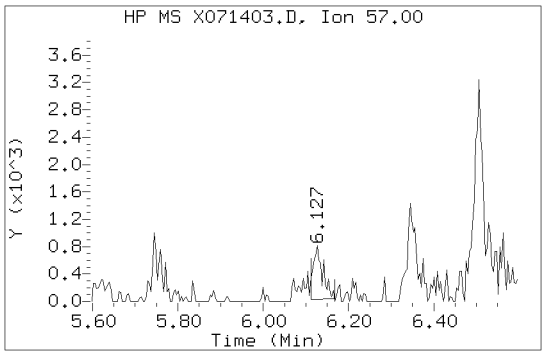
Epichlorohydrin (106-89-8)

Reason Code:

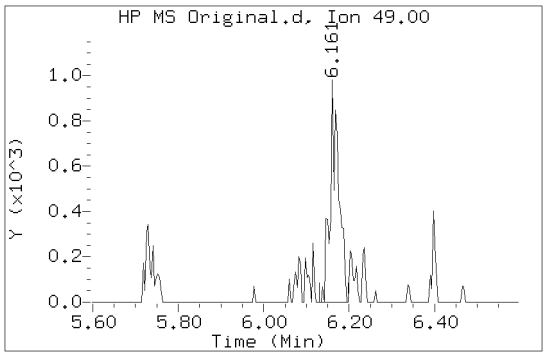
BEFORE
MASS
57
AREA
1233
HEIGHT
788
20-Jul-2023
15:04
linh
pham



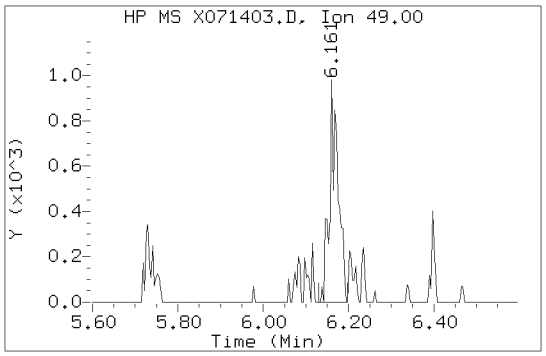
AFTER
MASS
57
AREA
1233
HEIGHT
788
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
49
AREA
1383
HEIGHT
981
20-Jul-2023
15:04
linh
pham



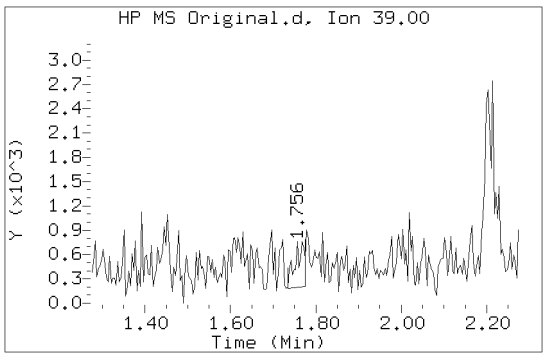
AFTER
MASS
49
AREA
1383
HEIGHT
981
20-Jul-2023
15:04
linh
pham



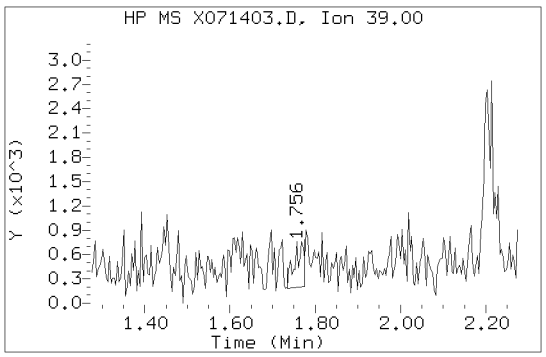
Isoprene (78-79-5)

Reason Code:

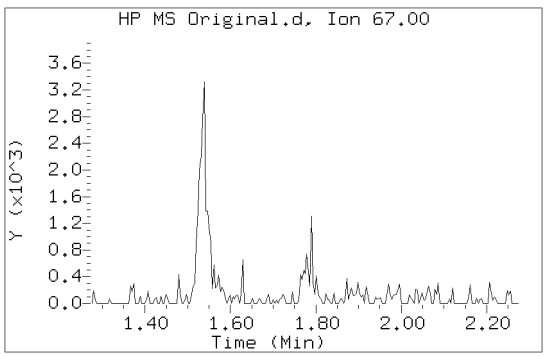
BEFORE
MASS
39
AREA
843
HEIGHT
570
20-Jul-2023
15:04
linh
pham



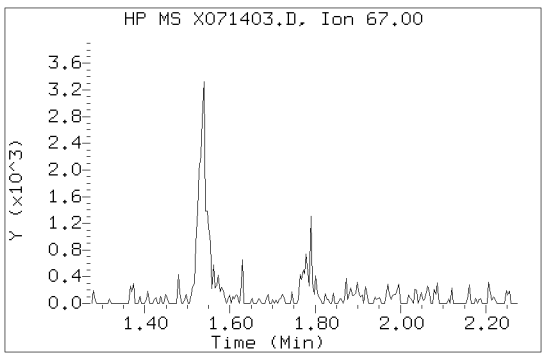
AFTER
MASS
39
AREA
843
HEIGHT
570
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
67
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER
MASS
67
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



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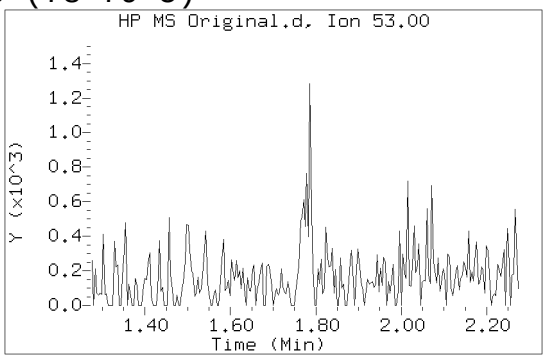
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Isoprene (78-79-5)

Reason Code:

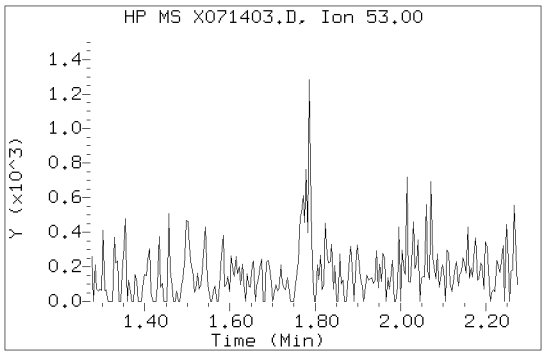
BEFORE

MASS
53
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
53
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



n-Amyl acetate (628-63-7)

Reason Code:

BEFORE

MASS
43
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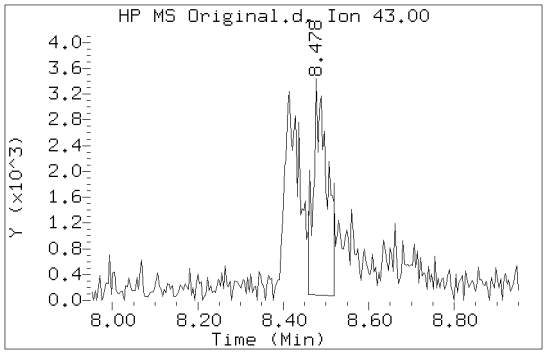
7447
HEIGHT
3352
20-Jul-2023
15:04
linh
pham



AFTER

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7447
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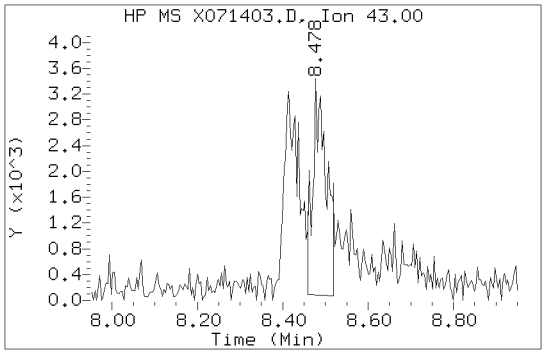
3352
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
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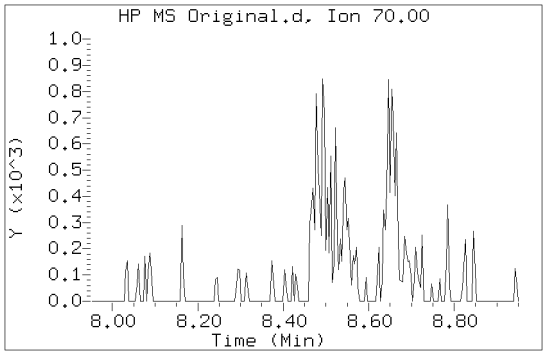
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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15:04
linh
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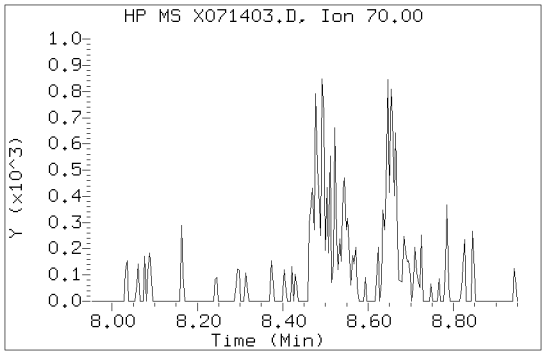

BEFORE

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20-Jul-2023
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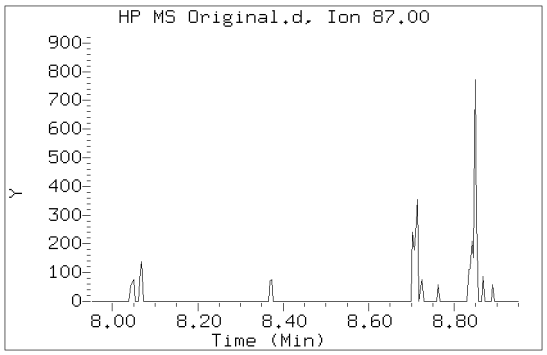

AFTER

MASS
87
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HEIGHT
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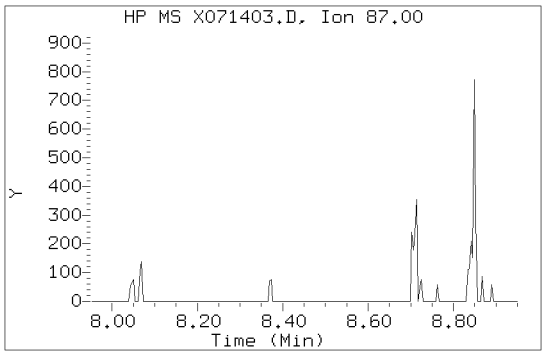
20-Jul-2023
15:04
linh
pham



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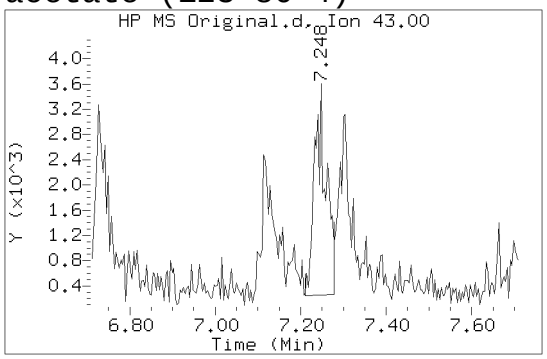
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

n-Butyl acetate (123-86-4)

Reason Code:

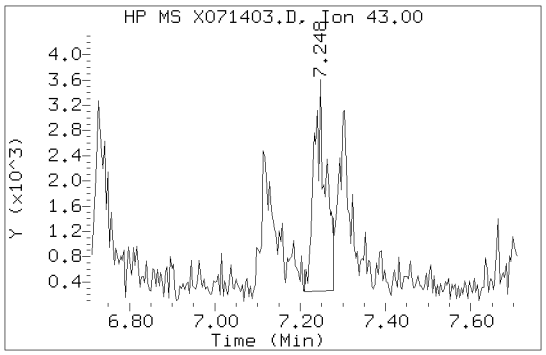
BEFORE

MASS
43
AREA
6398
HEIGHT
3352
20-Jul-2023
15:04
linh
pham



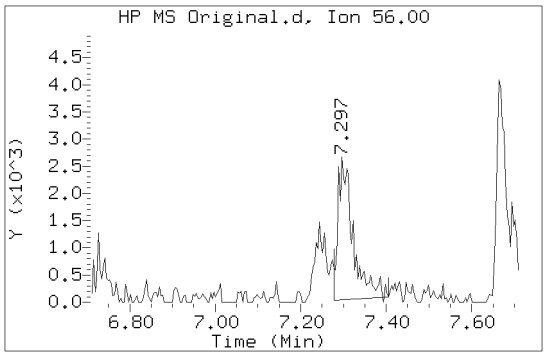
AFTER

MASS
43
AREA
6398
HEIGHT
3352
20-Jul-2023
15:04
linh
pham



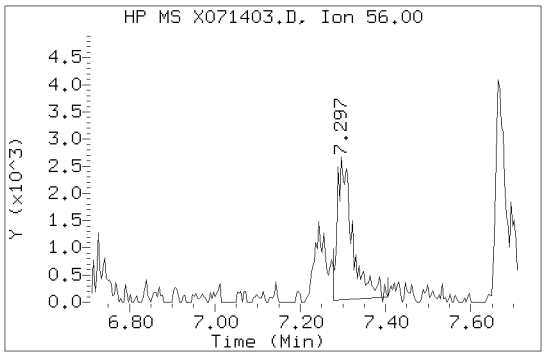
BEFORE

MASS
56
AREA
6426
HEIGHT
2636
20-Jul-2023
15:04
linh
pham



AFTER

MASS
56
AREA
6426
HEIGHT
2636
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
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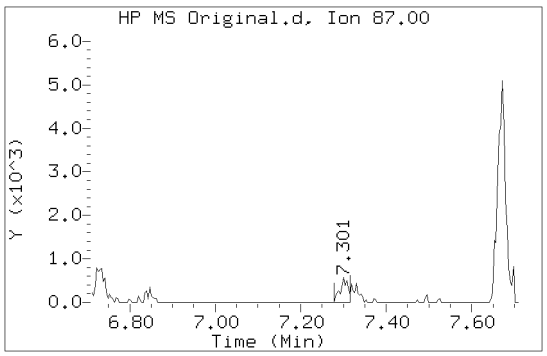
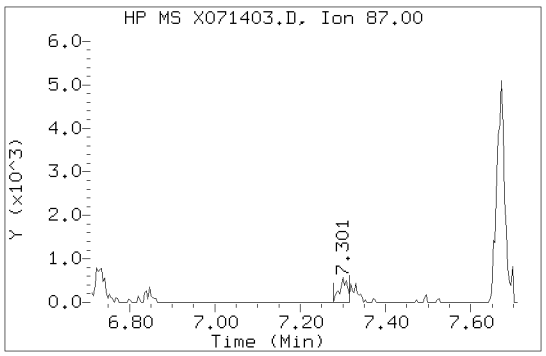
AREA
709
HEIGHT
572
20-Jul-2023
15:04
linh
pham



AFTER

MASS
87
AREA
709
HEIGHT
572
20-Jul-2023
15:04
linh
pham

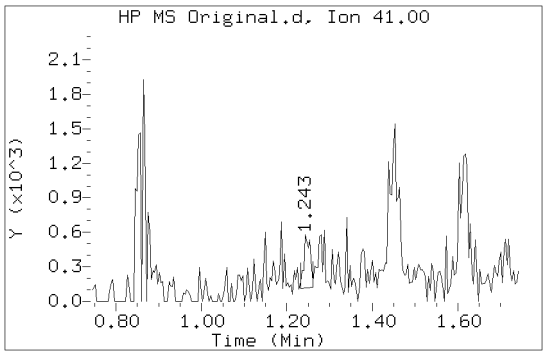


Isobutylene (115-11-7)

Reason Code:

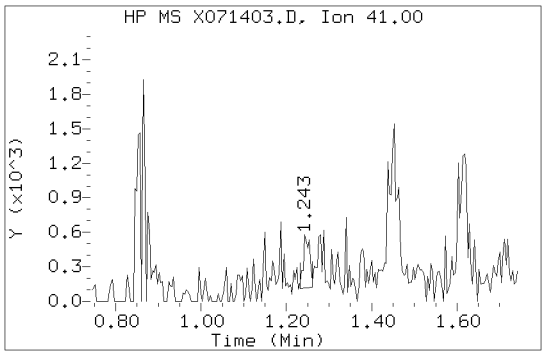
BEFORE

MASS
41
AREA
500
HEIGHT
462
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
500
HEIGHT
462
20-Jul-2023
15:04
linh
pham



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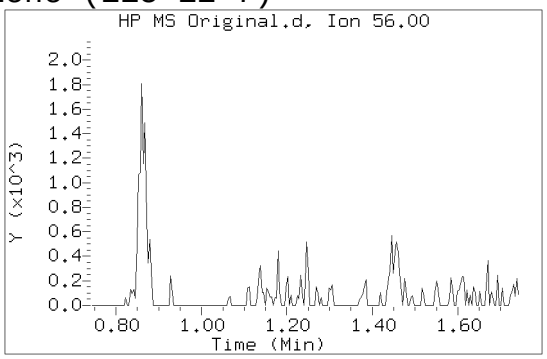
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Isobutylene (115-11-7)

Reason Code:

BEFORE

MASS
56
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
56
AREA
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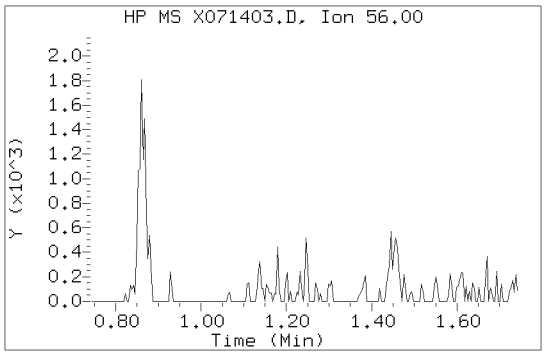
HEIGHT
0
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
84
AREA
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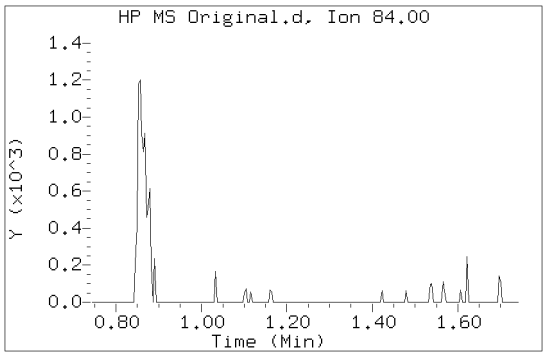
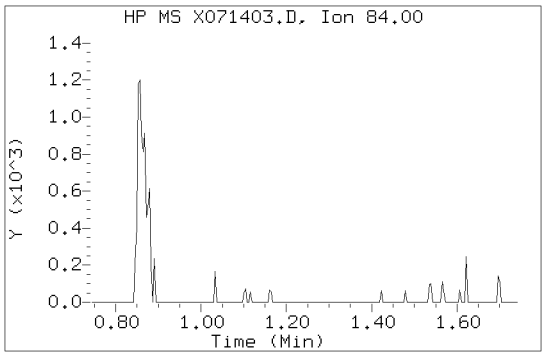
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
84
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



2-Ethylhexyl Acrylate (103-11-7)

Reason Code:

BEFORE

MASS
55
AREA
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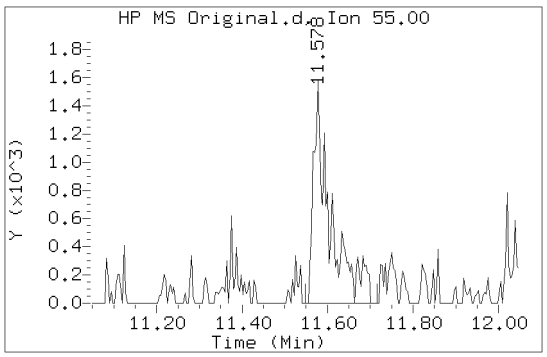
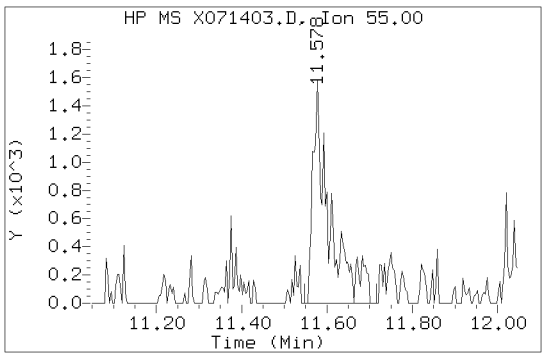
HEIGHT
1577
20-Jul-2023
15:04
linh
pham



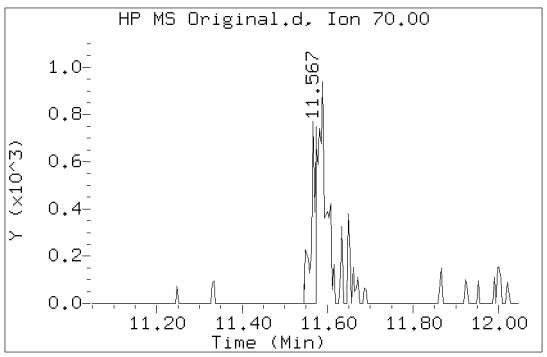
AFTER

MASS
55
AREA
4236
HEIGHT
1577
20-Jul-2023
15:04
linh
pham



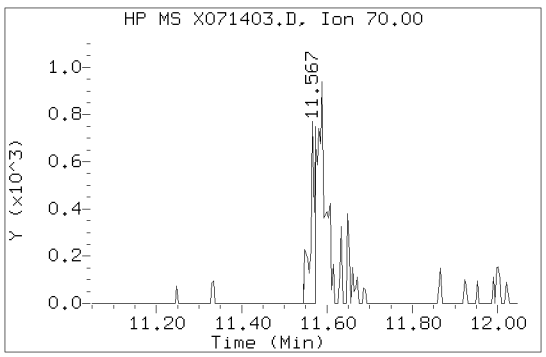
BEFORE

MASS
70
AREA
631
HEIGHT
771
20-Jul-2023
15:04
linh
pham



AFTER

MASS
70
AREA
631
HEIGHT
771
20-Jul-2023
15:04
linh
pham



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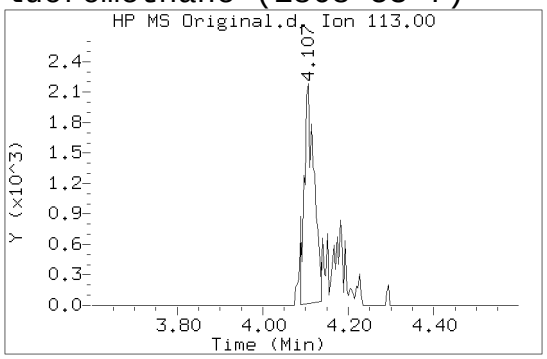
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Dibromofluoromethane (1868-53-7)

Reason Code:

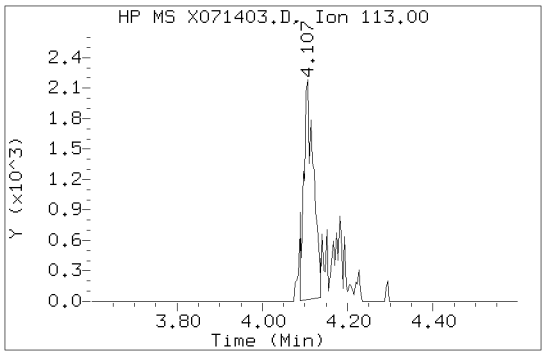
BEFORE

MASS
113
AREA
3536
HEIGHT
2165
20-Jul-2023
15:04
linh
pham



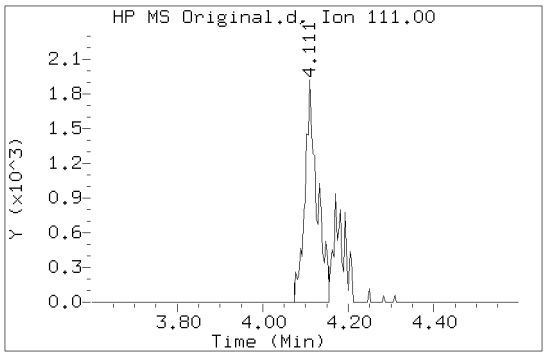
AFTER

MASS
113
AREA
3536
HEIGHT
2165
20-Jul-2023
15:04
linh
pham



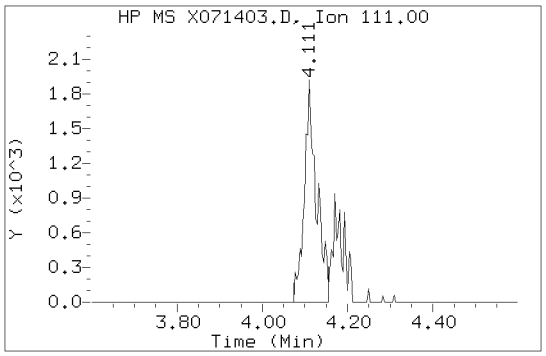
BEFORE

MASS
111
AREA
3831
HEIGHT
1919
20-Jul-2023
15:04
linh
pham



AFTER

MASS
111
AREA
3831
HEIGHT
1919
20-Jul-2023
15:04
linh
pham

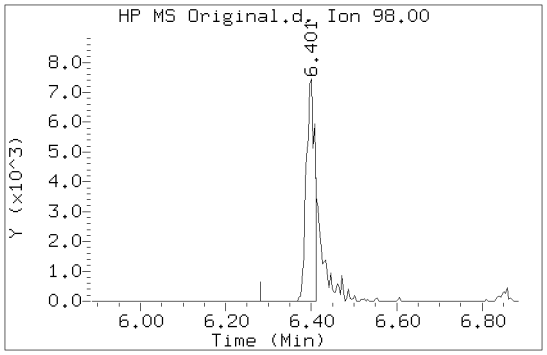


Toluene-d8 (2037-26-5)

Reason Code:

BEFORE

MASS
98
AREA
10379
HEIGHT
7449
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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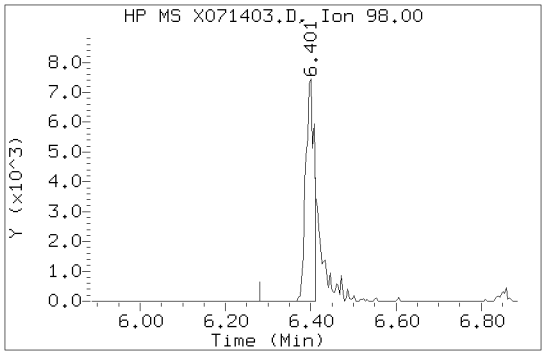
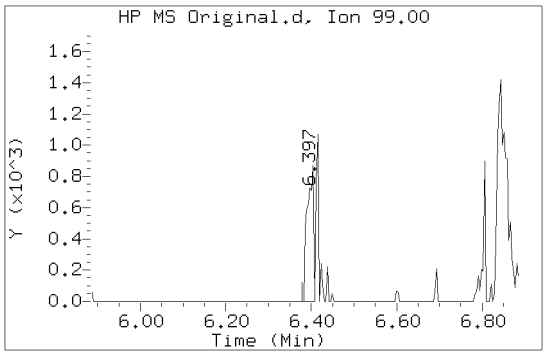
AREA
10379
HEIGHT
7449
20-Jul-2023
15:04
linh
pham



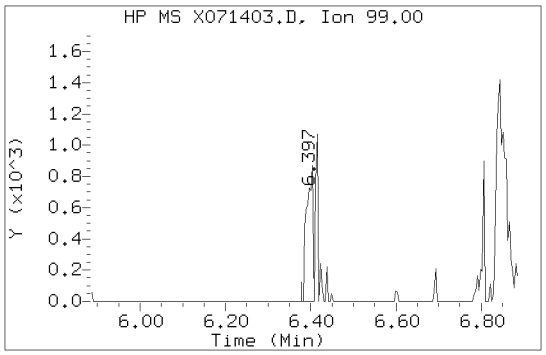
BEFORE

MASS
99
AREA
897
HEIGHT
727
20-Jul-2023
15:04
linh
pham



AFTER

MASS
99
AREA
897
HEIGHT
727
20-Jul-2023
15:04
linh
pham



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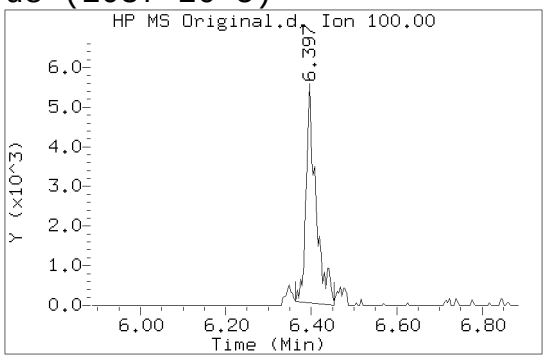
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Toluene-d8 (2037-26-5)

Reason Code:

BEFORE

MASS
100
AREA
8943
HEIGHT
5534
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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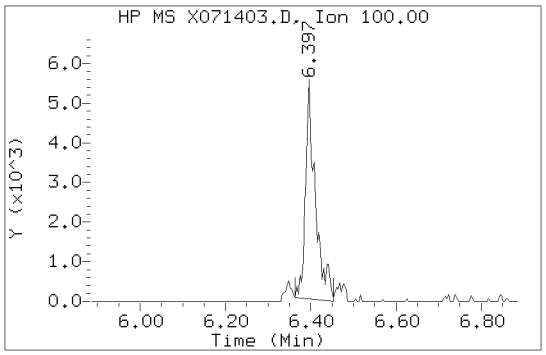
AREA
8943
HEIGHT
5534
20-Jul-2023
15:04
linh
pham

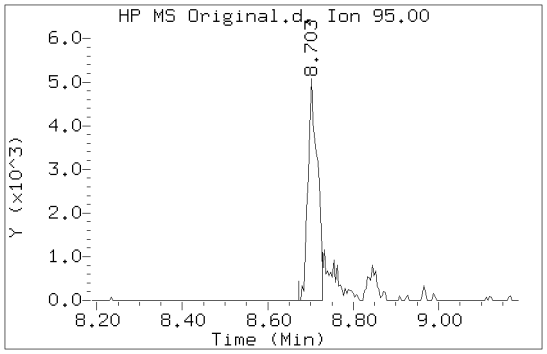


4-Bromofluorobenzene (460-00-4)

Reason Code:

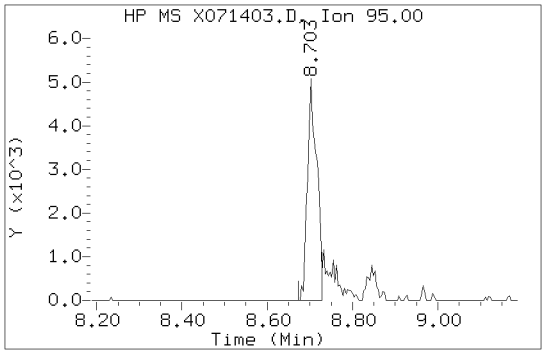
BEFORE

MASS
95
AREA
7819
HEIGHT
5079
20-Jul-2023
15:04
linh
pham



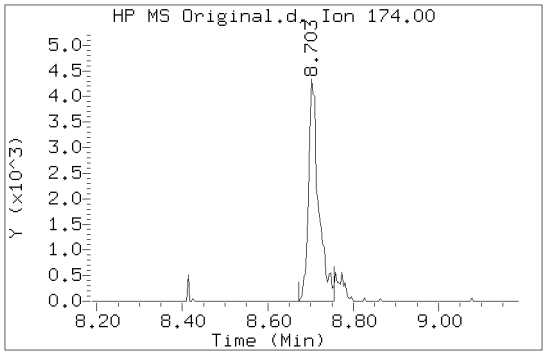
AFTER

MASS
95
AREA
7819
HEIGHT
5079
20-Jul-2023
15:04
linh
pham



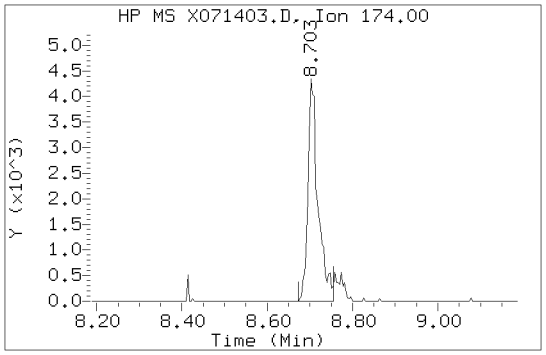
BEFORE

MASS
174
AREA
7142
HEIGHT
4342
20-Jul-2023
15:04
linh
pham



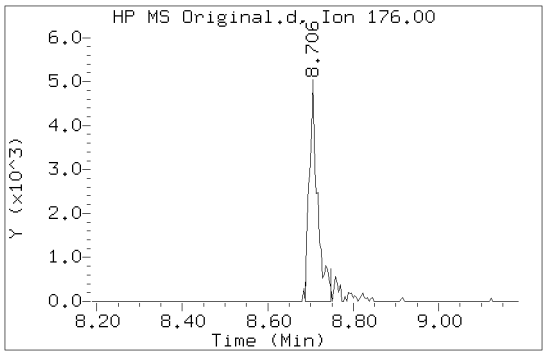
AFTER

MASS
174
AREA
7142
HEIGHT
4342
20-Jul-2023
15:04
linh
pham



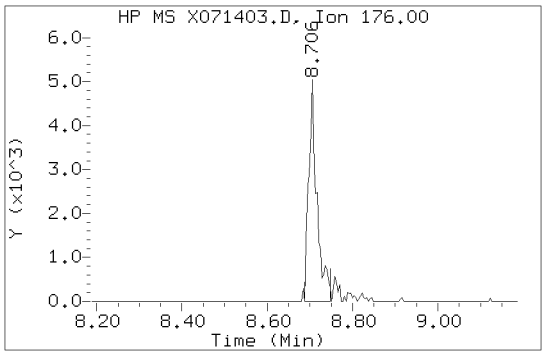
BEFORE

MASS
176
AREA
6702
HEIGHT
5044
20-Jul-2023
15:04
linh
pham



AFTER

MASS
176
AREA
6702
HEIGHT
5044
20-Jul-2023
15:04
linh
pham



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Report Date: 20-Jul-2023 15:05

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071404.D
Lab Smp Id: VSTD001 Client Smp ID: VSTD001
Inj Date : 14-JUL-2023 13:02
Operator : PC Inst ID: voa6.i
Smp Info : VSTD001;VSTD001;1;3;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\8260W.m
Meth Date : 20-Jul-2023 15:05 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 12:22 Cal File: X071403.D
Als bottle: 5 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1	Pentafluorobenzene	168	4.178	4.178	(1.000)	527854	50.0000	
2	Dichlorodifluoromethane	85	0.976	0.976	(0.234)	3668	1.00000	1.76
3	Chloromethane	50	1.081	1.081	(0.259)	7000	1.00000	0.87
4	Propionitrile	54	3.690	3.690	(0.883)	10495	10.0000	10.03(aM)
5	Vinyl Chloride	62	1.149	1.149	(0.275)	5610	1.00000	0.82
6	Bromomethane	94	1.344	1.344	(0.322)	2584	1.00000	0.91
7	Chloroethane	64	1.407	1.407	(0.337)	3779	1.00000	0.96
8	Trichlorofluoromethane	101	1.561	1.561	(0.374)	5888	1.00000	0.85(M)
9	Acrolein	56	1.861	1.861	(0.446)	510	2.00000	3.65(aM)
11	1,1-Dichloroethene	96	1.913	1.913	(0.458)	3525	1.00000	0.91(M)
12	Isobutyl Alcohol	43	4.687	4.687	(1.122)	16938	20.0000	16.92(aM)
13	Acetonitrile	39	2.198	2.198	(0.526)	7835	10.0000	10.58(a)
14	Allyl Chloride	41	2.202	2.202	(0.527)	19290	1.00000	1.11(a)
15	Iodomethane	142	2.030	2.030	(0.486)	4792	2.00000	4.73(M)
16	Acrylonitrile	53	2.551	2.551	(0.611)	4763	2.00000	1.85(M)
18	Methyl tert-butyl ether	73	2.543	2.543	(0.609)	15895	1.00000	1.10
19	Carbon Disulfide	76	2.071	2.071	(0.496)	21621	2.00000	1.77
20	trans-1,2-Dichloroethene	96	2.536	2.536	(0.607)	3665	1.00000	0.81
21	Vinyl Acetate	43	3.015	3.015	(0.722)	36157	2.00000	1.95
22	1,1-Dichloroethane	63	2.929	2.929	(0.701)	9261	1.00000	0.94

23 Chloroprene	53	1.786	1.786 (0.428)	2402	1.00000	1.01(aM)
24 2-Butanone	43	3.686	3.686 (0.882)	5549	2.00000	1.97(M)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	25 Methacrylonitrile	41	3.874	3.874	(0.927)	6195	1.00000	0.90(aM)
	26 2,2-Dichloropropane	77	3.518	3.518	(0.842)	7001	1.00000	1.12(M)
	27 cis-1,2-Dichloroethene	96	3.540	3.540	(0.847)	5828	1.00000	1.02(M)
	28 Chloroform	83	3.915	3.915	(0.937)	10007	1.00000	0.99
	29 Bromochloromethane	128	3.799	3.799	(0.909)	3002	1.00000	0.94(M)
	31 1,1,1-Trichloroethane	97	4.084	4.084	(0.978)	6398	1.00000	0.82(M)
	32 1,1-Dichloropropene	75	4.286	4.286	(0.863)	6097	1.00000	0.91(M)
	33 1,2-Dichloroethane	62	4.564	4.564	(0.919)	9069	1.00000	1.01
	34 Carbon Tetrachloride	117	4.264	4.264	(0.859)	7002	1.00000	1.04(M)
$	35 1,2-Dichloroethane-d4	65	4.485	4.485	(1.074)	7805	1.00000	0.68
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	814886	50.0000	
	37 Benzene	78	4.515	4.515	(0.909)	18433	1.00000	0.94
	38 Trichloroethene	130	5.212	5.212	(1.050)	4751	1.00000	0.86(a)
	39 Bromodichloromethane	83	5.730	5.730	(1.154)	6967	1.00000	0.93(aM)
	40 Methyl Methacrylate	41	5.628	5.628	(1.347)	7110	1.00000	1.11(a)
	41 2-Chloroethylvinyl ether	63	6.071	6.071	(1.223)	4176	2.00000	1.83(aM)
	42 1,2-Dichloropropane	63	5.441	5.441	(1.096)	5153	1.00000	0.82(aM)
	43 2-Nitropropane	43	5.992	5.992	(1.434)	2054	1.00000	0.97(aM)
	44 Dibromomethane	93	5.557	5.557	(1.119)	3511	1.00000	0.98(a)
	45 4-Methyl-2-Pentanone	43	6.337	6.337	(0.826)	14106	2.00000	1.87(aM)
	46 cis-1,3-Dichloropropene	75	6.168	6.168	(1.242)	7361	1.00000	0.85(a)
*	47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	765384	50.0000	
$	48 Toluene-d8	98	6.397	6.397	(0.834)	21847	1.00000	1.10(aM)
	49 Ethyl Methacrylate	69	6.730	6.730	(1.356)	5749	1.00000	1.07(aM)
	50 Toluene	91	6.453	6.453	(0.842)	17466	1.00000	0.84(a)
	51 trans-1,3-Dichloropropene	75	6.693	6.693	(1.348)	6303	1.00000	0.87(a)
	52 2-Hexanone	43	7.113	7.113	(0.928)	10319	2.00000	2.08(aM)
	53 1,1,2-Trichloroethane	83	6.843	6.843	(0.892)	4429	1.00000	1.01(a)
	54 1,3-Dichloropropane	76	6.985	6.985	(0.911)	8584	1.00000	0.96(a)
	55 Dibromochloromethane	129	7.180	7.180	(0.936)	6003	1.00000	0.95(a)
	56 Tetrachloroethene	164	6.929	6.929	(0.904)	3431	1.00000	0.80(aM)
	57 1,2-Dibromoethane	107	7.270	7.270	(0.948)	4879	1.00000	0.97(a)
	58 1-Chlorohexane	55	7.705	7.705	(1.552)	6663	1.00000	1.01(aM)
	59 Chlorobenzene	112	7.698	7.698	(1.004)	13305	1.00000	0.92(a)
	60 1,1,1,2-Tetrachloroethane	131	7.776	7.776	(1.014)	5021	1.00000	0.89(a)
	61 Ethylbenzene	106	7.806	7.806	(1.018)	6243	1.00000	0.86(a)
	62 m,p-Xylenes	106	7.915	7.915	(1.032)	15703	2.00000	1.73(aM)
	63 o-Xylene	106	8.249	8.249	(1.076)	7717	1.00000	0.89(a)
	64 Styrene	104	8.271	8.271	(1.079)	13315	1.00000	0.88(aM)
	66 Bromoform	173	8.421	8.421	(1.098)	3238	1.00000	0.79(TaM)
	67 Isopropylbenzene	105	8.567	8.567	(1.117)	17710	1.00000	0.80(a)
	68 1,1,2,2-Tetrachloroethane	83	8.841	8.841	(0.915)	6483	1.00000	0.99(a)
$	69 4-Bromofluorobenzene	95	8.702	8.702	(1.135)	11517	1.00000	1.09(aM)
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	389630	50.0000	
	71 1,2,3-Trichloropropane	75	8.871	8.871	(0.918)	5203	1.00000	1.00(aM)
	72 trans-1,4-Dichloro-2-butene	53	8.912	8.912	(1.162)	1951	1.00000	0.83(aM)
	73 n-Propylbenzene	91	8.920	8.920	(0.923)	19793	1.00000	0.84(a)
	74 Bromobenzene	156	8.815	8.815	(0.912)	5922	1.00000	0.97(a)
	75 1,3,5-Trimethylbenzene	105	9.077	9.077	(0.939)	14649	1.00000	0.83(aM)
	76 2-Chlorotoluene	91	8.980	8.980	(0.929)	15937	1.00000	1.00(aM)
	77 4-Chlorotoluene	91	9.085	9.085	(0.940)	14190	1.00000	0.81(a)
	78 tert-Butylbenzene	119	9.339	9.339	(0.967)	12560	1.00000	0.83(a)

79 1,2,4-Trimethylbenzene	105	9.388	9.388 (0.972)	14383	1.00000	0.81(a)
81 sec-Butylbenzene	105	9.519	9.519 (0.985)	16259	1.00000	0.80(a)

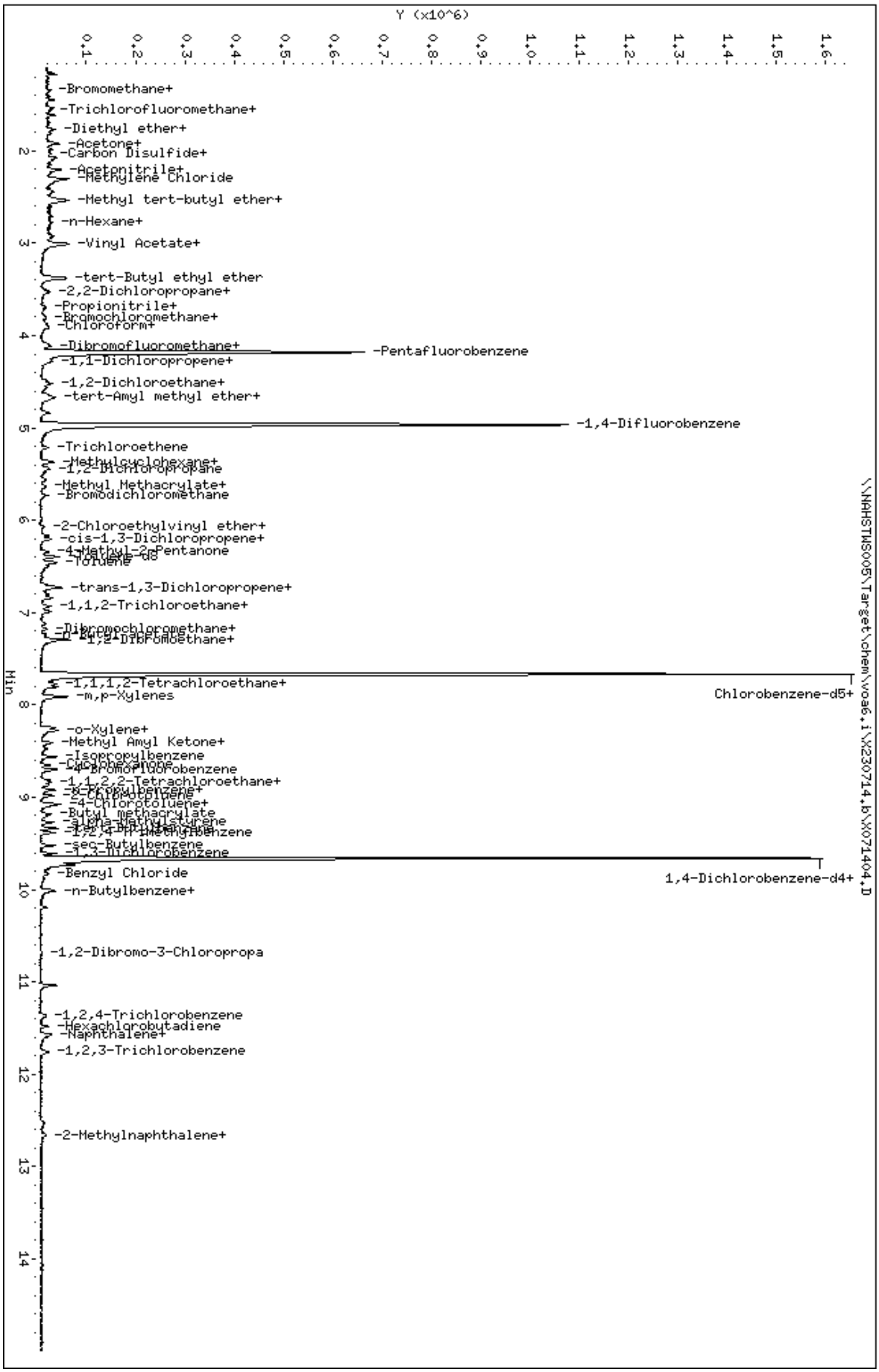
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
82	p-Isopropyltoluene	119	9.651	9.651	(0.999)	15092	1.00000	0.81(aM)
83	1,3-Dichlorobenzene	146	9.609	9.609	(0.995)	9170	1.00000	0.86(a)
84	1,4-Dichlorobenzene	146	9.684	9.684	(1.002)	10311	1.00000	0.88(a)
86	Benzyl Chloride	91	9.827	9.827	(1.282)	10259	1.00000	3.09(aM)
87	n-Butylbenzene	91	10.014	10.014	(1.036)	13321	1.00000	0.86(aM)
88	1,2-Dichlorobenzene	146	10.003	10.003	(1.035)	9791	1.00000	0.93(aM)
89	1,2-Dibromo-3-Chloropropane	155	10.700	10.700	(1.107)	831	1.00000	1.84(aM)
90	1,2,4-Trichlorobenzene	180	11.364	11.364	(1.176)	7113	1.00000	0.99(aM)
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	2109	1.00000	2.96(a)
92	Naphthalene	128	11.574	11.574	(1.198)	18131	1.00000	1.02(aM)
93	1,2,3-Trichlorobenzene	180	11.765	11.765	(1.218)	6973	1.00000	1.04(a)
146	Methyl acetate	43	2.243	2.243	(0.537)	4992	1.00000	1.06(aM)
138	Freon TF	101	1.917	1.917	(0.459)	2818	1.00000	0.25(aM)
141	Cyclohexane	56	4.121	4.121	(0.987)	7673	1.00000	0.83(aM)
142	Tetrahydrofuran	42	3.874	3.874	(0.927)	2815	2.00000	2.07(aM)
147	Methylcyclohexane	55	5.370	5.370	(1.082)	15783	1.00000	0.91(aM)
135	1,4-Dioxane	88	5.613	5.613	(1.344)	1290	20.0000	20.56(M)
132	n-Butanol	56	5.370	5.370	(1.285)	3103	20.0000	17.65(aM)
131	Methyl Acrylate	55	3.750	3.750	(0.898)	5778	1.00000	0.80(aM)
133	Ethyl Acrylate	55	5.370	5.370	(1.285)	18196	1.00000	1.04(M)
136	n-Hexane	57	2.776	2.776	(0.664)	5000	1.00000	0.27(aM)
139	Diethyl ether	59	1.767	1.767	(0.423)	5211	1.00000	1.05(a)
148	Tert-butyl alcohol	59	2.442	2.442	(0.585)	12965	20.0000	19.46(M)
149	Isopropyl alcohol	45	2.097	2.097	(0.502)	9372	20.0000	22.67(TM)
156	Diisopropyl ether	45	3.012	3.012	(0.721)	24757	1.00000	1.13(Ta)
166	1,2,3-Trimethylbenzene	105	9.733	9.733	(1.007)	19017	1.00000	1.05(a)
167	Ethanol	45	1.703	1.703	(0.408)	1613	20.0000	3.59(aM)
172	tert-Butyl formate	59	4.639	4.639	(1.110)	11427	2.00000	2.02(aM)
173	3,3-Dimethyl-1-butanol	57	7.293	7.293	(0.951)	16922	20.0000	20.55(M)
174	tert-Amyl methyl ether	73	4.669	4.669	(1.118)	19717	1.00000	1.13(a)
175	tert-Butyl ethyl ether	59	3.387	3.387	(0.811)	23746	1.00000	1.06(a)
176	tert-Amyl alcohol	59	4.639	4.639	(1.110)	10855	20.0000	18.82
151	4-Methyl-2-pentanol	45	6.727	6.727	(1.355)	35175	20.0000	20.14(M)
180	1-Methylnaphthalene	142	12.657	12.657	(1.310)	6480	1.00000	(a)
140	1,3-Butadiene	54	1.167	1.167	(0.280)	6040	1.00000	0.89(aM)
152	Amyl alcohol	42	6.989	6.989	(0.912)	3944	20.0000	17.91(M)
158	Dichlorofluoromethane	67	1.531	1.531	(0.367)	9743	1.00000	1.14(M)
159	Propylene oxide	43	1.805	1.805	(0.432)	1409	2.00000	2.17(aM)
161	3-Methyl-1-butanol	55	6.944	6.944	(0.906)	3623	20.0000	19.22(M)
162	Butyl acrylate	55	8.279	8.279	(1.080)	13586	1.00000	0.93(a)
163	Butyl methacrylate	41	9.178	9.178	(0.950)	9406	1.00000	1.00(a)
164	Dicyclopentadiene	66	9.677	9.677	(1.002)	24319	1.00000	1.08(aM)
182	Epichlorohydrin	57	6.119	6.119	(1.233)	2383	4.00000	3.91(aM)
M 94	1,2-Dichloroethylene (total)	96				9493	2.00000	(a)
130	Ethyl Acetate	43	3.713	3.713	(0.889)	7207	1.00000	0.91(TaM)
134	Cyclohexanone	55	8.646	8.646	(0.895)	7972	20.0000	22.98(aM)
185	Isoprene	39	1.778	1.778	(0.426)	1515	1.00000	0.87(a)
188	Isopropyl acetate	43	4.687	4.687	(0.944)	23748	1.00000	1.10(a)
187	n-Amyl acetate	43	8.474	8.474	(1.105)	15950	1.00000	1.13(aM)
189	n-Butyl acetate	43	7.233	7.233	(0.943)	9795	1.00000	0.83(aM)
150	Allyl alcohol	57	2.776	2.776	(0.664)	5000	20.0000	3.31(aM)
194	Acetaldehyde	44	1.216	1.216	(0.291)	5117	4.00000	(aM)

195 Methyl Amyl Ketone	43	8.406	8.406 (1.096)	14469	1.00000	0.90(a)
200 Dimethyl Disulfide	94	6.202	6.202 (0.809)	9361	1.00000	0.90(a)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
202 Isobutylene	41	1.246	1.246	(0.298)	875	1.00000	1.00(aM)
205 2-Ethylhexyl Acrylate	55	11.562	11.562	(1.197)	8780	1.00000	0.88(aM)

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: VSTD001;VSTD001;1;3;
Purge Volume: 5.0
Column phase: DB624

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

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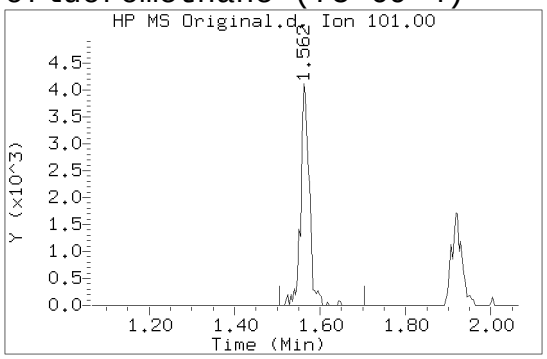
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

Trichlorofluoromethane (75-69-4)

Reason Code:

BEFORE
MASS
101
AREA
5888
HEIGHT
4116
20-Jul-2023
15:04
linh
pham



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20-Jul-2023
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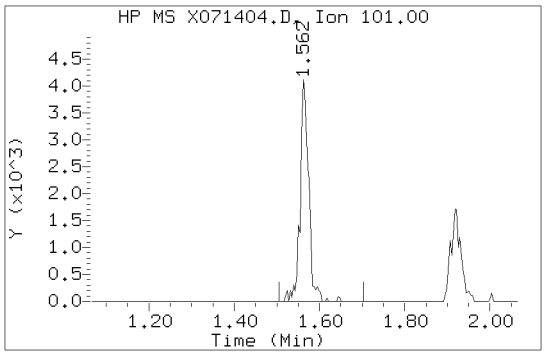

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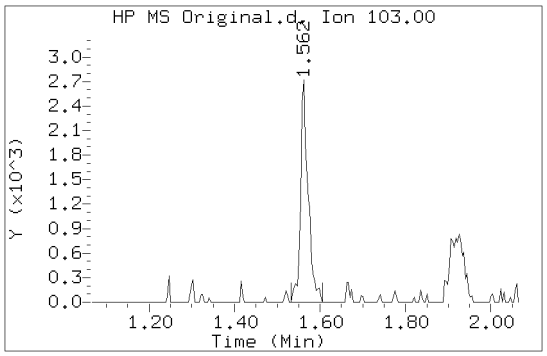

AFTER
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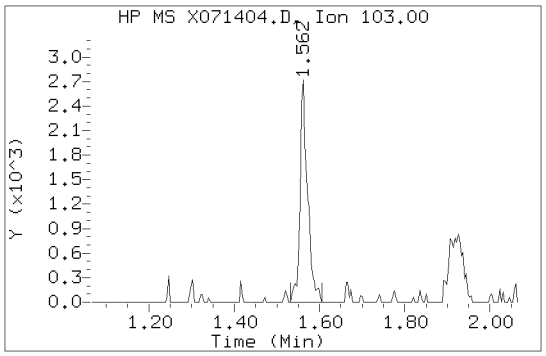

1,1-Dichloroethene (75-35-4)

Reason Code:

BEFORE
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HEIGHT
2613
20-Jul-2023
15:04
linh
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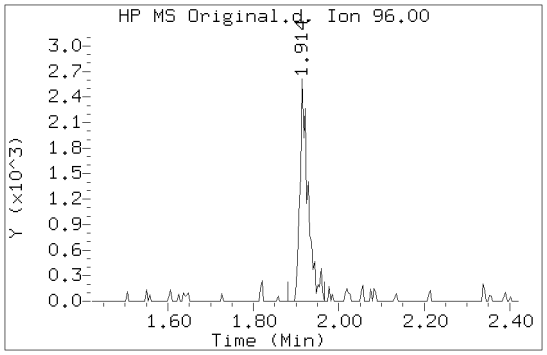

AFTER
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20-Jul-2023
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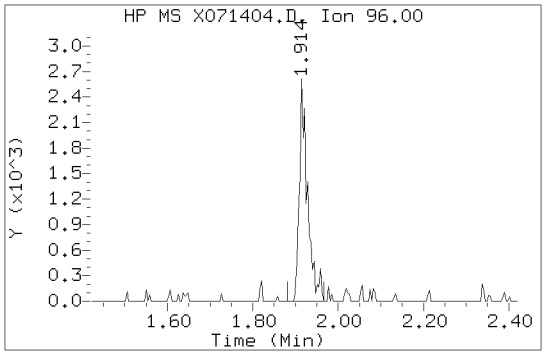

BEFORE
MASS
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AREA
5846
HEIGHT
4244
20-Jul-2023
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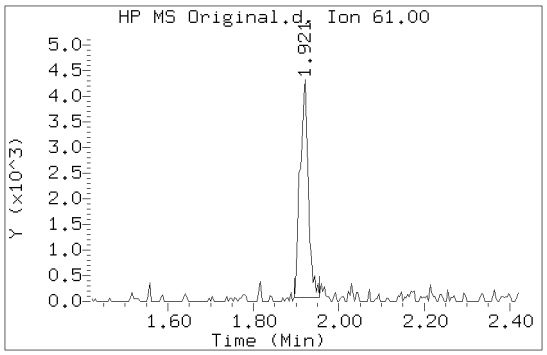

AFTER
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20-Jul-2023
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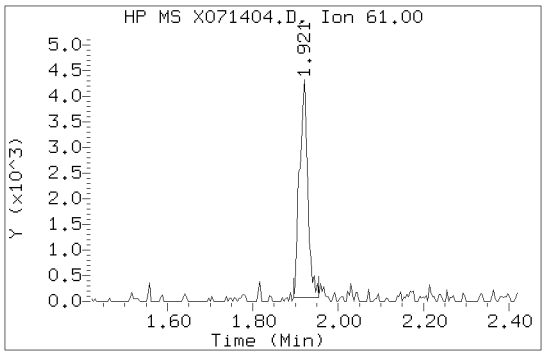

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InstruID : voa6.i
LabSampID : VSTD001

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

Reason Code:

BEFORE

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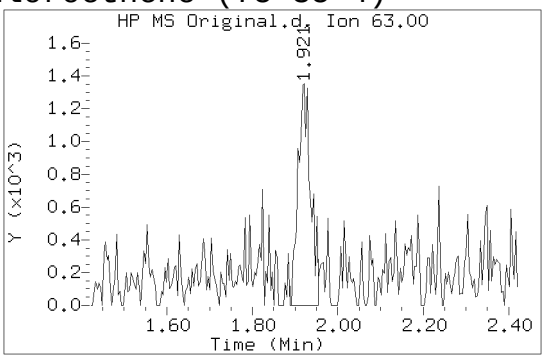
HEIGHT
1353
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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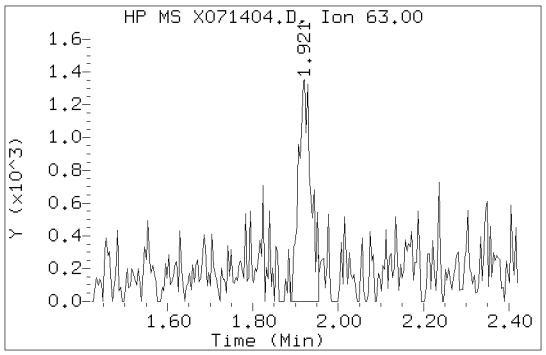

Iodomethane (74-88-4)

Reason Code:

BEFORE

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AREA
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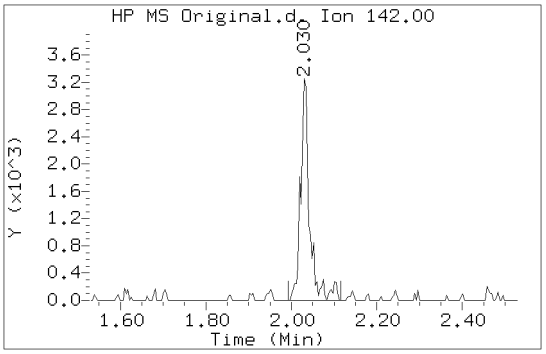
HEIGHT
3253
20-Jul-2023
15:04
linh
pham



AFTER

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20-Jul-2023
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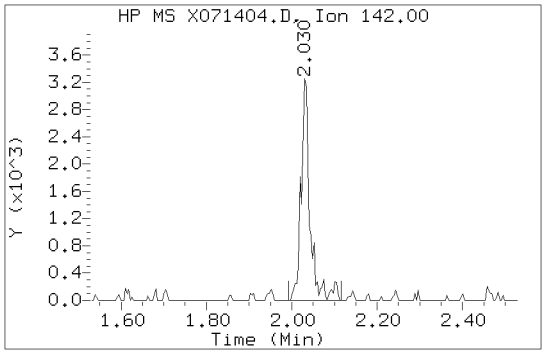
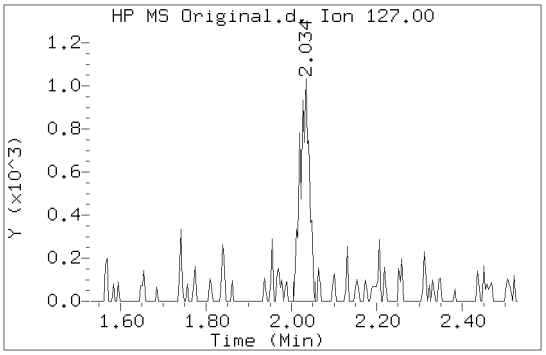
linh
pham



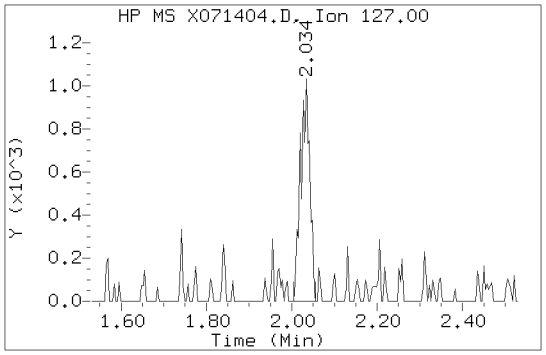
BEFORE

MASS
127
AREA
1562
HEIGHT
1033
20-Jul-2023
15:04
linh
pham



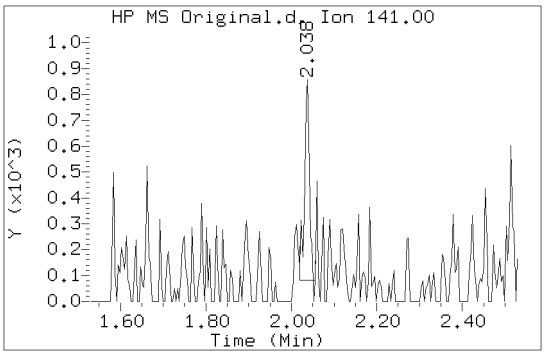
AFTER

MASS
127
AREA
1562
HEIGHT
1033
20-Jul-2023
15:04
linh
pham



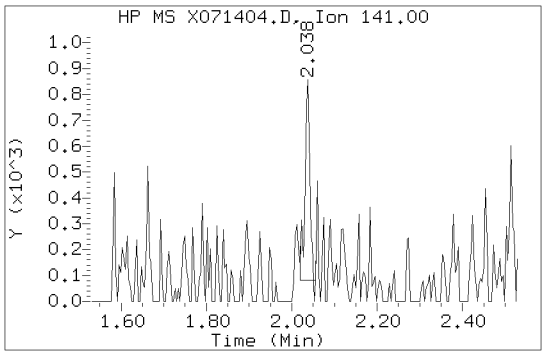
BEFORE

MASS
141
AREA
645
HEIGHT
775
20-Jul-2023
15:04
linh
pham



AFTER

MASS
141
AREA
645
HEIGHT
775
20-Jul-2023
15:04
linh
pham



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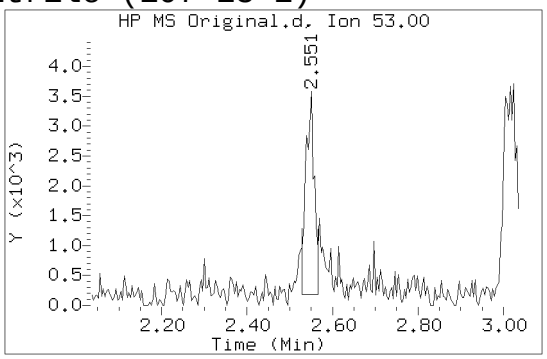
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

Acrylonitrile (107-13-1)

Reason Code:

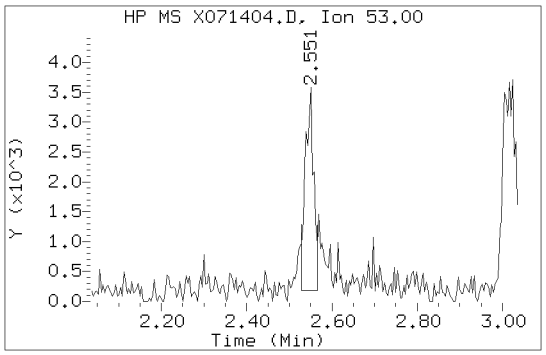
BEFORE

MASS
53
AREA
4763
HEIGHT
3403
20-Jul-2023
15:04
linh
pham



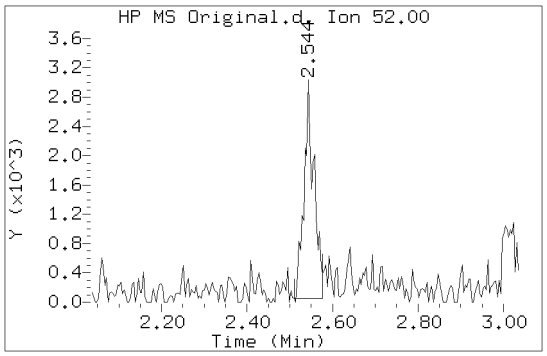
AFTER

MASS
53
AREA
4763
HEIGHT
3403
20-Jul-2023
15:04
linh
pham



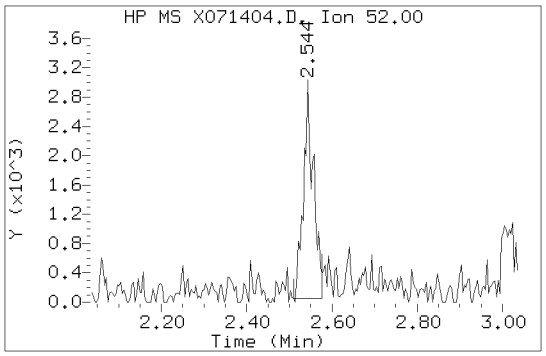
BEFORE

MASS
52
AREA
4911
HEIGHT
2983
20-Jul-2023
15:04
linh
pham



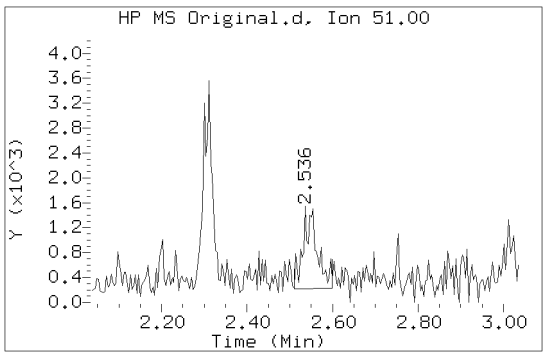
AFTER

MASS
52
AREA
4911
HEIGHT
2983
20-Jul-2023
15:04
linh
pham



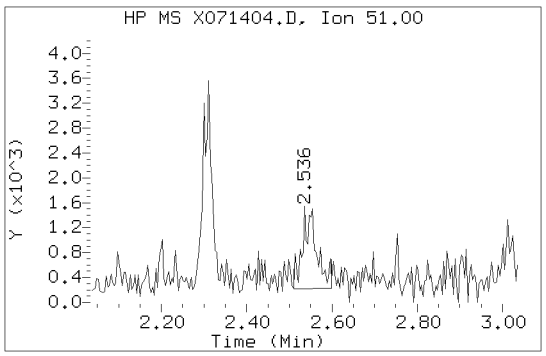
BEFORE

MASS
51
AREA
3020
HEIGHT
1324
20-Jul-2023
15:04
linh
pham



AFTER

MASS
51
AREA
3020
HEIGHT
1324
20-Jul-2023
15:04
linh
pham

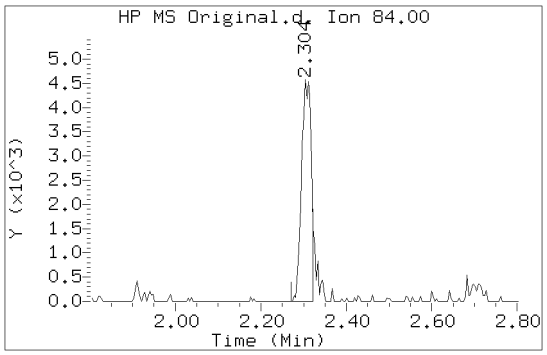


Methylene Chloride (75-09-2)

Reason Code:

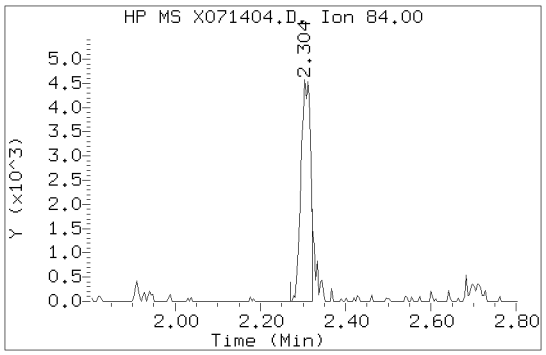
BEFORE

MASS
84
AREA
7389
HEIGHT
4576
20-Jul-2023
15:04
linh
pham



AFTER

MASS
84
AREA
7389
HEIGHT
4576
20-Jul-2023
15:04
linh
pham

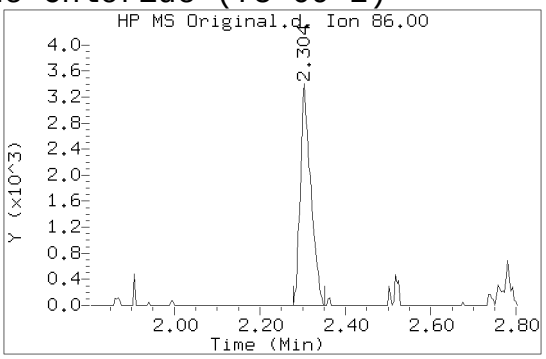


Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071404.D
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

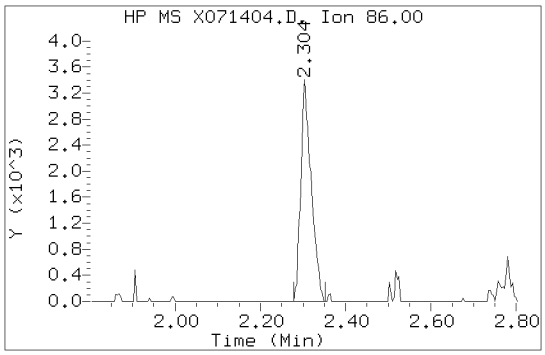
Methylene Chloride (75-09-2)

Reason Code:

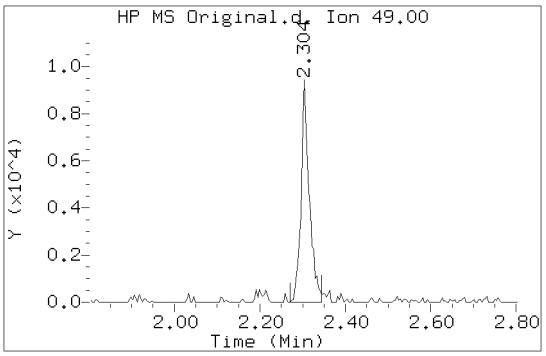
BEFORE
MASS
86
AREA
5890
HEIGHT
3405
20-Jul-2023
15:04
linh
pham



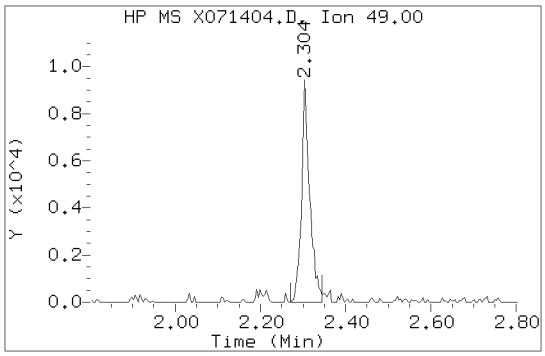
AFTER
MASS
86
AREA
5890
HEIGHT
3405
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
49
AREA
12826
HEIGHT
9432
20-Jul-2023
15:04
linh
pham



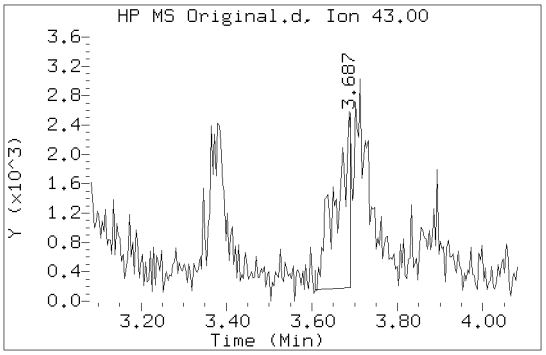
AFTER
MASS
49
AREA
12826
HEIGHT
9432
20-Jul-2023
15:04
linh
pham



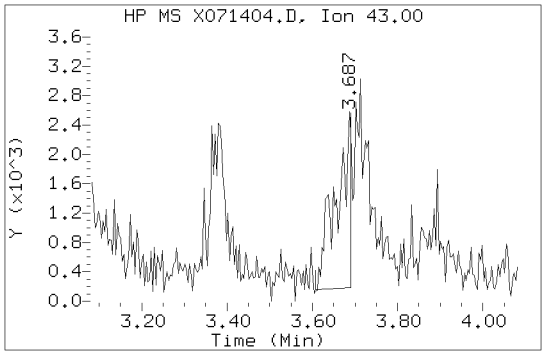
2-Butanone (78-93-3)

Reason Code:

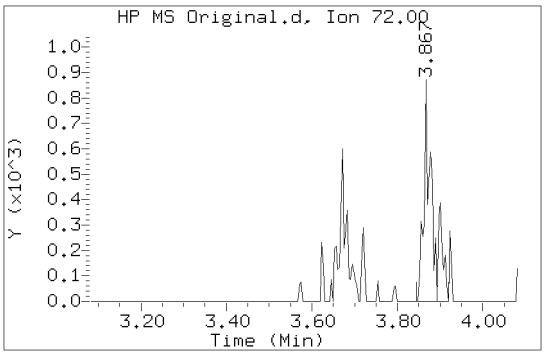
BEFORE
MASS
43
AREA
5549
HEIGHT
2403
20-Jul-2023
15:04
linh
pham



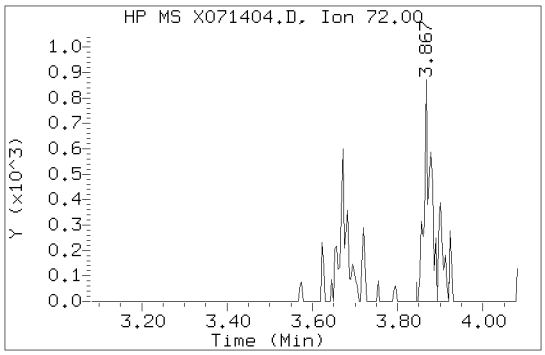
AFTER
MASS
43
AREA
5549
HEIGHT
2403
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
72
AREA
1227
HEIGHT
872
20-Jul-2023
15:04
linh
pham



AFTER
MASS
72
AREA
1227
HEIGHT
872
20-Jul-2023
15:04
linh
pham

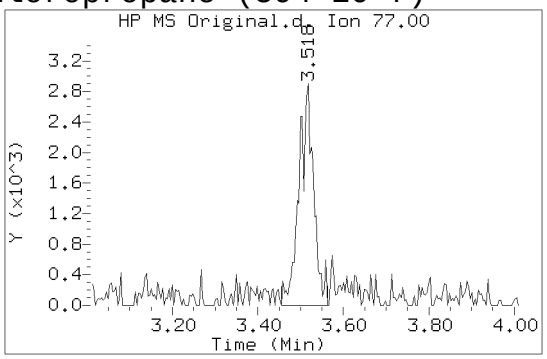


Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071404.D
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

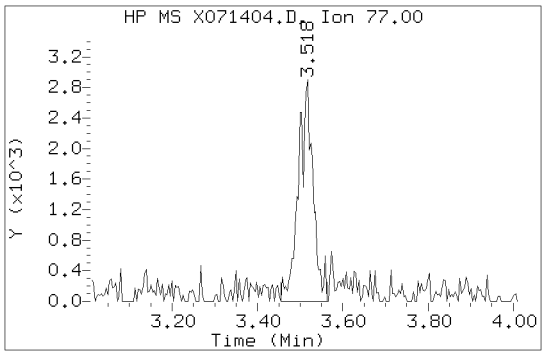
2,2-Dichloropropane (594-20-7)

Reason Code:

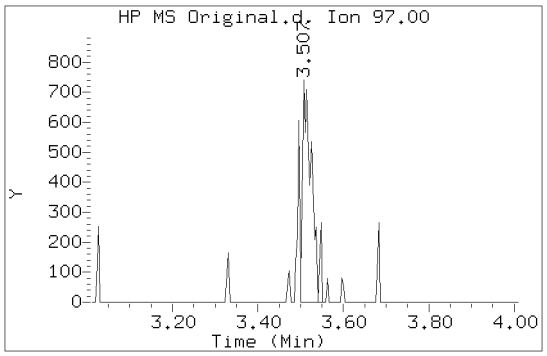
BEFORE
MASS
77
AREA
7001
HEIGHT
2901
20-Jul-2023
15:04
linh
pham



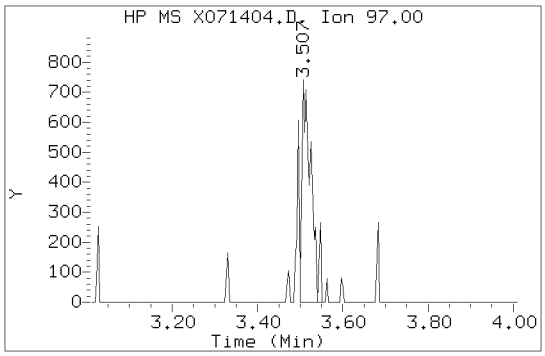
AFTER
MASS
77
AREA
7001
HEIGHT
2901
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
97
AREA
1144
HEIGHT
741
20-Jul-2023
15:04
linh
pham



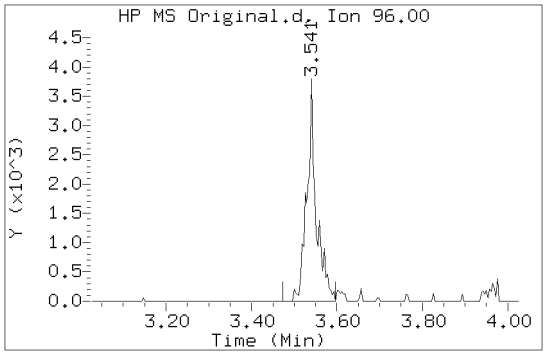
AFTER
MASS
97
AREA
1144
HEIGHT
741
20-Jul-2023
15:04
linh
pham



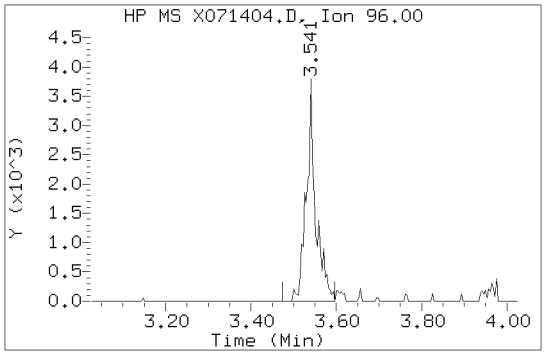
cis-1,2-Dichloroethene (156-59-2)

Reason Code:

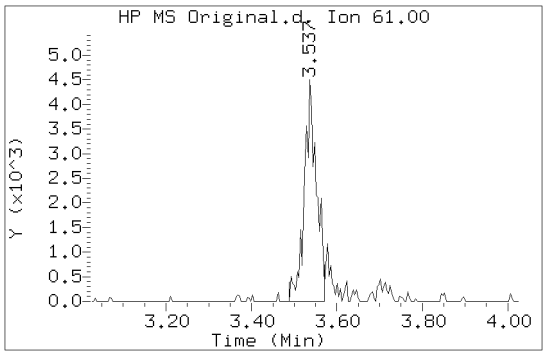
BEFORE
MASS
96
AREA
5828
HEIGHT
3797
20-Jul-2023
15:04
linh
pham



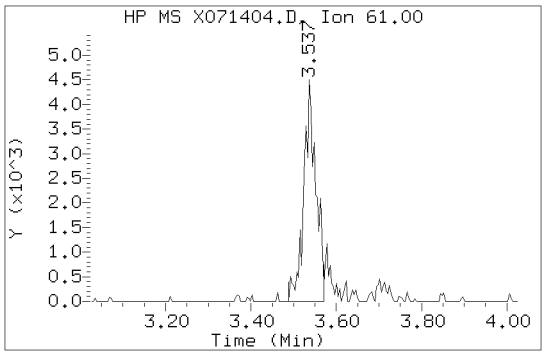
AFTER
MASS
96
AREA
5828
HEIGHT
3797
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
61
AREA
9003
HEIGHT
4504
20-Jul-2023
15:04
linh
pham



AFTER
MASS
61
AREA
9003
HEIGHT
4504
20-Jul-2023
15:04
linh
pham



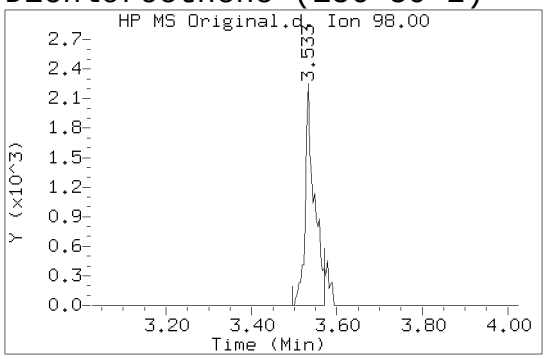
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071404.D
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

cis-1,2-Dichloroethene (156-59-2)

Reason Code:

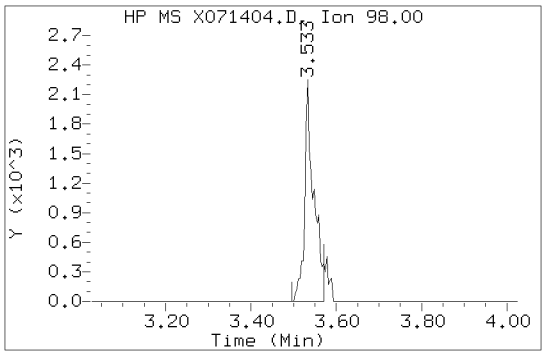
BEFORE

MASS
98
AREA
3384
HEIGHT
2251
20-Jul-2023
15:04
linh
pham



AFTER

MASS
98
AREA
3384
HEIGHT
2251
20-Jul-2023
15:04
linh
pham

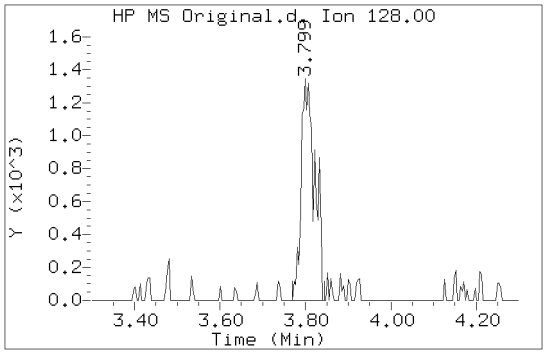


Bromochloromethane (74-97-5)

Reason Code:

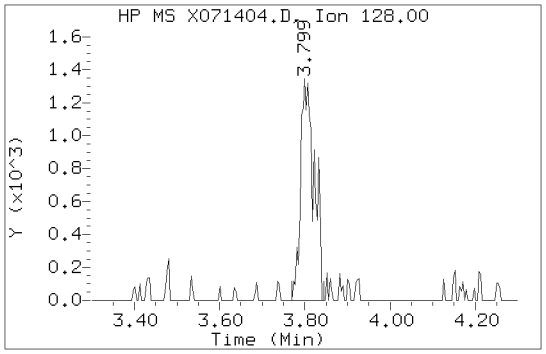
BEFORE

MASS
128
AREA
3002
HEIGHT
1346
20-Jul-2023
15:04
linh
pham



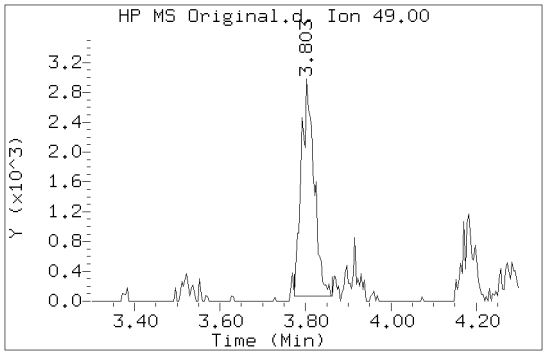
AFTER

MASS
128
AREA
3002
HEIGHT
1346
20-Jul-2023
15:04
linh
pham



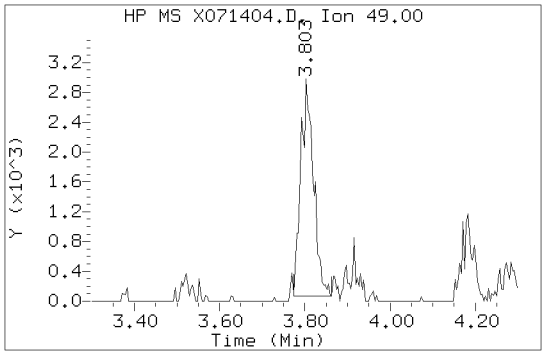
BEFORE

MASS
49
AREA
6119
HEIGHT
2913
20-Jul-2023
15:04
linh
pham



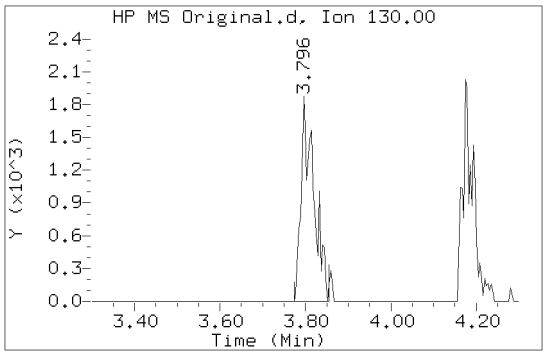
AFTER

MASS
49
AREA
6119
HEIGHT
2913
20-Jul-2023
15:04
linh
pham



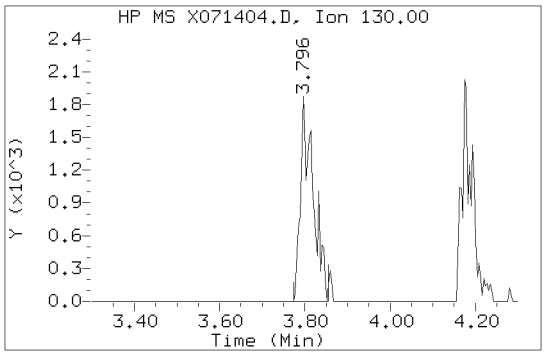
BEFORE

MASS
130
AREA
3970
HEIGHT
1875
20-Jul-2023
15:04
linh
pham



AFTER

MASS
130
AREA
3970
HEIGHT
1875
20-Jul-2023
15:04
linh
pham



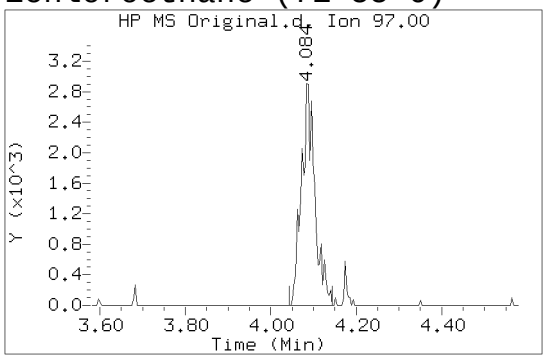
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071404.D
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

1,1,1-Trichloroethane (71-55-6)

Reason Code:

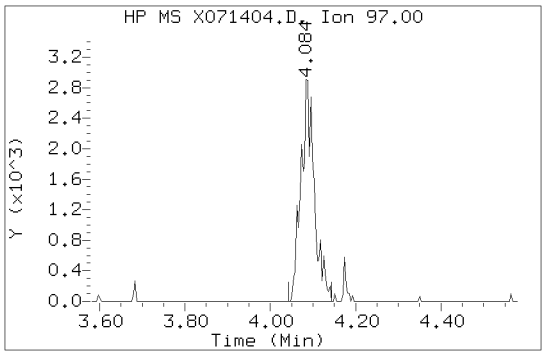
BEFORE

MASS
97
AREA
6398
HEIGHT
2905
20-Jul-2023
15:04
linh
pham



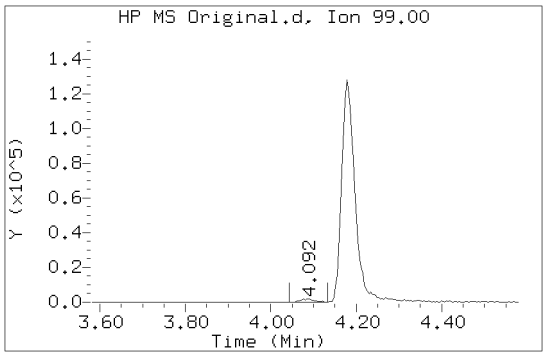
AFTER

MASS
97
AREA
6398
HEIGHT
2905
20-Jul-2023
15:04
linh
pham



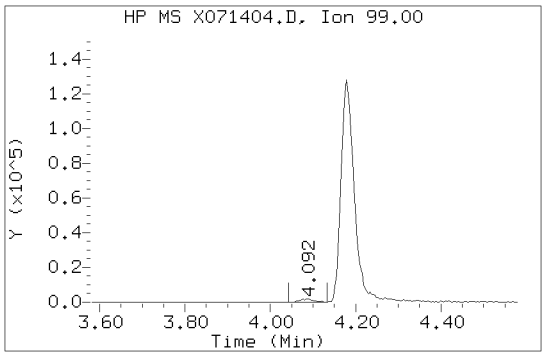
BEFORE

MASS
99
AREA
4128
HEIGHT
1962
20-Jul-2023
15:04
linh
pham



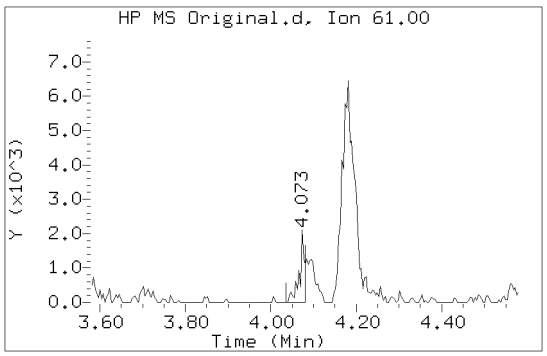
AFTER

MASS
99
AREA
4128
HEIGHT
1962
20-Jul-2023
15:04
linh
pham



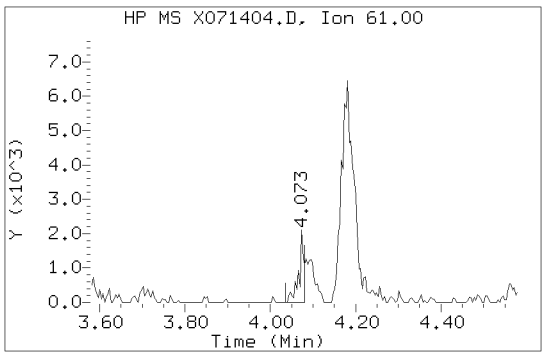
BEFORE

MASS
61
AREA
1719
HEIGHT
2107
20-Jul-2023
15:04
linh
pham



AFTER

MASS
61
AREA
1719
HEIGHT
2107
20-Jul-2023
15:04
linh
pham

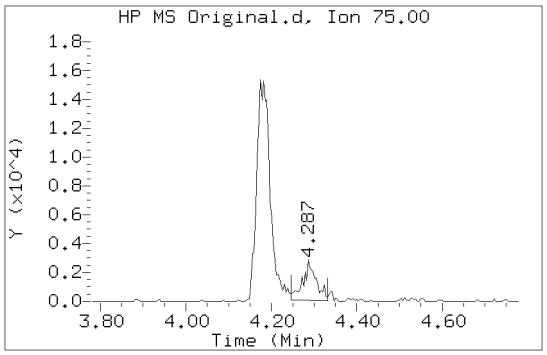


1,1-Dichloropropene (563-58-6)

Reason Code:

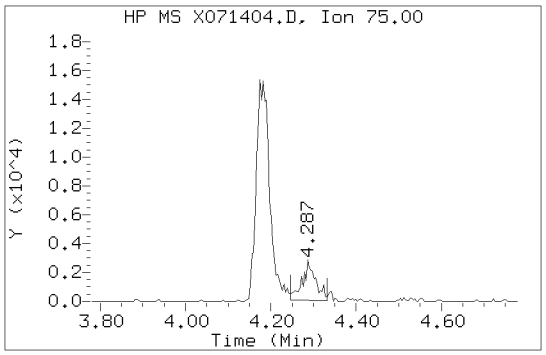
BEFORE

MASS
75
AREA
6097
HEIGHT
2831
20-Jul-2023
15:04
linh
pham



AFTER

MASS
75
AREA
6097
HEIGHT
2831
20-Jul-2023
15:04
linh
pham



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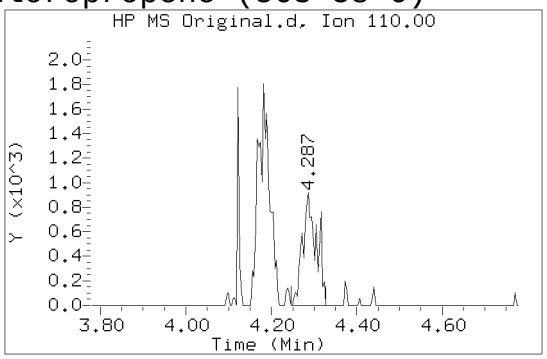
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

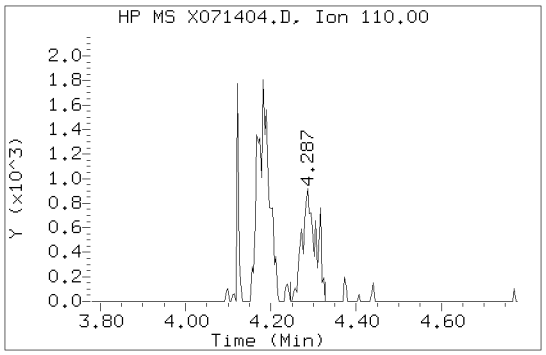
1,1-Dichloropropene (563-58-6)

Reason Code:

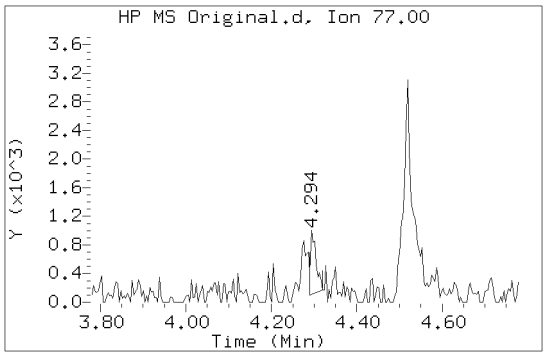
BEFORE
MASS
110
AREA
2079
HEIGHT
917
20-Jul-2023
15:04
linh
pham



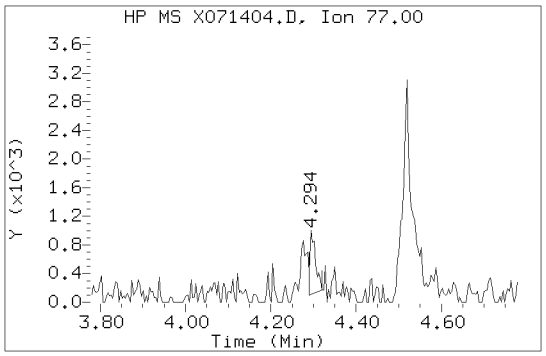
AFTER
MASS
110
AREA
2079
HEIGHT
917
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
77
AREA
821
HEIGHT
892
20-Jul-2023
15:04
linh
pham



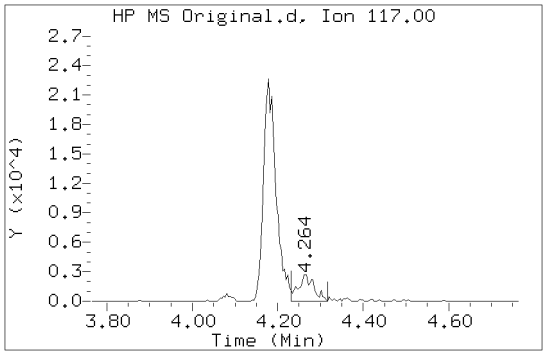
AFTER
MASS
77
AREA
821
HEIGHT
892
20-Jul-2023
15:04
linh
pham



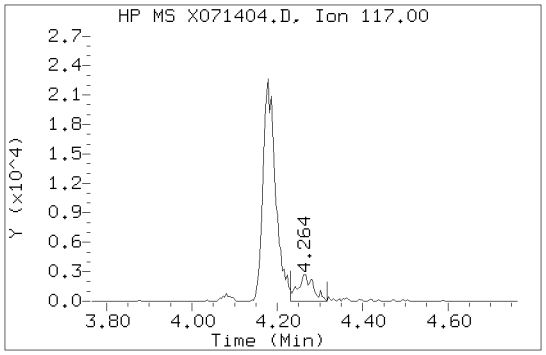
Carbon Tetrachloride (56-23-5)

Reason Code:

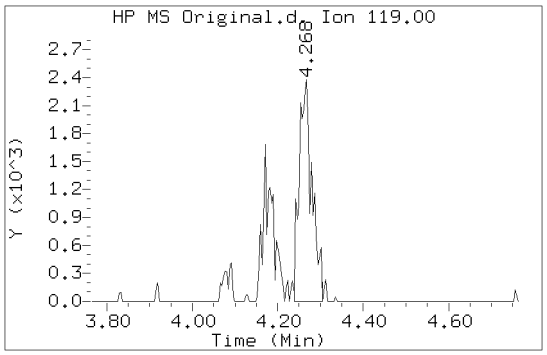
BEFORE
MASS
117
AREA
7002
HEIGHT
2701
20-Jul-2023
15:04
linh
pham



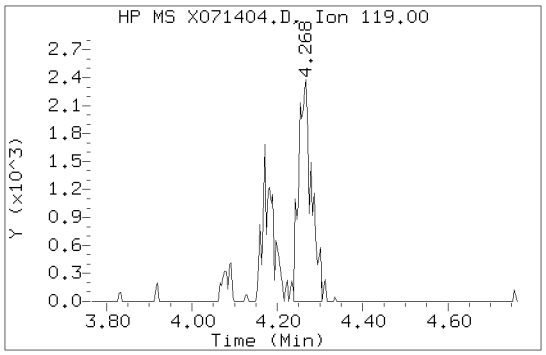
AFTER
MASS
117
AREA
7002
HEIGHT
2701
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
119
AREA
5029
HEIGHT
2378
20-Jul-2023
15:04
linh
pham



AFTER
MASS
119
AREA
5029
HEIGHT
2378
20-Jul-2023
15:04
linh
pham



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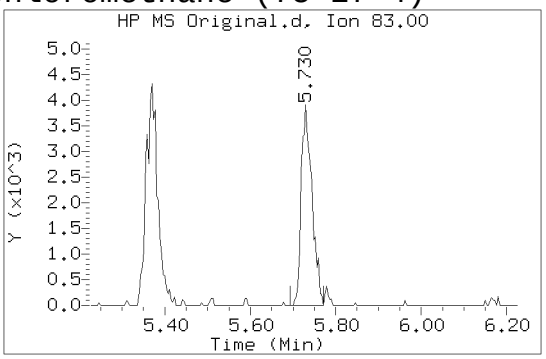
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

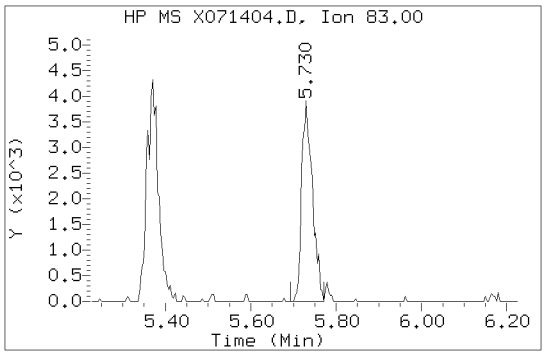
Bromodichloromethane (75-27-4)

Reason Code:

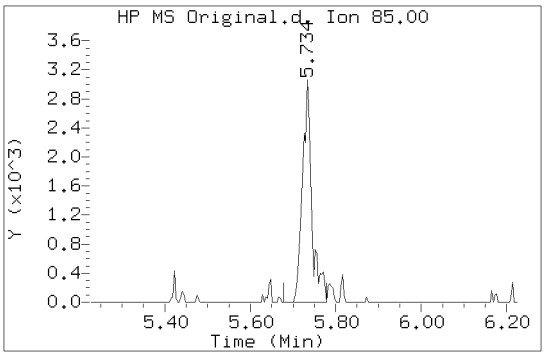
BEFORE
MASS
83
AREA
6967
HEIGHT
3917
20-Jul-2023
15:04
linh
pham



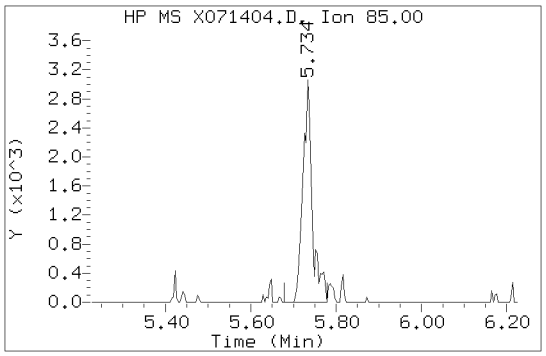
AFTER
MASS
83
AREA
6967
HEIGHT
3917
20-Jul-2023
15:04
linh
pham



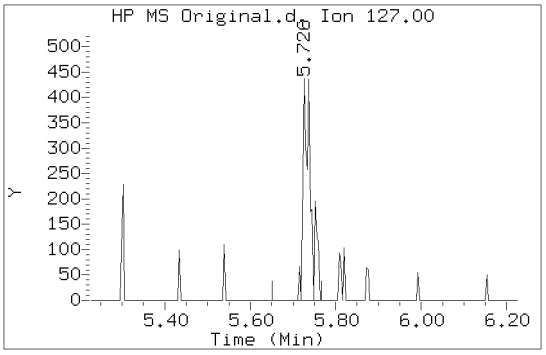
BEFORE
MASS
85
AREA
4797
HEIGHT
3061
20-Jul-2023
15:04
linh
pham



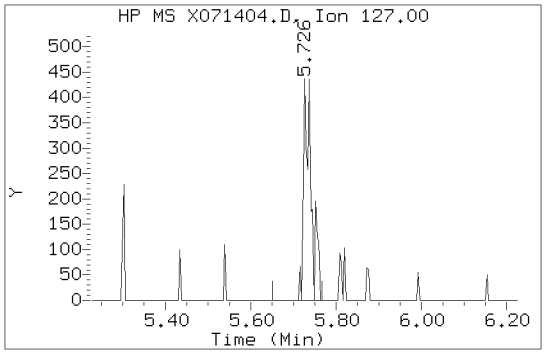
AFTER
MASS
85
AREA
4797
HEIGHT
3061
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
127
AREA
568
HEIGHT
437
20-Jul-2023
15:04
linh
pham



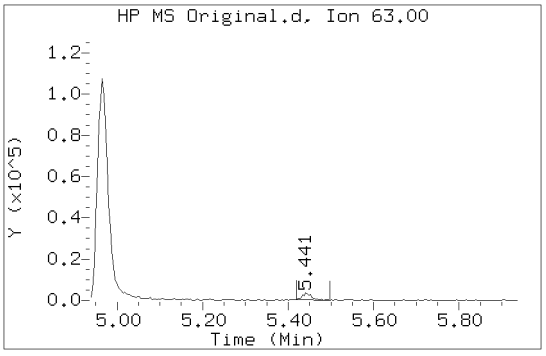
AFTER
MASS
127
AREA
568
HEIGHT
437
20-Jul-2023
15:04
linh
pham



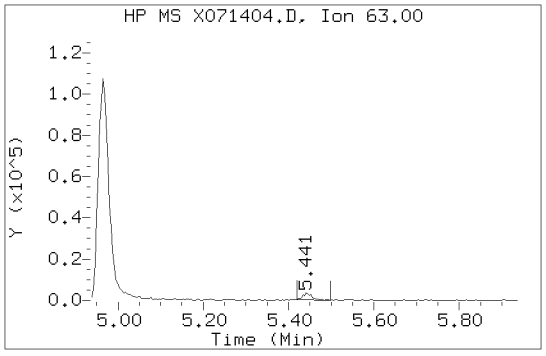
1,2-Dichloropropane (78-87-5)

Reason Code:

BEFORE
MASS
63
AREA
5153
HEIGHT
3474
20-Jul-2023
15:04
linh
pham



AFTER
MASS
63
AREA
5153
HEIGHT
3474
20-Jul-2023
15:04
linh
pham



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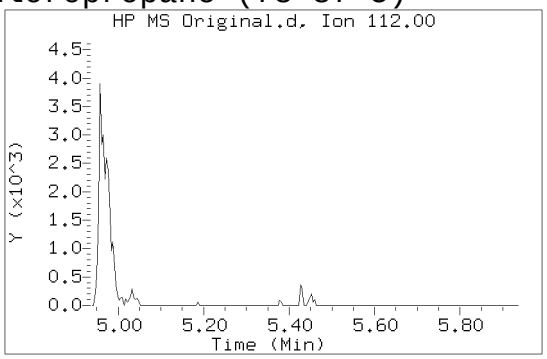
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

1,2-Dichloropropane (78-87-5)

Reason Code:

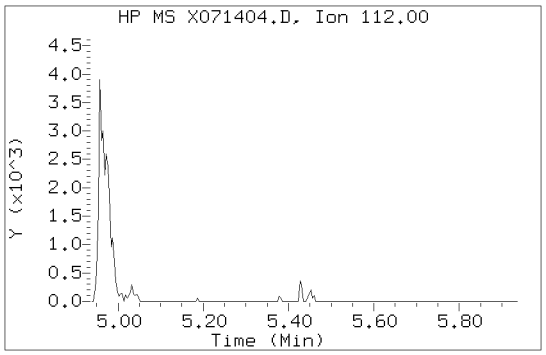
BEFORE

MASS
112
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
112
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

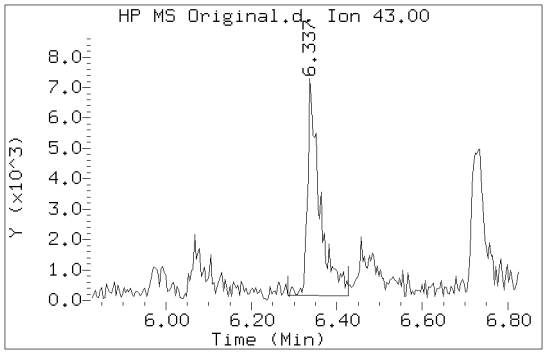


4-Methyl-2-Pentanone (108-10-1)

Reason Code:

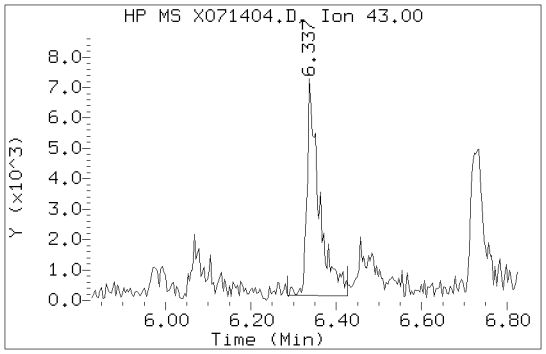
BEFORE

MASS
43
AREA
14106
HEIGHT
7121
20-Jul-2023
15:04
linh
pham



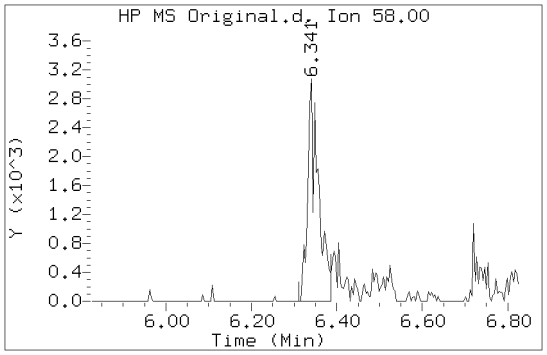
AFTER

MASS
43
AREA
14106
HEIGHT
7121
20-Jul-2023
15:04
linh
pham



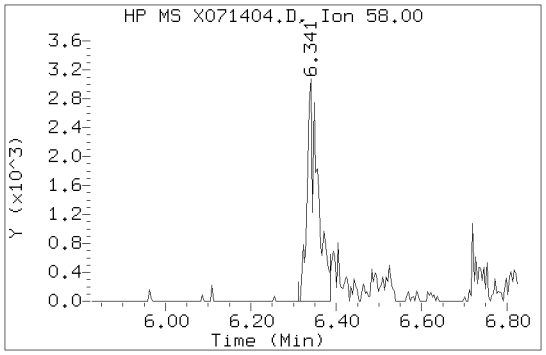
BEFORE

MASS
58
AREA
5370
HEIGHT
3077
20-Jul-2023
15:04
linh
pham



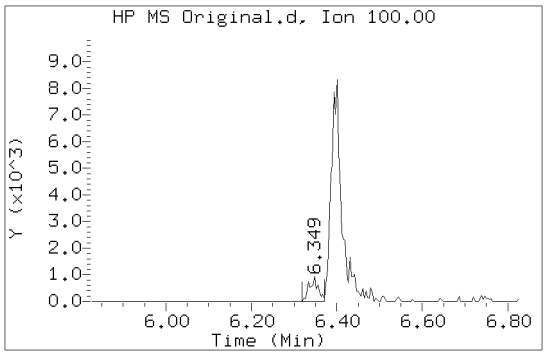
AFTER

MASS
58
AREA
5370
HEIGHT
3077
20-Jul-2023
15:04
linh
pham



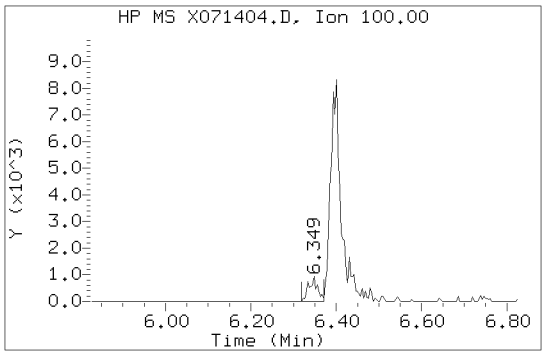
BEFORE

MASS
100
AREA
1328
HEIGHT
944
20-Jul-2023
15:04
linh
pham



AFTER

MASS
100
AREA
1328
HEIGHT
944
20-Jul-2023
15:04
linh
pham



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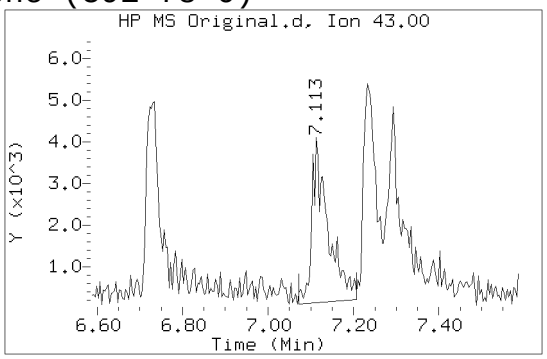
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

2-Hexanone (591-78-6)

Reason Code:

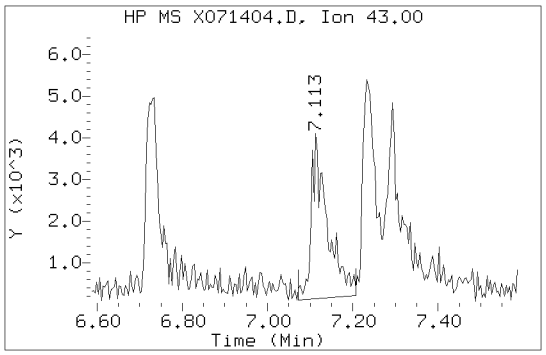
BEFORE

MASS
43
AREA
10319
HEIGHT
3957
20-Jul-2023
15:04
linh
pham



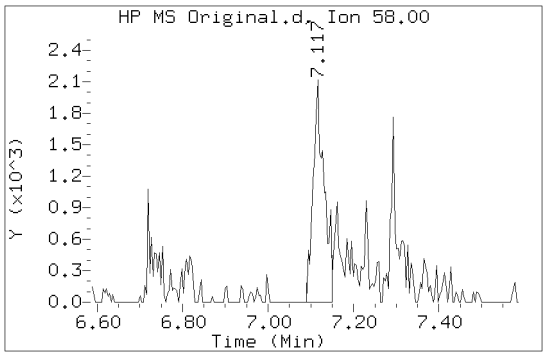
AFTER

MASS
43
AREA
10319
HEIGHT
3957
20-Jul-2023
15:04
linh
pham



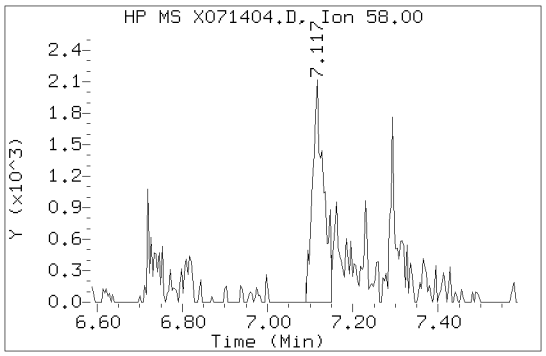
BEFORE

MASS
58
AREA
3772
HEIGHT
2118
20-Jul-2023
15:04
linh
pham



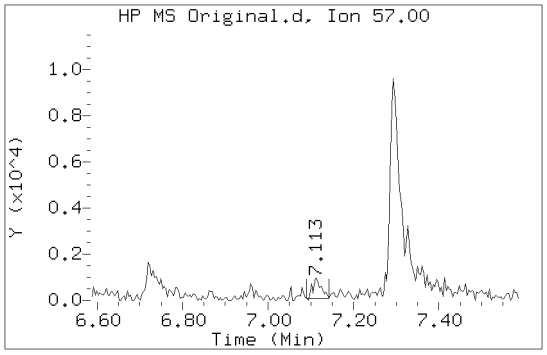
AFTER

MASS
58
AREA
3772
HEIGHT
2118
20-Jul-2023
15:04
linh
pham



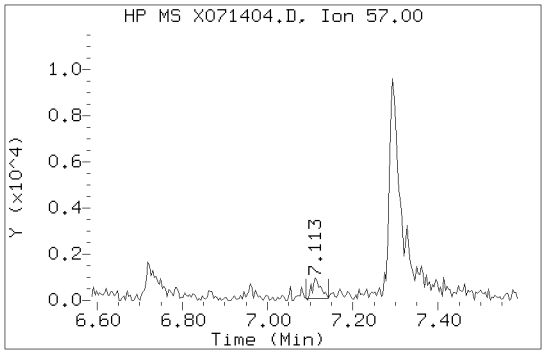
BEFORE

MASS
57
AREA
1177
HEIGHT
882
20-Jul-2023
15:04
linh
pham



AFTER

MASS
57
AREA
1177
HEIGHT
882
20-Jul-2023
15:04
linh
pham

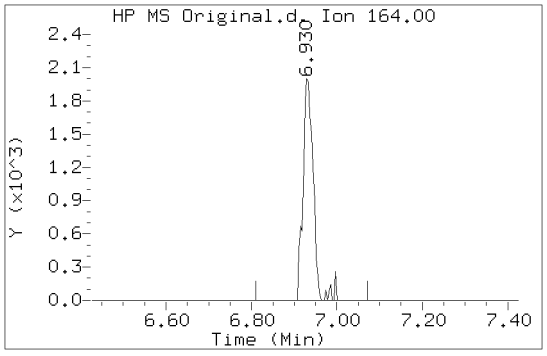


Tetrachloroethene (127-18-4)

Reason Code:

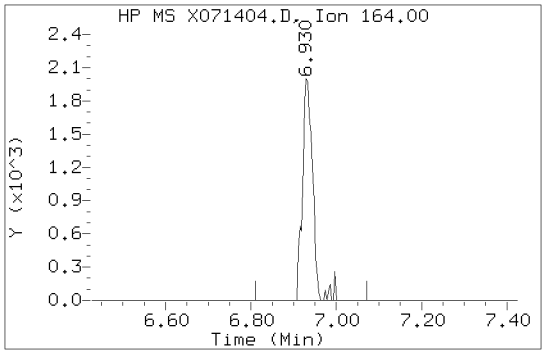
BEFORE

MASS
164
AREA
3431
HEIGHT
2001
20-Jul-2023
15:04
linh
pham



AFTER

MASS
164
AREA
3431
HEIGHT
2001
20-Jul-2023
15:04
linh
pham

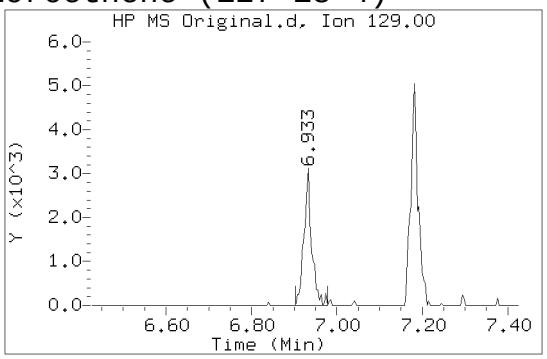


Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071404.D
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

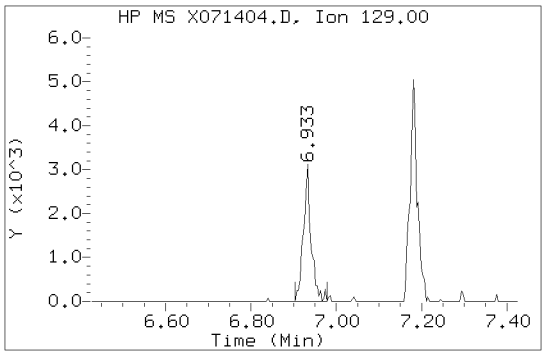
Tetrachloroethene (127-18-4)

Reason Code:

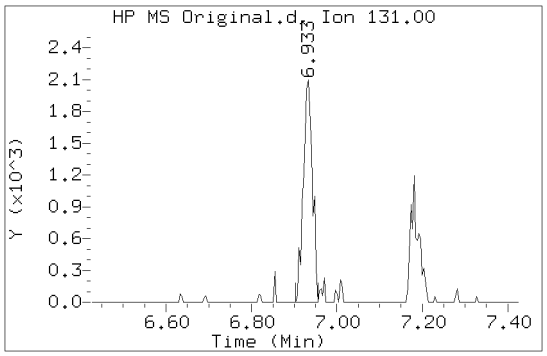
BEFORE
MASS
129
AREA
3977
HEIGHT
3127
20-Jul-2023
15:04
linh
pham



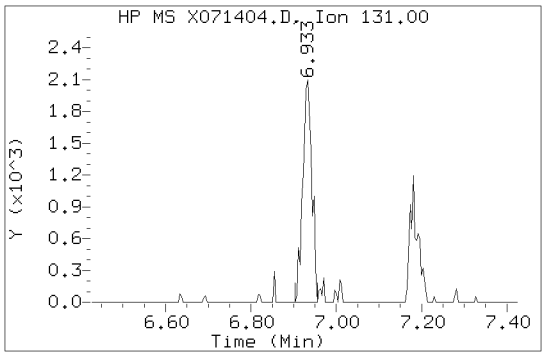
AFTER
MASS
129
AREA
3977
HEIGHT
3127
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
131
AREA
3184
HEIGHT
2098
20-Jul-2023
15:04
linh
pham



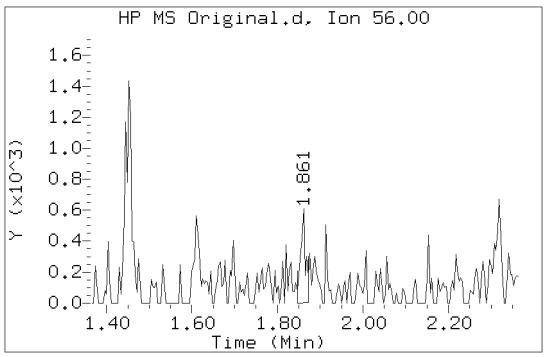
AFTER
MASS
131
AREA
3184
HEIGHT
2098
20-Jul-2023
15:04
linh
pham



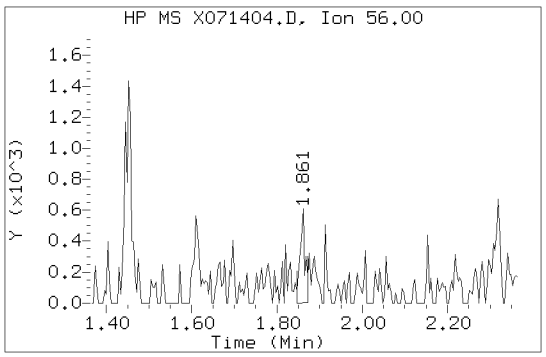
Acrolein (107-02-8)

Reason Code:

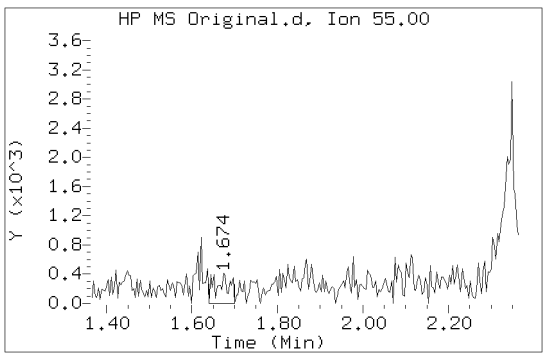
BEFORE
MASS
56
AREA
510
HEIGHT
608
20-Jul-2023
15:04
linh
pham



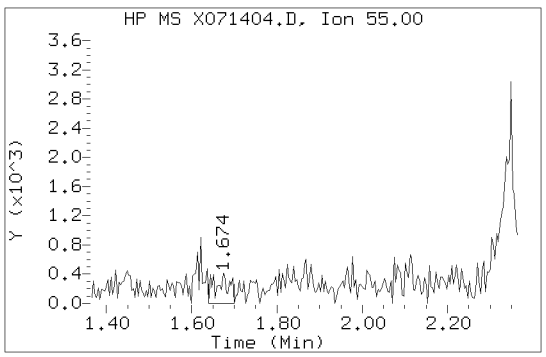
AFTER
MASS
56
AREA
510
HEIGHT
608
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
55
AREA
888
HEIGHT
412
20-Jul-2023
15:04
linh
pham



AFTER
MASS
55
AREA
888
HEIGHT
412
20-Jul-2023
15:04
linh
pham



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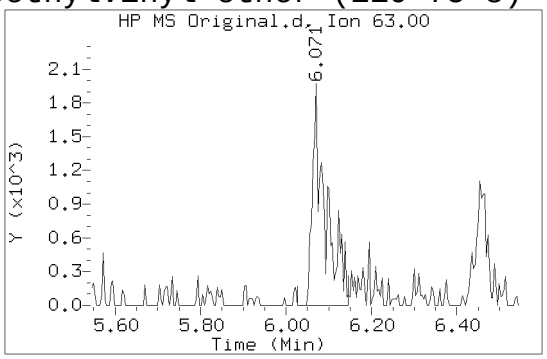
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

2-Chloroethylvinyl ether (110-75-8)

Reason Code:

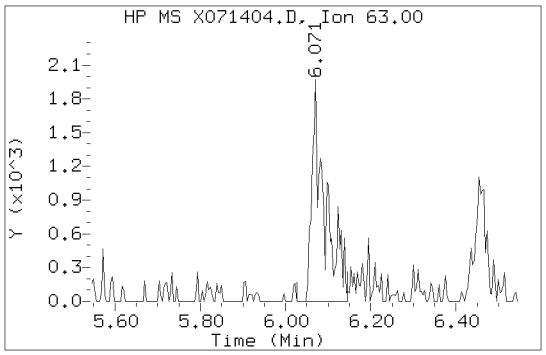
BEFORE

MASS
63
AREA
4176
HEIGHT
1971
20-Jul-2023
15:04
linh
pham



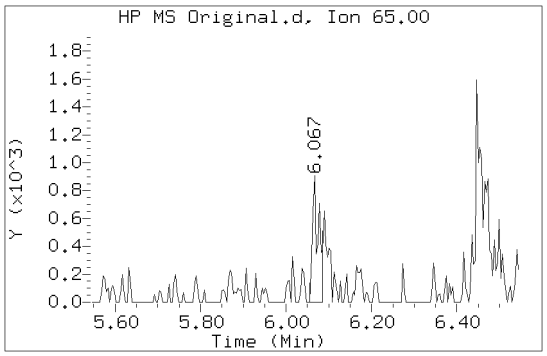
AFTER

MASS
63
AREA
4176
HEIGHT
1971
20-Jul-2023
15:04
linh
pham



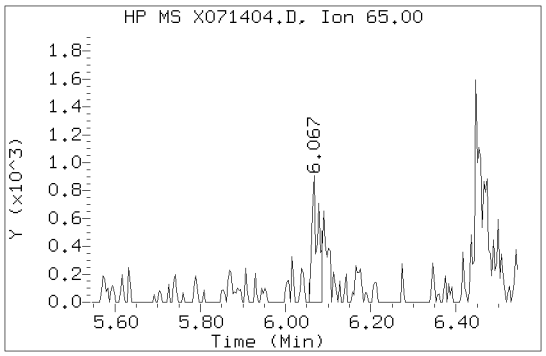
BEFORE

MASS
65
AREA
920
HEIGHT
907
20-Jul-2023
15:04
linh
pham



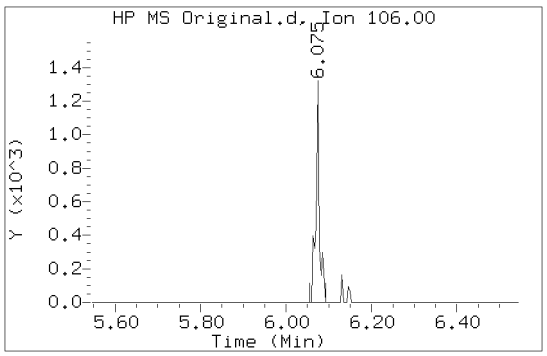
AFTER

MASS
65
AREA
920
HEIGHT
907
20-Jul-2023
15:04
linh
pham



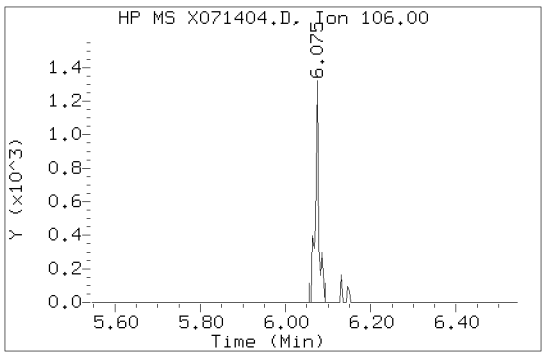
BEFORE

MASS
106
AREA
764
HEIGHT
1322
20-Jul-2023
15:04
linh
pham



AFTER

MASS
106
AREA
764
HEIGHT
1322
20-Jul-2023
15:04
linh
pham

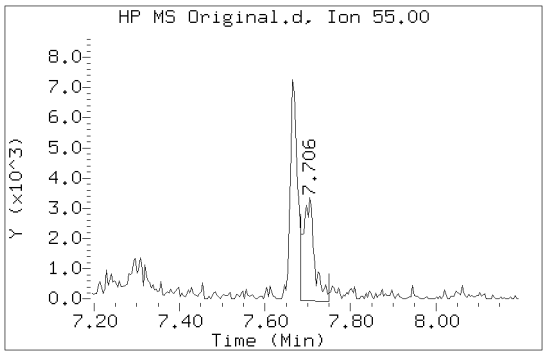


1-Chlorohexane (544-10-5)

Reason Code:

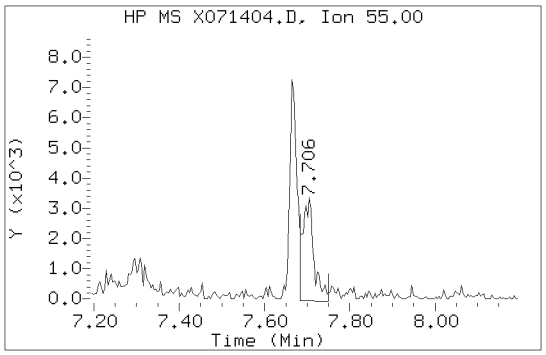
BEFORE

MASS
55
AREA
6663
HEIGHT
3425
20-Jul-2023
15:04
linh
pham



AFTER

MASS
55
AREA
6663
HEIGHT
3425
20-Jul-2023
15:04
linh
pham



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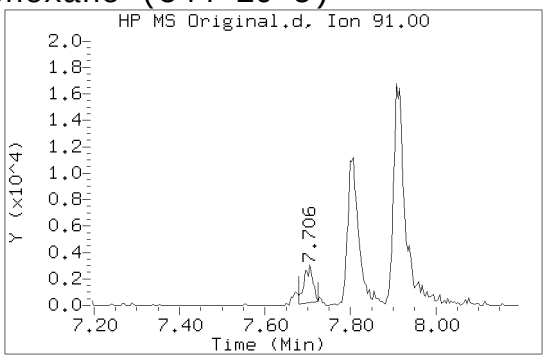
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

1-Chlorohexane (544-10-5)

Reason Code:

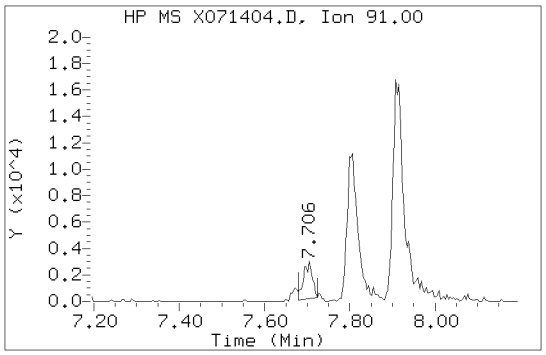
BEFORE

MASS
91
AREA
4133
HEIGHT
2845
20-Jul-2023
15:04
linh
pham



AFTER

MASS
91
AREA
4133
HEIGHT
2845
20-Jul-2023
15:04
linh
pham

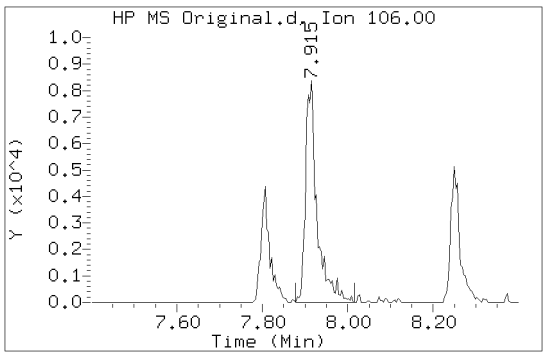


m,p-Xylenes ()

Reason Code:

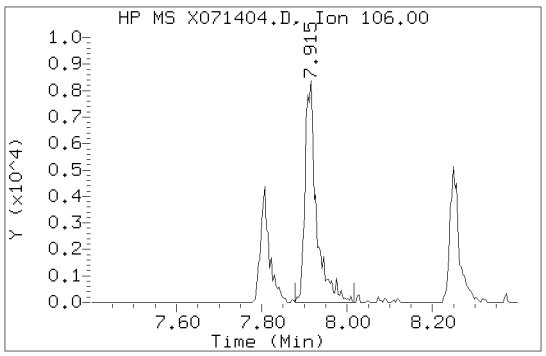
BEFORE

MASS
106
AREA
15703
HEIGHT
8376
20-Jul-2023
15:04
linh
pham



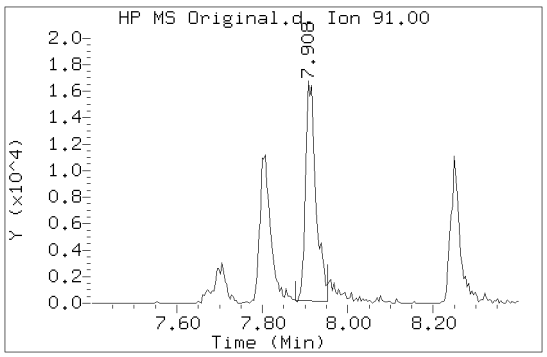
AFTER

MASS
106
AREA
15703
HEIGHT
8376
20-Jul-2023
15:04
linh
pham



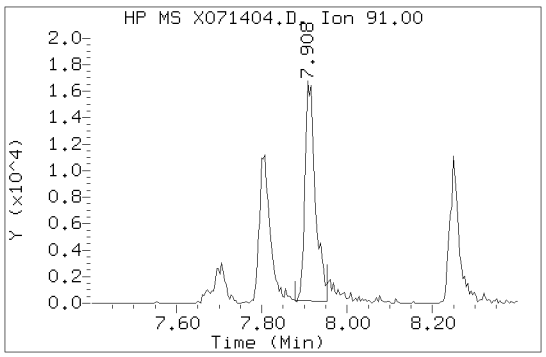
BEFORE

MASS
91
AREA
28386
HEIGHT
16587
20-Jul-2023
15:04
linh
pham



AFTER

MASS
91
AREA
28386
HEIGHT
16587
20-Jul-2023
15:04
linh
pham

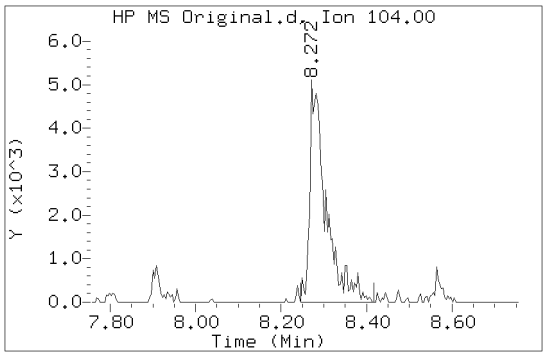


Styrene (100-42-5)

Reason Code:

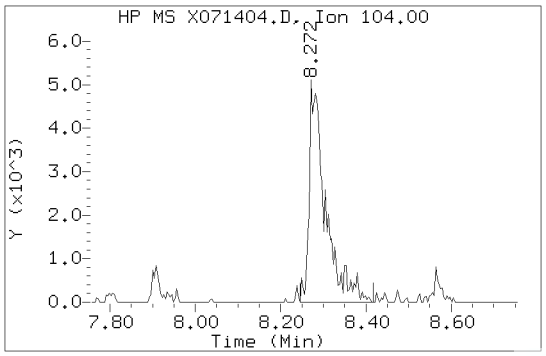
BEFORE

MASS
104
AREA
13315
HEIGHT
5109
20-Jul-2023
15:04
linh
pham



AFTER

MASS
104
AREA
13315
HEIGHT
5109
20-Jul-2023
15:04
linh
pham



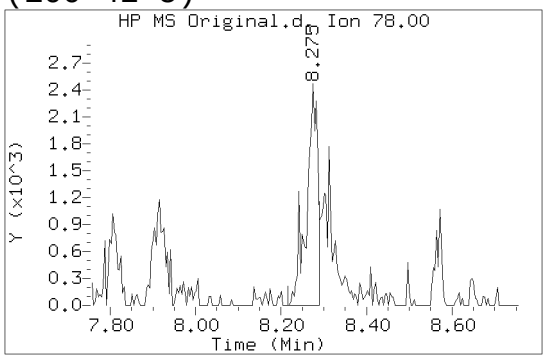
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071404.D
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

Styrene (100-42-5)

Reason Code:

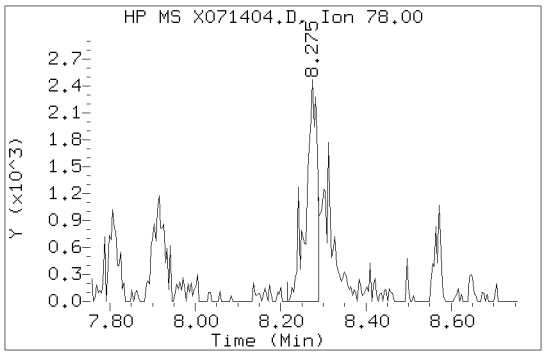
BEFORE

MASS
78
AREA
4442
HEIGHT
2469
20-Jul-2023
15:04
linh
pham



AFTER

MASS
78
AREA
4442
HEIGHT
2469
20-Jul-2023
15:04
linh
pham

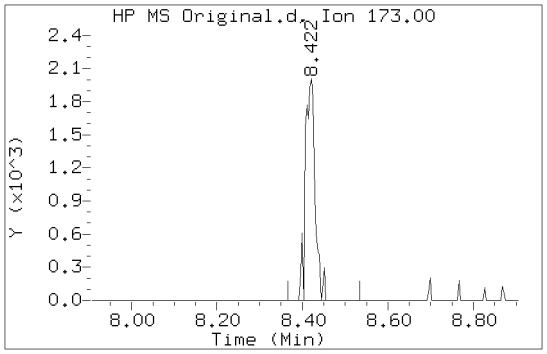


Bromoform (75-25-2)

Reason Code:

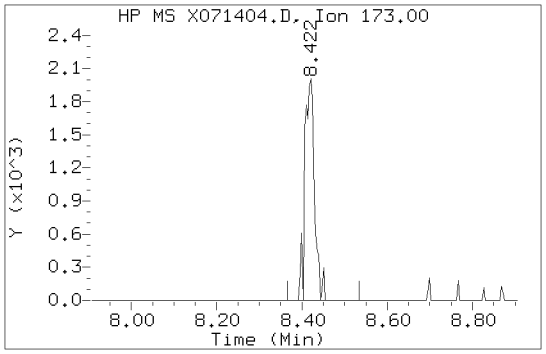
BEFORE

MASS
173
AREA
3238
HEIGHT
2008
20-Jul-2023
15:04
linh
pham



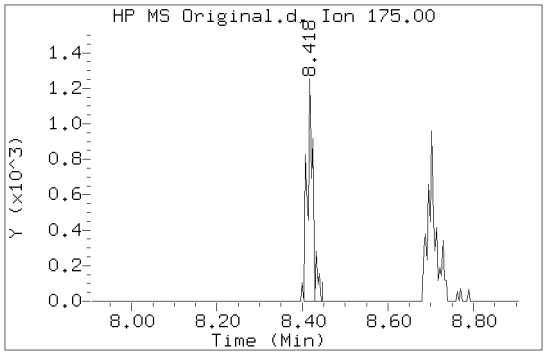
AFTER

MASS
173
AREA
3238
HEIGHT
2008
20-Jul-2023
15:04
linh
pham



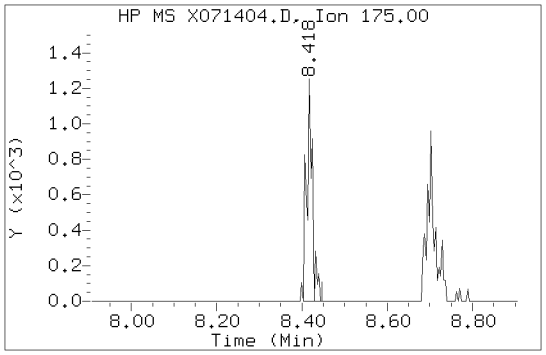
BEFORE

MASS
175
AREA
1174
HEIGHT
1253
20-Jul-2023
15:04
linh
pham



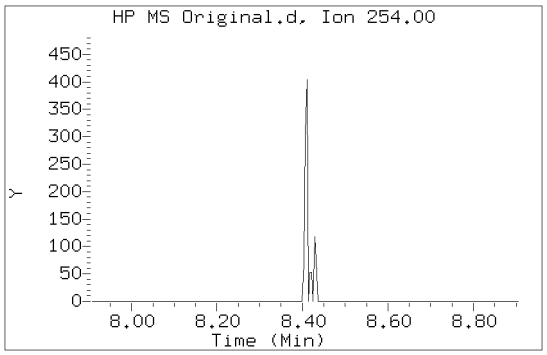
AFTER

MASS
175
AREA
1174
HEIGHT
1253
20-Jul-2023
15:04
linh
pham



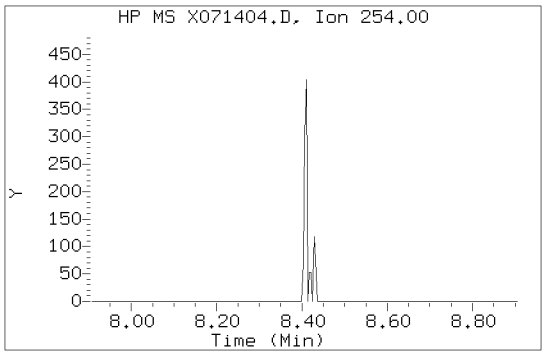
BEFORE

MASS
254
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
254
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

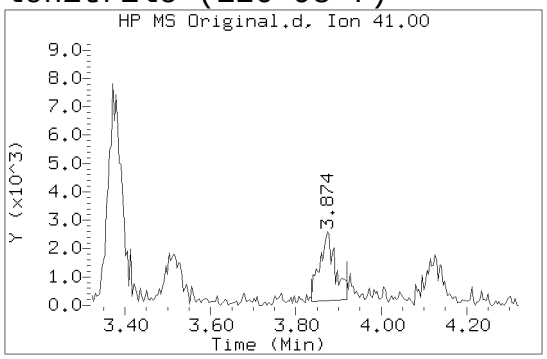


Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071404.D
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

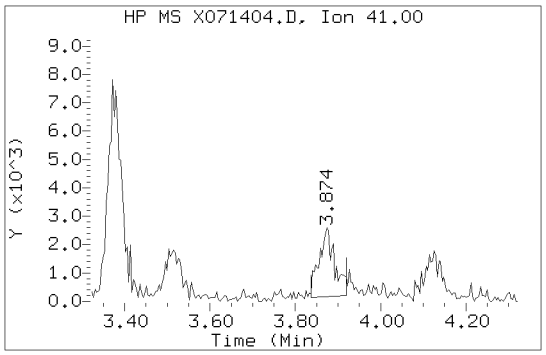
Methacrylonitrile (126-98-7)

Reason Code:

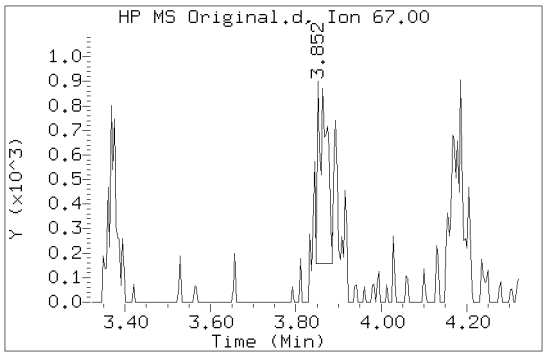
BEFORE
MASS
41
AREA
6195
HEIGHT
2436
20-Jul-2023
15:04
linh
pham



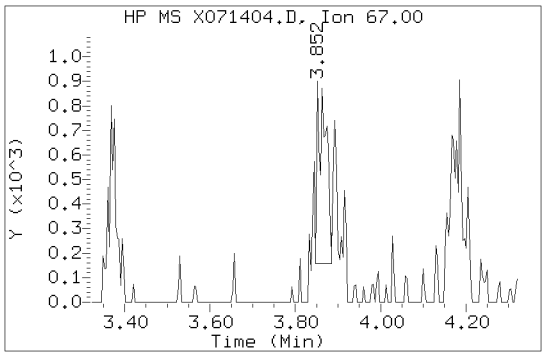
AFTER
MASS
41
AREA
6195
HEIGHT
2436
20-Jul-2023
15:04
linh
pham



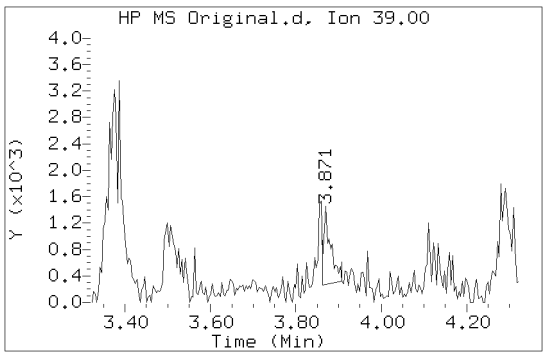
BEFORE
MASS
67
AREA
1024
HEIGHT
744
20-Jul-2023
15:04
linh
pham



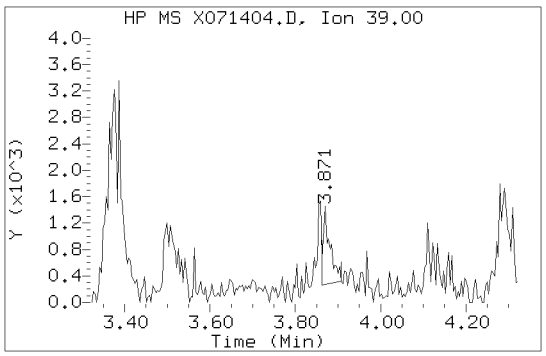
AFTER
MASS
67
AREA
1024
HEIGHT
744
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
39
AREA
1324
HEIGHT
1187
20-Jul-2023
15:04
linh
pham



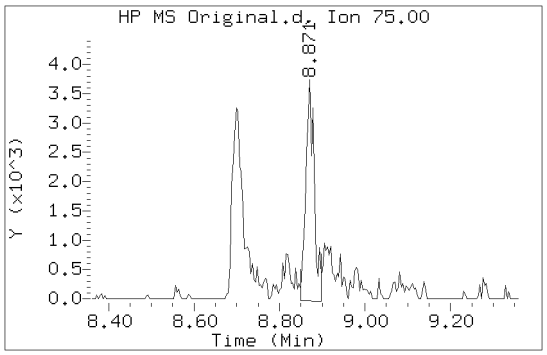
AFTER
MASS
39
AREA
1324
HEIGHT
1187
20-Jul-2023
15:04
linh
pham



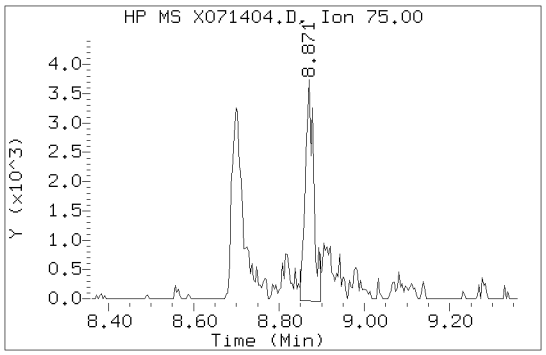
1,2,3-Trichloropropane (96-18-4)

Reason Code:

BEFORE
MASS
75
AREA
5203
HEIGHT
3776
20-Jul-2023
15:04
linh
pham



AFTER
MASS
75
AREA
5203
HEIGHT
3776
20-Jul-2023
15:04
linh
pham



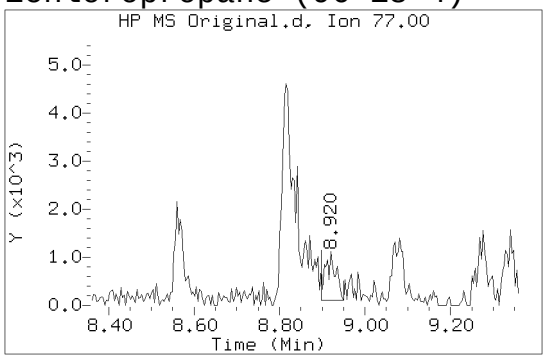
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071404.D
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

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

Reason Code:

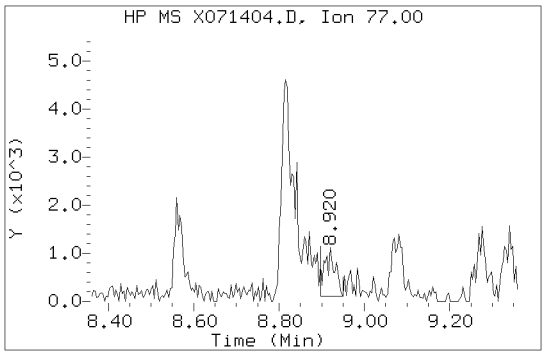
BEFORE

MASS
77
AREA
1749
HEIGHT
1014
20-Jul-2023
15:04
linh
pham



AFTER

MASS
77
AREA
1749
HEIGHT
1014
20-Jul-2023
15:04
linh
pham

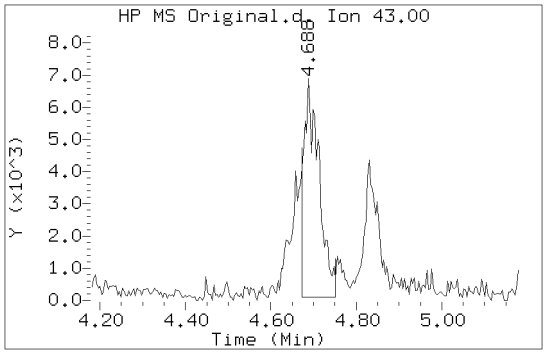


Isobutyl Alcohol (78-83-1)

Reason Code:

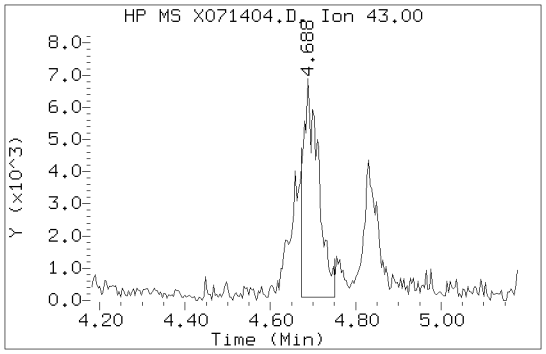
BEFORE

MASS
43
AREA
16938
HEIGHT
6786
20-Jul-2023
15:04
linh
pham



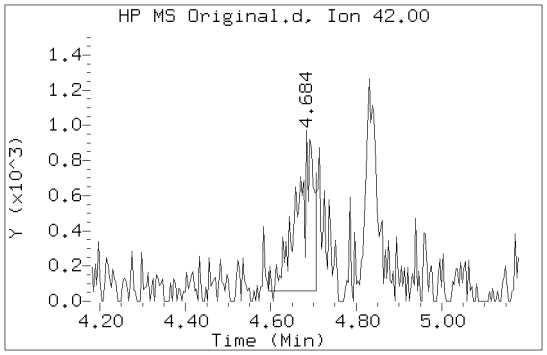
AFTER

MASS
43
AREA
16938
HEIGHT
6786
20-Jul-2023
15:04
linh
pham



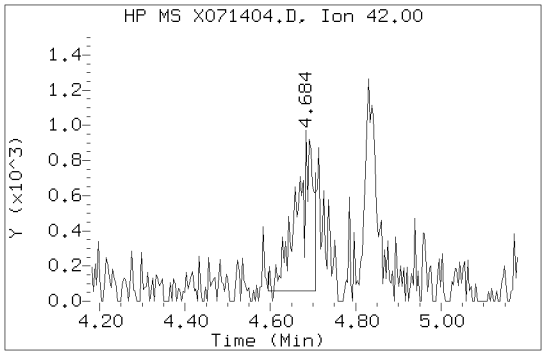
BEFORE

MASS
42
AREA
2469
HEIGHT
914
20-Jul-2023
15:04
linh
pham



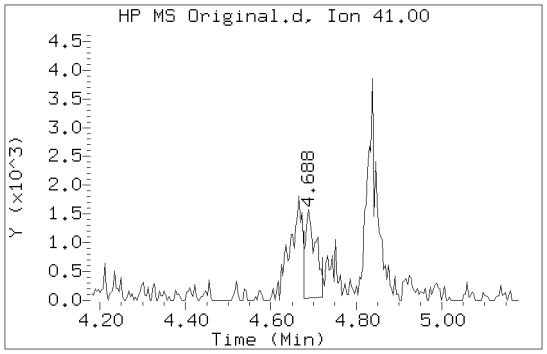
AFTER

MASS
42
AREA
2469
HEIGHT
914
20-Jul-2023
15:04
linh
pham



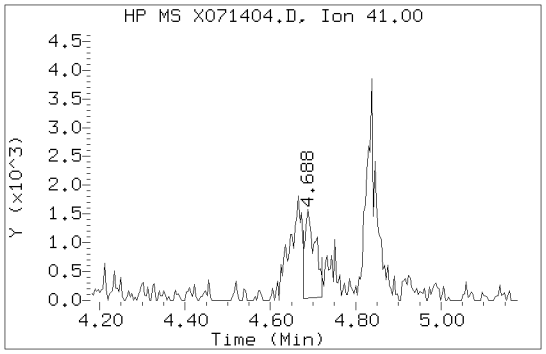
BEFORE

MASS
41
AREA
2733
HEIGHT
1544
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
2733
HEIGHT
1544
20-Jul-2023
15:04
linh
pham



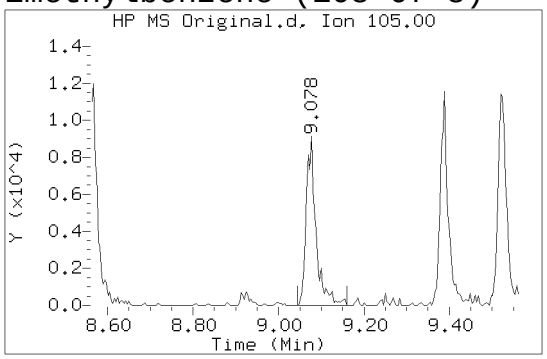
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071404.D
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

1,3,5-Trimethylbenzene (108-67-8)

Reason Code:

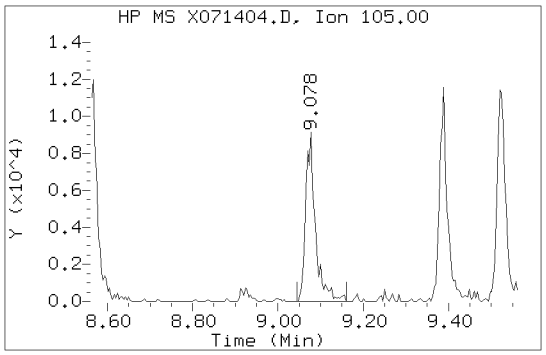
BEFORE

MASS
105
AREA
14649
HEIGHT
9159
20-Jul-2023
15:04
linh
pham



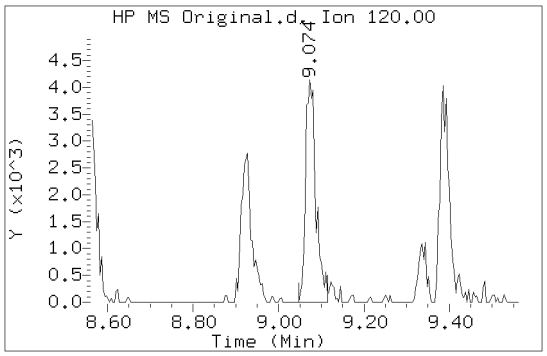
AFTER

MASS
105
AREA
14649
HEIGHT
9159
20-Jul-2023
15:04
linh
pham



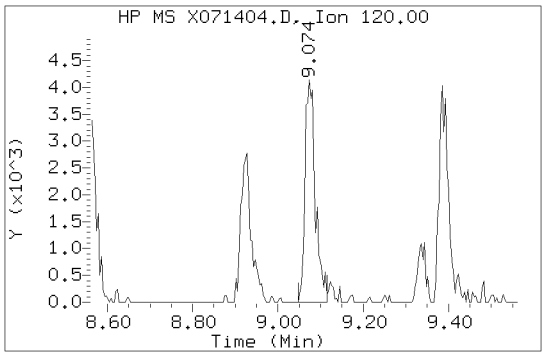
BEFORE

MASS
120
AREA
6985
HEIGHT
4141
20-Jul-2023
15:04
linh
pham



AFTER

MASS
120
AREA
6985
HEIGHT
4141
20-Jul-2023
15:04
linh
pham

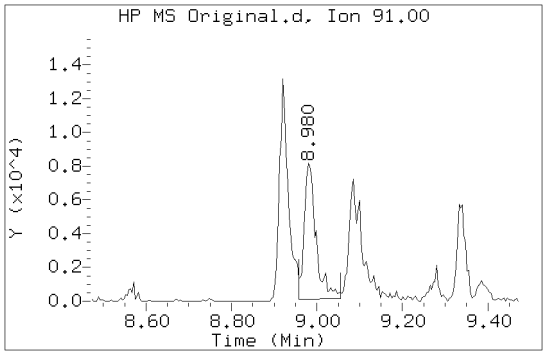


2-Chlorotoluene (95-49-8)

Reason Code:

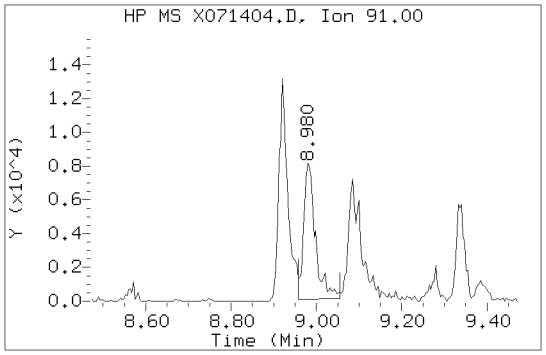
BEFORE

MASS
91
AREA
15937
HEIGHT
8082
20-Jul-2023
15:04
linh
pham



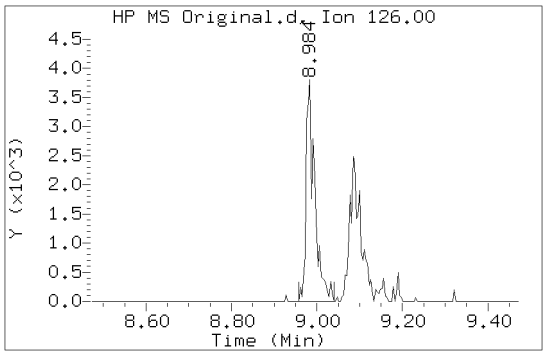
AFTER

MASS
91
AREA
15937
HEIGHT
8082
20-Jul-2023
15:04
linh
pham



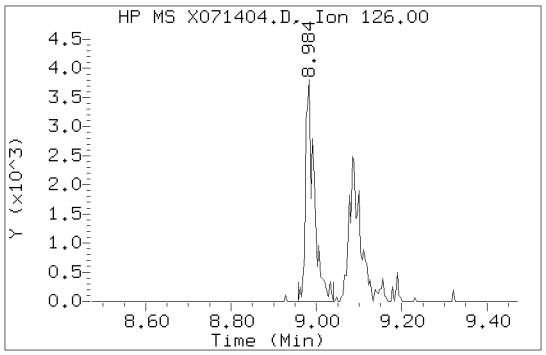
BEFORE

MASS
126
AREA
5351
HEIGHT
3805
20-Jul-2023
15:04
linh
pham



AFTER

MASS
126
AREA
5351
HEIGHT
3805
20-Jul-2023
15:04
linh
pham



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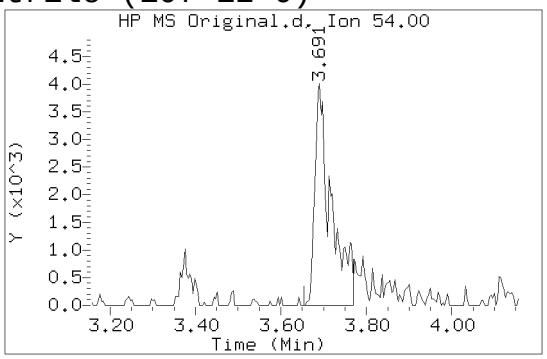
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

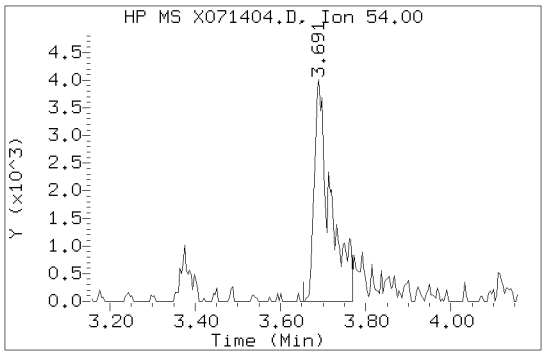
Propionitrile (107-12-0)

Reason Code:

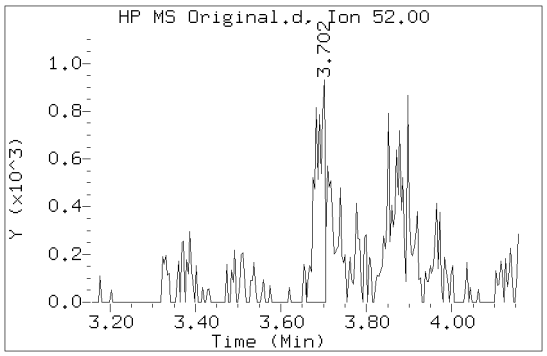
BEFORE
MASS
54
AREA
10495
HEIGHT
4008
20-Jul-2023
15:04
linh
pham



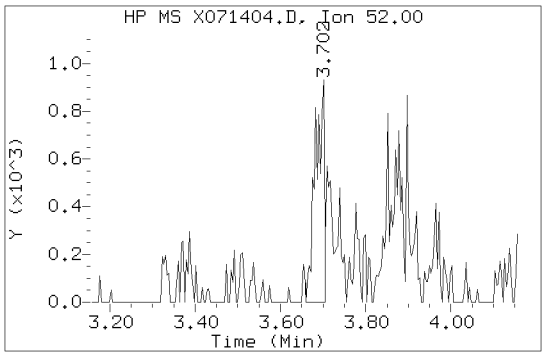
AFTER
MASS
54
AREA
10495
HEIGHT
4008
20-Jul-2023
15:04
linh
pham



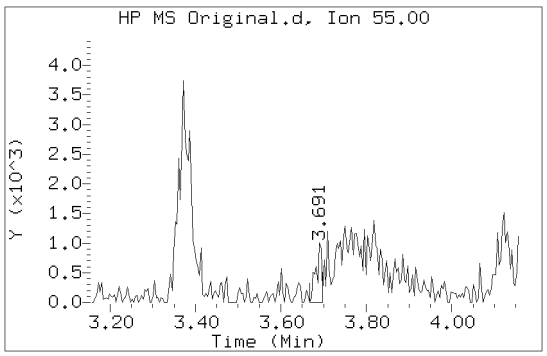
BEFORE
MASS
52
AREA
1356
HEIGHT
931
20-Jul-2023
15:04
linh
pham



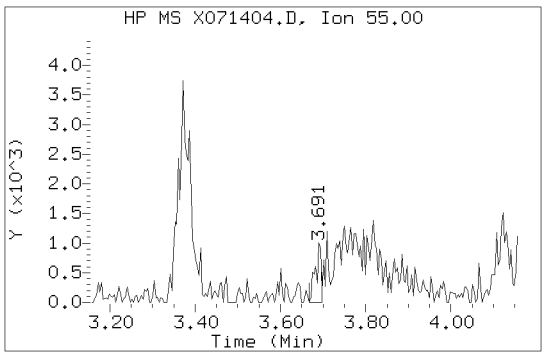
AFTER
MASS
52
AREA
1356
HEIGHT
931
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
55
AREA
924
HEIGHT
1009
20-Jul-2023
15:04
linh
pham



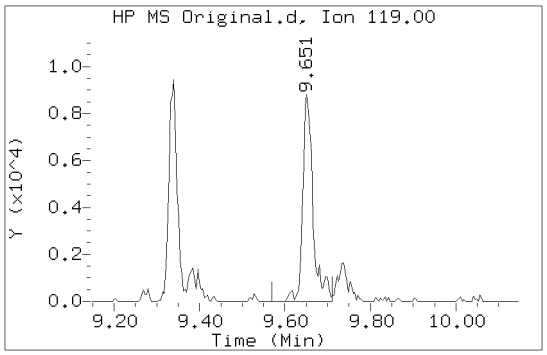
AFTER
MASS
55
AREA
924
HEIGHT
1009
20-Jul-2023
15:04
linh
pham



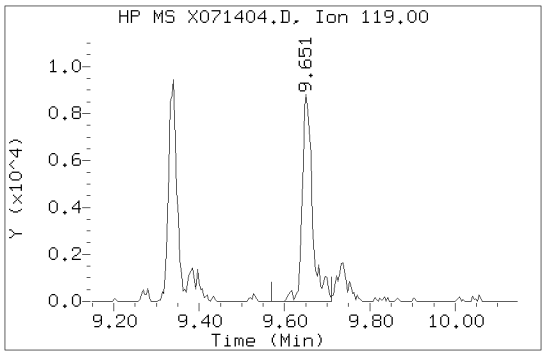
p-Isopropyltoluene (99-87-6)

Reason Code:

BEFORE
MASS
119
AREA
15092
HEIGHT
8813
20-Jul-2023
15:04
linh
pham



AFTER
MASS
119
AREA
15092
HEIGHT
8813
20-Jul-2023
15:04
linh
pham



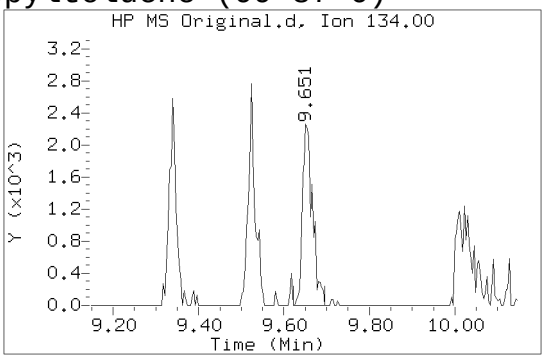
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071404.D
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

p-Isopropyltoluene (99-87-6)

Reason Code:

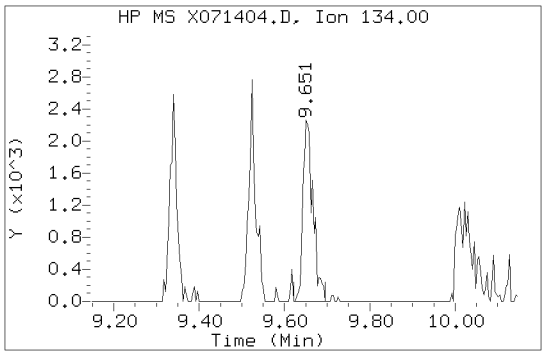
BEFORE

MASS
134
AREA
3764
HEIGHT
2261
20-Jul-2023
15:04
linh
pham



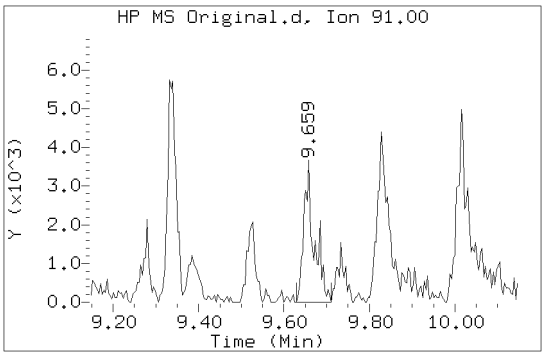
AFTER

MASS
134
AREA
3764
HEIGHT
2261
20-Jul-2023
15:04
linh
pham



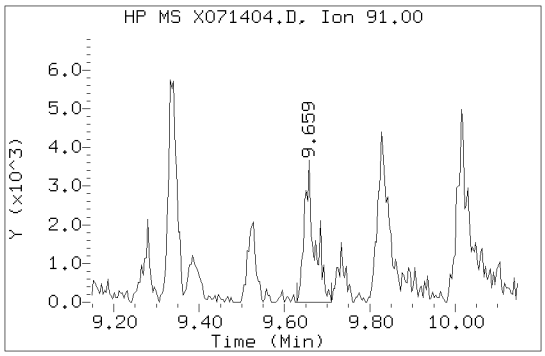
BEFORE

MASS
91
AREA
6124
HEIGHT
3669
20-Jul-2023
15:04
linh
pham



AFTER

MASS
91
AREA
6124
HEIGHT
3669
20-Jul-2023
15:04
linh
pham

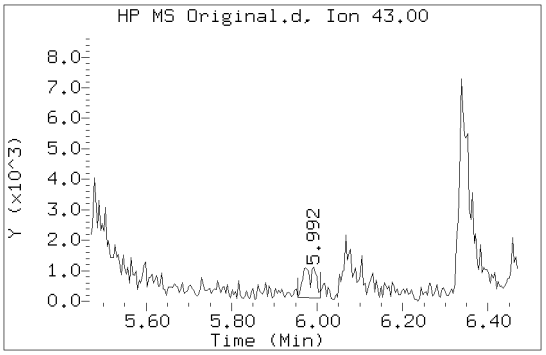


2-Nitropropane (79-46-9)

Reason Code:

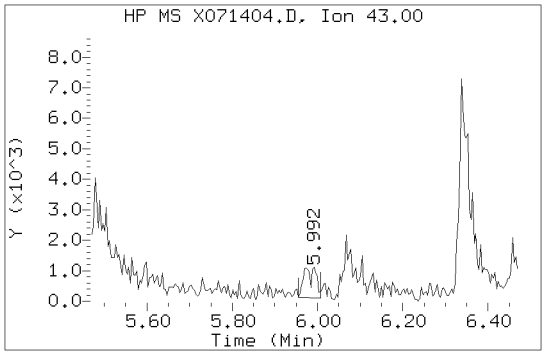
BEFORE

MASS
43
AREA
2054
HEIGHT
1008
20-Jul-2023
15:04
linh
pham



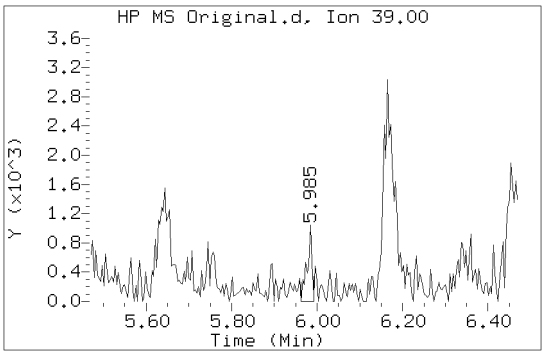
AFTER

MASS
43
AREA
2054
HEIGHT
1008
20-Jul-2023
15:04
linh
pham



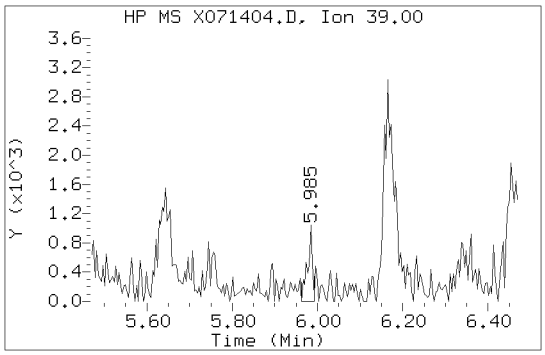
BEFORE

MASS
39
AREA
807
HEIGHT
1040
20-Jul-2023
15:04
linh
pham



AFTER

MASS
39
AREA
807
HEIGHT
1040
20-Jul-2023
15:04
linh
pham



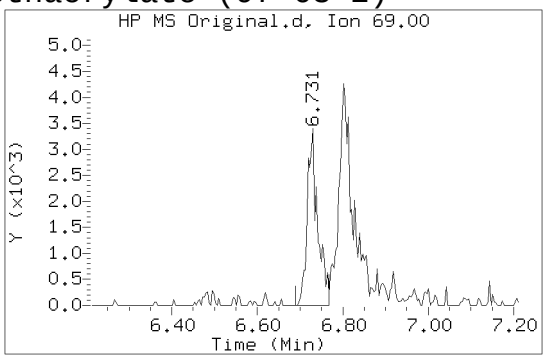
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071404.D
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

Ethyl Methacrylate (97-63-2)

Reason Code:

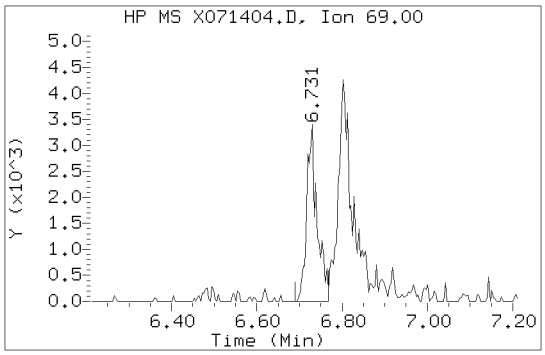
BEFORE

MASS
69
AREA
5749
HEIGHT
3399
20-Jul-2023
15:04
linh
pham



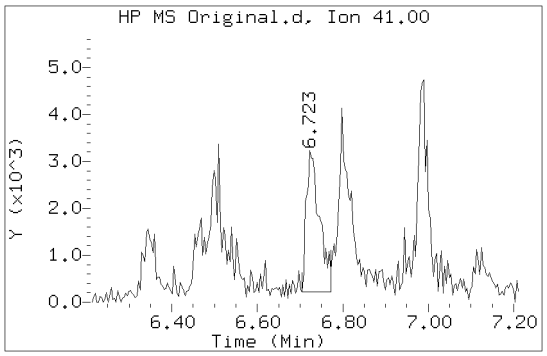
AFTER

MASS
69
AREA
5749
HEIGHT
3399
20-Jul-2023
15:04
linh
pham



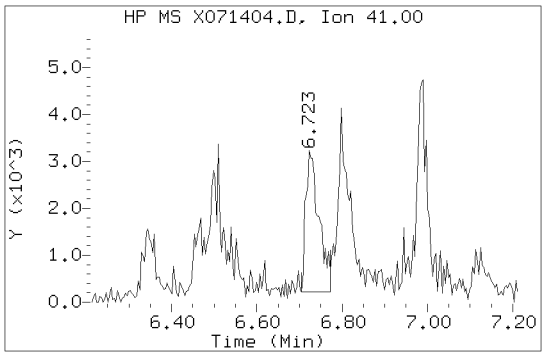
BEFORE

MASS
41
AREA
6505
HEIGHT
3006
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
6505
HEIGHT
3006
20-Jul-2023
15:04
linh
pham

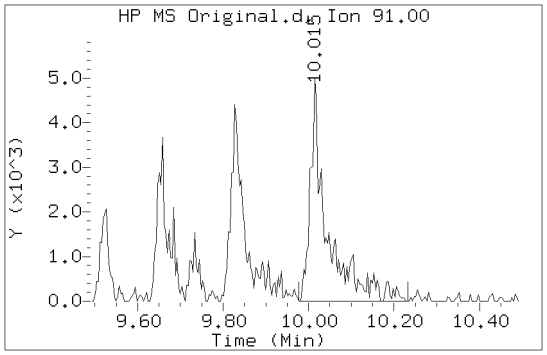


n-Butylbenzene (104-51-8)

Reason Code:

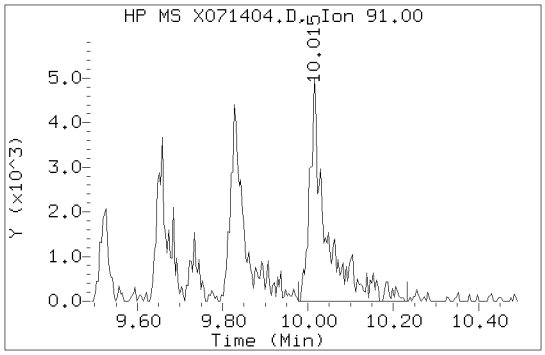
BEFORE

MASS
91
AREA
13321
HEIGHT
4981
20-Jul-2023
15:04
linh
pham



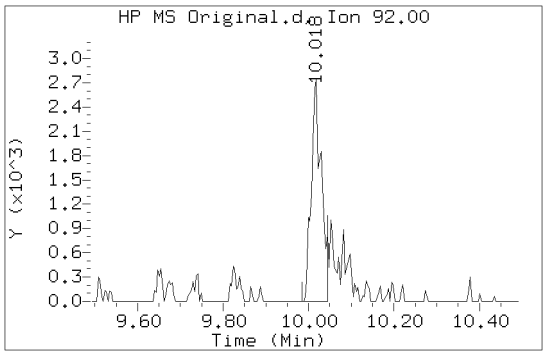
AFTER

MASS
91
AREA
13321
HEIGHT
4981
20-Jul-2023
15:04
linh
pham



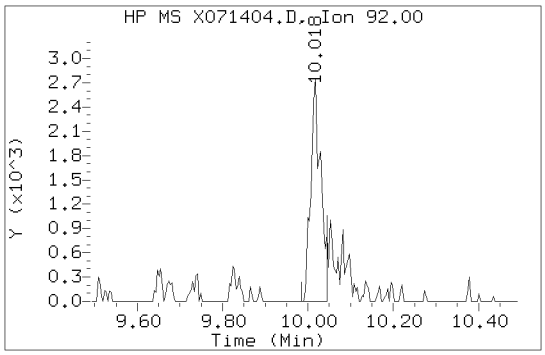
BEFORE

MASS
92
AREA
4505
HEIGHT
2738
20-Jul-2023
15:04
linh
pham



AFTER

MASS
92
AREA
4505
HEIGHT
2738
20-Jul-2023
15:04
linh
pham



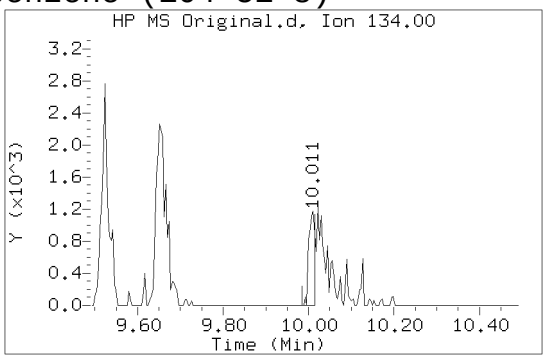
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071404.D
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

n-Butylbenzene (104-51-8)

Reason Code:

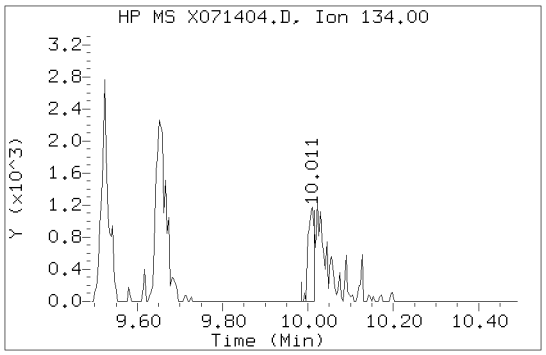
BEFORE

MASS
134
AREA
1125
HEIGHT
1172
20-Jul-2023
15:04
linh
pham



AFTER

MASS
134
AREA
1125
HEIGHT
1172
20-Jul-2023
15:04
linh
pham

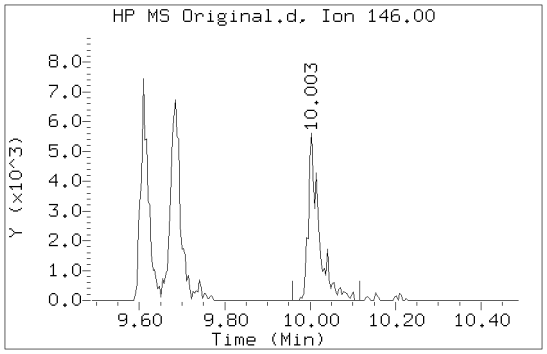


1,2-Dichlorobenzene (95-50-1)

Reason Code:

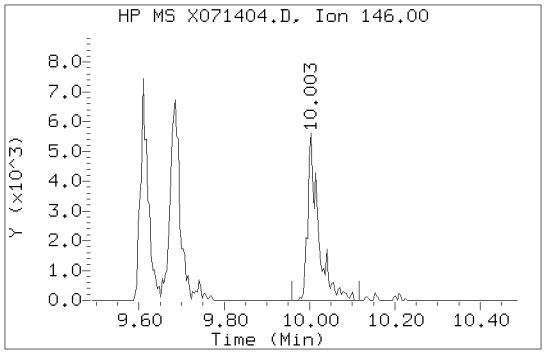
BEFORE

MASS
146
AREA
9791
HEIGHT
5614
20-Jul-2023
15:04
linh
pham



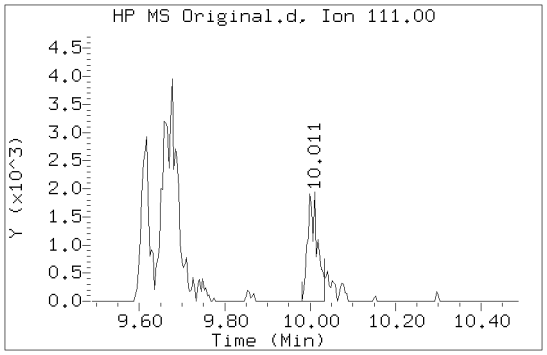
AFTER

MASS
146
AREA
9791
HEIGHT
5614
20-Jul-2023
15:04
linh
pham



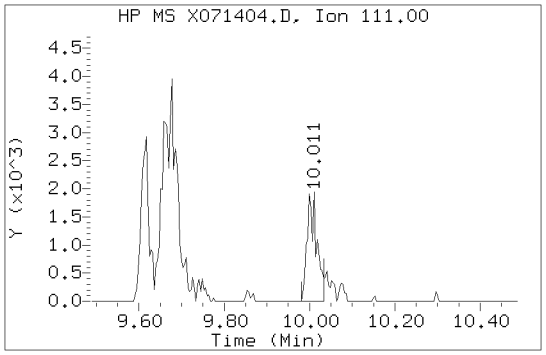
BEFORE

MASS
111
AREA
3070
HEIGHT
1939
20-Jul-2023
15:04
linh
pham



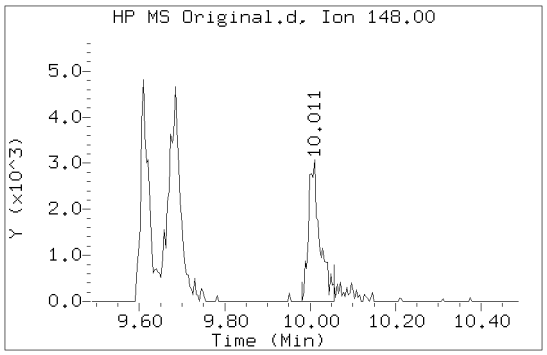
AFTER

MASS
111
AREA
3070
HEIGHT
1939
20-Jul-2023
15:04
linh
pham



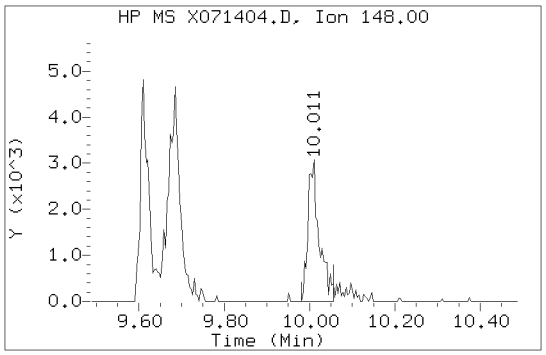
BEFORE

MASS
148
AREA
5707
HEIGHT
3072
20-Jul-2023
15:04
linh
pham



AFTER

MASS
148
AREA
5707
HEIGHT
3072
20-Jul-2023
15:04
linh
pham

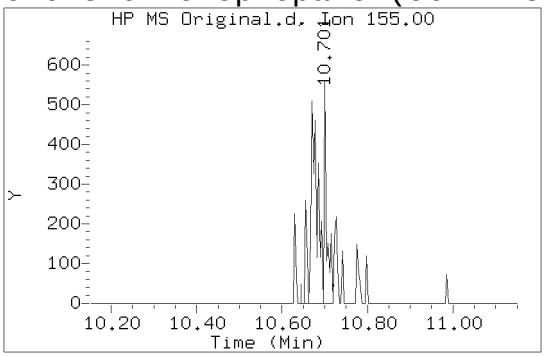


Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071404.D
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

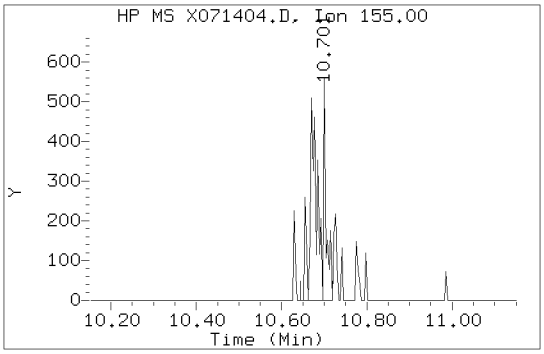
1,2-Dibromo-3-Chloropropane (96-12-8)

Reason Code:

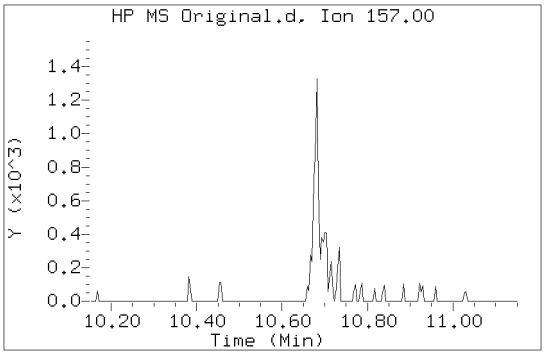
BEFORE
MASS
155
AREA
831
HEIGHT
558
20-Jul-2023
15:04
linh
pham



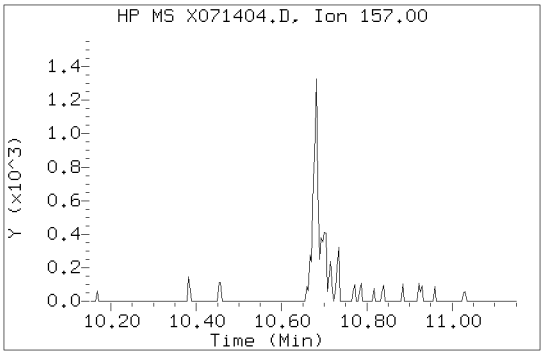
AFTER
MASS
155
AREA
831
HEIGHT
558
20-Jul-2023
15:04
linh
pham



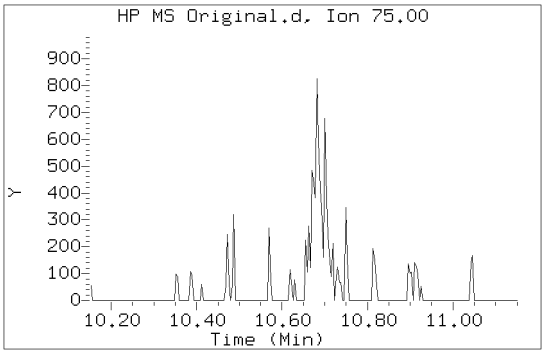
BEFORE
MASS
157
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



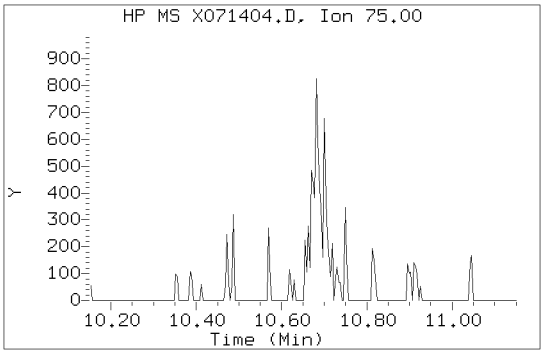
AFTER
MASS
157
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
75
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



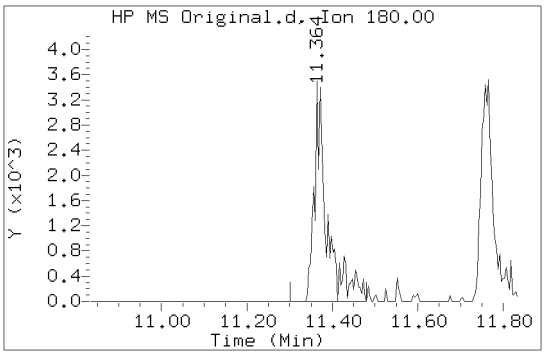
AFTER
MASS
75
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



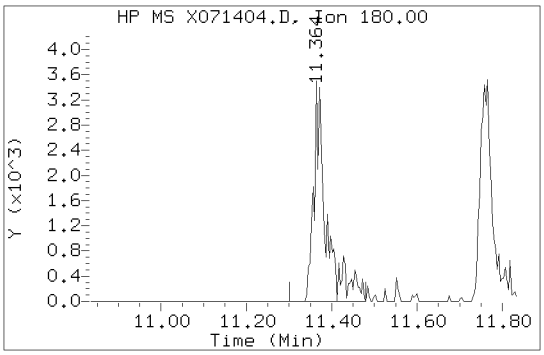
1,2,4-Trichlorobenzene (120-82-1)

Reason Code:

BEFORE
MASS
180
AREA
7113
HEIGHT
3499
20-Jul-2023
15:04
linh
pham



AFTER
MASS
180
AREA
7113
HEIGHT
3499
20-Jul-2023
15:04
linh
pham

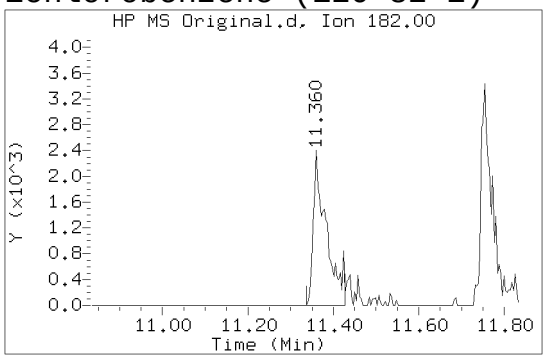


Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071404.D
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

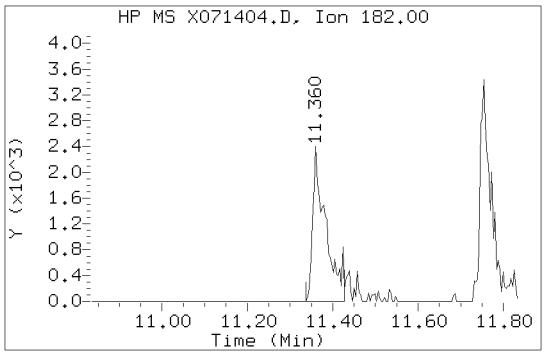
1,2,4-Trichlorobenzene (120-82-1)

Reason Code:

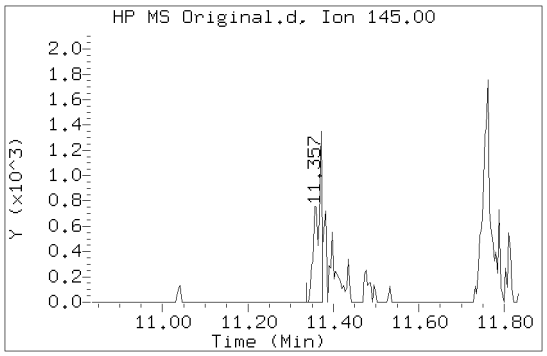
BEFORE
MASS
182
AREA
5066
HEIGHT
2401
20-Jul-2023
15:04
linh
pham



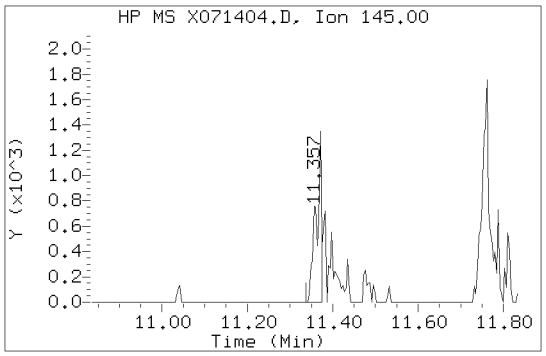
AFTER
MASS
182
AREA
5066
HEIGHT
2401
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
145
AREA
1146
HEIGHT
757
20-Jul-2023
15:04
linh
pham



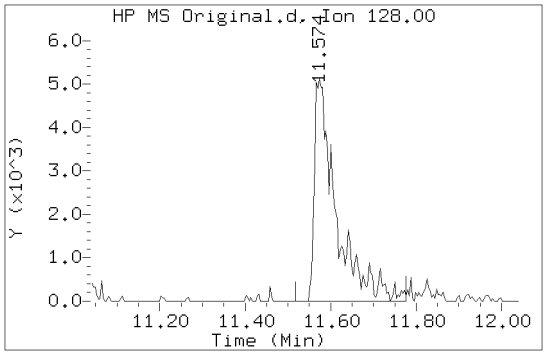
AFTER
MASS
145
AREA
1146
HEIGHT
757
20-Jul-2023
15:04
linh
pham



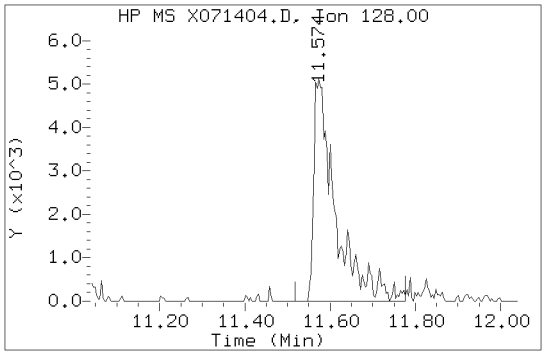
Naphthalene (91-20-3)

Reason Code:

BEFORE
MASS
128
AREA
18131
HEIGHT
5123
20-Jul-2023
15:04
linh
pham



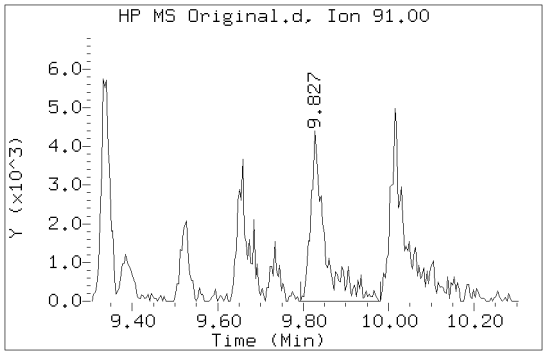
AFTER
MASS
128
AREA
18131
HEIGHT
5123
20-Jul-2023
15:04
linh
pham



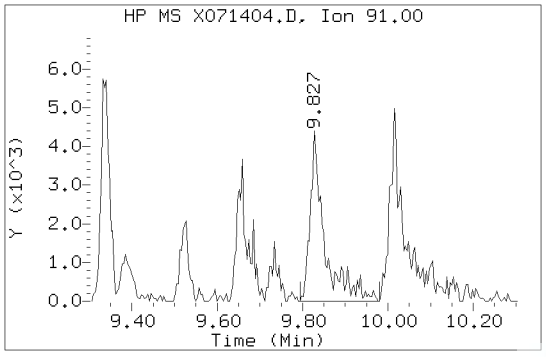
Benzyl Chloride (100-44-7)

Reason Code:

BEFORE
MASS
91
AREA
10259
HEIGHT
4403
20-Jul-2023
15:04
linh
pham



AFTER
MASS
91
AREA
10259
HEIGHT
4403
20-Jul-2023
15:04
linh
pham



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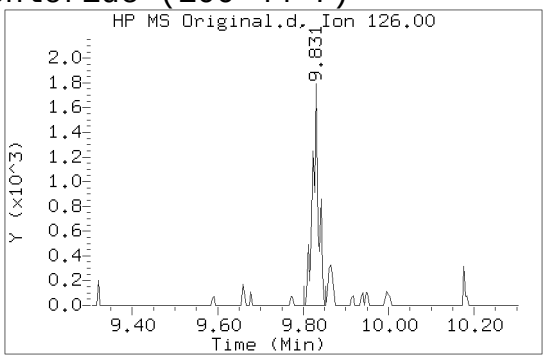
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

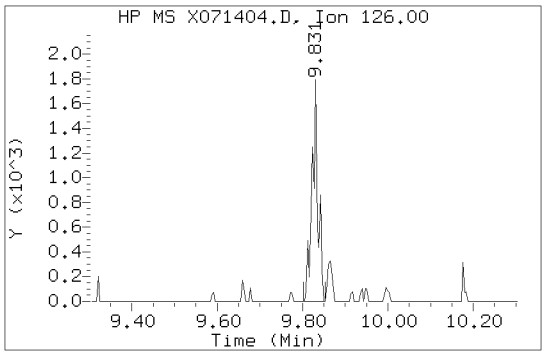
Benzyl Chloride (100-44-7)

Reason Code:

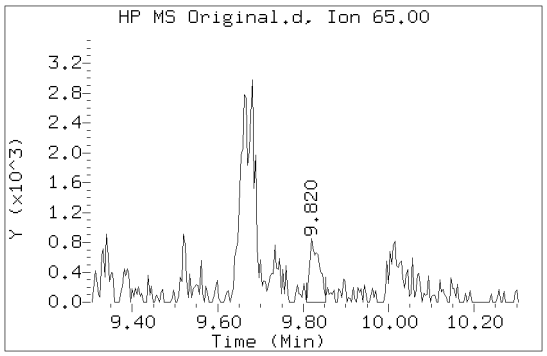
BEFORE
MASS
126
AREA
1709
HEIGHT
1793
20-Jul-2023
15:04
linh
pham



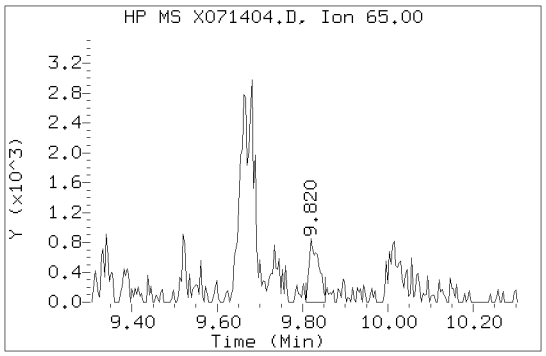
AFTER
MASS
126
AREA
1709
HEIGHT
1793
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
65
AREA
1300
HEIGHT
848
20-Jul-2023
15:04
linh
pham



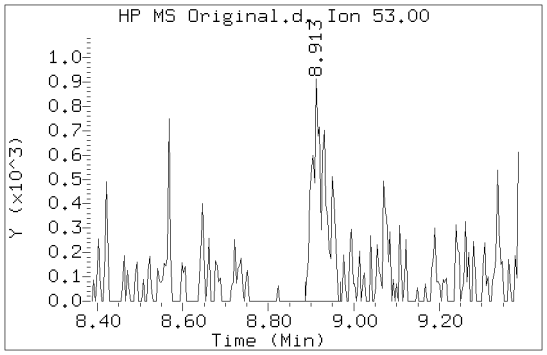
AFTER
MASS
65
AREA
1300
HEIGHT
848
20-Jul-2023
15:04
linh
pham



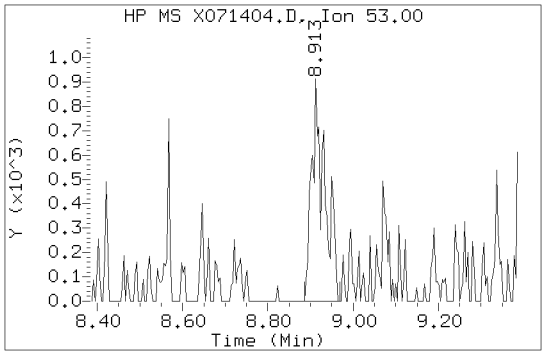
trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code:

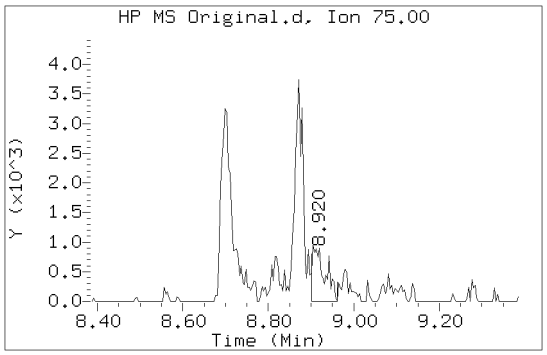
BEFORE
MASS
53
AREA
1951
HEIGHT
913
20-Jul-2023
15:04
linh
pham



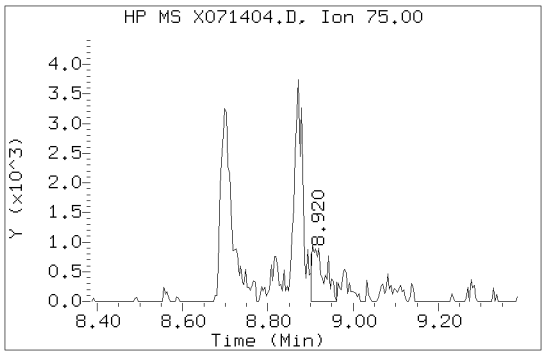
AFTER
MASS
53
AREA
1951
HEIGHT
913
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
75
AREA
1917
HEIGHT
902
20-Jul-2023
15:04
linh
pham



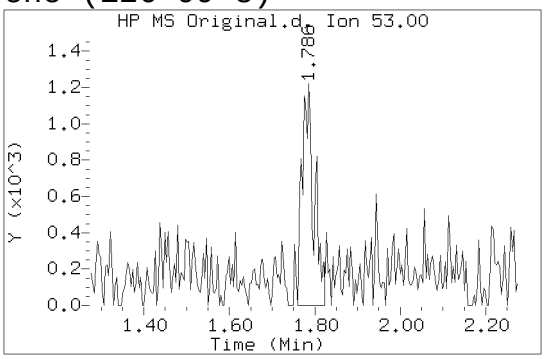
AFTER
MASS
75
AREA
1917
HEIGHT
902
20-Jul-2023
15:04
linh
pham



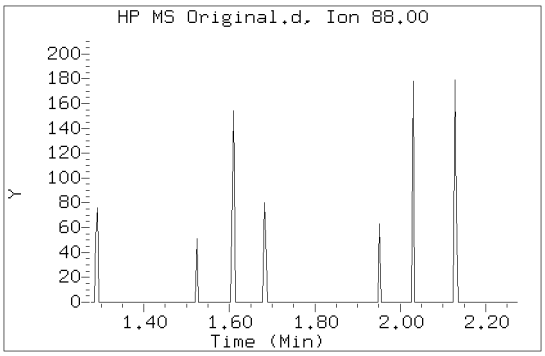
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071404.D
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

Chloroprene (126-99-8)

BEFORE
MASS
53
AREA
2402
HEIGHT
1221
20-Jul-2023
15:04
linh
pham

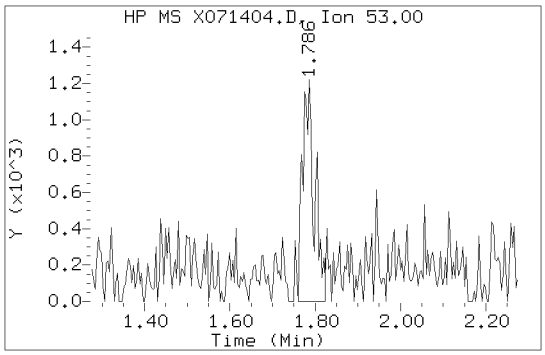


BEFORE
MASS
88
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

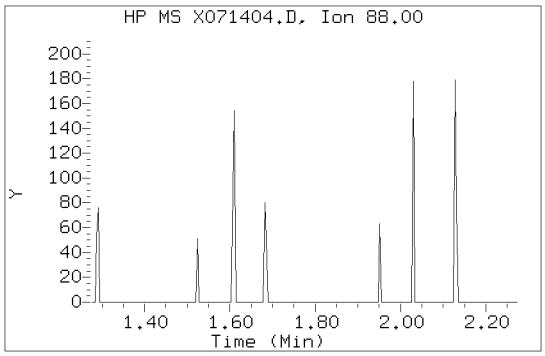


Reason Code:

AFTER
MASS
53
AREA
2402
HEIGHT
1221
20-Jul-2023
15:04
linh
pham

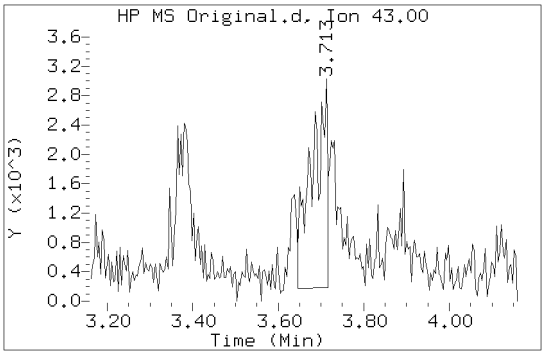


AFTER
MASS
88
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

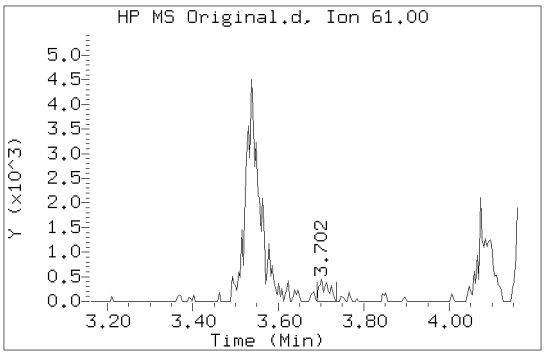


Ethyl Acetate (141-78-6)

BEFORE
MASS
43
AREA
7207
HEIGHT
2844
20-Jul-2023
15:04
linh
pham

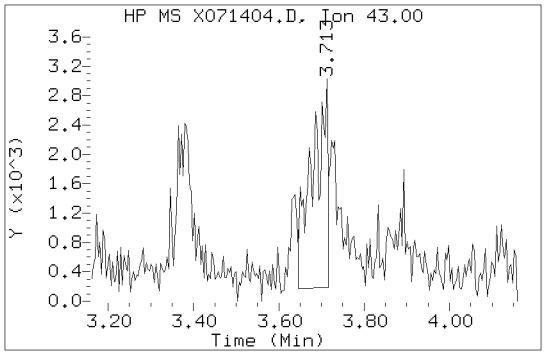


BEFORE
MASS
61
AREA
652
HEIGHT
462
20-Jul-2023
15:04
linh
pham

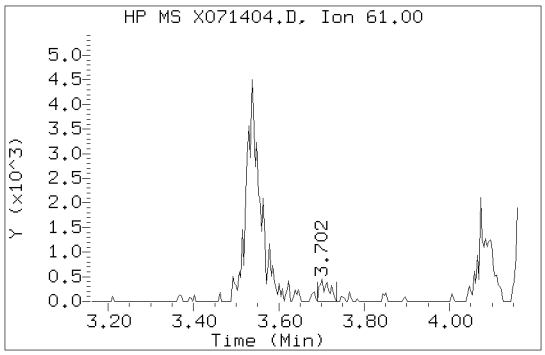


Reason Code:

AFTER
MASS
43
AREA
7207
HEIGHT
2844
20-Jul-2023
15:04
linh
pham



AFTER
MASS
61
AREA
652
HEIGHT
462
20-Jul-2023
15:04
linh
pham



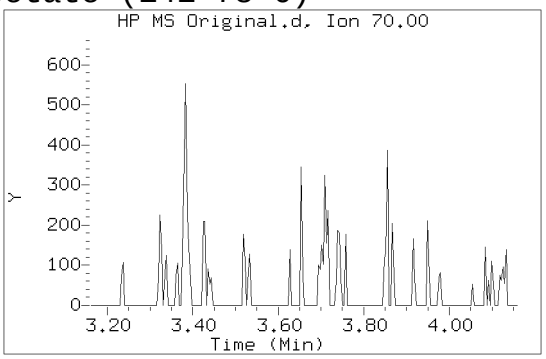
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071404.D
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

Ethyl Acetate (141-78-6)

Reason Code:

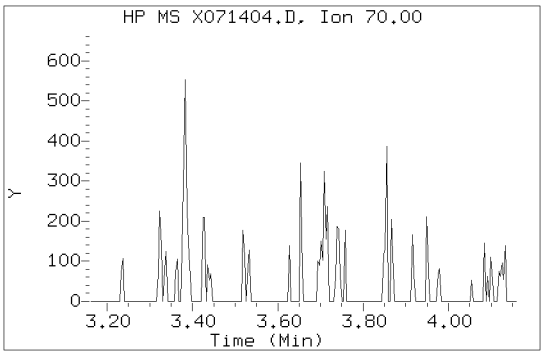
BEFORE

MASS
70
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
70
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

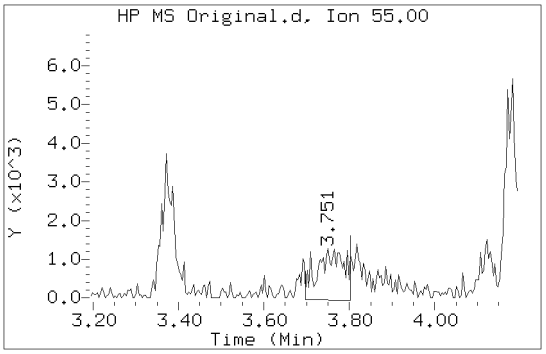


Methyl Acrylate (96-33-3)

Reason Code:

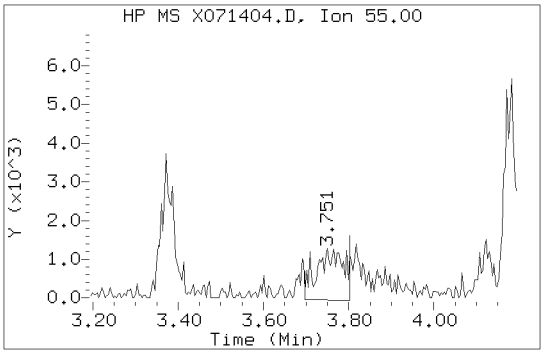
BEFORE

MASS
55
AREA
5778
HEIGHT
1338
20-Jul-2023
15:04
linh
pham



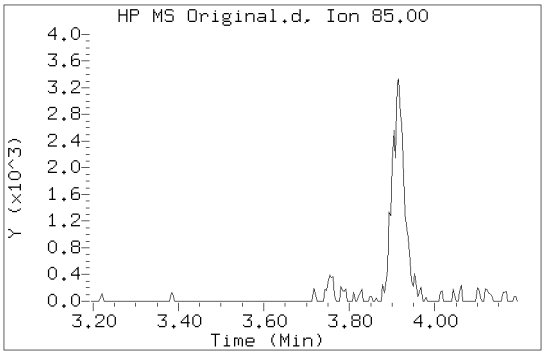
AFTER

MASS
55
AREA
5778
HEIGHT
1338
20-Jul-2023
15:04
linh
pham



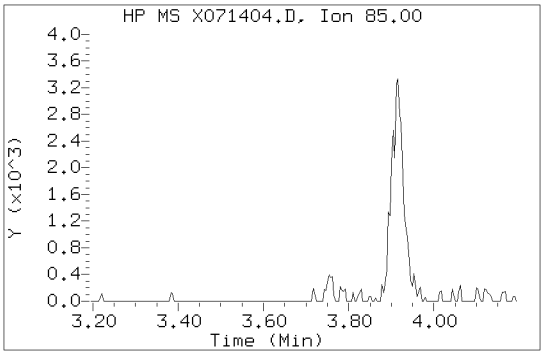
BEFORE

MASS
85
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
85
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

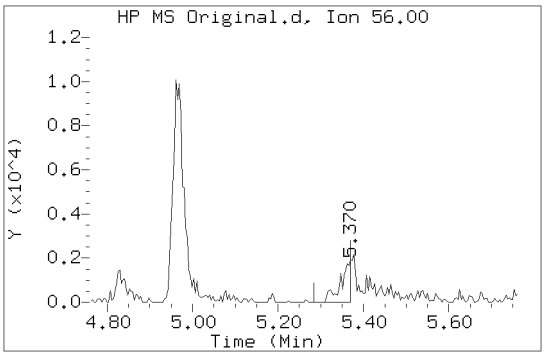


n-Butanol (71-36-3)

Reason Code:

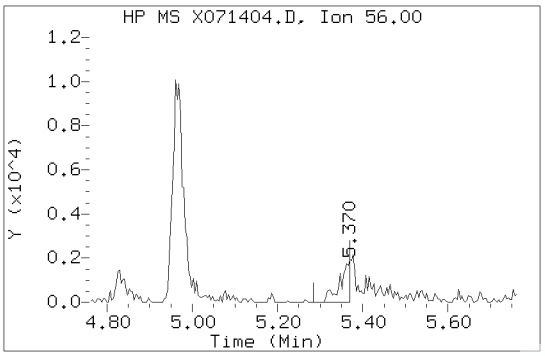
BEFORE

MASS
56
AREA
3103
HEIGHT
1929
20-Jul-2023
15:04
linh
pham



AFTER

MASS
56
AREA
3103
HEIGHT
1929
20-Jul-2023
15:04
linh
pham



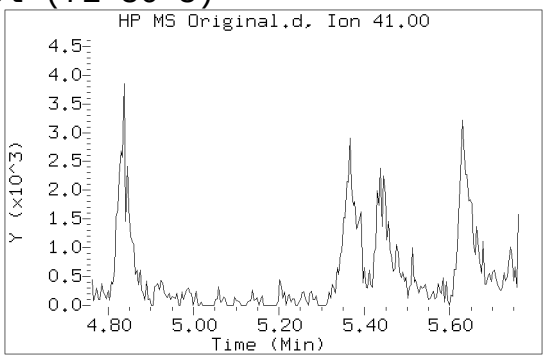
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071404.D
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

n-Butanol (71-36-3)

Reason Code:

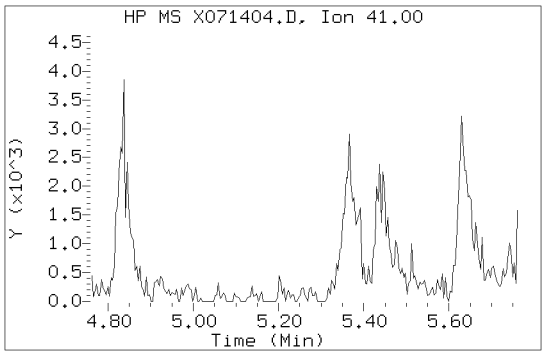
BEFORE

MASS
41
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

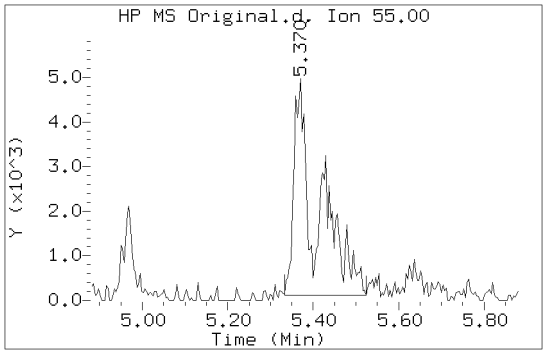


Ethyl Acrylate (140-88-5)

Reason Code:

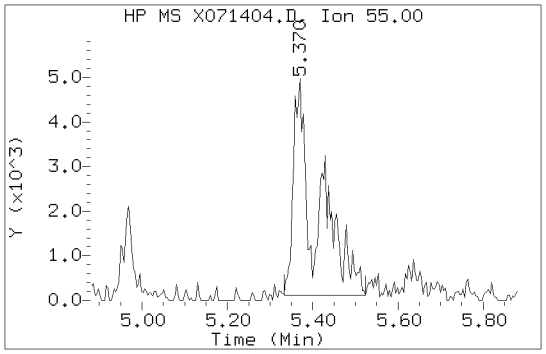
BEFORE

MASS
55
AREA
18196
HEIGHT
4857
20-Jul-2023
15:04
linh
pham



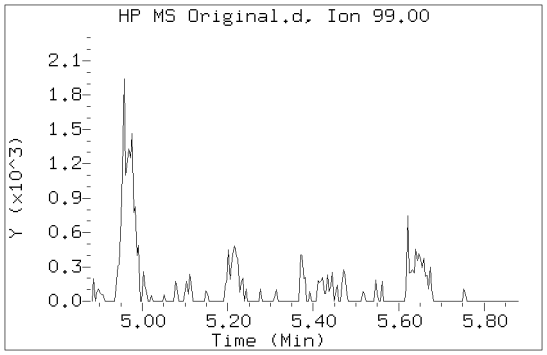
AFTER

MASS
55
AREA
18196
HEIGHT
4857
20-Jul-2023
15:04
linh
pham



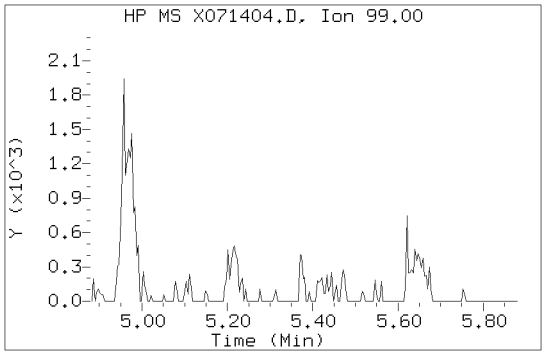
BEFORE

MASS
99
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
99
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

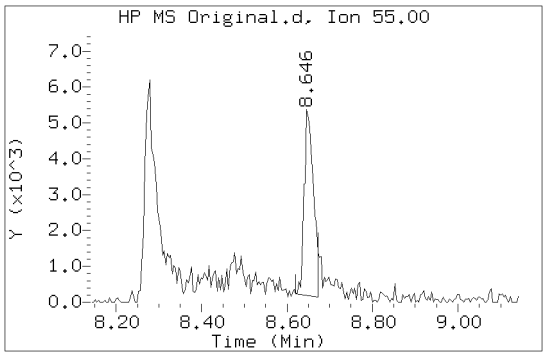


Cyclohexanone (108-94-1)

Reason Code:

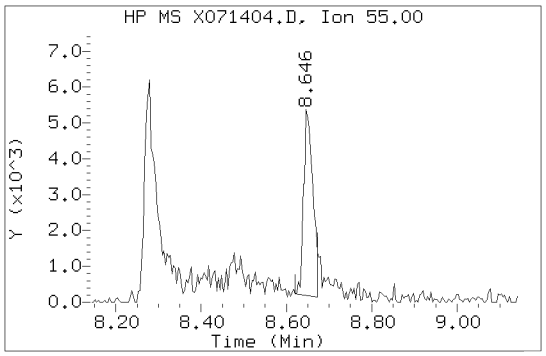
BEFORE

MASS
55
AREA
7972
HEIGHT
5194
20-Jul-2023
15:04
linh
pham



AFTER

MASS
55
AREA
7972
HEIGHT
5194
20-Jul-2023
15:04
linh
pham

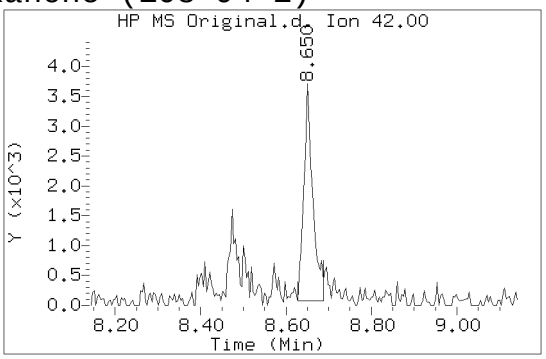


Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071404.D
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

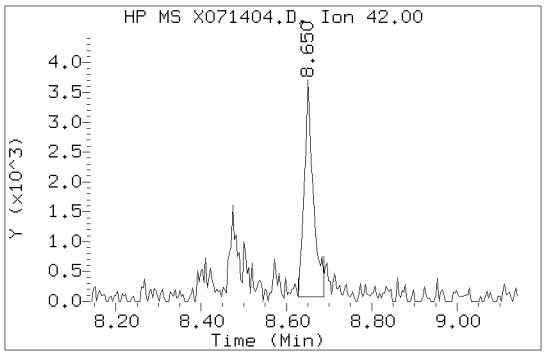
Cyclohexanone (108-94-1)

Reason Code:

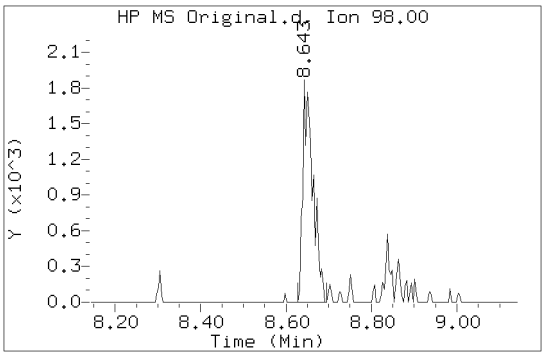
BEFORE
MASS
42
AREA
5392
HEIGHT
3640
20-Jul-2023
15:04
linh
pham



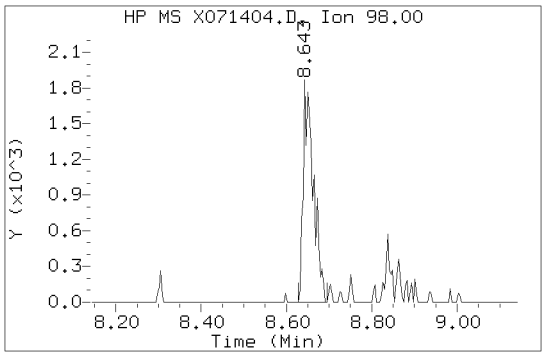
AFTER
MASS
42
AREA
5392
HEIGHT
3640
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
98
AREA
3142
HEIGHT
1869
20-Jul-2023
15:04
linh
pham



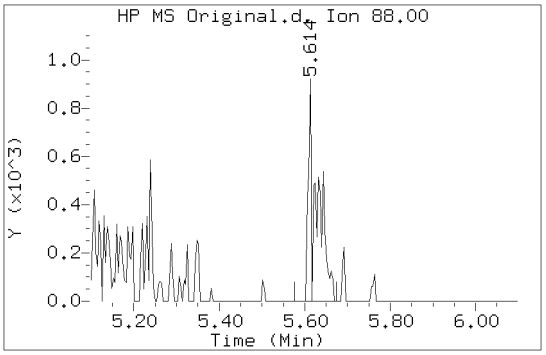
AFTER
MASS
98
AREA
3142
HEIGHT
1869
20-Jul-2023
15:04
linh
pham



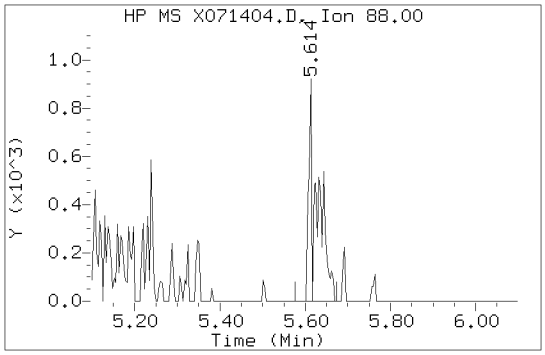
1,4-Dioxane ()

Reason Code:

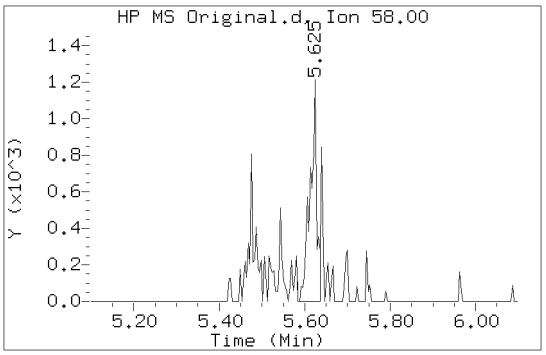
BEFORE
MASS
88
AREA
1290
HEIGHT
921
20-Jul-2023
15:04
linh
pham



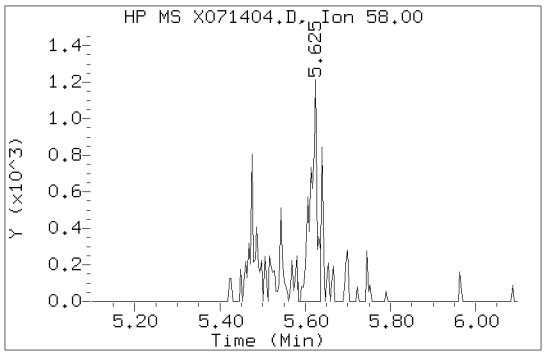
AFTER
MASS
88
AREA
1290
HEIGHT
921
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
58
AREA
1310
HEIGHT
1214
20-Jul-2023
15:04
linh
pham



AFTER
MASS
58
AREA
1310
HEIGHT
1214
20-Jul-2023
15:04
linh
pham

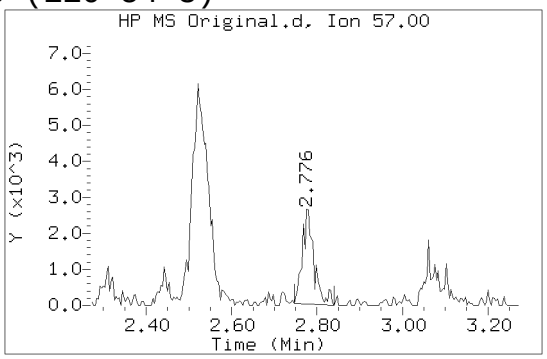


Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071404.D
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

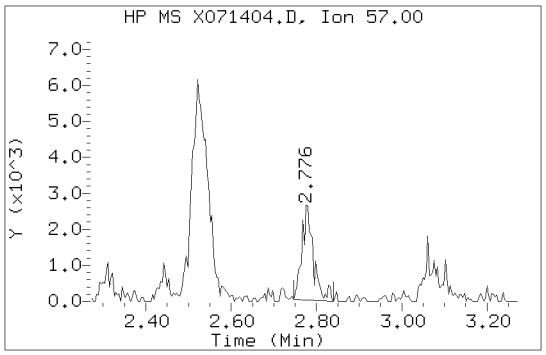
n-Hexane (110-54-3)

Reason Code:

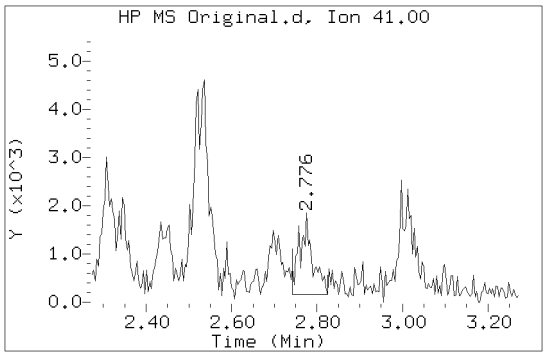
BEFORE
MASS
57
AREA
5000
HEIGHT
2629
20-Jul-2023
15:04
linh
pham



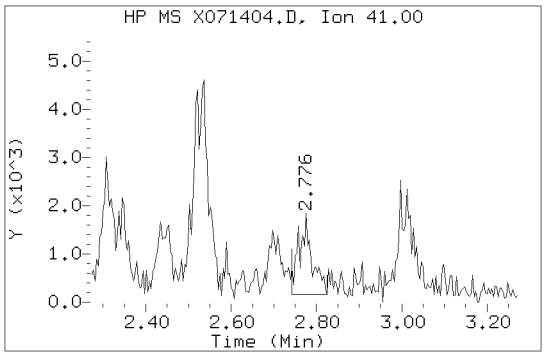
AFTER
MASS
57
AREA
5000
HEIGHT
2629
20-Jul-2023
15:04
linh
pham



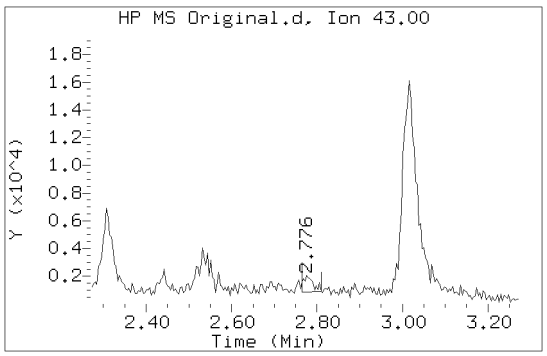
BEFORE
MASS
41
AREA
3569
HEIGHT
1692
20-Jul-2023
15:04
linh
pham



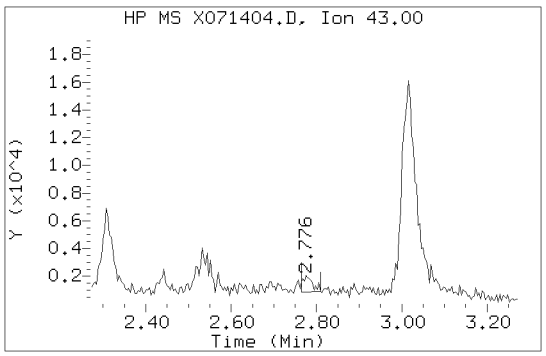
AFTER
MASS
41
AREA
3569
HEIGHT
1692
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
43
AREA
1865
HEIGHT
1174
20-Jul-2023
15:04
linh
pham



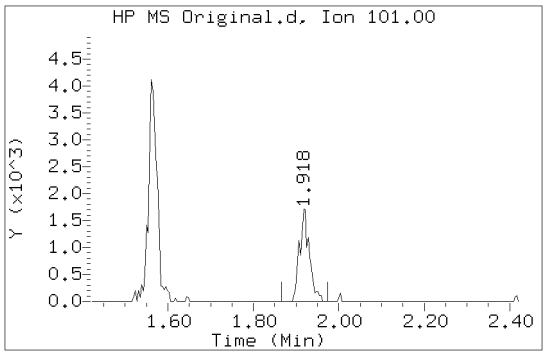
AFTER
MASS
43
AREA
1865
HEIGHT
1174
20-Jul-2023
15:04
linh
pham



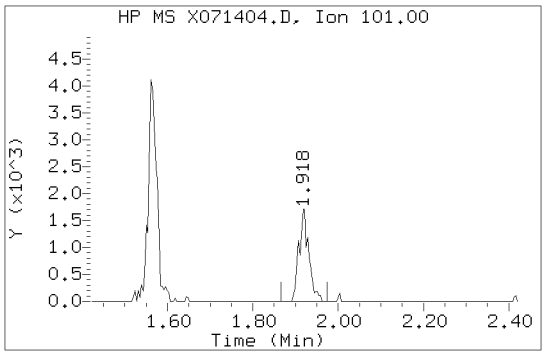
Freon TF (76-13-1)

Reason Code:

BEFORE
MASS
101
AREA
2818
HEIGHT
1714
20-Jul-2023
15:04
linh
pham



AFTER
MASS
101
AREA
2818
HEIGHT
1714
20-Jul-2023
15:04
linh
pham

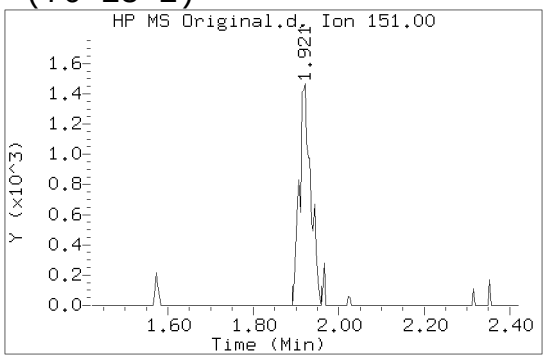


Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071404.D
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

Freon TF (76-13-1)

BEFORE

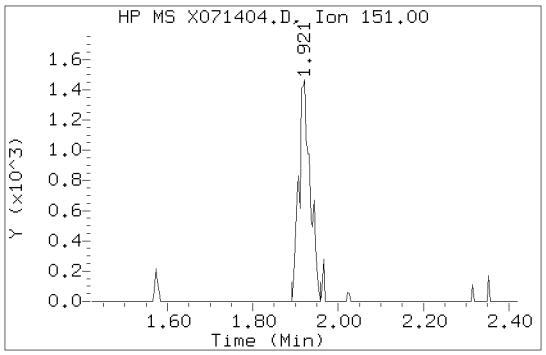
MASS
151
AREA
2770
HEIGHT
1467
20-Jul-2023
15:04
linh
pham



Reason Code:

AFTER

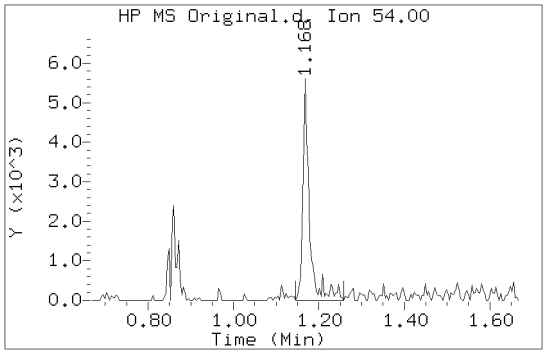
MASS
151
AREA
2770
HEIGHT
1467
20-Jul-2023
15:04
linh
pham



1,3-Butadiene (106-99-0)

BEFORE

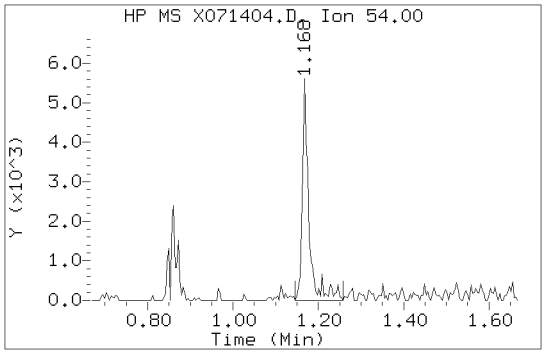
MASS
54
AREA
6040
HEIGHT
5609
20-Jul-2023
15:04
linh
pham



Reason Code:

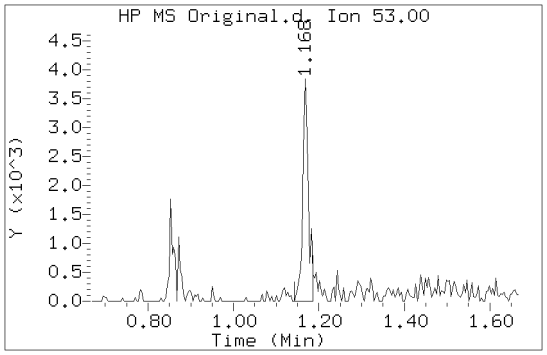
AFTER

MASS
54
AREA
6040
HEIGHT
5609
20-Jul-2023
15:04
linh
pham



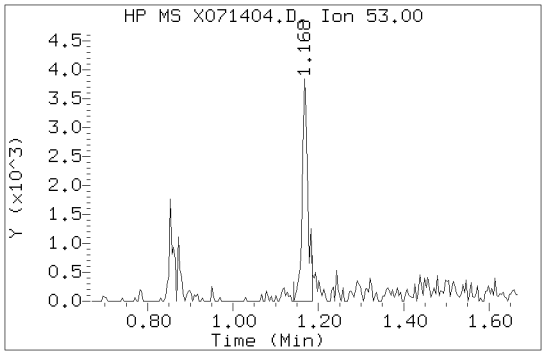
BEFORE

MASS
53
AREA
3632
HEIGHT
3843
20-Jul-2023
15:04
linh
pham



AFTER

MASS
53
AREA
3632
HEIGHT
3843
20-Jul-2023
15:04
linh
pham

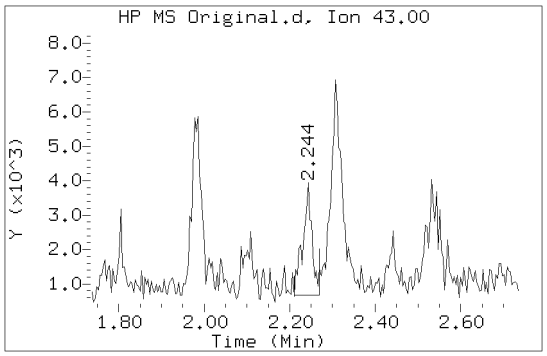


Methyl acetate (79-20-9)

Reason Code:

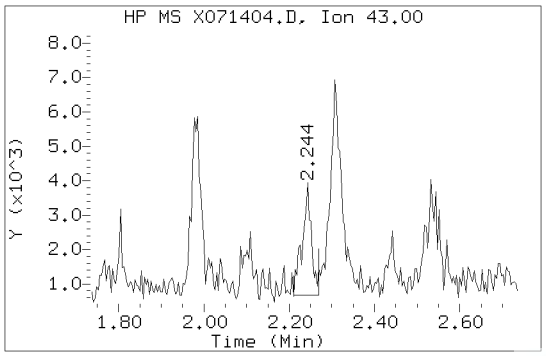
BEFORE

MASS
43
AREA
4992
HEIGHT
3260
20-Jul-2023
15:04
linh
pham



AFTER

MASS
43
AREA
4992
HEIGHT
3260
20-Jul-2023
15:04
linh
pham

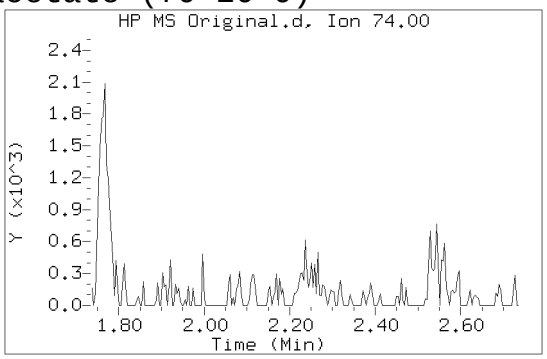


Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071404.D
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

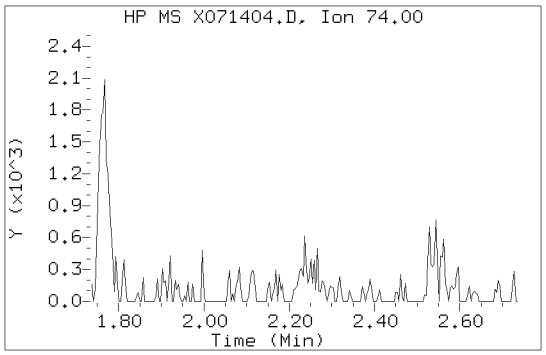
Methyl acetate (79-20-9)

Reason Code:

BEFORE
MASS
74
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



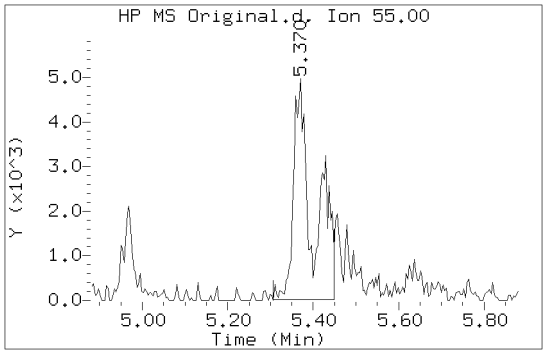
AFTER
MASS
74
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



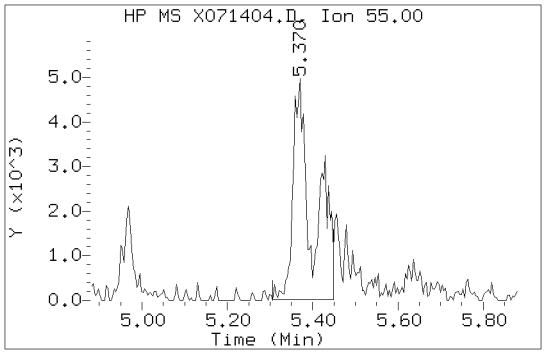
Methylcyclohexane (108-87-2)

Reason Code:

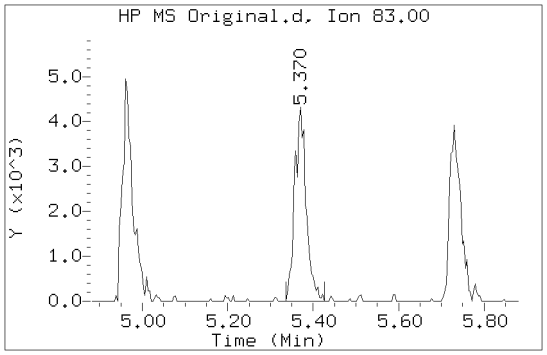
BEFORE
MASS
55
AREA
15783
HEIGHT
4958
20-Jul-2023
15:04
linh
pham



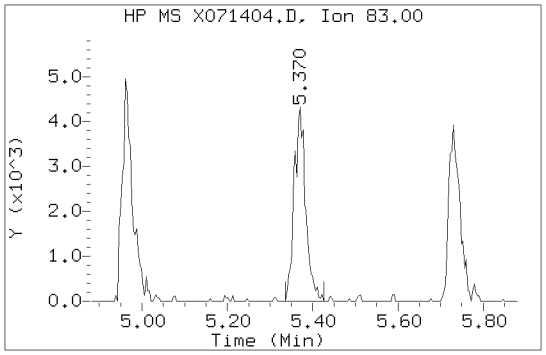
AFTER
MASS
55
AREA
15783
HEIGHT
4958
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
83
AREA
8157
HEIGHT
4322
20-Jul-2023
15:04
linh
pham



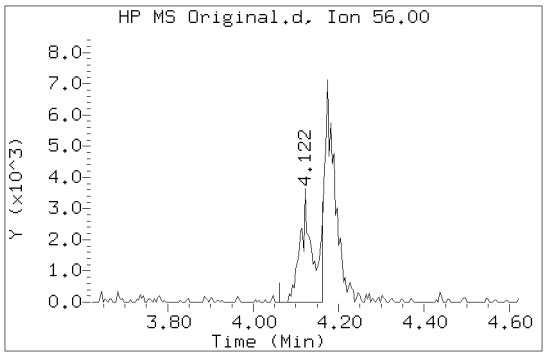
AFTER
MASS
83
AREA
8157
HEIGHT
4322
20-Jul-2023
15:04
linh
pham



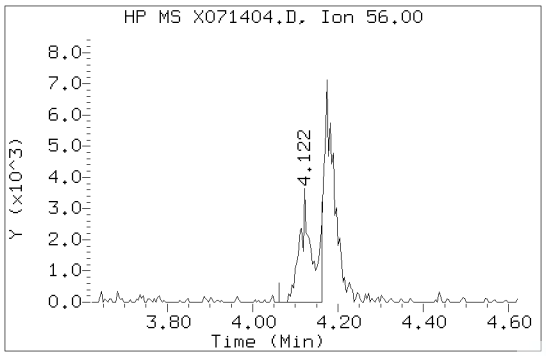
Cyclohexane (110-82-7)

Reason Code:

BEFORE
MASS
56
AREA
7673
HEIGHT
3640
20-Jul-2023
15:04
linh
pham



AFTER
MASS
56
AREA
7673
HEIGHT
3640
20-Jul-2023
15:04
linh
pham



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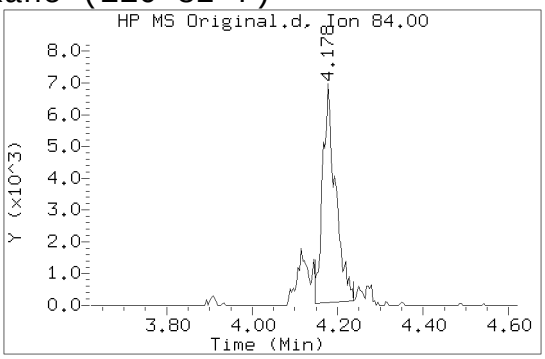
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

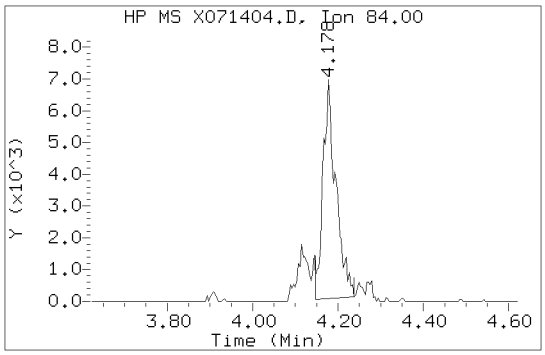
Cyclohexane (110-82-7)

Reason Code:

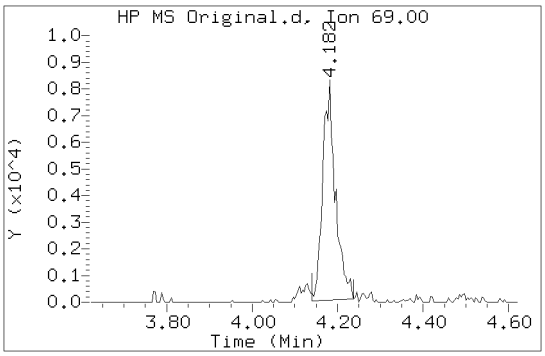
BEFORE
MASS
84
AREA
14444
HEIGHT
6891
20-Jul-2023
15:04
linh
pham



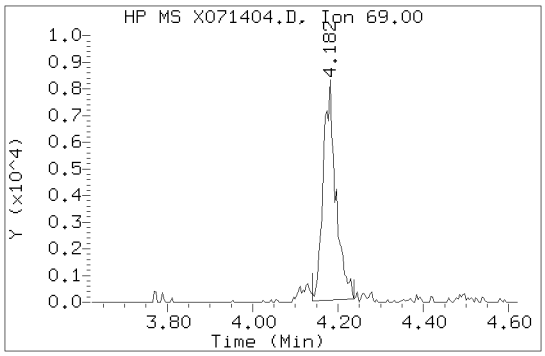
AFTER
MASS
84
AREA
14444
HEIGHT
6891
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
69
AREA
16995
HEIGHT
8270
20-Jul-2023
15:04
linh
pham



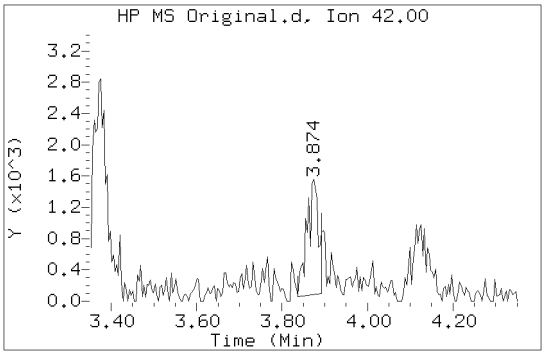
AFTER
MASS
69
AREA
16995
HEIGHT
8270
20-Jul-2023
15:04
linh
pham



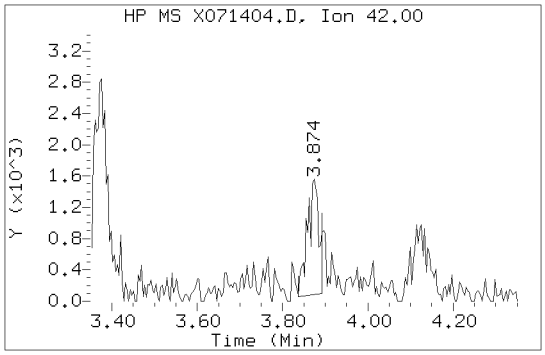
Tetrahydrofuran (109-99-9)

Reason Code:

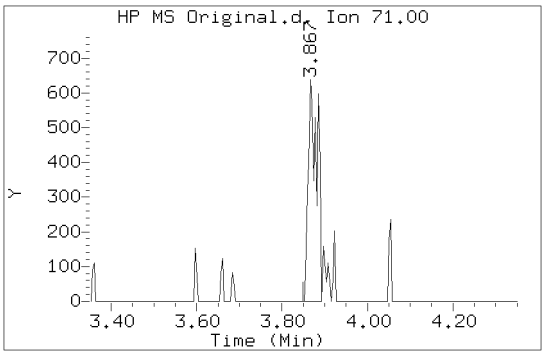
BEFORE
MASS
42
AREA
2815
HEIGHT
1476
20-Jul-2023
15:04
linh
pham



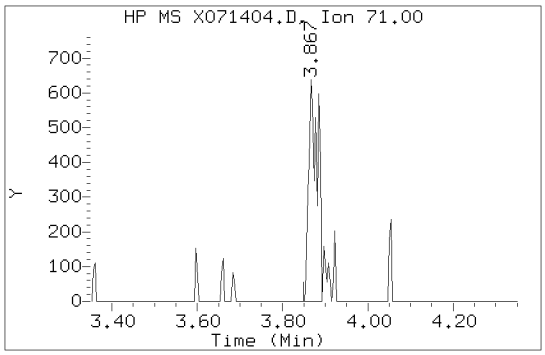
AFTER
MASS
42
AREA
2815
HEIGHT
1476
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
71
AREA
933
HEIGHT
638
20-Jul-2023
15:04
linh
pham



AFTER
MASS
71
AREA
933
HEIGHT
638
20-Jul-2023
15:04
linh
pham



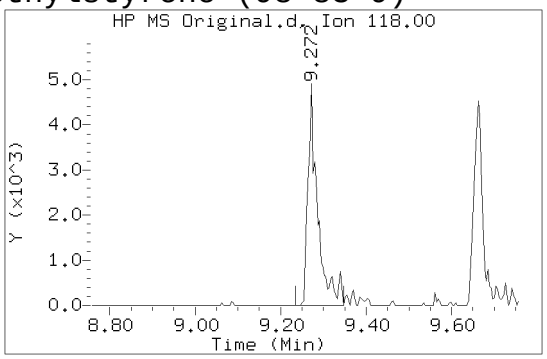
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071404.D
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

alpha-Methylstyrene (98-83-9)

Reason Code:

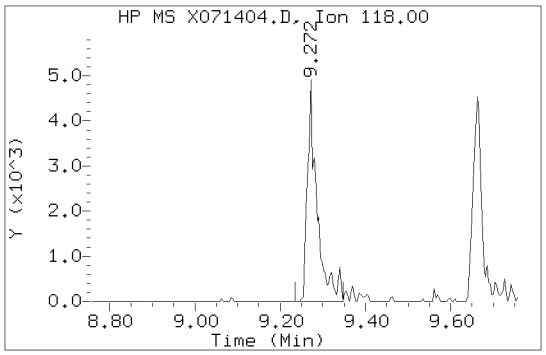
BEFORE

MASS
118
AREA
7755
HEIGHT
4913
20-Jul-2023
15:04
linh
pham



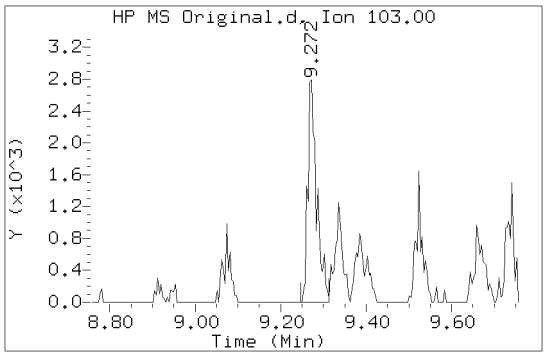
AFTER

MASS
118
AREA
7755
HEIGHT
4913
20-Jul-2023
15:04
linh
pham



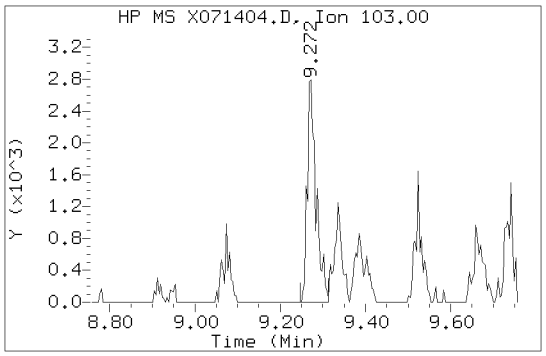
BEFORE

MASS
103
AREA
4028
HEIGHT
2790
20-Jul-2023
15:04
linh
pham



AFTER

MASS
103
AREA
4028
HEIGHT
2790
20-Jul-2023
15:04
linh
pham

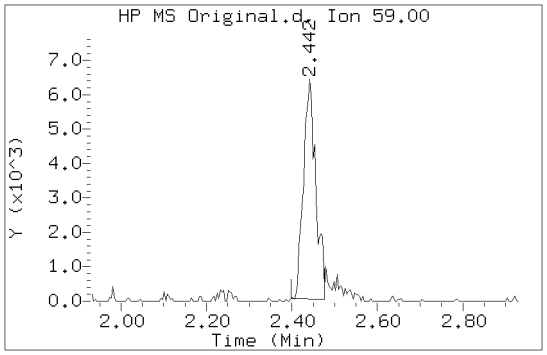


Tert-butyl alcohol (75-65-0)

Reason Code:

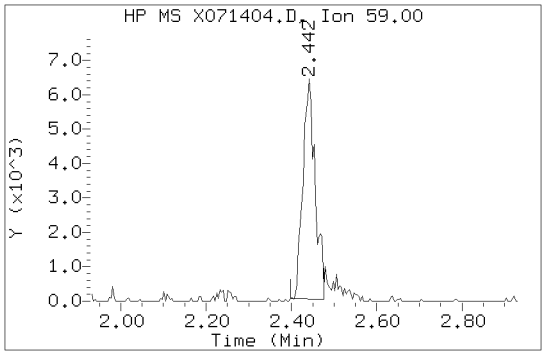
BEFORE

MASS
59
AREA
12965
HEIGHT
6400
20-Jul-2023
15:04
linh
pham



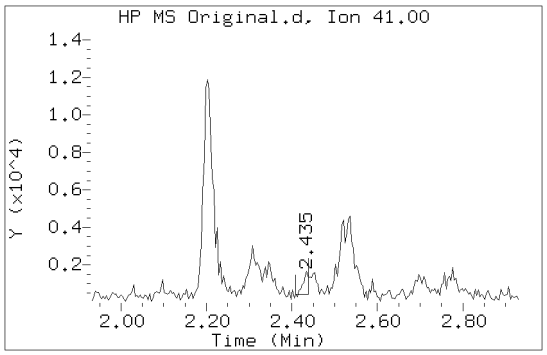
AFTER

MASS
59
AREA
12965
HEIGHT
6400
20-Jul-2023
15:04
linh
pham



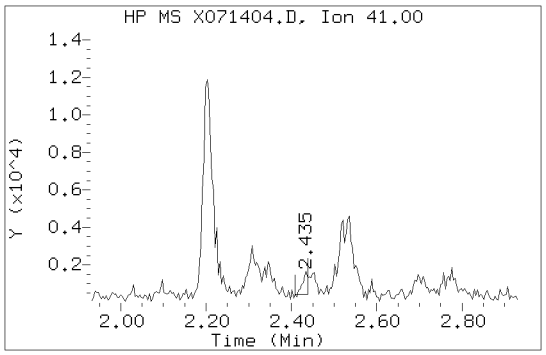
BEFORE

MASS
41
AREA
1041
HEIGHT
1246
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
1041
HEIGHT
1246
20-Jul-2023
15:04
linh
pham



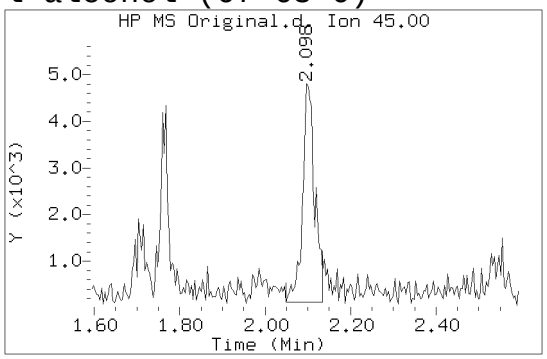
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071404.D
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

Isopropyl alcohol (67-63-0)

Reason Code:

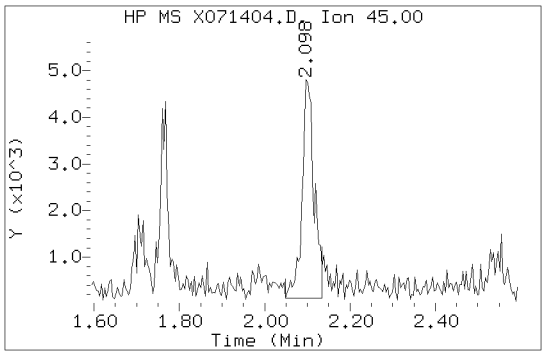
BEFORE

MASS
45
AREA
9372
HEIGHT
4685
20-Jul-2023
15:04
linh
pham



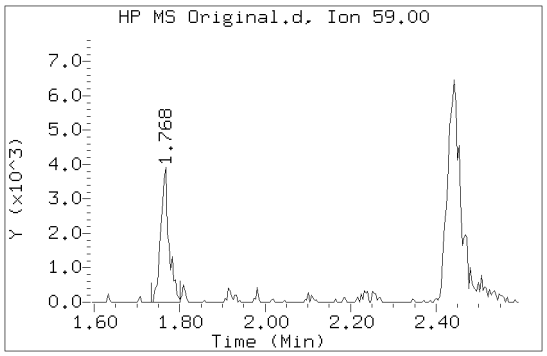
AFTER

MASS
45
AREA
9372
HEIGHT
4685
20-Jul-2023
15:04
linh
pham



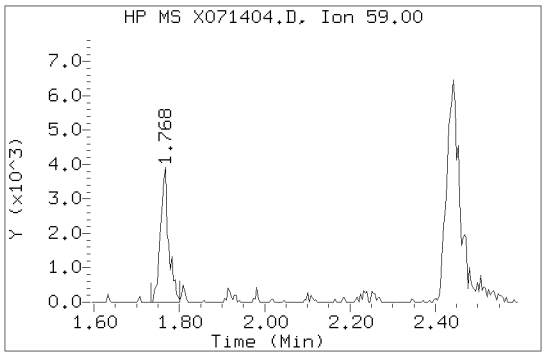
BEFORE

MASS
59
AREA
5211
HEIGHT
3930
20-Jul-2023
15:04
linh
pham



AFTER

MASS
59
AREA
5211
HEIGHT
3930
20-Jul-2023
15:04
linh
pham

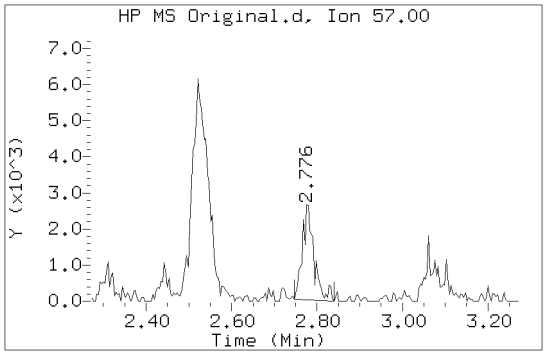


Allyl alcohol (107-18-6)

Reason Code:

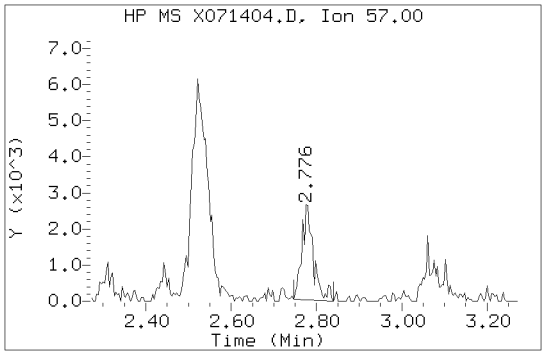
BEFORE

MASS
57
AREA
5000
HEIGHT
2629
20-Jul-2023
15:04
linh
pham



AFTER

MASS
57
AREA
5000
HEIGHT
2629
20-Jul-2023
15:04
linh
pham

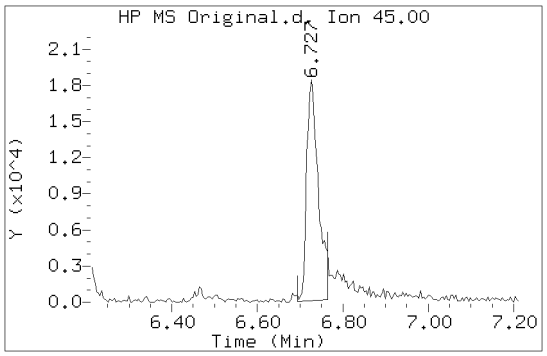


4-Methyl-2-pentanol (108-11-2)

Reason Code:

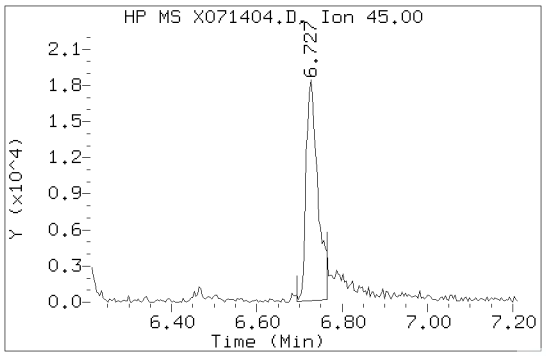
BEFORE

MASS
45
AREA
35175
HEIGHT
18341
20-Jul-2023
15:04
linh
pham



AFTER

MASS
45
AREA
35175
HEIGHT
18341
20-Jul-2023
15:04
linh
pham



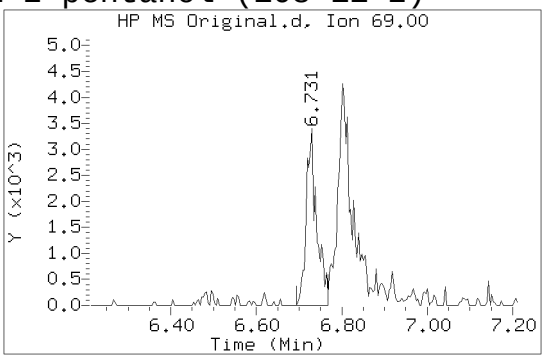
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071404.D
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

4-Methyl-2-pentanol (108-11-2)

Reason Code:

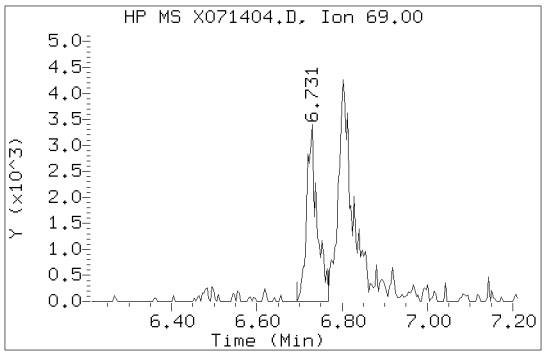
BEFORE

MASS
69
AREA
5748
HEIGHT
3399
20-Jul-2023
15:04
linh
pham



AFTER

MASS
69
AREA
5748
HEIGHT
3399
20-Jul-2023
15:04
linh
pham

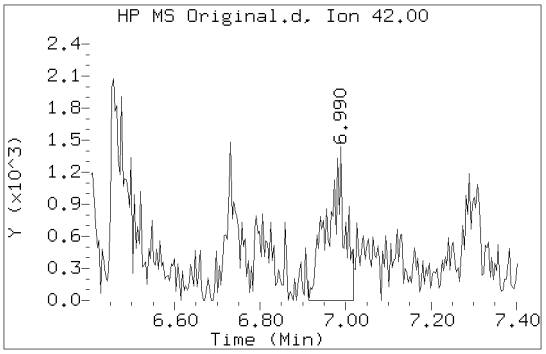


Amyl alcohol (71-41-0)

Reason Code:

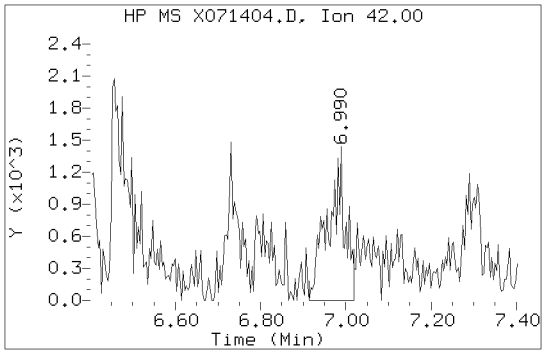
BEFORE

MASS
42
AREA
3944
HEIGHT
1442
20-Jul-2023
15:04
linh
pham



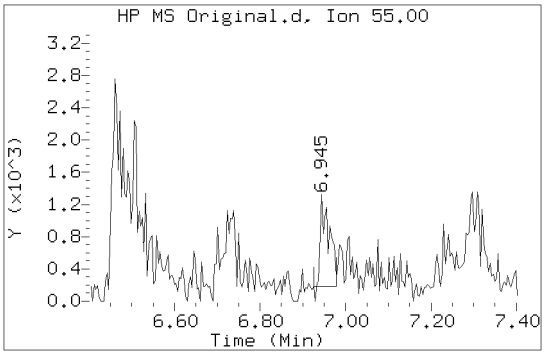
AFTER

MASS
42
AREA
3944
HEIGHT
1442
20-Jul-2023
15:04
linh
pham



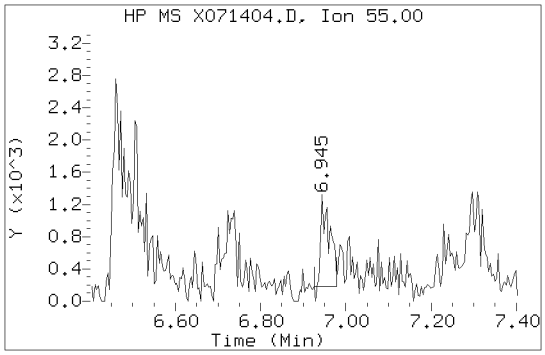
BEFORE

MASS
55
AREA
1617
HEIGHT
1137
20-Jul-2023
15:04
linh
pham



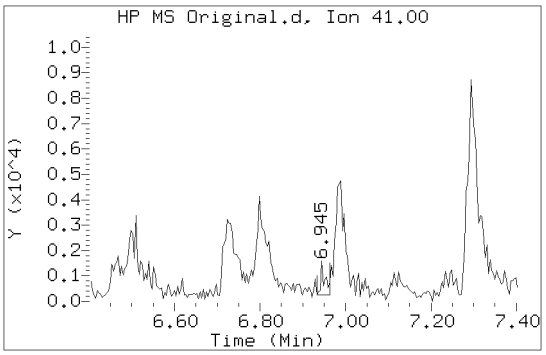
AFTER

MASS
55
AREA
1617
HEIGHT
1137
20-Jul-2023
15:04
linh
pham



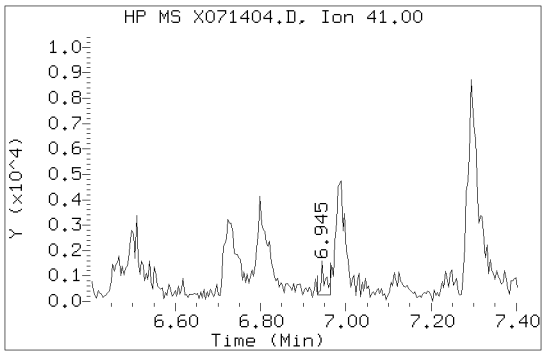
BEFORE

MASS
41
AREA
915
HEIGHT
1326
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
915
HEIGHT
1326
20-Jul-2023
15:04
linh
pham

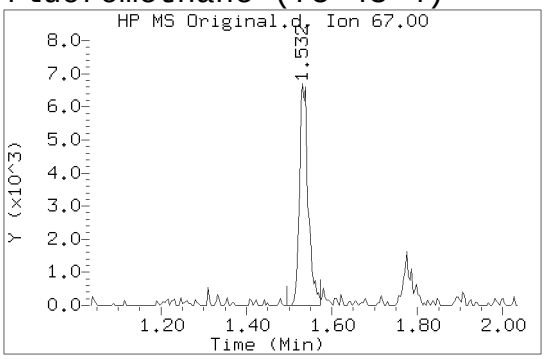


Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071404.D
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

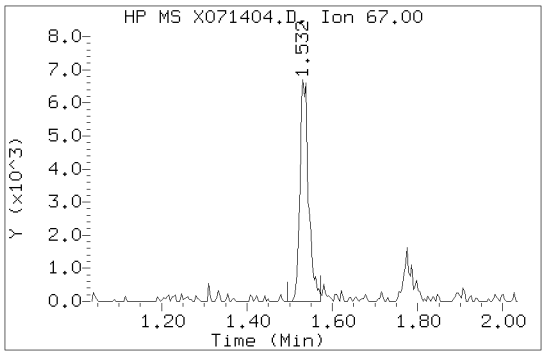
Dichlorofluoromethane (75-43-4)

Reason Code:

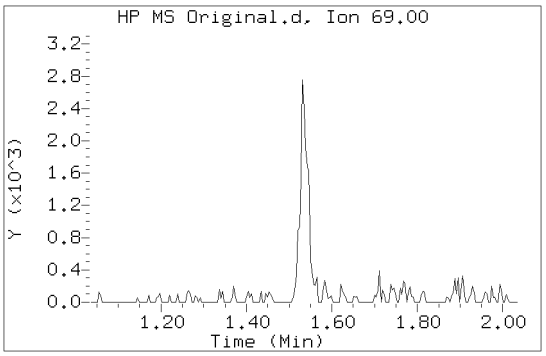
BEFORE
MASS
67
AREA
9743
HEIGHT
6701
20-Jul-2023
15:04
linh
pham



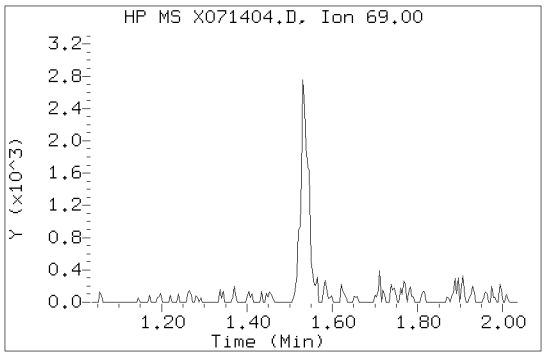
AFTER
MASS
67
AREA
9743
HEIGHT
6701
20-Jul-2023
15:04
linh
pham



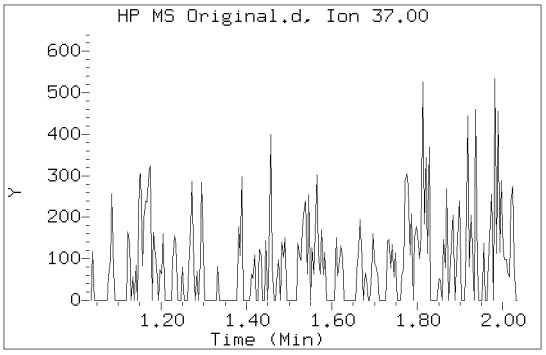
BEFORE
MASS
69
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



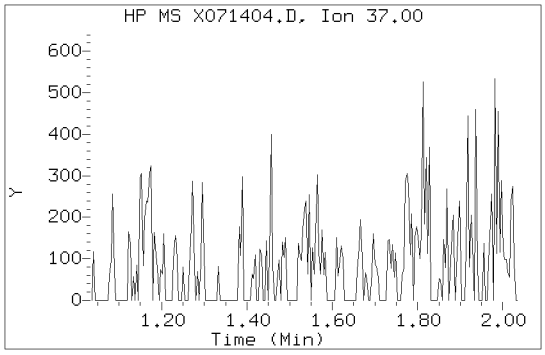
AFTER
MASS
69
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
37
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



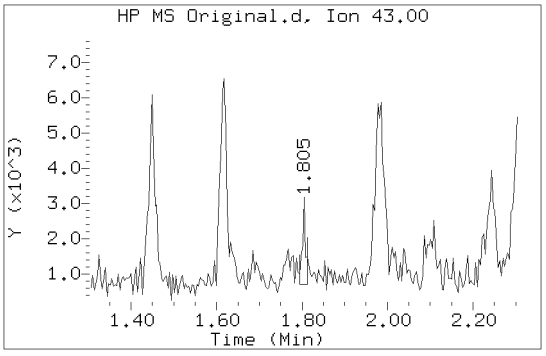
AFTER
MASS
37
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



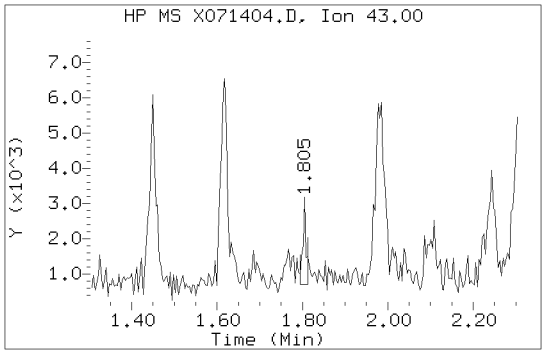
Propylene oxide ()

Reason Code:

BEFORE
MASS
43
AREA
1409
HEIGHT
2479
20-Jul-2023
15:04
linh
pham



AFTER
MASS
43
AREA
1409
HEIGHT
2479
20-Jul-2023
15:04
linh
pham

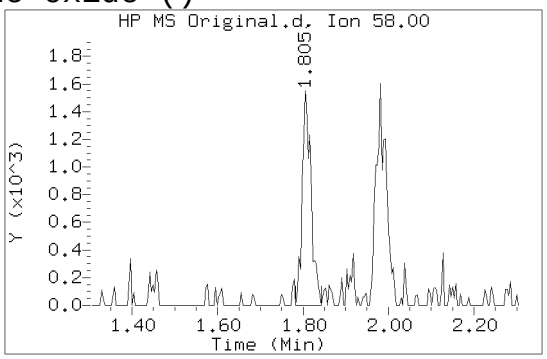


Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071404.D
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

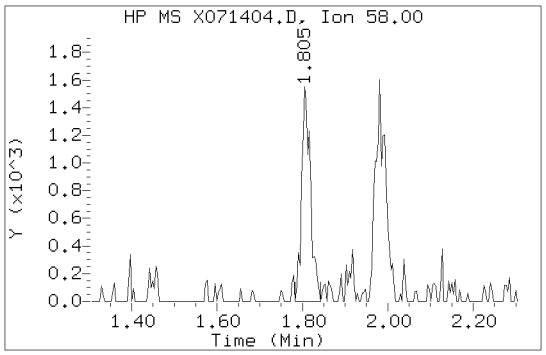
Propylene oxide ()

Reason Code:

BEFORE
MASS
58
AREA
2276
HEIGHT
1552
20-Jul-2023
15:04
linh
pham



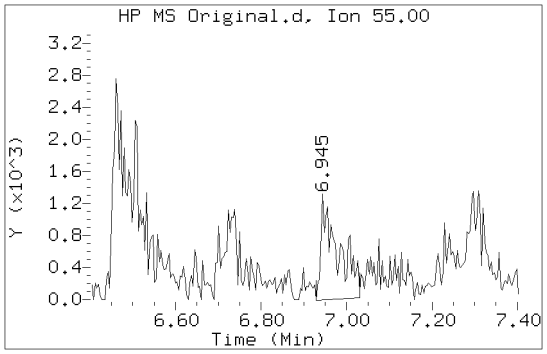
AFTER
MASS
58
AREA
2276
HEIGHT
1552
20-Jul-2023
15:04
linh
pham



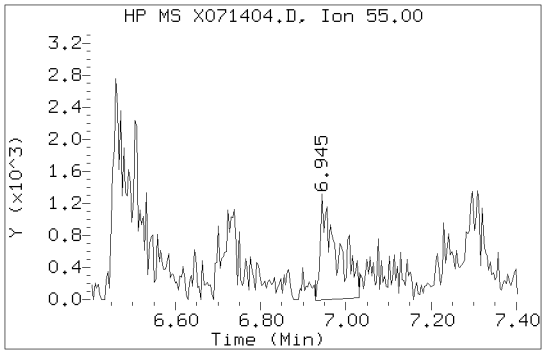
3-Methyl-1-butanol (123-51-3)

Reason Code:

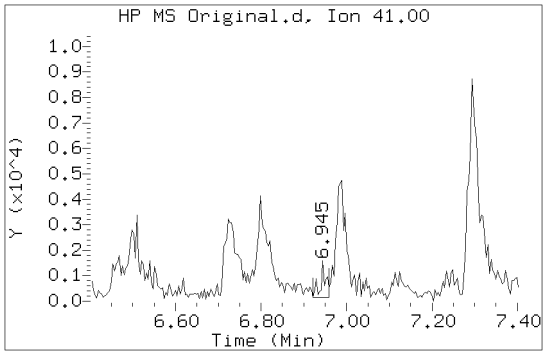
BEFORE
MASS
55
AREA
3623
HEIGHT
1323
20-Jul-2023
15:04
linh
pham



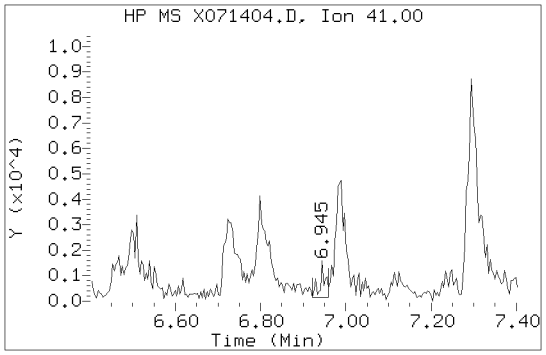
AFTER
MASS
55
AREA
3623
HEIGHT
1323
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
41
AREA
1239
HEIGHT
1440
20-Jul-2023
15:04
linh
pham



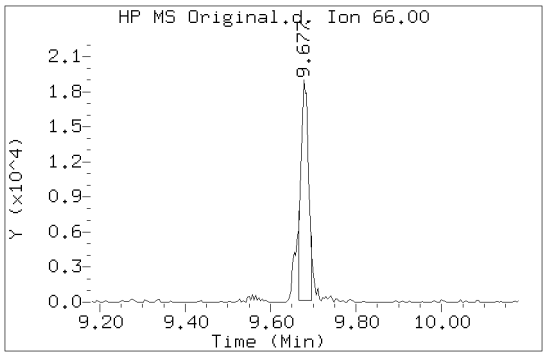
AFTER
MASS
41
AREA
1239
HEIGHT
1440
20-Jul-2023
15:04
linh
pham



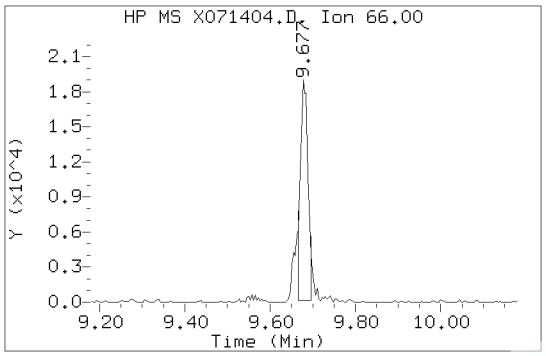
Dicyclopentadiene (77-73-6)

Reason Code:

BEFORE
MASS
66
AREA
24319
HEIGHT
18861
20-Jul-2023
15:04
linh
pham



AFTER
MASS
66
AREA
24319
HEIGHT
18861
20-Jul-2023
15:04
linh
pham



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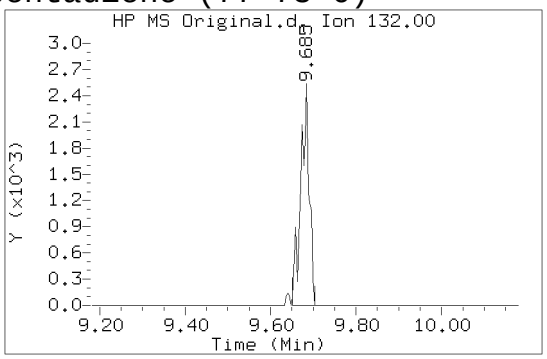
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

Dicyclopentadiene (77-73-6)

Reason Code:

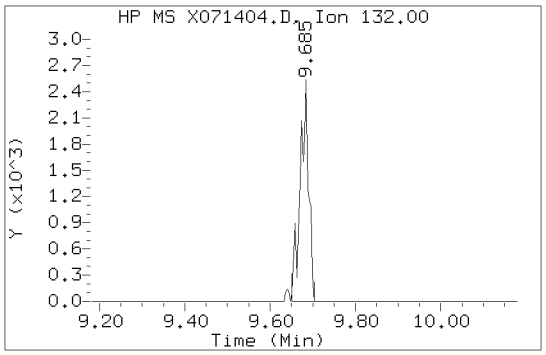
BEFORE

MASS
132
AREA
3579
HEIGHT
2538
20-Jul-2023
15:04
linh
pham



AFTER

MASS
132
AREA
3579
HEIGHT
2538
20-Jul-2023
15:04
linh
pham

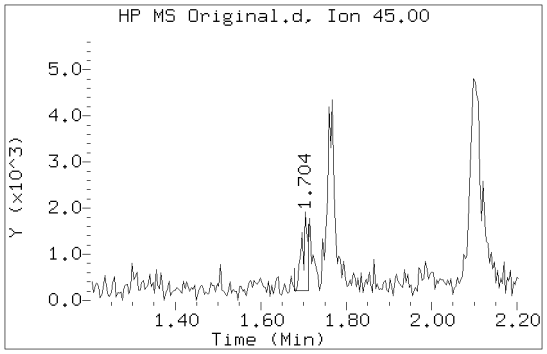


Ethanol (64-17-5)

Reason Code:

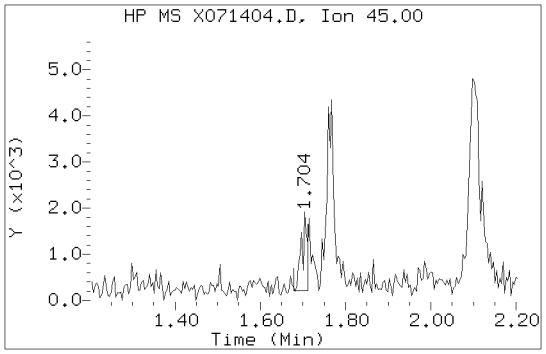
BEFORE

MASS
45
AREA
1613
HEIGHT
1703
20-Jul-2023
15:04
linh
pham



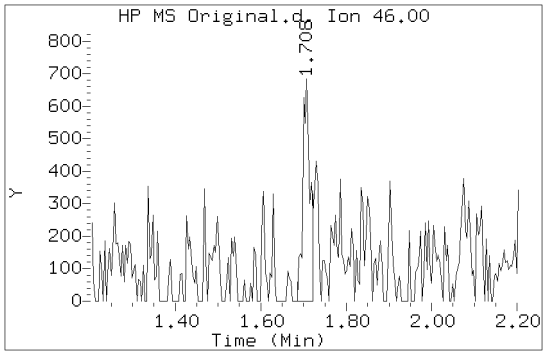
AFTER

MASS
45
AREA
1613
HEIGHT
1703
20-Jul-2023
15:04
linh
pham



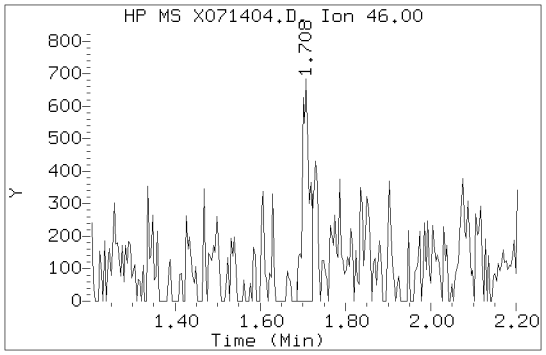
BEFORE

MASS
46
AREA
829
HEIGHT
684
20-Jul-2023
15:04
linh
pham



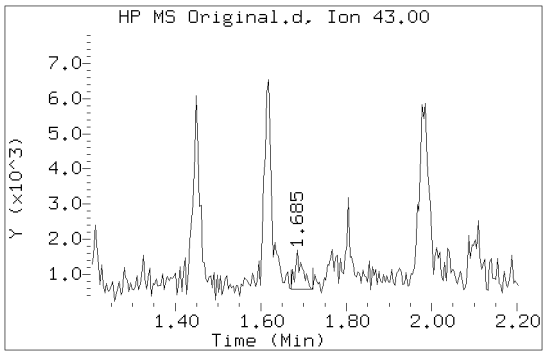
AFTER

MASS
46
AREA
829
HEIGHT
684
20-Jul-2023
15:04
linh
pham



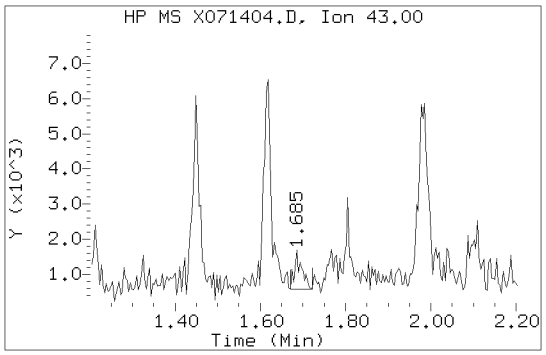
BEFORE

MASS
43
AREA
1337
HEIGHT
1114
20-Jul-2023
15:04
linh
pham



AFTER

MASS
43
AREA
1337
HEIGHT
1114
20-Jul-2023
15:04
linh
pham



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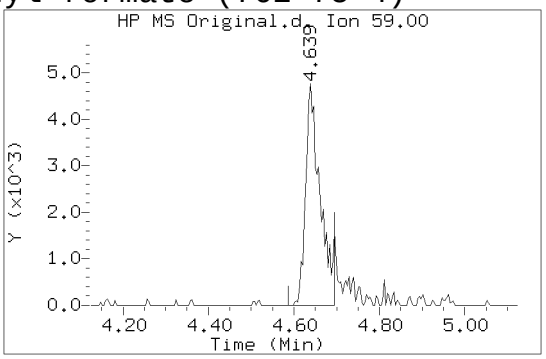
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

tert-Butyl formate (762-75-4)

Reason Code:

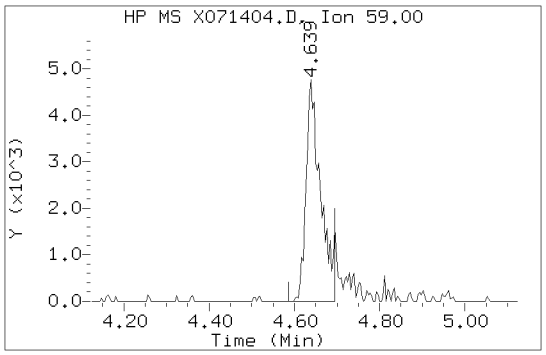
BEFORE

MASS
59
AREA
11427
HEIGHT
4768
20-Jul-2023
15:04
linh
pham



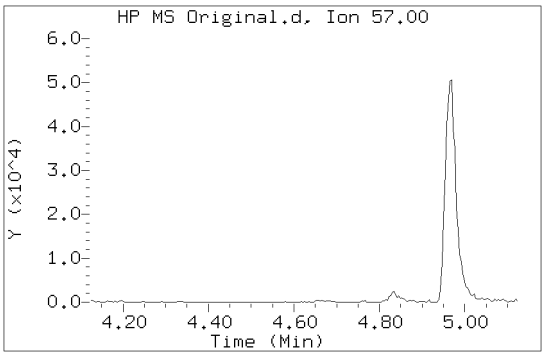
AFTER

MASS
59
AREA
11427
HEIGHT
4768
20-Jul-2023
15:04
linh
pham



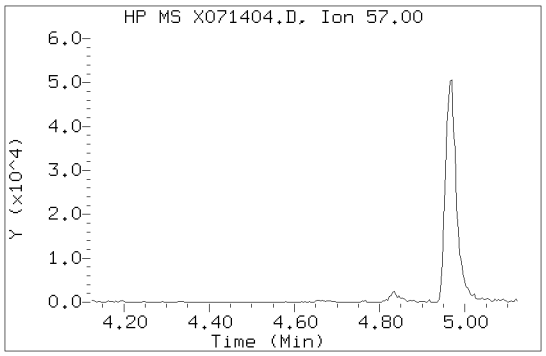
BEFORE

MASS
57
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



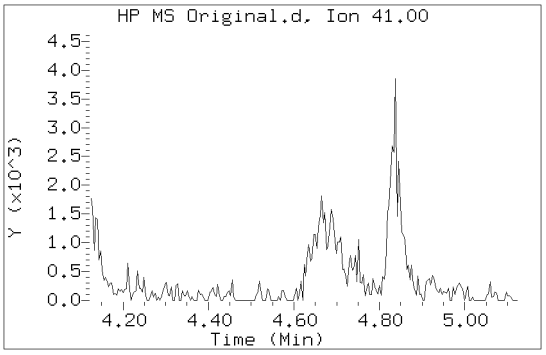
AFTER

MASS
57
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



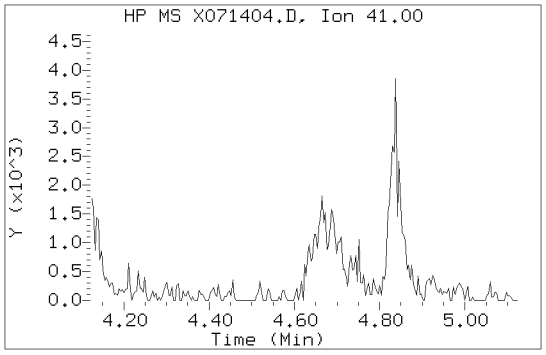
BEFORE

MASS
41
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

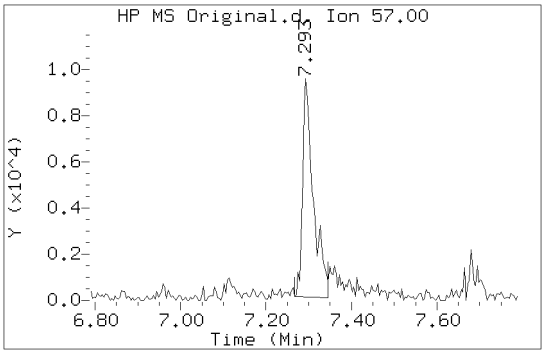


3,3-Dimethyl-1-butanol (624-95-3)

Reason Code:

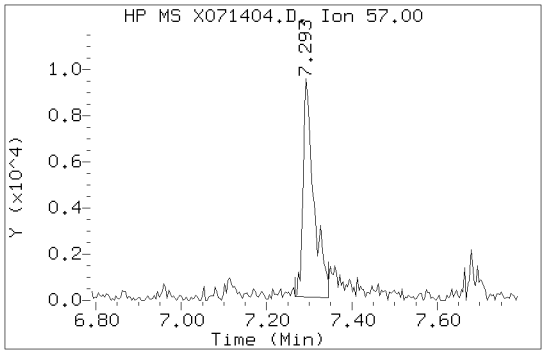
BEFORE

MASS
57
AREA
16922
HEIGHT
9467
20-Jul-2023
15:04
linh
pham



AFTER

MASS
57
AREA
16922
HEIGHT
9467
20-Jul-2023
15:04
linh
pham



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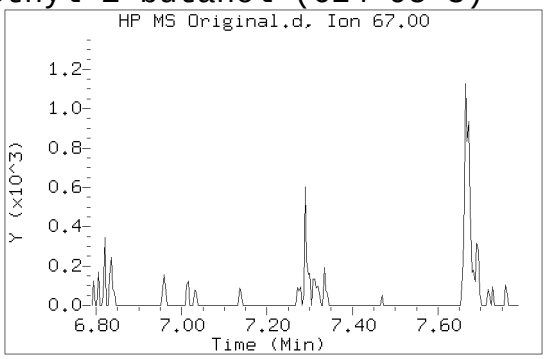
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

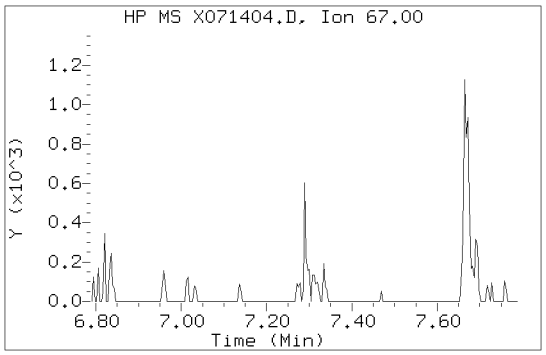
3,3-Dimethyl-1-butanol (624-95-3)

Reason Code:

BEFORE
MASS
67
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER
MASS
67
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
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AREA
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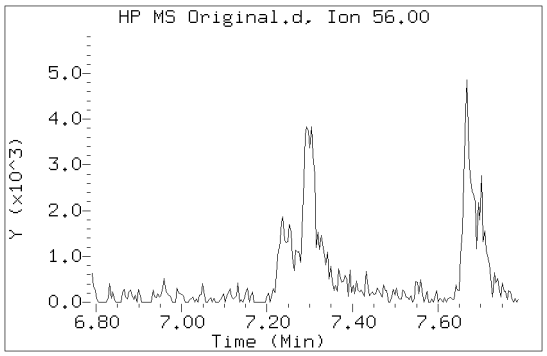
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER
MASS
56
AREA
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HEIGHT
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20-Jul-2023
15:04
linh
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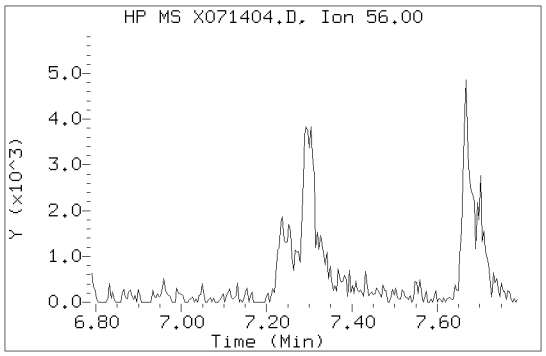
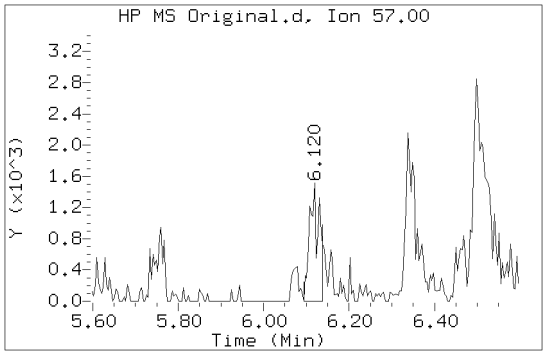


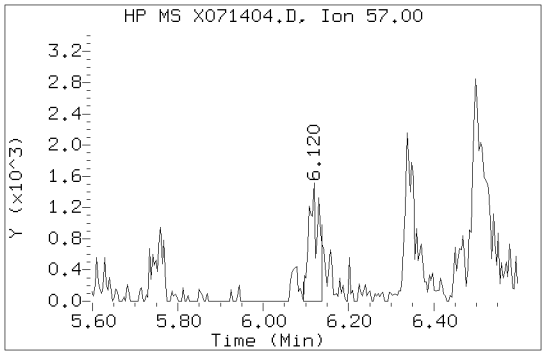
Epichlorohydrin (106-89-8)

Reason Code:

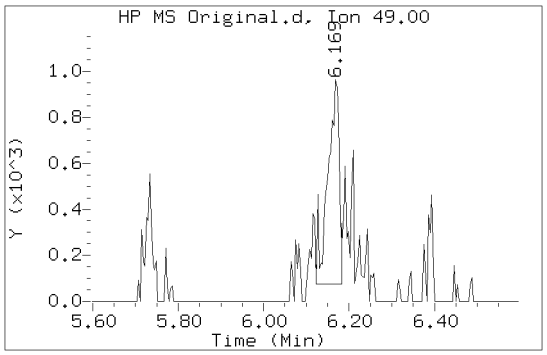
BEFORE
MASS
57
AREA
2383
HEIGHT
1514
20-Jul-2023
15:04
linh
pham



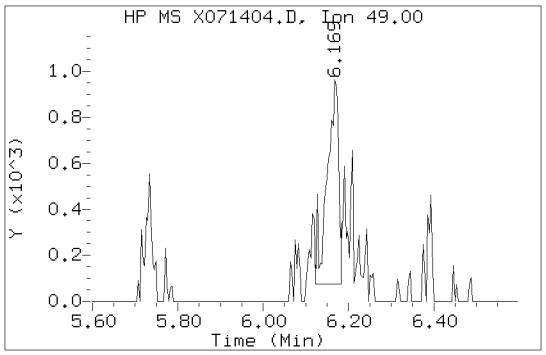
AFTER
MASS
57
AREA
2383
HEIGHT
1514
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
49
AREA
1633
HEIGHT
889
20-Jul-2023
15:04
linh
pham



AFTER
MASS
49
AREA
1633
HEIGHT
889
20-Jul-2023
15:04
linh
pham



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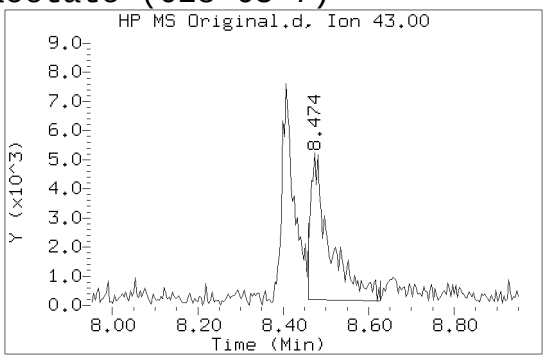
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

n-Amyl acetate (628-63-7)

Reason Code:

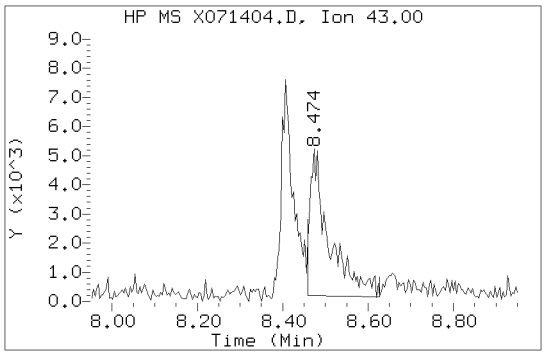
BEFORE

MASS
43
AREA
15950
HEIGHT
5045
20-Jul-2023
15:04
linh
pham



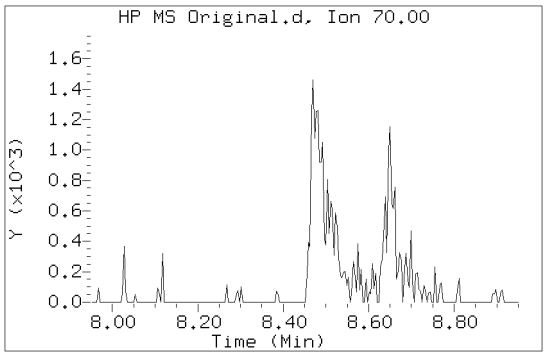
AFTER

MASS
43
AREA
15950
HEIGHT
5045
20-Jul-2023
15:04
linh
pham



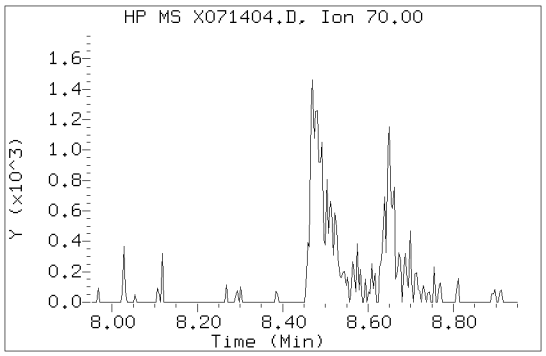
BEFORE

MASS
70
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



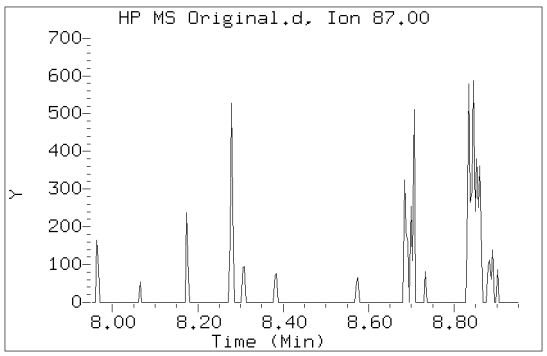
AFTER

MASS
70
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



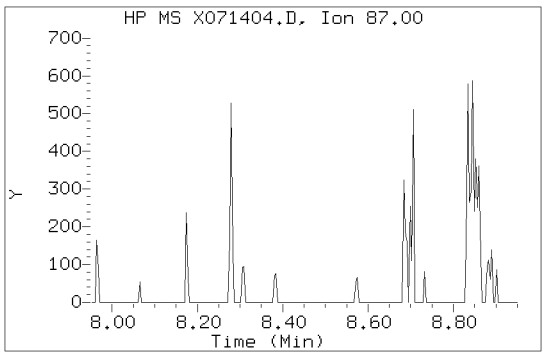
BEFORE

MASS
87
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
87
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

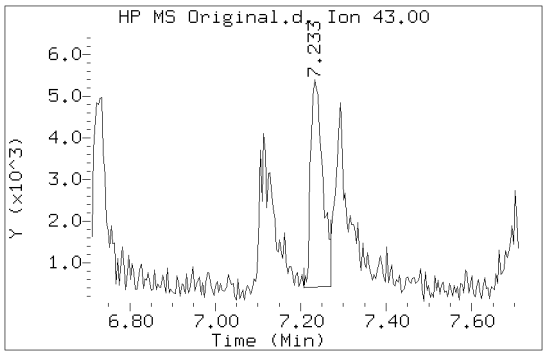


n-Butyl acetate (123-86-4)

Reason Code:

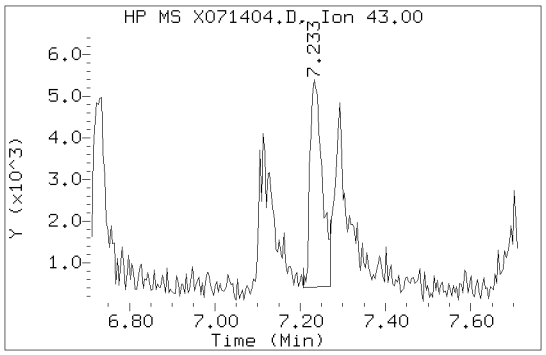
BEFORE

MASS
43
AREA
9795
HEIGHT
4977
20-Jul-2023
15:04
linh
pham



AFTER

MASS
43
AREA
9795
HEIGHT
4977
20-Jul-2023
15:04
linh
pham



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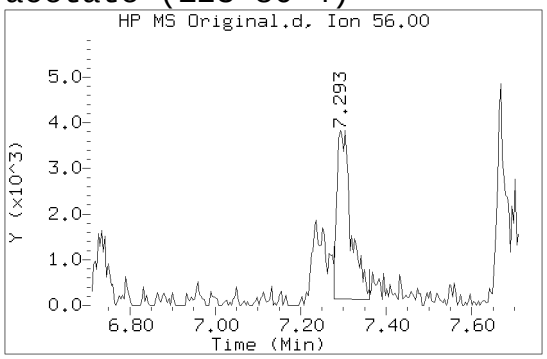
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

n-Butyl acetate (123-86-4)

Reason Code:

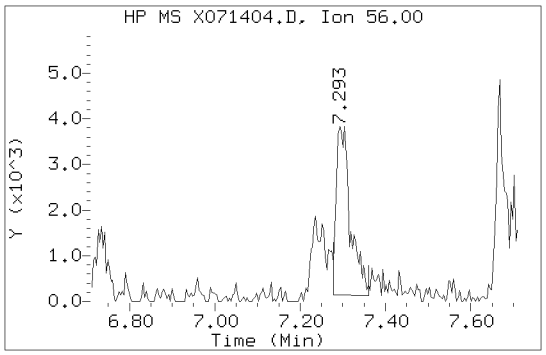
BEFORE

MASS
56
AREA
8623
HEIGHT
3689
20-Jul-2023
15:04
linh
pham



AFTER

MASS
56
AREA
8623
HEIGHT
3689
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
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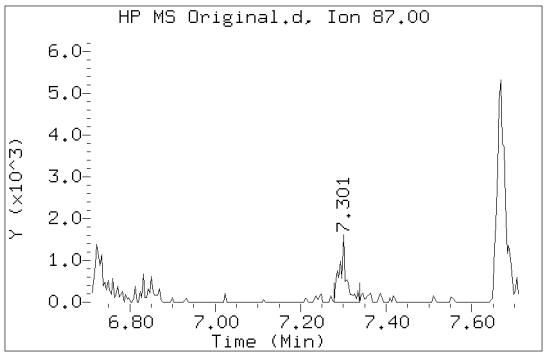

AFTER

MASS
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20-Jul-2023
15:04
linh
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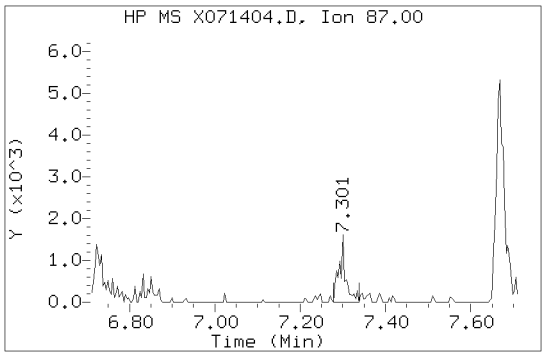

Acetaldehyde (75-07-0)

Reason Code:

BEFORE

MASS
44
AREA
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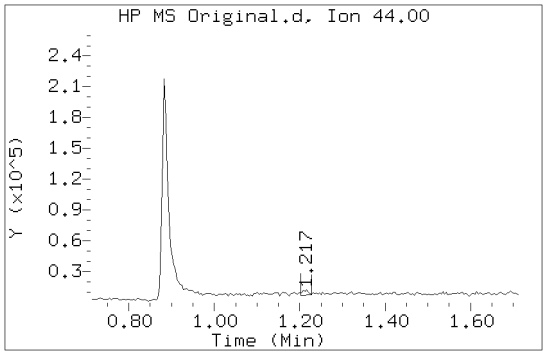
HEIGHT
4908
20-Jul-2023
15:04
linh
pham



AFTER

MASS
44
AREA
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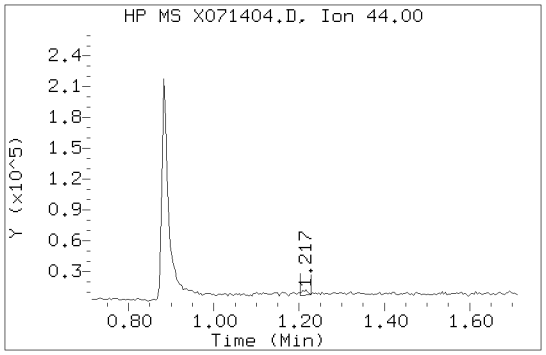
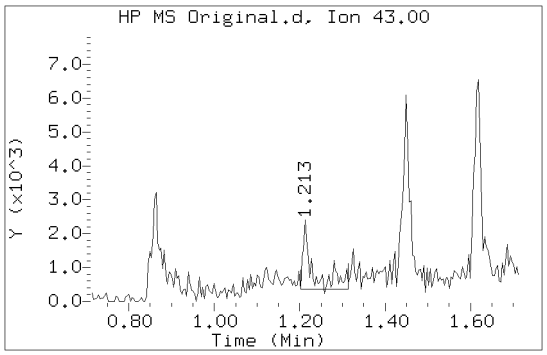
HEIGHT
4908
20-Jul-2023
15:04
linh
pham



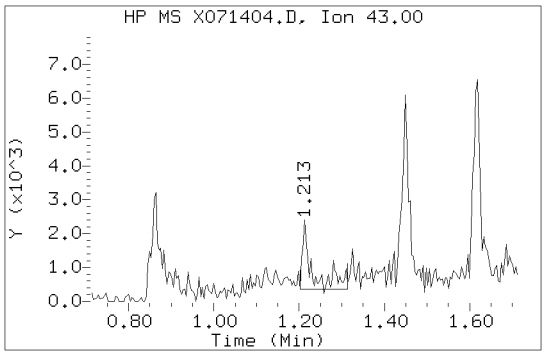
BEFORE

MASS
43
AREA
3201
HEIGHT
2038
20-Jul-2023
15:04
linh
pham



AFTER

MASS
43
AREA
3201
HEIGHT
2038
20-Jul-2023
15:04
linh
pham



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Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

Acetaldehyde (75-07-0)

Reason Code:

BEFORE

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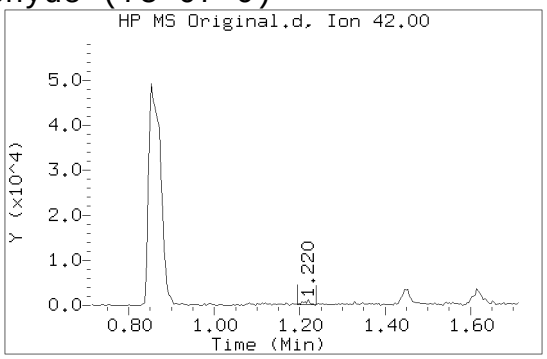
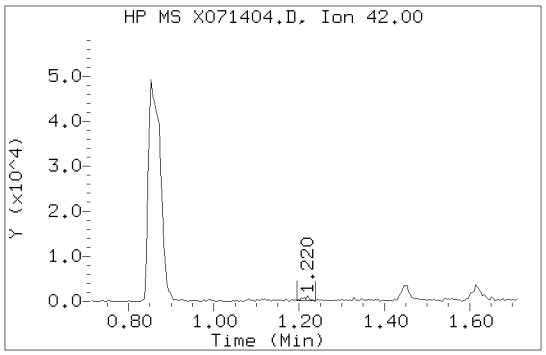
AREA
1038
HEIGHT
1152
20-Jul-2023
15:04
linh
pham



AFTER

MASS
42
AREA
1038
HEIGHT
1152
20-Jul-2023
15:04
linh
pham

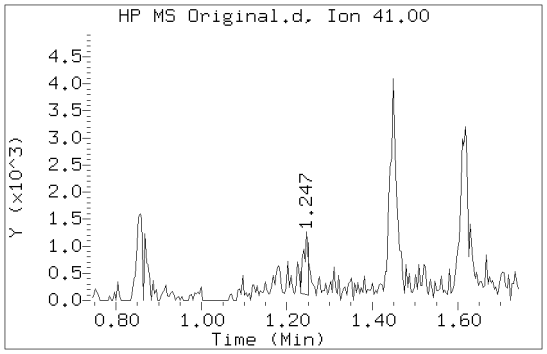


Isobutylene (115-11-7)

Reason Code:

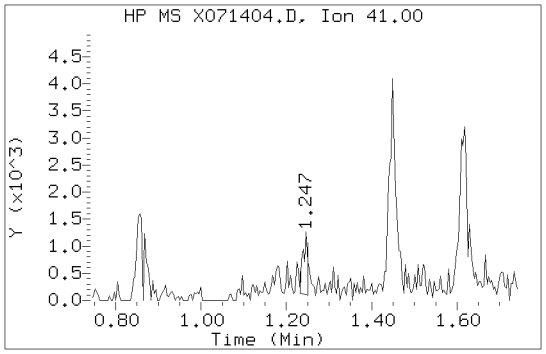
BEFORE

MASS
41
AREA
875
HEIGHT
1172
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
875
HEIGHT
1172
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
56
AREA
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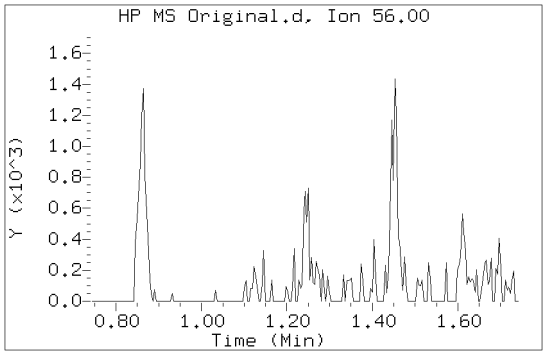
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
56
AREA
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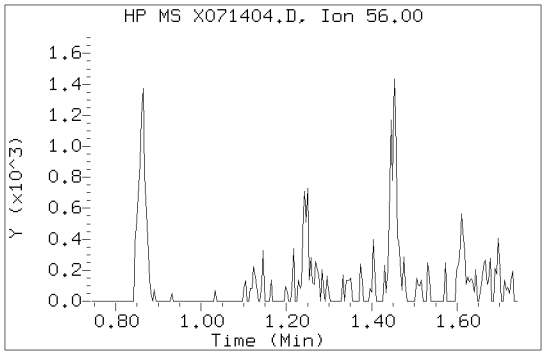
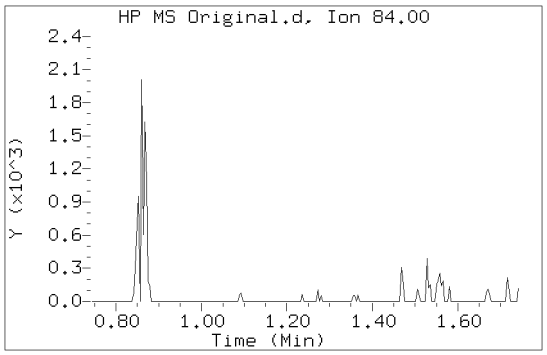
HEIGHT
0
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
84
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
84
AREA
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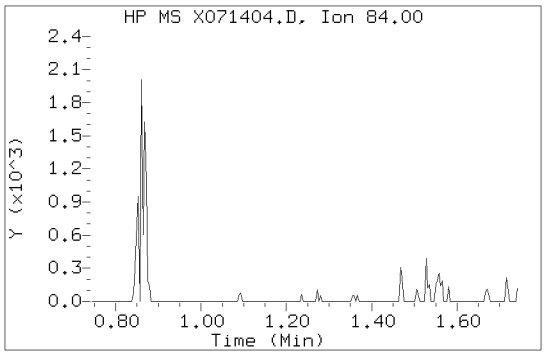
HEIGHT
0
20-Jul-2023
15:04
linh
pham



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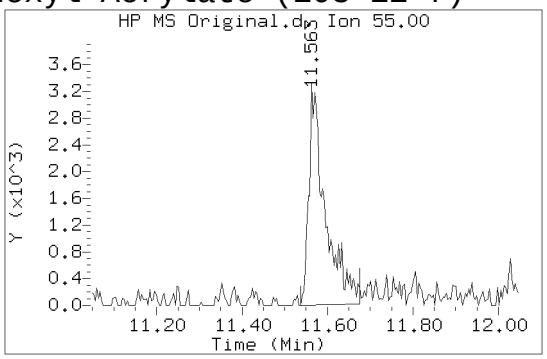
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

2-Ethylhexyl Acrylate (103-11-7)

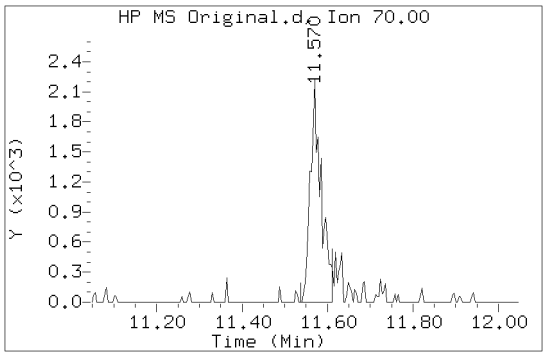
BEFORE

MASS
55
AREA
8780
HEIGHT
3308
20-Jul-2023
15:04
linh
pham



BEFORE

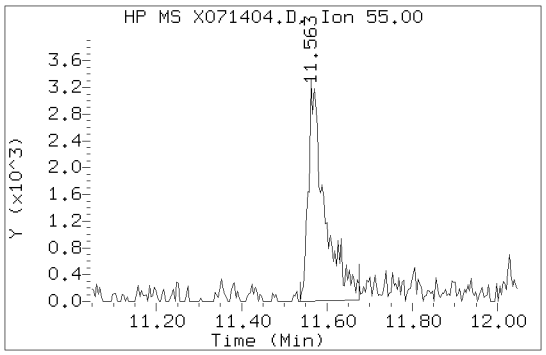
MASS
70
AREA
3926
HEIGHT
2219
20-Jul-2023
15:04
linh
pham



Reason Code:

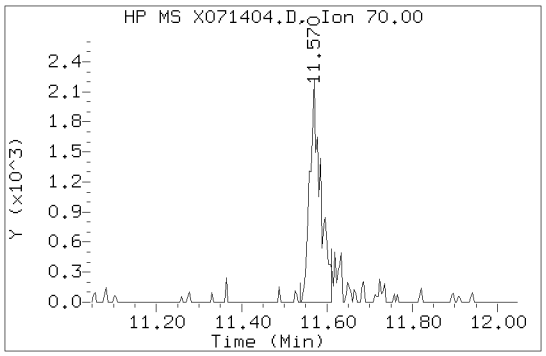
AFTER

MASS
55
AREA
8780
HEIGHT
3308
20-Jul-2023
15:04
linh
pham



AFTER

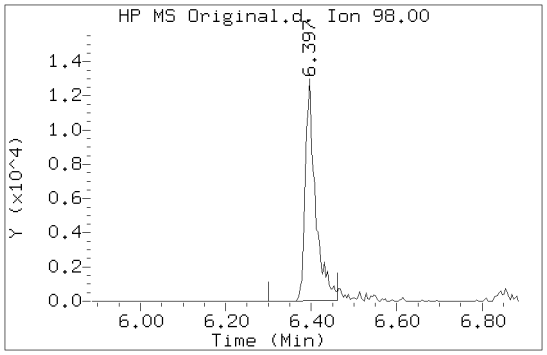
MASS
70
AREA
3926
HEIGHT
2219
20-Jul-2023
15:04
linh
pham



Toluene-d8 (2037-26-5)

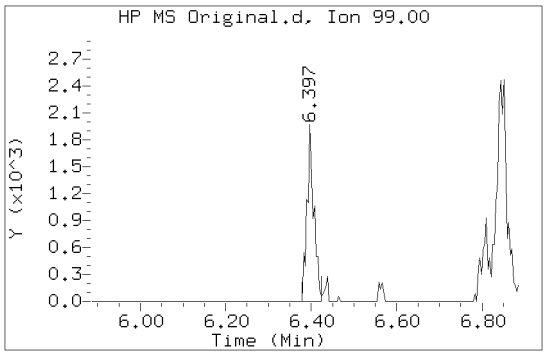
BEFORE

MASS
98
AREA
21847
HEIGHT
12976
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
99
AREA
2184
HEIGHT
1968
20-Jul-2023
15:04
linh
pham



Reason Code:

AFTER

MASS
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AREA
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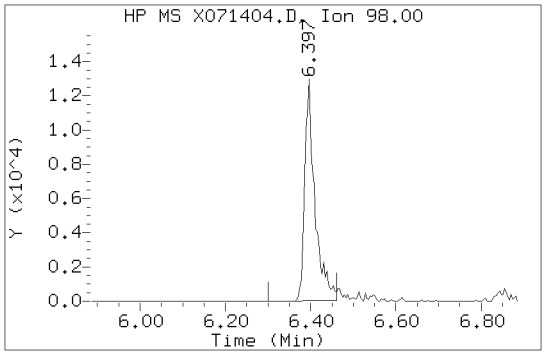
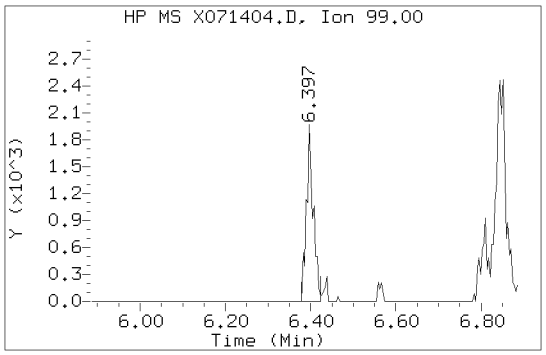
HEIGHT
12976
20-Jul-2023
15:04
linh
pham



AFTER

MASS
99
AREA
2184
HEIGHT
1968
20-Jul-2023
15:04
linh
pham



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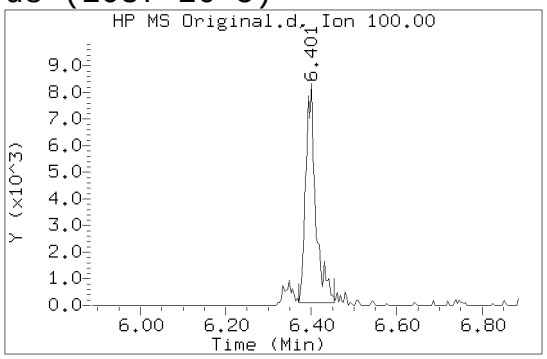
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

Toluene-d8 (2037-26-5)

Reason Code:

BEFORE

MASS
100
AREA
13429
HEIGHT
8225
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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AREA
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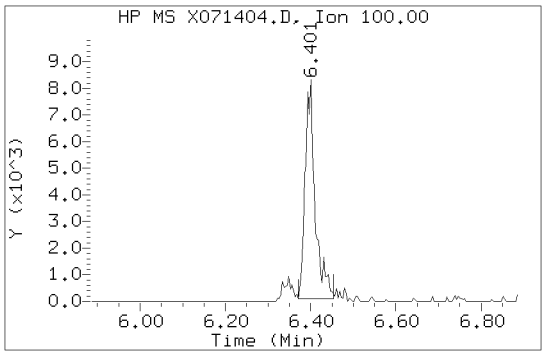
HEIGHT
8225
20-Jul-2023
15:04
linh
pham

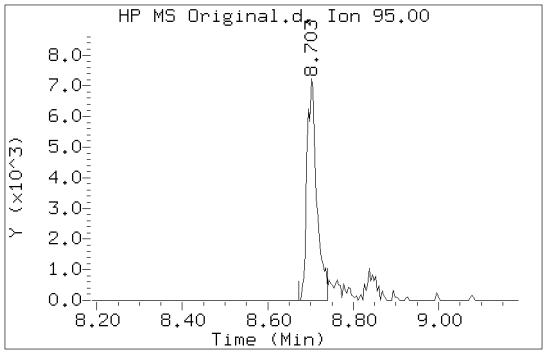


4-Bromofluorobenzene (460-00-4)

Reason Code:

BEFORE

MASS
95
AREA
11517
HEIGHT
7234
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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AREA
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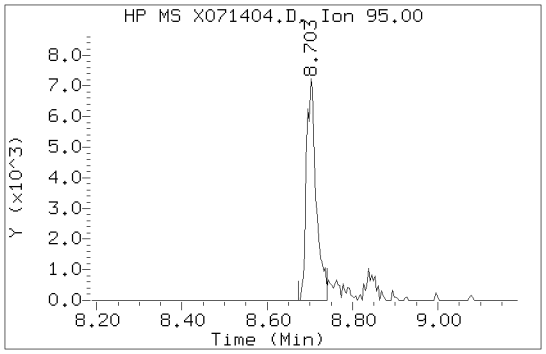
HEIGHT
7234
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
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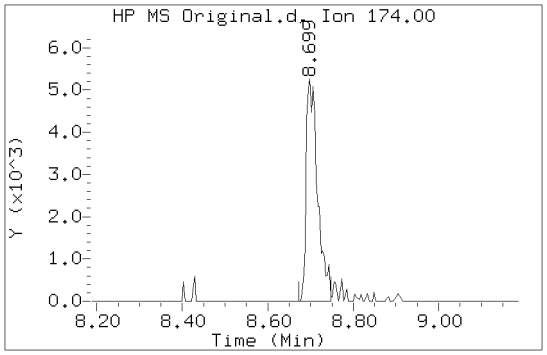
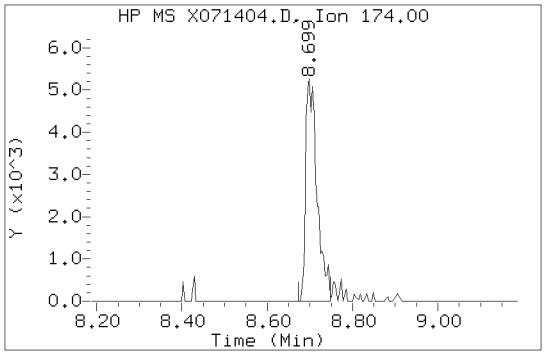
HEIGHT
5262
20-Jul-2023
15:04
linh
pham



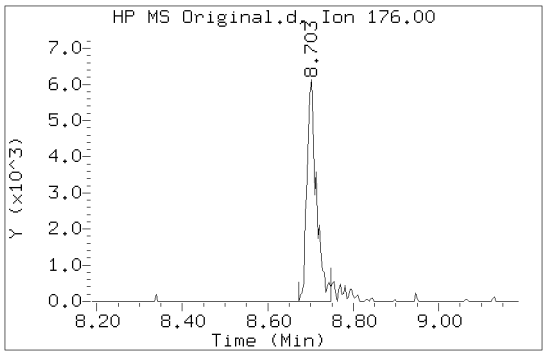
AFTER

MASS
174
AREA
9804
HEIGHT
5262
20-Jul-2023
15:04
linh
pham



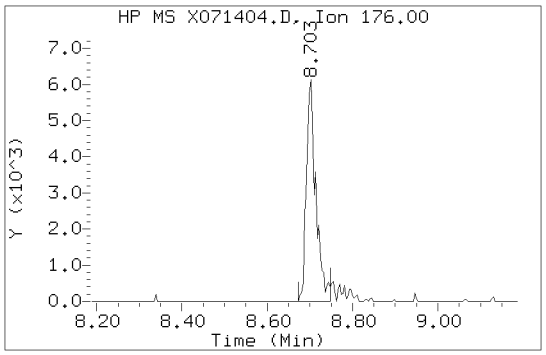
BEFORE

MASS
176
AREA
9576
HEIGHT
6132
20-Jul-2023
15:04
linh
pham



AFTER

MASS
176
AREA
9576
HEIGHT
6132
20-Jul-2023
15:04
linh
pham



ALS Laboratory Group

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Inj Date : 14-JUL-2023 13:23
Operator : PC Inst ID: voa6.i
Smp Info : VSTD002;VSTD002;1;4;
Misc Info : V6;WATER;0;1;
Comment :
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Meth Date : 20-Jul-2023 15:05 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 13:02 Cal File: X071404.D
Als bottle: 6 Calibration Sample, Level: 4
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	4.181	4.181	(1.000)	523249	50.0000	
2	Dichlorodifluoromethane	85	0.976	0.976	(0.234)	9210	2.00000	2.77(M)
3	Chloromethane	50	1.085	1.085	(0.260)	17566	2.00000	2.22
4	Propionitrile	54	3.683	3.683	(0.881)	20667	20.0000	19.93(aM)
5	Vinyl Chloride	62	1.145	1.145	(0.274)	15109	2.00000	2.23
6	Bromomethane	94	1.347	1.347	(0.322)	5769	2.00000	2.05(M)
7	Chloroethane	64	1.404	1.404	(0.336)	8482	2.00000	2.19(M)
8	Trichlorofluoromethane	101	1.561	1.561	(0.373)	15419	2.00000	2.24
9	Acrolein	56	1.861	1.861	(0.445)	917	4.00000	5.70(aMH)
10	Acetone	43	1.977	1.977	(0.473)	15631	4.00000	3.03
11	1,1-Dichloroethene	96	1.921	1.921	(0.459)	8527	2.00000	2.22
12	Isobutyl Alcohol	43	4.684	4.684	(1.120)	37832	40.0000	38.14(aM)
13	Acetonitrile	39	2.202	2.202	(0.527)	15528	20.0000	21.16(a)
14	Allyl Chloride	41	2.202	2.202	(0.527)	33926	2.00000	1.97(a)
15	Iodomethane	142	2.030	2.030	(0.485)	11682	4.00000	6.08(M)
16	Acrylonitrile	53	2.547	2.547	(0.609)	10541	4.00000	4.13
17	Methylene Chloride	84	2.303	2.303	(0.551)	11880	2.00000	1.28(M)
18	Methyl tert-butyl ether	73	2.543	2.543	(0.608)	30252	2.00000	2.12
19	Carbon Disulfide	76	2.075	2.075	(0.496)	52986	4.00000	4.39
20	trans-1,2-Dichloroethene	96	2.532	2.532	(0.606)	9515	2.00000	2.14

21 Vinyl Acetate	43	3.004	3.004 (0.719)	75193	4.00000	4.10
22 1,1-Dichloroethane	63	2.922	2.922 (0.699)	21647	2.00000	2.22

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	23 Chloroprene	53	1.771	1.771	(0.424)	4560	2.00000	1.93(aM)
	24 2-Butanone	43	3.672	3.672	(0.878)	10454	4.00000	3.75(M)
	25 Methacrylonitrile	41	3.870	3.870	(0.926)	12946	2.00000	1.91(a)
	26 2,2-Dichloropropane	77	3.514	3.514	(0.840)	15882	2.00000	2.30
	27 cis-1,2-Dichloroethene	96	3.537	3.537	(0.846)	11533	2.00000	2.04(M)
	28 Chloroform	83	3.915	3.915	(0.936)	21885	2.00000	2.19
	29 Bromochloromethane	128	3.799	3.799	(0.909)	7550	2.00000	2.38
$	30 Dibromofluoromethane	113	4.106	4.106	(0.982)	10131	2.00000	1.38
	31 1,1,1-Trichloroethane	97	4.088	4.088	(0.978)	16000	2.00000	2.08
	32 1,1-Dichloropropene	75	4.283	4.283	(0.863)	13616	2.00000	2.05
	33 1,2-Dichloroethane	62	4.564	4.564	(0.919)	16880	2.00000	1.89(M)
	34 Carbon Tetrachloride	117	4.264	4.264	(0.859)	13047	2.00000	1.95(M)
$	35 1,2-Dichloroethane-d4	65	4.477	4.477	(1.071)	14667	2.00000	1.85
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	811220	50.0000	
	37 Benzene	78	4.519	4.519	(0.910)	39692	2.00000	2.04
	38 Trichloroethene	130	5.208	5.208	(1.049)	12354	2.00000	2.25(a)
	39 Bromodichloromethane	83	5.733	5.733	(1.155)	14668	2.00000	1.97(a)
	40 Methyl Methacrylate	41	5.625	5.625	(1.345)	12770	2.00000	2.02(aM)
	41 2-Chloroethylvinyl ether	63	6.059	6.059	(1.220)	8400	4.00000	3.70(a)
	42 1,2-Dichloropropane	63	5.441	5.441	(1.096)	12678	2.00000	2.03(aM)
	43 2-Nitropropane	43	5.973	5.973	(1.428)	4635	2.00000	2.22(a)
	44 Dibromomethane	93	5.557	5.557	(1.119)	7713	2.00000	2.18(a)
	45 4-Methyl-2-Pentanone	43	6.333	6.333	(0.826)	29112	4.00000	3.99(a)
	46 cis-1,3-Dichloropropene	75	6.164	6.164	(1.242)	17329	2.00000	2.02(a)
*	47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	740616	50.0000	
$	48 Toluene-d8	98	6.389	6.389	(0.833)	41058	2.00000	2.15(aM)
	49 Ethyl Methacrylate	69	6.723	6.723	(1.354)	11361	2.00000	2.13(a)
	50 Toluene	91	6.449	6.449	(0.841)	40789	2.00000	2.04(a)
	51 trans-1,3-Dichloropropene	75	6.689	6.689	(1.347)	14549	2.00000	2.02(a)
	52 2-Hexanone	43	7.105	7.105	(0.927)	19503	4.00000	4.07(a)
	53 1,1,2-Trichloroethane	83	6.843	6.843	(0.892)	9040	2.00000	2.13(a)
	54 1,3-Dichloropropane	76	6.985	6.985	(0.911)	17344	2.00000	2.00(a)
	55 Dibromochloromethane	129	7.180	7.180	(0.936)	12160	2.00000	1.99(a)
	56 Tetrachloroethene	164	6.929	6.929	(0.904)	9711	2.00000	2.35(aM)
	57 1,2-Dibromoethane	107	7.263	7.263	(0.947)	9815	2.00000	2.03(a)
	58 1-Chlorohexane	55	7.694	7.694	(1.550)	14217	2.00000	2.18(a)
	59 Chlorobenzene	112	7.694	7.694	(1.003)	28612	2.00000	2.05(a)
	60 1,1,1,2-Tetrachloroethane	131	7.773	7.773	(1.014)	10835	2.00000	1.98(a)
	61 Ethylbenzene	106	7.799	7.799	(1.017)	14708	2.00000	2.10(a)
	62 m,p-Xylenes	106	7.904	7.904	(1.031)	39231	4.00000	4.47(a)
	63 o-Xylene	106	8.245	8.245	(1.075)	17205	2.00000	2.07(a)
	64 Styrene	104	8.275	8.275	(1.079)	28504	2.00000	1.96(a)
	66 Bromoform	173	8.414	8.414	(1.097)	8672	2.00000	2.21(Ta)
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	48187	2.00000	2.25(a)
	68 1,1,2,2-Tetrachloroethane	83	8.841	8.841	(0.915)	14352	2.00000	2.16(aM)
$	69 4-Bromofluorobenzene	95	8.695	8.695	(1.134)	17835	2.00000	2.01(a)
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	394737	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	10578	2.00000	2.01(aM)
	72 trans-1,4-Dichloro-2-butene	53	8.901	8.901	(1.161)	4279	2.00000	1.89(aM)
	73 n-Propylbenzene	91	8.916	8.916	(0.923)	50047	2.00000	2.09(a)
	74 Bromobenzene	156	8.815	8.815	(0.912)	12961	2.00000	2.09(a)
	75 1,3,5-Trimethylbenzene	105	9.070	9.070	(0.939)	37798	2.00000	2.11(a)

76	2-Chlorotoluene	91	8.980	8.980 (0.929)	34081	2.00000	2.11(a)
77	4-Chlorotoluene	91	9.077	9.077 (0.939)	37510	2.00000	2.12(a)

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071405.D Page 3
Report Date: 20-Jul-2023 15:05

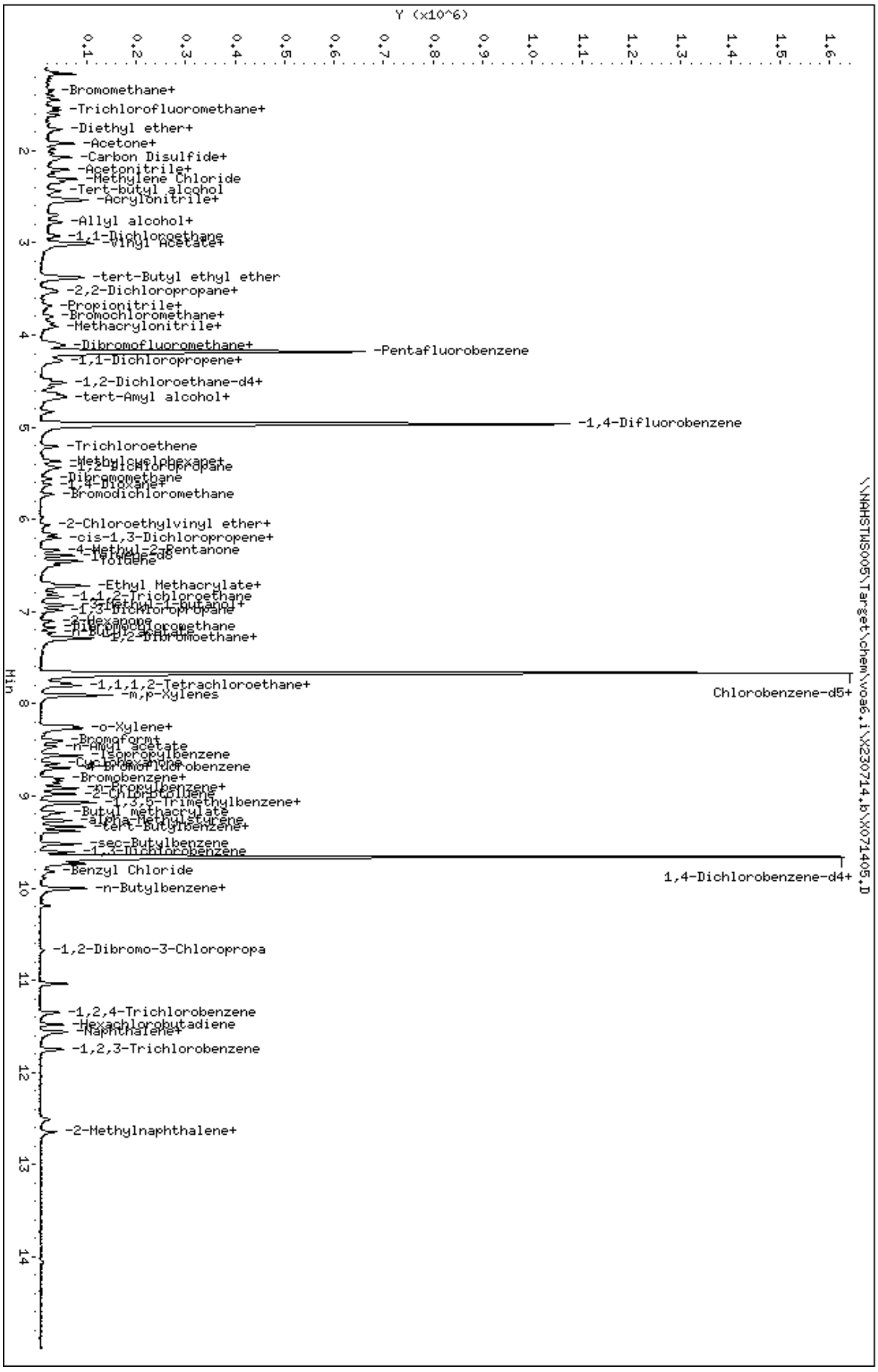
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
78	tert-Butylbenzene	119	9.336	9.336	(0.966)	34859	2.00000	2.27(a)
79	1,2,4-Trimethylbenzene	105	9.381	9.381	(0.971)	38346	2.00000	2.13(a)
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	45694	2.00000	2.23(a)
82	p-Isopropyltoluene	119	9.647	9.647	(0.998)	39231	2.00000	2.10(a)
83	1,3-Dichlorobenzene	146	9.609	9.609	(0.995)	22178	2.00000	2.06(a)
84	1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	26773	2.00000	2.27(a)
86	Benzyl Chloride	91	9.823	9.823	(1.281)	17851	2.00000	3.69(aM)
87	n-Butylbenzene	91	10.003	10.003	(1.035)	31075	2.00000	1.98(a)
88	1,2-Dichlorobenzene	146	9.999	9.999	(1.035)	21840	2.00000	2.06(a)
89	1,2-Dibromo-3-Chloropropane	155	10.678	10.678	(1.105)	1953	2.00000	2.84(a)
90	1,2,4-Trichlorobenzene	180	11.360	11.360	(1.176)	14997	2.00000	2.06(a)
91	Hexachlorobutadiene	225	11.476	11.476	(1.188)	6844	2.00000	4.30(aM)
92	Naphthalene	128	11.559	11.559	(1.196)	35806	2.00000	1.99(aM)
93	1,2,3-Trichlorobenzene	180	11.742	11.742	(1.215)	14737	2.00000	2.16(a)
146	Methyl acetate	43	2.247	2.247	(0.537)	9491	2.00000	2.03(aM)
138	Freon TF	101	1.917	1.917	(0.459)	7195	2.00000	1.83(aM)
141	Cyclohexane	56	4.121	4.121	(0.986)	19462	2.00000	2.14(aH)
142	Tetrahydrofuran	42	3.866	3.866	(0.925)	5657	4.00000	4.20(a)
147	Methylcyclohexane	55	5.370	5.370	(1.082)	31142	2.00000	1.81(aM)
135	1,4-Dioxane	88	5.617	5.617	(1.343)	2323	40.0000	37.36(M)
132	n-Butanol	56	5.362	5.362	(1.282)	7443	40.0000	42.73(aM)
131	Methyl Acrylate	55	3.743	3.743	(0.895)	13406	2.00000	1.88(aM)
133	Ethyl Acrylate	55	5.370	5.370	(1.284)	31450	2.00000	1.81(M)
136	n-Hexane	57	2.768	2.768	(0.662)	11984	2.00000	1.88(aM)
139	Diethyl ether	59	1.760	1.760	(0.421)	10716	2.00000	2.19(a)
148	Tert-butyl alcohol	59	2.442	2.442	(0.584)	29280	40.0000	44.33(M)
149	Isopropyl alcohol	45	2.097	2.097	(0.502)	17366	40.0000	42.37(T)
156	Diisopropyl ether	45	3.008	3.008	(0.719)	43282	2.00000	2.00(Ta)
166	1,2,3-Trimethylbenzene	105	9.733	9.733	(1.007)	31731	2.00000	1.73(a)
167	Ethanol	45	1.711	1.711	(0.409)	3219	40.0000	26.14(M)
172	tert-Butyl formate	59	4.635	4.635	(1.108)	23857	4.00000	4.26(aM)
173	3,3-Dimethyl-1-butanol	57	7.293	7.293	(0.951)	33143	40.0000	41.61
174	tert-Amyl methyl ether	73	4.672	4.672	(1.117)	31345	2.00000	1.82(aM)
175	tert-Butyl ethyl ether	59	3.383	3.383	(0.809)	42907	2.00000	1.93(a)
176	tert-Amyl alcohol	59	4.635	4.635	(1.108)	29185	40.0000	51.05
151	4-Methyl-2-pentanol	45	6.723	6.723	(1.354)	72210	40.0000	41.53(M)
180	1-Methylnaphthalene	142	12.649	12.649	(1.309)	14828	2.00000	(a)
140	1,3-Butadiene	54	1.167	1.167	(0.279)	15351	2.00000	2.28(aM)
152	Amyl alcohol	42	6.933	6.933	(0.904)	8579	40.0000	40.28(M)
158	Dichlorofluoromethane	67	1.535	1.535	(0.367)	17587	2.00000	2.08
159	Propylene oxide	43	1.805	1.805	(0.432)	2798	4.00000	4.35(a)
161	3-Methyl-1-butanol	55	6.929	6.929	(0.904)	5263	40.0000	28.86
162	Butyl acrylate	55	8.267	8.267	(1.078)	25518	2.00000	1.81(a)
163	Butyl methacrylate	41	9.178	9.178	(0.950)	19072	2.00000	2.01(a)
164	Dicyclopentadiene	66	9.681	9.681	(1.002)	44874	2.00000	1.97(a)
182	Epichlorohydrin	57	6.112	6.112	(1.231)	4808	8.00000	7.93
M 94	1,2-Dichloroethylene (total)	96				21048	4.00000	(a)
130	Ethyl Acetate	43	3.683	3.683	(0.881)	15481	2.00000	1.99(TaM)
134	Cyclohexanone	55	8.646	8.646	(0.895)	15113	40.0000	43.00(a)
185	Isoprene	39	1.771	1.771	(0.424)	3408	2.00000	1.97(aM)
188	Isopropyl acetate	43	4.684	4.684	(0.943)	48167	2.00000	2.25(a)
187	n-Amyl acetate	43	8.462	8.462	(1.104)	26886	2.00000	1.98(aM)

189 n-Butyl acetate	43	7.225	7.225 (0.942)	20825	2.00000	1.83(aM)
150 Allyl alcohol	57	2.768	2.768 (0.662)	14314	40.0000	46.26

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
194 Acetaldehyde	44	1.212	1.212	(0.290)	8114	8.00000	(aM)
195 Methyl Amyl Ketone	43	8.391	8.391	(1.094)	28766	2.00000	1.85(a)
200 Dimethyl Disulfide	94	6.202	6.202	(0.809)	17864	2.00000	1.78(a)
202 Isobutylene	41	1.246	1.246	(0.298)	1654	2.00000	1.91(aM)
205 2-Ethylhexyl Acrylate	55	11.559	11.559	(1.196)	18101	2.00000	1.79(aM)

QC Flag Legend

T - Target compound detected outside RT window.
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.



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Sample Info: VSTD002;VSTD002;1;4;
Purge Volume: 5.0
Column phase: DB624

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

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Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

Dichlorodifluoromethane (75-71-8)

Reason Code:

BEFORE

MASS
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9210
HEIGHT
12589
20-Jul-2023
15:04
linh
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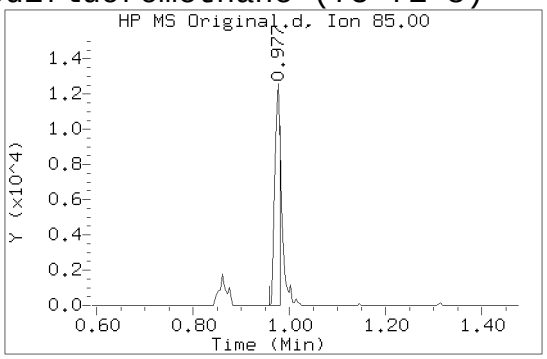

AFTER

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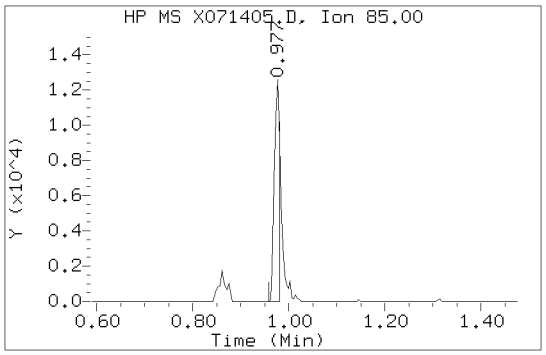

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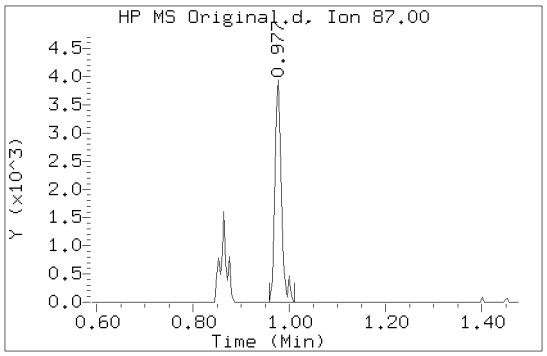

AFTER

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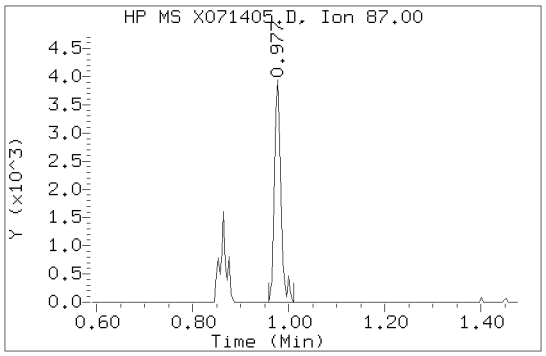

Bromomethane (74-83-9)

Reason Code:

BEFORE

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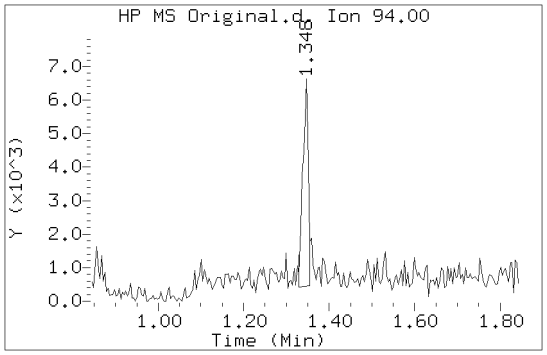

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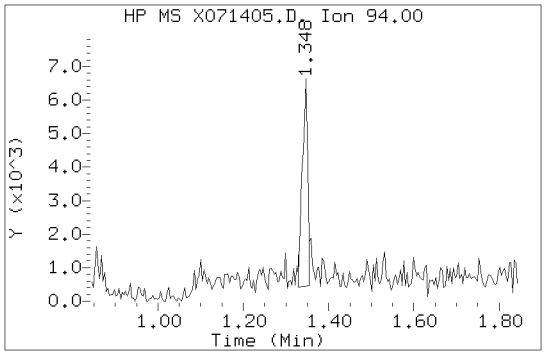

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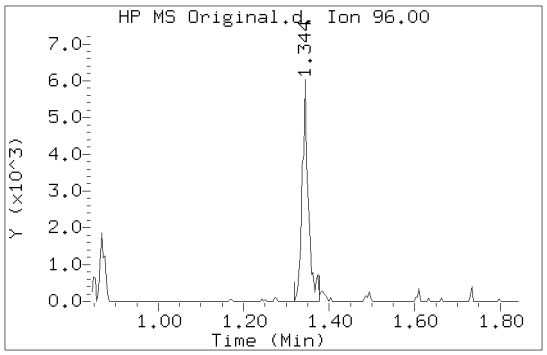

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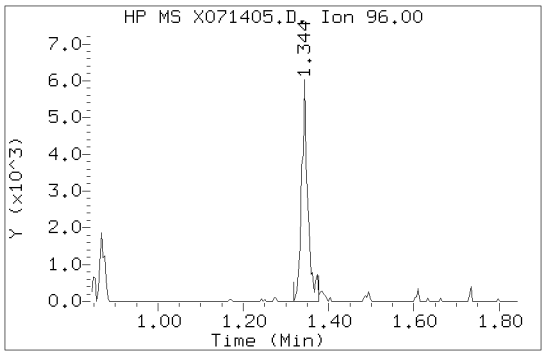

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InstruID : voa6.i
LabSampID : VSTD002

Chloroethane (75-00-3)

Reason Code:

BEFORE
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HEIGHT
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20-Jul-2023
15:04
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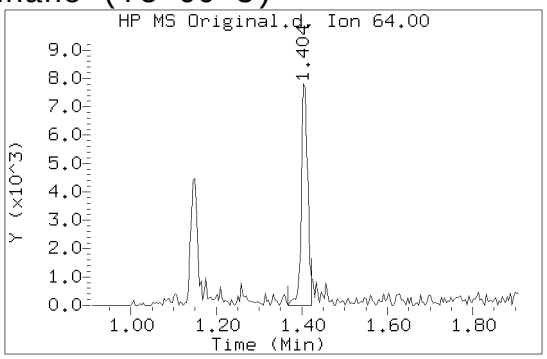
pham



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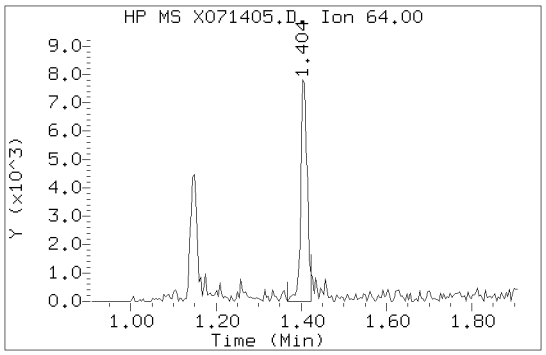

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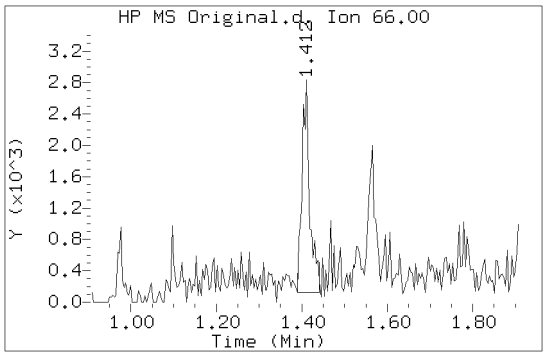

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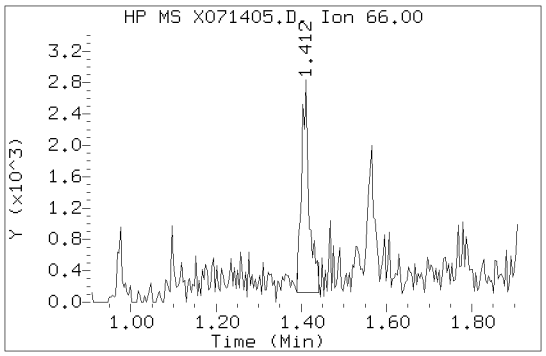

Iodomethane (74-88-4)

Reason Code:

BEFORE
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20-Jul-2023
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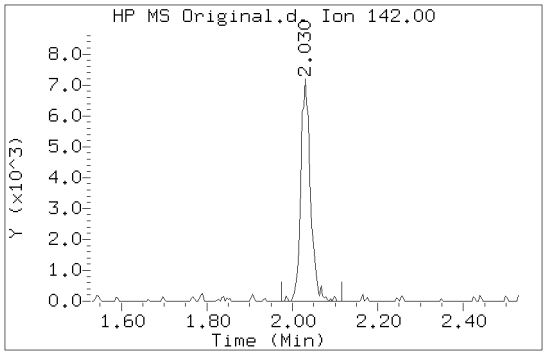

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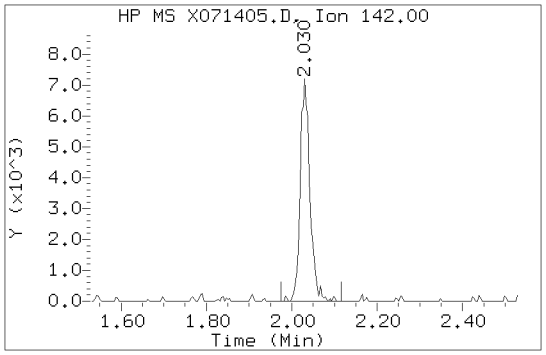

BEFORE
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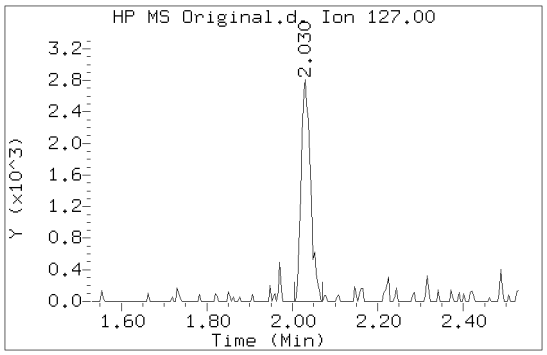

AFTER
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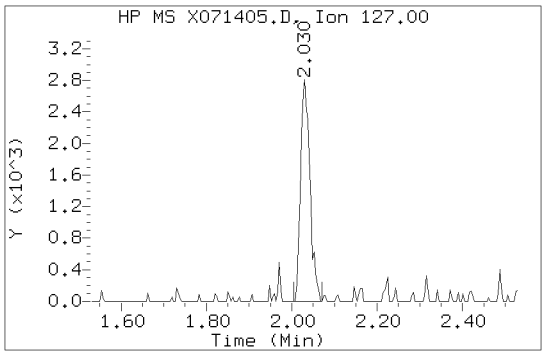

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InstruID : voa6.i
LabSampID : VSTD002

Iodomethane (74-88-4)

Reason Code:

BEFORE

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AREA
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1439
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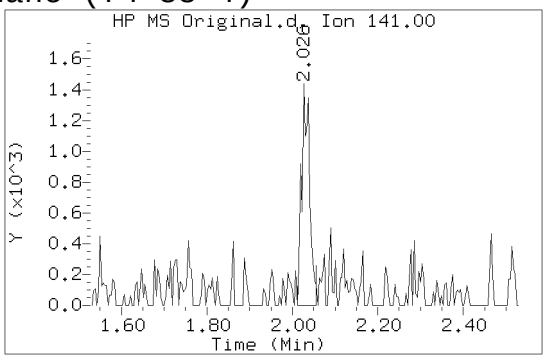

AFTER

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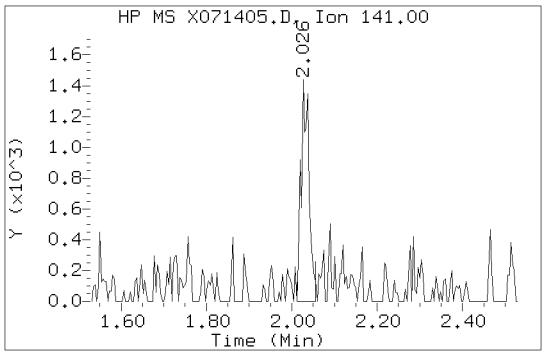

Methylene Chloride (75-09-2)

Reason Code:

BEFORE

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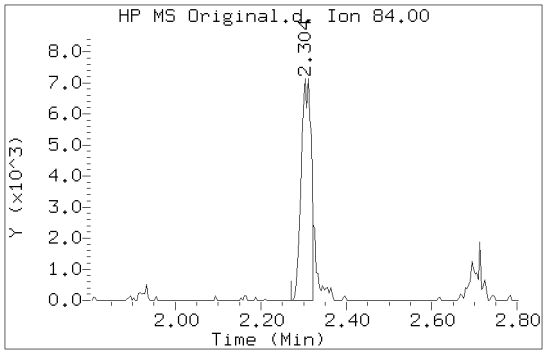
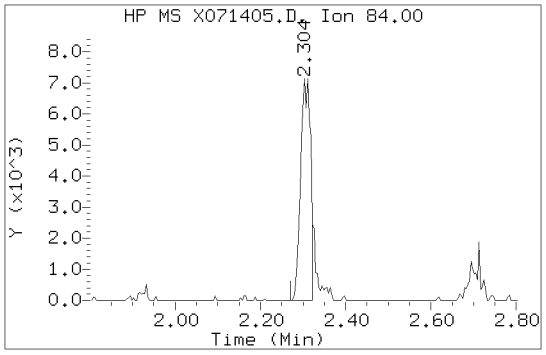
20-Jul-2023
15:04
linh
pham



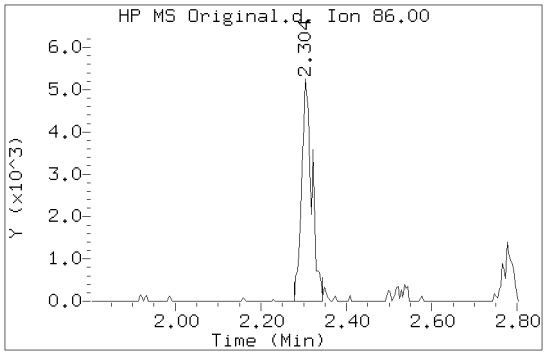
AFTER

MASS
84
AREA
11880
HEIGHT
7134
20-Jul-2023
15:04
linh
pham



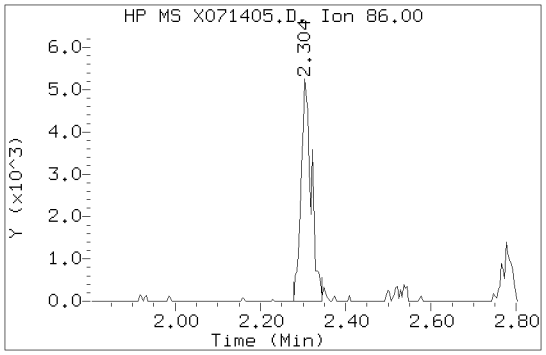
BEFORE

MASS
86
AREA
8944
HEIGHT
5254
20-Jul-2023
15:04
linh
pham



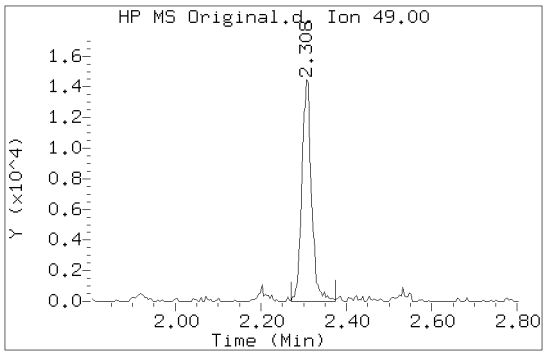
AFTER

MASS
86
AREA
8944
HEIGHT
5254
20-Jul-2023
15:04
linh
pham



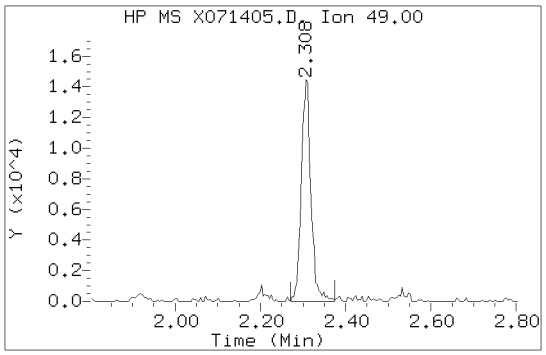
BEFORE

MASS
49
AREA
23277
HEIGHT
14471
20-Jul-2023
15:04
linh
pham



AFTER

MASS
49
AREA
23277
HEIGHT
14471
20-Jul-2023
15:04
linh
pham



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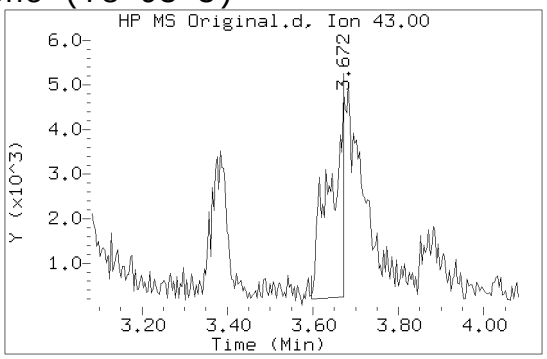
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

2-Butanone (78-93-3)

Reason Code:

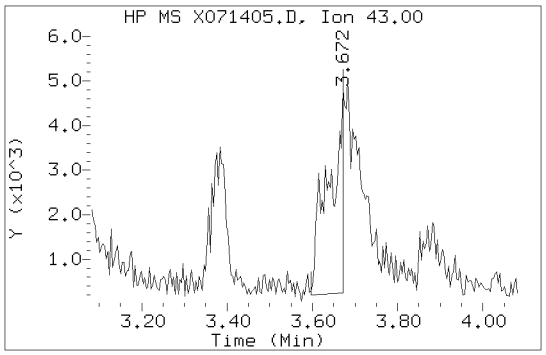
BEFORE

MASS
43
AREA
10454
HEIGHT
4589
20-Jul-2023
15:04
linh
pham



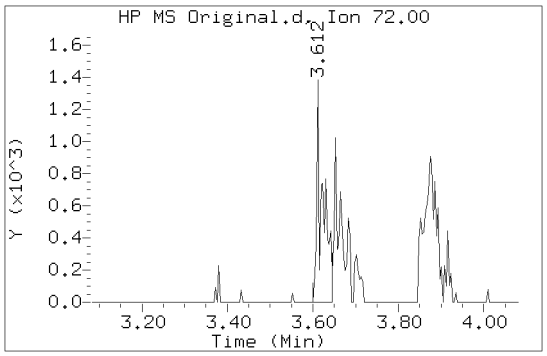
AFTER

MASS
43
AREA
10454
HEIGHT
4589
20-Jul-2023
15:04
linh
pham



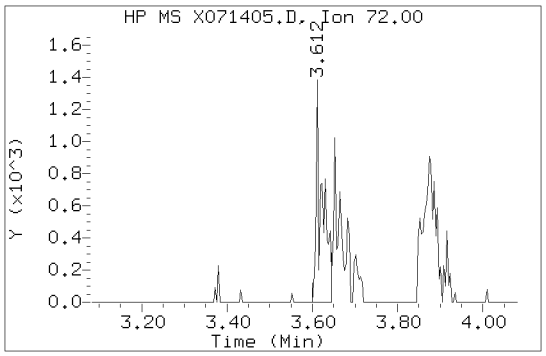
BEFORE

MASS
72
AREA
1388
HEIGHT
1384
20-Jul-2023
15:04
linh
pham



AFTER

MASS
72
AREA
1388
HEIGHT
1384
20-Jul-2023
15:04
linh
pham

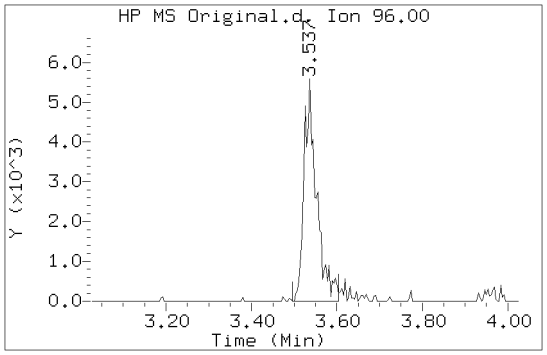


cis-1,2-Dichloroethene (156-59-2)

Reason Code:

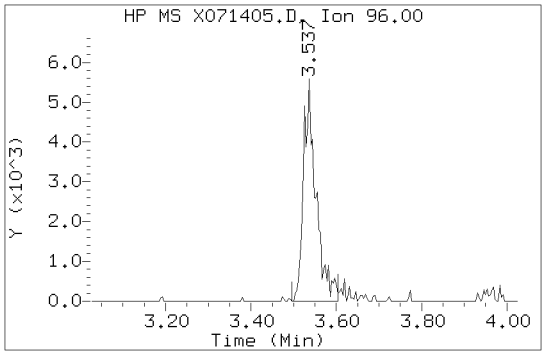
BEFORE

MASS
96
AREA
11533
HEIGHT
5587
20-Jul-2023
15:04
linh
pham



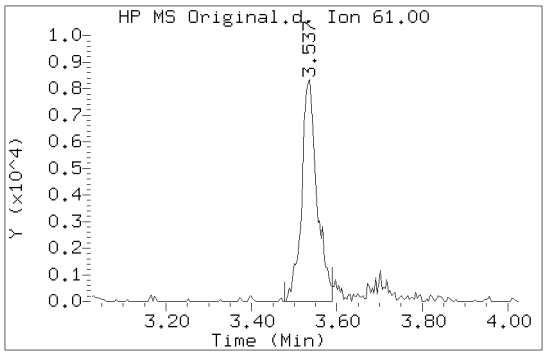
AFTER

MASS
96
AREA
11533
HEIGHT
5587
20-Jul-2023
15:04
linh
pham



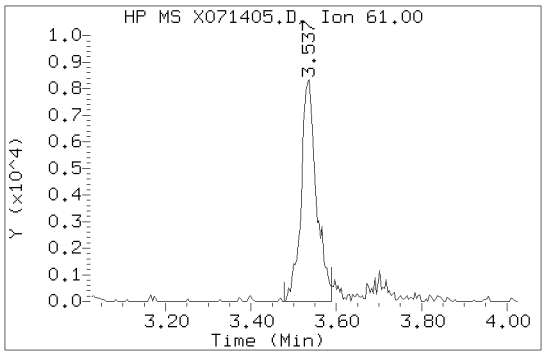
BEFORE

MASS
61
AREA
21081
HEIGHT
8339
20-Jul-2023
15:04
linh
pham



AFTER

MASS
61
AREA
21081
HEIGHT
8339
20-Jul-2023
15:04
linh
pham



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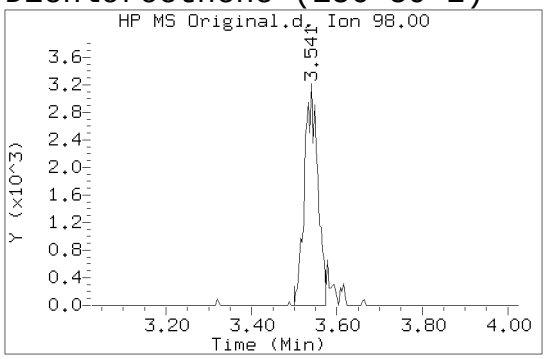
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

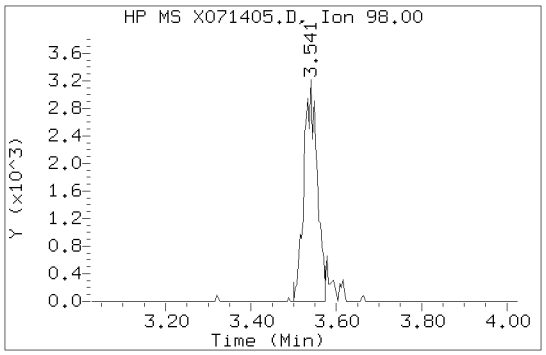
cis-1,2-Dichloroethene (156-59-2)

Reason Code:

BEFORE
MASS
98
AREA
6988
HEIGHT
3216
20-Jul-2023
15:04
linh
pham



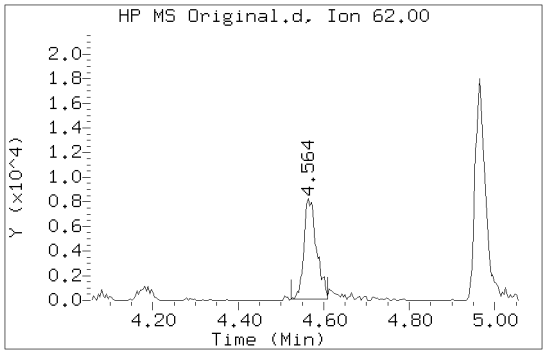
AFTER
MASS
98
AREA
6988
HEIGHT
3216
20-Jul-2023
15:04
linh
pham



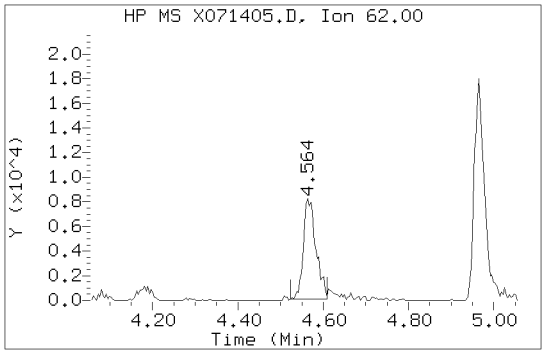
1,2-Dichloroethane (107-06-2)

Reason Code:

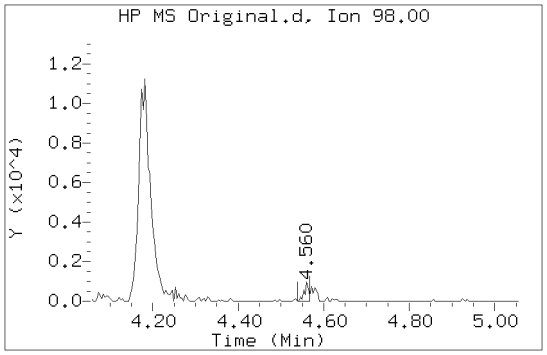
BEFORE
MASS
62
AREA
16880
HEIGHT
8150
20-Jul-2023
15:04
linh
pham



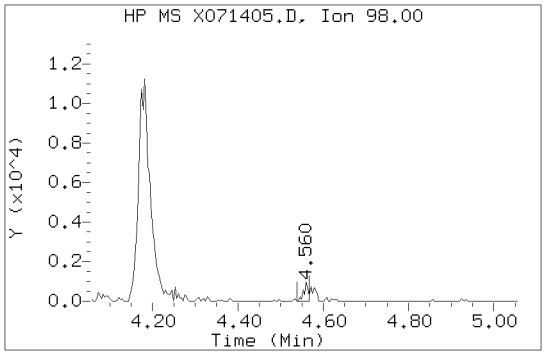
AFTER
MASS
62
AREA
16880
HEIGHT
8150
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
98
AREA
708
HEIGHT
981
20-Jul-2023
15:04
linh
pham



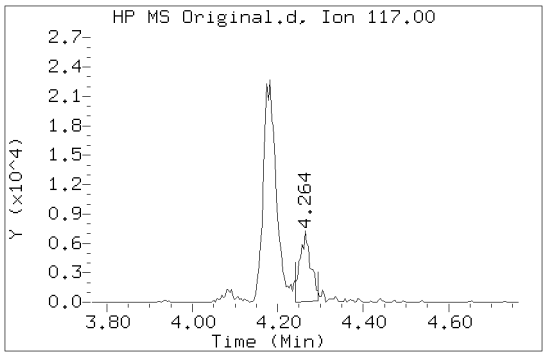
AFTER
MASS
98
AREA
708
HEIGHT
981
20-Jul-2023
15:04
linh
pham



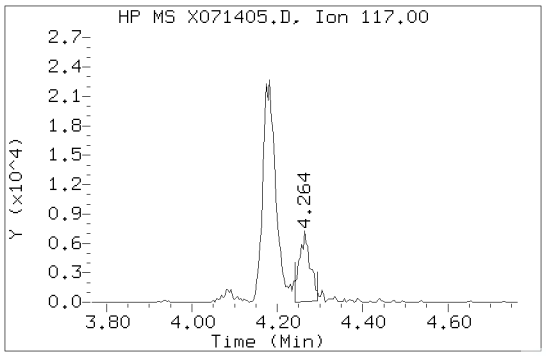
Carbon Tetrachloride (56-23-5)

Reason Code:

BEFORE
MASS
117
AREA
13047
HEIGHT
7258
20-Jul-2023
15:04
linh
pham



AFTER
MASS
117
AREA
13047
HEIGHT
7258
20-Jul-2023
15:04
linh
pham



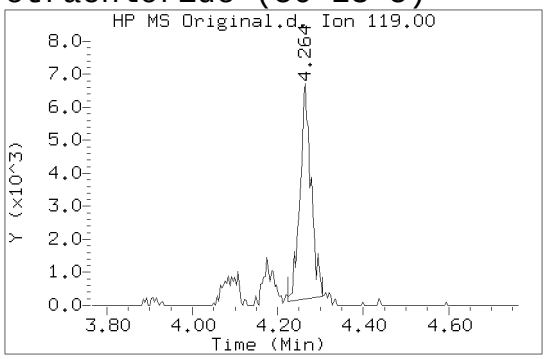
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071405.D
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

Carbon Tetrachloride (56-23-5)

Reason Code:

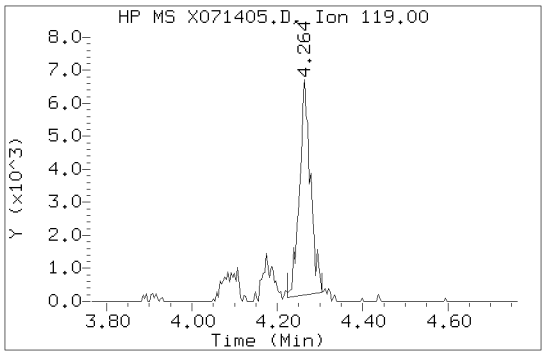
BEFORE

MASS
119
AREA
11949
HEIGHT
6520
20-Jul-2023
15:04
linh
pham



AFTER

MASS
119
AREA
11949
HEIGHT
6520
20-Jul-2023
15:04
linh
pham

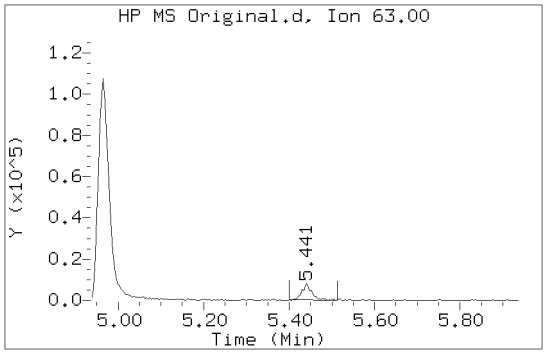


1,2-Dichloropropane (78-87-5)

Reason Code:

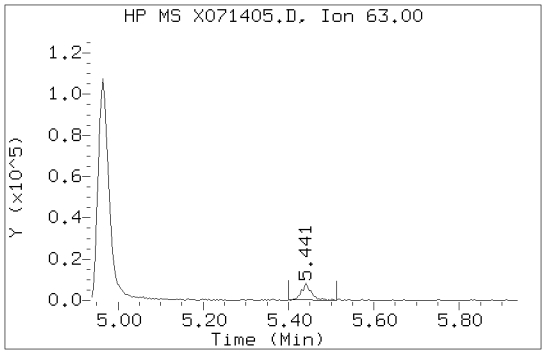
BEFORE

MASS
63
AREA
12678
HEIGHT
8183
20-Jul-2023
15:04
linh
pham



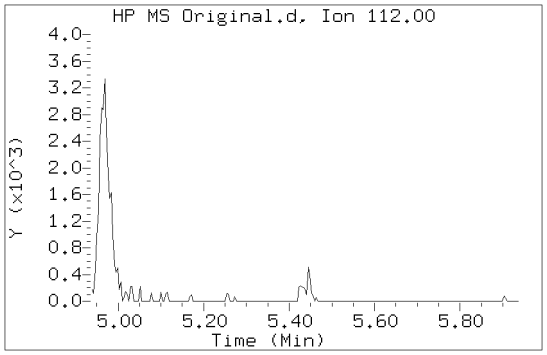
AFTER

MASS
63
AREA
12678
HEIGHT
8183
20-Jul-2023
15:04
linh
pham



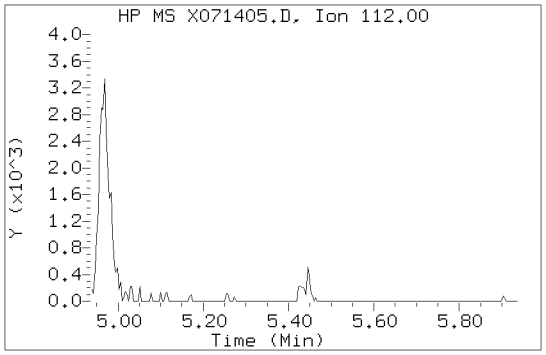
BEFORE

MASS
112
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
112
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

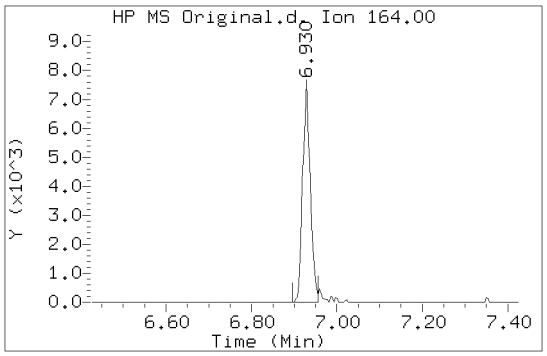


Tetrachloroethene (127-18-4)

Reason Code:

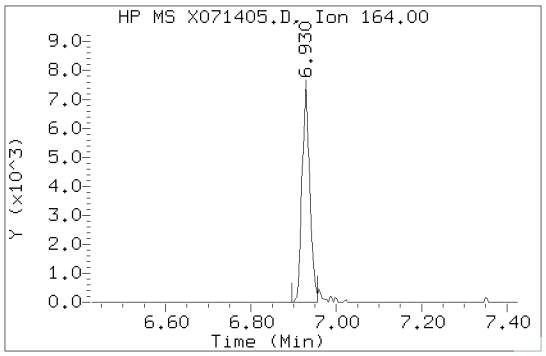
BEFORE

MASS
164
AREA
9711
HEIGHT
7674
20-Jul-2023
15:04
linh
pham



AFTER

MASS
164
AREA
9711
HEIGHT
7674
20-Jul-2023
15:04
linh
pham

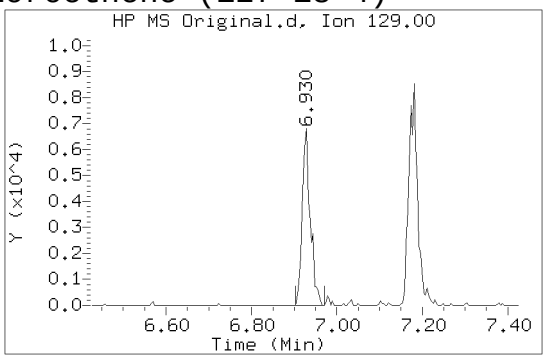


Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071405.D
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

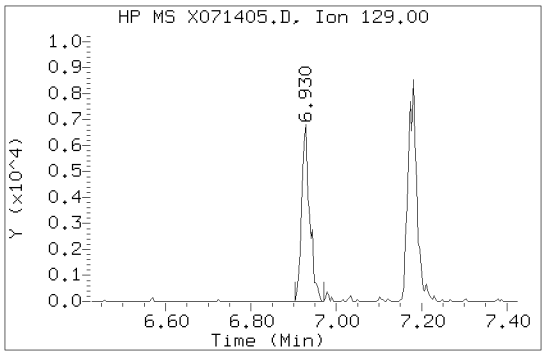
Tetrachloroethene (127-18-4)

Reason Code:

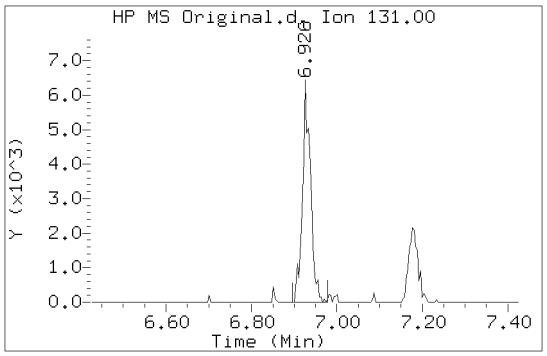
BEFORE
MASS
129
AREA
9180
HEIGHT
6806
20-Jul-2023
15:04
linh
pham



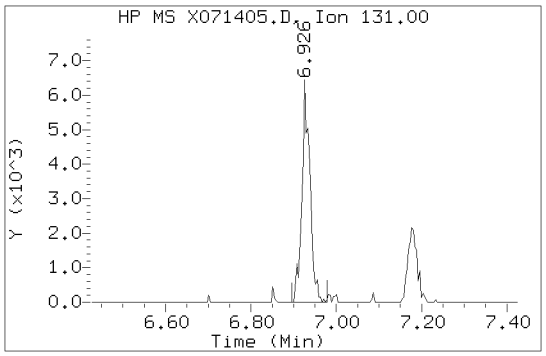
AFTER
MASS
129
AREA
9180
HEIGHT
6806
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
131
AREA
8692
HEIGHT
6442
20-Jul-2023
15:04
linh
pham



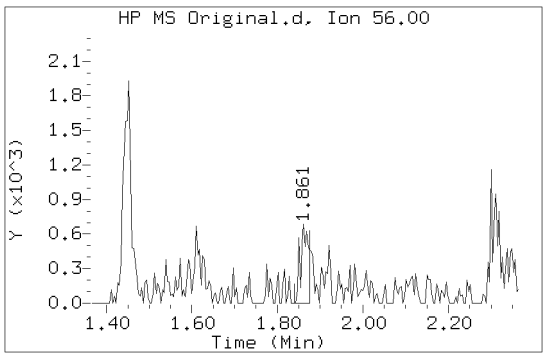
AFTER
MASS
131
AREA
8692
HEIGHT
6442
20-Jul-2023
15:04
linh
pham



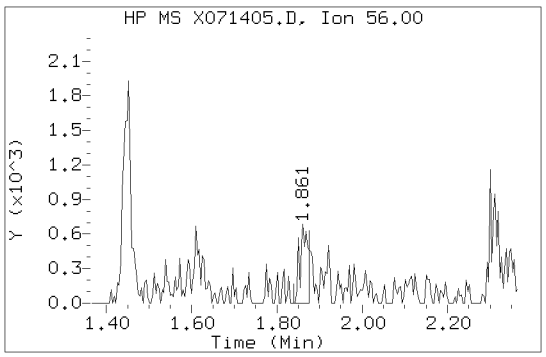
Acrolein (107-02-8)

Reason Code:

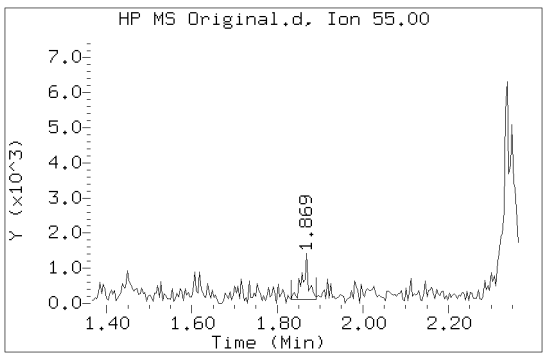
BEFORE
MASS
56
AREA
917
HEIGHT
685
20-Jul-2023
15:04
linh
pham



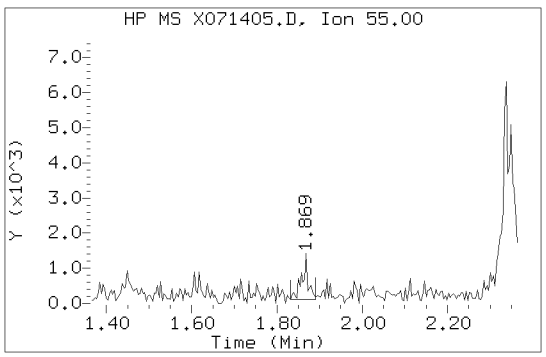
AFTER
MASS
56
AREA
917
HEIGHT
685
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
55
AREA
1362
HEIGHT
1313
20-Jul-2023
15:04
linh
pham



AFTER
MASS
55
AREA
1362
HEIGHT
1313
20-Jul-2023
15:04
linh
pham

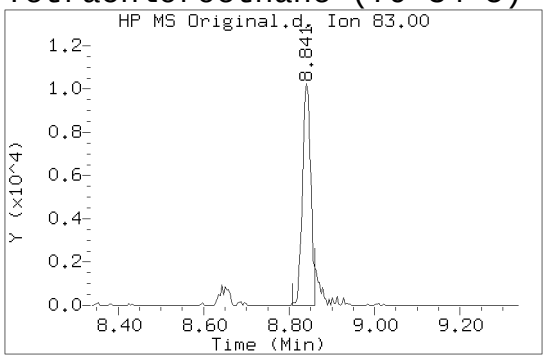


Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071405.D
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

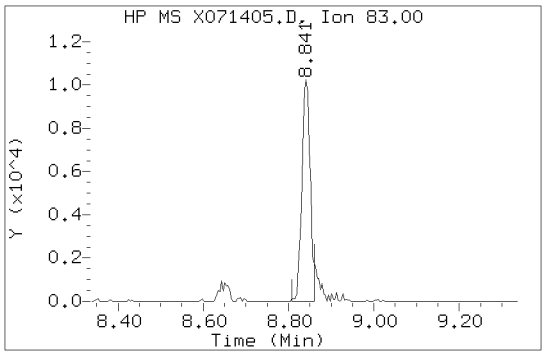
1,1,2,2-Tetrachloroethane (79-34-5)

Reason Code:

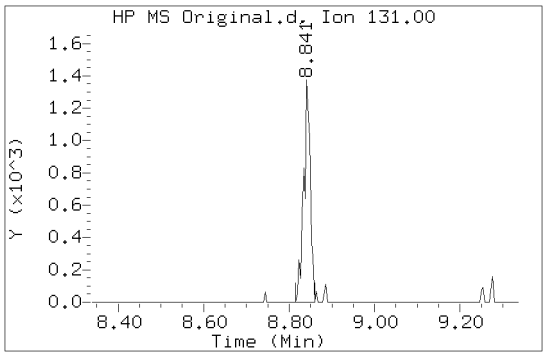
BEFORE
MASS
83
AREA
14352
HEIGHT
10244
20-Jul-2023
15:04
linh
pham



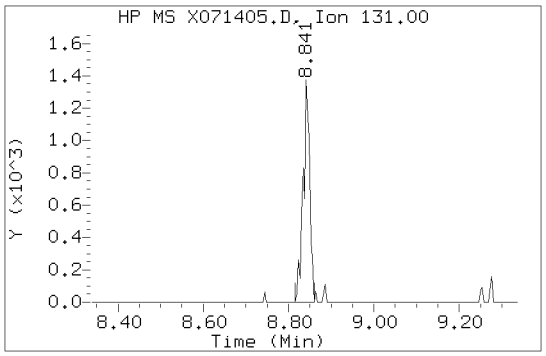
AFTER
MASS
83
AREA
14352
HEIGHT
10244
20-Jul-2023
15:04
linh
pham



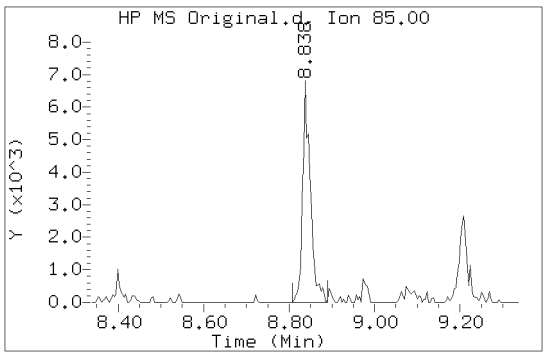
BEFORE
MASS
131
AREA
1498
HEIGHT
1375
20-Jul-2023
15:04
linh
pham



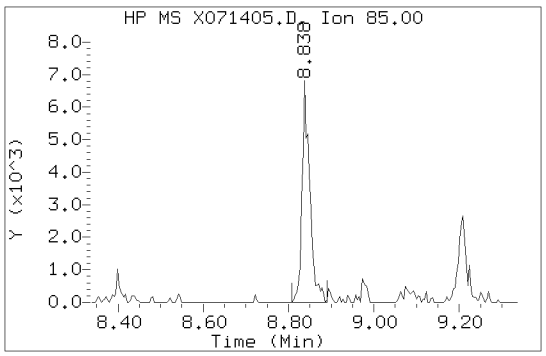
AFTER
MASS
131
AREA
1498
HEIGHT
1375
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
85
AREA
8867
HEIGHT
6812
20-Jul-2023
15:04
linh
pham



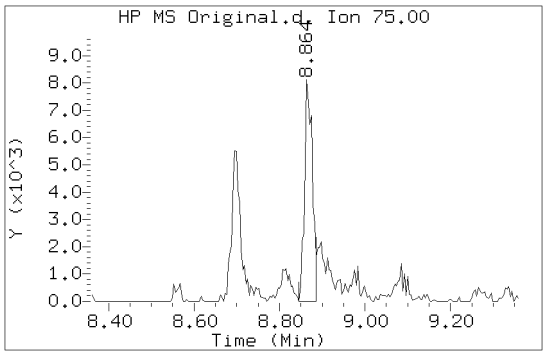
AFTER
MASS
85
AREA
8867
HEIGHT
6812
20-Jul-2023
15:04
linh
pham



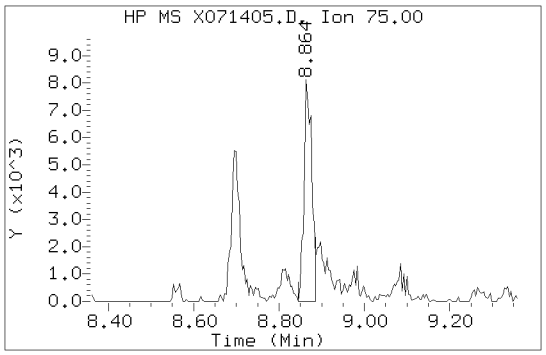
1,2,3-Trichloropropane (96-18-4)

Reason Code:

BEFORE
MASS
75
AREA
10578
HEIGHT
8119
20-Jul-2023
15:04
linh
pham



AFTER
MASS
75
AREA
10578
HEIGHT
8119
20-Jul-2023
15:04
linh
pham



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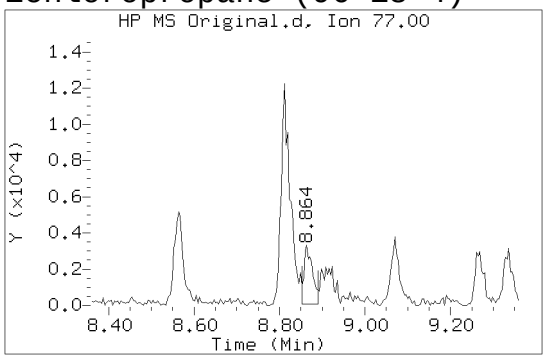
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

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

Reason Code:

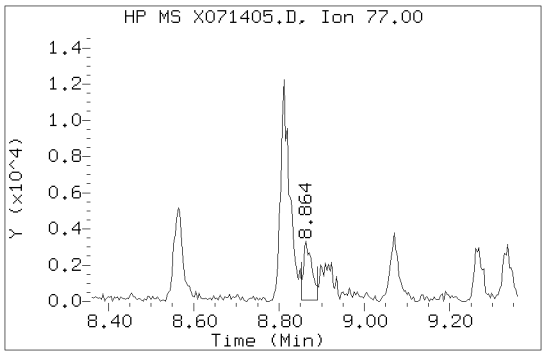
BEFORE

MASS
77
AREA
4616
HEIGHT
3271
20-Jul-2023
15:04
linh
pham



AFTER

MASS
77
AREA
4616
HEIGHT
3271
20-Jul-2023
15:04
linh
pham

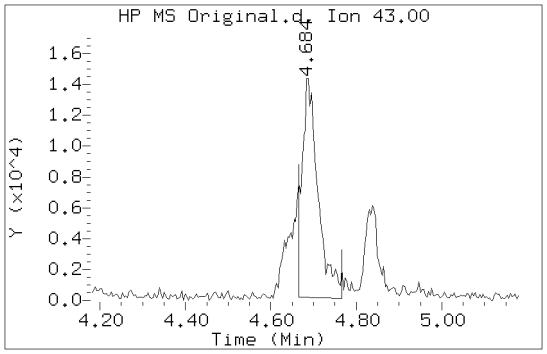


Isobutyl Alcohol (78-83-1)

Reason Code:

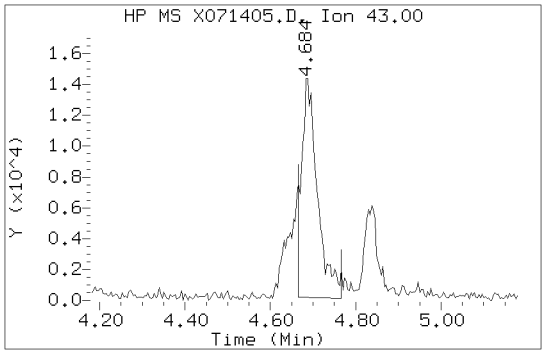
BEFORE

MASS
43
AREA
37832
HEIGHT
14170
20-Jul-2023
15:04
linh
pham



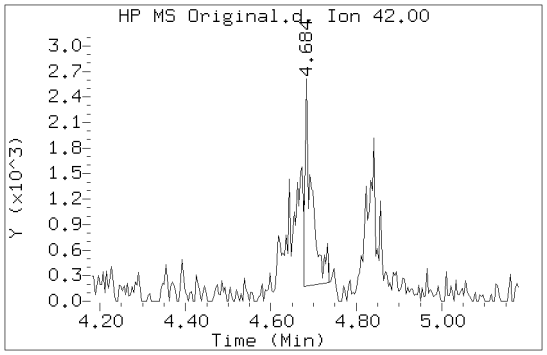
AFTER

MASS
43
AREA
37832
HEIGHT
14170
20-Jul-2023
15:04
linh
pham



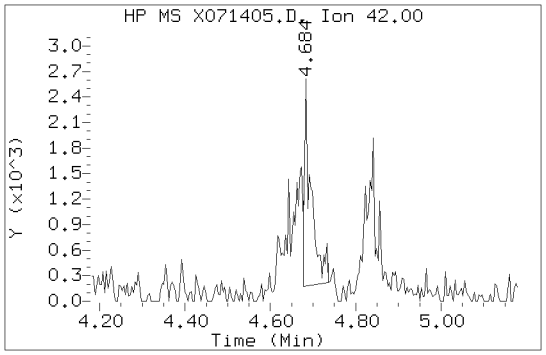
BEFORE

MASS
42
AREA
2790
HEIGHT
2433
20-Jul-2023
15:04
linh
pham



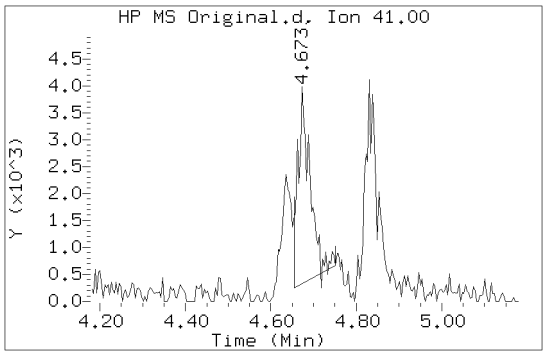
AFTER

MASS
42
AREA
2790
HEIGHT
2433
20-Jul-2023
15:04
linh
pham



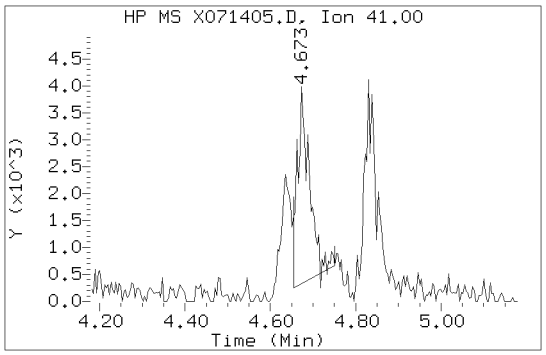
BEFORE

MASS
41
AREA
7292
HEIGHT
3653
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
7292
HEIGHT
3653
20-Jul-2023
15:04
linh
pham



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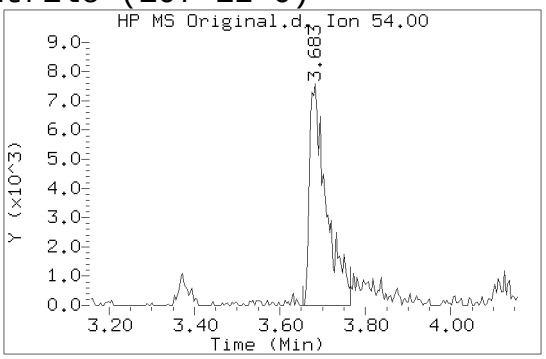
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

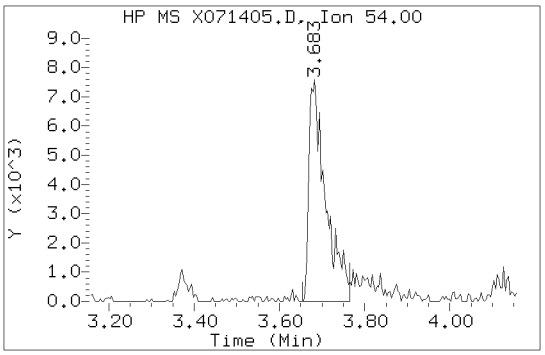
Propionitrile (107-12-0)

Reason Code:

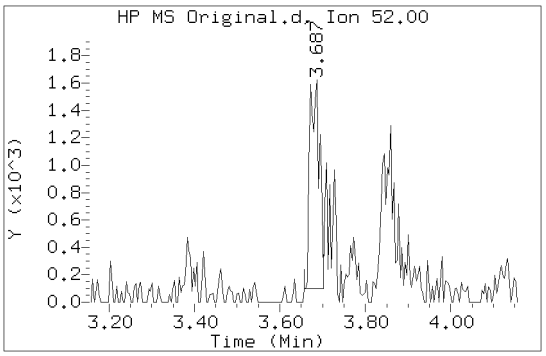
BEFORE
MASS
54
AREA
20667
HEIGHT
7586
20-Jul-2023
15:04
linh
pham



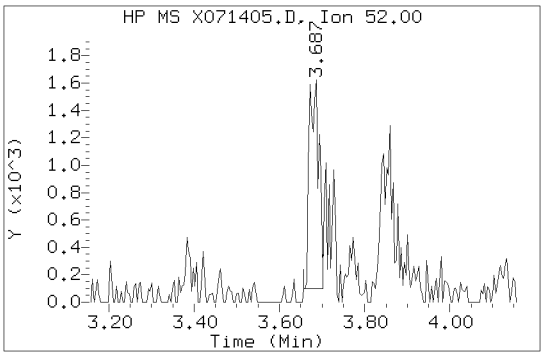
AFTER
MASS
54
AREA
20667
HEIGHT
7586
20-Jul-2023
15:04
linh
pham



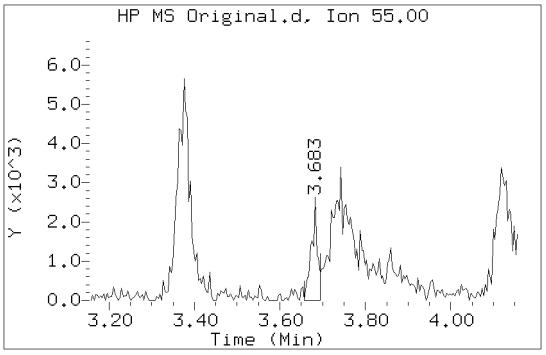
BEFORE
MASS
52
AREA
2370
HEIGHT
1524
20-Jul-2023
15:04
linh
pham



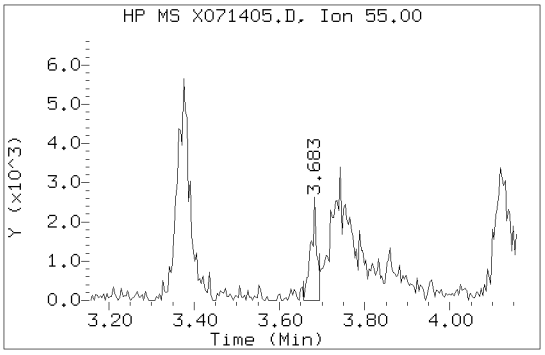
AFTER
MASS
52
AREA
2370
HEIGHT
1524
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
55
AREA
2547
HEIGHT
2627
20-Jul-2023
15:04
linh
pham



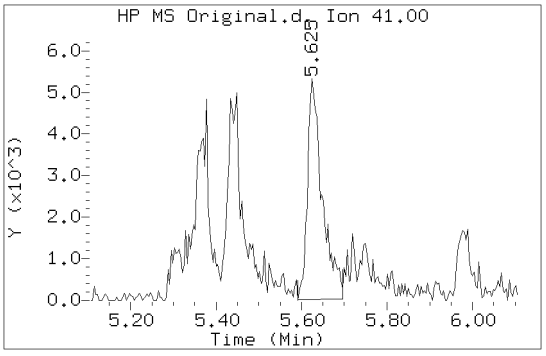
AFTER
MASS
55
AREA
2547
HEIGHT
2627
20-Jul-2023
15:04
linh
pham



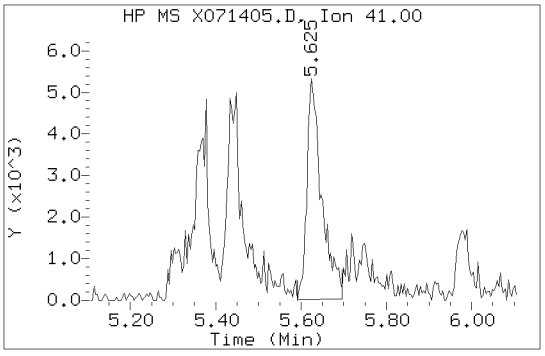
Methyl Methacrylate (80-62-6)

Reason Code:

BEFORE
MASS
41
AREA
12770
HEIGHT
5309
20-Jul-2023
15:04
linh
pham



AFTER
MASS
41
AREA
12770
HEIGHT
5309
20-Jul-2023
15:04
linh
pham



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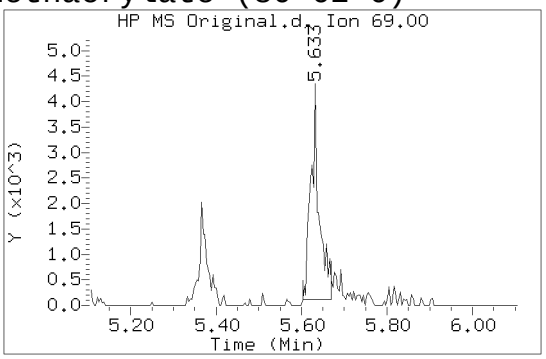
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

Methyl Methacrylate (80-62-6)

Reason Code:

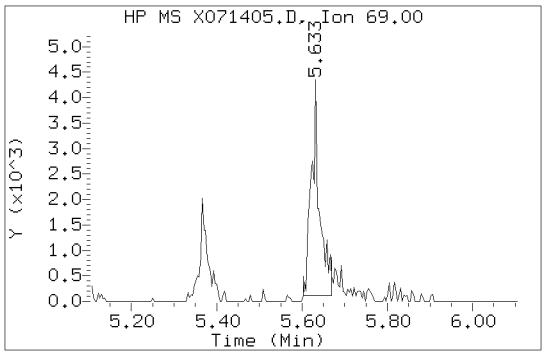
BEFORE

MASS
69
AREA
5709
HEIGHT
4235
20-Jul-2023
15:04
linh
pham



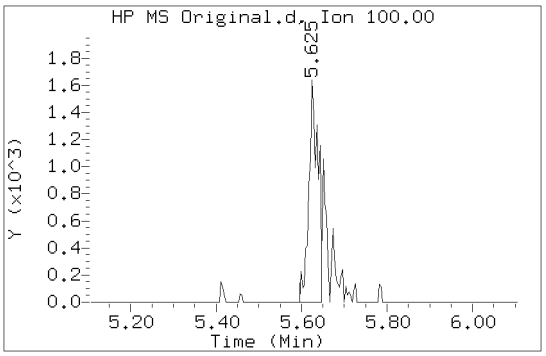
AFTER

MASS
69
AREA
5709
HEIGHT
4235
20-Jul-2023
15:04
linh
pham



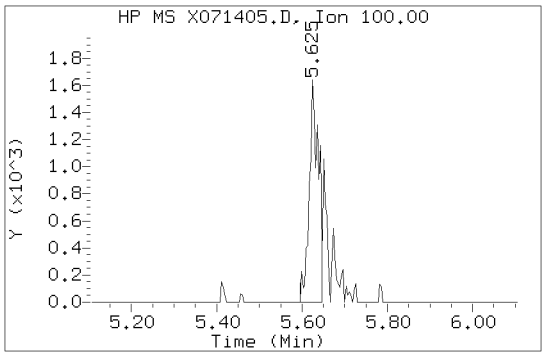
BEFORE

MASS
100
AREA
2452
HEIGHT
1641
20-Jul-2023
15:04
linh
pham



AFTER

MASS
100
AREA
2452
HEIGHT
1641
20-Jul-2023
15:04
linh
pham

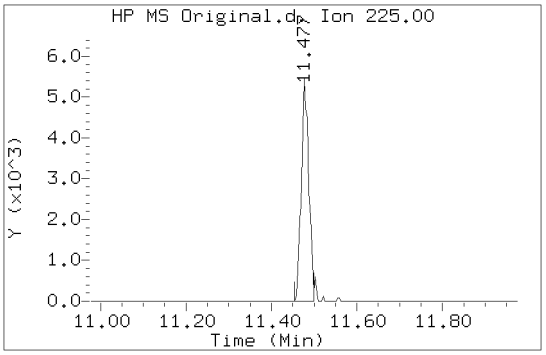


Hexachlorobutadiene (87-68-3)

Reason Code:

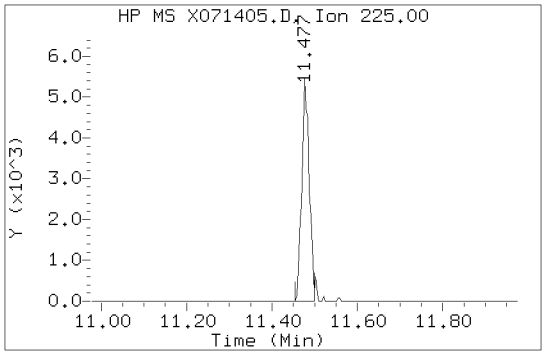
BEFORE

MASS
225
AREA
6844
HEIGHT
5446
20-Jul-2023
15:04
linh
pham



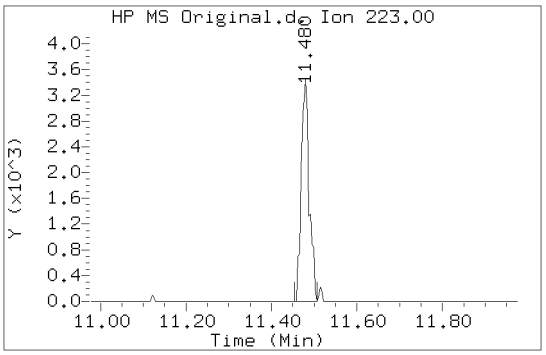
AFTER

MASS
225
AREA
6844
HEIGHT
5446
20-Jul-2023
15:04
linh
pham



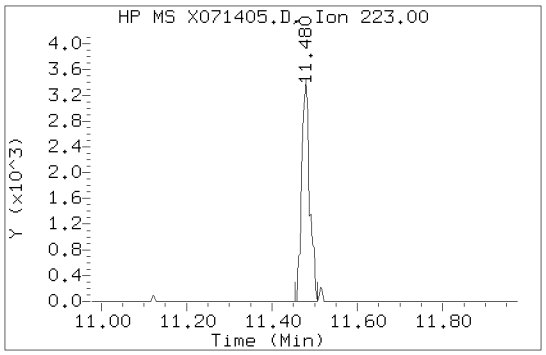
BEFORE

MASS
223
AREA
4606
HEIGHT
3443
20-Jul-2023
15:04
linh
pham



AFTER

MASS
223
AREA
4606
HEIGHT
3443
20-Jul-2023
15:04
linh
pham



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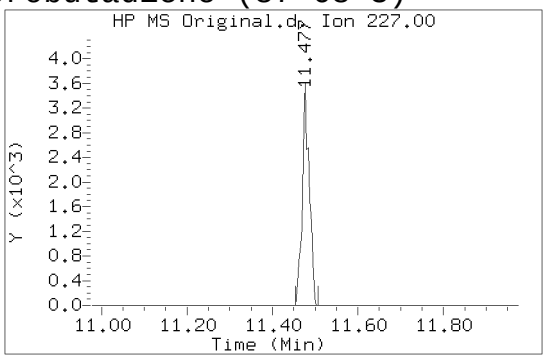
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

Hexachlorobutadiene (87-68-3)

Reason Code:

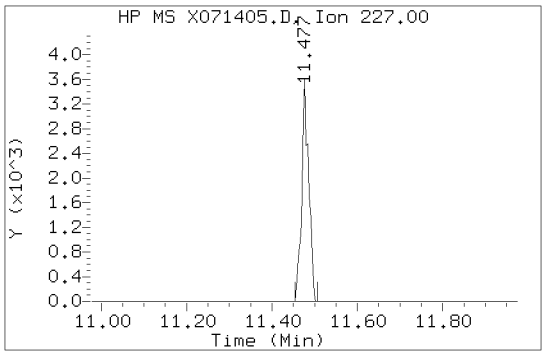
BEFORE

MASS
227
AREA
4231
HEIGHT
3595
20-Jul-2023
15:04
linh
pham



AFTER

MASS
227
AREA
4231
HEIGHT
3595
20-Jul-2023
15:04
linh
pham

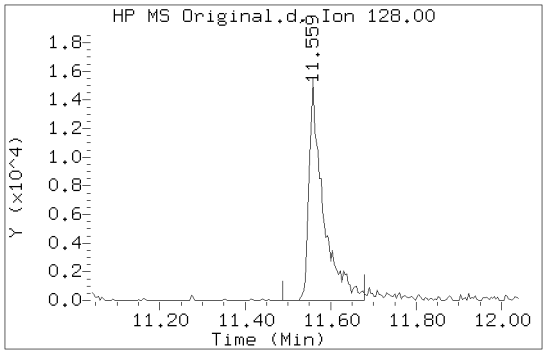


Naphthalene (91-20-3)

Reason Code:

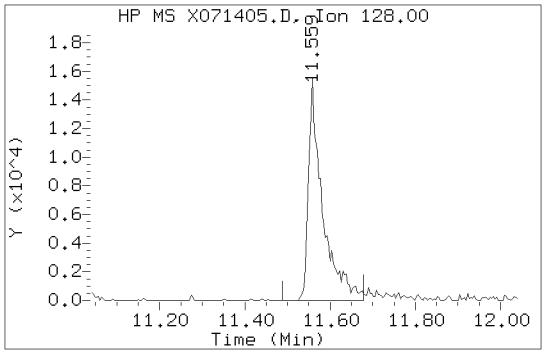
BEFORE

MASS
128
AREA
35806
HEIGHT
15488
20-Jul-2023
15:04
linh
pham



AFTER

MASS
128
AREA
35806
HEIGHT
15488
20-Jul-2023
15:04
linh
pham

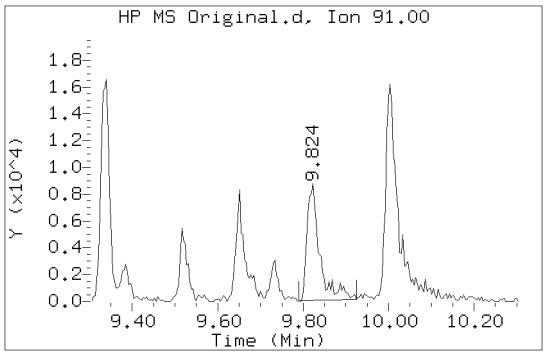


Benzyl Chloride (100-44-7)

Reason Code:

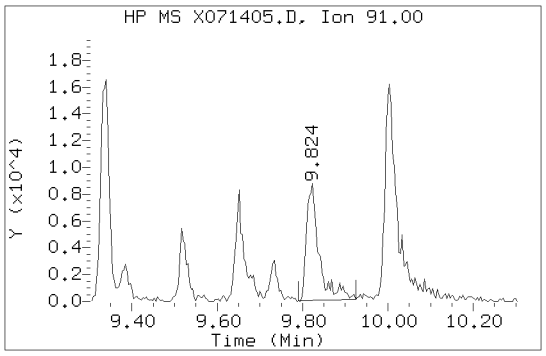
BEFORE

MASS
91
AREA
17851
HEIGHT
8726
20-Jul-2023
15:04
linh
pham



AFTER

MASS
91
AREA
17851
HEIGHT
8726
20-Jul-2023
15:04
linh
pham



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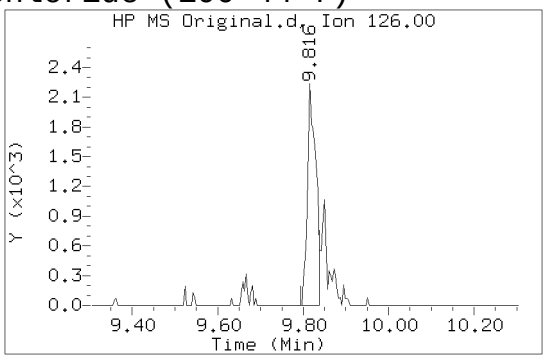
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

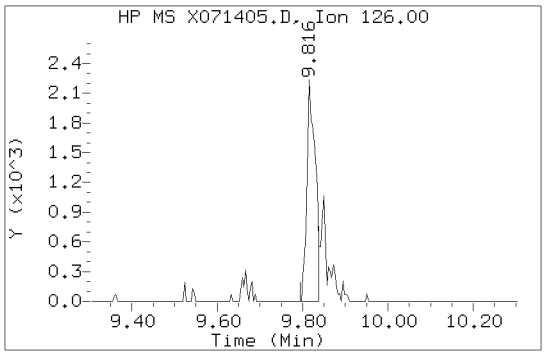
Benzyl Chloride (100-44-7)

Reason Code:

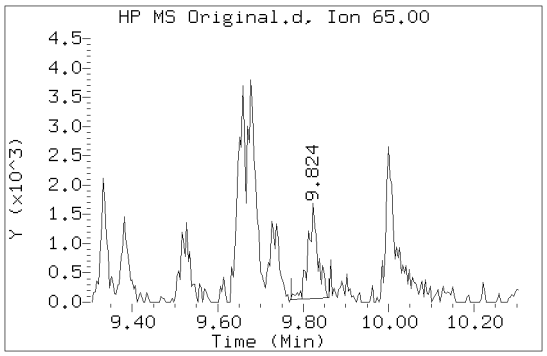
BEFORE
MASS
126
AREA
3073
HEIGHT
2237
20-Jul-2023
15:04
linh
pham



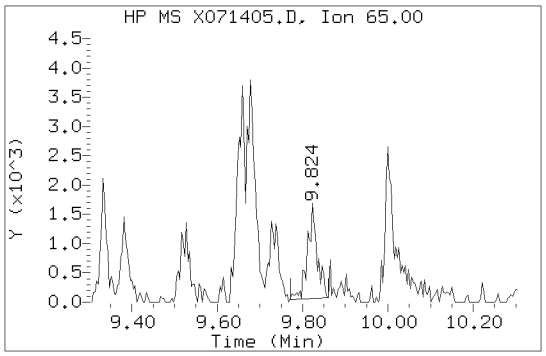
AFTER
MASS
126
AREA
3073
HEIGHT
2237
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
65
AREA
2588
HEIGHT
1635
20-Jul-2023
15:04
linh
pham



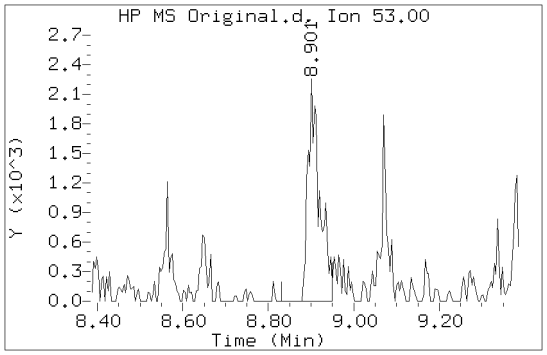
AFTER
MASS
65
AREA
2588
HEIGHT
1635
20-Jul-2023
15:04
linh
pham



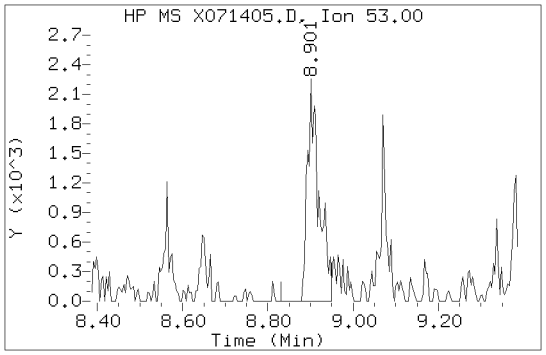
trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code:

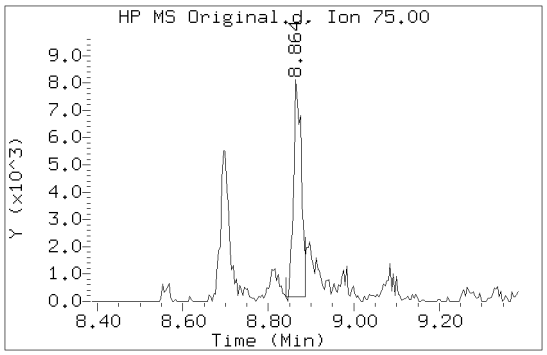
BEFORE
MASS
53
AREA
4279
HEIGHT
2257
20-Jul-2023
15:04
linh
pham



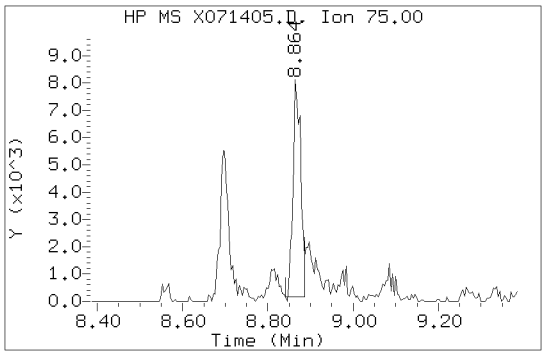
AFTER
MASS
53
AREA
4279
HEIGHT
2257
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
75
AREA
10144
HEIGHT
7958
20-Jul-2023
15:04
linh
pham



AFTER
MASS
75
AREA
10144
HEIGHT
7958
20-Jul-2023
15:04
linh
pham



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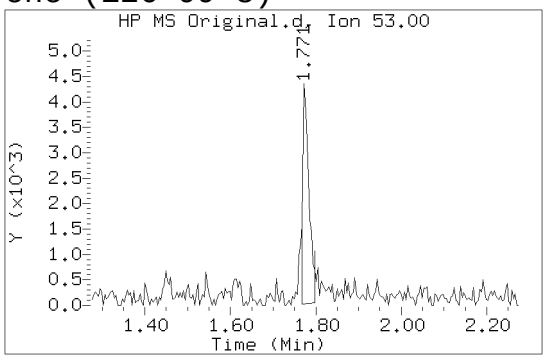
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

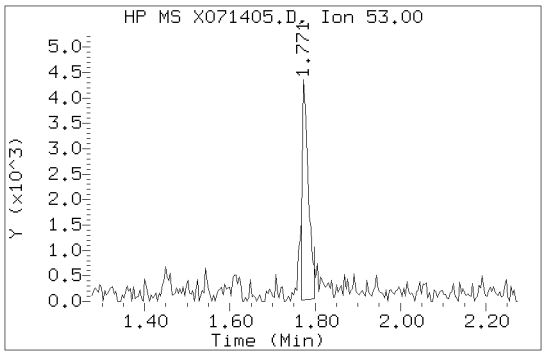
Chloroprene (126-99-8)

Reason Code:

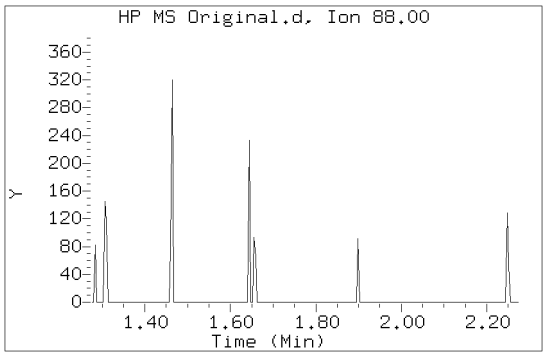
BEFORE
MASS
53
AREA
4560
HEIGHT
4328
20-Jul-2023
15:04
linh
pham



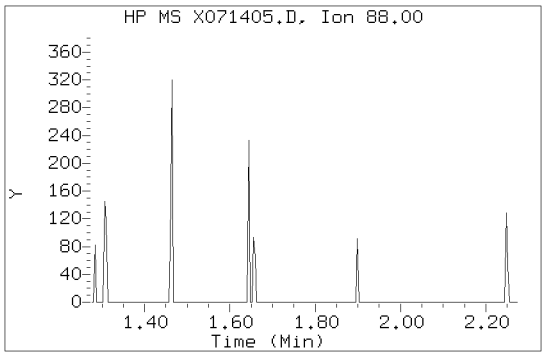
AFTER
MASS
53
AREA
4560
HEIGHT
4328
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
88
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



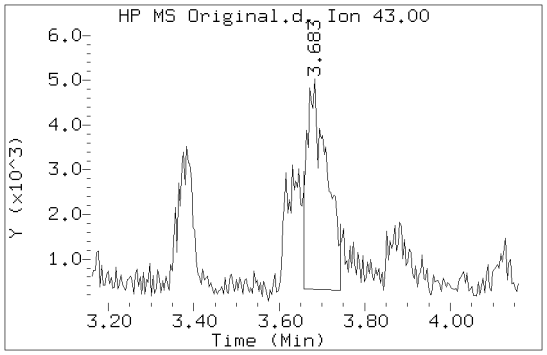
AFTER
MASS
88
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



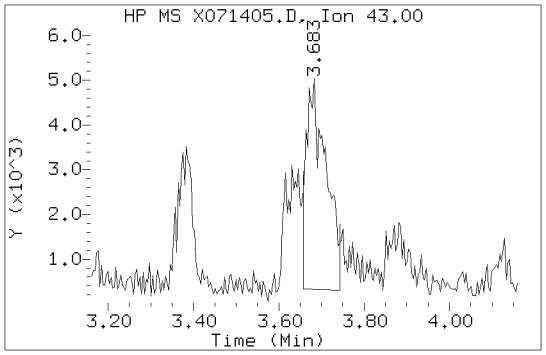
Ethyl Acetate (141-78-6)

Reason Code:

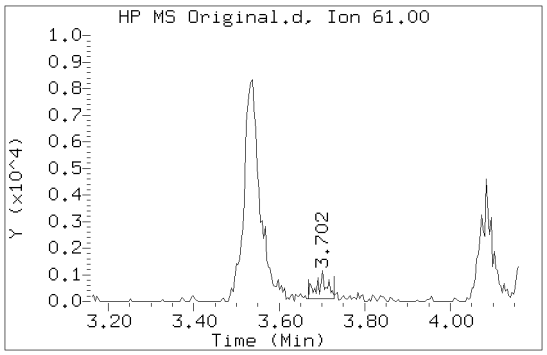
BEFORE
MASS
43
AREA
15481
HEIGHT
4704
20-Jul-2023
15:04
linh
pham



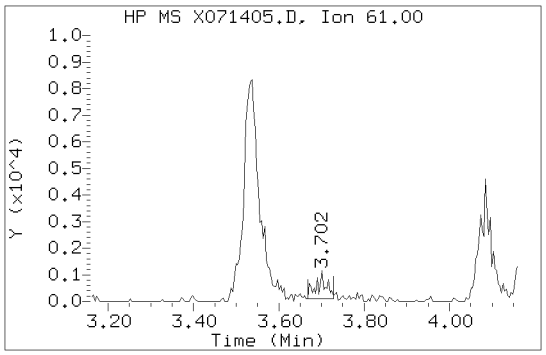
AFTER
MASS
43
AREA
15481
HEIGHT
4704
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
61
AREA
1598
HEIGHT
1061
20-Jul-2023
15:04
linh
pham



AFTER
MASS
61
AREA
1598
HEIGHT
1061
20-Jul-2023
15:04
linh
pham



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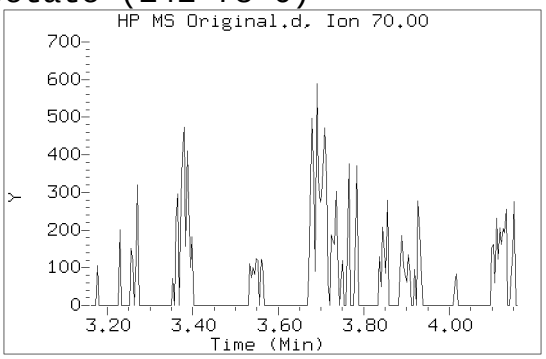
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

Ethyl Acetate (141-78-6)

Reason Code:

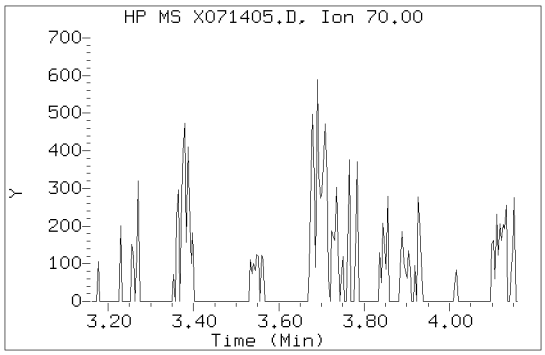
BEFORE

MASS
70
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
70
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

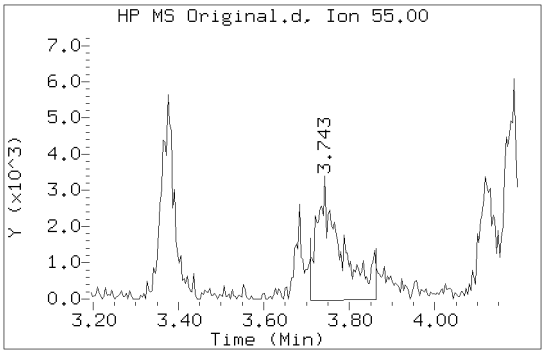


Methyl Acrylate (96-33-3)

Reason Code:

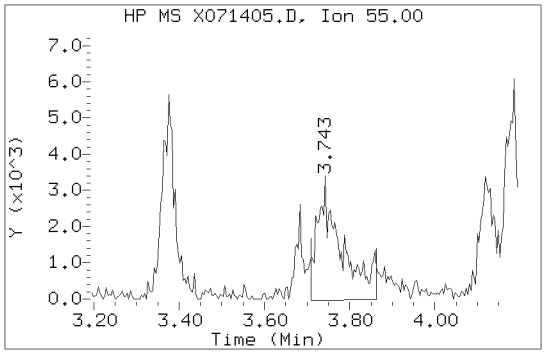
BEFORE

MASS
55
AREA
13406
HEIGHT
3436
20-Jul-2023
15:04
linh
pham



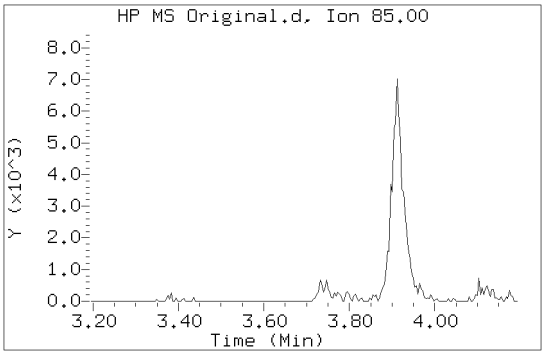
AFTER

MASS
55
AREA
13406
HEIGHT
3436
20-Jul-2023
15:04
linh
pham



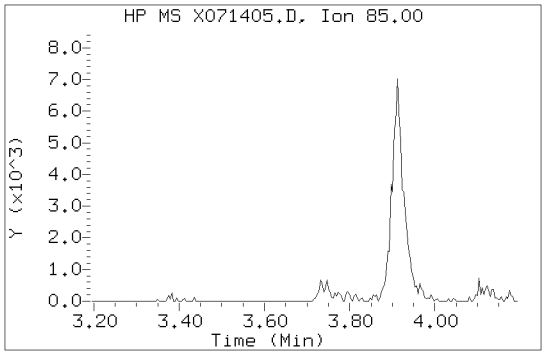
BEFORE

MASS
85
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
85
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

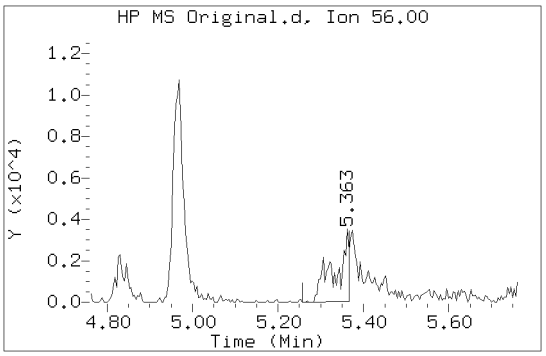


n-Butanol (71-36-3)

Reason Code:

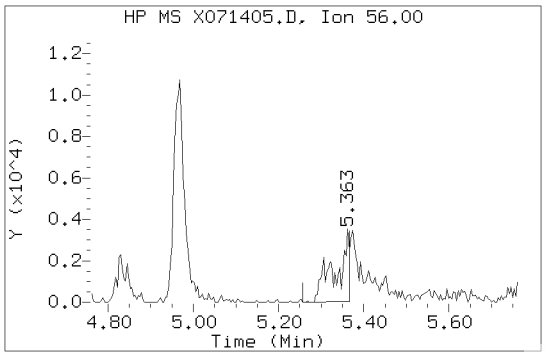
BEFORE

MASS
56
AREA
7443
HEIGHT
3529
20-Jul-2023
15:04
linh
pham



AFTER

MASS
56
AREA
7443
HEIGHT
3529
20-Jul-2023
15:04
linh
pham



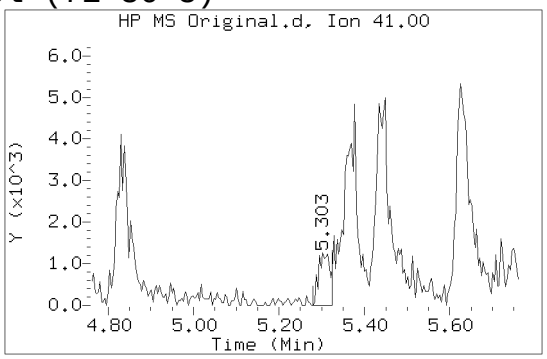
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071405.D
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

n-Butanol (71-36-3)

Reason Code:

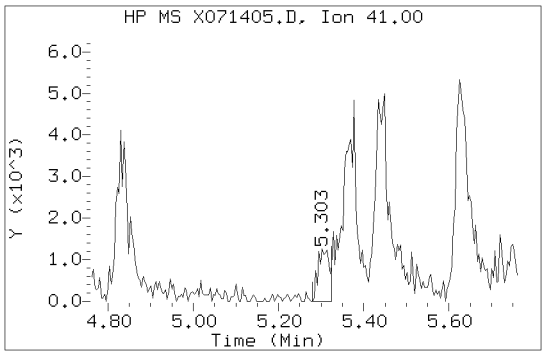
BEFORE

MASS
41
AREA
2384
HEIGHT
1261
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
2384
HEIGHT
1261
20-Jul-2023
15:04
linh
pham

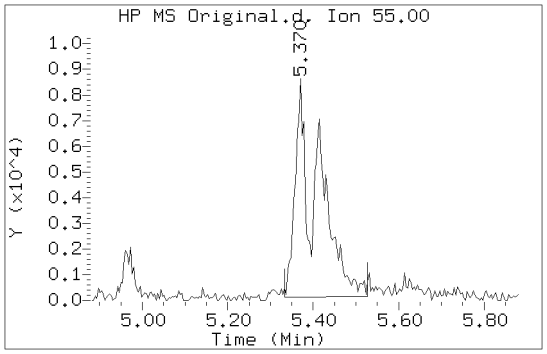


Ethyl Acrylate (140-88-5)

Reason Code:

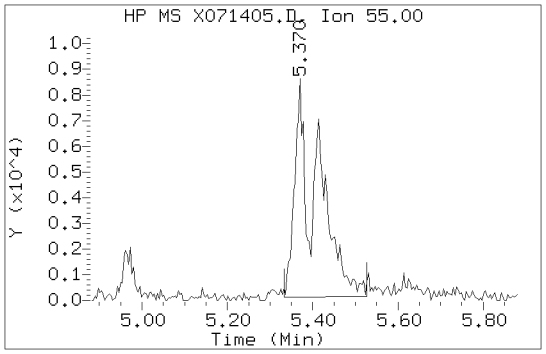
BEFORE

MASS
55
AREA
31450
HEIGHT
8507
20-Jul-2023
15:04
linh
pham



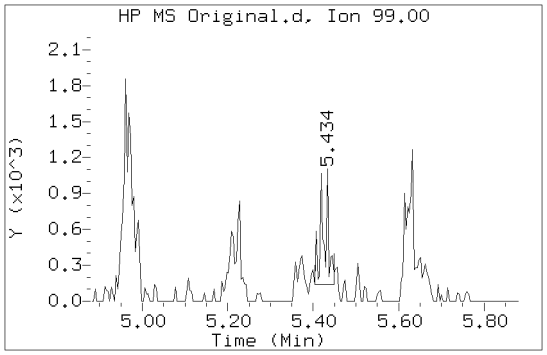
AFTER

MASS
55
AREA
31450
HEIGHT
8507
20-Jul-2023
15:04
linh
pham



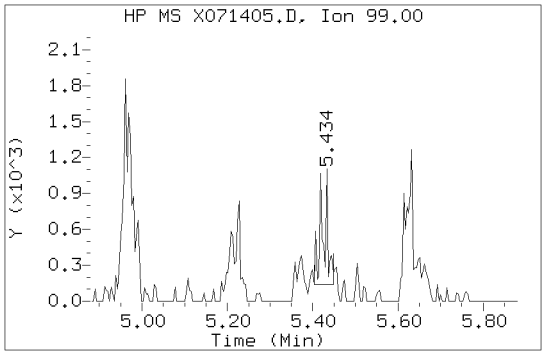
BEFORE

MASS
99
AREA
888
HEIGHT
965
20-Jul-2023
15:04
linh
pham



AFTER

MASS
99
AREA
888
HEIGHT
965
20-Jul-2023
15:04
linh
pham

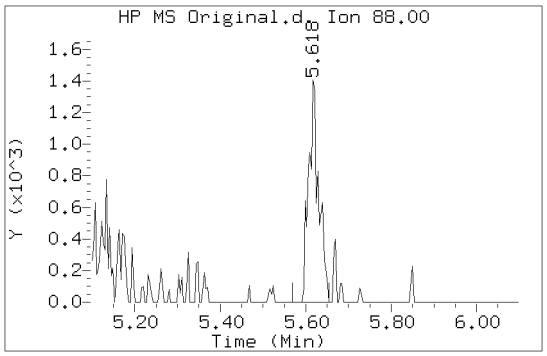


1,4-Dioxane ()

Reason Code:

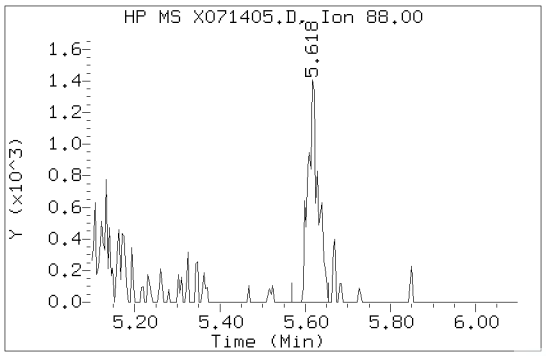
BEFORE

MASS
88
AREA
2323
HEIGHT
1407
20-Jul-2023
15:04
linh
pham



AFTER

MASS
88
AREA
2323
HEIGHT
1407
20-Jul-2023
15:04
linh
pham



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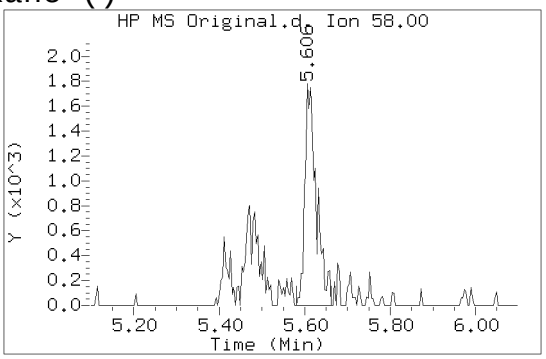
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

1,4-Dioxane ()

Reason Code:

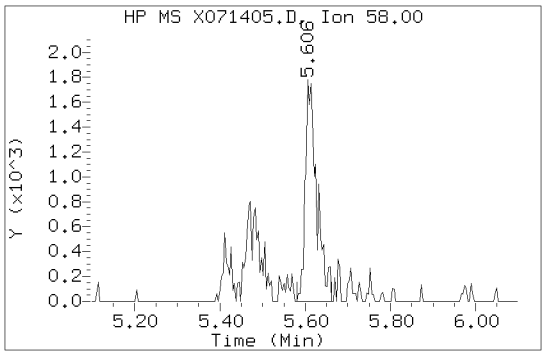
BEFORE

MASS
58
AREA
3341
HEIGHT
1781
20-Jul-2023
15:04
linh
pham



AFTER

MASS
58
AREA
3341
HEIGHT
1781
20-Jul-2023
15:04
linh
pham

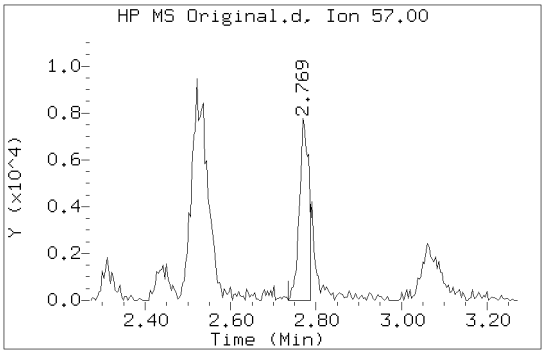


n-Hexane (110-54-3)

Reason Code:

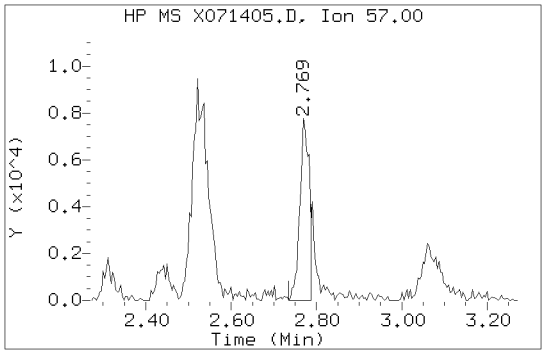
BEFORE

MASS
57
AREA
11984
HEIGHT
7776
20-Jul-2023
15:04
linh
pham



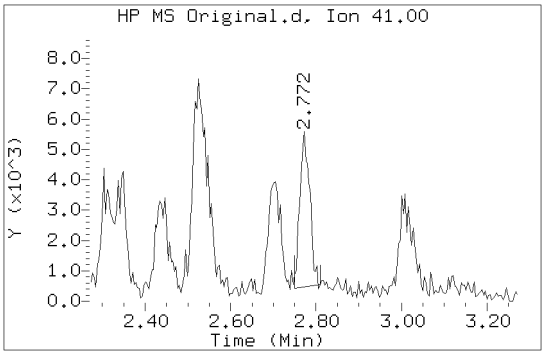
AFTER

MASS
57
AREA
11984
HEIGHT
7776
20-Jul-2023
15:04
linh
pham



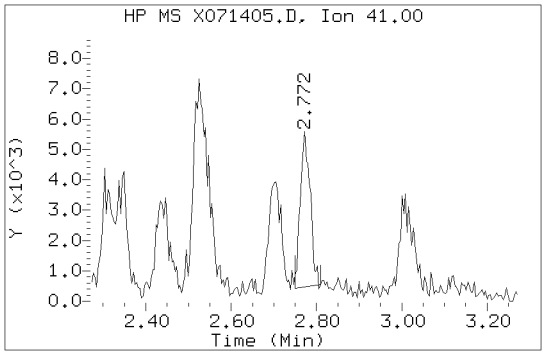
BEFORE

MASS
41
AREA
8381
HEIGHT
5113
20-Jul-2023
15:04
linh
pham



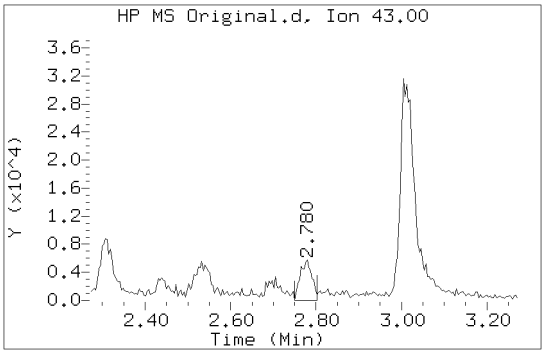
AFTER

MASS
41
AREA
8381
HEIGHT
5113
20-Jul-2023
15:04
linh
pham



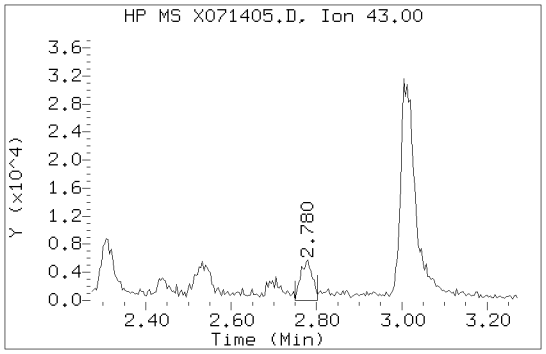
BEFORE

MASS
43
AREA
11133
HEIGHT
5721
20-Jul-2023
15:04
linh
pham



AFTER

MASS
43
AREA
11133
HEIGHT
5721
20-Jul-2023
15:04
linh
pham

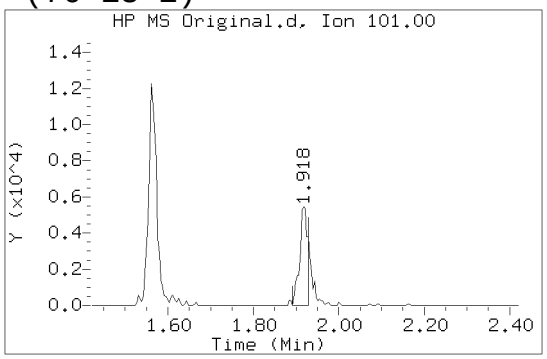


Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071405.D
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

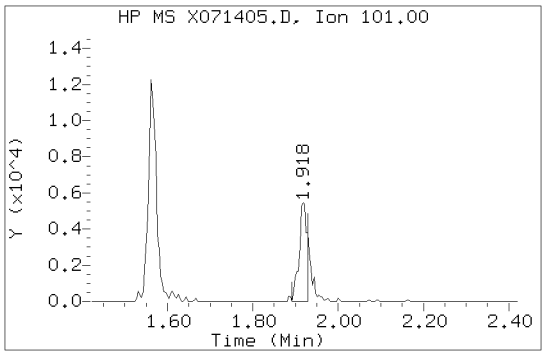
Freon TF (76-13-1)

Reason Code:

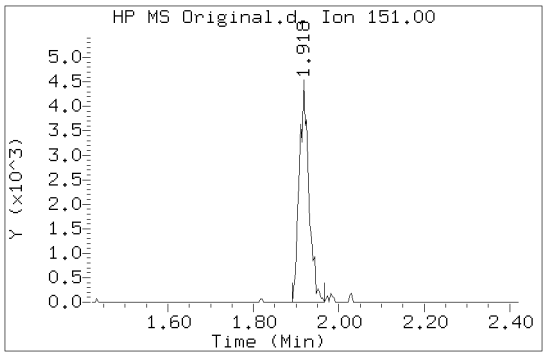
BEFORE
MASS
101
AREA
7195
HEIGHT
5473
20-Jul-2023
15:04
linh
pham



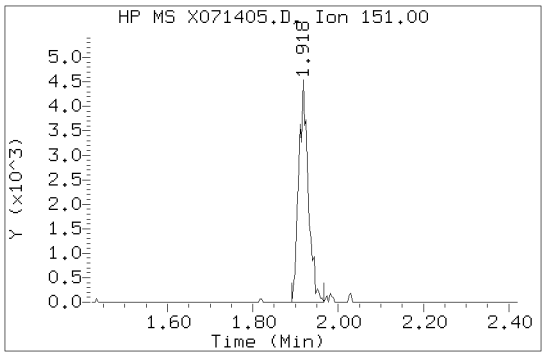
AFTER
MASS
101
AREA
7195
HEIGHT
5473
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
151
AREA
7204
HEIGHT
4541
20-Jul-2023
15:04
linh
pham



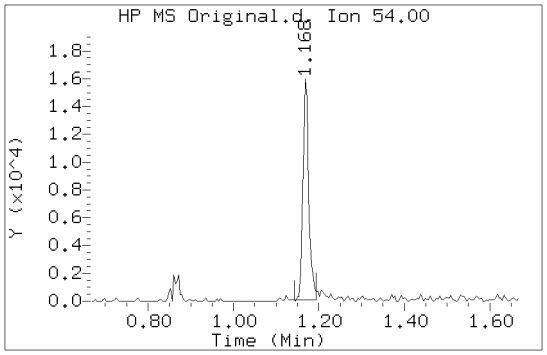
AFTER
MASS
151
AREA
7204
HEIGHT
4541
20-Jul-2023
15:04
linh
pham



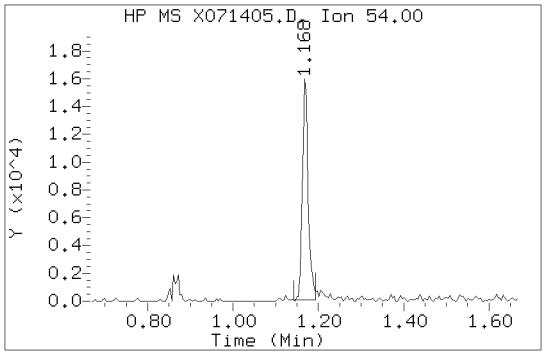
1,3-Butadiene (106-99-0)

Reason Code:

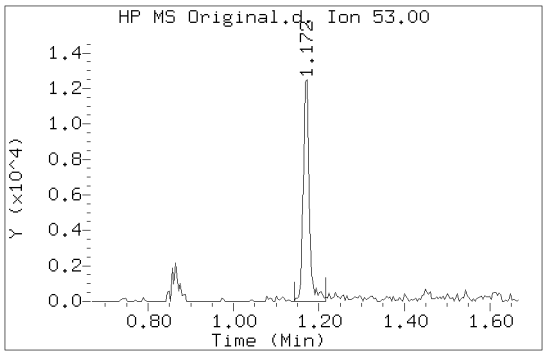
BEFORE
MASS
54
AREA
15351
HEIGHT
15893
20-Jul-2023
15:04
linh
pham



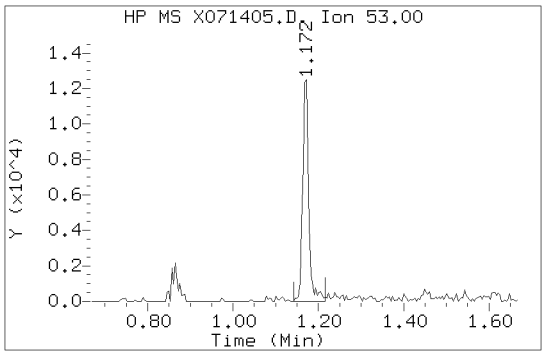
AFTER
MASS
54
AREA
15351
HEIGHT
15893
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
53
AREA
12769
HEIGHT
12495
20-Jul-2023
15:04
linh
pham



AFTER
MASS
53
AREA
12769
HEIGHT
12495
20-Jul-2023
15:04
linh
pham



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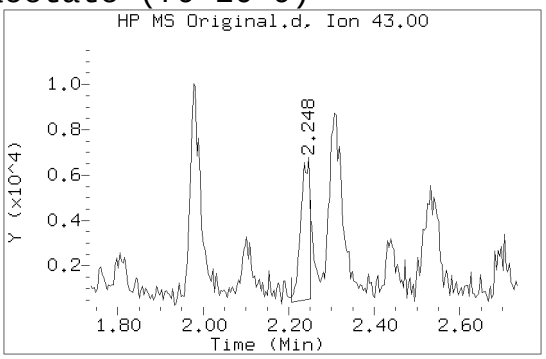
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

Methyl acetate (79-20-9)

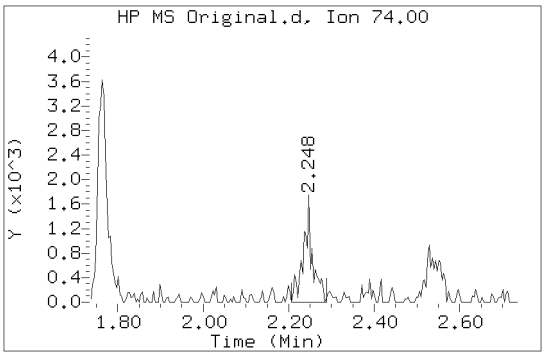
BEFORE

MASS
43
AREA
9491
HEIGHT
6252
20-Jul-2023
15:04
linh
pham



BEFORE

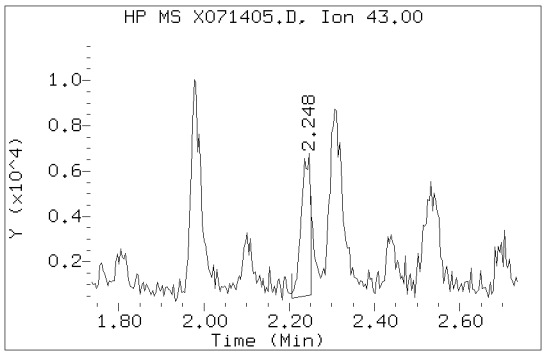
MASS
74
AREA
2612
HEIGHT
1756
20-Jul-2023
15:04
linh
pham



Reason Code:

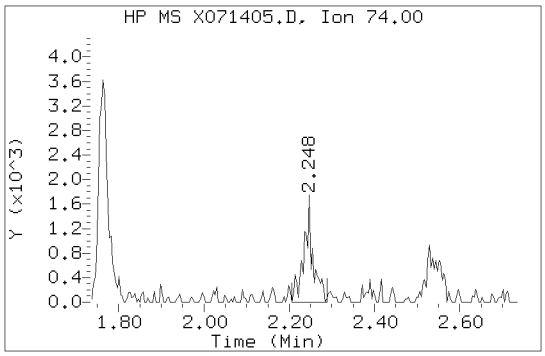
AFTER

MASS
43
AREA
9491
HEIGHT
6252
20-Jul-2023
15:04
linh
pham



AFTER

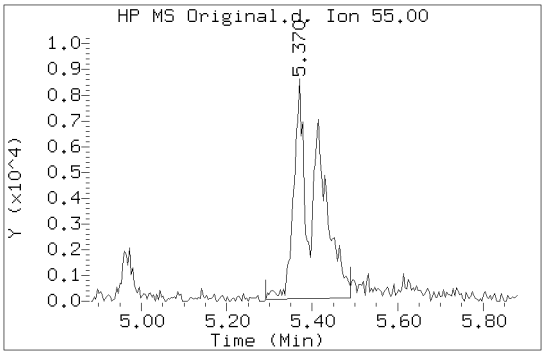
MASS
74
AREA
2612
HEIGHT
1756
20-Jul-2023
15:04
linh
pham



Methylcyclohexane (108-87-2)

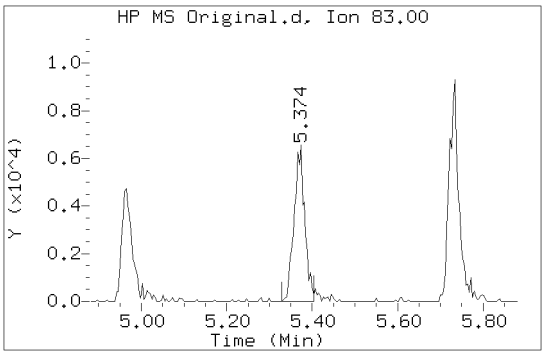
BEFORE

MASS
55
AREA
31142
HEIGHT
8535
20-Jul-2023
15:04
linh
pham



BEFORE

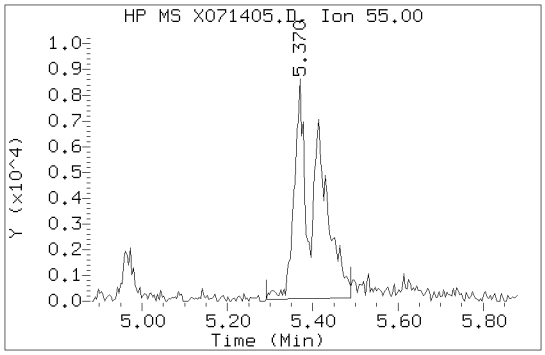
MASS
83
AREA
11484
HEIGHT
6566
20-Jul-2023
15:04
linh
pham



Reason Code:

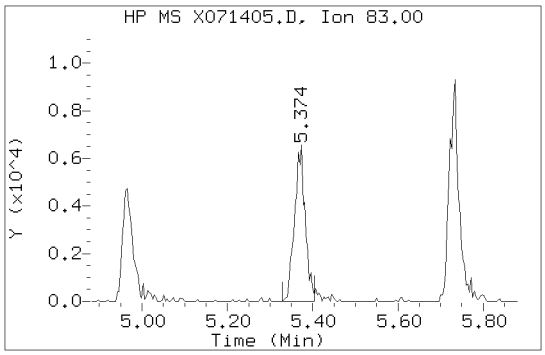
AFTER

MASS
55
AREA
31142
HEIGHT
8535
20-Jul-2023
15:04
linh
pham



AFTER

MASS
83
AREA
11484
HEIGHT
6566
20-Jul-2023
15:04
linh
pham



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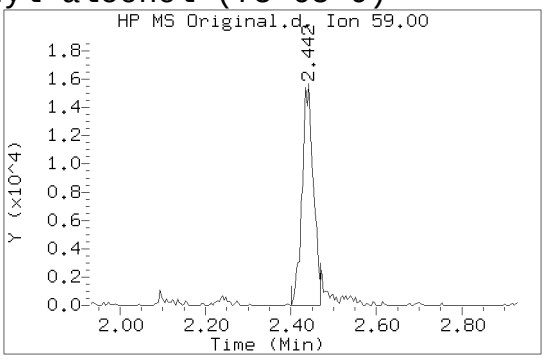
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

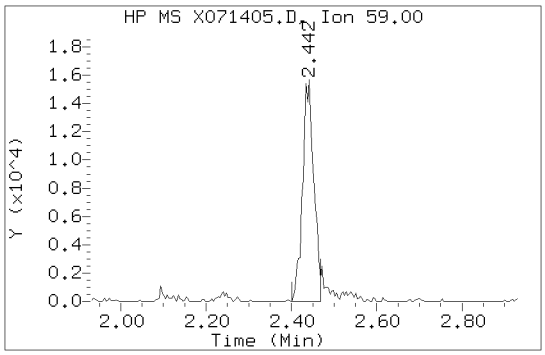
Tert-butyl alcohol (75-65-0)

Reason Code:

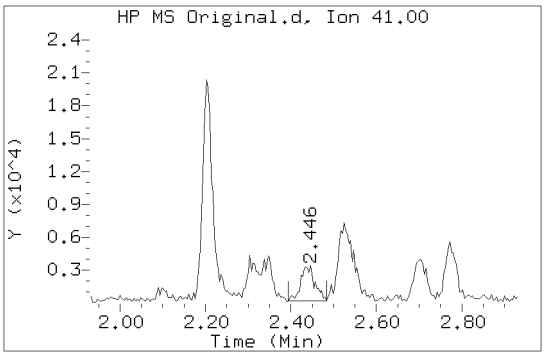
BEFORE
MASS
59
AREA
29280
HEIGHT
15681
20-Jul-2023
15:04
linh
pham



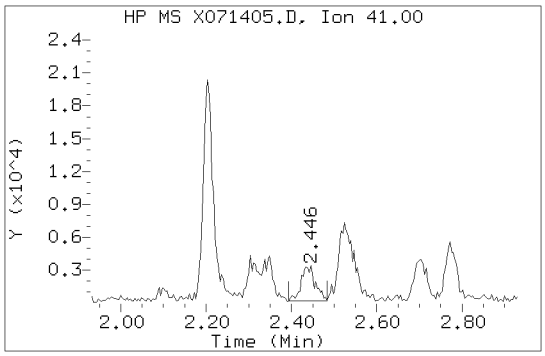
AFTER
MASS
59
AREA
29280
HEIGHT
15681
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
41
AREA
7457
HEIGHT
3224
20-Jul-2023
15:04
linh
pham



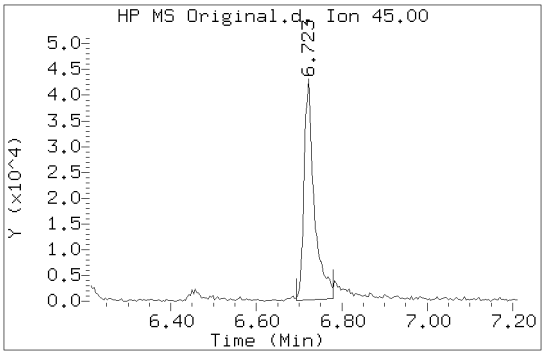
AFTER
MASS
41
AREA
7457
HEIGHT
3224
20-Jul-2023
15:04
linh
pham



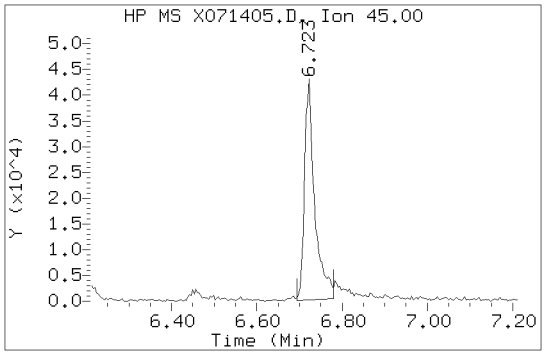
4-Methyl-2-pentanol (108-11-2)

Reason Code:

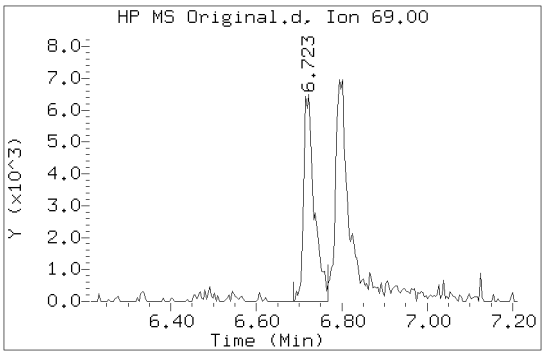
BEFORE
MASS
45
AREA
72210
HEIGHT
42882
20-Jul-2023
15:04
linh
pham



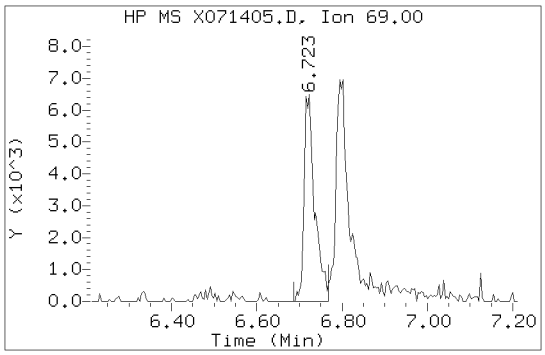
AFTER
MASS
45
AREA
72210
HEIGHT
42882
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
69
AREA
11484
HEIGHT
6492
20-Jul-2023
15:04
linh
pham



AFTER
MASS
69
AREA
11484
HEIGHT
6492
20-Jul-2023
15:04
linh
pham



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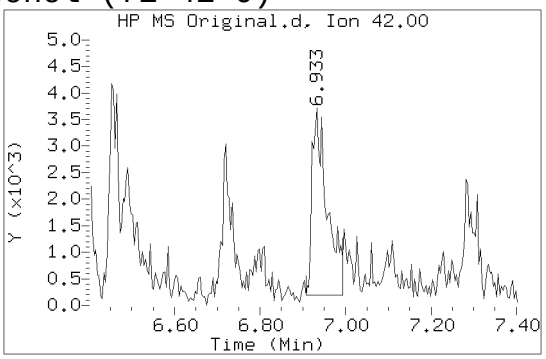
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

Amyl alcohol (71-41-0)

Reason Code:

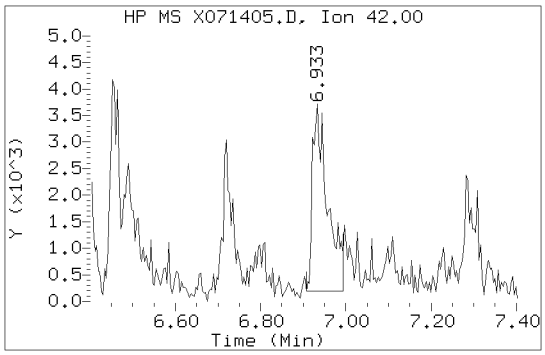
BEFORE

MASS
42
AREA
8579
HEIGHT
3524
20-Jul-2023
15:04
linh
pham



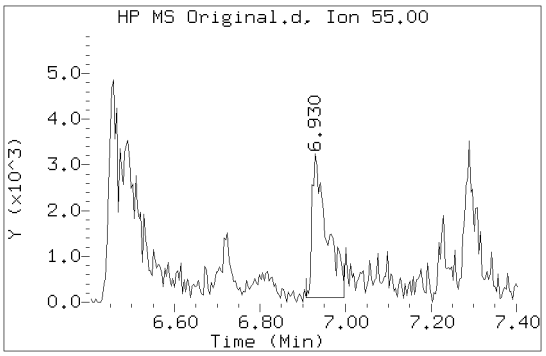
AFTER

MASS
42
AREA
8579
HEIGHT
3524
20-Jul-2023
15:04
linh
pham



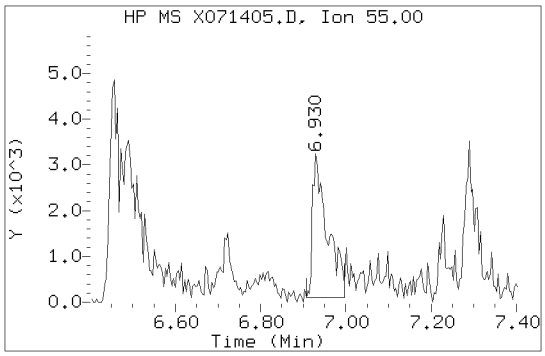
BEFORE

MASS
55
AREA
7591
HEIGHT
3153
20-Jul-2023
15:04
linh
pham



AFTER

MASS
55
AREA
7591
HEIGHT
3153
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
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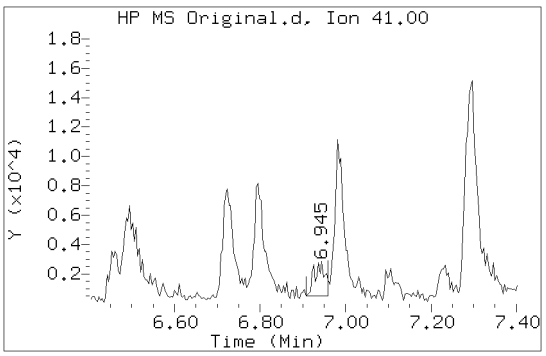
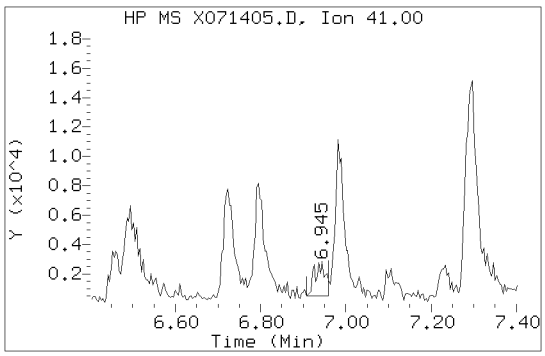
AREA
4124
HEIGHT
2354
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
4124
HEIGHT
2354
20-Jul-2023
15:04
linh
pham



Ethanol (64-17-5)

Reason Code:

BEFORE

MASS
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AREA
3219
HEIGHT
2559
20-Jul-2023
15:04
linh
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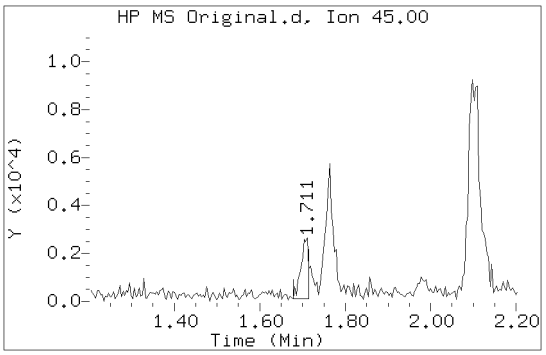

AFTER

MASS
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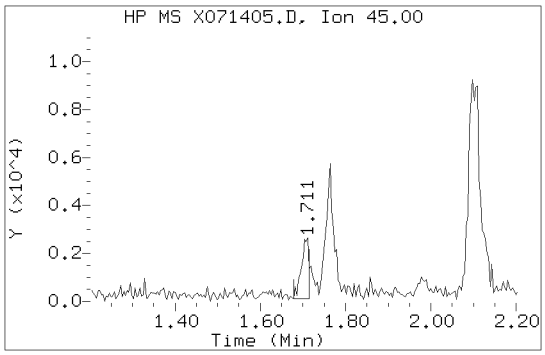
AREA
3219
HEIGHT
2559
20-Jul-2023
15:04
linh
pham



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Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

Ethanol (64-17-5)

Reason Code:

BEFORE
MASS
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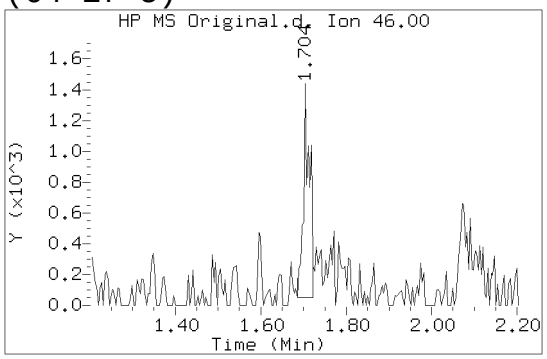
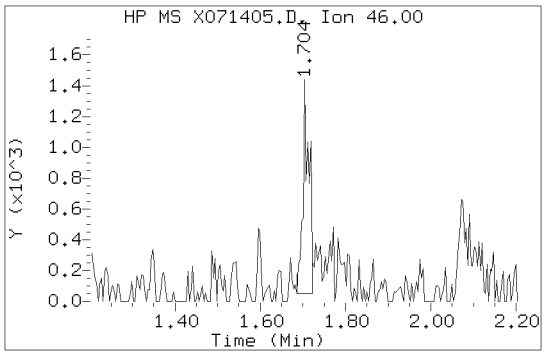
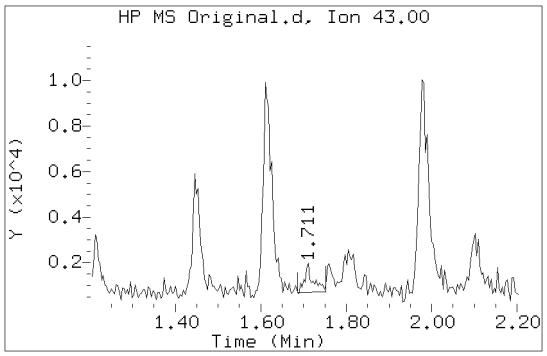
AREA
1433
HEIGHT
1387
20-Jul-2023
15:04
linh
pham



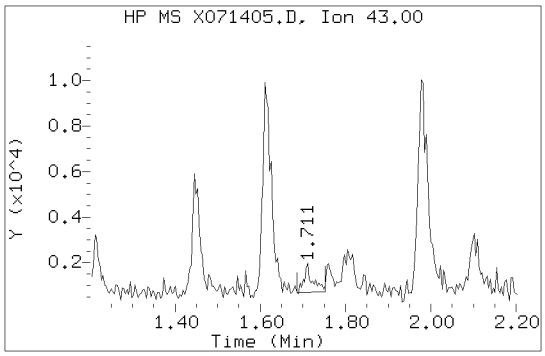
AFTER
MASS
46
AREA
1433
HEIGHT
1387
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
43
AREA
1776
HEIGHT
1290
20-Jul-2023
15:04
linh
pham



AFTER
MASS
43
AREA
1776
HEIGHT
1290
20-Jul-2023
15:04
linh
pham



tert-Butyl formate (762-75-4)

Reason Code:

BEFORE
MASS
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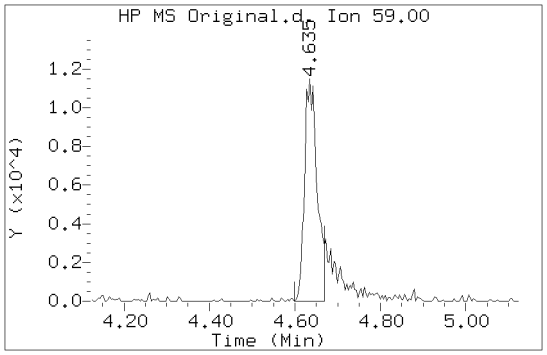
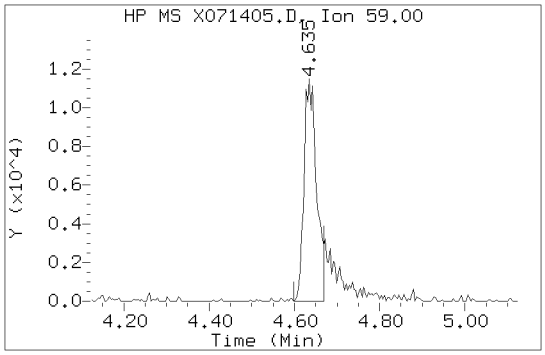
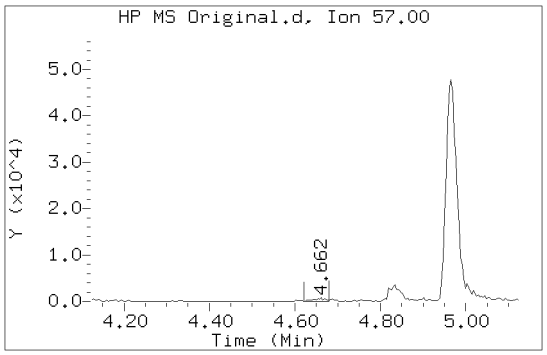
AREA
23857
HEIGHT
11486
20-Jul-2023
15:04
linh
pham



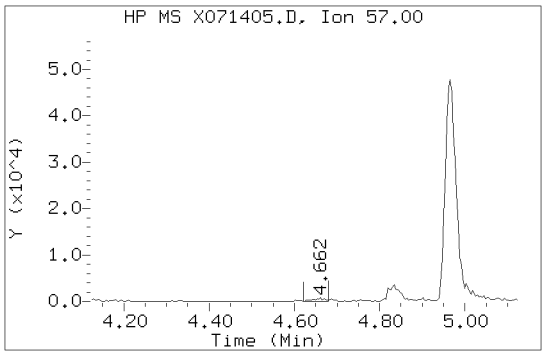
AFTER
MASS
59
AREA
23857
HEIGHT
11486
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
57
AREA
1334
HEIGHT
778
20-Jul-2023
15:04
linh
pham



AFTER
MASS
57
AREA
1334
HEIGHT
778
20-Jul-2023
15:04
linh
pham



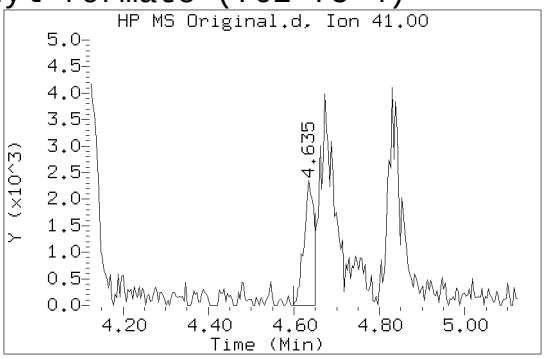
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071405.D
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

tert-Butyl formate (762-75-4)

Reason Code:

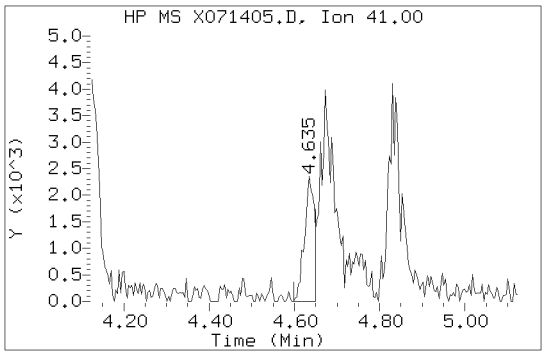
BEFORE

MASS
41
AREA
3833
HEIGHT
2355
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
3833
HEIGHT
2355
20-Jul-2023
15:04
linh
pham

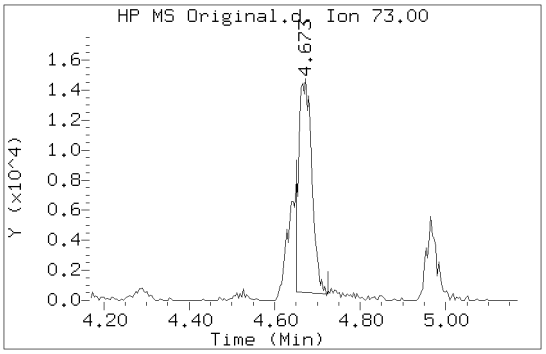


tert-Amyl methyl ether (974-05-08)

Reason Code:

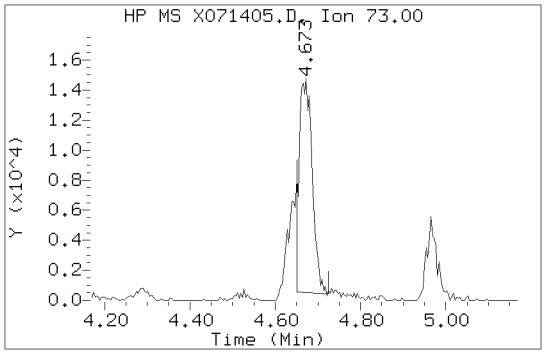
BEFORE

MASS
73
AREA
31345
HEIGHT
14253
20-Jul-2023
15:04
linh
pham



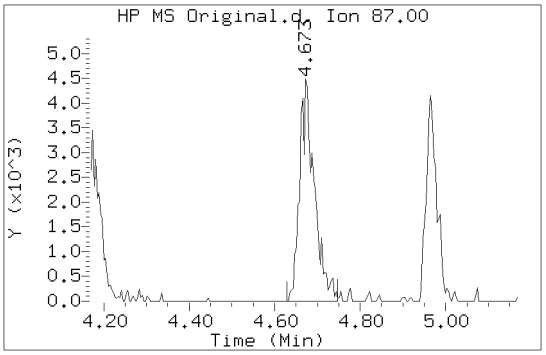
AFTER

MASS
73
AREA
31345
HEIGHT
14253
20-Jul-2023
15:04
linh
pham



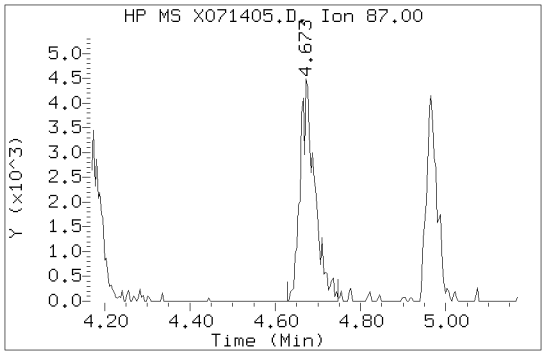
BEFORE

MASS
87
AREA
10923
HEIGHT
4489
20-Jul-2023
15:04
linh
pham



AFTER

MASS
87
AREA
10923
HEIGHT
4489
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
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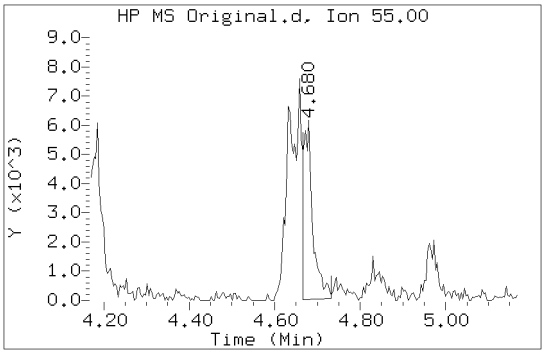
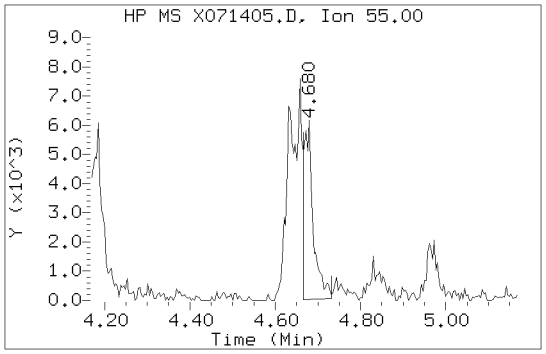
AREA
9755
HEIGHT
6135
20-Jul-2023
15:04
linh
pham



AFTER

MASS
55
AREA
9755
HEIGHT
6135
20-Jul-2023
15:04
linh
pham



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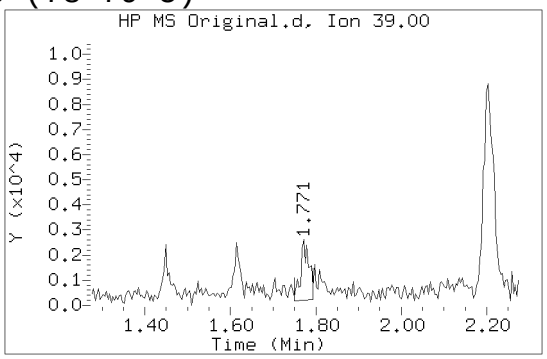
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

Isoprene (78-79-5)

Reason Code:

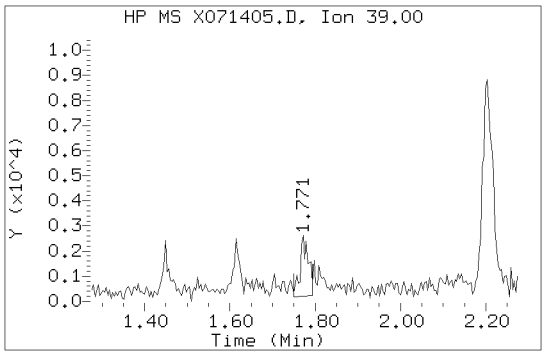
BEFORE

MASS
39
AREA
3408
HEIGHT
2427
20-Jul-2023
15:04
linh
pham



AFTER

MASS
39
AREA
3408
HEIGHT
2427
20-Jul-2023
15:04
linh
pham



BEFORE

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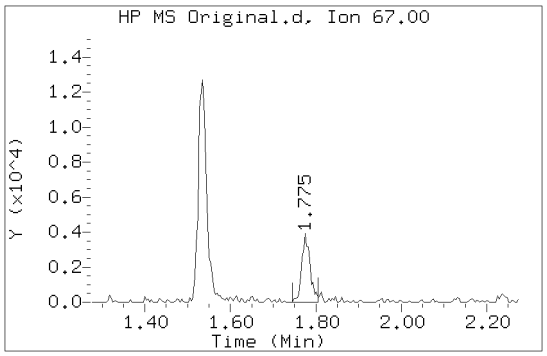
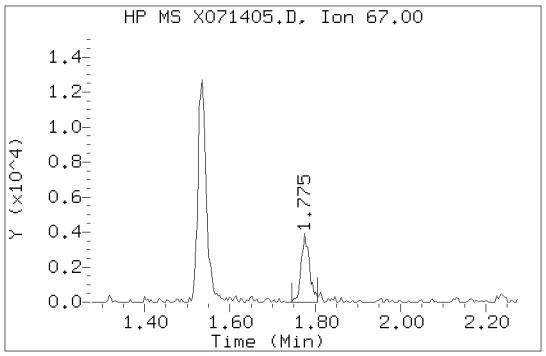
5482
HEIGHT
3925
20-Jul-2023
15:04
linh
pham



AFTER

MASS
67
AREA
5482
HEIGHT
3925
20-Jul-2023
15:04
linh
pham



BEFORE

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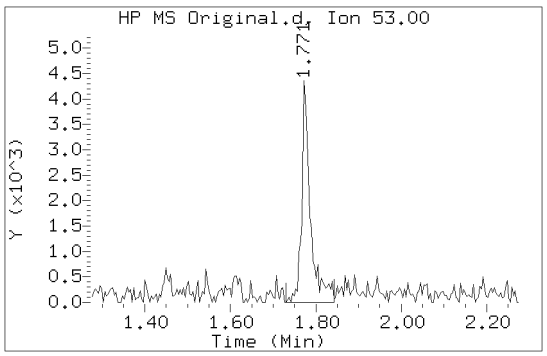
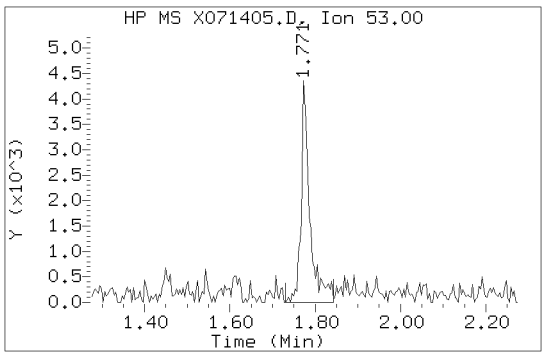
6318
HEIGHT
4358
20-Jul-2023
15:04
linh
pham



AFTER

MASS
53
AREA
6318
HEIGHT
4358
20-Jul-2023
15:04
linh
pham



n-Amyl acetate (628-63-7)

Reason Code:

BEFORE

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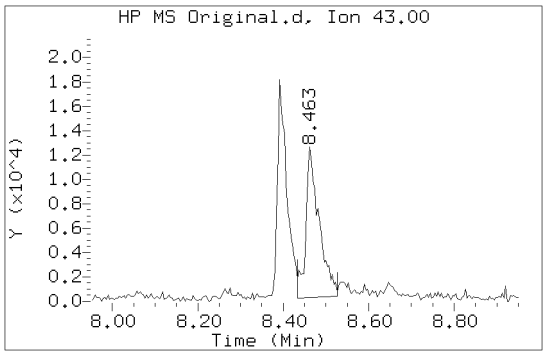
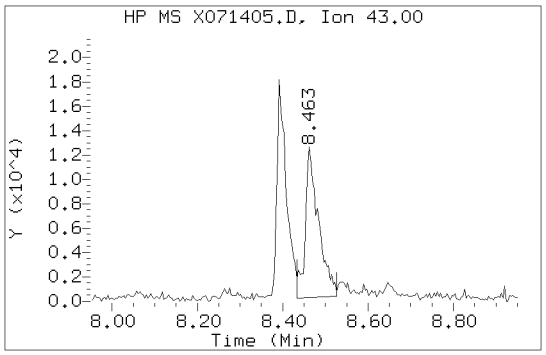
AREA
26886
HEIGHT
12364
20-Jul-2023
15:04
linh
pham



AFTER

MASS
43
AREA
26886
HEIGHT
12364
20-Jul-2023
15:04
linh
pham



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Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

n-Amyl acetate (628-63-7)

Reason Code:

BEFORE
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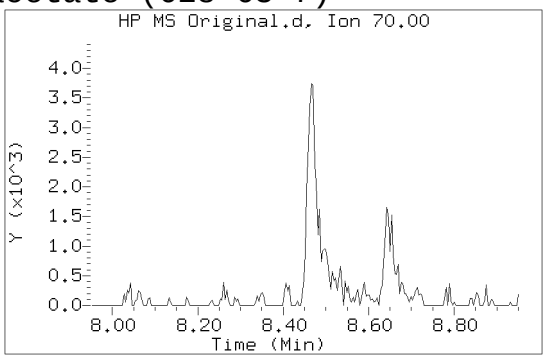
70
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER
MASS
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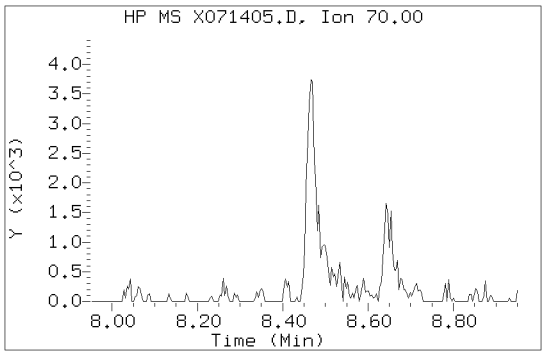
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
87
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HEIGHT
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20-Jul-2023
15:04
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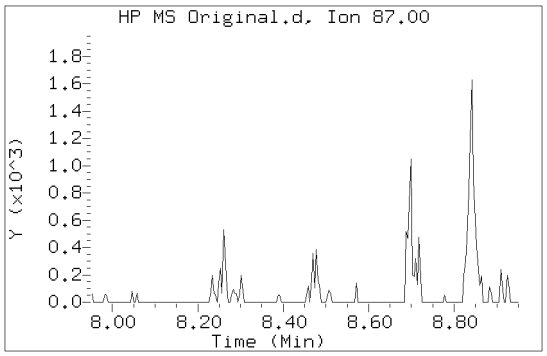

AFTER
MASS
87
AREA
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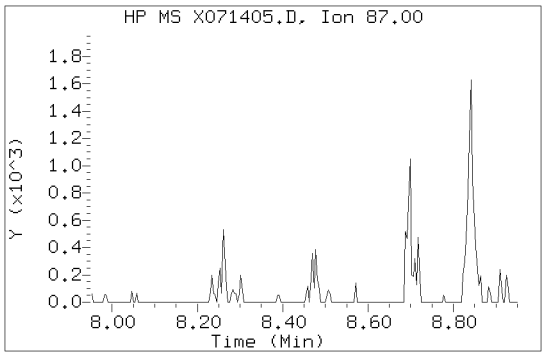
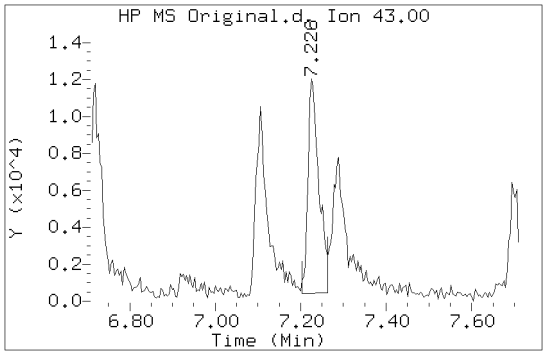
HEIGHT
0
20-Jul-2023
15:04
linh
pham



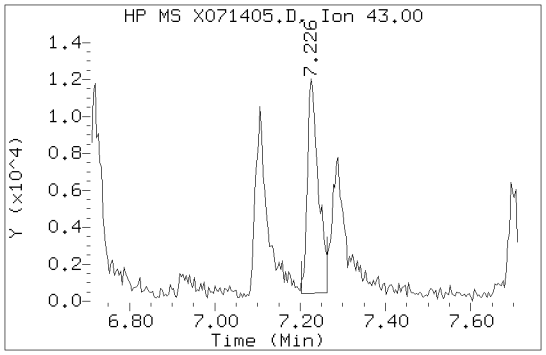
n-Butyl acetate (123-86-4)

Reason Code:

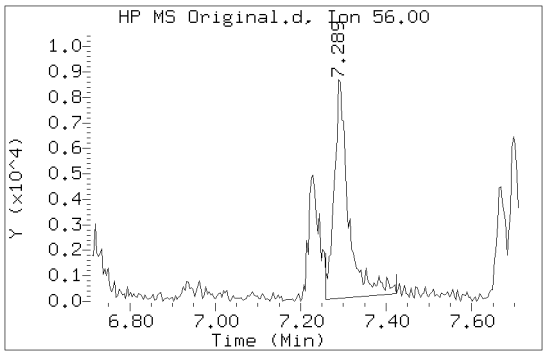
BEFORE
MASS
43
AREA
20825
HEIGHT
11598
20-Jul-2023
15:04
linh
pham



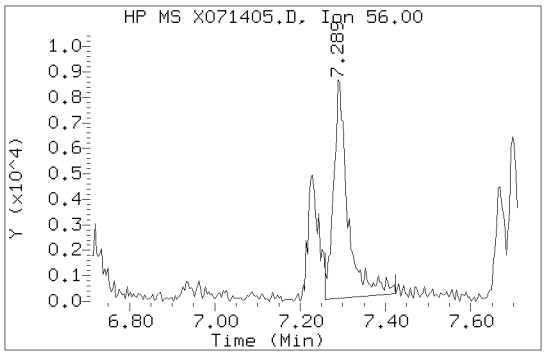
AFTER
MASS
43
AREA
20825
HEIGHT
11598
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
56
AREA
20012
HEIGHT
8570
20-Jul-2023
15:04
linh
pham



AFTER
MASS
56
AREA
20012
HEIGHT
8570
20-Jul-2023
15:04
linh
pham



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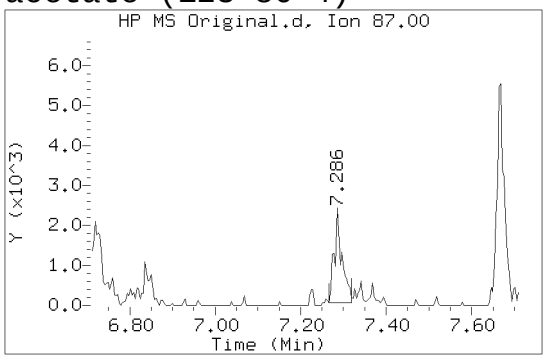
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

n-Butyl acetate (123-86-4)

Reason Code:

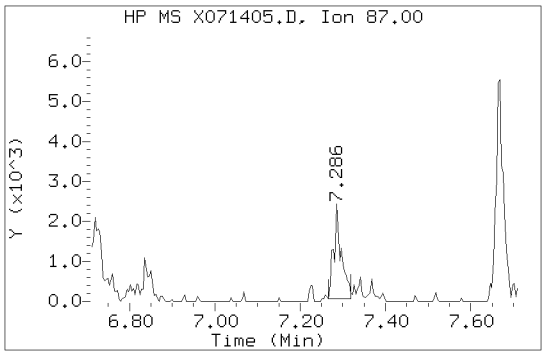
BEFORE

MASS
87
AREA
2958
HEIGHT
2373
20-Jul-2023
15:04
linh
pham



AFTER

MASS
87
AREA
2958
HEIGHT
2373
20-Jul-2023
15:04
linh
pham



Acetaldehyde (75-07-0)

Reason Code:

BEFORE

MASS
44
AREA
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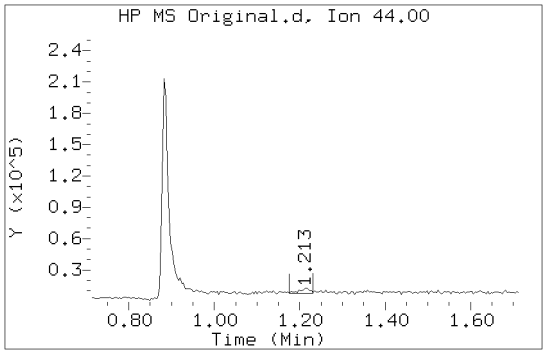
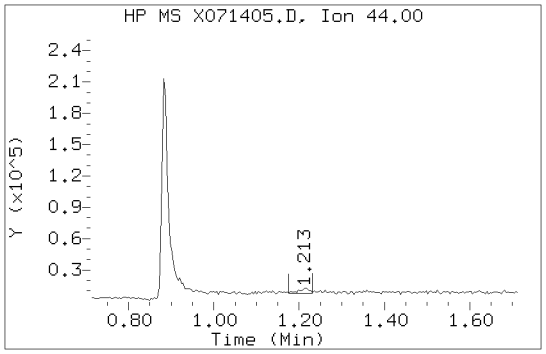
HEIGHT
5042
20-Jul-2023
15:04
linh
pham



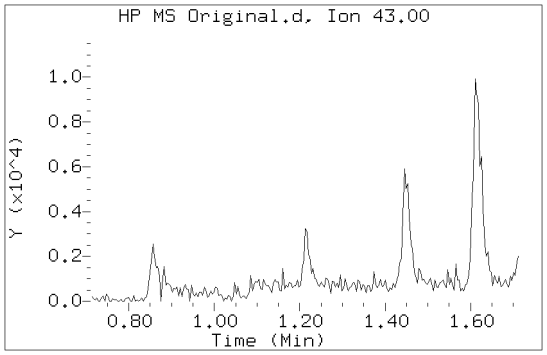
AFTER

MASS
44
AREA
8114
HEIGHT
5042
20-Jul-2023
15:04
linh
pham



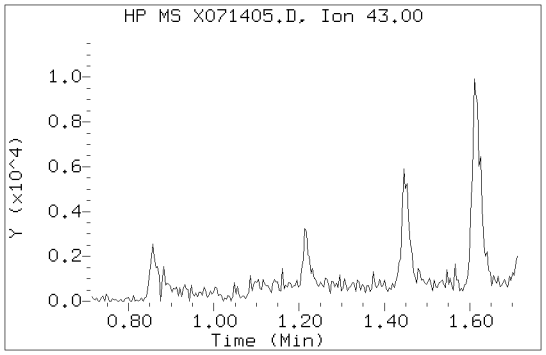
BEFORE

MASS
43
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



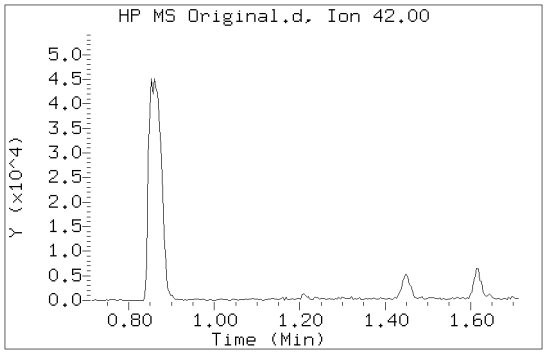
AFTER

MASS
43
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



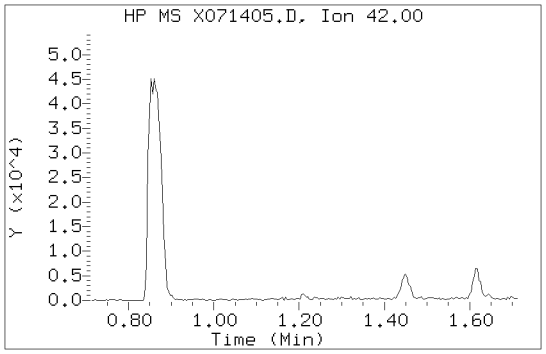
BEFORE

MASS
42
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
42
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



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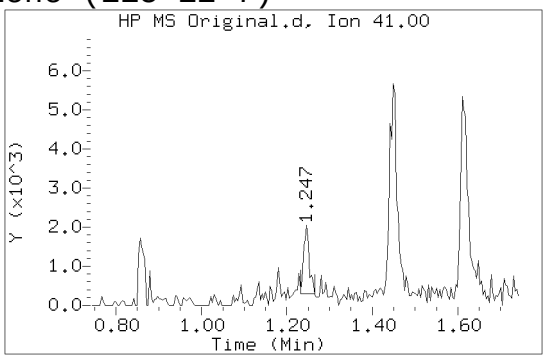
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

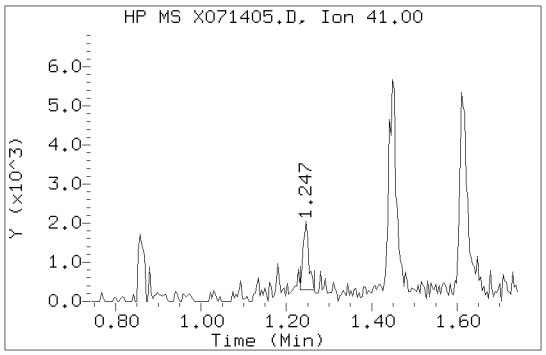
Isobutylene (115-11-7)

Reason Code:

BEFORE
MASS
41
AREA
1654
HEIGHT
1749
20-Jul-2023
15:04
linh
pham



AFTER
MASS
41
AREA
1654
HEIGHT
1749
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
56
AREA
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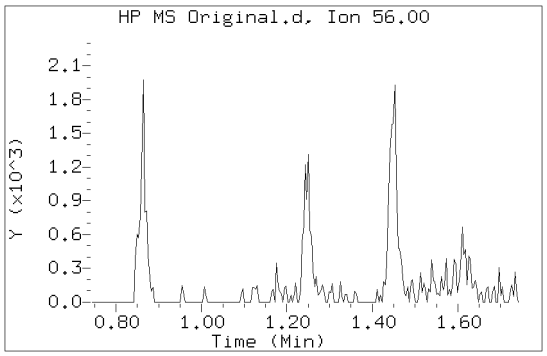
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER
MASS
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AREA
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HEIGHT
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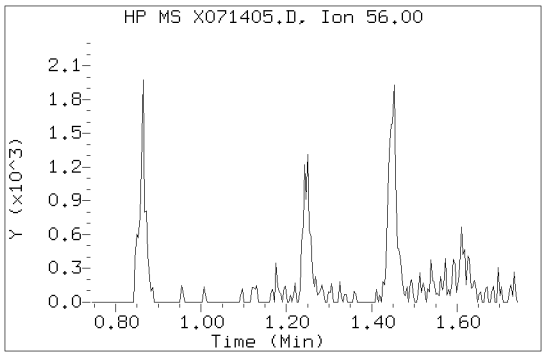
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
84
AREA
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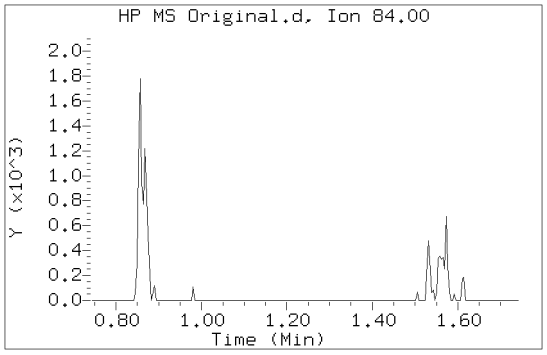
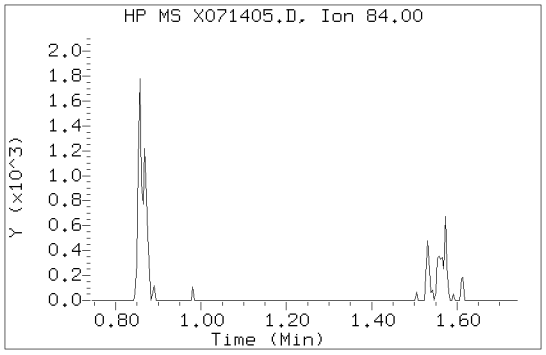
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER
MASS
84
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



2-Ethylhexyl Acrylate (103-11-7)

Reason Code:

BEFORE
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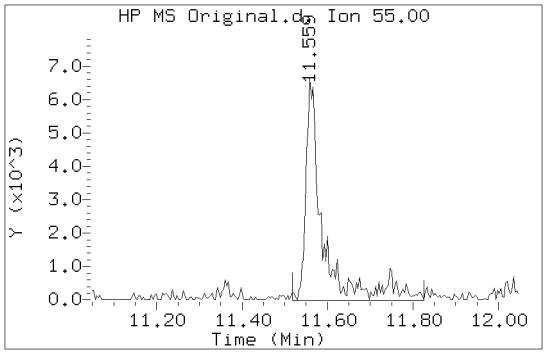
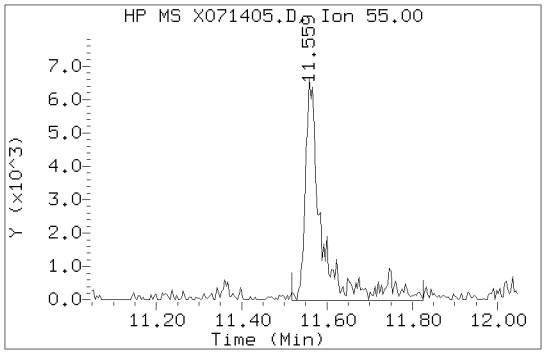
55
AREA
18101
HEIGHT
6633
20-Jul-2023
15:04
linh
pham



AFTER
MASS
55
AREA
18101
HEIGHT
6633
20-Jul-2023
15:04
linh
pham



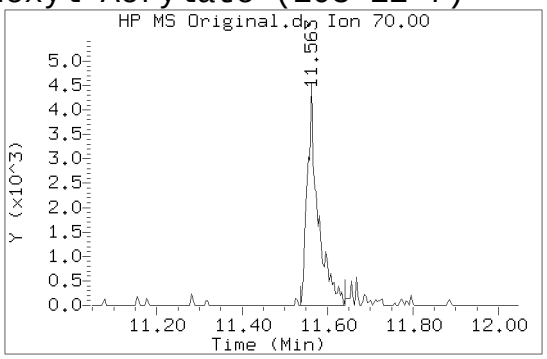
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071405.D
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

2-Ethylhexyl Acrylate (103-11-7)

Reason Code:

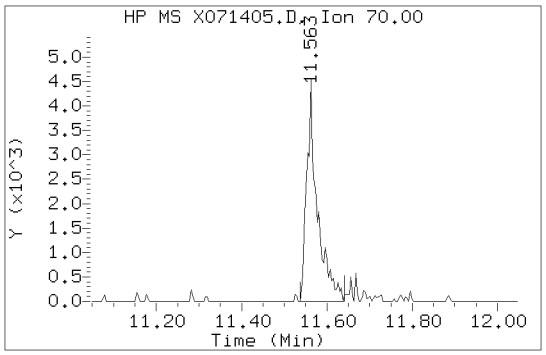
BEFORE

MASS
70
AREA
7844
HEIGHT
4538
20-Jul-2023
15:04
linh
pham



AFTER

MASS
70
AREA
7844
HEIGHT
4538
20-Jul-2023
15:04
linh
pham

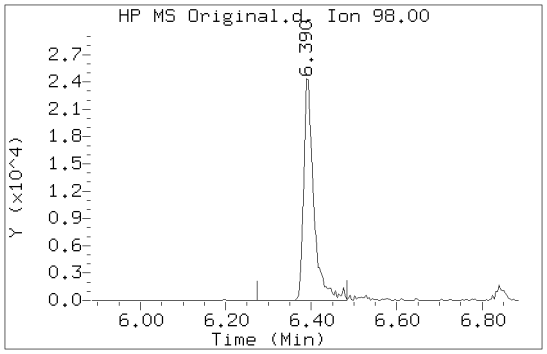


Toluene-d8 (2037-26-5)

Reason Code:

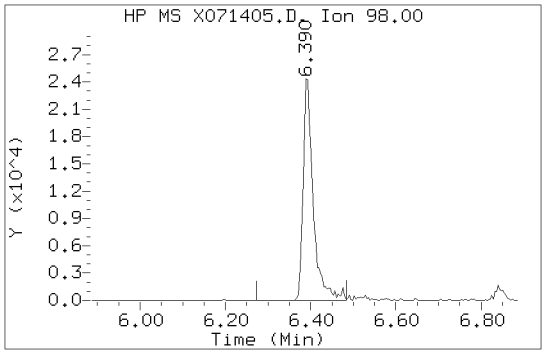
BEFORE

MASS
98
AREA
41058
HEIGHT
24360
20-Jul-2023
15:04
linh
pham



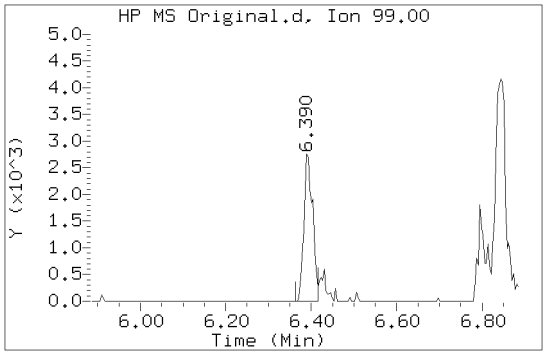
AFTER

MASS
98
AREA
41058
HEIGHT
24360
20-Jul-2023
15:04
linh
pham



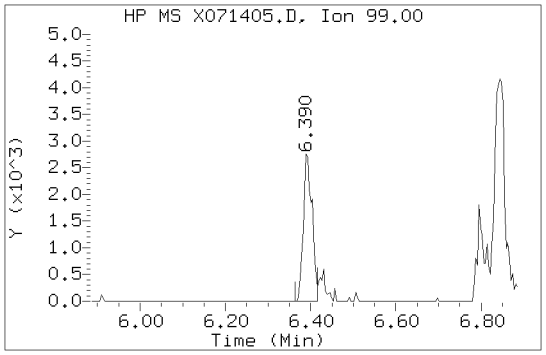
BEFORE

MASS
99
AREA
4023
HEIGHT
2761
20-Jul-2023
15:04
linh
pham



AFTER

MASS
99
AREA
4023
HEIGHT
2761
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
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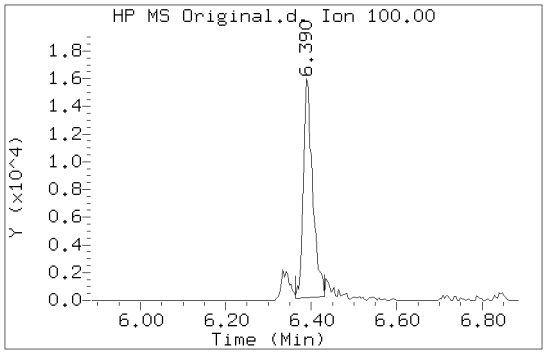
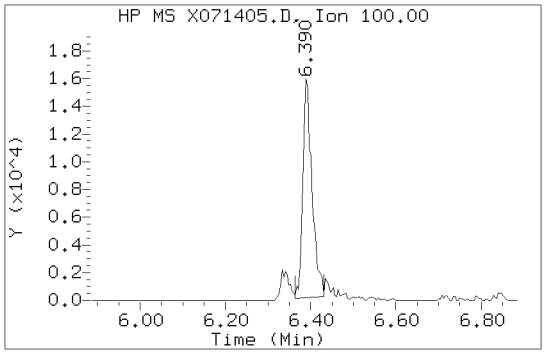
AREA
24373
HEIGHT
15816
20-Jul-2023
15:04
linh
pham



AFTER

MASS
100
AREA
24373
HEIGHT
15816
20-Jul-2023
15:04
linh
pham



ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071406.D
Lab Smp Id: VSTD005 Client Smp ID: VSTD005
Inj Date : 14-JUL-2023 13:43
Operator : PC Inst ID: voa6.i
Smp Info : VSTD005;VSTD005;1;5;
Misc Info : V6;WATER;0;1;
Comment :
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Meth Date : 20-Jul-2023 15:05 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 13:23 Cal File: X071405.D
Als bottle: 7 Calibration Sample, Level: 5
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	4.177	4.177	(1.000)	515309	50.0000	
2 Dichlorodifluoromethane	85	0.976	0.976	(0.234)	21541	5.00000	5.09
3 Chloromethane	50	1.081	1.081	(0.259)	35282	5.00000	4.53(M)
4 Propionitrile	54	3.671	3.671	(0.879)	48685	50.0000	47.69(a)
5 Vinyl Chloride	62	1.149	1.149	(0.275)	31539	5.00000	4.72
6 Bromomethane	94	1.343	1.343	(0.322)	13035	5.00000	4.72(M)
7 Chloroethane	64	1.407	1.407	(0.337)	17933	5.00000	4.71
8 Trichlorofluoromethane	101	1.565	1.565	(0.375)	30820	5.00000	4.56
9 Acrolein	56	1.868	1.868	(0.447)	2341	10.0000	12.99(aH)
10 Acetone	43	1.977	1.977	(0.473)	26152	10.0000	8.56
11 1,1-Dichloroethene	96	1.917	1.917	(0.459)	18372	5.00000	4.86
12 Isobutyl Alcohol	43	4.684	4.684	(1.121)	97691	100.000	100.01(a)
13 Acetonitrile	39	2.206	2.206	(0.528)	34072	50.0000	47.15(a)
14 Allyl Chloride	41	2.206	2.206	(0.528)	83408	5.00000	4.92(a)
15 Iodomethane	142	2.029	2.029	(0.486)	29645	10.0000	9.67(M)
16 Acrylonitrile	53	2.539	2.539	(0.608)	26399	10.0000	10.51
17 Methylene Chloride	84	2.307	2.307	(0.552)	25734	5.00000	4.52
18 Methyl tert-butyl ether	73	2.543	2.543	(0.609)	69208	5.00000	4.92
19 Carbon Disulfide	76	2.074	2.074	(0.497)	111855	10.0000	9.42
20 trans-1,2-Dichloroethene	96	2.532	2.532	(0.606)	22471	5.00000	5.14

21 Vinyl Acetate	43	3.008	3.008 (0.720)	178820	10.0000	9.90
22 1,1-Dichloroethane	63	2.925	2.925 (0.700)	46539	5.00000	4.85

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	23 Chloroprene	53	1.778	1.778	(0.426)	11212	5.00000	4.83(aM)
	24 2-Butanone	43	3.608	3.608	(0.864)	25624	10.0000	9.33(M)
	25 Methacrylonitrile	41	3.848	3.848	(0.921)	30821	5.00000	4.63(a)
	26 2,2-Dichloropropane	77	3.506	3.506	(0.839)	34523	5.00000	4.82
	27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.845)	27063	5.00000	4.86
	28 Chloroform	83	3.908	3.908	(0.935)	45886	5.00000	4.67
	29 Bromochloromethane	128	3.803	3.803	(0.910)	15326	5.00000	4.91
$	30 Dibromofluoromethane	113	4.102	4.102	(0.982)	26145	5.00000	4.85
	31 1,1,1-Trichloroethane	97	4.076	4.076	(0.976)	34806	5.00000	4.61
	32 1,1-Dichloropropene	75	4.282	4.282	(0.863)	28199	5.00000	4.24
	33 1,2-Dichloroethane	62	4.564	4.564	(0.919)	41945	5.00000	4.67
	34 Carbon Tetrachloride	117	4.264	4.264	(0.859)	30432	5.00000	4.54
$	35 1,2-Dichloroethane-d4	65	4.477	4.477	(1.072)	31653	5.00000	4.80
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	815041	50.0000	
	37 Benzene	78	4.515	4.515	(0.909)	91790	5.00000	4.70
	38 Trichloroethene	130	5.212	5.212	(1.050)	24824	5.00000	4.50(a)
	39 Bromodichloromethane	83	5.726	5.726	(1.153)	35030	5.00000	4.69(a)
	40 Methyl Methacrylate	41	5.617	5.617	(1.345)	30166	5.00000	4.85(a)
	41 2-Chloroethylvinyl ether	63	6.056	6.056	(1.220)	21401	10.0000	9.38(a)
	42 1,2-Dichloropropane	63	5.437	5.437	(1.095)	30550	5.00000	4.87(a)
	43 2-Nitropropane	43	5.981	5.981	(1.432)	8304	5.00000	4.05(a)
	44 Dibromomethane	93	5.557	5.557	(1.119)	16922	5.00000	4.76(a)
	45 4-Methyl-2-Pentanone	43	6.329	6.329	(0.825)	71437	10.0000	9.87
	46 cis-1,3-Dichloropropene	75	6.160	6.160	(1.241)	38467	5.00000	4.48(a)
*	47 Chlorobenzene-d5	117	7.667	7.667	(1.000)	735002	50.0000	
$	48 Toluene-d8	98	6.385	6.385	(0.833)	95273	5.00000	5.03(M)
	49 Ethyl Methacrylate	69	6.715	6.715	(1.353)	26485	5.00000	4.96(a)
	50 Toluene	91	6.445	6.445	(0.841)	96792	5.00000	4.89(a)
	51 trans-1,3-Dichloropropene	75	6.685	6.685	(1.347)	33424	5.00000	4.62(a)
	52 2-Hexanone	43	7.098	7.098	(0.926)	48930	10.0000	10.29
	53 1,1,2-Trichloroethane	83	6.843	6.843	(0.892)	20880	5.00000	4.97(a)
	54 1,3-Dichloropropane	76	6.981	6.981	(0.911)	43005	5.00000	5.01
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	28644	5.00000	4.72(a)
	56 Tetrachloroethene	164	6.929	6.929	(0.904)	19962	5.00000	4.88(a)
	57 1,2-Dibromoethane	107	7.263	7.263	(0.947)	25723	5.00000	5.36
	58 1-Chlorohexane	55	7.697	7.697	(1.550)	29679	5.00000	4.53(a)
	59 Chlorobenzene	112	7.694	7.694	(1.003)	65984	5.00000	4.77(a)
	60 1,1,1,2-Tetrachloroethane	131	7.776	7.776	(1.014)	25299	5.00000	4.67(a)
	61 Ethylbenzene	106	7.799	7.799	(1.017)	32420	5.00000	4.67(a)
	62 m,p-Xylenes	106	7.907	7.907	(1.031)	79790	10.0000	9.17(a)
	63 o-Xylene	106	8.241	8.241	(1.075)	37444	5.00000	4.54(a)
	64 Styrene	104	8.267	8.267	(1.078)	65591	5.00000	4.56(a)
	66 Bromoform	173	8.413	8.413	(1.097)	17937	5.00000	4.61(a)
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	96601	5.00000	4.56(a)
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	33128	5.00000	5.01
$	69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	40007	5.00000	5.08
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	393512	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	27801	5.00000	5.30
	72 trans-1,4-Dichloro-2-butene	53	8.893	8.893	(1.160)	9958	5.00000	4.45(aM)
	73 n-Propylbenzene	91	8.912	8.912	(0.922)	105135	5.00000	4.42(a)
	74 Bromobenzene	156	8.811	8.811	(0.912)	30146	5.00000	4.89(a)
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	77581	5.00000	4.35(a)

76	2-Chlorotoluene	91	8.972	8.972 (0.929)	73357	5.00000	4.57(a)
77	4-Chlorotoluene	91	9.073	9.073 (0.939)	83281	5.00000	4.72(a)

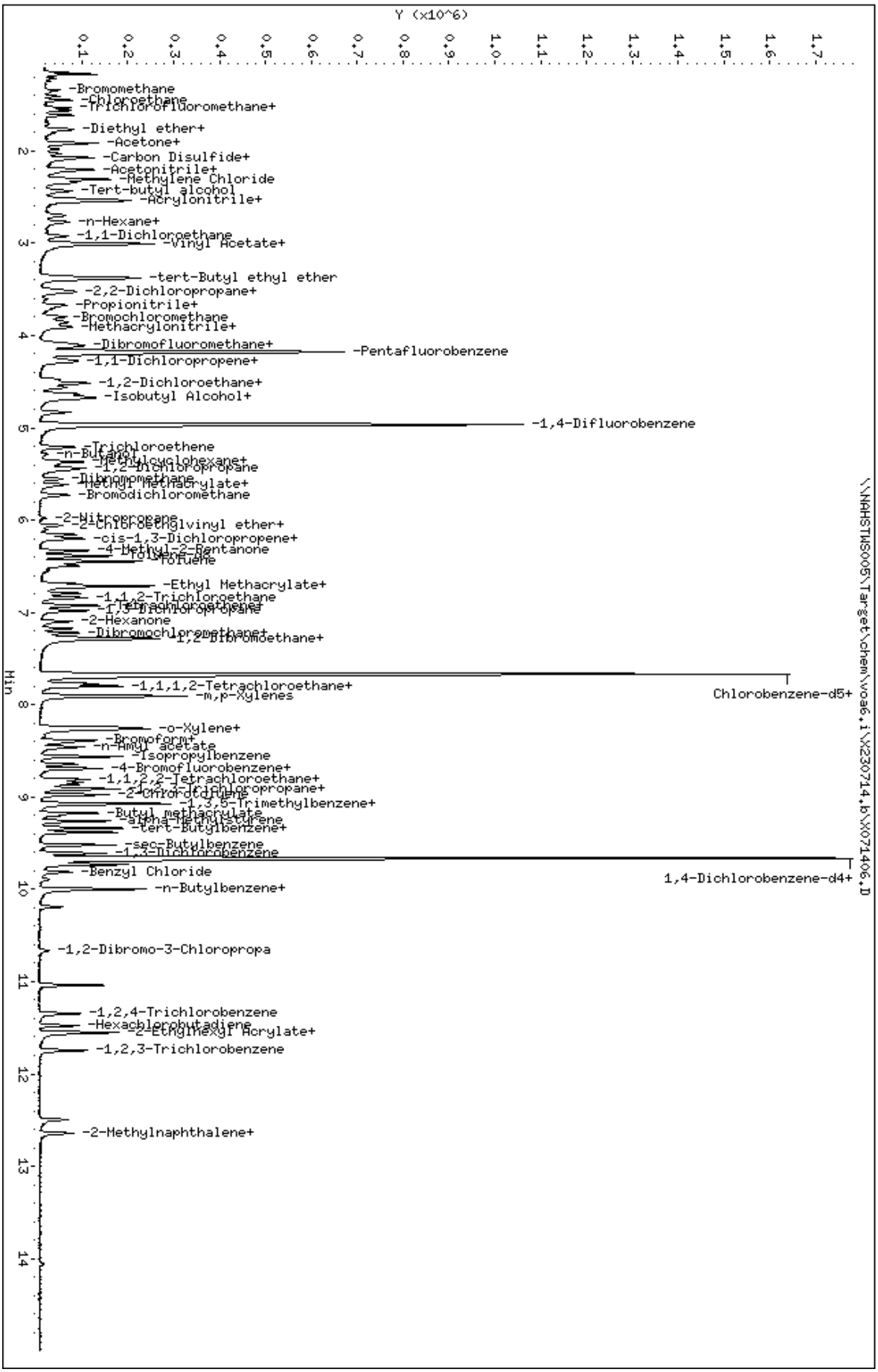
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
78	tert-Butylbenzene	119	9.336	9.336	(0.966)	68497	5.00000	4.48(a)
79	1,2,4-Trimethylbenzene	105	9.381	9.381	(0.971)	75897	5.00000	4.24(a)
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	89261	5.00000	4.38(a)
82	p-Isopropyltoluene	119	9.647	9.647	(0.998)	80480	5.00000	4.32(a)
83	1,3-Dichlorobenzene	146	9.609	9.609	(0.995)	48860	5.00000	4.55(a)
84	1,4-Dichlorobenzene	146	9.680	9.680	(1.002)	56875	5.00000	4.83(a)
86	Benzyl Chloride	91	9.815	9.815	(1.280)	45616	5.00000	5.82(M)
87	n-Butylbenzene	91	9.995	9.995	(1.035)	67203	5.00000	4.31(a)
88	1,2-Dichlorobenzene	146	9.995	9.995	(1.035)	49668	5.00000	4.71(a)
89	1,2-Dibromo-3-Chloropropane	155	10.659	10.659	(1.103)	5268	5.00000	5.83(M)
90	1,2,4-Trichlorobenzene	180	11.349	11.349	(1.175)	33646	5.00000	4.64(aM)
91	Hexachlorobutadiene	225	11.476	11.476	(1.188)	13714	5.00000	6.27
92	Naphthalene	128	11.551	11.551	(1.196)	85025	5.00000	4.74(aM)
93	1,2,3-Trichlorobenzene	180	11.742	11.742	(1.215)	30270	5.00000	4.47(a)
146	Methyl acetate	43	2.236	2.236	(0.535)	23616	5.00000	5.14
138	Freon TF	101	1.921	1.921	(0.460)	16656	5.00000	5.27
141	Cyclohexane	56	4.121	4.121	(0.987)	39083	5.00000	4.37(aH)
142	Tetrahydrofuran	42	3.863	3.863	(0.925)	12650	10.0000	9.54
147	Methylcyclohexane	55	5.399	5.399	(1.088)	84656	5.00000	4.92(aM)
135	1,4-Dioxane	88	5.617	5.617	(1.345)	6551	100.000	106.98(M)
132	n-Butanol	56	5.287	5.287	(1.266)	13588	100.000	79.21(aM)
131	Methyl Acrylate	55	3.716	3.716	(0.890)	33338	5.00000	4.75(aMH)
133	Ethyl Acrylate	55	5.399	5.399	(1.293)	82574	5.00000	4.83(M)
136	n-Hexane	57	2.775	2.775	(0.664)	26276	5.00000	5.21
139	Diethyl ether	59	1.763	1.763	(0.422)	23219	5.00000	4.83(a)
148	Tert-butyl alcohol	59	2.434	2.434	(0.583)	63493	100.000	97.62
149	Isopropyl alcohol	45	2.101	2.101	(0.503)	37998	100.000	94.15
156	Diisopropyl ether	45	3.008	3.008	(0.720)	98591	5.00000	4.64(Ta)
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	83294	5.00000	4.57(a)
167	Ethanol	45	1.703	1.703	(0.408)	7997	100.000	94.37
172	tert-Butyl formate	59	4.627	4.627	(1.108)	54968	10.0000	9.98
173	3,3-Dimethyl-1-butanol	57	7.289	7.289	(0.951)	78844	100.000	99.74
174	tert-Amyl methyl ether	73	4.669	4.669	(1.118)	83517	5.00000	4.92(aM)
175	tert-Butyl ethyl ether	59	3.379	3.379	(0.809)	109587	5.00000	5.02
176	tert-Amyl alcohol	59	4.627	4.627	(1.108)	54968	100.000	97.64
151	4-Methyl-2-pentanol	45	6.715	6.715	(1.353)	183123	100.000	104.84(M)
180	1-Methylnaphthalene	142	12.642	12.642	(1.308)	33519	5.00000	(a)
140	1,3-Butadiene	54	1.167	1.167	(0.280)	30818	5.00000	4.65(a)
152	Amyl alcohol	42	6.921	6.921	(0.903)	21498	100.000	101.70(M)
158	Dichlorofluoromethane	67	1.535	1.535	(0.367)	38837	5.00000	4.67
159	Propylene oxide	43	1.808	1.808	(0.433)	7637	10.0000	12.08
161	3-Methyl-1-butanol	55	6.921	6.921	(0.903)	17029	100.000	94.10(M)
162	Butyl acrylate	55	8.256	8.256	(1.077)	63254	5.00000	4.52(a)
163	Butyl methacrylate	41	9.178	9.178	(0.950)	44524	5.00000	4.72(a)
164	Dicyclopentadiene	66	9.680	9.680	(1.002)	101741	5.00000	4.48(a)
182	Epichlorohydrin	57	6.104	6.104	(1.230)	11661	20.0000	19.15
M 94	1,2-Dichloroethylene (total)	96				49534	10.0000	(a)
130	Ethyl Acetate	43	3.679	3.679	(0.881)	39438	5.00000	5.15(M)
134	Cyclohexanone	55	8.646	8.646	(0.895)	36410	100.000	103.93(a)
185	Isoprene	39	1.775	1.775	(0.425)	9011	5.00000	5.30
188	Isopropyl acetate	43	4.684	4.684	(0.943)	98768	5.00000	4.59(a)
187	n-Amyl acetate	43	8.458	8.458	(1.103)	62876	5.00000	4.66(a)

189 n-Butyl acetate	43	7.221	7.221 (0.942)	54777	5.00000	4.86(aH)
150 Allyl alcohol	57	2.775	2.775 (0.664)	26276	100.000	102.36

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
194 Acetaldehyde	44	1.212	1.212	(0.290)	20987	20.0000	27.87(M)
195 Methyl Amyl Ketone	43	8.387	8.387	(1.094)	76515	5.00000	4.98(aH)
200 Dimethyl Disulfide	94	6.202	6.202	(0.809)	44165	5.00000	4.45(a)
202 Isobutylene	41	1.246	1.246	(0.298)	4070	5.00000	4.77(aM)
205 2-Ethylhexyl Acrylate	55	11.551	11.551	(1.196)	41733	5.00000	4.15(a)

QC Flag Legend

T - Target compound detected outside RT window.
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.



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Client ID: VSTD005
Sample Info: VSTD005;VSTD005;1;5;
Purge Volume: 5.0
Column phase: DB624

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

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Inj Date : 14-JUL-2023 13:43
InstruID : voa6.i
LabSampID : VSTD005

Chloromethane (74-87-3)

Reason Code:

BEFORE
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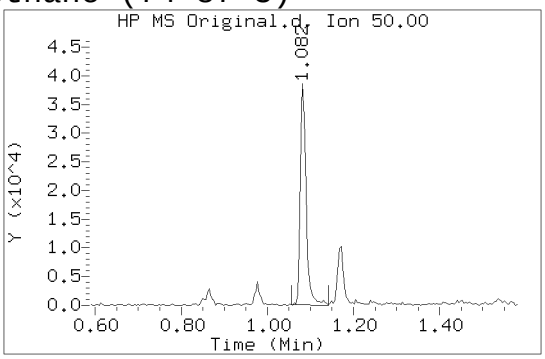
AREA
35282
HEIGHT
38561
20-Jul-2023
15:04
linh
pham



AFTER
MASS
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AREA
35282
HEIGHT
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20-Jul-2023
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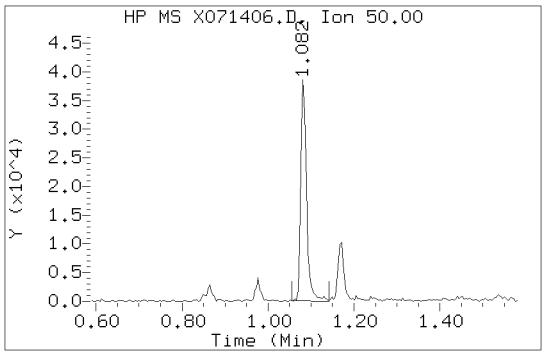

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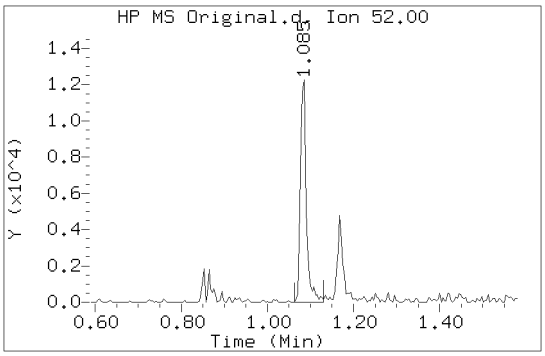

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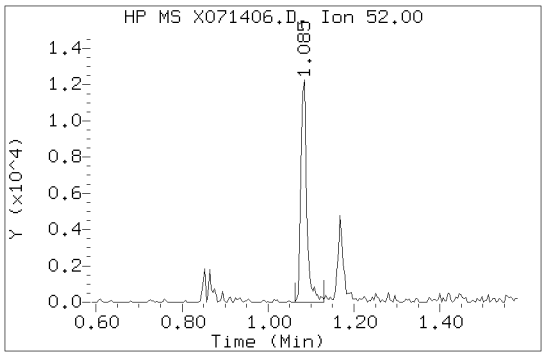

Bromomethane (74-83-9)

Reason Code:

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AREA
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HEIGHT
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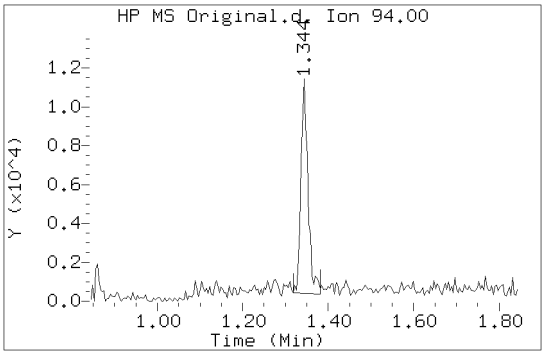
20-Jul-2023
15:04
linh
pham



AFTER
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20-Jul-2023
15:04
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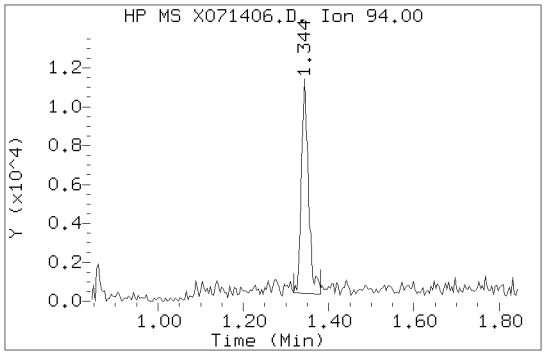

BEFORE
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HEIGHT
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20-Jul-2023
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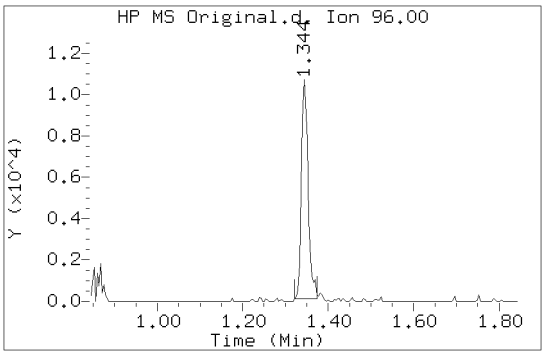
pham



AFTER
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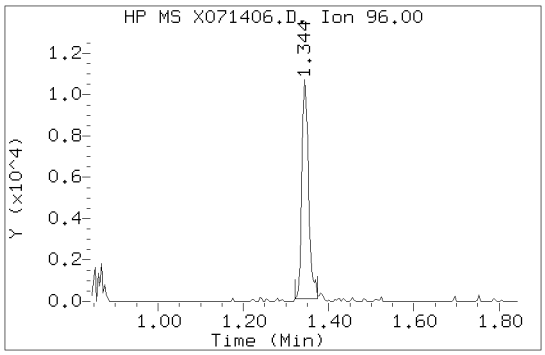
15:04
linh
pham



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Inj Date : 14-JUL-2023 13:43
InstruID : voa6.i
LabSampID : VSTD005

Iodomethane (74-88-4)

Reason Code:

BEFORE

MASS
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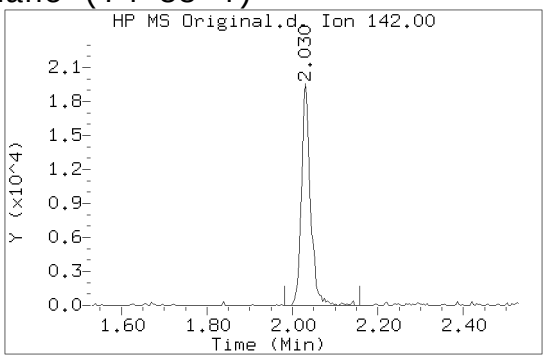
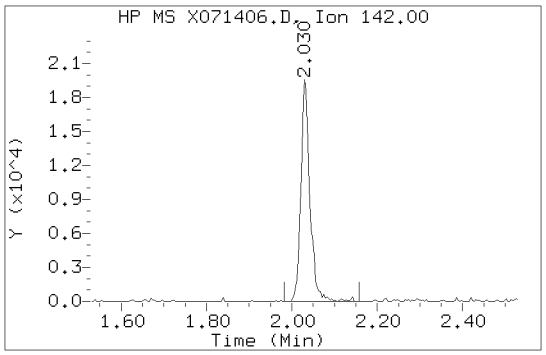
AREA
29645
HEIGHT
19576
20-Jul-2023
15:04
linh
pham



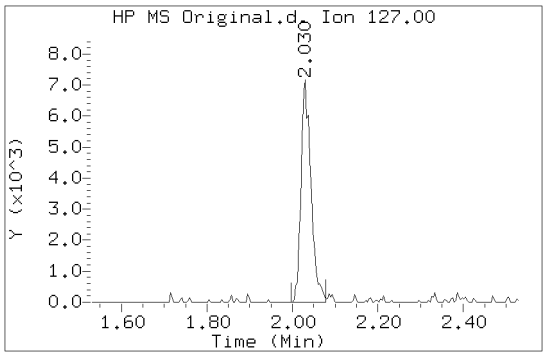
AFTER

MASS
142
AREA
29645
HEIGHT
19576
20-Jul-2023
15:04
linh
pham



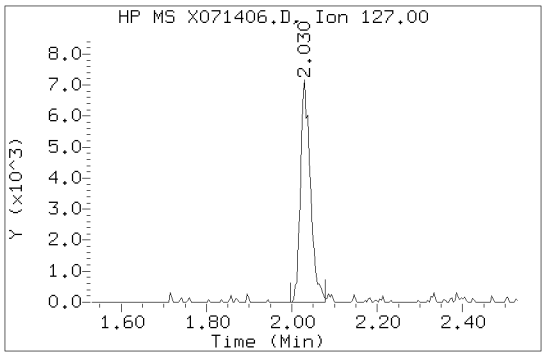
BEFORE

MASS
127
AREA
11941
HEIGHT
7165
20-Jul-2023
15:04
linh
pham



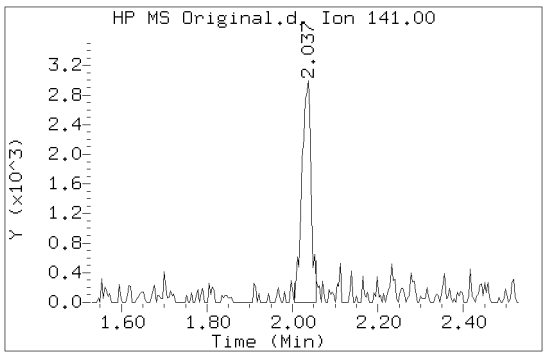
AFTER

MASS
127
AREA
11941
HEIGHT
7165
20-Jul-2023
15:04
linh
pham



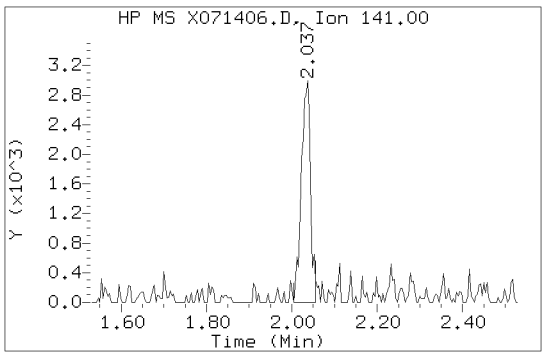
BEFORE

MASS
141
AREA
4591
HEIGHT
2994
20-Jul-2023
15:04
linh
pham



AFTER

MASS
141
AREA
4591
HEIGHT
2994
20-Jul-2023
15:04
linh
pham

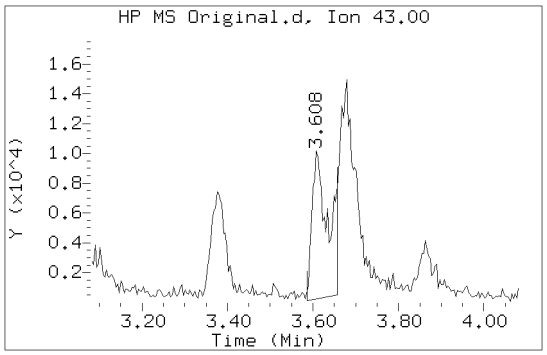


2-Butanone (78-93-3)

Reason Code:

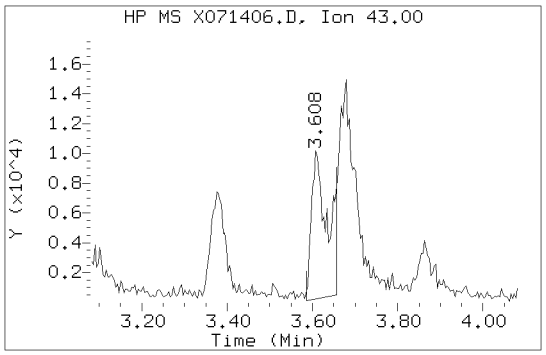
BEFORE

MASS
43
AREA
25624
HEIGHT
9920
20-Jul-2023
15:04
linh
pham



AFTER

MASS
43
AREA
25624
HEIGHT
9920
20-Jul-2023
15:04
linh
pham



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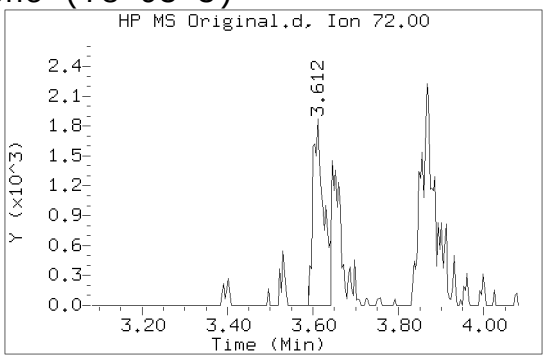
Inj Date : 14-JUL-2023 13:43
InstruID : voa6.i
LabSampID : VSTD005

2-Butanone (78-93-3)

Reason Code:

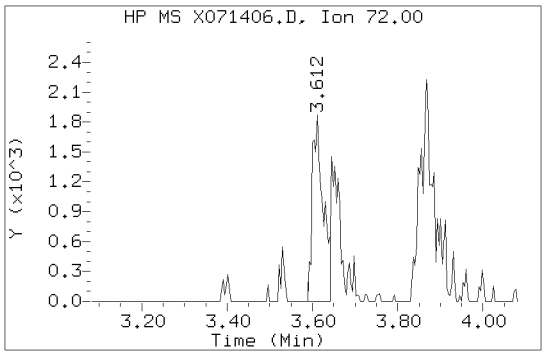
BEFORE

MASS
72
AREA
3309
HEIGHT
1873
20-Jul-2023
15:04
linh
pham



AFTER

MASS
72
AREA
3309
HEIGHT
1873
20-Jul-2023
15:04
linh
pham

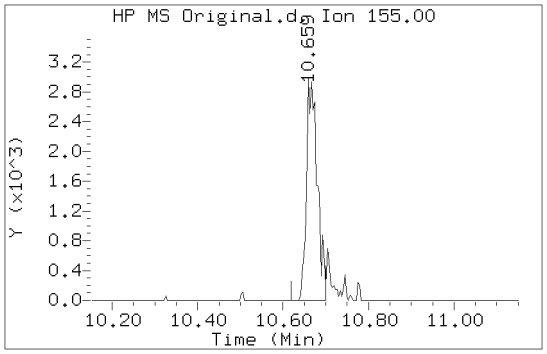


1,2-Dibromo-3-Chloropropane (96-12-8)

Reason Code:

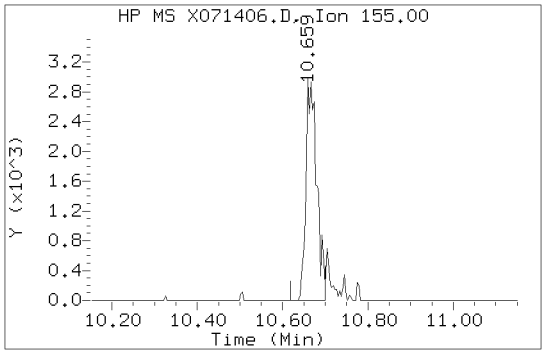
BEFORE

MASS
155
AREA
5268
HEIGHT
2977
20-Jul-2023
15:04
linh
pham



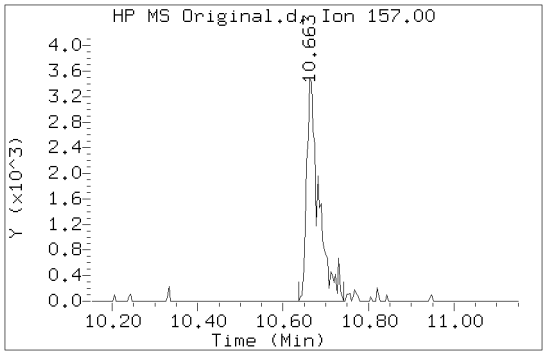
AFTER

MASS
155
AREA
5268
HEIGHT
2977
20-Jul-2023
15:04
linh
pham



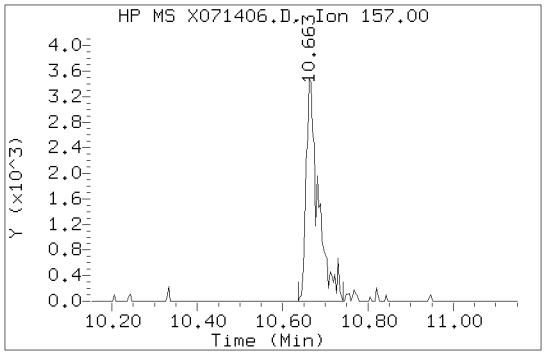
BEFORE

MASS
157
AREA
6914
HEIGHT
3477
20-Jul-2023
15:04
linh
pham



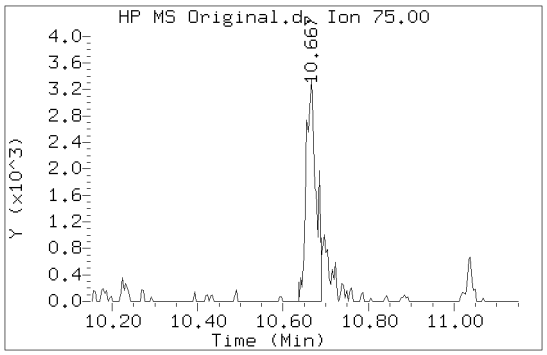
AFTER

MASS
157
AREA
6914
HEIGHT
3477
20-Jul-2023
15:04
linh
pham



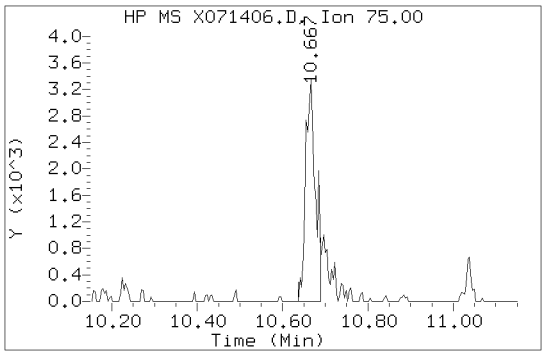
BEFORE

MASS
75
AREA
5387
HEIGHT
3348
20-Jul-2023
15:04
linh
pham



AFTER

MASS
75
AREA
5387
HEIGHT
3348
20-Jul-2023
15:04
linh
pham



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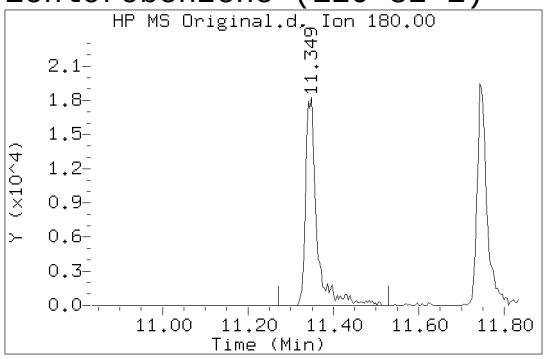
Inj Date : 14-JUL-2023 13:43
InstruID : voa6.i
LabSampID : VSTD005

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

Reason Code:

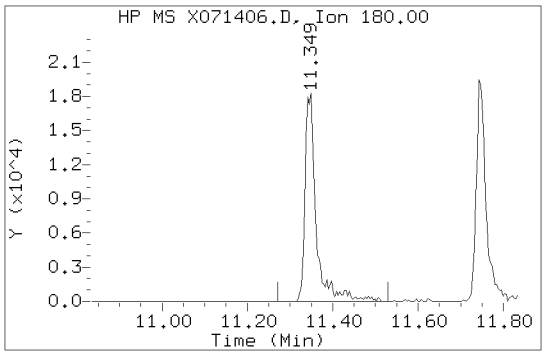
BEFORE

MASS
180
AREA
33646
HEIGHT
18264
20-Jul-2023
15:04
linh
pham



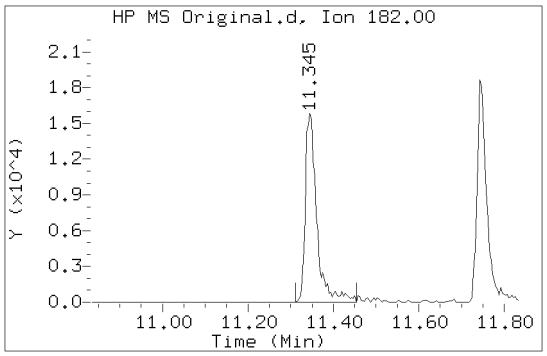
AFTER

MASS
180
AREA
33646
HEIGHT
18264
20-Jul-2023
15:04
linh
pham



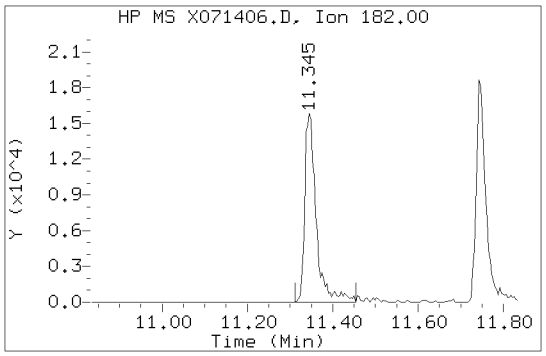
BEFORE

MASS
182
AREA
29855
HEIGHT
15861
20-Jul-2023
15:04
linh
pham



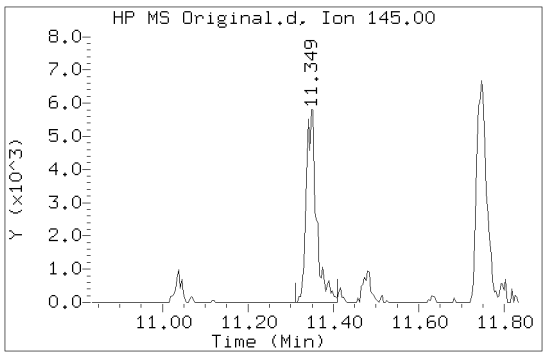
AFTER

MASS
182
AREA
29855
HEIGHT
15861
20-Jul-2023
15:04
linh
pham



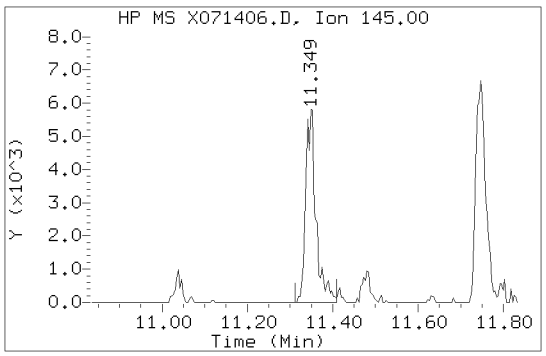
BEFORE

MASS
145
AREA
9753
HEIGHT
5817
20-Jul-2023
15:04
linh
pham



AFTER

MASS
145
AREA
9753
HEIGHT
5817
20-Jul-2023
15:04
linh
pham

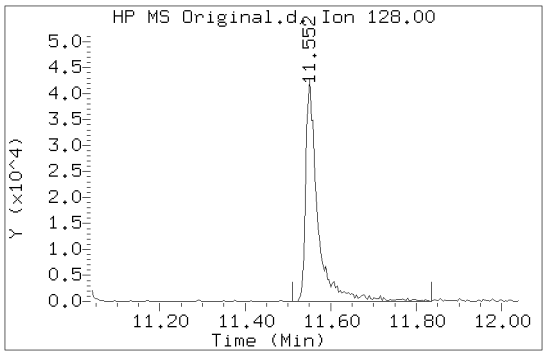


Naphthalene (91-20-3)

Reason Code:

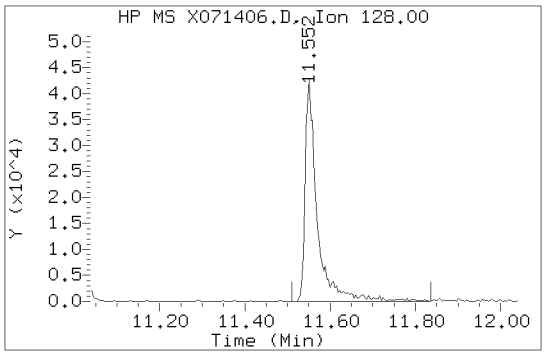
BEFORE

MASS
128
AREA
85025
HEIGHT
42672
20-Jul-2023
15:04
linh
pham



AFTER

MASS
128
AREA
85025
HEIGHT
42672
20-Jul-2023
15:04
linh
pham



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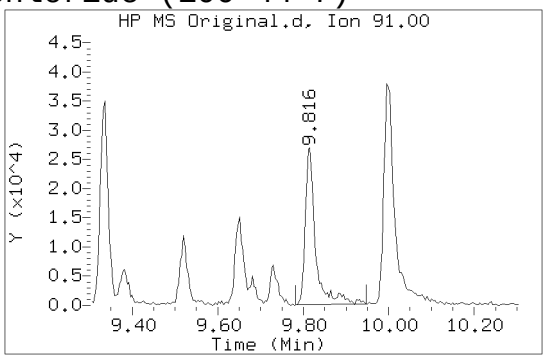
Inj Date : 14-JUL-2023 13:43
InstruID : voa6.i
LabSampID : VSTD005

Benzyl Chloride (100-44-7)

Reason Code:

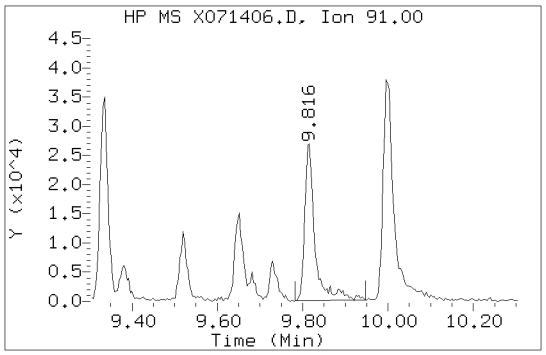
BEFORE

MASS
91
AREA
45616
HEIGHT
26893
20-Jul-2023
15:04
linh
pham



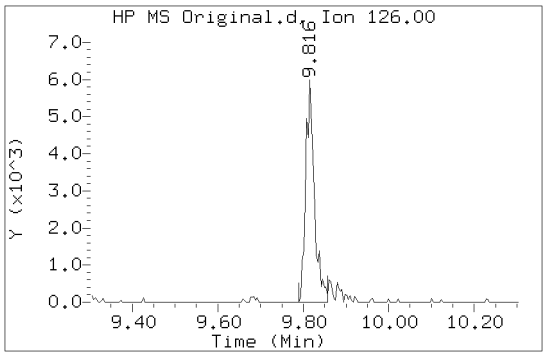
AFTER

MASS
91
AREA
45616
HEIGHT
26893
20-Jul-2023
15:04
linh
pham



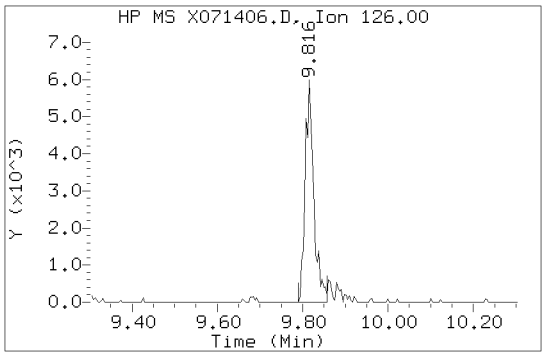
BEFORE

MASS
126
AREA
8499
HEIGHT
5989
20-Jul-2023
15:04
linh
pham



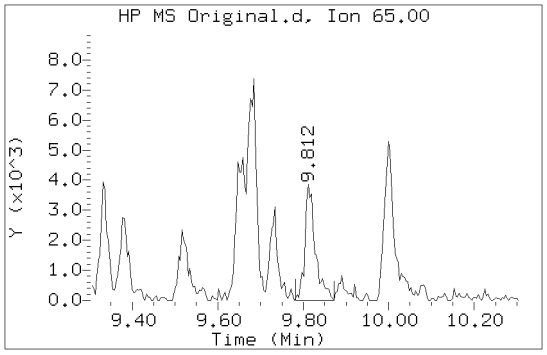
AFTER

MASS
126
AREA
8499
HEIGHT
5989
20-Jul-2023
15:04
linh
pham



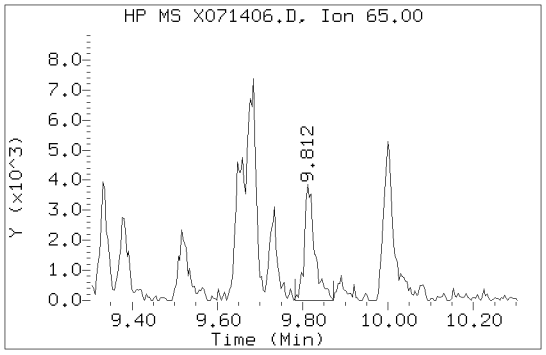
BEFORE

MASS
65
AREA
6591
HEIGHT
3852
20-Jul-2023
15:04
linh
pham



AFTER

MASS
65
AREA
6591
HEIGHT
3852
20-Jul-2023
15:04
linh
pham

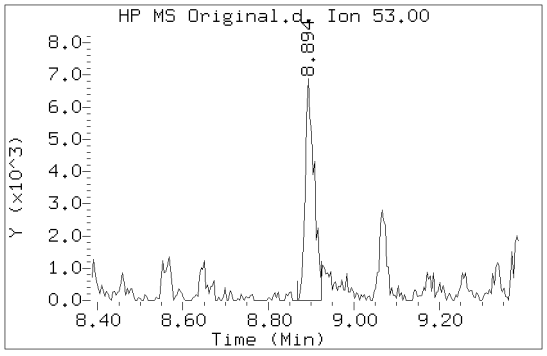


trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code:

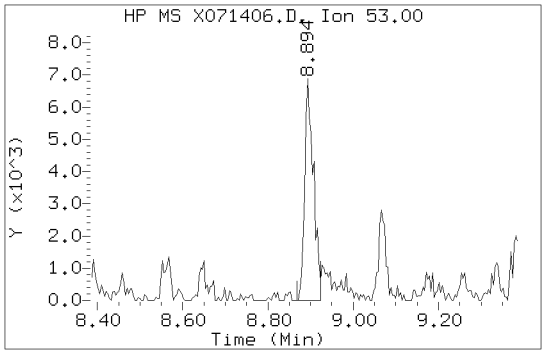
BEFORE

MASS
53
AREA
9958
HEIGHT
6886
20-Jul-2023
15:04
linh
pham



AFTER

MASS
53
AREA
9958
HEIGHT
6886
20-Jul-2023
15:04
linh
pham



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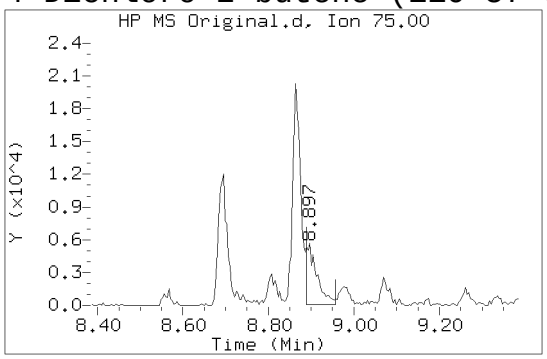
Inj Date : 14-JUL-2023 13:43
InstruID : voa6.i
LabSampID : VSTD005

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

Reason Code:

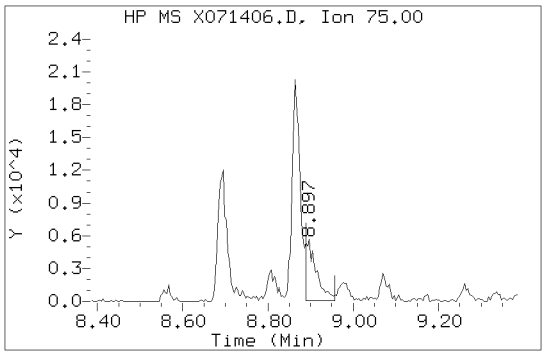
BEFORE

MASS
75
AREA
9615
HEIGHT
5621
20-Jul-2023
15:04
linh
pham



AFTER

MASS
75
AREA
9615
HEIGHT
5621
20-Jul-2023
15:04
linh
pham

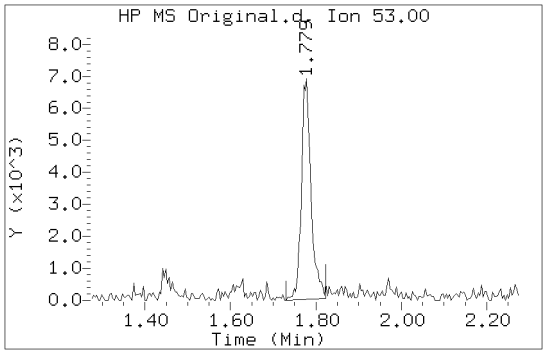


Chloroprene (126-99-8)

Reason Code:

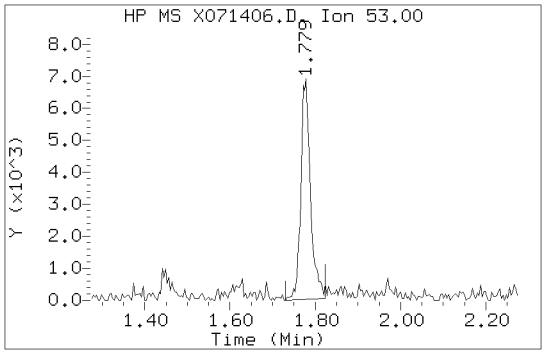
BEFORE

MASS
53
AREA
11212
HEIGHT
6900
20-Jul-2023
15:04
linh
pham



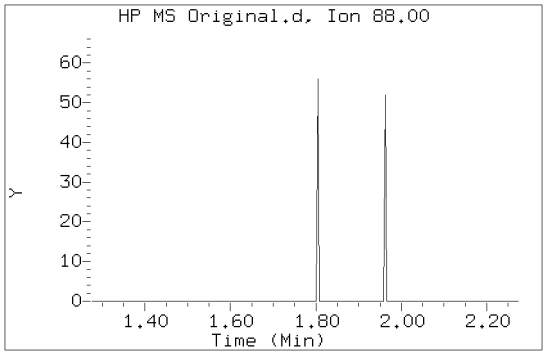
AFTER

MASS
53
AREA
11212
HEIGHT
6900
20-Jul-2023
15:04
linh
pham



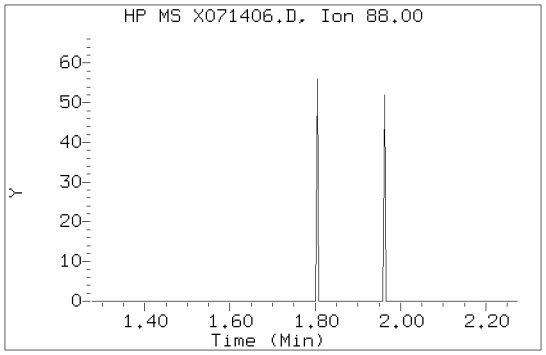
BEFORE

MASS
88
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
88
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

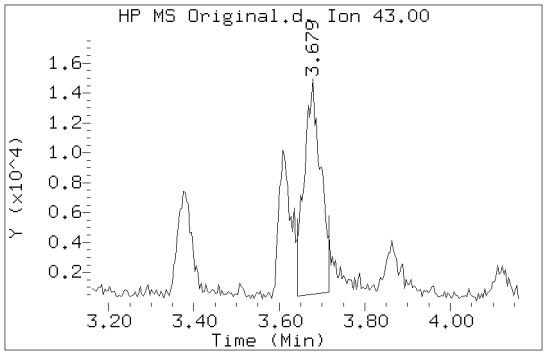


Ethyl Acetate (141-78-6)

Reason Code:

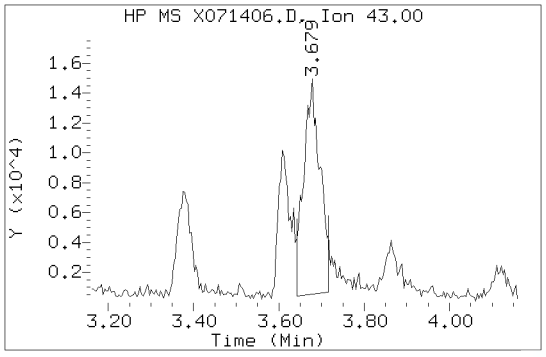
BEFORE

MASS
43
AREA
39438
HEIGHT
14396
20-Jul-2023
15:04
linh
pham



AFTER

MASS
43
AREA
39438
HEIGHT
14396
20-Jul-2023
15:04
linh
pham

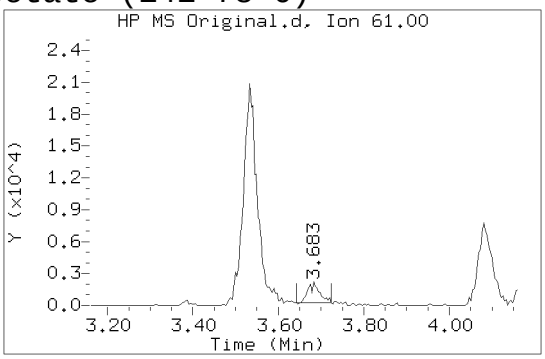


Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071406.D
Inj Date : 14-JUL-2023 13:43
InstruID : voa6.i
LabSampID : VSTD005

Ethyl Acetate (141-78-6)

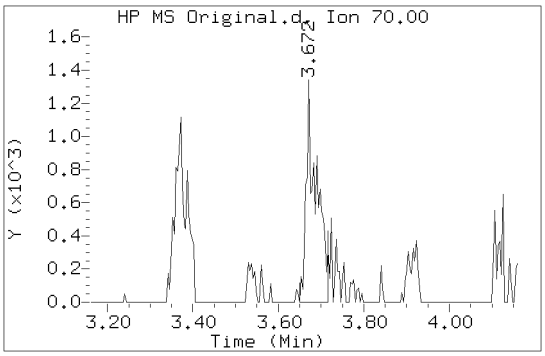
BEFORE

MASS
61
AREA
3702
HEIGHT
2000
20-Jul-2023
15:04
linh
pham



BEFORE

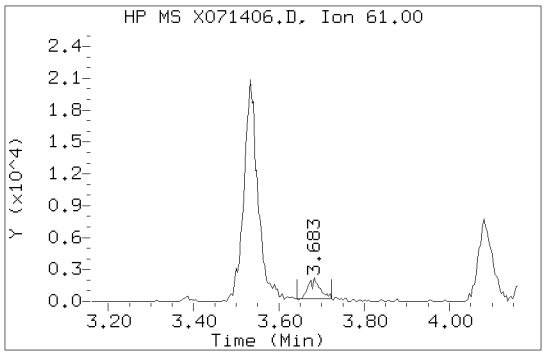
MASS
70
AREA
2283
HEIGHT
1341
20-Jul-2023
15:04
linh
pham



Reason Code:

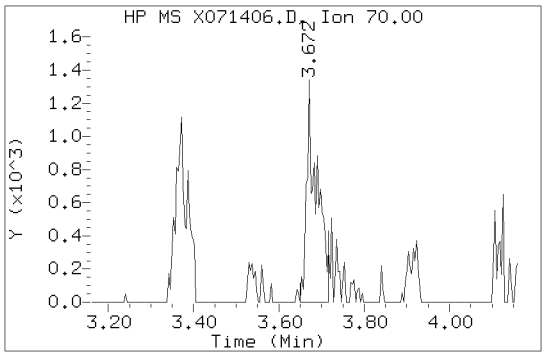
AFTER

MASS
61
AREA
3702
HEIGHT
2000
20-Jul-2023
15:04
linh
pham



AFTER

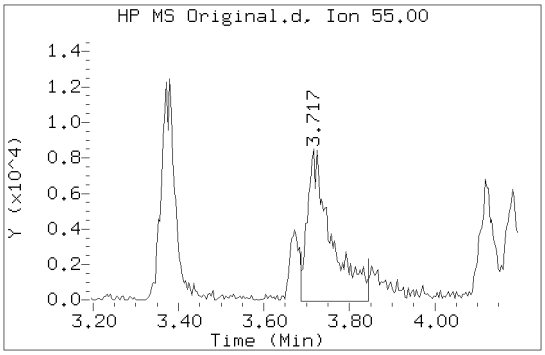
MASS
70
AREA
2283
HEIGHT
1341
20-Jul-2023
15:04
linh
pham



Methyl Acrylate (96-33-3)

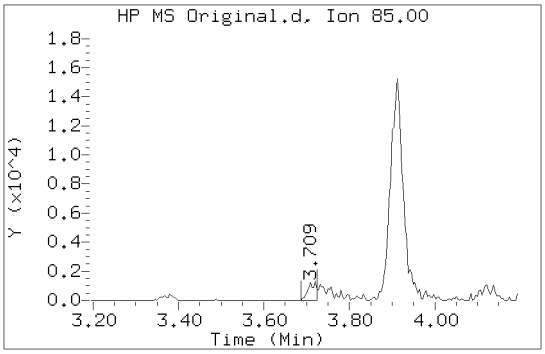
BEFORE

MASS
55
AREA
33338
HEIGHT
8583
20-Jul-2023
15:04
linh
pham



BEFORE

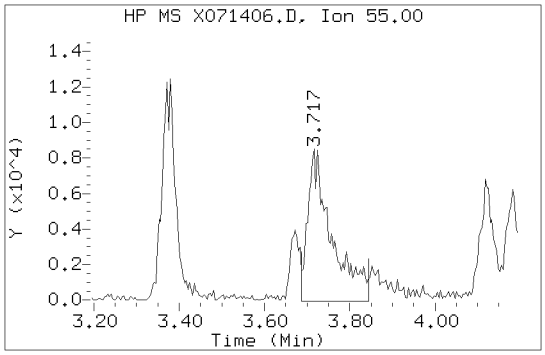
MASS
85
AREA
1657
HEIGHT
1216
20-Jul-2023
15:04
linh
pham



Reason Code:

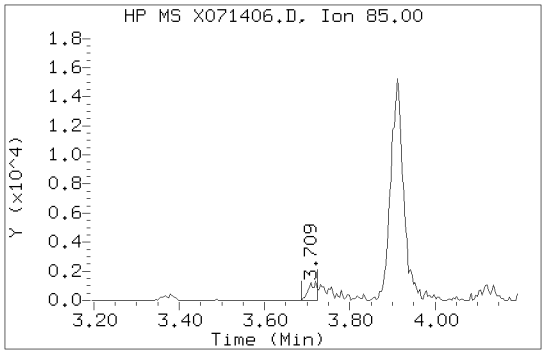
AFTER

MASS
55
AREA
33338
HEIGHT
8583
20-Jul-2023
15:04
linh
pham



AFTER

MASS
85
AREA
1657
HEIGHT
1216
20-Jul-2023
15:04
linh
pham



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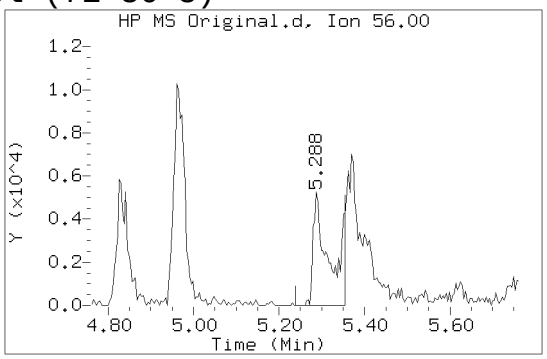
Inj Date : 14-JUL-2023 13:43
InstruID : voa6.i
LabSampID : VSTD005

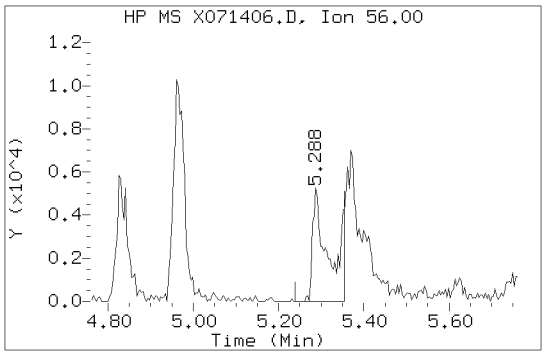
n-Butanol (71-36-3)

Reason Code:

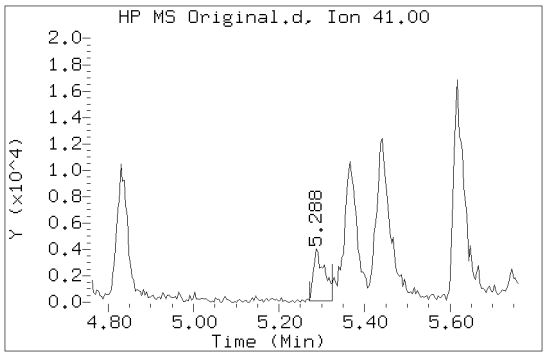
BEFORE
MASS
56
AREA
13588
HEIGHT
5250
20-Jul-2023
15:04
linh
pham



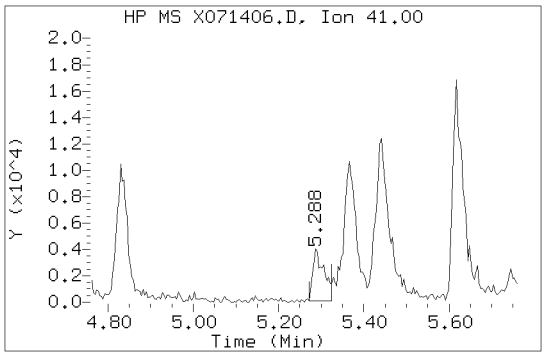
AFTER
MASS
56
AREA
13588
HEIGHT
5250
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
41
AREA
7179
HEIGHT
3942
20-Jul-2023
15:04
linh
pham



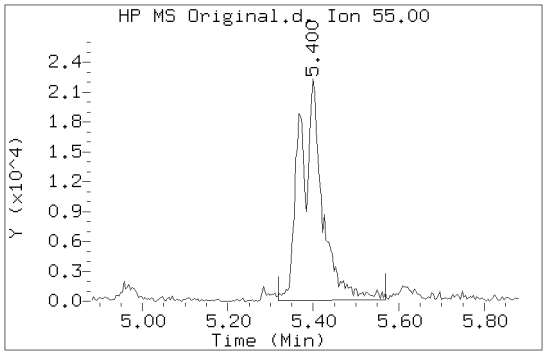
AFTER
MASS
41
AREA
7179
HEIGHT
3942
20-Jul-2023
15:04
linh
pham



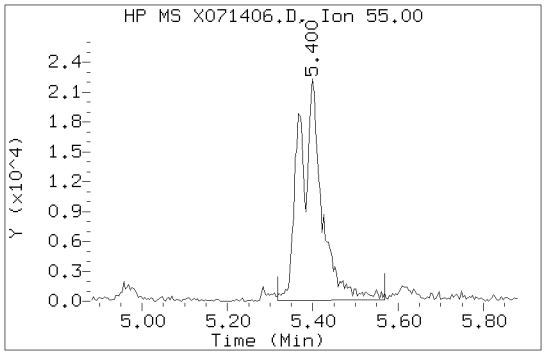
Ethyl Acrylate (140-88-5)

Reason Code:

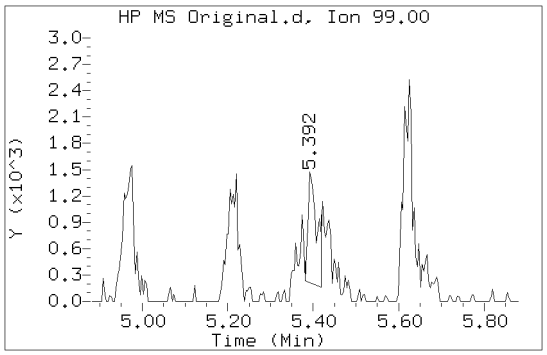
BEFORE
MASS
55
AREA
82574
HEIGHT
22225
20-Jul-2023
15:04
linh
pham



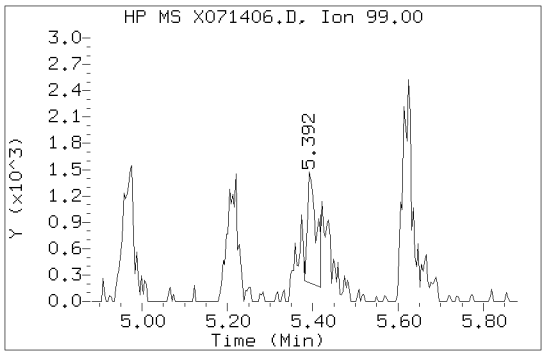
AFTER
MASS
55
AREA
82574
HEIGHT
22225
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
99
AREA
1773
HEIGHT
1256
20-Jul-2023
15:04
linh
pham



AFTER
MASS
99
AREA
1773
HEIGHT
1256
20-Jul-2023
15:04
linh
pham



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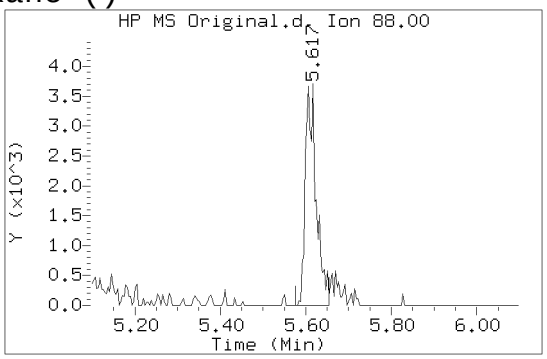
Inj Date : 14-JUL-2023 13:43
InstruID : voa6.i
LabSampID : VSTD005

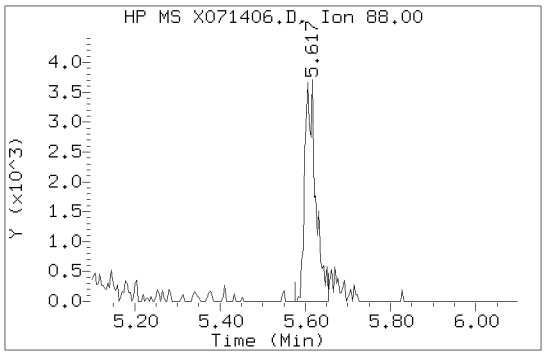
1,4-Dioxane ()

Reason Code:

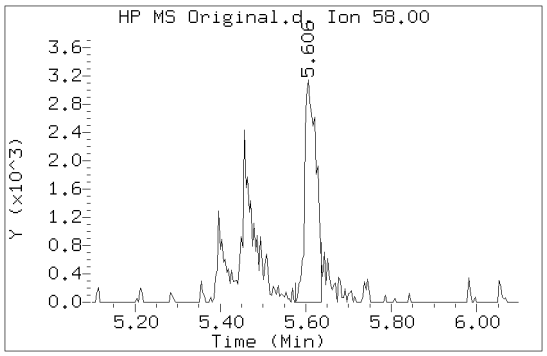
BEFORE
MASS
88
AREA
6551
HEIGHT
3709
20-Jul-2023
15:04
linh
pham



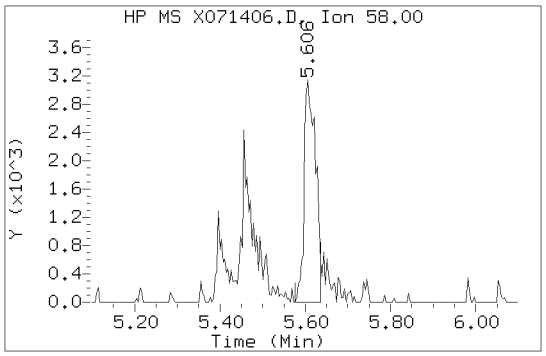
AFTER
MASS
88
AREA
6551
HEIGHT
3709
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
58
AREA
5961
HEIGHT
3144
20-Jul-2023
15:04
linh
pham



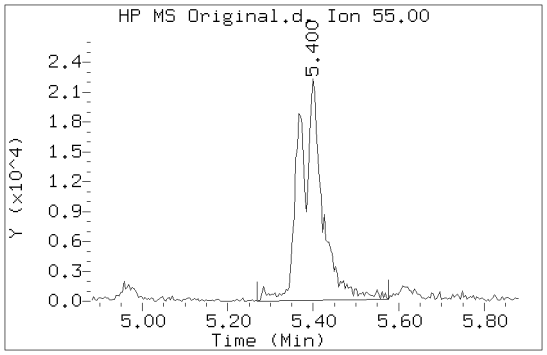
AFTER
MASS
58
AREA
5961
HEIGHT
3144
20-Jul-2023
15:04
linh
pham



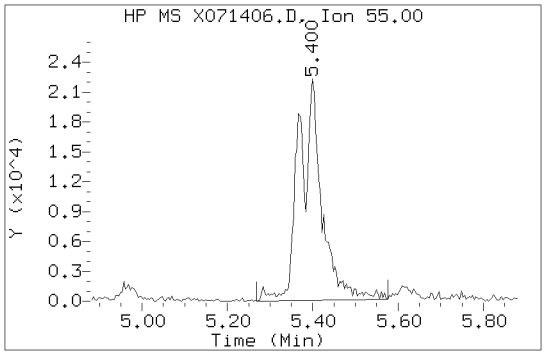
Methylcyclohexane (108-87-2)

Reason Code:

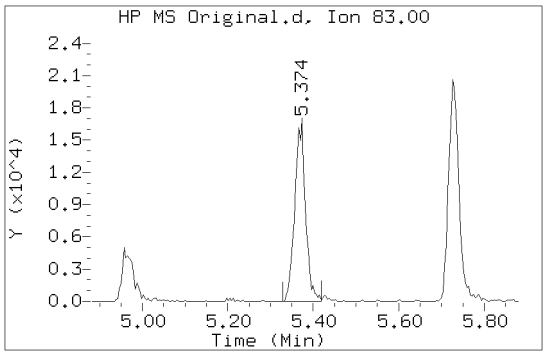
BEFORE
MASS
55
AREA
84656
HEIGHT
22257
20-Jul-2023
15:04
linh
pham



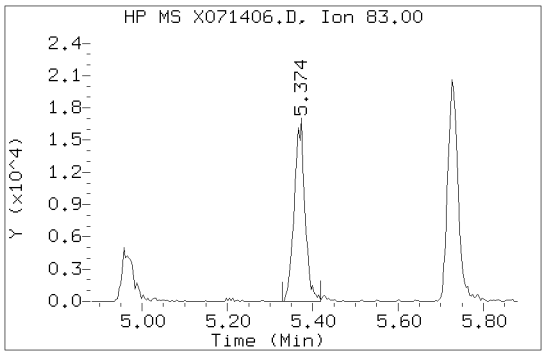
AFTER
MASS
55
AREA
84656
HEIGHT
22257
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
83
AREA
30014
HEIGHT
17040
20-Jul-2023
15:04
linh
pham



AFTER
MASS
83
AREA
30014
HEIGHT
17040
20-Jul-2023
15:04
linh
pham



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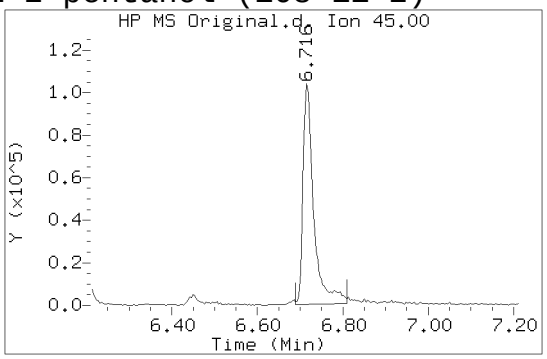
Inj Date : 14-JUL-2023 13:43
InstruID : voa6.i
LabSampID : VSTD005

4-Methyl-2-pentanol (108-11-2)

Reason Code:

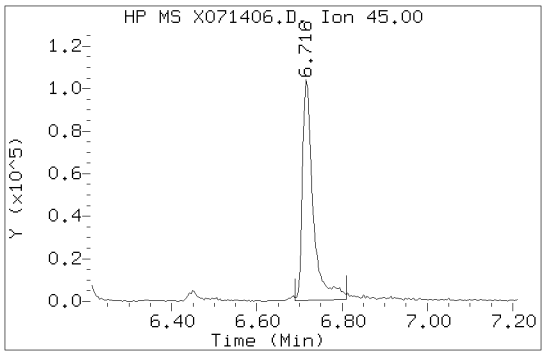
BEFORE

MASS
45
AREA
183123
HEIGHT
103764
20-Jul-2023
15:04
linh
pham



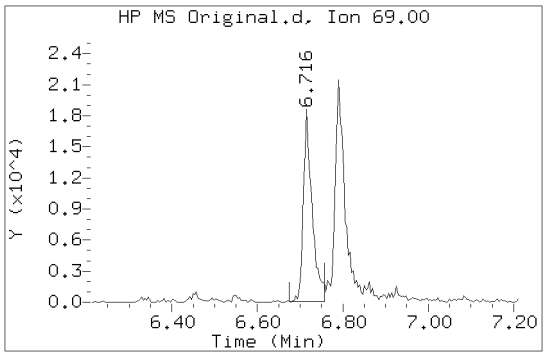
AFTER

MASS
45
AREA
183123
HEIGHT
103764
20-Jul-2023
15:04
linh
pham



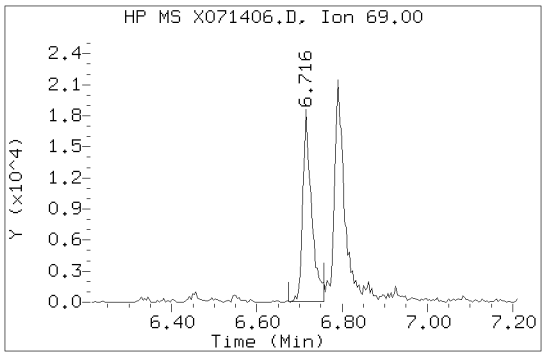
BEFORE

MASS
69
AREA
26485
HEIGHT
18576
20-Jul-2023
15:04
linh
pham



AFTER

MASS
69
AREA
26485
HEIGHT
18576
20-Jul-2023
15:04
linh
pham

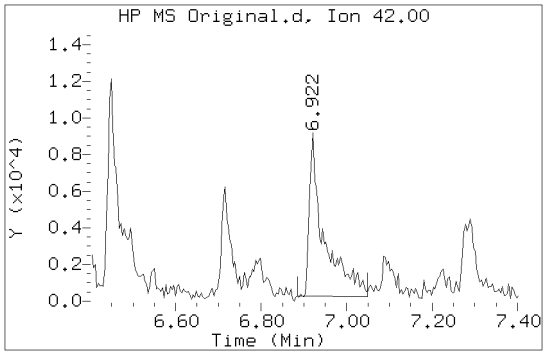


Amyl alcohol (71-41-0)

Reason Code:

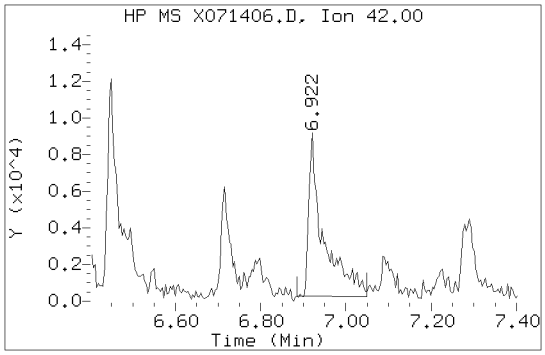
BEFORE

MASS
42
AREA
21498
HEIGHT
8913
20-Jul-2023
15:04
linh
pham



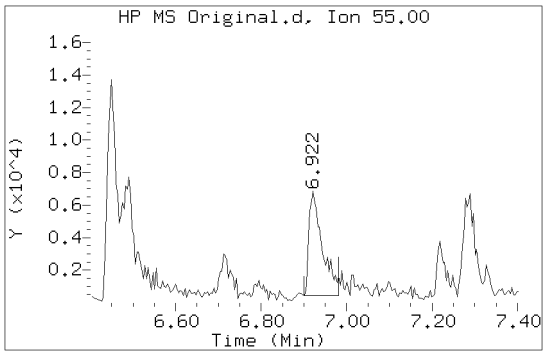
AFTER

MASS
42
AREA
21498
HEIGHT
8913
20-Jul-2023
15:04
linh
pham



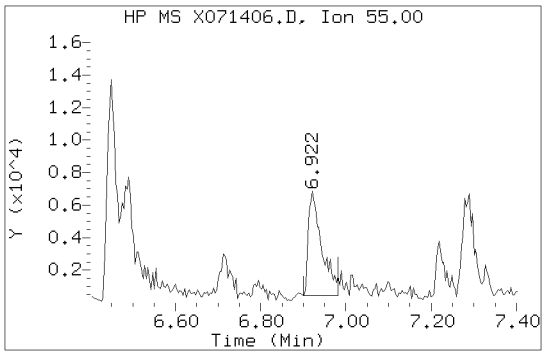
BEFORE

MASS
55
AREA
14214
HEIGHT
6435
20-Jul-2023
15:04
linh
pham



AFTER

MASS
55
AREA
14214
HEIGHT
6435
20-Jul-2023
15:04
linh
pham



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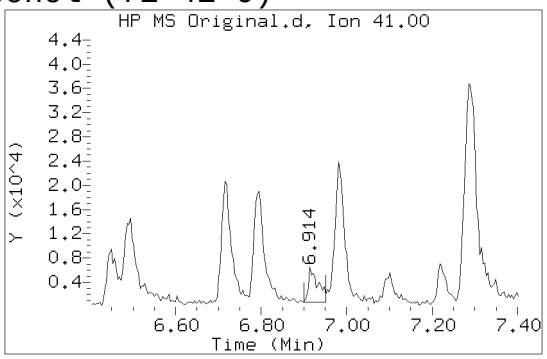
Inj Date : 14-JUL-2023 13:43
InstruID : voa6.i
LabSampID : VSTD005

Amyl alcohol (71-41-0)

Reason Code:

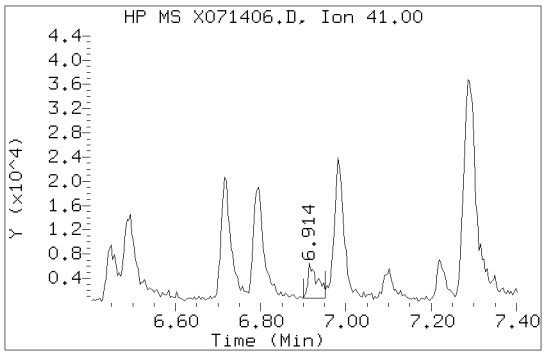
BEFORE

MASS
41
AREA
8850
HEIGHT
5781
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
8850
HEIGHT
5781
20-Jul-2023
15:04
linh
pham

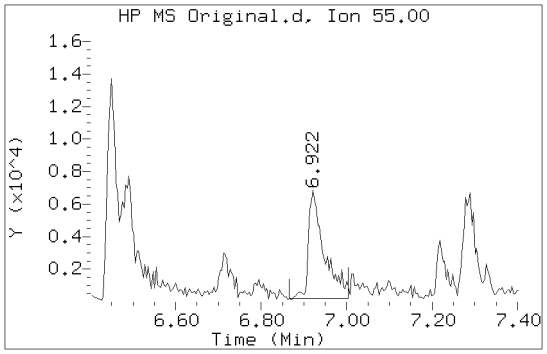


3-Methyl-1-butanol (123-51-3)

Reason Code:

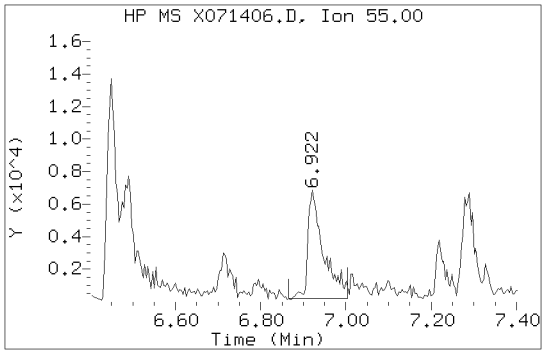
BEFORE

MASS
55
AREA
17029
HEIGHT
6664
20-Jul-2023
15:04
linh
pham



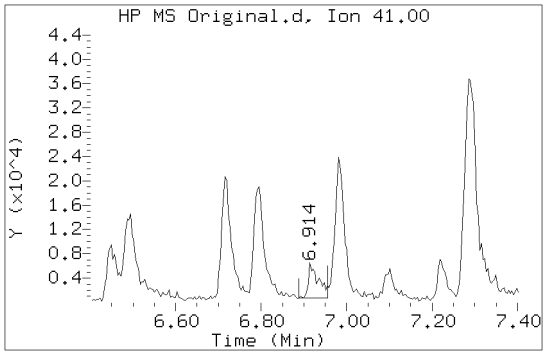
AFTER

MASS
55
AREA
17029
HEIGHT
6664
20-Jul-2023
15:04
linh
pham



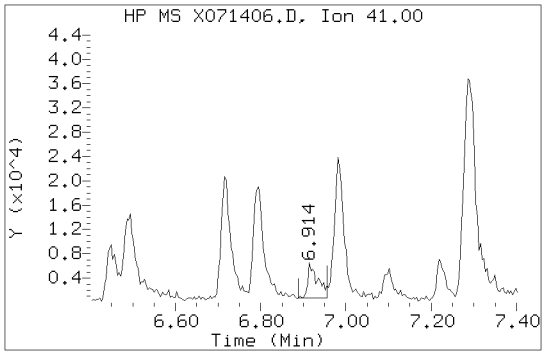
BEFORE

MASS
41
AREA
9490
HEIGHT
5807
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
9490
HEIGHT
5807
20-Jul-2023
15:04
linh
pham

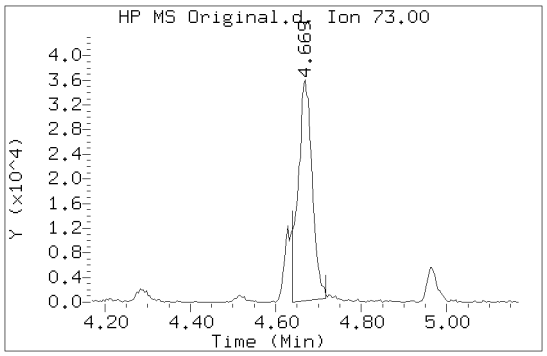


tert-Amyl methyl ether (974-05-08)

Reason Code:

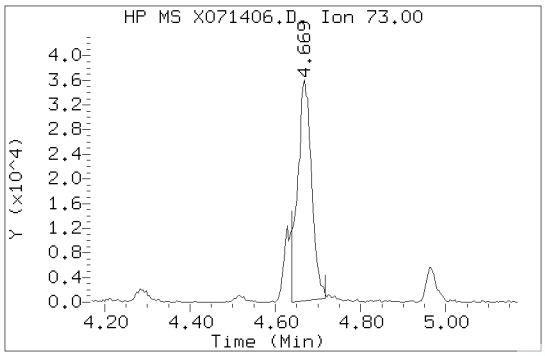
BEFORE

MASS
73
AREA
83517
HEIGHT
35784
20-Jul-2023
15:04
linh
pham



AFTER

MASS
73
AREA
83517
HEIGHT
35784
20-Jul-2023
15:04
linh
pham



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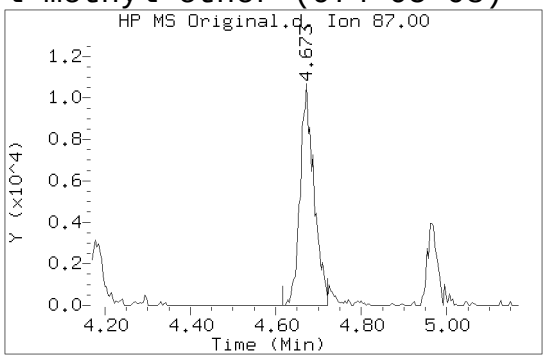
Inj Date : 14-JUL-2023 13:43
InstruID : voa6.i
LabSampID : VSTD005

tert-Amyl methyl ether (974-05-08)

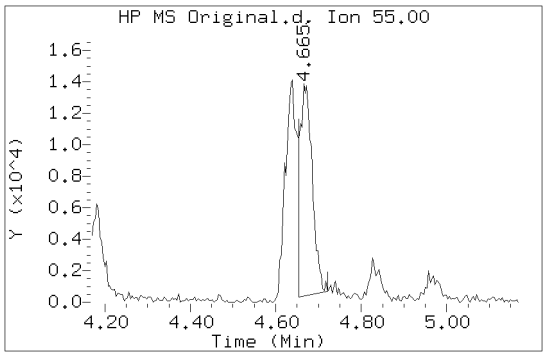
BEFORE

MASS
87
AREA
24319
HEIGHT
10688
20-Jul-2023
15:04
linh
pham



BEFORE

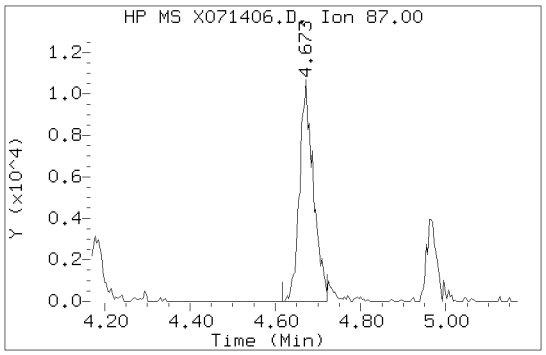
MASS
55
AREA
27476
HEIGHT
13484
20-Jul-2023
15:04
linh
pham



Reason Code:

AFTER

MASS
87
AREA
24319
HEIGHT
10688
20-Jul-2023
15:04
linh
pham



AFTER

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13484
20-Jul-2023
15:04
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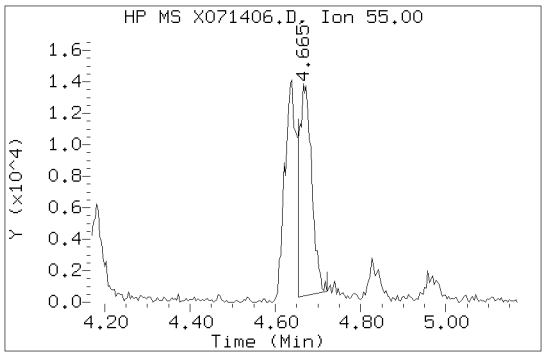

Acetaldehyde (75-07-0)

BEFORE

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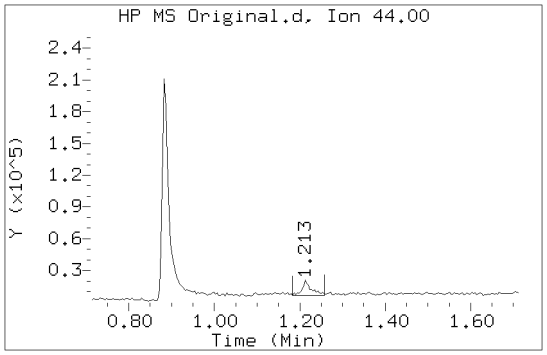

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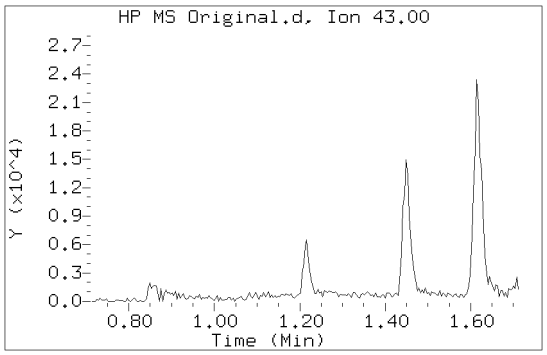

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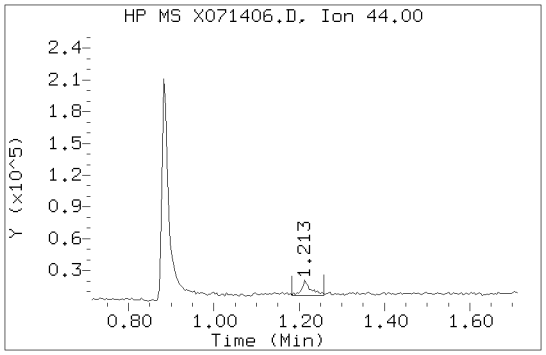

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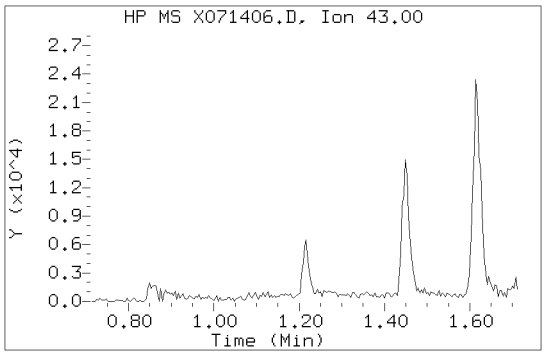

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InstruID : voa6.i
LabSampID : VSTD005

Acetaldehyde (75-07-0)

Reason Code:

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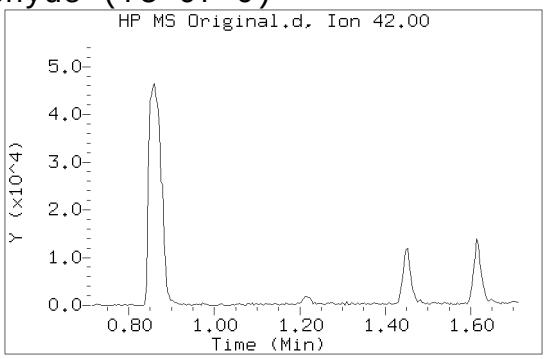

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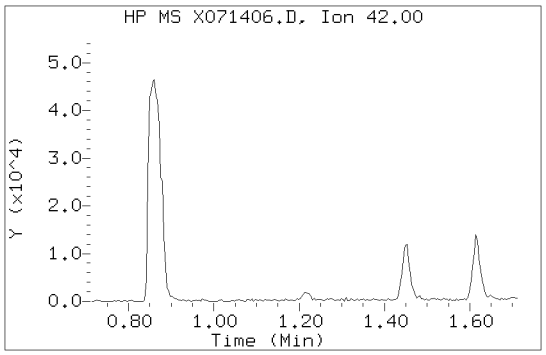

Isobutylene (115-11-7)

Reason Code:

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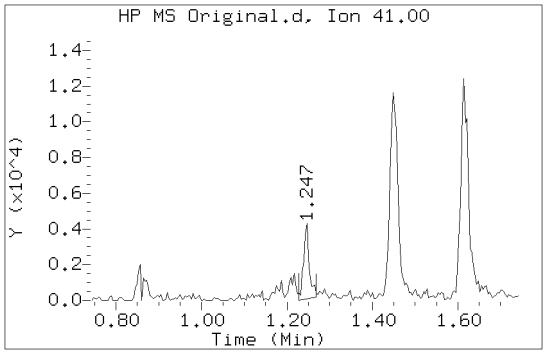

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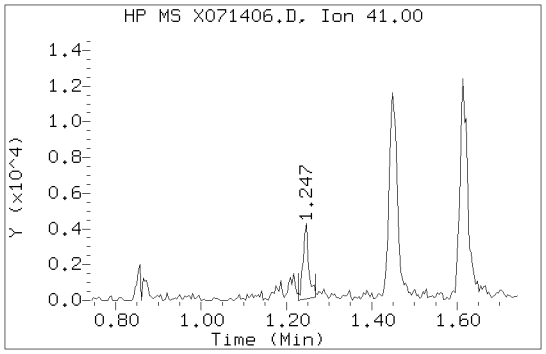

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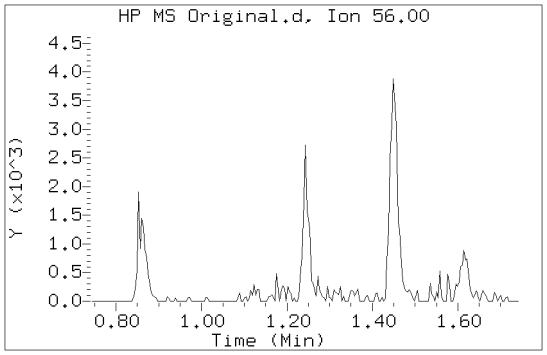

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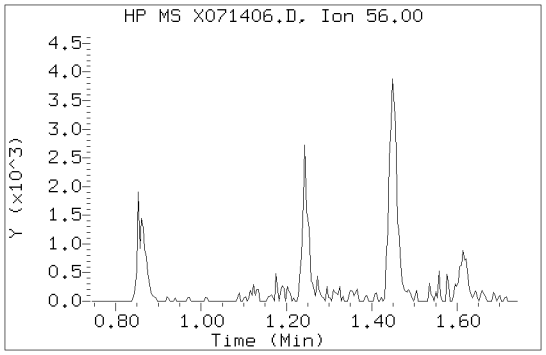

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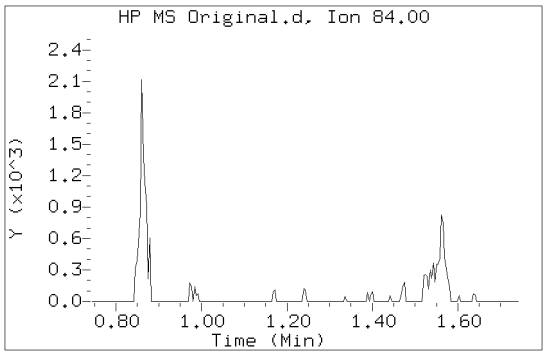

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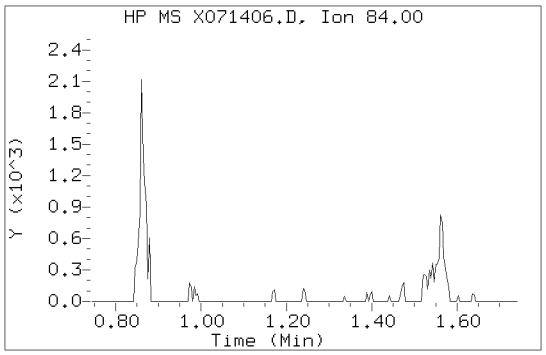

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InstruID : voa6.i
LabSampID : VSTD005

Toluene-d8 (2037-26-5)

Reason Code:

BEFORE
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20-Jul-2023
15:04
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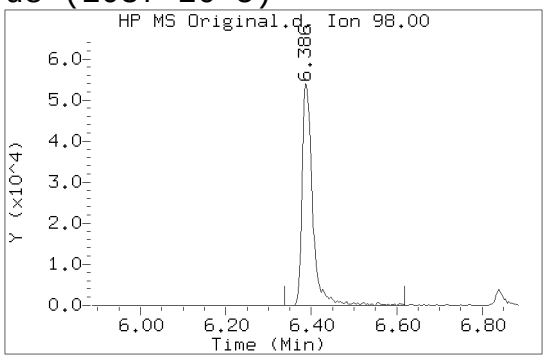

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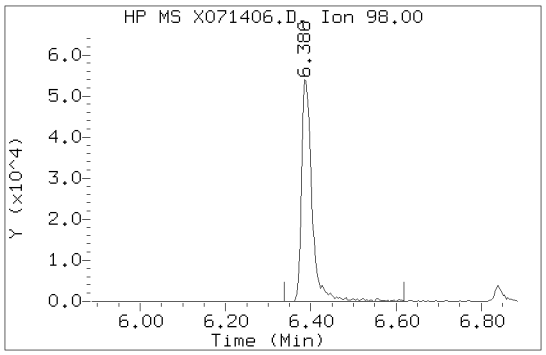

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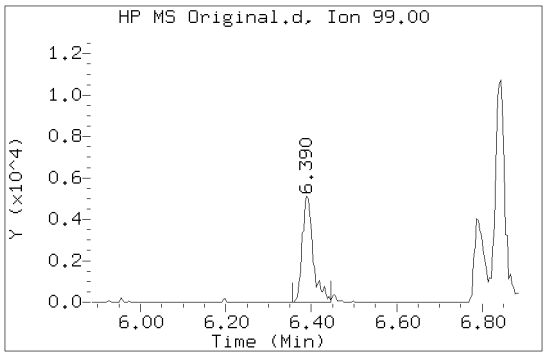

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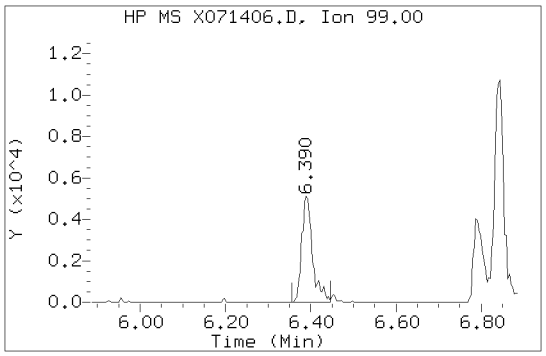

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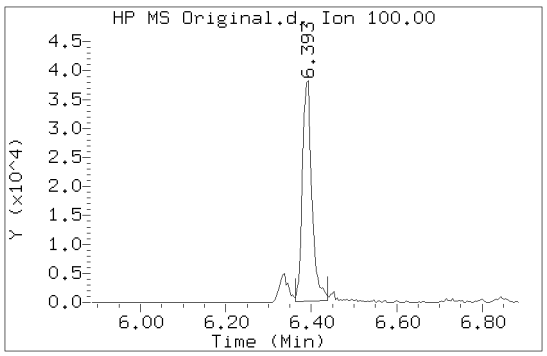

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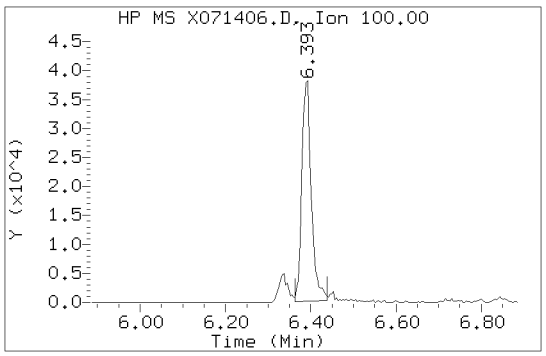

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Report Date: 20-Jul-2023 15:05

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071407.D
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Inj Date : 14-JUL-2023 14:04
Operator : PC Inst ID: voa6.i
Smp Info : VSTD020;VSTD020;1;6;
Misc Info : V6;WATER;0;1;
Comment   :
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Meth Date : 20-Jul-2023 15:05 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 13:43 Cal File: X071406.D
Als bottle: 8 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.178	4.178	(1.000)	507763	50.0000	
2 Dichlorodifluoromethane	85	0.976	0.976	(0.234)	94710	20.0000	18.92
3 Chloromethane	50	1.081	1.081	(0.259)	133501	20.0000	17.40
4 Propionitrile	54	3.660	3.660	(0.876)	205441	200.000	204.24(a)
5 Vinyl Chloride	62	1.145	1.145	(0.274)	126856	20.0000	19.30
6 Bromomethane	94	1.344	1.344	(0.322)	48177	20.0000	17.71
7 Chloroethane	64	1.407	1.407	(0.337)	72133	20.0000	19.23
8 Trichlorofluoromethane	101	1.561	1.561	(0.374)	132138	20.0000	19.84
9 Acrolein	56	1.865	1.865	(0.446)	6957	40.0000	36.90(H)
10 Acetone	43	1.977	1.977	(0.473)	92232	40.0000	43.26
11 1,1-Dichloroethene	96	1.917	1.917	(0.459)	72938	20.0000	19.60
12 Isobutyl Alcohol	43	4.680	4.680	(1.120)	401784	400.000	417.43(a)
13 Acetonitrile	39	2.198	2.198	(0.526)	138938	200.000	195.13(a)
14 Allyl Chloride	41	2.198	2.198	(0.526)	321229	20.0000	19.26(a)
15 Iodomethane	142	2.030	2.030	(0.486)	147770	40.0000	33.32
16 Acrylonitrile	53	2.539	2.539	(0.608)	96410	40.0000	38.96
17 Methylene Chloride	84	2.303	2.303	(0.551)	93705	20.0000	20.53
18 Methyl tert-butyl ether	73	2.539	2.539	(0.608)	272881	20.0000	19.72
19 Carbon Disulfide	76	2.075	2.075	(0.497)	443798	40.0000	37.95
20 trans-1,2-Dichloroethene	96	2.528	2.528	(0.605)	83048	20.0000	19.30

21 Vinyl Acetate	43	3.004	3.004 (0.719)	716288	40.0000	40.25
22 1,1-Dichloroethane	63	2.922	2.922 (0.699)	180478	20.0000	19.11

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	23 Chloroprene	53	1.775	1.775	(0.425)	42093	20.0000	18.43(M)
	24 2-Butanone	43	3.593	3.593	(0.860)	103083	40.0000	38.12
	25 Methacrylonitrile	41	3.833	3.833	(0.917)	134358	20.0000	20.49(a)
	26 2,2-Dichloropropane	77	3.510	3.510	(0.840)	136770	20.0000	18.78
	27 cis-1,2-Dichloroethene	96	3.525	3.525	(0.844)	106626	20.0000	19.45
	28 Chloroform	83	3.904	3.904	(0.935)	185575	20.0000	19.20
	29 Bromochloromethane	128	3.799	3.799	(0.909)	58138	20.0000	18.92
$	30 Dibromofluoromethane	113	4.103	4.103	(0.982)	100577	20.0000	21.17
	31 1,1,1-Trichloroethane	97	4.084	4.084	(0.978)	145149	20.0000	19.51
	32 1,1-Dichloropropene	75	4.283	4.283	(0.863)	122898	20.0000	18.90
	33 1,2-Dichloroethane	62	4.556	4.556	(0.918)	173705	20.0000	19.79
	34 Carbon Tetrachloride	117	4.264	4.264	(0.859)	124542	20.0000	19.01
$	35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	125030	20.0000	21.12
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	797093	50.0000	
	37 Benzene	78	4.511	4.511	(0.909)	377488	20.0000	19.79
	38 Trichloroethene	130	5.208	5.208	(1.049)	104832	20.0000	19.43
	39 Bromodichloromethane	83	5.726	5.726	(1.153)	141699	20.0000	19.40
	40 Methyl Methacrylate	41	5.610	5.610	(1.343)	116657	20.0000	19.03(a)
	41 2-Chloroethylvinyl ether	63	6.048	6.048	(1.218)	89929	40.0000	40.33
	42 1,2-Dichloropropane	63	5.437	5.437	(1.095)	123713	20.0000	20.17
	43 2-Nitropropane	43	5.969	5.969	(1.429)	38152	20.0000	18.91
	44 Dibromomethane	93	5.553	5.553	(1.119)	68138	20.0000	19.63
	45 4-Methyl-2-Pentanone	43	6.326	6.326	(0.825)	285574	40.0000	39.47
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	165788	20.0000	19.76
*	47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	735188	50.0000	
$	48 Toluene-d8	98	6.386	6.386	(0.833)	356461	20.0000	18.83(M)
	49 Ethyl Methacrylate	69	6.712	6.712	(1.352)	101772	20.0000	19.49(a)
	50 Toluene	91	6.446	6.446	(0.841)	392472	20.0000	19.83
	51 trans-1,3-Dichloropropene	75	6.682	6.682	(1.346)	139738	20.0000	19.76
	52 2-Hexanone	43	7.090	7.090	(0.925)	197105	40.0000	41.47
	53 1,1,2-Trichloroethane	83	6.835	6.835	(0.891)	84947	20.0000	20.23
	54 1,3-Dichloropropane	76	6.982	6.982	(0.911)	170222	20.0000	19.84
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	118768	20.0000	19.59
	56 Tetrachloroethene	164	6.922	6.922	(0.903)	79779	20.0000	19.51
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	99972	20.0000	20.83
	58 1-Chlorohexane	55	7.694	7.694	(1.550)	123726	20.0000	19.32
	59 Chlorobenzene	112	7.694	7.694	(1.003)	270232	20.0000	19.53
	60 1,1,1,2-Tetrachloroethane	131	7.773	7.773	(1.014)	107430	20.0000	19.83
	61 Ethylbenzene	106	7.795	7.795	(1.017)	131122	20.0000	18.90
	62 m,p-Xylenes	106	7.904	7.904	(1.031)	341700	40.0000	39.26
	63 o-Xylene	106	8.237	8.237	(1.074)	162342	20.0000	19.69
	64 Styrene	104	8.260	8.260	(1.077)	282779	20.0000	19.67
	66 Bromoform	173	8.406	8.406	(1.096)	75861	20.0000	19.50
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	405778	20.0000	19.15
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	127719	20.0000	19.39
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	153161	20.0000	20.67
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	392137	50.0000	
	71 1,2,3-Trichloropropane	75	8.860	8.860	(0.917)	106108	20.0000	20.30(M)
	72 trans-1,4-Dichloro-2-butene	53	8.886	8.886	(1.159)	44727	20.0000	20.00(a)
	73 n-Propylbenzene	91	8.908	8.908	(0.922)	471016	20.0000	19.87
	74 Bromobenzene	156	8.803	8.803	(0.911)	121594	20.0000	19.82
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	331762	20.0000	18.68

76	2-Chlorotoluene	91	8.972	8.972 (0.929)	320833	20.0000	20.07
77	4-Chlorotoluene	91	9.070	9.070 (0.939)	358181	20.0000	20.39

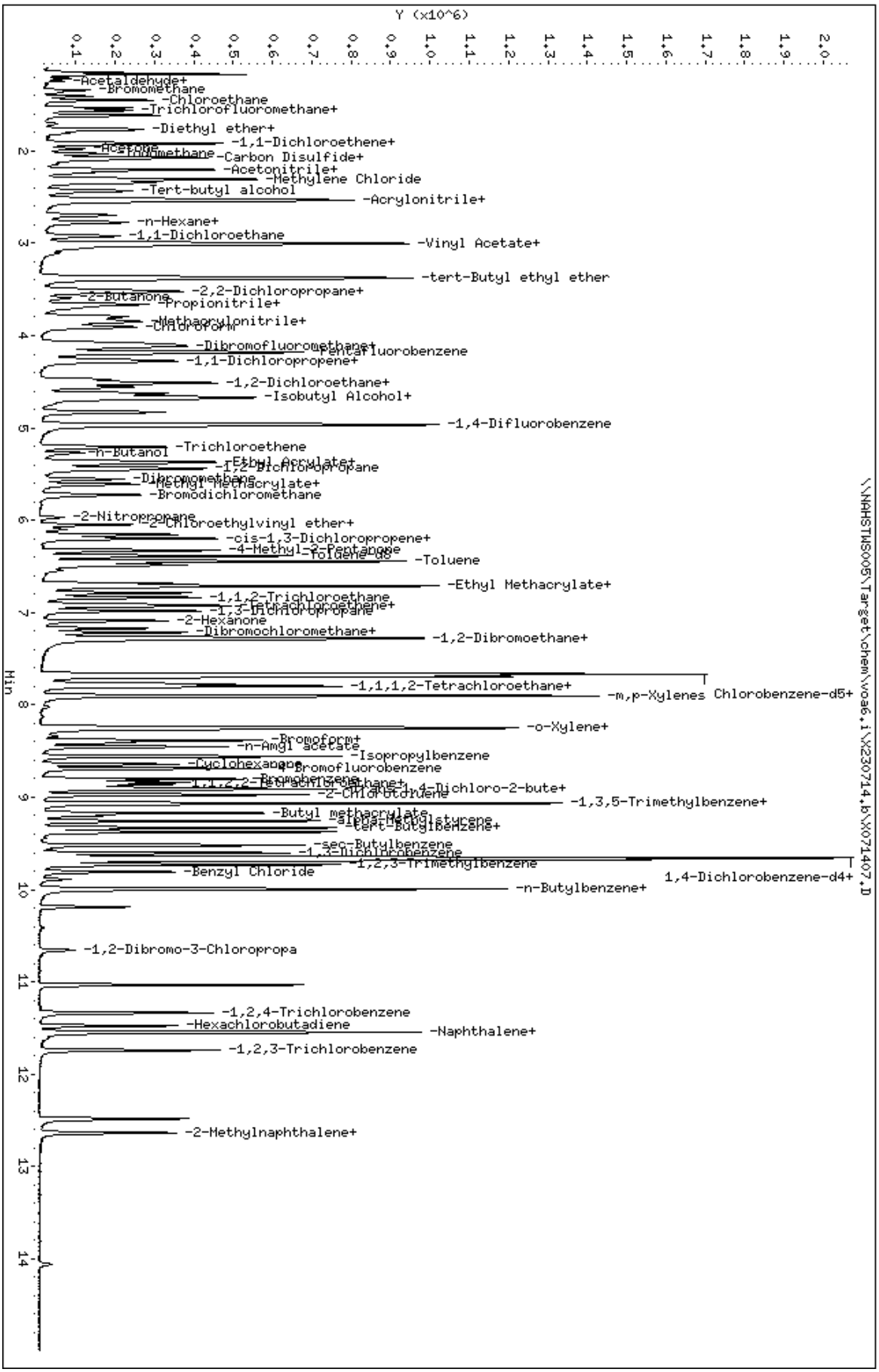
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
78	tert-Butylbenzene	119	9.332	9.332	(0.966)	287767	20.0000	18.90
79	1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	336741	20.0000	18.91
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	394513	20.0000	19.44
82	p-Isopropyltoluene	119	9.647	9.647	(0.998)	346253	20.0000	18.67
83	1,3-Dichlorobenzene	146	9.606	9.606	(0.994)	208939	20.0000	19.55
84	1,4-Dichlorobenzene	146	9.677	9.677	(1.002)	230542	20.0000	19.68
86	Benzyl Chloride	91	9.808	9.808	(1.279)	196200	20.0000	17.29
87	n-Butylbenzene	91	9.992	9.992	(1.034)	282220	20.0000	18.17
88	1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	209204	20.0000	19.91
89	1,2-Dibromo-3-Chloropropane	155	10.659	10.659	(1.103)	19568	20.0000	18.76
90	1,2,4-Trichlorobenzene	180	11.337	11.337	(1.173)	123442	20.0000	17.11
91	Hexachlorobutadiene	225	11.476	11.476	(1.188)	52647	20.0000	17.44
92	Naphthalene	128	11.540	11.540	(1.194)	325767	20.0000	18.24
93	1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	122392	20.0000	18.14
146	Methyl acetate	43	2.232	2.232	(0.534)	91399	20.0000	20.22
138	Freon TF	101	1.917	1.917	(0.459)	67796	20.0000	23.07(M)
141	Cyclohexane	56	4.121	4.121	(0.987)	165922	20.0000	18.85(H)
142	Tetrahydrofuran	42	3.851	3.851	(0.922)	53361	40.0000	40.84
147	Methylcyclohexane	55	5.388	5.388	(1.085)	328269	20.0000	19.51(M)
135	1,4-Dioxane	88	5.606	5.606	(1.342)	23823	400.000	394.82
132	n-Butanol	56	5.265	5.265	(1.260)	60771	400.000	359.52(a)
131	Methyl Acrylate	55	3.702	3.702	(0.886)	135453	20.0000	19.62(H)
133	Ethyl Acrylate	55	5.388	5.388	(1.290)	335022	20.0000	19.90
136	n-Hexane	57	2.772	2.772	(0.664)	106667	20.0000	23.04
139	Diethyl ether	59	1.763	1.763	(0.422)	93008	20.0000	19.64
148	Tert-butyl alcohol	59	2.434	2.434	(0.583)	251621	400.000	392.62
149	Isopropyl alcohol	45	2.097	2.097	(0.502)	157344	400.000	395.67
156	Diisopropyl ether	45	3.008	3.008	(0.720)	419096	20.0000	20.02
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	351806	20.0000	19.40
167	Ethanol	45	1.703	1.703	(0.408)	30252	400.000	415.32
172	tert-Butyl formate	59	4.627	4.627	(1.108)	202938	40.0000	37.41(M)
173	3,3-Dimethyl-1-butanol	57	7.285	7.285	(0.950)	307235	400.000	388.58
174	tert-Amyl methyl ether	73	4.669	4.669	(1.118)	318193	20.0000	19.04
175	tert-Butyl ethyl ether	59	3.379	3.379	(0.809)	413607	20.0000	19.24
176	tert-Amyl alcohol	59	4.627	4.627	(1.108)	206505	400.000	372.28(M)
151	4-Methyl-2-pentanol	45	6.712	6.712	(1.352)	666674	400.000	390.27(M)
180	1-Methylnaphthalene	142	12.635	12.635	(1.308)	150919	20.0000	(a)
140	1,3-Butadiene	54	1.167	1.167	(0.280)	123783	20.0000	18.97
152	Amyl alcohol	42	6.907	6.907	(0.901)	79891	400.000	377.87(M)
158	Dichlorofluoromethane	67	1.535	1.535	(0.367)	158942	20.0000	19.42
159	Propylene oxide	43	1.808	1.808	(0.433)	26882	40.0000	43.15
161	3-Methyl-1-butanol	55	6.907	6.907	(0.901)	65296	400.000	360.74
162	Butyl acrylate	55	8.252	8.252	(1.076)	278950	20.0000	19.94
163	Butyl methacrylate	41	9.167	9.167	(0.949)	181860	20.0000	19.36
164	Dicyclopentadiene	66	9.681	9.681	(1.002)	449218	20.0000	19.88
182	Epichlorohydrin	57	6.101	6.101	(1.229)	46921	80.0000	78.80
M 94	1,2-Dichloroethylene (total)	96				189674	40.0000	(a)
145	alpha-Methylstyrene	118	9.257	9.257	(0.958)	161241	20.0000	18.84
130	Ethyl Acetate	43	3.660	3.660	(0.876)	156852	20.0000	20.79
134	Cyclohexanone	55	8.642	8.642	(0.894)	143296	400.000	410.46(a)
185	Isoprene	39	1.771	1.771	(0.424)	34997	20.0000	20.90
188	Isopropyl acetate	43	4.680	4.680	(0.943)	402950	20.0000	19.17

187 n-Amyl acetate	43	8.451	8.451 (1.102)	257831	20.0000	19.13
189 n-Butyl acetate	43	7.214	7.214 (0.941)	233185	20.0000	20.69(H)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
150 Allyl alcohol	57	2.772	2.772	(0.664)	106667	400.000	460.03
194 Acetaldehyde	44	1.212	1.212	(0.290)	39093	80.0000	72.86(M)
195 Methyl Amyl Ketone	43	8.380	8.380	(1.093)	308846	20.0000	20.09(H)
200 Dimethyl Disulfide	94	6.198	6.198	(0.808)	200098	20.0000	20.17
202 Isobutylene	41	1.242	1.242	(0.297)	17453	20.0000	20.78(M)
205 2-Ethylhexyl Acrylate	55	11.547	11.547	(1.195)	205728	20.0000	20.54

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.



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Client ID: VSTD020
Sample Info: VSTD020;VSTD020;1;6;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6_i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071407.D
Inj Date : 14-JUL-2023 14:04
InstruID : voa6.i
LabSampID : VSTD020

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

Reason Code:

BEFORE

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75
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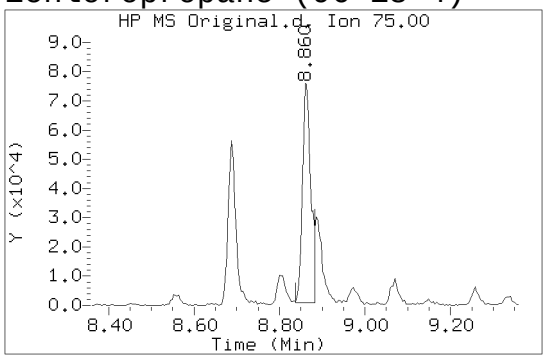
106108
HEIGHT
74979
20-Jul-2023
15:04
linh
pham



AFTER

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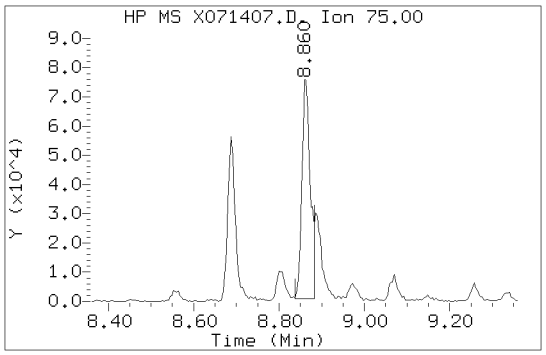

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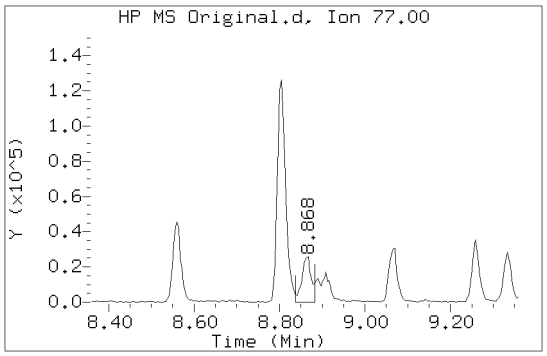

AFTER

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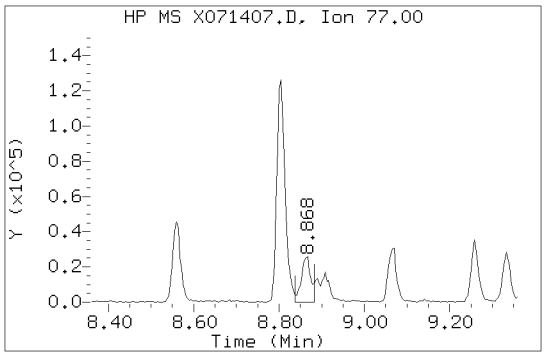

Chloroprene (126-99-8)

Reason Code:

BEFORE

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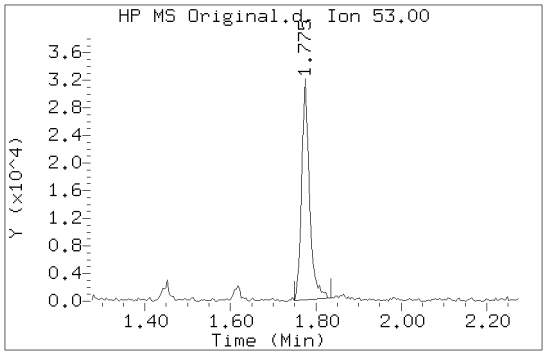

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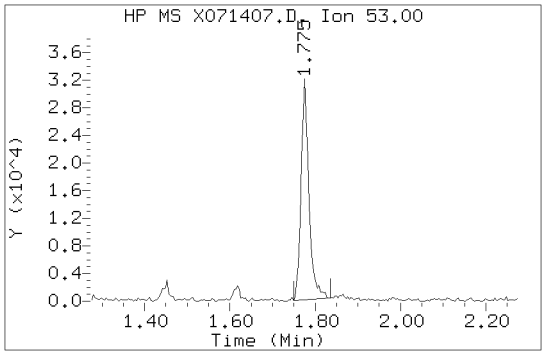

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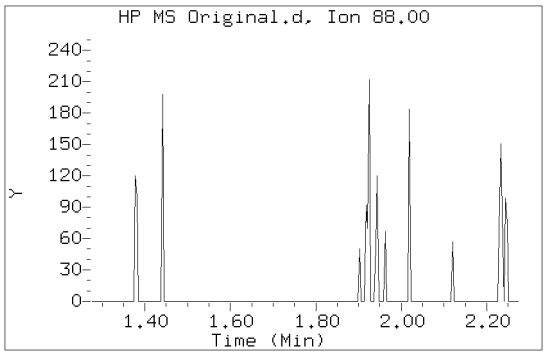

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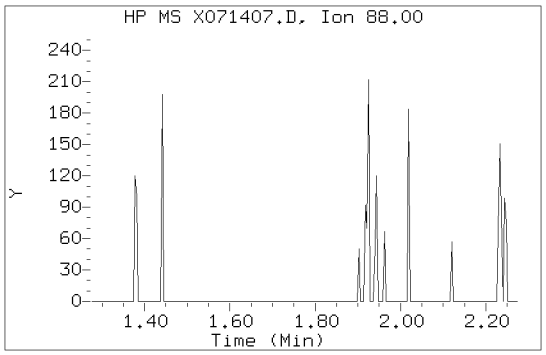

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Inj Date : 14-JUL-2023 14:04
InstruID : voa6.i
LabSampID : VSTD020

Freon TF (76-13-1)

BEFORE

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15:04
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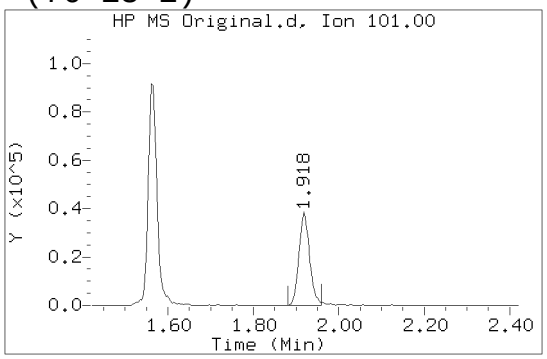

BEFORE

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20-Jul-2023
15:04
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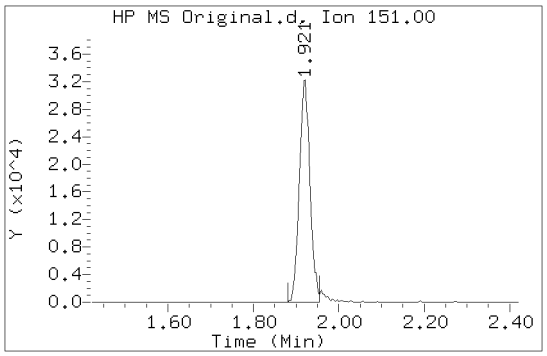

Reason Code:

AFTER

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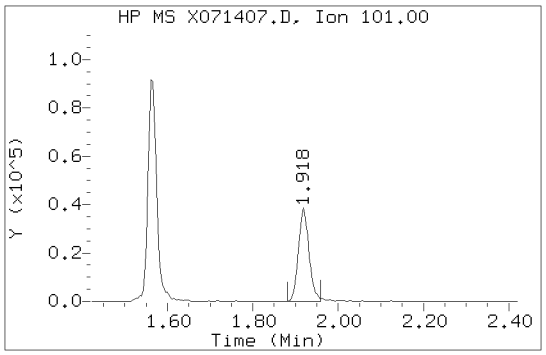

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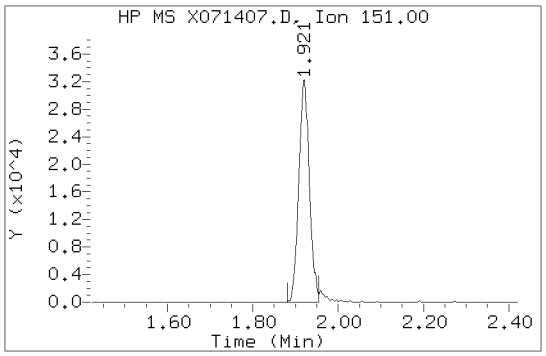

Methylcyclohexane (108-87-2)

BEFORE

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20-Jul-2023
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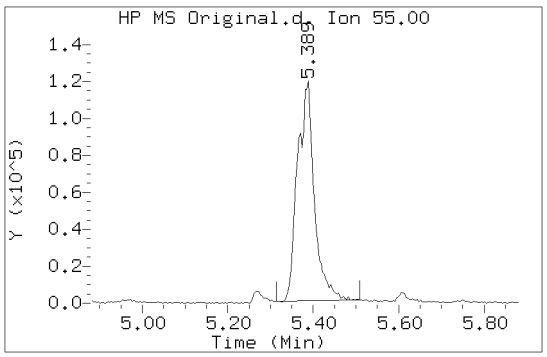

BEFORE

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79744
20-Jul-2023
15:04
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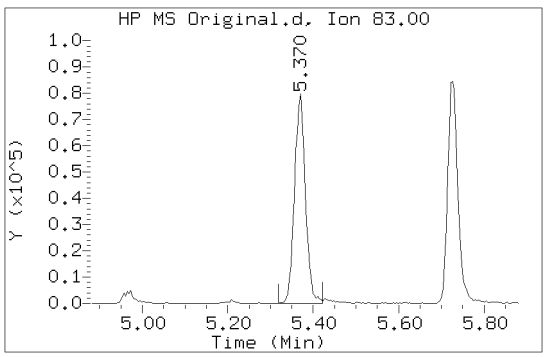
pham



Reason Code:

AFTER

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20-Jul-2023
15:04
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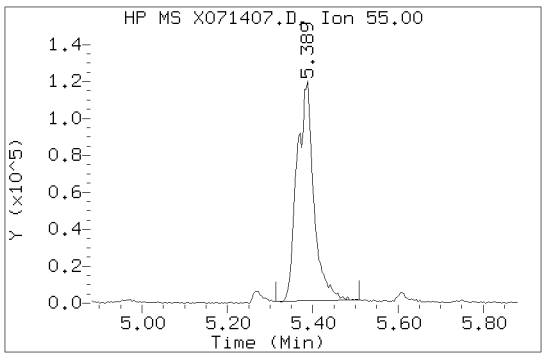

AFTER

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HEIGHT
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20-Jul-2023
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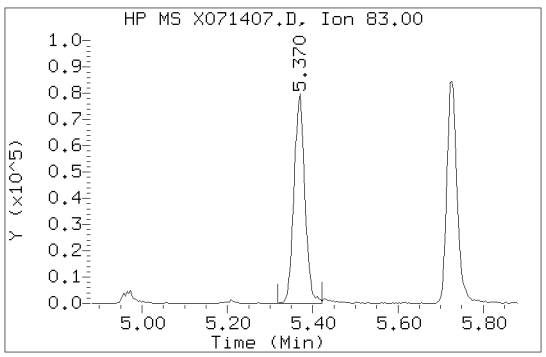

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Inj Date : 14-JUL-2023 14:04
InstruID : voa6.i
LabSampID : VSTD020

4-Methyl-2-pentanol (108-11-2)

Reason Code:

BEFORE

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AREA
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HEIGHT
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20-Jul-2023
15:04
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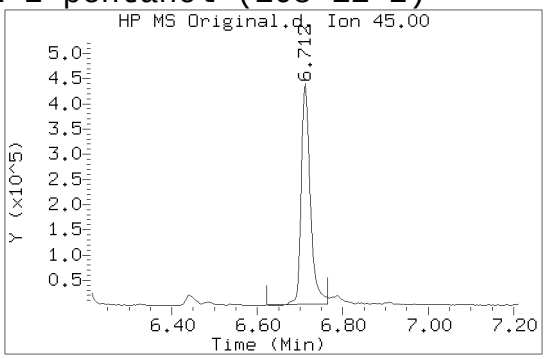

AFTER

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20-Jul-2023
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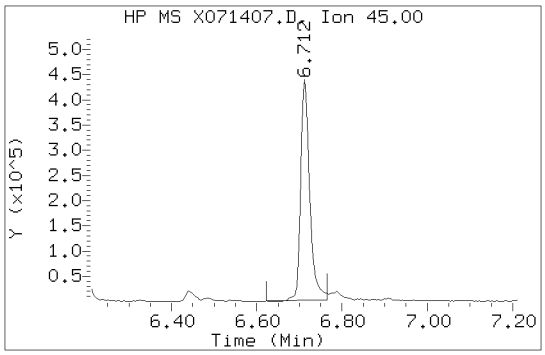

BEFORE

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20-Jul-2023
15:04
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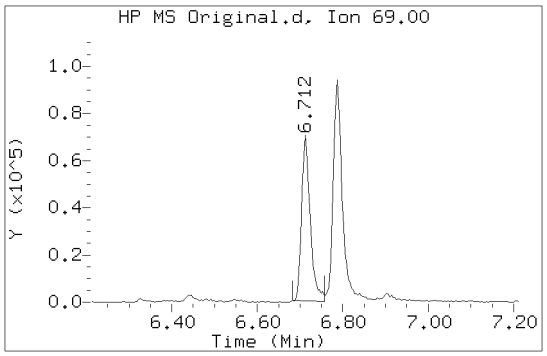

AFTER

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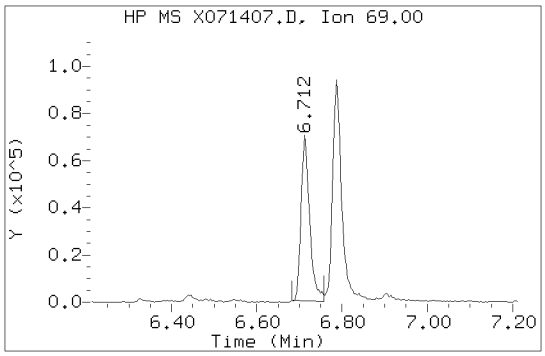

Amyl alcohol (71-41-0)

Reason Code:

BEFORE

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20-Jul-2023
15:04
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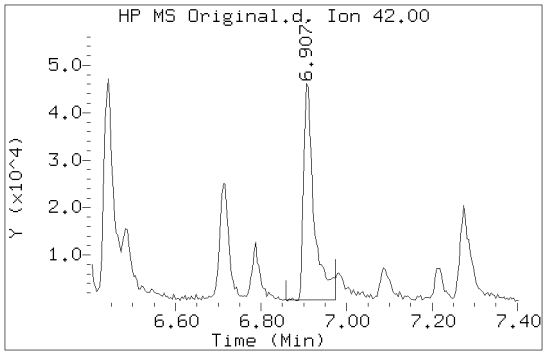

AFTER

MASS
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20-Jul-2023
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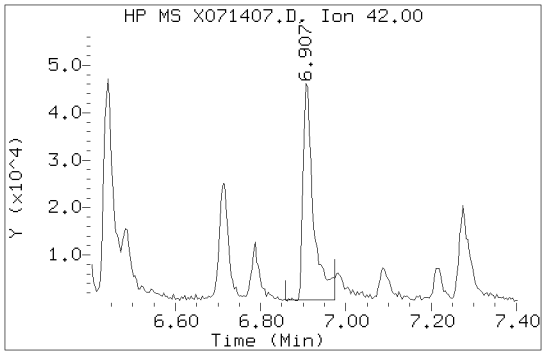

BEFORE

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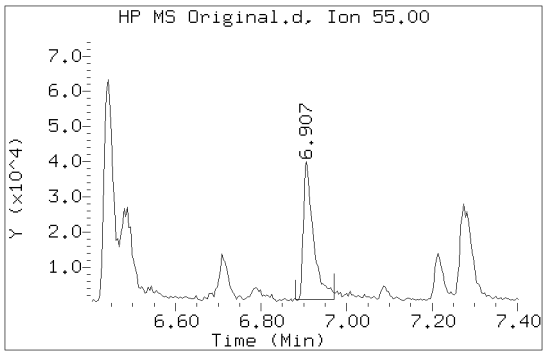

AFTER

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20-Jul-2023
15:04
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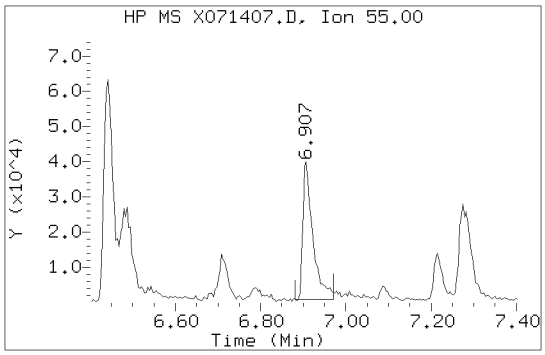

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Inj Date : 14-JUL-2023 14:04
InstruID : voa6.i
LabSampID : VSTD020

Amyl alcohol (71-41-0)

Reason Code:

BEFORE

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15:04
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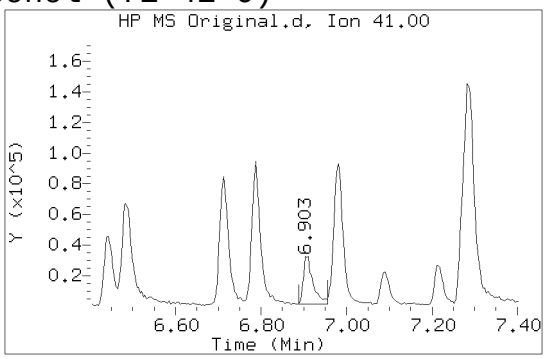

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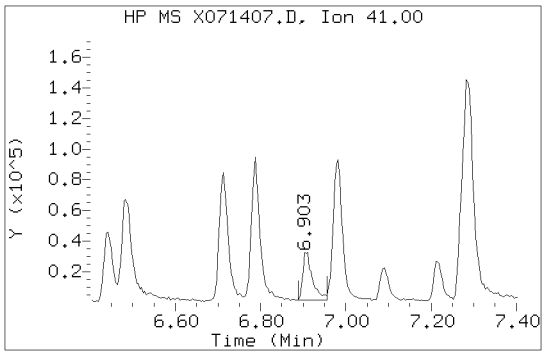

tert-Butyl formate (762-75-4)

Reason Code:

BEFORE

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20-Jul-2023
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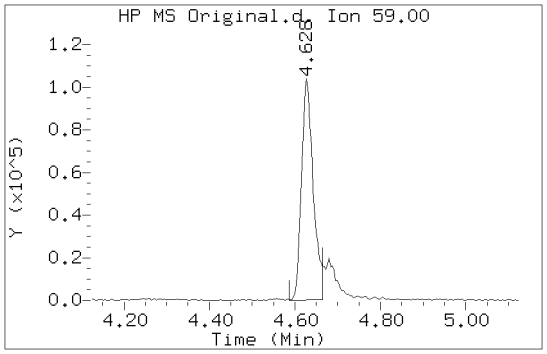

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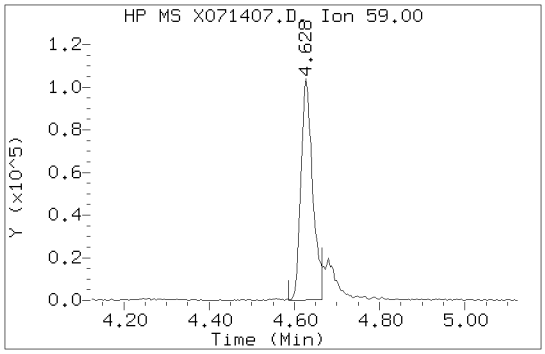

BEFORE

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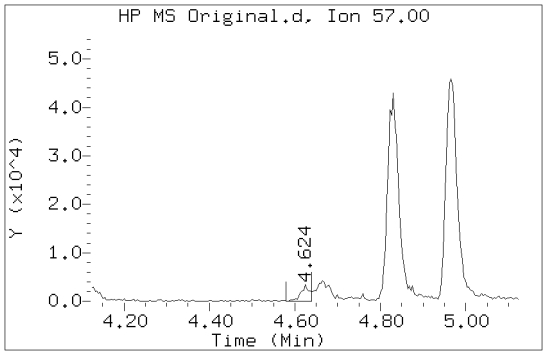

AFTER

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15:04
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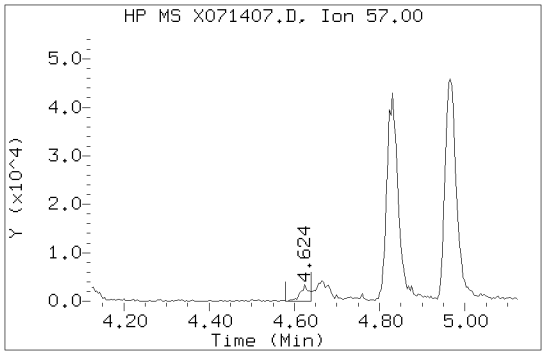

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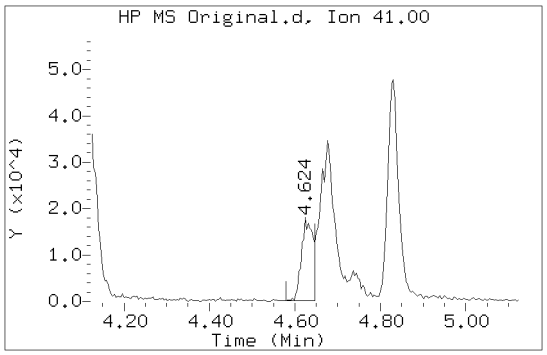

AFTER

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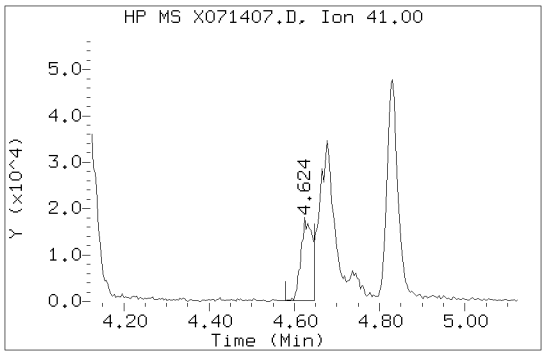

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Inj Date : 14-JUL-2023 14:04
InstruID : voa6.i
LabSampID : VSTD020

tert-Amyl alcohol (75-85-4)

Reason Code:

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20-Jul-2023
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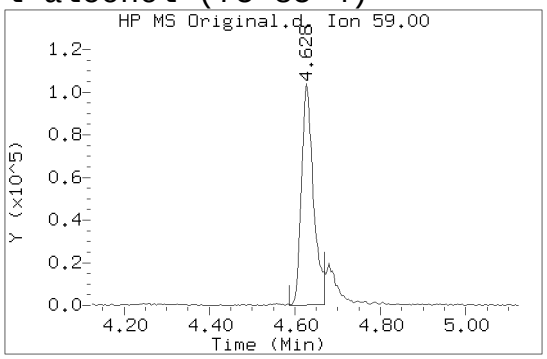

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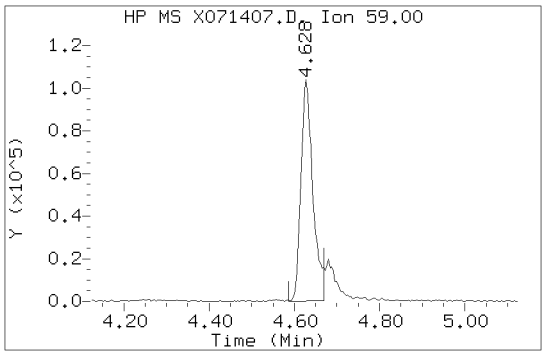

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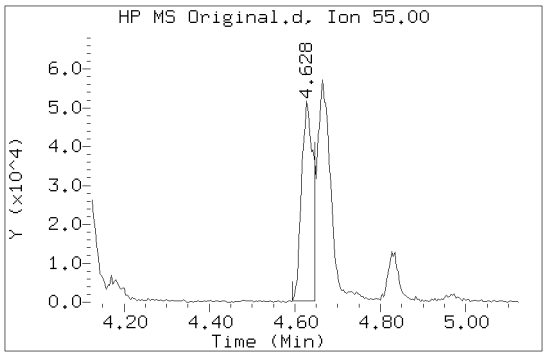

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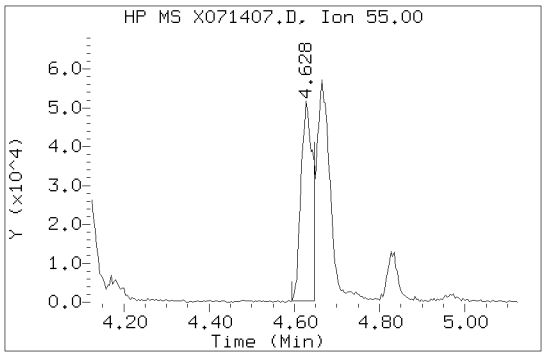

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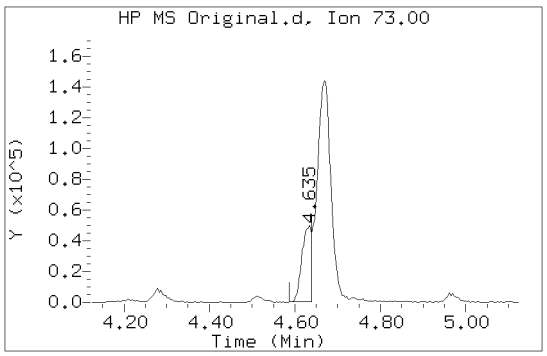

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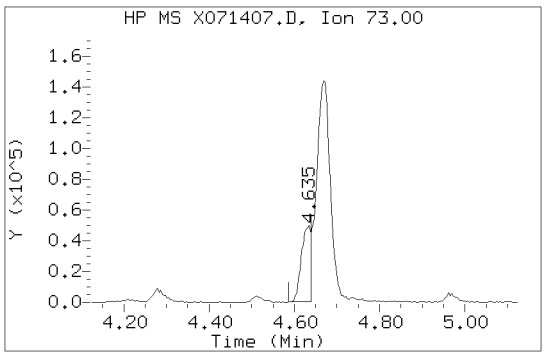

Acetaldehyde (75-07-0)

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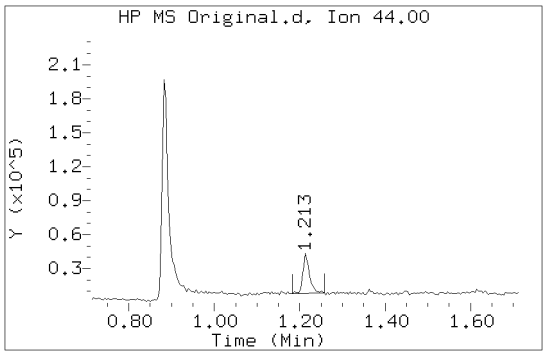

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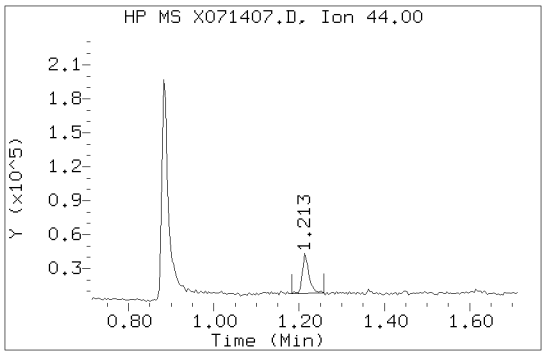

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InstruID : voa6.i
LabSampID : VSTD020

Acetaldehyde (75-07-0)

Reason Code:

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15:04
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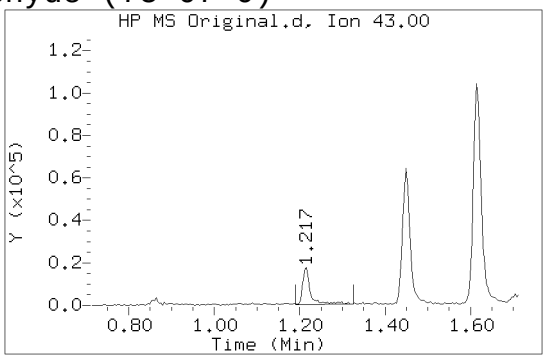

AFTER

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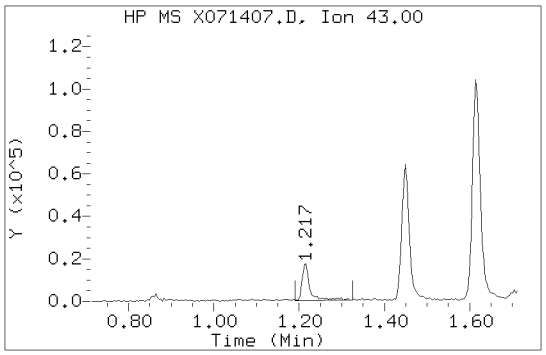

BEFORE

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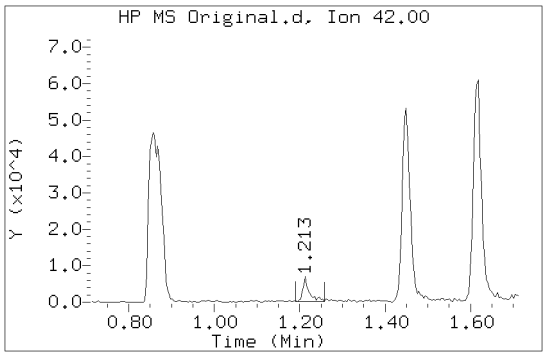

AFTER

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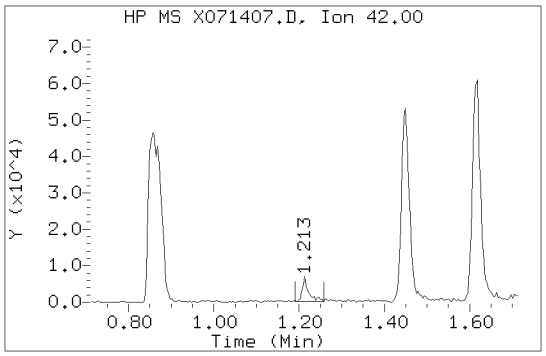

Isobutylene (115-11-7)

Reason Code:

BEFORE

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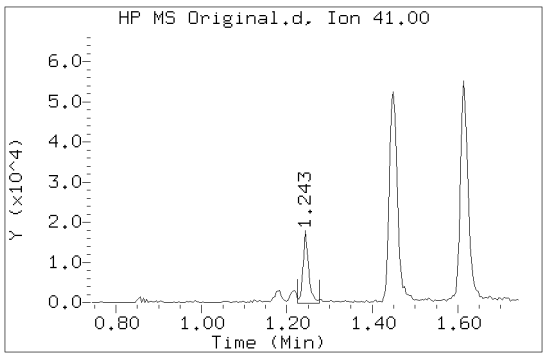

AFTER

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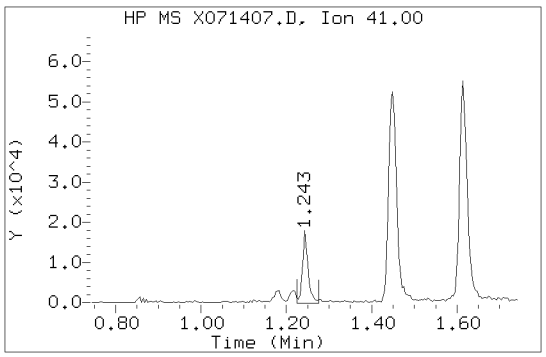

BEFORE

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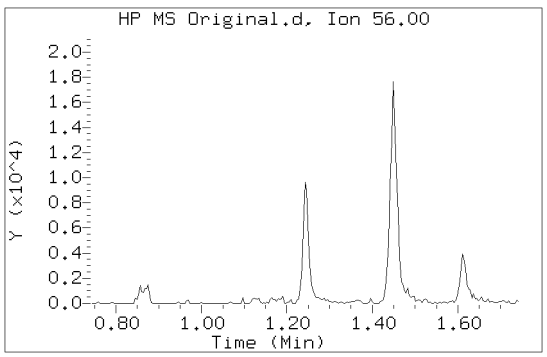

AFTER

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20-Jul-2023
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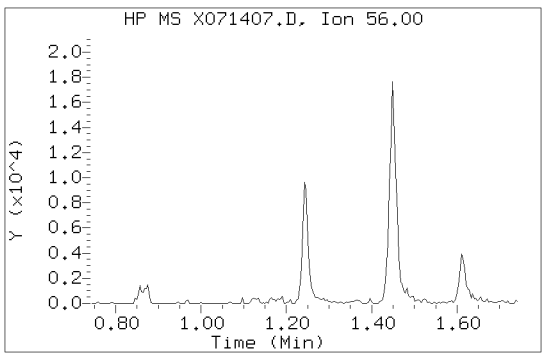

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Inj Date : 14-JUL-2023 14:04
InstruID : voa6.i
LabSampID : VSTD020

Isobutylene (115-11-7)

Reason Code:

BEFORE

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20-Jul-2023
15:04
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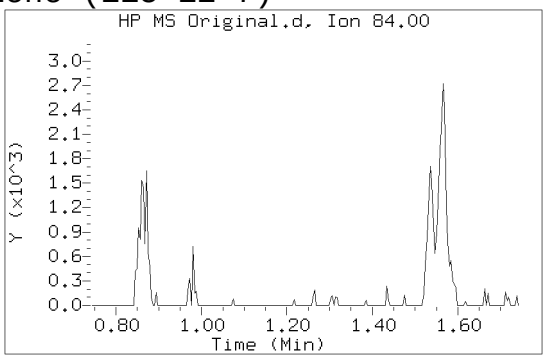

AFTER

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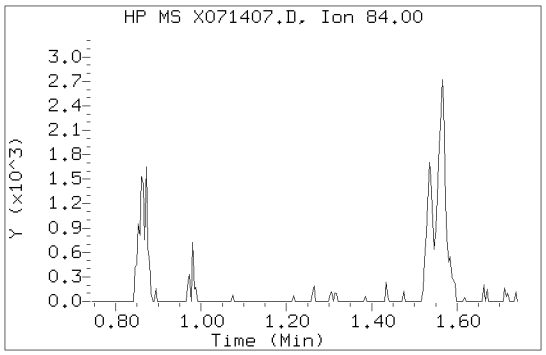

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Reason Code:

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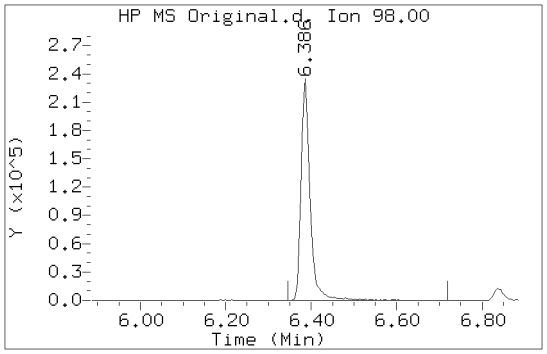

AFTER

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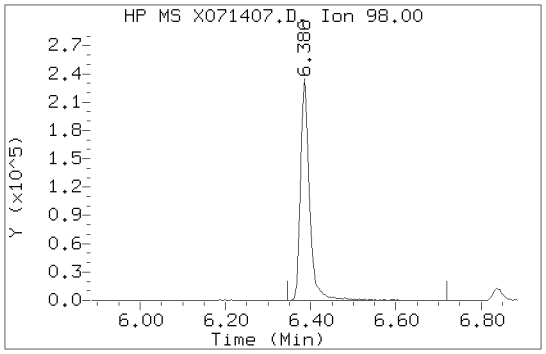

BEFORE

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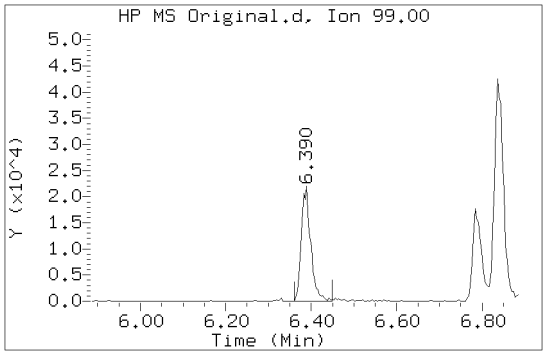

AFTER

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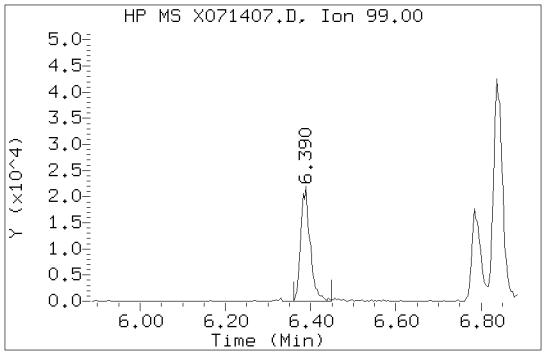

BEFORE

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15:04
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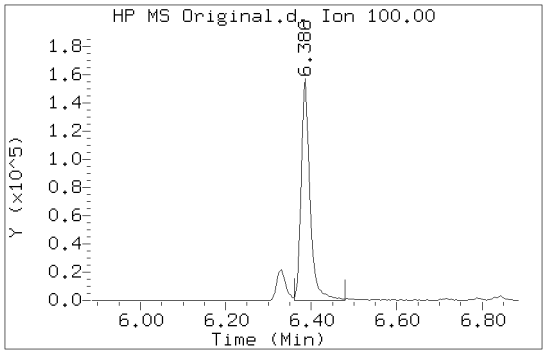

AFTER

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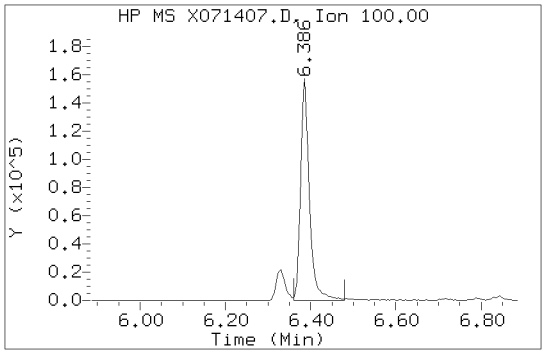

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071408.D Page 1
Report Date: 20-Jul-2023 15:05

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071408.D
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Inj Date : 14-JUL-2023 14:24
Operator : PC Inst ID: voa6.i
Smp Info : VSTD050;VSTD050;1;7;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\8260W.m
Meth Date : 20-Jul-2023 15:05 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:04 Cal File: X071407.D
Als bottle: 9 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.178	4.178	(1.000)	523013	50.0000	
2 Dichlorodifluoromethane	85	0.976	0.976	(0.234)	235300	50.0000	44.11
3 Chloromethane	50	1.081	1.081	(0.259)	354356	50.0000	44.85
4 Propionitrile	54	3.656	3.656	(0.875)	492839	500.000	475.69
5 Vinyl Chloride	62	1.145	1.145	(0.274)	318113	50.0000	47.00
6 Bromomethane	94	1.344	1.344	(0.322)	131891	50.0000	47.09
7 Chloroethane	64	1.407	1.407	(0.337)	180308	50.0000	46.66
8 Trichlorofluoromethane	101	1.561	1.561	(0.374)	315333	50.0000	45.97
9 Acrolein	56	1.861	1.861	(0.446)	19251	100.000	97.23(H)
10 Acetone	43	1.973	1.973	(0.472)	210033	100.000	101.57
11 1,1-Dichloroethene	96	1.913	1.913	(0.458)	183746	50.0000	47.95
12 Isobutyl Alcohol	43	4.680	4.680	(1.120)	992232	1000.00	1000.83
13 Acetonitrile	39	2.198	2.198	(0.526)	357196	500.000	487.03
14 Allyl Chloride	41	2.198	2.198	(0.526)	798138	50.0000	46.48
15 Iodomethane	142	2.030	2.030	(0.486)	473625	100.000	94.10
16 Acrylonitrile	53	2.532	2.532	(0.606)	235726	100.000	92.49
17 Methylene Chloride	84	2.307	2.307	(0.552)	228969	50.0000	50.65
18 Methyl tert-butyl ether	73	2.539	2.539	(0.608)	669525	50.0000	46.98
19 Carbon Disulfide	76	2.071	2.071	(0.496)	1141643	100.000	94.78
20 trans-1,2-Dichloroethene	96	2.528	2.528	(0.605)	211279	50.0000	47.66

21 Vinyl Acetate	43	2.997	2.997 (0.717)	1752870	100.000	95.62
22 1,1-Dichloroethane	63	2.922	2.922 (0.699)	470383	50.0000	48.36

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	23 Chloroprene	53	1.775	1.775	(0.425)	101850	50.0000	43.31(M)
	24 2-Butanone	43	3.582	3.582	(0.857)	268410	100.000	96.36
	25 Methacrylonitrile	41	3.821	3.821	(0.915)	328284	50.0000	48.62(a)
	26 2,2-Dichloropropane	77	3.507	3.507	(0.839)	357279	50.0000	47.33
	27 cis-1,2-Dichloroethene	96	3.525	3.525	(0.844)	274899	50.0000	48.68
	28 Chloroform	83	3.904	3.904	(0.935)	470821	50.0000	47.31
	29 Bromochloromethane	128	3.791	3.791	(0.908)	149658	50.0000	47.29
$	30 Dibromofluoromethane	113	4.099	4.099	(0.981)	227290	50.0000	47.37
	31 1,1,1-Trichloroethane	97	4.084	4.084	(0.978)	366818	50.0000	47.88
	32 1,1-Dichloropropene	75	4.279	4.279	(0.862)	311339	50.0000	45.93
	33 1,2-Dichloroethane	62	4.556	4.556	(0.918)	432993	50.0000	47.34
	34 Carbon Tetrachloride	117	4.268	4.268	(0.860)	295641	50.0000	43.30
$	35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	282994	50.0000	47.17
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	830857	50.0000	
	37 Benzene	78	4.511	4.511	(0.909)	951794	50.0000	47.89
	38 Trichloroethene	130	5.205	5.205	(1.048)	268578	50.0000	47.77
	39 Bromodichloromethane	83	5.722	5.722	(1.153)	359212	50.0000	47.18
	40 Methyl Methacrylate	41	5.606	5.606	(1.342)	290569	50.0000	46.03
	41 2-Chloroethylvinyl ether	63	6.048	6.048	(1.218)	231938	100.000	99.79
	42 1,2-Dichloropropane	63	5.433	5.433	(1.094)	313347	50.0000	49.03
	43 2-Nitropropane	43	5.969	5.969	(1.429)	96529	50.0000	46.45
	44 Dibromomethane	93	5.550	5.550	(1.118)	168989	50.0000	46.71
	45 4-Methyl-2-Pentanone	43	6.326	6.326	(0.825)	688236	100.000	93.62
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	425194	50.0000	48.63
*	47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	747052	50.0000	
$	48 Toluene-d8	98	6.385	6.385	(0.833)	806003	50.0000	41.90(M)
	49 Ethyl Methacrylate	69	6.712	6.712	(1.352)	223750	50.0000	41.11
	50 Toluene	91	6.445	6.445	(0.841)	1011174	50.0000	50.28
	51 trans-1,3-Dichloropropene	75	6.678	6.678	(1.345)	351933	50.0000	47.75
	52 2-Hexanone	43	7.086	7.086	(0.924)	449229	100.000	93.02
	53 1,1,2-Trichloroethane	83	6.835	6.835	(0.891)	205411	50.0000	48.15
	54 1,3-Dichloropropane	76	6.978	6.978	(0.910)	420354	50.0000	48.23
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	303363	50.0000	49.25
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	200679	50.0000	48.30
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	231339	50.0000	47.45
	58 1-Chlorohexane	55	7.694	7.694	(1.550)	276645	50.0000	41.44
	59 Chlorobenzene	112	7.690	7.690	(1.003)	673755	50.0000	47.92
	60 1,1,1,2-Tetrachloroethane	131	7.772	7.772	(1.014)	270349	50.0000	49.12
	61 Ethylbenzene	106	7.795	7.795	(1.017)	339019	50.0000	48.09
	62 m,p-Xylenes	106	7.900	7.900	(1.030)	871877	100.000	98.59
	63 o-Xylene	106	8.237	8.237	(1.074)	410767	50.0000	49.05
	64 Styrene	104	8.256	8.256	(1.077)	730009	50.0000	49.97
	66 Bromoform	173	8.406	8.406	(1.096)	197185	50.0000	49.90
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	1023144	50.0000	47.53
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	323110	50.0000	46.71
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	355682	50.0000	47.79
*	70 1,4-Dichlorobenzene-d4	152	9.658	9.658	(1.000)	411751	50.0000	
	71 1,2,3-Trichloropropane	75	8.860	8.860	(0.917)	256294	50.0000	46.70(M)
	72 trans-1,4-Dichloro-2-butene	53	8.886	8.886	(1.159)	113164	50.0000	49.80
	73 n-Propylbenzene	91	8.908	8.908	(0.922)	1199683	50.0000	48.21
	74 Bromobenzene	156	8.803	8.803	(0.912)	304391	50.0000	47.26
	75 1,3,5-Trimethylbenzene	105	9.062	9.062	(0.938)	873751	50.0000	46.87

76	2-Chlorotoluene	91	8.972	8.972 (0.929)	787863	50.0000	46.93
77	4-Chlorotoluene	91	9.066	9.066 (0.939)	904673	50.0000	49.04

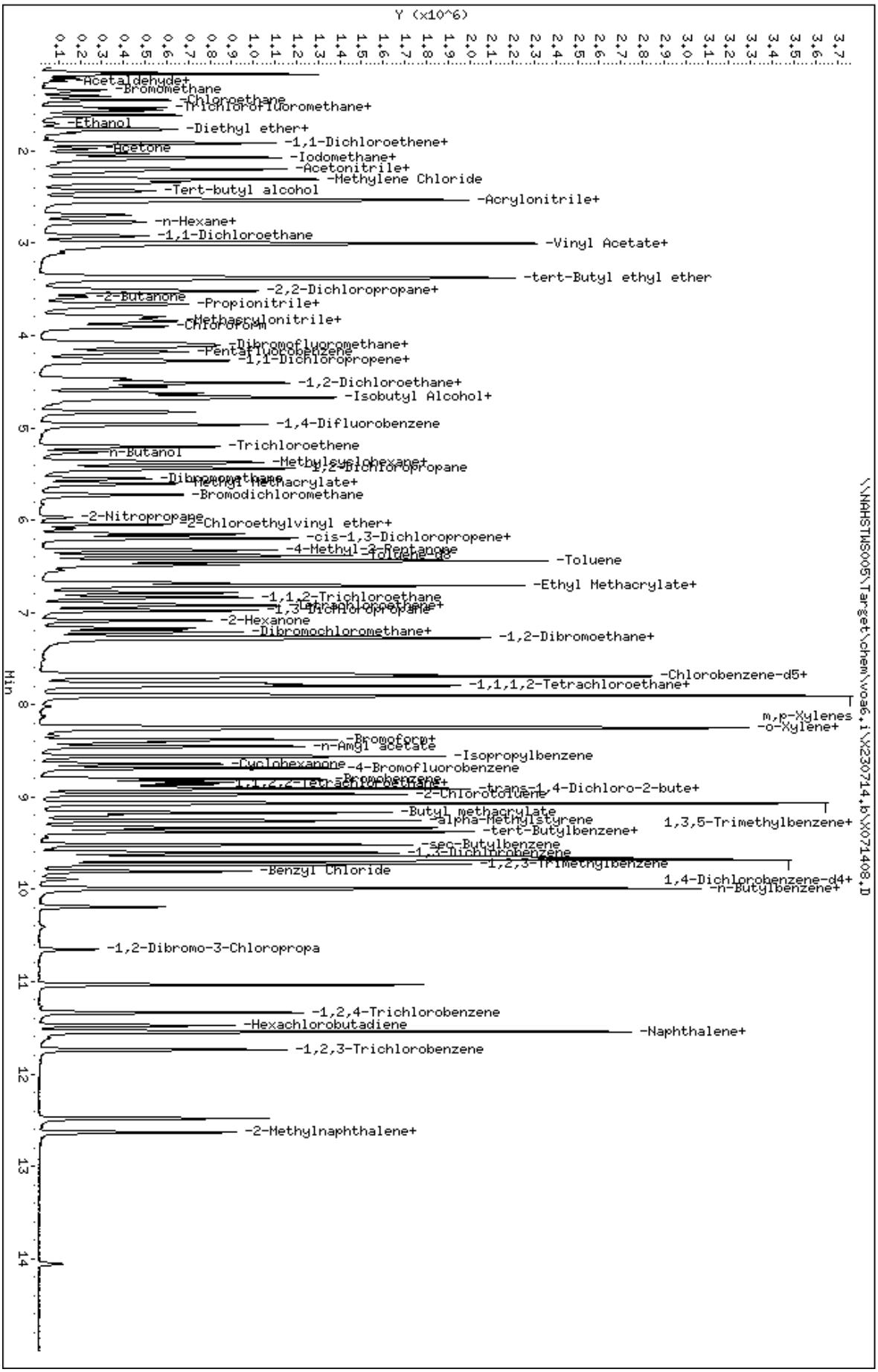
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	
78	tert-Butylbenzene	119	9.336	9.336	(0.967)	722967	50.0000	45.22	
79	1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	872776	50.0000	46.69	
81	sec-Butylbenzene	105	9.519	9.519	(0.986)	982642	50.0000	46.11	
82	p-Isopropyltoluene	119	9.647	9.647	(0.999)	896333	50.0000	46.05	
83	1,3-Dichlorobenzene	146	9.602	9.602	(0.994)	530593	50.0000	47.29	
84	1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	570511	50.0000	46.38	
86	Benzyl Chloride	91	9.804	9.804	(1.279)	558112	50.0000	44.19	
87	n-Butylbenzene	91	9.992	9.992	(1.035)	755707	50.0000	46.35	
88	1,2-Dichlorobenzene	146	9.988	9.988	(1.034)	524864	50.0000	47.58	
89	1,2-Dibromo-3-Chloropropane	155	10.651	10.651	(1.103)	51434	50.0000	45.34	
90	1,2,4-Trichlorobenzene	180	11.334	11.334	(1.173)	331560	50.0000	43.77	
91	Hexachlorobutadiene	225	11.476	11.476	(1.188)	139894	50.0000	40.54	
92	Naphthalene	128	11.540	11.540	(1.195)	833003	50.0000	44.42	
93	1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	307966	50.0000	43.47	
146	Methyl acetate	43	2.232	2.232	(0.534)	220729	50.0000	47.42	
138	Freon TF	101	1.917	1.917	(0.459)	154547	50.0000	48.17	
141	Cyclohexane	56	4.125	4.125	(0.987)	384719	50.0000	42.43	
142	Tetrahydrofuran	42	3.851	3.851	(0.922)	127806	100.000	94.98	
147	Methylcyclohexane	55	5.381	5.381	(1.084)	820341	50.0000	46.77	
135	1,4-Dioxane	88	5.602	5.602	(1.341)	56497	1000.00	909.04	
132	n-Butanol	56	5.261	5.261	(1.259)	163155	1000.00	937.09	
131	Methyl Acrylate	55	3.690	3.690	(0.883)	324862	50.0000	45.69	
133	Ethyl Acrylate	55	5.381	5.381	(1.288)	820341	50.0000	47.32	
136	n-Hexane	57	2.772	2.772	(0.664)	244351	50.0000	48.23	
139	Diethyl ether	59	1.760	1.760	(0.421)	229645	50.0000	47.08	
148	Tert-butyl alcohol	59	2.434	2.434	(0.583)	589524	1000.00	893.06	
149	Isopropyl alcohol	45	2.093	2.093	(0.501)	369866	1000.00	902.98	
156	Diisopropyl ether	45	3.004	3.004	(0.719)	1023782	50.0000	47.49	
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	931868	50.0000	48.95	
167	Ethanol	45	1.703	1.703	(0.408)	72445	1000.00	990.30	
172	tert-Butyl formate	59	4.627	4.627	(1.108)	483988	100.000	86.62	
173	3,3-Dimethyl-1-butanol	57	7.285	7.285	(0.950)	654787	1000.00	815.00	
174	tert-Amyl methyl ether	73	4.669	4.669	(1.118)	841588	50.0000	48.91	
175	tert-Butyl ethyl ether	59	3.379	3.379	(0.809)	1034229	50.0000	46.70	
176	tert-Amyl alcohol	59	4.627	4.627	(1.108)	483988	1000.00	847.08	
151	4-Methyl-2-pentanol	45	6.712	6.712	(1.352)	1443508	1000.00	810.70	
180	1-Methylnaphthalene	142	12.634	12.634	(1.308)	377609	50.0000	(a)	
140	1,3-Butadiene	54	1.167	1.167	(0.280)	306107	50.0000	45.54	
152	Amyl alcohol	42	6.903	6.903	(0.900)	190741	1000.00	887.85	
158	Dichlorofluoromethane	67	1.535	1.535	(0.367)	398292	50.0000	47.26	
159	Propylene oxide	43	1.805	1.805	(0.432)	59535	100.000	92.78	
161	3-Methyl-1-butanol	55	6.903	6.903	(0.900)	178568	1000.00	970.88	
162	Butyl acrylate	55	8.249	8.249	(1.076)	713652	50.0000	50.21	
163	Butyl methacrylate	41	9.167	9.167	(0.949)	474324	50.0000	48.09	
164	Dicyclopentadiene	66	9.681	9.681	(1.002)	1133352	50.0000	47.78	
182	Epichlorohydrin	57	6.093	6.093	(1.227)	118291	200.000	190.60	
M 94	1,2-Dichloroethylene (total)	96				486178	100.000	(a)	
145	alpha-Methylstyrene	118	9.257	9.257	(0.958)	421857	50.0000	46.96	
130	Ethyl Acetate	43	3.660	3.660	(0.876)	368212	50.0000	47.39	
134	Cyclohexanone	55	8.642	8.642	(0.895)	325236	1000.00	887.25	
185	Isoprene	39	1.775	1.775	(0.425)	78291	50.0000	45.41	
188	Isopropyl acetate	43	4.680	4.680	(0.943)	992232	50.0000	45.29	

187 n-Amyl acetate	43	8.451	8.451 (1.102)	605401	50.0000	44.21
189 n-Butyl acetate	43	7.210	7.210 (0.940)	548658	50.0000	47.91(H)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
150 Allyl alcohol	57	2.772	2.772	(0.664)	244351	1000.00	964.89
194 Acetaldehyde	44	1.212	1.212	(0.290)	101552	200.000	218.25(M)
195 Methyl Amyl Ketone	43	8.380	8.380	(1.093)	719543	50.0000	46.08
200 Dimethyl Disulfide	94	6.194	6.194	(0.808)	522090	50.0000	51.81
202 Isobutylene	41	1.242	1.242	(0.297)	36655	50.0000	42.38(M)
205 2-Ethylhexyl Acrylate	55	11.547	11.547	(1.196)	561357	50.0000	53.37

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.



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Client ID: VSTD050
Sample Info: VSTD050;VSTD050;1;7;
Purge Volume: 5.0
Column phase: DB624

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

Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071408.D
Inj Date : 14-JUL-2023 14:24
InstruID : voa6.i
LabSampID : VSTD050

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

Reason Code:

BEFORE

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256294
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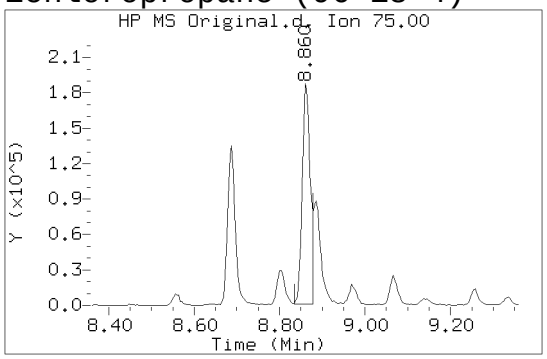
186871
20-Jul-2023
15:04
linh
pham



AFTER

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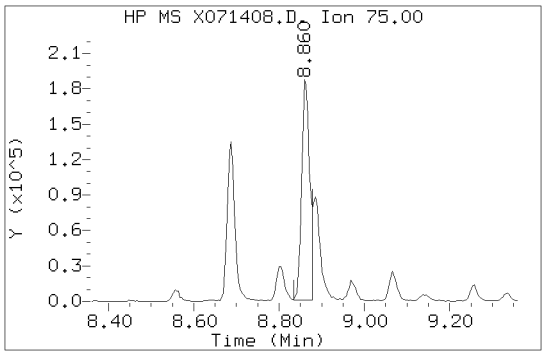

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20-Jul-2023
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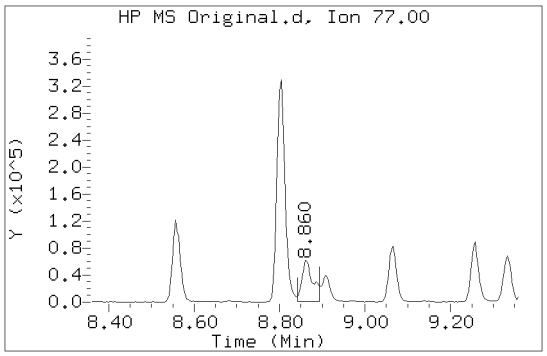

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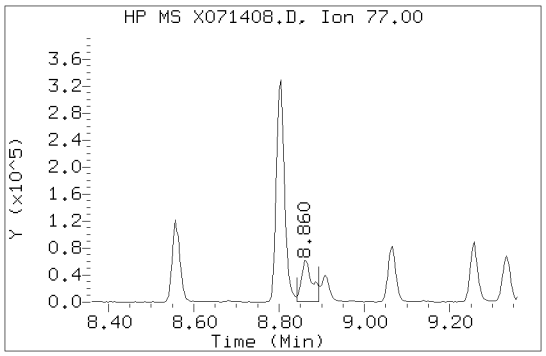

Chloroprene (126-99-8)

Reason Code:

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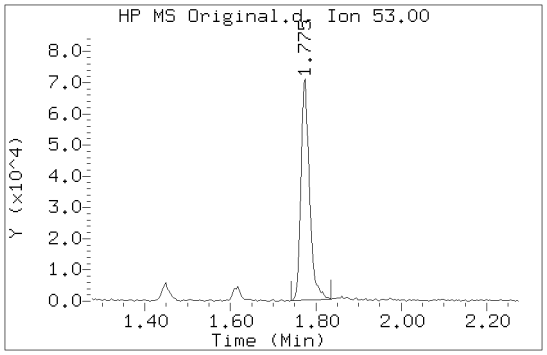

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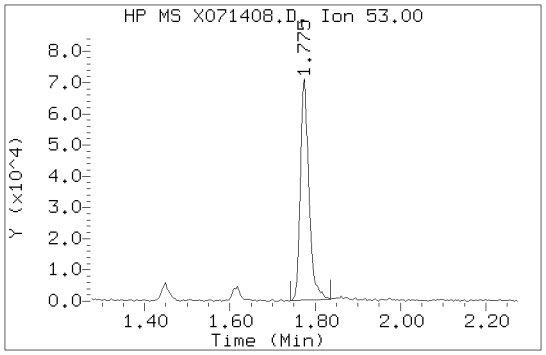

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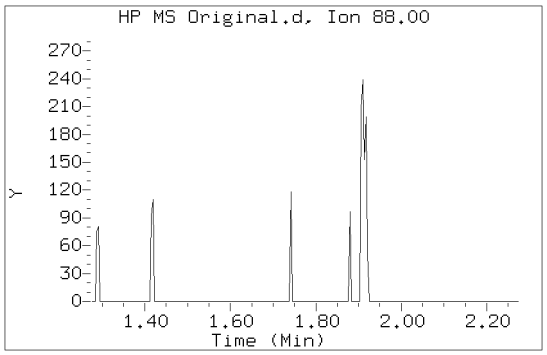

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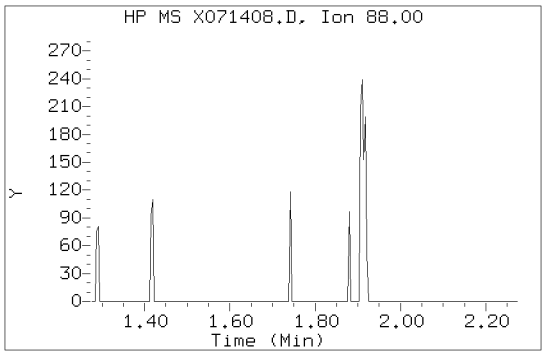

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InstruID : voa6.i
LabSampID : VSTD050

Acetaldehyde (75-07-0)

Reason Code:

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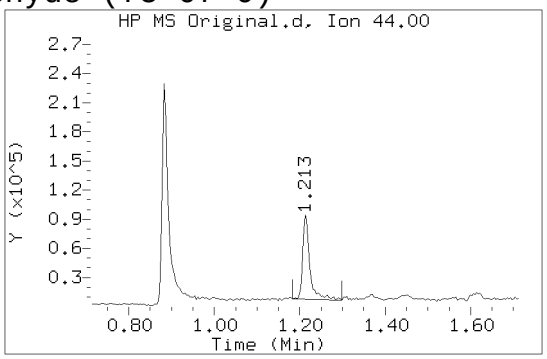

AFTER

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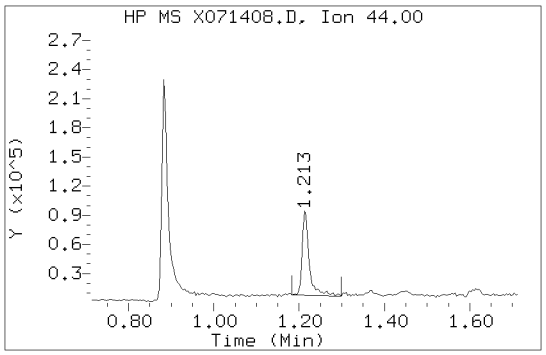

BEFORE

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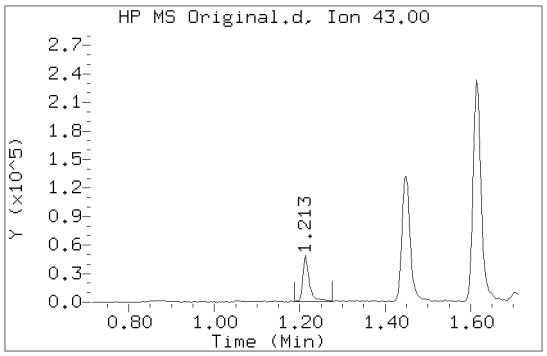

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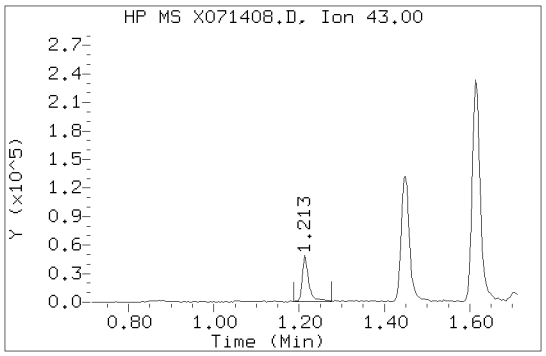

BEFORE

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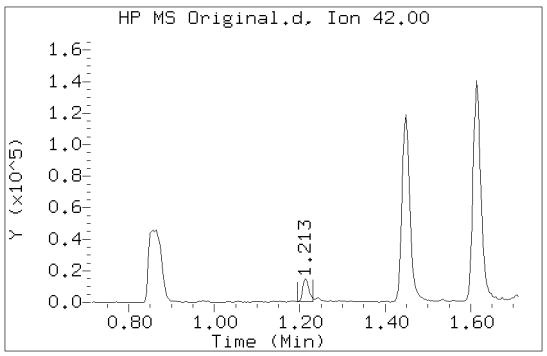

AFTER

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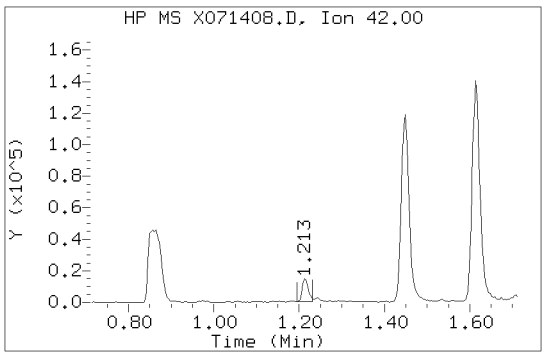

Isobutylene (115-11-7)

Reason Code:

BEFORE

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20-Jul-2023
15:04
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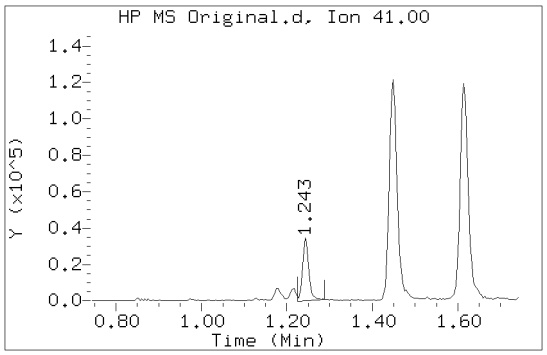

AFTER

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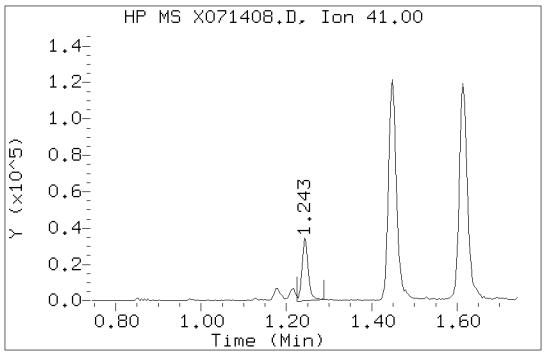

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Inj Date : 14-JUL-2023 14:24
InstruID : voa6.i
LabSampID : VSTD050

Isobutylene (115-11-7)

Reason Code:

BEFORE
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20-Jul-2023
15:04
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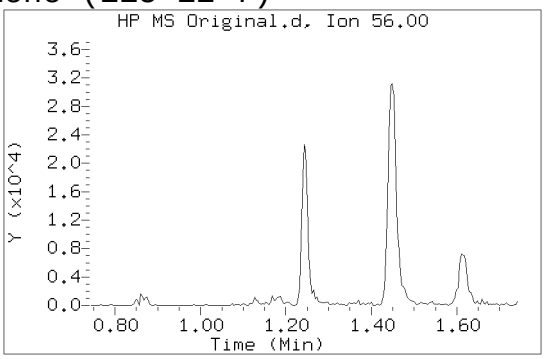

AFTER
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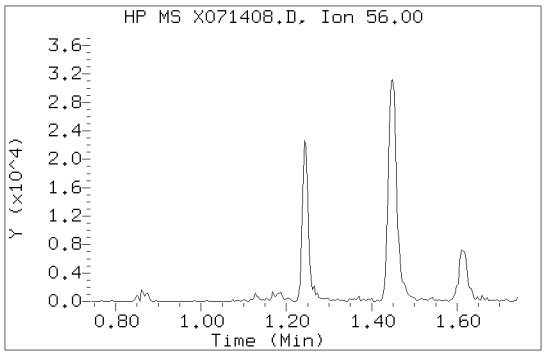

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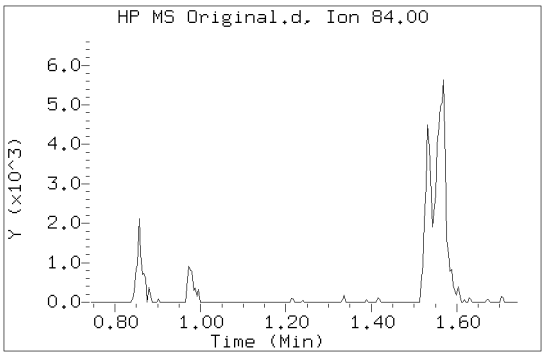

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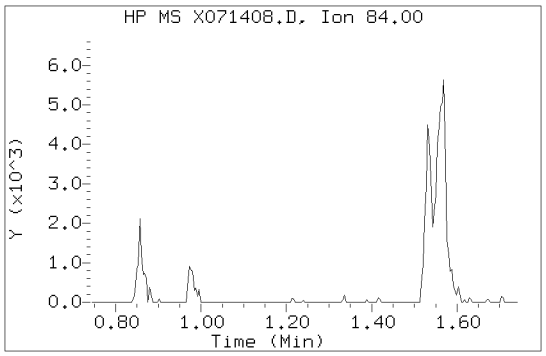

Toluene-d8 (2037-26-5)

Reason Code:

BEFORE
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20-Jul-2023
15:04
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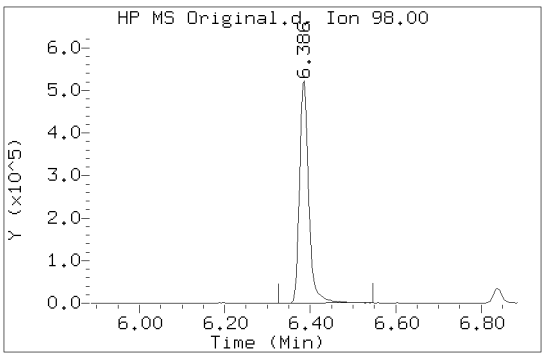

AFTER
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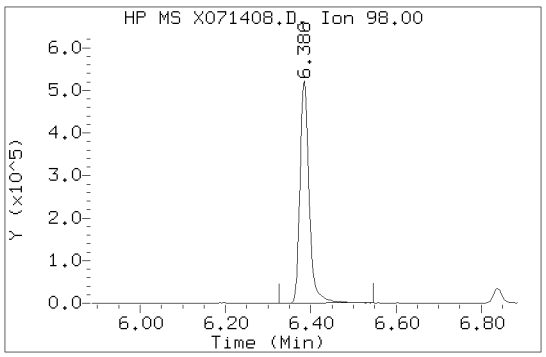

BEFORE
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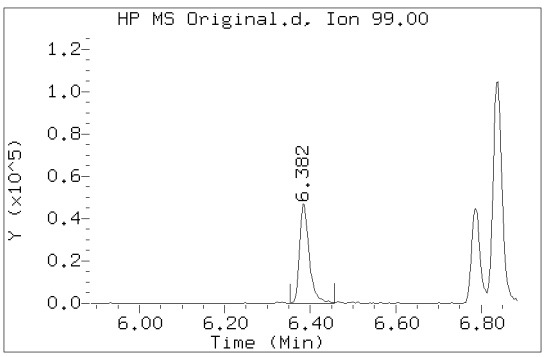

AFTER
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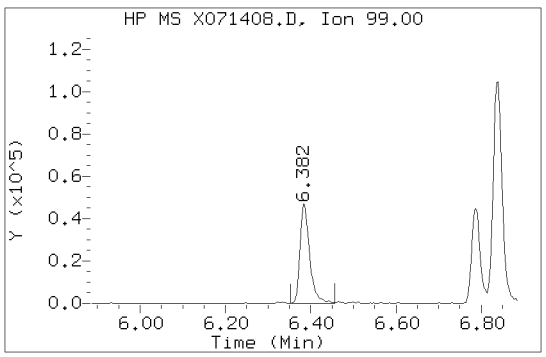

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Inj Date : 14-JUL-2023 14:24
InstruID : voa6.i
LabSampID : VSTD050

Toluene-d8 (2037-26-5)

Reason Code:

BEFORE

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20-Jul-2023
15:04
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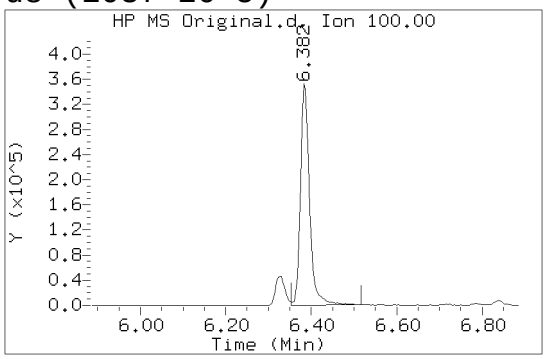

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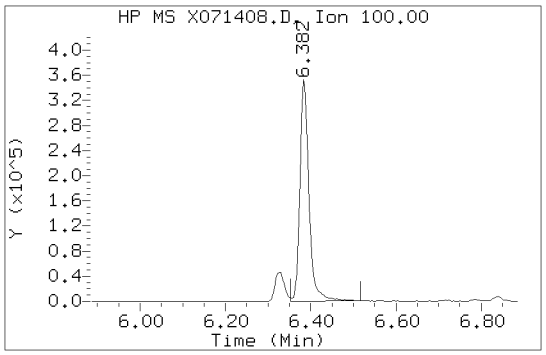


Data File: \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071409.D Page 1
Report Date: 20-Jul-2023 15:05

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071409.D
Lab Smp Id: VSTD100 Client Smp ID: VSTD100
Inj Date : 14-JUL-2023 14:44
Operator : PC Inst ID: voa6.i
Smp Info : VSTD100;VSTD100;1;8;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\8260W.m
Meth Date : 20-Jul-2023 15:05 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 10 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1	Pentafluorobenzene	168	4.178	4.178	(1.000)	523083	50.0000	
2	Dichlorodifluoromethane	85	0.976	0.976	(0.234)	576963	100.000	106.55
3	Chloromethane	50	1.081	1.081	(0.259)	835087	100.000	105.69
4	Propionitrile	54	3.657	3.657	(0.875)	1047975	1000.00	1011.37
5	Vinyl Chloride	62	1.145	1.145	(0.274)	734431	100.000	108.50
6	Bromomethane	94	1.340	1.340	(0.321)	298512	100.000	106.56
7	Chloroethane	64	1.404	1.404	(0.336)	388839	100.000	100.62
8	Trichlorofluoromethane	101	1.561	1.561	(0.374)	784790	100.000	114.40
9	Acrolein	56	1.861	1.861	(0.446)	38657	200.000	194.08(H)
10	Acetone	43	1.973	1.973	(0.472)	413238	200.000	204.54
11	1,1-Dichloroethene	96	1.917	1.917	(0.459)	418161	100.000	109.11
12	Isobutyl Alcohol	43	4.676	4.676	(1.119)	2105793	2000.00	2123.76
13	Acetonitrile	39	2.198	2.198	(0.526)	728143	1000.00	992.69
14	Allyl Chloride	41	2.198	2.198	(0.526)	1634102	100.000	95.15
15	Iodomethane	142	2.030	2.030	(0.486)	1101288	200.000	206.62
16	Acrylonitrile	53	2.532	2.532	(0.606)	485413	200.000	190.43
17	Methylene Chloride	84	2.303	2.303	(0.551)	461890	100.000	103.61
18	Methyl tert-butyl ether	73	2.539	2.539	(0.608)	1386267	100.000	97.26
19	Carbon Disulfide	76	2.071	2.071	(0.496)	2567979	200.000	213.18
20	trans-1,2-Dichloroethene	96	2.528	2.528	(0.605)	450376	100.000	101.60

21 Vinyl Acetate	43	3.001	3.001 (0.718)	3697154	200.000	201.67
22 1,1-Dichloroethane	63	2.918	2.918 (0.699)	974667	100.000	100.19

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	23 Chloroprene	53	1.775	1.775	(0.425)	247316	100.000	105.15(M)
	24 2-Butanone	43	3.582	3.582	(0.857)	596777	200.000	214.23
	25 Methacrylonitrile	41	3.821	3.821	(0.915)	700145	100.000	103.69(a)
	26 2,2-Dichloropropane	77	3.507	3.507	(0.839)	797830	100.000	105.42
	27 cis-1,2-Dichloroethene	96	3.525	3.525	(0.844)	578093	100.000	102.37
	28 Chloroform	83	3.904	3.904	(0.935)	984765	100.000	98.94
	29 Bromochloromethane	128	3.795	3.795	(0.908)	308539	100.000	97.49
$	30 Dibromofluoromethane	113	4.099	4.099	(0.981)	502644	100.000	105.68
	31 1,1,1-Trichloroethane	97	4.084	4.084	(0.978)	846403	100.000	110.47
	32 1,1-Dichloropropene	75	4.279	4.279	(0.862)	731563	100.000	110.92
	33 1,2-Dichloroethane	62	4.556	4.556	(0.918)	901009	100.000	101.23
	34 Carbon Tetrachloride	117	4.260	4.260	(0.858)	726709	100.000	109.37
$	35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	615043	100.000	103.24
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	808530	50.0000	
	37 Benzene	78	4.511	4.511	(0.909)	2032676	100.000	105.10
	38 Trichloroethene	130	5.201	5.201	(1.048)	584538	100.000	106.85
	39 Bromodichloromethane	83	5.726	5.726	(1.153)	741977	100.000	100.16
	40 Methyl Methacrylate	41	5.606	5.606	(1.342)	628263	100.000	99.51
	41 2-Chloroethylvinyl ether	63	6.044	6.044	(1.217)	497113	200.000	219.79
	42 1,2-Dichloropropane	63	5.433	5.433	(1.094)	653249	100.000	105.04
	43 2-Nitropropane	43	5.969	5.969	(1.429)	203991	100.000	98.16
	44 Dibromomethane	93	5.550	5.550	(1.118)	353228	100.000	100.34
	45 4-Methyl-2-Pentanone	43	6.326	6.326	(0.825)	1478418	200.000	198.78
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	899164	100.000	105.68
*	47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	755792	50.0000	
$	48 Toluene-d8	98	6.386	6.386	(0.833)	1813180	100.000	93.17(M)
	49 Ethyl Methacrylate	69	6.712	6.712	(1.352)	499748	100.000	94.37
	50 Toluene	91	6.442	6.442	(0.840)	2182793	100.000	107.28
	51 trans-1,3-Dichloropropene	75	6.678	6.678	(1.345)	755710	100.000	105.36
	52 2-Hexanone	43	7.087	7.087	(0.924)	970744	200.000	198.69
	53 1,1,2-Trichloroethane	83	6.835	6.835	(0.891)	424795	100.000	98.42
	54 1,3-Dichloropropane	76	6.978	6.978	(0.910)	873450	100.000	99.06
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	655964	100.000	105.28
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	469739	100.000	111.75
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	477019	100.000	96.72
	58 1-Chlorohexane	55	7.694	7.694	(1.550)	692334	100.000	106.58
	59 Chlorobenzene	112	7.690	7.690	(1.003)	1451842	100.000	102.08
	60 1,1,1,2-Tetrachloroethane	131	7.773	7.773	(1.014)	582430	100.000	104.61
	61 Ethylbenzene	106	7.795	7.795	(1.017)	757084	100.000	106.16
	62 m,p-Xylenes	106	7.900	7.900	(1.030)	1920317	200.000	214.63
	63 o-Xylene	106	8.237	8.237	(1.074)	894211	100.000	105.54
	64 Styrene	104	8.256	8.256	(1.077)	1543196	100.000	104.42
	66 Bromoform	173	8.410	8.410	(1.097)	423146	100.000	105.85
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	2408268	100.000	110.58
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	686871	100.000	97.37
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	767493	100.000	102.43
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	419955	50.0000	
	71 1,2,3-Trichloropropane	75	8.860	8.860	(0.917)	550885	100.000	98.41(M)
	72 trans-1,4-Dichloro-2-butene	53	8.886	8.886	(1.159)	253486	100.000	110.27
	73 n-Propylbenzene	91	8.908	8.908	(0.922)	2861434	100.000	112.75
	74 Bromobenzene	156	8.803	8.803	(0.911)	667827	100.000	101.67
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	2103222	100.000	110.62

76	2-Chlorotoluene	91	8.972	8.972 (0.929)	1748246	100.000	102.12
77	4-Chlorotoluene	91	9.066	9.066 (0.938)	2018059	100.000	107.27

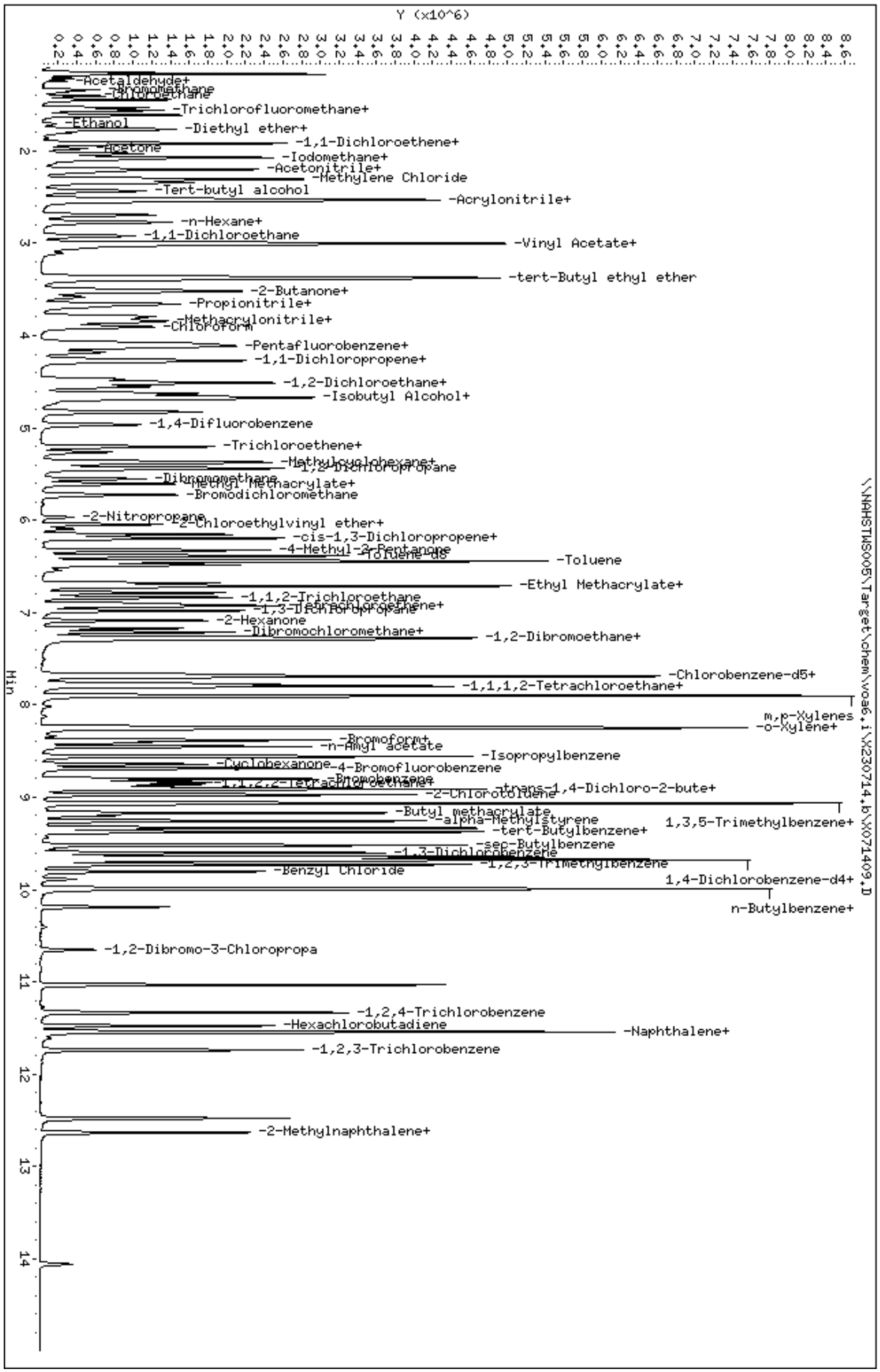
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
78	tert-Butylbenzene	119	9.336	9.336	(0.966)	1780796	100.000	109.22
79	1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	2073163	100.000	108.74
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	2510459	100.000	115.52
82	p-Isopropyltoluene	119	9.647	9.647	(0.998)	2265107	100.000	114.10
83	1,3-Dichlorobenzene	146	9.602	9.602	(0.994)	1217703	100.000	106.42
84	1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	1289815	100.000	102.81
86	Benzyl Chloride	91	9.804	9.804	(1.279)	1321247	100.000	100.26
87	n-Butylbenzene	91	9.992	9.992	(1.034)	1995906	100.000	120.04
88	1,2-Dichlorobenzene	146	9.988	9.988	(1.034)	1197079	100.000	106.41
89	1,2-Dibromo-3-Chloropropane	155	10.651	10.651	(1.102)	119154	100.000	101.61
90	1,2,4-Trichlorobenzene	180	11.334	11.334	(1.173)	818711	100.000	105.96
91	Hexachlorobutadiene	225	11.476	11.476	(1.188)	382401	100.000	104.71
92	Naphthalene	128	11.540	11.540	(1.194)	1978675	100.000	103.47
93	1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	745369	100.000	103.15
146	Methyl acetate	43	2.228	2.228	(0.533)	452160	100.000	97.12
138	Freon TF	101	1.917	1.917	(0.459)	422615	100.000	100.16
141	Cyclohexane	56	4.118	4.118	(0.986)	1080112	100.000	119.12
142	Tetrahydrofuran	42	3.848	3.848	(0.921)	261433	200.000	194.26
147	Methylcyclohexane	55	5.381	5.381	(1.084)	1785418	100.000	104.61(A)
135	1,4-Dioxane	88	5.598	5.598	(1.340)	124490	2000.00	2002.78
132	n-Butanol	56	5.261	5.261	(1.259)	380486	2000.00	2185.06
131	Methyl Acrylate	55	3.690	3.690	(0.883)	811825	100.000	114.17
133	Ethyl Acrylate	55	5.381	5.381	(1.288)	1785418	100.000	102.98
136	n-Hexane	57	2.772	2.772	(0.664)	700280	100.000	100.13
139	Diethyl ether	59	1.760	1.760	(0.421)	469212	100.000	96.19
148	Tert-butyl alcohol	59	2.434	2.434	(0.583)	1247600	2000.00	1889.72
149	Isopropyl alcohol	45	2.097	2.097	(0.502)	761231	2000.00	1858.21
156	Diisopropyl ether	45	3.004	3.004	(0.719)	2133149	100.000	98.94
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	2052311	100.000	105.71
167	Ethanol	45	1.703	1.703	(0.408)	150451	2000.00	2076.45
172	tert-Butyl formate	59	4.627	4.627	(1.108)	1076721	200.000	192.69
173	3,3-Dimethyl-1-butanol	57	7.289	7.289	(0.951)	1478367	2000.00	1818.81
174	tert-Amyl methyl ether	73	4.669	4.669	(1.118)	1654411	100.000	96.14
175	tert-Butyl ethyl ether	59	3.383	3.383	(0.810)	2142435	100.000	96.74
176	tert-Amyl alcohol	59	4.627	4.627	(1.108)	1076721	2000.00	1884.24
151	4-Methyl-2-pentanol	45	6.712	6.712	(1.352)	3281154	2000.00	1893.64
180	1-Methylnaphthalene	142	12.635	12.635	(1.308)	878613	100.000	(a)
140	1,3-Butadiene	54	1.167	1.167	(0.280)	742885	100.000	110.52
152	Amyl alcohol	42	6.903	6.903	(0.900)	457453	2000.00	2104.71
158	Dichlorofluoromethane	67	1.531	1.531	(0.367)	823584	100.000	97.72
159	Propylene oxide	43	1.805	1.805	(0.432)	116784	200.000	181.98
161	3-Methyl-1-butanol	55	6.899	6.899	(0.900)	421402	2000.00	2264.68
162	Butyl acrylate	55	8.249	8.249	(1.076)	1549632	100.000	107.77
163	Butyl methacrylate	41	9.167	9.167	(0.949)	1085490	100.000	107.91
164	Dicyclopentadiene	66	9.681	9.681	(1.002)	2485958	100.000	102.76
182	Epichlorohydrin	57	6.093	6.093	(1.227)	253170	400.000	419.20
M 94	1,2-Dichloroethylene (total)	96				1028469	200.000	(a)
145	alpha-Methylstyrene	118	9.257	9.257	(0.958)	977451	100.000	106.68
130	Ethyl Acetate	43	3.660	3.660	(0.876)	772631	100.000	99.44
134	Cyclohexanone	55	8.642	8.642	(0.894)	668441	2000.00	1787.90
185	Isoprene	39	1.771	1.771	(0.424)	186523	100.000	108.17
188	Isopropyl acetate	43	4.676	4.676	(0.942)	2105793	100.000	98.77

187 n-Amyl acetate	43	8.451	8.451 (1.102)	1369941	100.000	98.90
189 n-Butyl acetate	43	7.210	7.210 (0.940)	1203586	100.000	103.89(H)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
150 Allyl alcohol	57	2.772	2.772	(0.664)	700280	2000.00	2002.79
194 Acetaldehyde	44	1.212	1.212	(0.290)	189053	400.000	425.78(M)
195 Methyl Amyl Ketone	43	8.380	8.380	(1.093)	1583303	100.000	100.22
200 Dimethyl Disulfide	94	6.194	6.194	(0.808)	1112805	100.000	109.15
202 Isobutylene	41	1.242	1.242	(0.297)	90557	100.000	104.71(M)
205 2-Ethylhexyl Acrylate	55	11.544	11.544	(1.195)	1235080	100.000	115.14

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
exceeded maximum amount.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.



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Client ID: VSTD100
Sample Info: VSTD100;VSTD100;1;8;
Purge Volume: 5.0
Column phase: DB624

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

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Inj Date : 14-JUL-2023 14:44
InstruID : voa6.i
LabSampID : VSTD100

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

Reason Code:

BEFORE

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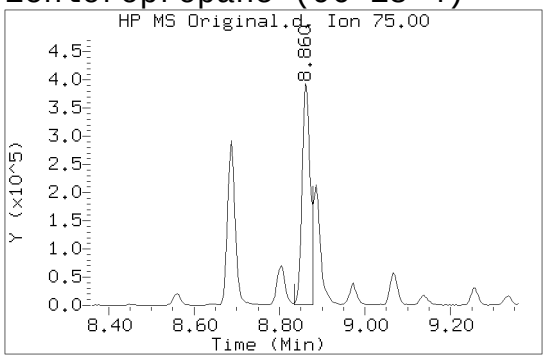
392625
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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AREA
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HEIGHT
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20-Jul-2023
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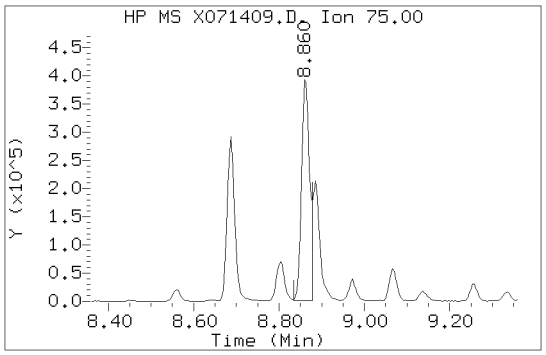

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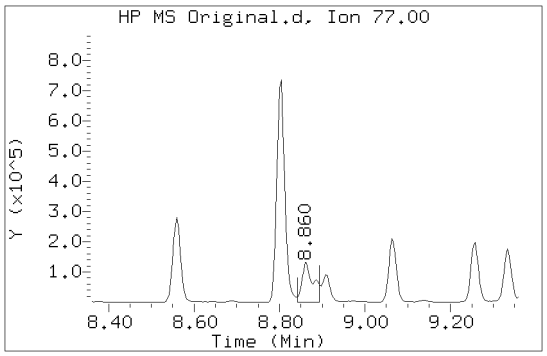

AFTER

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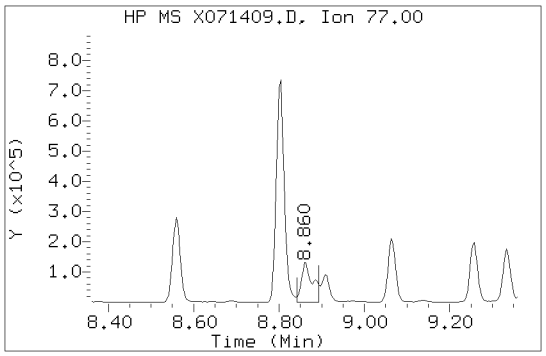

Chloroprene (126-99-8)

Reason Code:

BEFORE

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20-Jul-2023
15:04
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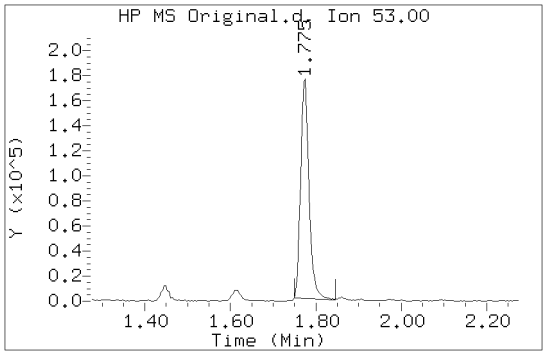
pham



AFTER

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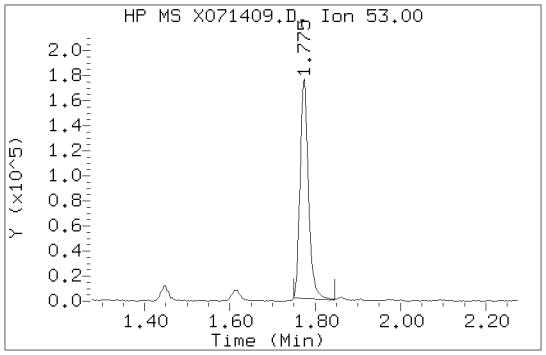

BEFORE

MASS
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AREA
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HEIGHT
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20-Jul-2023
15:04
linh
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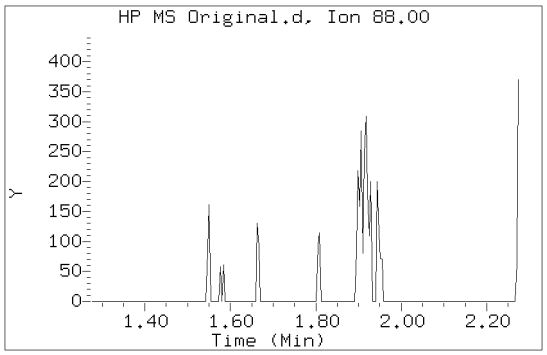

AFTER

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15:04
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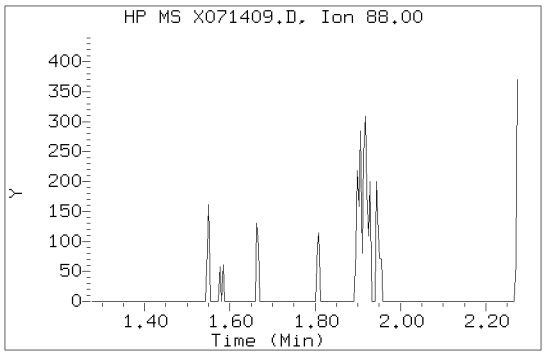

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Inj Date : 14-JUL-2023 14:44
InstruID : voa6.i
LabSampID : VSTD100

Acetaldehyde (75-07-0)

Reason Code:

BEFORE

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HEIGHT
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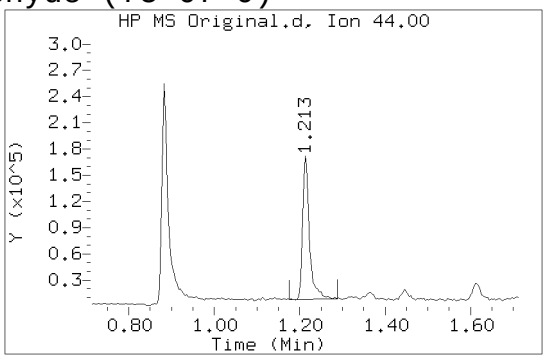
20-Jul-2023
15:04
linh
pham



AFTER

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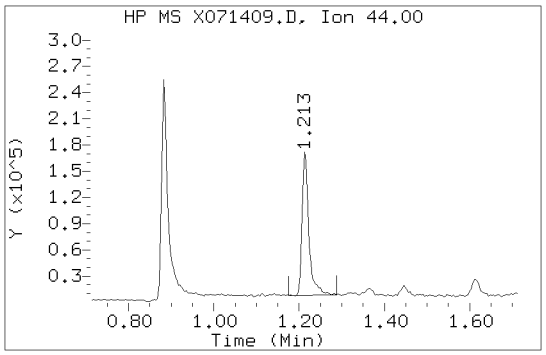

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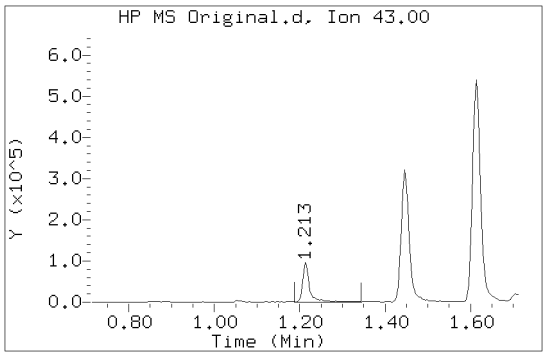

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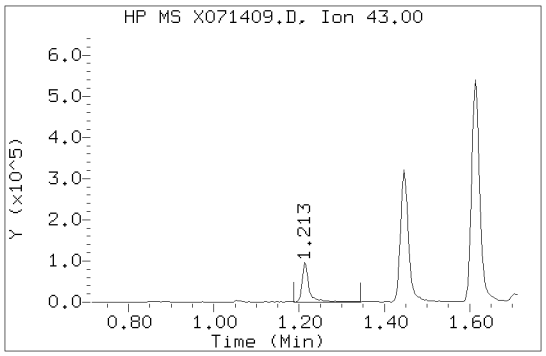

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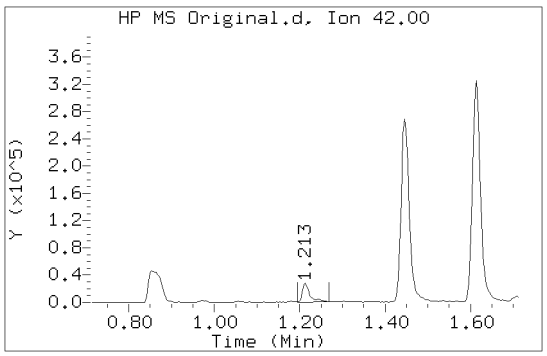

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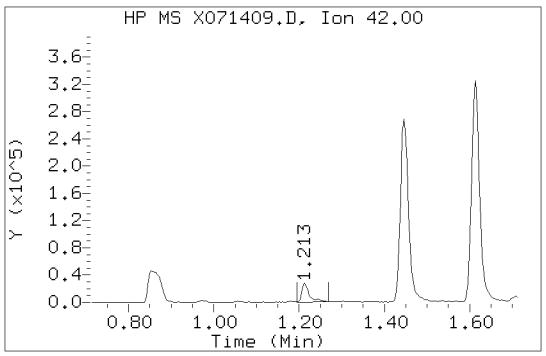

Isobutylene (115-11-7)

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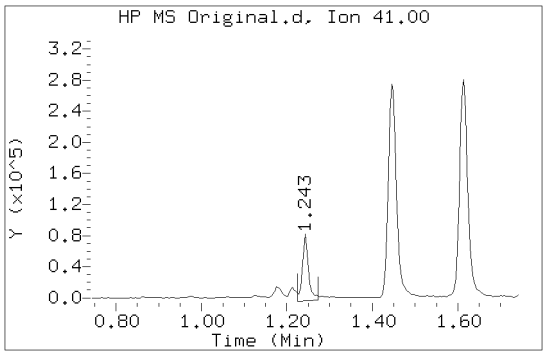

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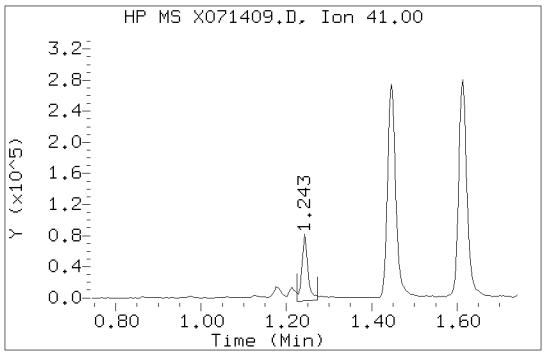

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LabSampID : VSTD100

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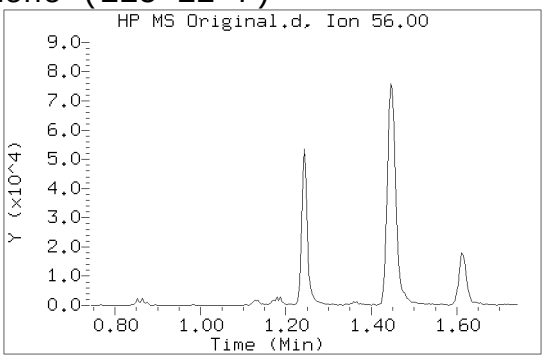

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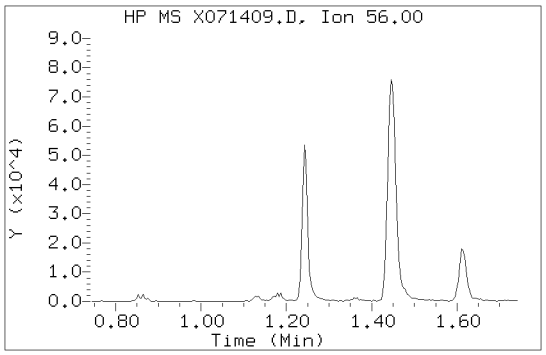

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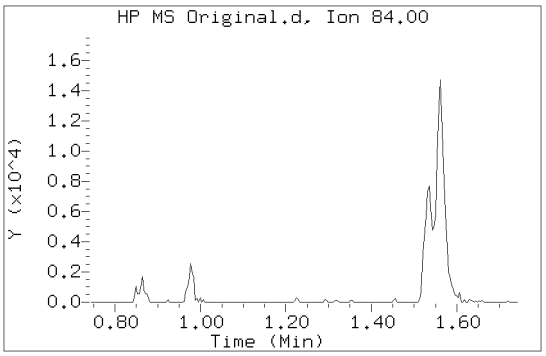

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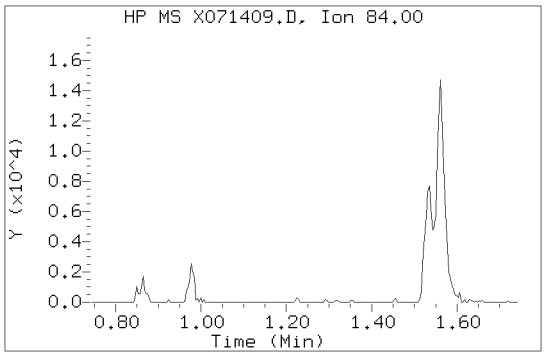

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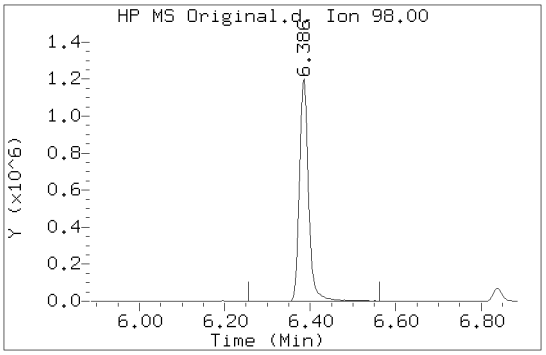

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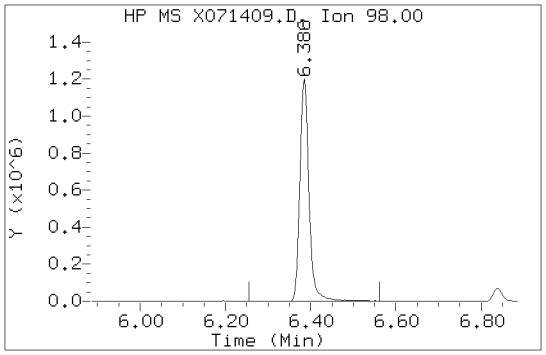

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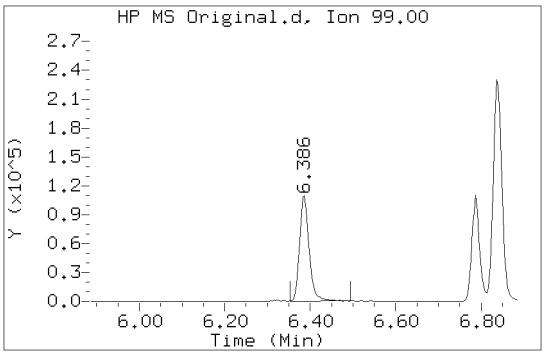

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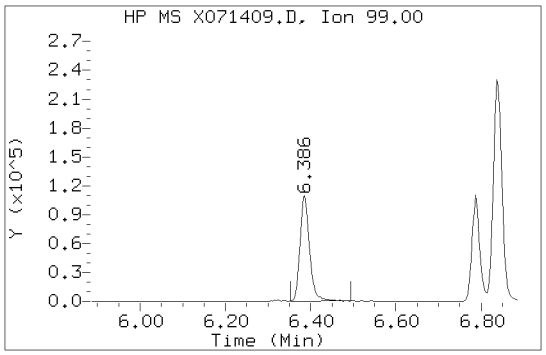

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Toluene-d8 (2037-26-5)

Reason Code:

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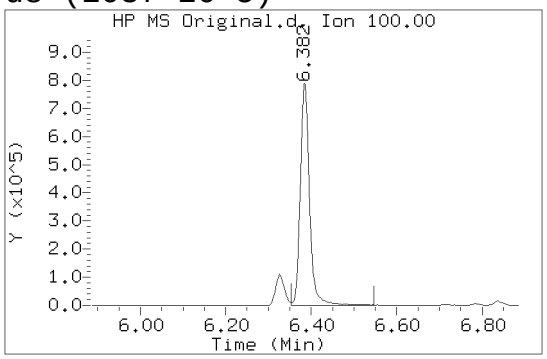

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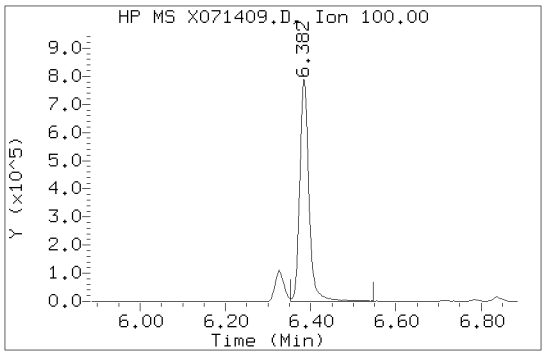

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Report Date: 20-Jul-2023 15:05

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071410.D
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Inj Date : 14-JUL-2023 15:05
Operator : PC Inst ID: voa6.i
Smp Info : VSTD150;VSTD150;1;9;
Misc Info : V6;WATER;0;1;
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Cal Date : 14-JUL-2023 14:44 Cal File: X071409.D
Als bottle: 11 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
*	1 Pentafluorobenzene	168	4.178	4.178	(1.000)	527810	50.0000	
	2 Dichlorodifluoromethane	85	0.976	0.976	(0.234)	822037	150.000	150.00
	3 Chloromethane	50	1.081	1.081	(0.259)	1286174	150.000	161.33
	4 Propionitrile	54	3.656	3.656	(0.875)	1601430	1500.00	1531.66
	5 Vinyl Chloride	62	1.145	1.145	(0.274)	1063794	150.000	155.75
	6 Bromomethane	94	1.336	1.336	(0.320)	469612	150.000	166.14
	7 Chloroethane	64	1.404	1.404	(0.336)	574620	150.000	147.37
	8 Trichlorofluoromethane	101	1.561	1.561	(0.374)	1133831	150.000	163.80
	9 Acrolein	56	1.861	1.861	(0.446)	60619	300.000	301.00(M)
	10 Acetone	43	1.973	1.973	(0.472)	616513	300.000	304.76
	11 1,1-Dichloroethene	96	1.913	1.913	(0.458)	592973	150.000	153.35
	12 Isobutyl Alcohol	43	4.676	4.676	(1.119)	3143464	3000.00	3141.89
	13 Acetonitrile	39	2.198	2.198	(0.526)	1116521	1500.00	1508.54
	14 Allyl Chloride	41	2.198	2.198	(0.526)	2479475	150.000	143.08
	15 Iodomethane	142	2.030	2.030	(0.486)	1666204	300.000	298.54
	16 Acrylonitrile	53	2.532	2.532	(0.606)	742882	300.000	288.83
	17 Methylene Chloride	84	2.303	2.303	(0.551)	679924	150.000	151.80
	18 Methyl tert-butyl ether	73	2.539	2.539	(0.608)	2090757	150.000	145.38
	19 Carbon Disulfide	76	2.071	2.071	(0.496)	3776842	300.000	310.72
	20 trans-1,2-Dichloroethene	96	2.528	2.528	(0.605)	652435	150.000	145.86

21 Vinyl Acetate	43	3.000	3.000 (0.718)	5593666	300.000	302.39
22 1,1-Dichloroethane	63	2.922	2.922 (0.699)	1431683	150.000	145.86

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	23 Chloroprene	53	1.771	1.771	(0.424)	369436	150.000	155.66
	24 2-Butanone	43	3.581	3.581	(0.857)	878521	300.000	312.55
	25 Methacrylonitrile	41	3.821	3.821	(0.915)	1065216	150.000	156.35(aM)
	26 2,2-Dichloropropane	77	3.507	3.507	(0.839)	1150093	150.000	150.52
	27 cis-1,2-Dichloroethene	96	3.522	3.522	(0.843)	837160	150.000	146.92
	28 Chloroform	83	3.904	3.904	(0.935)	1446796	150.000	144.05
	29 Bromochloromethane	128	3.791	3.791	(0.908)	457063	150.000	143.13
$	30 Dibromofluoromethane	113	4.099	4.099	(0.981)	719790	150.000	150.30
	31 1,1,1-Trichloroethane	97	4.080	4.080	(0.977)	1235806	150.000	159.84
	32 1,1-Dichloropropene	75	4.279	4.279	(0.862)	1058110	150.000	156.11
	33 1,2-Dichloroethane	62	4.552	4.552	(0.917)	1349536	150.000	147.53
	34 Carbon Tetrachloride	117	4.264	4.264	(0.859)	1056698	150.000	154.75(H)
$	35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	911155	150.000	151.87
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	830945	50.0000	
	37 Benzene	78	4.511	4.511	(0.909)	2966123	150.000	149.23
	38 Trichloroethene	130	5.205	5.205	(1.048)	855874	150.000	152.23
	39 Bromodichloromethane	83	5.726	5.726	(1.153)	1126828	150.000	148.01
	40 Methyl Methacrylate	41	5.606	5.606	(1.342)	952441	150.000	149.51
	41 2-Chloroethylvinyl ether	63	6.044	6.044	(1.217)	736745	300.000	316.95
	42 1,2-Dichloropropane	63	5.437	5.437	(1.095)	965373	150.000	151.04
	43 2-Nitropropane	43	5.969	5.969	(1.429)	327090	150.000	155.99
	44 Dibromomethane	93	5.550	5.550	(1.118)	514778	150.000	142.29
	45 4-Methyl-2-Pentanone	43	6.325	6.325	(0.825)	2236545	300.000	293.85
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	1331094	150.000	152.22
*	47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	773431	50.0000	
$	48 Toluene-d8	98	6.385	6.385	(0.833)	2609088	150.000	131.02(M)
	49 Ethyl Methacrylate	69	6.715	6.715	(1.353)	829910	150.000	152.50
	50 Toluene	91	6.442	6.442	(0.840)	3226930	150.000	154.99
	51 trans-1,3-Dichloropropene	75	6.678	6.678	(1.345)	1129301	150.000	153.20
	52 2-Hexanone	43	7.086	7.086	(0.924)	1502232	300.000	300.46
	53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	629049	150.000	142.43
	54 1,3-Dichloropropane	76	6.978	6.978	(0.910)	1287243	150.000	142.66
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	978359	150.000	153.44
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	682053	150.000	158.57
	57 1,2-Dibromoethane	107	7.255	7.255	(0.946)	707106	150.000	140.10
	58 1-Chlorohexane	55	7.694	7.694	(1.550)	1016479	150.000	152.26
	59 Chlorobenzene	112	7.690	7.690	(1.003)	2169037	150.000	149.03
	60 1,1,1,2-Tetrachloroethane	131	7.772	7.772	(1.014)	874873	150.000	153.55
	61 Ethylbenzene	106	7.795	7.795	(1.017)	1121097	150.000	153.61
	62 m,p-Xylenes	106	7.900	7.900	(1.030)	2832546	300.000	309.38
	63 o-Xylene	106	8.237	8.237	(1.074)	1332457	150.000	153.68
	64 Styrene	104	8.256	8.256	(1.077)	2314702	150.000	153.05
	66 Bromoform	173	8.406	8.406	(1.096)	644372	150.000	157.51
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	3517587	150.000	157.83
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	1039682	150.000	143.99
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	1135204	150.000	148.24
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	429875	50.0000	
	71 1,2,3-Trichloropropane	75	8.860	8.860	(0.917)	832853	150.000	145.35(M)
	72 trans-1,4-Dichloro-2-butene	53	8.886	8.886	(1.159)	389558	150.000	165.60
	73 n-Propylbenzene	91	8.908	8.908	(0.922)	4183180	150.000	161.03
	74 Bromobenzene	156	8.803	8.803	(0.911)	988462	150.000	147.02
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	3151476	150.000	161.94

76	2-Chlorotoluene	91	8.972	8.972 (0.929)	2593717	150.000	148.01
77	4-Chlorotoluene	91	9.066	9.066 (0.938)	3011546	150.000	156.39

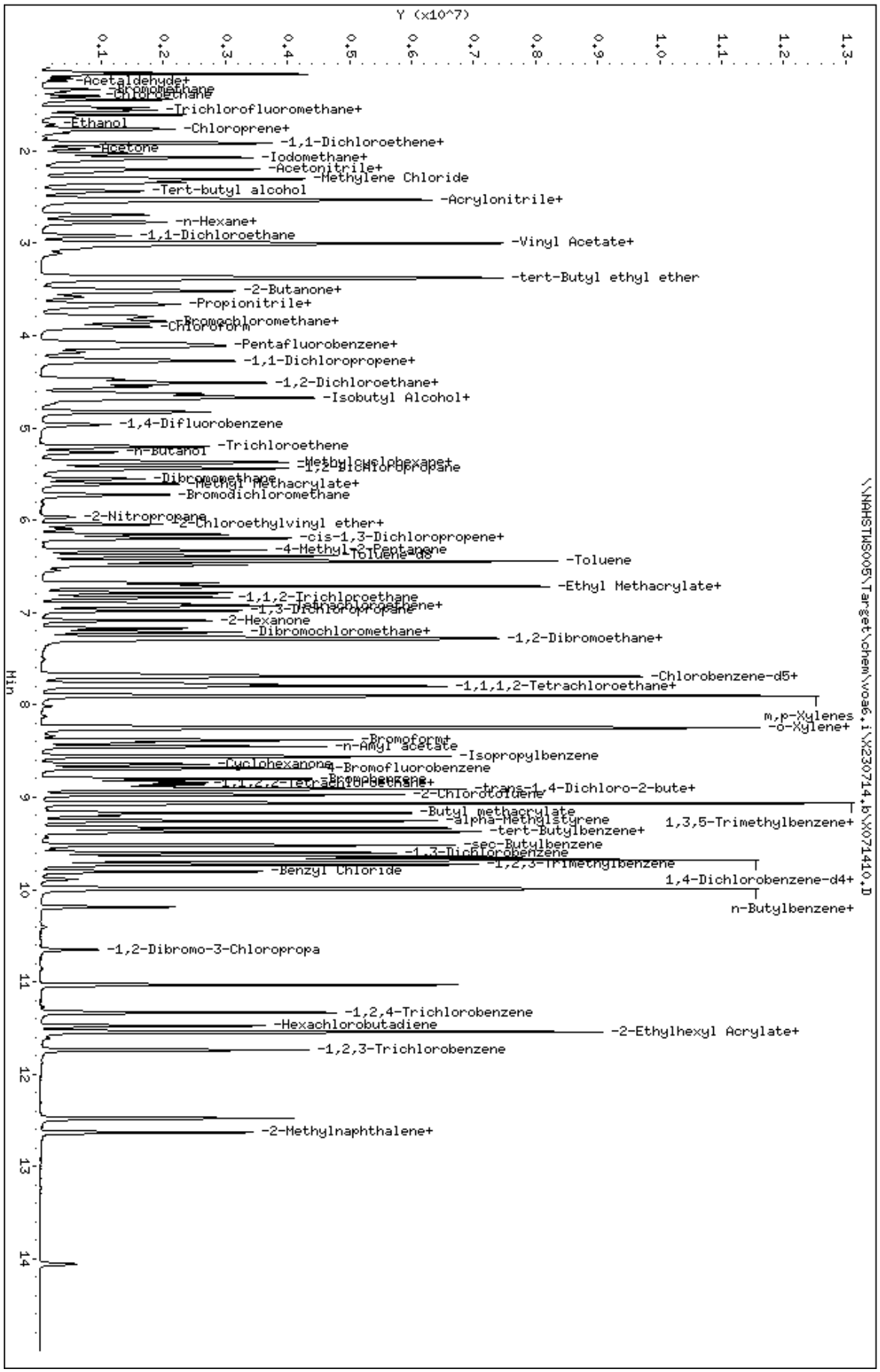
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
78	tert-Butylbenzene	119	9.336	9.336	(0.966)	2639400	150.000	158.15
79	1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	3108890	150.000	159.30
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	3705100	150.000	166.56
82	p-Isopropyltoluene	119	9.647	9.647	(0.998)	3332963	150.000	164.02
83	1,3-Dichlorobenzene	146	9.602	9.602	(0.994)	1820441	150.000	155.43
84	1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	1873658	150.000	145.90
86	Benzyl Chloride	91	9.804	9.804	(1.279)	2041719	150.000	150.20
87	n-Butylbenzene	91	9.992	9.992	(1.034)	2930740	150.000	172.20
88	1,2-Dichlorobenzene	146	9.988	9.988	(1.034)	1771825	150.000	153.87
89	1,2-Dibromo-3-Chloropropane	155	10.651	10.651	(1.102)	181917	150.000	151.02
90	1,2,4-Trichlorobenzene	180	11.334	11.334	(1.173)	1234851	150.000	156.14
91	Hexachlorobutadiene	225	11.476	11.476	(1.188)	564457	150.000	149.95
92	Naphthalene	128	11.536	11.536	(1.194)	2932468	150.000	149.81(H)
93	1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	1112132	150.000	150.36
146	Methyl acetate	43	2.228	2.228	(0.533)	681317	150.000	145.04
138	Freon TF	101	1.917	1.917	(0.459)	606555	150.000	111.66
141	Cyclohexane	56	4.118	4.118	(0.986)	1542802	150.000	168.63
142	Tetrahydrofuran	42	3.851	3.851	(0.922)	399301	300.000	294.06
147	Methylcyclohexane	55	5.377	5.377	(1.083)	2810624	150.000	160.25(A)
135	1,4-Dioxane	88	5.602	5.602	(1.341)	190045	3000.00	3030.04
132	n-Butanol	56	5.261	5.261	(1.259)	615802	3000.00	3504.76
131	Methyl Acrylate	55	3.690	3.690	(0.883)	1248423	150.000	174.00
133	Ethyl Acrylate	55	5.377	5.377	(1.287)	2810624	150.000	160.67
136	n-Hexane	57	2.772	2.772	(0.664)	1037045	150.000	105.54
139	Diethyl ether	59	1.756	1.756	(0.420)	707615	150.000	143.77
148	Tert-butyl alcohol	59	2.438	2.438	(0.584)	1892876	3000.00	2841.43
149	Isopropyl alcohol	45	2.097	2.097	(0.502)	1176234	3000.00	2845.54
156	Diisopropyl ether	45	3.004	3.004	(0.719)	3254817	150.000	149.61
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	3200479	150.000	161.06
167	Ethanol	45	1.711	1.711	(0.410)	220615	3000.00	3026.01
172	tert-Butyl formate	59	4.631	4.631	(1.109)	1704396	300.000	302.29(A)
173	3,3-Dimethyl-1-butanol	57	7.289	7.289	(0.951)	2433401	3000.00	2925.50
174	tert-Amyl methyl ether	73	4.669	4.669	(1.118)	2611847	150.000	150.42(M)
175	tert-Butyl ethyl ether	59	3.383	3.383	(0.810)	3273017	150.000	146.47
176	tert-Amyl alcohol	59	4.631	4.631	(1.109)	1704396	3000.00	2955.95
151	4-Methyl-2-pentanol	45	6.715	6.715	(1.353)	5221709	3000.00	2932.29
180	1-Methylnaphthalene	142	12.631	12.631	(1.307)	1346422	150.000	(a)
140	1,3-Butadiene	54	1.167	1.167	(0.280)	1064415	150.000	156.94
152	Amyl alcohol	42	6.903	6.903	(0.900)	729736	3000.00	3280.90
158	Dichlorofluoromethane	67	1.531	1.531	(0.367)	1246213	150.000	146.54
159	Propylene oxide	43	1.805	1.805	(0.432)	172752	300.000	266.78
161	3-Methyl-1-butanol	55	6.903	6.903	(0.900)	658666	3000.00	3459.04
162	Butyl acrylate	55	8.249	8.249	(1.076)	2429512	150.000	165.11
163	Butyl methacrylate	41	9.167	9.167	(0.949)	1571014	150.000	152.57
164	Dicyclopentadiene	66	9.684	9.684	(1.002)	3894938	150.000	157.29(H)
182	Epichlorohydrin	57	6.093	6.093	(1.227)	380786	600.000	613.50
M 94	1,2-Dichloroethylene (total)	96				1489595	300.000	(a)
145	alpha-Methylstyrene	118	9.257	9.257	(0.958)	1478505	150.000	157.64
130	Ethyl Acetate	43	3.660	3.660	(0.876)	1137763	150.000	145.13
134	Cyclohexanone	55	8.642	8.642	(0.894)	1027116	3000.00	2683.87
185	Isoprene	39	1.771	1.771	(0.424)	269460	150.000	154.87
188	Isopropyl acetate	43	4.676	4.676	(0.942)	3143464	150.000	143.47

187 n-Amyl acetate	43	8.451	8.451 (1.102)	2118647	150.000	149.46
189 n-Butyl acetate	43	7.210	7.210 (0.940)	1862306	150.000	157.09(H)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
150 Allyl alcohol	57	2.772	2.772	(0.664)	1037045	3000.00	2106.54
194 Acetaldehyde	44	1.212	1.212	(0.290)	265471	600.000	601.40(M)
195 Methyl Amyl Ketone	43	8.380	8.380	(1.093)	2526261	150.000	156.27
200 Dimethyl Disulfide	94	6.194	6.194	(0.808)	1709034	150.000	163.81
202 Isobutylene	41	1.242	1.242	(0.297)	129814	150.000	148.75(M)
205 2-Ethylhexyl Acrylate	55	11.544	11.544	(1.195)	1882332	150.000	171.43

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
exceeded maximum amount.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.



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Client ID: VSTD150
Sample Info: VSTD150;VSTD150;1;9;
Purge Volume: 5.0
Column phase: DB624

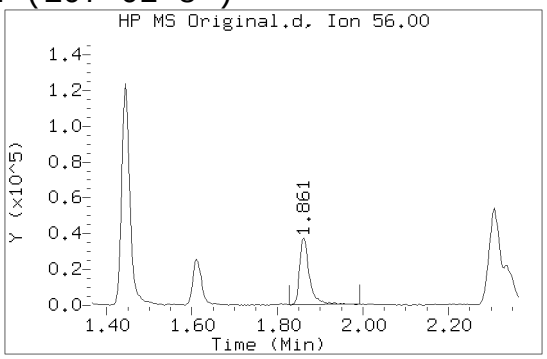
Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071410.D
Inj Date : 14-JUL-2023 15:05
InstruID : voa6.i
LabSampID : VSTD150

Acrolein (107-02-8)

Reason Code:

BEFORE
MASS
56
AREA
60619
HEIGHT
37327
20-Jul-2023
15:04
linh
pham



AFTER
MASS
56
AREA
60619
HEIGHT
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20-Jul-2023
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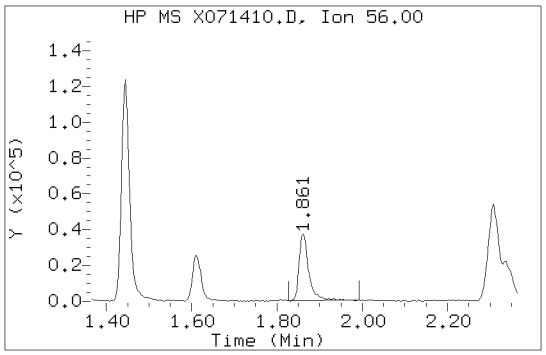
linh
pham



BEFORE
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45945
HEIGHT
31957
20-Jul-2023
15:04
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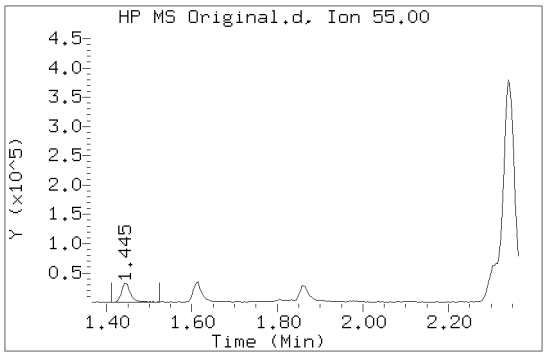
pham



AFTER
MASS
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20-Jul-2023
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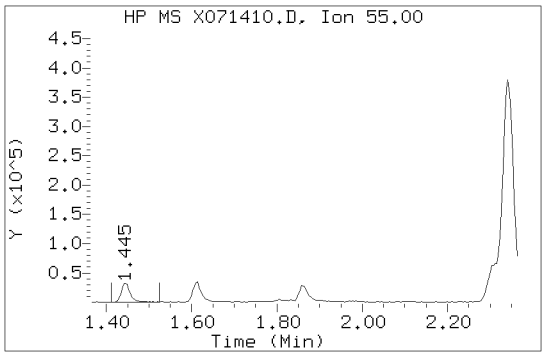
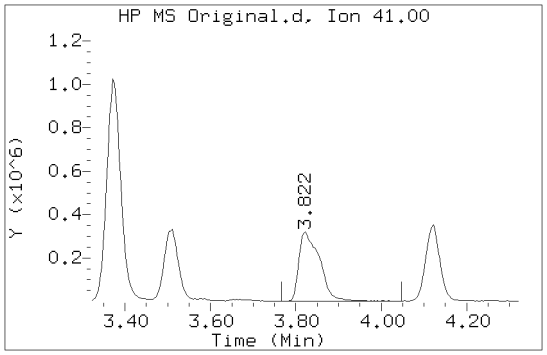


Methacrylonitrile (126-98-7)

Reason Code:

BEFORE
MASS
41
AREA
1065216
HEIGHT
318629
20-Jul-2023
15:04
linh
pham



AFTER
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20-Jul-2023
15:04
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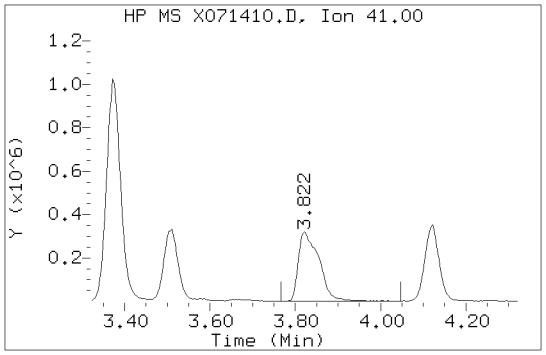
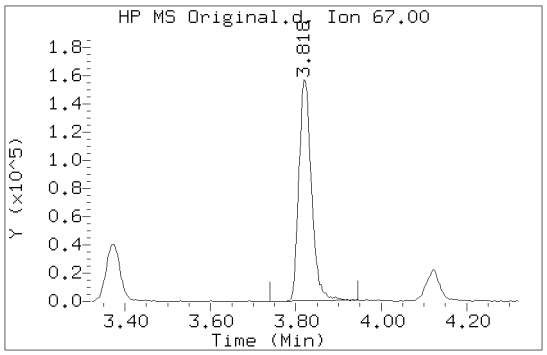


BEFORE
MASS
67
AREA
327199
HEIGHT
157063
20-Jul-2023
15:04
linh
pham



AFTER
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HEIGHT
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20-Jul-2023
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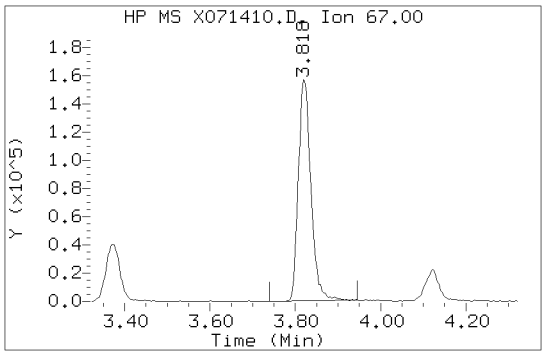

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Inj Date : 14-JUL-2023 15:05
InstruID : voa6.i
LabSampID : VSTD150

Methacrylonitrile (126-98-7)

Reason Code:

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AREA
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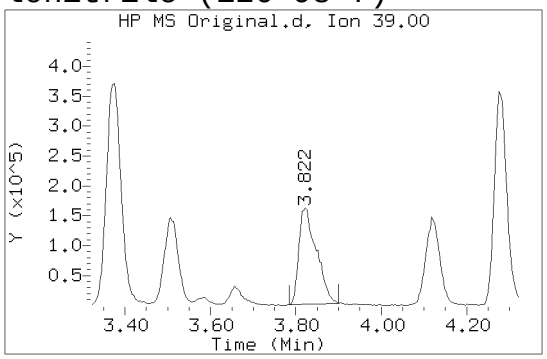
HEIGHT
161606
20-Jul-2023
15:04
linh
pham



AFTER

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20-Jul-2023
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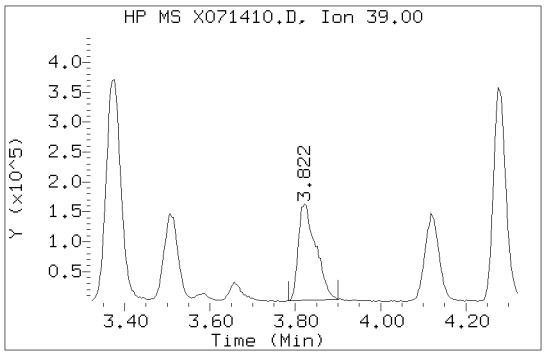

1,2,3-Trichloropropane (96-18-4)

Reason Code:

BEFORE

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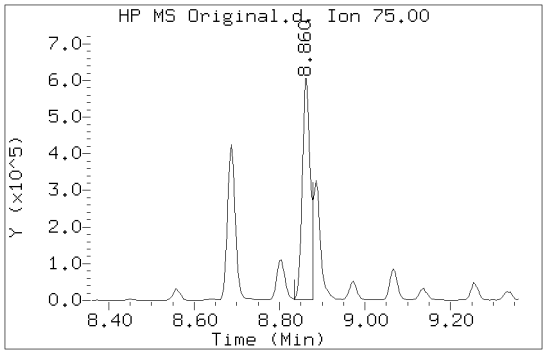
75
AREA
832853
HEIGHT
603944
20-Jul-2023
15:04
linh
pham



AFTER

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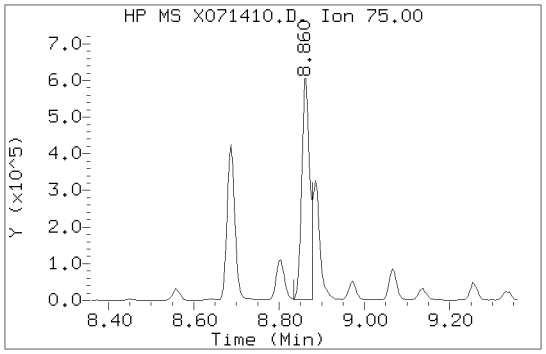

BEFORE

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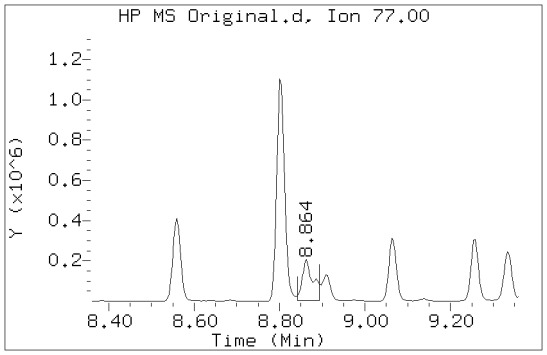
77
AREA
366391
HEIGHT
202553
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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AREA
366391
HEIGHT
202553
20-Jul-2023
15:04
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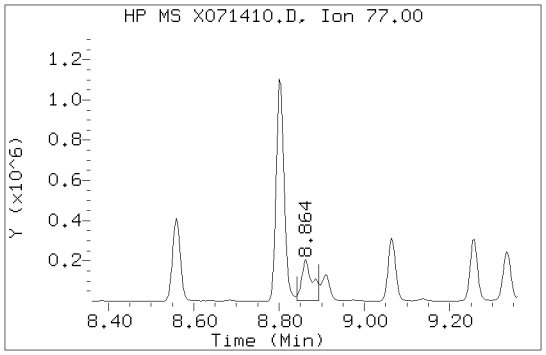
pham

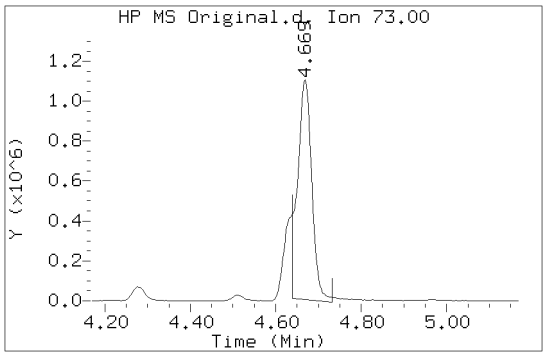


tert-Amyl methyl ether (974-05-08)

Reason Code:

BEFORE

MASS
73
AREA
2611847
HEIGHT
1100641
20-Jul-2023
15:04
linh
pham



AFTER

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HEIGHT
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20-Jul-2023
15:04
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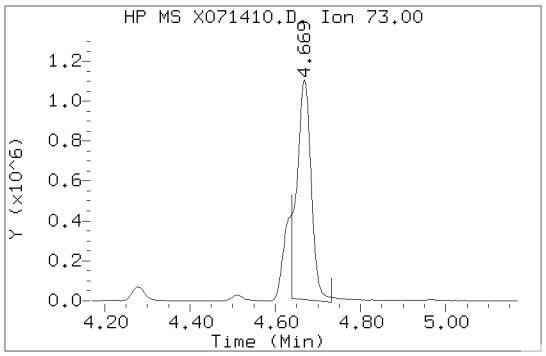

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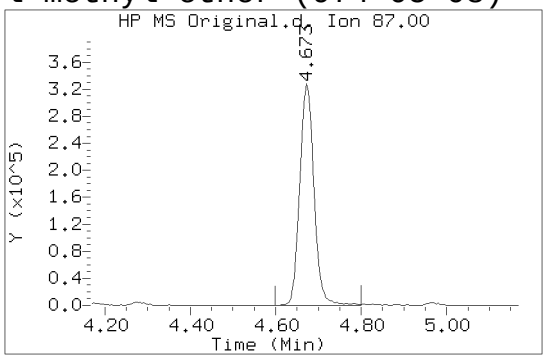
Inj Date : 14-JUL-2023 15:05
InstruID : voa6.i
LabSampID : VSTD150

tert-Amyl methyl ether (974-05-08)

BEFORE

MASS
87
AREA
775395
HEIGHT
328192
20-Jul-2023
15:04
linh
pham



BEFORE

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AREA
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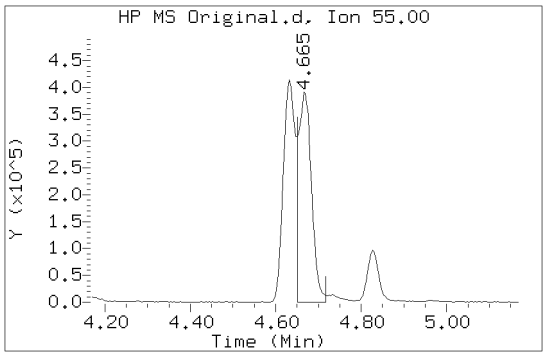
HEIGHT
391260
20-Jul-2023
15:04
linh
pham



Reason Code:

AFTER

MASS
87
AREA
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HEIGHT
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20-Jul-2023
15:04
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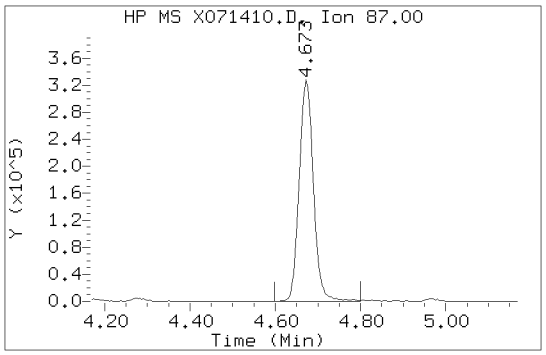

AFTER

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HEIGHT
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20-Jul-2023
15:04
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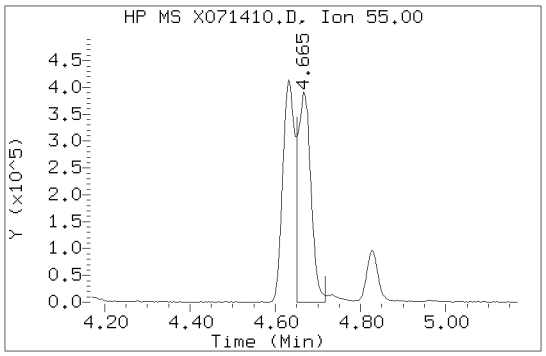

Acetaldehyde (75-07-0)

BEFORE

MASS
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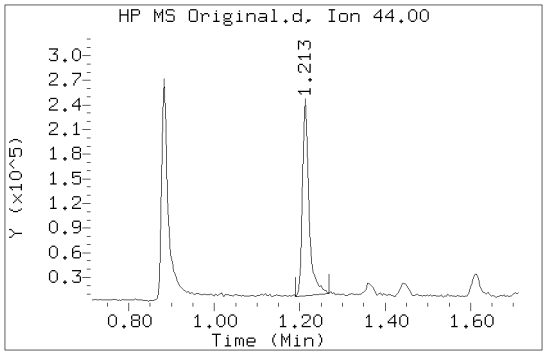
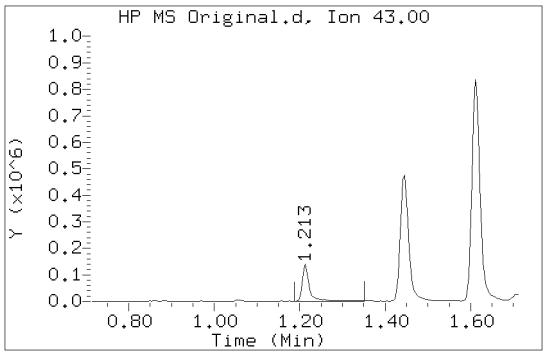
AREA
265471
HEIGHT
240024
20-Jul-2023
15:04
linh
pham



BEFORE

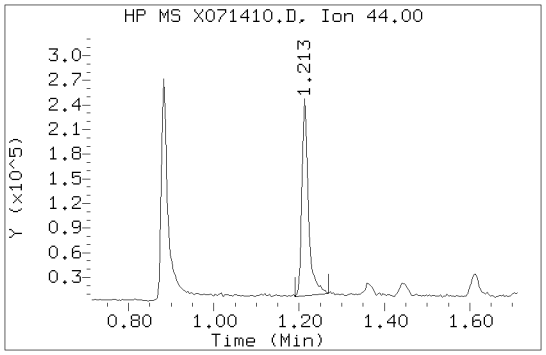
MASS
43
AREA
162116
HEIGHT
140408
20-Jul-2023
15:04
linh
pham



Reason Code:

AFTER

MASS
44
AREA
265471
HEIGHT
240024
20-Jul-2023
15:04
linh
pham



AFTER

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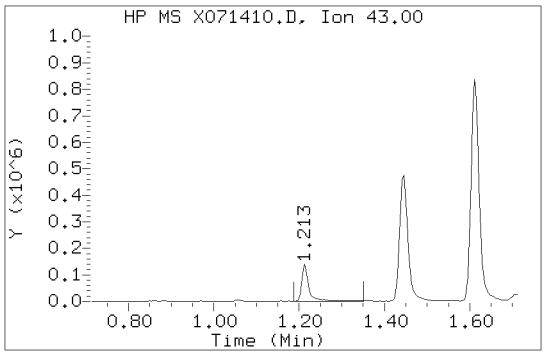
HEIGHT
140408
20-Jul-2023
15:04
linh
pham



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Inj Date : 14-JUL-2023 15:05
InstruID : voa6.i
LabSampID : VSTD150

Acetaldehyde (75-07-0)

Reason Code:

BEFORE

MASS
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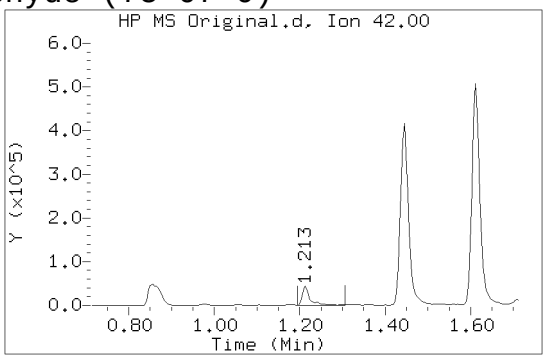
AREA
53628
HEIGHT
42843
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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HEIGHT
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20-Jul-2023
15:04
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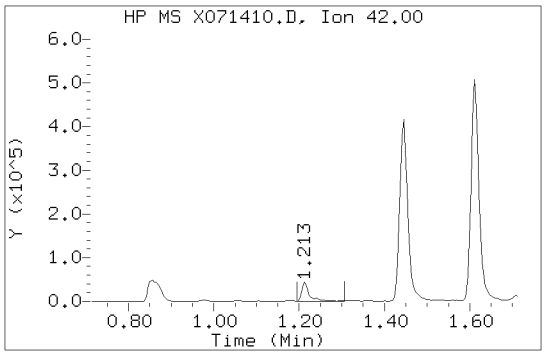

Isobutylene (115-11-7)

Reason Code:

BEFORE

MASS
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AREA
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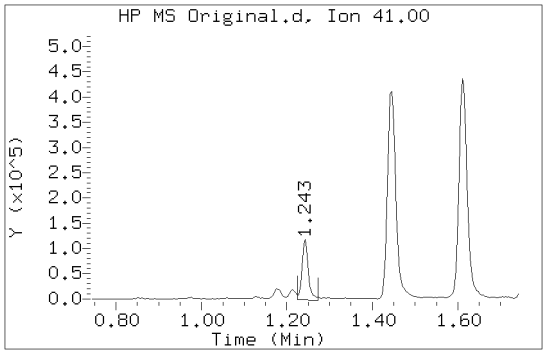
HEIGHT
120099
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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HEIGHT
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20-Jul-2023
15:04
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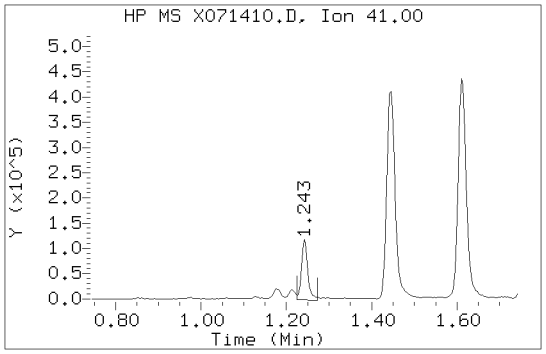

BEFORE

MASS
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AREA
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HEIGHT
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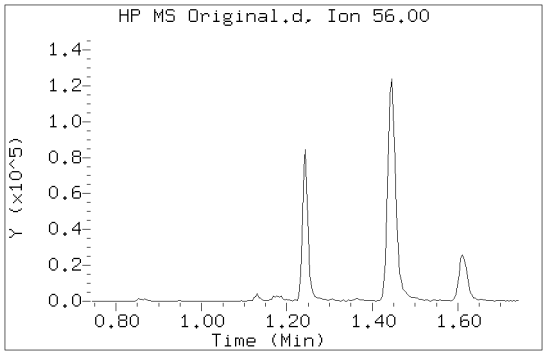
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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AREA
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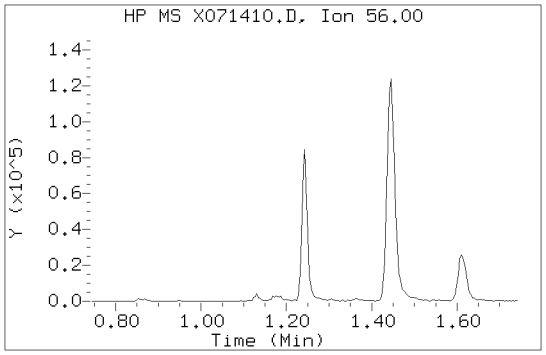
HEIGHT
0
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
84
AREA
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HEIGHT
0
20-Jul-2023
15:04
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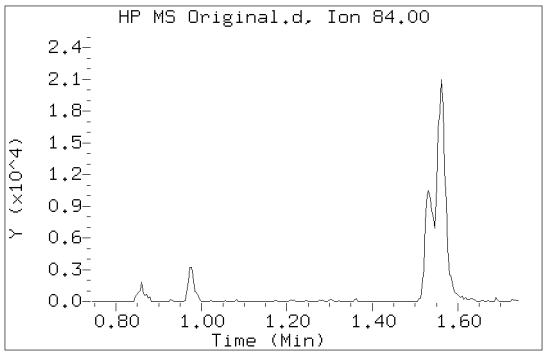

AFTER

MASS
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15:04
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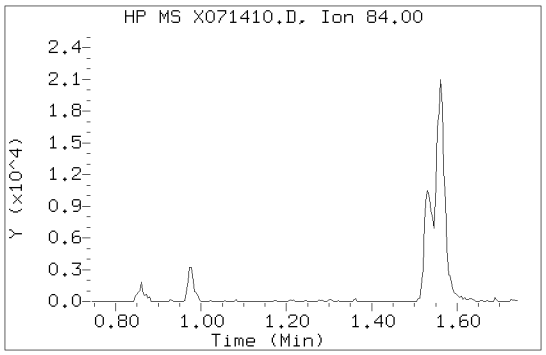

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Inj Date : 14-JUL-2023 15:05
InstruID : voa6.i
LabSampID : VSTD150

Toluene-d8 (2037-26-5)

Reason Code:

BEFORE
MASS
98
AREA
2609088
HEIGHT
1726183
20-Jul-2023
15:04
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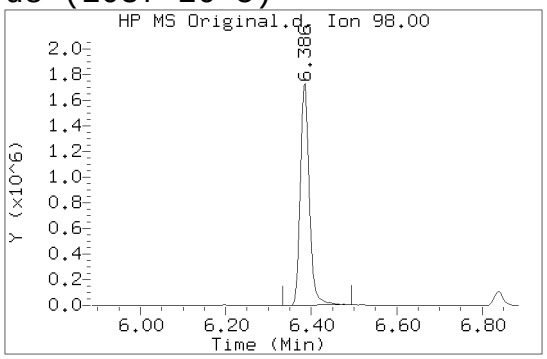

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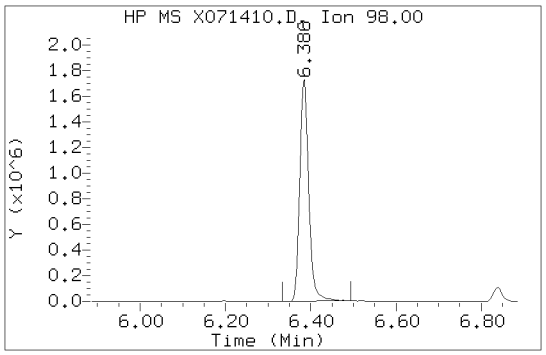

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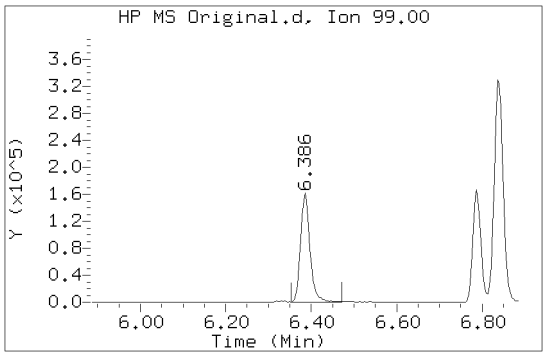

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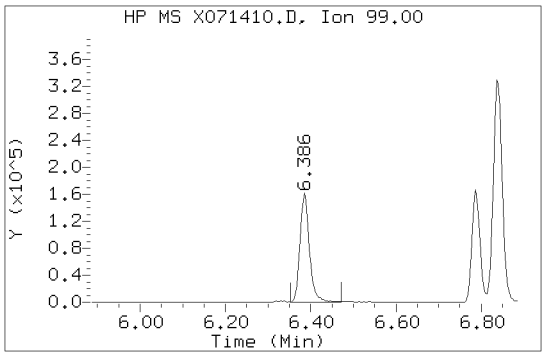

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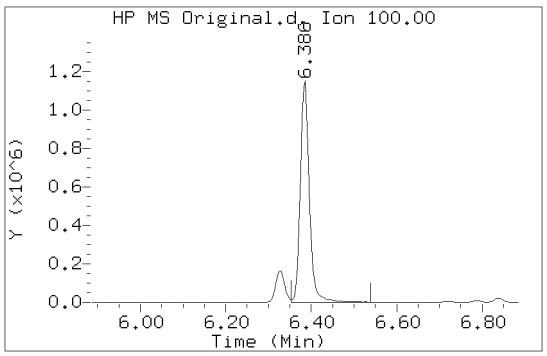

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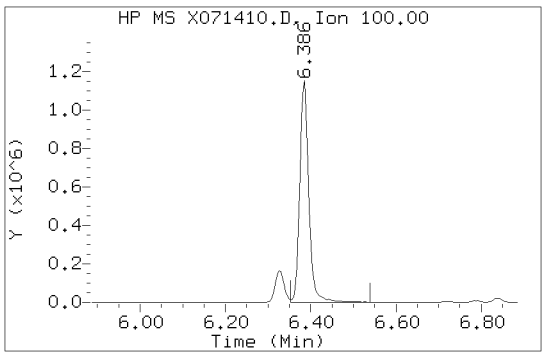

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Report Date: 20-Jul-2023 15:05

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071411.D
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Inj Date : 14-JUL-2023 15:25
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Smp Info : VSTD200;VSTD200;1;10;
Misc Info : V6;WATER;0;1;
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Als bottle: 12 Calibration Sample, Level: 10
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	4.181	4.181	(1.000)	537032	50.0000	
	2 Dichlorodifluoromethane	85	0.976	0.976	(0.234)	1105119	200.000	197.85
	3 Chloromethane	50	1.081	1.081	(0.259)	1771073	200.000	218.34(A)
	4 Propionitrile	54	3.660	3.660	(0.875)	2109183	2000.00	1982.65
	5 Vinyl Chloride	62	1.145	1.145	(0.274)	1416013	200.000	203.75(A)
	6 Bromomethane	94	1.332	1.332	(0.319)	617046	200.000	214.56(A)
	7 Chloroethane	64	1.400	1.400	(0.335)	747413	200.000	188.39
	8 Trichlorofluoromethane	101	1.561	1.561	(0.373)	1509581	200.000	214.34(A)
	9 Acrolein	56	1.857	1.857	(0.444)	82636	400.000	402.90(AM)
	10 Acetone	43	1.973	1.973	(0.472)	806431	400.000	393.20
	11 1,1-Dichloroethene	96	1.913	1.913	(0.458)	797906	200.000	202.80(A)
	12 Isobutyl Alcohol	43	4.680	4.680	(1.119)	4072757	4000.00	4000.82(A)
	13 Acetonitrile	39	2.198	2.198	(0.526)	1461877	2000.00	1941.23
	14 Allyl Chloride	41	2.198	2.198	(0.526)	3258545	200.000	184.81
	15 Iodomethane	142	2.029	2.029	(0.485)	2365259	400.000	399.51
	16 Acrylonitrile	53	2.535	2.535	(0.606)	973671	400.000	372.06
	17 Methylene Chloride	84	2.303	2.303	(0.551)	893552	200.000	196.48
	18 Methyl tert-butyl ether	73	2.535	2.535	(0.606)	2728667	200.000	186.48
	19 Carbon Disulfide	76	2.071	2.071	(0.495)	5098731	400.000	412.27(A)
	20 trans-1,2-Dichloroethene	96	2.528	2.528	(0.605)	885590	200.000	194.59

21 Vinyl Acetate	43	3.000	3.000 (0.718)	7496591	400.000	398.30
22 1,1-Dichloroethane	63	2.922	2.922 (0.699)	1905438	200.000	190.79

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	23 Chloroprene	53	1.771	1.771	(0.424)	498457	200.000	206.42(A)
	24 2-Butanone	43	3.581	3.581	(0.857)	1209313	400.000	422.85(A)
	25 Methacrylonitrile	41	3.818	3.818	(0.913)	1405724	200.000	202.79(aA)
	26 2,2-Dichloropropane	77	3.506	3.506	(0.839)	1535535	200.000	197.45
	27 cis-1,2-Dichloroethene	96	3.521	3.521	(0.842)	1110625	200.000	191.56
	28 Chloroform	83	3.904	3.904	(0.934)	1909053	200.000	186.82
	29 Bromochloromethane	128	3.791	3.791	(0.907)	607870	200.000	187.09
$	30 Dibromofluoromethane	113	4.099	4.099	(0.980)	959895	200.000	197.23
	31 1,1,1-Trichloroethane	97	4.080	4.080	(0.976)	1657906	200.000	210.76(A)
	32 1,1-Dichloropropene	75	4.279	4.279	(0.862)	1408668	200.000	209.46(A)
	33 1,2-Dichloroethane	62	4.552	4.552	(0.917)	1793850	200.000	197.64
	34 Carbon Tetrachloride	117	4.260	4.260	(0.858)	1394099	200.000	205.76(AH)
$	35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.069)	1203985	200.000	197.42
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	824484	50.0000	
	37 Benzene	78	4.511	4.511	(0.909)	3956301	200.000	200.61(A)
	38 Trichloroethene	130	5.205	5.205	(1.048)	1148728	200.000	205.93(A)
	39 Bromodichloromethane	83	5.722	5.722	(1.153)	1517659	200.000	200.91(A)
	40 Methyl Methacrylate	41	5.606	5.606	(1.341)	1251379	200.000	193.06
	41 2-Chloroethylvinyl ether	63	6.048	6.048	(1.218)	991998	400.000	430.11(A)
	42 1,2-Dichloropropane	63	5.437	5.437	(1.095)	1286655	200.000	202.89(A)
	43 2-Nitropropane	43	5.969	5.969	(1.428)	436967	200.000	204.81(A)
	44 Dibromomethane	93	5.549	5.549	(1.118)	688009	200.000	191.66
	45 4-Methyl-2-Pentanone	43	6.325	6.325	(0.825)	3017637	400.000	395.46
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	1783083	200.000	205.51(A)
*	47 Chlorobenzene-d5	117	7.667	7.667	(1.000)	775428	50.0000	
$	48 Toluene-d8	98	6.385	6.385	(0.833)	3447548	200.000	172.68(M)
	49 Ethyl Methacrylate	69	6.719	6.719	(1.353)	1128954	200.000	209.07
	50 Toluene	91	6.445	6.445	(0.841)	4312229	200.000	206.58(A)
	51 trans-1,3-Dichloropropene	75	6.678	6.678	(1.345)	1544556	200.000	211.18(A)
	52 2-Hexanone	43	7.086	7.086	(0.924)	2017738	400.000	402.53(A)
	53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	846183	200.000	191.10
	54 1,3-Dichloropropane	76	6.981	6.981	(0.911)	1733058	200.000	191.57
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	1320761	200.000	206.61(A)
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	902535	200.000	209.29(A)
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	964928	200.000	190.69
	58 1-Chlorohexane	55	7.694	7.694	(1.550)	1371878	200.000	207.11(A)
	59 Chlorobenzene	112	7.690	7.690	(1.003)	2926240	200.000	200.54(A)
	60 1,1,1,2-Tetrachloroethane	131	7.772	7.772	(1.014)	1173596	200.000	205.45(A)
	61 Ethylbenzene	106	7.799	7.799	(1.017)	1505552	200.000	205.76(A)
	62 m,p-Xylenes	106	7.900	7.900	(1.030)	3831125	400.000	417.37(A)
	63 o-Xylene	106	8.241	8.241	(1.075)	1805494	200.000	207.70(A)
	64 Styrene	104	8.256	8.256	(1.077)	3136788	200.000	206.88(A)
	66 Bromoform	173	8.406	8.406	(1.096)	880696	200.000	214.73(A)
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	4823863	200.000	215.89(A)
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	1401164	200.000	192.48
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	1538168	200.000	200.50(A)
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	433375	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	1119387	200.000	193.78(M)
	72 trans-1,4-Dichloro-2-butene	53	8.886	8.886	(1.159)	524884	200.000	222.56(A)
	73 n-Propylbenzene	91	8.912	8.912	(0.922)	5714404	200.000	218.20(A)
	74 Bromobenzene	156	8.803	8.803	(0.911)	1365207	200.000	201.42(A)
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	4273312	200.000	217.81(A)

76	2-Chlorotoluene	91	8.972	8.972 (0.929)	3520653	200.000	199.28
77	4-Chlorotoluene	91	9.069	9.069 (0.939)	4116709	200.000	212.06(A)

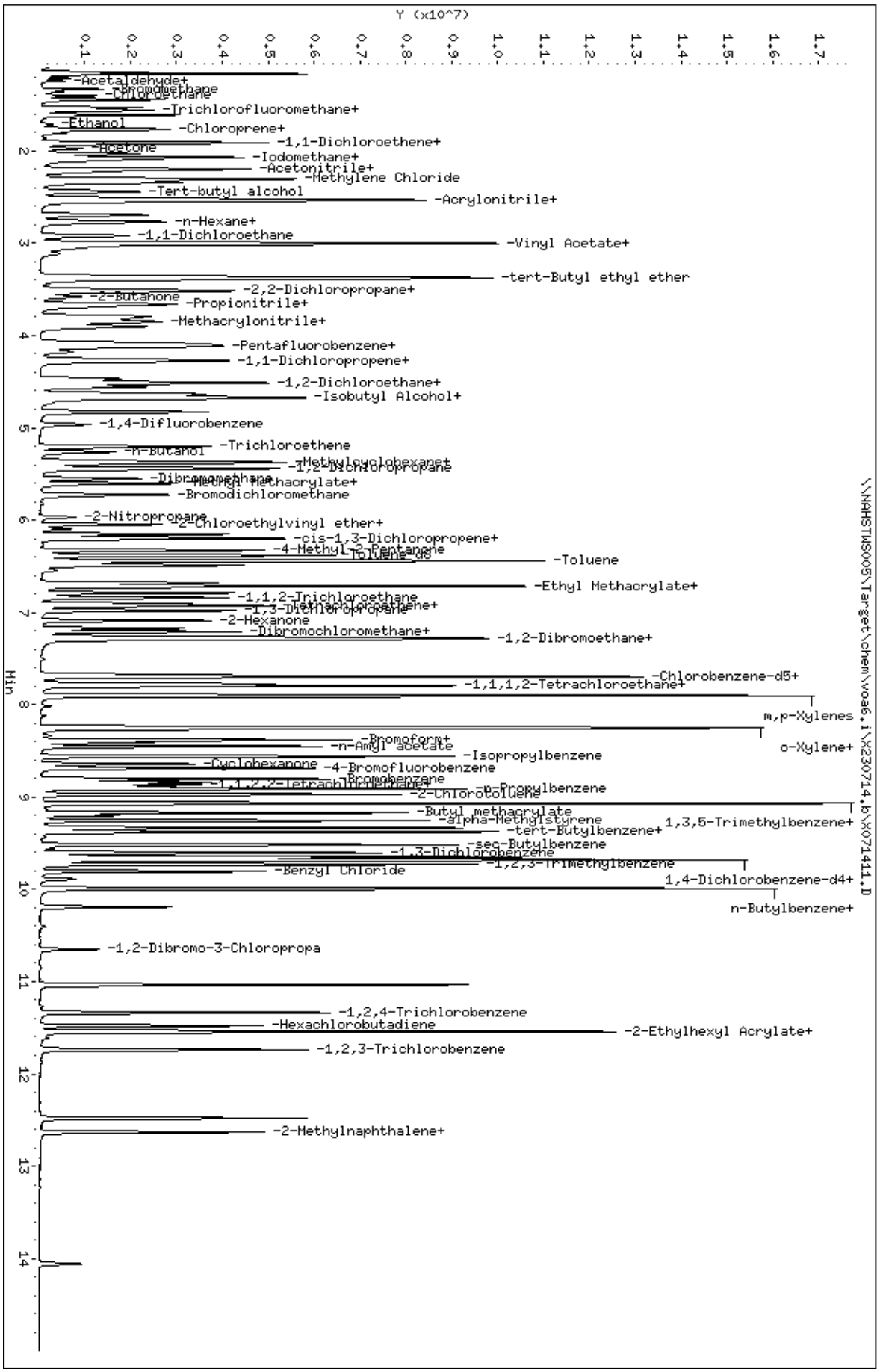
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
78	tert-Butylbenzene	119	9.336	9.336	(0.966)	3564918	200.000	211.88(A)
79	1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	4248690	200.000	215.95(A)
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	4998963	200.000	222.91(A)
82	p-Isopropyltoluene	119	9.647	9.647	(0.998)	4531097	200.000	221.18(A)
83	1,3-Dichlorobenzene	146	9.602	9.602	(0.994)	2443663	200.000	206.95(A)
84	1,4-Dichlorobenzene	146	9.680	9.680	(1.002)	2568367	200.000	198.39
86	Benzyl Chloride	91	9.804	9.804	(1.279)	2751633	200.000	201.10(A)
87	n-Butylbenzene	91	9.992	9.992	(1.034)	3988441	200.000	232.46(A)
88	1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	2403758	200.000	207.07(A)
89	1,2-Dibromo-3-Chloropropane	155	10.651	10.651	(1.102)	242707	200.000	199.51
90	1,2,4-Trichlorobenzene	180	11.334	11.334	(1.173)	1693827	200.000	212.44(A)
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	760294	200.000	199.55
92	Naphthalene	128	11.536	11.536	(1.194)	4036891	200.000	204.57(AH)
93	1,2,3-Trichlorobenzene	180	11.738	11.738	(1.215)	1513592	200.000	202.99(A)
146	Methyl acetate	43	2.228	2.228	(0.533)	902568	200.000	188.84
138	Freon TF	101	1.917	1.917	(0.459)	815067	200.000	103.34
141	Cyclohexane	56	4.117	4.117	(0.985)	2078176	200.000	223.25(A)
142	Tetrahydrofuran	42	3.851	3.851	(0.921)	520211	400.000	376.52
147	Methylcyclohexane	55	5.381	5.381	(1.084)	3760283	200.000	216.07(A)
135	1,4-Dioxane	88	5.602	5.602	(1.340)	258483	4000.00	4050.44(A)
132	n-Butanol	56	5.261	5.261	(1.258)	850812	4000.00	4759.14(A)
131	Methyl Acrylate	55	3.686	3.686	(0.882)	1635344	200.000	224.02(A)
133	Ethyl Acrylate	55	5.381	5.381	(1.287)	3760283	200.000	211.27(A)
136	n-Hexane	57	2.768	2.768	(0.662)	1402092	200.000	83.16
139	Diethyl ether	59	1.760	1.760	(0.421)	924117	200.000	184.53
148	Tert-butyl alcohol	59	2.442	2.442	(0.584)	2546793	4000.00	3757.39
149	Isopropyl alcohol	45	2.101	2.101	(0.502)	1585037	4000.00	3768.67
156	Diisopropyl ether	45	3.008	3.008	(0.719)	4204307	200.000	189.94
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	4285563	200.000	213.92(A)
167	Ethanol	45	1.711	1.711	(0.409)	291912	4000.00	3940.79
172	tert-Butyl formate	59	4.635	4.635	(1.108)	2334112	400.000	406.87(AM)
173	3,3-Dimethyl-1-butanol	57	7.293	7.293	(0.951)	3164338	4000.00	3794.46
174	tert-Amyl methyl ether	73	4.668	4.668	(1.117)	3325871	200.000	188.25(M)
175	tert-Butyl ethyl ether	59	3.379	3.379	(0.808)	4320968	200.000	190.05
176	tert-Amyl alcohol	59	4.635	4.635	(1.108)	2334112	4000.00	3978.56(M)
151	4-Methyl-2-pentanol	45	6.715	6.715	(1.353)	7205996	4000.00	4078.30(A)
180	1-Methylnaphthalene	142	12.631	12.631	(1.307)	1852094	200.000	(a)
140	1,3-Butadiene	54	1.167	1.167	(0.279)	1429438	200.000	207.14(A)
152	Amyl alcohol	42	6.903	6.903	(0.900)	980159	4000.00	4395.46(A)
158	Dichlorofluoromethane	67	1.531	1.531	(0.366)	1636710	200.000	189.15
159	Propylene oxide	43	1.805	1.805	(0.432)	214178	400.000	325.08
161	3-Methyl-1-butanol	55	6.903	6.903	(0.900)	873259	4000.00	4574.19(A)
162	Butyl acrylate	55	8.248	8.248	(1.076)	3266024	200.000	221.39(A)
163	Butyl methacrylate	41	9.171	9.171	(0.949)	2061719	200.000	198.61
164	Dicyclopentadiene	66	9.684	9.684	(1.002)	5152004	200.000	206.38(A)
182	Epichlorohydrin	57	6.093	6.093	(1.227)	509575	800.000	827.43(A)
M 94	1,2-Dichloroethylene (total)	96				1996215	400.000	(a)
145	alpha-Methylstyrene	118	9.257	9.257	(0.958)	1984425	200.000	209.88(A)
130	Ethyl Acetate	43	3.660	3.660	(0.875)	1526148	200.000	191.33
134	Cyclohexanone	55	8.642	8.642	(0.894)	1269424	4000.00	3290.23
185	Isoprene	39	1.771	1.771	(0.424)	352780	200.000	199.28
188	Isopropyl acetate	43	4.680	4.680	(0.943)	4112016	200.000	189.15

187 n-Amyl acetate	43	8.451	8.451 (1.102)	2862687	200.000	201.43(A)
189 n-Butyl acetate	43	7.210	7.210 (0.940)	2520952	200.000	212.11(AH)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
150 Allyl alcohol	57	2.768	2.768	(0.662)	1402092	4000.00	1651.10
194 Acetaldehyde	44	1.212	1.212	(0.290)	347350	800.000	779.86(M)
195 Methyl Amyl Ketone	43	8.380	8.380	(1.093)	3390972	200.000	209.22
200 Dimethyl Disulfide	94	6.198	6.198	(0.808)	2283547	200.000	218.32(A)
202 Isobutylene	41	1.242	1.242	(0.297)	170200	200.000	191.69(M)
205 2-Ethylhexyl Acrylate	55	11.547	11.547	(1.195)	2531204	200.000	228.67(A)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
exceeded maximum amount.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.



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Purge Volume: 5.0
Column phase: DB624

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

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Inj Date : 14-JUL-2023 15:25
InstruID : voa6.i
LabSampID : VSTD200

Acrolein (107-02-8)

Reason Code:

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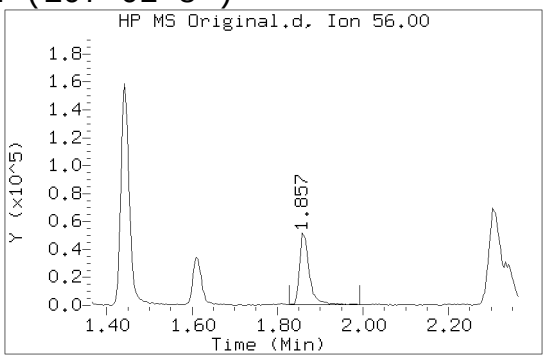

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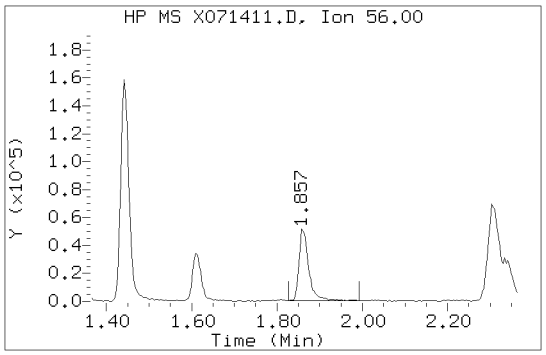

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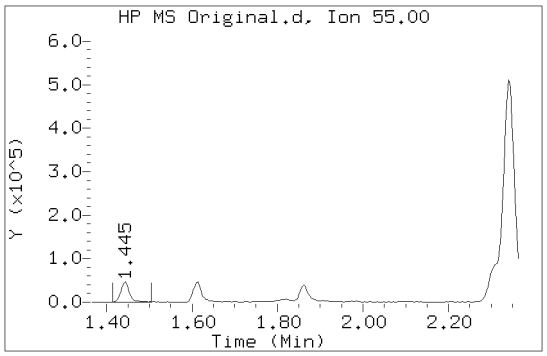

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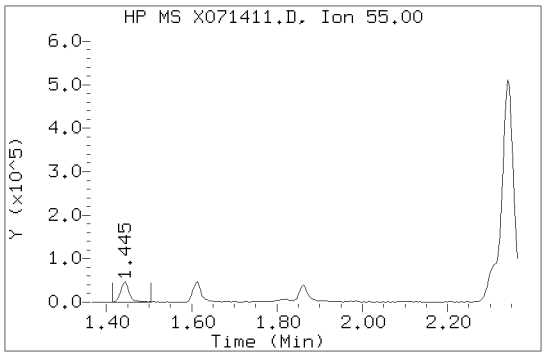
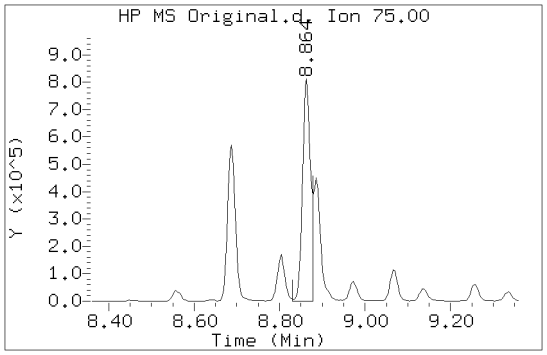


1,2,3-Trichloropropane (96-18-4)

Reason Code:

BEFORE

MASS
75
AREA
1119387
HEIGHT
811296
20-Jul-2023
15:04
linh
pham



AFTER

MASS
75
AREA
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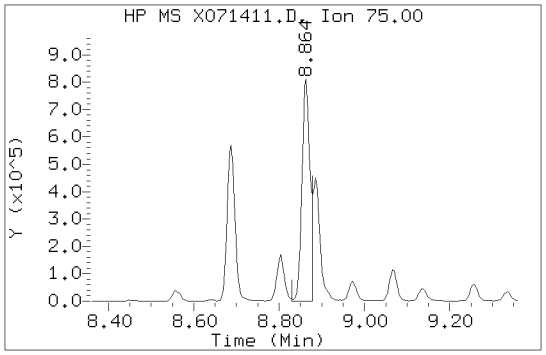
HEIGHT
811296
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
77
AREA
527358
HEIGHT
268689
20-Jul-2023
15:04
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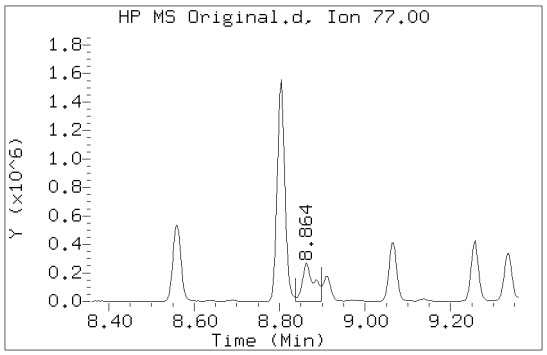

AFTER

MASS
77
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527358
HEIGHT
268689
20-Jul-2023
15:04
linh
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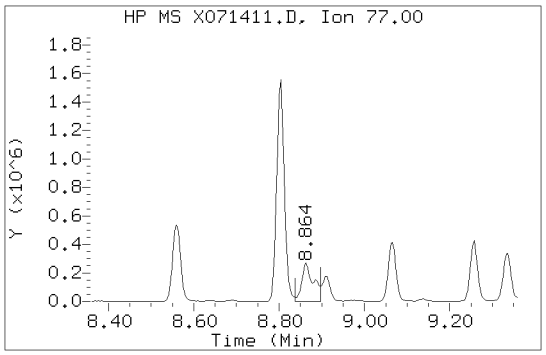

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Inj Date : 14-JUL-2023 15:25
InstruID : voa6.i
LabSampID : VSTD200

tert-Butyl formate (762-75-4)

Reason Code:

BEFORE

MASS
59
AREA
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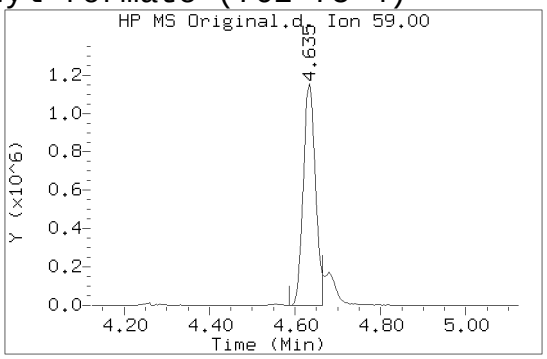
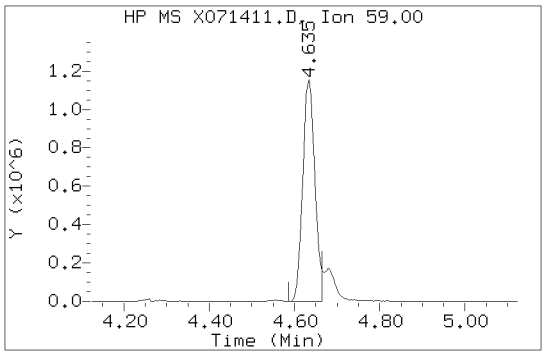
HEIGHT
1154659
20-Jul-2023
15:04
linh
pham



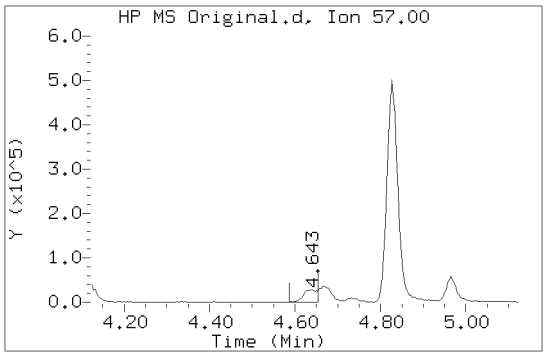
AFTER

MASS
59
AREA
2334112
HEIGHT
1154659
20-Jul-2023
15:04
linh
pham



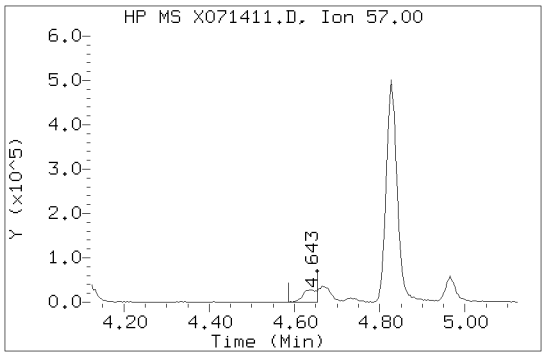
BEFORE

MASS
57
AREA
61248
HEIGHT
27018
20-Jul-2023
15:04
linh
pham



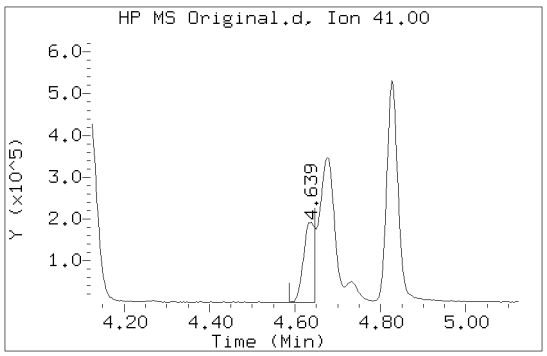
AFTER

MASS
57
AREA
61248
HEIGHT
27018
20-Jul-2023
15:04
linh
pham



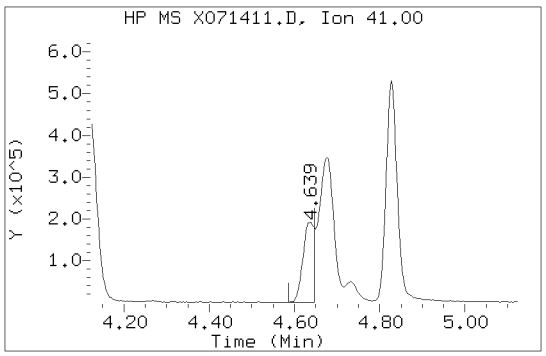
BEFORE

MASS
41
AREA
348681
HEIGHT
190663
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
348681
HEIGHT
190663
20-Jul-2023
15:04
linh
pham

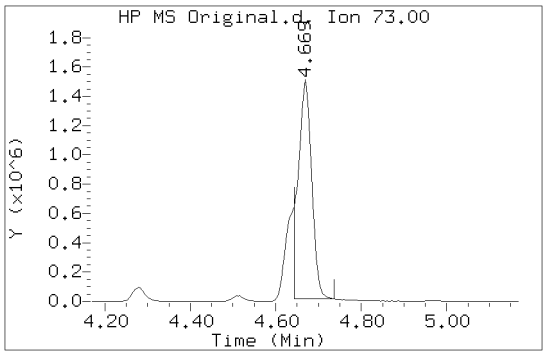


tert-Amyl methyl ether (974-05-08)

Reason Code:

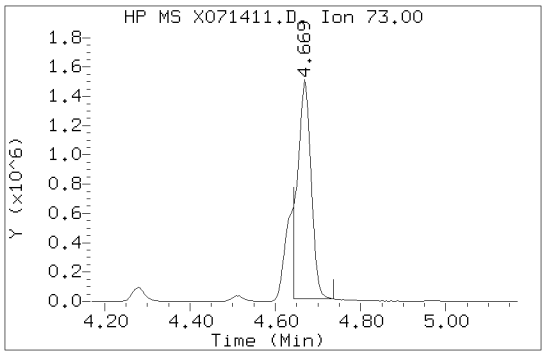
BEFORE

MASS
73
AREA
3325871
HEIGHT
1495166
20-Jul-2023
15:04
linh
pham



AFTER

MASS
73
AREA
3325871
HEIGHT
1495166
20-Jul-2023
15:04
linh
pham



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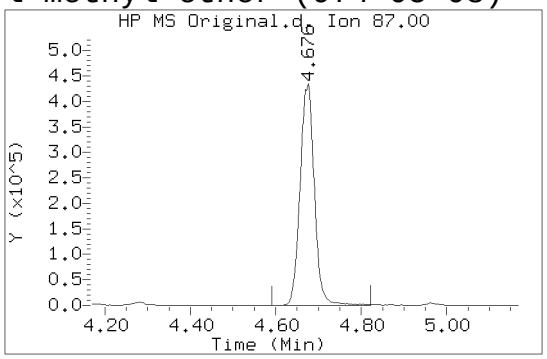
Inj Date : 14-JUL-2023 15:25
InstruID : voa6.i
LabSampID : VSTD200

tert-Amyl methyl ether (974-05-08)

Reason Code:

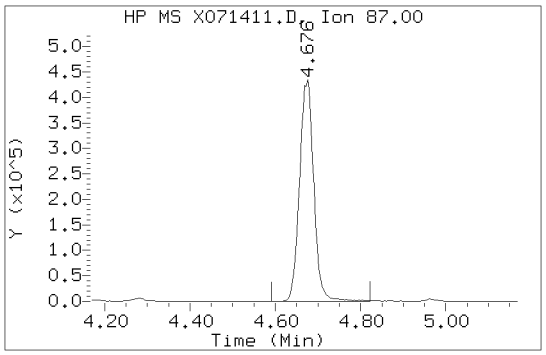
BEFORE

MASS
87
AREA
1024271
HEIGHT
434624
20-Jul-2023
15:04
linh
pham



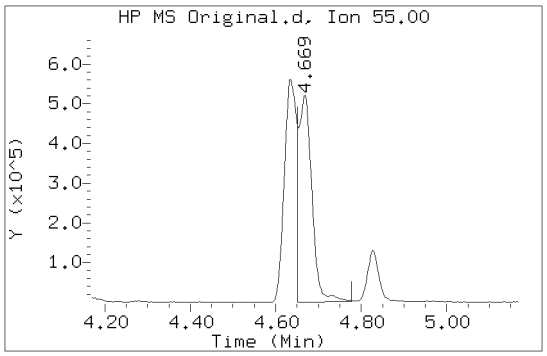
AFTER

MASS
87
AREA
1024271
HEIGHT
434624
20-Jul-2023
15:04
linh
pham



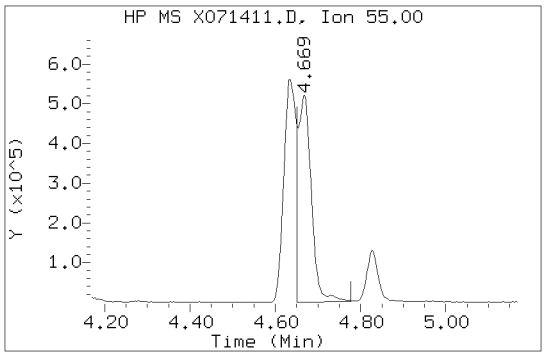
BEFORE

MASS
55
AREA
1191571
HEIGHT
521301
20-Jul-2023
15:04
linh
pham



AFTER

MASS
55
AREA
1191571
HEIGHT
521301
20-Jul-2023
15:04
linh
pham

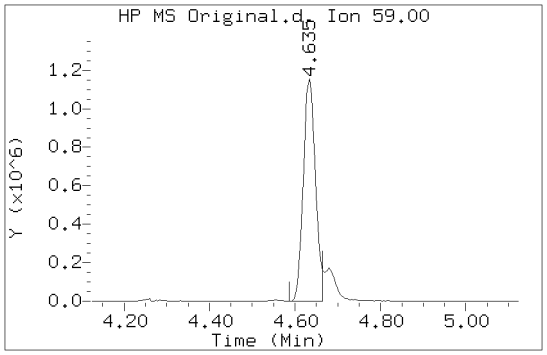


tert-Amyl alcohol (75-85-4)

Reason Code:

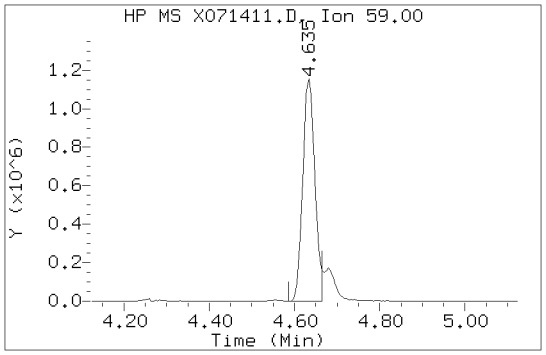
BEFORE

MASS
59
AREA
2334112
HEIGHT
1154659
20-Jul-2023
15:04
linh
pham



AFTER

MASS
59
AREA
2334112
HEIGHT
1154659
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
55
AREA
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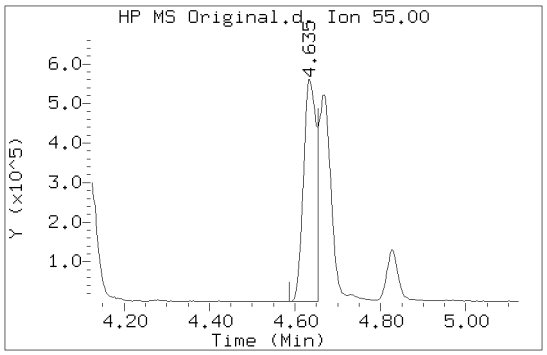
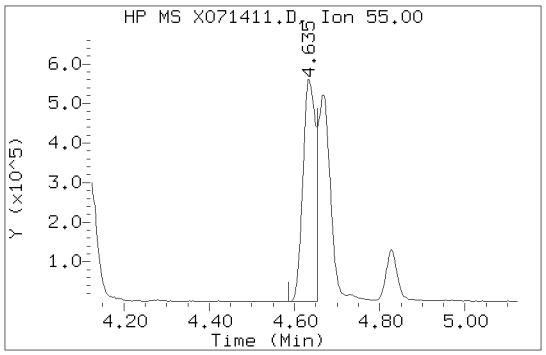
HEIGHT
559928
20-Jul-2023
15:04
linh
pham



AFTER

MASS
55
AREA
1205179
HEIGHT
559928
20-Jul-2023
15:04
linh
pham



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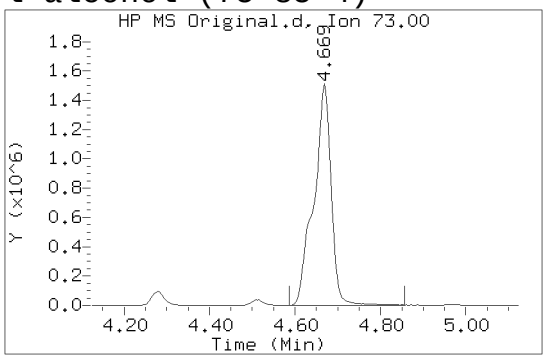
Inj Date : 14-JUL-2023 15:25
InstruID : voa6.i
LabSampID : VSTD200

tert-Amyl alcohol (75-85-4)

Reason Code:

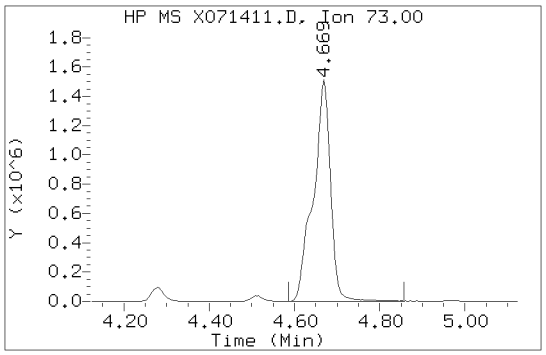
BEFORE

MASS
73
AREA
4277303
HEIGHT
1513022
20-Jul-2023
15:04
linh
pham



AFTER

MASS
73
AREA
4277303
HEIGHT
1513022
20-Jul-2023
15:04
linh
pham

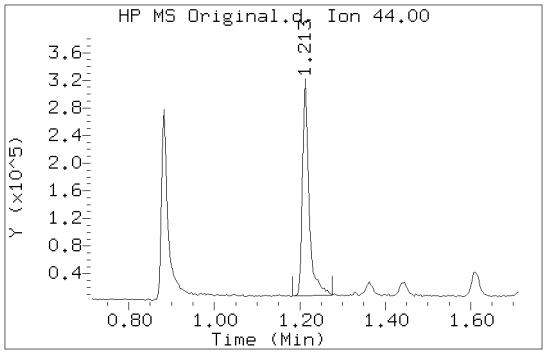


Acetaldehyde (75-07-0)

Reason Code:

BEFORE

MASS
44
AREA
347350
HEIGHT
313846
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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347350
HEIGHT
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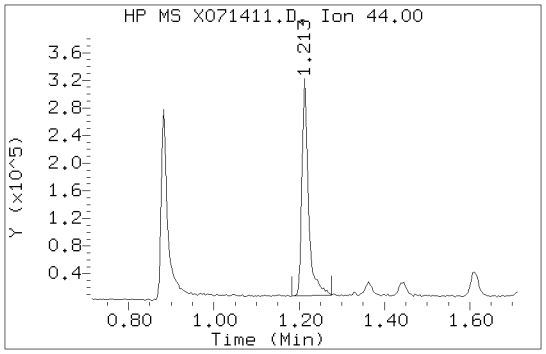
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
43
AREA
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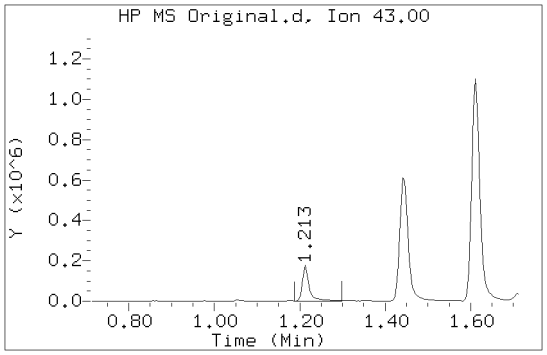
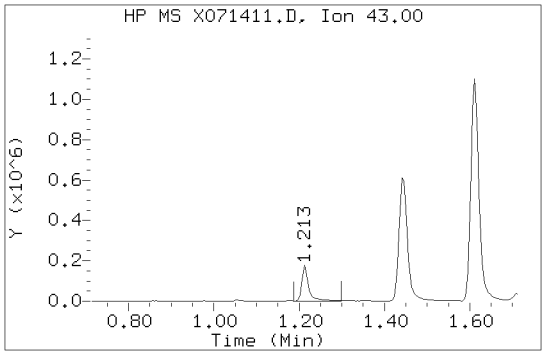
HEIGHT
178522
20-Jul-2023
15:04
linh
pham



AFTER

MASS
43
AREA
201165
HEIGHT
178522
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
42
AREA
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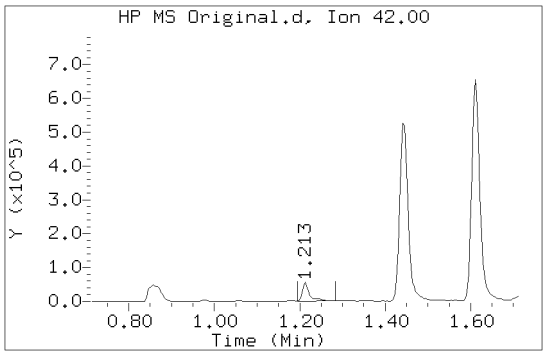
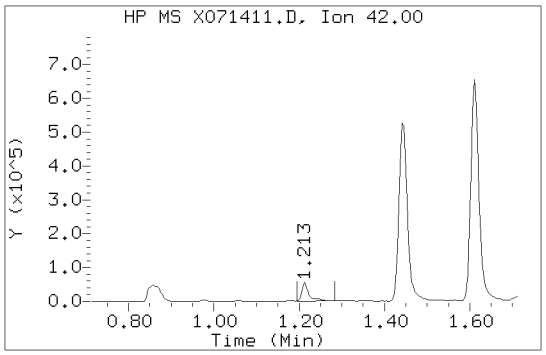
HEIGHT
55441
20-Jul-2023
15:04
linh
pham



AFTER

MASS
42
AREA
64792
HEIGHT
55441
20-Jul-2023
15:04
linh
pham



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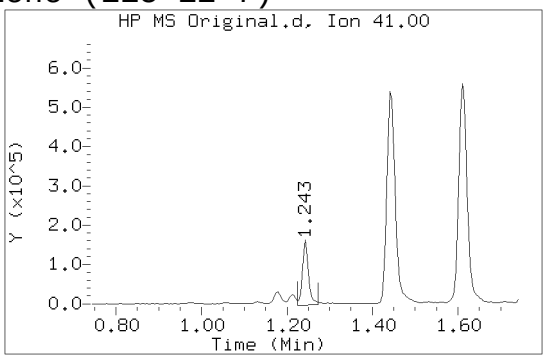
Inj Date : 14-JUL-2023 15:25
InstruID : voa6.i
LabSampID : VSTD200

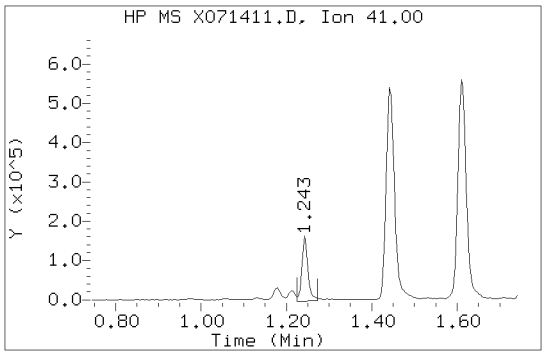
Isobutylene (115-11-7)

Reason Code:

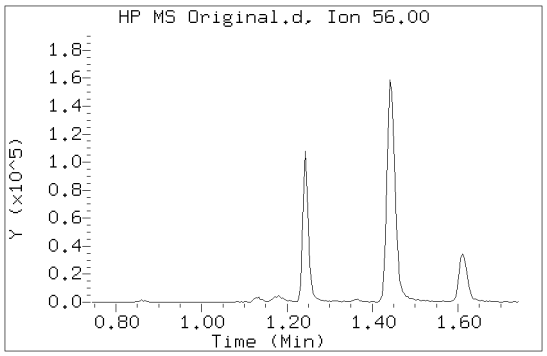
BEFORE
MASS
41
AREA
170200
HEIGHT
165804
20-Jul-2023
15:04
linh
pham



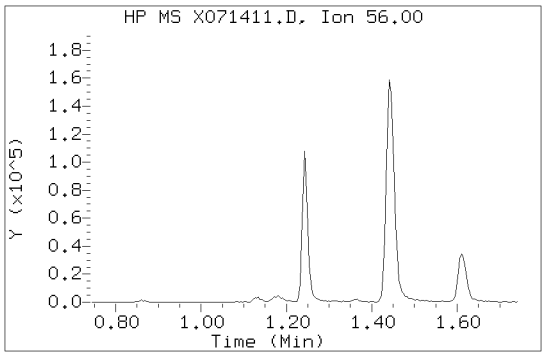
AFTER
MASS
41
AREA
170200
HEIGHT
165804
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
56
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER
MASS
56
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
84
AREA
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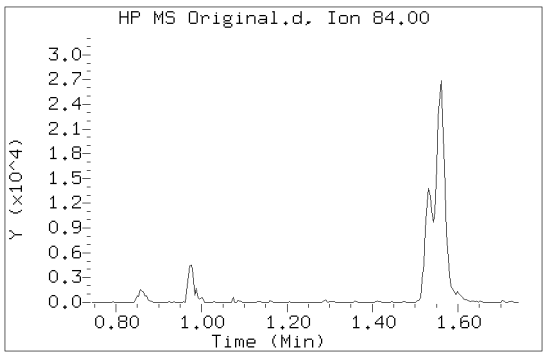
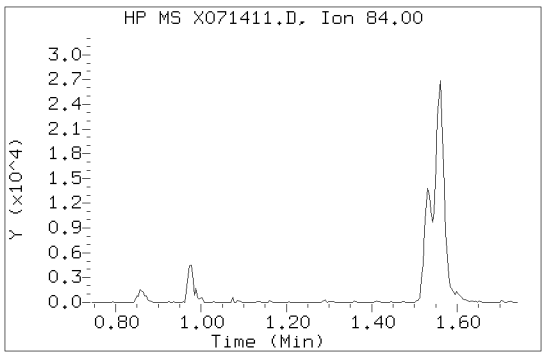
HEIGHT
0
20-Jul-2023
15:04
linh
pham



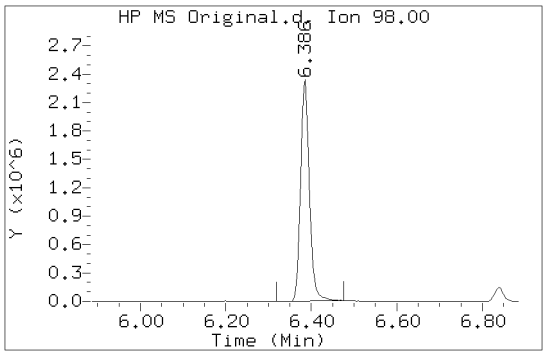
AFTER
MASS
84
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



Toluene-d8 (2037-26-5)

Reason Code:

BEFORE
MASS
98
AREA
3447548
HEIGHT
2338393
20-Jul-2023
15:04
linh
pham



AFTER
MASS
98
AREA
3447548
HEIGHT
2338393
20-Jul-2023
15:04
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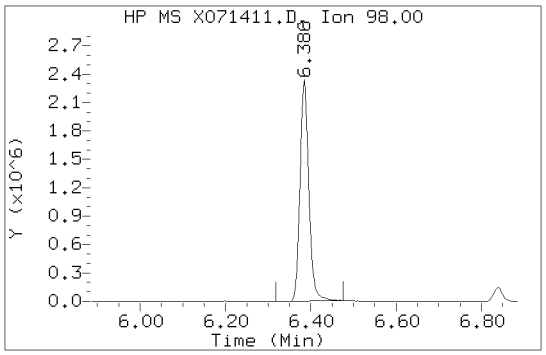
pham



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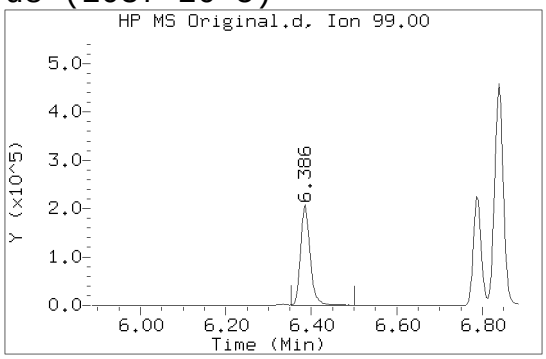
Inj Date : 14-JUL-2023 15:25
InstruID : voa6.i
LabSampID : VSTD200

Toluene-d8 (2037-26-5)

Reason Code:

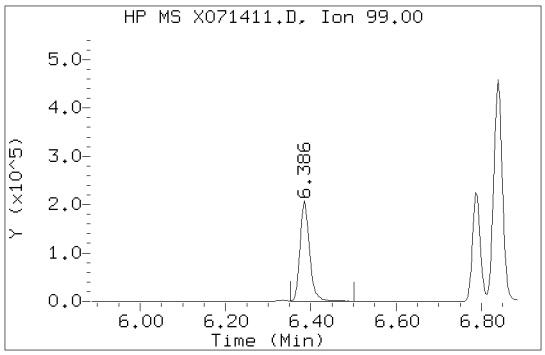
BEFORE

MASS
99
AREA
332540
HEIGHT
208135
20-Jul-2023
15:04
linh
pham



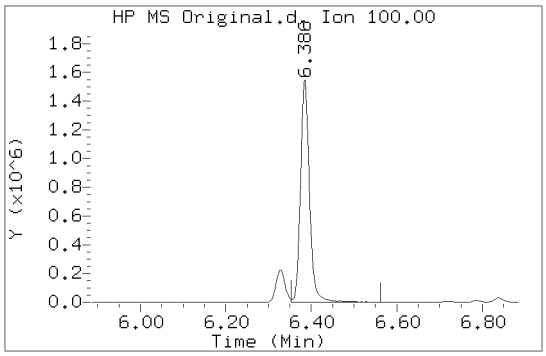
AFTER

MASS
99
AREA
332540
HEIGHT
208135
20-Jul-2023
15:04
linh
pham



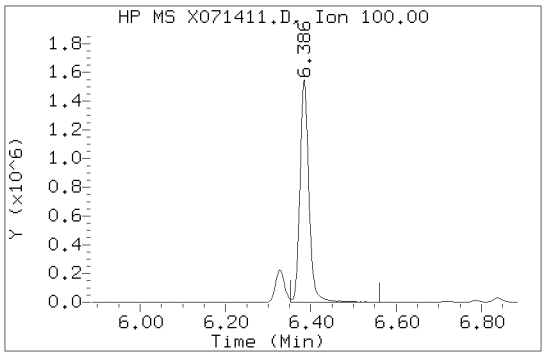
BEFORE

MASS
100
AREA
2330683
HEIGHT
1547095
20-Jul-2023
15:04
linh
pham



AFTER

MASS
100
AREA
2330683
HEIGHT
1547095
20-Jul-2023
15:04
linh
pham



ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071413.D
Lab Smp Id: ICV Client Smp ID: ICV
Inj Date : 14-JUL-2023 16:06
Operator : PC Inst ID: voa6.i
Smp Info : CCV;CCV;2;;ICV
Misc Info : V6;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\8260W.m
Meth Date : 20-Jul-2023 15:05 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 15:25 Cal File: X071411.D
Als bottle: 14 QC Sample: METHSPIKE
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1	Pentafluorobenzene	168	4.178	4.181	(1.000)	523560	50.0000	
2	Dichlorodifluoromethane	85	0.976	0.976	(0.234)	235700	44.1394	44.13
3	Chloromethane	50	1.081	1.081	(0.259)	369706	46.7515	46.75
4	Propionitrile	54	3.656	3.660	(0.875)	514137	495.730	495.72
5	Vinyl Chloride	62	1.145	1.145	(0.274)	314786	46.4622	46.46
6	Bromomethane	94	1.344	1.332	(0.322)	147749	52.6978	52.69
7	Chloroethane	64	1.404	1.400	(0.336)	174555	45.1318	45.13
8	Trichlorofluoromethane	101	1.561	1.561	(0.374)	321870	46.8787	46.87
9	Acrolein	56	1.857	1.857	(0.445)	18891	95.3394	95.33
10	Acetone	43	1.973	1.973	(0.472)	226282	109.688	109.68
11	1,1-Dichloroethene	96	1.913	1.913	(0.458)	173630	45.2674	45.26
12	Isobutyl Alcohol	43	4.680	4.680	(1.120)	1029947	1037.79	1037.79
13	Acetonitrile	39	2.202	2.198	(0.527)	350837	477.867	477.86
14	Allyl Chloride	41	2.198	2.198	(0.526)	795160	46.2587	46.25
15	Iodomethane	142	2.030	2.029	(0.486)	426627	85.2702	85.27
16	Acrylonitrile	53	2.536	2.535	(0.607)	247354	96.9514	96.95
17	Methylene Chloride	84	2.303	2.303	(0.551)	221542	48.9173	48.91
18	Methyl tert-butyl ether	73	2.539	2.535	(0.608)	686179	48.1012	48.10
19	Carbon Disulfide	76	2.071	2.071	(0.496)	1115788	92.5432	92.54
20	trans-1,2-Dichloroethene	96	2.528	2.528	(0.605)	201576	45.4331	45.43

21 Vinyl Acetate	43	3.000	3.000 (0.718)	1840684	100.315	100.31
22 1,1-Dichloroethane	63	2.918	2.922 (0.699)	455953	46.8308	46.83

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
	23 Chloroprene	53	1.771	1.771	(0.424)	106109	45.0742	45.07(M)
	24 2-Butanone	43	3.582	3.581	(0.857)	292924	105.060	105.06
	25 Methacrylonitrile	41	3.825	3.818	(0.916)	346558	51.2815	51.28(a)
	26 2,2-Dichloropropane	77	3.510	3.506	(0.840)	355659	47.0700	47.06
	27 cis-1,2-Dichloroethene	96	3.522	3.521	(0.843)	269347	47.6547	47.65
	28 Chloroform	83	3.904	3.904	(0.935)	458057	45.9797	45.97
	29 Bromochloromethane	128	3.795	3.791	(0.908)	150697	47.5755	47.57
$	30 Dibromofluoromethane	113	4.099	4.099	(0.981)	251919	52.5379	52.53
	31 1,1,1-Trichloroethane	97	4.076	4.080	(0.976)	356334	46.4653	46.46
	32 1,1-Dichloropropene	75	4.279	4.279	(0.862)	303929	45.5996	45.59
	33 1,2-Dichloroethane	62	4.552	4.552	(0.917)	426885	47.4578	47.45
	34 Carbon Tetrachloride	117	4.264	4.260	(0.859)	294766	43.8978	43.89
$	35 1,2-Dichloroethane-d4	65	4.474	4.470	(1.071)	312436	52.0928	52.09
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	817135	50.0000	
	37 Benzene	78	4.511	4.511	(0.909)	922063	47.1756	47.17
	38 Trichloroethene	130	5.205	5.205	(1.048)	257816	46.6338	46.63
	39 Bromodichloromethane	83	5.722	5.722	(1.153)	352205	47.0449	47.04
	40 Methyl Methacrylate	41	5.606	5.606	(1.342)	307355	48.6390	48.63
	41 2-Chloroethylvinyl ether	63	6.044	6.048	(1.217)	236549	103.486	103.48
	42 1,2-Dichloropropane	63	5.433	5.437	(1.094)	308027	49.0106	49.01
	43 2-Nitropropane	43	5.966	5.969	(1.428)	100815	48.4694	48.46
	44 Dibromomethane	93	5.550	5.549	(1.118)	168843	47.4595	47.45
	45 4-Methyl-2-Pentanone	43	6.326	6.325	(0.825)	705887	96.7791	96.77
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	426551	49.6054	49.60
*	47 Chlorobenzene-d5	117	7.668	7.667	(1.000)	741203	50.0000	
$	48 Toluene-d8	98	6.382	6.385	(0.832)	919255	48.1696	48.16
	49 Ethyl Methacrylate	69	6.712	6.719	(1.352)	227813	42.5696	42.56
	50 Toluene	91	6.442	6.445	(0.840)	975883	48.9113	48.91
	51 trans-1,3-Dichloropropene	75	6.682	6.678	(1.346)	355856	49.0932	49.09
	52 2-Hexanone	43	7.086	7.086	(0.924)	481140	100.419	100.41
	53 1,1,2-Trichloroethane	83	6.835	6.839	(0.891)	205333	48.5132	48.51
	54 1,3-Dichloropropane	76	6.982	6.981	(0.911)	419059	48.4632	48.46
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	311577	50.9926	50.99
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	194514	47.1890	47.18
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	231451	47.8539	47.85
	58 1-Chlorohexane	55	7.694	7.694	(1.550)	263762	40.1795	40.17
	59 Chlorobenzene	112	7.690	7.690	(1.003)	668608	47.9390	47.93
	60 1,1,1,2-Tetrachloroethane	131	7.772	7.772	(1.014)	267606	49.0109	49.01
	61 Ethylbenzene	106	7.795	7.799	(1.017)	323263	46.2211	46.22
	62 m,p-Xylenes	106	7.900	7.900	(1.030)	828056	94.3758	94.37
	63 o-Xylene	106	8.237	8.241	(1.074)	397534	47.8450	47.84
	64 Styrene	104	8.256	8.256	(1.077)	710304	49.0101	49.01
	66 Bromoform	173	8.406	8.406	(1.096)	197925	50.4868	50.48
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	956821	44.8008	44.80
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	331151	48.2326	48.23
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	388935	52.7245	52.72
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	408757	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	262052	48.0990	48.09(M)
	72 trans-1,4-Dichloro-2-butene	53	8.886	8.886	(1.159)	119855	53.1678	53.16
	73 n-Propylbenzene	91	8.908	8.912	(0.922)	1109886	44.9330	44.93
	74 Bromobenzene	156	8.803	8.803	(0.911)	301361	47.1405	47.14
	75 1,3,5-Trimethylbenzene	105	9.062	9.066	(0.938)	826279	44.6531	44.65

76	2-Chlorotoluene	91	8.972	8.972 (0.929)	751134	45.0789	45.07
77	4-Chlorotoluene	91	9.070	9.069 (0.939)	862507	47.1055	47.10

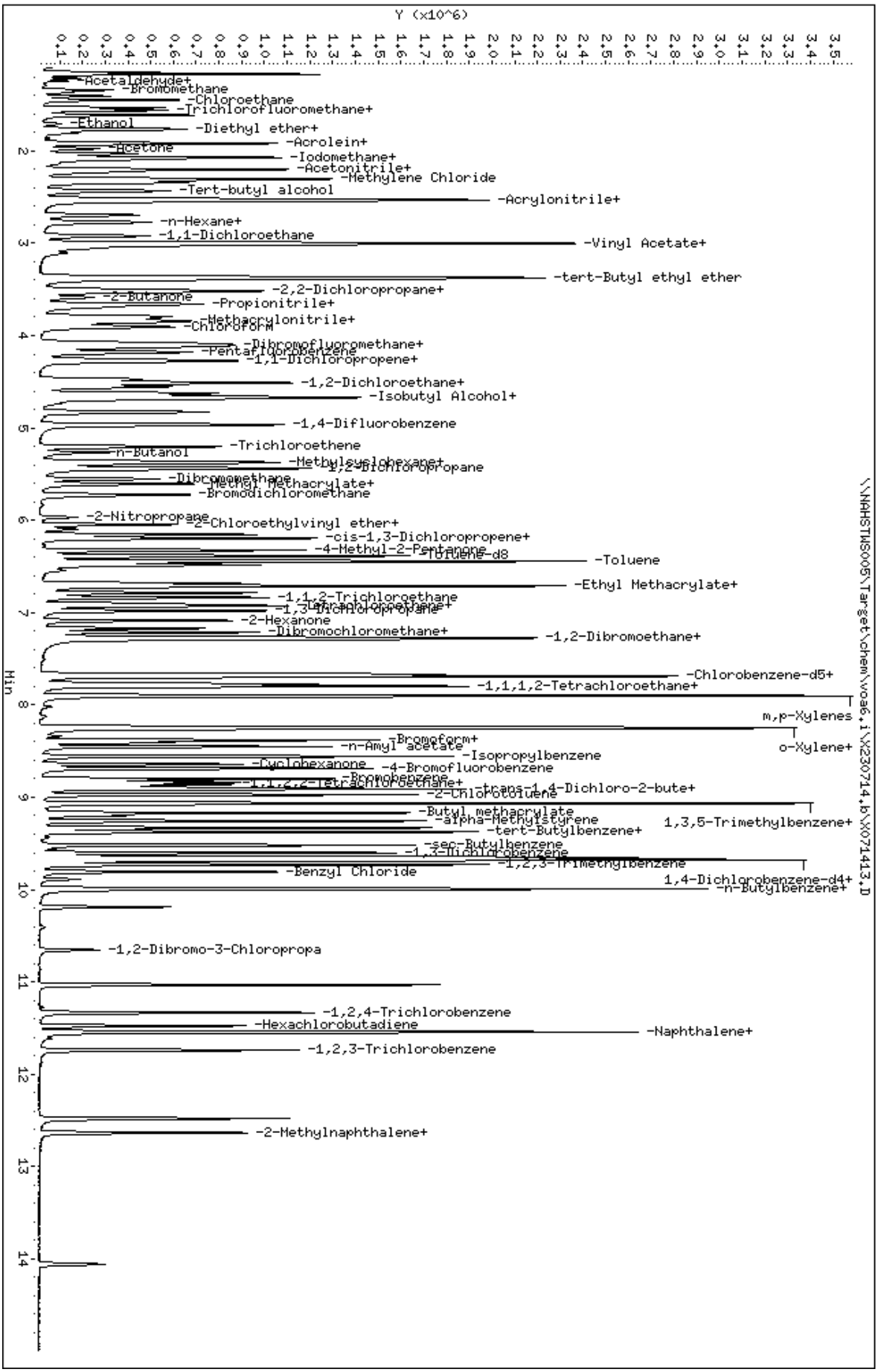
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	
78	tert-Butylbenzene	119	9.332	9.336	(0.966)	675255	42.5524	42.55	
79	1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	830881	44.7762	44.77	
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	905955	42.8308	42.83	
82	p-Isopropyltoluene	119	9.647	9.647	(0.998)	820416	42.4603	42.46	
83	1,3-Dichlorobenzene	146	9.602	9.602	(0.994)	517212	46.4420	46.44	
84	1,4-Dichlorobenzene	146	9.681	9.680	(1.002)	560136	45.8733	45.87	
86	Benzyl Chloride	91	9.808	9.804	(1.279)	615356	48.8480	48.84	
87	n-Butylbenzene	91	9.992	9.992	(1.034)	697021	43.0724	43.07	
88	1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	522905	47.7589	47.75	
89	1,2-Dibromo-3-Chloropropane	155	10.651	10.651	(1.102)	54433	48.2708	48.27	
90	1,2,4-Trichlorobenzene	180	11.334	11.334	(1.173)	326047	43.3575	43.35	
91	Hexachlorobutadiene	225	11.476	11.480	(1.188)	139858	40.8152	40.81	
92	Naphthalene	128	11.540	11.536	(1.194)	838509	45.0509	45.05	
93	1,2,3-Trichlorobenzene	180	11.739	11.738	(1.215)	302822	43.0586	43.05	
146	Methyl acetate	43	2.232	2.228	(0.534)	226459	48.6009	48.60	
138	Freon TF	101	1.917	1.917	(0.459)	164256	50.7362	50.73	
141	Cyclohexane	56	4.121	4.117	(0.987)	392805	43.2834	43.28	
142	Tetrahydrofuran	42	3.848	3.851	(0.921)	129569	96.1946	96.19	
147	Methylcyclohexane	55	5.381	5.381	(1.084)	818352	47.4476	47.44	
135	1,4-Dioxane	88	5.602	5.602	(1.341)	61482	988.216	988.21	
132	n-Butanol	56	5.261	5.261	(1.259)	170908	980.599	980.59	
131	Methyl Acrylate	55	3.690	3.686	(0.883)	366966	51.5629	51.56	
133	Ethyl Acrylate	55	5.381	5.381	(1.288)	818352	47.1623	47.16	
136	n-Hexane	57	2.772	2.768	(0.664)	239027	47.2779	47.27	
139	Diethyl ether	59	1.760	1.760	(0.421)	234998	48.1340	48.13	
148	Tert-butyl alcohol	59	2.434	2.442	(0.583)	626708	948.402	948.40	
149	Isopropyl alcohol	45	2.093	2.101	(0.501)	377497	920.653	920.65	
156	Diisopropyl ether	45	3.004	3.008	(0.719)	1037147	48.0634	48.06	
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	913282	48.3344	48.33	
167	Ethanol	45	1.703	1.711	(0.408)	74613	1019.42	1019.41	
172	tert-Butyl formate	59	4.627	4.635	(1.108)	507413	90.7266	90.72	
173	3,3-Dimethyl-1-butanol	57	7.285	7.293	(0.950)	688113	863.240	863.23	
174	tert-Amyl methyl ether	73	4.669	4.668	(1.118)	862678	50.0877	50.08	
175	tert-Butyl ethyl ether	59	3.379	3.379	(0.809)	1050302	47.3858	47.38	
176	tert-Amyl alcohol	59	4.627	4.635	(1.108)	507413	887.155	887.15	
151	4-Methyl-2-pentanol	45	6.712	6.715	(1.352)	1515654	865.514	865.51	
180	1-Methylnaphthalene	142	12.634	12.631	(1.308)	384606			(a)
140	1,3-Butadiene	54	1.167	1.167	(0.280)	301891	44.8739	44.87	
152	Amyl alcohol	42	6.903	6.903	(0.900)	195847	918.818	918.81	
158	Dichlorofluoromethane	67	1.531	1.531	(0.367)	380825	45.1447	45.14	
159	Propylene oxide	43	1.805	1.805	(0.432)	61412	95.6112	95.61	
161	3-Methyl-1-butanol	55	6.903	6.903	(0.900)	186846	1023.91	1023.90	
162	Butyl acrylate	55	8.249	8.248	(1.076)	731306	51.8619	51.86	
163	Butyl methacrylate	41	9.167	9.171	(0.949)	489010	49.9457	49.94	
164	Dicyclopentadiene	66	9.681	9.684	(1.002)	1106669	47.0024	47.00	
182	Epichlorohydrin	57	6.093	6.093	(1.227)	124324	203.690	203.69	
M 94	1,2-Dichloroethylene (total)	96				470923	93.0878	93.08	
M 95	Xylenes (total)	106				1225590	142.221	142.22	
145	alpha-Methylstyrene	118	9.257	9.257	(0.958)	409265	45.8929	45.89	
130	Ethyl Acetate	43	3.660	3.660	(0.876)	382709	49.2142	49.21	
134	Cyclohexanone	55	8.642	8.642	(0.894)	353883	972.476	972.47	
185	Isoprene	39	1.771	1.771	(0.424)	82361	47.7228	47.72	

188 Isopropyl acetate	43	4.680	4.680 (0.943)	1029947	47.8043	47.80
187 n-Amyl acetate	43	8.451	8.451 (1.102)	635386	46.7743	46.77

						CONCENTRATIONS	
	QUANT SIG					ON-COLUMN	FINAL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
189 n-Butyl acetate	43	7.214	7.210	(0.941)	567096	49.9183	49.91(H)
150 Allyl alcohol	57	2.772	2.768	(0.664)	239027	945.764	945.76
194 Acetaldehyde	44	1.212	1.212	(0.290)	96727	206.571	206.57
195 Methyl Amyl Ketone	43	8.380	8.380	(1.093)	761129	49.1308	49.13
200 Dimethyl Disulfide	94	6.194	6.198	(0.808)	522553	52.2664	52.26
202 Isobutylene	41	1.242	1.242	(0.297)	41486	47.9266	47.92(M)
205 2-Ethylhexyl Acrylate	55	11.547	11.547	(1.195)	553935	53.0575	53.05

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.



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Client ID: ICV
Sample Info: CCV;CCV;2;;ICV
Purge Volume: 5.0
Column phase: DB624

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

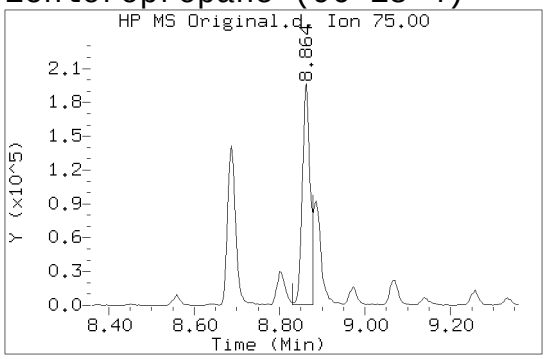
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071413.D
Inj Date : 14-JUL-2023 16:06
InstruID : voa6.i
LabSampID : ICV

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

Reason Code:

BEFORE

MASS
75
AREA
262052
HEIGHT
195933
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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AREA
262052
HEIGHT
195933
20-Jul-2023
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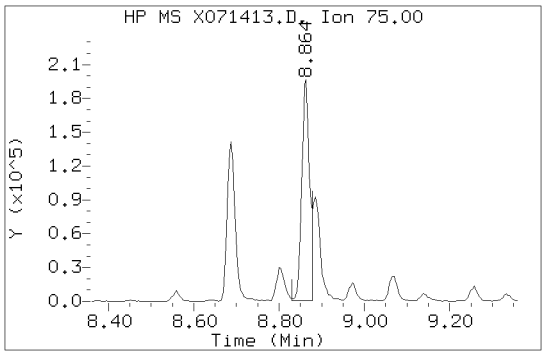

BEFORE

MASS
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64756
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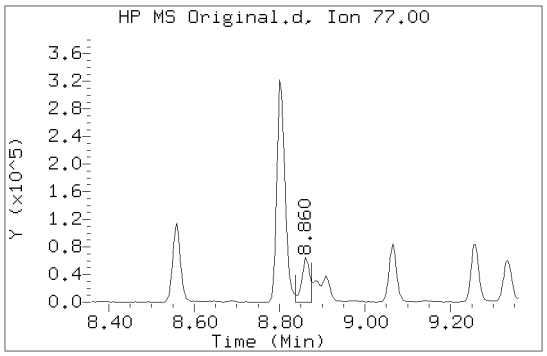
15:04
linh
pham



AFTER

MASS
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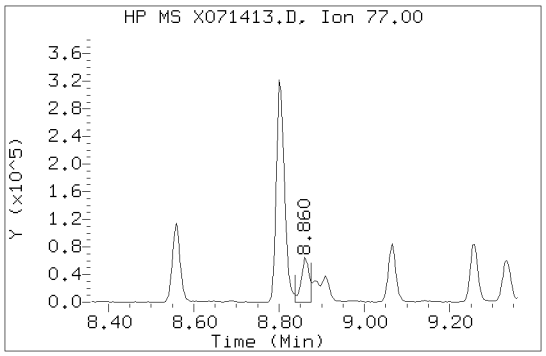
AREA
87073
HEIGHT
64756
20-Jul-2023
15:04
linh
pham



Chloroprene (126-99-8)

Reason Code:

BEFORE

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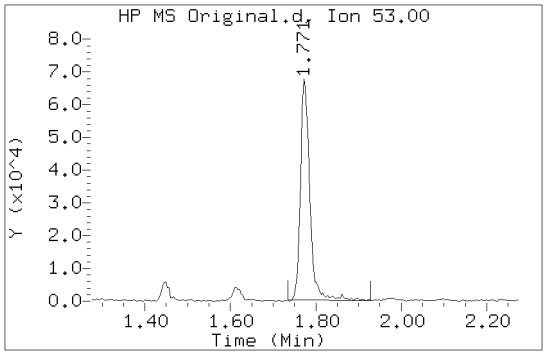
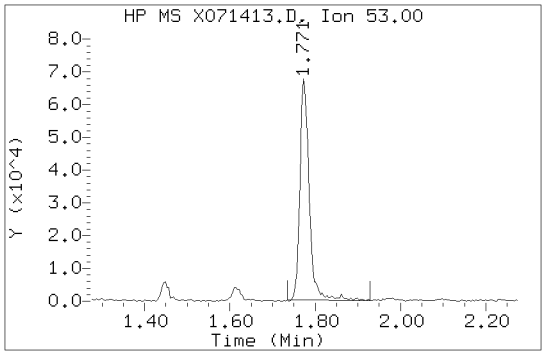
53
AREA
106109
HEIGHT
67580
20-Jul-2023
15:04
linh
pham



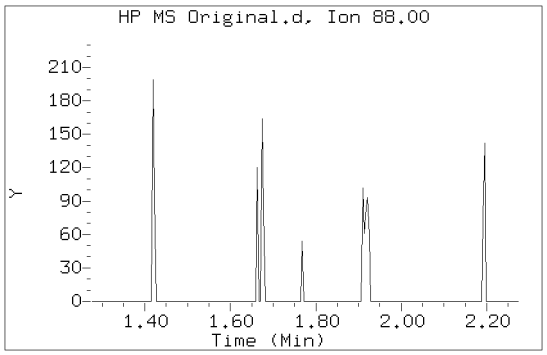
AFTER

MASS
53
AREA
106109
HEIGHT
67580
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
88
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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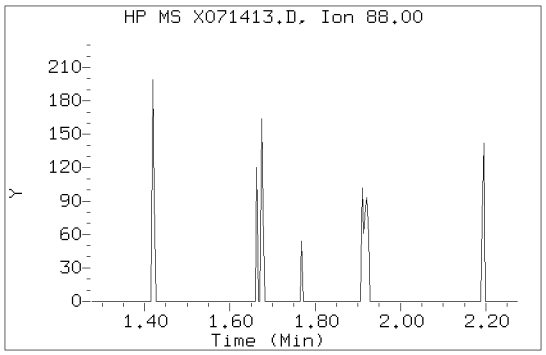
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



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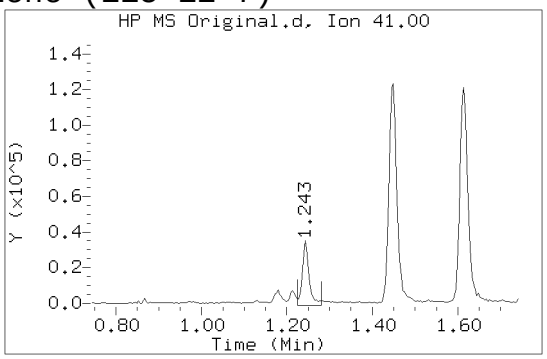
Inj Date : 14-JUL-2023 16:06
InstruID : voa6.i
LabSampID : ICV

Isobutylene (115-11-7)

Reason Code:

BEFORE
MASS
41
AREA
41486
HEIGHT
36200
20-Jul-2023
15:04
linh
pham



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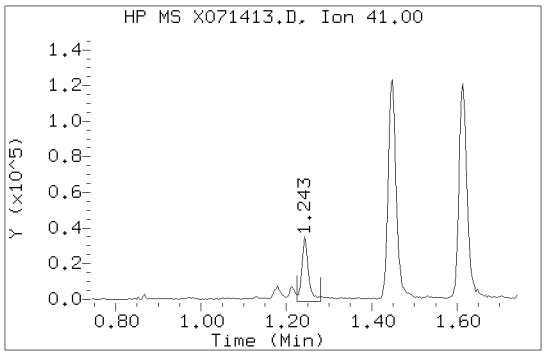

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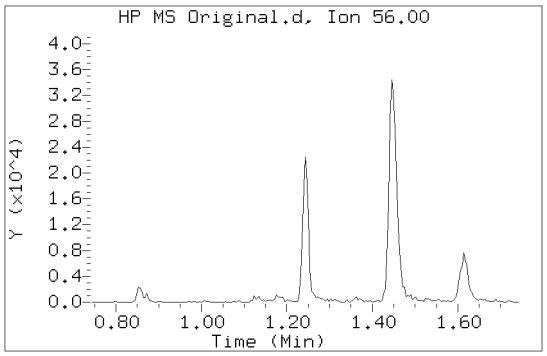

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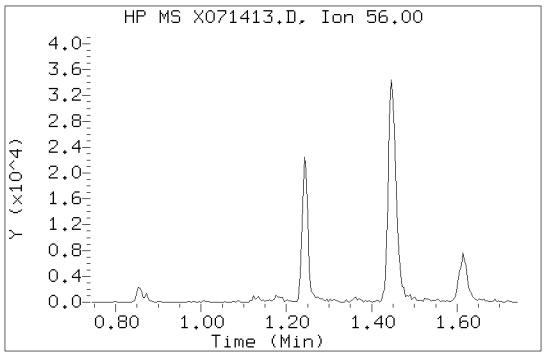

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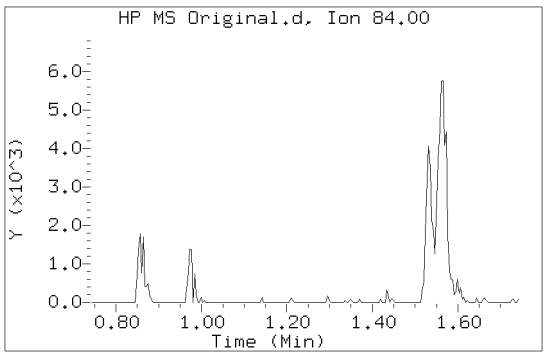

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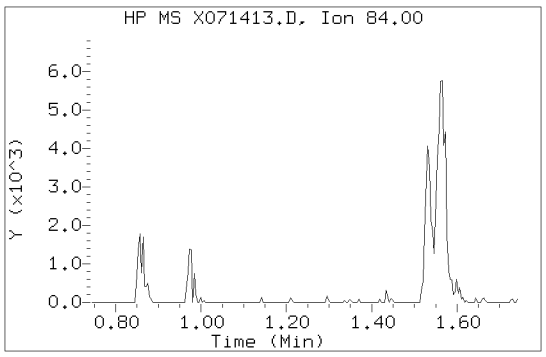

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Raw Data VOA6 442002

Volatiles by EPA 8260

Workorder

HS23070993

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072101.D
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 21-JUL-2023 12:16
Operator : PC Inst ID: voa6.i
Smp Info : BFB;BFB;3;;BFB
Misc Info : V6;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\bfb.m
Meth Date : 14-Mar-2023 15:45 Linh.Pham Quant Type: ISTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: NAHSTW7051

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

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

					CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/l)	TARGET RANGE	RATIO
1 bfb							CAS #: 460-00-4	
8.687	8.889	(0.000)	95	249216			0.00- 100.00	100.00
8.687	8.889	(0.000)	50	66296			15.00- 40.00	26.60
8.687	8.889	(0.000)	75	122904			30.00- 60.00	49.32
8.687	8.889	(0.000)	96	16424			5.00- 9.00	6.59
8.687	8.889	(0.000)	173	2639			0.00- 2.00	1.38
8.687	8.889	(0.000)	174	191040			50.00- 0.00	76.66
8.687	8.889	(0.000)	175	15623			5.00- 9.00	8.18
8.687	8.889	(0.000)	176	191488			95.00- 101.00	100.23
8.687	8.889	(0.000)	177	12356			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	26.60
75	30.00 - 60.00% of mass 95	49.32
96	5.00 - 9.00% of mass 95	6.59
173	Less than 2.00% of mass 174	1.06 (1.38)
174	Greater than 50.00% of mass 95	76.66
175	5.00 - 9.00% of mass 174	6.27 (8.18)
176	95.00 - 101.00% of mass 174	76.84 (100.23)
177	5.00 - 9.00% of mass 176	4.96 (6.45)

Data File: X072101.D
Spectrum: Scan 2159 (8.68)
Location of Maximum: 95.00
Number of points: 131

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.10	3226	68.00	24808	105.70	712	143.90	115
37.00	16147	69.00	23344	106.90	709	145.00	81
38.10	13137	70.10	2364	107.80	152	145.90	286
39.00	6414	71.10	572	109.00	756	146.80	452
40.00	4053	72.00	1342	111.00	157	147.70	405
41.10	2966	73.00	11251	111.60	114	148.90	171
42.10	3572	74.00	38192	112.10	87	149.80	149
43.10	1982	75.00	122904	112.60	51	151.70	299
44.00	5165	76.00	11018	113.20	412	152.60	90
45.00	4146	76.90	2364	115.60	501	154.10	204
46.10	369	77.90	1303	116.00	484	155.00	648
47.00	6071	78.90	5349	116.80	1064	156.00	130
48.00	2033	80.10	2205	117.80	857	156.90	262
49.00	13765	80.90	5481	118.80	1214	158.00	104
50.10	66296	81.90	1125	120.00	191	158.80	112
51.00	19720	83.10	604	120.80	119	160.90	430
51.90	890	85.00	168	123.70	201	168.10	316
52.90	594	85.90	524	124.00	201	169.10	126
54.20	667	87.00	12220	124.60	119	170.90	255
54.90	7221	88.00	9141	125.90	170	171.80	127
56.00	4655	91.10	845	126.80	482	173.00	2639
57.00	10670	92.00	6687	127.80	1036	174.00	191040
58.00	1523	93.00	9268	128.70	520	174.90	15623
59.10	54	94.10	24656	129.90	1040	175.90	191488
60.00	2264	95.00	249216	130.90	684	176.90	12356
61.00	12755	96.00	16424	134.80	232	178.00	573
62.10	12169	96.90	570	135.80	106	178.80	131
63.00	7632	97.90	1228	136.90	766	184.80	84
63.90	480	99.10	190	139.00	281	186.10	383
64.80	97	103.00	345	139.70	260	233.80	479
65.20	102	104.00	910	141.00	2169	235.90	99
66.00	76	104.70	559	141.70	243	262.00	154
67.00	1161	105.20	787	143.00	1948		

Data File: \\nahstws005\target\chem\voa6.i\x230721.b\x072101.d Page 1

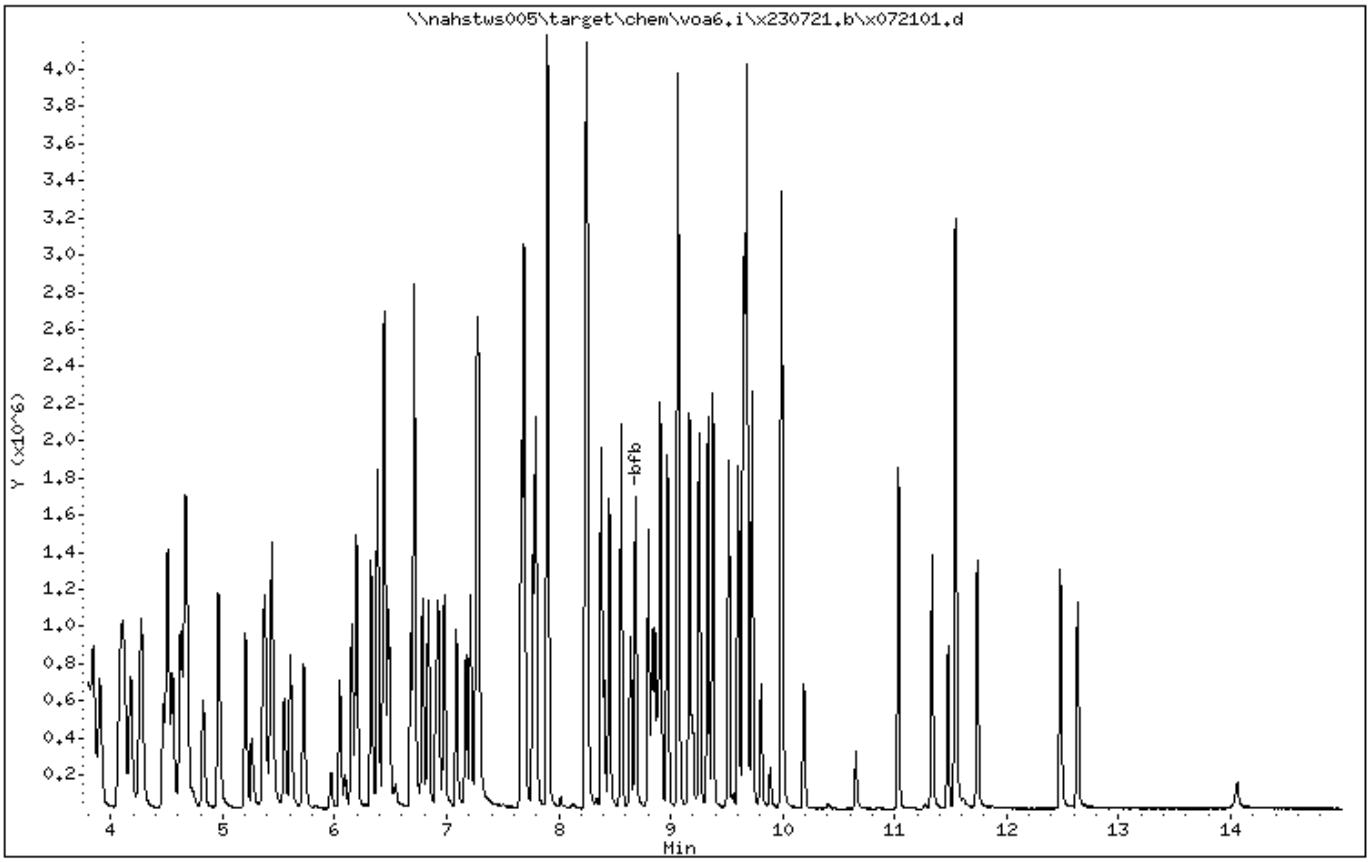
Date : 21-JUL-2023 12:16

Client ID: BFB Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0 Operator: PC

Column phase: DB624 Column diameter: 0.25



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Inj Date : 21-JUL-2023 12:16
InstruID : voa6.i
LabSampID : BFB

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072102.D Page 1
Report Date: 27-Jul-2023 12:58

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072102.D
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 21-JUL-2023 12:36
Operator : PC Inst ID: voa6.i
Smp Info : CCV;CCV;2;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\8260W.m
Meth Date : 27-Jul-2023 12:58 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.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	4.178	4.178	(1.000)	603321	50.0000	
135 1,4-Dioxane	88	5.598	5.598	(1.340)	71815	1000.00	1001.69
140 1,3-Butadiene	54	1.164	1.164	(0.279)	466283	50.0000	60.14
25 Methacrylonitrile	41	3.821	3.821	(0.915)	471169	50.0000	60.50
12 Isobutyl Alcohol	43	4.676	4.676	(1.119)	1368252	1000.00	1196.40
13 Acetonitrile	39	2.198	2.198	(0.526)	431686	500.000	510.25
14 Allyl Chloride	41	2.198	2.198	(0.526)	1026308	50.0000	51.81
4 Propionitrile	54	3.653	3.653	(0.874)	698850	500.000	584.74
72 trans-1,4-Dichloro-2-butene	53	8.886	8.886	(1.159)	153876	50.0000	54.36
130 Ethyl Acetate	43	3.657	3.657	(0.875)	525372	50.0000	58.62
40 Methyl Methacrylate	41	5.606	5.606	(1.342)	424225	50.0000	58.25
49 Ethyl Methacrylate	69	6.712	6.712	(1.352)	304497	50.0000	46.29
2 Dichlorodifluoromethane	85	0.972	0.972	(0.233)	270110	50.0000	43.90
3 Chloromethane	50	1.081	1.081	(0.259)	535653	50.0000	58.78
5 Vinyl Chloride	62	1.145	1.145	(0.274)	447094	50.0000	57.26
6 Bromomethane	94	1.340	1.340	(0.321)	180453	50.0000	55.85
7 Chloroethane	64	1.404	1.404	(0.336)	259526	50.0000	58.23
8 Trichlorofluoromethane	101	1.561	1.561	(0.374)	416534	50.0000	52.64
9 Acrolein	56	1.857	1.857	(0.445)	30241	100.000	132.00(M)
10 Acetone	43	1.973	1.973	(0.472)	283619	100.000	119.73(M)

11 1,1-Dichloroethene	96	1.913	1.913 (0.458)	240393	50.0000	54.38
15 Iodomethane	142	2.030	2.030 (0.486)	500963	100.000	86.78

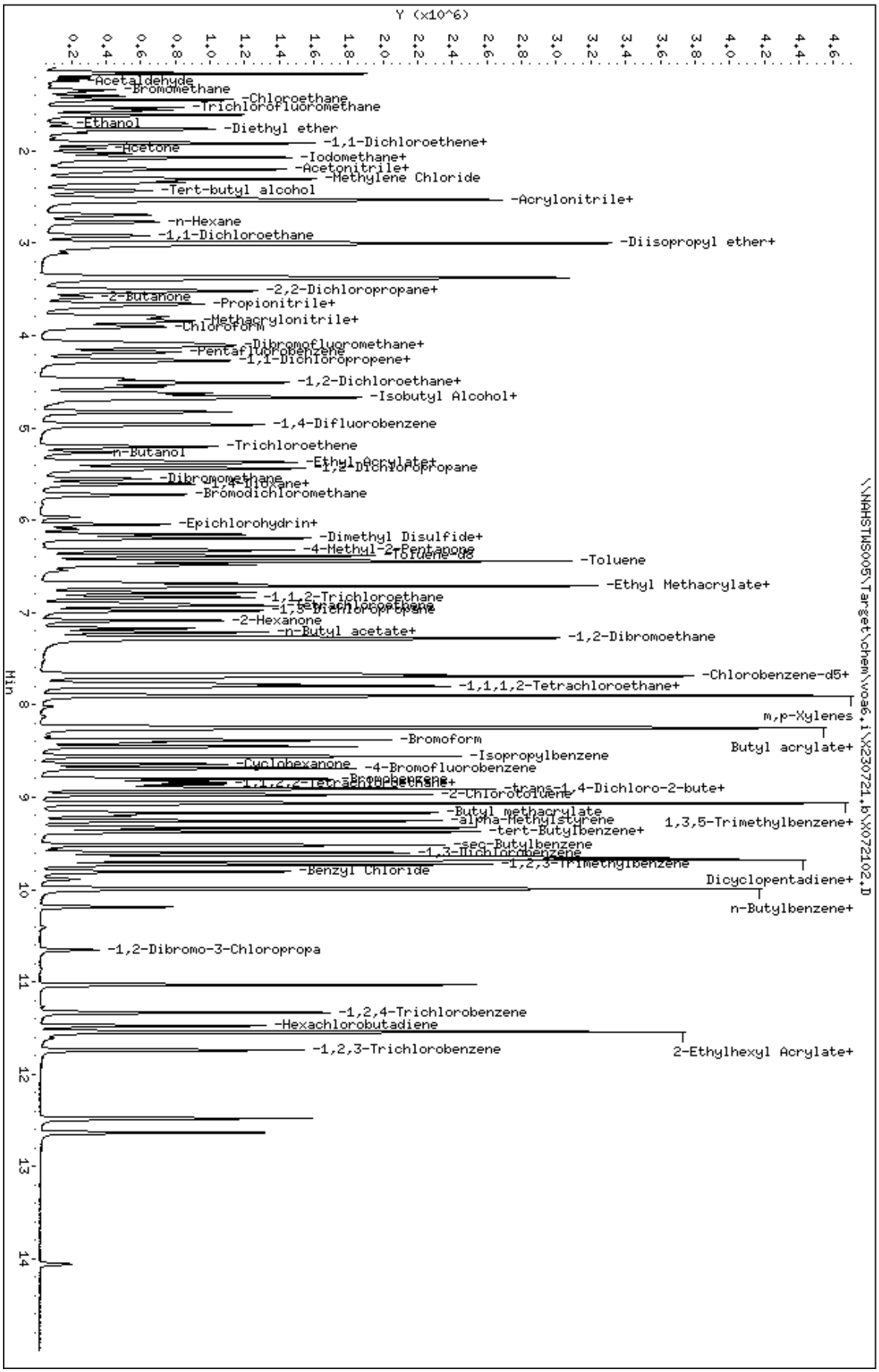
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	16 Acrylonitrile	53	2.532	2.532	(0.606)	344423	100.000	117.15
	17 Methylene Chloride	84	2.303	2.303	(0.551)	224395	50.0000	42.82
	18 Methyl tert-butyl ether	73	2.536	2.536	(0.607)	843578	50.0000	51.31
	19 Carbon Disulfide	76	2.071	2.071	(0.496)	1355064	100.000	97.53
	20 trans-1,2-Dichloroethene	96	2.528	2.528	(0.605)	242876	50.0000	47.50
	21 Vinyl Acetate	43	2.997	2.997	(0.717)	2534046	100.000	119.84(M)
	22 1,1-Dichloroethane	63	2.922	2.922	(0.699)	583230	50.0000	51.98
	24 2-Butanone	43	3.582	3.582	(0.857)	376035	100.000	117.03
	26 2,2-Dichloropropane	77	3.507	3.507	(0.839)	449667	50.0000	51.62
	27 cis-1,2-Dichloroethene	96	3.525	3.525	(0.844)	339898	50.0000	52.18
	28 Chloroform	83	3.904	3.904	(0.935)	559294	50.0000	48.71
	29 Bromochloromethane	128	3.795	3.795	(0.908)	185557	50.0000	50.83
$	30 Dibromofluoromethane	113	4.095	4.095	(0.980)	302579	50.0000	54.79
	31 1,1,1-Trichloroethane	97	4.076	4.076	(0.976)	438887	50.0000	49.66
	32 1,1-Dichloropropene	75	4.279	4.279	(0.862)	381109	50.0000	46.52
	33 1,2-Dichloroethane	62	4.556	4.556	(0.918)	527911	50.0000	47.75
	34 Carbon Tetrachloride	117	4.264	4.264	(0.859)	366748	50.0000	44.44
$	35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	366624	50.0000	53.05
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	1004251	50.0000	
	37 Benzene	78	4.507	4.507	(0.908)	1179400	50.0000	49.09
	38 Trichloroethene	130	5.205	5.205	(1.048)	325585	50.0000	47.91
	39 Bromodichloromethane	83	5.722	5.722	(1.153)	433262	50.0000	47.08
	41 2-Chloroethylvinyl ether	63	6.044	6.044	(1.217)	275484	100.000	98.06
	42 1,2-Dichloropropane	63	5.433	5.433	(1.094)	405213	50.0000	52.46
	44 Dibromomethane	93	5.550	5.550	(1.118)	212367	50.0000	48.57
	45 4-Methyl-2-Pentanone	43	6.326	6.326	(0.825)	953322	100.000	104.09
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	526161	50.0000	49.78
*	47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	930634	50.0000	
$	48 Toluene-d8	98	6.386	6.386	(0.833)	1075571	50.0000	44.88
	50 Toluene	91	6.442	6.442	(0.840)	1225124	50.0000	48.90
	51 trans-1,3-Dichloropropene	75	6.678	6.678	(1.345)	437405	50.0000	49.10
	52 2-Hexanone	43	7.087	7.087	(0.924)	629986	100.000	104.72
	53 1,1,2-Trichloroethane	83	6.835	6.835	(0.891)	254276	50.0000	47.84
	54 1,3-Dichloropropane	76	6.978	6.978	(0.910)	526573	50.0000	48.50
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	377224	50.0000	49.16
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	244478	50.0000	47.23
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	290815	50.0000	47.88
	58 1-Chlorohexane	55	7.694	7.694	(1.550)	382613	50.0000	47.42
	59 Chlorobenzene	112	7.690	7.690	(1.003)	848959	50.0000	48.47
	60 1,1,1,2-Tetrachloroethane	131	7.773	7.773	(1.014)	335198	50.0000	48.89
	61 Ethylbenzene	106	7.799	7.799	(1.017)	417920	50.0000	47.59
	62 m,p-Xylenes	106	7.900	7.900	(1.030)	1091304	100.000	99.06
	63 o-Xylene	106	8.237	8.237	(1.074)	516479	50.0000	49.50
	64 Styrene	104	8.256	8.256	(1.077)	908178	50.0000	49.90
	66 Bromoform	173	8.406	8.406	(1.096)	242019	50.0000	49.16
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	1310903	50.0000	48.88
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	421222	50.0000	50.10
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	470576	50.0000	50.79
*	70 1,4-Dichlorobenzene-d4	152	9.658	9.658	(1.000)	500527	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.918)	311359	50.0000	46.67(M)
	73 n-Propylbenzene	91	8.908	8.908	(0.922)	1574580	50.0000	52.05
	74 Bromobenzene	156	8.803	8.803	(0.912)	377084	50.0000	48.17

75	1,3,5-Trimethylbenzene	105	9.062	9.062 (0.938)	1094912	50.0000	48.32
76	2-Chlorotoluene	91	8.972	8.972 (0.929)	977015	50.0000	47.88

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	
	77 4-Chlorotoluene	91	9.066	9.066	(0.939)	1118088	50.0000	49.86	
	78 tert-Butylbenzene	119	9.332	9.332	(0.966)	942964	50.0000	48.52	
	79 1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	1114316	50.0000	49.04	
	81 sec-Butylbenzene	105	9.519	9.519	(0.986)	1314885	50.0000	50.76	
	82 p-Isopropyltoluene	119	9.647	9.647	(0.999)	1173690	50.0000	49.60	
	83 1,3-Dichlorobenzene	146	9.602	9.602	(0.994)	690591	50.0000	50.64	
	84 1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	726233	50.0000	48.57	
	87 n-Butylbenzene	91	9.992	9.992	(1.035)	1055611	50.0000	53.27	
	88 1,2-Dichlorobenzene	146	9.988	9.988	(1.034)	675137	50.0000	50.35	
	89 1,2-Dibromo-3-Chloropropane	155	10.651	10.651	(1.103)	68773	50.0000	49.77	
	90 1,2,4-Trichlorobenzene	180	11.334	11.334	(1.173)	448979	50.0000	48.75	
	91 Hexachlorobutadiene	225	11.476	11.476	(1.188)	196800	50.0000	46.55	
	92 Naphthalene	128	11.540	11.540	(1.195)	1133186	50.0000	49.72	
	93 1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	410008	50.0000	47.61	
M	94 1,2-Dichloroethylene (total)	96				582774	100.000	(a)	
	141 Cyclohexane	56	4.118	4.118	(0.986)	559901	50.0000	53.53	
	138 Freon TF	101	1.917	1.917	(0.459)	227975	50.0000	59.33	
	147 Methylcyclohexane	55	5.381	5.381	(1.084)	1146687	50.0000	54.09	
	146 Methyl Acetate	43	2.228	2.228	(0.533)	280343	50.0000	52.21	
	148 Tert-Butyl alcohol	59	2.431	2.431	(0.582)	685925	1000.00	900.78	
	149 Isopropyl Alcohol	45	2.093	2.093	(0.501)	507902	1000.00	1074.93	

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 : 21-JUL-2023 12:36
Client ID: CCV
Sample Info: CCV;CCV;2;;
Purge Volume: 5.0
Column phase: DB624

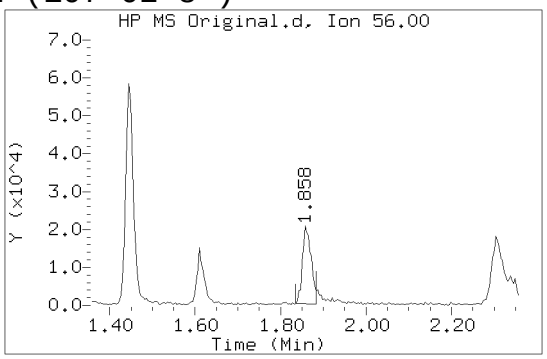
Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072102.D
Inj Date : 21-JUL-2023 12:36
InstruID : voa6.i
LabSampID : CCV

Acrolein (107-02-8)

Reason Code:

BEFORE
MASS
56
AREA
30241
HEIGHT
20545
21-Jul-2023
23:10



AFTER
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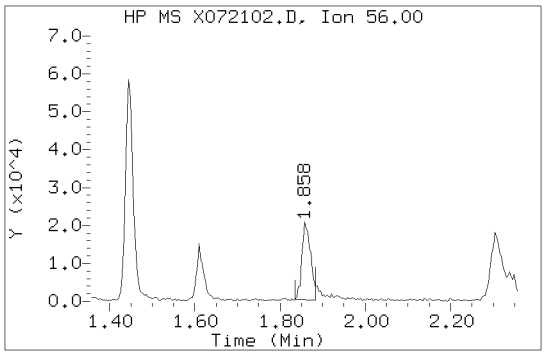
27-Jul-2023
12:58



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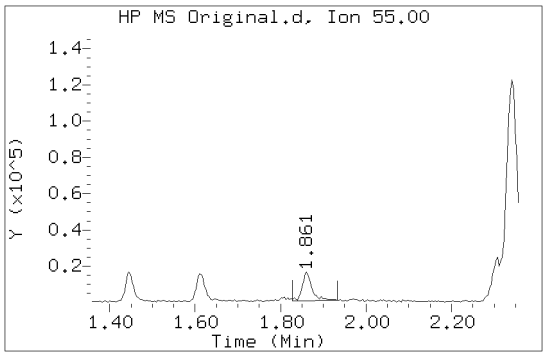
21-Jul-2023
23:10



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27-Jul-2023
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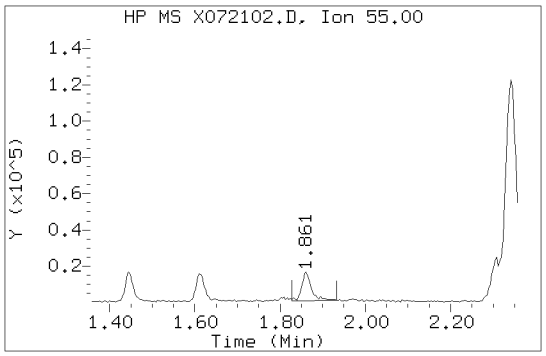

Acetone (67-64-1)

Reason Code:

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21-Jul-2023
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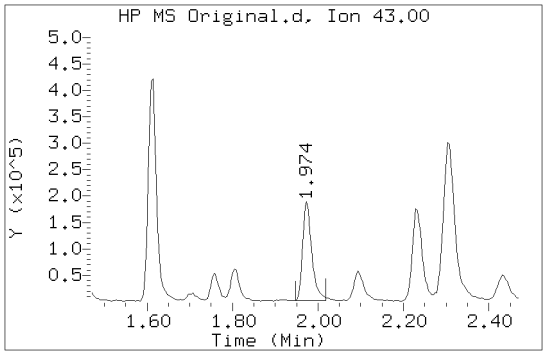

AFTER
MASS
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AREA
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27-Jul-2023
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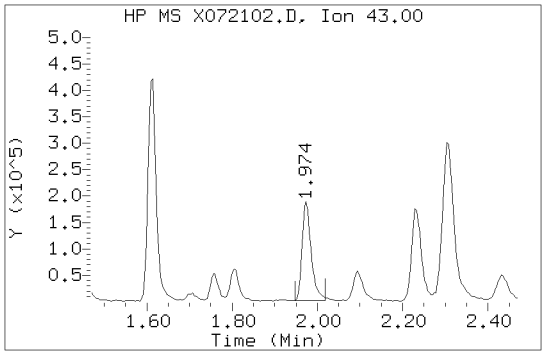

BEFORE
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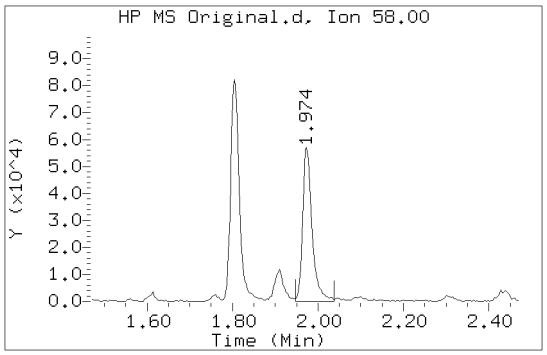
21-Jul-2023
23:10



AFTER
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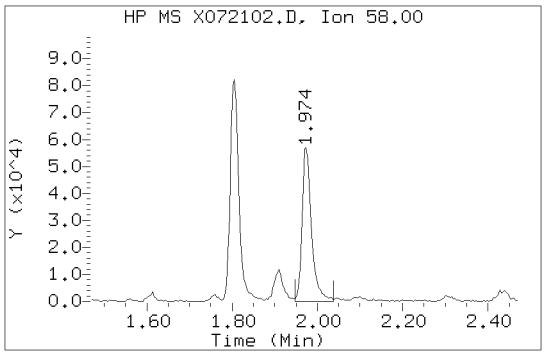
27-Jul-2023
12:58



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Inj Date : 21-JUL-2023 12:36
InstruID : voa6.i
LabSampID : CCV

Vinyl Acetate (108-05-4)

Reason Code:

BEFORE
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HEIGHT
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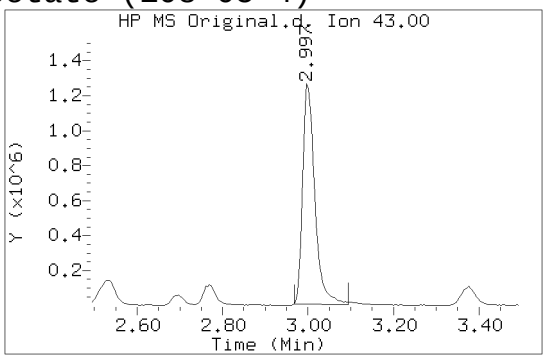
21-Jul-2023
23:10



AFTER
MASS
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AREA
2534046
HEIGHT
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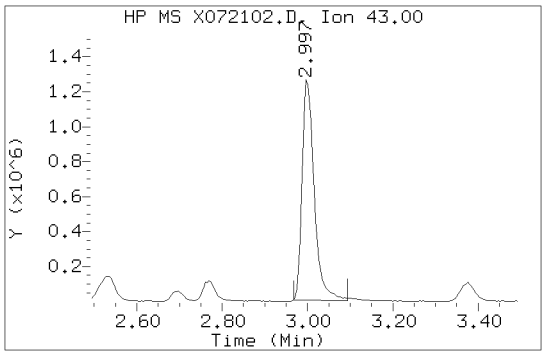
27-Jul-2023
12:58



BEFORE
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AREA
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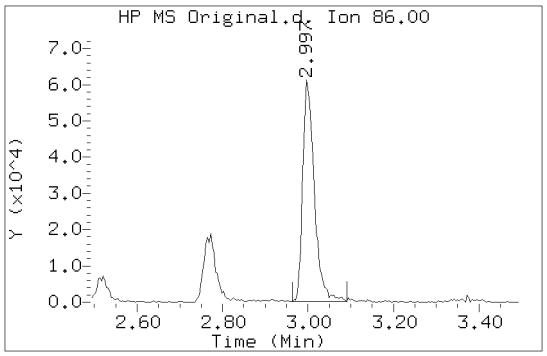
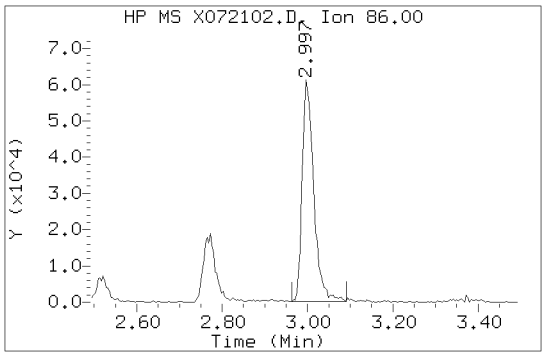
HEIGHT
61169
21-Jul-2023
23:10



AFTER
MASS
86
AREA
118093
HEIGHT
61169
27-Jul-2023
12:58



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

Reason Code:

BEFORE
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HEIGHT
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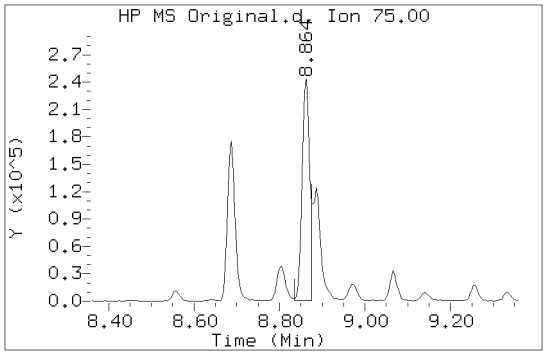
21-Jul-2023
23:10



AFTER
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AREA
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HEIGHT
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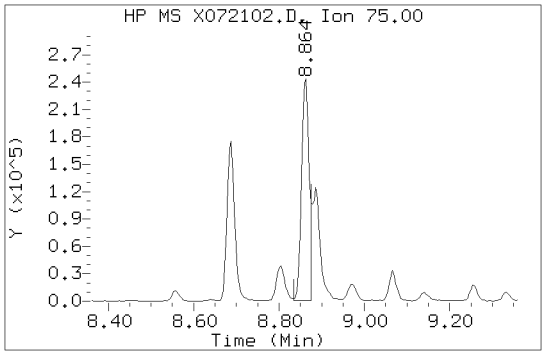
27-Jul-2023
12:58



BEFORE
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HEIGHT
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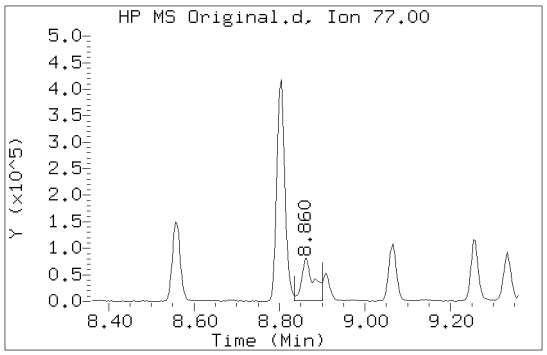
21-Jul-2023
23:10



AFTER
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AREA
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HEIGHT
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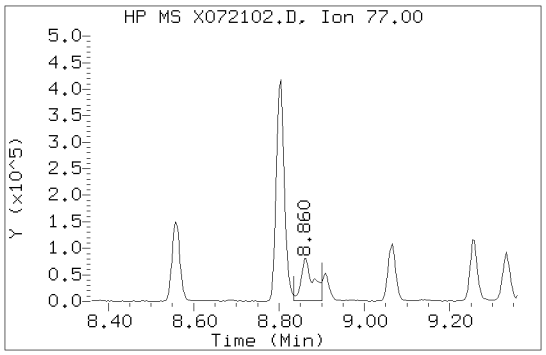
27-Jul-2023
12:58



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072104.D Page 1
Report Date: 27-Jul-2023 12:58

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072104.D
Lab Smp Id: CCB Client Smp ID: CCB
Inj Date : 21-JUL-2023 13:17
Operator : PC Inst ID: voa6.i
Smp Info : CCB;CCB;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\8260W.m
Meth Date : 27-Jul-2023 12:58 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.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	4.177	4.178	(1.000)	622793	50.0000	
$ 30 Dibromofluoromethane	113	4.099	4.095	(0.981)	308623	54.1310	54.13
$ 35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	372675	52.2377	52.23
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	954530	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	855340	50.0000	
$ 48 Toluene-d8	98	6.385	6.386	(0.833)	1118224	50.7767	50.77
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	413403	48.5294	48.52
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.658	(1.000)	434816	50.0000	

01322087

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072104.D

Date : 21-JUL-2023 13:17

Client ID: CCB

Instrument: voa6.i

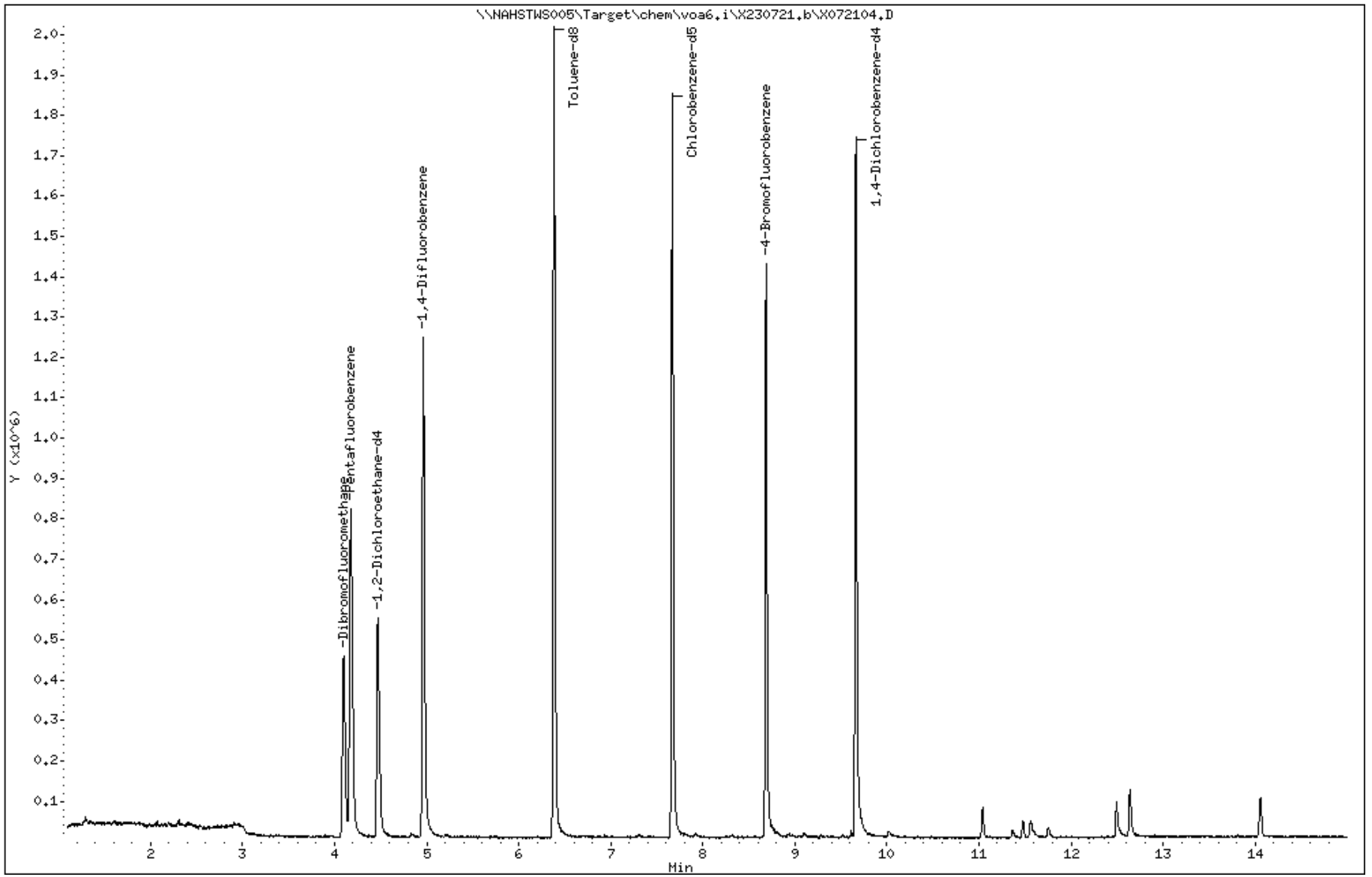
Sample Info: CCB;CCB;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



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Inj Date : 21-JUL-2023 13:17
InstruID : voa6.i
LabSampID : CCB

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072105.D Page 1
Report Date: 27-Jul-2023 12:58

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072105.D
Lab Smp Id: VLCSW-230721 Client Smp ID: VLCSW-230721
Inj Date : 21-JUL-2023 13:38
Operator : PC Inst ID: voa6.i
Smp Info : VLCSW-230721;VLCSW-230721;3;;LCS
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\8260W.m
Meth Date : 27-Jul-2023 12:58 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.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	4.177	4.178	(1.000)	622769	50.0000	
135 1,4-Dioxane	88	5.606	5.598	(1.342)	27467	371.154	371.15(a)
140 1,3-Butadiene	54	1.167	1.164	(0.280)	179634	22.4477	22.44
25 Methacrylonitrile	41	3.833	3.821	(0.917)	174044	21.6512	21.65
12 Isobutyl Alcohol	43	4.680	4.676	(1.120)	539797	457.262	457.26
13 Acetonitrile	39	2.198	2.198	(0.526)	209244	239.604	239.60
14 Allyl Chloride	41	2.198	2.198	(0.526)	530091	25.9256	25.92
4 Propionitrile	54	3.656	3.653	(0.875)	266770	216.243	216.24(a)
72 trans-1,4-Dichloro-2-butene	53	8.889	8.886	(1.159)	57076	20.6520	20.65
130 Ethyl Acetate	43	3.664	3.657	(0.877)	195290	21.1126	21.11
40 Methyl Methacrylate	41	5.609	5.606	(1.343)	164898	21.9381	21.93
49 Ethyl Methacrylate	69	6.712	6.712	(1.352)	120544	18.5941	18.59
2 Dichlorodifluoromethane	85	0.976	0.972	(0.234)	106052	17.3777	17.37
3 Chloromethane	50	1.081	1.081	(0.259)	197704	21.0181	21.01
5 Vinyl Chloride	62	1.145	1.145	(0.274)	171615	21.2951	21.29
6 Bromomethane	94	1.343	1.340	(0.322)	68651	20.5852	20.58
7 Chloroethane	64	1.407	1.404	(0.337)	104436	22.7007	22.70
8 Trichlorofluoromethane	101	1.561	1.561	(0.374)	162216	19.8623	19.86
9 Acrolein	56	1.865	1.857	(0.446)	12911	55.2595	55.25
10 Acetone	43	1.973	1.973	(0.472)	159480	62.9992	62.99

11 1,1-Dichloroethene	96	1.917	1.913 (0.459)	95726	20.9812	20.98
15 Iodomethane	142	2.029	2.030 (0.486)	187903	34.4048	34.40

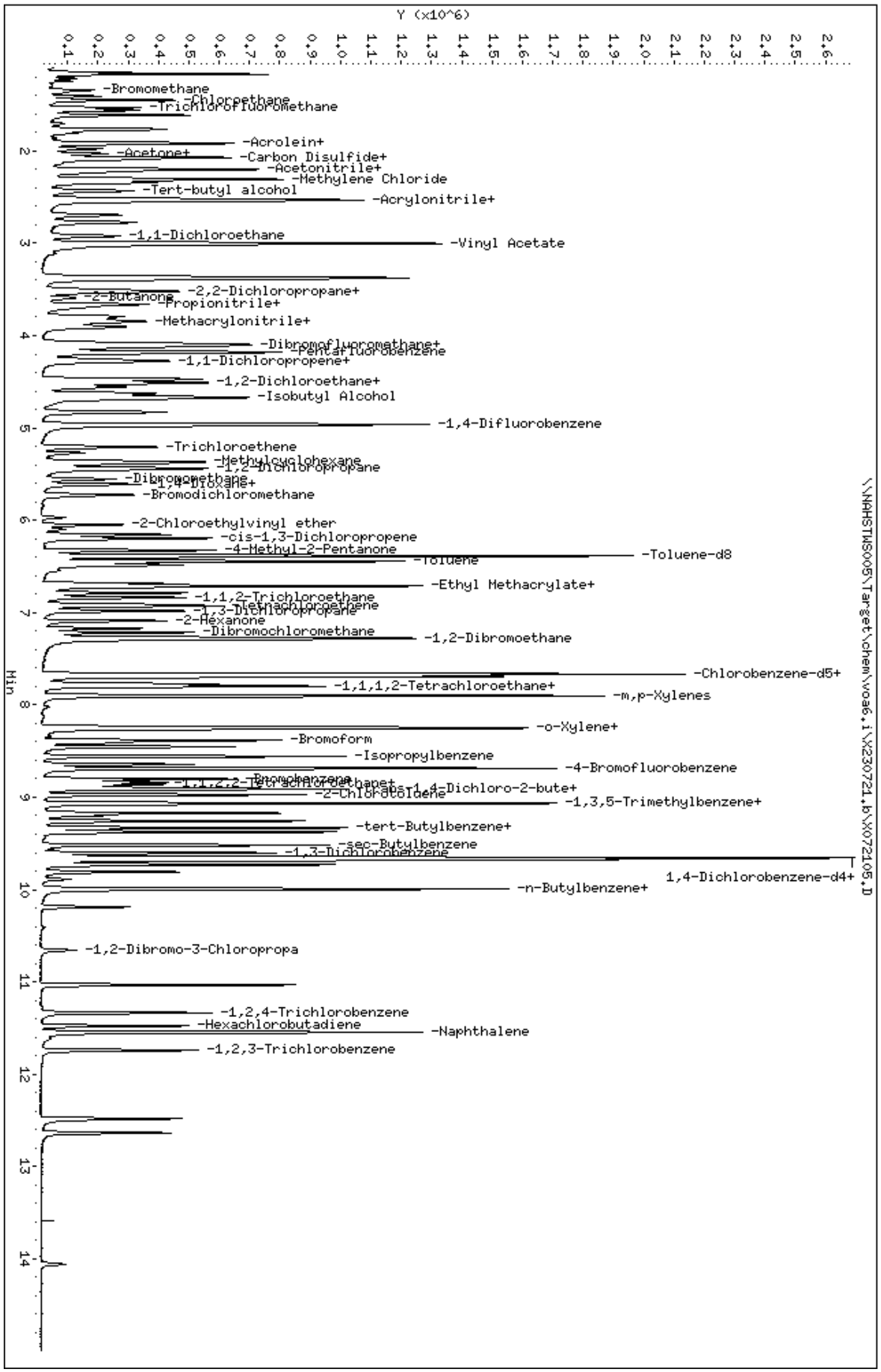
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	16 Acrylonitrile	53	2.536	2.532	(0.607)	140149	46.1812	46.18
	17 Methylene Chloride	84	2.307	2.303	(0.552)	110091	19.6147	19.61
	18 Methyl tert-butyl ether	73	2.536	2.536	(0.607)	322817	19.0246	19.02
	19 Carbon Disulfide	76	2.071	2.071	(0.496)	618240	43.1082	43.10
	20 trans-1,2-Dichloroethene	96	2.528	2.528	(0.605)	98566	18.6767	18.67
	21 Vinyl Acetate	43	3.000	2.997	(0.718)	968656	44.3807	44.38
	22 1,1-Dichloroethane	63	2.922	2.922	(0.699)	231145	19.9589	19.95
	24 2-Butanone	43	3.589	3.582	(0.859)	138533	41.7711	41.77
	26 2,2-Dichloropropane	77	3.510	3.507	(0.840)	167671	18.7811	18.78
	27 cis-1,2-Dichloroethene	96	3.525	3.525	(0.844)	128928	19.1770	19.17
	28 Chloroform	83	3.908	3.904	(0.935)	215914	18.2208	18.22
	29 Bromochloromethane	128	3.791	3.795	(0.908)	68582	18.2024	18.20
$	30 Dibromofluoromethane	113	4.099	4.095	(0.981)	297347	52.1274	52.12
	31 1,1,1-Trichloroethane	97	4.080	4.076	(0.977)	172061	18.8623	18.86
	32 1,1-Dichloropropene	75	4.279	4.279	(0.862)	148068	18.3383	18.33
	33 1,2-Dichloroethane	62	4.556	4.556	(0.918)	198732	18.2378	18.23
	34 Carbon Tetrachloride	117	4.264	4.264	(0.859)	143510	17.6423	17.64
$	35 1,2-Dichloroethane-d4	65	4.474	4.470	(1.071)	359875	50.4241	50.42
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	989887	50.0000	
	37 Benzene	78	4.511	4.507	(0.909)	458387	19.3596	19.35
	38 Trichloroethene	130	5.205	5.205	(1.048)	124497	18.5891	18.58
	39 Bromodichloromethane	83	5.726	5.722	(1.153)	164811	18.1724	18.17
	41 2-Chloroethylvinyl ether	63	6.048	6.044	(1.218)	103953	37.5410	37.54
	42 1,2-Dichloropropane	63	5.437	5.433	(1.095)	155690	20.4489	20.44
	44 Dibromomethane	93	5.553	5.550	(1.119)	80161	18.5999	18.59
	45 4-Methyl-2-Pentanone	43	6.325	6.326	(0.825)	372693	41.6787	41.67
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	193751	18.5999	18.59
*	47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	908700	50.0000	
$	48 Toluene-d8	98	6.385	6.386	(0.833)	1072019	45.8201	45.82
	50 Toluene	91	6.445	6.442	(0.841)	488395	19.9664	19.96
	51 trans-1,3-Dichloropropene	75	6.682	6.678	(1.346)	160080	18.2302	18.23
	52 2-Hexanone	43	7.086	7.087	(0.924)	253098	43.0876	43.08
	53 1,1,2-Trichloroethane	83	6.839	6.835	(0.892)	101938	19.6451	19.64
	54 1,3-Dichloropropane	76	6.981	6.978	(0.911)	201394	18.9976	18.99
	55 Dibromochloromethane	129	7.176	7.173	(0.936)	141848	18.9357	18.93
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	97441	19.2818	19.28
	57 1,2-Dibromoethane	107	7.263	7.259	(0.947)	113384	19.1217	19.12
	58 1-Chlorohexane	55	7.694	7.694	(1.550)	162165	20.3919	20.39
	59 Chlorobenzene	112	7.690	7.690	(1.003)	327970	19.1808	19.18
	60 1,1,1,2-Tetrachloroethane	131	7.772	7.773	(1.014)	129430	19.3352	19.33
	61 Ethylbenzene	106	7.799	7.799	(1.017)	165267	19.2747	19.27
	62 m,p-Xylenes	106	7.900	7.900	(1.030)	423964	39.4136	39.41
	63 o-Xylene	106	8.241	8.237	(1.075)	208377	20.4564	20.45
	64 Styrene	104	8.260	8.256	(1.077)	354416	19.9467	19.94
	66 Bromoform	173	8.410	8.406	(1.097)	92778	19.3036	19.30
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	528345	20.1785	20.17
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	159755	19.7275	19.72
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	457475	50.5674	50.56
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.658	(1.000)	482129	50.0000	
	71 1,2,3-Trichloropropane	75	8.860	8.863	(0.917)	132672	20.6457	20.64
	73 n-Propylbenzene	91	8.908	8.908	(0.922)	613089	21.0432	21.04
	74 Bromobenzene	156	8.803	8.803	(0.911)	148591	19.7061	19.70

75	1,3,5-Trimethylbenzene	105	9.066	9.062 (0.938)	422082	19.3385	19.33
76	2-Chlorotoluene	91	8.972	8.972 (0.929)	391325	19.9111	19.91

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	77 4-Chlorotoluene	91	9.069	9.066	(0.939)	437922	20.2772	20.27
	78 tert-Butylbenzene	119	9.332	9.332	(0.966)	379439	20.2722	20.27
	79 1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	426034	19.4650	19.46
	81 sec-Butylbenzene	105	9.519	9.519	(0.985)	534157	21.4102	21.41
	82 p-Isopropyltoluene	119	9.647	9.647	(0.998)	456431	20.0275	20.02
	83 1,3-Dichlorobenzene	146	9.605	9.602	(0.994)	263678	20.0733	20.07
	84 1,4-Dichlorobenzene	146	9.680	9.681	(1.002)	273053	18.9590	18.95
	87 n-Butylbenzene	91	9.992	9.992	(1.034)	398293	20.8669	20.86
	88 1,2-Dichlorobenzene	146	9.992	9.988	(1.034)	259542	20.0975	20.09
	89 1,2-Dibromo-3-Chloropropane	155	10.651	10.651	(1.102)	24911	19.3949	19.39
	90 1,2,4-Trichlorobenzene	180	11.337	11.334	(1.173)	151605	17.0923	17.09
	91 Hexachlorobutadiene	225	11.476	11.476	(1.188)	75381	19.9294	19.92
	92 Naphthalene	128	11.544	11.540	(1.195)	379157	17.2710	17.27
	93 1,2,3-Trichlorobenzene	180	11.742	11.739	(1.215)	143944	17.3527	17.35
M	94 1,2-Dichloroethylene (total)	96				227494	37.8537	37.85
M	95 Xylenes (total)	106				632341	59.8700	59.87
	141 Cyclohexane	56	4.117	4.118	(0.986)	224153	20.7648	20.76
	138 Freon TF	101	1.917	1.917	(0.459)	93436	25.8209	25.82
	147 Methylcyclohexane	55	5.385	5.381	(1.085)	432737	20.7113	20.71
	146 Methyl Acetate	43	2.232	2.228	(0.534)	148976	26.8788	26.87
	148 Tert-Butyl alcohol	59	2.434	2.431	(0.583)	303242	385.795	385.79
	149 Isopropyl Alcohol	45	2.093	2.093	(0.501)	231628	474.912	474.91

QC Flag Legend

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



Data File: \\NAHSTMS005\Target\chem\voa6.i\X230721.b\X072105.D
Date : 21-JUL-2023 13:38
Client ID: VLCSW-230721
Sample Info: VLCSW-230721;VLCSW-230721;3;;LCS
Purge Volume: 5.0
Column phase: DB624

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

Data File : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072105.D
Inj Date : 21-JUL-2023 13:38
InstruID : voa6.i
LabSampID : VLCSW-230721

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072107.D Page 1
Report Date: 27-Jul-2023 12:58

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072107.D
Lab Smp Id: VBLKW-230721 Client Smp ID: VBLKW-230721
Inj Date : 21-JUL-2023 14:19
Operator : PC Inst ID: voa6.i
Smp Info : VBLKW-230721;VBLKW-230721;3;;BLANK
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\8260W.m
Meth Date : 27-Jul-2023 12:58 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.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	4.178	4.178	(1.000)	632804	50.0000	
$ 30 Dibromofluoromethane	113	4.099	4.095	(0.981)	314494	54.2903	54.29
$ 35 1,2-Dichloroethane-d4	65	4.474	4.470	(1.071)	395054	54.5255	54.52
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	969596	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	851711	50.0000	
$ 48 Toluene-d8	98	6.385	6.386	(0.833)	1129033	51.4860	51.48
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	397905	46.8948	46.89
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.658	(1.000)	411177	50.0000	

01322097

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072107.D

Date : 21-JUL-2023 14:19

Client ID: VBLKW-230721

Instrument: voa6.i

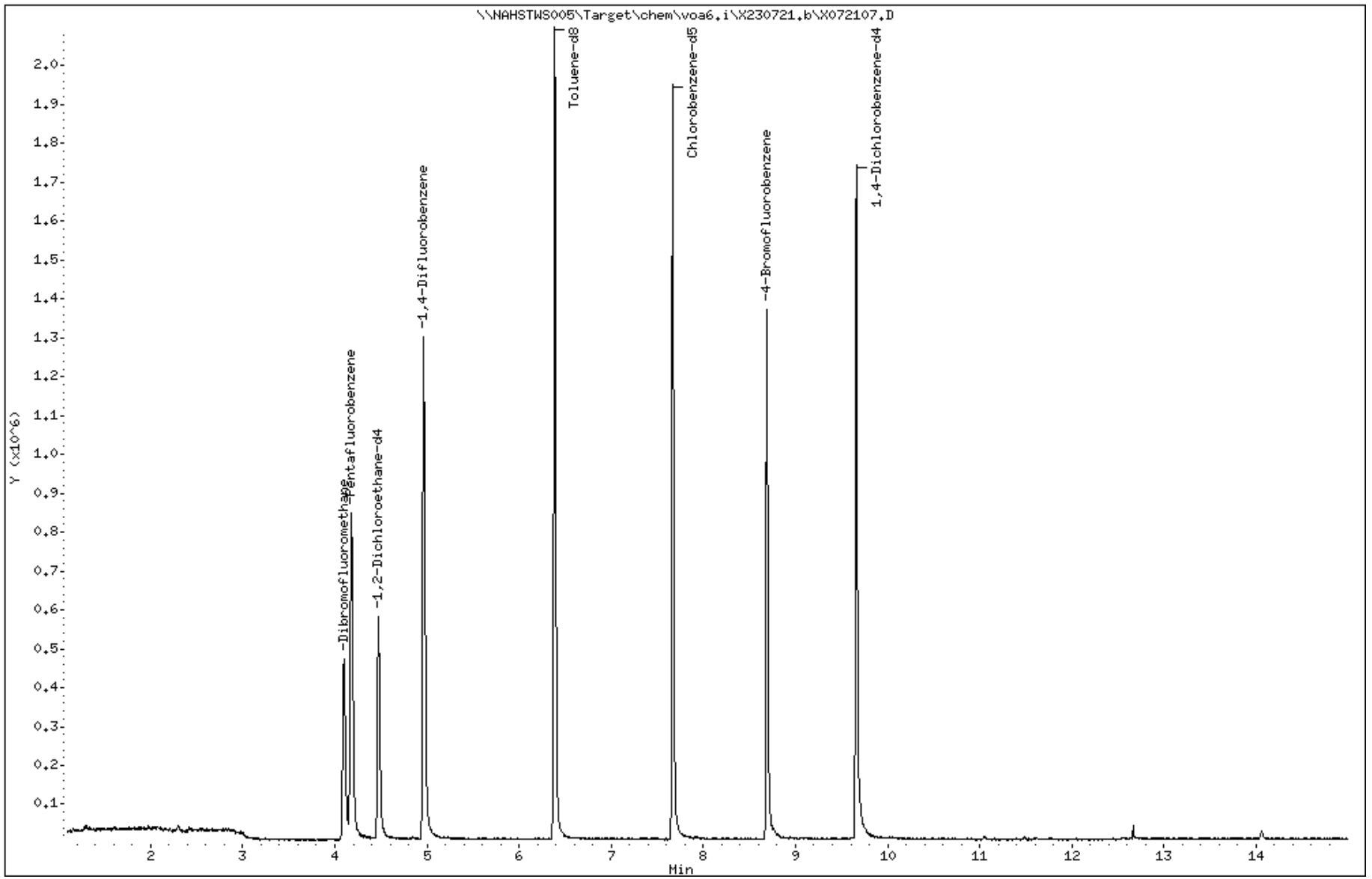
Sample Info: VBLKW-230721;VBLKW-230721;3;;BLANK

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072107.D
Inj Date : 21-JUL-2023 14:19
InstruID : voa6.i
LabSampID : VBLKW-230721

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072111.D Page 1
Report Date: 27-Jul-2023 12:58

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072111.D
Lab Smp Id: HS23070993-01 Client Smp ID: HS23070993-01
Inj Date : 21-JUL-2023 15:41
Operator : PC Inst ID: voa6.i
Smp Info : HS23070993-01;HS23070993-01;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\8260W.m
Meth Date : 27-Jul-2023 12:58 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.178	4.178	(1.000)	604115	50.0000	
$ 30 Dibromofluoromethane	113	4.099	4.095	(0.981)	296419	53.5904	53.59
$ 35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	370201	53.5102	53.51
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	913803	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	814287	50.0000	
$ 48 Toluene-d8	98	6.385	6.386	(0.833)	1070011	51.0370	51.03
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	385346	47.5075	47.50
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.658	(1.000)	421780	50.0000	
5 Vinyl Chloride	62	1.149	1.145	(0.275)	156323	19.9965	19.99
11 1,1-Dichloroethene	96	1.917	1.913	(0.459)	16303	3.68363	3.68(a)
27 cis-1,2-Dichloroethene	96	3.529	3.525	(0.845)	157722	24.1843	24.18
38 Trichloroethene	130	5.205	5.205	(1.048)	2373177	383.851	383.85(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.

01322100

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072111.D

Date : 21-JUL-2023 15:41

Client ID: HS23070993-01

Instrument: voa6.i

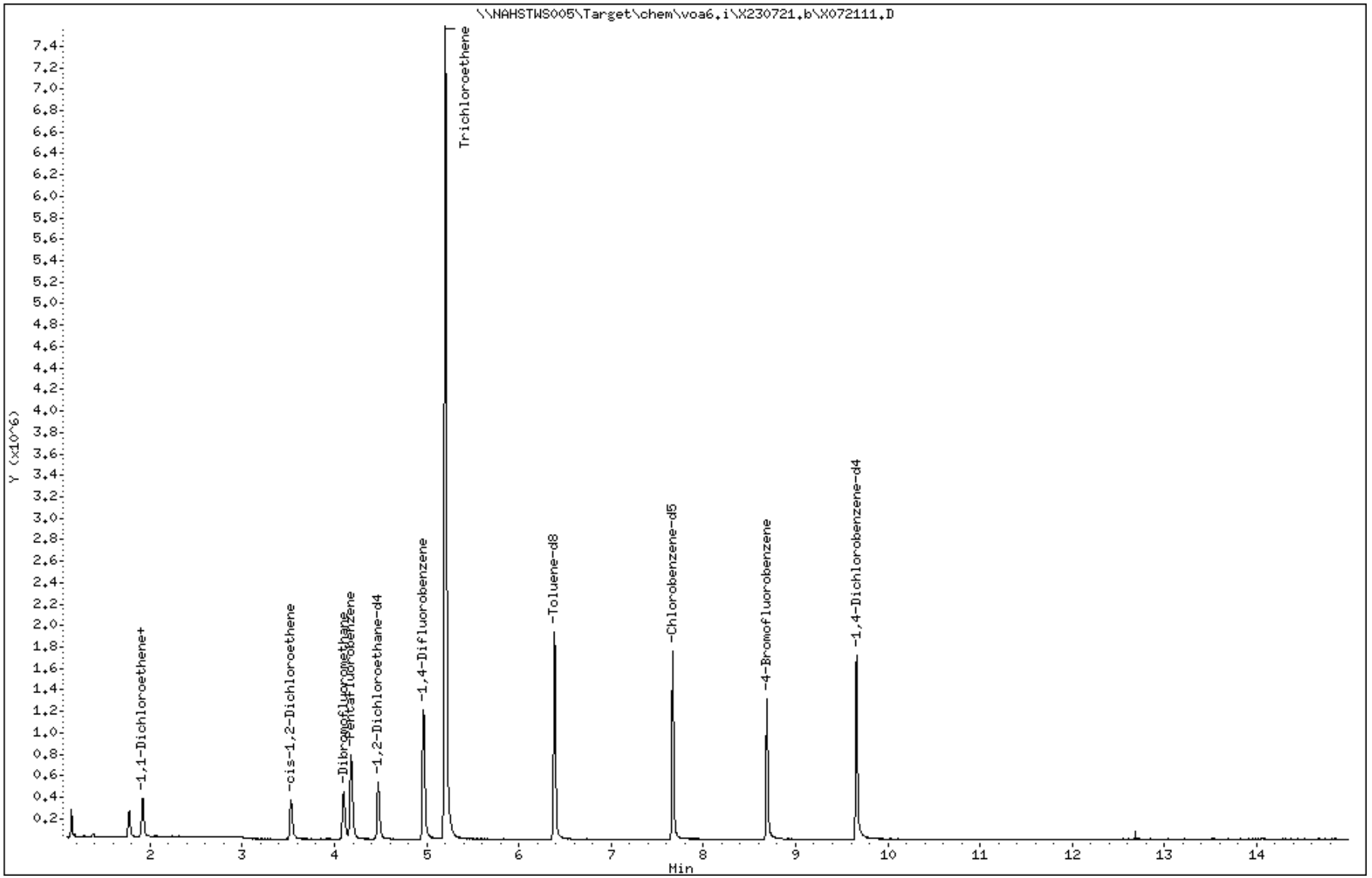
Sample Info: HS23070993-01;HS23070993-01;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072111.D

Date : 21-JUL-2023 15:41

Client ID: HS23070993-01

Instrument: voa6.i

Sample Info: HS23070993-01;HS23070993-01;;;

Purge Volume: 5.0

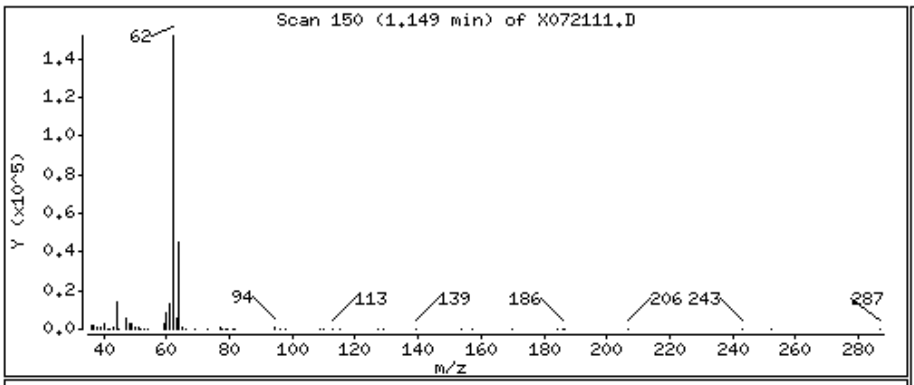
Operator: PC

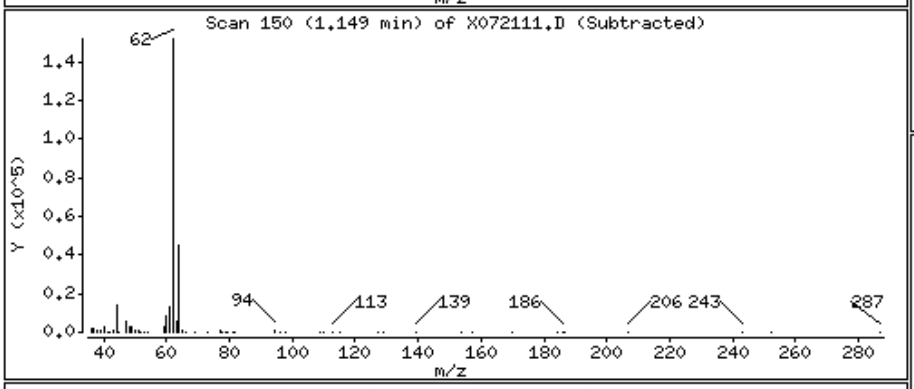
Column phase: DB624

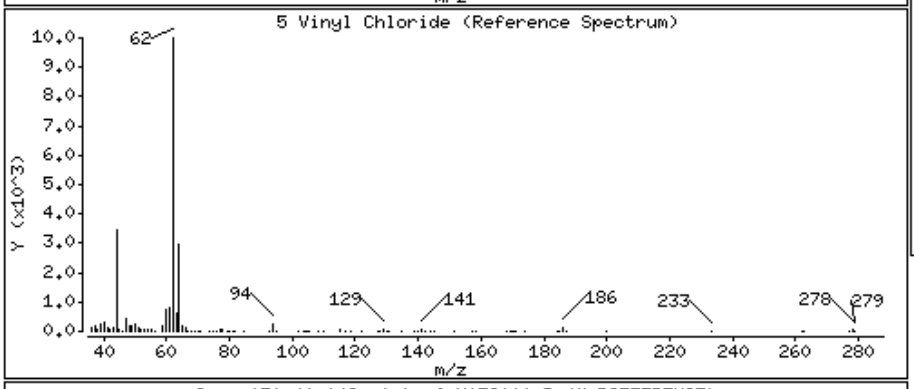
Column diameter: 0.18

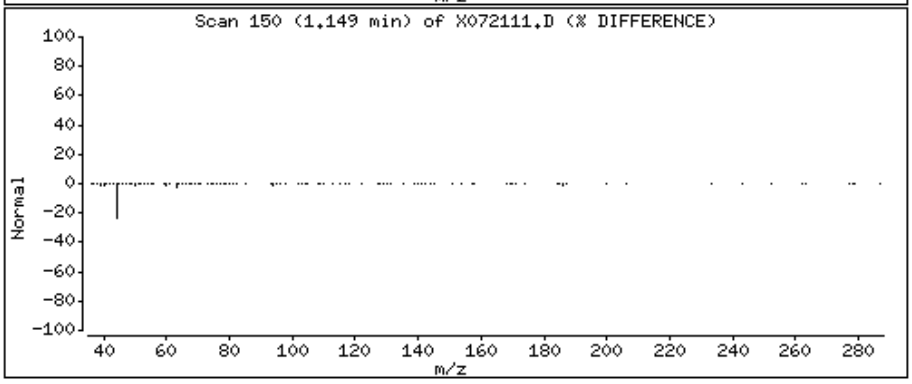
5 Vinyl Chloride

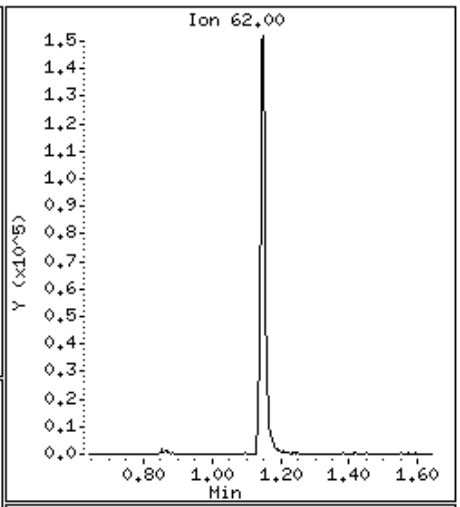
Concentration: 19.99 ug/l

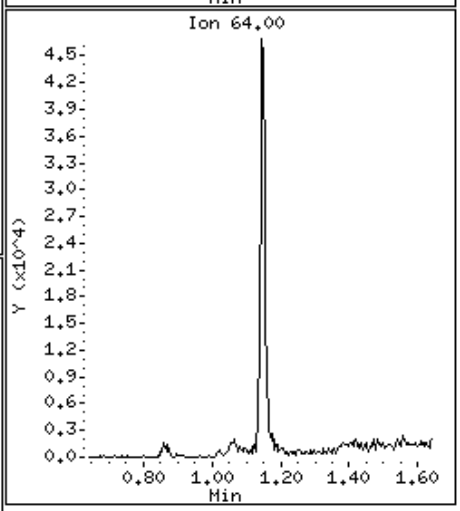












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072111.D

Date : 21-JUL-2023 15:41

Client ID: HS23070993-01

Instrument: voa6.i

Sample Info: HS23070993-01;HS23070993-01;;;

Purge Volume: 5.0

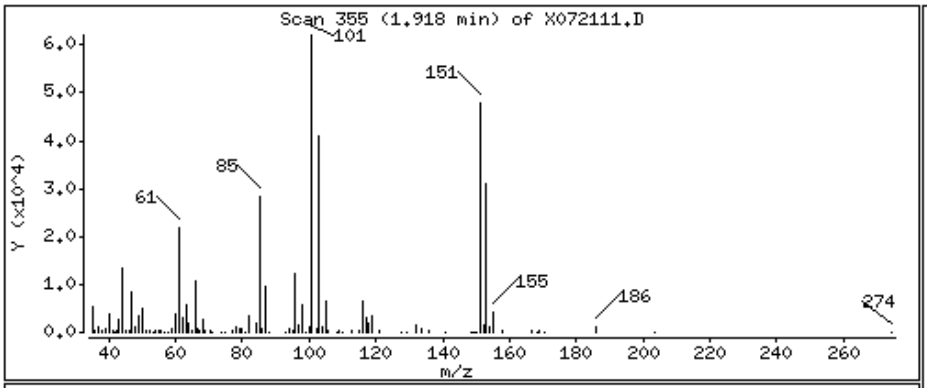
Operator: PC

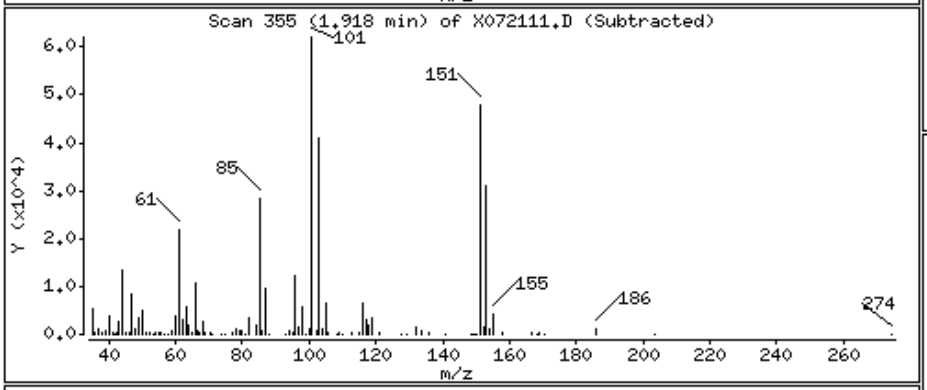
Column phase: DB624

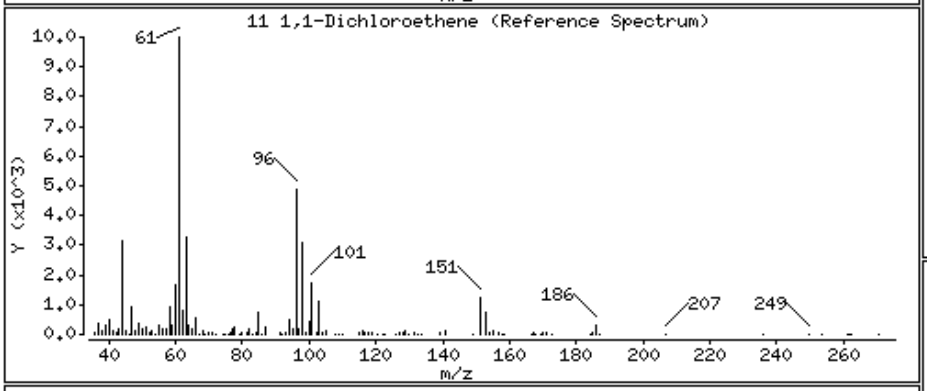
Column diameter: 0.18

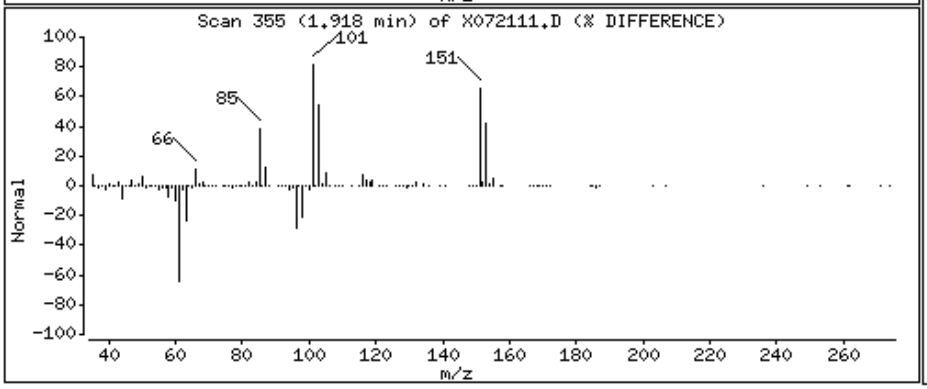
11 1,1-Dichloroethene

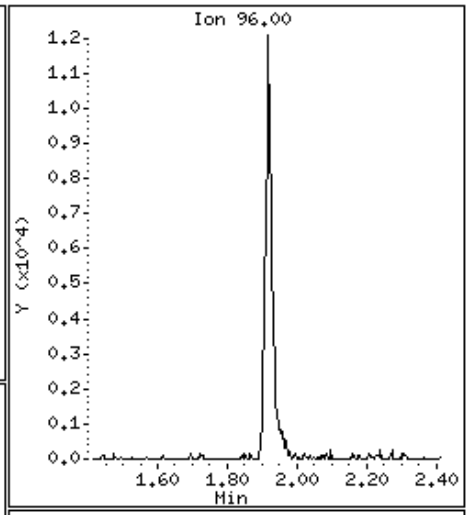
Concentration: 3.68 ug/l

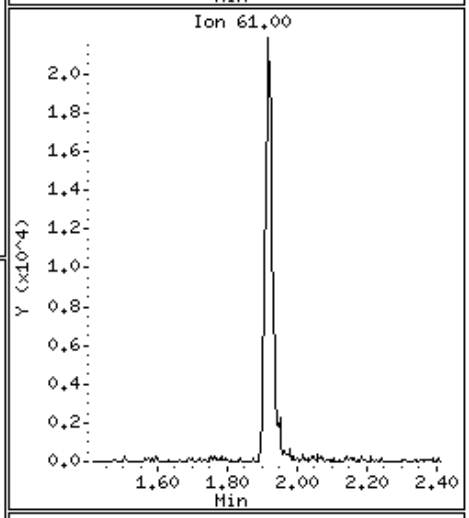


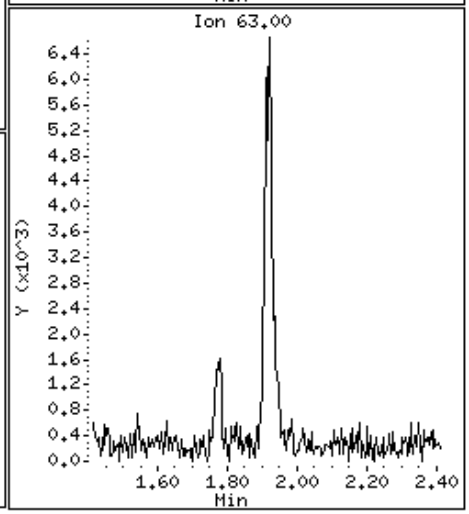












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072111.D Page 4

Date : 21-JUL-2023 15:41

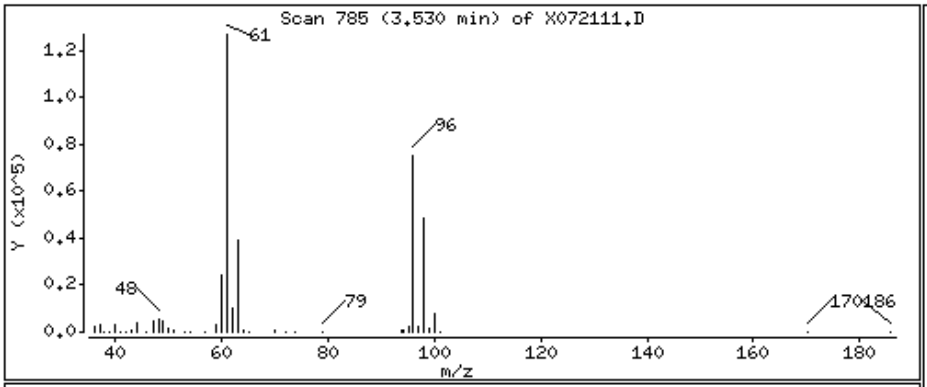
Client ID: HS23070993-01 Instrument: voa6.i

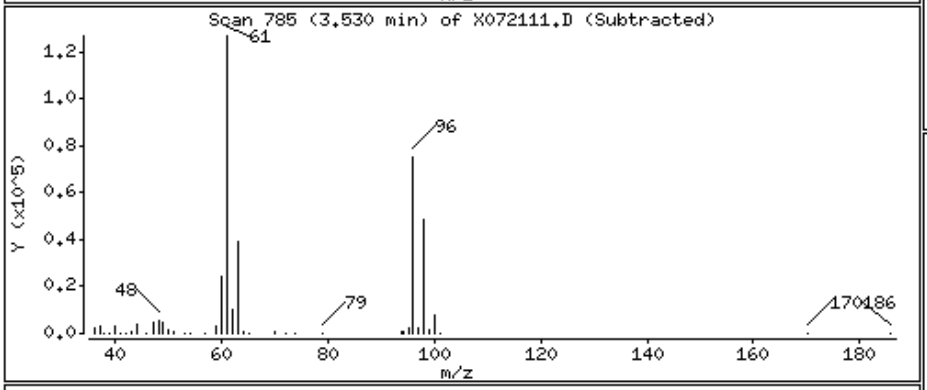
Sample Info: HS23070993-01;HS23070993-01;;;

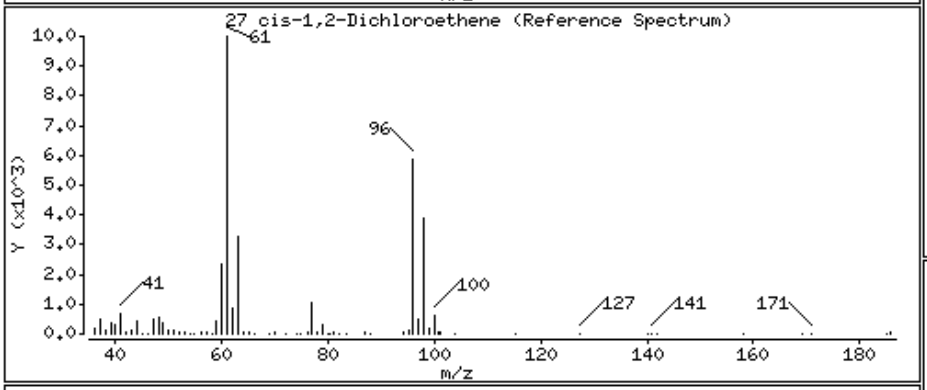
Purge Volume: 5.0 Operator: PC

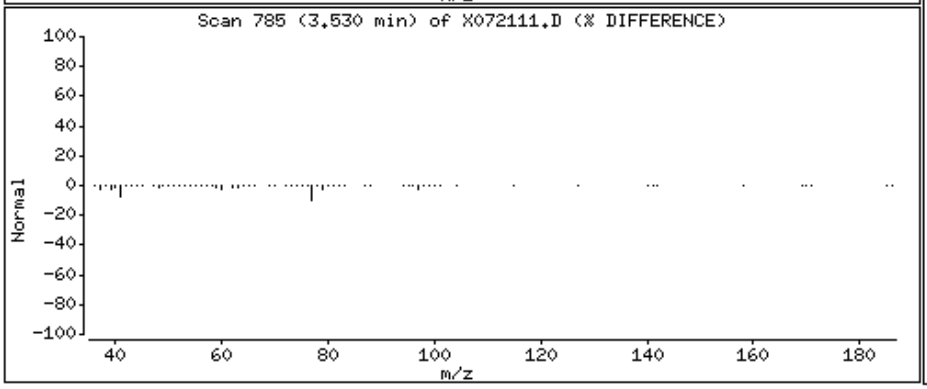
Column phase: DB624 Column diameter: 0.18

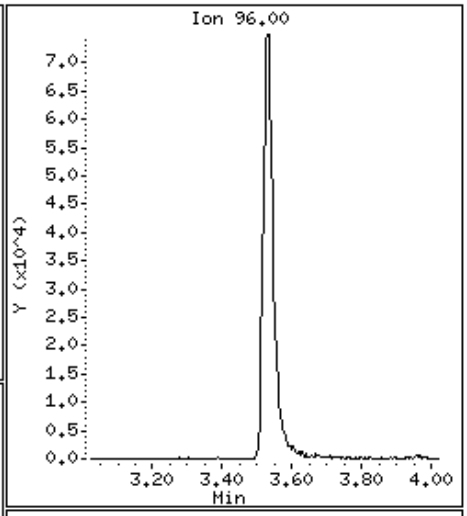
27 cis-1,2-Dichloroethene Concentration: 24.18 ug/l

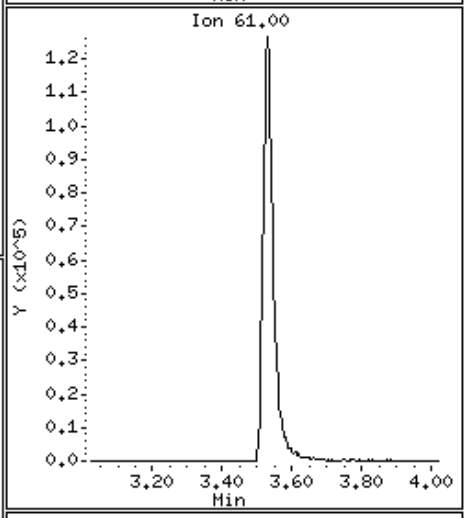


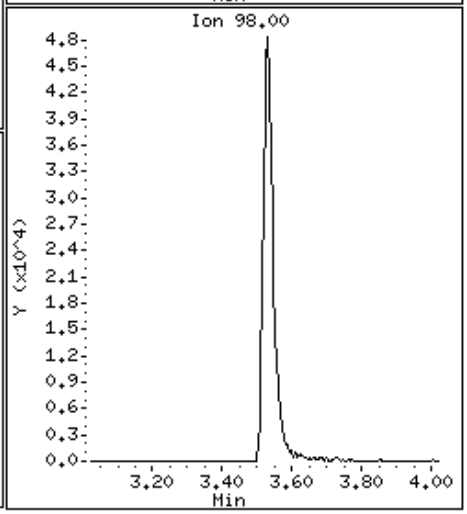












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072111.D

Date : 21-JUL-2023 15:41

Client ID: HS23070993-01

Instrument: voa6.i

Sample Info: HS23070993-01;HS23070993-01;;;

Purge Volume: 5.0

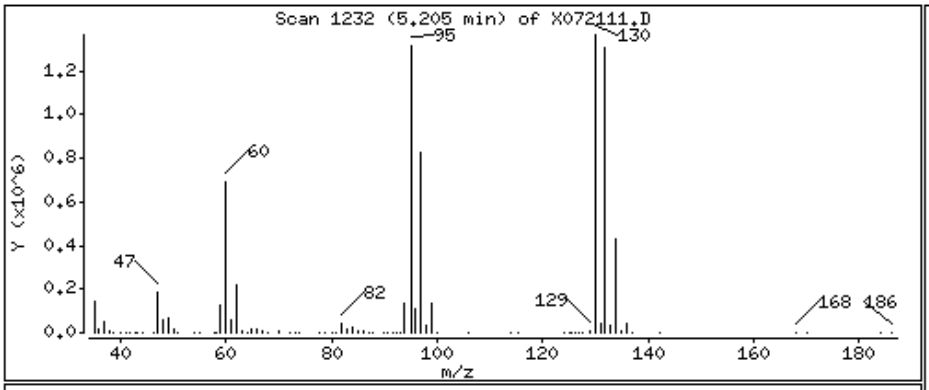
Operator: PC

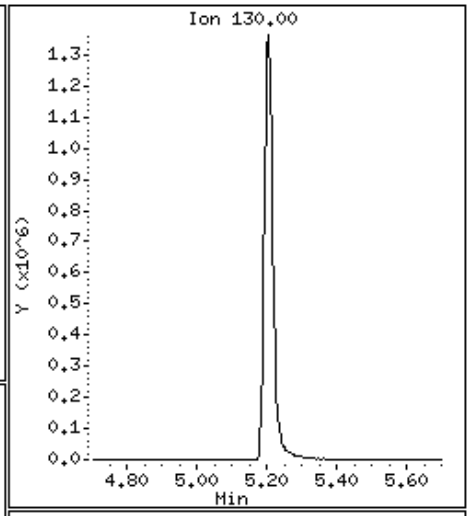
Column phase: DB624

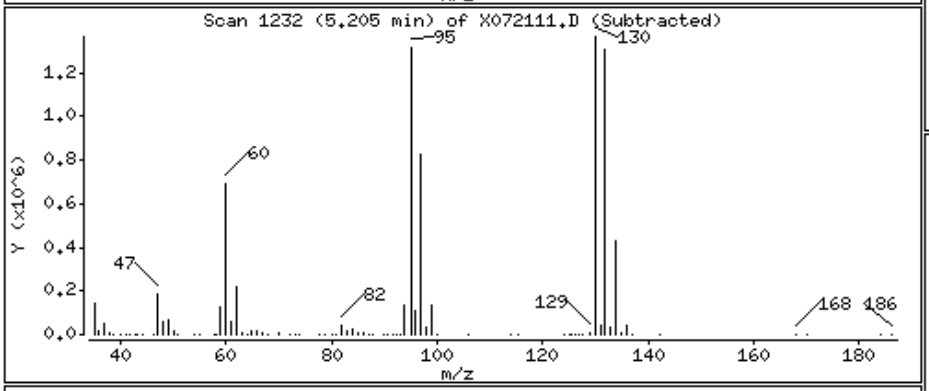
Column diameter: 0.18

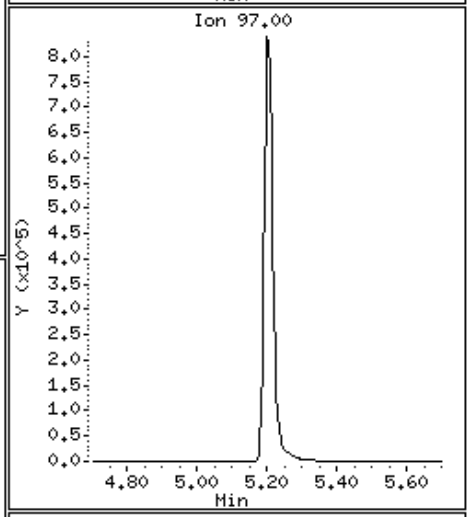
38 Trichloroethene

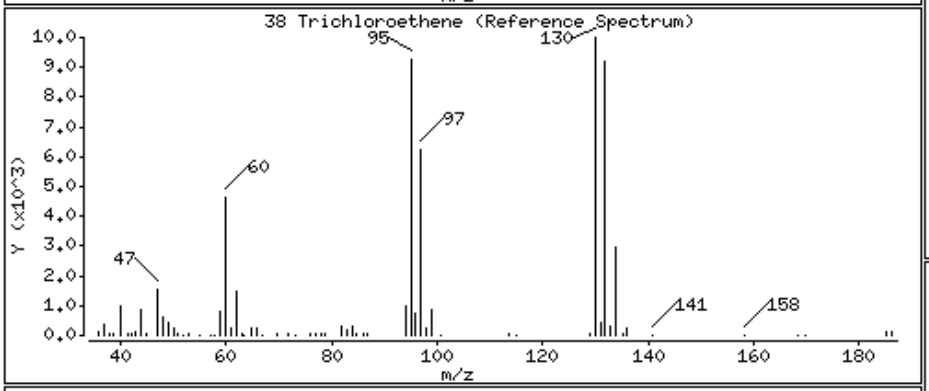
Concentration: 383.85 ug/l

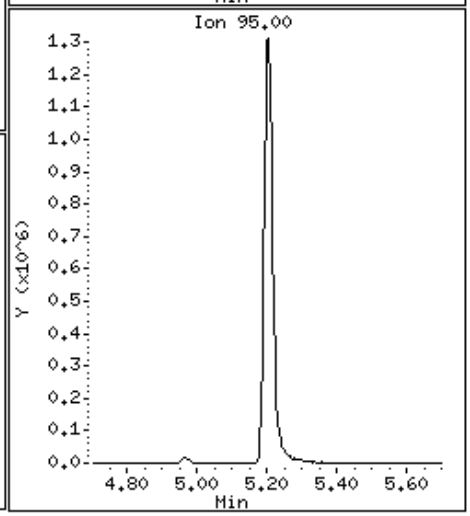


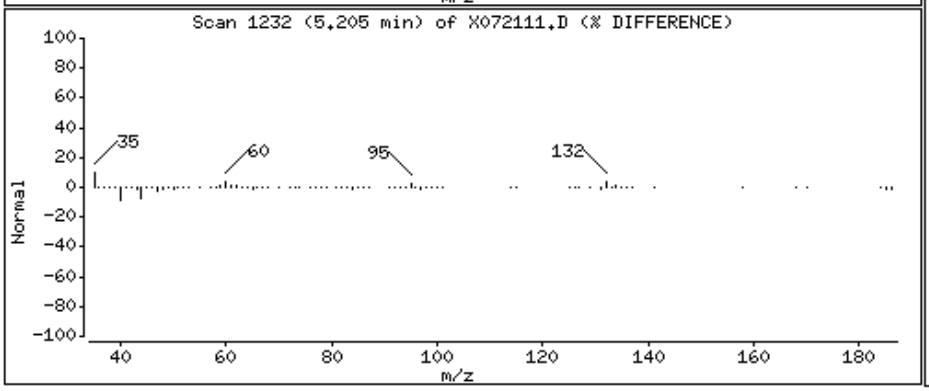












Data File : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072111.D
Inj Date : 21-JUL-2023 15:41
InstruID : voa6.i
LabSampID : HS23070993-01

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072112.D Page 1
Report Date: 27-Jul-2023 12:59

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Data file : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072112.D
Lab Smp Id: HS23070993-02 Client Smp ID: HS23070993-02
Inj Date : 21-JUL-2023 16:01
Operator : PC Inst ID: voa6.i
Smp Info : HS23070993-02;HS23070993-02;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\8260W.m
Meth Date : 27-Jul-2023 12:58 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.177	4.178	(1.000)	599836	50.0000	
$ 30 Dibromofluoromethane	113	4.099	4.095	(0.981)	307825	56.0845	56.08
$ 35 1,2-Dichloroethane-d4	65	4.474	4.470	(1.071)	387301	56.4147	56.41
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	950189	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	827279	50.0000	
$ 48 Toluene-d8	98	6.385	6.386	(0.833)	1088048	51.0823	51.08
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	394161	47.8340	47.83
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.658	(1.000)	417609	50.0000	
5 Vinyl Chloride	62	1.145	1.145	(0.274)	176518	22.7409	22.74
11 1,1-Dichloroethene	96	1.913	1.913	(0.458)	14075	3.20290	3.20(a)
27 cis-1,2-Dichloroethene	96	3.533	3.525	(0.846)	171419	26.4720	26.47
38 Trichloroethene	130	5.205	5.205	(1.048)	2543144	395.591	395.59(A)

QC Flag Legend

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

01322107

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072112.D

Date : 21-JUL-2023 16:01

Client ID: HS23070993-02

Instrument: voa6.i

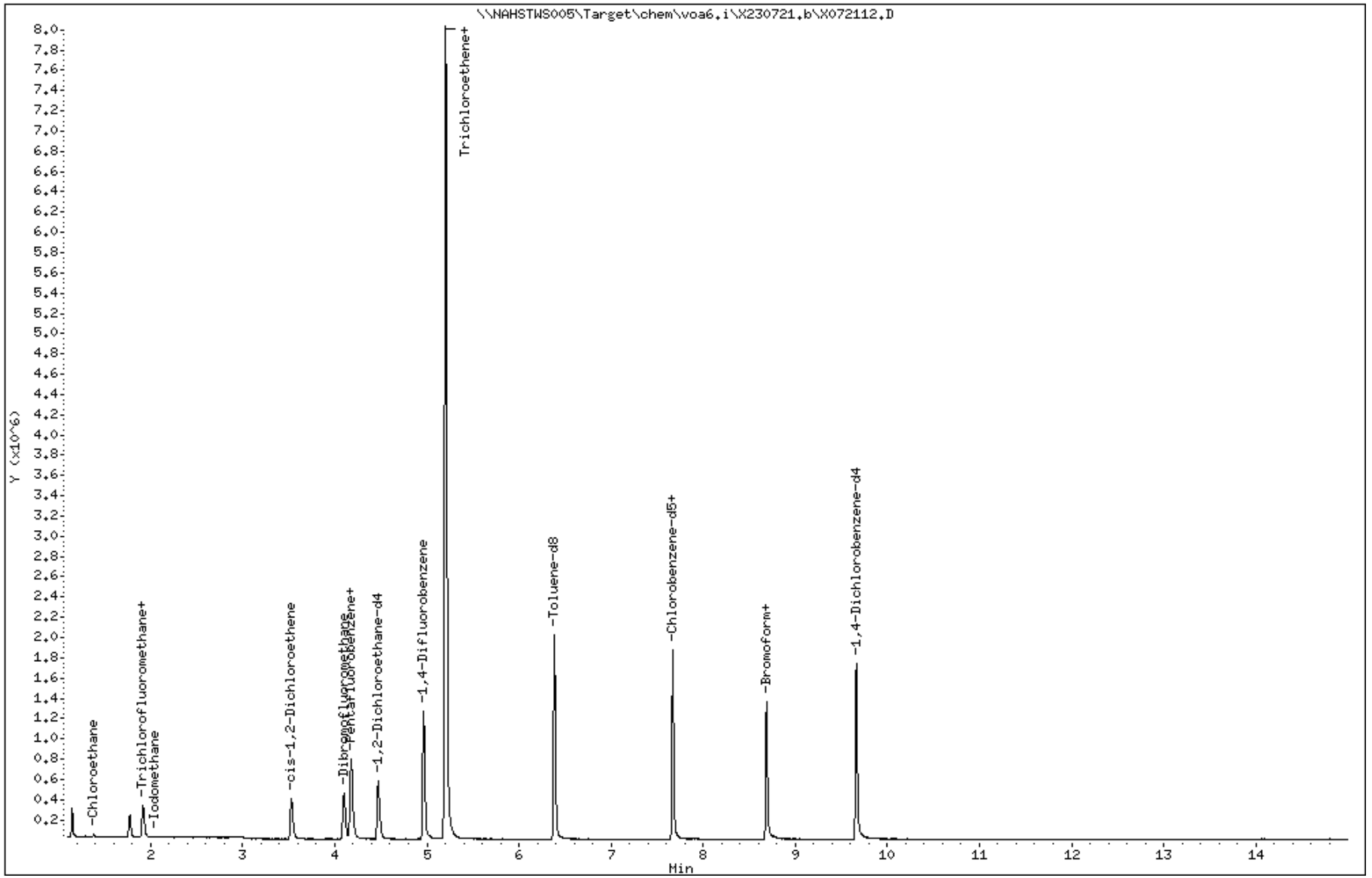
Sample Info: HS23070993-02;HS23070993-02;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072112.D Page 2

Date : 21-JUL-2023 16:01

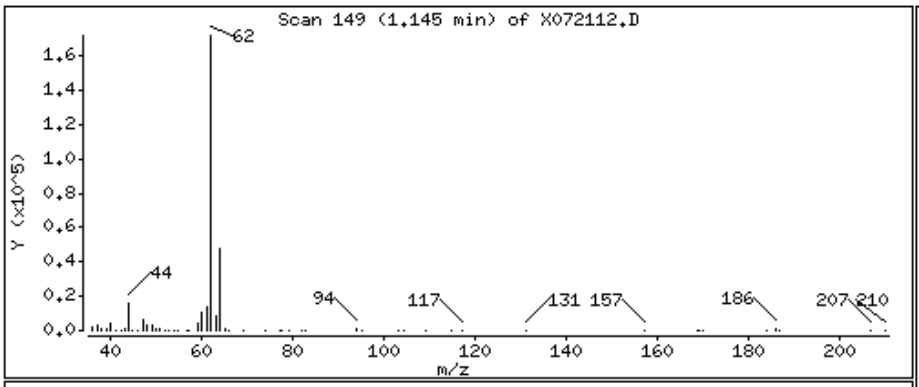
Client ID: HS23070993-02 Instrument: voa6.i

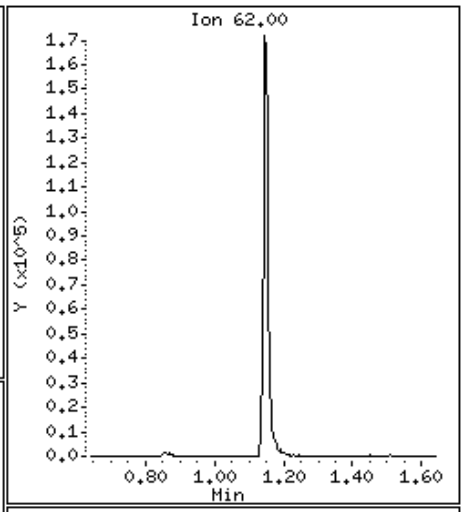
Sample Info: HS23070993-02;HS23070993-02;;;

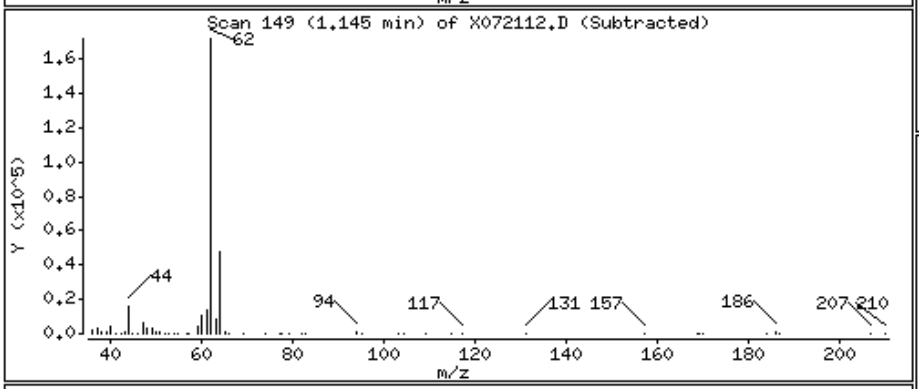
Purge Volume: 5.0 Operator: PC

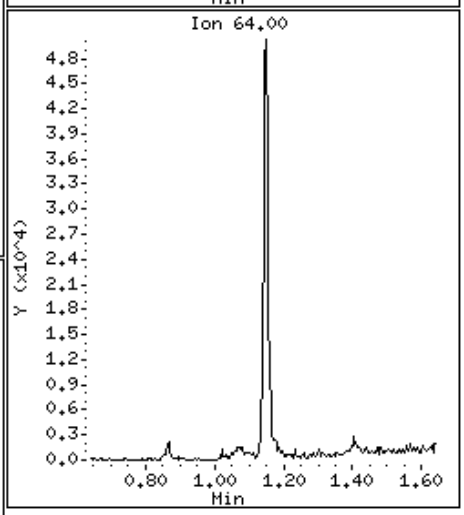
Column phase: DB624 Column diameter: 0.18

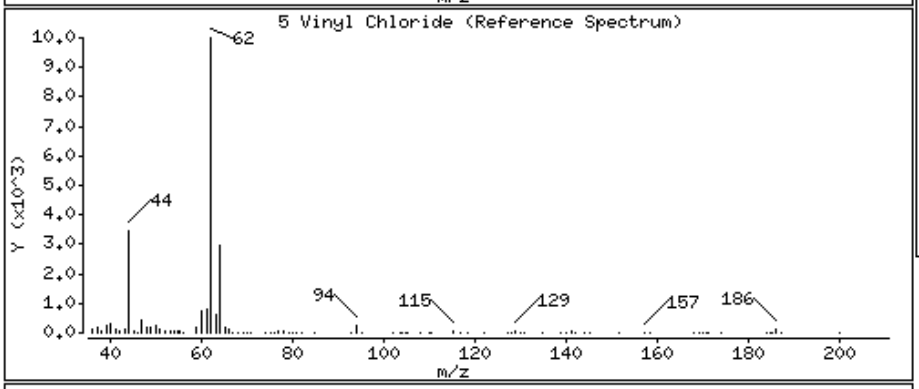
5 Vinyl Chloride Concentration: 22.74 ug/l

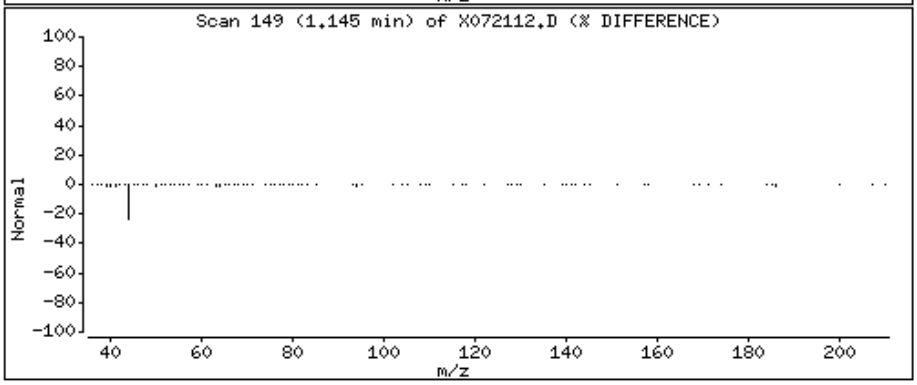












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072112.D

Date : 21-JUL-2023 16:01

Client ID: HS23070993-02

Instrument: voa6.i

Sample Info: HS23070993-02;HS23070993-02;;;

Purge Volume: 5.0

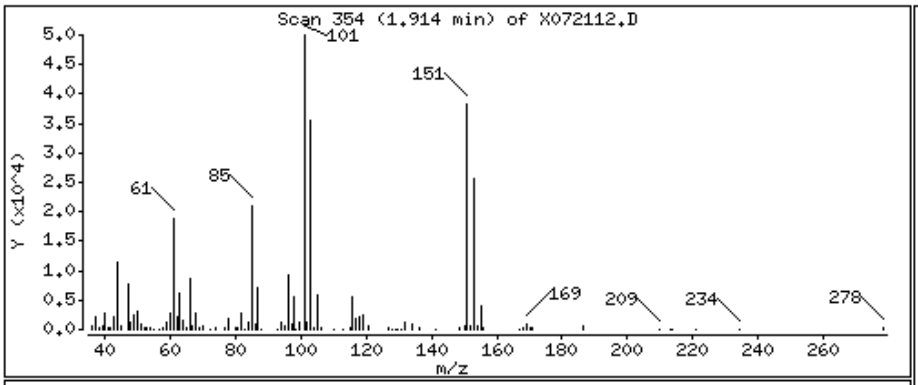
Operator: PC

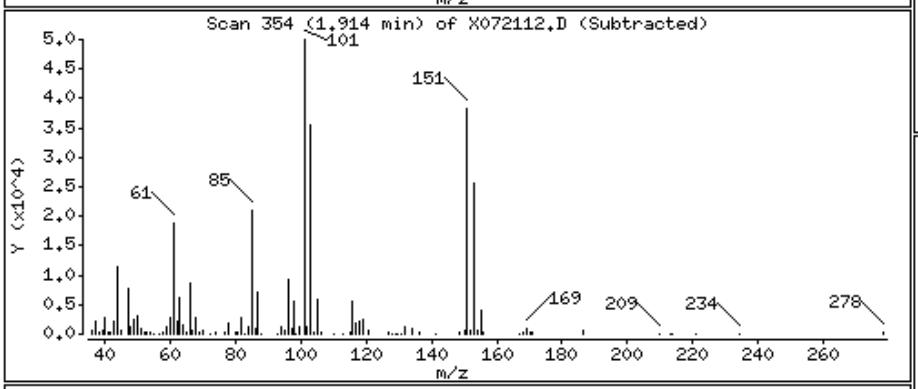
Column phase: DB624

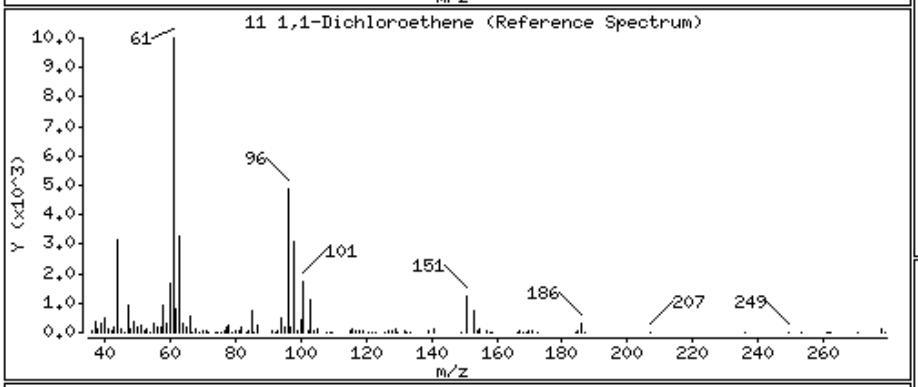
Column diameter: 0.18

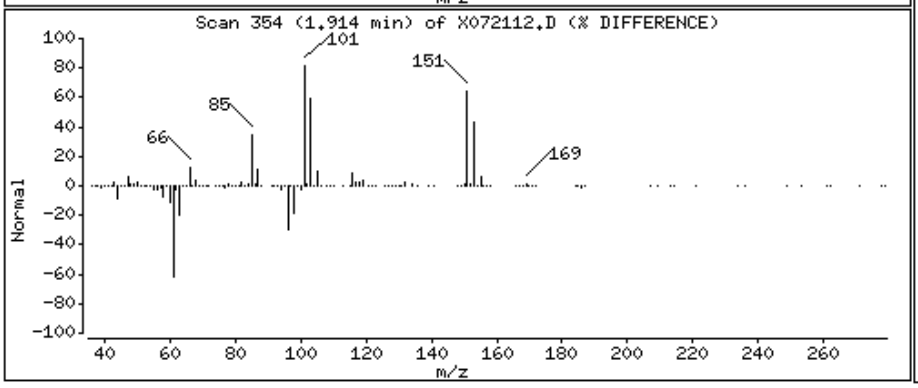
11 1,1-Dichloroethene

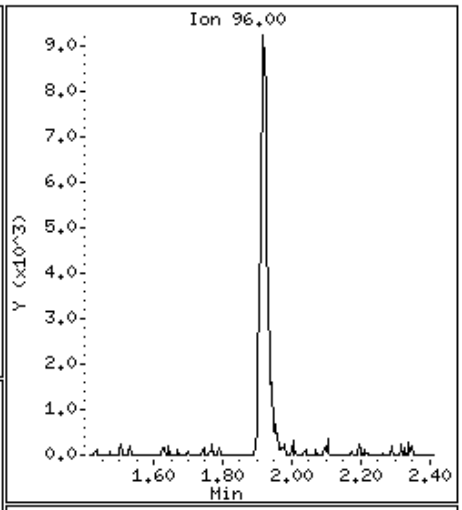
Concentration: 3.20 ug/l

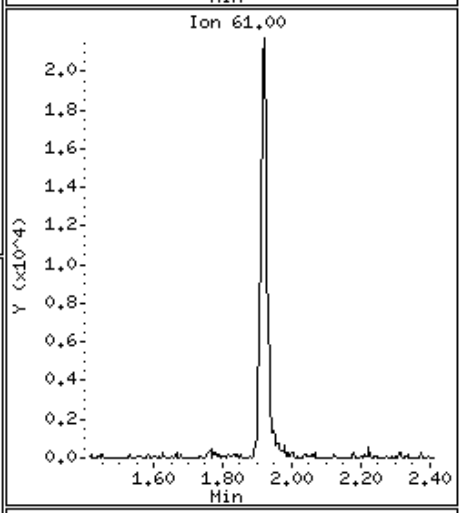


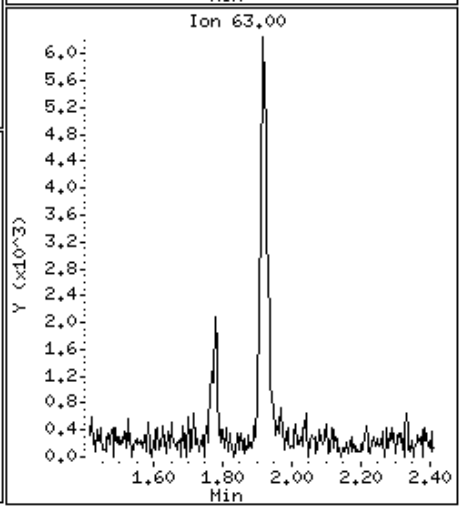












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072112.D

Date : 21-JUL-2023 16:01

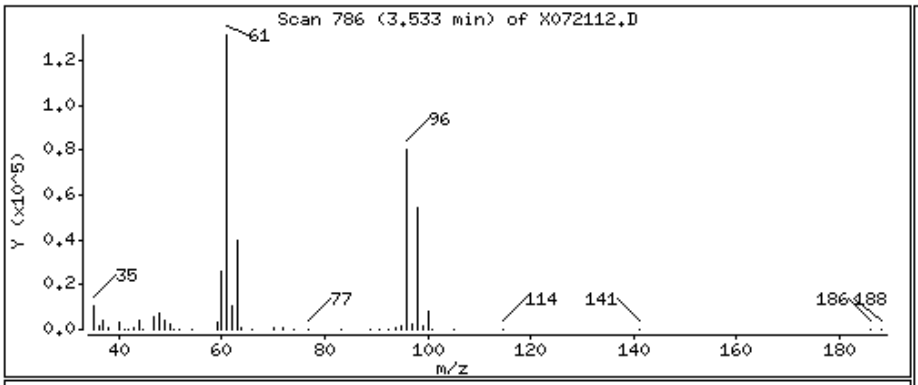
Client ID: HS23070993-02 Instrument: voa6.i

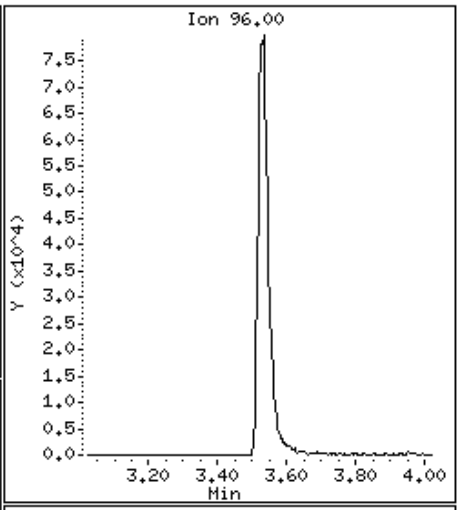
Sample Info: HS23070993-02;HS23070993-02;;;

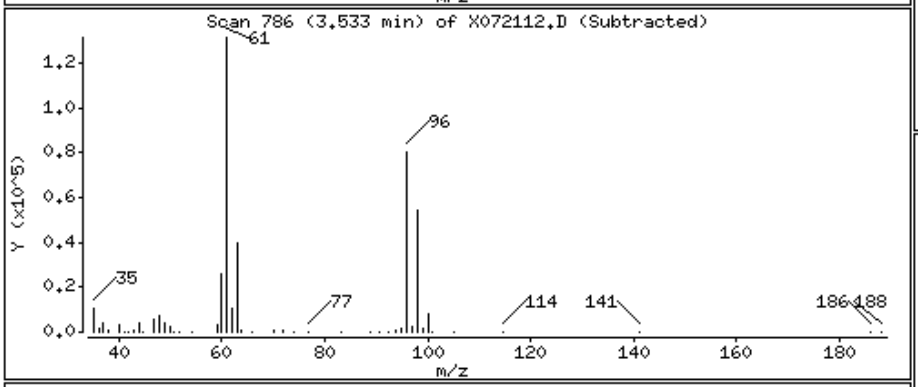
Purge Volume: 5.0 Operator: PC

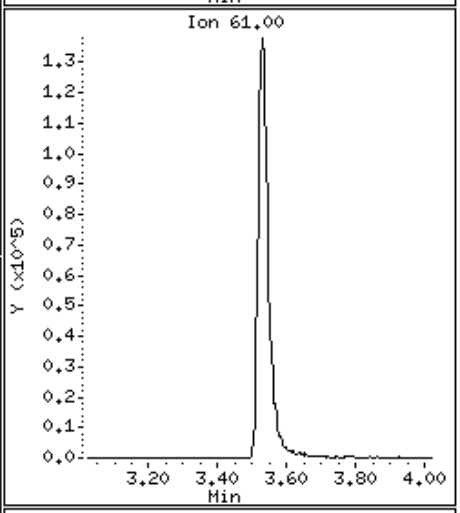
Column phase: DB624 Column diameter: 0.18

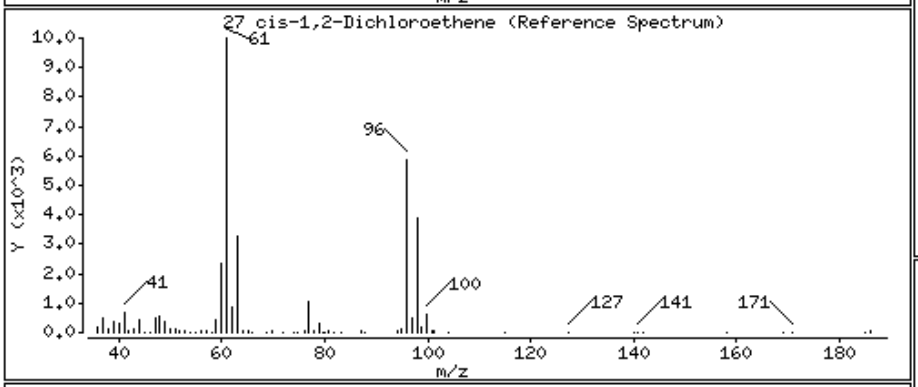
27 cis-1,2-Dichloroethene Concentration: 26.47 ug/l

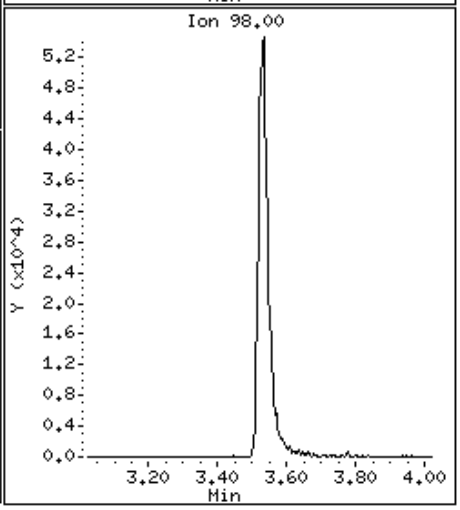


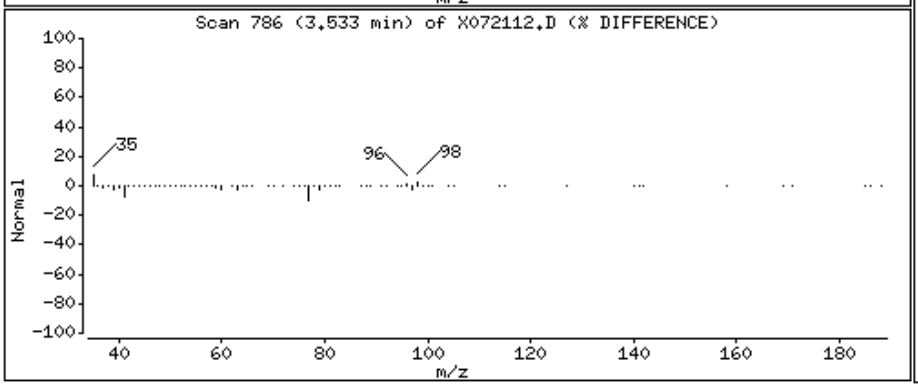












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072112.D Page 5

Date : 21-JUL-2023 16:01

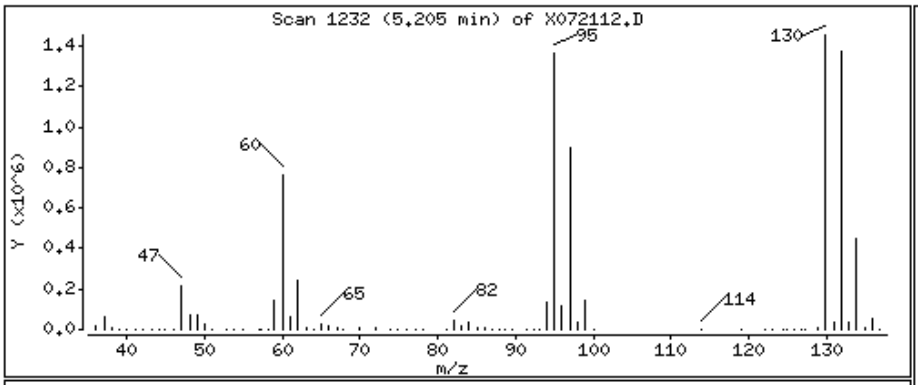
Client ID: HS23070993-02 Instrument: voa6.i

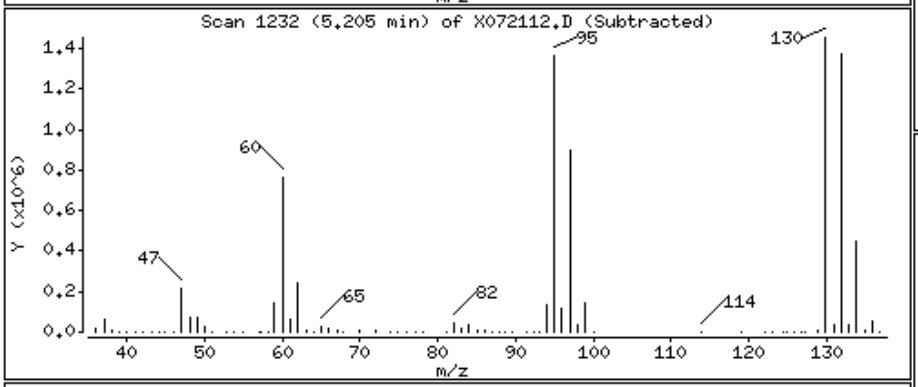
Sample Info: HS23070993-02;HS23070993-02;;;

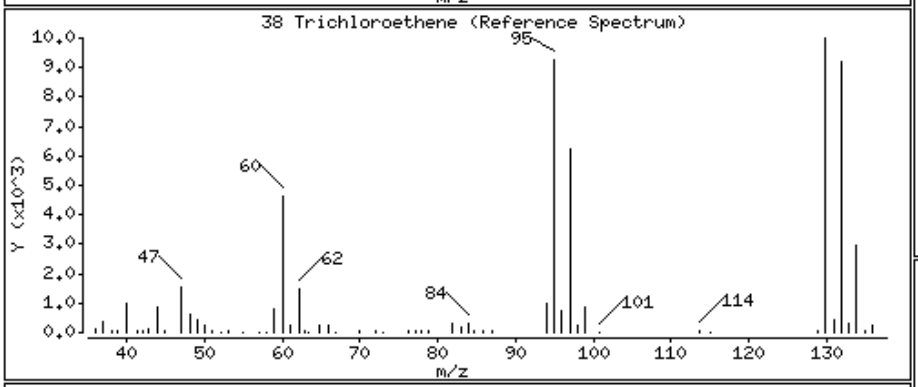
Purge Volume: 5.0 Operator: PC

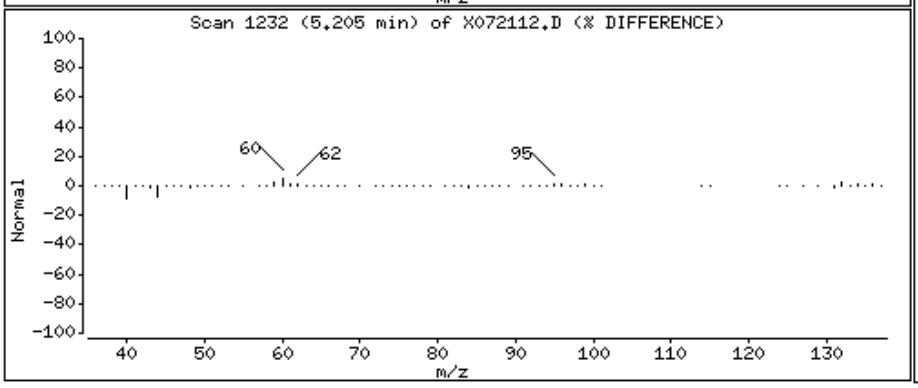
Column phase: DB624 Column diameter: 0.18

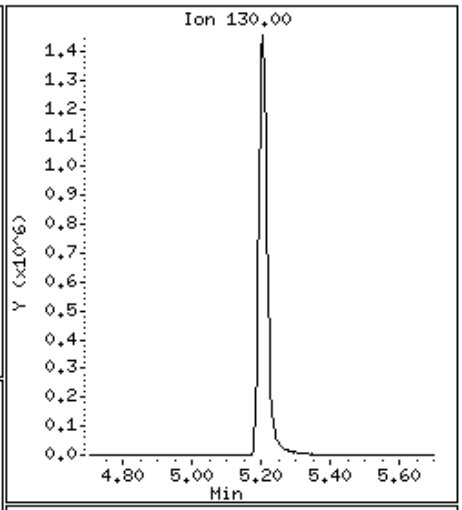
38 Trichloroethene Concentration: 395.59 ug/l

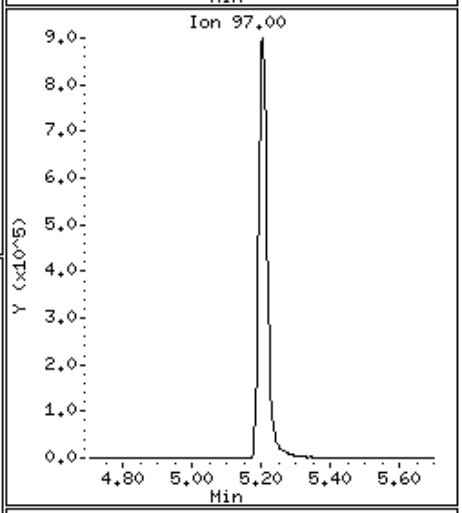


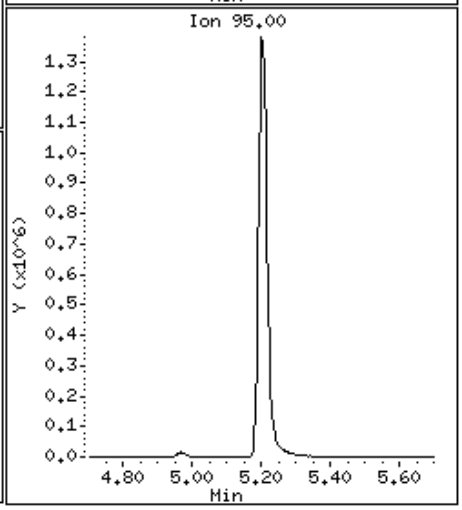












Data File : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072112.D
Inj Date : 21-JUL-2023 16:01
InstruID : voa6.i
LabSampID : HS23070993-02

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072113.D Page 1
Report Date: 27-Jul-2023 12:59

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072113.D
Lab Smp Id: HS23071109-01MS Client Smp ID: HS23071109-01MS
Inj Date : 21-JUL-2023 16:22
Operator : PC Inst ID: voa6.i
Smp Info : HS23071109-01MS;HS23071109-01MS;3;;MS
Misc Info : V6;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\8260W.m
Meth Date : 27-Jul-2023 12:58 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 12 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	4.181	4.178	(1.000)	608243	50.0000	
135	1,4-Dioxane	88	5.602	5.598	(1.340)	30066	415.977	415.97(a)
140	1,3-Butadiene	54	1.167	1.164	(0.279)	211396	27.0476	27.04
25	Methacrylonitrile	41	3.833	3.821	(0.917)	208836	26.5998	26.59
12	Isobutyl Alcohol	43	4.680	4.676	(1.119)	596844	517.660	517.66
13	Acetonitrile	39	2.198	2.198	(0.526)	245188	287.468	287.46
14	Allyl Chloride	41	2.202	2.198	(0.527)	576633	28.8754	28.87
4	Propionitrile	54	3.660	3.653	(0.875)	294754	244.633	244.63(a)
72	trans-1,4-Dichloro-2-butene	53	8.890	8.886	(1.159)	59754	24.7639	24.76
130	Ethyl Acetate	43	3.664	3.657	(0.876)	230565	25.5214	25.52
40	Methyl Methacrylate	41	5.610	5.606	(1.342)	162424	22.1251	22.12
49	Ethyl Methacrylate	69	6.712	6.712	(1.352)	125352	20.7734	20.77
2	Dichlorodifluoromethane	85	0.976	0.972	(0.234)	102000	17.1296	17.12
3	Chloromethane	50	1.081	1.081	(0.259)	204016	22.2072	22.20
5	Vinyl Chloride	62	1.145	1.145	(0.274)	205319	26.0857	26.08
6	Bromomethane	94	1.340	1.340	(0.321)	69740	21.4111	21.41
7	Chloroethane	64	1.404	1.404	(0.336)	114935	25.5795	25.57
8	Trichlorofluoromethane	101	1.565	1.561	(0.374)	202121	25.3394	25.33
9	Acrolein	56	1.861	1.857	(0.445)	17913	78.0245	78.02
10	Acetone	43	1.977	1.973	(0.473)	109733	42.9381	42.93

11 1,1-Dichloroethene	96	1.917	1.913 (0.459)	115516	25.9234	25.92
15 Iodomethane	142	2.030	2.030 (0.485)	217096	39.9481	39.94

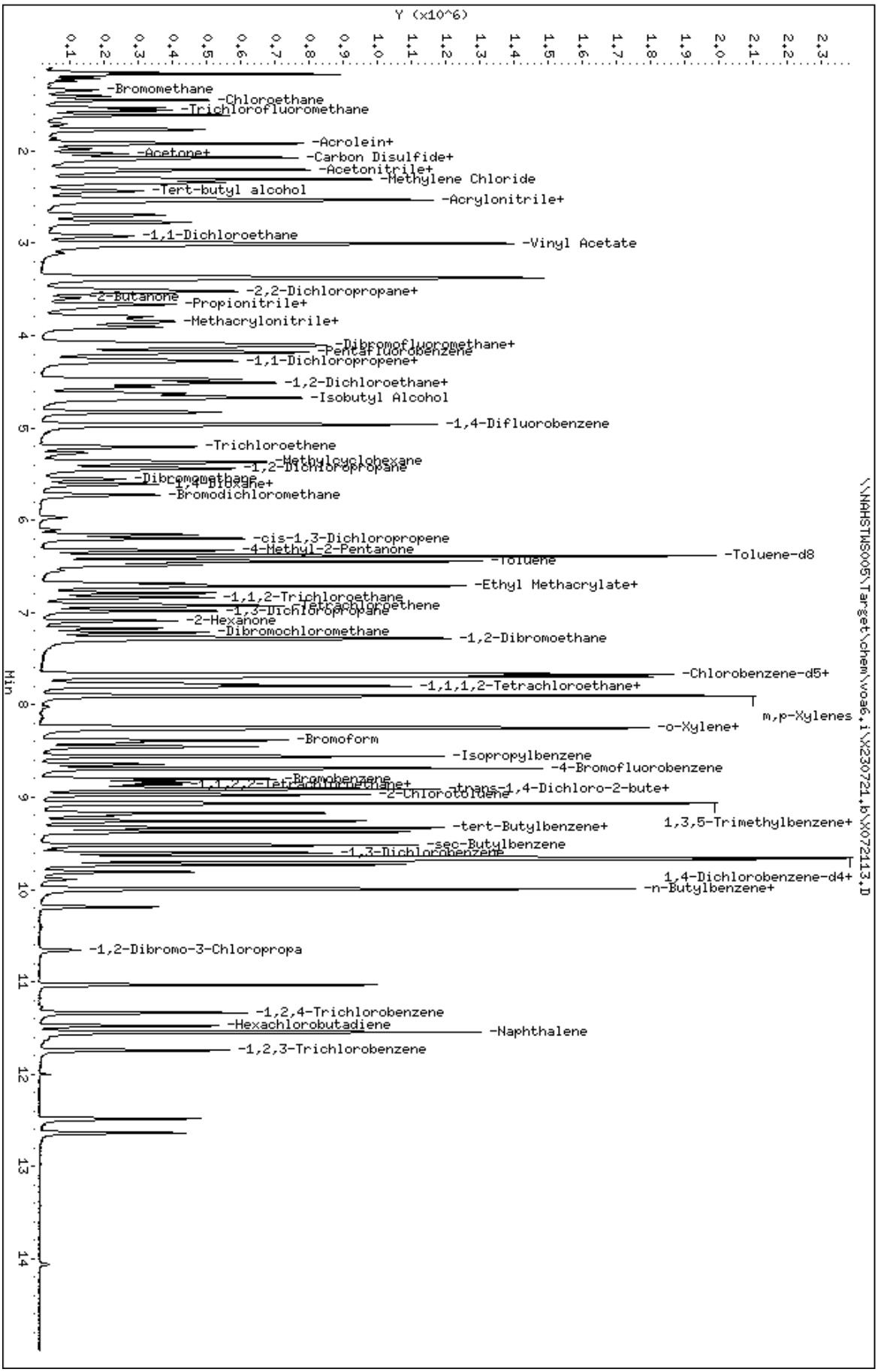
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
	16 Acrylonitrile	53	2.532	2.532	(0.606)	139228	46.9733	46.97
	17 Methylene Chloride	84	2.303	2.303	(0.551)	129561	23.9241	23.92
	18 Methyl tert-butyl ether	73	2.536	2.536	(0.606)	318857	19.2400	19.23
	19 Carbon Disulfide	76	2.071	2.071	(0.495)	761593	54.3720	54.37
	20 trans-1,2-Dichloroethene	96	2.528	2.528	(0.605)	111210	21.5758	21.57
	21 Vinyl Acetate	43	3.000	2.997	(0.718)	1033929	48.5026	48.50
	22 1,1-Dichloroethane	63	2.922	2.922	(0.699)	262076	23.1701	23.17
	24 2-Butanone	43	3.589	3.582	(0.858)	144523	44.6179	44.61
	26 2,2-Dichloropropane	77	3.507	3.507	(0.839)	209906	24.0148	24.01
	27 cis-1,2-Dichloroethene	96	3.529	3.525	(0.844)	155633	23.7020	23.70
	28 Chloroform	83	3.908	3.904	(0.935)	258163	22.3064	22.30
	29 Bromochloromethane	128	3.791	3.795	(0.907)	78284	21.2736	21.27
$	30 Dibromofluoromethane	113	4.095	4.095	(0.979)	309191	55.5476	55.54
	31 1,1,1-Trichloroethane	97	4.080	4.076	(0.976)	225663	25.3292	25.32
	32 1,1-Dichloropropene	75	4.279	4.279	(0.862)	197653	26.2994	26.29
	33 1,2-Dichloroethane	62	4.556	4.556	(0.918)	231280	22.8028	22.80
	34 Carbon Tetrachloride	117	4.264	4.264	(0.859)	185869	24.5486	24.54
$	35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.069)	396244	56.9252	56.92
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	921382	50.0000	
	37 Benzene	78	4.515	4.507	(0.909)	565015	25.6372	25.63
	38 Trichloroethene	130	5.201	5.205	(1.048)	152902	24.5278	24.52
	39 Bromodichloromethane	83	5.726	5.722	(1.153)	180619	21.3961	21.39
	42 1,2-Dichloropropane	63	5.437	5.433	(1.095)	170821	24.1044	24.10
	44 Dibromomethane	93	5.553	5.550	(1.119)	86650	21.6005	21.60
	45 4-Methyl-2-Pentanone	43	6.326	6.326	(0.825)	373864	47.8873	47.88
	46 cis-1,3-Dichloropropene	75	6.157	6.153	(1.240)	209848	21.6430	21.64
*	47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	793372	50.0000	
$	48 Toluene-d8	98	6.385	6.386	(0.833)	1071250	52.4431	52.44
	50 Toluene	91	6.445	6.442	(0.841)	541847	25.3716	25.37
	51 trans-1,3-Dichloropropene	75	6.682	6.678	(1.346)	175841	21.5140	21.51
	52 2-Hexanone	43	7.090	7.087	(0.925)	243681	47.5147	47.51
	53 1,1,2-Trichloroethane	83	6.839	6.835	(0.892)	105692	23.3294	23.32
	54 1,3-Dichloropropane	76	6.982	6.978	(0.911)	208916	22.5719	22.57
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	150866	23.0671	23.06
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	115930	26.2752	26.27
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	117789	22.7522	22.75
	58 1-Chlorohexane	55	7.694	7.694	(1.550)	199295	26.9242	26.92
	59 Chlorobenzene	112	7.690	7.690	(1.003)	365988	24.5157	24.51
	60 1,1,1,2-Tetrachloroethane	131	7.772	7.773	(1.014)	140743	24.0815	24.08
	61 Ethylbenzene	106	7.799	7.799	(1.017)	194214	25.9433	25.94
	62 m,p-Xylenes	106	7.900	7.900	(1.030)	486094	51.7585	51.75
	63 o-Xylene	106	8.241	8.237	(1.075)	232804	26.1766	26.17
	64 Styrene	104	8.256	8.256	(1.077)	387990	25.0105	25.01
	66 Bromoform	173	8.406	8.406	(1.096)	94409	22.4984	22.49
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	616350	26.9614	26.96
	68 1,1,2,2-Tetrachloroethane	83	8.833	8.837	(0.914)	167244	23.0113	23.01
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	390235	49.3954	49.39
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.658	(1.000)	432702	50.0000	
	71 1,2,3-Trichloropropane	75	8.860	8.863	(0.917)	128128	22.2161	22.21(M)
	73 n-Propylbenzene	91	8.908	8.908	(0.922)	716154	27.3886	27.38
	74 Bromobenzene	156	8.803	8.803	(0.911)	160457	23.7106	23.71
	75 1,3,5-Trimethylbenzene	105	9.066	9.062	(0.938)	486005	24.8109	24.81

76	2-Chlorotoluene	91	8.972	8.972 (0.929)	438494	24.8597	24.85
77	4-Chlorotoluene	91	9.070	9.066 (0.939)	492926	25.4312	25.43

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	78 tert-Butylbenzene	119	9.332	9.332	(0.966)	441181	26.2633	26.26
	79 1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	483805	24.6295	24.62
	81 sec-Butylbenzene	105	9.519	9.519	(0.985)	629149	28.0982	28.09
	82 p-Isopropyltoluene	119	9.647	9.647	(0.998)	533597	26.0879	26.08
	83 1,3-Dichlorobenzene	146	9.606	9.602	(0.994)	283478	24.0457	24.04
	84 1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	304194	23.5339	23.53
	87 n-Butylbenzene	91	9.992	9.992	(1.034)	473573	27.6450	27.64
	88 1,2-Dichlorobenzene	146	9.992	9.988	(1.034)	280380	24.1911	24.19
	89 1,2-Dibromo-3-Chloropropane	155	10.659	10.651	(1.103)	25751	22.1739	22.17
	90 1,2,4-Trichlorobenzene	180	11.337	11.334	(1.173)	160623	20.1775	20.17
	91 Hexachlorobutadiene	225	11.476	11.476	(1.188)	82574	23.8056	23.80
	92 Naphthalene	128	11.540	11.540	(1.194)	397394	20.1694	20.16
	93 1,2,3-Trichlorobenzene	180	11.742	11.739	(1.215)	155183	20.8445	20.84
M	94 1,2-Dichloroethylene (total)	96				266843	45.2778	45.27
M	95 Xylenes (total)	106				718898	77.9351	77.93
	141 Cyclohexane	56	4.118	4.118	(0.985)	353181	33.4989	33.49
	138 Freon TF	101	1.921	1.917	(0.459)	119829	33.4058	33.40
	147 Methylcyclohexane	55	5.381	5.381	(1.084)	494801	25.4425	25.44
	146 Methyl Acetate	43	2.232	2.228	(0.534)	159111	29.3930	29.39
	148 Tert-Butyl alcohol	59	2.434	2.431	(0.582)	309170	402.730	402.73
	149 Isopropyl Alcohol	45	2.097	2.093	(0.502)	249746	524.289	524.28

QC Flag Legend

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



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Column phase: DB624

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

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Inj Date : 21-JUL-2023 16:22
InstruID : voa6.i
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1,2,3-Trichloropropane (96-18-4)

Reason Code:

BEFORE

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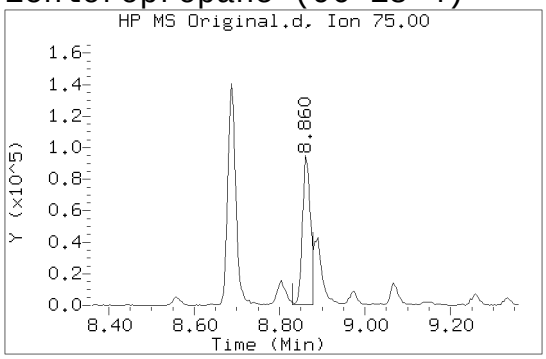
21-Jul-2023
23:10



AFTER

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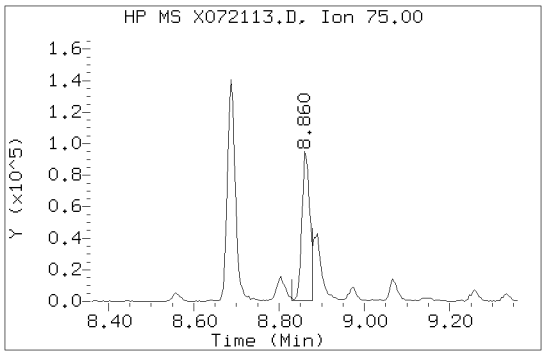

BEFORE

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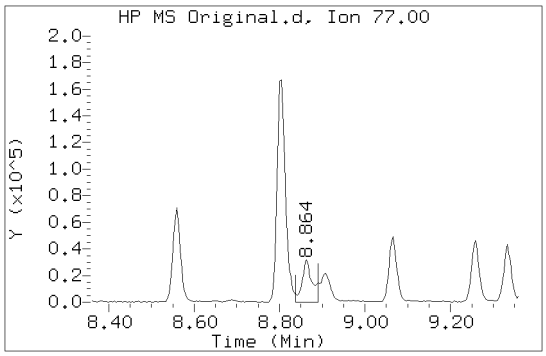

AFTER

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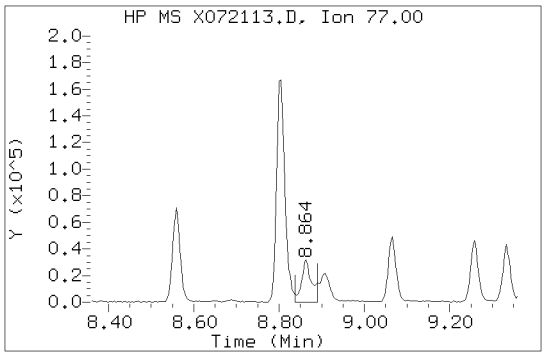

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Report Date: 27-Jul-2023 12:59

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072114.D
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Misc Info : V6;WATER;0;1;
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Als bottle: 12 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.178	4.178	(1.000)	605716	50.0000	
135 1,4-Dioxane	88	5.602	5.598	(1.341)	29999	416.781	416.78(a)
140 1,3-Butadiene	54	1.167	1.164	(0.280)	200260	25.7297	25.72
25 Methacrylonitrile	41	3.833	3.821	(0.917)	203097	25.9768	25.97
12 Isobutyl Alcohol	43	4.680	4.676	(1.120)	587392	511.588	511.58
13 Acetonitrile	39	2.202	2.198	(0.527)	198800	234.054	234.05
14 Allyl Chloride	41	2.202	2.198	(0.527)	461283	23.1955	23.19
4 Propionitrile	54	3.657	3.653	(0.875)	241270	201.079	201.07(a)
72 trans-1,4-Dichloro-2-butene	53	8.890	8.886	(1.159)	65642	25.3985	25.39
130 Ethyl Acetate	43	3.668	3.657	(0.878)	199372	22.1607	22.16
40 Methyl Methacrylate	41	5.610	5.606	(1.343)	184017	25.1710	25.17
49 Ethyl Methacrylate	69	6.712	6.712	(1.352)	125671	19.7091	19.70
2 Dichlorodifluoromethane	85	0.976	0.972	(0.234)	96485	16.3259	16.32
3 Chloromethane	50	1.081	1.081	(0.259)	208381	22.7769	22.77
5 Vinyl Chloride	62	1.149	1.145	(0.275)	194662	24.8349	24.83
6 Bromomethane	94	1.344	1.340	(0.322)	73255	22.5841	22.58
7 Chloroethane	64	1.407	1.404	(0.337)	108146	24.1690	24.16
8 Trichlorofluoromethane	101	1.565	1.561	(0.375)	206653	26.0156	26.01
9 Acrolein	56	1.865	1.857	(0.446)	15460	67.7713	67.77
10 Acetone	43	1.977	1.973	(0.473)	97417	37.7473	37.74

11 1,1-Dichloroethene	96	1.917	1.913 (0.459)	108648	24.4839	24.48
15 Iodomethane	142	2.033	2.030 (0.487)	197734	36.8898	36.88

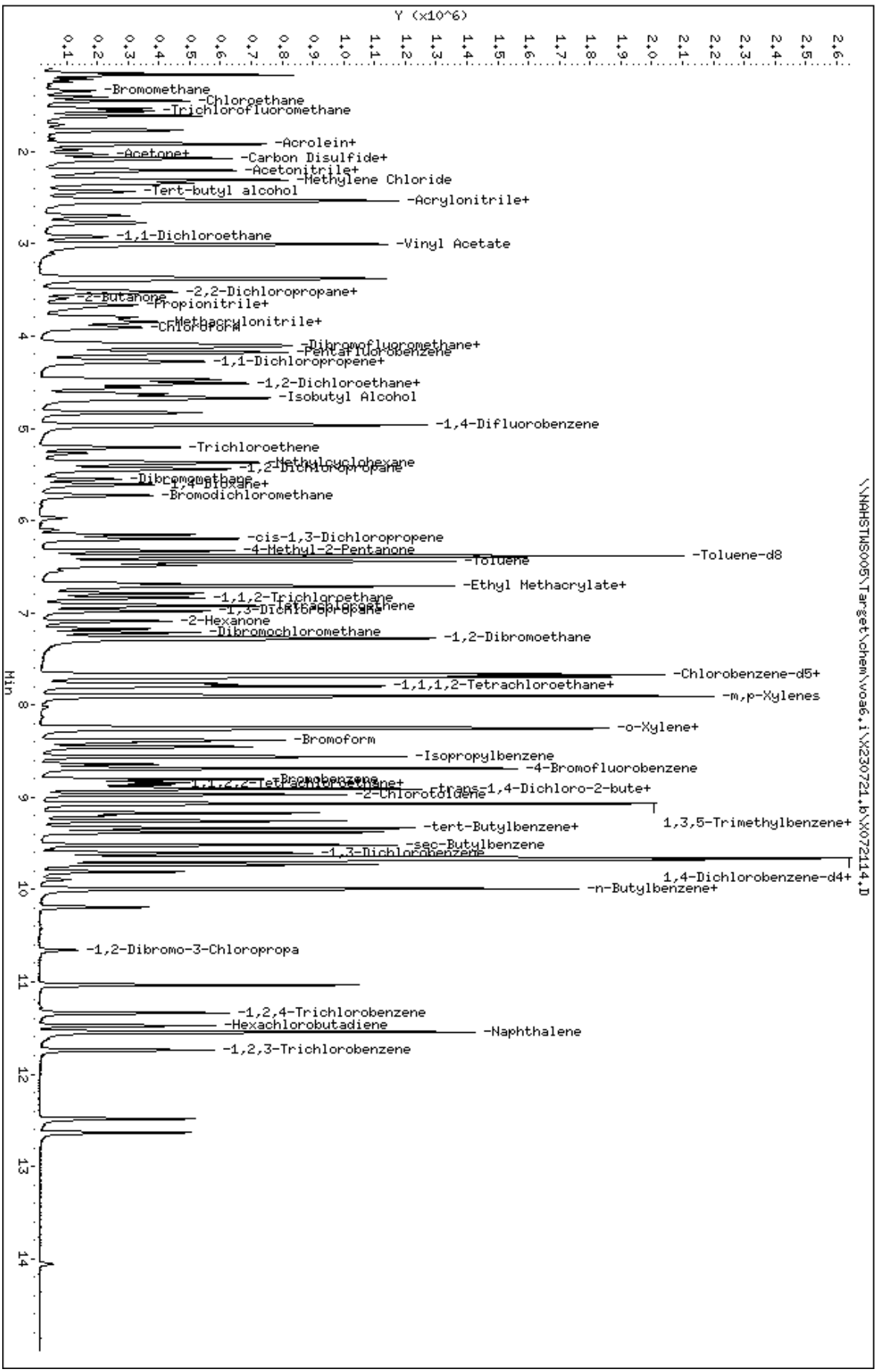
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
	16 Acrylonitrile	53	2.536	2.532	(0.607)	143200	48.5150	48.51
	17 Methylene Chloride	84	2.307	2.303	(0.552)	107888	19.7741	19.77
	18 Methyl tert-butyl ether	73	2.536	2.536	(0.607)	337476	20.4484	20.44
	19 Carbon Disulfide	76	2.075	2.071	(0.497)	623252	44.6811	44.68
	20 trans-1,2-Dichloroethene	96	2.532	2.528	(0.606)	107582	20.9590	20.95
	21 Vinyl Acetate	43	3.001	2.997	(0.718)	818429	38.5534	38.55
	22 1,1-Dichloroethane	63	2.922	2.922	(0.699)	203292	18.0480	18.04
	24 2-Butanone	43	3.593	3.582	(0.860)	117636	36.4687	36.46
	26 2,2-Dichloropropane	77	3.507	3.507	(0.839)	165496	19.0563	19.05
	27 cis-1,2-Dichloroethene	96	3.525	3.525	(0.844)	118409	18.1082	18.10
	28 Chloroform	83	3.908	3.904	(0.935)	245658	21.3145	21.31
	29 Bromochloromethane	128	3.799	3.795	(0.909)	77379	21.1154	21.11
$	30 Dibromofluoromethane	113	4.099	4.095	(0.981)	305366	55.0830	55.08
	31 1,1,1-Trichloroethane	97	4.080	4.076	(0.977)	207893	23.4320	23.43
	32 1,1-Dichloropropene	75	4.279	4.279	(0.862)	188127	23.6891	23.68
	33 1,2-Dichloroethane	62	4.560	4.556	(0.918)	231089	21.5618	21.56
	34 Carbon Tetrachloride	117	4.264	4.264	(0.859)	178954	22.3675	22.36
$	35 1,2-Dichloroethane-d4	65	4.474	4.470	(1.071)	391419	56.4616	56.46
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	973608	50.0000	
	37 Benzene	78	4.511	4.507	(0.909)	531203	22.8101	22.81
	38 Trichloroethene	130	5.205	5.205	(1.048)	150829	22.8974	22.89
	39 Bromodichloromethane	83	5.726	5.722	(1.153)	184336	20.6651	20.66
	42 1,2-Dichloropropane	63	5.433	5.433	(1.094)	179119	23.9195	23.91
	44 Dibromomethane	93	5.550	5.550	(1.118)	90885	21.4409	21.44
	45 4-Methyl-2-Pentanone	43	6.326	6.326	(0.825)	420958	50.3407	50.34
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	217694	21.2478	21.24
*	47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	849774	50.0000	
$	48 Toluene-d8	98	6.386	6.386	(0.833)	1139165	52.0664	52.06
	50 Toluene	91	6.446	6.442	(0.841)	551697	24.1182	24.11
	51 trans-1,3-Dichloropropene	75	6.682	6.678	(1.346)	177816	20.5886	20.58
	52 2-Hexanone	43	7.090	7.087	(0.925)	271124	49.3569	49.35
	53 1,1,2-Trichloroethane	83	6.835	6.835	(0.891)	110246	22.7195	22.71
	54 1,3-Dichloropropane	76	6.982	6.978	(0.911)	223085	22.5030	22.50
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	150677	21.5091	21.50
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	114008	24.1245	24.12
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	120880	21.7995	21.79
	58 1-Chlorohexane	55	7.694	7.694	(1.550)	210924	26.9667	26.96
	59 Chlorobenzene	112	7.690	7.690	(1.003)	367079	22.9567	22.95
	60 1,1,1,2-Tetrachloroethane	131	7.773	7.773	(1.014)	141540	22.6105	22.61
	61 Ethylbenzene	106	7.799	7.799	(1.017)	196818	24.5461	24.54
	62 m,p-Xylenes	106	7.900	7.900	(1.030)	494393	49.1481	49.14
	63 o-Xylene	106	8.237	8.237	(1.074)	231676	24.3208	24.32
	64 Styrene	104	8.256	8.256	(1.077)	395902	23.8266	23.82
	66 Bromoform	173	8.406	8.406	(1.096)	93127	20.7198	20.71
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	613426	25.0525	25.05
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	171798	22.9073	22.90
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	421683	49.8371	49.83
*	70 1,4-Dichlorobenzene-d4	152	9.658	9.658	(1.000)	446503	50.0000	
	71 1,2,3-Trichloropropane	75	8.860	8.863	(0.917)	131111	22.0307	22.03(M)
	73 n-Propylbenzene	91	8.908	8.908	(0.922)	725707	26.8961	26.89
	74 Bromobenzene	156	8.803	8.803	(0.912)	155866	22.3203	22.32
	75 1,3,5-Trimethylbenzene	105	9.062	9.062	(0.938)	485083	23.9984	23.99

76	2-Chlorotoluene	91	8.972	8.972 (0.929)	438308	24.0811	24.08
77	4-Chlorotoluene	91	9.066	9.066 (0.939)	493749	24.6863	24.68

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
	78 tert-Butylbenzene	119	9.332	9.332	(0.966)	439164	25.3352	25.33
	79 1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	480321	23.6963	23.69
	81 sec-Butylbenzene	105	9.519	9.519	(0.986)	637261	27.5808	27.58
	82 p-Isopropyltoluene	119	9.647	9.647	(0.999)	528967	25.0621	25.06
	83 1,3-Dichlorobenzene	146	9.602	9.602	(0.994)	283180	23.2780	23.27
	84 1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	304737	22.8472	22.84
	87 n-Butylbenzene	91	9.992	9.992	(1.035)	474947	26.8683	26.86
	88 1,2-Dichlorobenzene	146	9.992	9.988	(1.035)	281538	23.5402	23.54
	89 1,2-Dibromo-3-Chloropropane	155	10.659	10.651	(1.104)	23822	19.9914	19.99
	90 1,2,4-Trichlorobenzene	180	11.338	11.334	(1.174)	163613	19.9179	19.91
	91 Hexachlorobutadiene	225	11.476	11.476	(1.188)	84960	23.7432	23.74
	92 Naphthalene	128	11.544	11.540	(1.195)	406766	20.0070	20.00
	93 1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	149711	19.4880	19.48
M	94 1,2-Dichloroethylene (total)	96				225991	39.0672	39.06
M	95 Xylenes (total)	106				726069	73.4689	73.46
	141 Cyclohexane	56	4.118	4.118	(0.986)	338611	32.2509	32.25
	138 Freon TF	101	1.917	1.917	(0.459)	113283	31.8228	31.82
	147 Methylcyclohexane	55	5.385	5.381	(1.085)	525452	25.5692	25.56
	146 Methyl Acetate	43	2.236	2.228	(0.535)	127874	23.7211	23.72
	148 Tert-Butyl alcohol	59	2.435	2.431	(0.583)	307684	402.467	402.46
	149 Isopropyl Alcohol	45	2.097	2.093	(0.502)	209342	441.302	441.30

QC Flag Legend

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



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Column phase: DB624

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

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Inj Date : 21-JUL-2023 16:42
InstruID : voa6.i
LabSampID : HS23071109-01MSD

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

Reason Code:

BEFORE

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AREA
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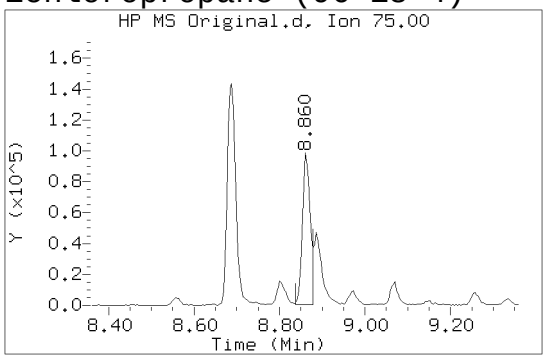
HEIGHT
98700
21-Jul-2023
23:10



AFTER

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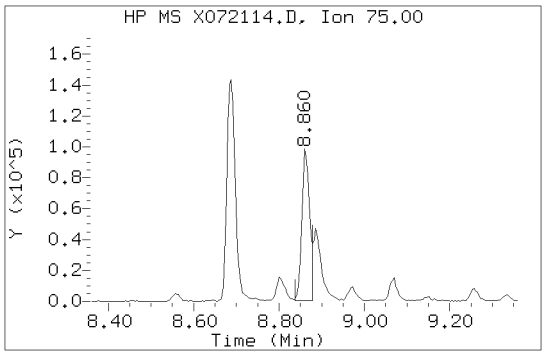

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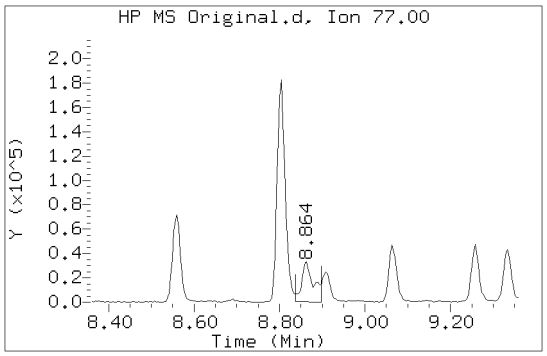

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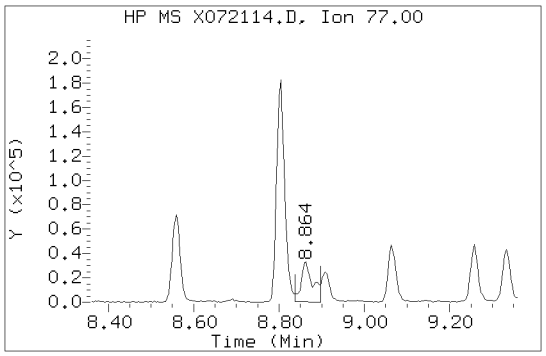

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Report Date: 27-Jul-2023 12:59

ALS Laboratory Group

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Misc Info : V6;WATER;0;10;
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Als bottle: 13
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

Name	Value	Description
DF	10.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.181	4.178	(1.000)	610427	50.0000	
$ 30 Dibromofluoromethane	113	4.099	4.095	(0.980)	303061	54.2337	54.23
$ 35 1,2-Dichloroethane-d4	65	4.474	4.470	(1.070)	396638	56.7763	56.77
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	959443	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	833199	50.0000	
$ 48 Toluene-d8	98	6.386	6.386	(0.833)	1116597	52.0502	52.05
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	390174	47.0064	47.00
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.658	(1.000)	415972	50.0000	
5 Vinyl Chloride	62	1.145	1.145	(0.274)	15783	1.99805	19.98(a)
27 cis-1,2-Dichloroethene	96	3.537	3.525	(0.846)	16418	2.49142	24.91(a)
38 Trichloroethene	130	5.205	5.205	(1.048)	233210	35.9264	359.26

QC Flag Legend

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

01322128

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072115.D

Date : 21-JUL-2023 17:03

Client ID: HS23070993-01

Instrument: voa6.i

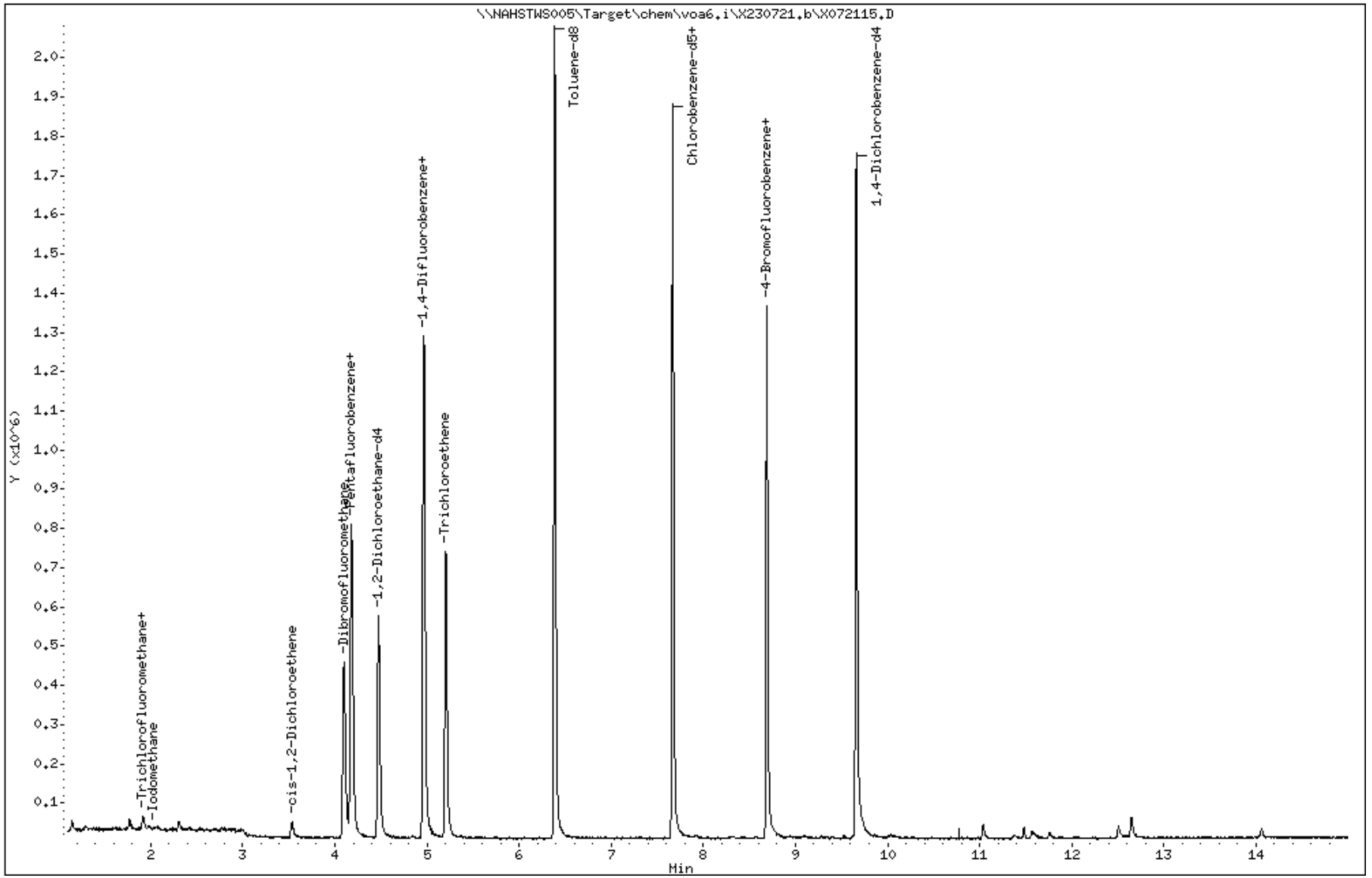
Sample Info: HS23070993-01;HS23070993-01;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072115.D

Date : 21-JUL-2023 17:03

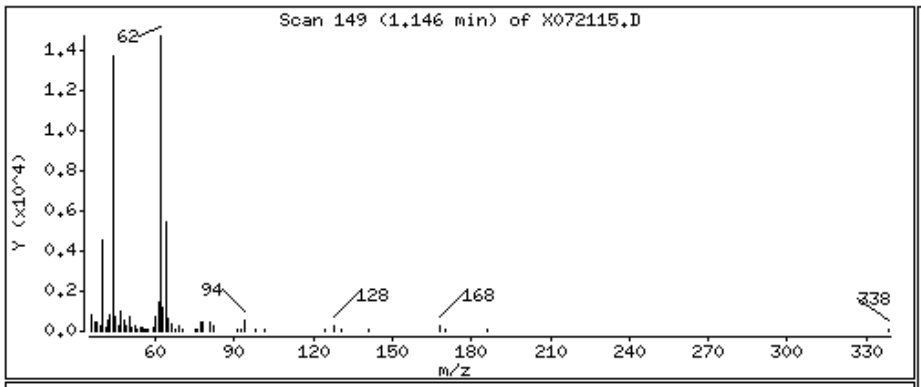
Client ID: HS23070993-01 Instrument: voa6.i

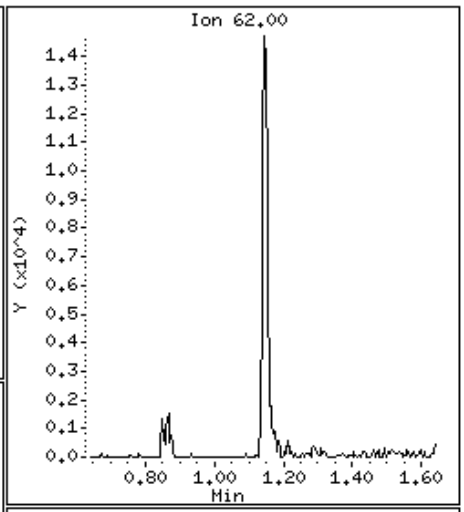
Sample Info: HS23070993-01;HS23070993-01;;;

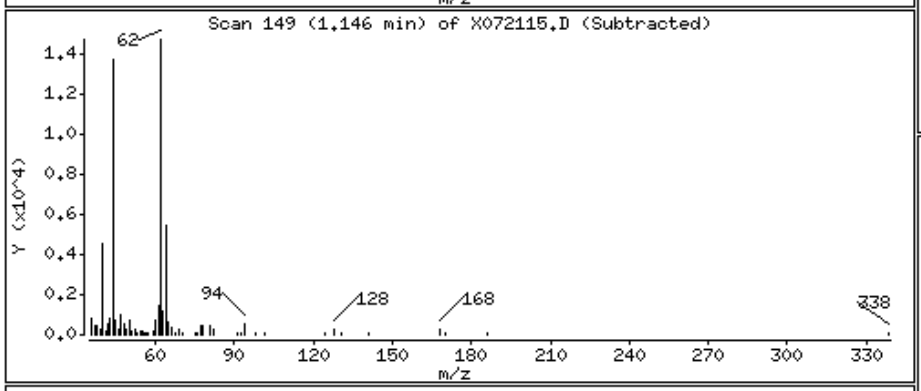
Purge Volume: 5.0 Operator: PC

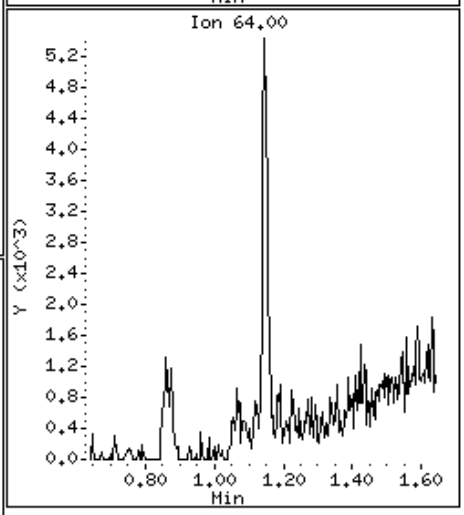
Column phase: DB624 Column diameter: 0.18

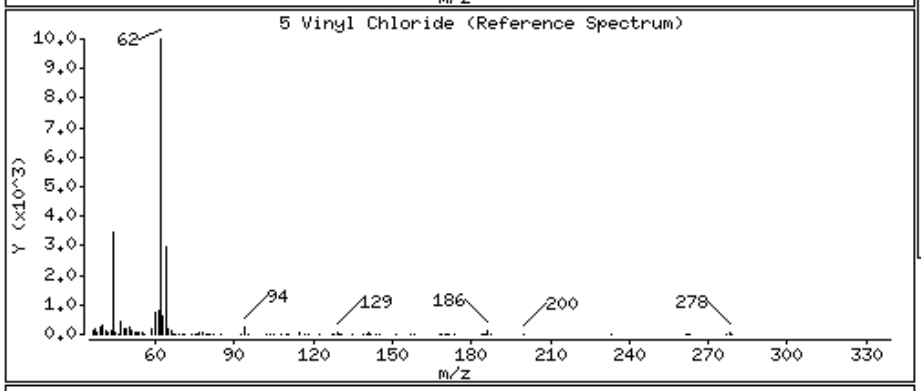
5 Vinyl Chloride Concentration: 19.98 ug/l

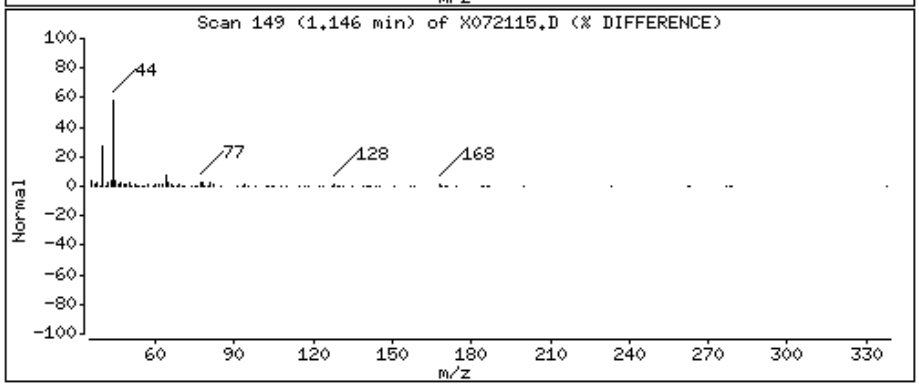












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072115.D Page 3

Date : 21-JUL-2023 17:03

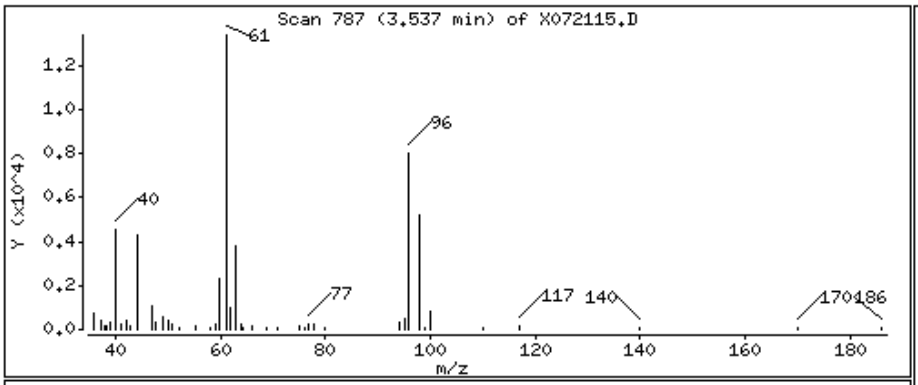
Client ID: HS23070993-01 Instrument: voa6.i

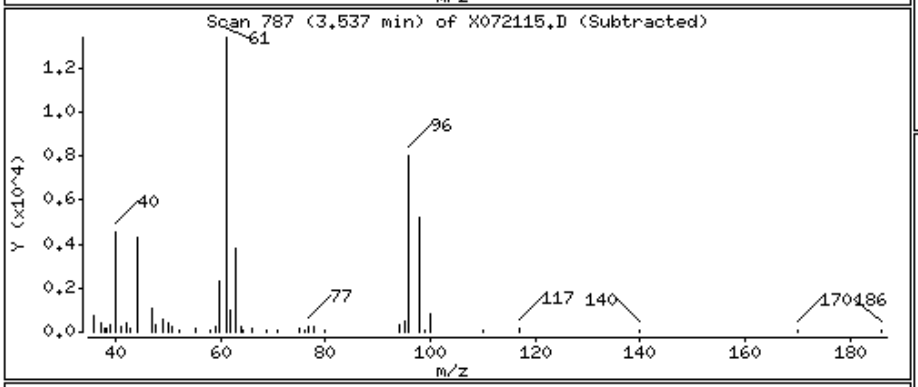
Sample Info: HS23070993-01;HS23070993-01;;;

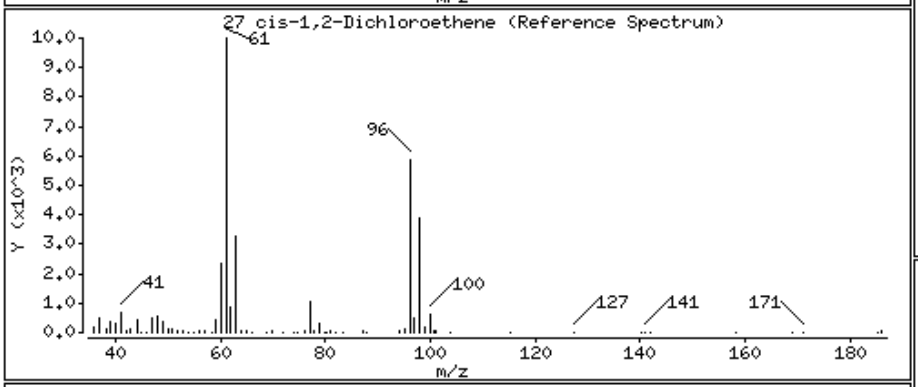
Purge Volume: 5.0 Operator: PC

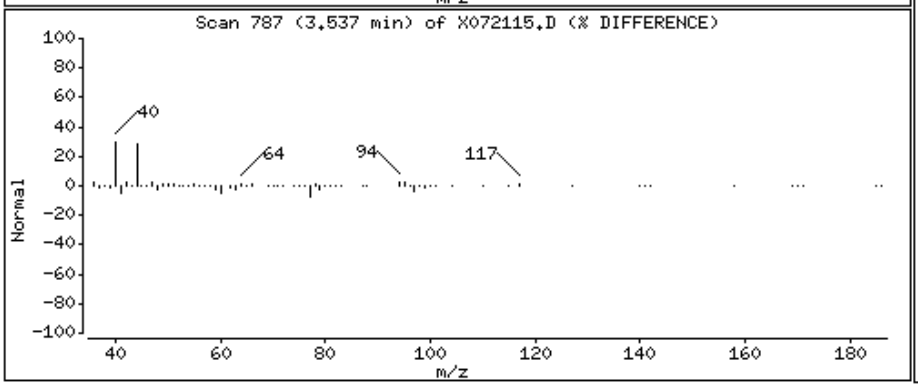
Column phase: DB624 Column diameter: 0.18

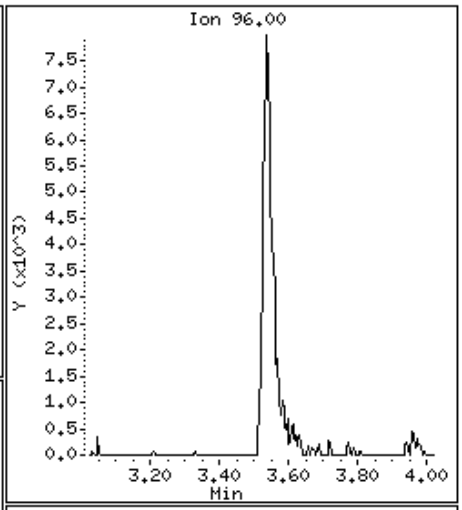
27 cis-1,2-Dichloroethene Concentration: 24.91 ug/l

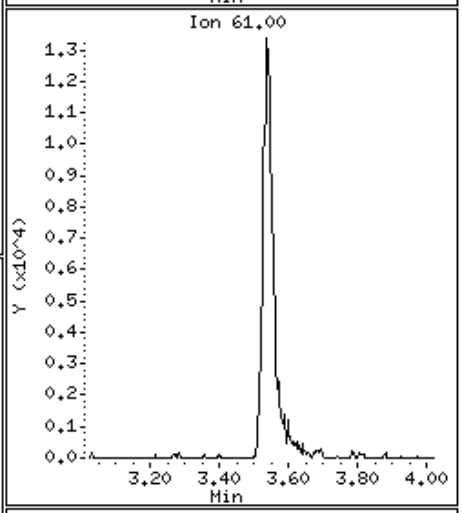


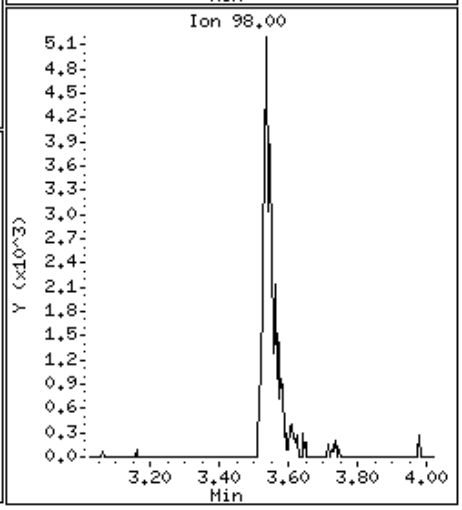












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072115.D Page 4

Date : 21-JUL-2023 17:03

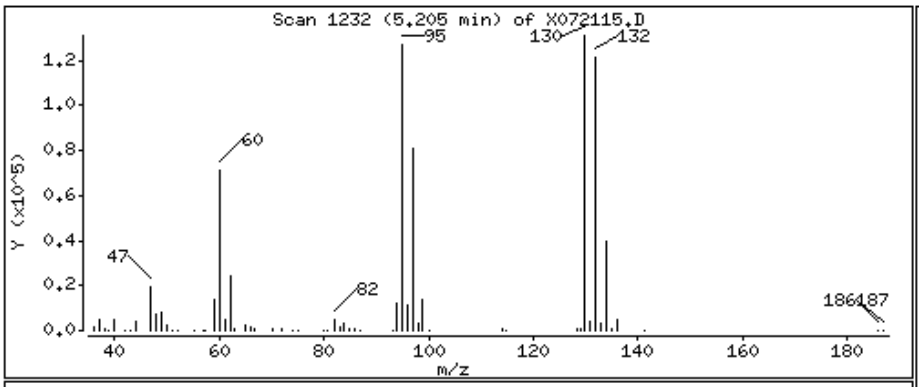
Client ID: HS23070993-01 Instrument: voa6.i

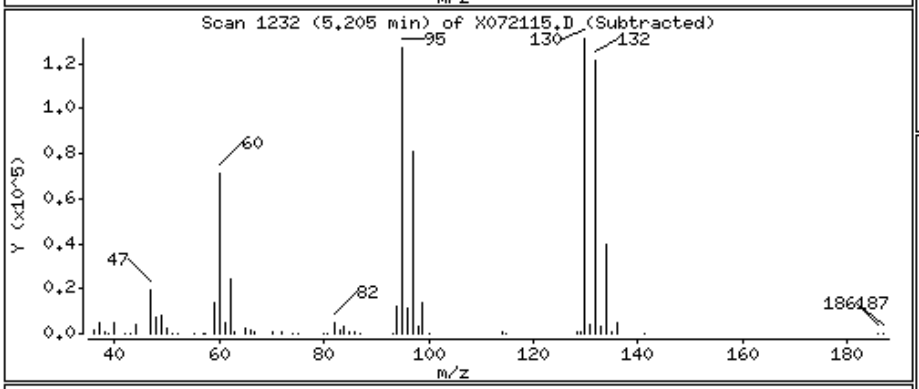
Sample Info: HS23070993-01;HS23070993-01;;;

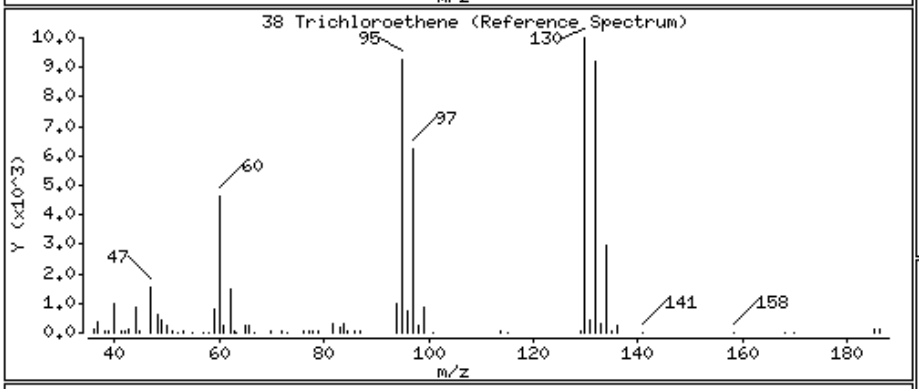
Purge Volume: 5.0 Operator: PC

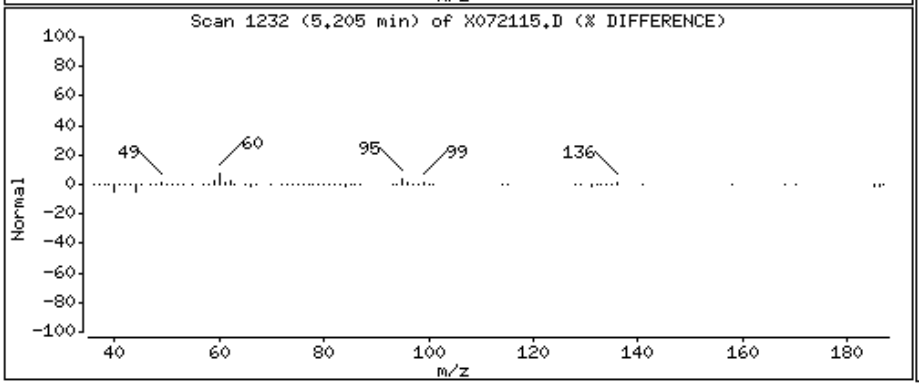
Column phase: DB624 Column diameter: 0.18

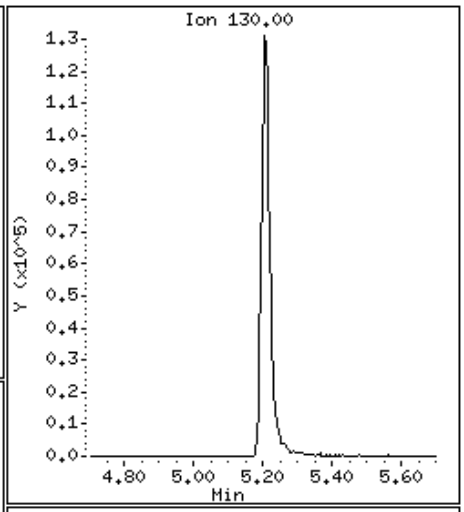
38 Trichloroethene Concentration: 359.26 ug/l

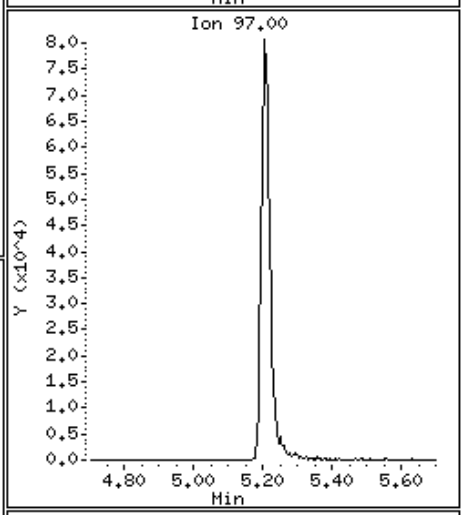


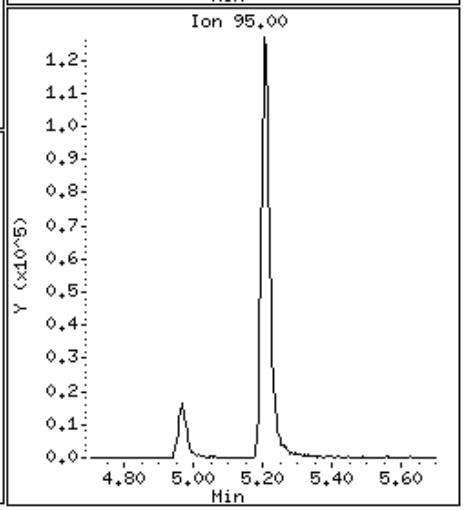












Data File : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072115.D
Inj Date : 21-JUL-2023 17:03
InstruID : voa6.i
LabSampID : HS23070993-01

NO MANUAL INTEGRATIONS

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072116.D
Lab Smp Id: HS23070993-02 Client Smp ID: HS23070993-02
Inj Date : 21-JUL-2023 17:23
Operator : PC Inst ID: voa6.i
Smp Info : HS23070993-02;HS23070993-02;;;
Misc Info : V6;WATER;0;10;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\8260W.m
Meth Date : 27-Jul-2023 12:58 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 14
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

Name	Value	Description
DF	10.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.181	4.178	(1.000)	610778	50.0000	
$ 30 Dibromofluoromethane	113	4.099	4.095	(0.980)	312527	55.9189	55.91
$ 35 1,2-Dichloroethane-d4	65	4.474	4.470	(1.070)	398165	56.9642	56.96
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	960663	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	842173	50.0000	
$ 48 Toluene-d8	98	6.386	6.386	(0.833)	1127821	52.0132	52.01
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	396376	47.2469	47.24
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.658	(1.000)	422600	50.0000	
5 Vinyl Chloride	62	1.145	1.145	(0.274)	15786	1.99728	19.97(a)
27 cis-1,2-Dichloroethene	96	3.537	3.525	(0.846)	16207	2.45799	24.57(a)
38 Trichloroethene	130	5.205	5.205	(1.048)	241794	37.2014	372.01

QC Flag Legend

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

01322134

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072116.D

Date : 21-JUL-2023 17:23

Client ID: HS23070993-02

Instrument: voa6.i

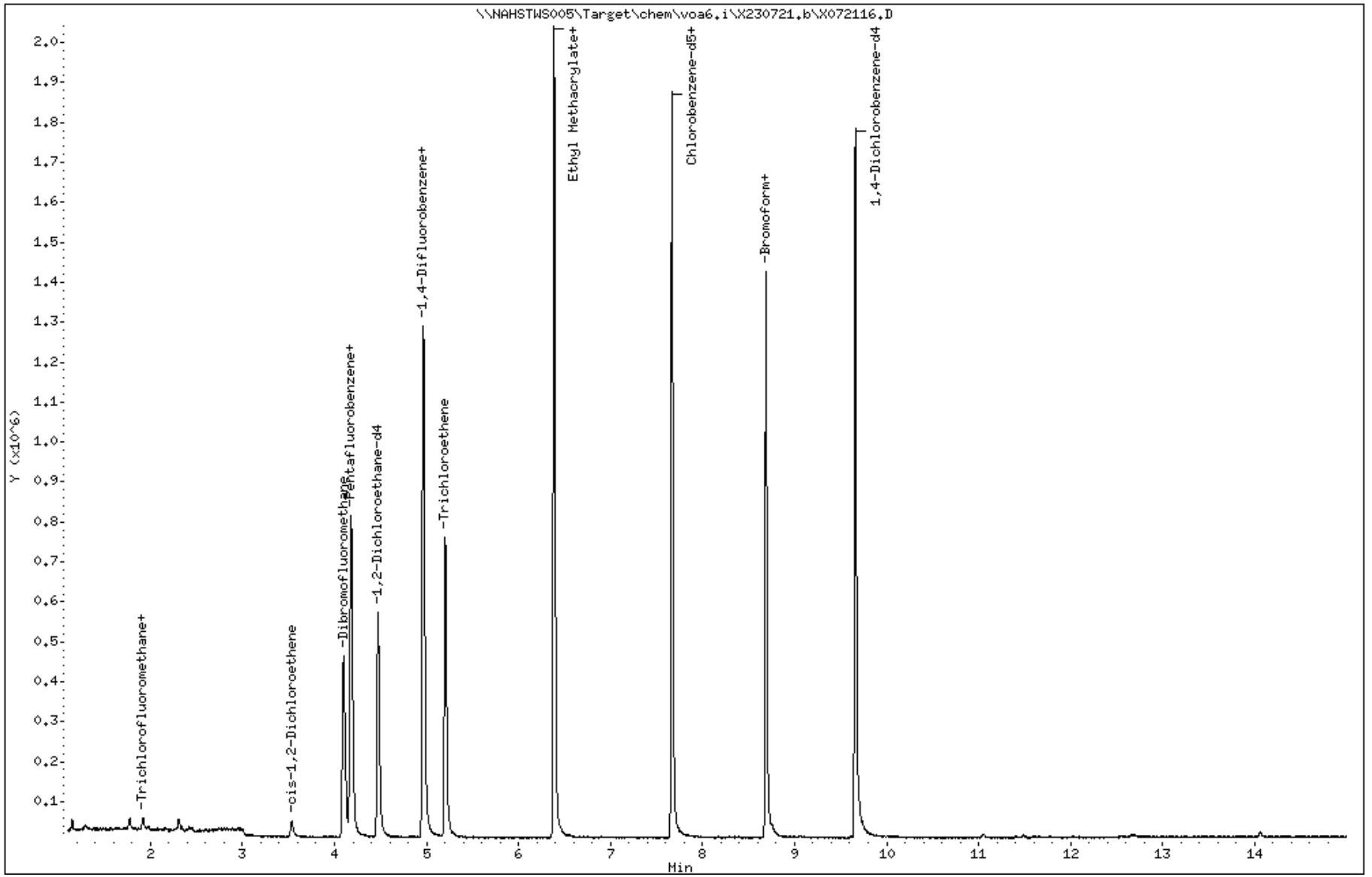
Sample Info: HS23070993-02;HS23070993-02;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072116.D

Date : 21-JUL-2023 17:23

Client ID: HS23070993-02

Instrument: voa6.i

Sample Info: HS23070993-02;HS23070993-02;;;

Purge Volume: 5.0

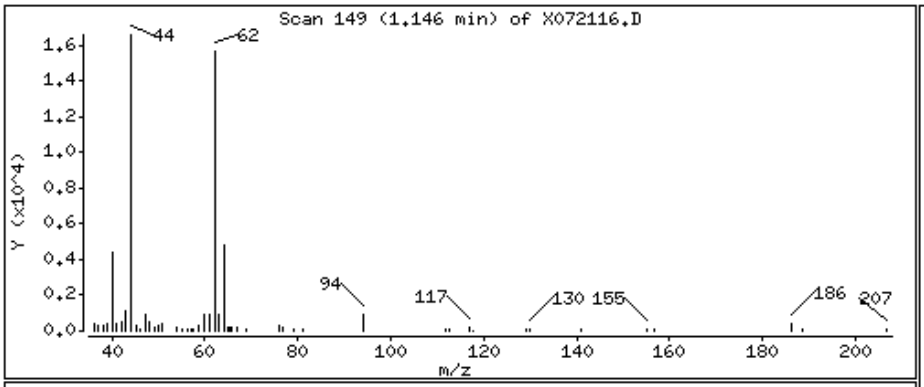
Operator: PC

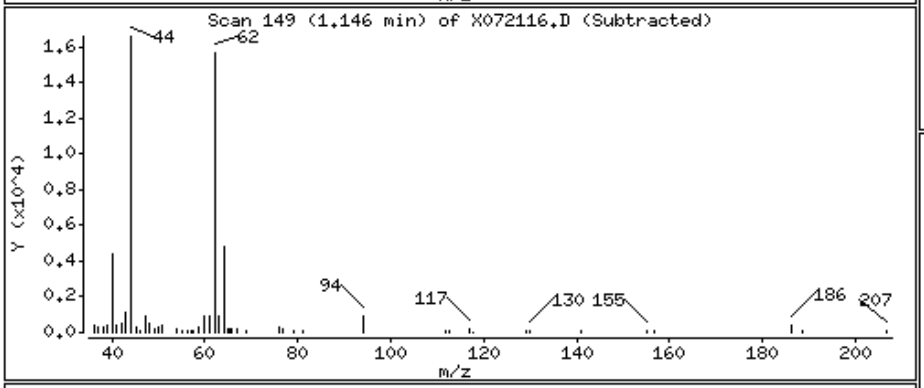
Column phase: DB624

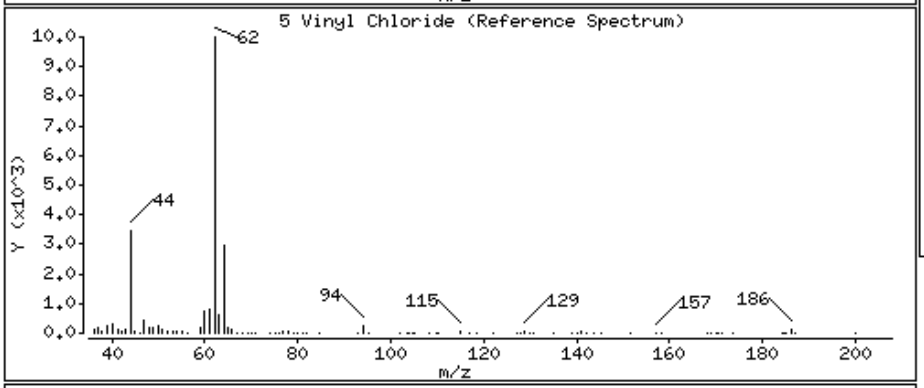
Column diameter: 0.18

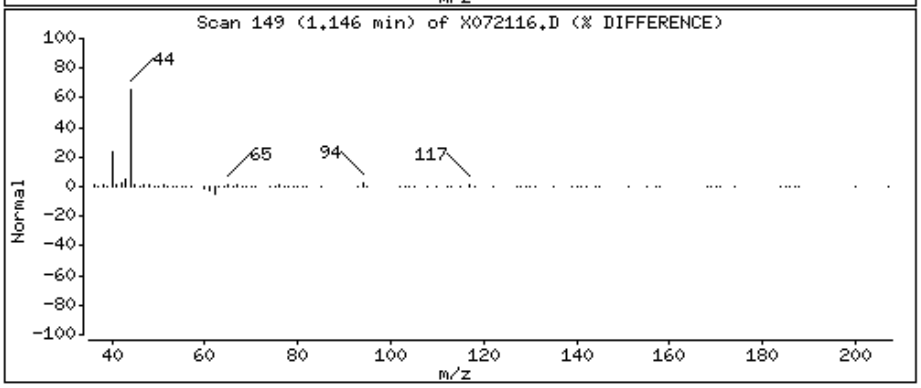
5 Vinyl Chloride

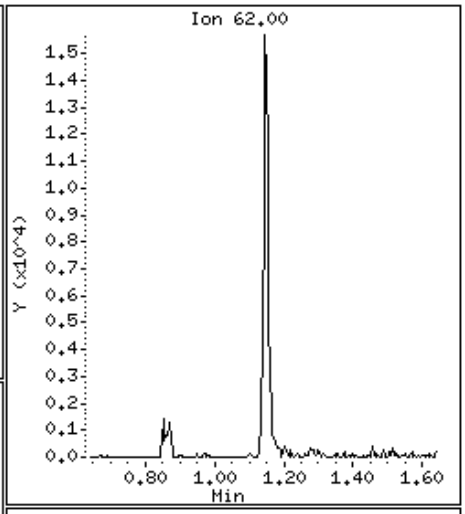
Concentration: 19.97 ug/l

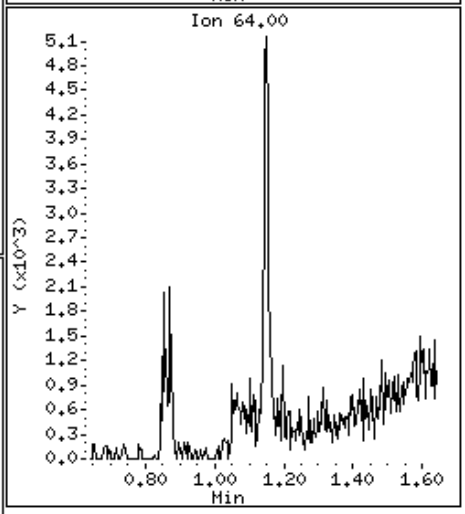












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072116.D Page 3

Date : 21-JUL-2023 17:23

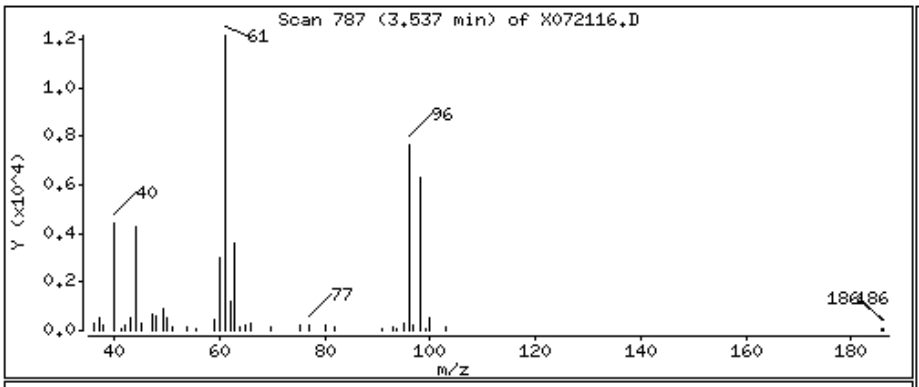
Client ID: HS23070993-02 Instrument: voa6.i

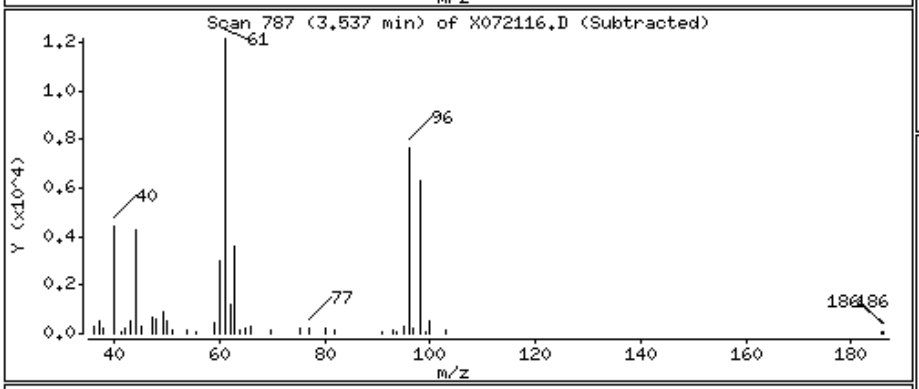
Sample Info: HS23070993-02;HS23070993-02;;;

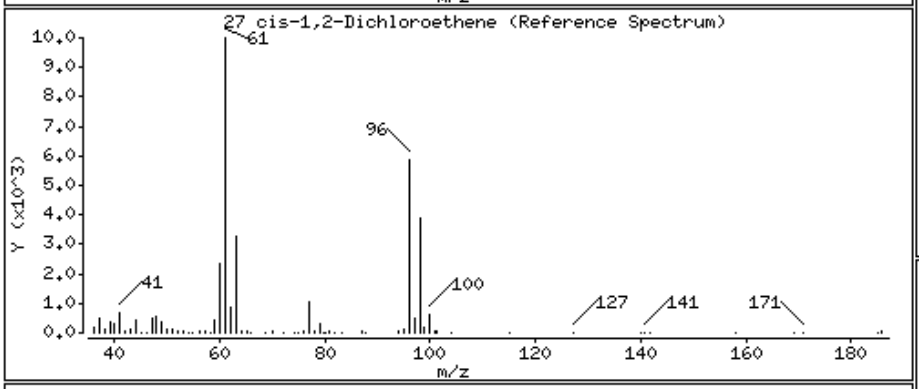
Purge Volume: 5.0 Operator: PC

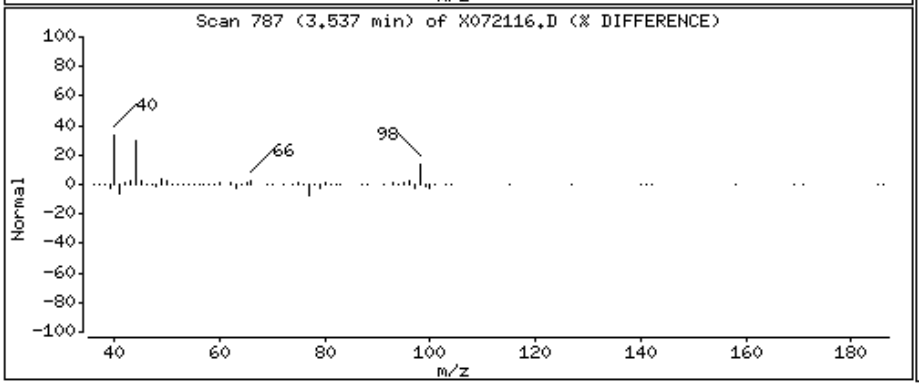
Column phase: DB624 Column diameter: 0.18

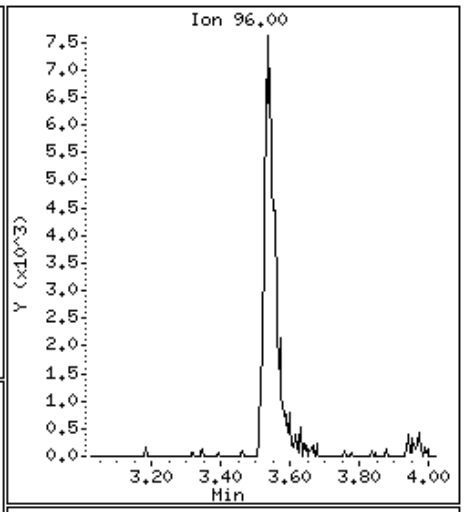
27 cis-1,2-Dichloroethene Concentration: 24.57 ug/l

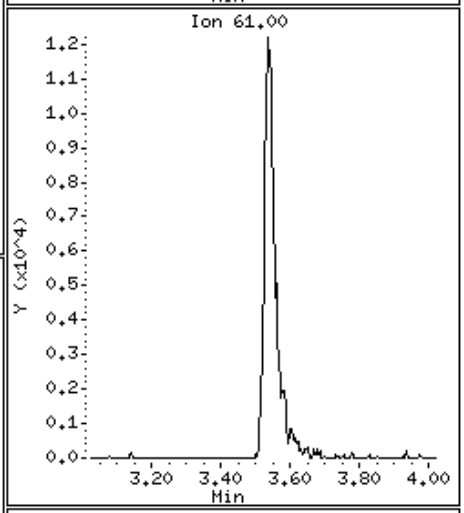


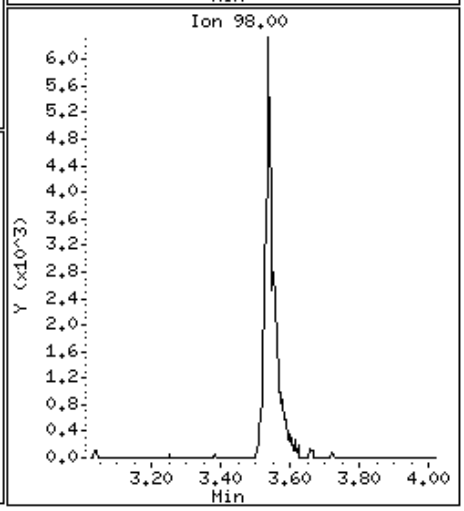












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072116.D

Date : 21-JUL-2023 17:23

Client ID: HS23070993-02

Instrument: voa6.i

Sample Info: HS23070993-02;HS23070993-02;;;

Purge Volume: 5.0

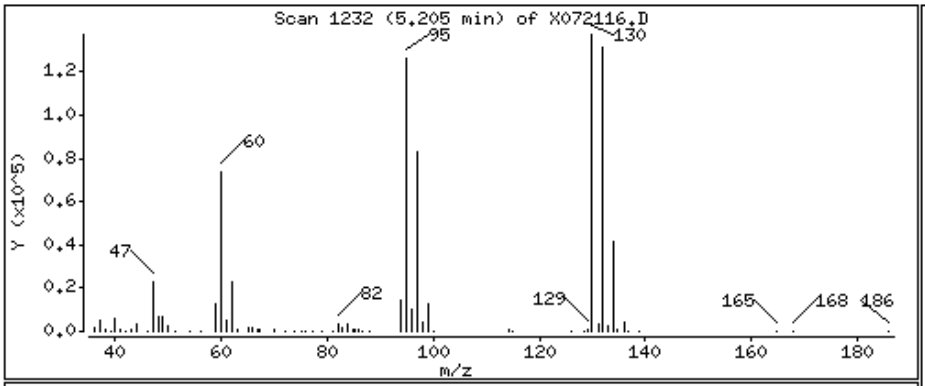
Operator: PC

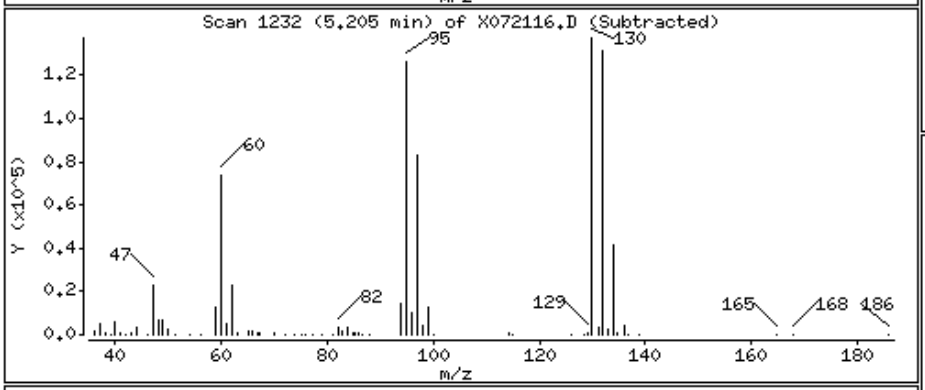
Column phase: DB624

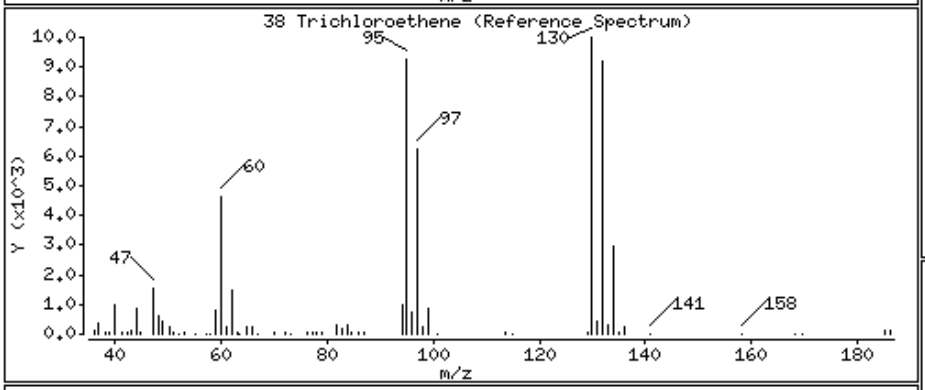
Column diameter: 0.18

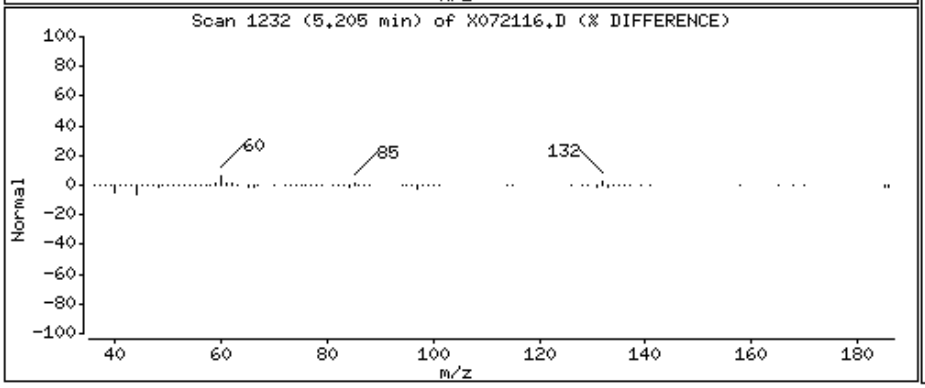
38 Trichloroethene

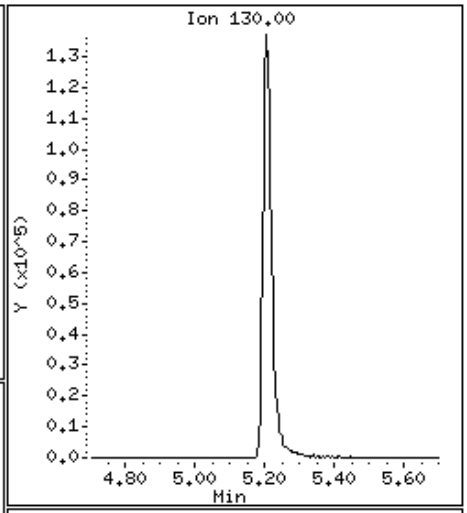
Concentration: 372.01 ug/l

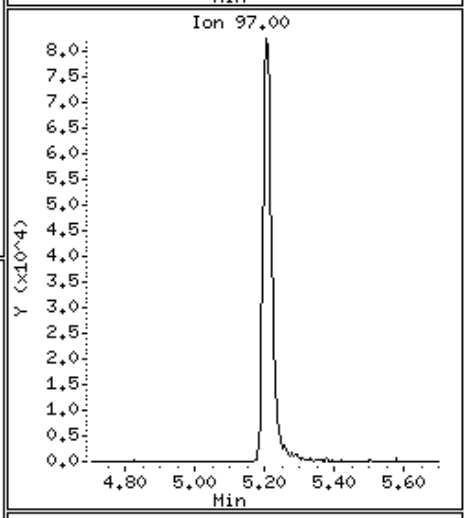


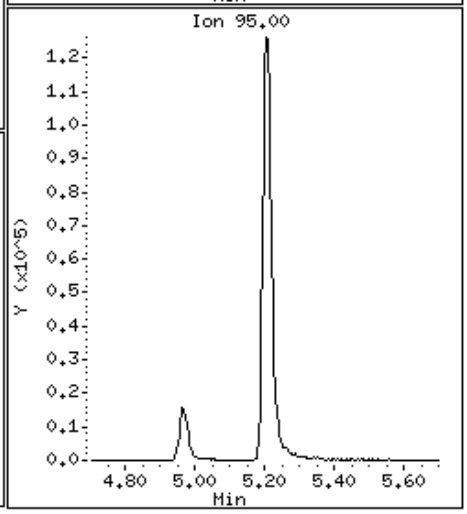












Data File : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072116.D
Inj Date : 21-JUL-2023 17:23
InstruID : voa6.i
LabSampID : HS23070993-02

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072117.D Page 1
Report Date: 27-Jul-2023 12:59

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072117.D
Lab Smp Id: HS23070993-11 Client Smp ID: HS23070993-11
Inj Date : 21-JUL-2023 17:44
Operator : PC Inst ID: voa6.i
Smp Info : HS23070993-11;HS23070993-11;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\8260W.m
Meth Date : 27-Jul-2023 12:58 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.178	4.178	(1.000)	617577	50.0000	
$ 30 Dibromofluoromethane	113	4.099	4.095	(0.981)	314700	55.6846	55.68
$ 35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	393750	55.6987	55.69
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	952567	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	849361	50.0000	
$ 48 Toluene-d8	98	6.386	6.386	(0.833)	1111227	50.8142	50.81
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	402254	47.5444	47.54
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.658	(1.000)	446573	50.0000	

01322140

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072117.D

Date : 21-JUL-2023 17:44

Client ID: HS23070993-11

Instrument: voa6.i

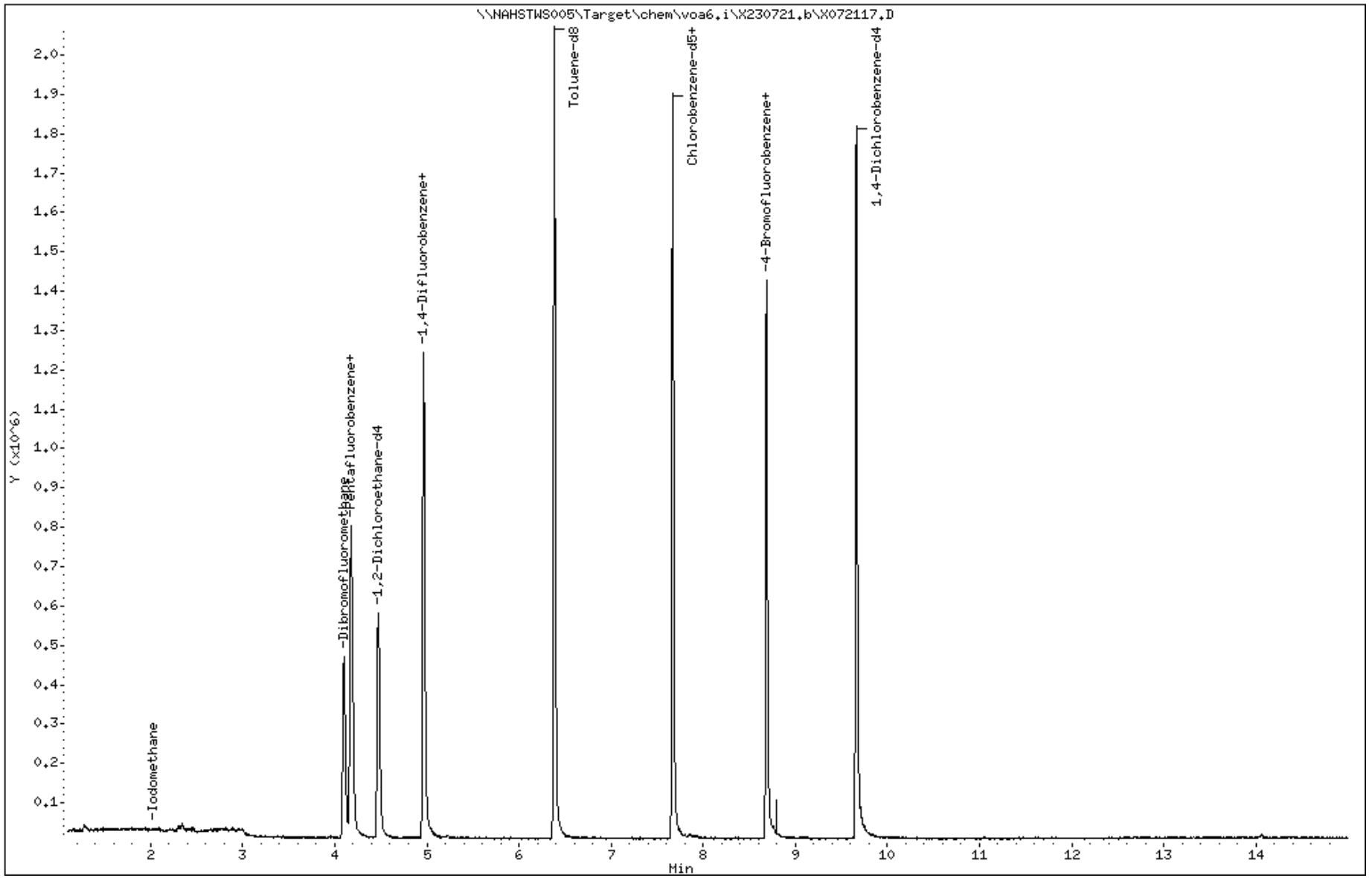
Sample Info: HS23070993-11;HS23070993-11;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072117.D
Inj Date : 21-JUL-2023 17:44
InstruID : voa6.i
LabSampID : HS23070993-11

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072119.D Page 1
Report Date: 27-Jul-2023 12:59

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072119.D
Lab Smp Id: HS23070993-04 Client Smp ID: HS23070993-04
Inj Date : 21-JUL-2023 18:25
Operator : PC Inst ID: voa6.i
Smp Info : HS23070993-04;HS23070993-04;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\8260W.m
Meth Date : 27-Jul-2023 12:58 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 17
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.178	4.178	(1.000)	617670	50.0000	
$ 30 Dibromofluoromethane	113	4.099	4.095	(0.981)	311633	55.1261	55.12
$ 35 1,2-Dichloroethane-d4	65	4.474	4.470	(1.071)	400715	56.6863	56.68
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	951869	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	839817	50.0000	
$ 48 Toluene-d8	98	6.382	6.386	(0.832)	1127561	52.1471	52.14
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	384797	45.9840	45.98
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.658	(1.000)	428328	50.0000	
38 Trichloroethene	130	5.212	5.205	(1.050)	7302	1.13383	1.13(a)

QC Flag Legend

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

01322143

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072119.D

Date : 21-JUL-2023 18:25

Client ID: HS23070993-04

Instrument: voa6.i

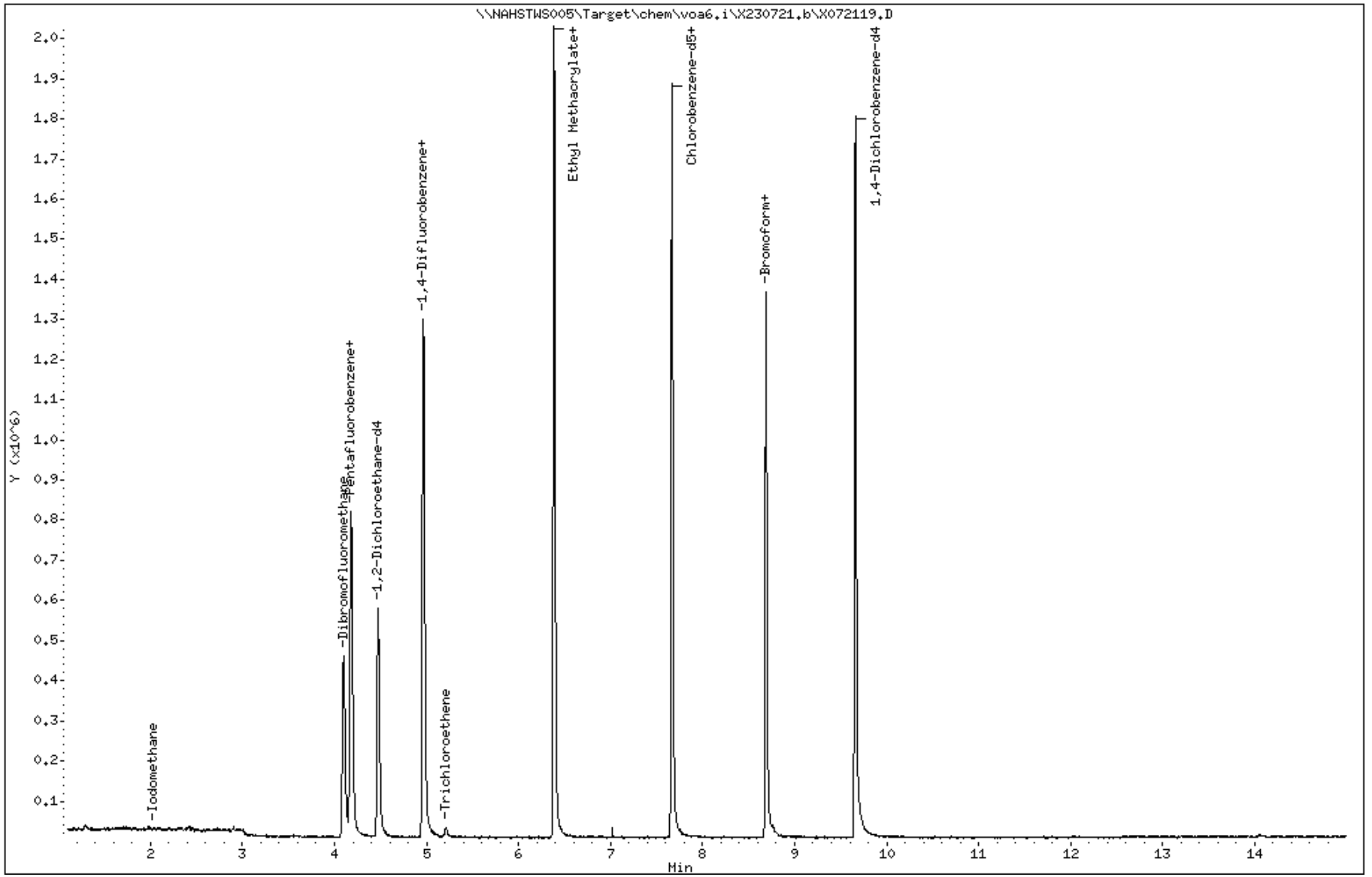
Sample Info: HS23070993-04;HS23070993-04;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072119.D

Date : 21-JUL-2023 18:25

Client ID: HS23070993-04

Instrument: voa6.i

Sample Info: HS23070993-04;HS23070993-04;;;

Purge Volume: 5.0

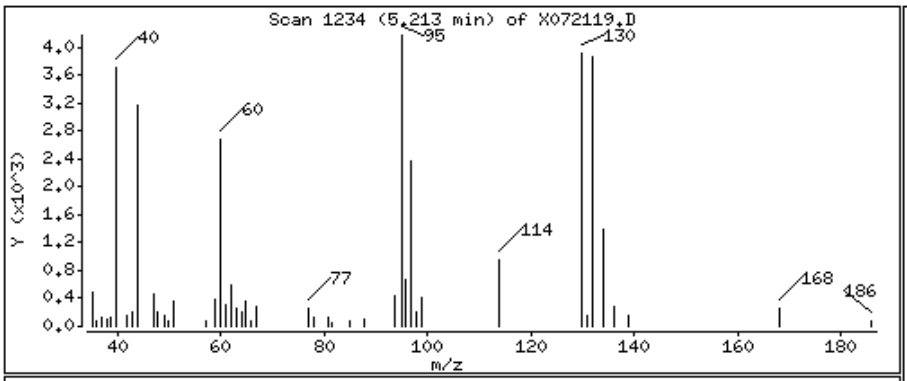
Operator: PC

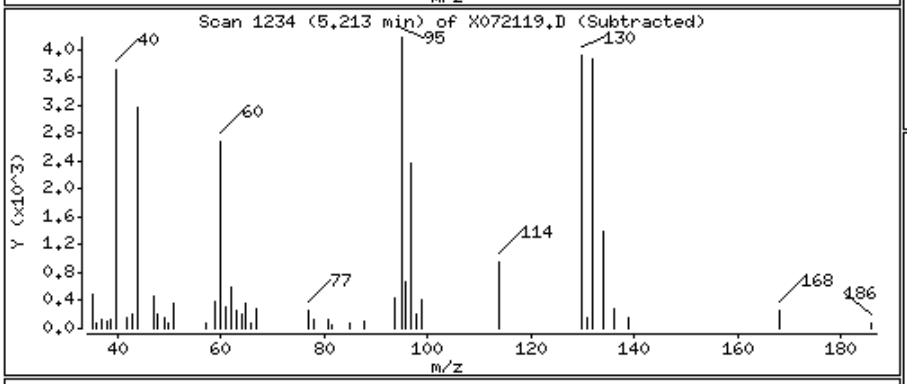
Column phase: DB624

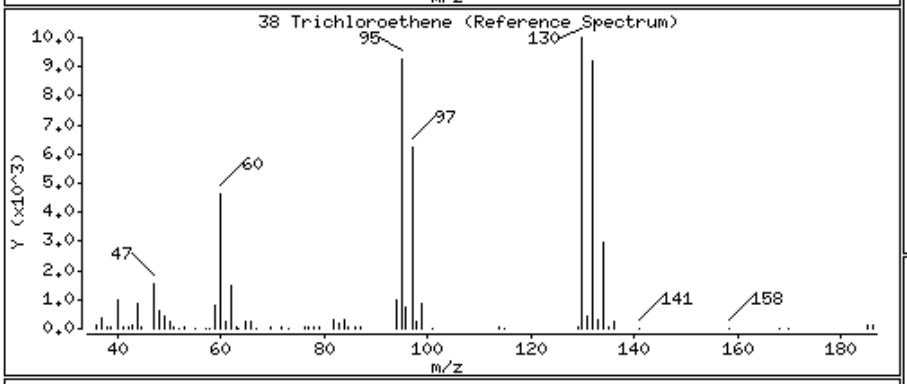
Column diameter: 0.18

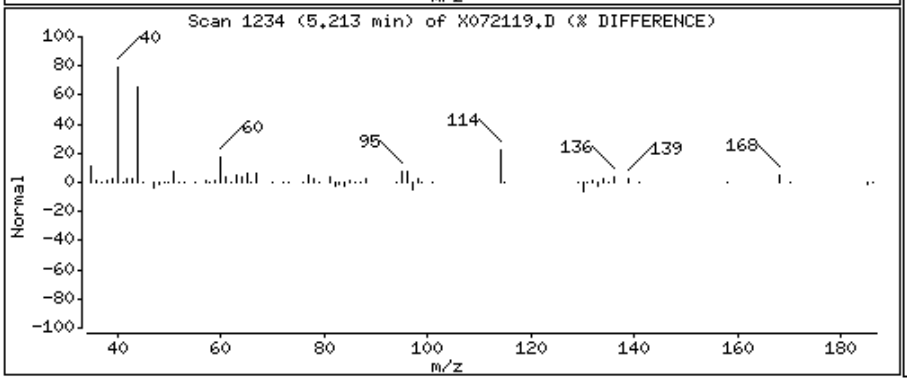
38 Trichloroethene

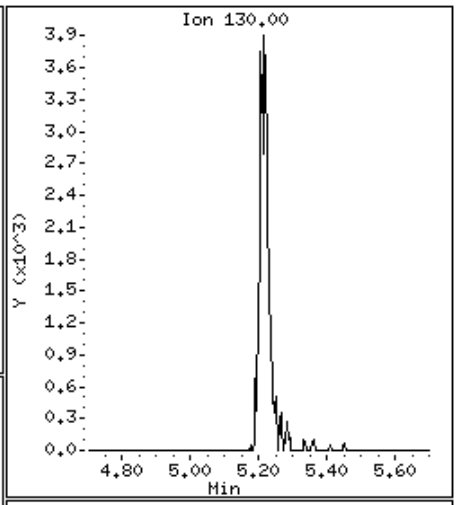
Concentration: 1.13 ug/l

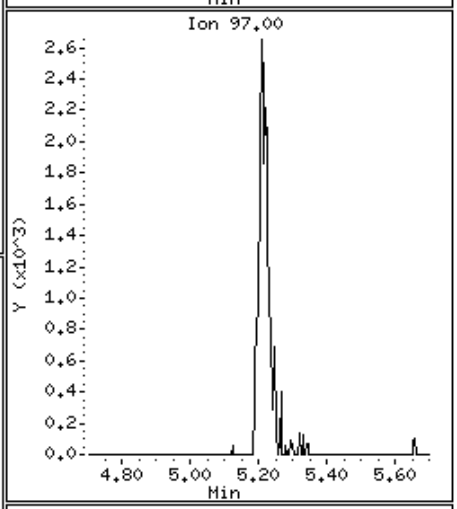


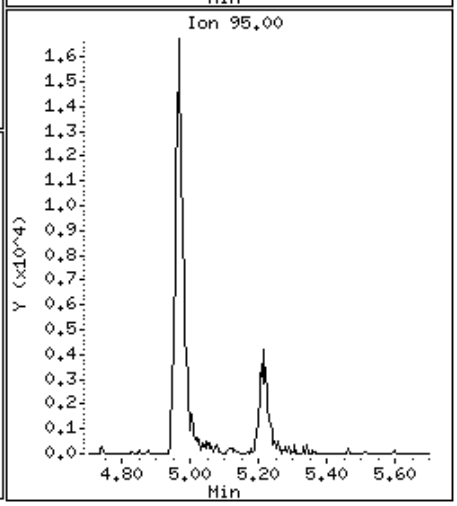












Data File : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072119.D
Inj Date : 21-JUL-2023 18:25
InstruID : voa6.i
LabSampID : HS23070993-04

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072120.D Page 1
Report Date: 27-Jul-2023 12:59

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072120.D
Lab Smp Id: HS23070993-07 Client Smp ID: HS23070993-07
Inj Date : 21-JUL-2023 18:45
Operator : PC Inst ID: voa6.i
Smp Info : HS23070993-07;HS23070993-07;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\8260W.m
Meth Date : 27-Jul-2023 12:58 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.181	4.178	(1.000)	593582	50.0000	
$ 30 Dibromofluoromethane	113	4.099	4.095	(0.980)	309131	56.9272	56.92
$ 35 1,2-Dichloroethane-d4	65	4.474	4.470	(1.070)	385760	56.7863	56.78
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	950934	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	831930	50.0000	
$ 48 Toluene-d8	98	6.385	6.386	(0.833)	1107832	51.7204	51.72
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	406424	49.0573	49.05
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.658	(1.000)	422331	50.0000	

01322147

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072120.D

Date : 21-JUL-2023 18:45

Client ID: HS23070993-07

Instrument: voa6.i

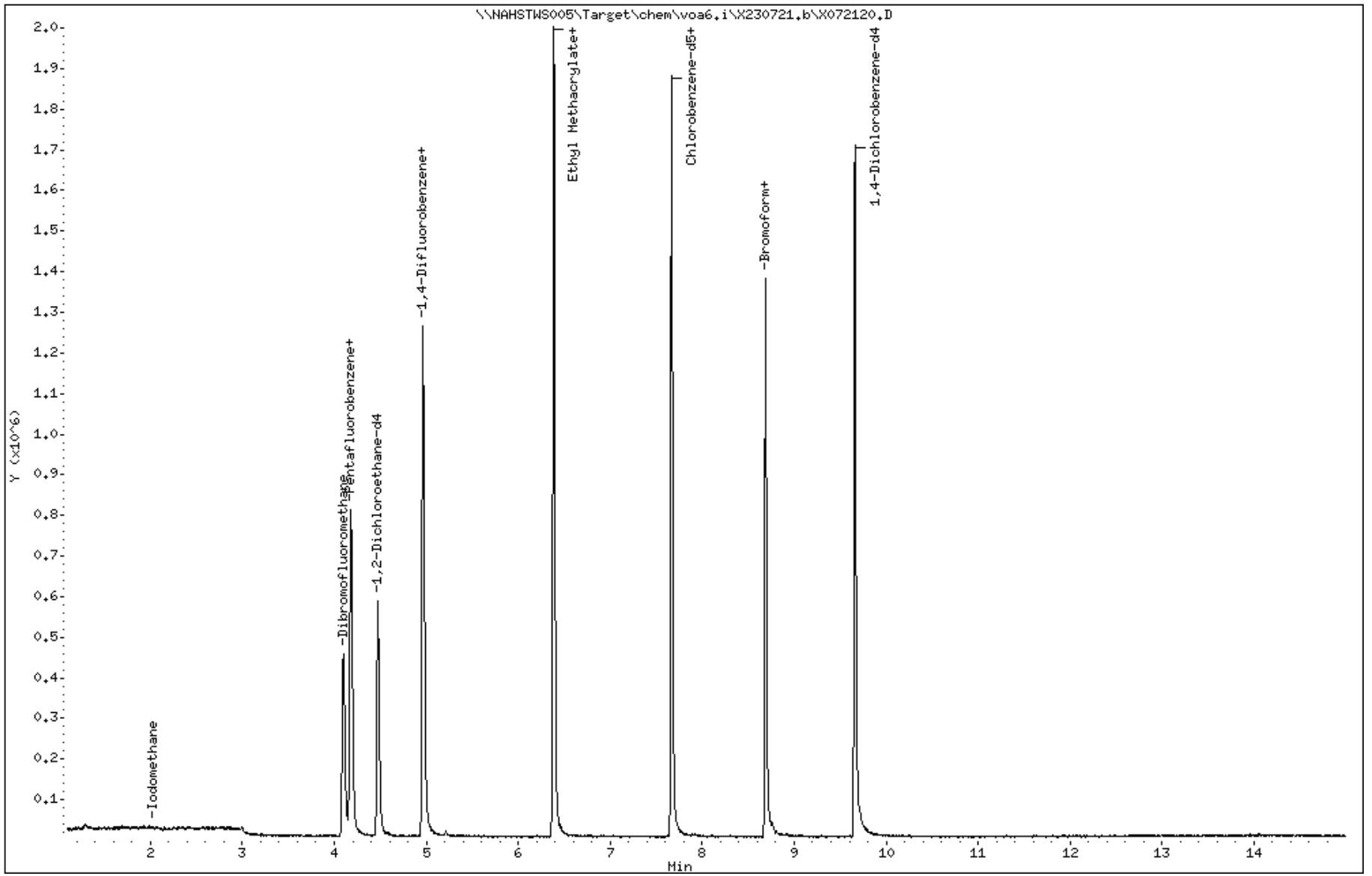
Sample Info: HS23070993-07;HS23070993-07;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072120.D
Inj Date : 21-JUL-2023 18:45
InstruID : voa6.i
LabSampID : HS23070993-07

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072121.D Page 1
Report Date: 27-Jul-2023 12:59

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072121.D
Lab Smp Id: HS23070993-06 Client Smp ID: HS23070993-06
Inj Date : 21-JUL-2023 19:06
Operator : PC Inst ID: voa6.i
Smp Info : HS23070993-06;HS23070993-06;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\8260W.m
Meth Date : 27-Jul-2023 12:58 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.181	4.178	(1.000)	612859	50.0000	
$ 30 Dibromofluoromethane	113	4.099	4.095	(0.980)	302607	53.9334	53.93
$ 35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.069)	386071	55.0254	55.02
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	938586	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	816895	50.0000	
$ 48 Toluene-d8	98	6.386	6.386	(0.833)	1087092	51.6862	51.68
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	389905	47.9197	47.91
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.658	(1.000)	400601	50.0000	
5 Vinyl Chloride	62	1.145	1.145	(0.274)	45995	5.79963	5.79
11 1,1-Dichloroethene	96	1.917	1.913	(0.459)	5024	1.11897	1.11(a)
27 cis-1,2-Dichloroethene	96	3.529	3.525	(0.844)	70810	10.7027	10.70
38 Trichloroethene	130	5.205	5.205	(1.048)	659100	103.792	103.79

QC Flag Legend

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

01322150

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072121.D

Date : 21-JUL-2023 19:06

Client ID: HS23070993-06

Instrument: voa6.i

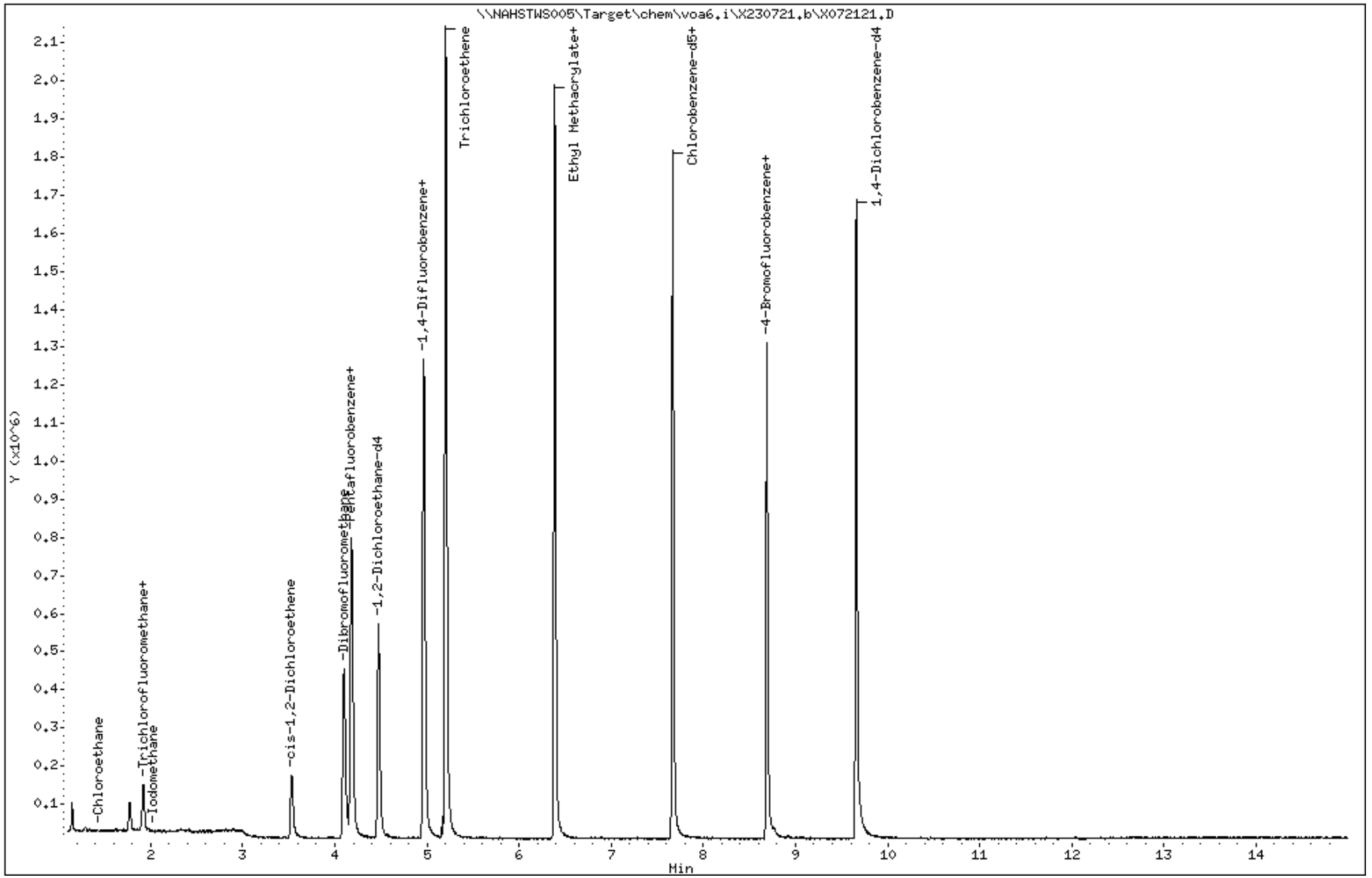
Sample Info: HS23070993-06;HS23070993-06;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072121.D

Date : 21-JUL-2023 19:06

Client ID: HS23070993-06

Instrument: voa6.i

Sample Info: HS23070993-06;HS23070993-06;;;

Purge Volume: 5.0

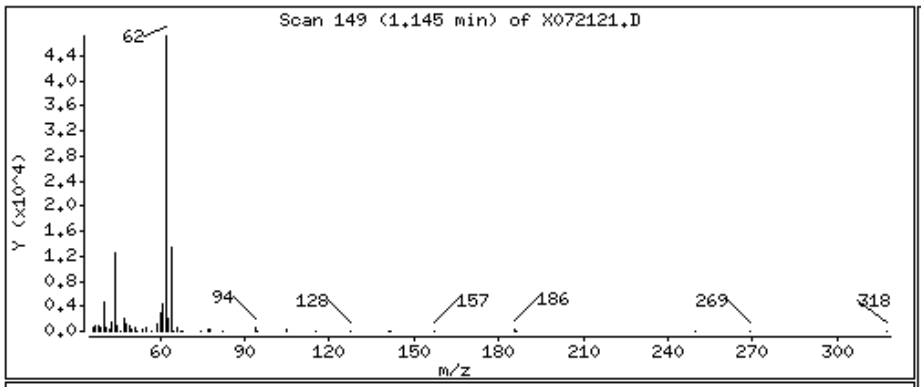
Operator: PC

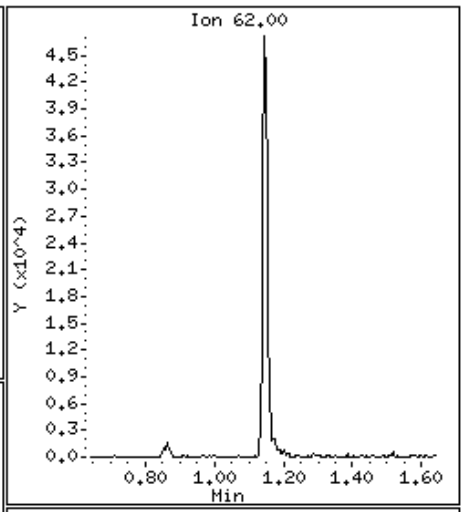
Column phase: DB624

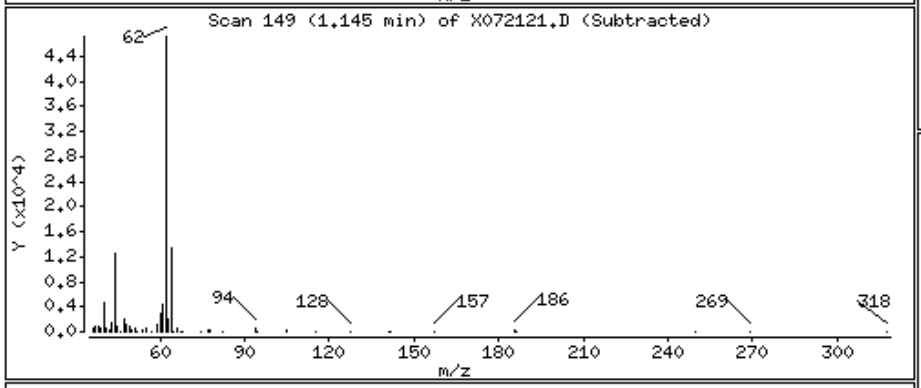
Column diameter: 0.18

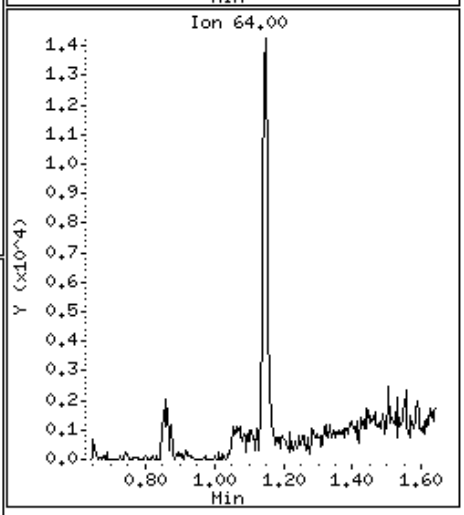
5 Vinyl Chloride

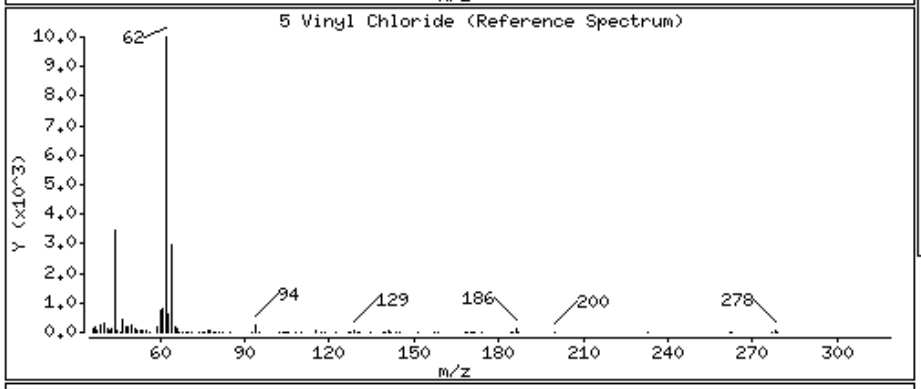
Concentration: 5.79 ug/l

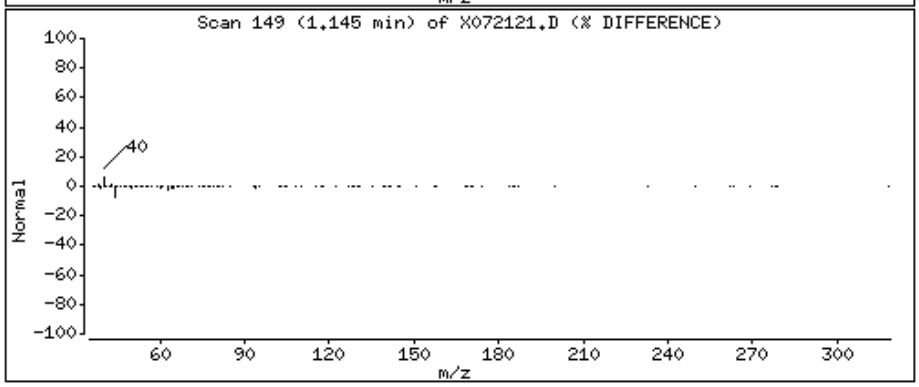












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072121.D Page 3

Date : 21-JUL-2023 19:06

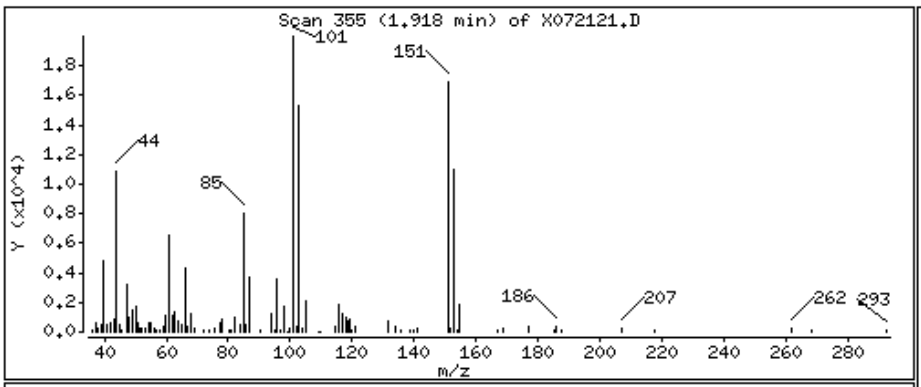
Client ID: HS23070993-06 Instrument: voa6.i

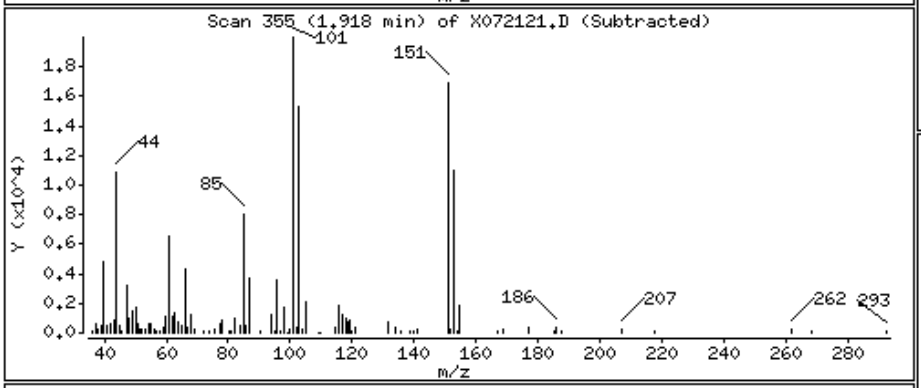
Sample Info: HS23070993-06;HS23070993-06;;;

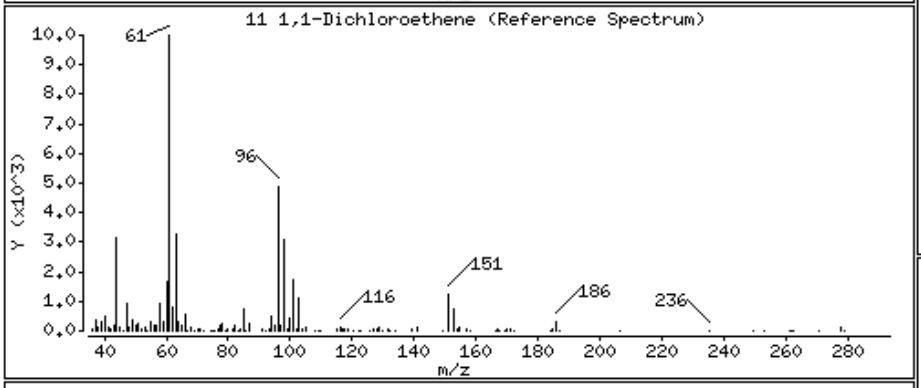
Purge Volume: 5.0 Operator: PC

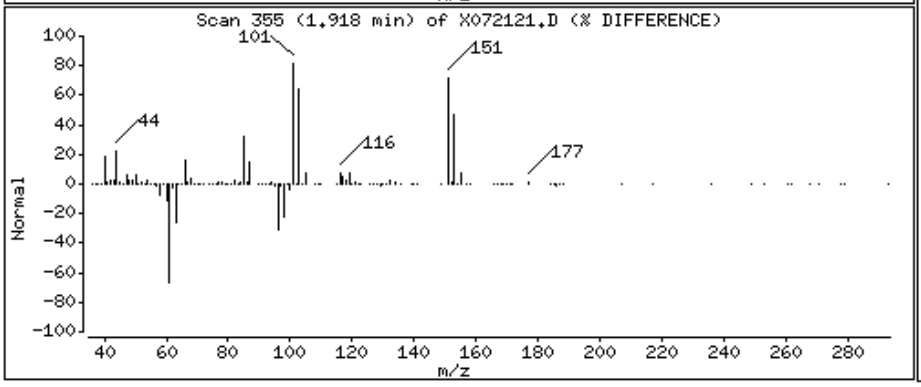
Column phase: DB624 Column diameter: 0.18

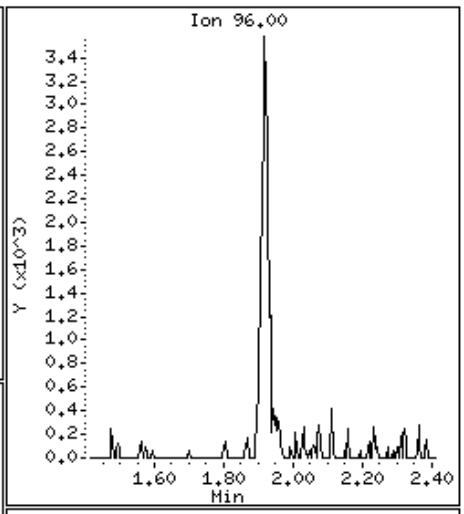
11 1,1-Dichloroethene Concentration: 1.11 ug/l

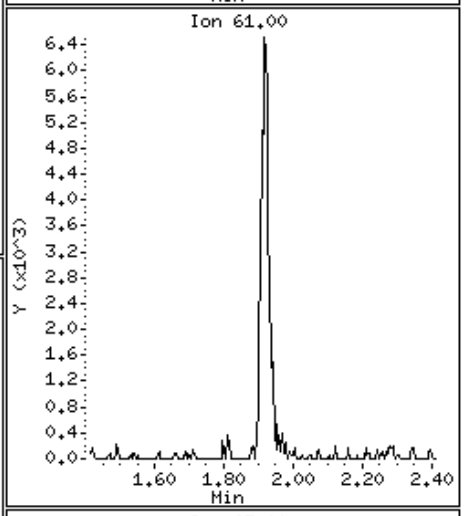


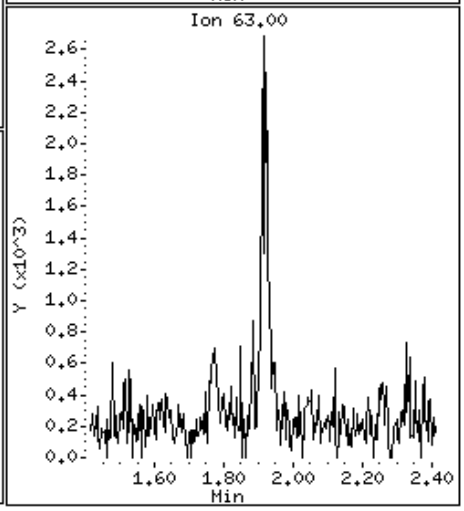












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072121.D

Date : 21-JUL-2023 19:06

Client ID: HS23070993-06

Instrument: voa6.i

Sample Info: HS23070993-06;HS23070993-06;;;

Purge Volume: 5.0

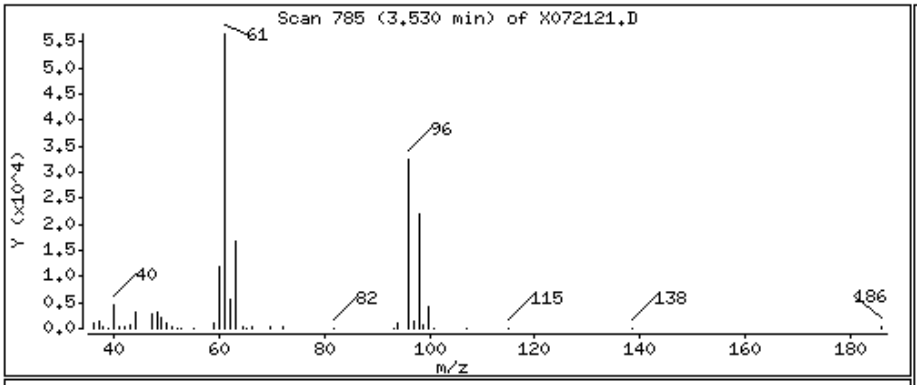
Operator: PC

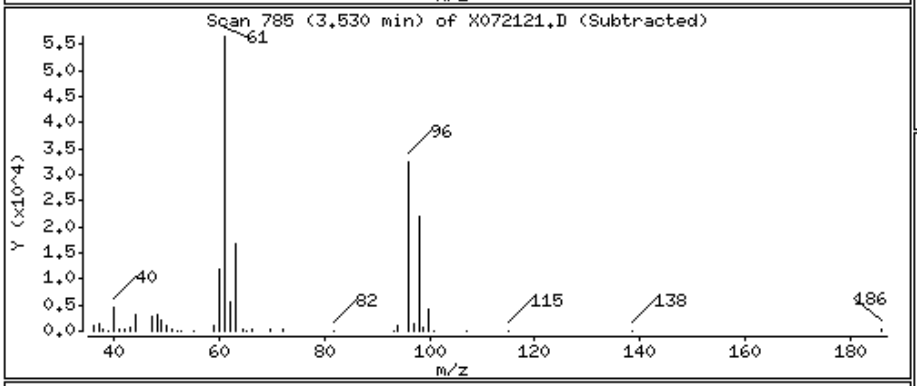
Column phase: DB624

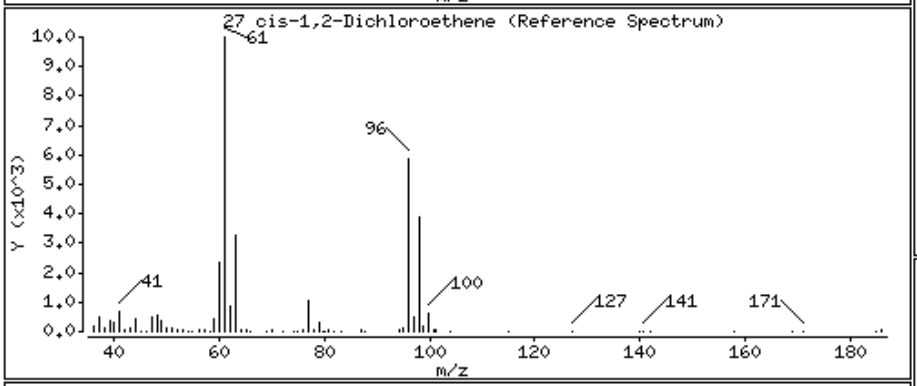
Column diameter: 0.18

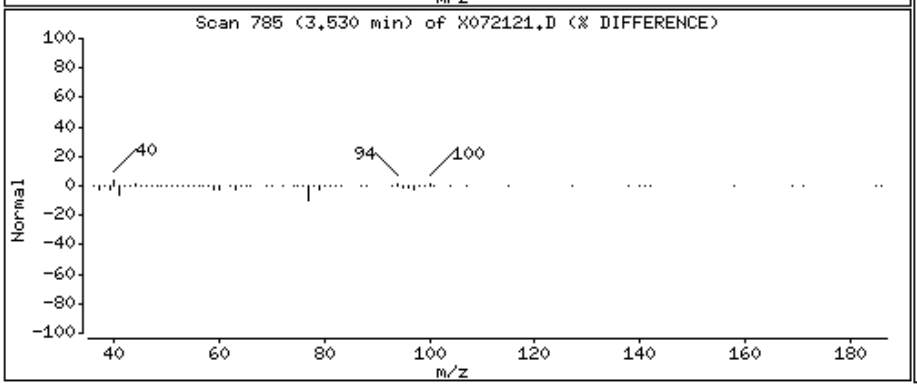
27 cis-1,2-Dichloroethene

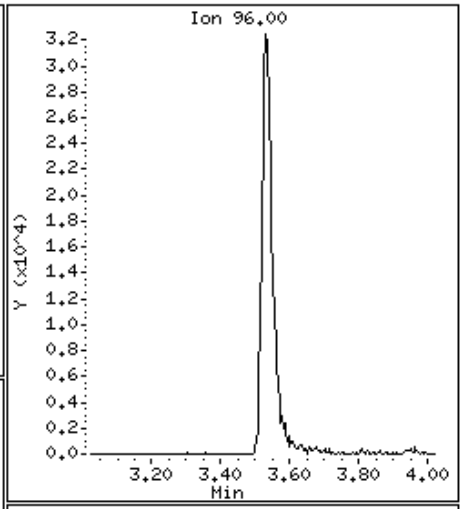
Concentration: 10.70 ug/l

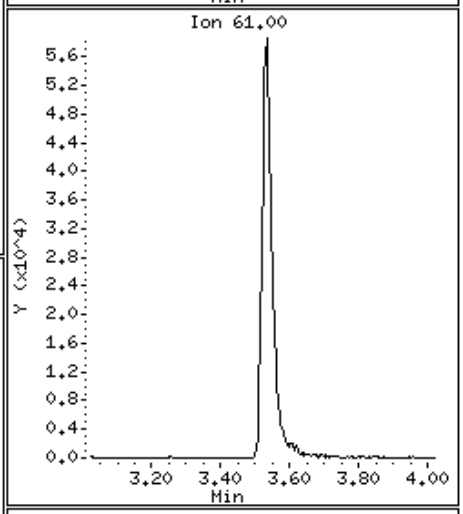


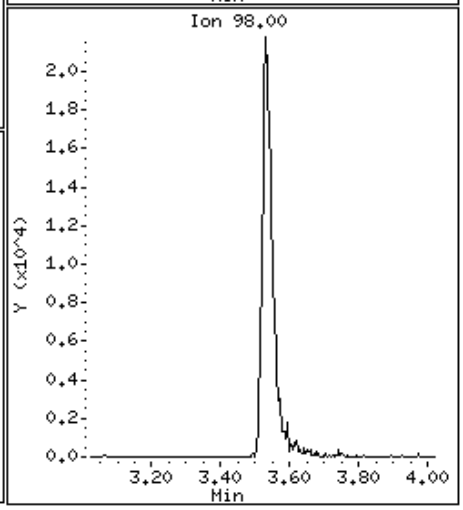












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072121.D Page 5

Date : 21-JUL-2023 19:06

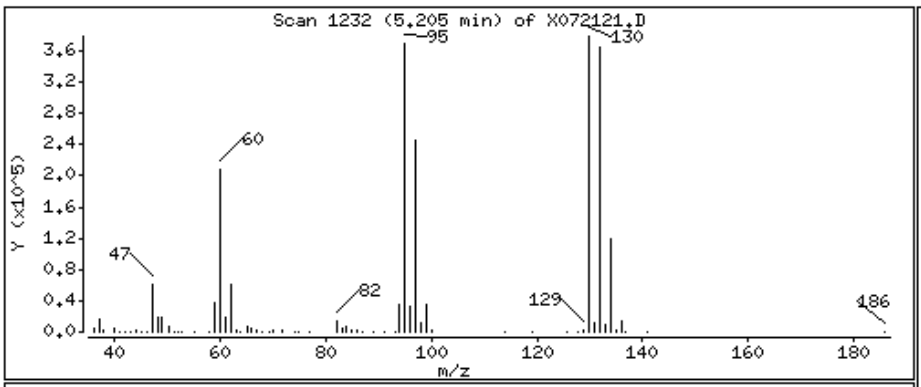
Client ID: HS23070993-06 Instrument: voa6.i

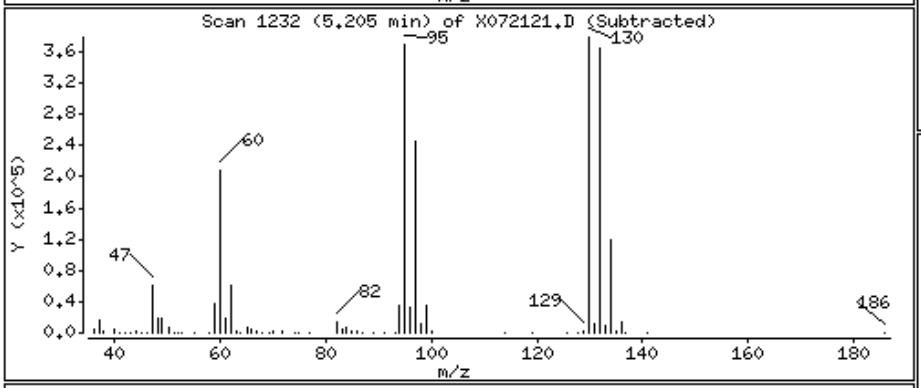
Sample Info: HS23070993-06;HS23070993-06;;;

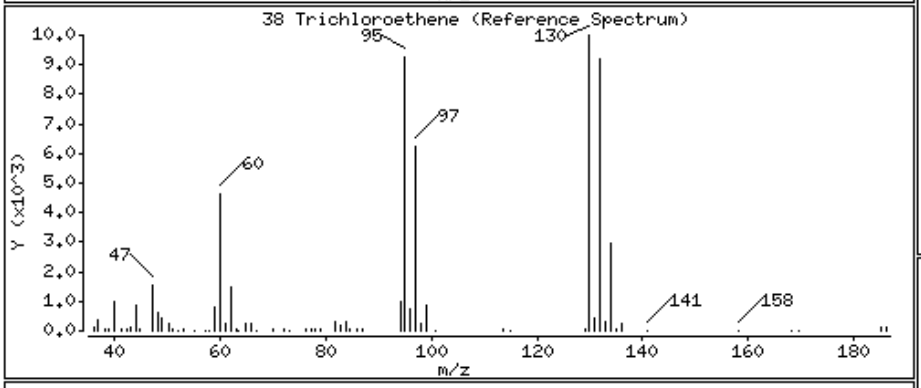
Purge Volume: 5.0 Operator: PC

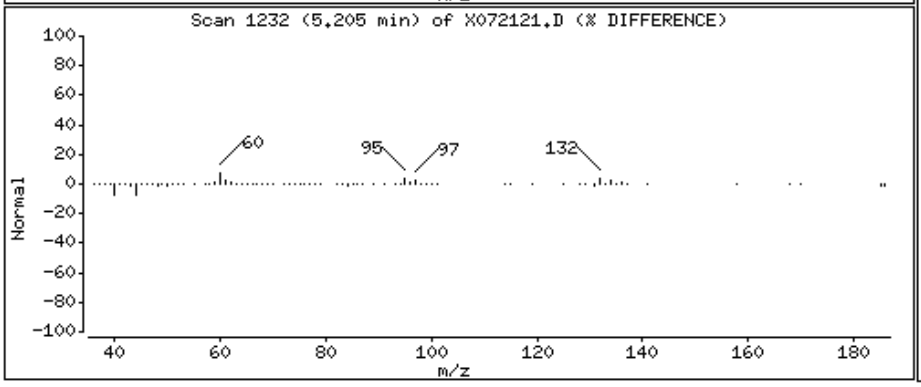
Column phase: DB624 Column diameter: 0.18

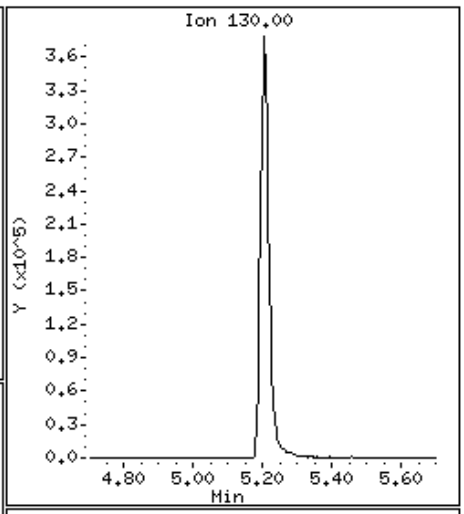
38 Trichloroethene Concentration: 103.79 ug/l

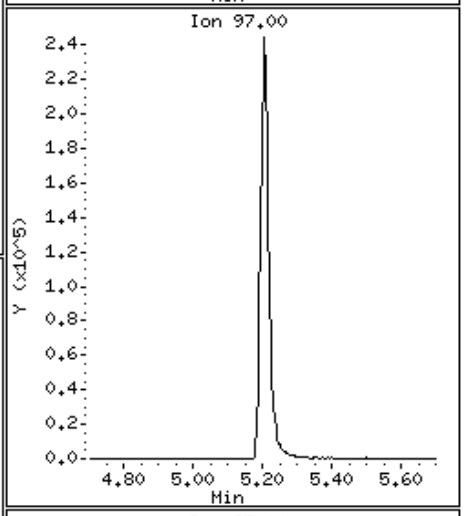


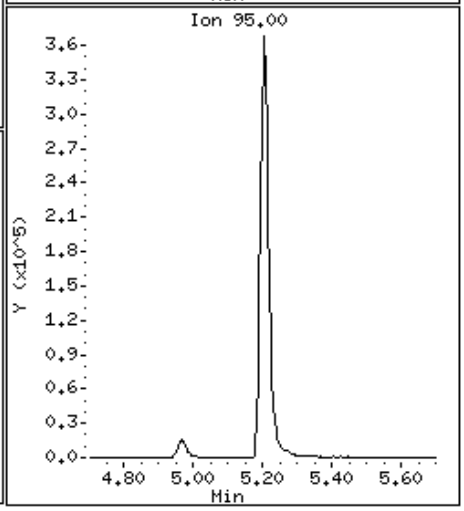












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Inj Date : 21-JUL-2023 19:06
InstruID : voa6.i
LabSampID : HS23070993-06

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072122.D Page 1
Report Date: 27-Jul-2023 12:59

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072122.D
Lab Smp Id: HS23070993-03 Client Smp ID: HS23070993-03
Inj Date : 21-JUL-2023 19:26
Operator : PC Inst ID: voa6.i
Smp Info : HS23070993-03;HS23070993-03;;;
Misc Info : V6;WATER;0;20;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\8260W.m
Meth Date : 27-Jul-2023 12:58 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 20
Dil Factor: 20.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

Name	Value	Description
DF	20.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.181	4.178	(1.000)	589616	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.095	(0.981)	298236	55.2683	55.26
$ 35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.069)	383529	56.8382	56.83
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	926889	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	798949	50.0000	
$ 48 Toluene-d8	98	6.385	6.386	(0.833)	1069103	51.9727	51.97
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	381679	47.9628	47.96
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.658	(1.000)	389610	50.0000	
5 Vinyl Chloride	62	1.149	1.145	(0.275)	24252	3.17855	63.57(a)
11 1,1-Dichloroethene	96	1.921	1.913	(0.459)	5080	1.17604	23.52(a)
27 cis-1,2-Dichloroethene	96	3.529	3.525	(0.844)	263916	41.4626	829.25
38 Trichloroethene	130	5.205	5.205	(1.048)	1155425	184.246	3684.92

QC Flag Legend

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

01322157

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072122.D

Date : 21-JUL-2023 19:26

Client ID: HS23070993-03

Instrument: voa6.i

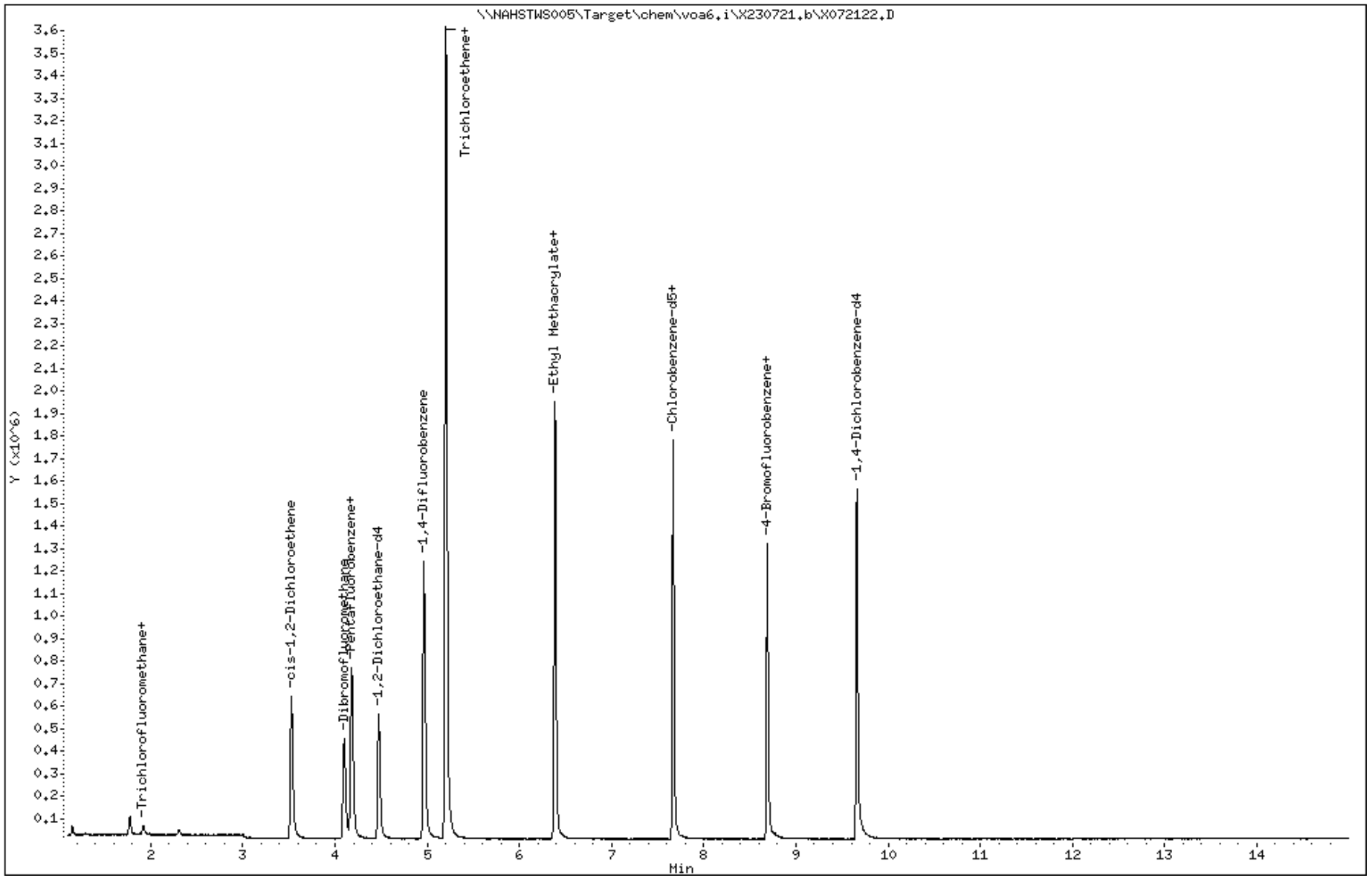
Sample Info: HS23070993-03;HS23070993-03;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072122.D

Date : 21-JUL-2023 19:26

Client ID: HS23070993-03

Instrument: voa6.i

Sample Info: HS23070993-03;HS23070993-03;;;

Purge Volume: 5.0

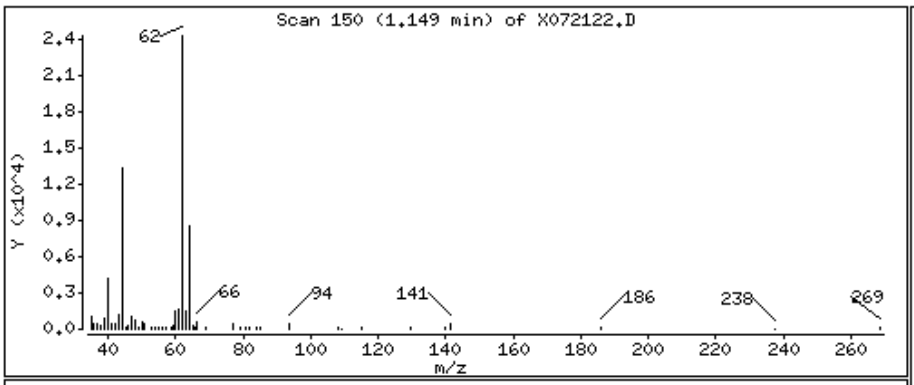
Operator: PC

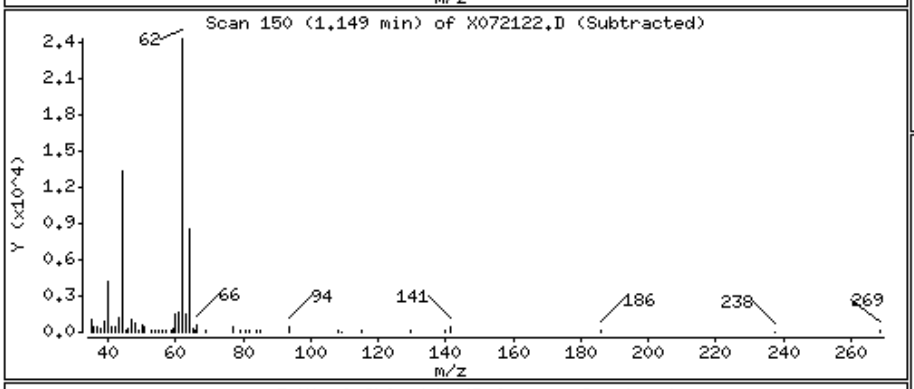
Column phase: DB624

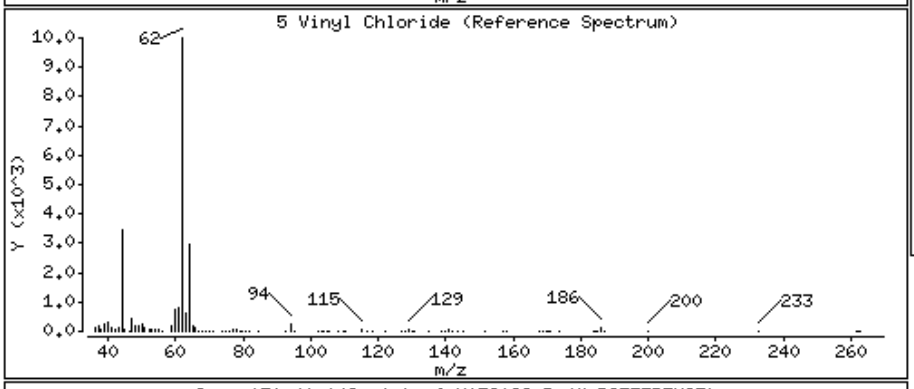
Column diameter: 0.18

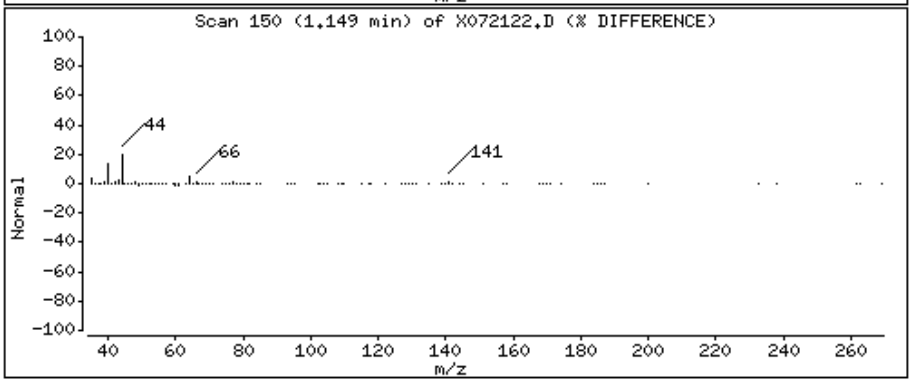
5 Vinyl Chloride

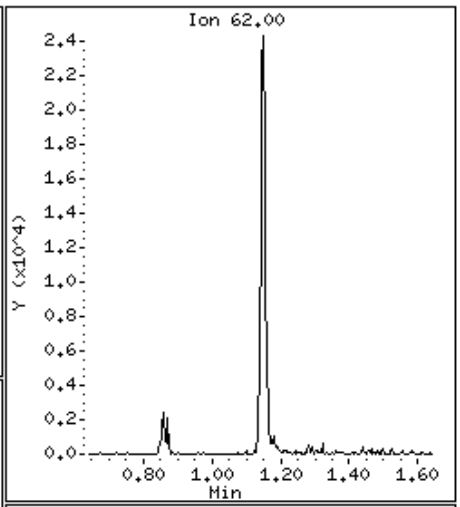
Concentration: 63.57 ug/l

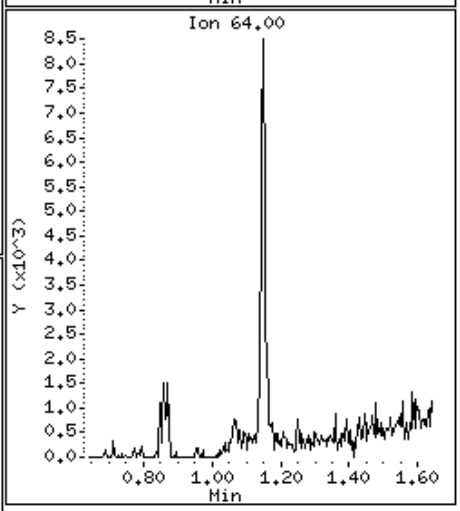












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072122.D Page 3

Date : 21-JUL-2023 19:26

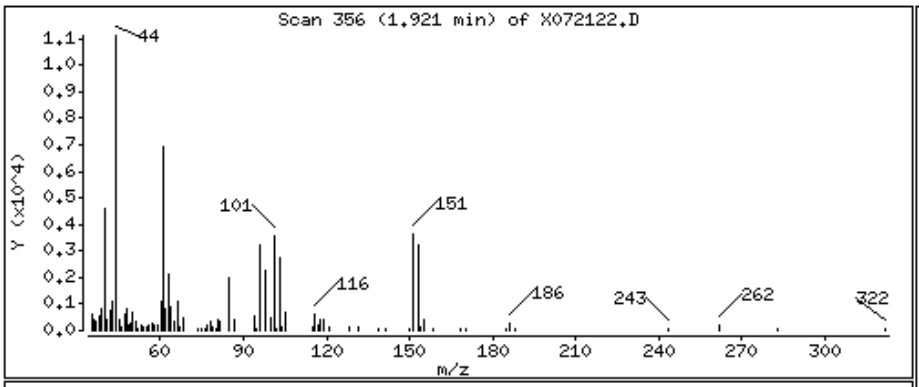
Client ID: HS23070993-03 Instrument: voa6.i

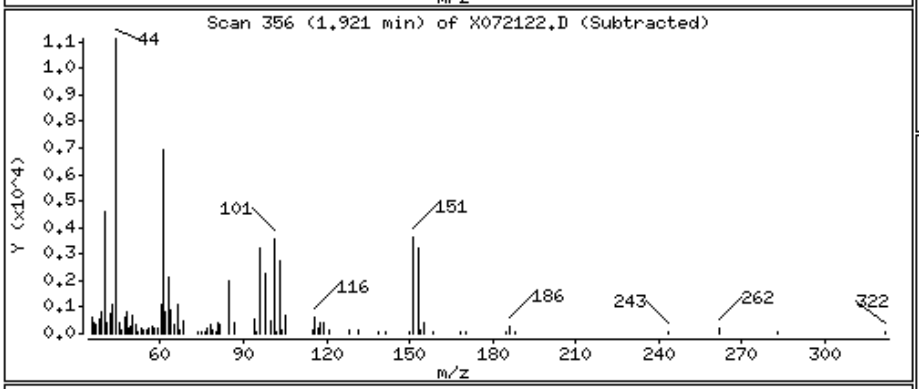
Sample Info: HS23070993-03;HS23070993-03;;;

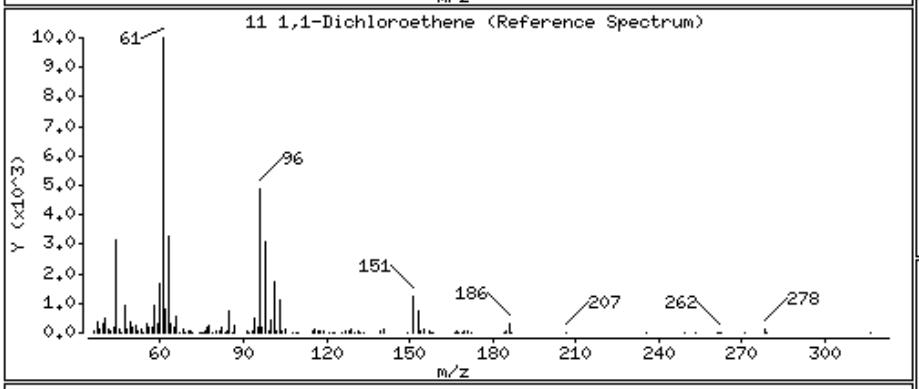
Purge Volume: 5.0 Operator: PC

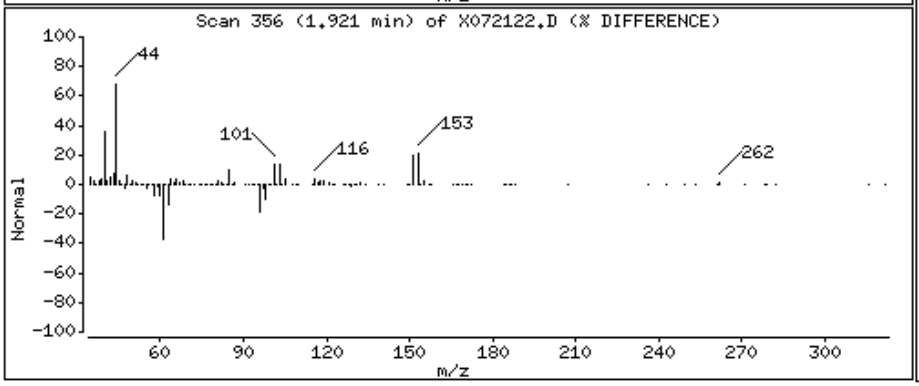
Column phase: DB624 Column diameter: 0.18

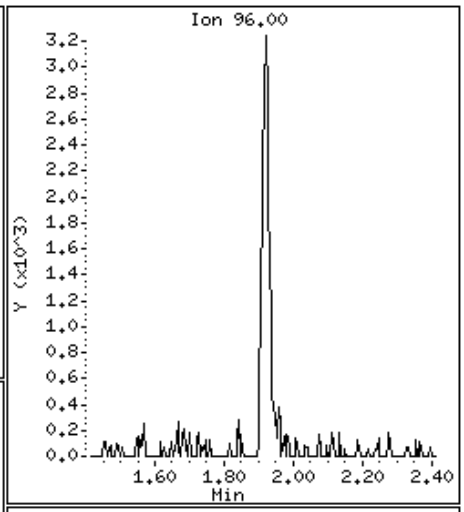
11 1,1-Dichloroethene Concentration: 23.52 ug/l

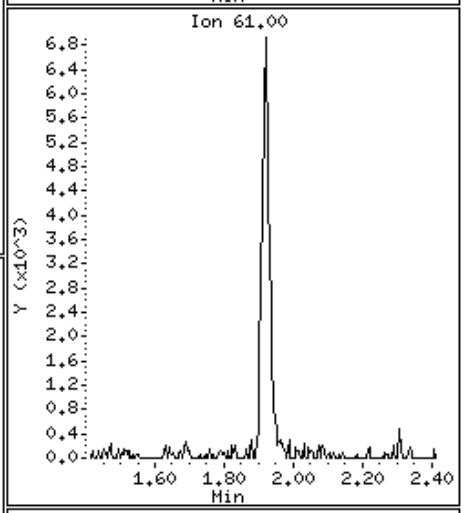


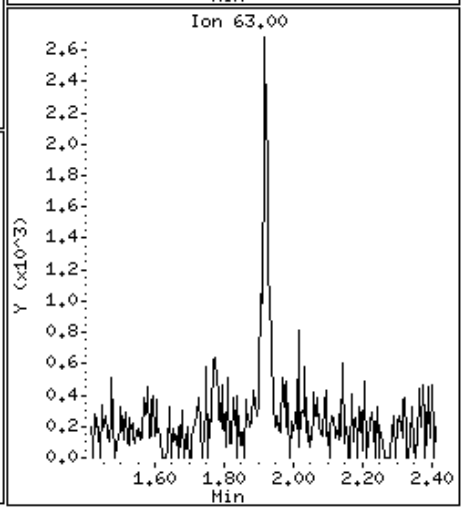












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Date : 21-JUL-2023 19:26

Client ID: HS23070993-03

Instrument: voa6.i

Sample Info: HS23070993-03;HS23070993-03;;;

Purge Volume: 5.0

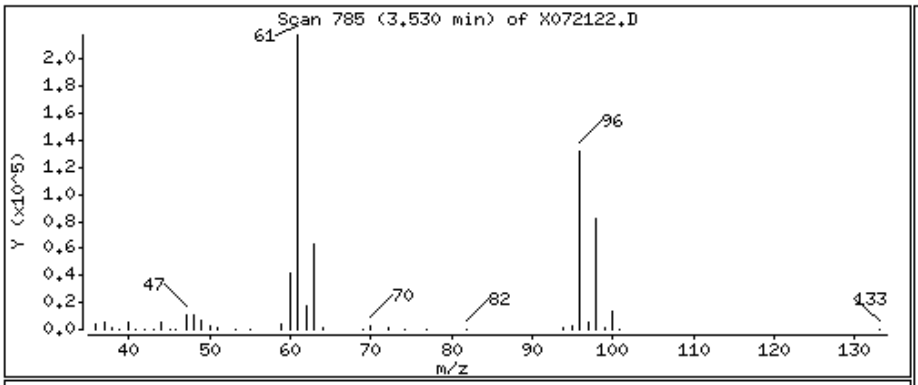
Operator: PC

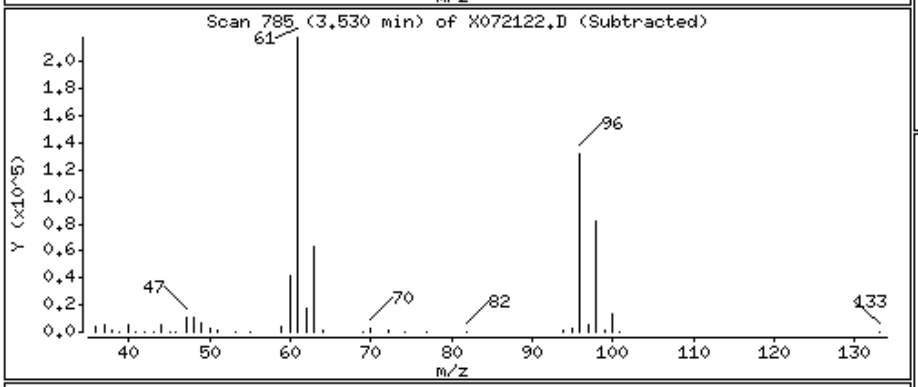
Column phase: DB624

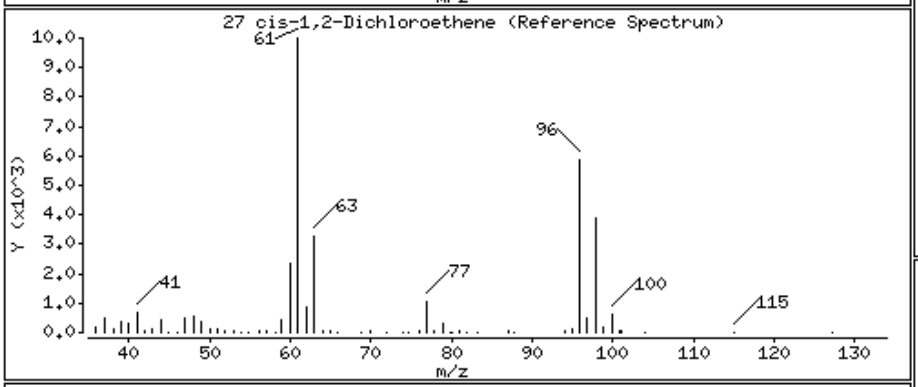
Column diameter: 0.18

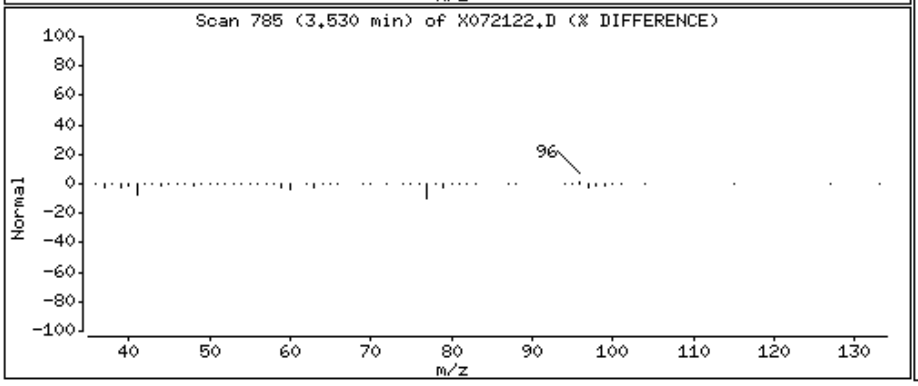
27 cis-1,2-Dichloroethene

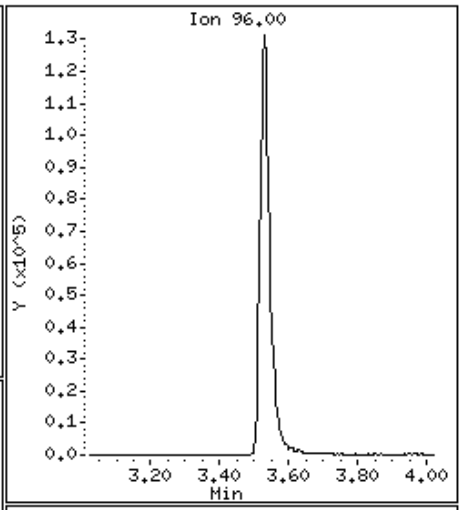
Concentration: 829.25 ug/l

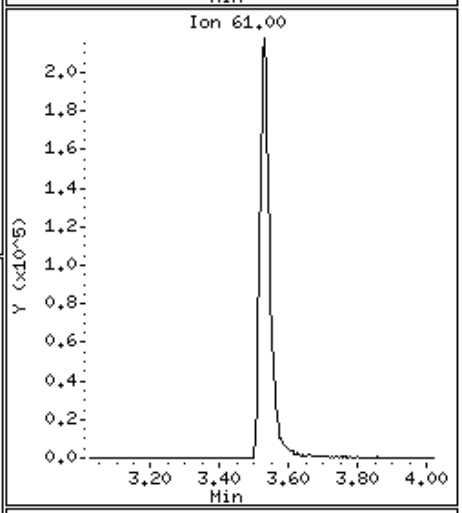


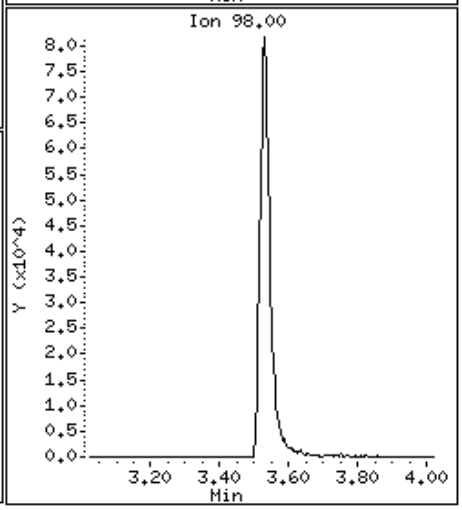












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072122.D Page 5

Date : 21-JUL-2023 19:26

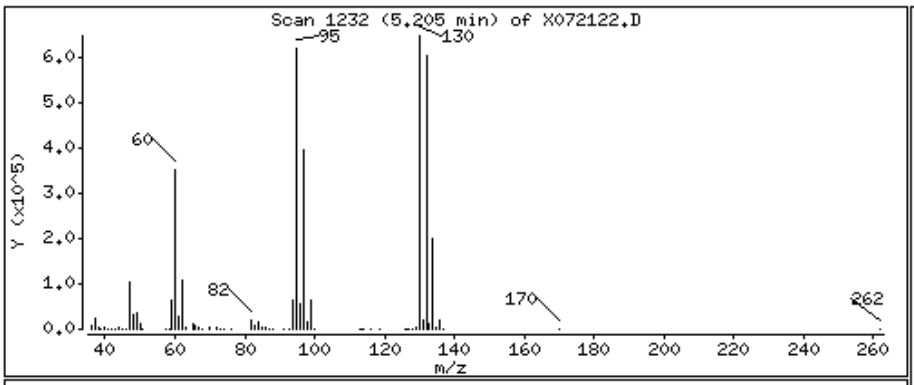
Client ID: HS23070993-03 Instrument: voa6.i

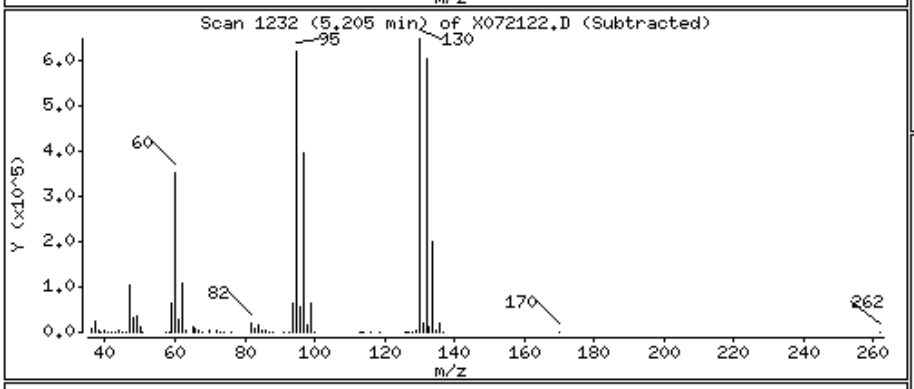
Sample Info: HS23070993-03;HS23070993-03;;;

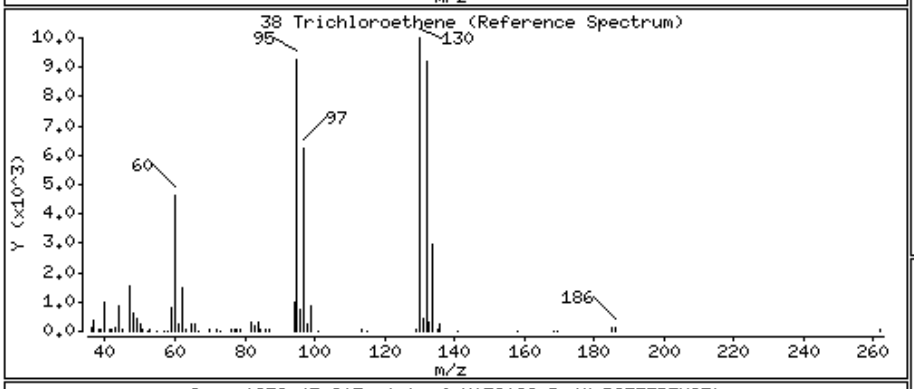
Purge Volume: 5.0 Operator: PC

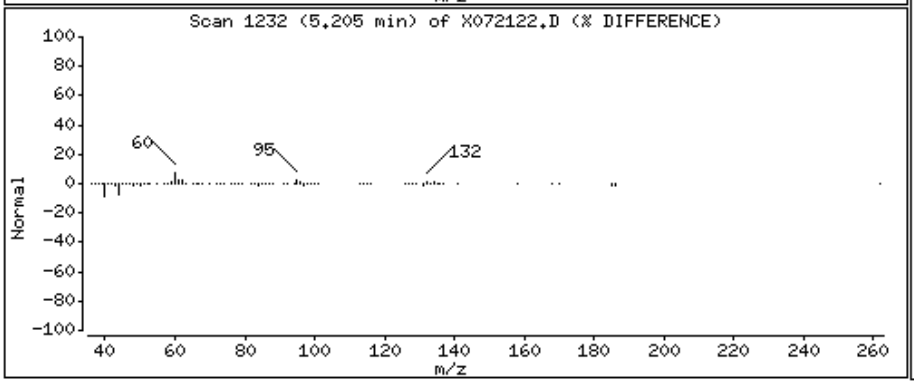
Column phase: DB624 Column diameter: 0.18

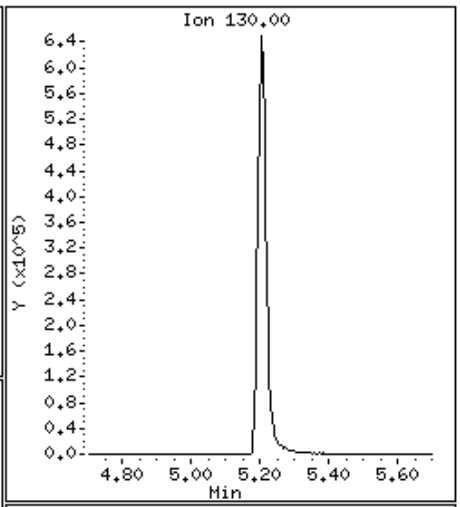
38 Trichloroethene Concentration: 3684.92 ug/l

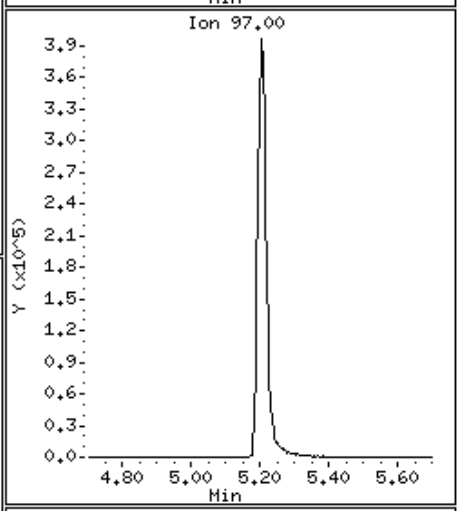


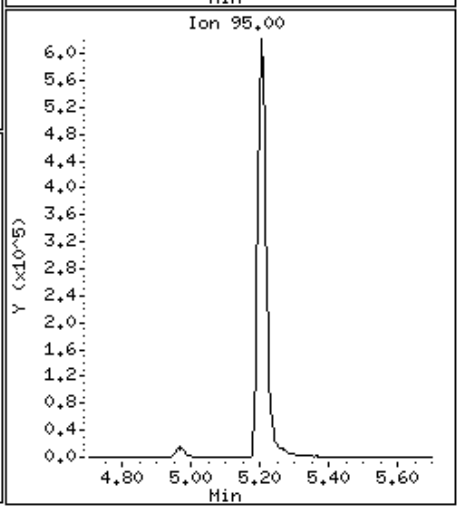












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Inj Date : 21-JUL-2023 19:26
InstruID : voa6.i
LabSampID : HS23070993-03

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072123.D Page 1
Report Date: 27-Jul-2023 12:59

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072123.D
Lab Smp Id: HS23070993-08 Client Smp ID: HS23070993-08
Inj Date : 21-JUL-2023 19:47
Operator : PC Inst ID: voa6.i
Smp Info : HS23070993-08;HS23070993-08;;;
Misc Info : V6;WATER;0;25;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\8260W.m
Meth Date : 27-Jul-2023 12:58 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 21
Dil Factor: 25.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.181	4.178	(1.000)	609840	50.0000	
$ 30 Dibromofluoromethane	113	4.099	4.095	(0.980)	301600	54.0212	54.02
$ 35 1,2-Dichloroethane-d4	65	4.474	4.470	(1.070)	386388	55.3468	55.34
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	941366	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	819608	50.0000	
$ 48 Toluene-d8	98	6.385	6.386	(0.833)	1099469	52.1016	52.10
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	391790	47.9927	47.99
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.658	(1.000)	387115	50.0000	
5 Vinyl Chloride	62	1.145	1.145	(0.274)	6947	0.88030	22.00(a)
11 1,1-Dichloroethene	96	1.924	1.913	(0.460)	4358	0.97544	24.38(a)
27 cis-1,2-Dichloroethene	96	3.529	3.525	(0.844)	104557	15.8817	397.04
38 Trichloroethene	130	5.205	5.205	(1.048)	310555	48.7602	1219.00

QC Flag Legend

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

01322164

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072123.D

Date : 21-JUL-2023 19:47

Client ID: HS23070993-08

Instrument: voa6.i

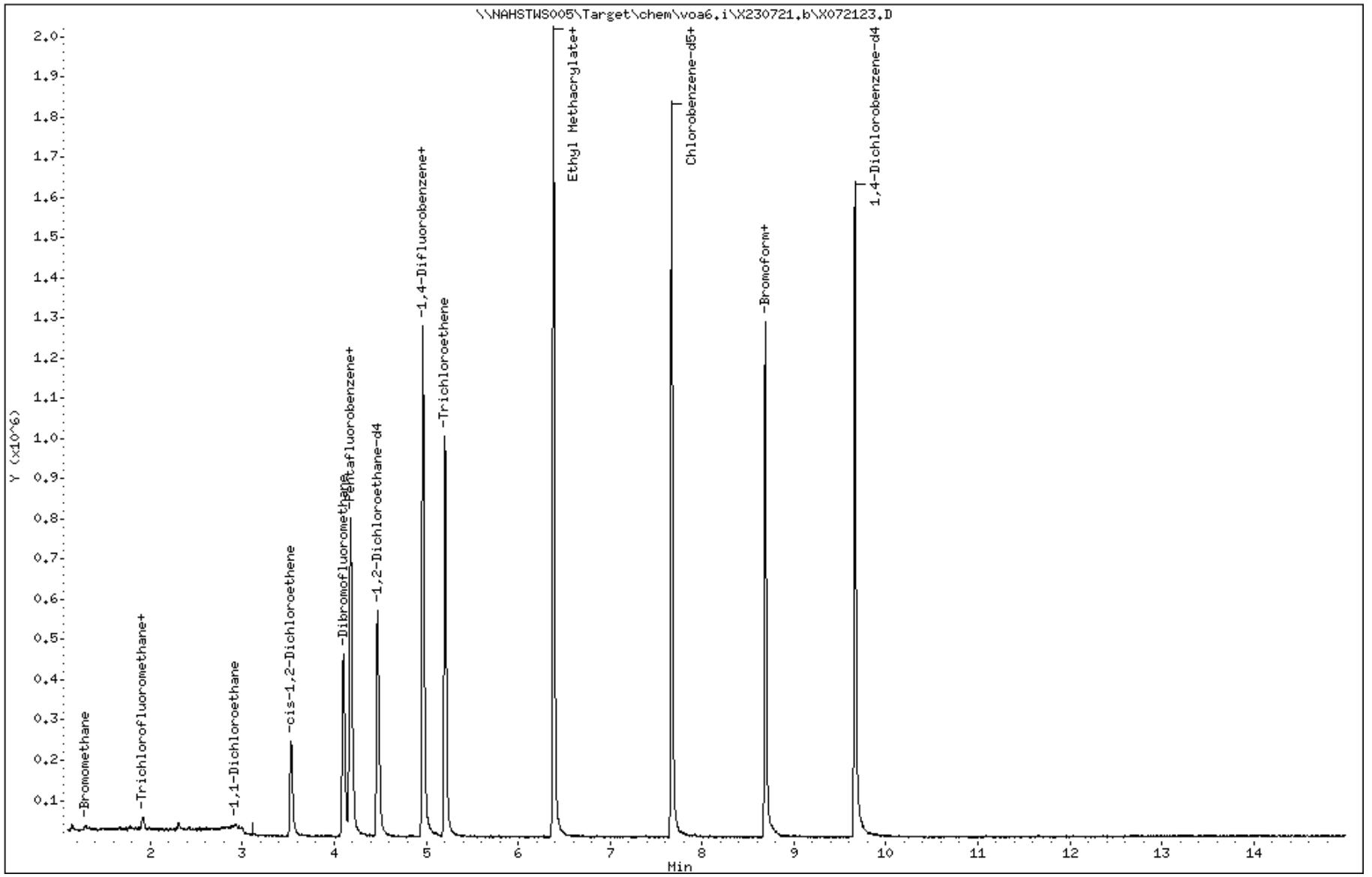
Sample Info: HS23070993-08;HS23070993-08;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072123.D

Date : 21-JUL-2023 19:47

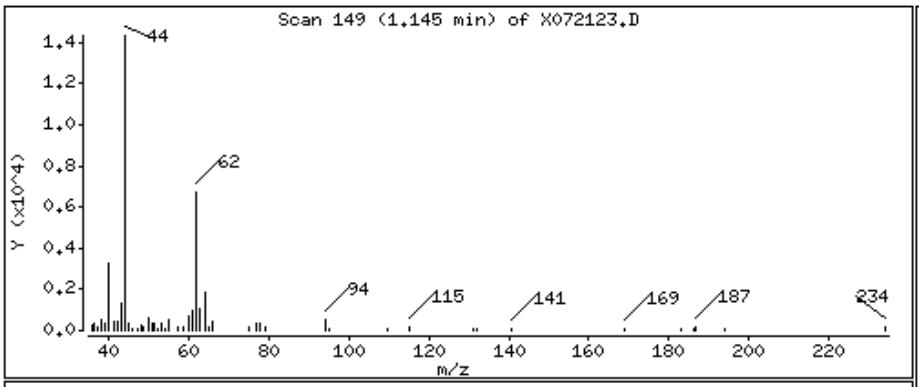
Client ID: HS23070993-08 Instrument: voa6.i

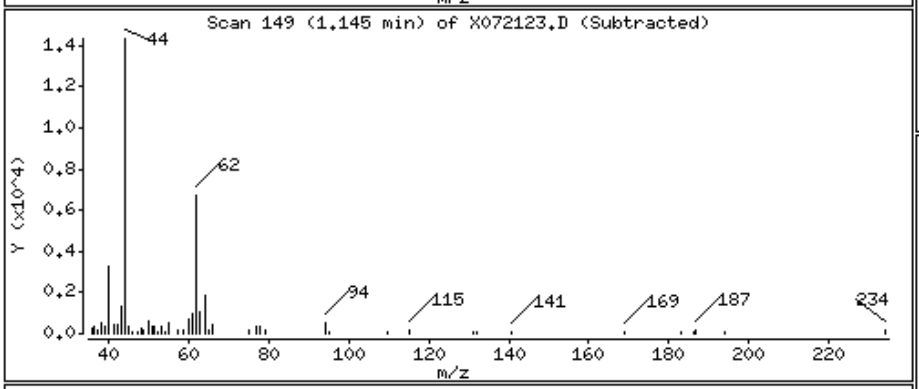
Sample Info: HS23070993-08;HS23070993-08;;;

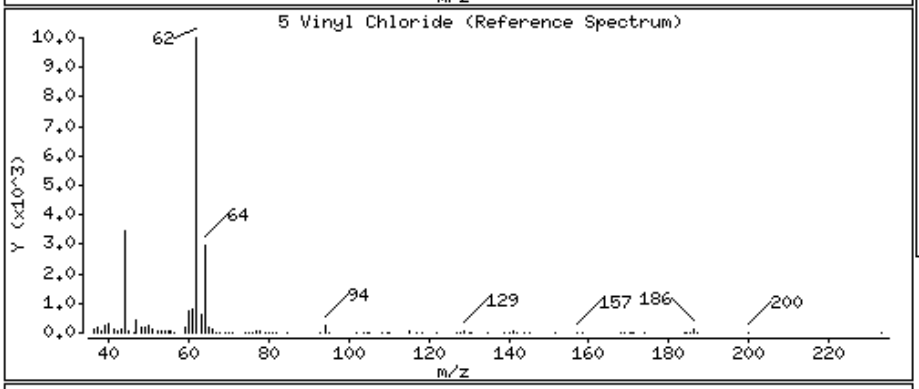
Purge Volume: 5.0 Operator: PC

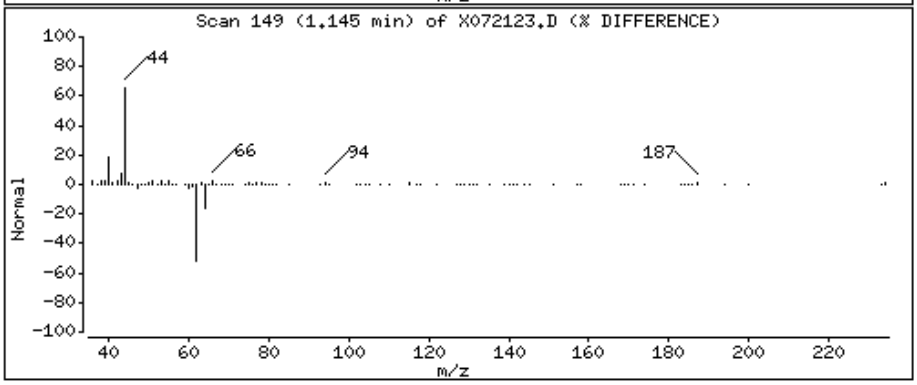
Column phase: DB624 Column diameter: 0.18

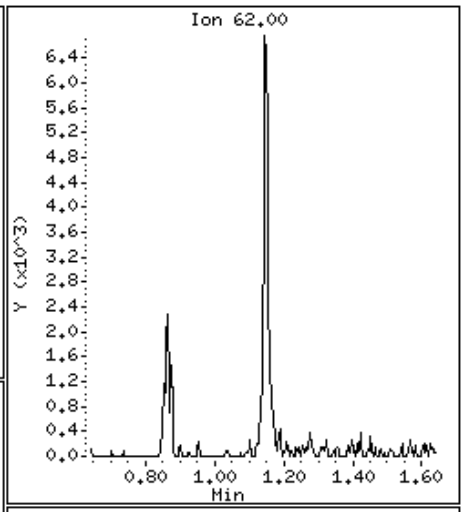
5 Vinyl Chloride Concentration: 22.00 ug/l

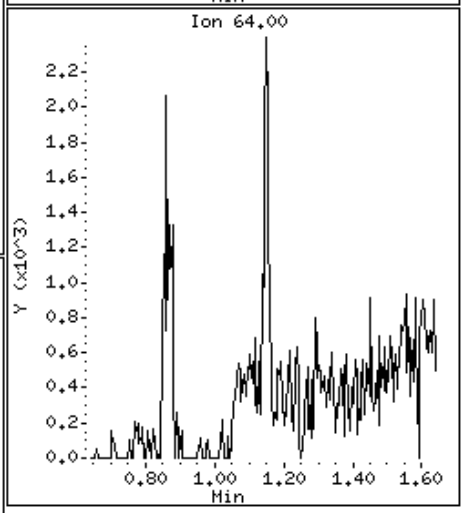












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072123.D Page 3

Date : 21-JUL-2023 19:47

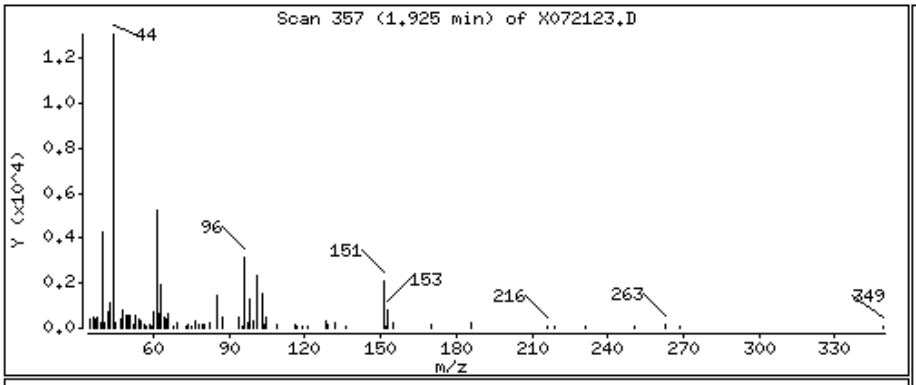
Client ID: HS23070993-08 Instrument: voa6.i

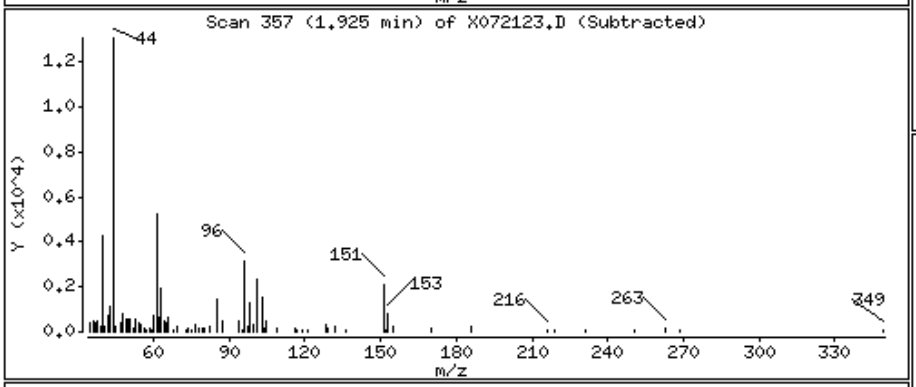
Sample Info: HS23070993-08;HS23070993-08;;;

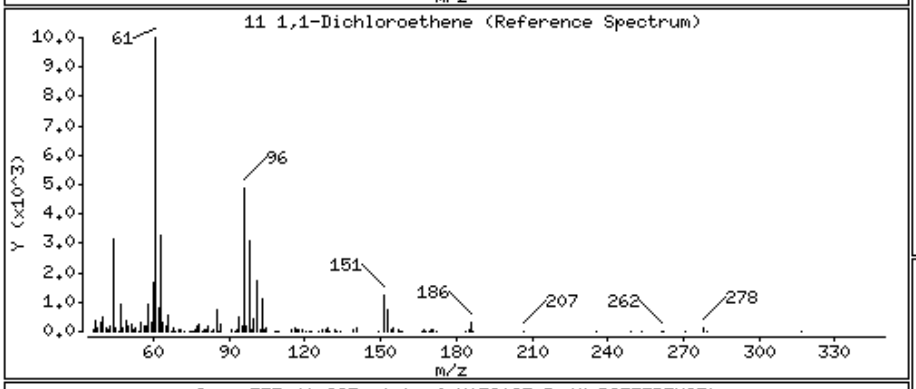
Purge Volume: 5.0 Operator: PC

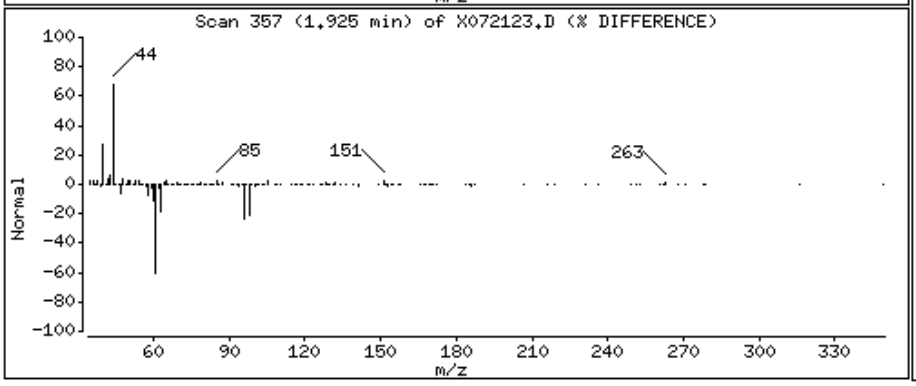
Column phase: DB624 Column diameter: 0.18

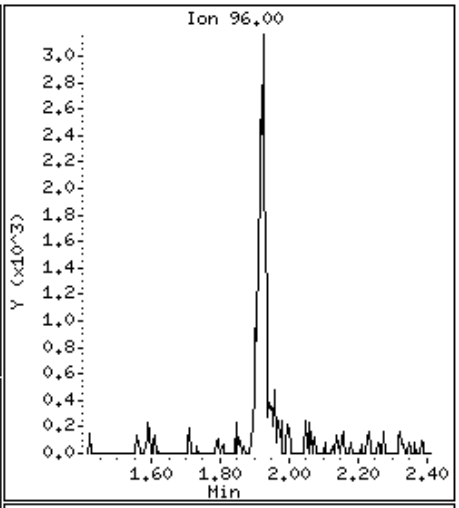
11 1,1-Dichloroethene Concentration: 24.38 ug/l

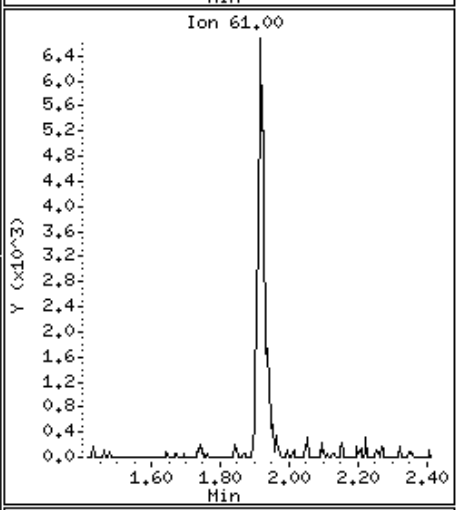


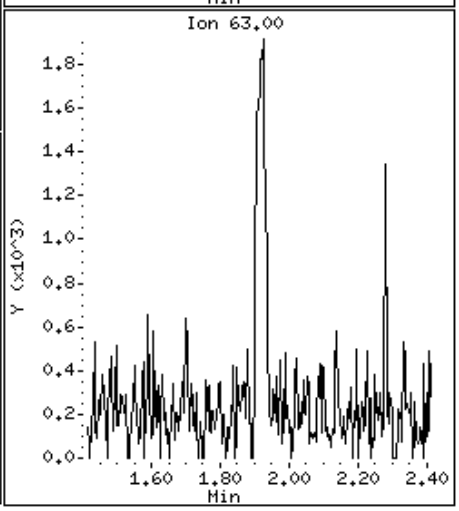












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072123.D Page 4

Date : 21-JUL-2023 19:47

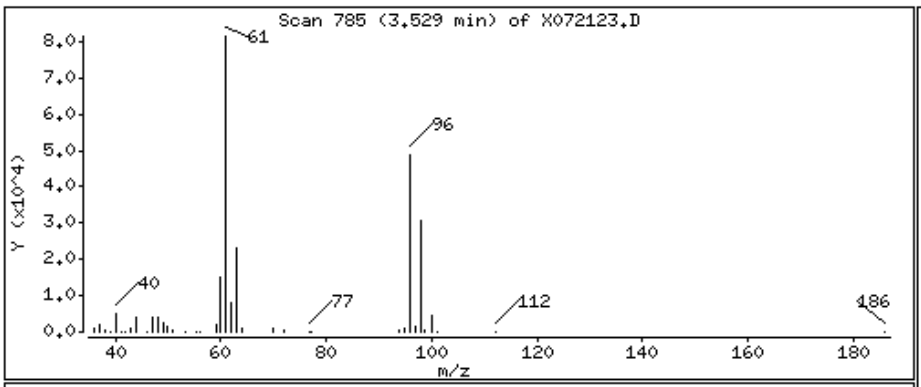
Client ID: HS23070993-08 Instrument: voa6.i

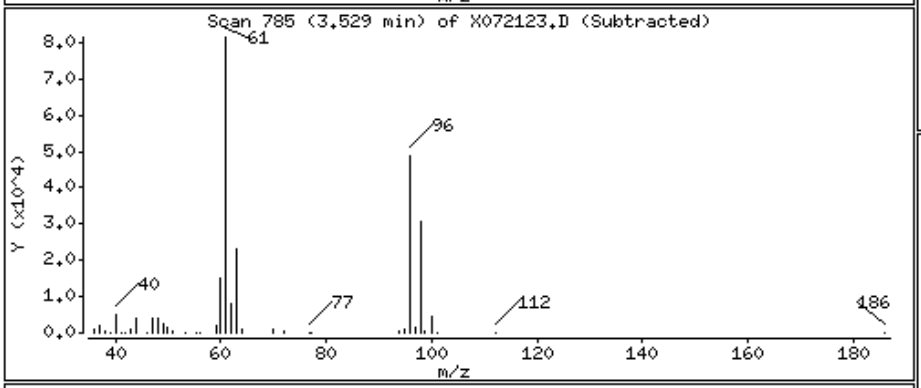
Sample Info: HS23070993-08;HS23070993-08;;;

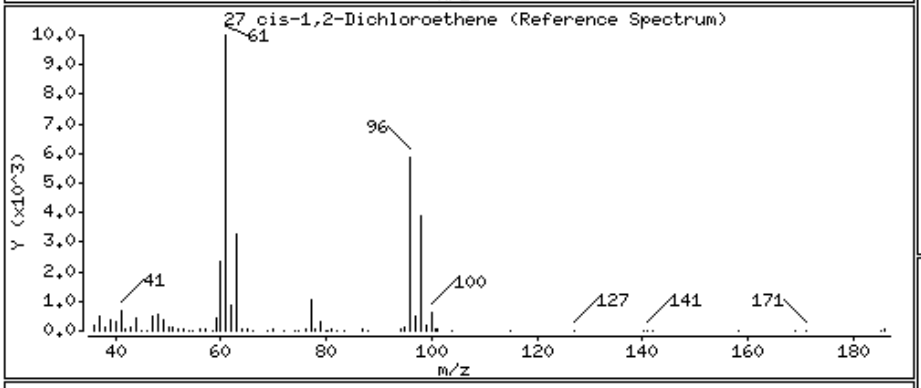
Purge Volume: 5.0 Operator: PC

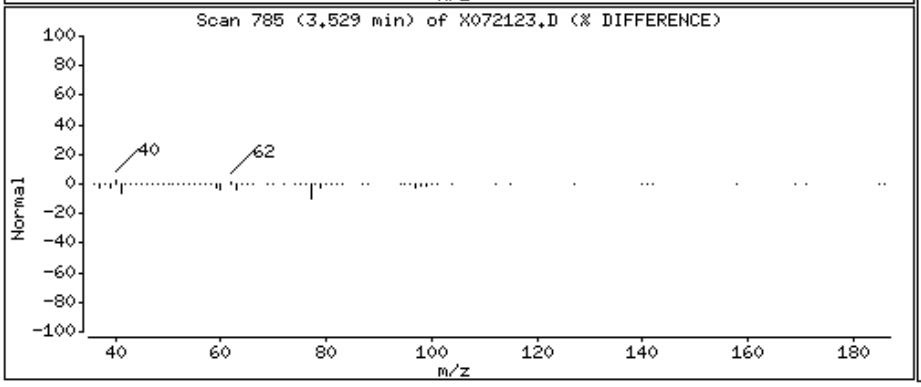
Column phase: DB624 Column diameter: 0.18

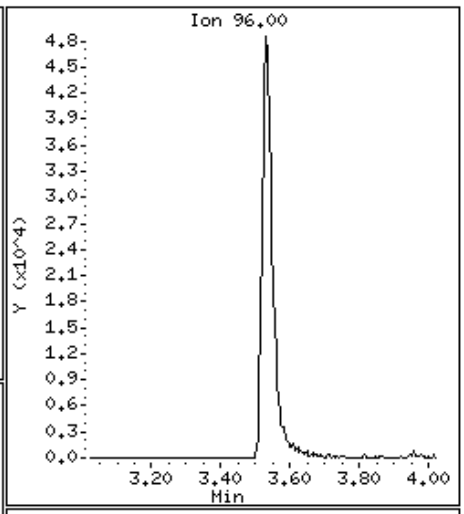
27 cis-1,2-Dichloroethene Concentration: 397.04 ug/l

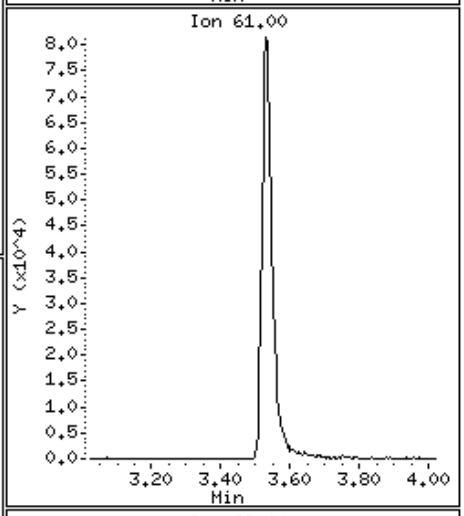


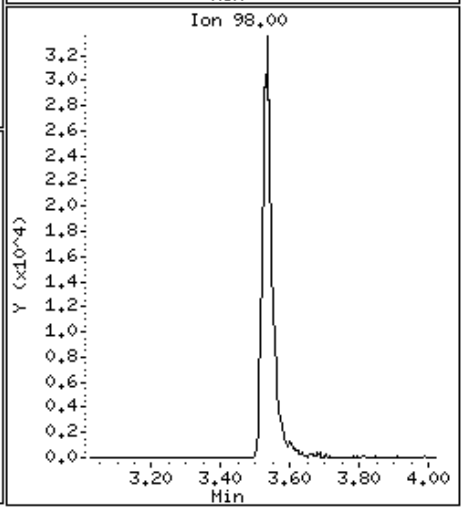












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072123.D Page 5

Date : 21-JUL-2023 19:47

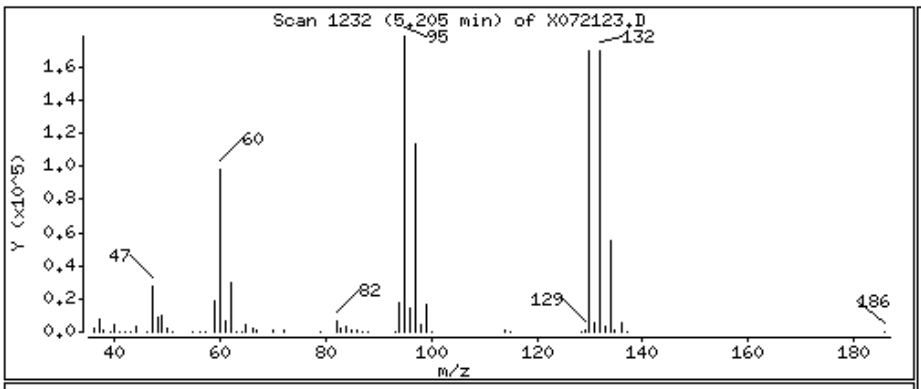
Client ID: HS23070993-08 Instrument: voa6.i

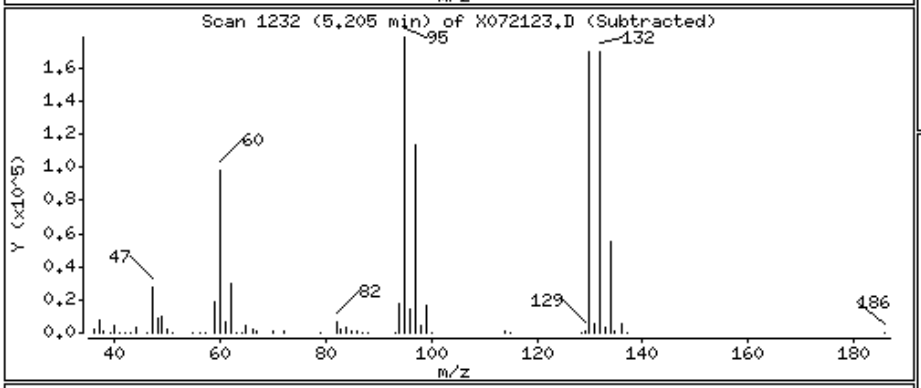
Sample Info: HS23070993-08;HS23070993-08;;;

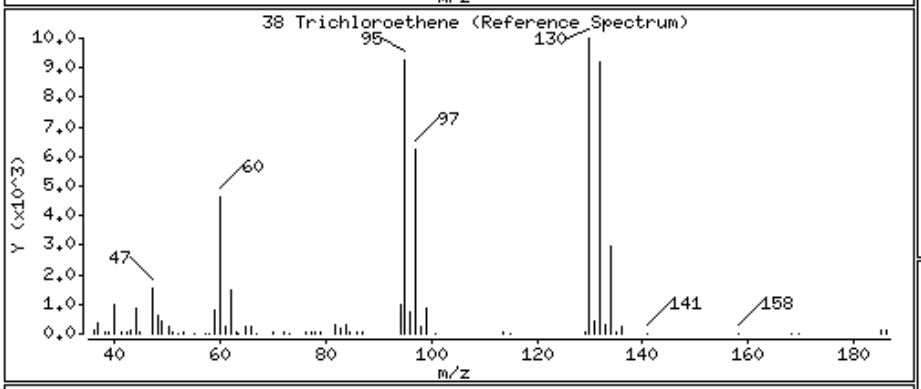
Purge Volume: 5.0 Operator: PC

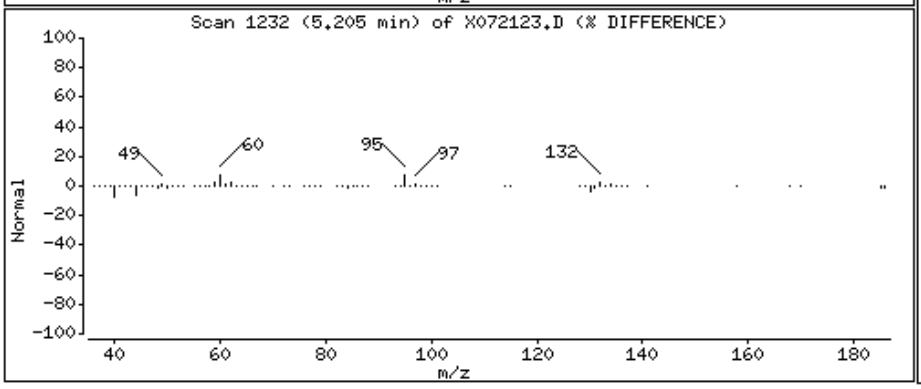
Column phase: DB624 Column diameter: 0.18

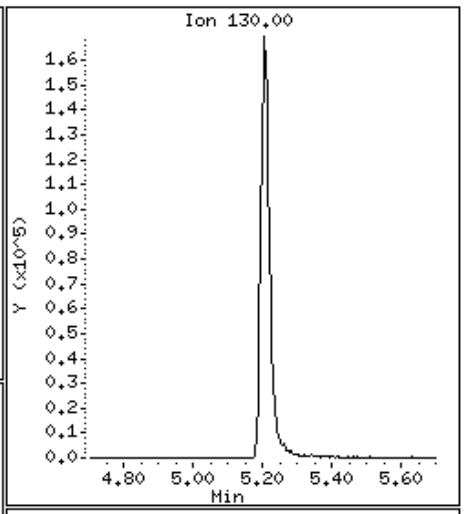
38 Trichloroethene Concentration: 1219.00 ug/l

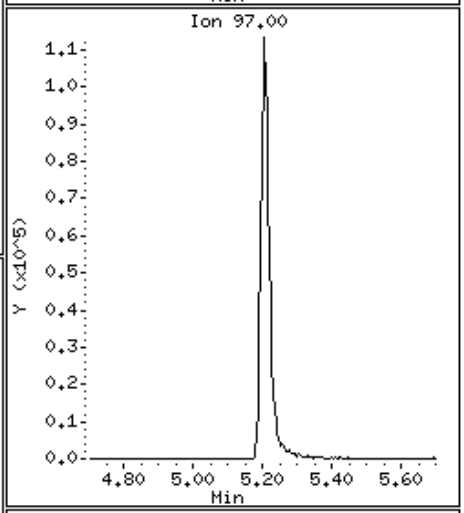


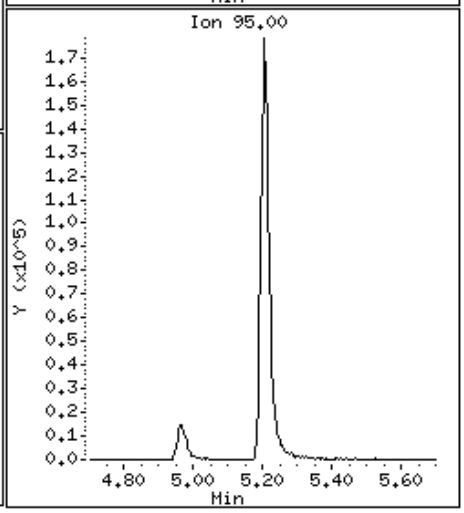












Data File : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072123.D
Inj Date : 21-JUL-2023 19:47
InstruID : voa6.i
LabSampID : HS23070993-08

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072124.D Page 1
Report Date: 27-Jul-2023 12:59

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072124.D
Lab Smp Id: HS23070993-10 Client Smp ID: HS23070993-10
Inj Date : 21-JUL-2023 20:07
Operator : PC Inst ID: voa6.i
Smp Info : HS23070993-10;HS23070993-10;;;
Misc Info : V6;WATER;0;50;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\8260W.m
Meth Date : 27-Jul-2023 12:58 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 22
Dil Factor: 50.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.181	4.178	(1.000)	606582	50.0000	
$ 30 Dibromofluoromethane	113	4.099	4.095	(0.980)	305699	55.0640	55.06
$ 35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.069)	391933	56.4550	56.45
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	957581	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	836652	50.0000	
$ 48 Toluene-d8	98	6.386	6.386	(0.833)	1107002	51.3899	51.38
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	408308	49.0061	49.00
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.658	(1.000)	438357	50.0000	
5 Vinyl Chloride	62	1.145	1.145	(0.274)	44217	5.63314	281.65
11 1,1-Dichloroethene	96	1.917	1.913	(0.459)	3135	0.70547	35.27(a)
27 cis-1,2-Dichloroethene	96	3.525	3.525	(0.843)	963100	147.076	7353.80
33 1,2-Dichloroethane	62	4.567	4.556	(0.920)	6389	0.60610	30.30(a)
38 Trichloroethene	130	5.205	5.205	(1.048)	851985	131.505	6575.23

QC Flag Legend

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

01322171

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072124.D

Page 1

Date : 21-JUL-2023 20:07

Client ID: HS23070993-10

Instrument: voa6.i

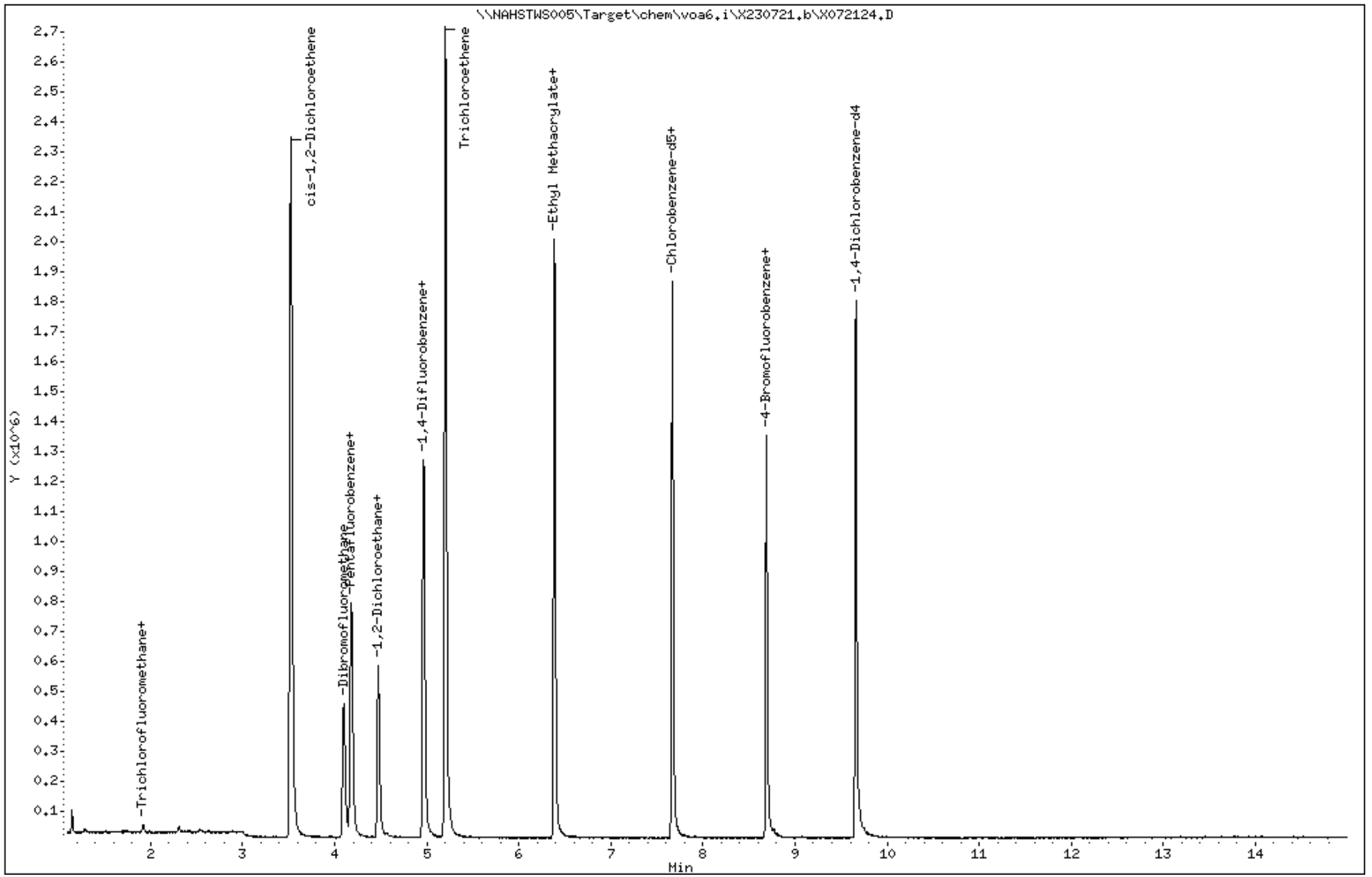
Sample Info: HS23070993-10;HS23070993-10;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



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Date : 21-JUL-2023 20:07

Client ID: HS23070993-10

Instrument: voa6.i

Sample Info: HS23070993-10;HS23070993-10;;;

Purge Volume: 5.0

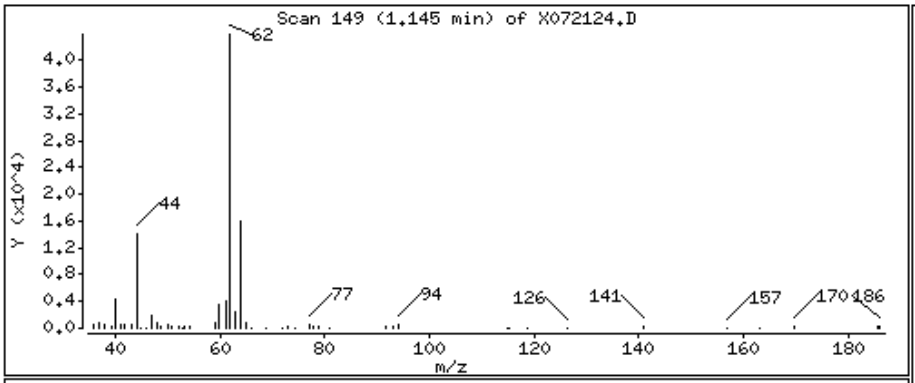
Operator: PC

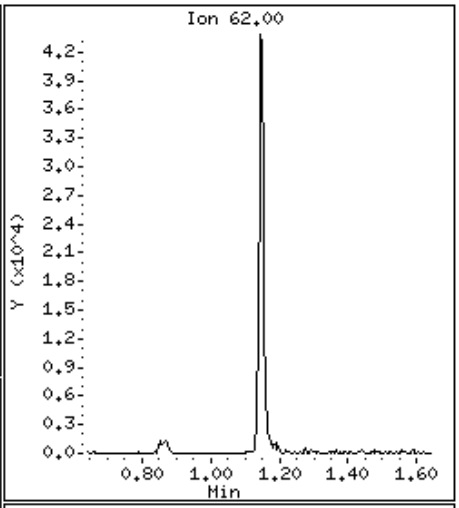
Column phase: DB624

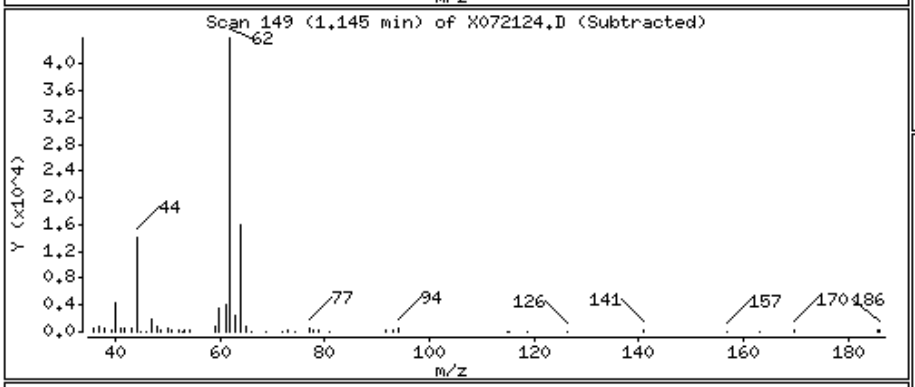
Column diameter: 0.18

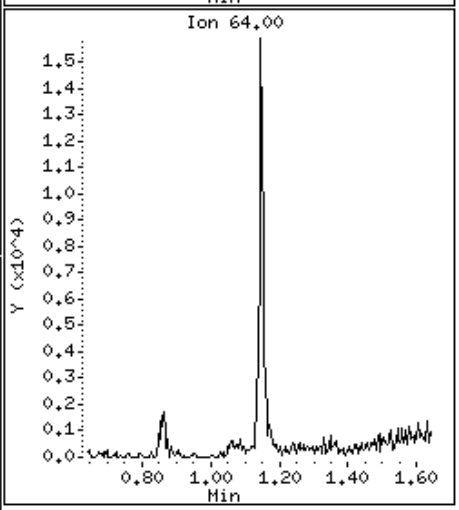
5 Vinyl Chloride

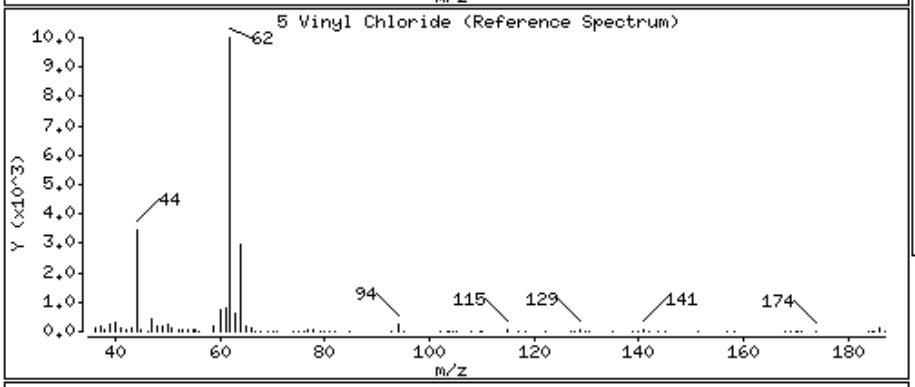
Concentration: 281.65 ug/l

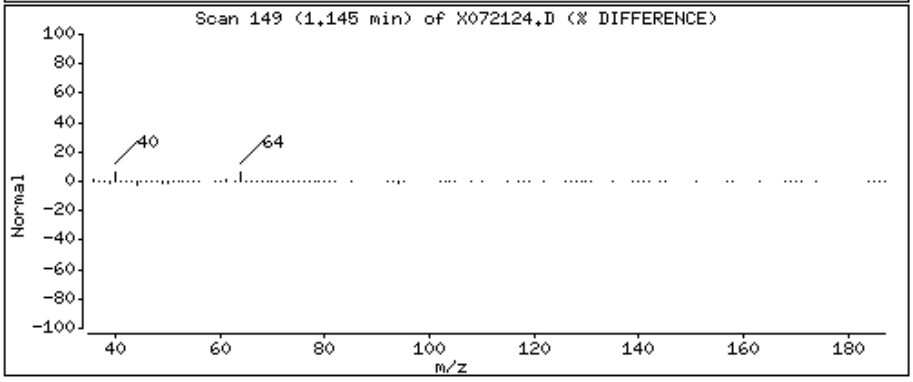












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072124.D

Date : 21-JUL-2023 20:07

Client ID: HS23070993-10

Instrument: voa6.i

Sample Info: HS23070993-10;HS23070993-10;;;

Purge Volume: 5.0

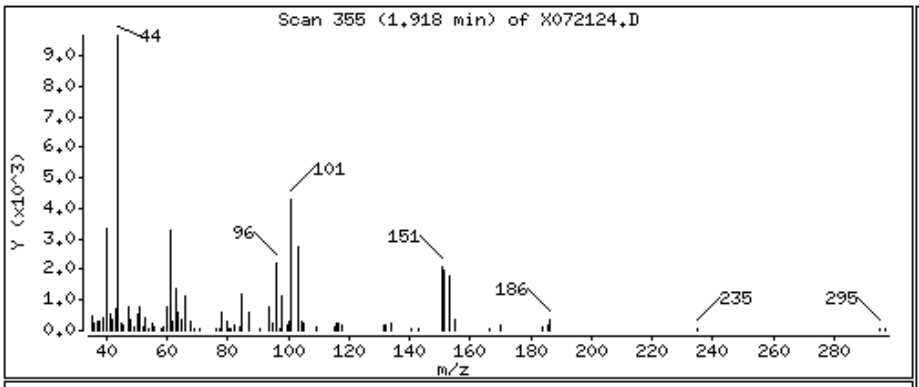
Operator: PC

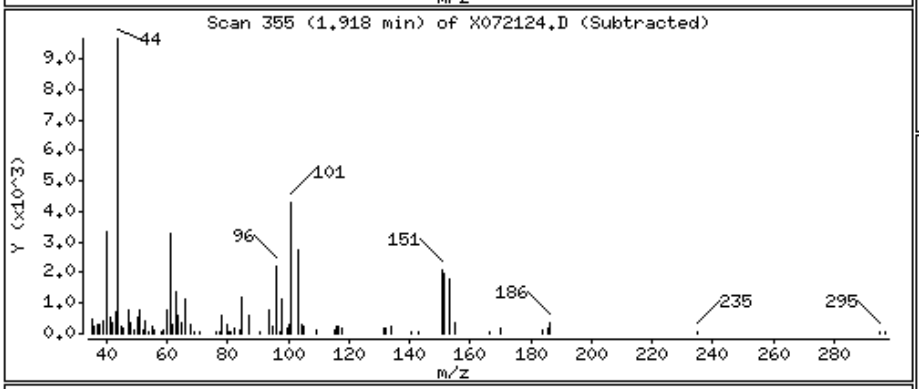
Column phase: DB624

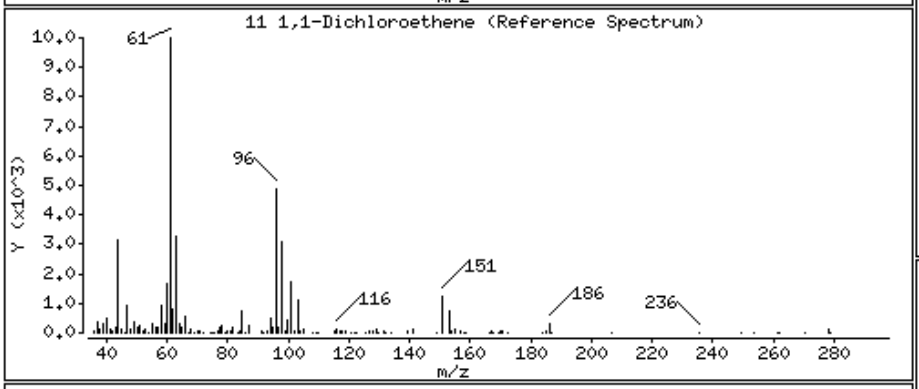
Column diameter: 0.18

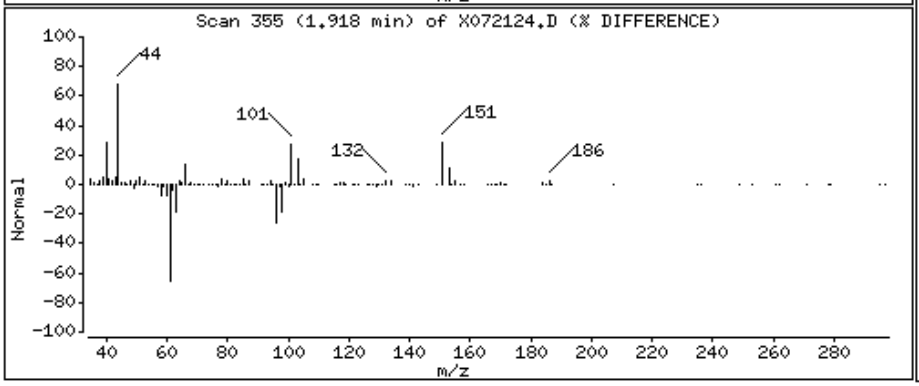
11 1,1-Dichloroethene

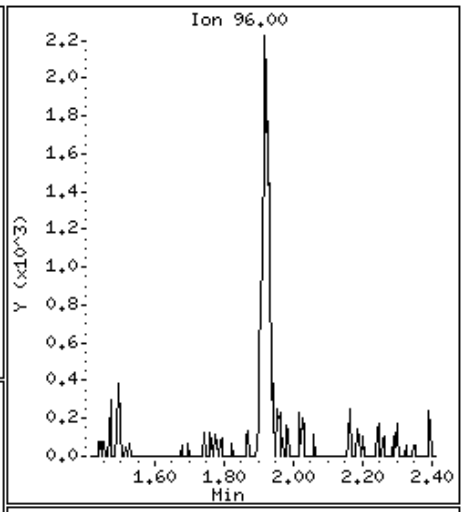
Concentration: 35.27 ug/l

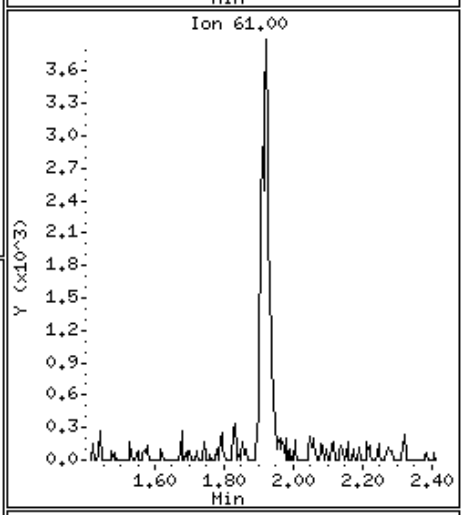


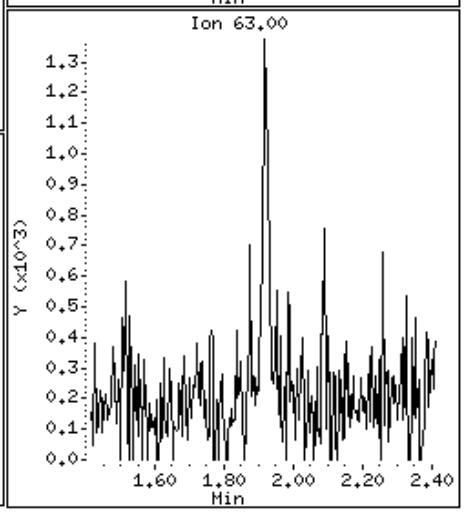












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072124.D

Date : 21-JUL-2023 20:07

Client ID: HS23070993-10

Instrument: voa6.i

Sample Info: HS23070993-10;HS23070993-10;;;

Purge Volume: 5.0

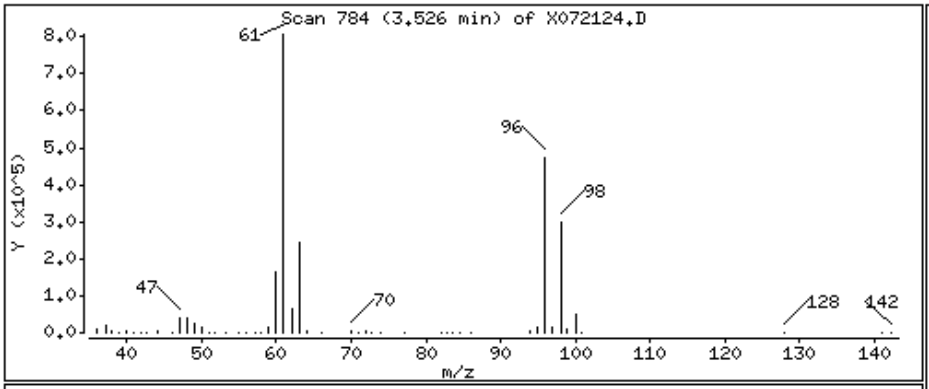
Operator: PC

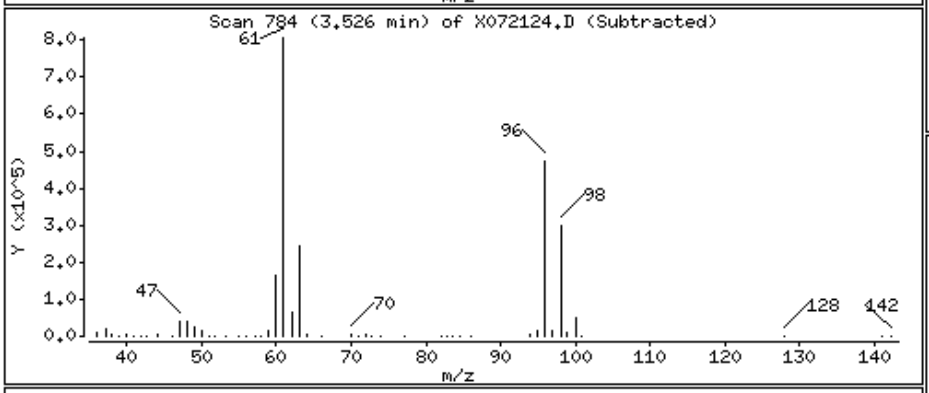
Column phase: DB624

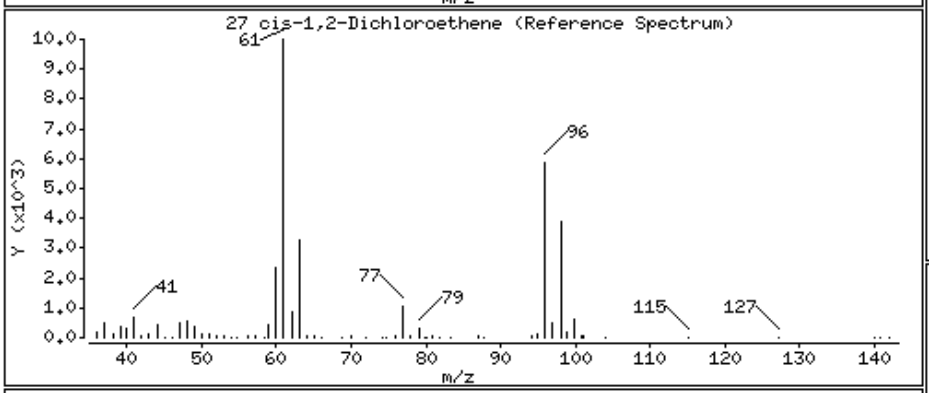
Column diameter: 0.18

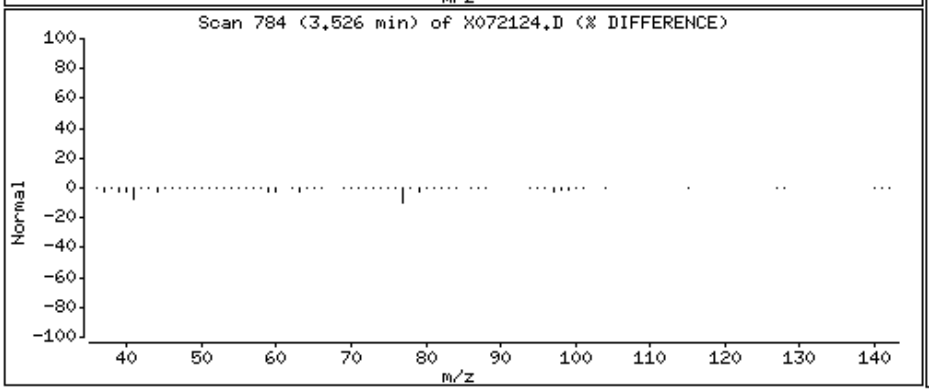
27 cis-1,2-Dichloroethene

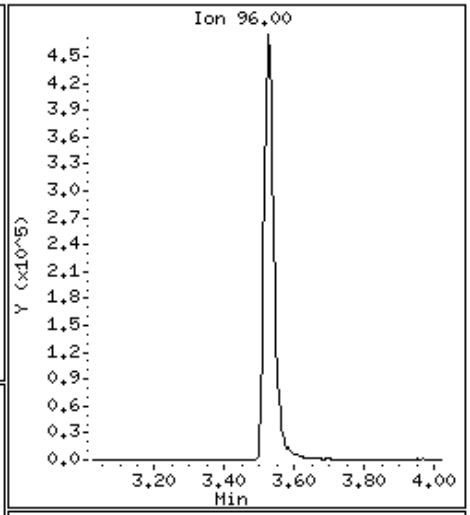
Concentration: 7353.80 ug/l

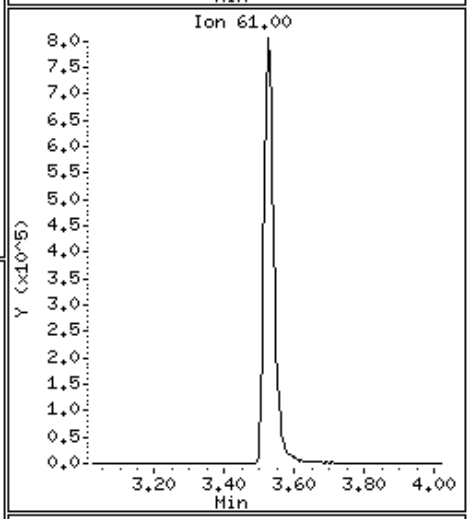


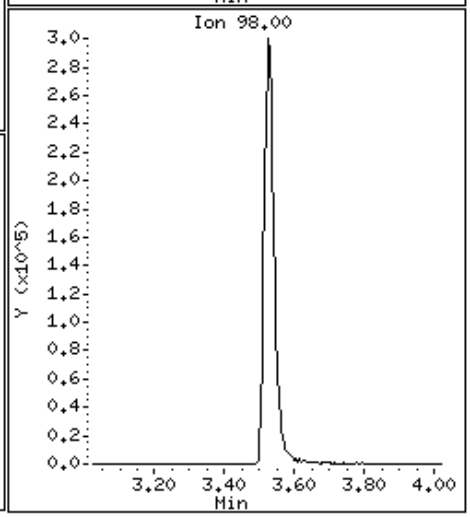












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072124.D Page 5

Date : 21-JUL-2023 20:07

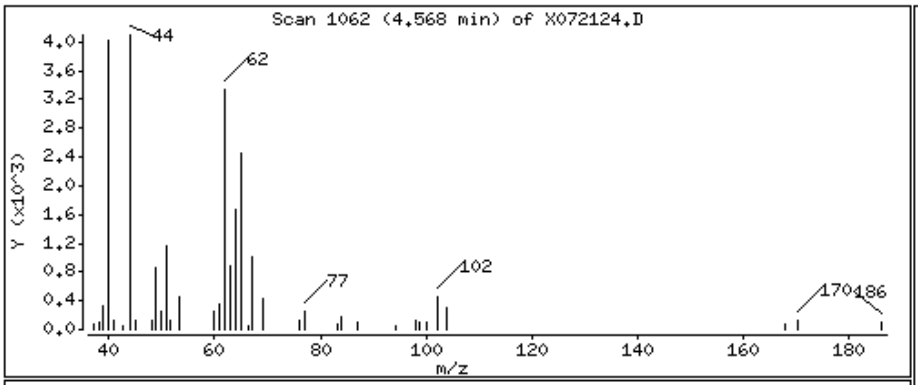
Client ID: HS23070993-10 Instrument: voa6.i

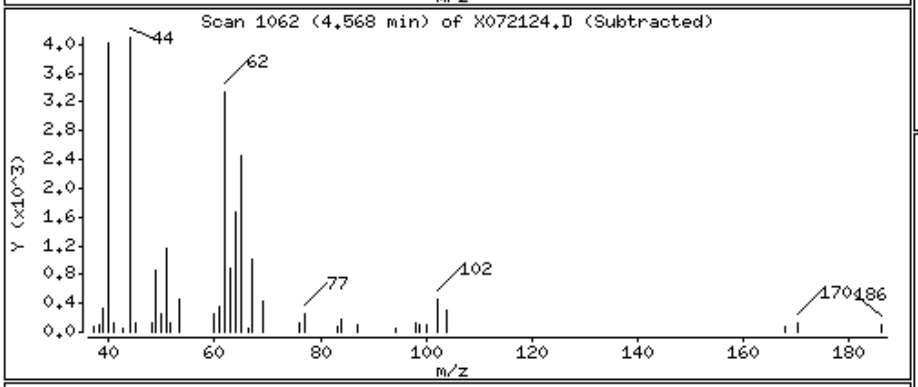
Sample Info: HS23070993-10;HS23070993-10;;;

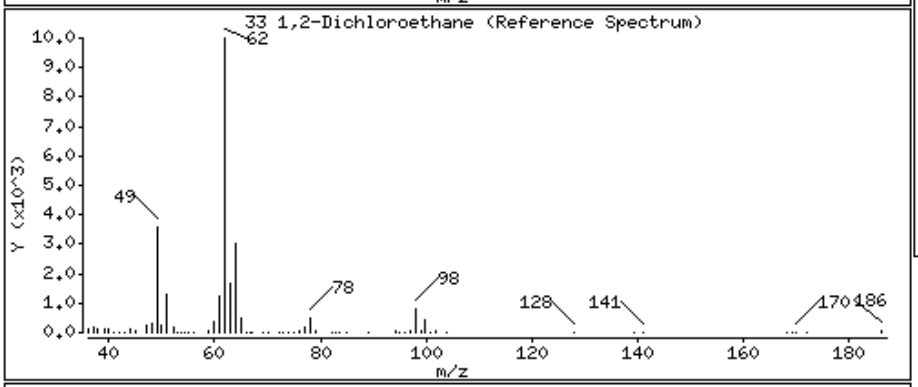
Purge Volume: 5.0 Operator: PC

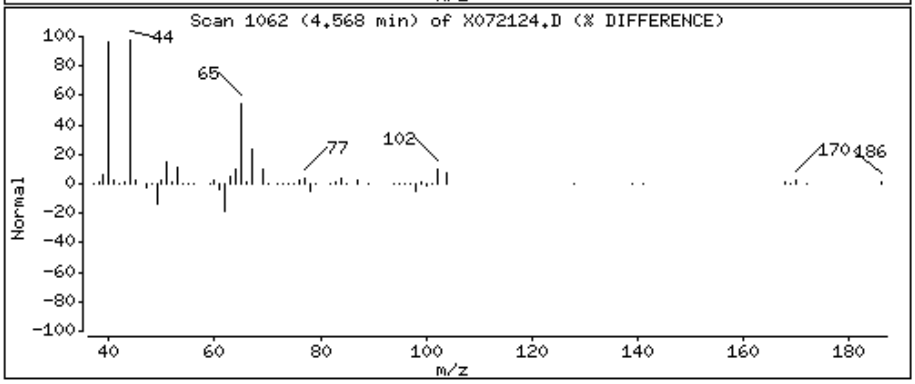
Column phase: DB624 Column diameter: 0.18

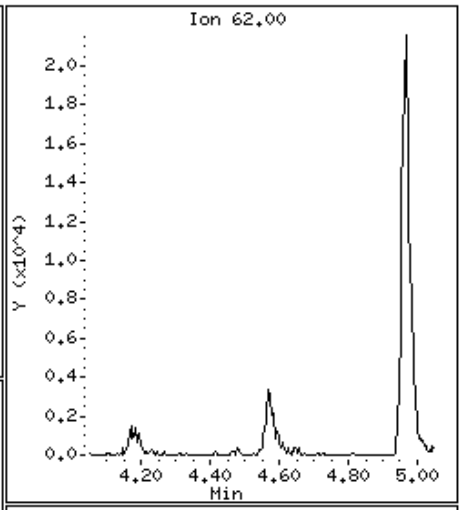
33 1,2-Dichloroethane Concentration: 30.30 ug/l

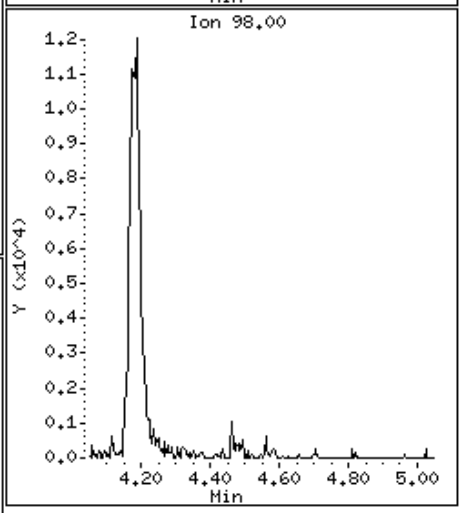












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072124.D Page 6

Date : 21-JUL-2023 20:07

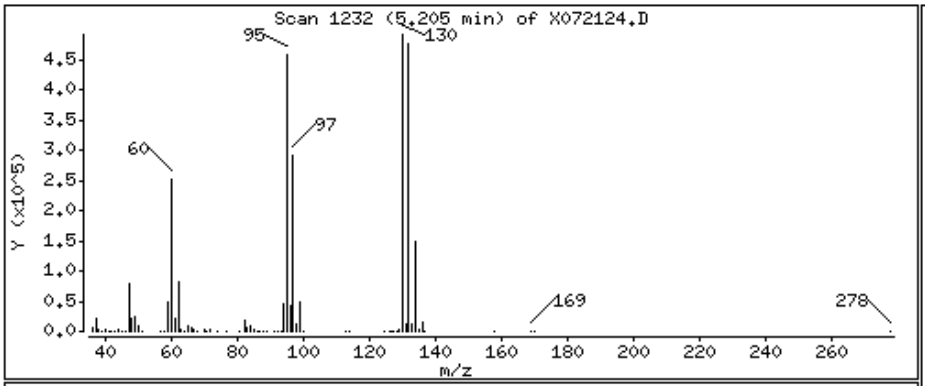
Client ID: HS23070993-10 Instrument: voa6.i

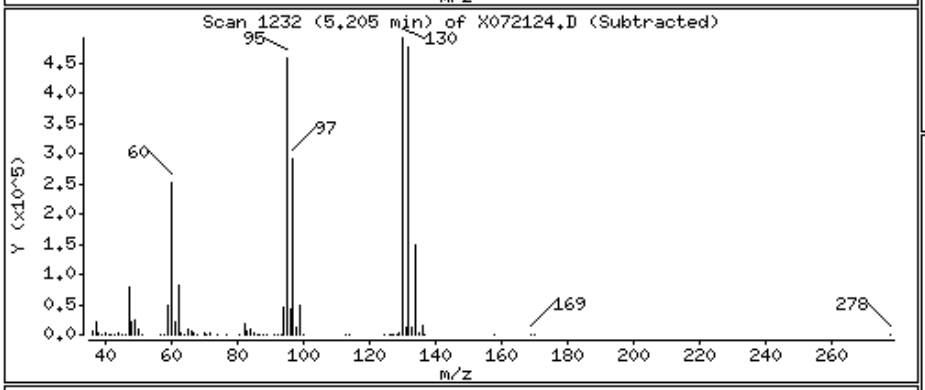
Sample Info: HS23070993-10;HS23070993-10;;;

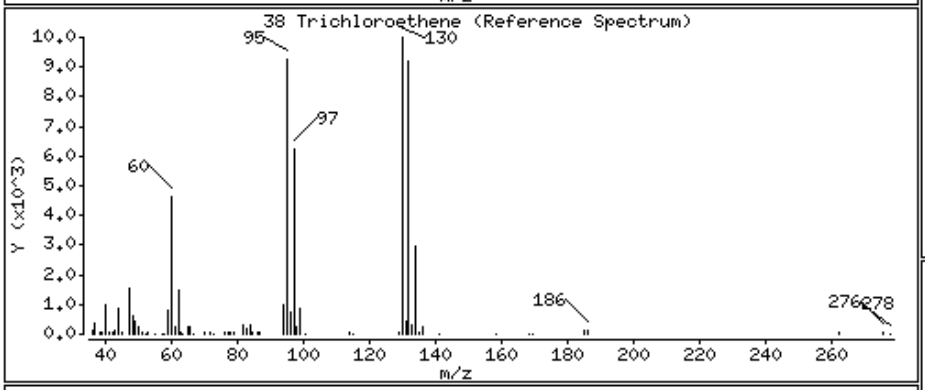
Purge Volume: 5.0 Operator: PC

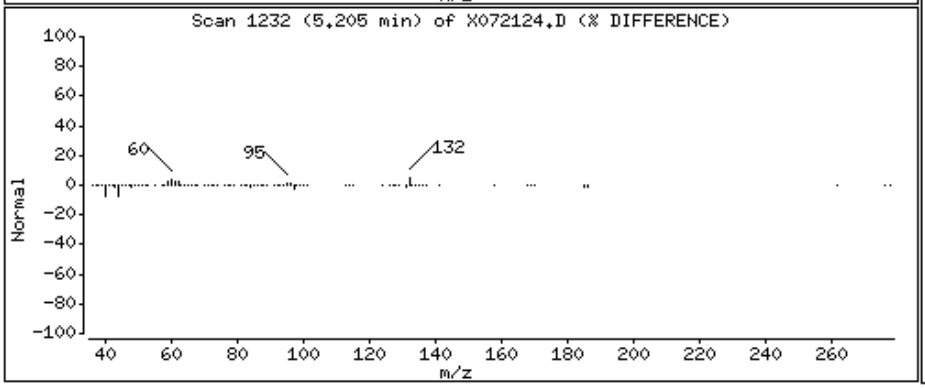
Column phase: DB624 Column diameter: 0.18

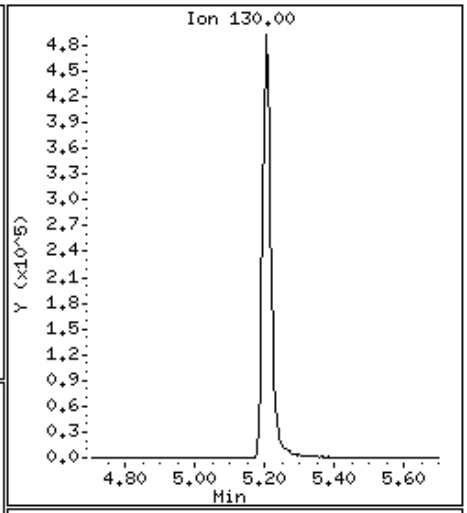
38 Trichloroethene Concentration: 6575.23 ug/l

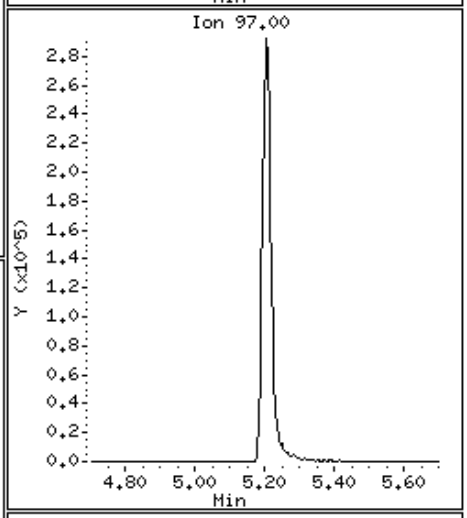


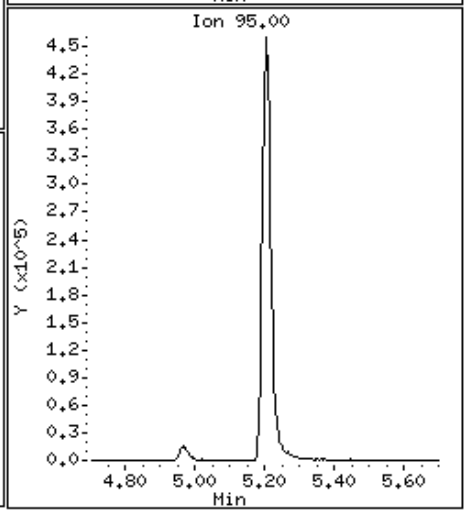












Data File : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072124.D
Inj Date : 21-JUL-2023 20:07
InstruID : voa6.i
LabSampID : HS23070993-10

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072125.D Page 1
Report Date: 27-Jul-2023 12:59

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072125.D
Lab Smp Id: HS23070993-05 Client Smp ID: HS23070993-05
Inj Date : 21-JUL-2023 20:28
Operator : PC Inst ID: voa6.i
Smp Info : HS23070993-05;HS23070993-05;;;
Misc Info : V6;WATER;0;5;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\8260W.m
Meth Date : 27-Jul-2023 12:58 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 23
Dil Factor: 5.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.181	4.178	(1.000)	584649	50.0000	
$ 30 Dibromofluoromethane	113	4.099	4.095	(0.980)	301472	56.3575	56.35
$ 35 1,2-Dichloroethane-d4	65	4.474	4.470	(1.070)	387393	57.9102	57.91
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	911885	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	796890	50.0000	
$ 48 Toluene-d8	98	6.386	6.386	(0.833)	1056991	51.5166	51.51
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	383599	48.3319	48.33
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.658	(1.000)	402246	50.0000	
5 Vinyl Chloride	62	1.149	1.145	(0.275)	74437	9.83885	49.19
11 1,1-Dichloroethene	96	1.917	1.913	(0.459)	7508	1.75290	8.76(a)
27 cis-1,2-Dichloroethene	96	3.533	3.525	(0.845)	76389	12.1031	60.51
38 Trichloroethene	130	5.205	5.205	(1.048)	1888350	306.075	1530.37(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.

01322179

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072125.D

Date : 21-JUL-2023 20:28

Client ID: HS23070993-05

Instrument: voa6.i

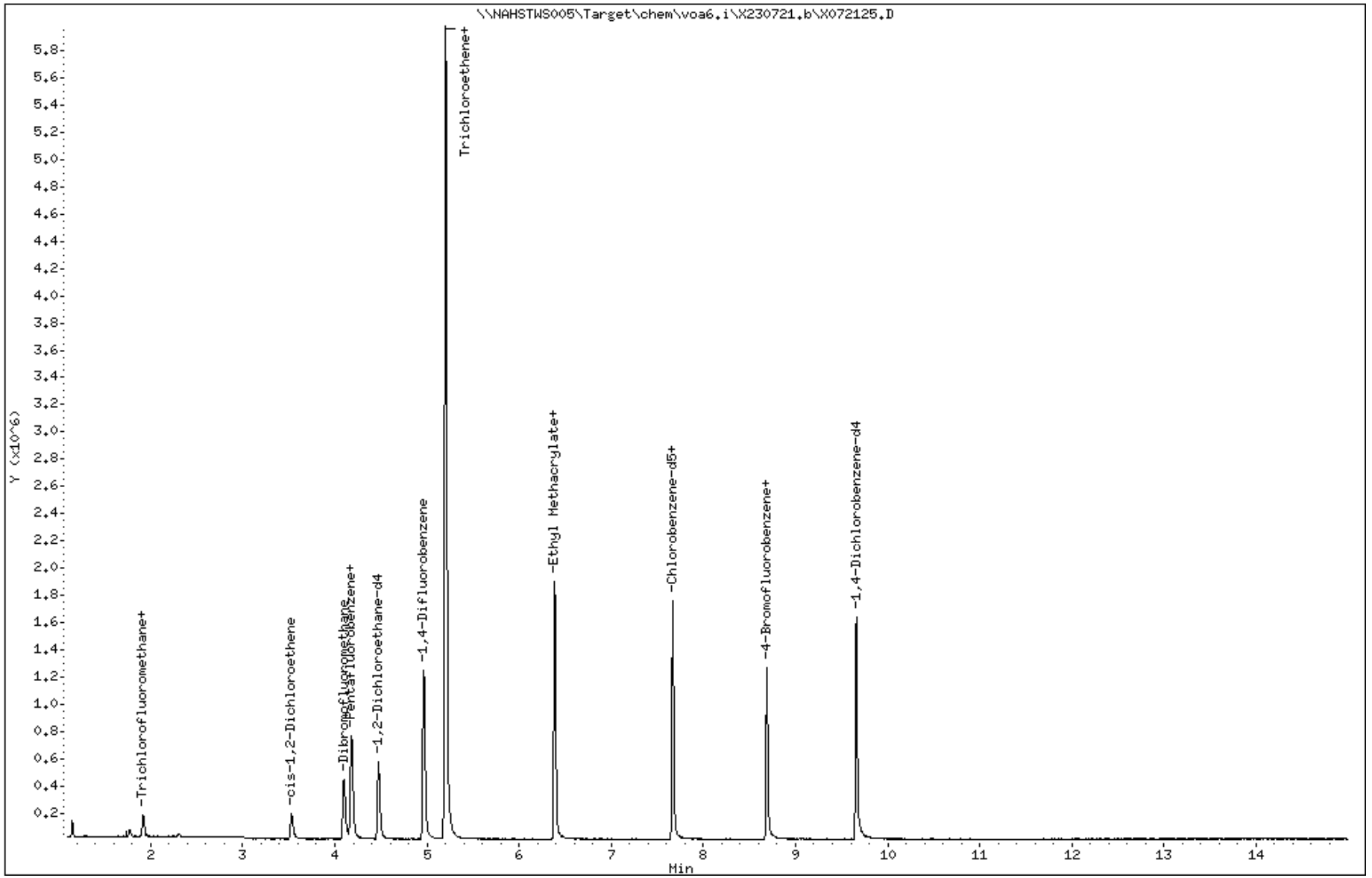
Sample Info: HS23070993-05;HS23070993-05;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072125.D

Date : 21-JUL-2023 20:28

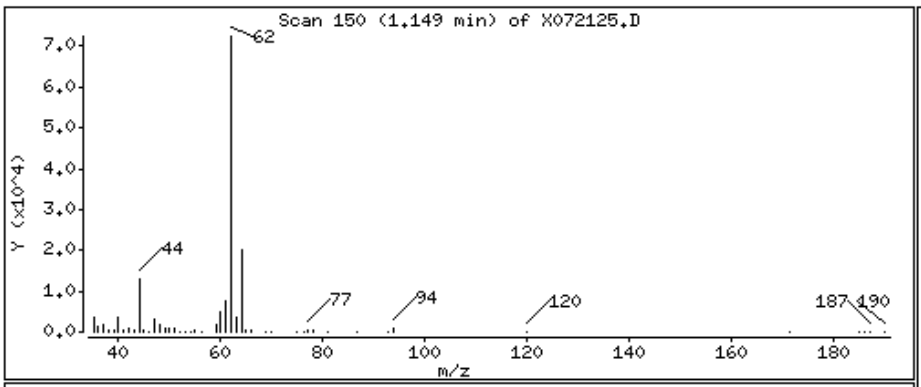
Client ID: HS23070993-05 Instrument: voa6.i

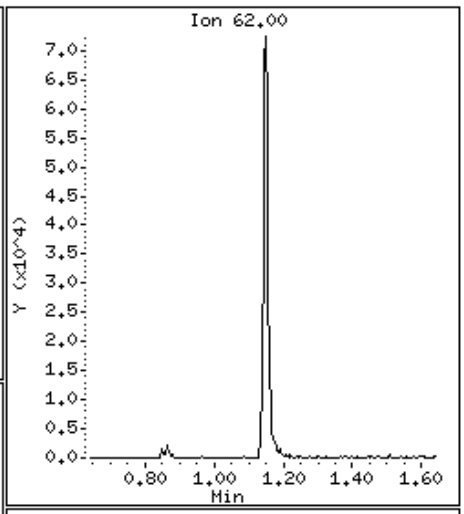
Sample Info: HS23070993-05;HS23070993-05;;;

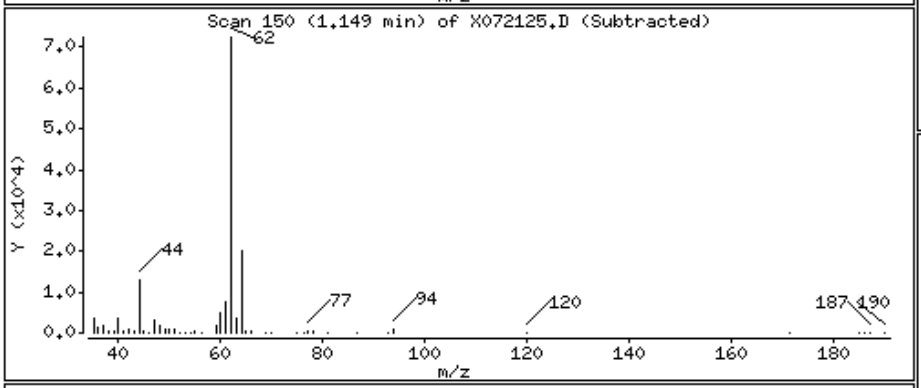
Purge Volume: 5.0 Operator: PC

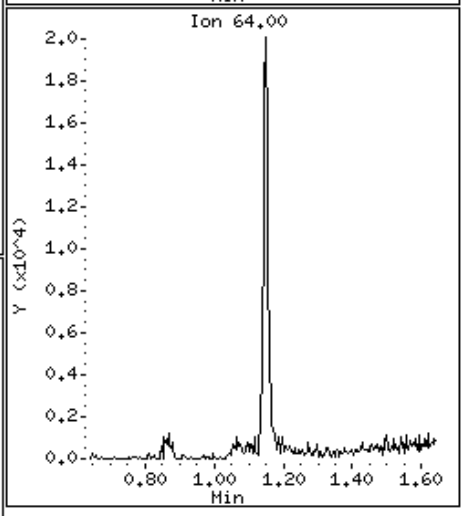
Column phase: DB624 Column diameter: 0.18

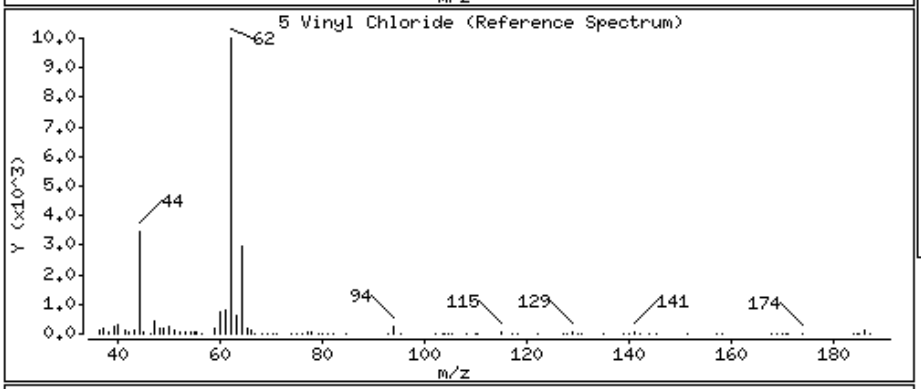
5 Vinyl Chloride Concentration: 49.19 ug/l

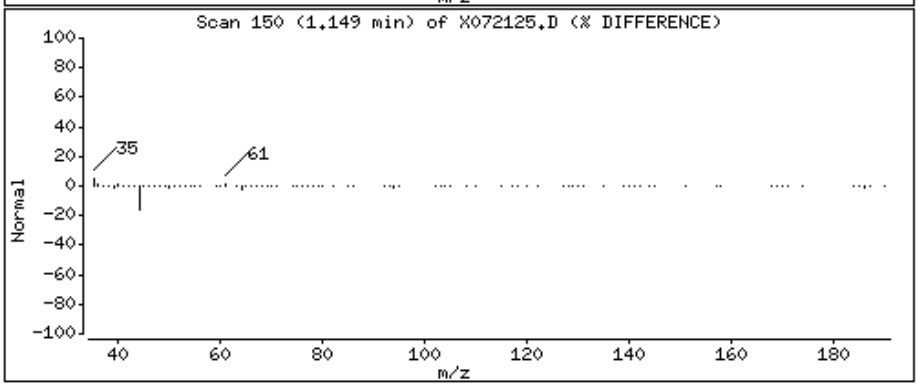












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072125.D

Date : 21-JUL-2023 20:28

Client ID: HS23070993-05

Instrument: voa6.i

Sample Info: HS23070993-05;HS23070993-05;;;

Purge Volume: 5.0

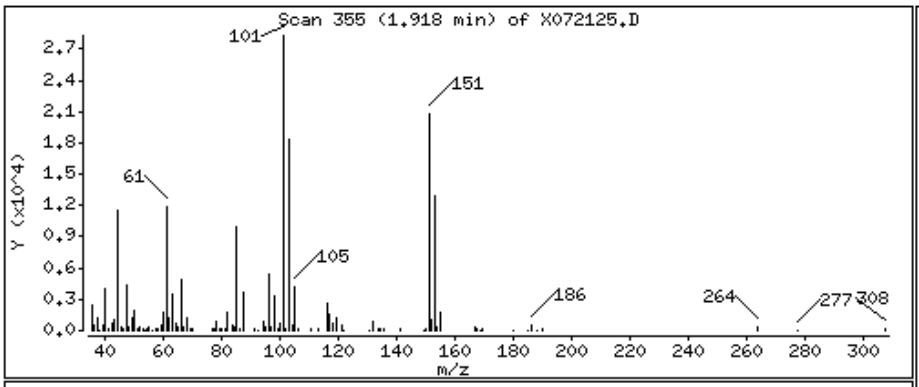
Operator: PC

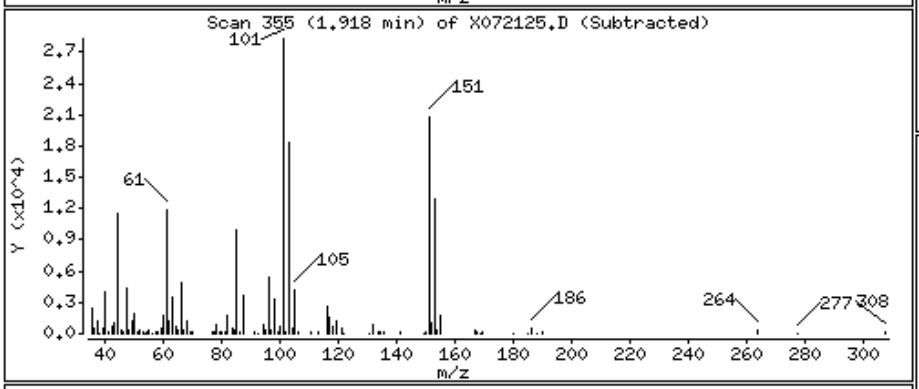
Column phase: DB624

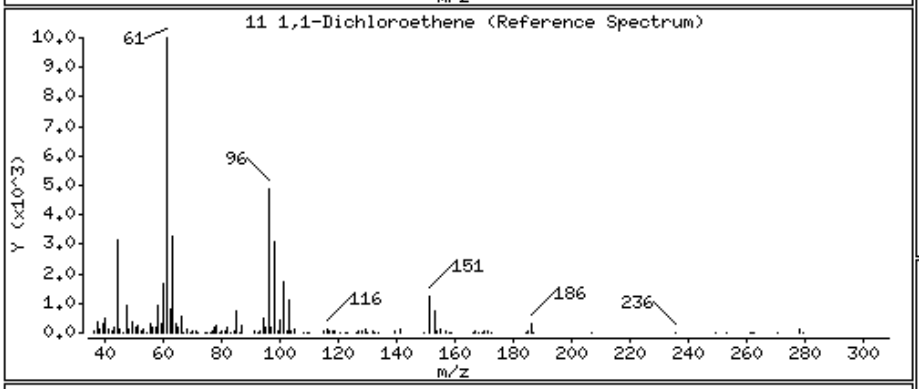
Column diameter: 0.18

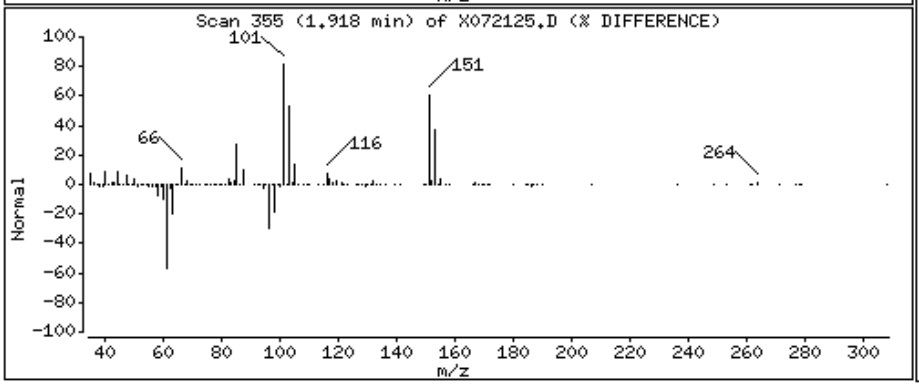
11 1,1-Dichloroethene

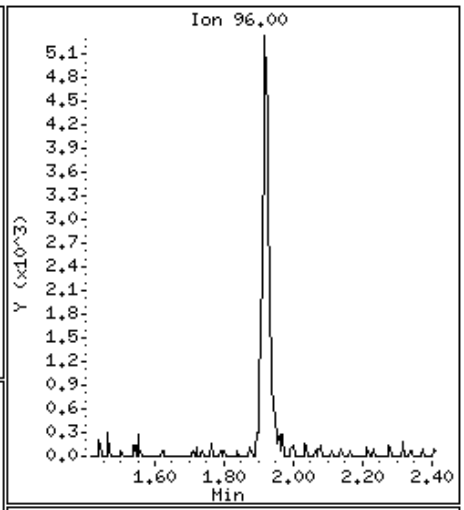
Concentration: 8.76 ug/l

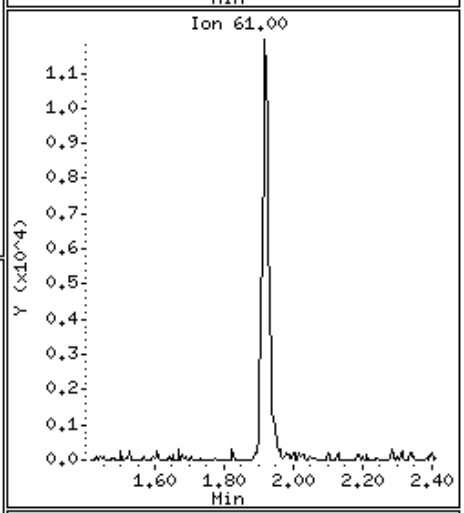


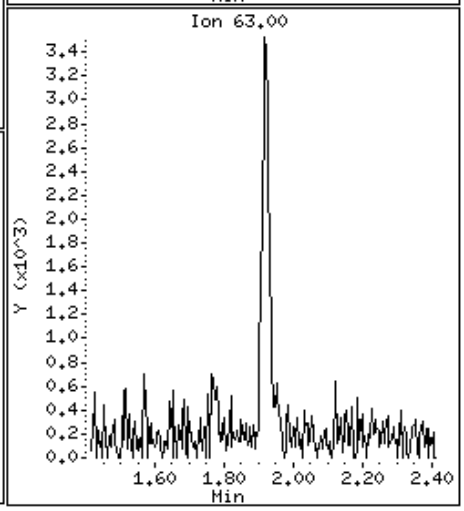












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072125.D Page 4

Date : 21-JUL-2023 20:28

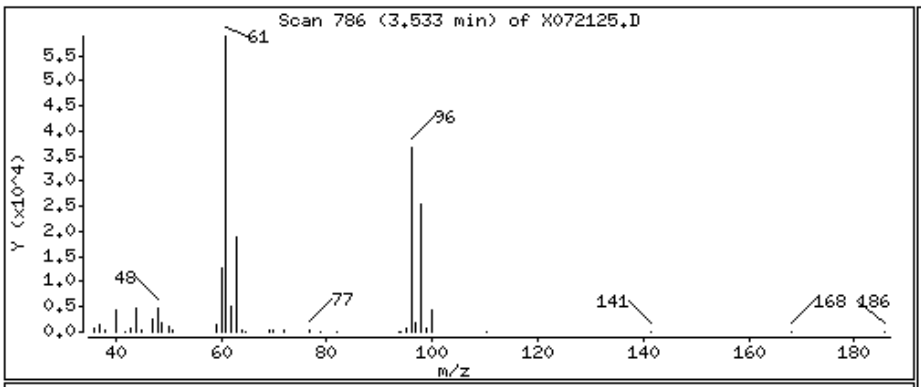
Client ID: HS23070993-05 Instrument: voa6.i

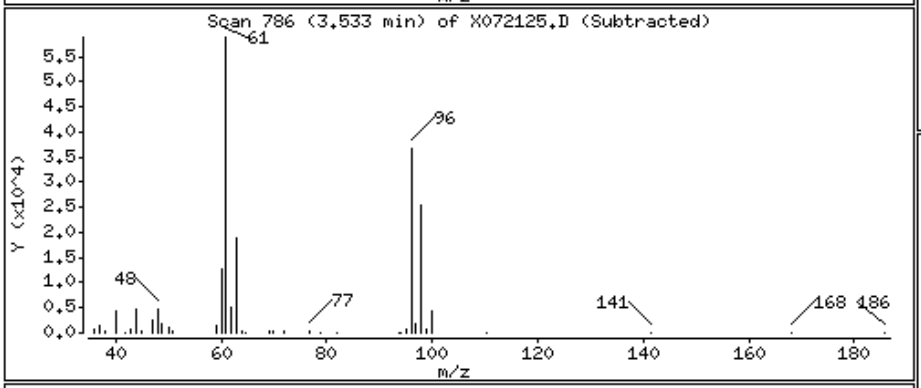
Sample Info: HS23070993-05;HS23070993-05;;;

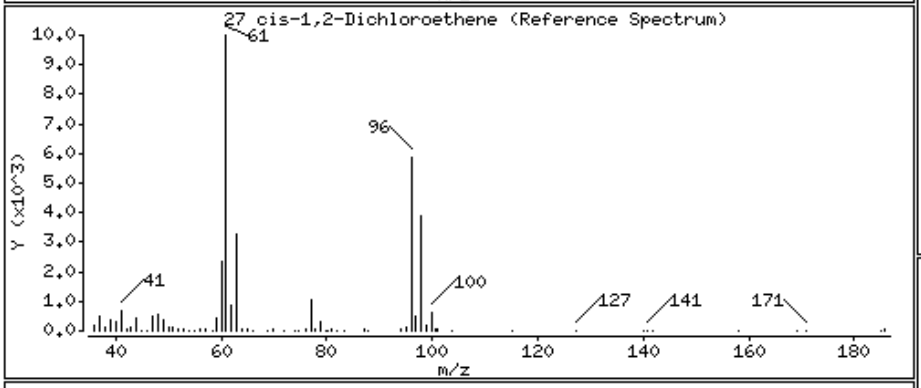
Purge Volume: 5.0 Operator: PC

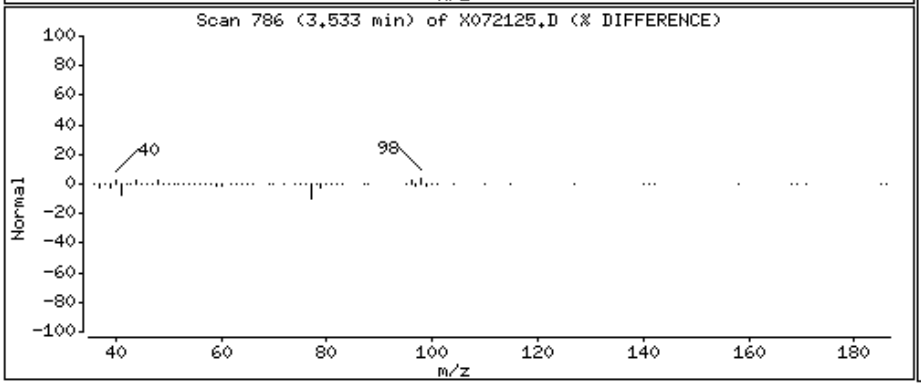
Column phase: DB624 Column diameter: 0.18

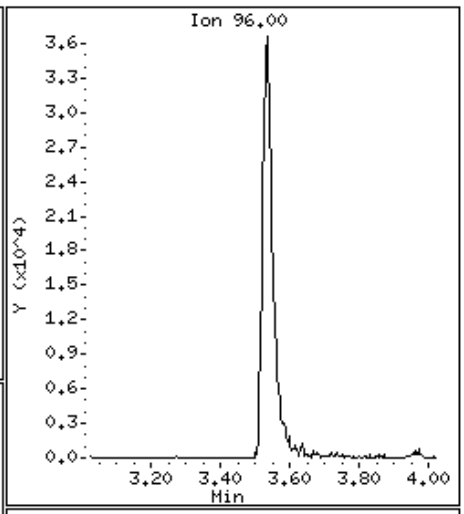
27 cis-1,2-Dichloroethene Concentration: 60.51 ug/l

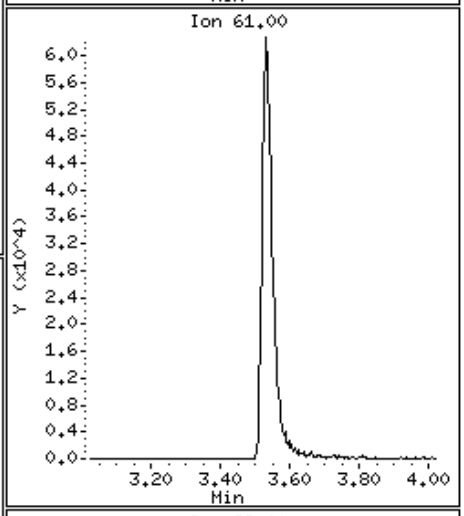


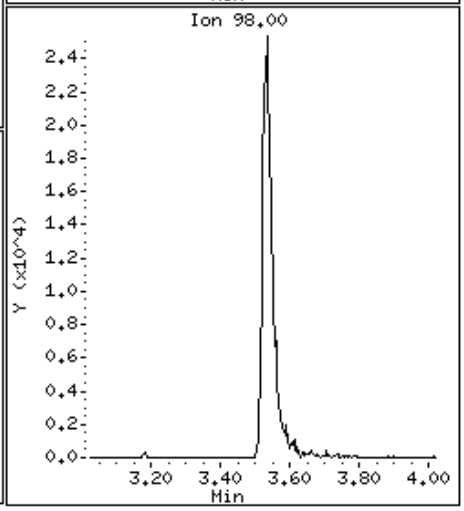












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072125.D Page 5

Date : 21-JUL-2023 20:28

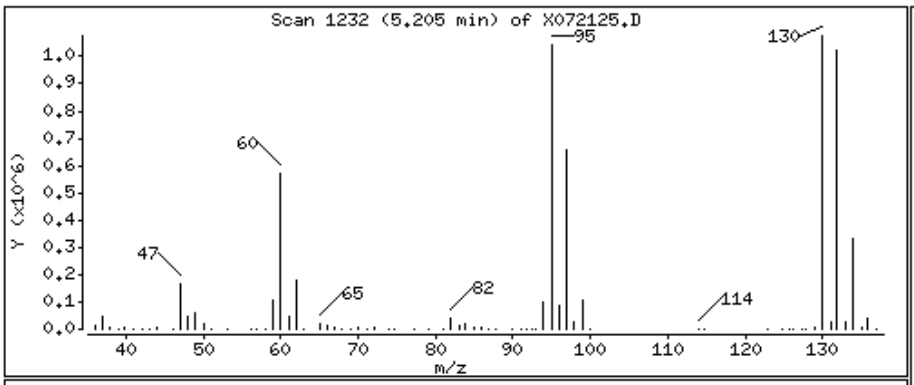
Client ID: HS23070993-05 Instrument: voa6.i

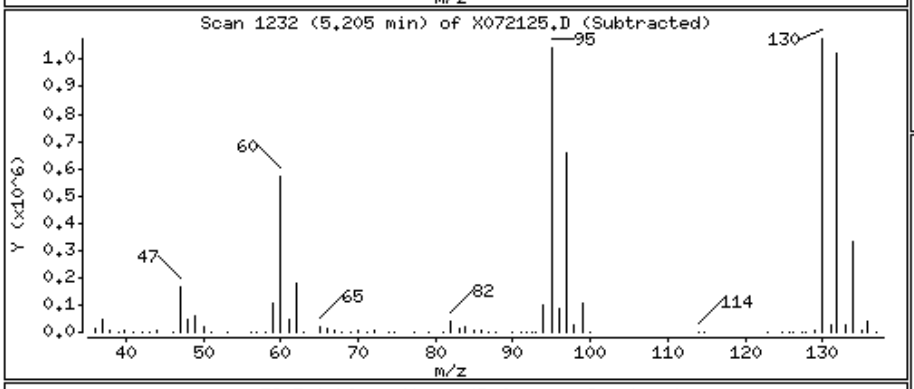
Sample Info: HS23070993-05;HS23070993-05;;;

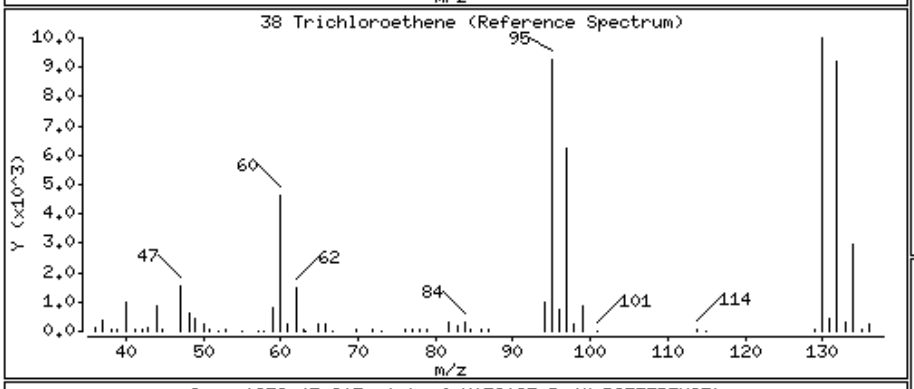
Purge Volume: 5.0 Operator: PC

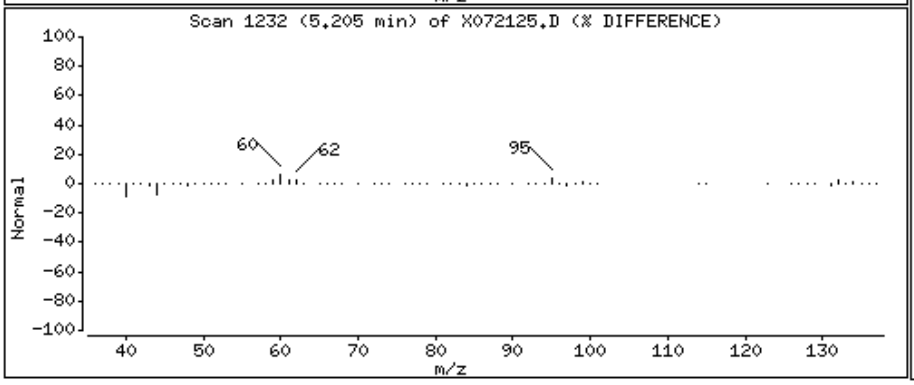
Column phase: DB624 Column diameter: 0.18

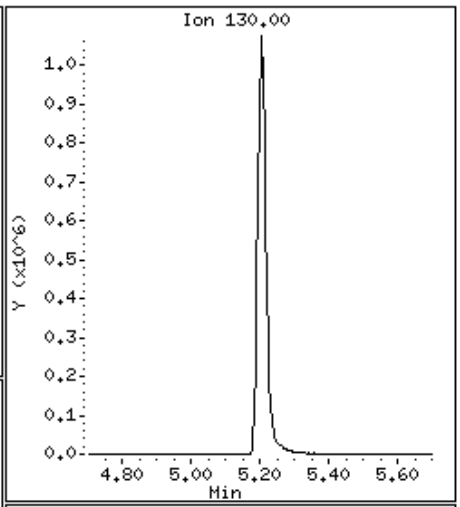
38 Trichloroethene Concentration: 1530.37 ug/l

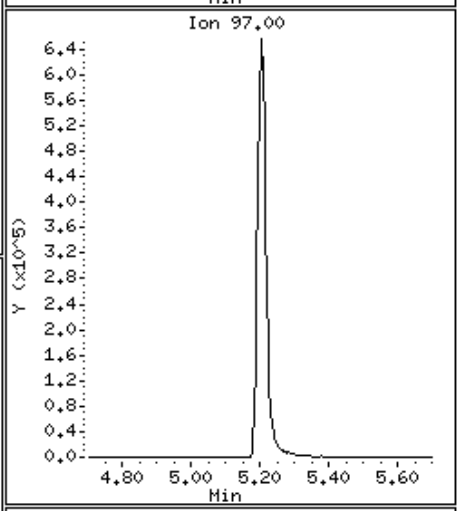


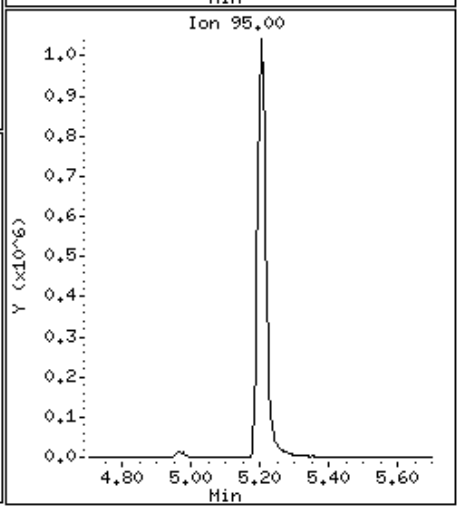












Data File : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072125.D
Inj Date : 21-JUL-2023 20:28
InstruID : voa6.i
LabSampID : HS23070993-05

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072126.D Page 1
Report Date: 27-Jul-2023 12:59

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072126.D
Lab Smp Id: HS23070993-05 Client Smp ID: HS23070993-05
Inj Date : 21-JUL-2023 20:48
Operator : PC Inst ID: voa6.i
Smp Info : HS23070993-05;HS23070993-05;;;
Misc Info : V6;WATER;0;50;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\8260W.m
Meth Date : 27-Jul-2023 12:58 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 24
Dil Factor: 50.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.178	4.178	(1.000)	636593	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.095	(0.982)	312962	53.6960	53.69
$ 35 1,2-Dichloroethane-d4	65	4.474	4.470	(1.071)	411906	56.5357	56.53
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	1002903	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	871875	50.0000	
$ 48 Toluene-d8	98	6.385	6.386	(0.833)	1147901	51.1357	51.13
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	418679	48.2139	48.21
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.658	(1.000)	451001	50.0000	
5 Vinyl Chloride	62	1.149	1.145	(0.275)	7370	0.89466	44.73(a)
27 cis-1,2-Dichloroethene	96	3.537	3.525	(0.847)	11954	1.73945	86.97(a)
38 Trichloroethene	130	5.208	5.205	(1.049)	179088	26.3932	1319.66

QC Flag Legend

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

01322186

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072126.D

Date : 21-JUL-2023 20:48

Client ID: HS23070993-05

Instrument: voa6.i

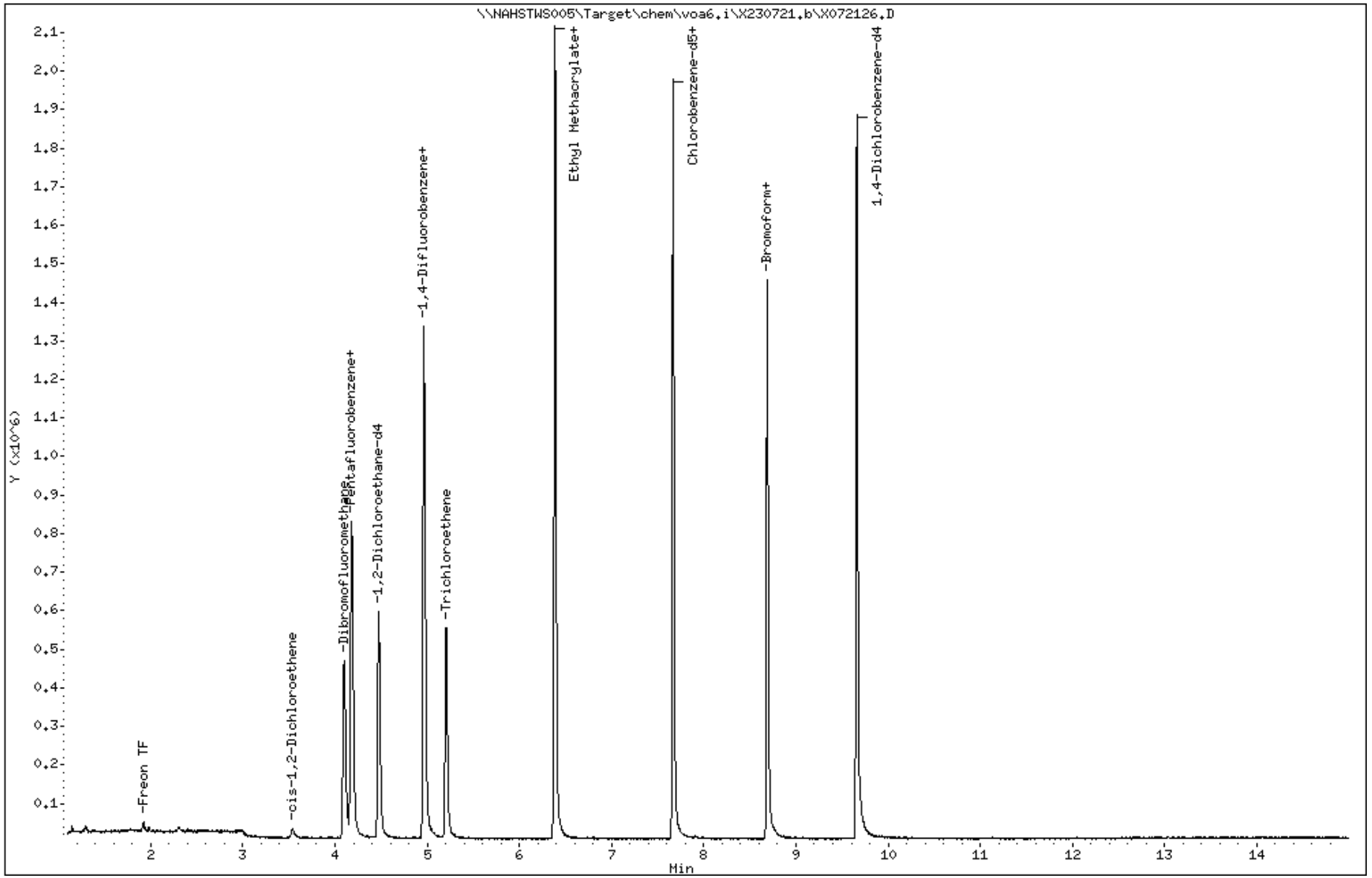
Sample Info: HS23070993-05;HS23070993-05;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072126.D

Date : 21-JUL-2023 20:48

Client ID: HS23070993-05

Instrument: voa6.i

Sample Info: HS23070993-05;HS23070993-05;;;

Purge Volume: 5.0

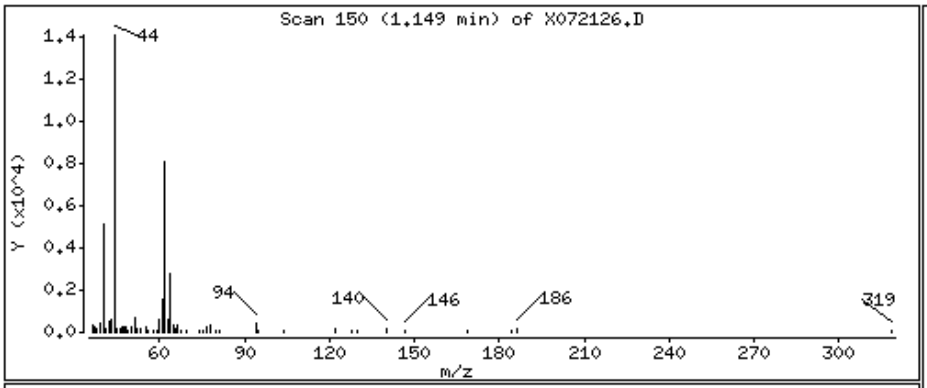
Operator: PC

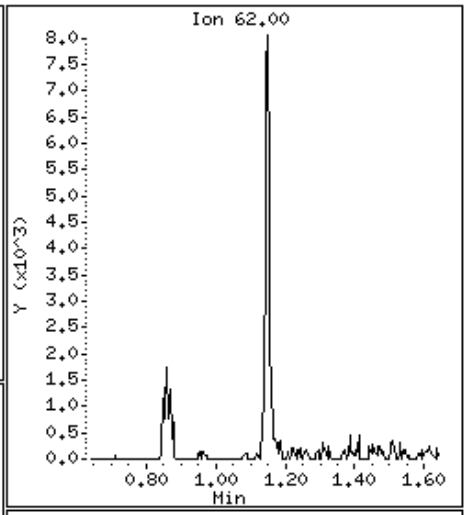
Column phase: DB624

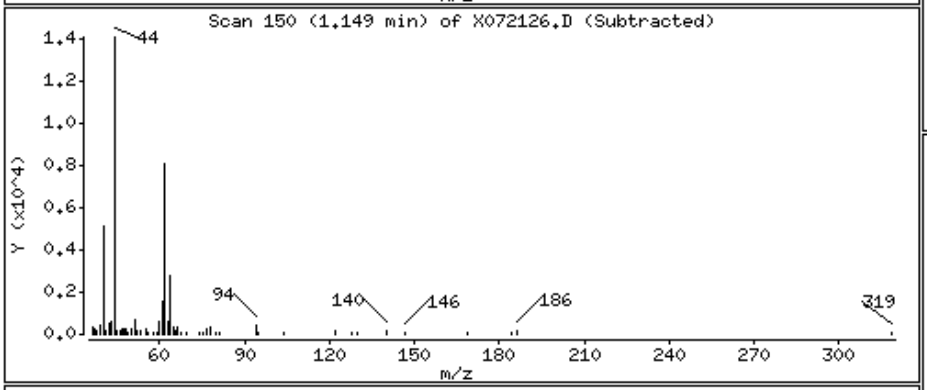
Column diameter: 0.18

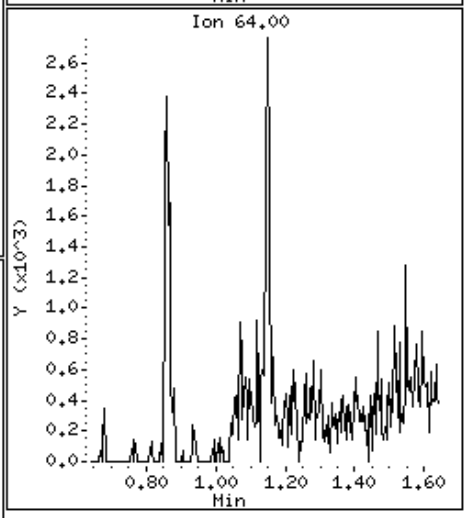
5 Vinyl Chloride

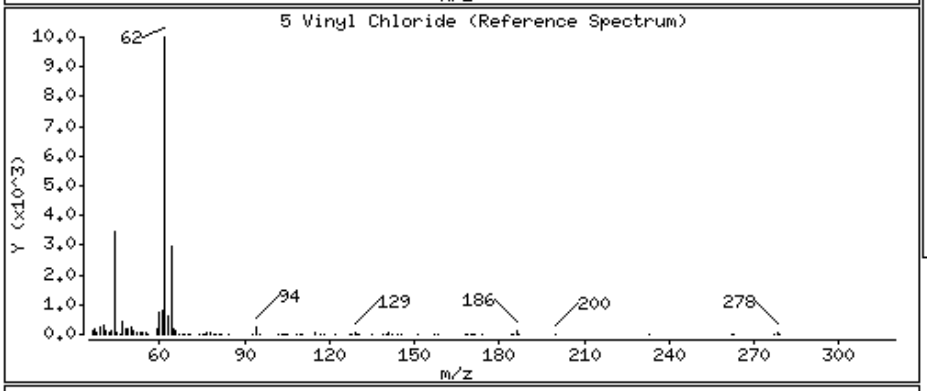
Concentration: 44.73 ug/l

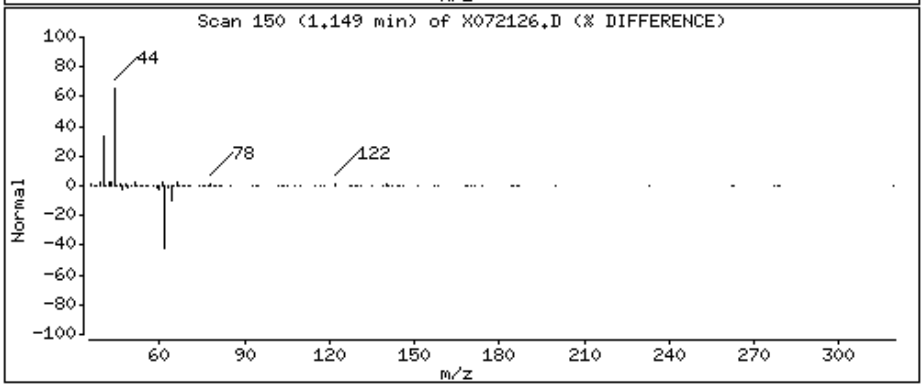












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072126.D Page 3

Date : 21-JUL-2023 20:48

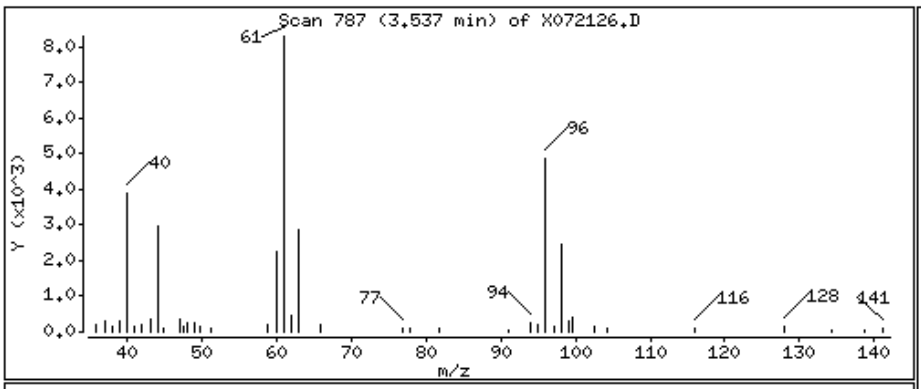
Client ID: HS23070993-05 Instrument: voa6.i

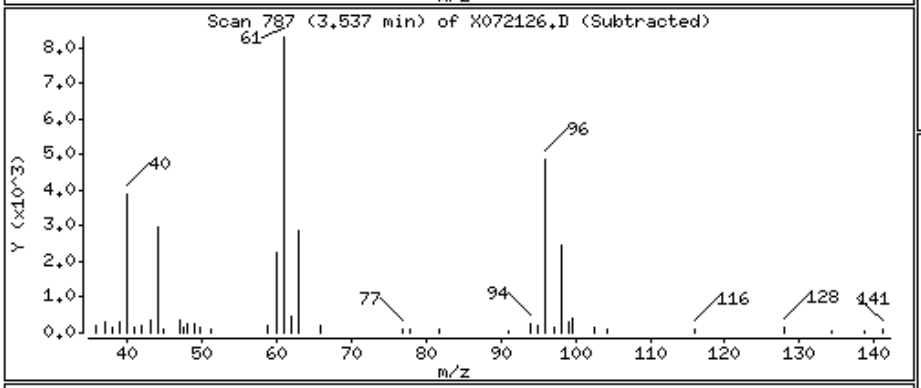
Sample Info: HS23070993-05;HS23070993-05;;;

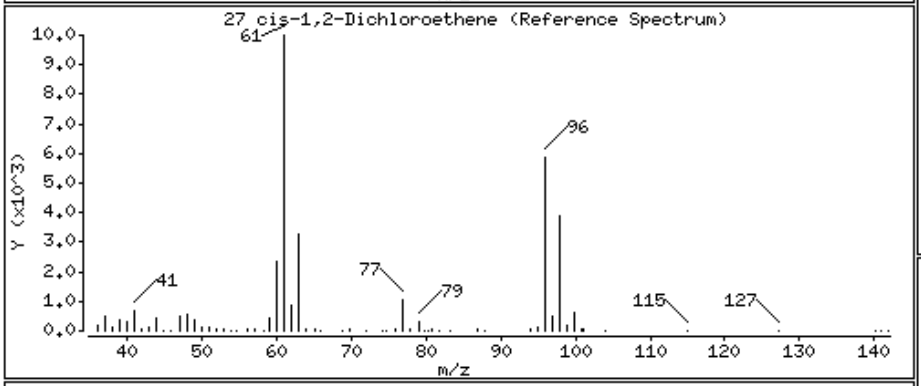
Purge Volume: 5.0 Operator: PC

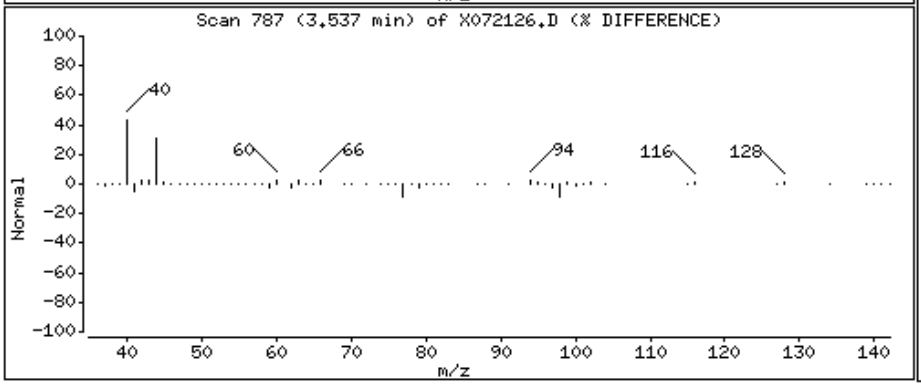
Column phase: DB624 Column diameter: 0.18

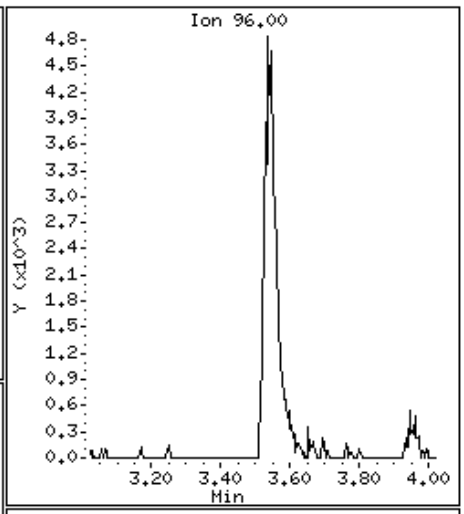
27 cis-1,2-Dichloroethene Concentration: 86.97 ug/l

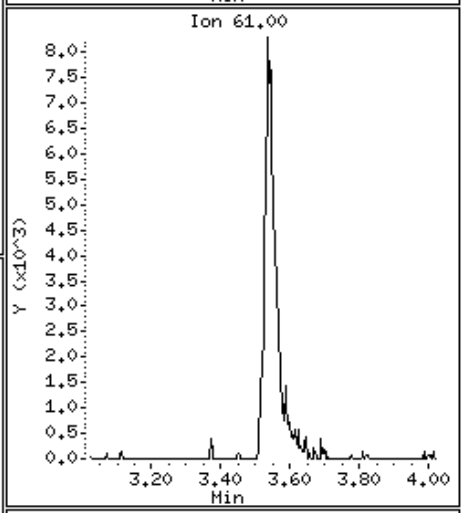


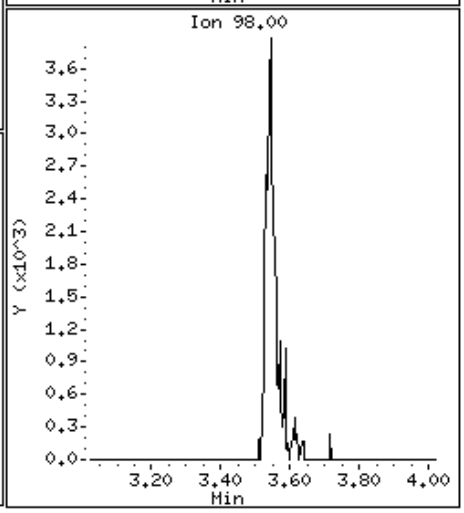












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072126.D Page 4

Date : 21-JUL-2023 20:48

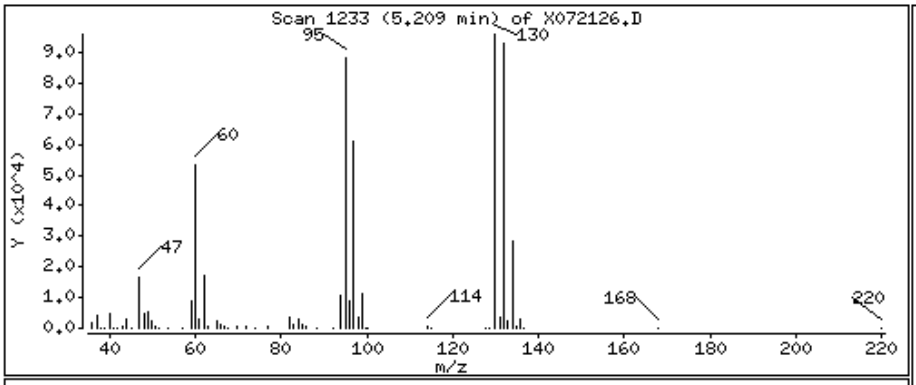
Client ID: HS23070993-05 Instrument: voa6.i

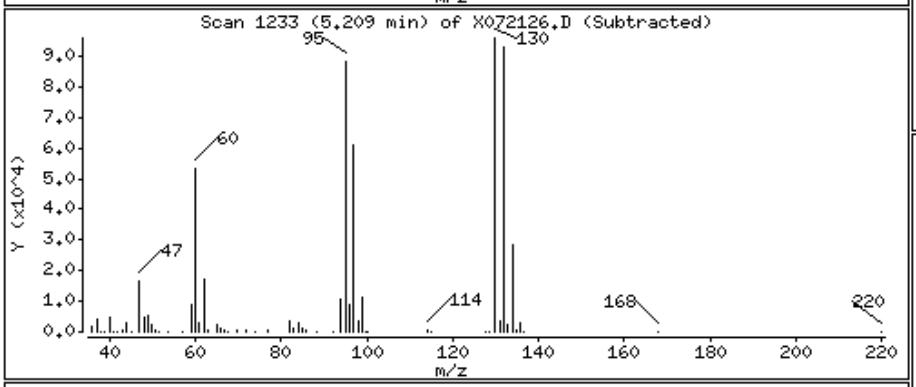
Sample Info: HS23070993-05;HS23070993-05;;;

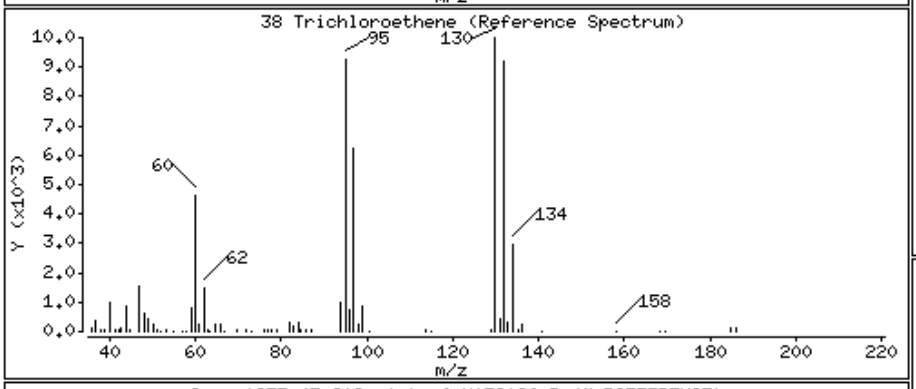
Purge Volume: 5.0 Operator: PC

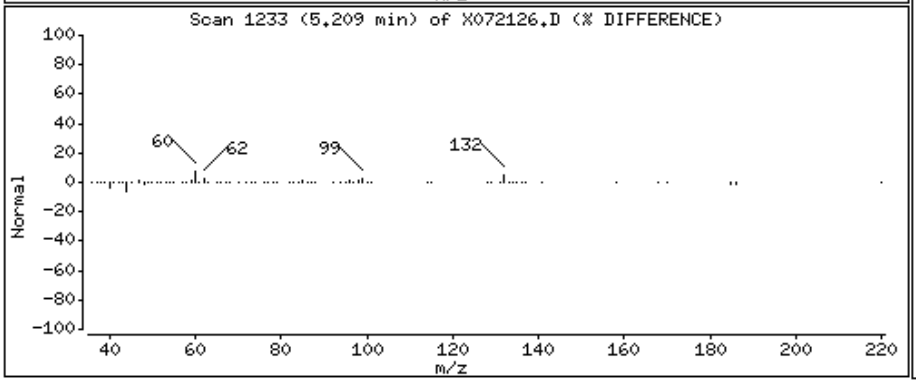
Column phase: DB624 Column diameter: 0.18

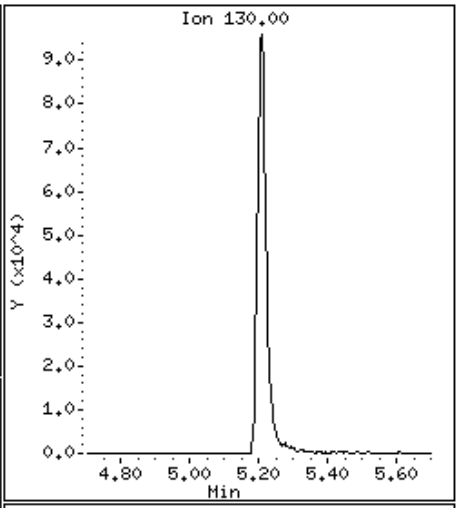
38 Trichloroethene Concentration: 1319.66 ug/l

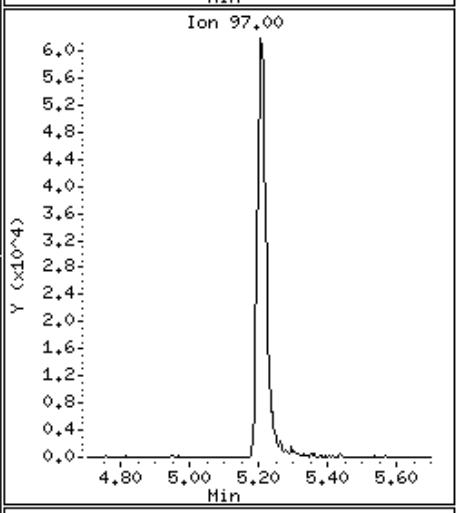


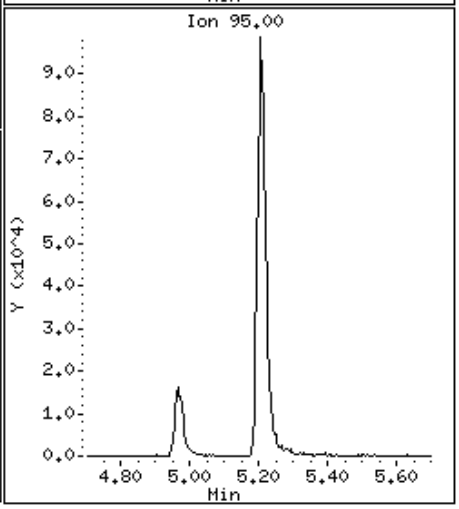












Data File : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072126.D
Inj Date : 21-JUL-2023 20:48
InstruID : voa6.i
LabSampID : HS23070993-05

NO MANUAL INTEGRATIONS

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072127.D
Lab Smp Id: HS23070993-09 Client Smp ID: HS23070993-09
Inj Date : 21-JUL-2023 21:09
Operator : PC Inst ID: voa6.i
Smp Info : HS23070993-09;HS23070993-09;;;
Misc Info : V6;WATER;0;250;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\8260W.m
Meth Date : 27-Jul-2023 12:58 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 25
Dil Factor: 250.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

Name	Value	Description
DF	250.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.181	4.178	(1.000)	606148	50.0000	
$ 30 Dibromofluoromethane	113	4.099	4.095	(0.980)	297634	53.6301	53.63
$ 35 1,2-Dichloroethane-d4	65	4.474	4.470	(1.070)	385589	55.5713	55.57
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	937641	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	833797	50.0000	
$ 48 Toluene-d8	98	6.386	6.386	(0.833)	1081753	50.3897	50.38
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	390996	47.0722	47.07
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.658	(1.000)	428790	50.0000	
5 Vinyl Chloride	62	1.145	1.145	(0.274)	26588	3.38967	847.41(a)
27 cis-1,2-Dichloroethene	96	3.525	3.525	(0.843)	804983	123.018	30754.46
38 Trichloroethene	130	5.205	5.205	(1.048)	2258396	355.999	88999.72(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.

01322192

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072127.D

Date : 21-JUL-2023 21:09

Client ID: HS23070993-09

Instrument: voa6.i

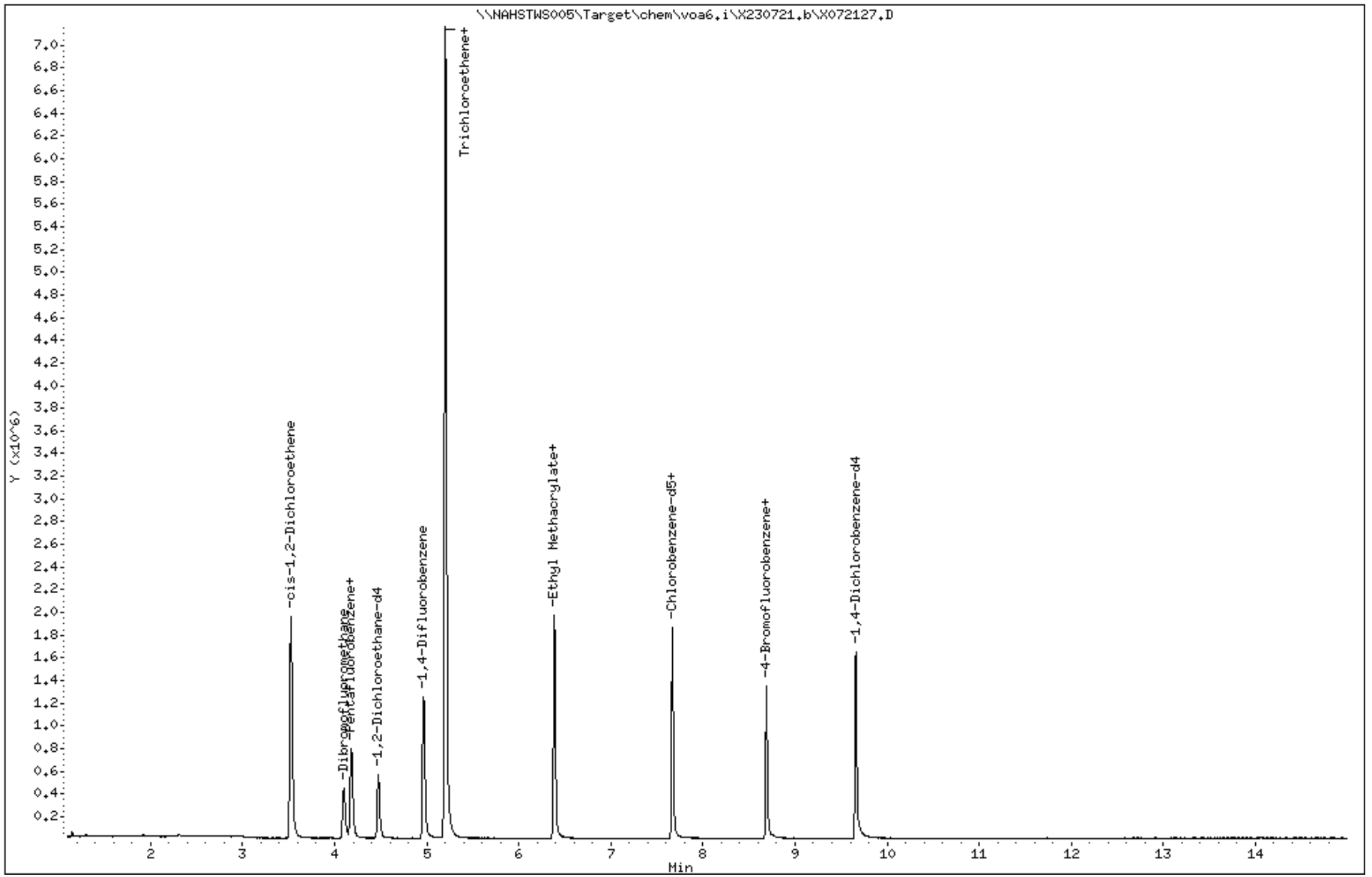
Sample Info: HS23070993-09;HS23070993-09;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072127.D

Date : 21-JUL-2023 21:09

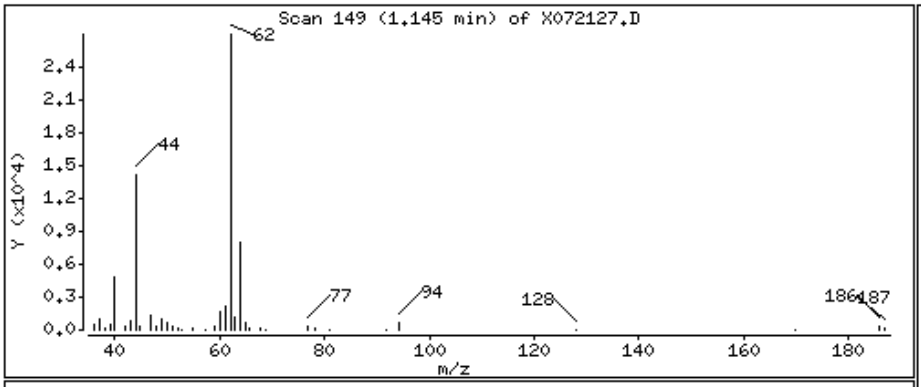
Client ID: HS23070993-09 Instrument: voa6.i

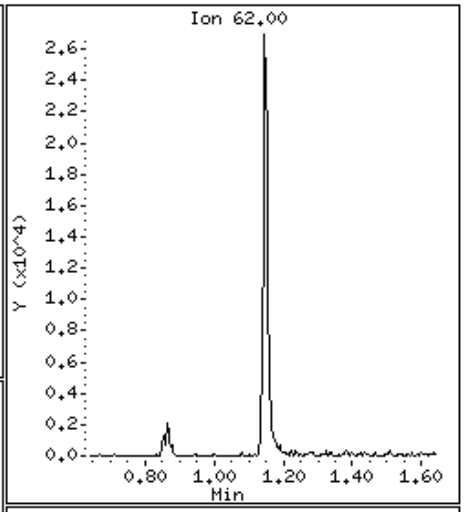
Sample Info: HS23070993-09;HS23070993-09;;;

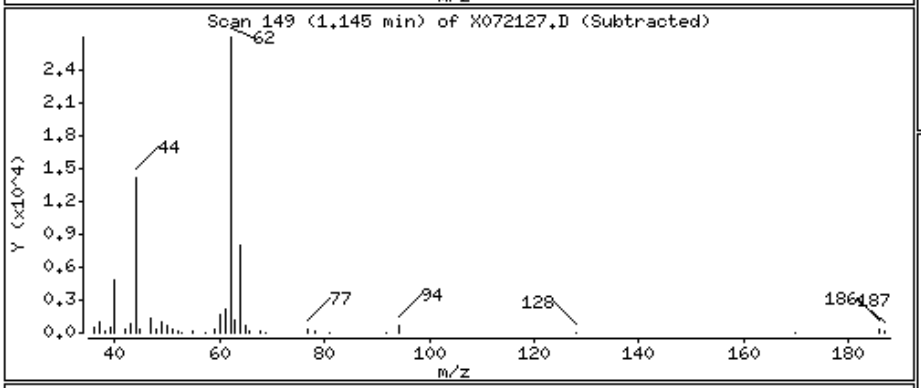
Purge Volume: 5.0 Operator: PC

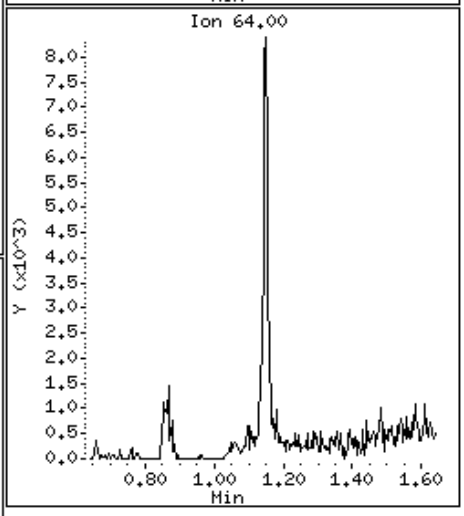
Column phase: DB624 Column diameter: 0.18

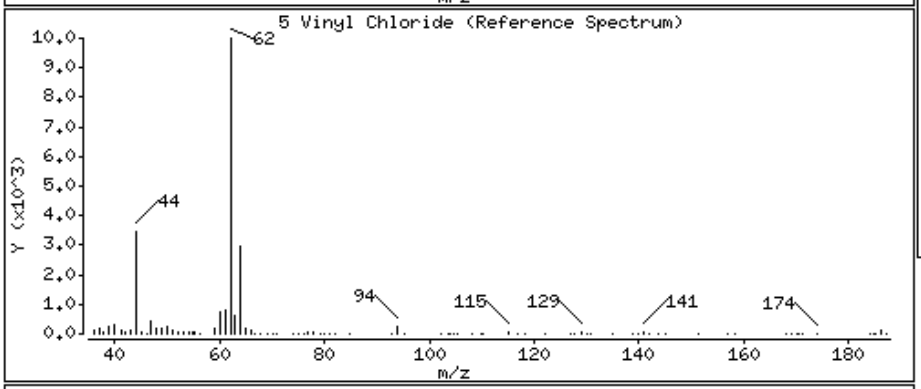
5 Vinyl Chloride Concentration: 847.41 ug/l

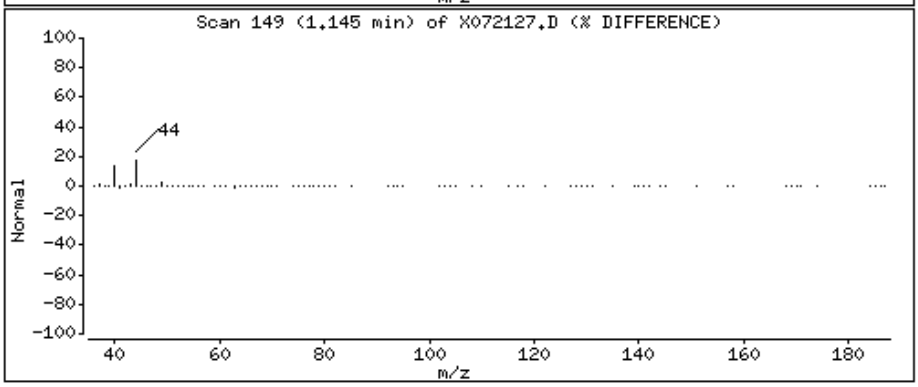












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072127.D

Date : 21-JUL-2023 21:09

Client ID: HS23070993-09

Instrument: voa6.i

Sample Info: HS23070993-09;HS23070993-09;;;

Purge Volume: 5.0

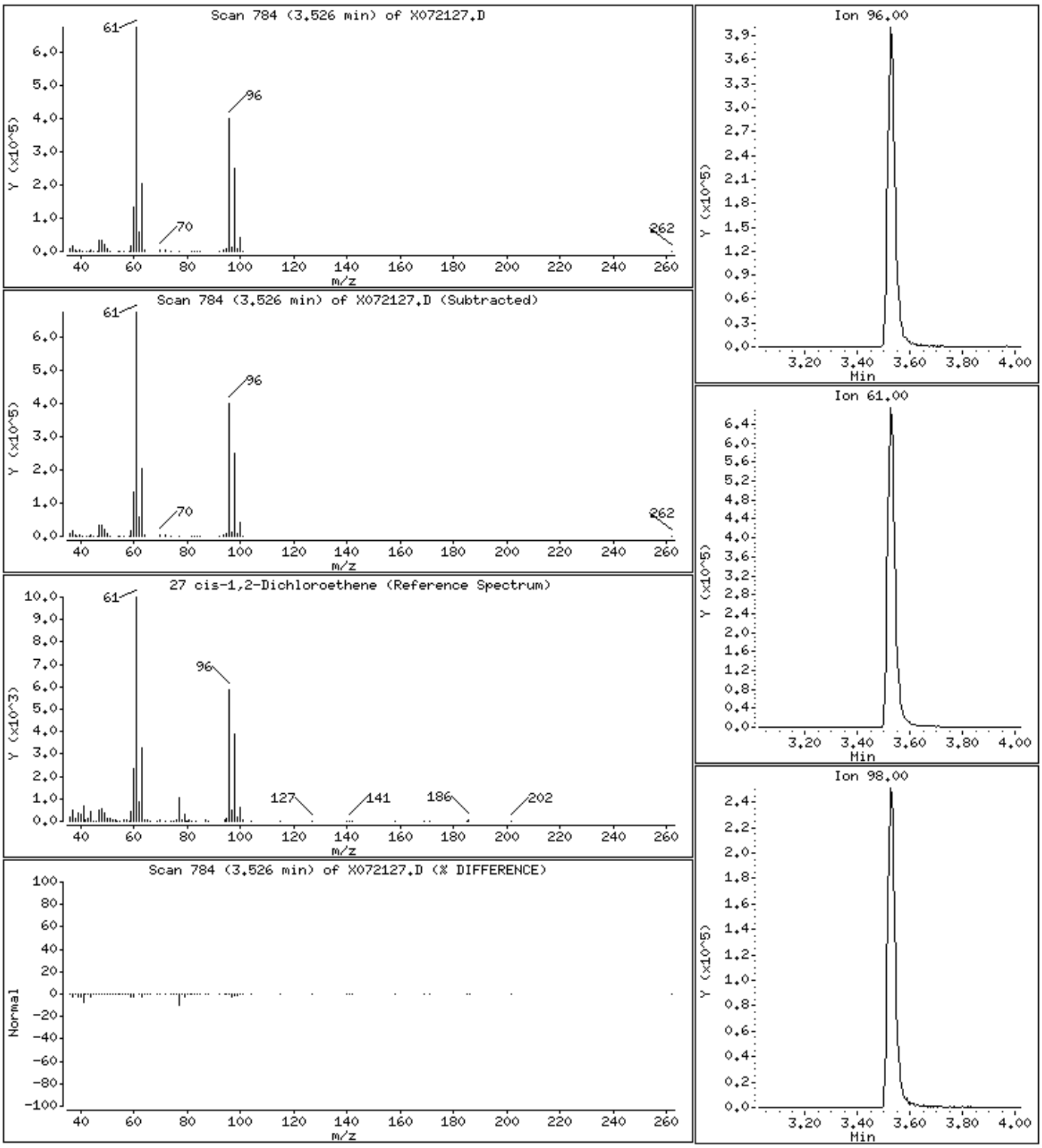
Operator: PC

Column phase: DB624

Column diameter: 0.18

27 cis-1,2-Dichloroethene

Concentration: 30754.46 ug/l



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072127.D Page 4

Date : 21-JUL-2023 21:09

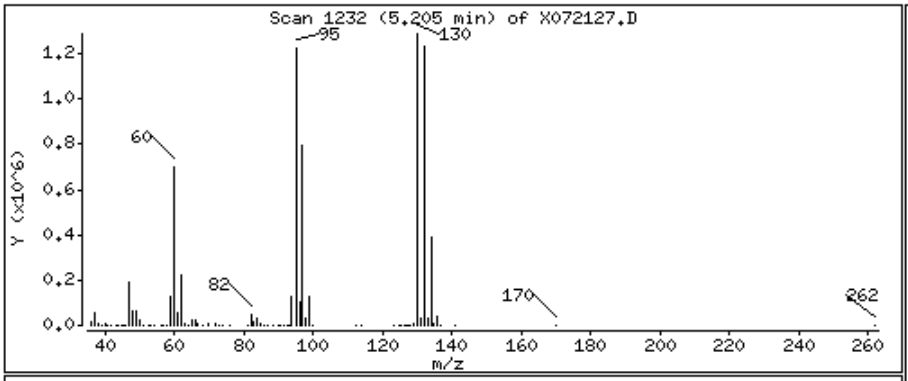
Client ID: HS23070993-09 Instrument: voa6.i

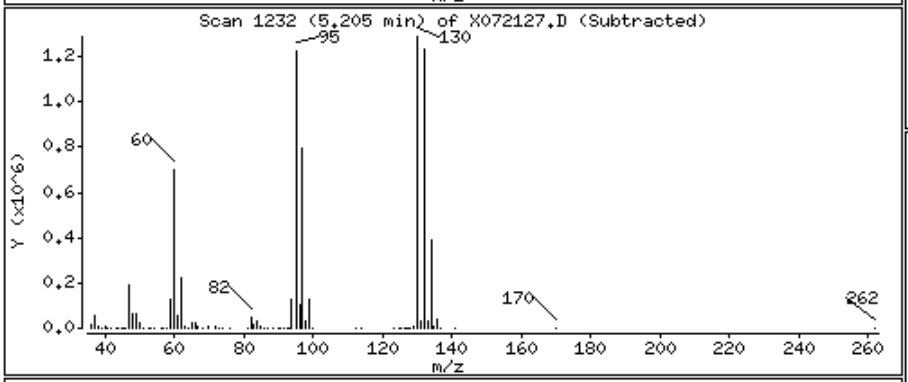
Sample Info: HS23070993-09;HS23070993-09;;;

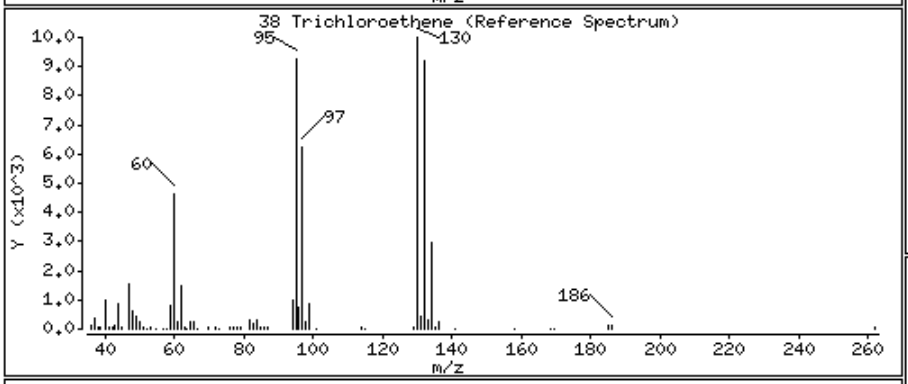
Purge Volume: 5.0 Operator: PC

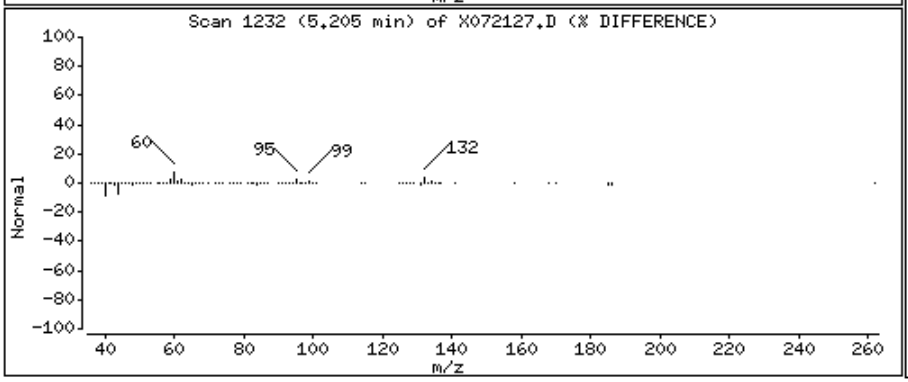
Column phase: DB624 Column diameter: 0.18

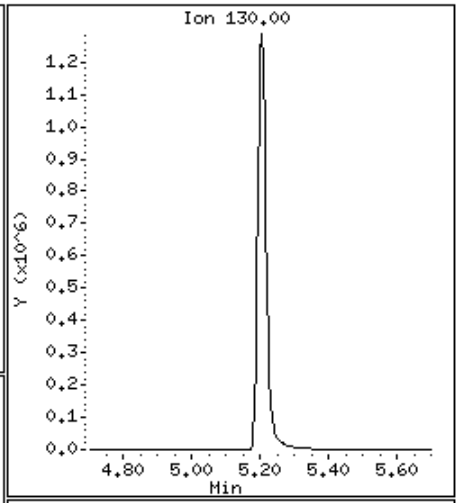
38 Trichloroethene Concentration: 88999.72 ug/l

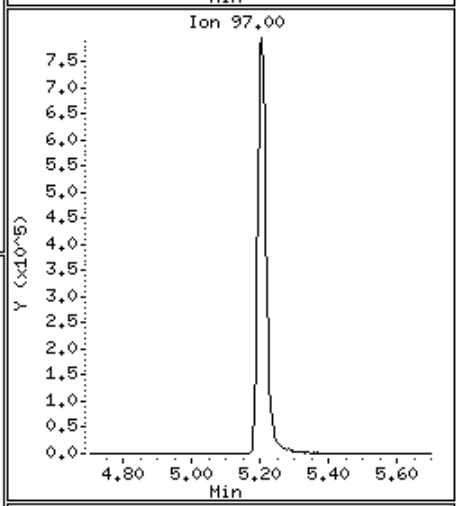


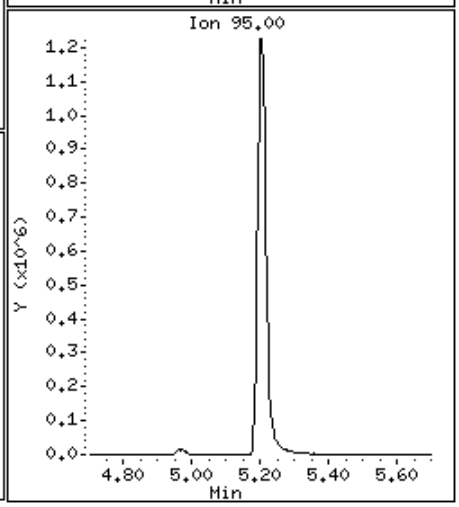












Data File : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072127.D
Inj Date : 21-JUL-2023 21:09
InstruID : voa6.i
LabSampID : HS23070993-09

NO MANUAL INTEGRATIONS

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072128.D
Lab Smp Id: HS23070993-09 Client Smp ID: HS23070993-09
Inj Date : 21-JUL-2023 21:29
Operator : PC Inst ID: voa6.i
Smp Info : HS23070993-09;HS23070993-09;;;
Misc Info : V6;WATER;0;2000;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\8260W.m
Meth Date : 27-Jul-2023 12:58 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 26
Dil Factor: 2000.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.181	4.178	(1.000)	595908	50.0000	
$ 30 Dibromofluoromethane	113	4.099	4.095	(0.980)	298967	54.8126	54.81
$ 35 1,2-Dichloroethane-d4	65	4.474	4.470	(1.070)	386486	56.6699	56.66
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	933817	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	827140	50.0000	
$ 48 Toluene-d8	98	6.386	6.386	(0.833)	1088732	51.1230	51.12
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	390472	47.3903	47.39
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.658	(1.000)	409285	50.0000	
5 Vinyl Chloride	62	1.149	1.145	(0.275)	3247	0.42107	842.13(a)
27 cis-1,2-Dichloroethene	96	3.533	3.525	(0.845)	98754	15.3510	30701.92
38 Trichloroethene	130	5.209	5.205	(1.049)	281644	44.5783	89156.67

QC Flag Legend

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

01322198

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072128.D

Date : 21-JUL-2023 21:29

Client ID: HS23070993-09

Instrument: voa6.i

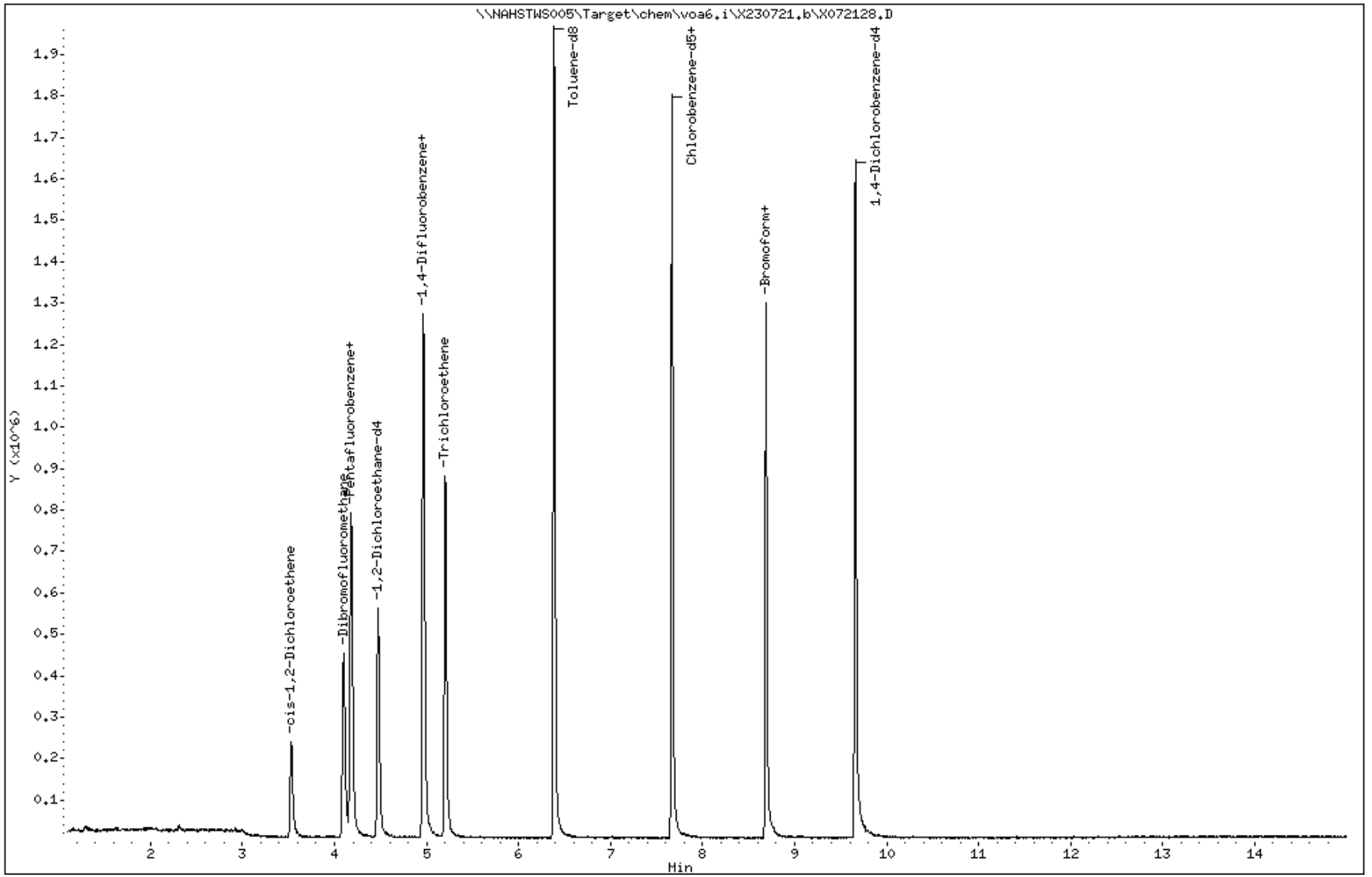
Sample Info: HS23070993-09;HS23070993-09;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072128.D Page 2

Date : 21-JUL-2023 21:29

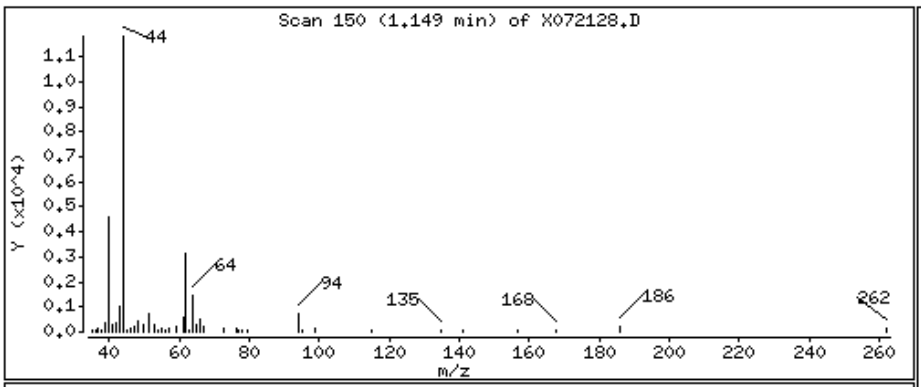
Client ID: HS23070993-09 Instrument: voa6.i

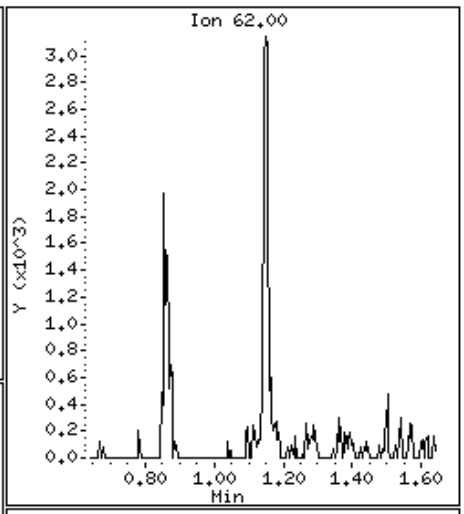
Sample Info: HS23070993-09;HS23070993-09;;;

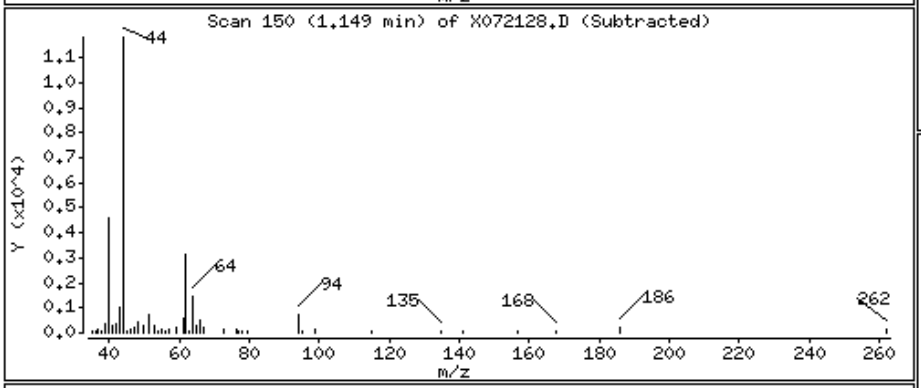
Purge Volume: 5.0 Operator: PC

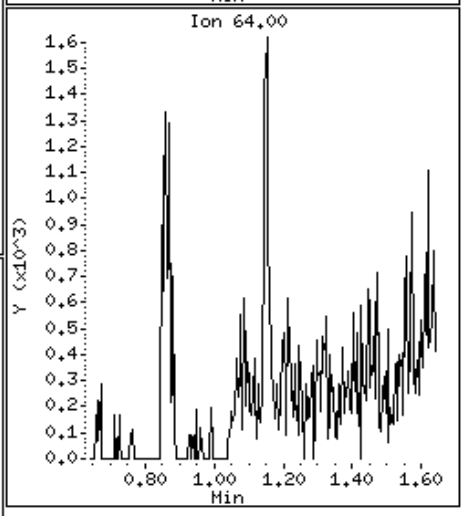
Column phase: DB624 Column diameter: 0.18

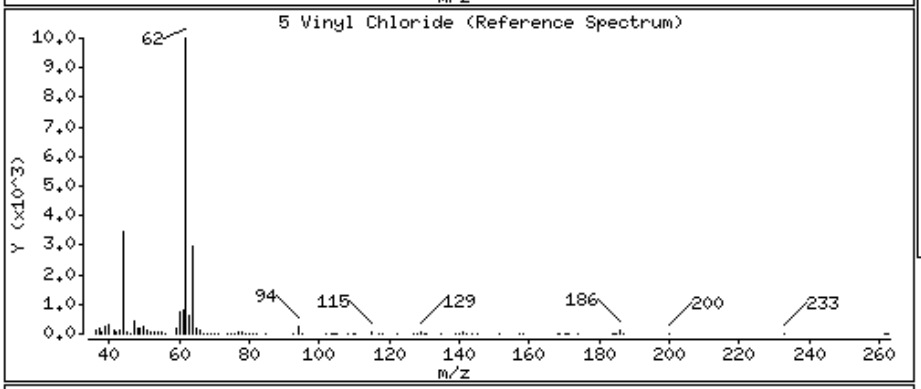
5 Vinyl Chloride Concentration: 842.13 ug/l

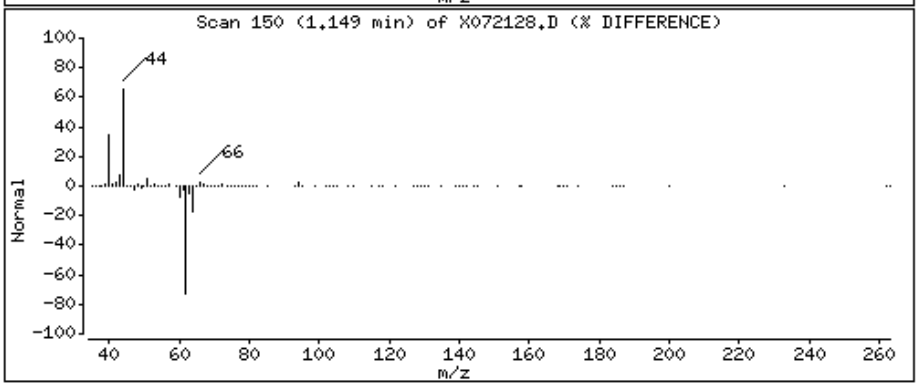












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072128.D Page 3

Date : 21-JUL-2023 21:29

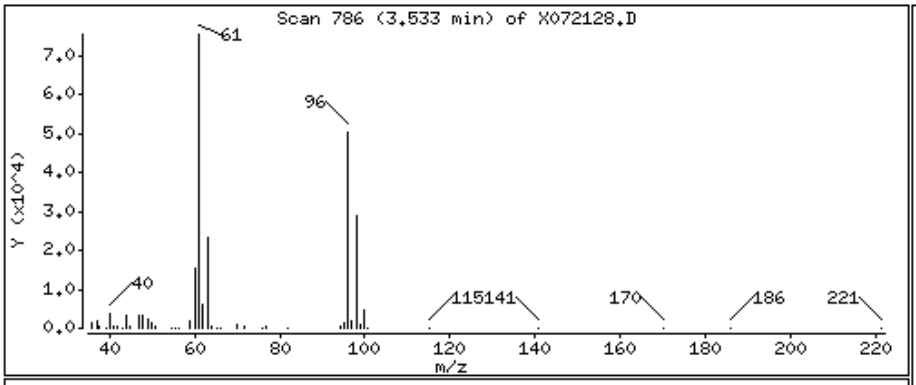
Client ID: HS23070993-09 Instrument: voa6.i

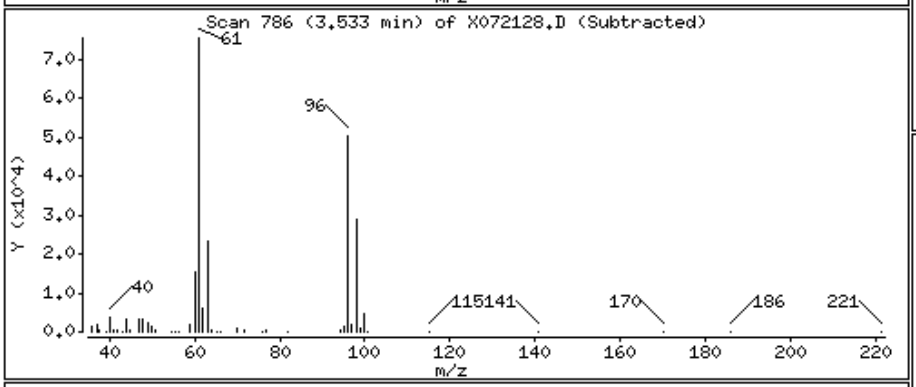
Sample Info: HS23070993-09;HS23070993-09;;;

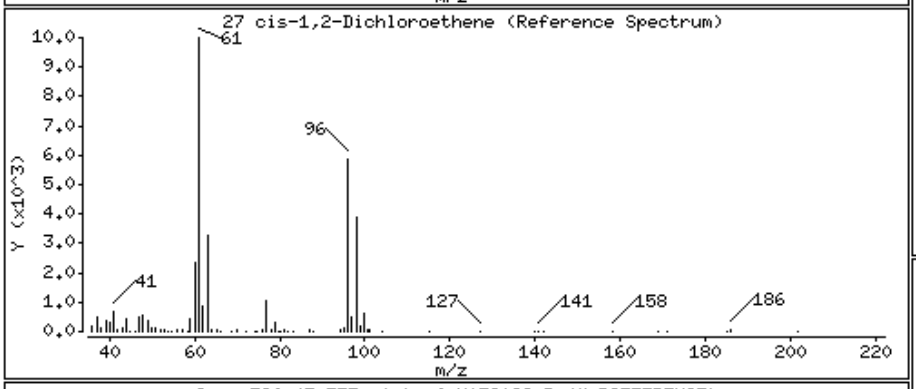
Purge Volume: 5.0 Operator: PC

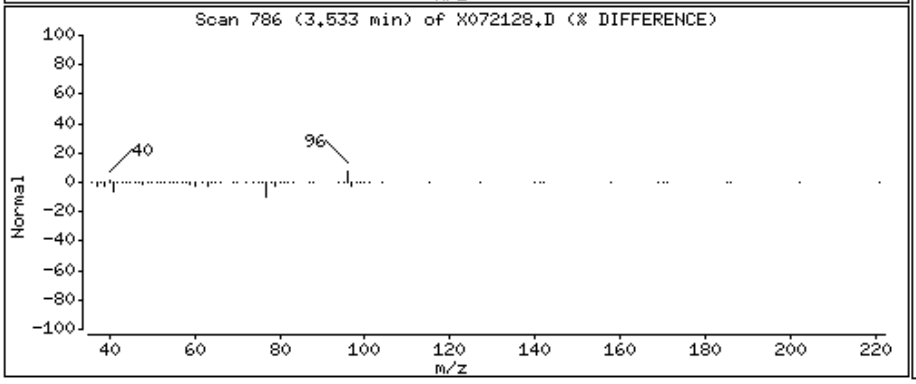
Column phase: DB624 Column diameter: 0.18

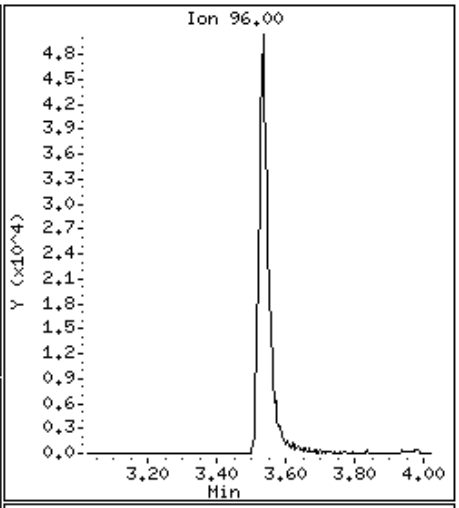
27 cis-1,2-Dichloroethene Concentration: 30701.92 ug/l

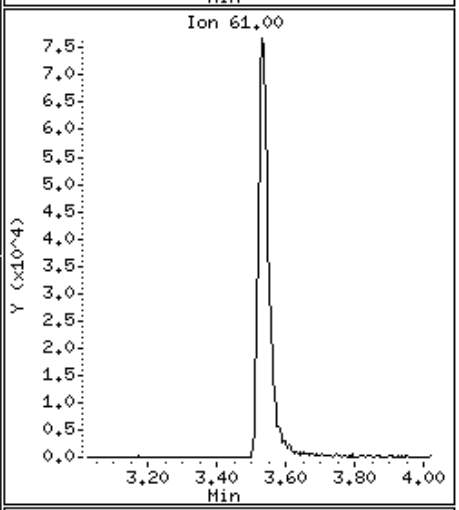


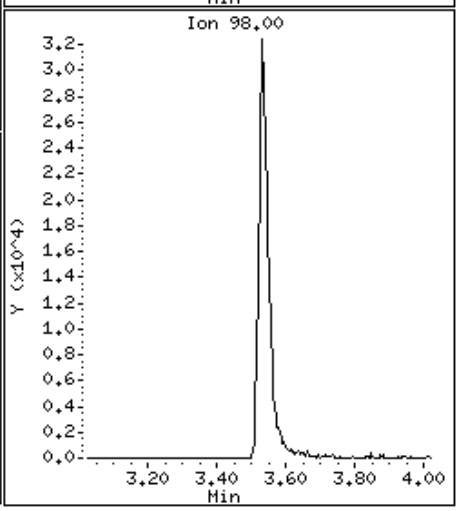












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072128.D Page 4

Date : 21-JUL-2023 21:29

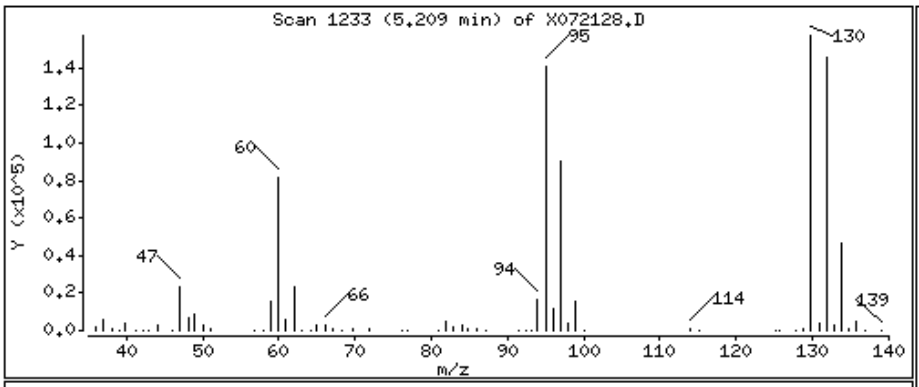
Client ID: HS23070993-09 Instrument: voa6.i

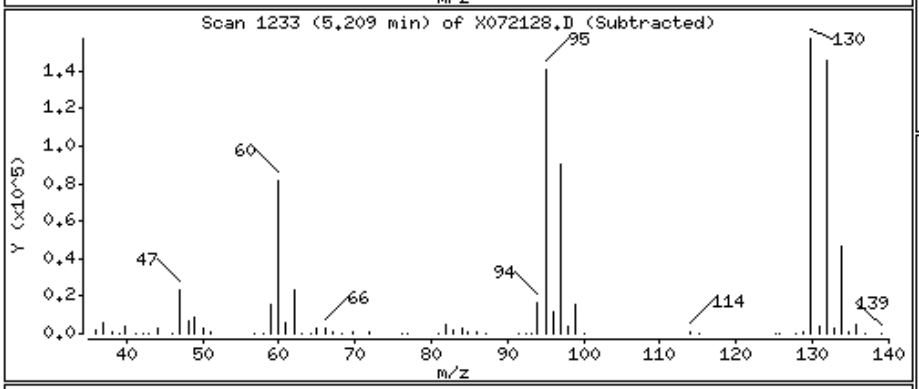
Sample Info: HS23070993-09;HS23070993-09;;;

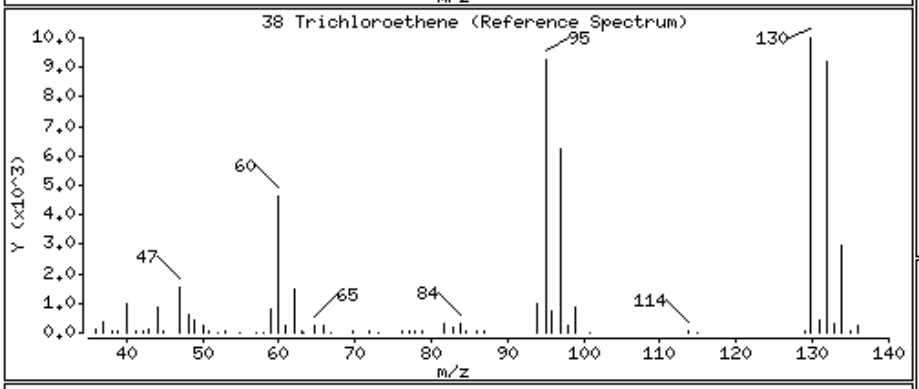
Purge Volume: 5.0 Operator: PC

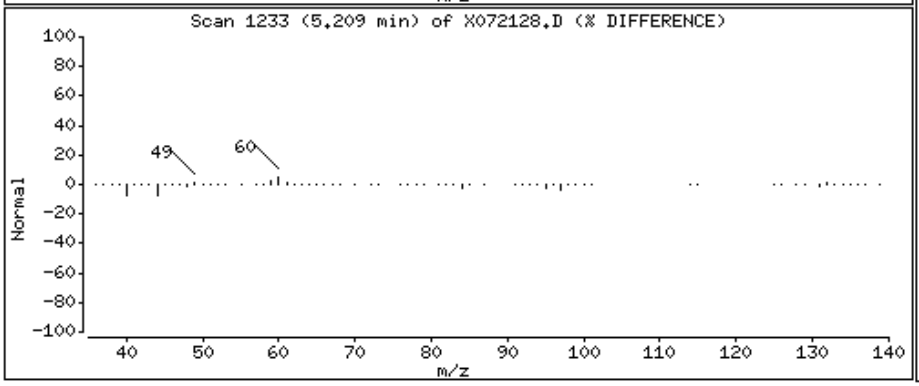
Column phase: DB624 Column diameter: 0.18

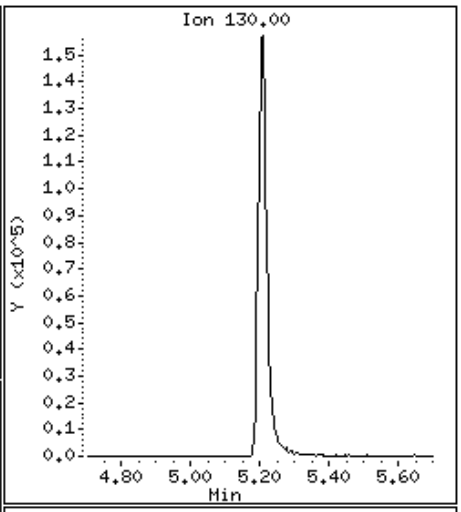
38 Trichloroethene Concentration: 89156.67 ug/l

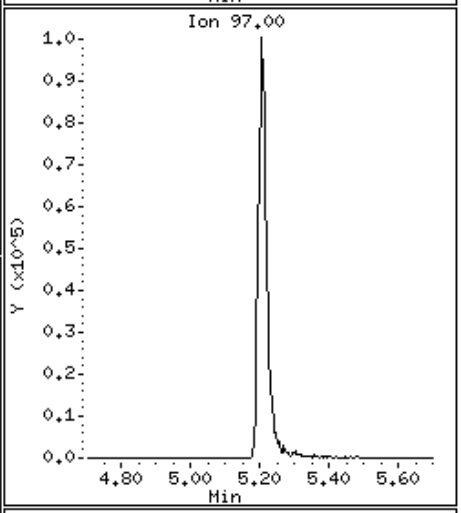


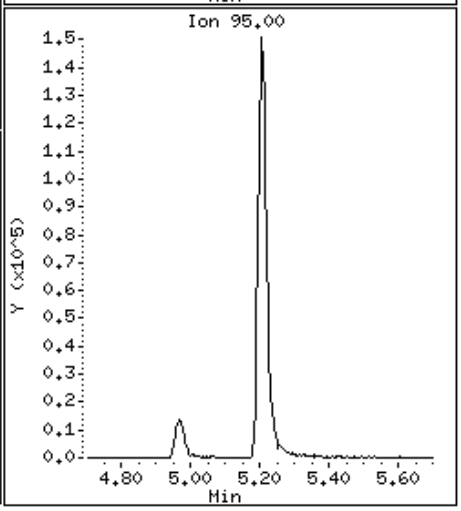












Data File : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072128.D
Inj Date : 21-JUL-2023 21:29
InstruID : voa6.i
LabSampID : HS23070993-09

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072130.D Page 1
Report Date: 27-Jul-2023 12:59

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072130.D
Lab Smp Id: CCV-END Client Smp ID: CCV-END
Inj Date : 21-JUL-2023 22:10
Operator : PC Inst ID: voa6.i
Smp Info : CCV-END;CCV-END;2;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\8260W.m
Meth Date : 27-Jul-2023 12:59 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.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	4.178	4.178	(1.000)	582134	50.0000	
135 1,4-Dioxane	88	5.598	5.598	(1.340)	76059	1000.00	1099.50
140 1,3-Butadiene	54	1.167	1.167	(0.280)	457089	50.0000	61.10
25 Methacrylonitrile	41	3.829	3.829	(0.917)	493064	50.0000	65.61
12 Isobutyl Alcohol	43	4.680	4.680	(1.120)	1401299	1000.00	1269.89
13 Acetonitrile	39	2.202	2.202	(0.527)	453220	500.000	555.20
14 Allyl Chloride	41	2.202	2.202	(0.527)	1098529	50.0000	57.47
4 Propionitrile	54	3.657	3.657	(0.875)	680324	500.000	589.96
72 trans-1,4-Dichloro-2-butene	53	8.886	8.886	(1.159)	146998	50.0000	52.92
130 Ethyl Acetate	43	3.660	3.660	(0.876)	534567	50.0000	61.82
40 Methyl Methacrylate	41	5.606	5.606	(1.342)	430674	50.0000	61.29
49 Ethyl Methacrylate	69	6.712	6.712	(1.352)	301292	50.0000	46.93
2 Dichlorodifluoromethane	85	0.976	0.976	(0.234)	275434	50.0000	46.33
3 Chloromethane	50	1.081	1.081	(0.259)	492528	50.0000	56.01
5 Vinyl Chloride	62	1.145	1.145	(0.274)	448761	50.0000	59.57
6 Bromomethane	94	1.344	1.344	(0.322)	165129	50.0000	52.97
7 Chloroethane	64	1.407	1.407	(0.337)	247433	50.0000	57.53
8 Trichlorofluoromethane	101	1.565	1.565	(0.375)	399474	50.0000	52.32
9 Acrolein	56	1.865	1.865	(0.446)	38533	100.000	173.95
10 Acetone	43	1.977	1.977	(0.473)	288740	100.000	126.60

11 1,1-Dichloroethene	96	1.917	1.917 (0.459)	234715	50.0000	55.03
15 Iodomethane	142	2.030	2.030 (0.486)	516796	100.000	92.37

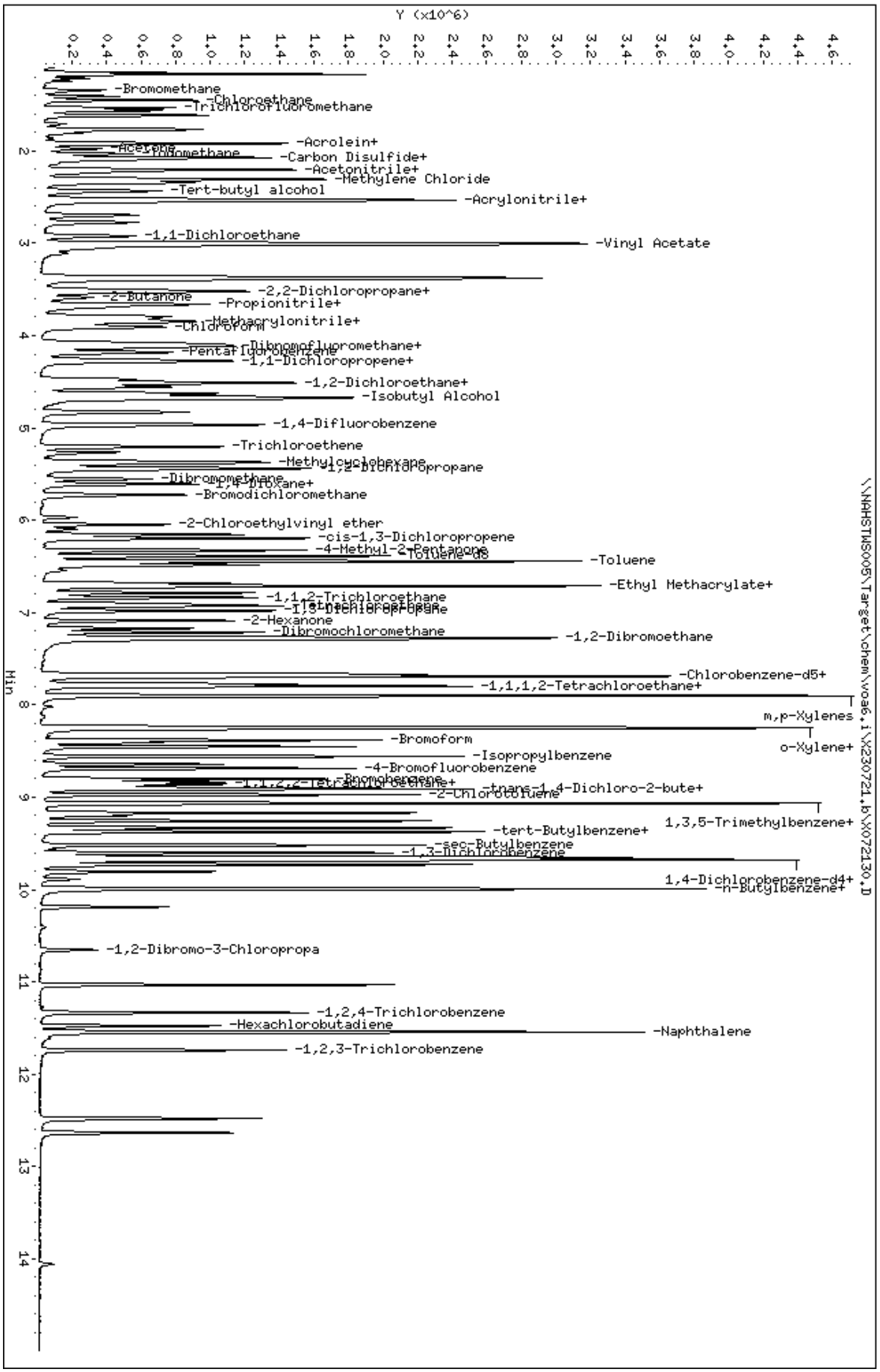
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	16 Acrylonitrile	53	2.536	2.536	(0.607)	316789	100.000	111.67
	17 Methylene Chloride	84	2.303	2.303	(0.551)	268714	50.0000	53.49
	18 Methyl tert-butyl ether	73	2.539	2.539	(0.608)	756237	50.0000	47.67
	19 Carbon Disulfide	76	2.071	2.071	(0.496)	1350165	100.000	100.71
	20 trans-1,2-Dichloroethene	96	2.532	2.532	(0.606)	236479	50.0000	47.93
	21 Vinyl Acetate	43	3.001	3.001	(0.718)	2478895	100.000	121.50
	22 1,1-Dichloroethane	63	2.922	2.922	(0.699)	529775	50.0000	48.93
	24 2-Butanone	43	3.585	3.585	(0.858)	385329	100.000	124.29
	26 2,2-Dichloropropane	77	3.507	3.507	(0.839)	390203	50.0000	46.44
	27 cis-1,2-Dichloroethene	96	3.525	3.525	(0.844)	336448	50.0000	53.53
	28 Chloroform	83	3.908	3.908	(0.935)	565627	50.0000	51.06
	29 Bromochloromethane	128	3.795	3.795	(0.908)	181985	50.0000	51.67
$	30 Dibromofluoromethane	113	4.099	4.099	(0.981)	300403	50.0000	56.40
	31 1,1,1-Trichloroethane	97	4.080	4.080	(0.977)	438771	50.0000	51.45
	32 1,1-Dichloropropene	75	4.283	4.283	(0.863)	392275	50.0000	49.06
	33 1,2-Dichloroethane	62	4.556	4.556	(0.918)	545801	50.0000	50.58
	34 Carbon Tetrachloride	117	4.260	4.260	(0.858)	357373	50.0000	44.37
$	35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	374004	50.0000	56.13
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	980132	50.0000	
	37 Benzene	78	4.511	4.511	(0.909)	1235981	50.0000	52.72
	38 Trichloroethene	130	5.205	5.205	(1.048)	334116	50.0000	50.38
	39 Bromodichloromethane	83	5.722	5.722	(1.153)	432943	50.0000	48.21
	41 2-Chloroethylvinyl ether	63	6.048	6.048	(1.218)	280364	100.000	102.25
	42 1,2-Dichloropropane	63	5.437	5.437	(1.095)	412813	50.0000	54.76
	44 Dibromomethane	93	5.550	5.550	(1.118)	209404	50.0000	49.07
	45 4-Methyl-2-Pentanone	43	6.326	6.326	(0.825)	1000278	100.000	111.30
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	514052	50.0000	49.83
*	47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	913260	50.0000	
$	48 Toluene-d8	98	6.386	6.386	(0.833)	1101669	50.0000	46.85
	50 Toluene	91	6.442	6.442	(0.840)	1267965	50.0000	51.57
	51 trans-1,3-Dichloropropene	75	6.682	6.682	(1.346)	427915	50.0000	49.21
	52 2-Hexanone	43	7.087	7.087	(0.924)	668431	100.000	113.22
	53 1,1,2-Trichloroethane	83	6.835	6.835	(0.891)	257639	50.0000	49.40
	54 1,3-Dichloropropane	76	6.978	6.978	(0.910)	539057	50.0000	50.59
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	365745	50.0000	48.58
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	235376	50.0000	46.34
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	290330	50.0000	48.71
	58 1-Chlorohexane	55	7.694	7.694	(1.550)	365745	50.0000	46.44
	59 Chlorobenzene	112	7.690	7.690	(1.003)	844114	50.0000	49.12
	60 1,1,1,2-Tetrachloroethane	131	7.773	7.773	(1.014)	324696	50.0000	48.26
	61 Ethylbenzene	106	7.795	7.795	(1.017)	419364	50.0000	48.66
	62 m,p-Xylenes	106	7.900	7.900	(1.030)	1076062	100.000	99.53
	63 o-Xylene	106	8.237	8.237	(1.074)	518699	50.0000	50.66
	64 Styrene	104	8.256	8.256	(1.077)	907479	50.0000	50.81
	66 Bromoform	173	8.406	8.406	(1.096)	237576	50.0000	49.18
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	1282831	50.0000	48.74
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	417378	50.0000	51.06
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	469976	50.0000	51.69
*	70 1,4-Dichlorobenzene-d4	152	9.658	9.658	(1.000)	486630	50.0000	
	71 1,2,3-Trichloropropane	75	8.860	8.860	(0.917)	329205	50.0000	50.75(M)
	73 n-Propylbenzene	91	8.908	8.908	(0.922)	1496623	50.0000	50.89
	74 Bromobenzene	156	8.803	8.803	(0.912)	369837	50.0000	48.59

75	1,3,5-Trimethylbenzene	105	9.062	9.062 (0.938)	1057704	50.0000	48.01
76	2-Chlorotoluene	91	8.972	8.972 (0.929)	961353	50.0000	48.46

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	
77	4-Chlorotoluene	91	9.066	9.066	(0.939)	1088700	50.0000	49.94	
78	tert-Butylbenzene	119	9.332	9.332	(0.966)	909790	50.0000	48.15	
79	1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	1092132	50.0000	49.43	
81	sec-Butylbenzene	105	9.519	9.519	(0.986)	1231542	50.0000	48.90	
82	p-Isopropyltoluene	119	9.647	9.647	(0.999)	1079569	50.0000	46.93	
83	1,3-Dichlorobenzene	146	9.602	9.602	(0.994)	651293	50.0000	49.12	
84	1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	685709	50.0000	47.17	
87	n-Butylbenzene	91	9.992	9.992	(1.035)	941069	50.0000	48.84	
88	1,2-Dichlorobenzene	146	9.988	9.988	(1.034)	645098	50.0000	49.49	
89	1,2-Dibromo-3-Chloropropane	155	10.651	10.651	(1.103)	60978	50.0000	45.48	
90	1,2,4-Trichlorobenzene	180	11.334	11.334	(1.173)	392529	50.0000	43.84	
91	Hexachlorobutadiene	225	11.476	11.476	(1.188)	153483	50.0000	37.80	
92	Naphthalene	128	11.540	11.540	(1.195)	1047354	50.0000	47.26	
93	1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	364213	50.0000	43.50	
M 94	1,2-Dichloroethylene (total)	96				572927	100.000	(a)	
141	Cyclohexane	56	4.121	4.121	(0.987)	529052	50.0000	52.43	
138	Freon TF	101	1.917	1.917	(0.459)	199049	50.0000	54.59	
147	Methylcyclohexane	55	5.385	5.385	(1.085)	1076671	50.0000	52.04	
146	Methyl Acetate	43	2.232	2.232	(0.534)	326020	50.0000	62.92	
148	Tert-Butyl alcohol	59	2.434	2.434	(0.583)	733910	1000.00	998.88	
149	Isopropyl Alcohol	45	2.097	2.097	(0.502)	526549	1000.00	1154.95	

QC Flag Legend

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



Data File: \\NAHSTMS005\Target\chem\voa6.i\X230721.b\X072130.D
Date : 21-JUL-2023 22:10
Client ID: CCV-END
Sample Info: CCV-END;CCV-END;2;;
Purge Volume: 5.0
Column phase: DB624

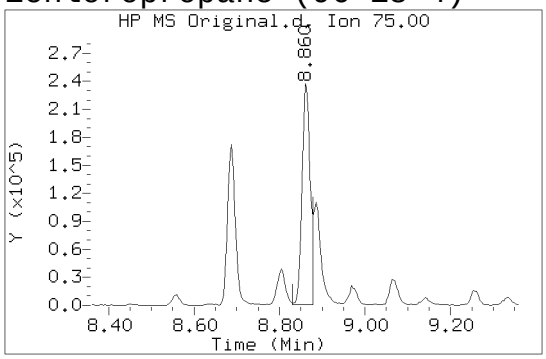
Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072130.D
Inj Date : 21-JUL-2023 22:10
InstruID : voa6.i
LabSampID : CCV-END

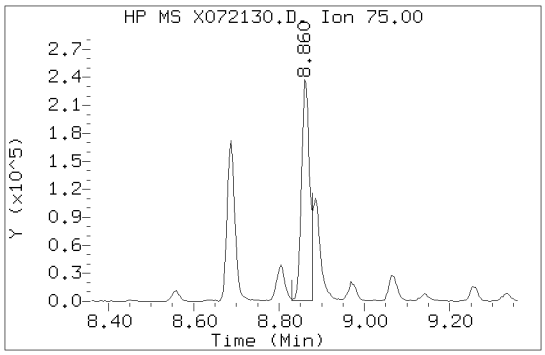
1,2,3-Trichloropropane (96-18-4)

Reason Code:

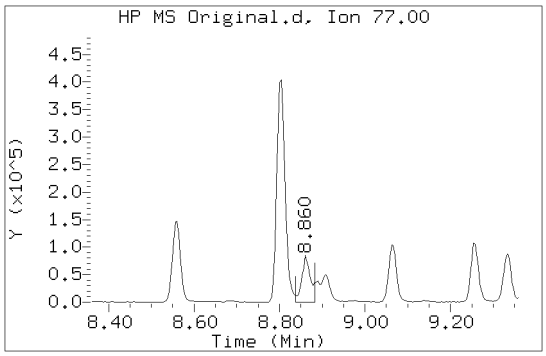
BEFORE
MASS
75
AREA
329205
HEIGHT
236676
21-Jul-2023
23:04



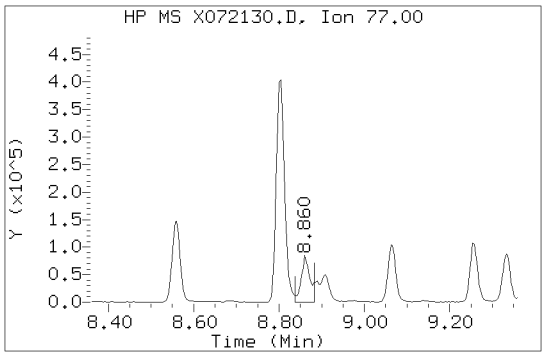
AFTER
MASS
75
AREA
329205
HEIGHT
236676
27-Jul-2023
12:58



BEFORE
MASS
77
AREA
124960
HEIGHT
85181
21-Jul-2023
23:04



AFTER
MASS
77
AREA
124960
HEIGHT
85181
27-Jul-2023
12:58



HS23070993-GCSEMI-RSK-175

ALS WO# HS23070993

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Form 1

Organic Analysis Data Sheet

Dissolved Gasses by RSK-175

Workorder

HS23070993

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23070993

Dissolved Gasses by RSK-175

HS23070993-09
16PM06-230713

Collected	Received	Matrix	Basis
07/13/23 11:55	07/14/23 09:40	Water	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
Ethane	mg/L	0.00100	U	0.000144	0.00100	0.00100	1	07/21/23 14:56	FID-4_442303	038.D
Ethene	mg/L	0.182		0.00468	0.0200	0.0200	20	07/21/23 15:16	FID-4_442303	039.D
Methane	mg/L	0.597		0.00214	0.0100	0.0100	20	07/21/23 15:16	FID-4_442303	039.D

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23070993**

Dissolved Gasses by RSK-175

MBLK-230721

MBLK-230721

Collected	Received	Matrix	Basis
NA	NA	Aqueous	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
Ethane	mg/L	0.00100	U	0.000144	0.00100	0.00100	1	07/21/23 14:22	FID-4_442303	035.D
Ethene	mg/L	0.00100	U	0.000234	0.00100	0.00100	1	07/21/23 14:22	FID-4_442303	035.D
Methane	mg/L	0.000500	U	0.000107	0.000500	0.000500	1	07/21/23 14:22	FID-4_442303	035.D

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Form 4

Method Blank Summary

Dissolved Gasses by RSK-175

Workorder

HS23070993

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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Form 4 - Method Blank Summary

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23070993

Dissolved Gasses by RSK-175

Client Sample ID	Type	Lab Sample ID	File ID	Date Analyzed	Run ID
METHOD BLANK	MBLK	MBLK-230721	035.D	07/21/23 14:22	FID-4_442303
LCS-230721	LCS	LCS-230721	036.D	07/21/23 14:32	FID-4_442303
LCSD-230721	LCSD	LCSD-230721	037.D	07/21/23 14:47	FID-4_442303
16PM06-230713	SAMP	HS23070993-09	038.D	07/21/23 14:56	FID-4_442303
16PM06-230713	SAMP	HS23070993-09	039.D	07/21/23 15:16	FID-4_442303
BatchQC	DUP	HS23071069-04DUP	063.D	07/21/23 19:32	FID-4_442303

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Form 6

Initial Calibration Data

Dissolved Gasses by RSK-175

Workorder

HS23070993

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

ALS Environmental–Houston Laboratory
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Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder HS23070993

RunID FID-4_322102

Dissolved Gasses by RSK-175

ICAL Start Date 24-JAN-2017 0906

ICAL End Date 24-JAN-2017 1113

Calibration Files

Calibration file names

Level 1..target\chem\fid-4.i\170124.b\001.d
Level 2..target\chem\fid-4.i\170124.b\002.d
Level 3..target\chem\fid-4.i\170124.b\003.d
Level 4..target\chem\fid-4.i\170124.b\004.d
Level 5..target\chem\fid-4.i\170124.b\005.d
Level 6..target\chem\fid-4.i\170124.b\006.d
Level 7..target\chem\fid-4.i\170124.b\007.d

Compound	1000.00 Level 7 10.00 Level 1	25.00 Level 2	50.00 Level 3	100.00 Level 4	250.00 Level 5	500.00 Level 6	Curve	b	m1	m2	%RSD or R2	Q
Methane	969 1082	978	1020	881	961	931	AVRG		974		6.55041	
Ethene	536 829	567	565	516	665	426	AVRG		586		21.93197	
Ethane	602 999	670	659	597	809	818	AVRG		736		19.88517	
Propane	500 96509	1279	2602	4785	18294	38286	QUAD	0.97987	0.00153	-4.583e-00	0.99914	
N-Butane	438 114164	936	2034	3864	18446	42817	QUAD	2.46870	0.00183	-5.537e-00	0.99808	
Pentane	115 488	3945	2080	950	501	412	AVRG		1213		112	*
Hexane	NE NE	NE	NE	NE	NE	NE	AVRG		0.000e+000		0.000e+000	

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

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Form 6I

Initial Calibration Verification (ICV)

Dissolved Gasses by RSK-175

Workorder

HS23070993

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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Initial Calibration Verification (ICV)

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

Workorder HS23070993

RunID FID-4_322102

Dissolved Gasses by RSK-175

Sample Matrix LIQUID
Lab Smp Id ICV
Level LOW
Fraction GASES
Client Smp ID ICV
Operator MA

Compound	Conc Added	Conc Recovered	% Recovered	Limits	Q
Methane	9.647	9.597	99.49	75-125	
Ethene	16.800	19.090	113.63	75-125	
Ethane	18.043	19.657	108.95	75-125	
Propane	26.463	27.238	102.93	75-125	
N-Butane	34.955	36.010	103.02	75-125	

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Form 7

Continuing Calibration Verification (CCV)

Dissolved Gasses by RSK-175

Workorder

HS23070993

Client

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Project

LHAAP 16 January 2023

07/27/2023

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Continuing Calibration Verification (CCV)

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

Workorder HS23070993

RunID FID-4_442303

Dissolved Gasses by RSK-175

Instrument ID FID-4.I
Lab File ID 033.D
Analysis Type WATER
Lab Sample ID RSK-CCV

Injection Date :00
ICAL Date(s) 24-JAN-2017 24-JAN-2017
ICAL Times :06 11:13
Quant Type ESTD

Compound	___ RRF / Conc	RF250	CCV RRF250	Min RRF	%D/ %D / %DRIFT	Max %D / %DRIFT	Curve CURVE TYPE	Q
Methane	975	800	800	0.010	17.94382	20.0	Averaged	
Ethene	586	630	630	0.010	-7.61836	20.0	Averaged	
Ethane	719	816	816	0.010	-13.45926	20.0	Averaged	

Continuing Calibration Verification (CCV)

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

Workorder HS23070993

RunID FID-4_442303

Dissolved Gasses by RSK-175

Instrument ID FID-4.I
Lab File ID 044.D
Analysis Type WATER
Lab Sample ID RSK-CCV

Injection Date :10
ICAL Date(s) 24-JAN-2017 24-JAN-2017
ICAL Times :06 11:13
Quant Type ESTD

Compound	___ RRF / Conc	RF250	CCV RRF250	Min RRF	%D/ %D / %DRIFT	Max %D / %DRIFT	Curve CURVE TYPE	Q
Methane	975	786	786	0.010	19.37911	20.0	Averaged	
Ethene	586	624	624	0.010	-6.55453	20.0	Averaged	
Ethane	719	789	789	0.010	-9.62311	20.0	Averaged	

Continuing Calibration Verification (CCV)

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

Workorder HS23070993

RunID FID-4_442303

Dissolved Gasses by RSK-175

Instrument ID FID-4.I
Lab File ID 055.D
Analysis Type WATER
Lab Sample ID RSK-CCV

Injection Date :15
ICAL Date(s) 24-JAN-2017 24-JAN-2017
ICAL Times :06 11:13
Quant Type ESTD

Compound	___ RRF / Conc	RF250	CCV RRF250	Min RRF	%D/ %D / %DRIFT	Max %D / %DRIFT	Curve CURVE TYPE	Q
Methane	975	816	816	0.010	16.33842	20.0	Averaged	
Ethene	586	642	642	0.010	-9.68521	20.0	Averaged	
Ethane	719	828	828	0.010	-15.03070	20.0	Averaged	

Continuing Calibration Verification (CCV)

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

Workorder HS23070993

RunID FID-4_442303

Dissolved Gasses by RSK-175

Instrument ID FID-4.I
Lab File ID 064.D
Analysis Type WATER
Lab Sample ID RSK-CCV

Injection Date :54
ICAL Date(s) 24-JAN-2017 24-JAN-2017
ICAL Times :06 11:13
Quant Type ESTD

Compound	RRF / Conc	RF250	CCV RRF250	Min RRF	%D/ %D / %DRIFT	Max %D / %DRIFT	Curve CURVE TYPE	Q
Methane	975	813	813	0.010	16.61485	20.0	Averaged	
Ethene	586	627	627	0.010	-7.03072	20.0	Averaged	
Ethane	719	796	796	0.010	-10.65532	20.0	Averaged	

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Analysis Run Log

Dissolved Gasses by RSK-175

Workorder

HS23070993

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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

Form 13 - Analysis Run Log

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23070993

RunID
FID-4-322102

Dissolved Gasses 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 Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23070993

RunID
FID-4-442303

Dissolved Gasses by RSK-175

Run ID FID-4_442303 **Start Date** 07/21/23 **EndDate** 07/21/23

Inj. Time	Client Sample ID	Type	Lab Sample ID	File ID	Analysis Date	DF
14:00	RSK-CCV	CCV	RSK-CCV	033.D	07/21/23	1
14:22	MBLK-230721	MBLK	MBLK-230721	035.D	07/21/23	1
14:32	LCS-230721	LCS	LCS-230721	036.D	07/21/23	1
14:47	LCSD-230721	LCSD	LCSD-230721	037.D	07/21/23	1
14:56	HS23070993-09	SAMP	16PM06-230713	038.D	07/21/23	1
15:16	HS23070993-09	SAMP	16PM06-230713	039.D	07/21/23	20
15:26	HS23071061-06	SAMP	ZZZZZZZZZZ	040.D	07/21/23	1
15:39	HS23071061-06	SAMP	ZZZZZZZZZZ	041.D	07/21/23	2
15:51	HS23071069-01	SAMP	ZZZZZZZZZZ	042.D	07/21/23	1
16:00	HS23071069-02	SAMP	ZZZZZZZZZZ	043.D	07/21/23	1
16:10	RSK-CCV	CCV	RSK-CCV	044.D	07/21/23	1
16:35	HS23071069-03	SAMP	ZZZZZZZZZZ	045.D	07/21/23	1
16:46	HS23071069-04	SAMP	ZZZZZZZZZZ	046.D	07/21/23	1
16:59	HS23071069-05	SAMP	ZZZZZZZZZZ	047.D	07/21/23	1
17:07	HS23071069-02	SAMP	ZZZZZZZZZZ	048.D	07/21/23	5
17:16	HS23071069-03	SAMP	ZZZZZZZZZZ	049.D	07/21/23	50
17:25	HS23071029-06	SAMP	ZZZZZZZZZZ	050.D	07/21/23	1
17:33	HS23071029-07	SAMP	ZZZZZZZZZZ	051.D	07/21/23	1
17:49	HS23071029-08	SAMP	ZZZZZZZZZZ	052.D	07/21/23	1
17:57	HS23071029-09	SAMP	ZZZZZZZZZZ	053.D	07/21/23	1
18:07	HS23071029-06	SAMP	ZZZZZZZZZZ	054.D	07/21/23	2
18:15	RSK-CCV	CCV	RSK-CCV	055.D	07/21/23	1
18:27	HS23071029-08	SAMP	ZZZZZZZZZZ	056.D	07/21/23	50
18:35	HS23071029-09	SAMP	ZZZZZZZZZZ	057.D	07/21/23	50
18:44	HS23071165-04	SAMP	ZZZZZZZZZZ	059.D	07/21/23	1
18:59	HS23071165-05	SAMP	ZZZZZZZZZZ	060.D	07/21/23	1
19:10	HS23071165-04	SAMP	ZZZZZZZZZZ	061.D	07/21/23	20
19:19	HS23071165-05	SAMP	ZZZZZZZZZZ	062.D	07/21/23	200
19:32	HS23071069-04DUP	DUP	ZZZZZZDUP	063.D	07/21/23	1
19:54	RSK-CCV	CCV	RSK-CCV	064.D	07/21/23	1

01322228

right solutions.
right partner.

Raw Data FID 4 322102

Dissolved Gasses by RSK-175

Workorder

HS23070993

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\001.D Page 1
Report Date: 28-Sep-2022 10:00

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\001.D
Lab Smp Id: ICAL1 Client Smp ID: ICAL1
Inj Date : 24-JAN-2017 09:06
Operator : JA Inst ID: FID-4.i
Smp Info : ICAL1;ICAL1;;;
Misc Info :
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Meth Date : 28-Sep-2022 10:00 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 11:13 Cal File: 007.D
Als bottle: 1 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Methane	1.043	1.043	0.000	374	0.38600	0.383(a)
2 Ethene	1.553	1.553	0.000	361	0.67400	0.615(a)
3 Ethane	1.716	1.716	0.000	435	0.72200	0.590(a)
4 Propane	4.073	4.073	0.000	500	1.05900	1.743
5 N-Butane	7.640	7.640	0.000	438	1.39800	3.271

QC Flag Legend

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

01322230

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\001.D

Date : 24-JAN-2017 09:06

Client ID: ICAL1

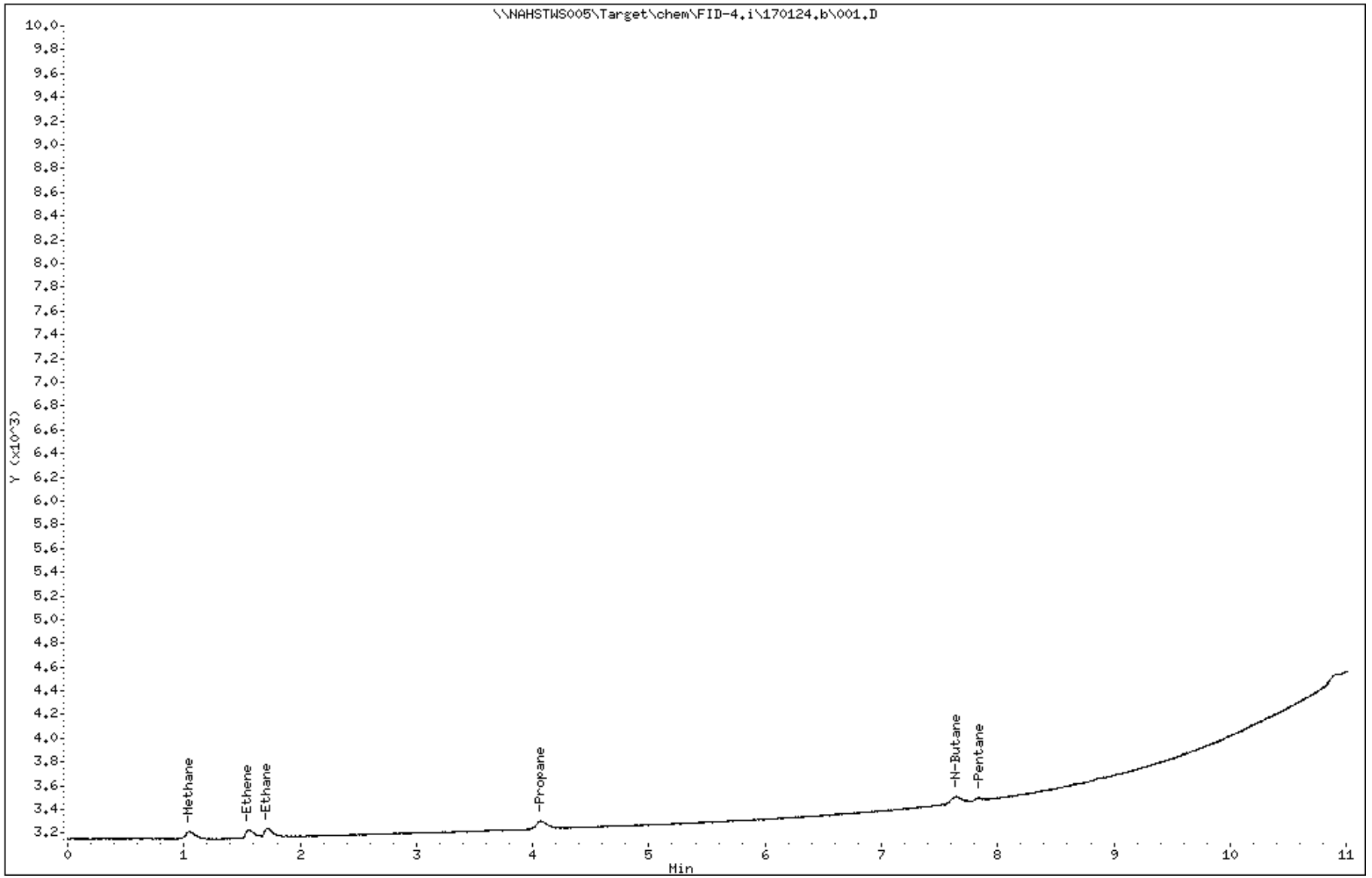
Instrument: FID-4.i

Sample Info: ICAL1;ICAL1;;;

Operator: JA

Column phase: Rtx-PLOT

Column diameter: 0.53



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

NO MANUAL INTEGRATIONS

ALS Laboratory Group

Dissolved Gases Analysis

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

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

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

01322233

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

Date : 24-JAN-2017 09:30

Client ID: ICAL2

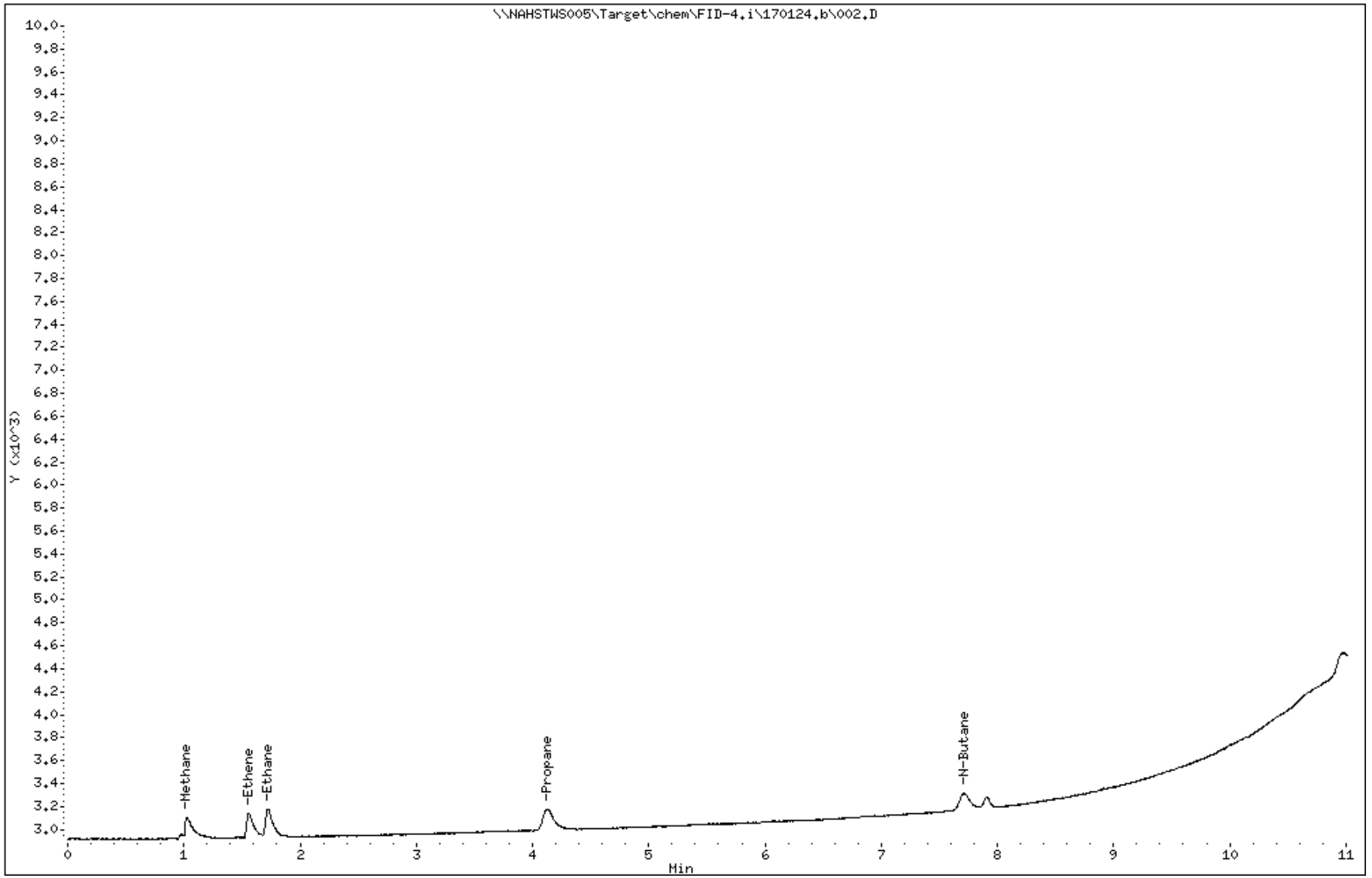
Instrument: FID-4.i

Sample Info: ICAL2;ICAL2;;;

Operator: MA

Column phase: Rtx-PLOT

Column diameter: 0.53



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

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\003.D Page 1
Report Date: 28-Sep-2022 10:00

ALS Laboratory Group

Dissolved Gases Analysis

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

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

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

01322236

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

Date : 24-JAN-2017 09:59

Client ID: ICAL3

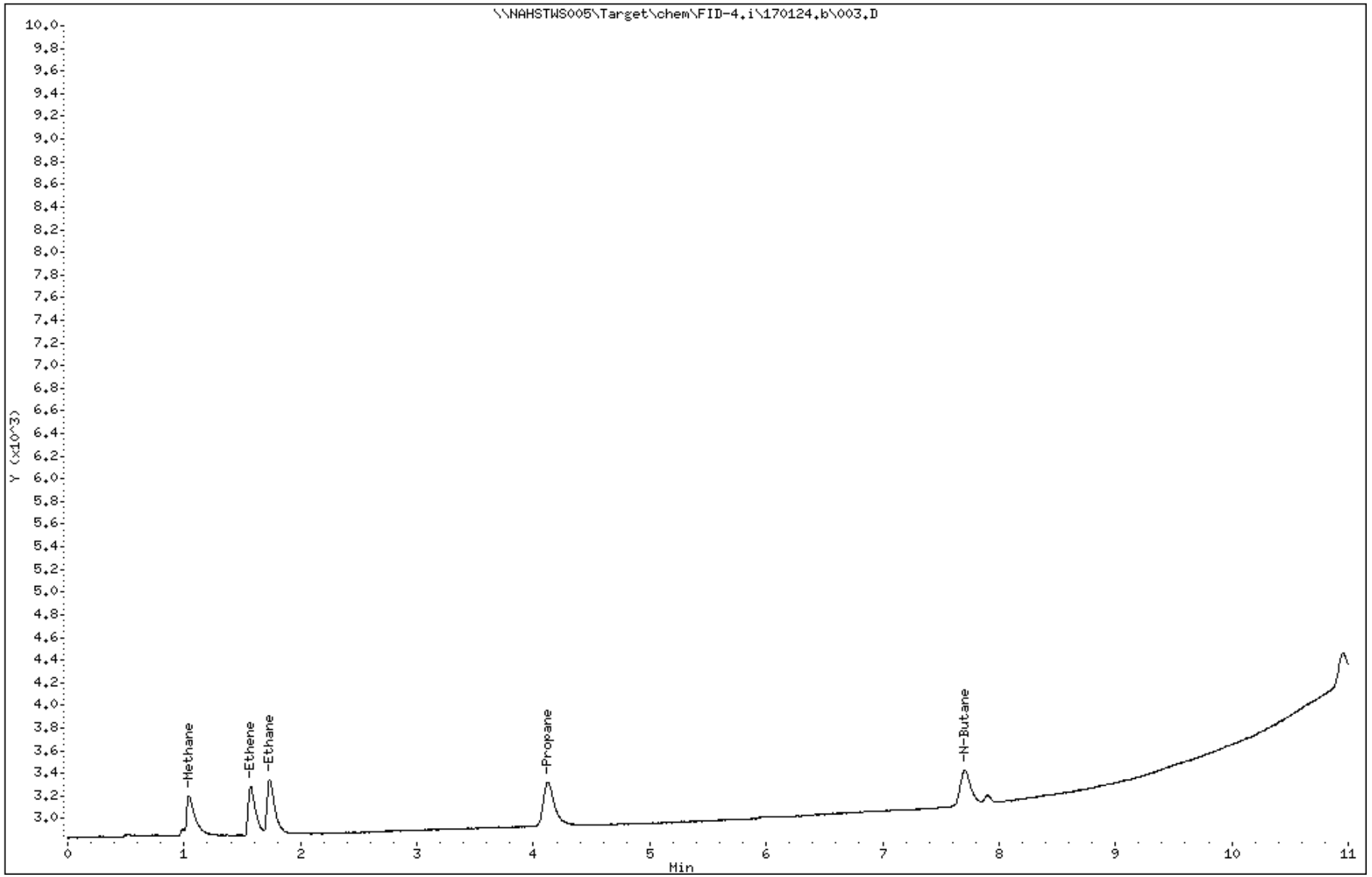
Instrument: FID-4.i

Sample Info: ICAL3;ICAL3;;;

Operator: MA

Column phase: Rtx-PLOT

Column diameter: 0.53



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

NO MANUAL INTEGRATIONS

ALS Laboratory Group

Dissolved Gases Analysis

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

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

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

QC Flag Legend

M - Compound response manually integrated.

01322239

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\004.D

Date : 24-JAN-2017 10:15

Client ID: ICAL4

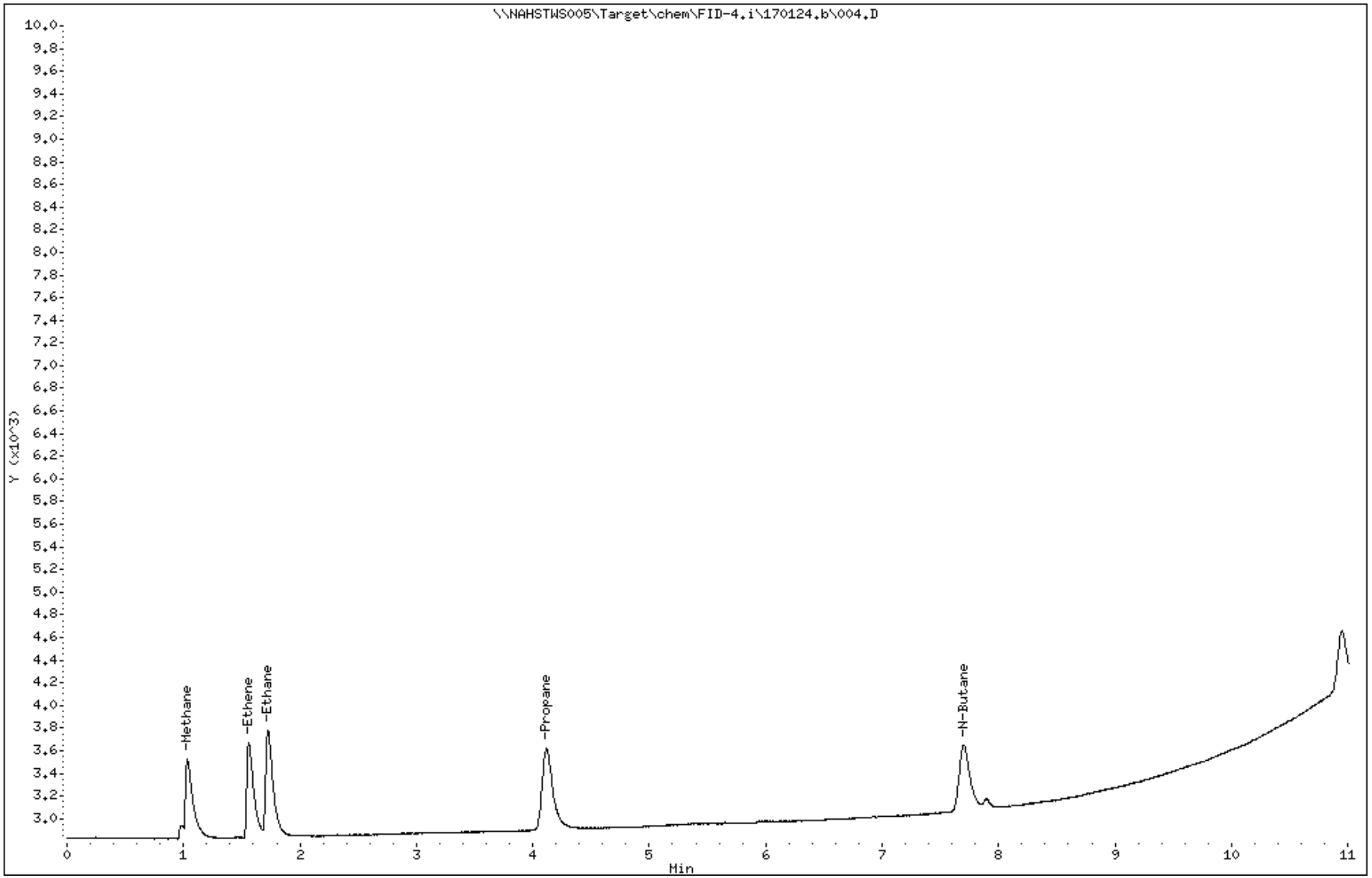
Instrument: FID-4.i

Sample Info: ICAL4;ICAL4;;;

Operator: MA

Column phase: Rtx-PLOT

Column diameter: 0.53



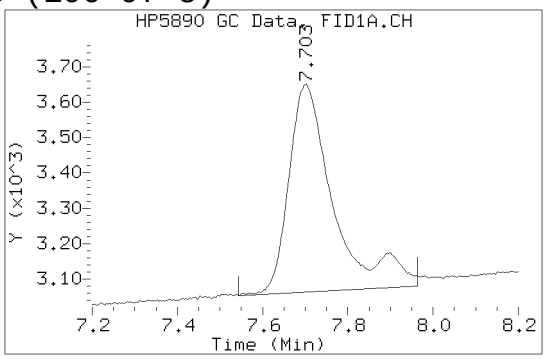
Data File : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\004.D
Inj Date : 24-JAN-2017 10:15
InstruID : FID-4.i
LabSampID : ICAL4

N-Butane (106-97-8)

Reason Code:

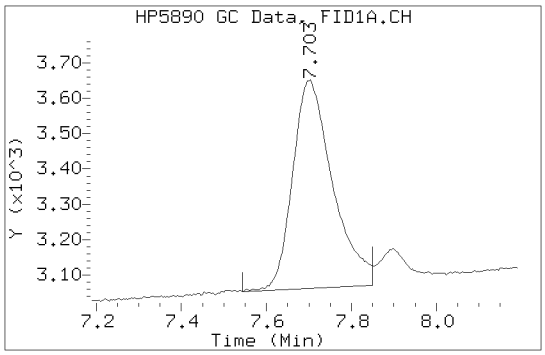
BEFORE

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)	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.

01322242

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\005.D

Date : 24-JAN-2017 10:39

Client ID: ICAL5

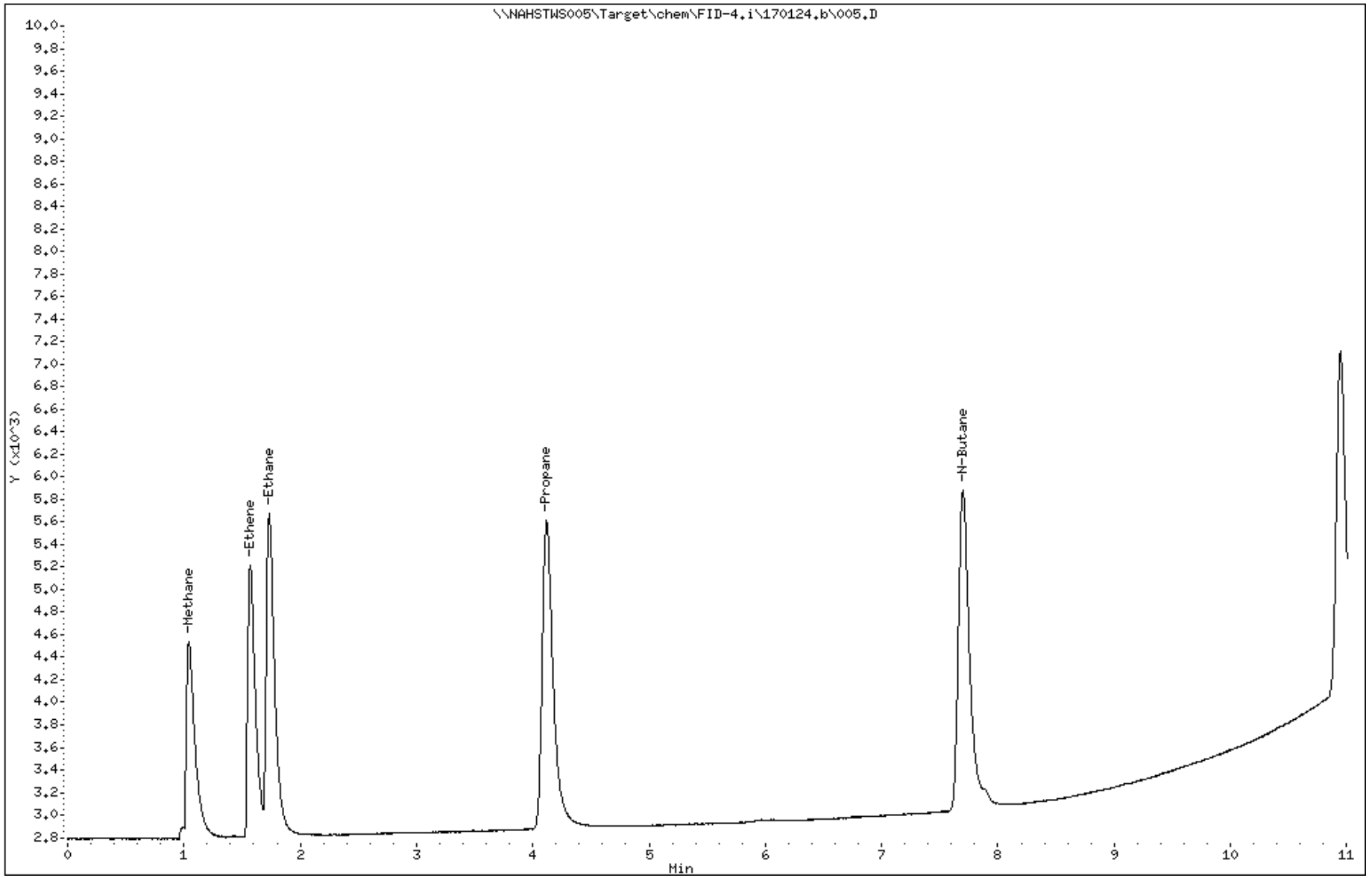
Instrument: FID-4.i

Sample Info: ICAL5;ICAL5;;;

Operator: MA

Column phase: Rtx-PLOT

Column diameter: 0.53



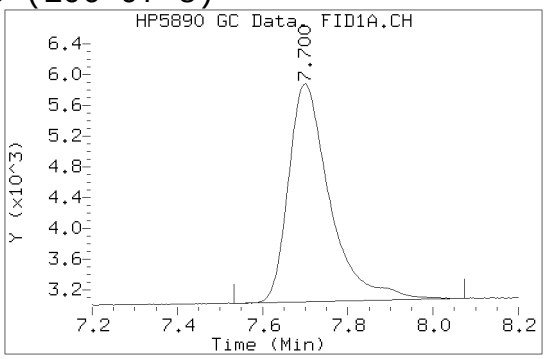
Data File : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\005.D
Inj Date : 24-JAN-2017 10:39
InstruID : FID-4.i
LabSampID : ICAL5

N-Butane (106-97-8)

Reason Code:

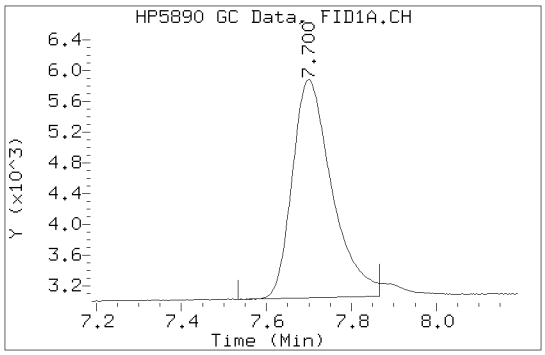
BEFORE

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



AFTER

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



ALS Laboratory Group

Dissolved Gases Analysis

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

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

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

01322245

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\006.D

Date : 24-JAN-2017 10:57

Client ID: ICAL6

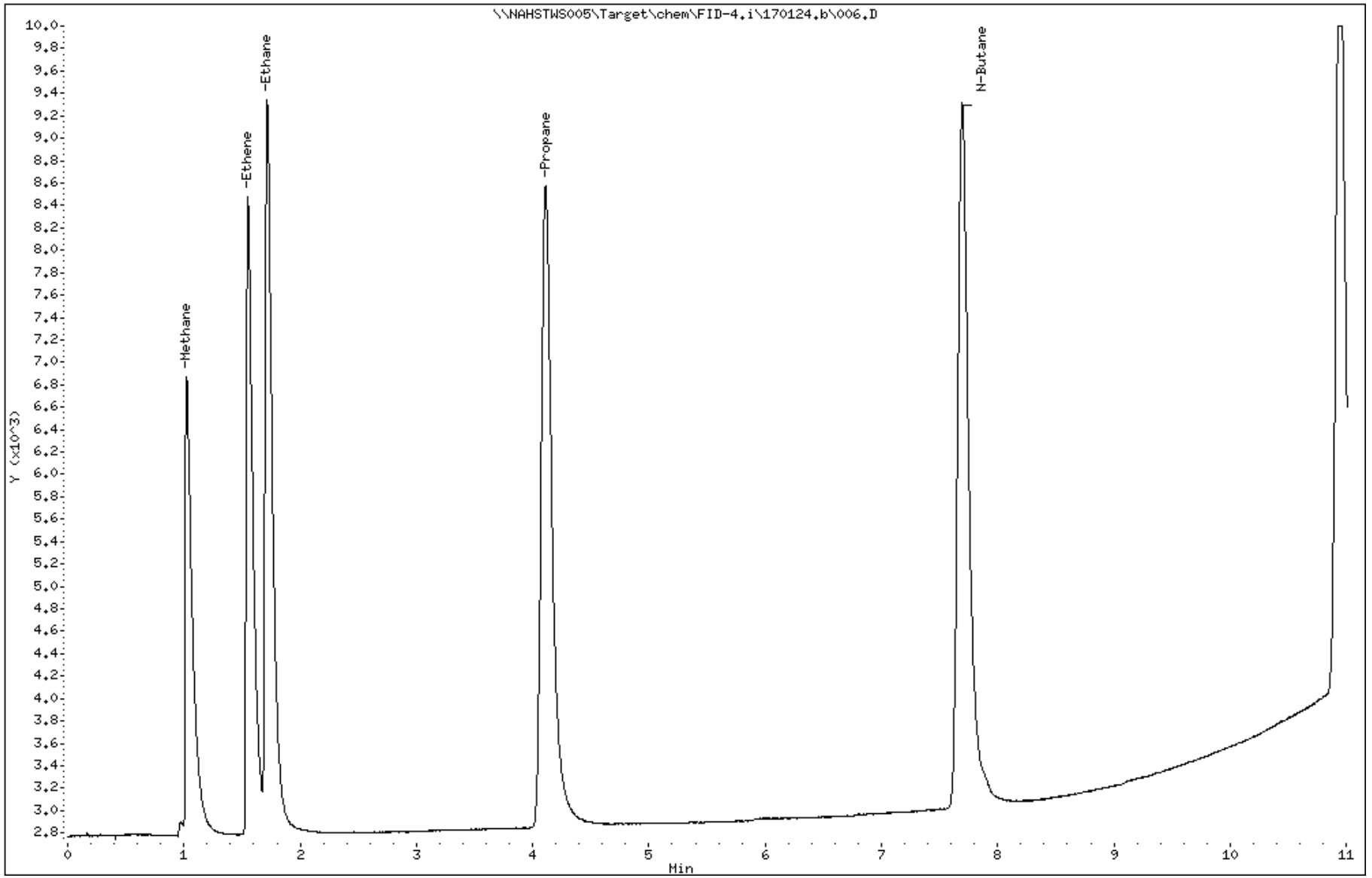
Instrument: FID-4.i

Sample Info: ICAL6;ICAL6;;;

Operator: MA

Column phase: Rtx-PLOT

Column diameter: 0.53



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

NO MANUAL INTEGRATIONS

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

ALS Laboratory Group

Dissolved Gases Analysis

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

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

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	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.

01322248

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\007.D

Page 1

Date : 24-JAN-2017 11:13

Client ID: ICAL7

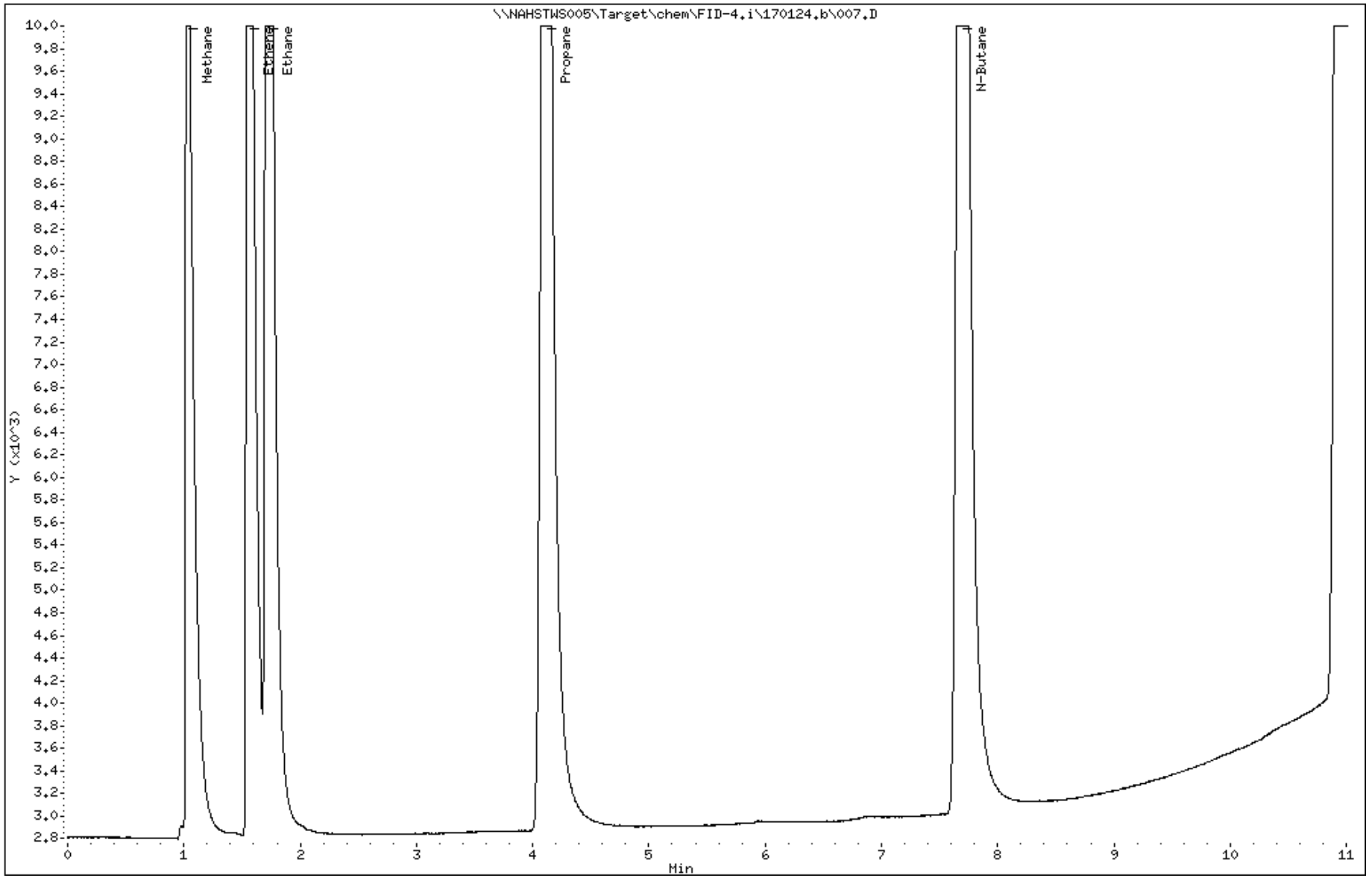
Instrument: FID-4.i

Sample Info: ICAL7;ICAL7;;;

Operator: MA

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\007.D
Inj Date : 24-JAN-2017 11:13
InstruID : FID-4.i
LabSampID : ICAL7

NO MANUAL INTEGRATIONS

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\008.D
Lab Smp Id: ICV Client Smp ID: ICV
Inj Date : 24-JAN-2017 12:05
Operator : MA Inst ID: FID-4.i
Smp Info : ICV;ICV;;;
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\170124.b\RSKNI2.m
Meth Date : 28-Sep-2022 10:00 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 11:13 Cal File: 007.D
Als bottle: 8 QC Sample: METHSPIKE
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

01322251

Data File: \\NAHSTWS005\Target\chem\FID-4.i\170124.b\008.D

Date : 24-JAN-2017 12:05

Client ID: ICV

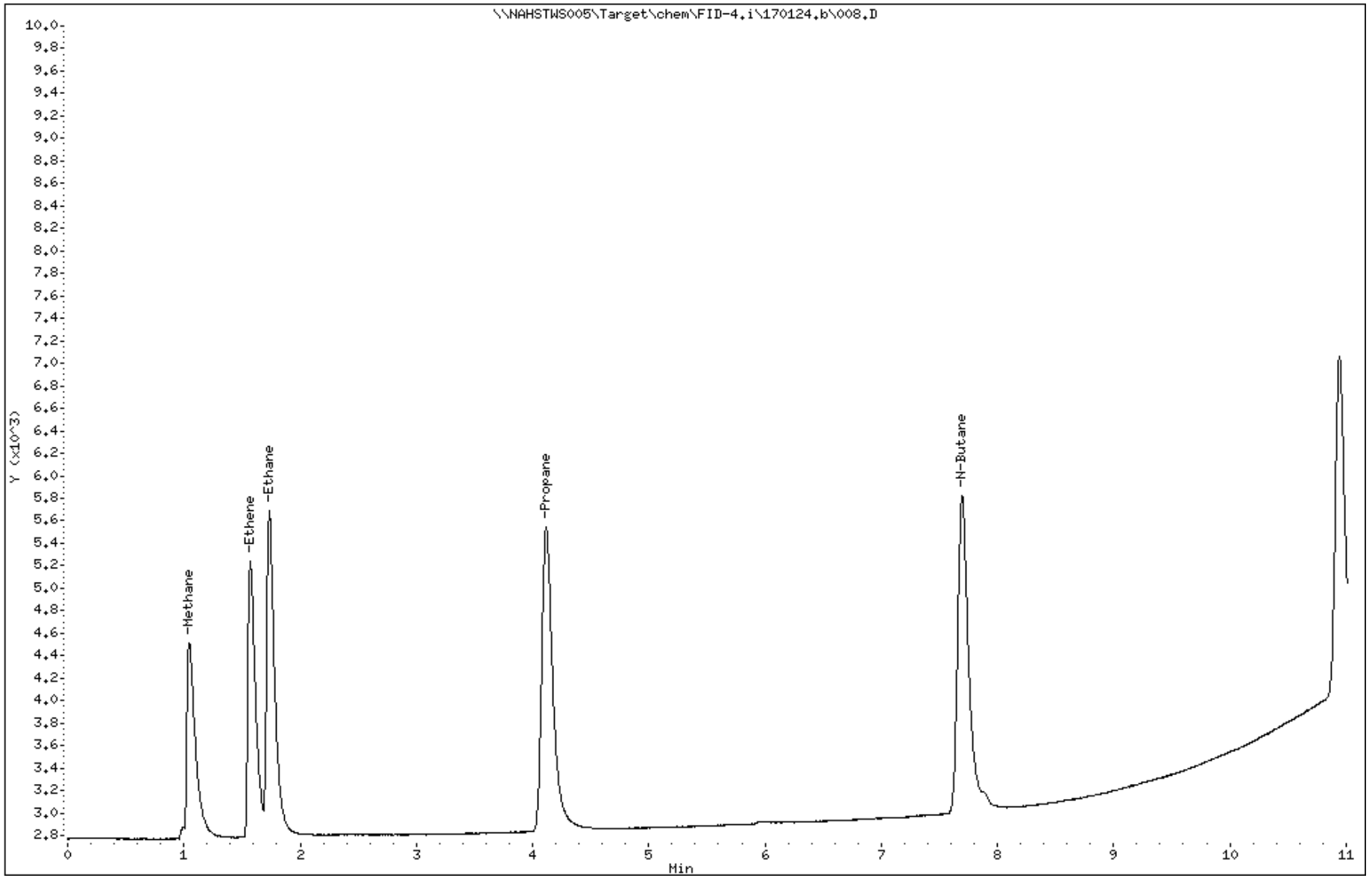
Instrument: FID-4.i

Sample Info: ICV;ICV;;;

Operator: MA

Column phase: Rtx-PLOT

Column diameter: 0.53



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Inj Date : 24-JAN-2017 12:05
InstruID : FID-4.i
LabSampID : ICV

NO MANUAL INTEGRATIONS

01322253

right solutions.
right partner.

Raw Data FID 4 442303

Dissolved Gasses by RSK-175

Workorder

HS23070993

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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

Data File: \\nahstws005\Target\chem\FID-4.i\230721.b\033.D Page 1
Report Date: 21-Jul-2023 14:08

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\230721.b\033.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 21-JUL-2023 14:00
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\230721.b\RSKNI3.m
Meth Date : 21-Jul-2023 14:08 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 33 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7022

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

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Methane	0.426	0.426	0.000	7718	9.64700	7.915
2 Ethene	0.640	0.640	0.000	10622	16.8500	18.133
3 Ethane	0.706	0.706	0.000	14729	18.0430	20.471

01322255

Data File: \\nahstws005\Target\chem\FID-4.i\230721.b\033.D

Page 1

Date : 21-JUL-2023 14:00

Client ID: RSK-CCV

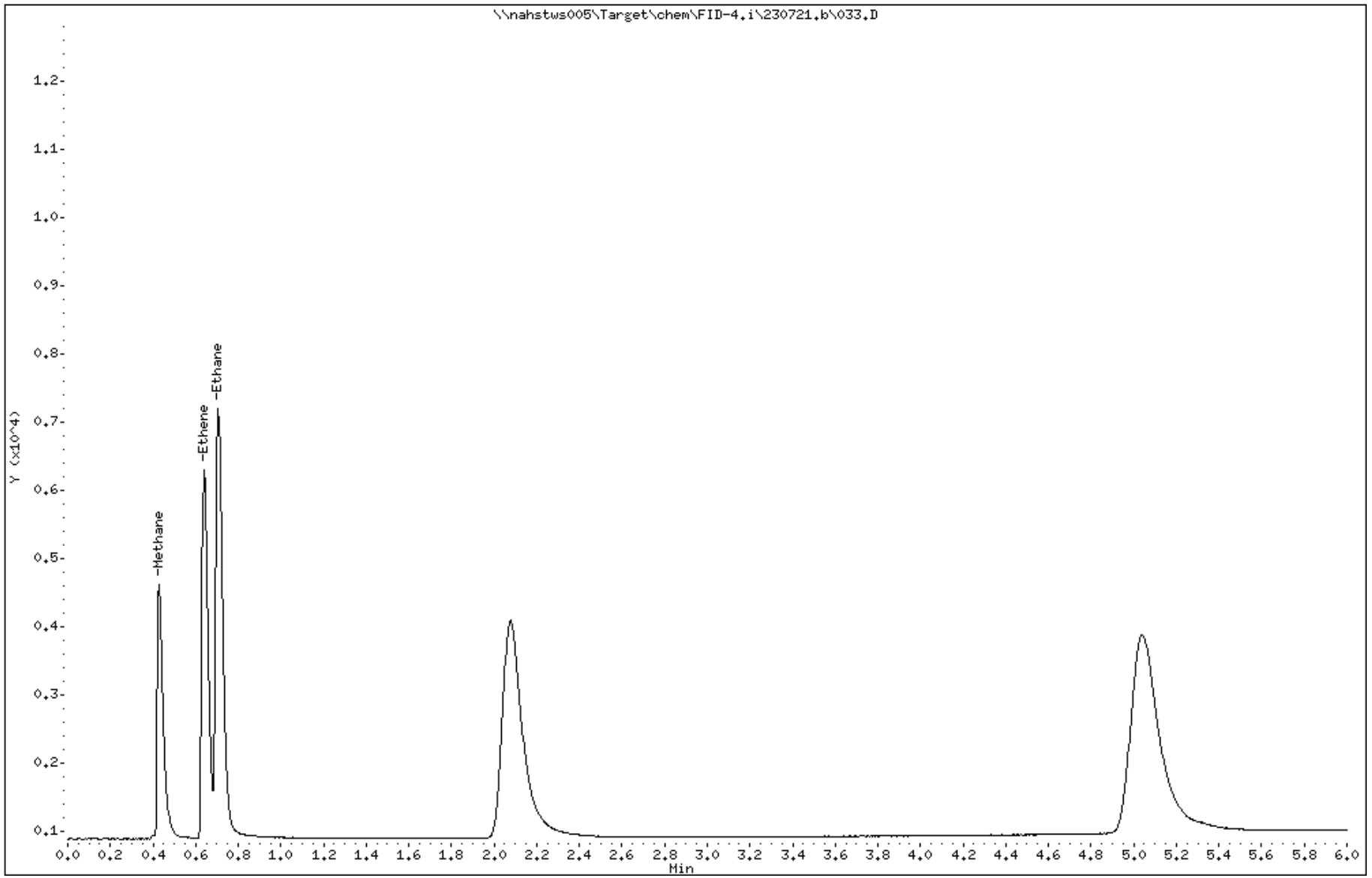
Instrument: FID-4.i

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\230721.b\033.D
Inj Date : 21-JUL-2023 14:00
InstruID : FID-4.i
LabSampID : RSK-CCV

NO MANUAL INTEGRATIONS

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\230721.b\035.D
Lab Smp Id: MBLK-230721 Client Smp ID: MBLK-230721
Inj Date : 21-JUL-2023 14:22
Operator : PL Inst ID: FID-4.i
Smp Info : MBLK-230721;MBLK-230721;3;;BLANK
Misc Info : ;1;0;1
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\230721.b\RSKNI3.m
Meth Date : 21-Jul-2023 16:34 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 35 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7022

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

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)

01322258

Data File: \\nahstws005\Target\chem\FID-4.i\230721.b\035.D

Date : 21-JUL-2023 14:22

Client ID: MBLK-230721

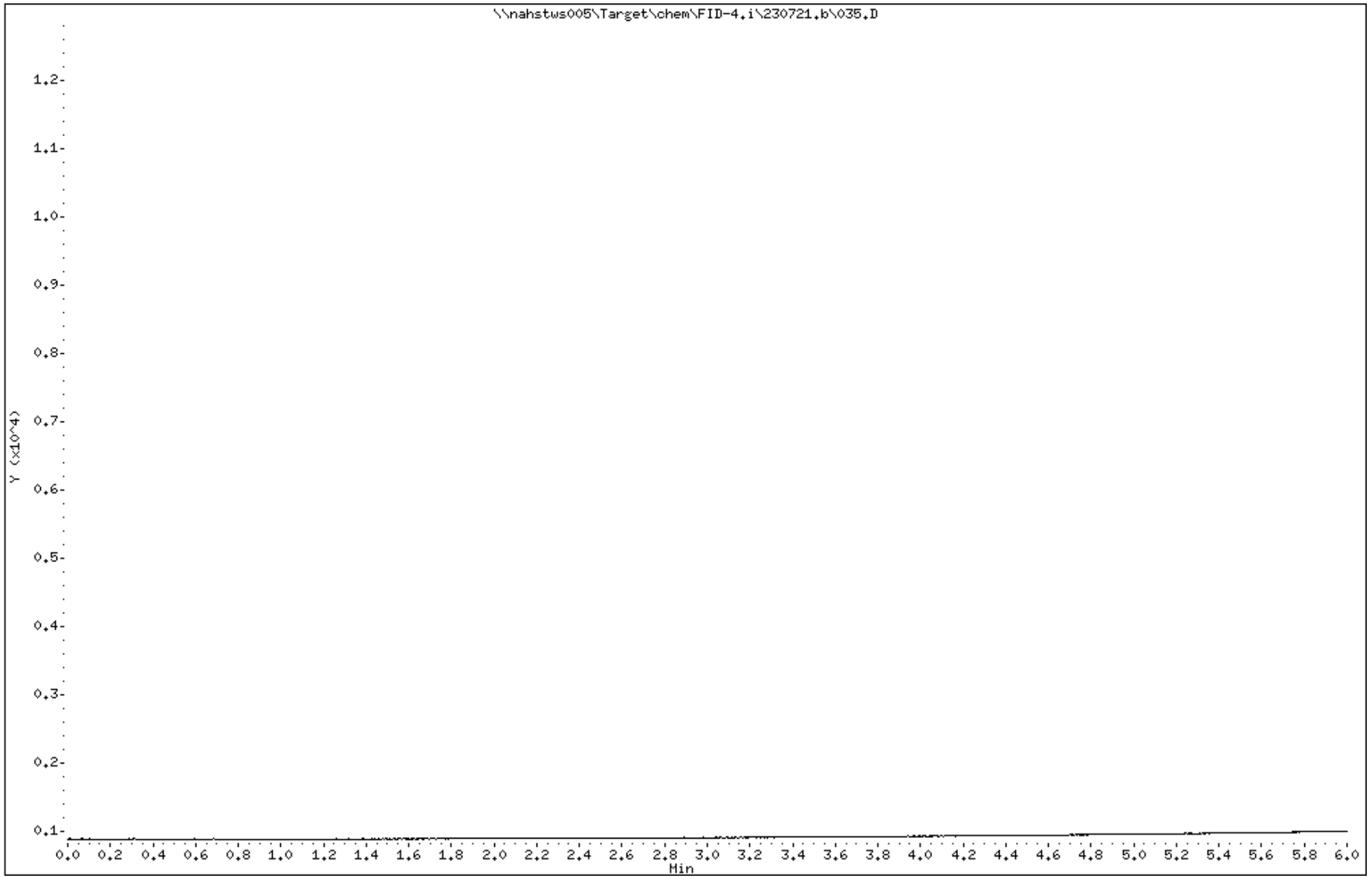
Instrument: FID-4.i

Sample Info: MBLK-230721;MBLK-230721;3;;BLANK

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\nahstws005\Target\chem\FID-4.i\230721.b\035.D
Inj Date : 21-JUL-2023 14:22
InstruID : FID-4.i
LabSampID : MBLK-230721

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\FID-4.i\230721.b\036.D Page 1
Report Date: 21-Jul-2023 16:53

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\230721.b\036.D
Lab Smp Id: LCS-230721 Client Smp ID: LCS-230721
Inj Date : 21-JUL-2023 14:32
Operator : PL Inst ID: FID-4.i
Smp Info : LCS-230721;LCS-230721;3;;LCS
Misc Info : ;1;0;1
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\230721.b\RSKNI3.m
Meth Date : 21-Jul-2023 16:34 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 36 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7022

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

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.423	0.423	0.000	7663	7.85955	7.859
2 Ethene	0.636	0.633	0.003	10600	18.0961	18.096
3 Ethane	0.703	0.703	0.000	14683	20.4075	20.407

01322261

Data File: \\nahstws005\Target\chem\FID-4.i\230721.b\036.D

Date : 21-JUL-2023 14:32

Client ID: LCS-230721

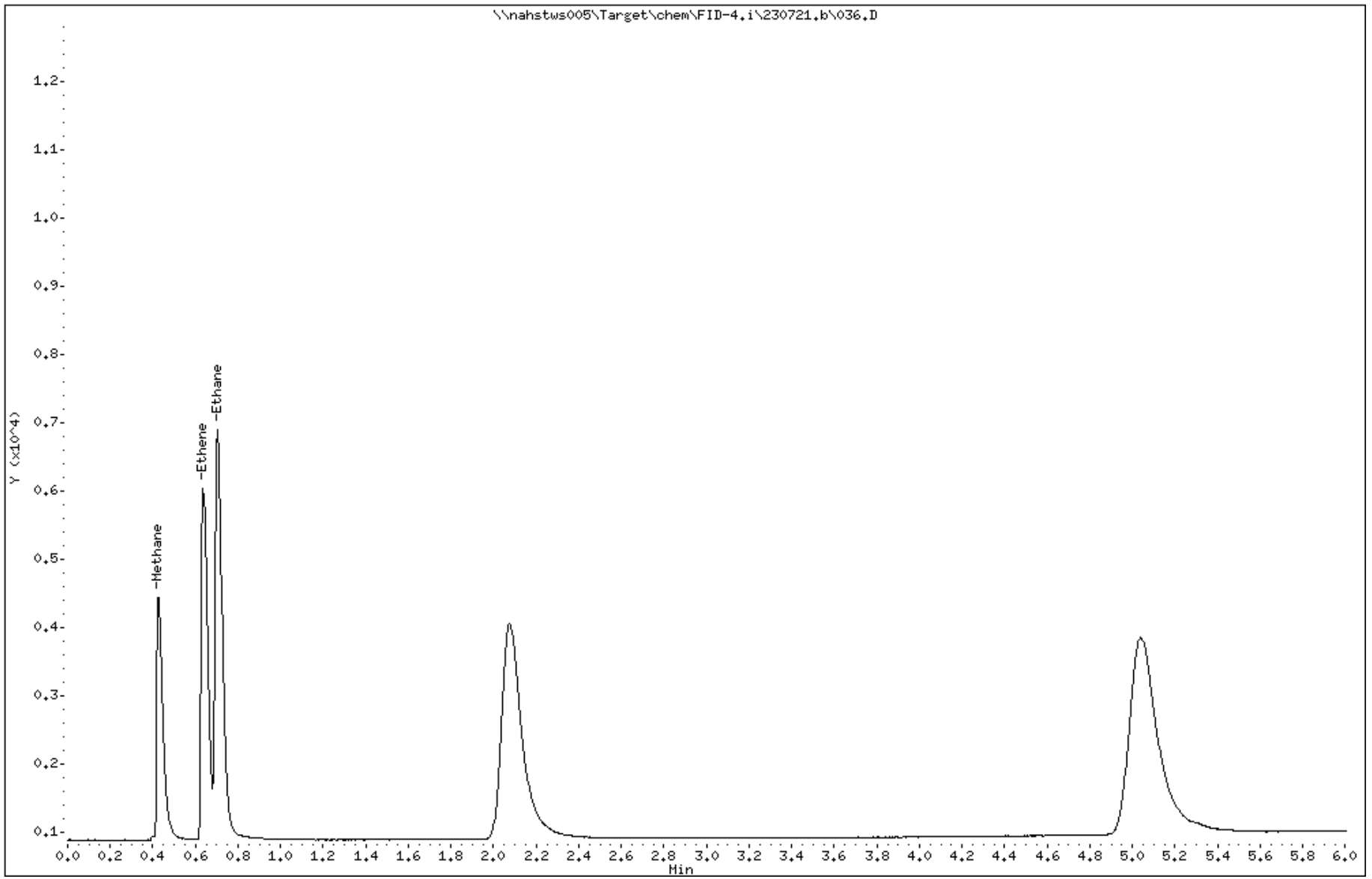
Instrument: FID-4.i

Sample Info: LCS-230721;LCS-230721;3;;LCS

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\nahstws005\Target\chem\FID-4.i\230721.b\036.D
Inj Date : 21-JUL-2023 14:32
InstruID : FID-4.i
LabSampID : LCS-230721

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\FID-4.i\230721.b\037.D Page 1
Report Date: 21-Jul-2023 16:53

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\230721.b\037.D
Lab Smp Id: LCSD-230721 Client Smp ID: LCSD-230721
Inj Date : 21-JUL-2023 14:47
Operator : PL Inst ID: FID-4.i
Smp Info : LCSD-230721;LCSD-230721;3;;LCSD
Misc Info : ;1;0;1
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\230721.b\RSKNI3.m
Meth Date : 21-Jul-2023 16:34 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 37 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7022

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

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.430	0.423	0.007	7855	8.05647	8.056
2 Ethene	0.640	0.633	0.007	10834	18.4956	18.495
3 Ethane	0.706	0.703	0.003	14719	20.4576	20.457

01322264

Data File: \\nahstws005\target\chem\fid-4.i\230721.b\037.d

Date : 21-JUL-2023 14:47

Client ID: LCSD-230721

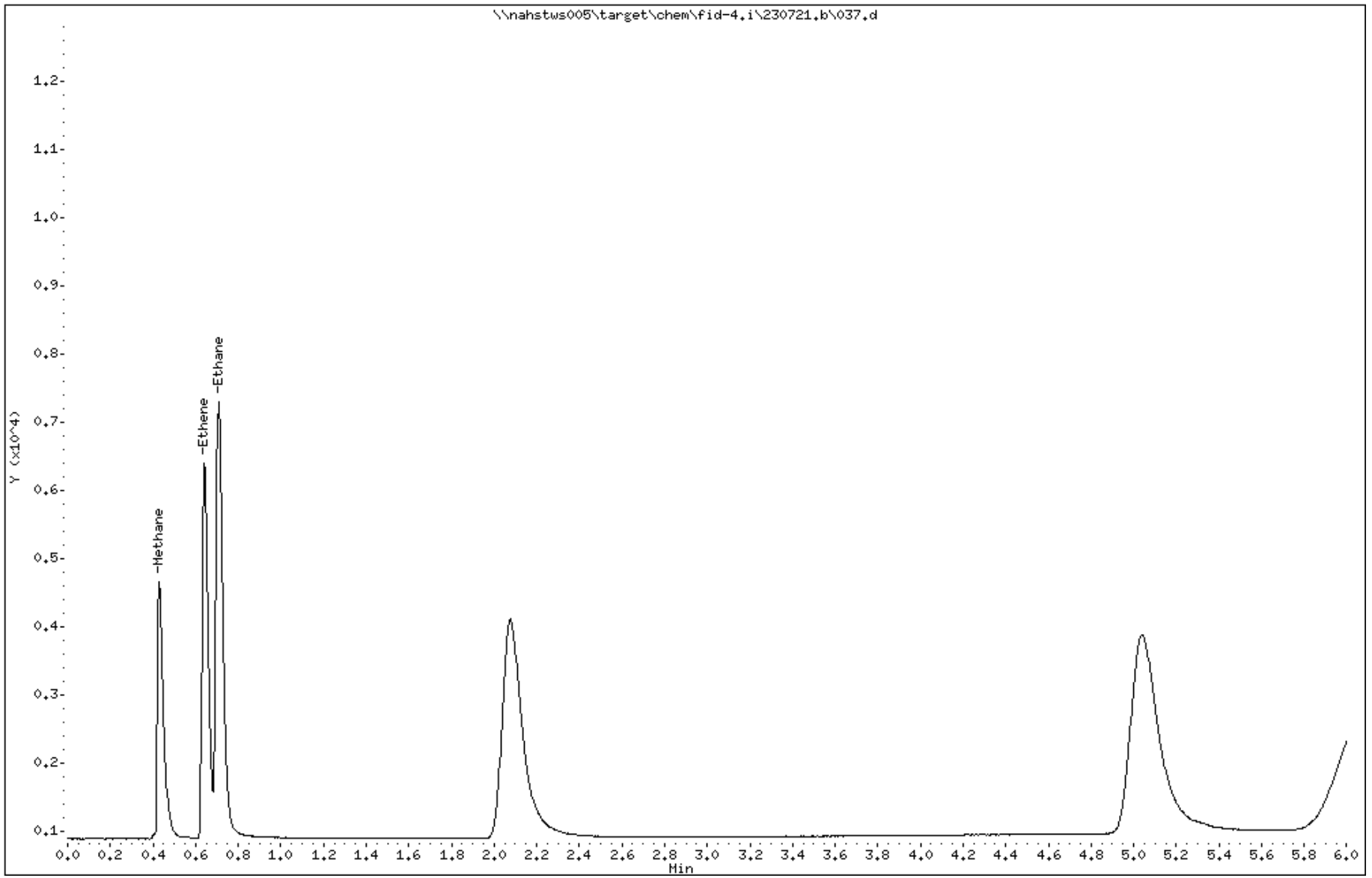
Instrument: FID-4.i

Sample Info: LCSD-230721;LCSD-230721;3;;LCSD

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\nahstws005\target\chem\fid-4.i\230721.b\037.d
Inj Date : 21-JUL-2023 14:47
InstruID : FID-4.i
LabSampID : LCSD-230721

NO MANUAL INTEGRATIONS

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\230721.b\038.D
Lab Smp Id: HS23070993-09 Client Smp ID: HS23070993-09
Inj Date : 21-JUL-2023 14:56
Operator : PL Inst ID: FID-4.i
Smp Info : HS23070993-09;HS23070993-09
Misc Info : ;1;0;1
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\230721.b\RSKNI3.m
Meth Date : 21-Jul-2023 14:08 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 38
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7022

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

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.433	0.426	0.007	564399	578.875	578.875(A)
2 Ethene	0.640	0.640	0.000	96933	165.482	165.482(A)

QC Flag Legend

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

01322267

Data File: \\nahstws005\Target\chem\FID-4.i\230721.b\038.D

Date : 21-JUL-2023 14:56

Client ID: HS23070993-09

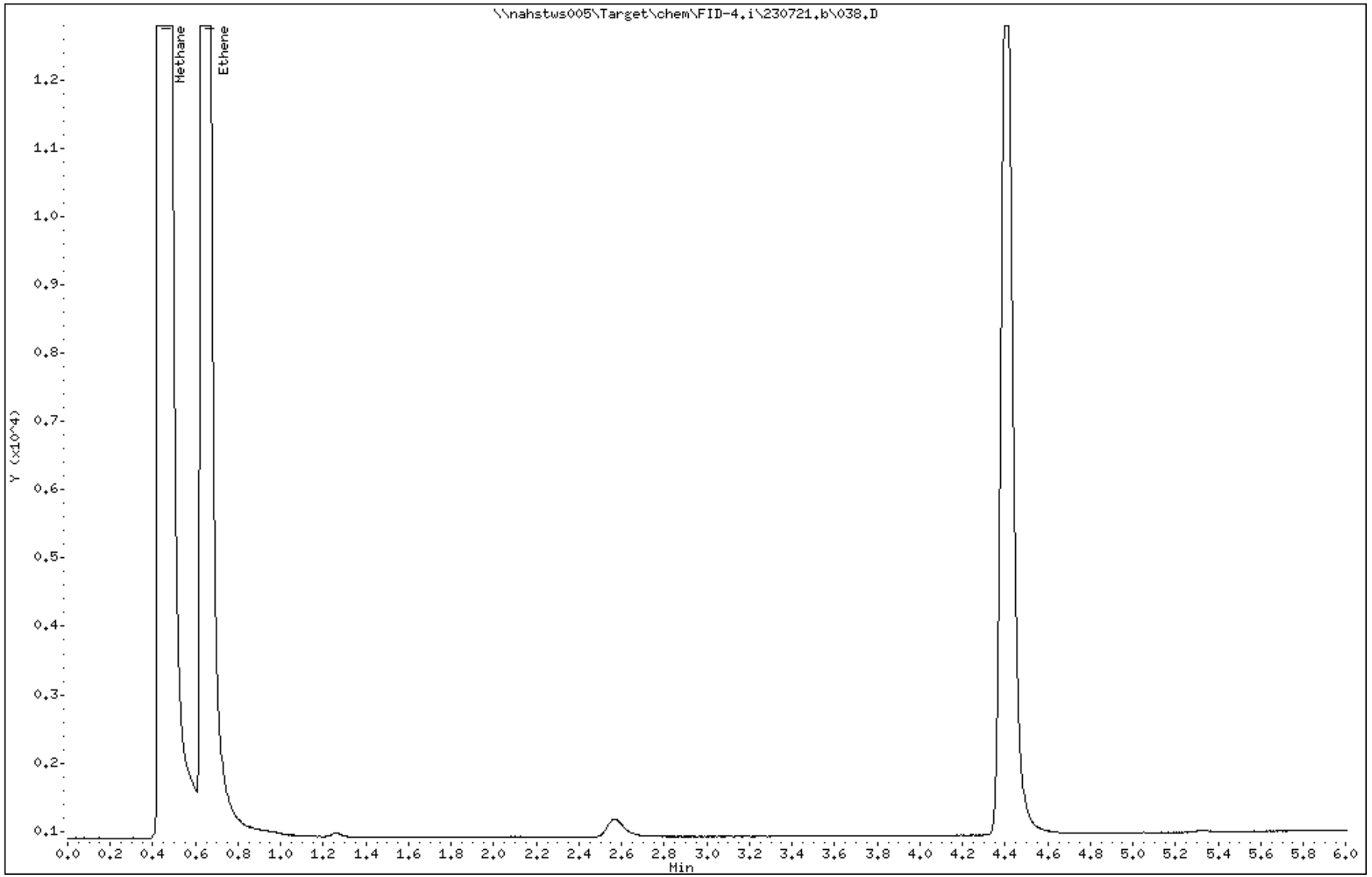
Instrument: FID-4.i

Sample Info: HS23070993-09;HS23070993-09

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\nahstws005\Target\chem\FID-4.i\230721.b\038.D
Inj Date : 21-JUL-2023 14:56
InstruID : FID-4.i
LabSampID : HS23070993-09

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\FID-4.i\230721.b\039.D Page 1
Report Date: 21-Jul-2023 15:30

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\230721.b\039.D
Lab Smp Id: HS23070993-09 Client Smp ID: HS23070993-09
Inj Date : 21-JUL-2023 15:16
Operator : PL Inst ID: FID-4.i
Smp Info : HS23070993-09;HS23070993-09
Misc Info : ;1;0;20
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\230721.b\RSKNI3.m
Meth Date : 21-Jul-2023 14:08 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 39
Dil Factor: 20.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7022

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

					CONCENTRATIONS	
					ON-COLUMN	FINAL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	0.443	0.426	0.017	29111	29.8577	597.153
2 Ethene	0.653	0.640	0.013	5543	9.46291	189.258

01322270

Data File: \\nahstws005\Target\chem\FID-4.i\230721.b\039.D

Date : 21-JUL-2023 15:16

Client ID: HS23070993-09

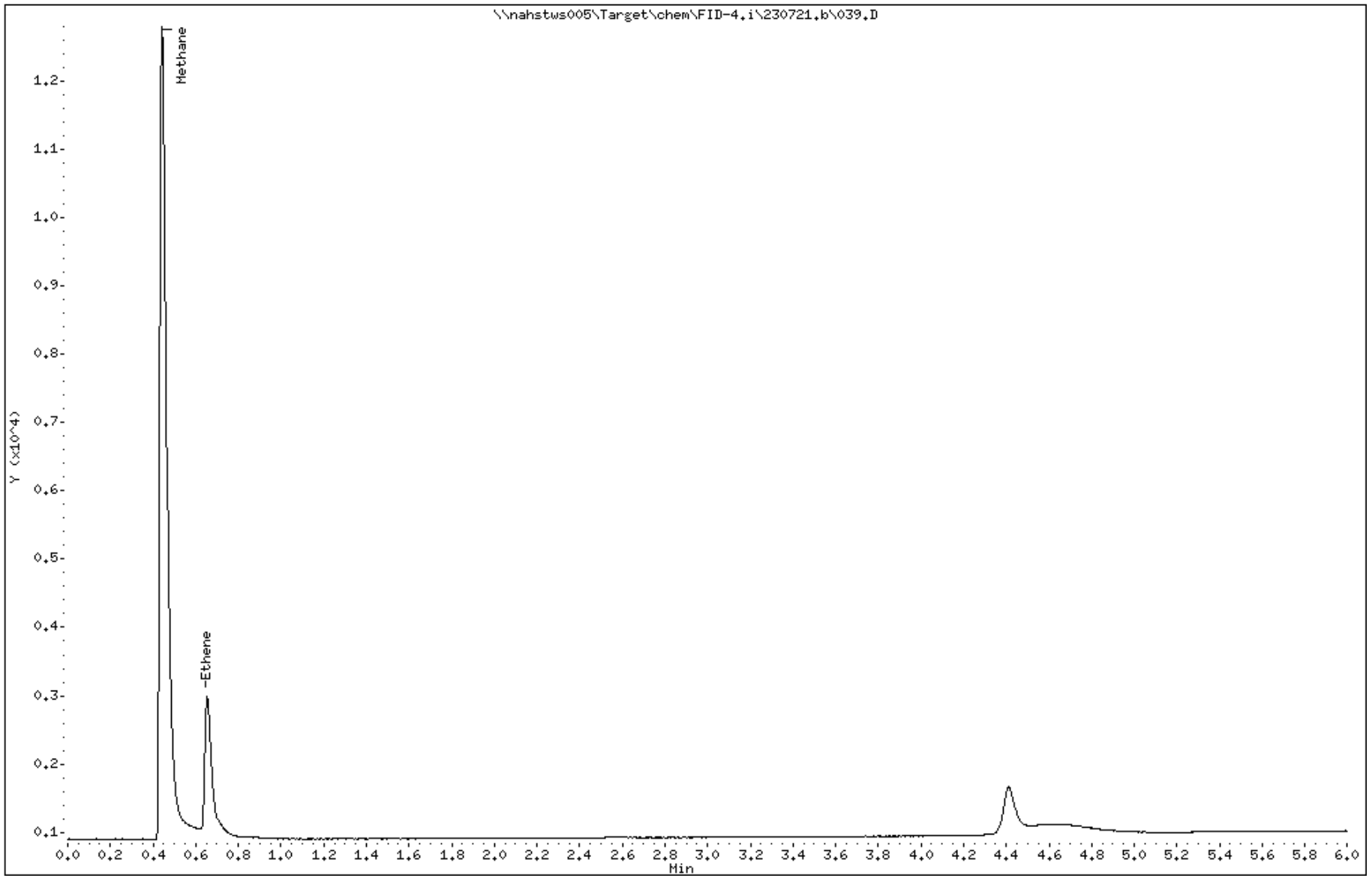
Instrument: FID-4.i

Sample Info: HS23070993-09;HS23070993-09

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\nahstws005\Target\chem\FID-4.i\230721.b\039.D
Inj Date : 21-JUL-2023 15:16
InstruID : FID-4.i
LabSampID : HS23070993-09

NO MANUAL INTEGRATIONS

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\230721.b\044.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 21-JUL-2023 16:10
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\230721.b\RSKNI3.m
Meth Date : 21-Jul-2023 16:34 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 44 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7022

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

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Methane	0.423	0.423	0.000	7583	9.64700	7.777
2 Ethene	0.633	0.633	0.000	10517	16.8500	17.954
3 Ethane	0.703	0.703	0.000	14231	18.0430	19.779

01322273

Data File: \\nahstws005\Target\chem\FID-4.i\230721.b\044.D

Page 1

Date : 21-JUL-2023 16:10

Client ID: RSK-CCV

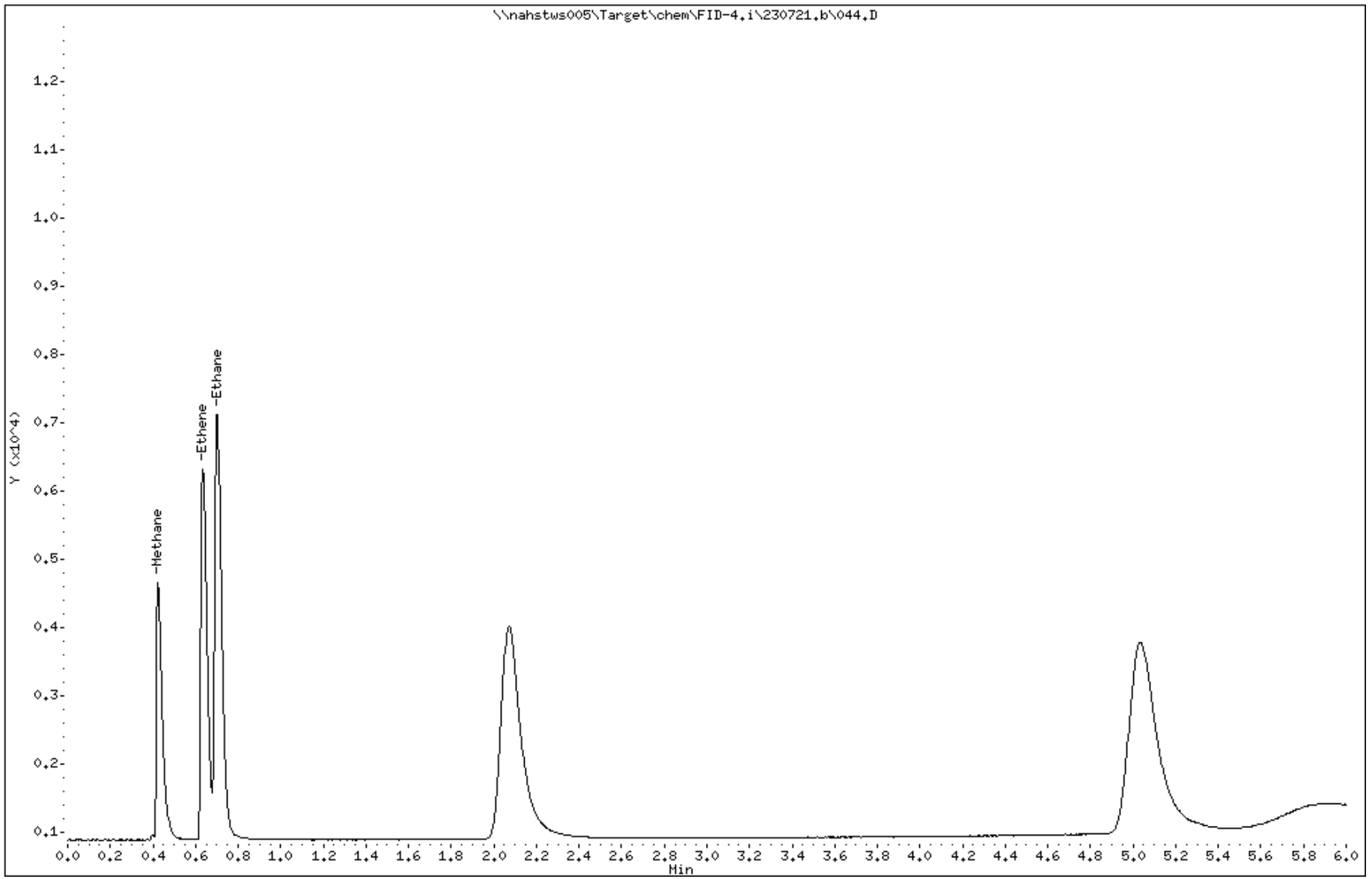
Instrument: FID-4.i

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\230721.b\044.D
Inj Date : 21-JUL-2023 16:10
InstruID : FID-4.i
LabSampID : RSK-CCV

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\FID-4.i\230721.b\055.D Page 1
Report Date: 21-Jul-2023 18:26

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\230721.b\055.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 21-JUL-2023 18:15
Operator : JA Inst ID: FID-4.i
Smp Info : RSK-CCV;RSK-CCV;2;4
Misc Info :
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\230721.b\RSKNI3.m
Meth Date : 21-Jul-2023 18:26 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 55 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	0.426	0.426	0.000	7869	9.64700	8.070
2 Ethene	0.640	0.640	0.000	10826	16.8500	18.481
3 Ethane	0.706	0.706	0.000	14933	18.0430	20.754

01322276

Data File: \\nahstws005\Target\chem\FID-4.i\230721.b\055.D

Page 1

Date : 21-JUL-2023 18:15

Client ID: RSK-CCV

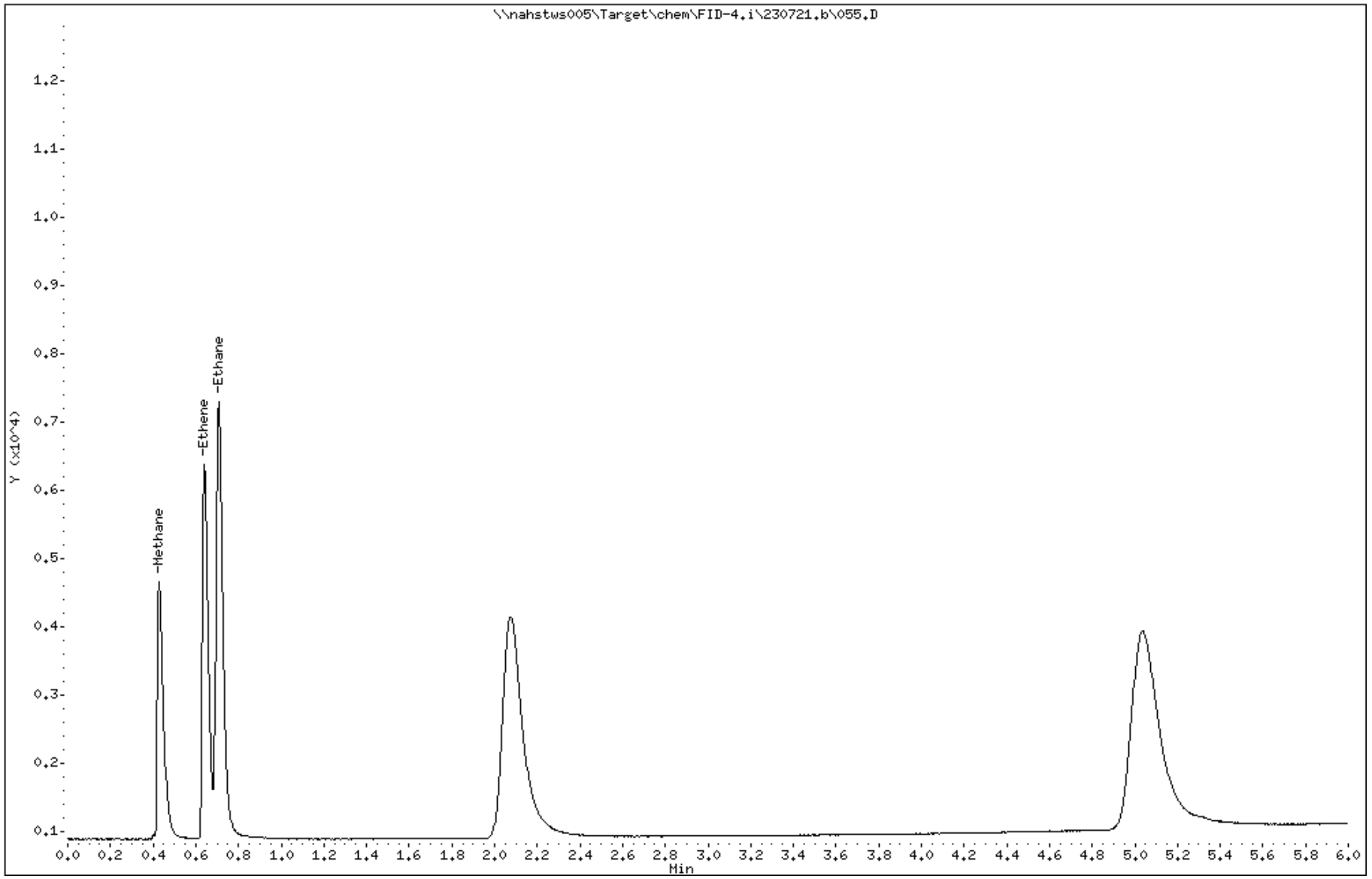
Instrument: FID-4.i

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\230721.b\055.D
Inj Date : 21-JUL-2023 18:15
InstruID : FID-4.i
LabSampID : RSK-CCV

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\FID-4.i\230721.b\063.D Page 1
Report Date: 21-Jul-2023 19:58

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\230721.b\063.D
Lab Smp Id: HS23071069-04DUP Client Smp ID: HS23071069-04DUP
Inj Date : 21-JUL-2023 19:32
Operator : PL Inst ID: FID-4.i
Smp Info : HS23071069-04DUP;HS23071069-04DUP
Misc Info : ;1;0;1
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\230721.b\RSKNI3.m
Meth Date : 21-Jul-2023 18:26 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 63
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: NAHSTW7022

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

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.426	0.426	0.000	15380	15.7745	15.774
3 Ethane	0.706	0.706	0.000	402	0.55873	0.558(a)

QC Flag Legend

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

01322279

Data File: \\nahstws005\Target\chem\FID-4.i\230721.b\063.D

Page 1

Date : 21-JUL-2023 19:32

Client ID: HS23071069-04DUP

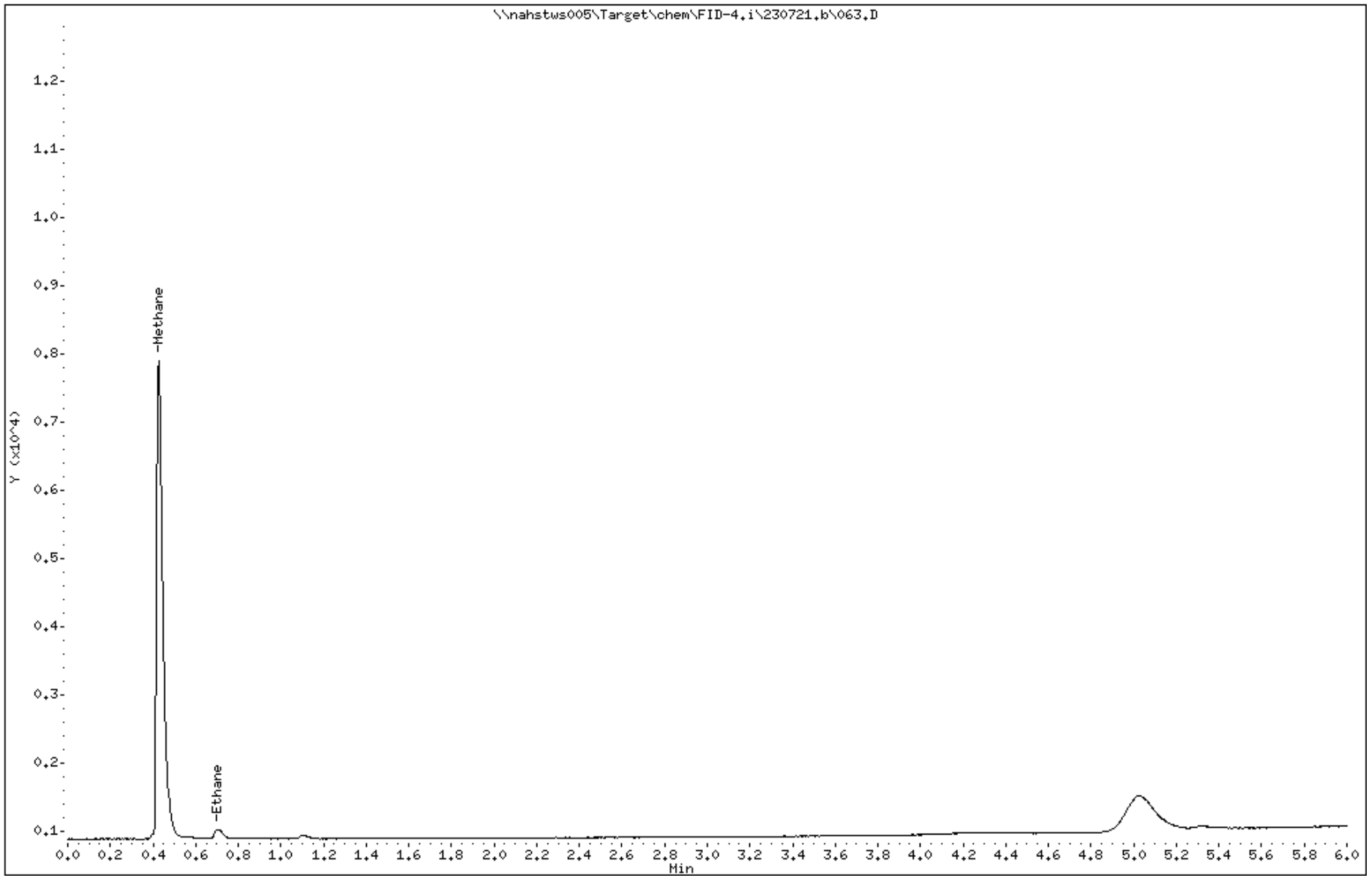
Instrument: FID-4.i

Sample Info: HS23071069-04DUP;HS23071069-04DUP

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File : \\nahstws005\Target\chem\FID-4.i\230721.b\063.D
Inj Date : 21-JUL-2023 19:32
InstruID : FID-4.i
LabSampID : HS23071069-04DUP

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\FID-4.i\230721.b\064.D Page 1
Report Date: 21-Jul-2023 20:03

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\230721.b\064.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 21-JUL-2023 19:54
Operator : JA Inst ID: FID-4.i
Smp Info : RSK-CCV;RSK-CCV;2;4
Misc Info :
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\230721.b\RSKNI3.m
Meth Date : 21-Jul-2023 20:03 samy.mata Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 64 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	0.426	0.426	0.000	7843	9.64700	8.044
2 Ethene	0.636	0.636	0.000	10564	16.8500	18.034
3 Ethane	0.703	0.703	0.000	14365	18.0430	19.965

01322282

Data File: \\nahstws005\Target\chem\FID-4.i\230721.b\064.D

Page 1

Date : 21-JUL-2023 19:54

Client ID: RSK-CCV

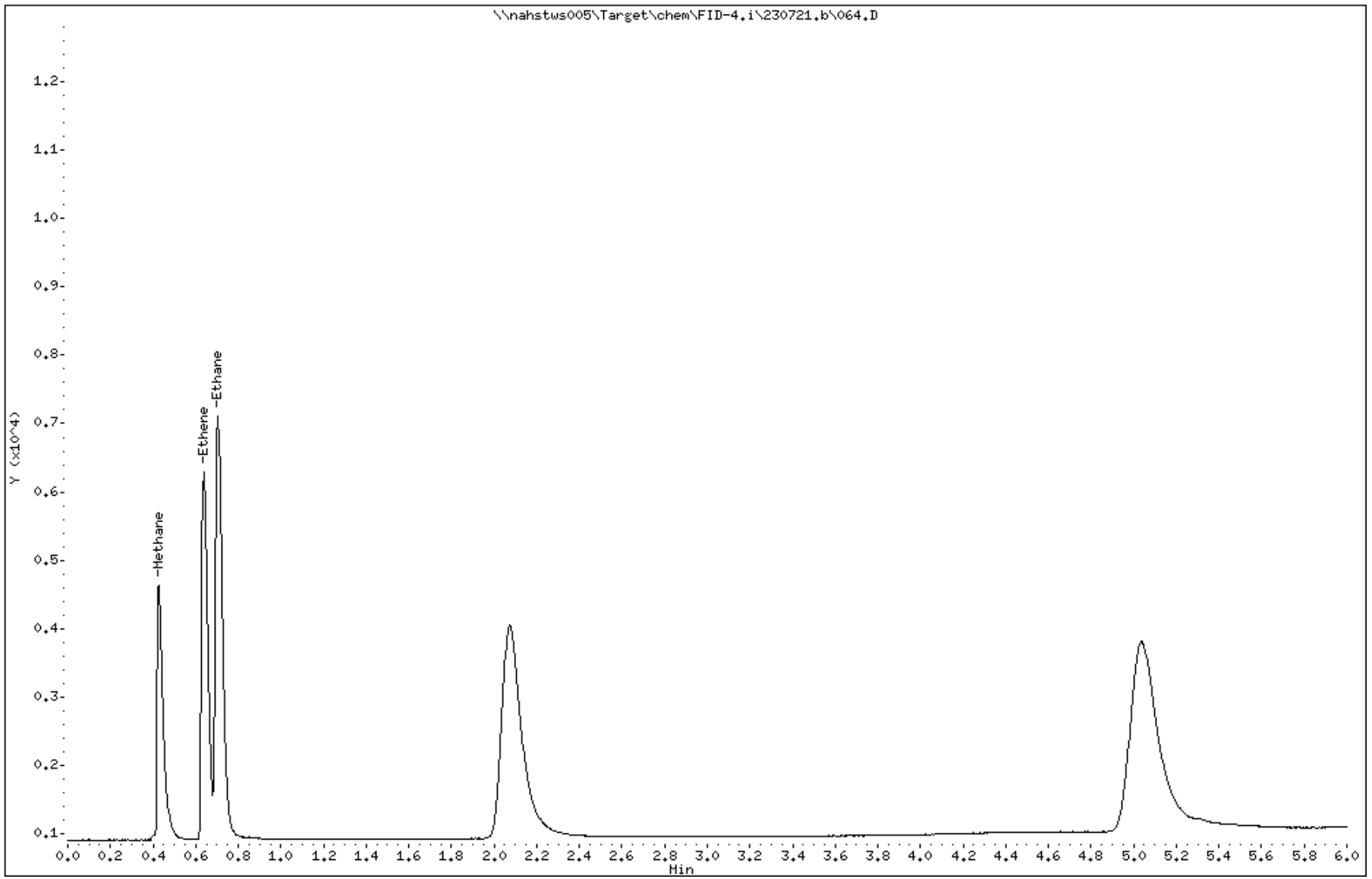
Instrument: FID-4.i

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\230721.b\064.d
Inj Date : 21-JUL-2023 19:54
InstruID : FID-4.i
LabSampID : RSK-CCV

NO MANUAL INTEGRATIONS

HS23070993 Perch Sub Data E2300657-IV

ALS WO# HS23070993

July 26, 2023 Service Request No:E2300657

Bernadette Fini
ALS Laboratory Group
10450 Stancliff Road
Suite 210
Houston, TX 77099-4338

Laboratory Results for: HS23070993

Dear Bernadette,

Enclosed are the results of the sample(s) submitted to our laboratory July 20, 2023
For your reference, these analyses have been assigned our service request number **E2300657.**

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

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

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

James Guin

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

Certificate of Analysis

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

ALS Environmental

Client:	ALS Environmental – US	**Service Request No.:**	E2300657
Project:	HS23070993	**Date Received:**	07/20/2023
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

Ten samples were received for analysis at ALS Environmental in Houston on 07/20/2023.

The sample were received in good condition and is 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:

EQ2300354: Laboratory Control Spike/Duplicate Laboratory Control Spike (LCS/DLCS) samples were analyzed and reported in lieu of 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:**E2300657
Project: HS23070993

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
E2300657-001	16WW37-230713	7/13/2023	0700
E2300657-002	16WW37-230713-FD	7/13/2023	0700
E2300657-003	16WW38-230713	7/13/2023	0745
E2300657-004	16WW44-230713	7/13/2023	0825
E2300657-005	16RW07-230713	7/13/2023	0905
E2300657-006	16RW06-230713	7/13/2023	0945
E2300657-007	16WW46-230713	7/13/2023	1030
E2300657-008	16PM09-230713	7/13/2023	1115
E2300657-009	16PM06-230713	7/13/2023	1155
E2300657-010	16PM14-230713	7/13/2023	1240

Service Request Summary

Folder #: **E2300657**
Client Name: ALS Environmental - US
Project Name: HS23070993
Project Number:

Report To: Bernadette Fini
ALS Laboratory Group
10450 Stancliff Road
Houston, TX 77099-4338
USA
Phone Number: 281-530-5656
Cell Number:
Fax Number: 281-530-5887
E-mail: bernadette.fini@alsglobal.com

Project Chemist: James Guin
Originating Lab: HOUSTON
Logged By: XMI
Date Received: 07/20/23
Internal Due Date: 7/28/2023
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS23070993
EDD: No EDD Specified

10 120 mL-Plastic Bottle Natural WM Unpreserved
Location: SUBBED
Pressure Gas:

Lab Samp No.	Client Samp No	Matrix	Collected	HOUSTON ClO4 DOD/6850
E2300657-001	16WW37-230713	Water	07/13/23 0700	**IV**
E2300657-002	16WW37-230713-FD	Water	07/13/23 0700	**IV**
E2300657-003	16WW38-230713	Water	07/13/23 0745	**IV**
E2300657-004	16WW44-230713	Water	07/13/23 0825	**IV**
E2300657-005	16RW07-230713	Water	07/13/23 0905	**IV**
E2300657-006	16RW06-230713	Water	07/13/23 0945	**IV**
E2300657-007	16WW46-230713	Water	07/13/23 1030	**IV**
E2300657-008	16PM09-230713	Water	07/13/23 1115	**IV**
E2300657-009	16PM06-230713	Water	07/13/23 1155	**IV**
E2300657-010	16PM14-230713	Water	07/13/23 1240	**IV**

Service Request Summary

Folder #: **E2300657**
Client Name: ALS Environmental - US
Project Name: HS23070993
Project Number:

Report To: Bernadette Fini
ALS Laboratory Group
10450 Stancliff Road
Houston, TX 77099-4338
USA
Phone Number: 281-530-5656
Cell Number:
Fax Number: 281-530-5887
E-mail: bernadette.fini@alsglobal.com

Project Chemist: James Guin
Originating Lab: HOUSTON
Logged By: XMI
Date Received: 07/20/23
Internal Due Date: 7/28/2023
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS23070993
EDD: No EDD Specified

10 120 mL-Plastic Bottle Natural WM Unpreserved
Location: SUBBED
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

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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 2022-2023	7/31/2023
Louisiana Department of Environmental Quality	03087-2023	6/30/2024
Louisiana Department of Health and Hospitals	LA028-2023	12/31/2023
Maine Department of Health and Human Services	2022017	6/5/2024
Maryland Department of the Environment	343	7/31/2023
Maryland Department of the Environment	343-2023	6/30/2024
Michigan Depratment of Environmental Quality	9971-2023	4/30/2024
Minnesota Department of Health	2368363	12/31/2023
Nebraska Department of Health and Human Services	NE-OS-25-13	4/30/2024
Nevada Department of Conservation and Natural Resources	TX026932023-1	7/31/2023
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	2022-141	8/31/2023
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
Utah Department of Health Environmental Laboratory Certification	TX026932022-13	7/31/2023
Washington Department of Ecology	C819-22	11/14/2023

ALS

Chain of Custody

ALS Environmental - Houston Specialties Laboratory
10450 Stancliff Rd., Suite 210, Houston TX 77099
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www.alsglobal.com

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Houston, TX 77099
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F: +1 281 530 5887
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Subcontract Chain of Custody

SAMPLING STATE: **Dept of Defense**

COC ID: **22428**

E2300657 5
ALS Laboratory Group
HS23070993

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:	HS23070993
TSR:	Ron Martino

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	**HS23070993-01**	**16WW37-230713**	**Water**	**13 Jul 2023 07:00**
	Perchlorate Level II and Level IV reports on a seperate pdf.			28 Jul 2023
2.	**HS23070993-02**	**16WW37-230713-FD**	**Water**	**13 Jul 2023 07:00**
	Perchlorate Level II and Level IV reports on a seperate pdf.			28 Jul 2023
3.	**HS23070993-03**	**16WW38-230713**	**Water**	**13 Jul 2023 07:45**
	Perchlorate Level II and Level IV reports on a seperate pdf.			28 Jul 2023
4.	**HS23070993-04**	**16WW44-230713**	**Water**	**13 Jul 2023 08:25**
	Perchlorate Level II and Level IV reports on a seperate pdf.			28 Jul 2023
5.	**HS23070993-05**	**16RW07-230713**	**Water**	**13 Jul 2023 09:05**
	Perchlorate Level II and Level IV reports on a seperate pdf.			28 Jul 2023
6.	**HS23070993-06**	**16RW06-230713**	**Water**	**13 Jul 2023 09:45**
	Perchlorate Level II and Level IV reports on a seperate pdf.			28 Jul 2023
7.	**HS23070993-07**	**16WW46-230713**	**Water**	**13 Jul 2023 10:30**
	Perchlorate Level II and Level IV reports on a seperate pdf.			28 Jul 2023
8.	**HS23070993-08**	**16PM09-230713**	**Water**	**13 Jul 2023 11:15**
	Perchlorate Level II and Level IV reports on a seperate pdf.			28 Jul 2023
9.	**HS23070993-09**	**16PM06-230713**	**Water**	**13 Jul 2023 11:55**

Subcontract Chain of Custody

SAMPLING STATE: **Dept of Defense** **COC ID: 22428**

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
	Perchlorate Level II and Level IV reports on a seperate pdf.			28 Jul 2023
10.	**HS23070993-10**	**16PM14-230713**	**Water**	**13 Jul 2023 12:40**
	Perchlorate Level II and Level IV reports on a seperate pdf.			28 Jul 2023

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

QC Level: DOD IV (DoD Data Package)

Relinquished By: _____ Date/Time: _____

Received By: _____ Date/Time: 7-14-23 1400

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

10450 Stancliff Rd., Suite 210
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#: 423531 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 7/24/23 10:30

#	Lab Code	Client ID	B#	Method /Test	pH	Cl	Matrix	Amt. Ext.	Sample Description
1	E2300657-001	16WW37-230713	.01	6850/ClO4 DOD			Water	10mL	
2	E2300657-002	16WW37-230713-FD	.01	6850/ClO4 DOD			Water	10mL	
3	E2300657-003	16WW38-230713	.01	6850/ClO4 DOD			Water	10mL	
4	E2300657-004	16WW44-230713	.01	6850/ClO4 DOD			Water	10mL	
5	E2300657-005	16RW07-230713	.01	6850/ClO4 DOD			Water	10mL	
6	E2300657-006	16RW06-230713	.01	6850/ClO4 DOD			Water	10mL	
7	E2300657-007	16WW46-230713	.01	6850/ClO4 DOD			Water	10mL	
8	E2300657-008	16PM09-230713	.01	6850/ClO4 DOD			Water	10mL	
9	E2300657-009	16PM06-230713	.01	6850/ClO4 DOD			Water	10mL	
10	E2300657-010	16PM14-230713	.01	6850/ClO4 DOD			Water	10mL	
11	E2300671-001	EA-15-0323	.01	6850/ClO4			Water	10mL	
12	E2300671-002	CTC 51 0323	.01	6850/ClO4			Water	10mL	
13	E2300671-003	CTC 46 0323	.01	6850/ClO4			Water	10mL	
14	E2300671-004	CTC 3 0323	.01	6850/ClO4			Water	10mL	
15	E2300671-005	EA 50 0323	.01	6850/ClO4			Water	10mL	
16	E2300671-006	CTC 2 0323	.01	6850/ClO4			Water	10mL	
17	E2300671-007	CTC 10 0323	.01	6850/ClO4			Water	10mL	
18	E2300671-008	CTC 23 0323	.01	6850/ClO4			Water	10mL	
19	E2300687-001	LH18/24-SP650_072423_AIX	.01	6850/ClO4 DOD			Water	10mL	
20	E2300687-002	LH18/24-SP650_072423_BIX	.01	6850/ClO4 DOD			Water	10mL	
21	EQ2300354-01	MB		6850/ClO4			Liquid	10mL	
22	EQ2300354-02	LCS		6850/ClO4			Liquid	10mL	
23	EQ2300354-03	DLCS		6850/ClO4			Liquid	10mL	

Spiking Solutions

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

EQ2300354-02	1.00µL	EQ2300354-02	1.00µL	EQ2300354-03	1.00µL	EQ2300354-03	1.00µL

Name: Perchlorate Internal Standard 1ug/mL Inventory ID 227244 Logbook Ref: Perchlorate Internal Standard Expires On: 07/31/2023

E2300657-001	100.00µL	E2300657-002	100.00µL	E2300657-003	100.00µL	E2300657-004	100.00µL	E2300657-005	100.00µL	E2300657-006	100.00µL
E2300657-007	100.00µL	E2300657-008	100.00µL	E2300657-009	100.00µL	E2300657-010	100.00µL	E2300671-001	100.00µL	E2300671-002	100.00µL
E2300671-003	100.00µL	E2300671-004	100.00µL	E2300671-005	100.00µL	E2300671-006	100.00µL	E2300671-007	100.00µL	E2300671-008	100.00µL
E2300687-001	100.00µL	E2300687-002	100.00µL	EQ2300354-01	100.00µL	EQ2300354-01	100.00µL	EQ2300354-02	100.00µL	EQ2300354-02	100.00µL
EQ2300354-03	100.00µL	EQ2300354-03	100.00µL								

Preparation Information Benchsheet

Prep Run#: 423531 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 7/24/23 10:30

Preparation Materials

Water HPLC Grade	HPLC water 5/18/23CG (229315)	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-lock syringes (228116)				

Preparation Steps

Step: Preparation
Started: 7/24/23 10:30
Finished: 7/25/23 09:20
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:**	E2300657
Project:	HS23070993	**Date Collected:**	7/13/23 0700
Sample Matrix:	Water	**Date Received:**	7/20/23
Sample Name:	16WW37-230713	**Units:**	µg/L
Lab Code:	E2300657-001	**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	**164**		1.00	0.500	0.250	10	7/24/23	7/25/23 10:50	423531	811716	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300657
Project:	HS23070993	**Date Collected:**	7/13/23 0700
Sample Matrix:	Water	**Date Received:**	7/20/23
Sample Name:	16WW37-230713-FD	**Units:**	µg/L
Lab Code:	E2300657-002	**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	**172**		1.00	0.500	0.250	10	7/24/23	7/25/23 10:55	423531	811716	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300657
Project:	HS23070993	**Date Collected:**	7/13/23 0745
Sample Matrix:	Water	**Date Received:**	7/20/23
Sample Name:	16WW38-230713	**Units:**	µg/L
Lab Code:	E2300657-003	**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	**0.203**		0.100	0.0500	0.0250	1	7/24/23	7/25/23 11:01	423531	811716	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300657
Project:	HS23070993	**Date Collected:**	7/13/23 0825
Sample Matrix:	Water	**Date Received:**	7/20/23
Sample Name:	16WW44-230713	**Units:**	µg/L
Lab Code:	E2300657-004	**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	**0.169**		0.100	0.0500	0.0250	1	7/24/23	7/25/23 11:06	423531	811716	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300657
Project:	HS23070993	**Date Collected:**	7/13/23 0905
Sample Matrix:	Water	**Date Received:**	7/20/23
Sample Name:	16RW07-230713	**Units:**	µg/L
Lab Code:	E2300657-005	**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	**0.448**		0.100	0.0500	0.0250	1	7/24/23	7/25/23 11:12	423531	811716	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300657
Project:	HS23070993	**Date Collected:**	7/13/23 0945
Sample Matrix:	Water	**Date Received:**	7/20/23
Sample Name:	16RW06-230713	**Units:**	µg/L
Lab Code:	E2300657-006	**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	**0.281**		0.100	0.0500	0.0250	1	7/24/23	7/25/23 11:17	423531	811716	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300657
Project:	HS23070993	**Date Collected:**	7/13/23 1030
Sample Matrix:	Water	**Date Received:**	7/20/23
Sample Name:	16WW46-230713	**Units:**	µg/L
Lab Code:	E2300657-007	**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	**0.239**		0.100	0.0500	0.0250	1	7/24/23	7/25/23 11:23	423531	811716	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300657
Project:	HS23070993	**Date Collected:**	7/13/23 1115
Sample Matrix:	Water	**Date Received:**	7/20/23
Sample Name:	16PM09-230713	**Units:**	µg/L
Lab Code:	E2300657-008	**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	**0.186**		0.100	0.0500	0.0250	1	7/24/23	7/25/23 11:34	423531	811716	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300657
Project:	HS23070993	**Date Collected:**	7/13/23 1155
Sample Matrix:	Water	**Date Received:**	7/20/23
Sample Name:	16PM06-230713	**Units:**	µg/L
Lab Code:	E2300657-009	**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	**0.193**		0.100	0.0500	0.0250	1	7/24/23	7/25/23 11:40	423531	811716	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300657
Project:	HS23070993	**Date Collected:**	7/13/23 1240
Sample Matrix:	Water	**Date Received:**	7/20/23
Sample Name:	16PM14-230713	**Units:**	µg/L
Lab Code:	E2300657-010	**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	**0.194**		0.100	0.0500	0.0250	1	7/24/23	7/25/23 11:45	423531	811716	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300657
Project:	HS23070993	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	EQ2300354-01	**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	7/24/23	7/25/23 10:33	423531	811716	

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: HS23070993
Sample Matrix: Water

Service Request: E2300657
Date Analyzed: 7/25/23

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

Analytical Method: 6850
Prep Method: Method

Units: µg/L
Basis: NA

Extraction Lot: 423531

	Lab Control Sample EQ2300354-02			Duplicate Lab Control Sample EQ2300354-03					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	0.0948	0.100	95	0.0899	0.100	90	84 - 119	5	15

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

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

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300657
Project:	HS23070993	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2300354-02	**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	**0.0948**	J	0.100	0.0500	0.0250	1	7/24/23	7/25/23 10:39	423531	811716	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300657
Project:	HS23070993	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2300354-03	**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	**0.0899**	J	0.100	0.0500	0.0250	1	7/24/23	7/25/23 10:44	423531	811716	

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

20230629-809329

Injection Log

LCMS01 -Shimadzu 8050

1st Review: XM
2nd Review: GC

ICAL Date: 6/29/2023
Cal. Std. xp: 06/29/2023
ICAL ID: EC2300011

Mobile Phases : A:20mM ammonium acetate in water 32103046 **B:**Acetonitrile 226552

	Sample Name		File Name	Acquisition Method	Dilution	Comments	Date/Time
1	PERCHLORATE1		20230629-001	Perchlorate6850c.lcm	1x	227245	6/29/2023 12:59
2	PERCHLORATE2		20230629-002	Perchlorate6850c.lcm	1x	227246	6/29/2023 13:05
3	PERCHLORATE3		20230629-003	Perchlorate6850c.lcm	1x	227247	6/29/2023 13:10
4	PERCHLORATE4		20230629-004	Perchlorate6850c.lcm	1x	227248	6/29/2023 13:16
5	PERCHLORATE5		20230629-005	Perchlorate6850c.lcm	1x	227249	6/29/2023 13:21
6	PERCHLORATE6		20230629-006	Perchlorate6850c.lcm	1x	227250	6/29/2023 13:27
7	PERCHLORATE7		20230629-007	Perchlorate6850c.lcm	1x	227251	6/29/2023 13:32
8	PERCHLORATE8		20230629-008	Perchlorate6850c.lcm	1x	227252	6/29/2023 13:38
9	PERCHLORATE9		20230629-009	Perchlorate6850c.lcm	1x	227253	6/29/2023 13:43
10	PERCHLORATE10		20230629-010	Perchlorate6850c.lcm	1x	227254	6/29/2023 13:49
11	PERCHLORATEICV		20230629-011	Perchlorate6850c.lcm	1x	227256	6/29/2023 13:55
12	IB		20230629-012	Perchlorate6850c.lcm	1x		6/29/2023 14:00
13	LODV		20230629-013	Perchlorate6850c.lcm	1x	227501	6/29/2023 14:06
14	ICS		20230629-014	Perchlorate6850c.lcm	1x	32103024	6/29/2023 14:11
15	CCV		20230629-015	Perchlorate6850c.lcm	1x	227251	6/29/2023 14:17
16	EQ2300312-01		20230629-016	Perchlorate6850c.lcm	1x		6/29/2023 14:22
17	EQ2300312-02		20230629-017	Perchlorate6850c.lcm	1x	DNU-RR	6/29/2023 14:28
18	EQ2300312-03		20230629-018	Perchlorate6850c.lcm	1x		6/29/2023 14:33
19	E2300606-001		20230629-019	Perchlorate6850c.lcm	10x		6/29/2023 14:39
20	EQ2300312-04		20230629-020	Perchlorate6850c.lcm	1x		6/29/2023 14:44
21	EQ2300312-05		20230629-021	Perchlorate6850c.lcm	1x		6/29/2023 14:50
22	E2300606-002		20230629-022	Perchlorate6850c.lcm	5x		6/29/2023 14:55
23	E2300606-003		20230629-023	Perchlorate6850c.lcm	10x		6/29/2023 15:01
24	E2300606-004		20230629-024	Perchlorate6850c.lcm	10x		6/29/2023 15:06
25	E2300606-005		20230629-025	Perchlorate6850c.lcm	1x		6/29/2023 15:12
26	CCV		20230629-026	Perchlorate6850c.lcm	1x	227251	6/29/2023 15:17
27	E2300606-006		20230629-027	Perchlorate6850c.lcm	1x		6/29/2023 15:23
28	E2300606-007		20230629-028	Perchlorate6850c.lcm	500x		6/29/2023 15:28
29	E2300606-008		20230629-029	Perchlorate6850c.lcm	100x		6/29/2023 15:34
30	EQ2300312-06		20230629-030	Perchlorate6850c.lcm	100x		6/29/2023 15:40
31	EQ2300312-07		20230629-031	Perchlorate6850c.lcm	100x		6/29/2023 15:45
32	E2300606-009		20230629-032	Perchlorate6850c.lcm	1x		6/29/2023 15:53
33	E2300610-001		20230629-033	Perchlorate6850c.lcm	10000x		6/29/2023 15:58
34	E2300610-002		20230629-034	Perchlorate6850c.lcm	1x		6/29/2023 16:04
35	E2300610-003		20230629-035	Perchlorate6850c.lcm	1x		6/29/2023 16:09
36	E2300610-004		20230629-036	Perchlorate6850c.lcm	1x		6/29/2023 16:15
37	CCV		20230629-037	Perchlorate6850c.lcm	1x	227251	6/29/2023 16:21

20230629-809329

Injection Log

LCMS01 -Shimadzu 8050

1st Review: XM
2nd Review: GC

ICAL Date: 6/29/2023
Cal. Std. xp: 06/29/2023
ICAL ID: EC2300011

Mobile Phases : A:20mM ammonium acetate in water 32103046 **B:**Acetonitrile 226552

	Sample Name		File Name	Acquisition Method	Dilution	Comments	Date/Time
38	E2300610-005		20230629-038	Perchlorate6850c.lcm	1x		6/29/2023 16:26
39	E2300610-006		20230629-039	Perchlorate6850c.lcm	1x		6/29/2023 16:32
40	E2300610-007		20230629-040	Perchlorate6850c.lcm	1x		6/29/2023 16:37
41	E2300610-008		20230629-041	Perchlorate6850c.lcm	1x	DNU-D	6/29/2023 16:43
42	EQ2300312-08		20230629-042	Perchlorate6850c.lcm	1x		6/29/2023 16:48
43	EQ2300312-09		20230629-043	Perchlorate6850c.lcm	1x		6/29/2023 16:54
44	E2300611-001		20230629-044	Perchlorate6850c.lcm	1x		6/29/2023 16:59
45	E2300611-002		20230629-045	Perchlorate6850c.lcm	1x		6/29/2023 17:05
46	E2300611-003		20230629-046	Perchlorate6850c.lcm	1x		6/29/2023 17:10
47	E2300611-004		20230629-047	Perchlorate6850c.lcm	1x	DNU-D	6/29/2023 17:16
48	CCV		20230629-048	Perchlorate6850c.lcm	1x	227251	6/29/2023 17:21
49	E2300611-005		20230629-049	Perchlorate6850c.lcm	1x		6/29/2023 17:27
50	E2300611-006		20230629-050	Perchlorate6850c.lcm	1x	DNU-D	6/29/2023 17:32
51	E2300611-007		20230629-051	Perchlorate6850c.lcm	1x	DNU-D	6/29/2023 17:38
52	E2300611-008		20230629-052	Perchlorate6850c.lcm	1x		6/29/2023 17:43
53	E2300611-009		20230629-053	Perchlorate6850c.lcm	1x		6/29/2023 17:49
54	E2300611-010		20230629-054	Perchlorate6850c.lcm	1x		6/29/2023 17:55
55	CCV		20230629-055	Perchlorate6850c.lcm	1x	227251	6/29/2023 18:06

Initial Calibration - Detailed Report

Calibration ID: EC2300011 **Instrument ID:** E-LCMS-01
Column Name: 1

#	Lab Code	Sample Name	File Location	Aquisition Date
01	EC2300011-01	PERCHLORATE1	20230629-001	06/29/2023 12:59
02	EC2300011-02	PERCHLORATE2	20230629-002	06/29/2023 13:05
03	EC2300011-03	PERCHLORATE3	20230629-003	06/29/2023 13:10
04	EC2300011-04	PERCHLORATE4	20230629-004	06/29/2023 13:16
05	EC2300011-05	PERCHLORATE5	20230629-005	06/29/2023 13:21
06	EC2300011-06	PERCHLORATE6	20230629-006	06/29/2023 13:27
07	EC2300011-07	PERCHLORATE7	20230629-007	06/29/2023 13:32
08	EC2300011-08	PERCHLORATE8	20230629-008	06/29/2023 13:38
09	EC2300011-09	PERCHLORATE9	20230629-009	06/29/2023 13:43
10	EC2300011-10	PERCHLORATE10	20230629-010	06/29/2023 13:49

Analyte **Curve Fit** **Weighting**

Perchlorate **Average RF** **RSD = 2.809** **Average RF = 0.1625**

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.1000	0.1678	02	0.5000	0.1574	03	0.7000	0.1599	04	1.0000	0.1567
05	2.0000	0.1596	06	5.0000	0.1641	07	10.0000	0.1704	08	20.0000	0.1667
09	30.0000	0.1608	10	50.0000	0.1619						

Analyte

Perchlorate RSE = 2.81

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.1000	0.103	3.2	02	0.5000	0.484	-3.1	03	0.7000	0.689	-1.6
04	1.0000	0.964	-3.6	05	2.0000	1.96	-1.8	06	5.0000	5.05	1.0
07	10.0000	10.5	4.8	08	20.0000	20.5	2.6	09	30.0000	29.7	-1.1
10	50.0000	49.8	-0.4								

Initial Calibration Verification Summary Report

Calibration ID:	EC2300011	**Instrument ID:**	E-LCMS-01
Datafile ID:	20230629-011	**Column Name:**	1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
Perchlorate	EC2300011-11	T	Average RF	10	9.913	ng/mL	-0.9	<= 15

Insight Report

Printed at 6/29/2023 2:17:05 PM

Method File: I:\LCMS01\DATA\20230628\06282023.lcm
Project File: I:\LCMS01\DATA\20230628\06282023.damlp

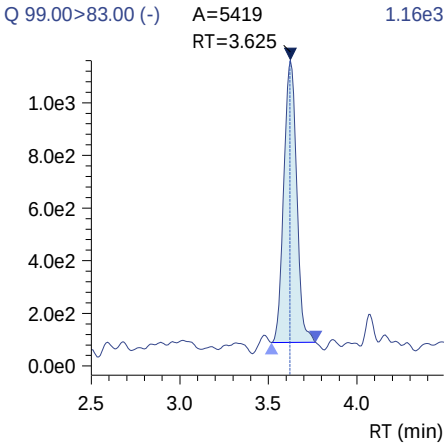
PERCHLORATE1

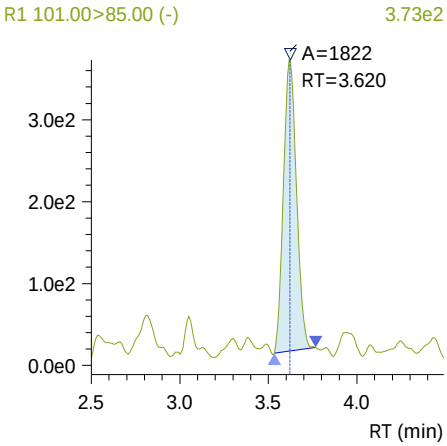
Sample ID: PERCHLORATE1
Date Acquired: 6/29/2023 12:59:40 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-001.lcd
Vial: 1 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.625	5419	323018	0.1032	ng/mL	101.00 >85.00	33.63	22.41-41.62
Sodium Perchlorate-18O4 _IS	Auto	3.617	323018	323018	1.0000	ng/mL	----	----	

Perchlorate

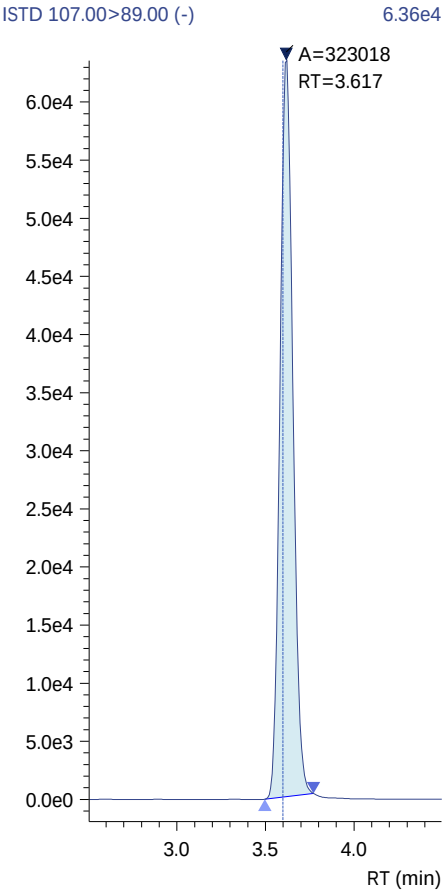
Conc 0.1032
R#1 33.63 (32.02)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/29/2023 2:17:05 PM

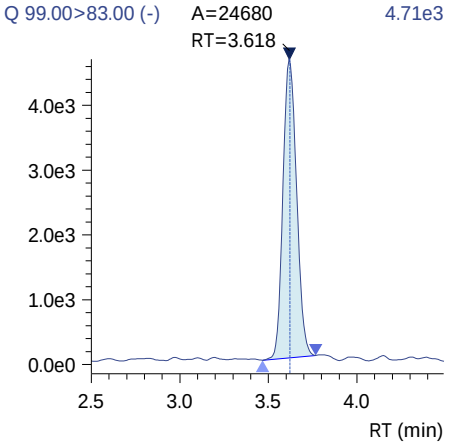
PERCHLORATE2

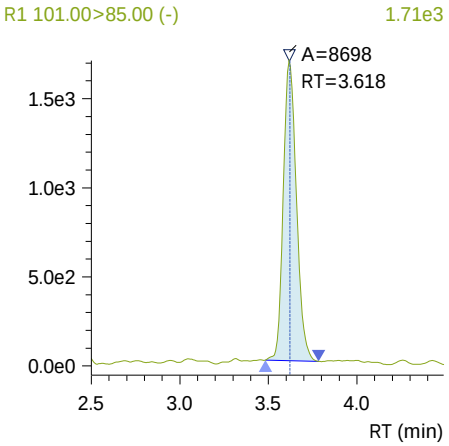
Sample ID: PERCHLORATE2
Date Acquired: 6/29/2023 1:05:11 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-002.lcd
Vial: 2 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.618	24680	313519	0.4844	ng/mL	101.00 >85.00	35.24	22.41-41.62
Sodium Perchlorate-18O4 _IS	Auto	3.618	313519	313519	1.0000	ng/mL	----	----	

Perchlorate

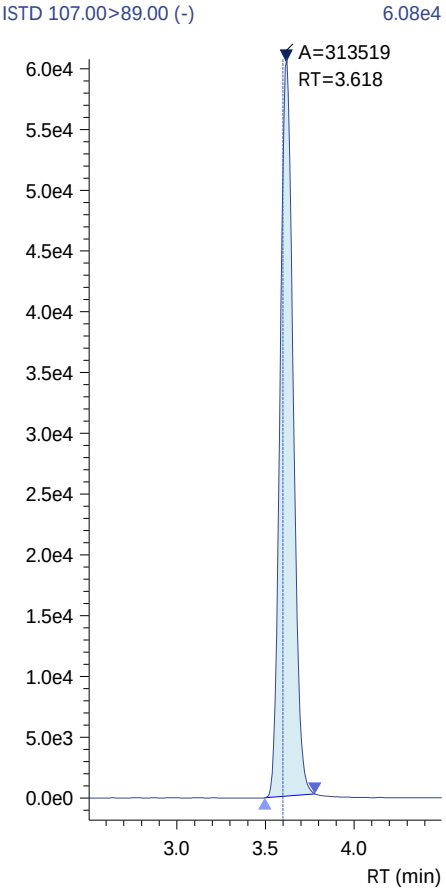
Conc 0.4844
R#1 35.24 (32.02)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/29/2023 2:17:05 PM

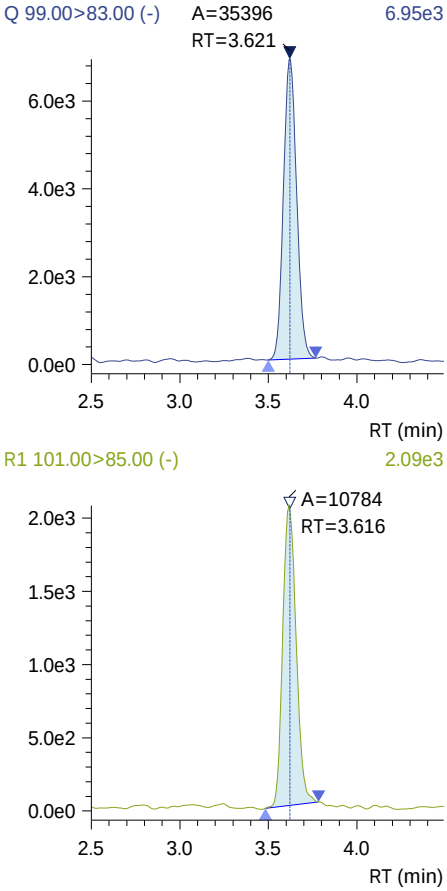
PERCHLORATE3

Sample ID: PERCHLORATE3
Date Acquired: 6/29/2023 1:10:46 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-003.lcd
Vial: 3 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.621	35396	316311	0.6886	ng/mL	101.00 >85.00	30.47	22.41-41.62
Sodium Perchlorate-18O4 _IS	Auto	3.618	316311	316311	1.0000	ng/mL	----	----	

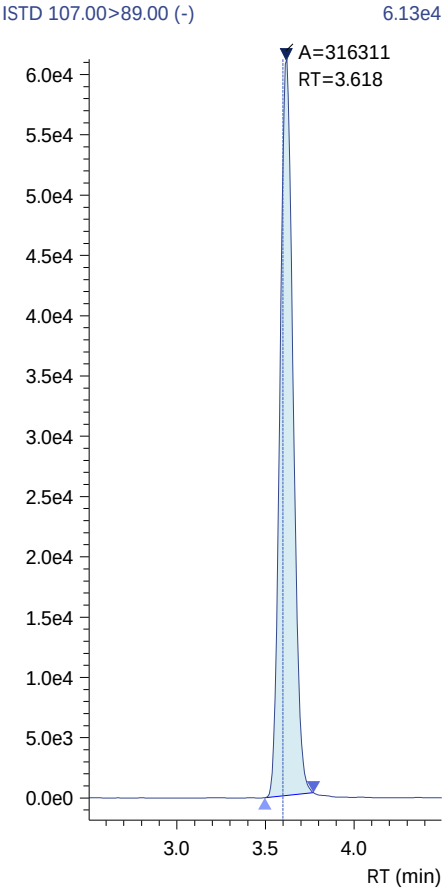
Perchlorate

Conc 0.6886
R#1 30.47 (32.02)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/29/2023 2:17:05 PM

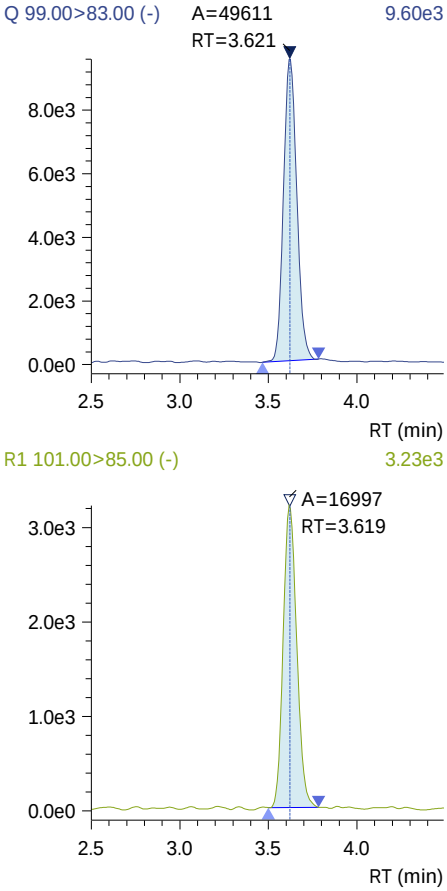
PERCHLORATE4

Sample ID: PERCHLORATE4
Date Acquired: 6/29/2023 1:16:19 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-004.lcd
Vial: 4 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.621	49611	316580	0.9643	ng/mL	101.00 >85.00	34.26	22.41-41.62
Sodium Perchlorate-18O4 _IS	Auto	3.618	316580	316580	1.0000	ng/mL	----	----	

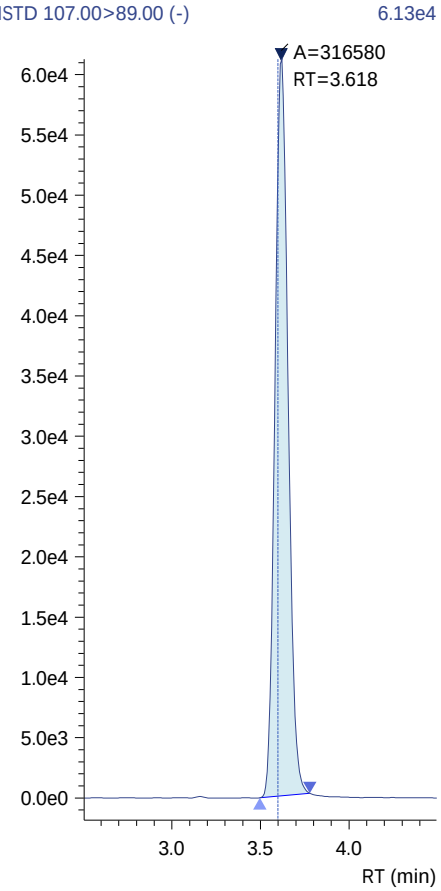
Perchlorate

Conc 0.9643
R#1 34.26 (32.02)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/29/2023 2:17:05 PM

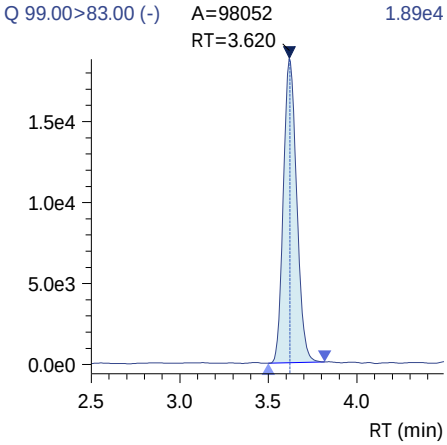
PERCHLORATE5

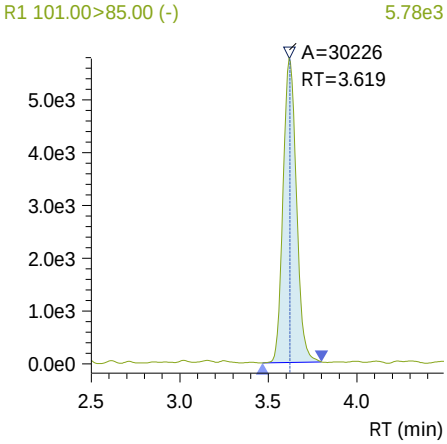
Sample ID: PERCHLORATE5
Date Acquired: 6/29/2023 1:21:50 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-005.lcd
Vial: 5 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.620	98052	307162	1.9642	ng/mL	101.00 >85.00	30.83	22.41-41.62
Sodium Perchlorate-18O4 _IS	Auto	3.617	307162	307162	1.0000	ng/mL	----	----	

Perchlorate

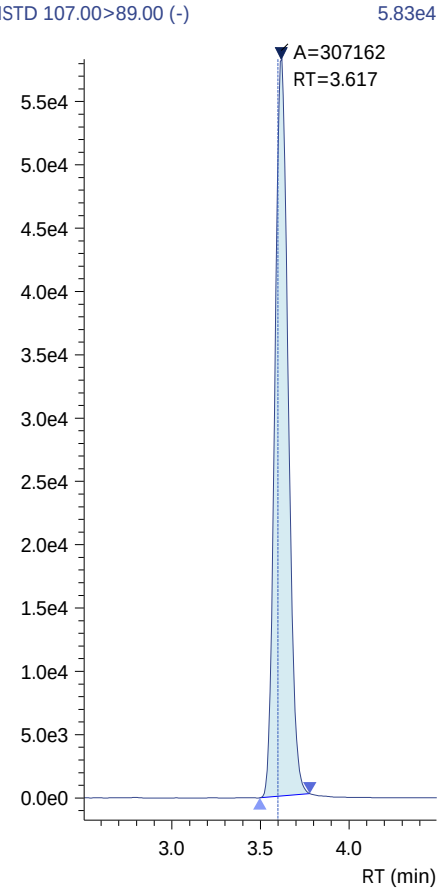
Conc 1.9642
R#1 30.83 (32.02)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/29/2023 2:17:05 PM

PERCHLORATE6

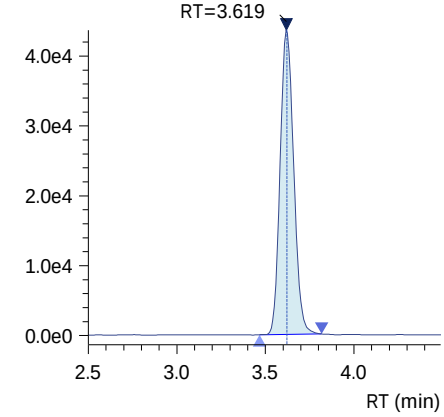
Sample ID: PERCHLORATE6
Date Acquired: 6/29/2023 1:27:22 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-006.lcd
Vial: 6 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.619	232011	282827	5.0477	ng/mL	101.00 >85.00	31.17	22.41-41.62
Sodium Perchlorate-18O4 _IS	Auto	3.617	282827	282827	1.0000	ng/mL	----	----	

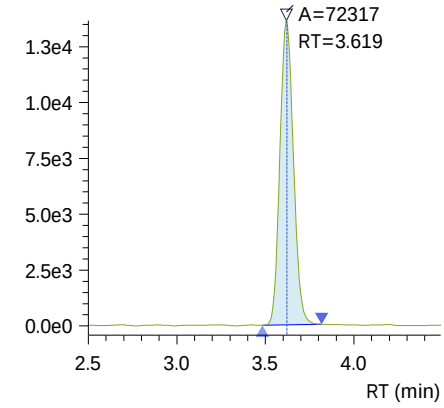
Perchlorate

Conc 5.0477
R#1 31.17 (32.02)

Q 99.00>83.00 (-) A=232011 RT=3.619 4.37e4



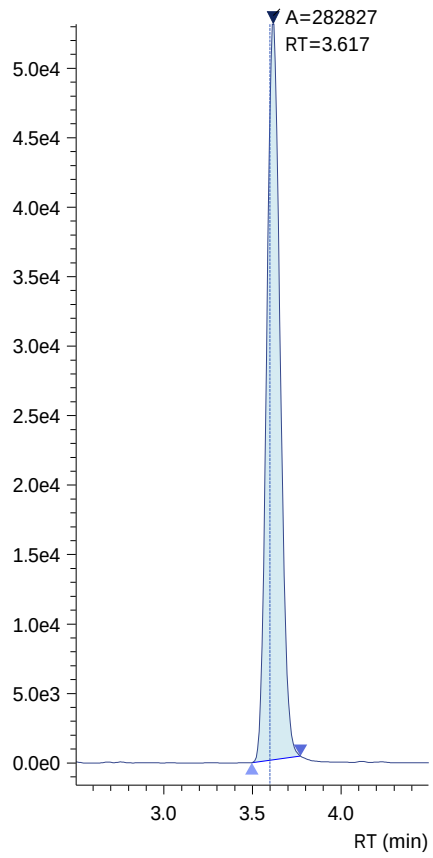
R1 101.00>85.00 (-) 1.37e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 5.32e4



Insight Report

Printed at 6/29/2023 2:17:05 PM

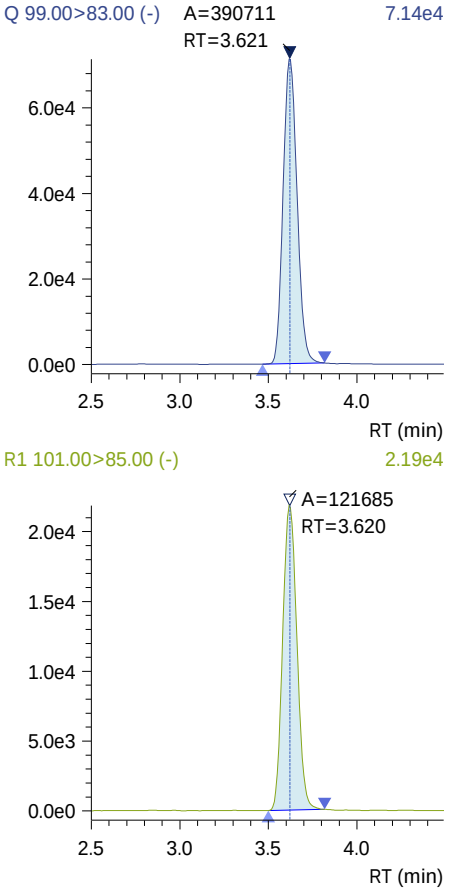
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 6/29/2023 1:32:51 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-007.lcd
Vial: 3 | 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	3.621	390711	229327	10.48 35	ng/mL	101.00 >85.00	31.14	22.41-41.62
Sodium Perchlorate-18O4 _IS	Auto	3.616	229327	229327	1.0000	ng/mL	----	----	

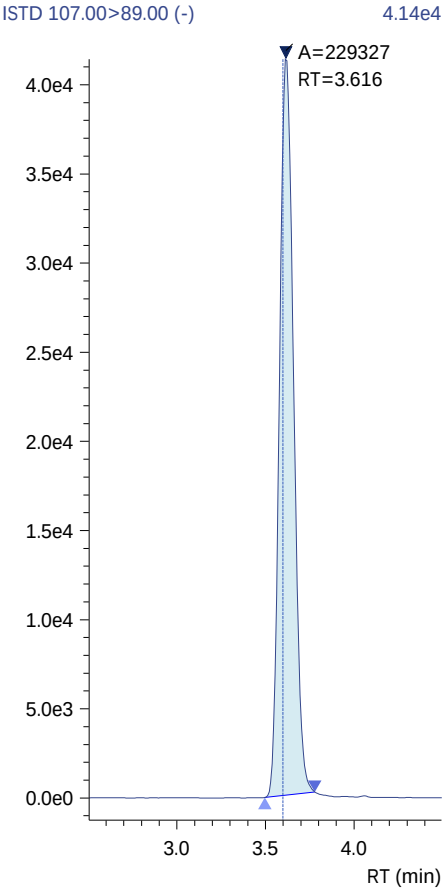
Perchlorate

Conc 10.4835
R#1 31.14 (32.02)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/29/2023 2:17:05 PM

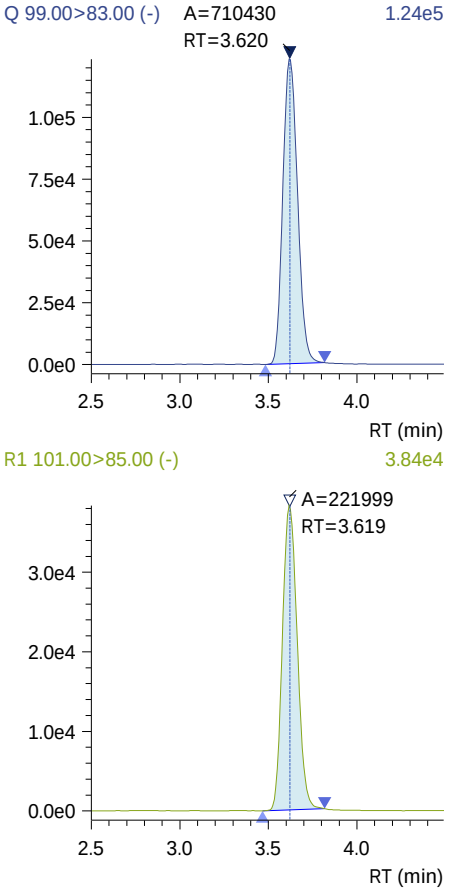
PERCHLORATE8

Sample ID: PERCHLORATE8
Date Acquired: 6/29/2023 1:38:22 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-008.lcd
Vial: 8 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.620	710430	213093	20.5144	ng/mL	101.00 >85.00	31.25	22.41-41.62
Sodium Perchlorate-18O4_IS	Auto	3.615	213093	213093	1.0000	ng/mL	----	----	

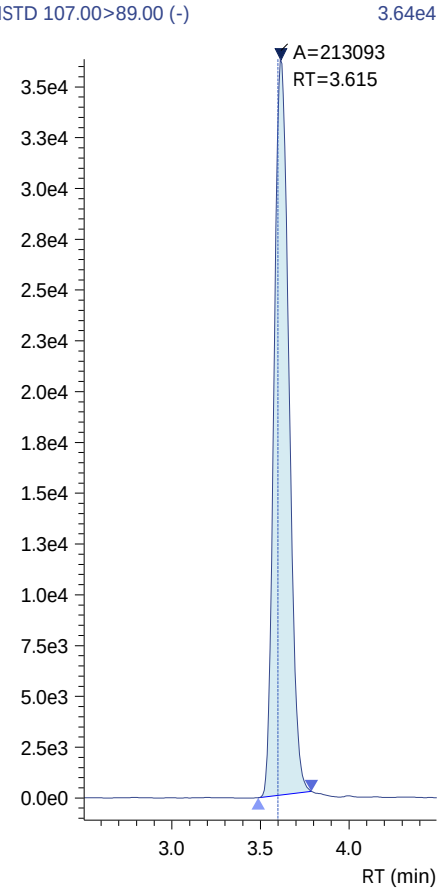
Perchlorate

Conc 20.5144
R#1 31.25 (32.02)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/29/2023 2:17:05 PM

PERCHLORATE9

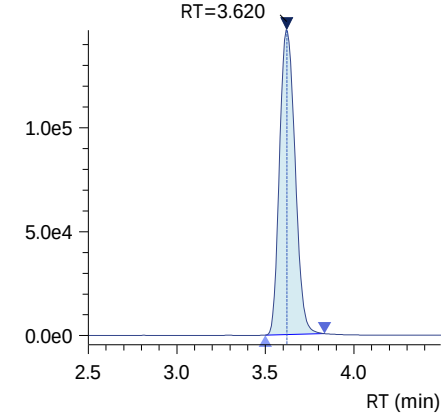
Sample ID: PERCHLORATE9
Date Acquired: 6/29/2023 1:43:53 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-009.lcd
Vial: 9 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.620	896468	185851	29.6808	ng/mL	101.00 >85.00	31.06	22.41-41.62
Sodium Perchlorate-18O4_IS	Auto	3.614	185851	185851	1.0000	ng/mL	----	----	

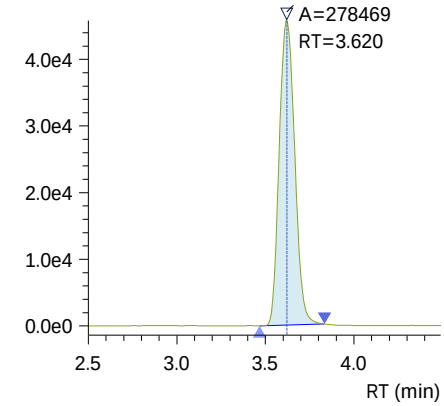
Perchlorate

Conc 29.6808
R#1 31.06 (32.02)

Q 99.00>83.00 (-) A=896468 1.47e5



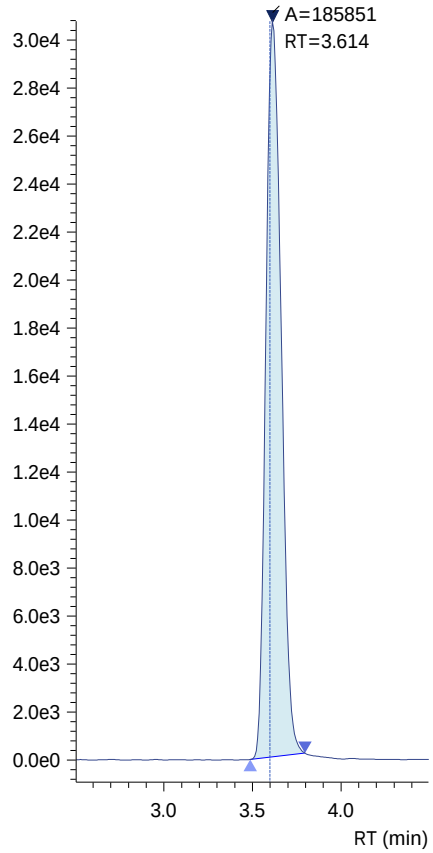
R1 101.00>85.00 (-) 4.58e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 3.08e4



Insight Report

Printed at 6/29/2023 2:17:05 PM

PERCHLORATE10

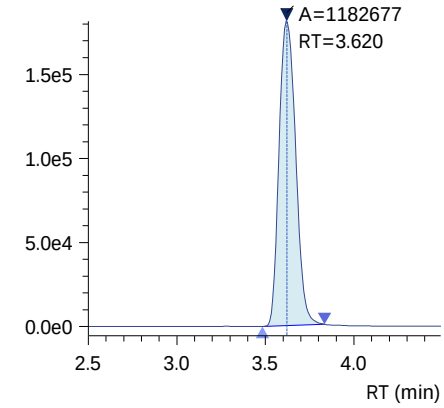
Sample ID: PERCHLORATE10
Date Acquired: 6/29/2023 1:49:27 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-010.lcd
Vial: 10 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.620	1182677	146135	49.79 86	ng/mL	101.00 >85.00	30.89	22.41-41.62
Sodium Perchlorate-18O4 _IS	Auto	3.614	146135	146135	1.0000	ng/mL	----	----	

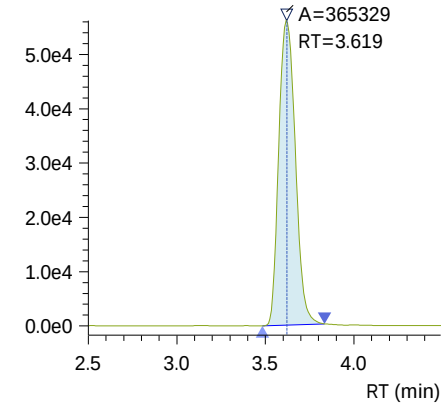
Perchlorate

Conc 49.7986
R#1 30.89 (32.02)

Q 99.00>83.00 (-) 1.82e5



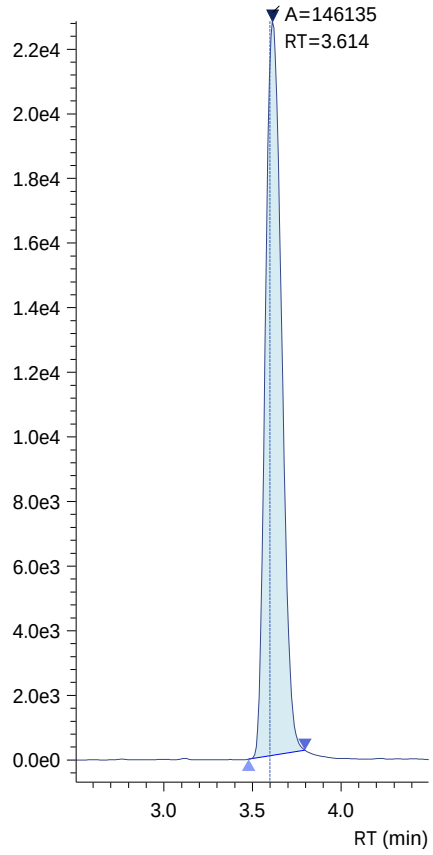
R1 101.00>85.00 (-) 5.62e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 2.29e4



Insight Report

Printed at 6/29/2023 2:17:05 PM

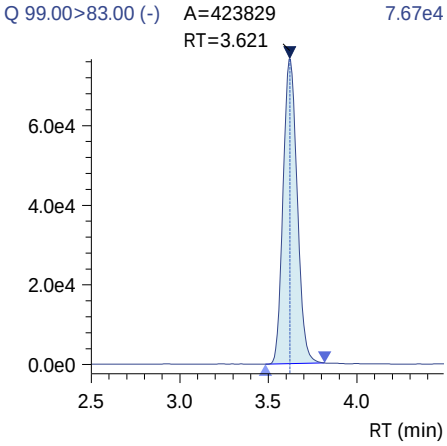
PERCHLORATEICV

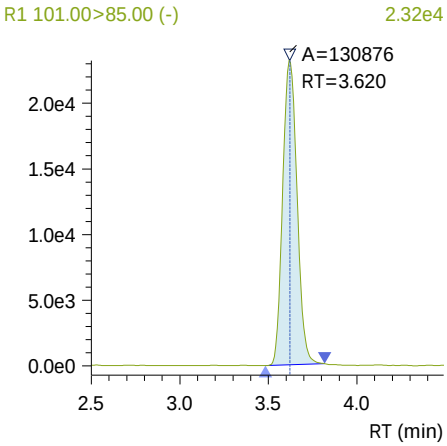
Sample ID: PERCHLORATEICV
Date Acquired: 6/29/2023 1:55:00 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-011.lcd
Vial: 11 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.621	423829	263091	9.9127	ng/mL	101.00 >85.00	30.88	22.41-41.62
Sodium Perchlorate-18O4 _IS	Auto	3.617	263091	263091	1.0000	ng/mL	----	----	

Perchlorate

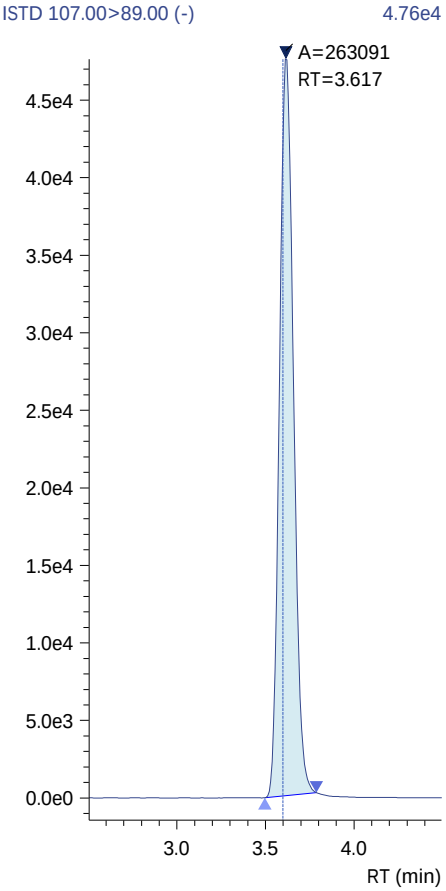
Conc 9.9127
R#1 30.88 (32.02)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Chromatograms and Selected Ion Monitoring

ALS Environmental - Houston HRMS
10450 Stancliff Rd., Suite 320, Houston TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

20230725-811716

Injection Log

LCMS01 -Shimadzu 8050

1st Review: XM
2nd Review: GC

ICAL Date: 6/29/2023
Cal. Std. xp: 07/31/2023
ICAL ID: EC2300011

Mobile Phases : A:20mM ammonium acetate in water 230388 **B:**Acetonitrile 229152

	Sample Name		File Name	Acquisition Method	Dilution	Comments	Date/Time
1	IB		20230725-001	Perchlorate6850c.lcm	1x		7/25/2023 9:25
2	LODV		20230725-002~1	Perchlorate6850c.lcm	1x	230386	7/25/2023 10:16
3	ICS		20230725-003	Perchlorate6850c.lcm	1x	32103024	7/25/2023 10:22
4	CCV		20230725-004	Perchlorate6850c.lcm	1x	227251	7/25/2023 10:28
5	EQ2300354-01		20230725-005	Perchlorate6850c.lcm	1x		7/25/2023 10:33
6	EQ2300354-02		20230725-006	Perchlorate6850c.lcm	1x		7/25/2023 10:39
7	EQ2300354-03		20230725-007	Perchlorate6850c.lcm	1x		7/25/2023 10:44
8	E2300657-001		20230725-008	Perchlorate6850c.lcm	10x		7/25/2023 10:50
9	E2300657-002		20230725-009	Perchlorate6850c.lcm	10x		7/25/2023 10:55
10	E2300657-003		20230725-010	Perchlorate6850c.lcm	1x		7/25/2023 11:01
11	E2300657-004		20230725-011	Perchlorate6850c.lcm	1x		7/25/2023 11:06
12	E2300657-005		20230725-012	Perchlorate6850c.lcm	1x		7/25/2023 11:12
13	E2300657-006		20230725-013	Perchlorate6850c.lcm	1x		7/25/2023 11:17
14	E2300657-007		20230725-014	Perchlorate6850c.lcm	1x		7/25/2023 11:23
15	CCV		20230725-015	Perchlorate6850c.lcm	1x	227251	7/25/2023 11:28
16	E2300657-008		20230725-016	Perchlorate6850c.lcm	1x		7/25/2023 11:34
17	E2300657-009		20230725-017	Perchlorate6850c.lcm	1x		7/25/2023 11:40
18	E2300657-010		20230725-018	Perchlorate6850c.lcm	1x		7/25/2023 11:45
19	E2300671-001		20230725-019	Perchlorate6850c.lcm	5x		7/25/2023 11:51
20	E2300671-002		20230725-020	Perchlorate6850c.lcm	1x		7/25/2023 11:56
21	E2300671-003		20230725-021	Perchlorate6850c.lcm	1x		7/25/2023 12:02
22	E2300671-004		20230725-022	Perchlorate6850c.lcm	5x		7/25/2023 12:07
23	E2300671-005		20230725-023	Perchlorate6850c.lcm	1x		7/25/2023 12:13
24	E2300671-006		20230725-024	Perchlorate6850c.lcm	5x		7/25/2023 12:18
25	E2300671-007		20230725-025	Perchlorate6850c.lcm	1x	DNU-RR	7/25/2023 12:24
26	CCV		20230725-026	Perchlorate6850c.lcm	1x	227251	7/25/2023 12:29
27	E2300671-008		20230725-027	Perchlorate6850c.lcm	5x		7/25/2023 12:35
28	E2300687-001		20230725-028	Perchlorate6850c.lcm	1x		7/25/2023 12:53
29	E2300687-002		20230725-029	Perchlorate6850c.lcm	1x		7/25/2023 12:58
30	EQ2300355-01		20230725-030	Perchlorate6850c.lcm	1x		7/25/2023 13:04
31	EQ2300355-02		20230725-031	Perchlorate6850c.lcm	1x		7/25/2023 13:10
32	EQ2300355-03		20230725-032	Perchlorate6850c.lcm	1x	DNU-IR	7/25/2023 13:15
33	E2300672-001		20230725-033	Perchlorate6850c.lcm	1x		7/25/2023 13:21
34	E2300672-002		20230725-034	Perchlorate6850c.lcm	1x		7/25/2023 13:26
35	E2300672-003		20230725-035	Perchlorate6850c.lcm	1x		7/25/2023 13:32
36	E2300673-001		20230725-036	Perchlorate6850c.lcm	1x		7/25/2023 13:37
37	CCV		20230725-037	Perchlorate6850c.lcm	1x	227251	7/25/2023 13:43

20230725-811716

Injection Log

LCMS01 -Shimadzu 8050

1st Review: XM
2nd Review: GC

ICAL Date: 6/29/2023
Cal. Std. xp: 07/31/2023
ICAL ID: EC2300011

Mobile Phases : A:20mM ammonium acetate in water 230388 **B:**Acetonitrile 229152

	Sample Name		File Name	Acquisition Method	Dilution	Comments	Date/Time
38	E2300673-002		20230725-038	Perchlorate6850c.lcm	1x		7/25/2023 13:48
39	E2300673-003		20230725-039	Perchlorate6850c.lcm	1x		7/25/2023 13:54
40	E2300673-004		20230725-040	Perchlorate6850c.lcm	1x		7/25/2023 13:59
41	E2300673-005		20230725-041	Perchlorate6850c.lcm	5x		7/25/2023 14:05
42	E2300673-006		20230725-042	Perchlorate6850c.lcm	1x		7/25/2023 14:11
43	E2300673-007		20230725-043	Perchlorate6850c.lcm	2000x		7/25/2023 14:16
44	E2300673-008		20230725-044	Perchlorate6850c.lcm	2000x		7/25/2023 14:22
45	E2300674-001		20230725-045	Perchlorate6850c.lcm	1x		7/25/2023 14:27
46	E2300674-002		20230725-046	Perchlorate6850c.lcm	1x		7/25/2023 14:33
47	E2300674-003		20230725-047	Perchlorate6850c.lcm	1x		7/25/2023 14:38
48	CCV		20230725-048	Perchlorate6850c.lcm	1x	227251	7/25/2023 14:44
49	E2300674-004		20230725-049	Perchlorate6850c.lcm	1x		7/25/2023 14:49
50	E2300674-005		20230725-050	Perchlorate6850c.lcm	1x		7/25/2023 14:55
51	E2300674-006		20230725-051	Perchlorate6850c.lcm	1x		7/25/2023 15:00
52	E2300674-007		20230725-052	Perchlorate6850c.lcm	1x		7/25/2023 15:06
53	E2300674-008		20230725-053	Perchlorate6850c.lcm	1x		7/25/2023 15:12
54	E2300674-009		20230725-054	Perchlorate6850c.lcm	1x		7/25/2023 15:17
55	EQ2300355-03		20230725-055	Perchlorate6850c.lcm	1x		7/25/2023 15:23
56	E2300671-007		20230725-056	Perchlorate6850c.lcm	1x		7/25/2023 15:38
57	CCV		20230725-057	Perchlorate6850c.lcm	1x	227251	7/25/2023 15:43

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23070993

Service Request: E2300657
Date Analyzed: 7/25/23 10:28

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

File ID: I:\LCMS01\DATA\20230725\20230725-004
Instrument ID: E-LCMS-01
Analytical Method: 6850

Lab Code: EQ2300360-01
Analysis Lot: 811716
Signal ID: 1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	263,382	3.62
	Upper Limit ==>	395,073	5.62
	Lower Limit ==>	131,691	1.62
Associated Analyses			
Continuing Calibration Verification	EQ2300360-01	239,575	3.57
Method Blank	EQ2300354-01	328,600	3.57
Lab Control Sample	EQ2300354-02	326,269	3.57
Duplicate Lab Control Sample	EQ2300354-03	323,362	3.57
16WW37-230713	E2300657-001	230,869	3.57
16WW37-230713-FD	E2300657-002	228,637	3.57
16WW38-230713	E2300657-003	349,362	3.57
16WW44-230713	E2300657-004	330,111	3.57
16RW07-230713	E2300657-005	347,175	3.57
16RW06-230713	E2300657-006	326,949	3.57
16WW46-230713	E2300657-007	358,872	3.57

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

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23070993

Service Request: E2300657
Date Analyzed: 7/25/23 11:28

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

File ID: I:\LCMS01\DATA\20230725\20230725-015
Instrument ID: E-LCMS-01
Analytical Method: 6850

Lab Code: EQ2300360-02
Analysis Lot: 811716
Signal ID: 1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	263,382	3.62
	Upper Limit ==>	395,073	5.62
	Lower Limit ==>	131,691	1.62
Associated Analyses			
Continuing Calibration Verification	EQ2300360-02	243,256	3.57
16PM09-230713	E2300657-008	339,236	3.57
16PM06-230713	E2300657-009	350,641	3.57
16PM14-230713	E2300657-010	374,449	3.57

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

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2300657
Project:	HS23070993	**Date Analyzed:**	7/25/23 12:29

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20230725\20230725-026	**Lab Code:**	EQ2300360-03
Instrument ID:	E-LCMS-01	**Analysis Lot:**	811716
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	263,382	3.62
	Upper Limit ==>	395,073	5.62
	Lower Limit ==>	131,691	1.62
Associated Analyses			
Continuing Calibration Verification	EQ2300360-03	238,049	3.57

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

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2300657
Project:	HS23070993	**Date Analyzed:**	7/25/23 13:43

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20230725\20230725-037	**Lab Code:**	EQ2300360-04
Instrument ID:	E-LCMS-01	**Analysis Lot:**	811716
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	263,382	3.62
	Upper Limit ==>	395,073	5.62
	Lower Limit ==>	131,691	1.62
Associated Analyses			
Continuing Calibration Verification	EQ2300360-04	234,296	3.57

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

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2300657
Project:	HS23070993	**Date Analyzed:**	7/25/23 14:44

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20230725\20230725-048	**Lab Code:**	EQ2300360-05
Instrument ID:	E-LCMS-01	**Analysis Lot:**	811716
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	263,382	3.62
	Upper Limit ==>	395,073	5.62
	Lower Limit ==>	131,691	1.62
Associated Analyses			
Continuing Calibration Verification	EQ2300360-05	236,851	3.57

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

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23070993

Service Request: E2300657
Date Analyzed: 7/25/23 15:43

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

File ID: I:\LCMS01\DATA\20230725\20230725-057
Instrument ID: E-LCMS-01
Analytical Method: 6850

Lab Code: EQ2300360-06
Analysis Lot: 811716
Signal ID: 1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	263,382	3.62
	Upper Limit ==>	395,073	5.62
	Lower Limit ==>	131,691	1.62
Associated Analyses			
Continuing Calibration Verification	EQ2300360-06	225,280	3.57

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

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23070993

Service Request: E2300657
Date Analyzed: 7/25/23

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20230725\20230725-004

Calibration Date: 6/29/23
Calibration ID: EC2300011
Analysis Lot: 811716
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.0	0.1625	0.1627	0.1	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23070993

Service Request: E2300657
Date Analyzed: 7/25/23

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20230725\20230725-015

Calibration Date: 6/29/23
Calibration ID: EC2300011
Analysis Lot: 811716
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.1	0.1625	0.1646	1.3	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23070993

Service Request: E2300657
Date Analyzed: 7/25/23

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20230725\20230725-026

Calibration Date: 6/29/23
Calibration ID: EC2300011
Analysis Lot: 811716
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.1	0.1625	0.1634	0.5	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23070993

Service Request: E2300657
Date Analyzed: 7/25/23

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20230725\20230725-037

Calibration Date: 6/29/23
Calibration ID: EC2300011
Analysis Lot: 811716
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.1	0.1625	0.1642	1.1	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23070993

Service Request: E2300657
Date Analyzed: 7/25/23

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20230725\20230725-048

Calibration Date: 6/29/23
Calibration ID: EC2300011
Analysis Lot: 811716
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.93	0.1625	0.1613	-0.7	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23070993

Service Request: E2300657
Date Analyzed: 7/25/23

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20230725\20230725-057

Calibration Date: 6/29/23
Calibration ID: EC2300011
Analysis Lot: 811716
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.1	0.1625	0.1639	0.9	NA	± 15 %	Average RF

Insight Report

Printed at 7/25/2023 4:00:31 PM

Method File: I:\LCMS01\DATA\20230725\20230725.lcm
Project File: I:\LCMS01\DATA\20230725\20230725.damlp

IB

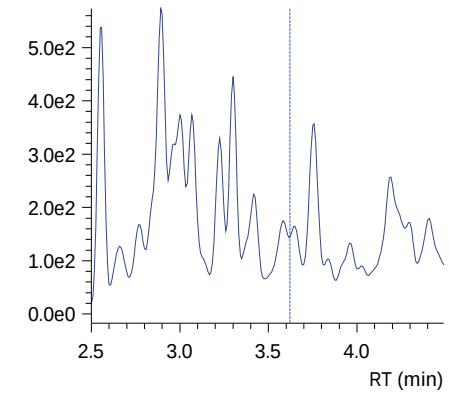
Sample ID: IB
Date Acquired: 7/25/2023 9:25:10 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-001.lcd
Vial: 4 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	382468	----	ng/mL	101.00 >85.00	0.00	19.68-36.55
Sodium Perchlorate-18O4_IS	Auto	3.580	382468	382468	1.0000	ng/mL	----	----	

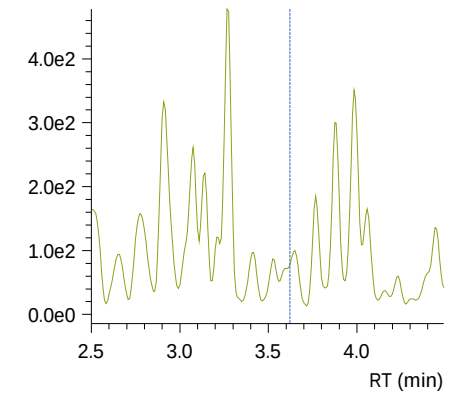
Perchlorate

Conc ----
R#1 0.00 (28.11)

Q 99.00>83.00 (-) 5.73e2



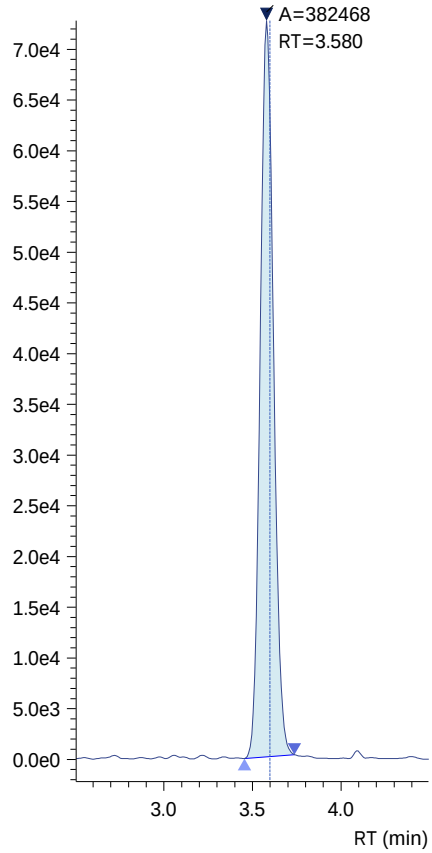
R1 101.00>85.00 (-) 4.78e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 7.28e4



Insight Report

Printed at 7/25/2023 4:00:31 PM

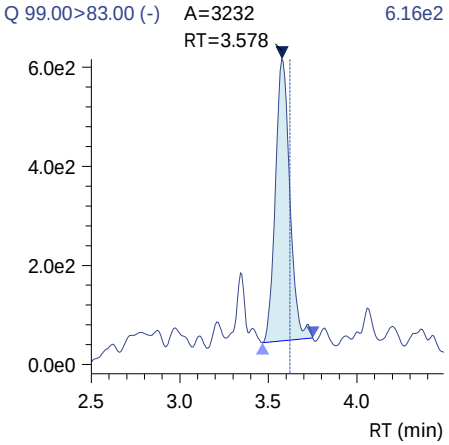
LODV

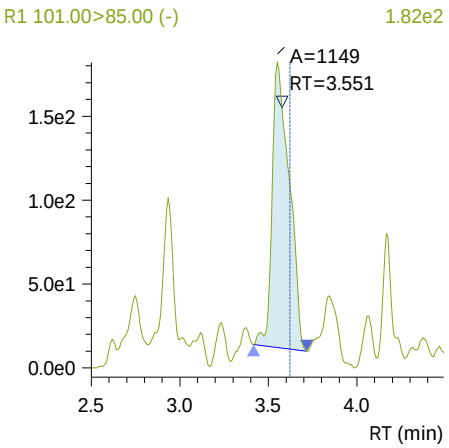
Sample ID: LODV
Date Acquired: 7/25/2023 10:16:49 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-002~1.lcd
Vial: 1 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.578	3232	357182	0.0557	ng/mL	101.00 >85.00	35.56	19.68-36.55
Sodium Perchlorate-18O4 _IS	Auto	3.571	357182	357182	1.0000	ng/mL	----	----	

Perchlorate

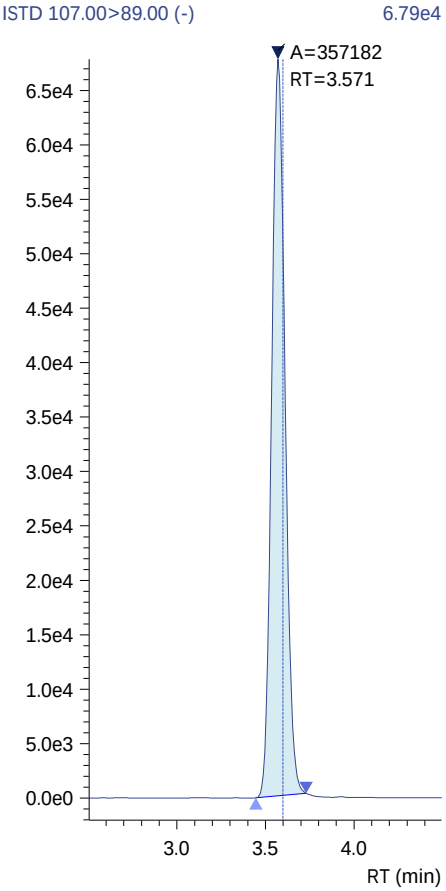
Conc 0.0557
R#1 35.56 (28.11)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/25/2023 4:00:31 PM

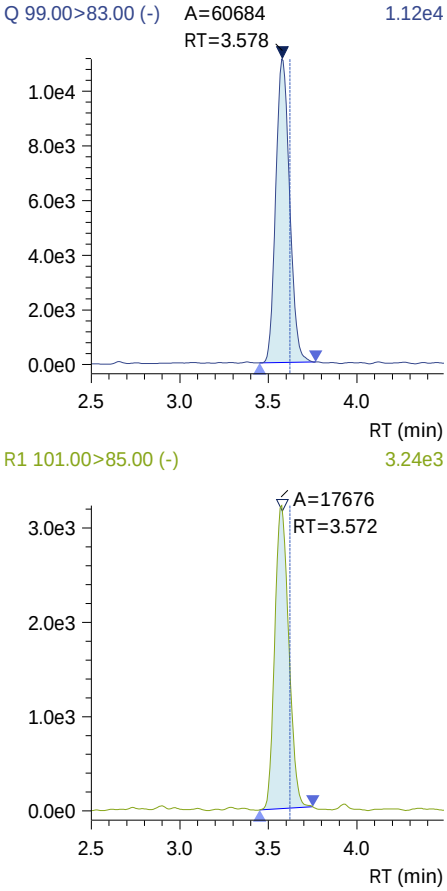
ICS

Sample ID: ICS
Date Acquired: 7/25/2023 10:22:35 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-003.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	3.578	60684	373050	1.0010	ng/mL	101.00 >85.00	29.13	19.68-36.55
Sodium Perchlorate-18O4 _IS	Auto	3.574	373050	373050	1.0000	ng/mL	----	----	

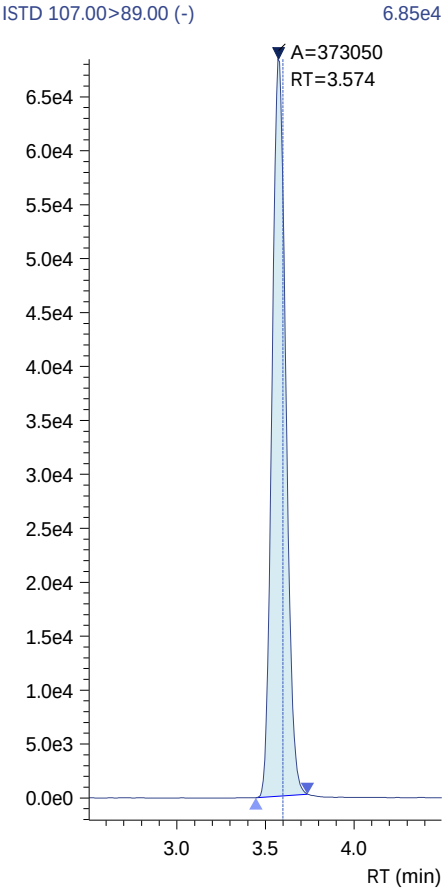
Perchlorate

Conc 1.0010
R#1 29.13 (28.11)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/25/2023 4:00:31 PM

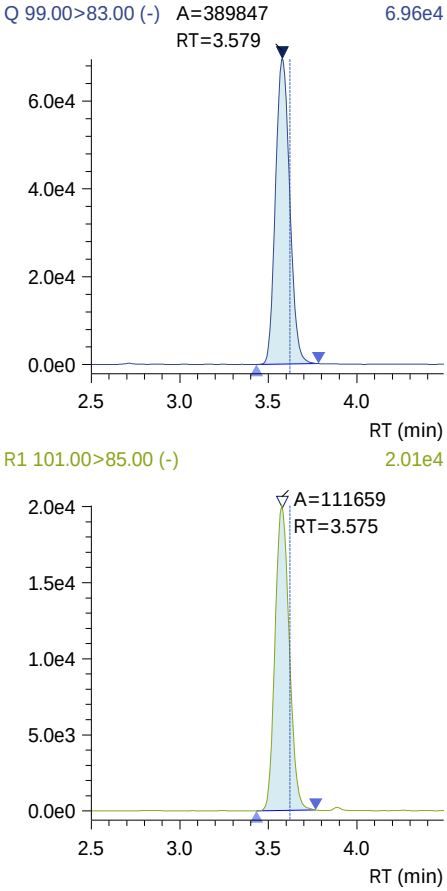
CCV

Sample ID: CCV
Date Acquired: 7/25/2023 10:28:08 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-004.lcd
Vial: 3 | 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	3.579	389847	239575	10.0129	ng/mL	101.00 >85.00	28.64	19.68-36.55
Sodium Perchlorate-18O4_IS	Auto	3.573	239575	239575	1.0000	ng/mL	----	----	

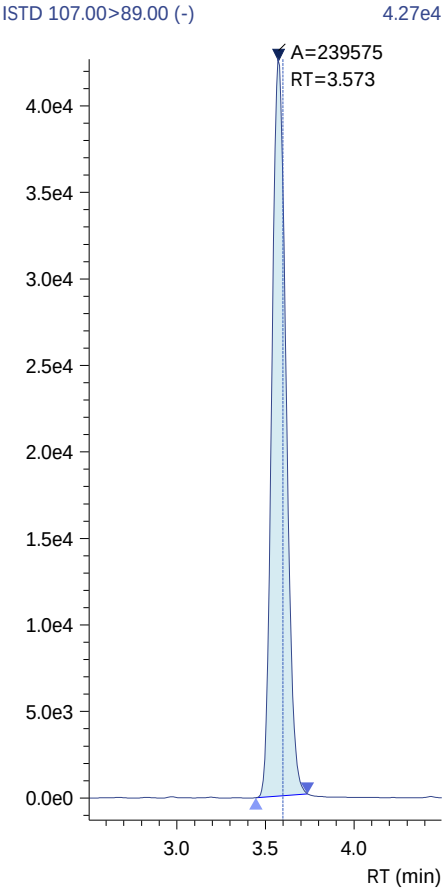
Perchlorate

Conc 10.0129
R#1 28.64 (28.11)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/25/2023 4:00:31 PM

EQ2300354-01

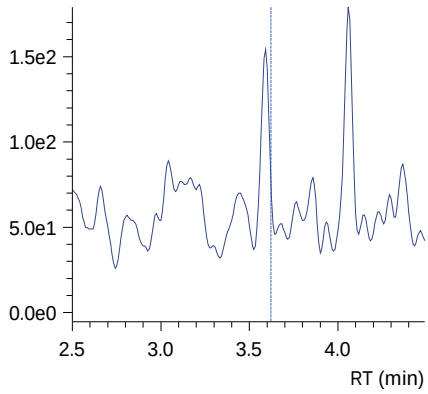
Sample ID: EQ2300354-01
Date Acquired: 7/25/2023 10:33:40 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-005.lcd
Vial: 11 | Inj. Volume: 10.0000uL | Tray: 4

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	328600	----	ng/mL	101.00 >85.00	0.00	19.68-36.55
Sodium Perchlorate-18O4_IS	Auto	3.573	328600	328600	1.0000	ng/mL	----	----	

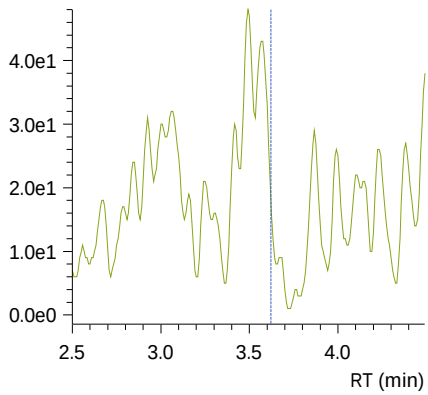
Perchlorate

Conc ----
R#1 0.00 (28.11)

Q 99.00>83.00 (-) 1.79e2



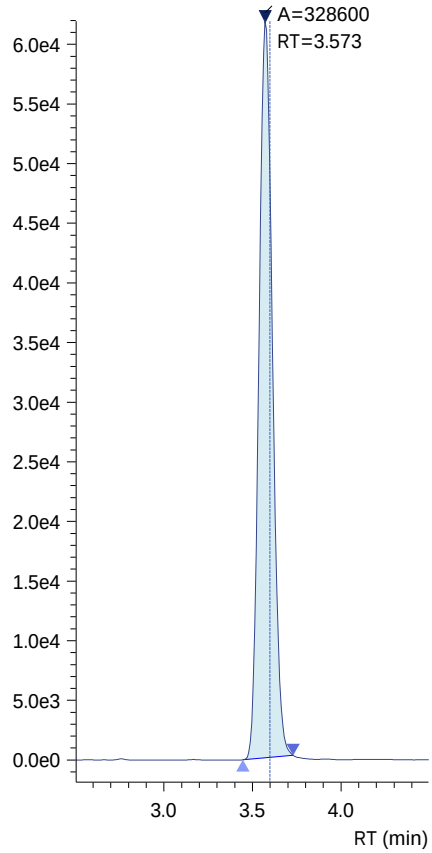
R1 101.00>85.00 (-) 4.80e1



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 6.19e4



Insight Report

Printed at 7/25/2023 4:00:31 PM

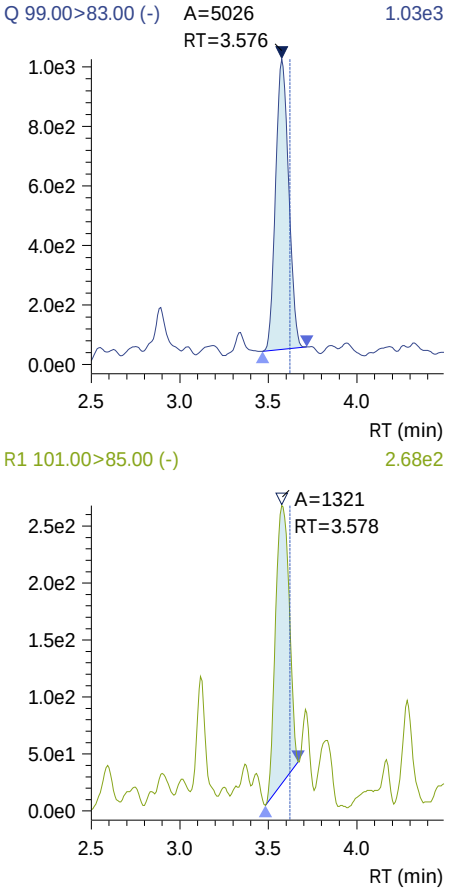
EQ2300354-02

Sample ID: EQ2300354-02
Date Acquired: 7/25/2023 10:39:12 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-006.lcd
Vial: 12 | Inj. Volume: 10.0000uL | Tray: 4

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.576	5026	326269	0.0948	ng/mL	101.00 >85.00	26.28	19.68-36.55
Sodium Perchlorate-18O4 _IS	Auto	3.574	326269	326269	1.0000	ng/mL	----	----	

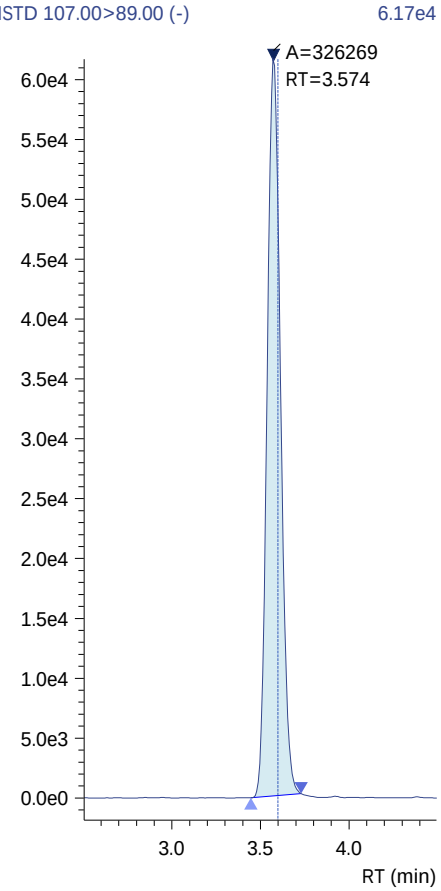
Perchlorate

Conc 0.0948
R#1 26.28 (28.11)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/25/2023 4:00:31 PM

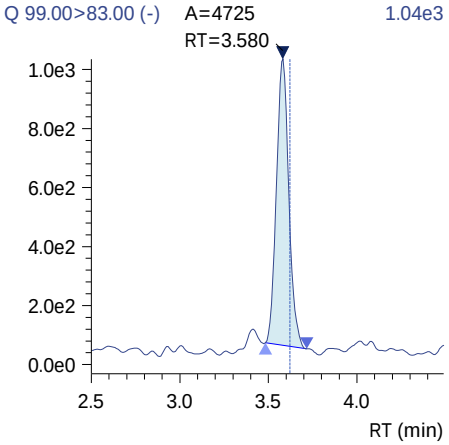
EQ2300354-03

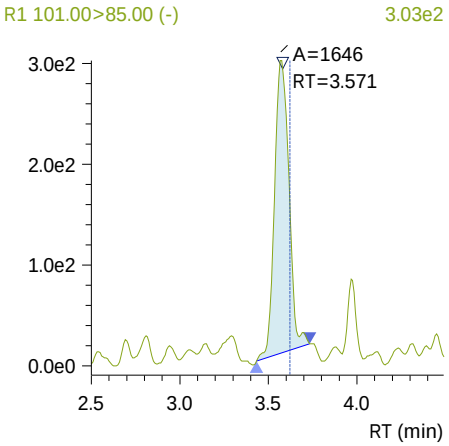
Sample ID: EQ2300354-03
Date Acquired: 7/25/2023 10:44:44 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-007.lcd
Vial: 13 | Inj. Volume: 10.0000uL | Tray: 4

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.580	4725	323362	0.0899	ng/mL	101.00 >85.00	34.84	19.68-36.55
Sodium Perchlorate-18O4 _IS	Auto	3.573	323362	323362	1.0000	ng/mL	----	----	

Perchlorate

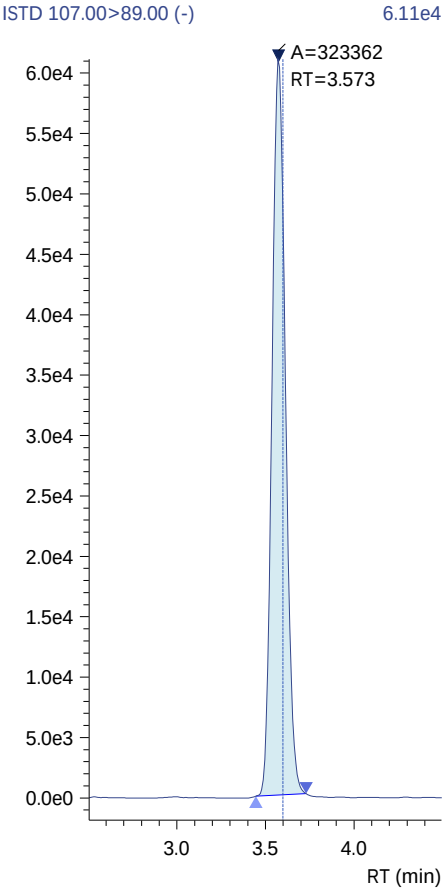
Conc 0.0899
R#1 34.84 (28.11)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/25/2023 4:00:31 PM

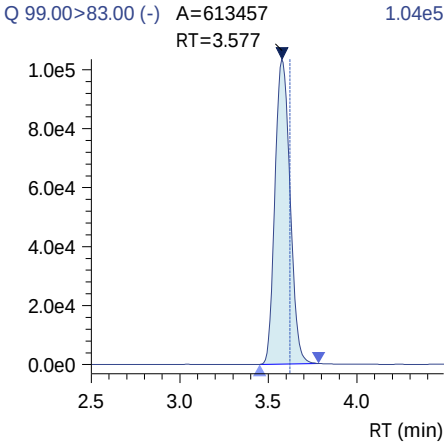
E2300657-001X10

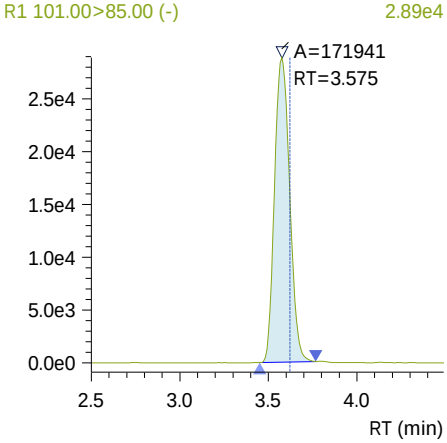
Sample ID: E2300657-001
Date Acquired: 7/25/2023 10:50:17 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-008.lcd
Vial: 14 | Inj. Volume: 10.0000uL | Tray: 4

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.577	613457	230869	16.3503	ng/mL	101.00 >85.00	28.03	19.68-36.55
Sodium Perchlorate-18O4_IS	Auto	3.573	230869	230869	1.0000	ng/mL	----	----	

Perchlorate

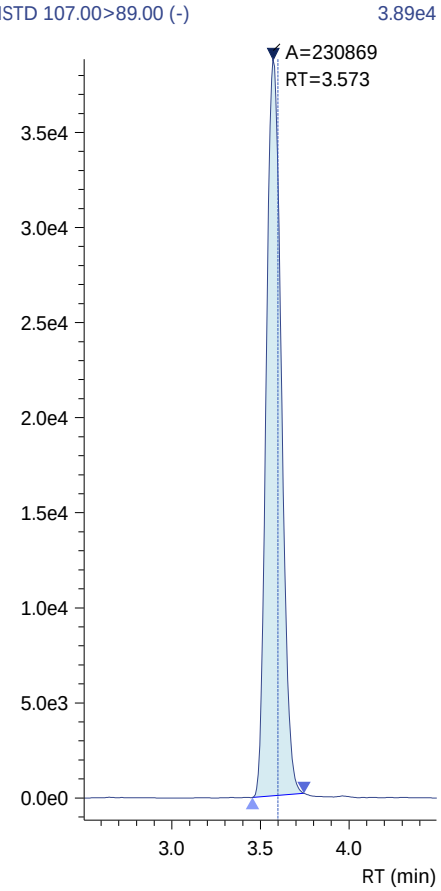
Conc 16.3503
R#1 28.03 (28.11)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/25/2023 4:00:31 PM

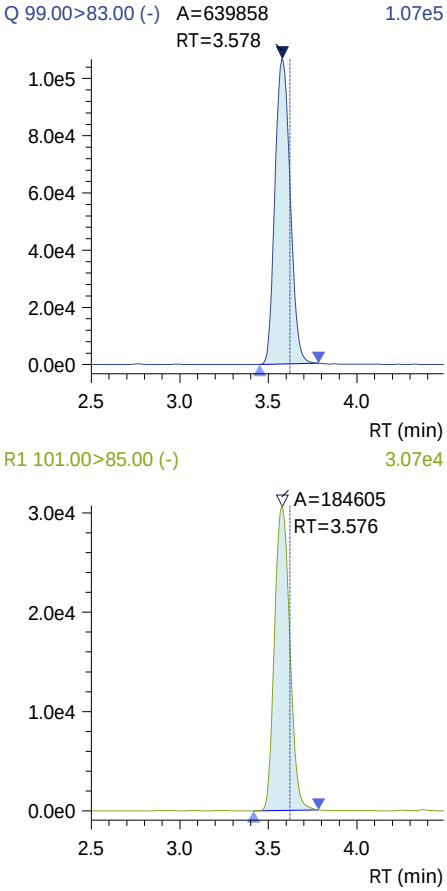
E2300657-002X10

Sample ID: E2300657-002
Date Acquired: 7/25/2023 10:55:49 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-009.lcd
Vial: 15 | Inj. Volume: 10.0000uL | Tray: 4

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.578	639858	228637	17.2204	ng/mL	101.00 >85.00	28.85	19.68-36.55
Sodium Perchlorate-18O4_IS	Auto	3.571	228637	228637	1.0000	ng/mL	----	----	

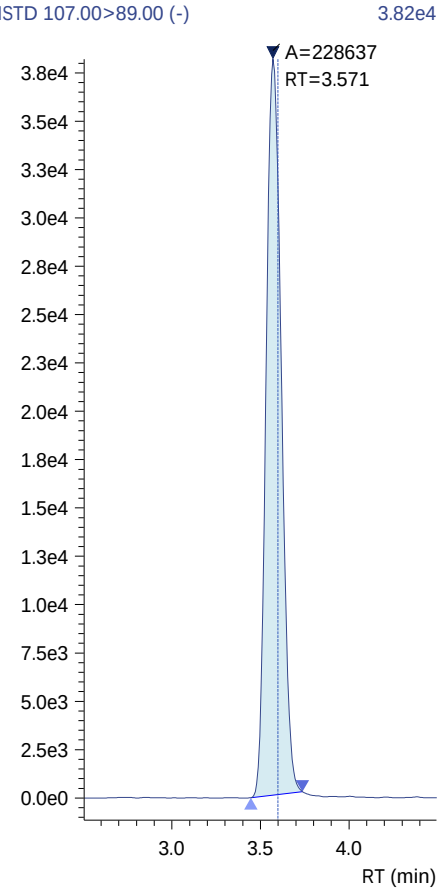
Perchlorate

Conc 17.2204
R#1 28.85 (28.11)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/25/2023 4:00:31 PM

E2300657-003

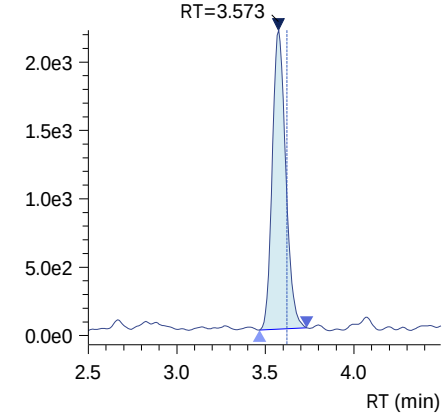
Sample ID: E2300657-003
Date Acquired: 7/25/2023 11:01:20 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-010.lcd
Vial: 16 | Inj. Volume: 10.0000uL | Tray: 4

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.573	11546	349362	0.2033	ng/mL	101.00 >85.00	26.79	19.68-36.55
Sodium Perchlorate-18O4 _IS	Auto	3.573	349362	349362	1.0000	ng/mL	----	----	

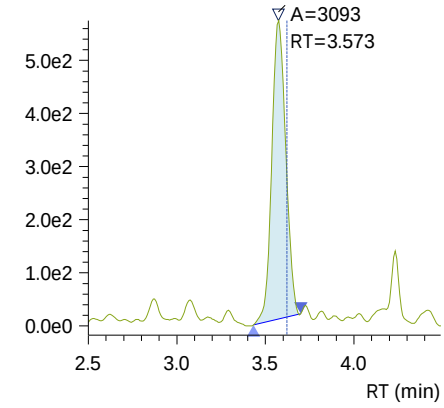
Perchlorate

Conc 0.2033
R#1 26.79 (28.11)

Q 99.00>83.00 (-) A=11546 2.23e3



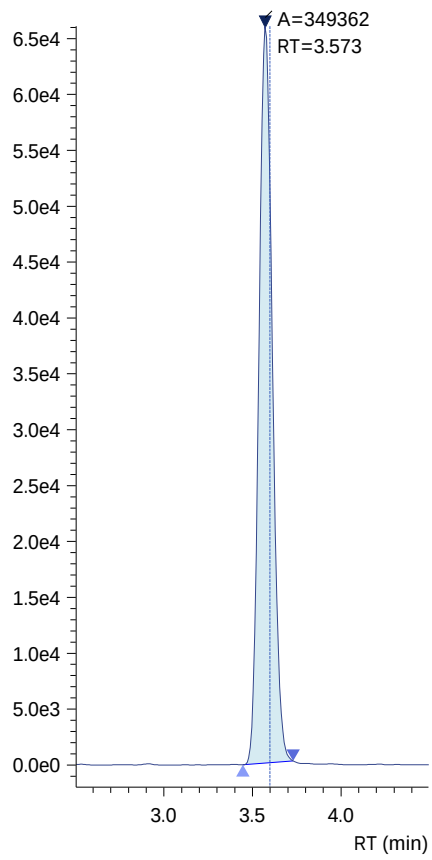
R1 101.00>85.00 (-) 5.75e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 6.61e4



Insight Report

Printed at 7/25/2023 4:00:31 PM

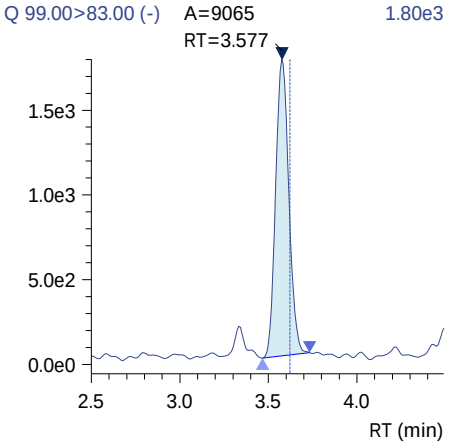
E2300657-004

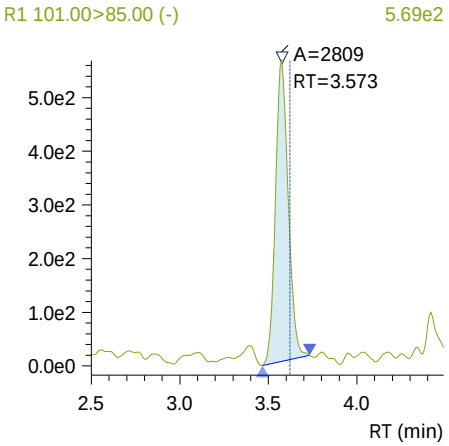
Sample ID: E2300657-004
Date Acquired: 7/25/2023 11:06:51 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-011.lcd
Vial: 17 | Inj. Volume: 10.0000uL | Tray: 4

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.577	9065	330111	0.1690	ng/mL	101.00 >85.00	30.99	19.68-36.55
Sodium Perchlorate-18O4 _IS	Auto	3.573	330111	330111	1.0000	ng/mL	----	----	

Perchlorate

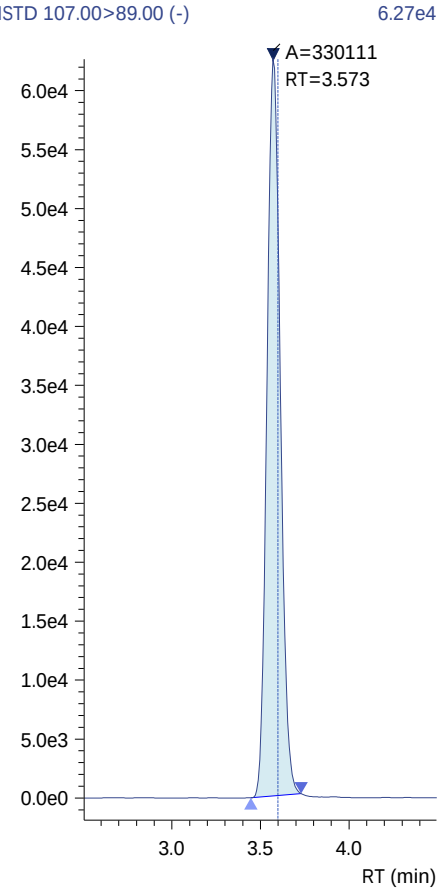
Conc 0.1690
R#1 30.99 (28.11)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/25/2023 4:00:31 PM

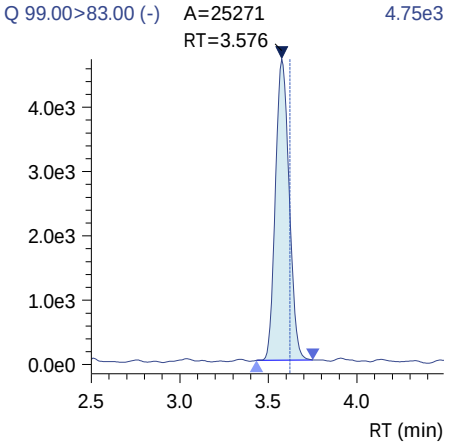
E2300657-005

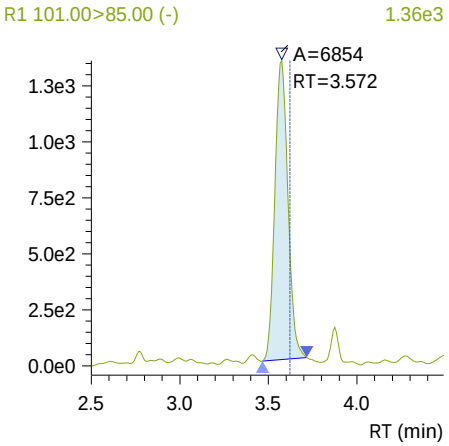
Sample ID: E2300657-005
Date Acquired: 7/25/2023 11:12:24 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-012.lcd
Vial: 18 | Inj. Volume: 10.0000uL | Tray: 4

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.576	25271	347175	0.4479	ng/mL	101.00 >85.00	27.12	19.68-36.55
Sodium Perchlorate-18O4 _IS	Auto	3.572	347175	347175	1.0000	ng/mL	----	----	

Perchlorate

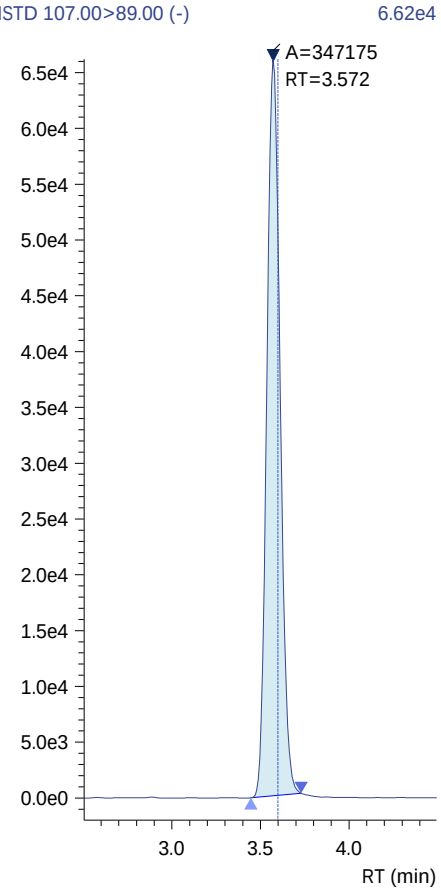
Conc 0.4479
R#1 27.12 (28.11)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/25/2023 4:00:31 PM

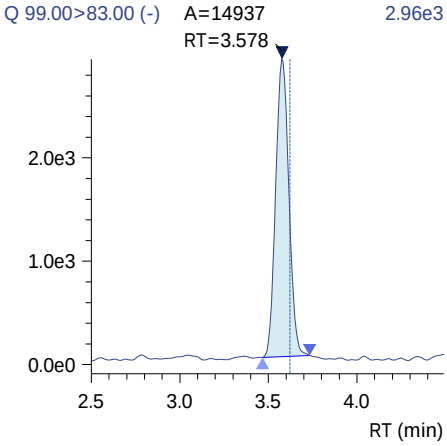
E2300657-006

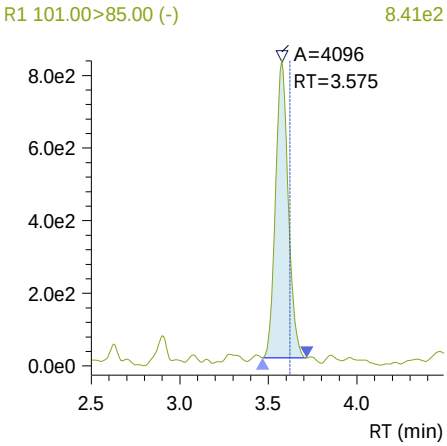
Sample ID: E2300657-006
Date Acquired: 7/25/2023 11:17:54 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-013.lcd
Vial: 19 | Inj. Volume: 10.0000uL | Tray: 4

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.578	14937	326949	0.2811	ng/mL	101.00 >85.00	27.42	19.68-36.55
Sodium Perchlorate-18O4 _IS	Auto	3.573	326949	326949	1.0000	ng/mL	----	----	

Perchlorate

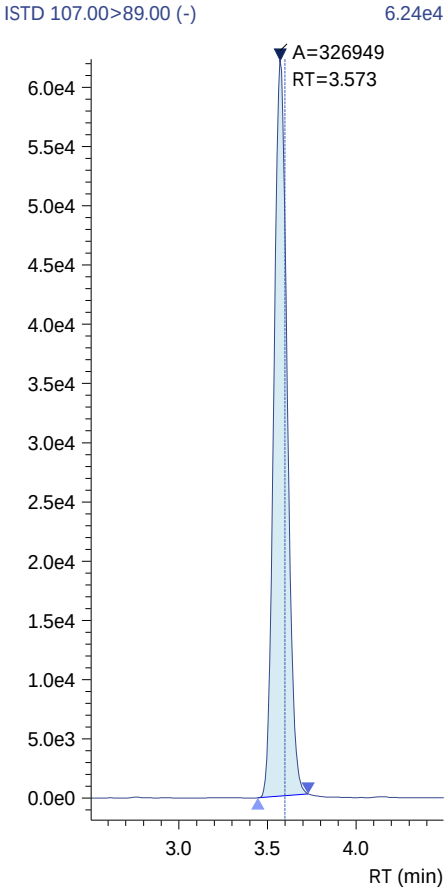
Conc 0.2811
R#1 27.42 (28.11)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/25/2023 4:00:31 PM

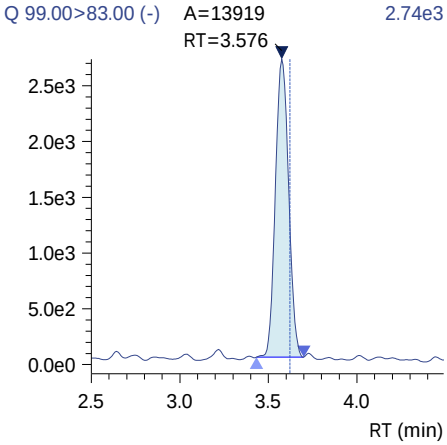
E2300657-007

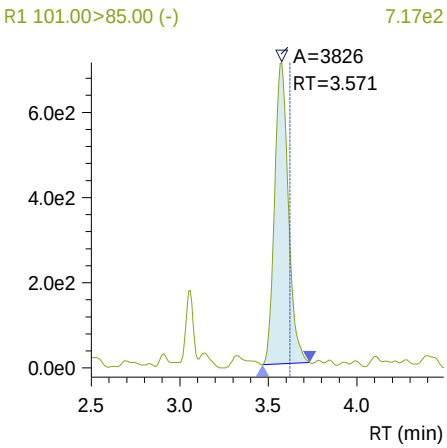
Sample ID: E2300657-007
Date Acquired: 7/25/2023 11:23:27 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-014.lcd
Vial: 20 | Inj. Volume: 10.0000uL | Tray: 4

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.576	13919	358872	0.2387	ng/mL	101.00 >85.00	27.49	19.68-36.55
Sodium Perchlorate-18O4 _IS	Auto	3.572	358872	358872	1.0000	ng/mL	----	----	

Perchlorate

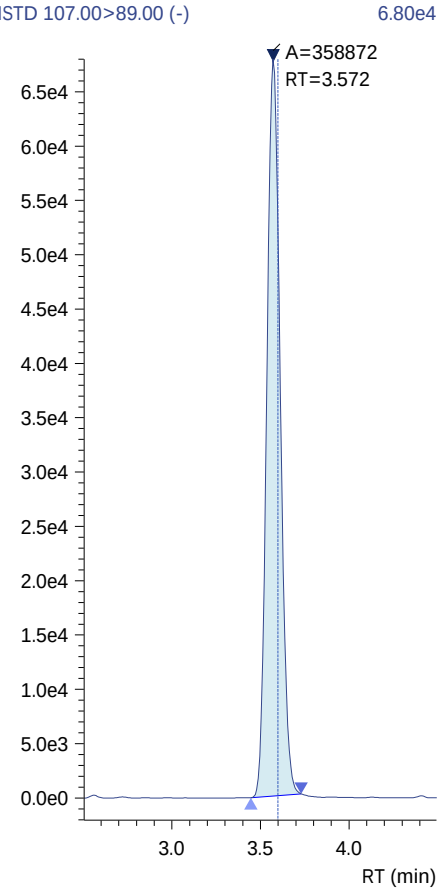
Conc 0.2387
R#1 27.49 (28.11)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/25/2023 4:00:31 PM

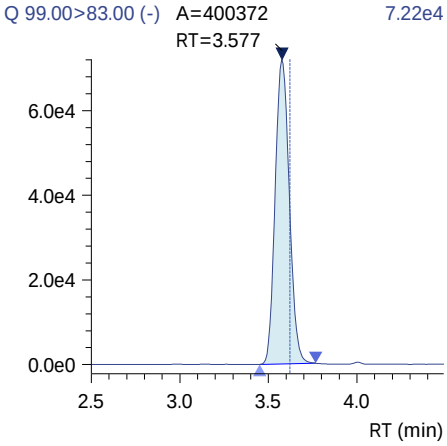
CCV

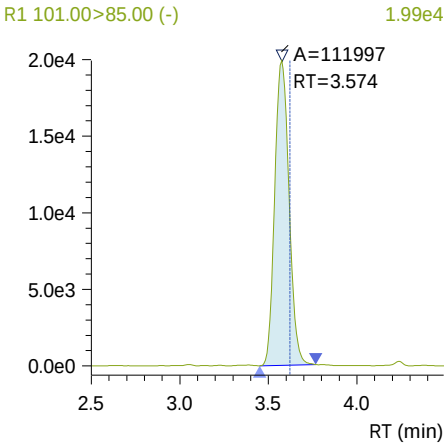
Sample ID: CCV
Date Acquired: 7/25/2023 11:28:58 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-015.lcd
Vial: 3 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.577	400372	243256	10.12 76	ng/mL	101.00 >85.00	27.97	19.68-36.55
Sodium Perchlorate-18O4_IS	Auto	3.572	243256	243256	1.0000	ng/mL	----	----	

Perchlorate

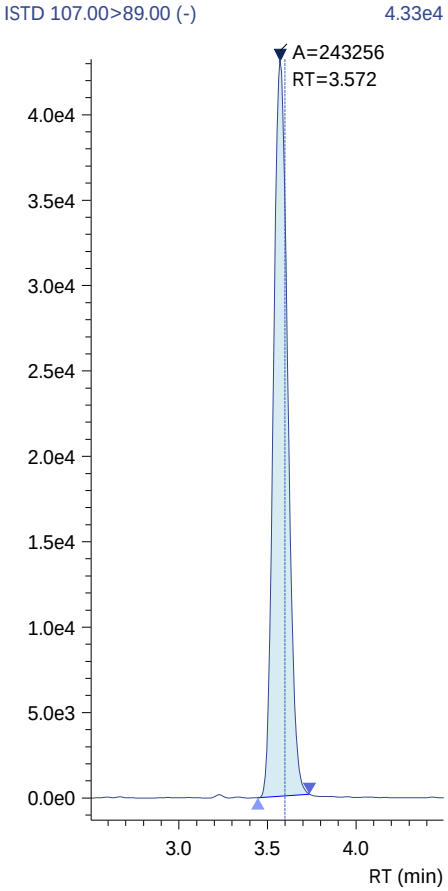
Conc 10.1276
R#1 27.97 (28.11)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/25/2023 4:00:31 PM

E2300657-008

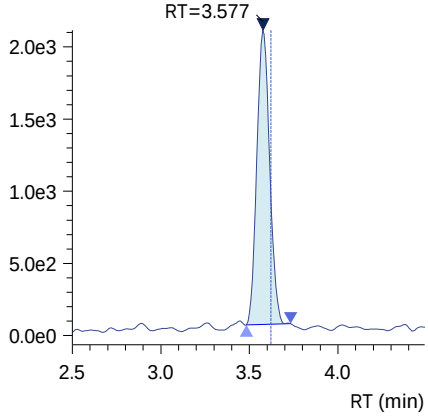
Sample ID: E2300657-008
Date Acquired: 7/25/2023 11:34:30 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-016.lcd
Vial: 21 | Inj. Volume: 10.0000uL | Tray: 4

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.577	10256	339236	0.1860	ng/mL	101.00 >85.00	28.98	19.68-36.55
Sodium Perchlorate-18O4 _IS	Auto	3.573	339236	339236	1.0000	ng/mL	----	----	

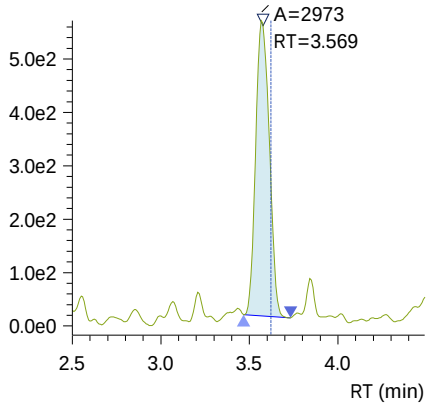
Perchlorate

Conc 0.1860
R#1 28.98 (28.11)

Q 99.00>83.00 (-) A=10256 2.12e3



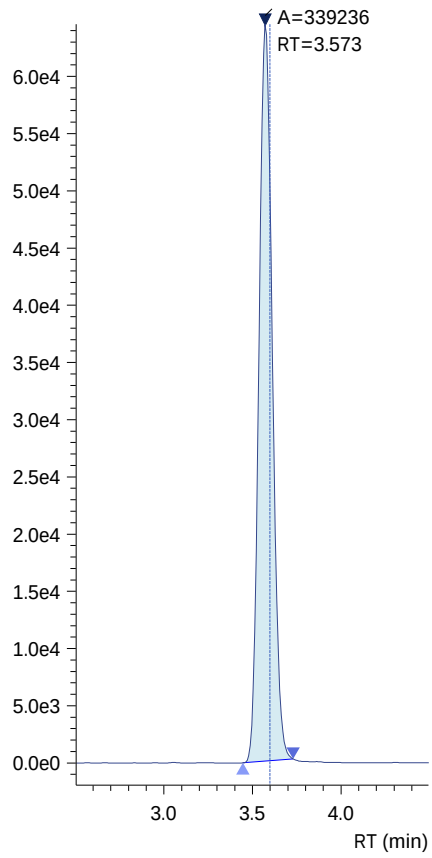
R1 101.00>85.00 (-) 5.72e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 6.46e4



Insight Report

Printed at 7/25/2023 4:00:31 PM

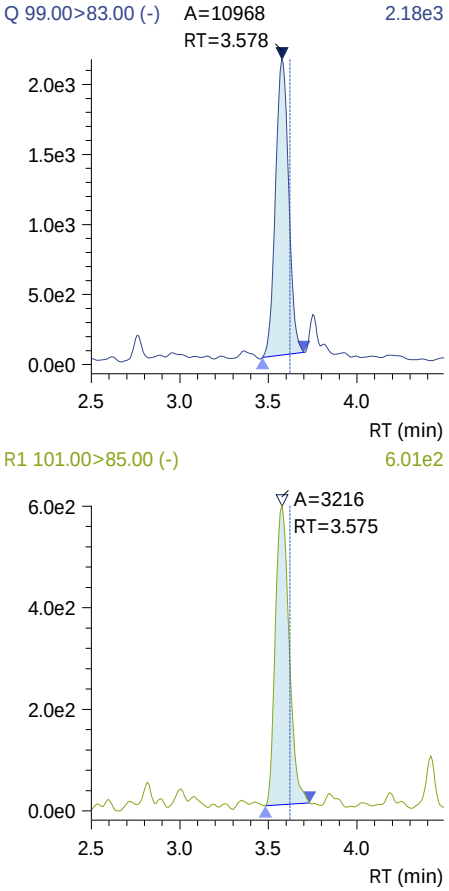
E2300657-009

Sample ID: E2300657-009
Date Acquired: 7/25/2023 11:40:00 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-017.lcd
Vial: 22 | Inj. Volume: 10.0000uL | Tray: 4

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.578	10968	350641	0.1925	ng/mL	101.00 >85.00	29.32	19.68-36.55
Sodium Perchlorate-18O4 _IS	Auto	3.573	350641	350641	1.0000	ng/mL	----	----	

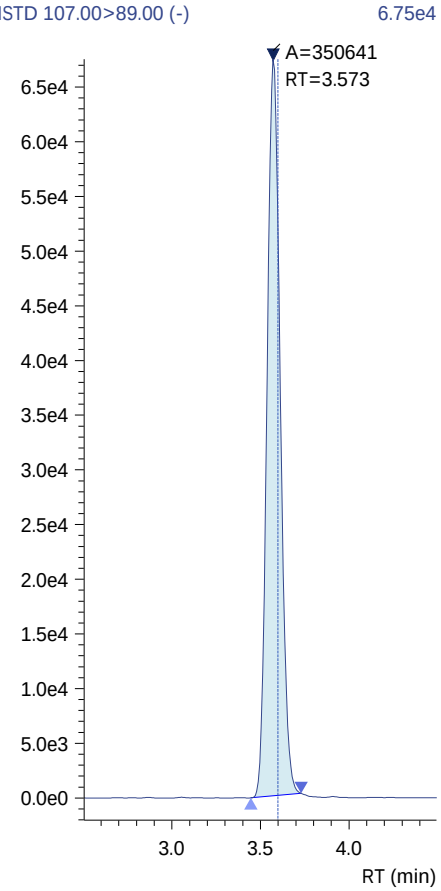
Perchlorate

Conc 0.1925
R#1 29.32 (28.11)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/25/2023 4:00:31 PM

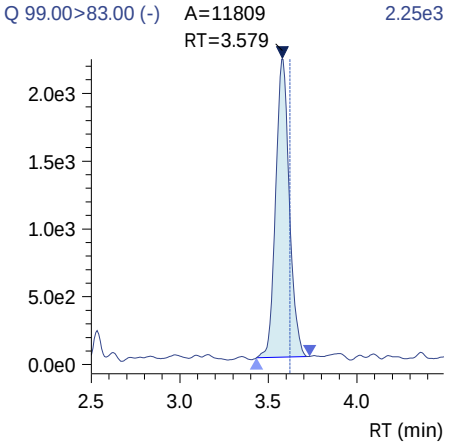
E2300657-010

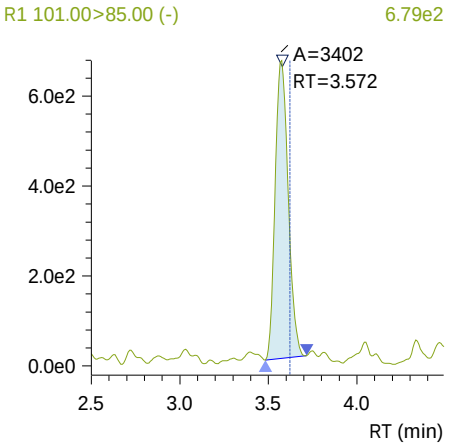
Sample ID: E2300657-010
Date Acquired: 7/25/2023 11:45:34 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-018.lcd
Vial: 23 | Inj. Volume: 10.0000uL | Tray: 4

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.579	11809	374449	0.1941	ng/mL	101.00 >85.00	28.80	19.68-36.55
Sodium Perchlorate-18O4 _IS	Auto	3.574	374449	374449	1.0000	ng/mL	----	----	

Perchlorate

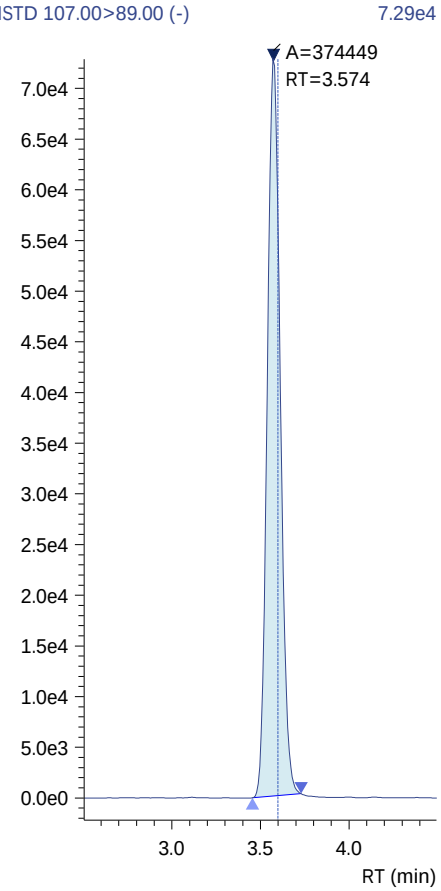
Conc 0.1941
R#1 28.80 (28.11)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/25/2023 4:00:31 PM

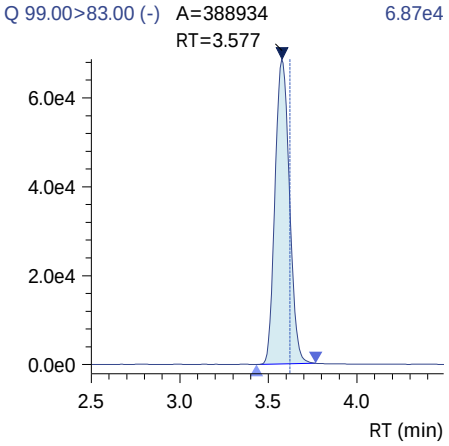
CCV

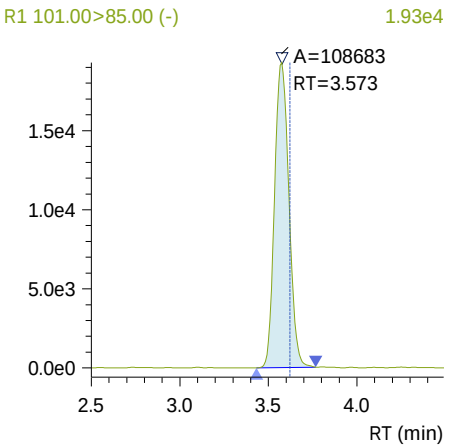
Sample ID: CCV
Date Acquired: 7/25/2023 12:29:50 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-026.lcd
Vial: 3 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.577	388934	238049	10.05 34	ng/mL	101.00 >85.00	27.94	19.68-36.55
Sodium Perchlorate-18O4_IS	Auto	3.571	238049	238049	1.0000	ng/mL	----	----	

Perchlorate

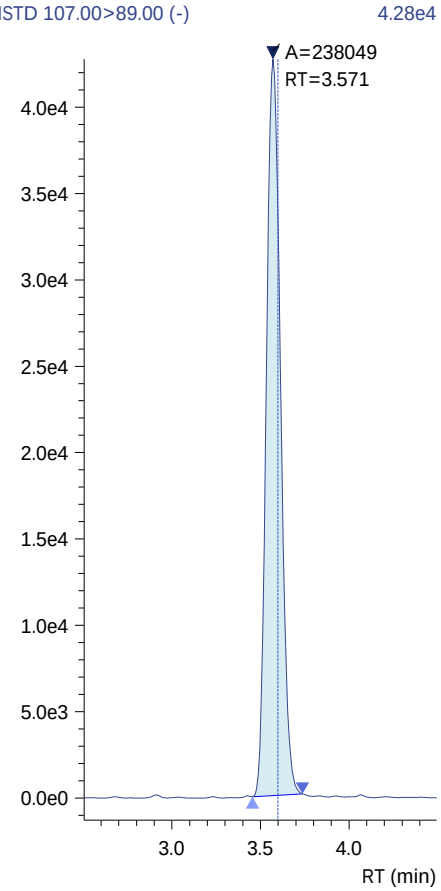
Conc 10.0534
R#1 27.94 (28.11)





Sodium Perchlorate-18O4_IS

Conc 1.0000



HS23071113 LHAAP 16 January 2023 Cover Page

ALS WO# HS23071113

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right solutions.
right partner.

WorkOrder: HS23071113

LHAAP 16 January 2023

Aptim Environmental & Infrastucture, Inc.

Vicki Graves
10333 Richmond Ave Ste 1030
Houston TX 77042

27-Jul-2023

HS23071113 LHAAP 16 January 2023 Final

ALS WO# HS23071113

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July 28, 2023

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

Work Order: **HS23071113**

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

Dear Vicki Graves ,

ALS Environmental received 10 sample(s) on Jul 15, 2023 for the analysis presented in the following report.

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

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

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

Sincerely,

Generated By: DAYNA.FISHER
James Guin

ALS Houston, US Date: 28-Jul-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Work Order: HS23071113

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS23071113-01	16ww51-230714	Groundwater		14-Jul-2023 07:05	15-Jul-2023 09:10	☐
HS23071113-02	16ww30-230714	Groundwater		14-Jul-2023 07:45	15-Jul-2023 09:10	☐
HS23071113-03	16ww29-230714	Groundwater		14-Jul-2023 08:25	15-Jul-2023 09:10	☐
HS23071113-04	16ww13-230714	Groundwater		14-Jul-2023 09:10	15-Jul-2023 09:10	☐
HS23071113-05	16ww42-230714	Groundwater		14-Jul-2023 09:50	15-Jul-2023 09:10	☐
HS23071113-06	16ww23-230714	Groundwater		14-Jul-2023 10:30	15-Jul-2023 09:10	☐
HS23071113-07	16ww24-230714	Groundwater		14-Jul-2023 11:10	15-Jul-2023 09:10	☐
HS23071113-08	16ww27-230714	Groundwater		14-Jul-2023 11:55	15-Jul-2023 09:10	☐
HS23071113-09	16ww43-230714	Groundwater		14-Jul-2023 12:35	15-Jul-2023 09:10	☐
HS23071113-10	Trip Blank-230714	Water		14-Jul-2023 00:00	15-Jul-2023 09:10	☐

ALS Houston, US Date: 28-Jul-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Work Order: HS23071113

CASE NARRATIVE

Work Order Comments

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

GCMS Volatiles by Method SW8260

Batch ID: R442002

Sample ID: HS23071109-01MSD

- MSD is for an unrelated sample

Batch ID: R442290

Sample ID: HS23071289-11MS

- MS is for an unrelated sample

Batch ID: R442149

Sample ID: 16ww30-230714 (HS23071113-02MS)

- MS recovered outside control limits for 1,1-Dichloroethene, Trichloroethene and Vinyl chloride. MS/MSD RPD recovered marginally above upper control limits for Vinyl chloride.

ALS Houston, US Date: 28-Jul-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16ww51-230714
Collection Date: 14-Jul-2023 07:05

ANALYTICAL REPORT
WorkOrder:HS23071113
Lab ID:HS23071113-01
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	5.0	U	1.5	5.0	5.0	ug/L	5	21-Jul-2023 21:50
1,1-Dichloroethene	**8.2**		**1.0**	**5.0**	**5.0**	**ug/L**	5	21-Jul-2023 21:50
1,2-Dichloroethane	5.0	U	1.0	5.0	5.0	ug/L	5	21-Jul-2023 21:50
cis-1,2-Dichloroethene	**810**		**1.0**	**5.0**	**5.0**	**ug/L**	5	21-Jul-2023 21:50
Methylene chloride	5.0	U	2.0	5.0	10	ug/L	5	21-Jul-2023 21:50
Trichloroethene	**4,200**		**10**	**50**	**50**	**ug/L**	50	24-Jul-2023 15:01
Vinyl chloride	**17**		**1.0**	**5.0**	**5.0**	**ug/L**	5	21-Jul-2023 21:50
Surr: 1,2-Dichloroethane-d4	*111*			**0**	*81-118*	*%REC*	*5*	*21-Jul-2023 21:50*
Surr: 1,2-Dichloroethane-d4	*109*			**0**	*81-118*	*%REC*	*50*	*24-Jul-2023 15:01*
Surr: 4-Bromofluorobenzene	*91.1*			**0**	*85-114*	*%REC*	*5*	*21-Jul-2023 21:50*
Surr: 4-Bromofluorobenzene	*95.0*			**0**	*85-114*	*%REC*	*50*	*24-Jul-2023 15:01*
Surr: Dibromofluoromethane	*110*			**0**	*80-119*	*%REC*	*5*	*21-Jul-2023 21:50*
Surr: Dibromofluoromethane	*108*			**0**	*80-119*	*%REC*	*50*	*24-Jul-2023 15:01*
Surr: Toluene-d8	*101*			**0**	*89-112*	*%REC*	*5*	*21-Jul-2023 21:50*
Surr: Toluene-d8	*101*			**0**	*89-112*	*%REC*	*50*	*24-Jul-2023 15:01*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	27-Jul-2023 20:10

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

ALS Houston, US Date: 28-Jul-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16ww30-230714
Collection Date: 14-Jul-2023 07:45

ANALYTICAL REPORT
WorkOrder:HS23071113
Lab ID:HS23071113-02
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	24-Jul-2023 13:18
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	24-Jul-2023 13:18
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	24-Jul-2023 13:18
cis-1,2-Dichloroethene	**5.2**		**0.20**	**1.0**	**1.0**	**ug/L**	1	24-Jul-2023 13:18
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	24-Jul-2023 13:18
Trichloroethene	**48**		**0.20**	**1.0**	**1.0**	**ug/L**	1	24-Jul-2023 13:18
Vinyl chloride	1.0	U	0.20	1.0	1.0	ug/L	1	24-Jul-2023 13:18
Surr: 1,2-Dichloroethane-d4	*106*			**0**	*81-118*	*%REC*	*1*	*24-Jul-2023 13:18*
Surr: 4-Bromofluorobenzene	*95.3*			**0**	*85-114*	*%REC*	*1*	*24-Jul-2023 13:18*
Surr: Dibromofluoromethane	*108*			**0**	*80-119*	*%REC*	*1*	*24-Jul-2023 13:18*
Surr: Toluene-d8	*101*			**0**	*89-112*	*%REC*	*1*	*24-Jul-2023 13:18*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	27-Jul-2023 20:10

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

ALS Houston, US Date: 28-Jul-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16ww29-230714
Collection Date: 14-Jul-2023 08:25

ANALYTICAL REPORT
WorkOrder:HS23071113
Lab ID:HS23071113-03
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	24-Jul-2023 15:21
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	24-Jul-2023 15:21
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	24-Jul-2023 15:21
cis-1,2-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	24-Jul-2023 15:21
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	24-Jul-2023 15:21
Trichloroethene	**1.2**		**0.20**	**1.0**	**1.0**	**ug/L**	1	24-Jul-2023 15:21
Vinyl chloride	1.0	U	0.20	1.0	1.0	ug/L	1	24-Jul-2023 15:21
Surr: 1,2-Dichloroethane-d4	*107*			**0**	*81-118*	*%REC*	*1*	*24-Jul-2023 15:21*
Surr: 4-Bromofluorobenzene	*100*			**0**	*85-114*	*%REC*	*1*	*24-Jul-2023 15:21*
Surr: Dibromofluoromethane	*107*			**0**	*80-119*	*%REC*	*1*	*24-Jul-2023 15:21*
Surr: Toluene-d8	*101*			**0**	*89-112*	*%REC*	*1*	*24-Jul-2023 15:21*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	27-Jul-2023 20:10

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

ALS Houston, US Date: 28-Jul-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16ww13-230714
Collection Date: 14-Jul-2023 09:10

ANALYTICAL REPORT
WorkOrder:HS23071113
Lab ID:HS23071113-04
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	24-Jul-2023 13:39
1,1-Dichloroethene	**2.6**		**0.20**	**1.0**	**1.0**	**ug/L**	1	24-Jul-2023 13:39
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	24-Jul-2023 13:39
cis-1,2-Dichloroethene	**640**		**5.0**	**25**	**25**	**ug/L**	25	25-Jul-2023 14:54
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	24-Jul-2023 13:39
Trichloroethene	**1,600**		**5.0**	**25**	**25**	**ug/L**	25	25-Jul-2023 14:54
Vinyl chloride	**18**		**0.20**	**1.0**	**1.0**	**ug/L**	1	24-Jul-2023 13:39
Surr: 1,2-Dichloroethane-d4	*107*			**0**	*81-118*	*%REC*	*1*	*24-Jul-2023 13:39*
Surr: 1,2-Dichloroethane-d4	*112*			**0**	*81-118*	*%REC*	*25*	*25-Jul-2023 14:54*
Surr: 4-Bromofluorobenzene	*98.4*			**0**	*85-114*	*%REC*	*1*	*24-Jul-2023 13:39*
Surr: 4-Bromofluorobenzene	*97.5*			**0**	*85-114*	*%REC*	*25*	*25-Jul-2023 14:54*
Surr: Dibromofluoromethane	*105*			**0**	*80-119*	*%REC*	*1*	*24-Jul-2023 13:39*
Surr: Dibromofluoromethane	*107*			**0**	*80-119*	*%REC*	*25*	*25-Jul-2023 14:54*
Surr: Toluene-d8	*99.1*			**0**	*89-112*	*%REC*	*1*	*24-Jul-2023 13:39*
Surr: Toluene-d8	*99.9*			**0**	*89-112*	*%REC*	*25*	*25-Jul-2023 14:54*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	27-Jul-2023 20:10

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

ALS Houston, US Date: 28-Jul-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16ww42-230714
Collection Date: 14-Jul-2023 09:50

ANALYTICAL REPORT
WorkOrder:HS23071113
Lab ID:HS23071113-05
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	24-Jul-2023 18:26
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	24-Jul-2023 18:26
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	24-Jul-2023 18:26
cis-1,2-Dichloroethene	**320**		**1.0**	**5.0**	**5.0**	**ug/L**	5	25-Jul-2023 15:15
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	24-Jul-2023 18:26
Trichloroethene	**22**		**0.20**	**1.0**	**1.0**	**ug/L**	1	24-Jul-2023 18:26
Vinyl chloride	**0.78**	J	**0.20**	**1.0**	**1.0**	**ug/L**	1	24-Jul-2023 18:26
Surr: 1,2-Dichloroethane-d4	*113*			**0**	*81-118*	*%REC*	*1*	*24-Jul-2023 18:26*
Surr: 1,2-Dichloroethane-d4	*112*			**0**	*81-118*	*%REC*	*5*	*25-Jul-2023 15:15*
Surr: 4-Bromofluorobenzene	*95.6*			**0**	*85-114*	*%REC*	*1*	*24-Jul-2023 18:26*
Surr: 4-Bromofluorobenzene	*96.6*			**0**	*85-114*	*%REC*	*5*	*25-Jul-2023 15:15*
Surr: Dibromofluoromethane	*111*			**0**	*80-119*	*%REC*	*1*	*24-Jul-2023 18:26*
Surr: Dibromofluoromethane	*108*			**0**	*80-119*	*%REC*	*5*	*25-Jul-2023 15:15*
Surr: Toluene-d8	*102*			**0**	*89-112*	*%REC*	*1*	*24-Jul-2023 18:26*
Surr: Toluene-d8	*101*			**0**	*89-112*	*%REC*	*5*	*25-Jul-2023 15:15*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	27-Jul-2023 20:10

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

ALS Houston, US Date: 28-Jul-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16ww23-230714
Collection Date: 14-Jul-2023 10:30

ANALYTICAL REPORT
WorkOrder:HS23071113
Lab ID:HS23071113-06
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	24-Jul-2023 15:42
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	24-Jul-2023 15:42
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	24-Jul-2023 15:42
cis-1,2-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	24-Jul-2023 15:42
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	24-Jul-2023 15:42
Trichloroethene	**0.53**	J	**0.20**	**1.0**	**1.0**	**ug/L**	1	24-Jul-2023 15:42
Vinyl chloride	1.0	U	0.20	1.0	1.0	ug/L	1	24-Jul-2023 15:42
Surr: 1,2-Dichloroethane-d4	*118*			**0**	*81-118*	*%REC*	*1*	*24-Jul-2023 15:42*
Surr: 4-Bromofluorobenzene	*95.8*			**0**	*85-114*	*%REC*	*1*	*24-Jul-2023 15:42*
Surr: Dibromofluoromethane	*111*			**0**	*80-119*	*%REC*	*1*	*24-Jul-2023 15:42*
Surr: Toluene-d8	*99.6*			**0**	*89-112*	*%REC*	*1*	*24-Jul-2023 15:42*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	27-Jul-2023 20:10

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

ALS Houston, US Date: 28-Jul-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16ww24-230714
Collection Date: 14-Jul-2023 11:10

ANALYTICAL REPORT
WorkOrder:HS23071113
Lab ID:HS23071113-07
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	1.0	U	0.30	1.0	1.0	ug/L	1	24-Jul-2023 16:02
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	24-Jul-2023 16:02
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	24-Jul-2023 16:02
cis-1,2-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	24-Jul-2023 16:02
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	24-Jul-2023 16:02
Trichloroethene	**0.67**	J	**0.20**	**1.0**	**1.0**	**ug/L**	1	24-Jul-2023 16:02
Vinyl chloride	1.0	U	0.20	1.0	1.0	ug/L	1	24-Jul-2023 16:02
Surr: 1,2-Dichloroethane-d4	*112*			**0**	*81-118*	*%REC*	*1*	*24-Jul-2023 16:02*
Surr: 4-Bromofluorobenzene	*94.8*			**0**	*85-114*	*%REC*	*1*	*24-Jul-2023 16:02*
Surr: Dibromofluoromethane	*112*			**0**	*80-119*	*%REC*	*1*	*24-Jul-2023 16:02*
Surr: Toluene-d8	*102*			**0**	*89-112*	*%REC*	*1*	*24-Jul-2023 16:02*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	27-Jul-2023 20:10

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

ALS Houston, US Date: 28-Jul-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16ww27-230714
Collection Date: 14-Jul-2023 11:55

ANALYTICAL REPORT
WorkOrder:HS23071113
Lab ID:HS23071113-08
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	1.0	U	0.30	1.0	1.0	ug/L	1	24-Jul-2023 16:23
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	24-Jul-2023 16:23
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	24-Jul-2023 16:23
cis-1,2-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	24-Jul-2023 16:23
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	24-Jul-2023 16:23
Trichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	24-Jul-2023 16:23
Vinyl chloride	1.0	U	0.20	1.0	1.0	ug/L	1	24-Jul-2023 16:23
Surr: 1,2-Dichloroethane-d4	*112*			**0**	*81-118*	*%REC*	*1*	*24-Jul-2023 16:23*
Surr: 4-Bromofluorobenzene	*95.2*			**0**	*85-114*	*%REC*	*1*	*24-Jul-2023 16:23*
Surr: Dibromofluoromethane	*110*			**0**	*80-119*	*%REC*	*1*	*24-Jul-2023 16:23*
Surr: Toluene-d8	*102*			**0**	*89-112*	*%REC*	*1*	*24-Jul-2023 16:23*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	27-Jul-2023 20:10

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

ALS Houston, US Date: 28-Jul-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16ww43-230714
Collection Date: 14-Jul-2023 12:35

ANALYTICAL REPORT
WorkOrder:HS23071113
Lab ID:HS23071113-09
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	24-Jul-2023 16:43
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	24-Jul-2023 16:43
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	24-Jul-2023 16:43
cis-1,2-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	24-Jul-2023 16:43
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	24-Jul-2023 16:43
Trichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	24-Jul-2023 16:43
Vinyl chloride	1.0	U	0.20	1.0	1.0	ug/L	1	24-Jul-2023 16:43
Surr: 1,2-Dichloroethane-d4	*107*			**0**	*81-118*	*%REC*	*1*	*24-Jul-2023 16:43*
Surr: 4-Bromofluorobenzene	*96.2*			**0**	*85-114*	*%REC*	*1*	*24-Jul-2023 16:43*
Surr: Dibromofluoromethane	*107*			**0**	*80-119*	*%REC*	*1*	*24-Jul-2023 16:43*
Surr: Toluene-d8	*100*			**0**	*89-112*	*%REC*	*1*	*24-Jul-2023 16:43*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	27-Jul-2023 20:10

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

ALS Houston, US Date: 28-Jul-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: Trip Blank-230714
Collection Date: 14-Jul-2023 00:00

ANALYTICAL REPORT
WorkOrder:HS23071113
Lab ID:HS23071113-10
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	21-Jul-2023 18:04
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	21-Jul-2023 18:04
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	21-Jul-2023 18:04
cis-1,2-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	21-Jul-2023 18:04
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	21-Jul-2023 18:04
Trichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	21-Jul-2023 18:04
Vinyl chloride	1.0	U	0.20	1.0	1.0	ug/L	1	21-Jul-2023 18:04
Surr: 1,2-Dichloroethane-d4	*113*			**0**	*81-118*	*%REC*	*1*	*21-Jul-2023 18:04*
Surr: 4-Bromofluorobenzene	*93.3*			**0**	*85-114*	*%REC*	*1*	*21-Jul-2023 18:04*
Surr: Dibromofluoromethane	*112*			**0**	*80-119*	*%REC*	*1*	*21-Jul-2023 18:04*
Surr: Toluene-d8	*104*			**0**	*89-112*	*%REC*	*1*	*21-Jul-2023 18:04*

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

ALS Houston, US Date: 28-Jul-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23071113

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: R442002 (0)	**Test Name :** VOLATILES ORGANICS BY METHOD 8260C				**Matrix:** Water	
HS23071113-10	Trip Blank-230714	14 Jul 2023 00:00			21 Jul 2023 18:04	1
Batch ID: R442002 (0)	**Test Name :** VOLATILES ORGANICS BY METHOD 8260C				**Matrix:** Groundwater	
HS23071113-01	16ww51-230714	14 Jul 2023 07:05			21 Jul 2023 21:50	5
Batch ID: R442149 (0)	**Test Name :** VOLATILES ORGANICS BY METHOD 8260C				**Matrix:** Groundwater	
HS23071113-01	16ww51-230714	14 Jul 2023 07:05			24 Jul 2023 15:01	50
HS23071113-02	16ww30-230714	14 Jul 2023 07:45			24 Jul 2023 13:18	1
HS23071113-03	16ww29-230714	14 Jul 2023 08:25			24 Jul 2023 15:21	1
HS23071113-04	16ww13-230714	14 Jul 2023 09:10			24 Jul 2023 13:39	1
HS23071113-05	16ww42-230714	14 Jul 2023 09:50			24 Jul 2023 18:26	1
HS23071113-06	16ww23-230714	14 Jul 2023 10:30			24 Jul 2023 15:42	1
HS23071113-07	16ww24-230714	14 Jul 2023 11:10			24 Jul 2023 16:02	1
HS23071113-08	16ww27-230714	14 Jul 2023 11:55			24 Jul 2023 16:23	1
HS23071113-09	16ww43-230714	14 Jul 2023 12:35			24 Jul 2023 16:43	1
Batch ID: R442290 (0)	**Test Name :** VOLATILES ORGANICS BY METHOD 8260C				**Matrix:** Groundwater	
HS23071113-04	16ww13-230714	14 Jul 2023 09:10			25 Jul 2023 14:54	25
HS23071113-05	16ww42-230714	14 Jul 2023 09:50			25 Jul 2023 15:15	5
Batch ID: R442554 (0)	**Test Name :** SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)				**Matrix:** Groundwater	
HS23071113-01	16ww51-230714	14 Jul 2023 07:05			27 Jul 2023 20:10	1
HS23071113-02	16ww30-230714	14 Jul 2023 07:45			27 Jul 2023 20:10	1
HS23071113-03	16ww29-230714	14 Jul 2023 08:25			27 Jul 2023 20:10	1
HS23071113-04	16ww13-230714	14 Jul 2023 09:10			27 Jul 2023 20:10	1
HS23071113-05	16ww42-230714	14 Jul 2023 09:50			27 Jul 2023 20:10	1
HS23071113-06	16ww23-230714	14 Jul 2023 10:30			27 Jul 2023 20:10	1
HS23071113-07	16ww24-230714	14 Jul 2023 11:10			27 Jul 2023 20:10	1
HS23071113-08	16ww27-230714	14 Jul 2023 11:55			27 Jul 2023 20:10	1
HS23071113-09	16ww43-230714	14 Jul 2023 12:35			27 Jul 2023 20:10	1

ALS Houston, US Date: 28-Jul-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23071113

QC BATCH REPORT

Batch ID: R442002 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MBLK Sample ID: **VBLKW-230721** Units: **ug/L** Analysis Date: **21-Jul-2023 14:19**
Client ID: Run ID: **VOA6_442002** SeqNo: **7443755** 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	*54.53*	*1.0*	*50*	*0*	*109*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*46.89*	*1.0*	*50*	*0*	*93.8*	*85 - 114*				
Surr: Dibromofluoromethane	*54.29*	*1.0*	*50*	*0*	*109*	*80 - 119*				
Surr: Toluene-d8	*51.49*	*1.0*	*50*	*0*	*103*	*89 - 112*				

LCS Sample ID: **VLCSW-230721** Units: **ug/L** Analysis Date: **21-Jul-2023 13:38**
Client ID: Run ID: **VOA6_442002** SeqNo: **7443754** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	19.65	1.0	20	0	98.2	80 - 119				
1,1-Dichloroethene	20.98	1.0	20	0	105	71 - 131				
1,2-Dichloroethane	18.24	1.0	20	0	91.2	73 - 128				
cis-1,2-Dichloroethene	19.18	1.0	20	0	95.9	78 - 123				
Methylene chloride	19.61	2.0	20	0	98.1	74 - 124				
Trichloroethene	18.59	1.0	20	0	92.9	79 - 123				
Vinyl chloride	21.3	1.0	20	0	106	58 - 137				
Surr: 1,2-Dichloroethane-d4	*50.42*	*1.0*	*50*	*0*	*101*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*50.57*	*1.0*	*50*	*0*	*101*	*85 - 114*				
Surr: Dibromofluoromethane	*52.13*	*1.0*	*50*	*0*	*104*	*80 - 119*				
Surr: Toluene-d8	*45.82*	*1.0*	*50*	*0*	*91.6*	*89 - 112*				

ALS Houston, US Date: 28-Jul-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23071113

QC BATCH REPORT

Batch ID: R442002 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MS Sample ID: **HS23071109-01MS** Units: **ug/L** Analysis Date: **21-Jul-2023 16:22**
Client ID: Run ID: **VOA6_442002** SeqNo: **7443761** 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	23.33	1.0	20	0	117	80 - 119				
1,1-Dichloroethene	25.92	1.0	20	0	130	71 - 131				
1,2-Dichloroethane	22.8	1.0	20	0	114	73 - 128				
cis-1,2-Dichloroethene	23.7	1.0	20	0	119	78 - 123				
Methylene chloride	23.92	2.0	20	0	120	74 - 124				
Trichloroethene	24.53	1.0	20	0	123	79 - 123				
Vinyl chloride	26.09	1.0	20	0	130	58 - 137				
Surr: 1,2-Dichloroethane-d4	*56.93*	*1.0*	*50*	*0*	*114*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*49.4*	*1.0*	*50*	*0*	*98.8*	*85 - 114*				
Surr: Dibromofluoromethane	*55.55*	*1.0*	*50*	*0*	*111*	*80 - 119*				
Surr: Toluene-d8	*52.44*	*1.0*	*50*	*0*	*105*	*89 - 112*				

MSD Sample ID: **HS23071109-01MSD** Units: **ug/L** Analysis Date: **21-Jul-2023 16:42**
Client ID: Run ID: **VOA6_442002** SeqNo: **7443762** 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	22.72	1.0	20	0	114	80 - 119	23.33	2.65	20	
1,1-Dichloroethene	24.48	1.0	20	0	122	71 - 131	25.92	5.71	20	
1,2-Dichloroethane	21.56	1.0	20	0	108	73 - 128	22.8	5.59	20	
cis-1,2-Dichloroethene	18.11	1.0	20	0	90.5	78 - 123	23.7	26.8	20	R
Methylene chloride	19.77	2.0	20	0	98.9	74 - 124	23.92	19	20	
Trichloroethene	22.9	1.0	20	0	114	79 - 123	24.53	6.88	20	
Vinyl chloride	24.83	1.0	20	0	124	58 - 137	26.09	4.91	20	
Surr: 1,2-Dichloroethane-d4	*56.46*	*1.0*	*50*	*0*	*113*	*81 - 118*	*56.93*	*0.818*	*20*	
Surr: 4-Bromofluorobenzene	*49.84*	*1.0*	*50*	*0*	*99.7*	*85 - 114*	*49.4*	*0.89*	*20*	
Surr: Dibromofluoromethane	*55.08*	*1.0*	*50*	*0*	*110*	*80 - 119*	*55.55*	*0.84*	*20*	
Surr: Toluene-d8	*52.07*	*1.0*	*50*	*0*	*104*	*89 - 112*	*52.44*	*0.721*	*20*	

The following samples were analyzed in this batch: HS23071113-01 HS23071113-10

ALS Houston, US Date: 28-Jul-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23071113

QC BATCH REPORT

Batch ID: R442149 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MBLK Sample ID: **VBLKW-230724** Units: **ug/L** Analysis Date: **24-Jul-2023 12:58**
Client ID: Run ID: **VOA6_442149** SeqNo: **7447084** 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	*53.08*	*1.0*	*50*	*0*	*106*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*48.63*	*1.0*	*50*	*0*	*97.3*	*85 - 114*				
Surr: Dibromofluoromethane	*53.58*	*1.0*	*50*	*0*	*107*	*80 - 119*				
Surr: Toluene-d8	*50.63*	*1.0*	*50*	*0*	*101*	*89 - 112*				

LCS Sample ID: **VLCSW-230724** Units: **ug/L** Analysis Date: **24-Jul-2023 13:59**
Client ID: Run ID: **VOA6_442149** SeqNo: **7447087** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	19.71	1.0	20	0	98.6	80 - 119				
1,1-Dichloroethene	19.62	1.0	20	0	98.1	71 - 131				
1,2-Dichloroethane	18.98	1.0	20	0	94.9	73 - 128				
cis-1,2-Dichloroethene	20.44	1.0	20	0	102	78 - 123				
Methylene chloride	18.3	2.0	20	0	91.5	74 - 124				
Trichloroethene	21.15	1.0	20	0	106	79 - 123				
Vinyl chloride	23.43	1.0	20	0	117	58 - 137				
Surr: 1,2-Dichloroethane-d4	*53.59*	*1.0*	*50*	*0*	*107*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*52.76*	*1.0*	*50*	*0*	*106*	*85 - 114*				
Surr: Dibromofluoromethane	*54.24*	*1.0*	*50*	*0*	*108*	*80 - 119*				
Surr: Toluene-d8	*46.33*	*1.0*	*50*	*0*	*92.7*	*89 - 112*				

ALS Houston, US Date: 28-Jul-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23071113

QC BATCH REPORT

Batch ID: R442149 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MS Sample ID: **HS23071113-02MS** Units: **ug/L** Analysis Date: **24-Jul-2023 14:20**
Client ID: **16ww30-230714** Run ID: **VOA6_442149** SeqNo: **7447088** 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	22.63	1.0	20	0	113	80 - 119				
1,1-Dichloroethene	28.77	1.0	20	0	144	71 - 131				S
1,2-Dichloroethane	23.06	1.0	20	0	115	73 - 128				
cis-1,2-Dichloroethene	29.65	1.0	20	5.204	122	78 - 123				
Methylene chloride	22.27	2.0	20	0	111	74 - 124				
Trichloroethene	73.78	1.0	20	48.41	127	79 - 123				S
Vinyl chloride	31.25	1.0	20	0	156	58 - 137				S
Surr: 1,2-Dichloroethane-d4	*57.03*	*1.0*	*50*	*0*	*114*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*55.08*	*1.0*	*50*	*0*	*110*	*85 - 114*				
Surr: Dibromofluoromethane	*56.29*	*1.0*	*50*	*0*	*113*	*80 - 119*				
Surr: Toluene-d8	*49.55*	*1.0*	*50*	*0*	*99.1*	*89 - 112*				

MSD Sample ID: **HS23071113-02MSD** Units: **ug/L** Analysis Date: **24-Jul-2023 14:40**
Client ID: **16ww30-230714** Run ID: **VOA6_442149** SeqNo: **7447089** 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	22.23	1.0	20	0	111	80 - 119	22.63	1.79	20	
1,1-Dichloroethene	23.98	1.0	20	0	120	71 - 131	28.77	18.1	20	
1,2-Dichloroethane	22.16	1.0	20	0	111	73 - 128	23.06	3.99	20	
cis-1,2-Dichloroethene	27.61	1.0	20	5.204	112	78 - 123	29.65	7.14	20	
Methylene chloride	22.24	2.0	20	0	111	74 - 124	22.27	0.102	20	
Trichloroethene	71.29	1.0	20	48.41	114	79 - 123	73.78	3.44	20	
Vinyl chloride	25.38	1.0	20	0	127	58 - 137	31.25	20.7	20	R
Surr: 1,2-Dichloroethane-d4	*52.67*	*1.0*	*50*	*0*	*105*	*81 - 118*	*57.03*	*7.95*	*20*	
Surr: 4-Bromofluorobenzene	*49.03*	*1.0*	*50*	*0*	*98.1*	*85 - 114*	*55.08*	*11.6*	*20*	
Surr: Dibromofluoromethane	*53.45*	*1.0*	*50*	*0*	*107*	*80 - 119*	*56.29*	*5.19*	*20*	
Surr: Toluene-d8	*50.45*	*1.0*	*50*	*0*	*101*	*89 - 112*	*49.55*	*1.8*	*20*	

The following samples were analyzed in this batch:

HS23071113-01	HS23071113-02	HS23071113-03	HS23071113-04
HS23071113-05	HS23071113-06	HS23071113-07	HS23071113-08
HS23071113-09			

ALS Houston, US Date: 28-Jul-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23071113

QC BATCH REPORT

Batch ID: R442290 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MBLK Sample ID: **VBLKW-230725** Units: **ug/L** Analysis Date: **25-Jul-2023 12:11**
Client ID: Run ID: **VOA6_442290** SeqNo: **7450220** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
cis-1,2-Dichloroethene	1.0	1.0								U
Trichloroethene	1.0	1.0								U
Surr: 1,2-Dichloroethane-d4	*56.45*	*1.0*	*50*	*0*	*113*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*48.69*	*1.0*	*50*	*0*	*97.4*	*85 - 114*				
Surr: Dibromofluoromethane	*54.56*	*1.0*	*50*	*0*	*109*	*80 - 119*				
Surr: Toluene-d8	*51.27*	*1.0*	*50*	*0*	*103*	*89 - 112*				

LCS Sample ID: **VLCSW-230725** Units: **ug/L** Analysis Date: **25-Jul-2023 11:30**
Client ID: Run ID: **VOA6_442290** SeqNo: **7450219** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
cis-1,2-Dichloroethene	22.06	1.0	20	0	110	78 - 123				
Trichloroethene	20.12	1.0	20	0	101	79 - 123				
Surr: 1,2-Dichloroethane-d4	*57.48*	*1.0*	*50*	*0*	*115*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*53.97*	*1.0*	*50*	*0*	*108*	*85 - 114*				
Surr: Dibromofluoromethane	*54.72*	*1.0*	*50*	*0*	*109*	*80 - 119*				
Surr: Toluene-d8	*47.68*	*1.0*	*50*	*0*	*95.4*	*89 - 112*				

MS Sample ID: **HS23071289-11MS** Units: **ug/L** Analysis Date: **25-Jul-2023 14:14**
Client ID: Run ID: **VOA6_442290** SeqNo: **7450225** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
cis-1,2-Dichloroethene	24.59	1.0	20	0	123	78 - 123				
Trichloroethene	25.67	1.0	20	0	128	79 - 123				S
Surr: 1,2-Dichloroethane-d4	*57.71*	*1.0*	*50*	*0*	*115*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*49.33*	*1.0*	*50*	*0*	*98.7*	*85 - 114*				
Surr: Dibromofluoromethane	*55.78*	*1.0*	*50*	*0*	*112*	*80 - 119*				
Surr: Toluene-d8	*51.85*	*1.0*	*50*	*0*	*104*	*89 - 112*				

ALS Houston, US Date: 28-Jul-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23071113

QC BATCH REPORT

Batch ID: R442290 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MSD Sample ID: **HS23071289-11MSD** Units: **ug/L** Analysis Date: **25-Jul-2023 14:34**
Client ID: Run ID: **VOA6_442290** SeqNo: **7450226** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
cis-1,2-Dichloroethene	24.23	1.0	20	0	121	78 - 123	24.59	1.49	20	
Trichloroethene	24.34	1.0	20	0	122	79 - 123	25.67	5.33	20	
Surr: 1,2-Dichloroethane-d4	*56.2*	*1.0*	*50*	*0*	*112*	*81 - 118*	*57.71*	*2.65*	*20*	
Surr: 4-Bromofluorobenzene	*49.71*	*1.0*	*50*	*0*	*99.4*	*85 - 114*	*49.33*	*0.778*	*20*	
Surr: Dibromofluoromethane	*55.77*	*1.0*	*50*	*0*	*112*	*80 - 119*	*55.78*	*0.0231*	*20*	
Surr: Toluene-d8	*50.43*	*1.0*	*50*	*0*	*101*	*89 - 112*	*51.85*	*2.78*	*20*	

The following samples were analyzed in this batch: HS23071113-04 HS23071113-05

ALS Houston, US Date: 28-Jul-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: **HS23071113**

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

ALS Houston, US Date: 28-Jul-23

CERTIFICATIONS,ACCREDITATIONS & LICENSES

Agency	Number	Expire Date
Arkansas	88-00356	27-Mar-2024
California	2919; 2024	30-Apr-2024
Dept of Defense	L23-358	31-May-2025
Florida	E87611-38	30-Jun-2024
Illinois	2000322023-11	30-Jun-2024
Kansas	E-10352; 2022-2023	31-Jul-2023
Louisiana	03087-2023	30-Jun-2024
Maryland	343; 2023-2024	30-Jun-2024
North Carolina	624-2023	31-Dec-2023
North Dakota	R-193 2023-2024	30-Apr-2024
Oklahoma	2022-141	31-Aug-2023
Texas	T104704231-23-31	30-Apr-2024
Utah	TX026932023-14	31-Jul-2024

01322395

ALS Houston, US Date: 28-Jul-23

Sample Receipt Checklist

Work Order ID: HS23071113 **Date/Time Received:** 15-Jul-2023 09:10

Client Name: CBI-Houston **Received by:** Nilesh D. Ranchod

Completed By: /S/ Nilesh D. Ranchod (eSignature) 20-Jul-2023 19:53 (Date/Time) **Reviewed by:** (eSignature) (Date/Time)

Matrices: **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 IDs:JVCPIBH.0001
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):	3.1C/3.0C UC/C	IR 31
Cooler(s)/Kit(s):	Teal	
Date/Time sample(s) sent to storage:	07/15/2023 13:00	

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

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

Corrective Action:

01322396

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

Project/Site Name: LHAAP / Site 16

Client Name:

Collected by: Scott Beesinger

HS23071113

Bhate Environmental Associates, Inc.
LHAAP/Site 16

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	Sample Analysis Requested (5) / Quality Assurance Samples (6)
bww51-230714	14Jul2023	0705	-	N		WG	4	X					X	
bww30-230714	14Jul2023	0745	-	N		WG	4	X					X	
bww28-230714	14Jul2023	0825	-	N		WG	4	X					X	
bww13-230714	14Jul2023	0910		N		WG	4	X					X	
bww42-230714	14Jul2023	0950		N		WG	4	X					X	
bww23-230714	14Jul2023	1030	-	N		WG	4	X					X	
bww24-230714	14Jul2023	1110	-	N		WG	4	X					X	
bww27-230714	14Jul2023	1155	-	N		WG	4	X					X	
bww43-230714	14Jul2023	1235	-	N		WG	4	X					X	
TRIP BLANK-230714	14Jul2023		-	TB		W	2	X						
			-											

COMMENTS: STANDARD TAT

Custody Transfers Prior to Receipt by Laboratory

Relinquished By (Signed)	Date	Time	Received by (signed)	Date	Time
Scott Beesinger	7/14/23	1330	1. NVL	7.15.23	707.0
			2.		
			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 310 Houston, TX 77099 (281) 530-5656

ATTN: Dane Wacasey Lab Recipient: Delivery Date/Time:

Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)

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)

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.)

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

Sample Analysis Requested: Analytical method requested and number of containers provided for each.

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

SW423 Tem 1.6.C

21

608

(ALS)

ORIGIN ID:SGRA (903) 930-8193
SCOTT BEESINGER
APTIM ENVIRONMENTAL & INFASTRUCTURE
1203-B EAST GRAND AVE
PMB 202
MARSHALL, TX 75670
UNITED STATES US

SHIP DATE: 30JUN23
ACTWGT: 1.00 LB MAN
CAD: 0221247/CAFE3709
DIMS: 26x14x14 IN

TO SHIPPING DEPT
ALS LABORATORY GROUP
10450 STANCLIFF RD
SUITE 210
HOUSTON TX 77099
(281) 530-5656

REF: LHAAP 16+80 94022-JG

RMA:

FedEx Express

FedEx
TRK# 0221 6230 3002 0837

SATURDAY 12:00P
PRIORITY OVERNIGHT

77099
TX-US
IAH

X0 SGRA

Seal Broken By:
Date:

30

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

CUSTODY SEA
Date: 7/14/23 Time: 13
Name: Scott Beesinger
Company: Battelle

ALS

July 26, 2023 Service Request No:E2300674

Bernadette Fini
ALS Laboratory Group
10450 Stancliff Road
Suite 210
Houston, TX 77099-4338

Laboratory Results for: HS23071113

Dear Bernadette,

Enclosed are the results of the sample(s) submitted to our laboratory July 21, 2023
For your reference, these analyses have been assigned our service request number **E2300674.**

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

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

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

James Guin

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

Certificate of Analysis

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

ALS Environmental

Client:	ALS Environmental - US	**Service Request No.:**	E2300674
Project:	HS23071113	**Date Received:**	07/21/2023
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

Nine samples were received for analysis at ALS Environmental in Houston on 07/21/2023.

The sample were received in good condition and is 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:

EQ2300355: Laboratory Control Spike/Duplicate Laboratory Control Spike (LCS/DLCS) samples were analyzed and reported in lieu of 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:**E2300674
Project: HS23071113

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
E2300674-001	hs23071113-01	7/14/2023	0705
E2300674-002	HS23071113-02	7/14/2023	0745
E2300674-003	HS23071113-03	7/14/2023	0825
E2300674-004	HS23071113-04	7/14/2023	0910
E2300674-005	HS23071113-05	7/14/2023	0950
E2300674-006	HS23071113-06	7/14/2023	1030
E2300674-007	HS23071113-07	7/14/2023	1110
E2300674-008	HS23071113-08	7/14/2023	1155
E2300674-009	HS23071113-09	7/14/2023	1235

Service Request Summary

Folder #: **E2300674**
Client Name: ALS Environmental - US
Project Name: HS23071113
Project Number:

Report To: Bernadette Fini
ALS Laboratory Group
10450 Stancliff Road
Houston, TX 77099-4338
USA
Phone Number: 281-530-5656
Cell Number:
Fax Number: 281-530-5887
E-mail: bernadette.fini@alsglobal.com

Project Chemist: James Guin
Originating Lab: HOUSTON
Logged By: TWOODS
Date Received: 07/21/23
Internal Due Date: 7/31/2023
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS23071113
EDD: No EDD Specified

9 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-AirArch 3
Pressure Gas:

Lab Samp No.	Client Samp No	Matrix	Collected	HOUSTON ClO4 DOD/6850
E2300674-001	hs23071113-01	Ground Water	07/14/23 0705	**IV**
E2300674-002	HS23071113-02	Ground Water	07/14/23 0745	**IV**
E2300674-003	HS23071113-03	Ground Water	07/14/23 0825	**IV**
E2300674-004	HS23071113-04	Ground Water	07/14/23 0910	**IV**
E2300674-005	HS23071113-05	Ground Water	07/14/23 0950	**IV**
E2300674-006	HS23071113-06	Ground Water	07/14/23 1030	**IV**
E2300674-007	HS23071113-07	Ground Water	07/14/23 1110	**IV**
E2300674-008	HS23071113-08	Ground Water	07/14/23 1155	**IV**
E2300674-009	HS23071113-09	Ground Water	07/14/23 1235	**IV**

Service Request Summary

Folder #: **E2300674**
Client Name: ALS Environmental - US
Project Name: HS23071113
Project Number:

Report To: Bernadette Fini
ALS Laboratory Group
10450 Stancliff Road
Houston, TX 77099-4338
USA
Phone Number: 281-530-5656
Cell Number:
Fax Number: 281-530-5887
E-mail: bernadette.fini@alsglobal.com

Project Chemist: James Guin
Originating Lab: HOUSTON
Logged By: TWOODS
Date Received: 07/21/23
Internal Due Date: 7/31/2023
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS23071113
EDD: No EDD Specified

9 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-AirArch 3
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 2022-2023	7/31/2023
Louisiana Department of Environmental Quality	03087-2023	6/30/2024
Louisiana Department of Health and Hospitals	LA028-2023	12/31/2023
Maine Department of Health and Human Services	2022017	6/5/2024
Maryland Department of the Environment	343	7/31/2023
Maryland Department of the Environment	343-2023	6/30/2024
Michigan Depratment of Environmental Quality	9971-2023	4/30/2024
Minnesota Department of Health	2368363	12/31/2023
Nebraska Department of Health and Human Services	NE-OS-25-13	4/30/2024
Nevada Department of Conservation and Natural Resources	TX026932023-1	7/31/2023
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	2022-141	8/31/2023
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
Utah Department of Health Environmental Laboratory Certification	TX026932022-13	7/31/2023
Washington Department of Ecology	C819-22	11/14/2023

ALS

Chain of Custody

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

E2300674 5
ALS Laboratory Group
Perchlorates

10450 Stancliff Rd, Ste 210
Houston, TX 77099
T: +1 281 530 5656
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Subcontract Chain of Custody

SAMPLING STATE: Texas **COC ID:** 22447

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:	HS23071113
TSR:	Holly Tignac

	LAB SAMPLE ID / ANALYSIS REQUESTED	CLIENT SAMPLE ID	MATRIX	COLLECT DATE / DUE DATE
1.	**HS23071113-01**	**16ww51-230714**	**Groundwater**	**14 Jul 2023 07:05**
	6850 Perchlorate; separte Level II & Level IV PDF; EQUIS EDD LHAAP			31 Jul 2023
2.	**HS23071113-02**	**16ww30-230714**	**Groundwater**	**14 Jul 2023 07:45**
	6850 Perchlorate; separte Level II & Level IV PDF; EQUIS EDD LHAAP			31 Jul 2023
3.	**HS23071113-03**	**16ww29-230714**	**Groundwater**	**14 Jul 2023 08:25**
	6850 Perchlorate; separte Level II & Level IV PDF; EQUIS EDD LHAAP			31 Jul 2023
4.	**HS23071113-04**	**16ww13-230714**	**Groundwater**	**14 Jul 2023 09:10**
	6850 Perchlorate; separte Level II & Level IV PDF; EQUIS EDD LHAAP			31 Jul 2023
5.	**HS23071113-05**	**16ww42-230714**	**Groundwater**	**14 Jul 2023 09:50**
	6850 Perchlorate; separte Level II & Level IV PDF; EQUIS EDD LHAAP			31 Jul 2023
6.	**HS23071113-06**	**16ww23-230714**	**Groundwater**	**14 Jul 2023 10:30**
	6850 Perchlorate; separte Level II & Level IV PDF; EQUIS EDD LHAAP			31 Jul 2023
7.	**HS23071113-07**	**16ww24-230714**	**Groundwater**	**14 Jul 2023 11:10**
	6850 Perchlorate; separte Level II & Level IV PDF; EQUIS EDD LHAAP			31 Jul 2023
8.	**HS23071113-08**	**16ww27-230714**	**Groundwater**	**14 Jul 2023 11:55**

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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#: 423544 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 7/24/23 12:17

#	Lab Code	Client ID	B#	Method /Test	pH	Cl	Matrix	Amt. Ext.	Sample Description
1	E2300672-001	GUKOMELIK#2 0323	.01	6850/ClO4			Water	10mL	
2	E2300672-002	EA 25 0323	.01	6850/ClO4			Water	10mL	
3	E2300672-003	EA 60 0323	.01	6850/ClO4			Water	10mL	
4	E2300673-001	AAR3329	.01	6850/ClO4 DOD			Ground Water	10mL	
5	E2300673-002	AAR3330	.01	6850/ClO4 DOD			Ground Water	10mL	
6	E2300673-003	AAR3337	.01	6850/ClO4 DOD			Ground Water	10mL	
7	E2300673-004	AAR3347	.01	6850/ClO4 DOD			Ground Water	10mL	
8	E2300673-005	AAR3349	.01	6850/ClO4 DOD			Ground Water	10mL	
9	E2300673-006	AAR3351	.01	6850/ClO4 DOD			Ground Water	10mL	
10	E2300673-007	AAR3354	.01	6850/ClO4 DOD			Ground Water	10mL	
11	E2300673-008	AAR3355	.01	6850/ClO4 DOD			Ground Water	10mL	
12	E2300674-001	hs23071113-01	.01	6850/ClO4 DOD			Ground Water	10mL	
13	E2300674-002	HS23071113-02	.01	6850/ClO4 DOD			Ground Water	10mL	
14	E2300674-003	HS23071113-03	.01	6850/ClO4 DOD			Ground Water	10mL	
15	E2300674-004	HS23071113-04	.01	6850/ClO4 DOD			Ground Water	10mL	
16	E2300674-005	HS23071113-05	.01	6850/ClO4 DOD			Ground Water	10mL	
17	E2300674-006	HS23071113-06	.01	6850/ClO4 DOD			Ground Water	10mL	
18	E2300674-007	HS23071113-07	.01	6850/ClO4 DOD			Ground Water	10mL	
19	E2300674-008	HS23071113-08	.01	6850/ClO4 DOD			Ground Water	10mL	
20	E2300674-009	HS23071113-09	.01	6850/ClO4 DOD			Ground Water	10mL	
21	EQ2300355-01	MB		6850/ClO4			Liquid	10mL	
22	EQ2300355-02	LCS		6850/ClO4			Liquid	10mL	
23	EQ2300355-03	DLCS		6850/ClO4			Liquid	10mL	

Spiking Solutions

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

EQ2300355-02 1.00µL EQ2300355-02 1.00µL EQ2300355-03 1.00µL EQ2300355-03 1.00µL

Name: Perchlorate Internal Standard 1ug/mL Inventory ID 227244 Logbook Ref: Perchlorate Internal Standard Expires On: 07/31/2023

E2300672-001	100.00µL	E2300672-002	100.00µL	E2300672-003	100.00µL	E2300673-001	100.00µL	E2300673-002	100.00µL	E2300673-003	100.00µL
E2300673-004	100.00µL	E2300673-005	100.00µL	E2300673-006	100.00µL	E2300673-007	100.00µL	E2300673-008	100.00µL	E2300674-001	100.00µL
E2300674-002	100.00µL	E2300674-003	100.00µL	E2300674-004	100.00µL	E2300674-005	100.00µL	E2300674-006	100.00µL	E2300674-007	100.00µL
E2300674-008	100.00µL	E2300674-009	100.00µL	EQ2300355-01	100.00µL	EQ2300355-01	100.00µL	EQ2300355-02	100.00µL	EQ2300355-02	100.00µL
EQ2300355-03	100.00µL	EQ2300355-03	100.00µL								

Preparation Information Benchsheet

Prep Run#: 423544 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 7/24/23 12:17

Preparation Materials

Water HPLC Grade	HPLC water 5/18/23CG (229315)	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-lock syringes (228116)				

Preparation Steps

Step: Preparation
Started: 7/24/23 12:17
Finished: 7/25/23 09:20
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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www.alsglobal.com

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300674
Project:	HS23071113	**Date Collected:**	7/14/23 0705
Sample Matrix:	Ground Water	**Date Received:**	7/21/23
Sample Name:	hs23071113-01	**Units:**	µg/L
Lab Code:	E2300674-001	**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	**0.163**		0.100	0.0500	0.0250	1	7/24/23	7/25/23 14:27	423544	811716	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300674
Project:	HS23071113	**Date Collected:**	7/14/23 0745
Sample Matrix:	Ground Water	**Date Received:**	7/21/23
Sample Name:	HS23071113-02	**Units:**	µg/L
Lab Code:	E2300674-002	**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	**0.174**		0.100	0.0500	0.0250	1	7/24/23	7/25/23 14:33	423544	811716	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300674
Project:	HS23071113	**Date Collected:**	7/14/23 0825
Sample Matrix:	Ground Water	**Date Received:**	7/21/23
Sample Name:	HS23071113-03	**Units:**	µg/L
Lab Code:	E2300674-003	**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	**0.110**		0.100	0.0500	0.0250	1	7/24/23	7/25/23 14:38	423544	811716	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300674
Project:	HS23071113	**Date Collected:**	7/14/23 0910
Sample Matrix:	Ground Water	**Date Received:**	7/21/23
Sample Name:	HS23071113-04	**Units:**	µg/L
Lab Code:	E2300674-004	**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	**0.281**		0.100	0.0500	0.0250	1	7/24/23	7/25/23 14:49	423544	811716	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300674
Project:	HS23071113	**Date Collected:**	7/14/23 0950
Sample Matrix:	Ground Water	**Date Received:**	7/21/23
Sample Name:	HS23071113-05	**Units:**	µg/L
Lab Code:	E2300674-005	**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	**0.432**		0.100	0.0500	0.0250	1	7/24/23	7/25/23 14:55	423544	811716	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300674
Project:	HS23071113	**Date Collected:**	7/14/23 1030
Sample Matrix:	Ground Water	**Date Received:**	7/21/23
Sample Name:	HS23071113-06	**Units:**	µg/L
Lab Code:	E2300674-006	**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	**0.176**		0.100	0.0500	0.0250	1	7/24/23	7/25/23 15:00	423544	811716	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300674
Project:	HS23071113	**Date Collected:**	7/14/23 1110
Sample Matrix:	Ground Water	**Date Received:**	7/21/23
Sample Name:	HS23071113-07	**Units:**	µg/L
Lab Code:	E2300674-007	**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	**0.206**		0.100	0.0500	0.0250	1	7/24/23	7/25/23 15:06	423544	811716	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300674
Project:	HS23071113	**Date Collected:**	7/14/23 1155
Sample Matrix:	Ground Water	**Date Received:**	7/21/23
Sample Name:	HS23071113-08	**Units:**	µg/L
Lab Code:	E2300674-008	**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	**0.168**		0.100	0.0500	0.0250	1	7/24/23	7/25/23 15:12	423544	811716	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300674
Project:	HS23071113	**Date Collected:**	7/14/23 1235
Sample Matrix:	Ground Water	**Date Received:**	7/21/23
Sample Name:	HS23071113-09	**Units:**	µg/L
Lab Code:	E2300674-009	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	7/24/23	7/25/23 15:17	423544	811716	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300674
Project:	HS23071113	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	EQ2300355-01	**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	7/24/23	7/25/23 13:04	423544	811716	

Accuracy & Precision

ALS Environmental - Houston Specialties Laboratory
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ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23071113
Sample Matrix: Ground Water

Service Request: E2300674
Date Analyzed: 7/25/23

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

Analytical Method: 6850
Prep Method: Method

Units: µg/L
Basis: NA

Extraction Lot: 423544

	Lab Control Sample EQ2300355-02			Duplicate Lab Control Sample EQ2300355-03					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	0.0853	0.100	85	0.0984	0.100	98	84 - 119	14	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:**	E2300674
Project:	HS23071113	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2300355-02	**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	**0.0853**	J	0.100	0.0500	0.0250	1	7/24/23	7/25/23 13:10	423544	811716	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300674
Project:	HS23071113	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2300355-03	**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	**0.0984**	J	0.100	0.0500	0.0250	1	7/24/23	7/25/23 15:23	423544	811716	

Initial Calibration

ALS Environmental - Houston HRMS
10450 Stancliff Rd., Suite 210, Houston, TX 77099
Phone (713)266-1599 Fax (713)266-0130
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20230629-809329

Injection Log

LCMS01 -Shimadzu 8050

1st Review: XM
2nd Review: GC

ICAL Date: 6/29/2023
Cal. Std. xp: 06/29/2023
ICAL ID: EC2300011

Mobile Phases : A:20mM ammonium acetate in water 32103046 **B:**Acetonitrile 226552

	Sample Name		File Name	Acquisition Method	Dilution	Comments	Date/Time
1	PERCHLORATE1		20230629-001	Perchlorate6850c.lcm	1x	227245	6/29/2023 12:59
2	PERCHLORATE2		20230629-002	Perchlorate6850c.lcm	1x	227246	6/29/2023 13:05
3	PERCHLORATE3		20230629-003	Perchlorate6850c.lcm	1x	227247	6/29/2023 13:10
4	PERCHLORATE4		20230629-004	Perchlorate6850c.lcm	1x	227248	6/29/2023 13:16
5	PERCHLORATE5		20230629-005	Perchlorate6850c.lcm	1x	227249	6/29/2023 13:21
6	PERCHLORATE6		20230629-006	Perchlorate6850c.lcm	1x	227250	6/29/2023 13:27
7	PERCHLORATE7		20230629-007	Perchlorate6850c.lcm	1x	227251	6/29/2023 13:32
8	PERCHLORATE8		20230629-008	Perchlorate6850c.lcm	1x	227252	6/29/2023 13:38
9	PERCHLORATE9		20230629-009	Perchlorate6850c.lcm	1x	227253	6/29/2023 13:43
10	PERCHLORATE10		20230629-010	Perchlorate6850c.lcm	1x	227254	6/29/2023 13:49
11	PERCHLORATEICV		20230629-011	Perchlorate6850c.lcm	1x	227256	6/29/2023 13:55
12	IB		20230629-012	Perchlorate6850c.lcm	1x		6/29/2023 14:00
13	LODV		20230629-013	Perchlorate6850c.lcm	1x	227501	6/29/2023 14:06
14	ICS		20230629-014	Perchlorate6850c.lcm	1x	32103024	6/29/2023 14:11
15	CCV		20230629-015	Perchlorate6850c.lcm	1x	227251	6/29/2023 14:17
16	EQ2300312-01		20230629-016	Perchlorate6850c.lcm	1x		6/29/2023 14:22
17	EQ2300312-02		20230629-017	Perchlorate6850c.lcm	1x	DNU-RR	6/29/2023 14:28
18	EQ2300312-03		20230629-018	Perchlorate6850c.lcm	1x		6/29/2023 14:33
19	E2300606-001		20230629-019	Perchlorate6850c.lcm	10x		6/29/2023 14:39
20	EQ2300312-04		20230629-020	Perchlorate6850c.lcm	1x		6/29/2023 14:44
21	EQ2300312-05		20230629-021	Perchlorate6850c.lcm	1x		6/29/2023 14:50
22	E2300606-002		20230629-022	Perchlorate6850c.lcm	5x		6/29/2023 14:55
23	E2300606-003		20230629-023	Perchlorate6850c.lcm	10x		6/29/2023 15:01
24	E2300606-004		20230629-024	Perchlorate6850c.lcm	10x		6/29/2023 15:06
25	E2300606-005		20230629-025	Perchlorate6850c.lcm	1x		6/29/2023 15:12
26	CCV		20230629-026	Perchlorate6850c.lcm	1x	227251	6/29/2023 15:17
27	E2300606-006		20230629-027	Perchlorate6850c.lcm	1x		6/29/2023 15:23
28	E2300606-007		20230629-028	Perchlorate6850c.lcm	500x		6/29/2023 15:28
29	E2300606-008		20230629-029	Perchlorate6850c.lcm	100x		6/29/2023 15:34
30	EQ2300312-06		20230629-030	Perchlorate6850c.lcm	100x		6/29/2023 15:40
31	EQ2300312-07		20230629-031	Perchlorate6850c.lcm	100x		6/29/2023 15:45
32	E2300606-009		20230629-032	Perchlorate6850c.lcm	1x		6/29/2023 15:53
33	E2300610-001		20230629-033	Perchlorate6850c.lcm	10000x		6/29/2023 15:58
34	E2300610-002		20230629-034	Perchlorate6850c.lcm	1x		6/29/2023 16:04
35	E2300610-003		20230629-035	Perchlorate6850c.lcm	1x		6/29/2023 16:09
36	E2300610-004		20230629-036	Perchlorate6850c.lcm	1x		6/29/2023 16:15
37	CCV		20230629-037	Perchlorate6850c.lcm	1x	227251	6/29/2023 16:21

20230629-809329

Injection Log

LCMS01 -Shimadzu 8050

1st Review: XM
2nd Review: GC

ICAL Date: 6/29/2023
Cal. Std. xp: 06/29/2023
ICAL ID: EC2300011

Mobile Phases : A:20mM ammonium acetate in water 32103046 **B:**Acetonitrile 226552

	Sample Name		File Name	Acquisition Method	Dilution	Comments	Date/Time
38	E2300610-005		20230629-038	Perchlorate6850c.lcm	1x		6/29/2023 16:26
39	E2300610-006		20230629-039	Perchlorate6850c.lcm	1x		6/29/2023 16:32
40	E2300610-007		20230629-040	Perchlorate6850c.lcm	1x		6/29/2023 16:37
41	E2300610-008		20230629-041	Perchlorate6850c.lcm	1x	DNU-D	6/29/2023 16:43
42	EQ2300312-08		20230629-042	Perchlorate6850c.lcm	1x		6/29/2023 16:48
43	EQ2300312-09		20230629-043	Perchlorate6850c.lcm	1x		6/29/2023 16:54
44	E2300611-001		20230629-044	Perchlorate6850c.lcm	1x		6/29/2023 16:59
45	E2300611-002		20230629-045	Perchlorate6850c.lcm	1x		6/29/2023 17:05
46	E2300611-003		20230629-046	Perchlorate6850c.lcm	1x		6/29/2023 17:10
47	E2300611-004		20230629-047	Perchlorate6850c.lcm	1x	DNU-D	6/29/2023 17:16
48	CCV		20230629-048	Perchlorate6850c.lcm	1x	227251	6/29/2023 17:21
49	E2300611-005		20230629-049	Perchlorate6850c.lcm	1x		6/29/2023 17:27
50	E2300611-006		20230629-050	Perchlorate6850c.lcm	1x	DNU-D	6/29/2023 17:32
51	E2300611-007		20230629-051	Perchlorate6850c.lcm	1x	DNU-D	6/29/2023 17:38
52	E2300611-008		20230629-052	Perchlorate6850c.lcm	1x		6/29/2023 17:43
53	E2300611-009		20230629-053	Perchlorate6850c.lcm	1x		6/29/2023 17:49
54	E2300611-010		20230629-054	Perchlorate6850c.lcm	1x		6/29/2023 17:55
55	CCV		20230629-055	Perchlorate6850c.lcm	1x	227251	6/29/2023 18:06

Initial Calibration - Detailed Report

Calibration ID: EC2300011 **Instrument ID:** E-LCMS-01
Column Name: 1

#	Lab Code	Sample Name	File Location	Aquisition Date
01	EC2300011-01	PERCHLORATE1	20230629-001	06/29/2023 12:59
02	EC2300011-02	PERCHLORATE2	20230629-002	06/29/2023 13:05
03	EC2300011-03	PERCHLORATE3	20230629-003	06/29/2023 13:10
04	EC2300011-04	PERCHLORATE4	20230629-004	06/29/2023 13:16
05	EC2300011-05	PERCHLORATE5	20230629-005	06/29/2023 13:21
06	EC2300011-06	PERCHLORATE6	20230629-006	06/29/2023 13:27
07	EC2300011-07	PERCHLORATE7	20230629-007	06/29/2023 13:32
08	EC2300011-08	PERCHLORATE8	20230629-008	06/29/2023 13:38
09	EC2300011-09	PERCHLORATE9	20230629-009	06/29/2023 13:43
10	EC2300011-10	PERCHLORATE10	20230629-010	06/29/2023 13:49

Analyte **Curve Fit** **Weighting**

Perchlorate **Average RF** **RSD = 2.809** **Average RF = 0.1625**

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.1000	0.1678	02	0.5000	0.1574	03	0.7000	0.1599	04	1.0000	0.1567
05	2.0000	0.1596	06	5.0000	0.1641	07	10.0000	0.1704	08	20.0000	0.1667
09	30.0000	0.1608	10	50.0000	0.1619						

Analyte

Perchlorate RSE = 2.81

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.1000	0.103	3.2	02	0.5000	0.484	-3.1	03	0.7000	0.689	-1.6
04	1.0000	0.964	-3.6	05	2.0000	1.96	-1.8	06	5.0000	5.05	1.0
07	10.0000	10.5	4.8	08	20.0000	20.5	2.6	09	30.0000	29.7	-1.1
10	50.0000	49.8	-0.4								

Initial Calibration Verification Summary Report

Calibration ID:	EC2300011	**Instrument ID:**	E-LCMS-01
Datafile ID:	20230629-011	**Column Name:**	1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
Perchlorate	EC2300011-11	T	Average RF	10	9.913	ng/mL	-0.9	<= 15

Insight Report

Printed at 6/29/2023 2:17:05 PM

Method File: I:\LCMS01\DATA\20230628\06282023.lcm
Project File: I:\LCMS01\DATA\20230628\06282023.damlp

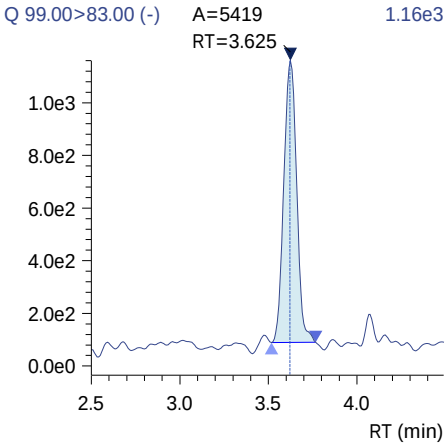
PERCHLORATE1

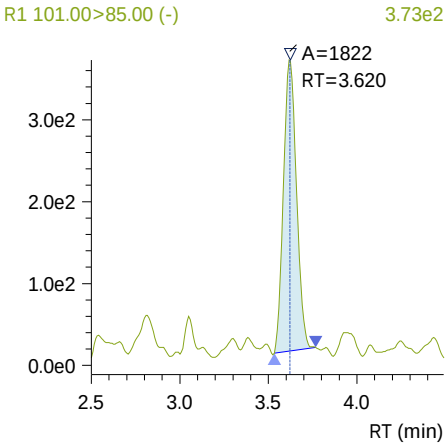
Sample ID: PERCHLORATE1
Date Acquired: 6/29/2023 12:59:40 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-001.lcd
Vial: 1 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.625	5419	323018	0.1032	ng/mL	101.00 >85.00	33.63	22.41-41.62
Sodium Perchlorate-18O4 _IS	Auto	3.617	323018	323018	1.0000	ng/mL	----	----	

Perchlorate

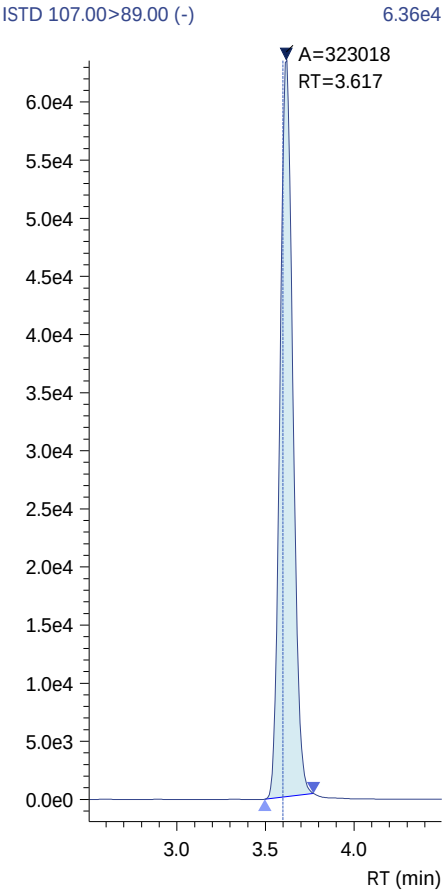
Conc 0.1032
R#1 33.63 (32.02)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/29/2023 2:17:05 PM

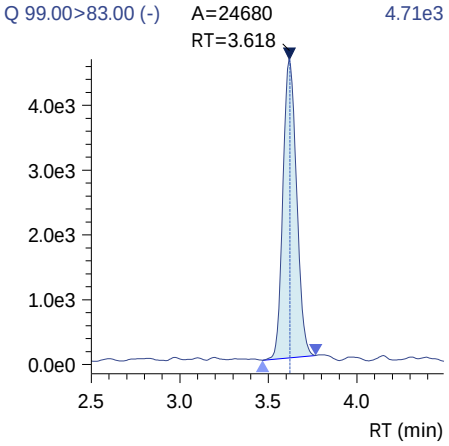
PERCHLORATE2

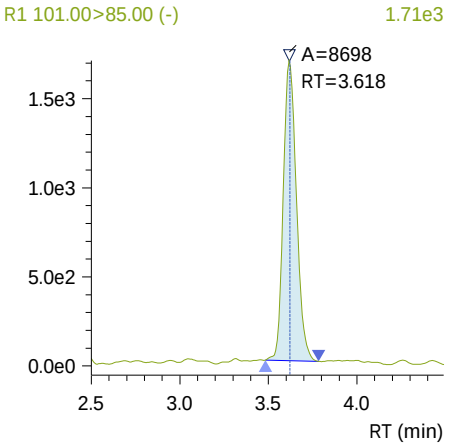
Sample ID: PERCHLORATE2
Date Acquired: 6/29/2023 1:05:11 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-002.lcd
Vial: 2 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.618	24680	313519	0.4844	ng/mL	101.00 >85.00	35.24	22.41-41.62
Sodium Perchlorate-18O4 _IS	Auto	3.618	313519	313519	1.0000	ng/mL	----	----	

Perchlorate

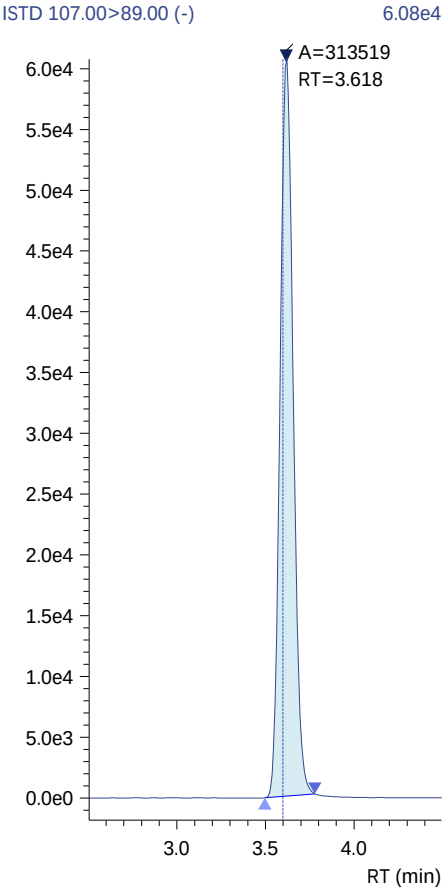
Conc 0.4844
R#1 35.24 (32.02)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/29/2023 2:17:05 PM

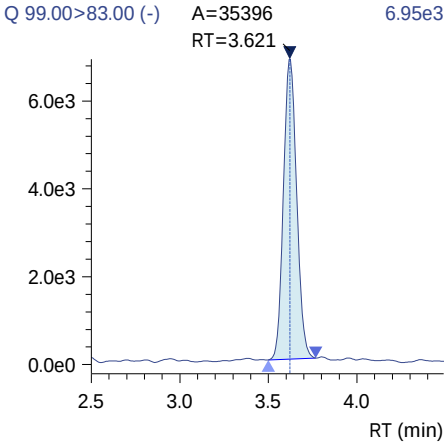
PERCHLORATE3

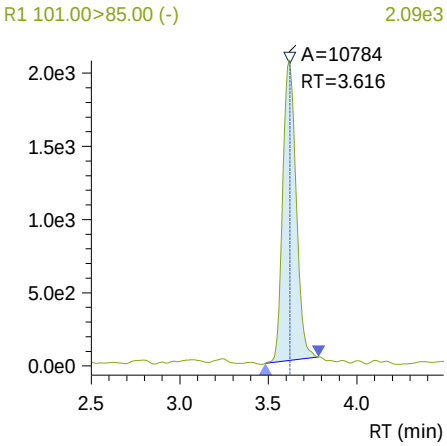
Sample ID: PERCHLORATE3
Date Acquired: 6/29/2023 1:10:46 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-003.lcd
Vial: 3 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.621	35396	316311	0.6886	ng/mL	101.00 >85.00	30.47	22.41-41.62
Sodium Perchlorate-18O4 _IS	Auto	3.618	316311	316311	1.0000	ng/mL	----	----	

Perchlorate

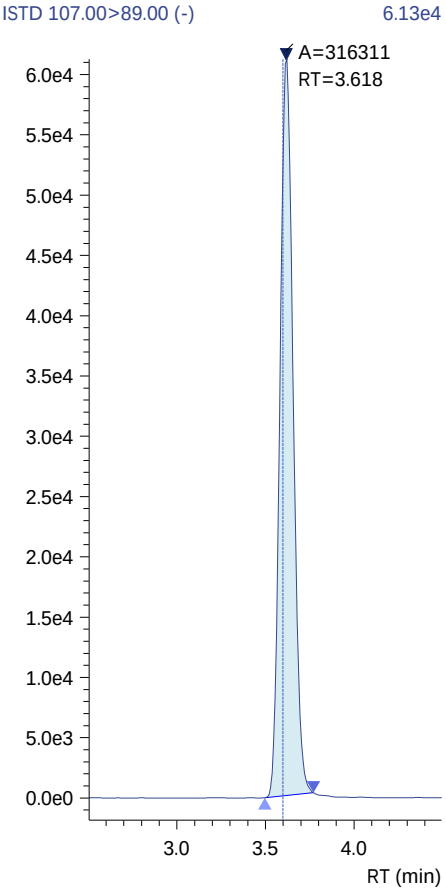
Conc 0.6886
R#1 30.47 (32.02)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/29/2023 2:17:05 PM

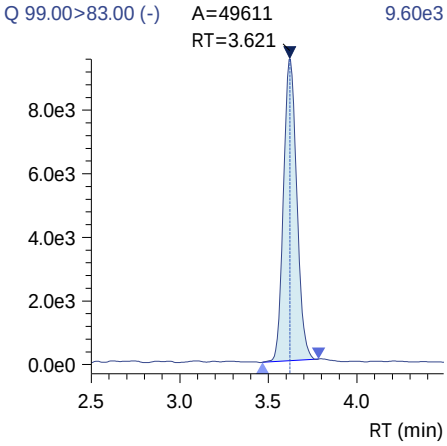
PERCHLORATE4

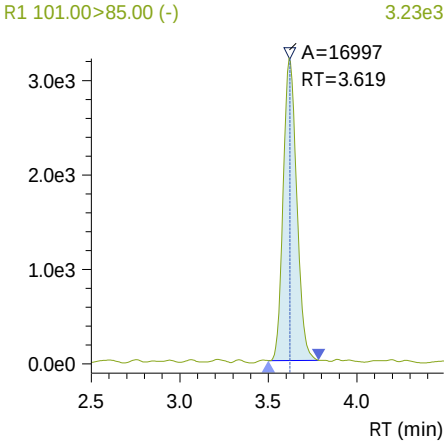
Sample ID: PERCHLORATE4
Date Acquired: 6/29/2023 1:16:19 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-004.lcd
Vial: 4 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.621	49611	316580	0.9643	ng/mL	101.00 >85.00	34.26	22.41-41.62
Sodium Perchlorate-18O4 _IS	Auto	3.618	316580	316580	1.0000	ng/mL	----	----	

Perchlorate

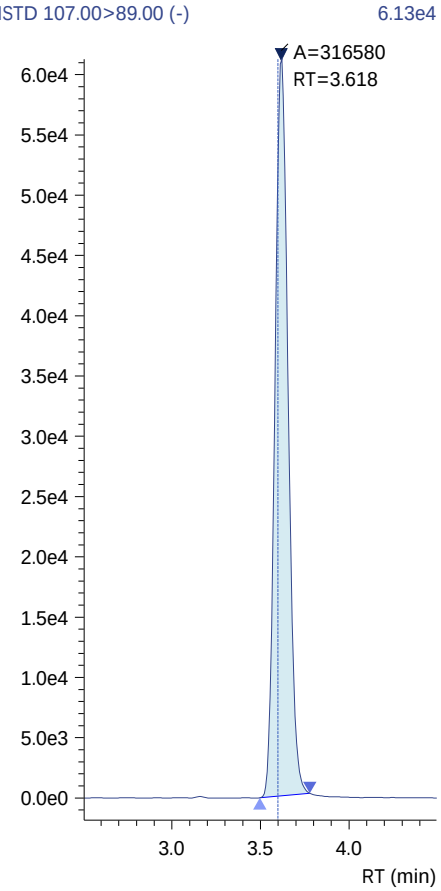
Conc 0.9643
R#1 34.26 (32.02)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/29/2023 2:17:05 PM

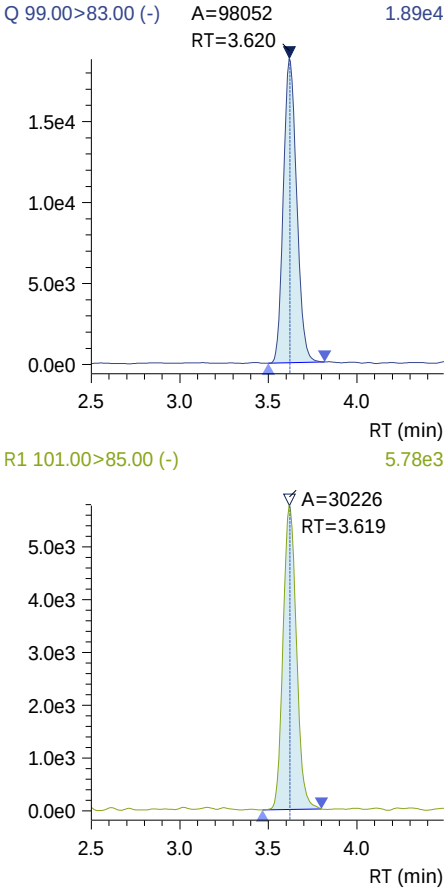
PERCHLORATE5

Sample ID: PERCHLORATE5
Date Acquired: 6/29/2023 1:21:50 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-005.lcd
Vial: 5 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.620	98052	307162	1.9642	ng/mL	101.00 >85.00	30.83	22.41-41.62
Sodium Perchlorate-18O4 _IS	Auto	3.617	307162	307162	1.0000	ng/mL	----	----	

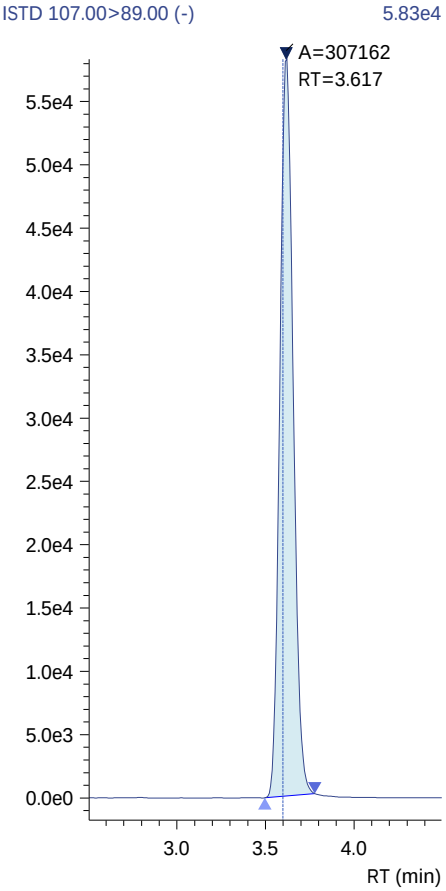
Perchlorate

Conc 1.9642
R#1 30.83 (32.02)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/29/2023 2:17:05 PM

PERCHLORATE6

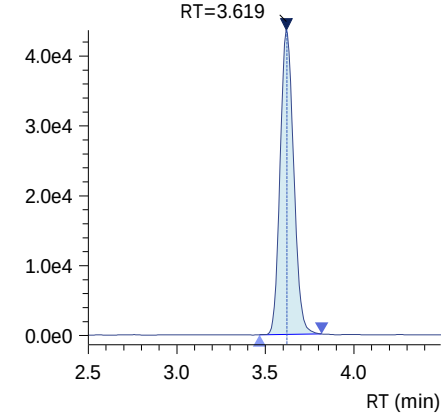
Sample ID: PERCHLORATE6
Date Acquired: 6/29/2023 1:27:22 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-006.lcd
Vial: 6 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.619	232011	282827	5.0477	ng/mL	101.00 >85.00	31.17	22.41-41.62
Sodium Perchlorate-18O4 _IS	Auto	3.617	282827	282827	1.0000	ng/mL	----	----	

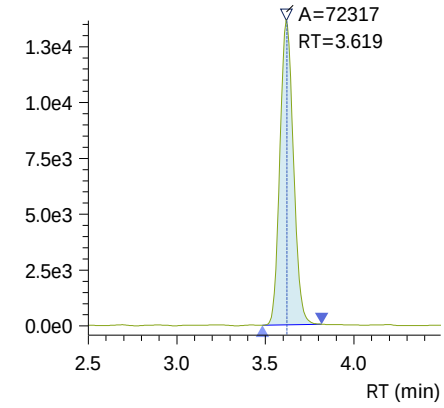
Perchlorate

Conc 5.0477
R#1 31.17 (32.02)

Q 99.00>83.00 (-) A=232011 RT=3.619 4.37e4



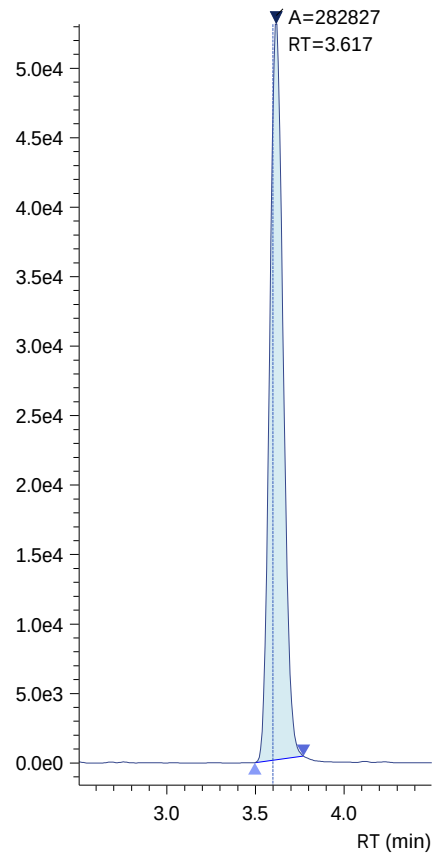
R1 101.00>85.00 (-) 1.37e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 5.32e4



Insight Report

Printed at 6/29/2023 2:17:05 PM

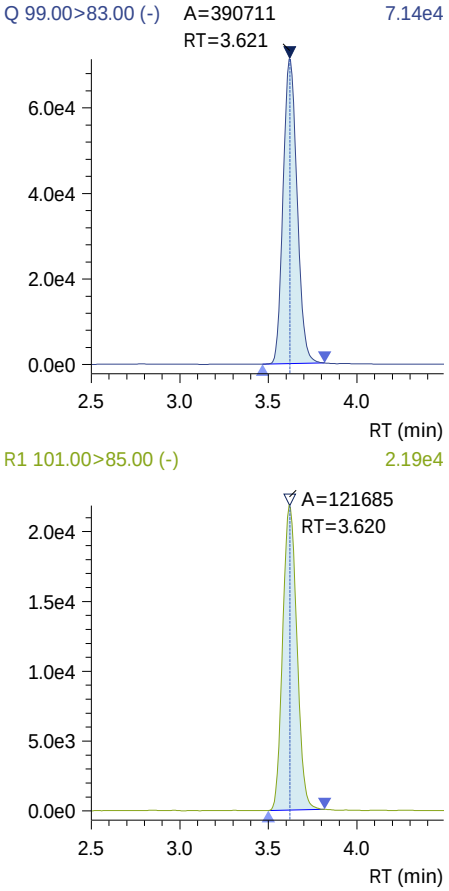
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 6/29/2023 1:32:51 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-007.lcd
Vial: 3 | 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	3.621	390711	229327	10.48 35	ng/mL	101.00 >85.00	31.14	22.41-41.62
Sodium Perchlorate-18O4 _IS	Auto	3.616	229327	229327	1.0000	ng/mL	----	----	

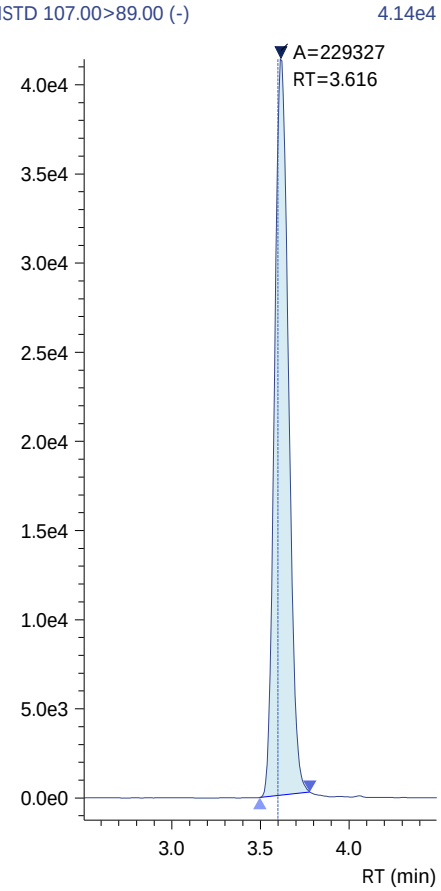
Perchlorate

Conc 10.4835
R#1 31.14 (32.02)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/29/2023 2:17:05 PM

PERCHLORATE8

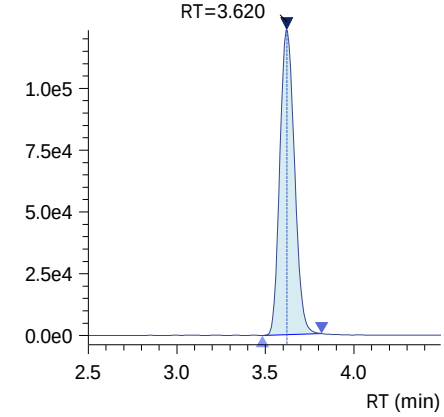
Sample ID: PERCHLORATE8
Date Acquired: 6/29/2023 1:38:22 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-008.lcd
Vial: 8 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.620	710430	213093	20.5144	ng/mL	101.00 >85.00	31.25	22.41-41.62
Sodium Perchlorate-18O4_IS	Auto	3.615	213093	213093	1.0000	ng/mL	----	----	

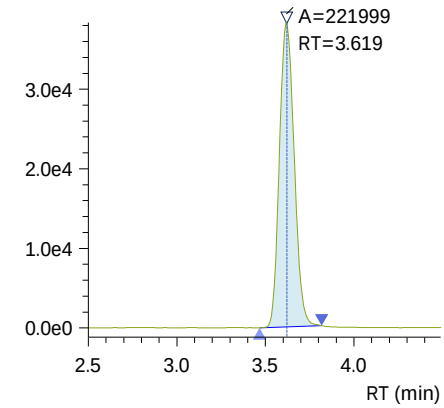
Perchlorate

Conc 20.5144
R#1 31.25 (32.02)

Q 99.00>83.00 (-) A=710430 RT=3.620 1.24e5



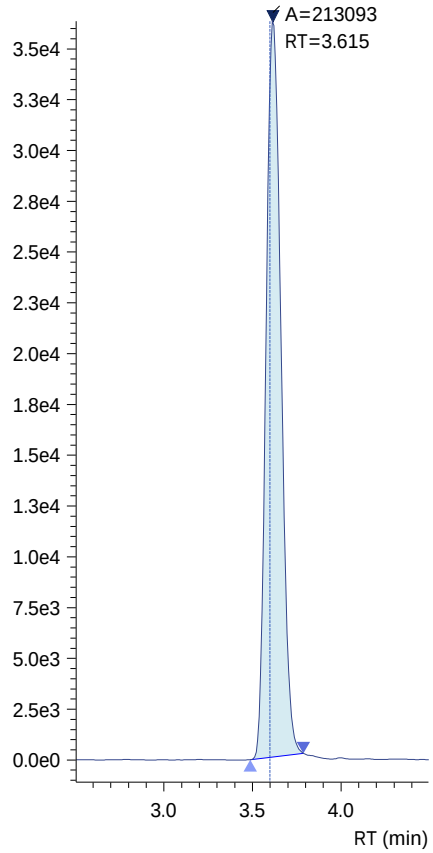
R1 101.00>85.00 (-) 3.84e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 3.64e4



Insight Report

Printed at 6/29/2023 2:17:05 PM

PERCHLORATE9

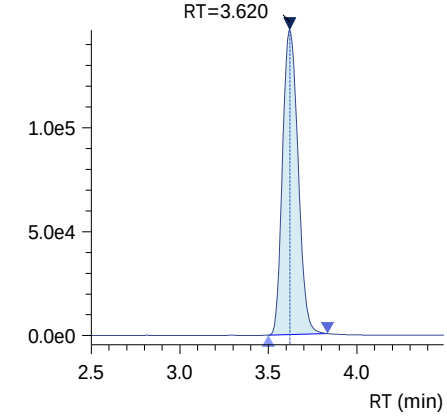
Sample ID: PERCHLORATE9
Date Acquired: 6/29/2023 1:43:53 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-009.lcd
Vial: 9 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.620	896468	185851	29.6808	ng/mL	101.00 >85.00	31.06	22.41-41.62
Sodium Perchlorate-18O4_IS	Auto	3.614	185851	185851	1.0000	ng/mL	----	----	

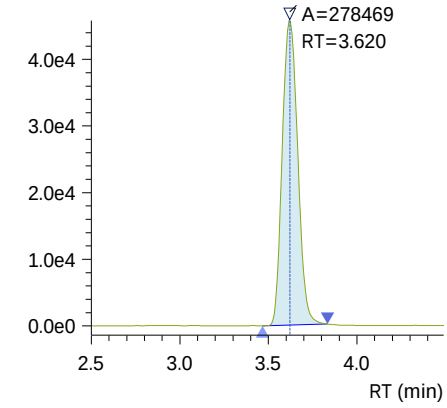
Perchlorate

Conc 29.6808
R#1 31.06 (32.02)

Q 99.00>83.00 (-) A=896468 1.47e5



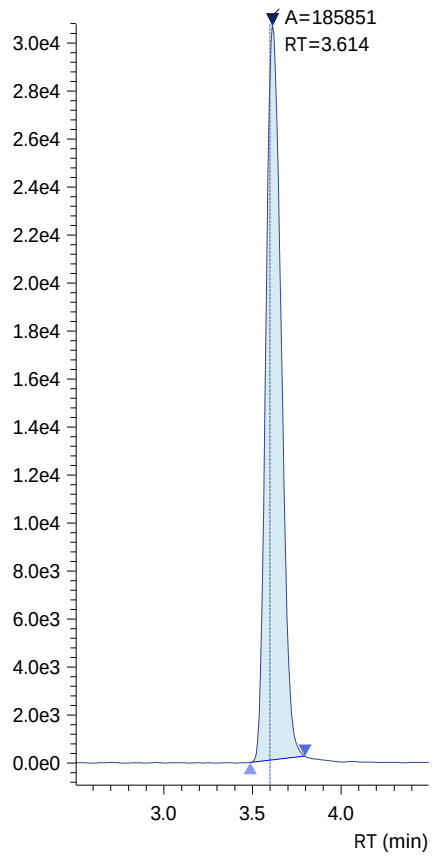
R1 101.00>85.00 (-) 4.58e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 3.08e4



Insight Report

Printed at 6/29/2023 2:17:05 PM

PERCHLORATE10

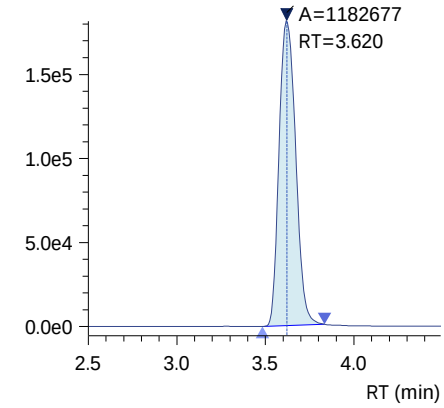
Sample ID: PERCHLORATE10
Date Acquired: 6/29/2023 1:49:27 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-010.lcd
Vial: 10 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.620	1182677	146135	49.79 86	ng/mL	101.00 >85.00	30.89	22.41-41.62
Sodium Perchlorate-18O4 _IS	Auto	3.614	146135	146135	1.0000	ng/mL	----	----	

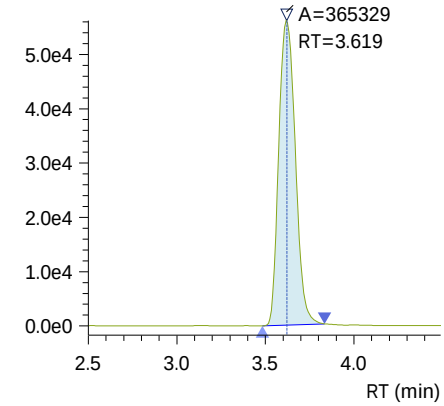
Perchlorate

Conc 49.7986
R#1 30.89 (32.02)

Q 99.00>83.00 (-) 1.82e5



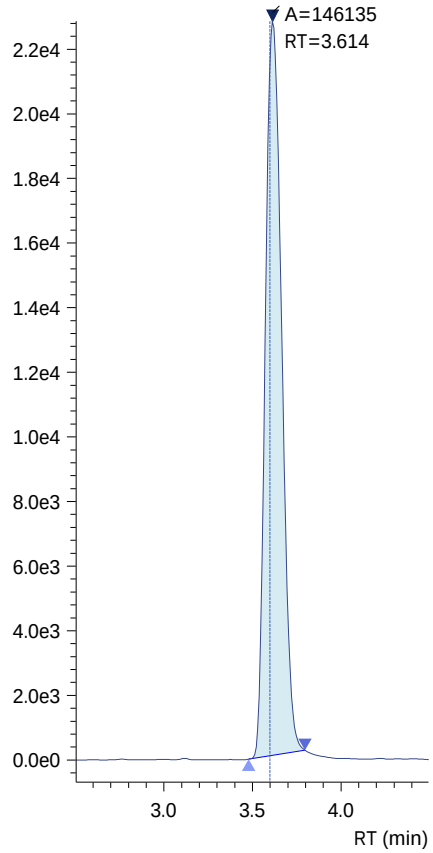
R1 101.00>85.00 (-) 5.62e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 2.29e4



Insight Report

Printed at 6/29/2023 2:17:05 PM

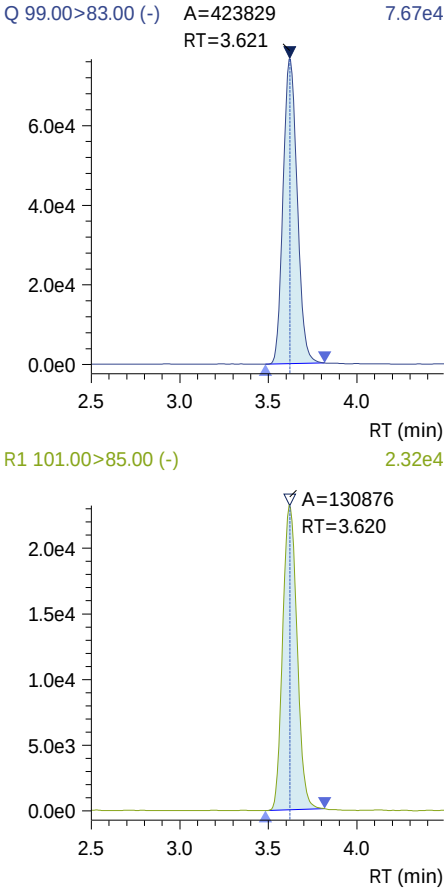
PERCHLORATEICV

Sample ID: PERCHLORATEICV
Date Acquired: 6/29/2023 1:55:00 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-011.lcd
Vial: 11 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.621	423829	263091	9.9127	ng/mL	101.00 >85.00	30.88	22.41-41.62
Sodium Perchlorate-18O4 _IS	Auto	3.617	263091	263091	1.0000	ng/mL	----	----	

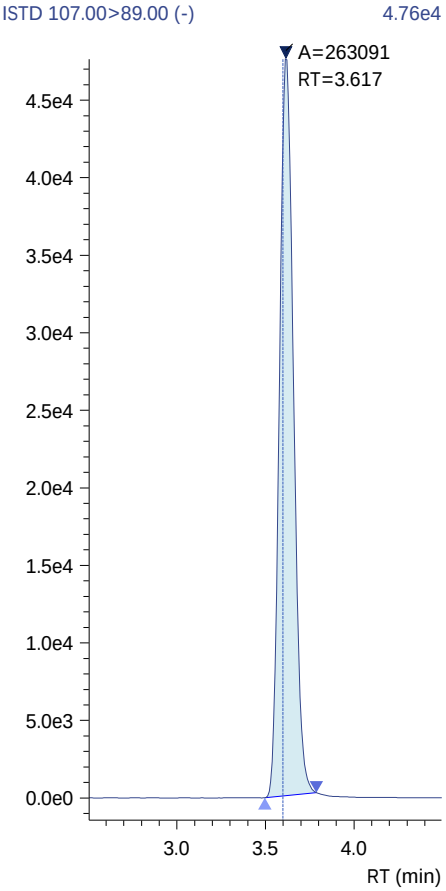
Perchlorate

Conc 9.9127
R#1 30.88 (32.02)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Chromatograms and Selected Ion Monitoring

ALS Environmental - Houston HRMS
10450 Stancliff Rd., Suite 320, Houston TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

20230725-811716

Injection Log

LCMS01 -Shimadzu 8050

1st Review: XM
2nd Review: GC

ICAL Date: 6/29/2023
Cal. Std. xp: 07/31/2023
ICAL ID: EC2300011

Mobile Phases : A:20mM ammonium acetate in water 230388 **B:**Acetonitrile 229152

	Sample Name		File Name	Acquisition Method	Dilution	Comments	Date/Time
1	IB		20230725-001	Perchlorate6850c.lcm	1x		7/25/2023 9:25
2	LODV		20230725-002~1	Perchlorate6850c.lcm	1x	230386	7/25/2023 10:16
3	ICS		20230725-003	Perchlorate6850c.lcm	1x	32103024	7/25/2023 10:22
4	CCV		20230725-004	Perchlorate6850c.lcm	1x	227251	7/25/2023 10:28
5	EQ2300354-01		20230725-005	Perchlorate6850c.lcm	1x		7/25/2023 10:33
6	EQ2300354-02		20230725-006	Perchlorate6850c.lcm	1x		7/25/2023 10:39
7	EQ2300354-03		20230725-007	Perchlorate6850c.lcm	1x		7/25/2023 10:44
8	E2300657-001		20230725-008	Perchlorate6850c.lcm	10x		7/25/2023 10:50
9	E2300657-002		20230725-009	Perchlorate6850c.lcm	10x		7/25/2023 10:55
10	E2300657-003		20230725-010	Perchlorate6850c.lcm	1x		7/25/2023 11:01
11	E2300657-004		20230725-011	Perchlorate6850c.lcm	1x		7/25/2023 11:06
12	E2300657-005		20230725-012	Perchlorate6850c.lcm	1x		7/25/2023 11:12
13	E2300657-006		20230725-013	Perchlorate6850c.lcm	1x		7/25/2023 11:17
14	E2300657-007		20230725-014	Perchlorate6850c.lcm	1x		7/25/2023 11:23
15	CCV		20230725-015	Perchlorate6850c.lcm	1x	227251	7/25/2023 11:28
16	E2300657-008		20230725-016	Perchlorate6850c.lcm	1x		7/25/2023 11:34
17	E2300657-009		20230725-017	Perchlorate6850c.lcm	1x		7/25/2023 11:40
18	E2300657-010		20230725-018	Perchlorate6850c.lcm	1x		7/25/2023 11:45
19	E2300671-001		20230725-019	Perchlorate6850c.lcm	5x		7/25/2023 11:51
20	E2300671-002		20230725-020	Perchlorate6850c.lcm	1x		7/25/2023 11:56
21	E2300671-003		20230725-021	Perchlorate6850c.lcm	1x		7/25/2023 12:02
22	E2300671-004		20230725-022	Perchlorate6850c.lcm	5x		7/25/2023 12:07
23	E2300671-005		20230725-023	Perchlorate6850c.lcm	1x		7/25/2023 12:13
24	E2300671-006		20230725-024	Perchlorate6850c.lcm	5x		7/25/2023 12:18
25	E2300671-007		20230725-025	Perchlorate6850c.lcm	1x	DNU-RR	7/25/2023 12:24
26	CCV		20230725-026	Perchlorate6850c.lcm	1x	227251	7/25/2023 12:29
27	E2300671-008		20230725-027	Perchlorate6850c.lcm	5x		7/25/2023 12:35
28	E2300687-001		20230725-028	Perchlorate6850c.lcm	1x		7/25/2023 12:53
29	E2300687-002		20230725-029	Perchlorate6850c.lcm	1x		7/25/2023 12:58
30	EQ2300355-01		20230725-030	Perchlorate6850c.lcm	1x		7/25/2023 13:04
31	EQ2300355-02		20230725-031	Perchlorate6850c.lcm	1x		7/25/2023 13:10
32	EQ2300355-03		20230725-032	Perchlorate6850c.lcm	1x	DNU-IR	7/25/2023 13:15
33	E2300672-001		20230725-033	Perchlorate6850c.lcm	1x		7/25/2023 13:21
34	E2300672-002		20230725-034	Perchlorate6850c.lcm	1x		7/25/2023 13:26
35	E2300672-003		20230725-035	Perchlorate6850c.lcm	1x		7/25/2023 13:32
36	E2300673-001		20230725-036	Perchlorate6850c.lcm	1x		7/25/2023 13:37
37	CCV		20230725-037	Perchlorate6850c.lcm	1x	227251	7/25/2023 13:43

20230725-811716

Injection Log

LCMS01 -Shimadzu 8050

1st Review: XM
2nd Review: GC

ICAL Date: 6/29/2023
Cal. Std. xp: 07/31/2023
ICAL ID: EC2300011

Mobile Phases : A:20mM ammonium acetate in water 230388 **B:**Acetonitrile 229152

	Sample Name		File Name	Acquisition Method	Dilution	Comments	Date/Time
38	E2300673-002		20230725-038	Perchlorate6850c.lcm	1x		7/25/2023 13:48
39	E2300673-003		20230725-039	Perchlorate6850c.lcm	1x		7/25/2023 13:54
40	E2300673-004		20230725-040	Perchlorate6850c.lcm	1x		7/25/2023 13:59
41	E2300673-005		20230725-041	Perchlorate6850c.lcm	5x		7/25/2023 14:05
42	E2300673-006		20230725-042	Perchlorate6850c.lcm	1x		7/25/2023 14:11
43	E2300673-007		20230725-043	Perchlorate6850c.lcm	2000x		7/25/2023 14:16
44	E2300673-008		20230725-044	Perchlorate6850c.lcm	2000x		7/25/2023 14:22
45	E2300674-001		20230725-045	Perchlorate6850c.lcm	1x		7/25/2023 14:27
46	E2300674-002		20230725-046	Perchlorate6850c.lcm	1x		7/25/2023 14:33
47	E2300674-003		20230725-047	Perchlorate6850c.lcm	1x		7/25/2023 14:38
48	CCV		20230725-048	Perchlorate6850c.lcm	1x	227251	7/25/2023 14:44
49	E2300674-004		20230725-049	Perchlorate6850c.lcm	1x		7/25/2023 14:49
50	E2300674-005		20230725-050	Perchlorate6850c.lcm	1x		7/25/2023 14:55
51	E2300674-006		20230725-051	Perchlorate6850c.lcm	1x		7/25/2023 15:00
52	E2300674-007		20230725-052	Perchlorate6850c.lcm	1x		7/25/2023 15:06
53	E2300674-008		20230725-053	Perchlorate6850c.lcm	1x		7/25/2023 15:12
54	E2300674-009		20230725-054	Perchlorate6850c.lcm	1x		7/25/2023 15:17
55	EQ2300355-03		20230725-055	Perchlorate6850c.lcm	1x		7/25/2023 15:23
56	E2300671-007		20230725-056	Perchlorate6850c.lcm	1x		7/25/2023 15:38
57	CCV		20230725-057	Perchlorate6850c.lcm	1x	227251	7/25/2023 15:43

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23071113

Service Request: E2300674
Date Analyzed: 7/25/23 10:28

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

File ID: I:\LCMS01\DATA\20230725\20230725-004
Instrument ID: E-LCMS-01
Analytical Method: 6850

Lab Code: EQ2300360-01
Analysis Lot: 811716
Signal ID: 1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	263,382	3.62
	Upper Limit ==>	395,073	5.62
	Lower Limit ==>	131,691	1.62
Associated Analyses			
Continuing Calibration Verification	EQ2300360-01	239,575	3.57

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

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23071113

Service Request: E2300674
Date Analyzed: 7/25/23 11:28

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

File ID: I:\LCMS01\DATA\20230725\20230725-015
Instrument ID: E-LCMS-01
Analytical Method: 6850

Lab Code: EQ2300360-02
Analysis Lot: 811716
Signal ID: 1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	263,382	3.62
	Upper Limit ==>	395,073	5.62
	Lower Limit ==>	131,691	1.62
Associated Analyses			
Continuing Calibration Verification	EQ2300360-02	243,256	3.57

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

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2300674
Project:	HS23071113	**Date Analyzed:**	7/25/23 12:29

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20230725\20230725-026	**Lab Code:**	EQ2300360-03
Instrument ID:	E-LCMS-01	**Analysis Lot:**	811716
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	263,382	3.62
	Upper Limit ==>	395,073	5.62
	Lower Limit ==>	131,691	1.62
Associated Analyses			
Continuing Calibration Verification	EQ2300360-03	238,049	3.57
Method Blank	EQ2300355-01	325,002	3.57
Lab Control Sample	EQ2300355-02	337,829	3.57

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

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23071113

Service Request: E2300674
Date Analyzed: 7/25/23 13:43

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

File ID: I:\LCMS01\DATA\20230725\20230725-037
Instrument ID: E-LCMS-01
Analytical Method: 6850

Lab Code: EQ2300360-04
Analysis Lot: 811716
Signal ID: 1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	263,382	3.62
	Upper Limit ==>	395,073	5.62
	Lower Limit ==>	131,691	1.62
Associated Analyses			
Continuing Calibration Verification	EQ2300360-04	234,296	3.57
hs23071113-01	E2300674-001	334,021	3.57
HS23071113-02	E2300674-002	333,789	3.57
HS23071113-03	E2300674-003	312,941	3.57

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

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23071113

Service Request: E2300674
Date Analyzed: 7/25/23 14:44

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

File ID: I:\LCMS01\DATA\20230725\20230725-048
Instrument ID: E-LCMS-01
Analytical Method: 6850

Lab Code: EQ2300360-05
Analysis Lot: 811716
Signal ID: 1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	263,382	3.62
	Upper Limit ==>	395,073	5.62
	Lower Limit ==>	131,691	1.62
Associated Analyses			
Continuing Calibration Verification	EQ2300360-05	236,851	3.57
HS23071113-04	E2300674-004	310,834	3.57
HS23071113-05	E2300674-005	321,085	3.57
HS23071113-06	E2300674-006	317,563	3.57
HS23071113-07	E2300674-007	323,118	3.57
HS23071113-08	E2300674-008	297,847	3.57
HS23071113-09	E2300674-009	329,121	3.57
Duplicate Lab Control Sample	EQ2300355-03	305,282	3.57

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

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2300674
Project:	HS23071113	**Date Analyzed:**	7/25/23 15:43

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

File ID:	I:\LCMS01\DATA\20230725\20230725-057	**Lab Code:**	EQ2300360-06
Instrument ID:	E-LCMS-01	**Analysis Lot:**	811716
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	263,382	3.62
	Upper Limit ==>	395,073	5.62
	Lower Limit ==>	131,691	1.62
Associated Analyses			
Continuing Calibration Verification	EQ2300360-06	225,280	3.57

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

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23071113

Service Request: E2300674
Date Analyzed: 7/25/23

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20230725\20230725-004

Calibration Date: 6/29/23
Calibration ID: EC2300011
Analysis Lot: 811716
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.0	0.1625	0.1627	0.1	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23071113

Service Request: E2300674
Date Analyzed: 7/25/23

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20230725\20230725-015

Calibration Date: 6/29/23
Calibration ID: EC2300011
Analysis Lot: 811716
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.1	0.1625	0.1646	1.3	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23071113

Service Request: E2300674
Date Analyzed: 7/25/23

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20230725\20230725-026

Calibration Date: 6/29/23
Calibration ID: EC2300011
Analysis Lot: 811716
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.1	0.1625	0.1634	0.5	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23071113

Service Request: E2300674
Date Analyzed: 7/25/23

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20230725\20230725-037

Calibration Date: 6/29/23
Calibration ID: EC2300011
Analysis Lot: 811716
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.1	0.1625	0.1642	1.1	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23071113

Service Request: E2300674
Date Analyzed: 7/25/23

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20230725\20230725-048

Calibration Date: 6/29/23
Calibration ID: EC2300011
Analysis Lot: 811716
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.93	0.1625	0.1613	-0.7	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23071113

Service Request: E2300674
Date Analyzed: 7/25/23

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20230725\20230725-057

Calibration Date: 6/29/23
Calibration ID: EC2300011
Analysis Lot: 811716
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.1	0.1625	0.1639	0.9	NA	± 15 %	Average RF

Insight Report

Printed at 7/25/2023 4:00:31 PM

Method File: I:\LCMS01\DATA\20230725\20230725.lcm
Project File: I:\LCMS01\DATA\20230725\20230725.damlp

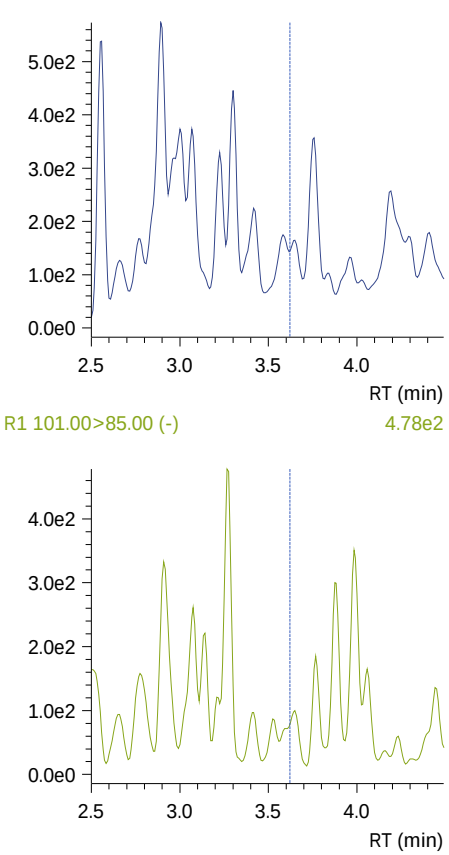
IB

Sample ID: IB
Date Acquired: 7/25/2023 9:25:10 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-001.lcd
Vial: 4 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	382468	----	ng/mL	101.00 >85.00	0.00	19.68-36.55
Sodium Perchlorate-18O4_IS	Auto	3.580	382468	382468	1.0000	ng/mL	----	----	

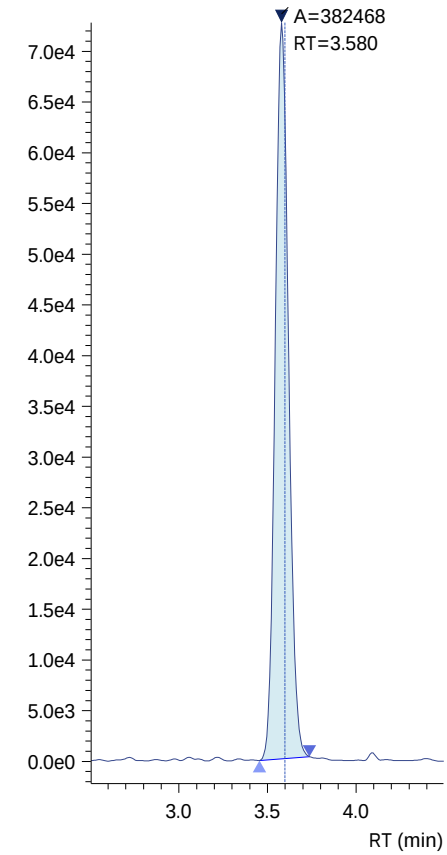
Perchlorate

Conc ----
R#1 0.00 (28.11)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/25/2023 4:00:31 PM

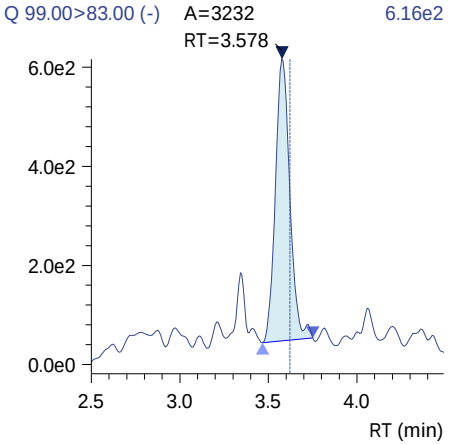
LODV

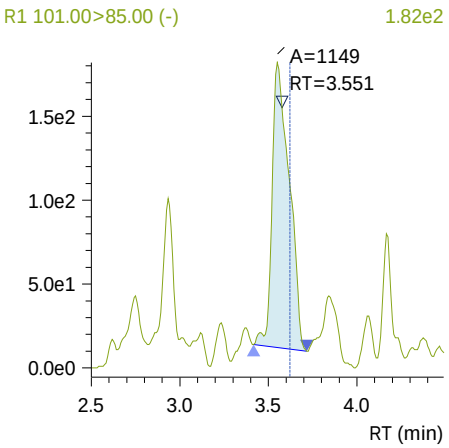
Sample ID: LODV
Date Acquired: 7/25/2023 10:16:49 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-002~1.lcd
Vial: 1 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.578	3232	357182	0.0557	ng/mL	101.00 >85.00	35.56	19.68-36.55
Sodium Perchlorate-18O4 _IS	Auto	3.571	357182	357182	1.0000	ng/mL	----	----	

Perchlorate

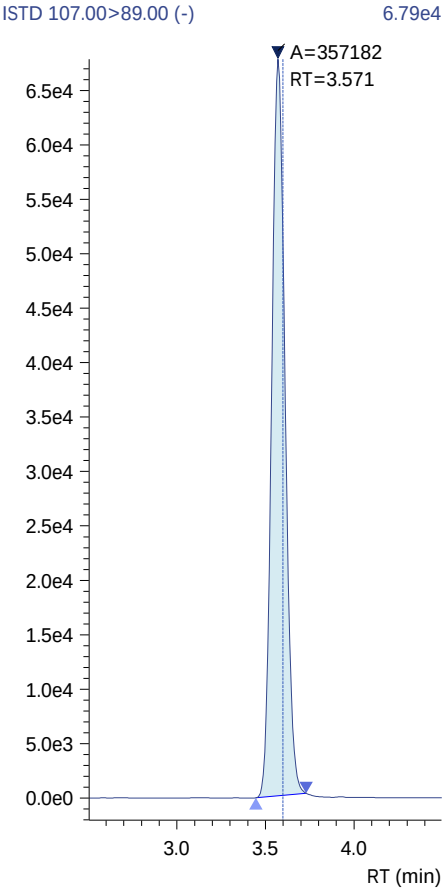
Conc 0.0557
R#1 35.56 (28.11)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/25/2023 4:00:31 PM

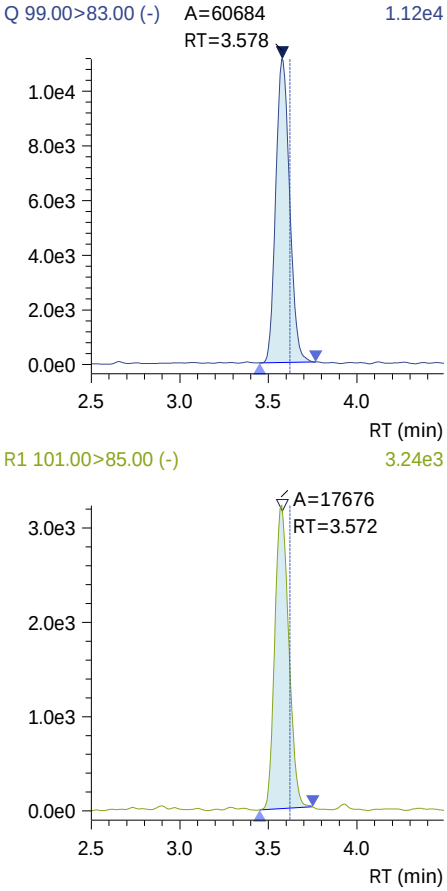
ICS

Sample ID: ICS
Date Acquired: 7/25/2023 10:22:35 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-003.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	3.578	60684	373050	1.0010	ng/mL	101.00 >85.00	29.13	19.68-36.55
Sodium Perchlorate-18O4 _IS	Auto	3.574	373050	373050	1.0000	ng/mL	----	----	

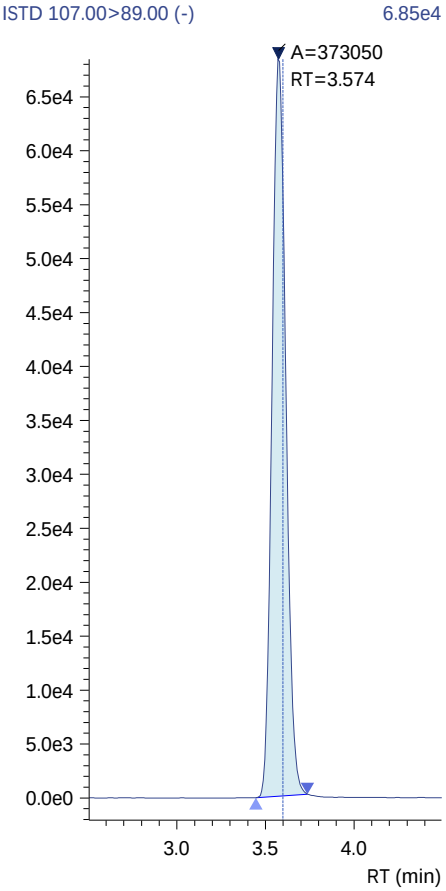
Perchlorate

Conc 1.0010
R#1 29.13 (28.11)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/25/2023 4:00:31 PM

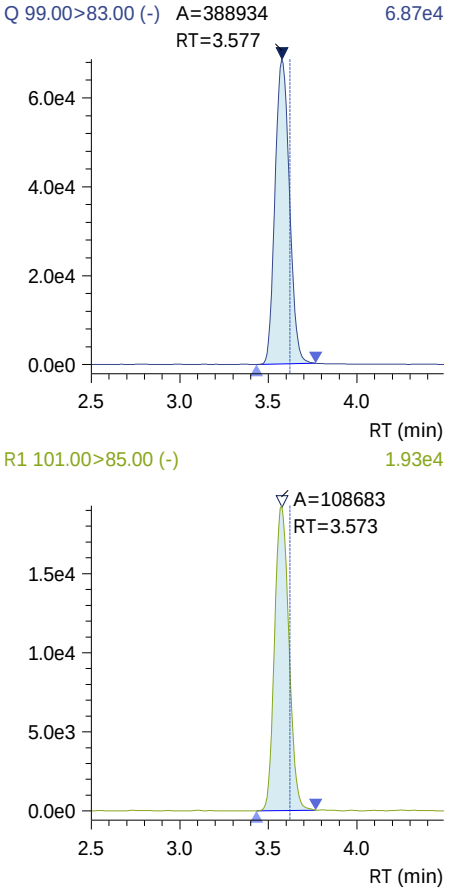
CCV

Sample ID: CCV
Date Acquired: 7/25/2023 12:29:50 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-026.lcd
Vial: 3 | 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	3.577	388934	238049	10.05 34	ng/mL	101.00 >85.00	27.94	19.68-36.55
Sodium Perchlorate-18O4_IS	Auto	3.571	238049	238049	1.0000	ng/mL	----	----	

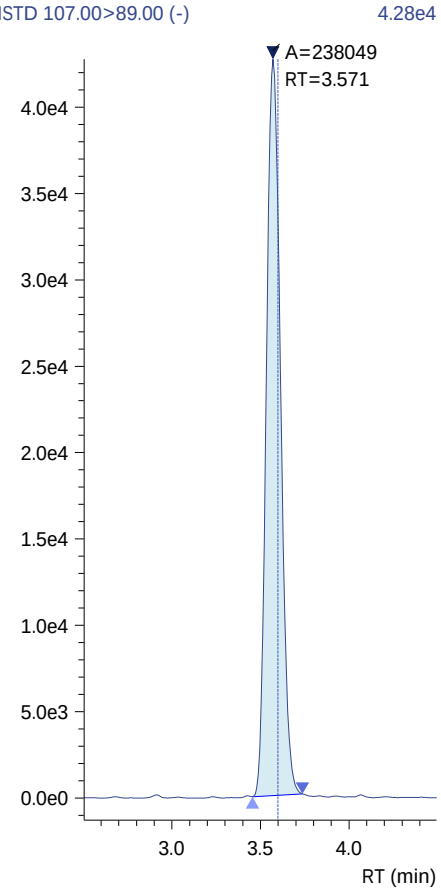
Perchlorate

Conc 10.0534
R#1 27.94 (28.11)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/25/2023 4:00:31 PM

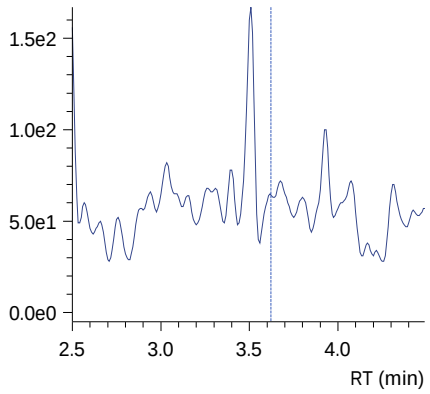
EQ2300355-01

Sample ID: EQ2300355-01
Date Acquired: 7/25/2023 1:04:30 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-030.lcd
Vial: 30 | Inj. Volume: 10.0000uL | Tray: 3

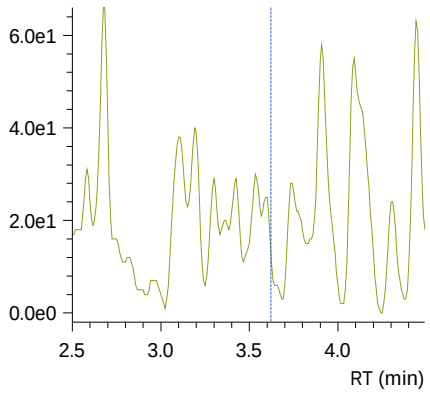
Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	325002	----	ng/mL	101.00 >85.00	0.00	19.68-36.55
Sodium Perchlorate-18O4_IS	Auto	3.572	325002	325002	1.0000	ng/mL	----	----	

Perchlorate

Conc ----
R#1 0.00 (28.11)
Q 99.00>83.00 (-) 1.67e2

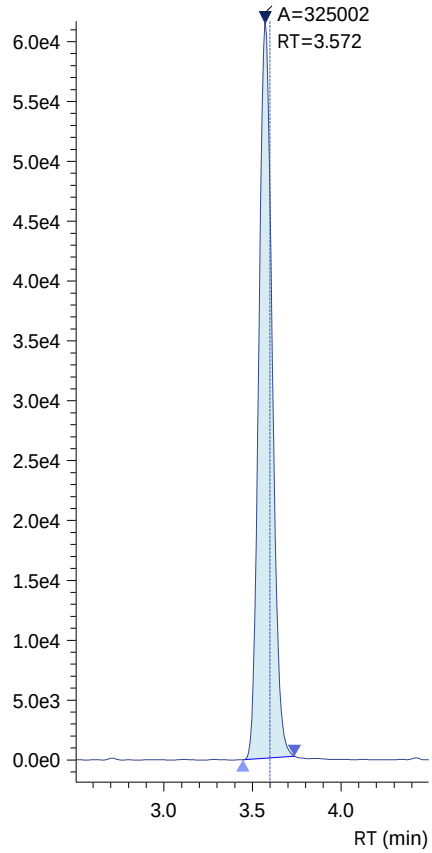


R1 101.00>85.00 (-) 6.60e1



Sodium Perchlorate-18O4_IS

Conc 1.0000
ISTD 107.00>89.00 (-) 6.17e4



Insight Report

Printed at 7/25/2023 4:00:31 PM

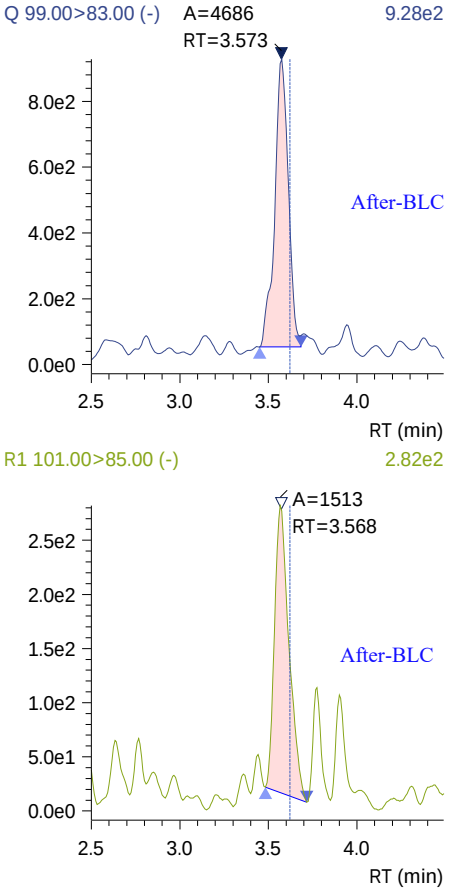
EQ2300355-02

Sample ID: EQ2300355-02
Date Acquired: 7/25/2023 1:10:04 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-031.lcd
Vial: 31 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	M	3.573	4686	337829	0.0853	ng/mL	101.00 >85.00	32.28	19.68-36.55
Sodium Perchlorate-18O4 _IS	Auto	3.572	337829	337829	1.0000	ng/mL	----	----	

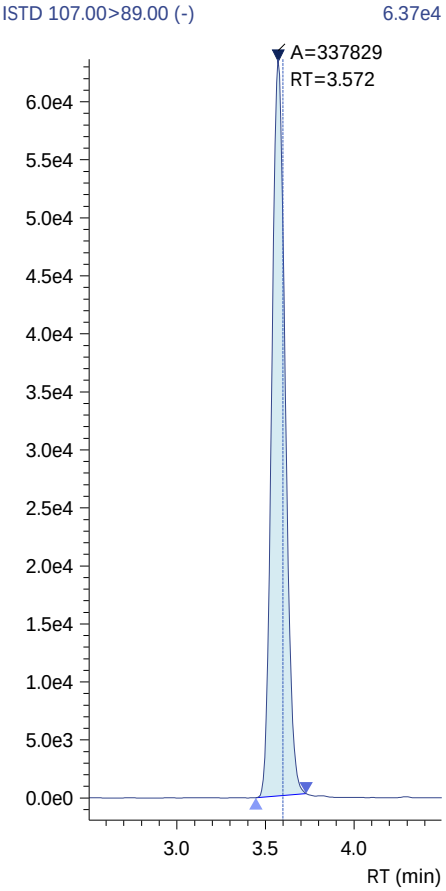
Perchlorate

Conc 0.0853
R#1 32.28 (28.11)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/25/2023 4:01:26 PM

Method File: I:\LCMS01\DATA\20230725\20230725.lcm
Project File: I:\LCMS01\DATA\20230725\20230725.damlp

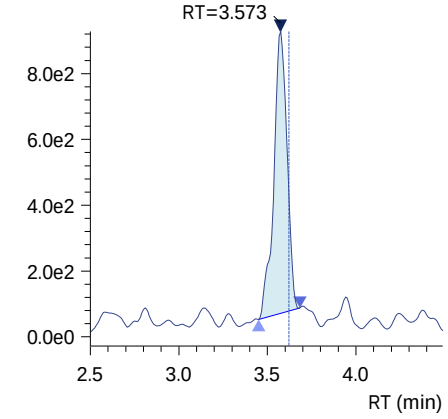
EQ2300355-02

Sample ID: EQ2300355-02
Date Acquired: 7/25/2023 1:10:04 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-031.lcd
Vial: 31 | Inj. Volume: 10.0000uL | Tray: 3

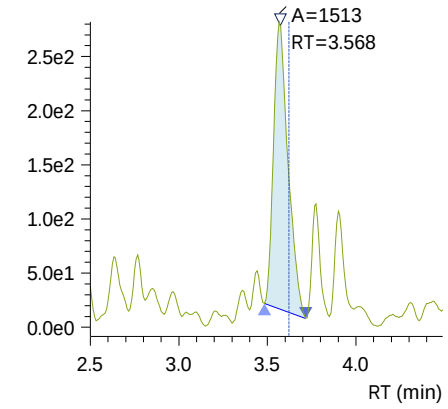
Perchlorate

Conc 0.0811
R#1 33.95 (28.11)

Q 99.00>83.00 (-) A=4455 9.28e2



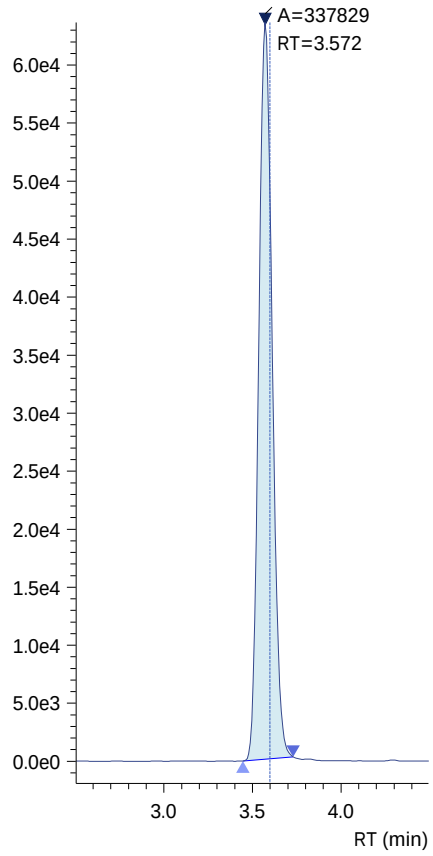
R1 101.00>85.00 (-) 2.82e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 6.37e4



Insight Report

Printed at 7/25/2023 4:00:31 PM

CCV

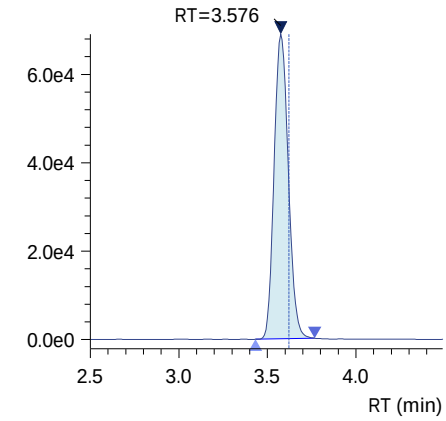
Sample ID: CCV
Date Acquired: 7/25/2023 1:43:19 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-037.lcd
Vial: 3 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.576	384811	234296	10.10 62	ng/mL	101.00 >85.00	27.94	19.68-36.55
Sodium Perchlorate-18O4_IS	Auto	3.572	234296	234296	1.0000	ng/mL	----	----	

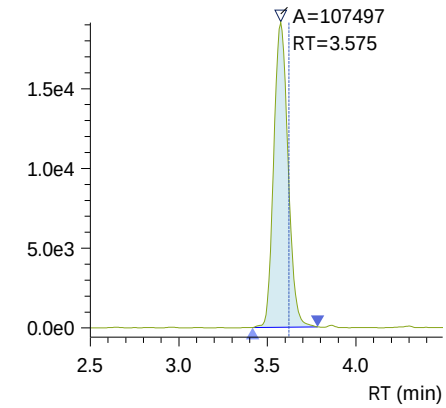
Perchlorate

Conc 10.1062
R#1 27.94 (28.11)

Q 99.00>83.00 (-) A=384811 6.91e4



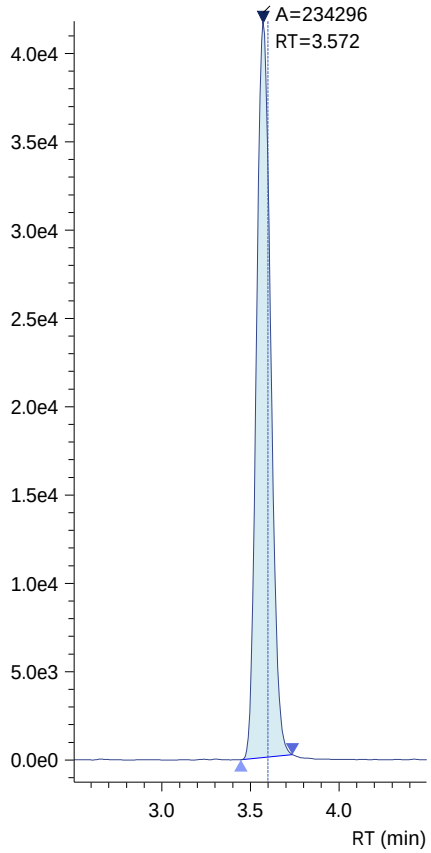
R1 101.00>85.00 (-) 1.91e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 4.18e4



Insight Report

Printed at 7/25/2023 4:00:31 PM

E2300674-001

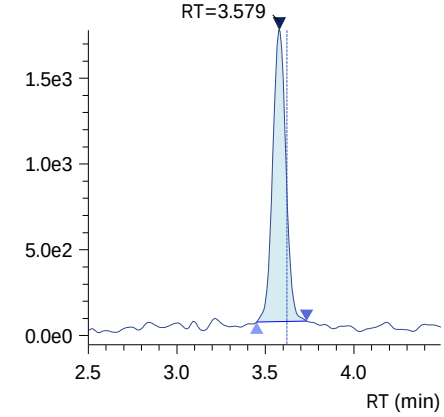
Sample ID: E2300674-001
Date Acquired: 7/25/2023 2:27:38 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-045.lcd
Vial: 20 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.579	8856	334021	0.1631	ng/mL	101.00 >85.00	29.50	19.68-36.55
Sodium Perchlorate-18O4 _IS	Auto	3.571	334021	334021	1.0000	ng/mL	----	----	

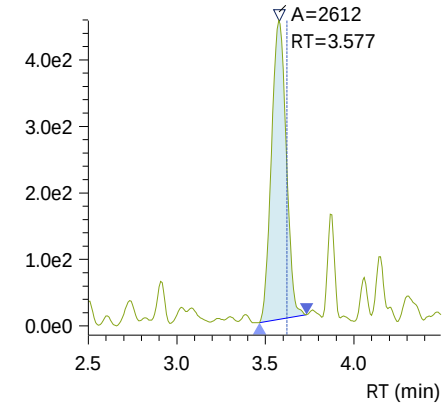
Perchlorate

Conc 0.1631
R#1 29.50 (28.11)

Q 99.00>83.00 (-) A=8856 1.78e3



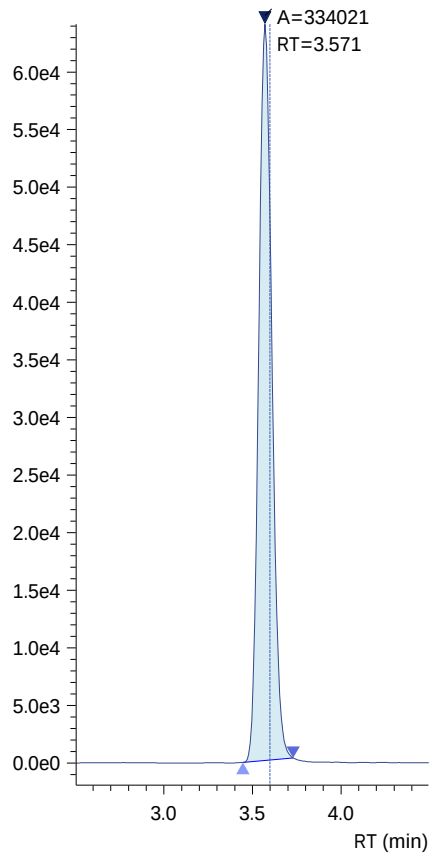
R1 101.00>85.00 (-) 4.59e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 6.42e4



Insight Report

Printed at 7/25/2023 4:00:31 PM

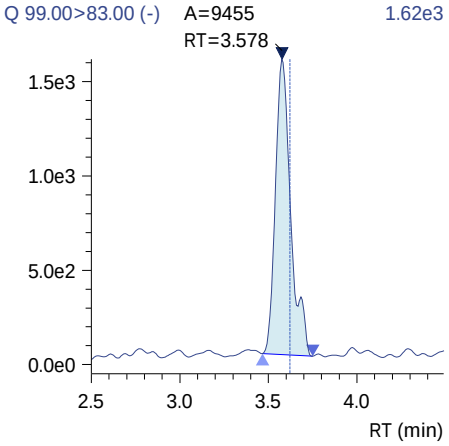
E2300674-002

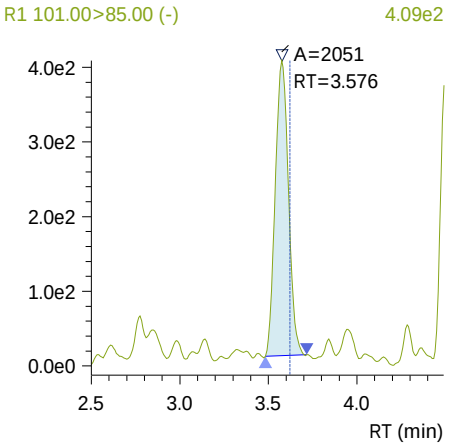
Sample ID: E2300674-002
Date Acquired: 7/25/2023 2:33:10 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-046.lcd
Vial: 21 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.578	9455	333789	0.1743	ng/mL	101.00 >85.00	21.69	19.68-36.55
Sodium Perchlorate-18O4 _IS	Auto	3.572	333789	333789	1.0000	ng/mL	----	----	

Perchlorate

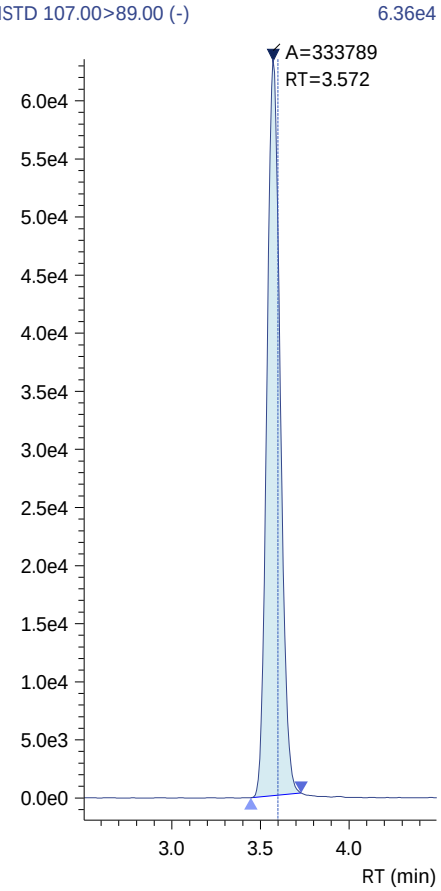
Conc 0.1743
R#1 21.69 (28.11)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/25/2023 4:00:31 PM

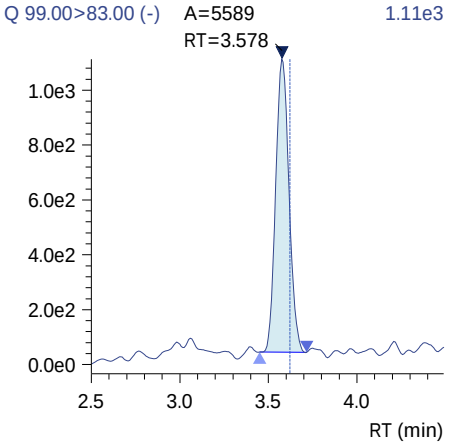
E2300674-003

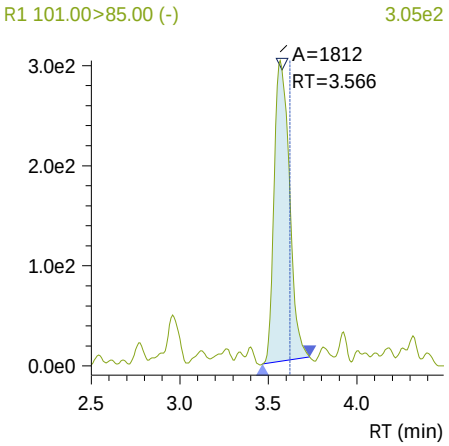
Sample ID: E2300674-003
Date Acquired: 7/25/2023 2:38:44 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-047.lcd
Vial: 22 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.578	5589	312941	0.1099	ng/mL	101.00 >85.00	32.43	19.68-36.55
Sodium Perchlorate-18O4 _IS	Auto	3.573	312941	312941	1.0000	ng/mL	----	----	

Perchlorate

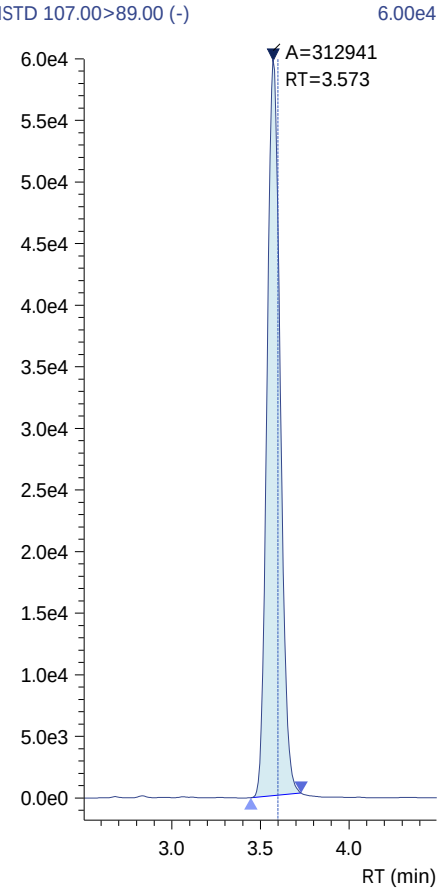
Conc 0.1099
R#1 32.43 (28.11)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/25/2023 4:00:31 PM

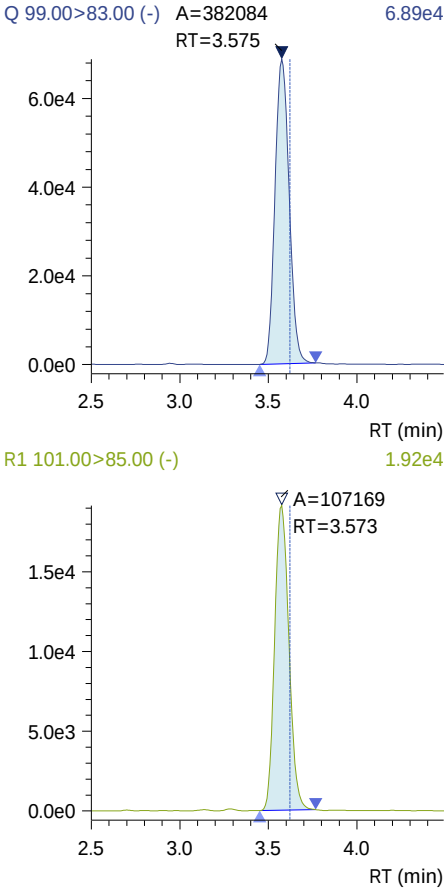
CCV

Sample ID: CCV
Date Acquired: 7/25/2023 2:44:15 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-048.lcd
Vial: 3 | 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	3.575	382084	236851	9.9263	ng/mL	101.00 >85.00	28.05	19.68-36.55
Sodium Perchlorate-18O4 _IS	Auto	3.571	236851	236851	1.0000	ng/mL	----	----	

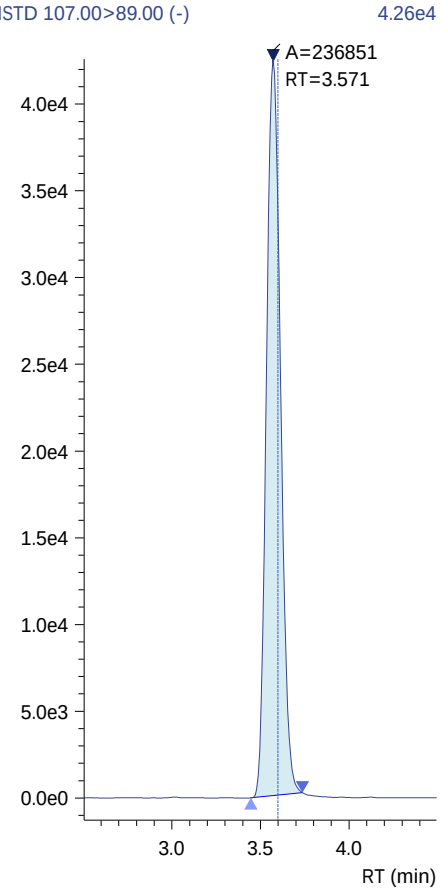
Perchlorate

Conc 9.9263
R#1 28.05 (28.11)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/25/2023 4:00:31 PM

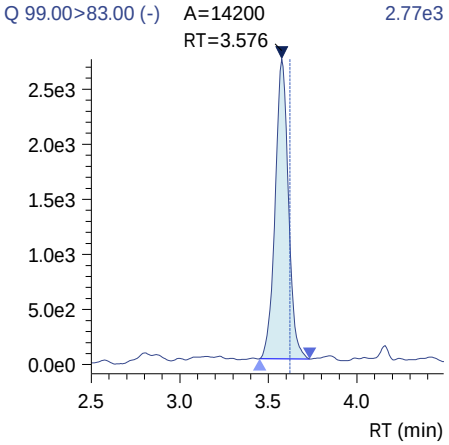
E2300674-004

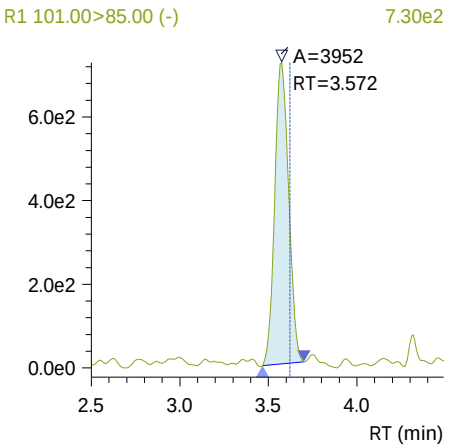
Sample ID: E2300674-004
Date Acquired: 7/25/2023 2:49:47 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-049.lcd
Vial: 23 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.576	14200	310834	0.2811	ng/mL	101.00 >85.00	27.83	19.68-36.55
Sodium Perchlorate-18O4 _IS	Auto	3.572	310834	310834	1.0000	ng/mL	----	----	

Perchlorate

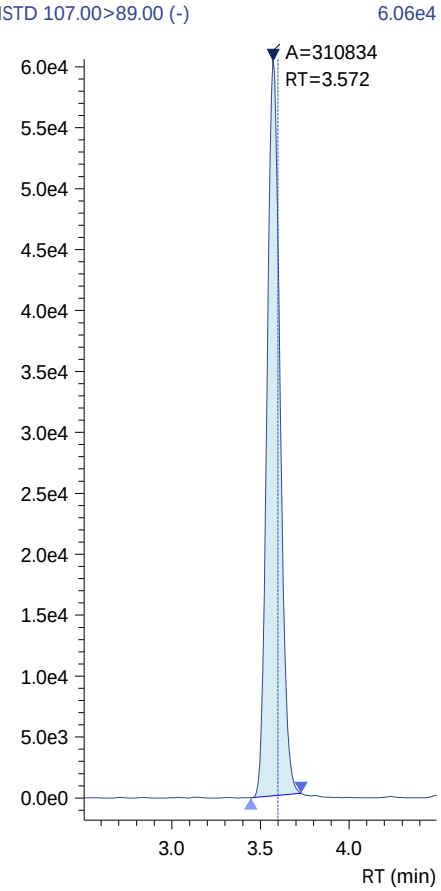
Conc 0.2811
R#1 27.83 (28.11)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/25/2023 4:00:31 PM

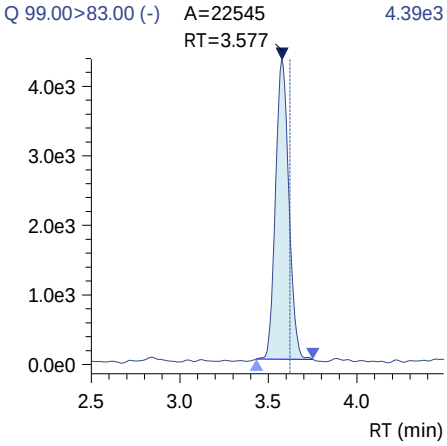
E2300674-005

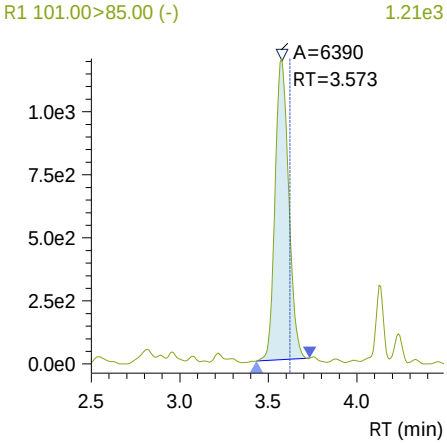
Sample ID: E2300674-005
Date Acquired: 7/25/2023 2:55:21 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-050.lcd
Vial: 24 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.577	22545	321085	0.4320	ng/mL	101.00 >85.00	28.35	19.68-36.55
Sodium Perchlorate-18O4 _IS	Auto	3.572	321085	321085	1.0000	ng/mL	----	----	

Perchlorate

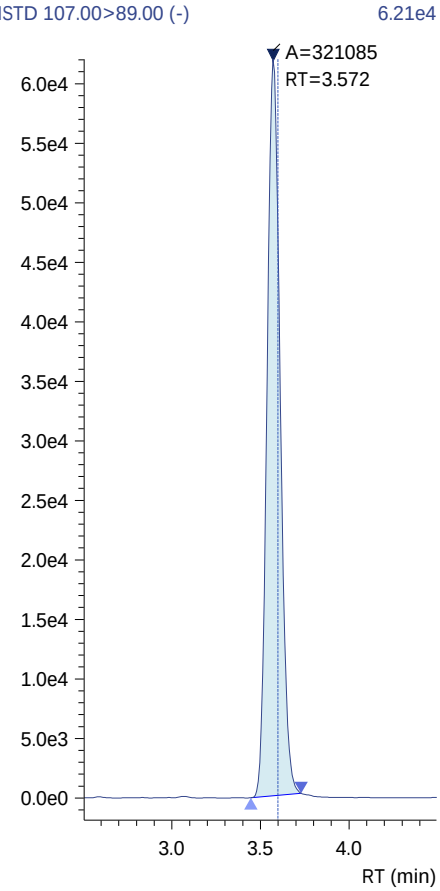
Conc 0.4320
R#1 28.35 (28.11)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/25/2023 4:00:31 PM

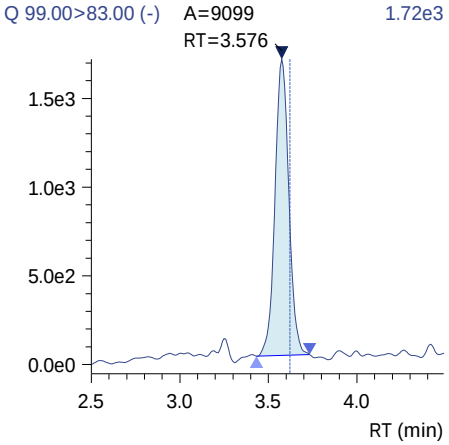
E2300674-006

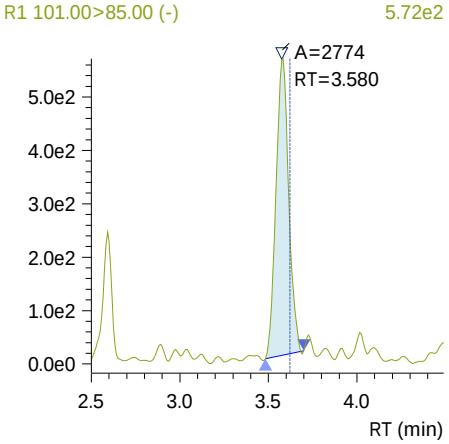
Sample ID: E2300674-006
Date Acquired: 7/25/2023 3:00:53 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-051.lcd
Vial: 25 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.576	9099	317563	0.1763	ng/mL	101.00 >85.00	30.49	19.68-36.55
Sodium Perchlorate-18O4 _IS	Auto	3.572	317563	317563	1.0000	ng/mL	----	----	

Perchlorate

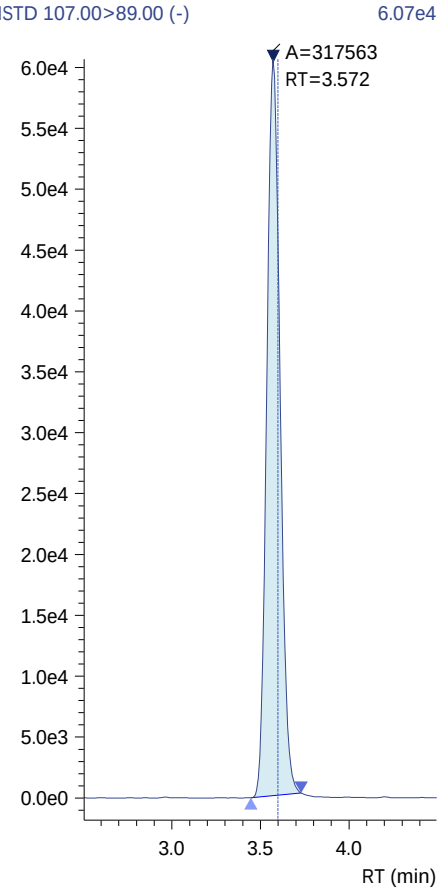
Conc 0.1763
R#1 30.49 (28.11)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/25/2023 4:00:31 PM

E2300674-007

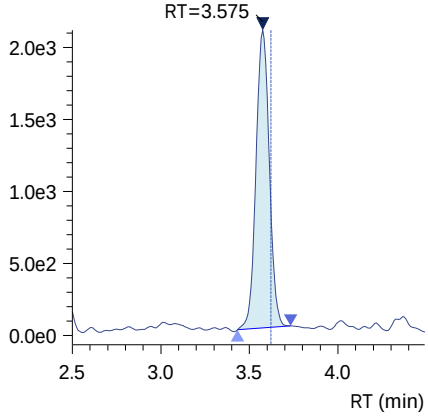
Sample ID: E2300674-007
Date Acquired: 7/25/2023 3:06:26 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-052.lcd
Vial: 26 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.575	10822	323118	0.2061	ng/mL	101.00 >85.00	24.67	19.68-36.55
Sodium Perchlorate-18O4 _IS	Auto	3.572	323118	323118	1.0000	ng/mL	----	----	

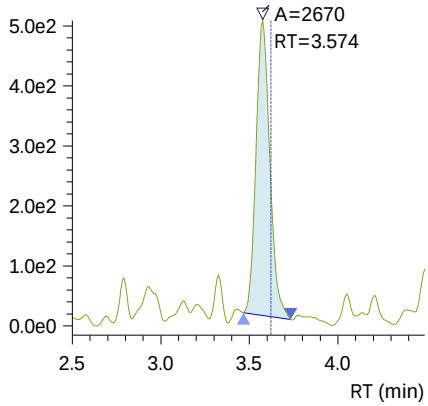
Perchlorate

Conc 0.2061
R#1 24.67 (28.11)

Q 99.00>83.00 (-) A=10822 2.12e3



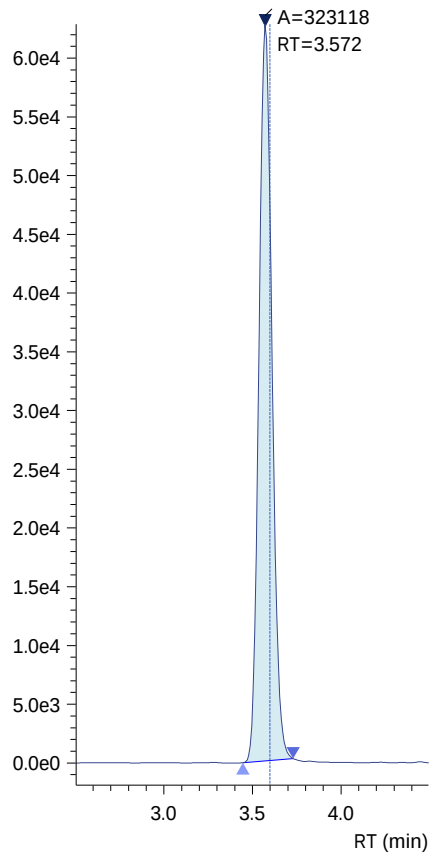
R1 101.00>85.00 (-) 5.09e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 6.29e4



Insight Report

Printed at 7/25/2023 4:00:31 PM

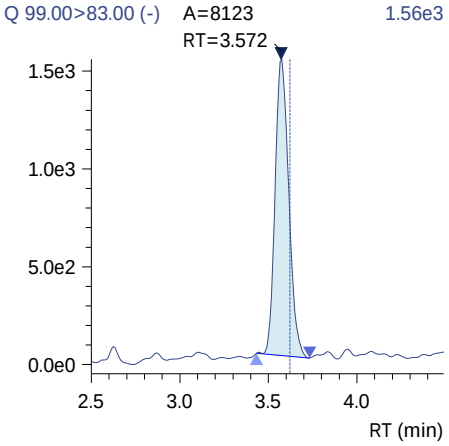
E2300674-008

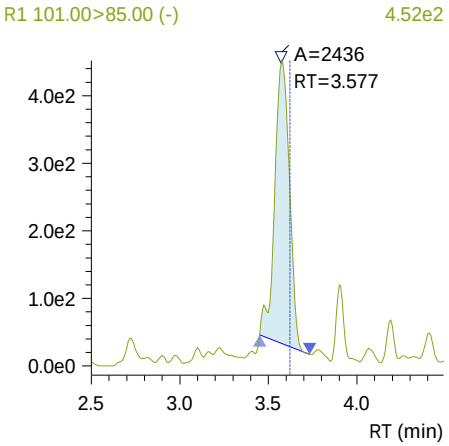
Sample ID: E2300674-008
Date Acquired: 7/25/2023 3:12:00 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-053.lcd
Vial: 27 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.572	8123	297847	0.1678	ng/mL	101.00 >85.00	29.99	19.68-36.55
Sodium Perchlorate-18O4 _IS	Auto	3.573	297847	297847	1.0000	ng/mL	----	----	

Perchlorate

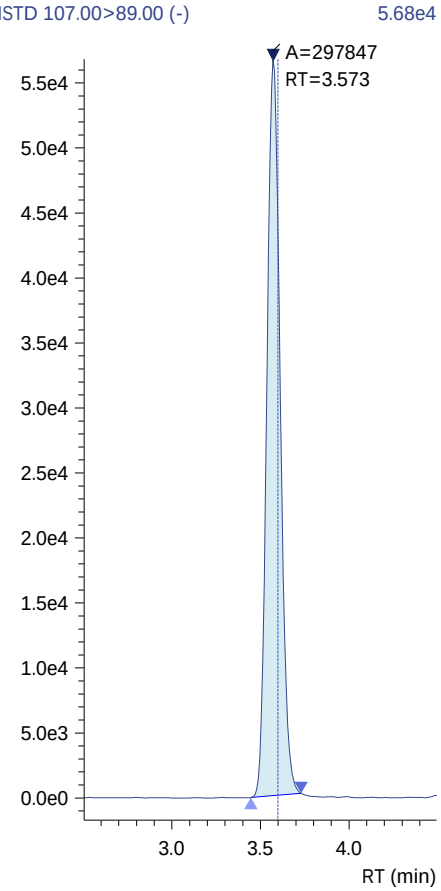
Conc 0.1678
R#1 29.99 (28.11)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/25/2023 4:00:31 PM

E2300674-009

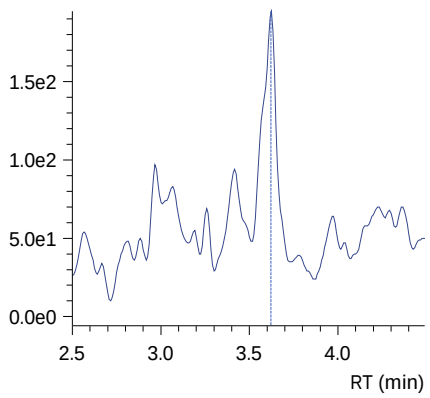
Sample ID: E2300674-009
Date Acquired: 7/25/2023 3:17:33 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-054.lcd
Vial: 28 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	329121	----	ng/mL	101.00 >85.00	0.00	19.68-36.55
Sodium Perchlorate-18O4_IS	Auto	3.572	329121	329121	1.0000	ng/mL	----	----	

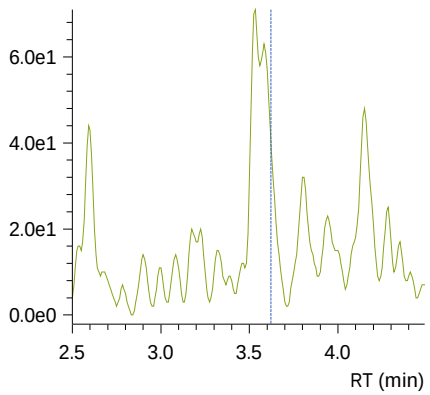
Perchlorate

Conc ----
R#1 0.00 (28.11)

Q 99.00>83.00 (-) 1.95e2



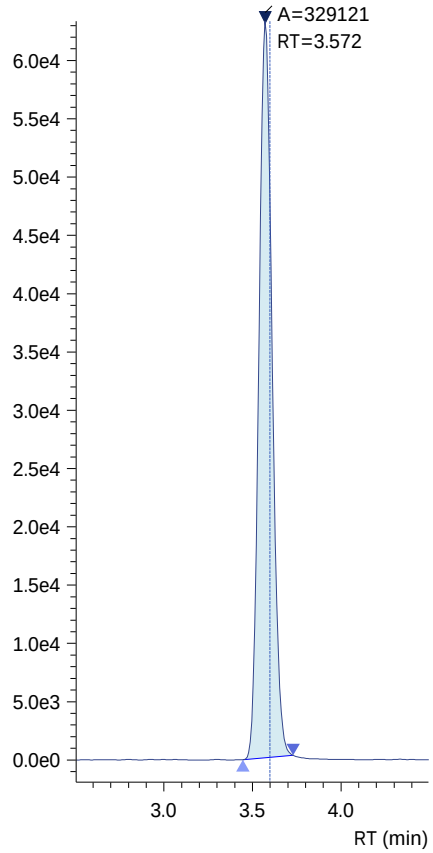
R1 101.00>85.00 (-) 7.10e1



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 6.34e4



Insight Report

Printed at 7/25/2023 4:00:31 PM

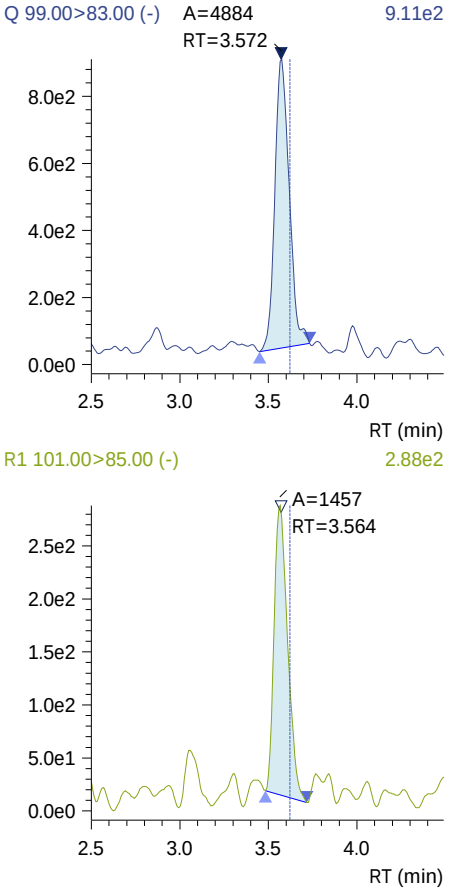
EQ2300355-03

Sample ID: EQ2300355-03
Date Acquired: 7/25/2023 3:23:05 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-055.lcd
Vial: 32 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.572	4884	305282	0.0984	ng/mL	101.00 >85.00	29.83	19.68-36.55
Sodium Perchlorate-18O4 _IS	Auto	3.571	305282	305282	1.0000	ng/mL	----	----	

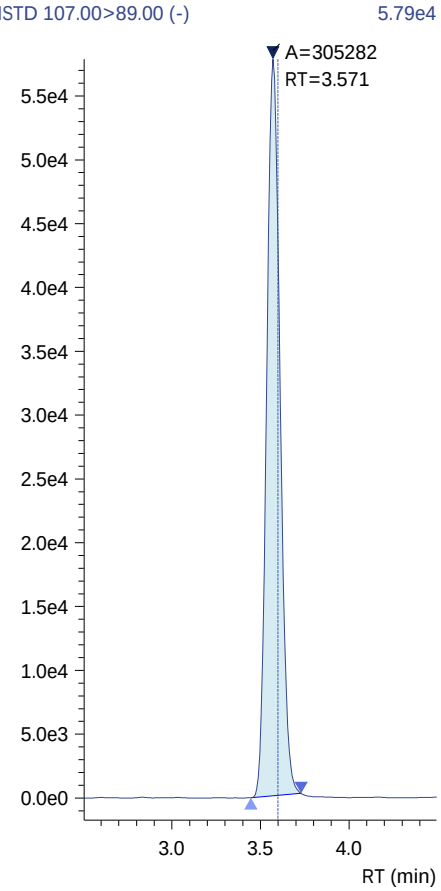
Perchlorate

Conc 0.0984
R#1 29.83 (28.11)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/25/2023 4:00:31 PM

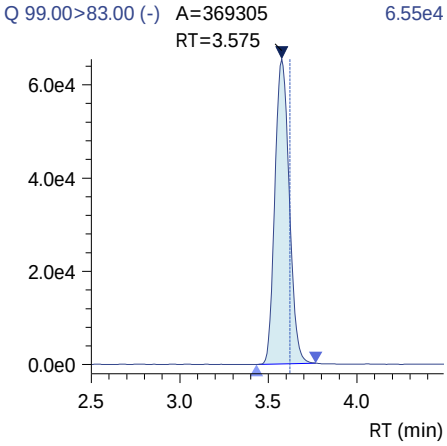
CCV

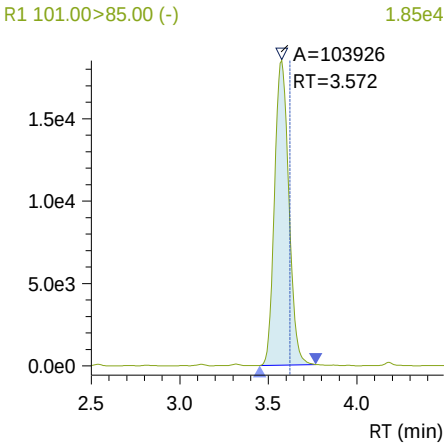
Sample ID: CCV
Date Acquired: 7/25/2023 3:43:37 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-057.lcd
Vial: 3 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.575	369305	225280	10.0871	ng/mL	101.00 >85.00	28.14	19.68-36.55
Sodium Perchlorate-18O4_IS	Auto	3.571	225280	225280	1.0000	ng/mL	----	----	

Perchlorate

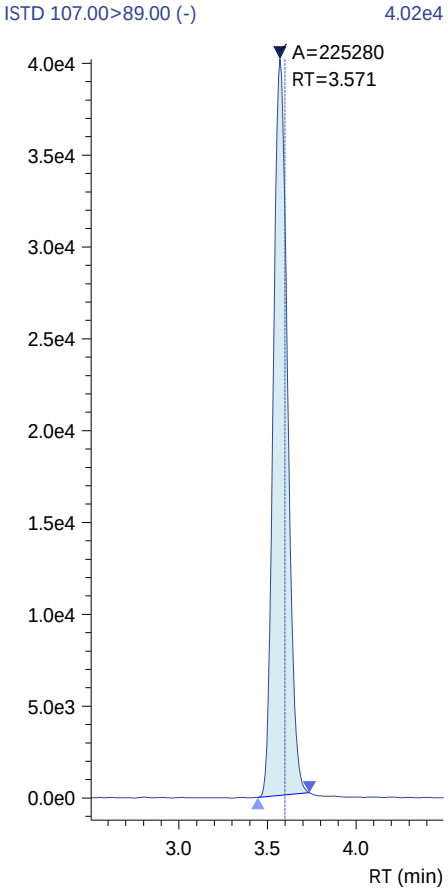
Conc 10.0871
R#1 28.14 (28.11)





Sodium Perchlorate-18O4_IS

Conc 1.0000



HS23071113-MSVOA-SW8260

ALS WO# HS23071113

01322481

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Form 1

Organic Analysis Data Sheet

Volatiles by EPA 8260

Workorder

HS23071113

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071113**

Volatiles by EPA 8260

HS23071113-01 | **16ww51-230714**

Collected	Received	Matrix	Basis
07/14/23 07:05	07/15/23 09:10	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	5.0	U	1.5	5.0	5.0	5	07/21/23 21:50	VOA6_442002	X072129.D
1,1-Dichloroethene	ug/L	8.2		1.0	5.0	5.0	5	07/21/23 21:50	VOA6_442002	X072129.D
1,2-Dichloroethane	ug/L	5.0	U	1.0	5.0	5.0	5	07/21/23 21:50	VOA6_442002	X072129.D
cis-1,2-Dichloroethene	ug/L	810		1.0	5.0	5.0	5	07/21/23 21:50	VOA6_442002	X072129.D
Methylene chloride	ug/L	10	U	2.0	10	10	5	07/21/23 21:50	VOA6_442002	X072129.D
Trichloroethene	ug/L	4,200		10	50	50	50	07/24/23 15:01	VOA6_442149	X072413.D
Vinyl chloride	ug/L	17		1.0	5.0	5.0	5	07/21/23 21:50	VOA6_442002	X072129.D

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071113**

Volatiles by EPA 8260

HS23071113-02

16ww30-230714

Collected	Received	Matrix	Basis
07/14/23 07:45	07/15/23 09:10	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	07/24/23 13:18	VOA6_442149	X072408.D
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/24/23 13:18	VOA6_442149	X072408.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	07/24/23 13:18	VOA6_442149	X072408.D
cis-1,2-Dichloroethene	ug/L	5.2		0.20	1.0	1.0	1	07/24/23 13:18	VOA6_442149	X072408.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	07/24/23 13:18	VOA6_442149	X072408.D
Trichloroethene	ug/L	48		0.20	1.0	1.0	1	07/24/23 13:18	VOA6_442149	X072408.D
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	07/24/23 13:18	VOA6_442149	X072408.D

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071113**

Volatiles by EPA 8260

HS23071113-03

16ww29-230714

Collected	Received	Matrix	Basis
07/14/23 08:25	07/15/23 09:10	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	07/24/23 15:21	VOA6_442149	X072414.D
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/24/23 15:21	VOA6_442149	X072414.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	07/24/23 15:21	VOA6_442149	X072414.D
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/24/23 15:21	VOA6_442149	X072414.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	07/24/23 15:21	VOA6_442149	X072414.D
Trichloroethene	ug/L	1.2		0.20	1.0	1.0	1	07/24/23 15:21	VOA6_442149	X072414.D
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	07/24/23 15:21	VOA6_442149	X072414.D

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071113**

Volatiles by EPA 8260

HS23071113-04

16ww13-230714

Collected	Received	Matrix	Basis
07/14/23 09:10	07/15/23 09:10	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	07/24/23 13:39	VOA6_442149	X072409.D
1,1-Dichloroethene	ug/L	2.6		0.20	1.0	1.0	1	07/24/23 13:39	VOA6_442149	X072409.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	07/24/23 13:39	VOA6_442149	X072409.D
cis-1,2-Dichloroethene	ug/L	640		5.0	25	25	25	07/25/23 14:54	VOA6_442290	X072515.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	07/24/23 13:39	VOA6_442149	X072409.D
Trichloroethene	ug/L	1,600		5.0	25	25	25	07/25/23 14:54	VOA6_442290	X072515.D
Vinyl chloride	ug/L	18		0.20	1.0	1.0	1	07/24/23 13:39	VOA6_442149	X072409.D

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071113**

Volatiles by EPA 8260

HS23071113-05

16ww42-230714

Collected	Received	Matrix	Basis
07/14/23 09:50	07/15/23 09:10	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	07/24/23 18:26	VOA6_442149	X072423.D
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/24/23 18:26	VOA6_442149	X072423.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	07/24/23 18:26	VOA6_442149	X072423.D
cis-1,2-Dichloroethene	ug/L	320		1.0	5.0	5.0	5	07/25/23 15:15	VOA6_442290	X072516.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	07/24/23 18:26	VOA6_442149	X072423.D
Trichloroethene	ug/L	22		0.20	1.0	1.0	1	07/24/23 18:26	VOA6_442149	X072423.D
Vinyl chloride	ug/L	0.78	J	0.20	1.0	1.0	1	07/24/23 18:26	VOA6_442149	X072423.D

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071113**

Volatiles by EPA 8260

HS23071113-06

16ww23-230714

Collected	Received	Matrix	Basis
07/14/23 10:30	07/15/23 09:10	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	07/24/23 15:42	VOA6_442149	X072415.D
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/24/23 15:42	VOA6_442149	X072415.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	07/24/23 15:42	VOA6_442149	X072415.D
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/24/23 15:42	VOA6_442149	X072415.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	07/24/23 15:42	VOA6_442149	X072415.D
Trichloroethene	ug/L	0.53	J	0.20	1.0	1.0	1	07/24/23 15:42	VOA6_442149	X072415.D
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	07/24/23 15:42	VOA6_442149	X072415.D

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071113**

Volatiles by EPA 8260

HS23071113-07

16ww24-230714

Collected	Received	Matrix	Basis
07/14/23 11:10	07/15/23 09:10	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	07/24/23 16:02	VOA6_442149	X072416.D
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/24/23 16:02	VOA6_442149	X072416.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	07/24/23 16:02	VOA6_442149	X072416.D
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/24/23 16:02	VOA6_442149	X072416.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	07/24/23 16:02	VOA6_442149	X072416.D
Trichloroethene	ug/L	0.67	J	0.20	1.0	1.0	1	07/24/23 16:02	VOA6_442149	X072416.D
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	07/24/23 16:02	VOA6_442149	X072416.D

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071113**

Volatiles by EPA 8260

HS23071113-08

16ww27-230714

Collected	Received	Matrix	Basis
07/14/23 11:55	07/15/23 09:10	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	07/24/23 16:23	VOA6_442149	X072417.D
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/24/23 16:23	VOA6_442149	X072417.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	07/24/23 16:23	VOA6_442149	X072417.D
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/24/23 16:23	VOA6_442149	X072417.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	07/24/23 16:23	VOA6_442149	X072417.D
Trichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/24/23 16:23	VOA6_442149	X072417.D
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	07/24/23 16:23	VOA6_442149	X072417.D

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071113**

Volatiles by EPA 8260

HS23071113-09

16ww43-230714

Collected	Received	Matrix	Basis
07/14/23 12:35	07/15/23 09:10	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	07/24/23 16:43	VOA6_442149	X072418.D
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/24/23 16:43	VOA6_442149	X072418.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	07/24/23 16:43	VOA6_442149	X072418.D
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/24/23 16:43	VOA6_442149	X072418.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	07/24/23 16:43	VOA6_442149	X072418.D
Trichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/24/23 16:43	VOA6_442149	X072418.D
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	07/24/23 16:43	VOA6_442149	X072418.D

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071113**

Volatiles by EPA 8260

HS23071113-10

Trip Blank-230714

Collected	Received	Matrix	Basis
07/14/23 00:00	07/15/23 09:10	Water	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	07/21/23 18:04	VOA6_442002	X072118.D
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/21/23 18:04	VOA6_442002	X072118.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	07/21/23 18:04	VOA6_442002	X072118.D
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/21/23 18:04	VOA6_442002	X072118.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	07/21/23 18:04	VOA6_442002	X072118.D
Trichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/21/23 18:04	VOA6_442002	X072118.D
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	07/21/23 18:04	VOA6_442002	X072118.D

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071113**

Volatiles by EPA 8260

VBLKW-230721	Collected	Received	Matrix	Basis
VBLKW-230721	NA	NA	Aqueous	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	07/21/23 14:19	VOA6_442002	X072107.D
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/21/23 14:19	VOA6_442002	X072107.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	07/21/23 14:19	VOA6_442002	X072107.D
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/21/23 14:19	VOA6_442002	X072107.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	07/21/23 14:19	VOA6_442002	X072107.D
Trichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/21/23 14:19	VOA6_442002	X072107.D
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	07/21/23 14:19	VOA6_442002	X072107.D

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071113**

Volatiles by EPA 8260

VBLKW-230724	Collected	Received	Matrix	Basis
VBLKW-230724	NA	NA	Aqueous	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	07/24/23 12:58	VOA6_442149	X072407.D
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/24/23 12:58	VOA6_442149	X072407.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	07/24/23 12:58	VOA6_442149	X072407.D
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/24/23 12:58	VOA6_442149	X072407.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	07/24/23 12:58	VOA6_442149	X072407.D
Trichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/24/23 12:58	VOA6_442149	X072407.D
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	07/24/23 12:58	VOA6_442149	X072407.D

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071113**

Volatiles by EPA 8260

VBLKW-230725	Collected	Received	Matrix	Basis
VBLKW-230725	NA	NA	Aqueous	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/25/23 12:11	VOA6_442290	X072507.D
Trichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/25/23 12:11	VOA6_442290	X072507.D

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Form 2

System Monitoring Compound Recovery

Volatiles by EPA 8260

Workorder

HS23071113

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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

Form 2 - System Monitoring Compound Recovery

Client: Aptim Environmental & Infrastucture, Inc.

Project: LHAAP 16 January 2023

Workorder: HS23071113

RunID: VOA6-442002

Volatiles by EPA 8260

CCB-CCB	Analyzed	Conc Units	Dilution
CCB	07/21/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	52.24	50	104		80-120
4-Bromofluorobenzene	48.53	50	97.1		80-120
Dibromofluoromethane	54.13	50	108		80-120
Toluene-d8	50.78	50	102		80-120

CCV-CCV	Analyzed	Conc Units	Dilution
CCV	07/21/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	53.06	50	106		80-120
4-Bromofluorobenzene	50.79	50	102		80-120
Dibromofluoromethane	54.79	50	110		80-120
Toluene-d8	44.89	50	89.8		80-120

HS23071109-01MS	Analyzed	Conc Units	Dilution
BatchQC	07/21/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	56.93	50	114		81-118
4-Bromofluorobenzene	49.4	50	98.8		85-114
Dibromofluoromethane	55.55	50	111		80-119
Toluene-d8	52.44	50	105		89-112

Form 2 - System Monitoring Compound Recovery

Client: Aptim Environmental & Infrastucture, Inc.

Project: LHAAP 16 January 2023

Workorder: HS23071113

RunID: VOA6-442002

Volatiles by EPA 8260

HS23071109-01MSD	Analyzed	Conc Units	Dilution
BatchQC	07/21/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	56.46	50	113		81-118
4-Bromofluorobenzene	49.84	50	99.7		85-114
Dibromofluoromethane	55.08	50	110		80-119
Toluene-d8	52.07	50	104		89-112

HS23071113-01	Analyzed	Conc Units	Dilution
16ww51-230714	07/21/23	%REC	5

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	280	250	111		81-118
4-Bromofluorobenzene	230	250	91.1		85-114
Dibromofluoromethane	280	250	110		80-119
Toluene-d8	250	250	101		89-112

HS23071113-10	Analyzed	Conc Units	Dilution
Trip Blank-230714	07/21/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	57	50	113		81-118
4-Bromofluorobenzene	47	50	93.3		85-114
Dibromofluoromethane	56	50	112		80-119
Toluene-d8	52	50	104		89-112

Form 2 - System Monitoring Compound Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071113**

RunID VOA6-442002

Volatiles by EPA 8260

VBLKW-230721	Analyzed	Conc Units	Dilution
VBLKW-230721	07/21/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	54.53	50	109		81-118
4-Bromofluorobenzene	46.89	50	93.8		85-114
Dibromofluoromethane	54.29	50	109		80-119
Toluene-d8	51.49	50	103		89-112

VLCSW-230721	Analyzed	Conc Units	Dilution
VLCSW-230721	07/21/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	50.42	50	101		81-118
4-Bromofluorobenzene	50.57	50	101		85-114
Dibromofluoromethane	52.13	50	104		80-119
Toluene-d8	45.82	50	91.6		89-112

Form 2 - System Monitoring Compound Recovery

Client: Aptim Environmental & Infrastucture, Inc.

Project: LHAAP 16 January 2023

Workorder: HS23071113

RunID: VOA6-442149

Volatiles by EPA 8260

CCB-CCB	Analyzed	Conc Units	Dilution
CCB	07/24/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	52.62	50	105		80-120
4-Bromofluorobenzene	47.75	50	95.5		80-120
Dibromofluoromethane	53.82	50	108		80-120
Toluene-d8	49.45	50	98.9		80-120

CCV-CCV	Analyzed	Conc Units	Dilution
CCV	07/24/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	52.84	50	106		80-120
4-Bromofluorobenzene	53.24	50	106		80-120
Dibromofluoromethane	53.46	50	107		80-120
Toluene-d8	46.94	50	93.9		80-120

HS23071113-01	Analyzed	Conc Units	Dilution
16ww51-230714	07/24/23	%REC	50

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	2700	2500	109		81-118
4-Bromofluorobenzene	2400	2500	95.0		85-114
Dibromofluoromethane	2700	2500	108		80-119
Toluene-d8	2500	2500	101		89-112

Form 2 - System Monitoring Compound Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder HS23071113

Volatiles by EPA 8260

RunID VOA6-442149

HS23071113-02	Analyzed	Conc Units	Dilution
16ww30-230714	07/24/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	53	50	106		81-118
4-Bromofluorobenzene	48	50	95.3		85-114
Dibromofluoromethane	54	50	108		80-119
Toluene-d8	51	50	101		89-112

HS23071113-02MS	Analyzed	Conc Units	Dilution
16ww30-230714	07/24/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	57.03	50	114		81-118
4-Bromofluorobenzene	55.08	50	110		85-114
Dibromofluoromethane	56.29	50	113		80-119
Toluene-d8	49.55	50	99.1		89-112

HS23071113-02MSD	Analyzed	Conc Units	Dilution
16ww30-230714	07/24/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	52.67	50	105		81-118
4-Bromofluorobenzene	49.03	50	98.1		85-114
Dibromofluoromethane	53.45	50	107		80-119
Toluene-d8	50.45	50	101		89-112

Form 2 - System Monitoring Compound Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder HS23071113

RunID VOA6-442149

Volatiles by EPA 8260

HS23071113-03	Analyzed	Conc Units	Dilution
16ww29-230714	07/24/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	54	50	107		81-118
4-Bromofluorobenzene	50	50	100		85-114
Dibromofluoromethane	53	50	107		80-119
Toluene-d8	51	50	101		89-112

HS23071113-04	Analyzed	Conc Units	Dilution
16ww13-230714	07/24/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	53	50	107		81-118
4-Bromofluorobenzene	49	50	98.4		85-114
Dibromofluoromethane	53	50	105		80-119
Toluene-d8	50	50	99.1		89-112

HS23071113-05	Analyzed	Conc Units	Dilution
16ww42-230714	07/24/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	56	50	113		81-118
4-Bromofluorobenzene	48	50	95.6		85-114
Dibromofluoromethane	55	50	111		80-119
Toluene-d8	51	50	102		89-112

Form 2 - System Monitoring Compound Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder HS23071113

RunID VOA6-442149

Volatiles by EPA 8260

HS23071113-06	Analyzed	Conc Units	Dilution
16ww23-230714	07/24/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	59	50	118		81-118
4-Bromofluorobenzene	48	50	95.8		85-114
Dibromofluoromethane	55	50	111		80-119
Toluene-d8	50	50	99.6		89-112

HS23071113-07	Analyzed	Conc Units	Dilution
16ww24-230714	07/24/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	56	50	112		81-118
4-Bromofluorobenzene	47	50	94.8		85-114
Dibromofluoromethane	56	50	112		80-119
Toluene-d8	51	50	102		89-112

HS23071113-08	Analyzed	Conc Units	Dilution
16ww27-230714	07/24/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	56	50	112		81-118
4-Bromofluorobenzene	48	50	95.2		85-114
Dibromofluoromethane	55	50	110		80-119
Toluene-d8	51	50	102		89-112

Form 2 - System Monitoring Compound Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder HS23071113

Volatiles by EPA 8260

RunID VOA6-442149

HS23071113-09	Analyzed	Conc Units	Dilution
16ww43-230714	07/24/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	53	50	107		81-118
4-Bromofluorobenzene	48	50	96.2		85-114
Dibromofluoromethane	54	50	107		80-119
Toluene-d8	50	50	100		89-112

VBLKW-230724	Analyzed	Conc Units	Dilution
VBLKW-230724	07/24/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	53.08	50	106		81-118
4-Bromofluorobenzene	48.63	50	97.3		85-114
Dibromofluoromethane	53.58	50	107		80-119
Toluene-d8	50.63	50	101		89-112

VLCSW-230724	Analyzed	Conc Units	Dilution
VLCSW-230724	07/24/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	53.59	50	107		81-118
4-Bromofluorobenzene	52.76	50	106		85-114
Dibromofluoromethane	54.24	50	108		80-119
Toluene-d8	46.33	50	92.7		89-112

Form 2 - System Monitoring Compound Recovery

Client: Aptim Environmental & Infrastucture, Inc.

Project: LHAAP 16 January 2023

Workorder: HS23071113

RunID: VOA6-442290

Volatiles by EPA 8260

CCB-CCB	Analyzed	Conc Units	Dilution
CCB	07/25/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	56.9	50	114		80-120
4-Bromofluorobenzene	48.55	50	97.1		80-120
Dibromofluoromethane	54.52	50	109		80-120
Toluene-d8	52.11	50	104		80-120

CCV-CCV	Analyzed	Conc Units	Dilution
CCV	07/25/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	54.23	50	108		80-120
4-Bromofluorobenzene	51.8	50	104		80-120
Dibromofluoromethane	52.8	50	106		80-120
Toluene-d8	46.46	50	92.9		80-120

HS23071113-04	Analyzed	Conc Units	Dilution
16ww13-230714	07/25/23	%REC	25

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	1400	1250	112		81-118
4-Bromofluorobenzene	1200	1250	97.5		85-114
Dibromofluoromethane	1300	1250	107		80-119
Toluene-d8	1200	1250	99.9		89-112

Form 2 - System Monitoring Compound Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder HS23071113

RunID VOA6-442290

Volatiles by EPA 8260

HS23071113-05	Analyzed	Conc Units	Dilution
16ww42-230714	07/25/23	%REC	5

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	280	250	112		81-118
4-Bromofluorobenzene	240	250	96.6		85-114
Dibromofluoromethane	270	250	108		80-119
Toluene-d8	250	250	101		89-112

HS23071289-11MS	Analyzed	Conc Units	Dilution
BatchQC	07/25/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	57.71	50	115		81-118
4-Bromofluorobenzene	49.33	50	98.7		85-114
Dibromofluoromethane	55.78	50	112		80-119
Toluene-d8	51.85	50	104		89-112

HS23071289-11MSD	Analyzed	Conc Units	Dilution
BatchQC	07/25/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	56.2	50	112		81-118
4-Bromofluorobenzene	49.71	50	99.4		85-114
Dibromofluoromethane	55.77	50	112		80-119
Toluene-d8	50.43	50	101		89-112

Form 2 - System Monitoring Compound Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071113**

RunID VOA6-442290

Volatiles by EPA 8260

VBLKW-230725	Analyzed	Conc Units	Dilution
VBLKW-230725	07/25/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	56.45	50	113		81-118
4-Bromofluorobenzene	48.69	50	97.4		85-114
Dibromofluoromethane	54.56	50	109		80-119
Toluene-d8	51.27	50	103		89-112

VLCSW-230725	Analyzed	Conc Units	Dilution
VLCSW-230725	07/25/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	57.48	50	115		81-118
4-Bromofluorobenzene	53.97	50	108		85-114
Dibromofluoromethane	54.72	50	109		80-119
Toluene-d8	47.68	50	95.4		89-112

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Form 3A

Matrix Spike/Spike Duplicate Recovery

Volatiles by EPA 8260

Workorder

HS23071113

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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

Form 3A - Matrix Spike/Spike Duplicate Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071113**

RunID VOA6-442002

Volatiles by EPA 8260

BatchQC (HS23071109-01)				HS23071109-01MS				HS23071109-01MSD						
Sample Matrix: Aqueous			Run Date	07/21/23				07/21/23						
Result Units: ug/L			Run Time	16:22				16:42						
			Data File	X072113.D				X072114.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	23.33	20	117		22.72	20	114		20	2.65	
1,1-Dichloroethene	71-131	1	0	25.92	20	130		24.48	20	122		20	5.71	
1,2-Dichloroethane	73-128	1	0	22.8	20	114		21.56	20	108		20	5.59	
cis-1,2-Dichloroethene	78-123	1	0	23.7	20	119		18.11	20	90		20	26.8	
Methylene chloride	74-124	1	0	23.92	20	120		19.77	20	99		20	19	
Trichloroethene	79-123	1	0	24.53	20	123		22.9	20	114		20	6.88	
Vinyl chloride	58-137	1	0	26.09	20	130		24.83	20	124		20	4.91	

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 Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071113**

RunID VOA6-442149

Volatiles by EPA 8260

16ww30-230714 (HS23071113-02)				HS23071113-02MS				HS23071113-02MSD						
Sample Matrix Aqueous			**Run Date**	07/24/23				07/24/23						
Result Units ug/L			**Run Time**	14:20				14:40						
			Data File	X072411.D				X072412.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	22.63	20	113		22.23	20	111		20	1.79	
1,1-Dichloroethene	71-131	1	0	28.77	20	144		23.98	20	120		20	18.1	
1,2-Dichloroethane	73-128	1	0	23.06	20	115		22.16	20	111		20	3.99	
cis-1,2-Dichloroethene	78-123	1	5.204	29.65	20	122		27.61	20	112		20	7.14	
Methylene chloride	74-124	1	0	22.27	20	111		22.24	20	111		20	0.102	
Trichloroethene	79-123	1	48.41	73.78	20	127		71.29	20	114		20	3.44	
Vinyl chloride	58-137	1	0	31.25	20	156		25.38	20	127		20	20.7	

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 Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071113**

RunID VOA6-442290

Volatiles by EPA 8260

BatchQC (HS23071289-11)				HS23071289-11MS				HS23071289-11MSD						
Sample Matrix: Aqueous			Run Date	07/25/23				07/25/23						
Result Units: ug/L			Run Time	14:14				14:34						
			Data File	X072513.D				X072514.D						
Analyte	%R Limits	DF	Sample Result	MS Result	Spike Added	%R	Q	MSD Result	Spike Added	%R	Q	RPD Limit	RPD	Q
cis-1,2-Dichloroethene	78-123	1	0	24.59	20	123		24.23	20	121		20	1.49	
Trichloroethene	79-123	1	0	25.67	20	128		24.34	20	122		20	5.33	

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 8260

Workorder

HS23071113

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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www.alsglobal.com

Form 3B - Laboratory Control Sample Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23071113

SAMPLENUM
VLCSW-230721

Volatiles by EPA 8260

VOA6_442002			VLCSW-230721			
Spike Matrix Aqueous		**Run Date**	07/21/23			
Result Units ug/L		**Run Time**	13:38			
		Data File	X072105.D			
Analyte	%Recovery Limits	Spike Added	LCS Result	%R	Q	
1,1,2-Trichloroethane	80-119	20	19.65	98		
1,1-Dichloroethene	71-131	20	20.98	105		
1,2-Dichloroethane	73-128	20	18.24	91		
cis-1,2-Dichloroethene	78-123	20	19.18	96		
Methylene chloride	74-124	20	19.61	98		
Trichloroethene	79-123	20	18.59	93		
Vinyl chloride	58-137	20	21.3	106		

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

Form 3B - Laboratory Control Sample Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23071113

SAMPLENUM
VLCSW-230724

Volatiles by EPA 8260

VOA6_442149			VLCSW-230724			
Spike Matrix Aqueous		**Run Date**	07/24/23			
Result Units ug/L		**Run Time**	13:59			
		Data File	X072410.D			
Analyte	%Recovery Limits	Spike Added	LCS Result	%R	Q	
1,1,2-Trichloroethane	80-119	20	19.71	99		
1,1-Dichloroethene	71-131	20	19.62	98		
1,2-Dichloroethane	73-128	20	18.98	95		
cis-1,2-Dichloroethene	78-123	20	20.44	102		
Methylene chloride	74-124	20	18.3	92		
Trichloroethene	79-123	20	21.15	106		
Vinyl chloride	58-137	20	23.43	117		

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

Form 3B - Laboratory Control Sample Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23071113

SAMPLENUM
VLCSW-230725

Volatiles by EPA 8260

VOA6_442290			VLCSW-230725			
Spike Matrix Aqueous		**Run Date**	07/25/23			
Result Units ug/L		**Run Time**	11:30			
		Data File	X072505.D			
Analyte	%Recovery Limits	Spike Added	LCS Result	%R	Q	
cis-1,2-Dichloroethene	78-123	20	22.06	110		
Trichloroethene	79-123	20	20.12	101		

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

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Form 4

Method Blank Summary

Volatiles by EPA 8260

Workorder

HS23071113

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

ALS Environmental–Houston Laboratory
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Form 4 - Method Blank Summary

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23071113

Volatiles by EPA 8260

Client Sample ID	Type	Lab Sample ID	File ID	Date Analyzed	Run ID
METHOD BLANK	MBLK	VBLKW-230721	X072107.D	07/21/23 14:19	VOA6_442002
VLCSW-230721	LCS	VLCSW-230721	X072105.D	07/21/23 13:38	VOA6_442002
BatchQC	MS	HS23071109-01MS	X072113.D	07/21/23 16:22	VOA6_442002
BatchQC	MSD	HS23071109-01MSD	X072114.D	07/21/23 16:42	VOA6_442002
Trip Blank-230714	SAMP	HS23071113-10	X072118.D	07/21/23 18:04	VOA6_442002
16ww51-230714	SAMP	HS23071113-01	X072129.D	07/21/23 21:50	VOA6_442002

Form 4 - Method Blank Summary

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23071113

Volatiles by EPA 8260

Client Sample ID	Type	Lab Sample ID	File ID	Date Analyzed	Run ID
METHOD BLANK	MBLK	VBLKW-230724	X072407.D	07/24/23 12:58	VOA6_442149
16ww30-230714	SAMP	HS23071113-02	X072408.D	07/24/23 13:18	VOA6_442149
16ww13-230714	SAMP	HS23071113-04	X072409.D	07/24/23 13:39	VOA6_442149
VLCSW-230724	LCS	VLCSW-230724	X072410.D	07/24/23 13:59	VOA6_442149
16ww30-230714	MS	HS23071113-02MS	X072411.D	07/24/23 14:20	VOA6_442149
16ww30-230714	MSD	HS23071113-02MSD	X072412.D	07/24/23 14:40	VOA6_442149
16ww51-230714	SAMP	HS23071113-01	X072413.D	07/24/23 15:01	VOA6_442149
16ww29-230714	SAMP	HS23071113-03	X072414.D	07/24/23 15:21	VOA6_442149
16ww23-230714	SAMP	HS23071113-06	X072415.D	07/24/23 15:42	VOA6_442149
16ww24-230714	SAMP	HS23071113-07	X072416.D	07/24/23 16:02	VOA6_442149
16ww27-230714	SAMP	HS23071113-08	X072417.D	07/24/23 16:23	VOA6_442149
16ww43-230714	SAMP	HS23071113-09	X072418.D	07/24/23 16:43	VOA6_442149
16ww42-230714	SAMP	HS23071113-05	X072423.D	07/24/23 18:26	VOA6_442149

Form 4 - Method Blank Summary

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23071113

Volatiles by EPA 8260

Client Sample ID	Type	Lab Sample ID	File ID	Date Analyzed	Run ID
METHOD BLANK	MBLK	VBLKW-230725	X072507.D	07/25/23 12:11	VOA6_442290
VLCSW-230725	LCS	VLCSW-230725	X072505.D	07/25/23 11:30	VOA6_442290
BatchQC	MS	HS23071289-11MS	X072513.D	07/25/23 14:14	VOA6_442290
BatchQC	MSD	HS23071289-11MSD	X072514.D	07/25/23 14:34	VOA6_442290
16ww13-230714	SAMP	HS23071113-04	X072515.D	07/25/23 14:54	VOA6_442290
16ww42-230714	SAMP	HS23071113-05	X072516.D	07/25/23 15:15	VOA6_442290

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Form 5

Instrument Performance Check

Volatiles by EPA 8260

Workorder

HS23071113

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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www.alsglobal.com

Form 5 - Instrument Performance Check

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071113**

RunID VOA6-441456

Volatiles by EPA 8260

Tune File X071401.D 07/14/23 7/14/2023

m / e	Ion Abundance Criterion	%RA
50	15.0 - 40.0% of mass 95	25.9 (25.9)
75	30.0 - 60.0% of mass 95	52 (52)
95	Base peak, 100% RA	100 (100)
96	5.0 - 9.0% of mass 95	5.6 (5.63)
173	Less than 2.0% of mass 174	0.8 (0.926) 1
174	50.0 - 120.0% of mass 95	82.2 (82.2)
175	4.0 - 9.0% of mass 174	5.4 (6.56) 1
176	93.0 - 101.0% of mass 174	79.3 (96.5) 1
177	5.0 - 9.0% of mass 176	4.5 (5.64) 2

%RA - Percent Relative Abundance

This check applies to the following analyses

	Lab Samp ID	Type	Date Analyzed	Lab File ID	Sample ID
1	VSTD000.25	ICAL1	7/14/2023	X071402	VSTD000.25
2	VSTD000.5	ICAL2	7/14/2023	X071403	VSTD000.5
3	VSTD001	ICAL3	7/14/2023	X071404	VSTD001
4	VSTD002	ICAL4	7/14/2023	X071405	VSTD002
5	VSTD005	ICAL5	7/14/2023	X071406	VSTD005
6	VSTD020	ICAL6	7/14/2023	X071407	VSTD020
7	VSTD050	ICAL7	7/14/2023	X071408	VSTD050
8	VSTD100	ICAL8	7/14/2023	X071409	VSTD100
9	VSTD150	ICAL9	7/14/2023	X071410	VSTD150
10	VSTD200	ICAL	7/14/2023	X071411	VSTD200
11	CCV	ICV	7/14/2023	X071413	CCV

Form 5 - Instrument Performance Check

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071113**

RunID VOA6-442002

Volatiles by EPA 8260

Tune File X072101.D 07/21/23 7/21/2023

m / e	Ion Abundance Criterion	%RA
50	15.0 - 40.0% of mass 95	26.6 (26.6)
75	30.0 - 60.0% of mass 95	49.3 (49.3)
95	Base peak, 100% RA	100 (100)
96	5.0 - 9.0% of mass 95	6.6 (6.59)
173	Less than 2.0% of mass 174	1.1 (1.38) 1
174	50.0 - 120.0% of mass 95	76.7 (76.7)
175	4.0 - 9.0% of mass 174	6.3 (8.18) 1
176	93.0 - 101.0% of mass 174	76.8 (100) 1
177	5.0 - 9.0% of mass 176	5 (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	7/21/2023	X072102	CCV
2	CCB	CCB	7/21/2023	X072104	CCB
3	VLCSW-	LCS	7/21/2023	X072105	VLCSW-230721
4	VBLKW-	MBLK	7/21/2023	X072107	VBLKW-230721
5	HS23071109-	MS	7/21/2023	X072113	ZZZZZZMS
6	HS23071109-	MSD	7/21/2023	X072114	ZZZZZZMSD
7	HS23071113-	SAMP	7/21/2023	X072118	Trip Blank-230714
8	HS23071113-	SAMP	7/21/2023	X072129	16ww51-230714
9	CCV-END	CCV_EN	7/21/2023	X072130	CCV-END

Form 5 - Instrument Performance Check

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071113**

RunID **VOA6-442149**

Volatiles by EPA 8260

Tune File X072401.D 07/24/23 7/24/2023

m / e	Ion Abundance Criterion	%RA
50	15.0 - 40.0% of mass 95	24.7 (24.7)
75	30.0 - 60.0% of mass 95	47.5 (47.5)
95	Base peak, 100% RA	100 (100)
96	5.0 - 9.0% of mass 95	6.6 (6.58)
173	Less than 2.0% of mass 174	1.2 (1.44) 1
174	50.0 - 120.0% of mass 95	82 (82)
175	4.0 - 9.0% of mass 174	7.3 (8.85) 1
176	93.0 - 101.0% of mass 174	81.1 (98.9) 1
177	5.0 - 9.0% of mass 176	5.5 (6.79) 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	7/24/2023	X072403	CCV
2	CCB	CCB	7/24/2023	X072404	CCB
3	VBLKW-	MBLK	7/24/2023	X072407	VBLKW-230724
4	HS23071113-	SAMP	7/24/2023	X072408	16ww30-230714
5	HS23071113-	SAMP	7/24/2023	X072409	16ww13-230714
6	VLCSW-	LCS	7/24/2023	X072410	VLCSW-230724
7	HS23071113-	MS	7/24/2023	X072411	HS23071113-02MS
8	HS23071113-	MSD	7/24/2023	X072412	HS23071113-02MSD
9	HS23071113-	SAMP	7/24/2023	X072413	16ww51-230714
10	HS23071113-	SAMP	7/24/2023	X072414	16ww29-230714
11	HS23071113-	SAMP	7/24/2023	X072415	16ww23-230714
12	HS23071113-	SAMP	7/24/2023	X072416	16ww24-230714
13	HS23071113-	SAMP	7/24/2023	X072417	16ww27-230714
14	HS23071113-	SAMP	7/24/2023	X072418	16ww43-230714
15	HS23071113-	SAMP	7/24/2023	X072423	16ww42-230714
16	CCV	CCV_EN	7/24/2023	X072432	CCV

Form 5 - Instrument Performance Check

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071113**

RunID VOA6-442290

Volatiles by EPA 8260

Tune File X072501.D 07/25/23 7/25/2023

m / e	Ion Abundance Criterion	%RA
50	15.0 - 40.0% of mass 95	29.1 (29.1)
75	30.0 - 60.0% of mass 95	47.2 (47.2)
95	Base peak, 100% RA	100 (100)
96	5.0 - 9.0% of mass 95	7.7 (7.68)
173	Less than 2.0% of mass 174	0.6 (0.86) 1
174	50.0 - 120.0% of mass 95	71.5 (71.5)
175	4.0 - 9.0% of mass 174	6 (8.42) 1
176	93.0 - 101.0% of mass 174	68.3 (95.5) 1
177	5.0 - 9.0% of mass 176	4.7 (6.92) 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	7/25/2023	X072502	CCV
2	CCB	CCB	7/25/2023	X072504	CCB
3	VLCSW-	LCS	7/25/2023	X072505	VLCSW-230725
4	VBLKW-	MBLK	7/25/2023	X072507	VBLKW-230725
5	HS23071289-	MS	7/25/2023	X072513	ZZZZZZMS
6	HS23071289-	MSD	7/25/2023	X072514	ZZZZZZMSD
7	HS23071113-	SAMP	7/25/2023	X072515	16ww13-230714
8	HS23071113-	SAMP	7/25/2023	X072516	16ww42-230714
9	CCV-END	CCV_EN	7/25/2023	X072530	CCV-END

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Form 6

Initial Calibration Data

Volatiles by EPA 8260

Workorder

HS23071113

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

ALS Environmental–Houston Laboratory
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Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder HS23071113

RunID VOA6_441456

Volatiles by EPA 8260

Compound	50.00 Level 7 0.250 Level 1	100.00 Level 8 0.500 Level 2	150.00 Level 9 1.00 Level 3	200.00 Level 10 2.00 Level 4	5.00 Level 5	20.00 Level 6	Curve	b	m1	m2	%RSD or R2	Q
Dichlorodifluoromethane	NE 235300	1663 576963	3668 822037	9210 1105119	21541	94710	LINR	0.02191	0.52294		0.99807	
Chloromethane	NE 0.67753	0.84001 0.79824	0.66306 0.81227	0.83928 0.82447	0.68468	0.65730	AVRG		0.75520		10.80318	
Propionitrile	NE 0.09423	0.10390 0.10017	0.09941 0.10114	0.09874 0.09819	0.09448	0.10115	AVRG		0.09905		3.16658	
Vinyl Chloride	NE 0.60823	0.69203 0.70202	0.53140 0.67183	0.72188 0.65918	0.61204	0.62458	AVRG		0.64702		9.14675	
Bromomethane	NE 0.25218	0.27789 0.28534	0.24476 0.29658	0.27563 0.28725	0.25296	0.23720	AVRG		0.26775		7.93201	
Chloroethane	NE 0.34475	0.43063 0.37168	0.35796 0.36290	0.40526 0.34794	0.34800	0.35515	AVRG		0.36936		7.97570	
Trichlorofluoromethane	NE 0.60292	0.58636 0.75016	0.55773 0.71606	0.73670 0.70274	0.59809	0.65059	AVRG		0.65570		11.03396	
Acrolein	NE 19251	268 38657	510 60619	917 82636	2341	6957	LINR	0.02257	0.01915		0.99956	
Acetone	NE 210033	7150 413238	8098 616513	15631 806431	26152	92232	LINR	-0.09778	0.18861		0.99933	
1,1-Dichloroethene	NE 0.35132	0.34284 0.39971	0.33390 0.37449	0.40741 0.37144	0.35652	0.35911	AVRG		0.36630		6.73637	

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Initial Calibration Data

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Compound	50.00 Level 7 0.250 Level 1	100.00 Level 8 0.500 Level 2	150.00 Level 9 1.00 Level 3	200.00 Level 10 2.00 Level 4	5.00 Level 5	20.00 Level 6	Curve	b	m1	m2	%RSD or R2	Q
Isobutyl Alcohol	NE 0.09486	0.09915 0.10064	0.08022 0.09926	0.09038 0.09480	0.09479	0.09891	AVRG		0.09478		6.69321	
Acetonitrile	NE 0.06830	0.07163 0.06960	0.07422 0.07051	0.07419 0.06805	0.06612	0.06841	AVRG		0.07011		3.98876	
Allyl Chloride	NE 1.52604	1.95513 1.56199	1.82721 1.56589	1.62093 1.51692	1.61860	1.58159	AVRG		1.64159		9.09372	
Iodomethane	NE 473625	2897 1101288	4792 1666204	11682 2365259	29645	147770	QUAD	0.07604	2.04557	-0.05646	0.99916	
Acrylonitrile	NE 0.22535	0.30341 0.23200	0.22558 0.23458	0.25182 0.22663	0.25615	0.23734	AVRG		0.24365		10.26343	
Methylene Chloride	NE 228969	3115 461890	7389 679924	11880 893552	25734	93705	LINR	-0.02821	0.42039		0.99928	
Methyl tert-butyl ether	NE 1.28013	1.42757 1.32509	1.50562 1.32040	1.44539 1.27025	1.34304	1.34355	AVRG		1.36234		5.84889	
Carbon Disulfide	NE 1.09141	1.19715 1.22733	1.02400 1.19261	1.26579 1.18678	1.08532	1.09253	AVRG		1.15144		6.97191	
trans-1,2-Dichloroethene	NE 0.40397	0.50790 0.43050	0.34716 0.41204	0.45461 0.41226	0.43607	0.40889	AVRG		0.42371		10.21222	
Vinyl Acetate	NE 1.67574	1.80993 1.76700	1.71245 1.76631	1.79630 1.74491	1.73508	1.76334	AVRG		1.75234		2.35224	
1,1-Dichloroethane	NE 0.89937	1.04282 0.93166	0.87723 0.90417	1.03426 0.88702	0.90313	0.88859	AVRG		0.92980		6.83106	
Chloroprene	NE 0.19474	0.25663 0.23640	0.22753 0.23331	0.21787 0.23204	0.21758	0.20725	AVRG		0.22482		8.00705	

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Compound	50.00 Level 7 0.250 Level 1	100.00 Level 8 0.500 Level 2	150.00 Level 9 1.00 Level 3	200.00 Level 10 2.00 Level 4	5.00 Level 5	20.00 Level 6	Curve	b	m1	m2	%RSD or R2	Q
2-Butanone	NE 0.25660	0.28077 0.28522	0.26281 0.27741	0.24974 0.28148	0.24863	0.25377	AVRG		0.26627		5.58805	
Methacrylonitrile	NE 0.62768	0.71944 0.66925	0.58681 0.67273	0.61854 0.65439	0.59811	0.66152	AVRG		0.64539		6.44560	
2,2-Dichloropropane	NE 357279	3703 797830	7001 1150093	15882 1535535	34523	136770	LINR	0.00416	0.72480		0.99899	
cis-1,2-Dichloroethene	NE 0.52561	0.58080 0.55258	0.55205 0.52870	0.55103 0.51702	0.52518	0.52498	AVRG		0.53977		3.81784	
Chloroform	NE 0.90021	1.12088 0.94131	0.94789 0.91371	1.04563 0.88871	0.89046	0.91369	AVRG		0.95139		8.37790	
Bromochloromethane	NE 0.28615	0.34105 0.29492	0.28436 0.28865	0.36073 0.28298	0.29741	0.28625	AVRG		0.30250		9.34540	
1,1,1-Trichloroethane	NE 0.70136	0.76811 0.80905	0.60604 0.78046	0.76445 0.77179	0.67544	0.71465	AVRG		0.73237		8.70697	
1,1-Dichloropropene	NE 0.37472	0.46667 0.45240	0.37410 0.42446	0.41961 0.42714	0.34598	0.38546	AVRG		0.40784		9.80634	
1,2-Dichloroethane	NE 0.52114	0.65388 0.55719	0.55646 0.54137	0.52020 0.54393	0.51464	0.54481	AVRG		0.55040		7.59848	
Carbon Tetrachloride	NE 0.35583	0.45034 0.44940	0.42963 0.42389	0.40208 0.42272	0.37338	0.39061	AVRG		0.41088		7.99245	
Benzene	NE 1.14556	1.30726 1.25702	1.13102 1.18986	1.22322 1.19963	1.12620	1.18395	AVRG		1.19597		5.00630	
Trichloroethene	NE 0.32325	0.36259 0.36148	0.29151 0.34333	0.38072 0.34832	0.30457	0.32879	AVRG		0.33829		8.55214	

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Compound	50.00 Level 7 0.250 Level 1	100.00 Level 8 0.500 Level 2	150.00 Level 9 1.00 Level 3	200.00 Level 10 2.00 Level 4	5.00 Level 5	20.00 Level 6	Curve	b	m1	m2	%RSD or R2	Q
Bromodichloromethane	NE 0.43234	0.56576 0.45884	0.42748 0.45203	0.45204 0.46018	0.42979	0.44442	AVRG		0.45810		9.21563	
Methyl Methacrylate	NE 0.55557	0.64774 0.60054	0.67348 0.60150	0.61013 0.58254	0.58540	0.57437	AVRG		0.60347		6.09532	
2-Chloroethylvinyl ether	NE 0.13958	0.13748 0.15371	0.12812 0.14777	0.12943 0.15040	0.13129	0.14103	AVRG		0.13987		6.65248	
1,2-Dichloropropane	NE 0.37714	0.43289 0.40397	0.31618 0.38726	0.39071 0.39014	0.37483	0.38801	AVRG		0.38457		8.02856	
2-Nitropropane	NE 0.18456	0.23319 0.19499	0.19456 0.20657	0.22145 0.20342	0.16115	0.18784	AVRG		0.19864		10.60581	
Dibromomethane	NE 0.20339	0.24779 0.21844	0.21543 0.20650	0.23770 0.20862	0.20762	0.21371	AVRG		0.21769		6.96902	
4-Methyl-2-Pentanone	NE 0.46063	0.58655 0.48903	0.46075 0.48195	0.49135 0.48645	0.48596	0.48555	AVRG		0.49202		7.57687	
cis-1,3-Dichloropropene	NE 0.51175	0.61537 0.55605	0.45166 0.53397	0.53404 0.54067	0.47196	0.51998	AVRG		0.52616		8.99460	
Ethyl Methacrylate	NE 0.26930	0.34651 0.30905	0.35275 0.33292	0.35012 0.34232	0.32495	0.31920	AVRG		0.32746		8.05273	
Toluene	NE 1.35355	1.36539 1.44404	1.14100 1.39074	1.37686 1.39027	1.31689	1.33460	AVRG		1.34593		6.32428	
trans-1,3-Dichloropropene	NE 0.42358	0.49608 0.46734	0.38674 0.45302	0.44837 0.46834	0.41009	0.43827	AVRG		0.44354		7.48885	
2-Hexanone	NE 0.30067	0.30395 0.32110	0.33705 0.32372	0.32917 0.32526	0.33286	0.33513	AVRG		0.32321		4.01955	

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Compound	50.00 Level 7 0.250 Level 1	100.00 Level 8 0.500 Level 2	150.00 Level 9 1.00 Level 3	200.00 Level 10 2.00 Level 4	5.00 Level 5	20.00 Level 6	Curve	b	m1	m2	%RSD or R2	Q
1,1,2-Trichloroethane	NE 0.27496	0.30232 0.28103	0.28933 0.27111	0.30515 0.27281	0.28408	0.28886	AVRG		0.28552		4.28271	
1,3-Dichloropropane	NE 0.56268	0.68555 0.57784	0.56076 0.55478	0.58546 0.55874	0.58510	0.57884	AVRG		0.58331		6.87413	
Dibromochloromethane	NE 0.40608	0.42594 0.43396	0.39216 0.42165	0.41047 0.42582	0.38971	0.40387	AVRG		0.41218		3.79175	
Tetrachloroethene	NE 0.26863	0.24343 0.31076	0.22414 0.29395	0.32780 0.29098	0.27159	0.27129	AVRG		0.27806		11.54647	
1,2-Dibromoethane	NE 0.30967	0.35535 0.31558	0.31873 0.30475	0.33131 0.31110	0.34997	0.33995	AVRG		0.32627		5.69357	
1-Chlorohexane	NE 0.33296	0.43114 0.42814	0.40883 0.40776	0.43814 0.41598	0.36414	0.38805	AVRG		0.40168		8.58201	
Chlorobenzene	NE 0.90189	1.07531 0.96048	0.86917 0.93481	0.96582 0.94343	0.89774	0.91892	AVRG		0.94084		6.30233	
1,1,1,2-Tetrachloroethane	NE 0.36189	0.40907 0.38531	0.32801 0.37705	0.36574 0.37837	0.34420	0.36531	AVRG		0.36833		6.36041	
Ethylbenzene	NE 0.45381	0.53160 0.50085	0.40783 0.48317	0.49648 0.48539	0.44109	0.44588	AVRG		0.47179		7.99221	
m,p-Xylenes	NE 0.58355	0.58138 0.63520	0.51291 0.61039	0.66213 0.61758	0.54279	0.58097	AVRG		0.59188		7.73323	
o-Xylene	NE 0.54985	0.60028 0.59157	0.50413 0.57426	0.58077 0.58210	0.50944	0.55204	AVRG		0.56049		6.17548	
Styrene	NE 0.97719	1.10605 1.02091	0.86982 0.99759	0.96217 1.01131	0.89239	0.96159	AVRG		0.97767		7.16726	

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Compound	50.00 Level 7 0.250 Level 1	100.00 Level 8 0.500 Level 2	150.00 Level 9 1.00 Level 3	200.00 Level 10 2.00 Level 4	5.00 Level 5	20.00 Level 6	Curve	b	m1	m2	%RSD or R2	Q
Bromoform	NE 0.26395	0.26832 0.27994	0.21153 0.27771	0.29273 0.28394	0.24404	0.25796	AVRG		0.26446		9.32941	
Isopropylbenzene	NE 1.36958	1.45474 1.59321	1.15694 1.51601	1.62659 1.55523	1.31430	1.37984	AVRG		1.44071		10.47090	
1,1,2,2-Tetrachloroethane	NE 0.78472	0.94445 0.81779	0.83194 0.80619	0.90896 0.80829	0.84185	0.81425	AVRG		0.83983		6.25761	
1,2,3-Trichloropropane	NE 0.62245	0.70743 0.65589	0.66768 0.64581	0.66994 0.64574	0.70648	0.67647	AVRG		0.66643		4.21060	
trans-1,4-Dichloro-2-butene	NE 0.15148	0.15286 0.16770	0.12745 0.16789	0.14444 0.16922	0.13548	0.15209	AVRG		0.15207		9.66771	
n-Propylbenzene	NE 2.91361	2.94838 3.40683	2.53997 3.24372	3.16964 3.29645	2.67171	3.00288	AVRG		3.02147		9.55626	
Bromobenzene	NE 0.73926	0.82736 0.79512	0.75995 0.76647	0.82086 0.78754	0.76608	0.77520	AVRG		0.78198		3.67998	
1,3,5-Trimethylbenzene	NE 2.12204	2.47615 2.50410	1.87986 2.44372	2.39387 2.46514	1.97150	2.11509	AVRG		2.26350		10.68239	
2-Chlorotoluene	NE 1.91345	2.19364 2.08147	2.04515 2.01122	2.15846 2.03095	1.86416	2.04541	AVRG		2.03821		5.12320	
4-Chlorotoluene	NE 2.19714	2.25128 2.40271	1.82096 2.33521	2.37563 2.37480	2.11635	2.28352	AVRG		2.23973		8.15437	
tert-Butylbenzene	NE 1.75584	2.09594 2.12022	1.61179 2.04664	2.20774 2.05649	1.74066	1.83461	AVRG		1.94110		10.71222	
1,2,4-Trimethylbenzene	NE 2.11967	2.62916 2.46832	1.84573 2.41069	2.42858 2.45093	1.92871	2.14683	AVRG		2.26985		11.86510	

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sec-Butylbenzene	NE 2.38650	2.39008 2.98896	2.08647 2.87301	2.89395 2.88374	2.26832	2.51515	AVRG		2.58735		12.68595	
p-Isopropyltoluene	NE 2.17688	2.52552 2.69684	1.93671 2.58444	2.48463 2.61384	2.04517	2.20747	AVRG		2.36350		11.64663	
1,3-Dichlorobenzene	NE 1.28863	1.54565 1.44980	1.17676 1.41160	1.40461 1.40967	1.24164	1.33205	AVRG		1.36227		8.33210	
1,4-Dichlorobenzene	NE 1.38557	1.65292 1.53566	1.32318 1.45287	1.69562 1.48161	1.44532	1.46978	AVRG		1.49361		7.97047	
Benzyl Chloride	NE 558112	6245 1321247	10259 2041719	17851 2751633	45616	196200	LINR	0.04694	0.89268		0.99874	
n-Butylbenzene	NE 1.83535	1.84574 2.37633	1.70944 2.27255	1.96808 2.30080	1.70778	1.79924	AVRG		1.97948		13.42128	
1,2-Dichlorobenzene	NE 1.27471	1.35749 1.42525	1.25645 1.37391	1.38320 1.38665	1.26217	1.33374	AVRG		1.33929		4.58000	
1,2-Dibromo-3-Chloropropane	NE 51434	675 119154	831 181917	1953 242707	5268	19568	LINR	0.02176	0.14112		0.99931	
1,2,4-Trichlorobenzene	NE 0.80524	1.05947 0.97476	0.91279 0.95753	0.94981 0.97711	0.85502	0.78698	AVRG		0.91986		9.65852	
Hexachlorobutadiene	NE 139894	1357 382401	2109 564457	6844 760294	13714	52647	LINR	0.04709	0.44481		0.99698	
Naphthalene	NE 2.02307	2.67698 2.35582	2.32669 2.27389	2.26771 2.32875	2.16067	2.07687	AVRG		2.27672		8.35550	
1,2,3-Trichlorobenzene	NE 0.74794	0.99382 0.88744	0.89482 0.86237	0.93334 0.87314	0.76923	0.78029	AVRG		0.86027		9.42402	

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Ethyl Acetate	NE 0.70402	0.85233 0.73854	0.68267 0.71854	0.73966 0.71045	0.76533	0.77227	AVRG		0.74265		6.75864	
Methyl Acrylate	NE 0.62114	0.66840 0.77600	0.54731 0.78843	0.64052 0.76129	0.64695	0.66691	AVRG		0.67966		11.81743	
n-Butanol	NE 0.01560	0.01615 0.01818	0.01470 0.01945	0.01778 0.01980	0.01318	0.01496	AVRG		0.01664		13.67270	
Ethyl Acrylate	NE 1.56849	1.63514 1.70663	1.72358 1.77502	1.50263 1.75049	1.60242	1.64950	AVRG		1.65710		5.42882	
Cyclohexanone	NE 0.03949	0.05394 0.03979	0.05115 0.03982	0.04786 0.03661	0.04626	0.04568	AVRG		0.04451		13.30149	
1,4-Dioxane	0.00529 0.00540	0.00687 0.00595	0.00611 0.00600	0.00555 0.00602	0.00636	0.00586	AVRG		0.00594		7.82889	
n-Hexane	NE 244351	2320 700280	5000 NE	11984 NE	26276	106667	QUAD	-0.01727	2.41947	-0.68015	0.99837	
Freon TF	NE 154547	1274 422615	2818 NE	7195 NE	16656	67796	QUAD	-0.01499	3.77998	-1.58677	0.99832	
Methyl Acetate	NE 0.42203	0.46559 0.43221	0.47286 0.43028	0.45346 0.42016	0.45829	0.45001	AVRG		0.44499		4.35037	
Methylcyclohexane	NE 0.98734	1.14273 1.10411	0.96842 1.12748	0.95973 1.14019	1.03867	1.02958	AVRG		1.05536		7.08148	
Isopropyl alcohol	NE 0.03536	0.04517 0.03638	0.04439 0.03714	0.04149 0.03689	0.03687	0.03873	AVRG		0.03916		9.28018	
Amyl alcohol	NE 0.01277	0.01442 0.01513	0.01288 0.01573	0.01448 0.01580	0.01462	0.01358	AVRG		0.01438		7.75370	

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Allyl alcohol	NE 244351	2068 700280	5000 NE	14314 NE	26276	106667	QUAD	-0.39232	48.54112	-13.69022	0.99834	
4-Methyl-2-pentanol	NE 0.08687	0.12600 0.10145	0.10791 0.10473	0.11127 0.10925	0.11234	0.10455	AVRG		0.10715		9.67860	
Tert-butyl alcohol	NE 0.05636	0.07802 0.05963	0.06140 0.05977	0.06995 0.05928	0.06161	0.06194	AVRG		0.06311		10.61812	
Diethyl ether	NE 0.43908	0.51744 0.44851	0.49360 0.44689	0.51199 0.43020	0.45058	0.45793	AVRG		0.46625		6.99240	
1,3-Butadiene	NE 0.58528	0.63622 0.71010	0.57213 0.67222	0.73345 0.66543	0.59805	0.60945	AVRG		0.64248		8.80211	
Cyclohexane	NE 0.73558	0.85829 1.03245	0.72681 0.97434	0.92986 0.96744	0.75844	0.81693	AVRG		0.86668		13.16994	
Tetrahydrofuran	NE 0.12218	0.14083 0.12495	0.13332 0.12609	0.13514 0.12108	0.12274	0.13136	AVRG		0.12863		5.31484	
alpha-Methylstyrene	NE 1.02454	1.23006 1.16376	0.99517 1.14646	1.09377 1.14475	0.99115	1.02796	AVRG		1.09085		7.81543	
Diisopropyl ether	NE 1.95747	2.14800 2.03902	2.34506 2.05555	2.06794 1.95720	1.91324	2.06344	AVRG		2.06077		6.23686	
Dichlorofluoromethane	NE 0.76153	0.85332 0.78724	0.92289 0.78703	0.84028 0.76192	0.75366	0.78256	AVRG		0.80560		6.93852	
Propylene oxide	NE 0.05692	0.06108 0.05582	0.06673 0.05455	0.06684 0.04985	0.07410	0.06618	AVRG		0.06134		12.54653	
3-Methyl-1-butanol	NE 0.01195	0.01323 0.01394	0.01183 0.01419	0.00888 0.01408	0.01158	0.01110	AVRG		0.01231		14.14320	

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

Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder HS23071113

RunID VOA6_441456

Volatiles by EPA 8260

Compound	50.00 Level 7 0.250 Level 1	100.00 Level 8 0.500 Level 2	150.00 Level 9 1.00 Level 3	200.00 Level 10 2.00 Level 4	5.00 Level 5	20.00 Level 6	Curve	b	m1	m2	%RSD or R2	Q
Butyl acrylate	NE 0.95529	0.92245 1.02517	0.88753 1.04707	0.86138 1.05297	0.86060	0.94857	AVRG		0.95123		7.98920	
Butyl methacrylate	NE 1.15197	1.22102 1.29239	1.20704 1.21819	1.20789 1.18934	1.13145	1.15942	AVRG		1.19763		3.97564	
Dicyclopentadiene	NE 2.75252	2.80389 2.95979	3.12078 3.02021	2.84202 2.97202	2.58546	2.86391	AVRG		2.88007		5.53053	
1,2,3-Trimethylbenzene	NE 2.26318	2.33141 2.44349	2.44039 2.48171	2.00963 2.47220	2.11668	2.24288	AVRG		2.31129		7.26158	
Ethanol	NE 72445	1082 150451	1613 220615	3219 291912	7997	30252	LINR	-0.37330	0.00686		0.99938	
tert-Butyl formate	NE 0.46269	0.60414 0.51460	0.54120 0.53820	0.56992 0.54329	0.53335	0.49959	AVRG		0.53411		7.55066	
3,3-Dimethyl-1-butanol	NE 0.04382	0.07070 0.04890	0.05527 0.05244	0.05594 0.05101	0.05364	0.05224	AVRG		0.05377		13.60012	
tert-Amyl methyl ether	NE 1.60911	1.86257 1.58140	1.86766 1.64949	1.49761 1.54826	1.62072	1.56664	AVRG		1.64483		8.04479	
tert-Butyl ethyl ether	NE 1.97744	2.48449 2.04789	2.24930 2.06704	2.05003 2.01150	2.12663	2.03642	AVRG		2.11675		7.49756	
tert-Amyl alcohol	NE 0.04627	0.06041 0.05146	0.05141 0.05382	0.06972 0.05433	0.05333	0.05084	AVRG		0.05462		12.42201	
Epichlorohydrin	NE 0.03559	0.03842 0.03914	0.03655 0.03819	0.03704 0.03863	0.03577	0.03679	AVRG		0.03735		3.45493	
Isoprene	NE 0.14969	0.16745 0.17829	0.14351 0.17017	0.16283 0.16423	0.17487	0.17231	AVRG		0.16482		6.98920	

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Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder HS23071113

RunID VOA6_441456

Volatiles by EPA 8260

Compound	50.00 Level 7 0.250 Level 1	100.00 Level 8 0.500 Level 2	150.00 Level 9 1.00 Level 3	200.00 Level 10 2.00 Level 4	5.00 Level 5	20.00 Level 6	Curve	b	m1	m2	%RSD or R2	Q
n-Amyl acetate	NE 0.81039	1.01275 0.90629	1.04196 0.91309	0.90756 0.92294	0.85545	0.87675	AVRG		0.91635		7.88906	
Isopropyl acetate	NE 1.19423	1.44350 1.30224	1.45714 1.26100	1.48440 1.24685	1.21182	1.26381	AVRG		1.31833		8.51827	
n-Butyl acetate	NE 0.73443	0.87010 0.79624	0.63987 0.80262	0.70296 0.81276	0.74526	0.79294	AVRG		0.76635		8.91130	
Acetaldehyde	NE 101552	NE 189053	5117 265471	8114 347350	20987	39093	LINR	-0.45320	0.04030		0.99713	
Methyl Amyl Ketone	NE 0.96318	1.20532 1.04745	0.94521 1.08877	0.97102 1.09326	1.04102	1.05023	AVRG		1.04505		7.72385	
Dimethyl Disulfide	NE 0.69887	0.66624 0.73618	0.61152 0.73656	0.60301 0.73622	0.60088	0.68043	AVRG		0.67444		8.55931	
Isobutylene	NE 0.07008	0.09932 0.08656	0.08288 0.08198	0.07903 0.07923	0.07898	0.08593	AVRG		0.08267		9.56800	
2-Ethylhexyl Acrylate	NE 1.36334	1.09488 1.47049	1.12671 1.45960	1.14640 1.46017	1.06053	1.31158	AVRG		1.27708		13.35344	
94 1,2-Dichloroethylene (total)	NE 0.46479	0.54435 0.49154	0.44960 0.47037	0.50282 0.46464	0.48062	0.46694	AVRG		0.48174		5.88171	
95 Xylenes (total)	NE 0.51459	0.53863 0.58017	0.47900 0.55693	0.57974 0.56971	0.47946	0.52696	AVRG		0.53613		7.35273	
30 Dibromofluoromethane	NE 227290	3536 502644	5859 719790	10131 959895	26145	100577	LINR	-0.01526	0.45137		0.99889	
35 1,2-Dichloroethane-d4	NE 282994	5342 615043	7805 911155	14667 1203985	31653	125030	LINR	-0.01246	0.56601		0.99932	

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Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder HS23071113

RunID VOA6_441456

Volatiles by EPA 8260

ICAL Summary Page 12 / 12

Compound	50.00 Level 7 0.250 Level 1	100.00 Level 8 0.500 Level 2	150.00 Level 9 1.00 Level 3	200.00 Level 10 2.00 Level 4	5.00 Level 5	20.00 Level 6	Curve	b	m1	m2	%RSD or R2	Q
48 Toluene-d8	NE 1.07891	1.41149 1.19952	1.42719 NE	1.38594 NE	1.29623	1.21214	AVRG		1.28735		10.10735	
69 4-Bromofluorobenzene	NE 355682	7819 767493	11517 1135204	17835 1538168	40007	153161	LINR	-0.00857	0.49361		0.99967	

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

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Form 6I

Initial Calibration Verification (ICV)

Volatiles by EPA 8260

Workorder

HS23071113

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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

Initial Calibration Verification (ICV)

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

Workorder HS23071113

RunID VOA6_441456

Volatiles by EPA 8260

Sample Matrix LIQUID
Lab Smp Id ICV
Level LOW
Fraction VOA
Client Smp ID ICV
Operator PC

Compound	Conc Added	Conc Recovered	% Recovered	Limits	Q
1,1,1,2-Tetrachloroethane	50.00	49.01	98.02	80-120	
1,1,1-Trichloroethane	50.00	46.46	92.93	80-120	
1,1,2,2-Tetrachloroethane	50.00	48.23	96.47	80-120	
Freon TF	50.00	50.73	101.47	80-120	
Methyl acetate	50.00	48.60	97.20	80-120	
Cyclohexane	50.00	43.28	86.57	80-120	
Methylcyclohexane	50.00	47.44	94.90	80-120	
Carbon Disulfide	100.00	92.54	92.54	80-120	
2-Hexanone	100.00	100.41	100.42	80-120	
1,1,2-Trichloroethane	50.00	48.51	97.03	80-120	
1,1-Dichloroethane	50.00	46.83	93.66	80-120	
1,1-Dichloroethene	50.00	45.26	90.53	80-120	
1,1-Dichloropropene	50.00	45.59	91.20	80-120	
1,2,3-Trichlorobenzene	50.00	43.05	86.12	80-120	
1,2,3-Trichloropropane	50.00	48.09	96.20	80-120	
1,2,4-Trichlorobenzene	50.00	43.35	86.72	80-120	
1,2,4-Trimethylbenzene	50.00	44.77	89.55	80-120	
1,2-Dibromo-3-Chloropropane	50.00	48.27	96.54	80-120	
1,2-Dibromoethane	50.00	47.85	95.71	80-120	
Acrolein	100.00	95.33	95.34	80-120	
Acrylonitrile	100.00	96.95	96.95	80-120	
1,2-Dichlorobenzene	50.00	47.75	95.52	80-120	
1,2-Dichloroethane	50.00	47.45	94.92	80-120	
1,2-Dichloropropane	50.00	49.01	98.02	80-120	
1,3,5-Trimethylbenzene	50.00	44.65	89.31	80-120	
1,3-Dichlorobenzene	50.00	46.44	92.88	80-120	
1,3-Dichloropropane	50.00	48.46	96.93	80-120	
1,4-Dichlorobenzene	50.00	45.87	91.75	80-120	
1-Chlorohexane	50.00	40.17	80.36	80-120	
2,2-Dichloropropane	50.00	47.06	94.14	80-120	
2-Butanone	100.00	105.06	105.06	80-120	
2-Chloroethylvinyl ether	100.00	103.48	103.49	80-120	
2-Chlorotoluene	50.00	45.07	90.16	80-120	
4-Chlorotoluene	50.00	47.10	94.21	80-120	

Initial Calibration Verification (ICV)

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

Workorder HS23071113

RunID VOA6_441456

Volatiles by EPA 8260

Sample Matrix LIQUID
Lab Smp Id ICV
Level LOW
Fraction VOA
Client Smp ID ICV
Operator PC

Compound	Conc Added	Conc Recovered	% Recovered	Limits	Q
p-Isopropyltoluene	50.00	42.46	84.92	80-120	
4-Methyl-2-Pentanone	100.00	96.77	96.78	80-120	
Acetone	100.00	109.68	109.69	80-120	
Acetonitrile	500.00	477.86	95.57	80-120	
Allyl Chloride	50.00	46.25	92.52	80-120	
Benzene	50.00	47.17	94.35	80-120	
Bromobenzene	50.00	47.14	94.28	80-120	
Bromochloromethane	50.00	47.57	95.15	80-120	
Bromodichloromethane	50.00	47.04	94.09	80-120	
Bromoform	50.00	50.48	100.97	80-120	
Bromomethane	50.00	52.69	105.40	80-120	
Carbon Tetrachloride	50.00	43.89	87.80	80-120	
Chlorobenzene	50.00	47.93	95.88	80-120	
Chloroethane	50.00	45.13	90.26	80-120	
Chloroform	50.00	45.97	91.96	80-120	
Chloromethane	50.00	46.75	93.50	80-120	
Chloroprene	50.00	45.07	90.15	80-120	
cis-1,2-Dichloroethene	50.00	47.65	95.31	80-120	
cis-1,3-Dichloropropene	50.00	49.60	99.21	80-120	
Dibromochloromethane	50.00	50.99	101.99	80-120	
Dibromomethane	50.00	47.45	94.92	80-120	
Dichlorodifluoromethane	50.00	44.13	88.28	80-120	
Ethylbenzene	50.00	46.22	92.44	80-120	
Ethyl Methacrylate	50.00	42.56	85.14	80-120	
Iodomethane	100.00	85.27	85.27	80-120	
Isobutyl Alcohol	1000.00	1037.79	103.78	70-130	
Propionitrile	500.00	495.72	99.15	70-130	
Hexachlorobutadiene	50.00	40.81	81.63	80-120	
Isopropylbenzene	50.00	44.80	89.60	80-120	
m,p-Xylenes	100.00	94.37	94.38	80-120	
Methyl tert-butyl ether	50.00	48.10	96.20	80-120	
Methylene Chloride	50.00	48.91	97.83	80-120	
Methacrylonitrile	50.00	51.28	102.56	80-120	
Methyl Methacrylate	50.00	48.63	97.28	80-120	

Initial Calibration Verification (ICV)

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

Workorder HS23071113

RunID VOA6_441456

Volatiles by EPA 8260

Sample Matrix LIQUID
Lab Smp Id ICV
Level LOW
Fraction VOA
Client Smp ID ICV
Operator PC

Compound	Conc Added	Conc Recovered	% Recovered	Limits	Q
n-Butylbenzene	50.00	43.07	86.14	80-120	
n-Propylbenzene	50.00	44.93	89.87	80-120	
Naphthalene	50.00	45.05	90.10	80-120	
o-Xylene	50.00	47.84	95.69	80-120	
sec-Butylbenzene	50.00	42.83	85.66	80-120	
Styrene	50.00	49.01	98.02	80-120	
tert-Butylbenzene	50.00	42.55	85.10	80-120	
Tetrachloroethene	50.00	47.18	94.38	80-120	
Toluene	50.00	48.91	97.82	80-120	
trans-1,2-Dichloroethene	50.00	45.43	90.87	80-120	
trans-1,3-Dichloropropene	50.00	49.09	98.19	80-120	
trans-1,4-Dichloro-2-butene	50.00	53.16	106.34	80-120	
Trichloroethene	50.00	46.63	93.27	80-120	
Trichlorofluoromethane	50.00	46.87	93.76	80-120	
Vinyl Acetate	100.00	100.31	100.31	80-120	
Vinyl Chloride	50.00	46.46	92.92	80-120	
1,2-Dichloroethylene (total)	100.00	93.08	93.09	80-120	
Xylenes (total)	150.00	142.22	94.81	80-120	
1,4-Dioxane	1000.00	988.21	98.82	80-120	
Dibromofluoromethane	50.00	52.53	105.08	71-125	
1,2-Dichloroethane-d4	50.00	52.09	104.19	70-125	
Toluene-d8	50.00	48.16	96.34	75-125	

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Form 7

Continuing Calibration Verification (CCV)

Volatiles by EPA 8260

Workorder

HS23071113

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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

Continuing Calibration Verification (CCV)

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

Workorder HS23071113

RunID VOA6_442002

Volatiles by EPA 8260

Instrument ID VOA6.I
Lab File ID X072102.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date :36
ICAL Date(s) 14-JUL-2023 14-JUL-2023
ICAL Times :41 15:25
Quant Type ISTD

Compound	$\overline{RRF}$ / Conc	RF50 / Conc	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
1,4-Dioxane	0.00594	0.00595	0.00595	0.001	-0.16988	20.0	Averaged	
1,3-Butadiene	0.64248	0.77286	0.77286	0.100	-20.29317	20.0	Averaged	*
Methacrylonitrile	0.64539	0.78096	0.78096	0.100	-21.00662	20.0	Averaged	*
Isobutyl Alcohol	0.09478	0.11339	0.11339	0.005	-19.64067	20.0	Averaged	
Acetonitrile	0.07011	0.07155	0.07155	0.005	-2.05102	20.0	Averaged	
Allyl Chloride	1.64159	1.70110	1.70110	0.100	-3.62504	20.0	Averaged	
Propionitrile	0.09905	0.11583	0.11583	0.010	-16.94947	20.0	Averaged	
trans-1,4-Dichloro-2-butene	0.15207	0.16535	0.16535	0.050	-8.73059	20.0	Averaged	
Ethyl Acetate	0.74265	0.87080	0.87080	0.100	-17.25653	20.0	Averaged	
Methyl Methacrylate	0.60347	0.70315	0.70315	0.100	-16.51693	20.0	Averaged	
Ethyl Methacrylate	0.32746	0.30321	0.30321	0.100	7.40533	20.0	Averaged	
Dichlorodifluoromethane	50.0	43.90212	0.44771	0.100	12.19575	20.0	Linear	
Chloromethane	0.75520	0.88784	0.88784	0.100	-17.56306	20.0	Averaged	
Vinyl Chloride	0.64702	0.74105	0.74105	0.100	-14.53307	20.0	Averaged	
Bromomethane	0.26775	0.29910	0.29910	0.100	-11.70696	20.0	Averaged	
Chloroethane	0.36936	0.43016	0.43016	0.100	-16.46064	20.0	Averaged	
Trichlorofluoromethane	0.65570	0.69040	0.69040	0.100	-5.29164	20.0	Averaged	
Acrolein	100	132	0.02506	0.010	-32.00452	20.0	Linear	*
Acetone	100	120	0.23505	0.100	-19.73513	20.0	Linear	
1,1-Dichloroethene	0.36630	0.39845	0.39845	0.100	-8.77548	20.0	Averaged	
Iodomethane	100	86.78202	0.41517	0.100	13.21798	20.0	Quadratic	
Acrylonitrile	0.24365	0.28544	0.28544	0.050	-17.15086	20.0	Averaged	
Methylene Chloride	50.0	42.82619	0.37193	0.100	14.34762	20.0	Linear	
Methyl tert-butyl ether	1.36234	1.39822	1.39822	0.100	-2.63416	20.0	Averaged	
Carbon Disulfide	1.15144	1.12300	1.12300	0.100	2.46941	20.0	Averaged	
trans-1,2-Dichloroethene	0.42371	0.40257	0.40257	0.100	4.99067	20.0	Averaged	
Vinyl Acetate	1.75234	2.10008	2.10008	0.010	-19.84428	20.0	Averaged	
1,1-Dichloroethane	0.92980	0.96670	0.96670	0.200	-3.96796	20.0	Averaged	
2-Butanone	0.26627	0.31164	0.31164	0.100	-17.03866	20.0	Averaged	
2,2-Dichloropropane	50.0	51.62370	0.74532	0.100	-3.24741	20.0	Linear	
cis-1,2-Dichloroethene	0.53977	0.56338	0.56338	0.100	-4.37351	20.0	Averaged	
Chloroform	0.95139	0.92703	0.92703	0.200	2.56062	20.0	Averaged	
Bromochloromethane	0.30250	0.30756	0.30756	0.100	-1.67265	20.0	Averaged	
30 Dibromofluoromethane	50.0	54.79294	0.50152	0.100	-9.58587	20.0	Linear	

Continuing Calibration Verification (CCV)

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

Workorder HS23071113

RunID VOA6_442002

Volatiles by EPA 8260

Instrument ID VOA6.I
Lab File ID X072102.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date :36
ICAL Date(s) 14-JUL-2023 14-JUL-2023
ICAL Times :41 15:25
Quant Type ISTD

Compound	$\overline{RRF}$ / Conc	RF50 / Conc	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
1,1,1-Trichloroethane	0.73237	0.72745	0.72745	0.100	0.67186	20.0	Averaged	
1,1-Dichloropropene	0.40784	0.37950	0.37950	0.100	6.94938	20.0	Averaged	
1,2-Dichloroethane	0.55040	0.52568	0.52568	0.100	4.49222	20.0	Averaged	
Carbon Tetrachloride	0.41088	0.36520	0.36520	0.100	11.11776	20.0	Averaged	
35 1,2-Dichloroethane-d4	50.0	53.05775	0.60768	0.100	-6.11549	20.0	Linear	
Benzene	1.19597	1.17441	1.17441	0.500	1.80281	20.0	Averaged	
Trichloroethene	0.33829	0.32421	0.32421	0.200	4.16211	20.0	Averaged	
Bromodichloromethane	0.45810	0.43143	0.43143	0.200	5.82204	20.0	Averaged	
2-Chloroethylvinyl ether	0.13987	0.13716	0.13716	0.001	1.93616	20.0	Averaged	
1,2-Dichloropropane	0.38457	0.40350	0.40350	0.100	-4.92197	20.0	Averaged	
Dibromomethane	0.21769	0.21147	0.21147	0.100	2.85758	20.0	Averaged	
4-Methyl-2-Pentanone	0.49202	0.51219	0.51219	0.100	-4.09846	20.0	Averaged	
cis-1,3-Dichloropropene	0.52616	0.52393	0.52393	0.200	0.42317	20.0	Averaged	
48 Toluene-d8	1.28735	1.15574	1.15574	0.100	10.22311	20.0	Averaged	
Toluene	1.34593	1.31644	1.31644	0.400	2.19086	20.0	Averaged	
trans-1,3-Dichloropropene	0.44354	0.43555	0.43555	0.100	1.79984	20.0	Averaged	
2-Hexanone	0.32321	0.33847	0.33847	0.100	-4.72144	20.0	Averaged	
1,1,2-Trichloroethane	0.28552	0.27323	0.27323	0.100	4.30373	20.0	Averaged	
1,3-Dichloropropane	0.58331	0.56582	0.56582	0.100	2.99738	20.0	Averaged	
Dibromochloromethane	0.41218	0.40534	0.40534	0.100	1.66010	20.0	Averaged	
Tetrachloroethene	0.27806	0.26270	0.26270	0.200	5.52476	20.0	Averaged	
1,2-Dibromoethane	0.32627	0.31249	0.31249	0.100	4.22245	20.0	Averaged	
1-Chlorohexane	0.40168	0.38099	0.38099	0.100	5.15087	20.0	Averaged	
Chlorobenzene	0.94084	0.91224	0.91224	0.500	3.04015	20.0	Averaged	
1,1,1,2-Tetrachloroethane	0.36833	0.36018	0.36018	0.100	2.21176	20.0	Averaged	
Ethylbenzene	0.47179	0.44907	0.44907	0.100	4.81569	20.0	Averaged	
m,p-Xylenes	0.59188	0.58632	0.58632	0.100	0.93851	20.0	Averaged	
o-Xylene	0.56049	0.55498	0.55498	0.300	0.98444	20.0	Averaged	
Styrene	0.97767	0.97587	0.97587	0.300	0.18399	20.0	Averaged	
Bromoform	0.26446	0.26006	0.26006	0.100	1.66347	20.0	Averaged	
Isopropylbenzene	1.44071	1.40861	1.40861	0.100	2.22807	20.0	Averaged	
1,1,2,2-Tetrachloroethane	0.83983	0.84156	0.84156	0.300	-0.20593	20.0	Averaged	
1,2,3-Trichloropropane	0.66643	0.62206	0.62206	0.100	6.65796	20.0	Averaged	
n-Propylbenzene	3.02147	3.14584	3.14584	0.100	-4.11646	20.0	Averaged	

Continuing Calibration Verification (CCV)

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

Workorder HS23071113

RunID VOA6_442002

Volatiles by EPA 8260

Instrument ID VOA6.I
Lab File ID X072102.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date :36
ICAL Date(s) 14-JUL-2023 14-JUL-2023
ICAL Times :41 15:25
Quant Type ISTD

Compound	$\overline{RRF}$ / Conc	RF50 / Conc	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
Bromobenzene	0.78198	0.75337	0.75337	0.100	3.65856	20.0	Averaged	
1,3,5-Trimethylbenzene	2.26350	2.18752	2.18752	0.100	3.35666	20.0	Averaged	
2-Chlorotoluene	2.03821	1.95197	1.95197	0.100	4.23112	20.0	Averaged	
4-Chlorotoluene	2.23973	2.23382	2.23382	0.100	0.26392	20.0	Averaged	
tert-Butylbenzene	1.94110	1.88394	1.88394	0.100	2.94467	20.0	Averaged	
1,2,4-Trimethylbenzene	2.26985	2.22629	2.22629	0.100	1.91912	20.0	Averaged	
sec-Butylbenzene	2.58735	2.62700	2.62700	0.100	-1.53243	20.0	Averaged	
p-Isopropyltoluene	2.36350	2.34491	2.34491	0.100	0.78668	20.0	Averaged	
1,3-Dichlorobenzene	1.36227	1.37973	1.37973	0.600	-1.28165	20.0	Averaged	
1,4-Dichlorobenzene	1.49361	1.45094	1.45094	0.400	2.85734	20.0	Averaged	
n-Butylbenzene	1.97948	2.10900	2.10900	0.500	-6.54309	20.0	Averaged	
1,2-Dichlorobenzene	1.33929	1.34885	1.34885	0.400	-0.71434	20.0	Averaged	
1,2-Dibromo-3-Chloropropane	50.0	49.77097	0.13740	0.040	0.45806	20.0	Linear	
1,2,4-Trichlorobenzene	0.91986	0.89701	0.89701	0.100	2.48352	20.0	Averaged	
Hexachlorobutadiene	50.0	46.55155	0.39319	0.100	6.89691	20.0	Linear	
Naphthalene	2.27672	2.26399	2.26399	0.200	0.55925	20.0	Averaged	
1,2,3-Trichlorobenzene	0.86027	0.81915	0.81915	0.010	4.77915	20.0	Averaged	
94 1,2-Dichloroethylene (total	0.48174	0.48297	0.48297	0.200	-0.25542	20.0	Averaged	
95 Xylenes (total)	0.53613	0.53366	0.53366	0.100	0.46142	20.0	Averaged	
Cyclohexane	0.86668	0.92803	0.92803	0.100	-7.07873	20.0	Averaged	
Freon TF	50.0	59.33891	0.37787	0.100	-18.67781	20.0	Quadratic	
Methylcyclohexane	1.05536	1.14183	1.14183	0.100	-8.19345	20.0	Averaged	
Methyl Acetate	0.44499	0.46467	0.46467	0.100	-4.42212	20.0	Averaged	
Tert-butyl alcohol	0.06311	0.05685	0.05685	0.005	9.92130	20.0	Averaged	
Isopropyl alcohol	0.03916	0.04209	0.04209	0.005	-7.49308	20.0	Averaged	

Continuing Calibration Verification (CCV)

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

Workorder HS23071113

RunID VOA6_442002

Volatiles by EPA 8260

Instrument ID VOA6.I
Lab File ID X072130.D
Analysis Type WATER
Lab Sample ID CCV-END

Injection Date :10
ICAL Date(s) 14-JUL-2023 14-JUL-2023
ICAL Times :41 15:25
Quant Type ISTD

Compound	$\overline{RRF}$ / Conc	RF50 / Conc	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
1,4-Dioxane	0.00594	0.00653	0.00653	0.001	-9.95072	50.0	Averaged	
1,3-Butadiene	0.64248	0.78520	0.78520	0.100	-22.21307	50.0	Averaged	
Methacrylonitrile	0.64539	0.84699	0.84699	0.100	-31.23848	50.0	Averaged	
Isobutyl Alcohol	0.09478	0.12036	0.12036	0.005	-26.98986	50.0	Averaged	
Acetonitrile	0.07011	0.07785	0.07785	0.005	-11.04115	50.0	Averaged	
Allyl Chloride	1.64159	1.88707	1.88707	0.100	-14.95398	50.0	Averaged	
Propionitrile	0.09905	0.11687	0.11687	0.010	-17.99281	50.0	Averaged	
trans-1,4-Dichloro-2-butene	0.15207	0.16096	0.16096	0.050	-5.84656	50.0	Averaged	
Ethyl Acetate	0.74265	0.91829	0.91829	0.100	-23.65103	50.0	Averaged	
Methyl Methacrylate	0.60347	0.73982	0.73982	0.100	-22.59335	50.0	Averaged	
Ethyl Methacrylate	0.32746	0.30740	0.30740	0.100	6.12537	50.0	Averaged	
Dichlorodifluoromethane	50.0	46.33453	0.47315	0.100	7.33094	50.0	Linear	
Chloromethane	0.75520	0.84607	0.84607	0.100	-12.03242	50.0	Averaged	
Vinyl Chloride	0.64702	0.77089	0.77089	0.100	-19.14413	50.0	Averaged	
Bromomethane	0.26775	0.28366	0.28366	0.100	-5.94122	50.0	Averaged	
Chloroethane	0.36936	0.42504	0.42504	0.100	-15.07511	50.0	Averaged	
Trichlorofluoromethane	0.65570	0.68622	0.68622	0.100	-4.65438	50.0	Averaged	
Acrolein	100	174	0.03310	0.010	-73.95968	50.0	Linear	
Acetone	100	127	0.24800	0.100	-26.60299	50.0	Linear	
1,1-Dichloroethene	0.36630	0.40320	0.40320	0.100	-10.07166	50.0	Averaged	
Iodomethane	100	92.37625	0.44388	0.100	7.62375	50.0	Quadratic	
Acrylonitrile	0.24365	0.27209	0.27209	0.050	-11.67318	50.0	Averaged	
Methylene Chloride	50.0	53.49118	0.46160	0.100	-6.98237	50.0	Linear	
Methyl tert-butyl ether	1.36234	1.29908	1.29908	0.100	4.64355	50.0	Averaged	
Carbon Disulfide	1.15144	1.15967	1.15967	0.100	-0.71482	50.0	Averaged	
trans-1,2-Dichloroethene	0.42371	0.40623	0.40623	0.100	4.12625	50.0	Averaged	
Vinyl Acetate	1.75234	2.12914	2.12914	0.010	-21.50284	50.0	Averaged	
1,1-Dichloroethane	0.92980	0.91006	0.91006	0.200	2.12391	50.0	Averaged	
2-Butanone	0.26627	0.33096	0.33096	0.100	-24.29631	50.0	Averaged	
2,2-Dichloropropane	50.0	46.44832	0.67030	0.100	7.10335	50.0	Linear	
cis-1,2-Dichloroethene	0.53977	0.57796	0.57796	0.100	-7.07427	50.0	Averaged	
Chloroform	0.95139	0.97164	0.97164	0.200	-2.12921	50.0	Averaged	
Bromochloromethane	0.30250	0.31262	0.31262	0.100	-3.34462	50.0	Averaged	
30 Dibromofluoromethane	50.0	56.40084	0.51604	0.100	-12.80169	50.0	Linear	

Continuing Calibration Verification (CCV)

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

Workorder HS23071113

RunID VOA6_442002

Volatiles by EPA 8260

Instrument ID VOA6.I
Lab File ID X072130.D
Analysis Type WATER
Lab Sample ID CCV-END

Injection Date :10
ICAL Date(s) 14-JUL-2023 14-JUL-2023
ICAL Times :41 15:25
Quant Type ISTD

Compound	$\overline{RRF}$ / Conc	RF50 / Conc	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
1,1,1-Trichloroethane	0.73237	0.75373	0.75373	0.100	-2.91602	50.0	Averaged	
1,1-Dichloropropene	0.40784	0.40023	0.40023	0.100	1.86625	50.0	Averaged	
1,2-Dichloroethane	0.55040	0.55686	0.55686	0.100	-1.17427	50.0	Averaged	
Carbon Tetrachloride	0.41088	0.36462	0.36462	0.100	11.25852	50.0	Averaged	
35 1,2-Dichloroethane-d4	50.0	56.13138	0.64247	0.100	-12.26275	50.0	Linear	
Benzene	1.19597	1.26104	1.26104	0.500	-5.44049	50.0	Averaged	
Trichloroethene	0.33829	0.34089	0.34089	0.200	-0.76921	50.0	Averaged	
Bromodichloromethane	0.45810	0.44172	0.44172	0.200	3.57556	50.0	Averaged	
2-Chloroethylvinyl ether	0.13987	0.14302	0.14302	0.001	-2.25686	50.0	Averaged	
1,2-Dichloropropane	0.38457	0.42118	0.42118	0.100	-9.52017	50.0	Averaged	
Dibromomethane	0.21769	0.21365	0.21365	0.100	1.85581	50.0	Averaged	
4-Methyl-2-Pentanone	0.49202	0.54764	0.54764	0.100	-11.30377	50.0	Averaged	
cis-1,3-Dichloropropene	0.52616	0.52447	0.52447	0.200	0.32083	50.0	Averaged	
48 Toluene-d8	1.28735	1.20630	1.20630	0.100	6.29536	50.0	Averaged	
Toluene	1.34593	1.38839	1.38839	0.400	-3.15520	50.0	Averaged	
trans-1,3-Dichloropropene	0.44354	0.43659	0.43659	0.100	1.56633	50.0	Averaged	
2-Hexanone	0.32321	0.36596	0.36596	0.100	-13.22590	50.0	Averaged	
1,1,2-Trichloroethane	0.28552	0.28211	0.28211	0.100	1.19345	50.0	Averaged	
1,3-Dichloropropane	0.58331	0.59026	0.59026	0.100	-1.19150	50.0	Averaged	
Dibromochloromethane	0.41218	0.40048	0.40048	0.100	2.83870	50.0	Averaged	
Tetrachloroethene	0.27806	0.25773	0.25773	0.200	7.31171	50.0	Averaged	
1,2-Dibromoethane	0.32627	0.31791	0.31791	0.100	2.56313	50.0	Averaged	
1-Chlorohexane	0.40168	0.37316	0.37316	0.100	7.10128	50.0	Averaged	
Chlorobenzene	0.94084	0.92429	0.92429	0.500	1.75945	50.0	Averaged	
1,1,1,2-Tetrachloroethane	0.36833	0.35554	0.35554	0.100	3.47348	50.0	Averaged	
Ethylbenzene	0.47179	0.45919	0.45919	0.100	2.66975	50.0	Averaged	
m,p-Xylenes	0.59188	0.58913	0.58913	0.100	0.46384	50.0	Averaged	
o-Xylene	0.56049	0.56796	0.56796	0.300	-1.33295	50.0	Averaged	
Styrene	0.97767	0.99367	0.99367	0.300	-1.63664	50.0	Averaged	
Bromoform	0.26446	0.26014	0.26014	0.100	1.63231	50.0	Averaged	
Isopropylbenzene	1.44071	1.40467	1.40467	0.100	2.50159	50.0	Averaged	
1,1,2,2-Tetrachloroethane	0.83983	0.85769	0.85769	0.300	-2.12699	50.0	Averaged	
1,2,3-Trichloropropane	0.66643	0.67650	0.67650	0.100	-1.51049	50.0	Averaged	
n-Propylbenzene	3.02147	3.07548	3.07548	0.100	-1.78780	50.0	Averaged	

Continuing Calibration Verification (CCV)

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

Workorder HS23071113

RunID VOA6_442002

Volatiles by EPA 8260

Instrument ID VOA6.I
Lab File ID X072130.D
Analysis Type WATER
Lab Sample ID CCV-END

Injection Date :10
ICAL Date(s) 14-JUL-2023 14-JUL-2023
ICAL Times :41 15:25
Quant Type ISTD

Compound	$\overline{RRF}$ / Conc	RF50 / Conc	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
Bromobenzene	0.78198	0.76000	0.76000	0.100	2.81170	50.0	Averaged	
1,3,5-Trimethylbenzene	2.26350	2.17353	2.17353	0.100	3.97474	50.0	Averaged	
2-Chlorotoluene	2.03821	1.97553	1.97553	0.100	3.07525	50.0	Averaged	
4-Chlorotoluene	2.23973	2.23722	2.23722	0.100	0.11204	50.0	Averaged	
tert-Butylbenzene	1.94110	1.86957	1.86957	0.100	3.68497	50.0	Averaged	
1,2,4-Trimethylbenzene	2.26985	2.24428	2.24428	0.100	1.12654	50.0	Averaged	
sec-Butylbenzene	2.58735	2.53076	2.53076	0.100	2.18738	50.0	Averaged	
p-Isopropyltoluene	2.36350	2.21846	2.21846	0.100	6.13675	50.0	Averaged	
1,3-Dichlorobenzene	1.36227	1.33837	1.33837	0.600	1.75399	50.0	Averaged	
1,4-Dichlorobenzene	1.49361	1.40910	1.40910	0.400	5.65856	50.0	Averaged	
n-Butylbenzene	1.97948	1.93385	1.93385	0.500	2.30520	50.0	Averaged	
1,2-Dichlorobenzene	1.33929	1.32564	1.32564	0.400	1.01857	50.0	Averaged	
1,2-Dibromo-3-Chloropropane	50.0	45.48574	0.12531	0.040	9.02851	50.0	Linear	
1,2,4-Trichlorobenzene	0.91986	0.80663	0.80663	0.100	12.30954	50.0	Averaged	
Hexachlorobutadiene	50.0	37.80782	0.31540	0.100	24.38435	50.0	Linear	
Naphthalene	2.27672	2.15226	2.15226	0.200	5.46659	50.0	Averaged	
1,2,3-Trichlorobenzene	0.86027	0.74844	0.74844	0.010	12.99909	50.0	Averaged	
94 1,2-Dichloroethylene (total	0.48174	0.49209	0.49209	0.200	-2.14861	50.0	Averaged	
95 Xylenes (total)	0.53613	0.54236	0.54236	0.100	-1.16198	50.0	Averaged	
Cyclohexane	0.86668	0.90881	0.90881	0.100	-4.86144	50.0	Averaged	
Freon TF	50.0	54.59913	0.34193	0.100	-9.19826	50.0	Quadratic	
Methylcyclohexane	1.05536	1.09850	1.09850	0.100	-4.08707	50.0	Averaged	
Methyl Acetate	0.44499	0.56004	0.56004	0.100	-25.85559	50.0	Averaged	
Tert-butyl alcohol	0.06311	0.06304	0.06304	0.005	0.11190	50.0	Averaged	
Isopropyl alcohol	0.03916	0.04523	0.04523	0.005	-15.49544	50.0	Averaged	

Continuing Calibration Verification (CCV)

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

Workorder HS23071113

RunID VOA6_442149

Volatiles by EPA 8260

Instrument ID VOA6.I
Lab File ID X072403.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date :36
ICAL Date(s) 14-JUL-2023 14-JUL-2023
ICAL Times :41 15:25
Quant Type ISTD

Compound	$\overline{RRF}$ / Conc	RF50 / Conc	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
30 Dibromofluoromethane	50.0	53.46245	0.48951	0.100	-6.92490	20.0	Linear	
35 1,2-Dichloroethane-d4	50.0	52.83887	0.60520	0.100	-5.67773	20.0	Linear	
48 Toluene-d8	1.28735	1.20858	1.20858	0.100	6.11859	20.0	Averaged	
Vinyl Chloride	0.64702	0.74019	0.74019	0.100	-14.39997	20.0	Averaged	
1,1-Dichloroethene	0.36630	0.39364	0.39364	0.100	-7.46153	20.0	Averaged	
Methylene Chloride	50.0	48.63168	0.42074	0.100	2.73665	20.0	Linear	
cis-1,2-Dichloroethene	0.53977	0.56794	0.56794	0.100	-5.21783	20.0	Averaged	
1,2-Dichloroethane	0.55040	0.54297	0.54297	0.100	1.35072	20.0	Averaged	
Trichloroethene	0.33829	0.32218	0.32218	0.200	4.76170	20.0	Averaged	
1,1,2-Trichloroethane	0.28552	0.28799	0.28799	0.100	-0.86492	20.0	Averaged	
trans-1,2-Dichloroethene	0.42371	0.38460	0.38460	0.100	9.22976	20.0	Averaged	

Continuing Calibration Verification (CCV)

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

Workorder HS23071113

RunID VOA6_442149

Volatiles by EPA 8260

Instrument ID VOA6.I
Lab File ID X072432.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date :30
ICAL Date(s) 14-JUL-2023 14-JUL-2023
ICAL Times :41 15:25
Quant Type ISTD

Compound	$\overline{RRF}$ / Conc	RF50 / Conc	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
30 Dibromofluoromethane	50.0	53.92149	0.49366	0.100	-7.84297	50.0	Linear	
35 1,2-Dichloroethane-d4	50.0	53.87164	0.61689	0.100	-7.74328	50.0	Linear	
48 Toluene-d8	1.28735	1.20400	1.20400	0.100	6.47432	50.0	Averaged	
Vinyl Chloride	0.64702	0.76140	0.76140	0.100	-17.67731	50.0	Averaged	
1,1-Dichloroethene	0.36630	0.35798	0.35798	0.100	2.27152	50.0	Averaged	
Methylene Chloride	50.0	58.25657	0.50167	0.100	-16.51314	50.0	Linear	
cis-1,2-Dichloroethene	0.53977	0.55782	0.55782	0.100	-3.34407	50.0	Averaged	
1,2-Dichloroethane	0.55040	0.54196	0.54196	0.100	1.53339	50.0	Averaged	
Trichloroethene	0.33829	0.33082	0.33082	0.200	2.20799	50.0	Averaged	
1,1,2-Trichloroethane	0.28552	0.28551	0.28551	0.100	0.00278	50.0	Averaged	
trans-1,2-Dichloroethene	0.42371	0.44904	0.44904	0.100	-5.97799	50.0	Averaged	

Continuing Calibration Verification (CCV)

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

Workorder HS23071113

RunID VOA6_442290

Volatiles by EPA 8260

Instrument ID VOA6.I
Lab File ID X072502.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date :28
ICAL Date(s) 14-JUL-2023 14-JUL-2023
ICAL Times :41 15:25
Quant Type ISTD

Compound	$\overline{RRF}$ / Conc	RF50 / Conc	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
1,4-Dioxane	0.00594	0.00595	0.00595	0.001	-0.20818	20.0	Averaged	
1,3-Butadiene	0.64248	0.74646	0.74646	0.100	-16.18386	20.0	Averaged	
Methacrylonitrile	0.64539	0.84690	0.84690	0.100	-31.22453	20.0	Averaged	*
Isobutyl Alcohol	0.09478	0.12106	0.12106	0.005	-27.73166	20.0	Averaged	*
Acetonitrile	0.07011	0.08475	0.08475	0.005	-20.87285	20.0	Averaged	*
Allyl Chloride	1.64159	2.05668	2.05668	0.100	-25.28603	20.0	Averaged	*
Propionitrile	0.09905	0.11698	0.11698	0.010	-18.10803	20.0	Averaged	
Dichlorodifluoromethane	50.0	43.04350	0.43873	0.100	13.91300	20.0	Linear	
Chloromethane	0.75520	0.67394	0.67394	0.100	10.76000	20.0	Averaged	
Vinyl Chloride	0.64702	0.66428	0.66428	0.100	-2.66781	20.0	Averaged	
Bromomethane	0.26775	0.21472	0.21472	0.100	19.80872	20.0	Averaged	
Chloroethane	0.36936	0.44002	0.44002	0.100	-19.12997	20.0	Averaged	
Trichlorofluoromethane	0.65570	0.68299	0.68299	0.100	-4.16157	20.0	Averaged	
Acrolein	100	156	0.02973	0.010	-56.36252	20.0	Linear	*
Acetone	100	128	0.25003	0.100	-27.67607	20.0	Linear	*
1,1-Dichloroethene	0.36630	0.37317	0.37317	0.100	-1.87291	20.0	Averaged	
Iodomethane	100	87.63567	0.41955	0.100	12.36433	20.0	Quadratic	
Acrylonitrile	0.24365	0.26870	0.26870	0.050	-10.28078	20.0	Averaged	
Methylene Chloride	50.0	50.60200	0.43731	0.100	-1.20400	20.0	Linear	
Methyl tert-butyl ether	1.36234	1.29349	1.29349	0.100	5.05367	20.0	Averaged	
Carbon Disulfide	1.15144	1.19836	1.19836	0.100	-4.07538	20.0	Averaged	
trans-1,2-Dichloroethene	0.42371	0.37088	0.37088	0.100	12.46967	20.0	Averaged	
Vinyl Acetate	1.75234	2.01326	2.01326	0.010	-14.88956	20.0	Averaged	
1,1-Dichloroethane	0.92980	0.87110	0.87110	0.200	6.31369	20.0	Averaged	
2-Butanone	0.26627	0.30527	0.30527	0.100	-14.64880	20.0	Averaged	
2,2-Dichloropropane	50.0	49.58021	0.71570	0.100	0.83958	20.0	Linear	
cis-1,2-Dichloroethene	0.53977	0.53914	0.53914	0.100	0.11655	20.0	Averaged	
Chloroform	0.95139	0.90224	0.90224	0.200	5.16593	20.0	Averaged	
Bromochloromethane	0.30250	0.28317	0.28317	0.100	6.38959	20.0	Averaged	
30 Dibromofluoromethane	50.0	52.80110	0.48354	0.100	-5.60219	20.0	Linear	
1,1,1-Trichloroethane	0.73237	0.71439	0.71439	0.100	2.45536	20.0	Averaged	
1,1-Dichloropropene	0.40784	0.37833	0.37833	0.100	7.23563	20.0	Averaged	
1,2-Dichloroethane	0.55040	0.55052	0.55052	0.100	-0.02229	20.0	Averaged	
Carbon Tetrachloride	0.41088	0.36726	0.36726	0.100	10.61508	20.0	Averaged	

Continuing Calibration Verification (CCV)

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

Workorder HS23071113

RunID VOA6_442290

Volatiles by EPA 8260

Instrument ID VOA6.I
Lab File ID X072502.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date :28
ICAL Date(s) 14-JUL-2023 14-JUL-2023
ICAL Times :41 15:25
Quant Type ISTD

Compound	$\overline{RRF}$ / Conc	RF50 / Conc	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
35 1,2-Dichloroethane-d4	50.0	54.22942	0.62094	0.100	-8.45884	20.0	Linear	
Benzene	1.19597	1.18872	1.18872	0.500	0.60643	20.0	Averaged	
Trichloroethene	0.33829	0.31658	0.31658	0.200	6.41624	20.0	Averaged	
Bromodichloromethane	0.45810	0.43519	0.43519	0.200	5.00094	20.0	Averaged	
2-Chloroethylvinyl ether	0.13987	0.13279	0.13279	0.001	5.06036	20.0	Averaged	
1,2-Dichloropropane	0.38457	0.41408	0.41408	0.100	-7.67431	20.0	Averaged	
Dibromomethane	0.21769	0.20678	0.20678	0.100	5.01298	20.0	Averaged	
4-Methyl-2-Pentanone	0.49202	0.56273	0.56273	0.100	-14.36950	20.0	Averaged	
cis-1,3-Dichloropropene	0.52616	0.50903	0.50903	0.200	3.25561	20.0	Averaged	
48 Toluene-d8	1.28735	1.19611	1.19611	0.100	7.08692	20.0	Averaged	
Toluene	1.34593	1.32106	1.32106	0.400	1.84790	20.0	Averaged	
trans-1,3-Dichloropropene	0.44354	0.42153	0.42153	0.100	4.96213	20.0	Averaged	
2-Hexanone	0.32321	0.37405	0.37405	0.100	-15.72892	20.0	Averaged	
1,1,2-Trichloroethane	0.28552	0.27429	0.27429	0.100	3.93109	20.0	Averaged	
1,3-Dichloropropane	0.58331	0.57160	0.57160	0.100	2.00743	20.0	Averaged	
Dibromochloromethane	0.41218	0.39342	0.39342	0.100	4.55255	20.0	Averaged	
Tetrachloroethene	0.27806	0.24643	0.24643	0.200	11.37776	20.0	Averaged	
1,2-Dibromoethane	0.32627	0.31304	0.31304	0.100	4.05511	20.0	Averaged	
1-Chlorohexane	0.40168	0.37587	0.37587	0.100	6.42756	20.0	Averaged	
Chlorobenzene	0.94084	0.89057	0.89057	0.500	5.34332	20.0	Averaged	
1,1,1,2-Tetrachloroethane	0.36833	0.34332	0.34332	0.100	6.79038	20.0	Averaged	
Ethylbenzene	0.47179	0.44215	0.44215	0.100	6.28253	20.0	Averaged	
m,p-Xylenes	0.59188	0.55281	0.55281	0.100	6.60110	20.0	Averaged	
o-Xylene	0.56049	0.53157	0.53157	0.300	5.16081	20.0	Averaged	
Styrene	0.97767	0.94792	0.94792	0.300	3.04274	20.0	Averaged	
Bromoform	0.26446	0.24709	0.24709	0.100	6.56598	20.0	Averaged	
Isopropylbenzene	1.44071	1.32024	1.32024	0.100	8.36204	20.0	Averaged	
1,1,2,2-Tetrachloroethane	0.83983	0.82262	0.82262	0.300	2.04873	20.0	Averaged	
1,2,3-Trichloropropane	0.66643	0.64449	0.64449	0.100	3.29226	20.0	Averaged	
n-Propylbenzene	3.02147	2.85563	2.85563	0.100	5.48869	20.0	Averaged	
Bromobenzene	0.78198	0.70976	0.70976	0.100	9.23595	20.0	Averaged	
1,3,5-Trimethylbenzene	2.26350	1.97127	1.97127	0.100	12.91027	20.0	Averaged	
2-Chlorotoluene	2.03821	1.81686	1.81686	0.100	10.86019	20.0	Averaged	
4-Chlorotoluene	2.23973	2.08769	2.08769	0.100	6.78861	20.0	Averaged	

Continuing Calibration Verification (CCV)

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

Workorder HS23071113

RunID VOA6_442290

Volatiles by EPA 8260

Instrument ID VOA6.I
Lab File ID X072502.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date :28
ICAL Date(s) 14-JUL-2023 14-JUL-2023
ICAL Times :41 15:25
Quant Type ISTD

Compound	$\overline{RRF}$ / Conc	RF50 / Conc	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
tert-Butylbenzene	1.94110	1.69661	1.69661	0.100	12.59546	20.0	Averaged	
1,2,4-Trimethylbenzene	2.26985	2.00626	2.00626	0.100	11.61238	20.0	Averaged	
sec-Butylbenzene	2.58735	2.39556	2.39556	0.100	7.41275	20.0	Averaged	
p-Isopropyltoluene	2.36350	2.10116	2.10116	0.100	11.09983	20.0	Averaged	
1,3-Dichlorobenzene	1.36227	1.21486	1.21486	0.600	10.82062	20.0	Averaged	
1,4-Dichlorobenzene	1.49361	1.29304	1.29304	0.400	13.42904	20.0	Averaged	
n-Butylbenzene	1.97948	1.87686	1.87686	0.500	5.18409	20.0	Averaged	
1,2-Dichlorobenzene	1.33929	1.21162	1.21162	0.400	9.53202	20.0	Averaged	
1,2-Dibromo-3-Chloropropane	50.0	43.16261	0.11875	0.040	13.67478	20.0	Linear	
1,2,4-Trichlorobenzene	0.91986	0.73979	0.73979	0.100	19.57610	20.0	Averaged	
Hexachlorobutadiene	50.0	41.14980	0.34513	0.100	17.70039	20.0	Linear	
Naphthalene	2.27672	1.94547	1.94547	0.200	14.54956	20.0	Averaged	
1,2,3-Trichlorobenzene	0.86027	0.69364	0.69364	0.010	19.36927	20.0	Averaged	
94 1,2-Dichloroethylene (total	0.48174	0.45501	0.45501	0.200	5.54909	20.0	Averaged	
95 Xylenes (total)	0.53613	0.49374	0.49374	0.100	7.90636	20.0	Averaged	
Cyclohexane	0.86668	0.92764	0.92764	0.100	-7.03350	20.0	Averaged	
Freon TF	50.0	55.79428	0.35085	0.100	-11.58857	20.0	Quadratic	
Methylcyclohexane	1.05536	1.14278	1.14278	0.100	-8.28320	20.0	Averaged	
Methyl Acetate	0.44499	0.56575	0.56575	0.100	-27.13837	20.0	Averaged	*
Tert-butyl alcohol	0.06311	0.06222	0.06222	0.005	1.41287	20.0	Averaged	
Isopropyl alcohol	0.03916	0.04776	0.04776	0.005	-21.96786	20.0	Averaged	*

Continuing Calibration Verification (CCV)

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

Workorder HS23071113

RunID VOA6_442290

Volatiles by EPA 8260

Instrument ID VOA6.I
Lab File ID X072530.D
Analysis Type WATER
Lab Sample ID CCV-END

Injection Date :02
ICAL Date(s) 14-JUL-2023 14-JUL-2023
ICAL Times :41 15:25
Quant Type ISTD

Compound	$\overline{RRF}$ / Conc	RF50 / Conc	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
1,4-Dioxane	0.00594	0.00607	0.00607	0.001	-2.18226	50.0	Averaged	
1,3-Butadiene	0.64248	0.82246	0.82246	0.100	-28.01265	50.0	Averaged	
Methacrylonitrile	0.64539	0.82365	0.82365	0.100	-27.62106	50.0	Averaged	
Isobutyl Alcohol	0.09478	0.11908	0.11908	0.005	-25.64462	50.0	Averaged	
Acetonitrile	0.07011	0.06060	0.06060	0.005	13.56833	50.0	Averaged	
Allyl Chloride	1.64159	1.45178	1.45178	0.100	11.56281	50.0	Averaged	
Propionitrile	0.09905	0.11706	0.11706	0.010	-18.18241	50.0	Averaged	
Dichlorodifluoromethane	50.0	47.81151	0.48859	0.100	4.37699	50.0	Linear	
Chloromethane	0.75520	0.79749	0.79749	0.100	-5.59967	50.0	Averaged	
Vinyl Chloride	0.64702	0.76857	0.76857	0.100	-18.78627	50.0	Averaged	
Bromomethane	0.26775	0.27486	0.27486	0.100	-2.65261	50.0	Averaged	
Chloroethane	0.36936	0.42795	0.42795	0.100	-15.86262	50.0	Averaged	
Trichlorofluoromethane	0.65570	0.75205	0.75205	0.100	-14.69333	50.0	Averaged	
Acrolein	100	121	0.02302	0.010	-21.34786	50.0	Linear	
Acetone	100	108	0.21232	0.100	-7.68385	50.0	Linear	
1,1-Dichloroethene	0.36630	0.33067	0.33067	0.100	9.72789	50.0	Averaged	
Iodomethane	100	77.00553	0.36523	0.100	22.99447	50.0	Quadratic	
Acrylonitrile	0.24365	0.22024	0.22024	0.050	9.60651	50.0	Averaged	
Methylene Chloride	50.0	39.63934	0.34514	0.100	20.72131	50.0	Linear	
Methyl tert-butyl ether	1.36234	1.06971	1.06971	0.100	21.47985	50.0	Averaged	
Carbon Disulfide	1.15144	0.89132	0.89132	0.100	22.59106	50.0	Averaged	
trans-1,2-Dichloroethene	0.42371	0.33450	0.33450	0.100	21.05447	50.0	Averaged	
Vinyl Acetate	1.75234	2.18471	2.18471	0.010	-24.67403	50.0	Averaged	
1,1-Dichloroethane	0.92980	0.99058	0.99058	0.200	-6.53669	50.0	Averaged	
2-Butanone	0.26627	0.30964	0.30964	0.100	-16.28673	50.0	Averaged	
2,2-Dichloropropane	50.0	49.47430	0.71416	0.100	1.05140	50.0	Linear	
cis-1,2-Dichloroethene	0.53977	0.56847	0.56847	0.100	-5.31675	50.0	Averaged	
Chloroform	0.95139	0.94966	0.94966	0.200	0.18111	50.0	Averaged	
Bromochloromethane	0.30250	0.29807	0.29807	0.100	1.46388	50.0	Averaged	
30 Dibromofluoromethane	50.0	54.17970	0.49599	0.100	-8.35940	50.0	Linear	
1,1,1-Trichloroethane	0.73237	0.80660	0.80660	0.100	-10.13462	50.0	Averaged	
1,1-Dichloropropene	0.40784	0.41336	0.41336	0.100	-1.35284	50.0	Averaged	
1,2-Dichloroethane	0.55040	0.57305	0.57305	0.100	-4.11505	50.0	Averaged	
Carbon Tetrachloride	0.41088	0.39574	0.39574	0.100	3.68425	50.0	Averaged	

Continuing Calibration Verification (CCV)

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

Workorder HS23071113

RunID VOA6_442290

Volatiles by EPA 8260

Instrument ID VOA6.I
Lab File ID X072530.D
Analysis Type WATER
Lab Sample ID CCV-END

Injection Date :02
ICAL Date(s) 14-JUL-2023 14-JUL-2023
ICAL Times :41 15:25
Quant Type ISTD

Compound	$\overline{RRF}$ / Conc	RF50 / Conc	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
35 1,2-Dichloroethane-d4	50.0	55.13708	0.63121	0.100	-10.27416	50.0	Linear	
Benzene	1.19597	1.20574	1.20574	0.500	-0.81706	50.0	Averaged	
Trichloroethene	0.33829	0.34656	0.34656	0.200	-2.44544	50.0	Averaged	
Bromodichloromethane	0.45810	0.43956	0.43956	0.200	4.04729	50.0	Averaged	
2-Chloroethylvinyl ether	0.13987	0.13385	0.13385	0.001	4.30391	50.0	Averaged	
1,2-Dichloropropane	0.38457	0.41481	0.41481	0.100	-7.86479	50.0	Averaged	
Dibromomethane	0.21769	0.20917	0.20917	0.100	3.91506	50.0	Averaged	
4-Methyl-2-Pentanone	0.49202	0.53314	0.53314	0.100	-8.35590	50.0	Averaged	
cis-1,3-Dichloropropene	0.52616	0.51296	0.51296	0.200	2.50836	50.0	Averaged	
48 Toluene-d8	1.28735	1.19209	1.19209	0.100	7.39933	50.0	Averaged	
Toluene	1.34593	1.37596	1.37596	0.400	-2.23130	50.0	Averaged	
trans-1,3-Dichloropropene	0.44354	0.42268	0.42268	0.100	4.70175	50.0	Averaged	
2-Hexanone	0.32321	0.36076	0.36076	0.100	-11.61699	50.0	Averaged	
1,1,2-Trichloroethane	0.28552	0.27323	0.27323	0.100	4.30176	50.0	Averaged	
1,3-Dichloropropane	0.58331	0.56479	0.56479	0.100	3.17350	50.0	Averaged	
Dibromochloromethane	0.41218	0.39691	0.39691	0.100	3.70556	50.0	Averaged	
Tetrachloroethene	0.27806	0.27920	0.27920	0.200	-0.41063	50.0	Averaged	
1,2-Dibromoethane	0.32627	0.30975	0.30975	0.100	5.06256	50.0	Averaged	
1-Chlorohexane	0.40168	0.42359	0.42359	0.100	-5.45343	50.0	Averaged	
Chlorobenzene	0.94084	0.93768	0.93768	0.500	0.33556	50.0	Averaged	
1,1,1,2-Tetrachloroethane	0.36833	0.35336	0.35336	0.100	4.06412	50.0	Averaged	
Ethylbenzene	0.47179	0.47017	0.47017	0.100	0.34432	50.0	Averaged	
m,p-Xylenes	0.59188	0.60368	0.60368	0.100	-1.99334	50.0	Averaged	
o-Xylene	0.56049	0.58012	0.58012	0.300	-3.50231	50.0	Averaged	
Styrene	0.97767	0.99495	0.99495	0.300	-1.76731	50.0	Averaged	
Bromoform	0.26446	0.24839	0.24839	0.100	6.07683	50.0	Averaged	
Isopropylbenzene	1.44071	1.48417	1.48417	0.100	-3.01655	50.0	Averaged	
1,1,2,2-Tetrachloroethane	0.83983	0.81901	0.81901	0.300	2.47873	50.0	Averaged	
1,2,3-Trichloropropane	0.66643	0.59667	0.59667	0.100	10.46810	50.0	Averaged	
n-Propylbenzene	3.02147	3.23400	3.23400	0.100	-7.03407	50.0	Averaged	
Bromobenzene	0.78198	0.77436	0.77436	0.100	0.97517	50.0	Averaged	
1,3,5-Trimethylbenzene	2.26350	2.28692	2.28692	0.100	-1.03488	50.0	Averaged	
2-Chlorotoluene	2.03821	2.04616	2.04616	0.100	-0.39004	50.0	Averaged	
4-Chlorotoluene	2.23973	2.33286	2.33286	0.100	-4.15777	50.0	Averaged	

Continuing Calibration Verification (CCV)

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

Workorder HS23071113

RunID VOA6_442290

Volatiles by EPA 8260

Instrument ID VOA6.I
Lab File ID X072530.D
Analysis Type WATER
Lab Sample ID CCV-END

Injection Date :02
ICAL Date(s) 14-JUL-2023 14-JUL-2023
ICAL Times :41 15:25
Quant Type ISTD

Compound	$\overline{RRF}$ / Conc	RF50 / Conc	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
tert-Butylbenzene	1.94110	2.02063	2.02063	0.100	-4.09707	50.0	Averaged	
1,2,4-Trimethylbenzene	2.26985	2.27888	2.27888	0.100	-0.39791	50.0	Averaged	
sec-Butylbenzene	2.58735	2.80048	2.80048	0.100	-8.23737	50.0	Averaged	
p-Isopropyltoluene	2.36350	2.39709	2.39709	0.100	-1.42112	50.0	Averaged	
1,3-Dichlorobenzene	1.36227	1.35473	1.35473	0.600	0.55300	50.0	Averaged	
1,4-Dichlorobenzene	1.49361	1.42468	1.42468	0.400	4.61547	50.0	Averaged	
n-Butylbenzene	1.97948	2.08561	2.08561	0.500	-5.36135	50.0	Averaged	
1,2-Dichlorobenzene	1.33929	1.35908	1.35908	0.400	-1.47804	50.0	Averaged	
1,2-Dibromo-3-Chloropropane	50.0	45.49540	0.12533	0.040	9.00921	50.0	Linear	
1,2,4-Trichlorobenzene	0.91986	0.79410	0.79410	0.100	13.67094	50.0	Averaged	
Hexachlorobutadiene	50.0	43.88737	0.36948	0.100	12.22525	50.0	Linear	
Naphthalene	2.27672	2.05057	2.05057	0.200	9.93322	50.0	Averaged	
1,2,3-Trichlorobenzene	0.86027	0.74472	0.74472	0.010	13.43190	50.0	Averaged	
94 1,2-Dichloroethylene (total	0.48174	0.45149	0.45149	0.200	6.28053	50.0	Averaged	
95 Xylenes (total)	0.53613	0.54688	0.54688	0.100	-2.00467	50.0	Averaged	
Cyclohexane	0.86668	1.08532	1.08532	0.100	-25.22746	50.0	Averaged	
Freon TF	50.0	53.21002	0.33168	0.100	-6.42004	50.0	Quadratic	
Methylcyclohexane	1.05536	1.02038	1.02038	0.100	3.31449	50.0	Averaged	
Methyl Acetate	0.44499	0.42445	0.42445	0.100	4.61541	50.0	Averaged	
Tert-butyl alcohol	0.06311	0.04987	0.04987	0.005	20.97428	50.0	Averaged	
Isopropyl alcohol	0.03916	0.03344	0.03344	0.005	14.59937	50.0	Averaged	

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Form 8

Internal Standard Area and RT Summary

Volatiles by EPA 8260

Workorder

HS23071113

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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

Form 8 - Internal Standard Area and RT Summary

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071113**

Volatiles by EPA 8260

VOA6_442002		Pentafluorobenzene				1,4-Difluorobenzene				Chlorobenzene				1,4-Dichlorobenze			
Sample ID	File ID	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
12-HOUR STD (CCV)	X072102.D	603321	#	4.18	#	1004251	#	4.97	#	930634	#	7.67	#	500527	#	9.66	#
HS23071113-01	X072129.D	602946		4.18		941231		4.97		838051		7.67		429062		9.66	
HS23071113-10	X072118.D	601318		4.18		943496		4.97		827514		7.67		419458		9.66	
VBLKW-230721	X072107.D	632804		4.18		969596		4.97		851711		7.67		411177		9.66	
VLCSW-230721	X072105.D	622769		4.18		989887		4.97		908700		7.67		482129		9.66	
MS-ZZZZZZMS	X072113.D	608243		4.18		921382		4.97		793372		7.67		432702		9.66	
ZZZZZZMSD	X072114.D	605716		4.18		973608		4.97		849774		7.67		446503		9.66	

AREA UPPER LIMIT = +100% of 12H STD IS Area
AREA LOWER LIMIT = - 50% of 12H STD IS Area
RT - Retention IS - Internal StandardTime

RT UPPER LIMIT = + 0.50 of 12H STD IS RT
RT LOWER LIMIT = - 0.50 of 12H STD IS RT
CCV - Continuing Calibration Verification

- Area or RT Limit Flag
* - Value Outside Area or RT limits
H - Hour STD - Standard

Form 8 - Internal Standard Area and RT Summary

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071113**

Volatiles by EPA 8260

VOA6_442149		Pentafluorobenzene				1,4-Difluorobenzene				Chlorobenzene				1,4-Dichlorobenze			
Sample ID	File ID	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
12-HOUR STD (CCV)	X072403.D	569251	#	4.17	#	922855	#	4.97	#	843367	#	7.67	#	457779	#	9.66	#
HS23071113-01	X072413.D	572761		4.18		878385		4.97		771242		7.67		394118		9.66	
HS23071113-02	X072408.D	600321		4.18		911128		4.97		804984		7.67		432750		9.66	
HS23071113-02MS	X072411.D	520372		4.18		816921		4.97		729742		7.67		440108		9.66	
HS23071113-02MSD	X072412.D	595747		4.18		922152		4.97		819904		7.67		447257		9.66	
HS23071113-03	X072414.D	593966		4.18		919630		4.97		815216		7.67		455242		9.66	
HS23071113-04	X072409.D	602660		4.18		918224		4.97		807633		7.67		441695		9.66	
HS23071113-05	X072423.D	553841		4.18		858699		4.97		748640		7.67		391961		9.66	
HS23071113-06	X072415.D	537190		4.18		896072		4.97		801261		7.67		413829		9.66	
HS23071113-07	X072416.D	557548		4.18		864834		4.97		759276		7.67		388381		9.66	
HS23071113-08	X072417.D	576866		4.18		896593		4.97		784206		7.67		407889		9.66	
HS23071113-09	X072418.D	592280		4.18		895620		4.97		797381		7.67		416265		9.66	
VBLKW-230724	X072407.D	590206		4.18		901388		4.97		800368		7.67		428640		9.66	
VLCSW-230724	X072410.D	576980		4.18		921440		4.97		863162		7.67		466768		9.66	

AREA UPPER LIMIT = +100% of 12H STD IS Area
AREA LOWER LIMIT = - 50% of 12H STD IS Area
RT - Retention IS - Internal StandardTime

RT UPPER LIMIT = + 0.50 of 12H STD IS RT
RT LOWER LIMIT = - 0.50 of 12H STD IS RT
CCV - Continuing Calibration Verification

- Area or RT Limit Flag
* - Value Outside Area or RT limits
H - Hour STD - Standard

Form 8 - Internal Standard Area and RT Summary

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071113**

Volatiles by EPA 8260

VOA6_442290		Pentafluorobenzene				1,4-Difluorobenzene				Chlorobenzene				1,4-Dichlorobenze			
Sample ID	File ID	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
12-HOUR STD (CCV)	X072502.D	575260	#	4.18	#	936985	#	4.97	#	847733	#	7.67	#	466038	#	9.66	#
HS23071113-04	X072515.D	567159		4.18		878122		4.97		765110		7.67		391309		9.66	
HS23071113-05	X072516.D	565449		4.18		872195		4.97		764529		7.67		395189		9.66	
VBLKW-230725	X072507.D	585803		4.18		919826		4.97		787286		7.67		400742		9.66	
VLCSW-230725	X072505.D	567256		4.18		942875		4.97		846696		7.67		455950		9.66	
MS-ZZZZZZMS	X072513.D	565124		4.18		894329		4.97		770201		7.67		403879		9.66	
ZZZZZZMSD	X072514.D	565484		4.18		894784		4.97		798127		7.67		431446		9.66	

AREA UPPER LIMIT = +100% of 12H STD IS Area
AREA LOWER LIMIT = - 50% of 12H STD IS Area
RT - Retention IS - Internal StandardTime

RT UPPER LIMIT = + 0.50 of 12H STD IS RT
RT LOWER LIMIT = - 0.50 of 12H STD IS RT
CCV - Continuing Calibration Verification

- Area or RT Limit Flag
* - Value Outside Area or RT limits
H - Hour STD - Standard

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Analysis Run Log

Volatiles by EPA 8260

Workorder

HS23071113

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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www.alsglobal.com

Form 13 - Analysis Run Log

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23071113

RunID
VOA6-441456

Volatiles by EPA 8260

Run ID VOA6_441456 **Start Date** 07/14/23 **EndDate** 07/14/23

Inj. Time	Client Sample ID	Type	Lab Sample ID	File ID	Analysis Date	DF
11:20	BFB	TUNE	BFB	X071401.D	07/14/23	1
12:01	VSTD000.25	ICAL1	VSTD000.25	X071402.D	07/14/23	1
12:22	VSTD000.5	ICAL2	VSTD000.5	X071403.D	07/14/23	1
13:02	VSTD001	ICAL3	VSTD001	X071404.D	07/14/23	1
13:23	VSTD002	ICAL4	VSTD002	X071405.D	07/14/23	1
13:43	VSTD005	ICAL5	VSTD005	X071406.D	07/14/23	1
14:04	VSTD020	ICAL6	VSTD020	X071407.D	07/14/23	1
14:24	VSTD050	ICAL7	VSTD050	X071408.D	07/14/23	1
14:44	VSTD100	ICAL8	VSTD100	X071409.D	07/14/23	1
15:05	VSTD150	ICAL9	VSTD150	X071410.D	07/14/23	1
15:25	VSTD200	ICAL	VSTD200	X071411.D	07/14/23	1
16:06	CCV	ICV	CCV	X071413.D	07/14/23	1

Form 13 - Analysis Run Log

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071113**

RunID VOA6-442002

Volatiles by EPA 8260

Run ID VOA6_442002 **Start Date** 07/21/23 **EndDate** 07/21/23

Inj. Time	Client Sample ID	Type	Lab Sample ID	File ID	Analysis Date	DF
12:16	BFB	TUNE	BFB	X072101.D	07/21/23	1
12:36	CCV	CCV	CCV	X072102.D	07/21/23	1
13:17	CCB	CCB	CCB	X072104.D	07/21/23	1
13:38	VLCSW-230721	LCS	VLCSW-230721	X072105.D	07/21/23	1
14:19	VBLKW-230721	MBLK	VBLKW-230721	X072107.D	07/21/23	1
14:39	HS23071109-03	SAMP	ZZZZZZZZZZ	X072108.D	07/21/23	1
15:00	HS23071109-02	SAMP	ZZZZZZZZZZ	X072109.D	07/21/23	1
15:20	HS23071109-01	SAMP	ZZZZZZZZZZ	X072110.D	07/21/23	1
15:41	HS23070993-01	SAMP	ZZZZZZZZZZ	X072111.D	07/21/23	1
16:01	HS23070993-02	SAMP	ZZZZZZZZZZ	X072112.D	07/21/23	1
16:22	HS23071109-01MS	MS	ZZZZZZMS	X072113.D	07/21/23	1
16:42	HS23071109-01MSD	MSD	ZZZZZZMSD	X072114.D	07/21/23	1
17:03	HS23070993-01	SAMP	ZZZZZZZZZZ	X072115.D	07/21/23	10
17:23	HS23070993-02	SAMP	ZZZZZZZZZZ	X072116.D	07/21/23	10
17:44	HS23070993-11	SAMP	ZZZZZZZZZZ	X072117.D	07/21/23	1
18:04	HS23071113-10	SAMP	Trip Blank-230714	X072118.D	07/21/23	1
18:25	HS23070993-04	SAMP	ZZZZZZZZZZ	X072119.D	07/21/23	1
18:45	HS23070993-07	SAMP	ZZZZZZZZZZ	X072120.D	07/21/23	1
19:06	HS23070993-06	SAMP	ZZZZZZZZZZ	X072121.D	07/21/23	1
19:26	HS23070993-03	SAMP	ZZZZZZZZZZ	X072122.D	07/21/23	20
19:47	HS23070993-08	SAMP	ZZZZZZZZZZ	X072123.D	07/21/23	25
20:07	HS23070993-10	SAMP	ZZZZZZZZZZ	X072124.D	07/21/23	50
20:28	HS23070993-05	SAMP	ZZZZZZZZZZ	X072125.D	07/21/23	5
20:48	HS23070993-05	SAMP	ZZZZZZZZZZ	X072126.D	07/21/23	50
21:09	HS23070993-09	SAMP	ZZZZZZZZZZ	X072127.D	07/21/23	250
21:29	HS23070993-09	SAMP	ZZZZZZZZZZ	X072128.D	07/21/23	2000
21:50	HS23071113-01	SAMP	16ww51-230714	X072129.D	07/21/23	5
22:10	CCV-END	CCV_END	CCV-END	X072130.D	07/21/23	1

Form 13 - Analysis Run Log

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071113**

RunID VOA6-442149

Volatiles by EPA 8260

Run ID VOA6_442149 **Start Date** 07/24/23 **EndDate** 07/24/23

Inj. Time	Client Sample ID	Type	Lab Sample ID	File ID	Analysis Date	DF
10:55	BFB	TUNE	BFB	X072401.D	07/24/23	1
11:36	CCV	CCV	CCV	X072403.D	07/24/23	1
11:56	CCB	CCB	CCB	X072404.D	07/24/23	1
12:58	VBLKW-230724	MBLK	VBLKW-230724	X072407.D	07/24/23	1
13:18	HS23071113-02	SAMP	16ww30-230714	X072408.D	07/24/23	1
13:39	HS23071113-04	SAMP	16ww13-230714	X072409.D	07/24/23	1
13:59	VLCSW-230724	LCS	VLCSW-230724	X072410.D	07/24/23	1
14:20	HS23071113-02MS	MS	HS23071113-02MS	X072411.D	07/24/23	1
14:40	HS23071113-02MSD	MSD	HS23071113-02MSD	X072412.D	07/24/23	1
15:01	HS23071113-01	SAMP	16ww51-230714	X072413.D	07/24/23	50
15:21	HS23071113-03	SAMP	16ww29-230714	X072414.D	07/24/23	1
15:42	HS23071113-06	SAMP	16ww23-230714	X072415.D	07/24/23	1
16:02	HS23071113-07	SAMP	16ww24-230714	X072416.D	07/24/23	1
16:23	HS23071113-08	SAMP	16ww27-230714	X072417.D	07/24/23	1
16:43	HS23071113-09	SAMP	16ww43-230714	X072418.D	07/24/23	1
17:04	HS23071165-02	SAMP	ZZZZZZZZZZ	X072419.D	07/24/23	1
17:24	HS23071165-05	SAMP	ZZZZZZZZZZ	X072420.D	07/24/23	1
17:45	HS23071165-07	SAMP	ZZZZZZZZZZ	X072421.D	07/24/23	1
18:05	HS23071165-08	SAMP	ZZZZZZZZZZ	X072422.D	07/24/23	1
18:26	HS23071113-05	SAMP	16ww42-230714	X072423.D	07/24/23	1
18:46	HS23071165-04	SAMP	ZZZZZZZZZZ	X072424.D	07/24/23	5
19:07	HS23071165-04	SAMP	ZZZZZZZZZZ	X072425.D	07/24/23	50
19:27	HS23071165-06	SAMP	ZZZZZZZZZZ	X072426.D	07/24/23	5
19:48	HS23071165-06	SAMP	ZZZZZZZZZZ	X072427.D	07/24/23	50
20:08	HS23071165-01	SAMP	ZZZZZZZZZZ	X072428.D	07/24/23	10
20:29	HS23071165-01	SAMP	ZZZZZZZZZZ	X072429.D	07/24/23	100
20:49	HS23071165-03	SAMP	ZZZZZZZZZZ	X072430.D	07/24/23	100
21:30	CCV	CCV_END	CCV	X072432.D	07/24/23	1

Form 13 - Analysis Run Log

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071113**

RunID VOA6-442290

Volatiles by EPA 8260

Run ID VOA6_442290 **Start Date** 07/25/23 **EndDate** 07/25/23

Inj. Time	Client Sample ID	Type	Lab Sample ID	File ID	Analysis Date	DF
10:08	BFB	TUNE	BFB	X072501.D	07/25/23	1
10:28	CCV	CCV	CCV	X072502.D	07/25/23	1
11:09	CCB	CCB	CCB	X072504.D	07/25/23	1
11:30	VLCSW-230725	LCS	VLCSW-230725	X072505.D	07/25/23	1
12:11	VBLKW-230725	MBLK	VBLKW-230725	X072507.D	07/25/23	1
12:31	HS23071293-01	SAMP	ZZZZZZZZZZ	X072508.D	07/25/23	1
12:52	HS23071293-02	SAMP	ZZZZZZZZZZ	X072509.D	07/25/23	1
13:12	HS23071293-03	SAMP	ZZZZZZZZZZ	X072510.D	07/25/23	1
13:33	HS23071289-11	SAMP	ZZZZZZZZZZ	X072511.D	07/25/23	1
14:14	HS23071289-11MS	MS	ZZZZZZMS	X072513.D	07/25/23	1
14:34	HS23071289-11MSD	MSD	ZZZZZZMSD	X072514.D	07/25/23	1
14:54	HS23071113-04	SAMP	16ww13-230714	X072515.D	07/25/23	25
15:15	HS23071113-05	SAMP	16ww42-230714	X072516.D	07/25/23	5
15:35	HS23071165-09	SAMP	ZZZZZZZZZZ	X072517.D	07/25/23	1
15:56	HS23071289-12	SAMP	ZZZZZZZZZZ	X072518.D	07/25/23	1
16:16	HS23071289-08	SAMP	ZZZZZZZZZZ	X072519.D	07/25/23	1
16:37	HS23071289-09	SAMP	ZZZZZZZZZZ	X072520.D	07/25/23	1
16:57	HS23071289-10	SAMP	ZZZZZZZZZZ	X072521.D	07/25/23	1
17:18	HS23071289-06	SAMP	ZZZZZZZZZZ	X072522.D	07/25/23	1
17:38	HS23071289-07	SAMP	ZZZZZZZZZZ	X072523.D	07/25/23	1
17:59	HS23071289-03	SAMP	ZZZZZZZZZZ	X072524.D	07/25/23	5
18:19	HS23071289-03	SAMP	ZZZZZZZZZZ	X072525.D	07/25/23	25
18:40	HS23071289-05	SAMP	ZZZZZZZZZZ	X072526.D	07/25/23	5
19:00	HS23071289-05	SAMP	ZZZZZZZZZZ	X072527.D	07/25/23	25
19:21	HS23071289-01	SAMP	ZZZZZZZZZZ	X072528.D	07/25/23	5
19:41	HS23071289-02	SAMP	ZZZZZZZZZZ	X072529.D	07/25/23	5
20:02	CCV-END	CCV_END	CCV-END	X072530.D	07/25/23	1

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Raw Data VOA6 441456

Volatiles by EPA 8260

Workorder

HS23071113

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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10450 Stancliff Road, Suite 210, Houston, TX 77099
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www.alsglobal.com

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071401.D Page 1
Report Date: 14-Jul-2023 12:16

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071401.D
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 14-JUL-2023 11:20
Operator : PC Inst ID: voa6.i
Smp Info : BFB;BFB;3;;BFB
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\bfb.m
Meth Date : 14-Mar-2023 15:45 Linh.Pham Quant Type: ISTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: NAHSTW7051

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

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

					CONCENTRATIONS ON-COL	CONCENTRATIONS FINAL		
RT	EXP RT	REL RT	MASS	RESPONSE	(ug/L)	(ug/l)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
8.687	8.889	(0.000)	95	75584			0.00- 100.00	100.00
8.687	8.889	(0.000)	50	19544			15.00- 40.00	25.86
8.687	8.889	(0.000)	75	39336			30.00- 60.00	52.04
8.687	8.889	(0.000)	96	4254			5.00- 9.00	5.63
8.687	8.889	(0.000)	173	575			0.00- 2.00	0.93
8.687	8.889	(0.000)	174	62120			50.00- 0.00	82.19
8.687	8.889	(0.000)	175	4074			5.00- 9.00	6.56
8.687	8.889	(0.000)	176	59920			95.00- 101.00	96.46
8.687	8.889	(0.000)	177	3382			5.00- 9.00	5.64

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	25.86
75	30.00 - 60.00% of mass 95	52.04
96	5.00 - 9.00% of mass 95	5.63
173	Less than 2.00% of mass 174	0.76 (0.93)
174	Greater than 50.00% of mass 95	82.19
175	5.00 - 9.00% of mass 174	5.39 (6.56)
176	95.00 - 101.00% of mass 174	79.28 (96.46)
177	5.00 - 9.00% of mass 176	4.47 (5.64)

Data File: X071401.D
Spectrum: Scan 2159 (8.68)
Location of Maximum: 95.10
Number of points: 86

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1001	59.90	684	88.00	3732	134.80	342
37.00	4000	61.00	4199	91.20	205	137.00	155
38.10	3490	62.10	4176	92.00	2613	140.00	79
39.20	1334	63.00	2135	93.00	3158	140.80	1031
39.90	3559	64.10	319	94.00	8834	142.20	140
40.70	64	67.00	413	95.10	75584	142.90	753
42.00	125	68.10	6971	96.00	4254	145.70	149
43.00	148	69.10	7538	97.30	71	147.80	317
44.10	2032	70.10	1203	104.00	361	148.70	68
45.10	1709	72.20	463	105.00	140	155.00	115
46.10	218	73.20	3048	105.90	261	156.90	305
47.00	2031	74.00	11989	107.00	78	158.60	77
47.80	299	75.00	39336	114.80	122	167.70	60
48.30	315	76.10	3185	115.70	131	169.70	59
49.00	4410	76.90	966	116.70	450	172.20	197
50.00	19544	78.10	384	118.00	134	173.00	575
51.00	6014	78.90	2349	118.90	176	174.00	62120
52.20	624	79.90	148	127.80	434	175.00	4074
55.10	243	80.80	1499	128.50	116	176.00	59920
55.90	1173	82.00	347	129.50	194	177.00	3382
57.00	2234	85.90	194	129.90	123		
57.80	62	87.00	3285	131.00	91		

Data File: \\nahstws005\target\chem\voa6.i\x230714.b\x071401.d Page 1

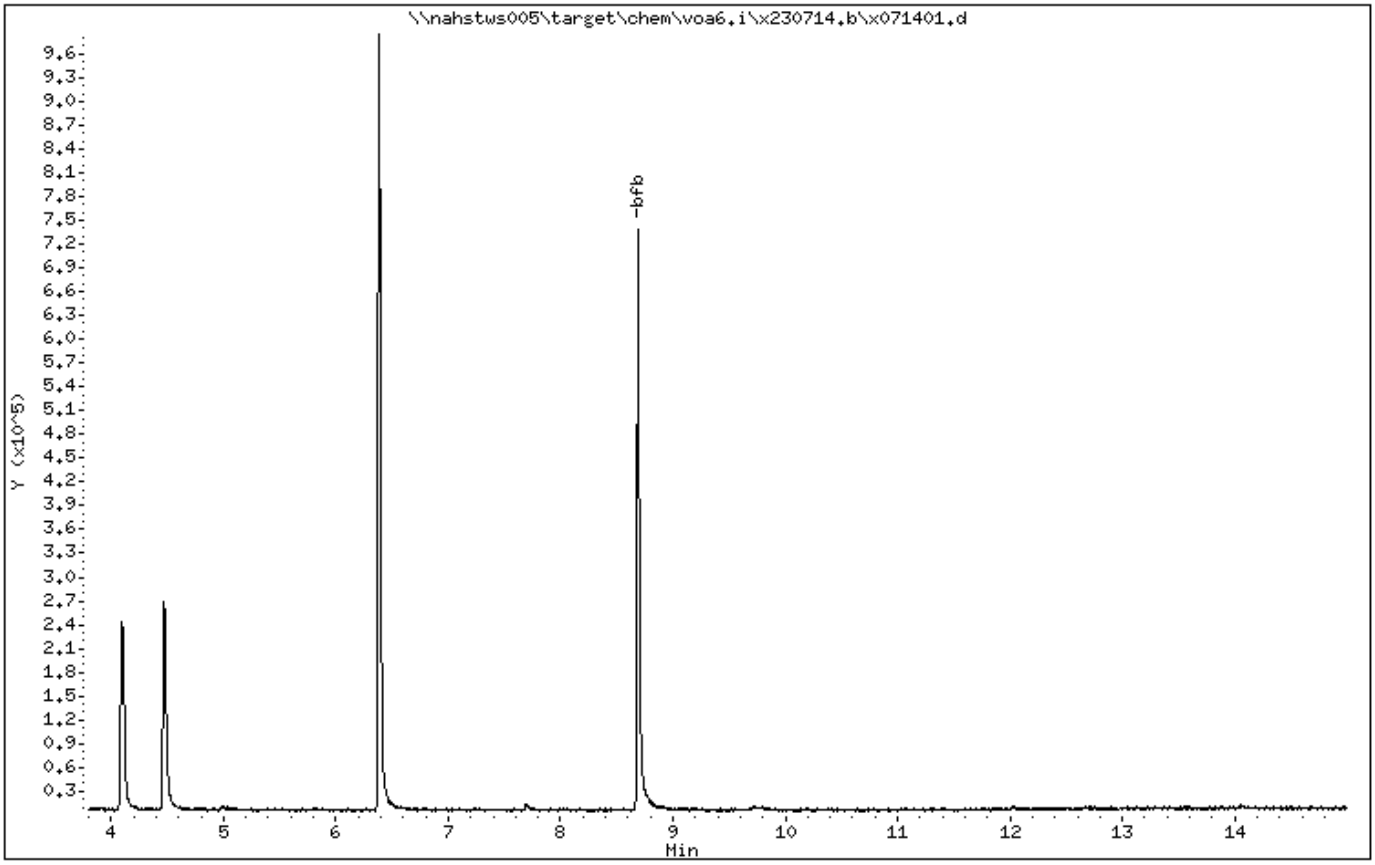
Date : 14-JUL-2023 11:20

Client ID: BFB Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0 Operator: PC

Column phase: DB624 Column diameter: 0.25



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Inj Date : 14-JUL-2023 11:20
InstruID : voa6.i
LabSampID : BFB

NO MANUAL INTEGRATIONS

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071402.D
Lab Smp Id: VSTD000.25 Client Smp ID: VSTD000.25
Inj Date : 14-JUL-2023 12:01
Operator : PC Inst ID: voa6.i
Smp Info : VSTD000.25;VSTD000.25;1;1;
Misc Info : V6;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\8260W.m
Meth Date : 20-Jul-2023 15:04 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 3 Calibration Sample, Level: 1
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	4.177	4.177	(1.000)	513772	50.0000	
	2 Dichlorodifluoromethane	85	0.972	0.972	(0.233)	1327	0.25000	1.34
	6 Bromomethane	94	1.344	1.344	(0.322)	1426	0.25000	0.51
	7 Chloroethane	64	1.404	1.404	(0.336)	2235	0.25000	0.58
	13 Acetonitrile	39	2.206	2.206	(0.528)	1743	2.50000	2.41(a)
	15 Iodomethane	142	2.026	2.026	(0.485)	1361	0.50000	4.07(T)
	34 Carbon Tetrachloride	117	4.177	4.177	(0.841)	45277	0.25000	6.79
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	810653	50.0000	
	43 2-Nitropropane	43	5.992	5.992	(1.434)	882	0.25000	0.43(a)
	44 Dibromomethane	93	5.557	5.557	(1.119)	982	0.25000	0.27(a)
	46 cis-1,3-Dichloropropene	75	6.164	6.164	(1.242)	2135	0.25000	0.25(a)
*	47 Chlorobenzene-d5	117	7.667	7.667	(1.000)	750028	50.0000	
$	48 Toluene-d8	98	6.400	6.400	(0.835)	9790	0.25000	0.50(aM)
	49 Ethyl Methacrylate	69	6.738	6.738	(1.357)	1122	0.25000	0.21(a)
	50 Toluene	91	6.457	6.457	(0.842)	5493	0.25000	0.27(a)
	53 1,1,2-Trichloroethane	83	6.847	6.847	(0.893)	800	0.25000	0.18(a)
	54 1,3-Dichloropropane	76	6.993	6.993	(0.912)	2465	0.25000	0.28(a)
	55 Dibromochloromethane	129	7.180	7.180	(0.936)	1520	0.25000	0.24(a)
	56 Tetrachloroethene	164	6.940	6.940	(0.905)	1306	0.25000	0.31(a)
	57 1,2-Dibromoethane	107	7.285	7.285	(0.950)	1533	0.25000	0.31(a)

58 1-Chlorohexane	55	7.667	7.667 (1.544)	8221	0.25000	1.26(a)
59 Chlorobenzene	112	7.694	7.694 (1.003)	4381	0.25000	0.31(a)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
60	1,1,1,2-Tetrachloroethane	131	7.780	7.780	(1.015)	1432	0.25000	0.25(a)
61	Ethylbenzene	106	7.810	7.810	(1.019)	1916	0.25000	0.27(a)
62	m,p-Xylenes	106	7.915	7.915	(1.032)	4768	0.50000	0.53(a)
63	o-Xylene	106	8.252	8.252	(1.076)	2524	0.25000	0.30(a)
64	Styrene	104	8.316	8.316	(1.085)	2747	0.25000	0.18(a)
67	Isopropylbenzene	105	8.567	8.567	(1.117)	5899	0.25000	0.27(a)
$ 69	4-Bromofluorobenzene	95	8.710	8.710	(1.136)	5758	0.25000	0.34(a)
* 70	1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	386421	50.0000	
71	1,2,3-Trichloropropane	75	8.871	8.871	(0.918)	2014	0.25000	0.39(a)
73	n-Propylbenzene	91	8.927	8.927	(0.924)	5784	0.25000	0.24(a)
74	Bromobenzene	156	8.818	8.818	(0.913)	1741	0.25000	0.28(a)
75	1,3,5-Trimethylbenzene	105	9.081	9.081	(0.940)	5918	0.25000	0.33(a)
76	2-Chlorotoluene	91	8.991	8.991	(0.931)	3339	0.25000	0.21(a)
77	4-Chlorotoluene	91	9.114	9.114	(0.943)	4046	0.25000	0.23(a)
78	tert-Butylbenzene	119	9.339	9.339	(0.967)	4275	0.25000	0.28(a)
79	1,2,4-Trimethylbenzene	105	9.392	9.392	(0.972)	5781	0.25000	0.32(a)
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	5830	0.25000	0.29(a)
82	p-Isopropyltoluene	119	9.654	9.654	(0.999)	5470	0.25000	0.29(a)
83	1,3-Dichlorobenzene	146	9.624	9.624	(0.996)	3790	0.25000	0.35(a)
84	1,4-Dichlorobenzene	146	9.684	9.684	(1.002)	4376	0.25000	0.37(a)
88	1,2-Dichlorobenzene	146	10.018	10.018	(1.037)	2842	0.25000	0.27(a)
93	1,2,3-Trichlorobenzene	180	11.780	11.780	(1.219)	1828	0.25000	0.27(a)
141	Cyclohexane	56	4.174	4.174	(0.999)	9736	0.25000	1.09(a)
135	1,4-Dioxane	88	5.621	5.621	(1.345)	272	5.00000	4.45(aM)
136	n-Hexane	57	2.772	2.772	(0.664)	1827	0.25000	(a)
139	Diethyl ether	59	1.760	1.760	(0.421)	1325	0.25000	0.27(a)
149	Isopropyl alcohol	45	2.097	2.097	(0.502)	2990	5.00000	7.43(T)
166	1,2,3-Trimethylbenzene	105	9.737	9.737	(1.008)	3283	0.25000	0.18(a)
174	tert-Amyl methyl ether	73	4.665	4.665	(1.117)	5098	0.25000	0.30(Ta)
175	tert-Butyl ethyl ether	59	3.379	3.379	(0.809)	5067	0.25000	0.23(a)
176	tert-Amyl alcohol	59	4.646	4.646	(1.112)	1684	5.00000	3.00(a)
151	4-Methyl-2-pentanol	45	6.734	6.734	(1.356)	10871	5.00000	6.25
180	1-Methylnaphthalene	142	12.672	12.672	(1.312)	2289	0.25000	(a)
140	1,3-Butadiene	54	1.171	1.171	(0.280)	1955	0.25000	0.29(a)
M 94	1,2-Dichloroethylene (total)	96				3006	0.50000	(a)
134	Cyclohexanone	55	8.653	8.653	(0.896)	2370	5.00000	6.88(a)
150	Allyl alcohol	57	2.772	2.772	(0.664)	1827	5.00000	(a)
200	Dimethyl Disulfide	94	6.202	6.202	(0.809)	2328	0.25000	0.23(a)

QC Flag Legend

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

01322574

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071402.D

Date : 14-JUL-2023 12:01

Client ID: VSTD000.25

Instrument: voa6.i

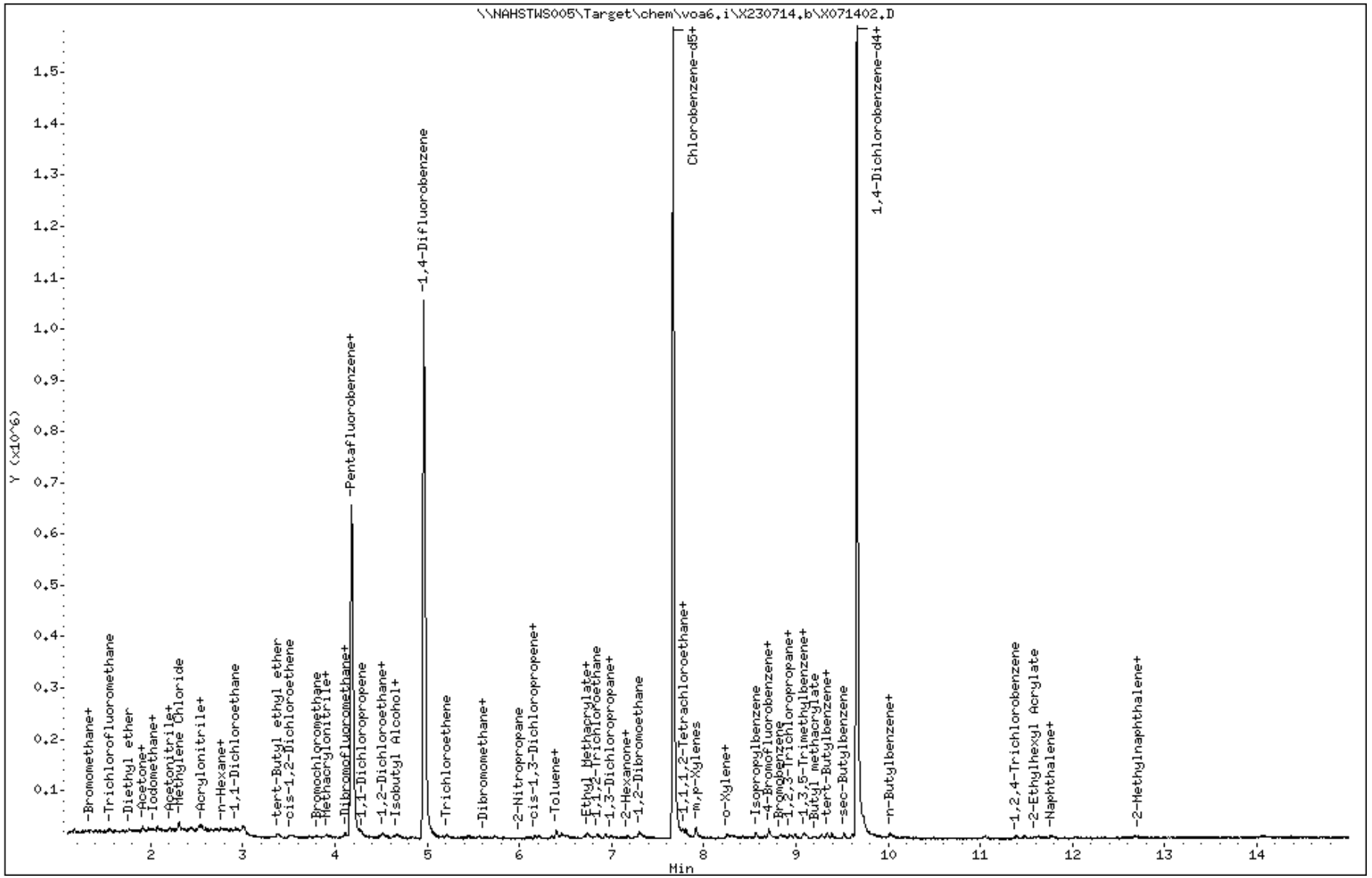
Sample Info: VSTD000.25;VSTD000.25;1;1;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



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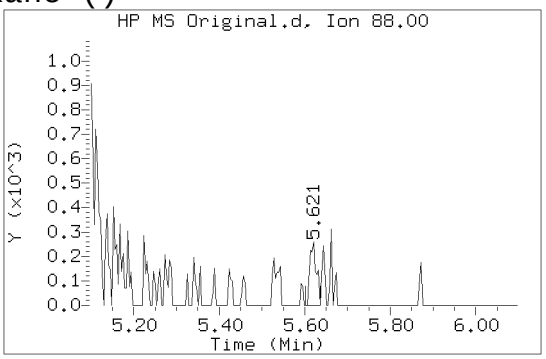
Inj Date : 14-JUL-2023 12:01
InstruID : voa6.i
LabSampID : VSTD000.25

1,4-Dioxane ()

Reason Code:

BEFORE
MASS
88
AREA
272
HEIGHT
259
20-Jul-2023
15:04
linh
pham



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AREA
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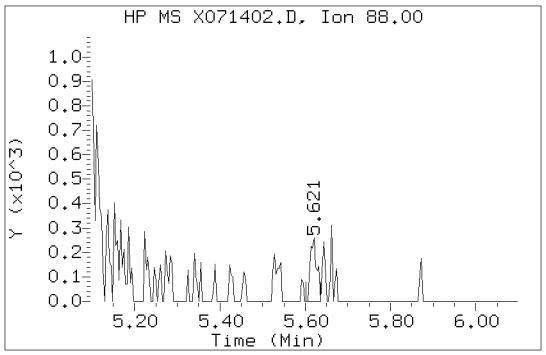

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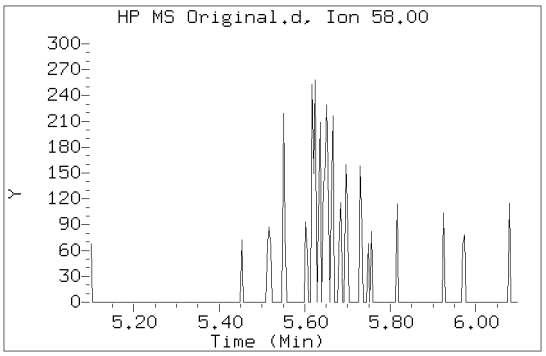

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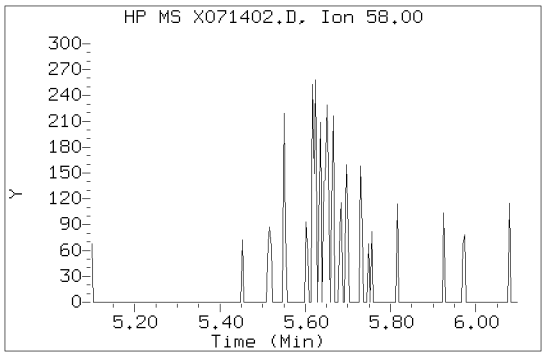

Toluene-d8 (2037-26-5)

Reason Code:

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AREA
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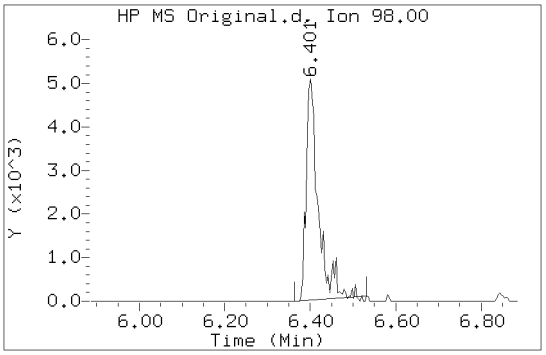

AFTER
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20-Jul-2023
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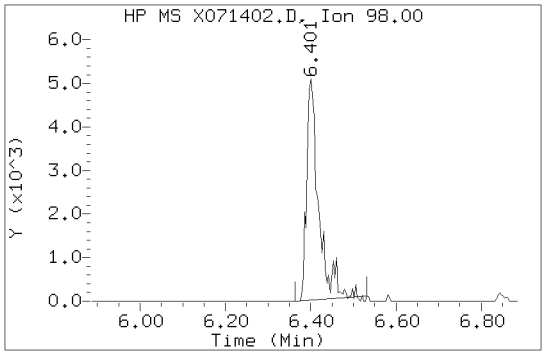

BEFORE
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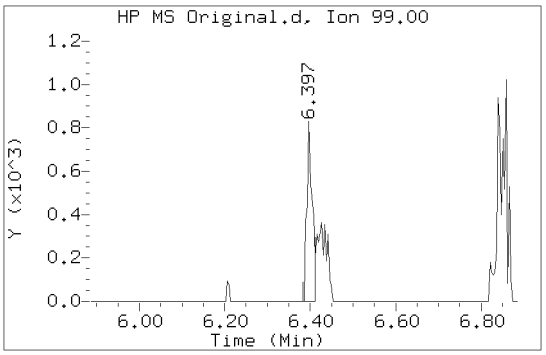

AFTER
MASS
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20-Jul-2023
15:04
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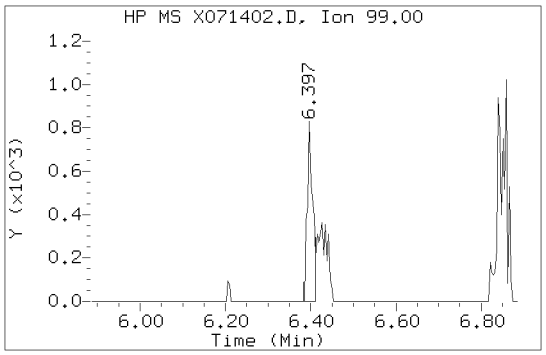

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Inj Date : 14-JUL-2023 12:01
InstruID : voa6.i
LabSampID : VSTD000.25

Toluene-d8 (2037-26-5)

Reason Code:

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20-Jul-2023
15:04
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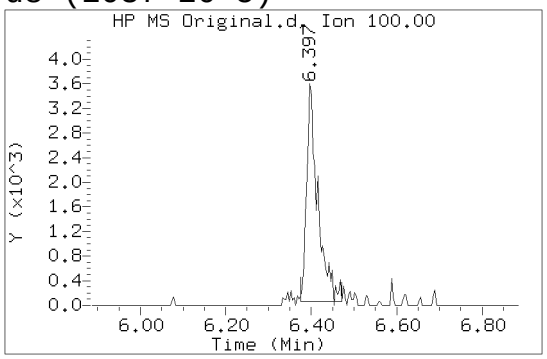
pham



AFTER

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HEIGHT
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20-Jul-2023
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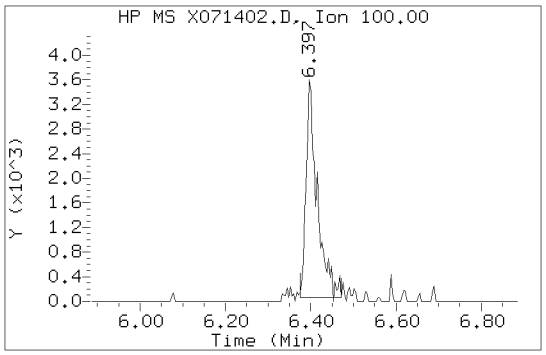


Data File: \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D Page 1
Report Date: 20-Jul-2023 15:04

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Lab Smp Id: VSTD000.5 Client Smp ID: VSTD000.5
Inj Date : 14-JUL-2023 12:22
Operator : PC Inst ID: voa6.i
Smp Info : VSTD000.5;VSTD000.5;1;2;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\8260W.m
Meth Date : 20-Jul-2023 15:04 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 12:01 Cal File: X071402.D
Als bottle: 3 Calibration Sample, Level: 2
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	4.181	4.181	(1.000)	503444	50.0000	
	2 Dichlorodifluoromethane	85	0.976	0.976	(0.234)	1663	0.50000	1.41
	3 Chloromethane	50	1.081	1.081	(0.259)	4229	0.50000	0.55
	4 Propionitrile	54	3.701	3.701	(0.885)	5231	5.00000	5.24(aM)
	5 Vinyl Chloride	62	1.145	1.145	(0.274)	3484	0.50000	0.53
	6 Bromomethane	94	1.340	1.340	(0.321)	1399	0.50000	0.51(M)
	7 Chloroethane	64	1.407	1.407	(0.337)	2168	0.50000	0.58(M)
	9 Acrolein	56	1.868	1.868	(0.447)	268	1.00000	2.51(aM)
	12 Isobutyl Alcohol	43	4.695	4.695	(1.123)	9983	10.0000	10.46(a)
	13 Acetonitrile	39	2.213	2.213	(0.529)	3606	5.00000	5.10(aM)
	14 Allyl Chloride	41	2.202	2.202	(0.527)	9843	0.50000	0.59(a)
	15 Iodomethane	142	2.026	2.026	(0.485)	2897	1.00000	4.39(TM)
	16 Acrylonitrile	53	2.539	2.539	(0.607)	3055	1.00000	1.24(M)
	18 Methyl tert-butyl ether	73	2.539	2.539	(0.607)	7187	0.50000	0.52(M)
	19 Carbon Disulfide	76	2.078	2.078	(0.497)	12054	1.00000	1.03
	20 trans-1,2-Dichloroethene	96	2.543	2.543	(0.608)	2557	0.50000	0.59
	21 Vinyl Acetate	43	3.019	3.019	(0.722)	18224	1.00000	1.03(M)
	22 1,1-Dichloroethane	63	2.929	2.929	(0.701)	5250	0.50000	0.56(TM)
	23 Chloroprene	53	1.786	1.786	(0.427)	1292	0.50000	0.57(aM)
	24 2-Butanone	43	3.675	3.675	(0.879)	2827	1.00000	1.05(M)

25 Methacrylonitrile	41	3.893	3.893 (0.931)	3622	0.50000	0.55(aM)
26 2,2-Dichloropropane	77	3.506	3.506 (0.839)	3703	0.50000	0.71(M)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
27	cis-1,2-Dichloroethene	96	3.540	3.540	(0.847)	2924	0.50000	0.53(M)
28	Chloroform	83	3.911	3.911	(0.935)	5643	0.50000	0.58(M)
29	Bromochloromethane	128	3.810	3.810	(0.911)	1717	0.50000	0.56(M)
31	1,1,1-Trichloroethane	97	4.080	4.080	(0.976)	3867	0.50000	0.52
32	1,1-Dichloropropene	75	4.286	4.286	(0.863)	3744	0.50000	0.57(M)
33	1,2-Dichloroethane	62	4.564	4.564	(0.919)	5246	0.50000	0.59(M)
34	Carbon Tetrachloride	117	4.256	4.256	(0.857)	3613	0.50000	0.54(M)
* 36	1,4-Difluorobenzene	114	4.965	4.965	(1.000)	802287	50.0000	
37	Benzene	78	4.526	4.526	(0.912)	10488	0.50000	0.54
38	Trichloroethene	130	5.216	5.216	(1.051)	2909	0.50000	0.53(a)
39	Bromodichloromethane	83	5.737	5.737	(1.156)	4539	0.50000	0.61(aM)
40	Methyl Methacrylate	41	5.636	5.636	(1.348)	3261	0.50000	0.53(aM)
41	2-Chloroethylvinyl ether	63	6.082	6.082	(1.225)	2206	1.00000	0.98(aM)
42	1,2-Dichloropropane	63	5.448	5.448	(1.097)	3473	0.50000	0.56(aM)
43	2-Nitropropane	43	5.984	5.984	(1.431)	1174	0.50000	0.58(aM)
44	Dibromomethane	93	5.568	5.568	(1.122)	1988	0.50000	0.56(a)
45	4-Methyl-2-Pentanone	43	6.348	6.348	(0.828)	8626	1.00000	1.19(a)
46	cis-1,3-Dichloropropene	75	6.168	6.168	(1.242)	4937	0.50000	0.58(a)
* 47	Chlorobenzene-d5	117	7.667	7.667	(1.000)	735322	50.0000	
$ 48	Toluene-d8	98	6.400	6.400	(0.835)	10379	0.50000	0.54(aM)
49	Ethyl Methacrylate	69	6.727	6.727	(1.355)	2780	0.50000	0.52(aM)
50	Toluene	91	6.453	6.453	(0.842)	10040	0.50000	0.50(a)
51	trans-1,3-Dichloropropene	75	6.700	6.700	(1.350)	3980	0.50000	0.55(a)
52	2-Hexanone	43	7.113	7.113	(0.928)	4470	1.00000	0.94(aM)
53	1,1,2-Trichloroethane	83	6.843	6.843	(0.892)	2223	0.50000	0.52(aM)
54	1,3-Dichloropropane	76	6.993	6.993	(0.912)	5041	0.50000	0.58(a)
55	Dibromochloromethane	129	7.184	7.184	(0.937)	3132	0.50000	0.51(aM)
56	Tetrachloroethene	164	6.933	6.933	(0.904)	1790	0.50000	0.43(a)
57	1,2-Dibromoethane	107	7.270	7.270	(0.948)	2613	0.50000	0.54(a)
58	1-Chlorohexane	55	7.701	7.701	(1.551)	3459	0.50000	0.53(aM)
59	Chlorobenzene	112	7.694	7.694	(1.003)	7907	0.50000	0.57(aM)
60	1,1,1,2-Tetrachloroethane	131	7.776	7.776	(1.014)	3008	0.50000	0.55(aM)
61	Ethylbenzene	106	7.802	7.802	(1.018)	3909	0.50000	0.56(aM)
62	m,p-Xylenes	106	7.907	7.907	(1.031)	8550	1.00000	0.98(a)
63	o-Xylene	106	8.256	8.256	(1.077)	4414	0.50000	0.53(aM)
64	Styrene	104	8.290	8.290	(1.081)	8133	0.50000	0.56(aM)
66	Bromoform	173	8.417	8.417	(1.098)	1973	0.50000	0.50(Ta)
67	Isopropylbenzene	105	8.563	8.563	(1.117)	10697	0.50000	0.50(a)
68	1,1,2,2-Tetrachloroethane	83	8.848	8.848	(0.916)	3654	0.50000	0.56(aM)
$ 69	4-Bromofluorobenzene	95	8.702	8.702	(1.135)	7819	0.50000	0.64(aM)
* 70	1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	386891	50.0000	
71	1,2,3-Trichloropropane	75	8.871	8.871	(0.918)	2737	0.50000	0.53(aM)
72	trans-1,4-Dichloro-2-butene	53	8.927	8.927	(1.164)	1124	0.50000	0.50(aM)
73	n-Propylbenzene	91	8.927	8.927	(0.924)	11407	0.50000	0.48(a)
74	Bromobenzene	156	8.818	8.818	(0.913)	3201	0.50000	0.52(aM)
75	1,3,5-Trimethylbenzene	105	9.077	9.077	(0.939)	9580	0.50000	0.54(a)
76	2-Chlorotoluene	91	8.983	8.983	(0.930)	8487	0.50000	0.53(aM)
77	4-Chlorotoluene	91	9.088	9.088	(0.941)	8710	0.50000	0.50(a)
78	tert-Butylbenzene	119	9.339	9.339	(0.967)	8109	0.50000	0.53(a)
79	1,2,4-Trimethylbenzene	105	9.392	9.392	(0.972)	10172	0.50000	0.57(aM)
81	sec-Butylbenzene	105	9.523	9.523	(0.986)	9247	0.50000	0.46(aM)
82	p-Isopropyltoluene	119	9.651	9.651	(0.999)	9771	0.50000	0.53(aM)

83 1,3-Dichlorobenzene	146	9.609	9.609 (0.995)	5980	0.50000	0.56(a)
84 1,4-Dichlorobenzene	146	9.681	9.681 (1.002)	6395	0.50000	0.55(a)

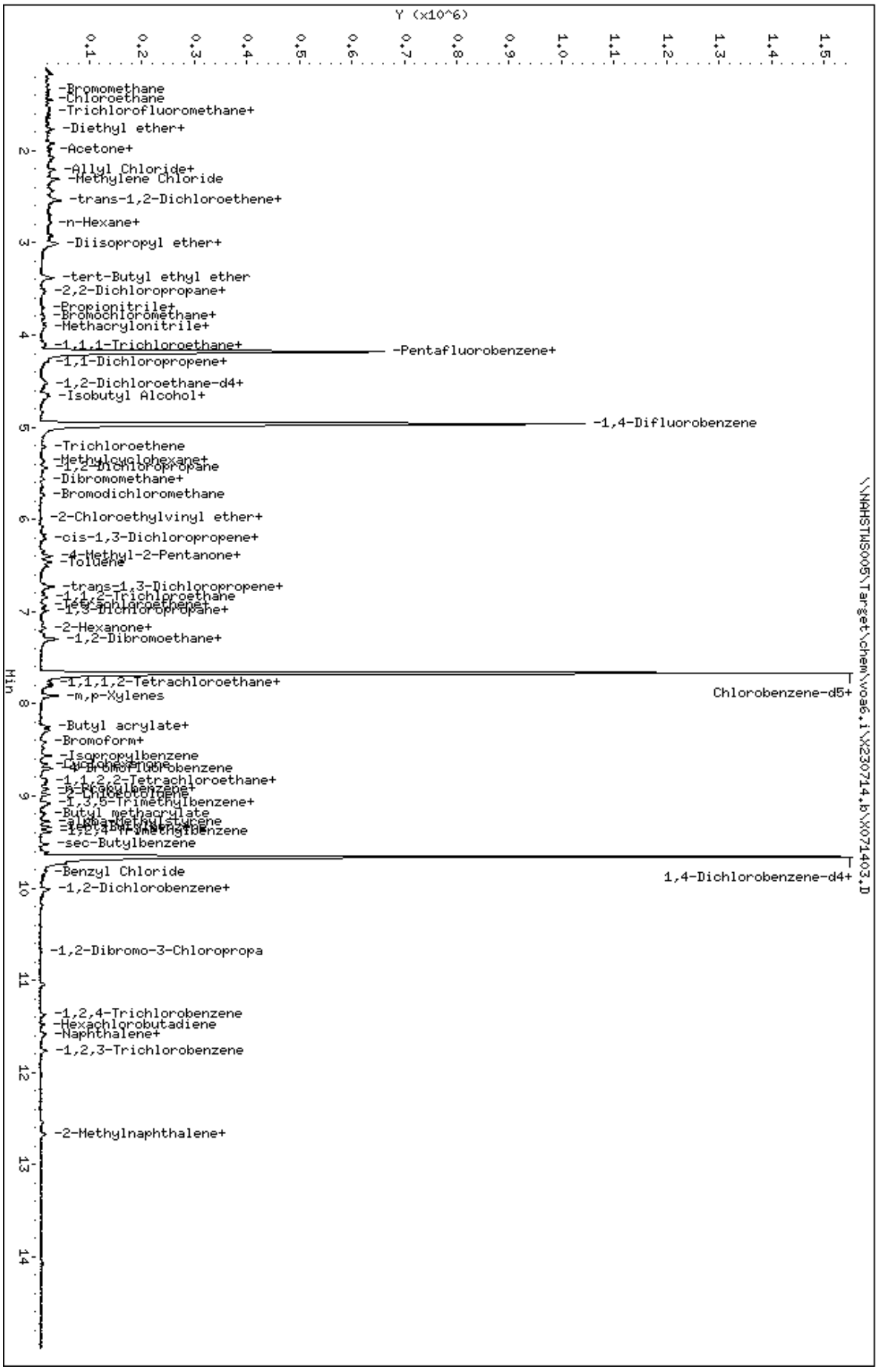
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
86	Benzyl Chloride	91	9.827	9.827	(1.282)	6245	0.50000	2.82(aM)
87	n-Butylbenzene	91	10.014	10.014	(1.036)	7141	0.50000	0.46(aM)
88	1,2-Dichlorobenzene	146	10.010	10.010	(1.036)	5252	0.50000	0.50(a)
89	1,2-Dibromo-3-Chloropropane	155	10.681	10.681	(1.106)	675	0.50000	1.70(aM)
90	1,2,4-Trichlorobenzene	180	11.371	11.371	(1.177)	4099	0.50000	0.57(aM)
91	Hexachlorobutadiene	225	11.484	11.484	(1.189)	1357	0.50000	2.74(aM)
92	Naphthalene	128	11.574	11.574	(1.198)	10357	0.50000	0.58(aM)
93	1,2,3-Trichlorobenzene	180	11.761	11.761	(1.217)	3845	0.50000	0.57(aM)
146	Methyl acetate	43	2.232	2.232	(0.534)	2344	0.50000	0.52(aM)
141	Cyclohexane	56	4.163	4.163	(0.996)	4321	0.50000	0.49(aM)
142	Tetrahydrofuran	42	3.870	3.870	(0.926)	1418	1.00000	1.09(aM)
147	Methylcyclohexane	55	5.366	5.366	(1.081)	9168	0.50000	0.54(aM)
135	1,4-Dioxane	88	5.624	5.624	(1.345)	692	10.0000	11.56(aM)
132	n-Butanol	56	5.355	5.355	(1.281)	1626	10.0000	9.70(aM)
131	Methyl Acrylate	55	3.750	3.750	(0.897)	3365	0.50000	0.49(aM)
133	Ethyl Acrylate	55	5.366	5.366	(1.283)	8232	0.50000	0.49(aM)
136	n-Hexane	57	2.787	2.787	(0.667)	2320	0.50000	(aM)
139	Diethyl ether	59	1.767	1.767	(0.423)	2605	0.50000	0.55(a)
148	Tert-butyl alcohol	59	2.442	2.442	(0.584)	7856	10.0000	12.36(M)
149	Isopropyl alcohol	45	2.105	2.105	(0.503)	4548	10.0000	11.53(T)
156	Diisopropyl ether	45	3.008	3.008	(0.719)	10814	0.50000	0.52(Ta)
166	1,2,3-Trimethylbenzene	105	9.737	9.737	(1.008)	9020	0.50000	0.50(a)
167	Ethanol	45	1.696	1.696	(0.406)	1082	10.0000	(aM)
172	tert-Butyl formate	59	4.646	4.646	(1.111)	6083	1.00000	1.13(aM)
173	3,3-Dimethyl-1-butanol	57	7.296	7.296	(0.952)	10397	10.0000	13.14(M)
174	tert-Amyl methyl ether	73	4.669	4.669	(1.117)	9377	0.50000	0.56(TaM)
175	tert-Butyl ethyl ether	59	3.390	3.390	(0.811)	12508	0.50000	0.58(a)
176	tert-Amyl alcohol	59	4.646	4.646	(1.111)	6083	10.0000	11.06(M)
151	4-Methyl-2-pentanol	45	6.723	6.723	(1.354)	20217	10.0000	11.75(M)
180	1-Methylnaphthalene	142	12.672	12.672	(1.312)	3667	0.50000	(a)
140	1,3-Butadiene	54	1.167	1.167	(0.279)	3203	0.50000	0.49(a)
152	Amyl alcohol	42	6.970	6.970	(0.909)	2120	10.0000	10.02(M)
158	Dichlorofluoromethane	67	1.538	1.538	(0.368)	4296	0.50000	0.52(M)
159	Propylene oxide	43	1.801	1.801	(0.431)	615	1.00000	0.99(aM)
161	3-Methyl-1-butanol	55	6.948	6.948	(0.906)	1945	10.0000	10.74(M)
162	Butyl acrylate	55	8.286	8.286	(1.081)	6783	0.50000	0.48(a)
163	Butyl methacrylate	41	9.182	9.182	(0.950)	4724	0.50000	0.50(aM)
182	Epichlorohydrin	57	6.127	6.127	(1.234)	1233	2.00000	2.05(aM)
M 94	1,2-Dichloroethylene (total)	96				5481	1.00000	(a)
130	Ethyl Acetate	43	3.690	3.690	(0.883)	4291	0.50000	0.57(aM)
134	Cyclohexanone	55	8.653	8.653	(0.896)	4174	10.0000	12.11(aM)
185	Isoprene	39	1.756	1.756	(0.420)	843	0.50000	0.50(aM)
188	Isopropyl acetate	43	4.695	4.695	(0.946)	11581	0.50000	0.54(a)
187	n-Amyl acetate	43	8.477	8.477	(1.106)	7447	0.50000	0.55(aM)
189	n-Butyl acetate	43	7.248	7.248	(0.945)	6398	0.50000	0.56(aM)
150	Allyl alcohol	57	2.787	2.787	(0.667)	2068	10.0000	(aM)
194	Acetaldehyde	44	1.212	1.212	(0.290)	32460	2.00000	57.33
195	Methyl Amyl Ketone	43	8.413	8.413	(1.097)	8863	0.50000	0.57(a)
200	Dimethyl Disulfide	94	6.213	6.213	(0.810)	4899	0.50000	0.49(a)

QC Flag Legend

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

QC Flag Legend

M - Compound response manually integrated.



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Sample Info: VSTD000,5;VSTD000,5;1;2;
Purge Volume: 5.0
Column phase: DB624

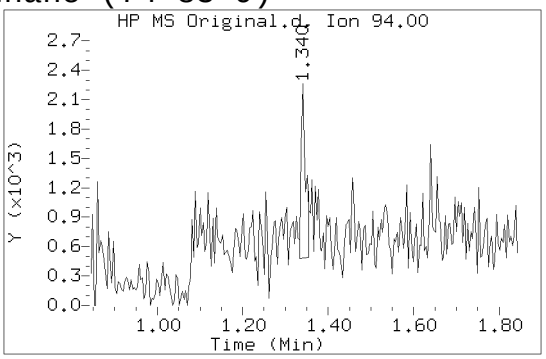
Instrument: voa6,i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Bromomethane (74-83-9)

Reason Code:

BEFORE
MASS
94
AREA
1399
HEIGHT
1780
20-Jul-2023
15:04
linh
pham



AFTER
MASS
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1399
HEIGHT
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20-Jul-2023
15:04
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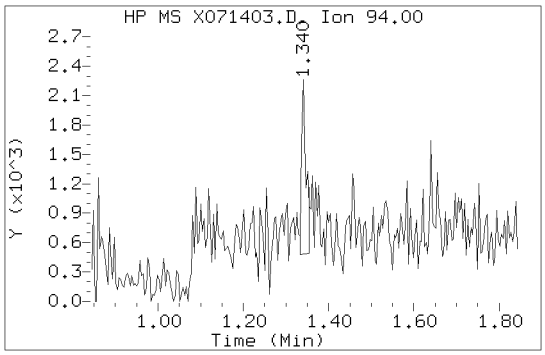
pham



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20-Jul-2023
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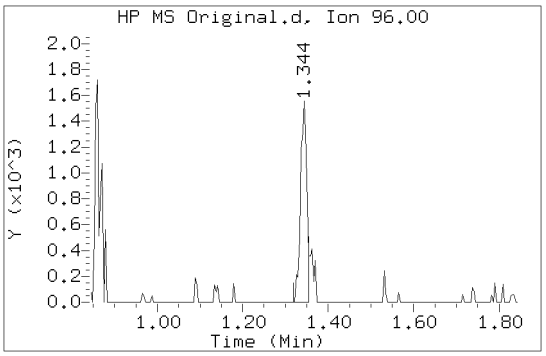
pham



AFTER
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20-Jul-2023
15:04
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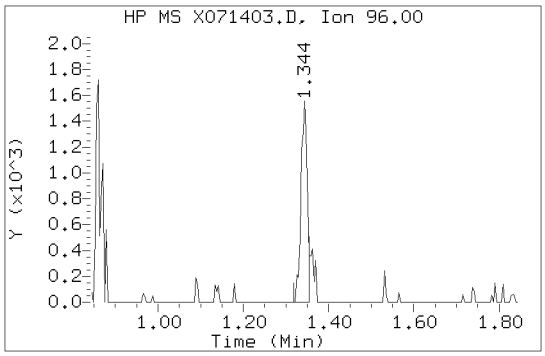

Chloroethane (75-00-3)

Reason Code:

BEFORE
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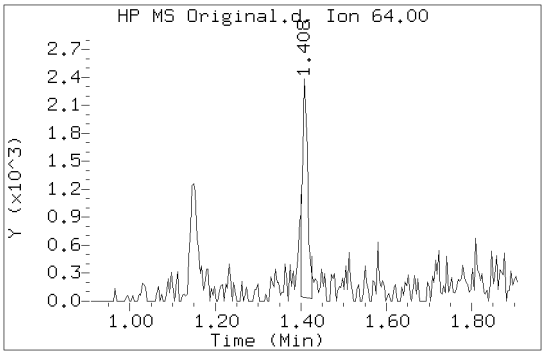
AREA
2168
HEIGHT
2339
20-Jul-2023
15:04
linh
pham



AFTER
MASS
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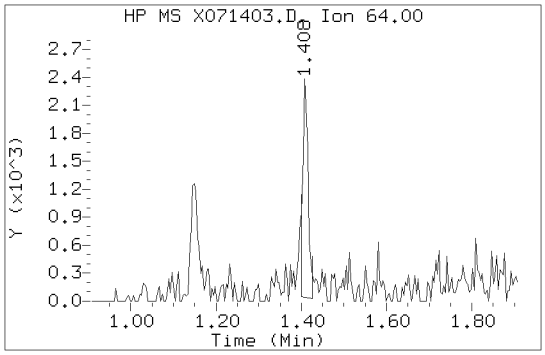
AREA
2168
HEIGHT
2339
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
66
AREA
934
HEIGHT
704
20-Jul-2023
15:04
linh
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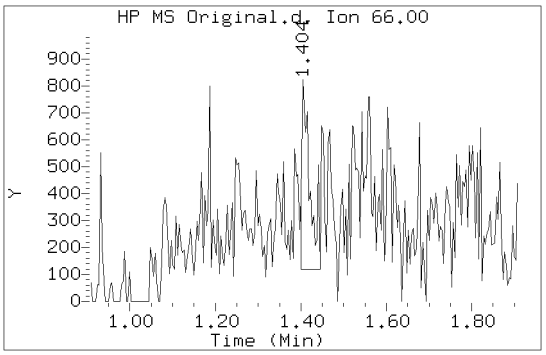

AFTER
MASS
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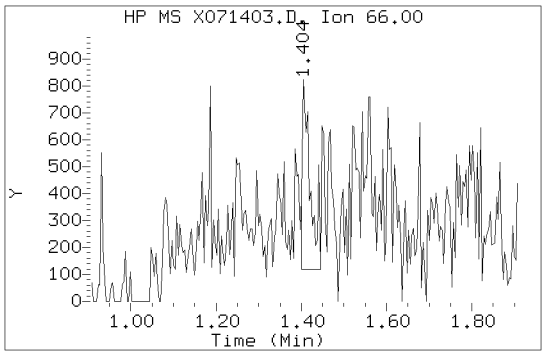
AREA
934
HEIGHT
704
20-Jul-2023
15:04
linh
pham



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Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Iodomethane (74-88-4)

Reason Code:

BEFORE
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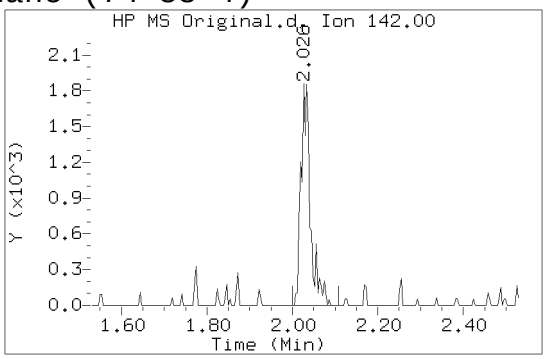
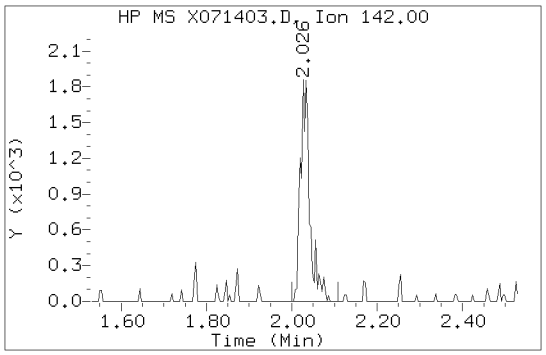
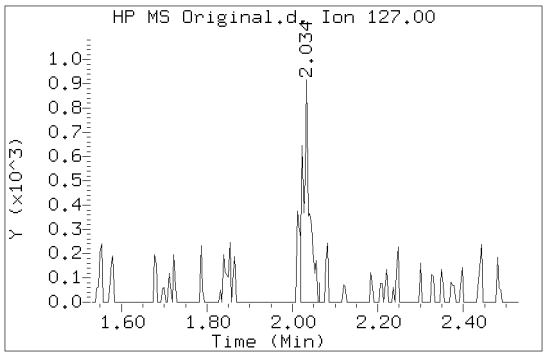
AREA
2897
HEIGHT
1860
20-Jul-2023
15:04
linh
pham



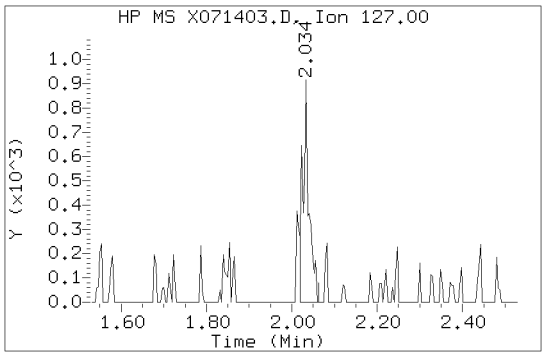
AFTER
MASS
142
AREA
2897
HEIGHT
1860
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
127
AREA
955
HEIGHT
916
20-Jul-2023
15:04
linh
pham



AFTER
MASS
127
AREA
955
HEIGHT
916
20-Jul-2023
15:04
linh
pham



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20-Jul-2023
15:04
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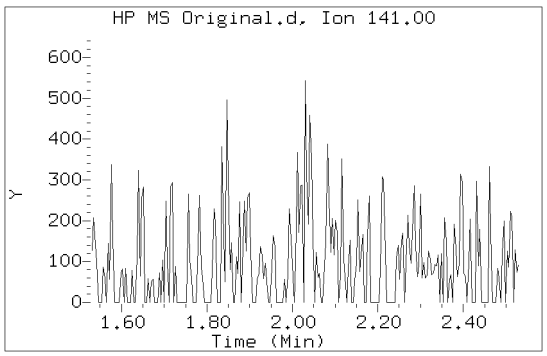

AFTER
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141
AREA
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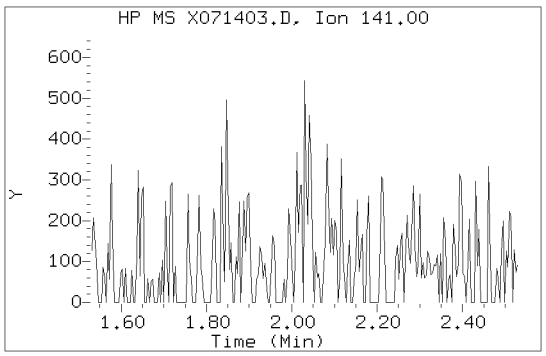
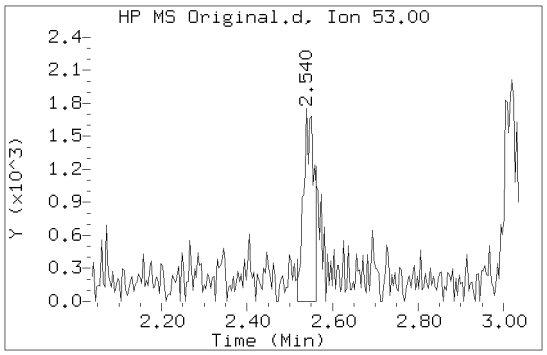
20-Jul-2023
15:04
linh
pham



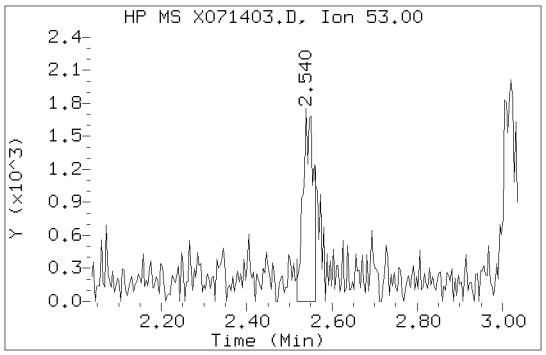
Acrylonitrile (107-13-1)

Reason Code:

BEFORE
MASS
53
AREA
3055
HEIGHT
1753
20-Jul-2023
15:04
linh
pham



AFTER
MASS
53
AREA
3055
HEIGHT
1753
20-Jul-2023
15:04
linh
pham



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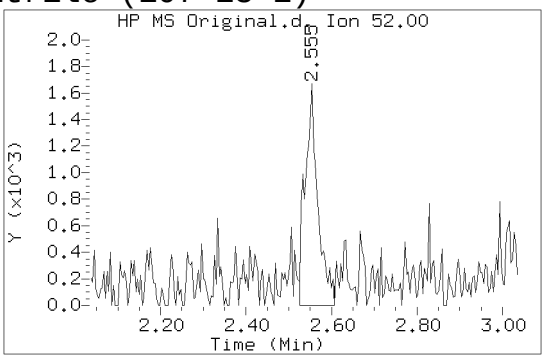
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Acrylonitrile (107-13-1)

Reason Code:

BEFORE

MASS
52
AREA
3501
HEIGHT
1670
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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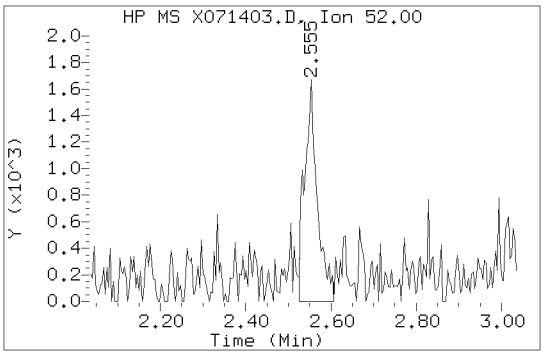
AREA
3501
HEIGHT
1670
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
51
AREA
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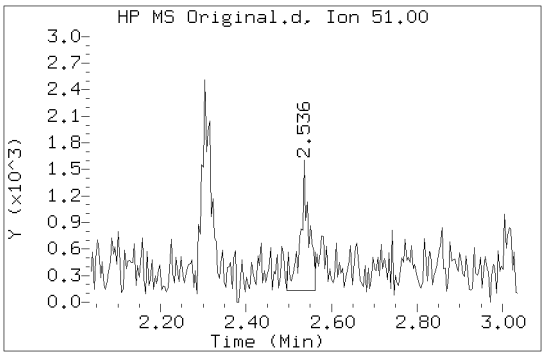
HEIGHT
1479
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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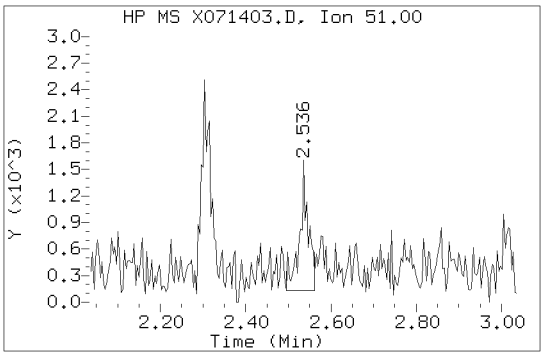
HEIGHT
1479
20-Jul-2023
15:04
linh
pham



Methylene Chloride (75-09-2)

Reason Code:

BEFORE

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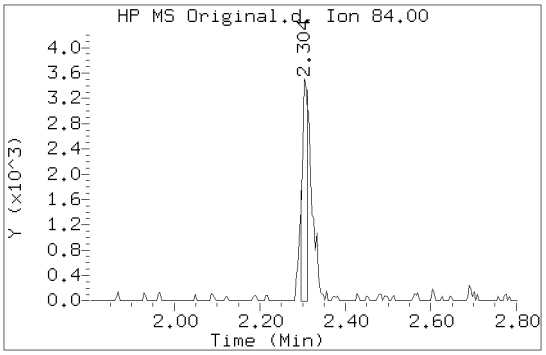
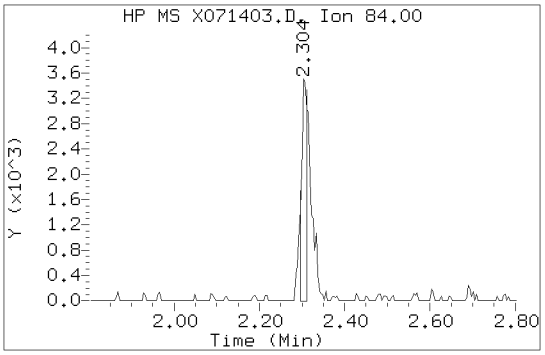
84
AREA
3115
HEIGHT
3513
20-Jul-2023
15:04
linh
pham



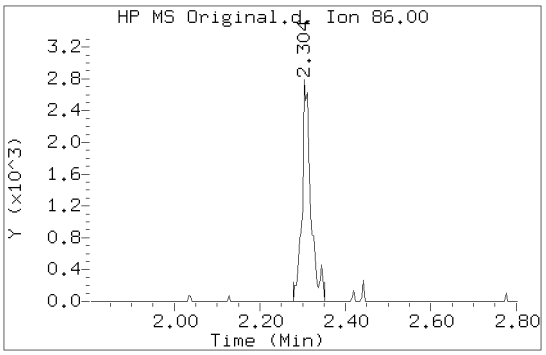
AFTER

MASS
84
AREA
3115
HEIGHT
3513
20-Jul-2023
15:04
linh
pham



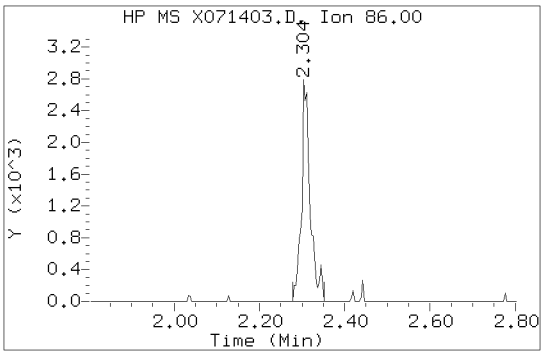
BEFORE

MASS
86
AREA
4061
HEIGHT
2789
20-Jul-2023
15:04
linh
pham



AFTER

MASS
86
AREA
4061
HEIGHT
2789
20-Jul-2023
15:04
linh
pham



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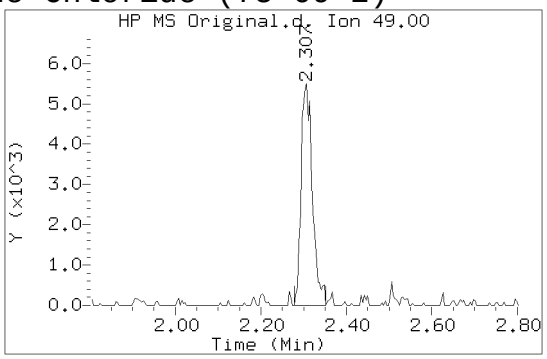
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Methylene Chloride (75-09-2)

BEFORE

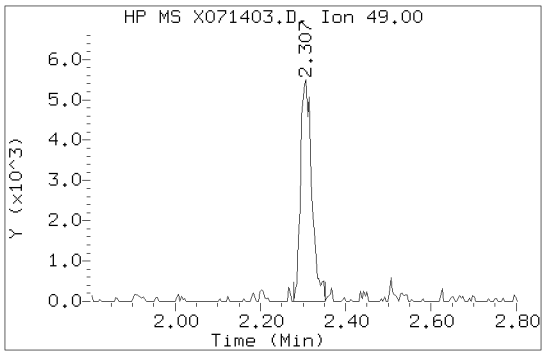
MASS
49
AREA
10268
HEIGHT
5500
20-Jul-2023
15:04
linh
pham



Reason Code:

AFTER

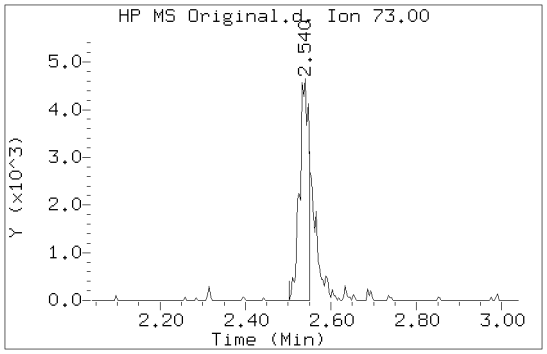
MASS
49
AREA
10268
HEIGHT
5500
20-Jul-2023
15:04
linh
pham



Methyl tert-butyl ether (1634-04-4)

BEFORE

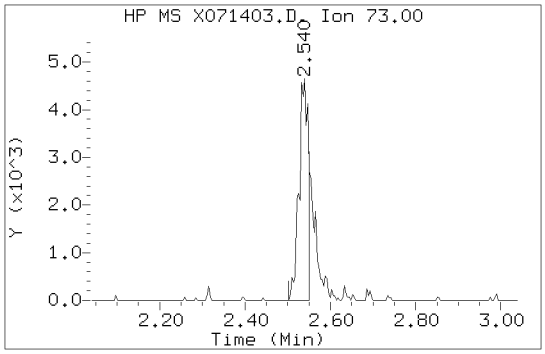
MASS
73
AREA
7187
HEIGHT
4650
20-Jul-2023
15:04
linh
pham



Reason Code:

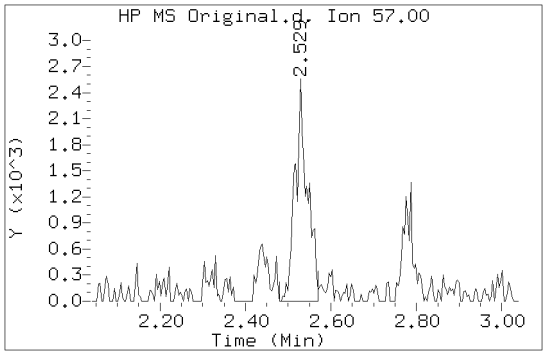
AFTER

MASS
73
AREA
7187
HEIGHT
4650
20-Jul-2023
15:04
linh
pham



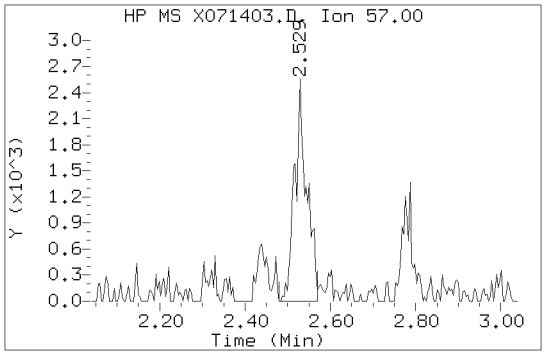
BEFORE

MASS
57
AREA
5084
HEIGHT
2558
20-Jul-2023
15:04
linh
pham



AFTER

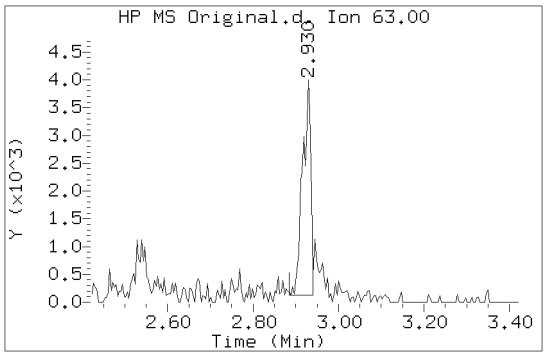
MASS
57
AREA
5084
HEIGHT
2558
20-Jul-2023
15:04
linh
pham



1,1-Dichloroethane (75-34-3)

BEFORE

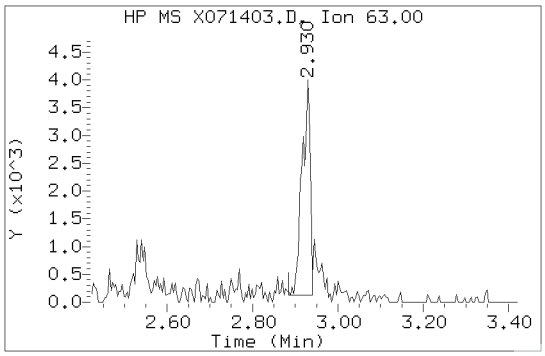
MASS
63
AREA
5250
HEIGHT
3871
20-Jul-2023
15:04
linh
pham



Reason Code:

AFTER

MASS
63
AREA
5250
HEIGHT
3871
20-Jul-2023
15:04
linh
pham



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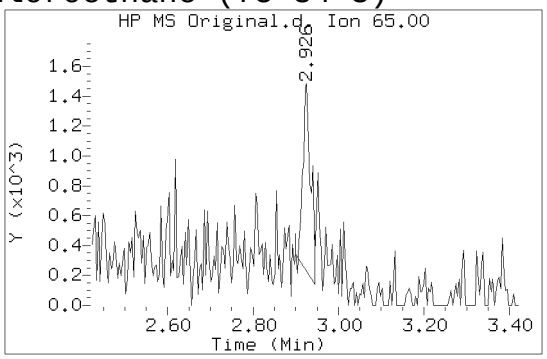
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

1,1-Dichloroethane (75-34-3)

Reason Code:

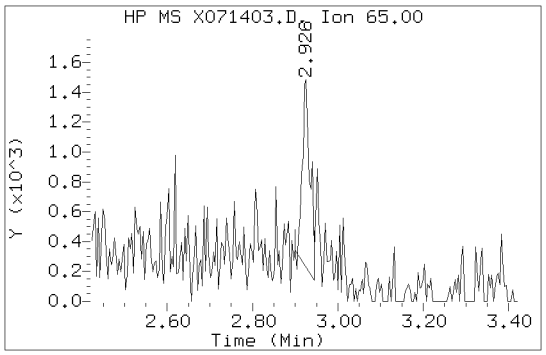
BEFORE

MASS
65
AREA
1602
HEIGHT
1258
20-Jul-2023
15:04
linh
pham



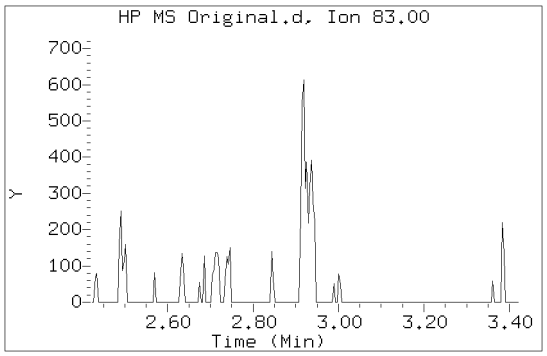
AFTER

MASS
65
AREA
1602
HEIGHT
1258
20-Jul-2023
15:04
linh
pham



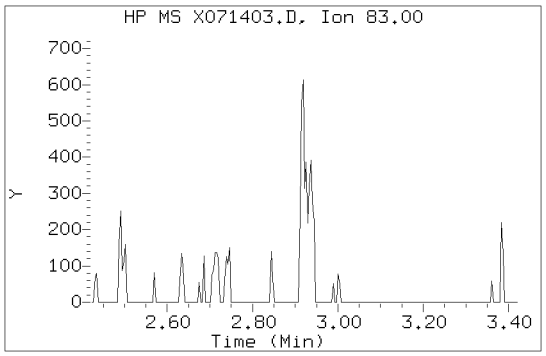
BEFORE

MASS
83
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
83
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

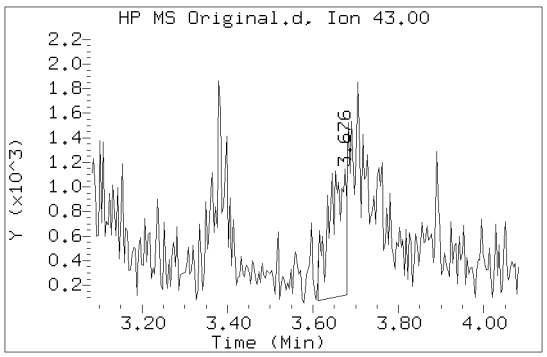


2-Butanone (78-93-3)

Reason Code:

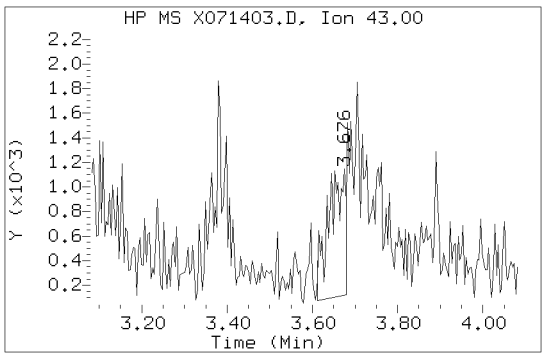
BEFORE

MASS
43
AREA
2827
HEIGHT
1024
20-Jul-2023
15:04
linh
pham



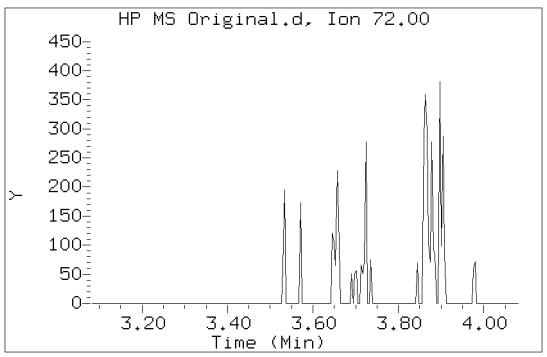
AFTER

MASS
43
AREA
2827
HEIGHT
1024
20-Jul-2023
15:04
linh
pham



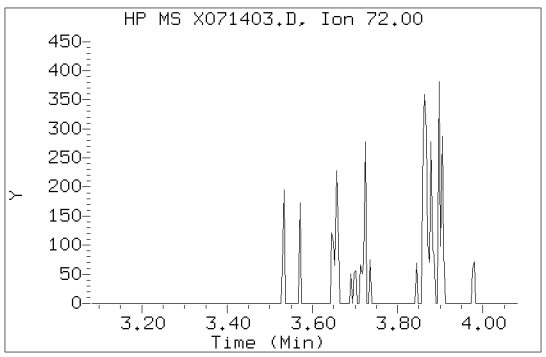
BEFORE

MASS
72
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
72
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



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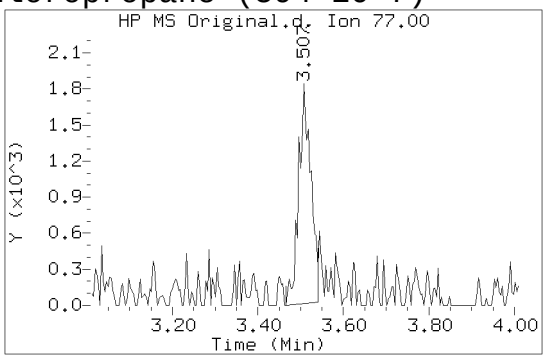
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

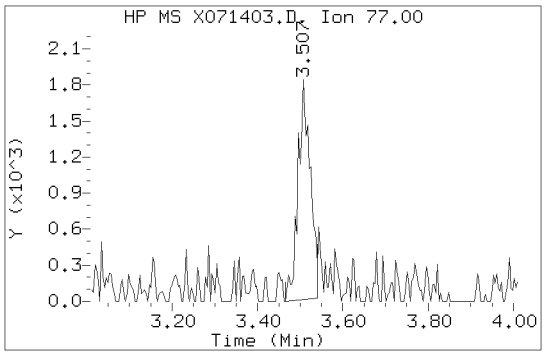
2,2-Dichloropropane (594-20-7)

Reason Code:

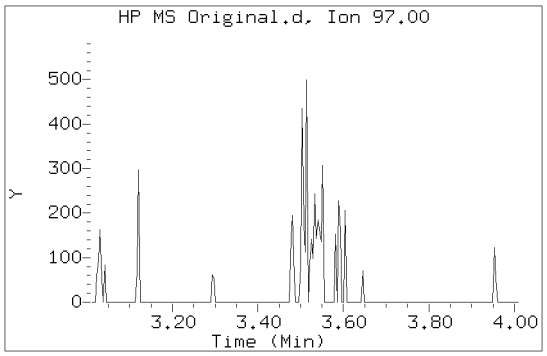
BEFORE
MASS
77
AREA
3703
HEIGHT
1829
20-Jul-2023
15:04
linh
pham



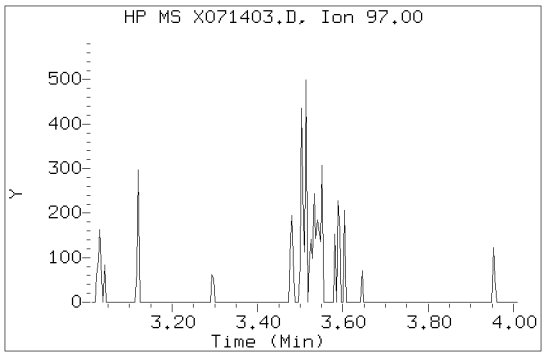
AFTER
MASS
77
AREA
3703
HEIGHT
1829
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
97
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



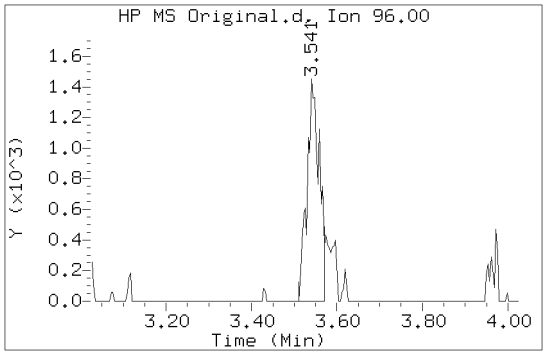
AFTER
MASS
97
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



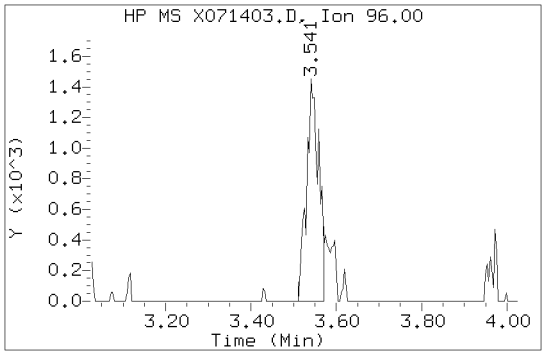
cis-1,2-Dichloroethene (156-59-2)

Reason Code:

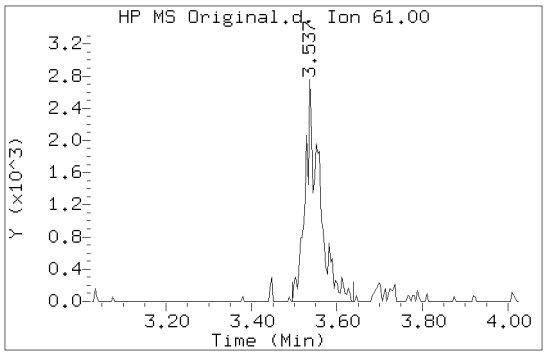
BEFORE
MASS
96
AREA
2924
HEIGHT
1452
20-Jul-2023
15:04
linh
pham



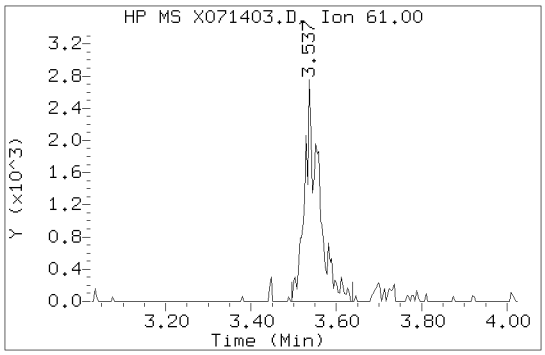
AFTER
MASS
96
AREA
2924
HEIGHT
1452
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
61
AREA
6464
HEIGHT
2755
20-Jul-2023
15:04
linh
pham



AFTER
MASS
61
AREA
6464
HEIGHT
2755
20-Jul-2023
15:04
linh
pham



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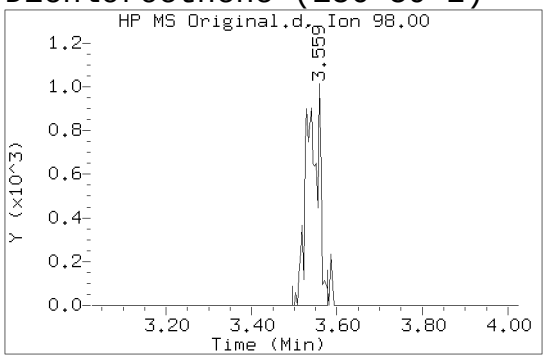
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

cis-1,2-Dichloroethene (156-59-2)

Reason Code:

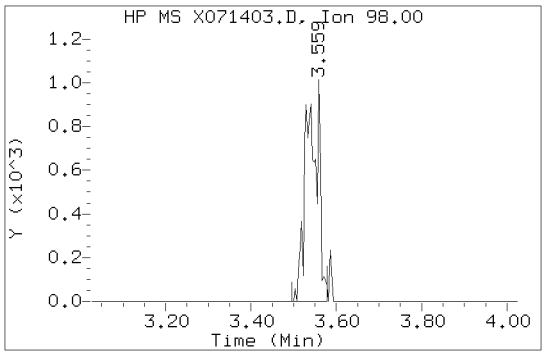
BEFORE

MASS
98
AREA
2118
HEIGHT
1014
20-Jul-2023
15:04
linh
pham



AFTER

MASS
98
AREA
2118
HEIGHT
1014
20-Jul-2023
15:04
linh
pham

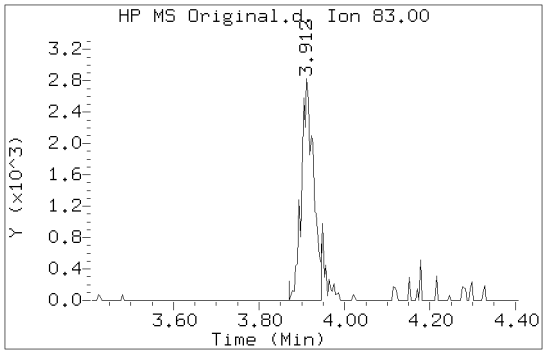


Chloroform (67-66-3)

Reason Code:

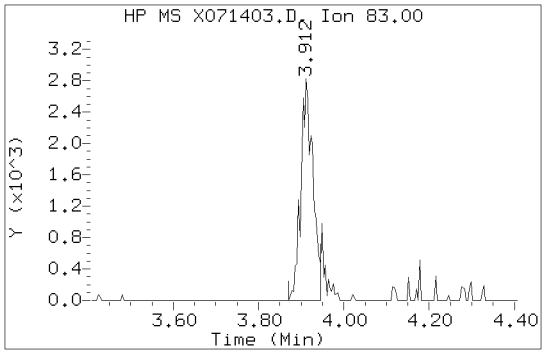
BEFORE

MASS
83
AREA
5643
HEIGHT
2826
20-Jul-2023
15:04
linh
pham



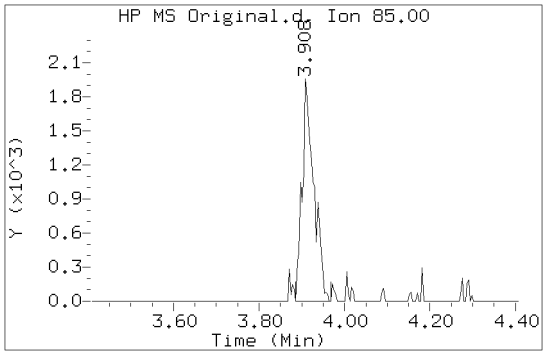
AFTER

MASS
83
AREA
5643
HEIGHT
2826
20-Jul-2023
15:04
linh
pham



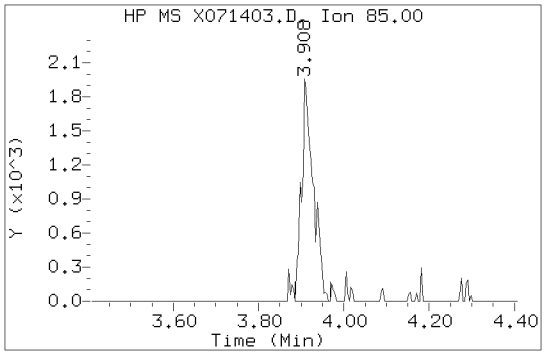
BEFORE

MASS
85
AREA
3815
HEIGHT
1958
20-Jul-2023
15:04
linh
pham



AFTER

MASS
85
AREA
3815
HEIGHT
1958
20-Jul-2023
15:04
linh
pham

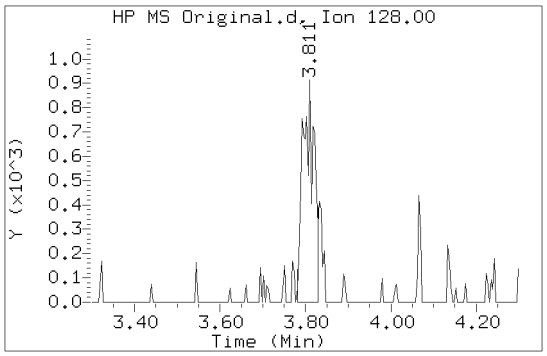


Bromochloromethane (74-97-5)

Reason Code:

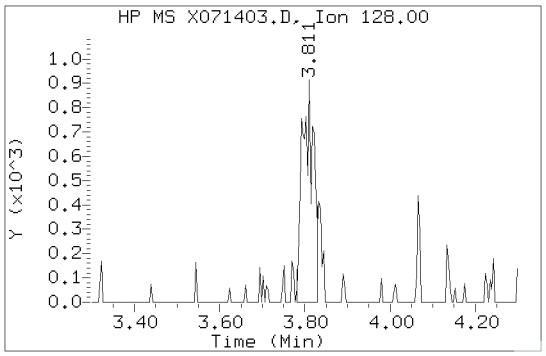
BEFORE

MASS
128
AREA
1717
HEIGHT
914
20-Jul-2023
15:04
linh
pham



AFTER

MASS
128
AREA
1717
HEIGHT
914
20-Jul-2023
15:04
linh
pham



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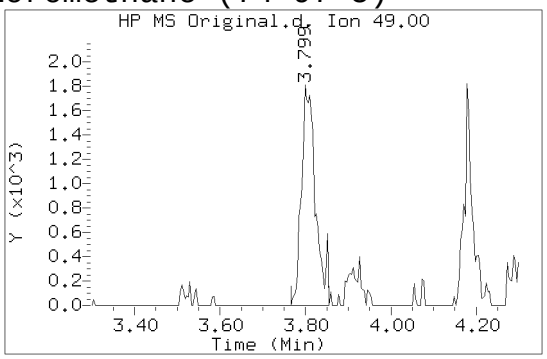
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Bromochloromethane (74-97-5)

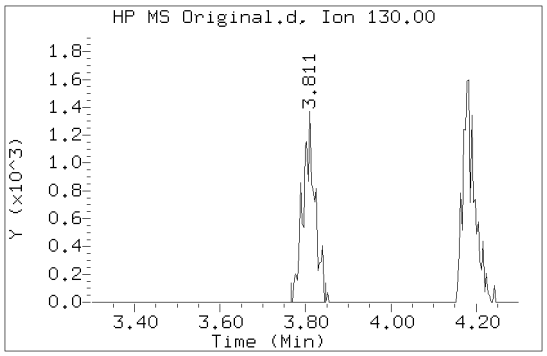
BEFORE

MASS
49
AREA
4173
HEIGHT
1811
20-Jul-2023
15:04
linh
pham



BEFORE

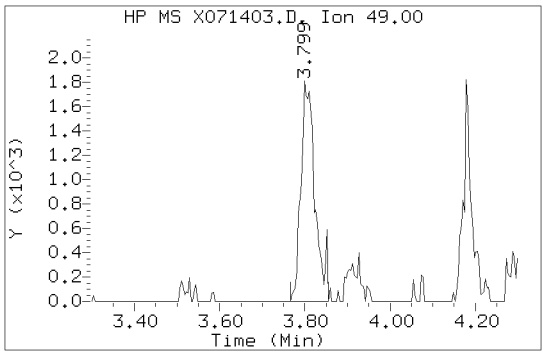
MASS
130
AREA
2643
HEIGHT
1372
20-Jul-2023
15:04
linh
pham



Reason Code:

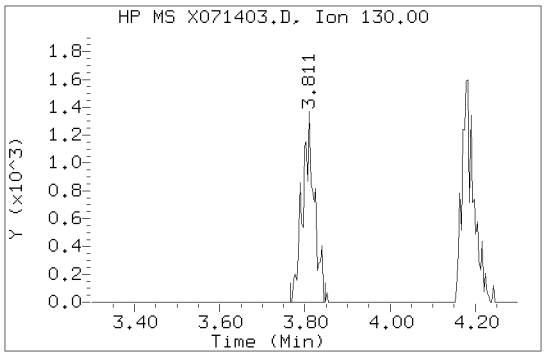
AFTER

MASS
49
AREA
4173
HEIGHT
1811
20-Jul-2023
15:04
linh
pham



AFTER

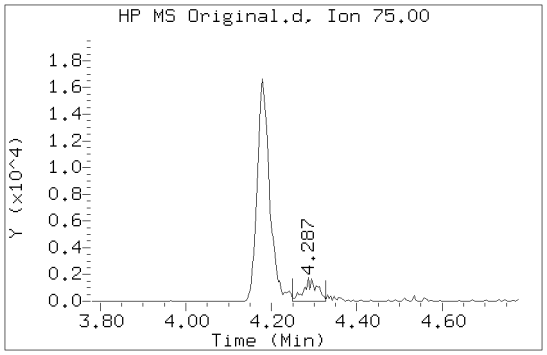
MASS
130
AREA
2643
HEIGHT
1372
20-Jul-2023
15:04
linh
pham



1,1-Dichloropropene (563-58-6)

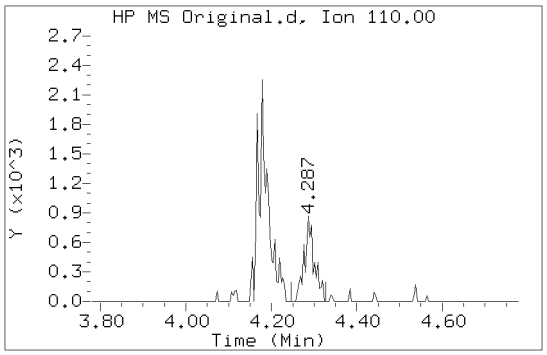
BEFORE

MASS
75
AREA
3744
HEIGHT
1770
20-Jul-2023
15:04
linh
pham



BEFORE

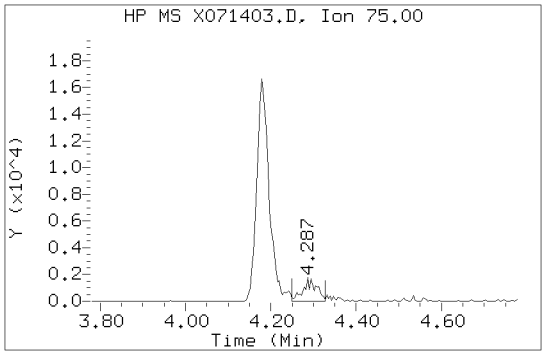
MASS
110
AREA
1389
HEIGHT
866
20-Jul-2023
15:04
linh
pham



Reason Code:

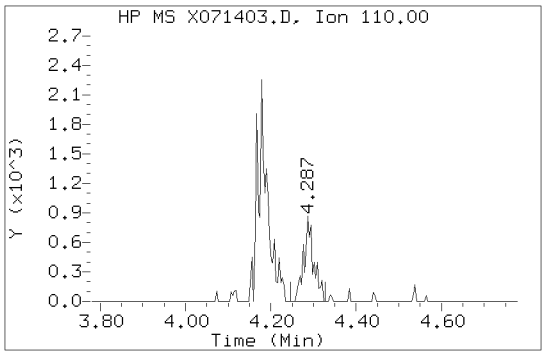
AFTER

MASS
75
AREA
3744
HEIGHT
1770
20-Jul-2023
15:04
linh
pham



AFTER

MASS
110
AREA
1389
HEIGHT
866
20-Jul-2023
15:04
linh
pham



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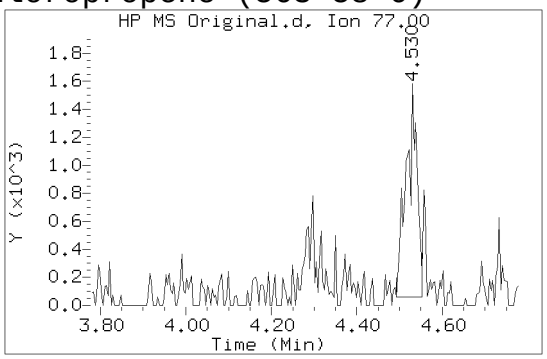
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

1,1-Dichloropropene (563-58-6)

Reason Code:

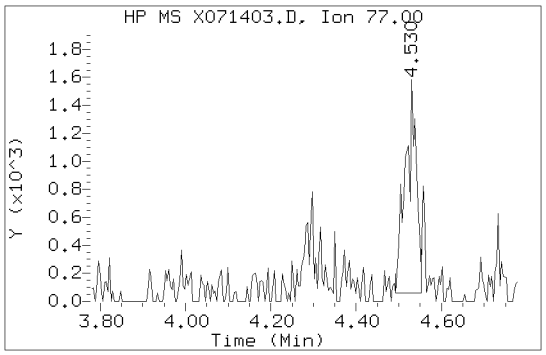
BEFORE

MASS
77
AREA
2714
HEIGHT
1524
20-Jul-2023
15:04
linh
pham



AFTER

MASS
77
AREA
2714
HEIGHT
1524
20-Jul-2023
15:04
linh
pham

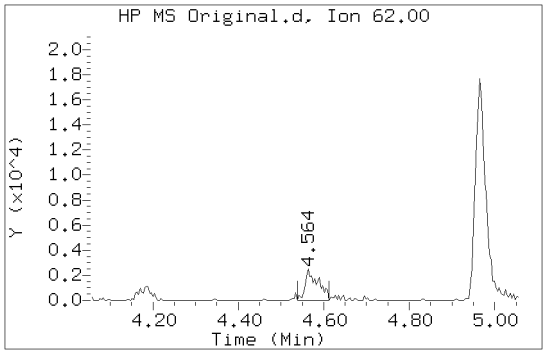


1,2-Dichloroethane (107-06-2)

Reason Code:

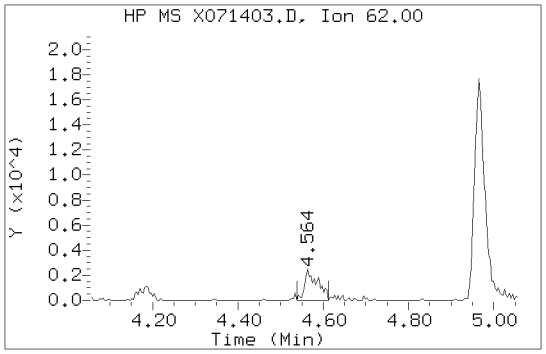
BEFORE

MASS
62
AREA
5246
HEIGHT
2498
20-Jul-2023
15:04
linh
pham



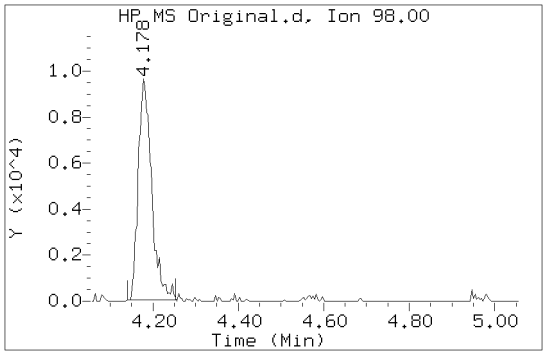
AFTER

MASS
62
AREA
5246
HEIGHT
2498
20-Jul-2023
15:04
linh
pham



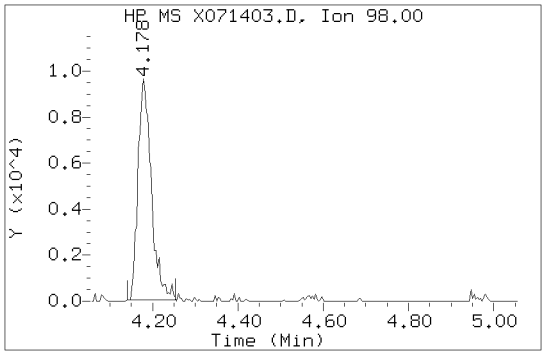
BEFORE

MASS
98
AREA
20890
HEIGHT
9608
20-Jul-2023
15:04
linh
pham



AFTER

MASS
98
AREA
20890
HEIGHT
9608
20-Jul-2023
15:04
linh
pham

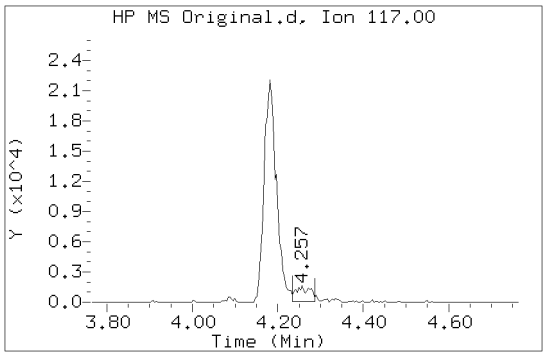


Carbon Tetrachloride (56-23-5)

Reason Code:

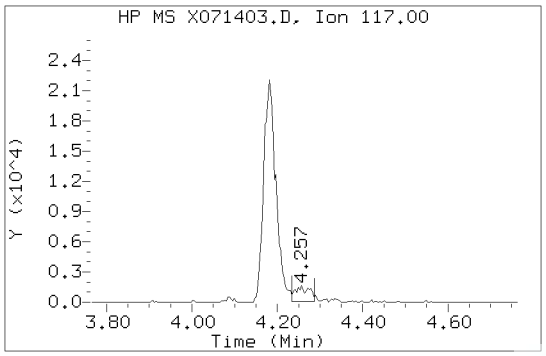
BEFORE

MASS
117
AREA
3613
HEIGHT
1577
20-Jul-2023
15:04
linh
pham



AFTER

MASS
117
AREA
3613
HEIGHT
1577
20-Jul-2023
15:04
linh
pham



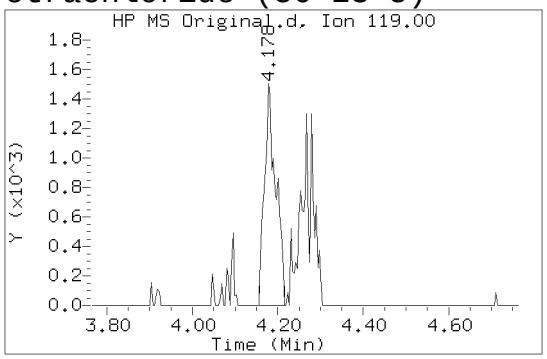
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Carbon Tetrachloride (56-23-5)

Reason Code:

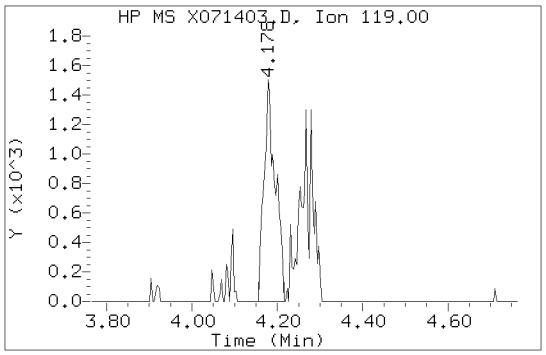
BEFORE

MASS
119
AREA
2769
HEIGHT
1504
20-Jul-2023
15:04
linh
pham



AFTER

MASS
119
AREA
2769
HEIGHT
1504
20-Jul-2023
15:04
linh
pham

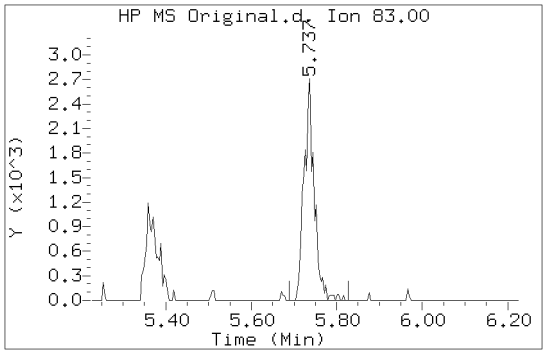


Bromodichloromethane (75-27-4)

Reason Code:

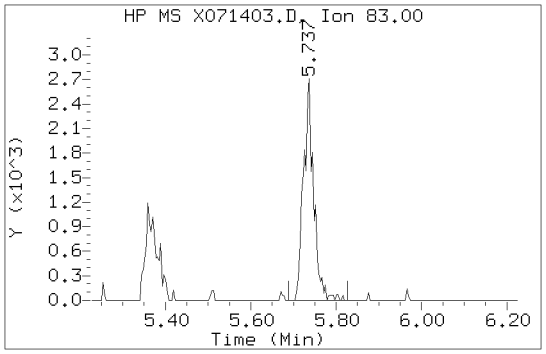
BEFORE

MASS
83
AREA
4539
HEIGHT
2709
20-Jul-2023
15:04
linh
pham



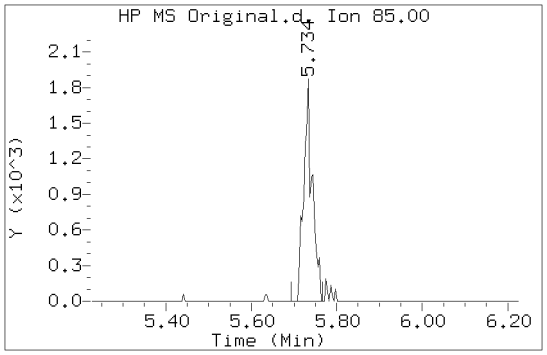
AFTER

MASS
83
AREA
4539
HEIGHT
2709
20-Jul-2023
15:04
linh
pham



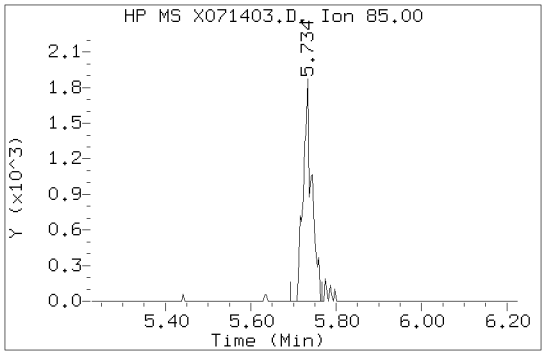
BEFORE

MASS
85
AREA
2648
HEIGHT
1873
20-Jul-2023
15:04
linh
pham



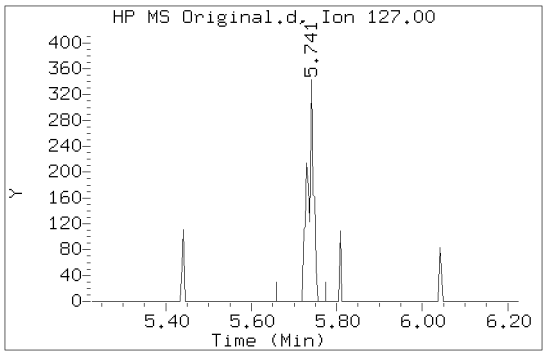
AFTER

MASS
85
AREA
2648
HEIGHT
1873
20-Jul-2023
15:04
linh
pham



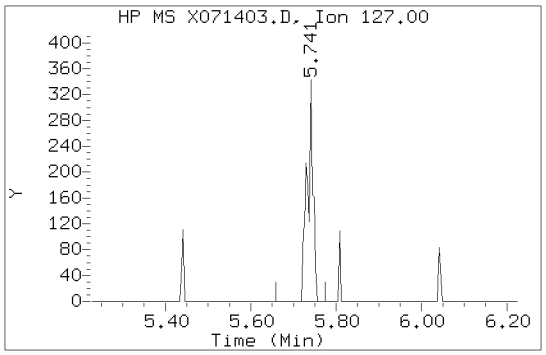
BEFORE

MASS
127
AREA
328
HEIGHT
343
20-Jul-2023
15:04
linh
pham



AFTER

MASS
127
AREA
328
HEIGHT
343
20-Jul-2023
15:04
linh
pham

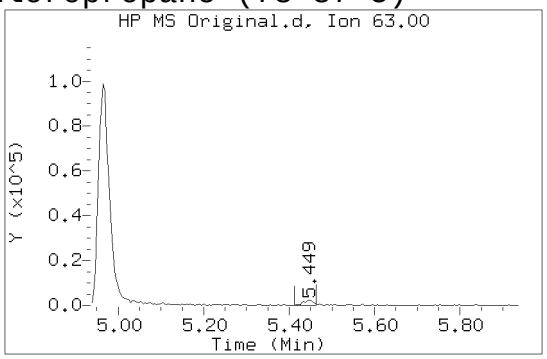


Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

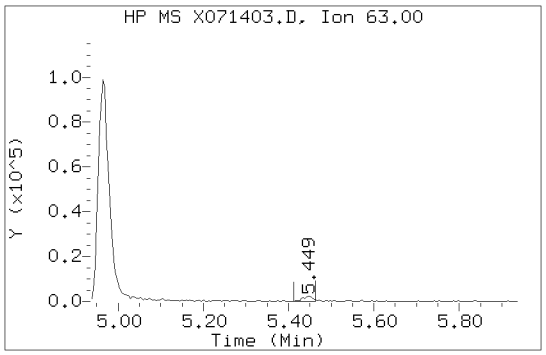
1,2-Dichloropropane (78-87-5)

Reason Code:

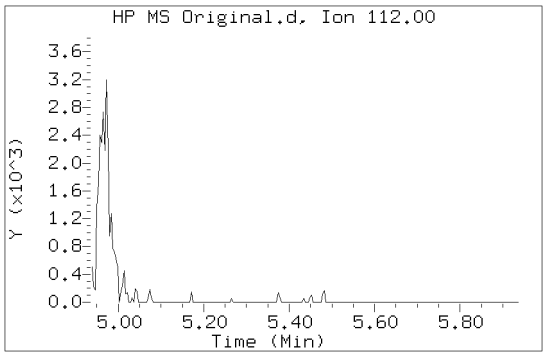
BEFORE
MASS
63
AREA
3473
HEIGHT
2209
20-Jul-2023
15:04
linh
pham



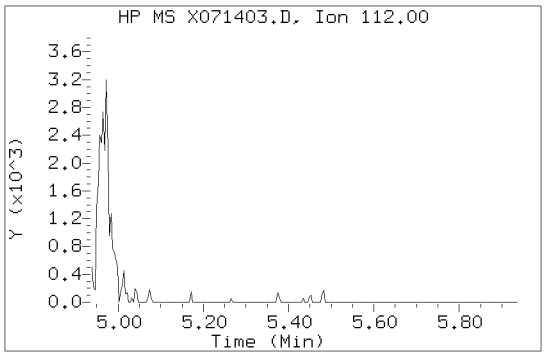
AFTER
MASS
63
AREA
3473
HEIGHT
2209
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
112
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



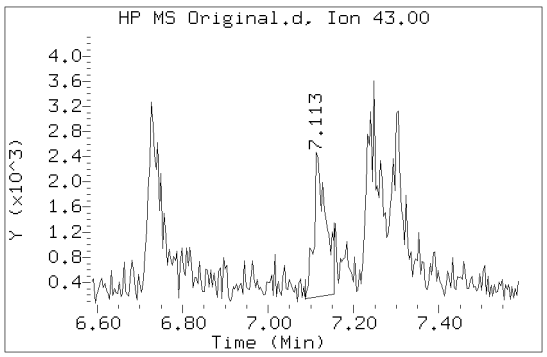
AFTER
MASS
112
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



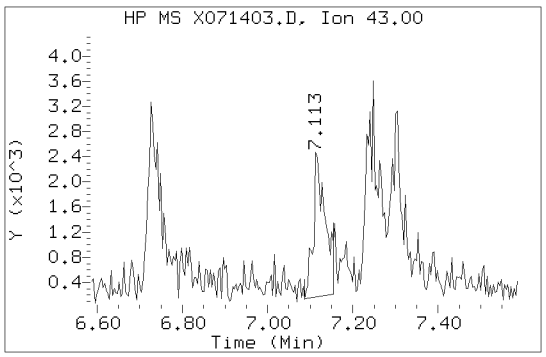
2-Hexanone (591-78-6)

Reason Code:

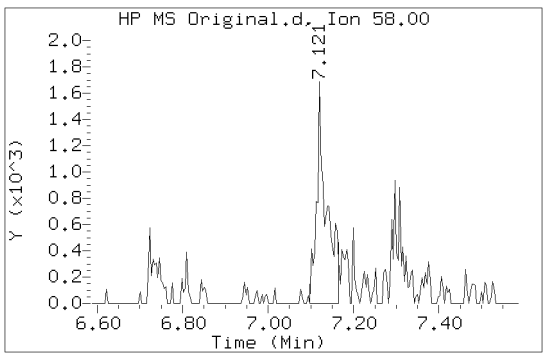
BEFORE
MASS
43
AREA
4470
HEIGHT
2301
20-Jul-2023
15:04
linh
pham



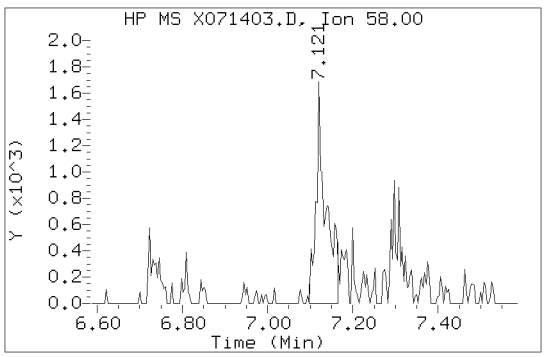
AFTER
MASS
43
AREA
4470
HEIGHT
2301
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
58
AREA
2664
HEIGHT
1687
20-Jul-2023
15:04
linh
pham



AFTER
MASS
58
AREA
2664
HEIGHT
1687
20-Jul-2023
15:04
linh
pham



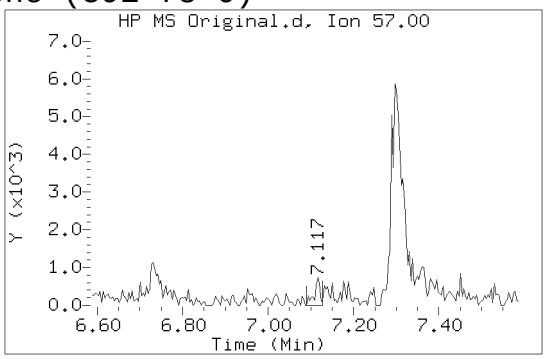
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

2-Hexanone (591-78-6)

Reason Code:

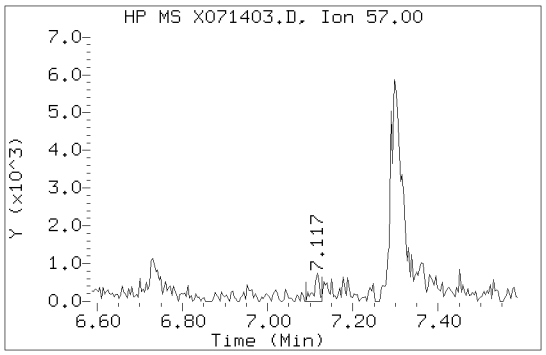
BEFORE

MASS
57
AREA
683
HEIGHT
740
20-Jul-2023
15:04
linh
pham



AFTER

MASS
57
AREA
683
HEIGHT
740
20-Jul-2023
15:04
linh
pham

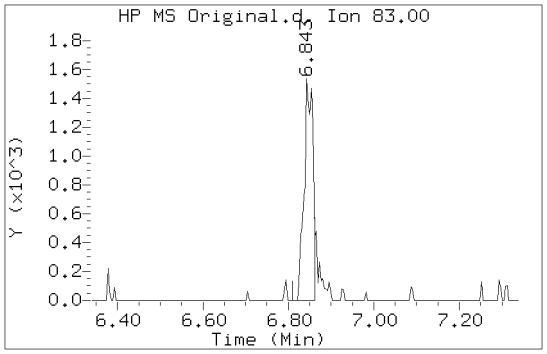


1,1,2-Trichloroethane (79-00-5)

Reason Code:

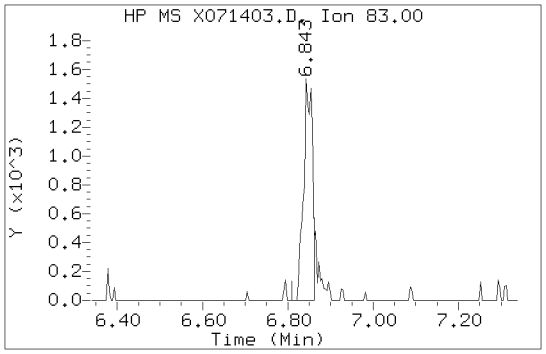
BEFORE

MASS
83
AREA
2223
HEIGHT
1536
20-Jul-2023
15:04
linh
pham



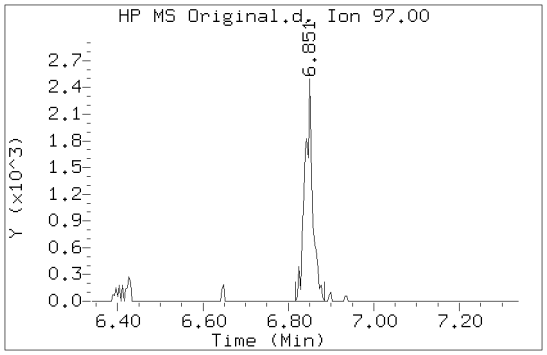
AFTER

MASS
83
AREA
2223
HEIGHT
1536
20-Jul-2023
15:04
linh
pham



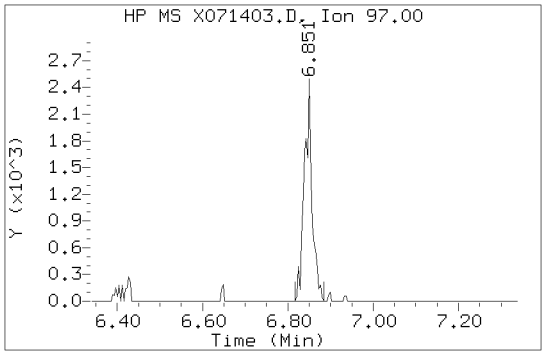
BEFORE

MASS
97
AREA
3209
HEIGHT
2495
20-Jul-2023
15:04
linh
pham



AFTER

MASS
97
AREA
3209
HEIGHT
2495
20-Jul-2023
15:04
linh
pham

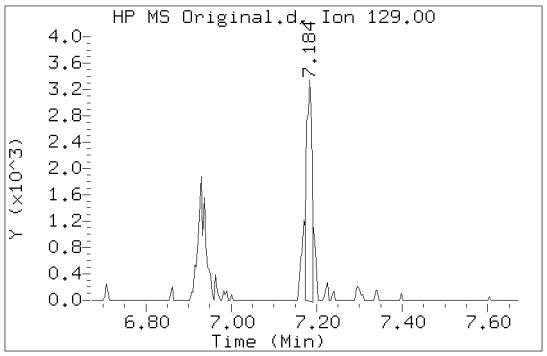


Dibromochloromethane (124-48-1)

Reason Code:

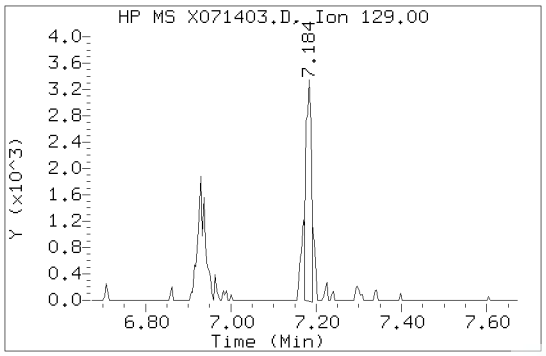
BEFORE

MASS
129
AREA
3132
HEIGHT
3366
20-Jul-2023
15:04
linh
pham



AFTER

MASS
129
AREA
3132
HEIGHT
3366
20-Jul-2023
15:04
linh
pham

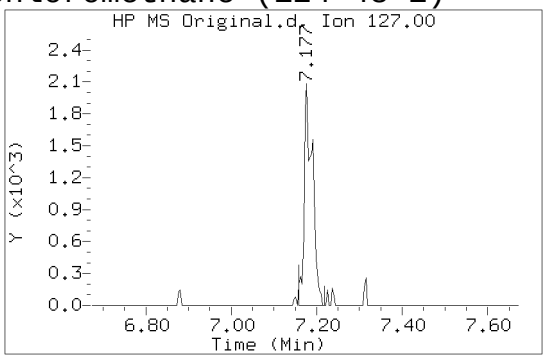


Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

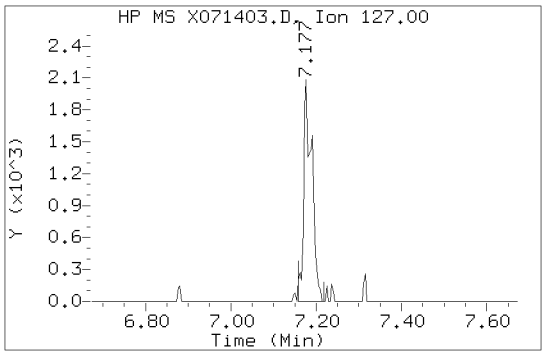
Dibromochloromethane (124-48-1)

Reason Code:

BEFORE
MASS
127
AREA
2854
HEIGHT
2083
20-Jul-2023
15:04
linh
pham



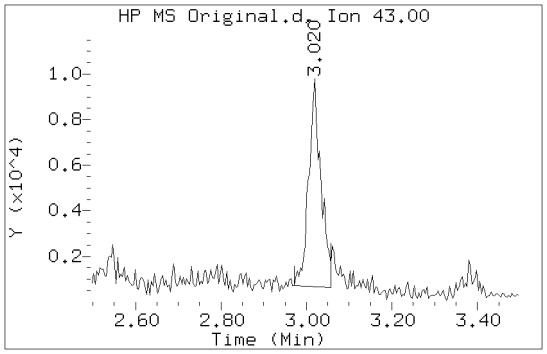
AFTER
MASS
127
AREA
2854
HEIGHT
2083
20-Jul-2023
15:04
linh
pham



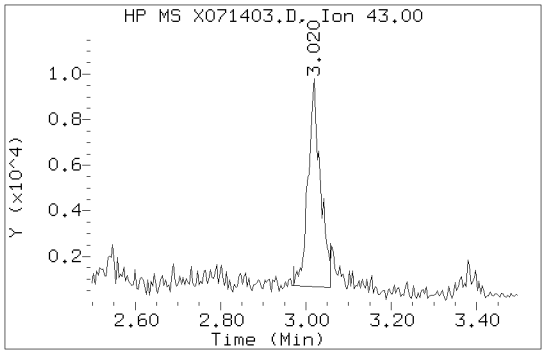
Vinyl Acetate (108-05-4)

Reason Code:

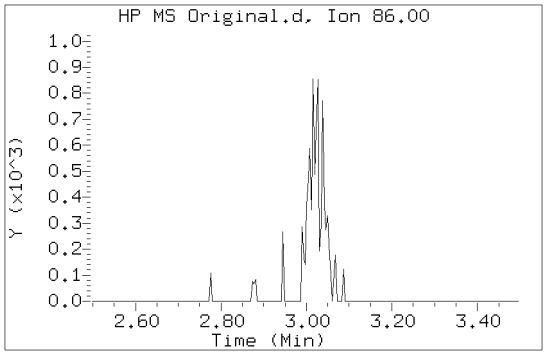
BEFORE
MASS
43
AREA
18224
HEIGHT
9126
20-Jul-2023
15:04
linh
pham



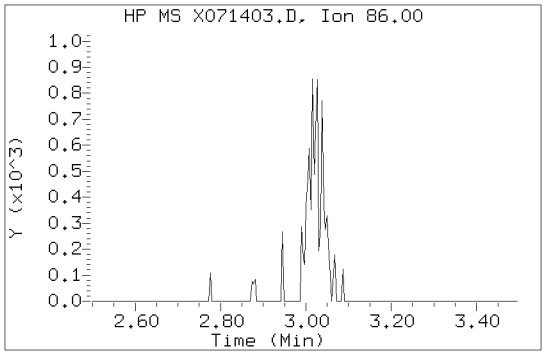
AFTER
MASS
43
AREA
18224
HEIGHT
9126
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
86
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



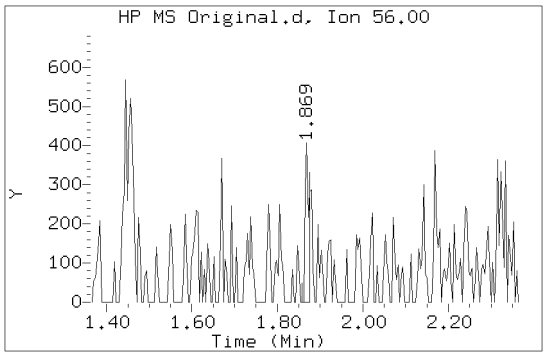
AFTER
MASS
86
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



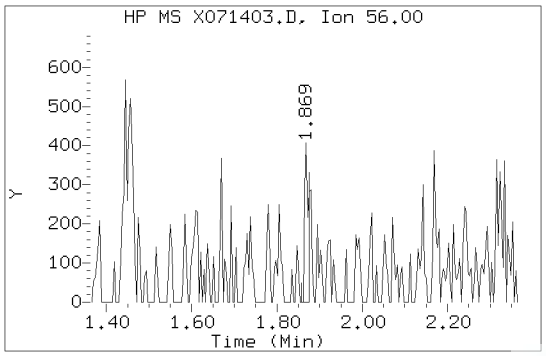
Acrolein (107-02-8)

Reason Code:

BEFORE
MASS
56
AREA
268
HEIGHT
407
20-Jul-2023
15:04
linh
pham



AFTER
MASS
56
AREA
268
HEIGHT
407
20-Jul-2023
15:04
linh
pham



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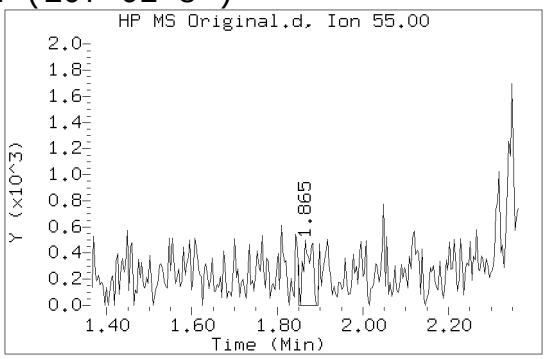
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Acrolein (107-02-8)

Reason Code:

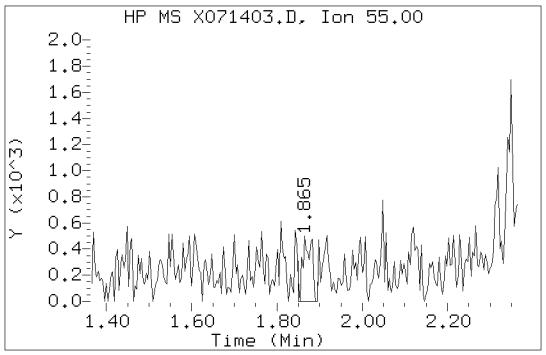
BEFORE

MASS
55
AREA
759
HEIGHT
500
20-Jul-2023
15:04
linh
pham



AFTER

MASS
55
AREA
759
HEIGHT
500
20-Jul-2023
15:04
linh
pham

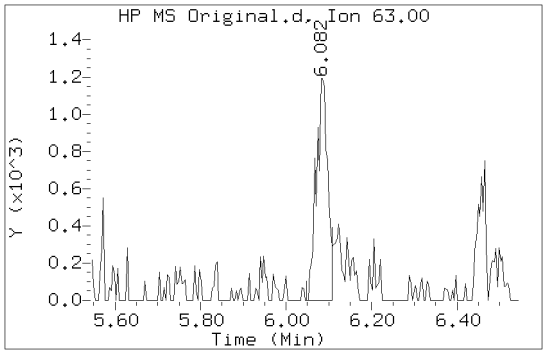


2-Chloroethylvinyl ether (110-75-8)

Reason Code:

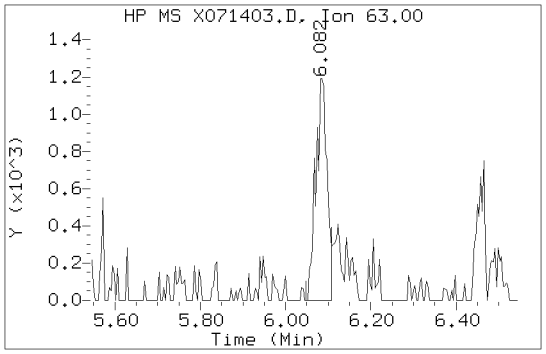
BEFORE

MASS
63
AREA
2206
HEIGHT
1191
20-Jul-2023
15:04
linh
pham



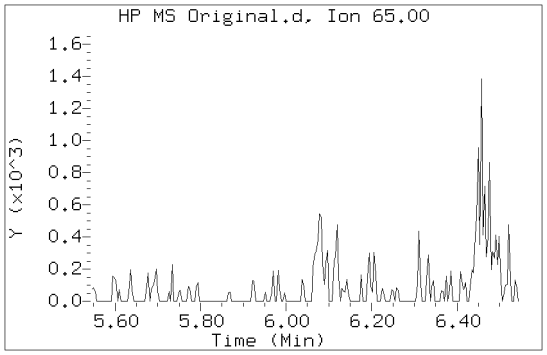
AFTER

MASS
63
AREA
2206
HEIGHT
1191
20-Jul-2023
15:04
linh
pham



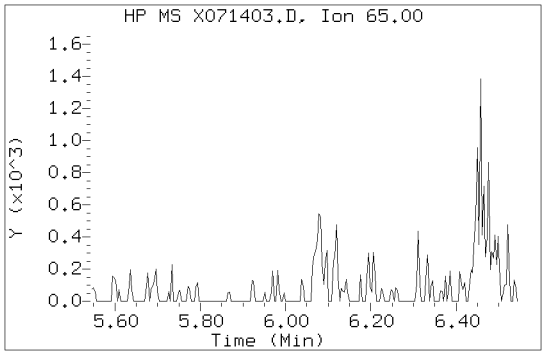
BEFORE

MASS
65
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



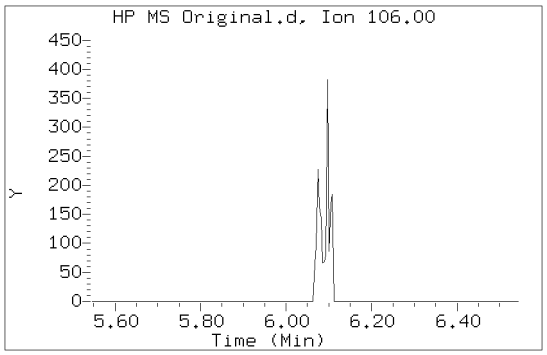
AFTER

MASS
65
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



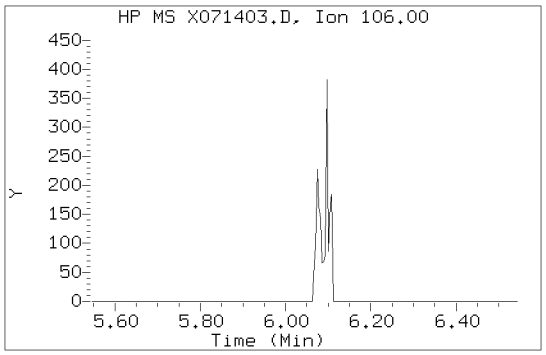
BEFORE

MASS
106
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
106
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



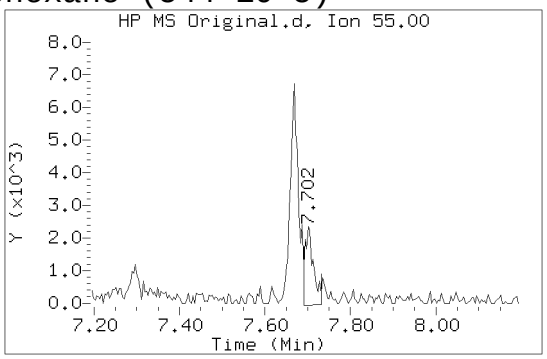
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

1-Chlorohexane (544-10-5)

Reason Code:

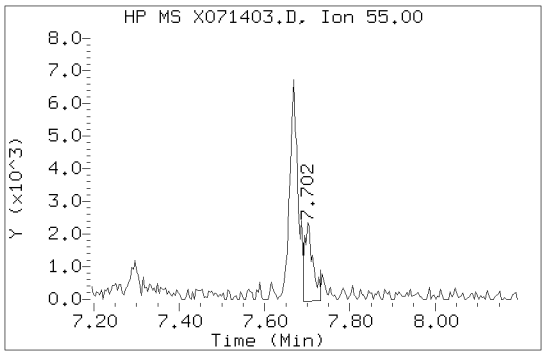
BEFORE

MASS
55
AREA
3459
HEIGHT
2414
20-Jul-2023
15:04
linh
pham



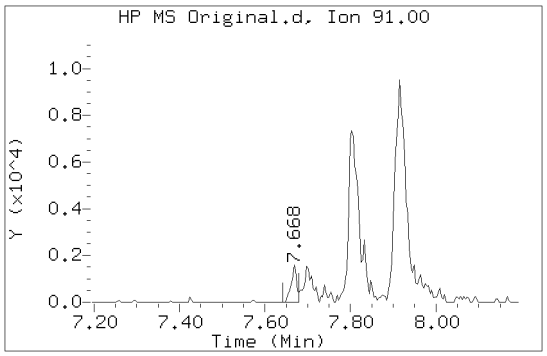
AFTER

MASS
55
AREA
3459
HEIGHT
2414
20-Jul-2023
15:04
linh
pham



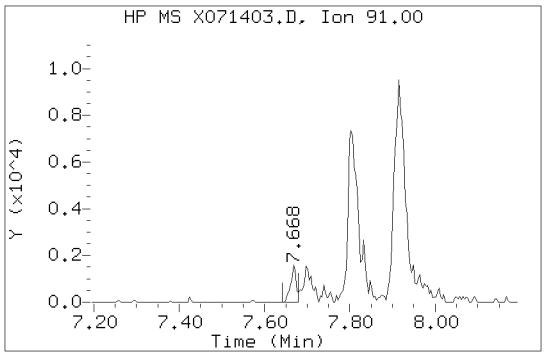
BEFORE

MASS
91
AREA
1435
HEIGHT
1592
20-Jul-2023
15:04
linh
pham



AFTER

MASS
91
AREA
1435
HEIGHT
1592
20-Jul-2023
15:04
linh
pham

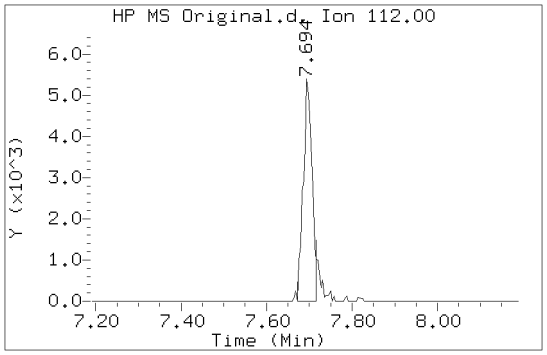


Chlorobenzene (108-90-7)

Reason Code:

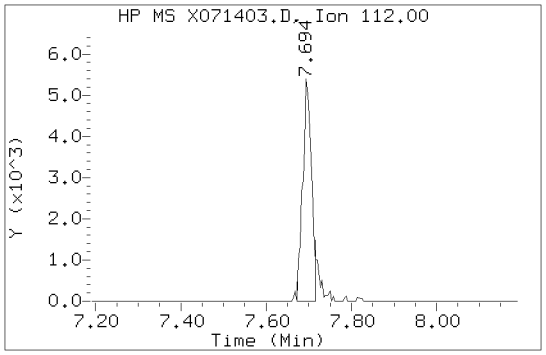
BEFORE

MASS
112
AREA
7907
HEIGHT
5398
20-Jul-2023
15:04
linh
pham



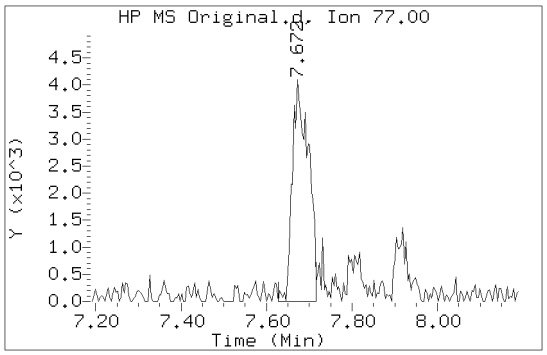
AFTER

MASS
112
AREA
7907
HEIGHT
5398
20-Jul-2023
15:04
linh
pham



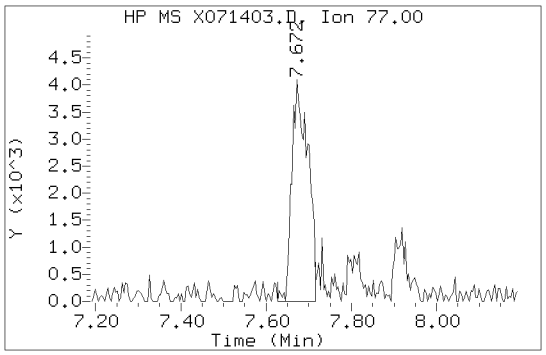
BEFORE

MASS
77
AREA
10872
HEIGHT
4098
20-Jul-2023
15:04
linh
pham



AFTER

MASS
77
AREA
10872
HEIGHT
4098
20-Jul-2023
15:04
linh
pham



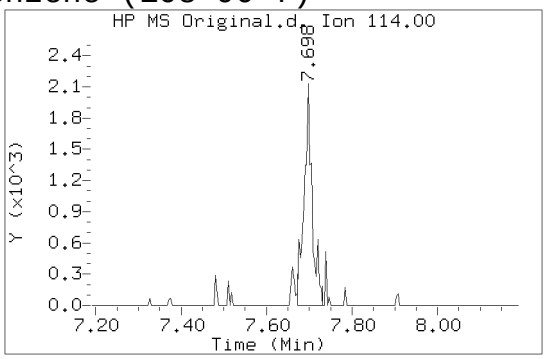
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Chlorobenzene (108-90-7)

Reason Code:

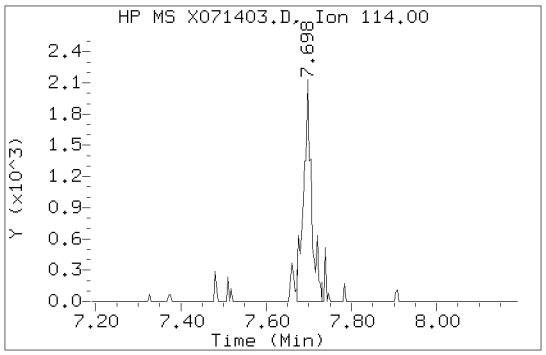
BEFORE

MASS
114
AREA
2819
HEIGHT
2130
20-Jul-2023
15:04
linh
pham



AFTER

MASS
114
AREA
2819
HEIGHT
2130
20-Jul-2023
15:04
linh
pham

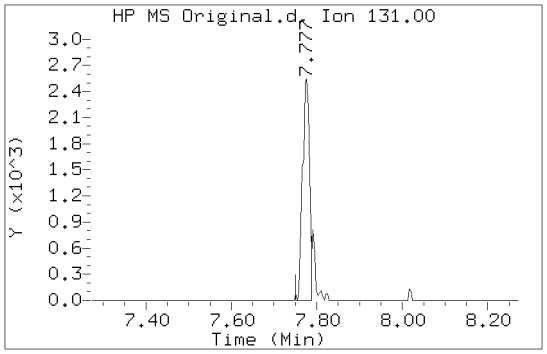


1,1,1,2-Tetrachloroethane (630-20-6)

Reason Code:

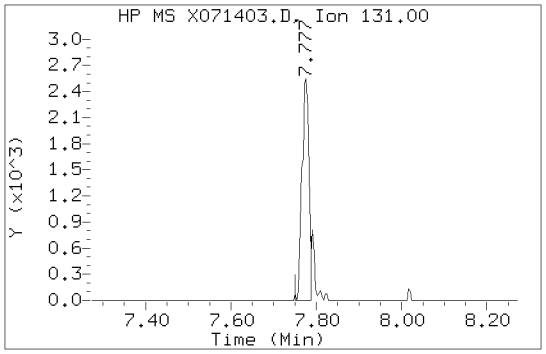
BEFORE

MASS
131
AREA
3008
HEIGHT
2547
20-Jul-2023
15:04
linh
pham



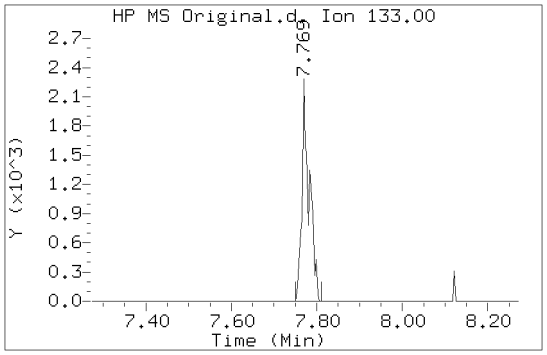
AFTER

MASS
131
AREA
3008
HEIGHT
2547
20-Jul-2023
15:04
linh
pham



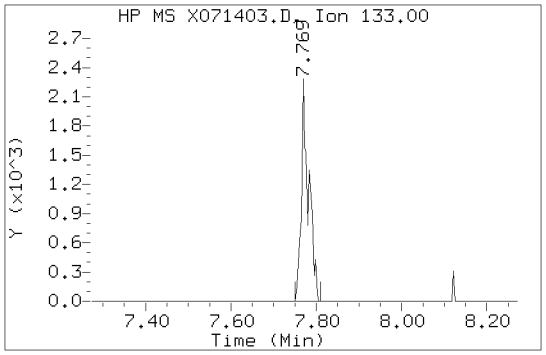
BEFORE

MASS
133
AREA
2774
HEIGHT
2284
20-Jul-2023
15:04
linh
pham



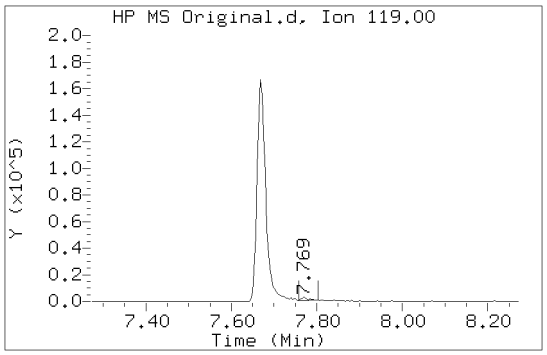
AFTER

MASS
133
AREA
2774
HEIGHT
2284
20-Jul-2023
15:04
linh
pham



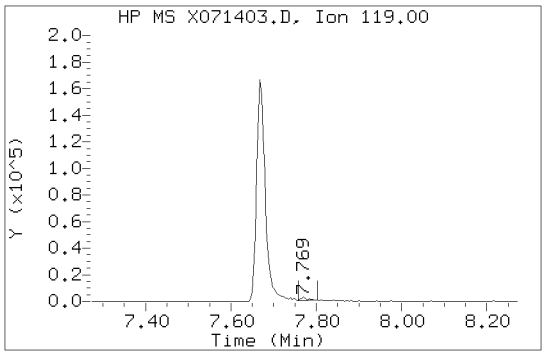
BEFORE

MASS
119
AREA
2799
HEIGHT
2519
20-Jul-2023
15:04
linh
pham



AFTER

MASS
119
AREA
2799
HEIGHT
2519
20-Jul-2023
15:04
linh
pham



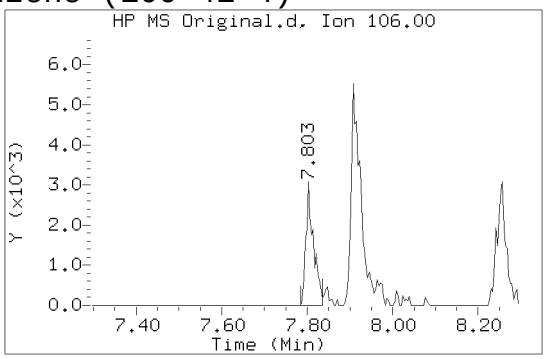
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Ethylbenzene (100-41-4)

Reason Code:

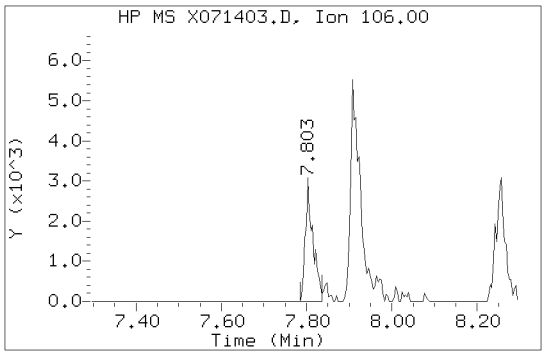
BEFORE

MASS
106
AREA
3909
HEIGHT
3078
20-Jul-2023
15:04
linh
pham



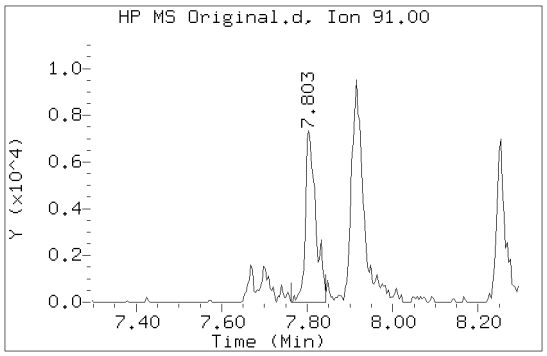
AFTER

MASS
106
AREA
3909
HEIGHT
3078
20-Jul-2023
15:04
linh
pham



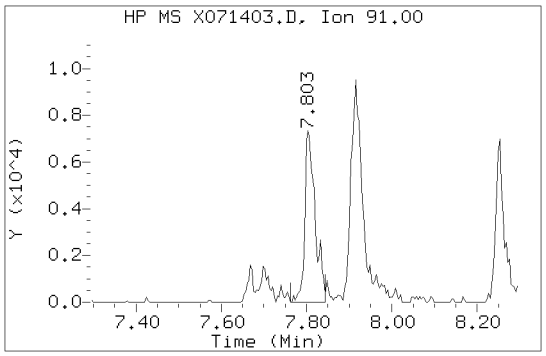
BEFORE

MASS
91
AREA
12659
HEIGHT
7347
20-Jul-2023
15:04
linh
pham



AFTER

MASS
91
AREA
12659
HEIGHT
7347
20-Jul-2023
15:04
linh
pham

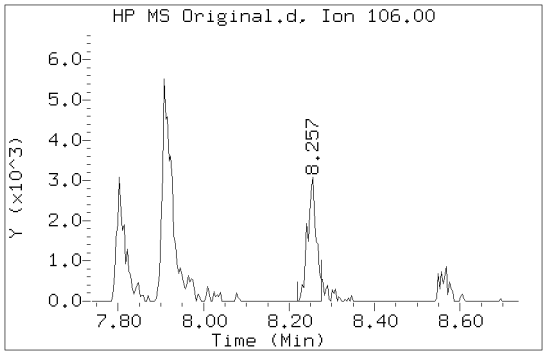


o-Xylene (95-47-6)

Reason Code:

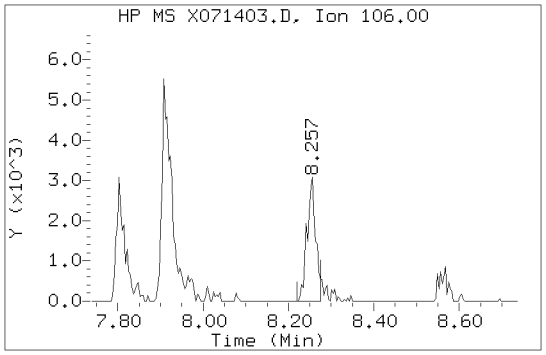
BEFORE

MASS
106
AREA
4414
HEIGHT
3089
20-Jul-2023
15:04
linh
pham



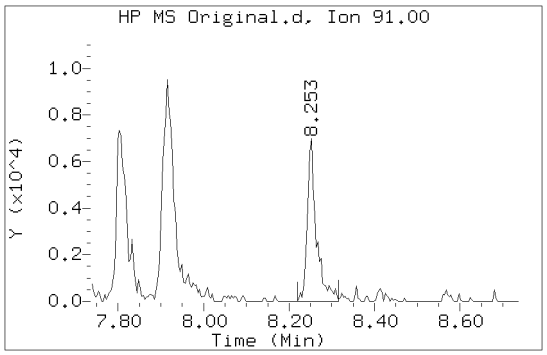
AFTER

MASS
106
AREA
4414
HEIGHT
3089
20-Jul-2023
15:04
linh
pham



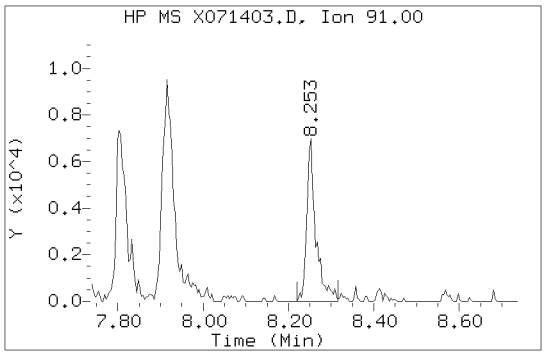
BEFORE

MASS
91
AREA
10415
HEIGHT
7000
20-Jul-2023
15:04
linh
pham



AFTER

MASS
91
AREA
10415
HEIGHT
7000
20-Jul-2023
15:04
linh
pham



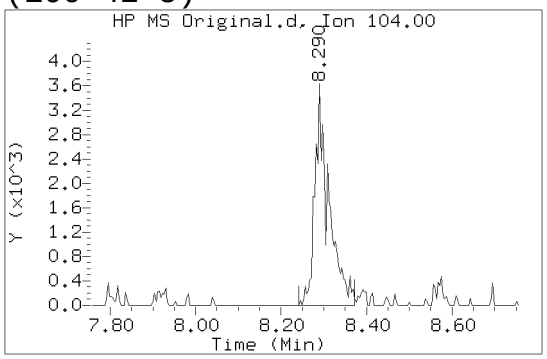
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Styrene (100-42-5)

Reason Code:

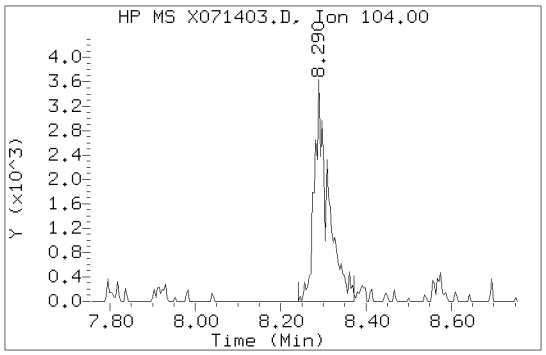
BEFORE

MASS
104
AREA
8133
HEIGHT
3635
20-Jul-2023
15:04
linh
pham



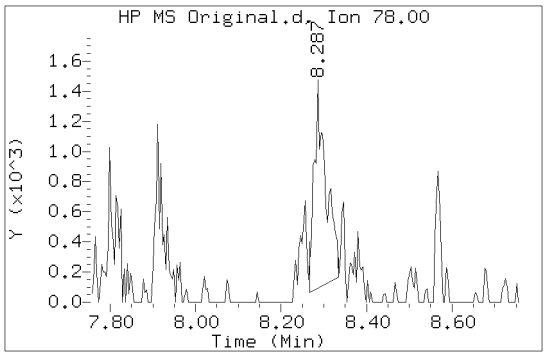
AFTER

MASS
104
AREA
8133
HEIGHT
3635
20-Jul-2023
15:04
linh
pham



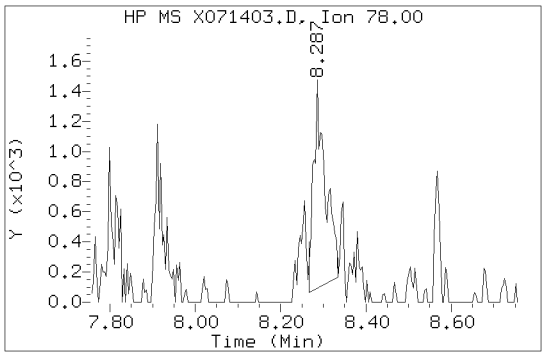
BEFORE

MASS
78
AREA
2633
HEIGHT
1381
20-Jul-2023
15:04
linh
pham



AFTER

MASS
78
AREA
2633
HEIGHT
1381
20-Jul-2023
15:04
linh
pham

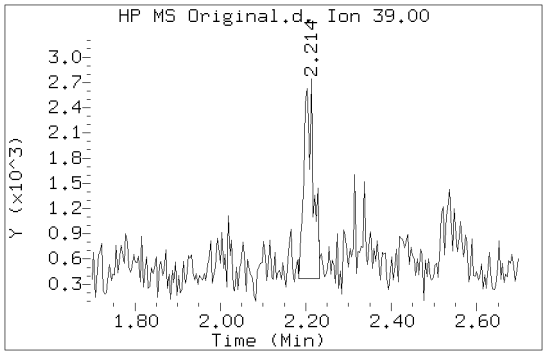


Acetonitrile (75-05-8)

Reason Code:

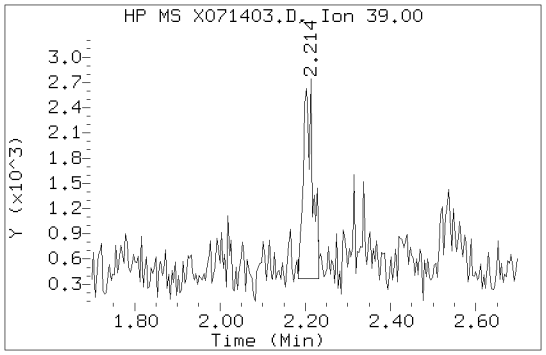
BEFORE

MASS
39
AREA
3606
HEIGHT
2378
20-Jul-2023
15:04
linh
pham



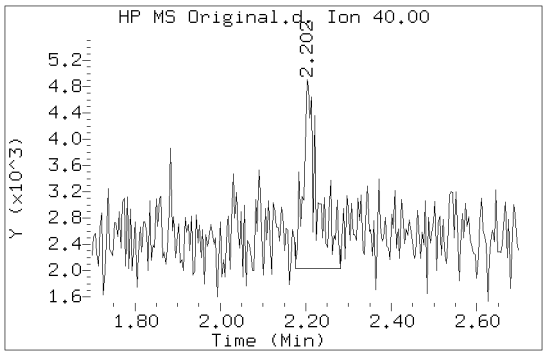
AFTER

MASS
39
AREA
3606
HEIGHT
2378
20-Jul-2023
15:04
linh
pham



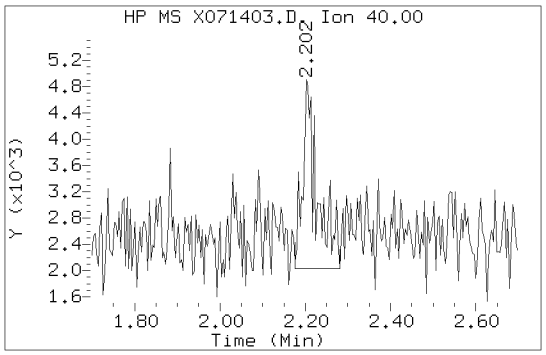
BEFORE

MASS
40
AREA
6842
HEIGHT
2874
20-Jul-2023
15:04
linh
pham



AFTER

MASS
40
AREA
6842
HEIGHT
2874
20-Jul-2023
15:04
linh
pham



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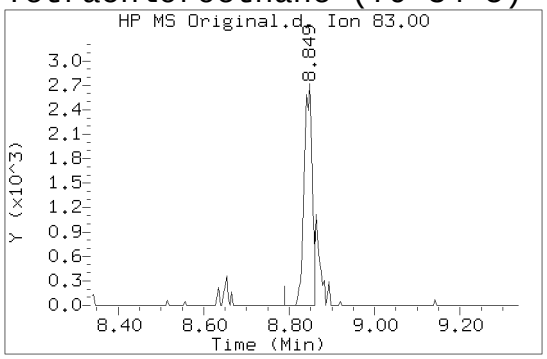
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

1,1,2,2-Tetrachloroethane (79-34-5)

Reason Code:

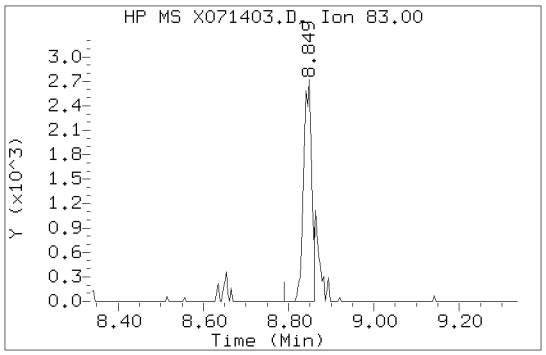
BEFORE

MASS
83
AREA
3654
HEIGHT
2720
20-Jul-2023
15:04
linh
pham



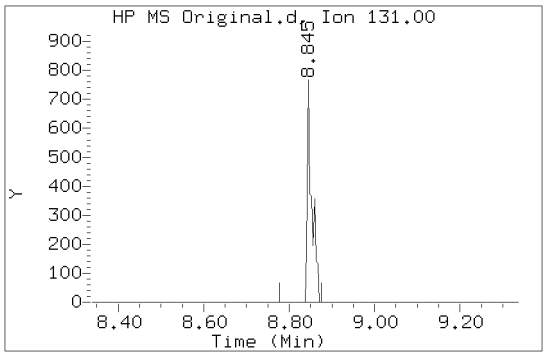
AFTER

MASS
83
AREA
3654
HEIGHT
2720
20-Jul-2023
15:04
linh
pham



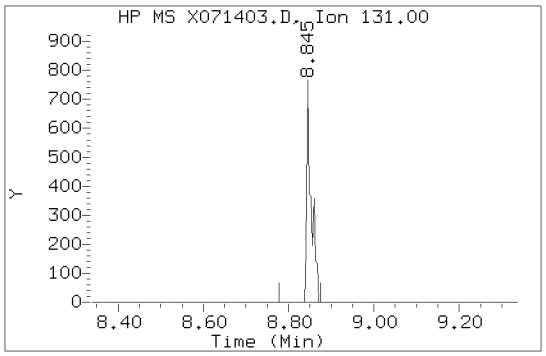
BEFORE

MASS
131
AREA
565
HEIGHT
767
20-Jul-2023
15:04
linh
pham



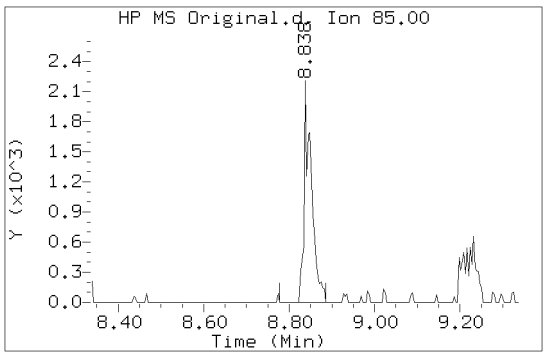
AFTER

MASS
131
AREA
565
HEIGHT
767
20-Jul-2023
15:04
linh
pham



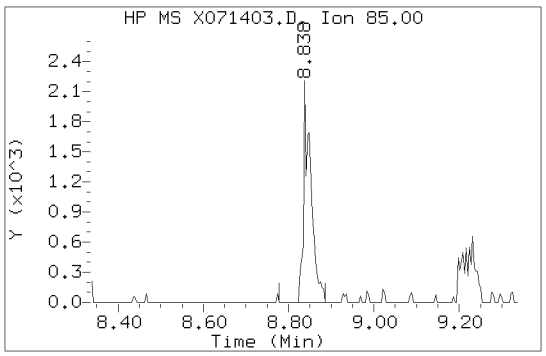
BEFORE

MASS
85
AREA
2735
HEIGHT
2209
20-Jul-2023
15:04
linh
pham



AFTER

MASS
85
AREA
2735
HEIGHT
2209
20-Jul-2023
15:04
linh
pham

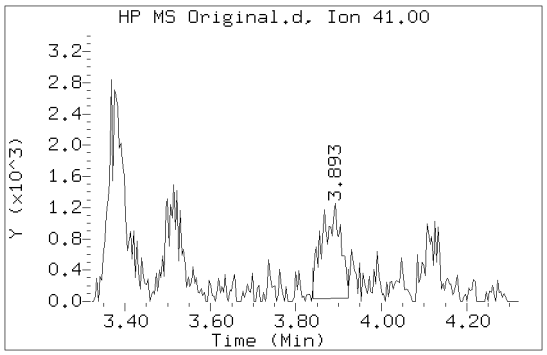


Methacrylonitrile (126-98-7)

Reason Code:

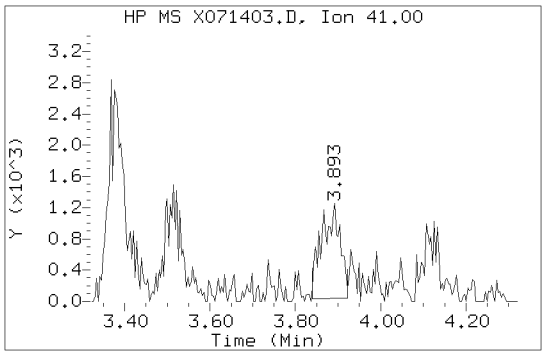
BEFORE

MASS
41
AREA
3622
HEIGHT
1212
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
3622
HEIGHT
1212
20-Jul-2023
15:04
linh
pham

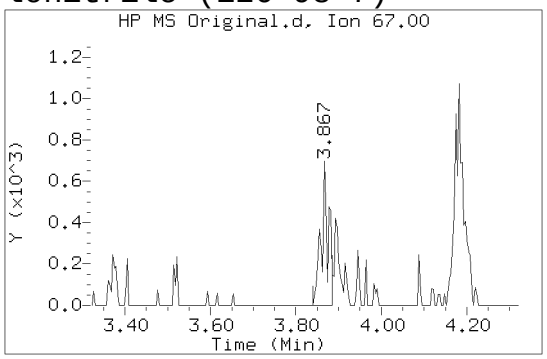


Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

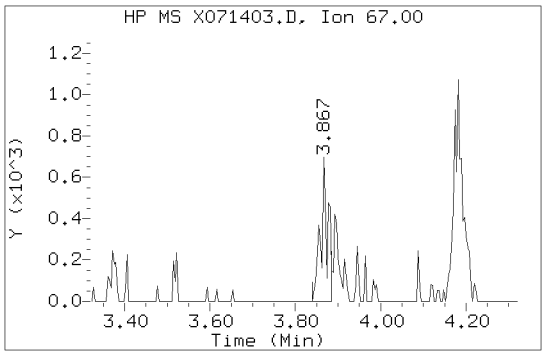
Methacrylonitrile (126-98-7)

Reason Code:

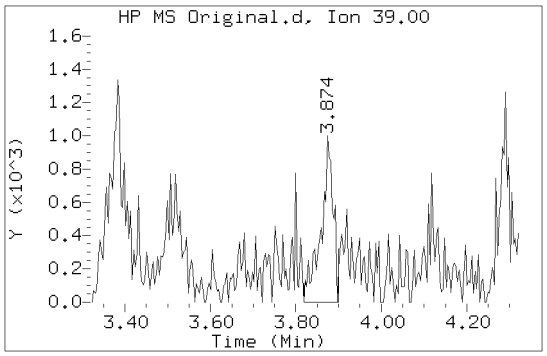
BEFORE
MASS
67
AREA
806
HEIGHT
697
20-Jul-2023
15:04
linh
pham



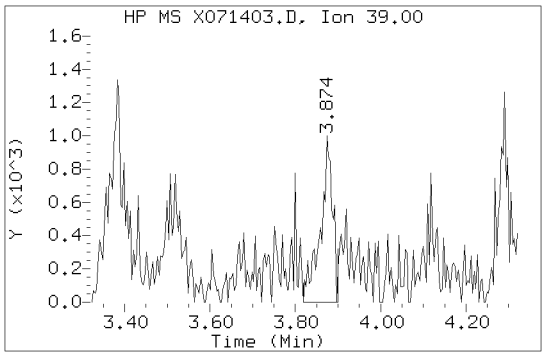
AFTER
MASS
67
AREA
806
HEIGHT
697
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
39
AREA
1986
HEIGHT
1000
20-Jul-2023
15:04
linh
pham



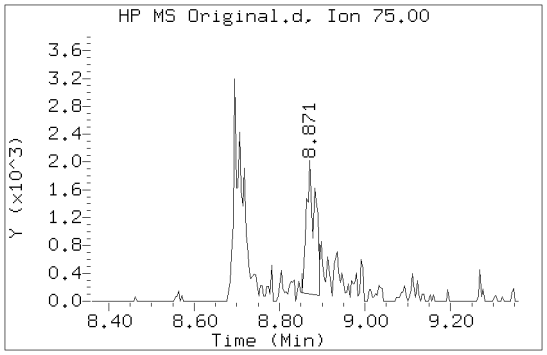
AFTER
MASS
39
AREA
1986
HEIGHT
1000
20-Jul-2023
15:04
linh
pham



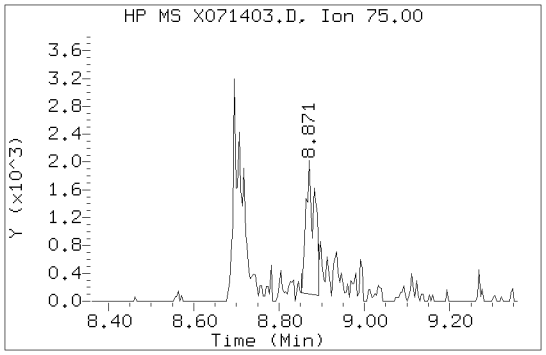
1,2,3-Trichloropropane (96-18-4)

Reason Code:

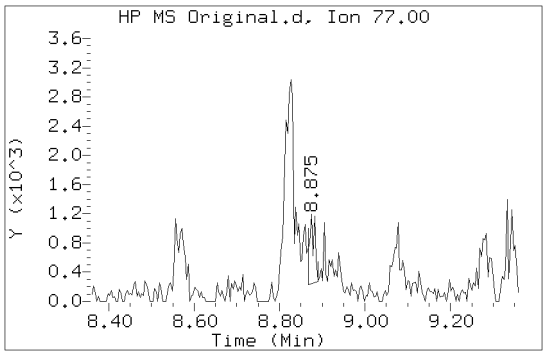
BEFORE
MASS
75
AREA
2737
HEIGHT
1922
20-Jul-2023
15:04
linh
pham



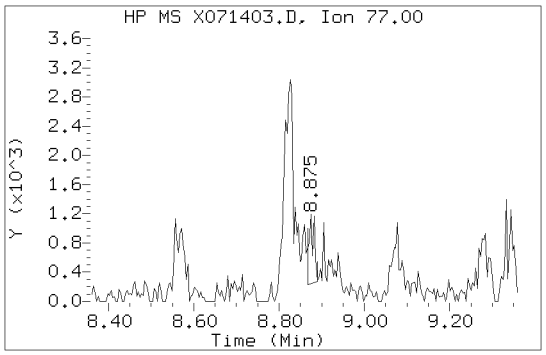
AFTER
MASS
75
AREA
2737
HEIGHT
1922
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
77
AREA
813
HEIGHT
948
20-Jul-2023
15:04
linh
pham



AFTER
MASS
77
AREA
813
HEIGHT
948
20-Jul-2023
15:04
linh
pham

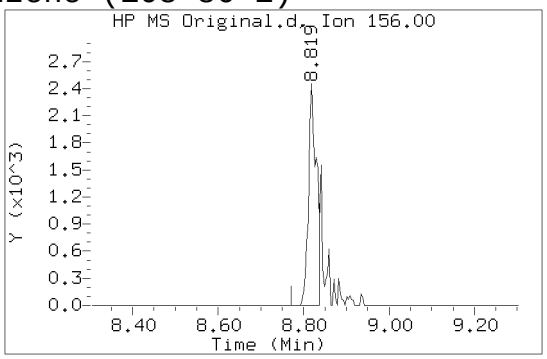


Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

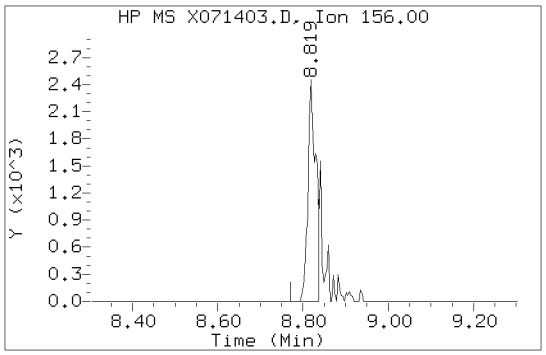
Bromobenzene (108-86-1)

Reason Code:

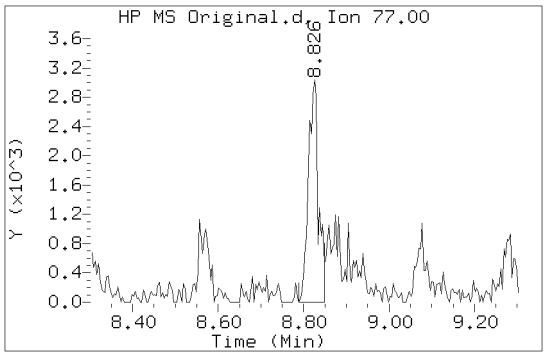
BEFORE
MASS
156
AREA
3201
HEIGHT
2455
20-Jul-2023
15:04
linh
pham



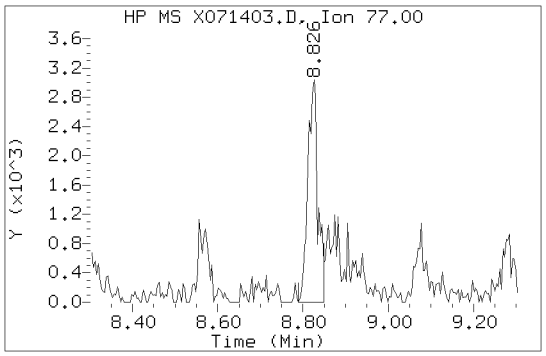
AFTER
MASS
156
AREA
3201
HEIGHT
2455
20-Jul-2023
15:04
linh
pham



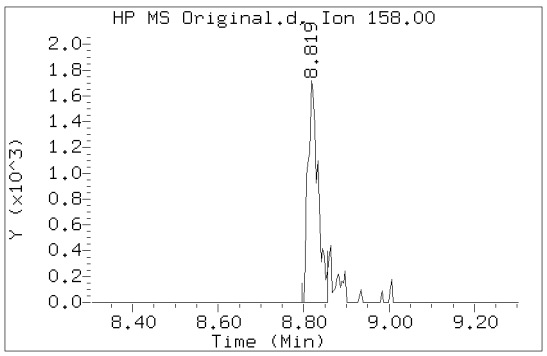
BEFORE
MASS
77
AREA
5003
HEIGHT
3037
20-Jul-2023
15:04
linh
pham



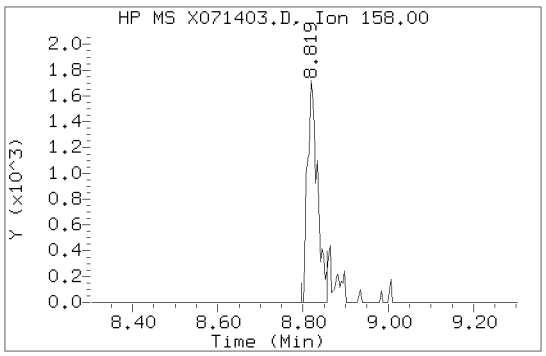
AFTER
MASS
77
AREA
5003
HEIGHT
3037
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
158
AREA
2823
HEIGHT
1718
20-Jul-2023
15:04
linh
pham



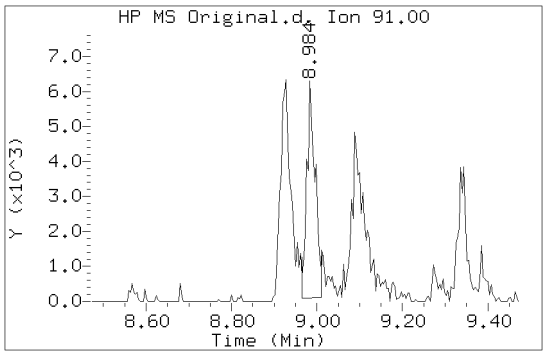
AFTER
MASS
158
AREA
2823
HEIGHT
1718
20-Jul-2023
15:04
linh
pham



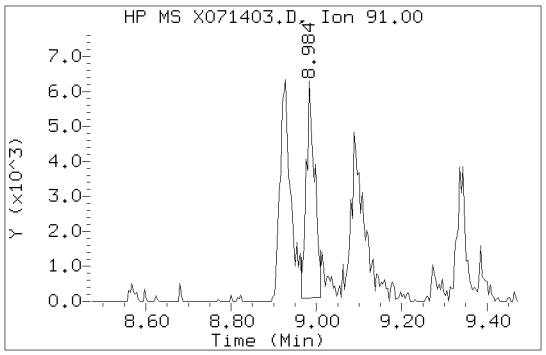
2-Chlorotoluene (95-49-8)

Reason Code:

BEFORE
MASS
91
AREA
8487
HEIGHT
6195
20-Jul-2023
15:04
linh
pham



AFTER
MASS
91
AREA
8487
HEIGHT
6195
20-Jul-2023
15:04
linh
pham



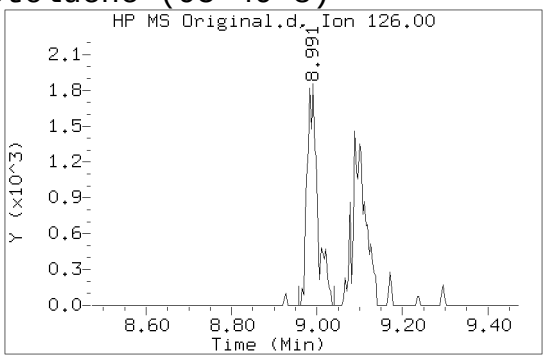
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

2-Chlorotoluene (95-49-8)

Reason Code:

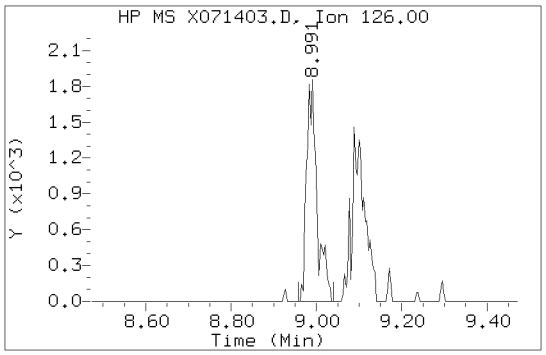
BEFORE

MASS
126
AREA
3192
HEIGHT
1856
20-Jul-2023
15:04
linh
pham



AFTER

MASS
126
AREA
3192
HEIGHT
1856
20-Jul-2023
15:04
linh
pham

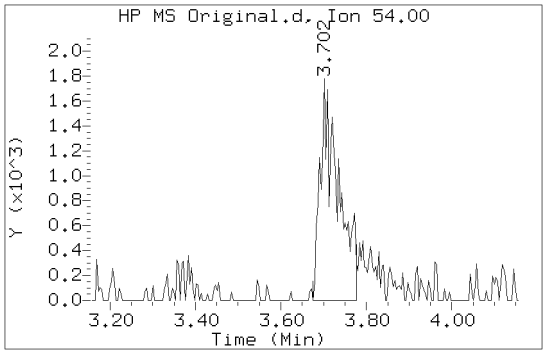


Propionitrile (107-12-0)

Reason Code:

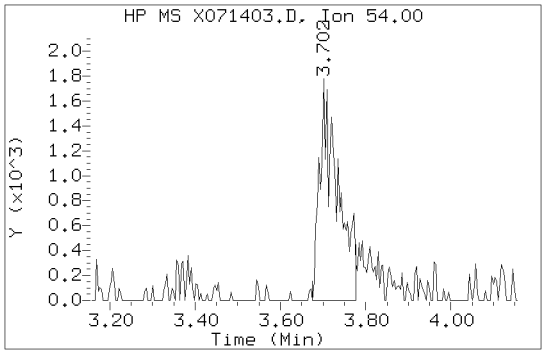
BEFORE

MASS
54
AREA
5231
HEIGHT
1779
20-Jul-2023
15:04
linh
pham



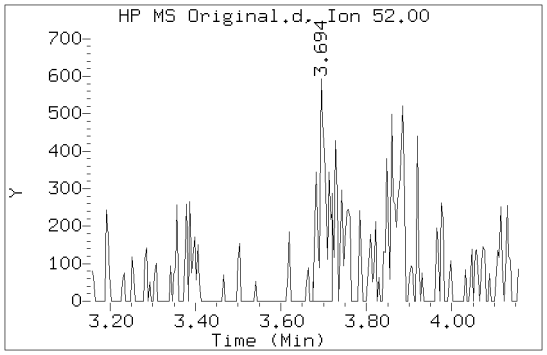
AFTER

MASS
54
AREA
5231
HEIGHT
1779
20-Jul-2023
15:04
linh
pham



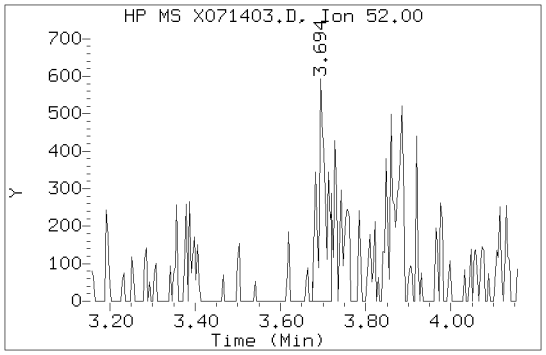
BEFORE

MASS
52
AREA
779
HEIGHT
593
20-Jul-2023
15:04
linh
pham



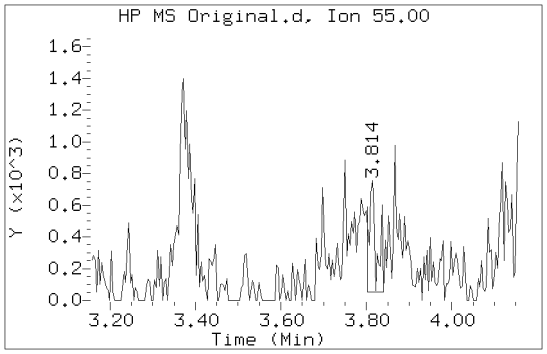
AFTER

MASS
52
AREA
779
HEIGHT
593
20-Jul-2023
15:04
linh
pham



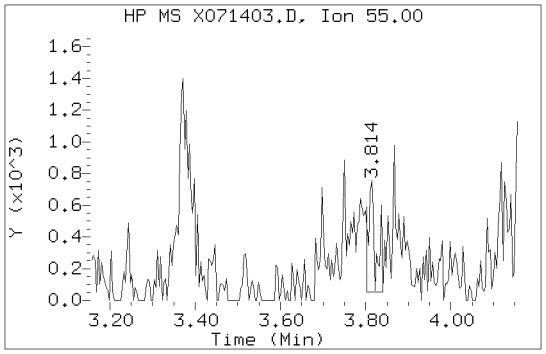
BEFORE

MASS
55
AREA
826
HEIGHT
704
20-Jul-2023
15:04
linh
pham



AFTER

MASS
55
AREA
826
HEIGHT
704
20-Jul-2023
15:04
linh
pham



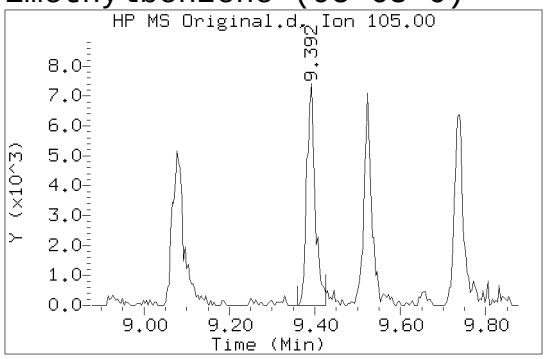
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

1,2,4-Trimethylbenzene (95-63-6)

Reason Code:

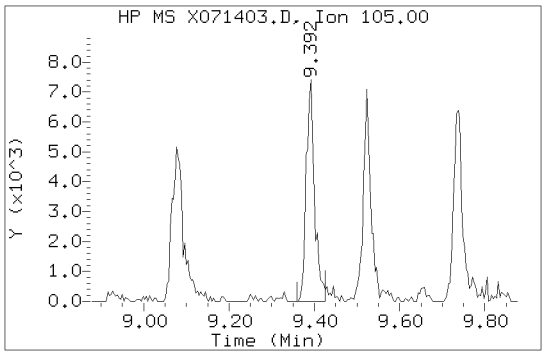
BEFORE

MASS
105
AREA
10172
HEIGHT
7414
20-Jul-2023
15:04
linh
pham



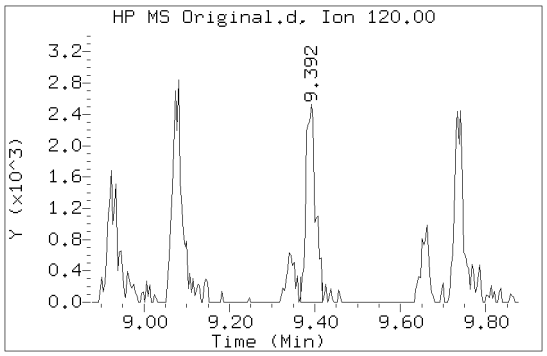
AFTER

MASS
105
AREA
10172
HEIGHT
7414
20-Jul-2023
15:04
linh
pham



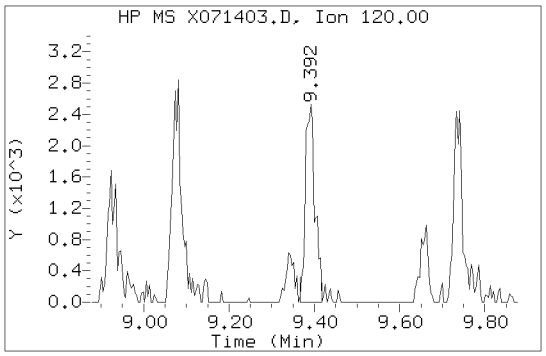
BEFORE

MASS
120
AREA
3980
HEIGHT
2527
20-Jul-2023
15:04
linh
pham



AFTER

MASS
120
AREA
3980
HEIGHT
2527
20-Jul-2023
15:04
linh
pham

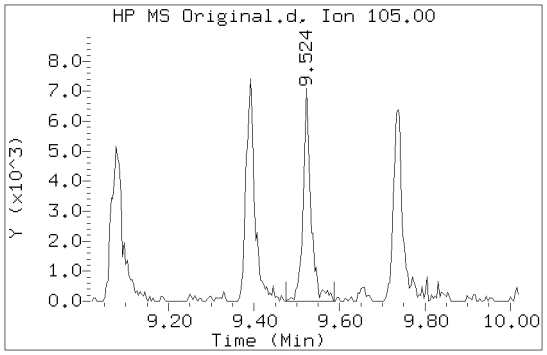


sec-Butylbenzene (135-98-8)

Reason Code:

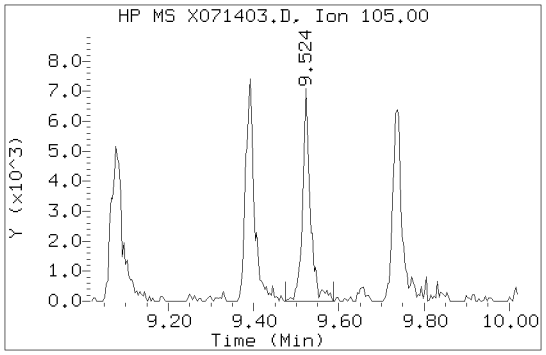
BEFORE

MASS
105
AREA
9247
HEIGHT
7103
20-Jul-2023
15:04
linh
pham



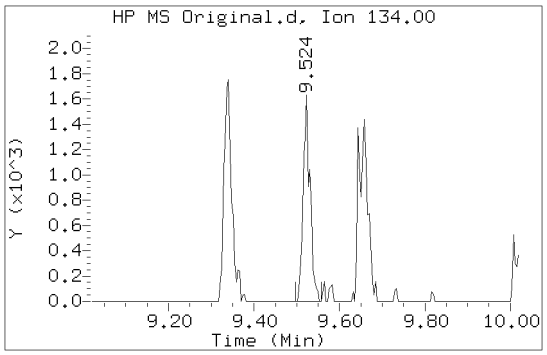
AFTER

MASS
105
AREA
9247
HEIGHT
7103
20-Jul-2023
15:04
linh
pham



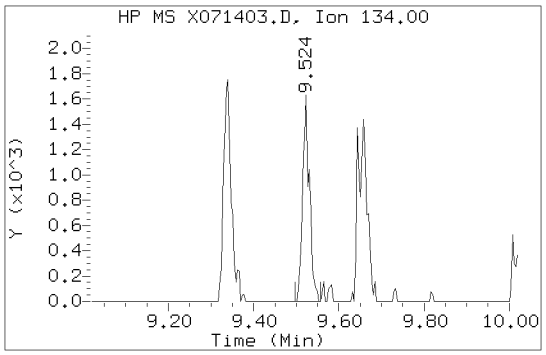
BEFORE

MASS
134
AREA
1861
HEIGHT
1631
20-Jul-2023
15:04
linh
pham



AFTER

MASS
134
AREA
1861
HEIGHT
1631
20-Jul-2023
15:04
linh
pham



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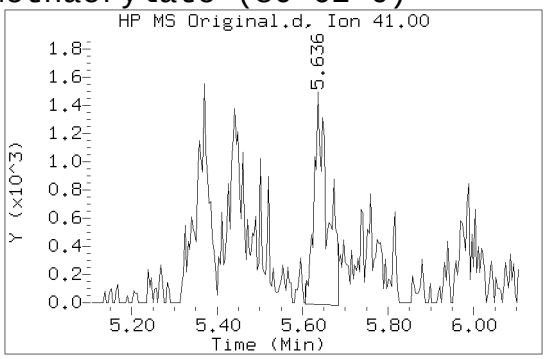
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Methyl Methacrylate (80-62-6)

Reason Code:

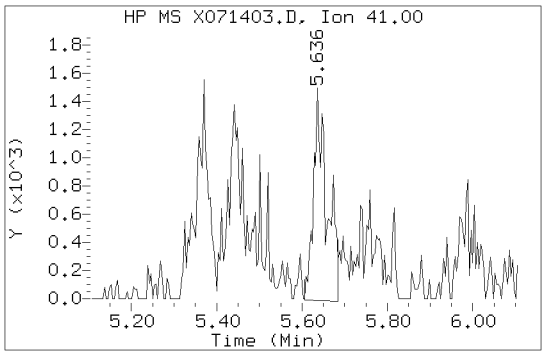
BEFORE

MASS
41
AREA
3261
HEIGHT
1505
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
3261
HEIGHT
1505
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
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AREA
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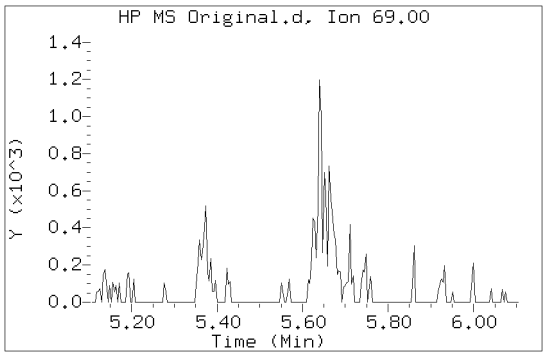
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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AREA
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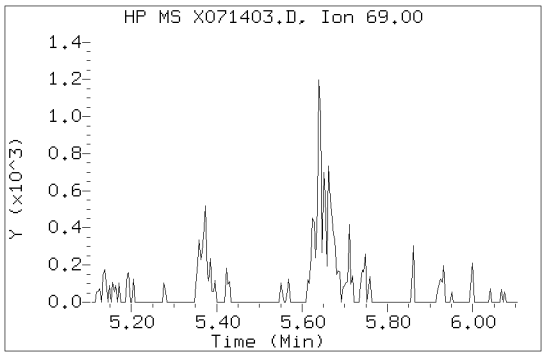
HEIGHT
0
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
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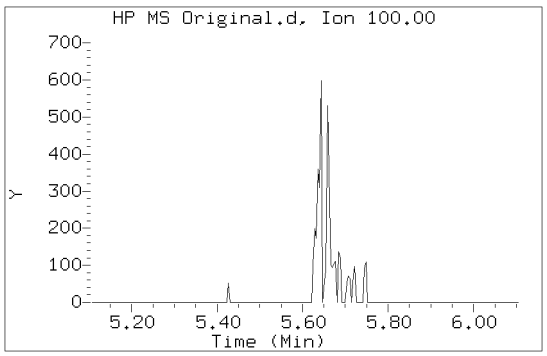
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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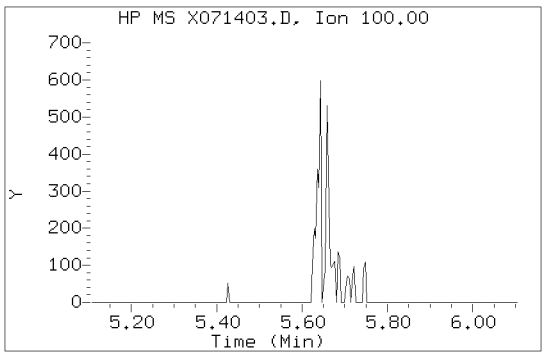
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

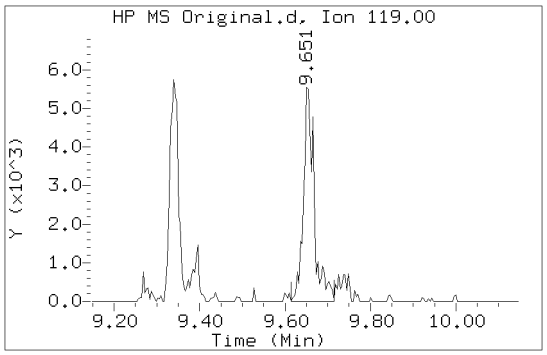


p-Isopropyltoluene (99-87-6)

Reason Code:

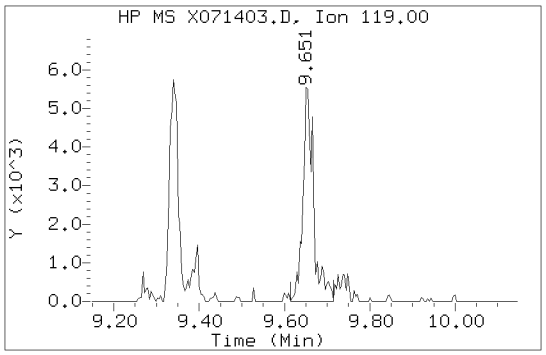
BEFORE

MASS
119
AREA
9771
HEIGHT
5556
20-Jul-2023
15:04
linh
pham



AFTER

MASS
119
AREA
9771
HEIGHT
5556
20-Jul-2023
15:04
linh
pham



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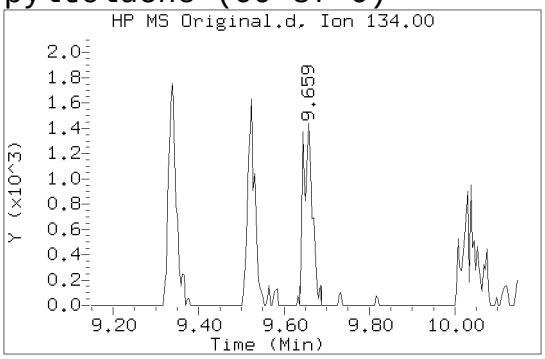
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

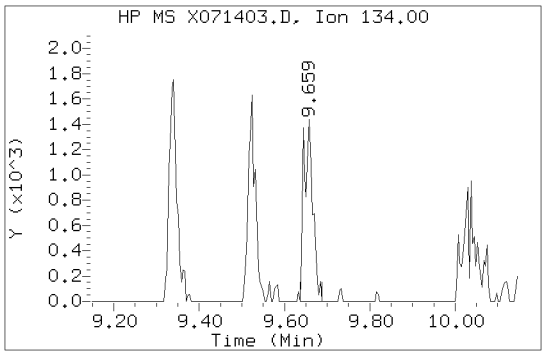
p-Isopropyltoluene (99-87-6)

Reason Code:

BEFORE
MASS
134
AREA
2131
HEIGHT
1438
20-Jul-2023
15:04
linh
pham



AFTER
MASS
134
AREA
2131
HEIGHT
1438
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
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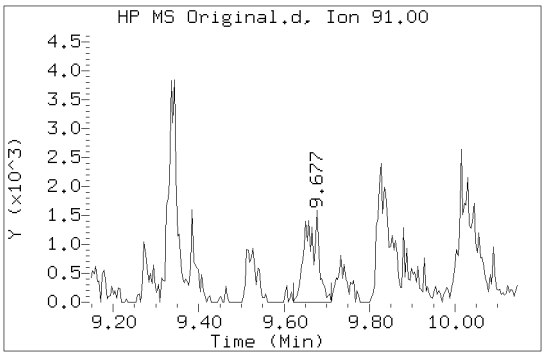
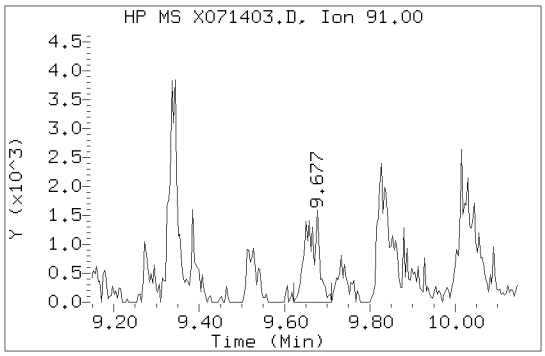
AREA
3352
HEIGHT
1591
20-Jul-2023
15:04
linh
pham



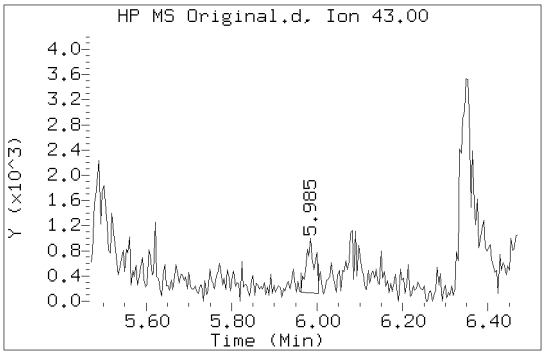
AFTER
MASS
91
AREA
3352
HEIGHT
1591
20-Jul-2023
15:04
linh
pham



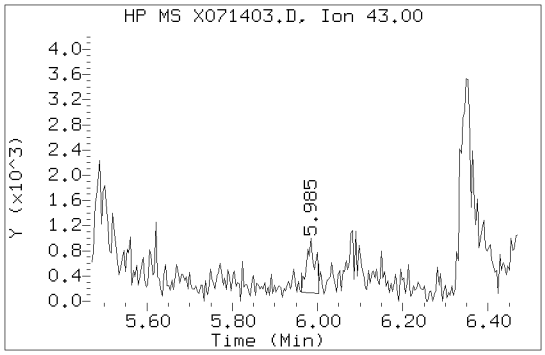
2-Nitropropane (79-46-9)

Reason Code:

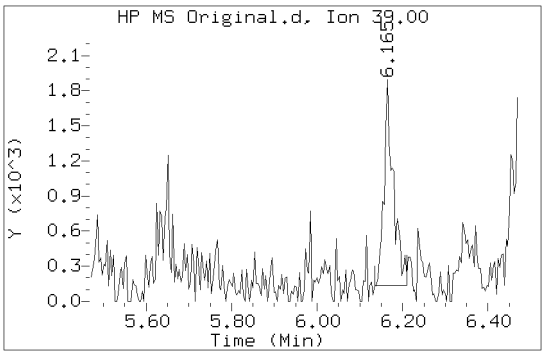
BEFORE
MASS
43
AREA
1174
HEIGHT
872
20-Jul-2023
15:04
linh
pham



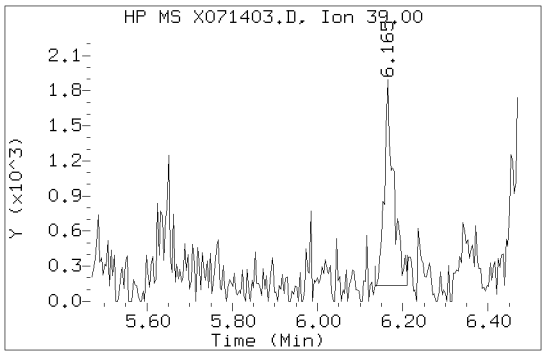
AFTER
MASS
43
AREA
1174
HEIGHT
872
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
39
AREA
2649
HEIGHT
1759
20-Jul-2023
15:04
linh
pham



AFTER
MASS
39
AREA
2649
HEIGHT
1759
20-Jul-2023
15:04
linh
pham



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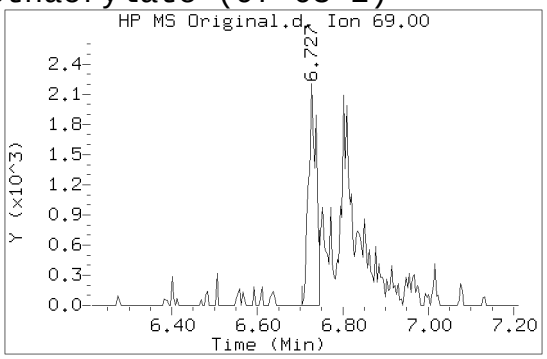
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Ethyl Methacrylate (97-63-2)

Reason Code:

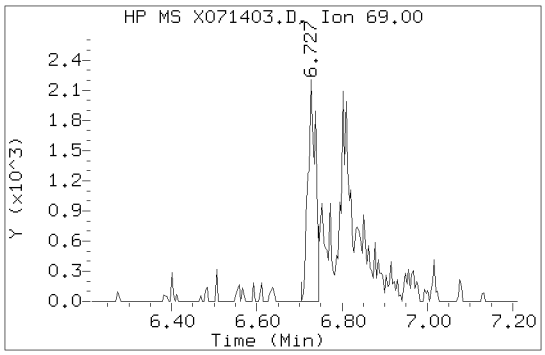
BEFORE

MASS
69
AREA
2780
HEIGHT
2206
20-Jul-2023
15:04
linh
pham



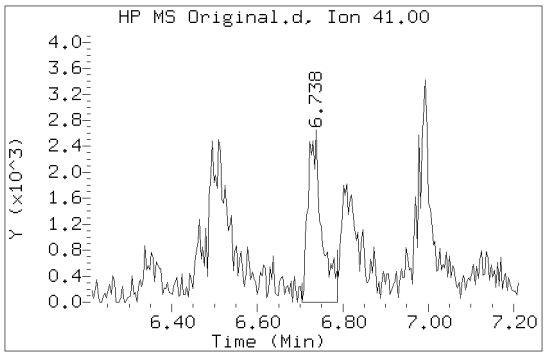
AFTER

MASS
69
AREA
2780
HEIGHT
2206
20-Jul-2023
15:04
linh
pham



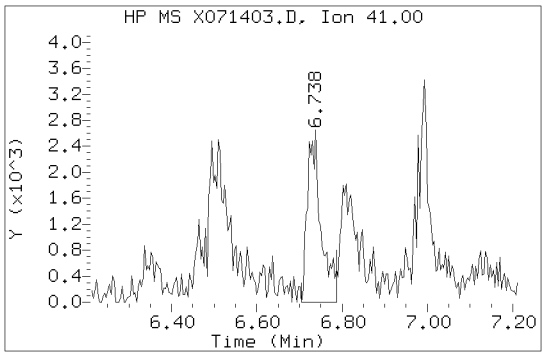
BEFORE

MASS
41
AREA
5900
HEIGHT
2651
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
5900
HEIGHT
2651
20-Jul-2023
15:04
linh
pham

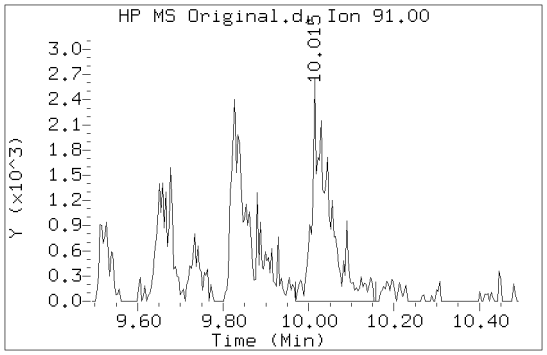


n-Butylbenzene (104-51-8)

Reason Code:

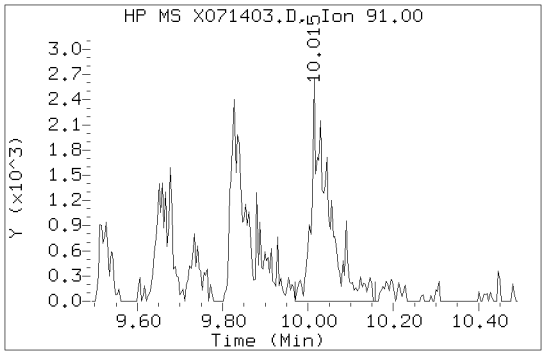
BEFORE

MASS
91
AREA
7141
HEIGHT
2647
20-Jul-2023
15:04
linh
pham



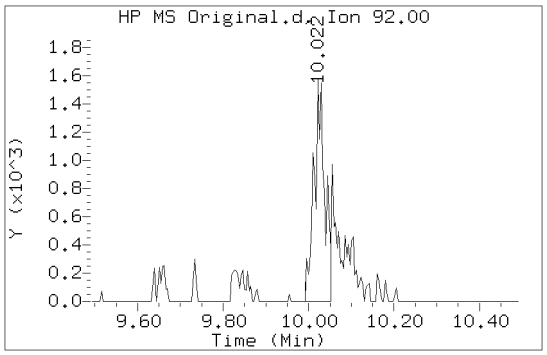
AFTER

MASS
91
AREA
7141
HEIGHT
2647
20-Jul-2023
15:04
linh
pham



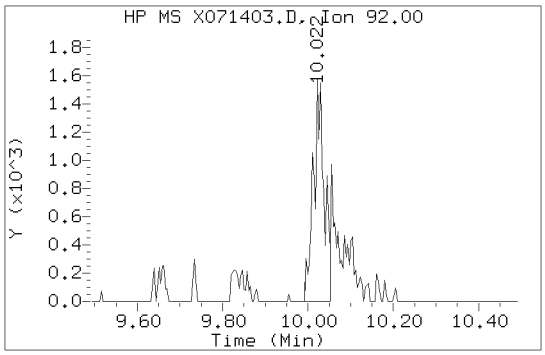
BEFORE

MASS
92
AREA
2733
HEIGHT
1571
20-Jul-2023
15:04
linh
pham



AFTER

MASS
92
AREA
2733
HEIGHT
1571
20-Jul-2023
15:04
linh
pham



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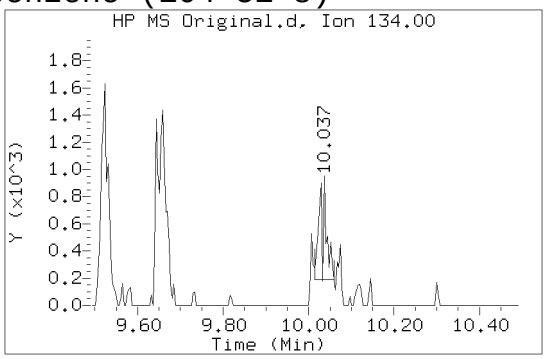
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

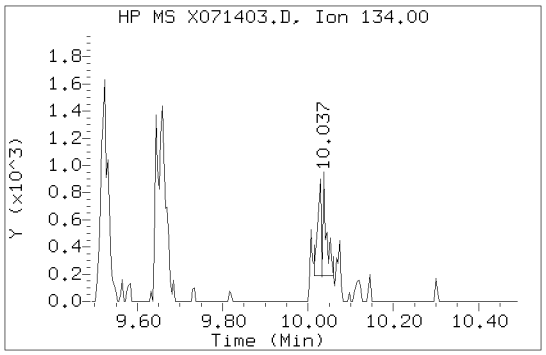
n-Butylbenzene (104-51-8)

Reason Code:

BEFORE
MASS
134
AREA
825
HEIGHT
766
20-Jul-2023
15:04
linh
pham



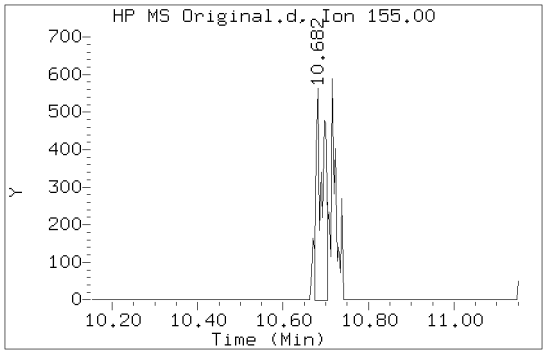
AFTER
MASS
134
AREA
825
HEIGHT
766
20-Jul-2023
15:04
linh
pham



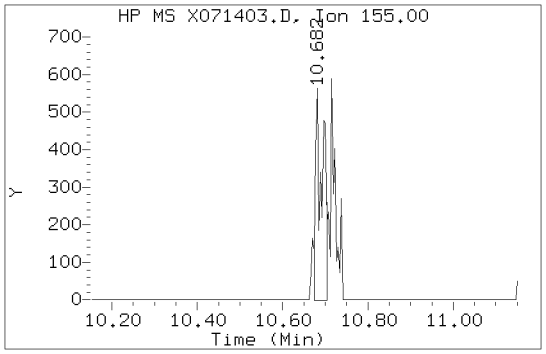
1,2-Dibromo-3-Chloropropane (96-12-8)

Reason Code:

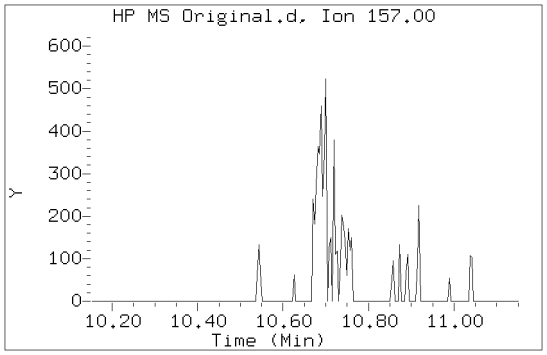
BEFORE
MASS
155
AREA
675
HEIGHT
564
20-Jul-2023
15:04
linh
pham



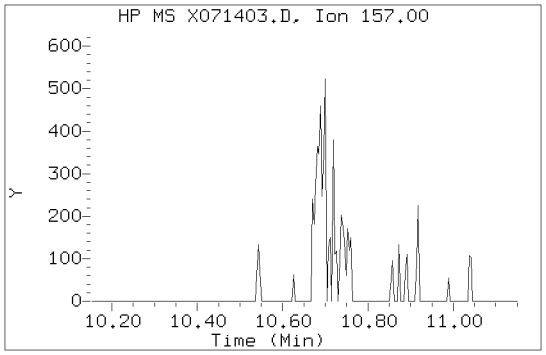
AFTER
MASS
155
AREA
675
HEIGHT
564
20-Jul-2023
15:04
linh
pham



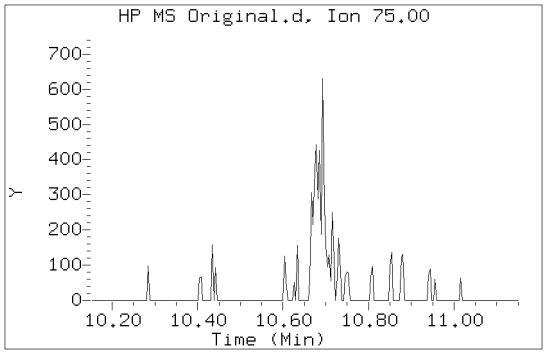
BEFORE
MASS
157
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



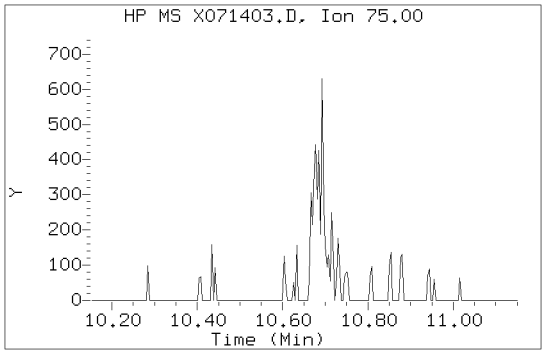
AFTER
MASS
157
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
75
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER
MASS
75
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



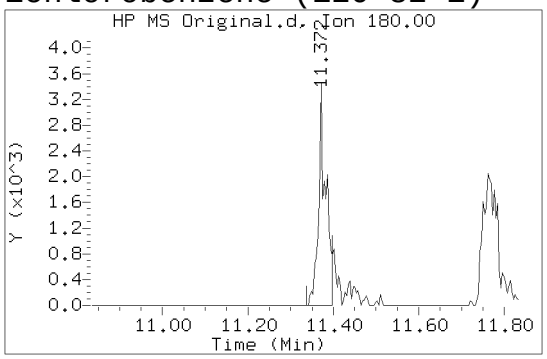
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

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

Reason Code:

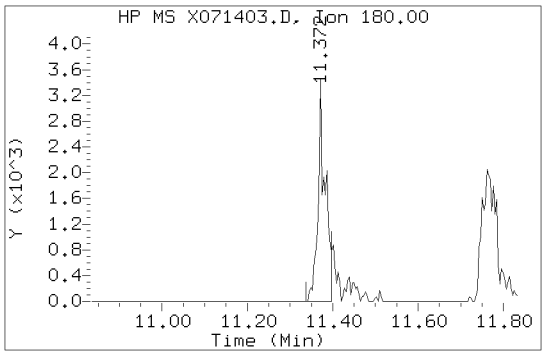
BEFORE

MASS
180
AREA
4099
HEIGHT
3445
20-Jul-2023
15:04
linh
pham



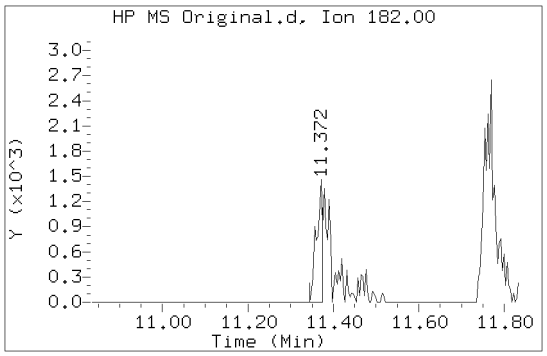
AFTER

MASS
180
AREA
4099
HEIGHT
3445
20-Jul-2023
15:04
linh
pham



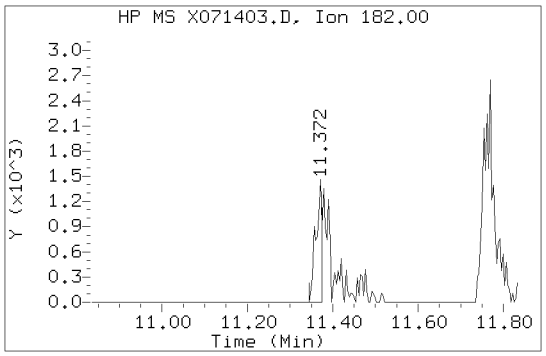
BEFORE

MASS
182
AREA
1413
HEIGHT
1466
20-Jul-2023
15:04
linh
pham



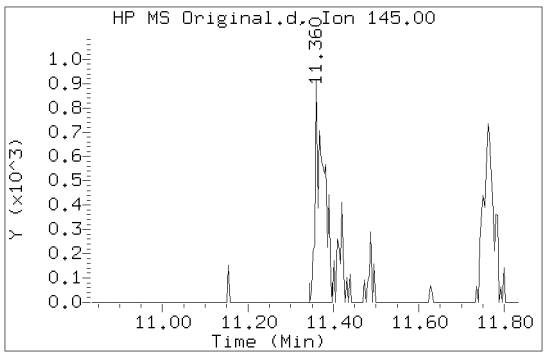
AFTER

MASS
182
AREA
1413
HEIGHT
1466
20-Jul-2023
15:04
linh
pham



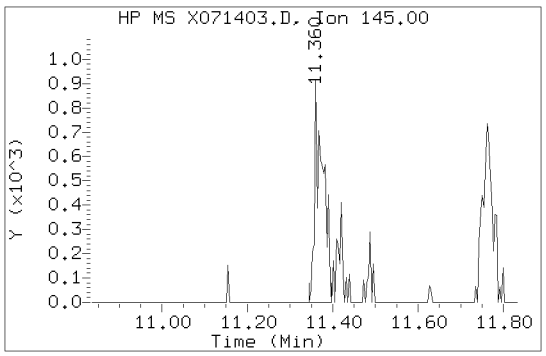
BEFORE

MASS
145
AREA
1239
HEIGHT
912
20-Jul-2023
15:04
linh
pham



AFTER

MASS
145
AREA
1239
HEIGHT
912
20-Jul-2023
15:04
linh
pham

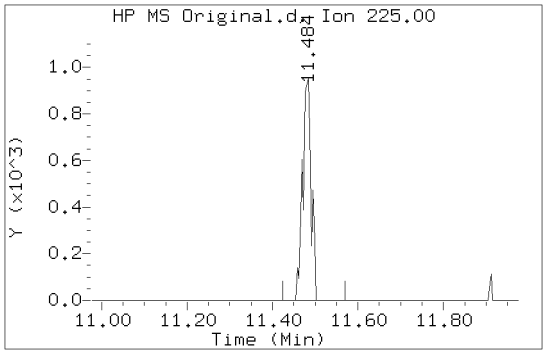


Hexachlorobutadiene (87-68-3)

Reason Code:

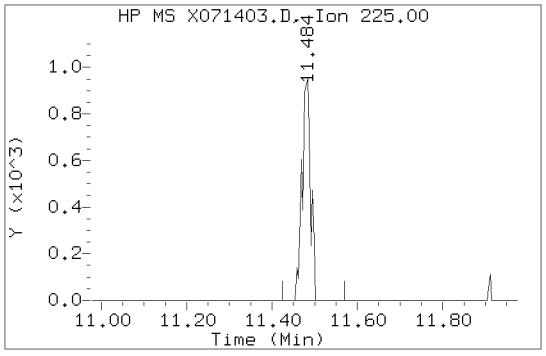
BEFORE

MASS
225
AREA
1357
HEIGHT
951
20-Jul-2023
15:04
linh
pham



AFTER

MASS
225
AREA
1357
HEIGHT
951
20-Jul-2023
15:04
linh
pham

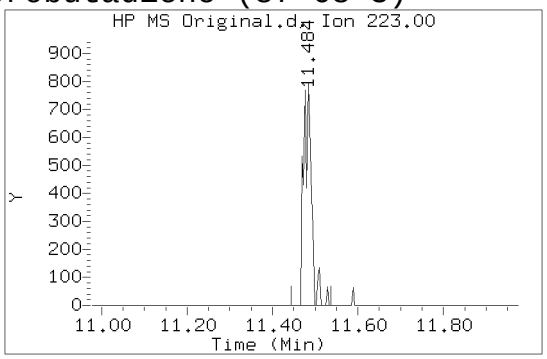


Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

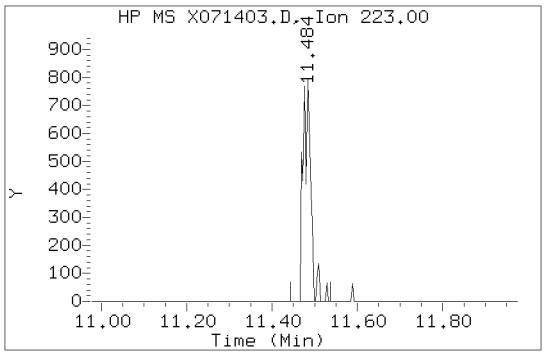
Hexachlorobutadiene (87-68-3)

Reason Code:

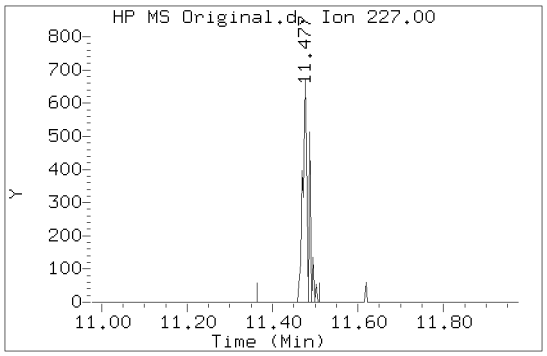
BEFORE
MASS
223
AREA
1025
HEIGHT
792
20-Jul-2023
15:04
linh
pham



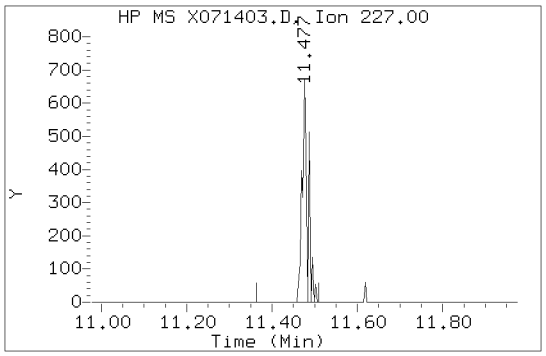
AFTER
MASS
223
AREA
1025
HEIGHT
792
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
227
AREA
611
HEIGHT
670
20-Jul-2023
15:04
linh
pham



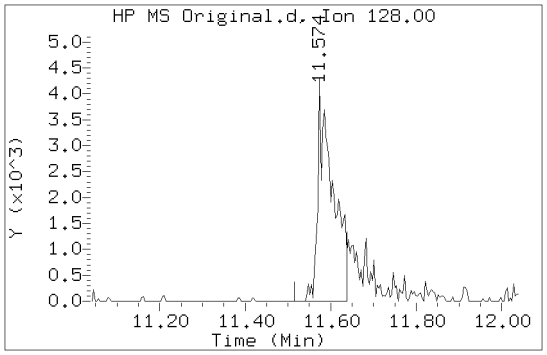
AFTER
MASS
227
AREA
611
HEIGHT
670
20-Jul-2023
15:04
linh
pham



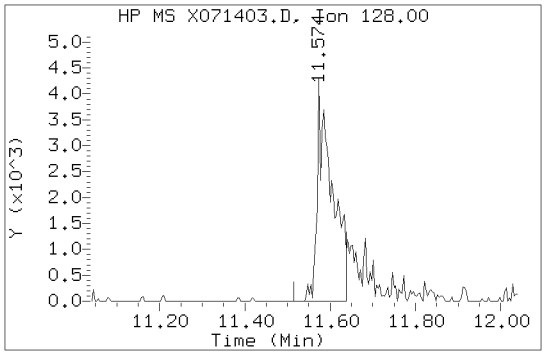
Naphthalene (91-20-3)

Reason Code:

BEFORE
MASS
128
AREA
10357
HEIGHT
4289
20-Jul-2023
15:04
linh
pham



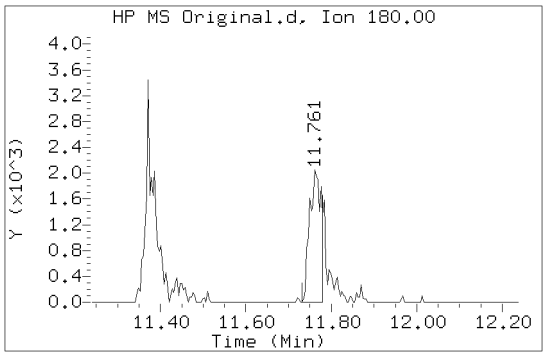
AFTER
MASS
128
AREA
10357
HEIGHT
4289
20-Jul-2023
15:04
linh
pham



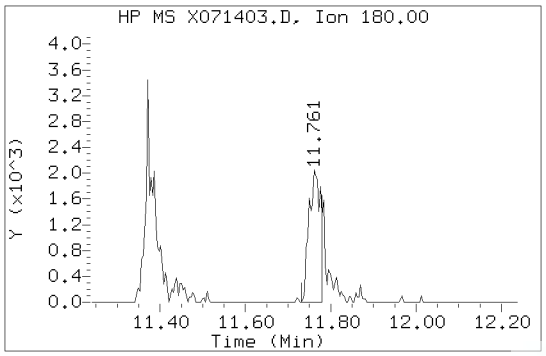
1,2,3-Trichlorobenzene (87-61-6)

Reason Code:

BEFORE
MASS
180
AREA
3845
HEIGHT
2053
20-Jul-2023
15:04
linh
pham



AFTER
MASS
180
AREA
3845
HEIGHT
2053
20-Jul-2023
15:04
linh
pham



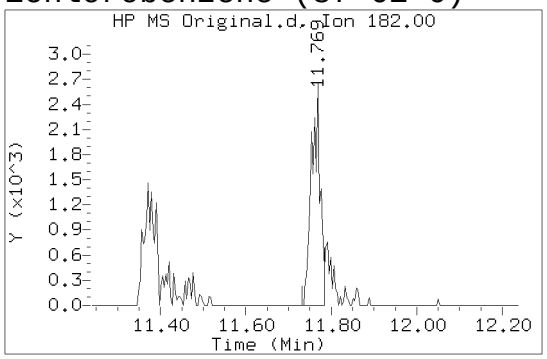
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

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

Reason Code:

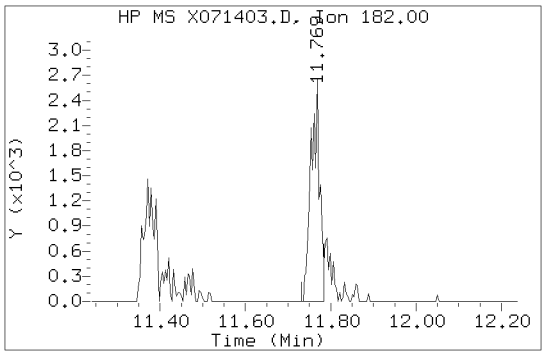
BEFORE

MASS
182
AREA
3757
HEIGHT
2648
20-Jul-2023
15:04
linh
pham



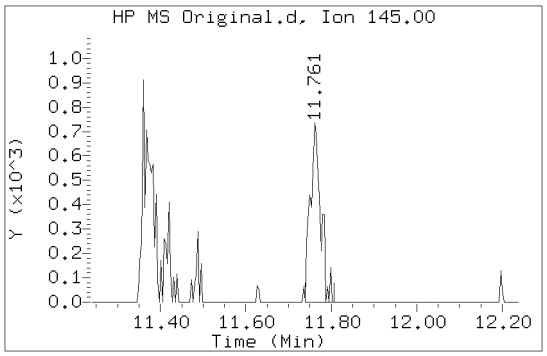
AFTER

MASS
182
AREA
3757
HEIGHT
2648
20-Jul-2023
15:04
linh
pham



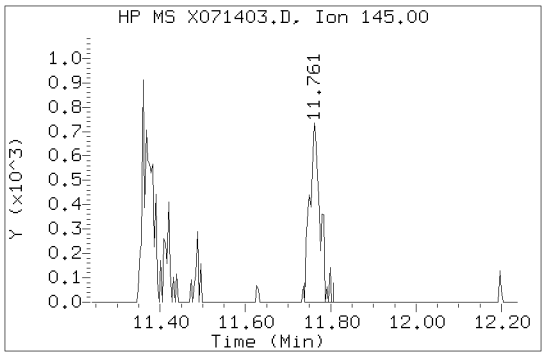
BEFORE

MASS
145
AREA
1239
HEIGHT
737
20-Jul-2023
15:04
linh
pham



AFTER

MASS
145
AREA
1239
HEIGHT
737
20-Jul-2023
15:04
linh
pham

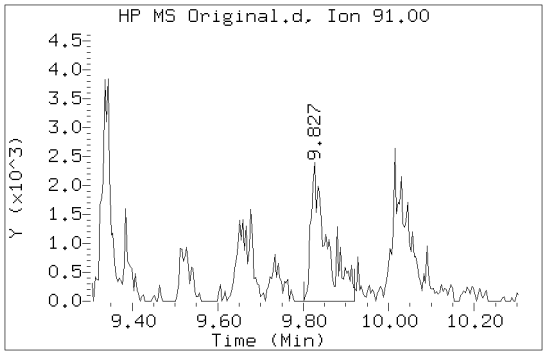


Benzyl Chloride (100-44-7)

Reason Code:

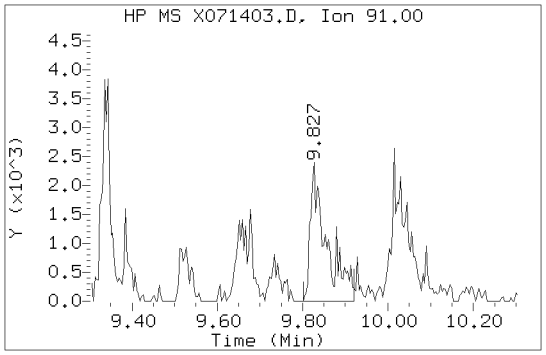
BEFORE

MASS
91
AREA
6245
HEIGHT
2401
20-Jul-2023
15:04
linh
pham



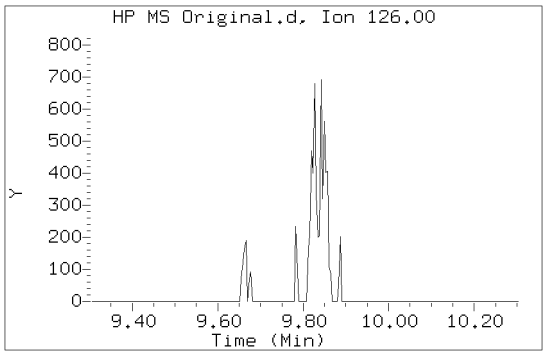
AFTER

MASS
91
AREA
6245
HEIGHT
2401
20-Jul-2023
15:04
linh
pham



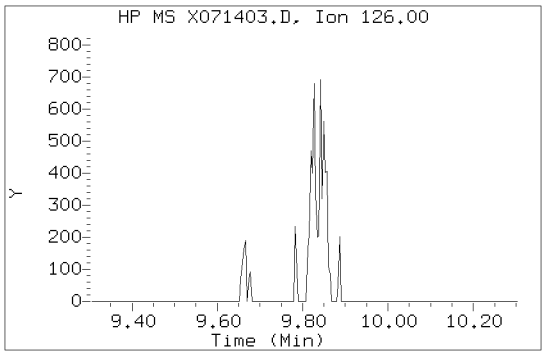
BEFORE

MASS
126
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
126
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



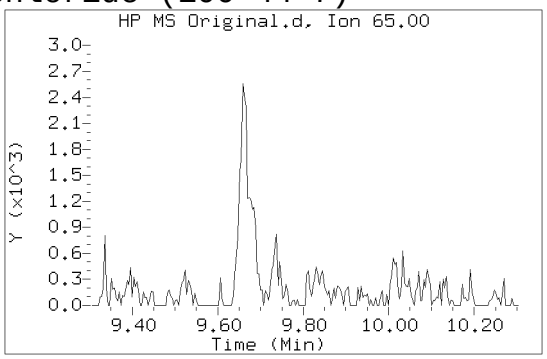
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Benzyl Chloride (100-44-7)

Reason Code:

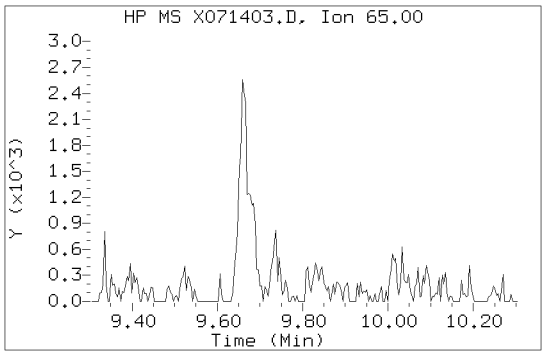
BEFORE

MASS
65
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
65
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

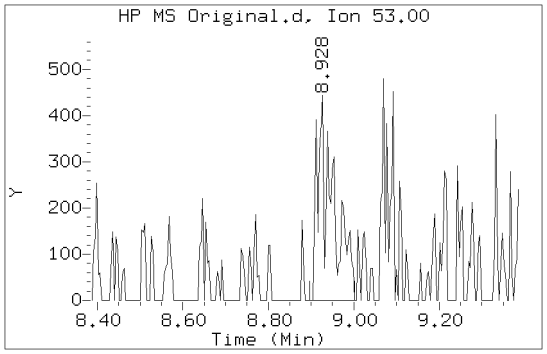


trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code:

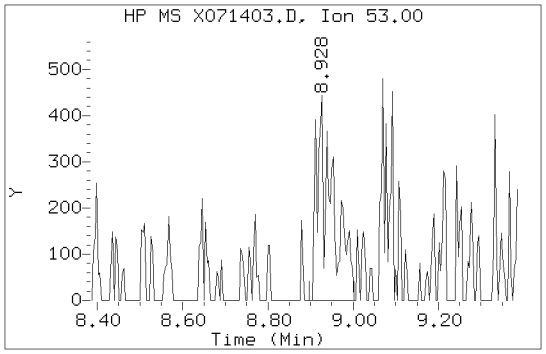
BEFORE

MASS
53
AREA
1124
HEIGHT
444
20-Jul-2023
15:04
linh
pham



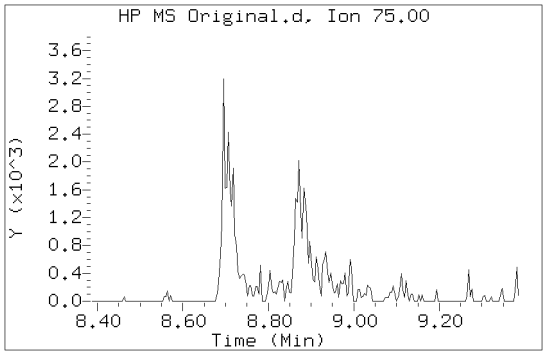
AFTER

MASS
53
AREA
1124
HEIGHT
444
20-Jul-2023
15:04
linh
pham



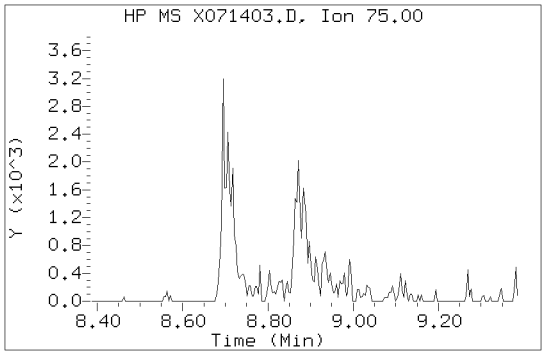
BEFORE

MASS
75
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
75
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

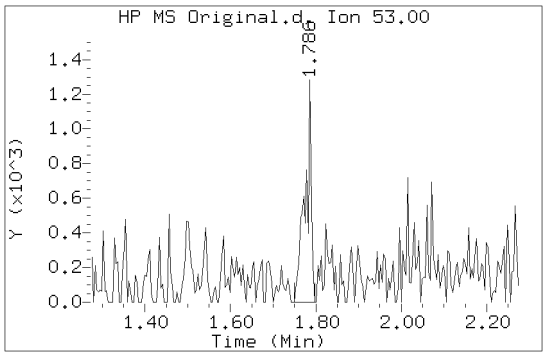


Chloroprene (126-99-8)

Reason Code:

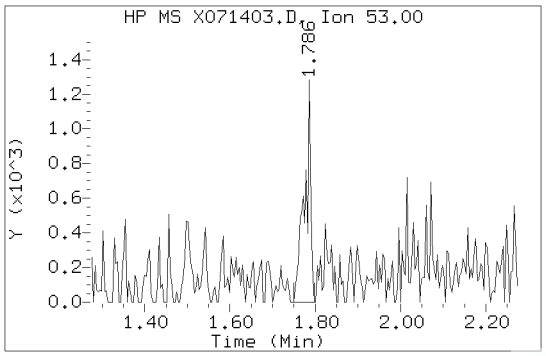
BEFORE

MASS
53
AREA
1292
HEIGHT
1283
20-Jul-2023
15:04
linh
pham



AFTER

MASS
53
AREA
1292
HEIGHT
1283
20-Jul-2023
15:04
linh
pham



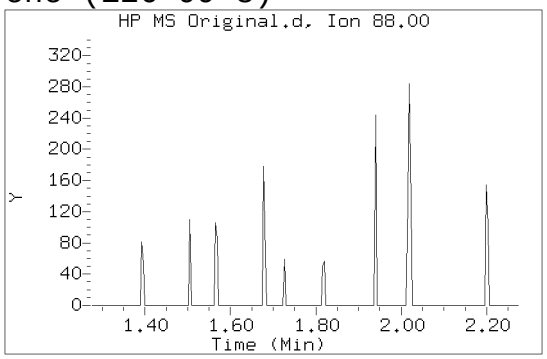
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Chloroprene (126-99-8)

Reason Code:

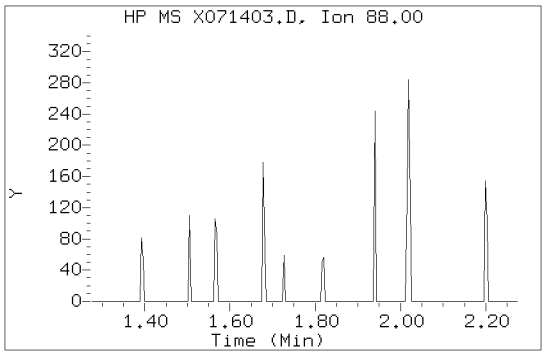
BEFORE

MASS
88
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
88
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

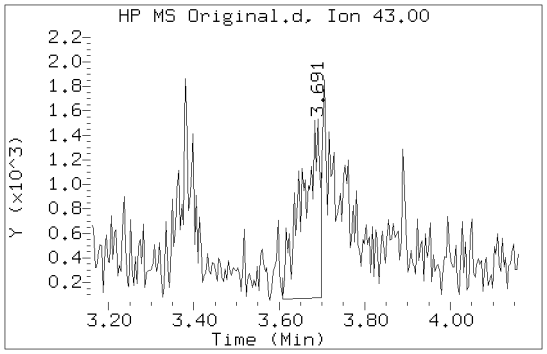


Ethyl Acetate (141-78-6)

Reason Code:

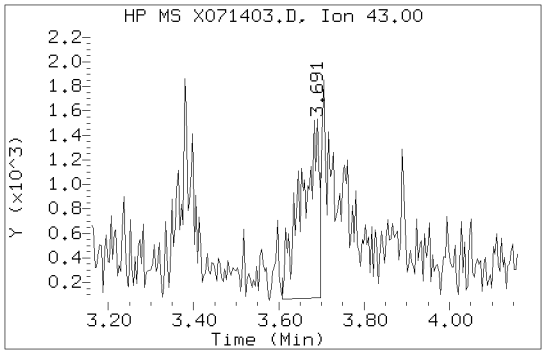
BEFORE

MASS
43
AREA
4291
HEIGHT
1463
20-Jul-2023
15:04
linh
pham



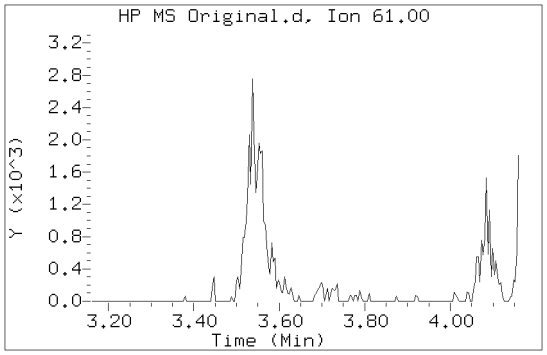
AFTER

MASS
43
AREA
4291
HEIGHT
1463
20-Jul-2023
15:04
linh
pham



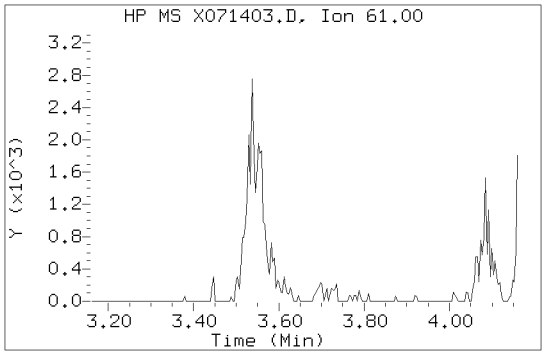
BEFORE

MASS
61
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



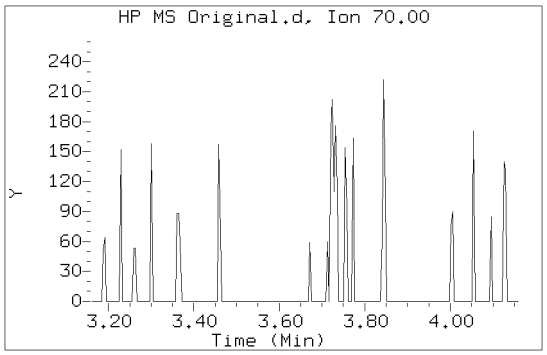
AFTER

MASS
61
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



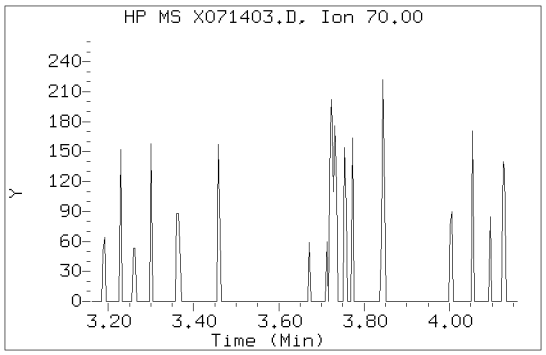
BEFORE

MASS
70
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
70
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

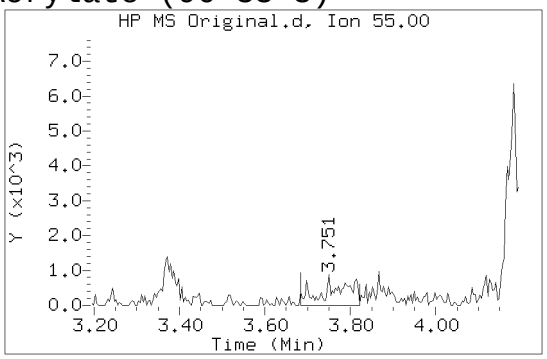


Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

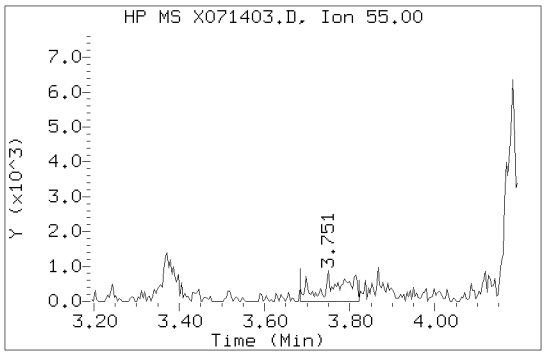
Methyl Acrylate (96-33-3)

Reason Code:

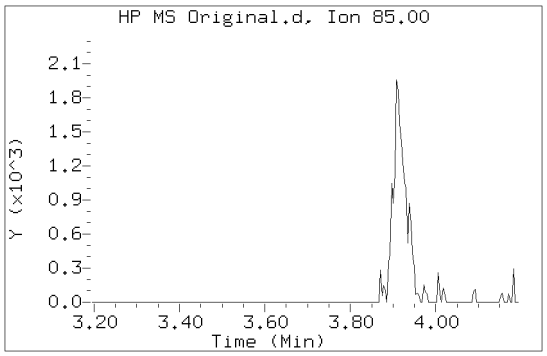
BEFORE
MASS
55
AREA
3365
HEIGHT
887
20-Jul-2023
15:04
linh
pham



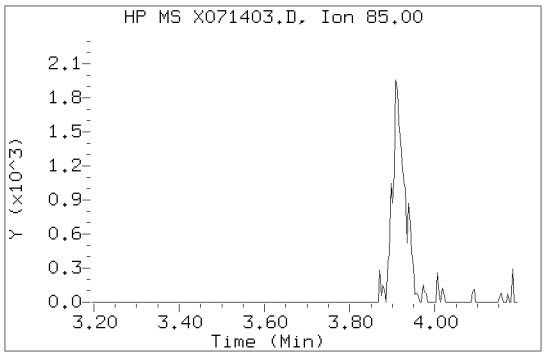
AFTER
MASS
55
AREA
3365
HEIGHT
887
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
85
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



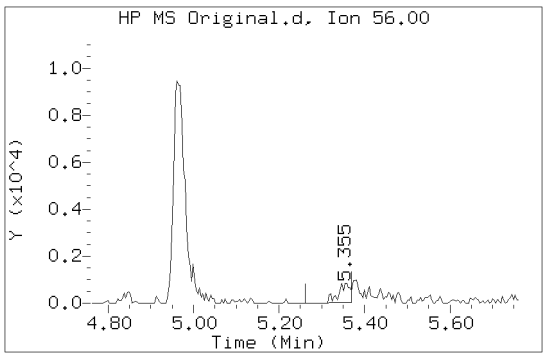
AFTER
MASS
85
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



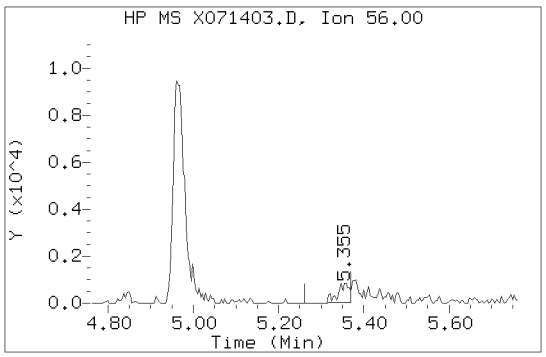
n-Butanol (71-36-3)

Reason Code:

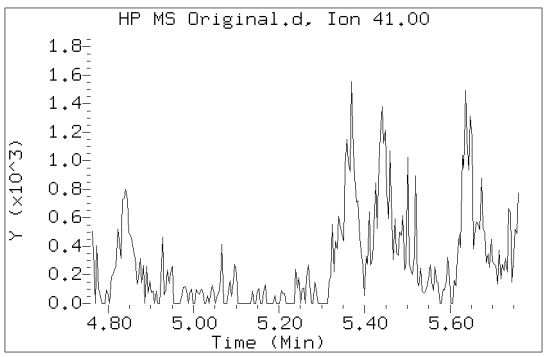
BEFORE
MASS
56
AREA
1626
HEIGHT
848
20-Jul-2023
15:04
linh
pham



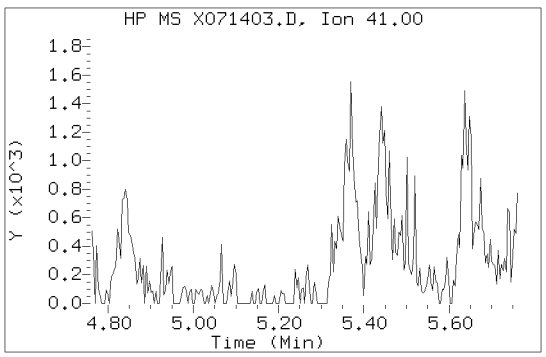
AFTER
MASS
56
AREA
1626
HEIGHT
848
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
41
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



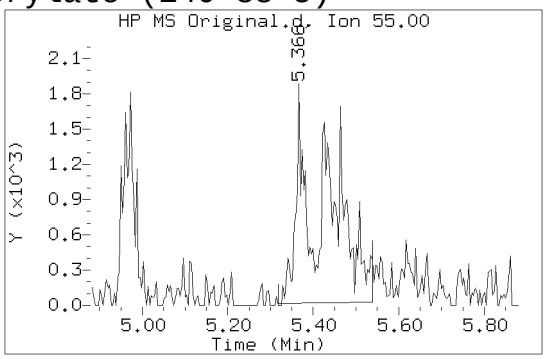
AFTER
MASS
41
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



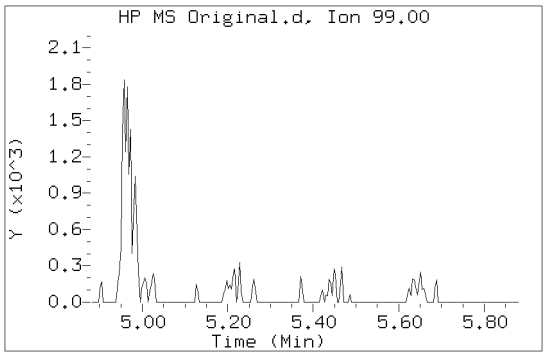
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Ethyl Acrylate (140-88-5)

BEFORE
MASS
55
AREA
8232
HEIGHT
1867
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
99
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



Reason Code:

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1867
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15:04
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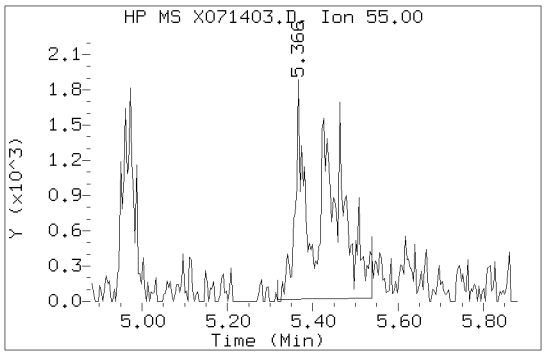

AFTER
MASS
99
AREA
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HEIGHT
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20-Jul-2023
15:04
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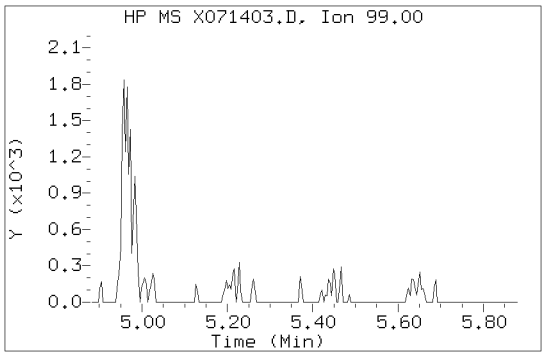

Cyclohexanone (108-94-1)

BEFORE
MASS
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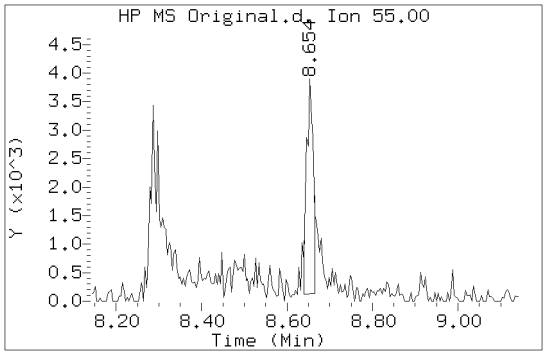
AREA
4174
HEIGHT
3766
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
42
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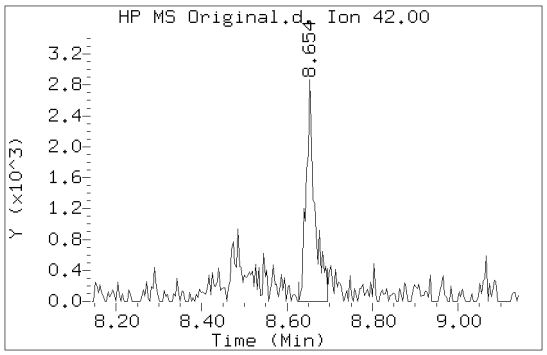
4022
HEIGHT
2868
20-Jul-2023
15:04
linh
pham



Reason Code:

AFTER
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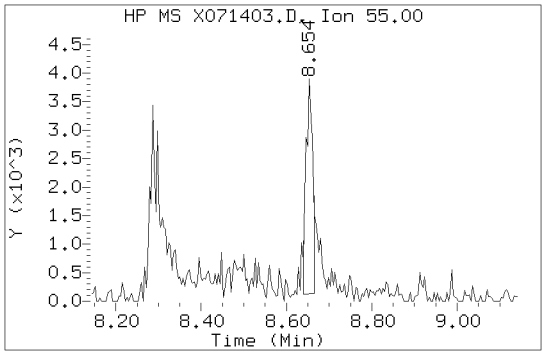
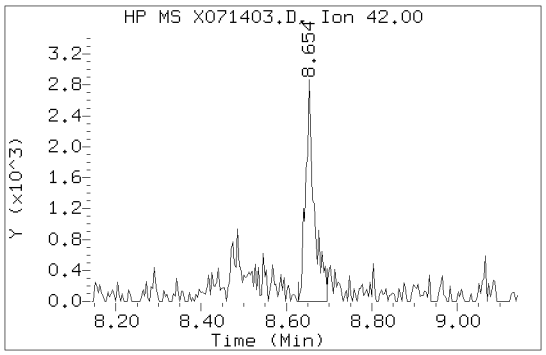
55
AREA
4174
HEIGHT
3766
20-Jul-2023
15:04
linh
pham



AFTER
MASS
42
AREA
4022
HEIGHT
2868
20-Jul-2023
15:04
linh
pham



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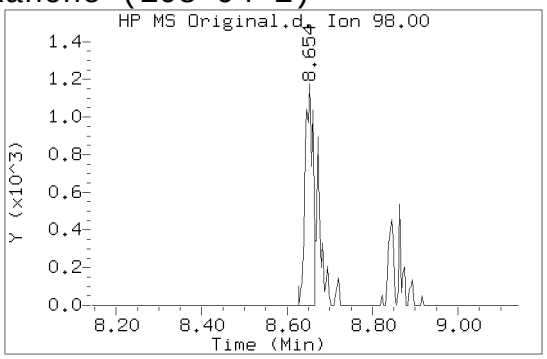
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Cyclohexanone (108-94-1)

Reason Code:

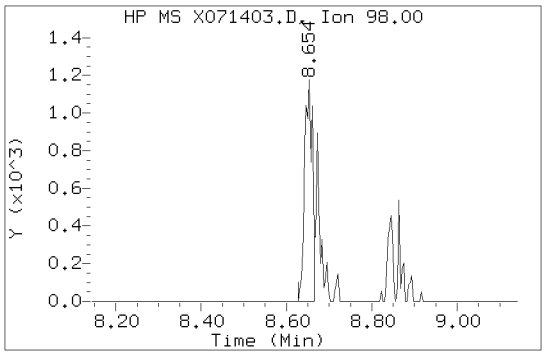
BEFORE

MASS
98
AREA
1506
HEIGHT
1177
20-Jul-2023
15:04
linh
pham



AFTER

MASS
98
AREA
1506
HEIGHT
1177
20-Jul-2023
15:04
linh
pham

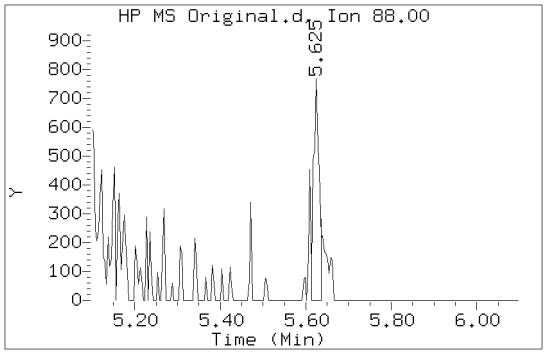


1,4-Dioxane ()

Reason Code:

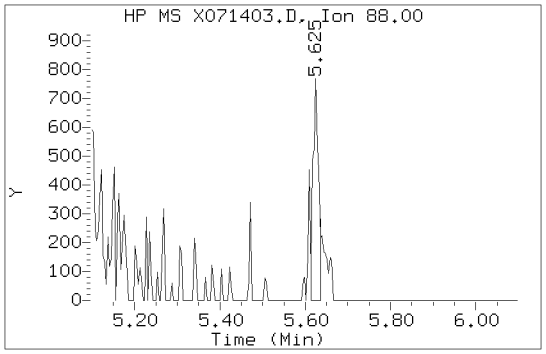
BEFORE

MASS
88
AREA
692
HEIGHT
769
20-Jul-2023
15:04
linh
pham



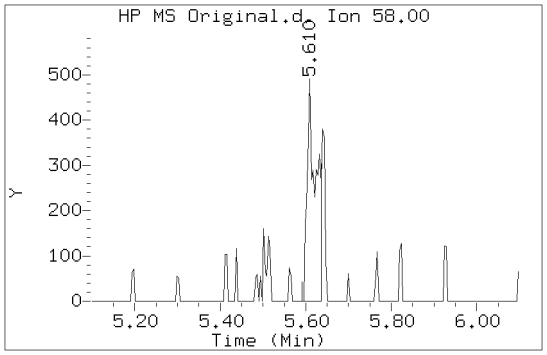
AFTER

MASS
88
AREA
692
HEIGHT
769
20-Jul-2023
15:04
linh
pham



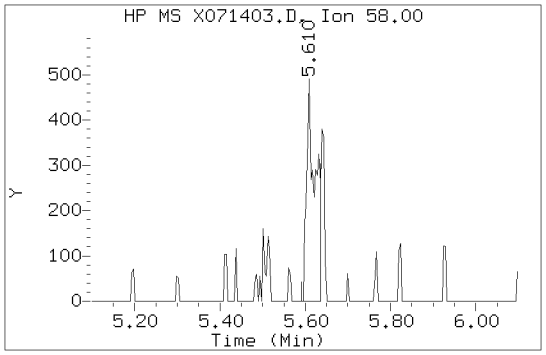
BEFORE

MASS
58
AREA
715
HEIGHT
491
20-Jul-2023
15:04
linh
pham



AFTER

MASS
58
AREA
715
HEIGHT
491
20-Jul-2023
15:04
linh
pham

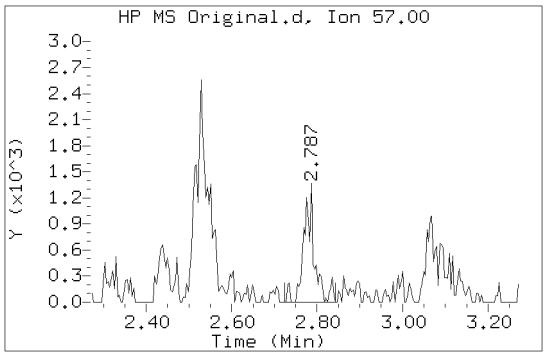


n-Hexane (110-54-3)

Reason Code:

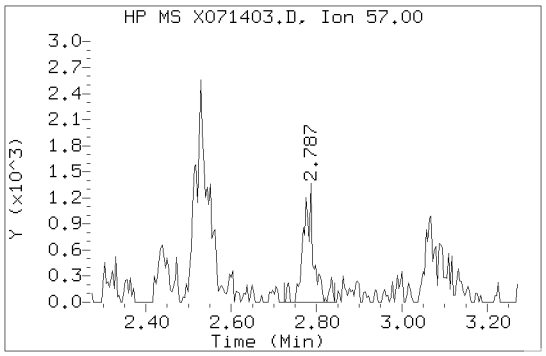
BEFORE

MASS
57
AREA
2320
HEIGHT
1372
20-Jul-2023
15:04
linh
pham



AFTER

MASS
57
AREA
2320
HEIGHT
1372
20-Jul-2023
15:04
linh
pham



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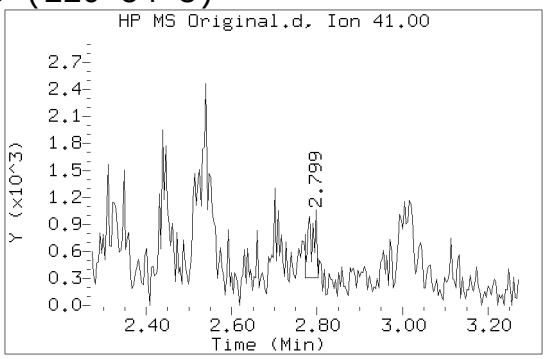
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

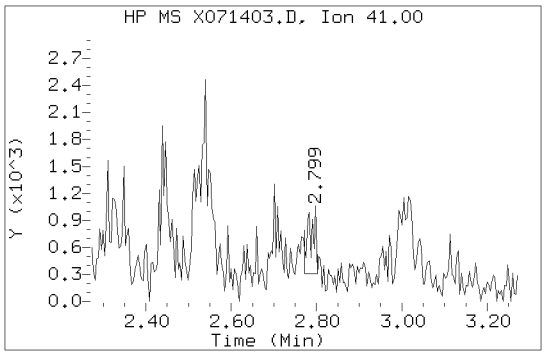
n-Hexane (110-54-3)

Reason Code:

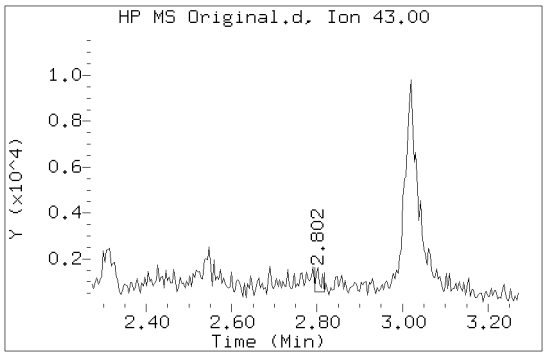
BEFORE
MASS
41
AREA
798
HEIGHT
755
20-Jul-2023
15:04
linh
pham



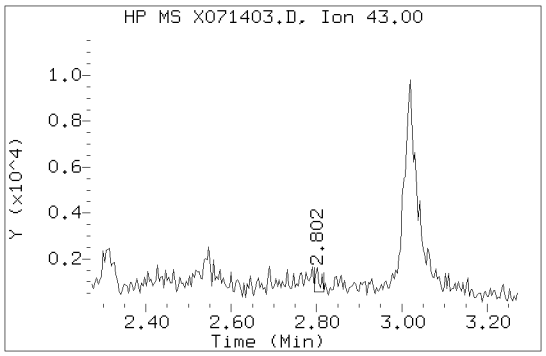
AFTER
MASS
41
AREA
798
HEIGHT
755
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
43
AREA
753
HEIGHT
1069
20-Jul-2023
15:04
linh
pham



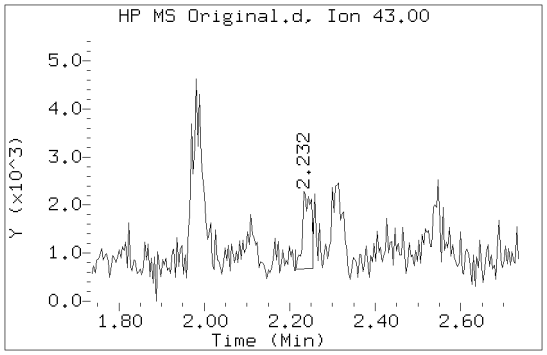
AFTER
MASS
43
AREA
753
HEIGHT
1069
20-Jul-2023
15:04
linh
pham



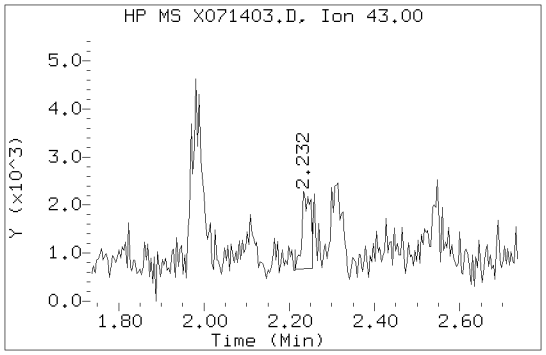
Methyl acetate (79-20-9)

Reason Code:

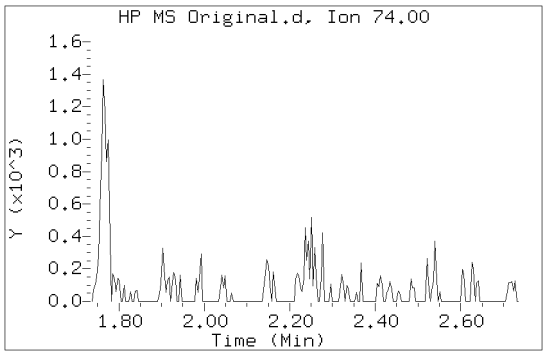
BEFORE
MASS
43
AREA
2344
HEIGHT
1617
20-Jul-2023
15:04
linh
pham



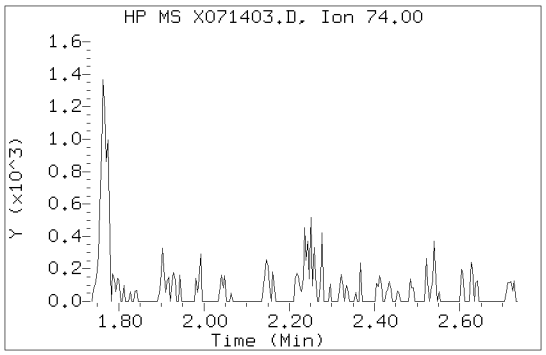
AFTER
MASS
43
AREA
2344
HEIGHT
1617
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
74
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER
MASS
74
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



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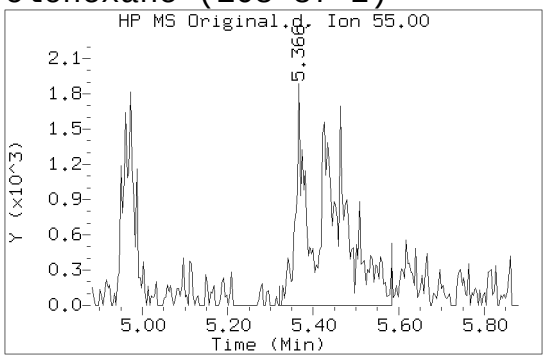
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

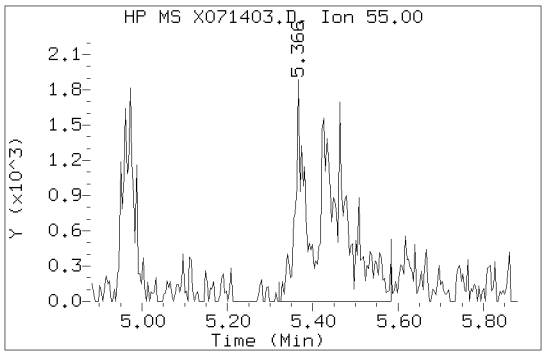
Methylcyclohexane (108-87-2)

Reason Code:

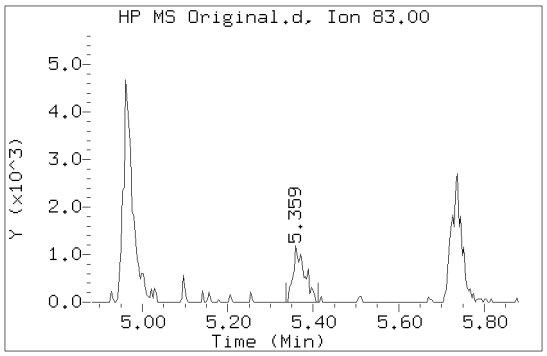
BEFORE
MASS
55
AREA
9168
HEIGHT
1886
20-Jul-2023
15:04
linh
pham



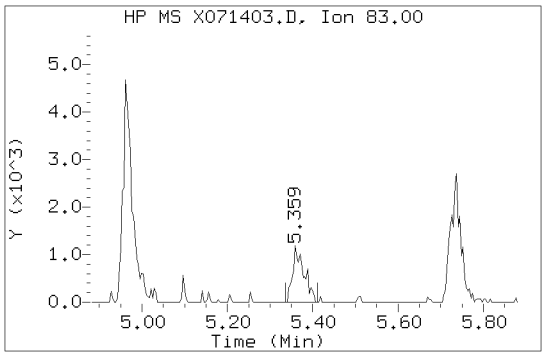
AFTER
MASS
55
AREA
9168
HEIGHT
1886
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
83
AREA
2193
HEIGHT
1189
20-Jul-2023
15:04
linh
pham



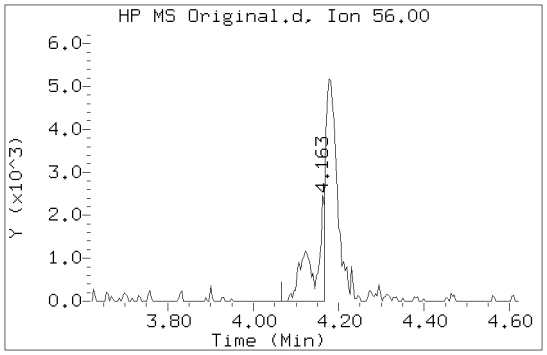
AFTER
MASS
83
AREA
2193
HEIGHT
1189
20-Jul-2023
15:04
linh
pham



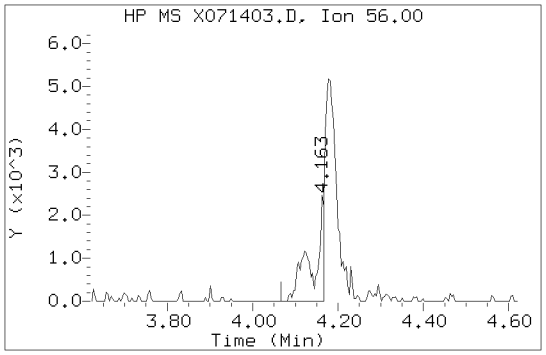
Cyclohexane (110-82-7)

Reason Code:

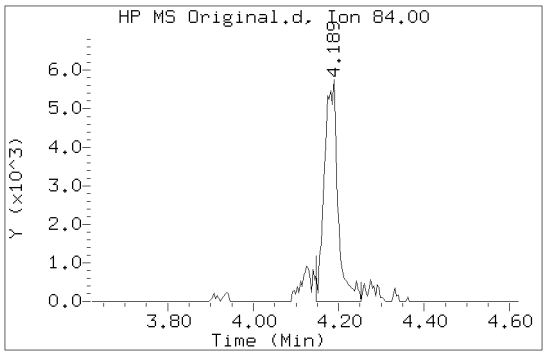
BEFORE
MASS
56
AREA
4321
HEIGHT
2474
20-Jul-2023
15:04
linh
pham



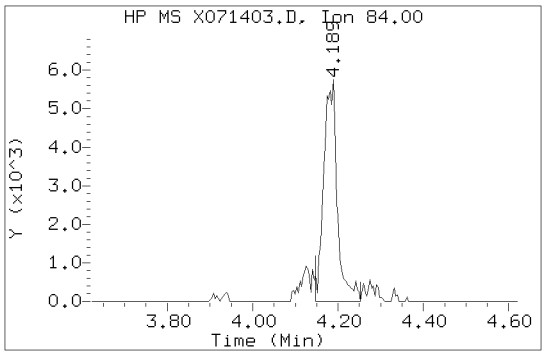
AFTER
MASS
56
AREA
4321
HEIGHT
2474
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
84
AREA
12654
HEIGHT
5754
20-Jul-2023
15:04
linh
pham



AFTER
MASS
84
AREA
12654
HEIGHT
5754
20-Jul-2023
15:04
linh
pham



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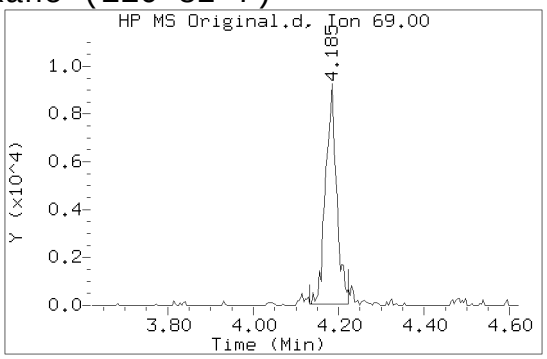
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Cyclohexane (110-82-7)

Reason Code:

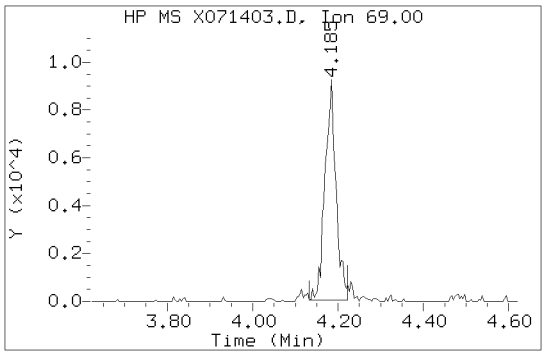
BEFORE

MASS
69
AREA
16448
HEIGHT
9203
20-Jul-2023
15:04
linh
pham



AFTER

MASS
69
AREA
16448
HEIGHT
9203
20-Jul-2023
15:04
linh
pham

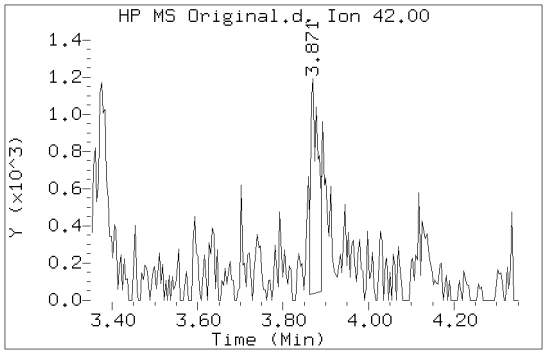


Tetrahydrofuran (109-99-9)

Reason Code:

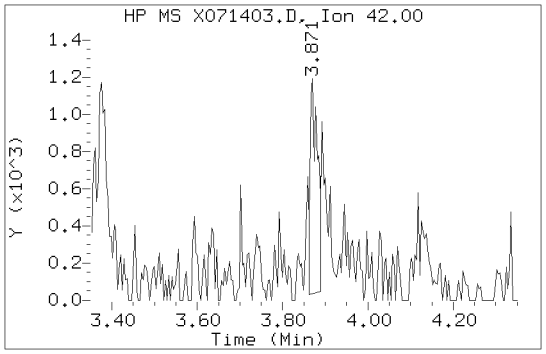
BEFORE

MASS
42
AREA
1418
HEIGHT
1157
20-Jul-2023
15:04
linh
pham



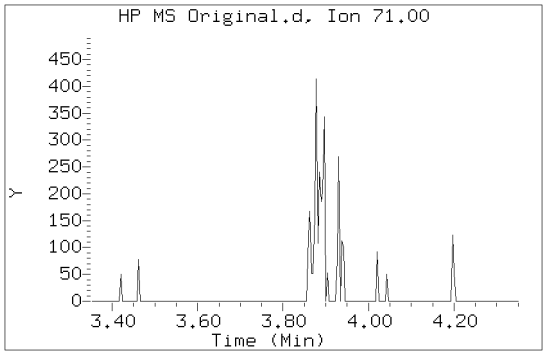
AFTER

MASS
42
AREA
1418
HEIGHT
1157
20-Jul-2023
15:04
linh
pham



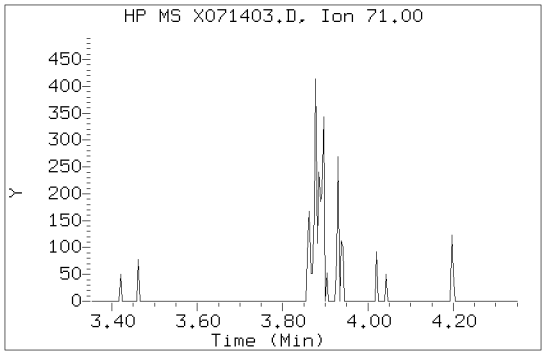
BEFORE

MASS
71
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
71
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

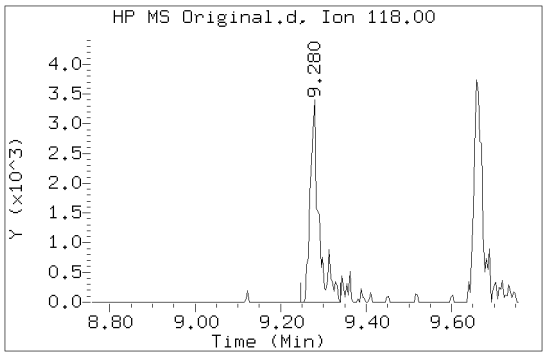


alpha-Methylstyrene (98-83-9)

Reason Code:

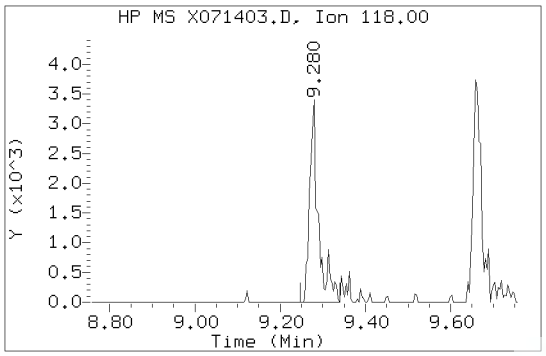
BEFORE

MASS
118
AREA
4759
HEIGHT
3401
20-Jul-2023
15:04
linh
pham



AFTER

MASS
118
AREA
4759
HEIGHT
3401
20-Jul-2023
15:04
linh
pham



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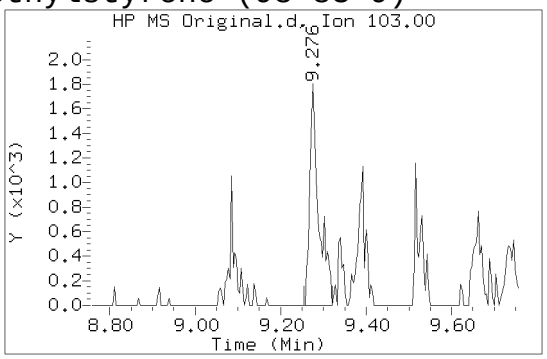
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

alpha-Methylstyrene (98-83-9)

Reason Code:

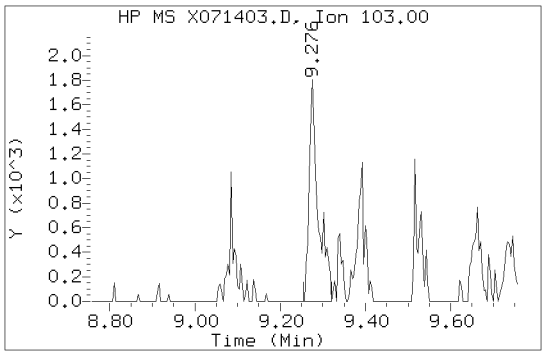
BEFORE

MASS
103
AREA
2652
HEIGHT
1804
20-Jul-2023
15:04
linh
pham



AFTER

MASS
103
AREA
2652
HEIGHT
1804
20-Jul-2023
15:04
linh
pham

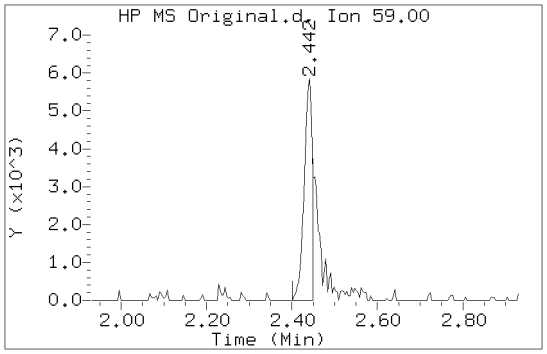


Tert-butyl alcohol (75-65-0)

Reason Code:

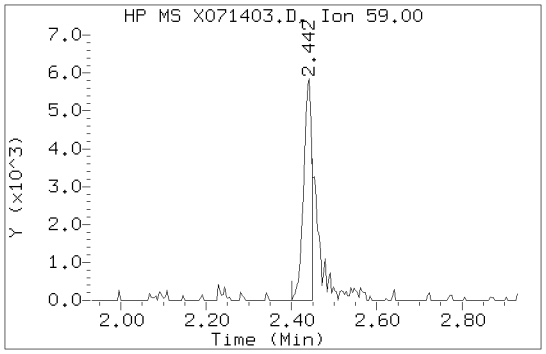
BEFORE

MASS
59
AREA
7856
HEIGHT
5851
20-Jul-2023
15:04
linh
pham



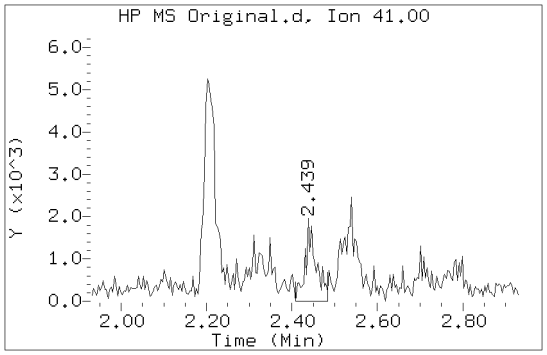
AFTER

MASS
59
AREA
7856
HEIGHT
5851
20-Jul-2023
15:04
linh
pham



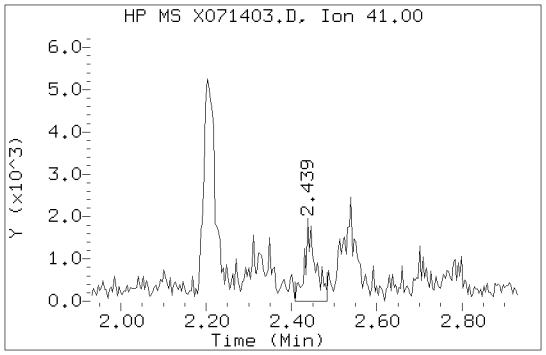
BEFORE

MASS
41
AREA
3380
HEIGHT
1954
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
3380
HEIGHT
1954
20-Jul-2023
15:04
linh
pham

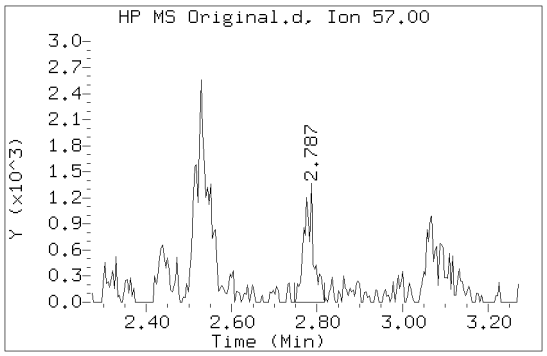


Allyl alcohol (107-18-6)

Reason Code:

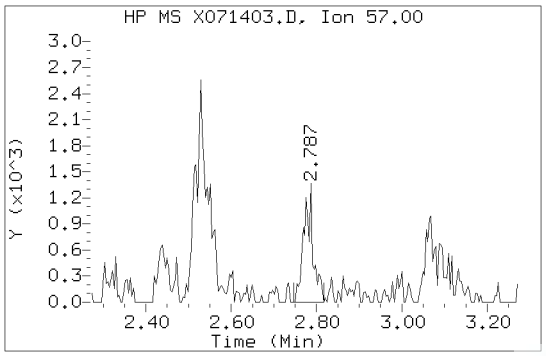
BEFORE

MASS
57
AREA
2068
HEIGHT
1372
20-Jul-2023
15:04
linh
pham



AFTER

MASS
57
AREA
2068
HEIGHT
1372
20-Jul-2023
15:04
linh
pham



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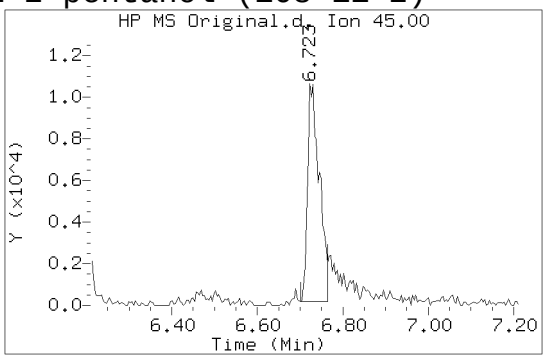
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

4-Methyl-2-pentanol (108-11-2)

Reason Code:

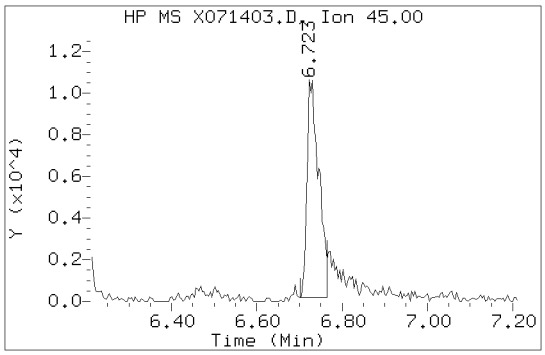
BEFORE

MASS
45
AREA
20217
HEIGHT
10478
20-Jul-2023
15:04
linh
pham



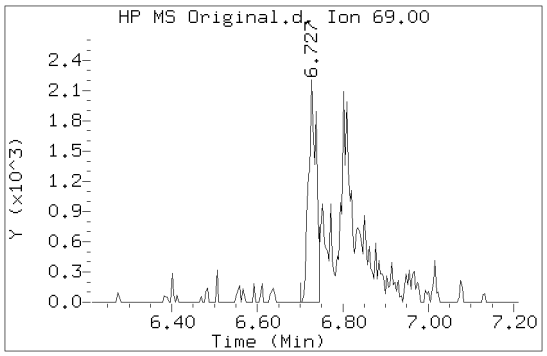
AFTER

MASS
45
AREA
20217
HEIGHT
10478
20-Jul-2023
15:04
linh
pham



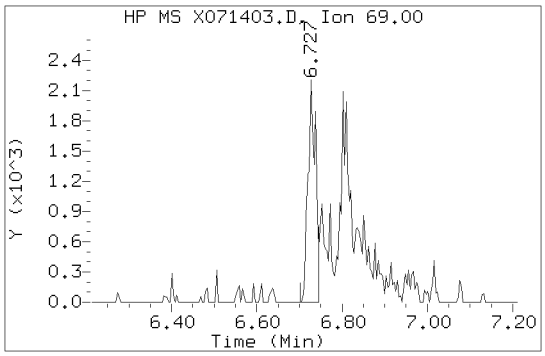
BEFORE

MASS
69
AREA
2780
HEIGHT
2206
20-Jul-2023
15:04
linh
pham



AFTER

MASS
69
AREA
2780
HEIGHT
2206
20-Jul-2023
15:04
linh
pham

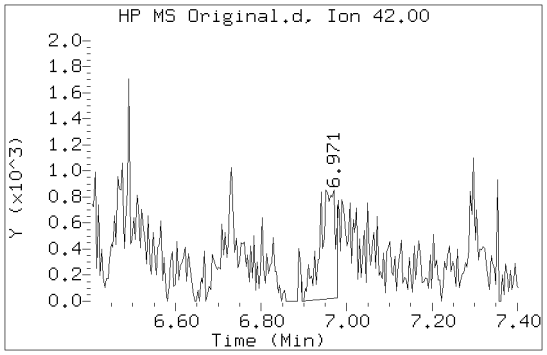


Amyl alcohol (71-41-0)

Reason Code:

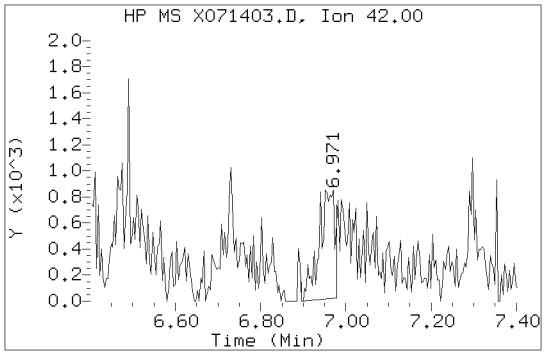
BEFORE

MASS
42
AREA
2120
HEIGHT
829
20-Jul-2023
15:04
linh
pham



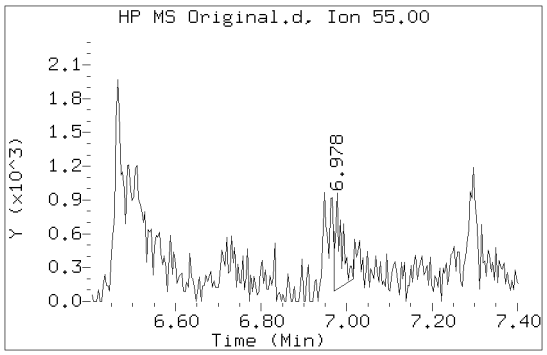
AFTER

MASS
42
AREA
2120
HEIGHT
829
20-Jul-2023
15:04
linh
pham



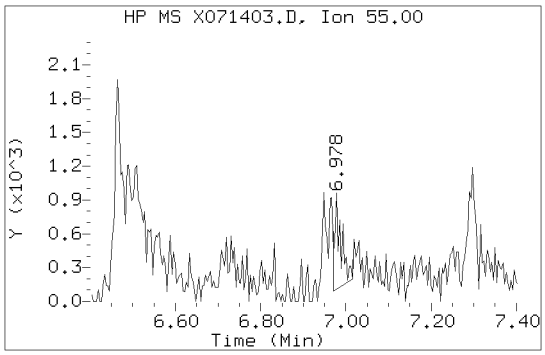
BEFORE

MASS
55
AREA
884
HEIGHT
854
20-Jul-2023
15:04
linh
pham



AFTER

MASS
55
AREA
884
HEIGHT
854
20-Jul-2023
15:04
linh
pham



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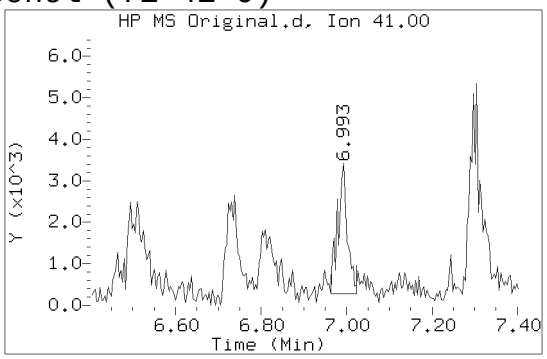
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Amyl alcohol (71-41-0)

Reason Code:

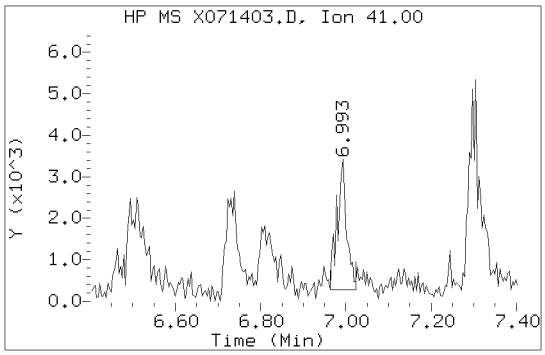
BEFORE

MASS
41
AREA
4891
HEIGHT
3144
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
4891
HEIGHT
3144
20-Jul-2023
15:04
linh
pham

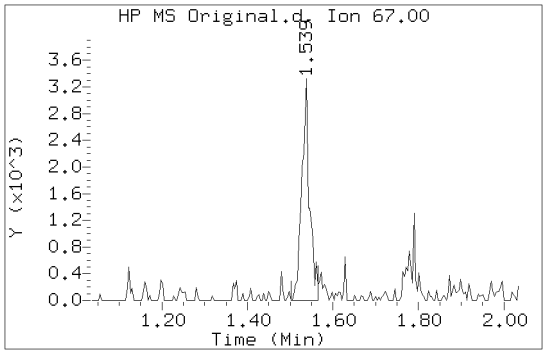


Dichlorofluoromethane (75-43-4)

Reason Code:

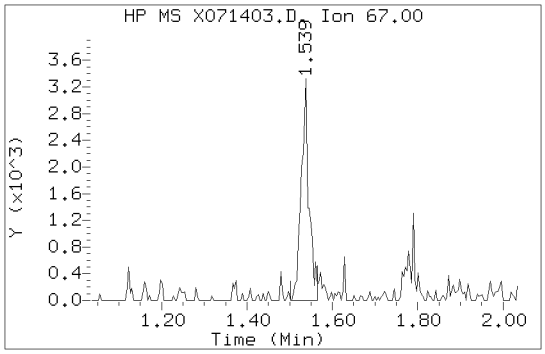
BEFORE

MASS
67
AREA
4296
HEIGHT
3324
20-Jul-2023
15:04
linh
pham



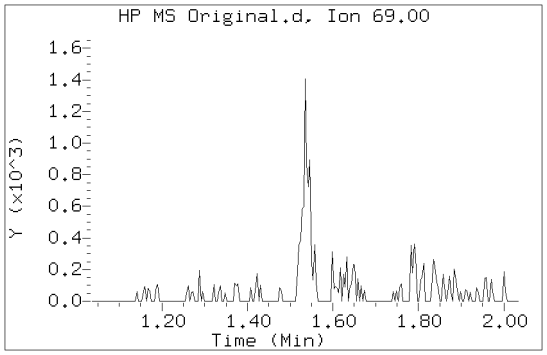
AFTER

MASS
67
AREA
4296
HEIGHT
3324
20-Jul-2023
15:04
linh
pham



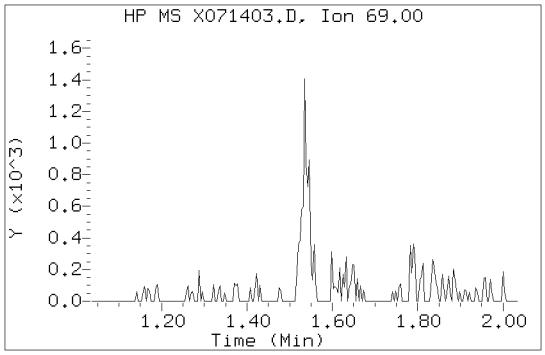
BEFORE

MASS
69
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



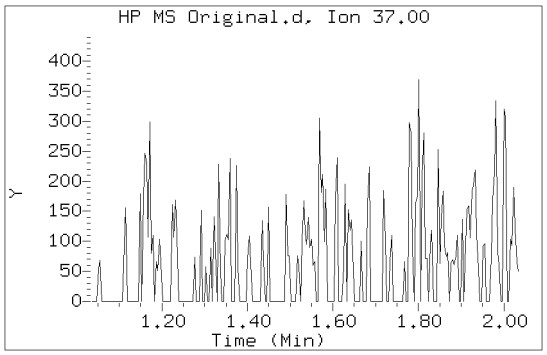
AFTER

MASS
69
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



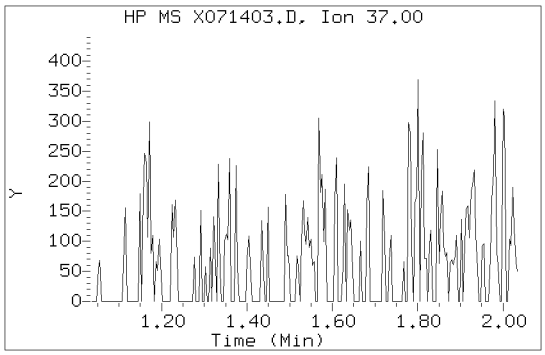
BEFORE

MASS
37
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
37
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



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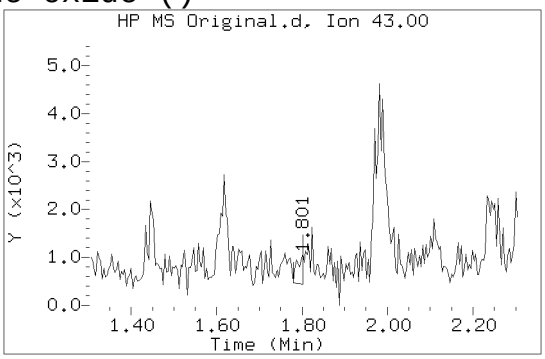
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

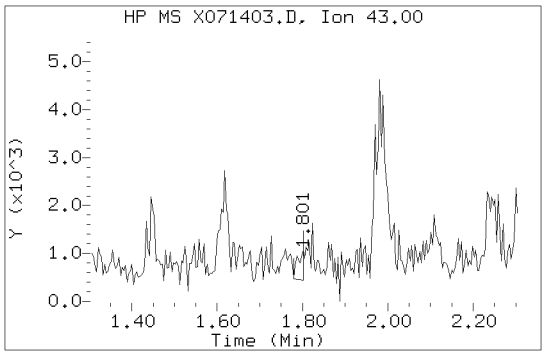
Propylene oxide ()

Reason Code:

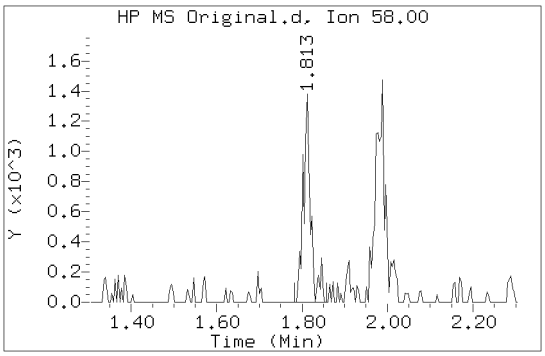
BEFORE
MASS
43
AREA
615
HEIGHT
640
20-Jul-2023
15:04
linh
pham



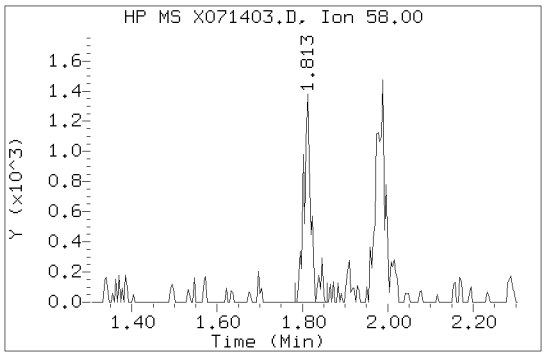
AFTER
MASS
43
AREA
615
HEIGHT
640
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
58
AREA
1675
HEIGHT
1380
20-Jul-2023
15:04
linh
pham



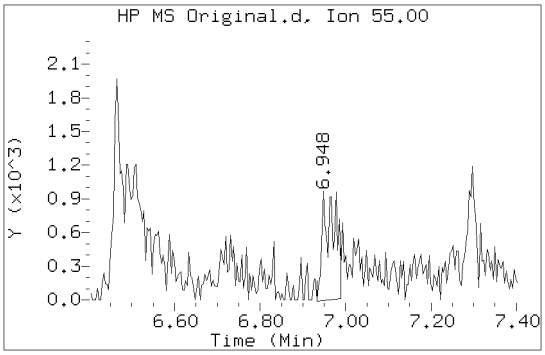
AFTER
MASS
58
AREA
1675
HEIGHT
1380
20-Jul-2023
15:04
linh
pham



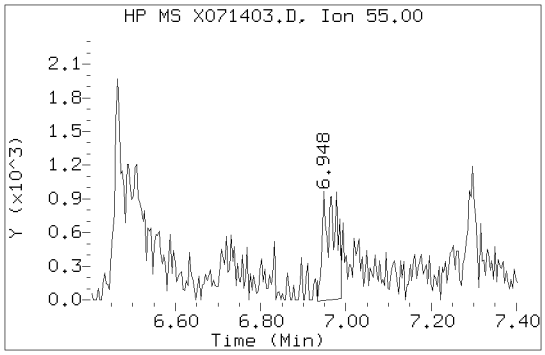
3-Methyl-1-butanol (123-51-3)

Reason Code:

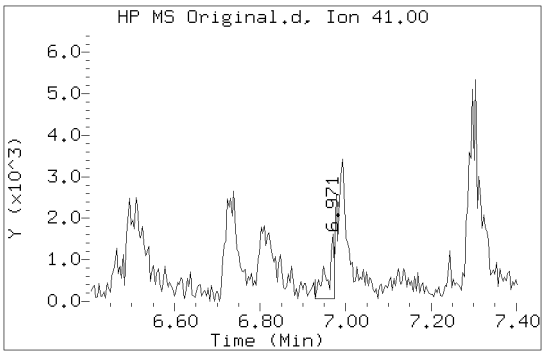
BEFORE
MASS
55
AREA
1945
HEIGHT
970
20-Jul-2023
15:04
linh
pham



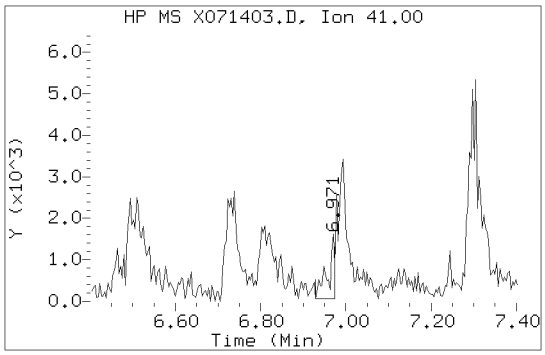
AFTER
MASS
55
AREA
1945
HEIGHT
970
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
41
AREA
1621
HEIGHT
1554
20-Jul-2023
15:04
linh
pham



AFTER
MASS
41
AREA
1621
HEIGHT
1554
20-Jul-2023
15:04
linh
pham



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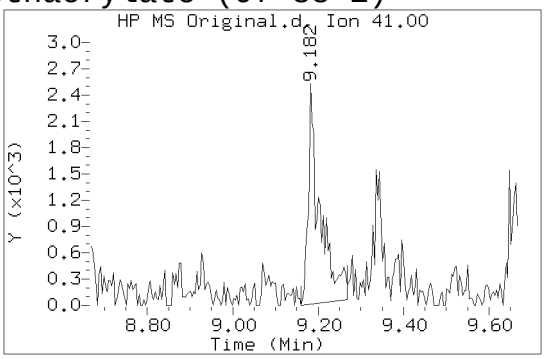
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Butyl methacrylate (97-88-1)

Reason Code:

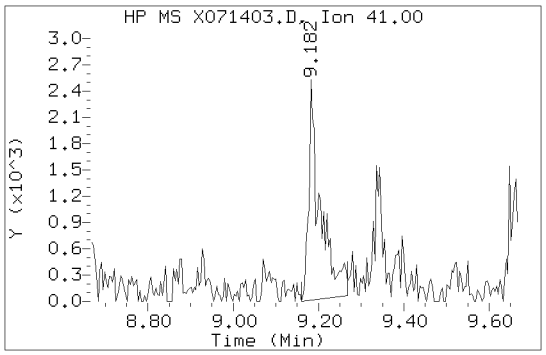
BEFORE

MASS
41
AREA
4724
HEIGHT
2516
20-Jul-2023
15:04
linh
pham



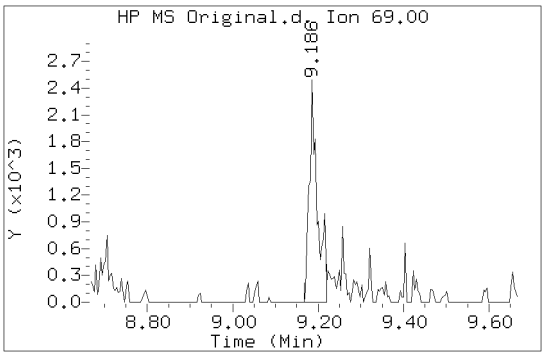
AFTER

MASS
41
AREA
4724
HEIGHT
2516
20-Jul-2023
15:04
linh
pham



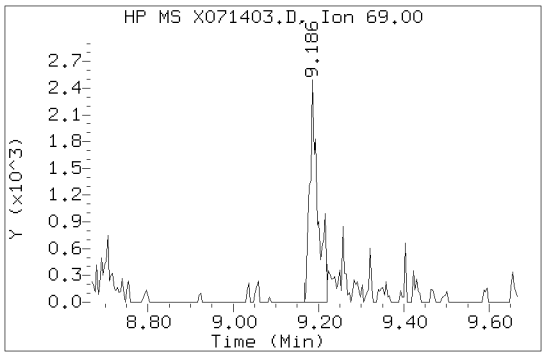
BEFORE

MASS
69
AREA
3258
HEIGHT
2492
20-Jul-2023
15:04
linh
pham



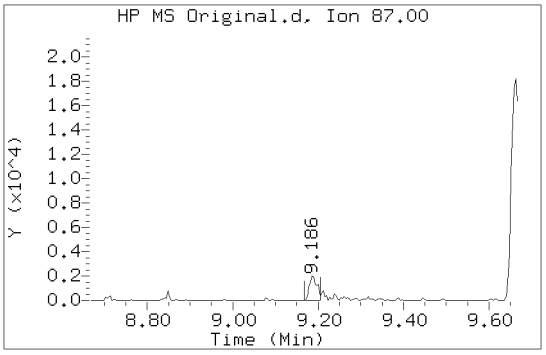
AFTER

MASS
69
AREA
3258
HEIGHT
2492
20-Jul-2023
15:04
linh
pham



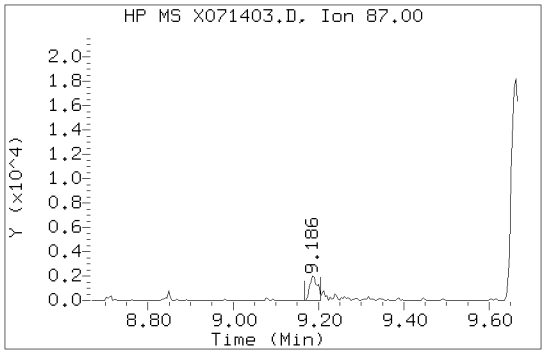
BEFORE

MASS
87
AREA
2479
HEIGHT
2026
20-Jul-2023
15:04
linh
pham



AFTER

MASS
87
AREA
2479
HEIGHT
2026
20-Jul-2023
15:04
linh
pham

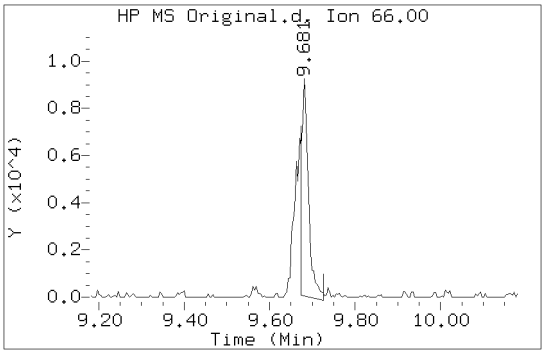


Dicyclopentadiene (77-73-6)

Reason Code:

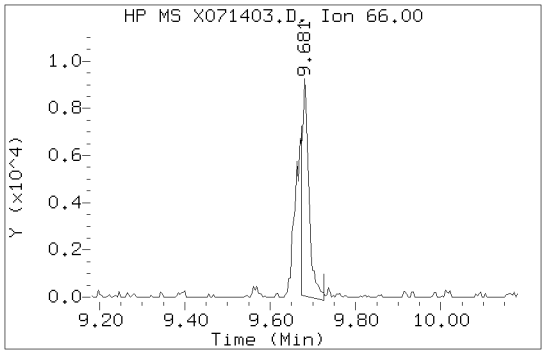
BEFORE

MASS
66
AREA
10848
HEIGHT
9195
20-Jul-2023
15:04
linh
pham



AFTER

MASS
66
AREA
10848
HEIGHT
9195
20-Jul-2023
15:04
linh
pham



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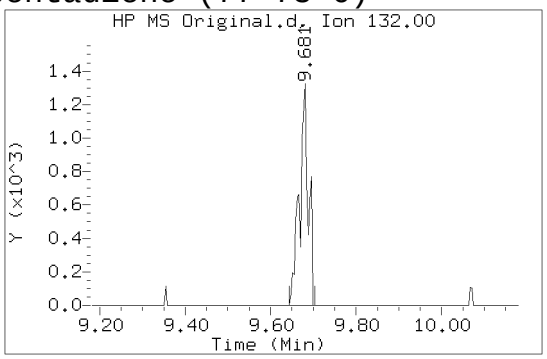
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Dicyclopentadiene (77-73-6)

Reason Code:

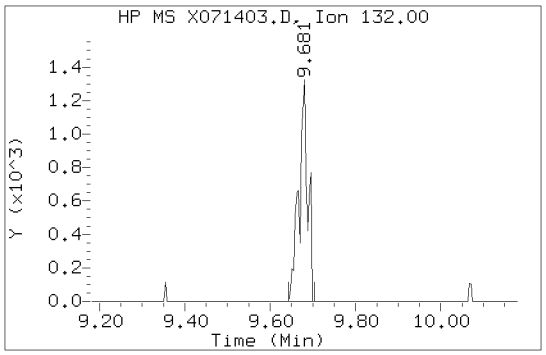
BEFORE

MASS
132
AREA
1955
HEIGHT
1325
20-Jul-2023
15:04
linh
pham



AFTER

MASS
132
AREA
1955
HEIGHT
1325
20-Jul-2023
15:04
linh
pham

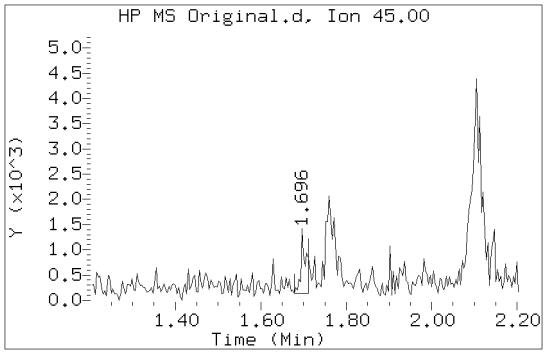


Ethanol (64-17-5)

Reason Code:

BEFORE

MASS
45
AREA
1082
HEIGHT
1281
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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1082
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1281
20-Jul-2023
15:04
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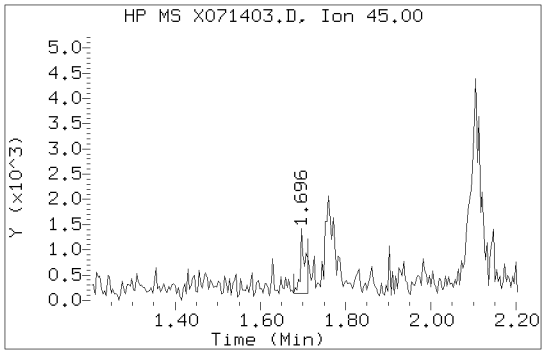

BEFORE

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46
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20-Jul-2023
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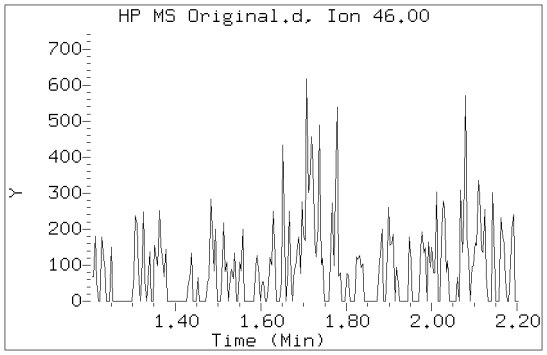

AFTER

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20-Jul-2023
15:04
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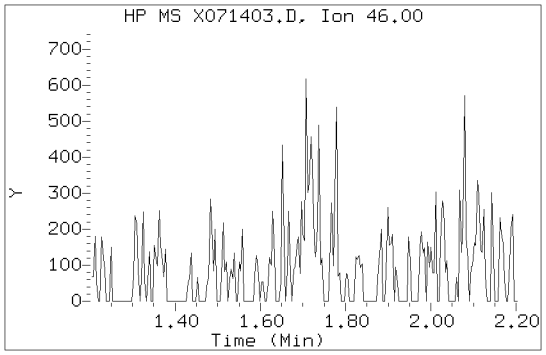

BEFORE

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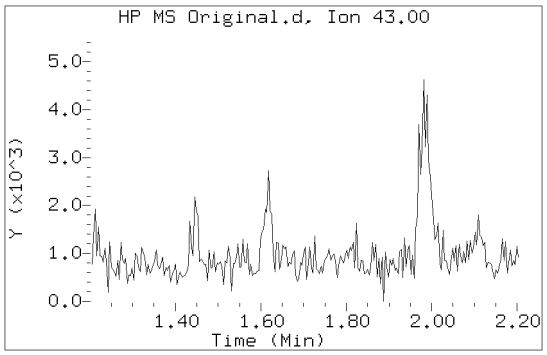

AFTER

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15:04
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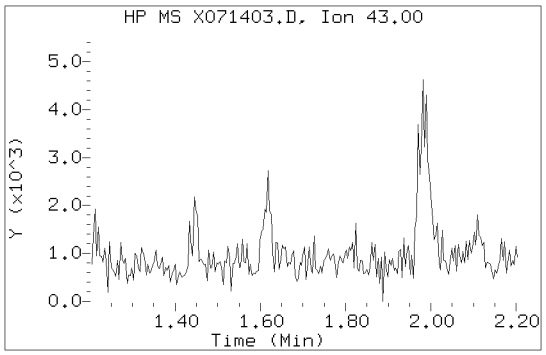

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Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

tert-Butyl formate (762-75-4)

Reason Code:

BEFORE

MASS
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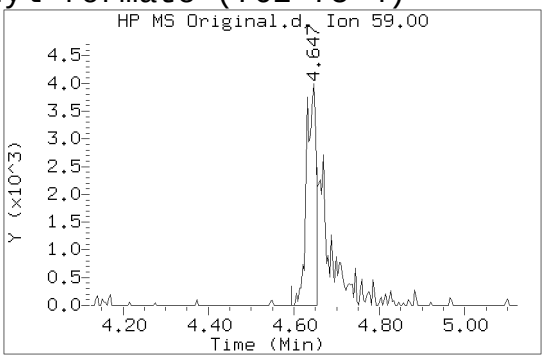
6083
HEIGHT
3995
20-Jul-2023
15:04
linh
pham



AFTER

MASS
59
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6083
HEIGHT
3995
20-Jul-2023
15:04
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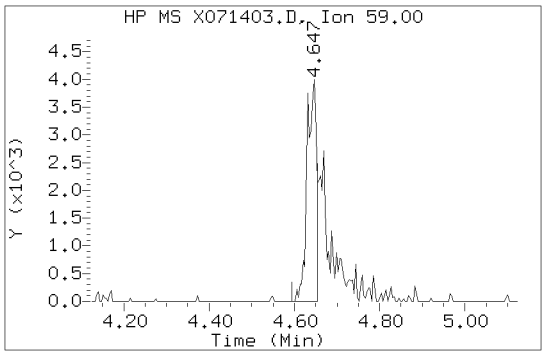

BEFORE

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20-Jul-2023
15:04
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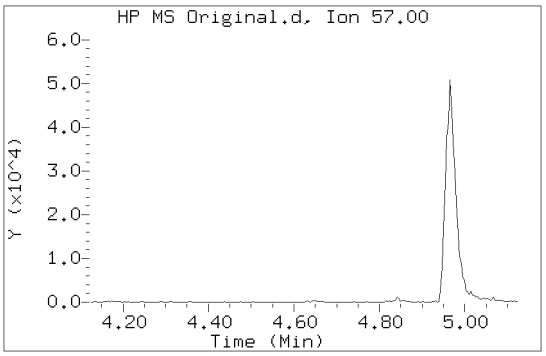

AFTER

MASS
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HEIGHT
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20-Jul-2023
15:04
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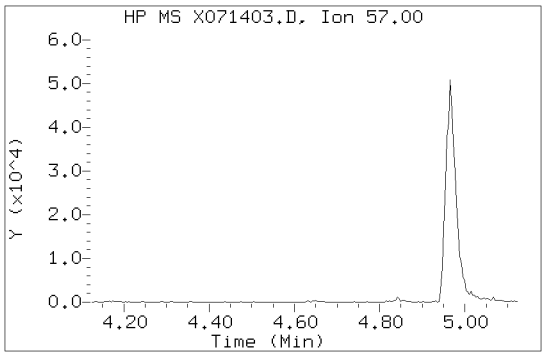

BEFORE

MASS
41
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20-Jul-2023
15:04
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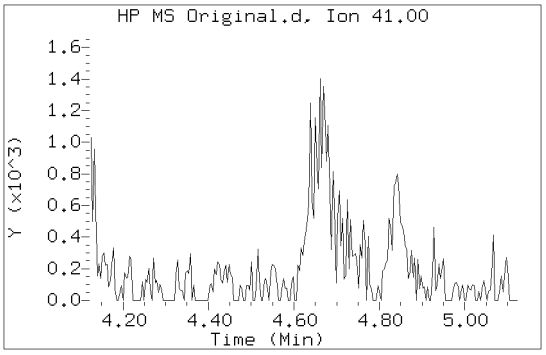

AFTER

MASS
41
AREA
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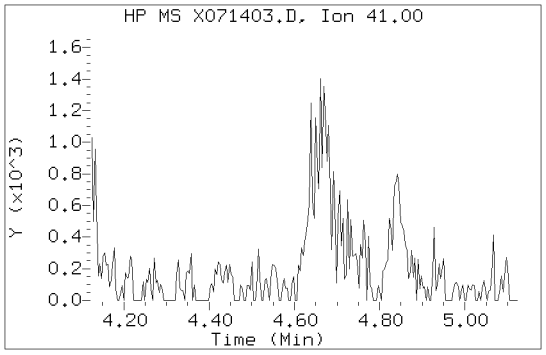
HEIGHT
0
20-Jul-2023
15:04
linh
pham

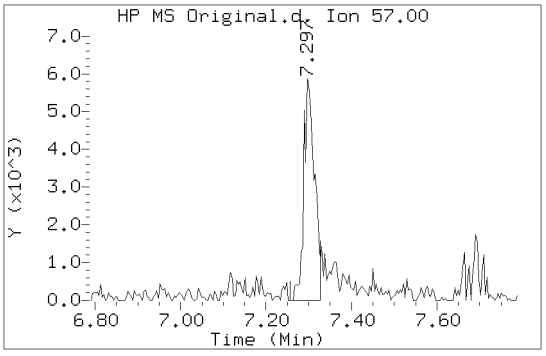


3,3-Dimethyl-1-butanol (624-95-3)

Reason Code:

BEFORE

MASS
57
AREA
10397
HEIGHT
5870
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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AREA
10397
HEIGHT
5870
20-Jul-2023
15:04
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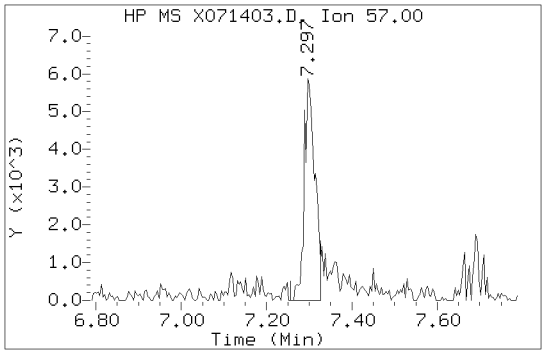
pham



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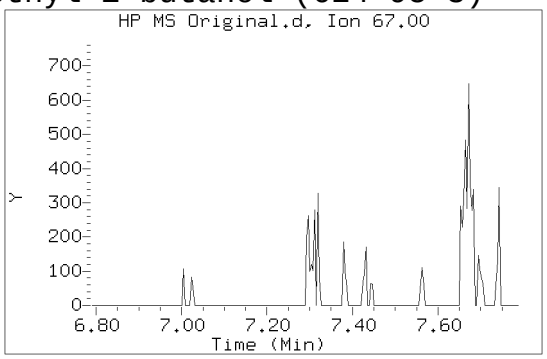
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

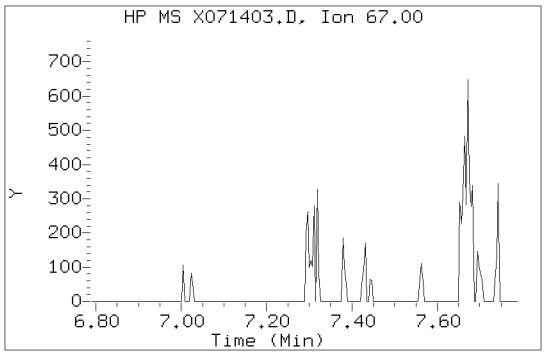
3,3-Dimethyl-1-butanol (624-95-3)

Reason Code:

BEFORE
MASS
67
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER
MASS
67
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



BEFORE
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20-Jul-2023
15:04
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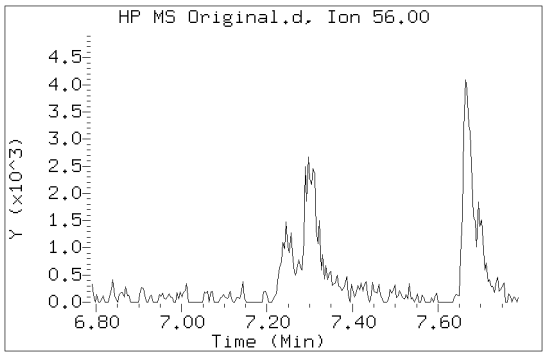

AFTER
MASS
56
AREA
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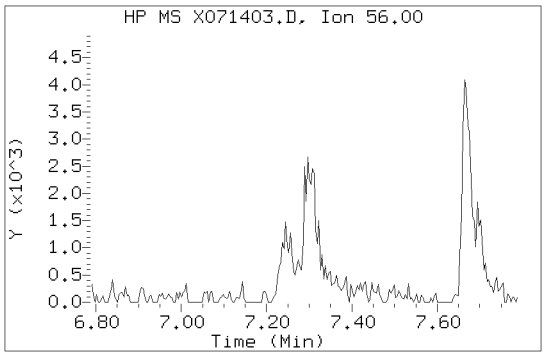
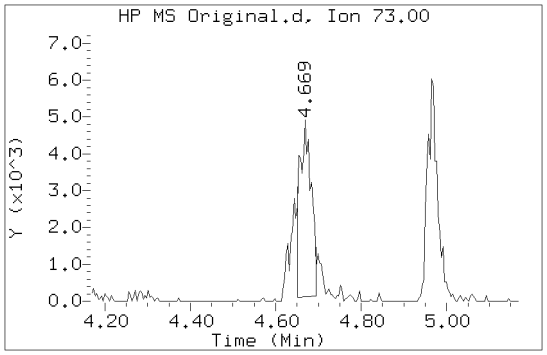
HEIGHT
0
20-Jul-2023
15:04
linh
pham



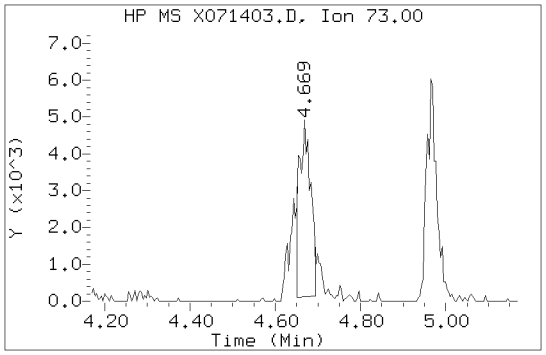
tert-Amyl methyl ether (974-05-08)

Reason Code:

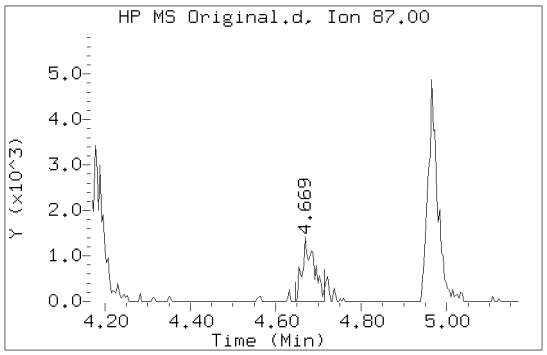
BEFORE
MASS
73
AREA
9377
HEIGHT
4800
20-Jul-2023
15:04
linh
pham



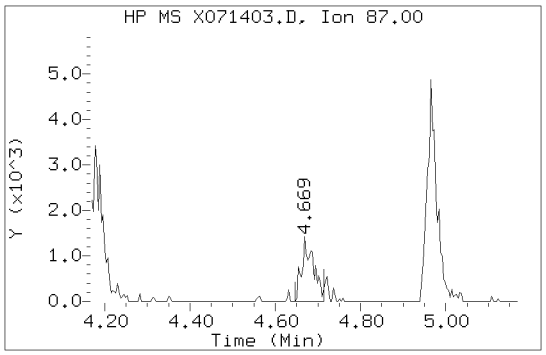
AFTER
MASS
73
AREA
9377
HEIGHT
4800
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
87
AREA
2769
HEIGHT
1423
20-Jul-2023
15:04
linh
pham



AFTER
MASS
87
AREA
2769
HEIGHT
1423
20-Jul-2023
15:04
linh
pham



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Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

tert-Amyl methyl ether (974-05-08)

Reason Code:

BEFORE

MASS
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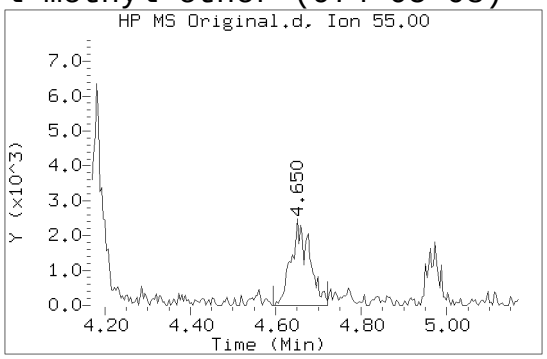
7426
HEIGHT
2483
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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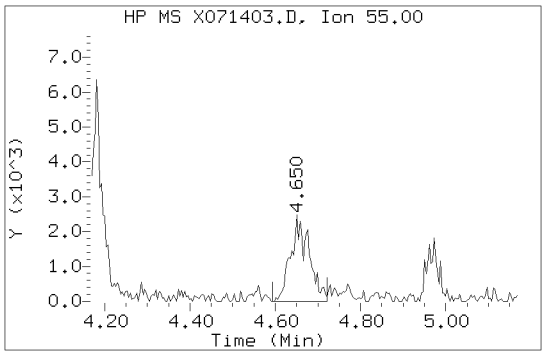
AREA
7426
HEIGHT
2483
20-Jul-2023
15:04
linh
pham



tert-Amyl alcohol (75-85-4)

Reason Code:

BEFORE

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59
AREA
6083
HEIGHT
3995
20-Jul-2023
15:04
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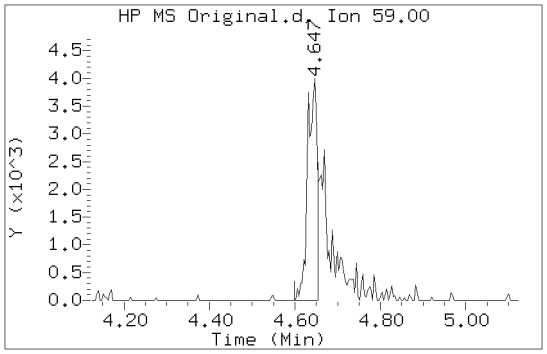

AFTER

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20-Jul-2023
15:04
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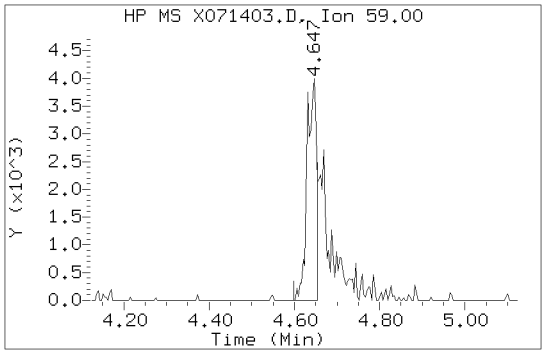

BEFORE

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AREA
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HEIGHT
2424
20-Jul-2023
15:04
linh
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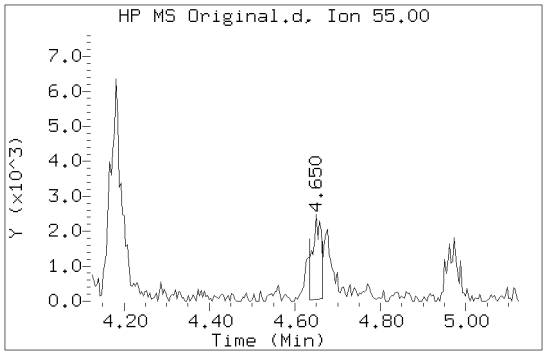

AFTER

MASS
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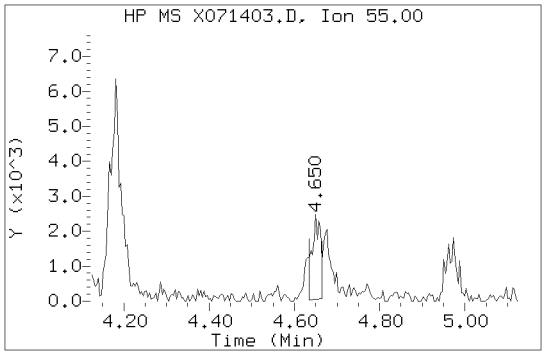
AREA
3364
HEIGHT
2424
20-Jul-2023
15:04
linh
pham



BEFORE

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4914
20-Jul-2023
15:04
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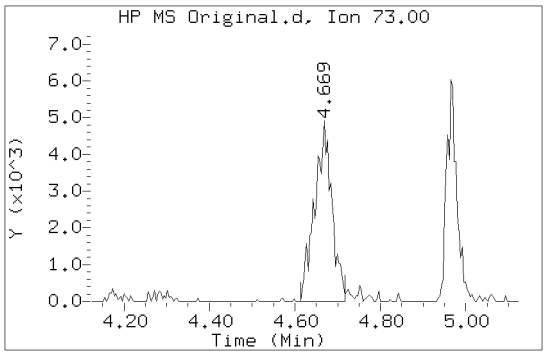
pham



AFTER

MASS
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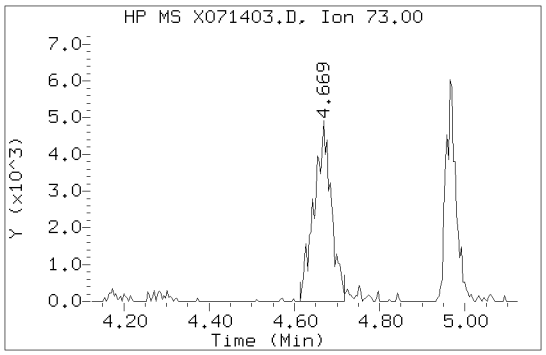
13761
HEIGHT
4914
20-Jul-2023
15:04
linh
pham



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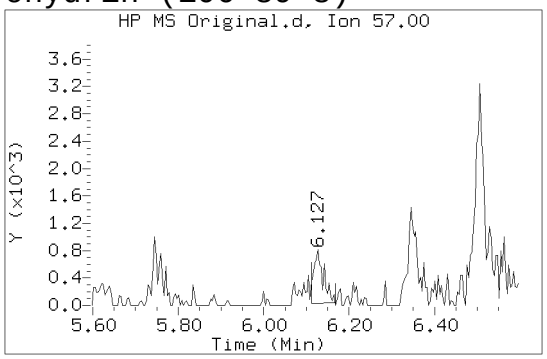
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Epichlorohydrin (106-89-8)

Reason Code:

BEFORE
MASS
57
AREA
1233
HEIGHT
788
20-Jul-2023
15:04
linh
pham



AFTER
MASS
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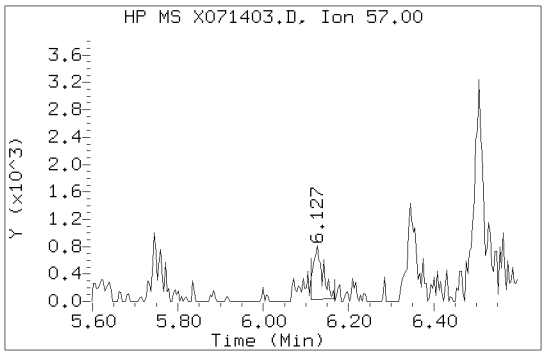
AREA
1233
HEIGHT
788
20-Jul-2023
15:04
linh
pham



BEFORE
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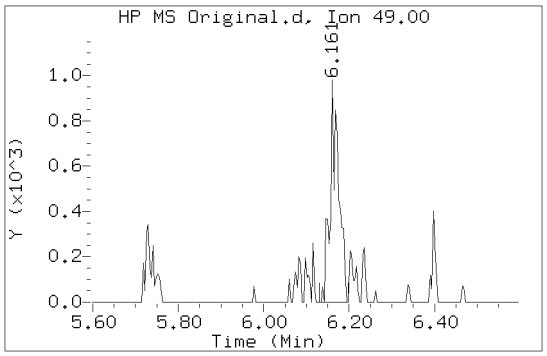
AREA
1383
HEIGHT
981
20-Jul-2023
15:04
linh
pham



AFTER
MASS
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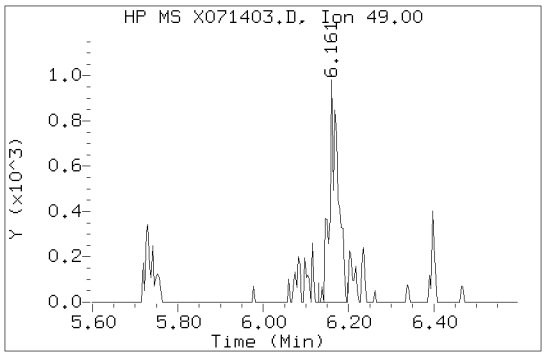
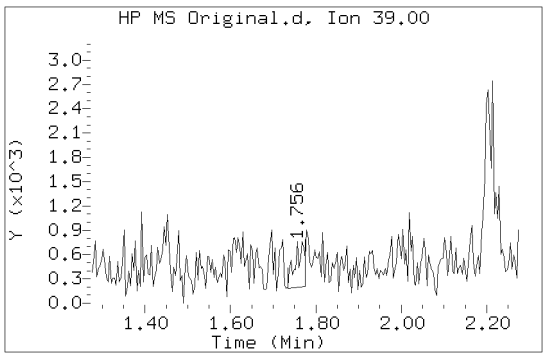
AREA
1383
HEIGHT
981
20-Jul-2023
15:04
linh
pham



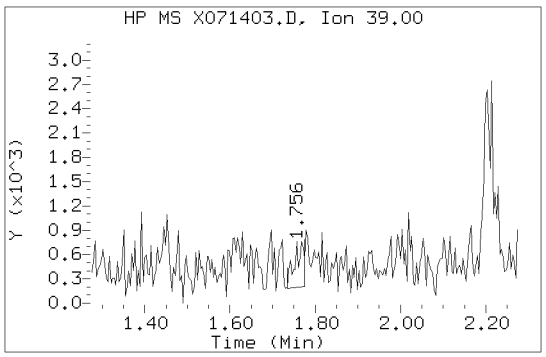
Isoprene (78-79-5)

Reason Code:

BEFORE
MASS
39
AREA
843
HEIGHT
570
20-Jul-2023
15:04
linh
pham



AFTER
MASS
39
AREA
843
HEIGHT
570
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
67
AREA
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HEIGHT
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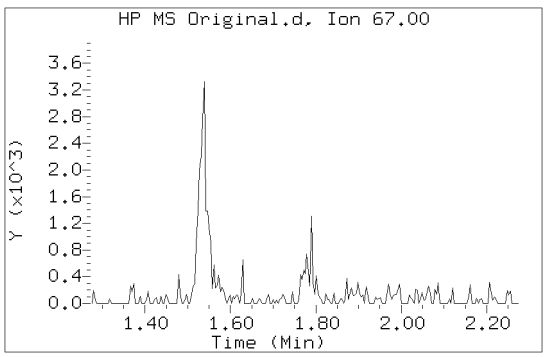
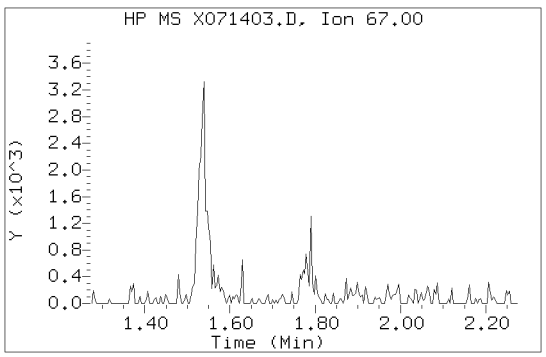
20-Jul-2023
15:04
linh
pham



AFTER
MASS
67
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



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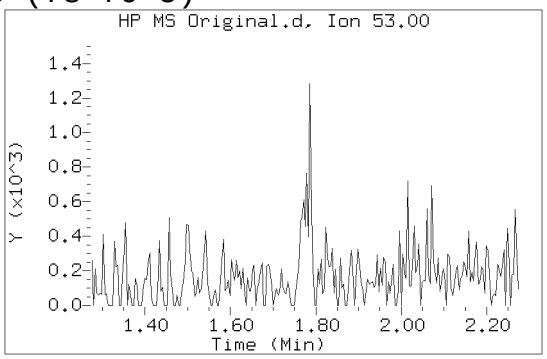
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Isoprene (78-79-5)

Reason Code:

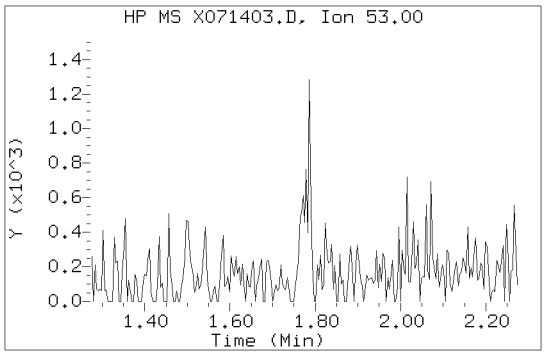
BEFORE

MASS
53
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
53
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

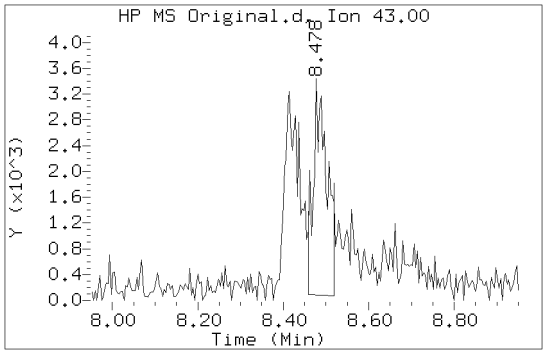


n-Amyl acetate (628-63-7)

Reason Code:

BEFORE

MASS
43
AREA
7447
HEIGHT
3352
20-Jul-2023
15:04
linh
pham



AFTER

MASS
43
AREA
7447
HEIGHT
3352
20-Jul-2023
15:04
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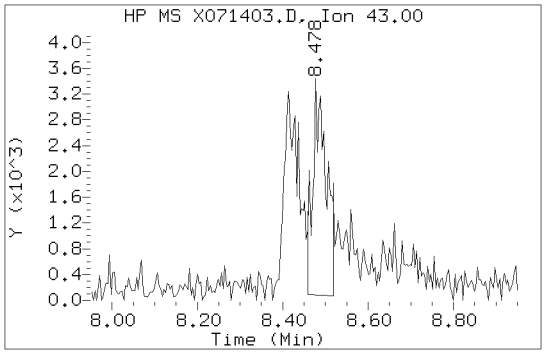
pham



BEFORE

MASS
70
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HEIGHT
0
20-Jul-2023
15:04
linh
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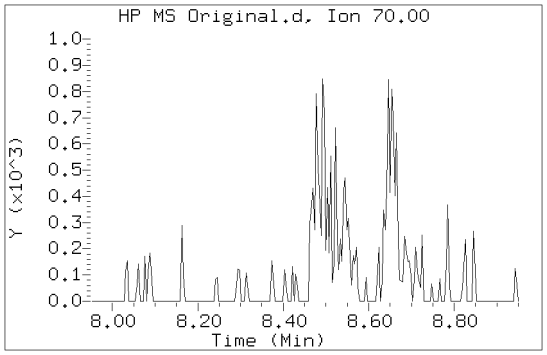

AFTER

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15:04
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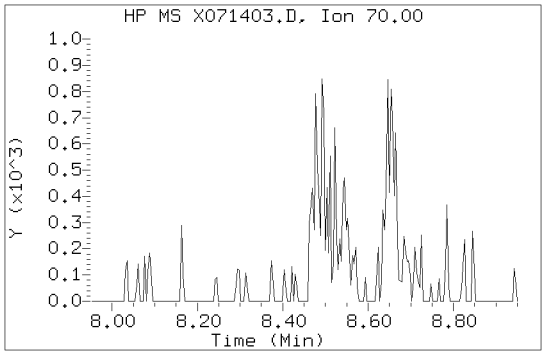

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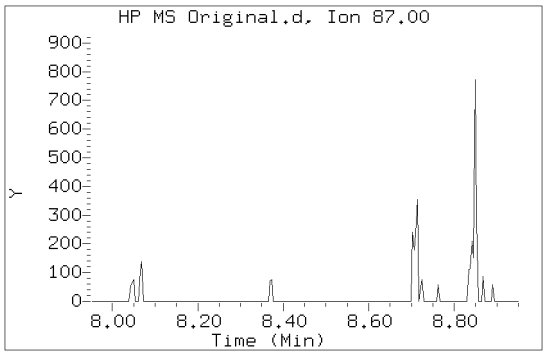

AFTER

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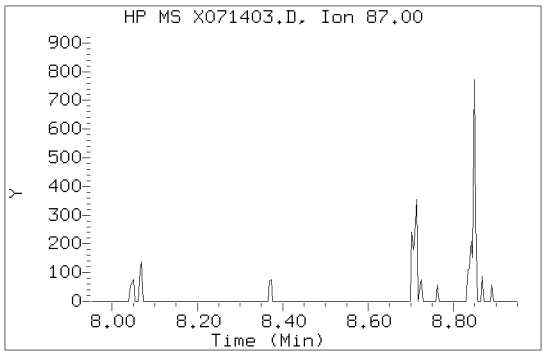

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Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

n-Butyl acetate (123-86-4)

Reason Code:

BEFORE

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3352
20-Jul-2023
15:04
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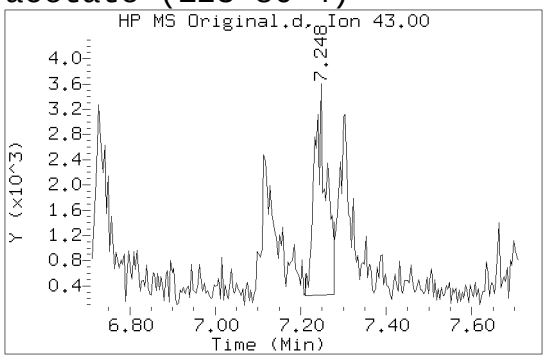
pham



AFTER

MASS
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AREA
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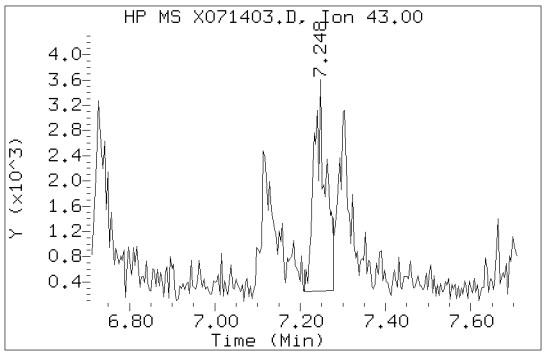
3352
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
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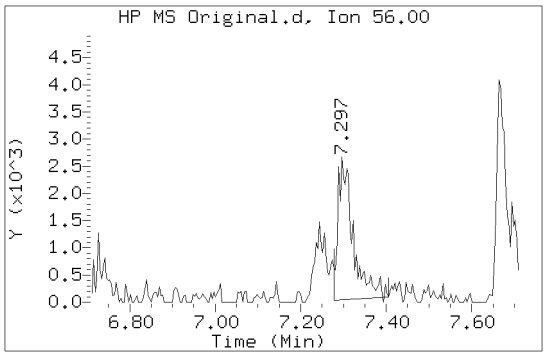
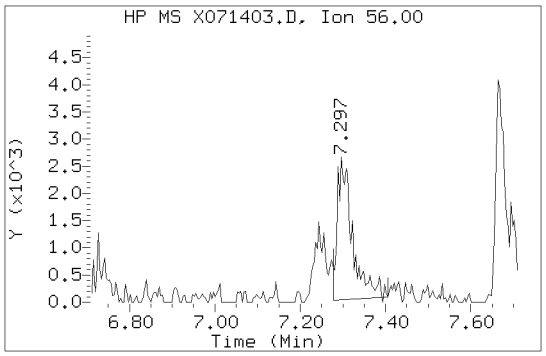
AREA
6426
HEIGHT
2636
20-Jul-2023
15:04
linh
pham



AFTER

MASS
56
AREA
6426
HEIGHT
2636
20-Jul-2023
15:04
linh
pham



BEFORE

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572
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15:04
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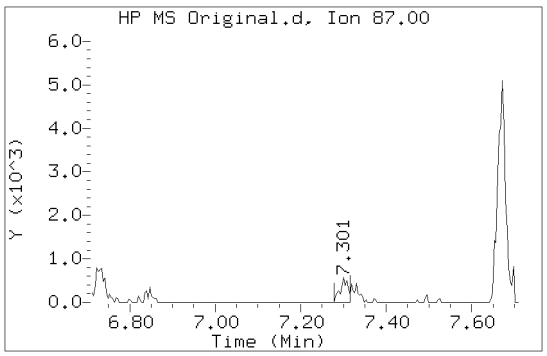
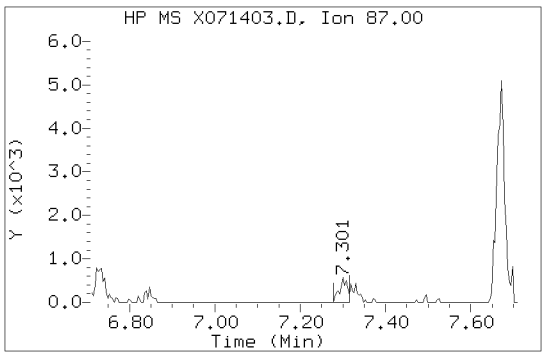


AFTER

MASS
87
AREA
709
HEIGHT
572
20-Jul-2023
15:04
linh
pham



Isobutylene (115-11-7)

Reason Code:

BEFORE

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AREA
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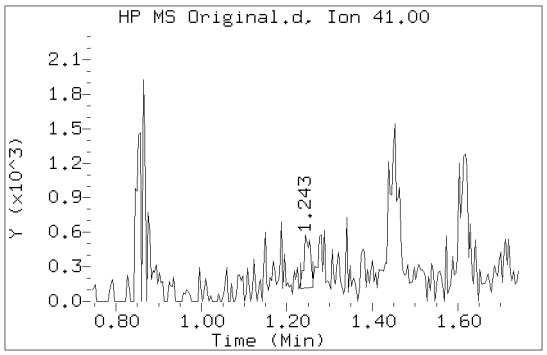
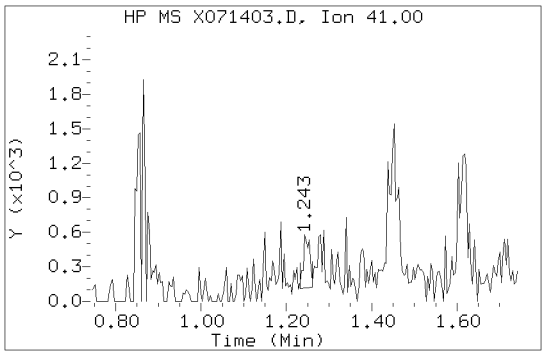
HEIGHT
462
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
500
HEIGHT
462
20-Jul-2023
15:04
linh
pham



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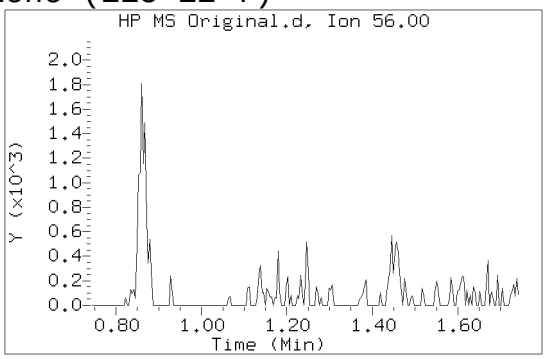
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

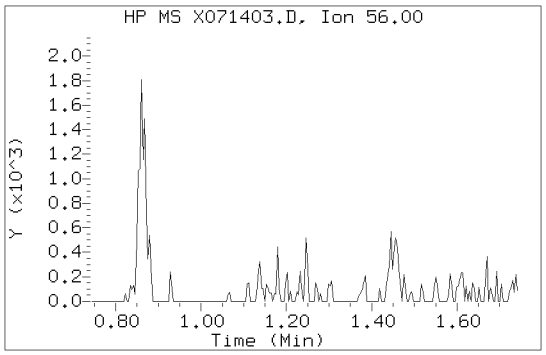
Isobutylene (115-11-7)

Reason Code:

BEFORE
MASS
56
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER
MASS
56
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
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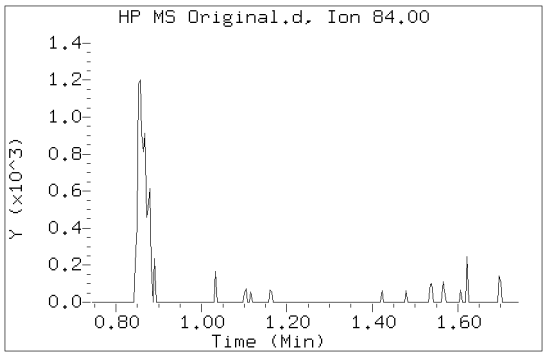
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER
MASS
84
AREA
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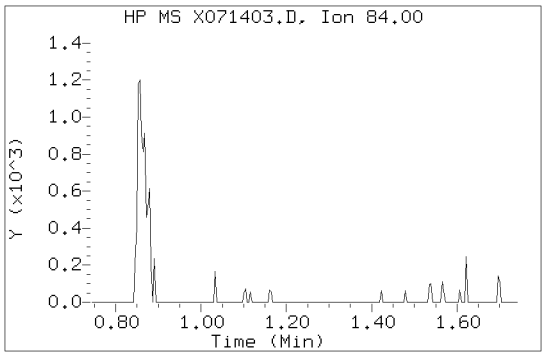
HEIGHT
0
20-Jul-2023
15:04
linh
pham



2-Ethylhexyl Acrylate (103-11-7)

Reason Code:

BEFORE
MASS
55
AREA
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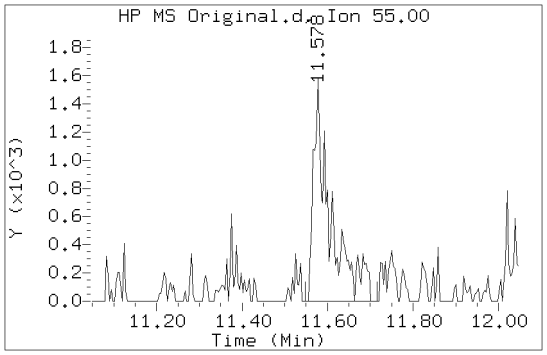
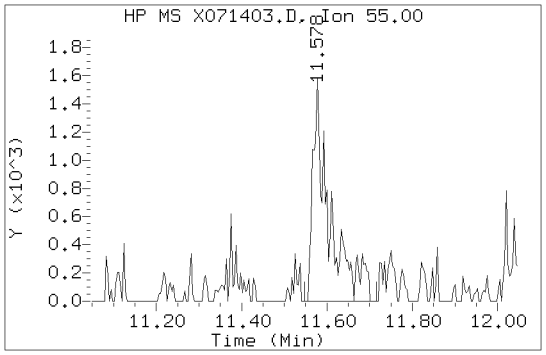
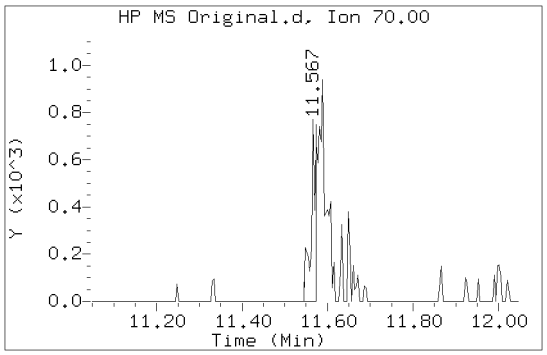
HEIGHT
1577
20-Jul-2023
15:04
linh
pham



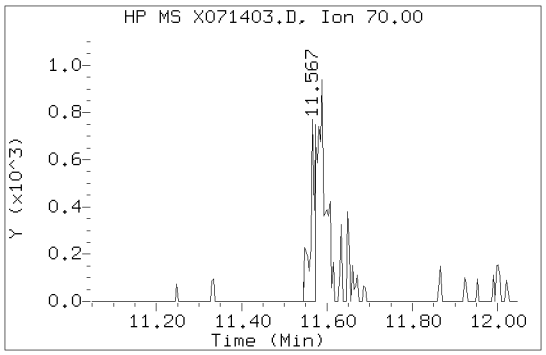
AFTER
MASS
55
AREA
4236
HEIGHT
1577
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
70
AREA
631
HEIGHT
771
20-Jul-2023
15:04
linh
pham



AFTER
MASS
70
AREA
631
HEIGHT
771
20-Jul-2023
15:04
linh
pham



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Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Dibromofluoromethane (1868-53-7)

Reason Code:

BEFORE

MASS
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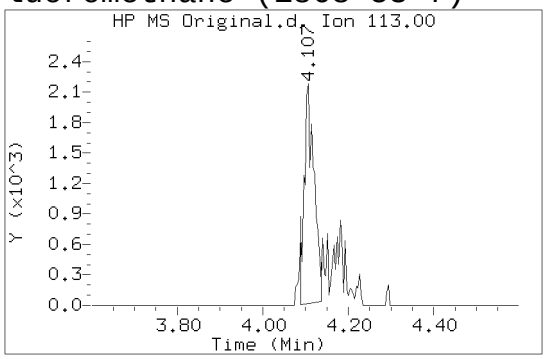
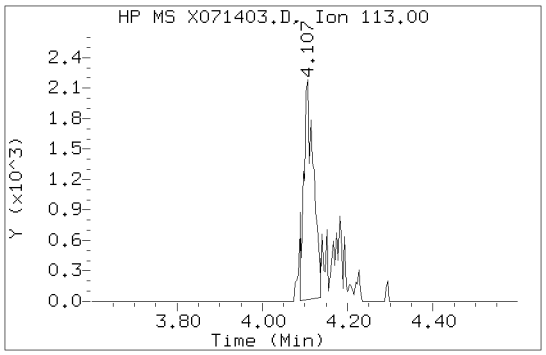
AREA
3536
HEIGHT
2165
20-Jul-2023
15:04
linh
pham



AFTER

MASS
113
AREA
3536
HEIGHT
2165
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
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AREA
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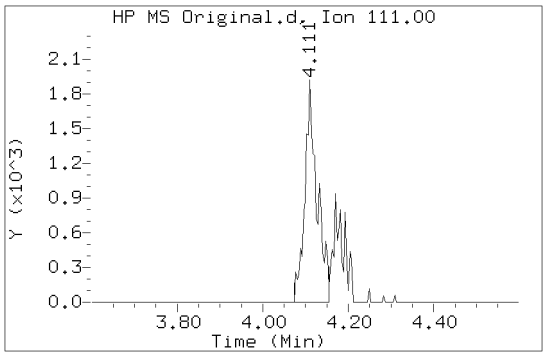
HEIGHT
1919
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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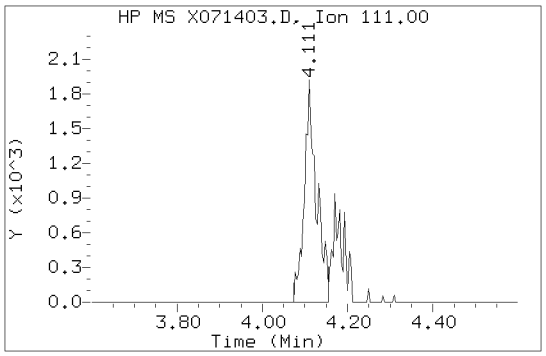
AREA
3831
HEIGHT
1919
20-Jul-2023
15:04
linh
pham



Toluene-d8 (2037-26-5)

Reason Code:

BEFORE

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98
AREA
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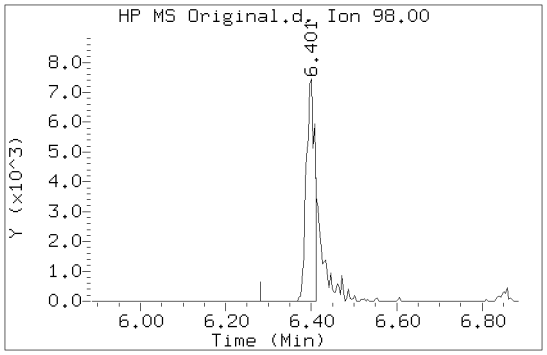
HEIGHT
7449
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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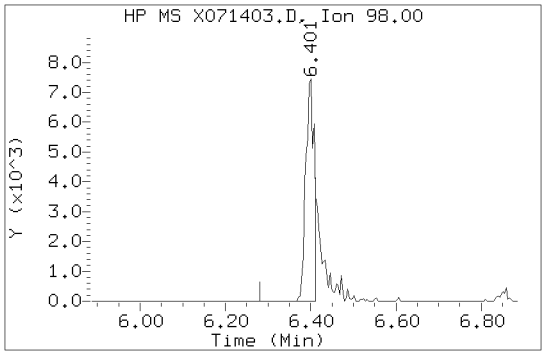
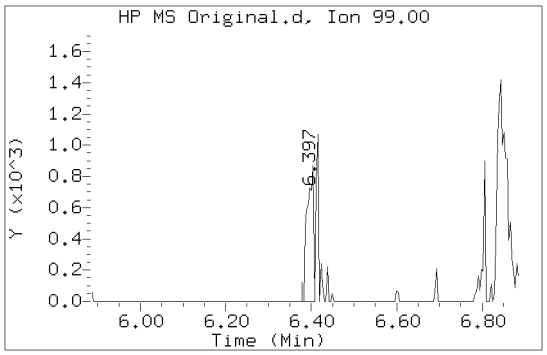
AREA
10379
HEIGHT
7449
20-Jul-2023
15:04
linh
pham



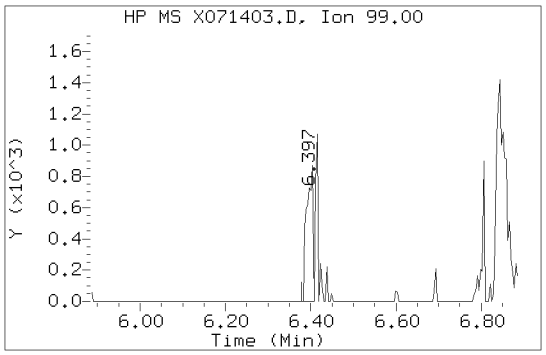
BEFORE

MASS
99
AREA
897
HEIGHT
727
20-Jul-2023
15:04
linh
pham



AFTER

MASS
99
AREA
897
HEIGHT
727
20-Jul-2023
15:04
linh
pham



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Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Toluene-d8 (2037-26-5)

Reason Code:

BEFORE

MASS
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AREA
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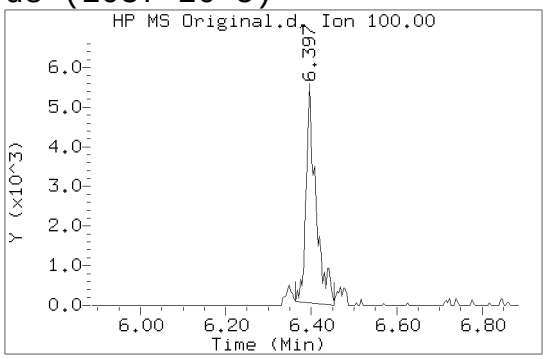
HEIGHT
5534
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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AREA
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HEIGHT
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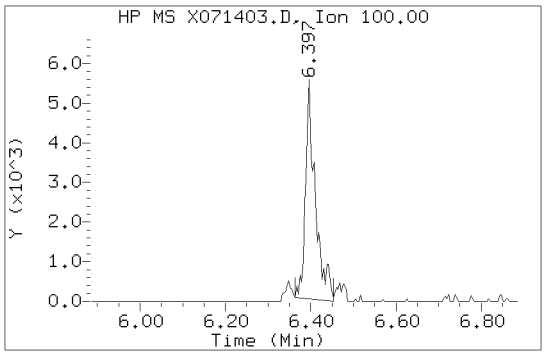
20-Jul-2023
15:04
linh
pham

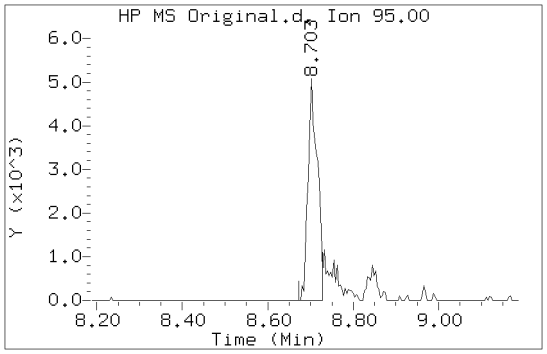


4-Bromofluorobenzene (460-00-4)

Reason Code:

BEFORE

MASS
95
AREA
7819
HEIGHT
5079
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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HEIGHT
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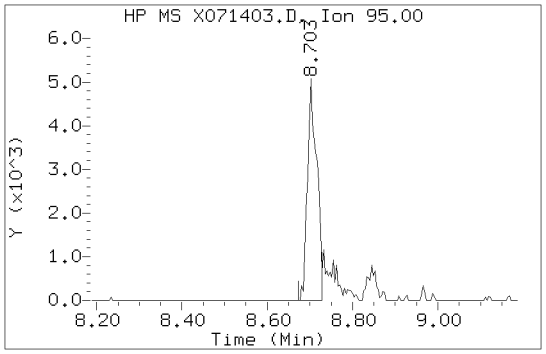
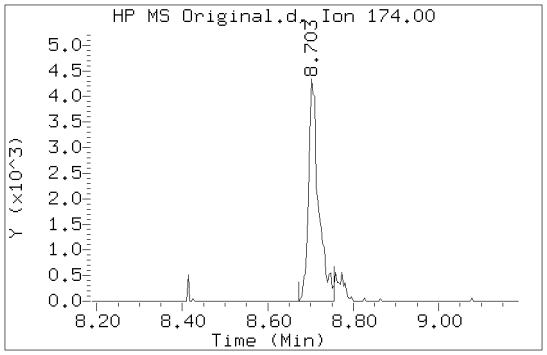
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
174
AREA
7142
HEIGHT
4342
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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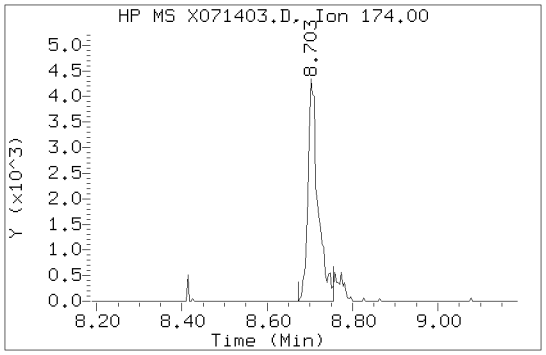
AREA
7142
HEIGHT
4342
20-Jul-2023
15:04
linh
pham



BEFORE

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AREA
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HEIGHT
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20-Jul-2023
15:04
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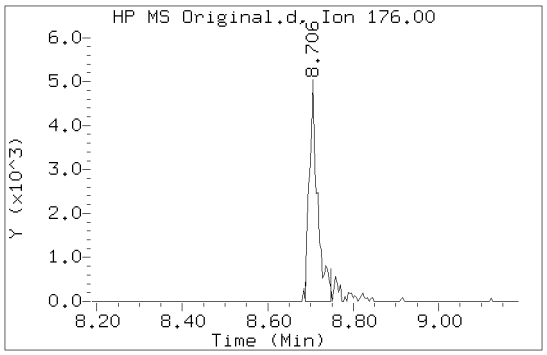
pham



AFTER

MASS
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AREA
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HEIGHT
5044
20-Jul-2023
15:04
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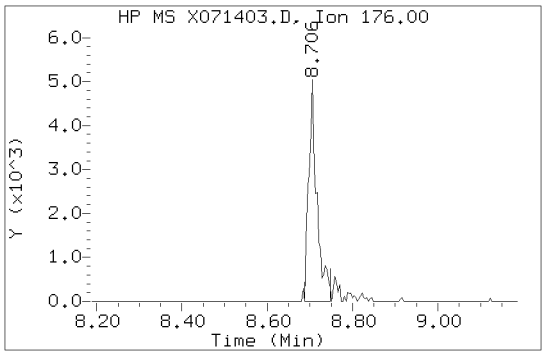
pham



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Report Date: 20-Jul-2023 15:05

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071404.D
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Inj Date : 14-JUL-2023 13:02
Operator : PC Inst ID: voa6.i
Smp Info : VSTD001;VSTD001;1;3;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\8260W.m
Meth Date : 20-Jul-2023 15:05 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 12:22 Cal File: X071403.D
Als bottle: 5 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1	Pentafluorobenzene	168	4.178	4.178	(1.000)	527854	50.0000	
2	Dichlorodifluoromethane	85	0.976	0.976	(0.234)	3668	1.00000	1.76
3	Chloromethane	50	1.081	1.081	(0.259)	7000	1.00000	0.87
4	Propionitrile	54	3.690	3.690	(0.883)	10495	10.0000	10.03(aM)
5	Vinyl Chloride	62	1.149	1.149	(0.275)	5610	1.00000	0.82
6	Bromomethane	94	1.344	1.344	(0.322)	2584	1.00000	0.91
7	Chloroethane	64	1.407	1.407	(0.337)	3779	1.00000	0.96
8	Trichlorofluoromethane	101	1.561	1.561	(0.374)	5888	1.00000	0.85(M)
9	Acrolein	56	1.861	1.861	(0.446)	510	2.00000	3.65(aM)
11	1,1-Dichloroethene	96	1.913	1.913	(0.458)	3525	1.00000	0.91(M)
12	Isobutyl Alcohol	43	4.687	4.687	(1.122)	16938	20.0000	16.92(aM)
13	Acetonitrile	39	2.198	2.198	(0.526)	7835	10.0000	10.58(a)
14	Allyl Chloride	41	2.202	2.202	(0.527)	19290	1.00000	1.11(a)
15	Iodomethane	142	2.030	2.030	(0.486)	4792	2.00000	4.73(M)
16	Acrylonitrile	53	2.551	2.551	(0.611)	4763	2.00000	1.85(M)
18	Methyl tert-butyl ether	73	2.543	2.543	(0.609)	15895	1.00000	1.10
19	Carbon Disulfide	76	2.071	2.071	(0.496)	21621	2.00000	1.77
20	trans-1,2-Dichloroethene	96	2.536	2.536	(0.607)	3665	1.00000	0.81
21	Vinyl Acetate	43	3.015	3.015	(0.722)	36157	2.00000	1.95
22	1,1-Dichloroethane	63	2.929	2.929	(0.701)	9261	1.00000	0.94

23 Chloroprene	53	1.786	1.786 (0.428)	2402	1.00000	1.01(aM)
24 2-Butanone	43	3.686	3.686 (0.882)	5549	2.00000	1.97(M)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	25 Methacrylonitrile	41	3.874	3.874	(0.927)	6195	1.00000	0.90(aM)
	26 2,2-Dichloropropane	77	3.518	3.518	(0.842)	7001	1.00000	1.12(M)
	27 cis-1,2-Dichloroethene	96	3.540	3.540	(0.847)	5828	1.00000	1.02(M)
	28 Chloroform	83	3.915	3.915	(0.937)	10007	1.00000	0.99
	29 Bromochloromethane	128	3.799	3.799	(0.909)	3002	1.00000	0.94(M)
	31 1,1,1-Trichloroethane	97	4.084	4.084	(0.978)	6398	1.00000	0.82(M)
	32 1,1-Dichloropropene	75	4.286	4.286	(0.863)	6097	1.00000	0.91(M)
	33 1,2-Dichloroethane	62	4.564	4.564	(0.919)	9069	1.00000	1.01
	34 Carbon Tetrachloride	117	4.264	4.264	(0.859)	7002	1.00000	1.04(M)
$	35 1,2-Dichloroethane-d4	65	4.485	4.485	(1.074)	7805	1.00000	0.68
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	814886	50.0000	
	37 Benzene	78	4.515	4.515	(0.909)	18433	1.00000	0.94
	38 Trichloroethene	130	5.212	5.212	(1.050)	4751	1.00000	0.86(a)
	39 Bromodichloromethane	83	5.730	5.730	(1.154)	6967	1.00000	0.93(aM)
	40 Methyl Methacrylate	41	5.628	5.628	(1.347)	7110	1.00000	1.11(a)
	41 2-Chloroethylvinyl ether	63	6.071	6.071	(1.223)	4176	2.00000	1.83(aM)
	42 1,2-Dichloropropane	63	5.441	5.441	(1.096)	5153	1.00000	0.82(aM)
	43 2-Nitropropane	43	5.992	5.992	(1.434)	2054	1.00000	0.97(aM)
	44 Dibromomethane	93	5.557	5.557	(1.119)	3511	1.00000	0.98(a)
	45 4-Methyl-2-Pentanone	43	6.337	6.337	(0.826)	14106	2.00000	1.87(aM)
	46 cis-1,3-Dichloropropene	75	6.168	6.168	(1.242)	7361	1.00000	0.85(a)
*	47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	765384	50.0000	
$	48 Toluene-d8	98	6.397	6.397	(0.834)	21847	1.00000	1.10(aM)
	49 Ethyl Methacrylate	69	6.730	6.730	(1.356)	5749	1.00000	1.07(aM)
	50 Toluene	91	6.453	6.453	(0.842)	17466	1.00000	0.84(a)
	51 trans-1,3-Dichloropropene	75	6.693	6.693	(1.348)	6303	1.00000	0.87(a)
	52 2-Hexanone	43	7.113	7.113	(0.928)	10319	2.00000	2.08(aM)
	53 1,1,2-Trichloroethane	83	6.843	6.843	(0.892)	4429	1.00000	1.01(a)
	54 1,3-Dichloropropane	76	6.985	6.985	(0.911)	8584	1.00000	0.96(a)
	55 Dibromochloromethane	129	7.180	7.180	(0.936)	6003	1.00000	0.95(a)
	56 Tetrachloroethene	164	6.929	6.929	(0.904)	3431	1.00000	0.80(aM)
	57 1,2-Dibromoethane	107	7.270	7.270	(0.948)	4879	1.00000	0.97(a)
	58 1-Chlorohexane	55	7.705	7.705	(1.552)	6663	1.00000	1.01(aM)
	59 Chlorobenzene	112	7.698	7.698	(1.004)	13305	1.00000	0.92(a)
	60 1,1,1,2-Tetrachloroethane	131	7.776	7.776	(1.014)	5021	1.00000	0.89(a)
	61 Ethylbenzene	106	7.806	7.806	(1.018)	6243	1.00000	0.86(a)
	62 m,p-Xylenes	106	7.915	7.915	(1.032)	15703	2.00000	1.73(aM)
	63 o-Xylene	106	8.249	8.249	(1.076)	7717	1.00000	0.89(a)
	64 Styrene	104	8.271	8.271	(1.079)	13315	1.00000	0.88(aM)
	66 Bromoform	173	8.421	8.421	(1.098)	3238	1.00000	0.79(TaM)
	67 Isopropylbenzene	105	8.567	8.567	(1.117)	17710	1.00000	0.80(a)
	68 1,1,2,2-Tetrachloroethane	83	8.841	8.841	(0.915)	6483	1.00000	0.99(a)
$	69 4-Bromofluorobenzene	95	8.702	8.702	(1.135)	11517	1.00000	1.09(aM)
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	389630	50.0000	
	71 1,2,3-Trichloropropane	75	8.871	8.871	(0.918)	5203	1.00000	1.00(aM)
	72 trans-1,4-Dichloro-2-butene	53	8.912	8.912	(1.162)	1951	1.00000	0.83(aM)
	73 n-Propylbenzene	91	8.920	8.920	(0.923)	19793	1.00000	0.84(a)
	74 Bromobenzene	156	8.815	8.815	(0.912)	5922	1.00000	0.97(a)
	75 1,3,5-Trimethylbenzene	105	9.077	9.077	(0.939)	14649	1.00000	0.83(aM)
	76 2-Chlorotoluene	91	8.980	8.980	(0.929)	15937	1.00000	1.00(aM)
	77 4-Chlorotoluene	91	9.085	9.085	(0.940)	14190	1.00000	0.81(a)
	78 tert-Butylbenzene	119	9.339	9.339	(0.967)	12560	1.00000	0.83(a)

79 1,2,4-Trimethylbenzene	105	9.388	9.388 (0.972)	14383	1.00000	0.81(a)
81 sec-Butylbenzene	105	9.519	9.519 (0.985)	16259	1.00000	0.80(a)

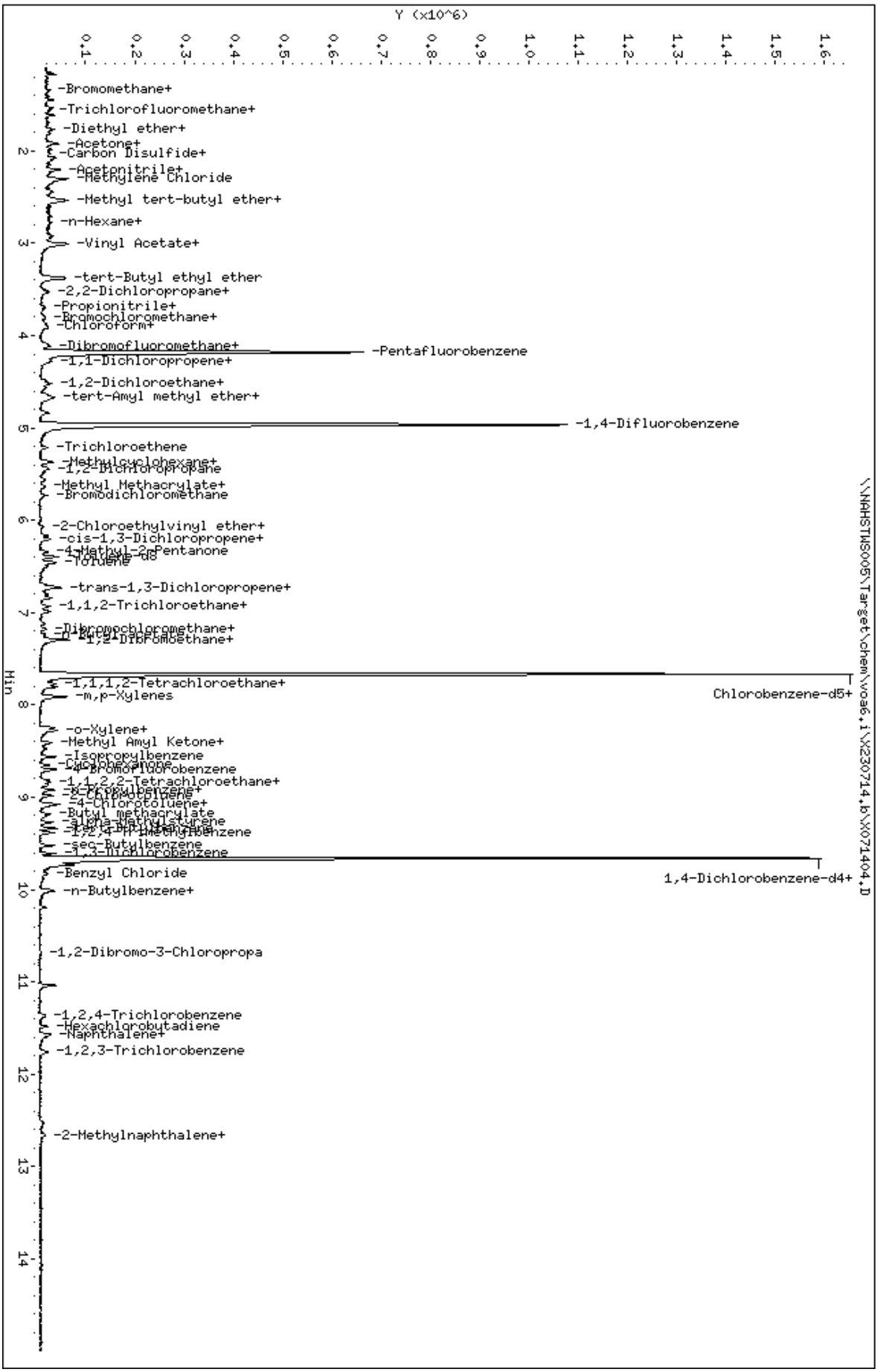
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
82	p-Isopropyltoluene	119	9.651	9.651	(0.999)	15092	1.00000	0.81(aM)
83	1,3-Dichlorobenzene	146	9.609	9.609	(0.995)	9170	1.00000	0.86(a)
84	1,4-Dichlorobenzene	146	9.684	9.684	(1.002)	10311	1.00000	0.88(a)
86	Benzyl Chloride	91	9.827	9.827	(1.282)	10259	1.00000	3.09(aM)
87	n-Butylbenzene	91	10.014	10.014	(1.036)	13321	1.00000	0.86(aM)
88	1,2-Dichlorobenzene	146	10.003	10.003	(1.035)	9791	1.00000	0.93(aM)
89	1,2-Dibromo-3-Chloropropane	155	10.700	10.700	(1.107)	831	1.00000	1.84(aM)
90	1,2,4-Trichlorobenzene	180	11.364	11.364	(1.176)	7113	1.00000	0.99(aM)
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	2109	1.00000	2.96(a)
92	Naphthalene	128	11.574	11.574	(1.198)	18131	1.00000	1.02(aM)
93	1,2,3-Trichlorobenzene	180	11.765	11.765	(1.218)	6973	1.00000	1.04(a)
146	Methyl acetate	43	2.243	2.243	(0.537)	4992	1.00000	1.06(aM)
138	Freon TF	101	1.917	1.917	(0.459)	2818	1.00000	0.25(aM)
141	Cyclohexane	56	4.121	4.121	(0.987)	7673	1.00000	0.83(aM)
142	Tetrahydrofuran	42	3.874	3.874	(0.927)	2815	2.00000	2.07(aM)
147	Methylcyclohexane	55	5.370	5.370	(1.082)	15783	1.00000	0.91(aM)
135	1,4-Dioxane	88	5.613	5.613	(1.344)	1290	20.0000	20.56(M)
132	n-Butanol	56	5.370	5.370	(1.285)	3103	20.0000	17.65(aM)
131	Methyl Acrylate	55	3.750	3.750	(0.898)	5778	1.00000	0.80(aM)
133	Ethyl Acrylate	55	5.370	5.370	(1.285)	18196	1.00000	1.04(M)
136	n-Hexane	57	2.776	2.776	(0.664)	5000	1.00000	0.27(aM)
139	Diethyl ether	59	1.767	1.767	(0.423)	5211	1.00000	1.05(a)
148	Tert-butyl alcohol	59	2.442	2.442	(0.585)	12965	20.0000	19.46(M)
149	Isopropyl alcohol	45	2.097	2.097	(0.502)	9372	20.0000	22.67(TM)
156	Diisopropyl ether	45	3.012	3.012	(0.721)	24757	1.00000	1.13(Ta)
166	1,2,3-Trimethylbenzene	105	9.733	9.733	(1.007)	19017	1.00000	1.05(a)
167	Ethanol	45	1.703	1.703	(0.408)	1613	20.0000	3.59(aM)
172	tert-Butyl formate	59	4.639	4.639	(1.110)	11427	2.00000	2.02(aM)
173	3,3-Dimethyl-1-butanol	57	7.293	7.293	(0.951)	16922	20.0000	20.55(M)
174	tert-Amyl methyl ether	73	4.669	4.669	(1.118)	19717	1.00000	1.13(a)
175	tert-Butyl ethyl ether	59	3.387	3.387	(0.811)	23746	1.00000	1.06(a)
176	tert-Amyl alcohol	59	4.639	4.639	(1.110)	10855	20.0000	18.82
151	4-Methyl-2-pentanol	45	6.727	6.727	(1.355)	35175	20.0000	20.14(M)
180	1-Methylnaphthalene	142	12.657	12.657	(1.310)	6480	1.00000	(a)
140	1,3-Butadiene	54	1.167	1.167	(0.280)	6040	1.00000	0.89(aM)
152	Amyl alcohol	42	6.989	6.989	(0.912)	3944	20.0000	17.91(M)
158	Dichlorofluoromethane	67	1.531	1.531	(0.367)	9743	1.00000	1.14(M)
159	Propylene oxide	43	1.805	1.805	(0.432)	1409	2.00000	2.17(aM)
161	3-Methyl-1-butanol	55	6.944	6.944	(0.906)	3623	20.0000	19.22(M)
162	Butyl acrylate	55	8.279	8.279	(1.080)	13586	1.00000	0.93(a)
163	Butyl methacrylate	41	9.178	9.178	(0.950)	9406	1.00000	1.00(a)
164	Dicyclopentadiene	66	9.677	9.677	(1.002)	24319	1.00000	1.08(aM)
182	Epichlorohydrin	57	6.119	6.119	(1.233)	2383	4.00000	3.91(aM)
M 94	1,2-Dichloroethylene (total)	96				9493	2.00000	(a)
130	Ethyl Acetate	43	3.713	3.713	(0.889)	7207	1.00000	0.91(TaM)
134	Cyclohexanone	55	8.646	8.646	(0.895)	7972	20.0000	22.98(aM)
185	Isoprene	39	1.778	1.778	(0.426)	1515	1.00000	0.87(a)
188	Isopropyl acetate	43	4.687	4.687	(0.944)	23748	1.00000	1.10(a)
187	n-Amyl acetate	43	8.474	8.474	(1.105)	15950	1.00000	1.13(aM)
189	n-Butyl acetate	43	7.233	7.233	(0.943)	9795	1.00000	0.83(aM)
150	Allyl alcohol	57	2.776	2.776	(0.664)	5000	20.0000	3.31(aM)
194	Acetaldehyde	44	1.216	1.216	(0.291)	5117	4.00000	(aM)

195 Methyl Amyl Ketone	43	8.406	8.406 (1.096)	14469	1.00000	0.90(a)
200 Dimethyl Disulfide	94	6.202	6.202 (0.809)	9361	1.00000	0.90(a)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
202 Isobutylene	41	1.246	1.246	(0.298)	875	1.00000	1.00(aM)
205 2-Ethylhexyl Acrylate	55	11.562	11.562	(1.197)	8780	1.00000	0.88(aM)

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

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Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

Trichlorofluoromethane (75-69-4)

Reason Code:

BEFORE
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101
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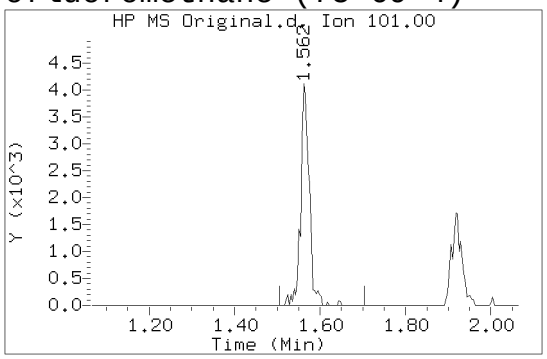
4116
20-Jul-2023
15:04
linh
pham



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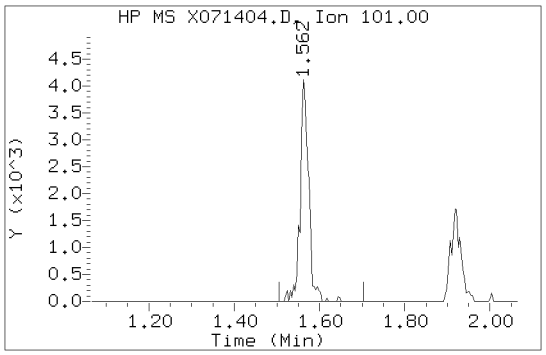

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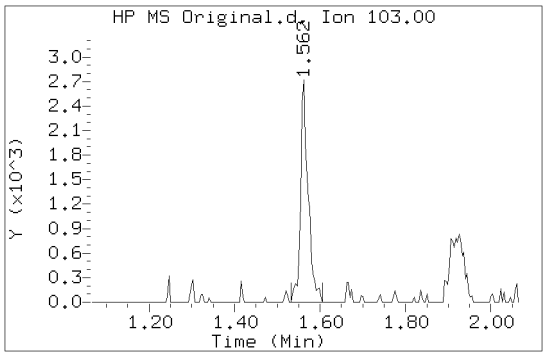

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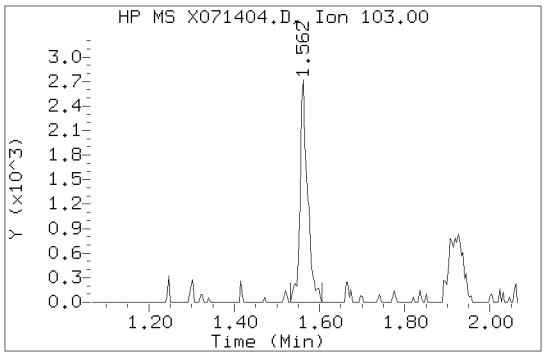

1,1-Dichloroethene (75-35-4)

Reason Code:

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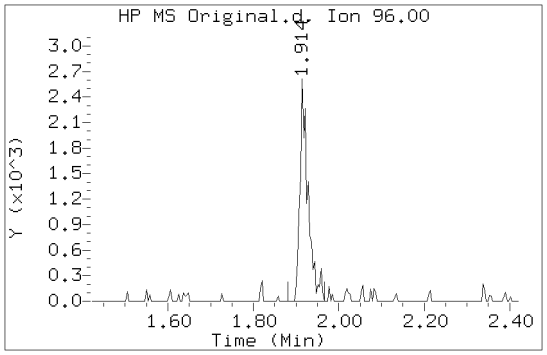

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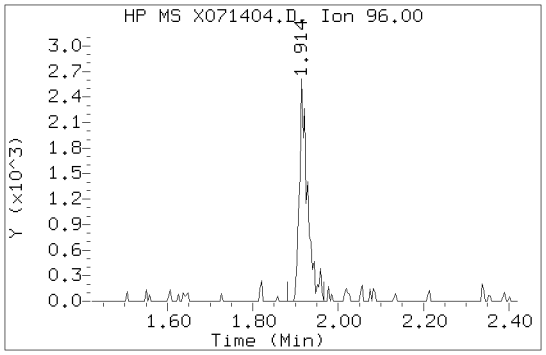

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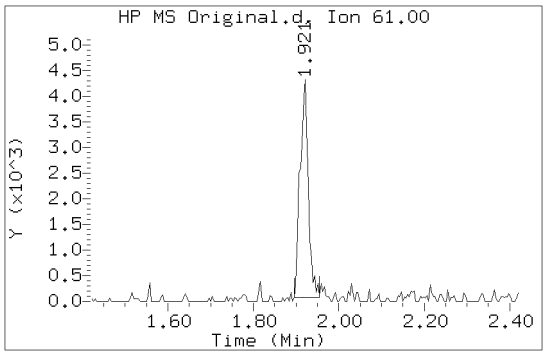

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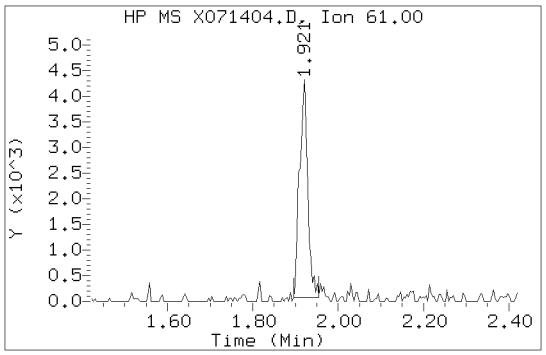

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LabSampID : VSTD001

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

Reason Code:

BEFORE

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20-Jul-2023
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linh
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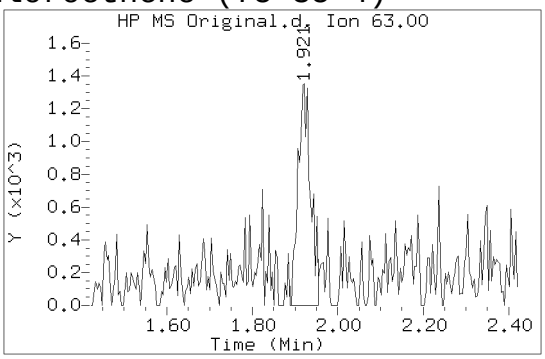

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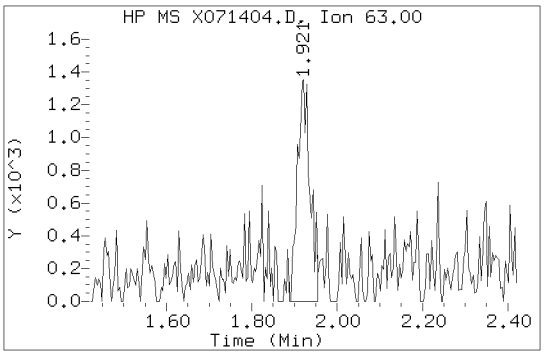

Iodomethane (74-88-4)

Reason Code:

BEFORE

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20-Jul-2023
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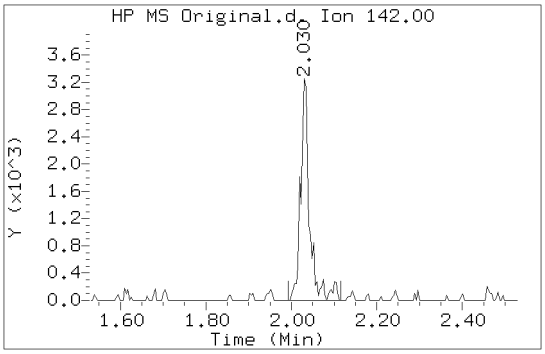

AFTER

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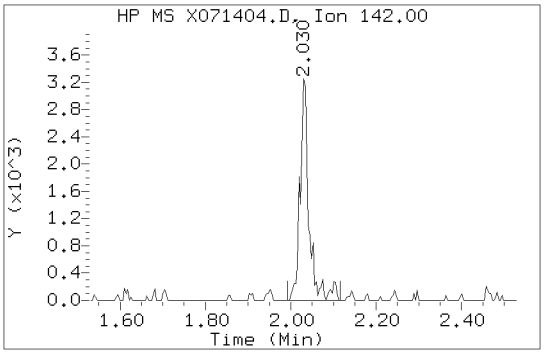

BEFORE

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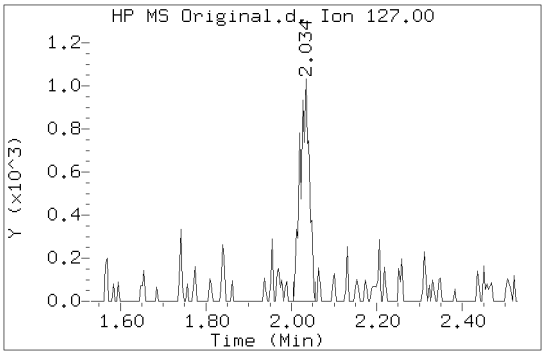

AFTER

MASS
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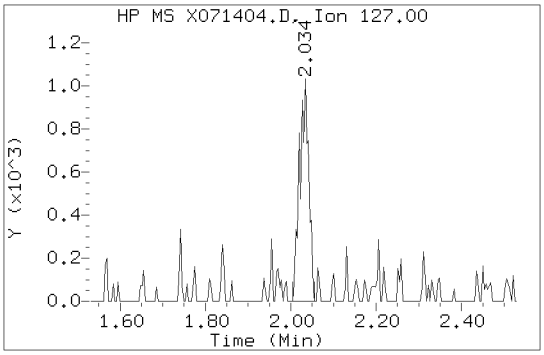
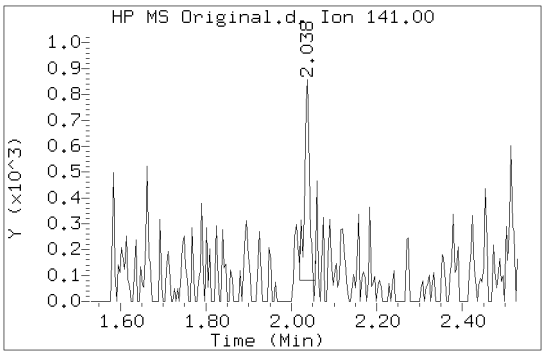
linh
pham



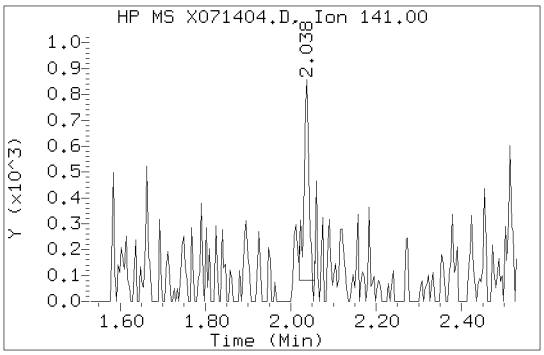
BEFORE

MASS
141
AREA
645
HEIGHT
775
20-Jul-2023
15:04
linh
pham



AFTER

MASS
141
AREA
645
HEIGHT
775
20-Jul-2023
15:04
linh
pham



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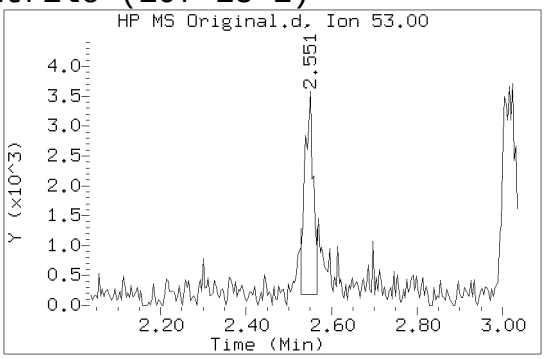
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

Acrylonitrile (107-13-1)

Reason Code:

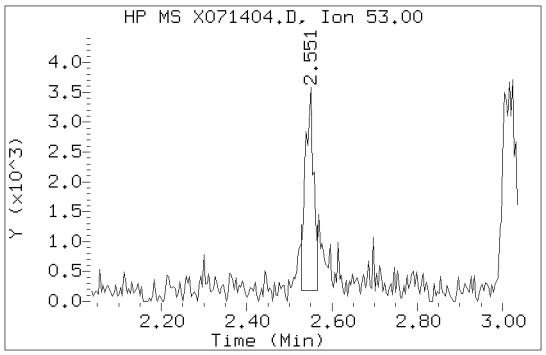
BEFORE

MASS
53
AREA
4763
HEIGHT
3403
20-Jul-2023
15:04
linh
pham



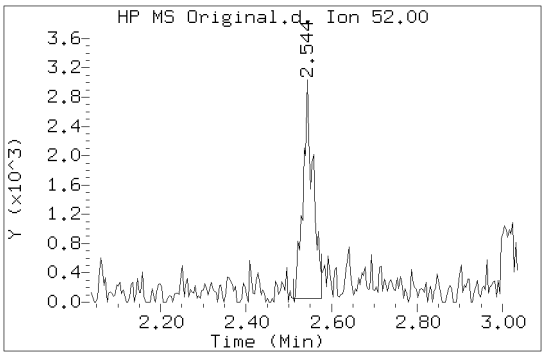
AFTER

MASS
53
AREA
4763
HEIGHT
3403
20-Jul-2023
15:04
linh
pham



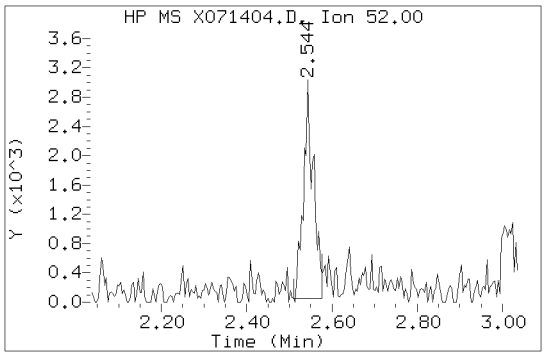
BEFORE

MASS
52
AREA
4911
HEIGHT
2983
20-Jul-2023
15:04
linh
pham



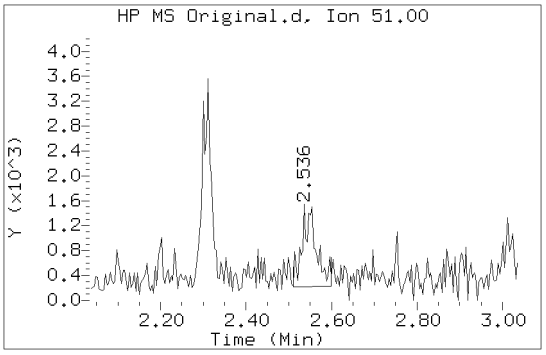
AFTER

MASS
52
AREA
4911
HEIGHT
2983
20-Jul-2023
15:04
linh
pham



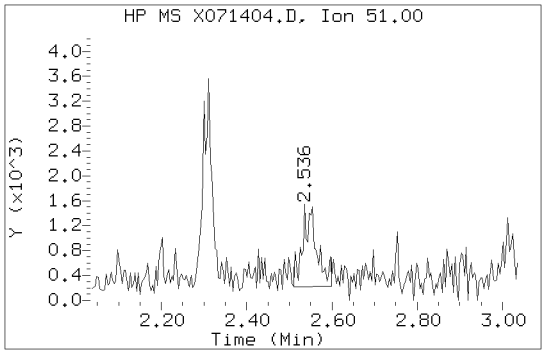
BEFORE

MASS
51
AREA
3020
HEIGHT
1324
20-Jul-2023
15:04
linh
pham



AFTER

MASS
51
AREA
3020
HEIGHT
1324
20-Jul-2023
15:04
linh
pham

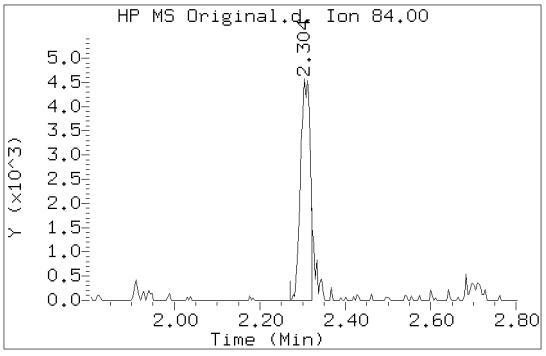


Methylene Chloride (75-09-2)

Reason Code:

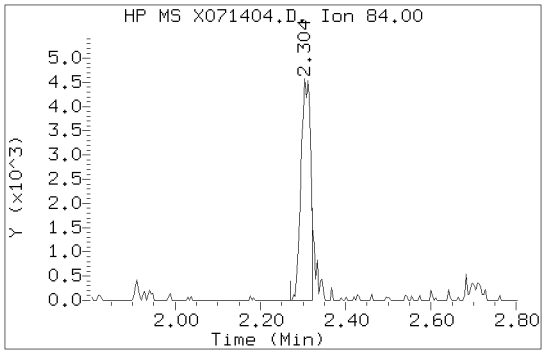
BEFORE

MASS
84
AREA
7389
HEIGHT
4576
20-Jul-2023
15:04
linh
pham



AFTER

MASS
84
AREA
7389
HEIGHT
4576
20-Jul-2023
15:04
linh
pham



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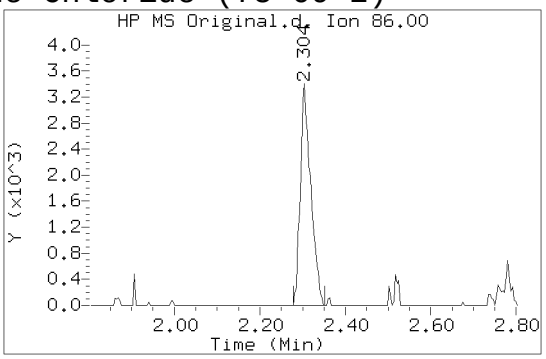
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

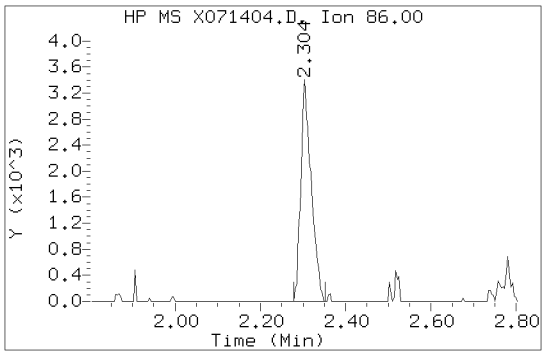
Methylene Chloride (75-09-2)

Reason Code:

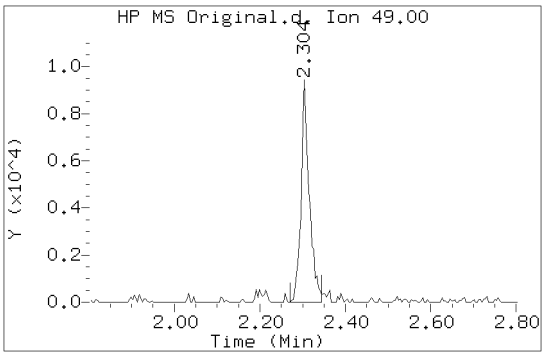
BEFORE
MASS
86
AREA
5890
HEIGHT
3405
20-Jul-2023
15:04
linh
pham



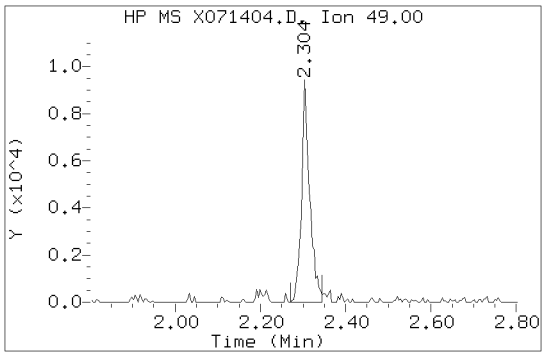
AFTER
MASS
86
AREA
5890
HEIGHT
3405
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
49
AREA
12826
HEIGHT
9432
20-Jul-2023
15:04
linh
pham



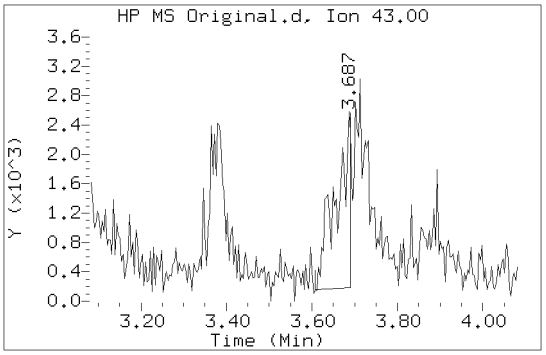
AFTER
MASS
49
AREA
12826
HEIGHT
9432
20-Jul-2023
15:04
linh
pham



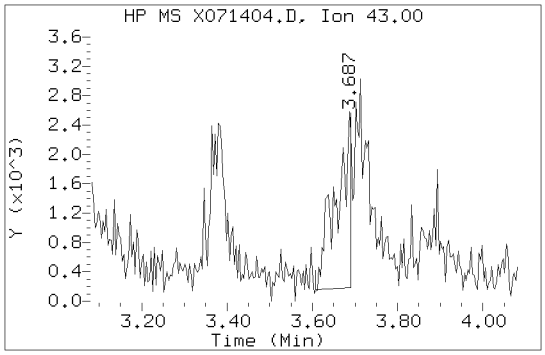
2-Butanone (78-93-3)

Reason Code:

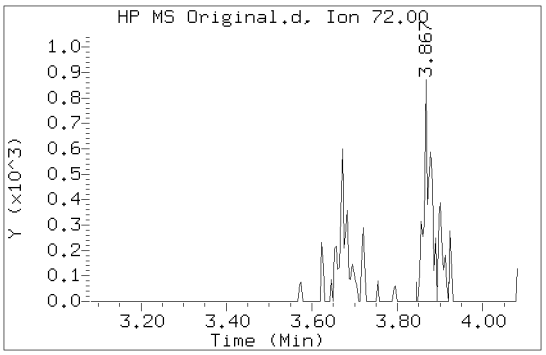
BEFORE
MASS
43
AREA
5549
HEIGHT
2403
20-Jul-2023
15:04
linh
pham



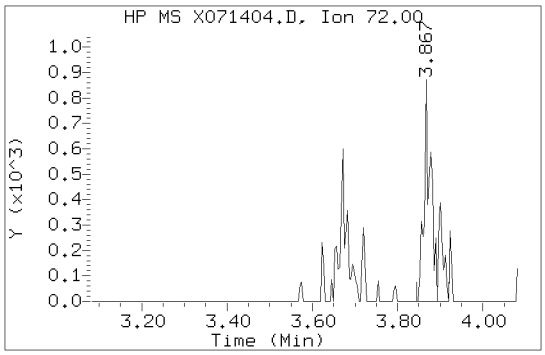
AFTER
MASS
43
AREA
5549
HEIGHT
2403
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
72
AREA
1227
HEIGHT
872
20-Jul-2023
15:04
linh
pham



AFTER
MASS
72
AREA
1227
HEIGHT
872
20-Jul-2023
15:04
linh
pham



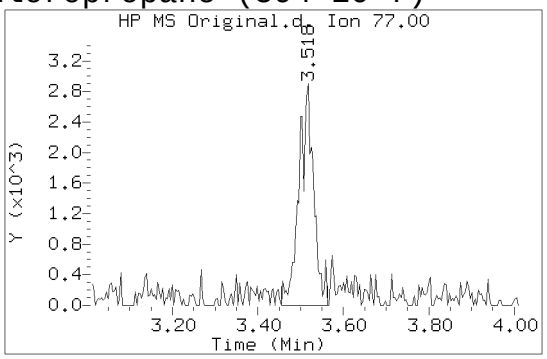
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071404.D
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

2,2-Dichloropropane (594-20-7)

Reason Code:

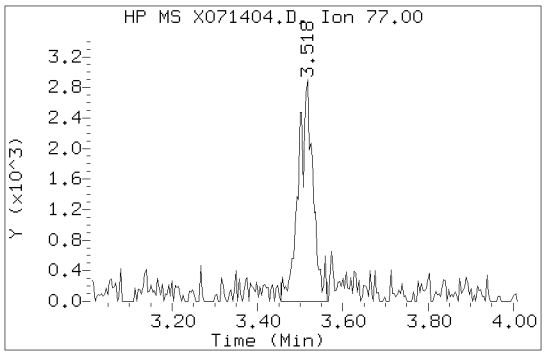
BEFORE

MASS
77
AREA
7001
HEIGHT
2901
20-Jul-2023
15:04
linh
pham



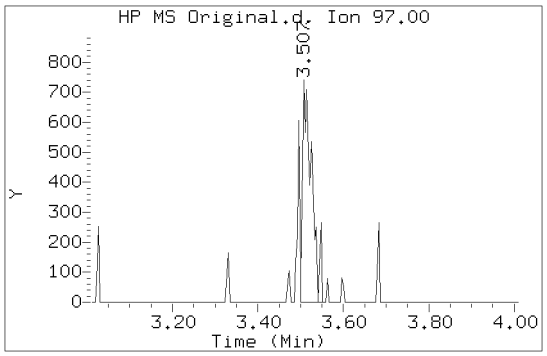
AFTER

MASS
77
AREA
7001
HEIGHT
2901
20-Jul-2023
15:04
linh
pham



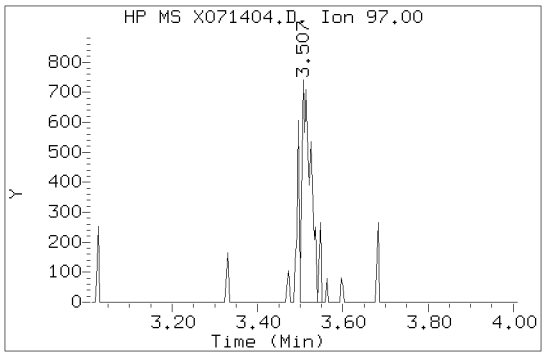
BEFORE

MASS
97
AREA
1144
HEIGHT
741
20-Jul-2023
15:04
linh
pham



AFTER

MASS
97
AREA
1144
HEIGHT
741
20-Jul-2023
15:04
linh
pham

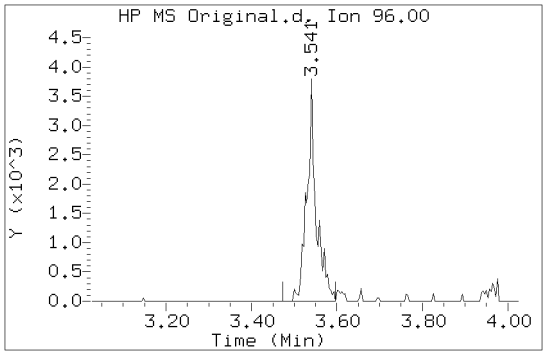


cis-1,2-Dichloroethene (156-59-2)

Reason Code:

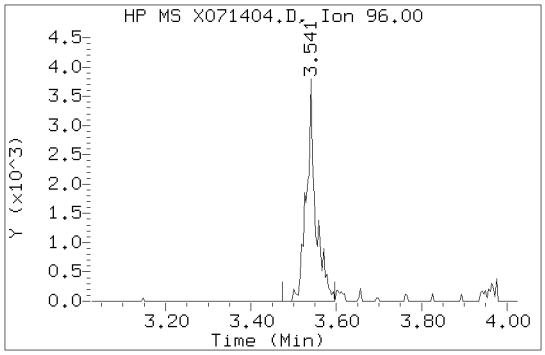
BEFORE

MASS
96
AREA
5828
HEIGHT
3797
20-Jul-2023
15:04
linh
pham



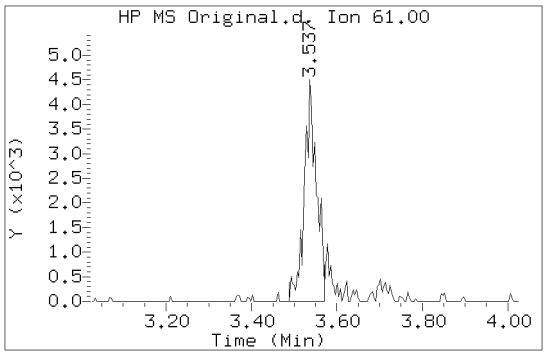
AFTER

MASS
96
AREA
5828
HEIGHT
3797
20-Jul-2023
15:04
linh
pham



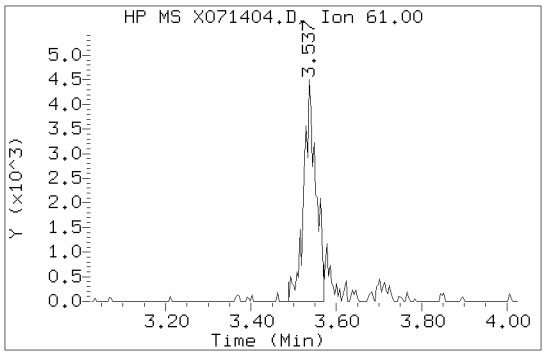
BEFORE

MASS
61
AREA
9003
HEIGHT
4504
20-Jul-2023
15:04
linh
pham



AFTER

MASS
61
AREA
9003
HEIGHT
4504
20-Jul-2023
15:04
linh
pham



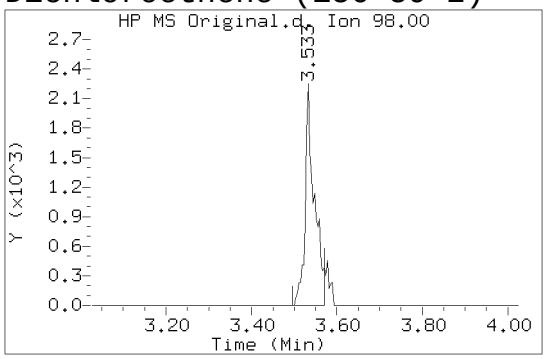
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071404.D
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

cis-1,2-Dichloroethene (156-59-2)

Reason Code:

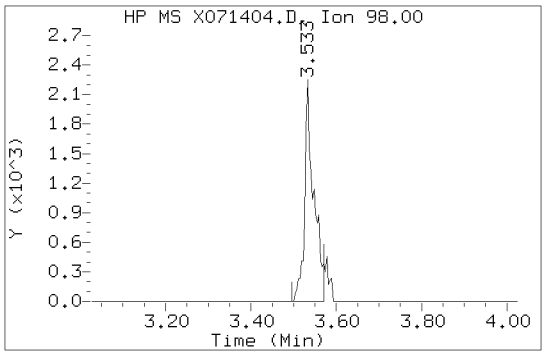
BEFORE

MASS
98
AREA
3384
HEIGHT
2251
20-Jul-2023
15:04
linh
pham



AFTER

MASS
98
AREA
3384
HEIGHT
2251
20-Jul-2023
15:04
linh
pham

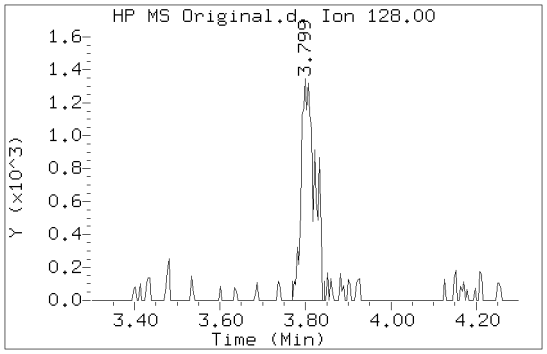


Bromochloromethane (74-97-5)

Reason Code:

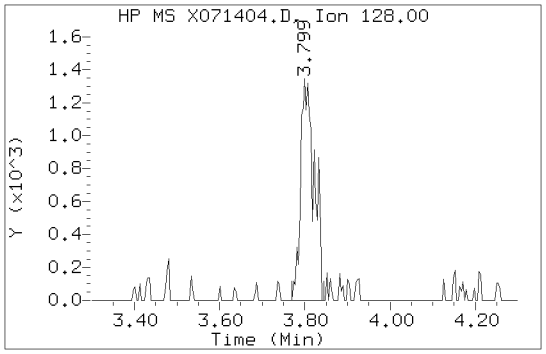
BEFORE

MASS
128
AREA
3002
HEIGHT
1346
20-Jul-2023
15:04
linh
pham



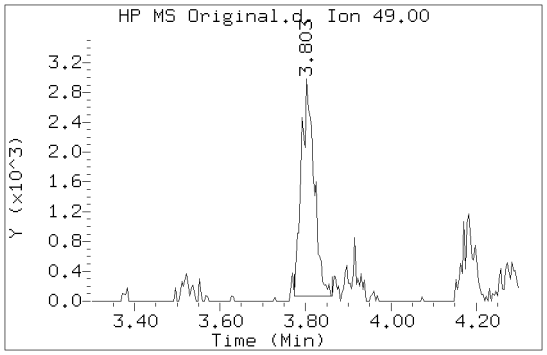
AFTER

MASS
128
AREA
3002
HEIGHT
1346
20-Jul-2023
15:04
linh
pham



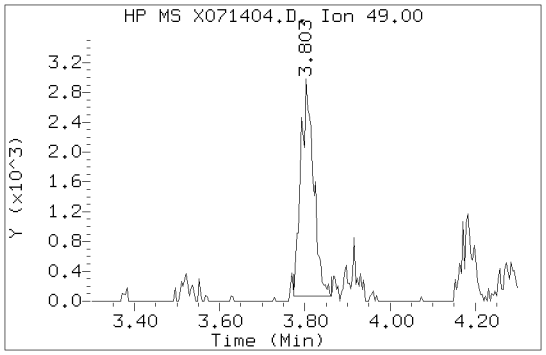
BEFORE

MASS
49
AREA
6119
HEIGHT
2913
20-Jul-2023
15:04
linh
pham



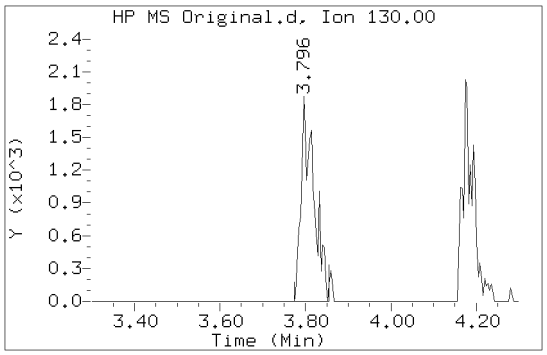
AFTER

MASS
49
AREA
6119
HEIGHT
2913
20-Jul-2023
15:04
linh
pham



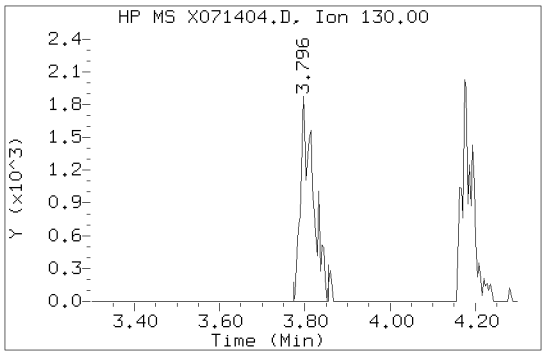
BEFORE

MASS
130
AREA
3970
HEIGHT
1875
20-Jul-2023
15:04
linh
pham



AFTER

MASS
130
AREA
3970
HEIGHT
1875
20-Jul-2023
15:04
linh
pham



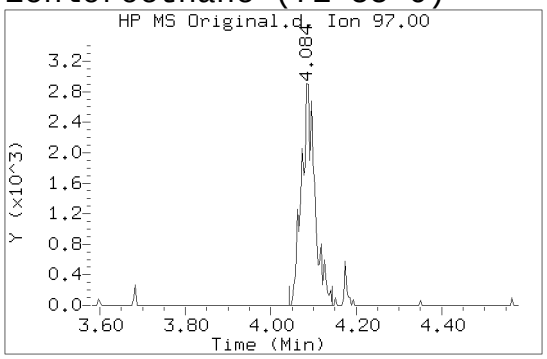
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071404.D
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

1,1,1-Trichloroethane (71-55-6)

Reason Code:

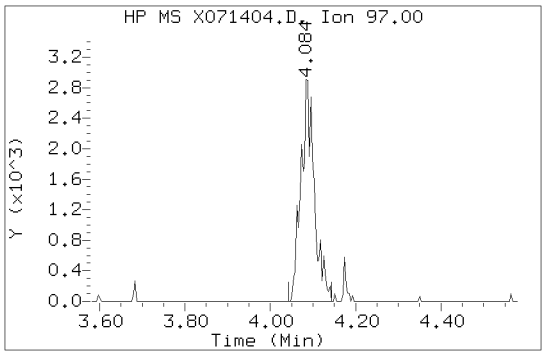
BEFORE

MASS
97
AREA
6398
HEIGHT
2905
20-Jul-2023
15:04
linh
pham



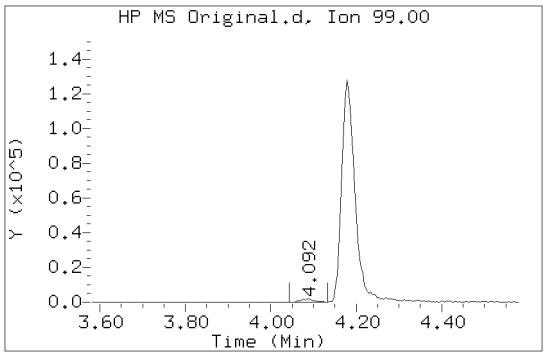
AFTER

MASS
97
AREA
6398
HEIGHT
2905
20-Jul-2023
15:04
linh
pham



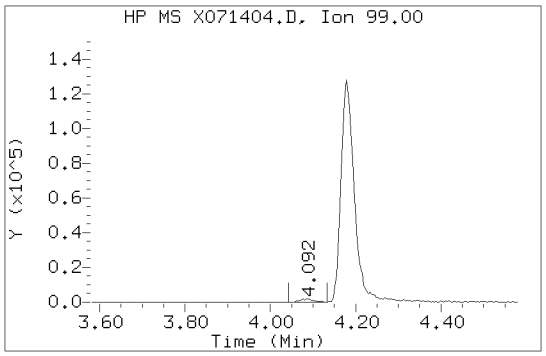
BEFORE

MASS
99
AREA
4128
HEIGHT
1962
20-Jul-2023
15:04
linh
pham



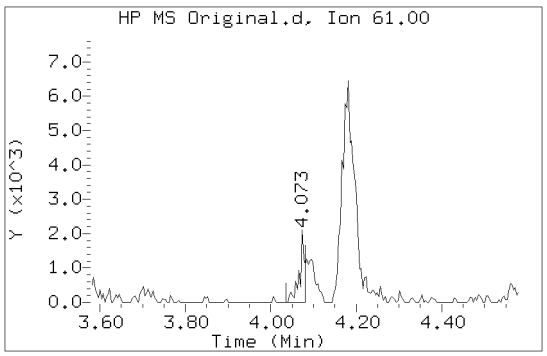
AFTER

MASS
99
AREA
4128
HEIGHT
1962
20-Jul-2023
15:04
linh
pham



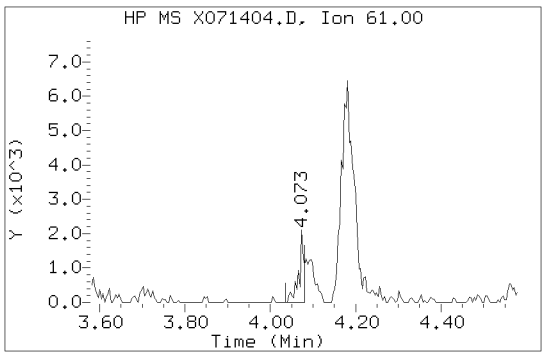
BEFORE

MASS
61
AREA
1719
HEIGHT
2107
20-Jul-2023
15:04
linh
pham



AFTER

MASS
61
AREA
1719
HEIGHT
2107
20-Jul-2023
15:04
linh
pham

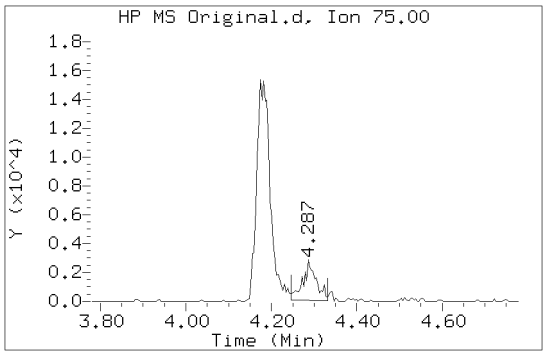


1,1-Dichloropropene (563-58-6)

Reason Code:

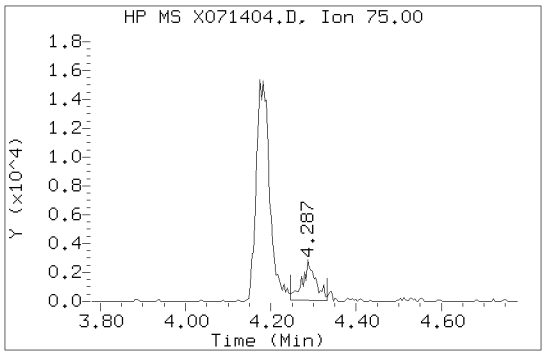
BEFORE

MASS
75
AREA
6097
HEIGHT
2831
20-Jul-2023
15:04
linh
pham



AFTER

MASS
75
AREA
6097
HEIGHT
2831
20-Jul-2023
15:04
linh
pham



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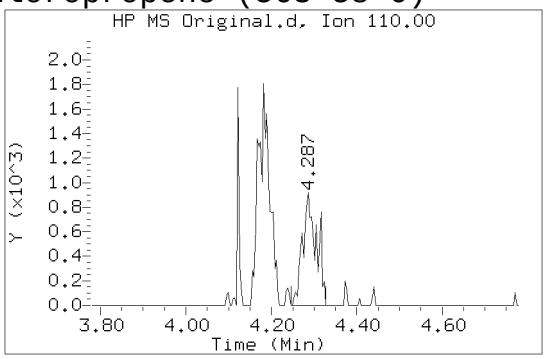
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

1,1-Dichloropropene (563-58-6)

Reason Code:

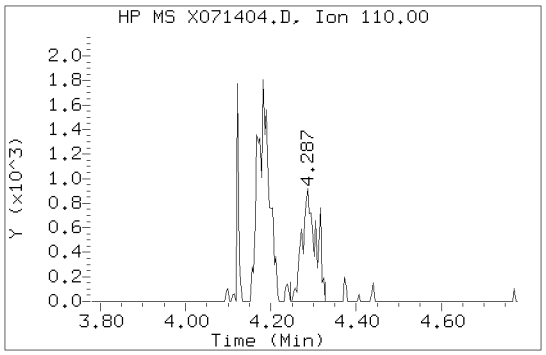
BEFORE

MASS
110
AREA
2079
HEIGHT
917
20-Jul-2023
15:04
linh
pham



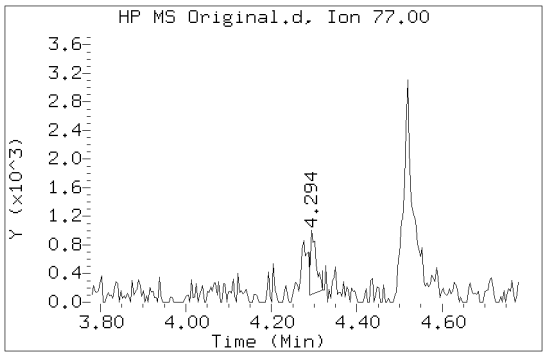
AFTER

MASS
110
AREA
2079
HEIGHT
917
20-Jul-2023
15:04
linh
pham



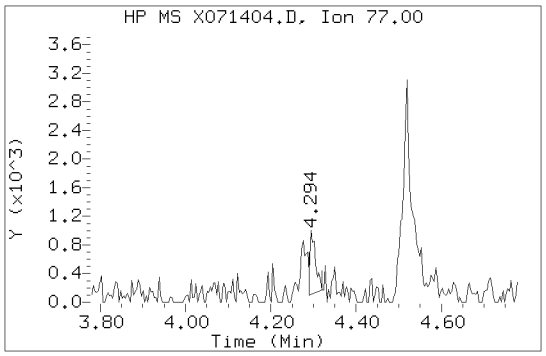
BEFORE

MASS
77
AREA
821
HEIGHT
892
20-Jul-2023
15:04
linh
pham



AFTER

MASS
77
AREA
821
HEIGHT
892
20-Jul-2023
15:04
linh
pham

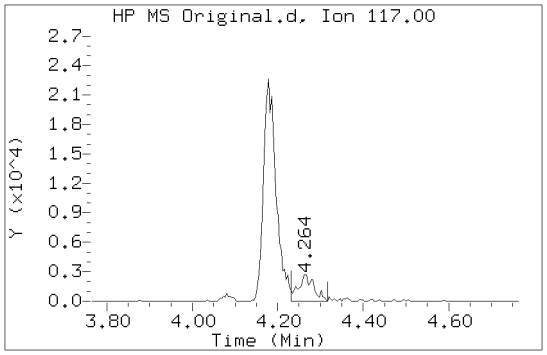


Carbon Tetrachloride (56-23-5)

Reason Code:

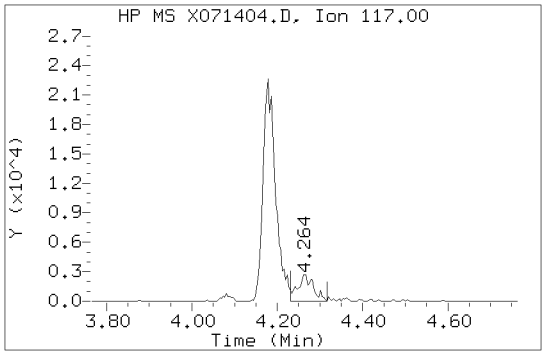
BEFORE

MASS
117
AREA
7002
HEIGHT
2701
20-Jul-2023
15:04
linh
pham



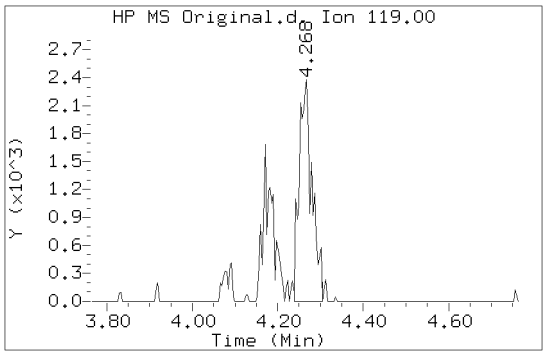
AFTER

MASS
117
AREA
7002
HEIGHT
2701
20-Jul-2023
15:04
linh
pham



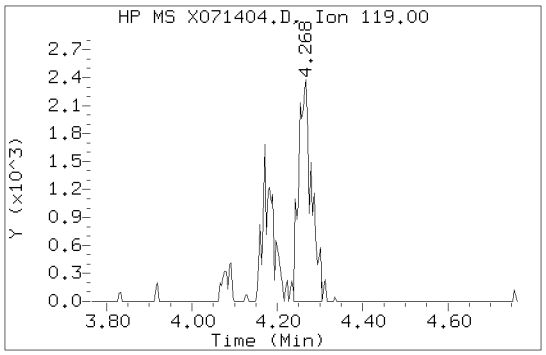
BEFORE

MASS
119
AREA
5029
HEIGHT
2378
20-Jul-2023
15:04
linh
pham



AFTER

MASS
119
AREA
5029
HEIGHT
2378
20-Jul-2023
15:04
linh
pham



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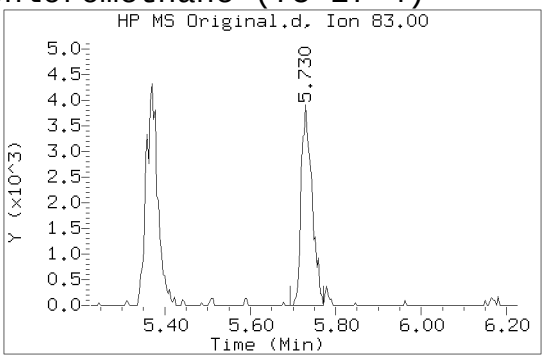
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

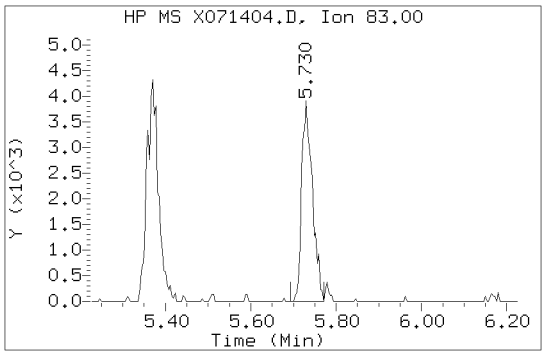
Bromodichloromethane (75-27-4)

Reason Code:

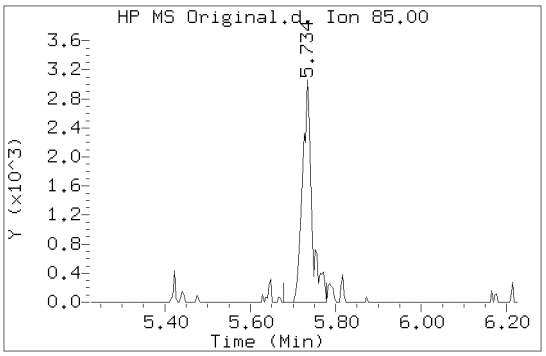
BEFORE
MASS
83
AREA
6967
HEIGHT
3917
20-Jul-2023
15:04
linh
pham



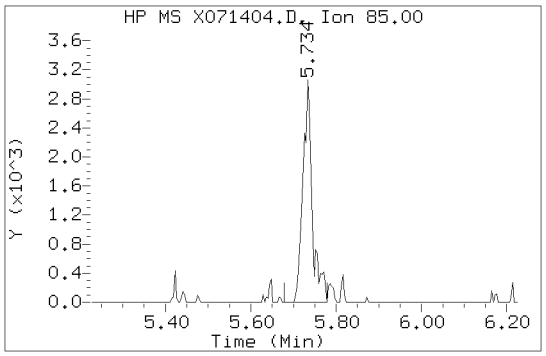
AFTER
MASS
83
AREA
6967
HEIGHT
3917
20-Jul-2023
15:04
linh
pham



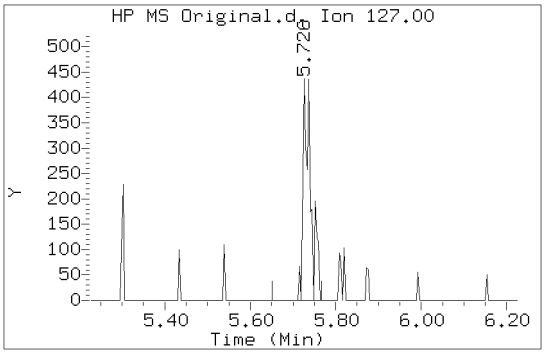
BEFORE
MASS
85
AREA
4797
HEIGHT
3061
20-Jul-2023
15:04
linh
pham



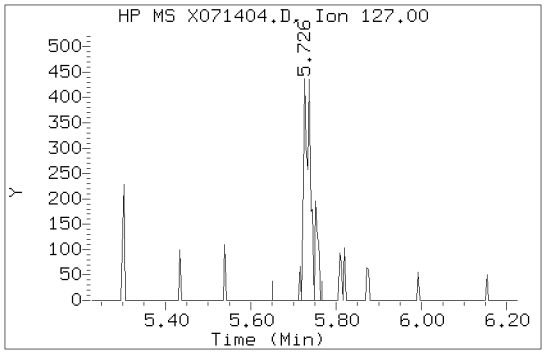
AFTER
MASS
85
AREA
4797
HEIGHT
3061
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
127
AREA
568
HEIGHT
437
20-Jul-2023
15:04
linh
pham



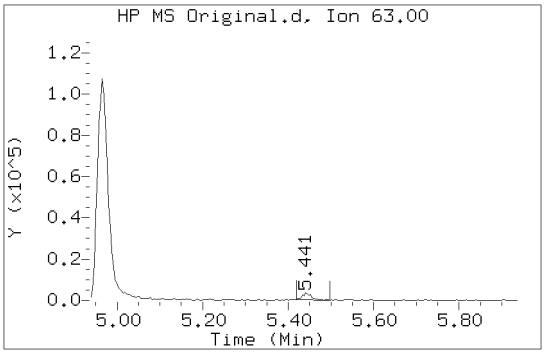
AFTER
MASS
127
AREA
568
HEIGHT
437
20-Jul-2023
15:04
linh
pham



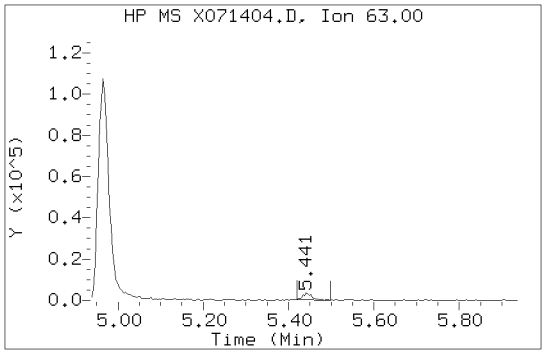
1,2-Dichloropropane (78-87-5)

Reason Code:

BEFORE
MASS
63
AREA
5153
HEIGHT
3474
20-Jul-2023
15:04
linh
pham



AFTER
MASS
63
AREA
5153
HEIGHT
3474
20-Jul-2023
15:04
linh
pham



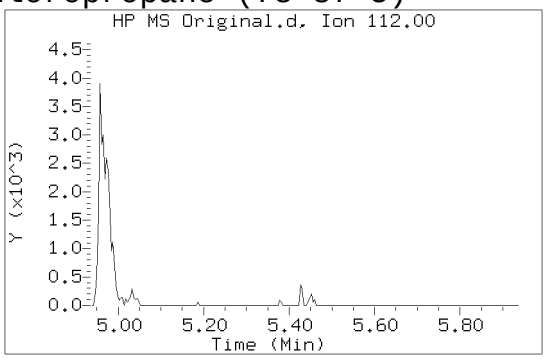
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071404.D
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

1,2-Dichloropropane (78-87-5)

Reason Code:

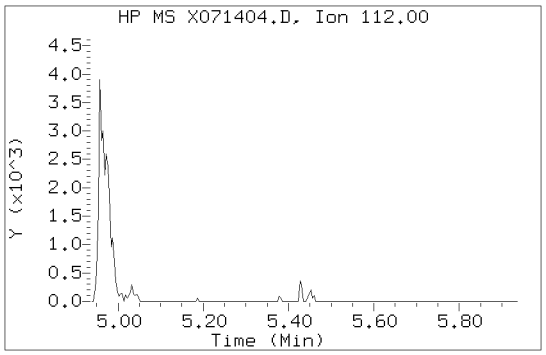
BEFORE

MASS
112
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
112
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

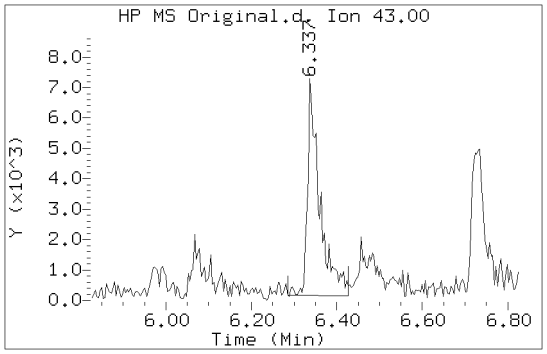


4-Methyl-2-Pentanone (108-10-1)

Reason Code:

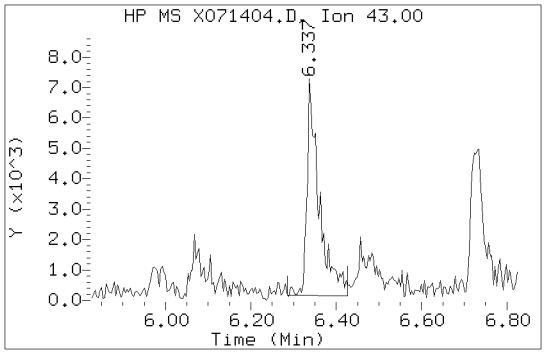
BEFORE

MASS
43
AREA
14106
HEIGHT
7121
20-Jul-2023
15:04
linh
pham



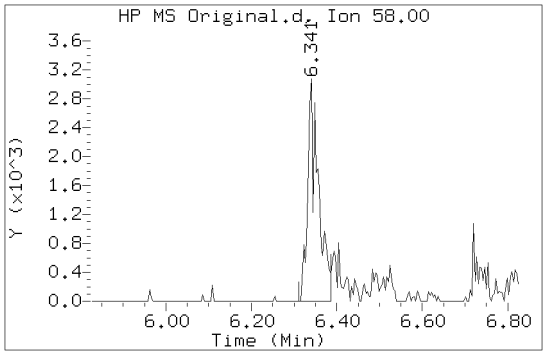
AFTER

MASS
43
AREA
14106
HEIGHT
7121
20-Jul-2023
15:04
linh
pham



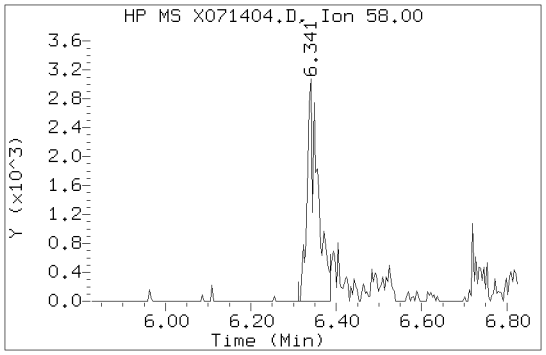
BEFORE

MASS
58
AREA
5370
HEIGHT
3077
20-Jul-2023
15:04
linh
pham



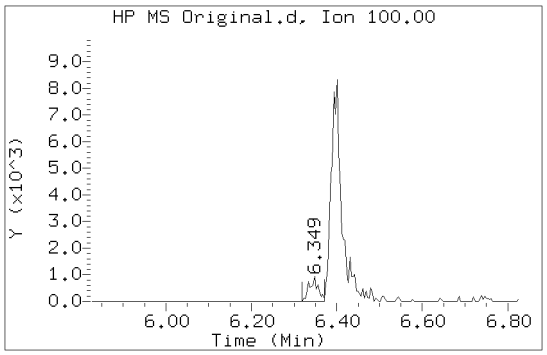
AFTER

MASS
58
AREA
5370
HEIGHT
3077
20-Jul-2023
15:04
linh
pham



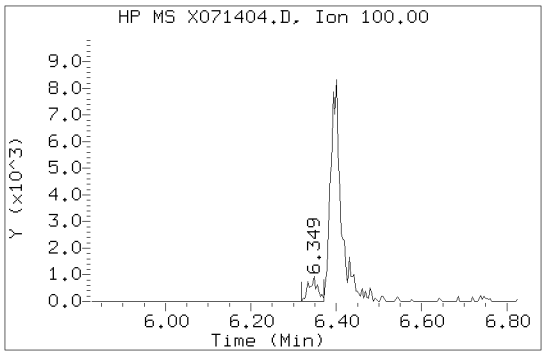
BEFORE

MASS
100
AREA
1328
HEIGHT
944
20-Jul-2023
15:04
linh
pham



AFTER

MASS
100
AREA
1328
HEIGHT
944
20-Jul-2023
15:04
linh
pham



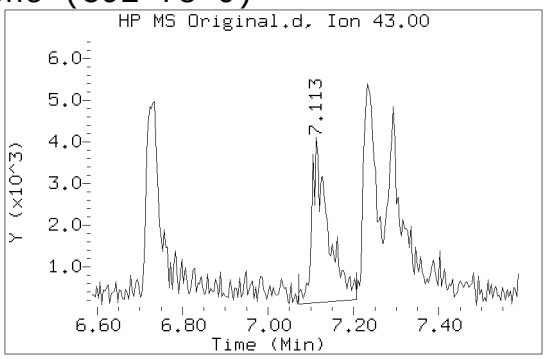
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071404.D
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

2-Hexanone (591-78-6)

Reason Code:

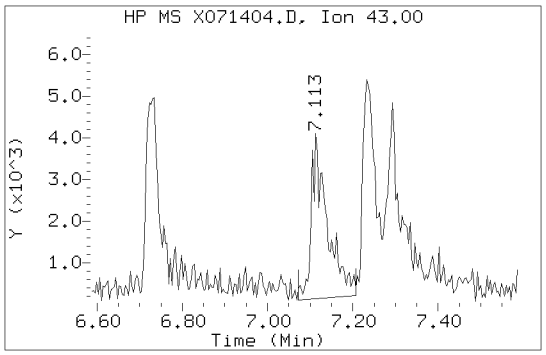
BEFORE

MASS
43
AREA
10319
HEIGHT
3957
20-Jul-2023
15:04
linh
pham



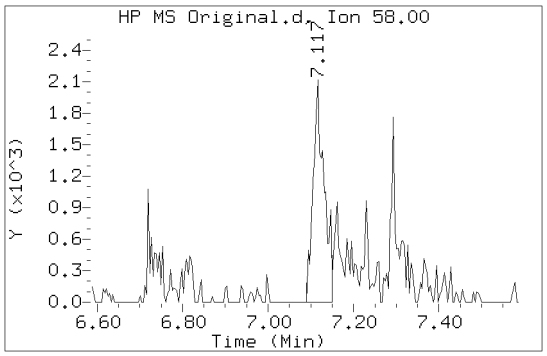
AFTER

MASS
43
AREA
10319
HEIGHT
3957
20-Jul-2023
15:04
linh
pham



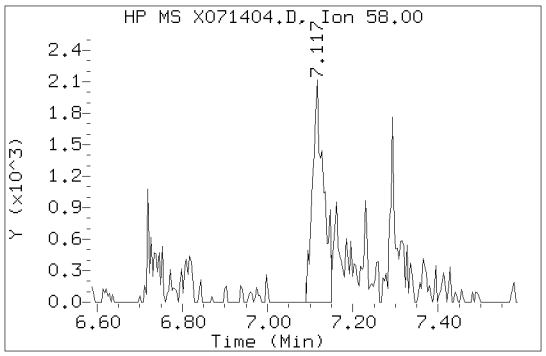
BEFORE

MASS
58
AREA
3772
HEIGHT
2118
20-Jul-2023
15:04
linh
pham



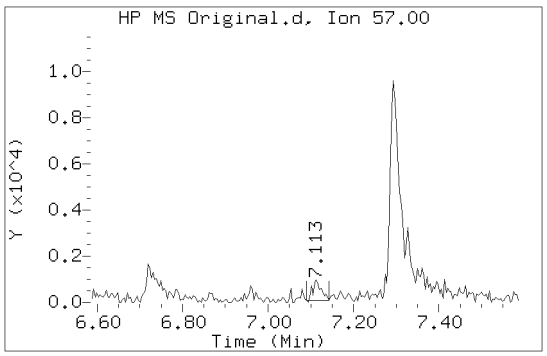
AFTER

MASS
58
AREA
3772
HEIGHT
2118
20-Jul-2023
15:04
linh
pham



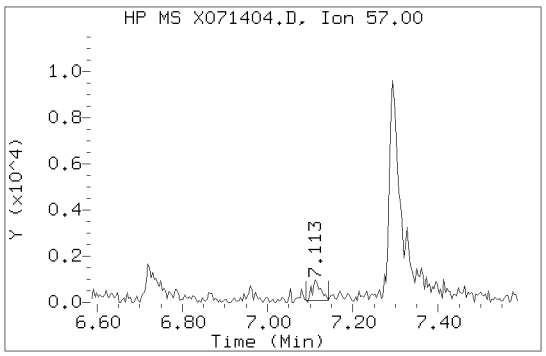
BEFORE

MASS
57
AREA
1177
HEIGHT
882
20-Jul-2023
15:04
linh
pham



AFTER

MASS
57
AREA
1177
HEIGHT
882
20-Jul-2023
15:04
linh
pham

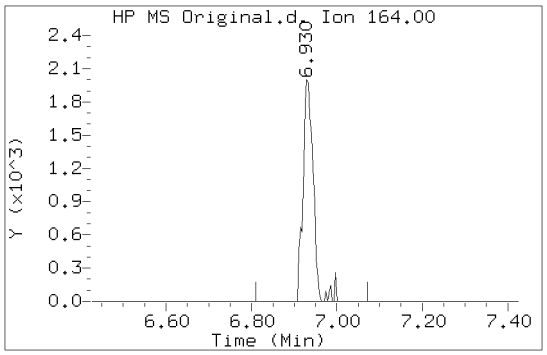


Tetrachloroethene (127-18-4)

Reason Code:

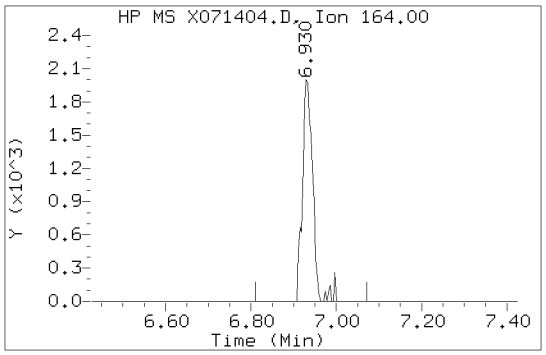
BEFORE

MASS
164
AREA
3431
HEIGHT
2001
20-Jul-2023
15:04
linh
pham



AFTER

MASS
164
AREA
3431
HEIGHT
2001
20-Jul-2023
15:04
linh
pham

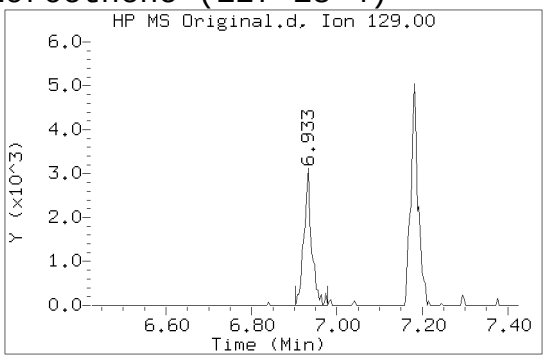


Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071404.D
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

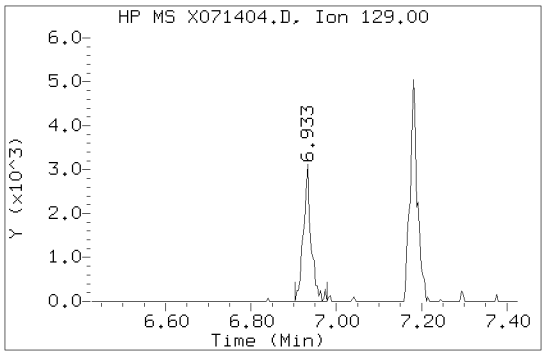
Tetrachloroethene (127-18-4)

Reason Code:

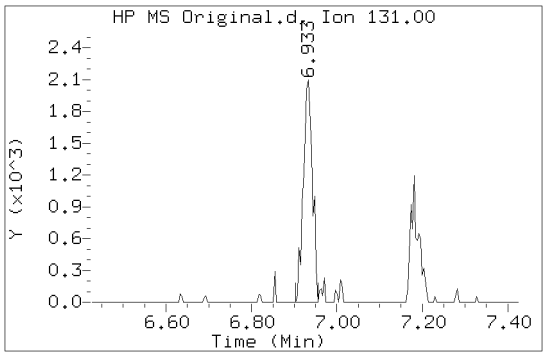
BEFORE
MASS
129
AREA
3977
HEIGHT
3127
20-Jul-2023
15:04
linh
pham



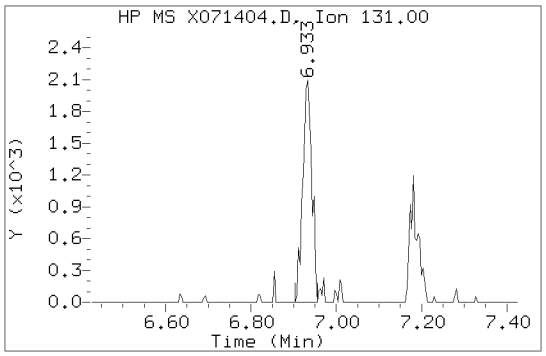
AFTER
MASS
129
AREA
3977
HEIGHT
3127
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
131
AREA
3184
HEIGHT
2098
20-Jul-2023
15:04
linh
pham



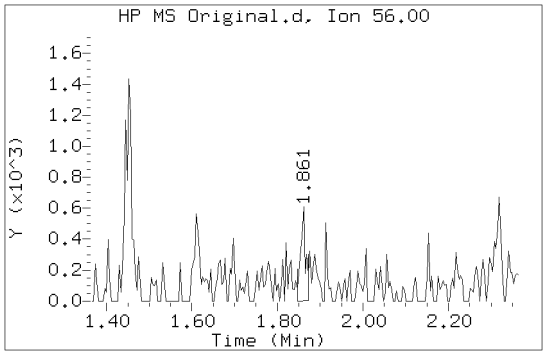
AFTER
MASS
131
AREA
3184
HEIGHT
2098
20-Jul-2023
15:04
linh
pham



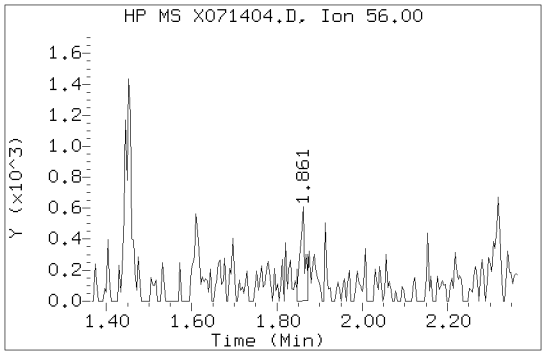
Acrolein (107-02-8)

Reason Code:

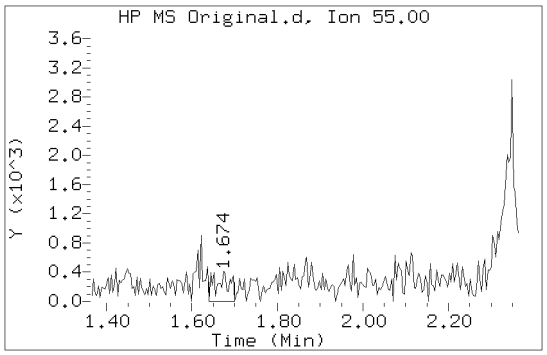
BEFORE
MASS
56
AREA
510
HEIGHT
608
20-Jul-2023
15:04
linh
pham



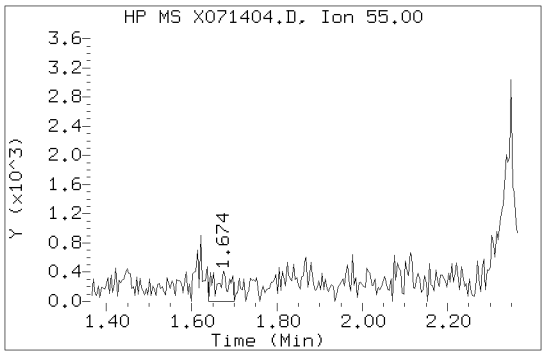
AFTER
MASS
56
AREA
510
HEIGHT
608
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
55
AREA
888
HEIGHT
412
20-Jul-2023
15:04
linh
pham



AFTER
MASS
55
AREA
888
HEIGHT
412
20-Jul-2023
15:04
linh
pham



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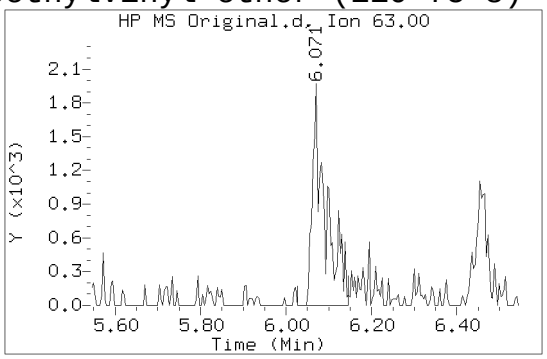
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

2-Chloroethylvinyl ether (110-75-8)

Reason Code:

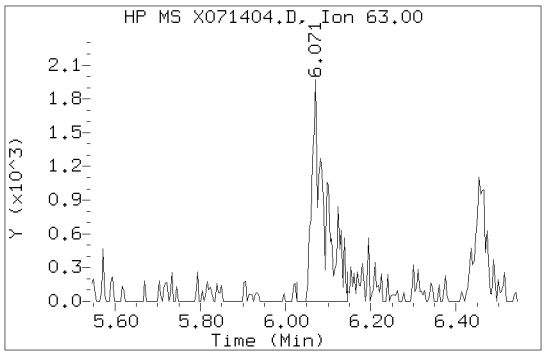
BEFORE

MASS
63
AREA
4176
HEIGHT
1971
20-Jul-2023
15:04
linh
pham



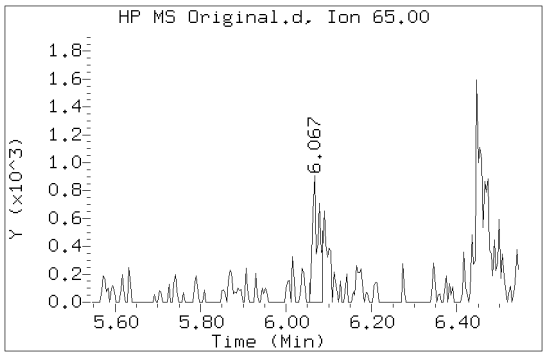
AFTER

MASS
63
AREA
4176
HEIGHT
1971
20-Jul-2023
15:04
linh
pham



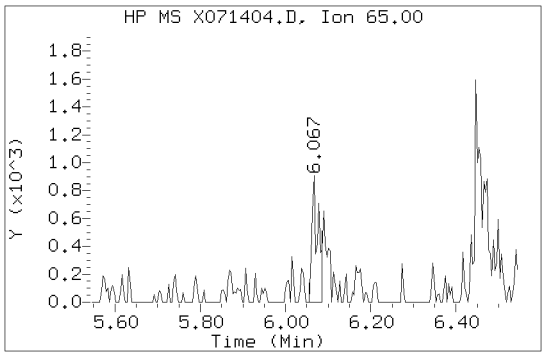
BEFORE

MASS
65
AREA
920
HEIGHT
907
20-Jul-2023
15:04
linh
pham



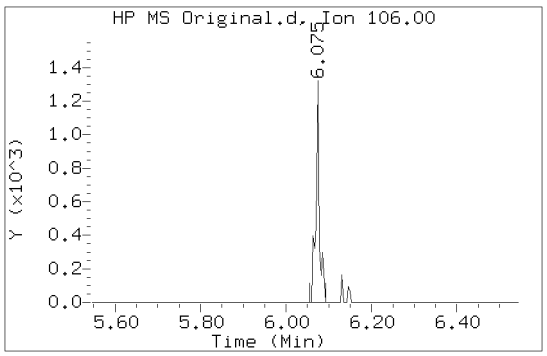
AFTER

MASS
65
AREA
920
HEIGHT
907
20-Jul-2023
15:04
linh
pham



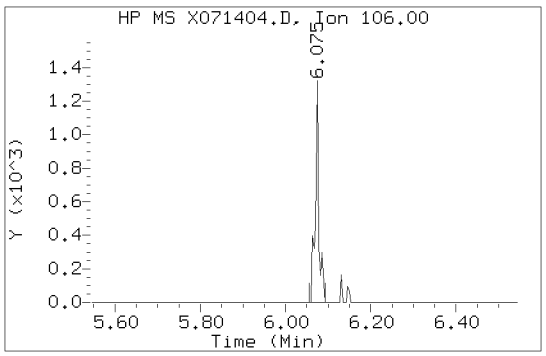
BEFORE

MASS
106
AREA
764
HEIGHT
1322
20-Jul-2023
15:04
linh
pham



AFTER

MASS
106
AREA
764
HEIGHT
1322
20-Jul-2023
15:04
linh
pham

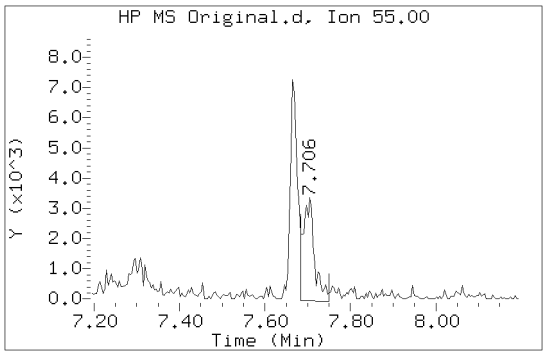


1-Chlorohexane (544-10-5)

Reason Code:

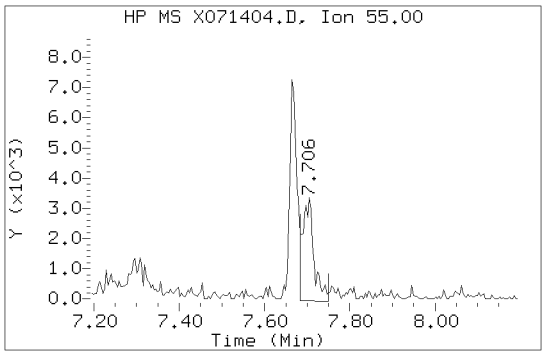
BEFORE

MASS
55
AREA
6663
HEIGHT
3425
20-Jul-2023
15:04
linh
pham



AFTER

MASS
55
AREA
6663
HEIGHT
3425
20-Jul-2023
15:04
linh
pham



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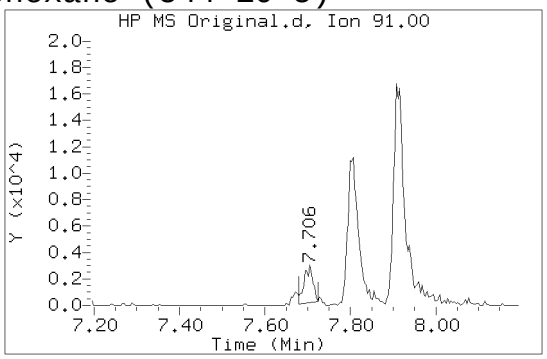
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

1-Chlorohexane (544-10-5)

Reason Code:

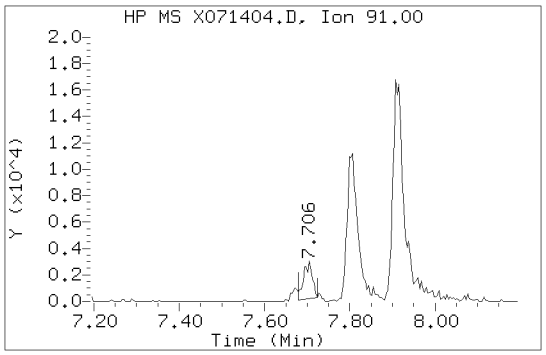
BEFORE

MASS
91
AREA
4133
HEIGHT
2845
20-Jul-2023
15:04
linh
pham



AFTER

MASS
91
AREA
4133
HEIGHT
2845
20-Jul-2023
15:04
linh
pham

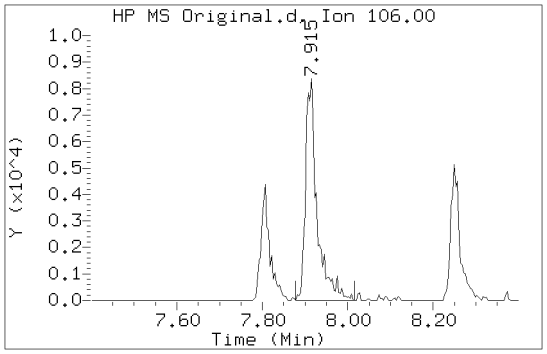


m,p-Xylenes ()

Reason Code:

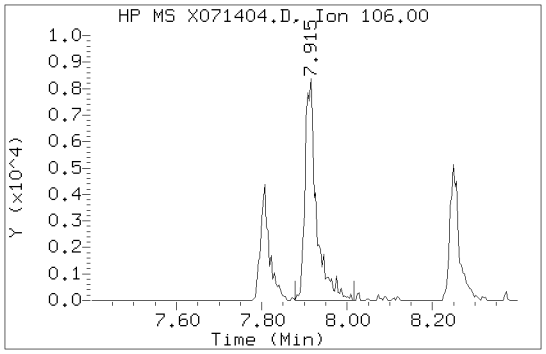
BEFORE

MASS
106
AREA
15703
HEIGHT
8376
20-Jul-2023
15:04
linh
pham



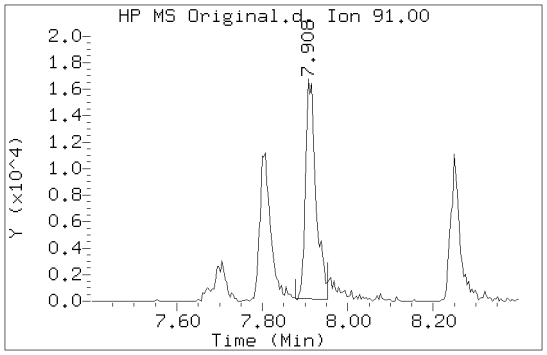
AFTER

MASS
106
AREA
15703
HEIGHT
8376
20-Jul-2023
15:04
linh
pham



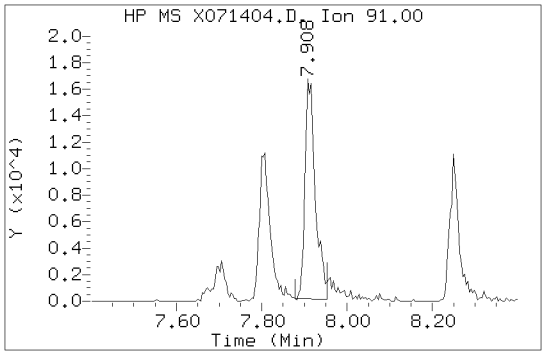
BEFORE

MASS
91
AREA
28386
HEIGHT
16587
20-Jul-2023
15:04
linh
pham



AFTER

MASS
91
AREA
28386
HEIGHT
16587
20-Jul-2023
15:04
linh
pham

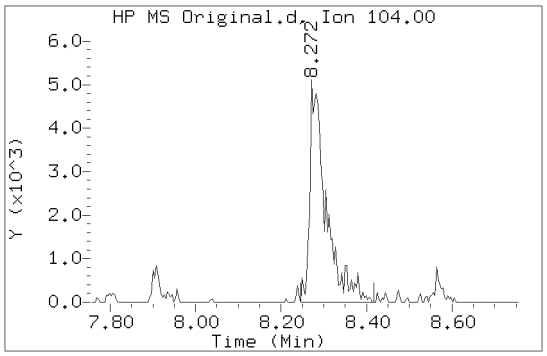


Styrene (100-42-5)

Reason Code:

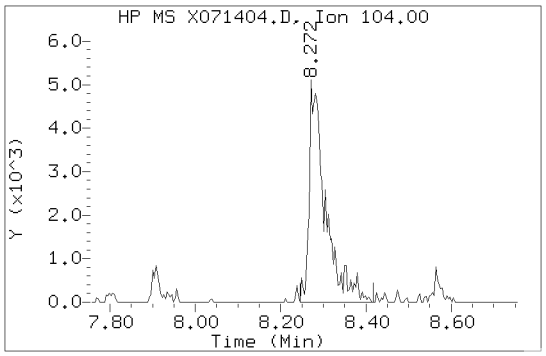
BEFORE

MASS
104
AREA
13315
HEIGHT
5109
20-Jul-2023
15:04
linh
pham



AFTER

MASS
104
AREA
13315
HEIGHT
5109
20-Jul-2023
15:04
linh
pham



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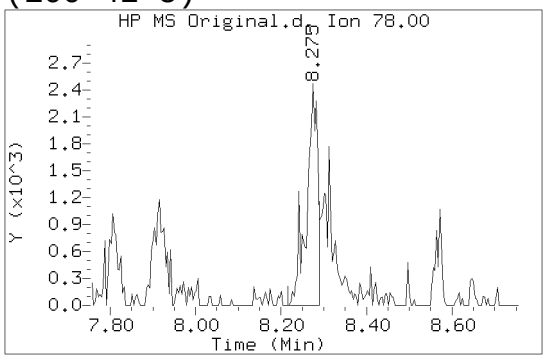
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

Styrene (100-42-5)

Reason Code:

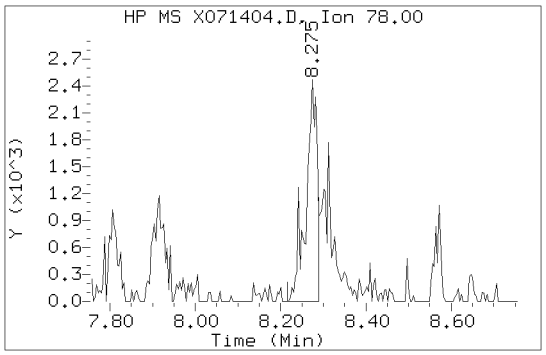
BEFORE

MASS
78
AREA
4442
HEIGHT
2469
20-Jul-2023
15:04
linh
pham



AFTER

MASS
78
AREA
4442
HEIGHT
2469
20-Jul-2023
15:04
linh
pham

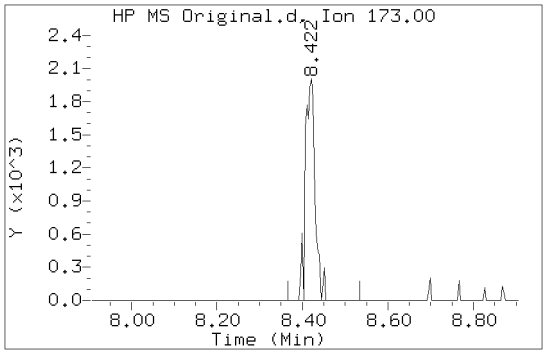


Bromoform (75-25-2)

Reason Code:

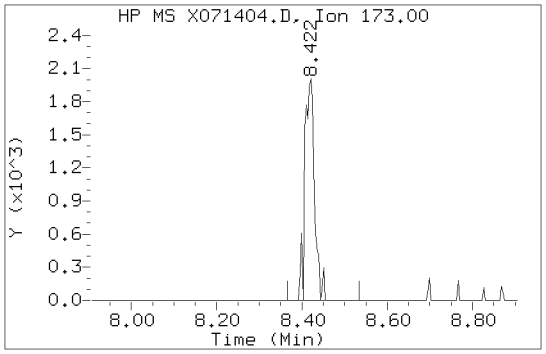
BEFORE

MASS
173
AREA
3238
HEIGHT
2008
20-Jul-2023
15:04
linh
pham



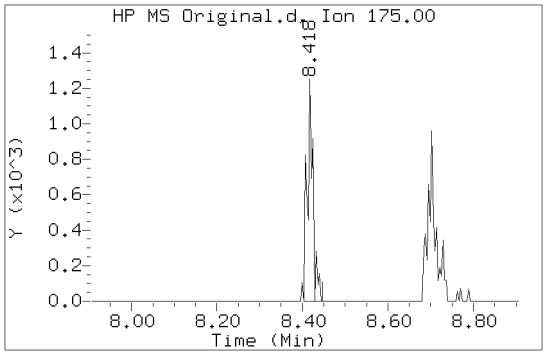
AFTER

MASS
173
AREA
3238
HEIGHT
2008
20-Jul-2023
15:04
linh
pham



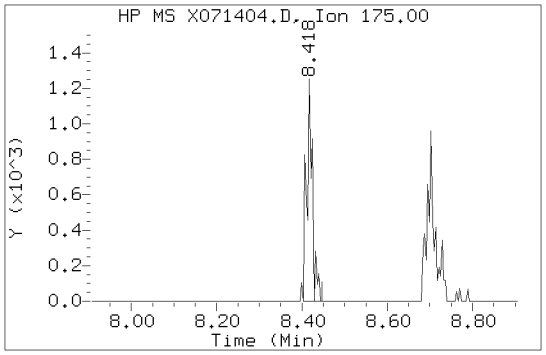
BEFORE

MASS
175
AREA
1174
HEIGHT
1253
20-Jul-2023
15:04
linh
pham



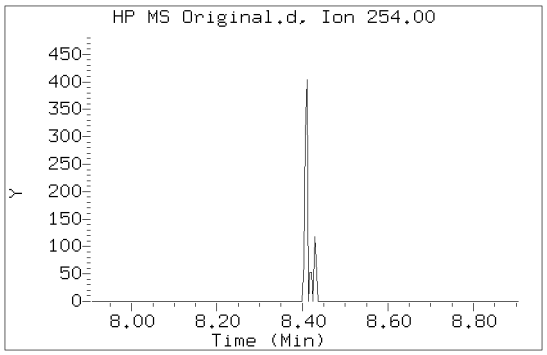
AFTER

MASS
175
AREA
1174
HEIGHT
1253
20-Jul-2023
15:04
linh
pham



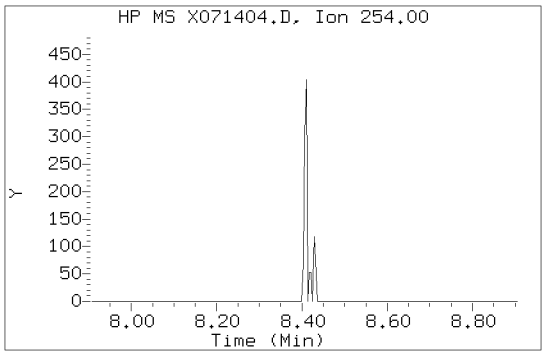
BEFORE

MASS
254
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
254
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



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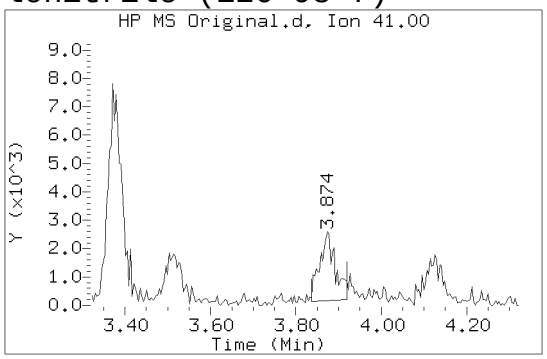
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

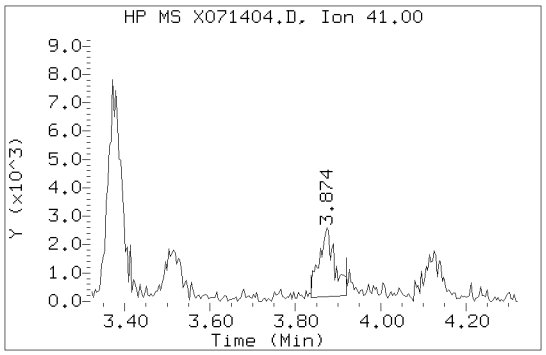
Methacrylonitrile (126-98-7)

Reason Code:

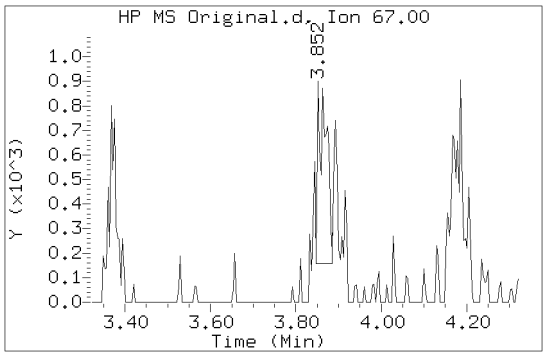
BEFORE
MASS
41
AREA
6195
HEIGHT
2436
20-Jul-2023
15:04
linh
pham



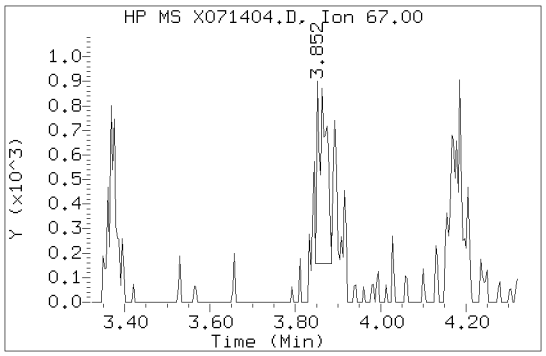
AFTER
MASS
41
AREA
6195
HEIGHT
2436
20-Jul-2023
15:04
linh
pham



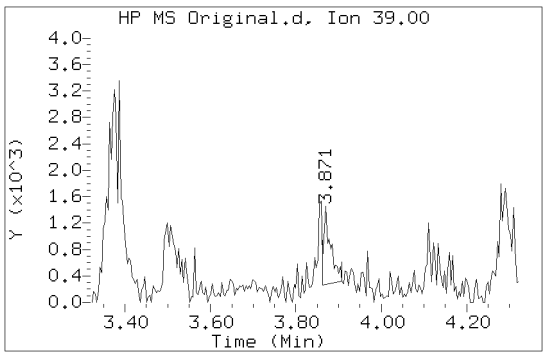
BEFORE
MASS
67
AREA
1024
HEIGHT
744
20-Jul-2023
15:04
linh
pham



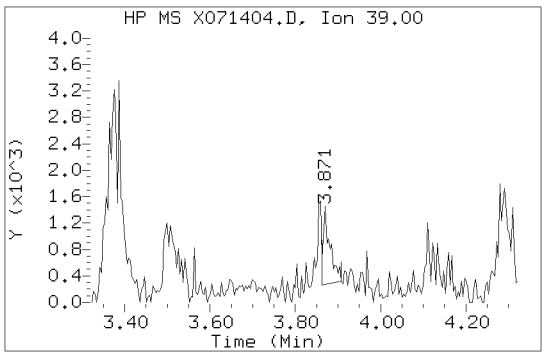
AFTER
MASS
67
AREA
1024
HEIGHT
744
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
39
AREA
1324
HEIGHT
1187
20-Jul-2023
15:04
linh
pham



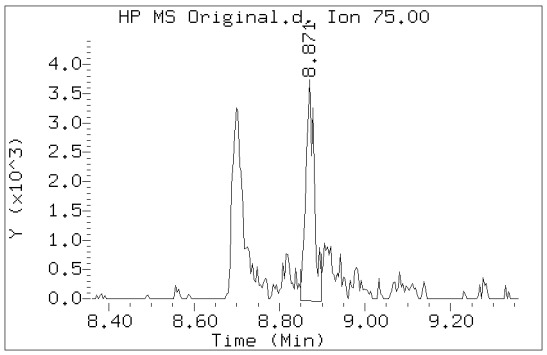
AFTER
MASS
39
AREA
1324
HEIGHT
1187
20-Jul-2023
15:04
linh
pham



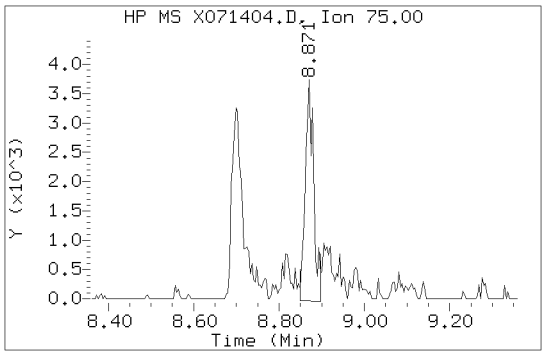
1,2,3-Trichloropropane (96-18-4)

Reason Code:

BEFORE
MASS
75
AREA
5203
HEIGHT
3776
20-Jul-2023
15:04
linh
pham



AFTER
MASS
75
AREA
5203
HEIGHT
3776
20-Jul-2023
15:04
linh
pham



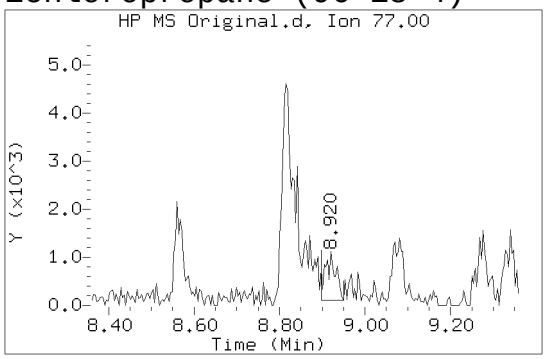
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071404.D
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

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

Reason Code:

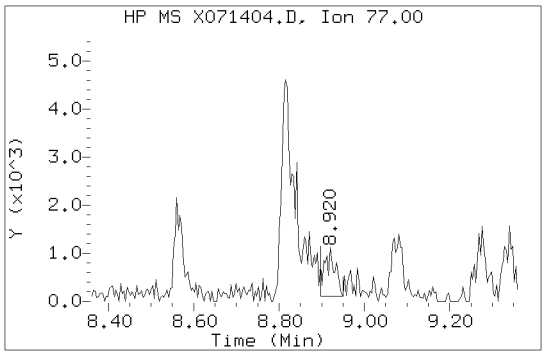
BEFORE

MASS
77
AREA
1749
HEIGHT
1014
20-Jul-2023
15:04
linh
pham



AFTER

MASS
77
AREA
1749
HEIGHT
1014
20-Jul-2023
15:04
linh
pham

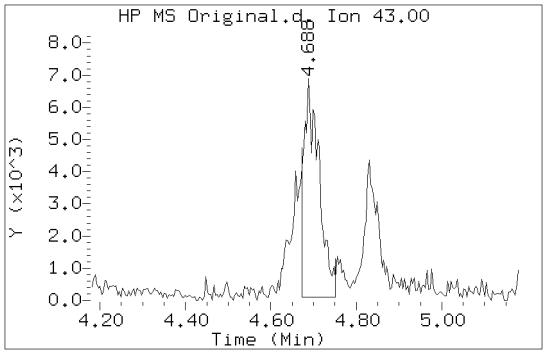


Isobutyl Alcohol (78-83-1)

Reason Code:

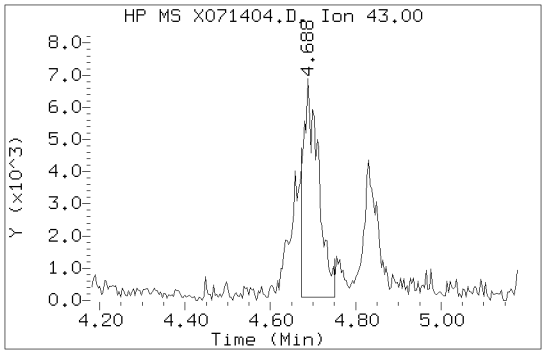
BEFORE

MASS
43
AREA
16938
HEIGHT
6786
20-Jul-2023
15:04
linh
pham



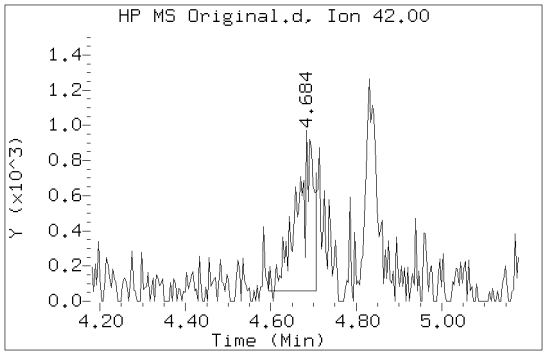
AFTER

MASS
43
AREA
16938
HEIGHT
6786
20-Jul-2023
15:04
linh
pham



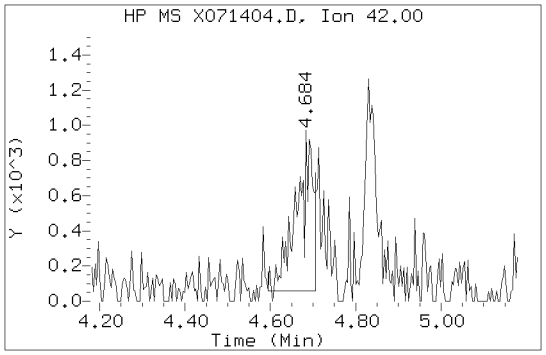
BEFORE

MASS
42
AREA
2469
HEIGHT
914
20-Jul-2023
15:04
linh
pham



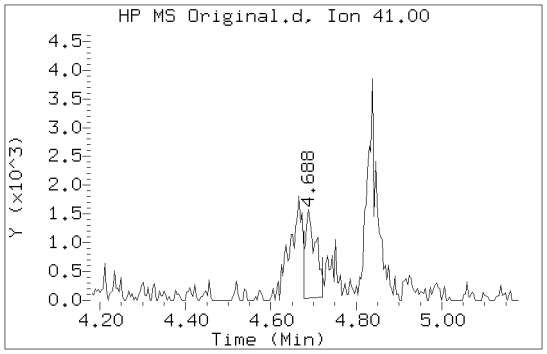
AFTER

MASS
42
AREA
2469
HEIGHT
914
20-Jul-2023
15:04
linh
pham



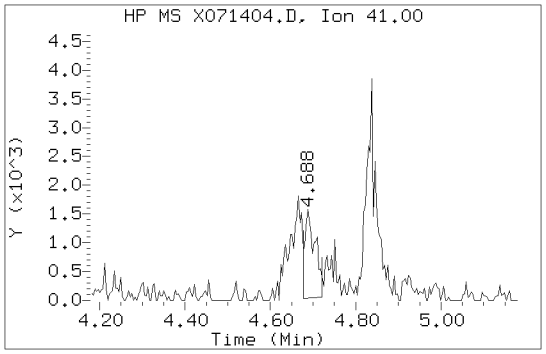
BEFORE

MASS
41
AREA
2733
HEIGHT
1544
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
2733
HEIGHT
1544
20-Jul-2023
15:04
linh
pham



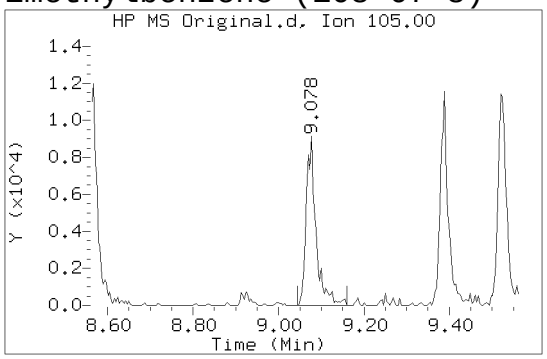
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071404.D
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

1,3,5-Trimethylbenzene (108-67-8)

Reason Code:

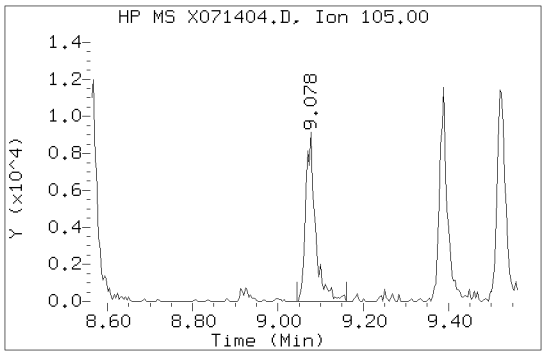
BEFORE

MASS
105
AREA
14649
HEIGHT
9159
20-Jul-2023
15:04
linh
pham



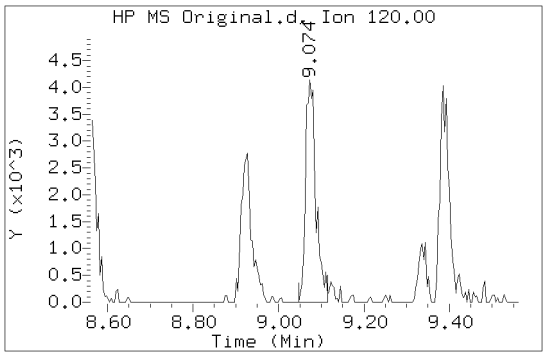
AFTER

MASS
105
AREA
14649
HEIGHT
9159
20-Jul-2023
15:04
linh
pham



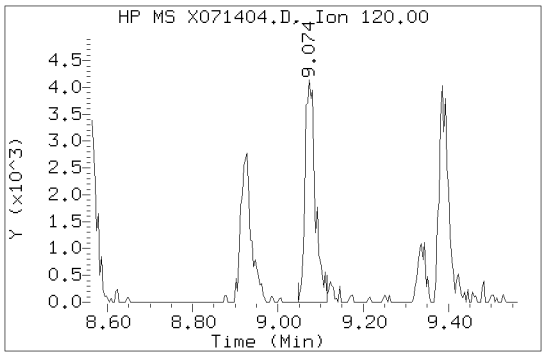
BEFORE

MASS
120
AREA
6985
HEIGHT
4141
20-Jul-2023
15:04
linh
pham



AFTER

MASS
120
AREA
6985
HEIGHT
4141
20-Jul-2023
15:04
linh
pham

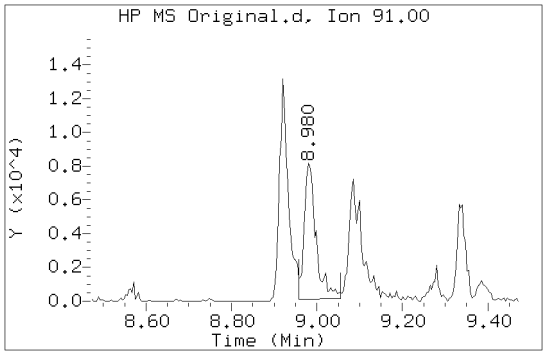


2-Chlorotoluene (95-49-8)

Reason Code:

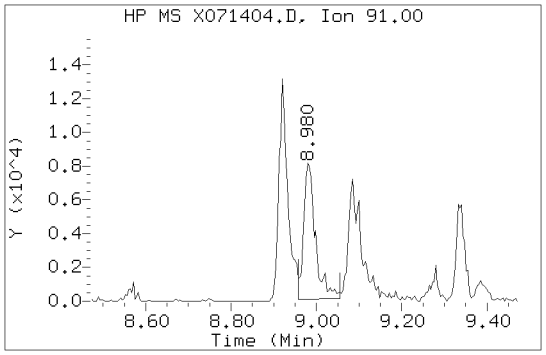
BEFORE

MASS
91
AREA
15937
HEIGHT
8082
20-Jul-2023
15:04
linh
pham



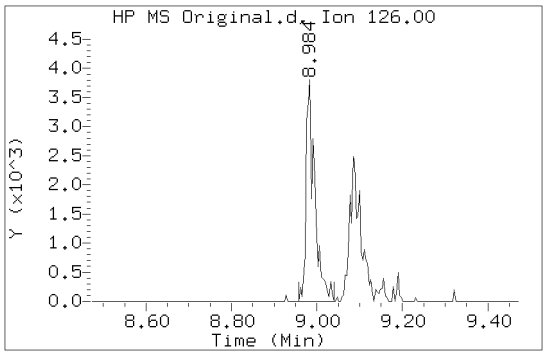
AFTER

MASS
91
AREA
15937
HEIGHT
8082
20-Jul-2023
15:04
linh
pham



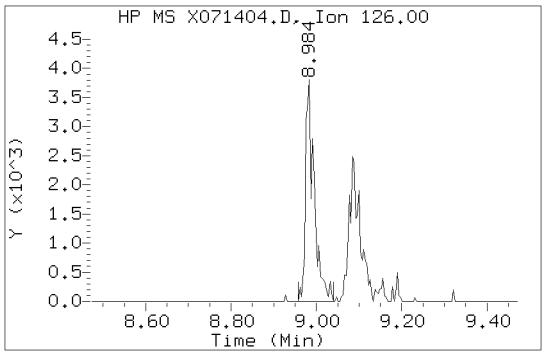
BEFORE

MASS
126
AREA
5351
HEIGHT
3805
20-Jul-2023
15:04
linh
pham



AFTER

MASS
126
AREA
5351
HEIGHT
3805
20-Jul-2023
15:04
linh
pham



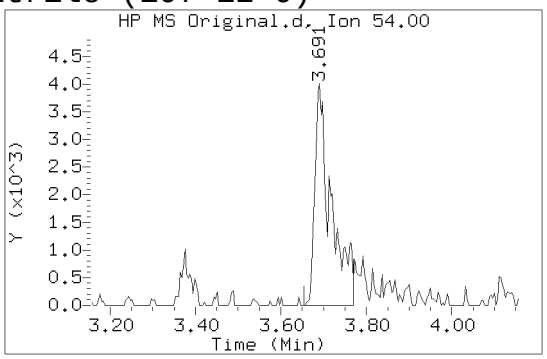
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071404.D
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

Propionitrile (107-12-0)

Reason Code:

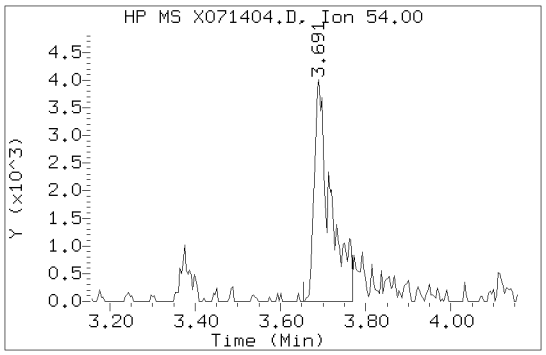
BEFORE

MASS
54
AREA
10495
HEIGHT
4008
20-Jul-2023
15:04
linh
pham



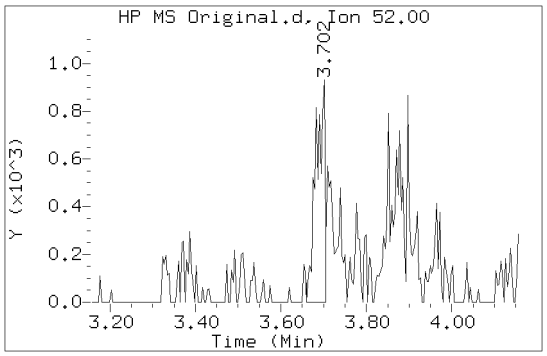
AFTER

MASS
54
AREA
10495
HEIGHT
4008
20-Jul-2023
15:04
linh
pham



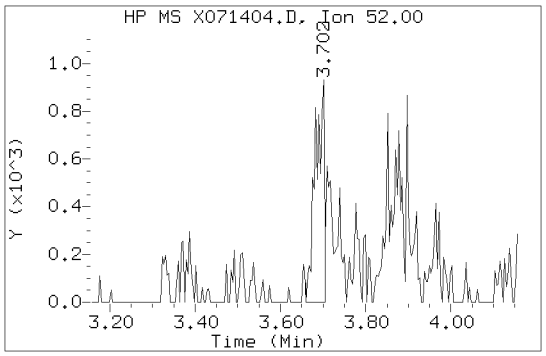
BEFORE

MASS
52
AREA
1356
HEIGHT
931
20-Jul-2023
15:04
linh
pham



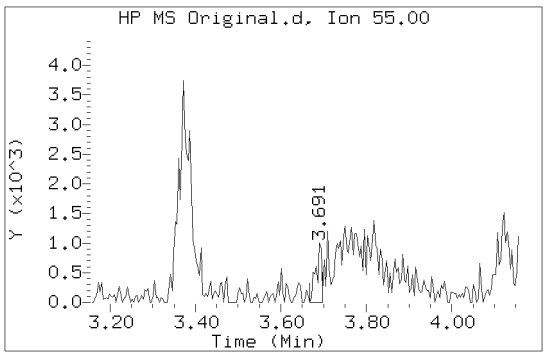
AFTER

MASS
52
AREA
1356
HEIGHT
931
20-Jul-2023
15:04
linh
pham



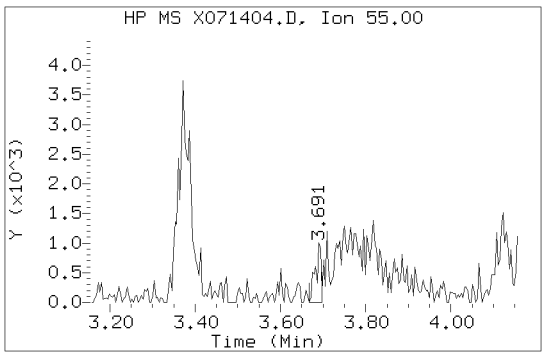
BEFORE

MASS
55
AREA
924
HEIGHT
1009
20-Jul-2023
15:04
linh
pham



AFTER

MASS
55
AREA
924
HEIGHT
1009
20-Jul-2023
15:04
linh
pham

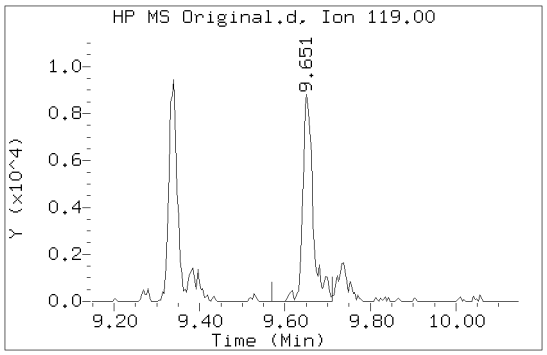


p-Isopropyltoluene (99-87-6)

Reason Code:

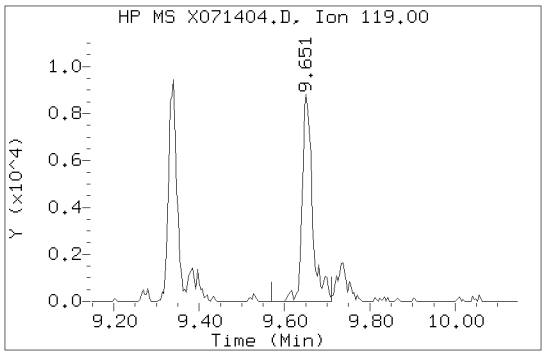
BEFORE

MASS
119
AREA
15092
HEIGHT
8813
20-Jul-2023
15:04
linh
pham



AFTER

MASS
119
AREA
15092
HEIGHT
8813
20-Jul-2023
15:04
linh
pham



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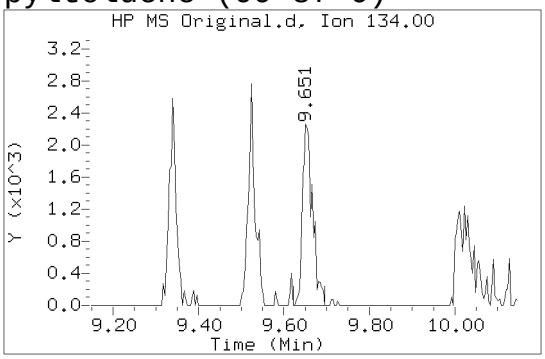
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

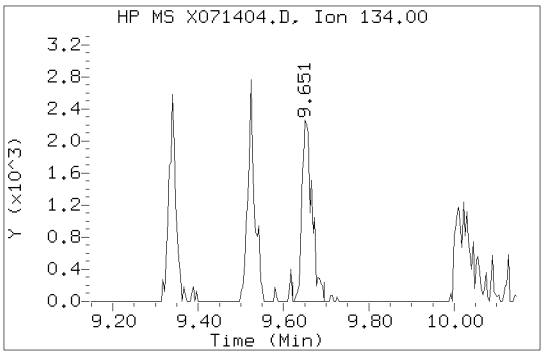
p-Isopropyltoluene (99-87-6)

BEFORE
MASS
134
AREA
3764
HEIGHT
2261
20-Jul-2023
15:04
linh
pham

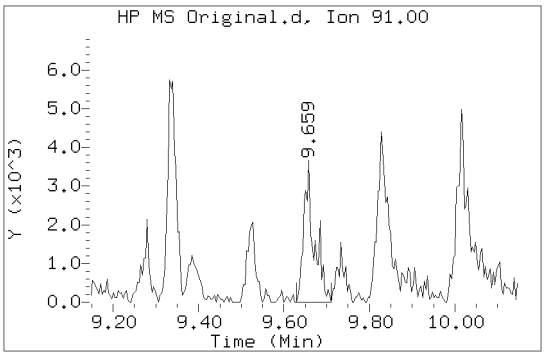


Reason Code:

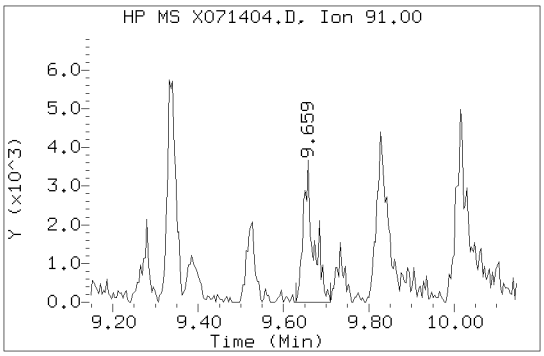
AFTER
MASS
134
AREA
3764
HEIGHT
2261
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
91
AREA
6124
HEIGHT
3669
20-Jul-2023
15:04
linh
pham

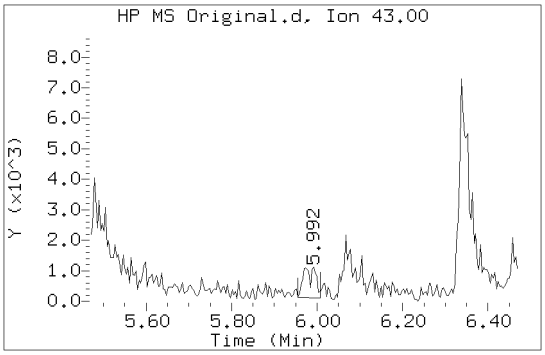


AFTER
MASS
91
AREA
6124
HEIGHT
3669
20-Jul-2023
15:04
linh
pham



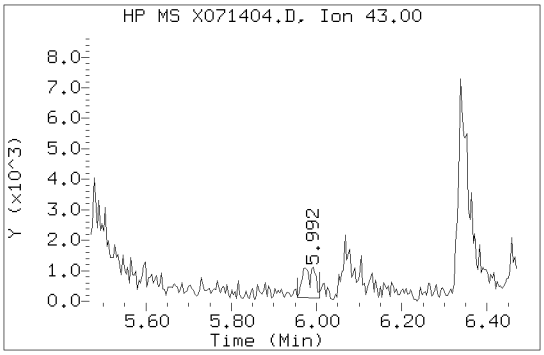
2-Nitropropane (79-46-9)

BEFORE
MASS
43
AREA
2054
HEIGHT
1008
20-Jul-2023
15:04
linh
pham

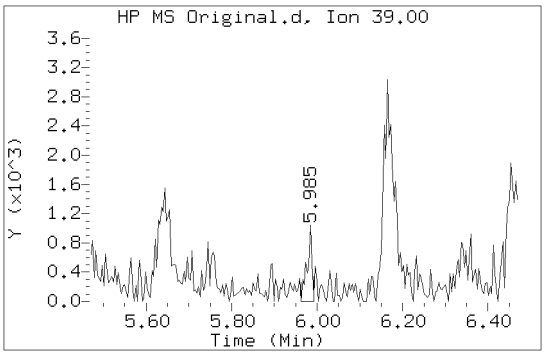


Reason Code:

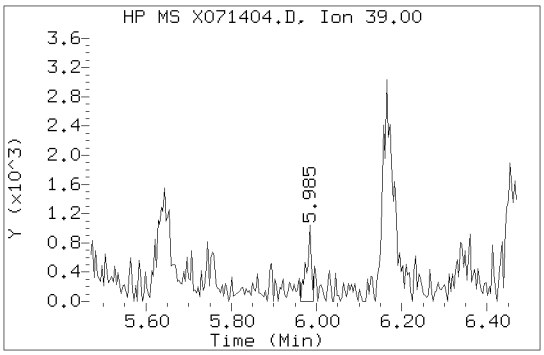
AFTER
MASS
43
AREA
2054
HEIGHT
1008
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
39
AREA
807
HEIGHT
1040
20-Jul-2023
15:04
linh
pham



AFTER
MASS
39
AREA
807
HEIGHT
1040
20-Jul-2023
15:04
linh
pham



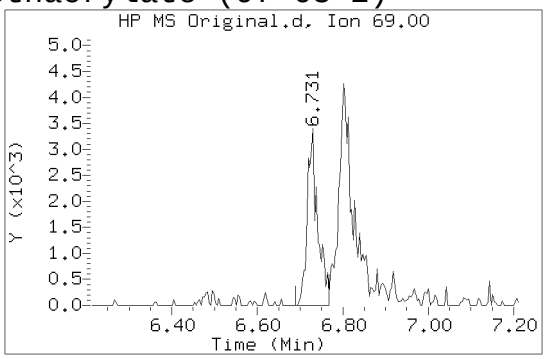
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071404.D
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

Ethyl Methacrylate (97-63-2)

Reason Code:

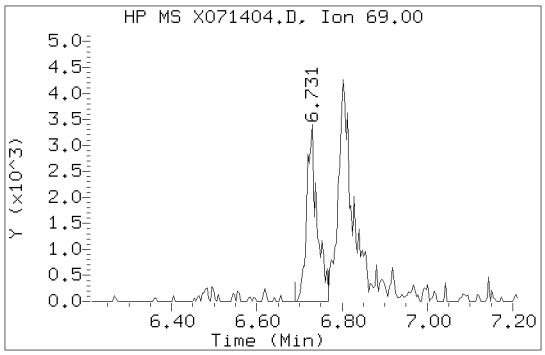
BEFORE

MASS
69
AREA
5749
HEIGHT
3399
20-Jul-2023
15:04
linh
pham



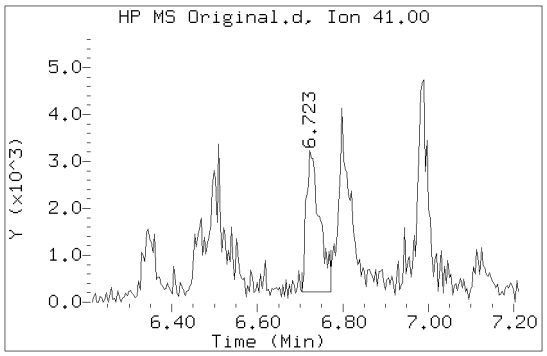
AFTER

MASS
69
AREA
5749
HEIGHT
3399
20-Jul-2023
15:04
linh
pham



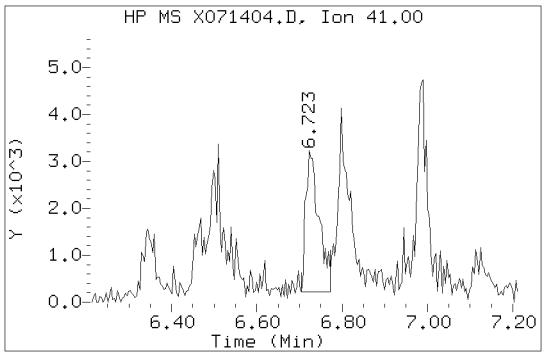
BEFORE

MASS
41
AREA
6505
HEIGHT
3006
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
6505
HEIGHT
3006
20-Jul-2023
15:04
linh
pham

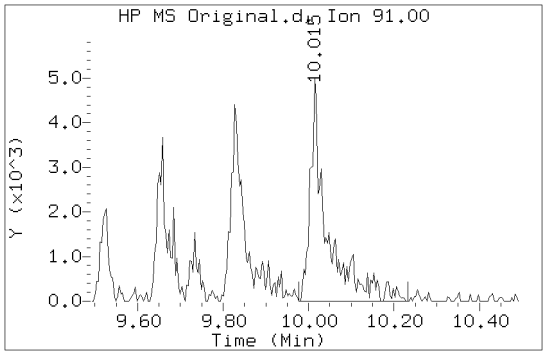


n-Butylbenzene (104-51-8)

Reason Code:

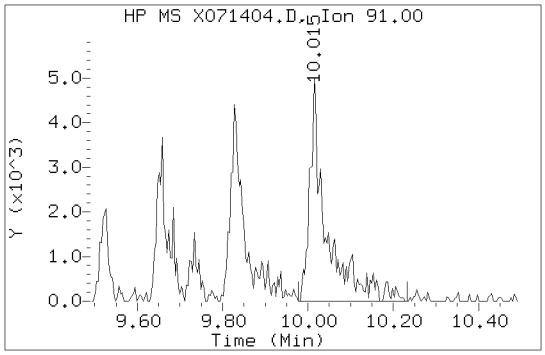
BEFORE

MASS
91
AREA
13321
HEIGHT
4981
20-Jul-2023
15:04
linh
pham



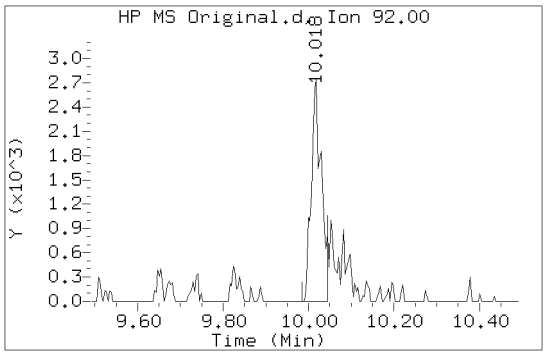
AFTER

MASS
91
AREA
13321
HEIGHT
4981
20-Jul-2023
15:04
linh
pham



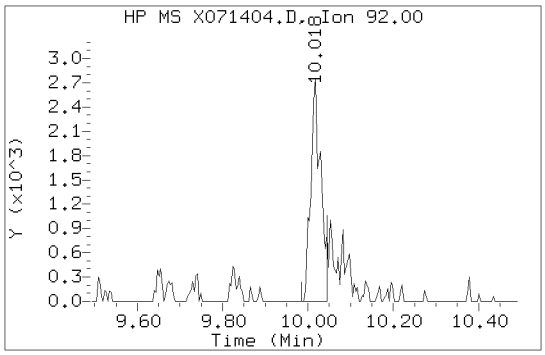
BEFORE

MASS
92
AREA
4505
HEIGHT
2738
20-Jul-2023
15:04
linh
pham



AFTER

MASS
92
AREA
4505
HEIGHT
2738
20-Jul-2023
15:04
linh
pham



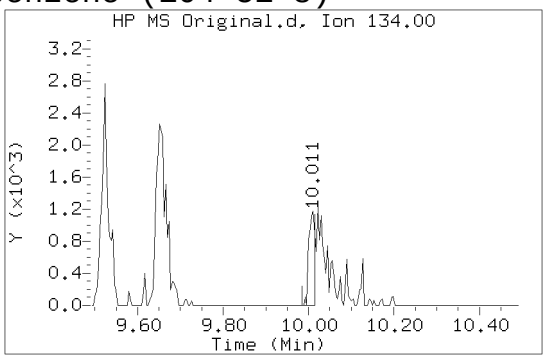
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071404.D
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

n-Butylbenzene (104-51-8)

Reason Code:

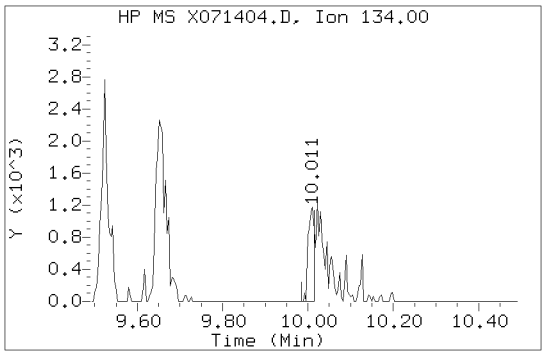
BEFORE

MASS
134
AREA
1125
HEIGHT
1172
20-Jul-2023
15:04
linh
pham



AFTER

MASS
134
AREA
1125
HEIGHT
1172
20-Jul-2023
15:04
linh
pham

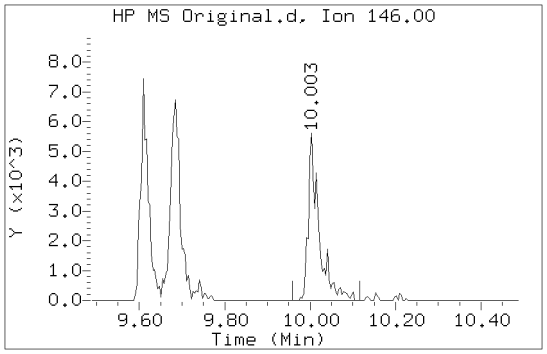


1,2-Dichlorobenzene (95-50-1)

Reason Code:

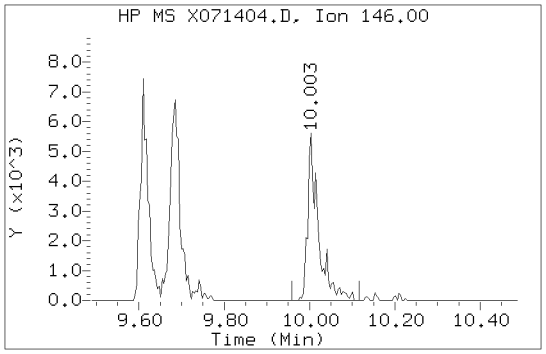
BEFORE

MASS
146
AREA
9791
HEIGHT
5614
20-Jul-2023
15:04
linh
pham



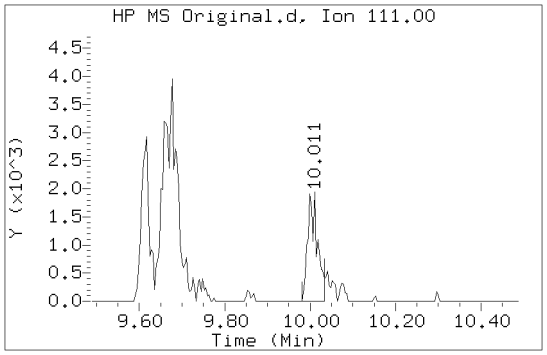
AFTER

MASS
146
AREA
9791
HEIGHT
5614
20-Jul-2023
15:04
linh
pham



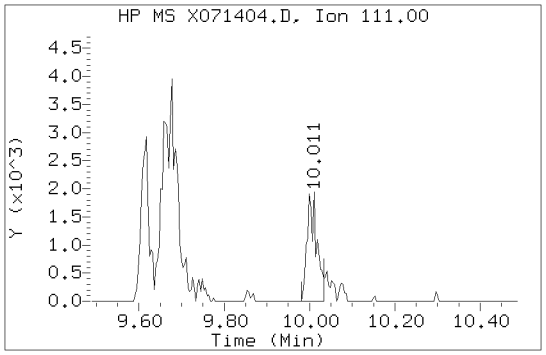
BEFORE

MASS
111
AREA
3070
HEIGHT
1939
20-Jul-2023
15:04
linh
pham



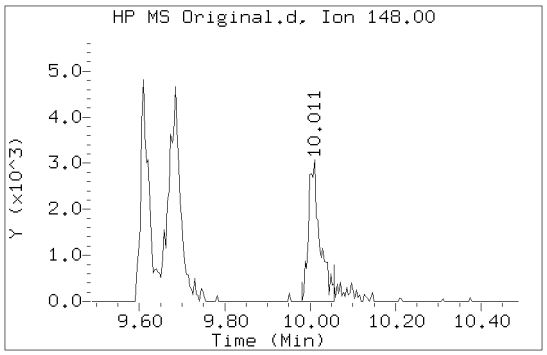
AFTER

MASS
111
AREA
3070
HEIGHT
1939
20-Jul-2023
15:04
linh
pham



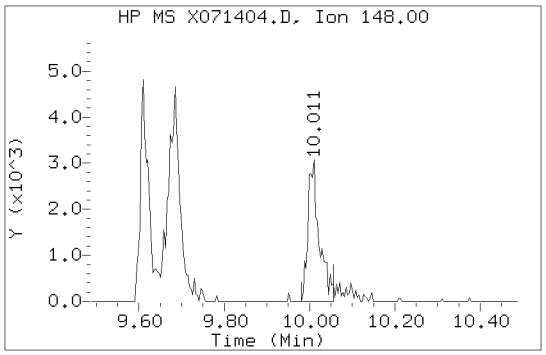
BEFORE

MASS
148
AREA
5707
HEIGHT
3072
20-Jul-2023
15:04
linh
pham



AFTER

MASS
148
AREA
5707
HEIGHT
3072
20-Jul-2023
15:04
linh
pham

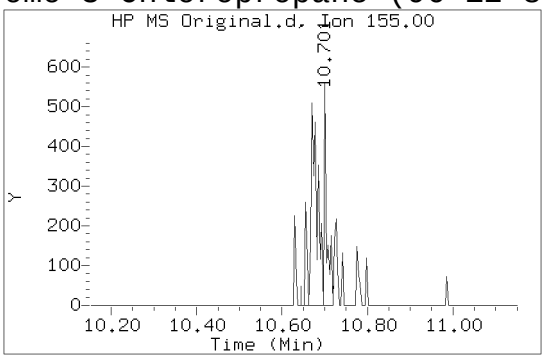


Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071404.D
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

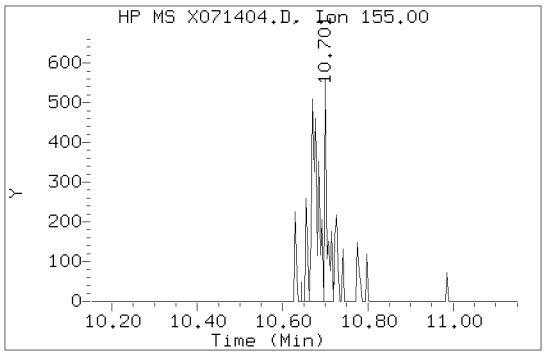
1,2-Dibromo-3-Chloropropane (96-12-8)

Reason Code:

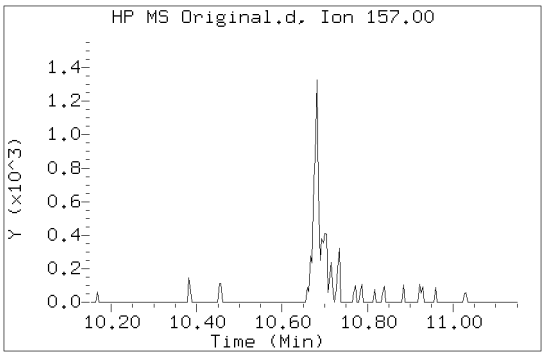
BEFORE
MASS
155
AREA
831
HEIGHT
558
20-Jul-2023
15:04
linh
pham



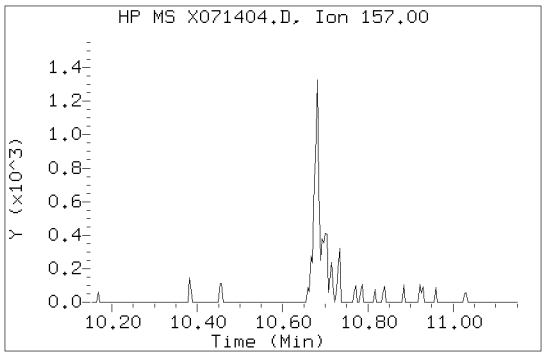
AFTER
MASS
155
AREA
831
HEIGHT
558
20-Jul-2023
15:04
linh
pham



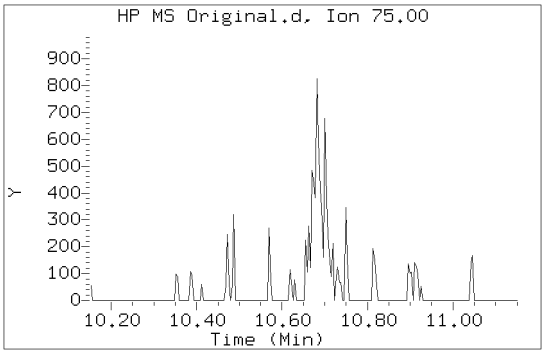
BEFORE
MASS
157
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



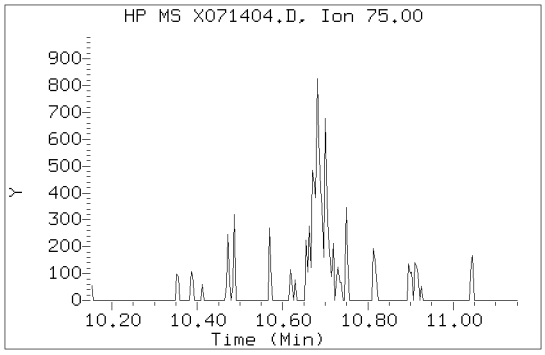
AFTER
MASS
157
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
75
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



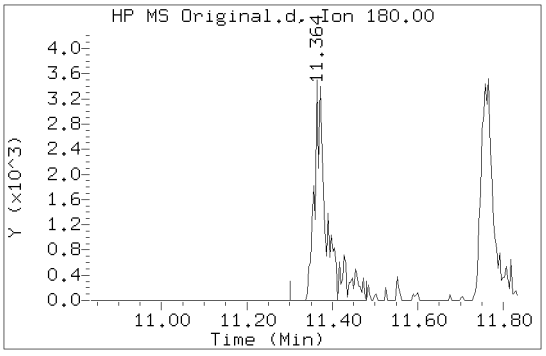
AFTER
MASS
75
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



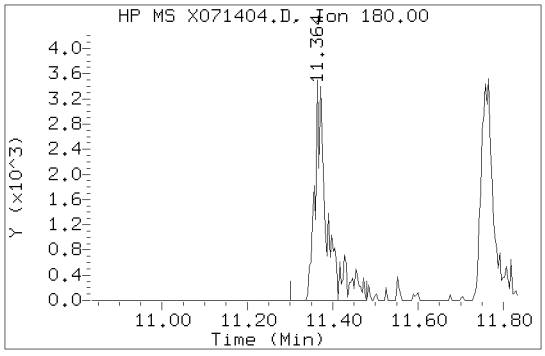
1,2,4-Trichlorobenzene (120-82-1)

Reason Code:

BEFORE
MASS
180
AREA
7113
HEIGHT
3499
20-Jul-2023
15:04
linh
pham



AFTER
MASS
180
AREA
7113
HEIGHT
3499
20-Jul-2023
15:04
linh
pham



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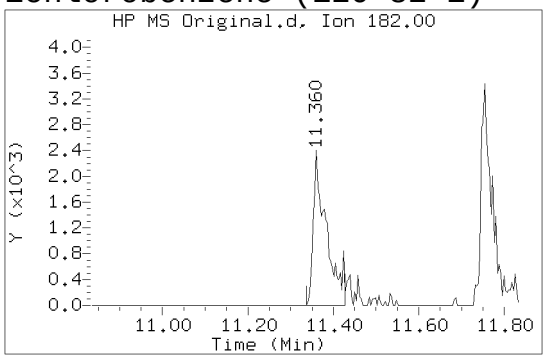
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

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

Reason Code:

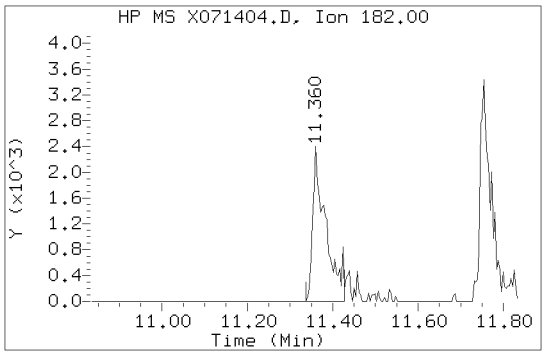
BEFORE

MASS
182
AREA
5066
HEIGHT
2401
20-Jul-2023
15:04
linh
pham



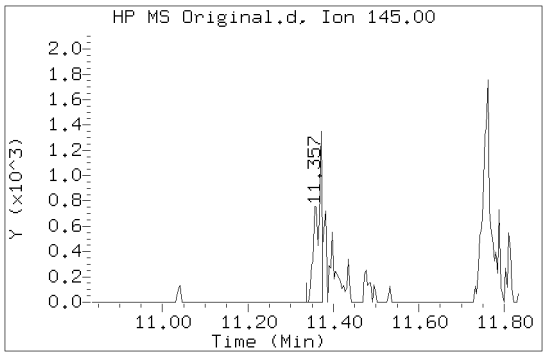
AFTER

MASS
182
AREA
5066
HEIGHT
2401
20-Jul-2023
15:04
linh
pham



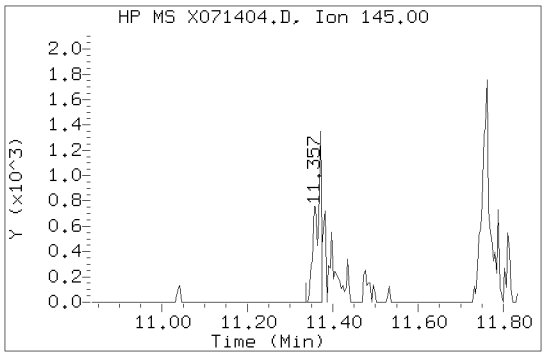
BEFORE

MASS
145
AREA
1146
HEIGHT
757
20-Jul-2023
15:04
linh
pham



AFTER

MASS
145
AREA
1146
HEIGHT
757
20-Jul-2023
15:04
linh
pham

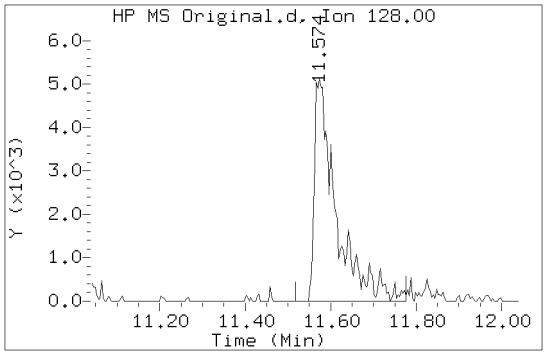


Naphthalene (91-20-3)

Reason Code:

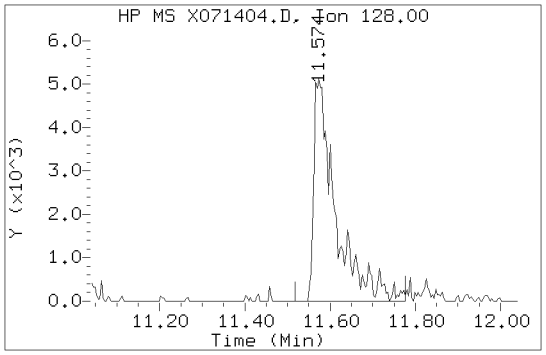
BEFORE

MASS
128
AREA
18131
HEIGHT
5123
20-Jul-2023
15:04
linh
pham



AFTER

MASS
128
AREA
18131
HEIGHT
5123
20-Jul-2023
15:04
linh
pham

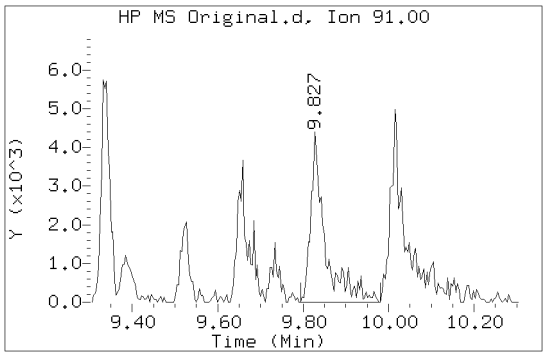


Benzyl Chloride (100-44-7)

Reason Code:

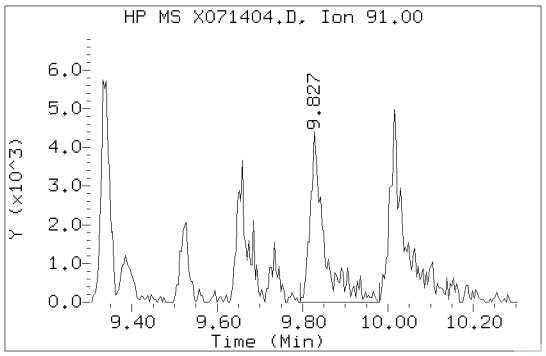
BEFORE

MASS
91
AREA
10259
HEIGHT
4403
20-Jul-2023
15:04
linh
pham



AFTER

MASS
91
AREA
10259
HEIGHT
4403
20-Jul-2023
15:04
linh
pham



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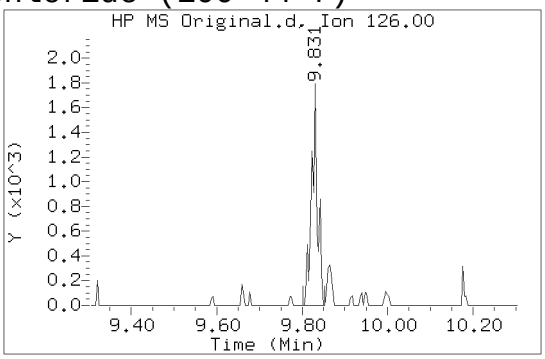
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

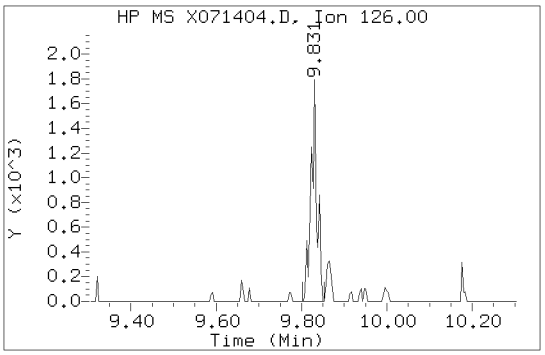
Benzyl Chloride (100-44-7)

BEFORE
MASS
126
AREA
1709
HEIGHT
1793
20-Jul-2023
15:04
linh
pham

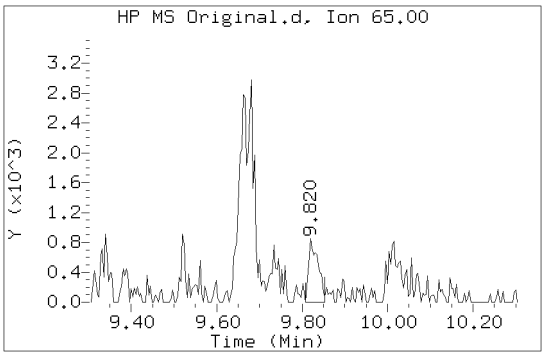


Reason Code:

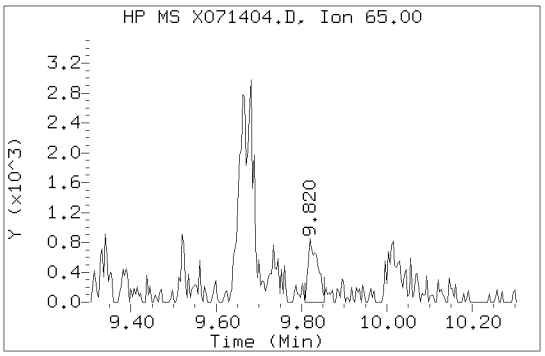
AFTER
MASS
126
AREA
1709
HEIGHT
1793
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
65
AREA
1300
HEIGHT
848
20-Jul-2023
15:04
linh
pham

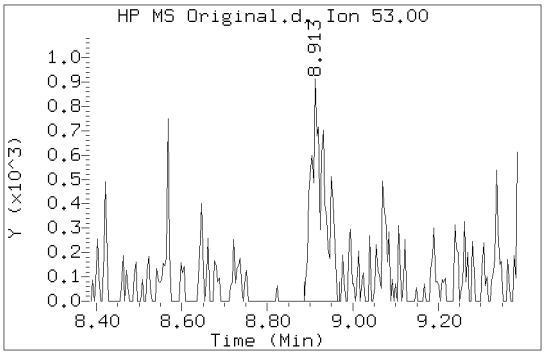


AFTER
MASS
65
AREA
1300
HEIGHT
848
20-Jul-2023
15:04
linh
pham



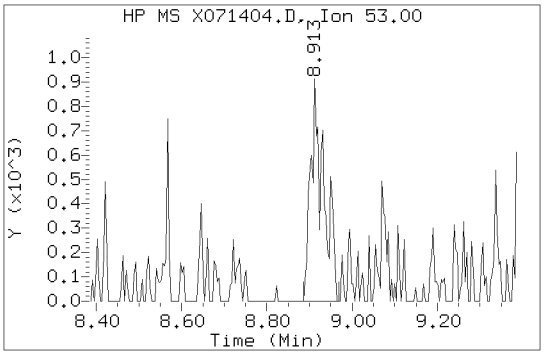
trans-1,4-Dichloro-2-butene (110-57-6)

BEFORE
MASS
53
AREA
1951
HEIGHT
913
20-Jul-2023
15:04
linh
pham

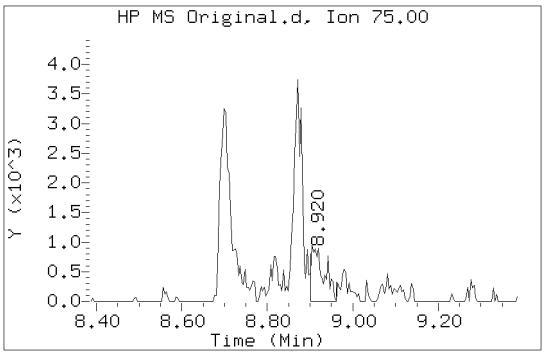


Reason Code:

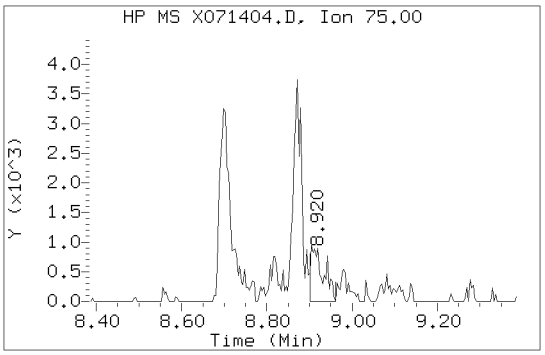
AFTER
MASS
53
AREA
1951
HEIGHT
913
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
75
AREA
1917
HEIGHT
902
20-Jul-2023
15:04
linh
pham



AFTER
MASS
75
AREA
1917
HEIGHT
902
20-Jul-2023
15:04
linh
pham



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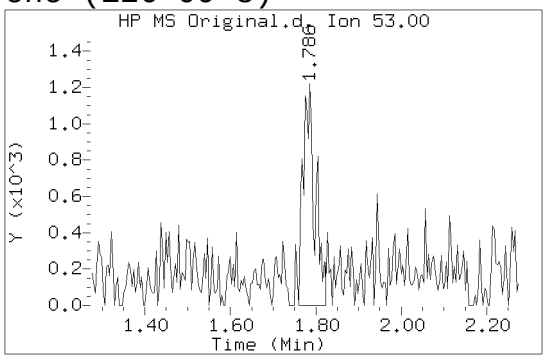
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

Chloroprene (126-99-8)

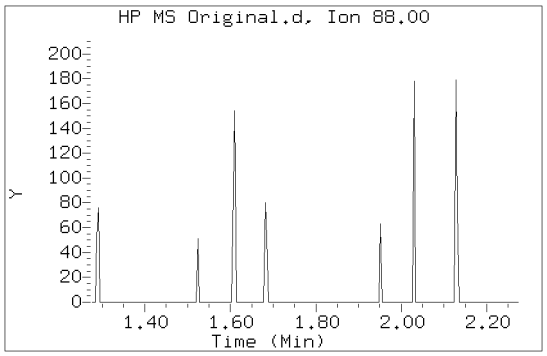
BEFORE

MASS
53
AREA
2402
HEIGHT
1221
20-Jul-2023
15:04
linh
pham



BEFORE

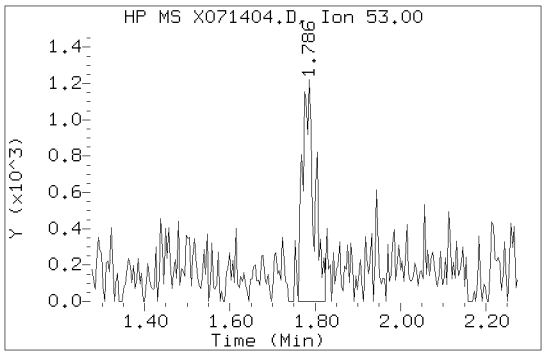
MASS
88
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



Reason Code:

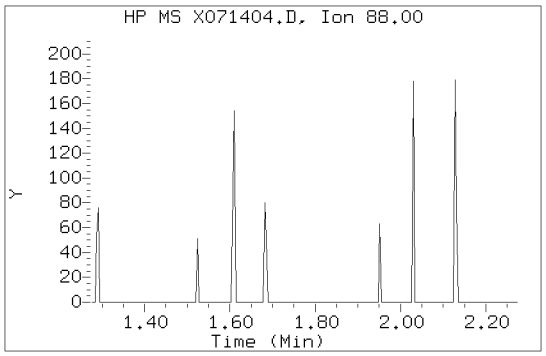
AFTER

MASS
53
AREA
2402
HEIGHT
1221
20-Jul-2023
15:04
linh
pham



AFTER

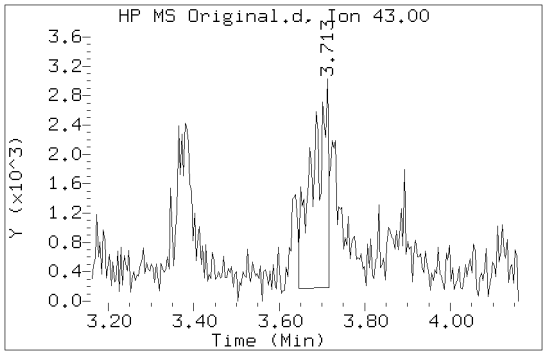
MASS
88
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



Ethyl Acetate (141-78-6)

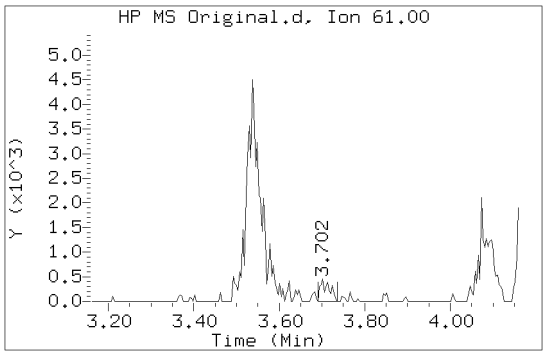
BEFORE

MASS
43
AREA
7207
HEIGHT
2844
20-Jul-2023
15:04
linh
pham



BEFORE

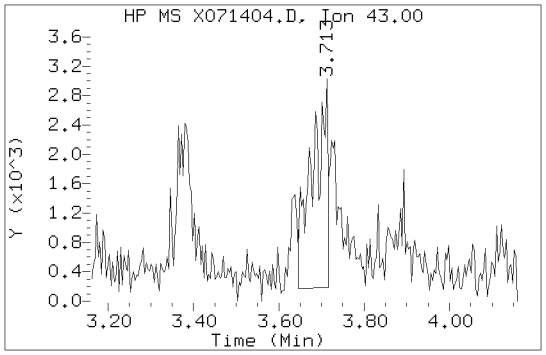
MASS
61
AREA
652
HEIGHT
462
20-Jul-2023
15:04
linh
pham



Reason Code:

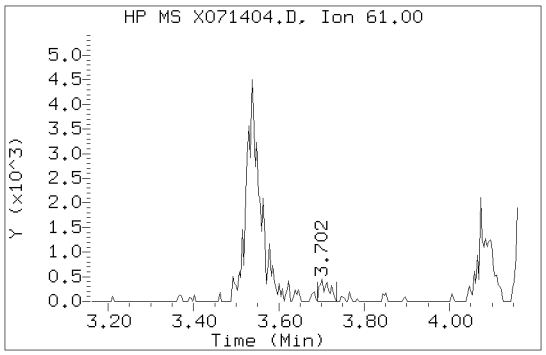
AFTER

MASS
43
AREA
7207
HEIGHT
2844
20-Jul-2023
15:04
linh
pham



AFTER

MASS
61
AREA
652
HEIGHT
462
20-Jul-2023
15:04
linh
pham



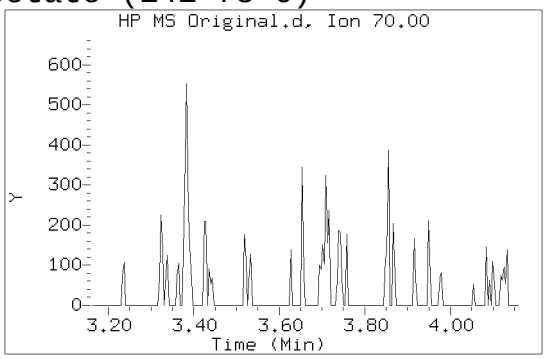
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071404.D
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

Ethyl Acetate (141-78-6)

Reason Code:

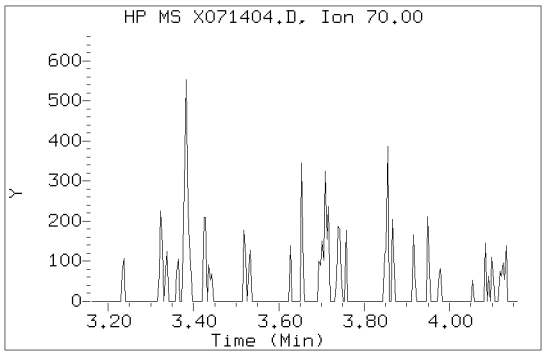
BEFORE

MASS
70
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
70
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

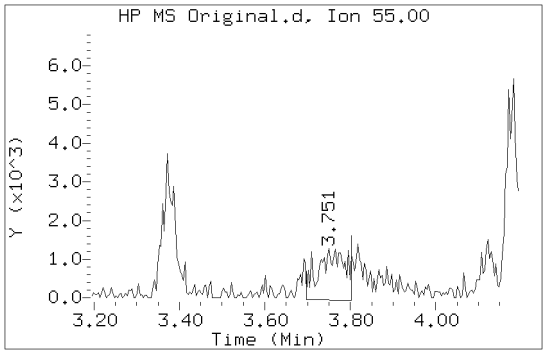


Methyl Acrylate (96-33-3)

Reason Code:

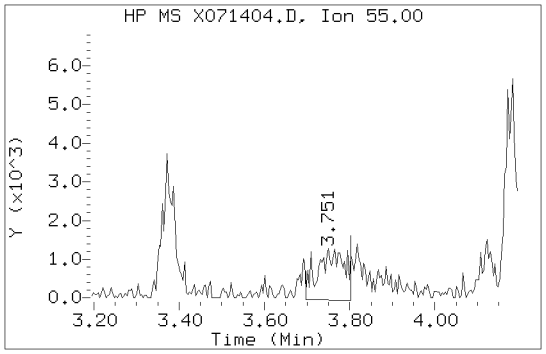
BEFORE

MASS
55
AREA
5778
HEIGHT
1338
20-Jul-2023
15:04
linh
pham



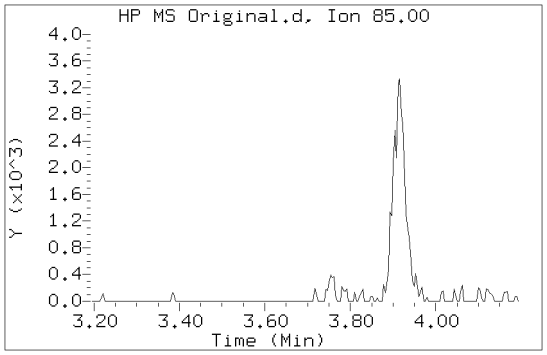
AFTER

MASS
55
AREA
5778
HEIGHT
1338
20-Jul-2023
15:04
linh
pham



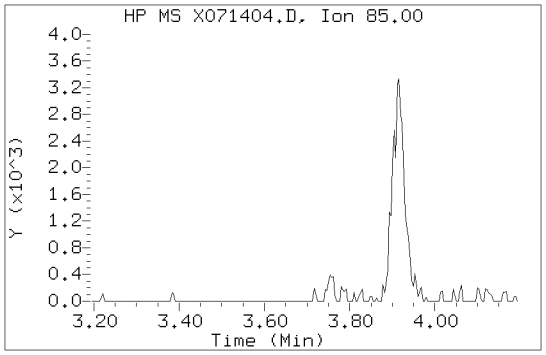
BEFORE

MASS
85
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
85
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

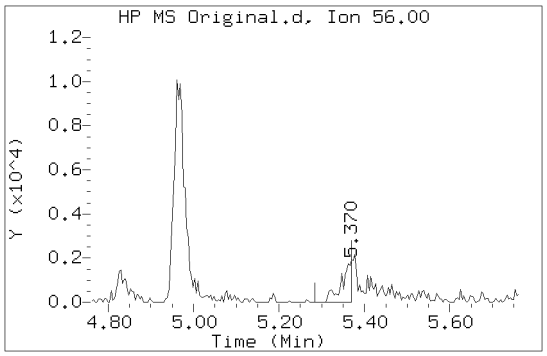


n-Butanol (71-36-3)

Reason Code:

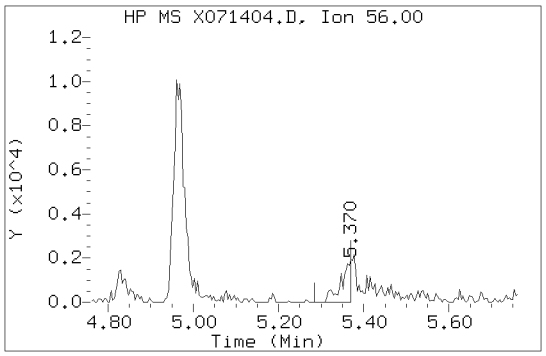
BEFORE

MASS
56
AREA
3103
HEIGHT
1929
20-Jul-2023
15:04
linh
pham



AFTER

MASS
56
AREA
3103
HEIGHT
1929
20-Jul-2023
15:04
linh
pham



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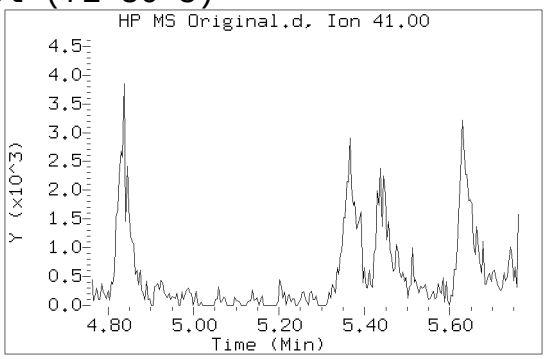
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

n-Butanol (71-36-3)

Reason Code:

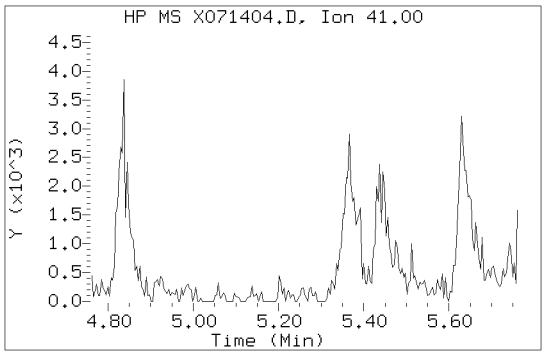
BEFORE

MASS
41
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

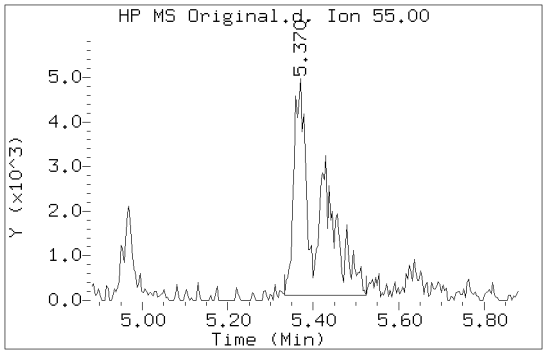


Ethyl Acrylate (140-88-5)

Reason Code:

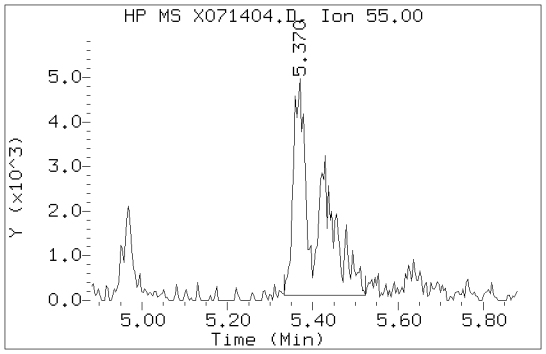
BEFORE

MASS
55
AREA
18196
HEIGHT
4857
20-Jul-2023
15:04
linh
pham



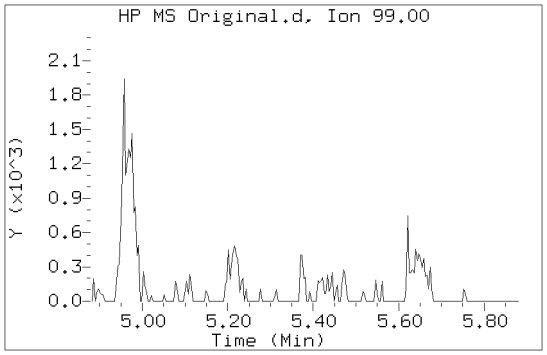
AFTER

MASS
55
AREA
18196
HEIGHT
4857
20-Jul-2023
15:04
linh
pham



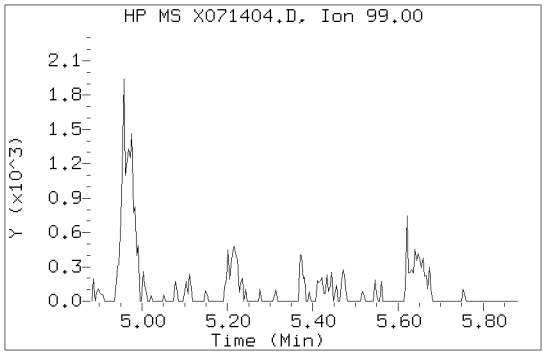
BEFORE

MASS
99
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
99
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

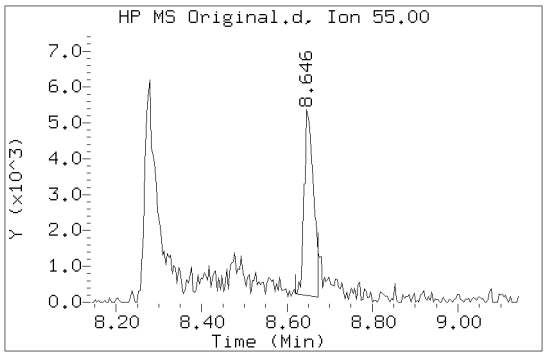


Cyclohexanone (108-94-1)

Reason Code:

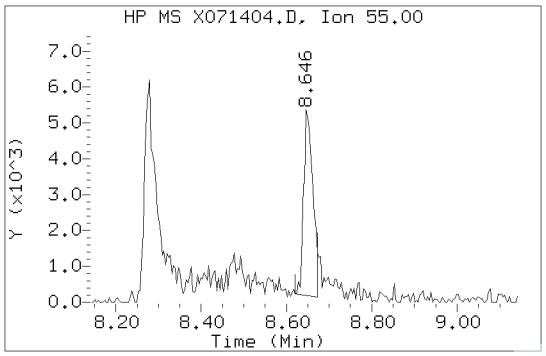
BEFORE

MASS
55
AREA
7972
HEIGHT
5194
20-Jul-2023
15:04
linh
pham



AFTER

MASS
55
AREA
7972
HEIGHT
5194
20-Jul-2023
15:04
linh
pham



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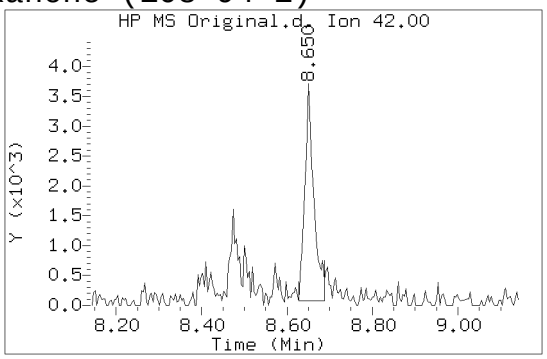
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

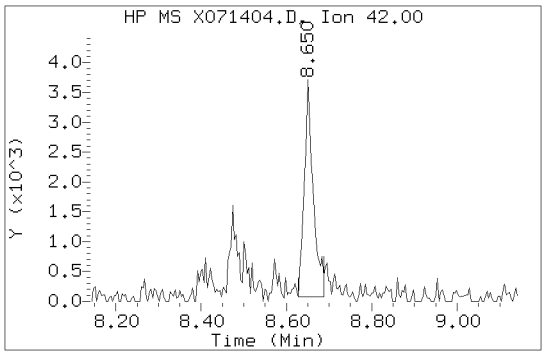
Cyclohexanone (108-94-1)

Reason Code:

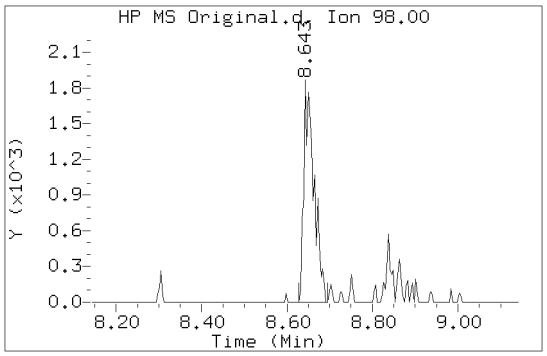
BEFORE
MASS
42
AREA
5392
HEIGHT
3640
20-Jul-2023
15:04
linh
pham



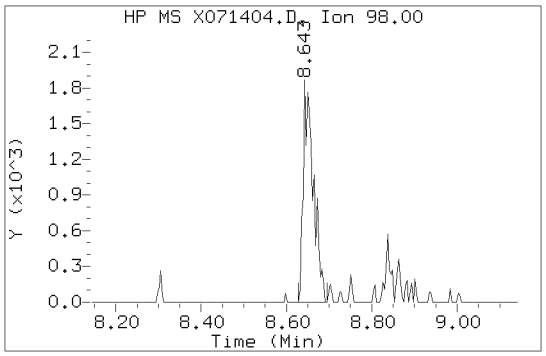
AFTER
MASS
42
AREA
5392
HEIGHT
3640
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
98
AREA
3142
HEIGHT
1869
20-Jul-2023
15:04
linh
pham



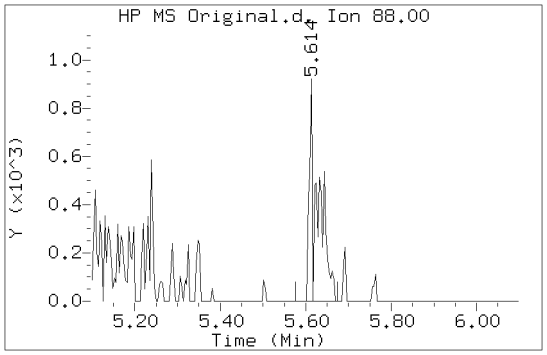
AFTER
MASS
98
AREA
3142
HEIGHT
1869
20-Jul-2023
15:04
linh
pham



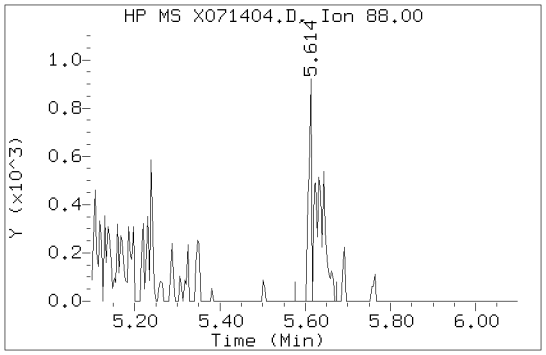
1,4-Dioxane ()

Reason Code:

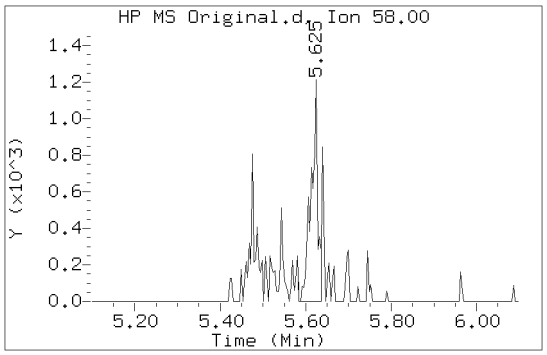
BEFORE
MASS
88
AREA
1290
HEIGHT
921
20-Jul-2023
15:04
linh
pham



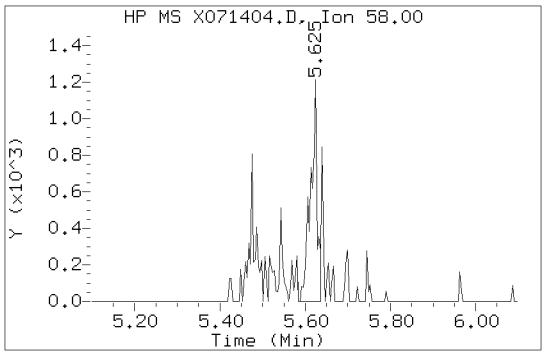
AFTER
MASS
88
AREA
1290
HEIGHT
921
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
58
AREA
1310
HEIGHT
1214
20-Jul-2023
15:04
linh
pham



AFTER
MASS
58
AREA
1310
HEIGHT
1214
20-Jul-2023
15:04
linh
pham



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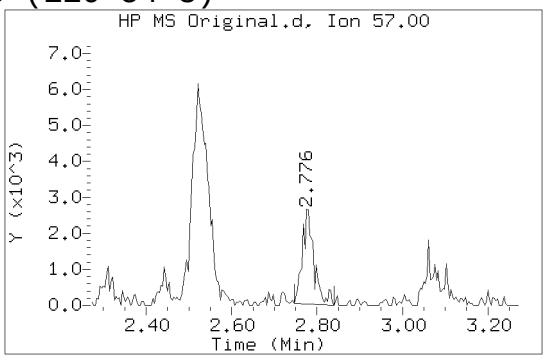
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

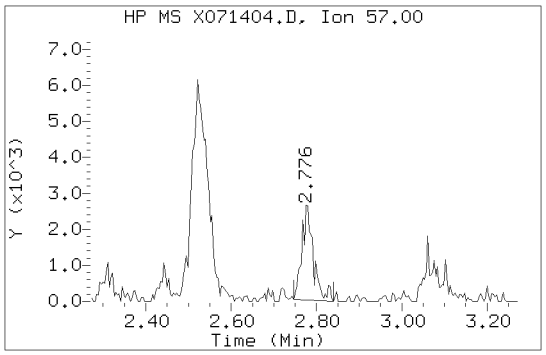
n-Hexane (110-54-3)

Reason Code:

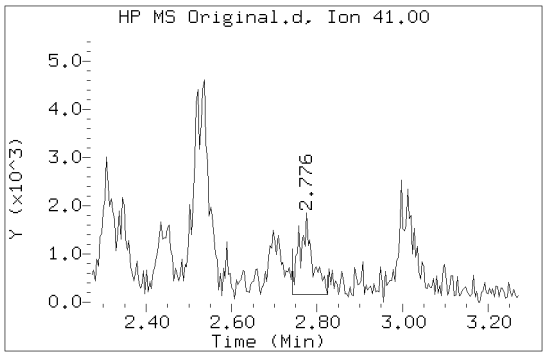
BEFORE
MASS
57
AREA
5000
HEIGHT
2629
20-Jul-2023
15:04
linh
pham



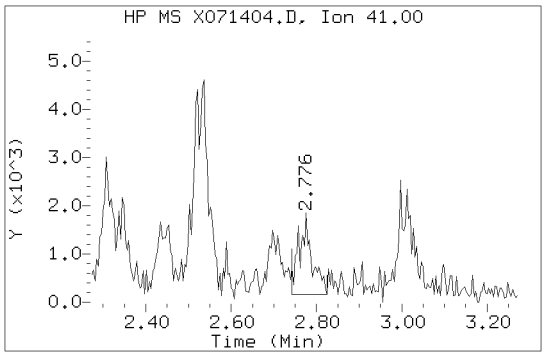
AFTER
MASS
57
AREA
5000
HEIGHT
2629
20-Jul-2023
15:04
linh
pham



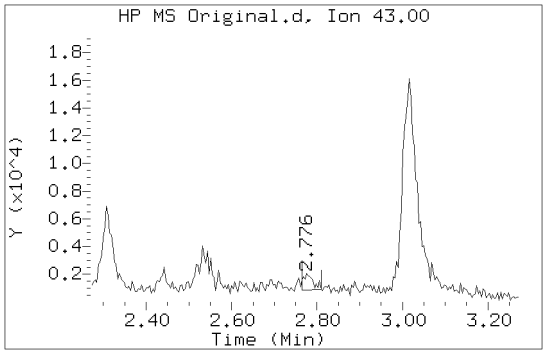
BEFORE
MASS
41
AREA
3569
HEIGHT
1692
20-Jul-2023
15:04
linh
pham



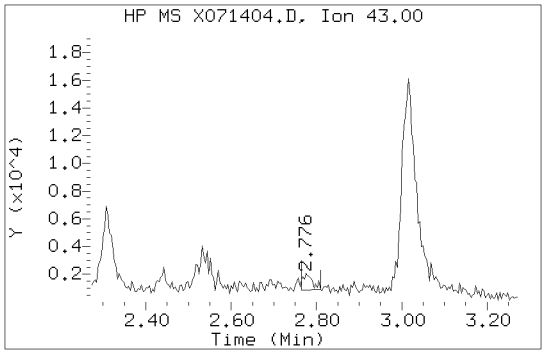
AFTER
MASS
41
AREA
3569
HEIGHT
1692
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
43
AREA
1865
HEIGHT
1174
20-Jul-2023
15:04
linh
pham



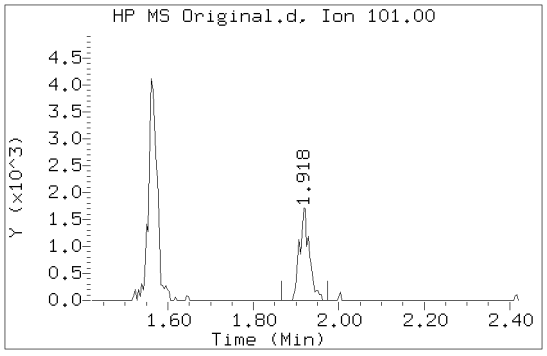
AFTER
MASS
43
AREA
1865
HEIGHT
1174
20-Jul-2023
15:04
linh
pham



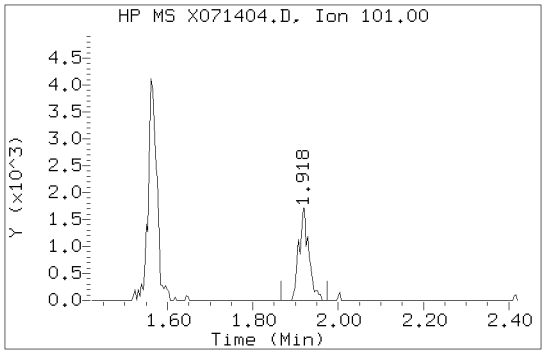
Freon TF (76-13-1)

Reason Code:

BEFORE
MASS
101
AREA
2818
HEIGHT
1714
20-Jul-2023
15:04
linh
pham



AFTER
MASS
101
AREA
2818
HEIGHT
1714
20-Jul-2023
15:04
linh
pham



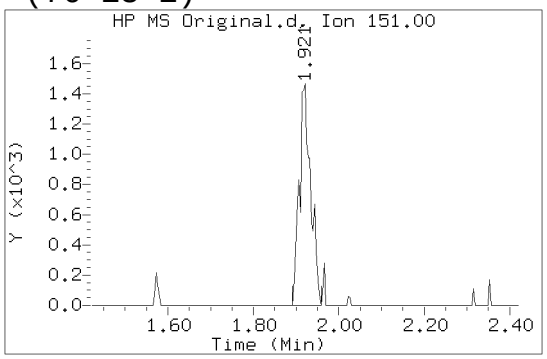
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071404.D
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

Freon TF (76-13-1)

Reason Code:

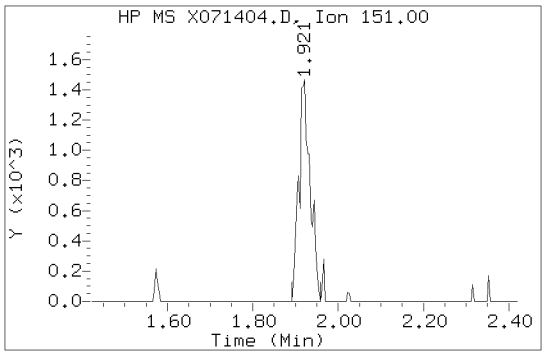
BEFORE

MASS
151
AREA
2770
HEIGHT
1467
20-Jul-2023
15:04
linh
pham



AFTER

MASS
151
AREA
2770
HEIGHT
1467
20-Jul-2023
15:04
linh
pham

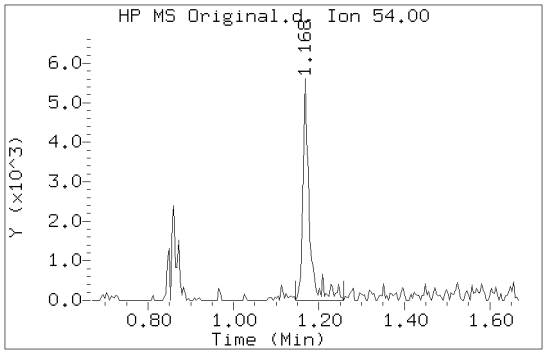


1,3-Butadiene (106-99-0)

Reason Code:

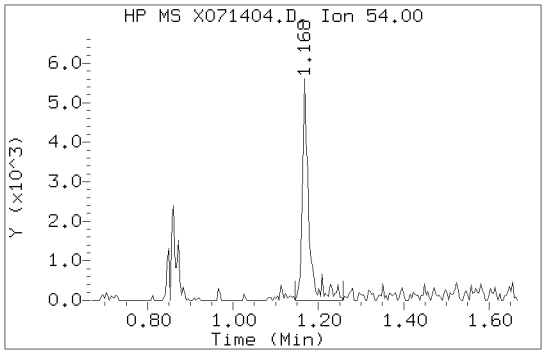
BEFORE

MASS
54
AREA
6040
HEIGHT
5609
20-Jul-2023
15:04
linh
pham



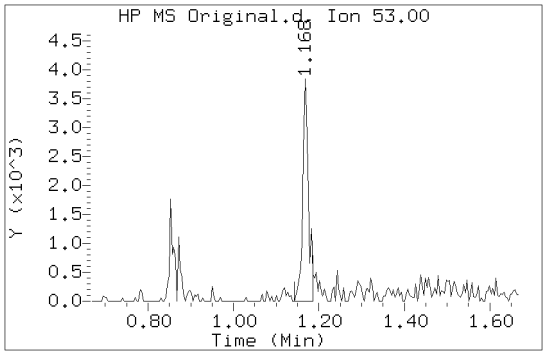
AFTER

MASS
54
AREA
6040
HEIGHT
5609
20-Jul-2023
15:04
linh
pham



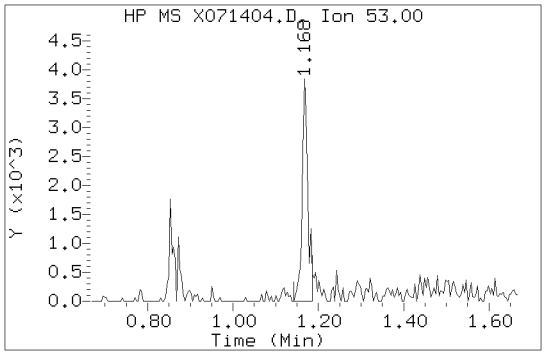
BEFORE

MASS
53
AREA
3632
HEIGHT
3843
20-Jul-2023
15:04
linh
pham



AFTER

MASS
53
AREA
3632
HEIGHT
3843
20-Jul-2023
15:04
linh
pham

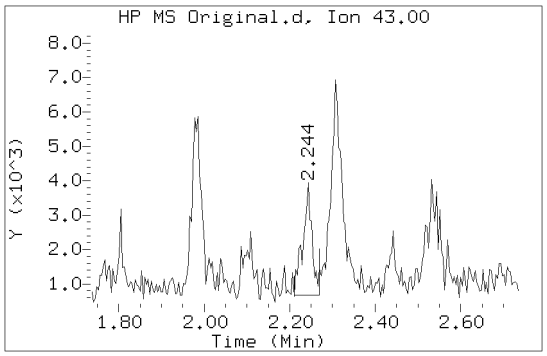


Methyl acetate (79-20-9)

Reason Code:

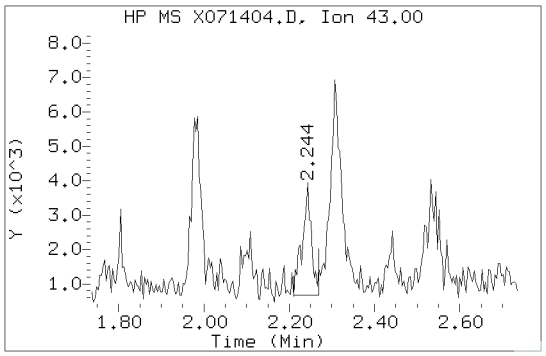
BEFORE

MASS
43
AREA
4992
HEIGHT
3260
20-Jul-2023
15:04
linh
pham



AFTER

MASS
43
AREA
4992
HEIGHT
3260
20-Jul-2023
15:04
linh
pham

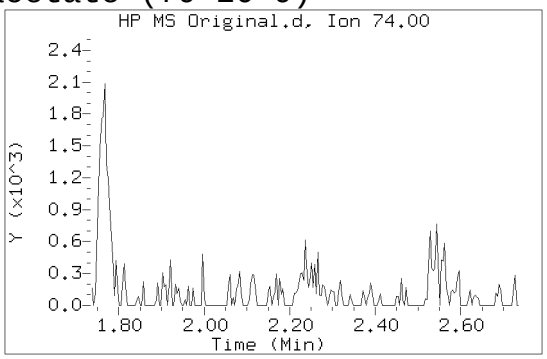


Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071404.D
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

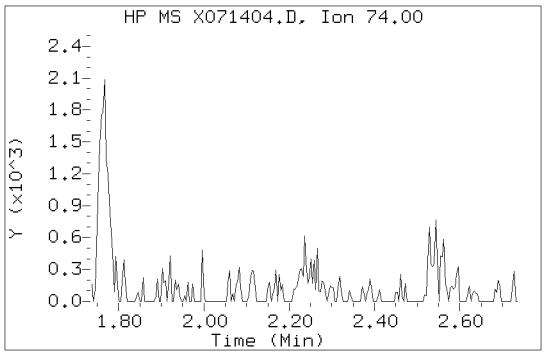
Methyl acetate (79-20-9)

Reason Code:

BEFORE
MASS
74
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



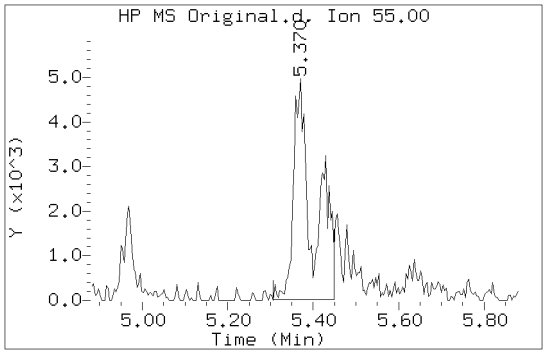
AFTER
MASS
74
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



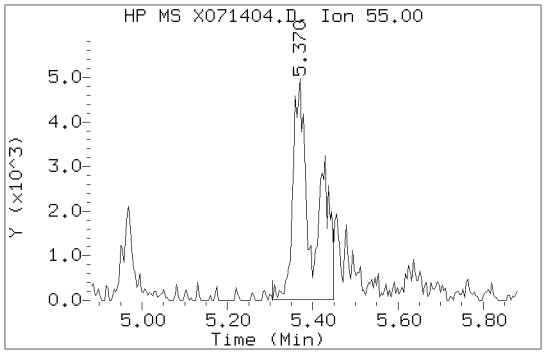
Methylcyclohexane (108-87-2)

Reason Code:

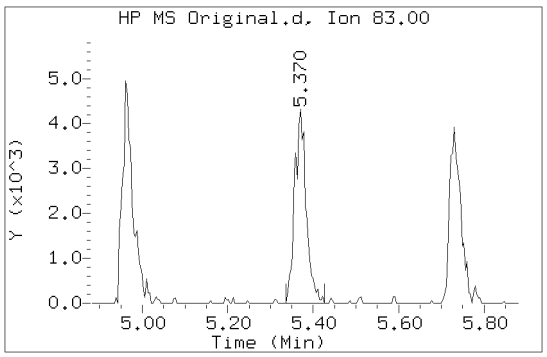
BEFORE
MASS
55
AREA
15783
HEIGHT
4958
20-Jul-2023
15:04
linh
pham



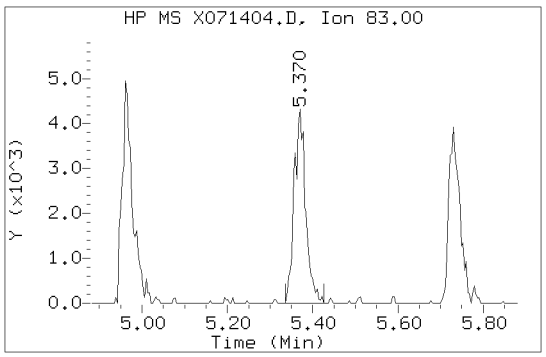
AFTER
MASS
55
AREA
15783
HEIGHT
4958
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
83
AREA
8157
HEIGHT
4322
20-Jul-2023
15:04
linh
pham



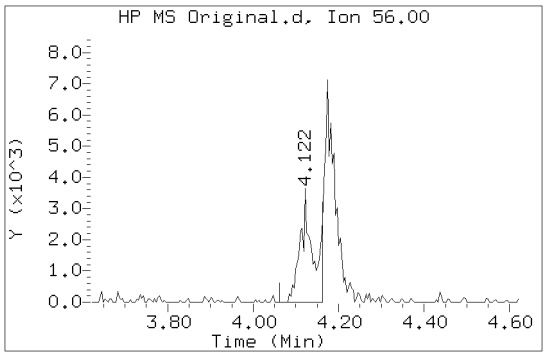
AFTER
MASS
83
AREA
8157
HEIGHT
4322
20-Jul-2023
15:04
linh
pham



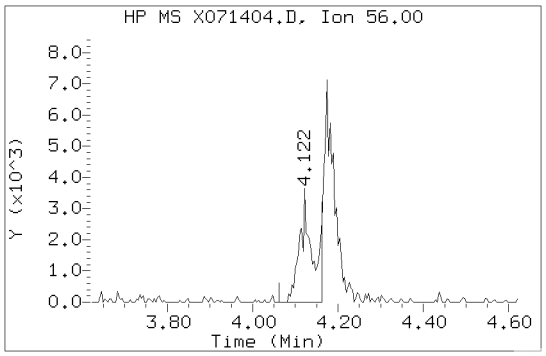
Cyclohexane (110-82-7)

Reason Code:

BEFORE
MASS
56
AREA
7673
HEIGHT
3640
20-Jul-2023
15:04
linh
pham



AFTER
MASS
56
AREA
7673
HEIGHT
3640
20-Jul-2023
15:04
linh
pham

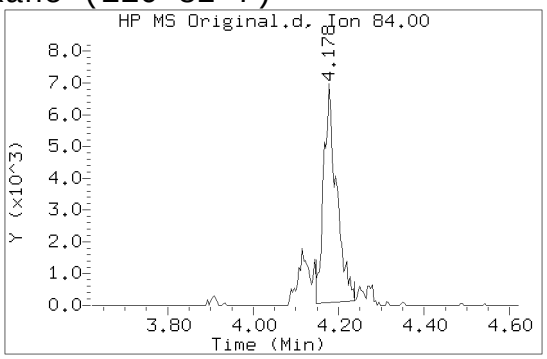


Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071404.D
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

Cyclohexane (110-82-7)

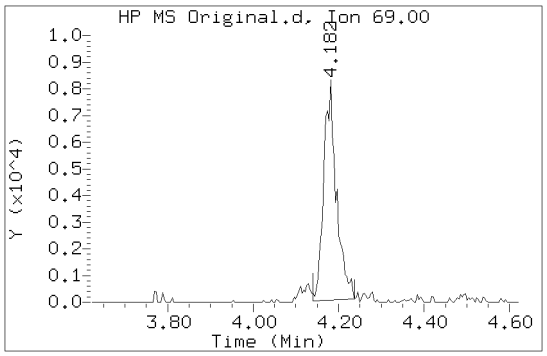
BEFORE

MASS
84
AREA
14444
HEIGHT
6891
20-Jul-2023
15:04
linh
pham



BEFORE

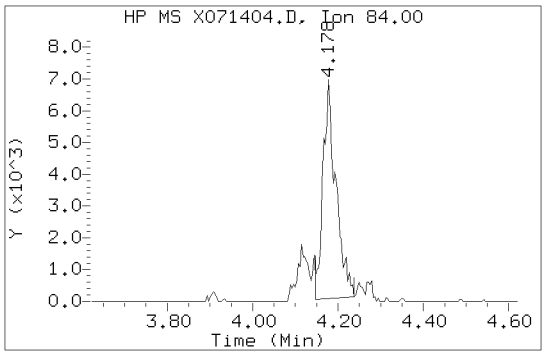
MASS
69
AREA
16995
HEIGHT
8270
20-Jul-2023
15:04
linh
pham



Reason Code:

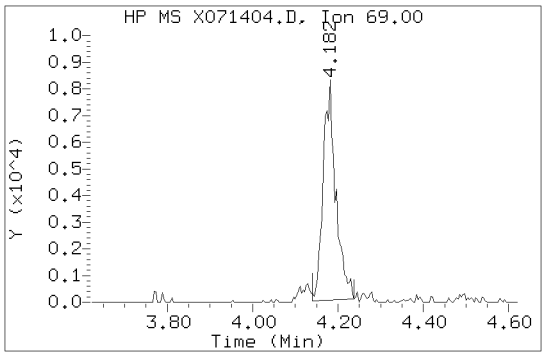
AFTER

MASS
84
AREA
14444
HEIGHT
6891
20-Jul-2023
15:04
linh
pham



AFTER

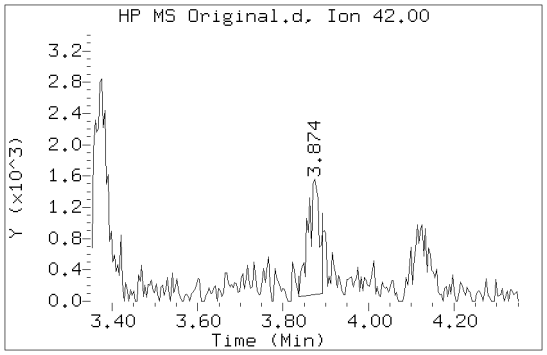
MASS
69
AREA
16995
HEIGHT
8270
20-Jul-2023
15:04
linh
pham



Tetrahydrofuran (109-99-9)

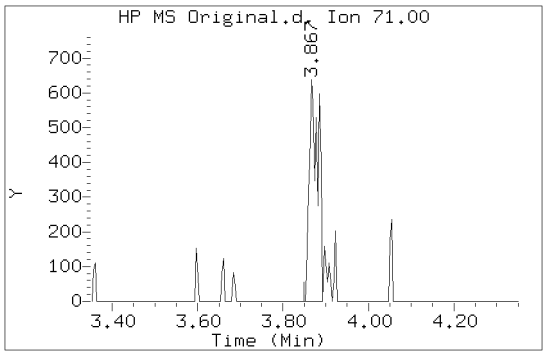
BEFORE

MASS
42
AREA
2815
HEIGHT
1476
20-Jul-2023
15:04
linh
pham



BEFORE

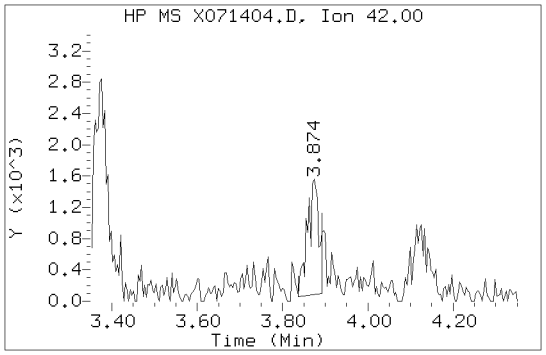
MASS
71
AREA
933
HEIGHT
638
20-Jul-2023
15:04
linh
pham



Reason Code:

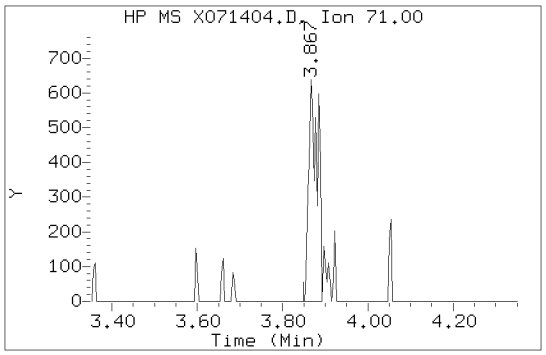
AFTER

MASS
42
AREA
2815
HEIGHT
1476
20-Jul-2023
15:04
linh
pham



AFTER

MASS
71
AREA
933
HEIGHT
638
20-Jul-2023
15:04
linh
pham

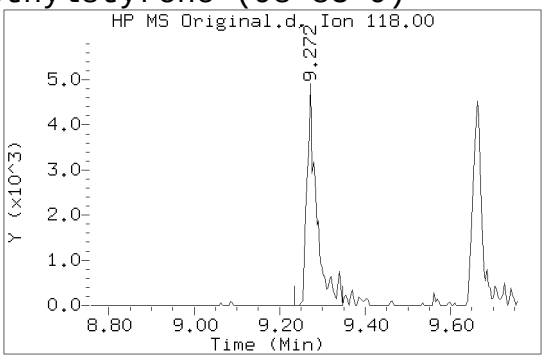


Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071404.D
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

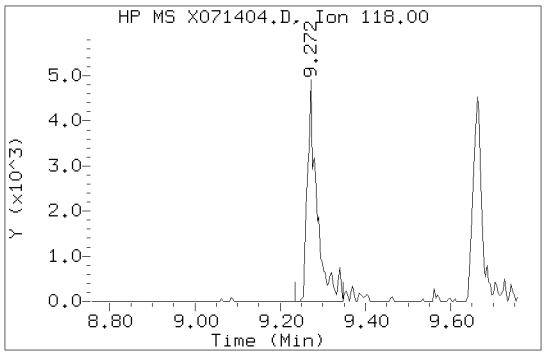
alpha-Methylstyrene (98-83-9)

Reason Code:

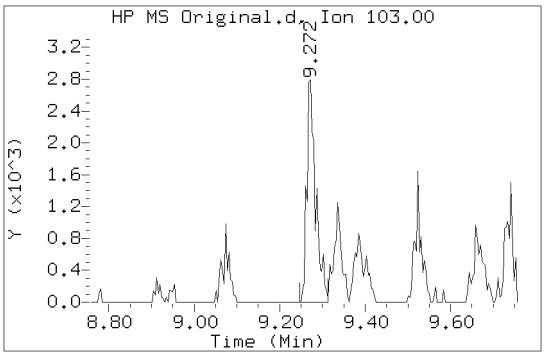
BEFORE
MASS
118
AREA
7755
HEIGHT
4913
20-Jul-2023
15:04
linh
pham



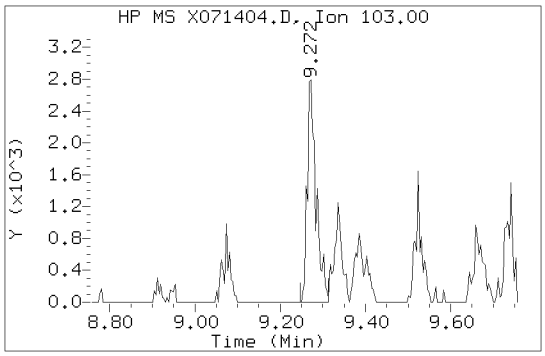
AFTER
MASS
118
AREA
7755
HEIGHT
4913
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
103
AREA
4028
HEIGHT
2790
20-Jul-2023
15:04
linh
pham



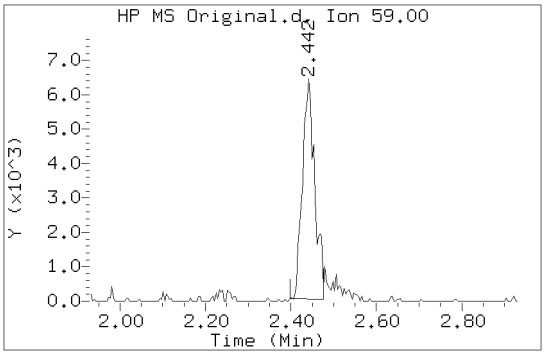
AFTER
MASS
103
AREA
4028
HEIGHT
2790
20-Jul-2023
15:04
linh
pham



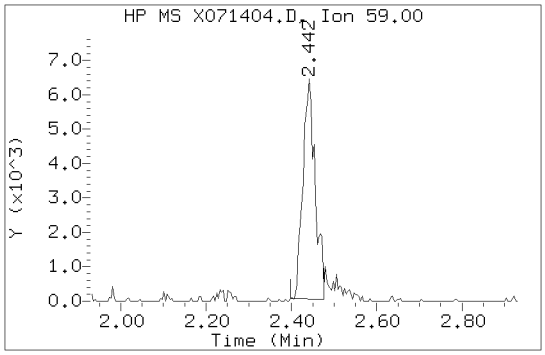
Tert-butyl alcohol (75-65-0)

Reason Code:

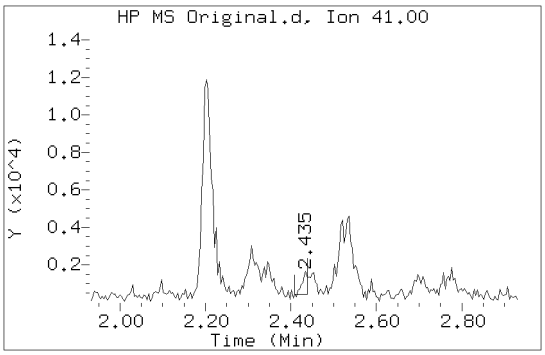
BEFORE
MASS
59
AREA
12965
HEIGHT
6400
20-Jul-2023
15:04
linh
pham



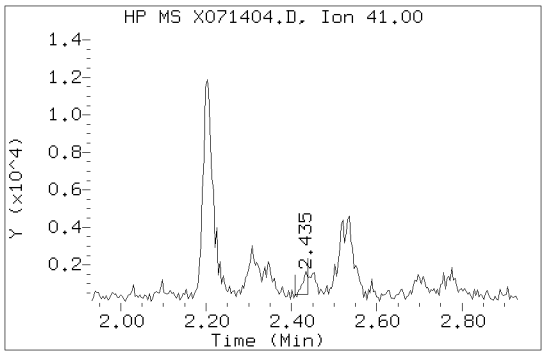
AFTER
MASS
59
AREA
12965
HEIGHT
6400
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
41
AREA
1041
HEIGHT
1246
20-Jul-2023
15:04
linh
pham



AFTER
MASS
41
AREA
1041
HEIGHT
1246
20-Jul-2023
15:04
linh
pham



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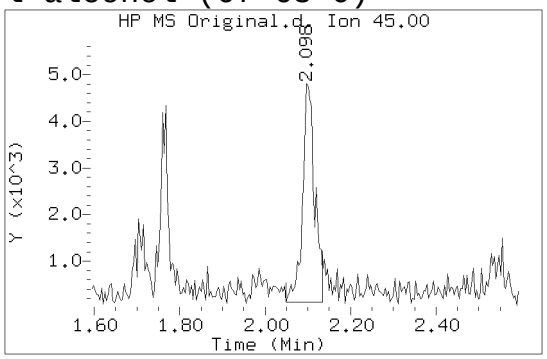
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

Isopropyl alcohol (67-63-0)

Reason Code:

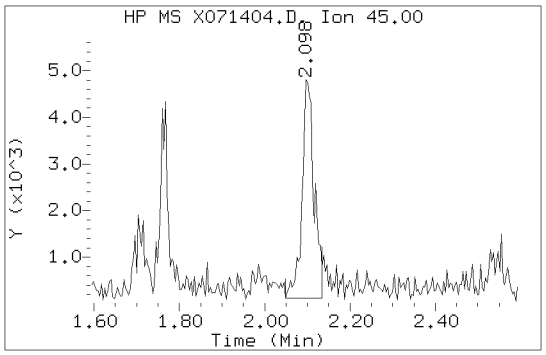
BEFORE

MASS
45
AREA
9372
HEIGHT
4685
20-Jul-2023
15:04
linh
pham



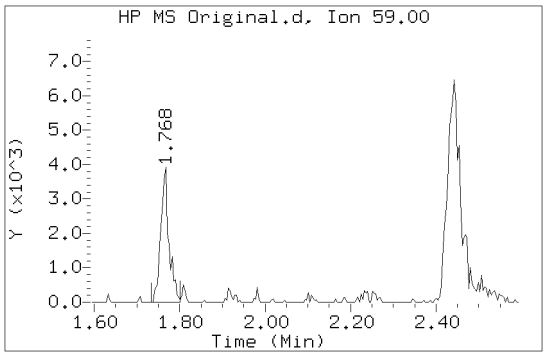
AFTER

MASS
45
AREA
9372
HEIGHT
4685
20-Jul-2023
15:04
linh
pham



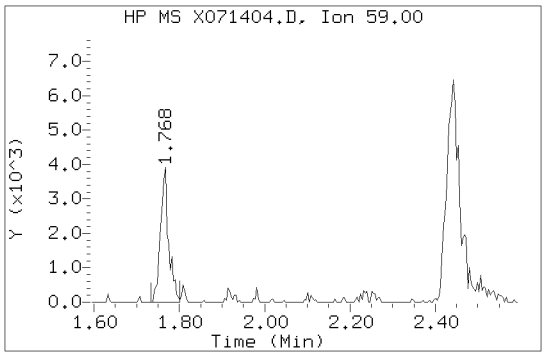
BEFORE

MASS
59
AREA
5211
HEIGHT
3930
20-Jul-2023
15:04
linh
pham



AFTER

MASS
59
AREA
5211
HEIGHT
3930
20-Jul-2023
15:04
linh
pham

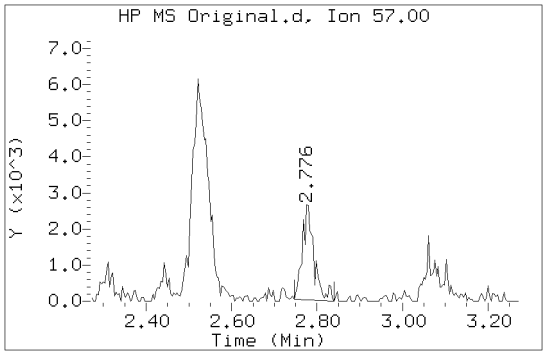


Allyl alcohol (107-18-6)

Reason Code:

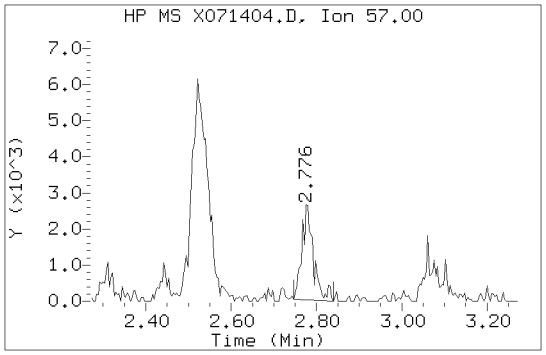
BEFORE

MASS
57
AREA
5000
HEIGHT
2629
20-Jul-2023
15:04
linh
pham



AFTER

MASS
57
AREA
5000
HEIGHT
2629
20-Jul-2023
15:04
linh
pham

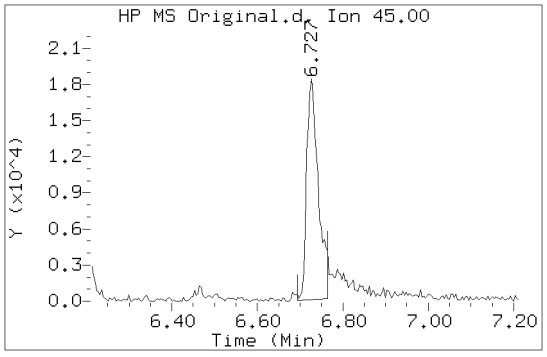


4-Methyl-2-pentanol (108-11-2)

Reason Code:

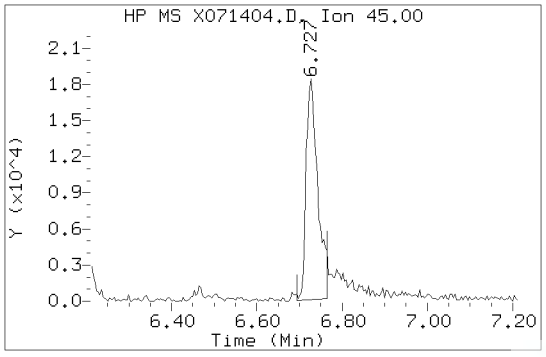
BEFORE

MASS
45
AREA
35175
HEIGHT
18341
20-Jul-2023
15:04
linh
pham



AFTER

MASS
45
AREA
35175
HEIGHT
18341
20-Jul-2023
15:04
linh
pham



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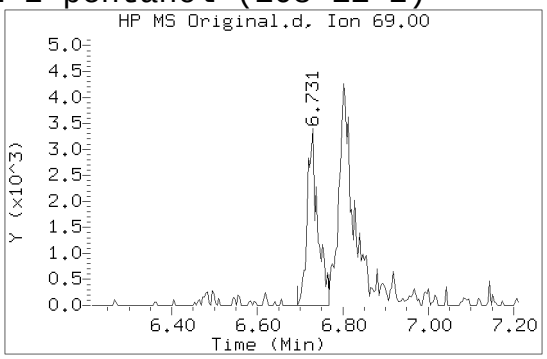
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

4-Methyl-2-pentanol (108-11-2)

Reason Code:

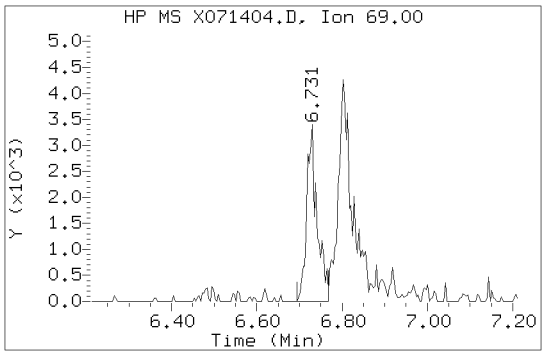
BEFORE

MASS
69
AREA
5748
HEIGHT
3399
20-Jul-2023
15:04
linh
pham



AFTER

MASS
69
AREA
5748
HEIGHT
3399
20-Jul-2023
15:04
linh
pham

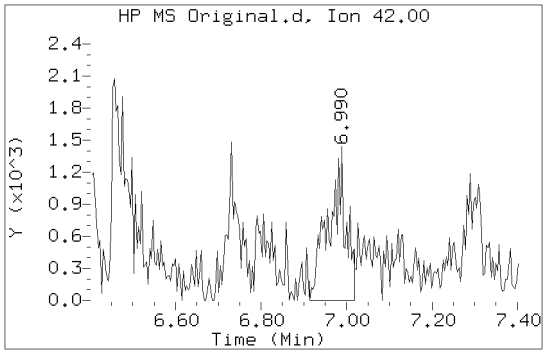


Amyl alcohol (71-41-0)

Reason Code:

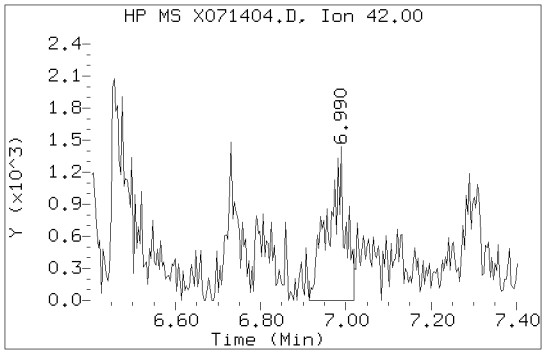
BEFORE

MASS
42
AREA
3944
HEIGHT
1442
20-Jul-2023
15:04
linh
pham



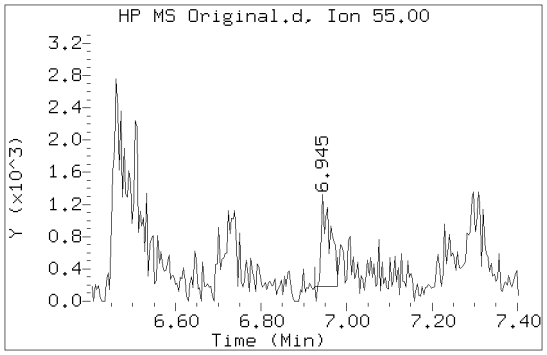
AFTER

MASS
42
AREA
3944
HEIGHT
1442
20-Jul-2023
15:04
linh
pham



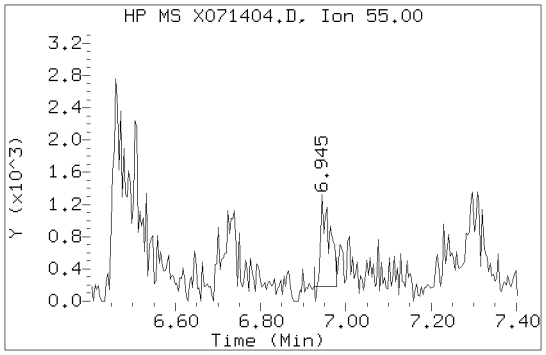
BEFORE

MASS
55
AREA
1617
HEIGHT
1137
20-Jul-2023
15:04
linh
pham



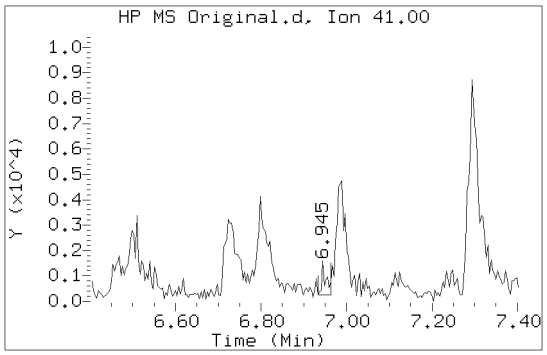
AFTER

MASS
55
AREA
1617
HEIGHT
1137
20-Jul-2023
15:04
linh
pham



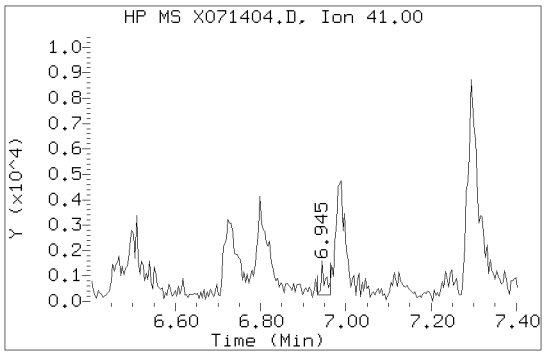
BEFORE

MASS
41
AREA
915
HEIGHT
1326
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
915
HEIGHT
1326
20-Jul-2023
15:04
linh
pham



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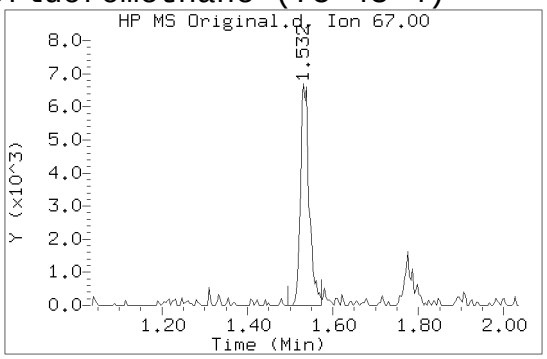
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

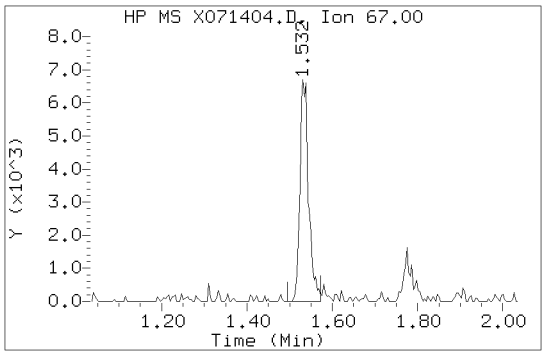
Dichlorofluoromethane (75-43-4)

Reason Code:

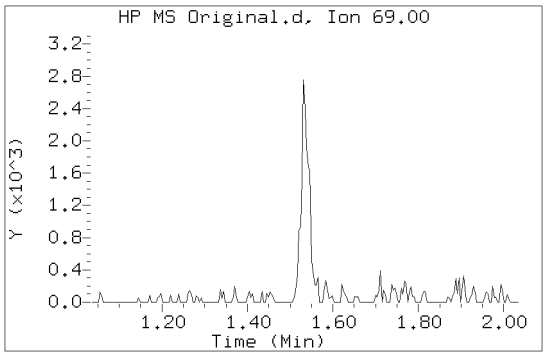
BEFORE
MASS
67
AREA
9743
HEIGHT
6701
20-Jul-2023
15:04
linh
pham



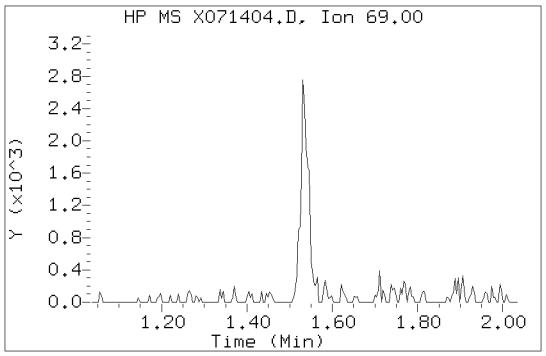
AFTER
MASS
67
AREA
9743
HEIGHT
6701
20-Jul-2023
15:04
linh
pham



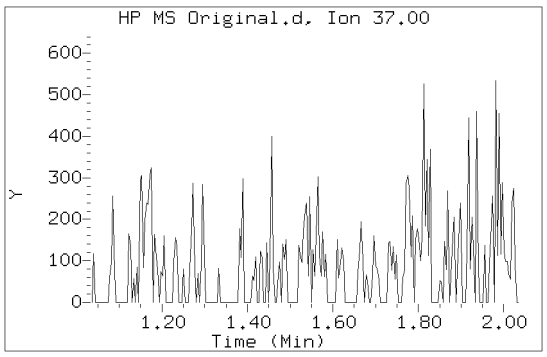
BEFORE
MASS
69
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



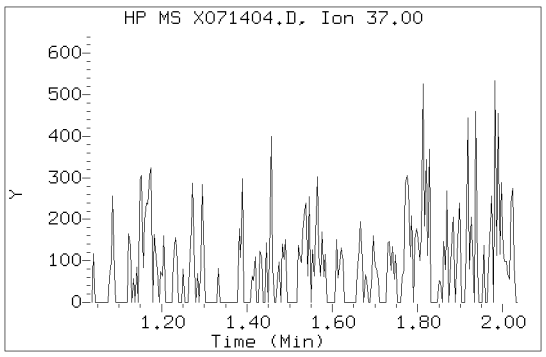
AFTER
MASS
69
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
37
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



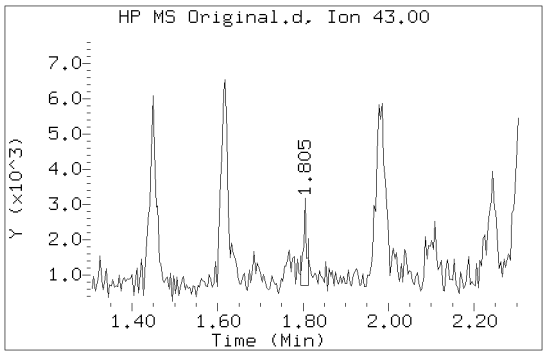
AFTER
MASS
37
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



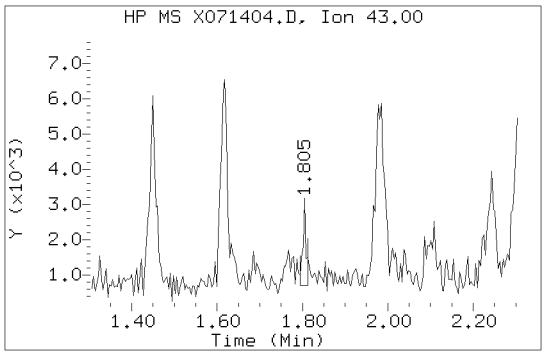
Propylene oxide ()

Reason Code:

BEFORE
MASS
43
AREA
1409
HEIGHT
2479
20-Jul-2023
15:04
linh
pham



AFTER
MASS
43
AREA
1409
HEIGHT
2479
20-Jul-2023
15:04
linh
pham



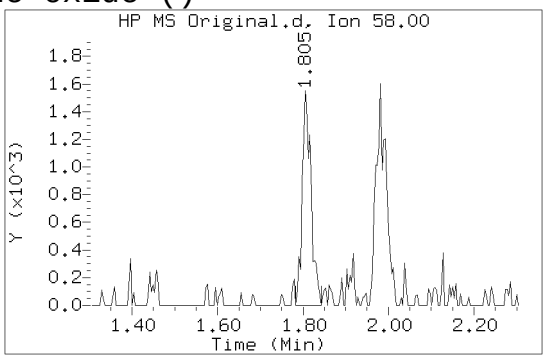
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071404.D
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

Propylene oxide ()

Reason Code:

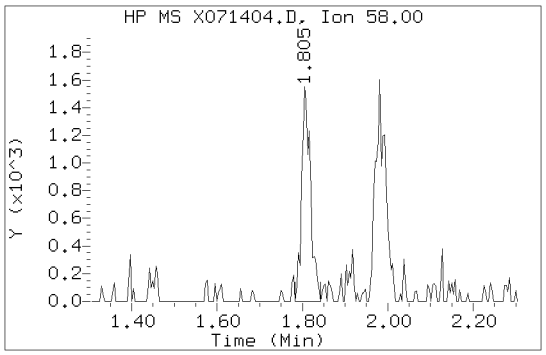
BEFORE

MASS
58
AREA
2276
HEIGHT
1552
20-Jul-2023
15:04
linh
pham



AFTER

MASS
58
AREA
2276
HEIGHT
1552
20-Jul-2023
15:04
linh
pham

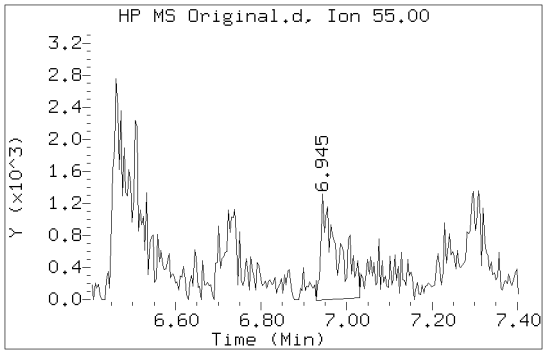


3-Methyl-1-butanol (123-51-3)

Reason Code:

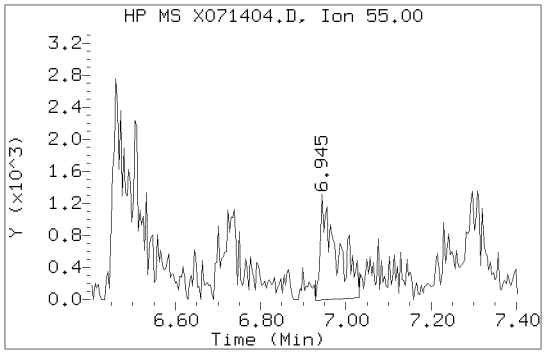
BEFORE

MASS
55
AREA
3623
HEIGHT
1323
20-Jul-2023
15:04
linh
pham



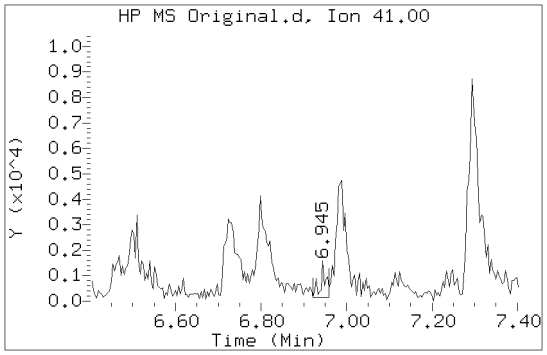
AFTER

MASS
55
AREA
3623
HEIGHT
1323
20-Jul-2023
15:04
linh
pham



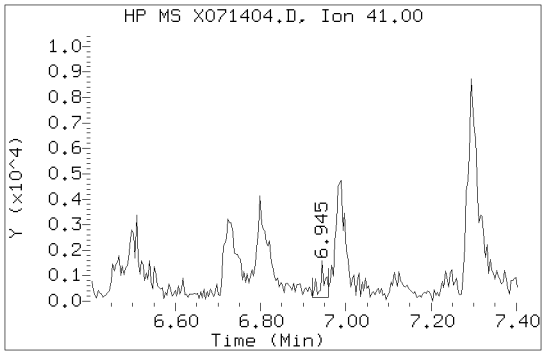
BEFORE

MASS
41
AREA
1239
HEIGHT
1440
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
1239
HEIGHT
1440
20-Jul-2023
15:04
linh
pham

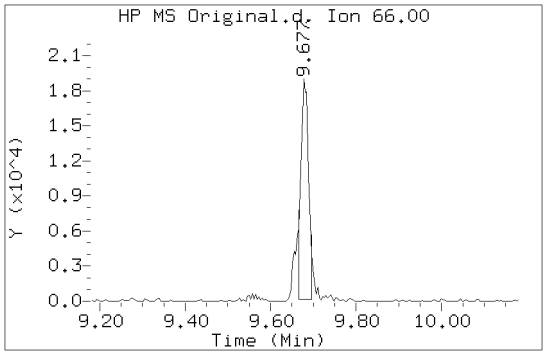


Dicyclopentadiene (77-73-6)

Reason Code:

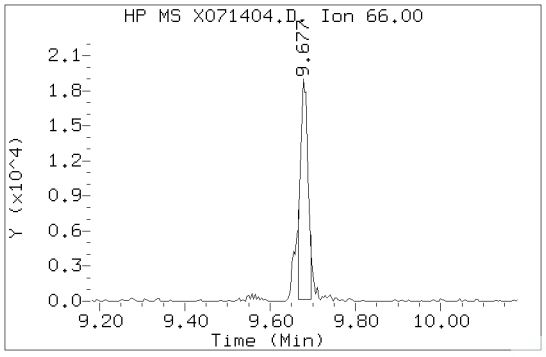
BEFORE

MASS
66
AREA
24319
HEIGHT
18861
20-Jul-2023
15:04
linh
pham



AFTER

MASS
66
AREA
24319
HEIGHT
18861
20-Jul-2023
15:04
linh
pham



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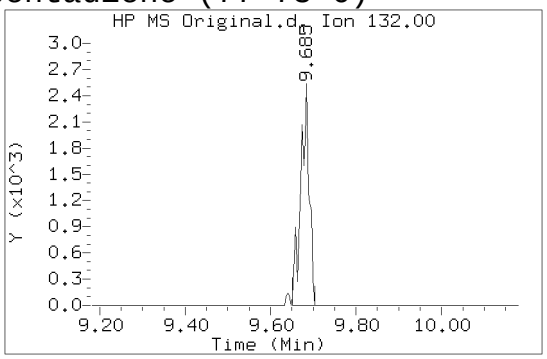
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

Dicyclopentadiene (77-73-6)

Reason Code:

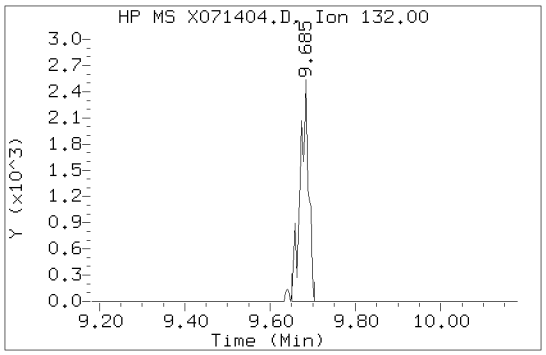
BEFORE

MASS
132
AREA
3579
HEIGHT
2538
20-Jul-2023
15:04
linh
pham



AFTER

MASS
132
AREA
3579
HEIGHT
2538
20-Jul-2023
15:04
linh
pham



Ethanol (64-17-5)

Reason Code:

BEFORE

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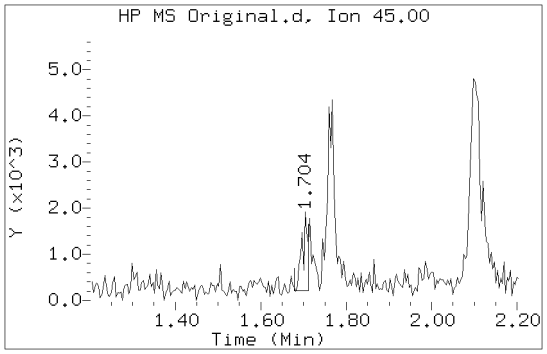
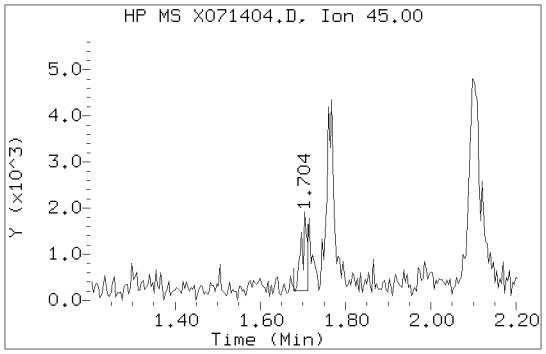
45
AREA
1613
HEIGHT
1703
20-Jul-2023
15:04
linh
pham



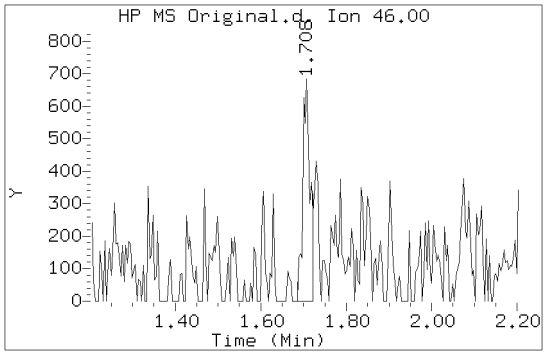
AFTER

MASS
45
AREA
1613
HEIGHT
1703
20-Jul-2023
15:04
linh
pham



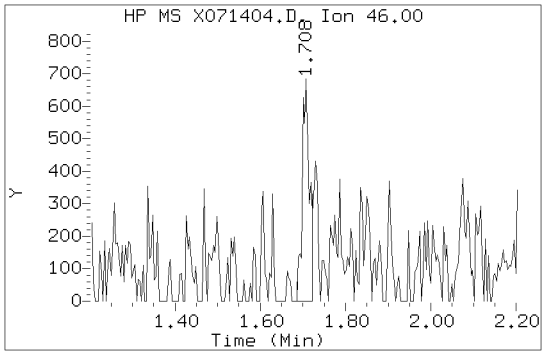
BEFORE

MASS
46
AREA
829
HEIGHT
684
20-Jul-2023
15:04
linh
pham



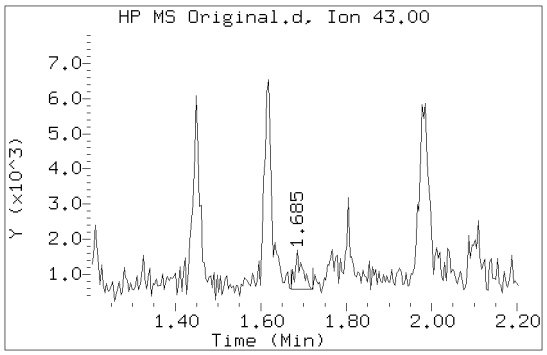
AFTER

MASS
46
AREA
829
HEIGHT
684
20-Jul-2023
15:04
linh
pham



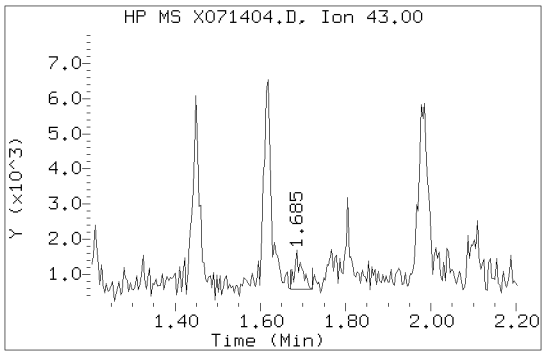
BEFORE

MASS
43
AREA
1337
HEIGHT
1114
20-Jul-2023
15:04
linh
pham



AFTER

MASS
43
AREA
1337
HEIGHT
1114
20-Jul-2023
15:04
linh
pham



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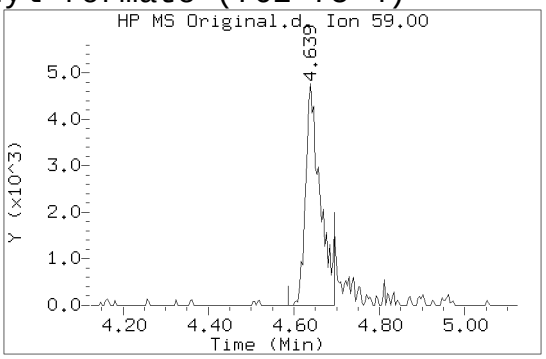
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

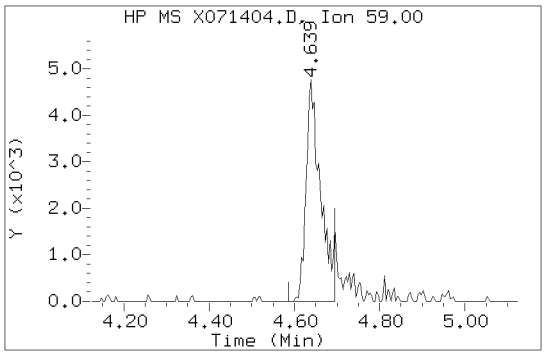
tert-Butyl formate (762-75-4)

Reason Code:

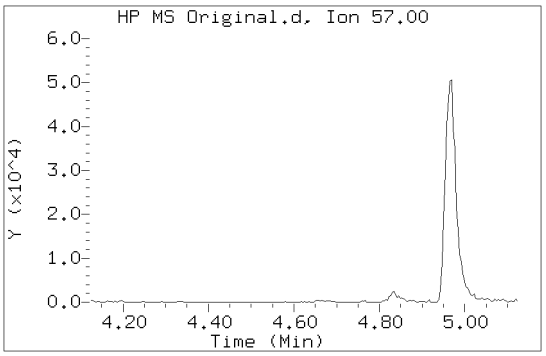
BEFORE
MASS
59
AREA
11427
HEIGHT
4768
20-Jul-2023
15:04
linh
pham



AFTER
MASS
59
AREA
11427
HEIGHT
4768
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
57
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER
MASS
57
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
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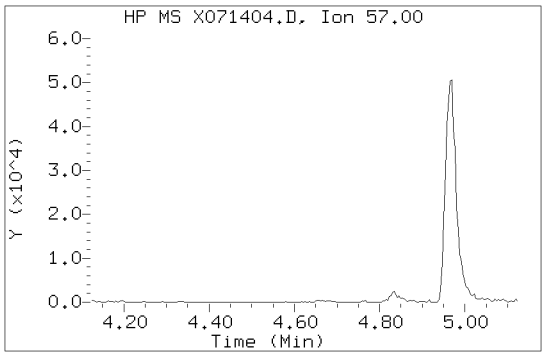
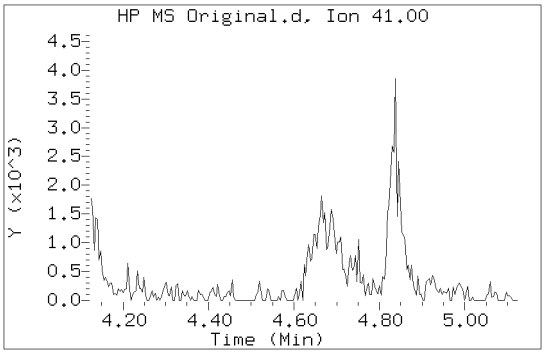
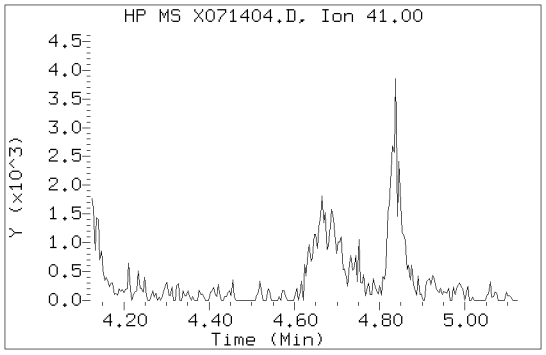


BEFORE
MASS
41
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



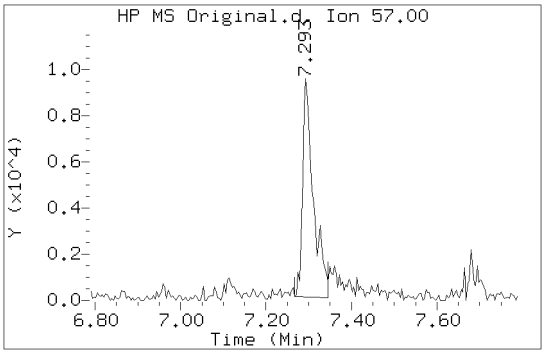
AFTER
MASS
41
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



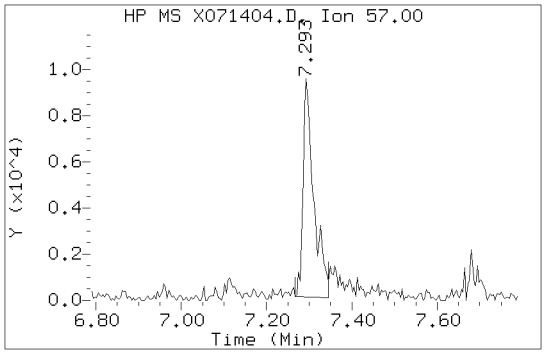
3,3-Dimethyl-1-butanol (624-95-3)

Reason Code:

BEFORE
MASS
57
AREA
16922
HEIGHT
9467
20-Jul-2023
15:04
linh
pham



AFTER
MASS
57
AREA
16922
HEIGHT
9467
20-Jul-2023
15:04
linh
pham



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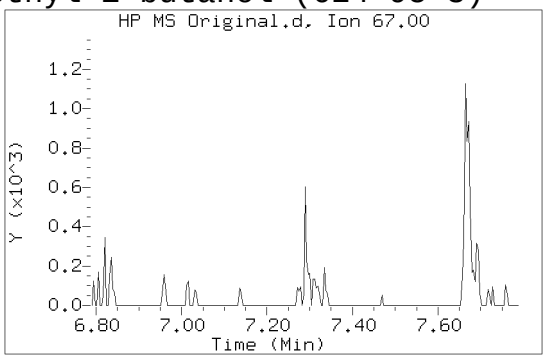
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

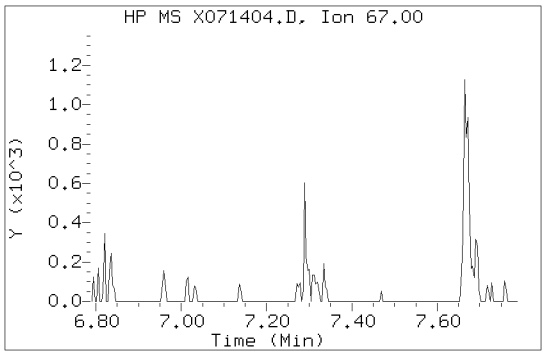
3,3-Dimethyl-1-butanol (624-95-3)

Reason Code:

BEFORE
MASS
67
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER
MASS
67
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
56
AREA
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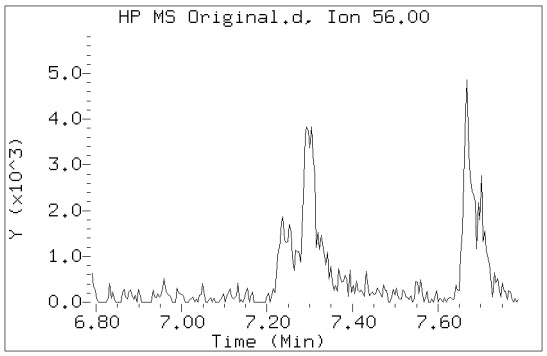
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER
MASS
56
AREA
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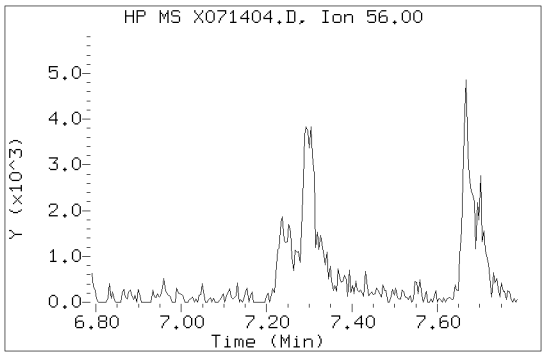
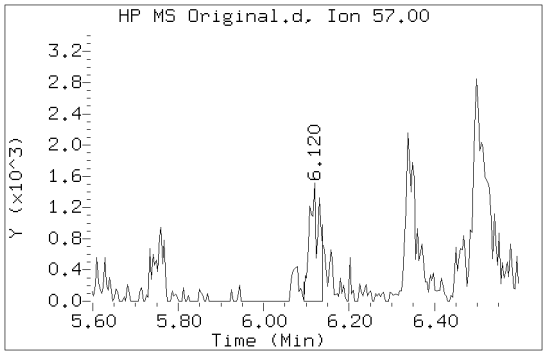
HEIGHT
0
20-Jul-2023
15:04
linh
pham



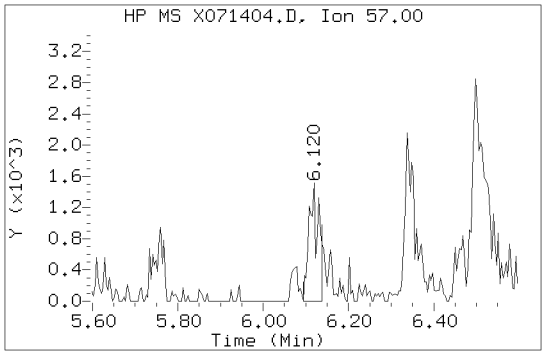
Epichlorohydrin (106-89-8)

Reason Code:

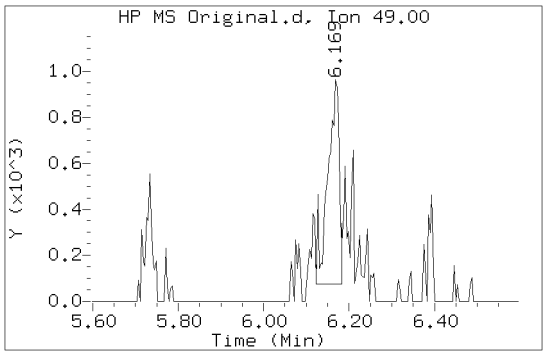
BEFORE
MASS
57
AREA
2383
HEIGHT
1514
20-Jul-2023
15:04
linh
pham



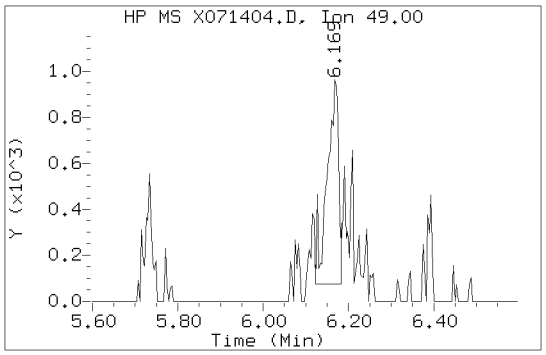
AFTER
MASS
57
AREA
2383
HEIGHT
1514
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
49
AREA
1633
HEIGHT
889
20-Jul-2023
15:04
linh
pham



AFTER
MASS
49
AREA
1633
HEIGHT
889
20-Jul-2023
15:04
linh
pham



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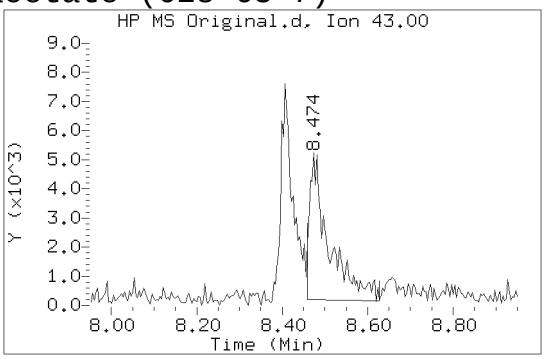
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

n-Amyl acetate (628-63-7)

Reason Code:

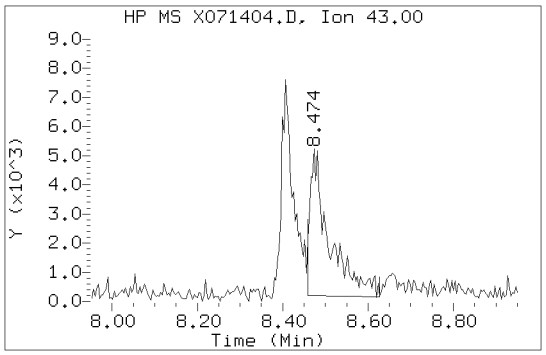
BEFORE

MASS
43
AREA
15950
HEIGHT
5045
20-Jul-2023
15:04
linh
pham



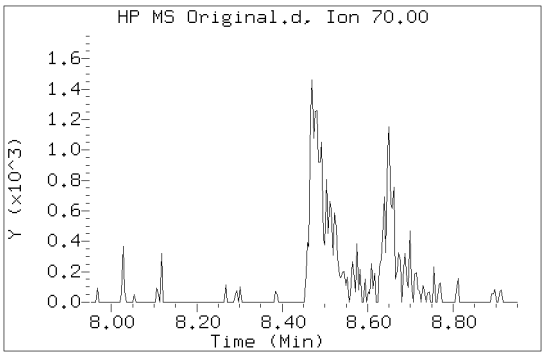
AFTER

MASS
43
AREA
15950
HEIGHT
5045
20-Jul-2023
15:04
linh
pham



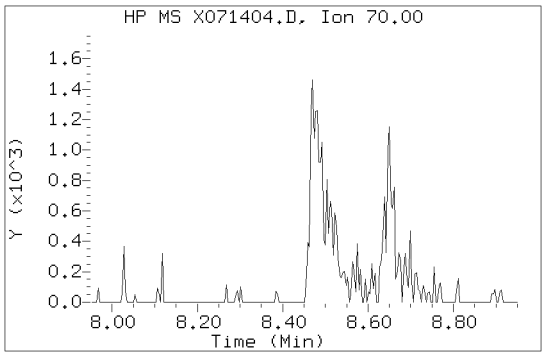
BEFORE

MASS
70
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



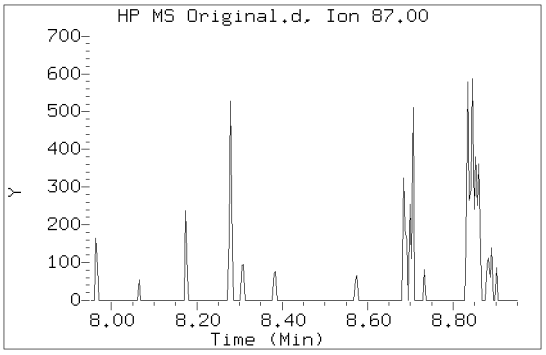
AFTER

MASS
70
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



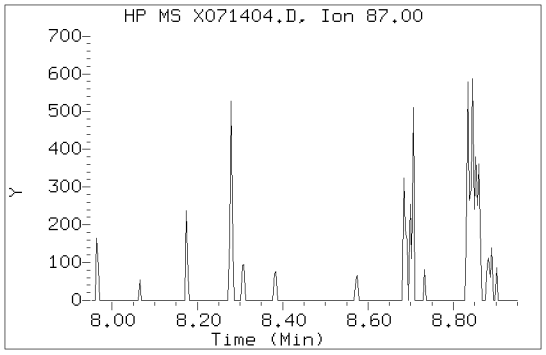
BEFORE

MASS
87
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
87
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

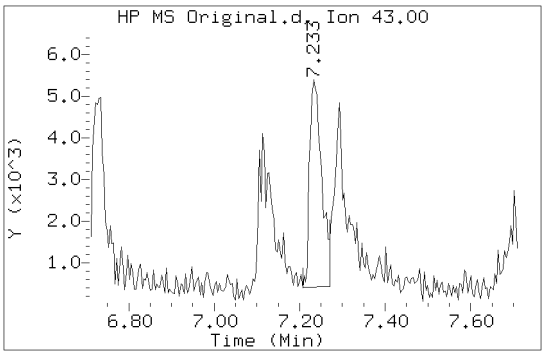


n-Butyl acetate (123-86-4)

Reason Code:

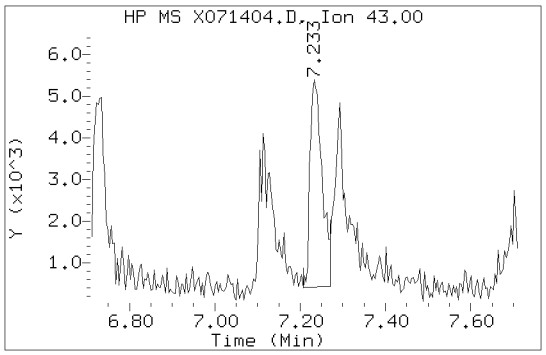
BEFORE

MASS
43
AREA
9795
HEIGHT
4977
20-Jul-2023
15:04
linh
pham



AFTER

MASS
43
AREA
9795
HEIGHT
4977
20-Jul-2023
15:04
linh
pham



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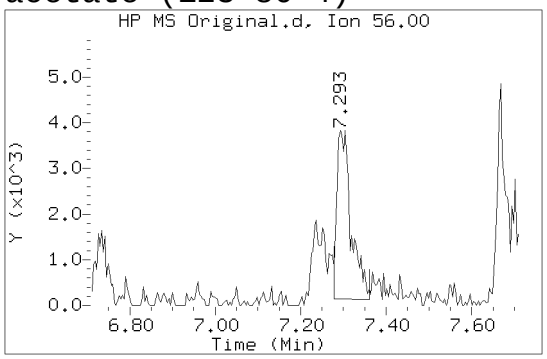
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

n-Butyl acetate (123-86-4)

Reason Code:

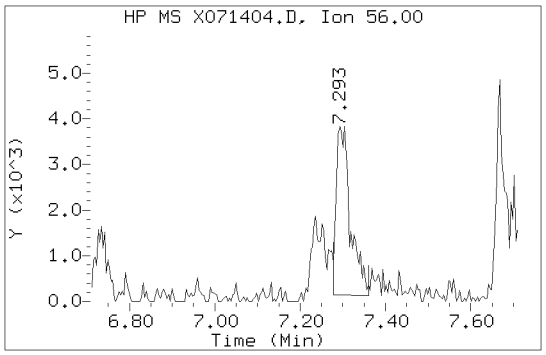
BEFORE

MASS
56
AREA
8623
HEIGHT
3689
20-Jul-2023
15:04
linh
pham



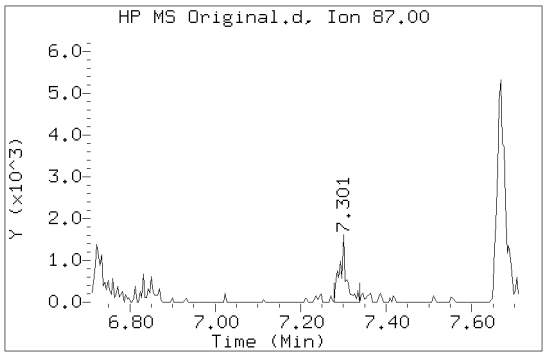
AFTER

MASS
56
AREA
8623
HEIGHT
3689
20-Jul-2023
15:04
linh
pham



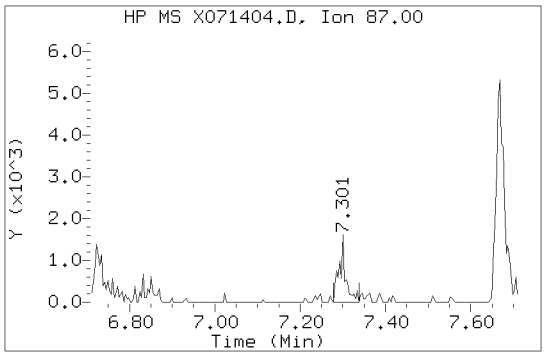
BEFORE

MASS
87
AREA
1682
HEIGHT
1613
20-Jul-2023
15:04
linh
pham



AFTER

MASS
87
AREA
1682
HEIGHT
1613
20-Jul-2023
15:04
linh
pham

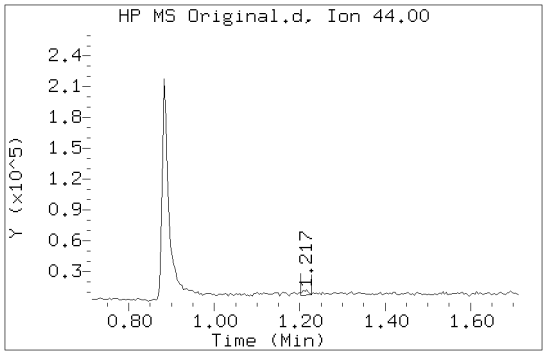


Acetaldehyde (75-07-0)

Reason Code:

BEFORE

MASS
44
AREA
5117
HEIGHT
4908
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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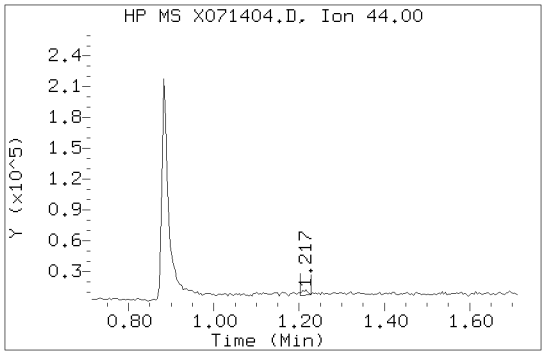
AREA
5117
HEIGHT
4908
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
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AREA
3201
HEIGHT
2038
20-Jul-2023
15:04
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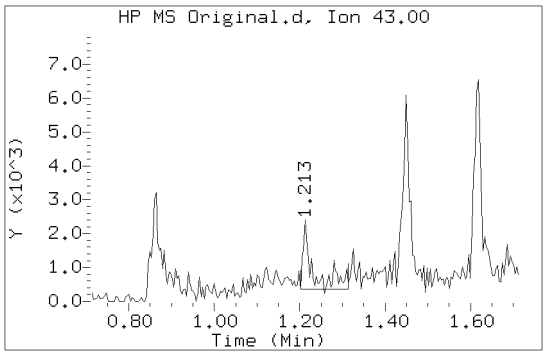
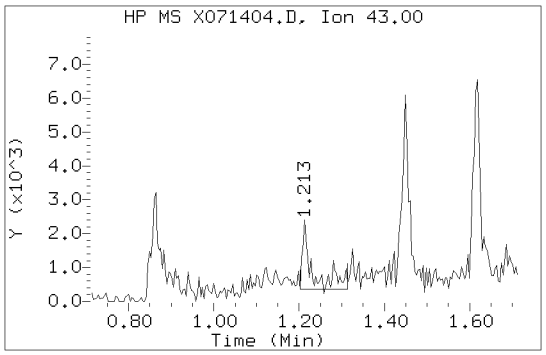


AFTER

MASS
43
AREA
3201
HEIGHT
2038
20-Jul-2023
15:04
linh
pham



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Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

Acetaldehyde (75-07-0)

Reason Code:

BEFORE

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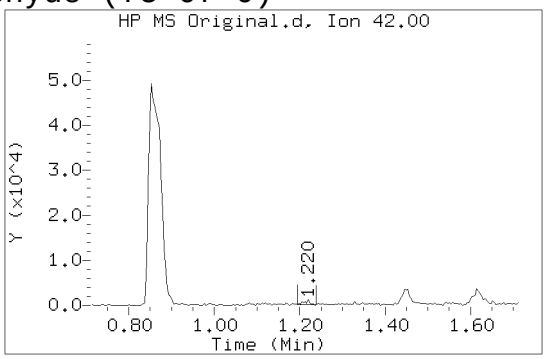
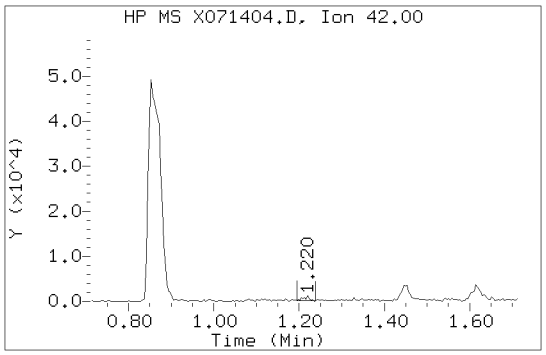
1038
HEIGHT
1152
20-Jul-2023
15:04
linh
pham



AFTER

MASS
42
AREA
1038
HEIGHT
1152
20-Jul-2023
15:04
linh
pham

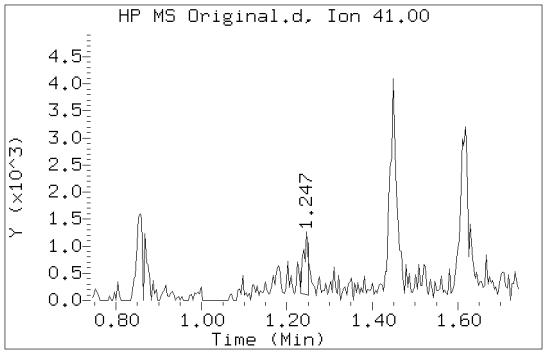


Isobutylene (115-11-7)

Reason Code:

BEFORE

MASS
41
AREA
875
HEIGHT
1172
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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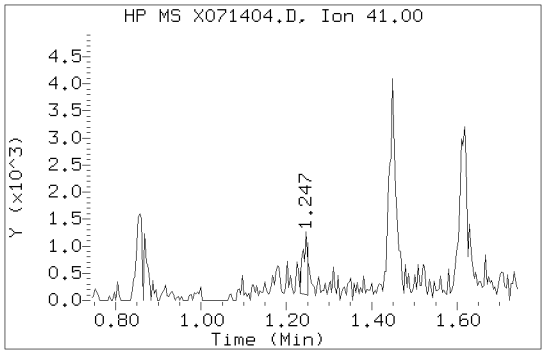
AREA
875
HEIGHT
1172
20-Jul-2023
15:04
linh
pham



BEFORE

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AREA
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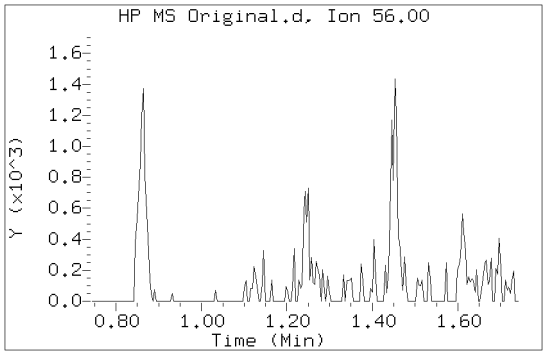
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
56
AREA
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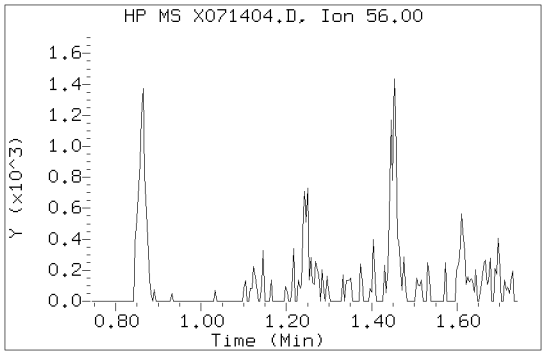
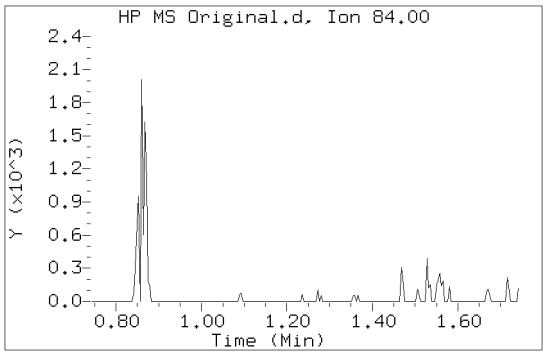
HEIGHT
0
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
84
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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AREA
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HEIGHT
0
20-Jul-2023
15:04
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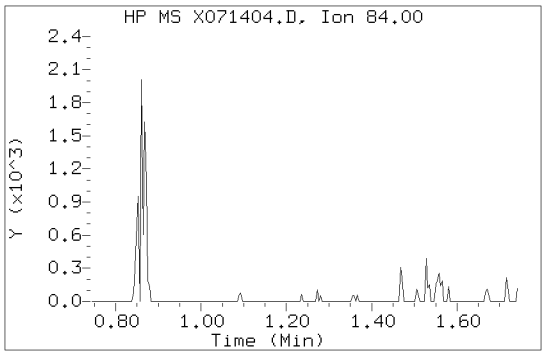
pham



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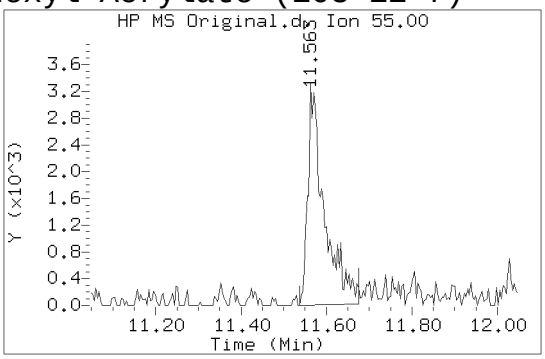
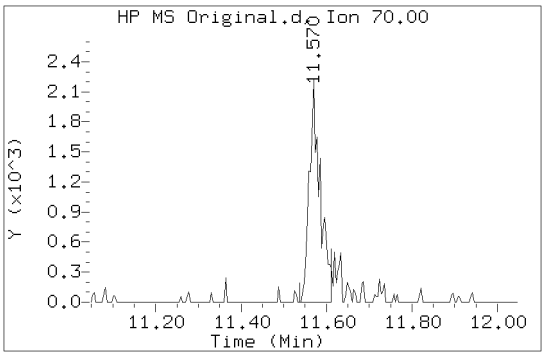
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

2-Ethylhexyl Acrylate (103-11-7)

BEFORE
MASS
55
AREA
8780
HEIGHT
3308
20-Jul-2023
15:04
linh
pham

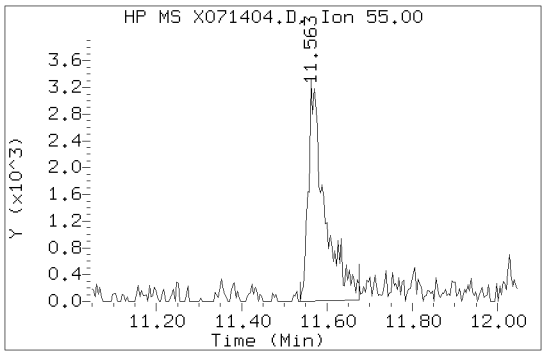


BEFORE
MASS
70
AREA
3926
HEIGHT
2219
20-Jul-2023
15:04
linh
pham

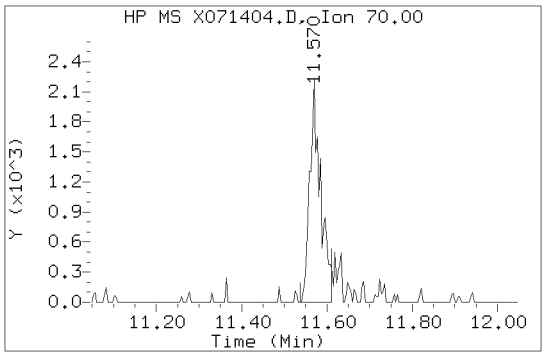


Reason Code:

AFTER
MASS
55
AREA
8780
HEIGHT
3308
20-Jul-2023
15:04
linh
pham

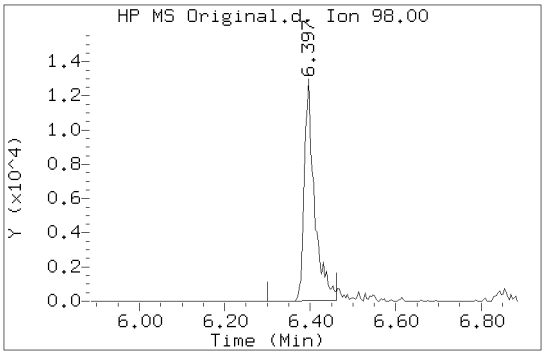


AFTER
MASS
70
AREA
3926
HEIGHT
2219
20-Jul-2023
15:04
linh
pham

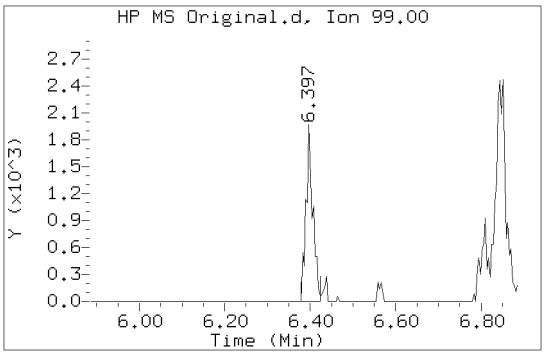


Toluene-d8 (2037-26-5)

BEFORE
MASS
98
AREA
21847
HEIGHT
12976
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
99
AREA
2184
HEIGHT
1968
20-Jul-2023
15:04
linh
pham



Reason Code:

AFTER
MASS
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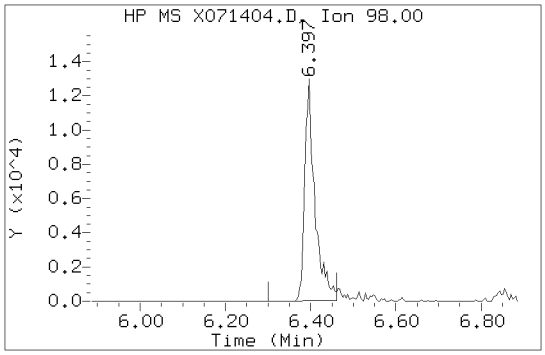
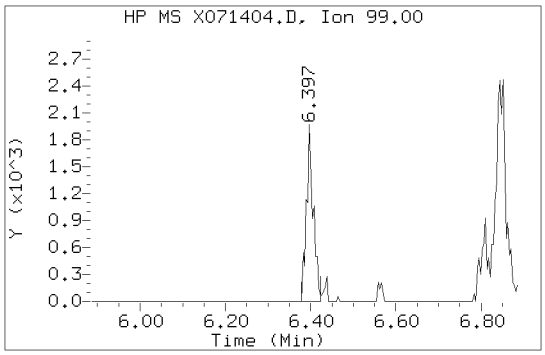
AREA
21847
HEIGHT
12976
20-Jul-2023
15:04
linh
pham



AFTER
MASS
99
AREA
2184
HEIGHT
1968
20-Jul-2023
15:04
linh
pham



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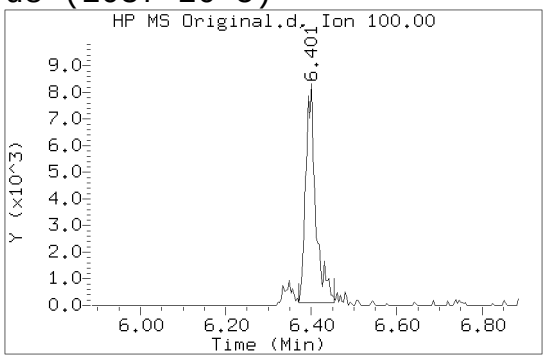
Inj Date : 14-JUL-2023 13:02
InstruID : voa6.i
LabSampID : VSTD001

Toluene-d8 (2037-26-5)

Reason Code:

BEFORE

MASS
100
AREA
13429
HEIGHT
8225
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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8225
20-Jul-2023
15:04
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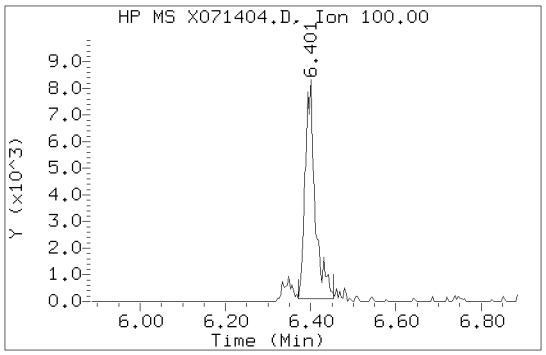
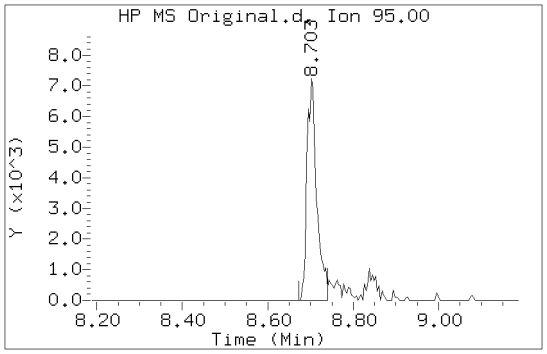


4-Bromofluorobenzene (460-00-4)

Reason Code:

BEFORE

MASS
95
AREA
11517
HEIGHT
7234
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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AREA
11517
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7234
20-Jul-2023
15:04
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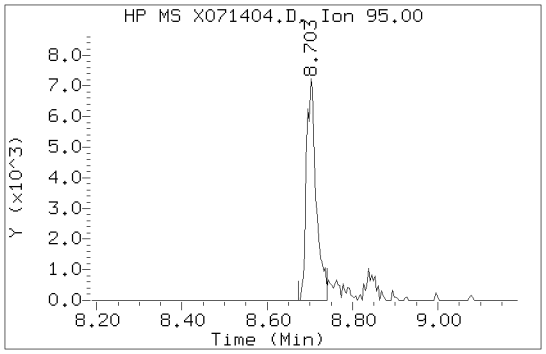
pham



BEFORE

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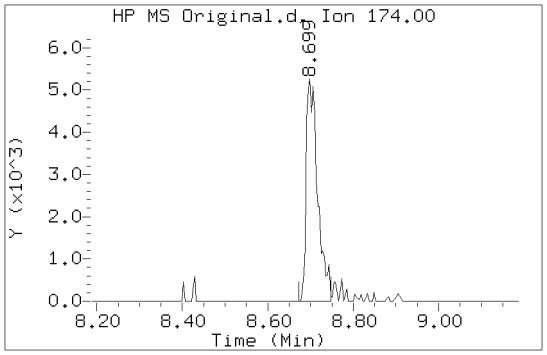
5262
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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AREA
9804
HEIGHT
5262
20-Jul-2023
15:04
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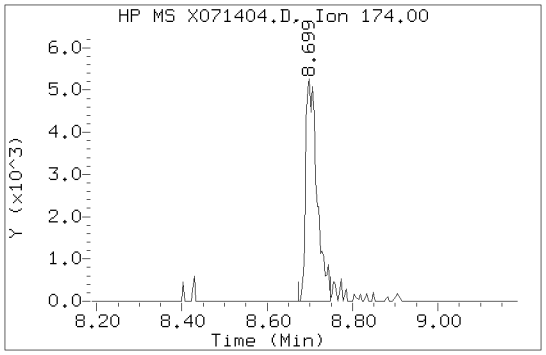
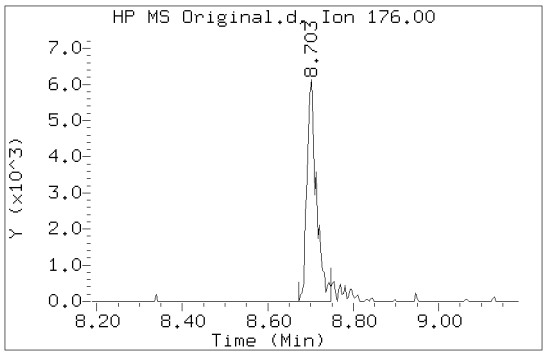
pham



BEFORE

MASS
176
AREA
9576
HEIGHT
6132
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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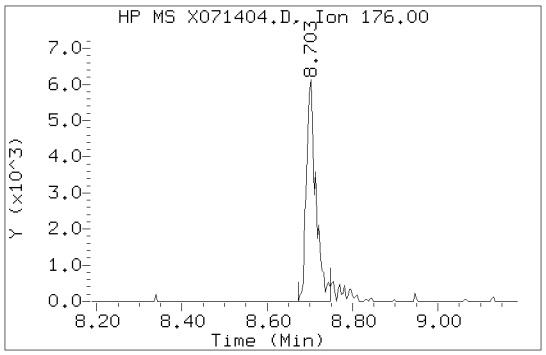
AREA
9576
HEIGHT
6132
20-Jul-2023
15:04
linh
pham



ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071405.D
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Inj Date : 14-JUL-2023 13:23
Operator : PC Inst ID: voa6.i
Smp Info : VSTD002;VSTD002;1;4;
Misc Info : V6;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\8260W.m
Meth Date : 20-Jul-2023 15:05 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 13:02 Cal File: X071404.D
Als bottle: 6 Calibration Sample, Level: 4
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	4.181	4.181	(1.000)	523249	50.0000	
2	Dichlorodifluoromethane	85	0.976	0.976	(0.234)	9210	2.00000	2.77(M)
3	Chloromethane	50	1.085	1.085	(0.260)	17566	2.00000	2.22
4	Propionitrile	54	3.683	3.683	(0.881)	20667	20.0000	19.93(aM)
5	Vinyl Chloride	62	1.145	1.145	(0.274)	15109	2.00000	2.23
6	Bromomethane	94	1.347	1.347	(0.322)	5769	2.00000	2.05(M)
7	Chloroethane	64	1.404	1.404	(0.336)	8482	2.00000	2.19(M)
8	Trichlorofluoromethane	101	1.561	1.561	(0.373)	15419	2.00000	2.24
9	Acrolein	56	1.861	1.861	(0.445)	917	4.00000	5.70(aMH)
10	Acetone	43	1.977	1.977	(0.473)	15631	4.00000	3.03
11	1,1-Dichloroethene	96	1.921	1.921	(0.459)	8527	2.00000	2.22
12	Isobutyl Alcohol	43	4.684	4.684	(1.120)	37832	40.0000	38.14(aM)
13	Acetonitrile	39	2.202	2.202	(0.527)	15528	20.0000	21.16(a)
14	Allyl Chloride	41	2.202	2.202	(0.527)	33926	2.00000	1.97(a)
15	Iodomethane	142	2.030	2.030	(0.485)	11682	4.00000	6.08(M)
16	Acrylonitrile	53	2.547	2.547	(0.609)	10541	4.00000	4.13
17	Methylene Chloride	84	2.303	2.303	(0.551)	11880	2.00000	1.28(M)
18	Methyl tert-butyl ether	73	2.543	2.543	(0.608)	30252	2.00000	2.12
19	Carbon Disulfide	76	2.075	2.075	(0.496)	52986	4.00000	4.39
20	trans-1,2-Dichloroethene	96	2.532	2.532	(0.606)	9515	2.00000	2.14

21 Vinyl Acetate	43	3.004	3.004 (0.719)	75193	4.00000	4.10
22 1,1-Dichloroethane	63	2.922	2.922 (0.699)	21647	2.00000	2.22

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	23 Chloroprene	53	1.771	1.771	(0.424)	4560	2.00000	1.93(aM)
	24 2-Butanone	43	3.672	3.672	(0.878)	10454	4.00000	3.75(M)
	25 Methacrylonitrile	41	3.870	3.870	(0.926)	12946	2.00000	1.91(a)
	26 2,2-Dichloropropane	77	3.514	3.514	(0.840)	15882	2.00000	2.30
	27 cis-1,2-Dichloroethene	96	3.537	3.537	(0.846)	11533	2.00000	2.04(M)
	28 Chloroform	83	3.915	3.915	(0.936)	21885	2.00000	2.19
	29 Bromochloromethane	128	3.799	3.799	(0.909)	7550	2.00000	2.38
$	30 Dibromofluoromethane	113	4.106	4.106	(0.982)	10131	2.00000	1.38
	31 1,1,1-Trichloroethane	97	4.088	4.088	(0.978)	16000	2.00000	2.08
	32 1,1-Dichloropropene	75	4.283	4.283	(0.863)	13616	2.00000	2.05
	33 1,2-Dichloroethane	62	4.564	4.564	(0.919)	16880	2.00000	1.89(M)
	34 Carbon Tetrachloride	117	4.264	4.264	(0.859)	13047	2.00000	1.95(M)
$	35 1,2-Dichloroethane-d4	65	4.477	4.477	(1.071)	14667	2.00000	1.85
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	811220	50.0000	
	37 Benzene	78	4.519	4.519	(0.910)	39692	2.00000	2.04
	38 Trichloroethene	130	5.208	5.208	(1.049)	12354	2.00000	2.25(a)
	39 Bromodichloromethane	83	5.733	5.733	(1.155)	14668	2.00000	1.97(a)
	40 Methyl Methacrylate	41	5.625	5.625	(1.345)	12770	2.00000	2.02(aM)
	41 2-Chloroethylvinyl ether	63	6.059	6.059	(1.220)	8400	4.00000	3.70(a)
	42 1,2-Dichloropropane	63	5.441	5.441	(1.096)	12678	2.00000	2.03(aM)
	43 2-Nitropropane	43	5.973	5.973	(1.428)	4635	2.00000	2.22(a)
	44 Dibromomethane	93	5.557	5.557	(1.119)	7713	2.00000	2.18(a)
	45 4-Methyl-2-Pentanone	43	6.333	6.333	(0.826)	29112	4.00000	3.99(a)
	46 cis-1,3-Dichloropropene	75	6.164	6.164	(1.242)	17329	2.00000	2.02(a)
*	47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	740616	50.0000	
$	48 Toluene-d8	98	6.389	6.389	(0.833)	41058	2.00000	2.15(aM)
	49 Ethyl Methacrylate	69	6.723	6.723	(1.354)	11361	2.00000	2.13(a)
	50 Toluene	91	6.449	6.449	(0.841)	40789	2.00000	2.04(a)
	51 trans-1,3-Dichloropropene	75	6.689	6.689	(1.347)	14549	2.00000	2.02(a)
	52 2-Hexanone	43	7.105	7.105	(0.927)	19503	4.00000	4.07(a)
	53 1,1,2-Trichloroethane	83	6.843	6.843	(0.892)	9040	2.00000	2.13(a)
	54 1,3-Dichloropropane	76	6.985	6.985	(0.911)	17344	2.00000	2.00(a)
	55 Dibromochloromethane	129	7.180	7.180	(0.936)	12160	2.00000	1.99(a)
	56 Tetrachloroethene	164	6.929	6.929	(0.904)	9711	2.00000	2.35(aM)
	57 1,2-Dibromoethane	107	7.263	7.263	(0.947)	9815	2.00000	2.03(a)
	58 1-Chlorohexane	55	7.694	7.694	(1.550)	14217	2.00000	2.18(a)
	59 Chlorobenzene	112	7.694	7.694	(1.003)	28612	2.00000	2.05(a)
	60 1,1,1,2-Tetrachloroethane	131	7.773	7.773	(1.014)	10835	2.00000	1.98(a)
	61 Ethylbenzene	106	7.799	7.799	(1.017)	14708	2.00000	2.10(a)
	62 m,p-Xylenes	106	7.904	7.904	(1.031)	39231	4.00000	4.47(a)
	63 o-Xylene	106	8.245	8.245	(1.075)	17205	2.00000	2.07(a)
	64 Styrene	104	8.275	8.275	(1.079)	28504	2.00000	1.96(a)
	66 Bromoform	173	8.414	8.414	(1.097)	8672	2.00000	2.21(Ta)
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	48187	2.00000	2.25(a)
	68 1,1,2,2-Tetrachloroethane	83	8.841	8.841	(0.915)	14352	2.00000	2.16(aM)
$	69 4-Bromofluorobenzene	95	8.695	8.695	(1.134)	17835	2.00000	2.01(a)
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	394737	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	10578	2.00000	2.01(aM)
	72 trans-1,4-Dichloro-2-butene	53	8.901	8.901	(1.161)	4279	2.00000	1.89(aM)
	73 n-Propylbenzene	91	8.916	8.916	(0.923)	50047	2.00000	2.09(a)
	74 Bromobenzene	156	8.815	8.815	(0.912)	12961	2.00000	2.09(a)
	75 1,3,5-Trimethylbenzene	105	9.070	9.070	(0.939)	37798	2.00000	2.11(a)

76	2-Chlorotoluene	91	8.980	8.980 (0.929)	34081	2.00000	2.11(a)
77	4-Chlorotoluene	91	9.077	9.077 (0.939)	37510	2.00000	2.12(a)

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071405.D Page 3
Report Date: 20-Jul-2023 15:05

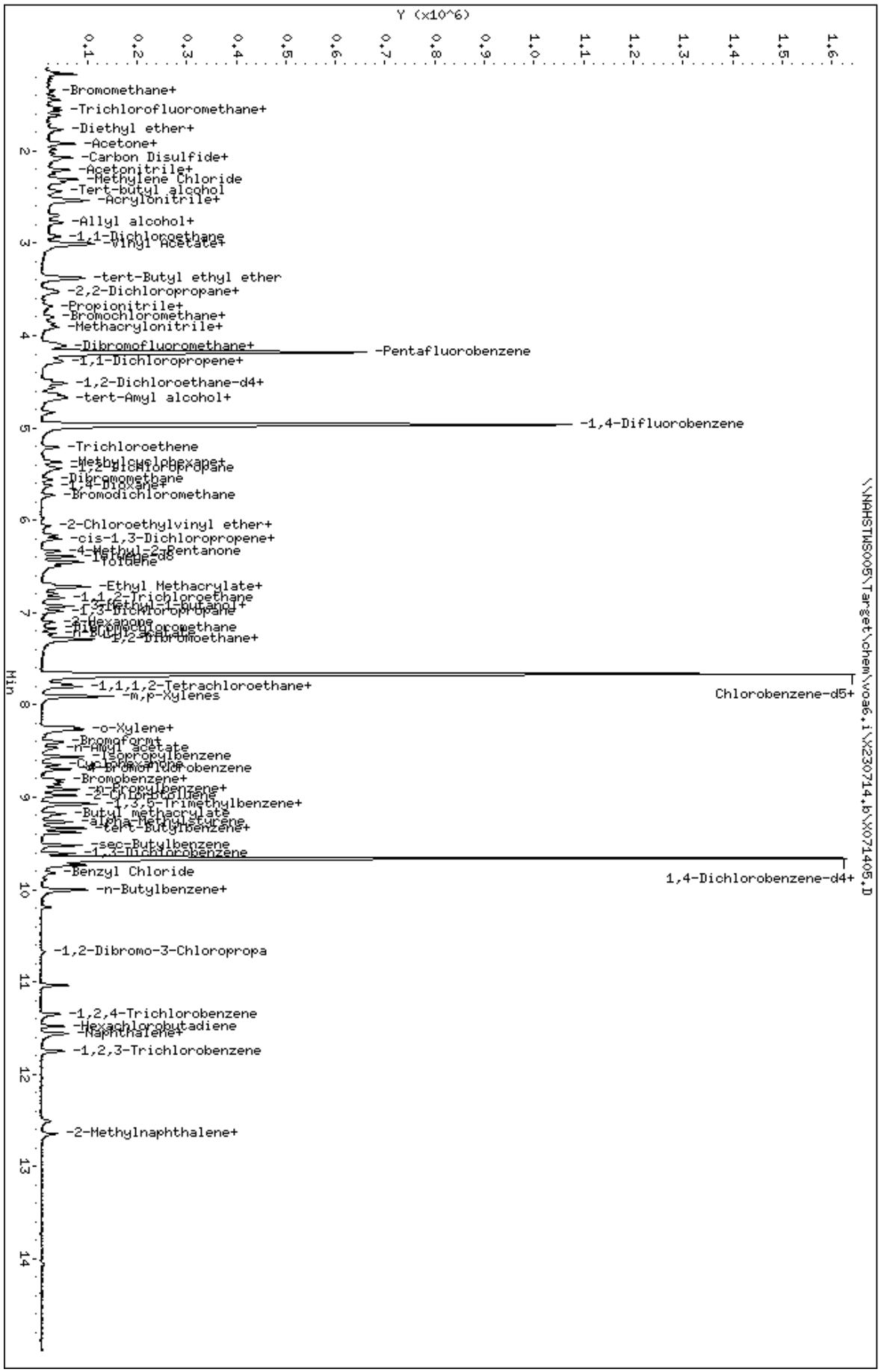
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
78	tert-Butylbenzene	119	9.336	9.336	(0.966)	34859	2.00000	2.27(a)
79	1,2,4-Trimethylbenzene	105	9.381	9.381	(0.971)	38346	2.00000	2.13(a)
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	45694	2.00000	2.23(a)
82	p-Isopropyltoluene	119	9.647	9.647	(0.998)	39231	2.00000	2.10(a)
83	1,3-Dichlorobenzene	146	9.609	9.609	(0.995)	22178	2.00000	2.06(a)
84	1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	26773	2.00000	2.27(a)
86	Benzyl Chloride	91	9.823	9.823	(1.281)	17851	2.00000	3.69(aM)
87	n-Butylbenzene	91	10.003	10.003	(1.035)	31075	2.00000	1.98(a)
88	1,2-Dichlorobenzene	146	9.999	9.999	(1.035)	21840	2.00000	2.06(a)
89	1,2-Dibromo-3-Chloropropane	155	10.678	10.678	(1.105)	1953	2.00000	2.84(a)
90	1,2,4-Trichlorobenzene	180	11.360	11.360	(1.176)	14997	2.00000	2.06(a)
91	Hexachlorobutadiene	225	11.476	11.476	(1.188)	6844	2.00000	4.30(aM)
92	Naphthalene	128	11.559	11.559	(1.196)	35806	2.00000	1.99(aM)
93	1,2,3-Trichlorobenzene	180	11.742	11.742	(1.215)	14737	2.00000	2.16(a)
146	Methyl acetate	43	2.247	2.247	(0.537)	9491	2.00000	2.03(aM)
138	Freon TF	101	1.917	1.917	(0.459)	7195	2.00000	1.83(aM)
141	Cyclohexane	56	4.121	4.121	(0.986)	19462	2.00000	2.14(aH)
142	Tetrahydrofuran	42	3.866	3.866	(0.925)	5657	4.00000	4.20(a)
147	Methylcyclohexane	55	5.370	5.370	(1.082)	31142	2.00000	1.81(aM)
135	1,4-Dioxane	88	5.617	5.617	(1.343)	2323	40.0000	37.36(M)
132	n-Butanol	56	5.362	5.362	(1.282)	7443	40.0000	42.73(aM)
131	Methyl Acrylate	55	3.743	3.743	(0.895)	13406	2.00000	1.88(aM)
133	Ethyl Acrylate	55	5.370	5.370	(1.284)	31450	2.00000	1.81(M)
136	n-Hexane	57	2.768	2.768	(0.662)	11984	2.00000	1.88(aM)
139	Diethyl ether	59	1.760	1.760	(0.421)	10716	2.00000	2.19(a)
148	Tert-butyl alcohol	59	2.442	2.442	(0.584)	29280	40.0000	44.33(M)
149	Isopropyl alcohol	45	2.097	2.097	(0.502)	17366	40.0000	42.37(T)
156	Diisopropyl ether	45	3.008	3.008	(0.719)	43282	2.00000	2.00(Ta)
166	1,2,3-Trimethylbenzene	105	9.733	9.733	(1.007)	31731	2.00000	1.73(a)
167	Ethanol	45	1.711	1.711	(0.409)	3219	40.0000	26.14(M)
172	tert-Butyl formate	59	4.635	4.635	(1.108)	23857	4.00000	4.26(aM)
173	3,3-Dimethyl-1-butanol	57	7.293	7.293	(0.951)	33143	40.0000	41.61
174	tert-Amyl methyl ether	73	4.672	4.672	(1.117)	31345	2.00000	1.82(aM)
175	tert-Butyl ethyl ether	59	3.383	3.383	(0.809)	42907	2.00000	1.93(a)
176	tert-Amyl alcohol	59	4.635	4.635	(1.108)	29185	40.0000	51.05
151	4-Methyl-2-pentanol	45	6.723	6.723	(1.354)	72210	40.0000	41.53(M)
180	1-Methylnaphthalene	142	12.649	12.649	(1.309)	14828	2.00000	(a)
140	1,3-Butadiene	54	1.167	1.167	(0.279)	15351	2.00000	2.28(aM)
152	Amyl alcohol	42	6.933	6.933	(0.904)	8579	40.0000	40.28(M)
158	Dichlorofluoromethane	67	1.535	1.535	(0.367)	17587	2.00000	2.08
159	Propylene oxide	43	1.805	1.805	(0.432)	2798	4.00000	4.35(a)
161	3-Methyl-1-butanol	55	6.929	6.929	(0.904)	5263	40.0000	28.86
162	Butyl acrylate	55	8.267	8.267	(1.078)	25518	2.00000	1.81(a)
163	Butyl methacrylate	41	9.178	9.178	(0.950)	19072	2.00000	2.01(a)
164	Dicyclopentadiene	66	9.681	9.681	(1.002)	44874	2.00000	1.97(a)
182	Epichlorohydrin	57	6.112	6.112	(1.231)	4808	8.00000	7.93
M 94	1,2-Dichloroethylene (total)	96				21048	4.00000	(a)
130	Ethyl Acetate	43	3.683	3.683	(0.881)	15481	2.00000	1.99(TaM)
134	Cyclohexanone	55	8.646	8.646	(0.895)	15113	40.0000	43.00(a)
185	Isoprene	39	1.771	1.771	(0.424)	3408	2.00000	1.97(aM)
188	Isopropyl acetate	43	4.684	4.684	(0.943)	48167	2.00000	2.25(a)
187	n-Amyl acetate	43	8.462	8.462	(1.104)	26886	2.00000	1.98(aM)

189 n-Butyl acetate	43	7.225	7.225 (0.942)	20825	2.00000	1.83(aM)
150 Allyl alcohol	57	2.768	2.768 (0.662)	14314	40.0000	46.26

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
194 Acetaldehyde	44	1.212	1.212	(0.290)	8114	8.00000	(aM)
195 Methyl Amyl Ketone	43	8.391	8.391	(1.094)	28766	2.00000	1.85(a)
200 Dimethyl Disulfide	94	6.202	6.202	(0.809)	17864	2.00000	1.78(a)
202 Isobutylene	41	1.246	1.246	(0.298)	1654	2.00000	1.91(aM)
205 2-Ethylhexyl Acrylate	55	11.559	11.559	(1.196)	18101	2.00000	1.79(aM)

QC Flag Legend

T - Target compound detected outside RT window.
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.



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Column phase: DB624

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

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Inj Date : 14-JUL-2023 13:23
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LabSampID : VSTD002

Dichlorodifluoromethane (75-71-8)

Reason Code:

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20-Jul-2023
15:04
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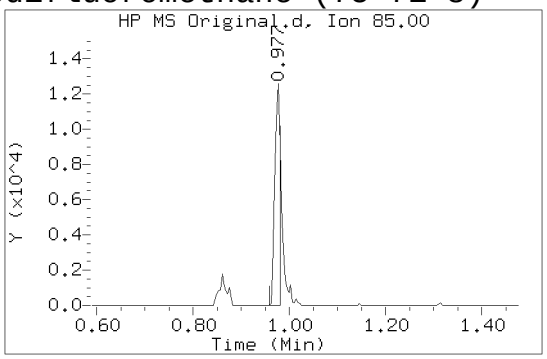

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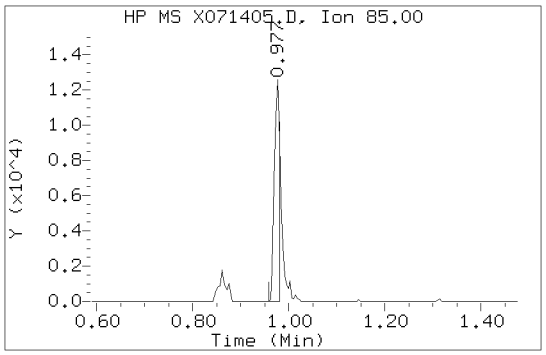

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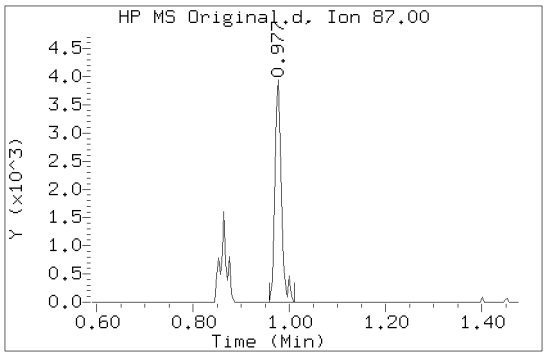

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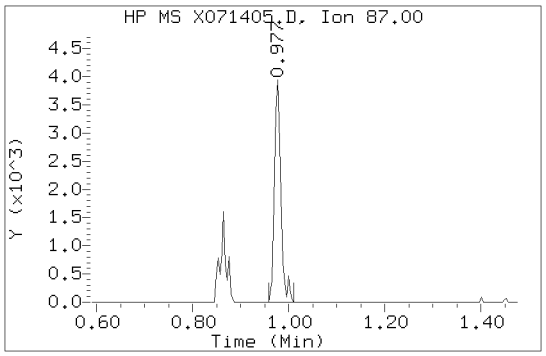

Bromomethane (74-83-9)

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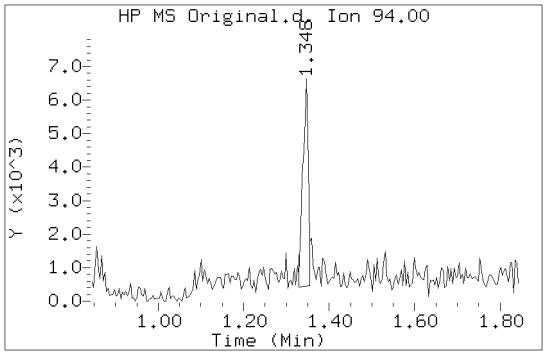

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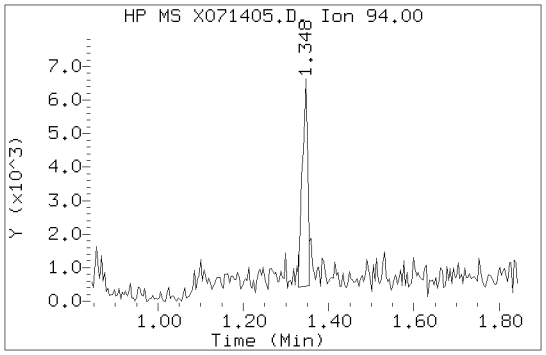

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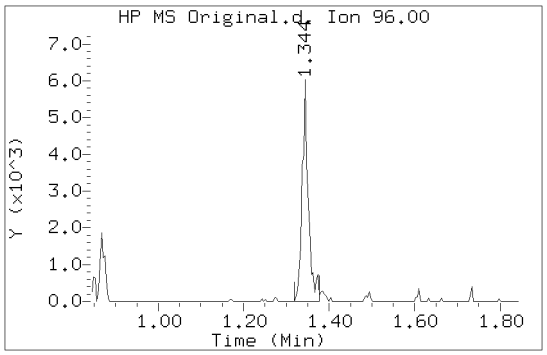

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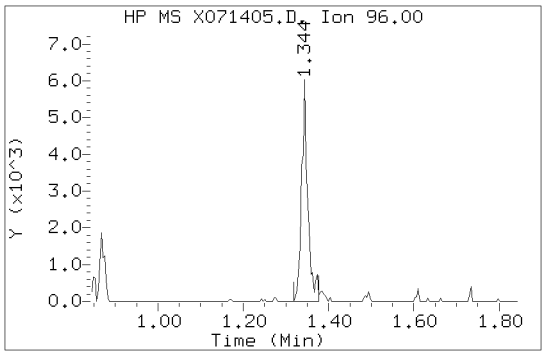

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LabSampID : VSTD002

Chloroethane (75-00-3)

Reason Code:

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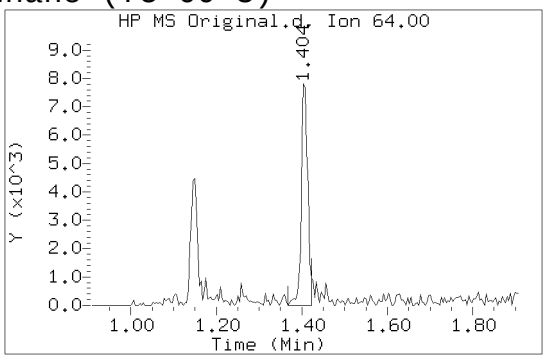

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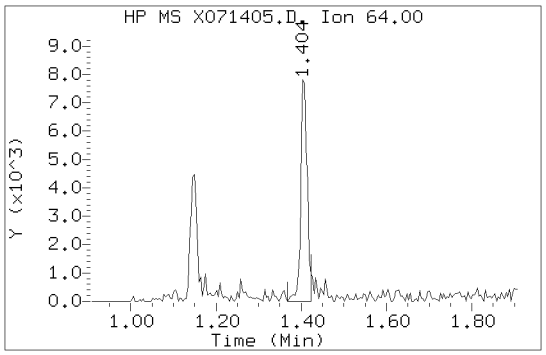

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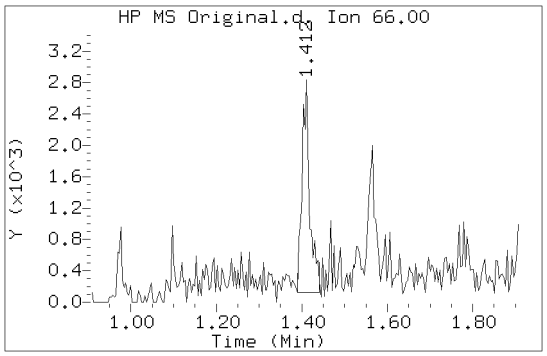

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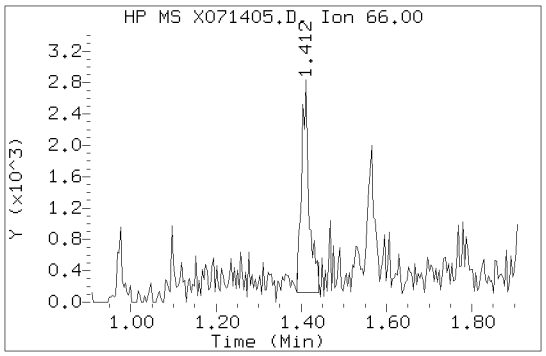

Iodomethane (74-88-4)

Reason Code:

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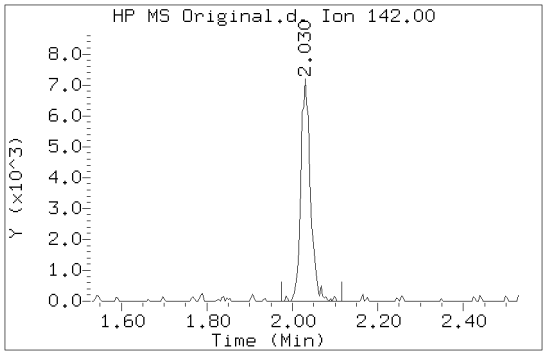

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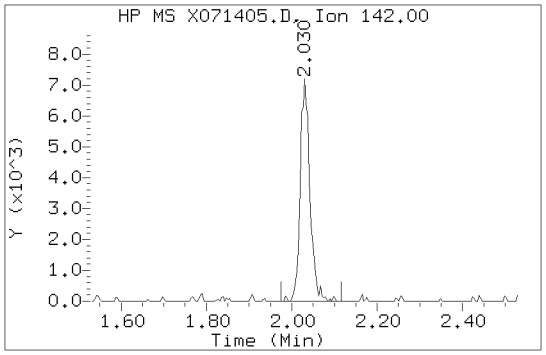

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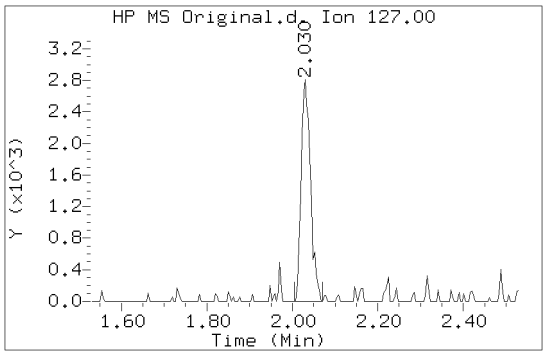

AFTER
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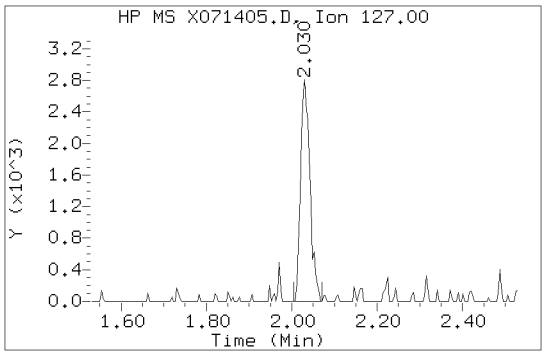

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LabSampID : VSTD002

Iodomethane (74-88-4)

Reason Code:

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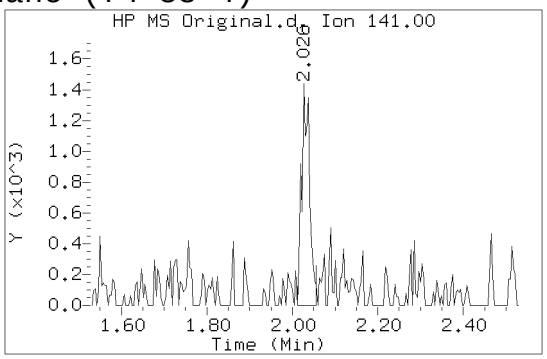

AFTER

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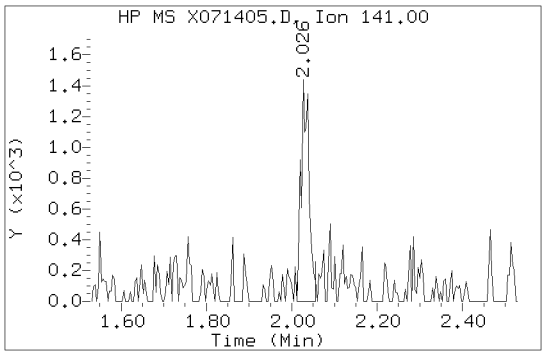

Methylene Chloride (75-09-2)

Reason Code:

BEFORE

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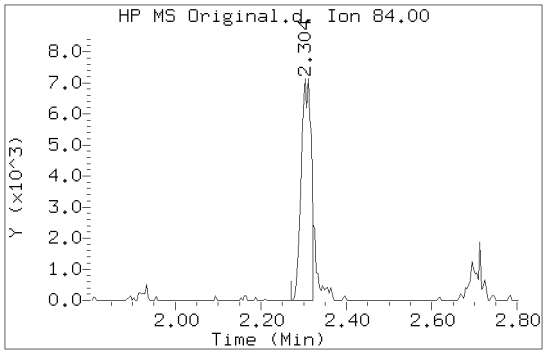

AFTER

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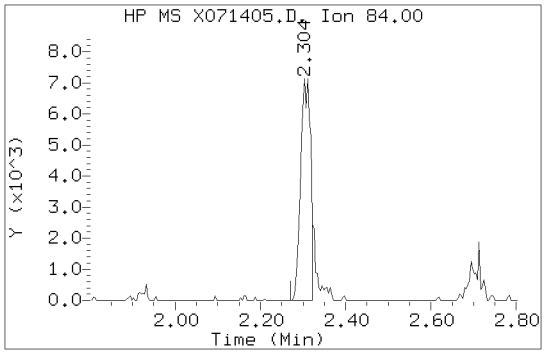

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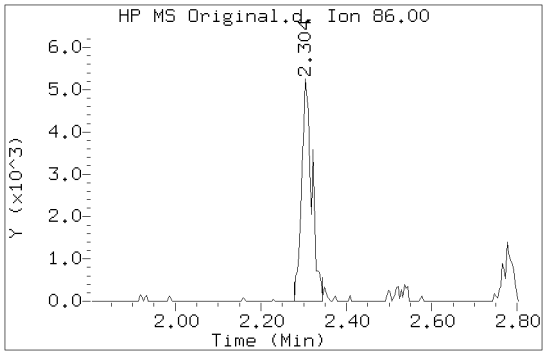

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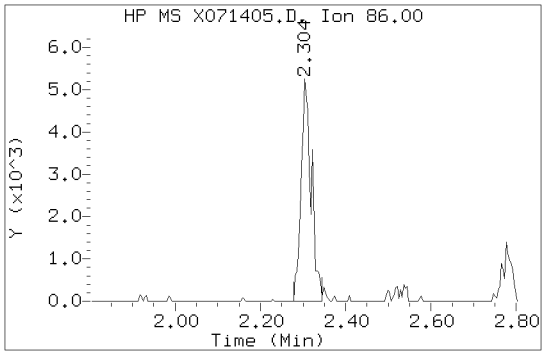
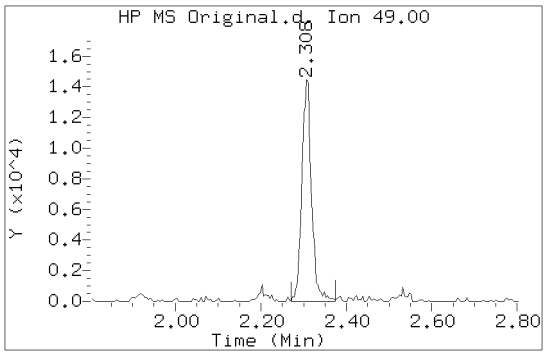


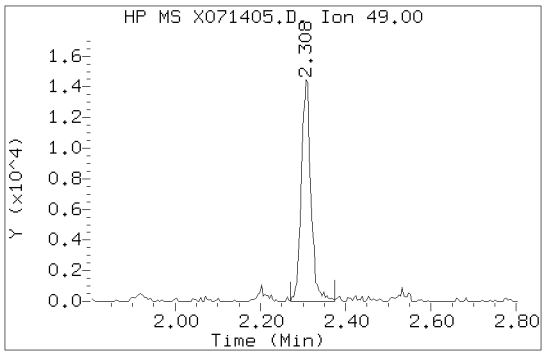
BEFORE

MASS
49
AREA
23277
HEIGHT
14471
20-Jul-2023
15:04
linh
pham



AFTER

MASS
49
AREA
23277
HEIGHT
14471
20-Jul-2023
15:04
linh
pham



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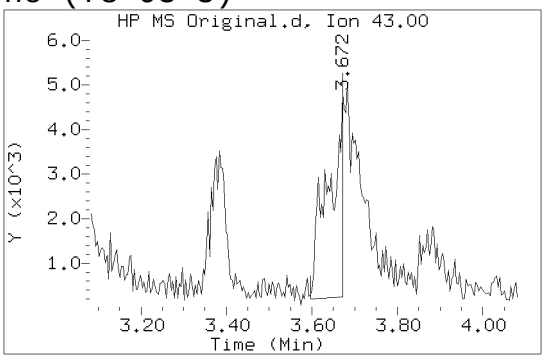
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

2-Butanone (78-93-3)

Reason Code:

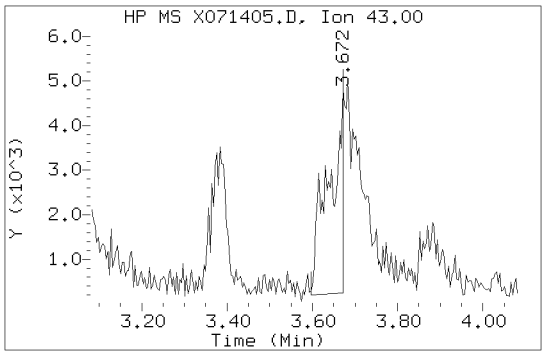
BEFORE

MASS
43
AREA
10454
HEIGHT
4589
20-Jul-2023
15:04
linh
pham



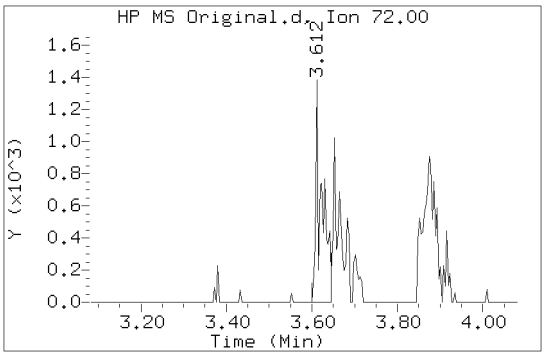
AFTER

MASS
43
AREA
10454
HEIGHT
4589
20-Jul-2023
15:04
linh
pham



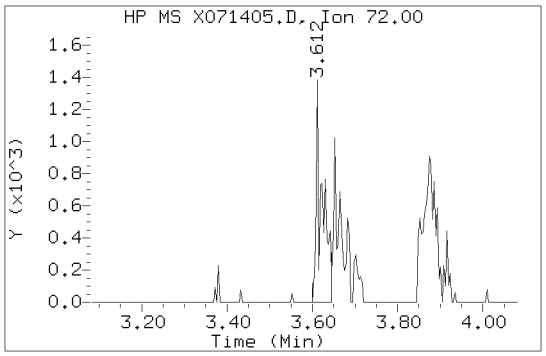
BEFORE

MASS
72
AREA
1388
HEIGHT
1384
20-Jul-2023
15:04
linh
pham



AFTER

MASS
72
AREA
1388
HEIGHT
1384
20-Jul-2023
15:04
linh
pham

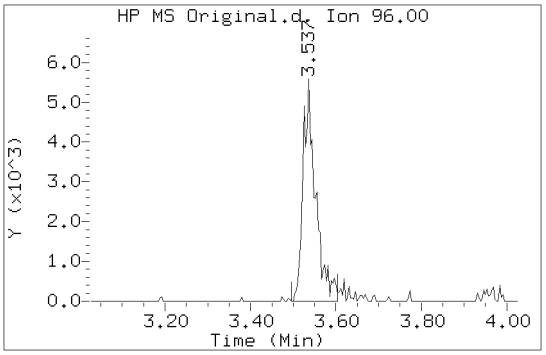


cis-1,2-Dichloroethene (156-59-2)

Reason Code:

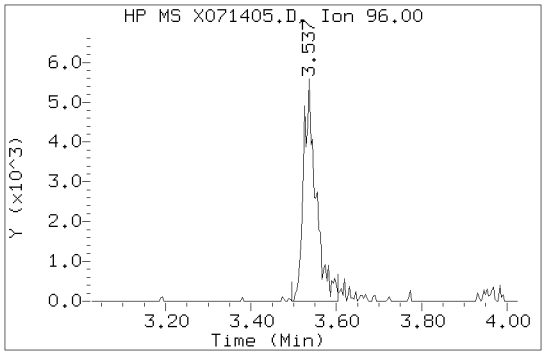
BEFORE

MASS
96
AREA
11533
HEIGHT
5587
20-Jul-2023
15:04
linh
pham



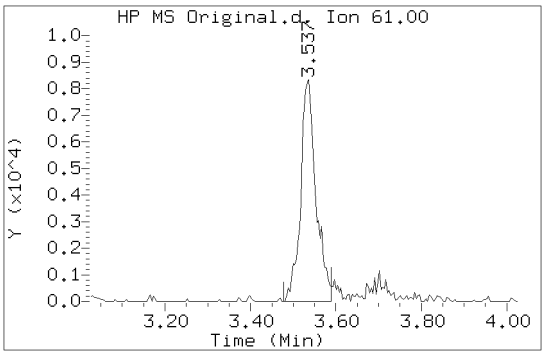
AFTER

MASS
96
AREA
11533
HEIGHT
5587
20-Jul-2023
15:04
linh
pham



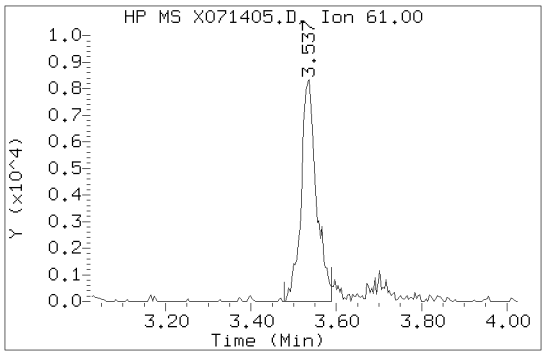
BEFORE

MASS
61
AREA
21081
HEIGHT
8339
20-Jul-2023
15:04
linh
pham



AFTER

MASS
61
AREA
21081
HEIGHT
8339
20-Jul-2023
15:04
linh
pham



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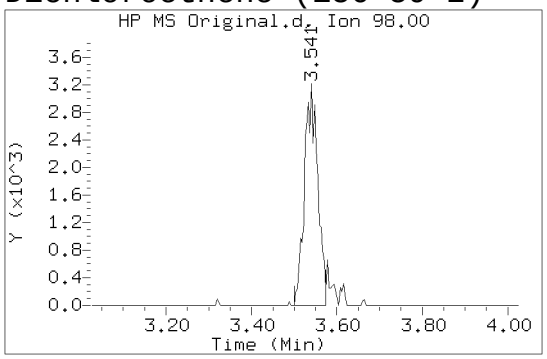
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

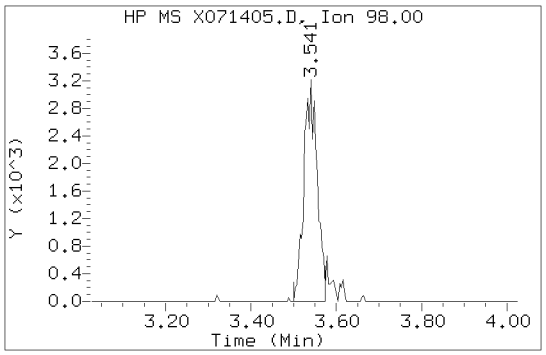
cis-1,2-Dichloroethene (156-59-2)

Reason Code:

BEFORE
MASS
98
AREA
6988
HEIGHT
3216
20-Jul-2023
15:04
linh
pham



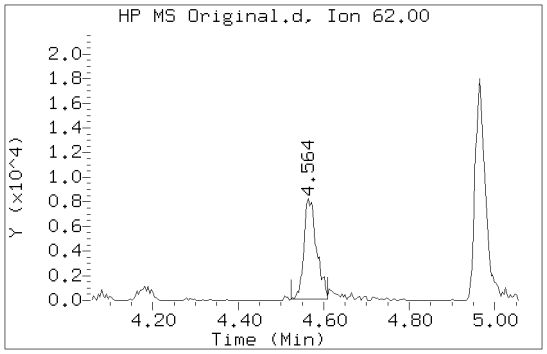
AFTER
MASS
98
AREA
6988
HEIGHT
3216
20-Jul-2023
15:04
linh
pham



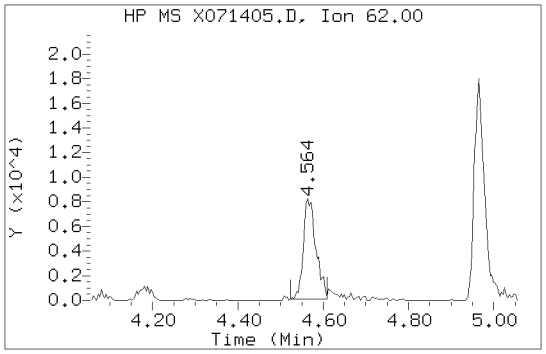
1,2-Dichloroethane (107-06-2)

Reason Code:

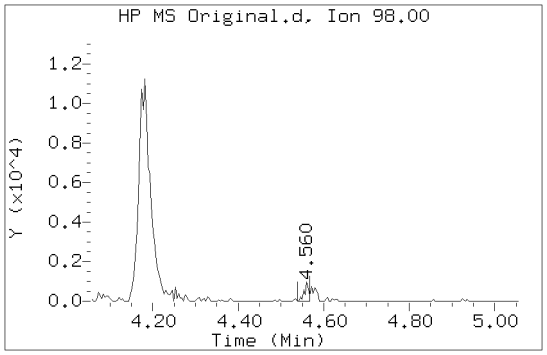
BEFORE
MASS
62
AREA
16880
HEIGHT
8150
20-Jul-2023
15:04
linh
pham



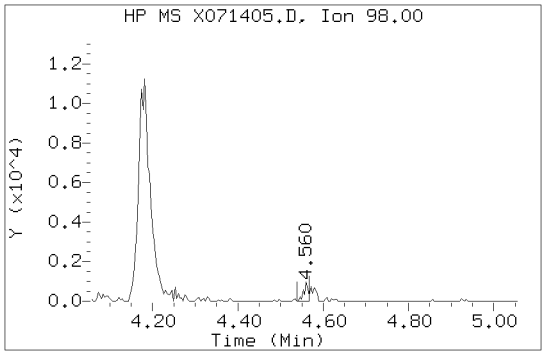
AFTER
MASS
62
AREA
16880
HEIGHT
8150
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
98
AREA
708
HEIGHT
981
20-Jul-2023
15:04
linh
pham



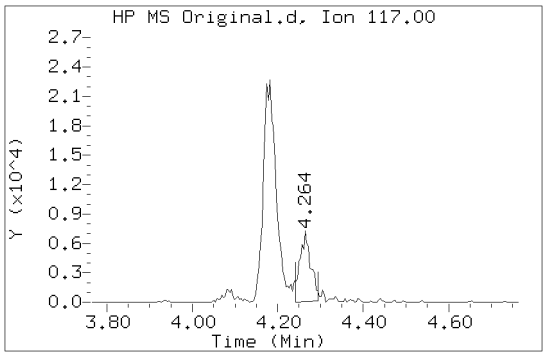
AFTER
MASS
98
AREA
708
HEIGHT
981
20-Jul-2023
15:04
linh
pham



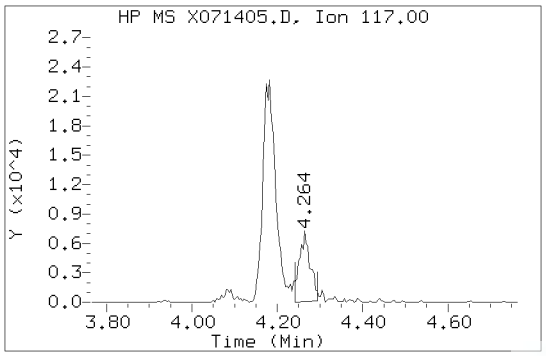
Carbon Tetrachloride (56-23-5)

Reason Code:

BEFORE
MASS
117
AREA
13047
HEIGHT
7258
20-Jul-2023
15:04
linh
pham



AFTER
MASS
117
AREA
13047
HEIGHT
7258
20-Jul-2023
15:04
linh
pham



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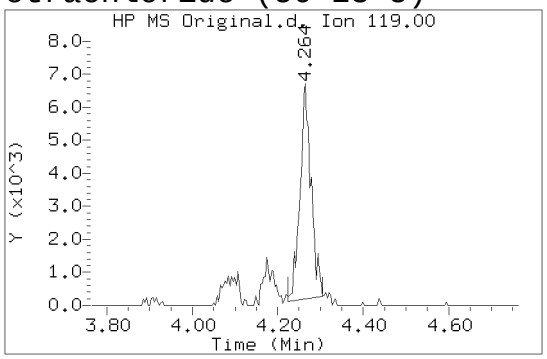
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

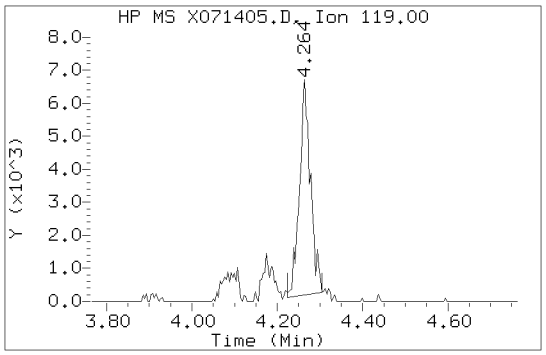
Carbon Tetrachloride (56-23-5)

Reason Code:

BEFORE
MASS
119
AREA
11949
HEIGHT
6520
20-Jul-2023
15:04
linh
pham



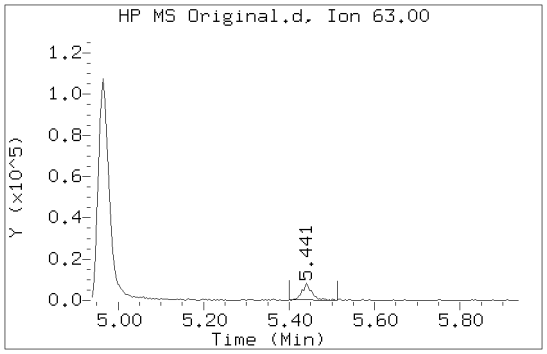
AFTER
MASS
119
AREA
11949
HEIGHT
6520
20-Jul-2023
15:04
linh
pham



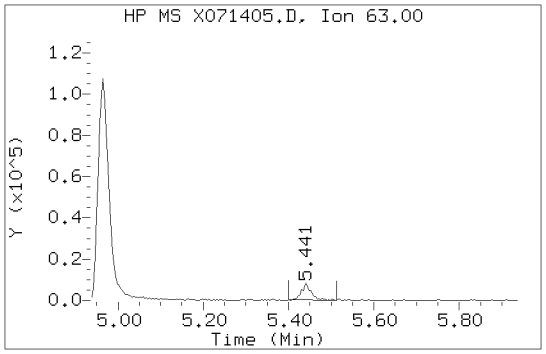
1,2-Dichloropropane (78-87-5)

Reason Code:

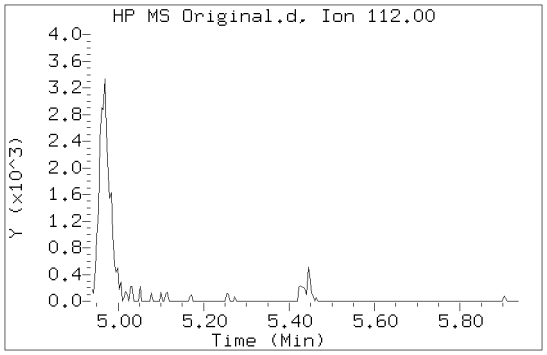
BEFORE
MASS
63
AREA
12678
HEIGHT
8183
20-Jul-2023
15:04
linh
pham



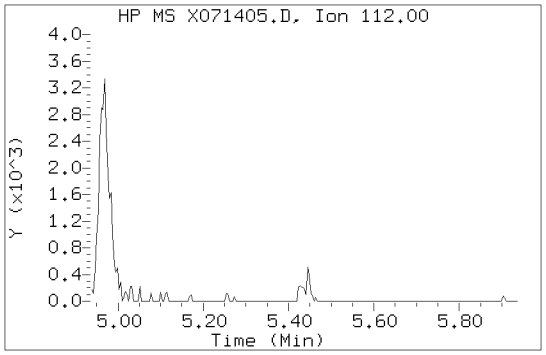
AFTER
MASS
63
AREA
12678
HEIGHT
8183
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
112
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



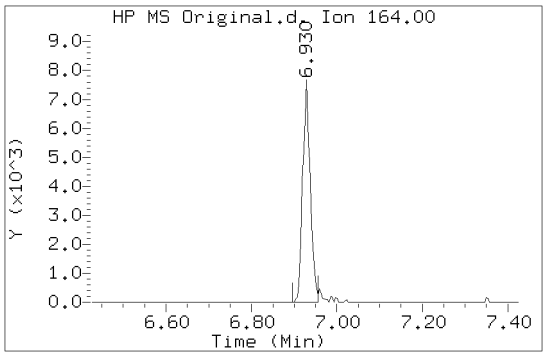
AFTER
MASS
112
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



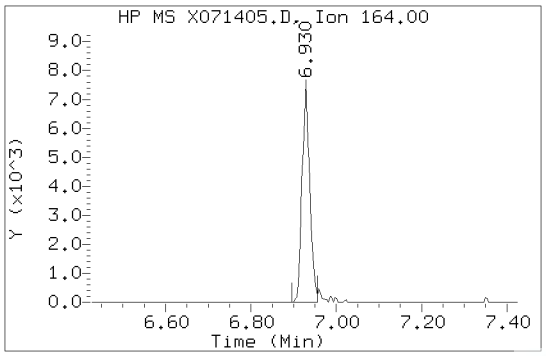
Tetrachloroethene (127-18-4)

Reason Code:

BEFORE
MASS
164
AREA
9711
HEIGHT
7674
20-Jul-2023
15:04
linh
pham



AFTER
MASS
164
AREA
9711
HEIGHT
7674
20-Jul-2023
15:04
linh
pham

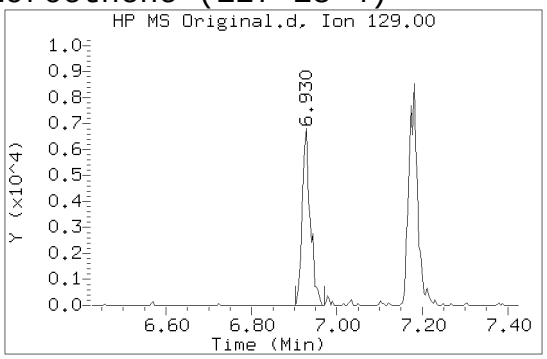


Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071405.D
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

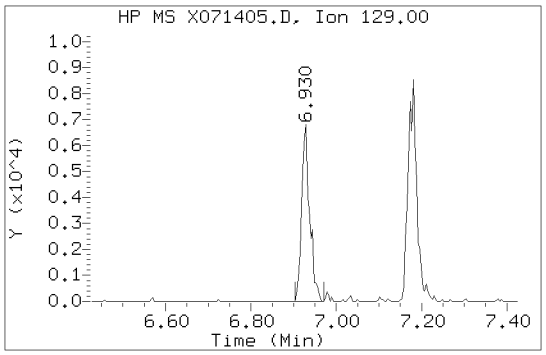
Tetrachloroethene (127-18-4)

Reason Code:

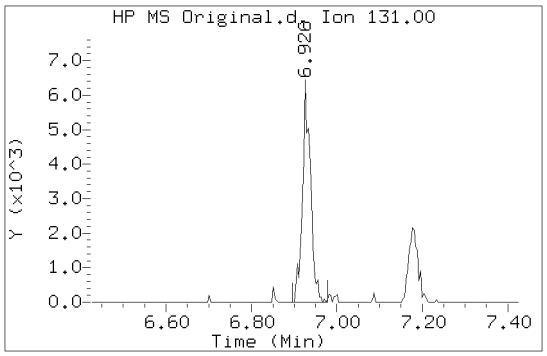
BEFORE
MASS
129
AREA
9180
HEIGHT
6806
20-Jul-2023
15:04
linh
pham



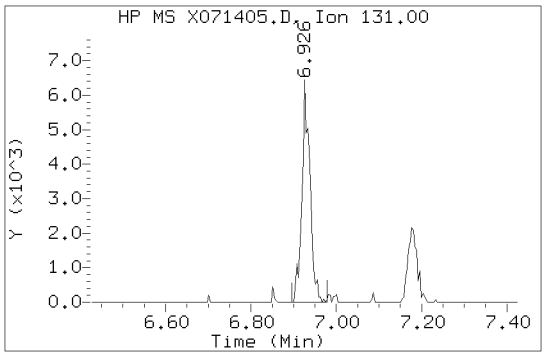
AFTER
MASS
129
AREA
9180
HEIGHT
6806
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
131
AREA
8692
HEIGHT
6442
20-Jul-2023
15:04
linh
pham



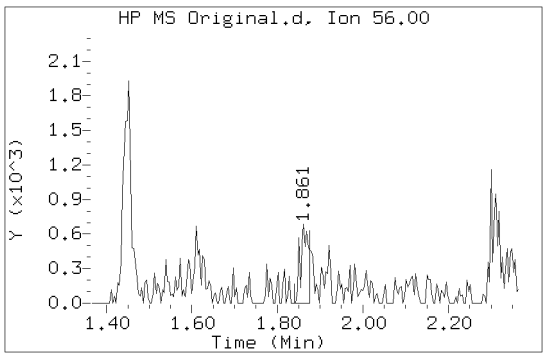
AFTER
MASS
131
AREA
8692
HEIGHT
6442
20-Jul-2023
15:04
linh
pham



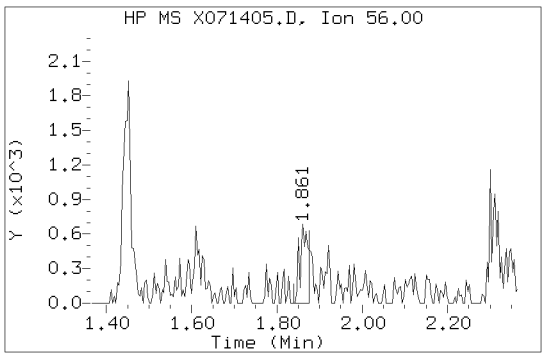
Acrolein (107-02-8)

Reason Code:

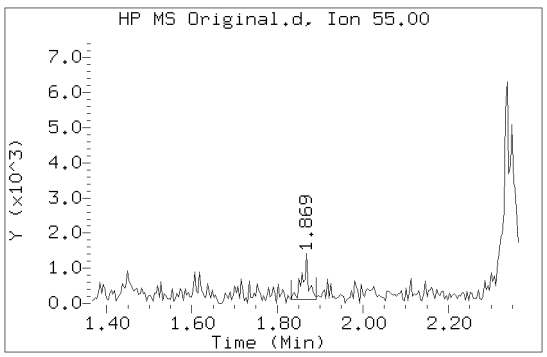
BEFORE
MASS
56
AREA
917
HEIGHT
685
20-Jul-2023
15:04
linh
pham



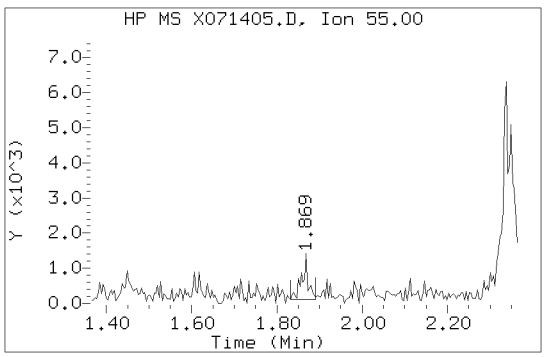
AFTER
MASS
56
AREA
917
HEIGHT
685
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
55
AREA
1362
HEIGHT
1313
20-Jul-2023
15:04
linh
pham



AFTER
MASS
55
AREA
1362
HEIGHT
1313
20-Jul-2023
15:04
linh
pham

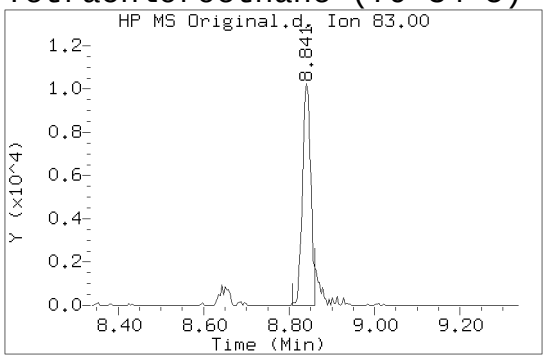


Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071405.D
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

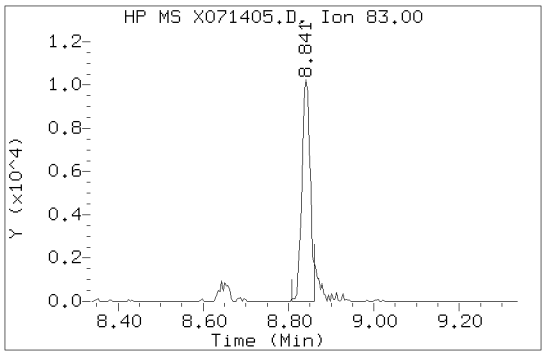
1,1,2,2-Tetrachloroethane (79-34-5)

Reason Code:

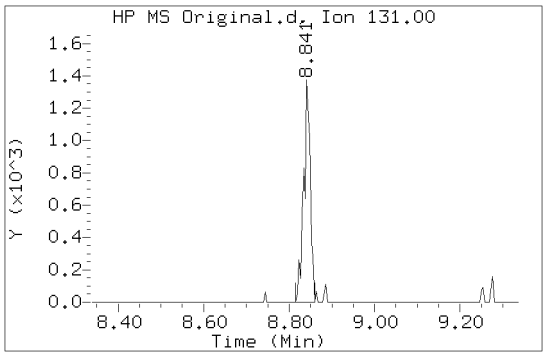
BEFORE
MASS
83
AREA
14352
HEIGHT
10244
20-Jul-2023
15:04
linh
pham



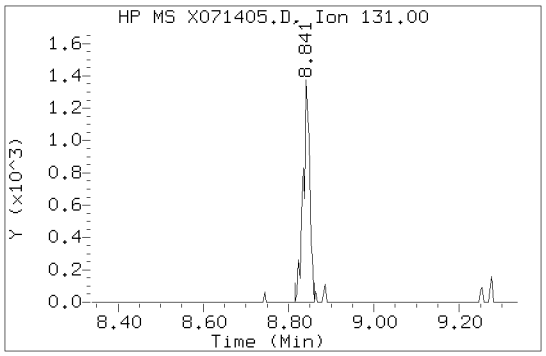
AFTER
MASS
83
AREA
14352
HEIGHT
10244
20-Jul-2023
15:04
linh
pham



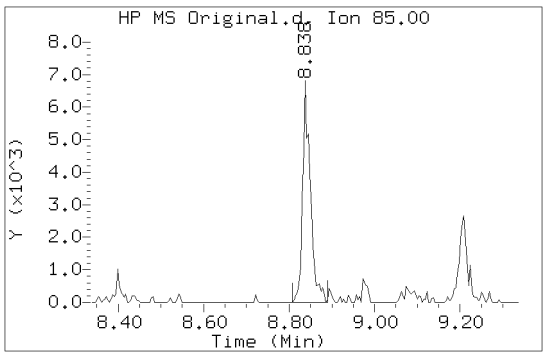
BEFORE
MASS
131
AREA
1498
HEIGHT
1375
20-Jul-2023
15:04
linh
pham



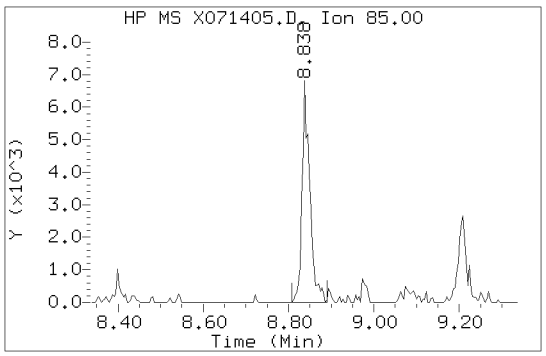
AFTER
MASS
131
AREA
1498
HEIGHT
1375
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
85
AREA
8867
HEIGHT
6812
20-Jul-2023
15:04
linh
pham



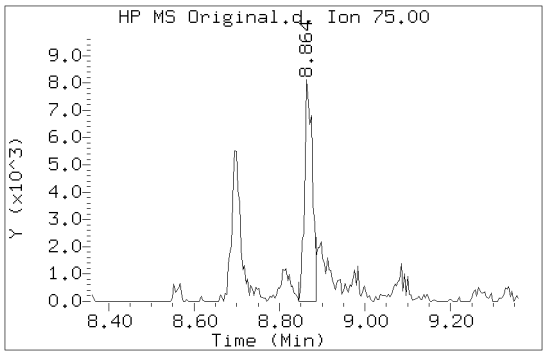
AFTER
MASS
85
AREA
8867
HEIGHT
6812
20-Jul-2023
15:04
linh
pham



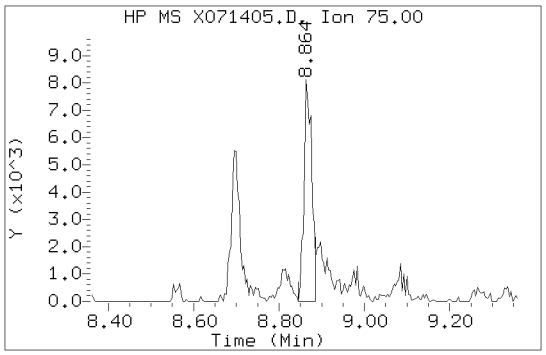
1,2,3-Trichloropropane (96-18-4)

Reason Code:

BEFORE
MASS
75
AREA
10578
HEIGHT
8119
20-Jul-2023
15:04
linh
pham



AFTER
MASS
75
AREA
10578
HEIGHT
8119
20-Jul-2023
15:04
linh
pham



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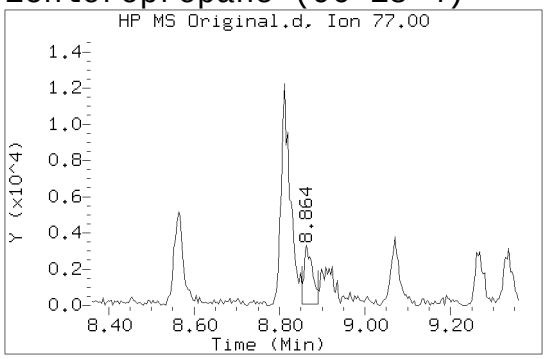
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

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

Reason Code:

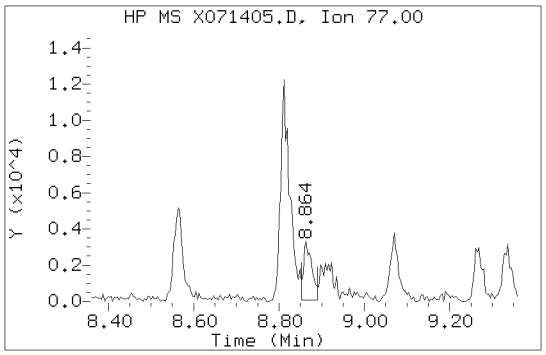
BEFORE

MASS
77
AREA
4616
HEIGHT
3271
20-Jul-2023
15:04
linh
pham



AFTER

MASS
77
AREA
4616
HEIGHT
3271
20-Jul-2023
15:04
linh
pham

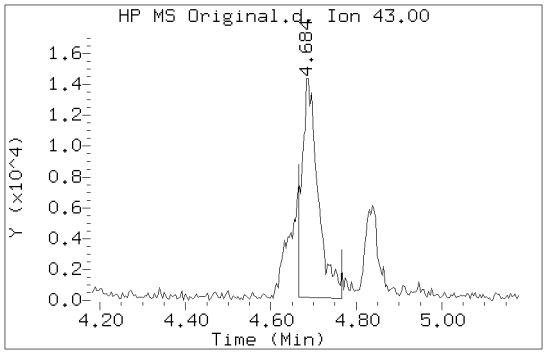


Isobutyl Alcohol (78-83-1)

Reason Code:

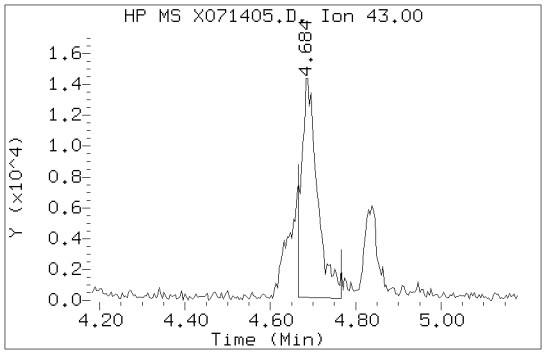
BEFORE

MASS
43
AREA
37832
HEIGHT
14170
20-Jul-2023
15:04
linh
pham



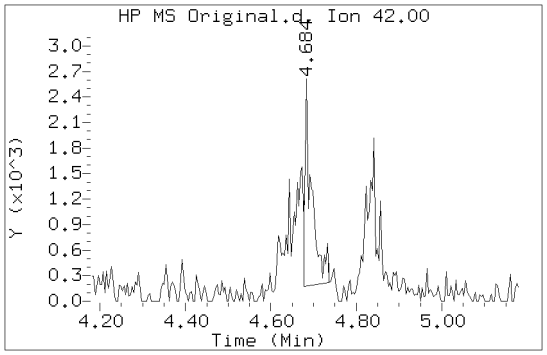
AFTER

MASS
43
AREA
37832
HEIGHT
14170
20-Jul-2023
15:04
linh
pham



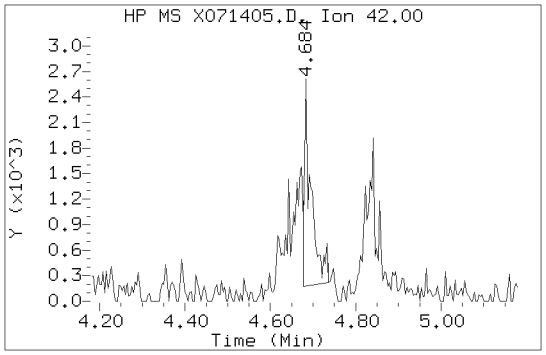
BEFORE

MASS
42
AREA
2790
HEIGHT
2433
20-Jul-2023
15:04
linh
pham



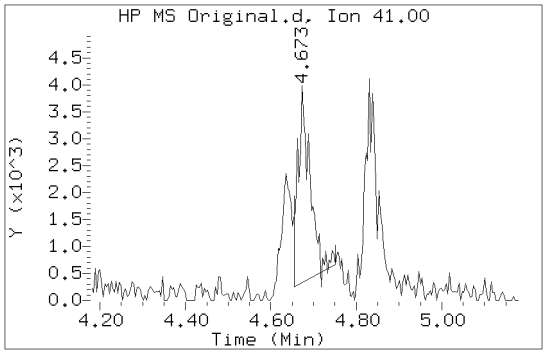
AFTER

MASS
42
AREA
2790
HEIGHT
2433
20-Jul-2023
15:04
linh
pham



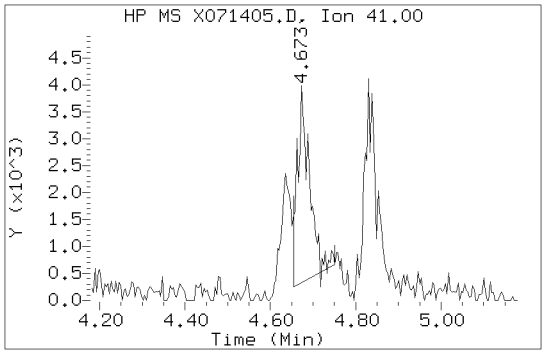
BEFORE

MASS
41
AREA
7292
HEIGHT
3653
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
7292
HEIGHT
3653
20-Jul-2023
15:04
linh
pham



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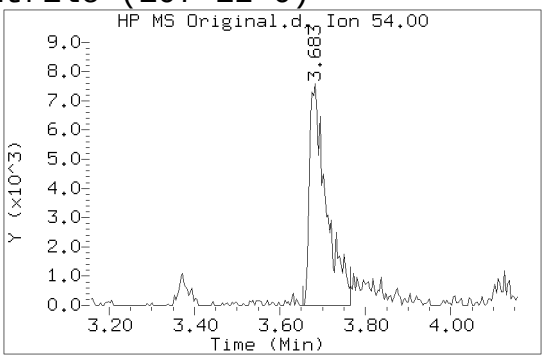
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

Propionitrile (107-12-0)

Reason Code:

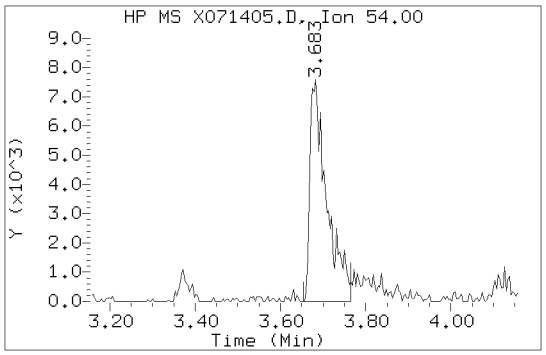
BEFORE

MASS
54
AREA
20667
HEIGHT
7586
20-Jul-2023
15:04
linh
pham



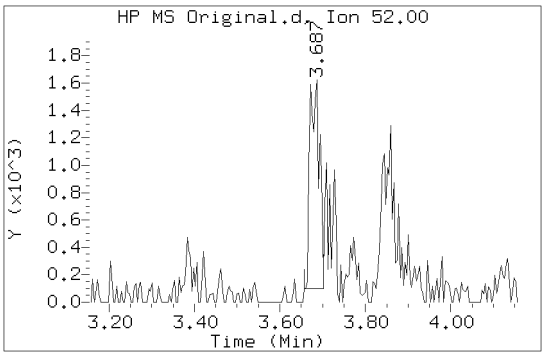
AFTER

MASS
54
AREA
20667
HEIGHT
7586
20-Jul-2023
15:04
linh
pham



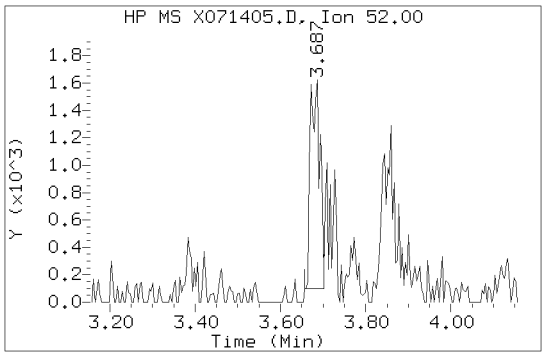
BEFORE

MASS
52
AREA
2370
HEIGHT
1524
20-Jul-2023
15:04
linh
pham



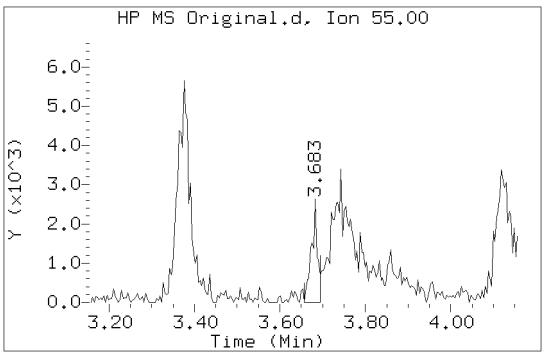
AFTER

MASS
52
AREA
2370
HEIGHT
1524
20-Jul-2023
15:04
linh
pham



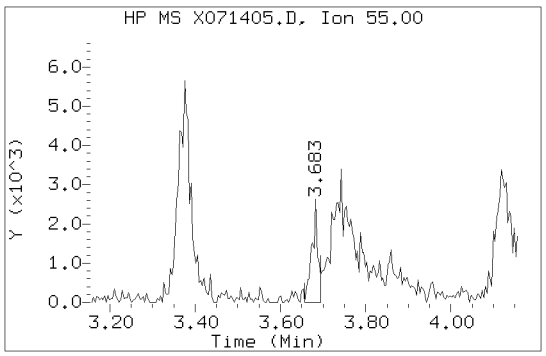
BEFORE

MASS
55
AREA
2547
HEIGHT
2627
20-Jul-2023
15:04
linh
pham



AFTER

MASS
55
AREA
2547
HEIGHT
2627
20-Jul-2023
15:04
linh
pham

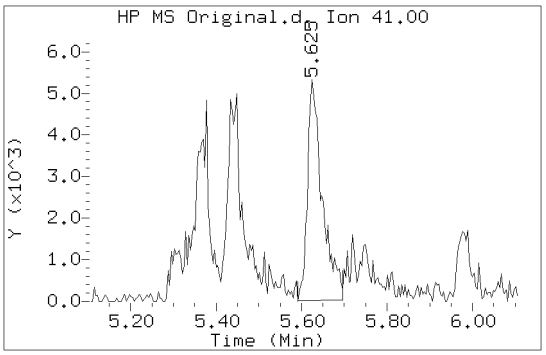


Methyl Methacrylate (80-62-6)

Reason Code:

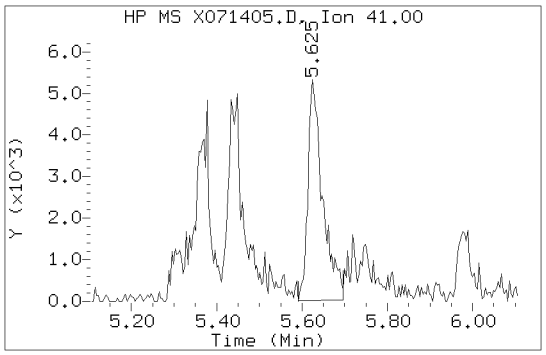
BEFORE

MASS
41
AREA
12770
HEIGHT
5309
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
12770
HEIGHT
5309
20-Jul-2023
15:04
linh
pham



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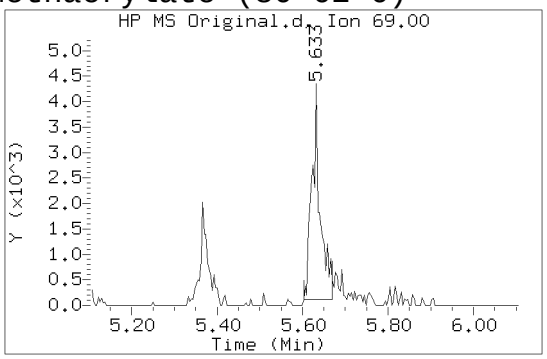
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

Methyl Methacrylate (80-62-6)

Reason Code:

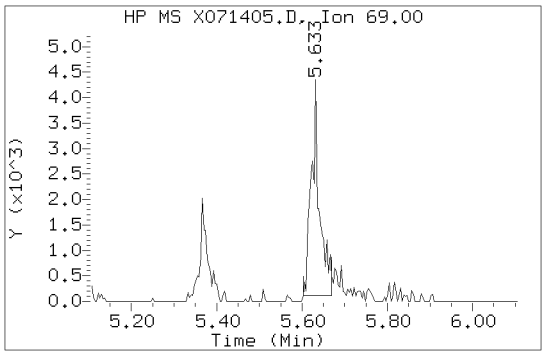
BEFORE

MASS
69
AREA
5709
HEIGHT
4235
20-Jul-2023
15:04
linh
pham



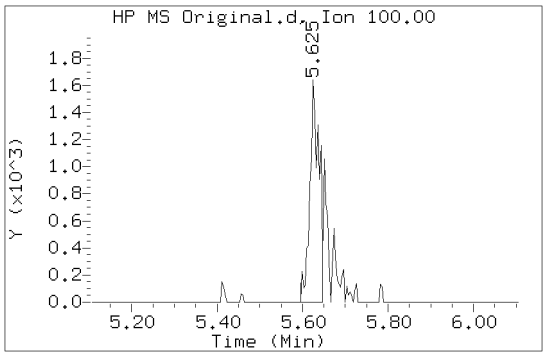
AFTER

MASS
69
AREA
5709
HEIGHT
4235
20-Jul-2023
15:04
linh
pham



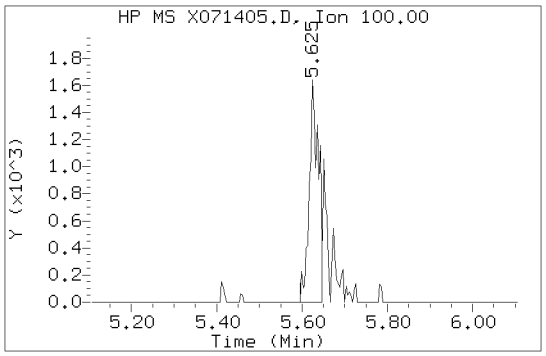
BEFORE

MASS
100
AREA
2452
HEIGHT
1641
20-Jul-2023
15:04
linh
pham



AFTER

MASS
100
AREA
2452
HEIGHT
1641
20-Jul-2023
15:04
linh
pham

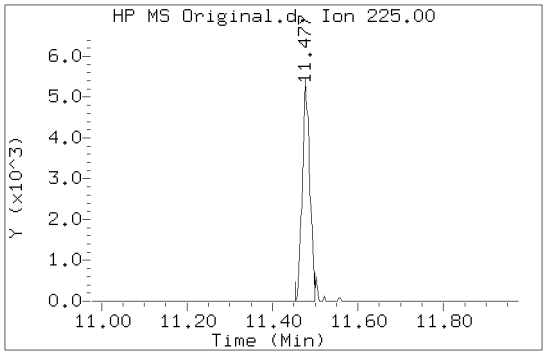


Hexachlorobutadiene (87-68-3)

Reason Code:

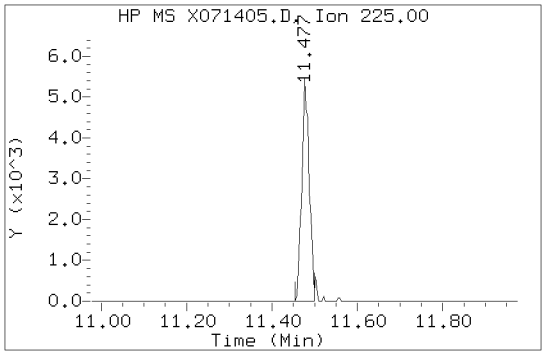
BEFORE

MASS
225
AREA
6844
HEIGHT
5446
20-Jul-2023
15:04
linh
pham



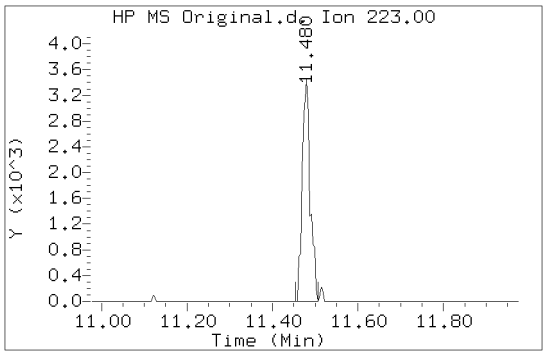
AFTER

MASS
225
AREA
6844
HEIGHT
5446
20-Jul-2023
15:04
linh
pham



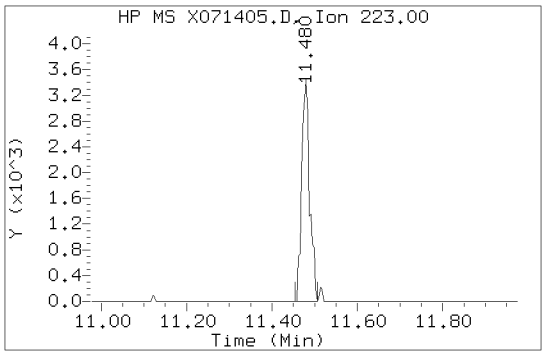
BEFORE

MASS
223
AREA
4606
HEIGHT
3443
20-Jul-2023
15:04
linh
pham



AFTER

MASS
223
AREA
4606
HEIGHT
3443
20-Jul-2023
15:04
linh
pham



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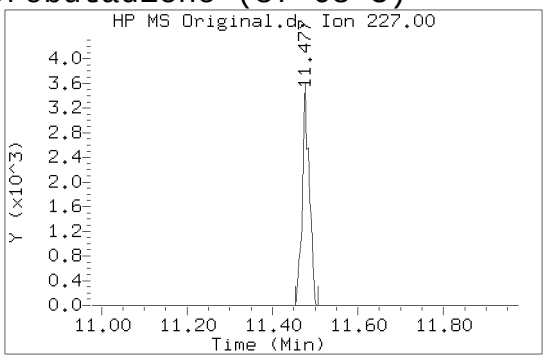
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

Hexachlorobutadiene (87-68-3)

Reason Code:

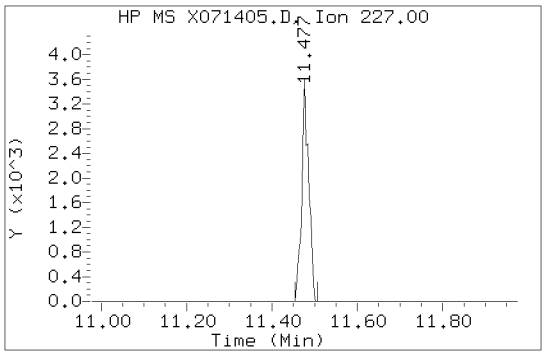
BEFORE

MASS
227
AREA
4231
HEIGHT
3595
20-Jul-2023
15:04
linh
pham



AFTER

MASS
227
AREA
4231
HEIGHT
3595
20-Jul-2023
15:04
linh
pham

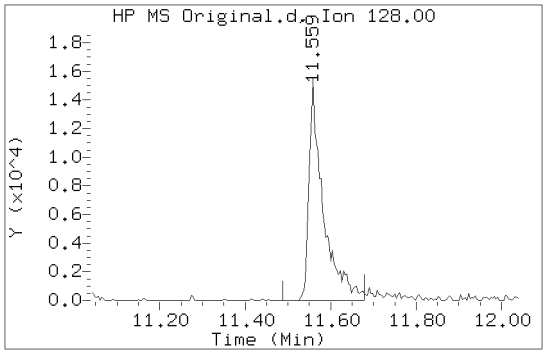


Naphthalene (91-20-3)

Reason Code:

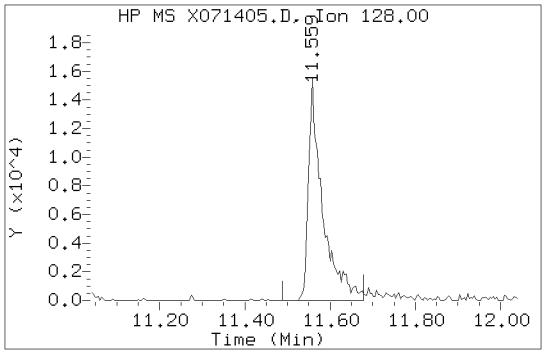
BEFORE

MASS
128
AREA
35806
HEIGHT
15488
20-Jul-2023
15:04
linh
pham



AFTER

MASS
128
AREA
35806
HEIGHT
15488
20-Jul-2023
15:04
linh
pham

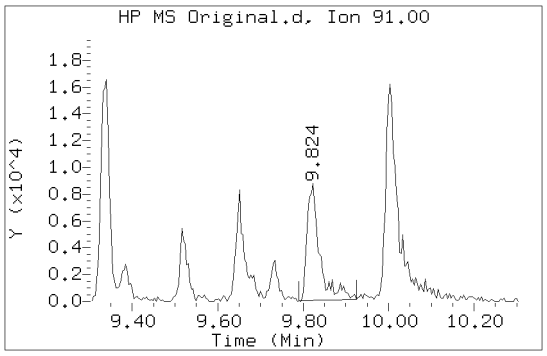


Benzyl Chloride (100-44-7)

Reason Code:

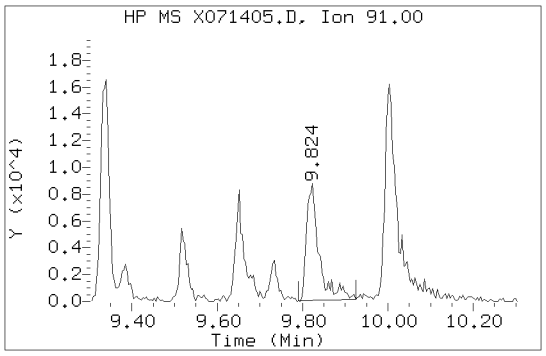
BEFORE

MASS
91
AREA
17851
HEIGHT
8726
20-Jul-2023
15:04
linh
pham



AFTER

MASS
91
AREA
17851
HEIGHT
8726
20-Jul-2023
15:04
linh
pham



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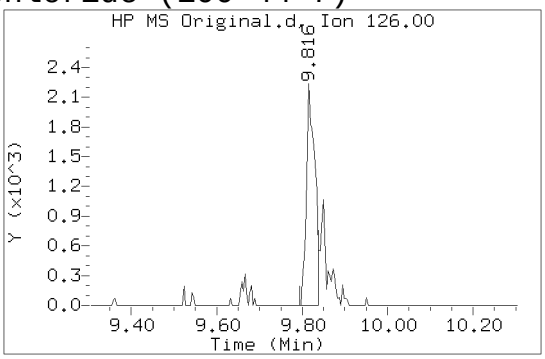
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

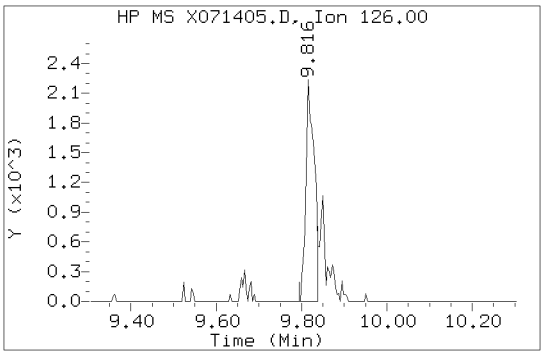
Benzyl Chloride (100-44-7)

Reason Code:

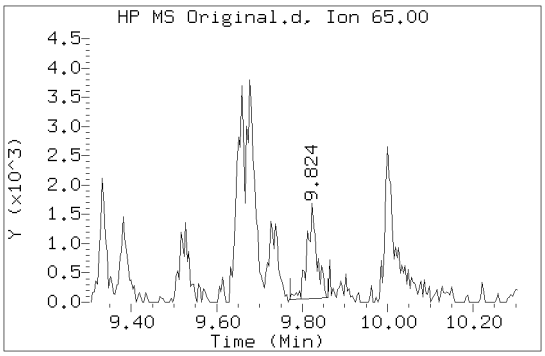
BEFORE
MASS
126
AREA
3073
HEIGHT
2237
20-Jul-2023
15:04
linh
pham



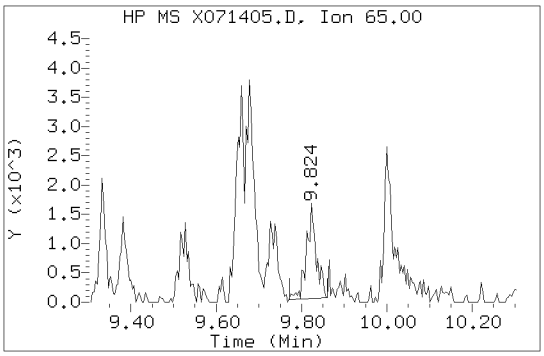
AFTER
MASS
126
AREA
3073
HEIGHT
2237
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
65
AREA
2588
HEIGHT
1635
20-Jul-2023
15:04
linh
pham



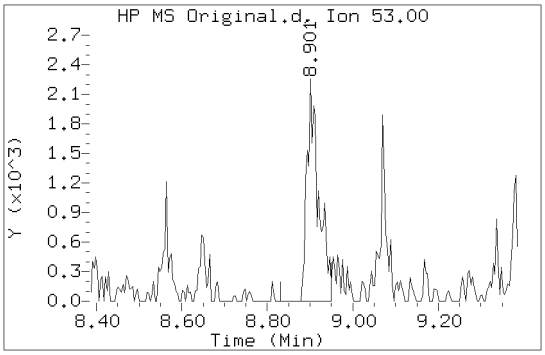
AFTER
MASS
65
AREA
2588
HEIGHT
1635
20-Jul-2023
15:04
linh
pham



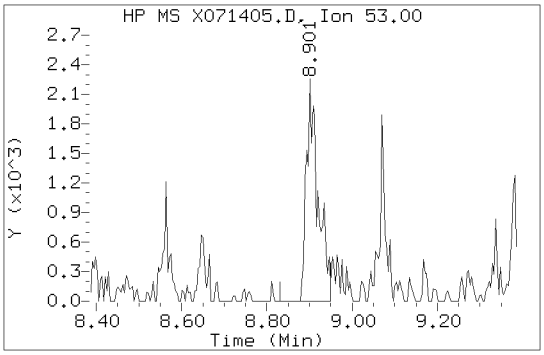
trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code:

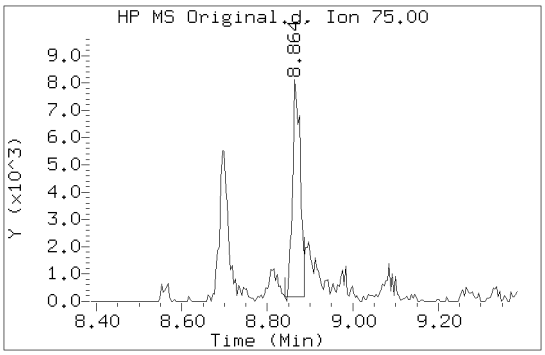
BEFORE
MASS
53
AREA
4279
HEIGHT
2257
20-Jul-2023
15:04
linh
pham



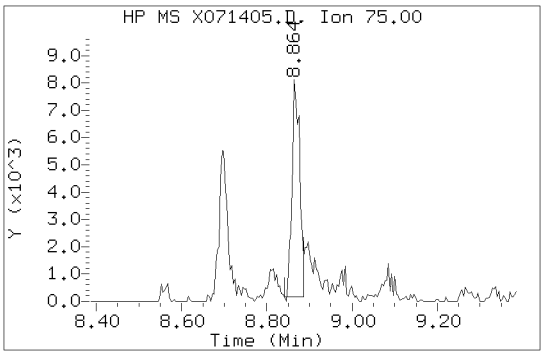
AFTER
MASS
53
AREA
4279
HEIGHT
2257
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
75
AREA
10144
HEIGHT
7958
20-Jul-2023
15:04
linh
pham



AFTER
MASS
75
AREA
10144
HEIGHT
7958
20-Jul-2023
15:04
linh
pham

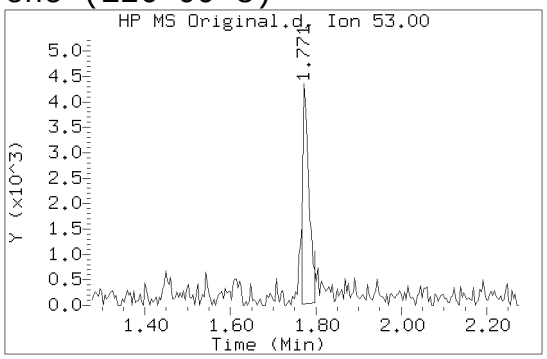


Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071405.D
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

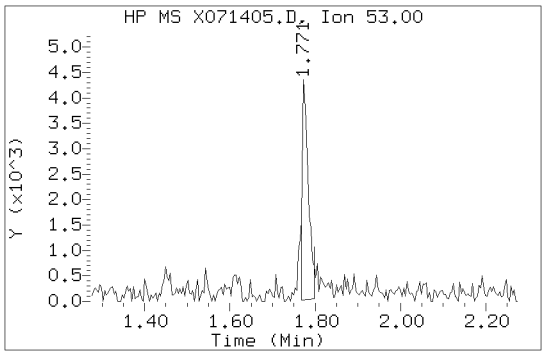
Chloroprene (126-99-8)

Reason Code:

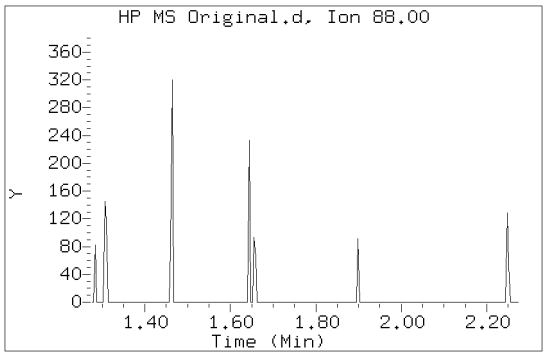
BEFORE
MASS
53
AREA
4560
HEIGHT
4328
20-Jul-2023
15:04
linh
pham



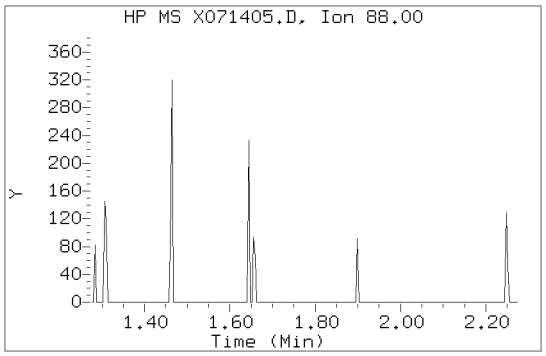
AFTER
MASS
53
AREA
4560
HEIGHT
4328
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
88
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



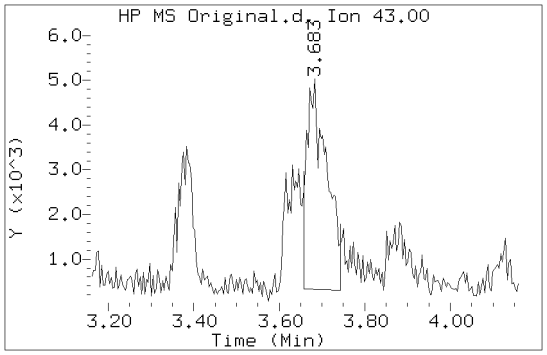
AFTER
MASS
88
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



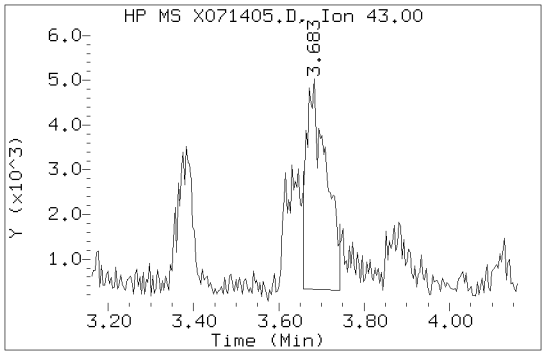
Ethyl Acetate (141-78-6)

Reason Code:

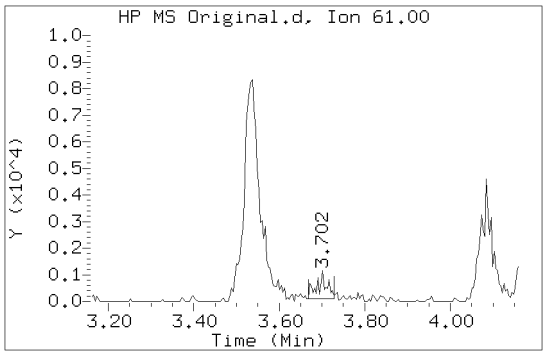
BEFORE
MASS
43
AREA
15481
HEIGHT
4704
20-Jul-2023
15:04
linh
pham



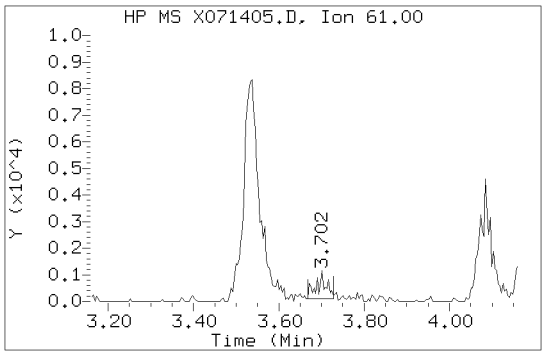
AFTER
MASS
43
AREA
15481
HEIGHT
4704
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
61
AREA
1598
HEIGHT
1061
20-Jul-2023
15:04
linh
pham



AFTER
MASS
61
AREA
1598
HEIGHT
1061
20-Jul-2023
15:04
linh
pham



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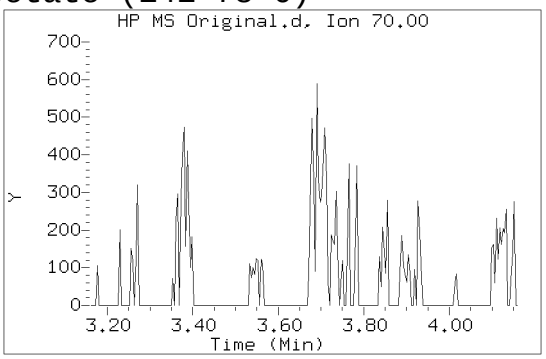
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

Ethyl Acetate (141-78-6)

Reason Code:

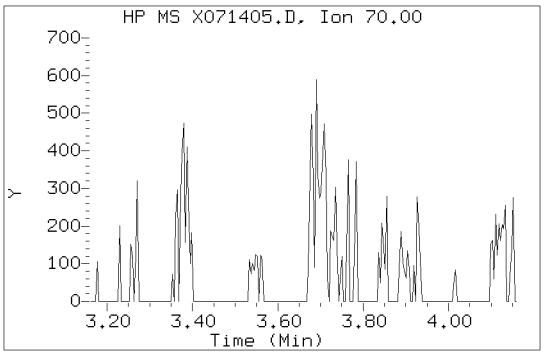
BEFORE

MASS
70
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
70
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

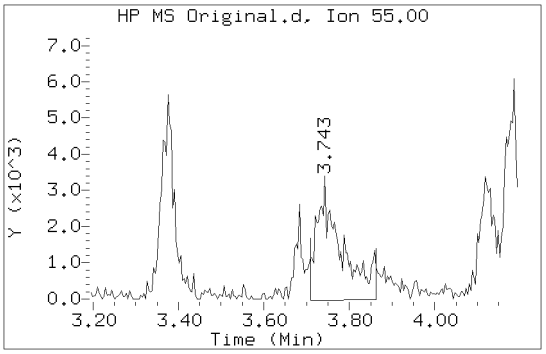


Methyl Acrylate (96-33-3)

Reason Code:

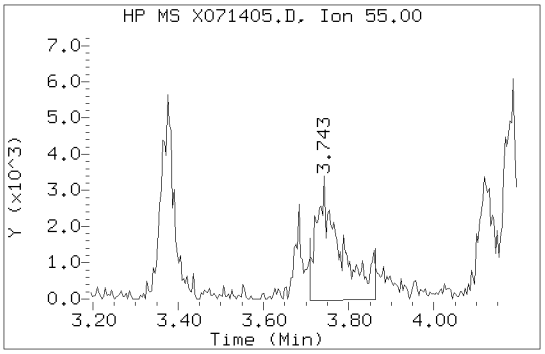
BEFORE

MASS
55
AREA
13406
HEIGHT
3436
20-Jul-2023
15:04
linh
pham



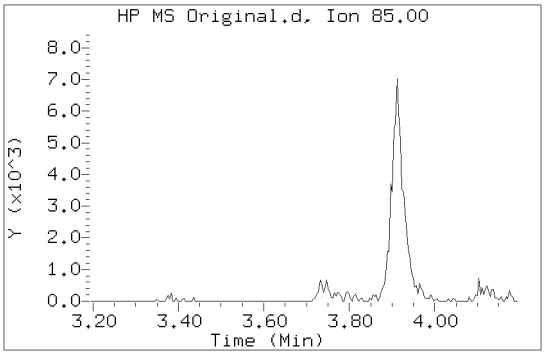
AFTER

MASS
55
AREA
13406
HEIGHT
3436
20-Jul-2023
15:04
linh
pham



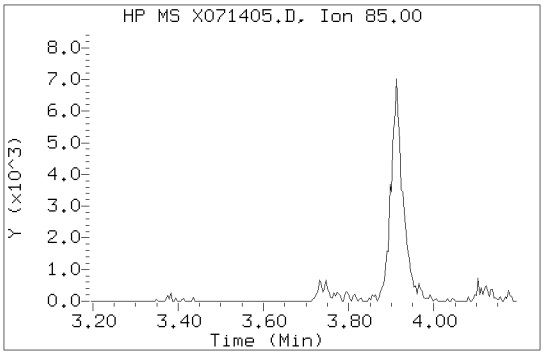
BEFORE

MASS
85
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
85
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

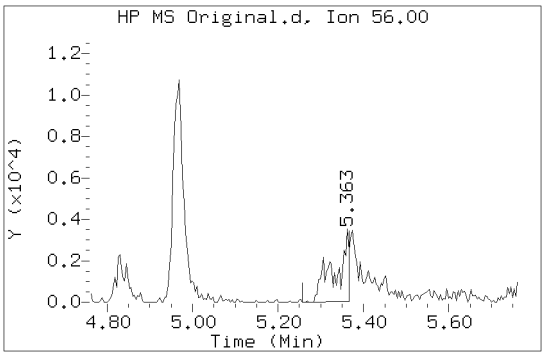


n-Butanol (71-36-3)

Reason Code:

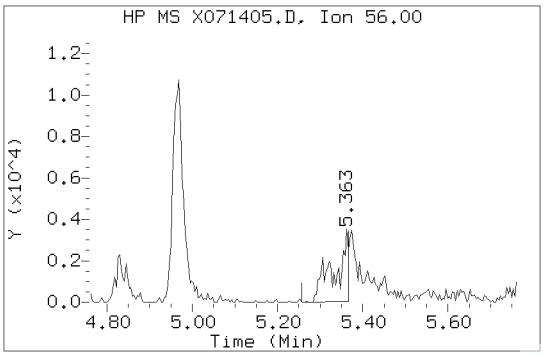
BEFORE

MASS
56
AREA
7443
HEIGHT
3529
20-Jul-2023
15:04
linh
pham



AFTER

MASS
56
AREA
7443
HEIGHT
3529
20-Jul-2023
15:04
linh
pham



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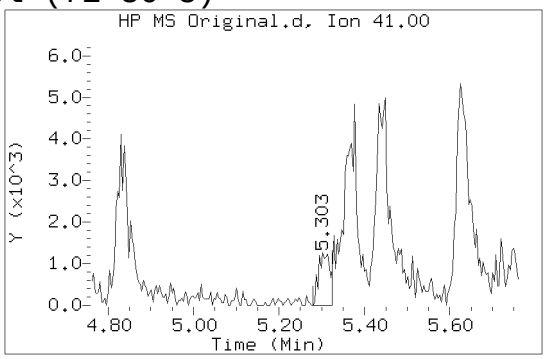
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

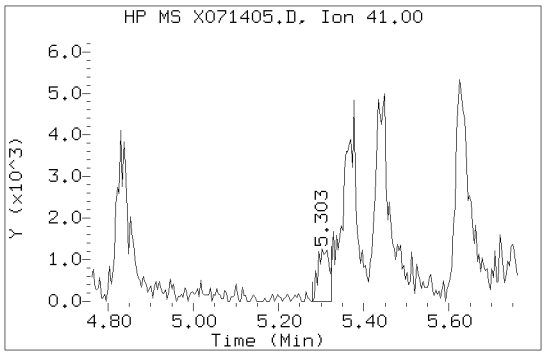
n-Butanol (71-36-3)

Reason Code:

BEFORE
MASS
41
AREA
2384
HEIGHT
1261
20-Jul-2023
15:04
linh
pham



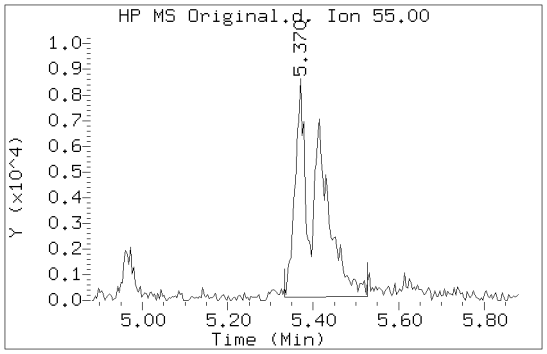
AFTER
MASS
41
AREA
2384
HEIGHT
1261
20-Jul-2023
15:04
linh
pham



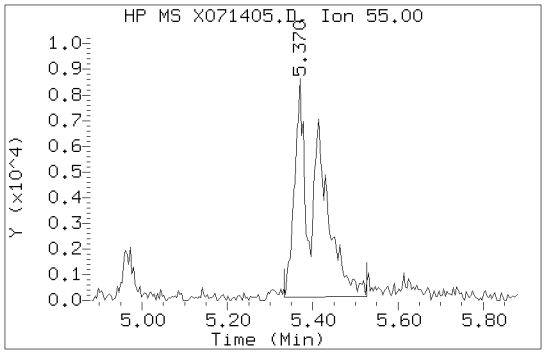
Ethyl Acrylate (140-88-5)

Reason Code:

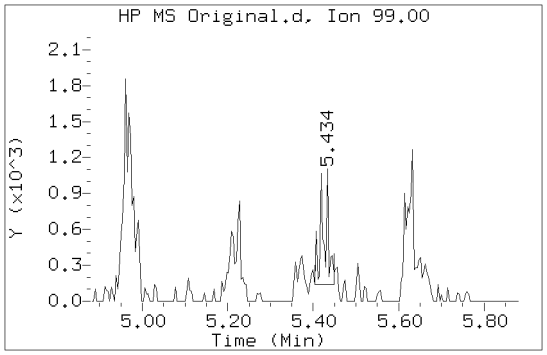
BEFORE
MASS
55
AREA
31450
HEIGHT
8507
20-Jul-2023
15:04
linh
pham



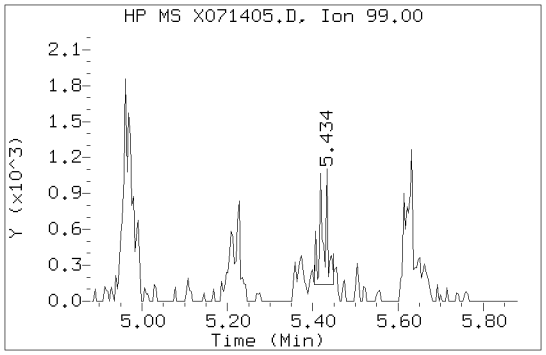
AFTER
MASS
55
AREA
31450
HEIGHT
8507
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
99
AREA
888
HEIGHT
965
20-Jul-2023
15:04
linh
pham



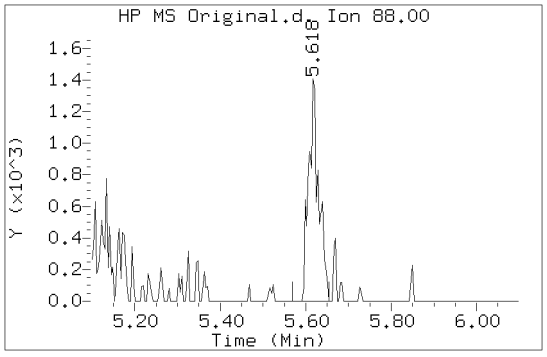
AFTER
MASS
99
AREA
888
HEIGHT
965
20-Jul-2023
15:04
linh
pham



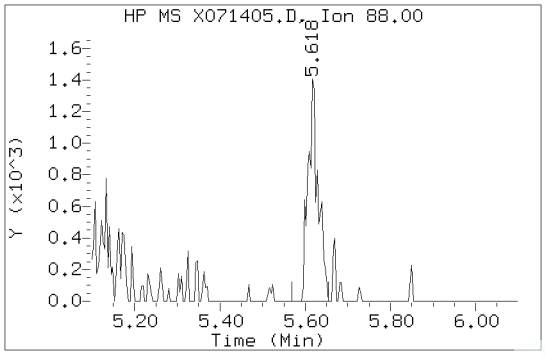
1,4-Dioxane ()

Reason Code:

BEFORE
MASS
88
AREA
2323
HEIGHT
1407
20-Jul-2023
15:04
linh
pham



AFTER
MASS
88
AREA
2323
HEIGHT
1407
20-Jul-2023
15:04
linh
pham



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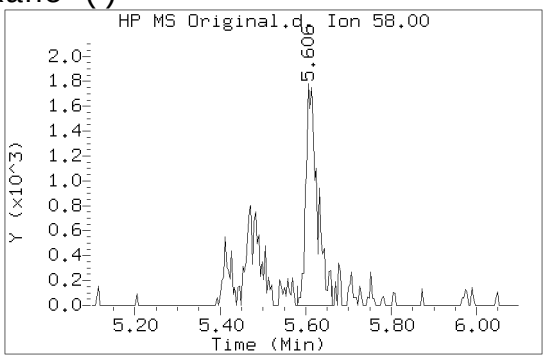
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

1,4-Dioxane ()

Reason Code:

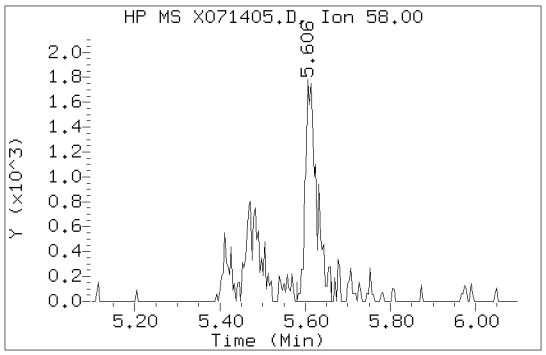
BEFORE

MASS
58
AREA
3341
HEIGHT
1781
20-Jul-2023
15:04
linh
pham



AFTER

MASS
58
AREA
3341
HEIGHT
1781
20-Jul-2023
15:04
linh
pham

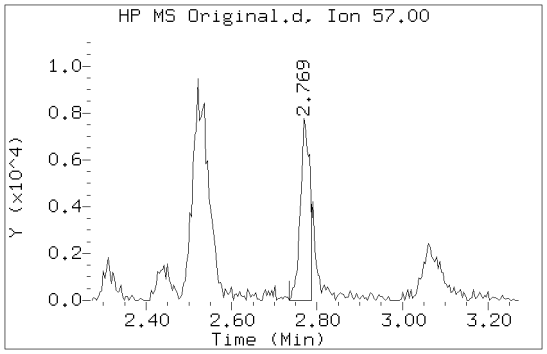


n-Hexane (110-54-3)

Reason Code:

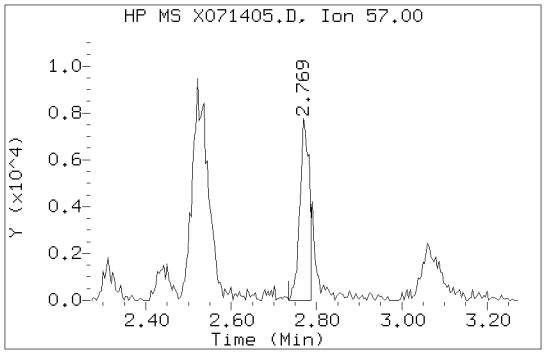
BEFORE

MASS
57
AREA
11984
HEIGHT
7776
20-Jul-2023
15:04
linh
pham



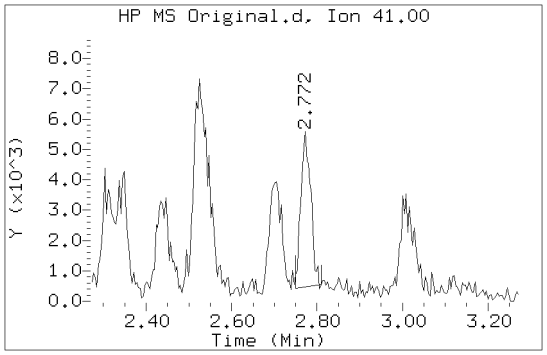
AFTER

MASS
57
AREA
11984
HEIGHT
7776
20-Jul-2023
15:04
linh
pham



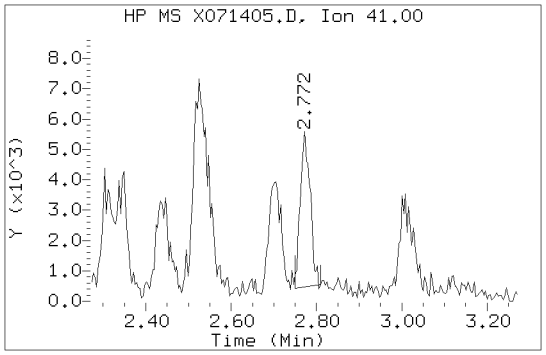
BEFORE

MASS
41
AREA
8381
HEIGHT
5113
20-Jul-2023
15:04
linh
pham



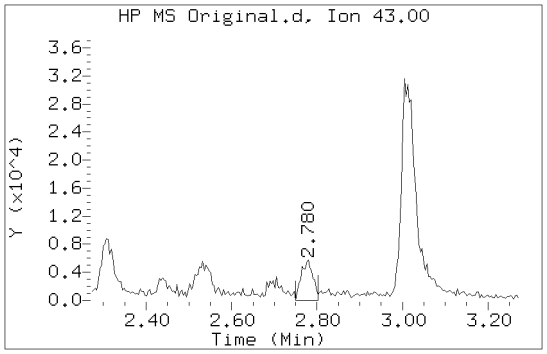
AFTER

MASS
41
AREA
8381
HEIGHT
5113
20-Jul-2023
15:04
linh
pham



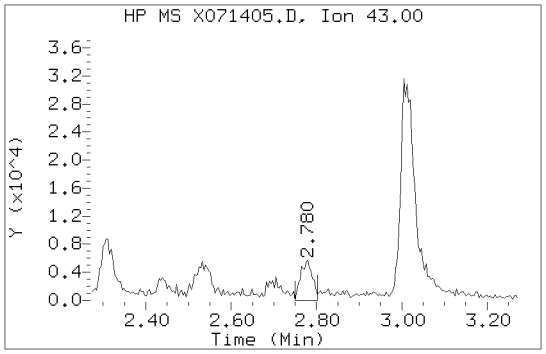
BEFORE

MASS
43
AREA
11133
HEIGHT
5721
20-Jul-2023
15:04
linh
pham



AFTER

MASS
43
AREA
11133
HEIGHT
5721
20-Jul-2023
15:04
linh
pham



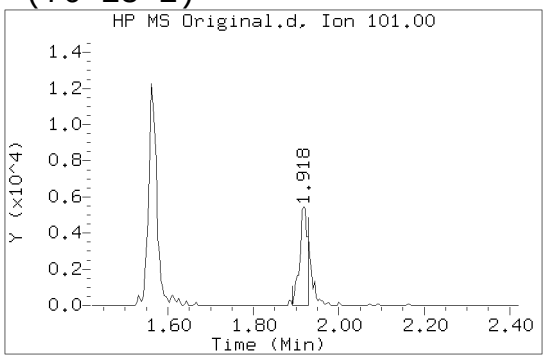
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071405.D
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

Freon TF (76-13-1)

Reason Code:

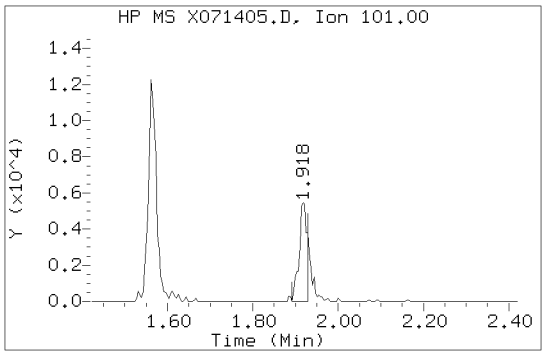
BEFORE

MASS
101
AREA
7195
HEIGHT
5473
20-Jul-2023
15:04
linh
pham



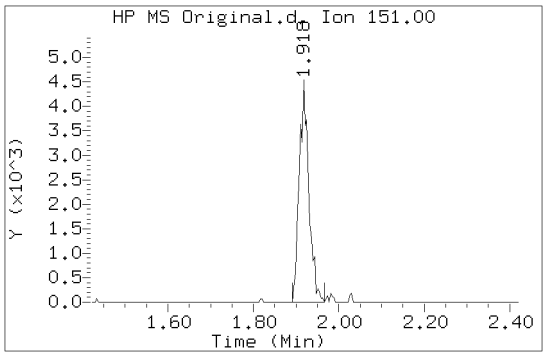
AFTER

MASS
101
AREA
7195
HEIGHT
5473
20-Jul-2023
15:04
linh
pham



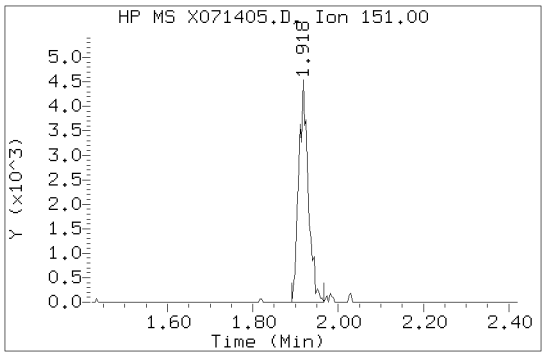
BEFORE

MASS
151
AREA
7204
HEIGHT
4541
20-Jul-2023
15:04
linh
pham



AFTER

MASS
151
AREA
7204
HEIGHT
4541
20-Jul-2023
15:04
linh
pham

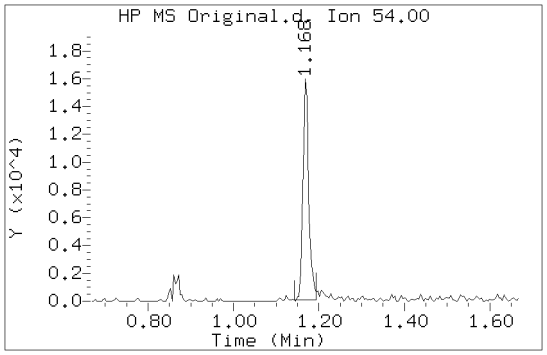


1,3-Butadiene (106-99-0)

Reason Code:

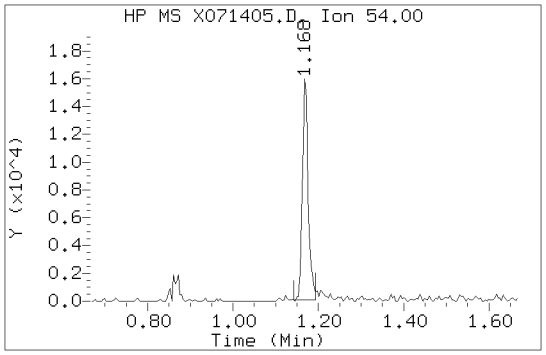
BEFORE

MASS
54
AREA
15351
HEIGHT
15893
20-Jul-2023
15:04
linh
pham



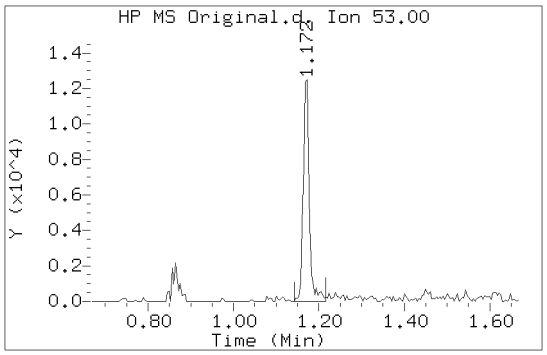
AFTER

MASS
54
AREA
15351
HEIGHT
15893
20-Jul-2023
15:04
linh
pham



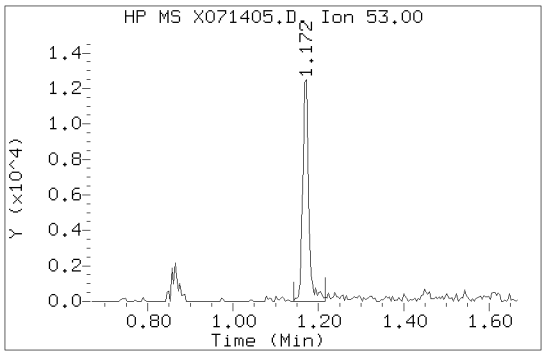
BEFORE

MASS
53
AREA
12769
HEIGHT
12495
20-Jul-2023
15:04
linh
pham



AFTER

MASS
53
AREA
12769
HEIGHT
12495
20-Jul-2023
15:04
linh
pham

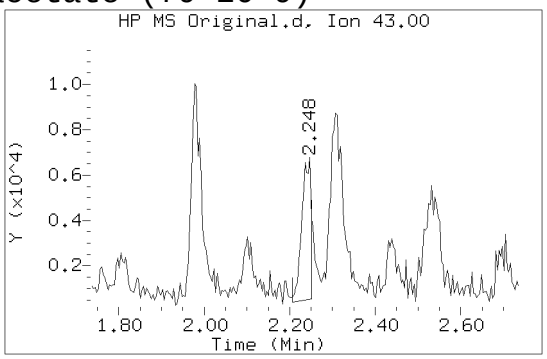


Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071405.D
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

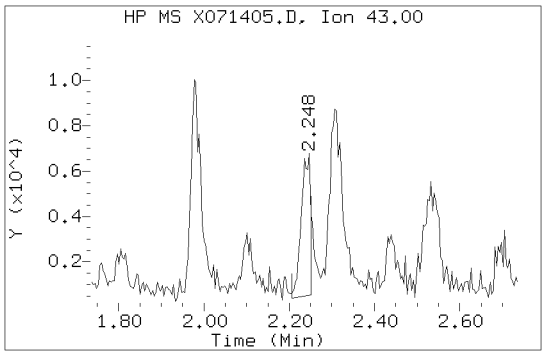
Methyl acetate (79-20-9)

Reason Code:

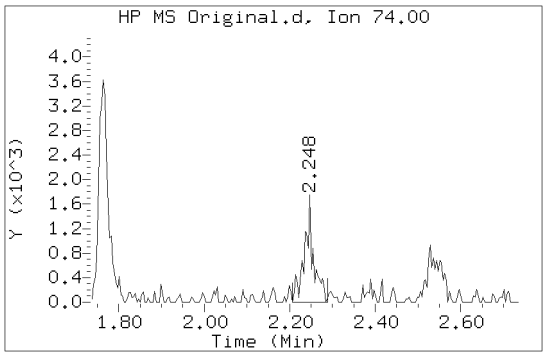
BEFORE
MASS
43
AREA
9491
HEIGHT
6252
20-Jul-2023
15:04
linh
pham



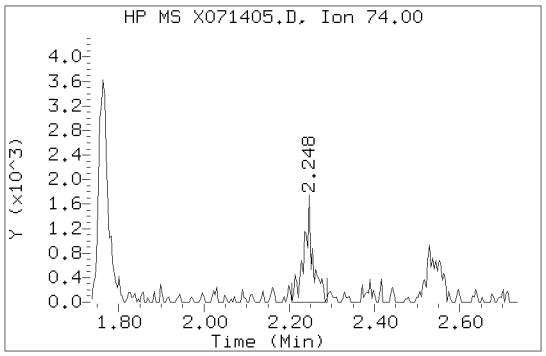
AFTER
MASS
43
AREA
9491
HEIGHT
6252
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
74
AREA
2612
HEIGHT
1756
20-Jul-2023
15:04
linh
pham



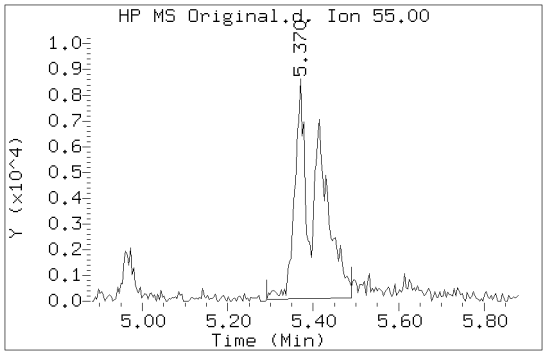
AFTER
MASS
74
AREA
2612
HEIGHT
1756
20-Jul-2023
15:04
linh
pham



Methylcyclohexane (108-87-2)

Reason Code:

BEFORE
MASS
55
AREA
31142
HEIGHT
8535
20-Jul-2023
15:04
linh
pham



AFTER
MASS
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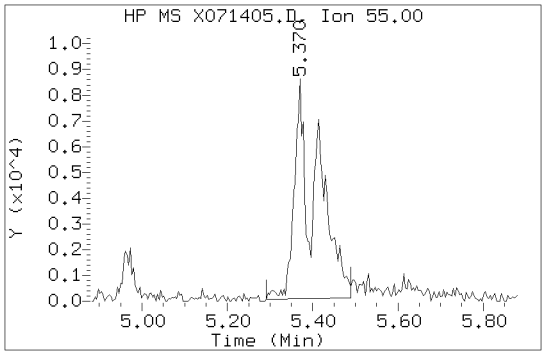
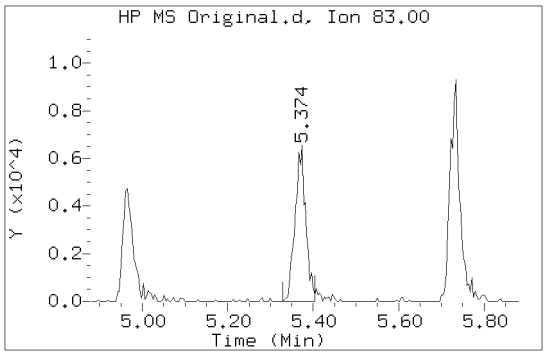
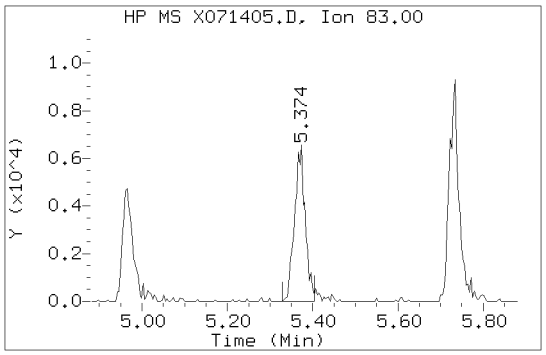
AREA
31142
HEIGHT
8535
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
83
AREA
11484
HEIGHT
6566
20-Jul-2023
15:04
linh
pham



AFTER
MASS
83
AREA
11484
HEIGHT
6566
20-Jul-2023
15:04
linh
pham



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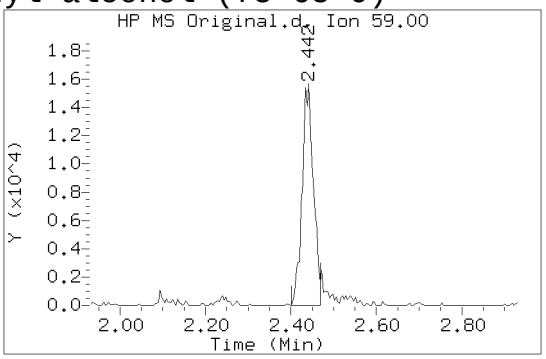
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

Tert-butyl alcohol (75-65-0)

Reason Code:

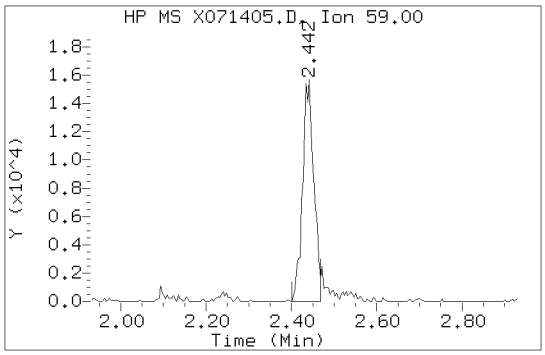
BEFORE

MASS
59
AREA
29280
HEIGHT
15681
20-Jul-2023
15:04
linh
pham



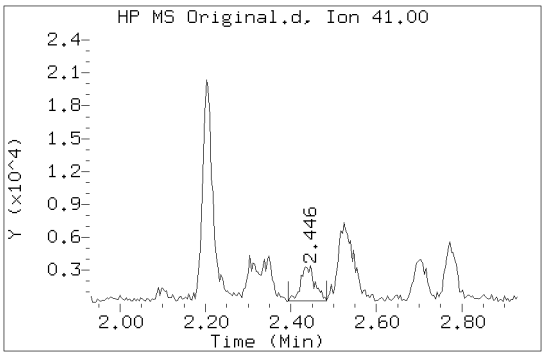
AFTER

MASS
59
AREA
29280
HEIGHT
15681
20-Jul-2023
15:04
linh
pham



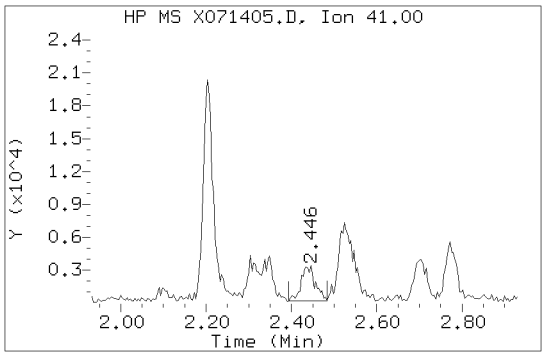
BEFORE

MASS
41
AREA
7457
HEIGHT
3224
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
7457
HEIGHT
3224
20-Jul-2023
15:04
linh
pham

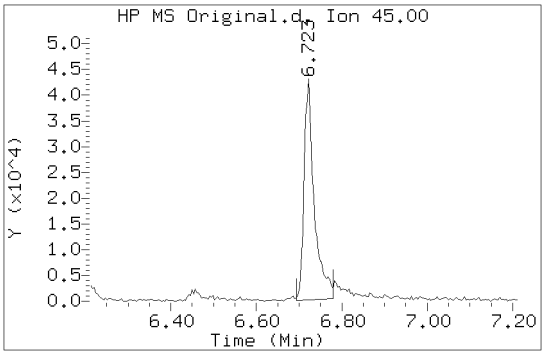


4-Methyl-2-pentanol (108-11-2)

Reason Code:

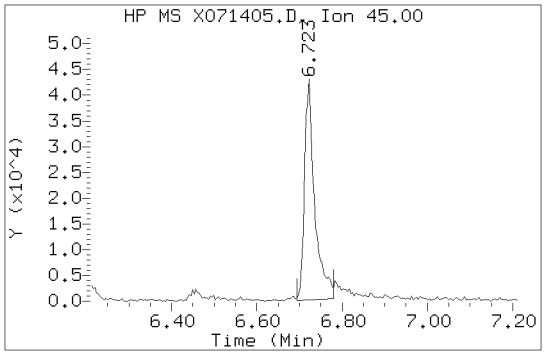
BEFORE

MASS
45
AREA
72210
HEIGHT
42882
20-Jul-2023
15:04
linh
pham



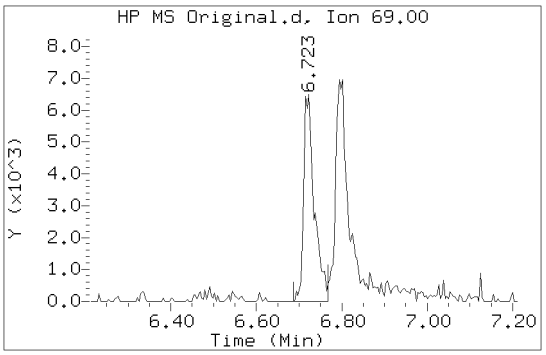
AFTER

MASS
45
AREA
72210
HEIGHT
42882
20-Jul-2023
15:04
linh
pham



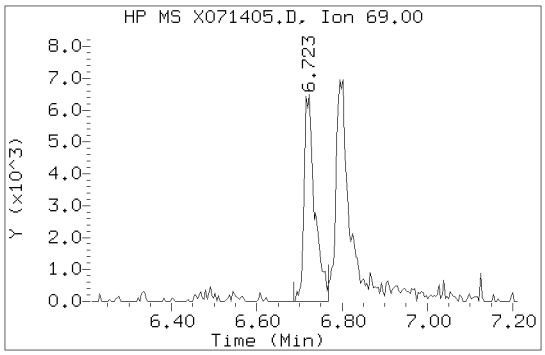
BEFORE

MASS
69
AREA
11484
HEIGHT
6492
20-Jul-2023
15:04
linh
pham



AFTER

MASS
69
AREA
11484
HEIGHT
6492
20-Jul-2023
15:04
linh
pham



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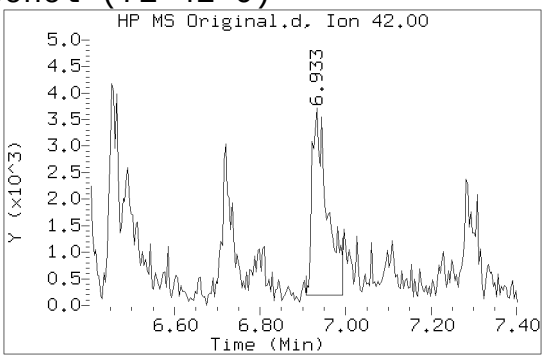
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

Amyl alcohol (71-41-0)

Reason Code:

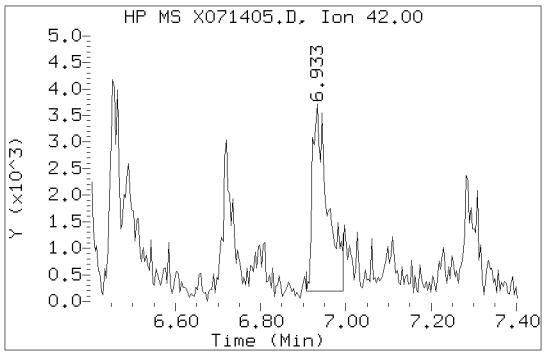
BEFORE

MASS
42
AREA
8579
HEIGHT
3524
20-Jul-2023
15:04
linh
pham



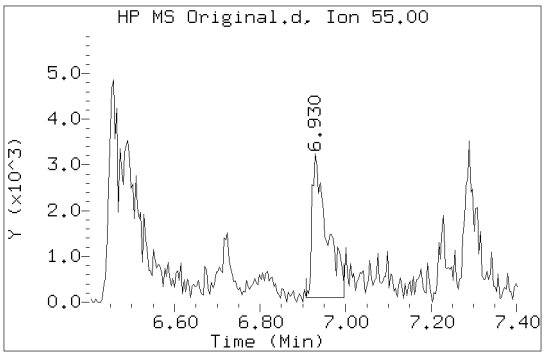
AFTER

MASS
42
AREA
8579
HEIGHT
3524
20-Jul-2023
15:04
linh
pham



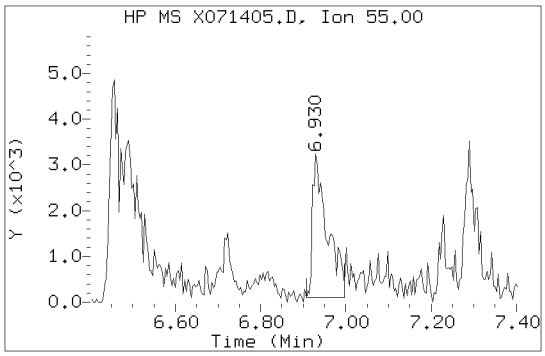
BEFORE

MASS
55
AREA
7591
HEIGHT
3153
20-Jul-2023
15:04
linh
pham



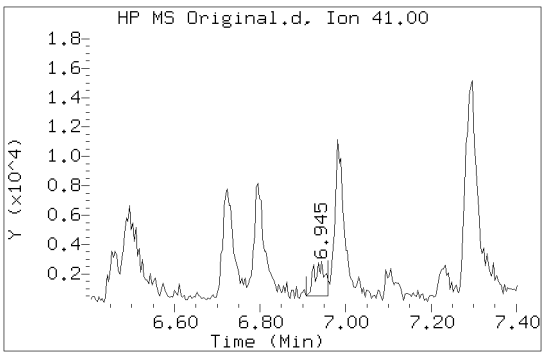
AFTER

MASS
55
AREA
7591
HEIGHT
3153
20-Jul-2023
15:04
linh
pham



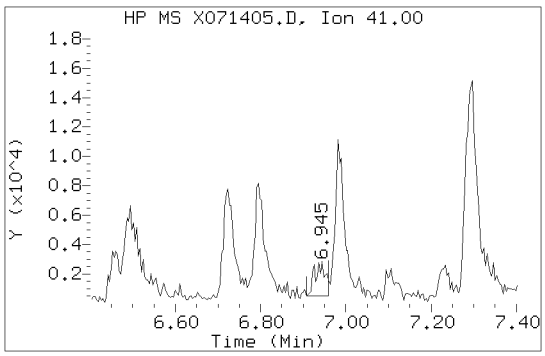
BEFORE

MASS
41
AREA
4124
HEIGHT
2354
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
4124
HEIGHT
2354
20-Jul-2023
15:04
linh
pham



Ethanol (64-17-5)

Reason Code:

BEFORE

MASS
45
AREA
3219
HEIGHT
2559
20-Jul-2023
15:04
linh
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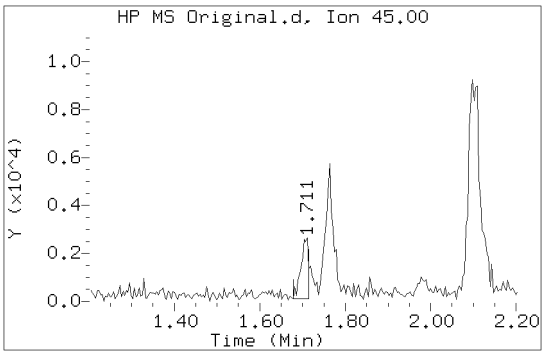

AFTER

MASS
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AREA
3219
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2559
20-Jul-2023
15:04
linh
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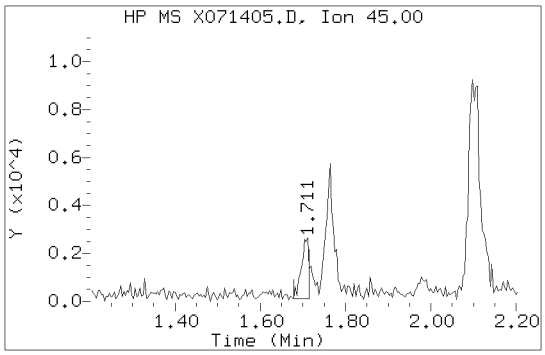

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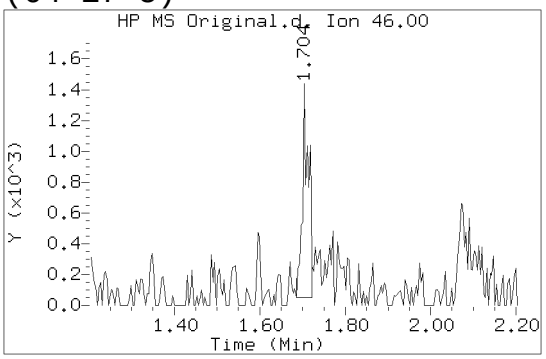
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

Ethanol (64-17-5)

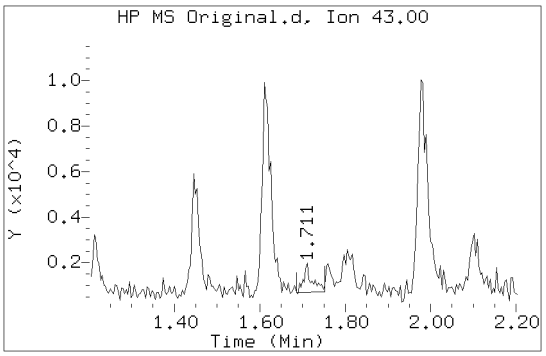
BEFORE

MASS
46
AREA
1433
HEIGHT
1387
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
43
AREA
1776
HEIGHT
1290
20-Jul-2023
15:04
linh
pham



Reason Code:

AFTER

MASS
46
AREA
1433
HEIGHT
1387
20-Jul-2023
15:04
linh
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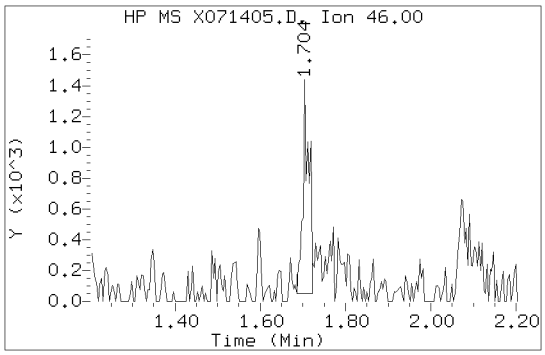

AFTER

MASS
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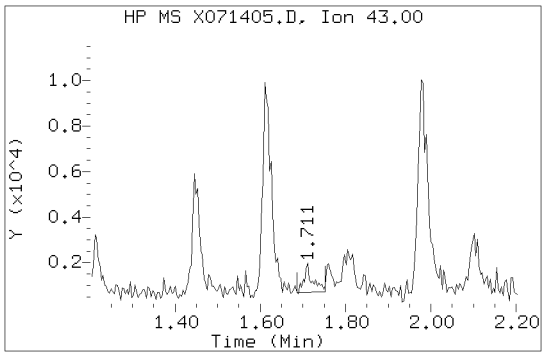
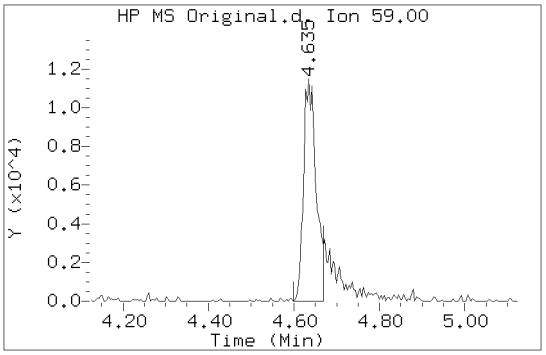
AREA
1776
HEIGHT
1290
20-Jul-2023
15:04
linh
pham



tert-Butyl formate (762-75-4)

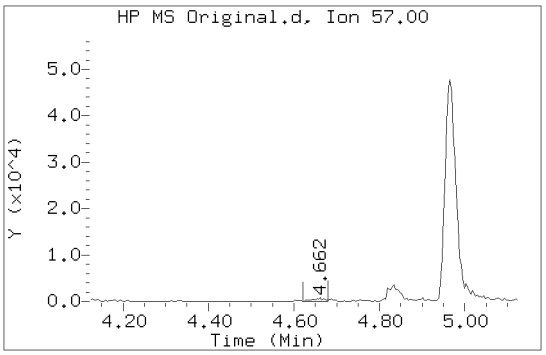
BEFORE

MASS
59
AREA
23857
HEIGHT
11486
20-Jul-2023
15:04
linh
pham



BEFORE

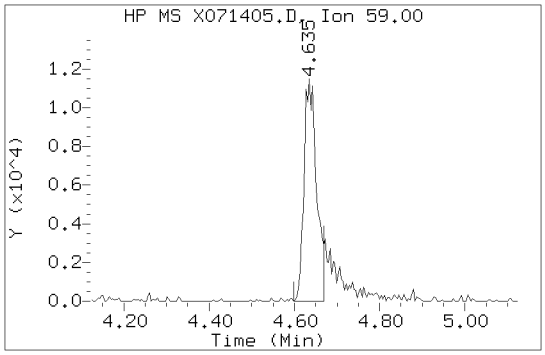
MASS
57
AREA
1334
HEIGHT
778
20-Jul-2023
15:04
linh
pham



Reason Code:

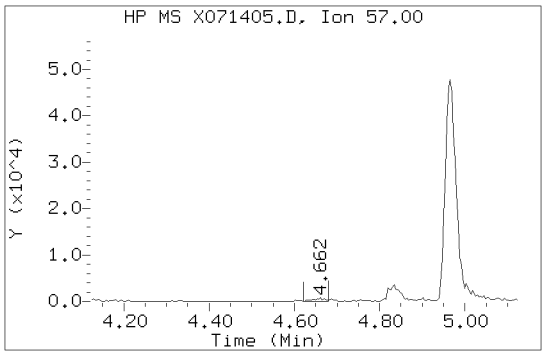
AFTER

MASS
59
AREA
23857
HEIGHT
11486
20-Jul-2023
15:04
linh
pham



AFTER

MASS
57
AREA
1334
HEIGHT
778
20-Jul-2023
15:04
linh
pham



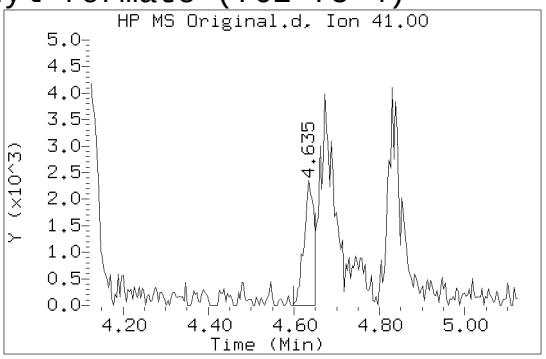
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071405.D
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

tert-Butyl formate (762-75-4)

Reason Code:

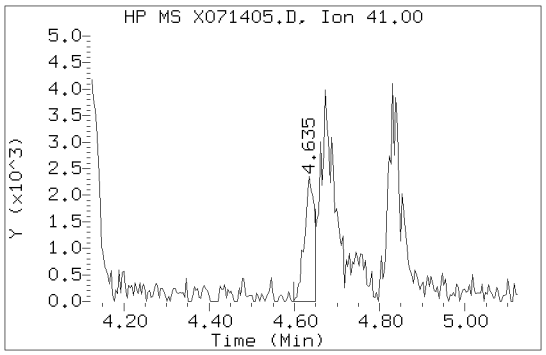
BEFORE

MASS
41
AREA
3833
HEIGHT
2355
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
3833
HEIGHT
2355
20-Jul-2023
15:04
linh
pham

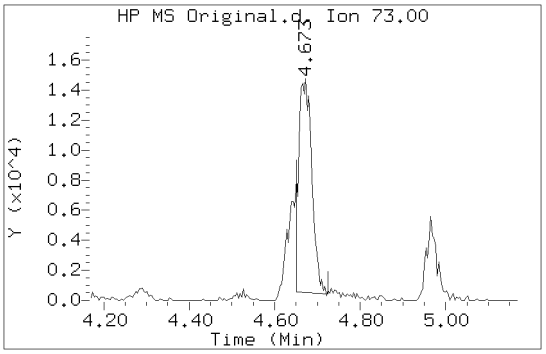


tert-Amyl methyl ether (974-05-08)

Reason Code:

BEFORE

MASS
73
AREA
31345
HEIGHT
14253
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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AREA
31345
HEIGHT
14253
20-Jul-2023
15:04
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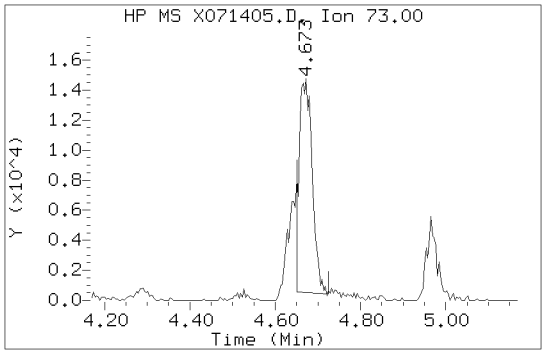
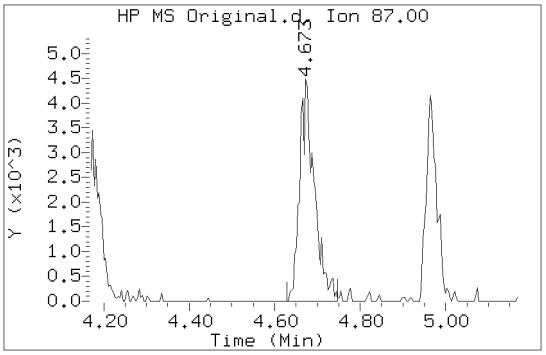
pham



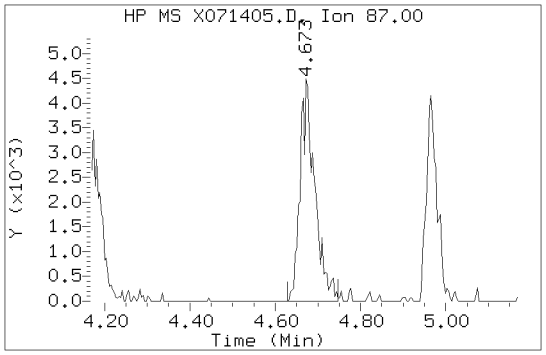
BEFORE

MASS
87
AREA
10923
HEIGHT
4489
20-Jul-2023
15:04
linh
pham



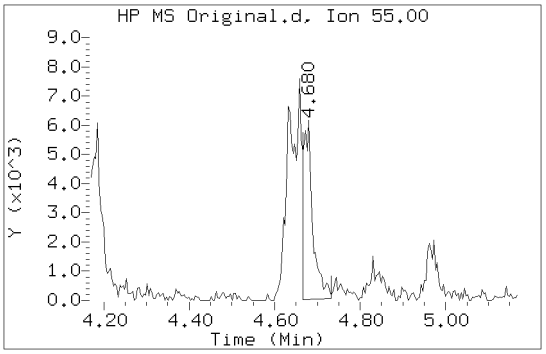
AFTER

MASS
87
AREA
10923
HEIGHT
4489
20-Jul-2023
15:04
linh
pham



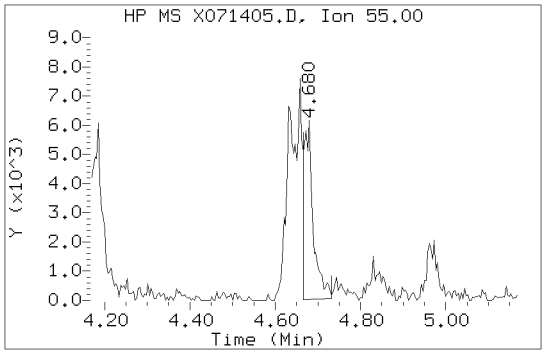
BEFORE

MASS
55
AREA
9755
HEIGHT
6135
20-Jul-2023
15:04
linh
pham



AFTER

MASS
55
AREA
9755
HEIGHT
6135
20-Jul-2023
15:04
linh
pham



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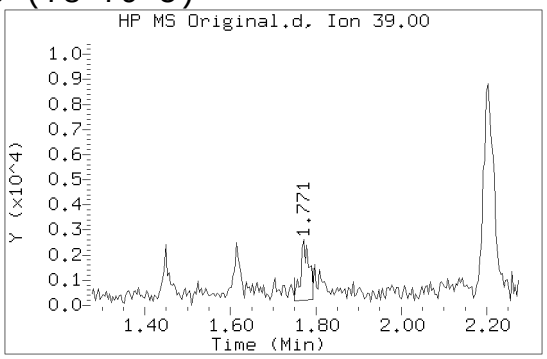
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

Isoprene (78-79-5)

Reason Code:

BEFORE
MASS
39
AREA
3408
HEIGHT
2427
20-Jul-2023
15:04
linh
pham



AFTER
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39
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3408
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2427
20-Jul-2023
15:04
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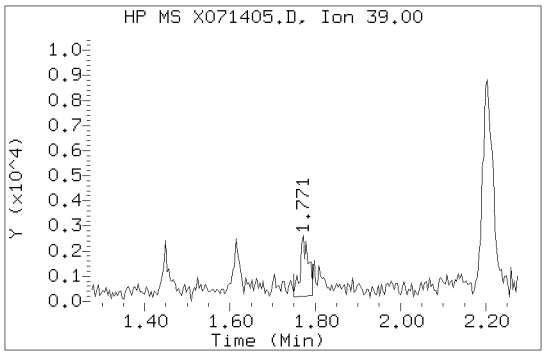

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67
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20-Jul-2023
15:04
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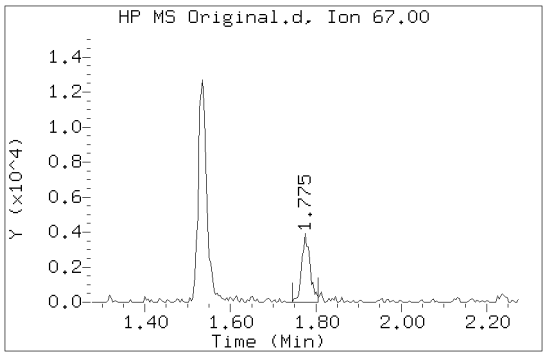

AFTER
MASS
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AREA
5482
HEIGHT
3925
20-Jul-2023
15:04
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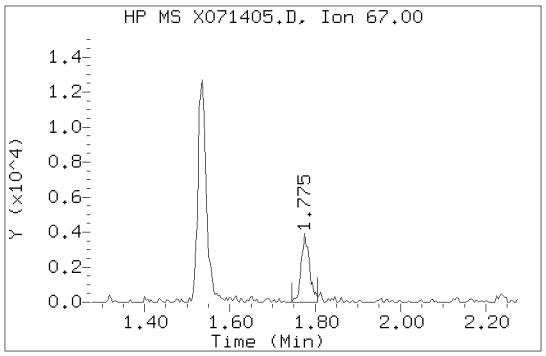

BEFORE
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53
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4358
20-Jul-2023
15:04
linh
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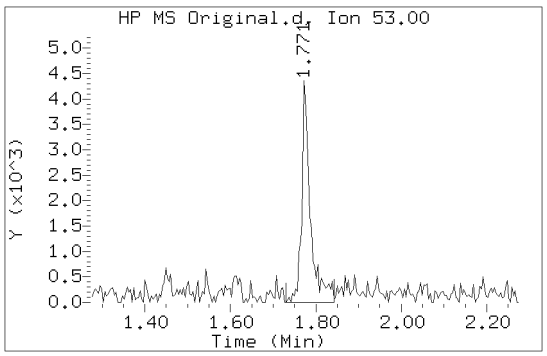

AFTER
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53
AREA
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HEIGHT
4358
20-Jul-2023
15:04
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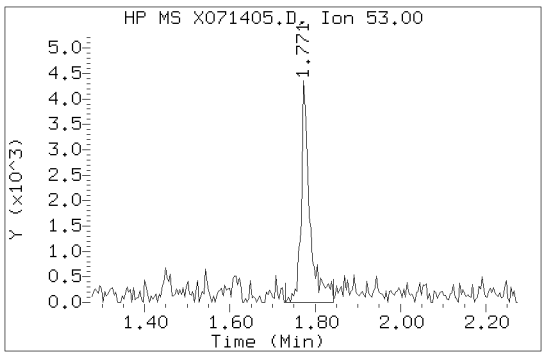

n-Amyl acetate (628-63-7)

Reason Code:

BEFORE
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12364
20-Jul-2023
15:04
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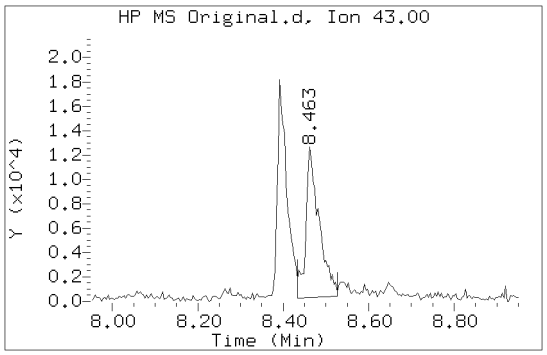

AFTER
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12364
20-Jul-2023
15:04
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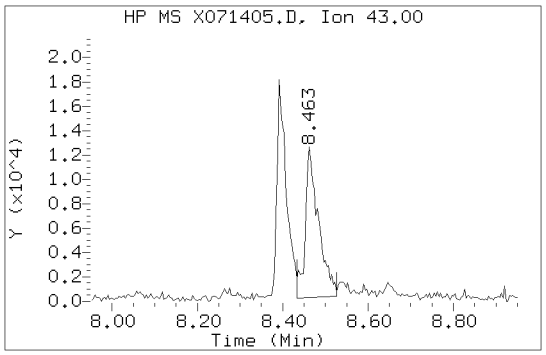

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Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

n-Amyl acetate (628-63-7)

Reason Code:

BEFORE
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HEIGHT
0
20-Jul-2023
15:04
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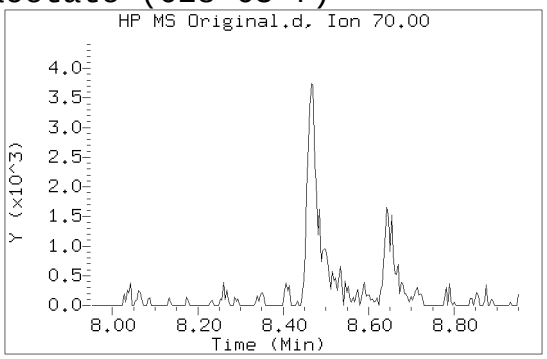
pham



AFTER
MASS
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AREA
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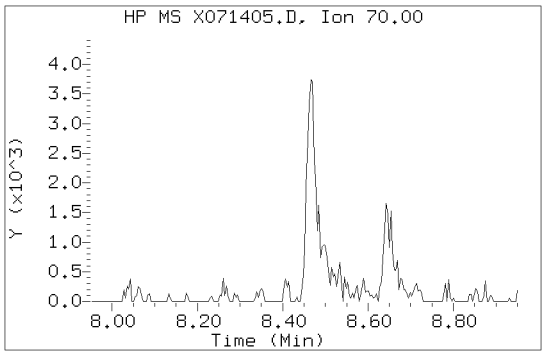
HEIGHT
0
20-Jul-2023
15:04
linh
pham



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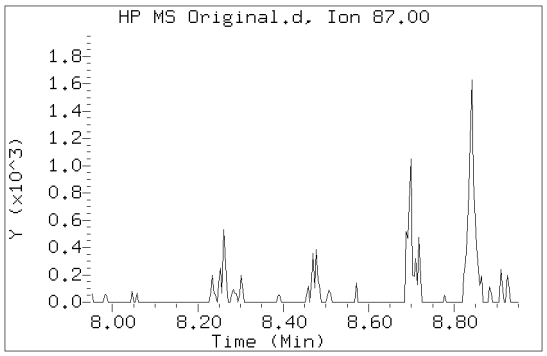

AFTER
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HEIGHT
0
20-Jul-2023
15:04
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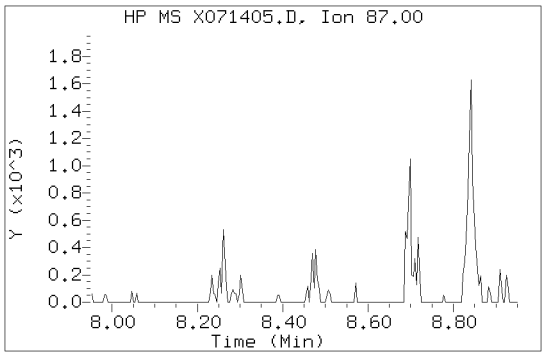
pham



n-Butyl acetate (123-86-4)

Reason Code:

BEFORE
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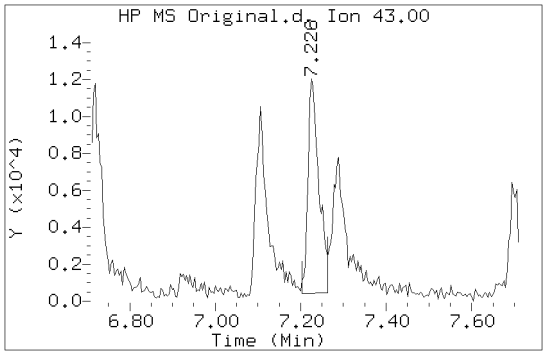
43
AREA
20825
HEIGHT
11598
20-Jul-2023
15:04
linh
pham



AFTER
MASS
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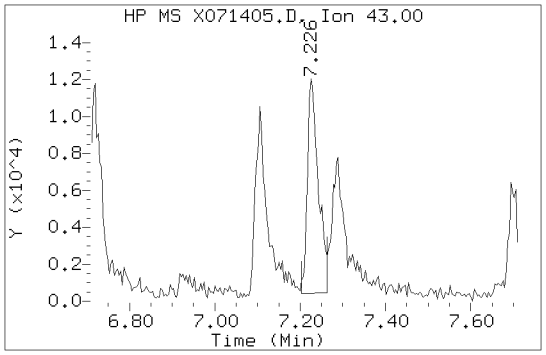
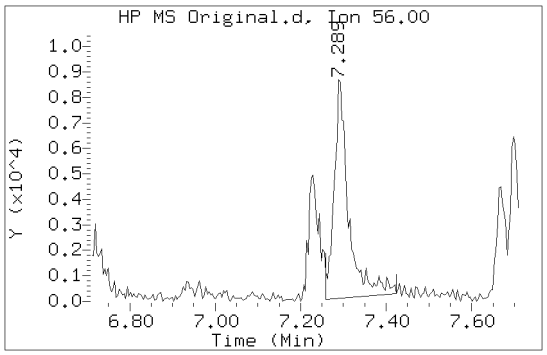
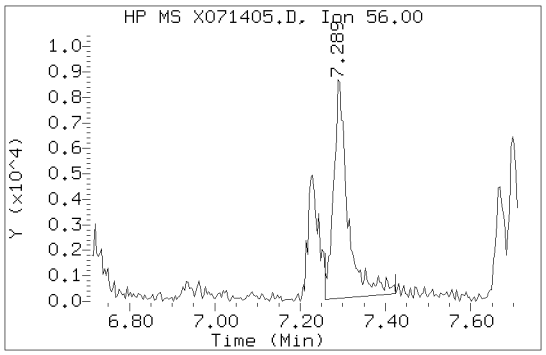
AREA
20825
HEIGHT
11598
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
56
AREA
20012
HEIGHT
8570
20-Jul-2023
15:04
linh
pham



AFTER
MASS
56
AREA
20012
HEIGHT
8570
20-Jul-2023
15:04
linh
pham



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Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

n-Butyl acetate (123-86-4)

Reason Code:

BEFORE

MASS
87
AREA
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HEIGHT
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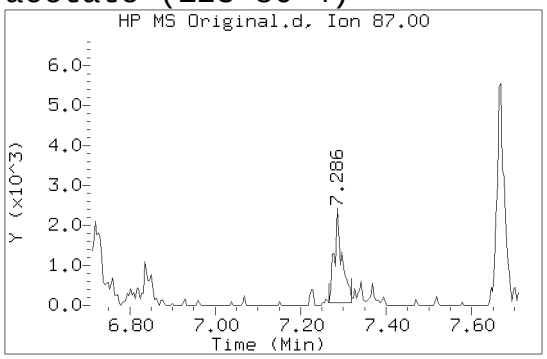
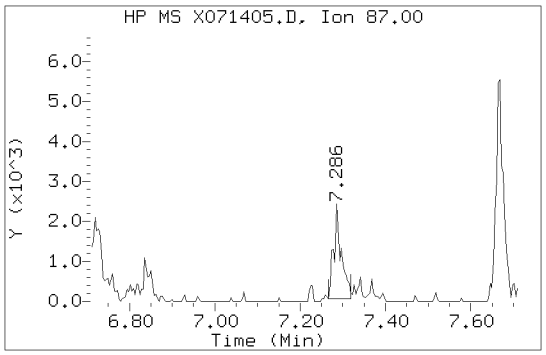
20-Jul-2023
15:04
linh
pham



AFTER

MASS
87
AREA
2958
HEIGHT
2373
20-Jul-2023
15:04
linh
pham



Acetaldehyde (75-07-0)

Reason Code:

BEFORE

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44
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HEIGHT
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20-Jul-2023
15:04
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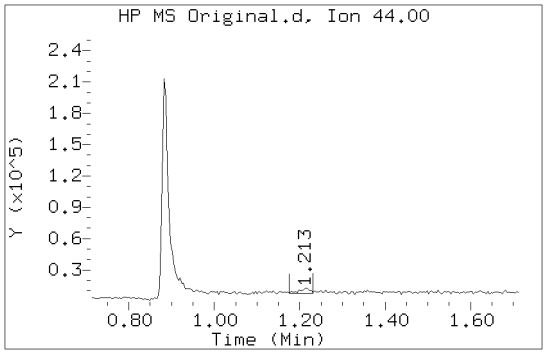

AFTER

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HEIGHT
5042
20-Jul-2023
15:04
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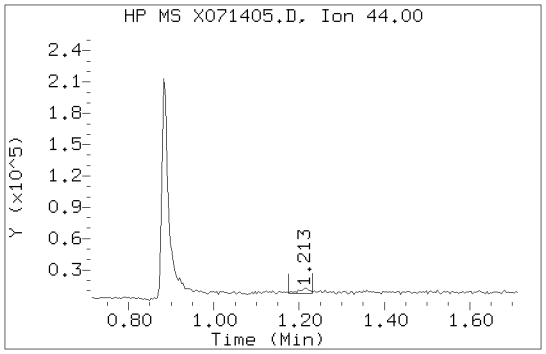
pham



BEFORE

MASS
43
AREA
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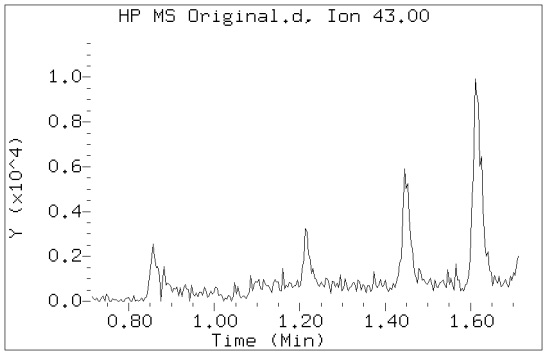
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
43
AREA
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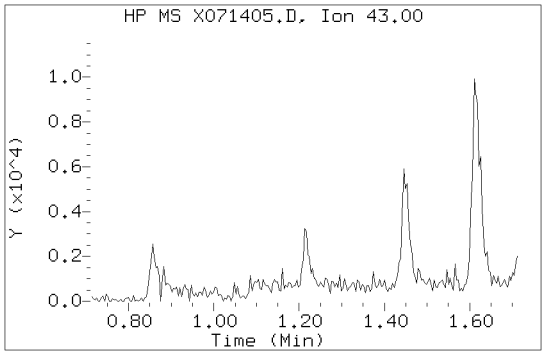
HEIGHT
0
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
42
AREA
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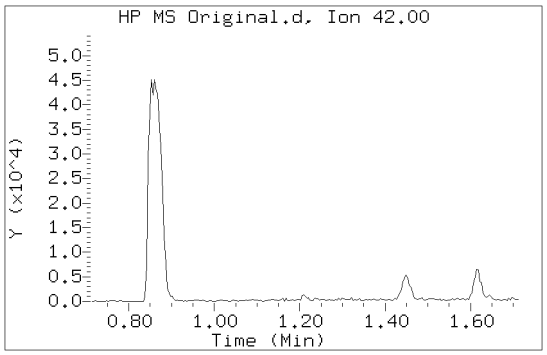
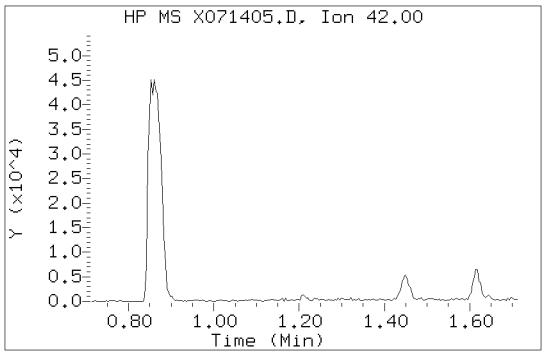
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
42
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



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Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

Isobutylene (115-11-7)

Reason Code:

BEFORE
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AREA
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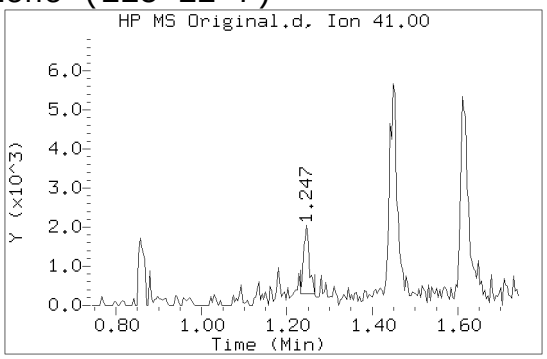
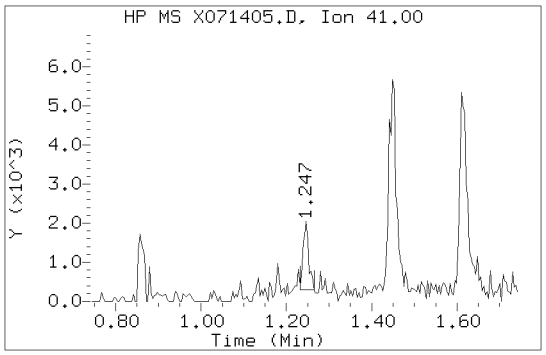
HEIGHT
1749
20-Jul-2023
15:04
linh
pham



AFTER
MASS
41
AREA
1654
HEIGHT
1749
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
56
AREA
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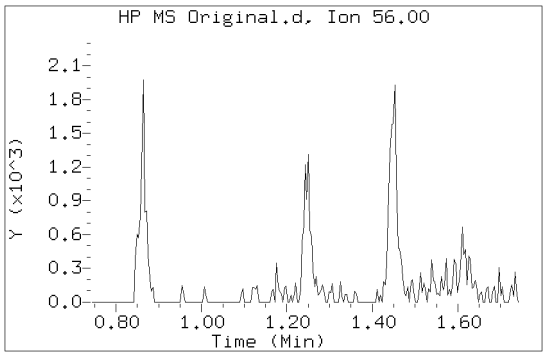
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER
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AREA
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HEIGHT
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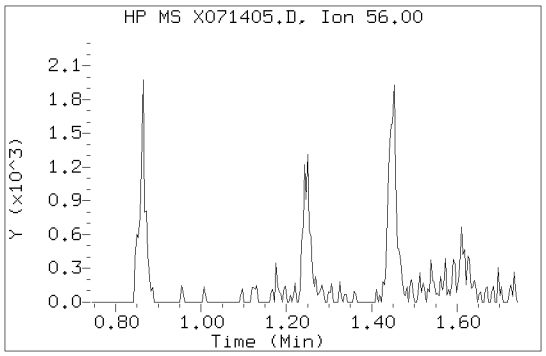
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
84
AREA
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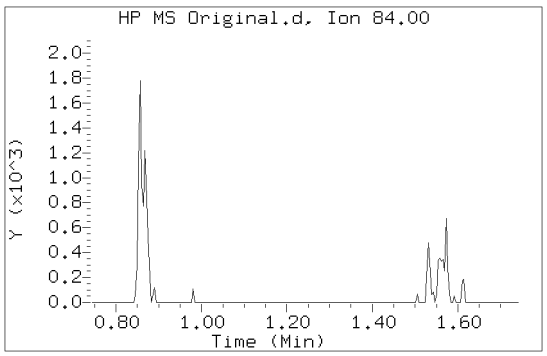
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER
MASS
84
AREA
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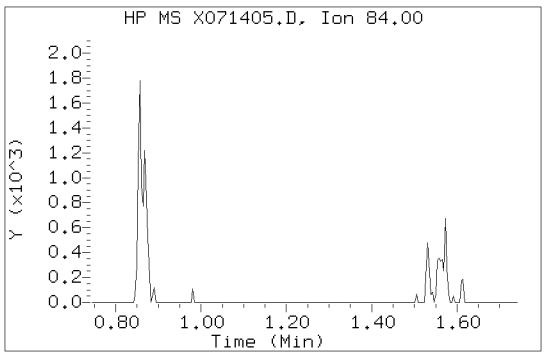
HEIGHT
0
20-Jul-2023
15:04
linh
pham



2-Ethylhexyl Acrylate (103-11-7)

Reason Code:

BEFORE
MASS
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AREA
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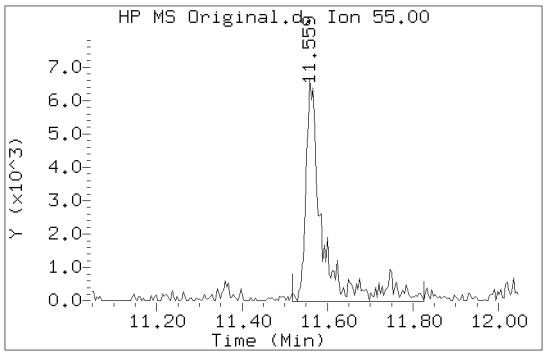
HEIGHT
6633
20-Jul-2023
15:04
linh
pham



AFTER
MASS
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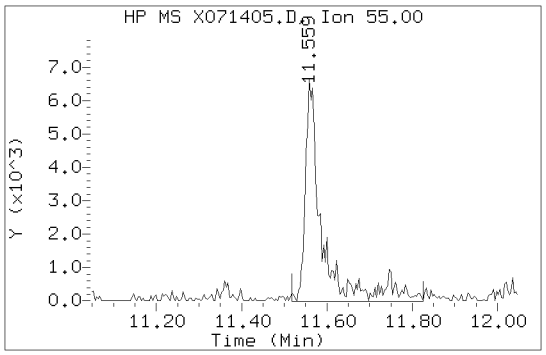
AREA
18101
HEIGHT
6633
20-Jul-2023
15:04
linh
pham



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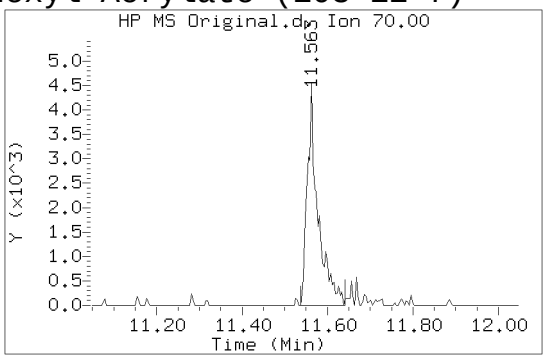
Inj Date : 14-JUL-2023 13:23
InstruID : voa6.i
LabSampID : VSTD002

2-Ethylhexyl Acrylate (103-11-7)

Reason Code:

BEFORE

MASS
70
AREA
7844
HEIGHT
4538
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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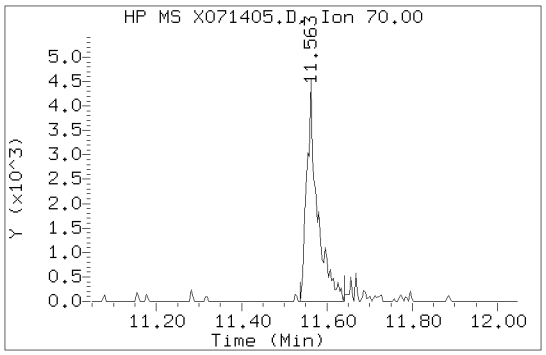
AREA
7844
HEIGHT
4538
20-Jul-2023
15:04
linh
pham

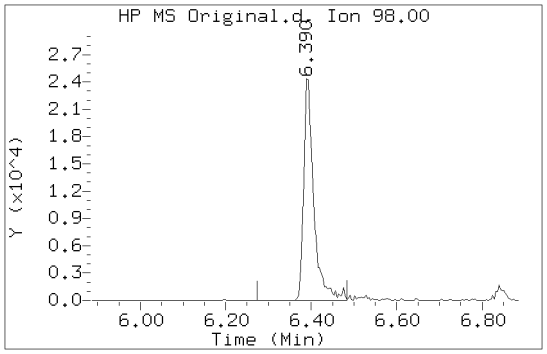


Toluene-d8 (2037-26-5)

Reason Code:

BEFORE

MASS
98
AREA
41058
HEIGHT
24360
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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AREA
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HEIGHT
24360
20-Jul-2023
15:04
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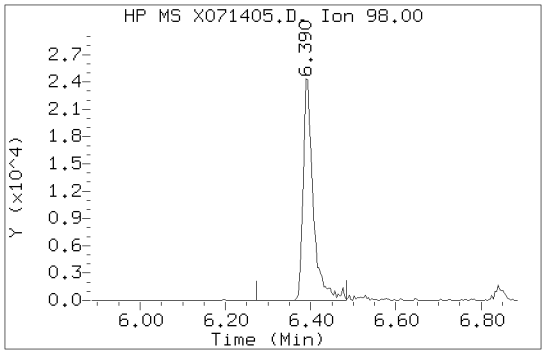
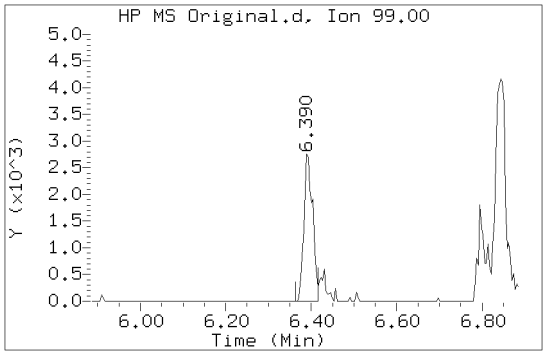
pham



BEFORE

MASS
99
AREA
4023
HEIGHT
2761
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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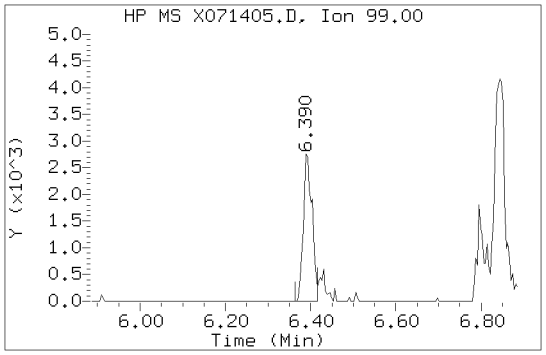
AREA
4023
HEIGHT
2761
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
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AREA
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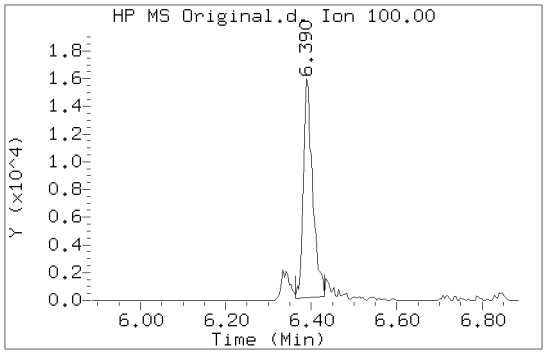
HEIGHT
15816
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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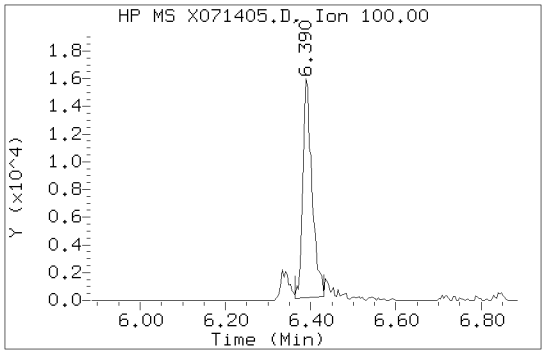
AREA
24373
HEIGHT
15816
20-Jul-2023
15:04
linh
pham



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Report Date: 20-Jul-2023 15:05

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071406.D
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Inj Date : 14-JUL-2023 13:43
Operator : PC Inst ID: voa6.i
Smp Info : VSTD005;VSTD005;1;5;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\8260W.m
Meth Date : 20-Jul-2023 15:05 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 13:23 Cal File: X071405.D
Als bottle: 7 Calibration Sample, Level: 5
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	4.177	4.177	(1.000)	515309	50.0000	
2	Dichlorodifluoromethane	85	0.976	0.976	(0.234)	21541	5.00000	5.09
3	Chloromethane	50	1.081	1.081	(0.259)	35282	5.00000	4.53(M)
4	Propionitrile	54	3.671	3.671	(0.879)	48685	50.0000	47.69(a)
5	Vinyl Chloride	62	1.149	1.149	(0.275)	31539	5.00000	4.72
6	Bromomethane	94	1.343	1.343	(0.322)	13035	5.00000	4.72(M)
7	Chloroethane	64	1.407	1.407	(0.337)	17933	5.00000	4.71
8	Trichlorofluoromethane	101	1.565	1.565	(0.375)	30820	5.00000	4.56
9	Acrolein	56	1.868	1.868	(0.447)	2341	10.0000	12.99(aH)
10	Acetone	43	1.977	1.977	(0.473)	26152	10.0000	8.56
11	1,1-Dichloroethene	96	1.917	1.917	(0.459)	18372	5.00000	4.86
12	Isobutyl Alcohol	43	4.684	4.684	(1.121)	97691	100.000	100.01(a)
13	Acetonitrile	39	2.206	2.206	(0.528)	34072	50.0000	47.15(a)
14	Allyl Chloride	41	2.206	2.206	(0.528)	83408	5.00000	4.92(a)
15	Iodomethane	142	2.029	2.029	(0.486)	29645	10.0000	9.67(M)
16	Acrylonitrile	53	2.539	2.539	(0.608)	26399	10.0000	10.51
17	Methylene Chloride	84	2.307	2.307	(0.552)	25734	5.00000	4.52
18	Methyl tert-butyl ether	73	2.543	2.543	(0.609)	69208	5.00000	4.92
19	Carbon Disulfide	76	2.074	2.074	(0.497)	111855	10.0000	9.42
20	trans-1,2-Dichloroethene	96	2.532	2.532	(0.606)	22471	5.00000	5.14

21 Vinyl Acetate	43	3.008	3.008 (0.720)	178820	10.0000	9.90
22 1,1-Dichloroethane	63	2.925	2.925 (0.700)	46539	5.00000	4.85

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	23 Chloroprene	53	1.778	1.778	(0.426)	11212	5.00000	4.83(aM)
	24 2-Butanone	43	3.608	3.608	(0.864)	25624	10.0000	9.33(M)
	25 Methacrylonitrile	41	3.848	3.848	(0.921)	30821	5.00000	4.63(a)
	26 2,2-Dichloropropane	77	3.506	3.506	(0.839)	34523	5.00000	4.82
	27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.845)	27063	5.00000	4.86
	28 Chloroform	83	3.908	3.908	(0.935)	45886	5.00000	4.67
	29 Bromochloromethane	128	3.803	3.803	(0.910)	15326	5.00000	4.91
$	30 Dibromofluoromethane	113	4.102	4.102	(0.982)	26145	5.00000	4.85
	31 1,1,1-Trichloroethane	97	4.076	4.076	(0.976)	34806	5.00000	4.61
	32 1,1-Dichloropropene	75	4.282	4.282	(0.863)	28199	5.00000	4.24
	33 1,2-Dichloroethane	62	4.564	4.564	(0.919)	41945	5.00000	4.67
	34 Carbon Tetrachloride	117	4.264	4.264	(0.859)	30432	5.00000	4.54
$	35 1,2-Dichloroethane-d4	65	4.477	4.477	(1.072)	31653	5.00000	4.80
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	815041	50.0000	
	37 Benzene	78	4.515	4.515	(0.909)	91790	5.00000	4.70
	38 Trichloroethene	130	5.212	5.212	(1.050)	24824	5.00000	4.50(a)
	39 Bromodichloromethane	83	5.726	5.726	(1.153)	35030	5.00000	4.69(a)
	40 Methyl Methacrylate	41	5.617	5.617	(1.345)	30166	5.00000	4.85(a)
	41 2-Chloroethylvinyl ether	63	6.056	6.056	(1.220)	21401	10.0000	9.38(a)
	42 1,2-Dichloropropane	63	5.437	5.437	(1.095)	30550	5.00000	4.87(a)
	43 2-Nitropropane	43	5.981	5.981	(1.432)	8304	5.00000	4.05(a)
	44 Dibromomethane	93	5.557	5.557	(1.119)	16922	5.00000	4.76(a)
	45 4-Methyl-2-Pentanone	43	6.329	6.329	(0.825)	71437	10.0000	9.87
	46 cis-1,3-Dichloropropene	75	6.160	6.160	(1.241)	38467	5.00000	4.48(a)
*	47 Chlorobenzene-d5	117	7.667	7.667	(1.000)	735002	50.0000	
$	48 Toluene-d8	98	6.385	6.385	(0.833)	95273	5.00000	5.03(M)
	49 Ethyl Methacrylate	69	6.715	6.715	(1.353)	26485	5.00000	4.96(a)
	50 Toluene	91	6.445	6.445	(0.841)	96792	5.00000	4.89(a)
	51 trans-1,3-Dichloropropene	75	6.685	6.685	(1.347)	33424	5.00000	4.62(a)
	52 2-Hexanone	43	7.098	7.098	(0.926)	48930	10.0000	10.29
	53 1,1,2-Trichloroethane	83	6.843	6.843	(0.892)	20880	5.00000	4.97(a)
	54 1,3-Dichloropropane	76	6.981	6.981	(0.911)	43005	5.00000	5.01
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	28644	5.00000	4.72(a)
	56 Tetrachloroethene	164	6.929	6.929	(0.904)	19962	5.00000	4.88(a)
	57 1,2-Dibromoethane	107	7.263	7.263	(0.947)	25723	5.00000	5.36
	58 1-Chlorohexane	55	7.697	7.697	(1.550)	29679	5.00000	4.53(a)
	59 Chlorobenzene	112	7.694	7.694	(1.003)	65984	5.00000	4.77(a)
	60 1,1,1,2-Tetrachloroethane	131	7.776	7.776	(1.014)	25299	5.00000	4.67(a)
	61 Ethylbenzene	106	7.799	7.799	(1.017)	32420	5.00000	4.67(a)
	62 m,p-Xylenes	106	7.907	7.907	(1.031)	79790	10.0000	9.17(a)
	63 o-Xylene	106	8.241	8.241	(1.075)	37444	5.00000	4.54(a)
	64 Styrene	104	8.267	8.267	(1.078)	65591	5.00000	4.56(a)
	66 Bromoform	173	8.413	8.413	(1.097)	17937	5.00000	4.61(a)
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	96601	5.00000	4.56(a)
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	33128	5.00000	5.01
$	69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	40007	5.00000	5.08
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	393512	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	27801	5.00000	5.30
	72 trans-1,4-Dichloro-2-butene	53	8.893	8.893	(1.160)	9958	5.00000	4.45(aM)
	73 n-Propylbenzene	91	8.912	8.912	(0.922)	105135	5.00000	4.42(a)
	74 Bromobenzene	156	8.811	8.811	(0.912)	30146	5.00000	4.89(a)
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	77581	5.00000	4.35(a)

76	2-Chlorotoluene	91	8.972	8.972 (0.929)	73357	5.00000	4.57(a)
77	4-Chlorotoluene	91	9.073	9.073 (0.939)	83281	5.00000	4.72(a)

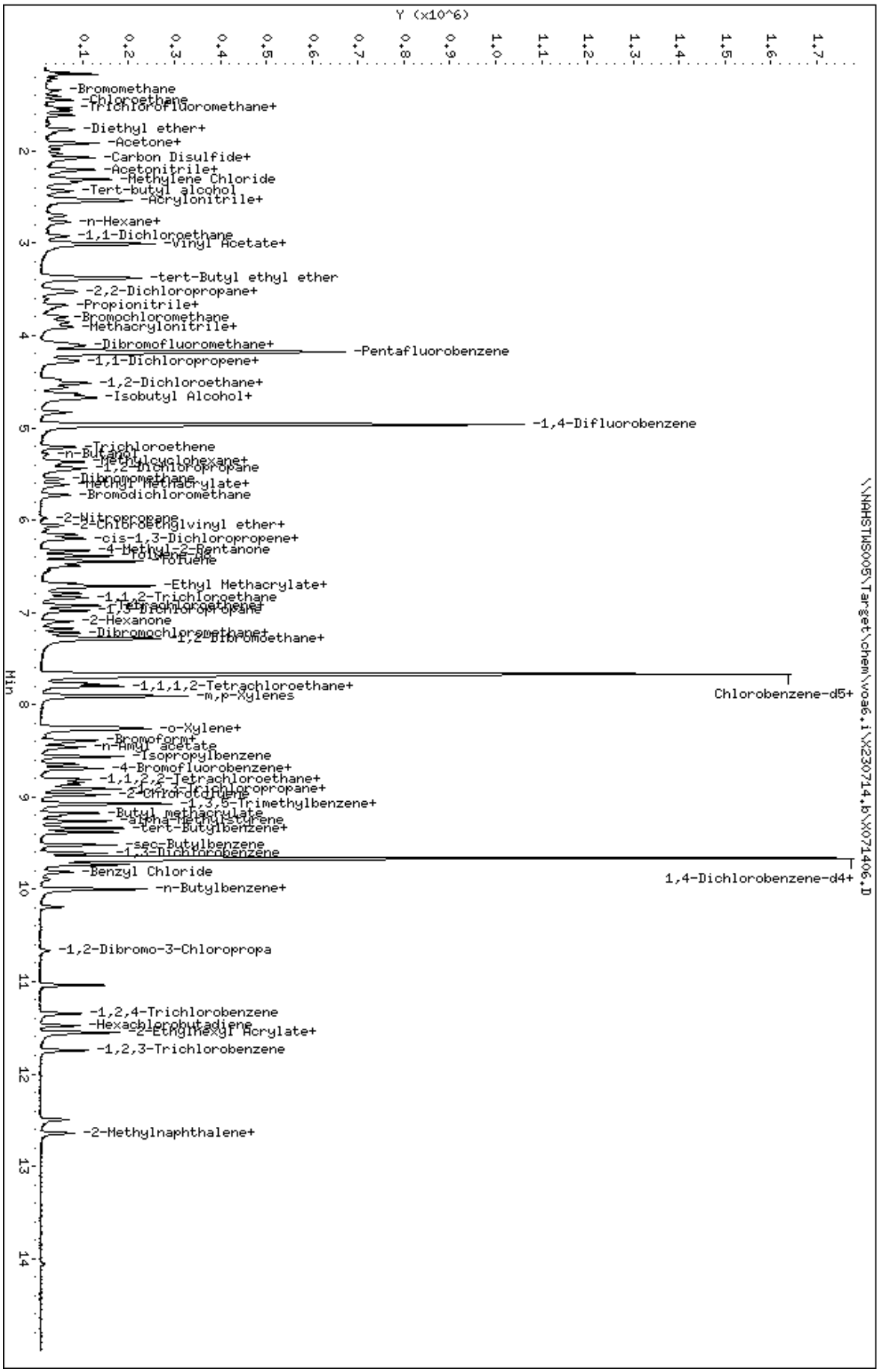
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
78	tert-Butylbenzene	119	9.336	9.336	(0.966)	68497	5.00000	4.48(a)
79	1,2,4-Trimethylbenzene	105	9.381	9.381	(0.971)	75897	5.00000	4.24(a)
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	89261	5.00000	4.38(a)
82	p-Isopropyltoluene	119	9.647	9.647	(0.998)	80480	5.00000	4.32(a)
83	1,3-Dichlorobenzene	146	9.609	9.609	(0.995)	48860	5.00000	4.55(a)
84	1,4-Dichlorobenzene	146	9.680	9.680	(1.002)	56875	5.00000	4.83(a)
86	Benzyl Chloride	91	9.815	9.815	(1.280)	45616	5.00000	5.82(M)
87	n-Butylbenzene	91	9.995	9.995	(1.035)	67203	5.00000	4.31(a)
88	1,2-Dichlorobenzene	146	9.995	9.995	(1.035)	49668	5.00000	4.71(a)
89	1,2-Dibromo-3-Chloropropane	155	10.659	10.659	(1.103)	5268	5.00000	5.83(M)
90	1,2,4-Trichlorobenzene	180	11.349	11.349	(1.175)	33646	5.00000	4.64(aM)
91	Hexachlorobutadiene	225	11.476	11.476	(1.188)	13714	5.00000	6.27
92	Naphthalene	128	11.551	11.551	(1.196)	85025	5.00000	4.74(aM)
93	1,2,3-Trichlorobenzene	180	11.742	11.742	(1.215)	30270	5.00000	4.47(a)
146	Methyl acetate	43	2.236	2.236	(0.535)	23616	5.00000	5.14
138	Freon TF	101	1.921	1.921	(0.460)	16656	5.00000	5.27
141	Cyclohexane	56	4.121	4.121	(0.987)	39083	5.00000	4.37(aH)
142	Tetrahydrofuran	42	3.863	3.863	(0.925)	12650	10.0000	9.54
147	Methylcyclohexane	55	5.399	5.399	(1.088)	84656	5.00000	4.92(aM)
135	1,4-Dioxane	88	5.617	5.617	(1.345)	6551	100.000	106.98(M)
132	n-Butanol	56	5.287	5.287	(1.266)	13588	100.000	79.21(aM)
131	Methyl Acrylate	55	3.716	3.716	(0.890)	33338	5.00000	4.75(aMH)
133	Ethyl Acrylate	55	5.399	5.399	(1.293)	82574	5.00000	4.83(M)
136	n-Hexane	57	2.775	2.775	(0.664)	26276	5.00000	5.21
139	Diethyl ether	59	1.763	1.763	(0.422)	23219	5.00000	4.83(a)
148	Tert-butyl alcohol	59	2.434	2.434	(0.583)	63493	100.000	97.62
149	Isopropyl alcohol	45	2.101	2.101	(0.503)	37998	100.000	94.15
156	Diisopropyl ether	45	3.008	3.008	(0.720)	98591	5.00000	4.64(Ta)
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	83294	5.00000	4.57(a)
167	Ethanol	45	1.703	1.703	(0.408)	7997	100.000	94.37
172	tert-Butyl formate	59	4.627	4.627	(1.108)	54968	10.0000	9.98
173	3,3-Dimethyl-1-butanol	57	7.289	7.289	(0.951)	78844	100.000	99.74
174	tert-Amyl methyl ether	73	4.669	4.669	(1.118)	83517	5.00000	4.92(aM)
175	tert-Butyl ethyl ether	59	3.379	3.379	(0.809)	109587	5.00000	5.02
176	tert-Amyl alcohol	59	4.627	4.627	(1.108)	54968	100.000	97.64
151	4-Methyl-2-pentanol	45	6.715	6.715	(1.353)	183123	100.000	104.84(M)
180	1-Methylnaphthalene	142	12.642	12.642	(1.308)	33519	5.00000	(a)
140	1,3-Butadiene	54	1.167	1.167	(0.280)	30818	5.00000	4.65(a)
152	Amyl alcohol	42	6.921	6.921	(0.903)	21498	100.000	101.70(M)
158	Dichlorofluoromethane	67	1.535	1.535	(0.367)	38837	5.00000	4.67
159	Propylene oxide	43	1.808	1.808	(0.433)	7637	10.0000	12.08
161	3-Methyl-1-butanol	55	6.921	6.921	(0.903)	17029	100.000	94.10(M)
162	Butyl acrylate	55	8.256	8.256	(1.077)	63254	5.00000	4.52(a)
163	Butyl methacrylate	41	9.178	9.178	(0.950)	44524	5.00000	4.72(a)
164	Dicyclopentadiene	66	9.680	9.680	(1.002)	101741	5.00000	4.48(a)
182	Epichlorohydrin	57	6.104	6.104	(1.230)	11661	20.0000	19.15
M 94	1,2-Dichloroethylene (total)	96				49534	10.0000	(a)
130	Ethyl Acetate	43	3.679	3.679	(0.881)	39438	5.00000	5.15(M)
134	Cyclohexanone	55	8.646	8.646	(0.895)	36410	100.000	103.93(a)
185	Isoprene	39	1.775	1.775	(0.425)	9011	5.00000	5.30
188	Isopropyl acetate	43	4.684	4.684	(0.943)	98768	5.00000	4.59(a)
187	n-Amyl acetate	43	8.458	8.458	(1.103)	62876	5.00000	4.66(a)

189 n-Butyl acetate	43	7.221	7.221 (0.942)	54777	5.00000	4.86(aH)
150 Allyl alcohol	57	2.775	2.775 (0.664)	26276	100.000	102.36

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
194 Acetaldehyde	44	1.212	1.212	(0.290)	20987	20.0000	27.87(M)
195 Methyl Amyl Ketone	43	8.387	8.387	(1.094)	76515	5.00000	4.98(aH)
200 Dimethyl Disulfide	94	6.202	6.202	(0.809)	44165	5.00000	4.45(a)
202 Isobutylene	41	1.246	1.246	(0.298)	4070	5.00000	4.77(aM)
205 2-Ethylhexyl Acrylate	55	11.551	11.551	(1.196)	41733	5.00000	4.15(a)

QC Flag Legend

T - Target compound detected outside RT window.
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.



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Sample Info: VSTD005;VSTD005;1;5;
Purge Volume: 5.0
Column phase: DB624

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

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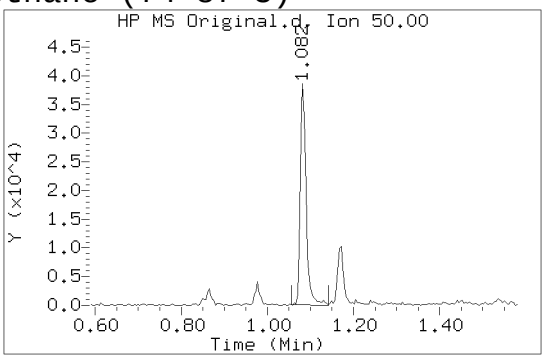
Inj Date : 14-JUL-2023 13:43
InstruID : voa6.i
LabSampID : VSTD005

Chloromethane (74-87-3)

Reason Code:

BEFORE
MASS
50
AREA
35282
HEIGHT
38561
20-Jul-2023
15:04
linh
pham



AFTER
MASS
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AREA
35282
HEIGHT
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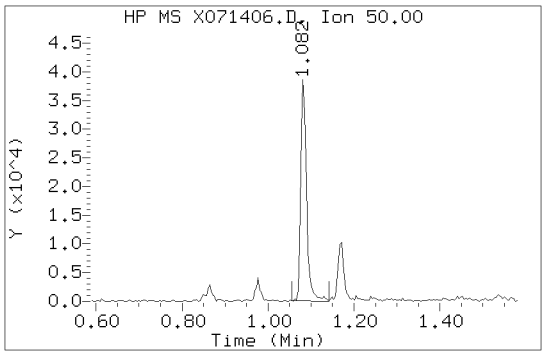

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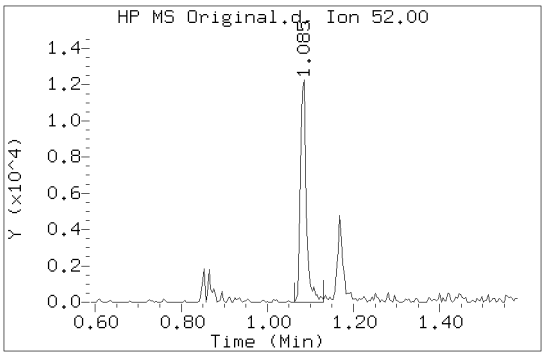

AFTER
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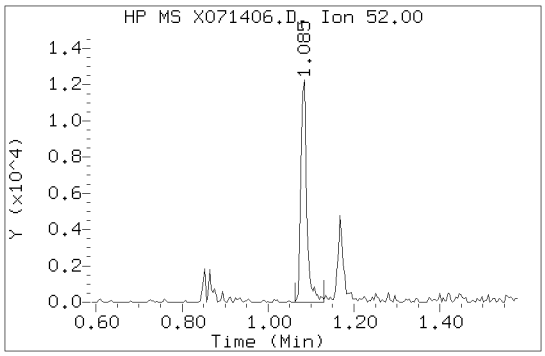

Bromomethane (74-83-9)

Reason Code:

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AREA
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HEIGHT
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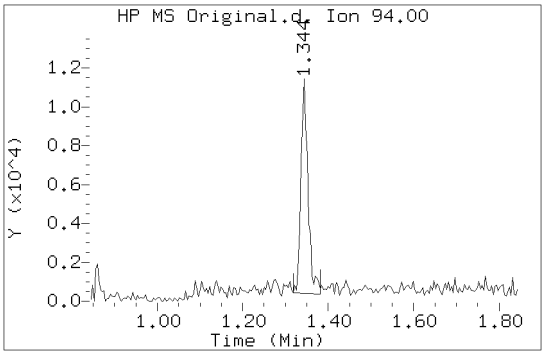
20-Jul-2023
15:04
linh
pham



AFTER
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HEIGHT
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20-Jul-2023
15:04
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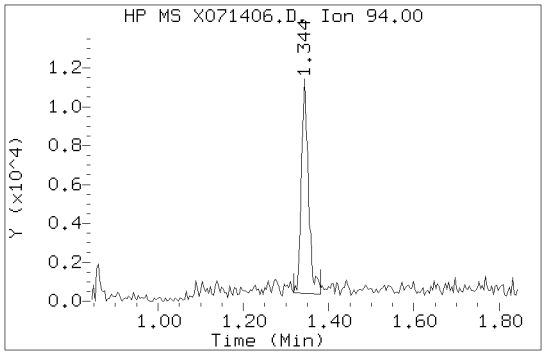

BEFORE
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AREA
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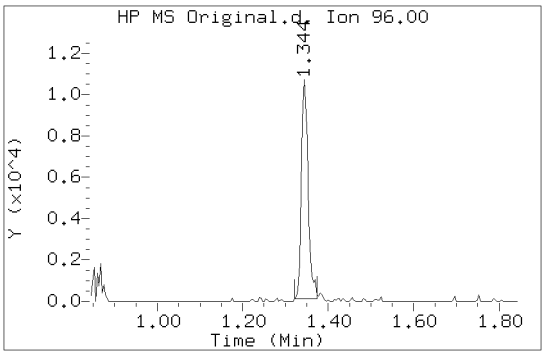
HEIGHT
10597
20-Jul-2023
15:04
linh
pham



AFTER
MASS
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AREA
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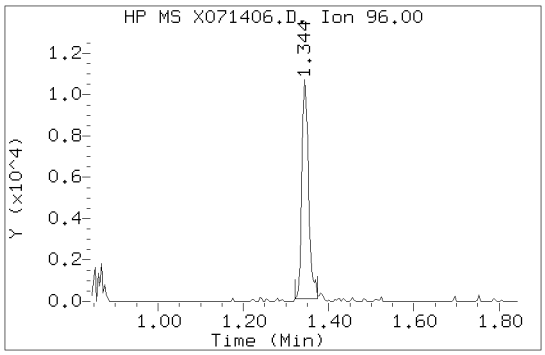
15:04
linh
pham



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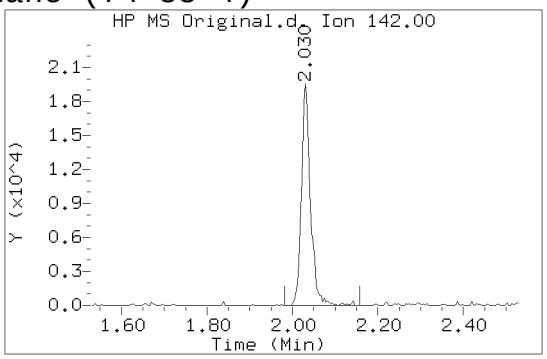
Inj Date : 14-JUL-2023 13:43
InstruID : voa6.i
LabSampID : VSTD005

Iodomethane (74-88-4)

Reason Code:

BEFORE

MASS
142
AREA
29645
HEIGHT
19576
20-Jul-2023
15:04
linh
pham



AFTER

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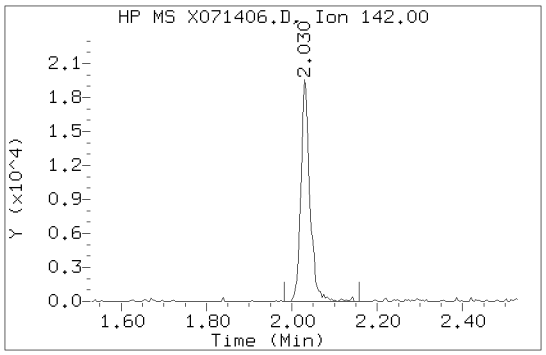

BEFORE

MASS
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AREA
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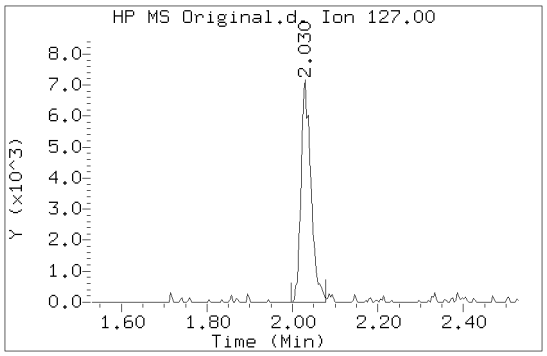
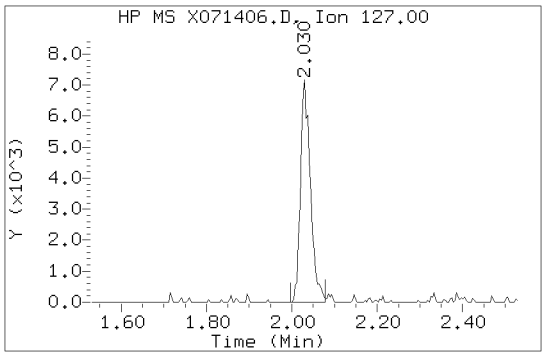
20-Jul-2023
15:04
linh
pham



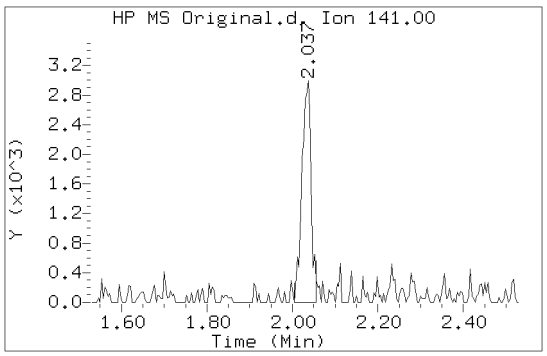
AFTER

MASS
127
AREA
11941
HEIGHT
7165
20-Jul-2023
15:04
linh
pham



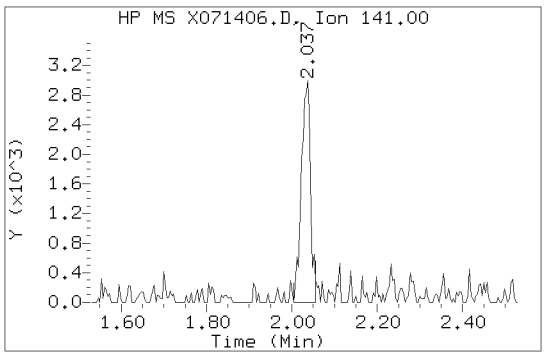
BEFORE

MASS
141
AREA
4591
HEIGHT
2994
20-Jul-2023
15:04
linh
pham



AFTER

MASS
141
AREA
4591
HEIGHT
2994
20-Jul-2023
15:04
linh
pham

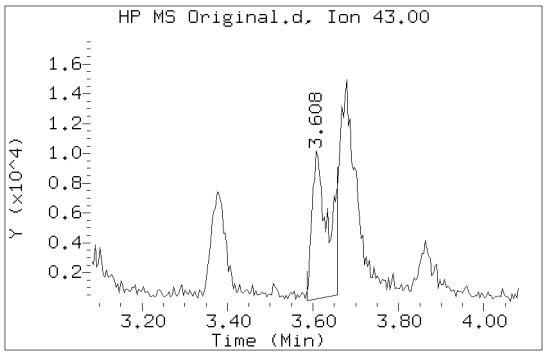


2-Butanone (78-93-3)

Reason Code:

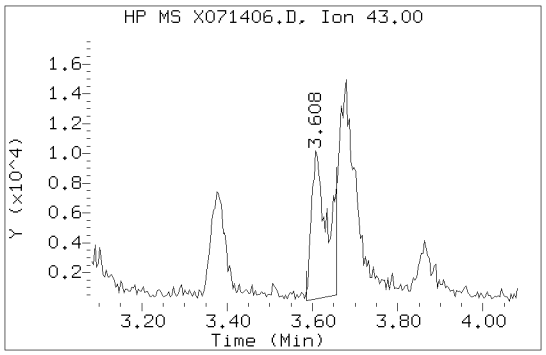
BEFORE

MASS
43
AREA
25624
HEIGHT
9920
20-Jul-2023
15:04
linh
pham



AFTER

MASS
43
AREA
25624
HEIGHT
9920
20-Jul-2023
15:04
linh
pham



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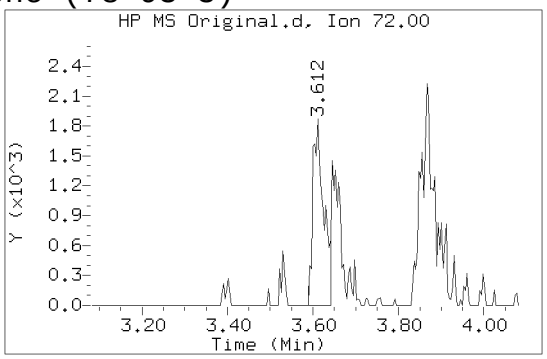
Inj Date : 14-JUL-2023 13:43
InstruID : voa6.i
LabSampID : VSTD005

2-Butanone (78-93-3)

Reason Code:

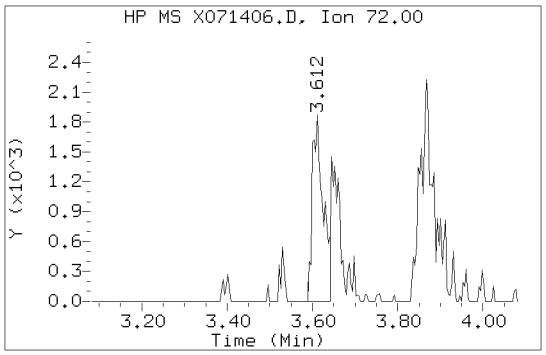
BEFORE

MASS
72
AREA
3309
HEIGHT
1873
20-Jul-2023
15:04
linh
pham



AFTER

MASS
72
AREA
3309
HEIGHT
1873
20-Jul-2023
15:04
linh
pham

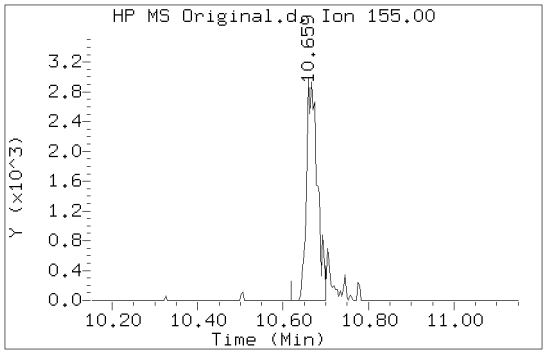


1,2-Dibromo-3-Chloropropane (96-12-8)

Reason Code:

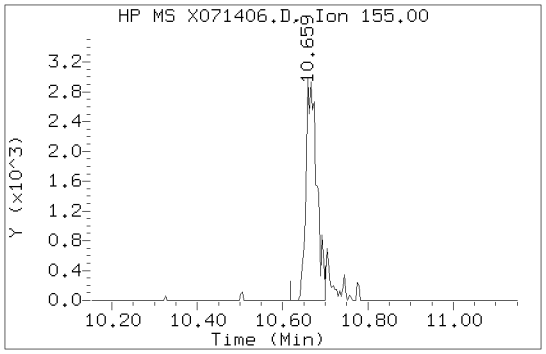
BEFORE

MASS
155
AREA
5268
HEIGHT
2977
20-Jul-2023
15:04
linh
pham



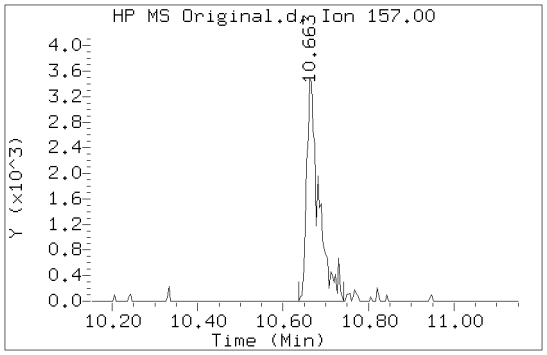
AFTER

MASS
155
AREA
5268
HEIGHT
2977
20-Jul-2023
15:04
linh
pham



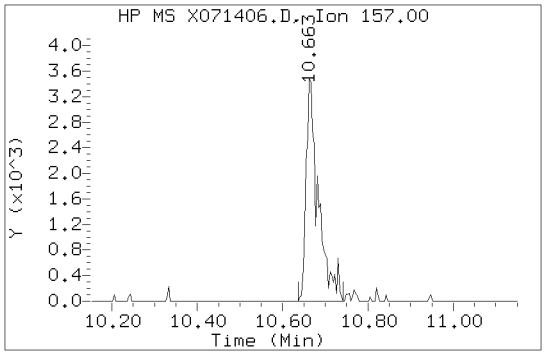
BEFORE

MASS
157
AREA
6914
HEIGHT
3477
20-Jul-2023
15:04
linh
pham



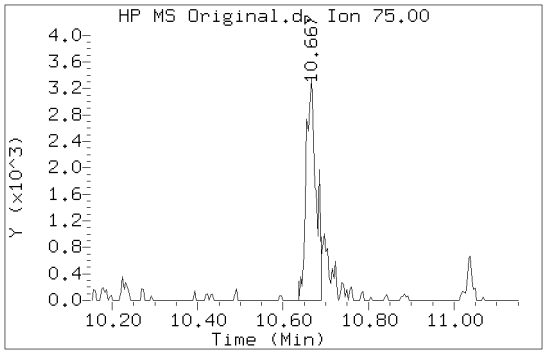
AFTER

MASS
157
AREA
6914
HEIGHT
3477
20-Jul-2023
15:04
linh
pham



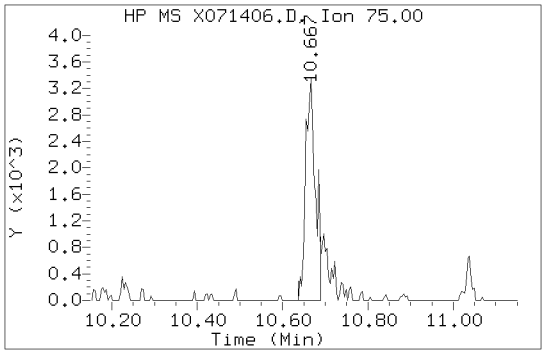
BEFORE

MASS
75
AREA
5387
HEIGHT
3348
20-Jul-2023
15:04
linh
pham



AFTER

MASS
75
AREA
5387
HEIGHT
3348
20-Jul-2023
15:04
linh
pham



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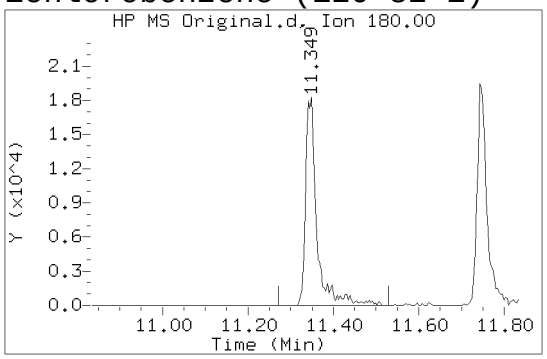
Inj Date : 14-JUL-2023 13:43
InstruID : voa6.i
LabSampID : VSTD005

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

Reason Code:

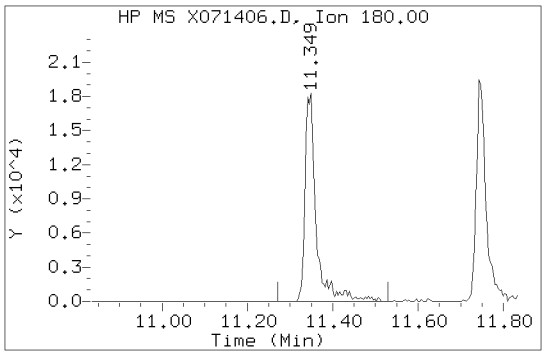
BEFORE

MASS
180
AREA
33646
HEIGHT
18264
20-Jul-2023
15:04
linh
pham



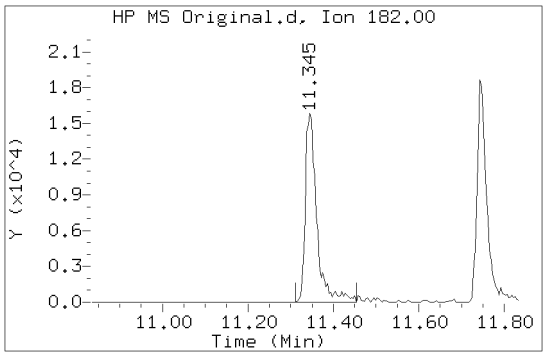
AFTER

MASS
180
AREA
33646
HEIGHT
18264
20-Jul-2023
15:04
linh
pham



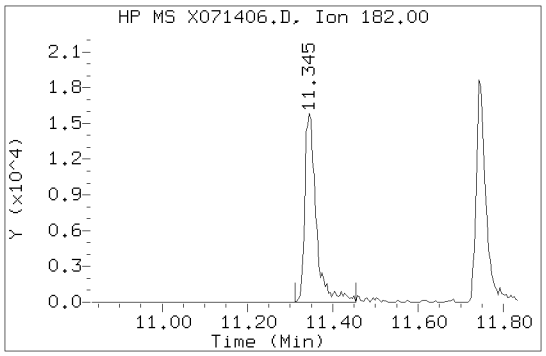
BEFORE

MASS
182
AREA
29855
HEIGHT
15861
20-Jul-2023
15:04
linh
pham



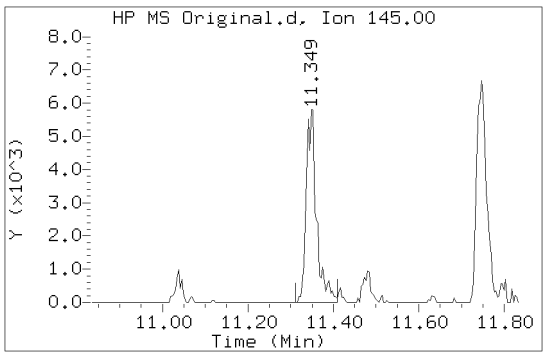
AFTER

MASS
182
AREA
29855
HEIGHT
15861
20-Jul-2023
15:04
linh
pham



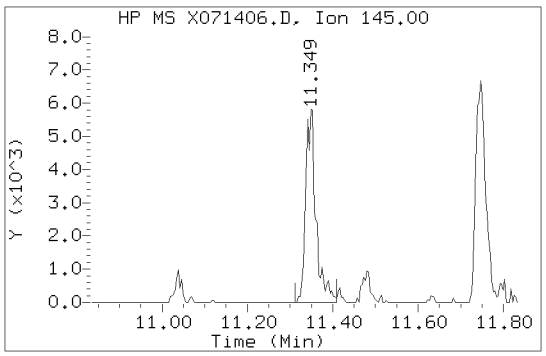
BEFORE

MASS
145
AREA
9753
HEIGHT
5817
20-Jul-2023
15:04
linh
pham



AFTER

MASS
145
AREA
9753
HEIGHT
5817
20-Jul-2023
15:04
linh
pham

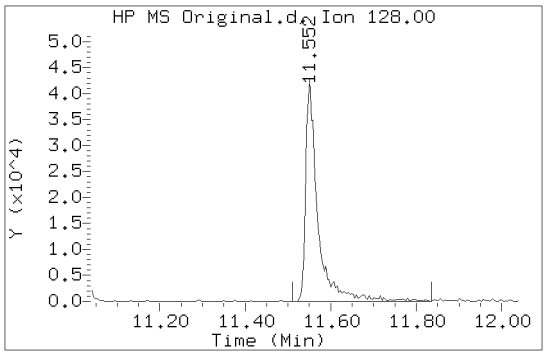


Naphthalene (91-20-3)

Reason Code:

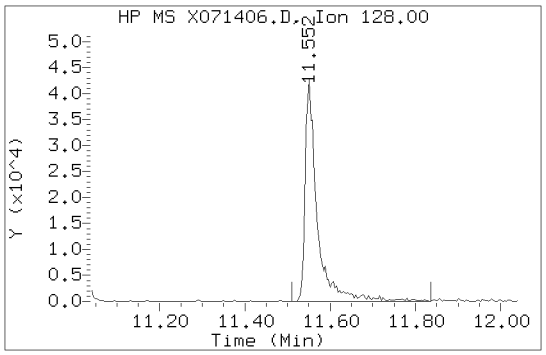
BEFORE

MASS
128
AREA
85025
HEIGHT
42672
20-Jul-2023
15:04
linh
pham



AFTER

MASS
128
AREA
85025
HEIGHT
42672
20-Jul-2023
15:04
linh
pham



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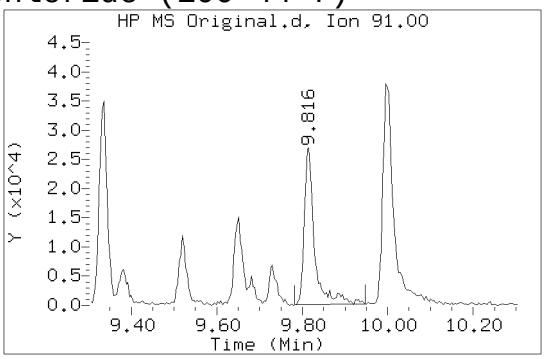
Inj Date : 14-JUL-2023 13:43
InstruID : voa6.i
LabSampID : VSTD005

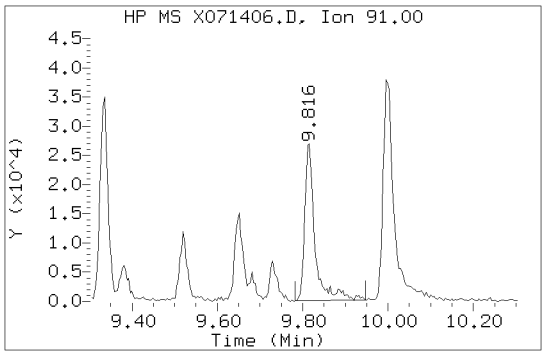
Benzyl Chloride (100-44-7)

Reason Code:

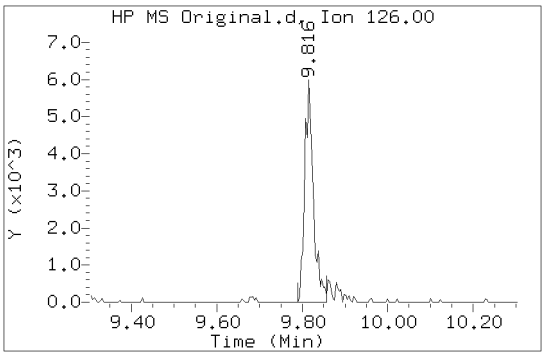
BEFORE
MASS
91
AREA
45616
HEIGHT
26893
20-Jul-2023
15:04
linh
pham



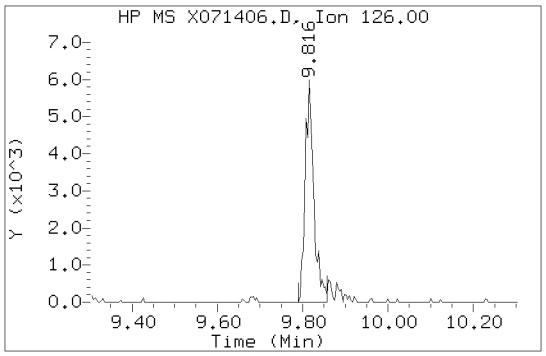
AFTER
MASS
91
AREA
45616
HEIGHT
26893
20-Jul-2023
15:04
linh
pham



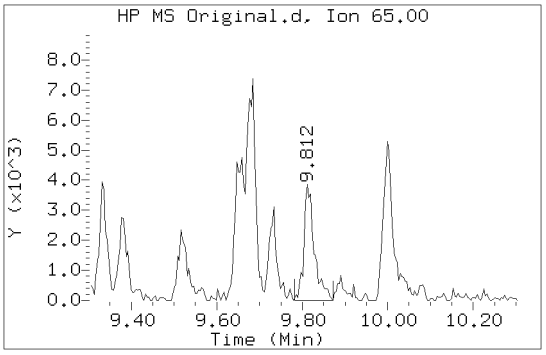
BEFORE
MASS
126
AREA
8499
HEIGHT
5989
20-Jul-2023
15:04
linh
pham



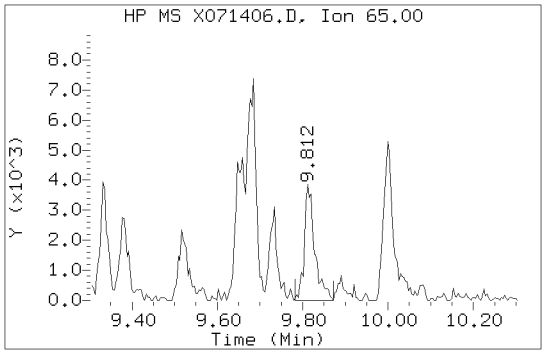
AFTER
MASS
126
AREA
8499
HEIGHT
5989
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
65
AREA
6591
HEIGHT
3852
20-Jul-2023
15:04
linh
pham



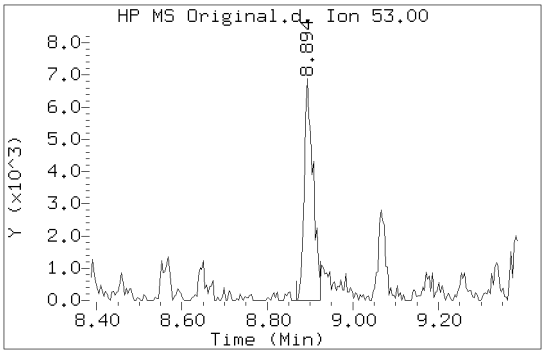
AFTER
MASS
65
AREA
6591
HEIGHT
3852
20-Jul-2023
15:04
linh
pham



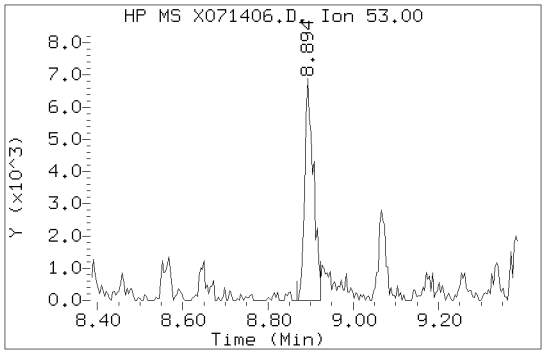
trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code:

BEFORE
MASS
53
AREA
9958
HEIGHT
6886
20-Jul-2023
15:04
linh
pham



AFTER
MASS
53
AREA
9958
HEIGHT
6886
20-Jul-2023
15:04
linh
pham



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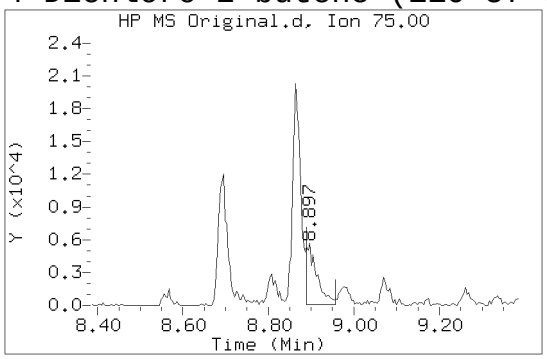
Inj Date : 14-JUL-2023 13:43
InstruID : voa6.i
LabSampID : VSTD005

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

Reason Code:

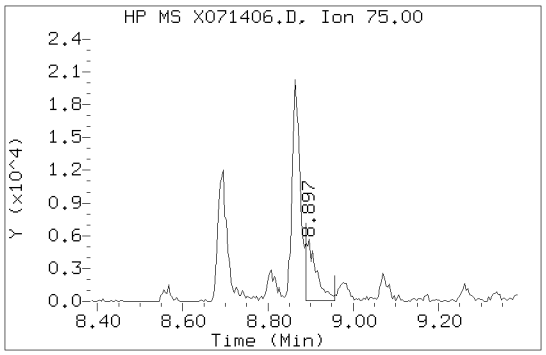
BEFORE

MASS
75
AREA
9615
HEIGHT
5621
20-Jul-2023
15:04
linh
pham



AFTER

MASS
75
AREA
9615
HEIGHT
5621
20-Jul-2023
15:04
linh
pham

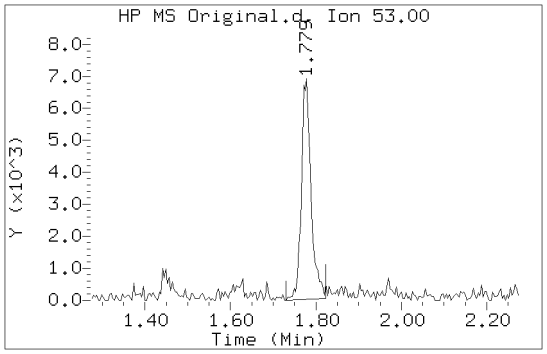


Chloroprene (126-99-8)

Reason Code:

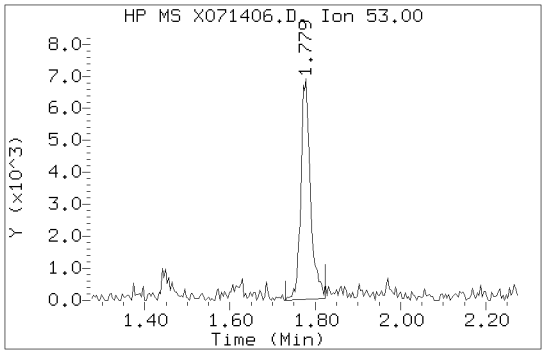
BEFORE

MASS
53
AREA
11212
HEIGHT
6900
20-Jul-2023
15:04
linh
pham



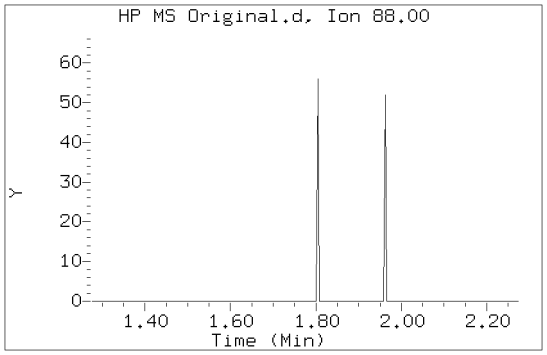
AFTER

MASS
53
AREA
11212
HEIGHT
6900
20-Jul-2023
15:04
linh
pham



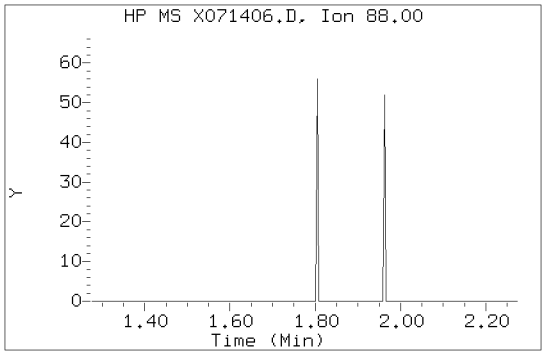
BEFORE

MASS
88
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
88
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

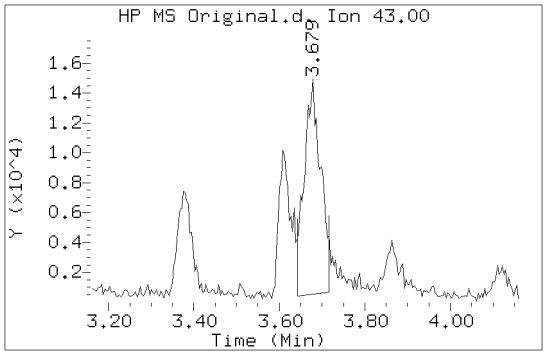


Ethyl Acetate (141-78-6)

Reason Code:

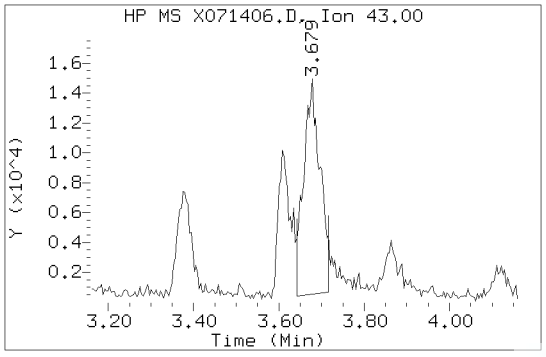
BEFORE

MASS
43
AREA
39438
HEIGHT
14396
20-Jul-2023
15:04
linh
pham



AFTER

MASS
43
AREA
39438
HEIGHT
14396
20-Jul-2023
15:04
linh
pham

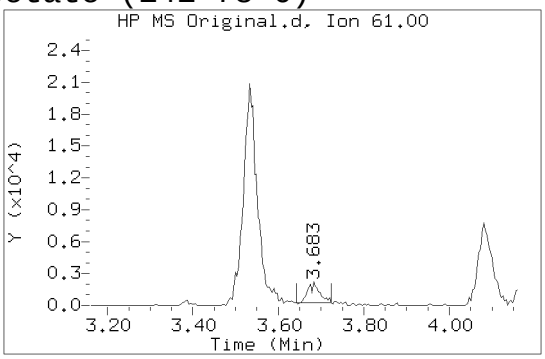


Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071406.D
Inj Date : 14-JUL-2023 13:43
InstruID : voa6.i
LabSampID : VSTD005

Ethyl Acetate (141-78-6)

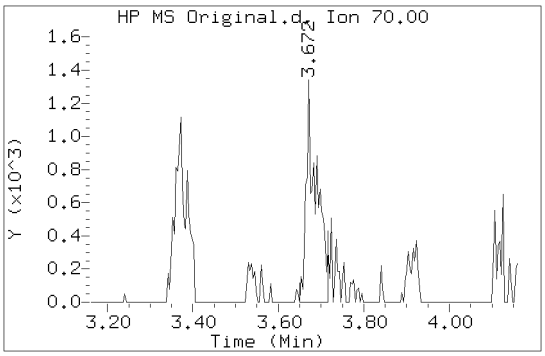
BEFORE

MASS
61
AREA
3702
HEIGHT
2000
20-Jul-2023
15:04
linh
pham



BEFORE

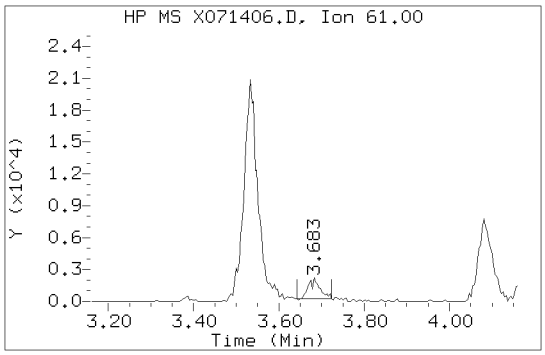
MASS
70
AREA
2283
HEIGHT
1341
20-Jul-2023
15:04
linh
pham



Reason Code:

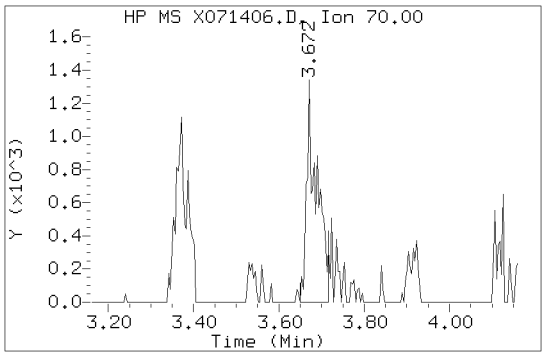
AFTER

MASS
61
AREA
3702
HEIGHT
2000
20-Jul-2023
15:04
linh
pham



AFTER

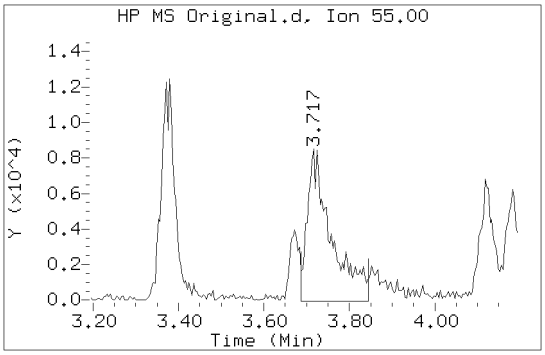
MASS
70
AREA
2283
HEIGHT
1341
20-Jul-2023
15:04
linh
pham



Methyl Acrylate (96-33-3)

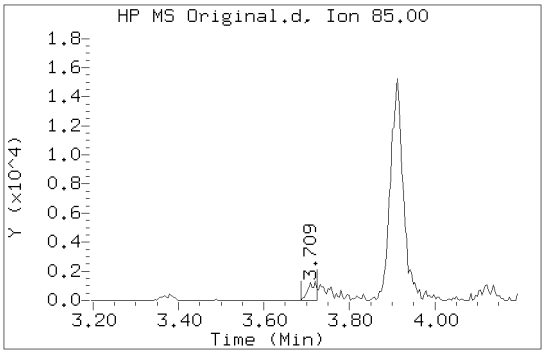
BEFORE

MASS
55
AREA
33338
HEIGHT
8583
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
85
AREA
1657
HEIGHT
1216
20-Jul-2023
15:04
linh
pham



Reason Code:

AFTER

MASS
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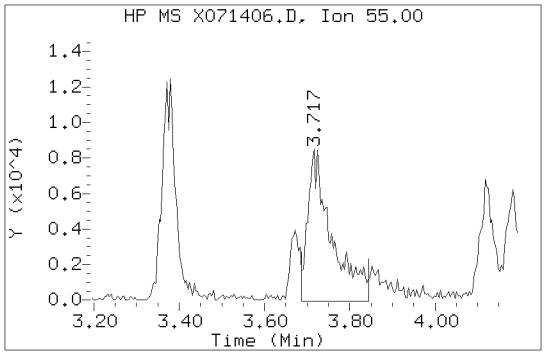
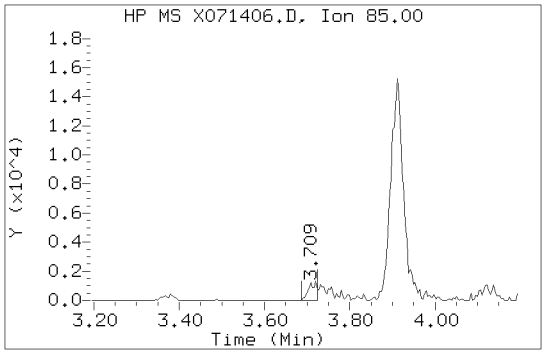
AREA
33338
HEIGHT
8583
20-Jul-2023
15:04
linh
pham



AFTER

MASS
85
AREA
1657
HEIGHT
1216
20-Jul-2023
15:04
linh
pham



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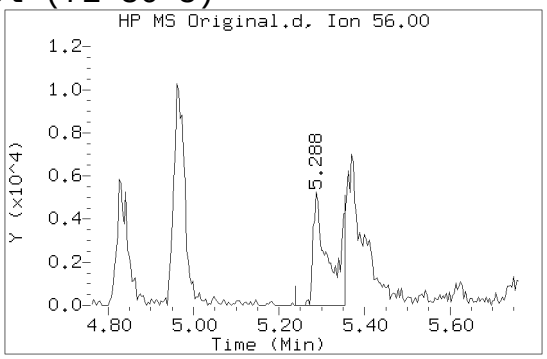
Inj Date : 14-JUL-2023 13:43
InstruID : voa6.i
LabSampID : VSTD005

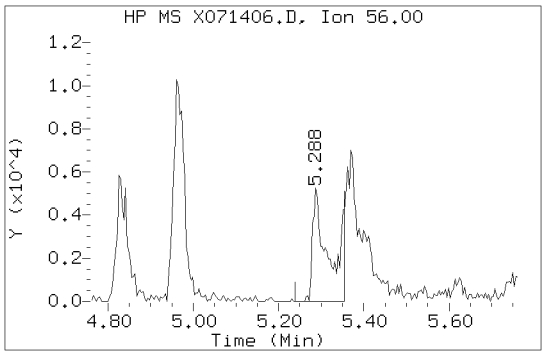
n-Butanol (71-36-3)

Reason Code:

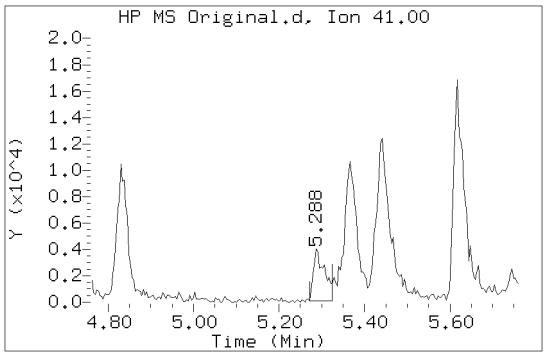
BEFORE
MASS
56
AREA
13588
HEIGHT
5250
20-Jul-2023
15:04
linh
pham



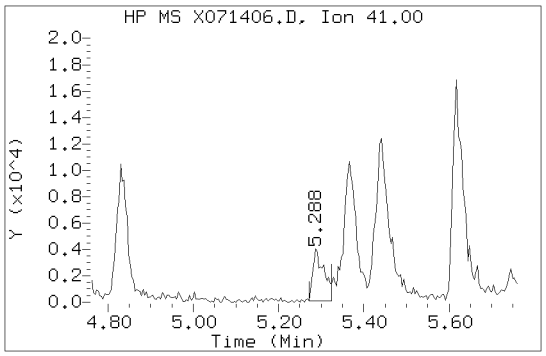
AFTER
MASS
56
AREA
13588
HEIGHT
5250
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
41
AREA
7179
HEIGHT
3942
20-Jul-2023
15:04
linh
pham



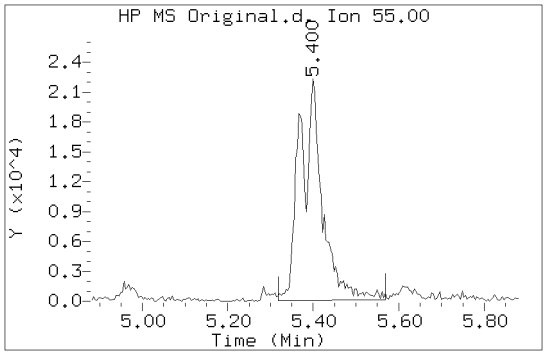
AFTER
MASS
41
AREA
7179
HEIGHT
3942
20-Jul-2023
15:04
linh
pham



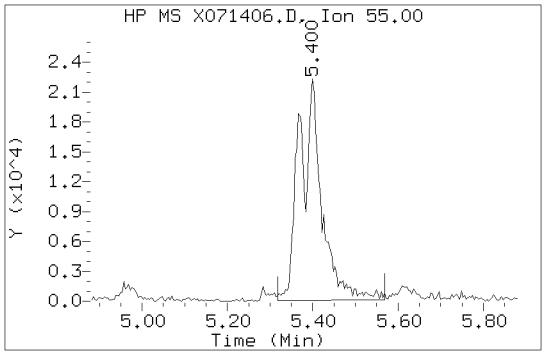
Ethyl Acrylate (140-88-5)

Reason Code:

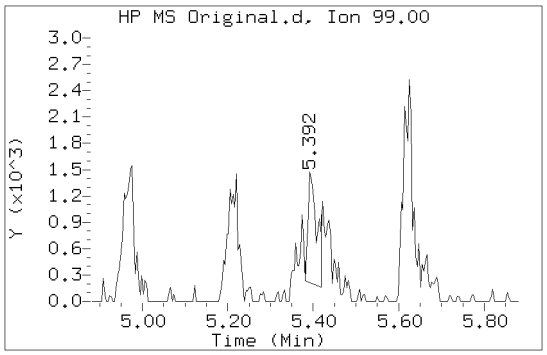
BEFORE
MASS
55
AREA
82574
HEIGHT
22225
20-Jul-2023
15:04
linh
pham



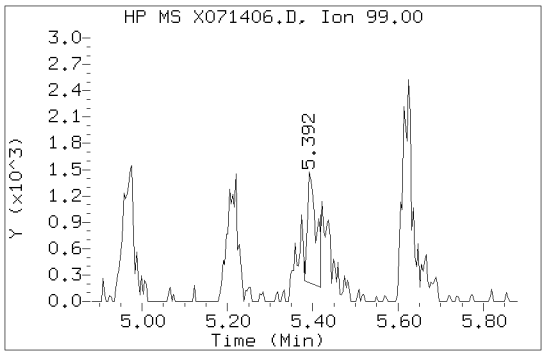
AFTER
MASS
55
AREA
82574
HEIGHT
22225
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
99
AREA
1773
HEIGHT
1256
20-Jul-2023
15:04
linh
pham



AFTER
MASS
99
AREA
1773
HEIGHT
1256
20-Jul-2023
15:04
linh
pham



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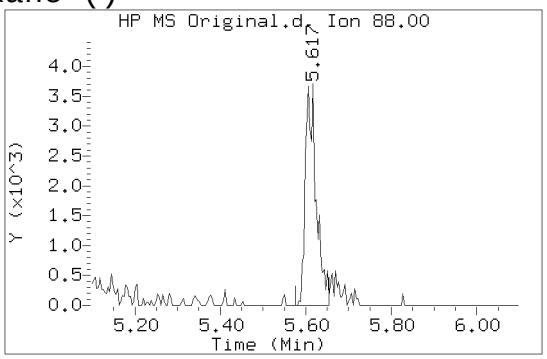
Inj Date : 14-JUL-2023 13:43
InstruID : voa6.i
LabSampID : VSTD005

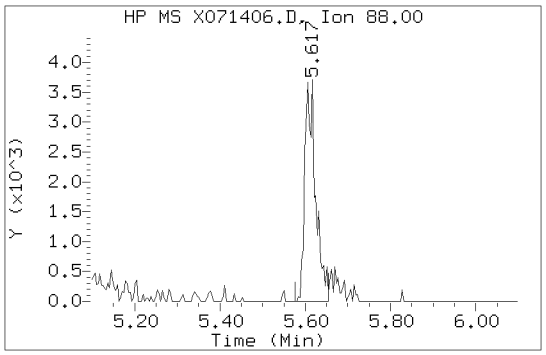
1,4-Dioxane ()

Reason Code:

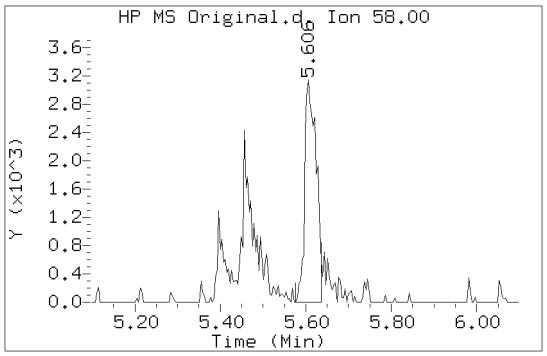
BEFORE
MASS
88
AREA
6551
HEIGHT
3709
20-Jul-2023
15:04
linh
pham



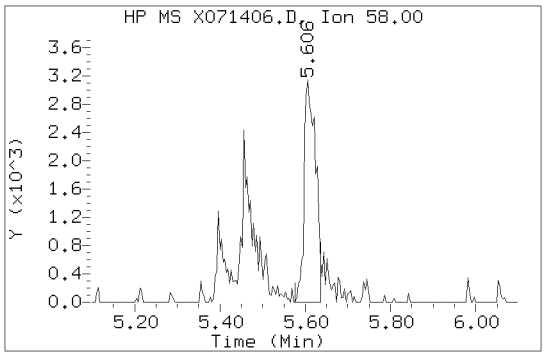
AFTER
MASS
88
AREA
6551
HEIGHT
3709
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
58
AREA
5961
HEIGHT
3144
20-Jul-2023
15:04
linh
pham



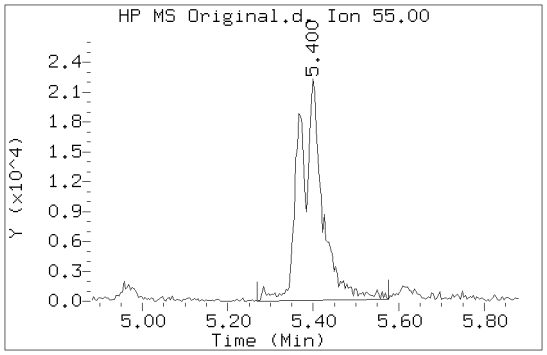
AFTER
MASS
58
AREA
5961
HEIGHT
3144
20-Jul-2023
15:04
linh
pham



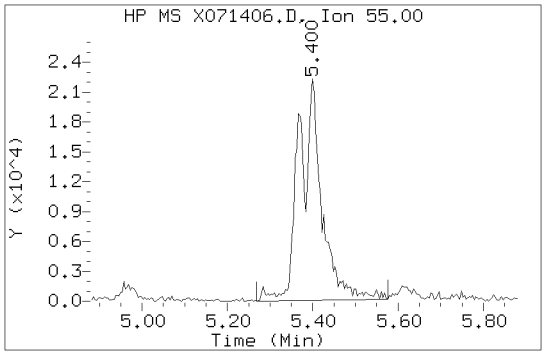
Methylcyclohexane (108-87-2)

Reason Code:

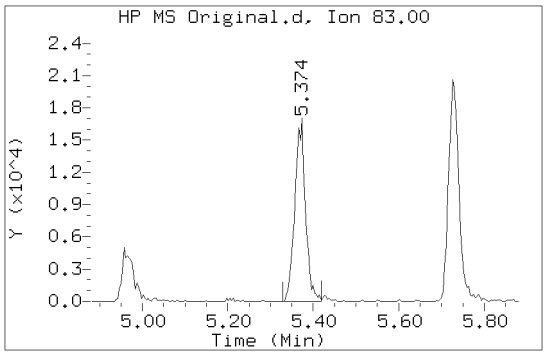
BEFORE
MASS
55
AREA
84656
HEIGHT
22257
20-Jul-2023
15:04
linh
pham



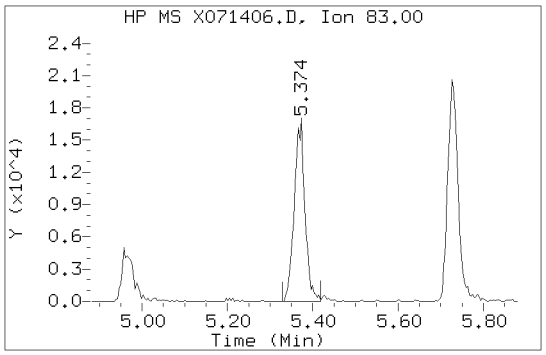
AFTER
MASS
55
AREA
84656
HEIGHT
22257
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
83
AREA
30014
HEIGHT
17040
20-Jul-2023
15:04
linh
pham



AFTER
MASS
83
AREA
30014
HEIGHT
17040
20-Jul-2023
15:04
linh
pham



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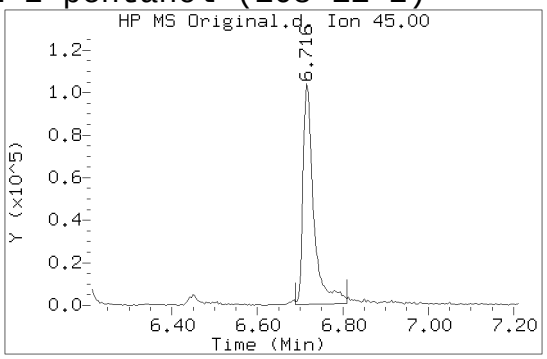
Inj Date : 14-JUL-2023 13:43
InstruID : voa6.i
LabSampID : VSTD005

4-Methyl-2-pentanol (108-11-2)

Reason Code:

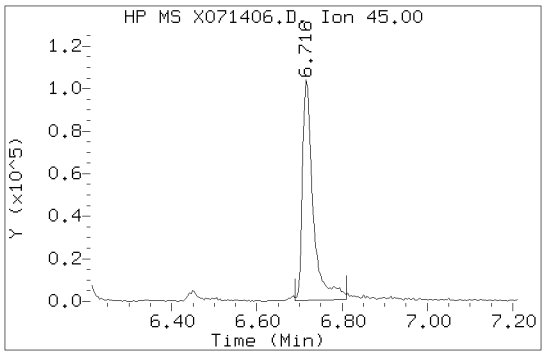
BEFORE

MASS
45
AREA
183123
HEIGHT
103764
20-Jul-2023
15:04
linh
pham



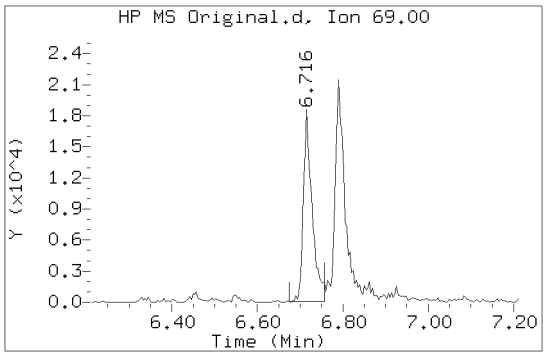
AFTER

MASS
45
AREA
183123
HEIGHT
103764
20-Jul-2023
15:04
linh
pham



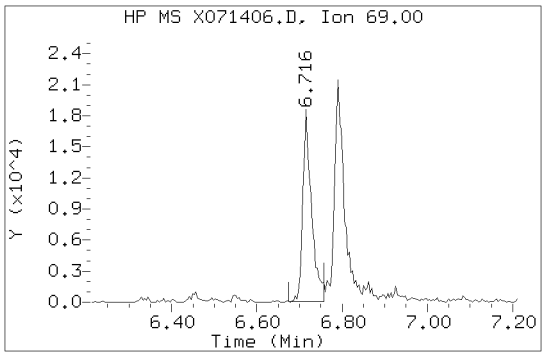
BEFORE

MASS
69
AREA
26485
HEIGHT
18576
20-Jul-2023
15:04
linh
pham



AFTER

MASS
69
AREA
26485
HEIGHT
18576
20-Jul-2023
15:04
linh
pham

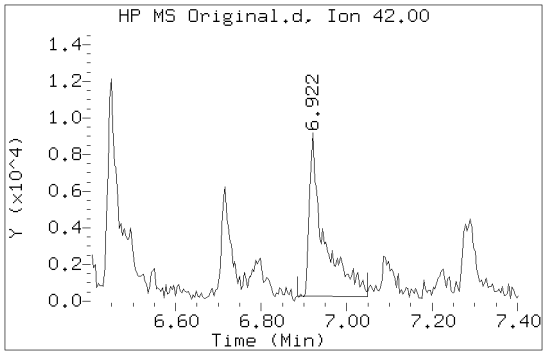


Amyl alcohol (71-41-0)

Reason Code:

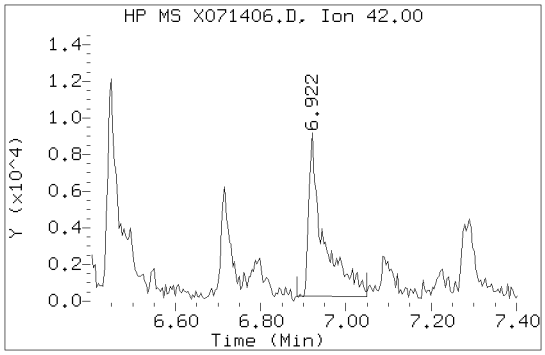
BEFORE

MASS
42
AREA
21498
HEIGHT
8913
20-Jul-2023
15:04
linh
pham



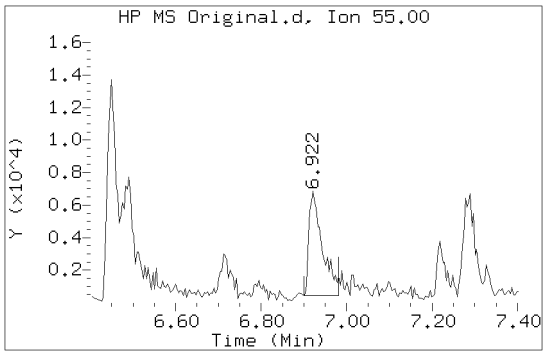
AFTER

MASS
42
AREA
21498
HEIGHT
8913
20-Jul-2023
15:04
linh
pham



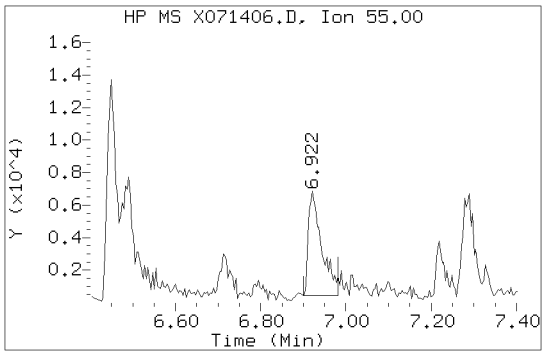
BEFORE

MASS
55
AREA
14214
HEIGHT
6435
20-Jul-2023
15:04
linh
pham



AFTER

MASS
55
AREA
14214
HEIGHT
6435
20-Jul-2023
15:04
linh
pham



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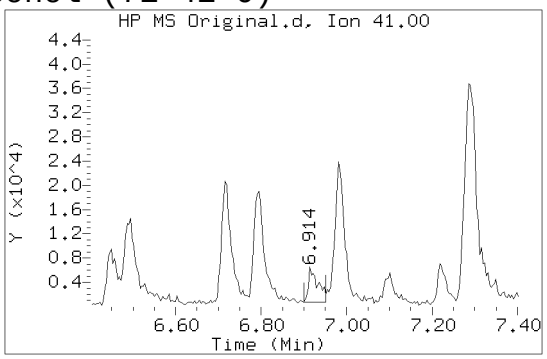
Inj Date : 14-JUL-2023 13:43
InstruID : voa6.i
LabSampID : VSTD005

Amyl alcohol (71-41-0)

Reason Code:

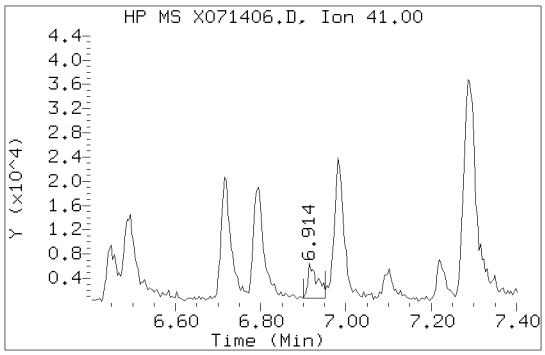
BEFORE

MASS
41
AREA
8850
HEIGHT
5781
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
8850
HEIGHT
5781
20-Jul-2023
15:04
linh
pham

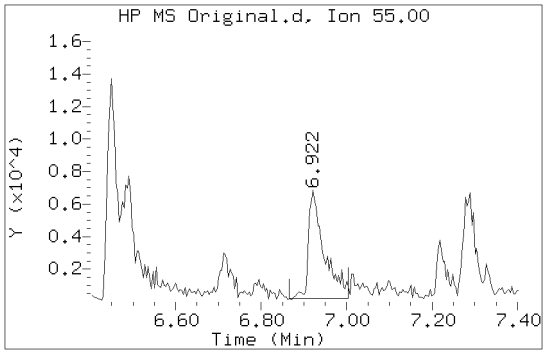


3-Methyl-1-butanol (123-51-3)

Reason Code:

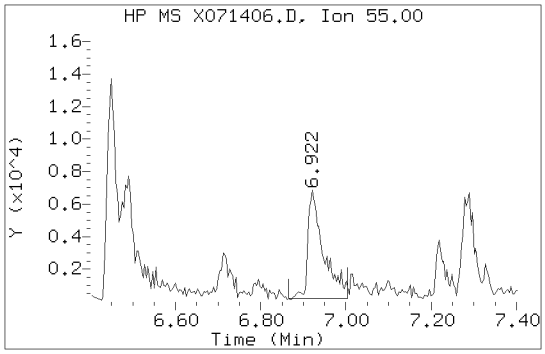
BEFORE

MASS
55
AREA
17029
HEIGHT
6664
20-Jul-2023
15:04
linh
pham



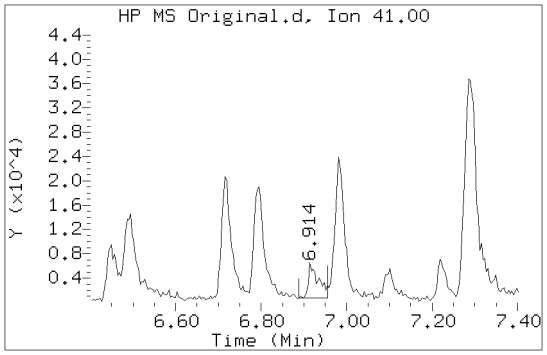
AFTER

MASS
55
AREA
17029
HEIGHT
6664
20-Jul-2023
15:04
linh
pham



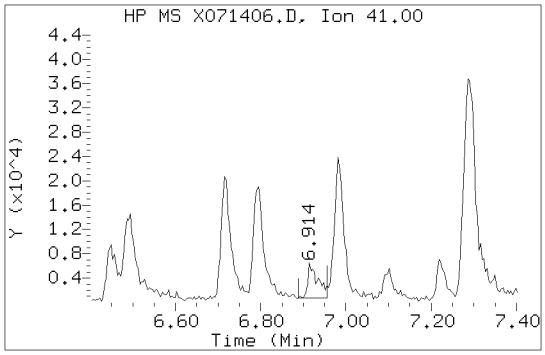
BEFORE

MASS
41
AREA
9490
HEIGHT
5807
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
9490
HEIGHT
5807
20-Jul-2023
15:04
linh
pham

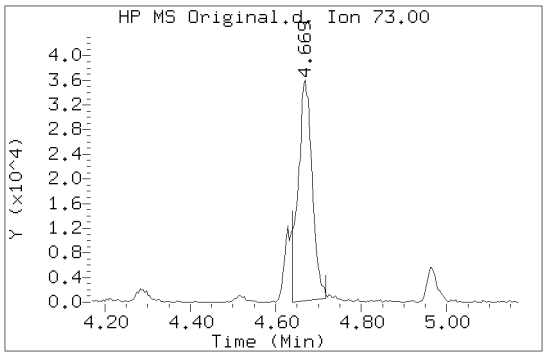


tert-Amyl methyl ether (974-05-08)

Reason Code:

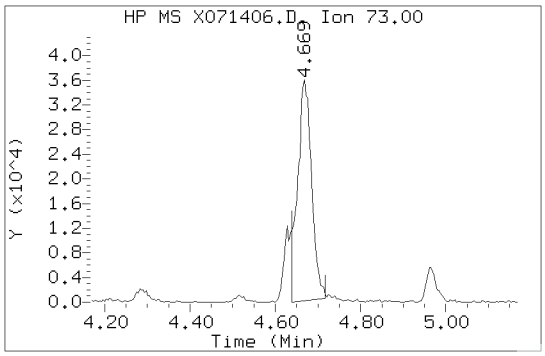
BEFORE

MASS
73
AREA
83517
HEIGHT
35784
20-Jul-2023
15:04
linh
pham



AFTER

MASS
73
AREA
83517
HEIGHT
35784
20-Jul-2023
15:04
linh
pham



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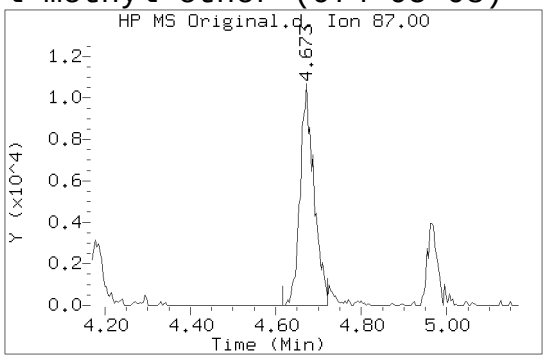
Inj Date : 14-JUL-2023 13:43
InstruID : voa6.i
LabSampID : VSTD005

tert-Amyl methyl ether (974-05-08)

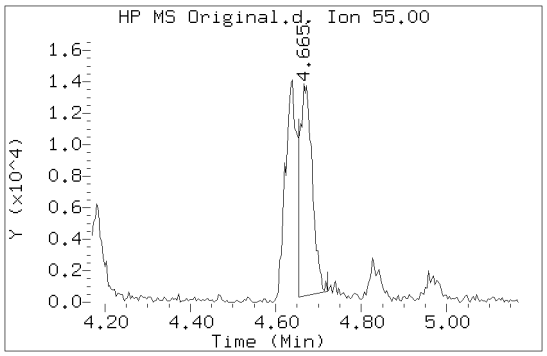
BEFORE

MASS
87
AREA
24319
HEIGHT
10688
20-Jul-2023
15:04
linh
pham



BEFORE

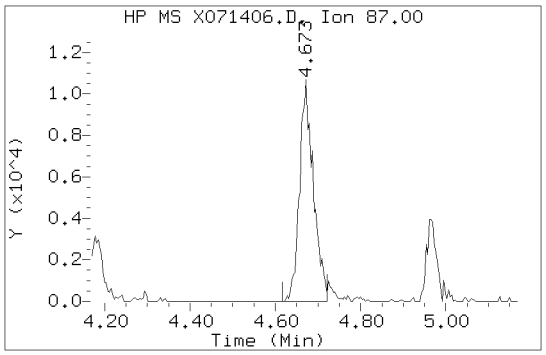
MASS
55
AREA
27476
HEIGHT
13484
20-Jul-2023
15:04
linh
pham



Reason Code:

AFTER

MASS
87
AREA
24319
HEIGHT
10688
20-Jul-2023
15:04
linh
pham



AFTER

MASS
55
AREA
27476
HEIGHT
13484
20-Jul-2023
15:04
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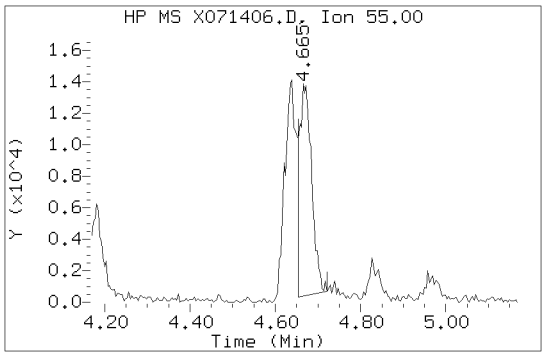

Acetaldehyde (75-07-0)

BEFORE

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20-Jul-2023
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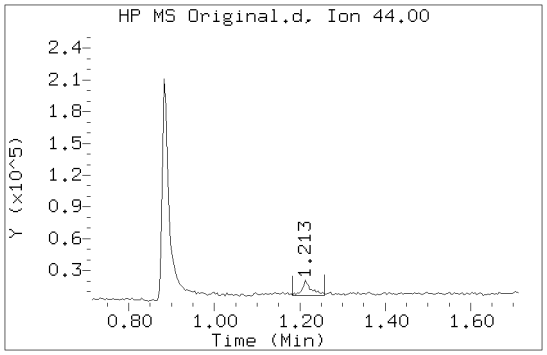

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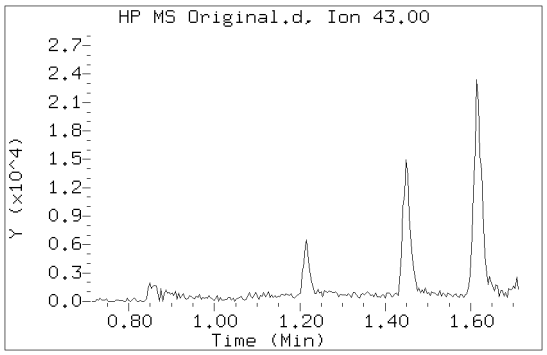

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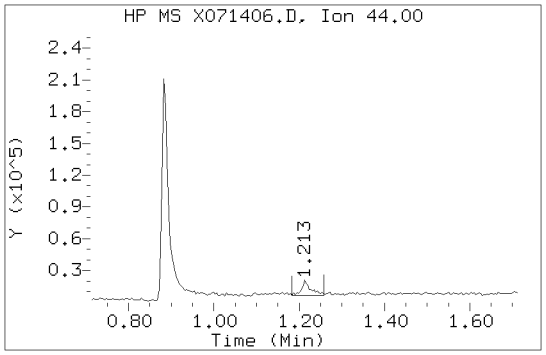

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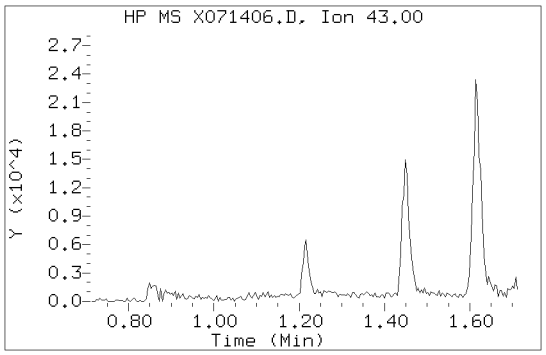

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LabSampID : VSTD005

Acetaldehyde (75-07-0)

Reason Code:

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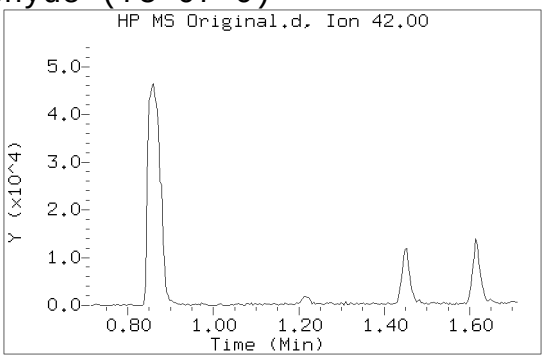

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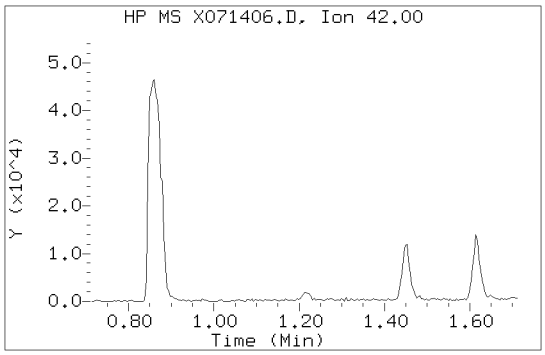

Isobutylene (115-11-7)

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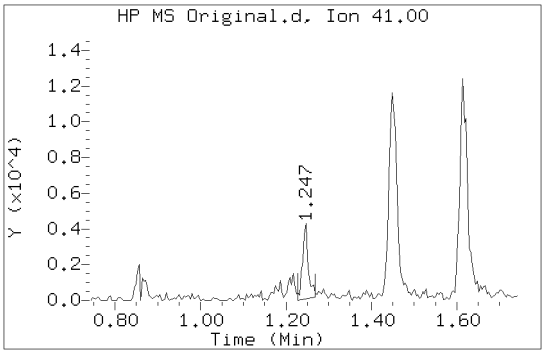

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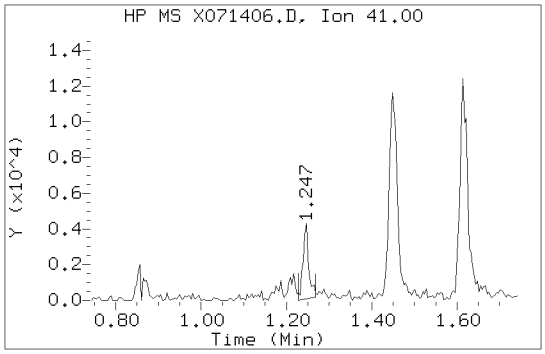

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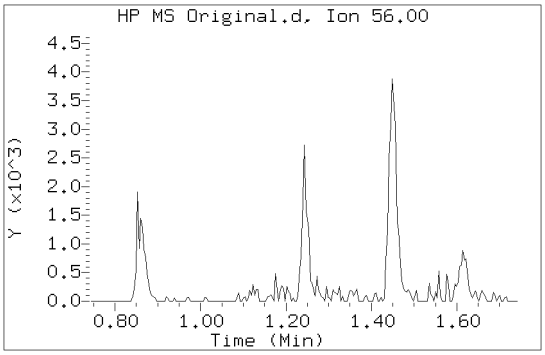

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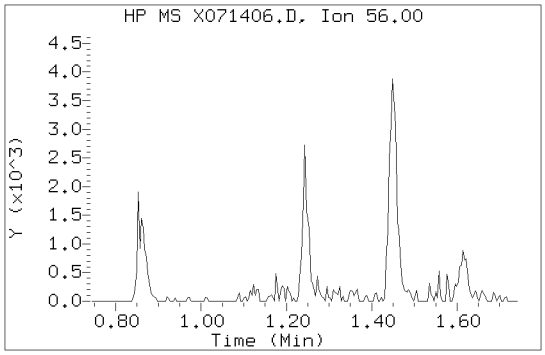

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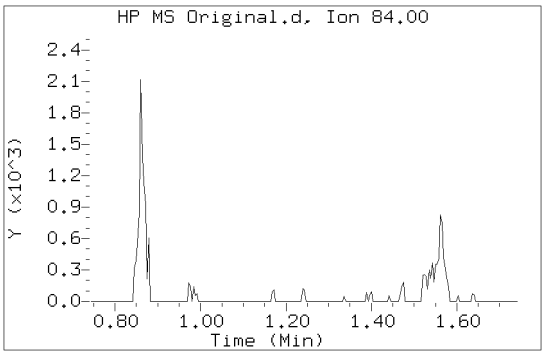

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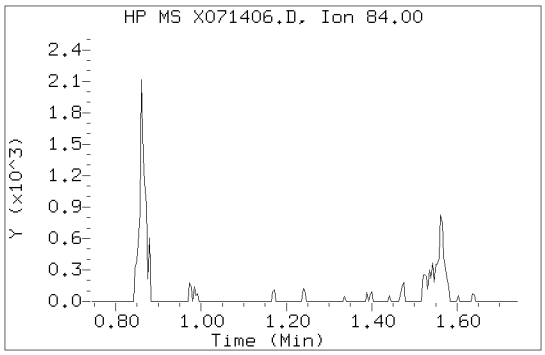

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LabSampID : VSTD005

Toluene-d8 (2037-26-5)

Reason Code:

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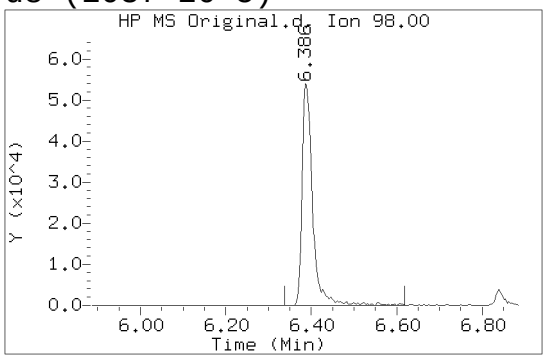

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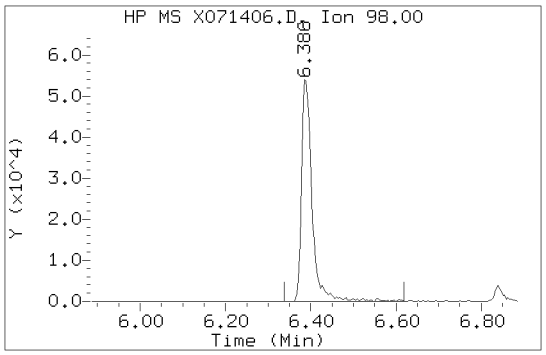

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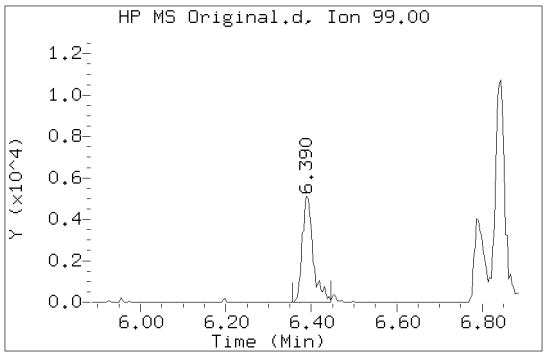

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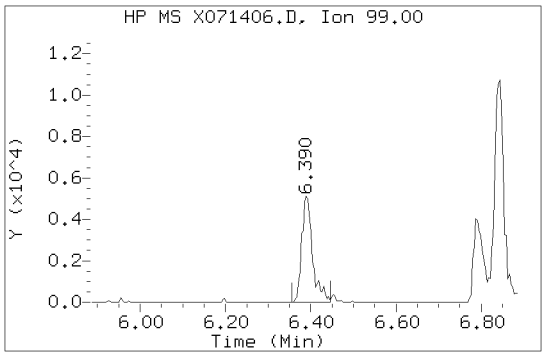

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20-Jul-2023
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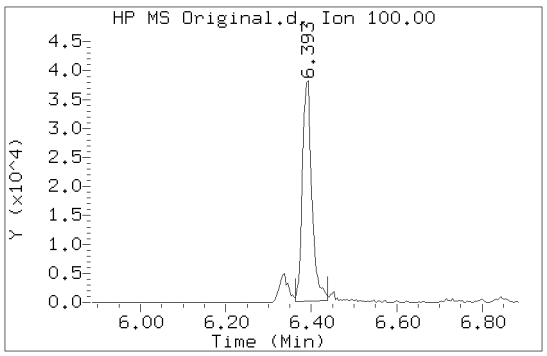

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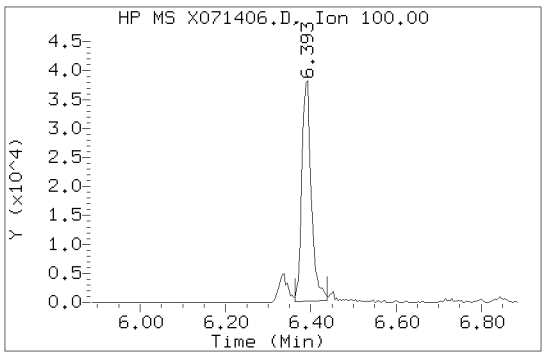

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Report Date: 20-Jul-2023 15:05

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071407.D
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Inj Date : 14-JUL-2023 14:04
Operator : PC Inst ID: voa6.i
Smp Info : VSTD020;VSTD020;1;6;
Misc Info : V6;WATER;0;1;
Comment   :
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Meth Date : 20-Jul-2023 15:05 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 13:43 Cal File: X071406.D
Als bottle: 8 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1	Pentafluorobenzene	168	4.178	4.178	(1.000)	507763	50.0000	
2	Dichlorodifluoromethane	85	0.976	0.976	(0.234)	94710	20.0000	18.92
3	Chloromethane	50	1.081	1.081	(0.259)	133501	20.0000	17.40
4	Propionitrile	54	3.660	3.660	(0.876)	205441	200.000	204.24(a)
5	Vinyl Chloride	62	1.145	1.145	(0.274)	126856	20.0000	19.30
6	Bromomethane	94	1.344	1.344	(0.322)	48177	20.0000	17.71
7	Chloroethane	64	1.407	1.407	(0.337)	72133	20.0000	19.23
8	Trichlorofluoromethane	101	1.561	1.561	(0.374)	132138	20.0000	19.84
9	Acrolein	56	1.865	1.865	(0.446)	6957	40.0000	36.90(H)
10	Acetone	43	1.977	1.977	(0.473)	92232	40.0000	43.26
11	1,1-Dichloroethene	96	1.917	1.917	(0.459)	72938	20.0000	19.60
12	Isobutyl Alcohol	43	4.680	4.680	(1.120)	401784	400.000	417.43(a)
13	Acetonitrile	39	2.198	2.198	(0.526)	138938	200.000	195.13(a)
14	Allyl Chloride	41	2.198	2.198	(0.526)	321229	20.0000	19.26(a)
15	Iodomethane	142	2.030	2.030	(0.486)	147770	40.0000	33.32
16	Acrylonitrile	53	2.539	2.539	(0.608)	96410	40.0000	38.96
17	Methylene Chloride	84	2.303	2.303	(0.551)	93705	20.0000	20.53
18	Methyl tert-butyl ether	73	2.539	2.539	(0.608)	272881	20.0000	19.72
19	Carbon Disulfide	76	2.075	2.075	(0.497)	443798	40.0000	37.95
20	trans-1,2-Dichloroethene	96	2.528	2.528	(0.605)	83048	20.0000	19.30

21 Vinyl Acetate	43	3.004	3.004 (0.719)	716288	40.0000	40.25
22 1,1-Dichloroethane	63	2.922	2.922 (0.699)	180478	20.0000	19.11

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	23 Chloroprene	53	1.775	1.775	(0.425)	42093	20.0000	18.43(M)
	24 2-Butanone	43	3.593	3.593	(0.860)	103083	40.0000	38.12
	25 Methacrylonitrile	41	3.833	3.833	(0.917)	134358	20.0000	20.49(a)
	26 2,2-Dichloropropane	77	3.510	3.510	(0.840)	136770	20.0000	18.78
	27 cis-1,2-Dichloroethene	96	3.525	3.525	(0.844)	106626	20.0000	19.45
	28 Chloroform	83	3.904	3.904	(0.935)	185575	20.0000	19.20
	29 Bromochloromethane	128	3.799	3.799	(0.909)	58138	20.0000	18.92
$	30 Dibromofluoromethane	113	4.103	4.103	(0.982)	100577	20.0000	21.17
	31 1,1,1-Trichloroethane	97	4.084	4.084	(0.978)	145149	20.0000	19.51
	32 1,1-Dichloropropene	75	4.283	4.283	(0.863)	122898	20.0000	18.90
	33 1,2-Dichloroethane	62	4.556	4.556	(0.918)	173705	20.0000	19.79
	34 Carbon Tetrachloride	117	4.264	4.264	(0.859)	124542	20.0000	19.01
$	35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	125030	20.0000	21.12
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	797093	50.0000	
	37 Benzene	78	4.511	4.511	(0.909)	377488	20.0000	19.79
	38 Trichloroethene	130	5.208	5.208	(1.049)	104832	20.0000	19.43
	39 Bromodichloromethane	83	5.726	5.726	(1.153)	141699	20.0000	19.40
	40 Methyl Methacrylate	41	5.610	5.610	(1.343)	116657	20.0000	19.03(a)
	41 2-Chloroethylvinyl ether	63	6.048	6.048	(1.218)	89929	40.0000	40.33
	42 1,2-Dichloropropane	63	5.437	5.437	(1.095)	123713	20.0000	20.17
	43 2-Nitropropane	43	5.969	5.969	(1.429)	38152	20.0000	18.91
	44 Dibromomethane	93	5.553	5.553	(1.119)	68138	20.0000	19.63
	45 4-Methyl-2-Pentanone	43	6.326	6.326	(0.825)	285574	40.0000	39.47
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	165788	20.0000	19.76
*	47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	735188	50.0000	
$	48 Toluene-d8	98	6.386	6.386	(0.833)	356461	20.0000	18.83(M)
	49 Ethyl Methacrylate	69	6.712	6.712	(1.352)	101772	20.0000	19.49(a)
	50 Toluene	91	6.446	6.446	(0.841)	392472	20.0000	19.83
	51 trans-1,3-Dichloropropene	75	6.682	6.682	(1.346)	139738	20.0000	19.76
	52 2-Hexanone	43	7.090	7.090	(0.925)	197105	40.0000	41.47
	53 1,1,2-Trichloroethane	83	6.835	6.835	(0.891)	84947	20.0000	20.23
	54 1,3-Dichloropropane	76	6.982	6.982	(0.911)	170222	20.0000	19.84
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	118768	20.0000	19.59
	56 Tetrachloroethene	164	6.922	6.922	(0.903)	79779	20.0000	19.51
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	99972	20.0000	20.83
	58 1-Chlorohexane	55	7.694	7.694	(1.550)	123726	20.0000	19.32
	59 Chlorobenzene	112	7.694	7.694	(1.003)	270232	20.0000	19.53
	60 1,1,1,2-Tetrachloroethane	131	7.773	7.773	(1.014)	107430	20.0000	19.83
	61 Ethylbenzene	106	7.795	7.795	(1.017)	131122	20.0000	18.90
	62 m,p-Xylenes	106	7.904	7.904	(1.031)	341700	40.0000	39.26
	63 o-Xylene	106	8.237	8.237	(1.074)	162342	20.0000	19.69
	64 Styrene	104	8.260	8.260	(1.077)	282779	20.0000	19.67
	66 Bromoform	173	8.406	8.406	(1.096)	75861	20.0000	19.50
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	405778	20.0000	19.15
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	127719	20.0000	19.39
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	153161	20.0000	20.67
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	392137	50.0000	
	71 1,2,3-Trichloropropane	75	8.860	8.860	(0.917)	106108	20.0000	20.30(M)
	72 trans-1,4-Dichloro-2-butene	53	8.886	8.886	(1.159)	44727	20.0000	20.00(a)
	73 n-Propylbenzene	91	8.908	8.908	(0.922)	471016	20.0000	19.87
	74 Bromobenzene	156	8.803	8.803	(0.911)	121594	20.0000	19.82
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	331762	20.0000	18.68

76	2-Chlorotoluene	91	8.972	8.972 (0.929)	320833	20.0000	20.07
77	4-Chlorotoluene	91	9.070	9.070 (0.939)	358181	20.0000	20.39

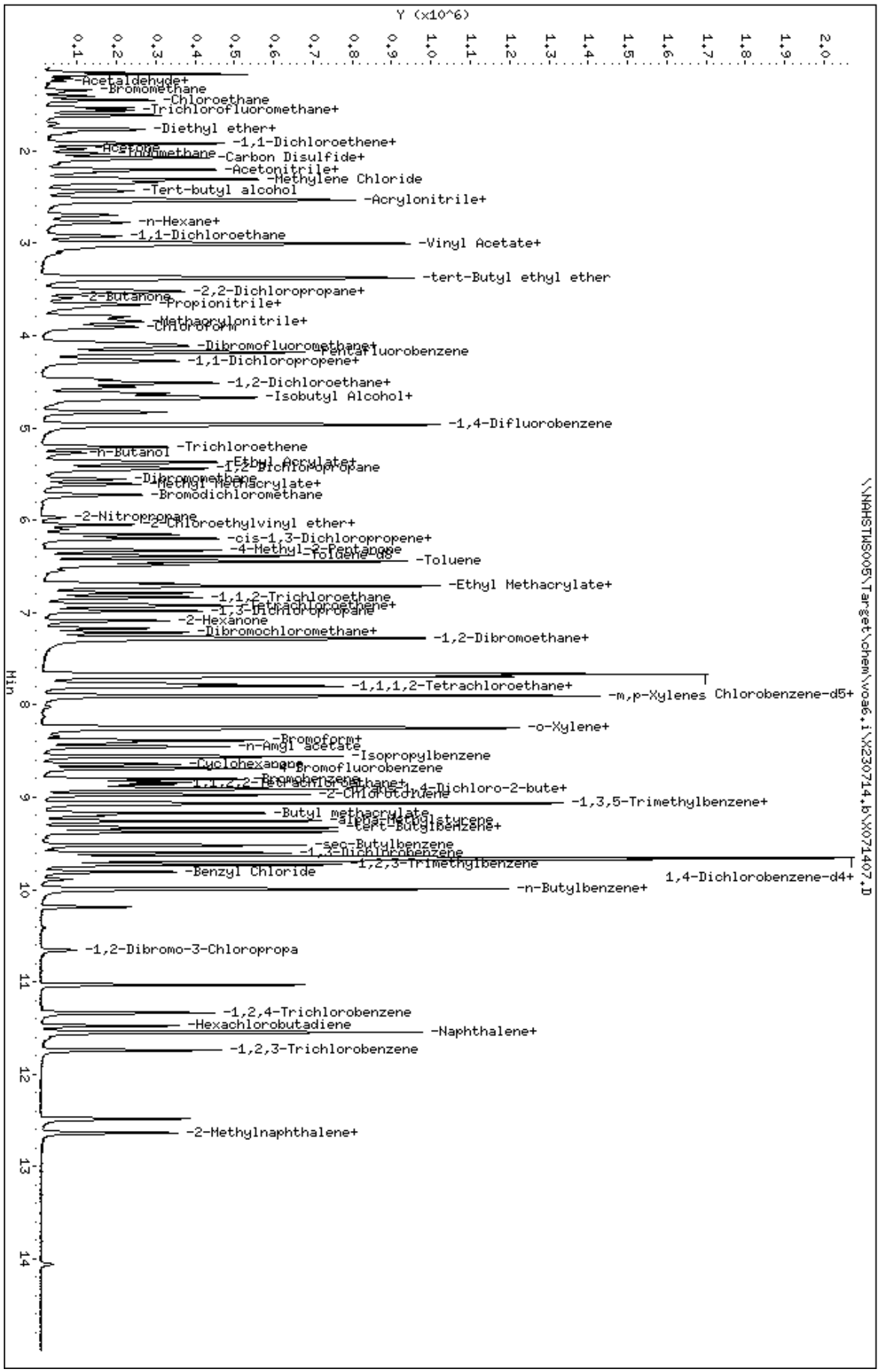
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
78	tert-Butylbenzene	119	9.332	9.332	(0.966)	287767	20.0000	18.90
79	1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	336741	20.0000	18.91
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	394513	20.0000	19.44
82	p-Isopropyltoluene	119	9.647	9.647	(0.998)	346253	20.0000	18.67
83	1,3-Dichlorobenzene	146	9.606	9.606	(0.994)	208939	20.0000	19.55
84	1,4-Dichlorobenzene	146	9.677	9.677	(1.002)	230542	20.0000	19.68
86	Benzyl Chloride	91	9.808	9.808	(1.279)	196200	20.0000	17.29
87	n-Butylbenzene	91	9.992	9.992	(1.034)	282220	20.0000	18.17
88	1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	209204	20.0000	19.91
89	1,2-Dibromo-3-Chloropropane	155	10.659	10.659	(1.103)	19568	20.0000	18.76
90	1,2,4-Trichlorobenzene	180	11.337	11.337	(1.173)	123442	20.0000	17.11
91	Hexachlorobutadiene	225	11.476	11.476	(1.188)	52647	20.0000	17.44
92	Naphthalene	128	11.540	11.540	(1.194)	325767	20.0000	18.24
93	1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	122392	20.0000	18.14
146	Methyl acetate	43	2.232	2.232	(0.534)	91399	20.0000	20.22
138	Freon TF	101	1.917	1.917	(0.459)	67796	20.0000	23.07(M)
141	Cyclohexane	56	4.121	4.121	(0.987)	165922	20.0000	18.85(H)
142	Tetrahydrofuran	42	3.851	3.851	(0.922)	53361	40.0000	40.84
147	Methylcyclohexane	55	5.388	5.388	(1.085)	328269	20.0000	19.51(M)
135	1,4-Dioxane	88	5.606	5.606	(1.342)	23823	400.000	394.82
132	n-Butanol	56	5.265	5.265	(1.260)	60771	400.000	359.52(a)
131	Methyl Acrylate	55	3.702	3.702	(0.886)	135453	20.0000	19.62(H)
133	Ethyl Acrylate	55	5.388	5.388	(1.290)	335022	20.0000	19.90
136	n-Hexane	57	2.772	2.772	(0.664)	106667	20.0000	23.04
139	Diethyl ether	59	1.763	1.763	(0.422)	93008	20.0000	19.64
148	Tert-butyl alcohol	59	2.434	2.434	(0.583)	251621	400.000	392.62
149	Isopropyl alcohol	45	2.097	2.097	(0.502)	157344	400.000	395.67
156	Diisopropyl ether	45	3.008	3.008	(0.720)	419096	20.0000	20.02
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	351806	20.0000	19.40
167	Ethanol	45	1.703	1.703	(0.408)	30252	400.000	415.32
172	tert-Butyl formate	59	4.627	4.627	(1.108)	202938	40.0000	37.41(M)
173	3,3-Dimethyl-1-butanol	57	7.285	7.285	(0.950)	307235	400.000	388.58
174	tert-Amyl methyl ether	73	4.669	4.669	(1.118)	318193	20.0000	19.04
175	tert-Butyl ethyl ether	59	3.379	3.379	(0.809)	413607	20.0000	19.24
176	tert-Amyl alcohol	59	4.627	4.627	(1.108)	206505	400.000	372.28(M)
151	4-Methyl-2-pentanol	45	6.712	6.712	(1.352)	666674	400.000	390.27(M)
180	1-Methylnaphthalene	142	12.635	12.635	(1.308)	150919	20.0000	(a)
140	1,3-Butadiene	54	1.167	1.167	(0.280)	123783	20.0000	18.97
152	Amyl alcohol	42	6.907	6.907	(0.901)	79891	400.000	377.87(M)
158	Dichlorofluoromethane	67	1.535	1.535	(0.367)	158942	20.0000	19.42
159	Propylene oxide	43	1.808	1.808	(0.433)	26882	40.0000	43.15
161	3-Methyl-1-butanol	55	6.907	6.907	(0.901)	65296	400.000	360.74
162	Butyl acrylate	55	8.252	8.252	(1.076)	278950	20.0000	19.94
163	Butyl methacrylate	41	9.167	9.167	(0.949)	181860	20.0000	19.36
164	Dicyclopentadiene	66	9.681	9.681	(1.002)	449218	20.0000	19.88
182	Epichlorohydrin	57	6.101	6.101	(1.229)	46921	80.0000	78.80
M 94	1,2-Dichloroethylene (total)	96				189674	40.0000	(a)
145	alpha-Methylstyrene	118	9.257	9.257	(0.958)	161241	20.0000	18.84
130	Ethyl Acetate	43	3.660	3.660	(0.876)	156852	20.0000	20.79
134	Cyclohexanone	55	8.642	8.642	(0.894)	143296	400.000	410.46(a)
185	Isoprene	39	1.771	1.771	(0.424)	34997	20.0000	20.90
188	Isopropyl acetate	43	4.680	4.680	(0.943)	402950	20.0000	19.17

187 n-Amyl acetate	43	8.451	8.451 (1.102)	257831	20.0000	19.13
189 n-Butyl acetate	43	7.214	7.214 (0.941)	233185	20.0000	20.69(H)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
150 Allyl alcohol	57	2.772	2.772	(0.664)	106667	400.000	460.03
194 Acetaldehyde	44	1.212	1.212	(0.290)	39093	80.0000	72.86(M)
195 Methyl Amyl Ketone	43	8.380	8.380	(1.093)	308846	20.0000	20.09(H)
200 Dimethyl Disulfide	94	6.198	6.198	(0.808)	200098	20.0000	20.17
202 Isobutylene	41	1.242	1.242	(0.297)	17453	20.0000	20.78(M)
205 2-Ethylhexyl Acrylate	55	11.547	11.547	(1.195)	205728	20.0000	20.54

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.



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Client ID: VSTD020
Sample Info: VSTD020;VSTD020;1;6;
Purge Volume: 5.0
Column phase: DB624

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

Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071407.D
Inj Date : 14-JUL-2023 14:04
InstruID : voa6.i
LabSampID : VSTD020

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

Reason Code:

BEFORE

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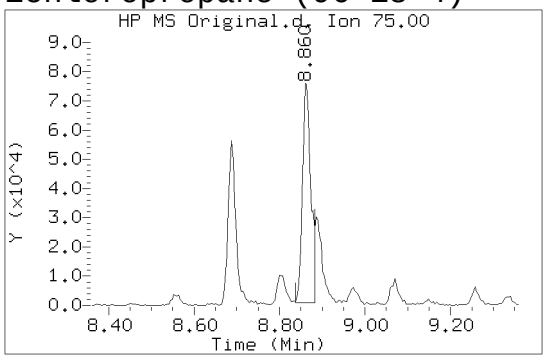
75
AREA
106108
HEIGHT
74979
20-Jul-2023
15:04
linh
pham



AFTER

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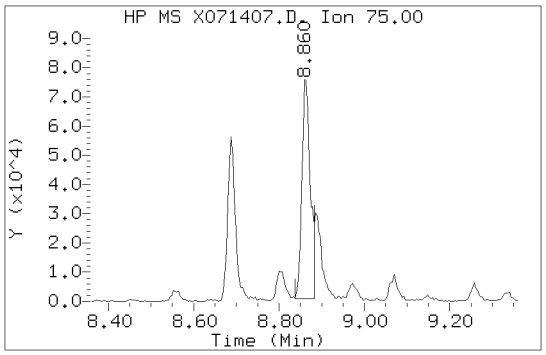

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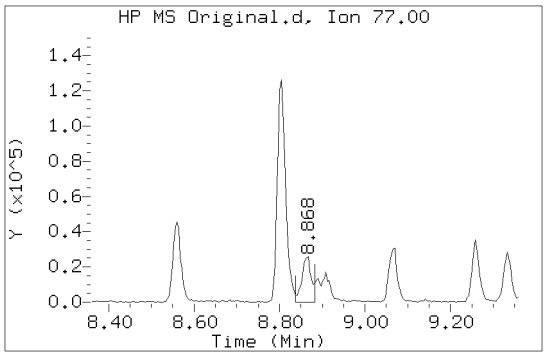

AFTER

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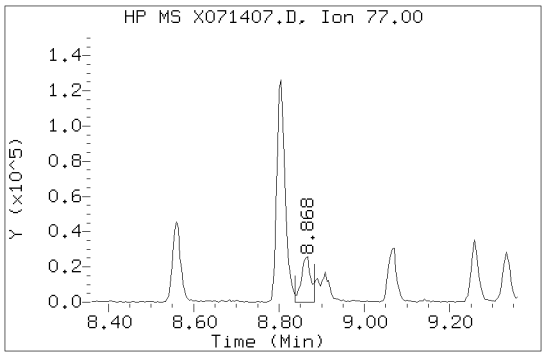

Chloroprene (126-99-8)

Reason Code:

BEFORE

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20-Jul-2023
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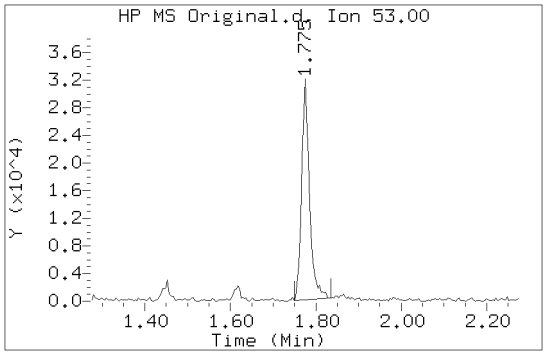

AFTER

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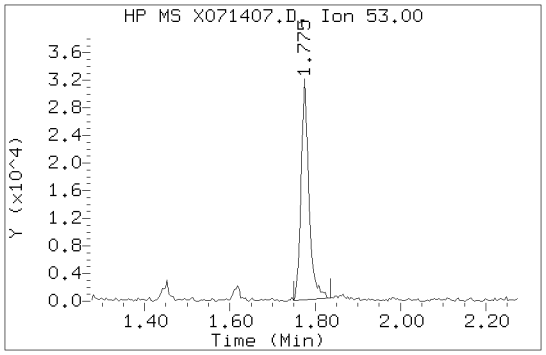

BEFORE

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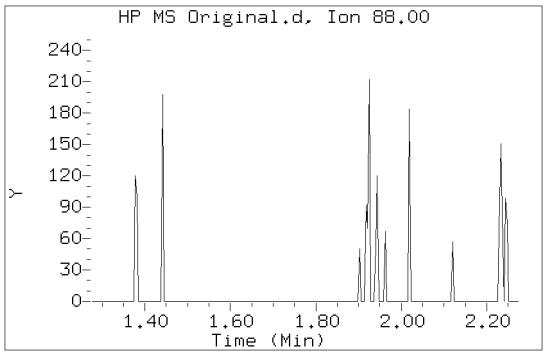

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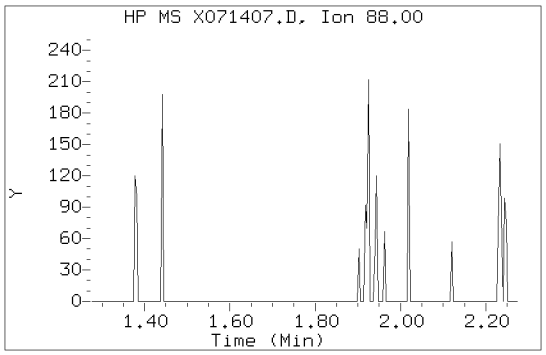

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Inj Date : 14-JUL-2023 14:04
InstruID : voa6.i
LabSampID : VSTD020

Freon TF (76-13-1)

Reason Code:

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20-Jul-2023
15:04
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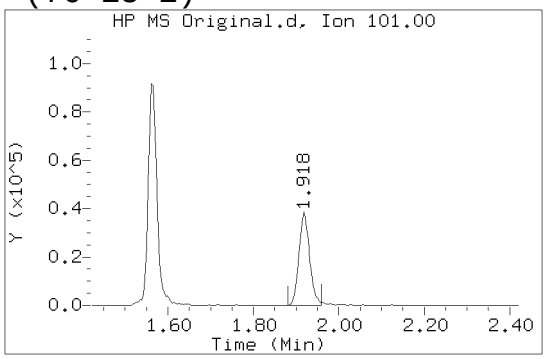

AFTER

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HEIGHT
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20-Jul-2023
15:04
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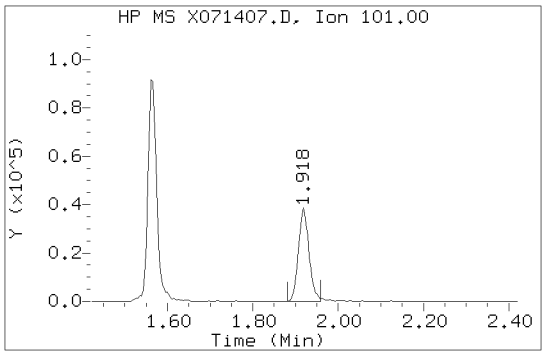

BEFORE

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20-Jul-2023
15:04
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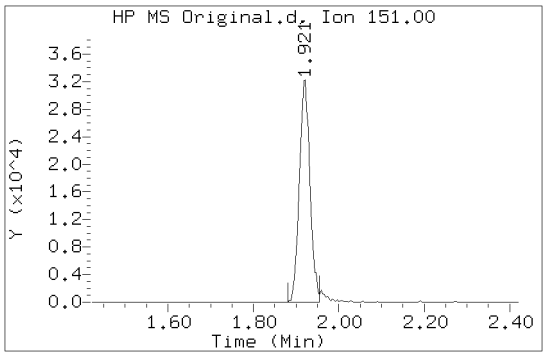

AFTER

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20-Jul-2023
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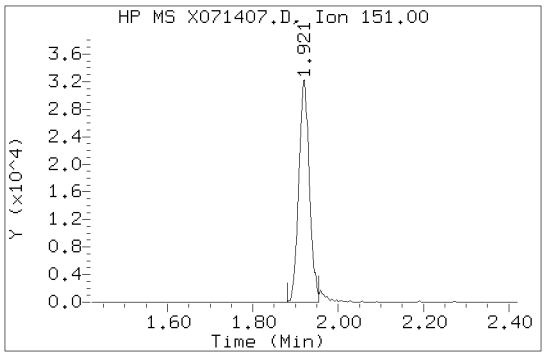

Methylcyclohexane (108-87-2)

Reason Code:

BEFORE

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AREA
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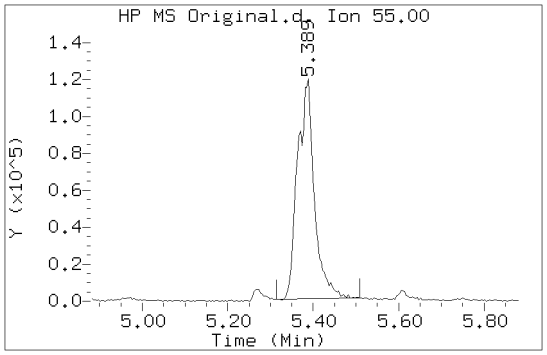
HEIGHT
118927
20-Jul-2023
15:04
linh
pham



AFTER

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HEIGHT
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20-Jul-2023
15:04
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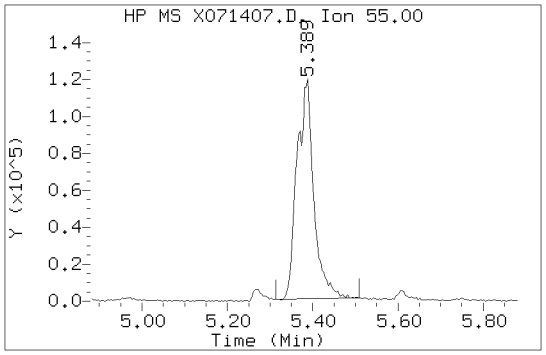

BEFORE

MASS
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AREA
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HEIGHT
79744
20-Jul-2023
15:04
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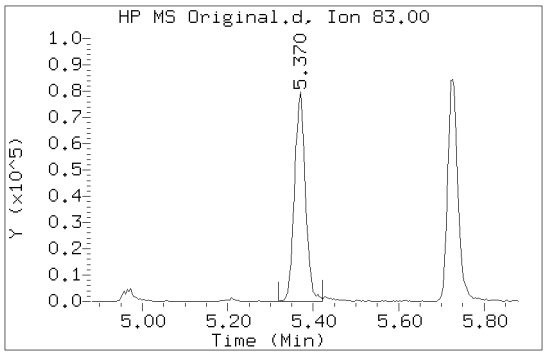

AFTER

MASS
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HEIGHT
79744
20-Jul-2023
15:04
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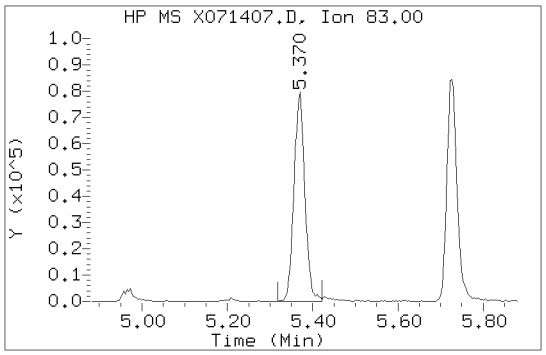

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Inj Date : 14-JUL-2023 14:04
InstruID : voa6.i
LabSampID : VSTD020

4-Methyl-2-pentanol (108-11-2)

Reason Code:

BEFORE

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AREA
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HEIGHT
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20-Jul-2023
15:04
linh
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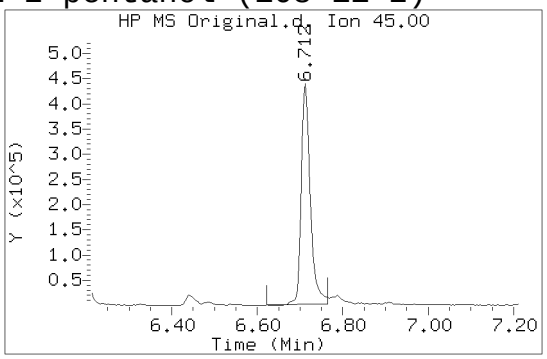

AFTER

MASS
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20-Jul-2023
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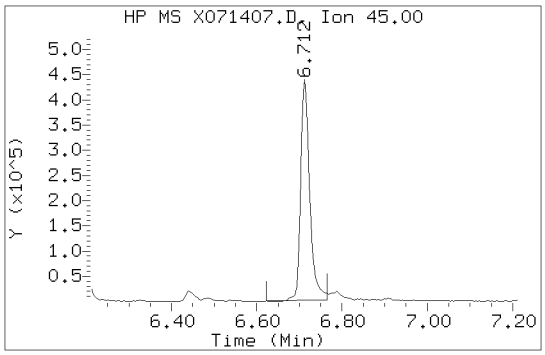

BEFORE

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20-Jul-2023
15:04
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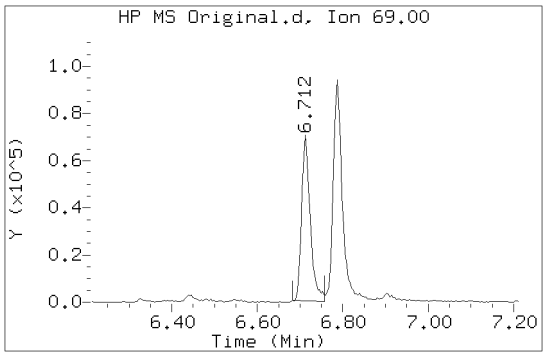

AFTER

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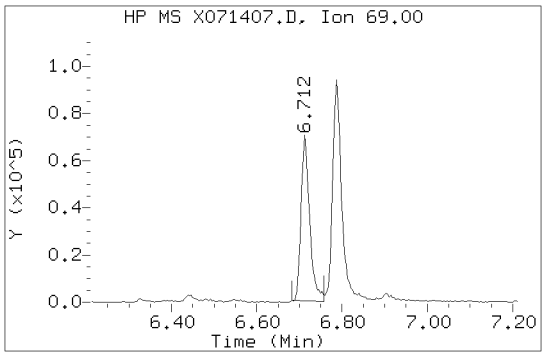

Amyl alcohol (71-41-0)

Reason Code:

BEFORE

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HEIGHT
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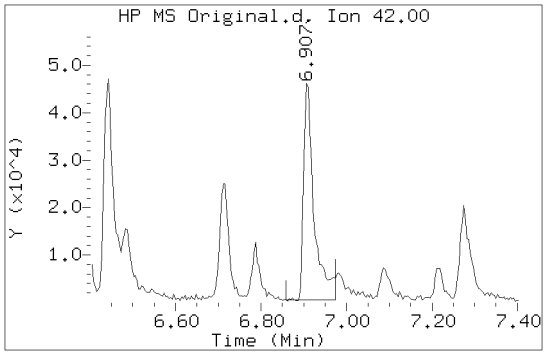
20-Jul-2023
15:04
linh
pham



AFTER

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HEIGHT
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20-Jul-2023
15:04
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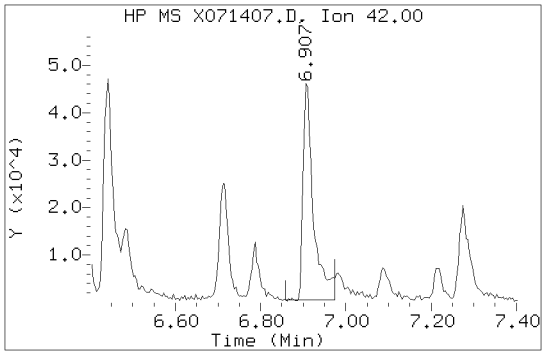

BEFORE

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20-Jul-2023
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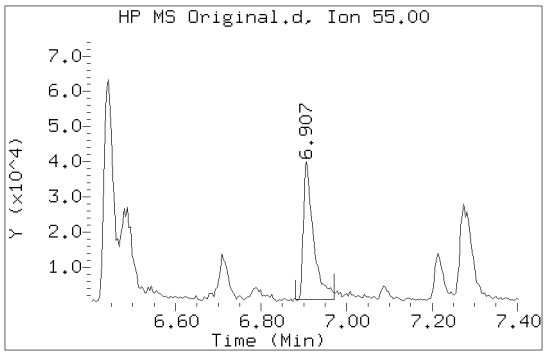

AFTER

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HEIGHT
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15:04
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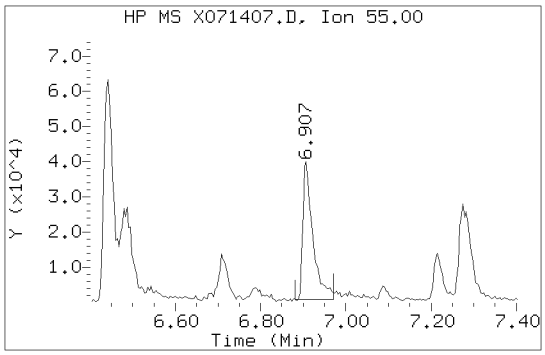

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Inj Date : 14-JUL-2023 14:04
InstruID : voa6.i
LabSampID : VSTD020

Amyl alcohol (71-41-0)

Reason Code:

BEFORE

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HEIGHT
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20-Jul-2023
15:04
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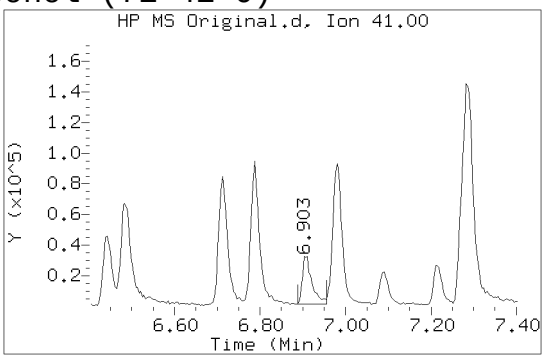

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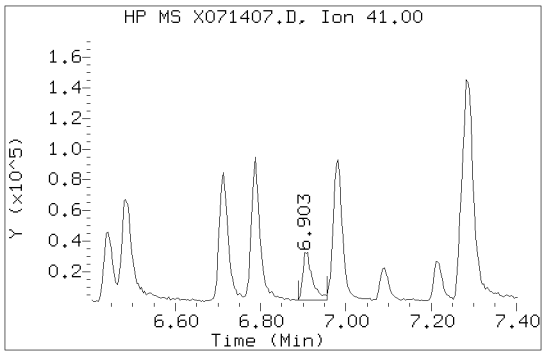

tert-Butyl formate (762-75-4)

Reason Code:

BEFORE

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20-Jul-2023
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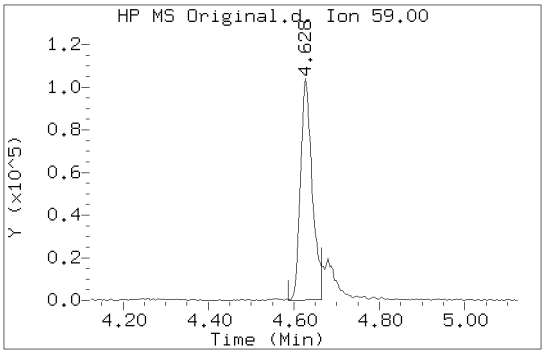

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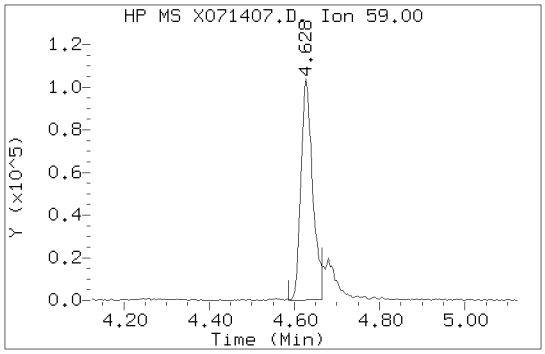

BEFORE

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20-Jul-2023
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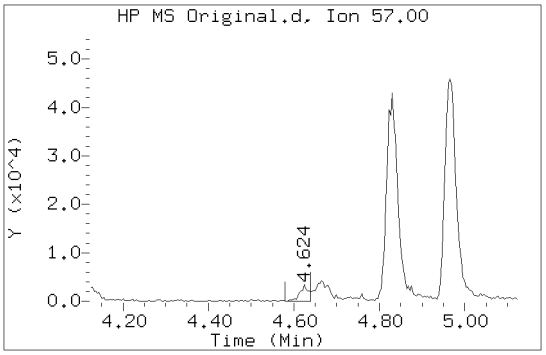

AFTER

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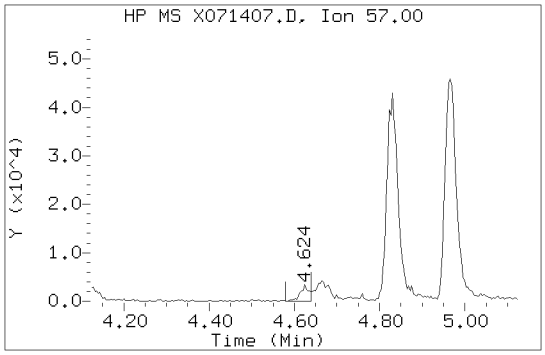

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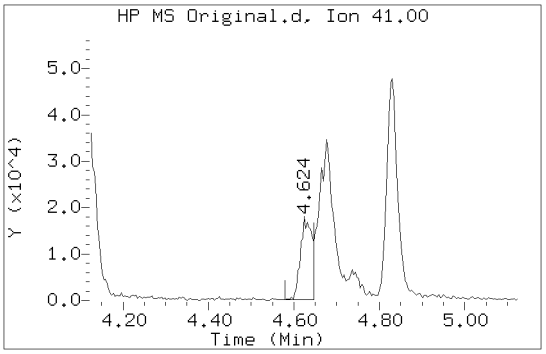

AFTER

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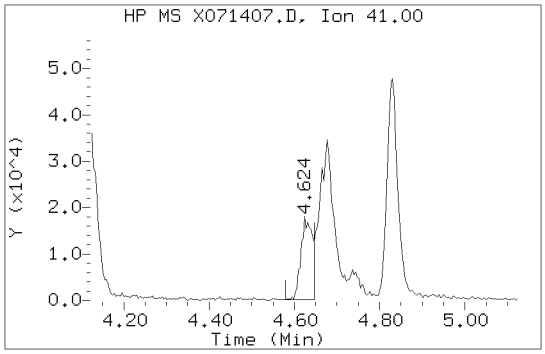

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Inj Date : 14-JUL-2023 14:04
InstruID : voa6.i
LabSampID : VSTD020

tert-Amyl alcohol (75-85-4)

Reason Code:

BEFORE

MASS
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206505
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103862
20-Jul-2023
15:04
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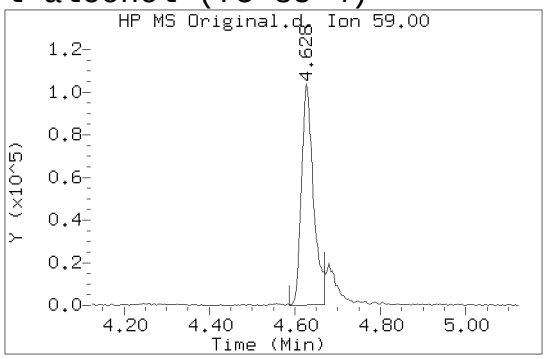

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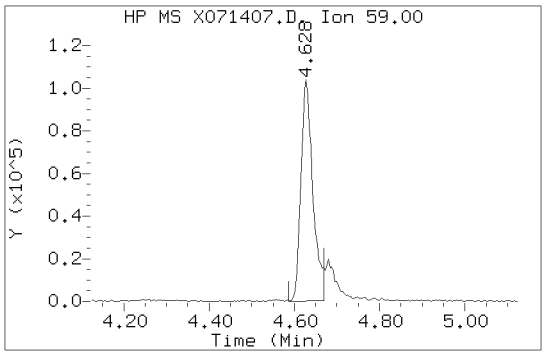

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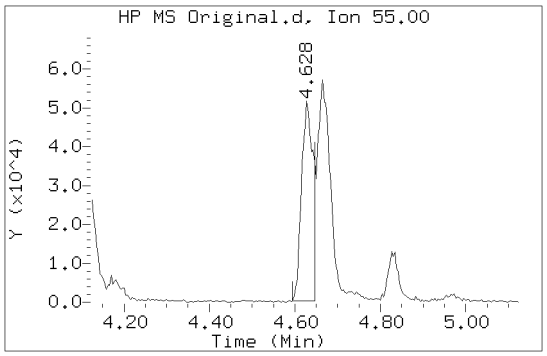

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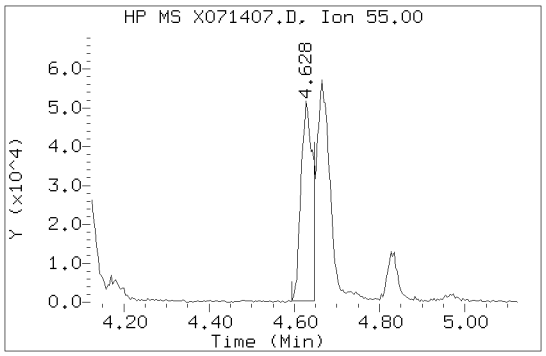

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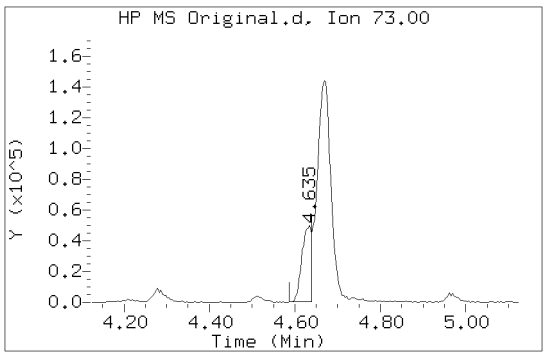

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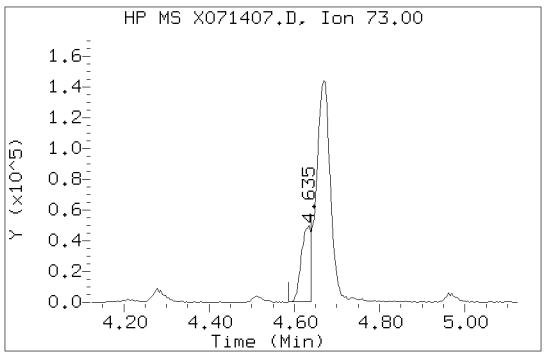

Acetaldehyde (75-07-0)

Reason Code:

BEFORE

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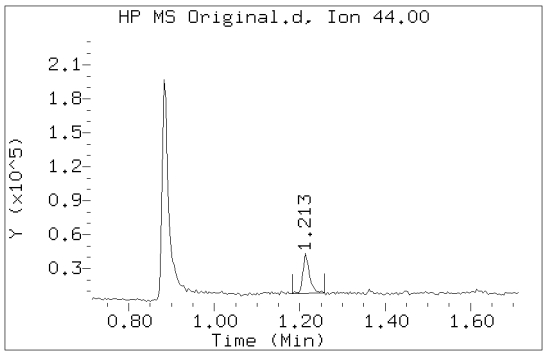

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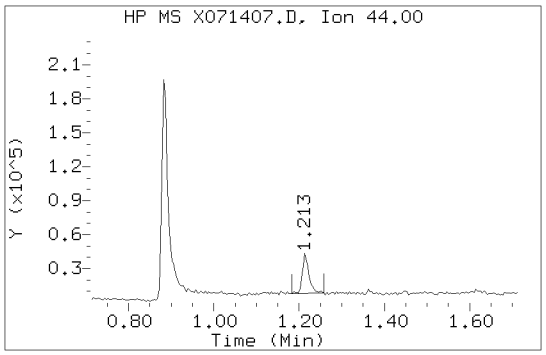

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Inj Date : 14-JUL-2023 14:04
InstruID : voa6.i
LabSampID : VSTD020

Acetaldehyde (75-07-0)

BEFORE

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20-Jul-2023
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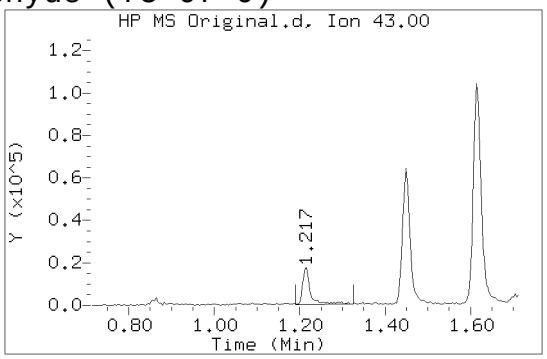

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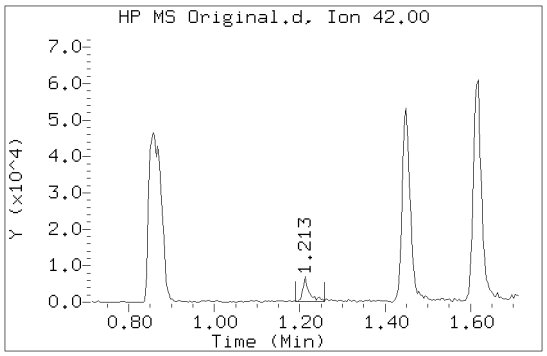

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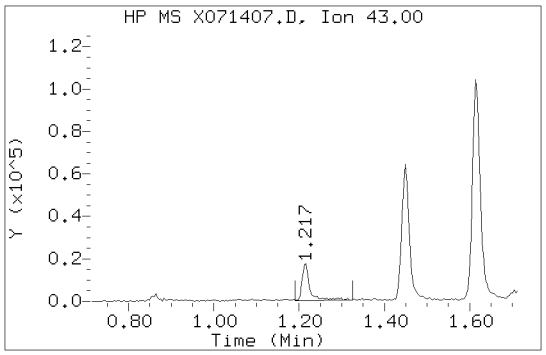

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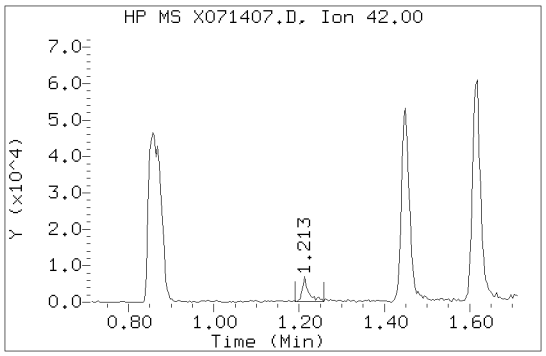

Isobutylene (115-11-7)

BEFORE

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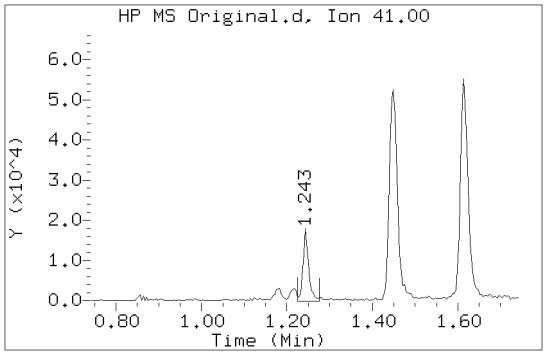

BEFORE

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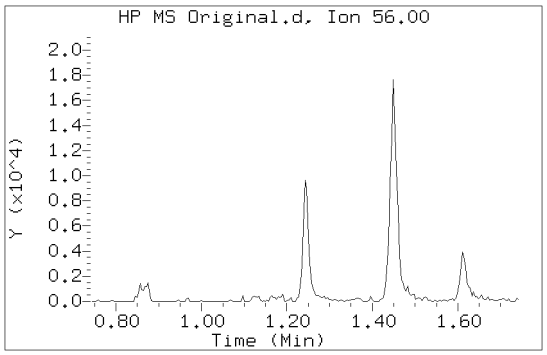

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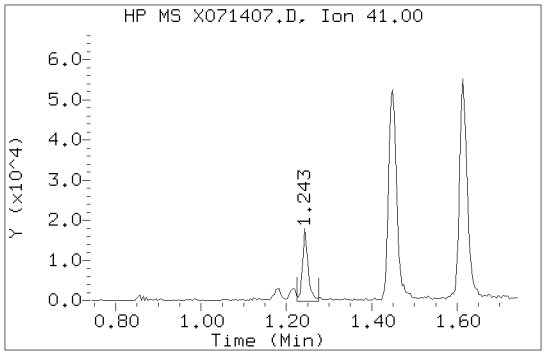

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20-Jul-2023
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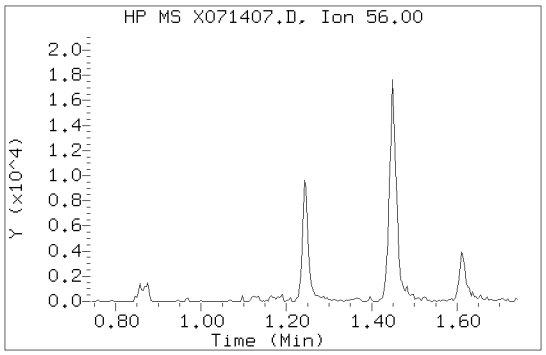

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Inj Date : 14-JUL-2023 14:04
InstruID : voa6.i
LabSampID : VSTD020

Isobutylene (115-11-7)

Reason Code:

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20-Jul-2023
15:04
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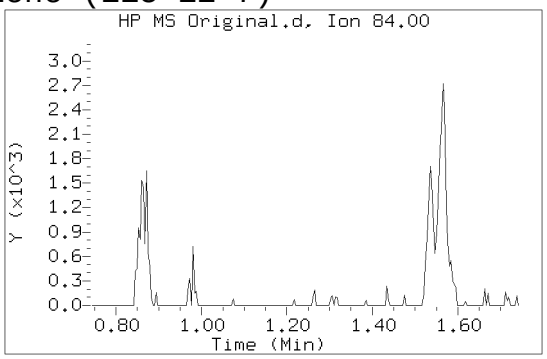

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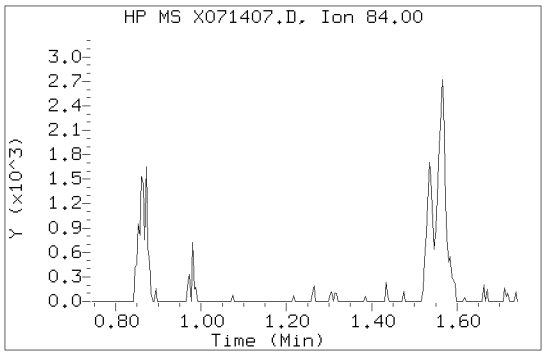

Toluene-d8 (2037-26-5)

Reason Code:

BEFORE

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20-Jul-2023
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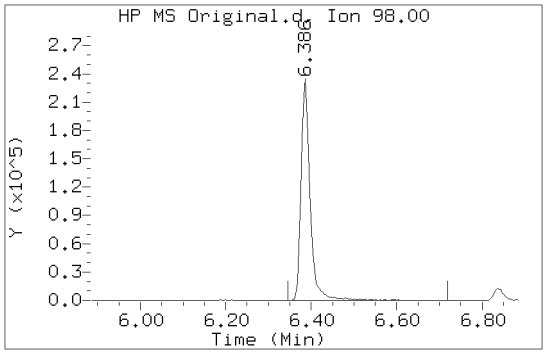

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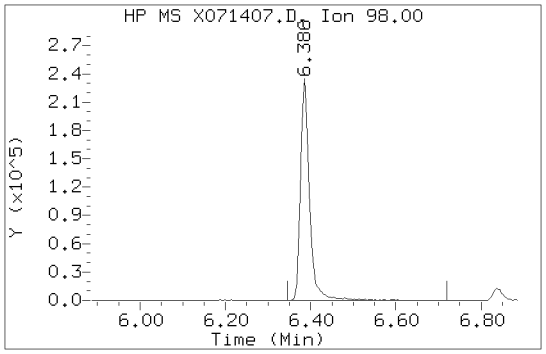

BEFORE

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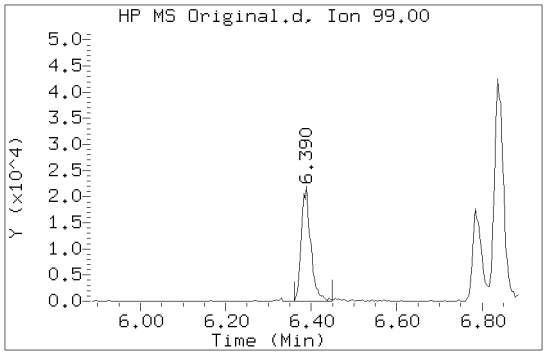

AFTER

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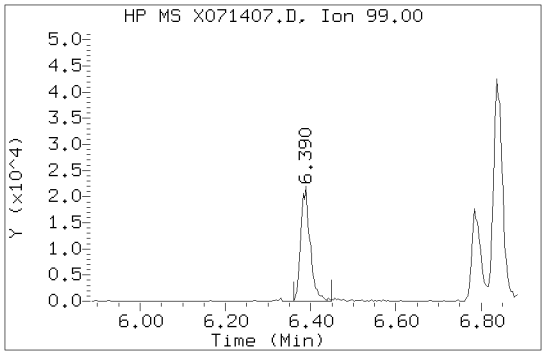

BEFORE

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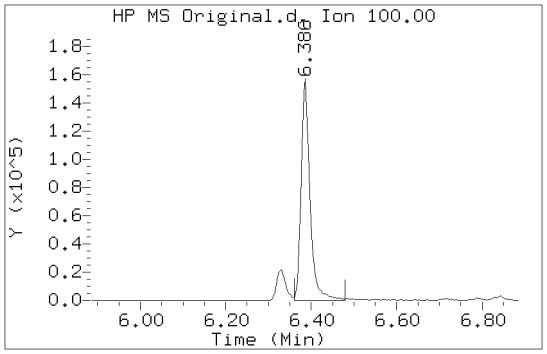

AFTER

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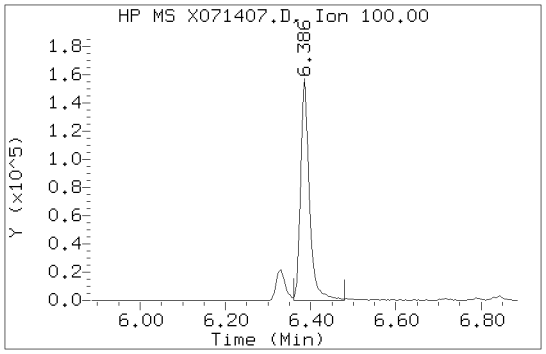

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071408.D Page 1
Report Date: 20-Jul-2023 15:05

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071408.D
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Inj Date : 14-JUL-2023 14:24
Operator : PC Inst ID: voa6.i
Smp Info : VSTD050;VSTD050;1;7;
Misc Info : V6;WATER;0;1;
Comment   :
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Meth Date : 20-Jul-2023 15:05 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:04 Cal File: X071407.D
Als bottle: 9 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
*	1 Pentafluorobenzene	168	4.178	4.178	(1.000)	523013	50.0000	
	2 Dichlorodifluoromethane	85	0.976	0.976	(0.234)	235300	50.0000	44.11
	3 Chloromethane	50	1.081	1.081	(0.259)	354356	50.0000	44.85
	4 Propionitrile	54	3.656	3.656	(0.875)	492839	500.000	475.69
	5 Vinyl Chloride	62	1.145	1.145	(0.274)	318113	50.0000	47.00
	6 Bromomethane	94	1.344	1.344	(0.322)	131891	50.0000	47.09
	7 Chloroethane	64	1.407	1.407	(0.337)	180308	50.0000	46.66
	8 Trichlorofluoromethane	101	1.561	1.561	(0.374)	315333	50.0000	45.97
	9 Acrolein	56	1.861	1.861	(0.446)	19251	100.000	97.23(H)
	10 Acetone	43	1.973	1.973	(0.472)	210033	100.000	101.57
	11 1,1-Dichloroethene	96	1.913	1.913	(0.458)	183746	50.0000	47.95
	12 Isobutyl Alcohol	43	4.680	4.680	(1.120)	992232	1000.00	1000.83
	13 Acetonitrile	39	2.198	2.198	(0.526)	357196	500.000	487.03
	14 Allyl Chloride	41	2.198	2.198	(0.526)	798138	50.0000	46.48
	15 Iodomethane	142	2.030	2.030	(0.486)	473625	100.000	94.10
	16 Acrylonitrile	53	2.532	2.532	(0.606)	235726	100.000	92.49
	17 Methylene Chloride	84	2.307	2.307	(0.552)	228969	50.0000	50.65
	18 Methyl tert-butyl ether	73	2.539	2.539	(0.608)	669525	50.0000	46.98
	19 Carbon Disulfide	76	2.071	2.071	(0.496)	1141643	100.000	94.78
	20 trans-1,2-Dichloroethene	96	2.528	2.528	(0.605)	211279	50.0000	47.66

21 Vinyl Acetate	43	2.997	2.997 (0.717)	1752870	100.000	95.62
22 1,1-Dichloroethane	63	2.922	2.922 (0.699)	470383	50.0000	48.36

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	23 Chloroprene	53	1.775	1.775	(0.425)	101850	50.0000	43.31(M)
	24 2-Butanone	43	3.582	3.582	(0.857)	268410	100.000	96.36
	25 Methacrylonitrile	41	3.821	3.821	(0.915)	328284	50.0000	48.62(a)
	26 2,2-Dichloropropane	77	3.507	3.507	(0.839)	357279	50.0000	47.33
	27 cis-1,2-Dichloroethene	96	3.525	3.525	(0.844)	274899	50.0000	48.68
	28 Chloroform	83	3.904	3.904	(0.935)	470821	50.0000	47.31
	29 Bromochloromethane	128	3.791	3.791	(0.908)	149658	50.0000	47.29
$	30 Dibromofluoromethane	113	4.099	4.099	(0.981)	227290	50.0000	47.37
	31 1,1,1-Trichloroethane	97	4.084	4.084	(0.978)	366818	50.0000	47.88
	32 1,1-Dichloropropene	75	4.279	4.279	(0.862)	311339	50.0000	45.93
	33 1,2-Dichloroethane	62	4.556	4.556	(0.918)	432993	50.0000	47.34
	34 Carbon Tetrachloride	117	4.268	4.268	(0.860)	295641	50.0000	43.30
$	35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	282994	50.0000	47.17
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	830857	50.0000	
	37 Benzene	78	4.511	4.511	(0.909)	951794	50.0000	47.89
	38 Trichloroethene	130	5.205	5.205	(1.048)	268578	50.0000	47.77
	39 Bromodichloromethane	83	5.722	5.722	(1.153)	359212	50.0000	47.18
	40 Methyl Methacrylate	41	5.606	5.606	(1.342)	290569	50.0000	46.03
	41 2-Chloroethylvinyl ether	63	6.048	6.048	(1.218)	231938	100.000	99.79
	42 1,2-Dichloropropane	63	5.433	5.433	(1.094)	313347	50.0000	49.03
	43 2-Nitropropane	43	5.969	5.969	(1.429)	96529	50.0000	46.45
	44 Dibromomethane	93	5.550	5.550	(1.118)	168989	50.0000	46.71
	45 4-Methyl-2-Pentanone	43	6.326	6.326	(0.825)	688236	100.000	93.62
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	425194	50.0000	48.63
*	47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	747052	50.0000	
$	48 Toluene-d8	98	6.385	6.385	(0.833)	806003	50.0000	41.90(M)
	49 Ethyl Methacrylate	69	6.712	6.712	(1.352)	223750	50.0000	41.11
	50 Toluene	91	6.445	6.445	(0.841)	1011174	50.0000	50.28
	51 trans-1,3-Dichloropropene	75	6.678	6.678	(1.345)	351933	50.0000	47.75
	52 2-Hexanone	43	7.086	7.086	(0.924)	449229	100.000	93.02
	53 1,1,2-Trichloroethane	83	6.835	6.835	(0.891)	205411	50.0000	48.15
	54 1,3-Dichloropropane	76	6.978	6.978	(0.910)	420354	50.0000	48.23
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	303363	50.0000	49.25
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	200679	50.0000	48.30
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	231339	50.0000	47.45
	58 1-Chlorohexane	55	7.694	7.694	(1.550)	276645	50.0000	41.44
	59 Chlorobenzene	112	7.690	7.690	(1.003)	673755	50.0000	47.92
	60 1,1,1,2-Tetrachloroethane	131	7.772	7.772	(1.014)	270349	50.0000	49.12
	61 Ethylbenzene	106	7.795	7.795	(1.017)	339019	50.0000	48.09
	62 m,p-Xylenes	106	7.900	7.900	(1.030)	871877	100.000	98.59
	63 o-Xylene	106	8.237	8.237	(1.074)	410767	50.0000	49.05
	64 Styrene	104	8.256	8.256	(1.077)	730009	50.0000	49.97
	66 Bromoform	173	8.406	8.406	(1.096)	197185	50.0000	49.90
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	1023144	50.0000	47.53
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	323110	50.0000	46.71
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	355682	50.0000	47.79
*	70 1,4-Dichlorobenzene-d4	152	9.658	9.658	(1.000)	411751	50.0000	
	71 1,2,3-Trichloropropane	75	8.860	8.860	(0.917)	256294	50.0000	46.70(M)
	72 trans-1,4-Dichloro-2-butene	53	8.886	8.886	(1.159)	113164	50.0000	49.80
	73 n-Propylbenzene	91	8.908	8.908	(0.922)	1199683	50.0000	48.21
	74 Bromobenzene	156	8.803	8.803	(0.912)	304391	50.0000	47.26
	75 1,3,5-Trimethylbenzene	105	9.062	9.062	(0.938)	873751	50.0000	46.87

76	2-Chlorotoluene	91	8.972	8.972 (0.929)	787863	50.0000	46.93
77	4-Chlorotoluene	91	9.066	9.066 (0.939)	904673	50.0000	49.04

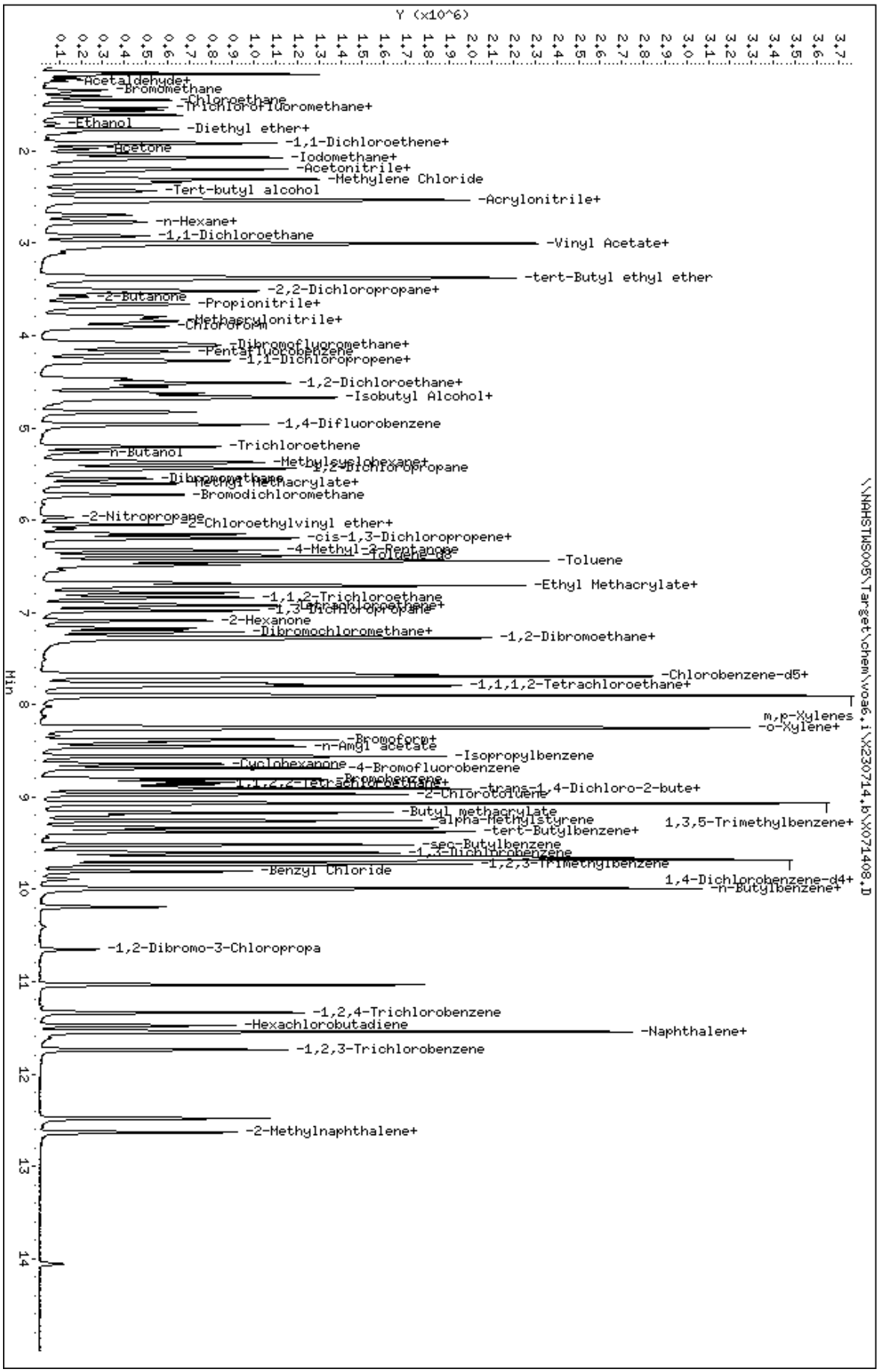
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	
78	tert-Butylbenzene	119	9.336	9.336	(0.967)	722967	50.0000	45.22	
79	1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	872776	50.0000	46.69	
81	sec-Butylbenzene	105	9.519	9.519	(0.986)	982642	50.0000	46.11	
82	p-Isopropyltoluene	119	9.647	9.647	(0.999)	896333	50.0000	46.05	
83	1,3-Dichlorobenzene	146	9.602	9.602	(0.994)	530593	50.0000	47.29	
84	1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	570511	50.0000	46.38	
86	Benzyl Chloride	91	9.804	9.804	(1.279)	558112	50.0000	44.19	
87	n-Butylbenzene	91	9.992	9.992	(1.035)	755707	50.0000	46.35	
88	1,2-Dichlorobenzene	146	9.988	9.988	(1.034)	524864	50.0000	47.58	
89	1,2-Dibromo-3-Chloropropane	155	10.651	10.651	(1.103)	51434	50.0000	45.34	
90	1,2,4-Trichlorobenzene	180	11.334	11.334	(1.173)	331560	50.0000	43.77	
91	Hexachlorobutadiene	225	11.476	11.476	(1.188)	139894	50.0000	40.54	
92	Naphthalene	128	11.540	11.540	(1.195)	833003	50.0000	44.42	
93	1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	307966	50.0000	43.47	
146	Methyl acetate	43	2.232	2.232	(0.534)	220729	50.0000	47.42	
138	Freon TF	101	1.917	1.917	(0.459)	154547	50.0000	48.17	
141	Cyclohexane	56	4.125	4.125	(0.987)	384719	50.0000	42.43	
142	Tetrahydrofuran	42	3.851	3.851	(0.922)	127806	100.000	94.98	
147	Methylcyclohexane	55	5.381	5.381	(1.084)	820341	50.0000	46.77	
135	1,4-Dioxane	88	5.602	5.602	(1.341)	56497	1000.00	909.04	
132	n-Butanol	56	5.261	5.261	(1.259)	163155	1000.00	937.09	
131	Methyl Acrylate	55	3.690	3.690	(0.883)	324862	50.0000	45.69	
133	Ethyl Acrylate	55	5.381	5.381	(1.288)	820341	50.0000	47.32	
136	n-Hexane	57	2.772	2.772	(0.664)	244351	50.0000	48.23	
139	Diethyl ether	59	1.760	1.760	(0.421)	229645	50.0000	47.08	
148	Tert-butyl alcohol	59	2.434	2.434	(0.583)	589524	1000.00	893.06	
149	Isopropyl alcohol	45	2.093	2.093	(0.501)	369866	1000.00	902.98	
156	Diisopropyl ether	45	3.004	3.004	(0.719)	1023782	50.0000	47.49	
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	931868	50.0000	48.95	
167	Ethanol	45	1.703	1.703	(0.408)	72445	1000.00	990.30	
172	tert-Butyl formate	59	4.627	4.627	(1.108)	483988	100.000	86.62	
173	3,3-Dimethyl-1-butanol	57	7.285	7.285	(0.950)	654787	1000.00	815.00	
174	tert-Amyl methyl ether	73	4.669	4.669	(1.118)	841588	50.0000	48.91	
175	tert-Butyl ethyl ether	59	3.379	3.379	(0.809)	1034229	50.0000	46.70	
176	tert-Amyl alcohol	59	4.627	4.627	(1.108)	483988	1000.00	847.08	
151	4-Methyl-2-pentanol	45	6.712	6.712	(1.352)	1443508	1000.00	810.70	
180	1-Methylnaphthalene	142	12.634	12.634	(1.308)	377609	50.0000	(a)	
140	1,3-Butadiene	54	1.167	1.167	(0.280)	306107	50.0000	45.54	
152	Amyl alcohol	42	6.903	6.903	(0.900)	190741	1000.00	887.85	
158	Dichlorofluoromethane	67	1.535	1.535	(0.367)	398292	50.0000	47.26	
159	Propylene oxide	43	1.805	1.805	(0.432)	59535	100.000	92.78	
161	3-Methyl-1-butanol	55	6.903	6.903	(0.900)	178568	1000.00	970.88	
162	Butyl acrylate	55	8.249	8.249	(1.076)	713652	50.0000	50.21	
163	Butyl methacrylate	41	9.167	9.167	(0.949)	474324	50.0000	48.09	
164	Dicyclopentadiene	66	9.681	9.681	(1.002)	1133352	50.0000	47.78	
182	Epichlorohydrin	57	6.093	6.093	(1.227)	118291	200.000	190.60	
M 94	1,2-Dichloroethylene (total)	96				486178	100.000	(a)	
145	alpha-Methylstyrene	118	9.257	9.257	(0.958)	421857	50.0000	46.96	
130	Ethyl Acetate	43	3.660	3.660	(0.876)	368212	50.0000	47.39	
134	Cyclohexanone	55	8.642	8.642	(0.895)	325236	1000.00	887.25	
185	Isoprene	39	1.775	1.775	(0.425)	78291	50.0000	45.41	
188	Isopropyl acetate	43	4.680	4.680	(0.943)	992232	50.0000	45.29	

187 n-Amyl acetate	43	8.451	8.451 (1.102)	605401	50.0000	44.21
189 n-Butyl acetate	43	7.210	7.210 (0.940)	548658	50.0000	47.91(H)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
150 Allyl alcohol	57	2.772	2.772	(0.664)	244351	1000.00	964.89
194 Acetaldehyde	44	1.212	1.212	(0.290)	101552	200.000	218.25(M)
195 Methyl Amyl Ketone	43	8.380	8.380	(1.093)	719543	50.0000	46.08
200 Dimethyl Disulfide	94	6.194	6.194	(0.808)	522090	50.0000	51.81
202 Isobutylene	41	1.242	1.242	(0.297)	36655	50.0000	42.38(M)
205 2-Ethylhexyl Acrylate	55	11.547	11.547	(1.196)	561357	50.0000	53.37

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.



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Client ID: VSTD050
Sample Info: VSTD050;VSTD050;1;7;
Purge Volume: 5.0
Column phase: DB624

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

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Inj Date : 14-JUL-2023 14:24
InstruID : voa6.i
LabSampID : VSTD050

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

Reason Code:

BEFORE

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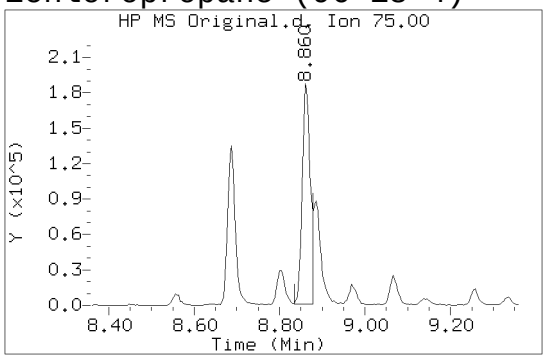
HEIGHT
186871
20-Jul-2023
15:04
linh
pham



AFTER

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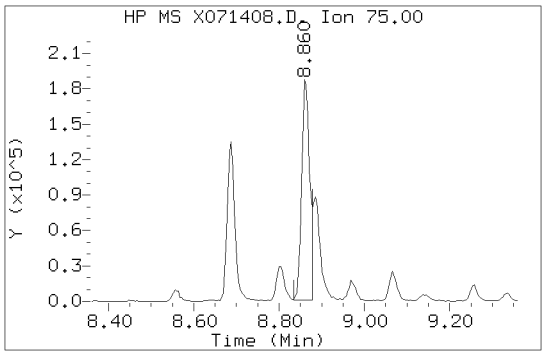

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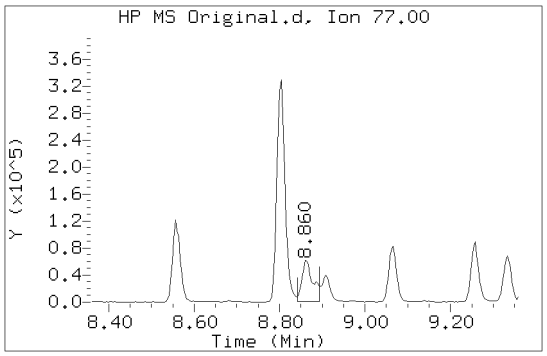

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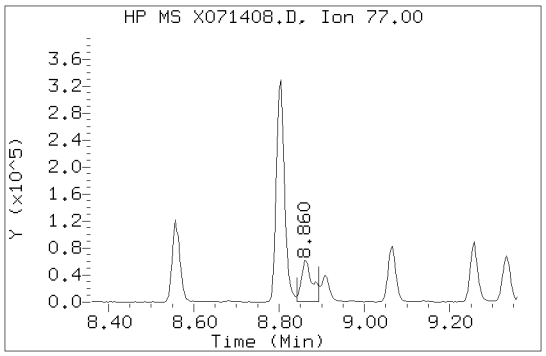

Chloroprene (126-99-8)

Reason Code:

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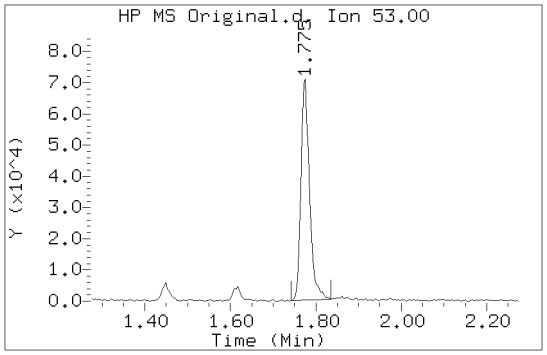

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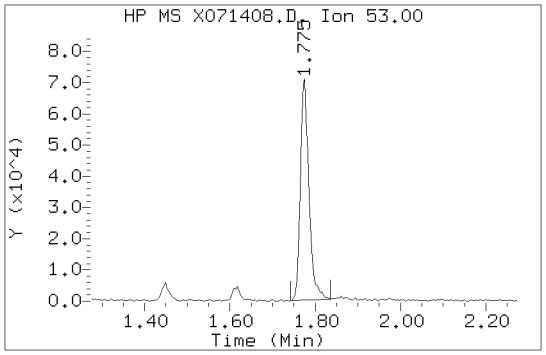

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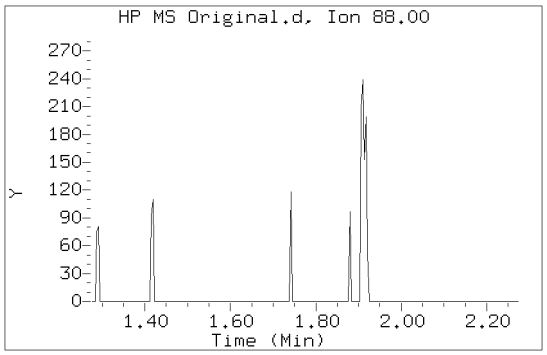

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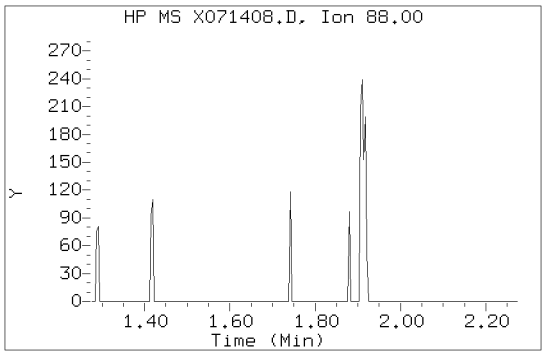

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InstruID : voa6.i
LabSampID : VSTD050

Acetaldehyde (75-07-0)

Reason Code:

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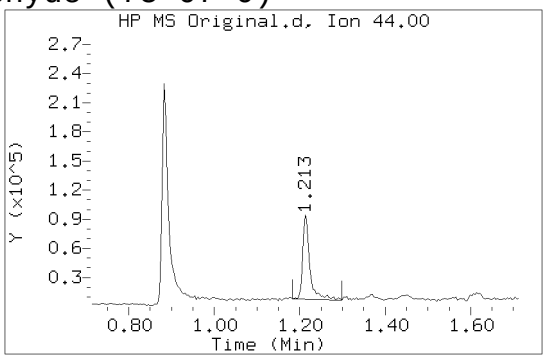

AFTER

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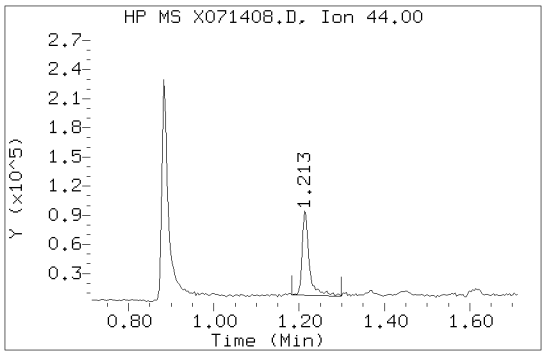

BEFORE

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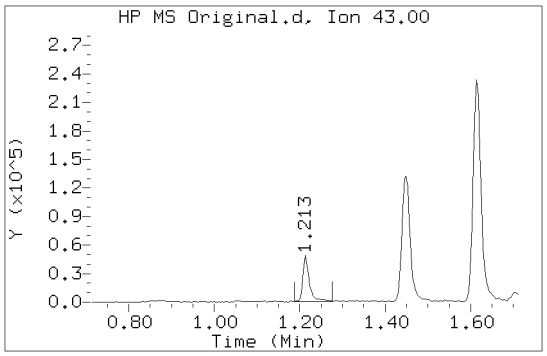

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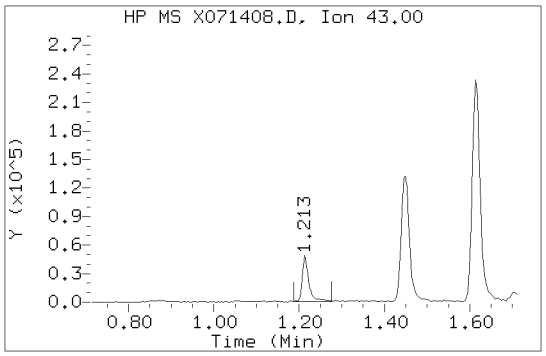

BEFORE

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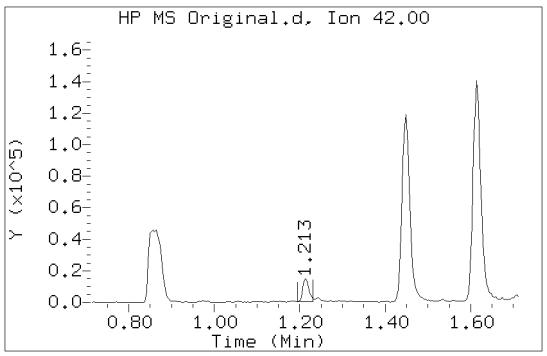

AFTER

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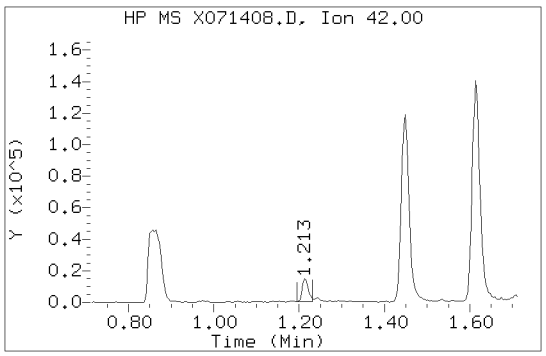

Isobutylene (115-11-7)

Reason Code:

BEFORE

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20-Jul-2023
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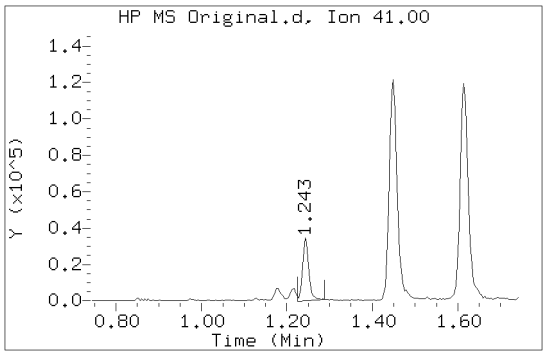

AFTER

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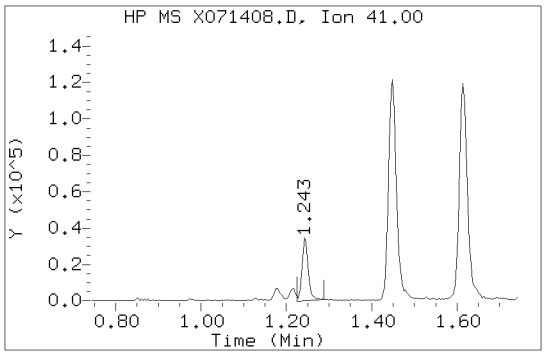

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InstruID : voa6.i
LabSampID : VSTD050

Isobutylene (115-11-7)

Reason Code:

BEFORE
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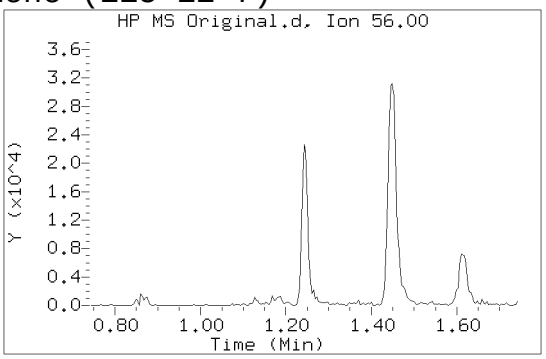

AFTER
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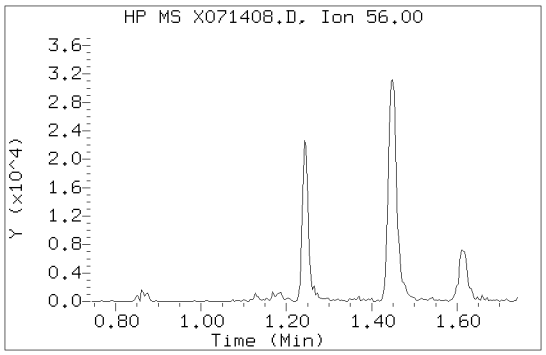

BEFORE
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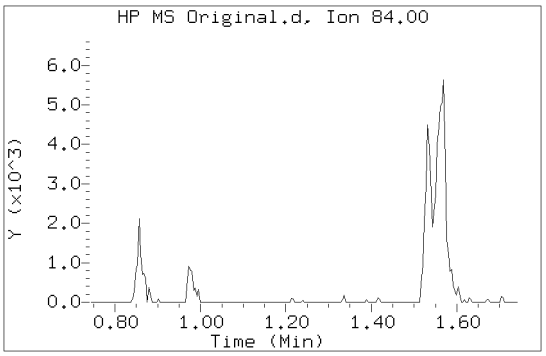

AFTER
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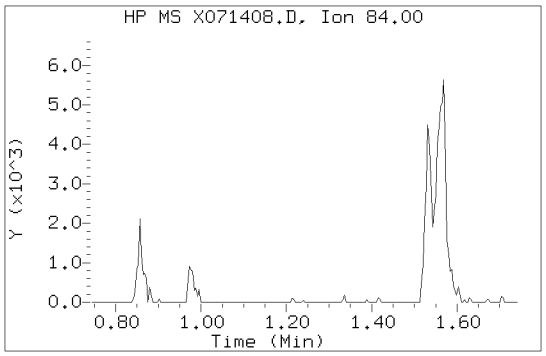

Toluene-d8 (2037-26-5)

Reason Code:

BEFORE
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AREA
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HEIGHT
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20-Jul-2023
15:04
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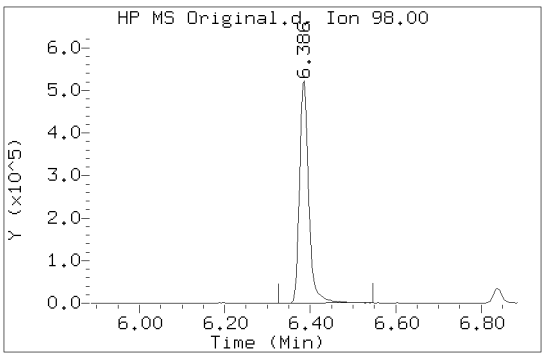

AFTER
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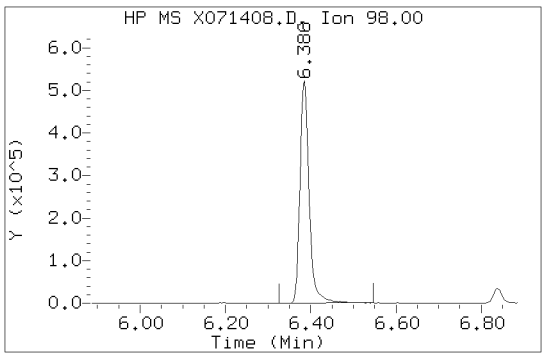

BEFORE
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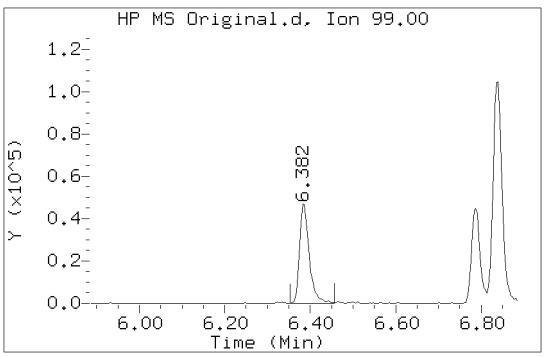

AFTER
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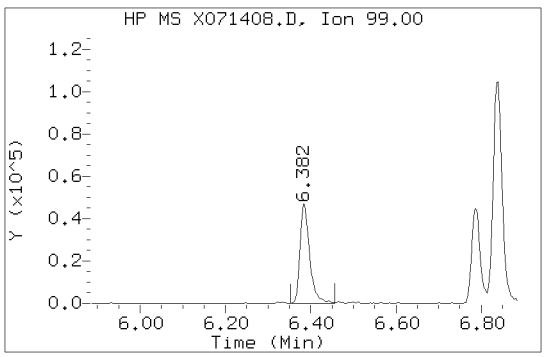

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InstruID : voa6.i
LabSampID : VSTD050

Toluene-d8 (2037-26-5)

Reason Code:

BEFORE

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20-Jul-2023
15:04
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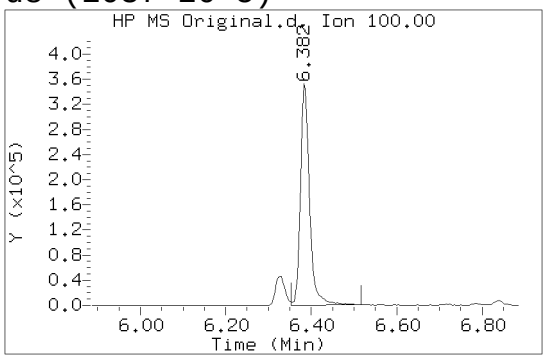

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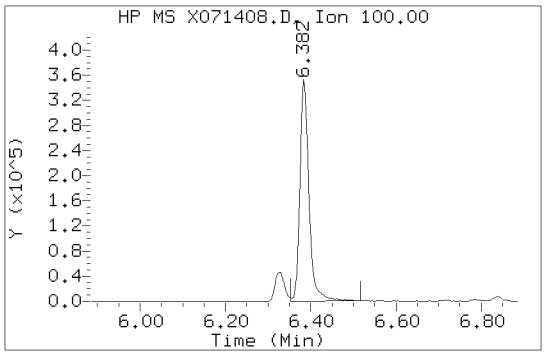

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Report Date: 20-Jul-2023 15:05

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071409.D
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Inj Date : 14-JUL-2023 14:44
Operator : PC Inst ID: voa6.i
Smp Info : VSTD100;VSTD100;1;8;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\8260W.m
Meth Date : 20-Jul-2023 15:05 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 10 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1	Pentafluorobenzene	168	4.178	4.178	(1.000)	523083	50.0000	
2	Dichlorodifluoromethane	85	0.976	0.976	(0.234)	576963	100.000	106.55
3	Chloromethane	50	1.081	1.081	(0.259)	835087	100.000	105.69
4	Propionitrile	54	3.657	3.657	(0.875)	1047975	1000.00	1011.37
5	Vinyl Chloride	62	1.145	1.145	(0.274)	734431	100.000	108.50
6	Bromomethane	94	1.340	1.340	(0.321)	298512	100.000	106.56
7	Chloroethane	64	1.404	1.404	(0.336)	388839	100.000	100.62
8	Trichlorofluoromethane	101	1.561	1.561	(0.374)	784790	100.000	114.40
9	Acrolein	56	1.861	1.861	(0.446)	38657	200.000	194.08(H)
10	Acetone	43	1.973	1.973	(0.472)	413238	200.000	204.54
11	1,1-Dichloroethene	96	1.917	1.917	(0.459)	418161	100.000	109.11
12	Isobutyl Alcohol	43	4.676	4.676	(1.119)	2105793	2000.00	2123.76
13	Acetonitrile	39	2.198	2.198	(0.526)	728143	1000.00	992.69
14	Allyl Chloride	41	2.198	2.198	(0.526)	1634102	100.000	95.15
15	Iodomethane	142	2.030	2.030	(0.486)	1101288	200.000	206.62
16	Acrylonitrile	53	2.532	2.532	(0.606)	485413	200.000	190.43
17	Methylene Chloride	84	2.303	2.303	(0.551)	461890	100.000	103.61
18	Methyl tert-butyl ether	73	2.539	2.539	(0.608)	1386267	100.000	97.26
19	Carbon Disulfide	76	2.071	2.071	(0.496)	2567979	200.000	213.18
20	trans-1,2-Dichloroethene	96	2.528	2.528	(0.605)	450376	100.000	101.60

21 Vinyl Acetate	43	3.001	3.001 (0.718)	3697154	200.000	201.67
22 1,1-Dichloroethane	63	2.918	2.918 (0.699)	974667	100.000	100.19

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	23 Chloroprene	53	1.775	1.775	(0.425)	247316	100.000	105.15(M)
	24 2-Butanone	43	3.582	3.582	(0.857)	596777	200.000	214.23
	25 Methacrylonitrile	41	3.821	3.821	(0.915)	700145	100.000	103.69(a)
	26 2,2-Dichloropropane	77	3.507	3.507	(0.839)	797830	100.000	105.42
	27 cis-1,2-Dichloroethene	96	3.525	3.525	(0.844)	578093	100.000	102.37
	28 Chloroform	83	3.904	3.904	(0.935)	984765	100.000	98.94
	29 Bromochloromethane	128	3.795	3.795	(0.908)	308539	100.000	97.49
$	30 Dibromofluoromethane	113	4.099	4.099	(0.981)	502644	100.000	105.68
	31 1,1,1-Trichloroethane	97	4.084	4.084	(0.978)	846403	100.000	110.47
	32 1,1-Dichloropropene	75	4.279	4.279	(0.862)	731563	100.000	110.92
	33 1,2-Dichloroethane	62	4.556	4.556	(0.918)	901009	100.000	101.23
	34 Carbon Tetrachloride	117	4.260	4.260	(0.858)	726709	100.000	109.37
$	35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	615043	100.000	103.24
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	808530	50.0000	
	37 Benzene	78	4.511	4.511	(0.909)	2032676	100.000	105.10
	38 Trichloroethene	130	5.201	5.201	(1.048)	584538	100.000	106.85
	39 Bromodichloromethane	83	5.726	5.726	(1.153)	741977	100.000	100.16
	40 Methyl Methacrylate	41	5.606	5.606	(1.342)	628263	100.000	99.51
	41 2-Chloroethylvinyl ether	63	6.044	6.044	(1.217)	497113	200.000	219.79
	42 1,2-Dichloropropane	63	5.433	5.433	(1.094)	653249	100.000	105.04
	43 2-Nitropropane	43	5.969	5.969	(1.429)	203991	100.000	98.16
	44 Dibromomethane	93	5.550	5.550	(1.118)	353228	100.000	100.34
	45 4-Methyl-2-Pentanone	43	6.326	6.326	(0.825)	1478418	200.000	198.78
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	899164	100.000	105.68
*	47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	755792	50.0000	
$	48 Toluene-d8	98	6.386	6.386	(0.833)	1813180	100.000	93.17(M)
	49 Ethyl Methacrylate	69	6.712	6.712	(1.352)	499748	100.000	94.37
	50 Toluene	91	6.442	6.442	(0.840)	2182793	100.000	107.28
	51 trans-1,3-Dichloropropene	75	6.678	6.678	(1.345)	755710	100.000	105.36
	52 2-Hexanone	43	7.087	7.087	(0.924)	970744	200.000	198.69
	53 1,1,2-Trichloroethane	83	6.835	6.835	(0.891)	424795	100.000	98.42
	54 1,3-Dichloropropane	76	6.978	6.978	(0.910)	873450	100.000	99.06
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	655964	100.000	105.28
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	469739	100.000	111.75
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	477019	100.000	96.72
	58 1-Chlorohexane	55	7.694	7.694	(1.550)	692334	100.000	106.58
	59 Chlorobenzene	112	7.690	7.690	(1.003)	1451842	100.000	102.08
	60 1,1,1,2-Tetrachloroethane	131	7.773	7.773	(1.014)	582430	100.000	104.61
	61 Ethylbenzene	106	7.795	7.795	(1.017)	757084	100.000	106.16
	62 m,p-Xylenes	106	7.900	7.900	(1.030)	1920317	200.000	214.63
	63 o-Xylene	106	8.237	8.237	(1.074)	894211	100.000	105.54
	64 Styrene	104	8.256	8.256	(1.077)	1543196	100.000	104.42
	66 Bromoform	173	8.410	8.410	(1.097)	423146	100.000	105.85
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	2408268	100.000	110.58
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	686871	100.000	97.37
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	767493	100.000	102.43
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	419955	50.0000	
	71 1,2,3-Trichloropropane	75	8.860	8.860	(0.917)	550885	100.000	98.41(M)
	72 trans-1,4-Dichloro-2-butene	53	8.886	8.886	(1.159)	253486	100.000	110.27
	73 n-Propylbenzene	91	8.908	8.908	(0.922)	2861434	100.000	112.75
	74 Bromobenzene	156	8.803	8.803	(0.911)	667827	100.000	101.67
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	2103222	100.000	110.62

76	2-Chlorotoluene	91	8.972	8.972 (0.929)	1748246	100.000	102.12
77	4-Chlorotoluene	91	9.066	9.066 (0.938)	2018059	100.000	107.27

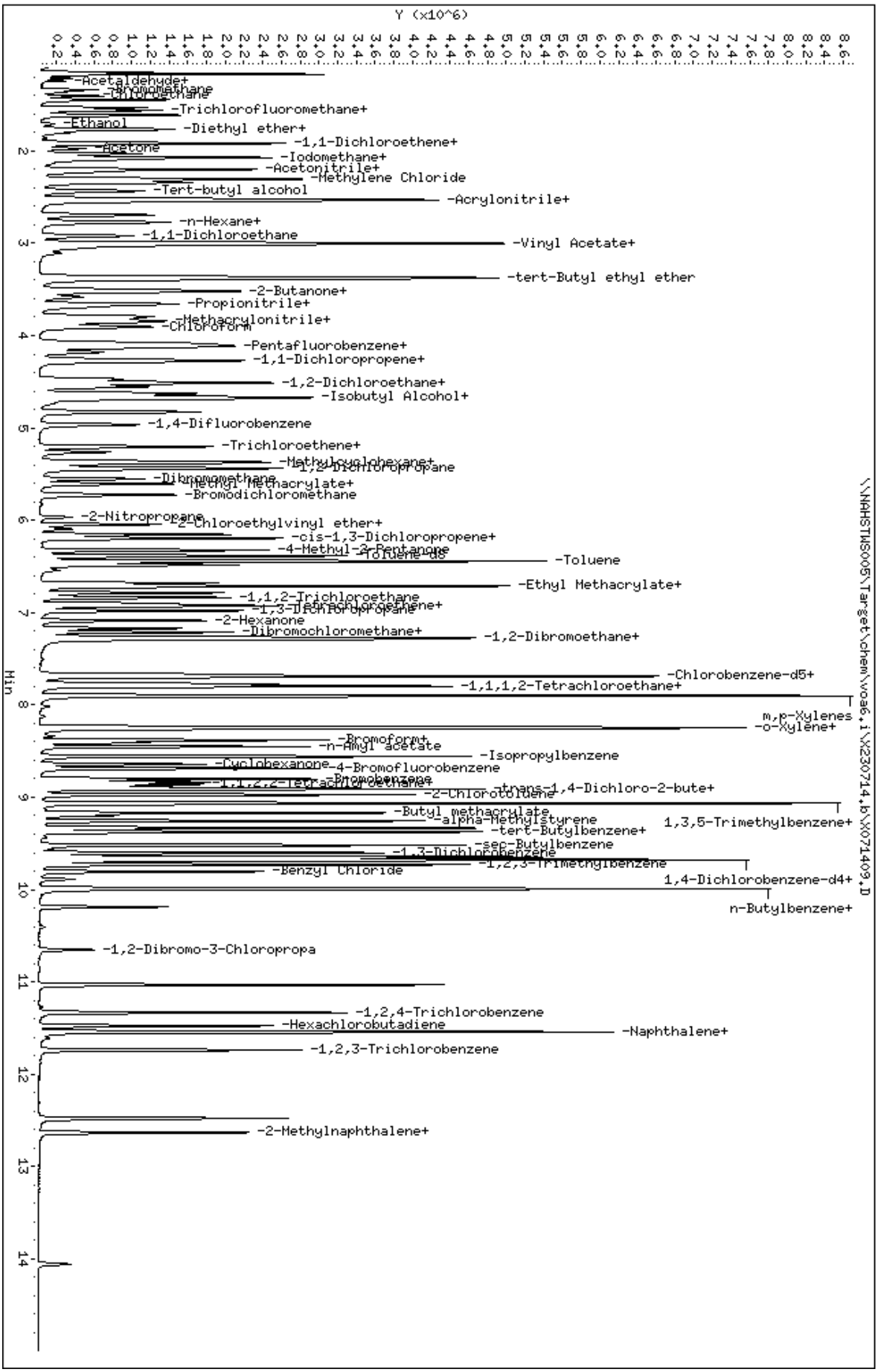
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
78	tert-Butylbenzene	119	9.336	9.336	(0.966)	1780796	100.000	109.22
79	1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	2073163	100.000	108.74
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	2510459	100.000	115.52
82	p-Isopropyltoluene	119	9.647	9.647	(0.998)	2265107	100.000	114.10
83	1,3-Dichlorobenzene	146	9.602	9.602	(0.994)	1217703	100.000	106.42
84	1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	1289815	100.000	102.81
86	Benzyl Chloride	91	9.804	9.804	(1.279)	1321247	100.000	100.26
87	n-Butylbenzene	91	9.992	9.992	(1.034)	1995906	100.000	120.04
88	1,2-Dichlorobenzene	146	9.988	9.988	(1.034)	1197079	100.000	106.41
89	1,2-Dibromo-3-Chloropropane	155	10.651	10.651	(1.102)	119154	100.000	101.61
90	1,2,4-Trichlorobenzene	180	11.334	11.334	(1.173)	818711	100.000	105.96
91	Hexachlorobutadiene	225	11.476	11.476	(1.188)	382401	100.000	104.71
92	Naphthalene	128	11.540	11.540	(1.194)	1978675	100.000	103.47
93	1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	745369	100.000	103.15
146	Methyl acetate	43	2.228	2.228	(0.533)	452160	100.000	97.12
138	Freon TF	101	1.917	1.917	(0.459)	422615	100.000	100.16
141	Cyclohexane	56	4.118	4.118	(0.986)	1080112	100.000	119.12
142	Tetrahydrofuran	42	3.848	3.848	(0.921)	261433	200.000	194.26
147	Methylcyclohexane	55	5.381	5.381	(1.084)	1785418	100.000	104.61(A)
135	1,4-Dioxane	88	5.598	5.598	(1.340)	124490	2000.00	2002.78
132	n-Butanol	56	5.261	5.261	(1.259)	380486	2000.00	2185.06
131	Methyl Acrylate	55	3.690	3.690	(0.883)	811825	100.000	114.17
133	Ethyl Acrylate	55	5.381	5.381	(1.288)	1785418	100.000	102.98
136	n-Hexane	57	2.772	2.772	(0.664)	700280	100.000	100.13
139	Diethyl ether	59	1.760	1.760	(0.421)	469212	100.000	96.19
148	Tert-butyl alcohol	59	2.434	2.434	(0.583)	1247600	2000.00	1889.72
149	Isopropyl alcohol	45	2.097	2.097	(0.502)	761231	2000.00	1858.21
156	Diisopropyl ether	45	3.004	3.004	(0.719)	2133149	100.000	98.94
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	2052311	100.000	105.71
167	Ethanol	45	1.703	1.703	(0.408)	150451	2000.00	2076.45
172	tert-Butyl formate	59	4.627	4.627	(1.108)	1076721	200.000	192.69
173	3,3-Dimethyl-1-butanol	57	7.289	7.289	(0.951)	1478367	2000.00	1818.81
174	tert-Amyl methyl ether	73	4.669	4.669	(1.118)	1654411	100.000	96.14
175	tert-Butyl ethyl ether	59	3.383	3.383	(0.810)	2142435	100.000	96.74
176	tert-Amyl alcohol	59	4.627	4.627	(1.108)	1076721	2000.00	1884.24
151	4-Methyl-2-pentanol	45	6.712	6.712	(1.352)	3281154	2000.00	1893.64
180	1-Methylnaphthalene	142	12.635	12.635	(1.308)	878613	100.000	(a)
140	1,3-Butadiene	54	1.167	1.167	(0.280)	742885	100.000	110.52
152	Amyl alcohol	42	6.903	6.903	(0.900)	457453	2000.00	2104.71
158	Dichlorofluoromethane	67	1.531	1.531	(0.367)	823584	100.000	97.72
159	Propylene oxide	43	1.805	1.805	(0.432)	116784	200.000	181.98
161	3-Methyl-1-butanol	55	6.899	6.899	(0.900)	421402	2000.00	2264.68
162	Butyl acrylate	55	8.249	8.249	(1.076)	1549632	100.000	107.77
163	Butyl methacrylate	41	9.167	9.167	(0.949)	1085490	100.000	107.91
164	Dicyclopentadiene	66	9.681	9.681	(1.002)	2485958	100.000	102.76
182	Epichlorohydrin	57	6.093	6.093	(1.227)	253170	400.000	419.20
M 94	1,2-Dichloroethylene (total)	96				1028469	200.000	(a)
145	alpha-Methylstyrene	118	9.257	9.257	(0.958)	977451	100.000	106.68
130	Ethyl Acetate	43	3.660	3.660	(0.876)	772631	100.000	99.44
134	Cyclohexanone	55	8.642	8.642	(0.894)	668441	2000.00	1787.90
185	Isoprene	39	1.771	1.771	(0.424)	186523	100.000	108.17
188	Isopropyl acetate	43	4.676	4.676	(0.942)	2105793	100.000	98.77

187 n-Amyl acetate	43	8.451	8.451 (1.102)	1369941	100.000	98.90
189 n-Butyl acetate	43	7.210	7.210 (0.940)	1203586	100.000	103.89(H)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
150 Allyl alcohol	57	2.772	2.772	(0.664)	700280	2000.00	2002.79
194 Acetaldehyde	44	1.212	1.212	(0.290)	189053	400.000	425.78(M)
195 Methyl Amyl Ketone	43	8.380	8.380	(1.093)	1583303	100.000	100.22
200 Dimethyl Disulfide	94	6.194	6.194	(0.808)	1112805	100.000	109.15
202 Isobutylene	41	1.242	1.242	(0.297)	90557	100.000	104.71(M)
205 2-Ethylhexyl Acrylate	55	11.544	11.544	(1.195)	1235080	100.000	115.14

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
exceeded maximum amount.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.



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Client ID: VSTD100
Sample Info: VSTD100;VSTD100;1;8;
Purge Volume: 5.0
Column phase: DB624

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

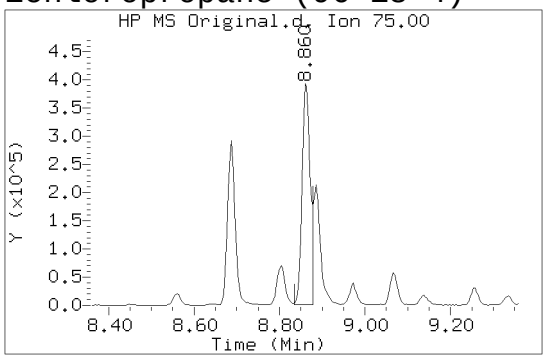
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071409.D
Inj Date : 14-JUL-2023 14:44
InstruID : voa6.i
LabSampID : VSTD100

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

Reason Code:

BEFORE

MASS
75
AREA
550885
HEIGHT
392625
20-Jul-2023
15:04
linh
pham



AFTER

MASS
75
AREA
550885
HEIGHT
392625
20-Jul-2023
15:04
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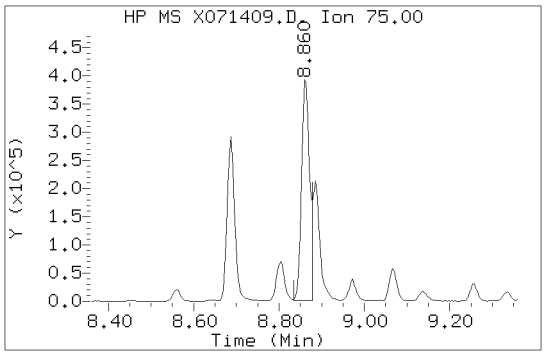

BEFORE

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20-Jul-2023
15:04
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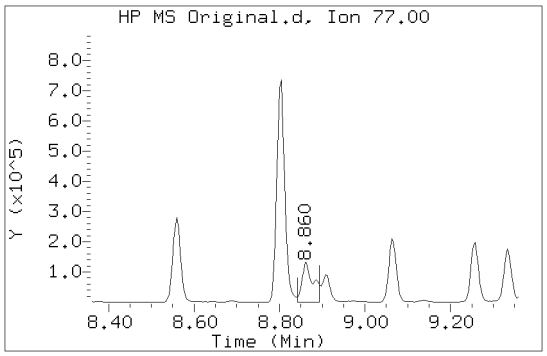
pham



AFTER

MASS
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20-Jul-2023
15:04
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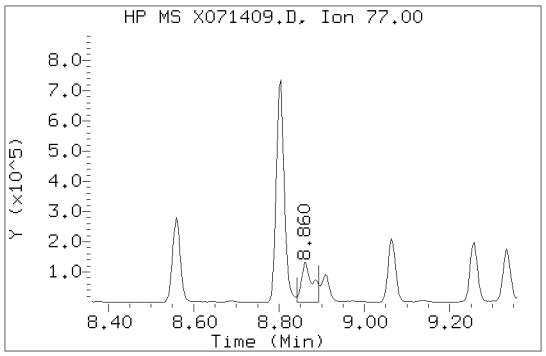

Chloroprene (126-99-8)

Reason Code:

BEFORE

MASS
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AREA
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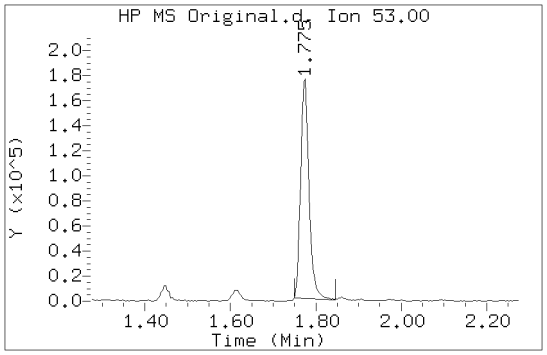
HEIGHT
175373
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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HEIGHT
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20-Jul-2023
15:04
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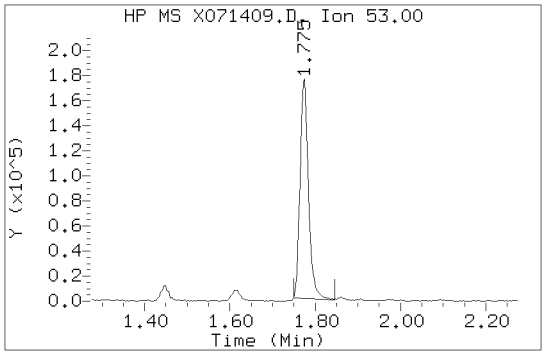
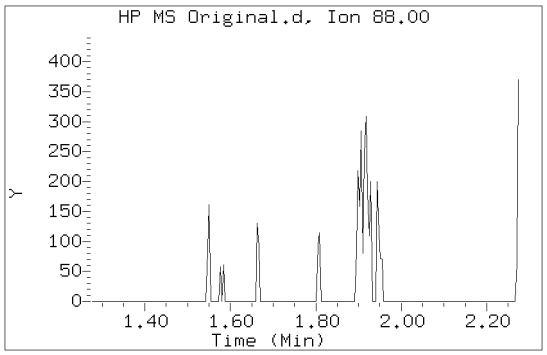
pham



BEFORE

MASS
88
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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AREA
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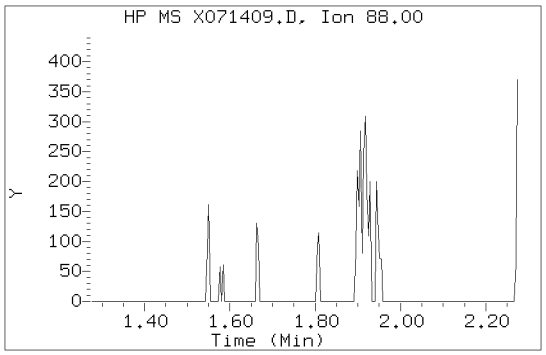
HEIGHT
0
20-Jul-2023
15:04
linh
pham



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Inj Date : 14-JUL-2023 14:44
InstruID : voa6.i
LabSampID : VSTD100

Acetaldehyde (75-07-0)

Reason Code:

BEFORE

MASS
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AREA
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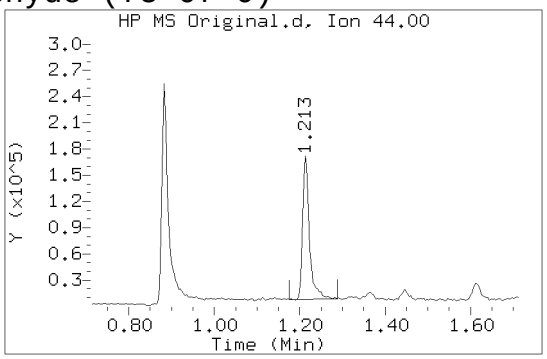
HEIGHT
163907
20-Jul-2023
15:04
linh
pham



AFTER

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189053
HEIGHT
163907
20-Jul-2023
15:04
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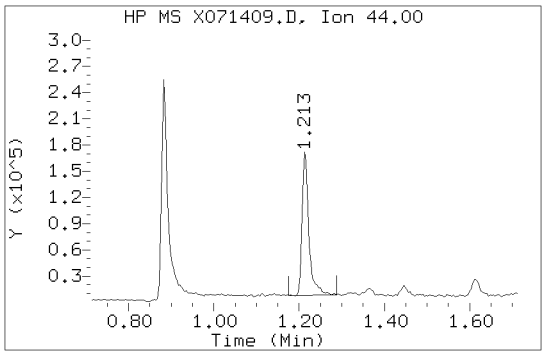
pham



BEFORE

MASS
43
AREA
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HEIGHT
96750
20-Jul-2023
15:04
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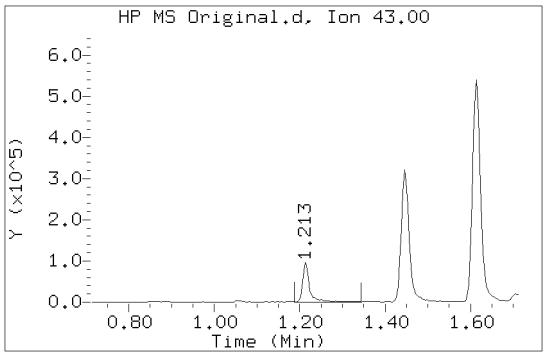
pham



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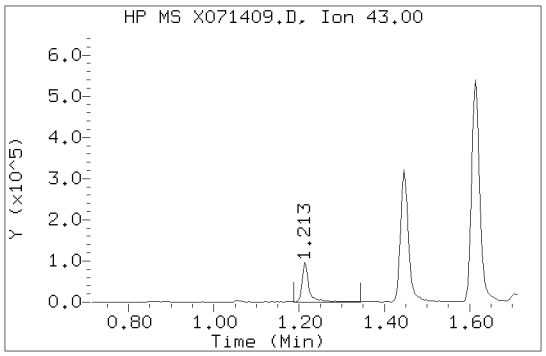

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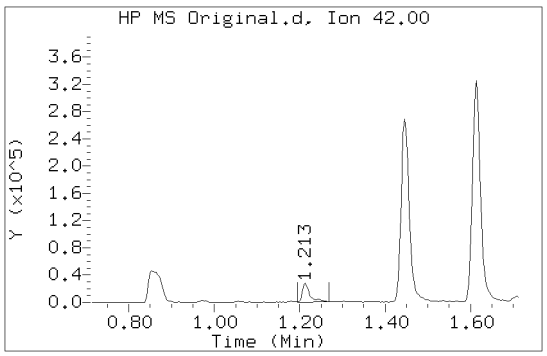

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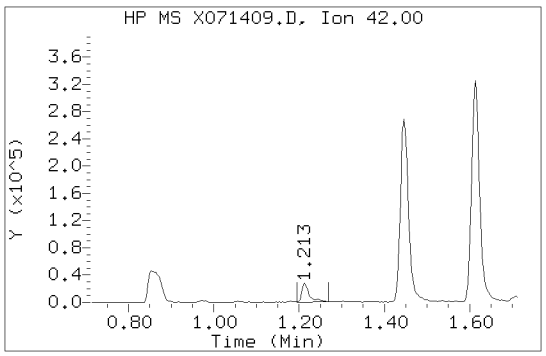

Isobutylene (115-11-7)

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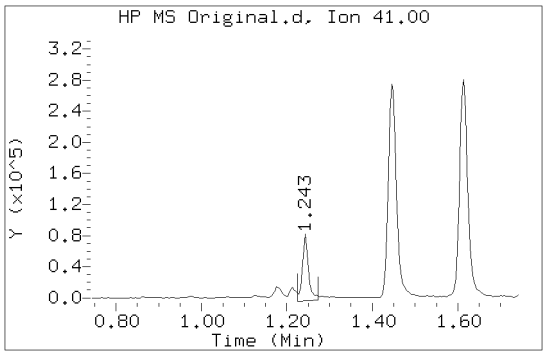

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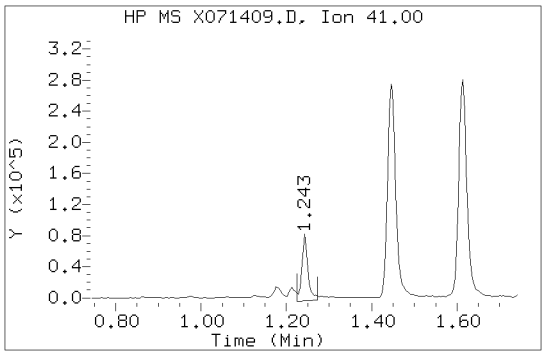

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LabSampID : VSTD100

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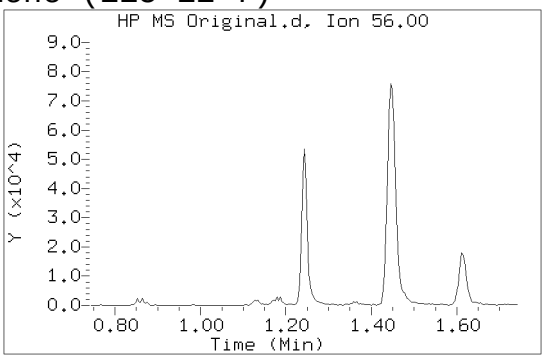

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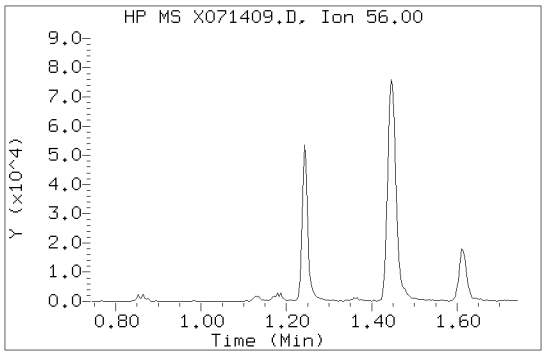

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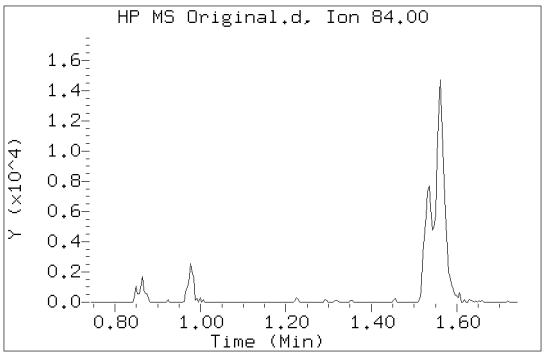

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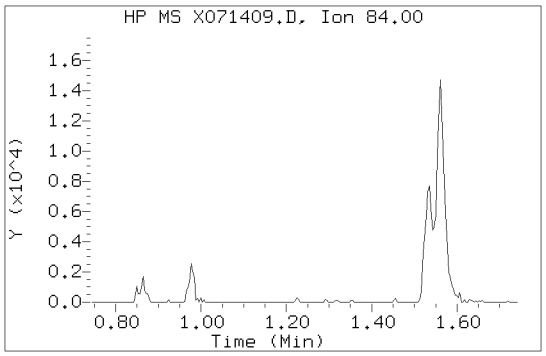

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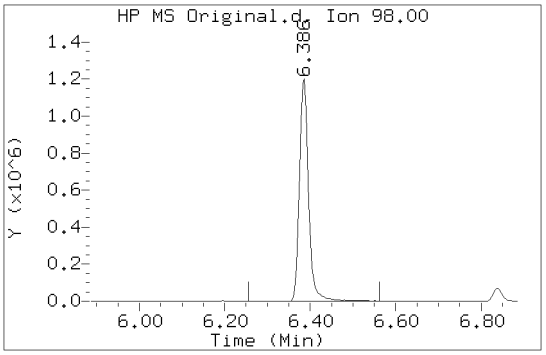

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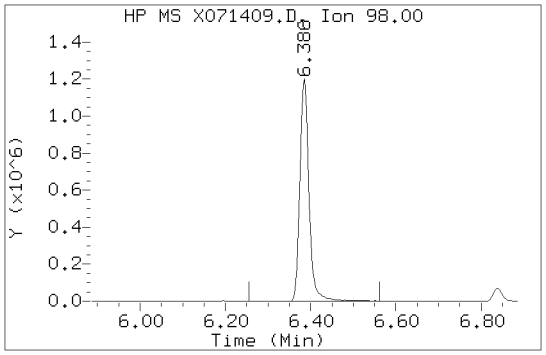

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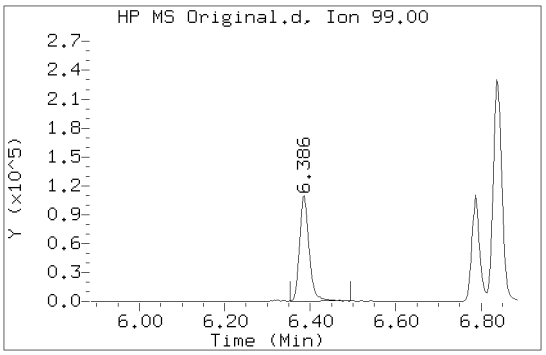

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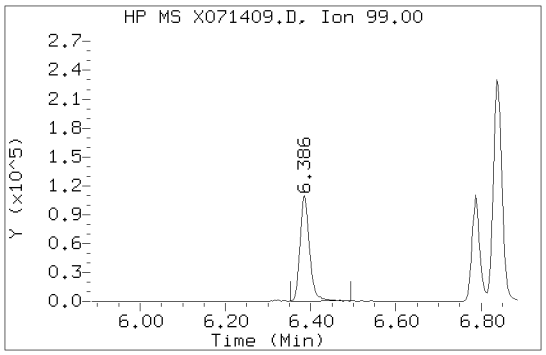

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LabSampID : VSTD100

Toluene-d8 (2037-26-5)

Reason Code:

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20-Jul-2023
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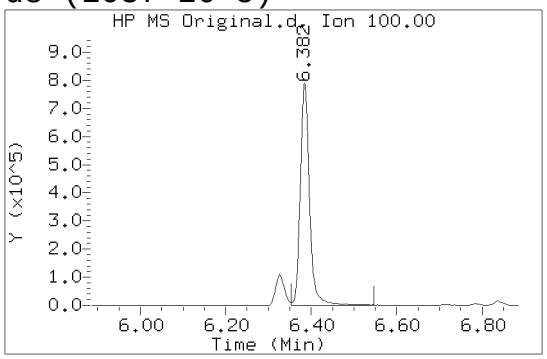

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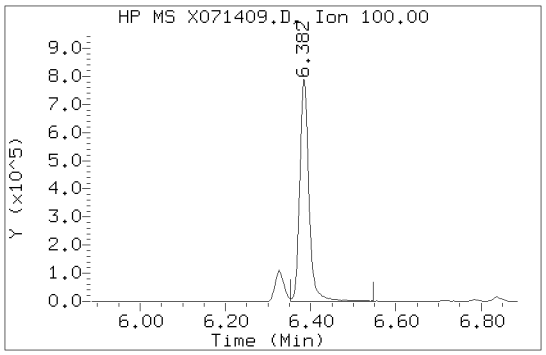

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Report Date: 20-Jul-2023 15:05

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071410.D
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Inj Date : 14-JUL-2023 15:05
Operator : PC Inst ID: voa6.i
Smp Info : VSTD150;VSTD150;1;9;
Misc Info : V6;WATER;0;1;
Comment   :
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Cal Date : 14-JUL-2023 14:44 Cal File: X071409.D
Als bottle: 11 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.178	4.178	(1.000)	527810	50.0000	
2 Dichlorodifluoromethane	85	0.976	0.976	(0.234)	822037	150.000	150.00
3 Chloromethane	50	1.081	1.081	(0.259)	1286174	150.000	161.33
4 Propionitrile	54	3.656	3.656	(0.875)	1601430	1500.00	1531.66
5 Vinyl Chloride	62	1.145	1.145	(0.274)	1063794	150.000	155.75
6 Bromomethane	94	1.336	1.336	(0.320)	469612	150.000	166.14
7 Chloroethane	64	1.404	1.404	(0.336)	574620	150.000	147.37
8 Trichlorofluoromethane	101	1.561	1.561	(0.374)	1133831	150.000	163.80
9 Acrolein	56	1.861	1.861	(0.446)	60619	300.000	301.00(M)
10 Acetone	43	1.973	1.973	(0.472)	616513	300.000	304.76
11 1,1-Dichloroethene	96	1.913	1.913	(0.458)	592973	150.000	153.35
12 Isobutyl Alcohol	43	4.676	4.676	(1.119)	3143464	3000.00	3141.89
13 Acetonitrile	39	2.198	2.198	(0.526)	1116521	1500.00	1508.54
14 Allyl Chloride	41	2.198	2.198	(0.526)	2479475	150.000	143.08
15 Iodomethane	142	2.030	2.030	(0.486)	1666204	300.000	298.54
16 Acrylonitrile	53	2.532	2.532	(0.606)	742882	300.000	288.83
17 Methylene Chloride	84	2.303	2.303	(0.551)	679924	150.000	151.80
18 Methyl tert-butyl ether	73	2.539	2.539	(0.608)	2090757	150.000	145.38
19 Carbon Disulfide	76	2.071	2.071	(0.496)	3776842	300.000	310.72
20 trans-1,2-Dichloroethene	96	2.528	2.528	(0.605)	652435	150.000	145.86

21 Vinyl Acetate	43	3.000	3.000 (0.718)	5593666	300.000	302.39
22 1,1-Dichloroethane	63	2.922	2.922 (0.699)	1431683	150.000	145.86

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
23	Chloroprene	53	1.771	1.771	(0.424)	369436	150.000	155.66
24	2-Butanone	43	3.581	3.581	(0.857)	878521	300.000	312.55
25	Methacrylonitrile	41	3.821	3.821	(0.915)	1065216	150.000	156.35(aM)
26	2,2-Dichloropropane	77	3.507	3.507	(0.839)	1150093	150.000	150.52
27	cis-1,2-Dichloroethene	96	3.522	3.522	(0.843)	837160	150.000	146.92
28	Chloroform	83	3.904	3.904	(0.935)	1446796	150.000	144.05
29	Bromochloromethane	128	3.791	3.791	(0.908)	457063	150.000	143.13
$ 30	Dibromofluoromethane	113	4.099	4.099	(0.981)	719790	150.000	150.30
31	1,1,1-Trichloroethane	97	4.080	4.080	(0.977)	1235806	150.000	159.84
32	1,1-Dichloropropene	75	4.279	4.279	(0.862)	1058110	150.000	156.11
33	1,2-Dichloroethane	62	4.552	4.552	(0.917)	1349536	150.000	147.53
34	Carbon Tetrachloride	117	4.264	4.264	(0.859)	1056698	150.000	154.75(H)
$ 35	1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	911155	150.000	151.87
* 36	1,4-Difluorobenzene	114	4.965	4.965	(1.000)	830945	50.0000	
37	Benzene	78	4.511	4.511	(0.909)	2966123	150.000	149.23
38	Trichloroethene	130	5.205	5.205	(1.048)	855874	150.000	152.23
39	Bromodichloromethane	83	5.726	5.726	(1.153)	1126828	150.000	148.01
40	Methyl Methacrylate	41	5.606	5.606	(1.342)	952441	150.000	149.51
41	2-Chloroethylvinyl ether	63	6.044	6.044	(1.217)	736745	300.000	316.95
42	1,2-Dichloropropane	63	5.437	5.437	(1.095)	965373	150.000	151.04
43	2-Nitropropane	43	5.969	5.969	(1.429)	327090	150.000	155.99
44	Dibromomethane	93	5.550	5.550	(1.118)	514778	150.000	142.29
45	4-Methyl-2-Pentanone	43	6.325	6.325	(0.825)	2236545	300.000	293.85
46	cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	1331094	150.000	152.22
* 47	Chlorobenzene-d5	117	7.668	7.668	(1.000)	773431	50.0000	
$ 48	Toluene-d8	98	6.385	6.385	(0.833)	2609088	150.000	131.02(M)
49	Ethyl Methacrylate	69	6.715	6.715	(1.353)	829910	150.000	152.50
50	Toluene	91	6.442	6.442	(0.840)	3226930	150.000	154.99
51	trans-1,3-Dichloropropene	75	6.678	6.678	(1.345)	1129301	150.000	153.20
52	2-Hexanone	43	7.086	7.086	(0.924)	1502232	300.000	300.46
53	1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	629049	150.000	142.43
54	1,3-Dichloropropane	76	6.978	6.978	(0.910)	1287243	150.000	142.66
55	Dibromochloromethane	129	7.173	7.173	(0.935)	978359	150.000	153.44
56	Tetrachloroethene	164	6.925	6.925	(0.903)	682053	150.000	158.57
57	1,2-Dibromoethane	107	7.255	7.255	(0.946)	707106	150.000	140.10
58	1-Chlorohexane	55	7.694	7.694	(1.550)	1016479	150.000	152.26
59	Chlorobenzene	112	7.690	7.690	(1.003)	2169037	150.000	149.03
60	1,1,1,2-Tetrachloroethane	131	7.772	7.772	(1.014)	874873	150.000	153.55
61	Ethylbenzene	106	7.795	7.795	(1.017)	1121097	150.000	153.61
62	m,p-Xylenes	106	7.900	7.900	(1.030)	2832546	300.000	309.38
63	o-Xylene	106	8.237	8.237	(1.074)	1332457	150.000	153.68
64	Styrene	104	8.256	8.256	(1.077)	2314702	150.000	153.05
66	Bromoform	173	8.406	8.406	(1.096)	644372	150.000	157.51
67	Isopropylbenzene	105	8.560	8.560	(1.116)	3517587	150.000	157.83
68	1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	1039682	150.000	143.99
$ 69	4-Bromofluorobenzene	95	8.687	8.687	(1.133)	1135204	150.000	148.24
* 70	1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	429875	50.0000	
71	1,2,3-Trichloropropane	75	8.860	8.860	(0.917)	832853	150.000	145.35(M)
72	trans-1,4-Dichloro-2-butene	53	8.886	8.886	(1.159)	389558	150.000	165.60
73	n-Propylbenzene	91	8.908	8.908	(0.922)	4183180	150.000	161.03
74	Bromobenzene	156	8.803	8.803	(0.911)	988462	150.000	147.02
75	1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	3151476	150.000	161.94

76	2-Chlorotoluene	91	8.972	8.972 (0.929)	2593717	150.000	148.01
77	4-Chlorotoluene	91	9.066	9.066 (0.938)	3011546	150.000	156.39

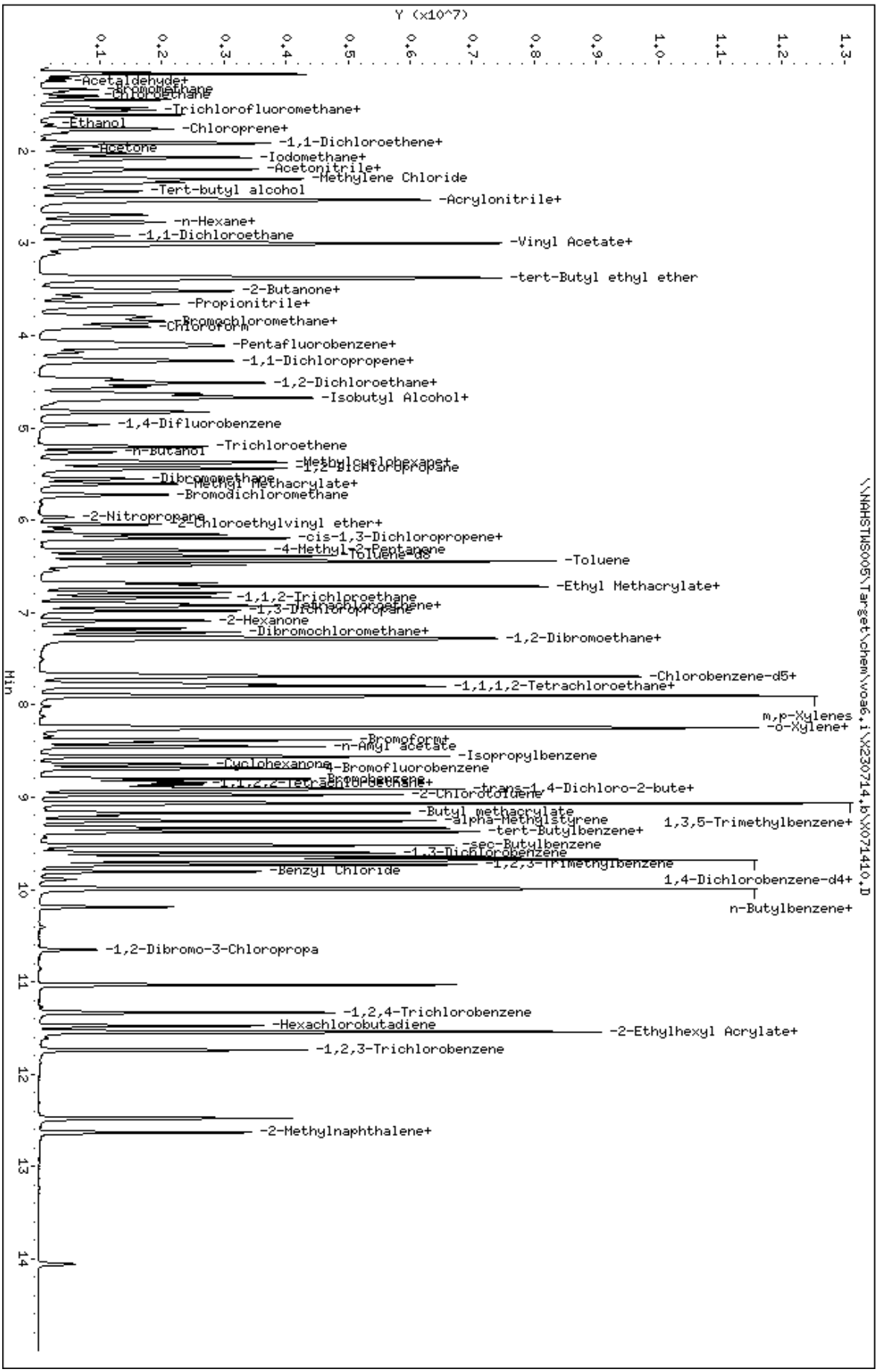
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
78	tert-Butylbenzene	119	9.336	9.336	(0.966)	2639400	150.000	158.15
79	1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	3108890	150.000	159.30
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	3705100	150.000	166.56
82	p-Isopropyltoluene	119	9.647	9.647	(0.998)	3332963	150.000	164.02
83	1,3-Dichlorobenzene	146	9.602	9.602	(0.994)	1820441	150.000	155.43
84	1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	1873658	150.000	145.90
86	Benzyl Chloride	91	9.804	9.804	(1.279)	2041719	150.000	150.20
87	n-Butylbenzene	91	9.992	9.992	(1.034)	2930740	150.000	172.20
88	1,2-Dichlorobenzene	146	9.988	9.988	(1.034)	1771825	150.000	153.87
89	1,2-Dibromo-3-Chloropropane	155	10.651	10.651	(1.102)	181917	150.000	151.02
90	1,2,4-Trichlorobenzene	180	11.334	11.334	(1.173)	1234851	150.000	156.14
91	Hexachlorobutadiene	225	11.476	11.476	(1.188)	564457	150.000	149.95
92	Naphthalene	128	11.536	11.536	(1.194)	2932468	150.000	149.81(H)
93	1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	1112132	150.000	150.36
146	Methyl acetate	43	2.228	2.228	(0.533)	681317	150.000	145.04
138	Freon TF	101	1.917	1.917	(0.459)	606555	150.000	111.66
141	Cyclohexane	56	4.118	4.118	(0.986)	1542802	150.000	168.63
142	Tetrahydrofuran	42	3.851	3.851	(0.922)	399301	300.000	294.06
147	Methylcyclohexane	55	5.377	5.377	(1.083)	2810624	150.000	160.25(A)
135	1,4-Dioxane	88	5.602	5.602	(1.341)	190045	3000.00	3030.04
132	n-Butanol	56	5.261	5.261	(1.259)	615802	3000.00	3504.76
131	Methyl Acrylate	55	3.690	3.690	(0.883)	1248423	150.000	174.00
133	Ethyl Acrylate	55	5.377	5.377	(1.287)	2810624	150.000	160.67
136	n-Hexane	57	2.772	2.772	(0.664)	1037045	150.000	105.54
139	Diethyl ether	59	1.756	1.756	(0.420)	707615	150.000	143.77
148	Tert-butyl alcohol	59	2.438	2.438	(0.584)	1892876	3000.00	2841.43
149	Isopropyl alcohol	45	2.097	2.097	(0.502)	1176234	3000.00	2845.54
156	Diisopropyl ether	45	3.004	3.004	(0.719)	3254817	150.000	149.61
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	3200479	150.000	161.06
167	Ethanol	45	1.711	1.711	(0.410)	220615	3000.00	3026.01
172	tert-Butyl formate	59	4.631	4.631	(1.109)	1704396	300.000	302.29(A)
173	3,3-Dimethyl-1-butanol	57	7.289	7.289	(0.951)	2433401	3000.00	2925.50
174	tert-Amyl methyl ether	73	4.669	4.669	(1.118)	2611847	150.000	150.42(M)
175	tert-Butyl ethyl ether	59	3.383	3.383	(0.810)	3273017	150.000	146.47
176	tert-Amyl alcohol	59	4.631	4.631	(1.109)	1704396	3000.00	2955.95
151	4-Methyl-2-pentanol	45	6.715	6.715	(1.353)	5221709	3000.00	2932.29
180	1-Methylnaphthalene	142	12.631	12.631	(1.307)	1346422	150.000	(a)
140	1,3-Butadiene	54	1.167	1.167	(0.280)	1064415	150.000	156.94
152	Amyl alcohol	42	6.903	6.903	(0.900)	729736	3000.00	3280.90
158	Dichlorofluoromethane	67	1.531	1.531	(0.367)	1246213	150.000	146.54
159	Propylene oxide	43	1.805	1.805	(0.432)	172752	300.000	266.78
161	3-Methyl-1-butanol	55	6.903	6.903	(0.900)	658666	3000.00	3459.04
162	Butyl acrylate	55	8.249	8.249	(1.076)	2429512	150.000	165.11
163	Butyl methacrylate	41	9.167	9.167	(0.949)	1571014	150.000	152.57
164	Dicyclopentadiene	66	9.684	9.684	(1.002)	3894938	150.000	157.29(H)
182	Epichlorohydrin	57	6.093	6.093	(1.227)	380786	600.000	613.50
M 94	1,2-Dichloroethylene (total)	96				1489595	300.000	(a)
145	alpha-Methylstyrene	118	9.257	9.257	(0.958)	1478505	150.000	157.64
130	Ethyl Acetate	43	3.660	3.660	(0.876)	1137763	150.000	145.13
134	Cyclohexanone	55	8.642	8.642	(0.894)	1027116	3000.00	2683.87
185	Isoprene	39	1.771	1.771	(0.424)	269460	150.000	154.87
188	Isopropyl acetate	43	4.676	4.676	(0.942)	3143464	150.000	143.47

187 n-Amyl acetate	43	8.451	8.451 (1.102)	2118647	150.000	149.46
189 n-Butyl acetate	43	7.210	7.210 (0.940)	1862306	150.000	157.09(H)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
150 Allyl alcohol	57	2.772	2.772	(0.664)	1037045	3000.00	2106.54
194 Acetaldehyde	44	1.212	1.212	(0.290)	265471	600.000	601.40(M)
195 Methyl Amyl Ketone	43	8.380	8.380	(1.093)	2526261	150.000	156.27
200 Dimethyl Disulfide	94	6.194	6.194	(0.808)	1709034	150.000	163.81
202 Isobutylene	41	1.242	1.242	(0.297)	129814	150.000	148.75(M)
205 2-Ethylhexyl Acrylate	55	11.544	11.544	(1.195)	1882332	150.000	171.43

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
exceeded maximum amount.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.



Data File: \\NAHSTMS005\Target\chem\voa6.i\X230714.b\X071410.D
Date : 14-JUL-2023 15:05
Client ID: VSTD150
Sample Info: VSTD150;VSTD150;1;9;
Purge Volume: 5.0
Column phase: DB624

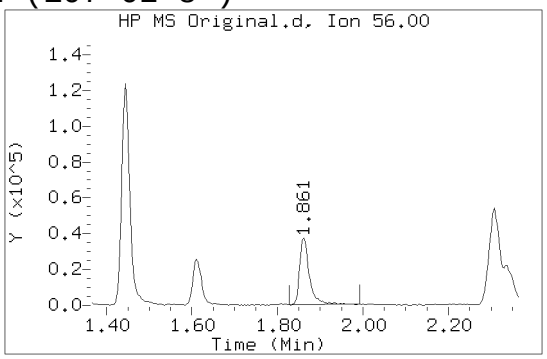
Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071410.D
Inj Date : 14-JUL-2023 15:05
InstruID : voa6.i
LabSampID : VSTD150

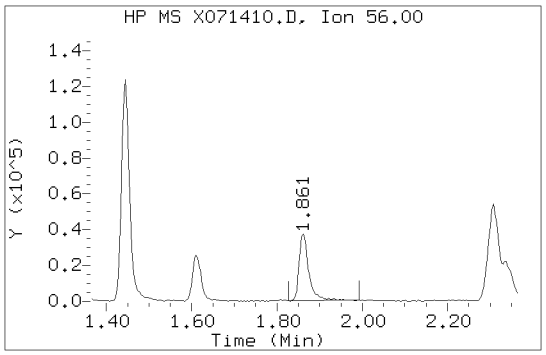
Acrolein (107-02-8)

Reason Code:

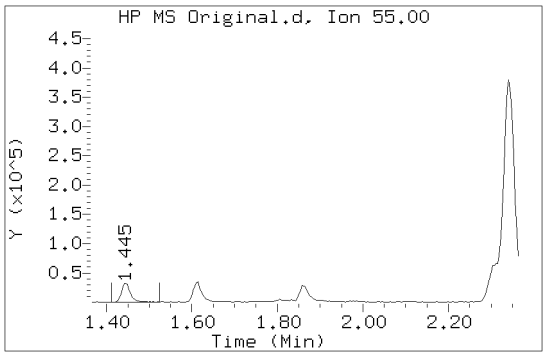
BEFORE
MASS
56
AREA
60619
HEIGHT
37327
20-Jul-2023
15:04
linh
pham



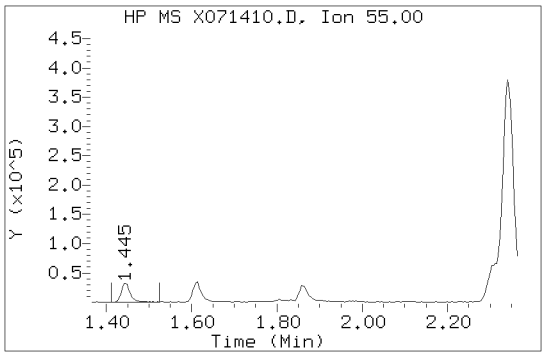
AFTER
MASS
56
AREA
60619
HEIGHT
37327
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
55
AREA
45945
HEIGHT
31957
20-Jul-2023
15:04
linh
pham



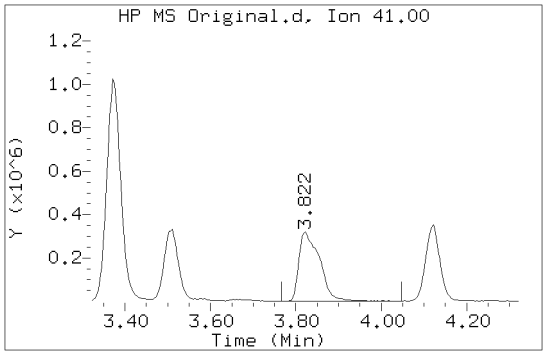
AFTER
MASS
55
AREA
45945
HEIGHT
31957
20-Jul-2023
15:04
linh
pham



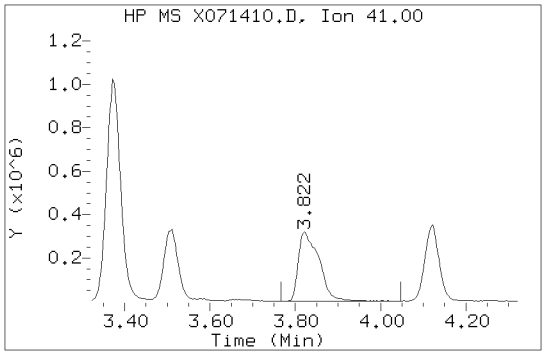
Methacrylonitrile (126-98-7)

Reason Code:

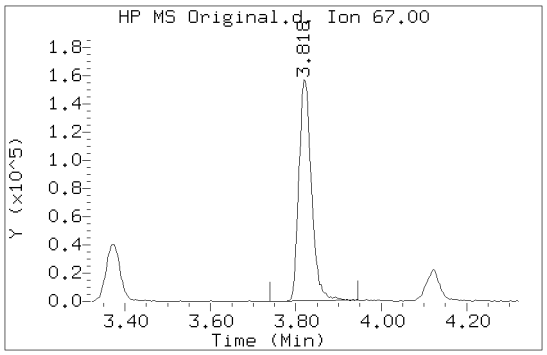
BEFORE
MASS
41
AREA
1065216
HEIGHT
318629
20-Jul-2023
15:04
linh
pham



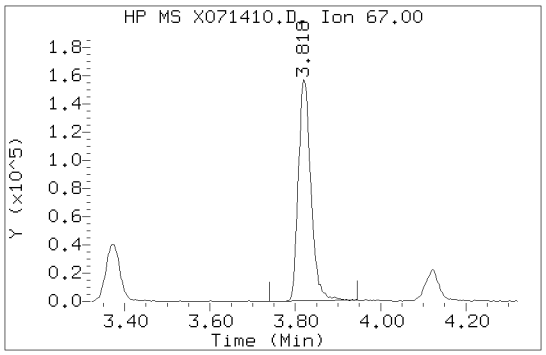
AFTER
MASS
41
AREA
1065216
HEIGHT
318629
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
67
AREA
327199
HEIGHT
157063
20-Jul-2023
15:04
linh
pham



AFTER
MASS
67
AREA
327199
HEIGHT
157063
20-Jul-2023
15:04
linh
pham



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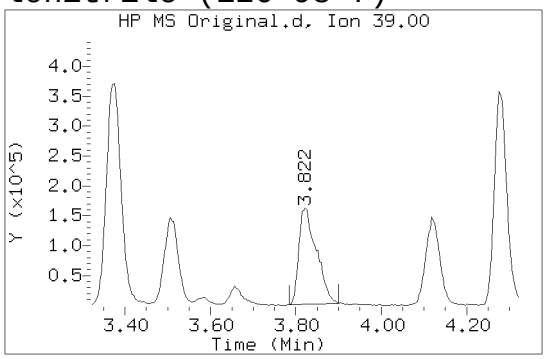
Inj Date : 14-JUL-2023 15:05
InstruID : voa6.i
LabSampID : VSTD150

Methacrylonitrile (126-98-7)

Reason Code:

BEFORE

MASS
39
AREA
462715
HEIGHT
161606
20-Jul-2023
15:04
linh
pham



AFTER

MASS
39
AREA
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HEIGHT
161606
20-Jul-2023
15:04
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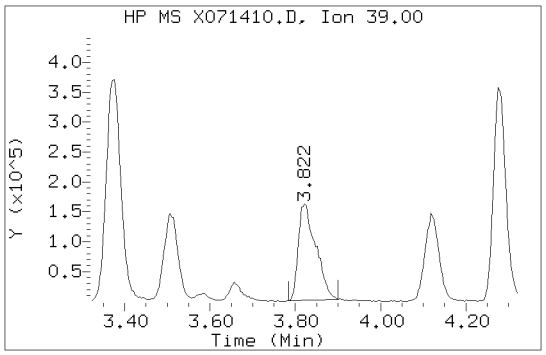
pham

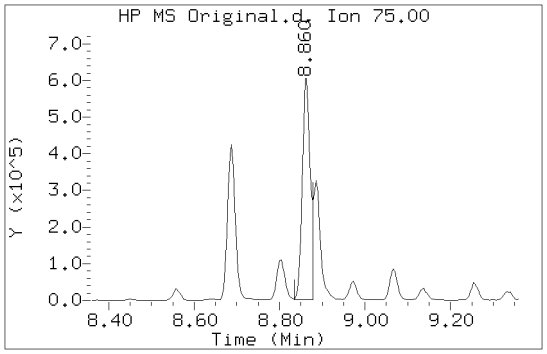


1,2,3-Trichloropropane (96-18-4)

Reason Code:

BEFORE

MASS
75
AREA
832853
HEIGHT
603944
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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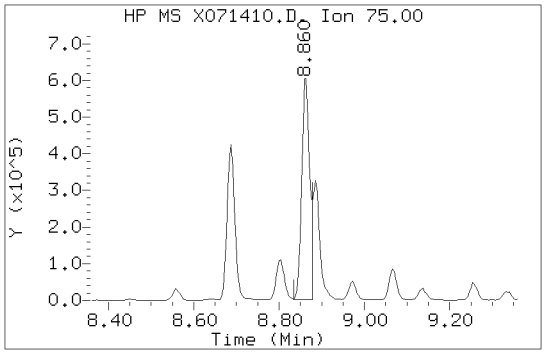
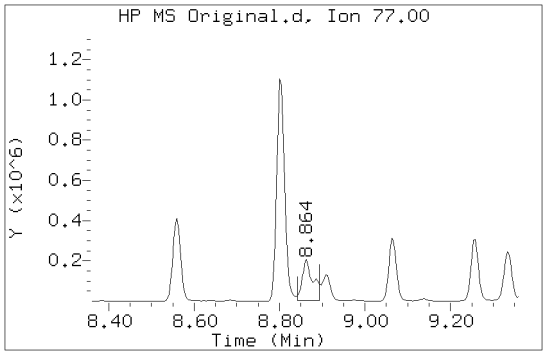
AREA
832853
HEIGHT
603944
20-Jul-2023
15:04
linh
pham



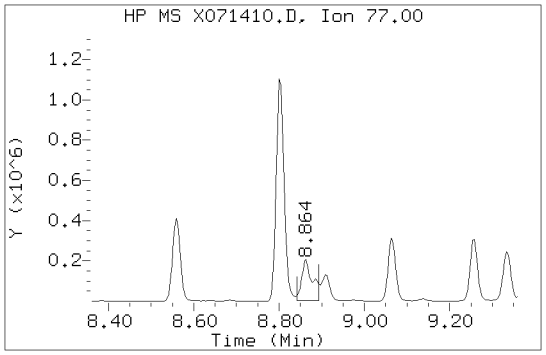
BEFORE

MASS
77
AREA
366391
HEIGHT
202553
20-Jul-2023
15:04
linh
pham



AFTER

MASS
77
AREA
366391
HEIGHT
202553
20-Jul-2023
15:04
linh
pham

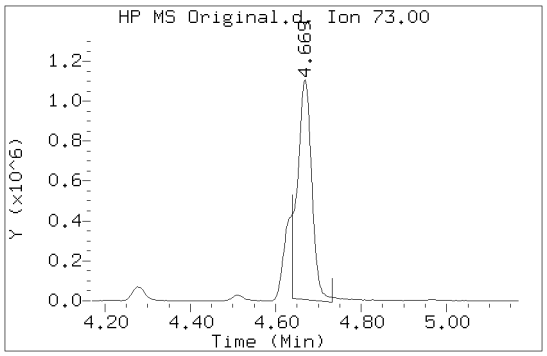


tert-Amyl methyl ether (974-05-08)

Reason Code:

BEFORE

MASS
73
AREA
2611847
HEIGHT
1100641
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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AREA
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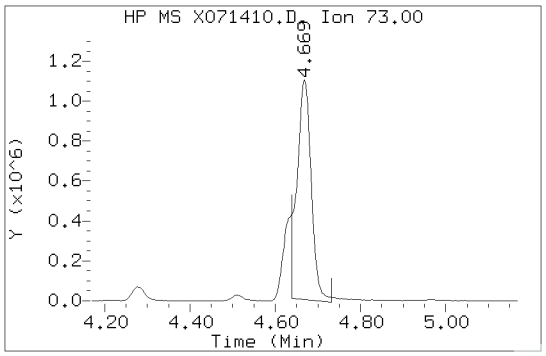
HEIGHT
1100641
20-Jul-2023
15:04
linh
pham



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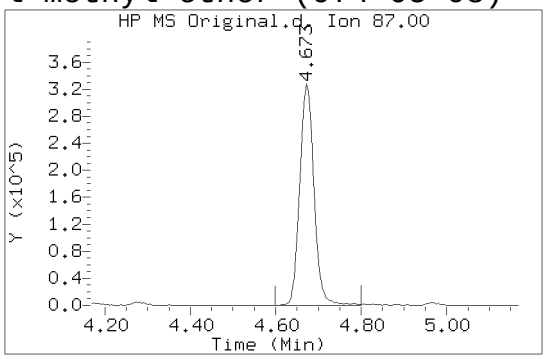
Inj Date : 14-JUL-2023 15:05
InstruID : voa6.i
LabSampID : VSTD150

tert-Amyl methyl ether (974-05-08)

Reason Code:

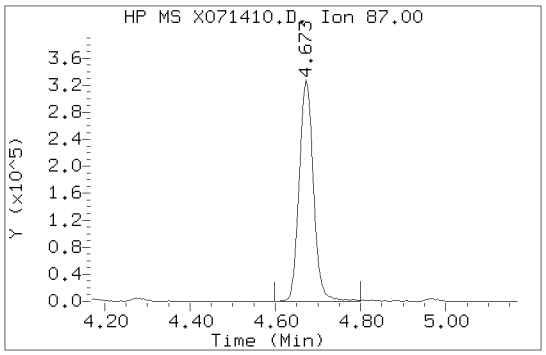
BEFORE

MASS
87
AREA
775395
HEIGHT
328192
20-Jul-2023
15:04
linh
pham



AFTER

MASS
87
AREA
775395
HEIGHT
328192
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
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AREA
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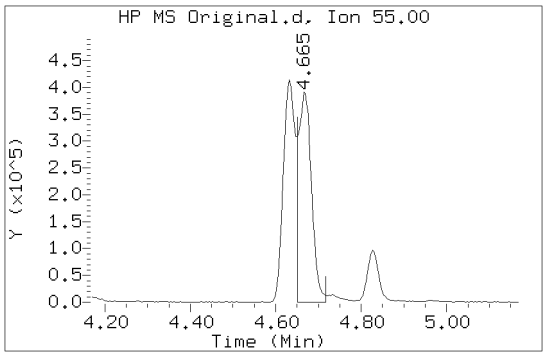
HEIGHT
391260
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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AREA
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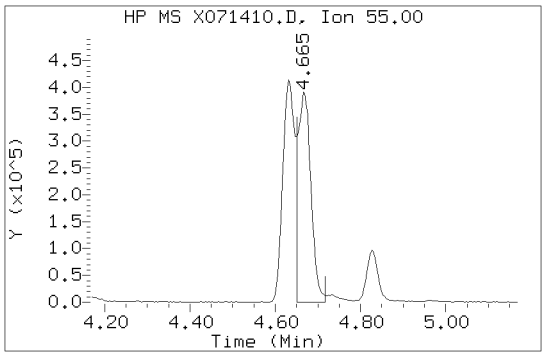
HEIGHT
391260
20-Jul-2023
15:04
linh
pham

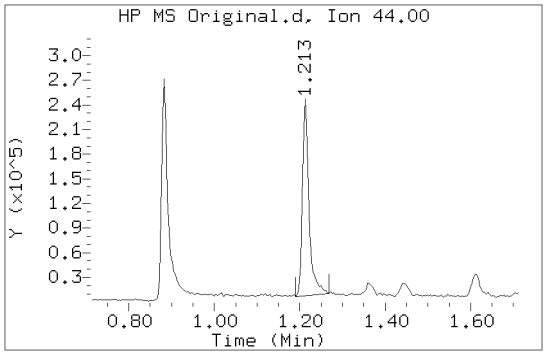


Acetaldehyde (75-07-0)

Reason Code:

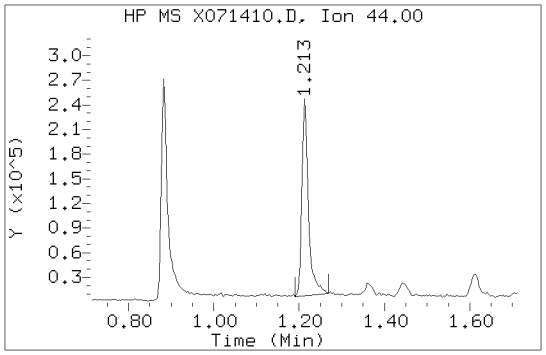
BEFORE

MASS
44
AREA
265471
HEIGHT
240024
20-Jul-2023
15:04
linh
pham



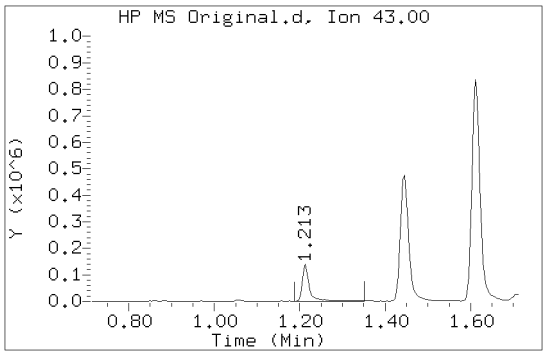
AFTER

MASS
44
AREA
265471
HEIGHT
240024
20-Jul-2023
15:04
linh
pham



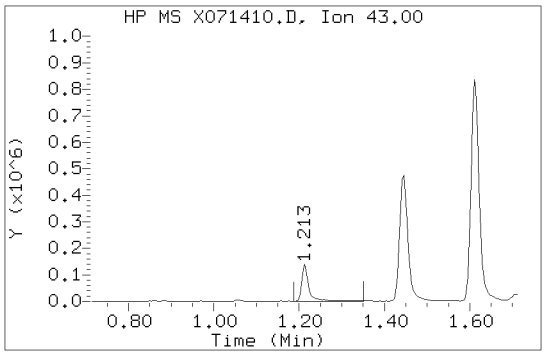
BEFORE

MASS
43
AREA
162116
HEIGHT
140408
20-Jul-2023
15:04
linh
pham



AFTER

MASS
43
AREA
162116
HEIGHT
140408
20-Jul-2023
15:04
linh
pham



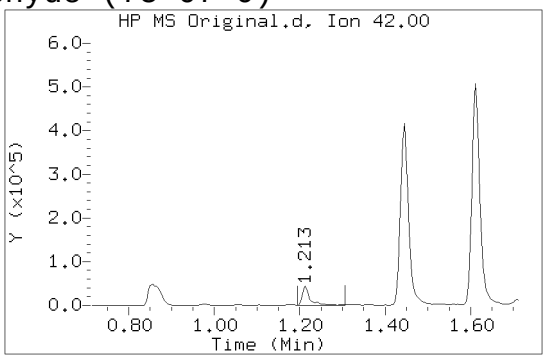
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071410.D
Inj Date : 14-JUL-2023 15:05
InstruID : voa6.i
LabSampID : VSTD150

Acetaldehyde (75-07-0)

Reason Code:

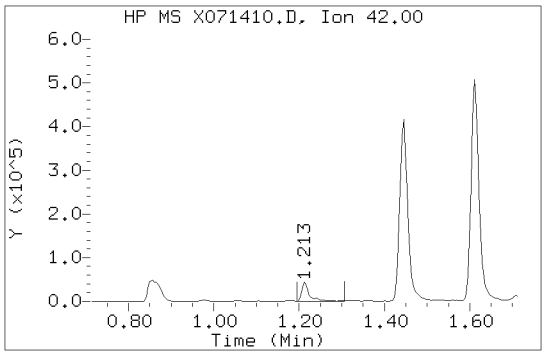
BEFORE

MASS
42
AREA
53628
HEIGHT
42843
20-Jul-2023
15:04
linh
pham



AFTER

MASS
42
AREA
53628
HEIGHT
42843
20-Jul-2023
15:04
linh
pham

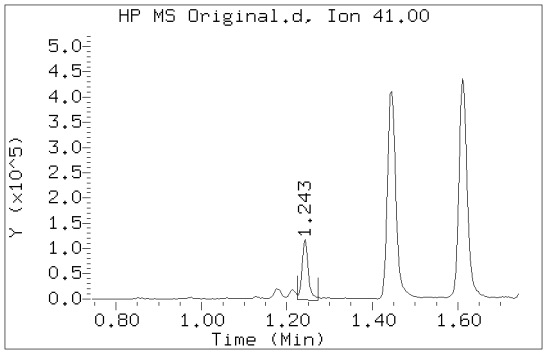


Isobutylene (115-11-7)

Reason Code:

BEFORE

MASS
41
AREA
129814
HEIGHT
120099
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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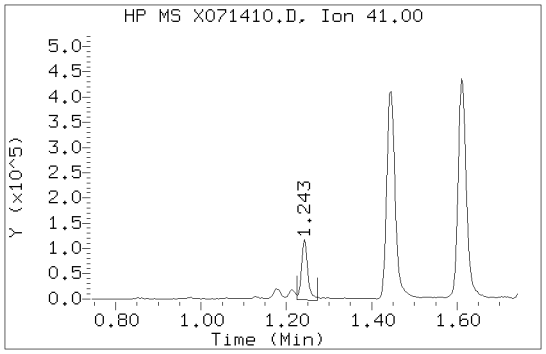
AREA
129814
HEIGHT
120099
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
56
AREA
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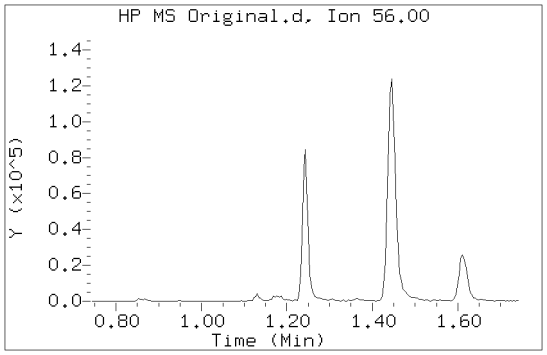
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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AREA
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HEIGHT
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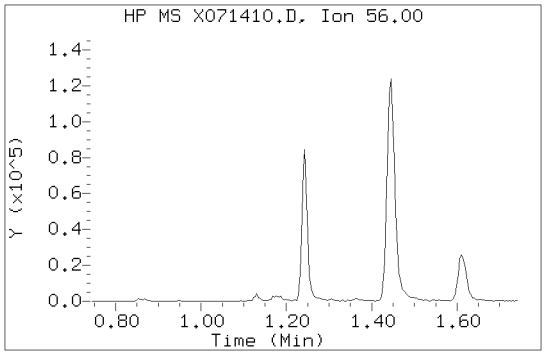
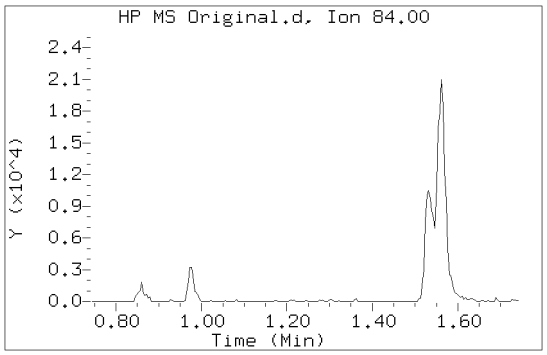
20-Jul-2023
15:04
linh
pham



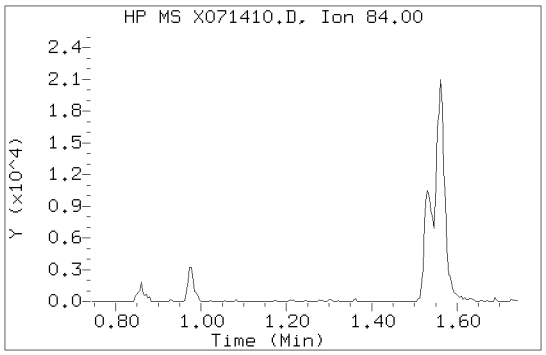
BEFORE

MASS
84
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
84
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



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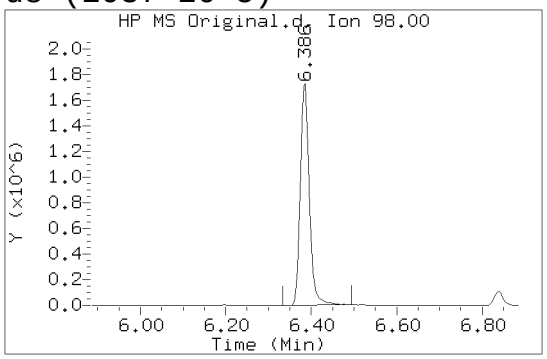
Inj Date : 14-JUL-2023 15:05
InstruID : voa6.i
LabSampID : VSTD150

Toluene-d8 (2037-26-5)

Reason Code:

BEFORE
MASS
98
AREA
2609088
HEIGHT
1726183
20-Jul-2023
15:04
linh
pham



AFTER
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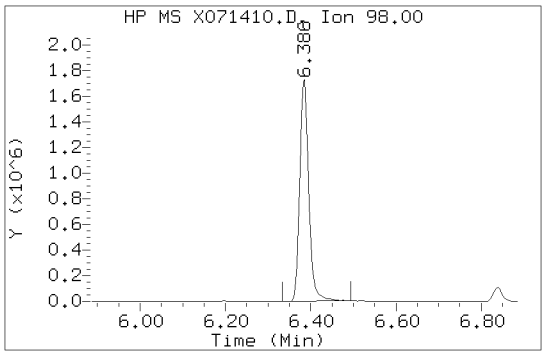
AREA
2609088
HEIGHT
1726183
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
99
AREA
255374
HEIGHT
162240
20-Jul-2023
15:04
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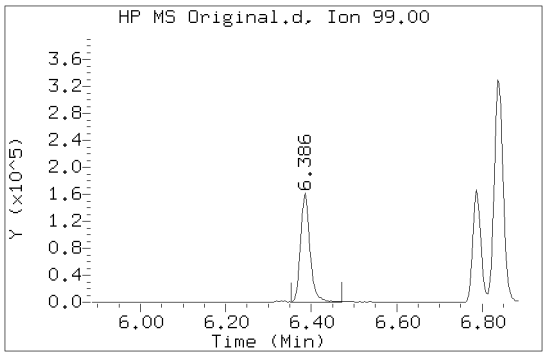

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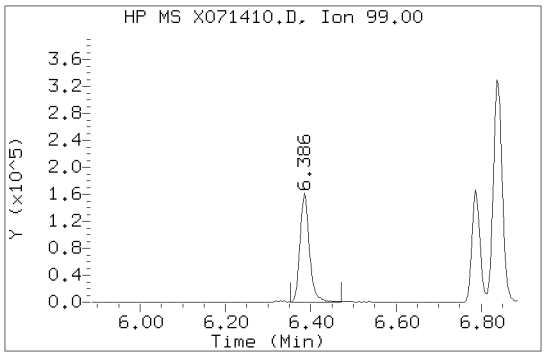

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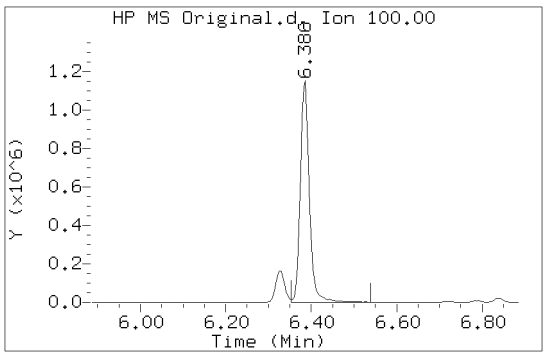

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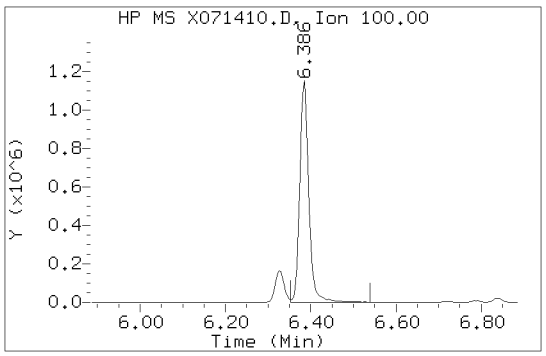

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Report Date: 20-Jul-2023 15:05

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071411.D
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Inj Date : 14-JUL-2023 15:25
Operator : PC Inst ID: voa6.i
Smp Info : VSTD200;VSTD200;1;10;
Misc Info : V6;WATER;0;1;
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Meth Date : 20-Jul-2023 15:05 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 15:05 Cal File: X071410.D
Als bottle: 12 Calibration Sample, Level: 10
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	4.181	4.181	(1.000)	537032	50.0000	
2	Dichlorodifluoromethane	85	0.976	0.976	(0.234)	1105119	200.000	197.85
3	Chloromethane	50	1.081	1.081	(0.259)	1771073	200.000	218.34(A)
4	Propionitrile	54	3.660	3.660	(0.875)	2109183	2000.00	1982.65
5	Vinyl Chloride	62	1.145	1.145	(0.274)	1416013	200.000	203.75(A)
6	Bromomethane	94	1.332	1.332	(0.319)	617046	200.000	214.56(A)
7	Chloroethane	64	1.400	1.400	(0.335)	747413	200.000	188.39
8	Trichlorofluoromethane	101	1.561	1.561	(0.373)	1509581	200.000	214.34(A)
9	Acrolein	56	1.857	1.857	(0.444)	82636	400.000	402.90(AM)
10	Acetone	43	1.973	1.973	(0.472)	806431	400.000	393.20
11	1,1-Dichloroethene	96	1.913	1.913	(0.458)	797906	200.000	202.80(A)
12	Isobutyl Alcohol	43	4.680	4.680	(1.119)	4072757	4000.00	4000.82(A)
13	Acetonitrile	39	2.198	2.198	(0.526)	1461877	2000.00	1941.23
14	Allyl Chloride	41	2.198	2.198	(0.526)	3258545	200.000	184.81
15	Iodomethane	142	2.029	2.029	(0.485)	2365259	400.000	399.51
16	Acrylonitrile	53	2.535	2.535	(0.606)	973671	400.000	372.06
17	Methylene Chloride	84	2.303	2.303	(0.551)	893552	200.000	196.48
18	Methyl tert-butyl ether	73	2.535	2.535	(0.606)	2728667	200.000	186.48
19	Carbon Disulfide	76	2.071	2.071	(0.495)	5098731	400.000	412.27(A)
20	trans-1,2-Dichloroethene	96	2.528	2.528	(0.605)	885590	200.000	194.59

21 Vinyl Acetate	43	3.000	3.000 (0.718)	7496591	400.000	398.30
22 1,1-Dichloroethane	63	2.922	2.922 (0.699)	1905438	200.000	190.79

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
23	Chloroprene	53	1.771	1.771	(0.424)	498457	200.000	206.42(A)
24	2-Butanone	43	3.581	3.581	(0.857)	1209313	400.000	422.85(A)
25	Methacrylonitrile	41	3.818	3.818	(0.913)	1405724	200.000	202.79(aA)
26	2,2-Dichloropropane	77	3.506	3.506	(0.839)	1535535	200.000	197.45
27	cis-1,2-Dichloroethene	96	3.521	3.521	(0.842)	1110625	200.000	191.56
28	Chloroform	83	3.904	3.904	(0.934)	1909053	200.000	186.82
29	Bromochloromethane	128	3.791	3.791	(0.907)	607870	200.000	187.09
$ 30	Dibromofluoromethane	113	4.099	4.099	(0.980)	959895	200.000	197.23
31	1,1,1-Trichloroethane	97	4.080	4.080	(0.976)	1657906	200.000	210.76(A)
32	1,1-Dichloropropene	75	4.279	4.279	(0.862)	1408668	200.000	209.46(A)
33	1,2-Dichloroethane	62	4.552	4.552	(0.917)	1793850	200.000	197.64
34	Carbon Tetrachloride	117	4.260	4.260	(0.858)	1394099	200.000	205.76(AH)
$ 35	1,2-Dichloroethane-d4	65	4.470	4.470	(1.069)	1203985	200.000	197.42
* 36	1,4-Difluorobenzene	114	4.965	4.965	(1.000)	824484	50.0000	
37	Benzene	78	4.511	4.511	(0.909)	3956301	200.000	200.61(A)
38	Trichloroethene	130	5.205	5.205	(1.048)	1148728	200.000	205.93(A)
39	Bromodichloromethane	83	5.722	5.722	(1.153)	1517659	200.000	200.91(A)
40	Methyl Methacrylate	41	5.606	5.606	(1.341)	1251379	200.000	193.06
41	2-Chloroethylvinyl ether	63	6.048	6.048	(1.218)	991998	400.000	430.11(A)
42	1,2-Dichloropropane	63	5.437	5.437	(1.095)	1286655	200.000	202.89(A)
43	2-Nitropropane	43	5.969	5.969	(1.428)	436967	200.000	204.81(A)
44	Dibromomethane	93	5.549	5.549	(1.118)	688009	200.000	191.66
45	4-Methyl-2-Pentanone	43	6.325	6.325	(0.825)	3017637	400.000	395.46
46	cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	1783083	200.000	205.51(A)
* 47	Chlorobenzene-d5	117	7.667	7.667	(1.000)	775428	50.0000	
$ 48	Toluene-d8	98	6.385	6.385	(0.833)	3447548	200.000	172.68(M)
49	Ethyl Methacrylate	69	6.719	6.719	(1.353)	1128954	200.000	209.07
50	Toluene	91	6.445	6.445	(0.841)	4312229	200.000	206.58(A)
51	trans-1,3-Dichloropropene	75	6.678	6.678	(1.345)	1544556	200.000	211.18(A)
52	2-Hexanone	43	7.086	7.086	(0.924)	2017738	400.000	402.53(A)
53	1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	846183	200.000	191.10
54	1,3-Dichloropropane	76	6.981	6.981	(0.911)	1733058	200.000	191.57
55	Dibromochloromethane	129	7.173	7.173	(0.935)	1320761	200.000	206.61(A)
56	Tetrachloroethene	164	6.925	6.925	(0.903)	902535	200.000	209.29(A)
57	1,2-Dibromoethane	107	7.259	7.259	(0.947)	964928	200.000	190.69
58	1-Chlorohexane	55	7.694	7.694	(1.550)	1371878	200.000	207.11(A)
59	Chlorobenzene	112	7.690	7.690	(1.003)	2926240	200.000	200.54(A)
60	1,1,1,2-Tetrachloroethane	131	7.772	7.772	(1.014)	1173596	200.000	205.45(A)
61	Ethylbenzene	106	7.799	7.799	(1.017)	1505552	200.000	205.76(A)
62	m,p-Xylenes	106	7.900	7.900	(1.030)	3831125	400.000	417.37(A)
63	o-Xylene	106	8.241	8.241	(1.075)	1805494	200.000	207.70(A)
64	Styrene	104	8.256	8.256	(1.077)	3136788	200.000	206.88(A)
66	Bromoform	173	8.406	8.406	(1.096)	880696	200.000	214.73(A)
67	Isopropylbenzene	105	8.560	8.560	(1.116)	4823863	200.000	215.89(A)
68	1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	1401164	200.000	192.48
$ 69	4-Bromofluorobenzene	95	8.687	8.687	(1.133)	1538168	200.000	200.50(A)
* 70	1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	433375	50.0000	
71	1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	1119387	200.000	193.78(M)
72	trans-1,4-Dichloro-2-butene	53	8.886	8.886	(1.159)	524884	200.000	222.56(A)
73	n-Propylbenzene	91	8.912	8.912	(0.922)	5714404	200.000	218.20(A)
74	Bromobenzene	156	8.803	8.803	(0.911)	1365207	200.000	201.42(A)
75	1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	4273312	200.000	217.81(A)

76	2-Chlorotoluene	91	8.972	8.972 (0.929)	3520653	200.000	199.28
77	4-Chlorotoluene	91	9.069	9.069 (0.939)	4116709	200.000	212.06(A)

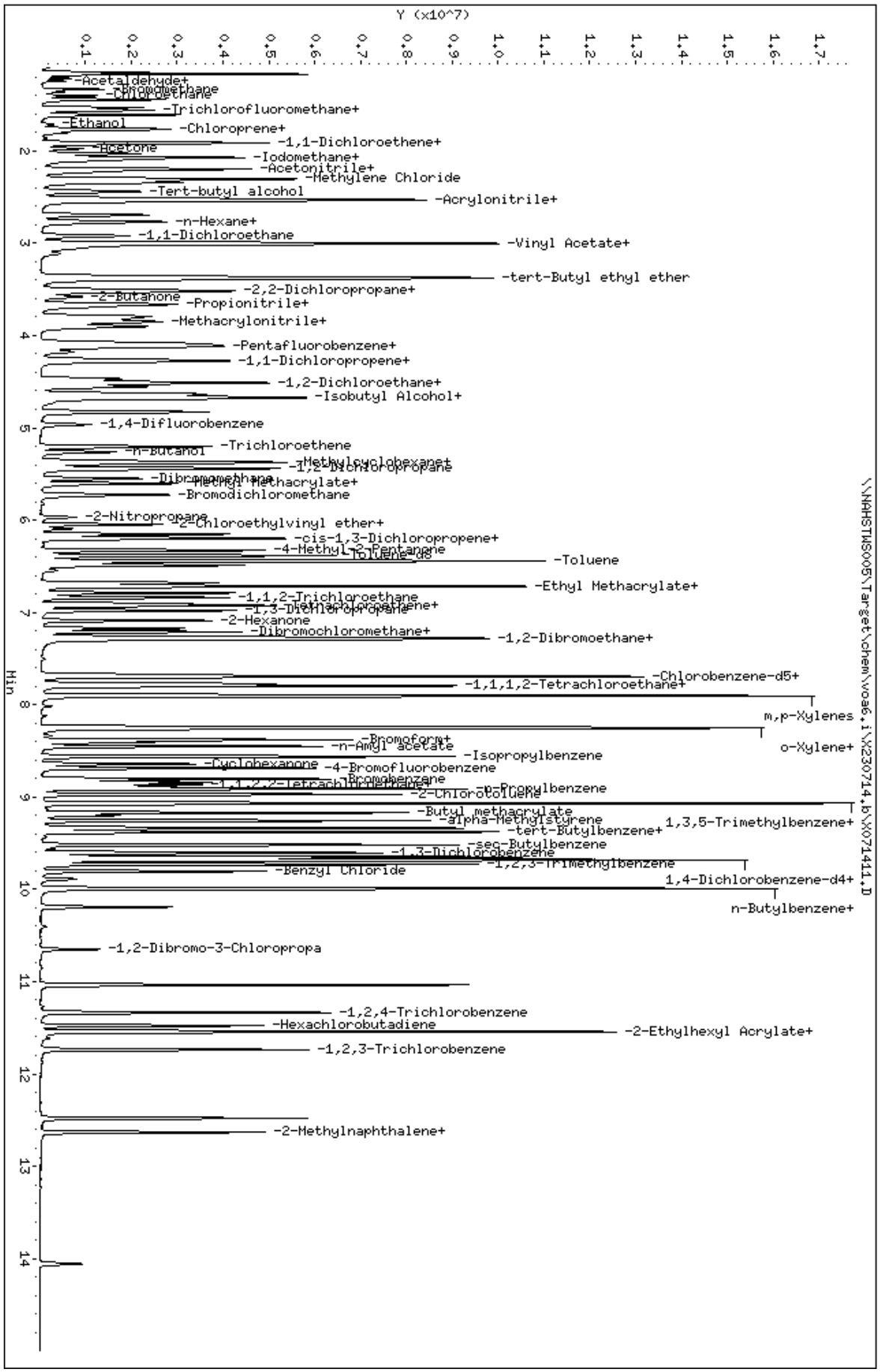
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
78	tert-Butylbenzene	119	9.336	9.336	(0.966)	3564918	200.000	211.88(A)
79	1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	4248690	200.000	215.95(A)
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	4998963	200.000	222.91(A)
82	p-Isopropyltoluene	119	9.647	9.647	(0.998)	4531097	200.000	221.18(A)
83	1,3-Dichlorobenzene	146	9.602	9.602	(0.994)	2443663	200.000	206.95(A)
84	1,4-Dichlorobenzene	146	9.680	9.680	(1.002)	2568367	200.000	198.39
86	Benzyl Chloride	91	9.804	9.804	(1.279)	2751633	200.000	201.10(A)
87	n-Butylbenzene	91	9.992	9.992	(1.034)	3988441	200.000	232.46(A)
88	1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	2403758	200.000	207.07(A)
89	1,2-Dibromo-3-Chloropropane	155	10.651	10.651	(1.102)	242707	200.000	199.51
90	1,2,4-Trichlorobenzene	180	11.334	11.334	(1.173)	1693827	200.000	212.44(A)
91	Hexachlorobutadiene	225	11.480	11.480	(1.188)	760294	200.000	199.55
92	Naphthalene	128	11.536	11.536	(1.194)	4036891	200.000	204.57(AH)
93	1,2,3-Trichlorobenzene	180	11.738	11.738	(1.215)	1513592	200.000	202.99(A)
146	Methyl acetate	43	2.228	2.228	(0.533)	902568	200.000	188.84
138	Freon TF	101	1.917	1.917	(0.459)	815067	200.000	103.34
141	Cyclohexane	56	4.117	4.117	(0.985)	2078176	200.000	223.25(A)
142	Tetrahydrofuran	42	3.851	3.851	(0.921)	520211	400.000	376.52
147	Methylcyclohexane	55	5.381	5.381	(1.084)	3760283	200.000	216.07(A)
135	1,4-Dioxane	88	5.602	5.602	(1.340)	258483	4000.00	4050.44(A)
132	n-Butanol	56	5.261	5.261	(1.258)	850812	4000.00	4759.14(A)
131	Methyl Acrylate	55	3.686	3.686	(0.882)	1635344	200.000	224.02(A)
133	Ethyl Acrylate	55	5.381	5.381	(1.287)	3760283	200.000	211.27(A)
136	n-Hexane	57	2.768	2.768	(0.662)	1402092	200.000	83.16
139	Diethyl ether	59	1.760	1.760	(0.421)	924117	200.000	184.53
148	Tert-butyl alcohol	59	2.442	2.442	(0.584)	2546793	4000.00	3757.39
149	Isopropyl alcohol	45	2.101	2.101	(0.502)	1585037	4000.00	3768.67
156	Diisopropyl ether	45	3.008	3.008	(0.719)	4204307	200.000	189.94
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	4285563	200.000	213.92(A)
167	Ethanol	45	1.711	1.711	(0.409)	291912	4000.00	3940.79
172	tert-Butyl formate	59	4.635	4.635	(1.108)	2334112	400.000	406.87(AM)
173	3,3-Dimethyl-1-butanol	57	7.293	7.293	(0.951)	3164338	4000.00	3794.46
174	tert-Amyl methyl ether	73	4.668	4.668	(1.117)	3325871	200.000	188.25(M)
175	tert-Butyl ethyl ether	59	3.379	3.379	(0.808)	4320968	200.000	190.05
176	tert-Amyl alcohol	59	4.635	4.635	(1.108)	2334112	4000.00	3978.56(M)
151	4-Methyl-2-pentanol	45	6.715	6.715	(1.353)	7205996	4000.00	4078.30(A)
180	1-Methylnaphthalene	142	12.631	12.631	(1.307)	1852094	200.000	(a)
140	1,3-Butadiene	54	1.167	1.167	(0.279)	1429438	200.000	207.14(A)
152	Amyl alcohol	42	6.903	6.903	(0.900)	980159	4000.00	4395.46(A)
158	Dichlorofluoromethane	67	1.531	1.531	(0.366)	1636710	200.000	189.15
159	Propylene oxide	43	1.805	1.805	(0.432)	214178	400.000	325.08
161	3-Methyl-1-butanol	55	6.903	6.903	(0.900)	873259	4000.00	4574.19(A)
162	Butyl acrylate	55	8.248	8.248	(1.076)	3266024	200.000	221.39(A)
163	Butyl methacrylate	41	9.171	9.171	(0.949)	2061719	200.000	198.61
164	Dicyclopentadiene	66	9.684	9.684	(1.002)	5152004	200.000	206.38(A)
182	Epichlorohydrin	57	6.093	6.093	(1.227)	509575	800.000	827.43(A)
M 94	1,2-Dichloroethylene (total)	96				1996215	400.000	(a)
145	alpha-Methylstyrene	118	9.257	9.257	(0.958)	1984425	200.000	209.88(A)
130	Ethyl Acetate	43	3.660	3.660	(0.875)	1526148	200.000	191.33
134	Cyclohexanone	55	8.642	8.642	(0.894)	1269424	4000.00	3290.23
185	Isoprene	39	1.771	1.771	(0.424)	352780	200.000	199.28
188	Isopropyl acetate	43	4.680	4.680	(0.943)	4112016	200.000	189.15

187 n-Amyl acetate	43	8.451	8.451 (1.102)	2862687	200.000	201.43(A)
189 n-Butyl acetate	43	7.210	7.210 (0.940)	2520952	200.000	212.11(AH)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
150 Allyl alcohol	57	2.768	2.768	(0.662)	1402092	4000.00	1651.10
194 Acetaldehyde	44	1.212	1.212	(0.290)	347350	800.000	779.86(M)
195 Methyl Amyl Ketone	43	8.380	8.380	(1.093)	3390972	200.000	209.22
200 Dimethyl Disulfide	94	6.198	6.198	(0.808)	2283547	200.000	218.32(A)
202 Isobutylene	41	1.242	1.242	(0.297)	170200	200.000	191.69(M)
205 2-Ethylhexyl Acrylate	55	11.547	11.547	(1.195)	2531204	200.000	228.67(A)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
exceeded maximum amount.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.



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

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Inj Date : 14-JUL-2023 15:25
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LabSampID : VSTD200

Acrolein (107-02-8)

Reason Code:

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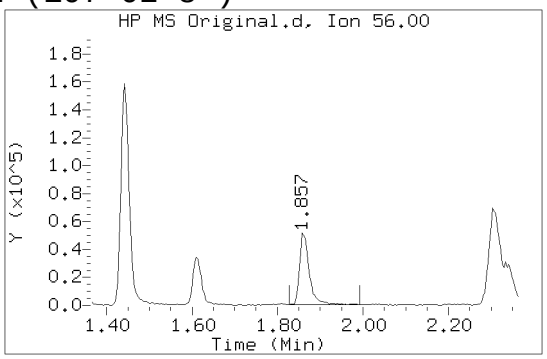

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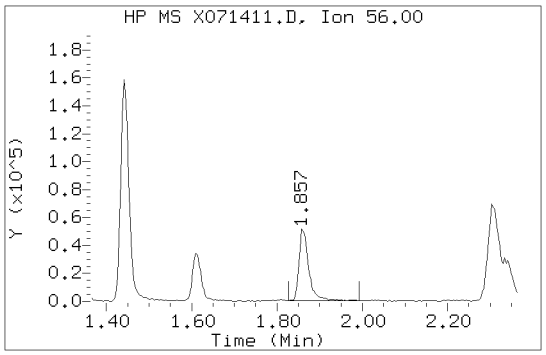

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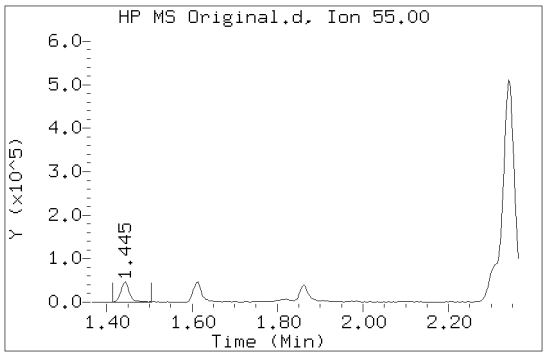

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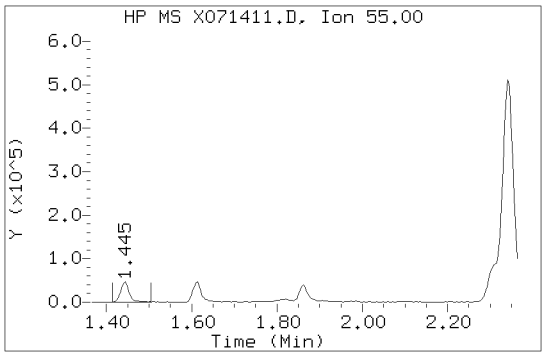

1,2,3-Trichloropropane (96-18-4)

Reason Code:

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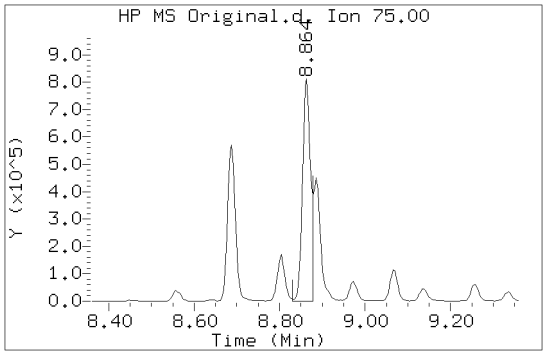

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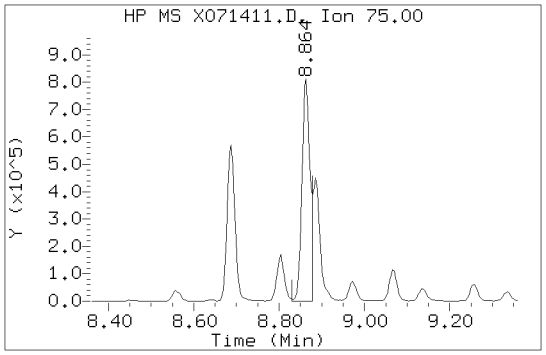
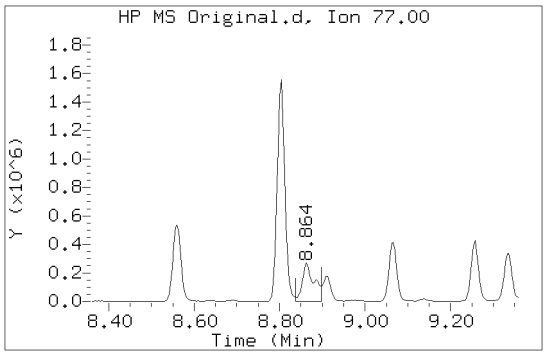


BEFORE
MASS
77
AREA
527358
HEIGHT
268689
20-Jul-2023
15:04
linh
pham



AFTER
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527358
HEIGHT
268689
20-Jul-2023
15:04
linh
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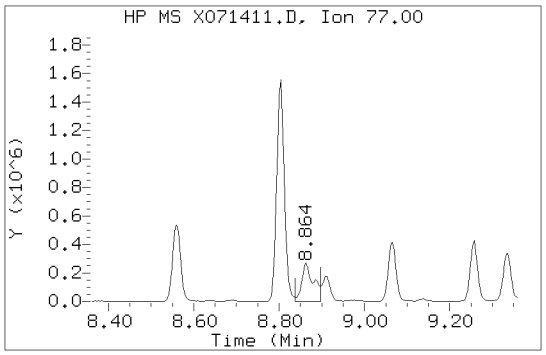

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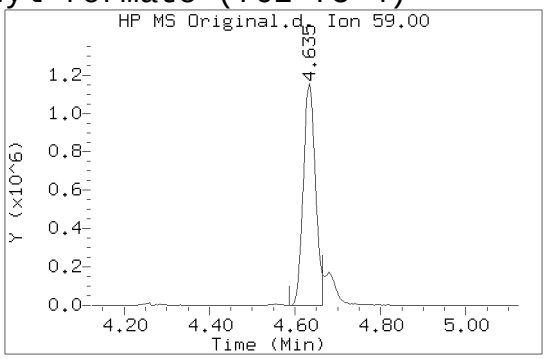
Inj Date : 14-JUL-2023 15:25
InstruID : voa6.i
LabSampID : VSTD200

tert-Butyl formate (762-75-4)

Reason Code:

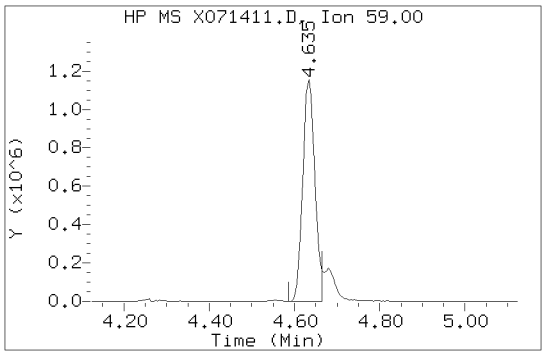
BEFORE

MASS
59
AREA
2334112
HEIGHT
1154659
20-Jul-2023
15:04
linh
pham



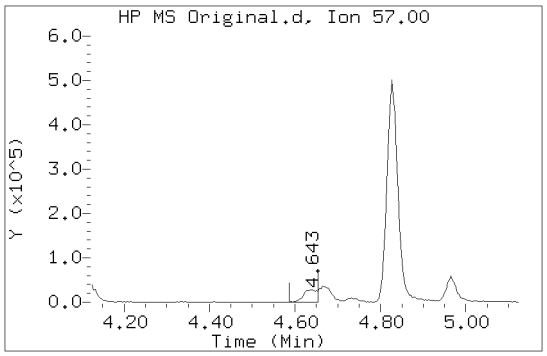
AFTER

MASS
59
AREA
2334112
HEIGHT
1154659
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
57
AREA
61248
HEIGHT
27018
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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AREA
61248
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20-Jul-2023
15:04
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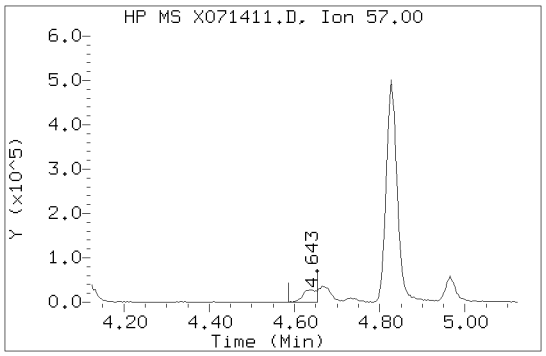
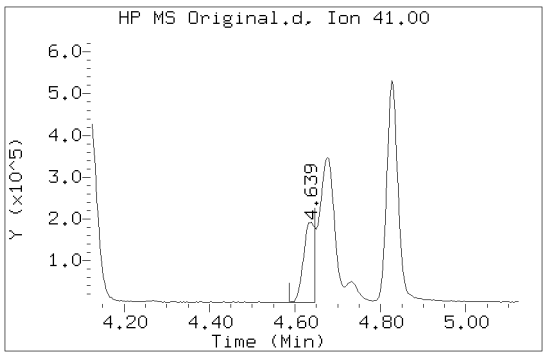


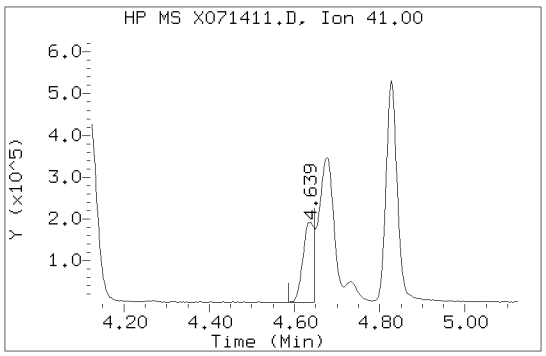
BEFORE

MASS
41
AREA
348681
HEIGHT
190663
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
348681
HEIGHT
190663
20-Jul-2023
15:04
linh
pham

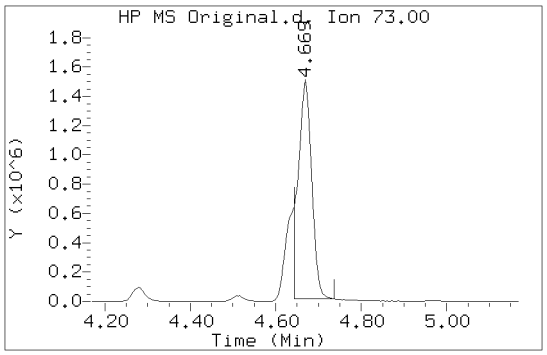


tert-Amyl methyl ether (974-05-08)

Reason Code:

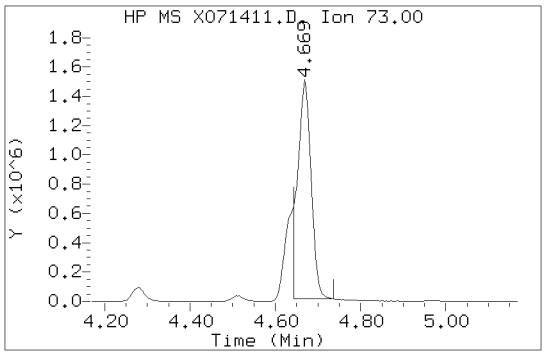
BEFORE

MASS
73
AREA
3325871
HEIGHT
1495166
20-Jul-2023
15:04
linh
pham



AFTER

MASS
73
AREA
3325871
HEIGHT
1495166
20-Jul-2023
15:04
linh
pham



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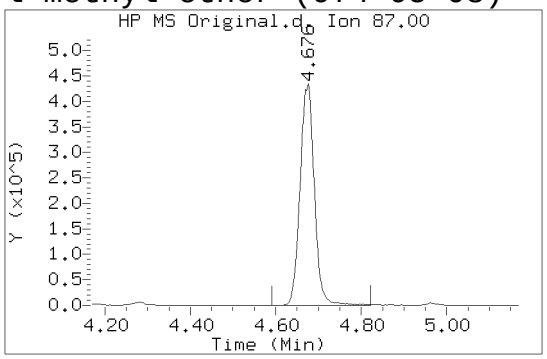
Inj Date : 14-JUL-2023 15:25
InstruID : voa6.i
LabSampID : VSTD200

tert-Amyl methyl ether (974-05-08)

Reason Code:

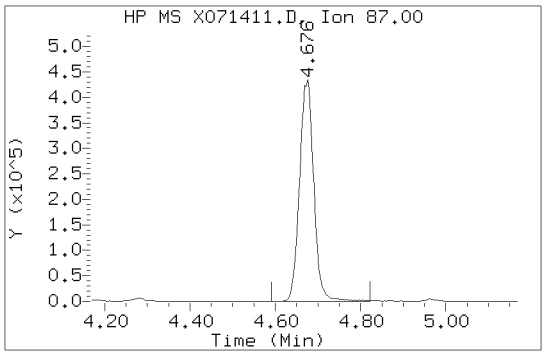
BEFORE

MASS
87
AREA
1024271
HEIGHT
434624
20-Jul-2023
15:04
linh
pham



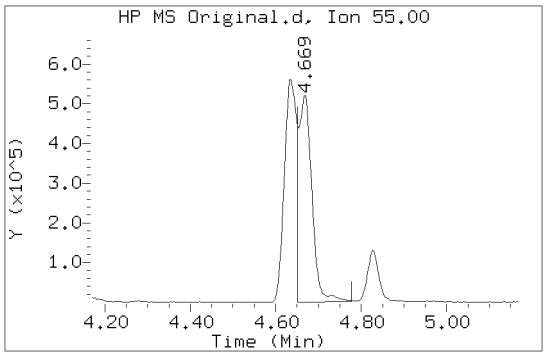
AFTER

MASS
87
AREA
1024271
HEIGHT
434624
20-Jul-2023
15:04
linh
pham



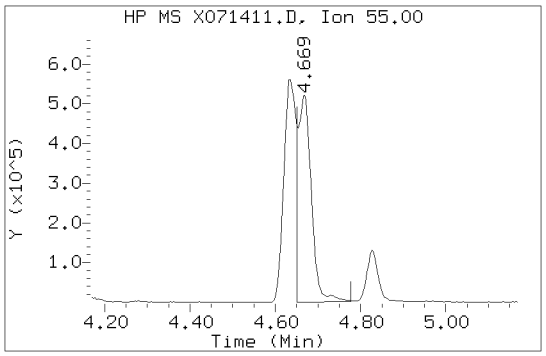
BEFORE

MASS
55
AREA
1191571
HEIGHT
521301
20-Jul-2023
15:04
linh
pham



AFTER

MASS
55
AREA
1191571
HEIGHT
521301
20-Jul-2023
15:04
linh
pham

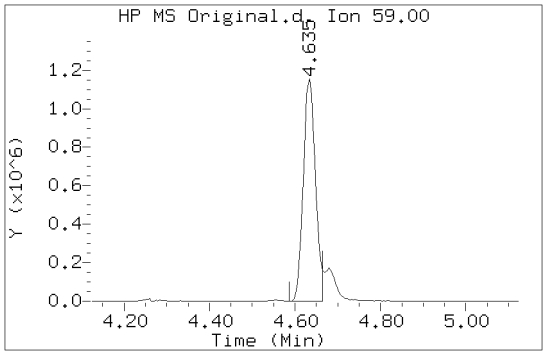


tert-Amyl alcohol (75-85-4)

Reason Code:

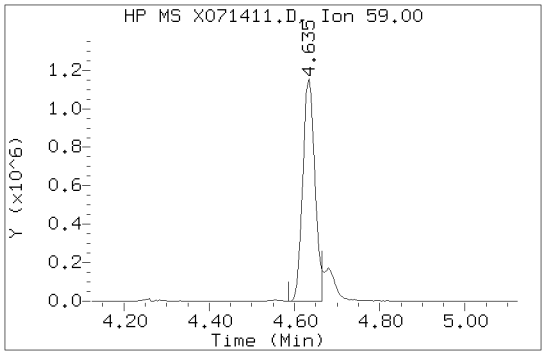
BEFORE

MASS
59
AREA
2334112
HEIGHT
1154659
20-Jul-2023
15:04
linh
pham



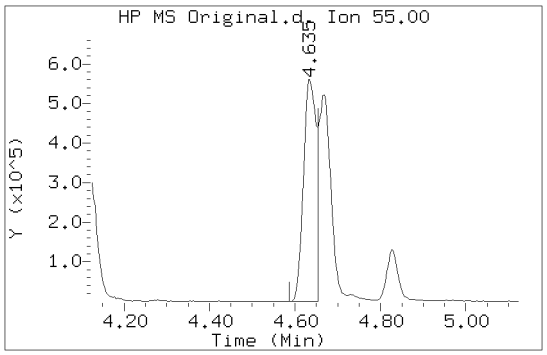
AFTER

MASS
59
AREA
2334112
HEIGHT
1154659
20-Jul-2023
15:04
linh
pham



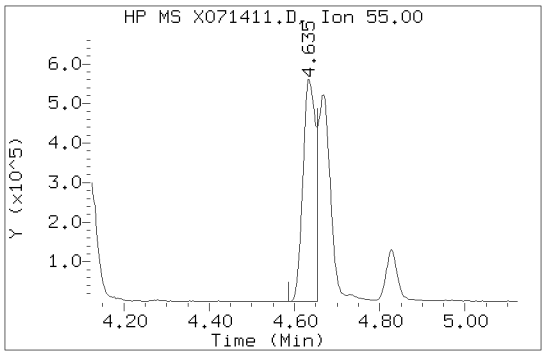
BEFORE

MASS
55
AREA
1205179
HEIGHT
559928
20-Jul-2023
15:04
linh
pham



AFTER

MASS
55
AREA
1205179
HEIGHT
559928
20-Jul-2023
15:04
linh
pham



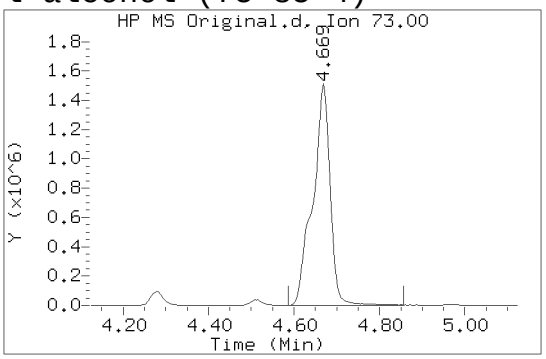
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071411.D
Inj Date : 14-JUL-2023 15:25
InstruID : voa6.i
LabSampID : VSTD200

tert-Amyl alcohol (75-85-4)

Reason Code:

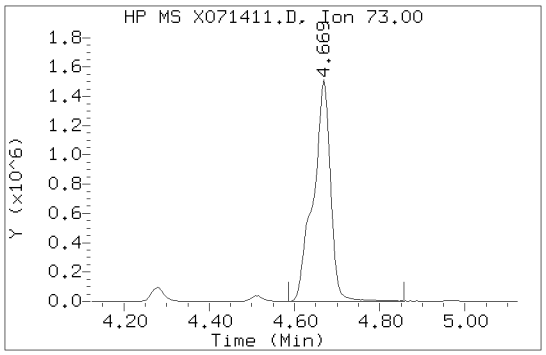
BEFORE

MASS
73
AREA
4277303
HEIGHT
1513022
20-Jul-2023
15:04
linh
pham



AFTER

MASS
73
AREA
4277303
HEIGHT
1513022
20-Jul-2023
15:04
linh
pham

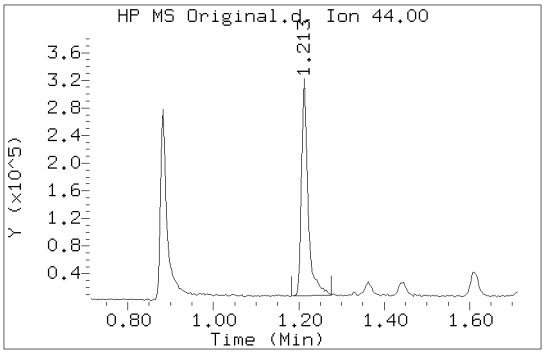


Acetaldehyde (75-07-0)

Reason Code:

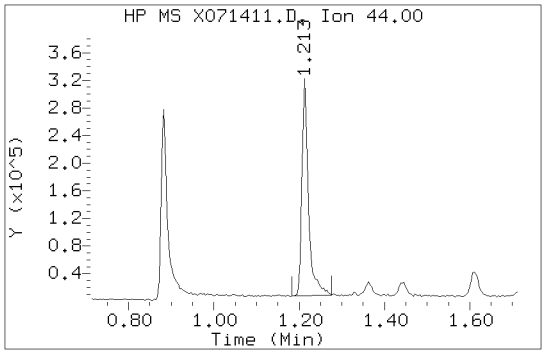
BEFORE

MASS
44
AREA
347350
HEIGHT
313846
20-Jul-2023
15:04
linh
pham



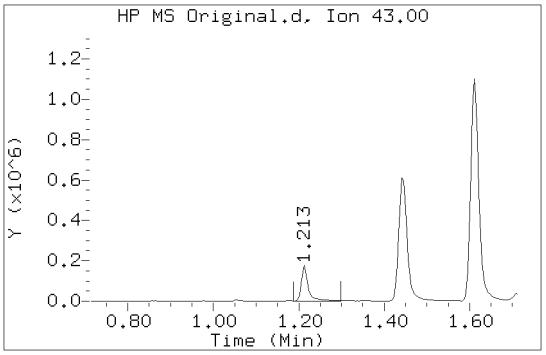
AFTER

MASS
44
AREA
347350
HEIGHT
313846
20-Jul-2023
15:04
linh
pham



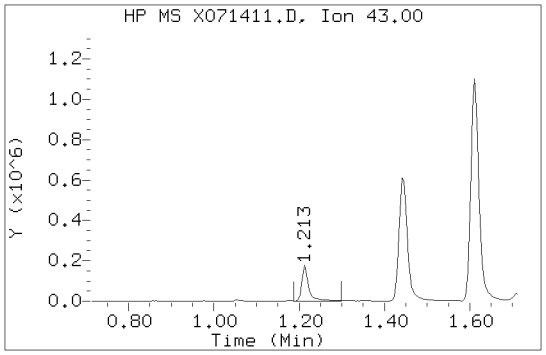
BEFORE

MASS
43
AREA
201165
HEIGHT
178522
20-Jul-2023
15:04
linh
pham



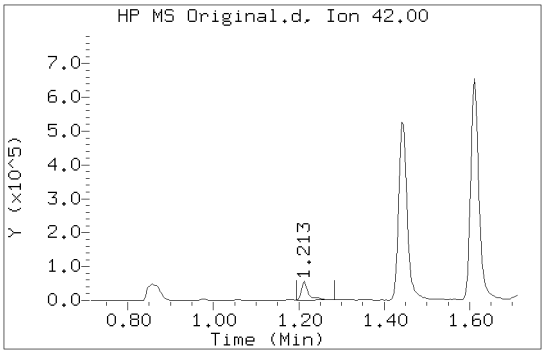
AFTER

MASS
43
AREA
201165
HEIGHT
178522
20-Jul-2023
15:04
linh
pham



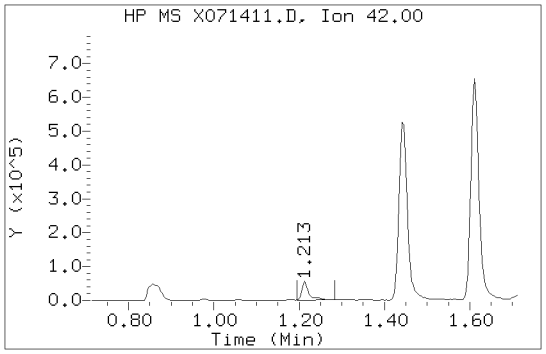
BEFORE

MASS
42
AREA
64792
HEIGHT
55441
20-Jul-2023
15:04
linh
pham



AFTER

MASS
42
AREA
64792
HEIGHT
55441
20-Jul-2023
15:04
linh
pham



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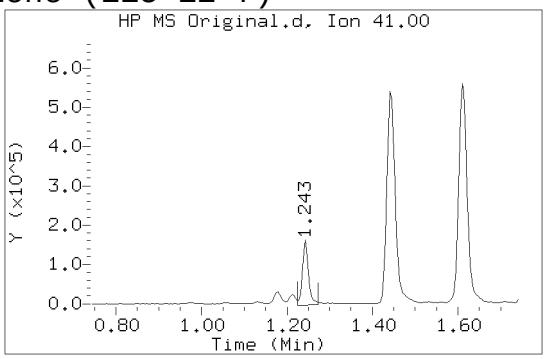
Inj Date : 14-JUL-2023 15:25
InstruID : voa6.i
LabSampID : VSTD200

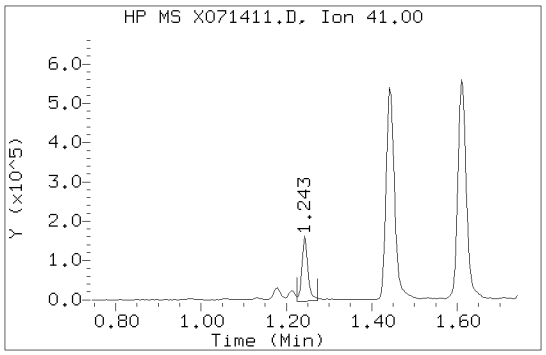
Isobutylene (115-11-7)

Reason Code:

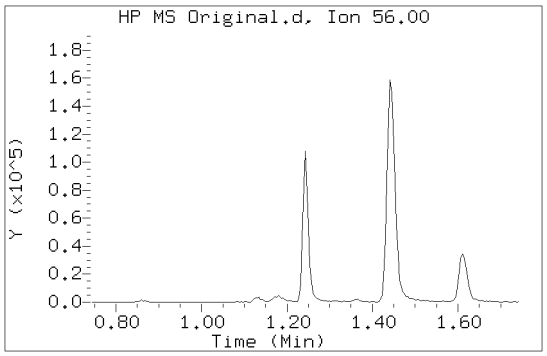
BEFORE
MASS
41
AREA
170200
HEIGHT
165804
20-Jul-2023
15:04
linh
pham



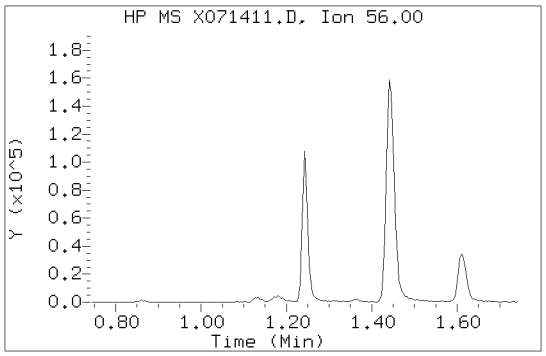
AFTER
MASS
41
AREA
170200
HEIGHT
165804
20-Jul-2023
15:04
linh
pham



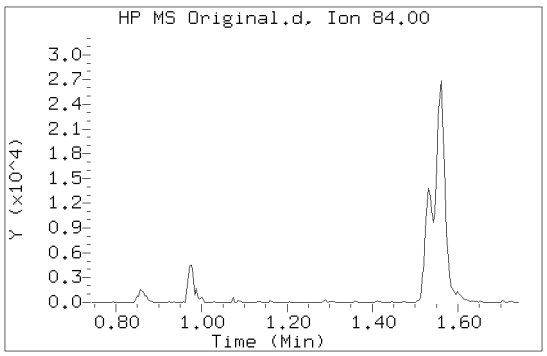
BEFORE
MASS
56
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



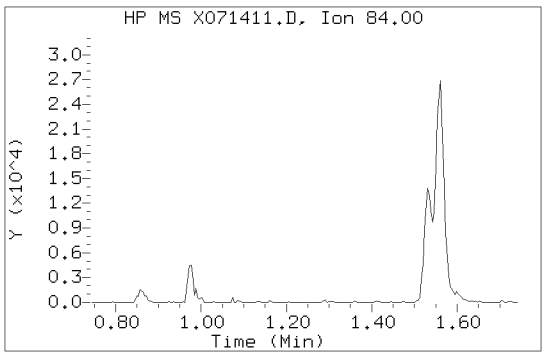
AFTER
MASS
56
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
84
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



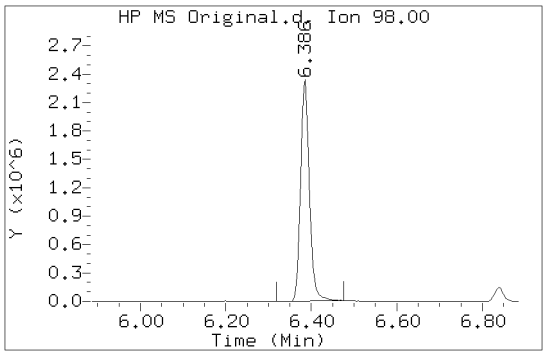
AFTER
MASS
84
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



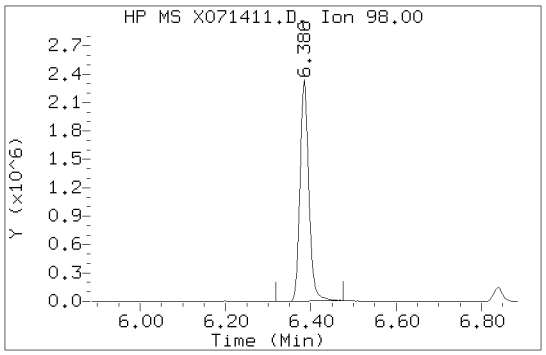
Toluene-d8 (2037-26-5)

Reason Code:

BEFORE
MASS
98
AREA
3447548
HEIGHT
2338393
20-Jul-2023
15:04
linh
pham



AFTER
MASS
98
AREA
3447548
HEIGHT
2338393
20-Jul-2023
15:04
linh
pham



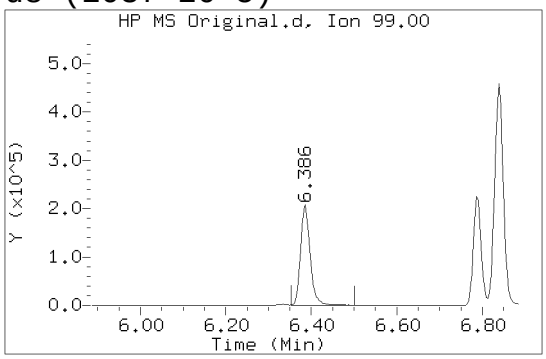
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071411.D
Inj Date : 14-JUL-2023 15:25
InstruID : voa6.i
LabSampID : VSTD200

Toluene-d8 (2037-26-5)

Reason Code:

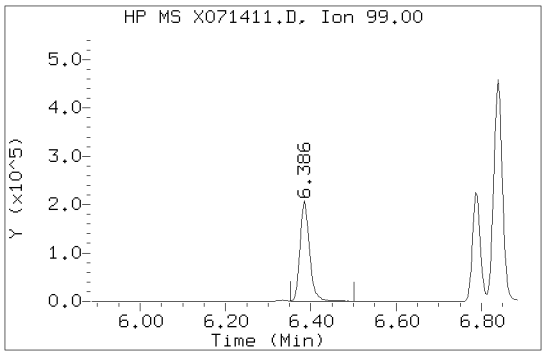
BEFORE

MASS
99
AREA
332540
HEIGHT
208135
20-Jul-2023
15:04
linh
pham



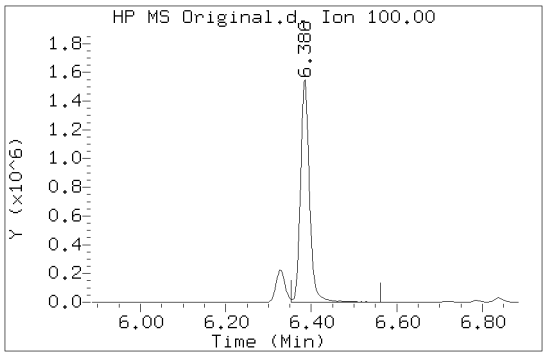
AFTER

MASS
99
AREA
332540
HEIGHT
208135
20-Jul-2023
15:04
linh
pham



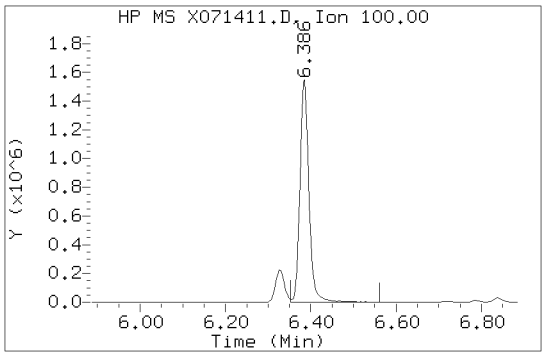
BEFORE

MASS
100
AREA
2330683
HEIGHT
1547095
20-Jul-2023
15:04
linh
pham



AFTER

MASS
100
AREA
2330683
HEIGHT
1547095
20-Jul-2023
15:04
linh
pham



ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071413.D
Lab Smp Id: ICV Client Smp ID: ICV
Inj Date : 14-JUL-2023 16:06
Operator : PC Inst ID: voa6.i
Smp Info : CCV;CCV;2;;ICV
Misc Info : V6;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\8260W.m
Meth Date : 20-Jul-2023 15:05 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 15:25 Cal File: X071411.D
Als bottle: 14 QC Sample: METHSPIKE
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 00000_8260.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.178	4.181	(1.000)	523560	50.0000	
2 Dichlorodifluoromethane	85	0.976	0.976	(0.234)	235700	44.1394	44.13
3 Chloromethane	50	1.081	1.081	(0.259)	369706	46.7515	46.75
4 Propionitrile	54	3.656	3.660	(0.875)	514137	495.730	495.72
5 Vinyl Chloride	62	1.145	1.145	(0.274)	314786	46.4622	46.46
6 Bromomethane	94	1.344	1.332	(0.322)	147749	52.6978	52.69
7 Chloroethane	64	1.404	1.400	(0.336)	174555	45.1318	45.13
8 Trichlorofluoromethane	101	1.561	1.561	(0.374)	321870	46.8787	46.87
9 Acrolein	56	1.857	1.857	(0.445)	18891	95.3394	95.33
10 Acetone	43	1.973	1.973	(0.472)	226282	109.688	109.68
11 1,1-Dichloroethene	96	1.913	1.913	(0.458)	173630	45.2674	45.26
12 Isobutyl Alcohol	43	4.680	4.680	(1.120)	1029947	1037.79	1037.79
13 Acetonitrile	39	2.202	2.198	(0.527)	350837	477.867	477.86
14 Allyl Chloride	41	2.198	2.198	(0.526)	795160	46.2587	46.25
15 Iodomethane	142	2.030	2.029	(0.486)	426627	85.2702	85.27
16 Acrylonitrile	53	2.536	2.535	(0.607)	247354	96.9514	96.95
17 Methylene Chloride	84	2.303	2.303	(0.551)	221542	48.9173	48.91
18 Methyl tert-butyl ether	73	2.539	2.535	(0.608)	686179	48.1012	48.10
19 Carbon Disulfide	76	2.071	2.071	(0.496)	1115788	92.5432	92.54
20 trans-1,2-Dichloroethene	96	2.528	2.528	(0.605)	201576	45.4331	45.43

21 Vinyl Acetate	43	3.000	3.000 (0.718)	1840684	100.315	100.31
22 1,1-Dichloroethane	63	2.918	2.922 (0.699)	455953	46.8308	46.83

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	23 Chloroprene	53	1.771	1.771	(0.424)	106109	45.0742	45.07(M)
	24 2-Butanone	43	3.582	3.581	(0.857)	292924	105.060	105.06
	25 Methacrylonitrile	41	3.825	3.818	(0.916)	346558	51.2815	51.28(a)
	26 2,2-Dichloropropane	77	3.510	3.506	(0.840)	355659	47.0700	47.06
	27 cis-1,2-Dichloroethene	96	3.522	3.521	(0.843)	269347	47.6547	47.65
	28 Chloroform	83	3.904	3.904	(0.935)	458057	45.9797	45.97
	29 Bromochloromethane	128	3.795	3.791	(0.908)	150697	47.5755	47.57
$	30 Dibromofluoromethane	113	4.099	4.099	(0.981)	251919	52.5379	52.53
	31 1,1,1-Trichloroethane	97	4.076	4.080	(0.976)	356334	46.4653	46.46
	32 1,1-Dichloropropene	75	4.279	4.279	(0.862)	303929	45.5996	45.59
	33 1,2-Dichloroethane	62	4.552	4.552	(0.917)	426885	47.4578	47.45
	34 Carbon Tetrachloride	117	4.264	4.260	(0.859)	294766	43.8978	43.89
$	35 1,2-Dichloroethane-d4	65	4.474	4.470	(1.071)	312436	52.0928	52.09
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	817135	50.0000	
	37 Benzene	78	4.511	4.511	(0.909)	922063	47.1756	47.17
	38 Trichloroethene	130	5.205	5.205	(1.048)	257816	46.6338	46.63
	39 Bromodichloromethane	83	5.722	5.722	(1.153)	352205	47.0449	47.04
	40 Methyl Methacrylate	41	5.606	5.606	(1.342)	307355	48.6390	48.63
	41 2-Chloroethylvinyl ether	63	6.044	6.048	(1.217)	236549	103.486	103.48
	42 1,2-Dichloropropane	63	5.433	5.437	(1.094)	308027	49.0106	49.01
	43 2-Nitropropane	43	5.966	5.969	(1.428)	100815	48.4694	48.46
	44 Dibromomethane	93	5.550	5.549	(1.118)	168843	47.4595	47.45
	45 4-Methyl-2-Pentanone	43	6.326	6.325	(0.825)	705887	96.7791	96.77
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	426551	49.6054	49.60
*	47 Chlorobenzene-d5	117	7.668	7.667	(1.000)	741203	50.0000	
$	48 Toluene-d8	98	6.382	6.385	(0.832)	919255	48.1696	48.16
	49 Ethyl Methacrylate	69	6.712	6.719	(1.352)	227813	42.5696	42.56
	50 Toluene	91	6.442	6.445	(0.840)	975883	48.9113	48.91
	51 trans-1,3-Dichloropropene	75	6.682	6.678	(1.346)	355856	49.0932	49.09
	52 2-Hexanone	43	7.086	7.086	(0.924)	481140	100.419	100.41
	53 1,1,2-Trichloroethane	83	6.835	6.839	(0.891)	205333	48.5132	48.51
	54 1,3-Dichloropropane	76	6.982	6.981	(0.911)	419059	48.4632	48.46
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	311577	50.9926	50.99
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	194514	47.1890	47.18
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	231451	47.8539	47.85
	58 1-Chlorohexane	55	7.694	7.694	(1.550)	263762	40.1795	40.17
	59 Chlorobenzene	112	7.690	7.690	(1.003)	668608	47.9390	47.93
	60 1,1,1,2-Tetrachloroethane	131	7.772	7.772	(1.014)	267606	49.0109	49.01
	61 Ethylbenzene	106	7.795	7.799	(1.017)	323263	46.2211	46.22
	62 m,p-Xylenes	106	7.900	7.900	(1.030)	828056	94.3758	94.37
	63 o-Xylene	106	8.237	8.241	(1.074)	397534	47.8450	47.84
	64 Styrene	104	8.256	8.256	(1.077)	710304	49.0101	49.01
	66 Bromoform	173	8.406	8.406	(1.096)	197925	50.4868	50.48
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	956821	44.8008	44.80
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	331151	48.2326	48.23
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	388935	52.7245	52.72
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	408757	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	262052	48.0990	48.09(M)
	72 trans-1,4-Dichloro-2-butene	53	8.886	8.886	(1.159)	119855	53.1678	53.16
	73 n-Propylbenzene	91	8.908	8.912	(0.922)	1109886	44.9330	44.93
	74 Bromobenzene	156	8.803	8.803	(0.911)	301361	47.1405	47.14
	75 1,3,5-Trimethylbenzene	105	9.062	9.066	(0.938)	826279	44.6531	44.65

76	2-Chlorotoluene	91	8.972	8.972 (0.929)	751134	45.0789	45.07
77	4-Chlorotoluene	91	9.070	9.069 (0.939)	862507	47.1055	47.10

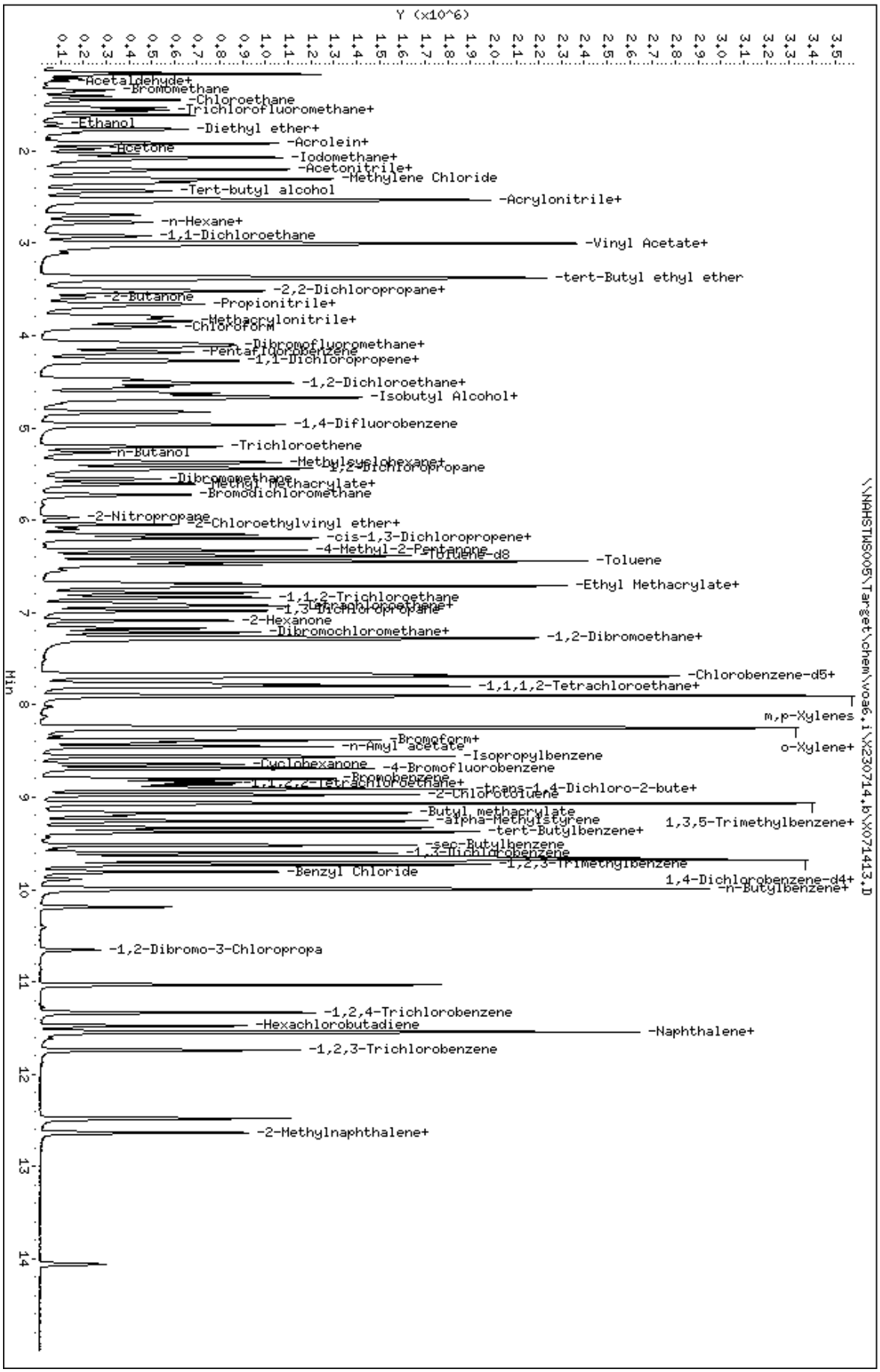
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)	
78	tert-Butylbenzene	119	9.332	9.336	(0.966)	675255	42.5524	42.55	
79	1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	830881	44.7762	44.77	
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	905955	42.8308	42.83	
82	p-Isopropyltoluene	119	9.647	9.647	(0.998)	820416	42.4603	42.46	
83	1,3-Dichlorobenzene	146	9.602	9.602	(0.994)	517212	46.4420	46.44	
84	1,4-Dichlorobenzene	146	9.681	9.680	(1.002)	560136	45.8733	45.87	
86	Benzyl Chloride	91	9.808	9.804	(1.279)	615356	48.8480	48.84	
87	n-Butylbenzene	91	9.992	9.992	(1.034)	697021	43.0724	43.07	
88	1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	522905	47.7589	47.75	
89	1,2-Dibromo-3-Chloropropane	155	10.651	10.651	(1.102)	54433	48.2708	48.27	
90	1,2,4-Trichlorobenzene	180	11.334	11.334	(1.173)	326047	43.3575	43.35	
91	Hexachlorobutadiene	225	11.476	11.480	(1.188)	139858	40.8152	40.81	
92	Naphthalene	128	11.540	11.536	(1.194)	838509	45.0509	45.05	
93	1,2,3-Trichlorobenzene	180	11.739	11.738	(1.215)	302822	43.0586	43.05	
146	Methyl acetate	43	2.232	2.228	(0.534)	226459	48.6009	48.60	
138	Freon TF	101	1.917	1.917	(0.459)	164256	50.7362	50.73	
141	Cyclohexane	56	4.121	4.117	(0.987)	392805	43.2834	43.28	
142	Tetrahydrofuran	42	3.848	3.851	(0.921)	129569	96.1946	96.19	
147	Methylcyclohexane	55	5.381	5.381	(1.084)	818352	47.4476	47.44	
135	1,4-Dioxane	88	5.602	5.602	(1.341)	61482	988.216	988.21	
132	n-Butanol	56	5.261	5.261	(1.259)	170908	980.599	980.59	
131	Methyl Acrylate	55	3.690	3.686	(0.883)	366966	51.5629	51.56	
133	Ethyl Acrylate	55	5.381	5.381	(1.288)	818352	47.1623	47.16	
136	n-Hexane	57	2.772	2.768	(0.664)	239027	47.2779	47.27	
139	Diethyl ether	59	1.760	1.760	(0.421)	234998	48.1340	48.13	
148	Tert-butyl alcohol	59	2.434	2.442	(0.583)	626708	948.402	948.40	
149	Isopropyl alcohol	45	2.093	2.101	(0.501)	377497	920.653	920.65	
156	Diisopropyl ether	45	3.004	3.008	(0.719)	1037147	48.0634	48.06	
166	1,2,3-Trimethylbenzene	105	9.729	9.729	(1.007)	913282	48.3344	48.33	
167	Ethanol	45	1.703	1.711	(0.408)	74613	1019.42	1019.41	
172	tert-Butyl formate	59	4.627	4.635	(1.108)	507413	90.7266	90.72	
173	3,3-Dimethyl-1-butanol	57	7.285	7.293	(0.950)	688113	863.240	863.23	
174	tert-Amyl methyl ether	73	4.669	4.668	(1.118)	862678	50.0877	50.08	
175	tert-Butyl ethyl ether	59	3.379	3.379	(0.809)	1050302	47.3858	47.38	
176	tert-Amyl alcohol	59	4.627	4.635	(1.108)	507413	887.155	887.15	
151	4-Methyl-2-pentanol	45	6.712	6.715	(1.352)	1515654	865.514	865.51	
180	1-Methylnaphthalene	142	12.634	12.631	(1.308)	384606			(a)
140	1,3-Butadiene	54	1.167	1.167	(0.280)	301891	44.8739	44.87	
152	Amyl alcohol	42	6.903	6.903	(0.900)	195847	918.818	918.81	
158	Dichlorofluoromethane	67	1.531	1.531	(0.367)	380825	45.1447	45.14	
159	Propylene oxide	43	1.805	1.805	(0.432)	61412	95.6112	95.61	
161	3-Methyl-1-butanol	55	6.903	6.903	(0.900)	186846	1023.91	1023.90	
162	Butyl acrylate	55	8.249	8.248	(1.076)	731306	51.8619	51.86	
163	Butyl methacrylate	41	9.167	9.171	(0.949)	489010	49.9457	49.94	
164	Dicyclopentadiene	66	9.681	9.684	(1.002)	1106669	47.0024	47.00	
182	Epichlorohydrin	57	6.093	6.093	(1.227)	124324	203.690	203.69	
M 94	1,2-Dichloroethylene (total)	96				470923	93.0878	93.08	
M 95	Xylenes (total)	106				1225590	142.221	142.22	
145	alpha-Methylstyrene	118	9.257	9.257	(0.958)	409265	45.8929	45.89	
130	Ethyl Acetate	43	3.660	3.660	(0.876)	382709	49.2142	49.21	
134	Cyclohexanone	55	8.642	8.642	(0.894)	353883	972.476	972.47	
185	Isoprene	39	1.771	1.771	(0.424)	82361	47.7228	47.72	

188 Isopropyl acetate	43	4.680	4.680 (0.943)	1029947	47.8043	47.80
187 n-Amyl acetate	43	8.451	8.451 (1.102)	635386	46.7743	46.77

						CONCENTRATIONS	
	QUANT SIG					ON-COLUMN	FINAL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
189 n-Butyl acetate	43	7.214	7.210	(0.941)	567096	49.9183	49.91(H)
150 Allyl alcohol	57	2.772	2.768	(0.664)	239027	945.764	945.76
194 Acetaldehyde	44	1.212	1.212	(0.290)	96727	206.571	206.57
195 Methyl Amyl Ketone	43	8.380	8.380	(1.093)	761129	49.1308	49.13
200 Dimethyl Disulfide	94	6.194	6.198	(0.808)	522553	52.2664	52.26
202 Isobutylene	41	1.242	1.242	(0.297)	41486	47.9266	47.92(M)
205 2-Ethylhexyl Acrylate	55	11.547	11.547	(1.195)	553935	53.0575	53.05

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.



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Sample Info: CCV;CCV;2;;ICV
Purge Volume: 5.0
Column phase: DB624

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

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Inj Date : 14-JUL-2023 16:06
InstruID : voa6.i
LabSampID : ICV

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

Reason Code:

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HEIGHT
195933
20-Jul-2023
15:04
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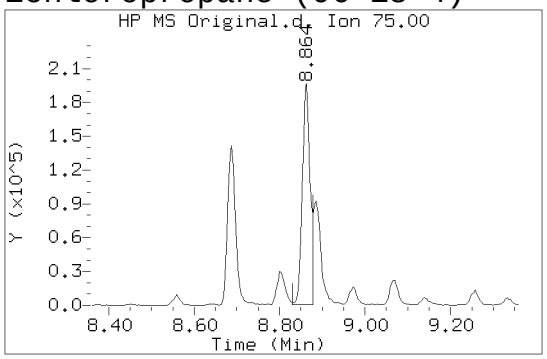
pham



AFTER

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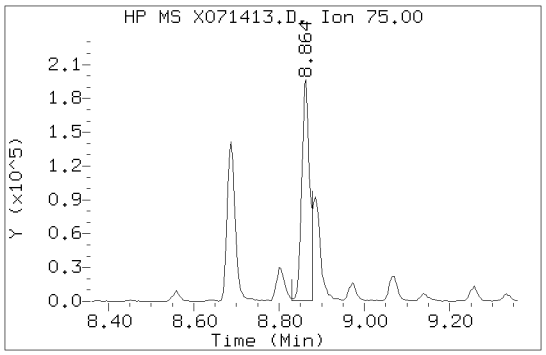

BEFORE

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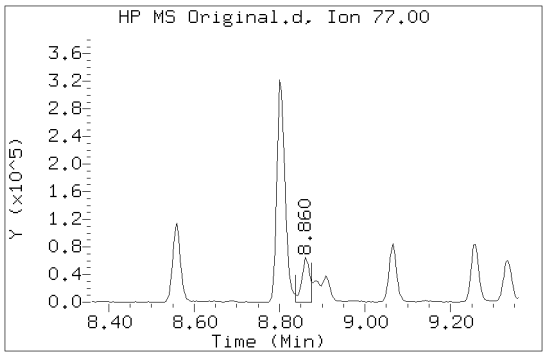

AFTER

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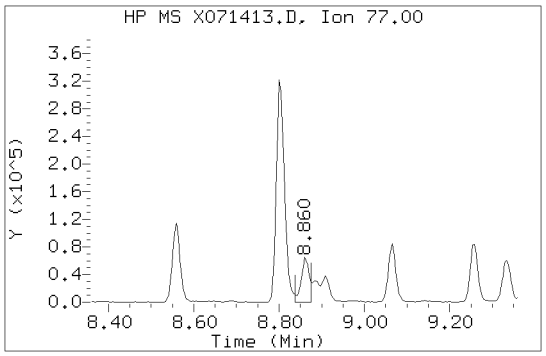

Chloroprene (126-99-8)

Reason Code:

BEFORE

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HEIGHT
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20-Jul-2023
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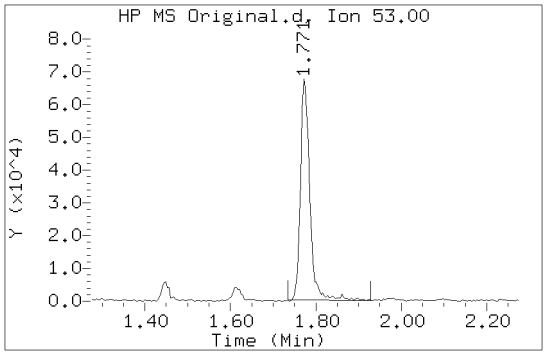
linh
pham



AFTER

MASS
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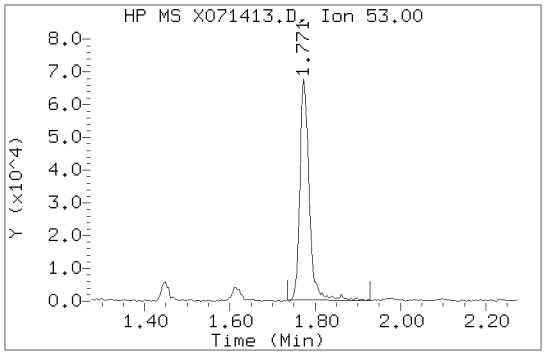

BEFORE

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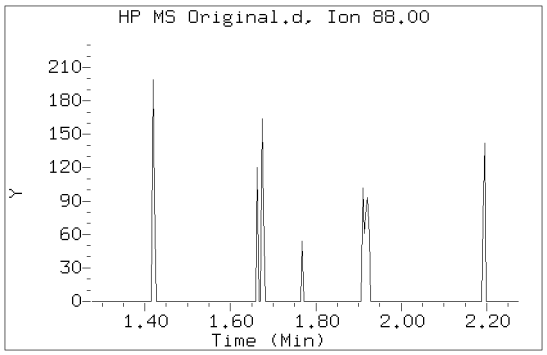

AFTER

MASS
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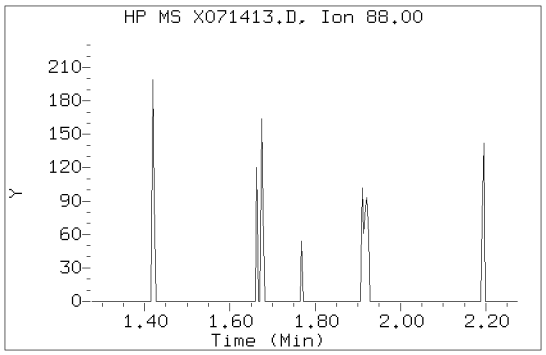

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Inj Date : 14-JUL-2023 16:06
InstruID : voa6.i
LabSampID : ICV

Isobutylene (115-11-7)

Reason Code:

BEFORE

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HEIGHT
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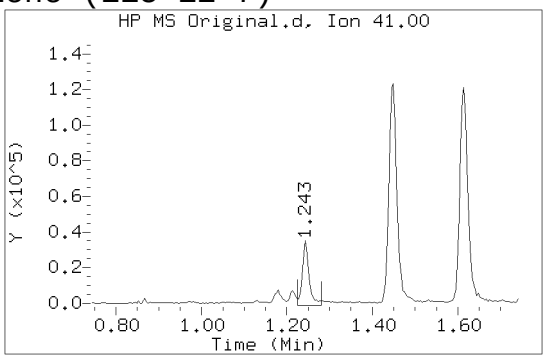
20-Jul-2023
15:04
linh
pham



AFTER

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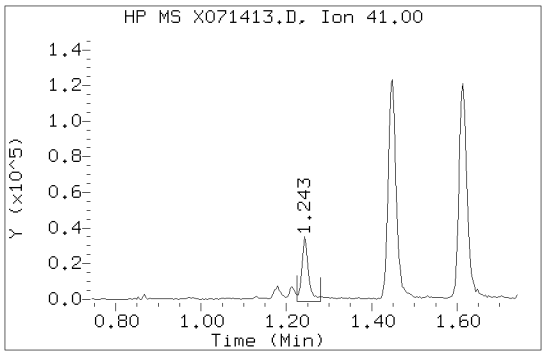

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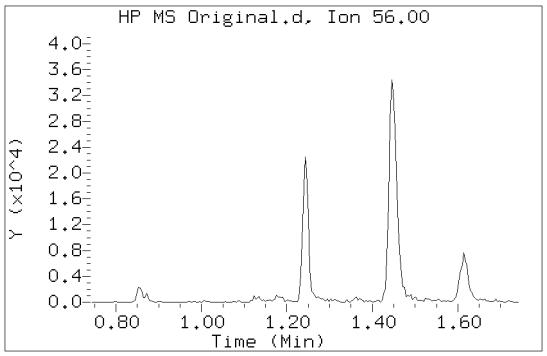

AFTER

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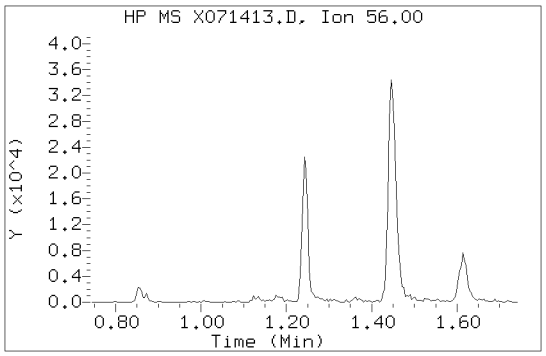
pham



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20-Jul-2023
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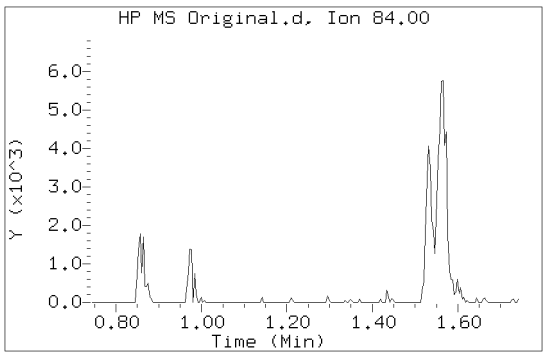

AFTER

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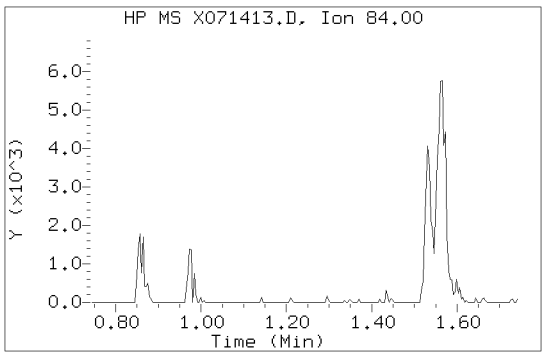

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right solutions.
right partner.

Raw Data VOA6 442002

Volatiles by EPA 8260

Workorder

HS23071113

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072101.D Page 1
Report Date: 21-Jul-2023 23:06

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072101.D
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 21-JUL-2023 12:16
Operator : PC Inst ID: voa6.i
Smp Info : BFB;BFB;3;;BFB
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\bfb.m
Meth Date : 14-Mar-2023 15:45 Linh.Pham Quant Type: ISTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: NAHSTW7051

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

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

RT	EXP RT	REL RT	MASS	RESPONSE	CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/l)	TARGET RANGE	RATIO
1 bfb						CAS #: 460-00-4		
8.687	8.889	(0.000)	95	249216			0.00- 100.00	100.00
8.687	8.889	(0.000)	50	66296			15.00- 40.00	26.60
8.687	8.889	(0.000)	75	122904			30.00- 60.00	49.32
8.687	8.889	(0.000)	96	16424			5.00- 9.00	6.59
8.687	8.889	(0.000)	173	2639			0.00- 2.00	1.38
8.687	8.889	(0.000)	174	191040			50.00- 0.00	76.66
8.687	8.889	(0.000)	175	15623			5.00- 9.00	8.18
8.687	8.889	(0.000)	176	191488			95.00- 101.00	100.23
8.687	8.889	(0.000)	177	12356			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	26.60
75	30.00 - 60.00% of mass 95	49.32
96	5.00 - 9.00% of mass 95	6.59
173	Less than 2.00% of mass 174	1.06 (1.38)
174	Greater than 50.00% of mass 95	76.66
175	5.00 - 9.00% of mass 174	6.27 (8.18)
176	95.00 - 101.00% of mass 174	76.84 (100.23)
177	5.00 - 9.00% of mass 176	4.96 (6.45)

Data File: X072101.D
Spectrum: Scan 2159 (8.68)
Location of Maximum: 95.00
Number of points: 131

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.10	3226	68.00	24808	105.70	712	143.90	115
37.00	16147	69.00	23344	106.90	709	145.00	81
38.10	13137	70.10	2364	107.80	152	145.90	286
39.00	6414	71.10	572	109.00	756	146.80	452
40.00	4053	72.00	1342	111.00	157	147.70	405
41.10	2966	73.00	11251	111.60	114	148.90	171
42.10	3572	74.00	38192	112.10	87	149.80	149
43.10	1982	75.00	122904	112.60	51	151.70	299
44.00	5165	76.00	11018	113.20	412	152.60	90
45.00	4146	76.90	2364	115.60	501	154.10	204
46.10	369	77.90	1303	116.00	484	155.00	648
47.00	6071	78.90	5349	116.80	1064	156.00	130
48.00	2033	80.10	2205	117.80	857	156.90	262
49.00	13765	80.90	5481	118.80	1214	158.00	104
50.10	66296	81.90	1125	120.00	191	158.80	112
51.00	19720	83.10	604	120.80	119	160.90	430
51.90	890	85.00	168	123.70	201	168.10	316
52.90	594	85.90	524	124.00	201	169.10	126
54.20	667	87.00	12220	124.60	119	170.90	255
54.90	7221	88.00	9141	125.90	170	171.80	127
56.00	4655	91.10	845	126.80	482	173.00	2639
57.00	10670	92.00	6687	127.80	1036	174.00	191040
58.00	1523	93.00	9268	128.70	520	174.90	15623
59.10	54	94.10	24656	129.90	1040	175.90	191488
60.00	2264	95.00	249216	130.90	684	176.90	12356
61.00	12755	96.00	16424	134.80	232	178.00	573
62.10	12169	96.90	570	135.80	106	178.80	131
63.00	7632	97.90	1228	136.90	766	184.80	84
63.90	480	99.10	190	139.00	281	186.10	383
64.80	97	103.00	345	139.70	260	233.80	479
65.20	102	104.00	910	141.00	2169	235.90	99
66.00	76	104.70	559	141.70	243	262.00	154
67.00	1161	105.20	787	143.00	1948		

Data File: \\nahstws005\target\chem\voa6.i\x230721.b\x072101.d Page 1

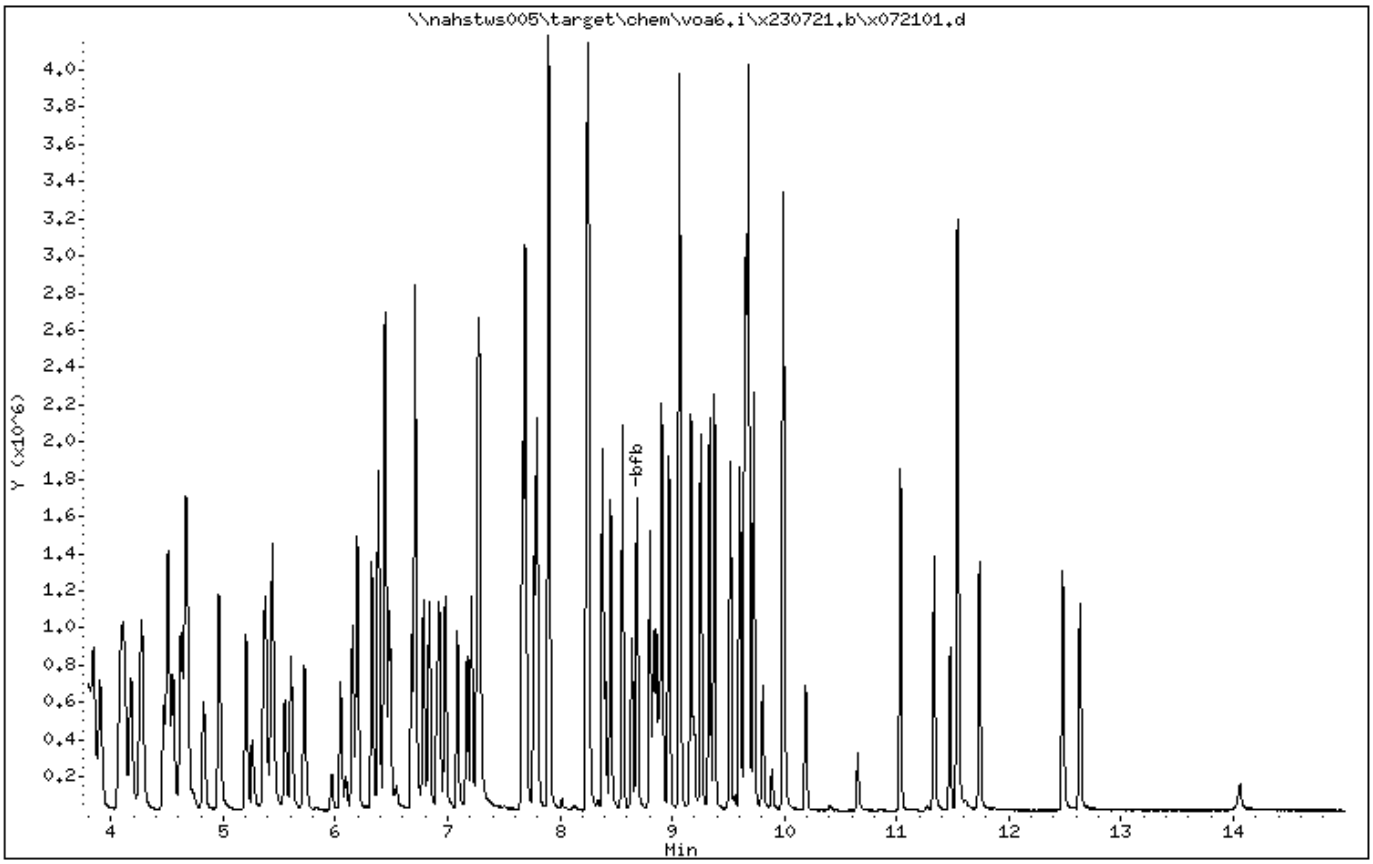
Date : 21-JUL-2023 12:16

Client ID: BFB Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0 Operator: PC

Column phase: DB624 Column diameter: 0.25



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Inj Date : 21-JUL-2023 12:16
InstruID : voa6.i
LabSampID : BFB

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072102.D Page 1
Report Date: 27-Jul-2023 12:58

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072102.D
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 21-JUL-2023 12:36
Operator : PC Inst ID: voa6.i
Smp Info : CCV;CCV;2;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\8260W.m
Meth Date : 27-Jul-2023 12:58 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.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	4.178	4.178	(1.000)	603321	50.0000	
135 1,4-Dioxane	88	5.598	5.598	(1.340)	71815	1000.00	1001.69
140 1,3-Butadiene	54	1.164	1.164	(0.279)	466283	50.0000	60.14
25 Methacrylonitrile	41	3.821	3.821	(0.915)	471169	50.0000	60.50
12 Isobutyl Alcohol	43	4.676	4.676	(1.119)	1368252	1000.00	1196.40
13 Acetonitrile	39	2.198	2.198	(0.526)	431686	500.000	510.25
14 Allyl Chloride	41	2.198	2.198	(0.526)	1026308	50.0000	51.81
4 Propionitrile	54	3.653	3.653	(0.874)	698850	500.000	584.74
72 trans-1,4-Dichloro-2-butene	53	8.886	8.886	(1.159)	153876	50.0000	54.36
130 Ethyl Acetate	43	3.657	3.657	(0.875)	525372	50.0000	58.62
40 Methyl Methacrylate	41	5.606	5.606	(1.342)	424225	50.0000	58.25
49 Ethyl Methacrylate	69	6.712	6.712	(1.352)	304497	50.0000	46.29
2 Dichlorodifluoromethane	85	0.972	0.972	(0.233)	270110	50.0000	43.90
3 Chloromethane	50	1.081	1.081	(0.259)	535653	50.0000	58.78
5 Vinyl Chloride	62	1.145	1.145	(0.274)	447094	50.0000	57.26
6 Bromomethane	94	1.340	1.340	(0.321)	180453	50.0000	55.85
7 Chloroethane	64	1.404	1.404	(0.336)	259526	50.0000	58.23
8 Trichlorofluoromethane	101	1.561	1.561	(0.374)	416534	50.0000	52.64
9 Acrolein	56	1.857	1.857	(0.445)	30241	100.000	132.00(M)
10 Acetone	43	1.973	1.973	(0.472)	283619	100.000	119.73(M)

11 1,1-Dichloroethene	96	1.913	1.913 (0.458)	240393	50.0000	54.38
15 Iodomethane	142	2.030	2.030 (0.486)	500963	100.000	86.78

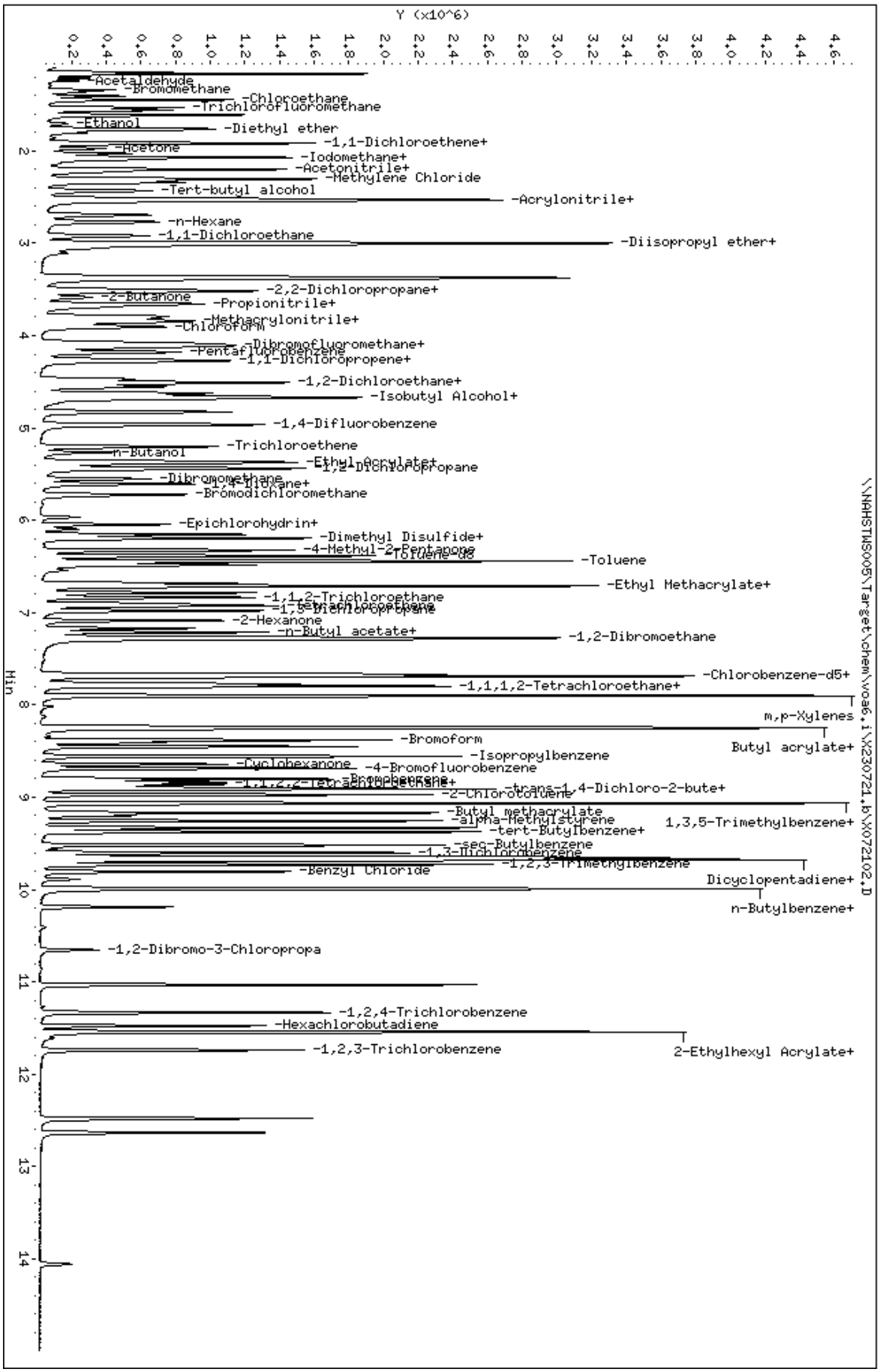
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	16 Acrylonitrile	53	2.532	2.532	(0.606)	344423	100.000	117.15
	17 Methylene Chloride	84	2.303	2.303	(0.551)	224395	50.0000	42.82
	18 Methyl tert-butyl ether	73	2.536	2.536	(0.607)	843578	50.0000	51.31
	19 Carbon Disulfide	76	2.071	2.071	(0.496)	1355064	100.000	97.53
	20 trans-1,2-Dichloroethene	96	2.528	2.528	(0.605)	242876	50.0000	47.50
	21 Vinyl Acetate	43	2.997	2.997	(0.717)	2534046	100.000	119.84(M)
	22 1,1-Dichloroethane	63	2.922	2.922	(0.699)	583230	50.0000	51.98
	24 2-Butanone	43	3.582	3.582	(0.857)	376035	100.000	117.03
	26 2,2-Dichloropropane	77	3.507	3.507	(0.839)	449667	50.0000	51.62
	27 cis-1,2-Dichloroethene	96	3.525	3.525	(0.844)	339898	50.0000	52.18
	28 Chloroform	83	3.904	3.904	(0.935)	559294	50.0000	48.71
	29 Bromochloromethane	128	3.795	3.795	(0.908)	185557	50.0000	50.83
$	30 Dibromofluoromethane	113	4.095	4.095	(0.980)	302579	50.0000	54.79
	31 1,1,1-Trichloroethane	97	4.076	4.076	(0.976)	438887	50.0000	49.66
	32 1,1-Dichloropropene	75	4.279	4.279	(0.862)	381109	50.0000	46.52
	33 1,2-Dichloroethane	62	4.556	4.556	(0.918)	527911	50.0000	47.75
	34 Carbon Tetrachloride	117	4.264	4.264	(0.859)	366748	50.0000	44.44
$	35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	366624	50.0000	53.05
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	1004251	50.0000	
	37 Benzene	78	4.507	4.507	(0.908)	1179400	50.0000	49.09
	38 Trichloroethene	130	5.205	5.205	(1.048)	325585	50.0000	47.91
	39 Bromodichloromethane	83	5.722	5.722	(1.153)	433262	50.0000	47.08
	41 2-Chloroethylvinyl ether	63	6.044	6.044	(1.217)	275484	100.000	98.06
	42 1,2-Dichloropropane	63	5.433	5.433	(1.094)	405213	50.0000	52.46
	44 Dibromomethane	93	5.550	5.550	(1.118)	212367	50.0000	48.57
	45 4-Methyl-2-Pentanone	43	6.326	6.326	(0.825)	953322	100.000	104.09
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	526161	50.0000	49.78
*	47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	930634	50.0000	
$	48 Toluene-d8	98	6.386	6.386	(0.833)	1075571	50.0000	44.88
	50 Toluene	91	6.442	6.442	(0.840)	1225124	50.0000	48.90
	51 trans-1,3-Dichloropropene	75	6.678	6.678	(1.345)	437405	50.0000	49.10
	52 2-Hexanone	43	7.087	7.087	(0.924)	629986	100.000	104.72
	53 1,1,2-Trichloroethane	83	6.835	6.835	(0.891)	254276	50.0000	47.84
	54 1,3-Dichloropropane	76	6.978	6.978	(0.910)	526573	50.0000	48.50
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	377224	50.0000	49.16
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	244478	50.0000	47.23
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	290815	50.0000	47.88
	58 1-Chlorohexane	55	7.694	7.694	(1.550)	382613	50.0000	47.42
	59 Chlorobenzene	112	7.690	7.690	(1.003)	848959	50.0000	48.47
	60 1,1,1,2-Tetrachloroethane	131	7.773	7.773	(1.014)	335198	50.0000	48.89
	61 Ethylbenzene	106	7.799	7.799	(1.017)	417920	50.0000	47.59
	62 m,p-Xylenes	106	7.900	7.900	(1.030)	1091304	100.000	99.06
	63 o-Xylene	106	8.237	8.237	(1.074)	516479	50.0000	49.50
	64 Styrene	104	8.256	8.256	(1.077)	908178	50.0000	49.90
	66 Bromoform	173	8.406	8.406	(1.096)	242019	50.0000	49.16
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	1310903	50.0000	48.88
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	421222	50.0000	50.10
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	470576	50.0000	50.79
*	70 1,4-Dichlorobenzene-d4	152	9.658	9.658	(1.000)	500527	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.918)	311359	50.0000	46.67(M)
	73 n-Propylbenzene	91	8.908	8.908	(0.922)	1574580	50.0000	52.05
	74 Bromobenzene	156	8.803	8.803	(0.912)	377084	50.0000	48.17

75	1,3,5-Trimethylbenzene	105	9.062	9.062 (0.938)	1094912	50.0000	48.32
76	2-Chlorotoluene	91	8.972	8.972 (0.929)	977015	50.0000	47.88

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	
	77 4-Chlorotoluene	91	9.066	9.066	(0.939)	1118088	50.0000	49.86	
	78 tert-Butylbenzene	119	9.332	9.332	(0.966)	942964	50.0000	48.52	
	79 1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	1114316	50.0000	49.04	
	81 sec-Butylbenzene	105	9.519	9.519	(0.986)	1314885	50.0000	50.76	
	82 p-Isopropyltoluene	119	9.647	9.647	(0.999)	1173690	50.0000	49.60	
	83 1,3-Dichlorobenzene	146	9.602	9.602	(0.994)	690591	50.0000	50.64	
	84 1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	726233	50.0000	48.57	
	87 n-Butylbenzene	91	9.992	9.992	(1.035)	1055611	50.0000	53.27	
	88 1,2-Dichlorobenzene	146	9.988	9.988	(1.034)	675137	50.0000	50.35	
	89 1,2-Dibromo-3-Chloropropane	155	10.651	10.651	(1.103)	68773	50.0000	49.77	
	90 1,2,4-Trichlorobenzene	180	11.334	11.334	(1.173)	448979	50.0000	48.75	
	91 Hexachlorobutadiene	225	11.476	11.476	(1.188)	196800	50.0000	46.55	
	92 Naphthalene	128	11.540	11.540	(1.195)	1133186	50.0000	49.72	
	93 1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	410008	50.0000	47.61	
M	94 1,2-Dichloroethylene (total)	96				582774	100.000	(a)	
	141 Cyclohexane	56	4.118	4.118	(0.986)	559901	50.0000	53.53	
	138 Freon TF	101	1.917	1.917	(0.459)	227975	50.0000	59.33	
	147 Methylcyclohexane	55	5.381	5.381	(1.084)	1146687	50.0000	54.09	
	146 Methyl Acetate	43	2.228	2.228	(0.533)	280343	50.0000	52.21	
	148 Tert-Butyl alcohol	59	2.431	2.431	(0.582)	685925	1000.00	900.78	
	149 Isopropyl Alcohol	45	2.093	2.093	(0.501)	507902	1000.00	1074.93	

QC Flag Legend

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



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Client ID: CCV
Sample Info: CCV;CCV;2;;
Purge Volume: 5.0
Column phase: DB624

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

Data File : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072102.D
Inj Date : 21-JUL-2023 12:36
InstruID : voa6.i
LabSampID : CCV

Acrolein (107-02-8)

Reason Code:

BEFORE

MASS
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HEIGHT
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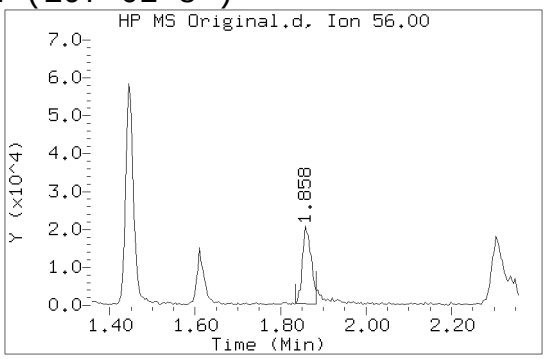
21-Jul-2023
23:10



AFTER

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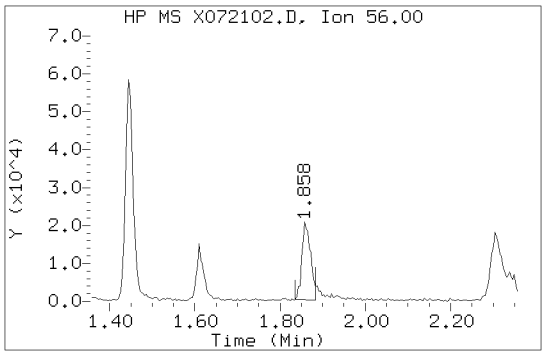

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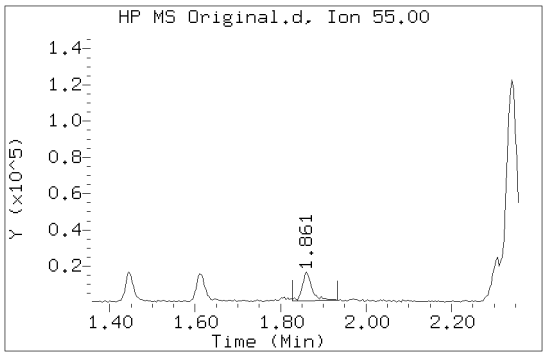
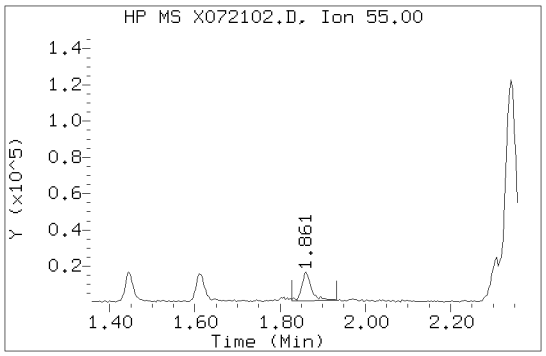
21-Jul-2023
23:10



AFTER

MASS
55
AREA
26214
HEIGHT
15865
27-Jul-2023
12:58



Acetone (67-64-1)

Reason Code:

BEFORE

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HEIGHT
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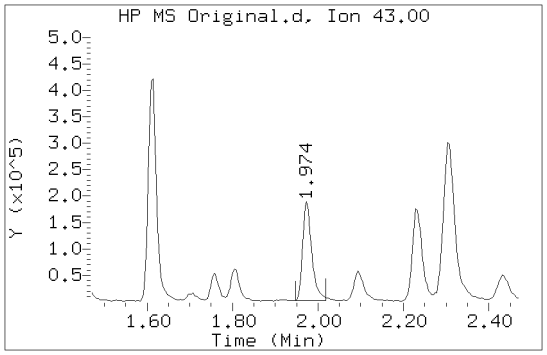
21-Jul-2023
23:10



AFTER

MASS
43
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27-Jul-2023
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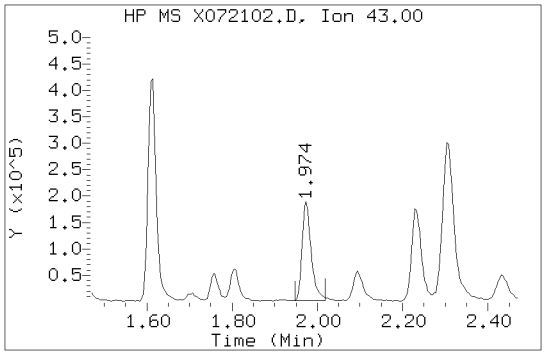

BEFORE

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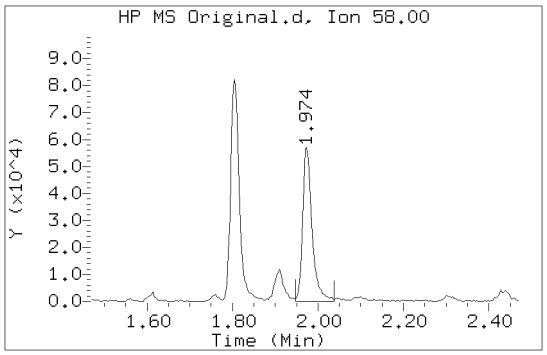
21-Jul-2023
23:10



AFTER

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HEIGHT
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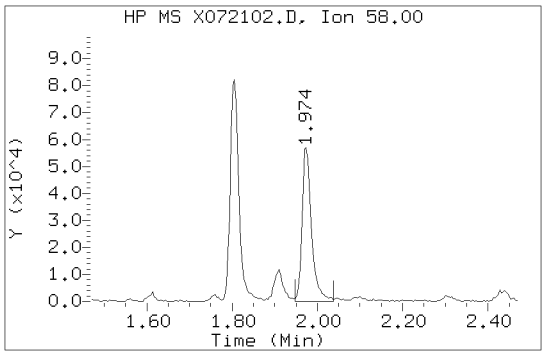
27-Jul-2023
12:58



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Inj Date : 21-JUL-2023 12:36
InstruID : voa6.i
LabSampID : CCV

Vinyl Acetate (108-05-4)

Reason Code:

BEFORE
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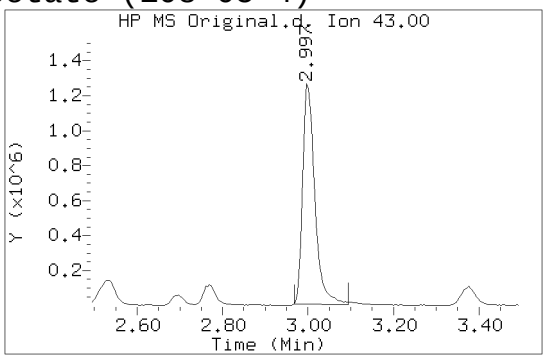
21-Jul-2023
23:10



AFTER
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HEIGHT
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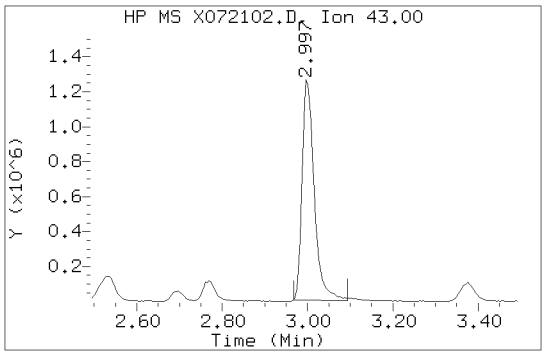
27-Jul-2023
12:58



BEFORE
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HEIGHT
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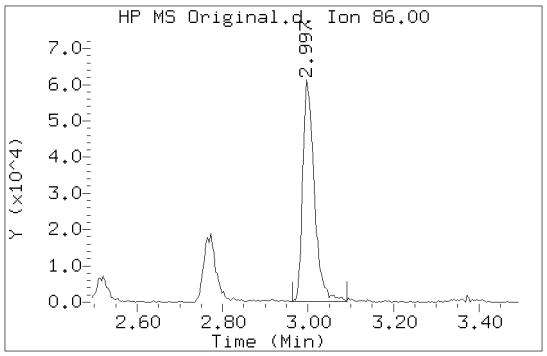
21-Jul-2023
23:10



AFTER
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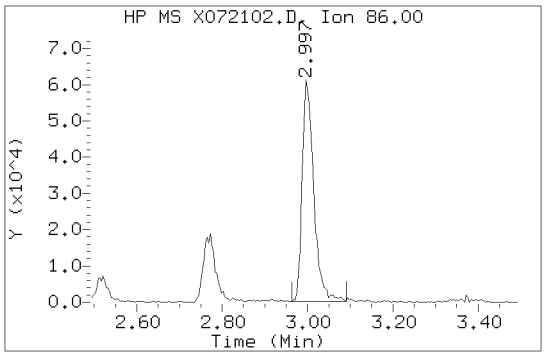
61169
27-Jul-2023
12:58



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

Reason Code:

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HEIGHT
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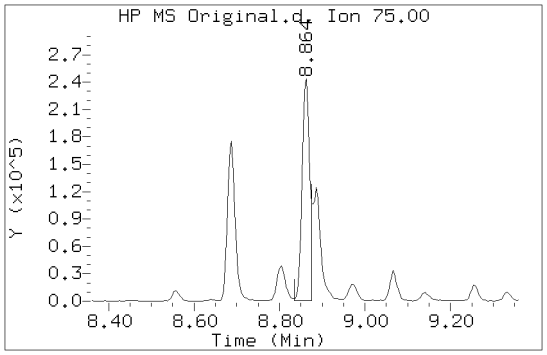
21-Jul-2023
23:10



AFTER
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27-Jul-2023
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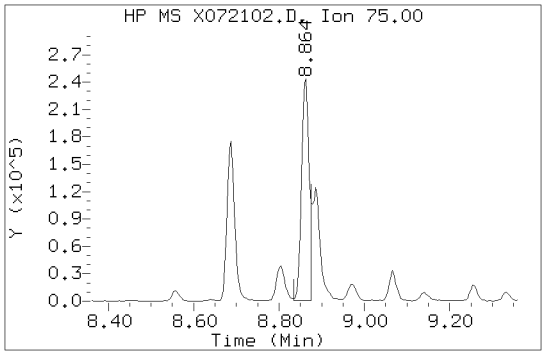

BEFORE
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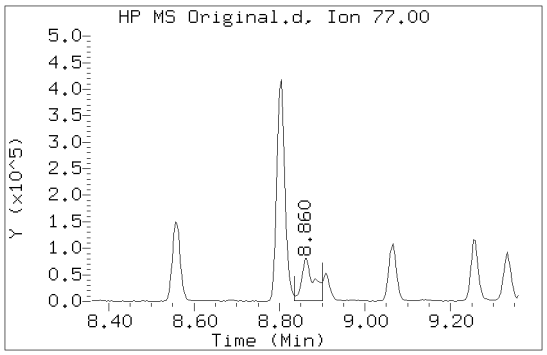
21-Jul-2023
23:10



AFTER
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AREA
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HEIGHT
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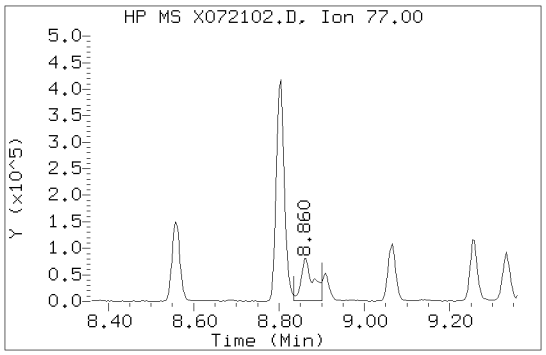
27-Jul-2023
12:58



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072104.D Page 1
Report Date: 27-Jul-2023 12:58

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072104.D
Lab Smp Id: CCB Client Smp ID: CCB
Inj Date : 21-JUL-2023 13:17
Operator : PC Inst ID: voa6.i
Smp Info : CCB;CCB;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\8260W.m
Meth Date : 27-Jul-2023 12:58 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.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	4.177	4.178	(1.000)	622793	50.0000	
$ 30 Dibromofluoromethane	113	4.099	4.095	(0.981)	308623	54.1310	54.13
$ 35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	372675	52.2377	52.23
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	954530	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	855340	50.0000	
$ 48 Toluene-d8	98	6.385	6.386	(0.833)	1118224	50.7767	50.77
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	413403	48.5294	48.52
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.658	(1.000)	434816	50.0000	

01322841

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072104.D

Date : 21-JUL-2023 13:17

Client ID: CCB

Instrument: voa6.i

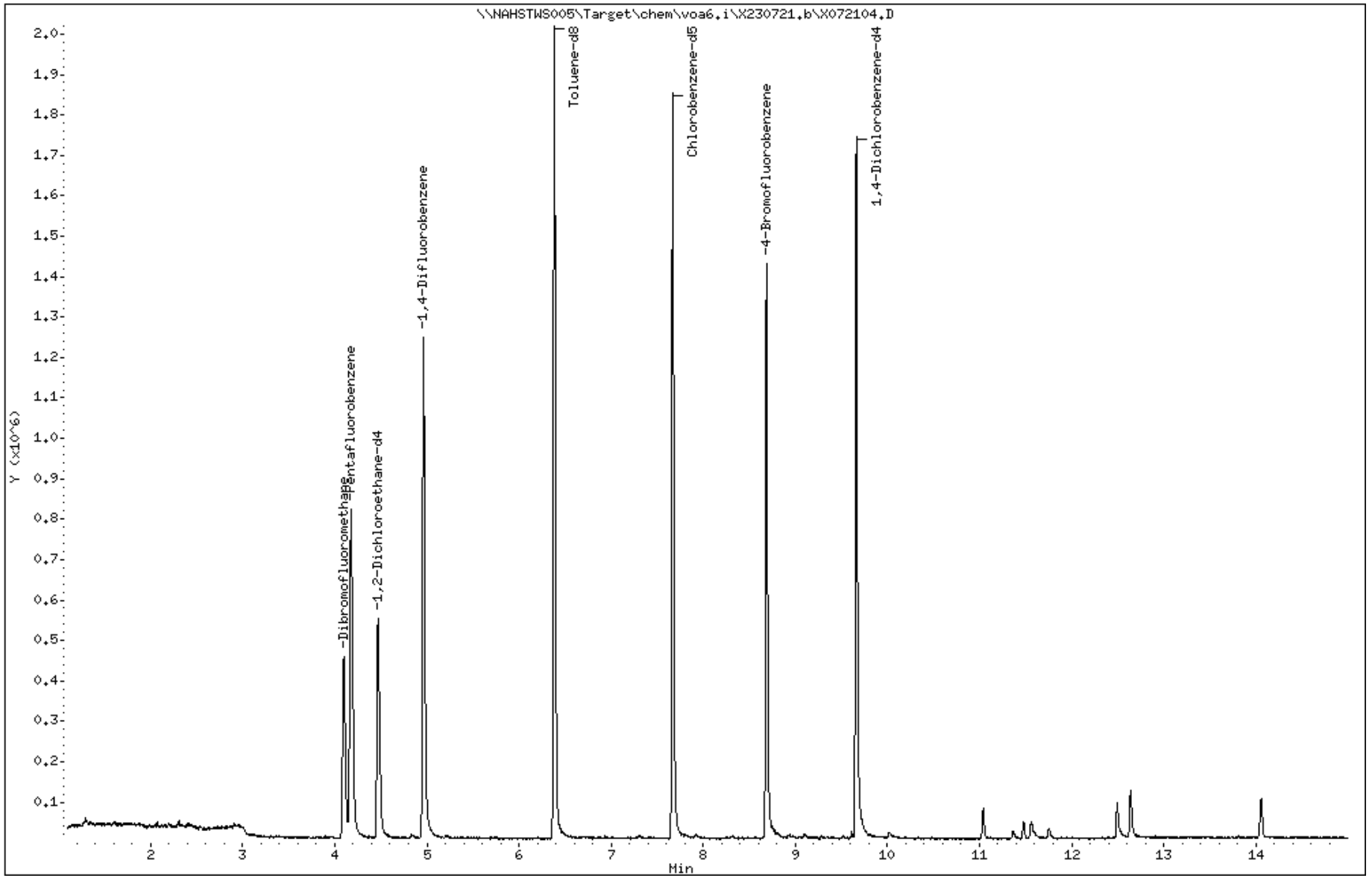
Sample Info: CCB;CCB;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



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Inj Date : 21-JUL-2023 13:17
InstruID : voa6.i
LabSampID : CCB

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072105.D Page 1
Report Date: 27-Jul-2023 12:58

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072105.D
Lab Smp Id: VLCSW-230721 Client Smp ID: VLCSW-230721
Inj Date : 21-JUL-2023 13:38
Operator : PC Inst ID: voa6.i
Smp Info : VLCSW-230721;VLCSW-230721;3;;LCS
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\8260W.m
Meth Date : 27-Jul-2023 12:58 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.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	4.177	4.178	(1.000)	622769	50.0000	
135 1,4-Dioxane	88	5.606	5.598	(1.342)	27467	371.154	371.15(a)
140 1,3-Butadiene	54	1.167	1.164	(0.280)	179634	22.4477	22.44
25 Methacrylonitrile	41	3.833	3.821	(0.917)	174044	21.6512	21.65
12 Isobutyl Alcohol	43	4.680	4.676	(1.120)	539797	457.262	457.26
13 Acetonitrile	39	2.198	2.198	(0.526)	209244	239.604	239.60
14 Allyl Chloride	41	2.198	2.198	(0.526)	530091	25.9256	25.92
4 Propionitrile	54	3.656	3.653	(0.875)	266770	216.243	216.24(a)
72 trans-1,4-Dichloro-2-butene	53	8.889	8.886	(1.159)	57076	20.6520	20.65
130 Ethyl Acetate	43	3.664	3.657	(0.877)	195290	21.1126	21.11
40 Methyl Methacrylate	41	5.609	5.606	(1.343)	164898	21.9381	21.93
49 Ethyl Methacrylate	69	6.712	6.712	(1.352)	120544	18.5941	18.59
2 Dichlorodifluoromethane	85	0.976	0.972	(0.234)	106052	17.3777	17.37
3 Chloromethane	50	1.081	1.081	(0.259)	197704	21.0181	21.01
5 Vinyl Chloride	62	1.145	1.145	(0.274)	171615	21.2951	21.29
6 Bromomethane	94	1.343	1.340	(0.322)	68651	20.5852	20.58
7 Chloroethane	64	1.407	1.404	(0.337)	104436	22.7007	22.70
8 Trichlorofluoromethane	101	1.561	1.561	(0.374)	162216	19.8623	19.86
9 Acrolein	56	1.865	1.857	(0.446)	12911	55.2595	55.25
10 Acetone	43	1.973	1.973	(0.472)	159480	62.9992	62.99

11 1,1-Dichloroethene	96	1.917	1.913 (0.459)	95726	20.9812	20.98
15 Iodomethane	142	2.029	2.030 (0.486)	187903	34.4048	34.40

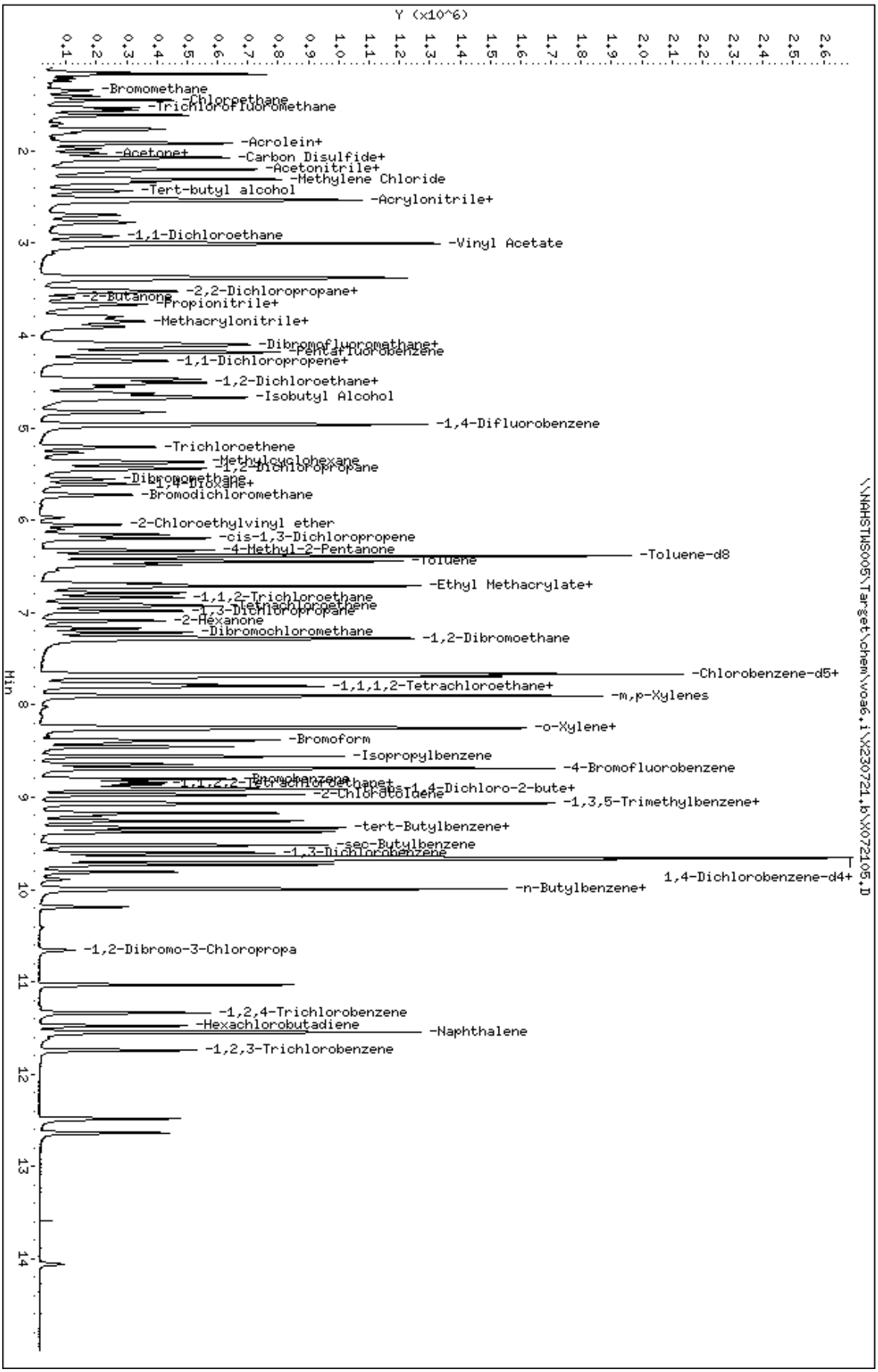
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	16 Acrylonitrile	53	2.536	2.532	(0.607)	140149	46.1812	46.18
	17 Methylene Chloride	84	2.307	2.303	(0.552)	110091	19.6147	19.61
	18 Methyl tert-butyl ether	73	2.536	2.536	(0.607)	322817	19.0246	19.02
	19 Carbon Disulfide	76	2.071	2.071	(0.496)	618240	43.1082	43.10
	20 trans-1,2-Dichloroethene	96	2.528	2.528	(0.605)	98566	18.6767	18.67
	21 Vinyl Acetate	43	3.000	2.997	(0.718)	968656	44.3807	44.38
	22 1,1-Dichloroethane	63	2.922	2.922	(0.699)	231145	19.9589	19.95
	24 2-Butanone	43	3.589	3.582	(0.859)	138533	41.7711	41.77
	26 2,2-Dichloropropane	77	3.510	3.507	(0.840)	167671	18.7811	18.78
	27 cis-1,2-Dichloroethene	96	3.525	3.525	(0.844)	128928	19.1770	19.17
	28 Chloroform	83	3.908	3.904	(0.935)	215914	18.2208	18.22
	29 Bromochloromethane	128	3.791	3.795	(0.908)	68582	18.2024	18.20
$	30 Dibromofluoromethane	113	4.099	4.095	(0.981)	297347	52.1274	52.12
	31 1,1,1-Trichloroethane	97	4.080	4.076	(0.977)	172061	18.8623	18.86
	32 1,1-Dichloropropene	75	4.279	4.279	(0.862)	148068	18.3383	18.33
	33 1,2-Dichloroethane	62	4.556	4.556	(0.918)	198732	18.2378	18.23
	34 Carbon Tetrachloride	117	4.264	4.264	(0.859)	143510	17.6423	17.64
$	35 1,2-Dichloroethane-d4	65	4.474	4.470	(1.071)	359875	50.4241	50.42
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	989887	50.0000	
	37 Benzene	78	4.511	4.507	(0.909)	458387	19.3596	19.35
	38 Trichloroethene	130	5.205	5.205	(1.048)	124497	18.5891	18.58
	39 Bromodichloromethane	83	5.726	5.722	(1.153)	164811	18.1724	18.17
	41 2-Chloroethylvinyl ether	63	6.048	6.044	(1.218)	103953	37.5410	37.54
	42 1,2-Dichloropropane	63	5.437	5.433	(1.095)	155690	20.4489	20.44
	44 Dibromomethane	93	5.553	5.550	(1.119)	80161	18.5999	18.59
	45 4-Methyl-2-Pentanone	43	6.325	6.326	(0.825)	372693	41.6787	41.67
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	193751	18.5999	18.59
*	47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	908700	50.0000	
$	48 Toluene-d8	98	6.385	6.386	(0.833)	1072019	45.8201	45.82
	50 Toluene	91	6.445	6.442	(0.841)	488395	19.9664	19.96
	51 trans-1,3-Dichloropropene	75	6.682	6.678	(1.346)	160080	18.2302	18.23
	52 2-Hexanone	43	7.086	7.087	(0.924)	253098	43.0876	43.08
	53 1,1,2-Trichloroethane	83	6.839	6.835	(0.892)	101938	19.6451	19.64
	54 1,3-Dichloropropane	76	6.981	6.978	(0.911)	201394	18.9976	18.99
	55 Dibromochloromethane	129	7.176	7.173	(0.936)	141848	18.9357	18.93
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	97441	19.2818	19.28
	57 1,2-Dibromoethane	107	7.263	7.259	(0.947)	113384	19.1217	19.12
	58 1-Chlorohexane	55	7.694	7.694	(1.550)	162165	20.3919	20.39
	59 Chlorobenzene	112	7.690	7.690	(1.003)	327970	19.1808	19.18
	60 1,1,1,2-Tetrachloroethane	131	7.772	7.773	(1.014)	129430	19.3352	19.33
	61 Ethylbenzene	106	7.799	7.799	(1.017)	165267	19.2747	19.27
	62 m,p-Xylenes	106	7.900	7.900	(1.030)	423964	39.4136	39.41
	63 o-Xylene	106	8.241	8.237	(1.075)	208377	20.4564	20.45
	64 Styrene	104	8.260	8.256	(1.077)	354416	19.9467	19.94
	66 Bromoform	173	8.410	8.406	(1.097)	92778	19.3036	19.30
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	528345	20.1785	20.17
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	159755	19.7275	19.72
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	457475	50.5674	50.56
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.658	(1.000)	482129	50.0000	
	71 1,2,3-Trichloropropane	75	8.860	8.863	(0.917)	132672	20.6457	20.64
	73 n-Propylbenzene	91	8.908	8.908	(0.922)	613089	21.0432	21.04
	74 Bromobenzene	156	8.803	8.803	(0.911)	148591	19.7061	19.70

75	1,3,5-Trimethylbenzene	105	9.066	9.062 (0.938)	422082	19.3385	19.33
76	2-Chlorotoluene	91	8.972	8.972 (0.929)	391325	19.9111	19.91

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	77 4-Chlorotoluene	91	9.069	9.066	(0.939)	437922	20.2772	20.27
	78 tert-Butylbenzene	119	9.332	9.332	(0.966)	379439	20.2722	20.27
	79 1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	426034	19.4650	19.46
	81 sec-Butylbenzene	105	9.519	9.519	(0.985)	534157	21.4102	21.41
	82 p-Isopropyltoluene	119	9.647	9.647	(0.998)	456431	20.0275	20.02
	83 1,3-Dichlorobenzene	146	9.605	9.602	(0.994)	263678	20.0733	20.07
	84 1,4-Dichlorobenzene	146	9.680	9.681	(1.002)	273053	18.9590	18.95
	87 n-Butylbenzene	91	9.992	9.992	(1.034)	398293	20.8669	20.86
	88 1,2-Dichlorobenzene	146	9.992	9.988	(1.034)	259542	20.0975	20.09
	89 1,2-Dibromo-3-Chloropropane	155	10.651	10.651	(1.102)	24911	19.3949	19.39
	90 1,2,4-Trichlorobenzene	180	11.337	11.334	(1.173)	151605	17.0923	17.09
	91 Hexachlorobutadiene	225	11.476	11.476	(1.188)	75381	19.9294	19.92
	92 Naphthalene	128	11.544	11.540	(1.195)	379157	17.2710	17.27
	93 1,2,3-Trichlorobenzene	180	11.742	11.739	(1.215)	143944	17.3527	17.35
M	94 1,2-Dichloroethylene (total)	96				227494	37.8537	37.85
M	95 Xylenes (total)	106				632341	59.8700	59.87
	141 Cyclohexane	56	4.117	4.118	(0.986)	224153	20.7648	20.76
	138 Freon TF	101	1.917	1.917	(0.459)	93436	25.8209	25.82
	147 Methylcyclohexane	55	5.385	5.381	(1.085)	432737	20.7113	20.71
	146 Methyl Acetate	43	2.232	2.228	(0.534)	148976	26.8788	26.87
	148 Tert-Butyl alcohol	59	2.434	2.431	(0.583)	303242	385.795	385.79
	149 Isopropyl Alcohol	45	2.093	2.093	(0.501)	231628	474.912	474.91

QC Flag Legend

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



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Date : 21-JUL-2023 13:38
Client ID: VLCSW-230721
Sample Info: VLCSW-230721;VLCSW-230721;3;;LCS
Purge Volume: 5.0
Column phase: DB624

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

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InstruID : voa6.i
LabSampID : VLCSW-230721

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072107.D Page 1
Report Date: 27-Jul-2023 12:58

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072107.D
Lab Smp Id: VBLKW-230721 Client Smp ID: VBLKW-230721
Inj Date : 21-JUL-2023 14:19
Operator : PC Inst ID: voa6.i
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Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\8260W.m
Meth Date : 27-Jul-2023 12:58 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.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	4.178	4.178	(1.000)	632804	50.0000	
$ 30 Dibromofluoromethane	113	4.099	4.095	(0.981)	314494	54.2903	54.29
$ 35 1,2-Dichloroethane-d4	65	4.474	4.470	(1.071)	395054	54.5255	54.52
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	969596	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	851711	50.0000	
$ 48 Toluene-d8	98	6.385	6.386	(0.833)	1129033	51.4860	51.48
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	397905	46.8948	46.89
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.658	(1.000)	411177	50.0000	

01322851

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072107.D

Page 1

Date : 21-JUL-2023 14:19

Client ID: VBLKW-230721

Instrument: voa6.i

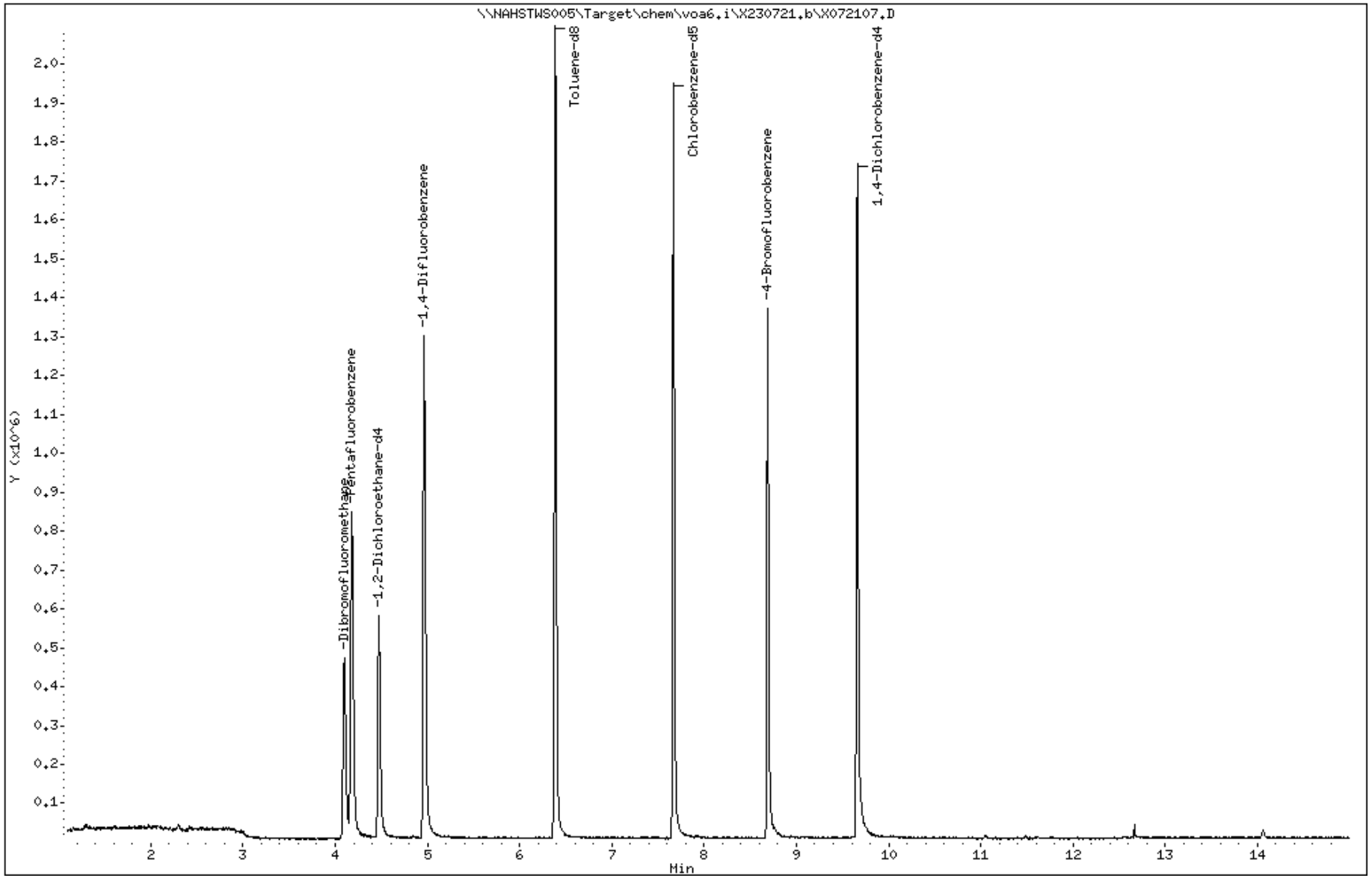
Sample Info: VBLKW-230721;VBLKW-230721;3;;BLANK

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



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LabSampID : VBLKW-230721

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072113.D Page 1
Report Date: 27-Jul-2023 12:59

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Data file : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072113.D
Lab Smp Id: HS23071109-01MS Client Smp ID: HS23071109-01MS
Inj Date : 21-JUL-2023 16:22
Operator : PC Inst ID: voa6.i
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Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\8260W.m
Meth Date : 27-Jul-2023 12:58 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 12 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	4.181	4.178	(1.000)	608243	50.0000	
135 1,4-Dioxane	88	5.602	5.598	(1.340)	30066	415.977	415.97(a)
140 1,3-Butadiene	54	1.167	1.164	(0.279)	211396	27.0476	27.04
25 Methacrylonitrile	41	3.833	3.821	(0.917)	208836	26.5998	26.59
12 Isobutyl Alcohol	43	4.680	4.676	(1.119)	596844	517.660	517.66
13 Acetonitrile	39	2.198	2.198	(0.526)	245188	287.468	287.46
14 Allyl Chloride	41	2.202	2.198	(0.527)	576633	28.8754	28.87
4 Propionitrile	54	3.660	3.653	(0.875)	294754	244.633	244.63(a)
72 trans-1,4-Dichloro-2-butene	53	8.890	8.886	(1.159)	59754	24.7639	24.76
130 Ethyl Acetate	43	3.664	3.657	(0.876)	230565	25.5214	25.52
40 Methyl Methacrylate	41	5.610	5.606	(1.342)	162424	22.1251	22.12
49 Ethyl Methacrylate	69	6.712	6.712	(1.352)	125352	20.7734	20.77
2 Dichlorodifluoromethane	85	0.976	0.972	(0.234)	102000	17.1296	17.12
3 Chloromethane	50	1.081	1.081	(0.259)	204016	22.2072	22.20
5 Vinyl Chloride	62	1.145	1.145	(0.274)	205319	26.0857	26.08
6 Bromomethane	94	1.340	1.340	(0.321)	69740	21.4111	21.41
7 Chloroethane	64	1.404	1.404	(0.336)	114935	25.5795	25.57
8 Trichlorofluoromethane	101	1.565	1.561	(0.374)	202121	25.3394	25.33
9 Acrolein	56	1.861	1.857	(0.445)	17913	78.0245	78.02
10 Acetone	43	1.977	1.973	(0.473)	109733	42.9381	42.93

11 1,1-Dichloroethene	96	1.917	1.913 (0.459)	115516	25.9234	25.92
15 Iodomethane	142	2.030	2.030 (0.485)	217096	39.9481	39.94

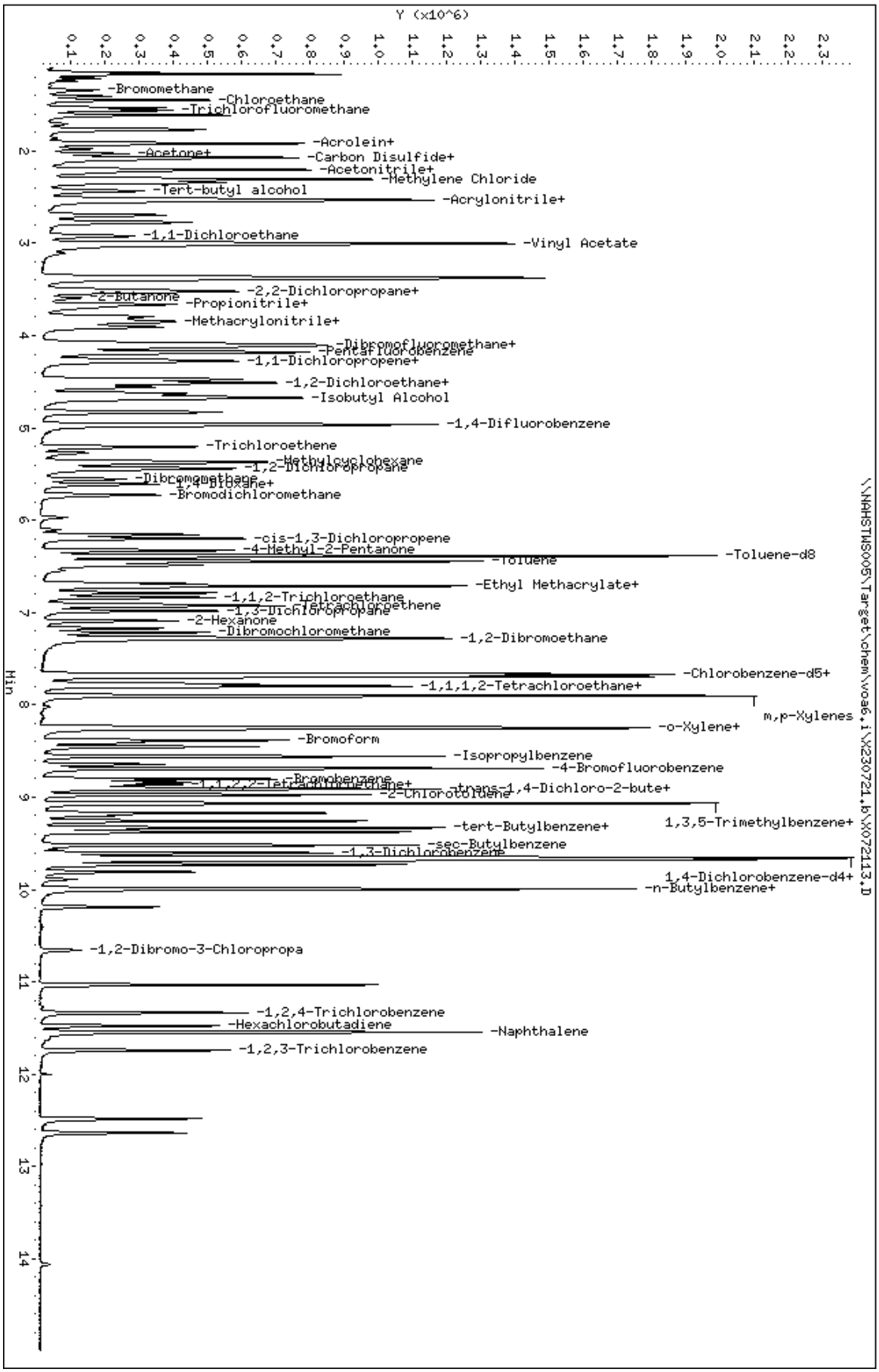
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
16	Acrylonitrile	53	2.532	2.532	(0.606)	139228	46.9733	46.97
17	Methylene Chloride	84	2.303	2.303	(0.551)	129561	23.9241	23.92
18	Methyl tert-butyl ether	73	2.536	2.536	(0.606)	318857	19.2400	19.23
19	Carbon Disulfide	76	2.071	2.071	(0.495)	761593	54.3720	54.37
20	trans-1,2-Dichloroethene	96	2.528	2.528	(0.605)	111210	21.5758	21.57
21	Vinyl Acetate	43	3.000	2.997	(0.718)	1033929	48.5026	48.50
22	1,1-Dichloroethane	63	2.922	2.922	(0.699)	262076	23.1701	23.17
24	2-Butanone	43	3.589	3.582	(0.858)	144523	44.6179	44.61
26	2,2-Dichloropropane	77	3.507	3.507	(0.839)	209906	24.0148	24.01
27	cis-1,2-Dichloroethene	96	3.529	3.525	(0.844)	155633	23.7020	23.70
28	Chloroform	83	3.908	3.904	(0.935)	258163	22.3064	22.30
29	Bromochloromethane	128	3.791	3.795	(0.907)	78284	21.2736	21.27
$ 30	Dibromofluoromethane	113	4.095	4.095	(0.979)	309191	55.5476	55.54
31	1,1,1-Trichloroethane	97	4.080	4.076	(0.976)	225663	25.3292	25.32
32	1,1-Dichloropropene	75	4.279	4.279	(0.862)	197653	26.2994	26.29
33	1,2-Dichloroethane	62	4.556	4.556	(0.918)	231280	22.8028	22.80
34	Carbon Tetrachloride	117	4.264	4.264	(0.859)	185869	24.5486	24.54
$ 35	1,2-Dichloroethane-d4	65	4.470	4.470	(1.069)	396244	56.9252	56.92
* 36	1,4-Difluorobenzene	114	4.965	4.965	(1.000)	921382	50.0000	
37	Benzene	78	4.515	4.507	(0.909)	565015	25.6372	25.63
38	Trichloroethene	130	5.201	5.205	(1.048)	152902	24.5278	24.52
39	Bromodichloromethane	83	5.726	5.722	(1.153)	180619	21.3961	21.39
42	1,2-Dichloropropane	63	5.437	5.433	(1.095)	170821	24.1044	24.10
44	Dibromomethane	93	5.553	5.550	(1.119)	86650	21.6005	21.60
45	4-Methyl-2-Pentanone	43	6.326	6.326	(0.825)	373864	47.8873	47.88
46	cis-1,3-Dichloropropene	75	6.157	6.153	(1.240)	209848	21.6430	21.64
* 47	Chlorobenzene-d5	117	7.668	7.668	(1.000)	793372	50.0000	
$ 48	Toluene-d8	98	6.385	6.386	(0.833)	1071250	52.4431	52.44
50	Toluene	91	6.445	6.442	(0.841)	541847	25.3716	25.37
51	trans-1,3-Dichloropropene	75	6.682	6.678	(1.346)	175841	21.5140	21.51
52	2-Hexanone	43	7.090	7.087	(0.925)	243681	47.5147	47.51
53	1,1,2-Trichloroethane	83	6.839	6.835	(0.892)	105692	23.3294	23.32
54	1,3-Dichloropropane	76	6.982	6.978	(0.911)	208916	22.5719	22.57
55	Dibromochloromethane	129	7.173	7.173	(0.935)	150866	23.0671	23.06
56	Tetrachloroethene	164	6.925	6.925	(0.903)	115930	26.2752	26.27
57	1,2-Dibromoethane	107	7.259	7.259	(0.947)	117789	22.7522	22.75
58	1-Chlorohexane	55	7.694	7.694	(1.550)	199295	26.9242	26.92
59	Chlorobenzene	112	7.690	7.690	(1.003)	365988	24.5157	24.51
60	1,1,1,2-Tetrachloroethane	131	7.772	7.773	(1.014)	140743	24.0815	24.08
61	Ethylbenzene	106	7.799	7.799	(1.017)	194214	25.9433	25.94
62	m,p-Xylenes	106	7.900	7.900	(1.030)	486094	51.7585	51.75
63	o-Xylene	106	8.241	8.237	(1.075)	232804	26.1766	26.17
64	Styrene	104	8.256	8.256	(1.077)	387990	25.0105	25.01
66	Bromoform	173	8.406	8.406	(1.096)	94409	22.4984	22.49
67	Isopropylbenzene	105	8.560	8.560	(1.116)	616350	26.9614	26.96
68	1,1,2,2-Tetrachloroethane	83	8.833	8.837	(0.914)	167244	23.0113	23.01
$ 69	4-Bromofluorobenzene	95	8.687	8.687	(1.133)	390235	49.3954	49.39
* 70	1,4-Dichlorobenzene-d4	152	9.662	9.658	(1.000)	432702	50.0000	
71	1,2,3-Trichloropropane	75	8.860	8.863	(0.917)	128128	22.2161	22.21(M)
73	n-Propylbenzene	91	8.908	8.908	(0.922)	716154	27.3886	27.38
74	Bromobenzene	156	8.803	8.803	(0.911)	160457	23.7106	23.71
75	1,3,5-Trimethylbenzene	105	9.066	9.062	(0.938)	486005	24.8109	24.81

76	2-Chlorotoluene	91	8.972	8.972 (0.929)	438494	24.8597	24.85
77	4-Chlorotoluene	91	9.070	9.066 (0.939)	492926	25.4312	25.43

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	78 tert-Butylbenzene	119	9.332	9.332	(0.966)	441181	26.2633	26.26
	79 1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	483805	24.6295	24.62
	81 sec-Butylbenzene	105	9.519	9.519	(0.985)	629149	28.0982	28.09
	82 p-Isopropyltoluene	119	9.647	9.647	(0.998)	533597	26.0879	26.08
	83 1,3-Dichlorobenzene	146	9.606	9.602	(0.994)	283478	24.0457	24.04
	84 1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	304194	23.5339	23.53
	87 n-Butylbenzene	91	9.992	9.992	(1.034)	473573	27.6450	27.64
	88 1,2-Dichlorobenzene	146	9.992	9.988	(1.034)	280380	24.1911	24.19
	89 1,2-Dibromo-3-Chloropropane	155	10.659	10.651	(1.103)	25751	22.1739	22.17
	90 1,2,4-Trichlorobenzene	180	11.337	11.334	(1.173)	160623	20.1775	20.17
	91 Hexachlorobutadiene	225	11.476	11.476	(1.188)	82574	23.8056	23.80
	92 Naphthalene	128	11.540	11.540	(1.194)	397394	20.1694	20.16
	93 1,2,3-Trichlorobenzene	180	11.742	11.739	(1.215)	155183	20.8445	20.84
M	94 1,2-Dichloroethylene (total)	96				266843	45.2778	45.27
M	95 Xylenes (total)	106				718898	77.9351	77.93
	141 Cyclohexane	56	4.118	4.118	(0.985)	353181	33.4989	33.49
	138 Freon TF	101	1.921	1.917	(0.459)	119829	33.4058	33.40
	147 Methylcyclohexane	55	5.381	5.381	(1.084)	494801	25.4425	25.44
	146 Methyl Acetate	43	2.232	2.228	(0.534)	159111	29.3930	29.39
	148 Tert-Butyl alcohol	59	2.434	2.431	(0.582)	309170	402.730	402.73
	149 Isopropyl Alcohol	45	2.097	2.093	(0.502)	249746	524.289	524.28

QC Flag Legend

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



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Sample Info: HS230711O9-01HS,HS230711O9-01HS,3,,MS
Purge Volume: 5.0
Column phase: DB624

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

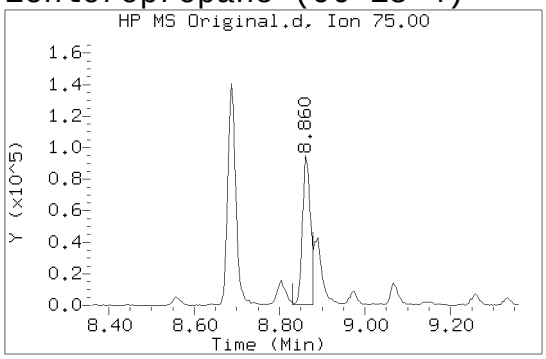
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072113.D
Inj Date : 21-JUL-2023 16:22
InstruID : voa6.i
LabSampID : HS23071109-01MS

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

Reason Code:

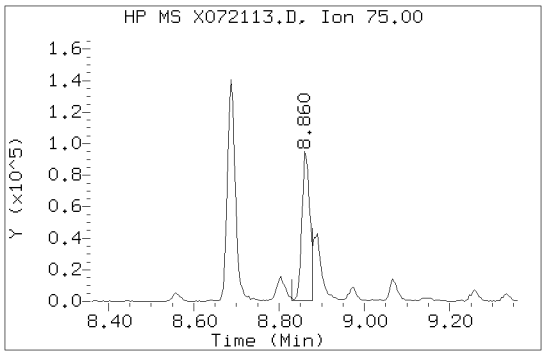
BEFORE

MASS
75
AREA
128128
HEIGHT
94754
21-Jul-2023
23:10



AFTER

MASS
75
AREA
128128
HEIGHT
94754
27-Jul-2023
12:58



BEFORE

MASS
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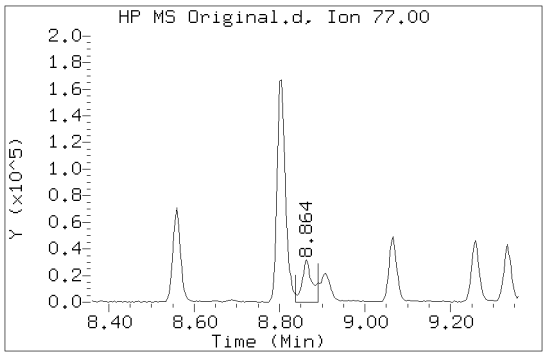
21-Jul-2023
23:10



AFTER

MASS
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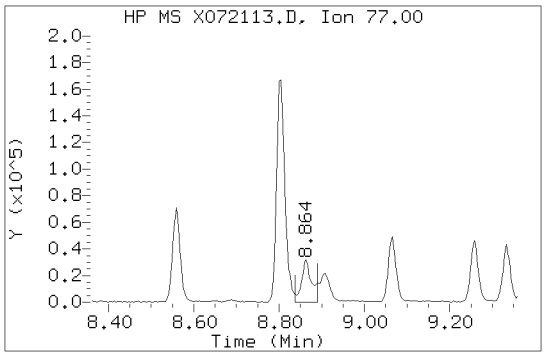
AREA
54146
HEIGHT
31794
27-Jul-2023
12:58



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072114.D Page 1
Report Date: 27-Jul-2023 12:59

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072114.D
Lab Smp Id: HS23071109-01MSD Client Smp ID: HS23071109-01MSD
Inj Date : 21-JUL-2023 16:42
Operator : PC Inst ID: voa6.i
Smp Info : HS23071109-01MSD;HS23071109-01MSD;3;;MSD
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\8260W.m
Meth Date : 27-Jul-2023 12:58 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 12 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.178	4.178	(1.000)	605716	50.0000	
135 1,4-Dioxane	88	5.602	5.598	(1.341)	29999	416.781	416.78(a)
140 1,3-Butadiene	54	1.167	1.164	(0.280)	200260	25.7297	25.72
25 Methacrylonitrile	41	3.833	3.821	(0.917)	203097	25.9768	25.97
12 Isobutyl Alcohol	43	4.680	4.676	(1.120)	587392	511.588	511.58
13 Acetonitrile	39	2.202	2.198	(0.527)	198800	234.054	234.05
14 Allyl Chloride	41	2.202	2.198	(0.527)	461283	23.1955	23.19
4 Propionitrile	54	3.657	3.653	(0.875)	241270	201.079	201.07(a)
72 trans-1,4-Dichloro-2-butene	53	8.890	8.886	(1.159)	65642	25.3985	25.39
130 Ethyl Acetate	43	3.668	3.657	(0.878)	199372	22.1607	22.16
40 Methyl Methacrylate	41	5.610	5.606	(1.343)	184017	25.1710	25.17
49 Ethyl Methacrylate	69	6.712	6.712	(1.352)	125671	19.7091	19.70
2 Dichlorodifluoromethane	85	0.976	0.972	(0.234)	96485	16.3259	16.32
3 Chloromethane	50	1.081	1.081	(0.259)	208381	22.7769	22.77
5 Vinyl Chloride	62	1.149	1.145	(0.275)	194662	24.8349	24.83
6 Bromomethane	94	1.344	1.340	(0.322)	73255	22.5841	22.58
7 Chloroethane	64	1.407	1.404	(0.337)	108146	24.1690	24.16
8 Trichlorofluoromethane	101	1.565	1.561	(0.375)	206653	26.0156	26.01
9 Acrolein	56	1.865	1.857	(0.446)	15460	67.7713	67.77
10 Acetone	43	1.977	1.973	(0.473)	97417	37.7473	37.74

11 1,1-Dichloroethene	96	1.917	1.913 (0.459)	108648	24.4839	24.48
15 Iodomethane	142	2.033	2.030 (0.487)	197734	36.8898	36.88

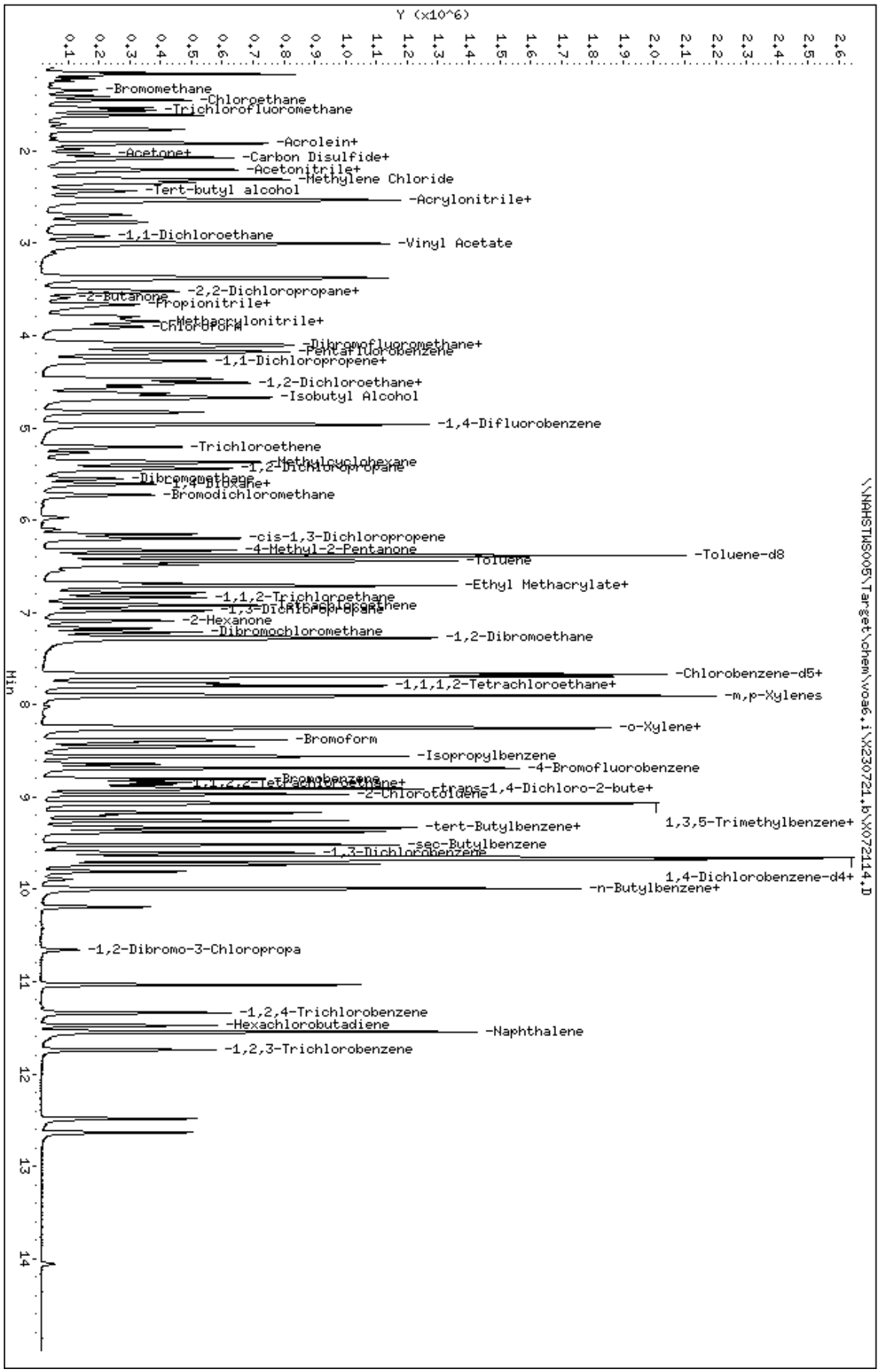
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
	16 Acrylonitrile	53	2.536	2.532	(0.607)	143200	48.5150	48.51
	17 Methylene Chloride	84	2.307	2.303	(0.552)	107888	19.7741	19.77
	18 Methyl tert-butyl ether	73	2.536	2.536	(0.607)	337476	20.4484	20.44
	19 Carbon Disulfide	76	2.075	2.071	(0.497)	623252	44.6811	44.68
	20 trans-1,2-Dichloroethene	96	2.532	2.528	(0.606)	107582	20.9590	20.95
	21 Vinyl Acetate	43	3.001	2.997	(0.718)	818429	38.5534	38.55
	22 1,1-Dichloroethane	63	2.922	2.922	(0.699)	203292	18.0480	18.04
	24 2-Butanone	43	3.593	3.582	(0.860)	117636	36.4687	36.46
	26 2,2-Dichloropropane	77	3.507	3.507	(0.839)	165496	19.0563	19.05
	27 cis-1,2-Dichloroethene	96	3.525	3.525	(0.844)	118409	18.1082	18.10
	28 Chloroform	83	3.908	3.904	(0.935)	245658	21.3145	21.31
	29 Bromochloromethane	128	3.799	3.795	(0.909)	77379	21.1154	21.11
$	30 Dibromofluoromethane	113	4.099	4.095	(0.981)	305366	55.0830	55.08
	31 1,1,1-Trichloroethane	97	4.080	4.076	(0.977)	207893	23.4320	23.43
	32 1,1-Dichloropropene	75	4.279	4.279	(0.862)	188127	23.6891	23.68
	33 1,2-Dichloroethane	62	4.560	4.556	(0.918)	231089	21.5618	21.56
	34 Carbon Tetrachloride	117	4.264	4.264	(0.859)	178954	22.3675	22.36
$	35 1,2-Dichloroethane-d4	65	4.474	4.470	(1.071)	391419	56.4616	56.46
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	973608	50.0000	
	37 Benzene	78	4.511	4.507	(0.909)	531203	22.8101	22.81
	38 Trichloroethene	130	5.205	5.205	(1.048)	150829	22.8974	22.89
	39 Bromodichloromethane	83	5.726	5.722	(1.153)	184336	20.6651	20.66
	42 1,2-Dichloropropane	63	5.433	5.433	(1.094)	179119	23.9195	23.91
	44 Dibromomethane	93	5.550	5.550	(1.118)	90885	21.4409	21.44
	45 4-Methyl-2-Pentanone	43	6.326	6.326	(0.825)	420958	50.3407	50.34
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	217694	21.2478	21.24
*	47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	849774	50.0000	
$	48 Toluene-d8	98	6.386	6.386	(0.833)	1139165	52.0664	52.06
	50 Toluene	91	6.446	6.442	(0.841)	551697	24.1182	24.11
	51 trans-1,3-Dichloropropene	75	6.682	6.678	(1.346)	177816	20.5886	20.58
	52 2-Hexanone	43	7.090	7.087	(0.925)	271124	49.3569	49.35
	53 1,1,2-Trichloroethane	83	6.835	6.835	(0.891)	110246	22.7195	22.71
	54 1,3-Dichloropropane	76	6.982	6.978	(0.911)	223085	22.5030	22.50
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	150677	21.5091	21.50
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	114008	24.1245	24.12
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	120880	21.7995	21.79
	58 1-Chlorohexane	55	7.694	7.694	(1.550)	210924	26.9667	26.96
	59 Chlorobenzene	112	7.690	7.690	(1.003)	367079	22.9567	22.95
	60 1,1,1,2-Tetrachloroethane	131	7.773	7.773	(1.014)	141540	22.6105	22.61
	61 Ethylbenzene	106	7.799	7.799	(1.017)	196818	24.5461	24.54
	62 m,p-Xylenes	106	7.900	7.900	(1.030)	494393	49.1481	49.14
	63 o-Xylene	106	8.237	8.237	(1.074)	231676	24.3208	24.32
	64 Styrene	104	8.256	8.256	(1.077)	395902	23.8266	23.82
	66 Bromoform	173	8.406	8.406	(1.096)	93127	20.7198	20.71
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	613426	25.0525	25.05
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	171798	22.9073	22.90
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	421683	49.8371	49.83
*	70 1,4-Dichlorobenzene-d4	152	9.658	9.658	(1.000)	446503	50.0000	
	71 1,2,3-Trichloropropane	75	8.860	8.863	(0.917)	131111	22.0307	22.03(M)
	73 n-Propylbenzene	91	8.908	8.908	(0.922)	725707	26.8961	26.89
	74 Bromobenzene	156	8.803	8.803	(0.912)	155866	22.3203	22.32
	75 1,3,5-Trimethylbenzene	105	9.062	9.062	(0.938)	485083	23.9984	23.99

76	2-Chlorotoluene	91	8.972	8.972 (0.929)	438308	24.0811	24.08
77	4-Chlorotoluene	91	9.066	9.066 (0.939)	493749	24.6863	24.68

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
78	tert-Butylbenzene	119	9.332	9.332	(0.966)	439164	25.3352	25.33
79	1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	480321	23.6963	23.69
81	sec-Butylbenzene	105	9.519	9.519	(0.986)	637261	27.5808	27.58
82	p-Isopropyltoluene	119	9.647	9.647	(0.999)	528967	25.0621	25.06
83	1,3-Dichlorobenzene	146	9.602	9.602	(0.994)	283180	23.2780	23.27
84	1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	304737	22.8472	22.84
87	n-Butylbenzene	91	9.992	9.992	(1.035)	474947	26.8683	26.86
88	1,2-Dichlorobenzene	146	9.992	9.988	(1.035)	281538	23.5402	23.54
89	1,2-Dibromo-3-Chloropropane	155	10.659	10.651	(1.104)	23822	19.9914	19.99
90	1,2,4-Trichlorobenzene	180	11.338	11.334	(1.174)	163613	19.9179	19.91
91	Hexachlorobutadiene	225	11.476	11.476	(1.188)	84960	23.7432	23.74
92	Naphthalene	128	11.544	11.540	(1.195)	406766	20.0070	20.00
93	1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	149711	19.4880	19.48
M 94	1,2-Dichloroethylene (total)	96				225991	39.0672	39.06
M 95	Xylenes (total)	106				726069	73.4689	73.46
141	Cyclohexane	56	4.118	4.118	(0.986)	338611	32.2509	32.25
138	Freon TF	101	1.917	1.917	(0.459)	113283	31.8228	31.82
147	Methylcyclohexane	55	5.385	5.381	(1.085)	525452	25.5692	25.56
146	Methyl Acetate	43	2.236	2.228	(0.535)	127874	23.7211	23.72
148	Tert-Butyl alcohol	59	2.435	2.431	(0.583)	307684	402.467	402.46
149	Isopropyl Alcohol	45	2.097	2.093	(0.502)	209342	441.302	441.30

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 : 21-JUL-2023 16:42
Client ID: HS23071109-01MSD
Sample Info: HS23071109-01MSD;HS23071109-01MSD;3;;MSD
Purge Volume: 5.0
Column phase: DB624

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

Data File : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072114.D
Inj Date : 21-JUL-2023 16:42
InstruID : voa6.i
LabSampID : HS23071109-01MSD

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

Reason Code:

BEFORE

MASS
75
AREA
131111
HEIGHT
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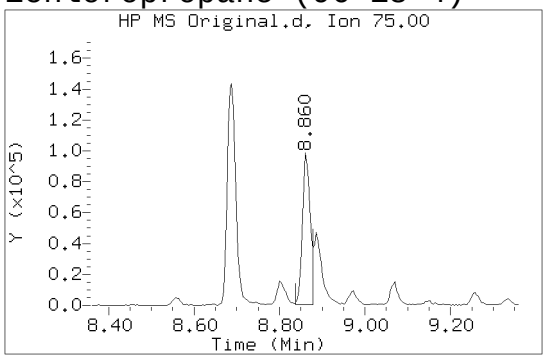
21-Jul-2023
23:10



AFTER

MASS
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AREA
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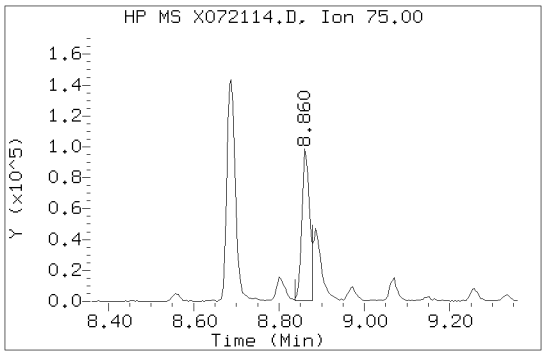
HEIGHT
98700
27-Jul-2023
12:58



BEFORE

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AREA
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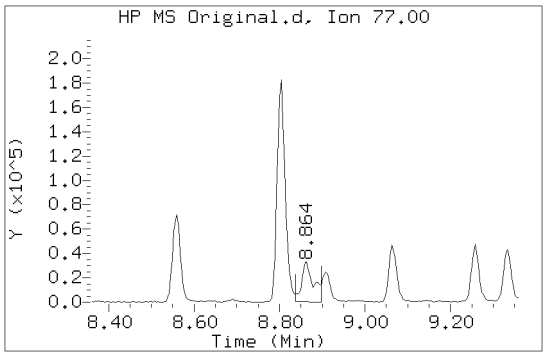
HEIGHT
32769
21-Jul-2023
23:10



AFTER

MASS
77
AREA
65337
HEIGHT
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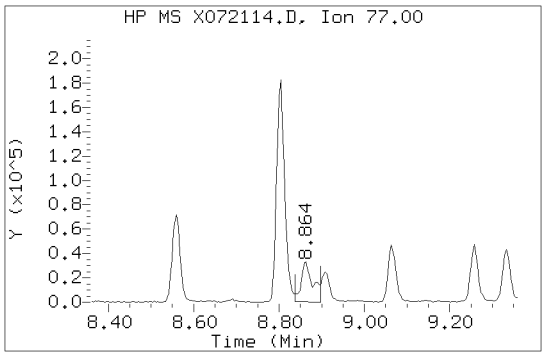
27-Jul-2023
12:58



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072118.D Page 1
Report Date: 27-Jul-2023 12:59

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072118.D
Lab Smp Id: HS23071113-10 Client Smp ID: HS23071113-10
Inj Date : 21-JUL-2023 18:04
Operator : PC Inst ID: voa6.i
Smp Info : HS23071113-10;HS23071113-10;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\8260W.m
Meth Date : 27-Jul-2023 12:58 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.177	4.178	(1.000)	601318	50.0000	
$ 30 Dibromofluoromethane	113	4.102	4.095	(0.982)	308396	56.0496	56.04
$ 35 1,2-Dichloroethane-d4	65	4.474	4.470	(1.071)	390358	56.7232	56.72
* 36 1,4-Difluorobenzene	114	4.968	4.965	(1.000)	943496	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	827514	50.0000	
$ 48 Toluene-d8	98	6.385	6.386	(0.833)	1112039	52.1938	52.19
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	384442	46.6306	46.63
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.658	(1.000)	419458	50.0000	

01322868

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072118.D

Page 1

Date : 21-JUL-2023 18:04

Client ID: HS23071113-10

Instrument: voa6.i

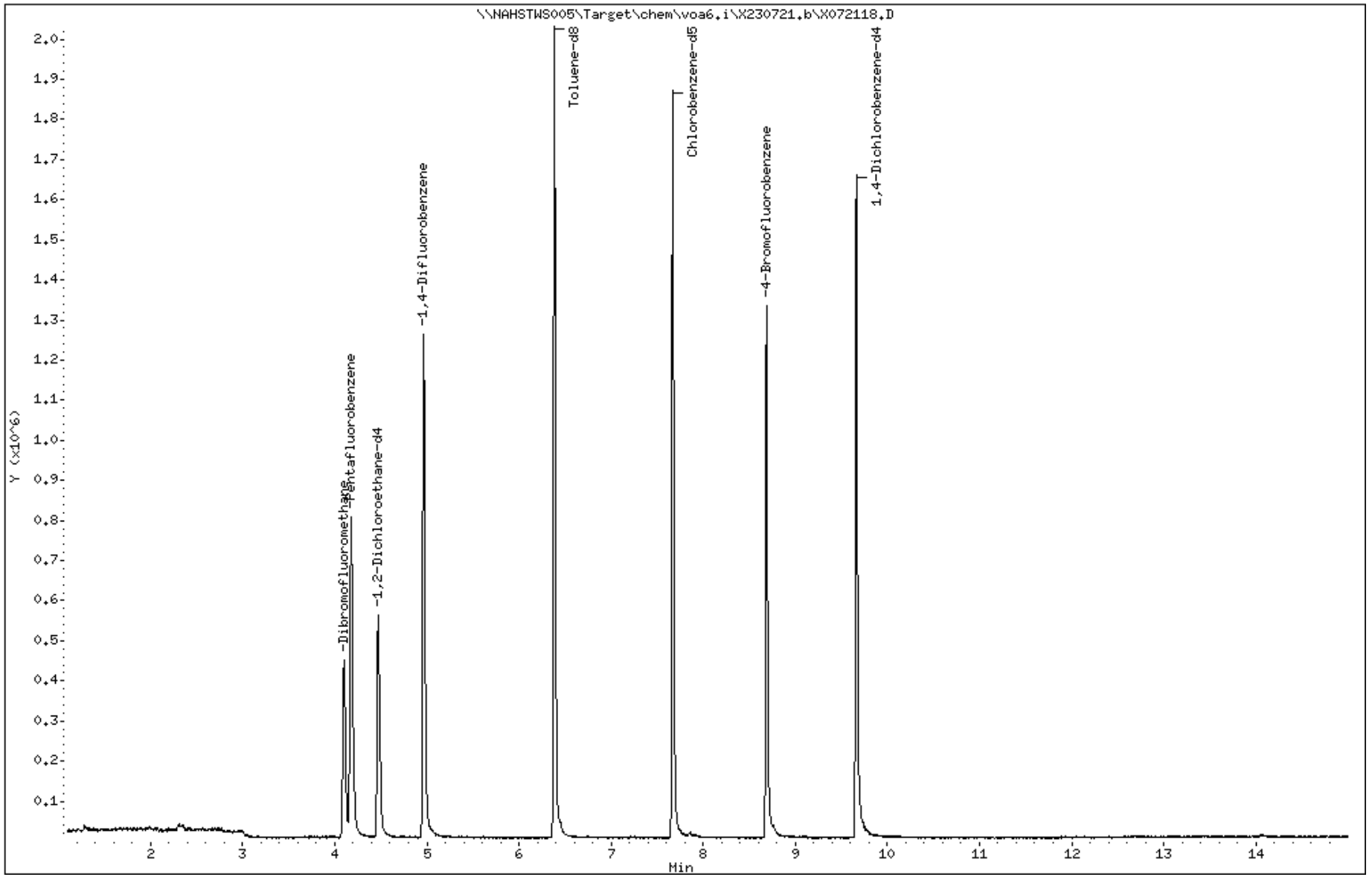
Sample Info: HS23071113-10;HS23071113-10;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072118.D
Inj Date : 21-JUL-2023 18:04
InstruID : voa6.i
LabSampID : HS23071113-10

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072129.D Page 1
Report Date: 27-Jul-2023 12:59

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072129.D
Lab Smp Id: HS23071113-01 Client Smp ID: HS23071113-01
Inj Date : 21-JUL-2023 21:50
Operator : PC Inst ID: voa6.i
Smp Info : HS23071113-01;HS23071113-01;;;
Misc Info : V6;WATER;0;5;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\8260W.m
Meth Date : 27-Jul-2023 12:58 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 27
Dil Factor: 5.00000
Integrator: HP RTE Compound Sublist: 8260_GB.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

		QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
Compounds		MASS	RT	EXP RT	REL RT	RESPONSE	(ug/l)	(ug/l)
*	1 Pentafluorobenzene	168	4.178	4.178	(1.000)	602946	50.0000	
	5 Vinyl Chloride	62	1.145	1.145	(0.274)	26461	3.39139	16.95(a)
	11 1,1-Dichloroethene	96	1.917	1.913	(0.459)	7274	1.64673	8.23(a)
	27 cis-1,2-Dichloroethene	96	3.525	3.525	(0.844)	1058437	162.610	813.04
$	30 Dibromofluoromethane	113	4.099	4.095	(0.981)	303592	55.0136	55.01
$	35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	384359	55.6895	55.68
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	941231	50.0000	
	38 Trichloroethene	130	5.205	5.205	(1.048)	5599598	879.318	4396.58(A)
*	47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	838051	50.0000	
$	48 Toluene-d8	98	6.385	6.386	(0.833)	1084472	50.2600	50.25
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	380355	45.5449	45.54
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.658	(1.000)	429062	50.0000	
M	94 1,2-Dichloroethylene (total)	96				1058437	162.610	813.04
	138 Freon TF	101	1.921	1.917	(0.460)	20838	5.68781	28.43

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.

01322872

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072129.D

Date : 21-JUL-2023 21:50

Client ID: HS23071113-01

Instrument: voa6.i

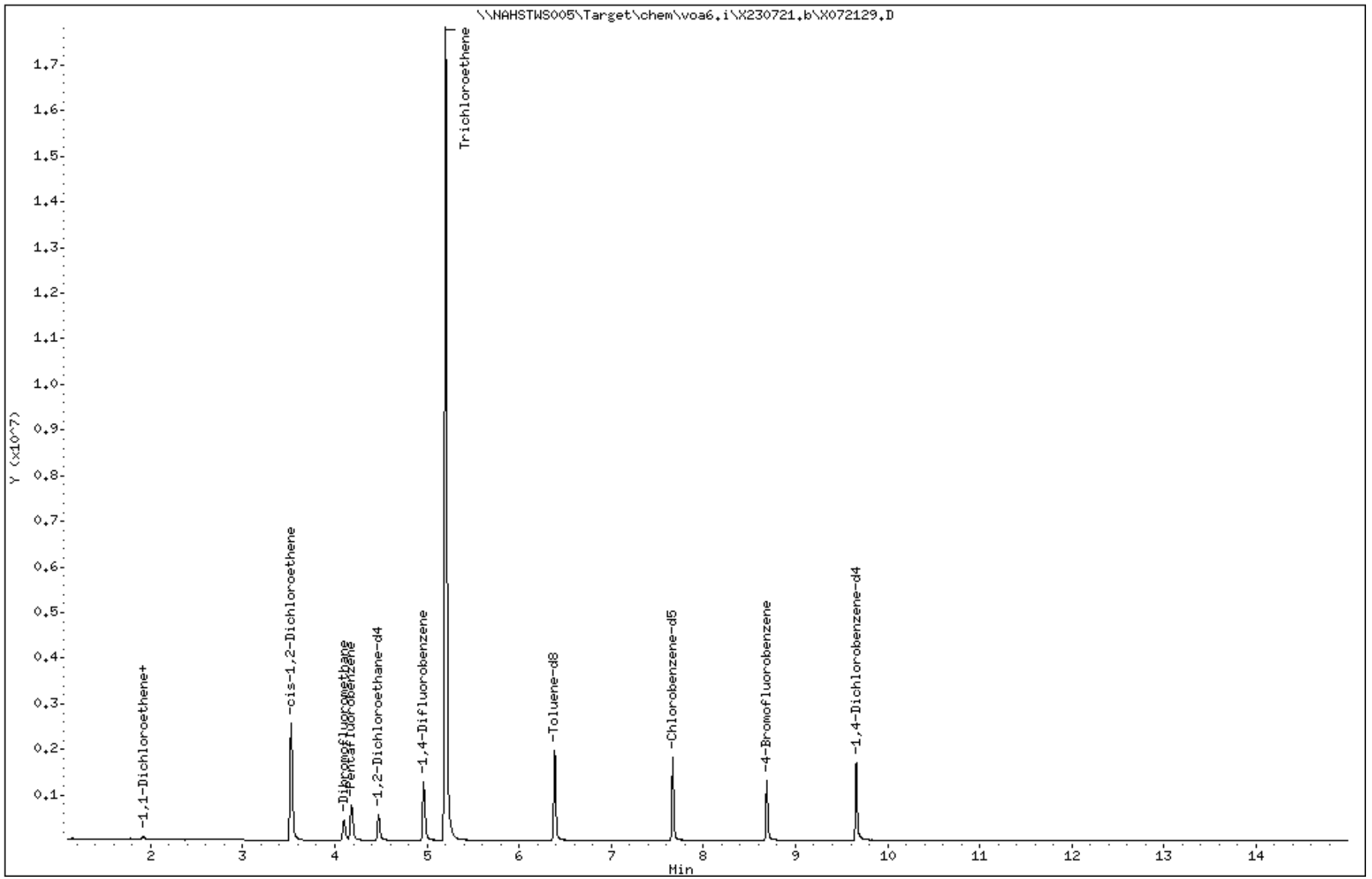
Sample Info: HS23071113-01;HS23071113-01;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



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Date : 21-JUL-2023 21:50

Client ID: HS23071113-01

Instrument: voa6.i

Sample Info: HS23071113-01;HS23071113-01;;;

Purge Volume: 5.0

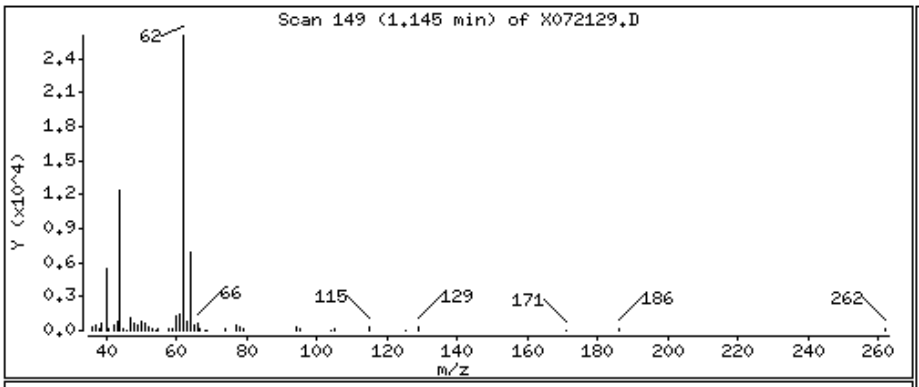
Operator: PC

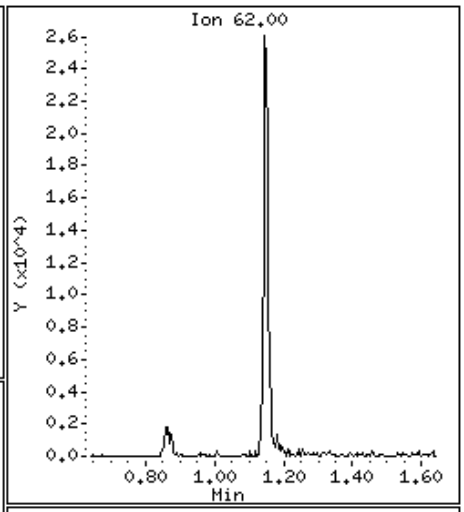
Column phase: DB624

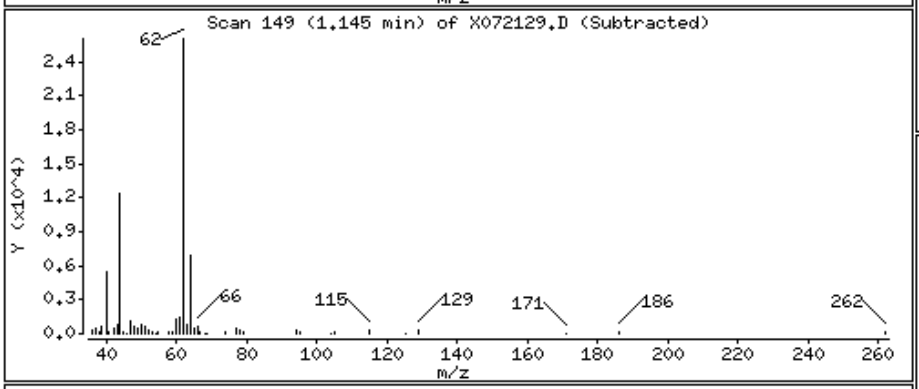
Column diameter: 0.18

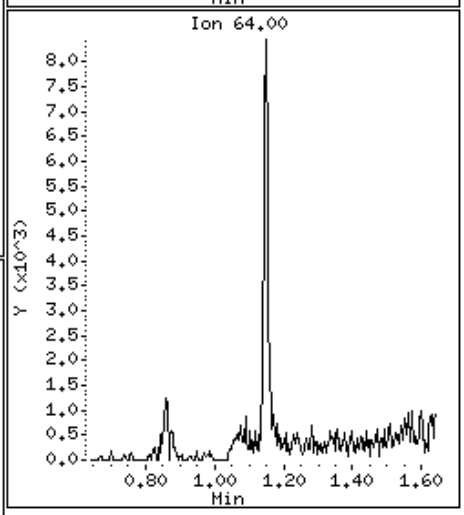
5 Vinyl Chloride

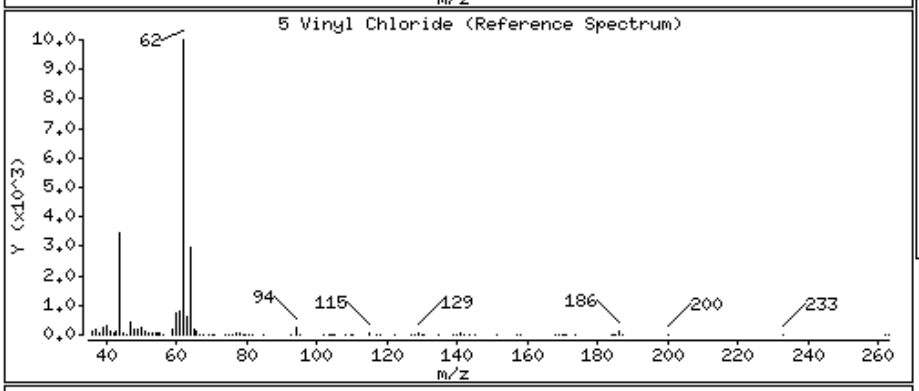
Concentration: 16.95 ug/l

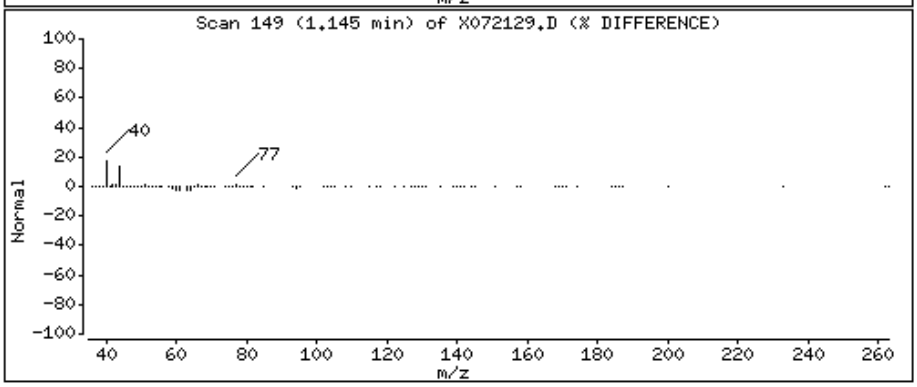












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072129.D Page 3

Date : 21-JUL-2023 21:50

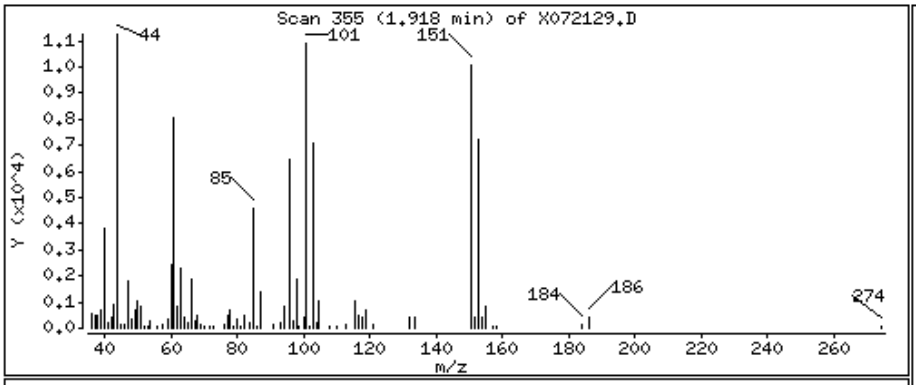
Client ID: HS23071113-01 Instrument: voa6.i

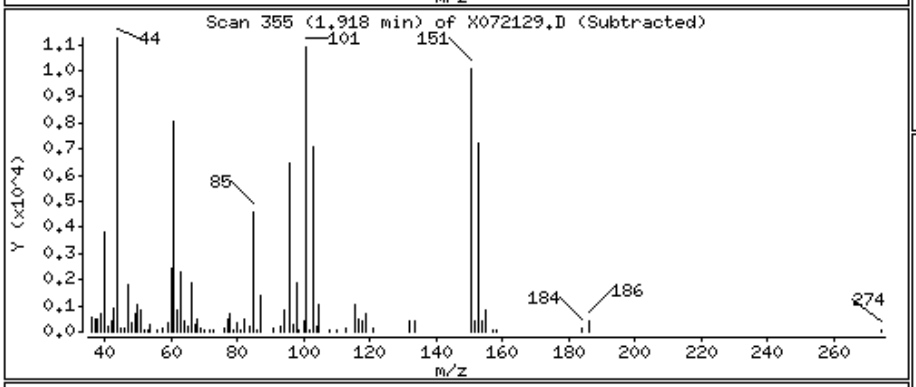
Sample Info: HS23071113-01;HS23071113-01;;;

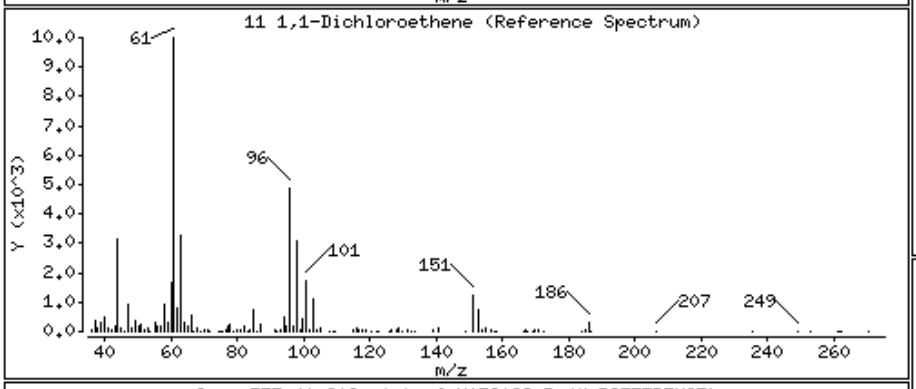
Purge Volume: 5.0 Operator: PC

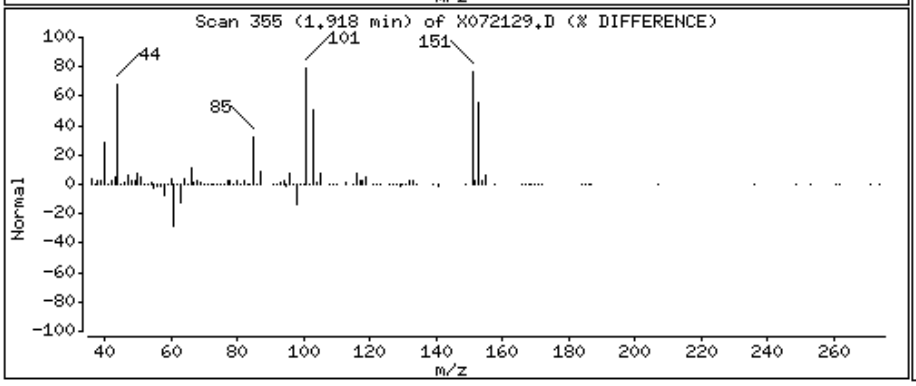
Column phase: DB624 Column diameter: 0.18

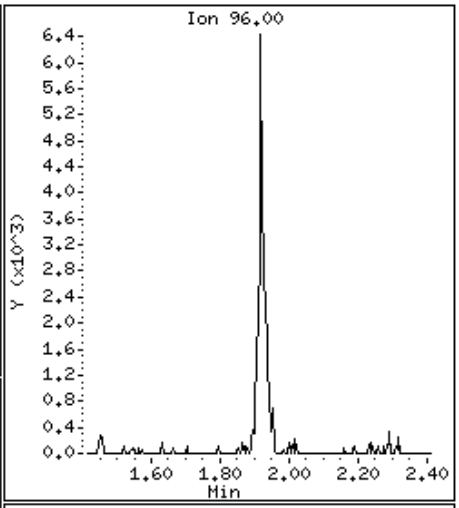
11 1,1-Dichloroethene Concentration: 8.23 ug/l

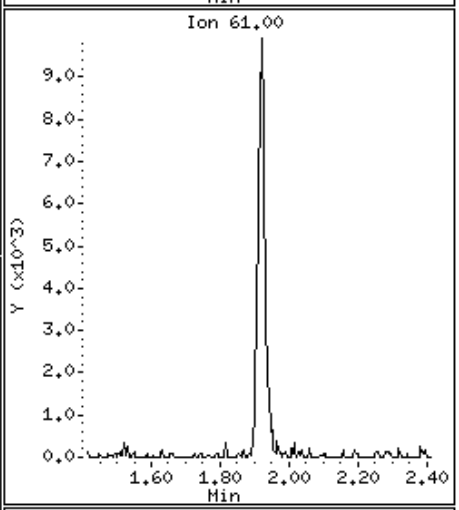


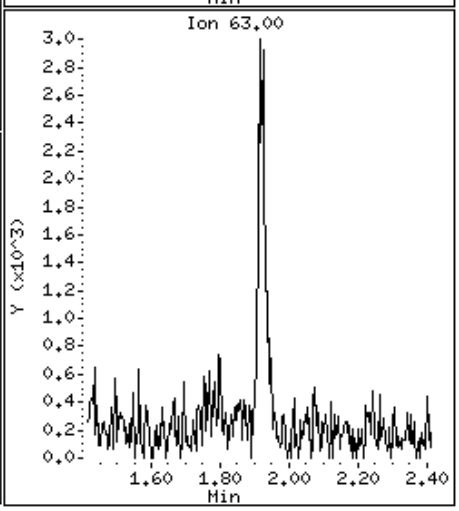












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Date : 21-JUL-2023 21:50

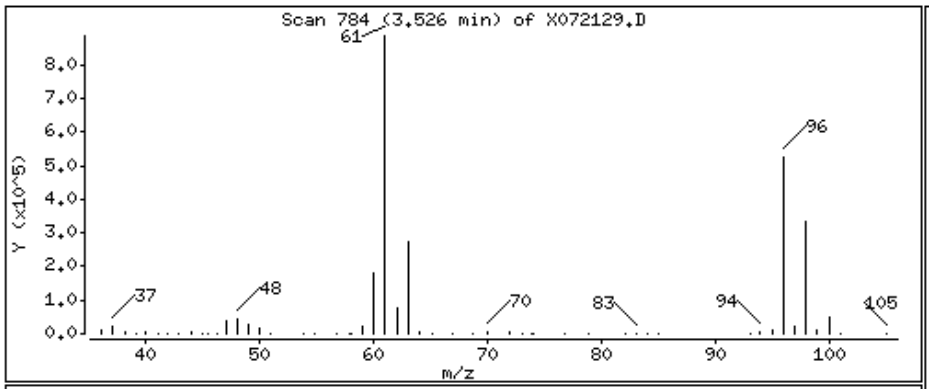
Client ID: HS23071113-01 Instrument: voa6.i

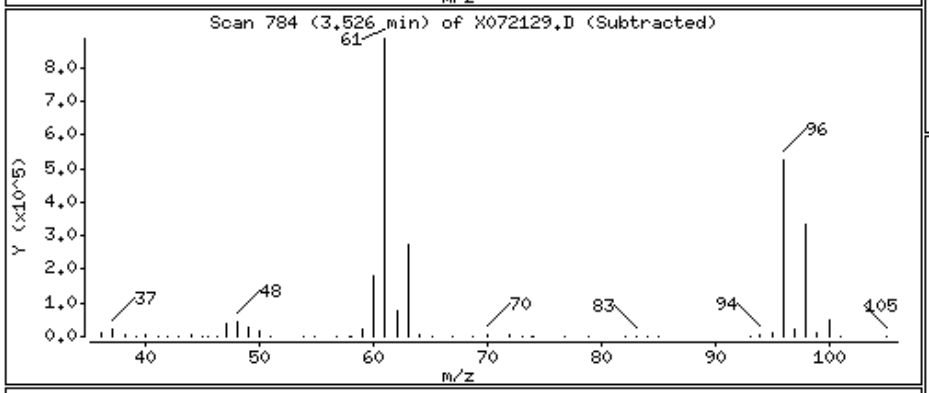
Sample Info: HS23071113-01;HS23071113-01;;;

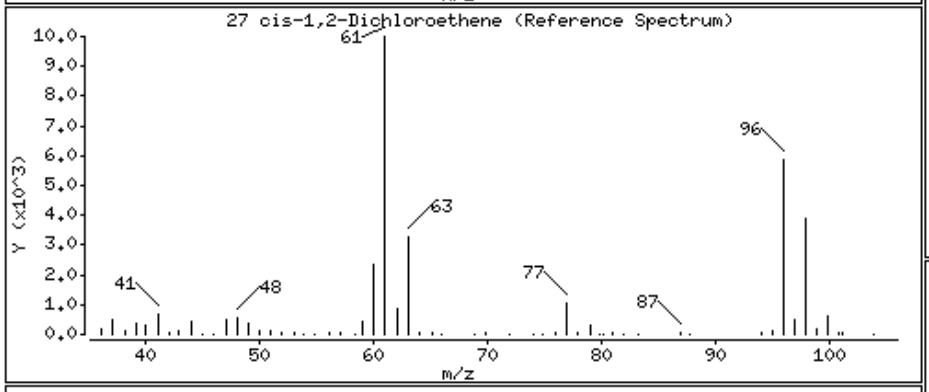
Purge Volume: 5.0 Operator: PC

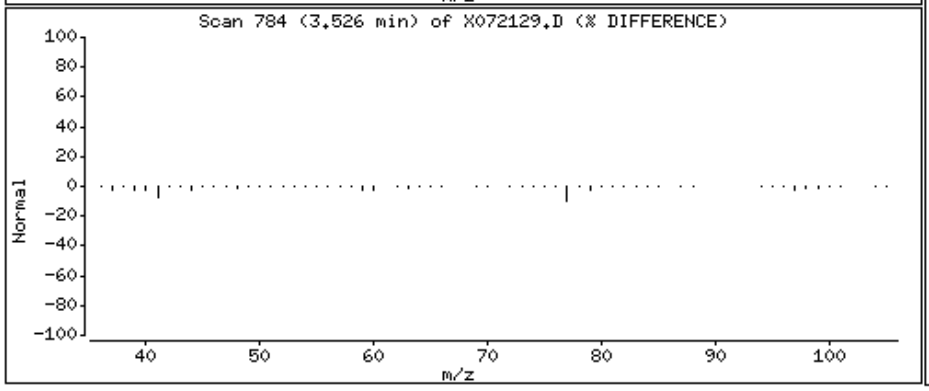
Column phase: DB624 Column diameter: 0.18

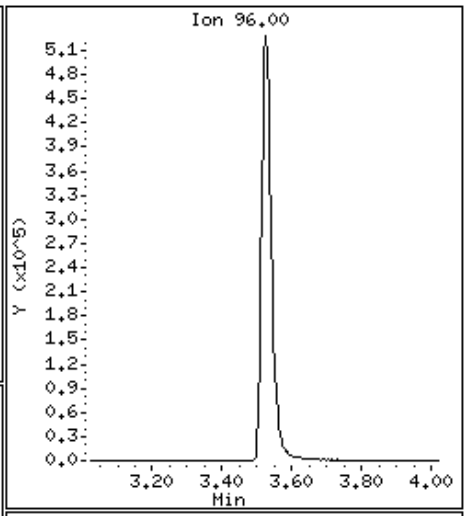
27 cis-1,2-Dichloroethene Concentration: 813.04 ug/l

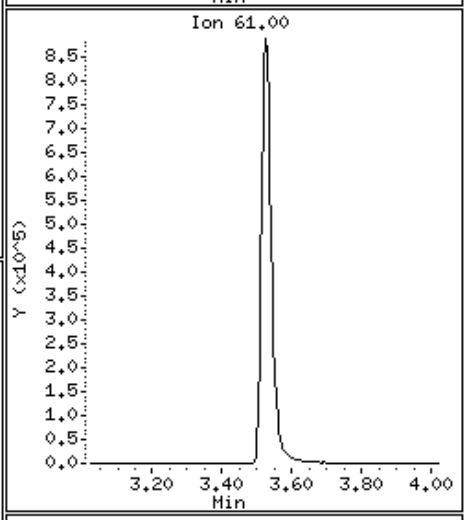


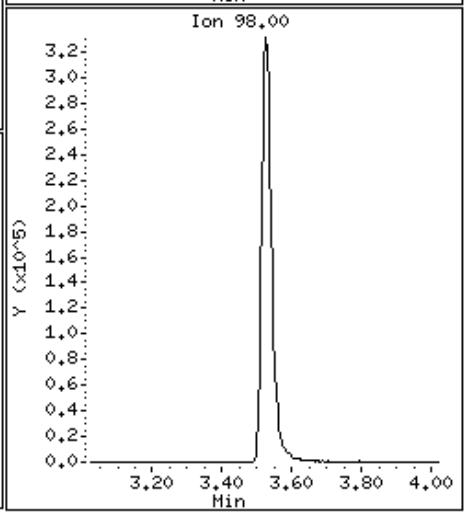












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072129.D Page 5

Date : 21-JUL-2023 21:50

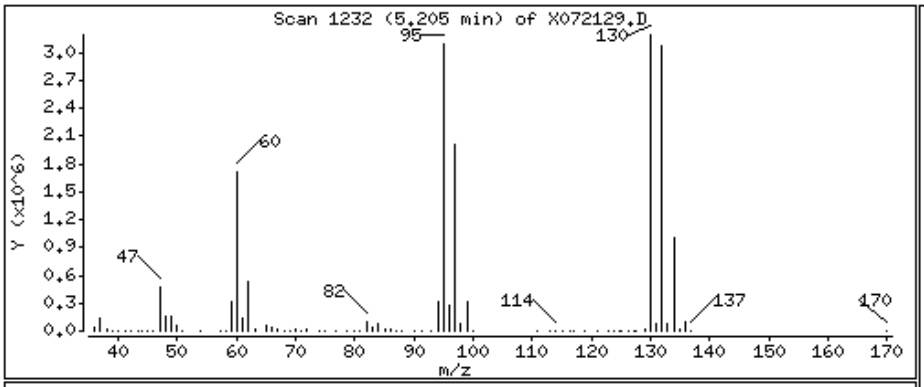
Client ID: HS23071113-01 Instrument: voa6.i

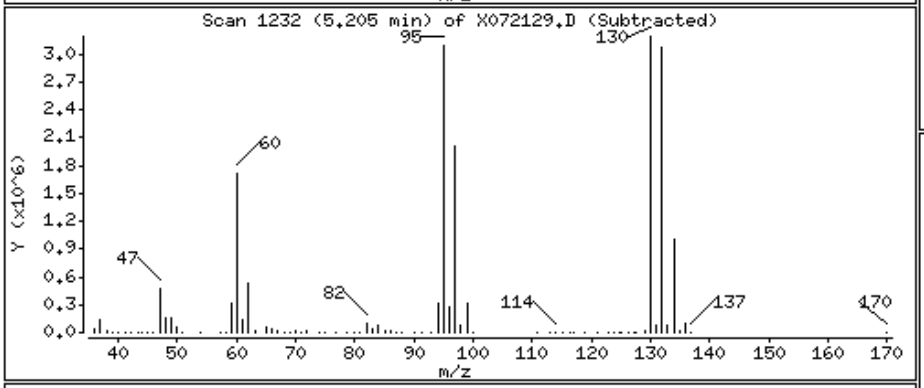
Sample Info: HS23071113-01;HS23071113-01;;;

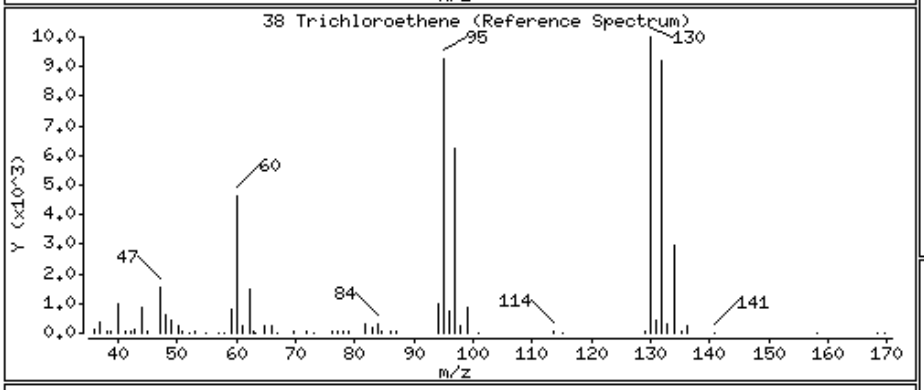
Purge Volume: 5.0 Operator: PC

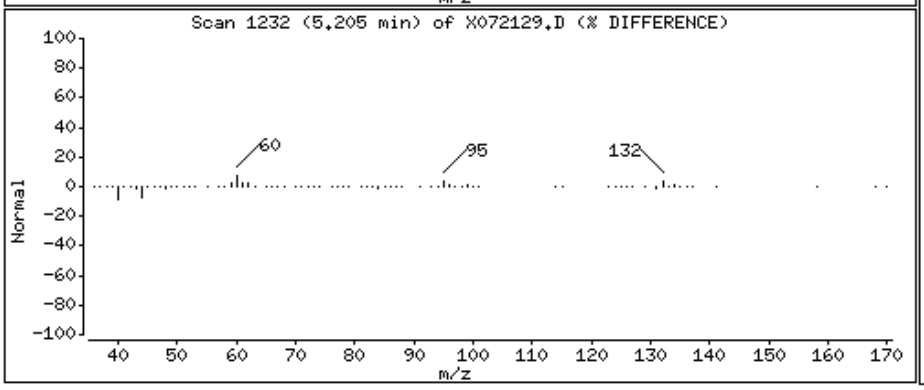
Column phase: DB624 Column diameter: 0.18

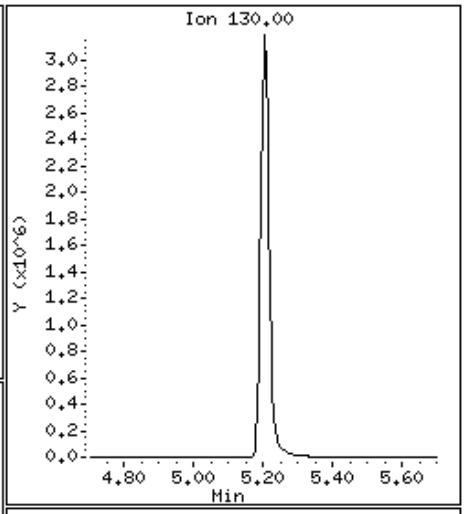
38 Trichloroethene Concentration: 4396.58 ug/l

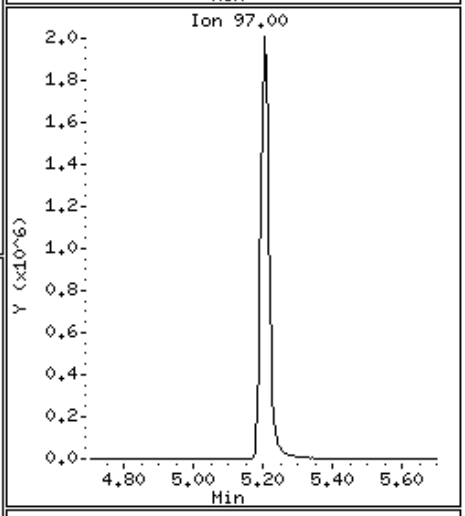


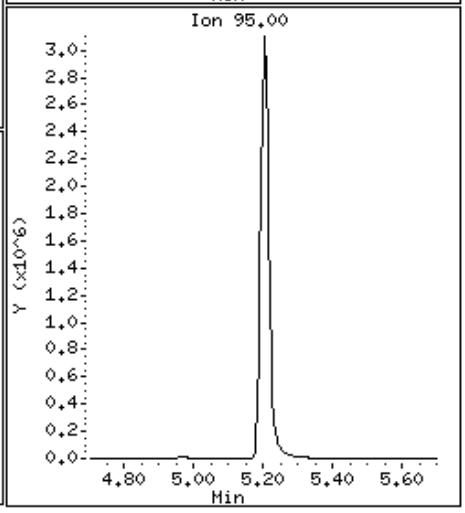












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072129.D Page 6

Date : 21-JUL-2023 21:50

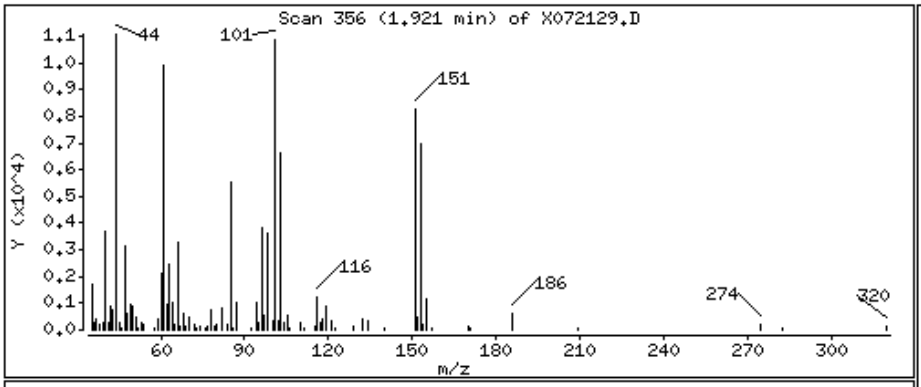
Client ID: HS23071113-01 Instrument: voa6.i

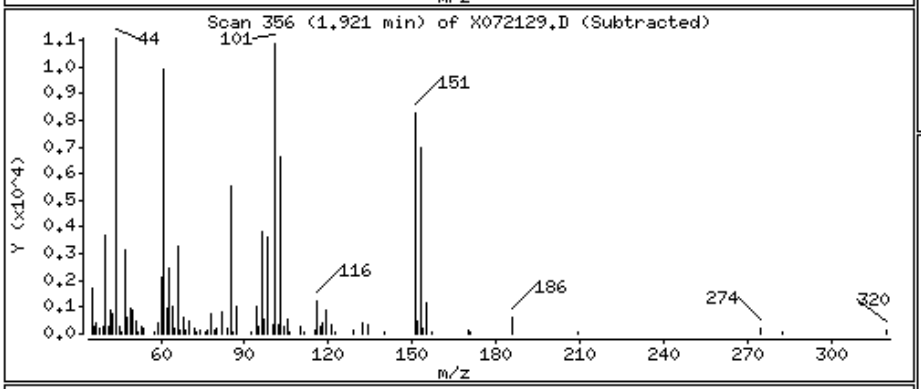
Sample Info: HS23071113-01;HS23071113-01;;;

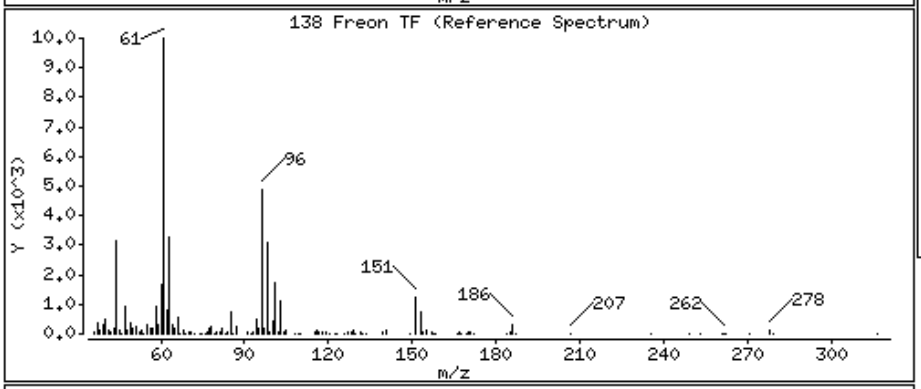
Purge Volume: 5.0 Operator: PC

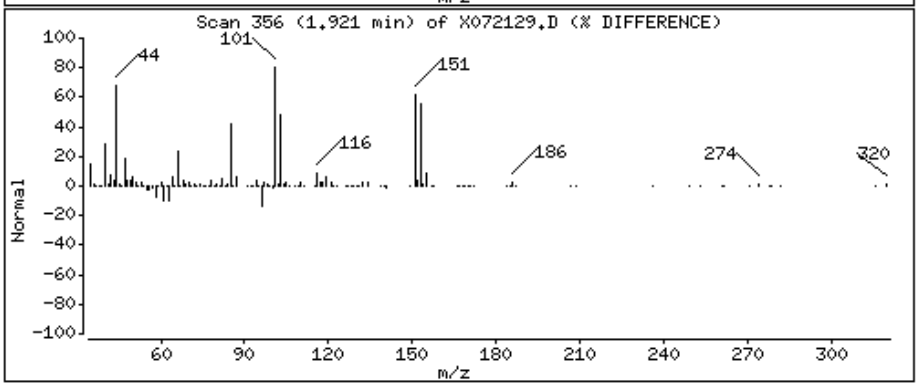
Column phase: DB624 Column diameter: 0.18

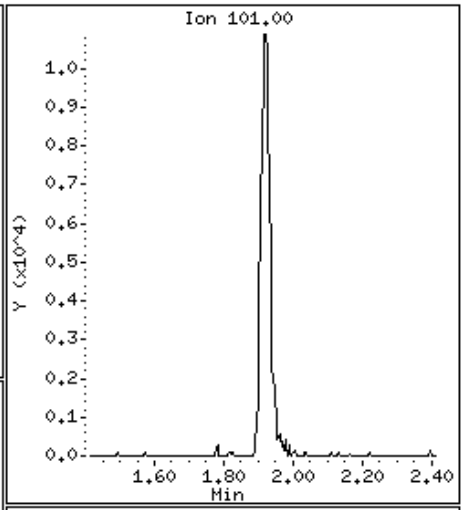
138 Freon TF Concentration: 28.43 ug/l

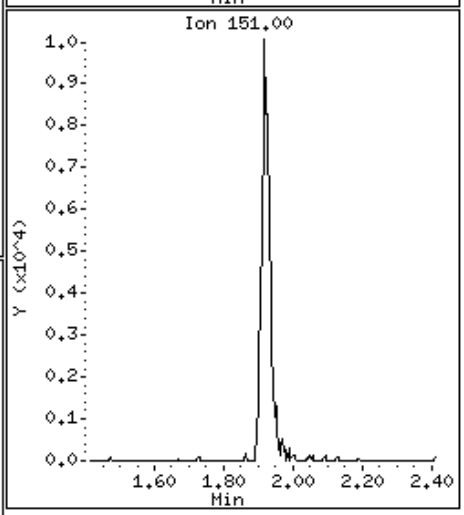












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Inj Date : 21-JUL-2023 21:50
InstruID : voa6.i
LabSampID : HS23071113-01

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072130.D Page 1
Report Date: 27-Jul-2023 12:59

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072130.D
Lab Smp Id: CCV-END Client Smp ID: CCV-END
Inj Date : 21-JUL-2023 22:10
Operator : PC Inst ID: voa6.i
Smp Info : CCV-END;CCV-END;2;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\8260W.m
Meth Date : 27-Jul-2023 12:59 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.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	4.178	4.178	(1.000)	582134	50.0000	
135 1,4-Dioxane	88	5.598	5.598	(1.340)	76059	1000.00	1099.50
140 1,3-Butadiene	54	1.167	1.167	(0.280)	457089	50.0000	61.10
25 Methacrylonitrile	41	3.829	3.829	(0.917)	493064	50.0000	65.61
12 Isobutyl Alcohol	43	4.680	4.680	(1.120)	1401299	1000.00	1269.89
13 Acetonitrile	39	2.202	2.202	(0.527)	453220	500.000	555.20
14 Allyl Chloride	41	2.202	2.202	(0.527)	1098529	50.0000	57.47
4 Propionitrile	54	3.657	3.657	(0.875)	680324	500.000	589.96
72 trans-1,4-Dichloro-2-butene	53	8.886	8.886	(1.159)	146998	50.0000	52.92
130 Ethyl Acetate	43	3.660	3.660	(0.876)	534567	50.0000	61.82
40 Methyl Methacrylate	41	5.606	5.606	(1.342)	430674	50.0000	61.29
49 Ethyl Methacrylate	69	6.712	6.712	(1.352)	301292	50.0000	46.93
2 Dichlorodifluoromethane	85	0.976	0.976	(0.234)	275434	50.0000	46.33
3 Chloromethane	50	1.081	1.081	(0.259)	492528	50.0000	56.01
5 Vinyl Chloride	62	1.145	1.145	(0.274)	448761	50.0000	59.57
6 Bromomethane	94	1.344	1.344	(0.322)	165129	50.0000	52.97
7 Chloroethane	64	1.407	1.407	(0.337)	247433	50.0000	57.53
8 Trichlorofluoromethane	101	1.565	1.565	(0.375)	399474	50.0000	52.32
9 Acrolein	56	1.865	1.865	(0.446)	38533	100.000	173.95
10 Acetone	43	1.977	1.977	(0.473)	288740	100.000	126.60

11 1,1-Dichloroethene	96	1.917	1.917 (0.459)	234715	50.0000	55.03
15 Iodomethane	142	2.030	2.030 (0.486)	516796	100.000	92.37

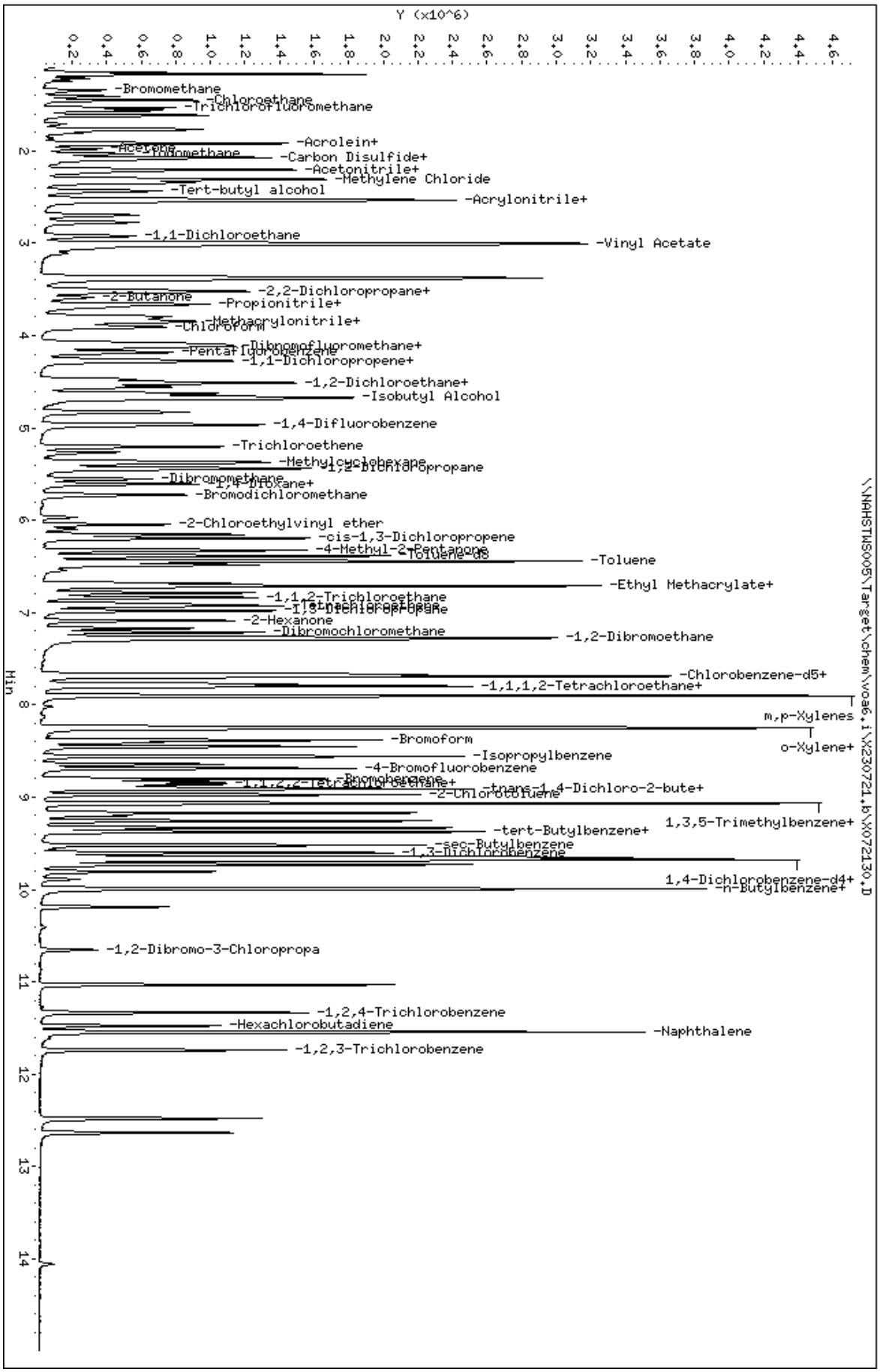
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	16 Acrylonitrile	53	2.536	2.536	(0.607)	316789	100.000	111.67
	17 Methylene Chloride	84	2.303	2.303	(0.551)	268714	50.0000	53.49
	18 Methyl tert-butyl ether	73	2.539	2.539	(0.608)	756237	50.0000	47.67
	19 Carbon Disulfide	76	2.071	2.071	(0.496)	1350165	100.000	100.71
	20 trans-1,2-Dichloroethene	96	2.532	2.532	(0.606)	236479	50.0000	47.93
	21 Vinyl Acetate	43	3.001	3.001	(0.718)	2478895	100.000	121.50
	22 1,1-Dichloroethane	63	2.922	2.922	(0.699)	529775	50.0000	48.93
	24 2-Butanone	43	3.585	3.585	(0.858)	385329	100.000	124.29
	26 2,2-Dichloropropane	77	3.507	3.507	(0.839)	390203	50.0000	46.44
	27 cis-1,2-Dichloroethene	96	3.525	3.525	(0.844)	336448	50.0000	53.53
	28 Chloroform	83	3.908	3.908	(0.935)	565627	50.0000	51.06
	29 Bromochloromethane	128	3.795	3.795	(0.908)	181985	50.0000	51.67
$	30 Dibromofluoromethane	113	4.099	4.099	(0.981)	300403	50.0000	56.40
	31 1,1,1-Trichloroethane	97	4.080	4.080	(0.977)	438771	50.0000	51.45
	32 1,1-Dichloropropene	75	4.283	4.283	(0.863)	392275	50.0000	49.06
	33 1,2-Dichloroethane	62	4.556	4.556	(0.918)	545801	50.0000	50.58
	34 Carbon Tetrachloride	117	4.260	4.260	(0.858)	357373	50.0000	44.37
$	35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	374004	50.0000	56.13
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	980132	50.0000	
	37 Benzene	78	4.511	4.511	(0.909)	1235981	50.0000	52.72
	38 Trichloroethene	130	5.205	5.205	(1.048)	334116	50.0000	50.38
	39 Bromodichloromethane	83	5.722	5.722	(1.153)	432943	50.0000	48.21
	41 2-Chloroethylvinyl ether	63	6.048	6.048	(1.218)	280364	100.000	102.25
	42 1,2-Dichloropropane	63	5.437	5.437	(1.095)	412813	50.0000	54.76
	44 Dibromomethane	93	5.550	5.550	(1.118)	209404	50.0000	49.07
	45 4-Methyl-2-Pentanone	43	6.326	6.326	(0.825)	1000278	100.000	111.30
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	514052	50.0000	49.83
*	47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	913260	50.0000	
$	48 Toluene-d8	98	6.386	6.386	(0.833)	1101669	50.0000	46.85
	50 Toluene	91	6.442	6.442	(0.840)	1267965	50.0000	51.57
	51 trans-1,3-Dichloropropene	75	6.682	6.682	(1.346)	427915	50.0000	49.21
	52 2-Hexanone	43	7.087	7.087	(0.924)	668431	100.000	113.22
	53 1,1,2-Trichloroethane	83	6.835	6.835	(0.891)	257639	50.0000	49.40
	54 1,3-Dichloropropane	76	6.978	6.978	(0.910)	539057	50.0000	50.59
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	365745	50.0000	48.58
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	235376	50.0000	46.34
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	290330	50.0000	48.71
	58 1-Chlorohexane	55	7.694	7.694	(1.550)	365745	50.0000	46.44
	59 Chlorobenzene	112	7.690	7.690	(1.003)	844114	50.0000	49.12
	60 1,1,1,2-Tetrachloroethane	131	7.773	7.773	(1.014)	324696	50.0000	48.26
	61 Ethylbenzene	106	7.795	7.795	(1.017)	419364	50.0000	48.66
	62 m,p-Xylenes	106	7.900	7.900	(1.030)	1076062	100.000	99.53
	63 o-Xylene	106	8.237	8.237	(1.074)	518699	50.0000	50.66
	64 Styrene	104	8.256	8.256	(1.077)	907479	50.0000	50.81
	66 Bromoform	173	8.406	8.406	(1.096)	237576	50.0000	49.18
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	1282831	50.0000	48.74
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	417378	50.0000	51.06
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	469976	50.0000	51.69
*	70 1,4-Dichlorobenzene-d4	152	9.658	9.658	(1.000)	486630	50.0000	
	71 1,2,3-Trichloropropane	75	8.860	8.860	(0.917)	329205	50.0000	50.75(M)
	73 n-Propylbenzene	91	8.908	8.908	(0.922)	1496623	50.0000	50.89
	74 Bromobenzene	156	8.803	8.803	(0.912)	369837	50.0000	48.59

75	1,3,5-Trimethylbenzene	105	9.062	9.062 (0.938)	1057704	50.0000	48.01
76	2-Chlorotoluene	91	8.972	8.972 (0.929)	961353	50.0000	48.46

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	
77	4-Chlorotoluene	91	9.066	9.066	(0.939)	1088700	50.0000	49.94	
78	tert-Butylbenzene	119	9.332	9.332	(0.966)	909790	50.0000	48.15	
79	1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	1092132	50.0000	49.43	
81	sec-Butylbenzene	105	9.519	9.519	(0.986)	1231542	50.0000	48.90	
82	p-Isopropyltoluene	119	9.647	9.647	(0.999)	1079569	50.0000	46.93	
83	1,3-Dichlorobenzene	146	9.602	9.602	(0.994)	651293	50.0000	49.12	
84	1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	685709	50.0000	47.17	
87	n-Butylbenzene	91	9.992	9.992	(1.035)	941069	50.0000	48.84	
88	1,2-Dichlorobenzene	146	9.988	9.988	(1.034)	645098	50.0000	49.49	
89	1,2-Dibromo-3-Chloropropane	155	10.651	10.651	(1.103)	60978	50.0000	45.48	
90	1,2,4-Trichlorobenzene	180	11.334	11.334	(1.173)	392529	50.0000	43.84	
91	Hexachlorobutadiene	225	11.476	11.476	(1.188)	153483	50.0000	37.80	
92	Naphthalene	128	11.540	11.540	(1.195)	1047354	50.0000	47.26	
93	1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	364213	50.0000	43.50	
M 94	1,2-Dichloroethylene (total)	96				572927	100.000	(a)	
141	Cyclohexane	56	4.121	4.121	(0.987)	529052	50.0000	52.43	
138	Freon TF	101	1.917	1.917	(0.459)	199049	50.0000	54.59	
147	Methylcyclohexane	55	5.385	5.385	(1.085)	1076671	50.0000	52.04	
146	Methyl Acetate	43	2.232	2.232	(0.534)	326020	50.0000	62.92	
148	Tert-Butyl alcohol	59	2.434	2.434	(0.583)	733910	1000.00	998.88	
149	Isopropyl Alcohol	45	2.097	2.097	(0.502)	526549	1000.00	1154.95	

QC Flag Legend

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



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072130.D
Date : 21-JUL-2023 22:10
Client ID: CCV-END
Sample Info: CCV-END;CCV-END;2;;
Purge Volume: 5.0
Column phase: DB624

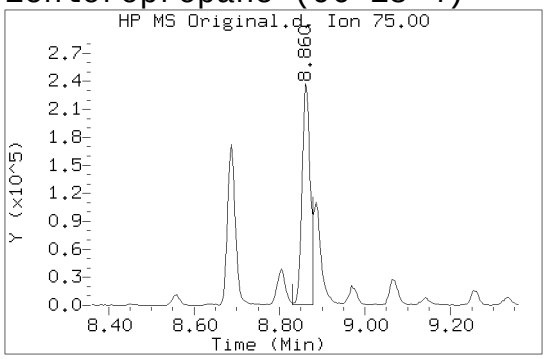
Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\voa6.i\X230721.b\X072130.D
Inj Date : 21-JUL-2023 22:10
InstruID : voa6.i
LabSampID : CCV-END

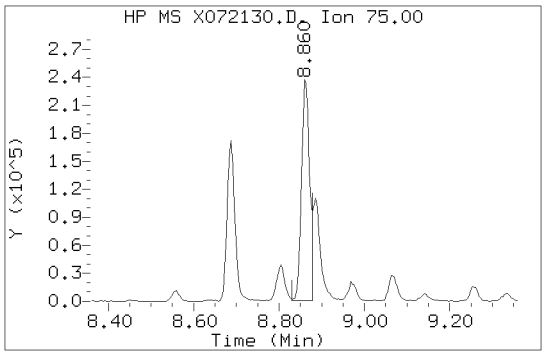
1,2,3-Trichloropropane (96-18-4)

Reason Code:

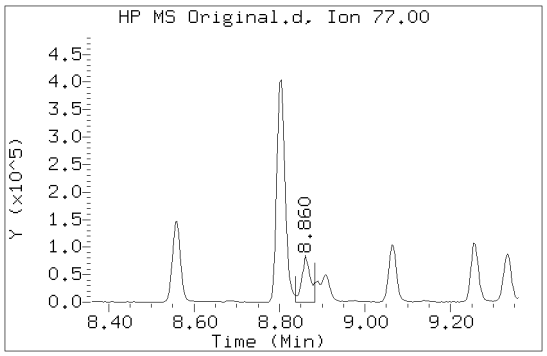
BEFORE
MASS
75
AREA
329205
HEIGHT
236676
21-Jul-2023
23:04



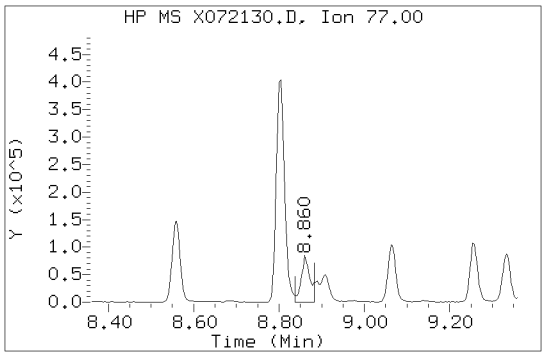
AFTER
MASS
75
AREA
329205
HEIGHT
236676
27-Jul-2023
12:58



BEFORE
MASS
77
AREA
124960
HEIGHT
85181
21-Jul-2023
23:04



AFTER
MASS
77
AREA
124960
HEIGHT
85181
27-Jul-2023
12:58



01322886

right solutions.
right partner.

Raw Data VOA6 442149

Volatiles by EPA 8260

Workorder

HS23071113

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072401.D Page 1
Report Date: 24-Jul-2023 21:32

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072401.D
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 24-JUL-2023 10:55
Operator : PC Inst ID: voa6.i
Smp Info : BFB;BFB;3;;BFB
Misc Info : V6;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\bfb.m
Meth Date : 14-Mar-2023 15:45 Linh.Pham Quant Type: ISTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: NAHSTW7051

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

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

					CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/l)		
RT	EXP RT	REL RT	MASS	RESPONSE			TARGET RANGE	RATIO
1 bfb							CAS #: 460-00-4	
8.687	8.889	(0.000)	95	53200			0.00- 100.00	100.00
8.687	8.889	(0.000)	50	13159			15.00- 40.00	24.73
8.687	8.889	(0.000)	75	25256			30.00- 60.00	47.47
8.687	8.889	(0.000)	96	3502			5.00- 9.00	6.58
8.687	8.889	(0.000)	173	629			0.00- 2.00	1.44
8.687	8.889	(0.000)	174	43624			50.00- 0.00	82.00
8.687	8.889	(0.000)	175	3862			5.00- 9.00	8.85
8.687	8.889	(0.000)	176	43128			95.00- 101.00	98.86
8.687	8.889	(0.000)	177	2927			5.00- 9.00	6.79

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	24.73
75	30.00 - 60.00% of mass 95	47.47
96	5.00 - 9.00% of mass 95	6.58
173	Less than 2.00% of mass 174	1.18 (1.44)
174	Greater than 50.00% of mass 95	82.00
175	5.00 - 9.00% of mass 174	7.26 (8.85)
176	95.00 - 101.00% of mass 174	81.07 (98.86)
177	5.00 - 9.00% of mass 176	5.50 (6.79)

Data File: X072401.D
Spectrum: Avg. Scans 2159-2163 (8.69)
Location of Maximum: 95.00
Number of points: 132

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	812	70.00	929	105.00	264	153.00	73
37.00	3241	71.00	289	106.00	131	154.00	31
38.00	3167	72.00	417	107.00	421	155.00	297
39.00	2541	73.00	1921	109.00	387	157.00	120
40.00	3138	74.00	7367	110.00	95	159.00	170
41.00	2052	75.00	25256	112.00	49	161.00	48
42.00	2526	76.00	2253	113.00	95	168.00	23
43.00	1877	77.00	700	114.00	10	169.00	53
44.00	2729	78.00	306	115.00	200	170.00	51
45.00	987	79.00	1408	116.00	120	171.00	39
46.00	117	80.00	771	117.00	492	172.00	201
47.00	1100	81.00	1326	118.00	266	173.00	629
48.00	490	82.00	365	119.00	374	174.00	43624
49.00	2622	83.00	203	121.00	28	175.00	3862
50.00	13159	84.00	53	122.00	51	176.00	43128
51.00	4444	85.00	318	126.00	77	177.00	2927
52.00	243	86.00	113	127.00	170	178.00	160
53.00	457	87.00	2610	128.00	449	184.00	80
54.00	364	88.00	2057	129.00	205	186.00	188
55.00	4743	89.00	45	130.00	199	187.00	49
56.00	1773	90.00	10	131.00	133	194.00	31
57.00	2447	91.00	264	135.00	48	201.00	71
58.00	477	92.00	1514	136.00	11	202.00	19
59.00	386	93.00	2259	137.00	113	233.00	12
60.00	506	94.00	6561	139.00	172	234.00	91
61.00	2760	95.00	53200	141.00	624	235.00	29
62.00	3028	96.00	3502	142.00	128	236.00	22
63.00	2313	97.00	169	143.00	567	246.00	14
64.00	329	98.00	948	146.00	151	257.00	27
65.00	277	99.00	96	147.00	151	278.00	42
66.00	91	100.00	13	148.00	74		
67.00	328	101.00	26	149.00	159		
68.00	5215	103.00	88	151.00	38		
69.00	6140	104.00	357	152.00	15		

Data File: \\nahstws005\target\chem\voa6.i\x230724.b\x072401.d Page 1

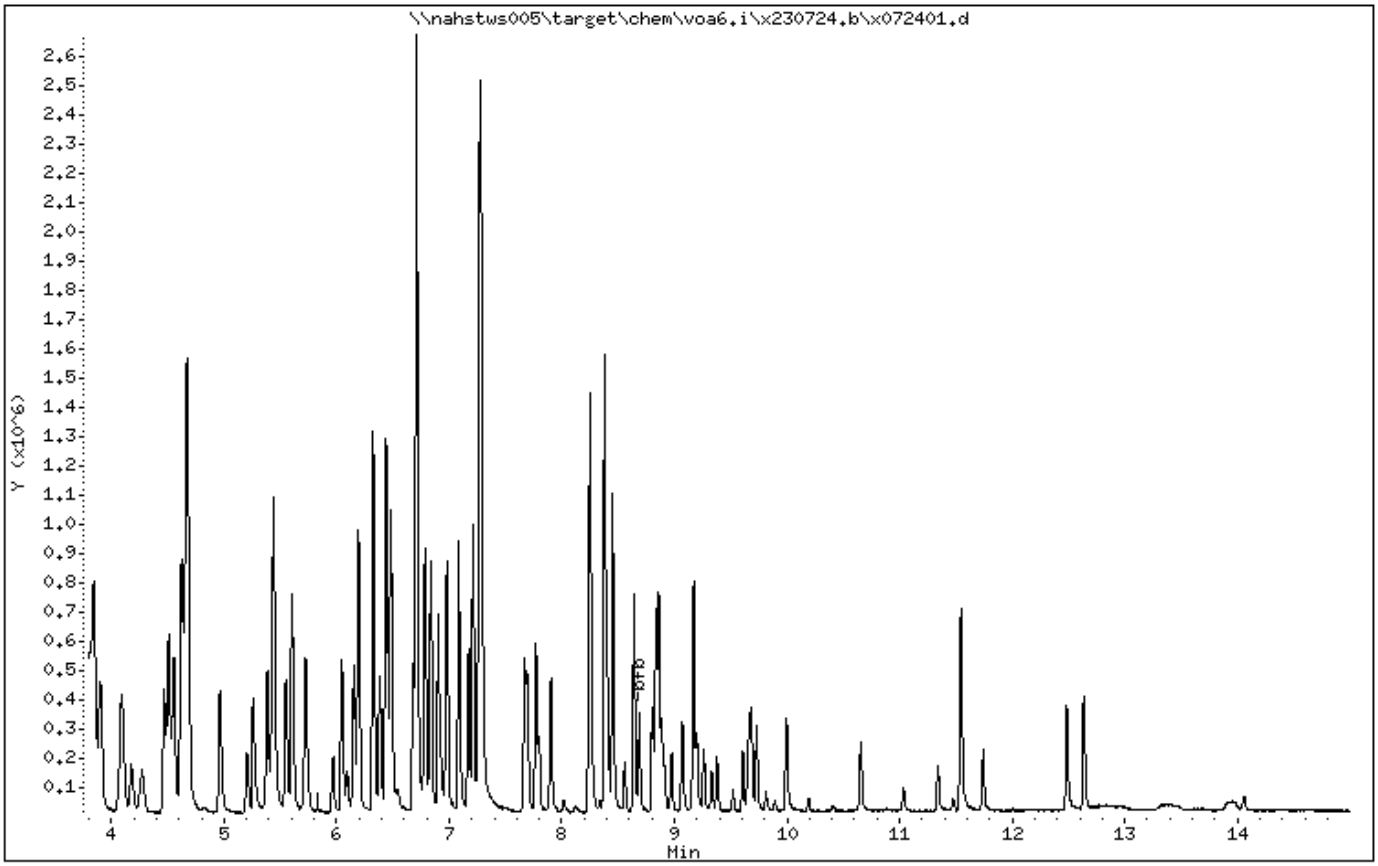
Date : 24-JUL-2023 10:55

Client ID: BFB Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0 Operator: PC

Column phase: DB624 Column diameter: 0.25



Data File : \\nahstws005\target\chem\voa6.i\x230724.b\x072401.d
Inj Date : 24-JUL-2023 10:55
InstruID : voa6.i
LabSampID : BFB

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072403.D Page 1
Report Date: 27-Jul-2023 13:08

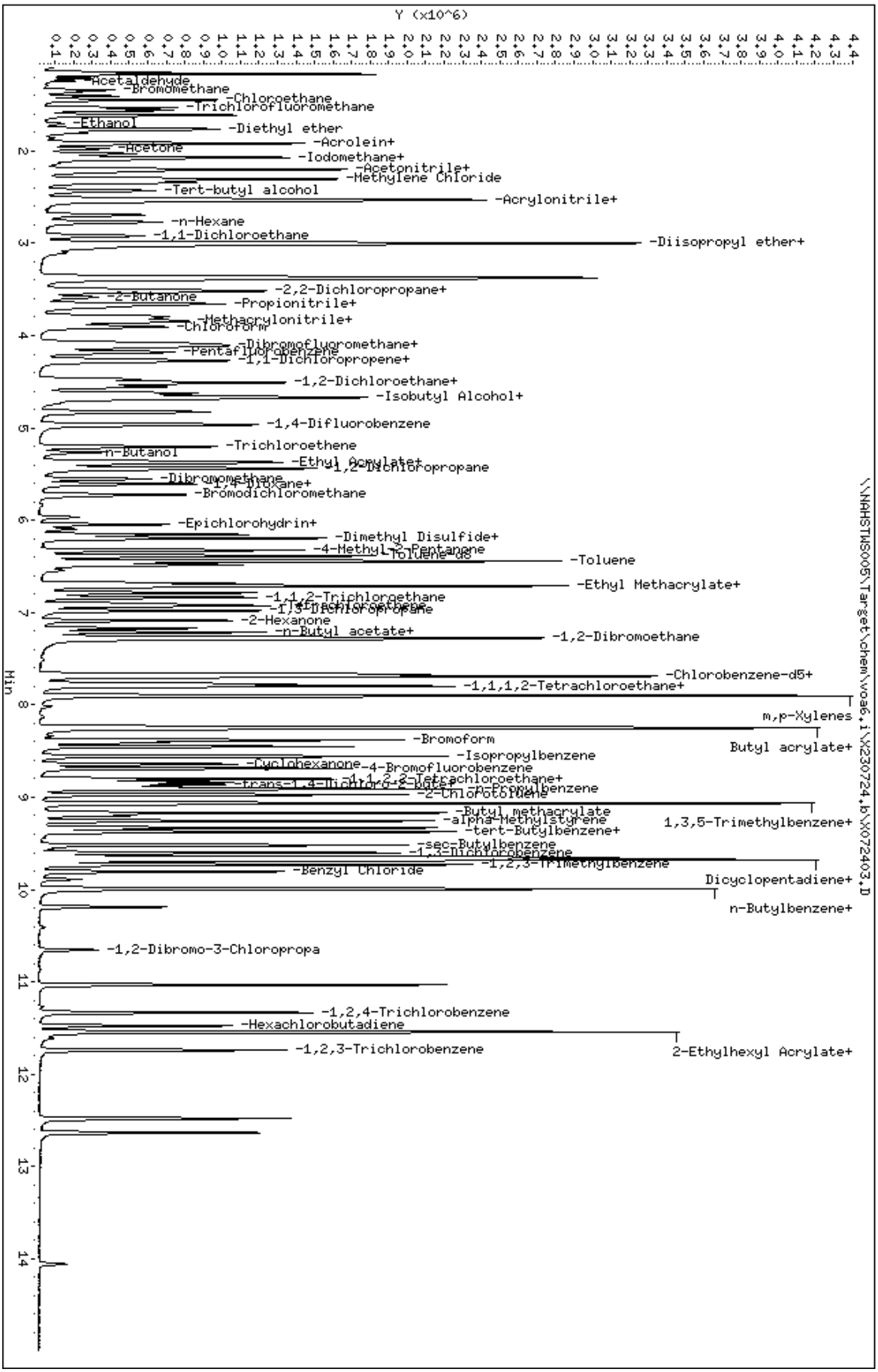
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072403.D
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 24-JUL-2023 11:36
Operator : PC Inst ID: voa6.i
Smp Info : CCV;CCV;2;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\8260W.m
Meth Date : 27-Jul-2023 13:08 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.174	4.174	(1.000)	569251	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.981)	278655	50.0000	53.46
$ 35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.071)	344510	50.0000	52.83
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	922855	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	843367	50.0000	
$ 48 Toluene-d8	98	6.386	6.386	(0.833)	1019276	50.0000	46.94
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	446857	50.0000	53.24
* 70 1,4-Dichlorobenzene-d4	152	9.658	9.658	(1.000)	457779	50.0000	
5 Vinyl Chloride	62	1.145	1.145	(0.274)	421356	50.0000	57.19
11 1,1-Dichloroethene	96	1.917	1.917	(0.459)	224078	50.0000	53.73
17 Methylene Chloride	84	2.303	2.303	(0.552)	239509	50.0000	48.63
27 cis-1,2-Dichloroethene	96	3.525	3.525	(0.845)	323298	50.0000	52.60
33 1,2-Dichloroethane	62	4.556	4.556	(0.918)	501080	50.0000	49.32
38 Trichloroethene	130	5.205	5.205	(1.048)	297324	50.0000	47.61
53 1,1,2-Trichloroethane	83	6.835	6.835	(0.891)	242878	50.0000	50.43
20 trans-1,2-Dichloroethene	96	2.528	2.528	(0.606)	218936	50.0000	45.38



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072403.D
Date : 24-JUL-2023 11:36
Client ID: CCV
Sample Info: CCV,CCV,2,,
Purge Volume: 5.0
Column phase: DB624

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

Data File : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072403.D
Inj Date : 24-JUL-2023 11:36
InstruID : voa6.i
LabSampID : CCV

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072404.D Page 1
Report Date: 27-Jul-2023 13:08

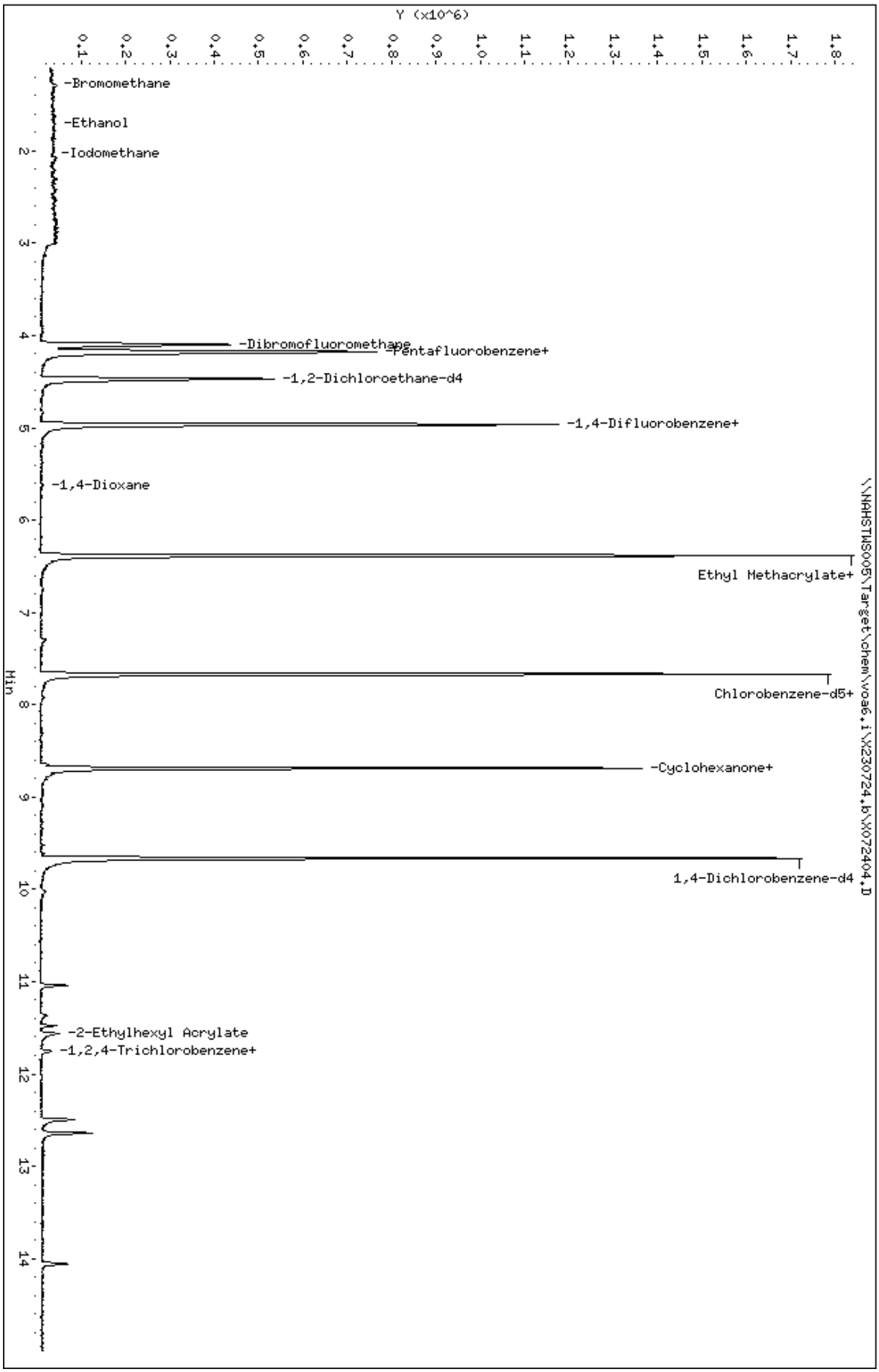
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072404.D
Lab Smp Id: CCB Client Smp ID: CCB
Inj Date : 24-JUL-2023 11:56
Operator : PC Inst ID: voa6.i
Smp Info : CCB;CCB;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\8260W.m
Meth Date : 27-Jul-2023 13:08 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.177	4.174	(1.000)	585631	50.0000	
$ 30 Dibromofluoromethane	113	4.099	4.095	(0.981)	288549	53.8173	53.81
$ 35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	352961	52.6183	52.61
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	901702	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	815353	50.0000	
$ 48 Toluene-d8	98	6.385	6.386	(0.833)	1038085	49.4495	49.44
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	387804	47.7502	47.75
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.658	(1.000)	412447	50.0000	



Data File: \\NAHSTMS005\Target\chem\voa6.i\X230724.b\X072404.D
Date : 24-JUL-2023 11:56
Client ID: CCB
Sample Info: CCB;CCB;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072404.D
Inj Date : 24-JUL-2023 11:56
InstruID : voa6.i
LabSampID : CCB

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072407.D Page 1
Report Date: 27-Jul-2023 13:08

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072407.D
Lab Smp Id: VBLKW-230724 Client Smp ID: VBLKW-230724
Inj Date : 24-JUL-2023 12:58
Operator : PC Inst ID: voa6.i
Smp Info : VBLKW-230724;VBLKW-230724;3;;BLANK
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\8260W.m
Meth Date : 27-Jul-2023 13:08 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 6 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.181	4.174	(1.000)	590206	50.0000	
$ 30 Dibromofluoromethane	113	4.099	4.095	(0.980)	289540	53.5802	53.58
$ 35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.069)	358806	53.0804	53.08
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	901388	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	800368	50.0000	
$ 48 Toluene-d8	98	6.385	6.386	(0.833)	1043294	50.6281	50.62
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	387622	48.6292	48.62
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.658	(1.000)	428640	50.0000	

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Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072407.D

Page 1

Date : 24-JUL-2023 12:58

Client ID: VBLKW-230724

Instrument: voa6.i

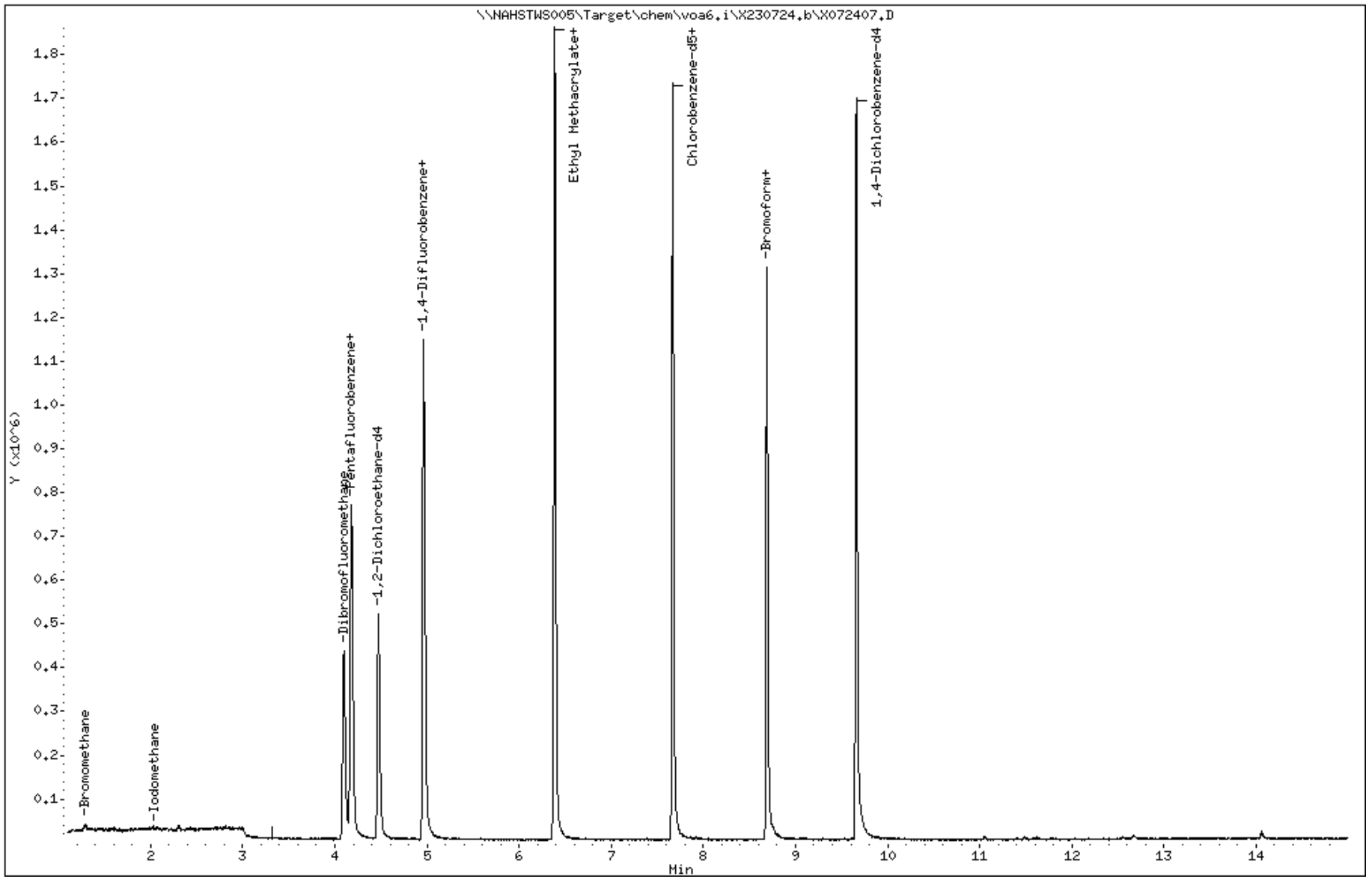
Sample Info: VBLKW-230724;VBLKW-230724;3;;BLANK

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072407.D
Inj Date : 24-JUL-2023 12:58
InstruID : voa6.i
LabSampID : VBLKW-230724

NO MANUAL INTEGRATIONS

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072408.D
Lab Smp Id: HS23071113-02 Client Smp ID: HS23071113-02
Inj Date : 24-JUL-2023 13:18
Operator : PC Inst ID: voa6.i
Smp Info : HS23071113-02;HS23071113-02;;;
Misc Info : V6;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\8260W.m
Meth Date : 27-Jul-2023 13:08 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.177	4.174	(1.000)	600321	50.0000	
$ 30 Dibromofluoromethane	113	4.099	4.095	(0.981)	295852	53.8293	53.82
$ 35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	363521	52.8694	52.86
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	911128	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	804984	50.0000	
$ 48 Toluene-d8	98	6.385	6.386	(0.833)	1051065	50.7127	50.71
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	382150	47.6593	47.65
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.658	(1.000)	432750	50.0000	
27 cis-1,2-Dichloroethene	96	3.529	3.525	(0.845)	33726	5.20405	5.20
38 Trichloroethene	130	5.201	5.205	(1.048)	298420	48.4098	48.40

01322902

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072408.D

Date : 24-JUL-2023 13:18

Client ID: HS23071113-02

Instrument: voa6.i

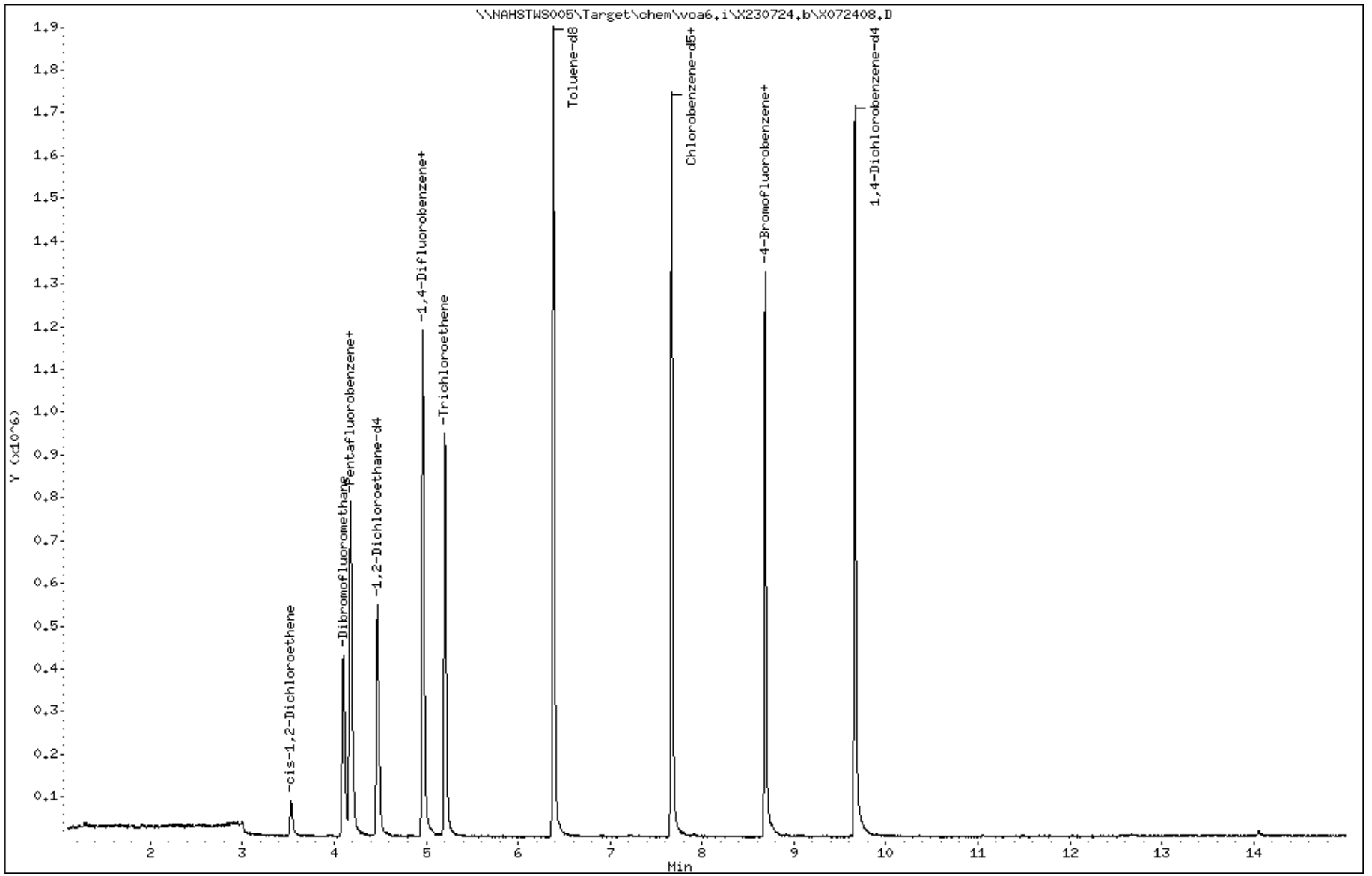
Sample Info: HS23071113-02;HS23071113-02;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072408.D Page 2

Date : 24-JUL-2023 13:18

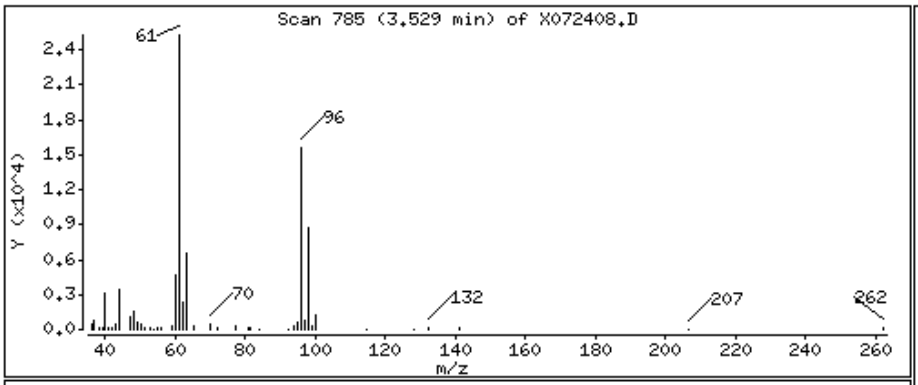
Client ID: HS23071113-02 Instrument: voa6.i

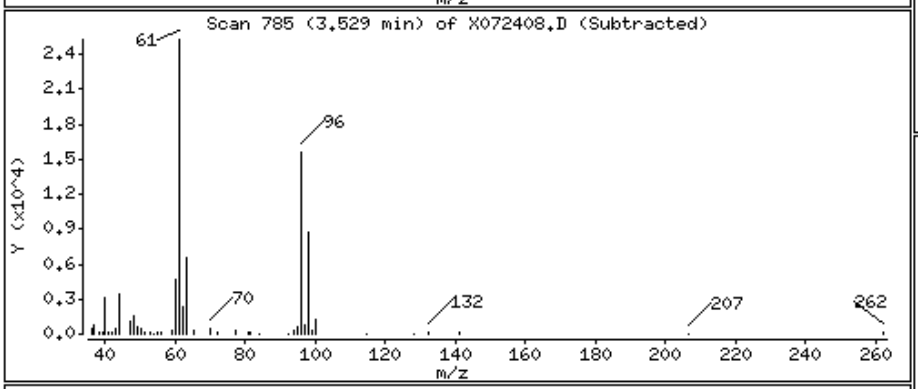
Sample Info: HS23071113-02;HS23071113-02;;;

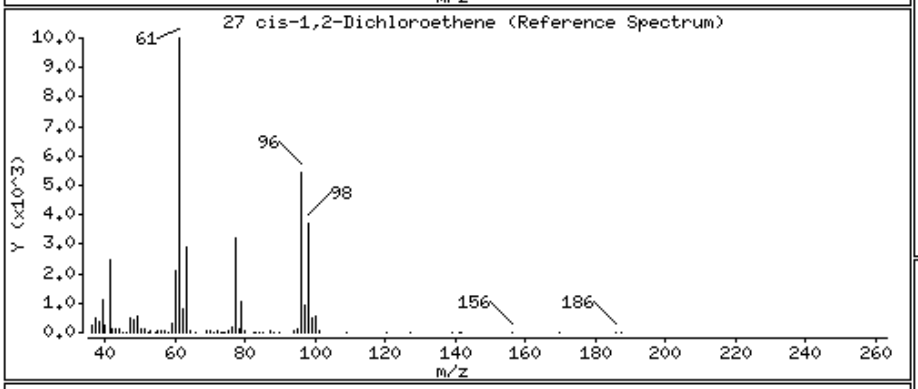
Purge Volume: 5.0 Operator: PC

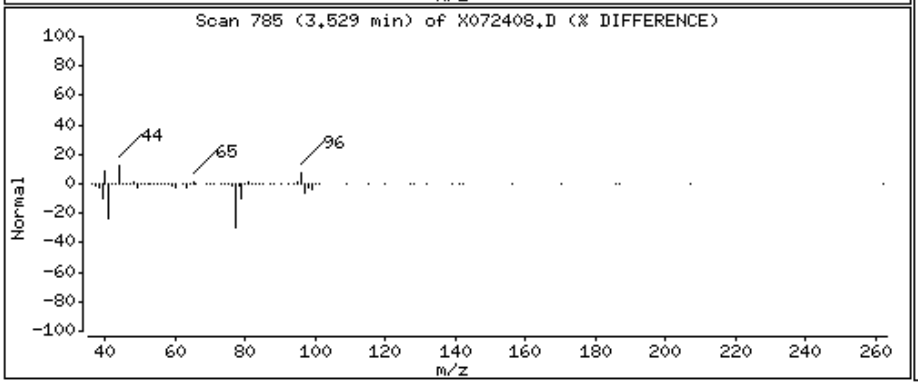
Column phase: DB624 Column diameter: 0.18

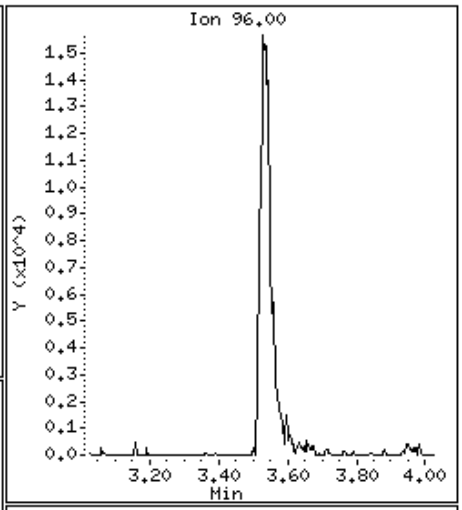
27 cis-1,2-Dichloroethene Concentration: 5.20 ug/l

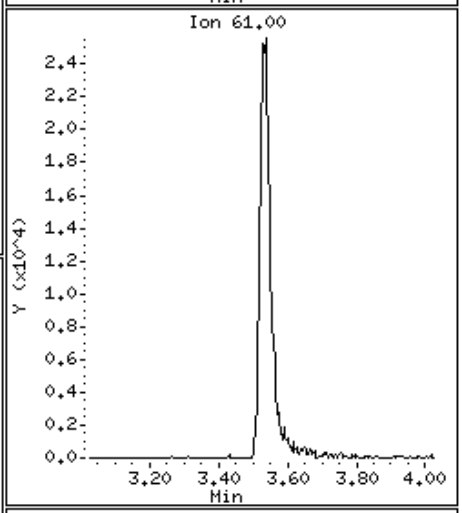


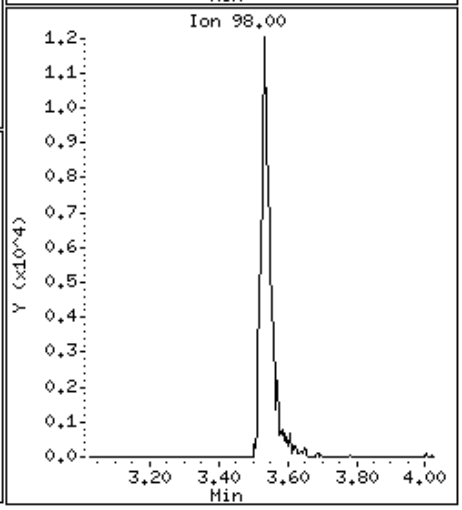












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072408.D Page 3

Date : 24-JUL-2023 13:18

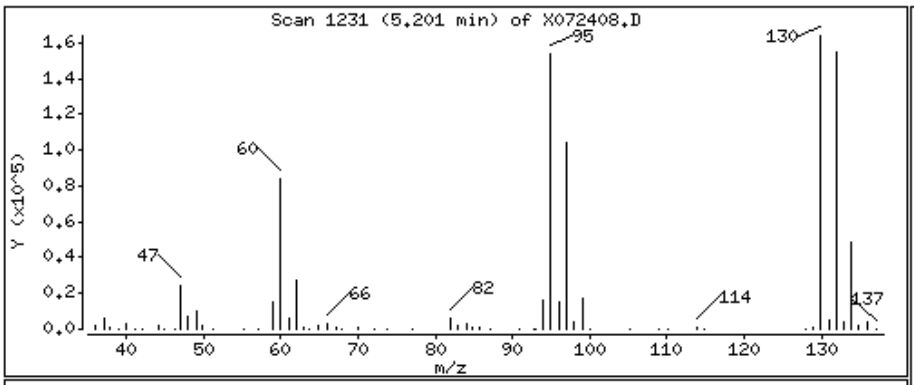
Client ID: HS23071113-02 Instrument: voa6.i

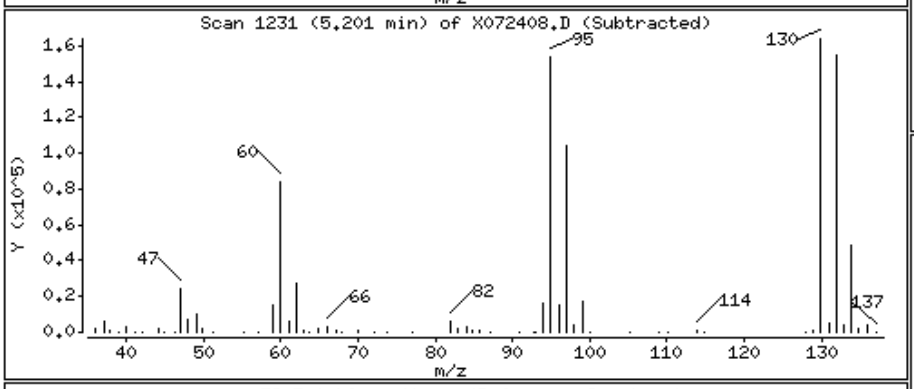
Sample Info: HS23071113-02;HS23071113-02;;;

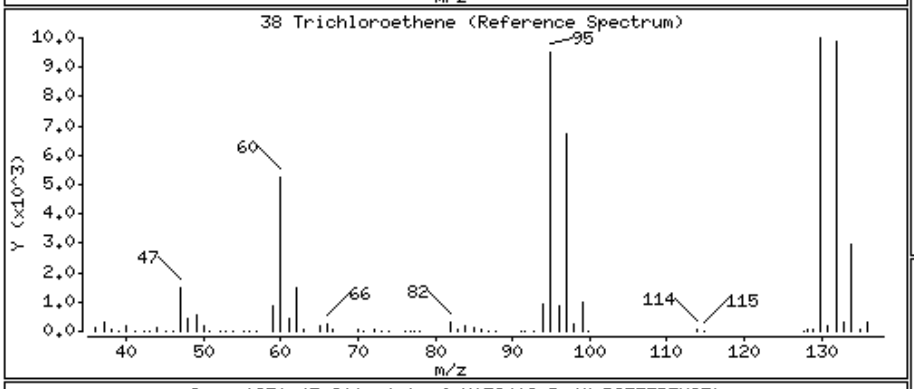
Purge Volume: 5.0 Operator: PC

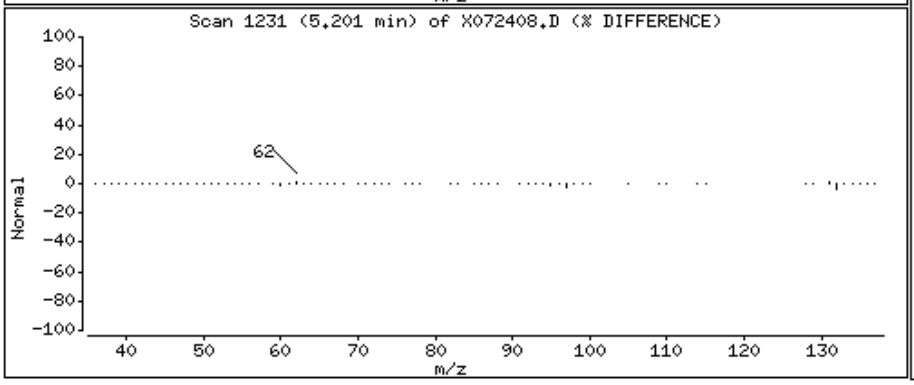
Column phase: DB624 Column diameter: 0.18

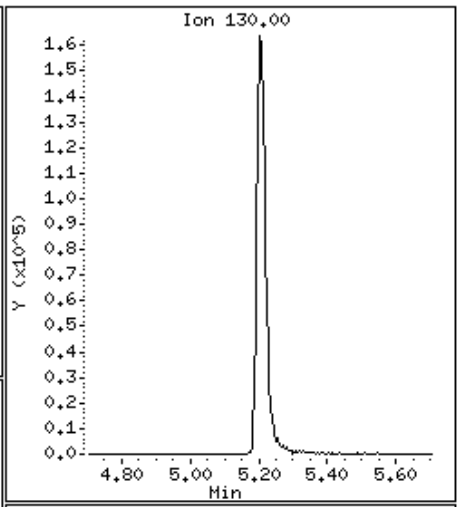
38 Trichloroethene Concentration: 48.40 ug/l

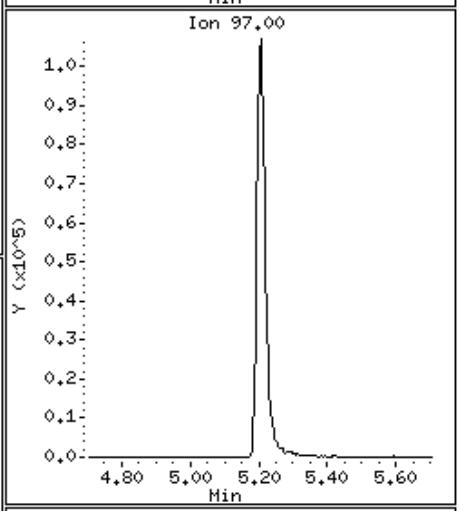


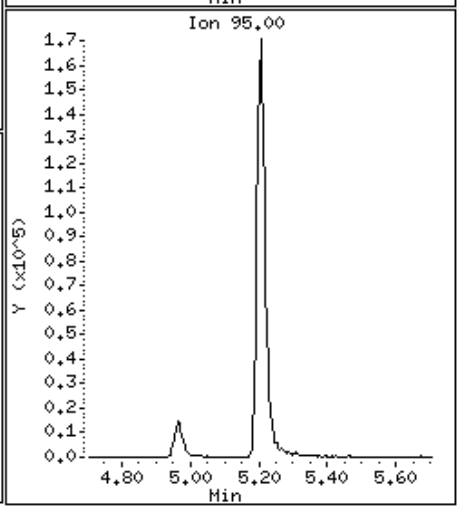












Data File : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072408.D
Inj Date : 24-JUL-2023 13:18
InstruID : voa6.i
LabSampID : HS23071113-02

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072409.D Page 1
Report Date: 27-Jul-2023 13:08

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072409.D
Lab Smp Id: HS23071113-04 Client Smp ID: HS23071113-04
Inj Date : 24-JUL-2023 13:39
Operator : PC Inst ID: voa6.i
Smp Info : HS23071113-04;HS23071113-04;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\8260W.m
Meth Date : 27-Jul-2023 13:08 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.178	4.174	(1.000)	602660	50.0000	
$ 30 Dibromofluoromethane	113	4.099	4.095	(0.981)	290504	52.6344	52.63
$ 35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	369044	53.4713	53.47
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	918224	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	807633	50.0000	
$ 48 Toluene-d8	98	6.386	6.386	(0.833)	1030444	49.5547	49.55
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	395689	49.1996	49.19
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.658	(1.000)	441695	50.0000	
5 Vinyl Chloride	62	1.145	1.145	(0.274)	142205	18.2345	18.23
11 1,1-Dichloroethene	96	1.913	1.917	(0.458)	11512	2.60739	2.60(a)
27 cis-1,2-Dichloroethene	96	3.522	3.525	(0.843)	4573686	702.998	702.99(A)
38 Trichloroethene	130	5.205	5.205	(1.048)	10643570	1713.26	1713.26(A)
20 trans-1,2-Dichloroethene	96	2.536	2.528	(0.607)	27349	5.35512	5.35

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.

01322908

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072409.D

Page 1

Date : 24-JUL-2023 13:39

Client ID: HS23071113-04

Instrument: voa6.i

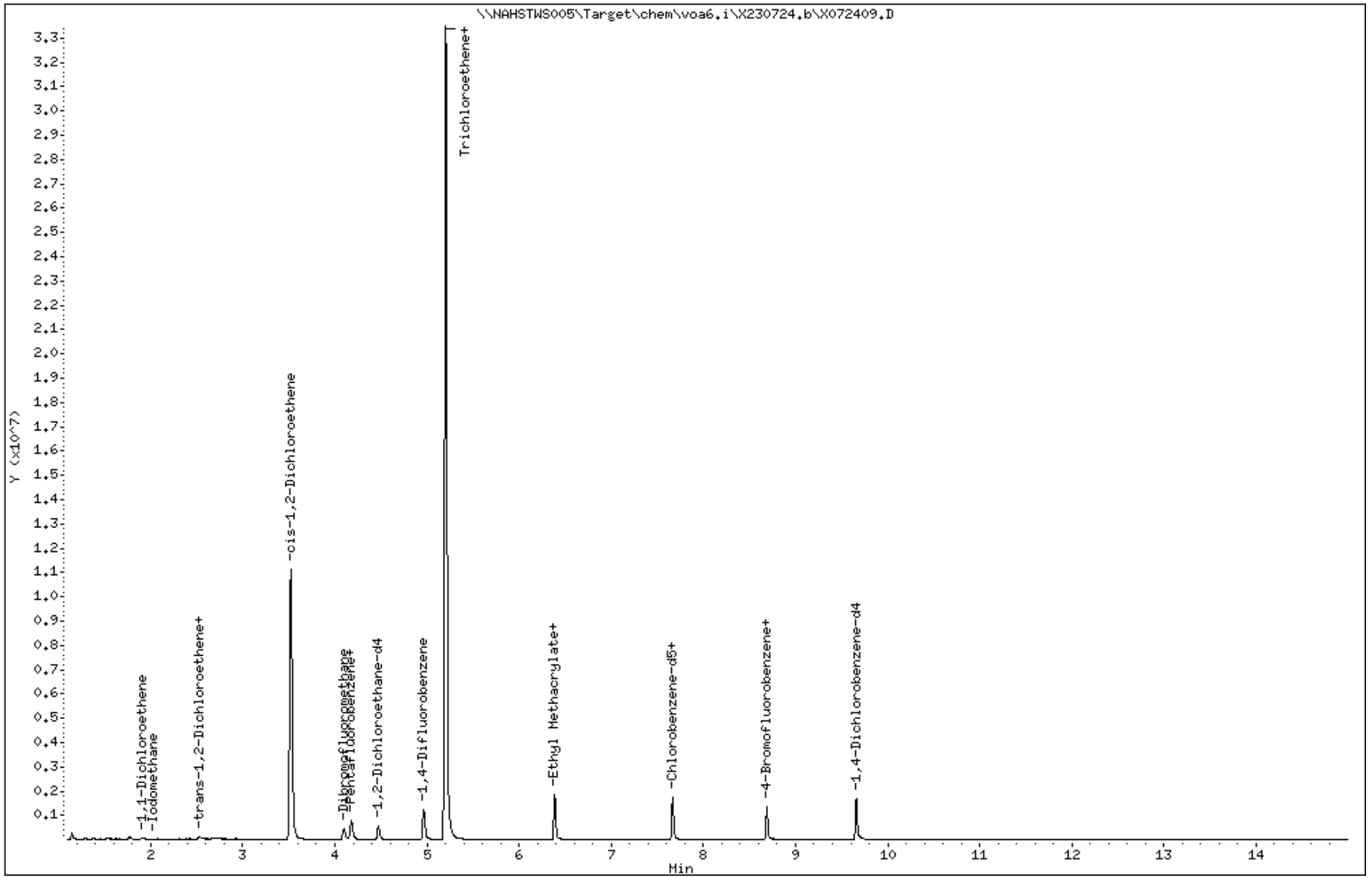
Sample Info: HS23071113-04;HS23071113-04;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



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Date : 24-JUL-2023 13:39

Client ID: HS23071113-04

Instrument: voa6.i

Sample Info: HS23071113-04;HS23071113-04;;;

Purge Volume: 5.0

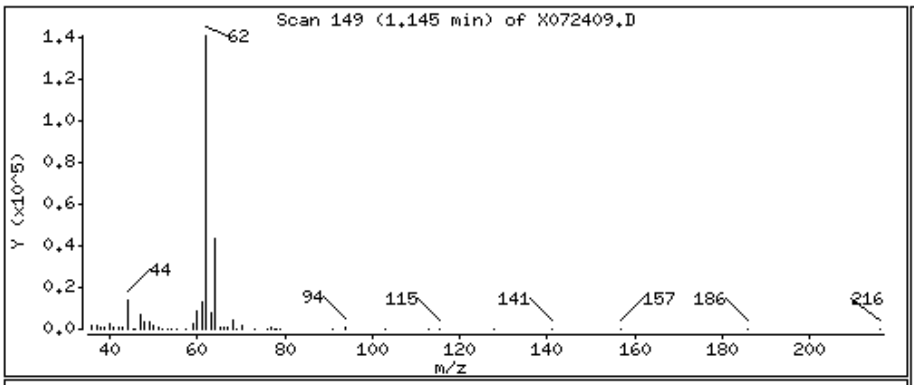
Operator: PC

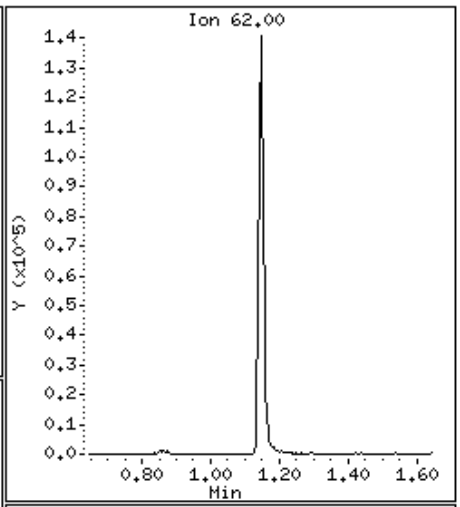
Column phase: DB624

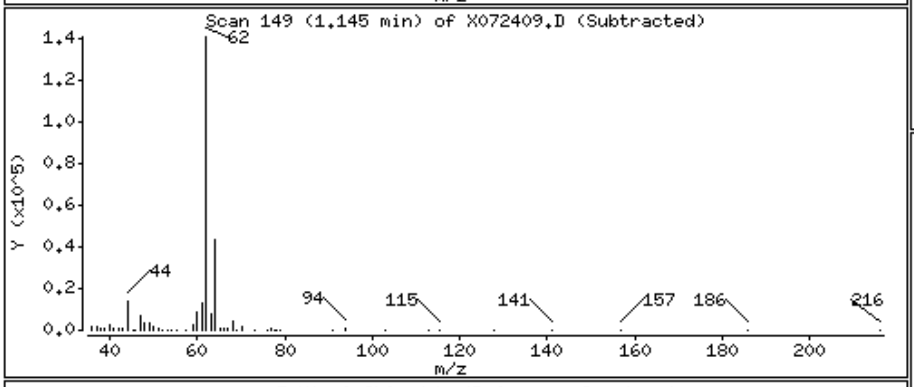
Column diameter: 0.18

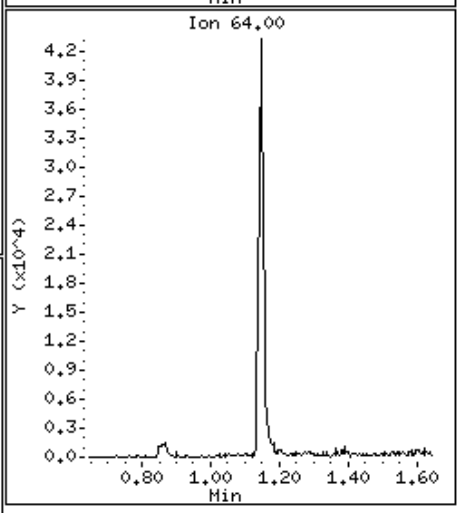
5 Vinyl Chloride

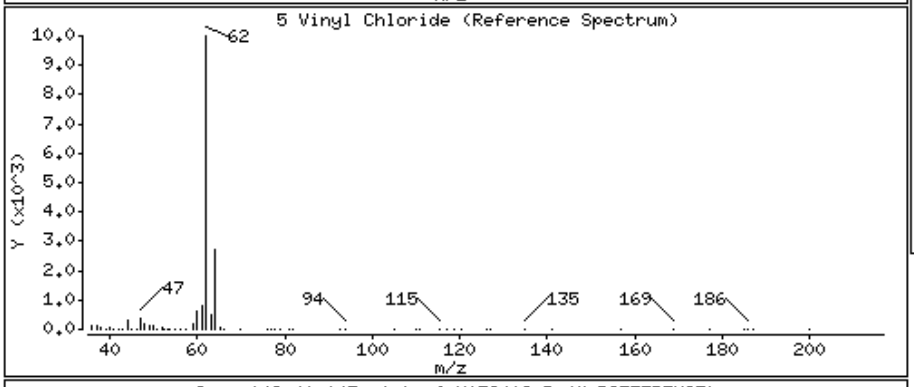
Concentration: 18.23 ug/l

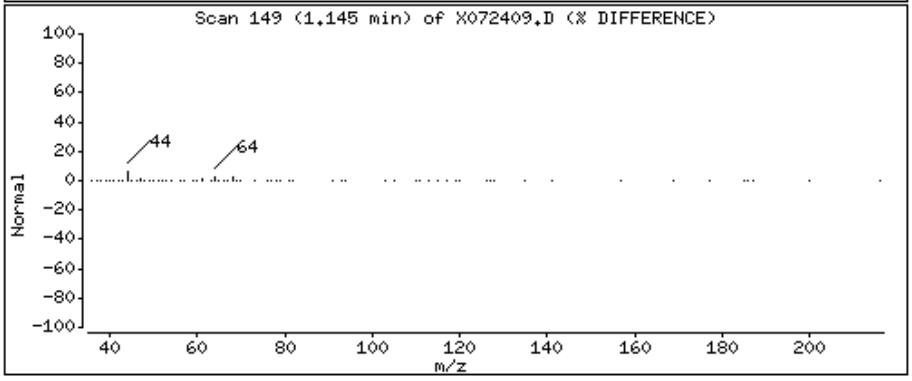












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072409.D

Date : 24-JUL-2023 13:39

Client ID: HS23071113-04

Instrument: voa6.i

Sample Info: HS23071113-04;HS23071113-04;;;

Purge Volume: 5.0

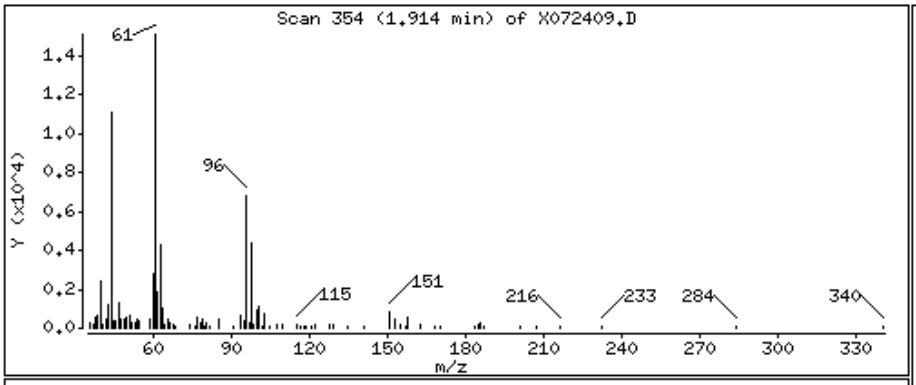
Operator: PC

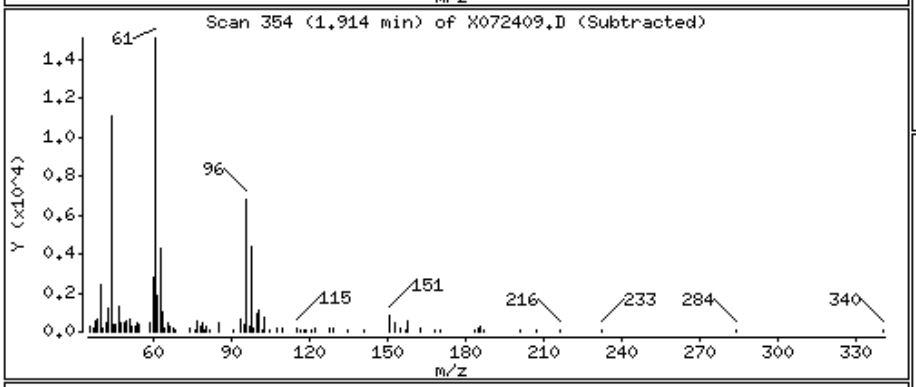
Column phase: DB624

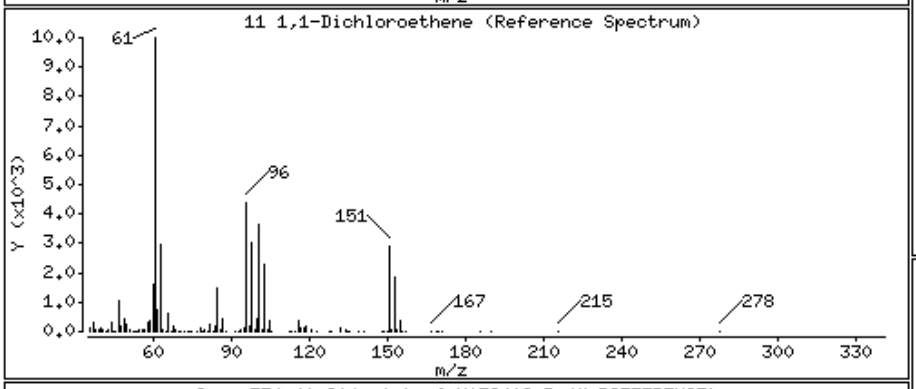
Column diameter: 0.18

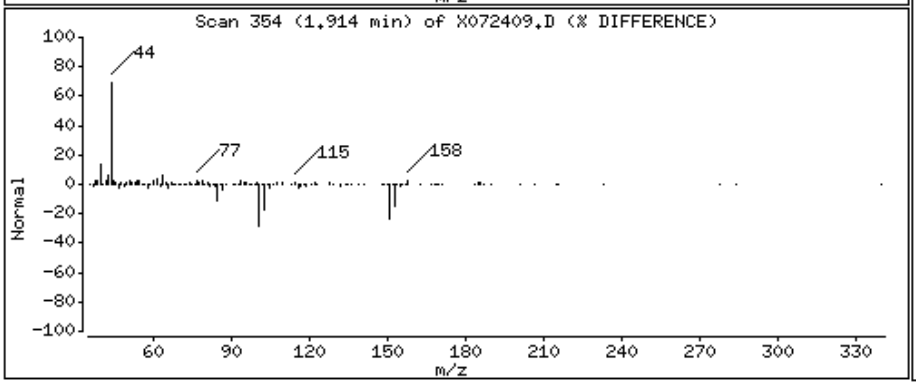
11 1,1-Dichloroethene

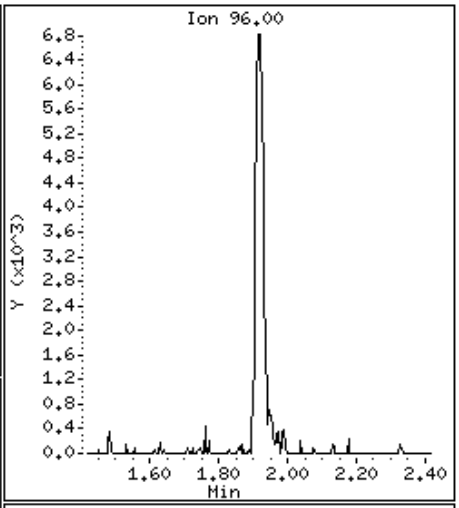
Concentration: 2.60 ug/l

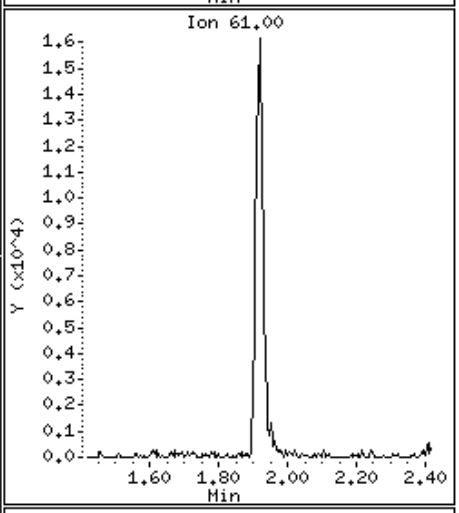


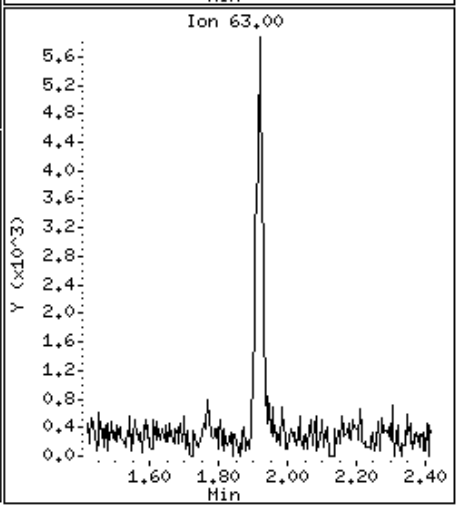












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072409.D Page 4

Date : 24-JUL-2023 13:39

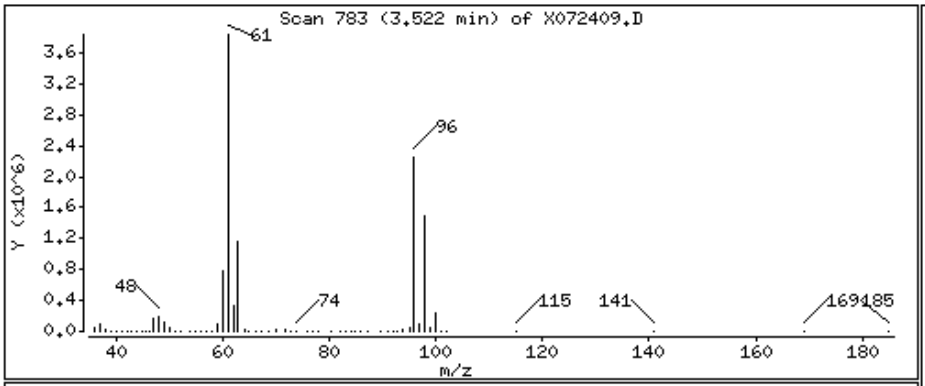
Client ID: HS23071113-04 Instrument: voa6.i

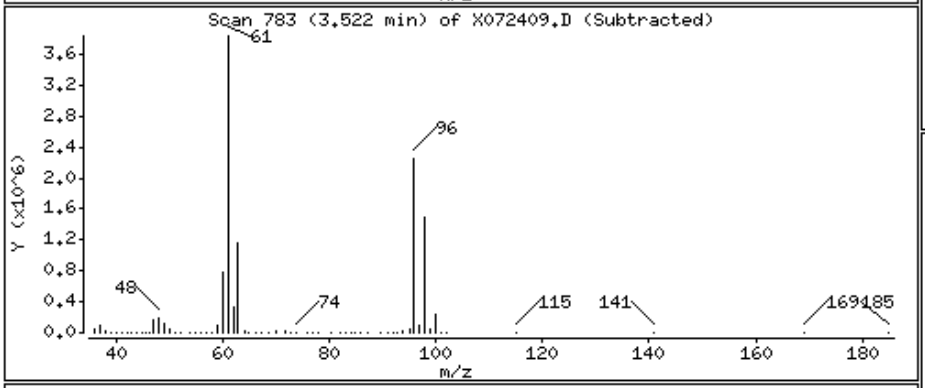
Sample Info: HS23071113-04;HS23071113-04;;;

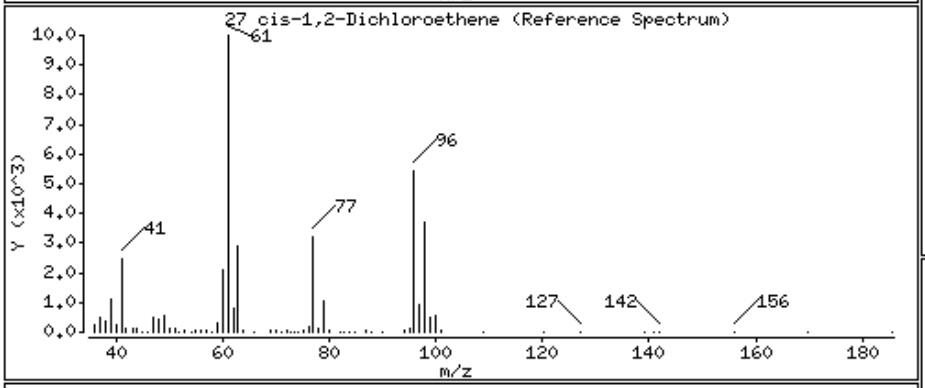
Purge Volume: 5.0 Operator: PC

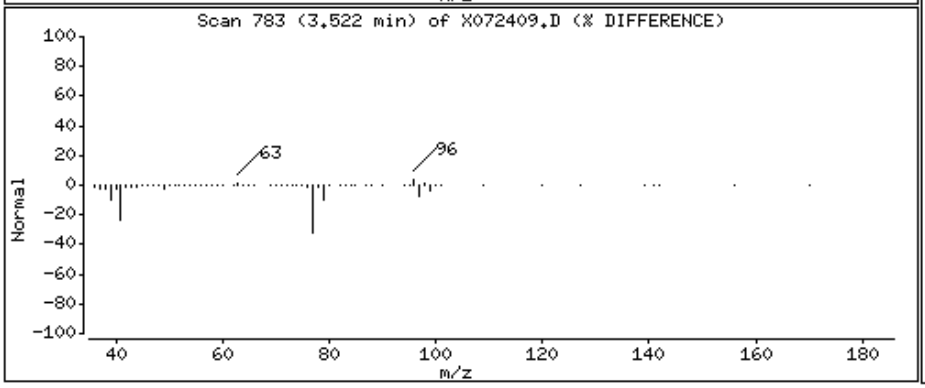
Column phase: DB624 Column diameter: 0.18

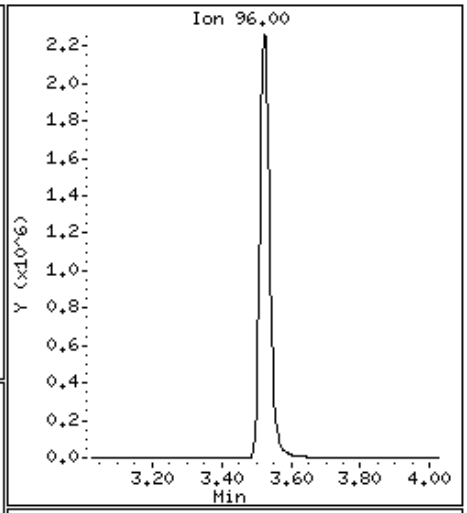
27 cis-1,2-Dichloroethene Concentration: 702.99 ug/l

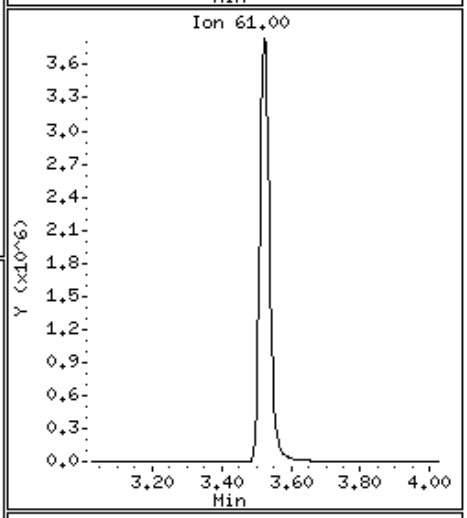


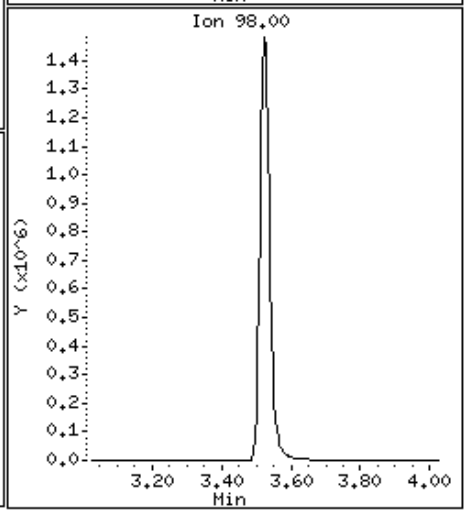












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072409.D Page 5

Date : 24-JUL-2023 13:39

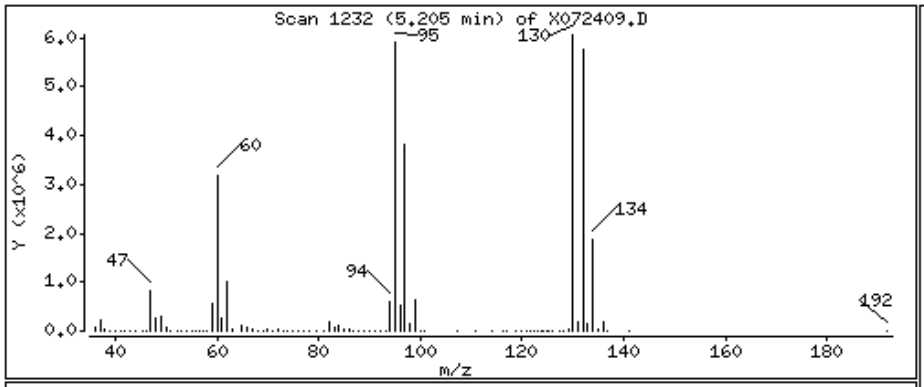
Client ID: HS23071113-04 Instrument: voa6.i

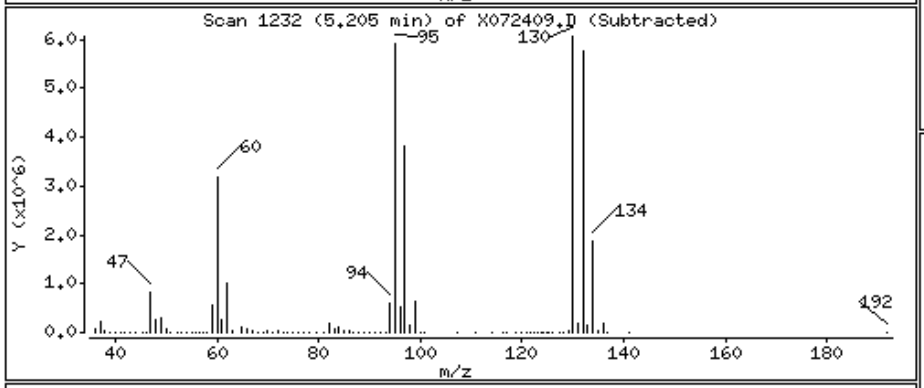
Sample Info: HS23071113-04;HS23071113-04;;;

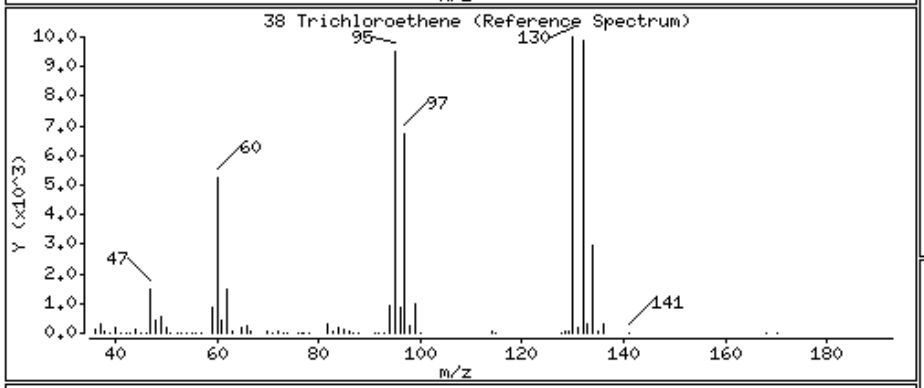
Purge Volume: 5.0 Operator: PC

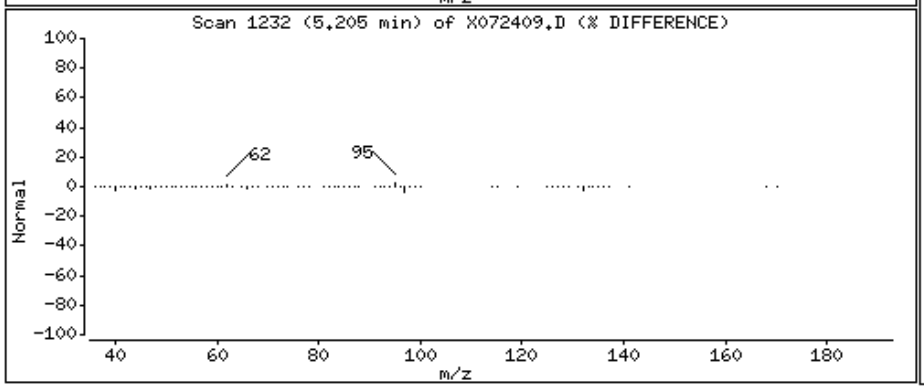
Column phase: DB624 Column diameter: 0.18

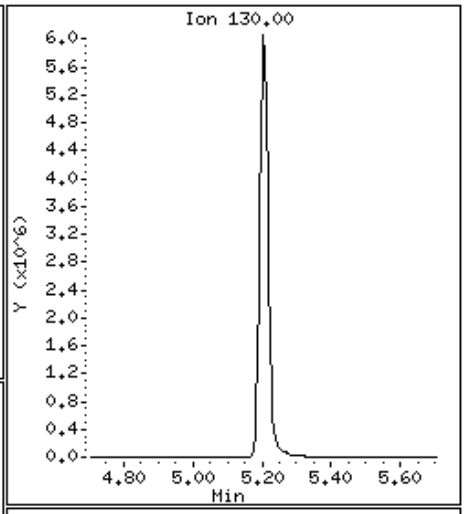
38 Trichloroethene Concentration: 1713.26 ug/l

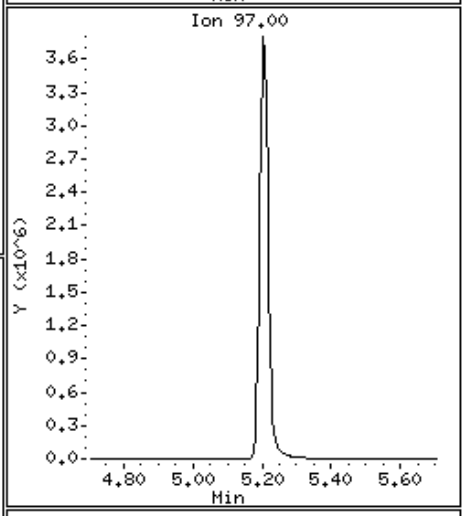


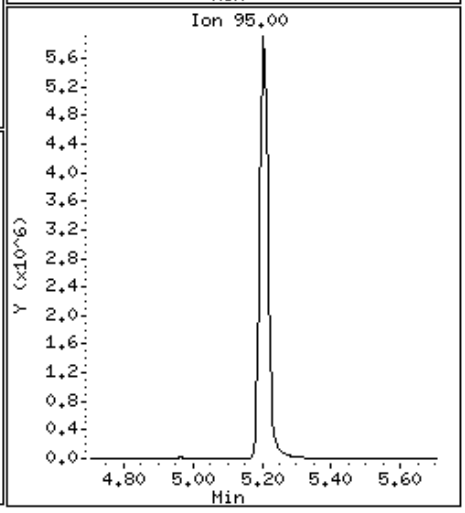












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072409.D Page 6

Date : 24-JUL-2023 13:39

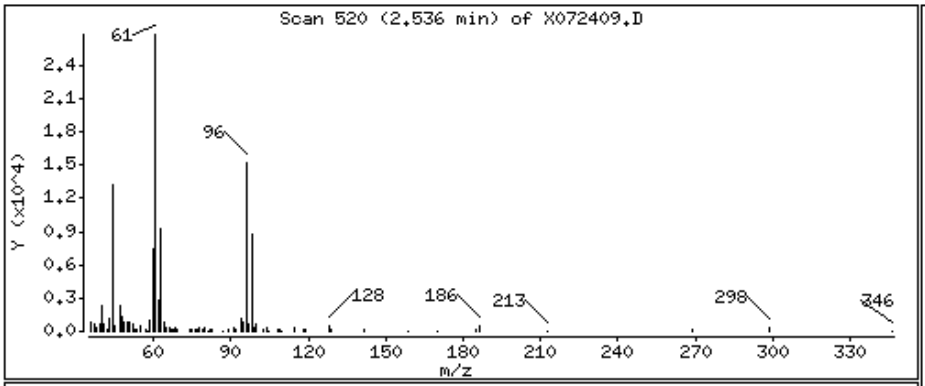
Client ID: HS23071113-04 Instrument: voa6.i

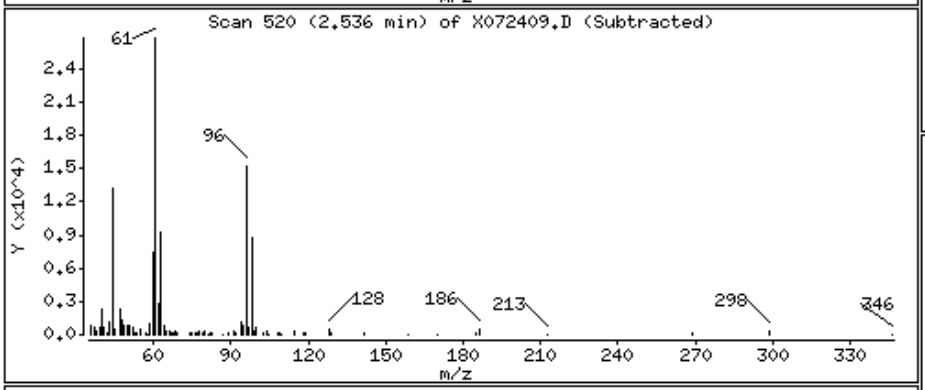
Sample Info: HS23071113-04;HS23071113-04;;;

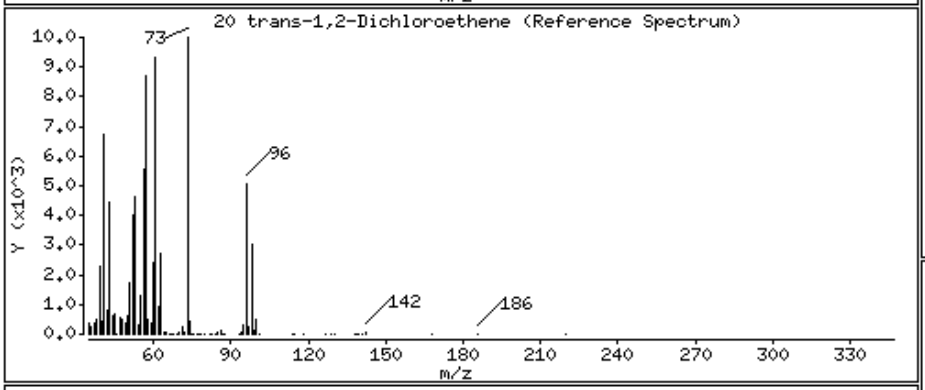
Purge Volume: 5.0 Operator: PC

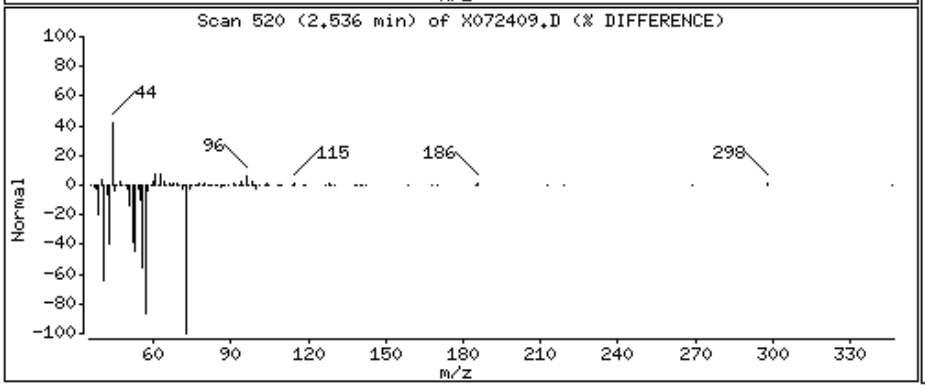
Column phase: DB624 Column diameter: 0.18

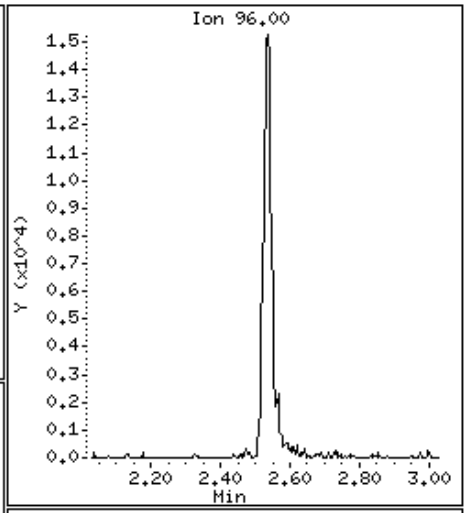
20 trans-1,2-Dichloroethene Concentration: 5.35 ug/l

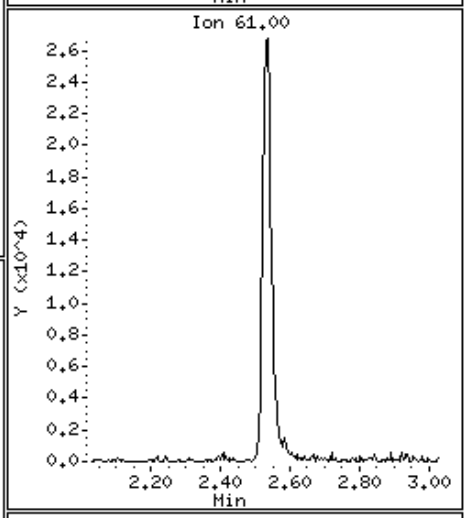


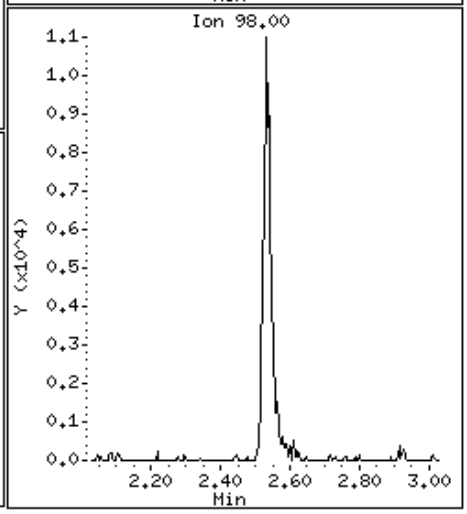












Data File : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072409.D
Inj Date : 24-JUL-2023 13:39
InstruID : voa6.i
LabSampID : HS23071113-04

NO MANUAL INTEGRATIONS

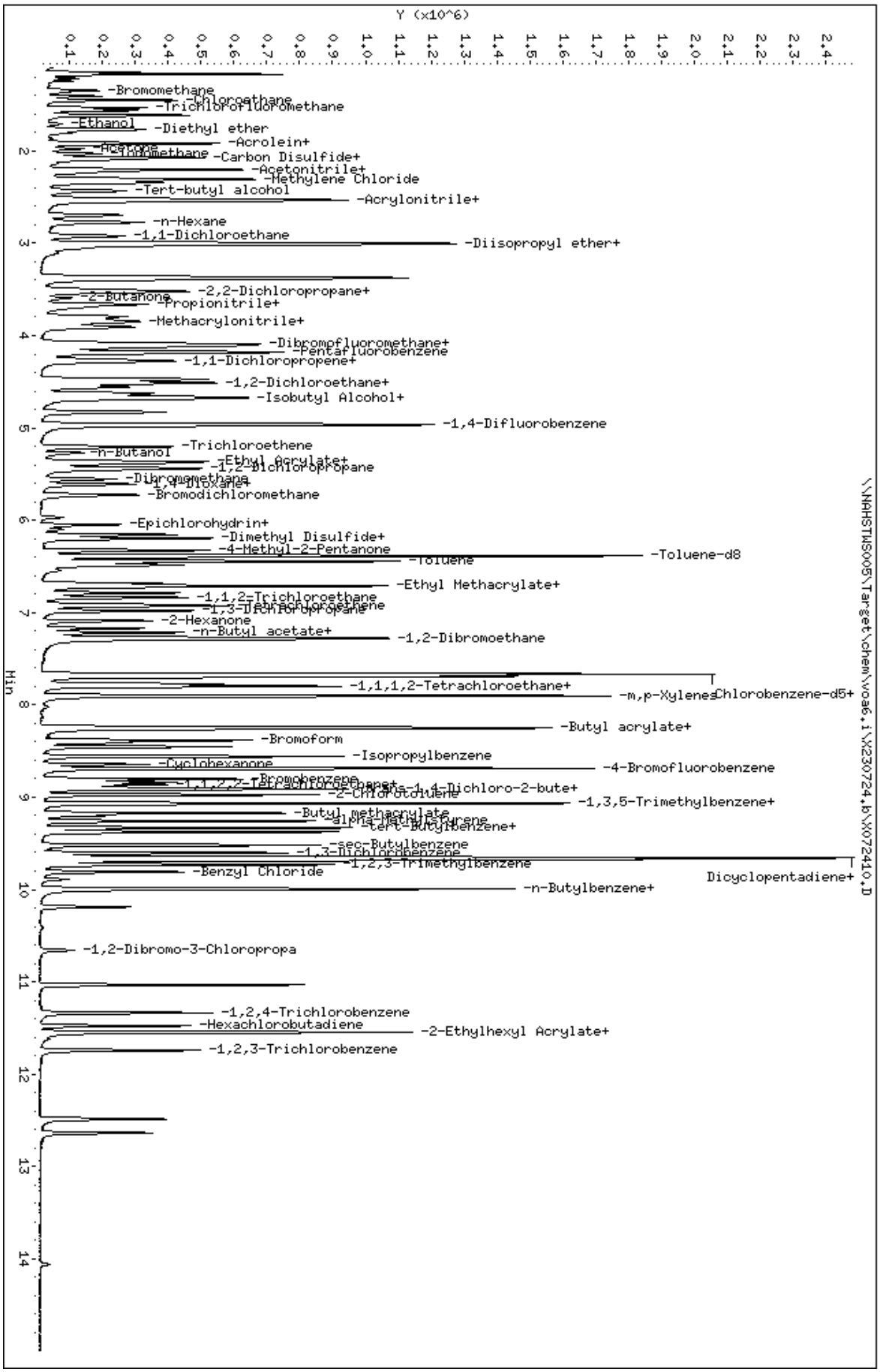
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072410.D
Lab Smp Id: VLCSW-230724 Client Smp ID: VLCSW-230724
Inj Date : 24-JUL-2023 13:59
Operator : PC Inst ID: voa6.i
Smp Info : VLCSW-230724;VLCSW-230724;3;;LCS
Misc Info : V6;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\8260W.m
Meth Date : 27-Jul-2023 13:08 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 9 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.178	4.174	(1.000)	576980	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.980)	286479	54.2382	54.23
$ 35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	354070	53.5864	53.58
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	921440	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	863162	50.0000	
$ 48 Toluene-d8	98	6.382	6.386	(0.832)	1029612	46.3293	46.32
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	453196	52.7556	52.75
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.658	(1.000)	466768	50.0000	
5 Vinyl Chloride	62	1.145	1.145	(0.274)	174942	23.4306	23.43
11 1,1-Dichloroethene	96	1.917	1.917	(0.459)	82928	19.6186	19.61
17 Methylene Chloride	84	2.303	2.303	(0.551)	95632	18.3027	18.30
27 cis-1,2-Dichloroethene	96	3.525	3.525	(0.844)	127333	20.4428	20.44
33 1,2-Dichloroethane	62	4.556	4.556	(0.918)	192562	18.9843	18.98
38 Trichloroethene	130	5.205	5.205	(1.048)	131854	21.1500	21.15
53 1,1,2-Trichloroethane	83	6.835	6.835	(0.891)	97167	19.7136	19.71
20 trans-1,2-Dichloroethene	96	2.532	2.528	(0.606)	92351	18.8878	18.88



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072410.D
Date : 24-JUL-2023 13:59
Client ID: VLCSW-230724
Sample Info: VLCSW-230724;VLCSW-230724;3;;LCS
Purge Volume: 5.0
Column phase: DB624

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

Data File : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072410.D
Inj Date : 24-JUL-2023 13:59
InstruID : voa6.i
LabSampID : VLCSW-230724

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072411.D Page 1
Report Date: 27-Jul-2023 13:08

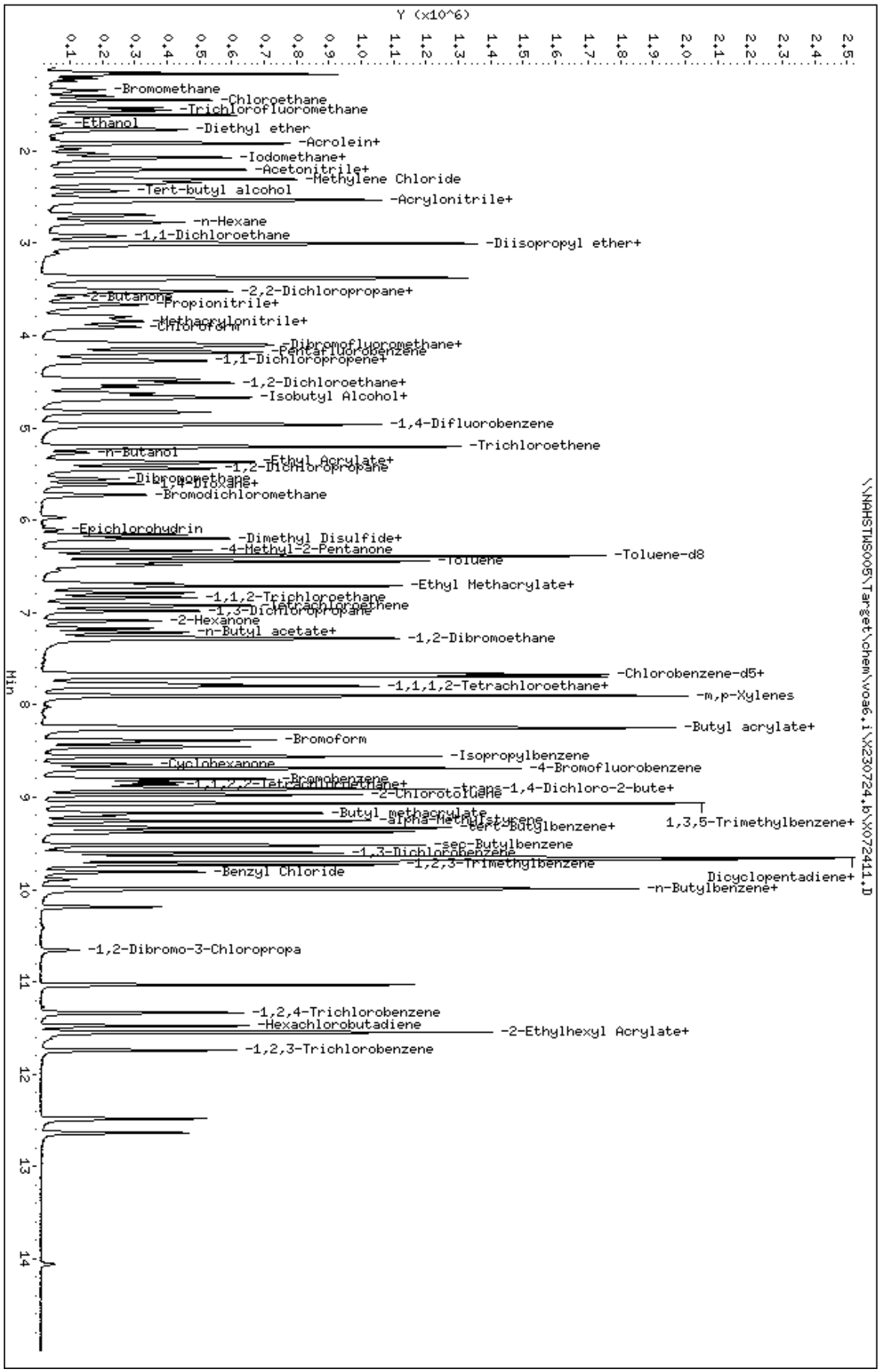
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072411.D
Lab Smp Id: HS23071113-02MS Client Smp ID: HS23071113-02MS
Inj Date : 24-JUL-2023 14:20
Operator : PC Inst ID: voa6.i
Smp Info : HS23071113-02MS;HS23071113-02MS;3;;MS
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\8260W.m
Meth Date : 27-Jul-2023 13:08 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 10 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.181	4.174	(1.000)	520372	50.0000	
$ 30 Dibromofluoromethane	113	4.095	4.095	(0.979)	268033	56.2947	56.29
$ 35 1,2-Dichloroethane-d4	65	4.473	4.470	(1.070)	339642	57.0342	57.03
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	816921	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	729742	50.0000	
$ 48 Toluene-d8	98	6.385	6.386	(0.833)	930979	49.5501	49.55
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	399903	55.0818	55.08
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.658	(1.000)	440108	50.0000	
5 Vinyl Chloride	62	1.145	1.145	(0.274)	210415	31.2474	31.24
11 1,1-Dichloroethene	96	1.913	1.917	(0.458)	109672	28.7680	28.76
17 Methylene Chloride	84	2.307	2.303	(0.552)	103591	22.2664	22.26
27 cis-1,2-Dichloroethene	96	3.529	3.525	(0.844)	166556	29.6488	29.64
33 1,2-Dichloroethane	62	4.556	4.556	(0.918)	207397	23.0628	23.06
38 Trichloroethene	130	5.204	5.205	(1.048)	407782	73.7791	73.77
53 1,1,2-Trichloroethane	83	6.839	6.835	(0.892)	94282	22.6255	22.62
20 trans-1,2-Dichloroethene	96	2.528	2.528	(0.605)	101998	23.1301	23.13



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Date : 24-JUL-2023 14:20
Client ID: HS23071113-02MS
Sample Info: HS23071113-02MS;HS23071113-02MS;3;;MS
Purge Volume: 5.0
Column phase: DB624

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

Data File : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072411.D
Inj Date : 24-JUL-2023 14:20
InstruID : voa6.i
LabSampID : HS23071113-02MS

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072412.D Page 1
Report Date: 27-Jul-2023 13:08

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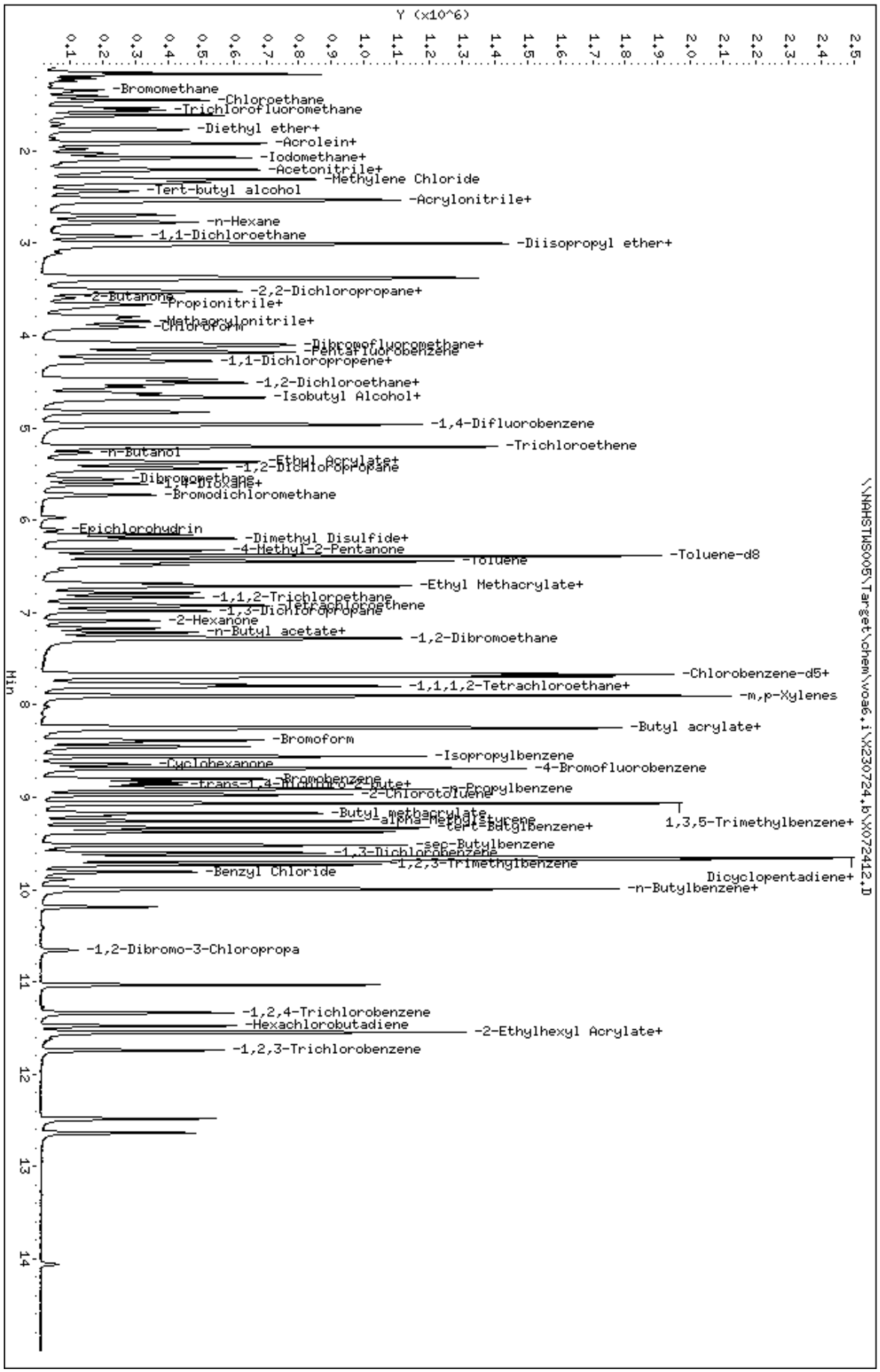
Data file : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072412.D
Lab Smp Id: HS23071113-02MSD Client Smp ID: HS23071113-02MSD
Inj Date : 24-JUL-2023 14:40
Operator : PC Inst ID: voa6.i
Smp Info : HS23071113-02MSD;HS23071113-02MSD;3;;MSD
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\8260W.m
Meth Date : 27-Jul-2023 13:08 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 10 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.177	4.174	(1.000)	595747	50.0000	
$ 30 Dibromofluoromethane	113	4.099	4.095	(0.981)	291535	53.4457	53.44
$ 35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	359425	52.6727	52.67
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	922152	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	819904	50.0000	
$ 48 Toluene-d8	98	6.382	6.386	(0.832)	1064986	50.4493	50.44
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	400305	49.0272	49.02
* 70 1,4-Dichlorobenzene-d4	152	9.658	9.658	(1.000)	447257	50.0000	
5 Vinyl Chloride	62	1.145	1.145	(0.274)	195663	25.3803	25.38
11 1,1-Dichloroethene	96	1.913	1.917	(0.458)	104672	23.9826	23.98
17 Methylene Chloride	84	2.307	2.303	(0.552)	118482	22.2436	22.24
27 cis-1,2-Dichloroethene	96	3.525	3.525	(0.844)	177538	27.6051	27.60
33 1,2-Dichloroethane	62	4.556	4.556	(0.918)	224947	22.1599	22.15
38 Trichloroethene	130	5.205	5.205	(1.048)	444755	71.2859	71.28
53 1,1,2-Trichloroethane	83	6.839	6.835	(0.892)	104056	22.2250	22.22
20 trans-1,2-Dichloroethene	96	2.532	2.528	(0.606)	111234	22.0331	22.03



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Date : 24-JUL-2023 14:40
Client ID: HS23071113-02HSD
Sample Info: HS23071113-02HSD;HS23071113-02HSD;3;;HSD
Purge Volume: 5.0
Column phase: DB624

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

Data File : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072412.D
Inj Date : 24-JUL-2023 14:40
InstruID : voa6.i
LabSampID : HS23071113-02MSD

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072413.D Page 1
Report Date: 27-Jul-2023 13:08

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072413.D
Lab Smp Id: HS23071113-01 Client Smp ID: HS23071113-01
Inj Date : 24-JUL-2023 15:01
Operator : PC Inst ID: voa6.i
Smp Info : HS23071113-01;HS23071113-01;;;
Misc Info : V6;WATER;0;50;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\8260W.m
Meth Date : 27-Jul-2023 13:08 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 11
Dil Factor: 50.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.181	4.174	(1.000)	572761	50.0000	
$ 30 Dibromofluoromethane	113	4.099	4.095	(0.980)	284428	54.2467	54.24
$ 35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.069)	356980	54.4345	54.43
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	878385	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	771242	50.0000	
$ 48 Toluene-d8	98	6.386	6.386	(0.833)	1003069	50.5143	50.51
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	364905	47.4982	47.49
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.658	(1.000)	394118	50.0000	
5 Vinyl Chloride	62	1.145	1.145	(0.274)	3385	0.45670	22.83(a)
27 cis-1,2-Dichloroethene	96	3.533	3.525	(0.845)	90671	14.6641	733.20
38 Trichloroethene	130	5.205	5.205	(1.048)	498946	83.9564	4197.81

QC Flag Legend

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

01322925

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072413.D

Date : 24-JUL-2023 15:01

Client ID: HS23071113-01

Instrument: voa6.i

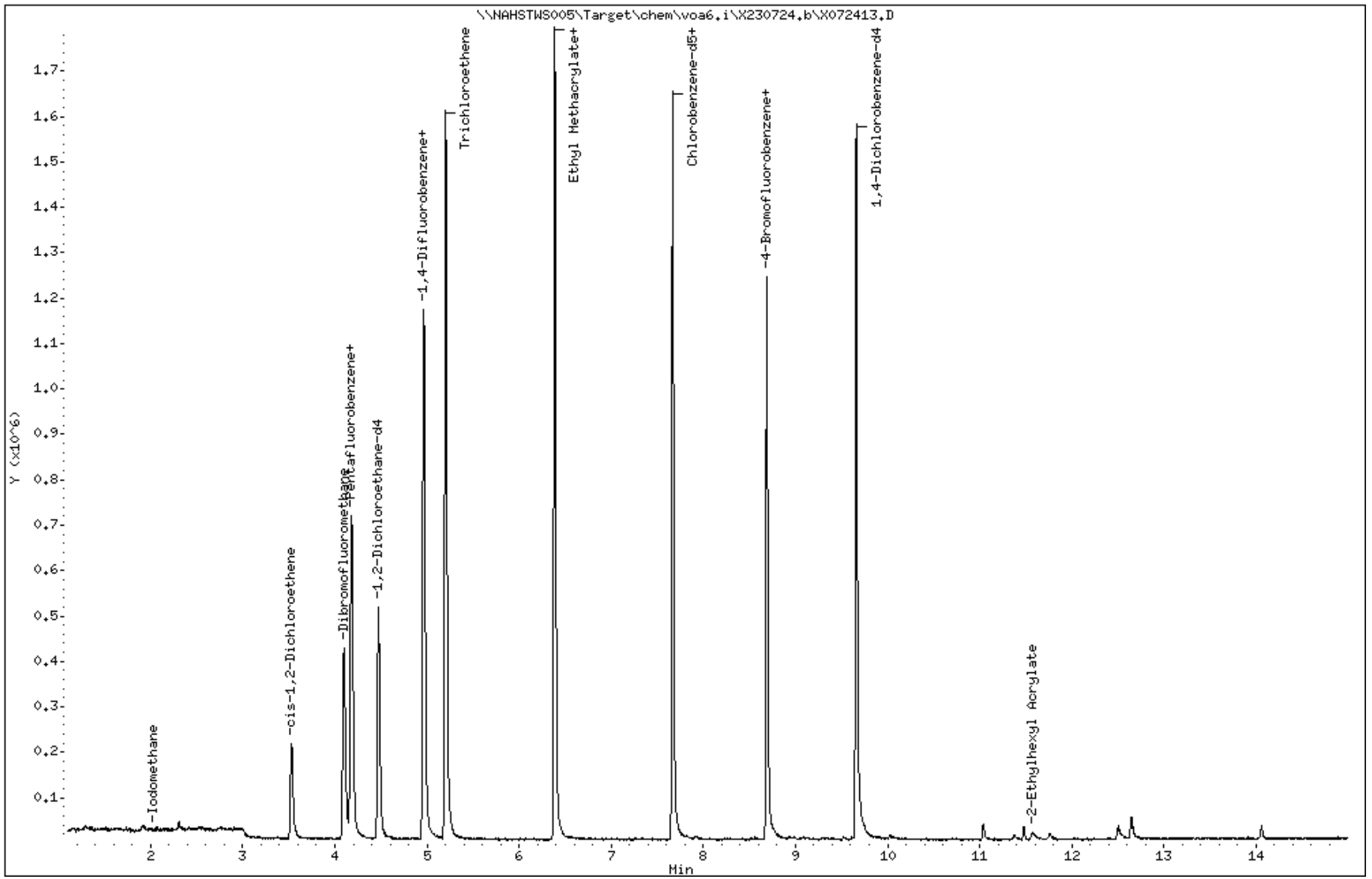
Sample Info: HS23071113-01;HS23071113-01;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072413.D Page 2

Date : 24-JUL-2023 15:01

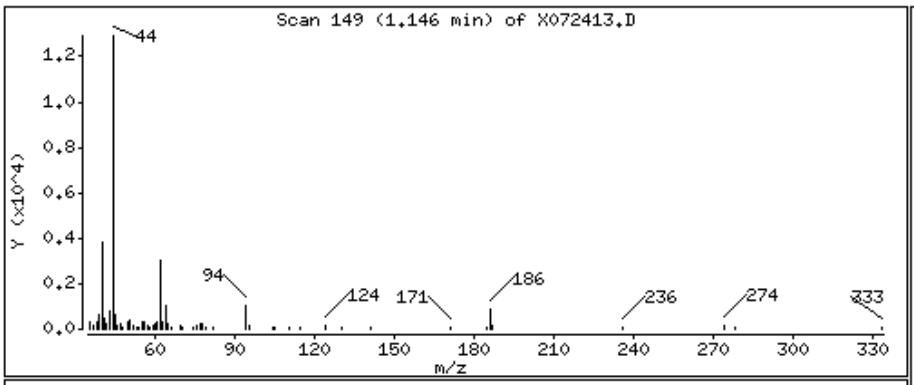
Client ID: HS23071113-01 Instrument: voa6.i

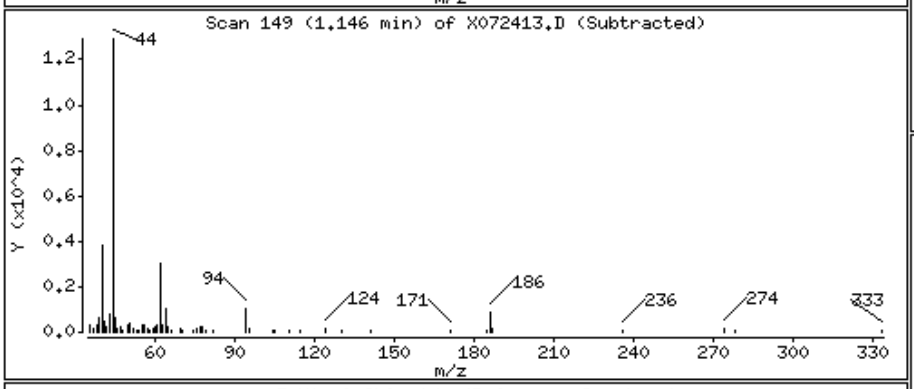
Sample Info: HS23071113-01;HS23071113-01;;;

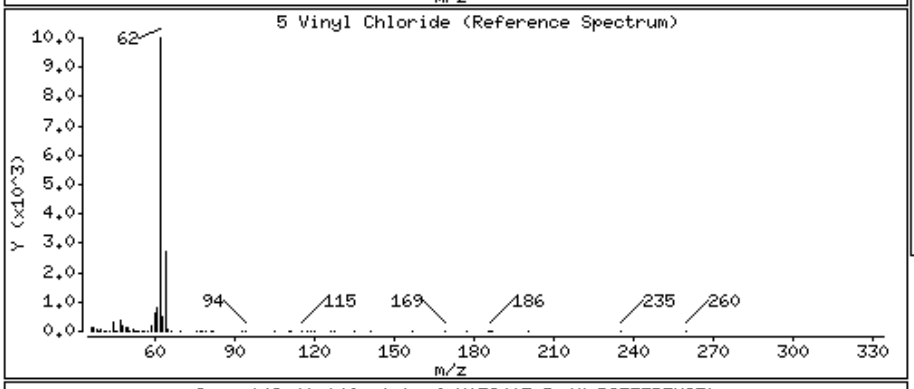
Purge Volume: 5.0 Operator: PC

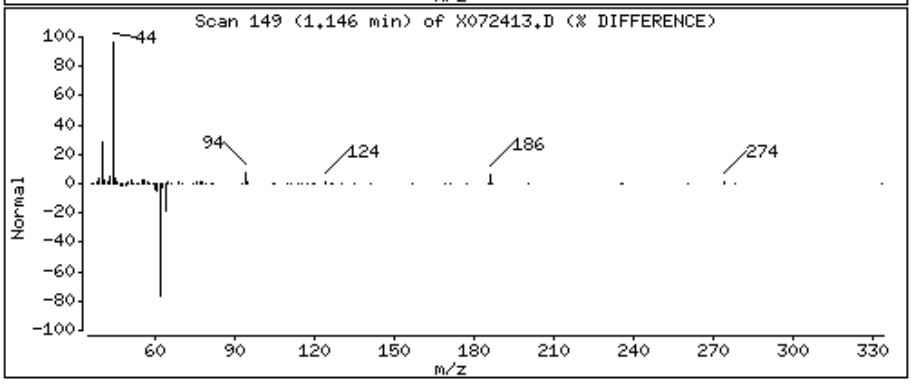
Column phase: DB624 Column diameter: 0.18

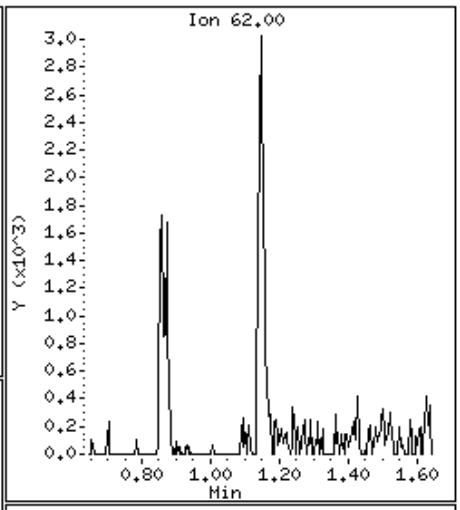
5 Vinyl Chloride Concentration: 22.83 ug/l

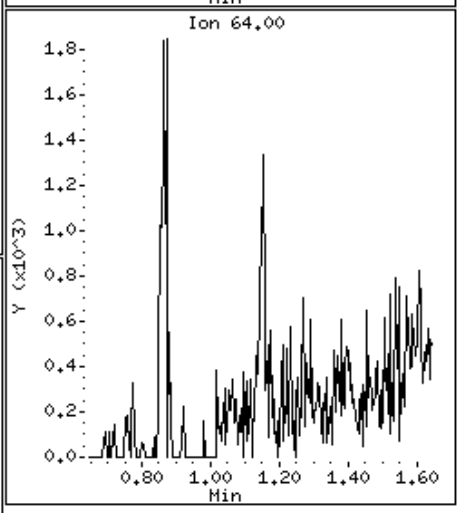












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072413.D

Date : 24-JUL-2023 15:01

Client ID: HS23071113-01

Instrument: voa6.i

Sample Info: HS23071113-01;HS23071113-01;;;

Purge Volume: 5.0

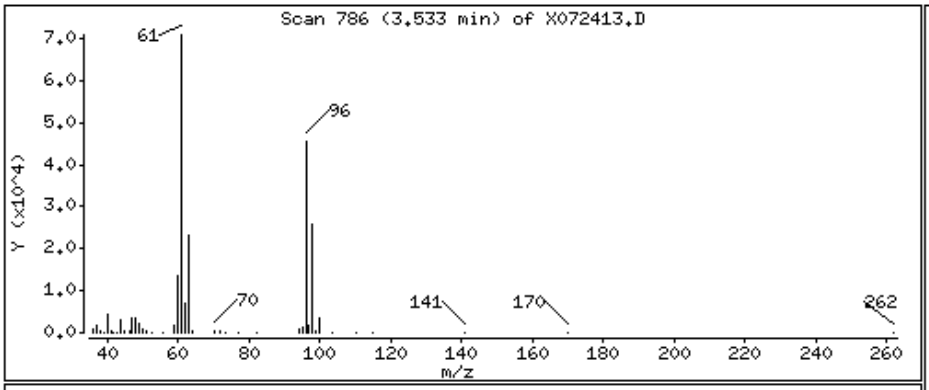
Operator: PC

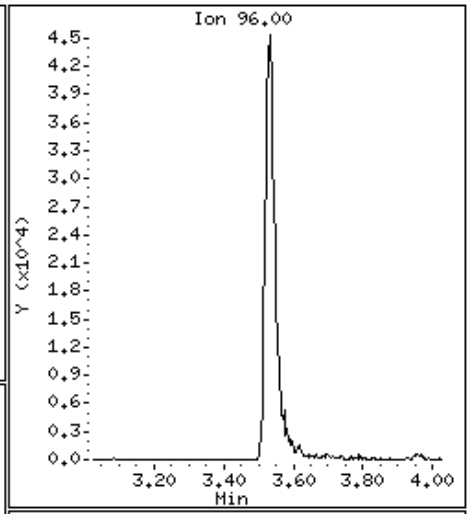
Column phase: DB624

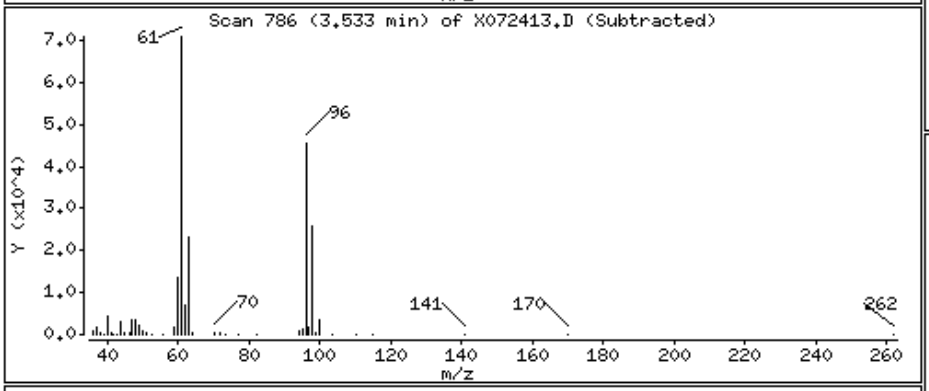
Column diameter: 0.18

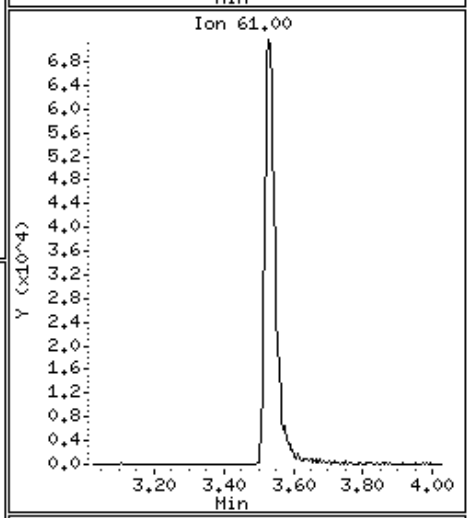
27 cis-1,2-Dichloroethene

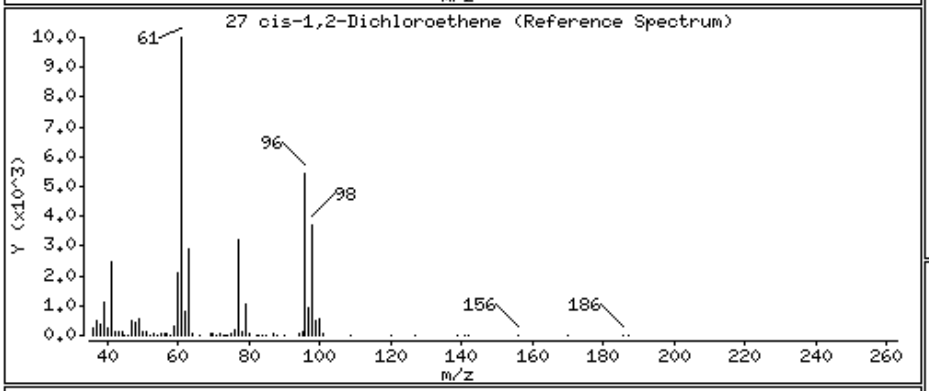
Concentration: 733.20 ug/l

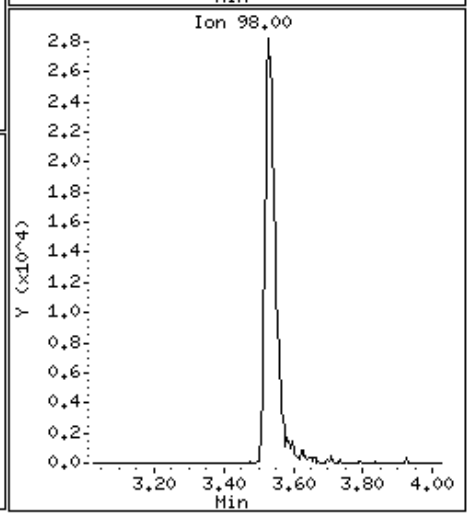


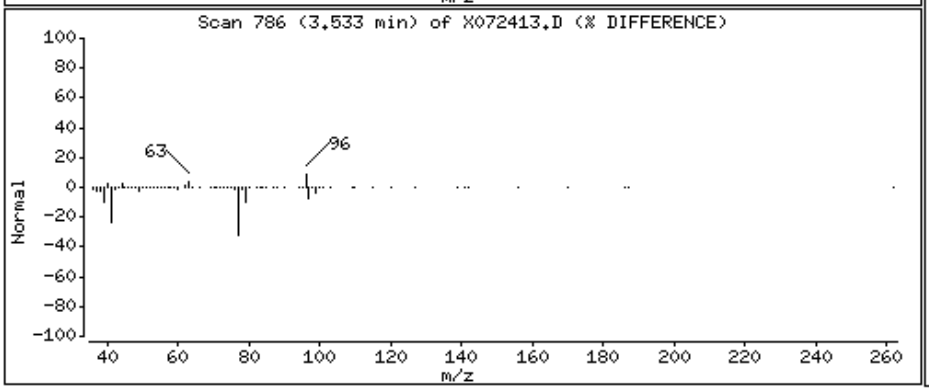












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072413.D Page 4

Date : 24-JUL-2023 15:01

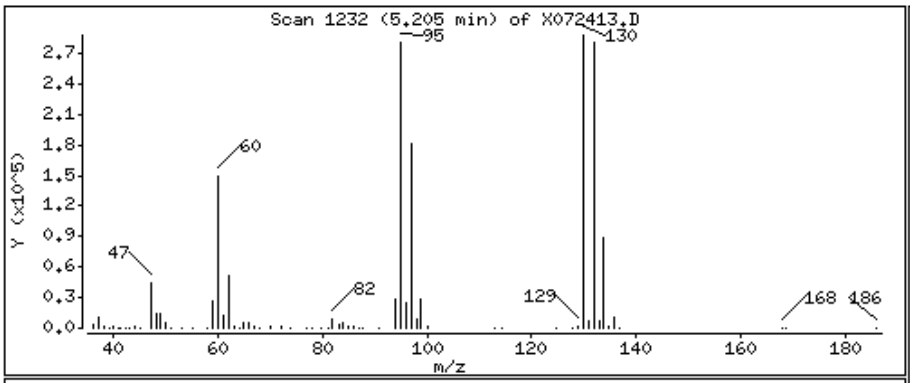
Client ID: HS23071113-01 Instrument: voa6.i

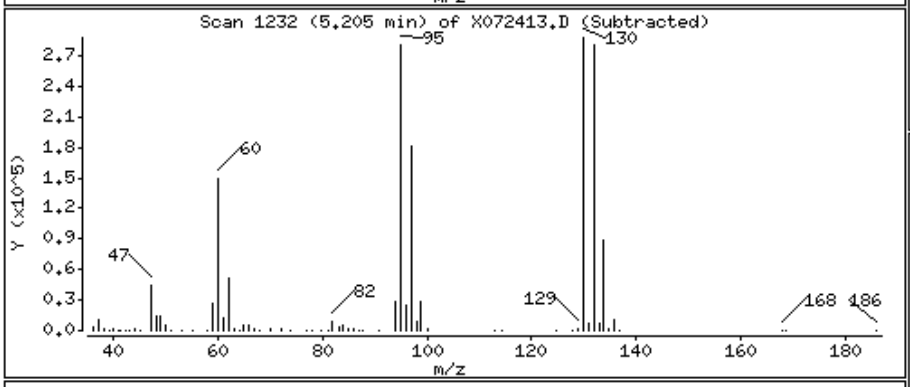
Sample Info: HS23071113-01;HS23071113-01;;;

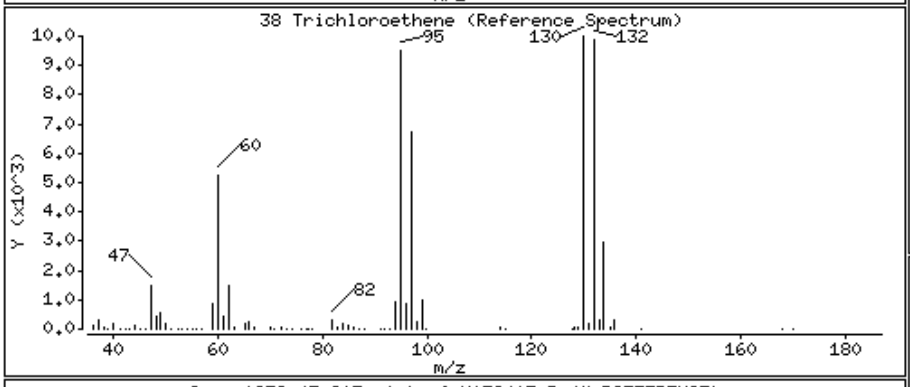
Purge Volume: 5.0 Operator: PC

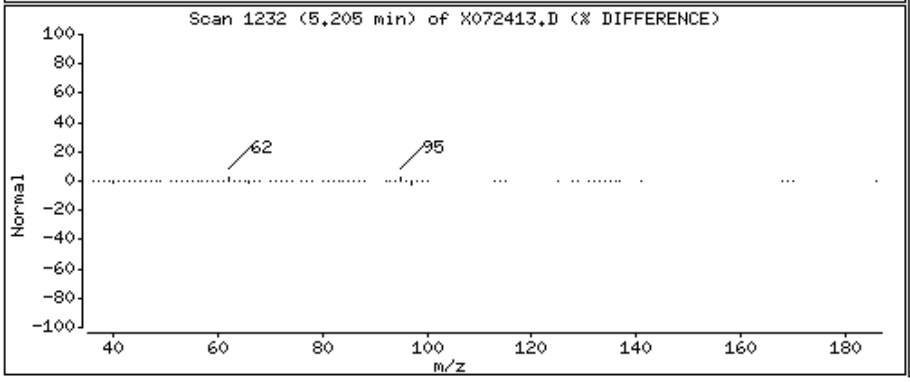
Column phase: DB624 Column diameter: 0.18

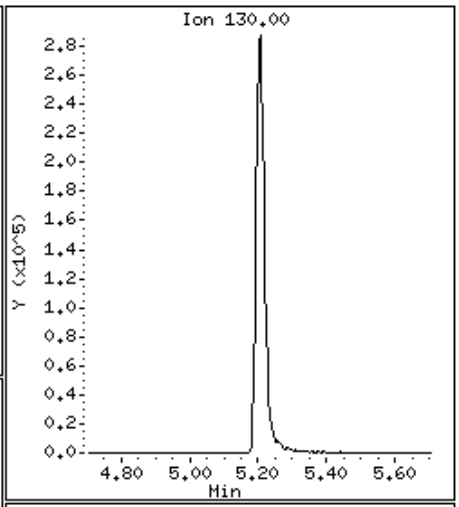
38 Trichloroethene Concentration: 4197.81 ug/l

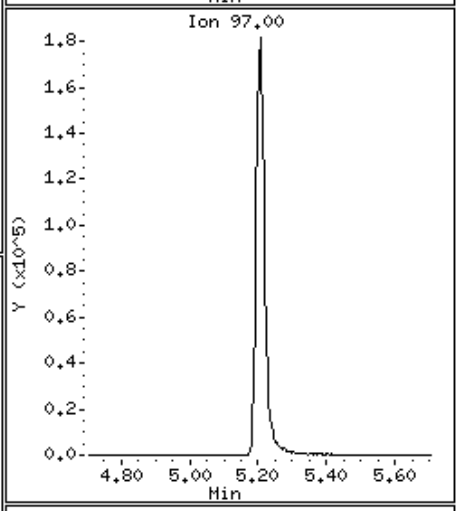


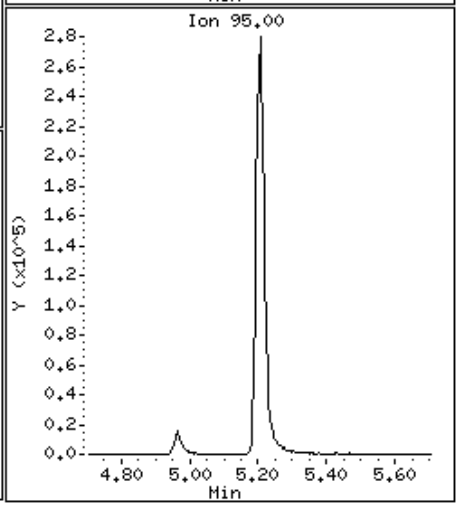












Data File : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072413.D
Inj Date : 24-JUL-2023 15:01
InstruID : voa6.i
LabSampID : HS23071113-01

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072414.D Page 1
Report Date: 27-Jul-2023 13:08

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072414.D
Lab Smp Id: HS23071113-03 Client Smp ID: HS23071113-03
Inj Date : 24-JUL-2023 15:21
Operator : PC Inst ID: voa6.i
Smp Info : HS23071113-03;HS23071113-03;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\8260W.m
Meth Date : 27-Jul-2023 13:08 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.178	4.174	(1.000)	593966	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.095	(0.982)	290446	53.4051	53.40
$ 35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	364525	53.5910	53.59
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	919630	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	815216	50.0000	
$ 48 Toluene-d8	98	6.385	6.386	(0.833)	1061805	50.5879	50.58
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	407728	50.2339	50.23
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.658	(1.000)	455242	50.0000	
38 Trichloroethene	130	5.220	5.205	(1.051)	7410	1.19094	1.19(a)

QC Flag Legend

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

01322931

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072414.D

Page 1

Date : 24-JUL-2023 15:21

Client ID: HS23071113-03

Instrument: voa6.i

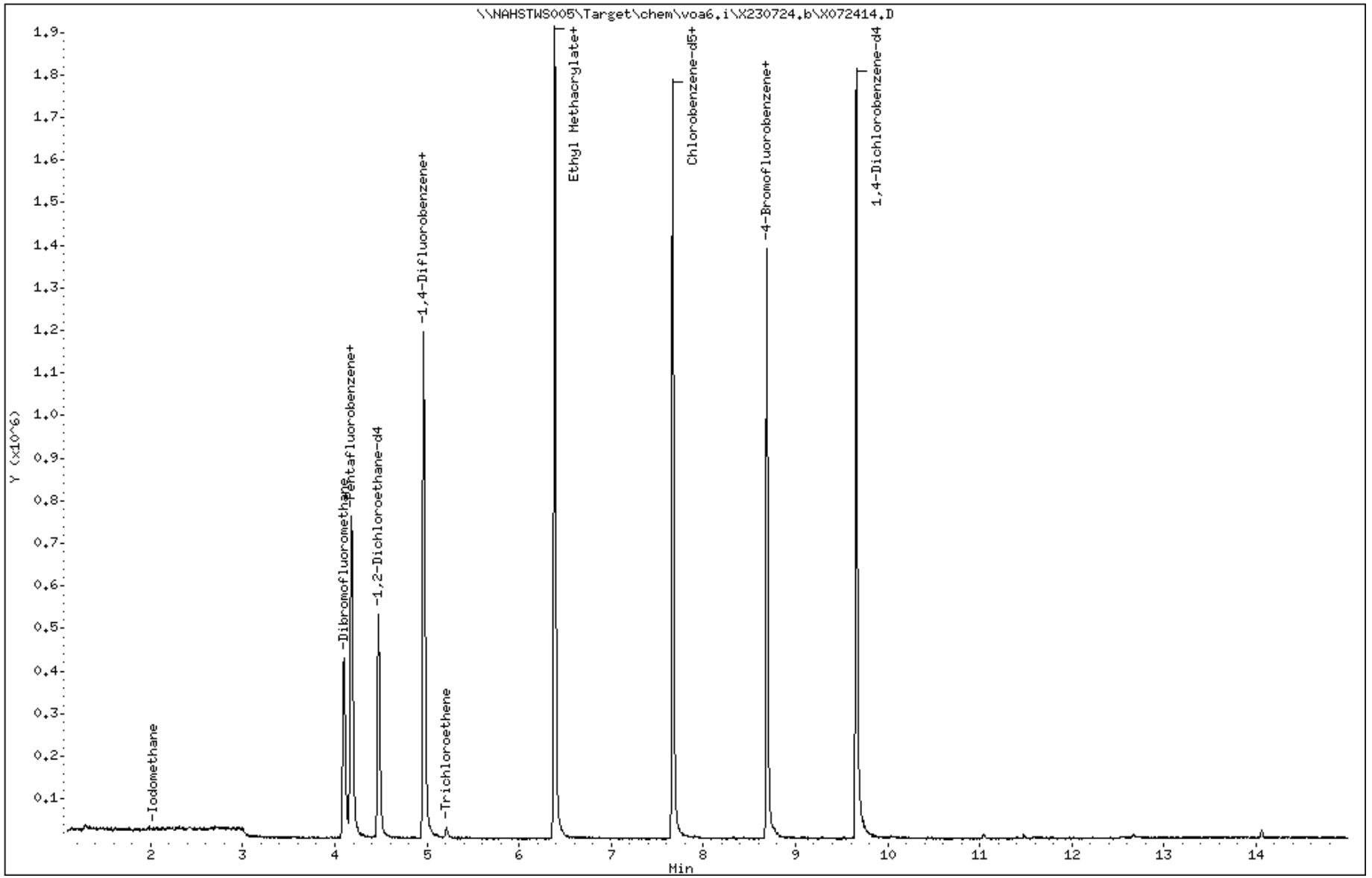
Sample Info: HS23071113-03;HS23071113-03;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072414.D

Date : 24-JUL-2023 15:21

Client ID: HS23071113-03

Instrument: voa6.i

Sample Info: HS23071113-03;HS23071113-03;;;

Purge Volume: 5.0

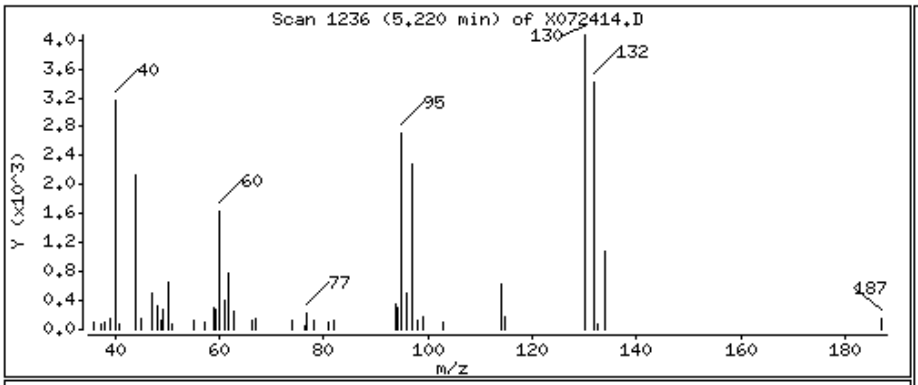
Operator: PC

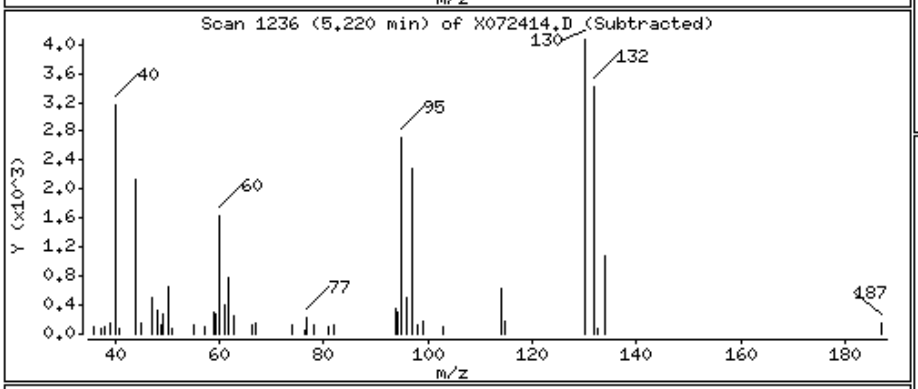
Column phase: DB624

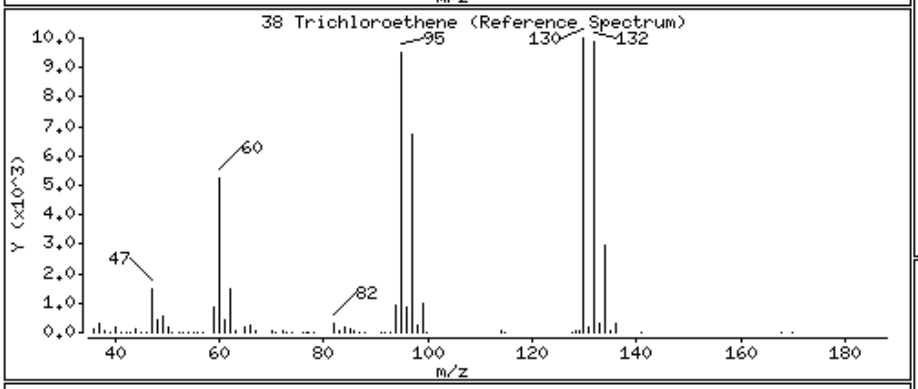
Column diameter: 0.18

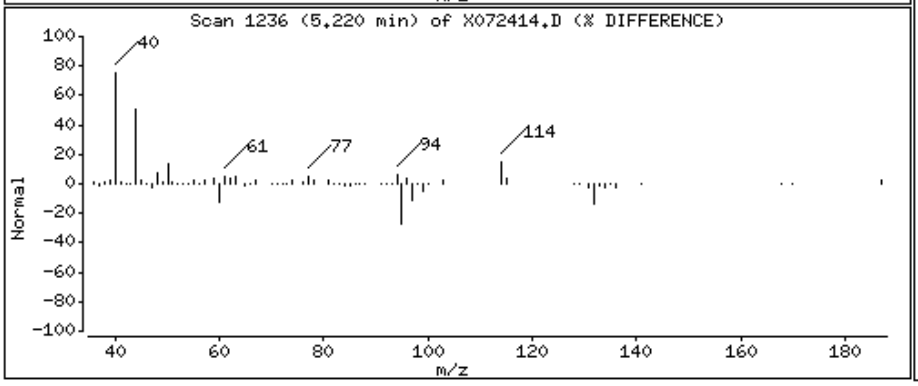
38 Trichloroethene

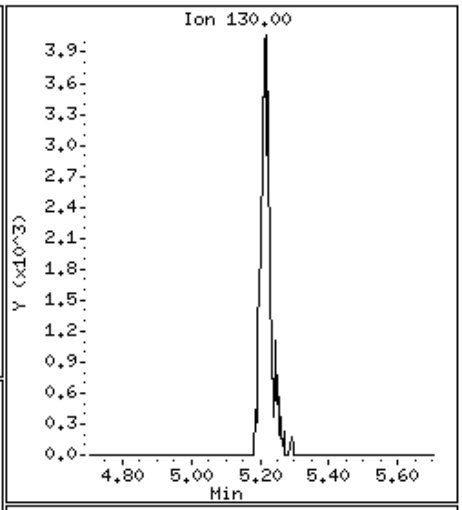
Concentration: 1.19 ug/l

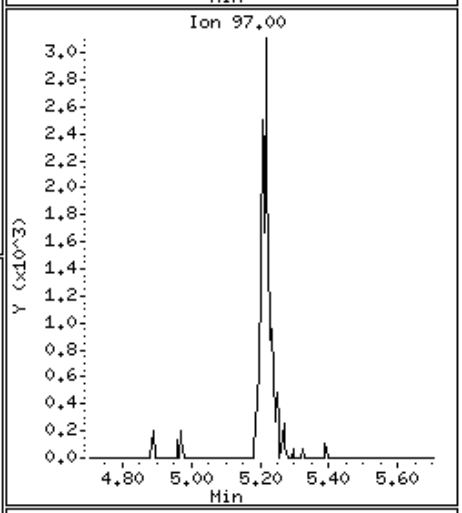


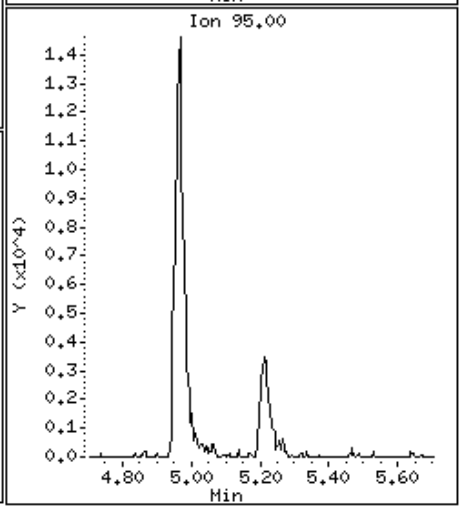












Data File : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072414.D
Inj Date : 24-JUL-2023 15:21
InstruID : voa6.i
LabSampID : HS23071113-03

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072415.D Page 1
Report Date: 27-Jul-2023 13:08

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072415.D
Lab Smp Id: HS23071113-06 Client Smp ID: HS23071113-06
Inj Date : 24-JUL-2023 15:42
Operator : PC Inst ID: voa6.i
Smp Info : HS23071113-06;HS23071113-06;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\8260W.m
Meth Date : 27-Jul-2023 13:08 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.178	4.174	(1.000)	537190	50.0000	
$ 30 Dibromofluoromethane	113	4.099	4.095	(0.981)	272091	55.3452	55.34
$ 35 1,2-Dichloroethane-d4	65	4.470	4.470	(1.070)	362275	58.9510	58.95(M)
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	896072	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	801261	50.0000	
$ 48 Toluene-d8	98	6.386	6.386	(0.833)	1027421	49.8022	49.80
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	382433	47.9185	47.91
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.658	(1.000)	413829	50.0000	
38 Trichloroethene	130	5.216	5.205	(1.051)	3223	0.53162	0.53(a)

QC Flag Legend

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

01322935

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072415.D

Date : 24-JUL-2023 15:42

Client ID: HS23071113-06

Instrument: voa6.i

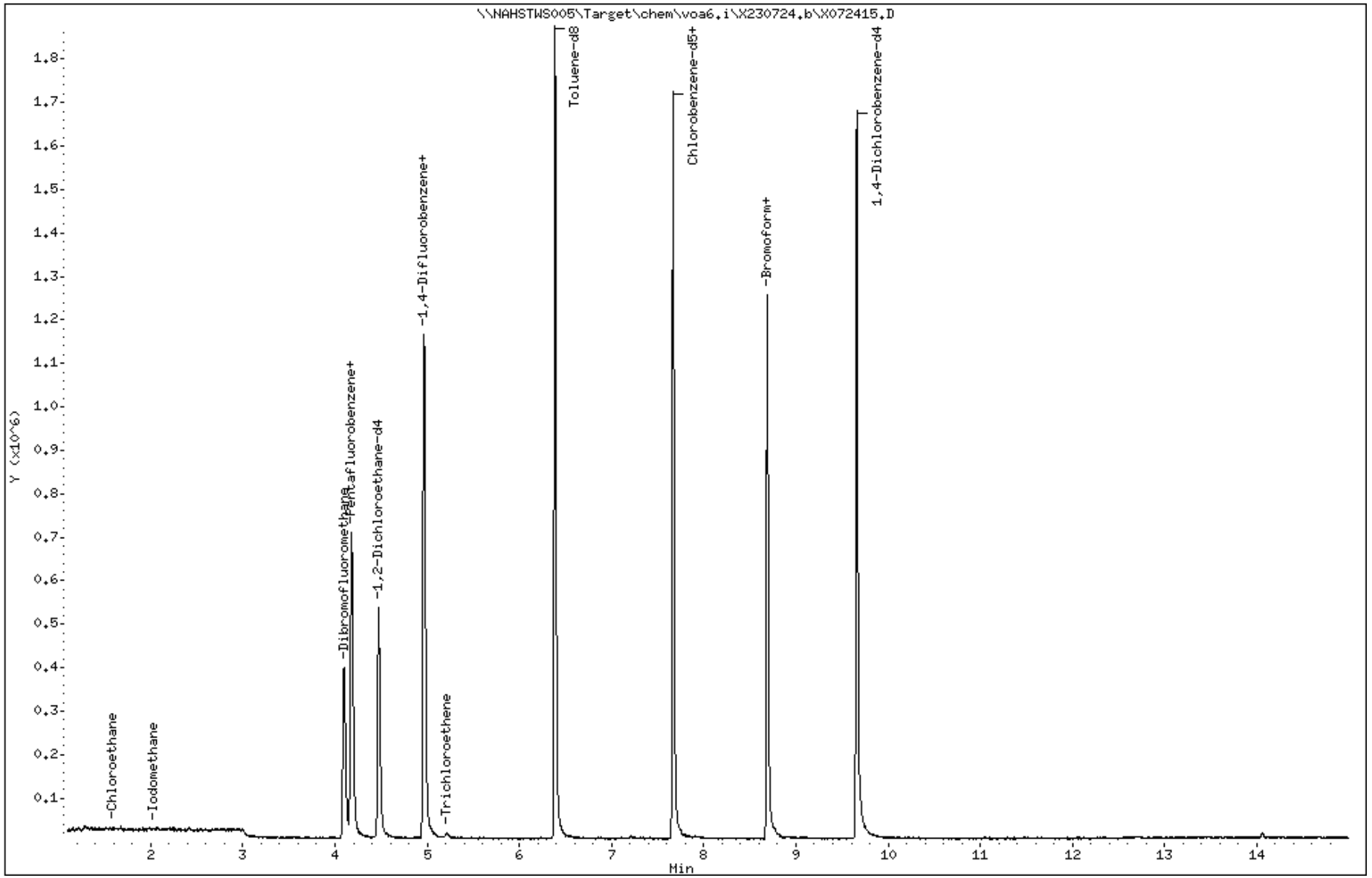
Sample Info: HS23071113-06;HS23071113-06;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072415.D

Date : 24-JUL-2023 15:42

Client ID: HS23071113-06

Instrument: voa6.i

Sample Info: HS23071113-06;HS23071113-06;;;

Purge Volume: 5.0

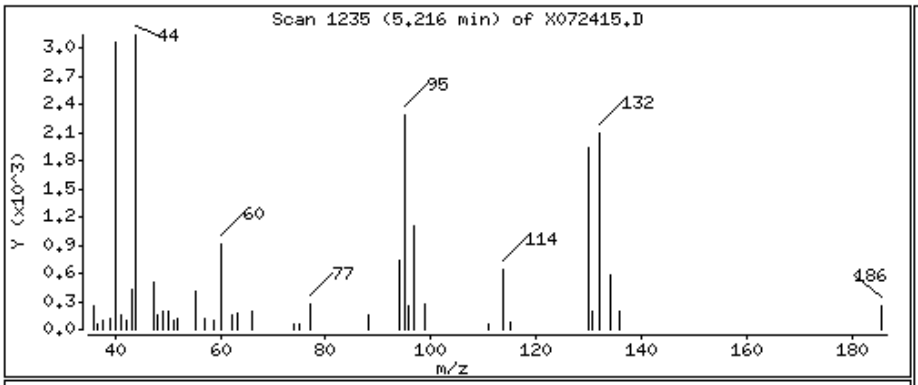
Operator: PC

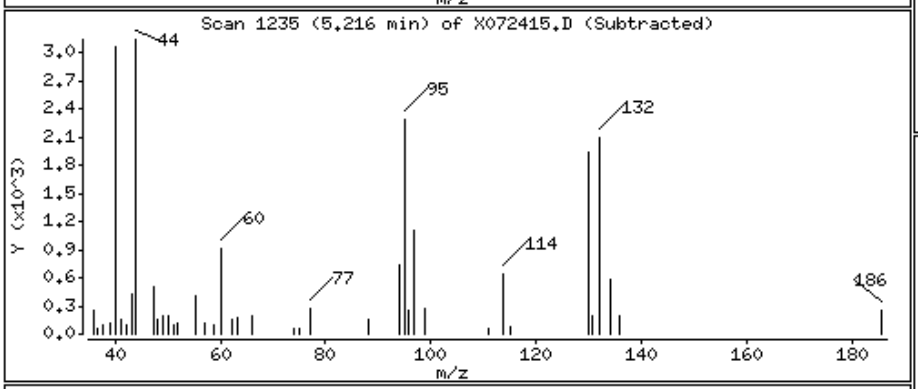
Column phase: DB624

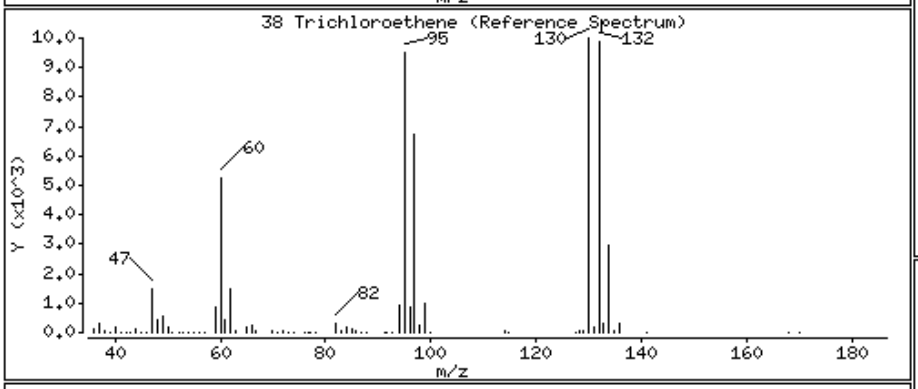
Column diameter: 0.18

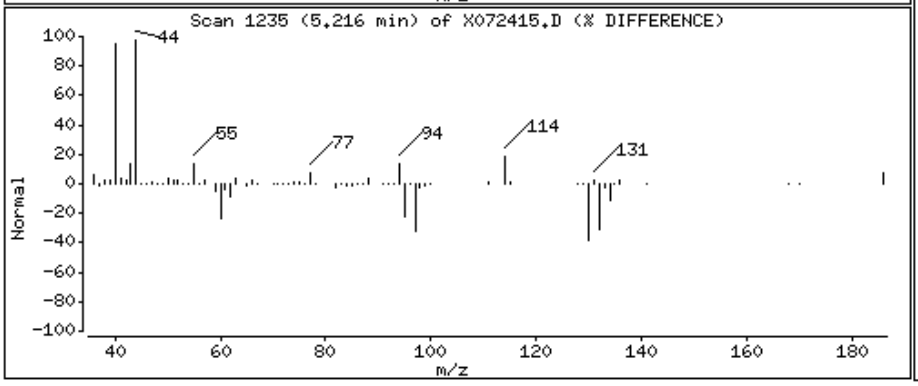
38 Trichloroethene

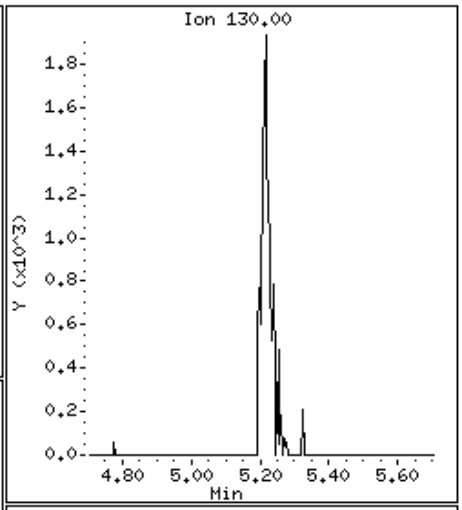
Concentration: 0.53 ug/l

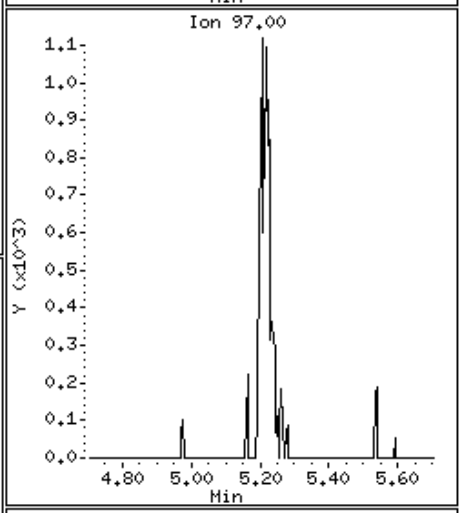


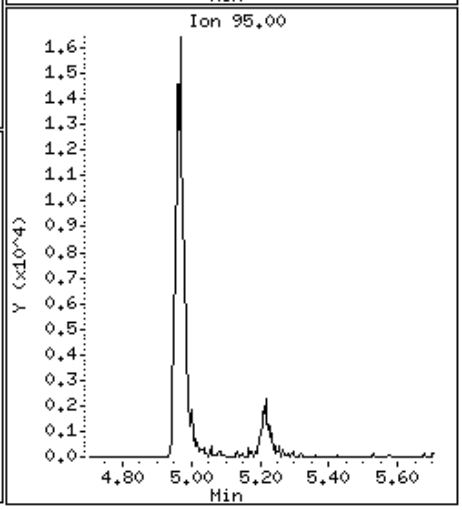












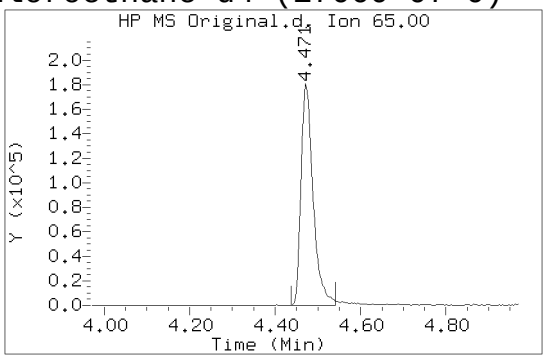
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072415.D
Inj Date : 24-JUL-2023 15:42
InstruID : voa6.i
LabSampID : HS23071113-06

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

Reason Code:

BEFORE

MASS
65
AREA
362275
HEIGHT
180716
27-Jul-2023
13:08
linh
pham



AFTER

MASS
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AREA
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HEIGHT
180716
27-Jul-2023
13:08
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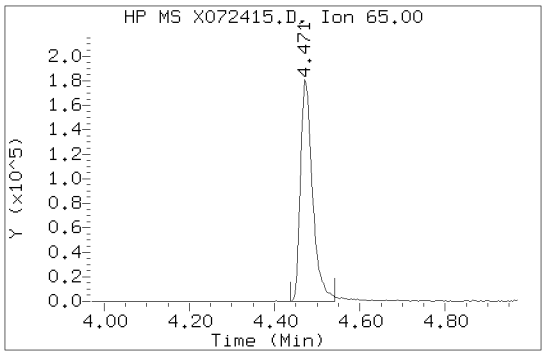

BEFORE

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AREA
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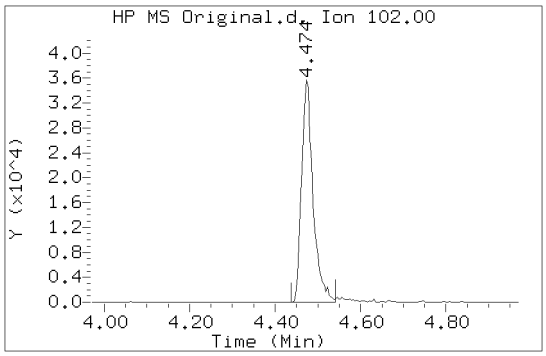
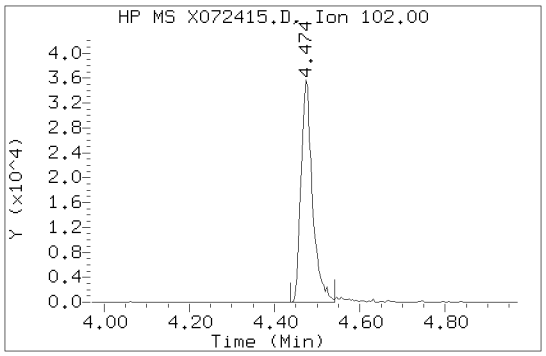
HEIGHT
35704
27-Jul-2023
13:08
linh
pham



AFTER

MASS
102
AREA
67965
HEIGHT
35704
27-Jul-2023
13:08
linh
pham



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072416.D Page 1
Report Date: 27-Jul-2023 13:08

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072416.D
Lab Smp Id: HS23071113-07 Client Smp ID: HS23071113-07
Inj Date : 24-JUL-2023 16:02
Operator : PC Inst ID: voa6.i
Smp Info : HS23071113-07;HS23071113-07;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\8260W.m
Meth Date : 27-Jul-2023 13:08 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.181	4.174	(1.000)	557548	50.0000	
$ 30 Dibromofluoromethane	113	4.099	4.095	(0.980)	286359	56.1313	56.13
$ 35 1,2-Dichloroethane-d4	65	4.474	4.470	(1.070)	355997	55.7810	55.78
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	864834	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	759276	50.0000	
$ 48 Toluene-d8	98	6.385	6.386	(0.833)	998847	51.0944	51.09
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	358462	47.3939	47.39
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.658	(1.000)	388381	50.0000	
38 Trichloroethene	130	5.216	5.205	(1.051)	3946	0.67439	0.67(a)

QC Flag Legend

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

01322939

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072416.D

Date : 24-JUL-2023 16:02

Client ID: HS23071113-07

Instrument: voa6.i

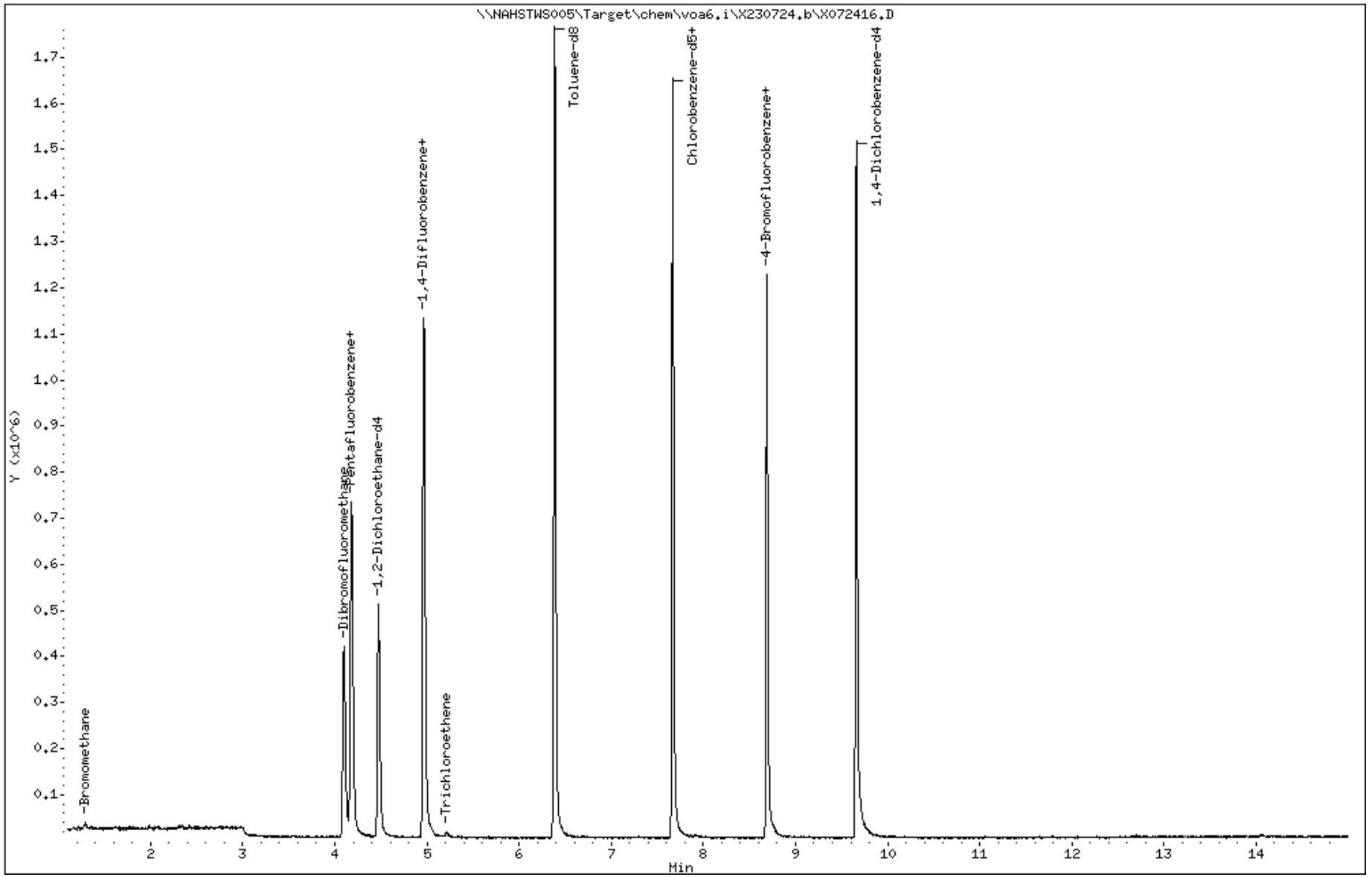
Sample Info: HS23071113-07;HS23071113-07;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072416.D

Date : 24-JUL-2023 16:02

Client ID: HS23071113-07

Instrument: voa6.i

Sample Info: HS23071113-07;HS23071113-07;;;

Purge Volume: 5.0

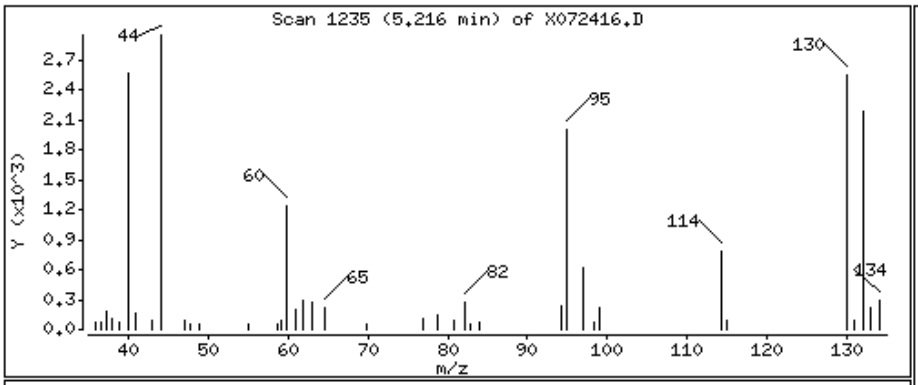
Operator: PC

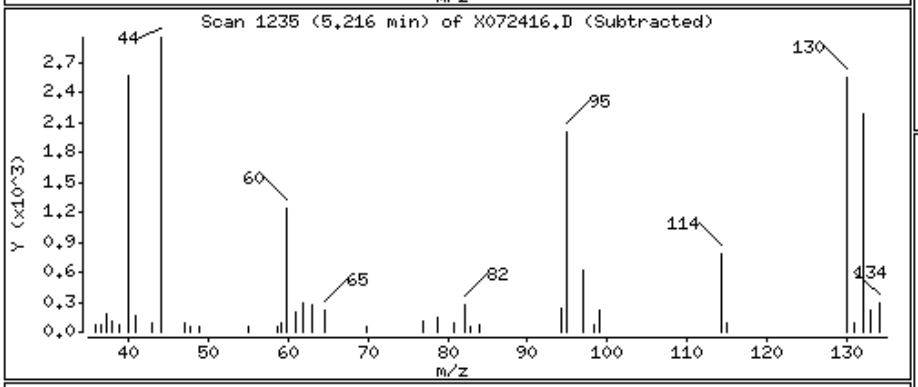
Column phase: DB624

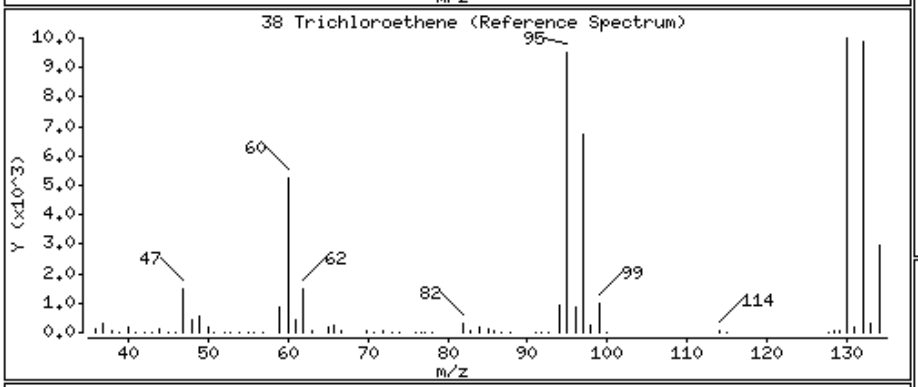
Column diameter: 0.18

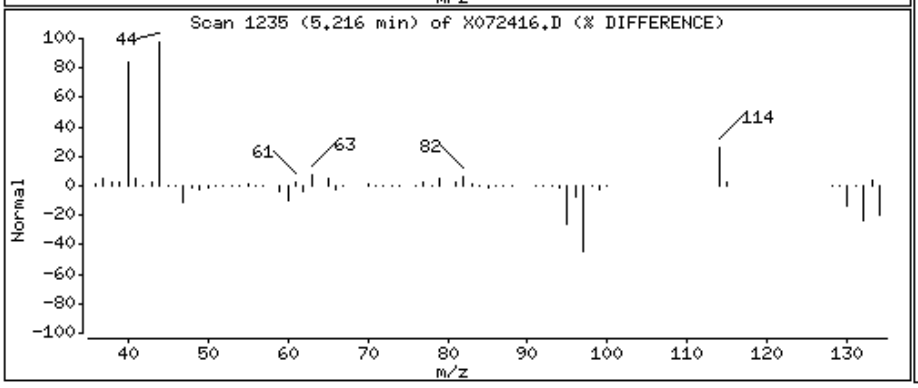
38 Trichloroethene

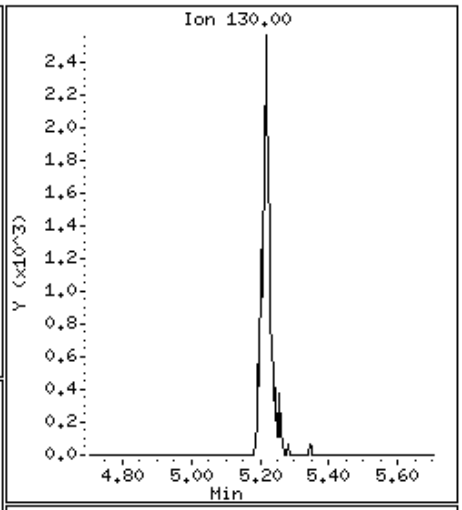
Concentration: 0.67 ug/l

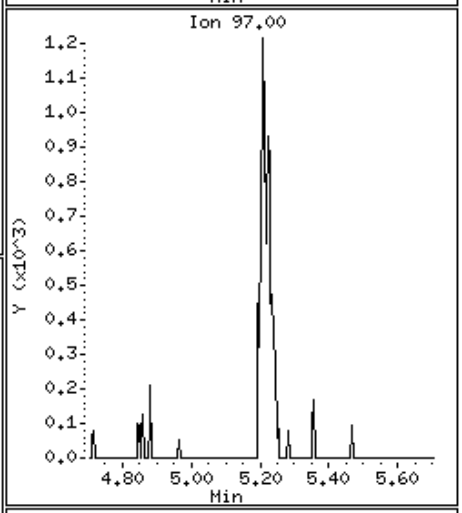


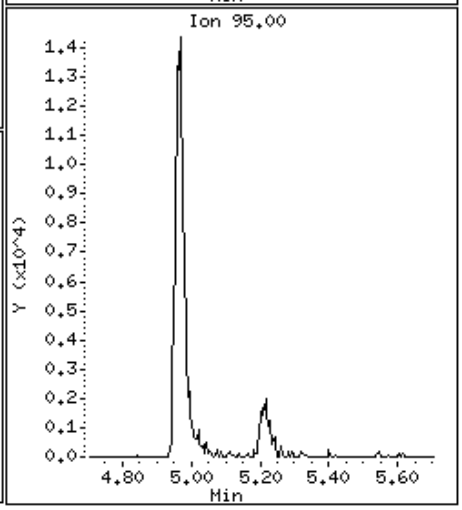












Data File : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072416.D
Inj Date : 24-JUL-2023 16:02
InstruID : voa6.i
LabSampID : HS23071113-07

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072417.D Page 1
Report Date: 27-Jul-2023 13:08

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072417.D
Lab Smp Id: HS23071113-08 Client Smp ID: HS23071113-08
Inj Date : 24-JUL-2023 16:23
Operator : PC Inst ID: voa6.i
Smp Info : HS23071113-08;HS23071113-08;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\8260W.m
Meth Date : 27-Jul-2023 13:08 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 15
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.181	4.174	(1.000)	576866	50.0000	
$ 30 Dibromofluoromethane	113	4.099	4.095	(0.980)	290481	55.0176	55.01
$ 35 1,2-Dichloroethane-d4	65	4.474	4.470	(1.070)	368749	55.8449	55.84
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	896593	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	784206	50.0000	
$ 48 Toluene-d8	98	6.385	6.386	(0.833)	1031268	51.0759	51.07
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	371676	47.5805	47.58
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.658	(1.000)	407889	50.0000	

01322943

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072417.D

Page 1

Date : 24-JUL-2023 16:23

Client ID: HS23071113-08

Instrument: voa6.i

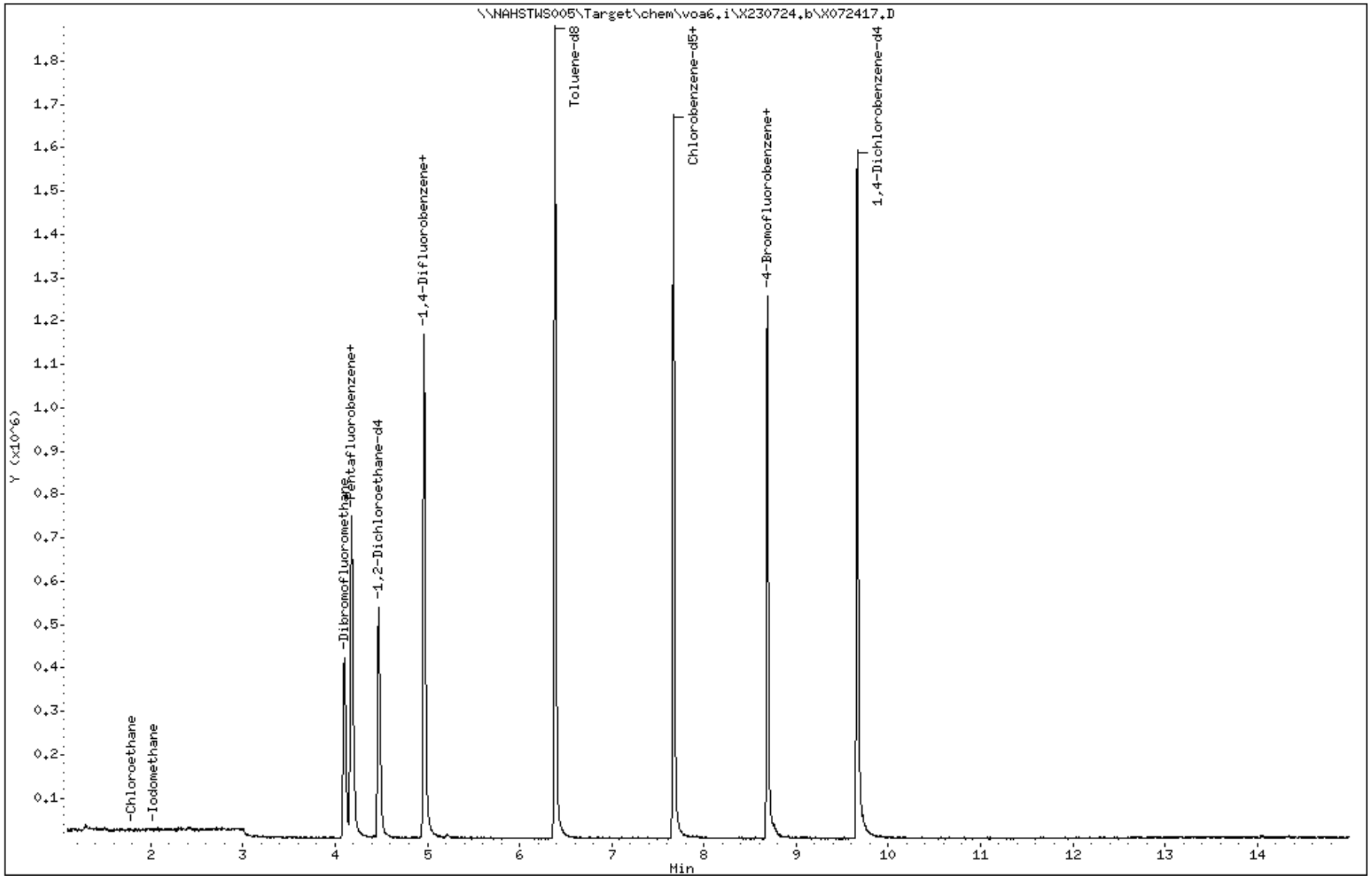
Sample Info: HS23071113-08;HS23071113-08;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072417.D
Inj Date : 24-JUL-2023 16:23
InstruID : voa6.i
LabSampID : HS23071113-08

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072418.D Page 1
Report Date: 27-Jul-2023 13:09

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072418.D
Lab Smp Id: HS23071113-09 Client Smp ID: HS23071113-09
Inj Date : 24-JUL-2023 16:43
Operator : PC Inst ID: voa6.i
Smp Info : HS23071113-09;HS23071113-09;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\8260W.m
Meth Date : 27-Jul-2023 13:08 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 16
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.181	4.174	(1.000)	592280	50.0000	
$ 30 Dibromofluoromethane	113	4.102	4.095	(0.981)	290313	53.5345	53.53
$ 35 1,2-Dichloroethane-d4	65	4.474	4.470	(1.070)	362733	53.4781	53.47
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	895620	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.668	(1.000)	797381	50.0000	
$ 48 Toluene-d8	98	6.385	6.386	(0.833)	1031556	50.2460	50.24
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	381949	48.0923	48.09
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.658	(1.000)	416265	50.0000	

01322946

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072418.D

Date : 24-JUL-2023 16:43

Client ID: HS23071113-09

Instrument: voa6.i

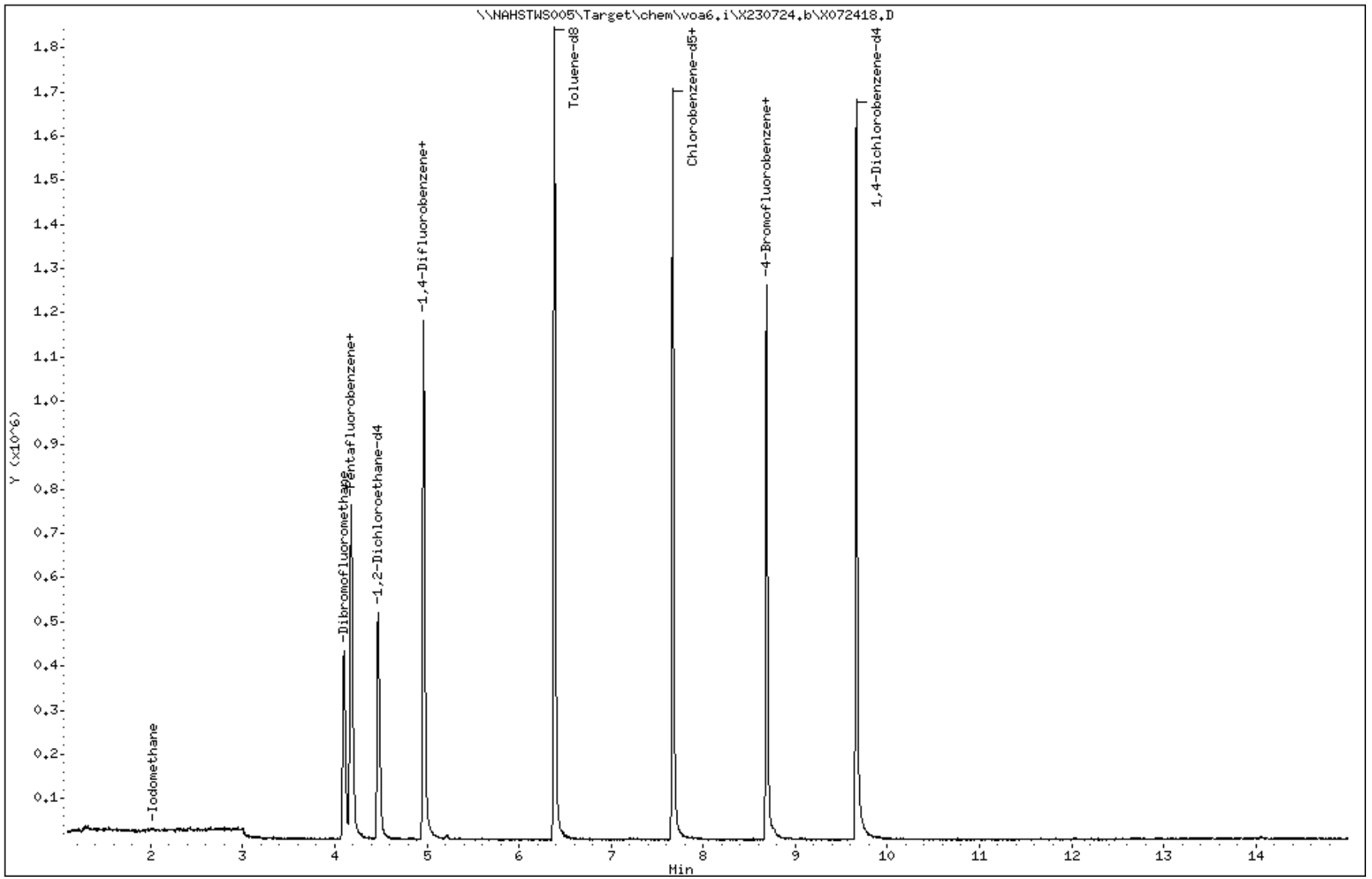
Sample Info: HS23071113-09;HS23071113-09;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072418.D
Inj Date : 24-JUL-2023 16:43
InstruID : voa6.i
LabSampID : HS23071113-09

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072423.D Page 1
Report Date: 27-Jul-2023 13:09

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072423.D
Lab Smp Id: HS23071113-05 Client Smp ID: HS23071113-05
Inj Date : 24-JUL-2023 18:26
Operator : PC Inst ID: voa6.i
Smp Info : HS23071113-05;HS23071113-05;;;
Misc Info : V6;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\8260W.m
Meth Date : 27-Jul-2023 13:08 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.178	4.174	(1.000)	553841	50.0000	
$ 30 Dibromofluoromethane	113	4.099	4.095	(0.981)	280563	55.3528	55.35
$ 35 1,2-Dichloroethane-d4	65	4.474	4.470	(1.071)	356902	56.3029	56.30
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	858699	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.668	(1.000)	748640	50.0000	
$ 48 Toluene-d8	98	6.386	6.386	(0.833)	979639	50.8238	50.82
$ 69 4-Bromofluorobenzene	95	8.691	8.687	(1.133)	356437	47.7993	47.79
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.658	(1.000)	391961	50.0000	
5 Vinyl Chloride	62	1.149	1.145	(0.275)	5581	0.77871	0.77(a)
27 cis-1,2-Dichloroethene	96	3.525	3.525	(0.844)	2194078	366.967	366.96(A)
38 Trichloroethene	130	5.205	5.205	(1.048)	128231	22.0718	22.07
20 trans-1,2-Dichloroethene	96	2.539	2.528	(0.608)	9286	1.97853	1.97(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.

01322949

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072423.D

Page 1

Date : 24-JUL-2023 18:26

Client ID: HS23071113-05

Instrument: voa6.i

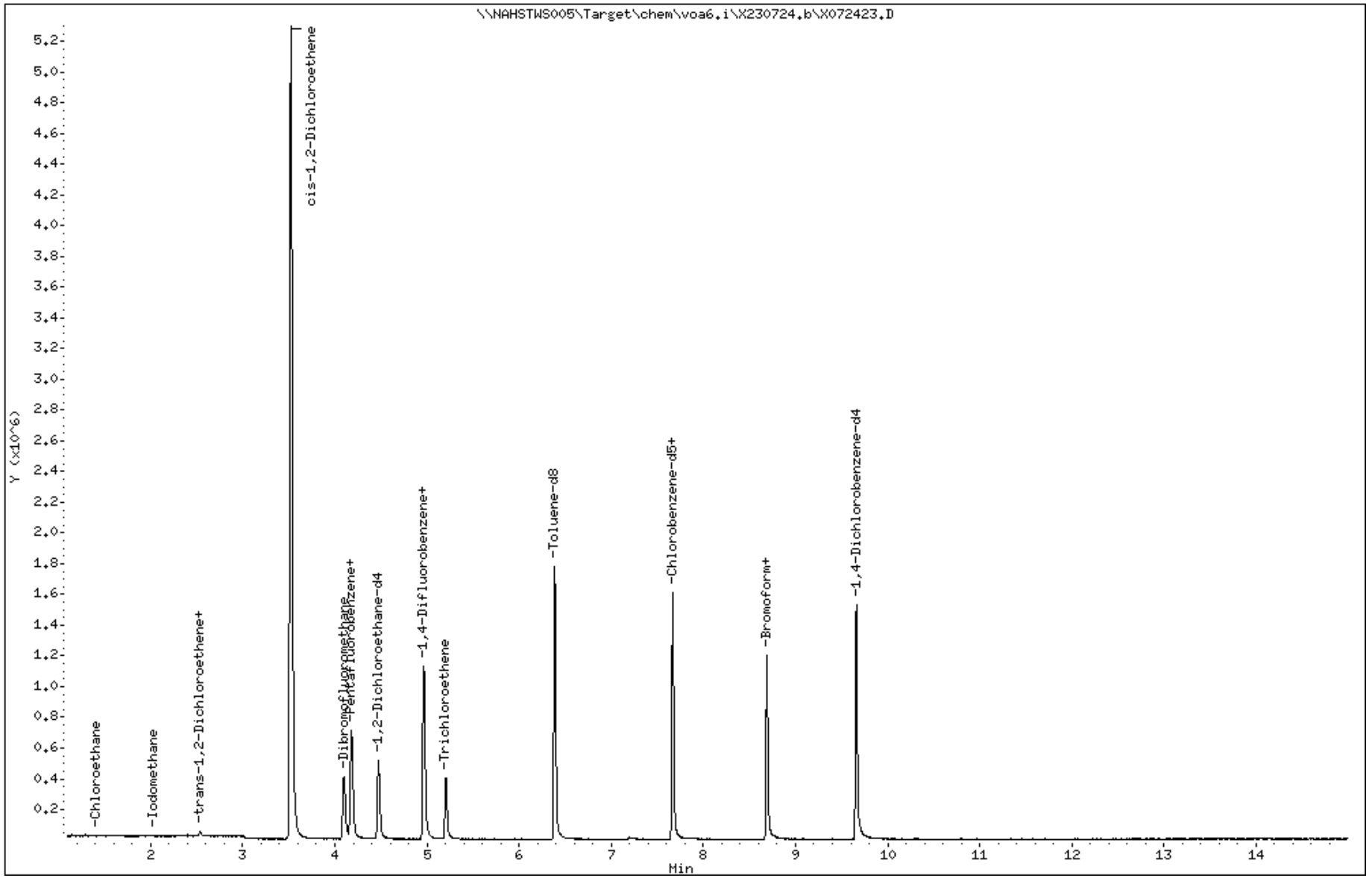
Sample Info: HS23071113-05;HS23071113-05;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



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Date : 24-JUL-2023 18:26

Client ID: HS23071113-05

Instrument: voa6.i

Sample Info: HS23071113-05;HS23071113-05;;;

Purge Volume: 5.0

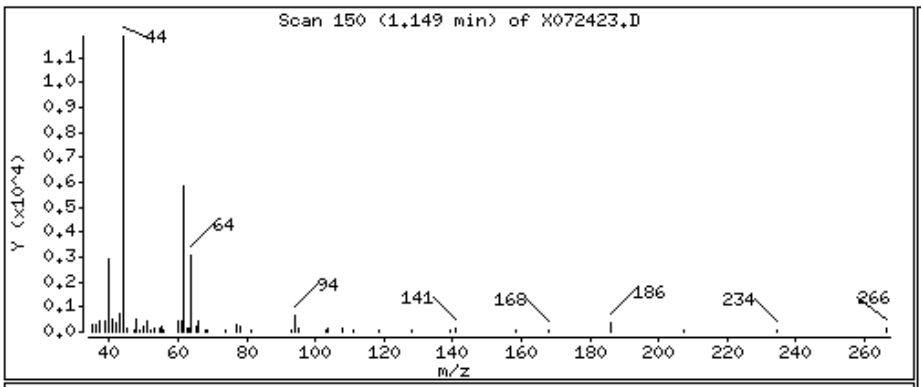
Operator: PC

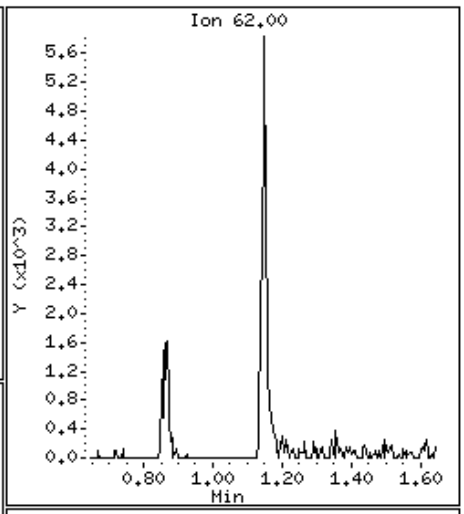
Column phase: DB624

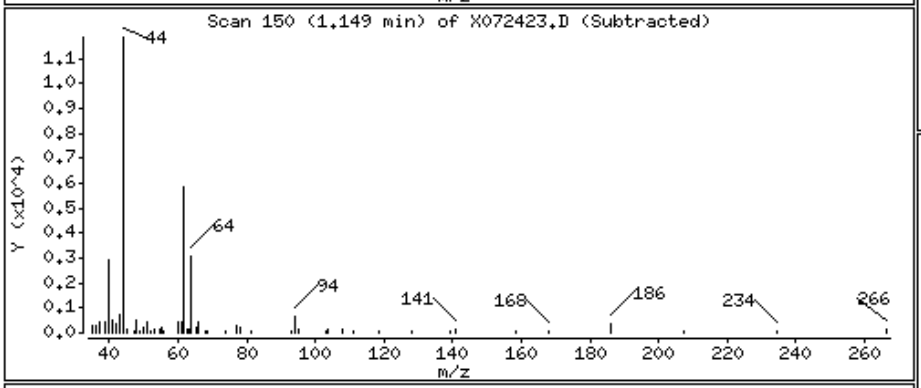
Column diameter: 0.18

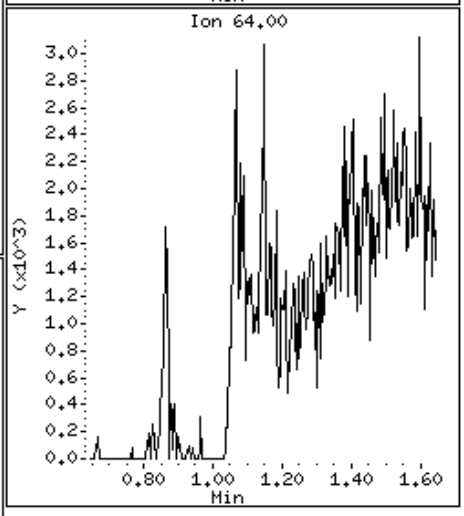
5 Vinyl Chloride

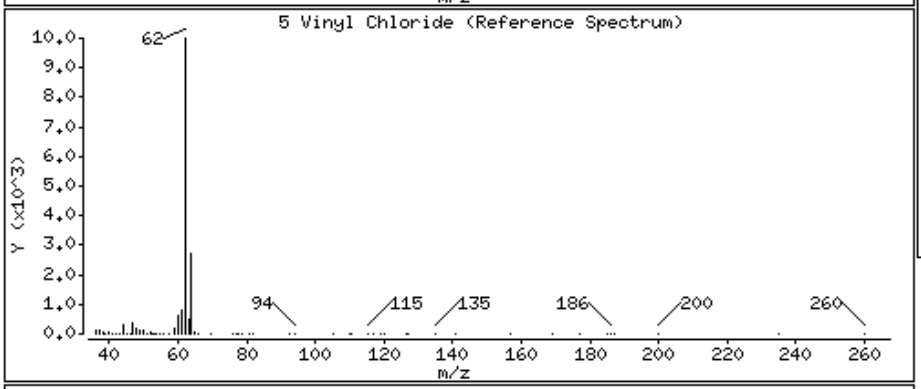
Concentration: 0.77 ug/l

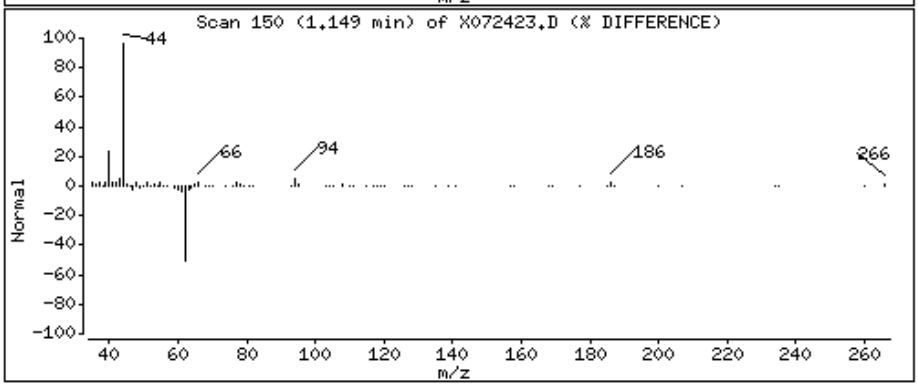












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072423.D

Date : 24-JUL-2023 18:26

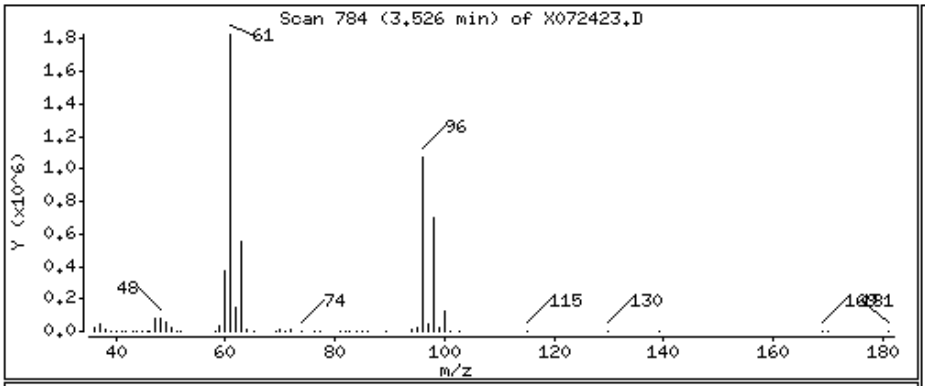
Client ID: HS23071113-05 Instrument: voa6.i

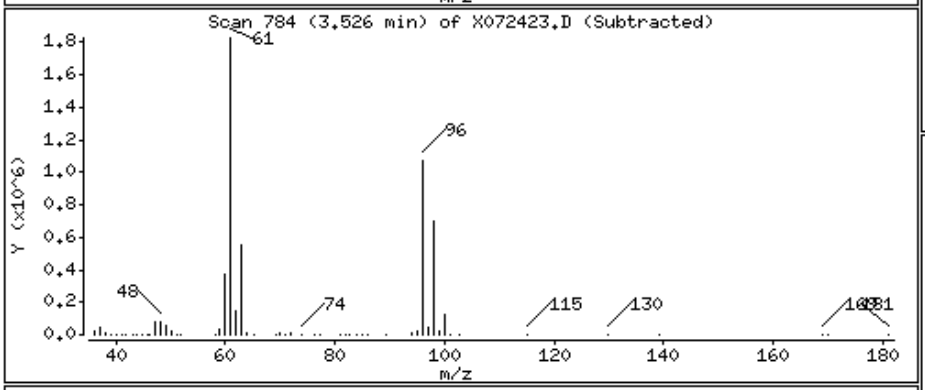
Sample Info: HS23071113-05;HS23071113-05;;;

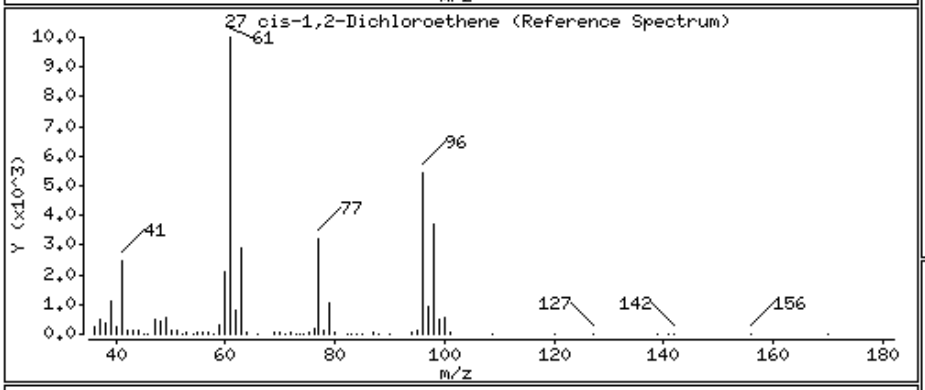
Purge Volume: 5.0 Operator: PC

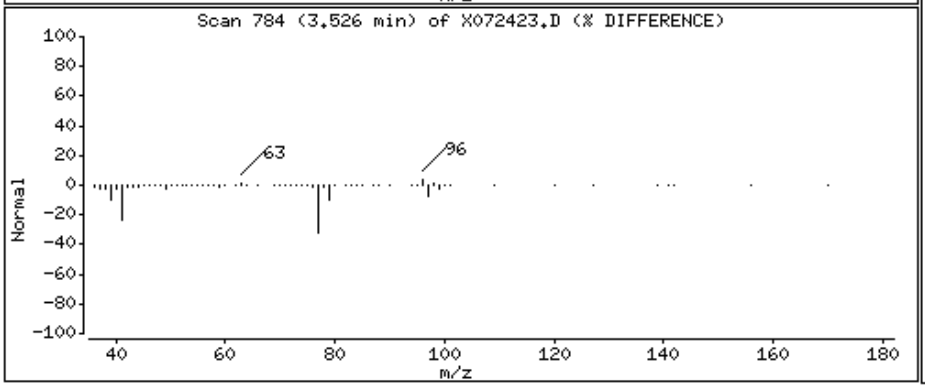
Column phase: DB624 Column diameter: 0.18

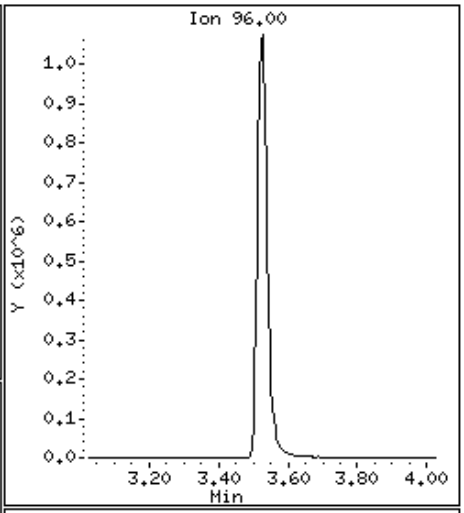
27 cis-1,2-Dichloroethene Concentration: 366.96 ug/l

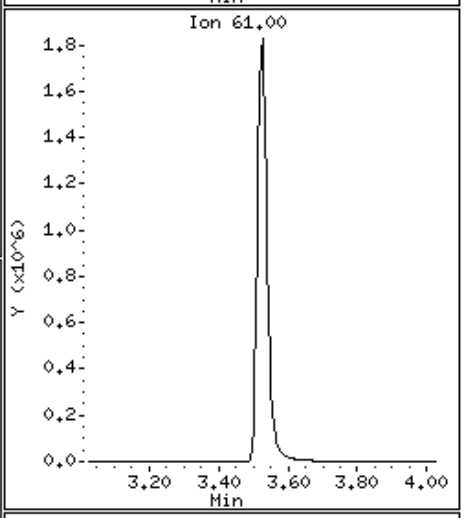


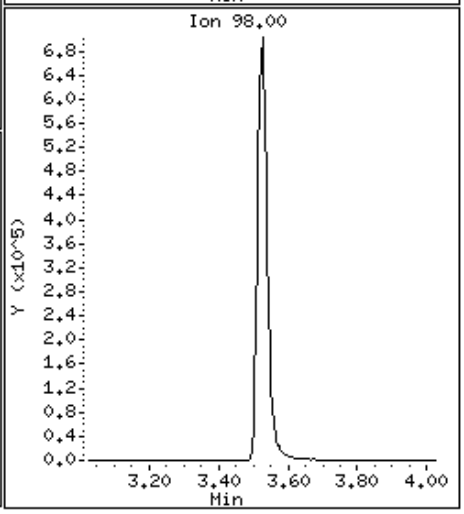












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072423.D Page 4

Date : 24-JUL-2023 18:26

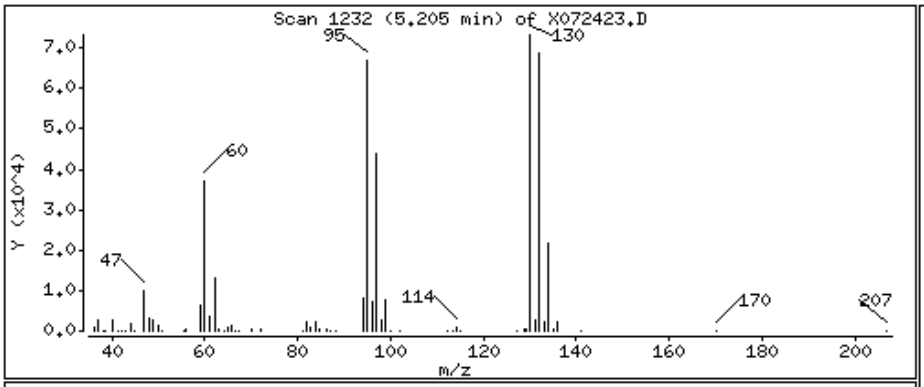
Client ID: HS23071113-05 Instrument: voa6.i

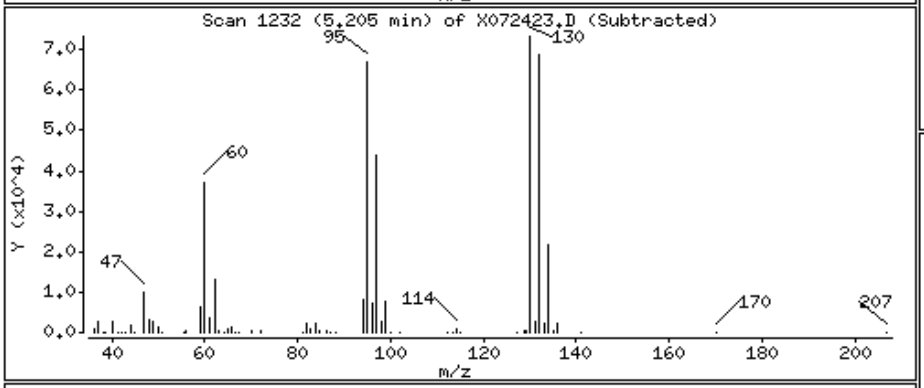
Sample Info: HS23071113-05;HS23071113-05;;;

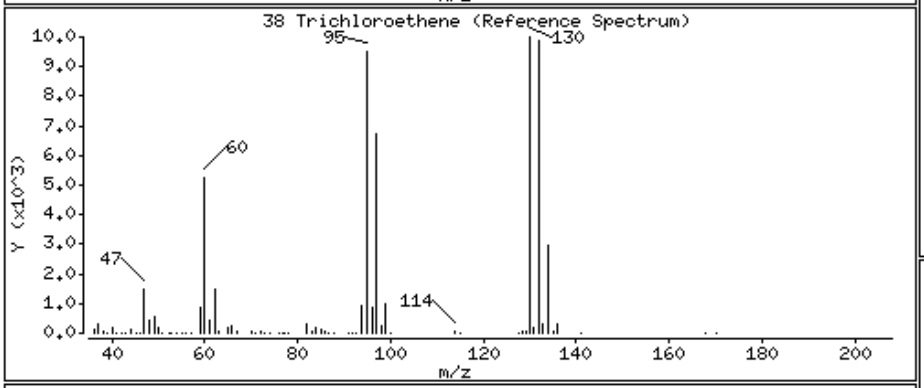
Purge Volume: 5.0 Operator: PC

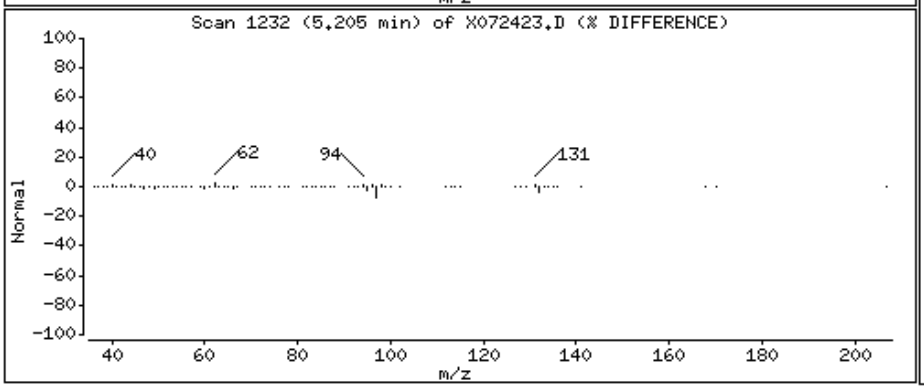
Column phase: DB624 Column diameter: 0.18

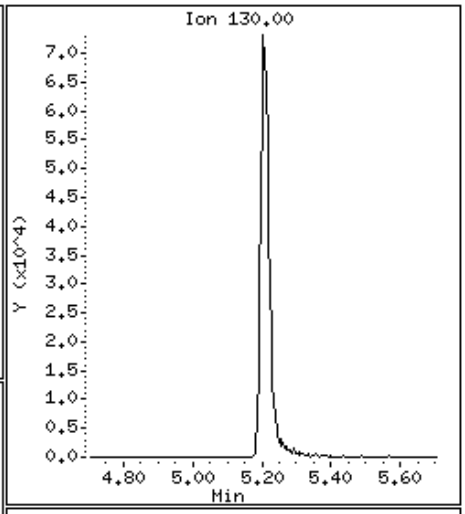
38 Trichloroethene Concentration: 22.07 ug/l

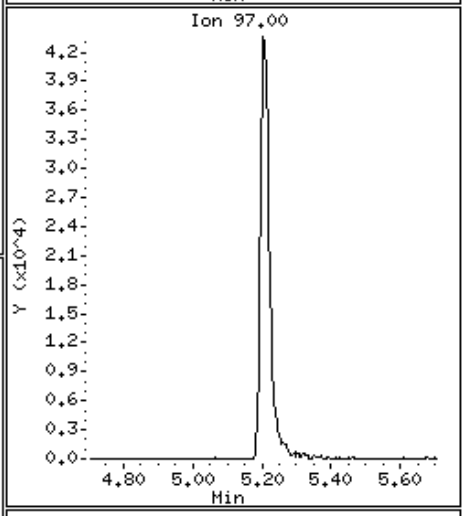


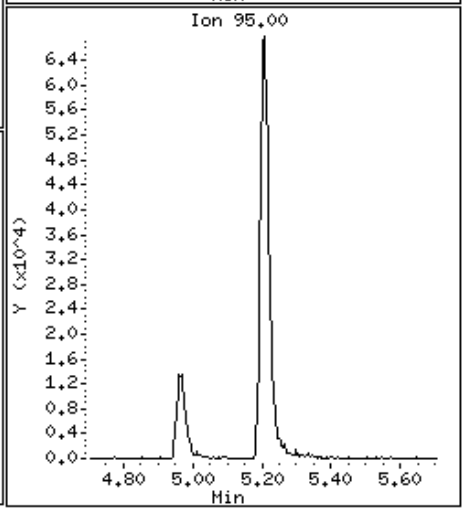












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072423.D Page 5

Date : 24-JUL-2023 18:26

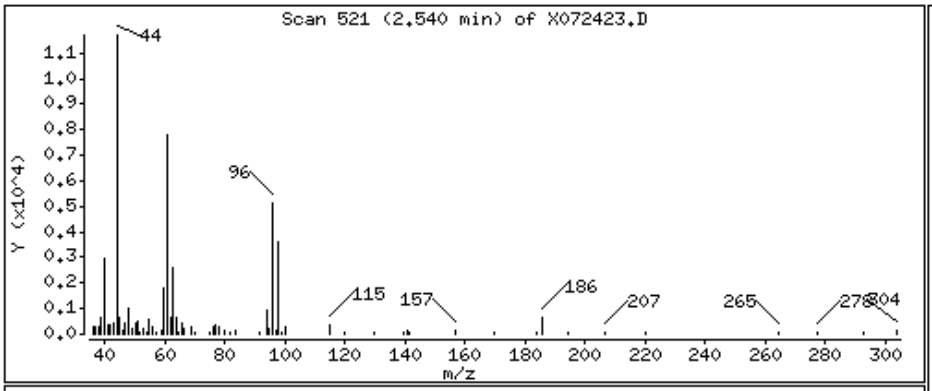
Client ID: HS23071113-05 Instrument: voa6.i

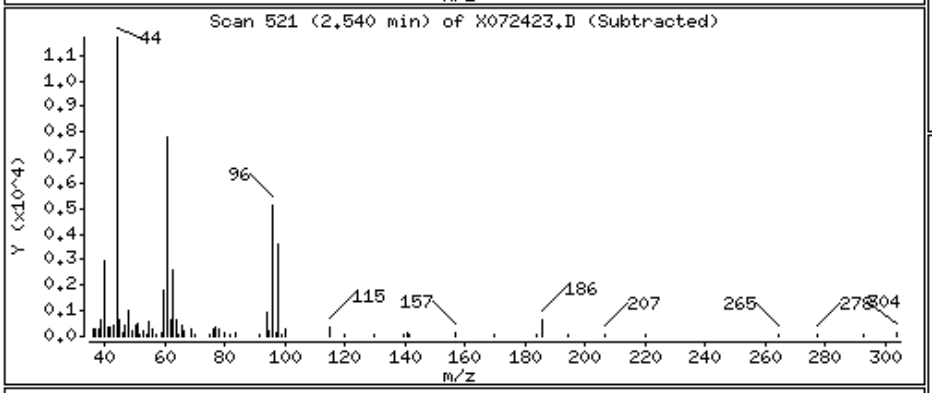
Sample Info: HS23071113-05;HS23071113-05;;;

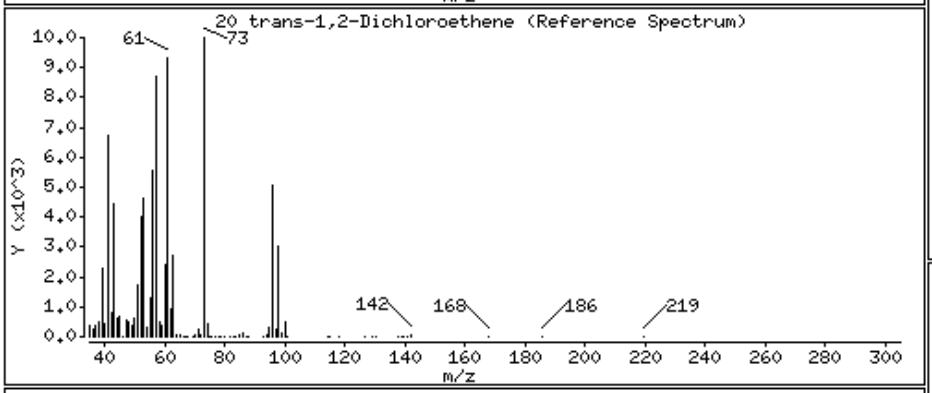
Purge Volume: 5.0 Operator: PC

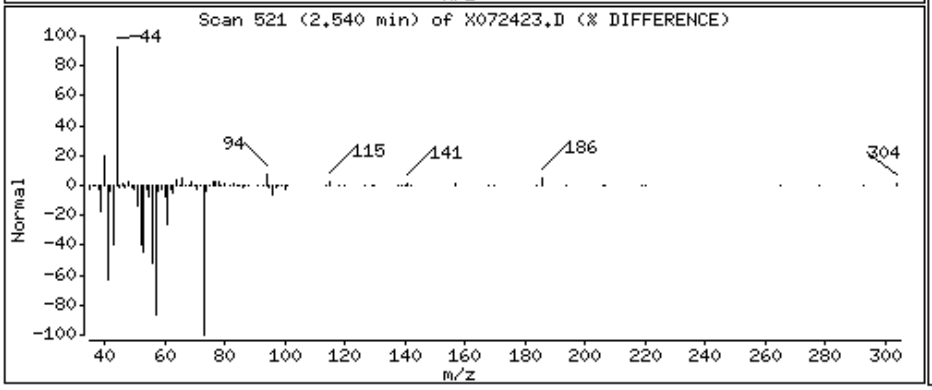
Column phase: DB624 Column diameter: 0.18

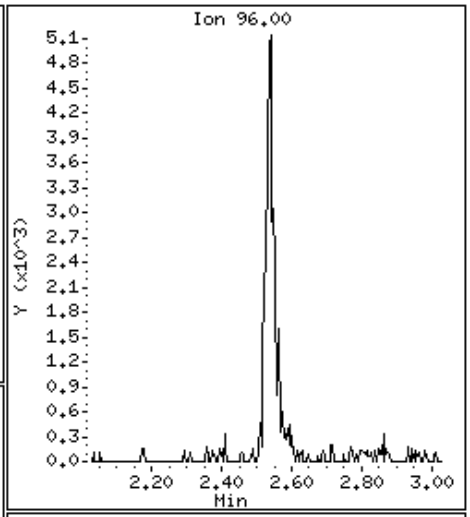
20 trans-1,2-Dichloroethene Concentration: 1.97 ug/l

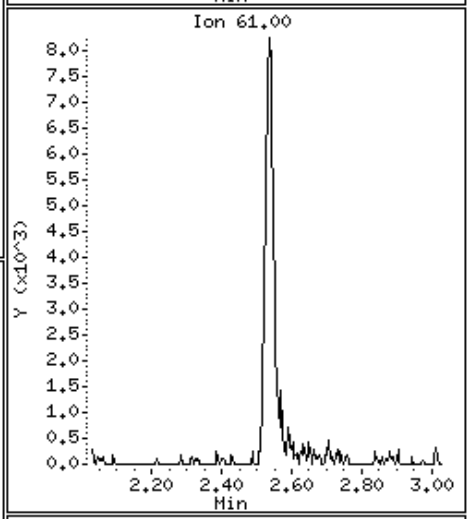


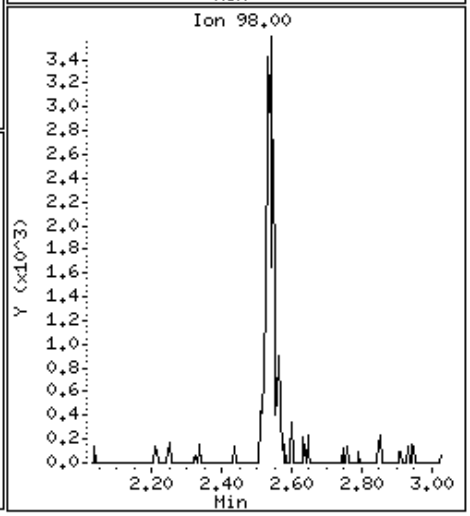












Data File : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072423.D
Inj Date : 24-JUL-2023 18:26
InstruID : voa6.i
LabSampID : HS23071113-05

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072432.D Page 1
Report Date: 27-Jul-2023 13:09

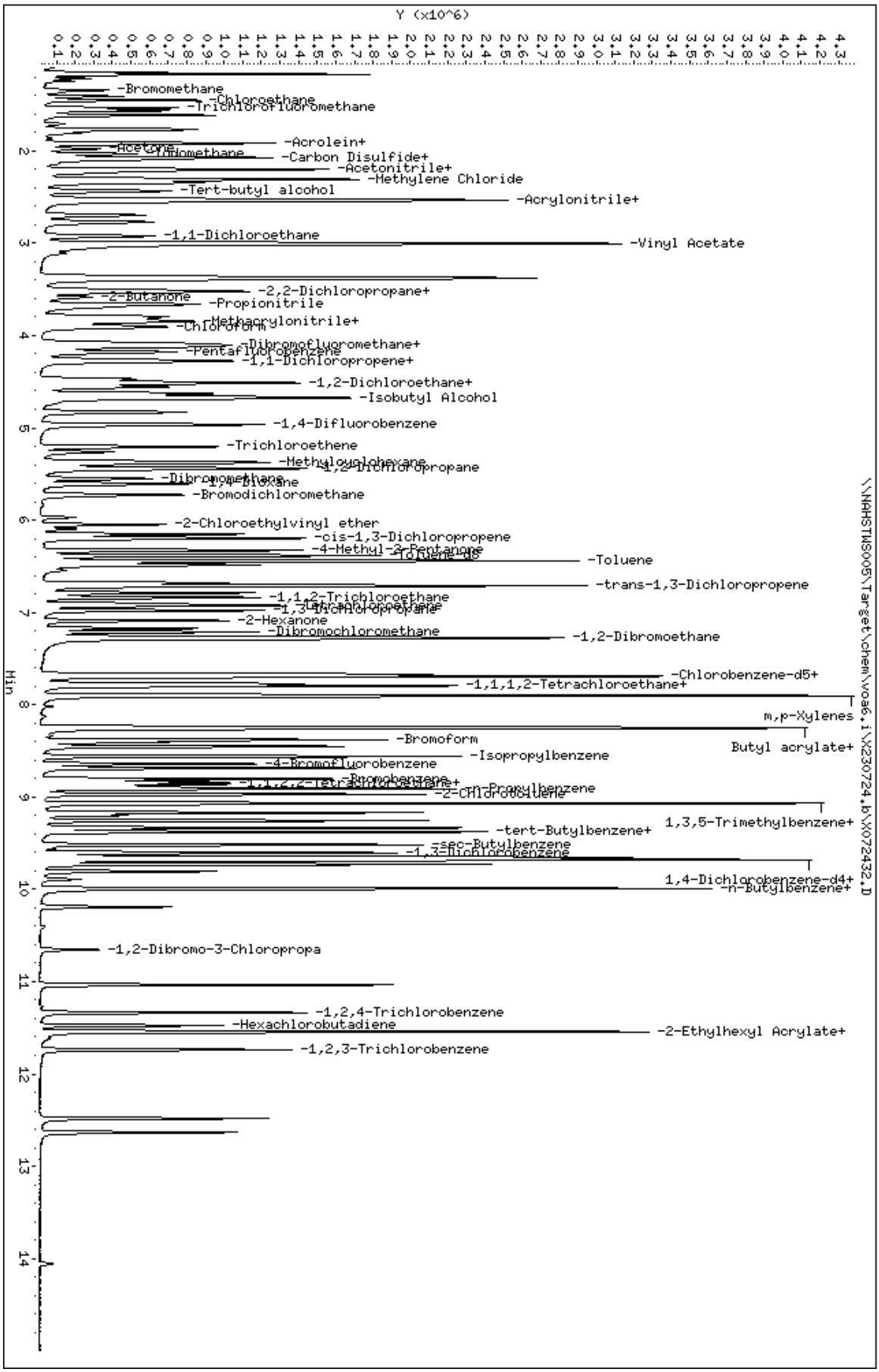
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072432.D
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 24-JUL-2023 21:30
Operator : PC Inst ID: voa6.i
Smp Info : CCV;CCV;2;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\8260W.m
Meth Date : 27-Jul-2023 13:09 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 30 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.181	4.181	(1.000)	560014	50.0000	
$ 30 Dibromofluoromethane	113	4.099	4.099	(0.980)	276454	50.0000	53.92
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.070)	345467	50.0000	53.87
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	925139	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.667	(1.000)	855466	50.0000	
$ 48 Toluene-d8	98	6.385	6.385	(0.833)	1029981	50.0000	46.76
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	447627	50.0000	52.57
* 70 1,4-Dichlorobenzene-d4	152	9.658	9.658	(1.000)	467326	50.0000	
5 Vinyl Chloride	62	1.149	1.149	(0.275)	426394	50.0000	58.83
11 1,1-Dichloroethene	96	1.917	1.917	(0.459)	200476	50.0000	48.86
17 Methylene Chloride	84	2.307	2.307	(0.552)	280941	50.0000	58.25
27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.844)	312388	50.0000	51.67
33 1,2-Dichloroethane	62	4.556	4.556	(0.918)	501390	50.0000	49.23
38 Trichloroethene	130	5.205	5.205	(1.048)	306052	50.0000	48.89
53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	244243	50.0000	49.99
20 trans-1,2-Dichloroethene	96	2.528	2.528	(0.605)	251469	50.0000	52.98



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072432.D
Date : 24-JUL-2023 21:30
Client ID: CCV
Sample Info: CCV;CCV;2;;
Purge Volume: 5.0
Column phase: DB624

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

Data File : \\NAHSTWS005\Target\chem\voa6.i\X230724.b\X072432.D
Inj Date : 24-JUL-2023 21:30
InstruID : voa6.i
LabSampID : CCV

NO MANUAL INTEGRATIONS

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right solutions.
right partner.

Raw Data VOA6 442290

Volatiles by EPA 8260

Workorder

HS23071113

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072501.D Page 1
Report Date: 25-Jul-2023 20:34

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072501.D
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 25-JUL-2023 10:08
Operator : PC Inst ID: voa6.i
Smp Info : BFB;BFB;3;;BFB
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\bfb.m
Meth Date : 14-Mar-2023 15:45 Linh.Pham Quant Type: ISTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: NAHSTW7051

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

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

					CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/l)	TARGET RANGE	RATIO
1 bfb							CAS #: 460-00-4	
8.687	8.889	(0.000)	95	170112			0.00- 100.00	100.00
8.687	8.889	(0.000)	50	49440			15.00- 40.00	29.06
8.687	8.889	(0.000)	75	80264			30.00- 60.00	47.18
8.687	8.889	(0.000)	96	13068			5.00- 9.00	7.68
8.687	8.889	(0.000)	173	1046			0.00- 2.00	0.86
8.687	8.889	(0.000)	174	121632			50.00- 0.00	71.50
8.687	8.889	(0.000)	175	10246			5.00- 9.00	8.42
8.687	8.889	(0.000)	176	116144			95.00- 101.00	95.49
8.687	8.889	(0.000)	177	8032			5.00- 9.00	6.92

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	29.06
75	30.00 - 60.00% of mass 95	47.18
96	5.00 - 9.00% of mass 95	7.68
173	Less than 2.00% of mass 174	0.61 (0.86)
174	Greater than 50.00% of mass 95	71.50
175	5.00 - 9.00% of mass 174	6.02 (8.42)
176	95.00 - 101.00% of mass 174	68.28 (95.49)
177	5.00 - 9.00% of mass 176	4.72 (6.92)

Data File: X072501.D
Spectrum: Scan 2159 (8.68)
Location of Maximum: 95.00
Number of points: 110

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2997	64.10	567	94.00	19480	138.70	119
37.10	12548	65.00	169	95.00	170112	139.50	75
38.10	9542	66.80	360	96.00	13068	140.90	1887
39.10	7098	68.00	17352	96.90	517	143.00	1534
40.10	4370	69.00	19208	98.10	1424	143.80	170
41.10	3024	70.10	1289	98.90	83	145.10	74
42.10	4165	71.00	351	103.10	150	145.90	388
43.10	2875	72.00	635	103.80	737	147.70	567
44.00	4668	73.00	5995	104.70	593	148.80	174
44.90	2333	74.10	28016	105.70	825	149.60	151
45.90	274	75.00	80264	106.90	1037	150.10	144
47.00	3512	76.10	7416	108.80	1120	152.90	315
48.00	1417	76.90	597	109.90	182	154.00	136
49.00	8792	78.20	797	111.90	146	154.90	484
50.10	49440	78.90	3752	113.30	131	156.80	341
51.00	14627	79.90	2029	113.70	120	158.80	249
52.00	764	81.00	4300	115.00	158	160.90	179
52.90	467	81.80	1184	115.70	615	171.00	131
54.00	424	82.80	407	116.70	798	172.80	1046
55.10	7082	83.10	376	118.00	418	174.00	121632
56.00	4103	85.10	520	118.90	962	174.90	10246
57.00	6554	86.10	204	126.90	221	175.90	116144
58.10	614	87.00	6575	128.00	611	177.00	8032
58.80	76	87.90	6495	128.90	345	177.90	266
59.90	2731	88.70	293	130.00	698	233.80	196
61.00	10342	90.80	613	131.00	173	235.80	148
62.00	6914	92.00	4116	134.80	240		
63.00	6530	92.90	6217	137.00	271		

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072501.D

Date : 25-JUL-2023 10:08

Client ID: BFB

Instrument: voa6.i

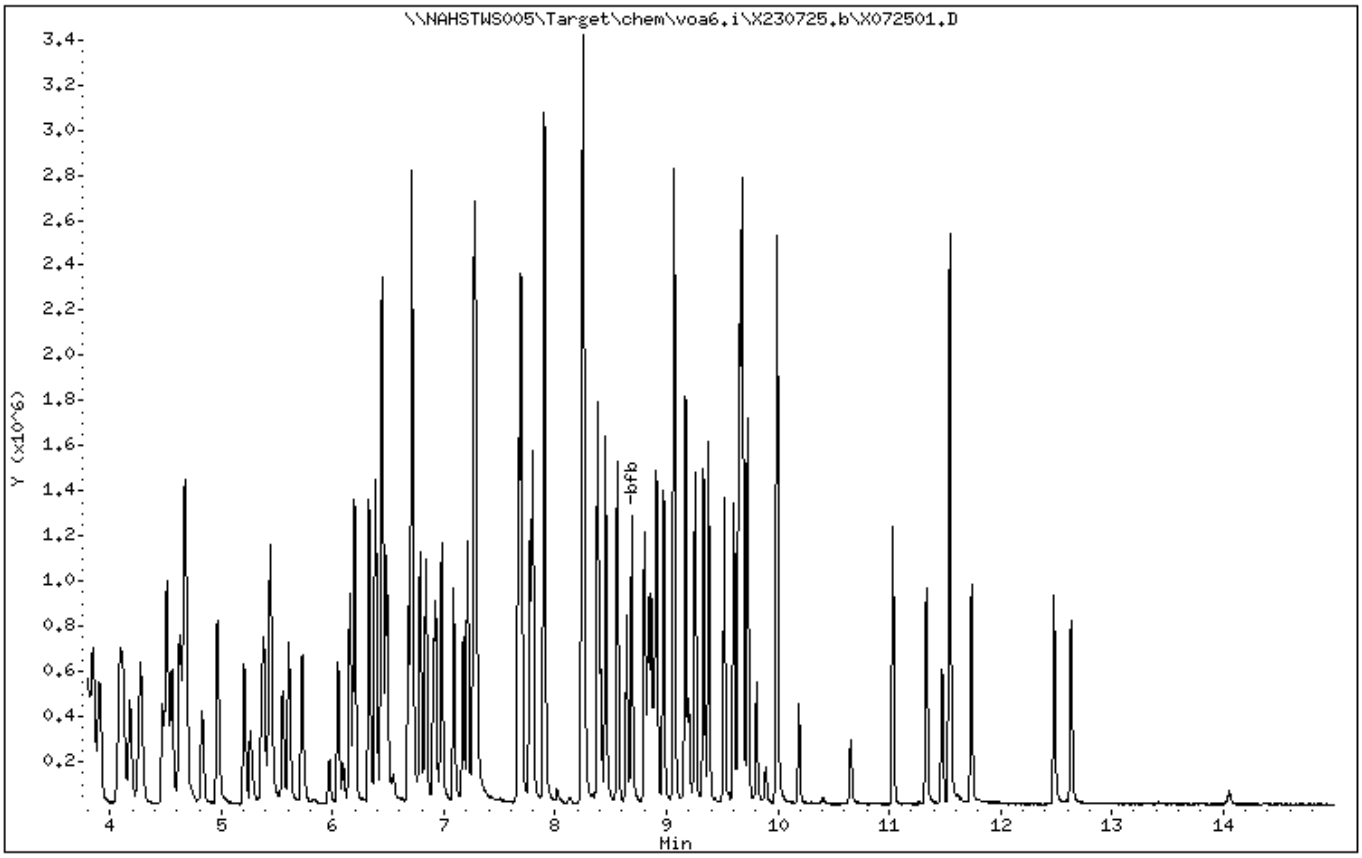
Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0

Operator: PC

Column phase: DB624

Column diameter: 0.25



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072501.D

Date : 25-JUL-2023 10:08

Client ID: BFB

Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

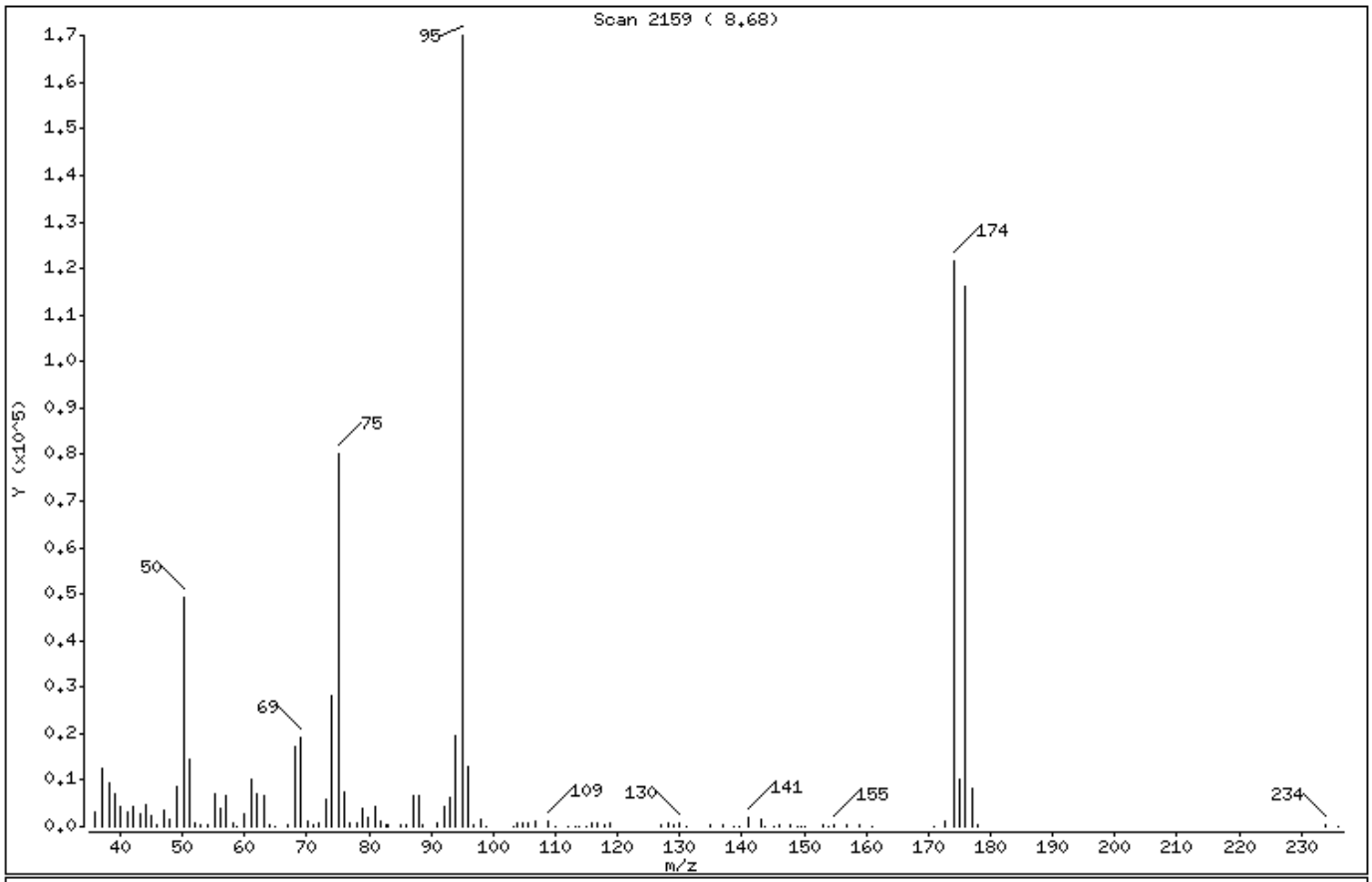
Volume Injected (uL): 2.0

Operator: PC

Column phase: DB624

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	29.06
75	30.00 - 60.00% of mass 95	47.18
96	5.00 - 9.00% of mass 95	7.68
173	Less than 2.00% of mass 174	0.61 (0.86)
174	Greater than 50.00% of mass 95	71.50
175	5.00 - 9.00% of mass 174	6.02 (8.42)
176	95.00 - 101.00% of mass 174	68.28 (95.49)
177	5.00 - 9.00% of mass 176	4.72 (6.92)

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072501.D

Date : 25-JUL-2023 10:08

Client ID: BFB Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0 Operator: PC

Column phase: DB624 Column diameter: 0.25

Data File: X072501.D
Spectrum: Scan 2159 (8.68)
Location of Maximum: 95.00
Number of points: 110

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	2997	64.10	567	94.00	19480	138.70	119
37.10	12548	65.00	169	95.00	170112	139.50	75
38.10	9542	66.80	360	96.00	13068	140.90	1887
39.10	7098	68.00	17352	96.90	517	143.00	1534
40.10	4370	69.00	19208	98.10	1424	143.80	170
41.10	3024	70.10	1289	98.90	83	145.10	74
42.10	4165	71.00	351	103.10	150	145.90	388
43.10	2875	72.00	635	103.80	737	147.70	567
44.00	4668	73.00	5995	104.70	593	148.80	174
44.90	2333	74.10	28016	105.70	825	149.60	151
45.90	274	75.00	80264	106.90	1037	150.10	144
47.00	3512	76.10	7416	108.80	1120	152.90	315
48.00	1417	76.90	597	109.90	182	154.00	136
49.00	8792	78.20	797	111.90	146	154.90	484
50.10	49440	78.90	3752	113.30	131	156.80	341
51.00	14627	79.90	2029	113.70	120	158.80	249
52.00	764	81.00	4300	115.00	158	160.90	179
52.90	467	81.80	1184	115.70	615	171.00	131
54.00	424	82.80	407	116.70	798	172.80	1046
55.10	7082	83.10	376	118.00	418	174.00	121632
56.00	4103	85.10	520	118.90	962	174.90	10246
57.00	6554	86.10	204	126.90	221	175.90	116144
58.10	614	87.00	6575	128.00	611	177.00	8032
58.80	76	87.90	6495	128.90	345	177.90	266
59.90	2731	88.70	293	130.00	698	233.80	196
61.00	10342	90.80	613	131.00	173	235.80	148
62.00	6914	92.00	4116	134.80	240		
63.00	6530	92.90	6217	137.00	271		

Data File : \\nahstws005\target\chem\voa6.i\x230725.b\x072501.d
Inj Date : 25-JUL-2023 10:08
InstruID : voa6.i
LabSampID : BFB

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072502.D Page 1
Report Date: 27-Jul-2023 13:10

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072502.D
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 25-JUL-2023 10:28
Operator : PC Inst ID: voa6.i
Smp Info : CCV;CCV;2;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\8260W.m
Meth Date : 27-Jul-2023 13:10 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.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	4.181	4.181	(1.000)	575260	50.0000	
135 1,4-Dioxane	88	5.602	5.602	(1.340)	68501	1000.00	1002.08
140 1,3-Butadiene	54	1.171	1.171	(0.280)	429408	50.0000	58.09
25 Methacrylonitrile	41	3.821	3.821	(0.914)	487190	50.0000	65.61
12 Isobutyl Alcohol	43	4.680	4.680	(1.119)	1392841	1000.00	1277.31
13 Acetonitrile	39	2.202	2.202	(0.527)	487523	500.000	604.36
14 Allyl Chloride	41	2.202	2.202	(0.527)	1183127	50.0000	62.64
4 Propionitrile	54	3.656	3.656	(0.875)	672947	500.000	590.54
2 Dichlorodifluoromethane	85	0.980	0.980	(0.234)	252381	50.0000	43.04
3 Chloromethane	50	1.085	1.085	(0.260)	387693	50.0000	44.62
5 Vinyl Chloride	62	1.149	1.149	(0.275)	382136	50.0000	51.33
6 Bromomethane	94	1.344	1.344	(0.321)	123517	50.0000	40.09
7 Chloroethane	64	1.407	1.407	(0.337)	253127	50.0000	59.56
8 Trichlorofluoromethane	101	1.565	1.565	(0.374)	392898	50.0000	52.08
9 Acrolein	56	1.865	1.865	(0.446)	34201	100.000	156.36
10 Acetone	43	1.977	1.977	(0.473)	287659	100.000	127.67
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	214667	50.0000	50.93
15 Iodomethane	142	2.030	2.030	(0.485)	482696	100.000	87.63
16 Acrylonitrile	53	2.536	2.536	(0.606)	309145	100.000	110.28
17 Methylene Chloride	84	2.307	2.307	(0.552)	251567	50.0000	50.60

18	Methyl tert-butyl ether	73	2.539	2.539 (0.607)	744093	50.0000	47.47
19	Carbon Disulfide	76	2.075	2.075 (0.496)	1378741	100.000	104.07

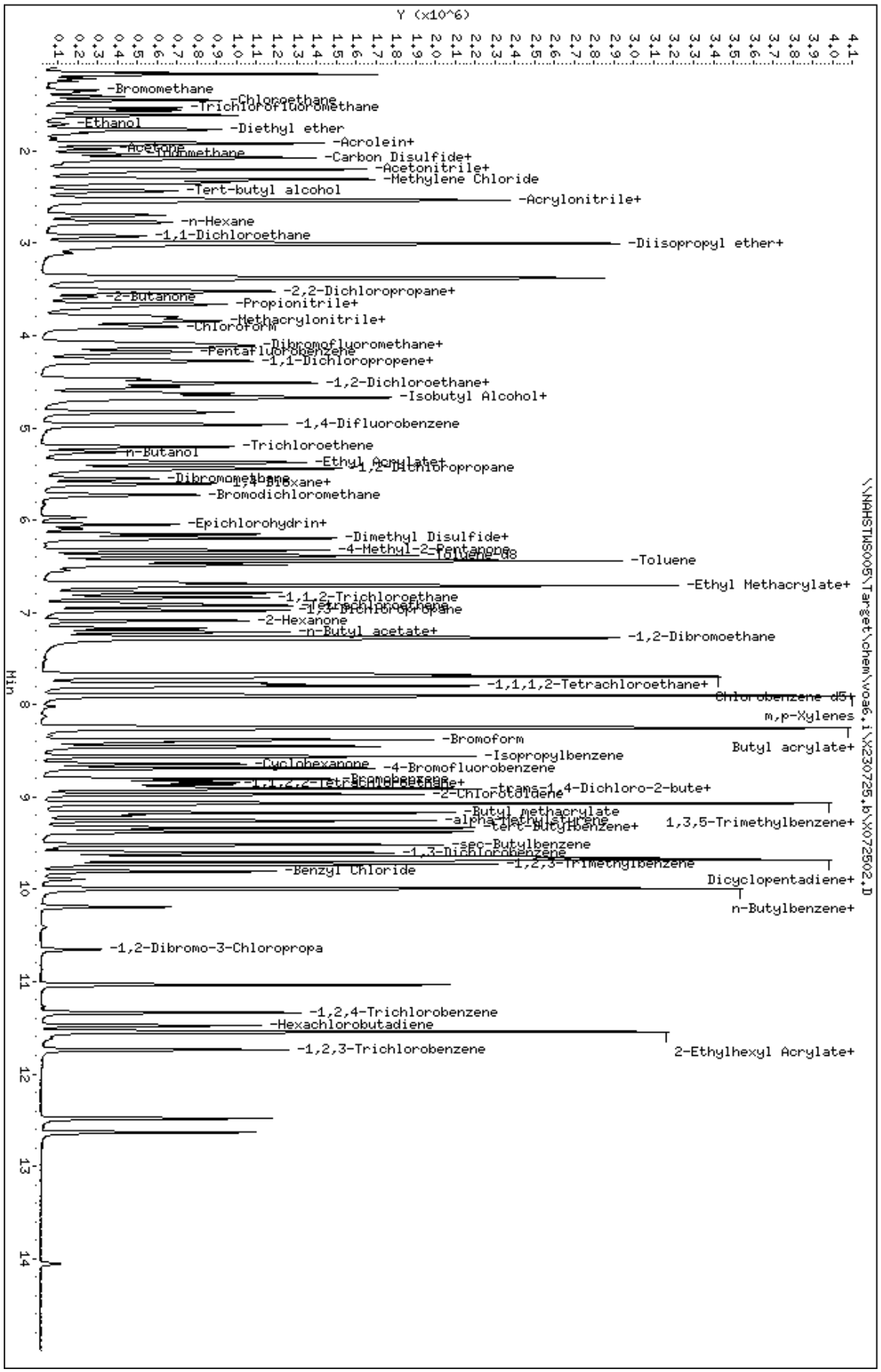
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	20 trans-1,2-Dichloroethene	96	2.532	2.532	(0.606)	213350	50.0000	43.76
	21 Vinyl Acetate	43	3.000	3.000	(0.718)	2316293	100.000	114.88
	22 1,1-Dichloroethane	63	2.922	2.922	(0.699)	501109	50.0000	46.84
	24 2-Butanone	43	3.585	3.585	(0.857)	351224	100.000	114.64
	26 2,2-Dichloropropane	77	3.510	3.510	(0.840)	411712	50.0000	49.58
	27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.844)	310147	50.0000	49.94
	28 Chloroform	83	3.908	3.908	(0.935)	519022	50.0000	47.41
	29 Bromochloromethane	128	3.795	3.795	(0.908)	162897	50.0000	46.80
$	30 Dibromofluoromethane	113	4.099	4.099	(0.980)	278162	50.0000	52.80
	31 1,1,1-Trichloroethane	97	4.080	4.080	(0.976)	410960	50.0000	48.77
	32 1,1-Dichloropropene	75	4.279	4.279	(0.862)	354488	50.0000	46.38
	33 1,2-Dichloroethane	62	4.556	4.556	(0.918)	515833	50.0000	50.01
	34 Carbon Tetrachloride	117	4.264	4.264	(0.859)	344118	50.0000	44.69
$	35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.070)	357202	50.0000	54.22
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	936985	50.0000	
	37 Benzene	78	4.511	4.511	(0.909)	1113809	50.0000	49.69
	38 Trichloroethene	130	5.208	5.208	(1.049)	296632	50.0000	46.79
	39 Bromodichloromethane	83	5.726	5.726	(1.153)	407766	50.0000	47.49
	41 2-Chloroethylvinyl ether	63	6.048	6.048	(1.218)	248843	100.000	94.93
	42 1,2-Dichloropropane	63	5.433	5.433	(1.094)	387989	50.0000	53.83
	44 Dibromomethane	93	5.553	5.553	(1.119)	193746	50.0000	47.49
	45 4-Methyl-2-Pentanone	43	6.325	6.325	(0.825)	954082	100.000	114.36
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	476954	50.0000	48.37
*	47 Chlorobenzene-d5	117	7.667	7.667	(1.000)	847733	50.0000	
$	48 Toluene-d8	98	6.385	6.385	(0.833)	1013985	50.0000	46.45
	50 Toluene	91	6.445	6.445	(0.841)	1119903	50.0000	49.07
	51 trans-1,3-Dichloropropene	75	6.682	6.682	(1.346)	394965	50.0000	47.51
	52 2-Hexanone	43	7.086	7.086	(0.924)	634187	100.000	115.72
	53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	232527	50.0000	48.03
	54 1,3-Dichloropropane	76	6.981	6.981	(0.911)	484561	50.0000	48.99
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	333514	50.0000	47.72
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	208903	50.0000	44.31
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	265372	50.0000	47.97
	58 1-Chlorohexane	55	7.694	7.694	(1.550)	352180	50.0000	46.78
	59 Chlorobenzene	112	7.694	7.694	(1.003)	754964	50.0000	47.32
	60 1,1,1,2-Tetrachloroethane	131	7.772	7.772	(1.014)	291042	50.0000	46.60
	61 Ethylbenzene	106	7.795	7.795	(1.017)	374825	50.0000	46.85
	62 m,p-Xylenes	106	7.900	7.900	(1.030)	937266	100.000	93.39
	63 o-Xylene	106	8.237	8.237	(1.074)	450627	50.0000	47.41
	64 Styrene	104	8.256	8.256	(1.077)	803584	50.0000	48.47
	66 Bromoform	173	8.410	8.410	(1.097)	209469	50.0000	46.71
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	1119211	50.0000	45.81
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	383373	50.0000	48.97
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	437075	50.0000	51.79
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	466038	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	300358	50.0000	48.35(M)
	73 n-Propylbenzene	91	8.908	8.908	(0.922)	1330831	50.0000	47.25
	74 Bromobenzene	156	8.803	8.803	(0.911)	330775	50.0000	45.38
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	918688	50.0000	43.54
	76 2-Chlorotoluene	91	8.972	8.972	(0.929)	846725	50.0000	44.56
	77 4-Chlorotoluene	91	9.066	9.066	(0.938)	972941	50.0000	46.60
	78 tert-Butylbenzene	119	9.332	9.332	(0.966)	790685	50.0000	43.70

79 1,2,4-Trimethylbenzene	105	9.377	9.377 (0.971)	934995	50.0000	44.19
81 sec-Butylbenzene	105	9.519	9.519 (0.985)	1116421	50.0000	46.29

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	82 p-Isopropyltoluene	119	9.647	9.647	(0.998)	979219	50.0000	44.45
	83 1,3-Dichlorobenzene	146	9.602	9.602	(0.994)	566172	50.0000	44.58
	84 1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	602604	50.0000	43.28
	87 n-Butylbenzene	91	9.992	9.992	(1.034)	874689	50.0000	47.40
	88 1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	564663	50.0000	45.23
	89 1,2-Dibromo-3-Chloropropane	155	10.655	10.655	(1.103)	55342	50.0000	43.16
	90 1,2,4-Trichlorobenzene	180	11.334	11.334	(1.173)	344768	50.0000	40.21
	91 Hexachlorobutadiene	225	11.476	11.476	(1.188)	160844	50.0000	41.14
	92 Naphthalene	128	11.540	11.540	(1.194)	906661	50.0000	42.72
	93 1,2,3-Trichlorobenzene	180	11.739	11.739	(1.215)	323262	50.0000	40.31(M)
M	94 1,2-Dichloroethylene (total)	96				523497	100.000	(a)
	141 Cyclohexane	56	4.121	4.121	(0.986)	533634	50.0000	53.51
	138 Freon TF	101	1.917	1.917	(0.459)	201828	50.0000	55.79
	147 Methylcyclohexane	55	5.381	5.381	(1.084)	1070768	50.0000	54.14
	146 Methyl Acetate	43	2.232	2.232	(0.534)	325454	50.0000	63.56
	148 Tert-Butyl alcohol	59	2.434	2.434	(0.582)	715798	1000.00	985.87
	149 Isopropyl Alcohol	45	2.097	2.097	(0.502)	549491	1000.00	1219.67

QC Flag Legend

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



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Date : 25-JUL-2023 10:28
Client ID: CCV
Sample Info: CCV,CCV,2,,
Purge Volume: 5.0
Column phase: DB624

\\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072502.D

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

Data File : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072502.D
Inj Date : 25-JUL-2023 10:28
InstruID : voa6.i
LabSampID : CCV

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

Reason Code:

BEFORE

MASS
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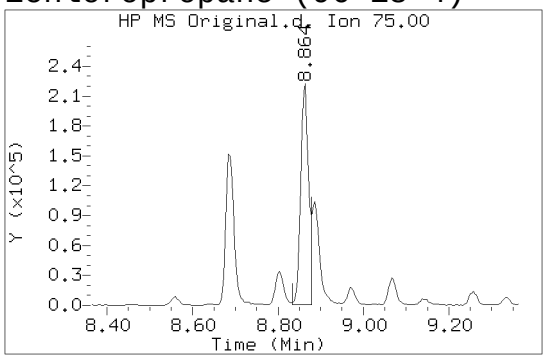
AREA
300358
HEIGHT
222013
27-Jul-2023
13:09
linh
pham



AFTER

MASS
75
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300358
HEIGHT
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27-Jul-2023
13:09
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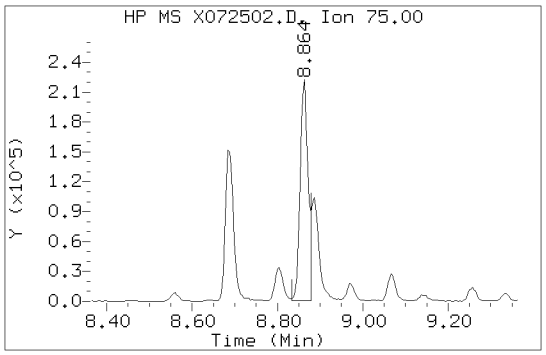

BEFORE

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13:09
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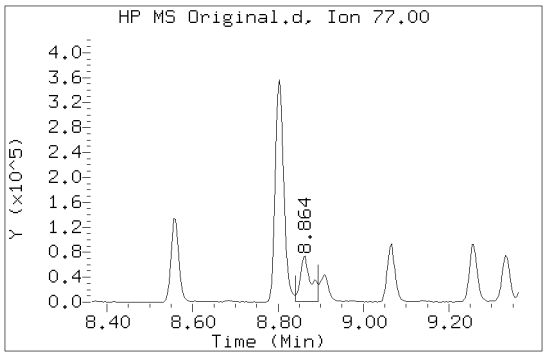

AFTER

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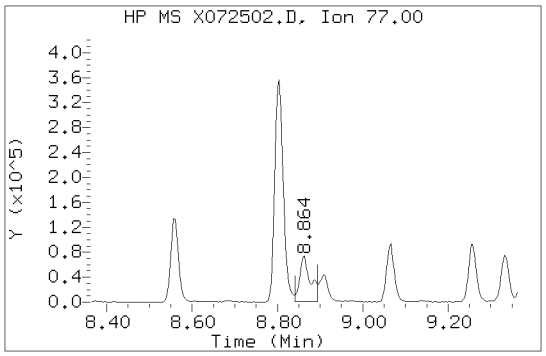

1,2,3-Trichlorobenzene (87-61-6)

Reason Code:

BEFORE

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AREA
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HEIGHT
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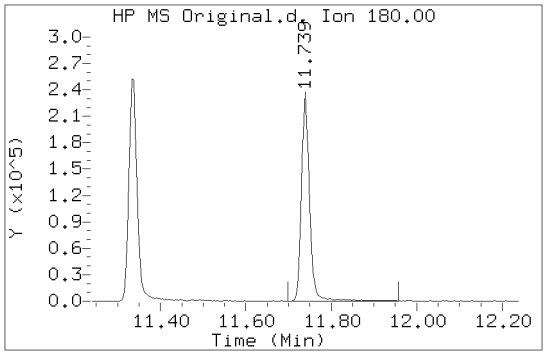
27-Jul-2023
13:09
linh
pham



AFTER

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HEIGHT
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27-Jul-2023
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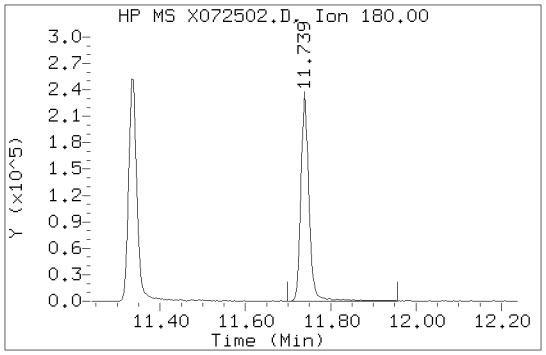

BEFORE

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27-Jul-2023
13:09
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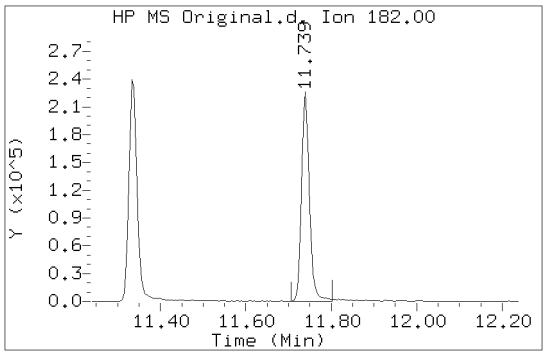
pham



AFTER

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AREA
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HEIGHT
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27-Jul-2023
13:09
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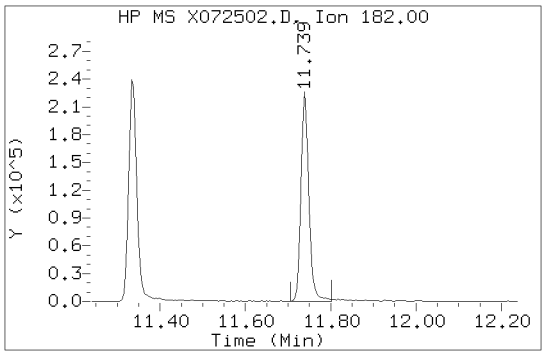
pham



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Inj Date : 25-JUL-2023 10:28
InstruID : voa6.i
LabSampID : CCV

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

Reason Code:

BEFORE

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HEIGHT
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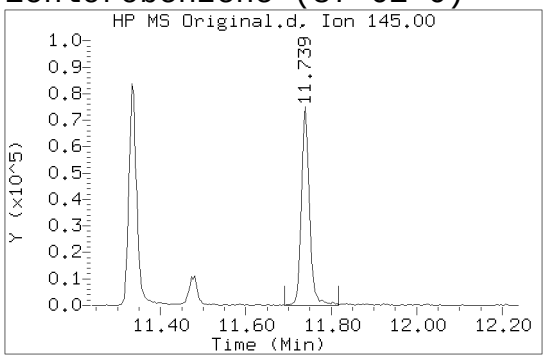
27-Jul-2023
13:09
linh
pham



AFTER

MASS
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AREA
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HEIGHT
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27-Jul-2023
13:09
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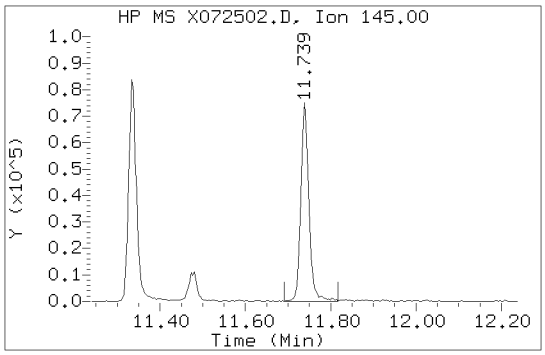


Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072504.D Page 1
Report Date: 27-Jul-2023 13:10

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072504.D
Lab Smp Id: CCB Client Smp ID: CCB
Inj Date : 25-JUL-2023 11:09
Operator : PC Inst ID: voa6.i
Smp Info : CCB;CCB;;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\8260W.m
Meth Date : 27-Jul-2023 13:10 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.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	4.181	4.181	(1.000)	570751	50.0000	
$ 30 Dibromofluoromethane	113	4.099	4.099	(0.980)	284848	54.5219	54.52
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.070)	371688	56.9048	56.90
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	885705	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.667	(1.000)	745492	50.0000	
$ 48 Toluene-d8	98	6.385	6.385	(0.833)	1000257	52.1126	52.11
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	360479	48.5522	48.55
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	369968	50.0000	

01322975

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072504.D

Page 1

Date : 25-JUL-2023 11:09

Client ID: CCB

Instrument: voa6.i

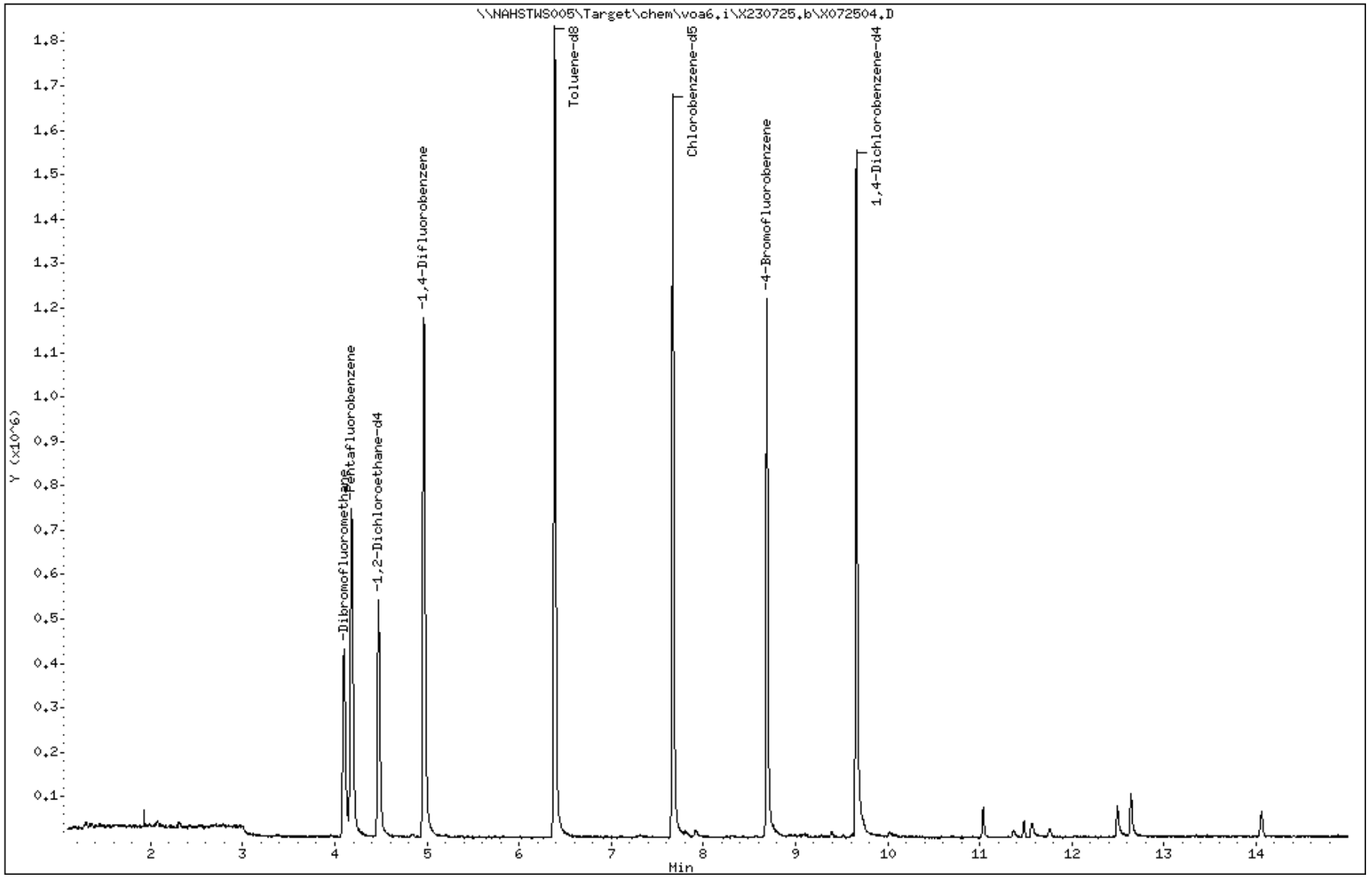
Sample Info: CCB;CCB;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



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Inj Date : 25-JUL-2023 11:09
InstruID : voa6.i
LabSampID : CCB

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072505.D Page 1
Report Date: 27-Jul-2023 13:10

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072505.D
Lab Smp Id: VLCSW-230725 Client Smp ID: VLCSW-230725
Inj Date : 25-JUL-2023 11:30
Operator : PC Inst ID: voa6.i
Smp Info : VLCSW-230725;VLCSW-230725;3;;LCS
Misc Info : V6;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\8260W.m
Meth Date : 27-Jul-2023 13:10 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.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	4.181	4.181	(1.000)	567256	50.0000	
135 1,4-Dioxane	88	5.606	5.602	(1.341)	26556	393.962	393.96(a)
140 1,3-Butadiene	54	1.167	1.171	(0.279)	196833	27.0040	27.00
25 Methacrylonitrile	41	3.837	3.821	(0.918)	192819	26.3343	26.33
12 Isobutyl Alcohol	43	4.680	4.680	(1.119)	520435	484.004	484.00
13 Acetonitrile	39	2.202	2.202	(0.527)	179039	225.080	225.07
14 Allyl Chloride	41	2.202	2.202	(0.527)	438566	23.5484	23.54
4 Propionitrile	54	3.664	3.656	(0.876)	269936	240.223	240.22(a)
2 Dichlorodifluoromethane	85	0.976	0.980	(0.234)	116772	20.7780	20.77
3 Chloromethane	50	1.085	1.085	(0.260)	187763	21.9148	21.91
5 Vinyl Chloride	62	1.149	1.149	(0.275)	176368	24.0265	24.02
6 Bromomethane	94	1.344	1.344	(0.321)	62997	20.7384	20.73
7 Chloroethane	64	1.407	1.407	(0.337)	104157	24.8557	24.85
8 Trichlorofluoromethane	101	1.565	1.565	(0.374)	179486	24.1276	24.12
9 Acrolein	56	1.865	1.865	(0.446)	11775	55.3279	55.32
10 Acetone	43	1.981	1.977	(0.474)	104794	44.0857	44.08
11 1,1-Dichloroethene	96	1.917	1.921	(0.459)	91691	22.0635	22.06
15 Iodomethane	142	2.033	2.030	(0.486)	148173	30.3257	30.32
16 Acrylonitrile	53	2.539	2.536	(0.607)	132348	47.8784	47.87
17 Methylene Chloride	84	2.307	2.307	(0.552)	105219	20.6508	20.65

18 Methyl tert-butyl ether	73	2.539	2.539 (0.607)	309248	20.0084	20.00
19 Carbon Disulfide	76	2.075	2.075 (0.496)	550591	42.1482	42.14

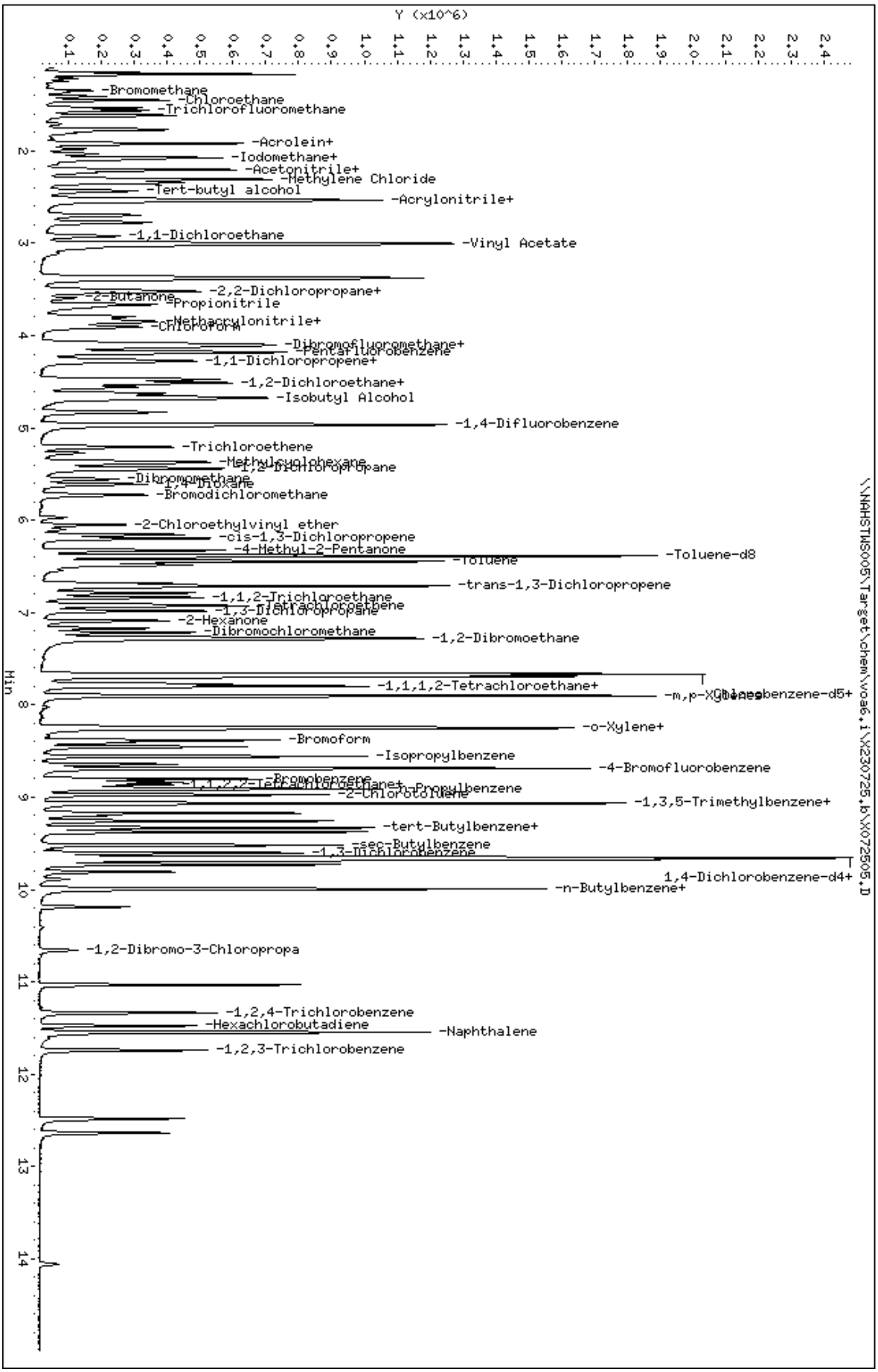
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	20 trans-1,2-Dichloroethene	96	2.532	2.532	(0.606)	98095	20.4065	20.40
	21 Vinyl Acetate	43	3.001	3.000	(0.718)	990674	49.8314	49.83
	22 1,1-Dichloroethane	63	2.922	2.922	(0.699)	223840	21.2196	21.21
	24 2-Butanone	43	3.589	3.585	(0.858)	127523	42.2142	42.21
	26 2,2-Dichloropropane	77	3.510	3.510	(0.840)	178207	21.8800	21.88
	27 cis-1,2-Dichloroethene	96	3.525	3.529	(0.843)	135098	22.0612	22.06
	28 Chloroform	83	3.908	3.908	(0.935)	222720	20.6345	20.63
	29 Bromochloromethane	128	3.795	3.795	(0.908)	69916	20.3724	20.37
$	30 Dibromofluoromethane	113	4.099	4.099	(0.980)	284136	54.7235	54.72
	31 1,1,1-Trichloroethane	97	4.080	4.080	(0.976)	185478	22.3229	22.32
	32 1,1-Dichloropropene	75	4.279	4.279	(0.862)	157733	20.5093	20.50
	33 1,2-Dichloroethane	62	4.560	4.556	(0.918)	213814	20.6002	20.60
	34 Carbon Tetrachloride	117	4.264	4.264	(0.859)	157272	20.2982	20.29
$	35 1,2-Dichloroethane-d4	65	4.470	4.474	(1.069)	373109	57.4806	57.48
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	942875	50.0000	
	37 Benzene	78	4.511	4.511	(0.909)	473030	20.9742	20.97
	38 Trichloroethene	130	5.209	5.208	(1.049)	128336	20.1178	20.11
	39 Bromodichloromethane	83	5.726	5.726	(1.153)	168213	19.4723	19.47
	41 2-Chloroethylvinyl ether	63	6.052	6.048	(1.219)	105016	39.8159	39.81
	42 1,2-Dichloropropane	63	5.433	5.433	(1.094)	159725	22.0249	22.02
	44 Dibromomethane	93	5.553	5.553	(1.119)	81033	19.7398	19.73
	45 4-Methyl-2-Pentanone	43	6.326	6.325	(0.825)	384968	46.2041	46.20
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	188100	18.9577	18.95
*	47 Chlorobenzene-d5	117	7.668	7.667	(1.000)	846696	50.0000	
$	48 Toluene-d8	98	6.386	6.385	(0.833)	1039336	47.6763	47.67
	50 Toluene	91	6.446	6.445	(0.841)	492710	21.6178	21.61
	51 trans-1,3-Dichloropropene	75	6.682	6.682	(1.346)	157532	18.8346	18.83
	52 2-Hexanone	43	7.087	7.086	(0.924)	258150	47.1659	47.16
	53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	100511	20.7886	20.78
	54 1,3-Dichloropropane	76	6.982	6.981	(0.911)	200750	20.3237	20.32
	55 Dibromochloromethane	129	7.177	7.173	(0.936)	134118	19.2149	19.21
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	101462	21.5478	21.54
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	109614	19.8397	19.83
	58 1-Chlorohexane	55	7.694	7.694	(1.550)	165269	21.8184	21.81
	59 Chlorobenzene	112	7.690	7.694	(1.003)	331637	20.8156	20.81
	60 1,1,1,2-Tetrachloroethane	131	7.773	7.772	(1.014)	124609	19.9782	19.97
	61 Ethylbenzene	106	7.795	7.795	(1.017)	168987	21.1518	21.15
	62 m,p-Xylenes	106	7.900	7.900	(1.030)	437548	43.6552	43.65
	63 o-Xylene	106	8.241	8.237	(1.075)	202596	21.3453	21.34
	64 Styrene	104	8.260	8.256	(1.077)	344877	20.8312	20.83
	66 Bromoform	173	8.410	8.410	(1.097)	86989	19.4246	19.42
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	524252	21.4885	21.48
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	157404	20.5532	20.55
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	454714	53.9715	53.97
*	70 1,4-Dichlorobenzene-d4	152	9.658	9.662	(1.000)	455950	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.918)	118161	19.4433	19.44(M)
	73 n-Propylbenzene	91	8.908	8.908	(0.922)	614984	22.3202	22.32
	74 Bromobenzene	156	8.803	8.803	(0.912)	142700	20.0115	20.01
	75 1,3,5-Trimethylbenzene	105	9.062	9.066	(0.938)	423745	20.5295	20.52
	76 2-Chlorotoluene	91	8.972	8.972	(0.929)	390343	21.0015	21.00
	77 4-Chlorotoluene	91	9.070	9.066	(0.939)	444742	21.7753	21.77
	78 tert-Butylbenzene	119	9.332	9.332	(0.966)	379352	21.4312	21.43

79 1,2,4-Trimethylbenzene	105	9.377	9.377 (0.971)	423171	20.4443	20.44
81 sec-Butylbenzene	105	9.519	9.519 (0.986)	529091	22.4248	22.42

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
	82 p-Isopropyltoluene	119	9.647	9.647	(0.999)	450554	20.9047	20.90
	83 1,3-Dichlorobenzene	146	9.602	9.602	(0.994)	250025	20.1267	20.12
	84 1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	274431	20.1487	20.14
	87 n-Butylbenzene	91	9.992	9.992	(1.035)	389445	21.5749	21.57
	88 1,2-Dichlorobenzene	146	9.992	9.992	(1.035)	254576	20.8448	20.84
	89 1,2-Dibromo-3-Chloropropane	155	10.655	10.655	(1.103)	23868	19.6355	19.63
	90 1,2,4-Trichlorobenzene	180	11.338	11.334	(1.174)	146953	17.5191	17.51
	91 Hexachlorobutadiene	225	11.476	11.476	(1.188)	73088	20.3732	20.37
	92 Naphthalene	128	11.544	11.540	(1.195)	368997	17.7732	17.77
	93 1,2,3-Trichlorobenzene	180	11.742	11.739	(1.216)	136514	17.4019	17.40
M	94 1,2-Dichloroethylene (total)	96				233193	42.4677	42.46
M	95 Xylenes (total)	106				640144	65.0006	65.00
	141 Cyclohexane	56	4.118	4.121	(0.985)	272440	27.7078	27.70
	138 Freon TF	101	1.917	1.917	(0.459)	93338	28.2011	28.20
	147 Methylcyclohexane	55	5.388	5.381	(1.085)	423363	21.2729	21.27
	146 Methyl Acetate	43	2.236	2.232	(0.535)	123223	24.4081	24.40
	148 Tert-Butyl alcohol	59	2.435	2.434	(0.582)	295014	412.057	412.05
	149 Isopropyl Alcohol	45	2.093	2.097	(0.501)	207183	466.363	466.36

QC Flag Legend

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



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Client ID: VLCSW-230725
Sample Info: VLCSW-230725;VLCSW-230725;3;;LCS
Purge Volume: 5.0
Column phase: DB624

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

Data File : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072505.D
Inj Date : 25-JUL-2023 11:30
InstruID : voa6.i
LabSampID : VLCSW-230725

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

Reason Code:

BEFORE

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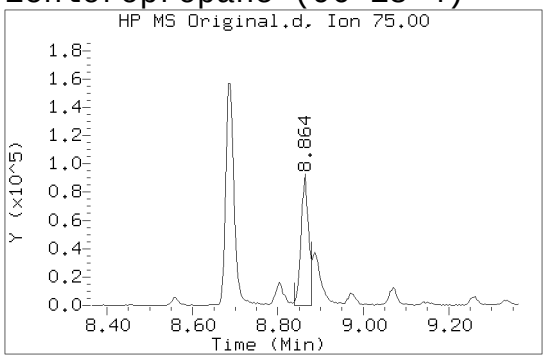
HEIGHT
92554
27-Jul-2023
13:09
linh
pham



AFTER

MASS
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118161
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27-Jul-2023
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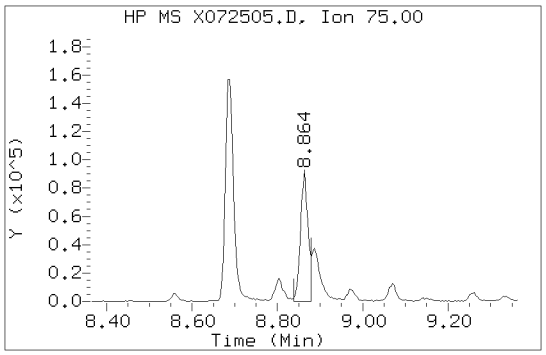

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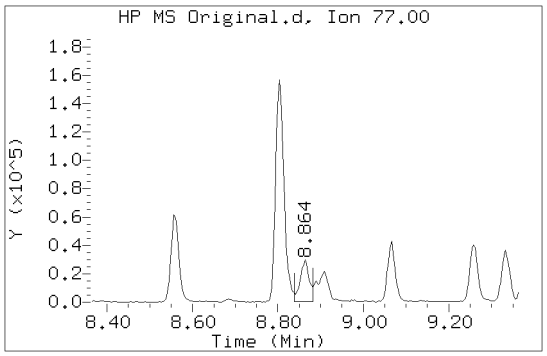

AFTER

MASS
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AREA
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HEIGHT
29401
27-Jul-2023
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linh
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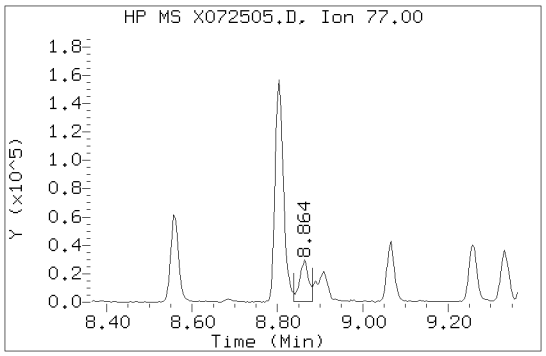


Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072507.D Page 1
Report Date: 27-Jul-2023 13:10

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072507.D
Lab Smp Id: VBLKW-230725 Client Smp ID: VBLKW-230725
Inj Date : 25-JUL-2023 12:11
Operator : PC Inst ID: voa6.i
Smp Info : VBLKW-230725;VBLKW-230725;3;;BLANK
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\8260W.m
Meth Date : 27-Jul-2023 13:10 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.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	4.181	4.181	(1.000)	585803	50.0000	
$ 30 Dibromofluoromethane	113	4.102	4.099	(0.981)	292572	54.5620	54.56
$ 35 1,2-Dichloroethane-d4	65	4.470	4.474	(1.069)	378446	56.4458	56.44
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	919826	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.667	(1.000)	787286	50.0000	
$ 48 Toluene-d8	98	6.385	6.385	(0.833)	1039232	51.2689	51.26
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	381759	48.6900	48.68
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	400742	50.0000	

01322985

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072507.D

Date : 25-JUL-2023 12:11

Client ID: VBLKW-230725

Instrument: voa6.i

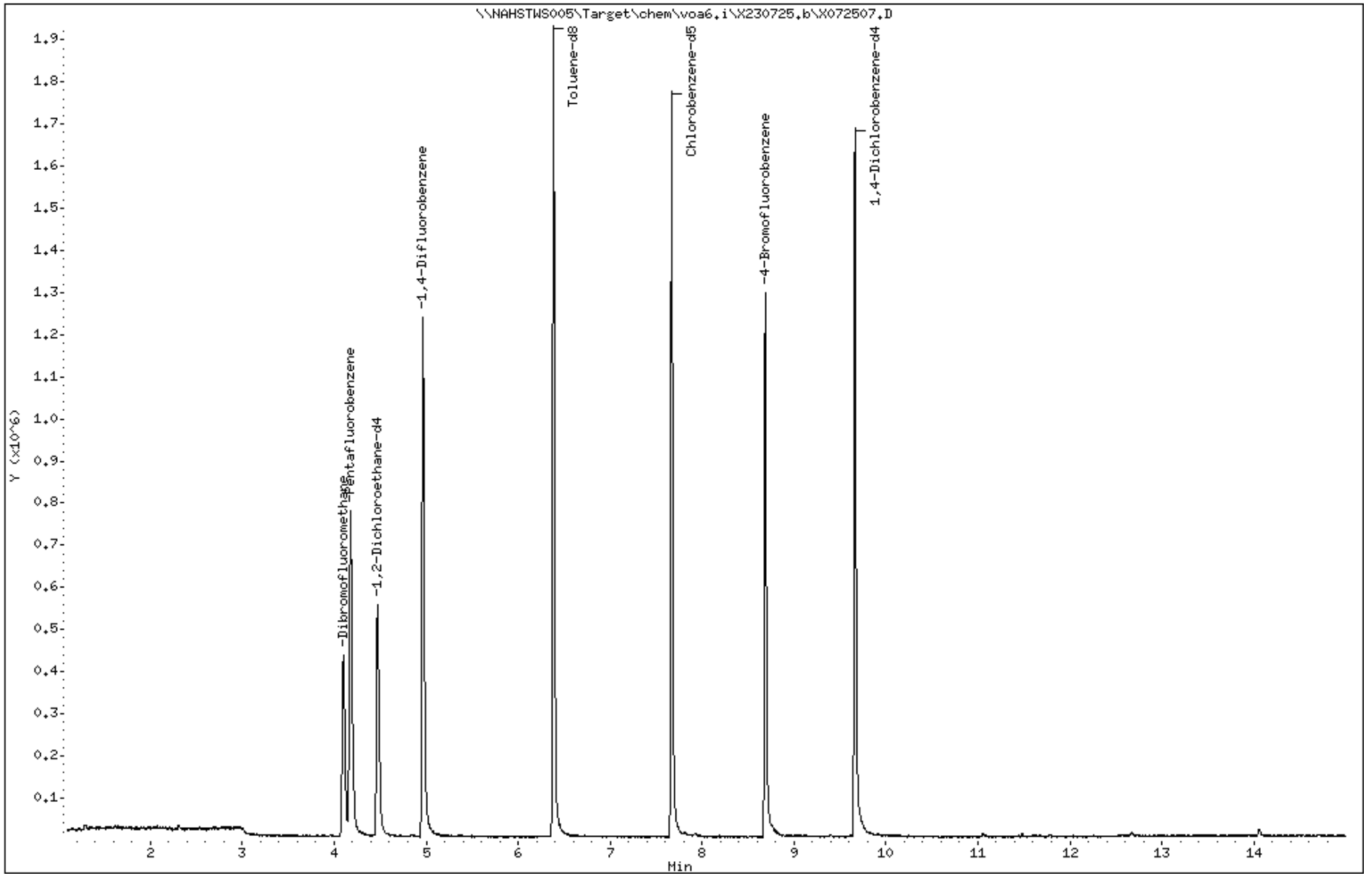
Sample Info: VBLKW-230725;VBLKW-230725;3;;BLANK

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



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Inj Date : 25-JUL-2023 12:11
InstruID : voa6.i
LabSampID : VBLKW-230725

NO MANUAL INTEGRATIONS

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072513.D
Lab Smp Id: HS23071289-11MS Client Smp ID: HS23071289-11MS
Inj Date : 25-JUL-2023 14:14
Operator : PC Inst ID: voa6.i
Smp Info : HS23071289-11MS;HS23071289-11MS;3;;MS
Misc Info : V6;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\8260W.m
Meth Date : 27-Jul-2023 13:10 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 12 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	4.181	4.181	(1.000)	565124	50.0000	
135	1,4-Dioxane	88	5.598	5.602	(1.339)	29006	431.931	431.93(a)
140	1,3-Butadiene	54	1.167	1.171	(0.279)	203521	28.0269	28.02
25	Methacrylonitrile	41	3.833	3.821	(0.917)	201777	27.6617	27.66
12	Isobutyl Alcohol	43	4.680	4.680	(1.119)	602257	562.211	562.21
13	Acetonitrile	39	2.202	2.202	(0.527)	222729	281.061	281.06
14	Allyl Chloride	41	2.202	2.202	(0.527)	505409	27.2398	27.23
4	Propionitrile	54	3.660	3.656	(0.875)	262759	234.718	234.71(a)
2	Dichlorodifluoromethane	85	0.976	0.980	(0.234)	103907	18.6756	18.67
3	Chloromethane	50	1.081	1.085	(0.259)	188155	22.0434	22.04
5	Vinyl Chloride	62	1.145	1.149	(0.274)	189342	25.8913	25.89
6	Bromomethane	94	1.340	1.344	(0.320)	68919	22.7735	22.77
7	Chloroethane	64	1.407	1.407	(0.337)	112293	26.8984	26.89
8	Trichlorofluoromethane	101	1.561	1.565	(0.373)	217116	29.2961	29.29
9	Acrolein	56	1.861	1.865	(0.445)	15148	71.1166	71.11
10	Acetone	43	1.977	1.977	(0.473)	105852	44.7668	44.76
11	1,1-Dichloroethene	96	1.917	1.921	(0.459)	107104	25.8696	25.86
15	Iodomethane	142	2.029	2.030	(0.485)	154047	31.4725	31.47
16	Acrylonitrile	53	2.536	2.536	(0.606)	117628	42.7139	42.71
17	Methylene Chloride	84	2.307	2.307	(0.552)	117306	23.2779	23.27

18 Methyl tert-butyl ether	73	2.539	2.539 (0.607)	287473	18.6697	18.66
19 Carbon Disulfide	76	2.071	2.075 (0.495)	656525	50.4472	50.44

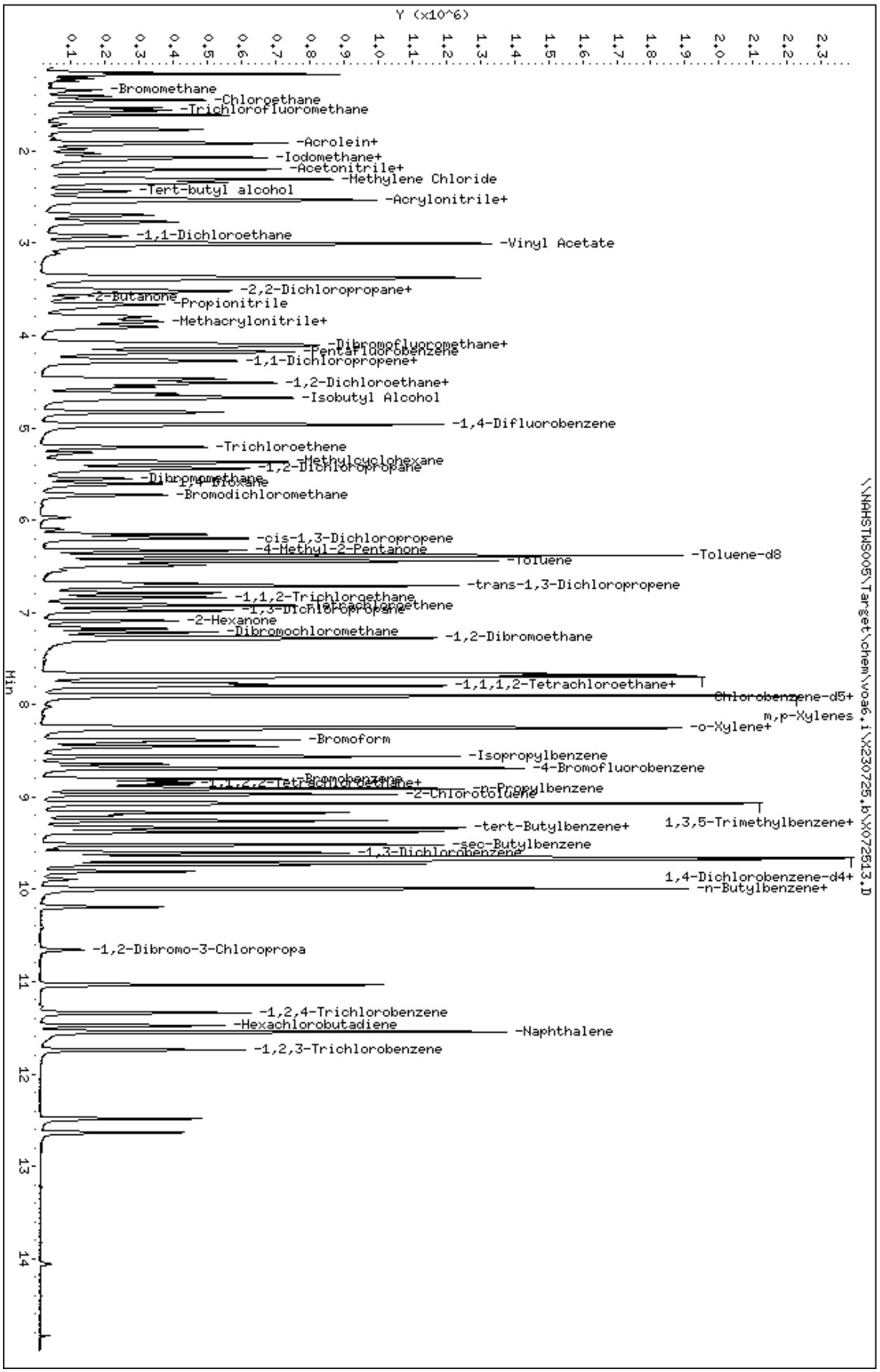
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
	20 trans-1,2-Dichloroethene	96	2.528	2.532	(0.605)	97636	20.3876	20.38
	21 Vinyl Acetate	43	3.004	3.000	(0.719)	960002	48.4707	48.47
	22 1,1-Dichloroethane	63	2.922	2.922	(0.699)	236225	22.4781	22.47
	24 2-Butanone	43	3.589	3.585	(0.858)	141067	46.8739	46.87
	26 2,2-Dichloropropane	77	3.514	3.510	(0.840)	213733	26.2984	26.29
	27 cis-1,2-Dichloroethene	96	3.525	3.529	(0.843)	150024	24.5911	24.59
	28 Chloroform	83	3.908	3.908	(0.935)	254283	23.6476	23.64
	29 Bromochloromethane	128	3.791	3.795	(0.907)	77977	22.8070	22.80
$	30 Dibromofluoromethane	113	4.099	4.099	(0.980)	288458	55.7800	55.78
	31 1,1,1-Trichloroethane	97	4.080	4.080	(0.976)	222340	26.8604	26.86
	32 1,1-Dichloropropene	75	4.279	4.279	(0.862)	193871	26.5765	26.57
	33 1,2-Dichloroethane	62	4.560	4.556	(0.918)	240996	24.4795	24.47
	34 Carbon Tetrachloride	117	4.264	4.264	(0.859)	197384	26.8580	26.85
$	35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.070)	373162	57.7080	57.70
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	894329	50.0000	
	37 Benzene	78	4.511	4.511	(0.909)	544238	25.4414	25.44
	38 Trichloroethene	130	5.208	5.208	(1.049)	155331	25.6712	25.67
	39 Bromodichloromethane	83	5.726	5.726	(1.153)	191278	23.3442	23.34
	42 1,2-Dichloropropane	63	5.437	5.433	(1.095)	178935	26.0132	26.01
	44 Dibromomethane	93	5.549	5.553	(1.118)	90329	23.1987	23.19
	45 4-Methyl-2-Pentanone	43	6.325	6.325	(0.825)	403224	53.2017	53.20
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.239)	212314	22.5597	22.55
*	47 Chlorobenzene-d5	117	7.667	7.667	(1.000)	770201	50.0000	
$	48 Toluene-d8	98	6.385	6.385	(0.833)	1028182	51.8490	51.84
	50 Toluene	91	6.445	6.445	(0.841)	567745	27.3840	27.38
	51 trans-1,3-Dichloropropene	75	6.682	6.682	(1.346)	174964	22.0542	22.05
	52 2-Hexanone	43	7.086	7.086	(0.924)	263503	52.9255	52.92
	53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	111844	25.4300	25.43
	54 1,3-Dichloropropane	76	6.981	6.981	(0.911)	222174	24.7265	24.72
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	151820	23.9114	23.91
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	121240	28.3054	28.30
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	121436	24.1624	24.16
	58 1-Chlorohexane	55	7.694	7.694	(1.550)	226274	31.4937	31.49
	59 Chlorobenzene	112	7.690	7.694	(1.003)	379420	26.1800	26.18
	60 1,1,1,2-Tetrachloroethane	131	7.772	7.772	(1.014)	140401	24.7457	24.74
	61 Ethylbenzene	106	7.795	7.795	(1.017)	195465	26.8959	26.89
	62 m,p-Xylenes	106	7.900	7.900	(1.030)	498093	54.6317	54.63
	63 o-Xylene	106	8.241	8.237	(1.075)	237379	27.4940	27.49
	64 Styrene	104	8.256	8.256	(1.077)	400362	26.5844	26.58
	66 Bromoform	173	8.406	8.410	(1.096)	94250	23.1362	23.13
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	636256	28.6695	28.66
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	169226	24.9457	24.94
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	378329	49.3284	49.32
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	403879	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	130975	24.3305	24.33(M)
	73 n-Propylbenzene	91	8.912	8.908	(0.922)	744127	30.4893	30.48
	74 Bromobenzene	156	8.803	8.803	(0.911)	162844	25.7806	25.78
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	510588	27.9261	27.92
	76 2-Chlorotoluene	91	8.972	8.972	(0.929)	458429	27.8446	27.84
	77 4-Chlorotoluene	91	9.069	9.066	(0.939)	517807	28.6214	28.62
	78 tert-Butylbenzene	119	9.332	9.332	(0.966)	463179	29.5406	29.54
	79 1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	504130	27.4957	27.49

81 sec-Butylbenzene	105	9.519	9.519 (0.985)	656250	31.4002	31.40
82 p-Isopropyltoluene	119	9.647	9.647 (0.998)	547965	28.7022	28.70

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
	83 1,3-Dichlorobenzene	146	9.605	9.602	(0.994)	296578	26.9523	26.95
	84 1,4-Dichlorobenzene	146	9.680	9.681	(1.002)	302198	25.0479	25.04
	87 n-Butylbenzene	91	9.992	9.992	(1.034)	486431	30.4221	30.42
	88 1,2-Dichlorobenzene	146	9.992	9.992	(1.034)	284392	26.2883	26.28
	89 1,2-Dibromo-3-Chloropropane	155	10.659	10.655	(1.103)	25611	23.5559	23.55
	90 1,2,4-Trichlorobenzene	180	11.337	11.334	(1.173)	170160	22.9011	22.90
	91 Hexachlorobutadiene	225	11.476	11.476	(1.188)	83673	25.6423	25.64
	92 Naphthalene	128	11.540	11.540	(1.194)	401247	21.8183	21.81
	93 1,2,3-Trichlorobenzene	180	11.738	11.739	(1.215)	149312	21.4872	21.48
M	94 1,2-Dichloroethylene (total)	96				247660	44.9787	44.97
M	95 Xylenes (total)	106				735472	82.1257	82.12
	141 Cyclohexane	56	4.117	4.121	(0.985)	344462	35.1648	35.16
	138 Freon TF	101	1.921	1.917	(0.459)	114821	34.3760	34.37
	147 Methylcyclohexane	55	5.385	5.381	(1.085)	526650	27.8993	27.89
	146 Methyl Acetate	43	2.232	2.232	(0.534)	133771	26.5974	26.59
	148 Tert-Butyl alcohol	59	2.438	2.434	(0.583)	269325	377.596	377.59
	149 Isopropyl Alcohol	45	2.097	2.097	(0.502)	214328	484.266	484.26

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: HS230712B9-11MS;HS230712B9-11MS;3;;MS
Purge Volume: 5.0
Column phase: DB624

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

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Inj Date : 25-JUL-2023 14:14
InstruID : voa6.i
LabSampID : HS23071289-11MS

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

Reason Code:

BEFORE

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AREA
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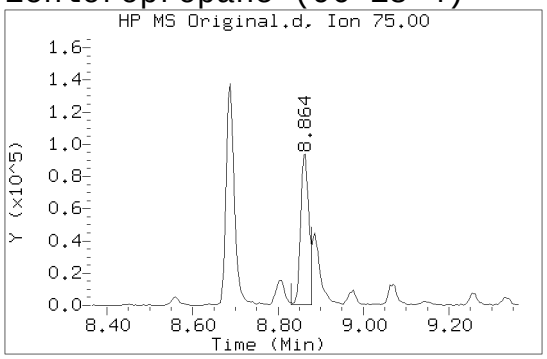
HEIGHT
93726
27-Jul-2023
13:09
linh
pham



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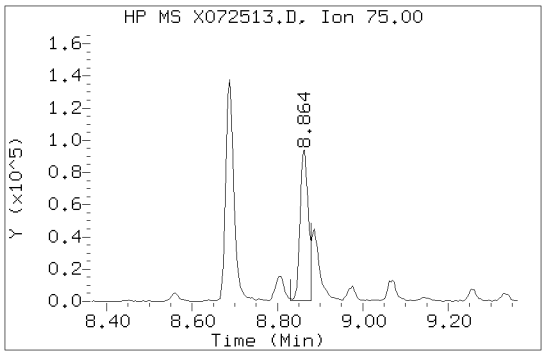

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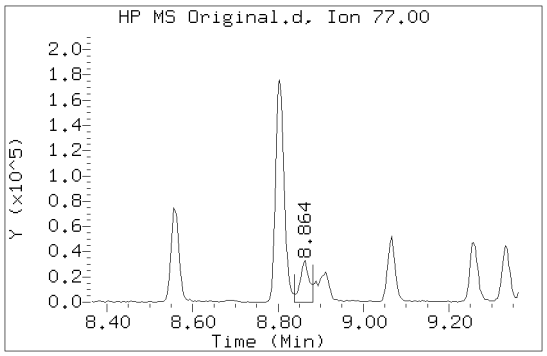

AFTER

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27-Jul-2023
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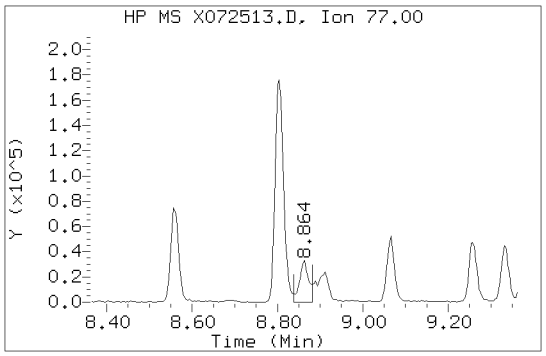

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Report Date: 27-Jul-2023 13:10

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072514.D
Lab Smp Id: HS23071289-11MSD Client Smp ID: HS23071289-11MSD
Inj Date : 25-JUL-2023 14:34
Operator : PC Inst ID: voa6.i
Smp Info : HS23071289-11MSD;HS23071289-11MSD;3;;MSD
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\8260W.m
Meth Date : 27-Jul-2023 13:10 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 12 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.178	4.181	(1.000)	565484	50.0000	
135 1,4-Dioxane	88	5.598	5.602	(1.340)	31971	475.780	475.78(a)
140 1,3-Butadiene	54	1.167	1.171	(0.280)	194437	26.7589	26.75
25 Methacrylonitrile	41	3.833	3.821	(0.917)	196260	26.8882	26.88
12 Isobutyl Alcohol	43	4.680	4.680	(1.120)	590821	551.184	551.18
13 Acetonitrile	39	2.202	2.202	(0.527)	216859	273.480	273.47
14 Allyl Chloride	41	2.202	2.202	(0.527)	503802	27.1359	27.13
4 Propionitrile	54	3.660	3.656	(0.876)	268547	239.736	239.73(a)
2 Dichlorodifluoromethane	85	0.976	0.980	(0.234)	98274	17.7120	17.71
3 Chloromethane	50	1.085	1.085	(0.260)	189014	22.1299	22.12
5 Vinyl Chloride	62	1.149	1.149	(0.275)	186158	25.4397	25.43
6 Bromomethane	94	1.344	1.344	(0.322)	69626	22.9925	22.99
7 Chloroethane	64	1.407	1.407	(0.337)	111360	26.6579	26.65
8 Trichlorofluoromethane	101	1.565	1.565	(0.375)	205406	27.6984	27.69
9 Acrolein	56	1.861	1.865	(0.446)	13826	64.9679	64.96
10 Acetone	43	1.977	1.977	(0.473)	107938	45.7131	45.71
11 1,1-Dichloroethene	96	1.917	1.921	(0.459)	97615	23.5626	23.56
15 Iodomethane	142	2.030	2.030	(0.486)	179681	36.0159	36.01
16 Acrylonitrile	53	2.539	2.536	(0.608)	126430	45.8809	45.88
17 Methylene Chloride	84	2.307	2.307	(0.552)	113957	22.5578	22.55

18 Methyl tert-butyl ether	73	2.543	2.539 (0.609)	306766	19.9100	19.91
19 Carbon Disulfide	76	2.075	2.075 (0.497)	637197	48.9309	48.93

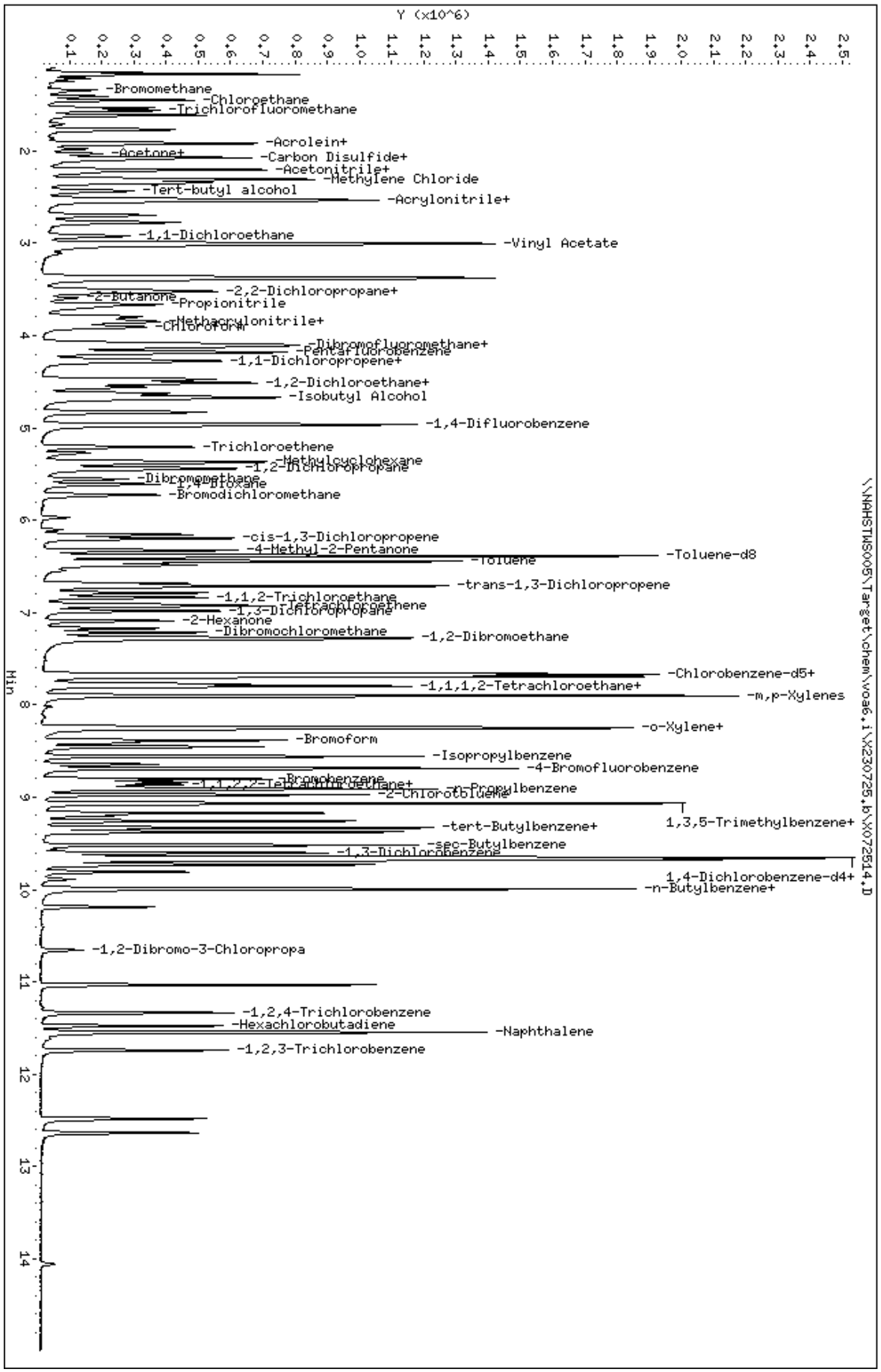
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
	20 trans-1,2-Dichloroethene	96	2.536	2.532	(0.607)	103557	21.6102	21.61
	21 Vinyl Acetate	43	3.004	3.000	(0.719)	1066562	53.8167	53.81
	22 1,1-Dichloroethane	63	2.922	2.922	(0.699)	255046	24.2536	24.25
	24 2-Butanone	43	3.589	3.585	(0.859)	132453	43.9836	43.98
	26 2,2-Dichloropropane	77	3.510	3.510	(0.840)	204386	25.1416	25.14
	27 cis-1,2-Dichloroethene	96	3.525	3.529	(0.844)	147897	24.2270	24.22
	28 Chloroform	83	3.908	3.908	(0.935)	244699	22.7418	22.74
	29 Bromochloromethane	128	3.795	3.795	(0.908)	75449	22.0535	22.05
$	30 Dibromofluoromethane	113	4.099	4.099	(0.981)	288576	55.7671	55.76
	31 1,1,1-Trichloroethane	97	4.084	4.080	(0.978)	213425	25.7670	25.76
	32 1,1-Dichloropropene	75	4.279	4.279	(0.861)	185710	25.4448	25.44
	33 1,2-Dichloroethane	62	4.556	4.556	(0.917)	233558	23.7119	23.71
	34 Carbon Tetrachloride	117	4.267	4.264	(0.859)	180707	24.5763	24.57
$	35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.071)	363721	56.1961	56.19
*	36 1,4-Difluorobenzene	114	4.968	4.965	(1.000)	894784	50.0000	
	37 Benzene	78	4.511	4.511	(0.908)	519871	24.2900	24.29
	38 Trichloroethene	130	5.208	5.208	(1.048)	147346	24.3391	24.33
	39 Bromodichloromethane	83	5.726	5.726	(1.152)	184120	22.4592	22.45
	42 1,2-Dichloropropane	63	5.437	5.433	(1.094)	175909	25.5603	25.56
	44 Dibromomethane	93	5.553	5.553	(1.118)	87223	22.3896	22.38
	45 4-Methyl-2-Pentanone	43	6.329	6.325	(0.825)	404737	51.5329	51.53
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.238)	213362	22.6595	22.65
*	47 Chlorobenzene-d5	117	7.668	7.667	(1.000)	798127	50.0000	
$	48 Toluene-d8	98	6.382	6.385	(0.832)	1036266	50.4282	50.42
	50 Toluene	91	6.445	6.445	(0.841)	546859	25.4537	25.45
	51 trans-1,3-Dichloropropene	75	6.682	6.682	(1.345)	172489	21.7312	21.73
	52 2-Hexanone	43	7.090	7.086	(0.925)	268940	52.1275	52.12
	53 1,1,2-Trichloroethane	83	6.835	6.839	(0.891)	107412	23.5678	23.56
	54 1,3-Dichloropropane	76	6.982	6.981	(0.911)	221834	23.8248	23.82
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	147563	22.4277	22.42
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	118093	26.6060	26.60
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	118834	22.8173	22.81
	58 1-Chlorohexane	55	7.694	7.694	(1.548)	216235	30.0811	30.08
	59 Chlorobenzene	112	7.690	7.694	(1.003)	361954	24.1010	24.10
	60 1,1,1,2-Tetrachloroethane	131	7.769	7.772	(1.013)	138082	23.4855	23.48
	61 Ethylbenzene	106	7.795	7.795	(1.017)	191240	25.3938	25.39
	62 m,p-Xylenes	106	7.900	7.900	(1.030)	492804	52.1603	52.16
	63 o-Xylene	106	8.241	8.237	(1.075)	231875	25.9168	25.91
	64 Styrene	104	8.256	8.256	(1.077)	390603	25.0289	25.02
	66 Bromoform	173	8.410	8.410	(1.097)	93554	22.1618	22.16
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	622097	27.0507	27.05
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	171552	23.6728	23.67
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	395084	49.7139	49.71
*	70 1,4-Dichlorobenzene-d4	152	9.658	9.662	(1.000)	431446	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.918)	127664	22.2001	22.20(M)
	73 n-Propylbenzene	91	8.908	8.908	(0.922)	736135	28.2347	28.23
	74 Bromobenzene	156	8.803	8.803	(0.912)	161275	23.9008	23.90
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.939)	486201	24.8931	24.89
	76 2-Chlorotoluene	91	8.972	8.972	(0.929)	443883	25.2385	25.23
	77 4-Chlorotoluene	91	9.069	9.066	(0.939)	497269	25.7299	25.72
	78 tert-Butylbenzene	119	9.332	9.332	(0.966)	451987	26.9849	26.98
	79 1,2,4-Trimethylbenzene	105	9.377	9.377	(0.971)	488650	24.9485	24.94

81 sec-Butylbenzene	105	9.519	9.519 (0.986)	638222	28.5864	28.58
82 p-Isopropyltoluene	119	9.647	9.647 (0.999)	547426	26.8419	26.84

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	CONCENTRATIONS FINAL (ug/l)
	83 1,3-Dichlorobenzene	146	9.602	9.602	(0.994)	289430	24.6221	24.62
	84 1,4-Dichlorobenzene	146	9.681	9.681	(1.002)	308529	23.9387	23.93
	87 n-Butylbenzene	91	9.992	9.992	(1.035)	477519	27.9565	27.95
	88 1,2-Dichlorobenzene	146	9.992	9.992	(1.035)	279202	24.1596	24.15
	89 1,2-Dibromo-3-Chloropropane	155	10.655	10.655	(1.103)	25874	22.3363	22.33
	90 1,2,4-Trichlorobenzene	180	11.337	11.334	(1.174)	164239	20.6919	20.69
	91 Hexachlorobutadiene	225	11.476	11.476	(1.188)	85919	24.7395	24.73
	92 Naphthalene	128	11.540	11.540	(1.195)	394657	20.0888	20.08
	93 1,2,3-Trichlorobenzene	180	11.742	11.739	(1.216)	153885	20.7304	20.73
M	94 1,2-Dichloroethylene (total)	96				251454	45.8372	45.83
M	95 Xylenes (total)	106				724679	78.0771	78.07
	141 Cyclohexane	56	4.121	4.121	(0.987)	333862	34.0610	34.06
	138 Freon TF	101	1.921	1.917	(0.460)	103523	31.1917	31.19
	147 Methylcyclohexane	55	5.385	5.381	(1.084)	513973	27.2139	27.21
	146 Methyl Acetate	43	2.236	2.232	(0.535)	137296	27.2809	27.28
	148 Tert-Butyl alcohol	59	2.434	2.434	(0.583)	295617	414.193	414.19
	149 Isopropyl Alcohol	45	2.097	2.097	(0.502)	216922	489.815	489.81

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: HS23071289-11MSD;HS23071289-11MSD;3;;MSD
Purge Volume: 5.0
Column phase: DB624

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

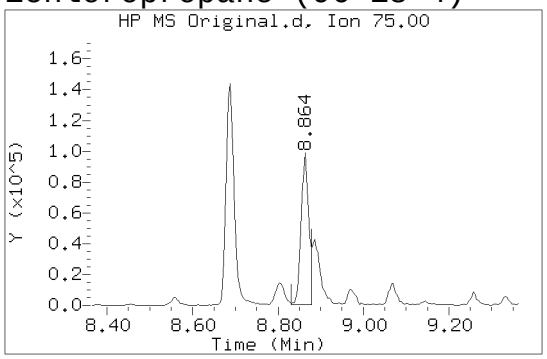
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072514.D
Inj Date : 25-JUL-2023 14:34
InstruID : voa6.i
LabSampID : HS23071289-11MSD

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

Reason Code:

BEFORE

MASS
75
AREA
127664
HEIGHT
98588
27-Jul-2023
13:09
linh
pham



AFTER

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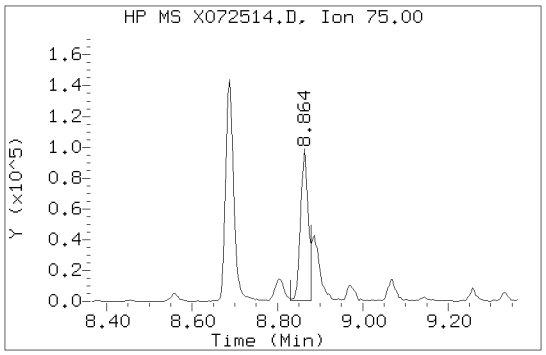

BEFORE

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27-Jul-2023
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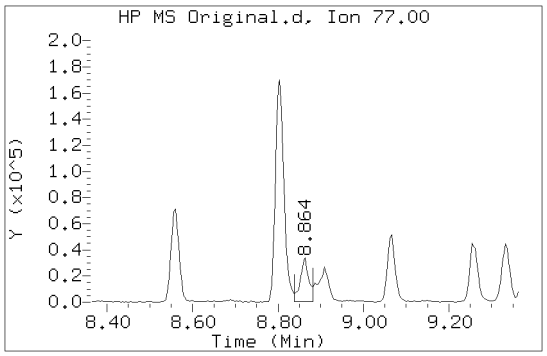

AFTER

MASS
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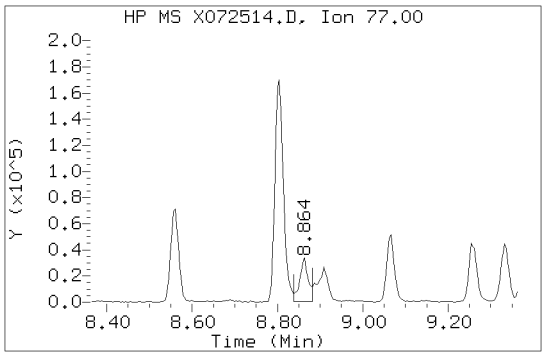

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Report Date: 27-Jul-2023 13:10

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072515.D
Lab Smp Id: HS23071113-04 Client Smp ID: HS23071113-04
Inj Date : 25-JUL-2023 14:54
Operator : PC Inst ID: voa6.i
Smp Info : HS23071113-04;HS23071113-04;;;
Misc Info : V6;WATER;0;25;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\8260W.m
Meth Date : 27-Jul-2023 13:10 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 13
Dil Factor: 25.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

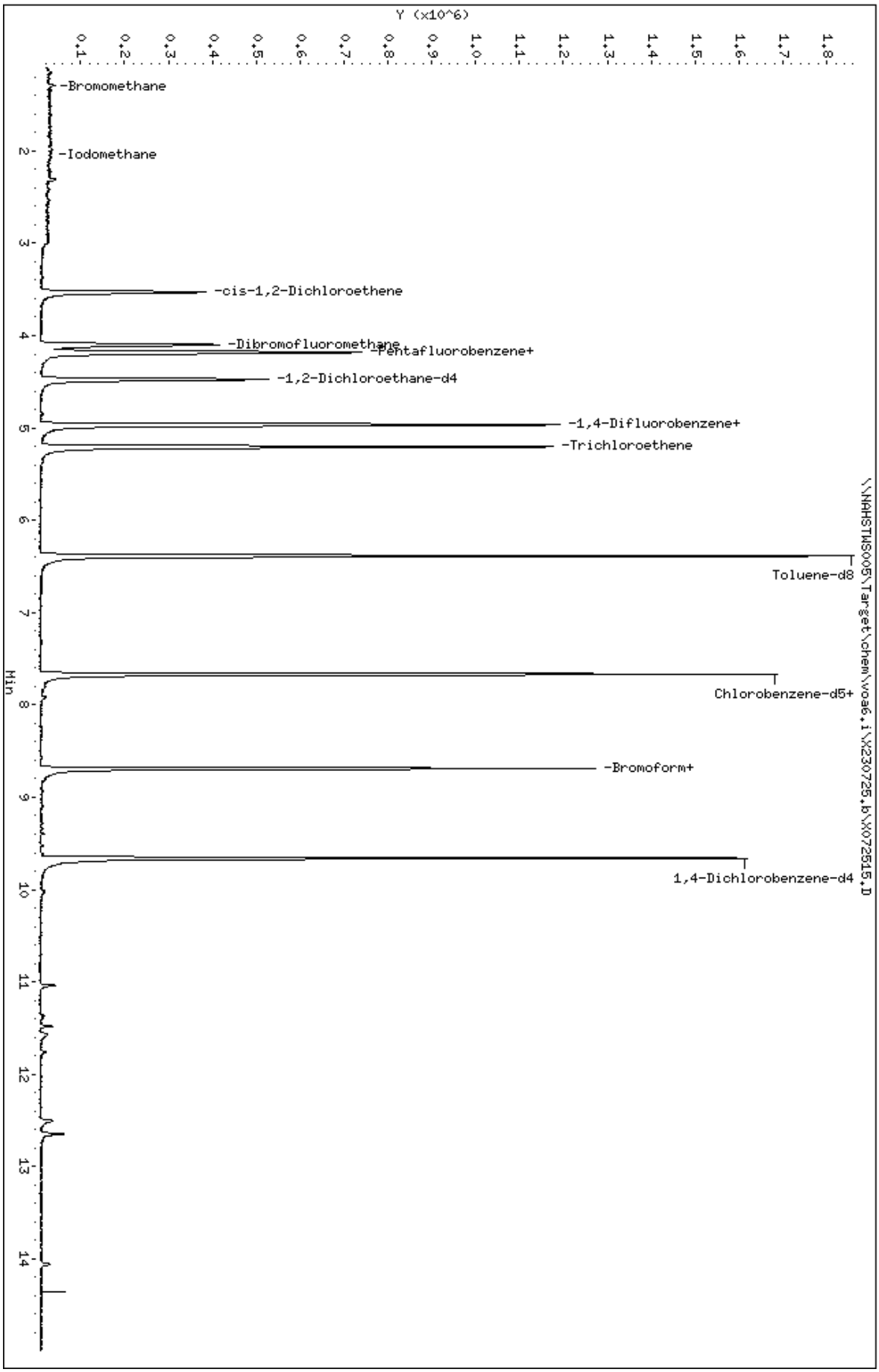
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.181	4.181	(1.000)	567159	50.0000	
$ 30 Dibromofluoromethane	113	4.099	4.099	(0.980)	276700	53.2806	53.28
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.070)	362589	55.8520	55.85
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	878122	50.0000	
* 47 Chlorobenzene-d5	117	7.668	7.667	(1.000)	765110	50.0000	
$ 48 Toluene-d8	98	6.386	6.385	(0.833)	983879	49.9450	49.94
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	371529	48.7592	48.75
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	391309	50.0000	
5 Vinyl Chloride	62	1.149	1.149	(0.275)	4739	0.64570	16.14(a)
27 cis-1,2-Dichloroethene	96	3.533	3.529	(0.845)	156981	25.6391	640.97
38 Trichloroethene	130	5.208	5.208	(1.049)	374749	63.0770	1576.92

QC Flag Legend

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



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Client ID: HS230711I3-04
Sample Info: HS230711I3-04;HS230711I3-04;;;
Purge Volume: 5.0
Column phase: DB624

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

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072515.D

Date : 25-JUL-2023 14:54

Client ID: HS23071113-04

Instrument: voa6.i

Sample Info: HS23071113-04;HS23071113-04;;;

Purge Volume: 5.0

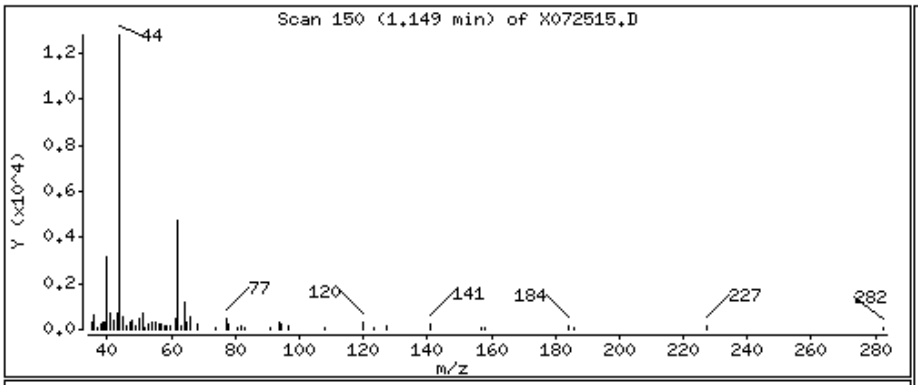
Operator: PC

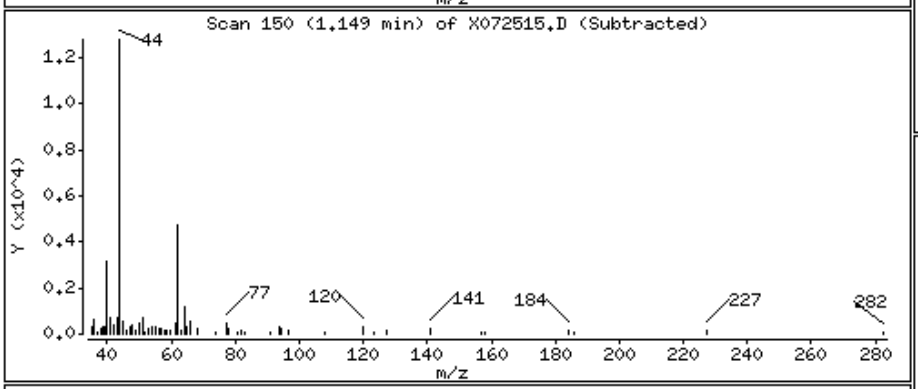
Column phase: DB624

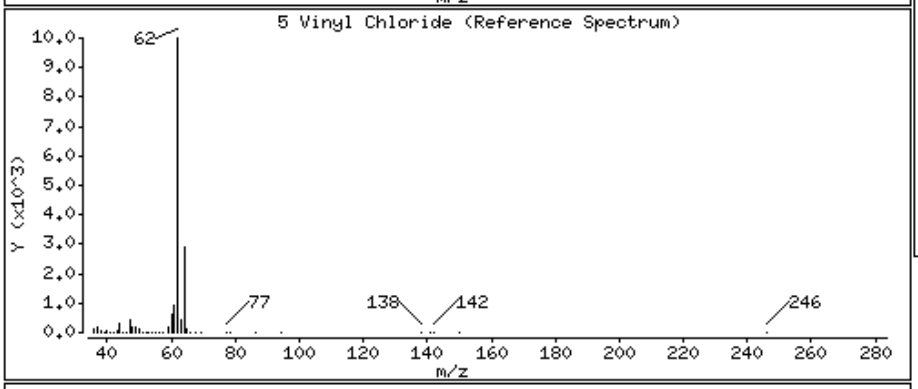
Column diameter: 0.18

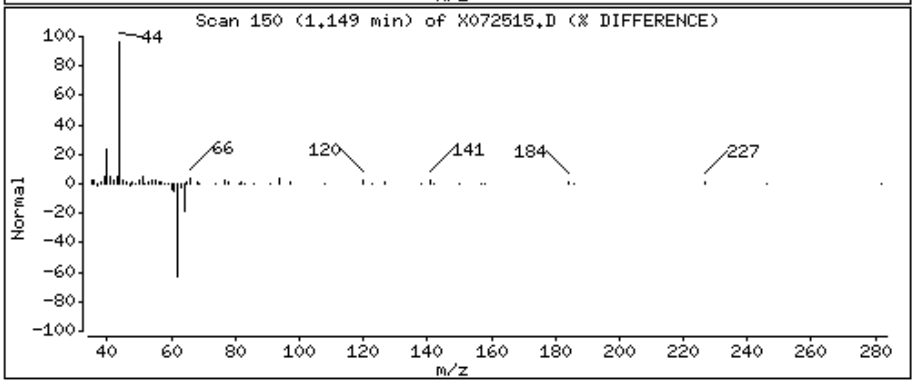
5 Vinyl Chloride

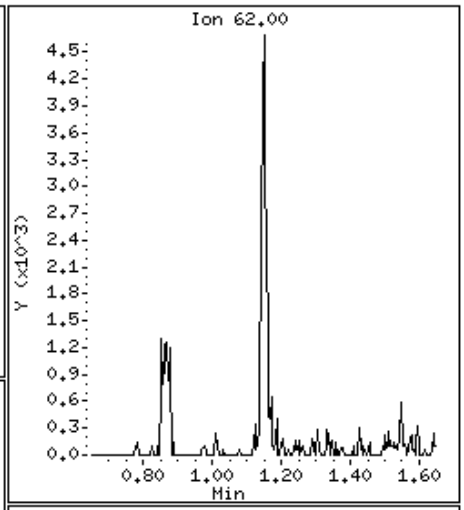
Concentration: 16.14 ug/l

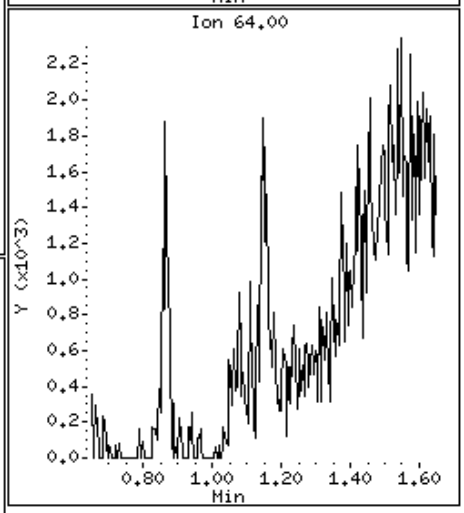












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072515.D

Date : 25-JUL-2023 14:54

Client ID: HS23071113-04

Instrument: voa6.i

Sample Info: HS23071113-04;HS23071113-04;;;

Purge Volume: 5.0

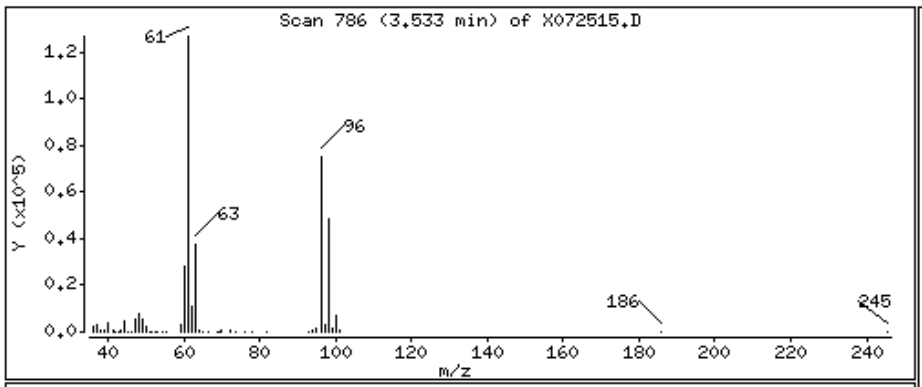
Operator: PC

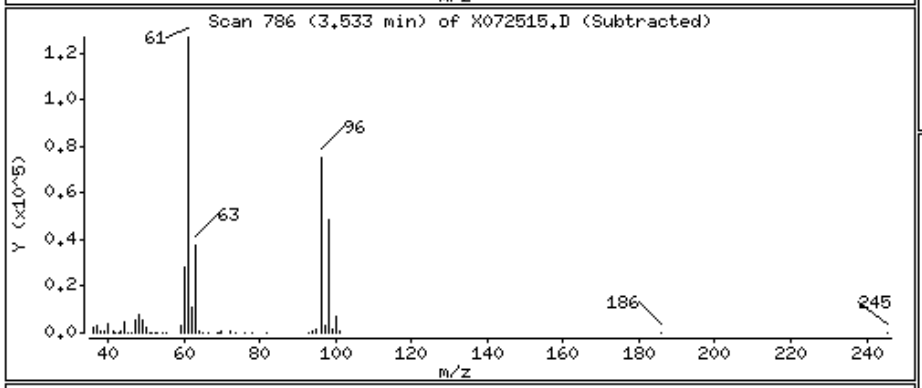
Column phase: DB624

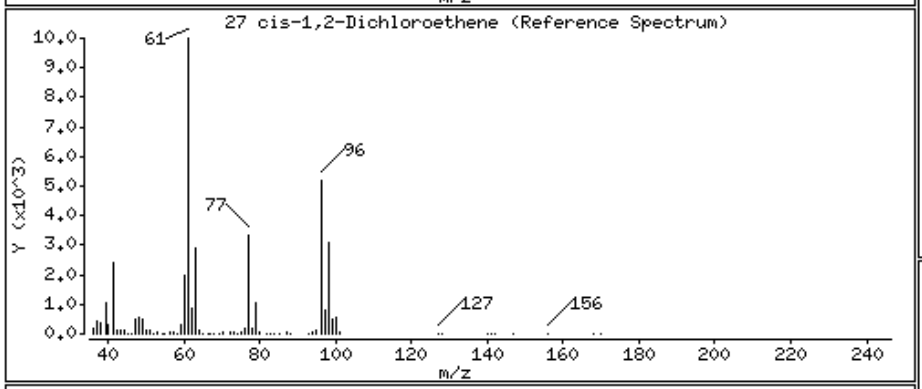
Column diameter: 0.18

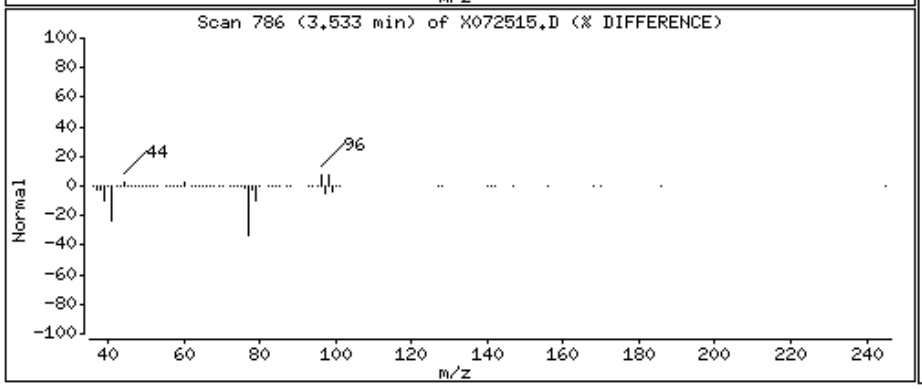
27 cis-1,2-Dichloroethene

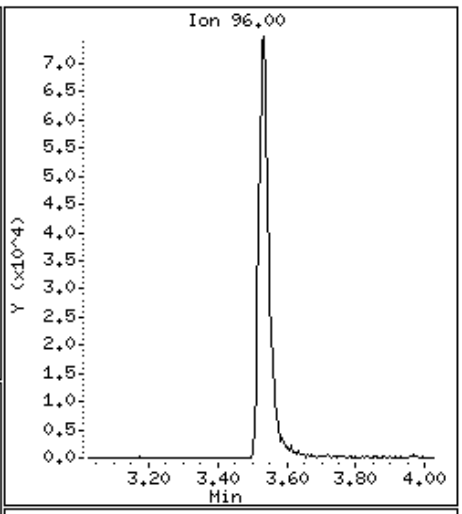
Concentration: 640.97 ug/l

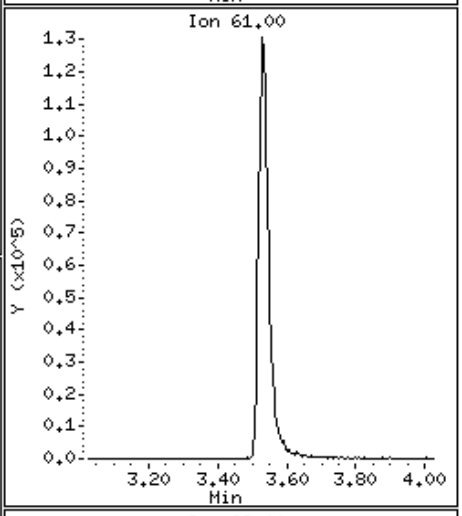


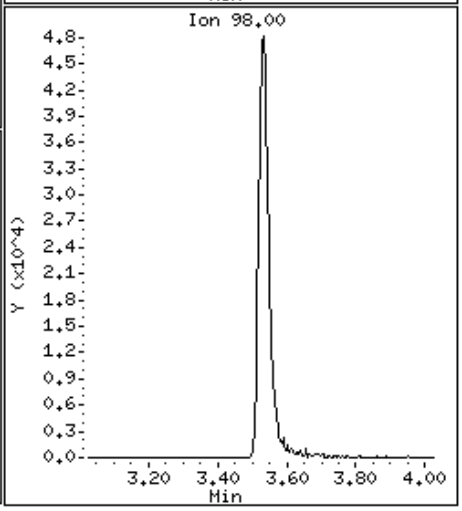












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072515.D

Date : 25-JUL-2023 14:54

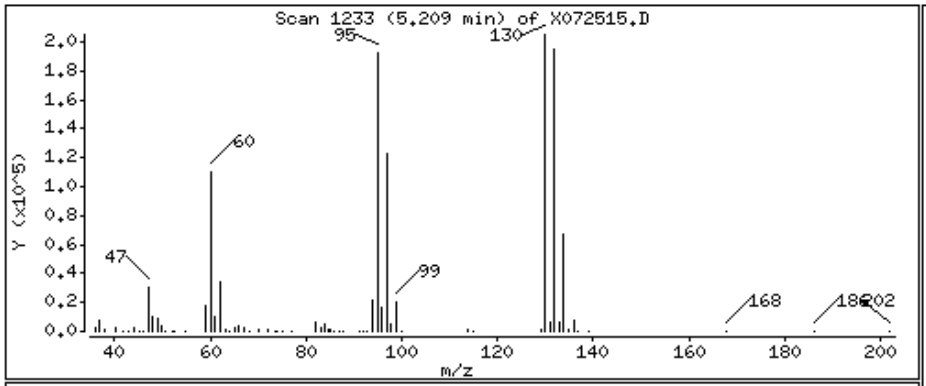
Client ID: HS23071113-04 Instrument: voa6.i

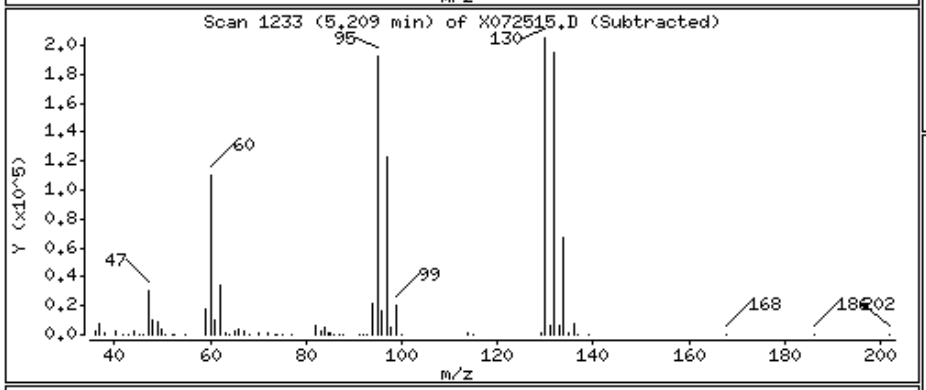
Sample Info: HS23071113-04;HS23071113-04;;;

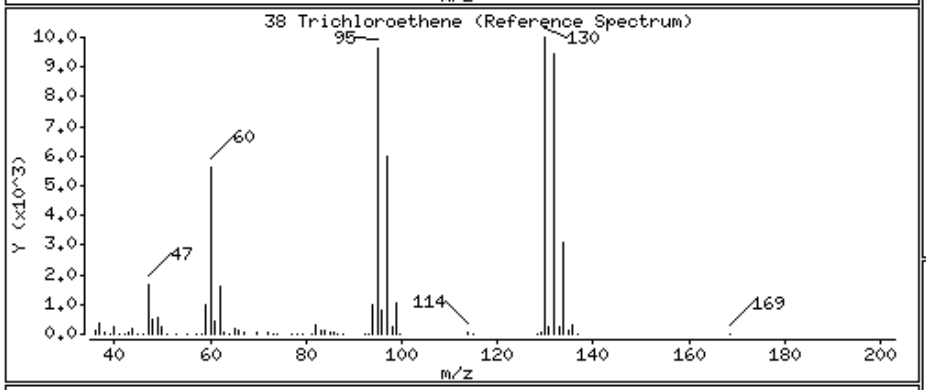
Purge Volume: 5.0 Operator: PC

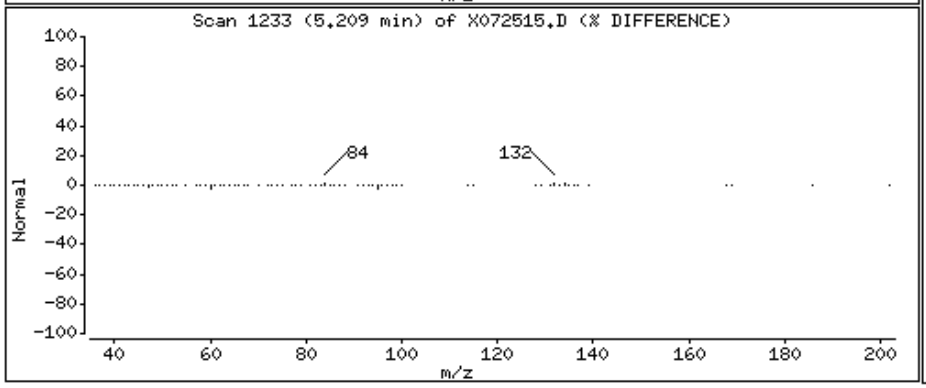
Column phase: DB624 Column diameter: 0.18

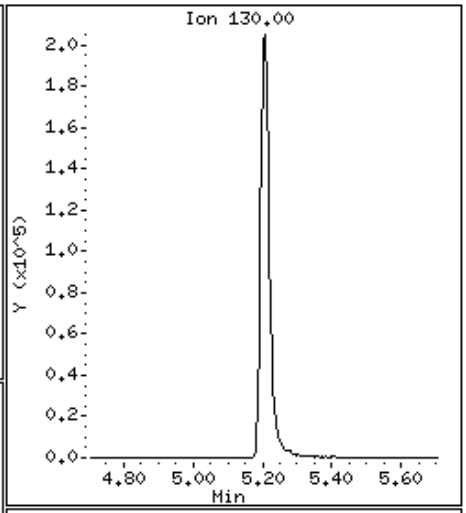
38 Trichloroethene Concentration: 1576.92 ug/l

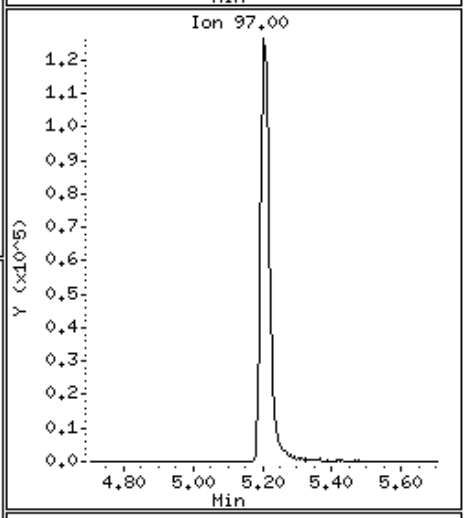


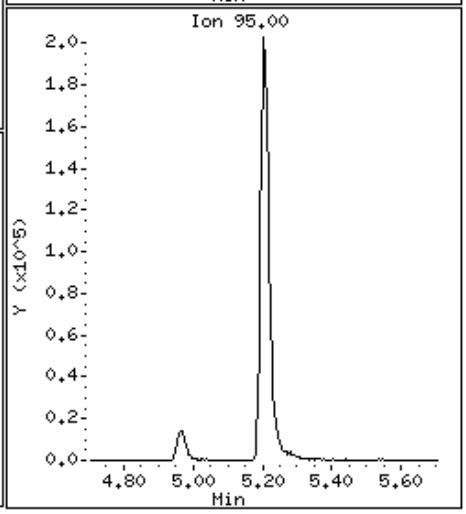












Data File : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072515.D
Inj Date : 25-JUL-2023 14:54
InstruID : voa6.i
LabSampID : HS23071113-04

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072516.D Page 1
Report Date: 27-Jul-2023 13:10

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072516.D
Lab Smp Id: HS23071113-05 Client Smp ID: HS23071113-05
Inj Date : 25-JUL-2023 15:15
Operator : PC Inst ID: voa6.i
Smp Info : HS23071113-05;HS23071113-05;;;
Misc Info : V6;WATER;0;5;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\8260W.m
Meth Date : 27-Jul-2023 13:10 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 14
Dil Factor: 5.00000
Integrator: HP RTE Compound Sublist: 0474-dod.sub
Target Version: 4.14
Processing Host: NAHSTW7056

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

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

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.181	4.181	(1.000)	565449	50.0000	
$ 30 Dibromofluoromethane	113	4.099	4.099	(0.980)	279898	54.0706	54.07
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.070)	362914	56.0735	56.07
* 36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	872195	50.0000	
* 47 Chlorobenzene-d5	117	7.667	7.667	(1.000)	764529	50.0000	
$ 48 Toluene-d8	98	6.385	6.385	(0.833)	990125	50.3003	50.30
$ 69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	367948	48.3222	48.32
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	395189	50.0000	
27 cis-1,2-Dichloroethene	96	3.525	3.529	(0.843)	392784	64.3458	321.72
38 Trichloroethene	130	5.212	5.208	(1.050)	22966	3.89186	19.45(a)

QC Flag Legend

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

01323008

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072516.D

Date : 25-JUL-2023 15:15

Client ID: HS23071113-05

Instrument: voa6.i

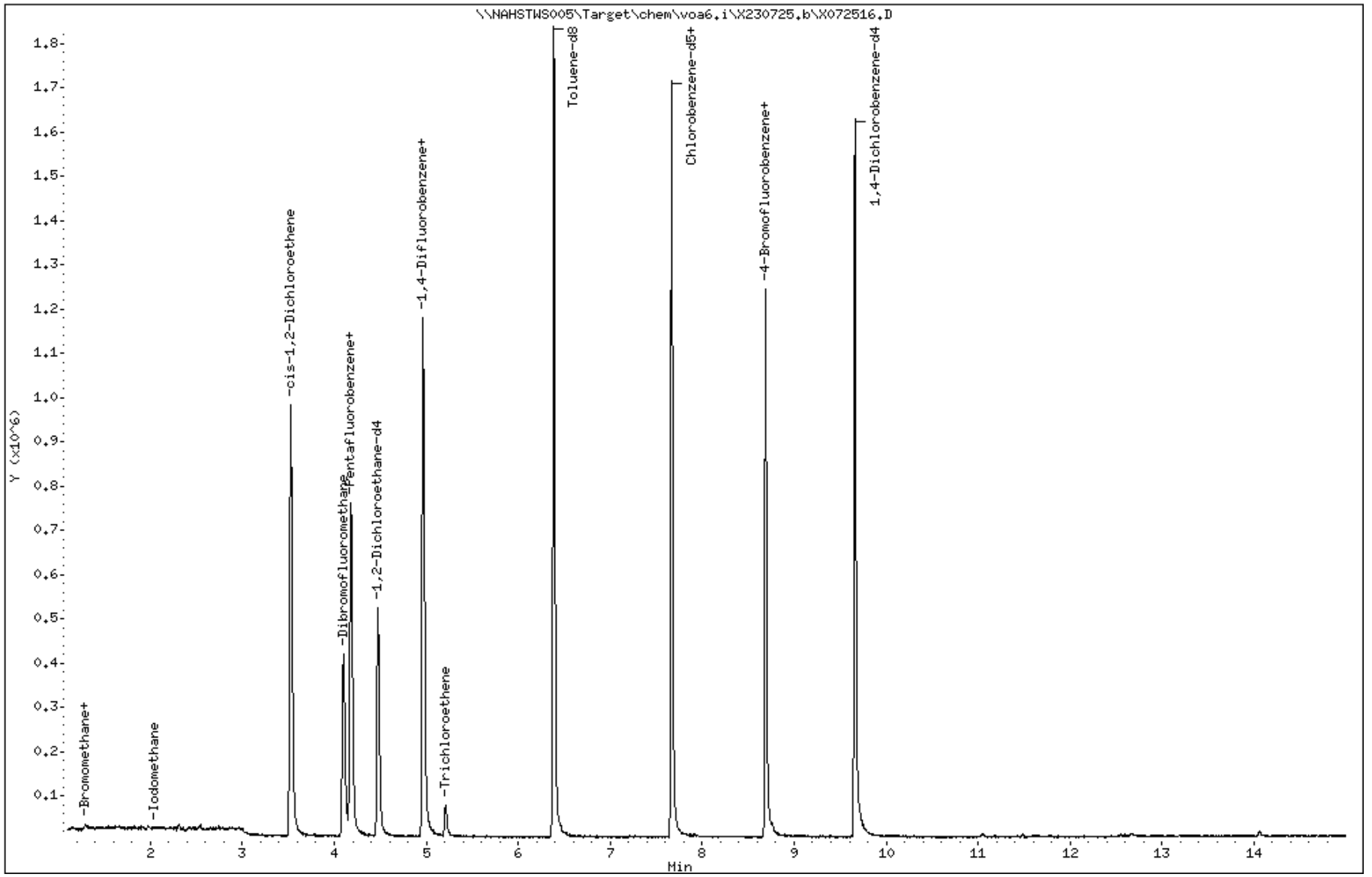
Sample Info: HS23071113-05;HS23071113-05;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



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Date : 25-JUL-2023 15:15

Client ID: HS23071113-05

Instrument: voa6.i

Sample Info: HS23071113-05;HS23071113-05;;;

Purge Volume: 5.0

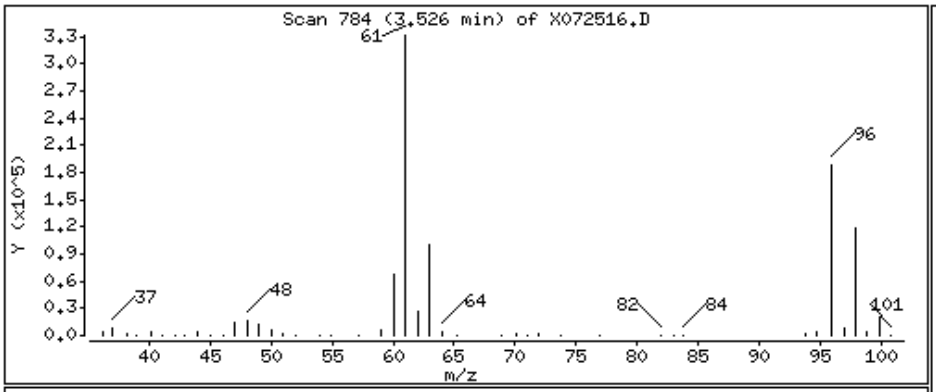
Operator: PC

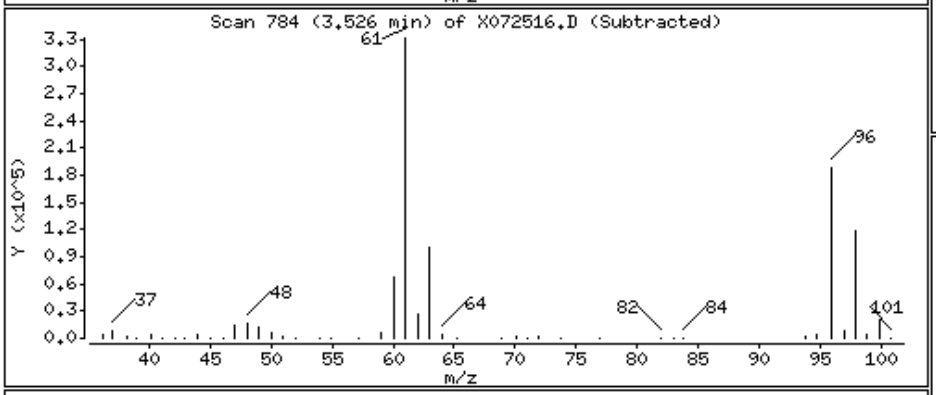
Column phase: DB624

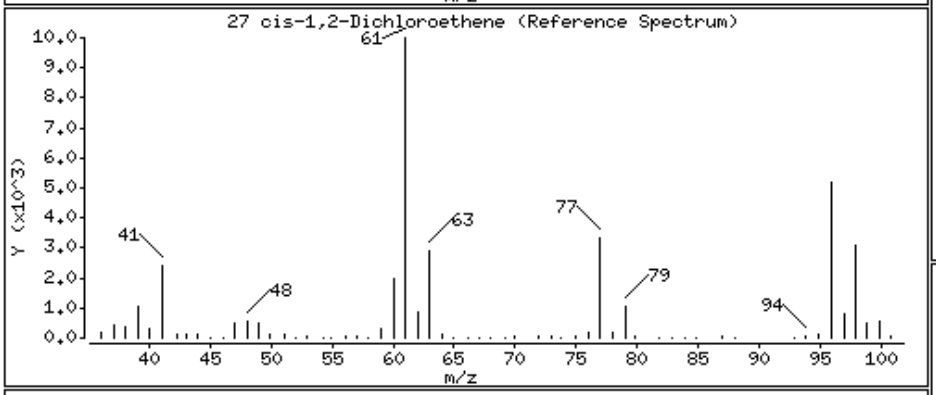
Column diameter: 0.18

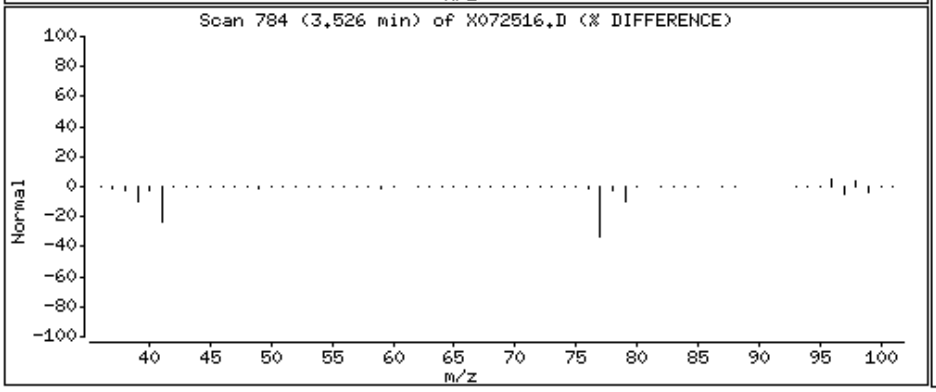
27 cis-1,2-Dichloroethene

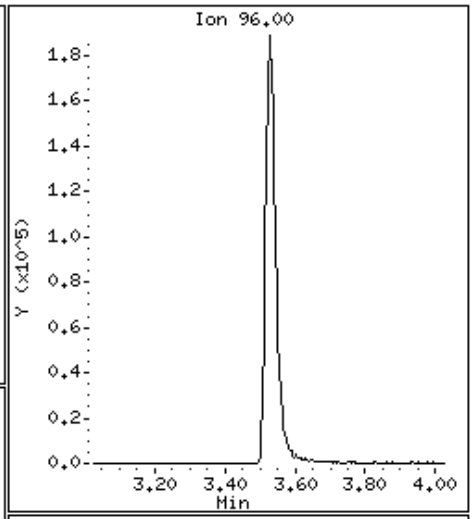
Concentration: 321.72 ug/l

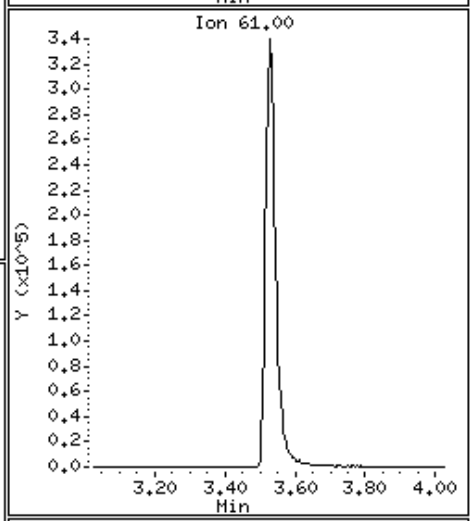


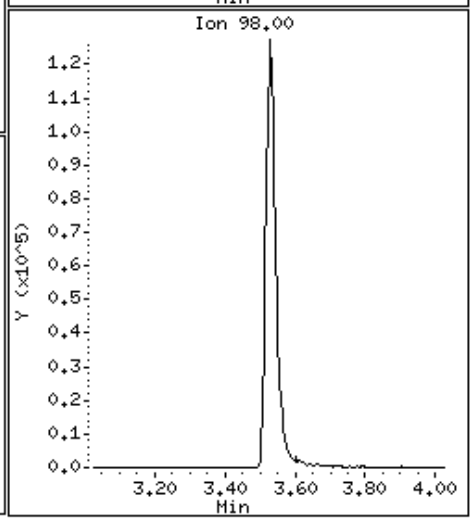












Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072516.D Page 3

Date : 25-JUL-2023 15:15

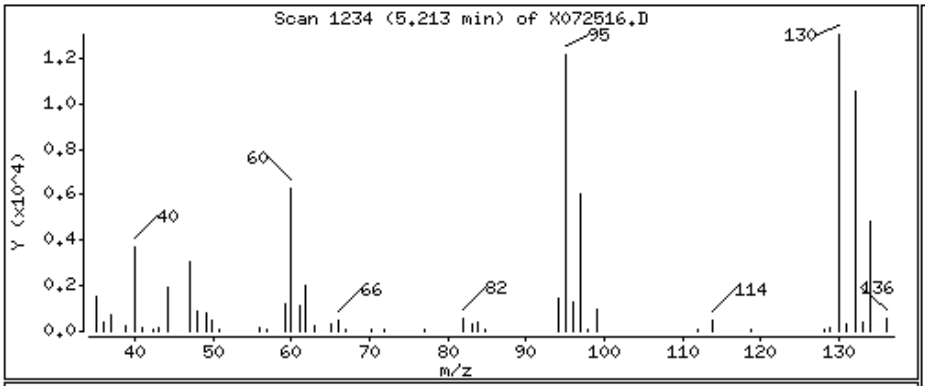
Client ID: HS23071113-05 Instrument: voa6.i

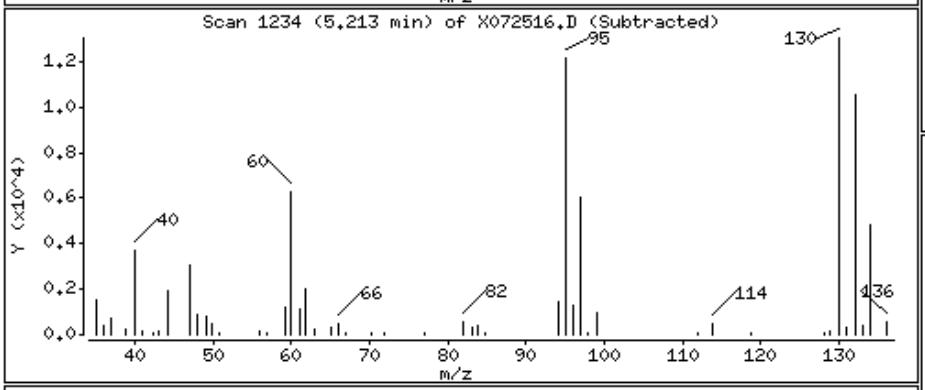
Sample Info: HS23071113-05;HS23071113-05;;;

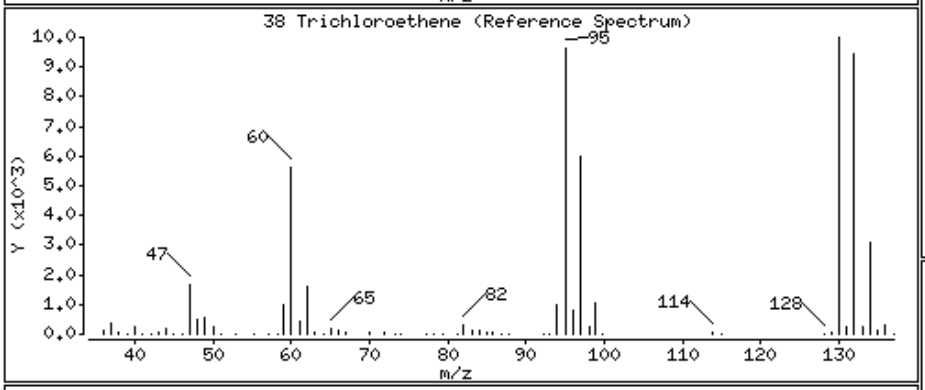
Purge Volume: 5.0 Operator: PC

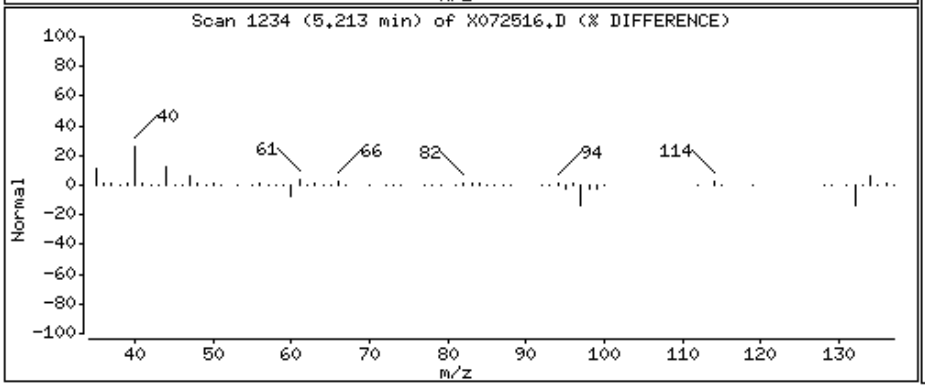
Column phase: DB624 Column diameter: 0.18

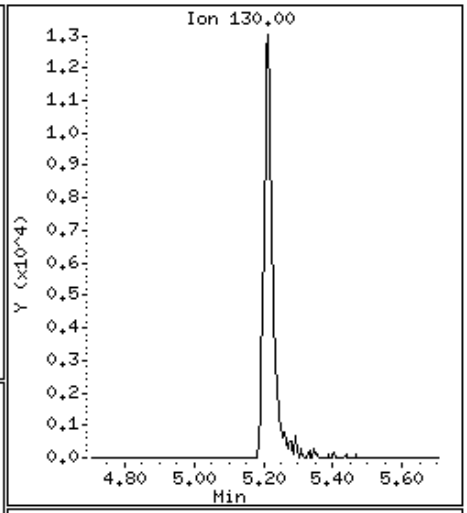
38 Trichloroethene Concentration: 19.45 ug/l

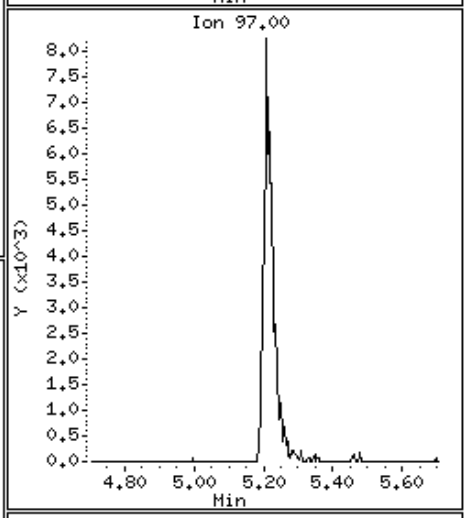


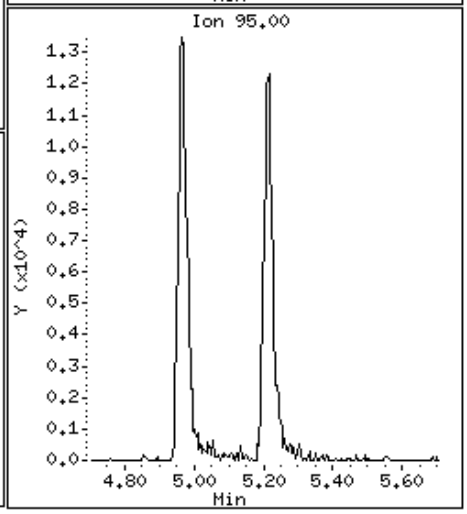












Data File : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072516.D
Inj Date : 25-JUL-2023 15:15
InstruID : voa6.i
LabSampID : HS23071113-05

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072530.D Page 1
Report Date: 27-Jul-2023 13:10

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072530.D
Lab Smp Id: CCV-END Client Smp ID: CCV-END
Inj Date : 25-JUL-2023 20:02
Operator : PC Inst ID: voa6.i
Smp Info : CCV-END;CCV-END;2;;
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\8260W.m
Meth Date : 27-Jul-2023 13:10 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.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	4.181	4.181	(1.000)	528964	50.0000	
135 1,4-Dioxane	88	5.602	5.602	(1.340)	64229	1000.00	1021.82
140 1,3-Butadiene	54	1.171	1.171	(0.280)	435050	50.0000	64.00
25 Methacrylonitrile	41	3.829	3.829	(0.916)	435680	50.0000	63.81
12 Isobutyl Alcohol	43	4.680	4.680	(1.119)	1259821	1000.00	1256.44
13 Acetonitrile	39	2.202	2.202	(0.527)	320554	500.000	432.15
14 Allyl Chloride	41	2.202	2.202	(0.527)	767937	50.0000	44.21
4 Propionitrile	54	3.656	3.656	(0.874)	619179	500.000	590.91
2 Dichlorodifluoromethane	85	0.980	0.980	(0.234)	258448	50.0000	47.81
3 Chloromethane	50	1.085	1.085	(0.260)	421845	50.0000	52.79
5 Vinyl Chloride	62	1.149	1.149	(0.275)	406548	50.0000	59.39
6 Bromomethane	94	1.343	1.343	(0.321)	145389	50.0000	51.32
7 Chloroethane	64	1.407	1.407	(0.337)	226372	50.0000	57.93
8 Trichlorofluoromethane	101	1.565	1.565	(0.374)	397807	50.0000	57.34
9 Acrolein	56	1.868	1.868	(0.447)	24355	100.000	121.34
10 Acetone	43	1.977	1.977	(0.473)	224618	100.000	107.68
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	174913	50.0000	45.13
15 Iodomethane	142	2.033	2.033	(0.486)	386383	100.000	77.00
16 Acrylonitrile	53	2.539	2.539	(0.607)	233003	100.000	90.39
17 Methylene Chloride	84	2.307	2.307	(0.552)	182566	50.0000	39.63

18 Methyl tert-butyl ether	73	2.543	2.543 (0.608)	565838	50.0000	39.26
19 Carbon Disulfide	76	2.074	2.074 (0.496)	942948	100.000	77.40

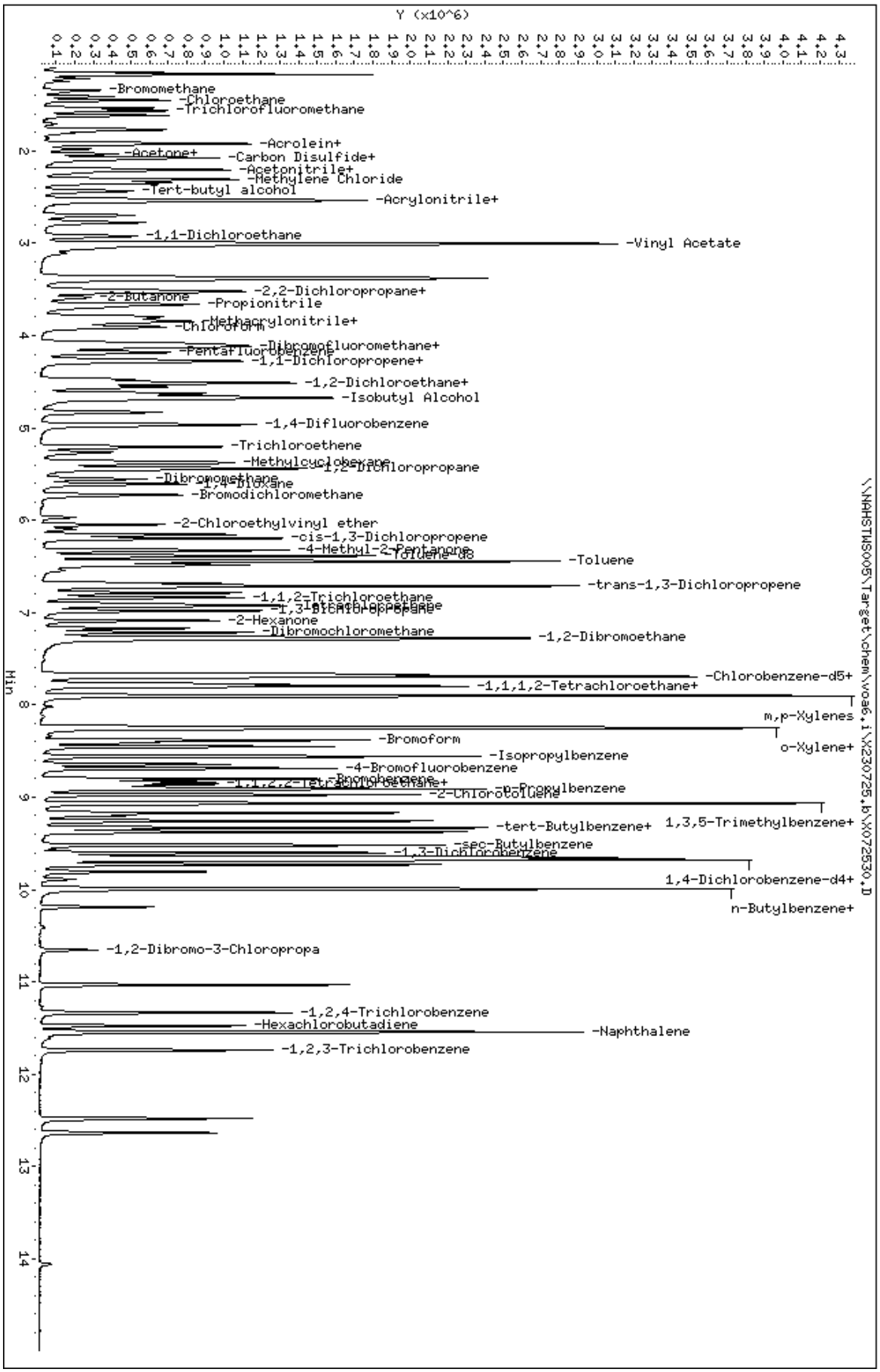
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	20 trans-1,2-Dichloroethene	96	2.532	2.532	(0.606)	176939	50.0000	39.47
	21 Vinyl Acetate	43	3.000	3.000	(0.718)	2311271	100.000	124.67
	22 1,1-Dichloroethane	63	2.922	2.922	(0.699)	523983	50.0000	53.26
	24 2-Butanone	43	3.585	3.585	(0.857)	327572	100.000	116.28
	26 2,2-Dichloropropane	77	3.510	3.510	(0.840)	377766	50.0000	49.47
	27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.844)	300700	50.0000	52.65
	28 Chloroform	83	3.908	3.908	(0.935)	502338	50.0000	49.90
	29 Bromochloromethane	128	3.799	3.799	(0.909)	157669	50.0000	49.26
$	30 Dibromofluoromethane	113	4.099	4.099	(0.980)	262359	50.0000	54.17
	31 1,1,1-Trichloroethane	97	4.080	4.080	(0.976)	426660	50.0000	55.06
	32 1,1-Dichloropropene	75	4.279	4.279	(0.861)	365624	50.0000	50.67
	33 1,2-Dichloroethane	62	4.556	4.556	(0.917)	506879	50.0000	52.05
	34 Carbon Tetrachloride	117	4.260	4.260	(0.857)	350041	50.0000	48.15
$	35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.070)	333890	50.0000	55.13
*	36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	884527	50.0000	
	37 Benzene	78	4.511	4.511	(0.908)	1066510	50.0000	50.40
	38 Trichloroethene	130	5.205	5.205	(1.048)	306541	50.0000	51.22
	39 Bromodichloromethane	83	5.726	5.726	(1.152)	388801	50.0000	47.97
	41 2-Chloroethylvinyl ether	63	6.048	6.048	(1.217)	236783	100.000	95.69
	42 1,2-Dichloropropane	63	5.437	5.437	(1.094)	366915	50.0000	53.93
	44 Dibromomethane	93	5.549	5.549	(1.117)	185013	50.0000	48.04
	45 4-Methyl-2-Pentanone	43	6.325	6.325	(0.825)	865673	100.000	108.35
	46 cis-1,3-Dichloropropene	75	6.153	6.153	(1.238)	453729	50.0000	48.74
*	47 Chlorobenzene-d5	117	7.667	7.667	(1.000)	811867	50.0000	
$	48 Toluene-d8	98	6.385	6.385	(0.833)	967820	50.0000	46.30
	50 Toluene	91	6.445	6.445	(0.841)	1117096	50.0000	51.11
	51 trans-1,3-Dichloropropene	75	6.678	6.678	(1.344)	373874	50.0000	47.64
	52 2-Hexanone	43	7.086	7.086	(0.924)	585776	100.000	111.61
	53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	221830	50.0000	47.84
	54 1,3-Dichloropropane	76	6.978	6.978	(0.910)	458538	50.0000	48.41
	55 Dibromochloromethane	129	7.173	7.173	(0.935)	322238	50.0000	48.14
	56 Tetrachloroethene	164	6.925	6.925	(0.903)	226677	50.0000	50.20
	57 1,2-Dibromoethane	107	7.259	7.259	(0.947)	251476	50.0000	47.46
	58 1-Chlorohexane	55	7.694	7.694	(1.548)	374676	50.0000	52.72
	59 Chlorobenzene	112	7.690	7.690	(1.003)	761274	50.0000	49.83
	60 1,1,1,2-Tetrachloroethane	131	7.772	7.772	(1.014)	286881	50.0000	47.96
	61 Ethylbenzene	106	7.795	7.795	(1.017)	381712	50.0000	49.82
	62 m,p-Xylenes	106	7.900	7.900	(1.030)	980209	100.000	101.99
	63 o-Xylene	106	8.237	8.237	(1.074)	470983	50.0000	51.75
	64 Styrene	104	8.256	8.256	(1.077)	807765	50.0000	50.88
	66 Bromoform	173	8.406	8.406	(1.096)	201657	50.0000	46.96
	67 Isopropylbenzene	105	8.560	8.560	(1.116)	1204951	50.0000	51.50
	68 1,1,2,2-Tetrachloroethane	83	8.837	8.837	(0.915)	357150	50.0000	48.76
$	69 4-Bromofluorobenzene	95	8.687	8.687	(1.133)	415614	50.0000	51.42
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	436075	50.0000	
	71 1,2,3-Trichloropropane	75	8.863	8.863	(0.917)	260193	50.0000	44.76
	73 n-Propylbenzene	91	8.908	8.908	(0.922)	1410266	50.0000	53.51
	74 Bromobenzene	156	8.803	8.803	(0.911)	337678	50.0000	49.51
	75 1,3,5-Trimethylbenzene	105	9.066	9.066	(0.938)	997269	50.0000	50.51
	76 2-Chlorotoluene	91	8.972	8.972	(0.929)	892280	50.0000	50.19
	77 4-Chlorotoluene	91	9.069	9.069	(0.939)	1017300	50.0000	52.07
	78 tert-Butylbenzene	119	9.332	9.332	(0.966)	881146	50.0000	52.04

79 1,2,4-Trimethylbenzene	105	9.377	9.377 (0.971)	993762	50.0000	50.19
81 sec-Butylbenzene	105	9.519	9.519 (0.985)	1221220	50.0000	54.11

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)	
82	p-Isopropyltoluene	119	9.647	9.647	(0.998)	1045311	50.0000	50.71	
83	1,3-Dichlorobenzene	146	9.602	9.602	(0.994)	590766	50.0000	49.72	
84	1,4-Dichlorobenzene	146	9.680	9.680	(1.002)	621266	50.0000	47.69	
87	n-Butylbenzene	91	9.992	9.992	(1.034)	909481	50.0000	52.68	
88	1,2-Dichlorobenzene	146	9.988	9.988	(1.034)	592661	50.0000	50.73	
89	1,2-Dibromo-3-Chloropropane	155	10.655	10.655	(1.103)	54655	50.0000	45.49	
90	1,2,4-Trichlorobenzene	180	11.334	11.334	(1.173)	346289	50.0000	43.16	
91	Hexachlorobutadiene	225	11.476	11.476	(1.188)	161123	50.0000	43.88	
92	Naphthalene	128	11.540	11.540	(1.194)	894201	50.0000	45.03	
93	1,2,3-Trichlorobenzene	180	11.738	11.738	(1.215)	324752	50.0000	43.28	
M 94	1,2-Dichloroethylene (total)	96				477639	100.000	(a)	
141	Cyclohexane	56	4.121	4.121	(0.986)	574097	50.0000	62.61	
138	Freon TF	101	1.921	1.921	(0.459)	175448	50.0000	53.21	
147	Methylcyclohexane	55	5.384	5.384	(1.084)	902556	50.0000	48.34	
146	Methyl Acetate	43	2.236	2.236	(0.535)	224519	50.0000	47.69	
148	Tert-Butyl alcohol	59	2.438	2.438	(0.583)	527595	1000.00	790.25	
149	Isopropyl Alcohol	45	2.097	2.097	(0.502)	353784	1000.00	854.00	

QC Flag Legend

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



Data File: \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072530.D
Date : 25-JUL-2023 20:02
Client ID: CCV-END
Sample Info: CCV-END;CCV-END;2;;
Purge Volume: 5.0
Column phase: DB624

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

Data File : \\NAHSTWS005\Target\chem\voa6.i\X230725.b\X072530.D
Inj Date : 25-JUL-2023 20:02
InstruID : voa6.i
LabSampID : CCV-END

NO MANUAL INTEGRATIONS

HS23071113 Perch Sub Data E2300674-IV

ALS WO# HS23071113

July 26, 2023 Service Request No:E2300674

Bernadette Fini
ALS Laboratory Group
10450 Stancliff Road
Suite 210
Houston, TX 77099-4338

Laboratory Results for: HS23071113

Dear Bernadette,

Enclosed are the results of the sample(s) submitted to our laboratory July 21, 2023
For your reference, these analyses have been assigned our service request number **E2300674.**

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

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

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

James Guin

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

Certificate of Analysis

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

ALS Environmental

Client:	ALS Environmental - US	**Service Request No.:**	E2300674
Project:	HS23071113	**Date Received:**	07/21/2023
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

Nine samples were received for analysis at ALS Environmental in Houston on 07/21/2023.

The sample were received in good condition and is 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:

EQ2300355: Laboratory Control Spike/Duplicate Laboratory Control Spike (LCS/DLCS) samples were analyzed and reported in lieu of 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:**E2300674
Project: HS23071113

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
E2300674-001	hs23071113-01	7/14/2023	0705
E2300674-002	HS23071113-02	7/14/2023	0745
E2300674-003	HS23071113-03	7/14/2023	0825
E2300674-004	HS23071113-04	7/14/2023	0910
E2300674-005	HS23071113-05	7/14/2023	0950
E2300674-006	HS23071113-06	7/14/2023	1030
E2300674-007	HS23071113-07	7/14/2023	1110
E2300674-008	HS23071113-08	7/14/2023	1155
E2300674-009	HS23071113-09	7/14/2023	1235

Service Request Summary

Folder #: **E2300674**
Client Name: ALS Environmental - US
Project Name: HS23071113
Project Number:

Report To: Bernadette Fini
ALS Laboratory Group
10450 Stancliff Road
Houston, TX 77099-4338
USA
Phone Number: 281-530-5656
Cell Number:
Fax Number: 281-530-5887
E-mail: bernadette.fini@alsglobal.com

Project Chemist: James Guin
Originating Lab: HOUSTON
Logged By: TWOODS
Date Received: 07/21/23
Internal Due Date: 7/31/2023
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS23071113
EDD: No EDD Specified

9 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-AirArch 3
Pressure Gas:

Lab Samp No.	Client Samp No	Matrix	Collected	HOUSTON ClO4 DOD/6850
E2300674-001	hs23071113-01	Ground Water	07/14/23 0705	**IV**
E2300674-002	HS23071113-02	Ground Water	07/14/23 0745	**IV**
E2300674-003	HS23071113-03	Ground Water	07/14/23 0825	**IV**
E2300674-004	HS23071113-04	Ground Water	07/14/23 0910	**IV**
E2300674-005	HS23071113-05	Ground Water	07/14/23 0950	**IV**
E2300674-006	HS23071113-06	Ground Water	07/14/23 1030	**IV**
E2300674-007	HS23071113-07	Ground Water	07/14/23 1110	**IV**
E2300674-008	HS23071113-08	Ground Water	07/14/23 1155	**IV**
E2300674-009	HS23071113-09	Ground Water	07/14/23 1235	**IV**

Service Request Summary

Folder #: **E2300674**
Client Name: ALS Environmental - US
Project Name: HS23071113
Project Number:

Report To: Bernadette Fini
ALS Laboratory Group
10450 Stancliff Road
Houston, TX 77099-4338
USA
Phone Number: 281-530-5656
Cell Number:
Fax Number: 281-530-5887
E-mail: bernadette.fini@alsglobal.com

Project Chemist: James Guin
Originating Lab: HOUSTON
Logged By: TWOODS
Date Received: 07/21/23
Internal Due Date: 7/31/2023
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS23071113
EDD: No EDD Specified

9 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-AirArch 3
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 2022-2023	7/31/2023
Louisiana Department of Environmental Quality	03087-2023	6/30/2024
Louisiana Department of Health and Hospitals	LA028-2023	12/31/2023
Maine Department of Health and Human Services	2022017	6/5/2024
Maryland Department of the Environment	343	7/31/2023
Maryland Department of the Environment	343-2023	6/30/2024
Michigan Depratment of Environmental Quality	9971-2023	4/30/2024
Minnesota Department of Health	2368363	12/31/2023
Nebraska Department of Health and Human Services	NE-OS-25-13	4/30/2024
Nevada Department of Conservation and Natural Resources	TX026932023-1	7/31/2023
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	2022-141	8/31/2023
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
Utah Department of Health Environmental Laboratory Certification	TX026932022-13	7/31/2023
Washington Department of Ecology	C819-22	11/14/2023

ALS

Chain of Custody

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

E2300674 5
ALS Laboratory Group
Perchlorates

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

SAMPLING STATE: Texas **COC ID:** 22447

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:	HS23071113
TSR:	Holly Tignac

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	**HS23071113-01**	**16ww51-230714**	**Groundwater**	**14 Jul 2023 07:05**
	6850 Perchlorate; separte Level II & Level IV PDF; EQUIS EDD LHAAP			31 Jul 2023
2.	**HS23071113-02**	**16ww30-230714**	**Groundwater**	**14 Jul 2023 07:45**
	6850 Perchlorate; separte Level II & Level IV PDF; EQUIS EDD LHAAP			31 Jul 2023
3.	**HS23071113-03**	**16ww29-230714**	**Groundwater**	**14 Jul 2023 08:25**
	6850 Perchlorate; separte Level II & Level IV PDF; EQUIS EDD LHAAP			31 Jul 2023
4.	**HS23071113-04**	**16ww13-230714**	**Groundwater**	**14 Jul 2023 09:10**
	6850 Perchlorate; separte Level II & Level IV PDF; EQUIS EDD LHAAP			31 Jul 2023
5.	**HS23071113-05**	**16ww42-230714**	**Groundwater**	**14 Jul 2023 09:50**
	6850 Perchlorate; separte Level II & Level IV PDF; EQUIS EDD LHAAP			31 Jul 2023
6.	**HS23071113-06**	**16ww23-230714**	**Groundwater**	**14 Jul 2023 10:30**
	6850 Perchlorate; separte Level II & Level IV PDF; EQUIS EDD LHAAP			31 Jul 2023
7.	**HS23071113-07**	**16ww24-230714**	**Groundwater**	**14 Jul 2023 11:10**
	6850 Perchlorate; separte Level II & Level IV PDF; EQUIS EDD LHAAP			31 Jul 2023
8.	**HS23071113-08**	**16ww27-230714**	**Groundwater**	**14 Jul 2023 11:55**

10450 Stancliff Rd., Suite 210
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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#: 423544 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 7/24/23 12:17

#	Lab Code	Client ID	B#	Method /Test	pH	Cl	Matrix	Amt. Ext.	Sample Description
1	E2300672-001	GUKOMELIK#2 0323	.01	6850/ClO4			Water	10mL	
2	E2300672-002	EA 25 0323	.01	6850/ClO4			Water	10mL	
3	E2300672-003	EA 60 0323	.01	6850/ClO4			Water	10mL	
4	E2300673-001	AAR3329	.01	6850/ClO4 DOD			Ground Water	10mL	
5	E2300673-002	AAR3330	.01	6850/ClO4 DOD			Ground Water	10mL	
6	E2300673-003	AAR3337	.01	6850/ClO4 DOD			Ground Water	10mL	
7	E2300673-004	AAR3347	.01	6850/ClO4 DOD			Ground Water	10mL	
8	E2300673-005	AAR3349	.01	6850/ClO4 DOD			Ground Water	10mL	
9	E2300673-006	AAR3351	.01	6850/ClO4 DOD			Ground Water	10mL	
10	E2300673-007	AAR3354	.01	6850/ClO4 DOD			Ground Water	10mL	
11	E2300673-008	AAR3355	.01	6850/ClO4 DOD			Ground Water	10mL	
12	E2300674-001	hs23071113-01	.01	6850/ClO4 DOD			Ground Water	10mL	
13	E2300674-002	HS23071113-02	.01	6850/ClO4 DOD			Ground Water	10mL	
14	E2300674-003	HS23071113-03	.01	6850/ClO4 DOD			Ground Water	10mL	
15	E2300674-004	HS23071113-04	.01	6850/ClO4 DOD			Ground Water	10mL	
16	E2300674-005	HS23071113-05	.01	6850/ClO4 DOD			Ground Water	10mL	
17	E2300674-006	HS23071113-06	.01	6850/ClO4 DOD			Ground Water	10mL	
18	E2300674-007	HS23071113-07	.01	6850/ClO4 DOD			Ground Water	10mL	
19	E2300674-008	HS23071113-08	.01	6850/ClO4 DOD			Ground Water	10mL	
20	E2300674-009	HS23071113-09	.01	6850/ClO4 DOD			Ground Water	10mL	
21	EQ2300355-01	MB		6850/ClO4			Liquid	10mL	
22	EQ2300355-02	LCS		6850/ClO4			Liquid	10mL	
23	EQ2300355-03	DLCS		6850/ClO4			Liquid	10mL	

Spiking Solutions

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

EQ2300355-02	1.00µL	EQ2300355-02	1.00µL	EQ2300355-03	1.00µL	EQ2300355-03	1.00µL

Name: Perchlorate Internal Standard 1ug/mL Inventory ID 227244 Logbook Ref: Perchlorate Internal Standard Expires On: 07/31/2023

E2300672-001	100.00µL	E2300672-002	100.00µL	E2300672-003	100.00µL	E2300673-001	100.00µL	E2300673-002	100.00µL	E2300673-003	100.00µL
E2300673-004	100.00µL	E2300673-005	100.00µL	E2300673-006	100.00µL	E2300673-007	100.00µL	E2300673-008	100.00µL	E2300674-001	100.00µL
E2300674-002	100.00µL	E2300674-003	100.00µL	E2300674-004	100.00µL	E2300674-005	100.00µL	E2300674-006	100.00µL	E2300674-007	100.00µL
E2300674-008	100.00µL	E2300674-009	100.00µL	EQ2300355-01	100.00µL	EQ2300355-01	100.00µL	EQ2300355-02	100.00µL	EQ2300355-02	100.00µL
EQ2300355-03	100.00µL	EQ2300355-03	100.00µL								

Preparation Information Benchsheet

Prep Run#: 423544 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 7/24/23 12:17

Preparation Materials

Water HPLC Grade	HPLC water 5/18/23CG (229315)	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-lock syringes (228116)				

Preparation Steps

Step: Preparation
Started: 7/24/23 12:17
Finished: 7/25/23 09:20
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:**	E2300674
Project:	HS23071113	**Date Collected:**	7/14/23 0705
Sample Matrix:	Ground Water	**Date Received:**	7/21/23
Sample Name:	hs23071113-01	**Units:**	µg/L
Lab Code:	E2300674-001	**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	**0.163**		0.100	0.0500	0.0250	1	7/24/23	7/25/23 14:27	423544	811716	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300674
Project:	HS23071113	**Date Collected:**	7/14/23 0745
Sample Matrix:	Ground Water	**Date Received:**	7/21/23
Sample Name:	HS23071113-02	**Units:**	µg/L
Lab Code:	E2300674-002	**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	**0.174**		0.100	0.0500	0.0250	1	7/24/23	7/25/23 14:33	423544	811716	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300674
Project:	HS23071113	**Date Collected:**	7/14/23 0825
Sample Matrix:	Ground Water	**Date Received:**	7/21/23
Sample Name:	HS23071113-03	**Units:**	µg/L
Lab Code:	E2300674-003	**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	**0.110**		0.100	0.0500	0.0250	1	7/24/23	7/25/23 14:38	423544	811716	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300674
Project:	HS23071113	**Date Collected:**	7/14/23 0910
Sample Matrix:	Ground Water	**Date Received:**	7/21/23
Sample Name:	HS23071113-04	**Units:**	µg/L
Lab Code:	E2300674-004	**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	**0.281**		0.100	0.0500	0.0250	1	7/24/23	7/25/23 14:49	423544	811716	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300674
Project:	HS23071113	**Date Collected:**	7/14/23 0950
Sample Matrix:	Ground Water	**Date Received:**	7/21/23
Sample Name:	HS23071113-05	**Units:**	µg/L
Lab Code:	E2300674-005	**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	**0.432**		0.100	0.0500	0.0250	1	7/24/23	7/25/23 14:55	423544	811716	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300674
Project:	HS23071113	**Date Collected:**	7/14/23 1030
Sample Matrix:	Ground Water	**Date Received:**	7/21/23
Sample Name:	HS23071113-06	**Units:**	µg/L
Lab Code:	E2300674-006	**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	**0.176**		0.100	0.0500	0.0250	1	7/24/23	7/25/23 15:00	423544	811716	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300674
Project:	HS23071113	**Date Collected:**	7/14/23 1110
Sample Matrix:	Ground Water	**Date Received:**	7/21/23
Sample Name:	HS23071113-07	**Units:**	µg/L
Lab Code:	E2300674-007	**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	**0.206**		0.100	0.0500	0.0250	1	7/24/23	7/25/23 15:06	423544	811716	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300674
Project:	HS23071113	**Date Collected:**	7/14/23 1155
Sample Matrix:	Ground Water	**Date Received:**	7/21/23
Sample Name:	HS23071113-08	**Units:**	µg/L
Lab Code:	E2300674-008	**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	**0.168**		0.100	0.0500	0.0250	1	7/24/23	7/25/23 15:12	423544	811716	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300674
Project:	HS23071113	**Date Collected:**	7/14/23 1235
Sample Matrix:	Ground Water	**Date Received:**	7/21/23
Sample Name:	HS23071113-09	**Units:**	µg/L
Lab Code:	E2300674-009	**Basis:**	NA

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

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	7/24/23	7/25/23 15:17	423544	811716	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300674
Project:	HS23071113	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	EQ2300355-01	**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	7/24/23	7/25/23 13:04	423544	811716	

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: HS23071113
Sample Matrix: Ground Water

Service Request: E2300674
Date Analyzed: 7/25/23

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

Analytical Method: 6850
Prep Method: Method

Units: µg/L
Basis: NA

Extraction Lot: 423544

	Lab Control Sample EQ2300355-02			Duplicate Lab Control Sample EQ2300355-03					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	0.0853	0.100	85	0.0984	0.100	98	84 - 119	14	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:**	E2300674
Project:	HS23071113	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2300355-02	**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	**0.0853**	J	0.100	0.0500	0.0250	1	7/24/23	7/25/23 13:10	423544	811716	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300674
Project:	HS23071113	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2300355-03	**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	**0.0984**	J	0.100	0.0500	0.0250	1	7/24/23	7/25/23 15:23	423544	811716	

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

20230629-809329

Injection Log

LCMS01 -Shimadzu 8050

1st Review: XM
2nd Review: GC

ICAL Date: 6/29/2023
Cal. Std. xp: 06/29/2023
ICAL ID: EC2300011

Mobile Phases : A:20mM ammonium acetate in water 32103046 **B:**Acetonitrile 226552

	Sample Name		File Name	Acquisition Method	Dilution	Comments	Date/Time
1	PERCHLORATE1		20230629-001	Perchlorate6850c.lcm	1x	227245	6/29/2023 12:59
2	PERCHLORATE2		20230629-002	Perchlorate6850c.lcm	1x	227246	6/29/2023 13:05
3	PERCHLORATE3		20230629-003	Perchlorate6850c.lcm	1x	227247	6/29/2023 13:10
4	PERCHLORATE4		20230629-004	Perchlorate6850c.lcm	1x	227248	6/29/2023 13:16
5	PERCHLORATE5		20230629-005	Perchlorate6850c.lcm	1x	227249	6/29/2023 13:21
6	PERCHLORATE6		20230629-006	Perchlorate6850c.lcm	1x	227250	6/29/2023 13:27
7	PERCHLORATE7		20230629-007	Perchlorate6850c.lcm	1x	227251	6/29/2023 13:32
8	PERCHLORATE8		20230629-008	Perchlorate6850c.lcm	1x	227252	6/29/2023 13:38
9	PERCHLORATE9		20230629-009	Perchlorate6850c.lcm	1x	227253	6/29/2023 13:43
10	PERCHLORATE10		20230629-010	Perchlorate6850c.lcm	1x	227254	6/29/2023 13:49
11	PERCHLORATEICV		20230629-011	Perchlorate6850c.lcm	1x	227256	6/29/2023 13:55
12	IB		20230629-012	Perchlorate6850c.lcm	1x		6/29/2023 14:00
13	LODV		20230629-013	Perchlorate6850c.lcm	1x	227501	6/29/2023 14:06
14	ICS		20230629-014	Perchlorate6850c.lcm	1x	32103024	6/29/2023 14:11
15	CCV		20230629-015	Perchlorate6850c.lcm	1x	227251	6/29/2023 14:17
16	EQ2300312-01		20230629-016	Perchlorate6850c.lcm	1x		6/29/2023 14:22
17	EQ2300312-02		20230629-017	Perchlorate6850c.lcm	1x	DNU-RR	6/29/2023 14:28
18	EQ2300312-03		20230629-018	Perchlorate6850c.lcm	1x		6/29/2023 14:33
19	E2300606-001		20230629-019	Perchlorate6850c.lcm	10x		6/29/2023 14:39
20	EQ2300312-04		20230629-020	Perchlorate6850c.lcm	1x		6/29/2023 14:44
21	EQ2300312-05		20230629-021	Perchlorate6850c.lcm	1x		6/29/2023 14:50
22	E2300606-002		20230629-022	Perchlorate6850c.lcm	5x		6/29/2023 14:55
23	E2300606-003		20230629-023	Perchlorate6850c.lcm	10x		6/29/2023 15:01
24	E2300606-004		20230629-024	Perchlorate6850c.lcm	10x		6/29/2023 15:06
25	E2300606-005		20230629-025	Perchlorate6850c.lcm	1x		6/29/2023 15:12
26	CCV		20230629-026	Perchlorate6850c.lcm	1x	227251	6/29/2023 15:17
27	E2300606-006		20230629-027	Perchlorate6850c.lcm	1x		6/29/2023 15:23
28	E2300606-007		20230629-028	Perchlorate6850c.lcm	500x		6/29/2023 15:28
29	E2300606-008		20230629-029	Perchlorate6850c.lcm	100x		6/29/2023 15:34
30	EQ2300312-06		20230629-030	Perchlorate6850c.lcm	100x		6/29/2023 15:40
31	EQ2300312-07		20230629-031	Perchlorate6850c.lcm	100x		6/29/2023 15:45
32	E2300606-009		20230629-032	Perchlorate6850c.lcm	1x		6/29/2023 15:53
33	E2300610-001		20230629-033	Perchlorate6850c.lcm	10000x		6/29/2023 15:58
34	E2300610-002		20230629-034	Perchlorate6850c.lcm	1x		6/29/2023 16:04
35	E2300610-003		20230629-035	Perchlorate6850c.lcm	1x		6/29/2023 16:09
36	E2300610-004		20230629-036	Perchlorate6850c.lcm	1x		6/29/2023 16:15
37	CCV		20230629-037	Perchlorate6850c.lcm	1x	227251	6/29/2023 16:21

20230629-809329

Injection Log

LCMS01 -Shimadzu 8050

1st Review: XM
2nd Review: GC

ICAL Date: 6/29/2023
Cal. Std. xp: 06/29/2023
ICAL ID: EC2300011

Mobile Phases : A:20mM ammonium acetate in water 32103046 **B:**Acetonitrile 226552

	Sample Name		File Name	Acquisition Method	Dilution	Comments	Date/Time
38	E2300610-005		20230629-038	Perchlorate6850c.lcm	1x		6/29/2023 16:26
39	E2300610-006		20230629-039	Perchlorate6850c.lcm	1x		6/29/2023 16:32
40	E2300610-007		20230629-040	Perchlorate6850c.lcm	1x		6/29/2023 16:37
41	E2300610-008		20230629-041	Perchlorate6850c.lcm	1x	DNU-D	6/29/2023 16:43
42	EQ2300312-08		20230629-042	Perchlorate6850c.lcm	1x		6/29/2023 16:48
43	EQ2300312-09		20230629-043	Perchlorate6850c.lcm	1x		6/29/2023 16:54
44	E2300611-001		20230629-044	Perchlorate6850c.lcm	1x		6/29/2023 16:59
45	E2300611-002		20230629-045	Perchlorate6850c.lcm	1x		6/29/2023 17:05
46	E2300611-003		20230629-046	Perchlorate6850c.lcm	1x		6/29/2023 17:10
47	E2300611-004		20230629-047	Perchlorate6850c.lcm	1x	DNU-D	6/29/2023 17:16
48	CCV		20230629-048	Perchlorate6850c.lcm	1x	227251	6/29/2023 17:21
49	E2300611-005		20230629-049	Perchlorate6850c.lcm	1x		6/29/2023 17:27
50	E2300611-006		20230629-050	Perchlorate6850c.lcm	1x	DNU-D	6/29/2023 17:32
51	E2300611-007		20230629-051	Perchlorate6850c.lcm	1x	DNU-D	6/29/2023 17:38
52	E2300611-008		20230629-052	Perchlorate6850c.lcm	1x		6/29/2023 17:43
53	E2300611-009		20230629-053	Perchlorate6850c.lcm	1x		6/29/2023 17:49
54	E2300611-010		20230629-054	Perchlorate6850c.lcm	1x		6/29/2023 17:55
55	CCV		20230629-055	Perchlorate6850c.lcm	1x	227251	6/29/2023 18:06

Initial Calibration - Detailed Report

Calibration ID: EC2300011 **Instrument ID:** E-LCMS-01
Column Name: 1

#	Lab Code	Sample Name	File Location	Aquisition Date
01	EC2300011-01	PERCHLORATE1	20230629-001	06/29/2023 12:59
02	EC2300011-02	PERCHLORATE2	20230629-002	06/29/2023 13:05
03	EC2300011-03	PERCHLORATE3	20230629-003	06/29/2023 13:10
04	EC2300011-04	PERCHLORATE4	20230629-004	06/29/2023 13:16
05	EC2300011-05	PERCHLORATE5	20230629-005	06/29/2023 13:21
06	EC2300011-06	PERCHLORATE6	20230629-006	06/29/2023 13:27
07	EC2300011-07	PERCHLORATE7	20230629-007	06/29/2023 13:32
08	EC2300011-08	PERCHLORATE8	20230629-008	06/29/2023 13:38
09	EC2300011-09	PERCHLORATE9	20230629-009	06/29/2023 13:43
10	EC2300011-10	PERCHLORATE10	20230629-010	06/29/2023 13:49

Analyte **Curve Fit** **Weighting**

Perchlorate **Average RF** **RSD = 2.809** **Average RF = 0.1625**

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.1000	0.1678	02	0.5000	0.1574	03	0.7000	0.1599	04	1.0000	0.1567
05	2.0000	0.1596	06	5.0000	0.1641	07	10.0000	0.1704	08	20.0000	0.1667
09	30.0000	0.1608	10	50.0000	0.1619						

Analyte

Perchlorate RSE = 2.81

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.1000	0.103	3.2	02	0.5000	0.484	-3.1	03	0.7000	0.689	-1.6
04	1.0000	0.964	-3.6	05	2.0000	1.96	-1.8	06	5.0000	5.05	1.0
07	10.0000	10.5	4.8	08	20.0000	20.5	2.6	09	30.0000	29.7	-1.1
10	50.0000	49.8	-0.4								

Initial Calibration Verification Summary Report

Calibration ID:	EC2300011	**Instrument ID:**	E-LCMS-01
Datafile ID:	20230629-011	**Column Name:**	1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
Perchlorate	EC2300011-11	T	Average RF	10	9.913	ng/mL	-0.9	<= 15

Insight Report

Printed at 6/29/2023 2:17:05 PM

Method File: I:\LCMS01\DATA\20230628\06282023.lcm
Project File: I:\LCMS01\DATA\20230628\06282023.damlp

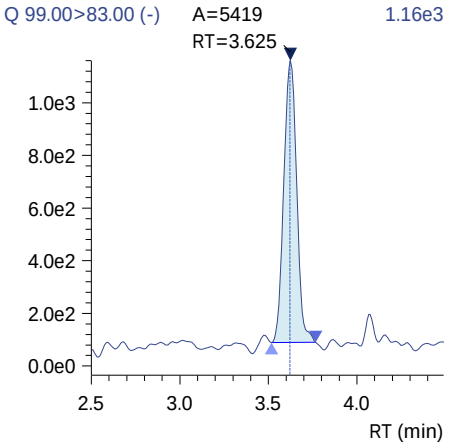
PERCHLORATE1

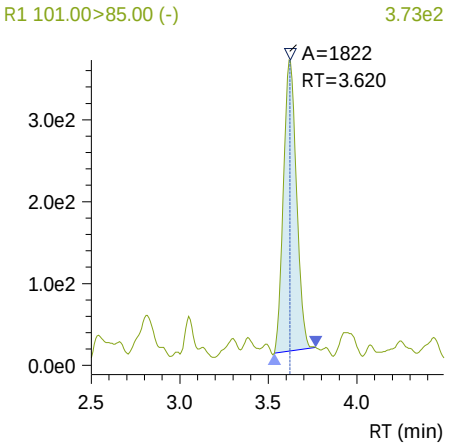
Sample ID: PERCHLORATE1
Date Acquired: 6/29/2023 12:59:40 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-001.lcd
Vial: 1 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.625	5419	323018	0.1032	ng/mL	101.00 >85.00	33.63	22.41-41.62
Sodium Perchlorate-18O4 _IS	Auto	3.617	323018	323018	1.0000	ng/mL	----	----	

Perchlorate

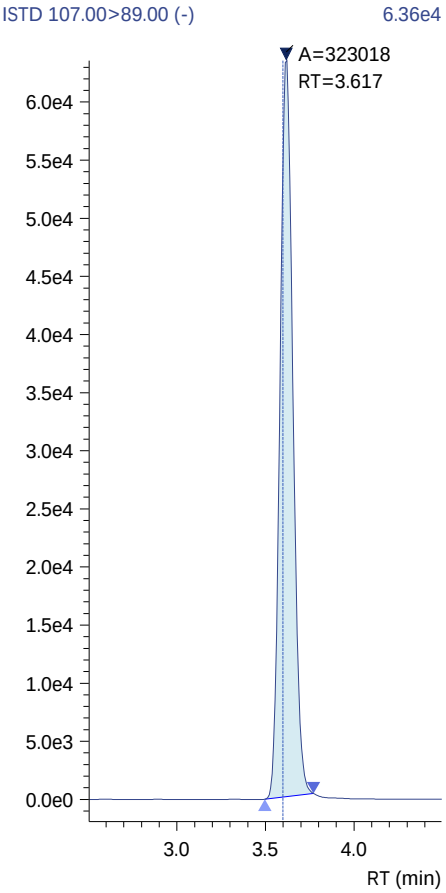
Conc 0.1032
R#1 33.63 (32.02)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/29/2023 2:17:05 PM

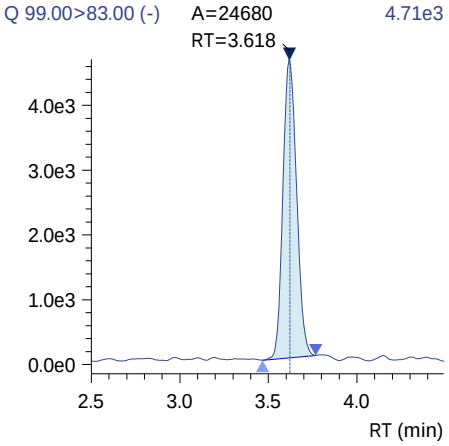
PERCHLORATE2

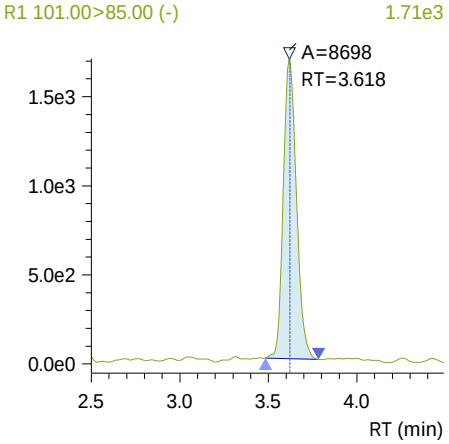
Sample ID: PERCHLORATE2
Date Acquired: 6/29/2023 1:05:11 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-002.lcd
Vial: 2 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.618	24680	313519	0.4844	ng/mL	101.00 >85.00	35.24	22.41-41.62
Sodium Perchlorate-18O4 _IS	Auto	3.618	313519	313519	1.0000	ng/mL	----	----	

Perchlorate

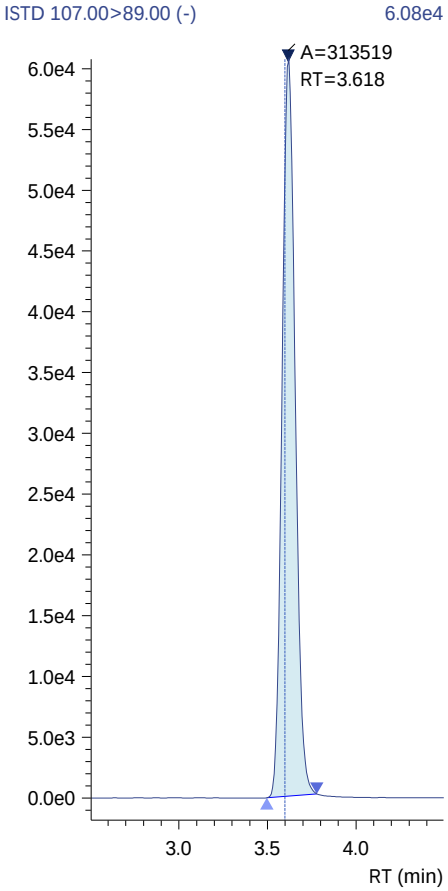
Conc 0.4844
R#1 35.24 (32.02)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/29/2023 2:17:05 PM

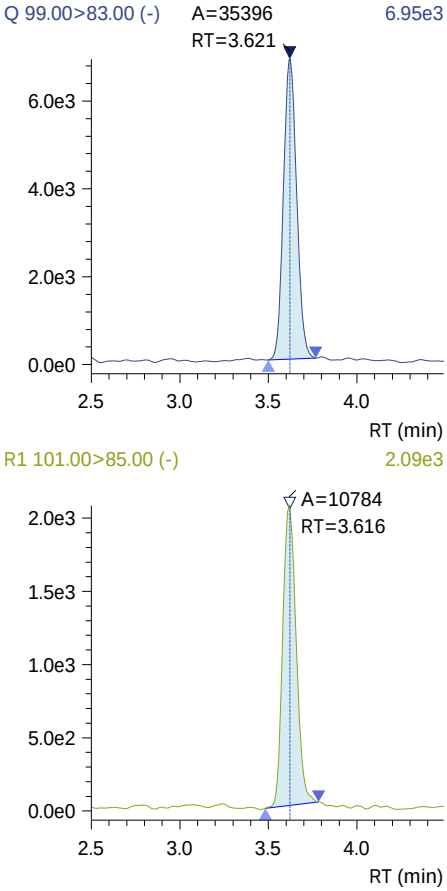
PERCHLORATE3

Sample ID: PERCHLORATE3
Date Acquired: 6/29/2023 1:10:46 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-003.lcd
Vial: 3 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.621	35396	316311	0.6886	ng/mL	101.00 >85.00	30.47	22.41-41.62
Sodium Perchlorate-18O4 _IS	Auto	3.618	316311	316311	1.0000	ng/mL	----	----	

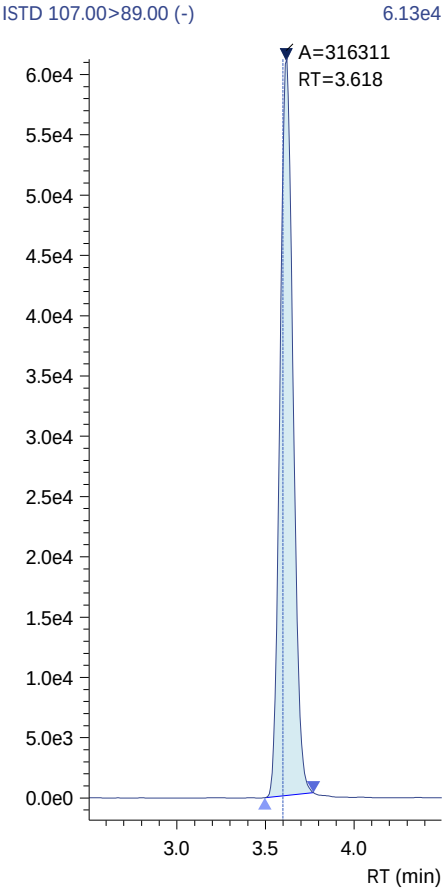
Perchlorate

Conc 0.6886
R#1 30.47 (32.02)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/29/2023 2:17:05 PM

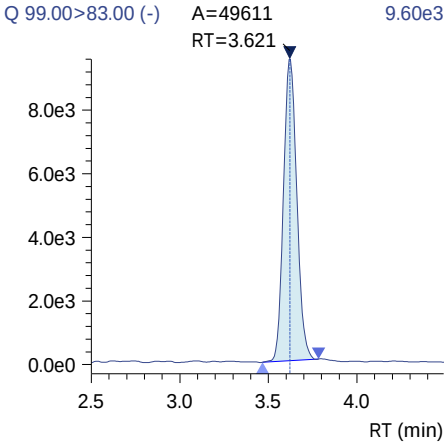
PERCHLORATE4

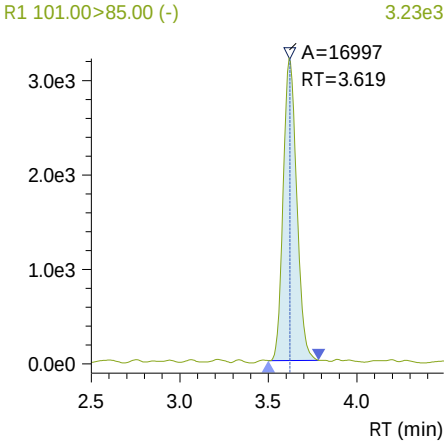
Sample ID: PERCHLORATE4
Date Acquired: 6/29/2023 1:16:19 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-004.lcd
Vial: 4 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.621	49611	316580	0.9643	ng/mL	101.00 >85.00	34.26	22.41-41.62
Sodium Perchlorate-18O4 _IS	Auto	3.618	316580	316580	1.0000	ng/mL	----	----	

Perchlorate

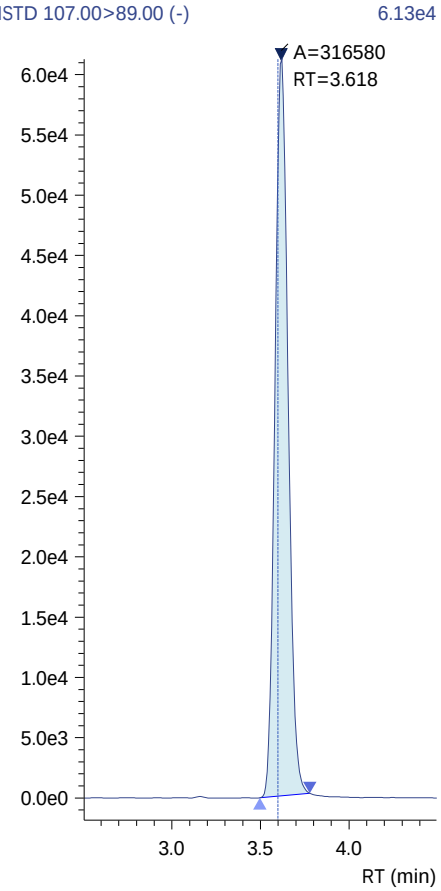
Conc 0.9643
R#1 34.26 (32.02)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/29/2023 2:17:05 PM

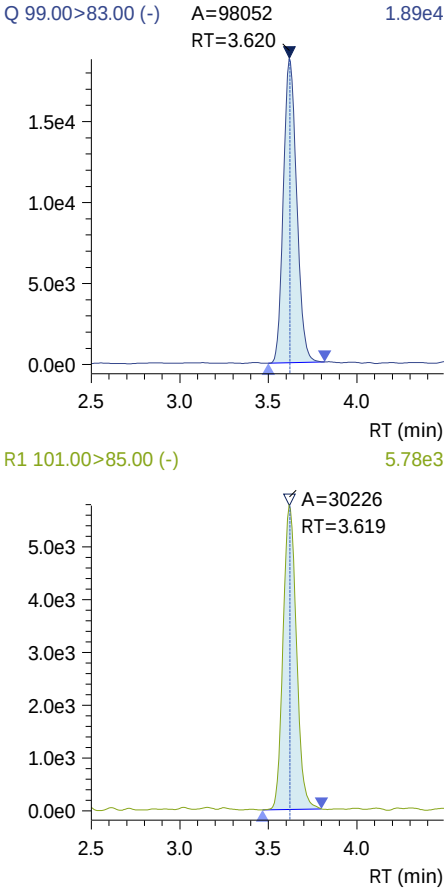
PERCHLORATE5

Sample ID: PERCHLORATE5
Date Acquired: 6/29/2023 1:21:50 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-005.lcd
Vial: 5 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.620	98052	307162	1.9642	ng/mL	101.00 >85.00	30.83	22.41-41.62
Sodium Perchlorate-18O4 _IS	Auto	3.617	307162	307162	1.0000	ng/mL	----	----	

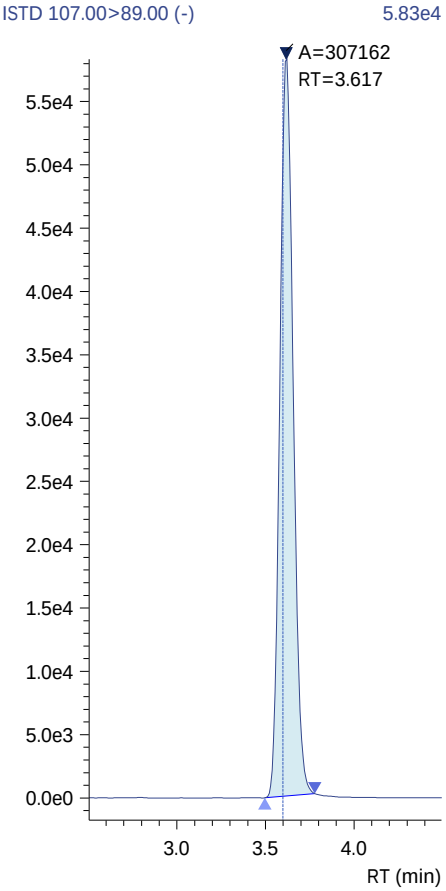
Perchlorate

Conc 1.9642
R#1 30.83 (32.02)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/29/2023 2:17:05 PM

PERCHLORATE6

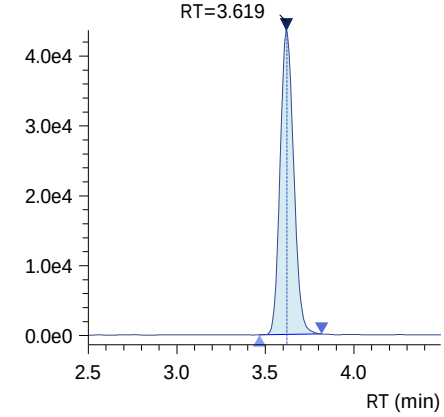
Sample ID: PERCHLORATE6
Date Acquired: 6/29/2023 1:27:22 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-006.lcd
Vial: 6 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.619	232011	282827	5.0477	ng/mL	101.00 >85.00	31.17	22.41-41.62
Sodium Perchlorate-18O4 _IS	Auto	3.617	282827	282827	1.0000	ng/mL	----	----	

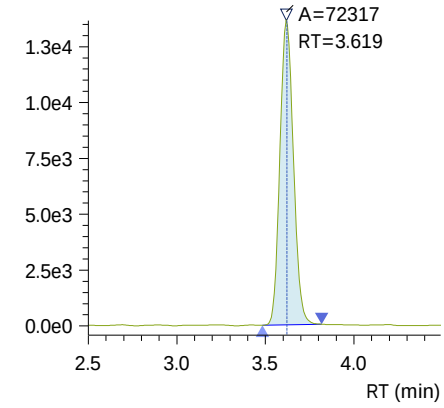
Perchlorate

Conc 5.0477
R#1 31.17 (32.02)

Q 99.00>83.00 (-) A=232011 RT=3.619 4.37e4



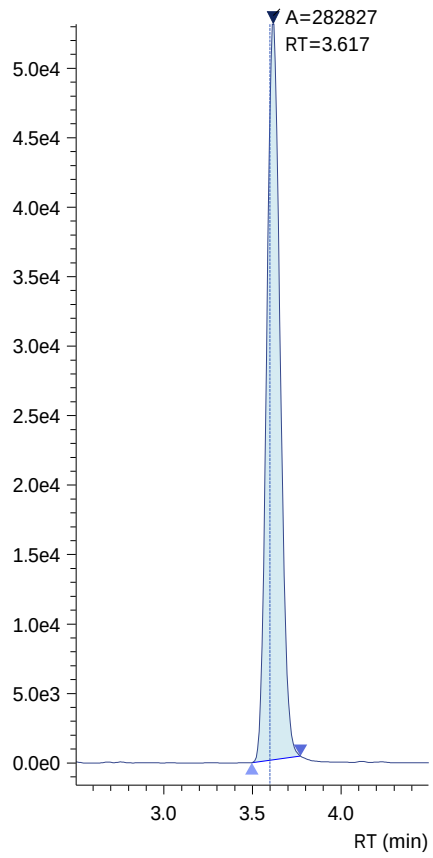
R1 101.00>85.00 (-) 1.37e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 5.32e4



Insight Report

Printed at 6/29/2023 2:17:05 PM

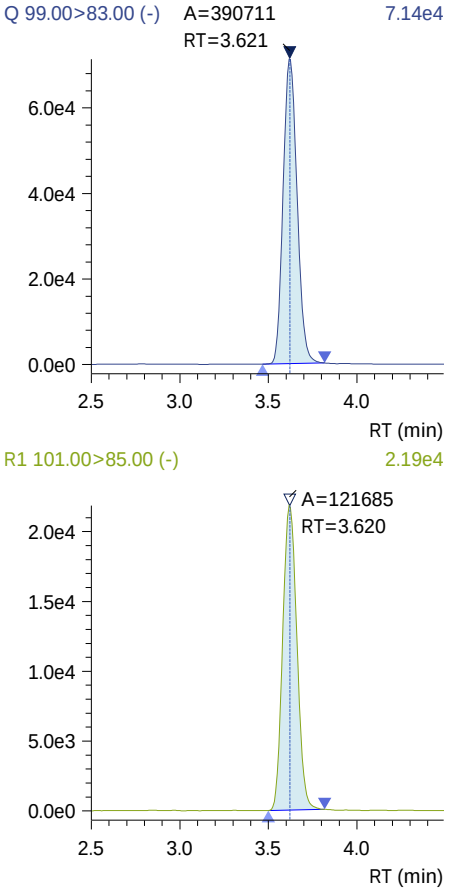
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 6/29/2023 1:32:51 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-007.lcd
Vial: 3 | 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	3.621	390711	229327	10.48 35	ng/mL	101.00 >85.00	31.14	22.41-41.62
Sodium Perchlorate-18O4 _IS	Auto	3.616	229327	229327	1.0000	ng/mL	----	----	

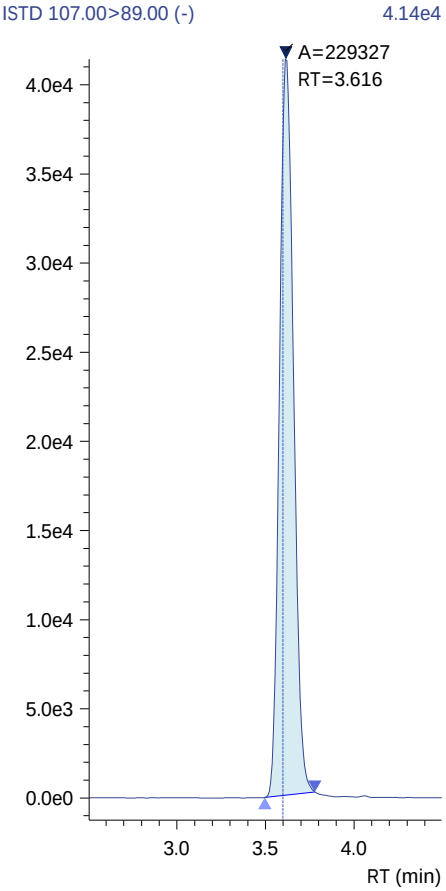
Perchlorate

Conc 10.4835
R#1 31.14 (32.02)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/29/2023 2:17:05 PM

PERCHLORATE8

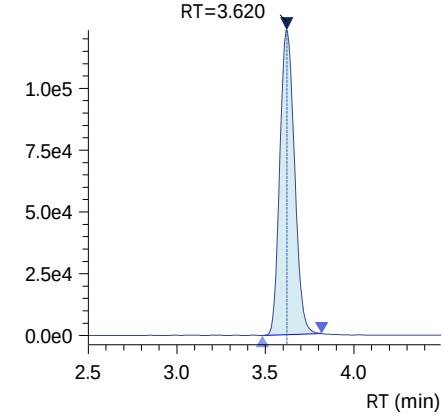
Sample ID: PERCHLORATE8
Date Acquired: 6/29/2023 1:38:22 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-008.lcd
Vial: 8 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.620	710430	213093	20.5144	ng/mL	101.00 >85.00	31.25	22.41-41.62
Sodium Perchlorate-18O4_IS	Auto	3.615	213093	213093	1.0000	ng/mL	----	----	

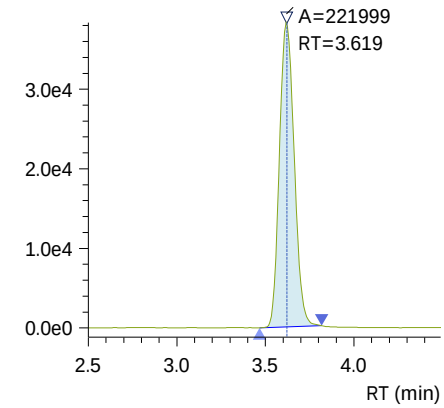
Perchlorate

Conc 20.5144
R#1 31.25 (32.02)

Q 99.00>83.00 (-) A=710430 RT=3.620 1.24e5



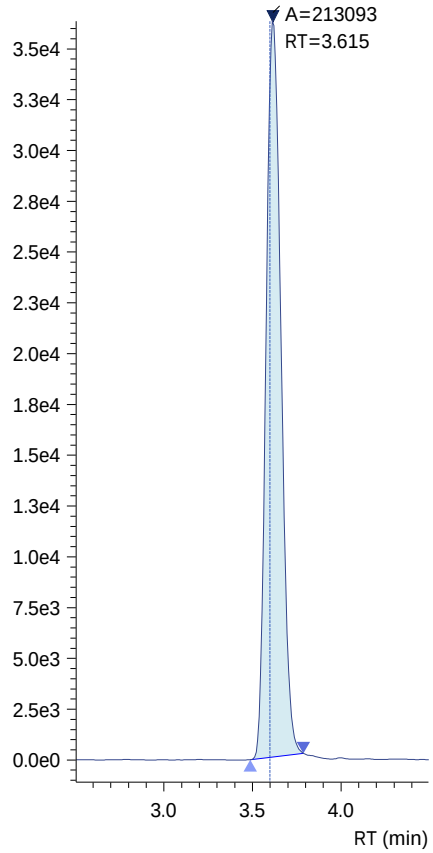
R1 101.00>85.00 (-) 3.84e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 3.64e4



Insight Report

Printed at 6/29/2023 2:17:05 PM

PERCHLORATE9

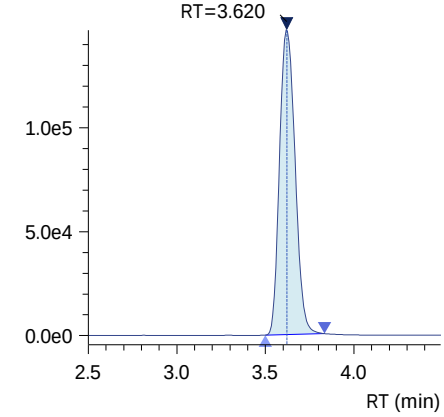
Sample ID: PERCHLORATE9
Date Acquired: 6/29/2023 1:43:53 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-009.lcd
Vial: 9 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.620	896468	185851	29.6808	ng/mL	101.00 >85.00	31.06	22.41-41.62
Sodium Perchlorate-18O4_IS	Auto	3.614	185851	185851	1.0000	ng/mL	----	----	

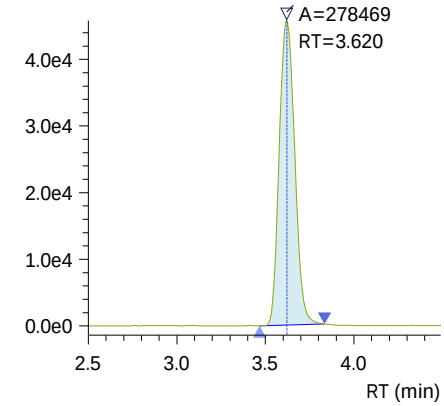
Perchlorate

Conc 29.6808
R#1 31.06 (32.02)

Q 99.00>83.00 (-) A=896468 1.47e5



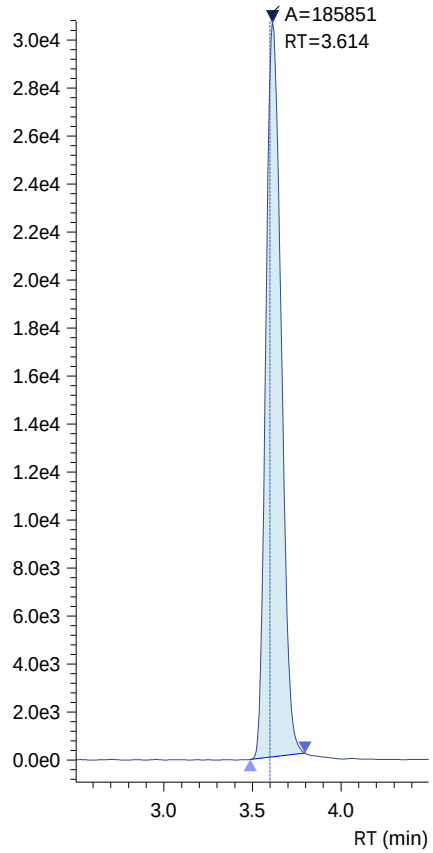
R1 101.00>85.00 (-) 4.58e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 3.08e4



Insight Report

Printed at 6/29/2023 2:17:05 PM

PERCHLORATE10

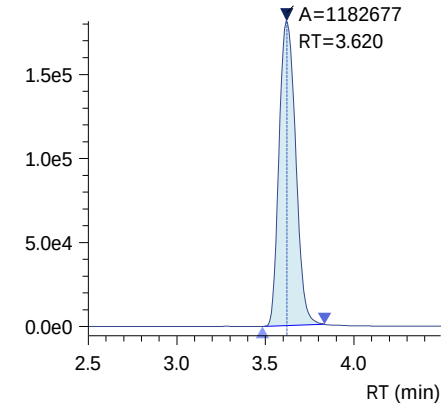
Sample ID: PERCHLORATE10
Date Acquired: 6/29/2023 1:49:27 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-010.lcd
Vial: 10 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.620	1182677	146135	49.79 86	ng/mL	101.00 >85.00	30.89	22.41-41.62
Sodium Perchlorate-18O4 _IS	Auto	3.614	146135	146135	1.0000	ng/mL	----	----	

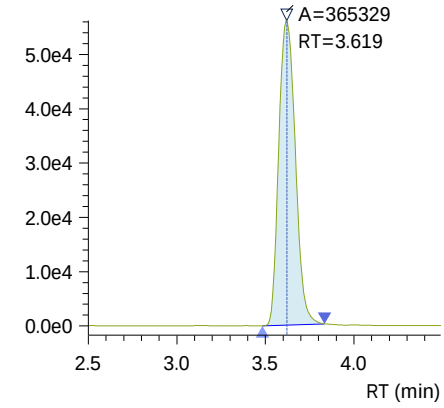
Perchlorate

Conc 49.7986
R#1 30.89 (32.02)

Q 99.00>83.00 (-) 1.82e5



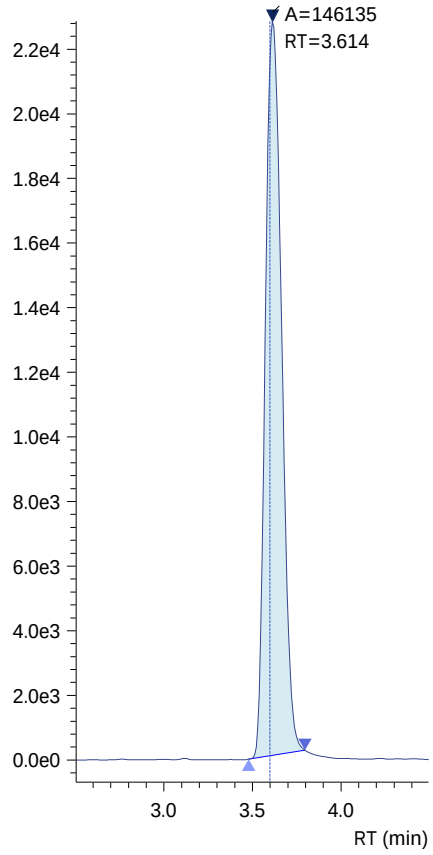
R1 101.00>85.00 (-) 5.62e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 2.29e4



Insight Report

Printed at 6/29/2023 2:17:05 PM

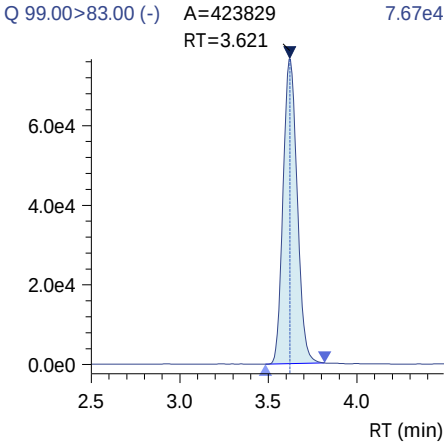
PERCHLORATEICV

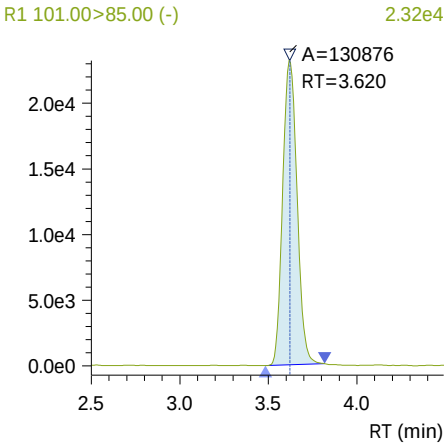
Sample ID: PERCHLORATEICV
Date Acquired: 6/29/2023 1:55:00 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230629\20230629-011.lcd
Vial: 11 | Inj. Volume: 10.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.621	423829	263091	9.9127	ng/mL	101.00 >85.00	30.88	22.41-41.62
Sodium Perchlorate-18O4 _IS	Auto	3.617	263091	263091	1.0000	ng/mL	----	----	

Perchlorate

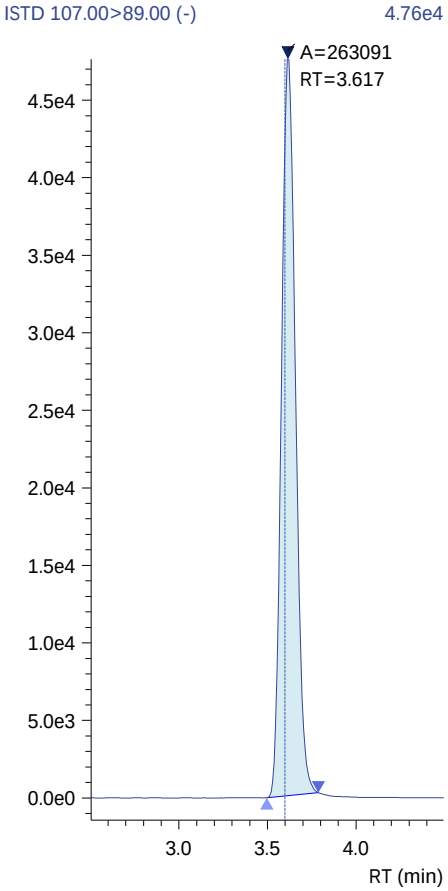
Conc 9.9127
R#1 30.88 (32.02)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Chromatograms and Selected Ion Monitoring

ALS Environmental - Houston HRMS
10450 Stancliff Rd., Suite 320, Houston TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

20230725-811716

Injection Log

LCMS01 -Shimadzu 8050

1st Review: XM
2nd Review: GC

ICAL Date: 6/29/2023
Cal. Std. xp: 07/31/2023
ICAL ID: EC2300011

Mobile Phases : A:20mM ammonium acetate in water 230388 **B:**Acetonitrile 229152

	Sample Name		File Name	Acquisition Method	Dilution	Comments	Date/Time
1	IB		20230725-001	Perchlorate6850c.lcm	1x		7/25/2023 9:25
2	LODV		20230725-002~1	Perchlorate6850c.lcm	1x	230386	7/25/2023 10:16
3	ICS		20230725-003	Perchlorate6850c.lcm	1x	32103024	7/25/2023 10:22
4	CCV		20230725-004	Perchlorate6850c.lcm	1x	227251	7/25/2023 10:28
5	EQ2300354-01		20230725-005	Perchlorate6850c.lcm	1x		7/25/2023 10:33
6	EQ2300354-02		20230725-006	Perchlorate6850c.lcm	1x		7/25/2023 10:39
7	EQ2300354-03		20230725-007	Perchlorate6850c.lcm	1x		7/25/2023 10:44
8	E2300657-001		20230725-008	Perchlorate6850c.lcm	10x		7/25/2023 10:50
9	E2300657-002		20230725-009	Perchlorate6850c.lcm	10x		7/25/2023 10:55
10	E2300657-003		20230725-010	Perchlorate6850c.lcm	1x		7/25/2023 11:01
11	E2300657-004		20230725-011	Perchlorate6850c.lcm	1x		7/25/2023 11:06
12	E2300657-005		20230725-012	Perchlorate6850c.lcm	1x		7/25/2023 11:12
13	E2300657-006		20230725-013	Perchlorate6850c.lcm	1x		7/25/2023 11:17
14	E2300657-007		20230725-014	Perchlorate6850c.lcm	1x		7/25/2023 11:23
15	CCV		20230725-015	Perchlorate6850c.lcm	1x	227251	7/25/2023 11:28
16	E2300657-008		20230725-016	Perchlorate6850c.lcm	1x		7/25/2023 11:34
17	E2300657-009		20230725-017	Perchlorate6850c.lcm	1x		7/25/2023 11:40
18	E2300657-010		20230725-018	Perchlorate6850c.lcm	1x		7/25/2023 11:45
19	E2300671-001		20230725-019	Perchlorate6850c.lcm	5x		7/25/2023 11:51
20	E2300671-002		20230725-020	Perchlorate6850c.lcm	1x		7/25/2023 11:56
21	E2300671-003		20230725-021	Perchlorate6850c.lcm	1x		7/25/2023 12:02
22	E2300671-004		20230725-022	Perchlorate6850c.lcm	5x		7/25/2023 12:07
23	E2300671-005		20230725-023	Perchlorate6850c.lcm	1x		7/25/2023 12:13
24	E2300671-006		20230725-024	Perchlorate6850c.lcm	5x		7/25/2023 12:18
25	E2300671-007		20230725-025	Perchlorate6850c.lcm	1x	DNU-RR	7/25/2023 12:24
26	CCV		20230725-026	Perchlorate6850c.lcm	1x	227251	7/25/2023 12:29
27	E2300671-008		20230725-027	Perchlorate6850c.lcm	5x		7/25/2023 12:35
28	E2300687-001		20230725-028	Perchlorate6850c.lcm	1x		7/25/2023 12:53
29	E2300687-002		20230725-029	Perchlorate6850c.lcm	1x		7/25/2023 12:58
30	EQ2300355-01		20230725-030	Perchlorate6850c.lcm	1x		7/25/2023 13:04
31	EQ2300355-02		20230725-031	Perchlorate6850c.lcm	1x		7/25/2023 13:10
32	EQ2300355-03		20230725-032	Perchlorate6850c.lcm	1x	DNU-IR	7/25/2023 13:15
33	E2300672-001		20230725-033	Perchlorate6850c.lcm	1x		7/25/2023 13:21
34	E2300672-002		20230725-034	Perchlorate6850c.lcm	1x		7/25/2023 13:26
35	E2300672-003		20230725-035	Perchlorate6850c.lcm	1x		7/25/2023 13:32
36	E2300673-001		20230725-036	Perchlorate6850c.lcm	1x		7/25/2023 13:37
37	CCV		20230725-037	Perchlorate6850c.lcm	1x	227251	7/25/2023 13:43

20230725-811716

Injection Log

LCMS01 -Shimadzu 8050

1st Review: XM
2nd Review: GC

ICAL Date: 6/29/2023
Cal. Std. xp: 07/31/2023
ICAL ID: EC2300011

Mobile Phases : A:20mM ammonium acetate in water 230388 **B:**Acetonitrile 229152

	Sample Name		File Name	Acquisition Method	Dilution	Comments	Date/Time
38	E2300673-002		20230725-038	Perchlorate6850c.lcm	1x		7/25/2023 13:48
39	E2300673-003		20230725-039	Perchlorate6850c.lcm	1x		7/25/2023 13:54
40	E2300673-004		20230725-040	Perchlorate6850c.lcm	1x		7/25/2023 13:59
41	E2300673-005		20230725-041	Perchlorate6850c.lcm	5x		7/25/2023 14:05
42	E2300673-006		20230725-042	Perchlorate6850c.lcm	1x		7/25/2023 14:11
43	E2300673-007		20230725-043	Perchlorate6850c.lcm	2000x		7/25/2023 14:16
44	E2300673-008		20230725-044	Perchlorate6850c.lcm	2000x		7/25/2023 14:22
45	E2300674-001		20230725-045	Perchlorate6850c.lcm	1x		7/25/2023 14:27
46	E2300674-002		20230725-046	Perchlorate6850c.lcm	1x		7/25/2023 14:33
47	E2300674-003		20230725-047	Perchlorate6850c.lcm	1x		7/25/2023 14:38
48	CCV		20230725-048	Perchlorate6850c.lcm	1x	227251	7/25/2023 14:44
49	E2300674-004		20230725-049	Perchlorate6850c.lcm	1x		7/25/2023 14:49
50	E2300674-005		20230725-050	Perchlorate6850c.lcm	1x		7/25/2023 14:55
51	E2300674-006		20230725-051	Perchlorate6850c.lcm	1x		7/25/2023 15:00
52	E2300674-007		20230725-052	Perchlorate6850c.lcm	1x		7/25/2023 15:06
53	E2300674-008		20230725-053	Perchlorate6850c.lcm	1x		7/25/2023 15:12
54	E2300674-009		20230725-054	Perchlorate6850c.lcm	1x		7/25/2023 15:17
55	EQ2300355-03		20230725-055	Perchlorate6850c.lcm	1x		7/25/2023 15:23
56	E2300671-007		20230725-056	Perchlorate6850c.lcm	1x		7/25/2023 15:38
57	CCV		20230725-057	Perchlorate6850c.lcm	1x	227251	7/25/2023 15:43

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2300674
Project:	HS23071113	**Date Analyzed:**	7/25/23 10:28

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20230725\20230725-004	**Lab Code:**	EQ2300360-01
Instrument ID:	E-LCMS-01	**Analysis Lot:**	811716
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	263,382	3.62
	Upper Limit ==>	395,073	5.62
	Lower Limit ==>	131,691	1.62
Associated Analyses			
Continuing Calibration Verification	EQ2300360-01	239,575	3.57

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

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2300674
Project:	HS23071113	**Date Analyzed:**	7/25/23 11:28

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20230725\20230725-015	**Lab Code:**	EQ2300360-02
Instrument ID:	E-LCMS-01	**Analysis Lot:**	811716
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	263,382	3.62
	Upper Limit ==>	395,073	5.62
	Lower Limit ==>	131,691	1.62
Associated Analyses			
Continuing Calibration Verification	EQ2300360-02	243,256	3.57

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

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2300674
Project:	HS23071113	**Date Analyzed:**	7/25/23 12:29

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20230725\20230725-026	**Lab Code:**	EQ2300360-03
Instrument ID:	E-LCMS-01	**Analysis Lot:**	811716
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	263,382	3.62
	Upper Limit ==>	395,073	5.62
	Lower Limit ==>	131,691	1.62
Associated Analyses			
Continuing Calibration Verification	EQ2300360-03	238,049	3.57
Method Blank	EQ2300355-01	325,002	3.57
Lab Control Sample	EQ2300355-02	337,829	3.57

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

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2300674
Project:	HS23071113	**Date Analyzed:**	7/25/23 13:43

Internal Standard Area and RT Summary

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

File ID:	I:\LCMS01\DATA\20230725\20230725-037	**Lab Code:**	EQ2300360-04
Instrument ID:	E-LCMS-01	**Analysis Lot:**	811716
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	263,382	3.62
	Upper Limit ==>	395,073	5.62
	Lower Limit ==>	131,691	1.62
Associated Analyses			
Continuing Calibration Verification	EQ2300360-04	234,296	3.57
hs23071113-01	E2300674-001	334,021	3.57
HS23071113-02	E2300674-002	333,789	3.57
HS23071113-03	E2300674-003	312,941	3.57

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

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23071113

Service Request: E2300674
Date Analyzed: 7/25/23 14:44

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

File ID: I:\LCMS01\DATA\20230725\20230725-048
Instrument ID: E-LCMS-01
Analytical Method: 6850

Lab Code: EQ2300360-05
Analysis Lot: 811716
Signal ID: 1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	263,382	3.62
	Upper Limit ==>	395,073	5.62
	Lower Limit ==>	131,691	1.62
Associated Analyses			
Continuing Calibration Verification	EQ2300360-05	236,851	3.57
HS23071113-04	E2300674-004	310,834	3.57
HS23071113-05	E2300674-005	321,085	3.57
HS23071113-06	E2300674-006	317,563	3.57
HS23071113-07	E2300674-007	323,118	3.57
HS23071113-08	E2300674-008	297,847	3.57
HS23071113-09	E2300674-009	329,121	3.57
Duplicate Lab Control Sample	EQ2300355-03	305,282	3.57

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

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23071113

Service Request: E2300674
Date Analyzed: 7/25/23 15:43

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

File ID: I:\LCMS01\DATA\20230725\20230725-057
Instrument ID: E-LCMS-01
Analytical Method: 6850

Lab Code: EQ2300360-06
Analysis Lot: 811716
Signal ID: 1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	263,382	3.62
	Upper Limit ==>	395,073	5.62
	Lower Limit ==>	131,691	1.62
Associated Analyses			
Continuing Calibration Verification	EQ2300360-06	225,280	3.57

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

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23071113

Service Request: E2300674
Date Analyzed: 7/25/23

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20230725\20230725-004

Calibration Date: 6/29/23
Calibration ID: EC2300011
Analysis Lot: 811716
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.0	0.1625	0.1627	0.1	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23071113

Service Request: E2300674
Date Analyzed: 7/25/23

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20230725\20230725-015

Calibration Date: 6/29/23
Calibration ID: EC2300011
Analysis Lot: 811716
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.1	0.1625	0.1646	1.3	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23071113

Service Request: E2300674
Date Analyzed: 7/25/23

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20230725\20230725-026

Calibration Date: 6/29/23
Calibration ID: EC2300011
Analysis Lot: 811716
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.1	0.1625	0.1634	0.5	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23071113

Service Request: E2300674
Date Analyzed: 7/25/23

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20230725\20230725-037

Calibration Date: 6/29/23
Calibration ID: EC2300011
Analysis Lot: 811716
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.1	0.1625	0.1642	1.1	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23071113

Service Request: E2300674
Date Analyzed: 7/25/23

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20230725\20230725-048

Calibration Date: 6/29/23
Calibration ID: EC2300011
Analysis Lot: 811716
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.93	0.1625	0.1613	-0.7	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS23071113

Service Request: E2300674
Date Analyzed: 7/25/23

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20230725\20230725-057

Calibration Date: 6/29/23
Calibration ID: EC2300011
Analysis Lot: 811716
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.1	0.1625	0.1639	0.9	NA	± 15 %	Average RF

Insight Report

Printed at 7/25/2023 4:00:31 PM

Method File: I:\LCMS01\DATA\20230725\20230725.lcm
Project File: I:\LCMS01\DATA\20230725\20230725.damlp

IB

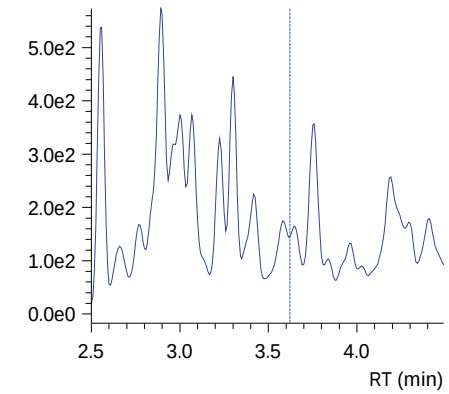
Sample ID: IB
Date Acquired: 7/25/2023 9:25:10 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-001.lcd
Vial: 4 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	382468	----	ng/mL	101.00 >85.00	0.00	19.68-36.55
Sodium Perchlorate-18O4_IS	Auto	3.580	382468	382468	1.0000	ng/mL	----	----	

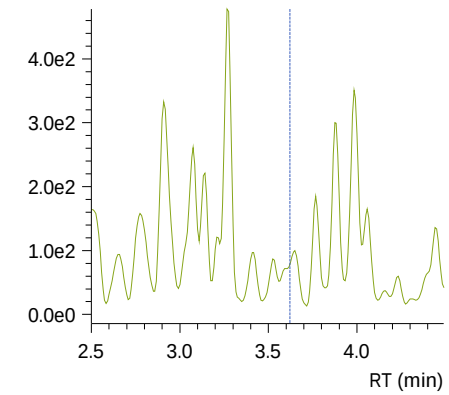
Perchlorate

Conc ----
R#1 0.00 (28.11)

Q 99.00>83.00 (-) 5.73e2



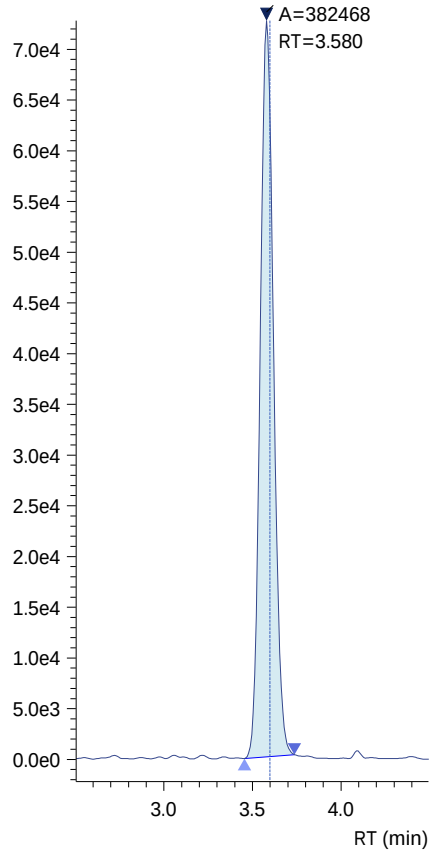
R1 101.00>85.00 (-) 4.78e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 7.28e4



Insight Report

Printed at 7/25/2023 4:00:31 PM

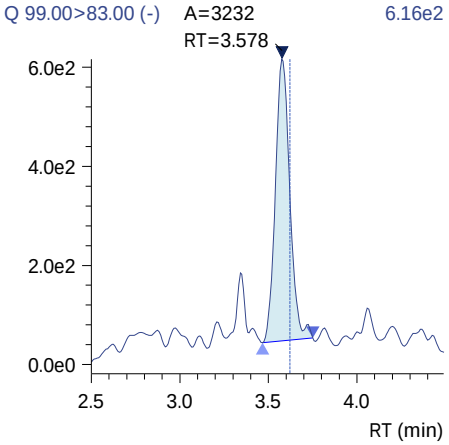
LODV

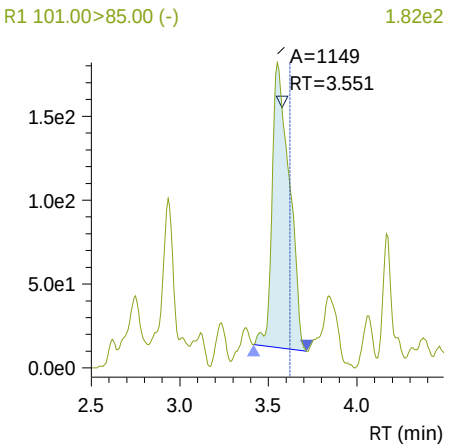
Sample ID: LODV
Date Acquired: 7/25/2023 10:16:49 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-002~1.lcd
Vial: 1 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.578	3232	357182	0.0557	ng/mL	101.00 >85.00	35.56	19.68-36.55
Sodium Perchlorate-18O4 _IS	Auto	3.571	357182	357182	1.0000	ng/mL	----	----	

Perchlorate

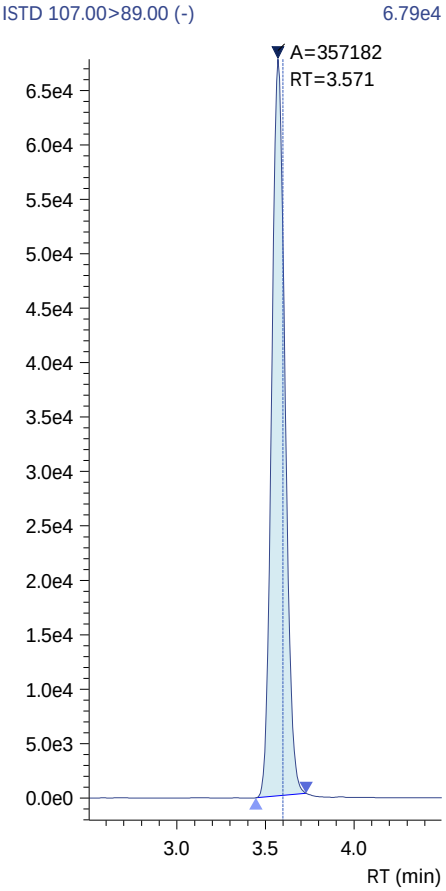
Conc 0.0557
R#1 35.56 (28.11)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/25/2023 4:00:31 PM

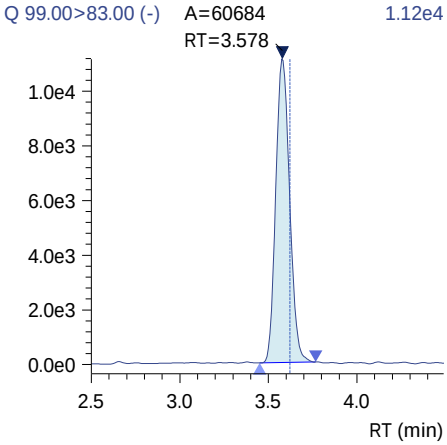
ICS

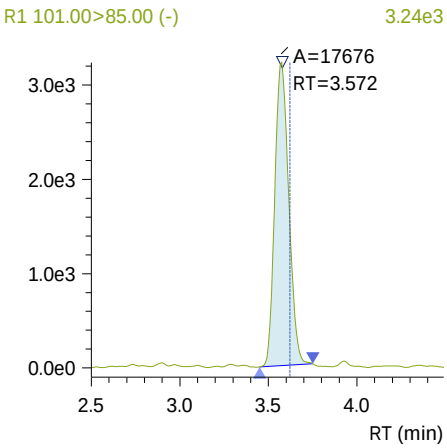
Sample ID: ICS
Date Acquired: 7/25/2023 10:22:35 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-003.lcd
Vial: 2 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.578	60684	373050	1.0010	ng/mL	101.00 >85.00	29.13	19.68-36.55
Sodium Perchlorate-18O4 _IS	Auto	3.574	373050	373050	1.0000	ng/mL	----	----	

Perchlorate

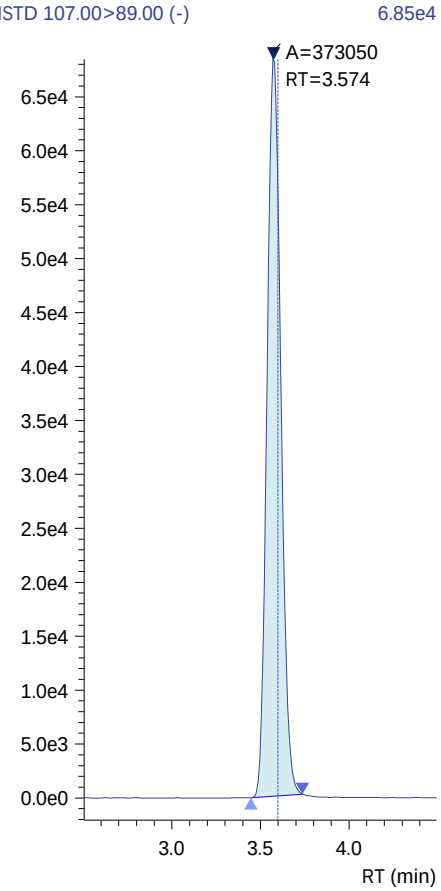
Conc 1.0010
R#1 29.13 (28.11)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

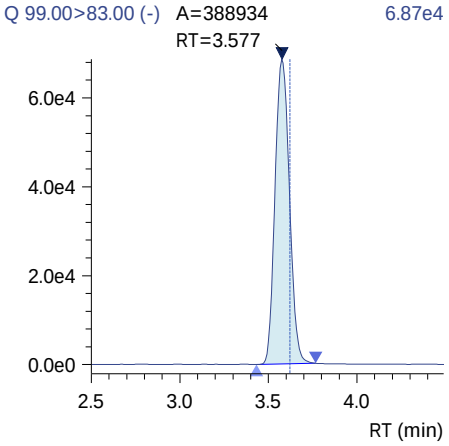
CCV

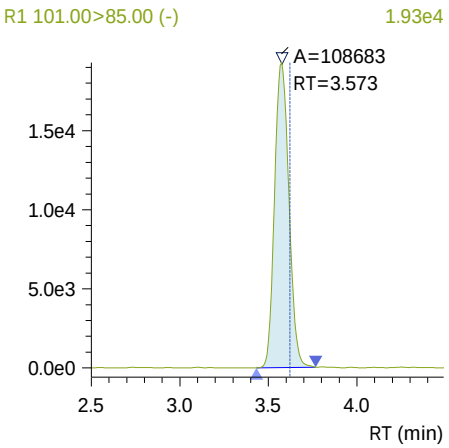
Sample ID: CCV
Date Acquired: 7/25/2023 12:29:50 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-026.lcd
Vial: 3 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.577	388934	238049	10.05 34	ng/mL	101.00 >85.00	27.94	19.68-36.55
Sodium Perchlorate-18O4_IS	Auto	3.571	238049	238049	1.0000	ng/mL	----	----	

Perchlorate

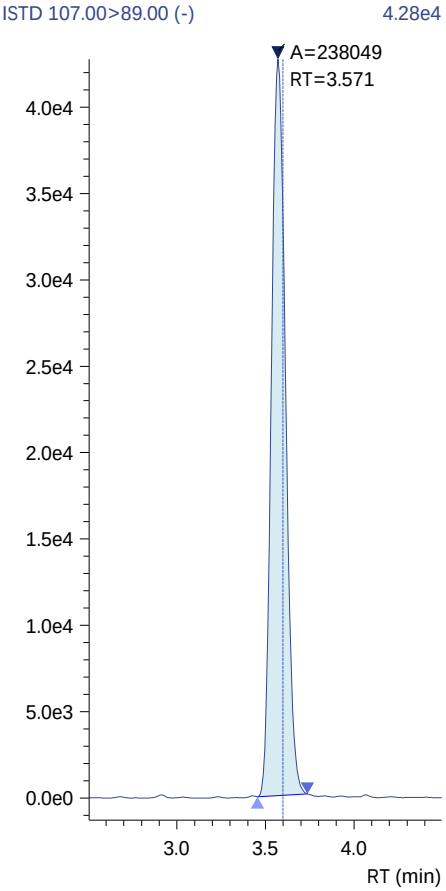
Conc 10.0534
R#1 27.94 (28.11)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/25/2023 4:00:31 PM

EQ2300355-01

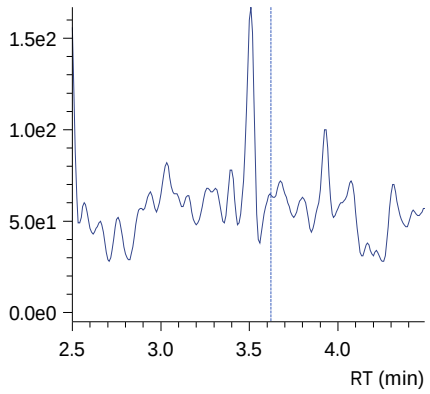
Sample ID: EQ2300355-01
Date Acquired: 7/25/2023 1:04:30 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-030.lcd
Vial: 30 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	325002	----	ng/mL	101.00 >85.00	0.00	19.68-36.55
Sodium Perchlorate-18O4_IS	Auto	3.572	325002	325002	1.0000	ng/mL	----	----	

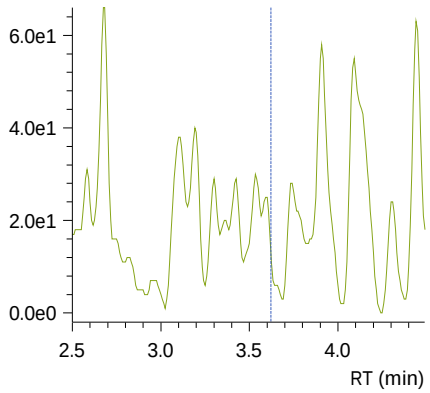
Perchlorate

Conc ----
R#1 0.00 (28.11)

Q 99.00>83.00 (-) 1.67e2



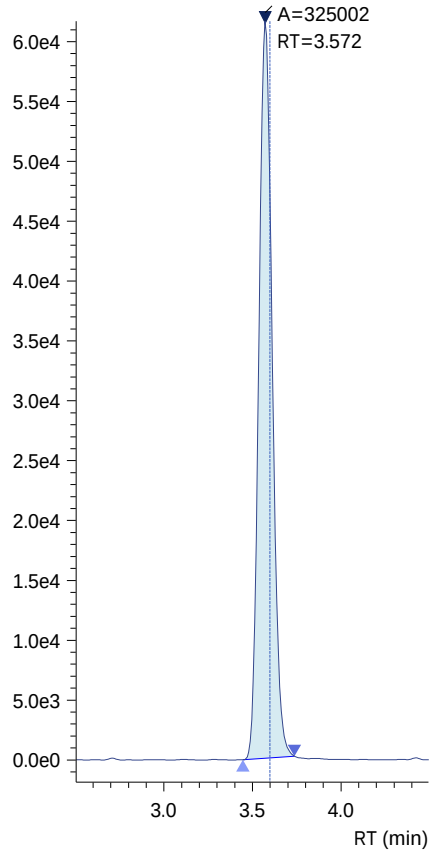
R1 101.00>85.00 (-) 6.60e1



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 6.17e4



Insight Report

Printed at 7/25/2023 4:00:31 PM

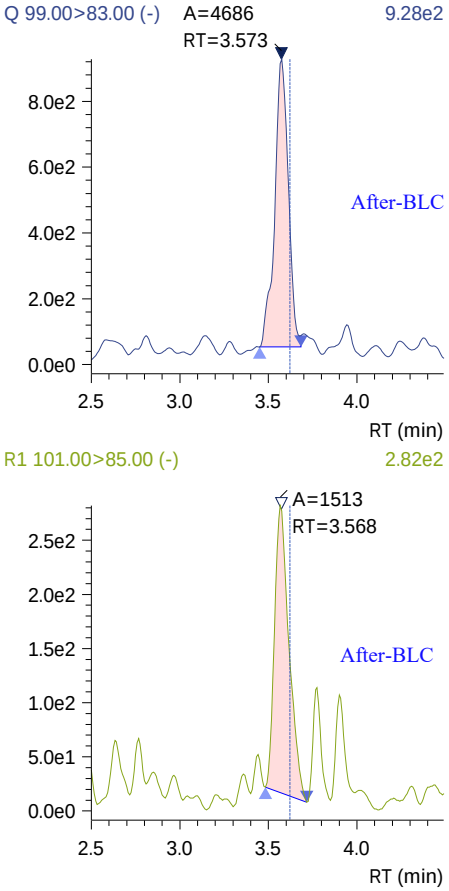
EQ2300355-02

Sample ID: EQ2300355-02
Date Acquired: 7/25/2023 1:10:04 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-031.lcd
Vial: 31 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	M	3.573	4686	337829	0.0853	ng/mL	101.00 >85.00	32.28	19.68-36.55
Sodium Perchlorate-18O4 _IS	Auto	3.572	337829	337829	1.0000	ng/mL	----	----	

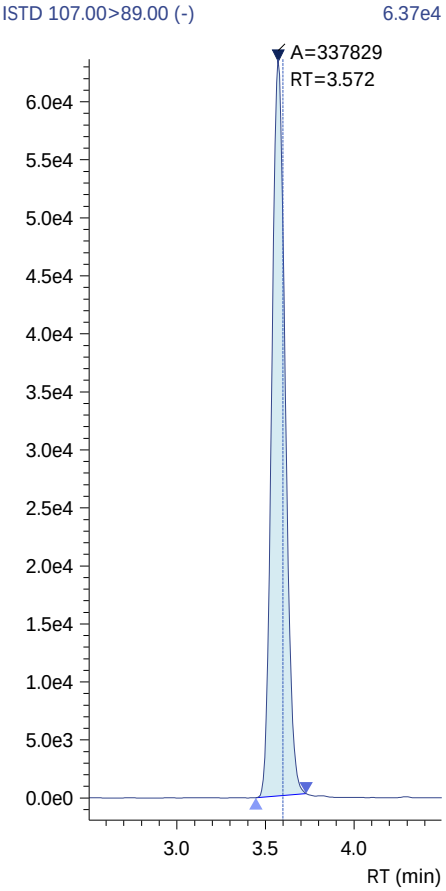
Perchlorate

Conc 0.0853
R#1 32.28 (28.11)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/25/2023 4:01:26 PM

Method File: I:\LCMS01\DATA\20230725\20230725.lcm
Project File: I:\LCMS01\DATA\20230725\20230725.damlp

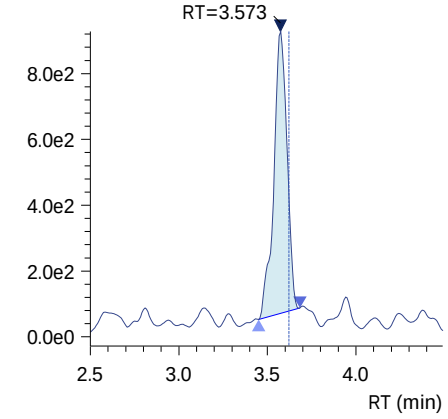
EQ2300355-02

Sample ID: EQ2300355-02
Date Acquired: 7/25/2023 1:10:04 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-031.lcd
Vial: 31 | Inj. Volume: 10.0000uL | Tray: 3

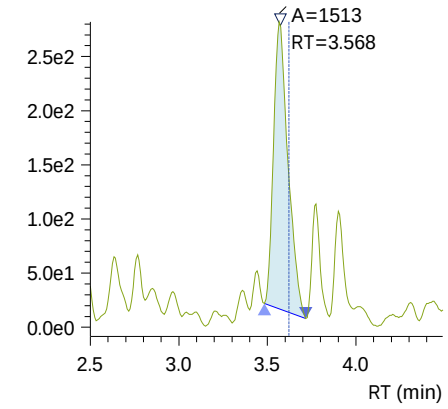
Perchlorate

Conc 0.0811
R#1 33.95 (28.11)

Q 99.00>83.00 (-) A=4455 9.28e2



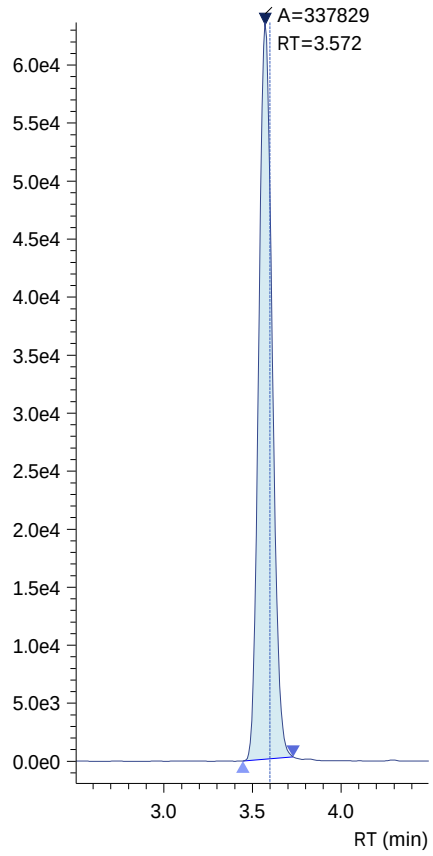
R1 101.00>85.00 (-) 2.82e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 6.37e4



Insight Report

Printed at 7/25/2023 4:00:31 PM

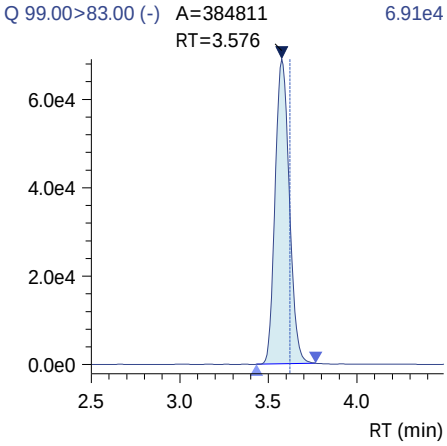
CCV

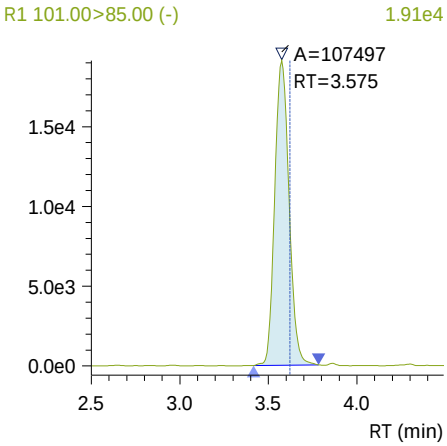
Sample ID: CCV
Date Acquired: 7/25/2023 1:43:19 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-037.lcd
Vial: 3 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.576	384811	234296	10.10 62	ng/mL	101.00 >85.00	27.94	19.68-36.55
Sodium Perchlorate-18O4 _IS	Auto	3.572	234296	234296	1.0000	ng/mL	----	----	

Perchlorate

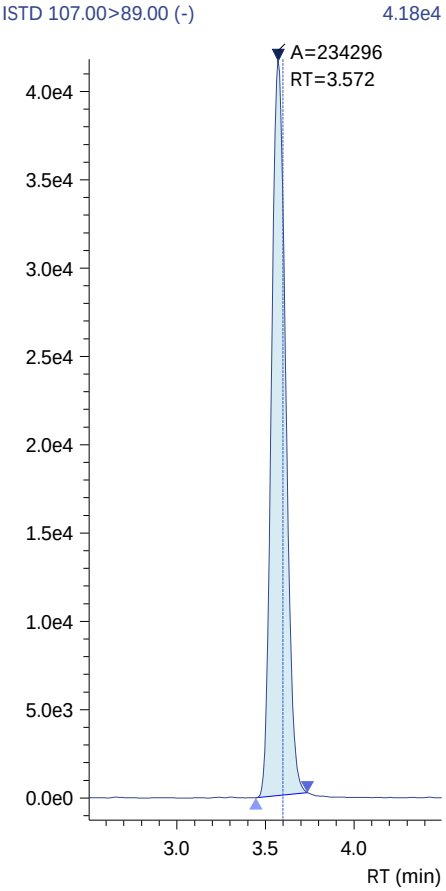
Conc 10.1062
R#1 27.94 (28.11)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/25/2023 4:00:31 PM

E2300674-001

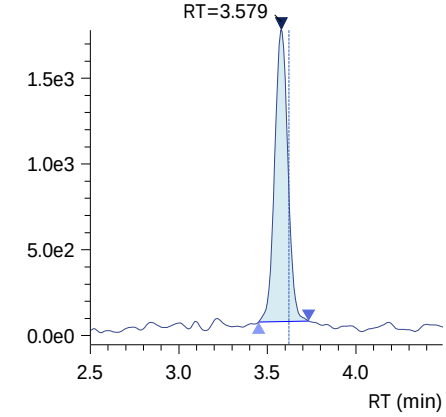
Sample ID: E2300674-001
Date Acquired: 7/25/2023 2:27:38 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-045.lcd
Vial: 20 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.579	8856	334021	0.1631	ng/mL	101.00 >85.00	29.50	19.68-36.55
Sodium Perchlorate-18O4 _IS	Auto	3.571	334021	334021	1.0000	ng/mL	----	----	

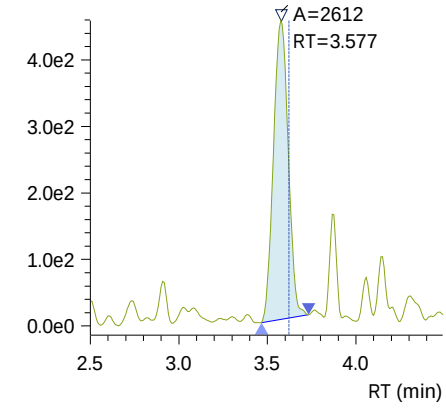
Perchlorate

Conc 0.1631
R#1 29.50 (28.11)

Q 99.00>83.00 (-) A=8856 1.78e3



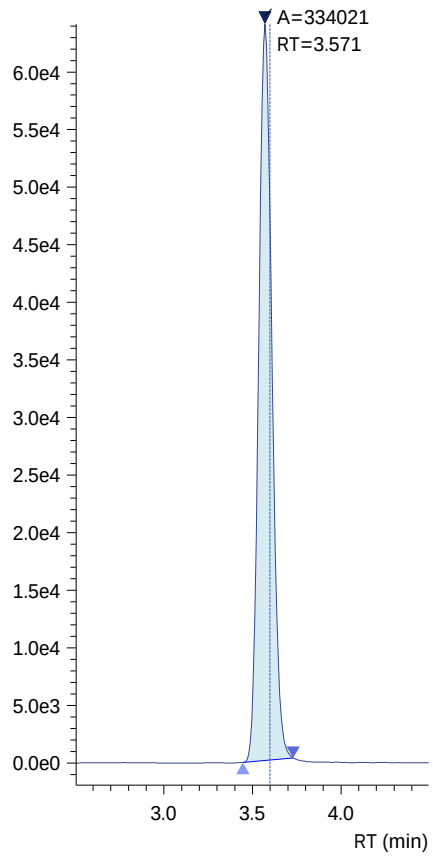
R1 101.00>85.00 (-) 4.59e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 6.42e4



Insight Report

Printed at 7/25/2023 4:00:31 PM

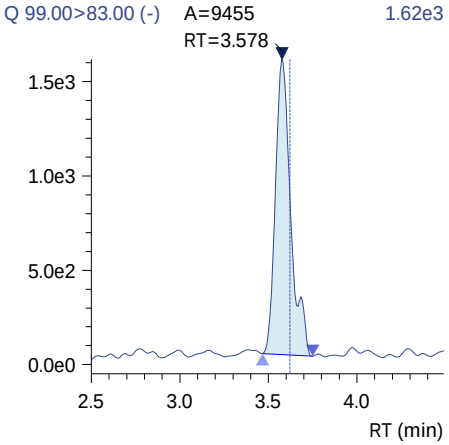
E2300674-002

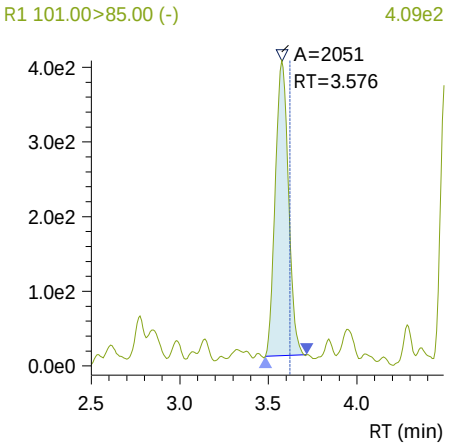
Sample ID: E2300674-002
Date Acquired: 7/25/2023 2:33:10 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-046.lcd
Vial: 21 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.578	9455	333789	0.1743	ng/mL	101.00 >85.00	21.69	19.68-36.55
Sodium Perchlorate-18O4 _IS	Auto	3.572	333789	333789	1.0000	ng/mL	----	----	

Perchlorate

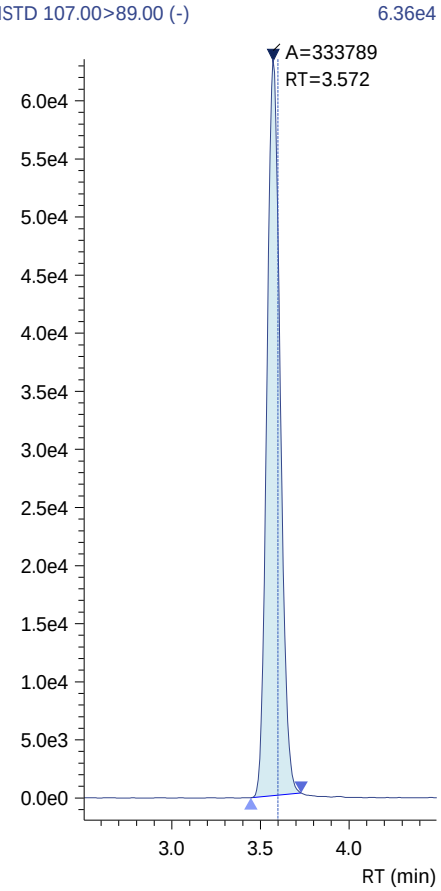
Conc 0.1743
R#1 21.69 (28.11)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/25/2023 4:00:31 PM

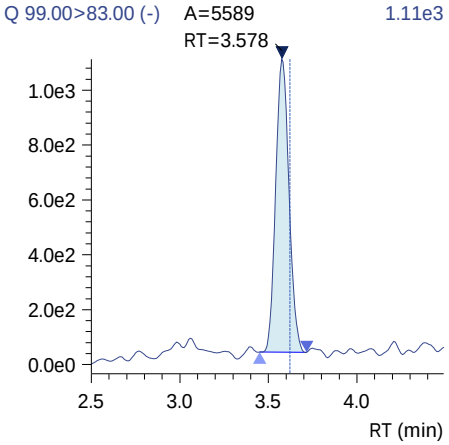
E2300674-003

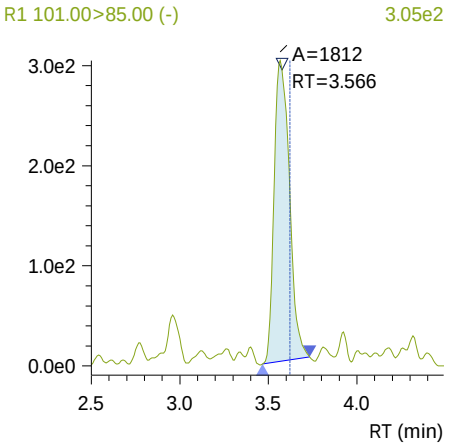
Sample ID: E2300674-003
Date Acquired: 7/25/2023 2:38:44 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-047.lcd
Vial: 22 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.578	5589	312941	0.1099	ng/mL	101.00 >85.00	32.43	19.68-36.55
Sodium Perchlorate-18O4 _IS	Auto	3.573	312941	312941	1.0000	ng/mL	----	----	

Perchlorate

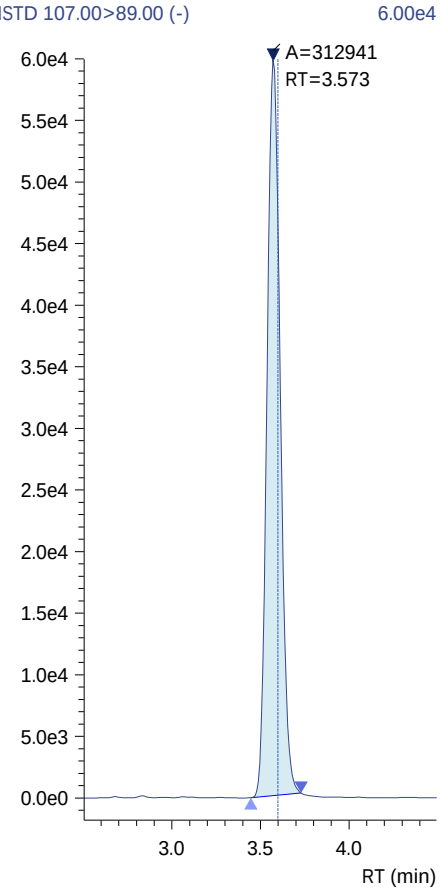
Conc 0.1099
R#1 32.43 (28.11)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/25/2023 4:00:31 PM

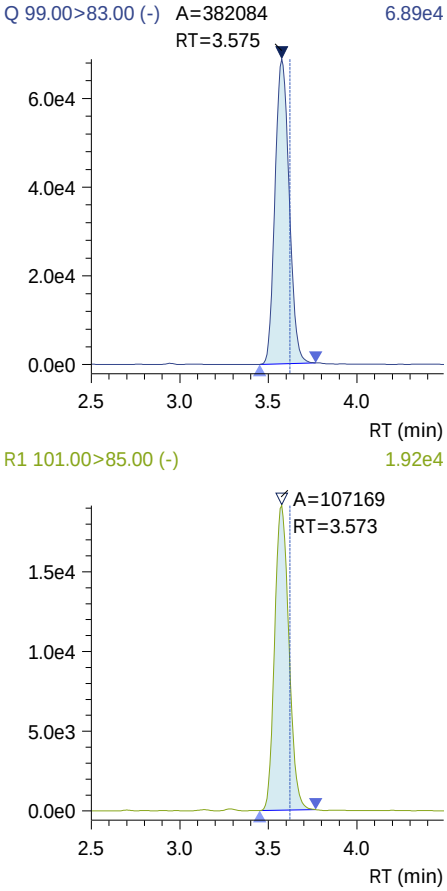
CCV

Sample ID: CCV
Date Acquired: 7/25/2023 2:44:15 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-048.lcd
Vial: 3 | 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	3.575	382084	236851	9.9263	ng/mL	101.00 >85.00	28.05	19.68-36.55
Sodium Perchlorate-18O4 _IS	Auto	3.571	236851	236851	1.0000	ng/mL	----	----	

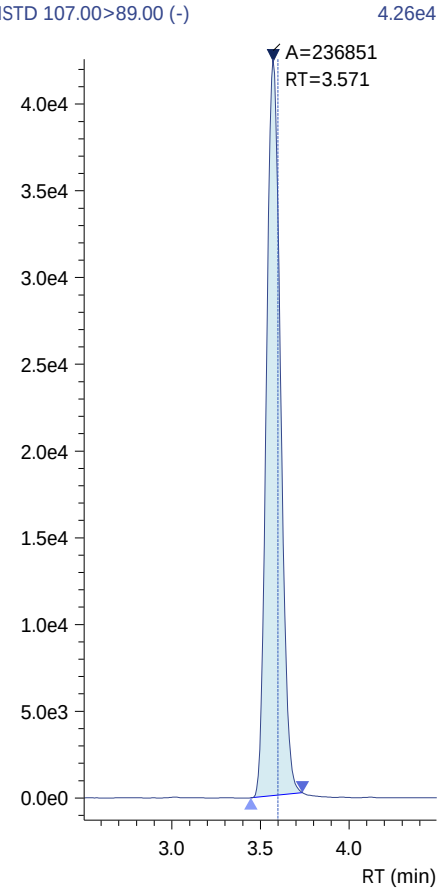
Perchlorate

Conc 9.9263
R#1 28.05 (28.11)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/25/2023 4:00:31 PM

E2300674-004

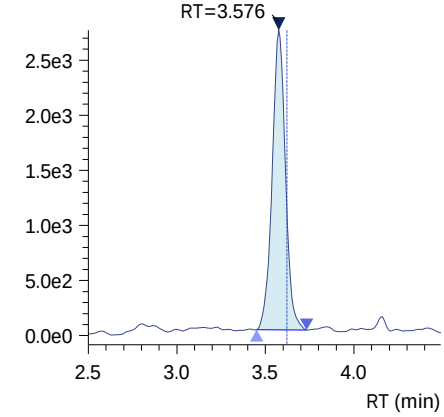
Sample ID: E2300674-004
Date Acquired: 7/25/2023 2:49:47 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-049.lcd
Vial: 23 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.576	14200	310834	0.2811	ng/mL	101.00 >85.00	27.83	19.68-36.55
Sodium Perchlorate-18O4 _IS	Auto	3.572	310834	310834	1.0000	ng/mL	----	----	

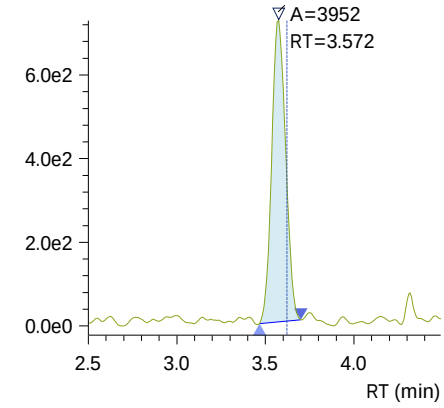
Perchlorate

Conc 0.2811
R#1 27.83 (28.11)

Q 99.00>83.00 (-) A=14200 2.77e3



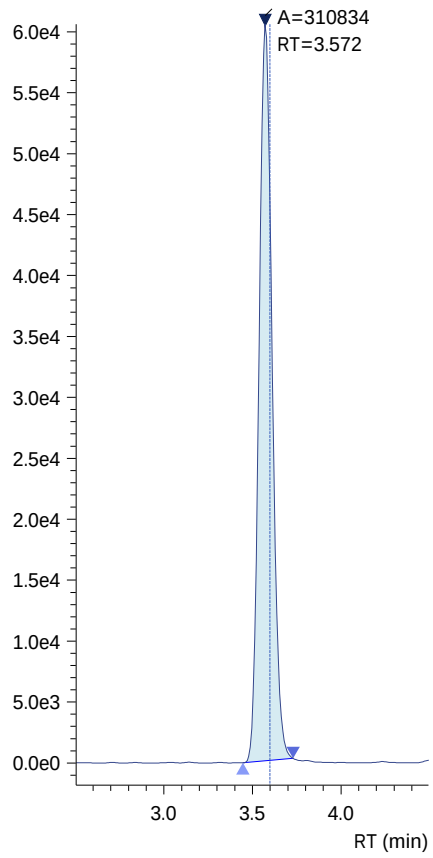
R1 101.00>85.00 (-) 7.30e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 6.06e4



Insight Report

Printed at 7/25/2023 4:00:31 PM

E2300674-005

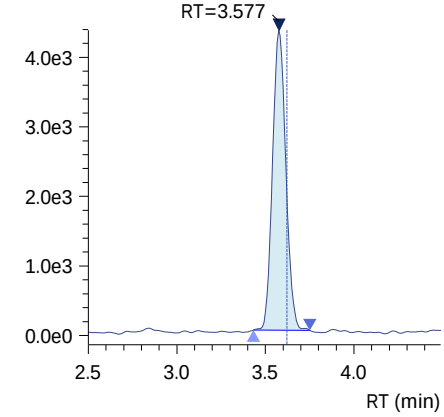
Sample ID: E2300674-005
Date Acquired: 7/25/2023 2:55:21 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-050.lcd
Vial: 24 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.577	22545	321085	0.4320	ng/mL	101.00 >85.00	28.35	19.68-36.55
Sodium Perchlorate-18O4 _IS	Auto	3.572	321085	321085	1.0000	ng/mL	----	----	

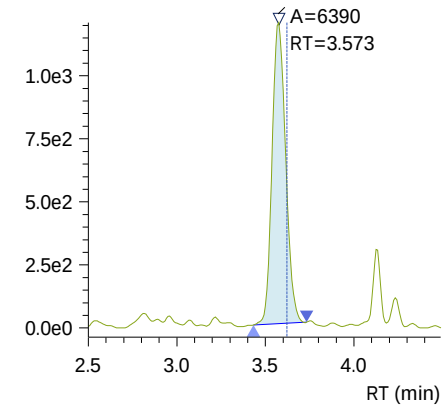
Perchlorate

Conc 0.4320
R#1 28.35 (28.11)

Q 99.00>83.00 (-) A=22545 4.39e3



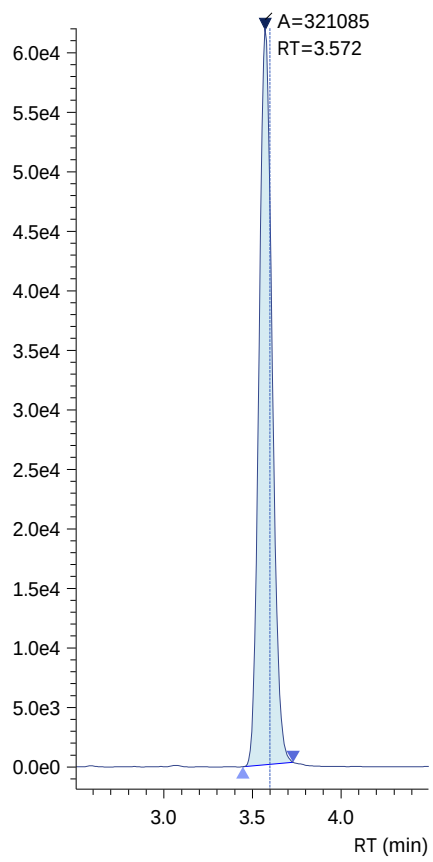
R1 101.00>85.00 (-) 1.21e3



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 6.21e4



Insight Report

Printed at 7/25/2023 4:00:31 PM

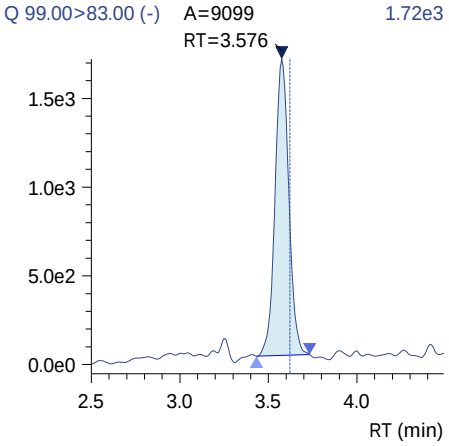
E2300674-006

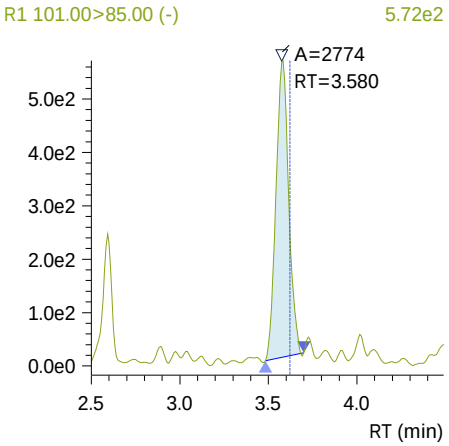
Sample ID: E2300674-006
Date Acquired: 7/25/2023 3:00:53 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-051.lcd
Vial: 25 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.576	9099	317563	0.1763	ng/mL	101.00 >85.00	30.49	19.68-36.55
Sodium Perchlorate-18O4 _IS	Auto	3.572	317563	317563	1.0000	ng/mL	----	----	

Perchlorate

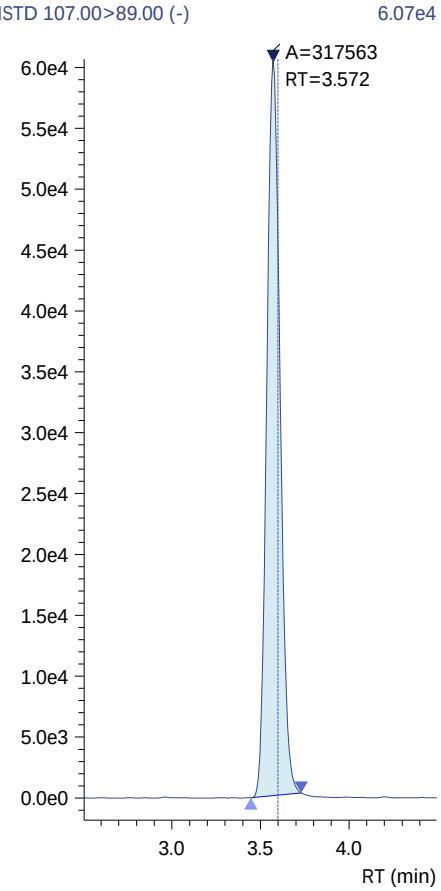
Conc 0.1763
R#1 30.49 (28.11)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/25/2023 4:00:31 PM

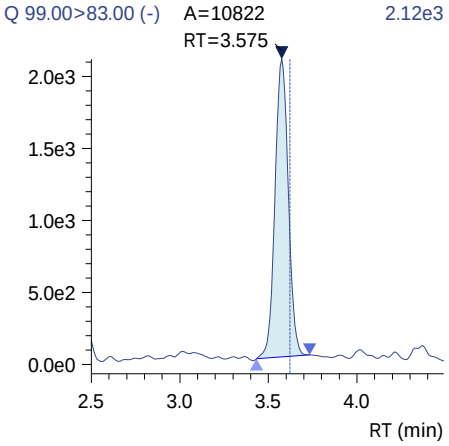
E2300674-007

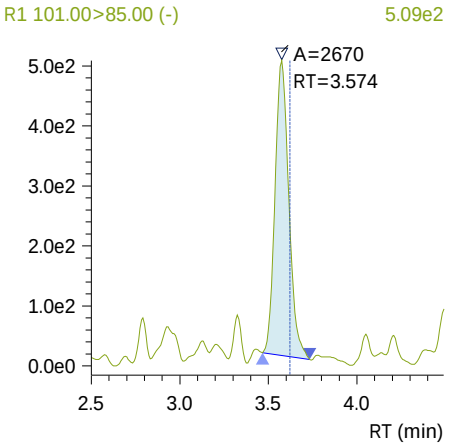
Sample ID: E2300674-007
Date Acquired: 7/25/2023 3:06:26 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-052.lcd
Vial: 26 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.575	10822	323118	0.2061	ng/mL	101.00 >85.00	24.67	19.68-36.55
Sodium Perchlorate-18O4 _IS	Auto	3.572	323118	323118	1.0000	ng/mL	----	----	

Perchlorate

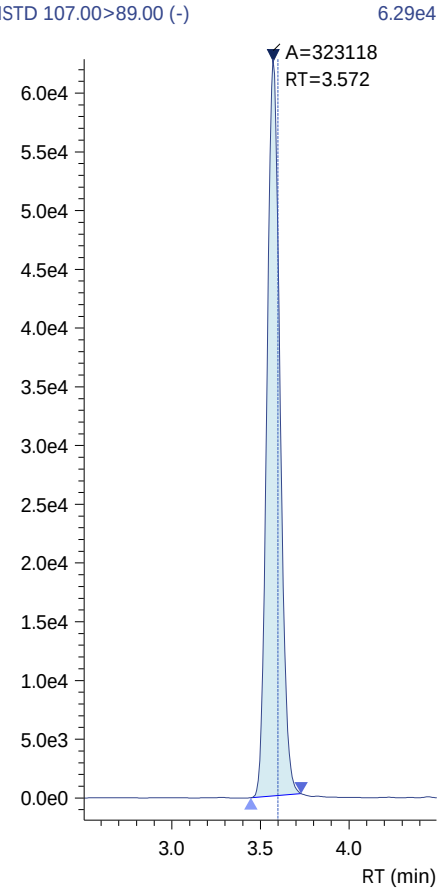
Conc 0.2061
R#1 24.67 (28.11)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/25/2023 4:00:31 PM

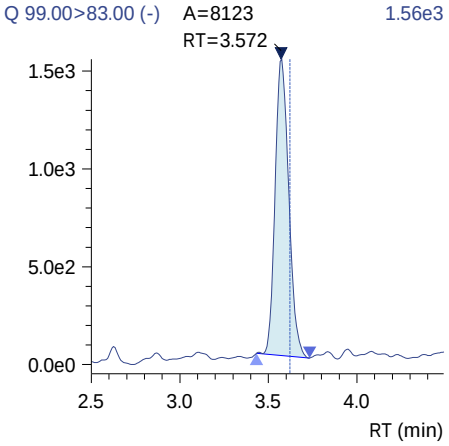
E2300674-008

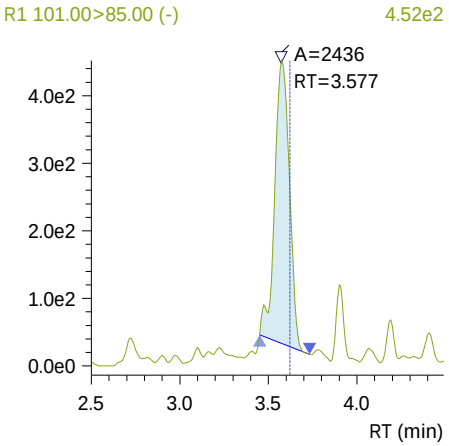
Sample ID: E2300674-008
Date Acquired: 7/25/2023 3:12:00 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-053.lcd
Vial: 27 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.572	8123	297847	0.1678	ng/mL	101.00 >85.00	29.99	19.68-36.55
Sodium Perchlorate-18O4 _IS	Auto	3.573	297847	297847	1.0000	ng/mL	----	----	

Perchlorate

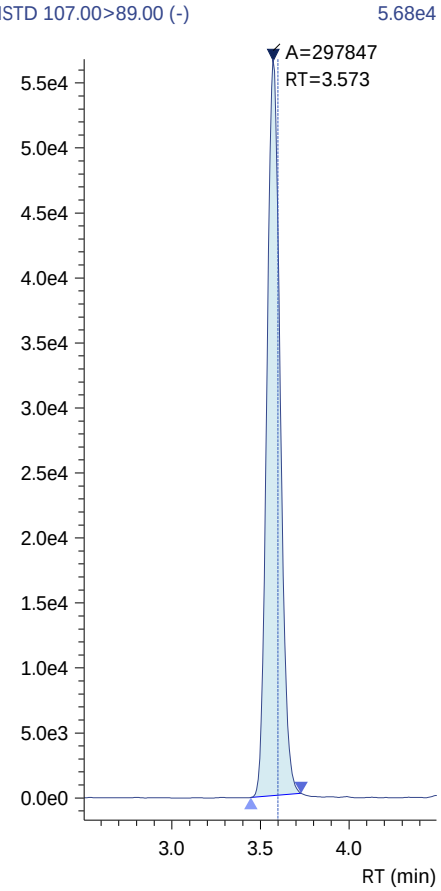
Conc 0.1678
R#1 29.99 (28.11)





Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/25/2023 4:00:31 PM

E2300674-009

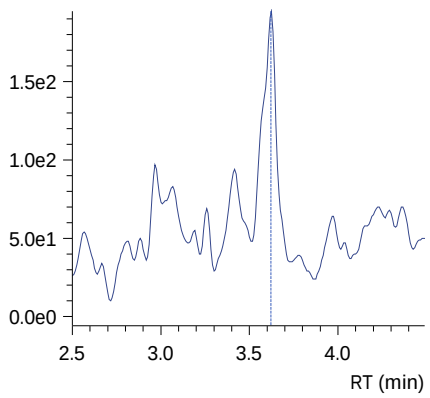
Sample ID: E2300674-009
Date Acquired: 7/25/2023 3:17:33 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-054.lcd
Vial: 28 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	329121	----	ng/mL	101.00 >85.00	0.00	19.68-36.55
Sodium Perchlorate-18O4_IS	Auto	3.572	329121	329121	1.0000	ng/mL	----	----	

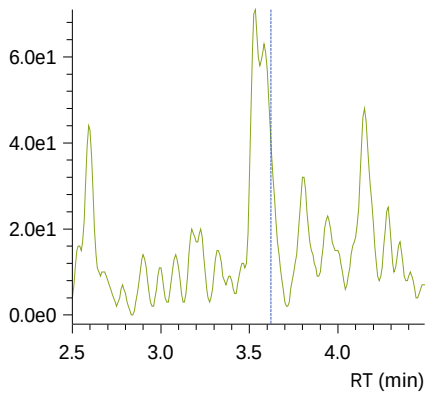
Perchlorate

Conc ----
R#1 0.00 (28.11)

Q 99.00>83.00 (-) 1.95e2



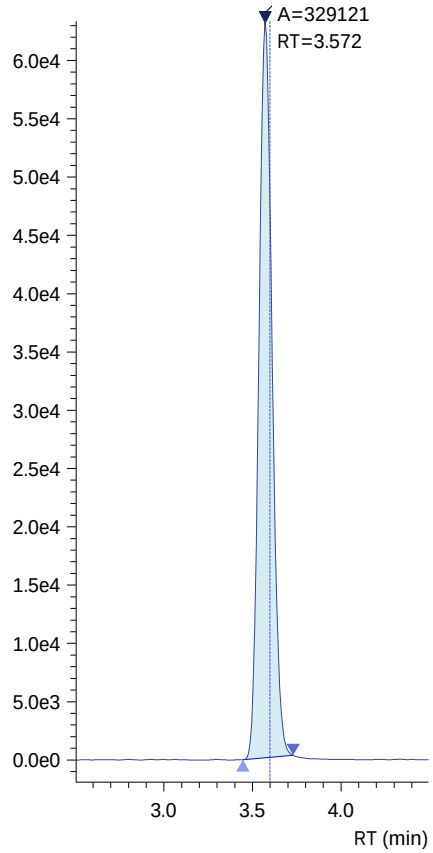
R1 101.00>85.00 (-) 7.10e1



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 6.34e4



Insight Report

Printed at 7/25/2023 4:00:31 PM

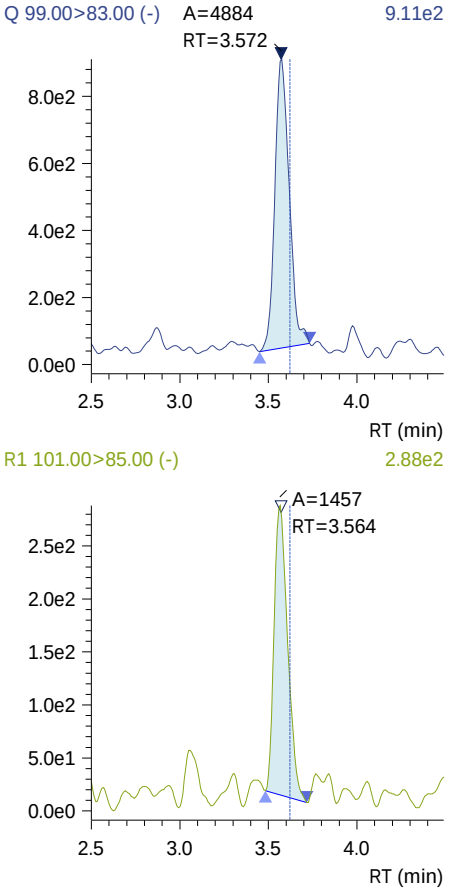
EQ2300355-03

Sample ID: EQ2300355-03
Date Acquired: 7/25/2023 3:23:05 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-055.lcd
Vial: 32 | Inj. Volume: 10.0000uL | Tray: 3

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.572	4884	305282	0.0984	ng/mL	101.00 >85.00	29.83	19.68-36.55
Sodium Perchlorate-18O4 _IS	Auto	3.571	305282	305282	1.0000	ng/mL	----	----	

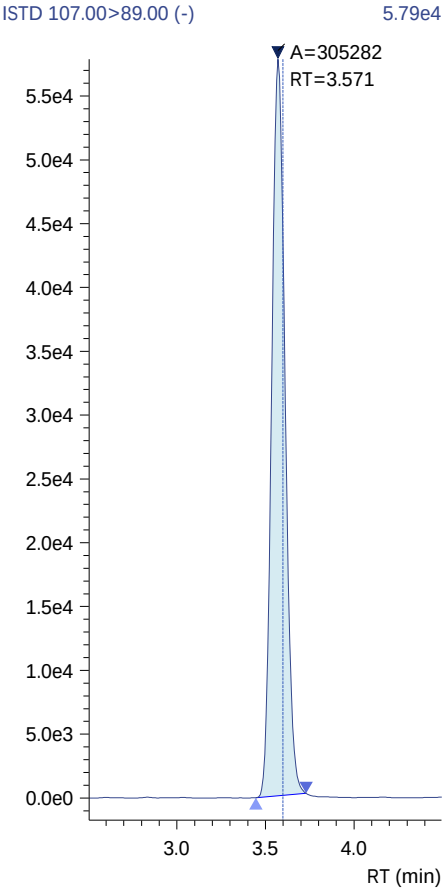
Perchlorate

Conc 0.0984
R#1 29.83 (28.11)



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/25/2023 4:00:31 PM

CCV

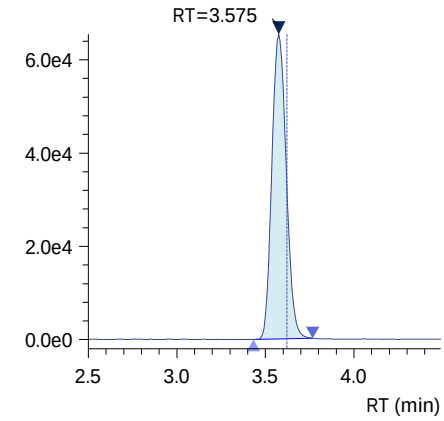
Sample ID: CCV
Date Acquired: 7/25/2023 3:43:37 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20230725\20230725-057.lcd
Vial: 3 | Inj. Volume: 10.0000uL | Tray: 0

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 m/z	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	3.575	369305	225280	10.08 71	ng/mL	101.00 >85.00	28.14	19.68-36.55
Sodium Perchlorate-18O4 _IS	Auto	3.571	225280	225280	1.0000	ng/mL	----	----	

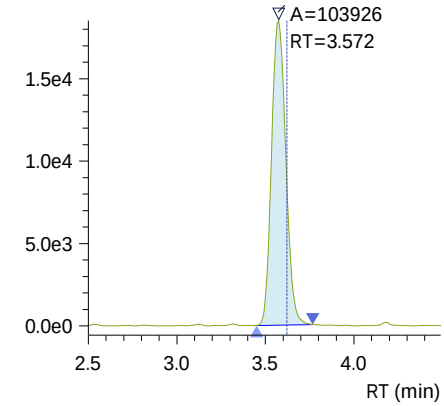
Perchlorate

Conc 10.0871
R#1 28.14 (28.11)

Q 99.00>83.00 (-) A=369305 6.55e4



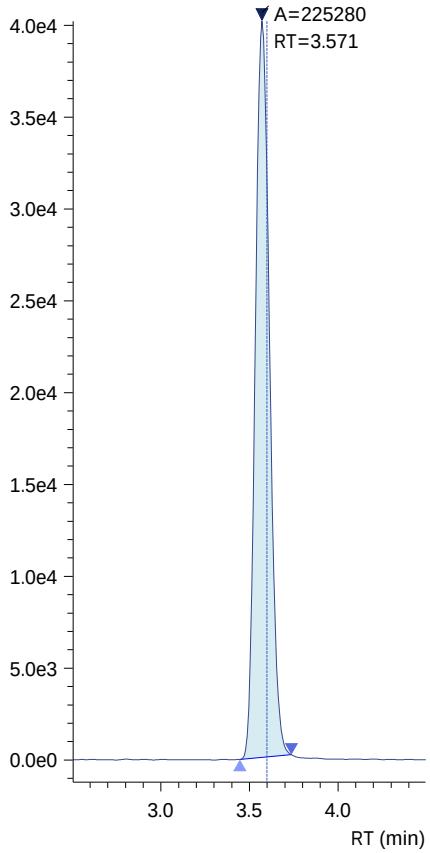
R1 101.00>85.00 (-) 1.85e4



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) 4.02e4



HS23071165 LHAAP 16 January 2023 Cover Page

ALS WO# HS23071165

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WorkOrder: HS23071165

LHAAP 16 January 2023

Aptim Environmental & Infrastucture, Inc.

Vicki Graves
10333 Richmond Ave Ste 1030
Houston TX 77042

27-Jul-2023

HS23071165 LHAAP 16 January 2023 Final

ALS WO# HS23071165

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August 01, 2023

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

Work Order: **HS23071165**

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

Dear Vicki Graves ,

ALS Environmental received 9 sample(s) on Jul 18, 2023 for the analysis presented in the following report.

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

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

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

Sincerely,

Generated By: JUMOKE.LAWAL
James Guin

ALS Houston, US Date: 01-Aug-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Work Order: HS23071165

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS23071165-01	16EW01-230717	Groundwater		17-Jul-2023 07:20	18-Jul-2023 09:25	☐
HS23071165-02	16EW08-230717	Groundwater		17-Jul-2023 08:00	18-Jul-2023 09:25	☐
HS23071165-03	16EW04-230717	Groundwater		17-Jul-2023 08:40	18-Jul-2023 09:25	☐
HS23071165-04	16RW04-230717	Groundwater		17-Jul-2023 09:20	18-Jul-2023 09:25	☐
HS23071165-05	16RW05-230717	Groundwater		17-Jul-2023 10:05	18-Jul-2023 09:25	☐
HS23071165-06	16RW01-230717	Groundwater		17-Jul-2023 10:45	18-Jul-2023 09:25	☐
HS23071165-07	16WW22-230717	Groundwater		17-Jul-2023 11:30	18-Jul-2023 09:25	☐
HS23071165-08	16RW12-230717	Groundwater		17-Jul-2023 12:10	18-Jul-2023 09:25	☐
HS23071165-09	Trip Blank-230717	Water		17-Jul-2023 00:00	18-Jul-2023 09:25	☐

ALS Houston, US Date: 01-Aug-23

Client: Aptim Environmental & Infrastucture, Inc. **CASE NARRATIVE**
Project: LHAAP 16 January 2023
Work Order: HS23071165

Work Order Comments

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

Work Order Comments

• Sample 16EW08 3 vials have head space

GC Semivolatiles by Method RSK-175

Batch ID: R442303

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

GCMS Volatiles by Method SW8260

Batch ID: R442149

Sample ID: 16EW04-230717 (HS23071165-03)

• Lowest practical dilution due to matrix.

Sample ID: HS23071113-02MS

• MS and MSD are for an unrelated sample

Batch ID: R442290

Sample ID: HS23071289-11MS

• MS and MSD are for an unrelated sample

WetChemistry by Method SM5310B

Batch ID: R442838

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

ALS Houston, US Date: 01-Aug-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16EW01-230717
Collection Date: 17-Jul-2023 07:20

ANALYTICAL REPORT
WorkOrder:HS23071165
Lab ID:HS23071165-01
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	10	U	3.0	10	10	ug/L	10	24-Jul-2023 20:08
1,1-Dichloroethene	**34**		**2.0**	**10**	**10**	**ug/L**	10	24-Jul-2023 20:08
1,2-Dichloroethane	**17**		**2.0**	**10**	**10**	**ug/L**	10	24-Jul-2023 20:08
cis-1,2-Dichloroethene	**9,200**		**20**	**100**	**100**	**ug/L**	100	24-Jul-2023 20:29
Methylene chloride	10	U	4.0	10	20	ug/L	10	24-Jul-2023 20:08
Trichloroethene	**4,900**		**20**	**100**	**100**	**ug/L**	100	24-Jul-2023 20:29
Vinyl chloride	**1,400**		**2.0**	**10**	**10**	**ug/L**	10	24-Jul-2023 20:08
Surr: 1,2-Dichloroethane-d4	*110*			**0**	*81-118*	*%REC*	*10*	*24-Jul-2023 20:08*
Surr: 1,2-Dichloroethane-d4	*108*			**0**	*81-118*	*%REC*	*100*	*24-Jul-2023 20:29*
Surr: 4-Bromofluorobenzene	*91.5*			**0**	*85-114*	*%REC*	*10*	*24-Jul-2023 20:08*
Surr: 4-Bromofluorobenzene	*92.1*			**0**	*85-114*	*%REC*	*100*	*24-Jul-2023 20:29*
Surr: Dibromofluoromethane	*109*			**0**	*80-119*	*%REC*	*10*	*24-Jul-2023 20:08*
Surr: Dibromofluoromethane	*109*			**0**	*80-119*	*%REC*	*100*	*24-Jul-2023 20:29*
Surr: Toluene-d8	*100*			**0**	*89-112*	*%REC*	*10*	*24-Jul-2023 20:08*
Surr: Toluene-d8	*101*			**0**	*89-112*	*%REC*	*100*	*24-Jul-2023 20:29*
TOTAL ORGANIC CARBON - SM5310B-2011		**Method:SM5310B**						Analyst: DW
Organic Carbon, Total	**18.7**		**0.500**	**1.00**	**1.00**	**mg/L**	1	31-Jul-2023 17:51
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	27-Jul-2023 20:10

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

ALS Houston, US Date: 01-Aug-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16EW08-230717
Collection Date: 17-Jul-2023 08:00

ANALYTICAL REPORT
WorkOrder:HS23071165
Lab ID:HS23071165-02
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	24-Jul-2023 17:04
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	24-Jul-2023 17:04
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	24-Jul-2023 17:04
cis-1,2-Dichloroethene	**6.0**		**0.20**	**1.0**	**1.0**	**ug/L**	1	24-Jul-2023 17:04
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	24-Jul-2023 17:04
Trichloroethene	**1.3**		**0.20**	**1.0**	**1.0**	**ug/L**	1	24-Jul-2023 17:04
Vinyl chloride	1.0	U	0.20	1.0	1.0	ug/L	1	24-Jul-2023 17:04
Surr: 1,2-Dichloroethane-d4	*111*			**0**	*81-118*	*%REC*	*1*	*24-Jul-2023 17:04*
Surr: 4-Bromofluorobenzene	*96.7*			**0**	*85-114*	*%REC*	*1*	*24-Jul-2023 17:04*
Surr: Dibromofluoromethane	*109*			**0**	*80-119*	*%REC*	*1*	*24-Jul-2023 17:04*
Surr: Toluene-d8	*102*			**0**	*89-112*	*%REC*	*1*	*24-Jul-2023 17:04*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	27-Jul-2023 20:10

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

ALS Houston, US Date: 01-Aug-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16EW04-230717
Collection Date: 17-Jul-2023 08:40

ANALYTICAL REPORT
WorkOrder:HS23071165
Lab ID:HS23071165-03
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	24-Jul-2023 20:49
1,1-Dichloroethene	100	U	20	100	100	ug/L	100	24-Jul-2023 20:49
1,2-Dichloroethane	100	U	20	100	100	ug/L	100	24-Jul-2023 20:49
cis-1,2-Dichloroethene	**3,900**		**20**	**100**	**100**	**ug/L**	100	24-Jul-2023 20:49
Methylene chloride	100	U	40	100	200	ug/L	100	24-Jul-2023 20:49
Trichloroethene	**8,100**		**20**	**100**	**100**	**ug/L**	100	24-Jul-2023 20:49
Vinyl chloride	**110**		**20**	**100**	**100**	**ug/L**	100	24-Jul-2023 20:49
Surr: 1,2-Dichloroethane-d4	*109*			**0**	*81-118*	*%REC*	*100*	*24-Jul-2023 20:49*
Surr: 4-Bromofluorobenzene	*95.1*			**0**	*85-114*	*%REC*	*100*	*24-Jul-2023 20:49*
Surr: Dibromofluoromethane	*105*			**0**	*80-119*	*%REC*	*100*	*24-Jul-2023 20:49*
Surr: Toluene-d8	*101*			**0**	*89-112*	*%REC*	*100*	*24-Jul-2023 20:49*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	27-Jul-2023 20:10

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

ALS Houston, US Date: 01-Aug-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16RW04-230717
Collection Date: 17-Jul-2023 09:20

ANALYTICAL REPORT
WorkOrder:HS23071165
Lab ID:HS23071165-04
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	5.0	U	1.5	5.0	5.0	ug/L	5	24-Jul-2023 18:46
1,1-Dichloroethene	**4.0**	J	**1.0**	**5.0**	**5.0**	**ug/L**	5	24-Jul-2023 18:46
1,2-Dichloroethane	5.0	U	1.0	5.0	5.0	ug/L	5	24-Jul-2023 18:46
cis-1,2-Dichloroethene	**180**		**1.0**	**5.0**	**5.0**	**ug/L**	5	24-Jul-2023 18:46
Methylene chloride	5.0	U	2.0	5.0	10	ug/L	5	24-Jul-2023 18:46
Trichloroethene	**3,300**		**10**	**50**	**50**	**ug/L**	50	24-Jul-2023 19:07
Vinyl chloride	**8.9**		**1.0**	**5.0**	**5.0**	**ug/L**	5	24-Jul-2023 18:46
Surr: 1,2-Dichloroethane-d4	*112*			**0**	*81-118*	*%REC*	*5*	*24-Jul-2023 18:46*
Surr: 1,2-Dichloroethane-d4	*111*			**0**	*81-118*	*%REC*	*50*	*24-Jul-2023 19:07*
Surr: 4-Bromofluorobenzene	*95.3*			**0**	*85-114*	*%REC*	*5*	*24-Jul-2023 18:46*
Surr: 4-Bromofluorobenzene	*95.5*			**0**	*85-114*	*%REC*	*50*	*24-Jul-2023 19:07*
Surr: Dibromofluoromethane	*110*			**0**	*80-119*	*%REC*	*5*	*24-Jul-2023 18:46*
Surr: Dibromofluoromethane	*110*			**0**	*80-119*	*%REC*	*50*	*24-Jul-2023 19:07*
Surr: Toluene-d8	*108*			**0**	*89-112*	*%REC*	*5*	*24-Jul-2023 18:46*
Surr: Toluene-d8	*104*			**0**	*89-112*	*%REC*	*50*	*24-Jul-2023 19:07*
DISSOLVED GASES BY RSK-175		**Method:RSK-175**						Analyst: SAM
Ethane	**0.00555**		**0.000144**	**0.000500**	**0.00100**	**mg/L**	1	21-Jul-2023 18:44
Ethene	**0.00422**		**0.000234**	**0.000500**	**0.00100**	**mg/L**	1	21-Jul-2023 18:44
Methane	**0.352**		**0.00214**	**0.0100**	**0.0100**	**mg/L**	20	21-Jul-2023 19:10
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	27-Jul-2023 20:10

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

ALS Houston, US Date: 01-Aug-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16RW05-230717
Collection Date: 17-Jul-2023 10:05

ANALYTICAL REPORT
WorkOrder:HS23071165
Lab ID:HS23071165-05
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	24-Jul-2023 17:24
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	24-Jul-2023 17:24
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	24-Jul-2023 17:24
cis-1,2-Dichloroethene	**1.3**		**0.20**	**1.0**	**1.0**	**ug/L**	1	24-Jul-2023 17:24
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	24-Jul-2023 17:24
Trichloroethene	**1.5**		**0.20**	**1.0**	**1.0**	**ug/L**	1	24-Jul-2023 17:24
Vinyl chloride	**0.72**	J	**0.20**	**1.0**	**1.0**	**ug/L**	1	24-Jul-2023 17:24
Surr: 1,2-Dichloroethane-d4	*105*			**0**	*81-118*	*%REC*	*1*	*24-Jul-2023 17:24*
Surr: 4-Bromofluorobenzene	*95.4*			**0**	*85-114*	*%REC*	*1*	*24-Jul-2023 17:24*
Surr: Dibromofluoromethane	*106*			**0**	*80-119*	*%REC*	*1*	*24-Jul-2023 17:24*
Surr: Toluene-d8	*100*			**0**	*89-112*	*%REC*	*1*	*24-Jul-2023 17:24*
DISSOLVED GASES BY RSK-175		**Method:RSK-175**						Analyst: SAM
Ethane	0.000500	U	0.000144	0.000500	0.00100	mg/L	1	21-Jul-2023 18:59
Ethene	0.000500	U	0.000234	0.000500	0.00100	mg/L	1	21-Jul-2023 18:59
Methane	**5.93**		**0.0214**	**0.100**	**0.100**	**mg/L**	200	21-Jul-2023 19:19
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	27-Jul-2023 20:10

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

ALS Houston, US Date: 01-Aug-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16RW01-230717
Collection Date: 17-Jul-2023 10:45

ANALYTICAL REPORT
WorkOrder:HS23071165
Lab ID:HS23071165-06
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	5.0	U	1.5	5.0	5.0	ug/L	5	24-Jul-2023 19:27
1,1-Dichloroethene	5.0	U	1.0	5.0	5.0	ug/L	5	24-Jul-2023 19:27
1,2-Dichloroethane	5.0	U	1.0	5.0	5.0	ug/L	5	24-Jul-2023 19:27
cis-1,2-Dichloroethene	**88**		**1.0**	**5.0**	**5.0**	**ug/L**	5	24-Jul-2023 19:27
Methylene chloride	5.0	U	2.0	5.0	10	ug/L	5	24-Jul-2023 19:27
Trichloroethene	**2,100**		**10**	**50**	**50**	**ug/L**	50	24-Jul-2023 19:48
Vinyl chloride	**4.3**	J	**1.0**	**5.0**	**5.0**	**ug/L**	5	24-Jul-2023 19:27
Surr: 1,2-Dichloroethane-d4	*115*			**0**	*81-118*	*%REC*	*5*	*24-Jul-2023 19:27*
Surr: 1,2-Dichloroethane-d4	*110*			**0**	*81-118*	*%REC*	*50*	*24-Jul-2023 19:48*
Surr: 4-Bromofluorobenzene	*99.1*			**0**	*85-114*	*%REC*	*5*	*24-Jul-2023 19:27*
Surr: 4-Bromofluorobenzene	*95.6*			**0**	*85-114*	*%REC*	*50*	*24-Jul-2023 19:48*
Surr: Dibromofluoromethane	*108*			**0**	*80-119*	*%REC*	*5*	*24-Jul-2023 19:27*
Surr: Dibromofluoromethane	*109*			**0**	*80-119*	*%REC*	*50*	*24-Jul-2023 19:48*
Surr: Toluene-d8	*101*			**0**	*89-112*	*%REC*	*5*	*24-Jul-2023 19:27*
Surr: Toluene-d8	*102*			**0**	*89-112*	*%REC*	*50*	*24-Jul-2023 19:48*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	27-Jul-2023 20:10

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

ALS Houston, US Date: 01-Aug-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16WW22-230717
Collection Date: 17-Jul-2023 11:30

ANALYTICAL REPORT
WorkOrder:HS23071165
Lab ID:HS23071165-07
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	1.0	U	0.30	1.0	1.0	ug/L	1	24-Jul-2023 17:45
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	24-Jul-2023 17:45
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	24-Jul-2023 17:45
cis-1,2-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	24-Jul-2023 17:45
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	24-Jul-2023 17:45
Trichloroethene	**4.1**		**0.20**	**1.0**	**1.0**	**ug/L**	1	24-Jul-2023 17:45
Vinyl chloride	1.0	U	0.20	1.0	1.0	ug/L	1	24-Jul-2023 17:45
Surr: 1,2-Dichloroethane-d4	*108*			**0**	*81-118*	*%REC*	*1*	*24-Jul-2023 17:45*
Surr: 4-Bromofluorobenzene	*96.1*			**0**	*85-114*	*%REC*	*1*	*24-Jul-2023 17:45*
Surr: Dibromofluoromethane	*108*			**0**	*80-119*	*%REC*	*1*	*24-Jul-2023 17:45*
Surr: Toluene-d8	*101*			**0**	*89-112*	*%REC*	*1*	*24-Jul-2023 17:45*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	27-Jul-2023 20:10

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

ALS Houston, US Date: 01-Aug-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: 16RW12-230717
Collection Date: 17-Jul-2023 12:10

ANALYTICAL REPORT
WorkOrder:HS23071165
Lab ID:HS23071165-08
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	1.0	U	0.30	1.0	1.0	ug/L	1	24-Jul-2023 18:05
1,1-Dichloroethene	**0.89**	J	**0.20**	**1.0**	**1.0**	**ug/L**	1	24-Jul-2023 18:05
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	24-Jul-2023 18:05
cis-1,2-Dichloroethene	**43**		**0.20**	**1.0**	**1.0**	**ug/L**	1	24-Jul-2023 18:05
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	24-Jul-2023 18:05
Trichloroethene	**79**		**0.20**	**1.0**	**1.0**	**ug/L**	1	24-Jul-2023 18:05
Vinyl chloride	**10**		**0.20**	**1.0**	**1.0**	**ug/L**	1	24-Jul-2023 18:05
Surr: 1,2-Dichloroethane-d4	*117*			**0**	*81-118*	*%REC*	*1*	*24-Jul-2023 18:05*
Surr: 4-Bromofluorobenzene	*93.6*			**0**	*85-114*	*%REC*	*1*	*24-Jul-2023 18:05*
Surr: Dibromofluoromethane	*114*			**0**	*80-119*	*%REC*	*1*	*24-Jul-2023 18:05*
Surr: Toluene-d8	*99.3*			**0**	*89-112*	*%REC*	*1*	*24-Jul-2023 18:05*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	27-Jul-2023 20:10

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

ALS Houston, US Date: 01-Aug-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
Sample ID: Trip Blank-230717
Collection Date: 17-Jul-2023 00:00

ANALYTICAL REPORT
WorkOrder:HS23071165
Lab ID:HS23071165-09
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	25-Jul-2023 15:35
1,1-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	25-Jul-2023 15:35
1,2-Dichloroethane	1.0	U	0.20	1.0	1.0	ug/L	1	25-Jul-2023 15:35
cis-1,2-Dichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	25-Jul-2023 15:35
Methylene chloride	1.0	U	0.40	1.0	2.0	ug/L	1	25-Jul-2023 15:35
Trichloroethene	1.0	U	0.20	1.0	1.0	ug/L	1	25-Jul-2023 15:35
Vinyl chloride	1.0	U	0.20	1.0	1.0	ug/L	1	25-Jul-2023 15:35
Surr: 1,2-Dichloroethane-d4	*115*			**0**	*81-118*	*%REC*	*1*	*25-Jul-2023 15:35*
Surr: 4-Bromofluorobenzene	*96.2*			**0**	*85-114*	*%REC*	*1*	*25-Jul-2023 15:35*
Surr: Dibromofluoromethane	*109*			**0**	*80-119*	*%REC*	*1*	*25-Jul-2023 15:35*
Surr: Toluene-d8	*103*			**0**	*89-112*	*%REC*	*1*	*25-Jul-2023 15:35*

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

ALS Houston, US Date: 01-Aug-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23071165

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: R442149 (0)	**Test Name :** VOLATILES ORGANICS BY METHOD 8260C				**Matrix:** Groundwater	
HS23071165-01	16EW01-230717	17 Jul 2023 07:20			24 Jul 2023 20:29	100
HS23071165-01	16EW01-230717	17 Jul 2023 07:20			24 Jul 2023 20:08	10
HS23071165-02	16EW08-230717	17 Jul 2023 08:00			24 Jul 2023 17:04	1
HS23071165-03	16EW04-230717	17 Jul 2023 08:40			24 Jul 2023 20:49	100
HS23071165-04	16RW04-230717	17 Jul 2023 09:20			24 Jul 2023 19:07	50
HS23071165-04	16RW04-230717	17 Jul 2023 09:20			24 Jul 2023 18:46	5
HS23071165-05	16RW05-230717	17 Jul 2023 10:05			24 Jul 2023 17:24	1
HS23071165-06	16RW01-230717	17 Jul 2023 10:45			24 Jul 2023 19:48	50
HS23071165-06	16RW01-230717	17 Jul 2023 10:45			24 Jul 2023 19:27	5
HS23071165-07	16WW22-230717	17 Jul 2023 11:30			24 Jul 2023 17:45	1
HS23071165-08	16RW12-230717	17 Jul 2023 12:10			24 Jul 2023 18:05	1
Batch ID: R442290 (0)	**Test Name :** VOLATILES ORGANICS BY METHOD 8260C				**Matrix:** Water	
HS23071165-09	Trip Blank-230717	17 Jul 2023 00:00			25 Jul 2023 15:35	1
Batch ID: R442303 (1)	**Test Name :** DISSOLVED GASES BY RSK-175				**Matrix:** Groundwater	
HS23071165-04	16RW04-230717	17 Jul 2023 09:20			21 Jul 2023 19:10	20
HS23071165-04	16RW04-230717	17 Jul 2023 09:20			21 Jul 2023 18:44	1
HS23071165-05	16RW05-230717	17 Jul 2023 10:05			21 Jul 2023 19:19	200
HS23071165-05	16RW05-230717	17 Jul 2023 10:05			21 Jul 2023 18:59	1
Batch ID: R442554 (0)	**Test Name :** SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)				**Matrix:** Groundwater	
HS23071165-01	16EW01-230717	17 Jul 2023 07:20			27 Jul 2023 20:10	1
HS23071165-02	16EW08-230717	17 Jul 2023 08:00			27 Jul 2023 20:10	1
HS23071165-03	16EW04-230717	17 Jul 2023 08:40			27 Jul 2023 20:10	1
HS23071165-04	16RW04-230717	17 Jul 2023 09:20			27 Jul 2023 20:10	1
HS23071165-05	16RW05-230717	17 Jul 2023 10:05			27 Jul 2023 20:10	1
HS23071165-06	16RW01-230717	17 Jul 2023 10:45			27 Jul 2023 20:10	1
HS23071165-07	16WW22-230717	17 Jul 2023 11:30			27 Jul 2023 20:10	1
HS23071165-08	16RW12-230717	17 Jul 2023 12:10			27 Jul 2023 20:10	1
Batch ID: R442838 (0)	**Test Name :** TOTAL ORGANIC CARBON - SM5310B-2011				**Matrix:** Groundwater	
HS23071165-01	16EW01-230717	17 Jul 2023 07:20			31 Jul 2023 17:51	1

ALS Houston, US Date: 01-Aug-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23071165

QC BATCH REPORT

Batch ID: R442303 (1) **Instrument: FID-4** **Method: DISSOLVED GASES BY RSK-175**

MBLK Sample ID: **MBLK-230721** Units: **mg/L** Analysis Date: **21-Jul-2023 14:22**
Client ID: Run ID: **FID-4_442303** SeqNo: **7450742** 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-230721** Units: **mg/L** Analysis Date: **21-Jul-2023 14:32**
Client ID: Run ID: **FID-4_442303** SeqNo: **7450743** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	0.0204	0.00100	0.01804	0	113	75 - 125				
Ethene	0.0181	0.00100	0.0168	0	108	75 - 125				
Methane	0.00786	0.000500	0.009647	0	81.5	75 - 125				

LCSD Sample ID: **LCSD-230721** Units: **mg/L** Analysis Date: **21-Jul-2023 14:47**
Client ID: Run ID: **FID-4_442303** SeqNo: **7450744** 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	113	75 - 125	0.02041	0.245	30	
Ethene	0.0185	0.00100	0.0168	0	110	75 - 125	0.01810	2.18	30	
Methane	0.00806	0.000500	0.009647	0	83.5	75 - 125	0.007860	2.47	30	

DUP Sample ID: **HS23071069-04DUP** Units: **mg/L** Analysis Date: **21-Jul-2023 19:32**
Client ID: Run ID: **FID-4_442303** SeqNo: **7450769** 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					0	0	30	U
Ethene	0.000500	0.00100					0	0	30	U
Methane	0.0156	0.000500					0.01558	0.335	30	

The following samples were analyzed in this batch: HS23071165-04 HS23071165-05

ALS Houston, US Date: 01-Aug-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23071165

QC BATCH REPORT

Batch ID: R442149 (0) **Instrument: VOA6** **Method: VOLATILES ORGANICS BY METHOD 8260C**

MBLK Sample ID: **VBLKW-230724** Units: **ug/L** Analysis Date: **24-Jul-2023 12:58**
Client ID: Run ID: **VOA6_442149** SeqNo: **7447084** 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	*53.08*	*1.0*	*50*	*0*	*106*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*48.63*	*1.0*	*50*	*0*	*97.3*	*85 - 114*				
Surr: Dibromofluoromethane	*53.58*	*1.0*	*50*	*0*	*107*	*80 - 119*				
Surr: Toluene-d8	*50.63*	*1.0*	*50*	*0*	*101*	*89 - 112*				

LCS Sample ID: **VLCSW-230724** Units: **ug/L** Analysis Date: **24-Jul-2023 13:59**
Client ID: Run ID: **VOA6_442149** SeqNo: **7447087** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	19.71	1.0	20	0	98.6	80 - 119				
1,1-Dichloroethene	19.62	1.0	20	0	98.1	71 - 131				
1,2-Dichloroethane	18.98	1.0	20	0	94.9	73 - 128				
cis-1,2-Dichloroethene	20.44	1.0	20	0	102	78 - 123				
Methylene chloride	18.3	2.0	20	0	91.5	74 - 124				
Trichloroethene	21.15	1.0	20	0	106	79 - 123				
Vinyl chloride	23.43	1.0	20	0	117	58 - 137				
Surr: 1,2-Dichloroethane-d4	*53.59*	*1.0*	*50*	*0*	*107*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*52.76*	*1.0*	*50*	*0*	*106*	*85 - 114*				
Surr: Dibromofluoromethane	*54.24*	*1.0*	*50*	*0*	*108*	*80 - 119*				
Surr: Toluene-d8	*46.33*	*1.0*	*50*	*0*	*92.7*	*89 - 112*				

ALS Houston, US Date: 01-Aug-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23071165

QC BATCH REPORT

Batch ID: R442149 (0) **Instrument: VOA6** **Method: VOLATILES ORGANICS BY METHOD 8260C**

MS Sample ID: **HS23071113-02MS** Units: **ug/L** Analysis Date: **24-Jul-2023 14:20**
Client ID: Run ID: **VOA6_442149** SeqNo: **7447088** 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	22.63	1.0	20	0	113	80 - 119				
1,1-Dichloroethene	28.77	1.0	20	0	144	71 - 131				S
1,2-Dichloroethane	23.06	1.0	20	0	115	73 - 128				
cis-1,2-Dichloroethene	29.65	1.0	20	5.204	122	78 - 123				
Methylene chloride	22.27	2.0	20	0	111	74 - 124				
Trichloroethene	73.78	1.0	20	48.41	127	79 - 123				S
Vinyl chloride	31.25	1.0	20	0	156	58 - 137				S
Surr: 1,2-Dichloroethane-d4	*57.03*	*1.0*	*50*	*0*	*114*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*55.08*	*1.0*	*50*	*0*	*110*	*85 - 114*				
Surr: Dibromofluoromethane	*56.29*	*1.0*	*50*	*0*	*113*	*80 - 119*				
Surr: Toluene-d8	*49.55*	*1.0*	*50*	*0*	*99.1*	*89 - 112*				

MSD Sample ID: **HS23071113-02MSD** Units: **ug/L** Analysis Date: **24-Jul-2023 14:40**
Client ID: Run ID: **VOA6_442149** SeqNo: **7447089** 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	22.23	1.0	20	0	111	80 - 119	22.63	1.79	20	
1,1-Dichloroethene	23.98	1.0	20	0	120	71 - 131	28.77	18.1	20	
1,2-Dichloroethane	22.16	1.0	20	0	111	73 - 128	23.06	3.99	20	
cis-1,2-Dichloroethene	27.61	1.0	20	5.204	112	78 - 123	29.65	7.14	20	
Methylene chloride	22.24	2.0	20	0	111	74 - 124	22.27	0.102	20	
Trichloroethene	71.29	1.0	20	48.41	114	79 - 123	73.78	3.44	20	
Vinyl chloride	25.38	1.0	20	0	127	58 - 137	31.25	20.7	20	R
Surr: 1,2-Dichloroethane-d4	*52.67*	*1.0*	*50*	*0*	*105*	*81 - 118*	*57.03*	*7.95*	*20*	
Surr: 4-Bromofluorobenzene	*49.03*	*1.0*	*50*	*0*	*98.1*	*85 - 114*	*55.08*	*11.6*	*20*	
Surr: Dibromofluoromethane	*53.45*	*1.0*	*50*	*0*	*107*	*80 - 119*	*56.29*	*5.19*	*20*	
Surr: Toluene-d8	*50.45*	*1.0*	*50*	*0*	*101*	*89 - 112*	*49.55*	*1.8*	*20*	

The following samples were analyzed in this batch:

HS23071165-01	HS23071165-02	HS23071165-03	HS23071165-04
HS23071165-05	HS23071165-06	HS23071165-07	HS23071165-08

ALS Houston, US Date: 01-Aug-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23071165

QC BATCH REPORT

Batch ID: R442290 (0) **Instrument: VOA6** **Method: VOLATILES ORGANICS BY METHOD 8260C**

MBLK Sample ID: **VBLKW-230725** Units: **ug/L** Analysis Date: **25-Jul-2023 12:11**
Client ID: Run ID: **VOA6_442290** SeqNo: **7450220** 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	*56.45*	*1.0*	*50*	*0*	*113*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*48.69*	*1.0*	*50*	*0*	*97.4*	*85 - 114*				
Surr: Dibromofluoromethane	*54.56*	*1.0*	*50*	*0*	*109*	*80 - 119*				
Surr: Toluene-d8	*51.27*	*1.0*	*50*	*0*	*103*	*89 - 112*				

LCS Sample ID: **VLCSW-230725** Units: **ug/L** Analysis Date: **25-Jul-2023 11:30**
Client ID: Run ID: **VOA6_442290** SeqNo: **7450219** 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	20.79	1.0	20	0	104	80 - 119				
1,1-Dichloroethene	22.06	1.0	20	0	110	71 - 131				
1,2-Dichloroethane	20.6	1.0	20	0	103	73 - 128				
cis-1,2-Dichloroethene	22.06	1.0	20	0	110	78 - 123				
Methylene chloride	20.65	2.0	20	0	103	74 - 124				
Trichloroethene	20.12	1.0	20	0	101	79 - 123				
Vinyl chloride	24.03	1.0	20	0	120	58 - 137				
Surr: 1,2-Dichloroethane-d4	*57.48*	*1.0*	*50*	*0*	*115*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*53.97*	*1.0*	*50*	*0*	*108*	*85 - 114*				
Surr: Dibromofluoromethane	*54.72*	*1.0*	*50*	*0*	*109*	*80 - 119*				
Surr: Toluene-d8	*47.68*	*1.0*	*50*	*0*	*95.4*	*89 - 112*				

ALS Houston, US Date: 01-Aug-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23071165

QC BATCH REPORT

Batch ID: R442290 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MS Sample ID: **HS23071289-11MS** Units: **ug/L** Analysis Date: **25-Jul-2023 14:14**
Client ID: Run ID: **VOA6_442290** SeqNo: **7450225** 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	25.43	1.0	20	0	127	80 - 119				S
1,1-Dichloroethene	25.87	1.0	20	0	129	71 - 131				
1,2-Dichloroethane	24.48	1.0	20	0	122	73 - 128				
cis-1,2-Dichloroethene	24.59	1.0	20	0	123	78 - 123				
Methylene chloride	23.28	2.0	20	0	116	74 - 124				
Trichloroethene	25.67	1.0	20	0	128	79 - 123				S
Vinyl chloride	25.89	1.0	20	0	129	58 - 137				
Surr: 1,2-Dichloroethane-d4	*57.71*	*1.0*	*50*	*0*	*115*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*49.33*	*1.0*	*50*	*0*	*98.7*	*85 - 114*				
Surr: Dibromofluoromethane	*55.78*	*1.0*	*50*	*0*	*112*	*80 - 119*				
Surr: Toluene-d8	*51.85*	*1.0*	*50*	*0*	*104*	*89 - 112*				

MSD Sample ID: **HS23071289-11MSD** Units: **ug/L** Analysis Date: **25-Jul-2023 14:34**
Client ID: Run ID: **VOA6_442290** SeqNo: **7450226** 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	23.57	1.0	20	0	118	80 - 119	25.43	7.6	20	
1,1-Dichloroethene	23.56	1.0	20	0	118	71 - 131	25.87	9.33	20	
1,2-Dichloroethane	23.71	1.0	20	0	119	73 - 128	24.48	3.19	20	
cis-1,2-Dichloroethene	24.23	1.0	20	0	121	78 - 123	24.59	1.49	20	
Methylene chloride	22.56	2.0	20	0	113	74 - 124	23.28	3.14	20	
Trichloroethene	24.34	1.0	20	0	122	79 - 123	25.67	5.33	20	
Vinyl chloride	25.44	1.0	20	0	127	58 - 137	25.89	1.76	20	
Surr: 1,2-Dichloroethane-d4	*56.2*	*1.0*	*50*	*0*	*112*	*81 - 118*	*57.71*	*2.65*	*20*	
Surr: 4-Bromofluorobenzene	*49.71*	*1.0*	*50*	*0*	*99.4*	*85 - 114*	*49.33*	*0.778*	*20*	
Surr: Dibromofluoromethane	*55.77*	*1.0*	*50*	*0*	*112*	*80 - 119*	*55.78*	*0.0231*	*20*	
Surr: Toluene-d8	*50.43*	*1.0*	*50*	*0*	*101*	*89 - 112*	*51.85*	*2.78*	*20*	

The following samples were analyzed in this batch: HS23071165-09

ALS Houston, US Date: 01-Aug-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: HS23071165

QC BATCH REPORT

Batch ID: R442838 (0) **Instrument:** TOC_04 **Method:** TOTAL ORGANIC CARBON - SM5310B-2011

MBLK Sample ID: **MBLK-07312023** Units: **mg/L** Analysis Date: **31-Jul-2023 16:01**
Client ID: Run ID: **TOC_04_442838** SeqNo: **7463498** 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-07312023** Units: **mg/L** Analysis Date: **31-Jul-2023 17:24**
Client ID: Run ID: **TOC_04_442838** SeqNo: **7463499** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	9.447	1.00	10	0	94.5	85 - 115				

LCSD Sample ID: **LCSD-07312023** Units: **mg/L** Analysis Date: **31-Jul-2023 17:37**
Client ID: Run ID: **TOC_04_442838** SeqNo: **7463500** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	9.361	1.00	10	0	93.6	85 - 115	9.447	0.915	20	

MS Sample ID: **HS23071165-01MS** Units: **mg/L** Analysis Date: **31-Jul-2023 18:05**
Client ID: **16EW01-230717** Run ID: **TOC_04_442838** SeqNo: **7463502** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	30.67	1.00	10	18.67	120	80 - 120				

The following samples were analyzed in this batch: HS23071165-01

ALS Houston, US Date: 01-Aug-23

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 January 2023
WorkOrder: **HS23071165**

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	31-May-2025
Florida	E87611-38	30-Jun-2024
Illinois	2000322023-11	30-Jun-2024
Kansas	E-10352 2023-2024	31-Jul-2024
Louisiana	03087-2023	30-Jun-2024
Maryland	343; 2023-2024	30-Jun-2024
North Carolina	624-2023	31-Dec-2023
North Dakota	R-193 2023-2024	30-Apr-2024
Oklahoma	2022-141	31-Aug-2023
Texas	T104704231-23-31	30-Apr-2024
Utah	TX026932023-14	31-Jul-2024

ALS Houston, US Date: 01-Aug-23

Sample Receipt Checklist

Work Order ID: HS23071165 **Date/Time Received:** 18-Jul-2023 09:25

Client Name: CBI-Houston **Received by:** Ragen Giga

Completed By: /S/ Bernadette A. Fini (eSignature) 21-Jul-2023 12:50 (Date/Time) **Reviewed by:** (eSignature) (Date/Time)

Matrices: **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 IDs:JVCPIBH.0001
Samplers name present on COC?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	

Temperature(s)/Thermometer(s):	0.9/0.8 UC/C	IR 31
Cooler(s)/Kit(s):	50655	
Date/Time sample(s) sent to storage:	07/21/2023 13:15	

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: Sample 16EW08 3 vials have head space

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

Chain of Custody and Analytical Request

COC Number(t):

LIMS Number:

Facility/Base I.D.: LHAAP

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
16EW01-230717	17Jul2023	0720	-	N		wg	6	X		X			X				
16EW08-230717	17Jul2023	0800	-	N		wg	4	X					X				
16EW04-230717	17Jul2023	0840	-	N		wg	4	X					X				
16RW04-230717	17Jul2023	0920	-	N		wg	7	X	X				X				
16RW05-230717	17Jul2023	1005	-	N		wg	7	X	X				X				
16RW01-230717	17Jul2023	1045	-	N		wg	4	X					X				
16MW22-230717	17Jul2023	1130	-	N		wg	4	X					X				
16RW12-230717	17Jul2023	1210	-	N		wg	4	X					X				
TRIPBLANK-230717	17Jul2023		-	TB		w	2	X									
			-														
			-														

Sample Analysis Requested [5] | Quality Assurance Samples [6]

HS23071165

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	7/17/23	1330		7/18/2023	0825
2.						
3.						

IR=3.1
0.9W
+2.1C

Sample Delivery Details / Laboratory Receipt

Delivered Directly to Lab: ____ Shipped ____ No.:

Method of Shipment: ____

Fed ____ Ex ____ Airbill ____ Number:

Analytical Lab: ALS 10450 Stanfiff Rd. Suite 210 Houston, TX 77099 (281) 530-5656

ATTN: Dane Wacaser Lab Recipient: Delivery Date/Time:

1.) Chain of Custody Number = date collected + custody number (e.g. 09-02-1999-01)

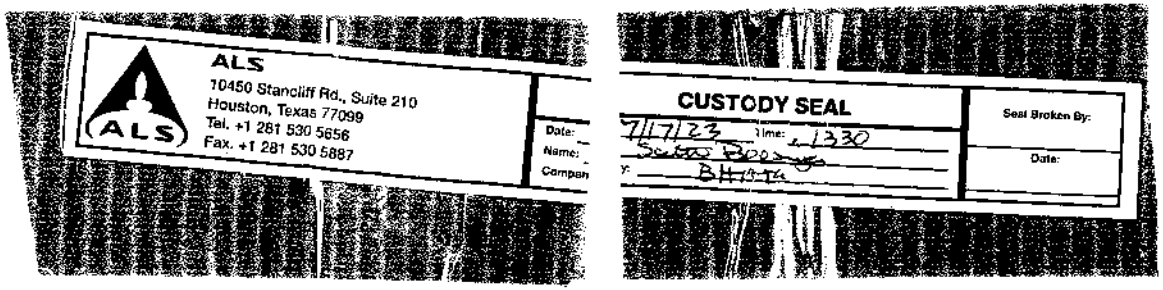
2.) Sample Type (SA) Codes: N = Normal Sample, TB = Trip Blank (-c) Sample, FD = Field Duplicate (-a) Samples, FR = Field Replicate (-b) Samples, EB = Equipment Blank (-d) Samples, MS = Matrix Spike, SD = Matrix Spike Duplicate, AB = Ambient Blank (-e)

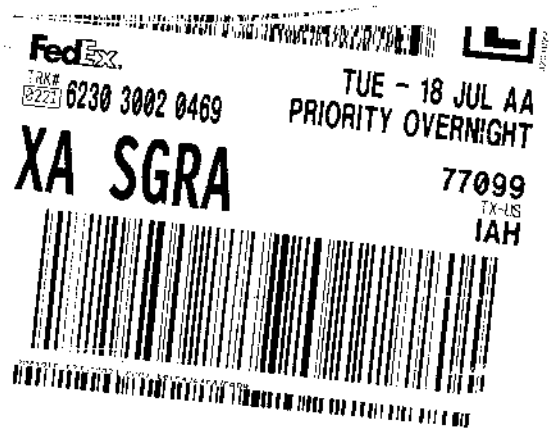
3.) Sample Number: Unique sample number collected from a particular location per day. (e.g. Groundwater sample collected from MW-1 on 10/10/99 = 01, if sampled again on 10/10/99 = 02, etc.)

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
CUSTODY SEAL
Seal Broken By:
Date:


FedEx
TRK# 6230 3002 0469
TUE - 18 JUL AA
PRIORITY OVERNIGHT
XA SGRA
77099
TX-US
IAH

July 27, 2023 Service Request No:E2300685

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

Laboratory Results for: HS23071165

Dear James,

Enclosed are the results of the sample(s) submitted to our laboratory July 24, 2023
For your reference, these analyses have been assigned our service request number **E2300685.**

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

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

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

James Guin

Certificate of Analysis

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

ALS Environmental

Client:	ALS Environmental – US	**Service Request No.:**	E2300685
Project:	HS23071165	**Date Received:**	07/24/2023
Sample Matrix:	GroundWater		

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 07/24/2023.

The sample were received in good condition and is 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:

EQ2300358: Laboratory Control Spike/Duplicate Laboratory Control Spike (LCS/DLCS) samples were analyzed and reported in Lieu of 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:**E2300685
Project: HS23071165

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
E2300685-001	16EW01-230717	7/17/2023	0720
E2300685-002	16EW08-230717	7/17/2023	0800
E2300685-003	16EW04-230717	7/17/2023	0840
E2300685-004	16RW04-230717	7/17/2023	0920
E2300685-005	16RW05-230717	7/17/2023	1005
E2300685-006	16RW01-230717	7/17/2023	1045
E2300685-007	16WW22-230717	7/17/2023	1130
E2300685-008	16RW12-230717	7/17/2023	1210

Service Request Summary

Folder #: **E2300685**
Client Name: ALS Environmental - US
Project Name: HS23071165
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: James Guin
Originating Lab: HOUSTON
Logged By: CGRANDITS
Date Received: 07/24/23
Internal Due Date: 8/1/2023
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS23071165
EDD: BASIC_WQC_CASNo_LOD

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

Lab Samp No.	Client Samp No	Matrix	Collected	HOUSTON ClO4 DOD/6850
E2300685-001	16EW01-230717	Ground Water	07/17/23 0720	**IV**
E2300685-002	16EW08-230717	Ground Water	07/17/23 0800	**IV**
E2300685-003	16EW04-230717	Ground Water	07/17/23 0840	**IV**
E2300685-004	16RW04-230717	Ground Water	07/17/23 0920	**IV**
E2300685-005	16RW05-230717	Ground Water	07/17/23 1005	**IV**
E2300685-006	16RW01-230717	Ground Water	07/17/23 1045	**IV**
E2300685-007	16WW22-230717	Ground Water	07/17/23 1130	**IV**
E2300685-008	16RW12-230717	Ground Water	07/17/23 1210	**IV**

Service Request Summary

Folder #: **E2300685**
Client Name: ALS Environmental - US
Project Name: HS23071165
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: James Guin
Originating Lab: HOUSTON
Logged By: CGRANDITS
Date Received: 07/24/23
Internal Due Date: 8/1/2023
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS23071165
EDD: BASIC_WQC_CASNo_LOD

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

Data Qualifiers

Lab Standard

+	Possible Tedlar bag artifact.
A	TIC is a suspected aldol-condensation product
B	Analyte found in the associated method blank as well as in the sample.
BC	Reported results are not blank corrected.
BH	The back section of the tube yielded higher results than the front.
BT	Results indicated possible breakthrough; back section >=10% front section.
C	Result identification confirmed.
D	Compound identified in an analysis at a secondary dilution factor
D	Spike was diluted out
DE	Reported results are corrected for desorption efficiency.
E	Estimated value. Concentration above calibration range
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
H1	Sample analysis performed past holding time. See case narrative.
H2	Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
H3	Sample was received and analyzed past holding time.
H4	Sample was extracted past required extraction holding time, but analyzed within analysis holding time. See case narrative.
I	(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

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 2022-2023	7/31/2023
Louisiana Department of Environmental Quality	03087-2023	6/30/2024
Louisiana Department of Health and Hospitals	LA028-2023	12/31/2023
Maine Department of Health and Human Services	2022017	6/5/2024
Maryland Department of the Environment	343	7/31/2023
Maryland Department of the Environment	343-2023	6/30/2024
Michigan Depratment of Environmental Quality	9971-2023	4/30/2024
Minnesota Department of Health	2368363	12/31/2023
Nebraska Department of Health and Human Services	NE-OS-25-13	4/30/2024
Nevada Department of Conservation and Natural Resources	TX026932023-1	7/31/2023
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	2022-141	8/31/2023
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
Utah Department of Health Environmental Laboratory Certification	TX026932022-13	7/31/2023
Washington Department of Ecology	C819-22	11/14/2023

Chain of Custody

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

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Houston, TX 77099
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Subcontract Chain of Custody

SAMPLING STATE: Dept of Defense **COC ID:** 22451

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:	HS23071165
TSR:	Holly Tignac

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	**HS23071165-01**	**16EW01-230717**	**Groundwater**	**17 Jul 2023 07:20**
	6850 Perchlorate; separte Level II & Level IV PDF; EQUIS EDD LHAAP			01 Aug 2023
2.	**HS23071165-02**	**16EW08-230717**	**Groundwater**	**17 Jul 2023 08:00**
	6850 Perchlorate; separte Level II & Level IV PDF; EQUIS EDD LHAAP			01 Aug 2023
3.	**HS23071165-03**	**16EW04-230717**	**Groundwater**	**17 Jul 2023 08:40**
	6850 Perchlorate; separte Level II & Level IV PDF; EQUIS EDD LHAAP			01 Aug 2023
4.	**HS23071165-04**	**16RW04-230717**	**Groundwater**	**17 Jul 2023 09:20**
	6850 Perchlorate; separte Level II & Level IV PDF; EQUIS EDD LHAAP			01 Aug 2023
5.	**HS23071165-05**	**16RW05-230717**	**Groundwater**	**17 Jul 2023 10:05**
	6850 Perchlorate; separte Level II & Level IV PDF; EQUIS EDD LHAAP			01 Aug 2023
6.	**HS23071165-06**	**16RW01-230717**	**Groundwater**	**17 Jul 2023 10:45**
	6850 Perchlorate; separte Level II & Level IV PDF; EQUIS EDD LHAAP			01 Aug 2023
7.	**HS23071165-07**	**16WW22-230717**	**Groundwater**	**17 Jul 2023 11:30**
	6850 Perchlorate; separte Level II & Level IV PDF; EQUIS EDD LHAAP			01 Aug 2023
8.	**HS23071165-08**	**16RW12-230717**	**Groundwater**	**17 Jul 2023 12:10**

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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#: 423609 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 7/25/23 10:47

#	Lab Code	Client ID	B#	Method /Test	pH	Cl	Matrix	Amt. Ext.	Sample Description
1	E2300684-001	16RW09-230718	.01	6850/ClO4 DOD			Ground Water	10mL	
2	E2300684-002	16RW09-230718-FD	.01	6850/ClO4 DOD			Ground Water	10mL	
3	E2300684-003	16RW10-230718	.01	6850/ClO4 DOD			Ground Water	10mL	
4	E2300684-004	16WW40-230718	.01	6850/ClO4 DOD			Ground Water	10mL	
5	E2300684-005	16WW12-230718	.01	6850/ClO4 DOD			Ground Water	10mL	
6	E2300684-006	16WW34-230718	.01	6850/ClO4 DOD			Ground Water	10mL	
7	E2300684-007	16WW49-230718	.01	6850/ClO4 DOD			Ground Water	10mL	
8	E2300684-008	16SW01-230718	.01	6850/ClO4 DOD			Ground Water	10mL	
9	E2300684-009	16SW01-230718-FD	.01	6850/ClO4 DOD			Ground Water	10mL	
10	E2300684-010	16SW02-230718	.01	6850/ClO4 DOD			Ground Water	10mL	
11	E2300684-011	16SW03-230718	.02	6850/ClO4 DOD			Ground Water	10mL	
12	E2300685-001	16EW01-230717	.01	6850/ClO4 DOD			Ground Water	10mL	
13	E2300685-002	16EW08-230717	.01	6850/ClO4 DOD			Ground Water	10mL	
14	E2300685-003	16EW04-230717	.01	6850/ClO4 DOD			Ground Water	10mL	
15	E2300685-004	16RW04-230717	.01	6850/ClO4 DOD			Ground Water	10mL	
16	E2300685-005	16RW05-230717	.01	6850/ClO4 DOD			Ground Water	10mL	
17	E2300685-006	16RW01-230717	.01	6850/ClO4 DOD			Ground Water	10mL	
18	E2300685-007	16WW22-230717	.01	6850/ClO4 DOD			Ground Water	10mL	
19	E2300685-008	16RW12-230717	.01	6850/ClO4 DOD			Ground Water	10mL	
20	EQ2300358-01	MB		6850/ClO4			Liquid	10mL	
21	EQ2300358-02	LCS		6850/ClO4			Liquid	10mL	
22	EQ2300358-03	DLCS		6850/ClO4			Liquid	10mL	
23	EQ2300358-04	16SW03-230718 MS	.02	6850/ClO4 DOD			Liquid	10mL	
24	EQ2300358-05	16SW03-230718 DMS	.02	6850/ClO4 DOD			Liquid	10mL	
25	R2306302-005	2307111341Y 700-E-458	.01	6850/ClO4			Water	10mL	

Spiking Solutions

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

EQ2300358-02	1.00µL	EQ2300358-02	1.00µL	EQ2300358-03	1.00µL	EQ2300358-03	1.00µL	EQ2300358-04	1.00µL	EQ2300358-05	1.00µL

Name: Perchlorate Internal Standard 1ug/mL Inventory ID 227244 Logbook Ref: Perchlorate Internal Standard Expires On: 07/31/2023

E2300684-001	100.00µL	E2300684-002	100.00µL	E2300684-003	100.00µL	E2300684-004	100.00µL	E2300684-005	100.00µL	E2300684-006	100.00µL
E2300684-007	100.00µL	E2300684-008	100.00µL	E2300684-009	100.00µL	E2300684-010	100.00µL	E2300684-011	100.00µL	E2300685-001	100.00µL
E2300685-002	100.00µL	E2300685-003	100.00µL	E2300685-004	100.00µL	E2300685-005	100.00µL	E2300685-006	100.00µL	E2300685-007	100.00µL

Preparation Information Benchsheet

Prep Run#: 423609 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/XMI **Prep Method:** Method **Prep Date/Time:** 7/25/23 10:47

E2300685-008	100.00µL	EQ2300358-01	100.00µL	EQ2300358-01	100.00µL	EQ2300358-02	100.00µL	EQ2300358-02	100.00µL	EQ2300358-03	100.00µL
EQ2300358-03	100.00µL	EQ2300358-04	100.00µL	EQ2300358-05	100.00µL	R2306302-005	100.00µL				

Preparation Materials

Water HPLC Grade	HPLC water 5/18/23CG (229315)	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-lock syringes (228116)				

Preparation Steps

Step: Preparation
Started: 7/25/23 10:47
Finished: 7/25/23 15:50
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:**	E2300685
Project:	HS23071165	**Date Collected:**	7/17/23 0720
Sample Matrix:	Ground Water	**Date Received:**	7/24/23
Sample Name:	16EW01-230717	**Units:**	µg/L
Lab Code:	E2300685-001	**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	**49.1**		0.100	0.0500	0.0250	1	7/25/23	7/26/23 11:57	423609	811888	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300685
Project:	HS23071165	**Date Collected:**	7/17/23 0800
Sample Matrix:	Ground Water	**Date Received:**	7/24/23
Sample Name:	16EW08-230717	**Units:**	µg/L
Lab Code:	E2300685-002	**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	**0.168**		0.100	0.0500	0.0250	1	7/25/23	7/26/23 12:02	423609	811888	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300685
Project:	HS23071165	**Date Collected:**	7/17/23 0840
Sample Matrix:	Ground Water	**Date Received:**	7/24/23
Sample Name:	16EW04-230717	**Units:**	µg/L
Lab Code:	E2300685-003	**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	**0.159**		0.100	0.0500	0.0250	1	7/25/23	7/26/23 12:08	423609	811888	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300685
Project:	HS23071165	**Date Collected:**	7/17/23 0920
Sample Matrix:	Ground Water	**Date Received:**	7/24/23
Sample Name:	16RW04-230717	**Units:**	µg/L
Lab Code:	E2300685-004	**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	**0.207**		0.100	0.0500	0.0250	1	7/25/23	7/26/23 12:13	423609	811888	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300685
Project:	HS23071165	**Date Collected:**	7/17/23 1005
Sample Matrix:	Ground Water	**Date Received:**	7/24/23
Sample Name:	16RW05-230717	**Units:**	µg/L
Lab Code:	E2300685-005	**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	**0.212**		0.100	0.0500	0.0250	1	7/25/23	7/26/23 12:25	423609	811888	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300685
Project:	HS23071165	**Date Collected:**	7/17/23 1045
Sample Matrix:	Ground Water	**Date Received:**	7/24/23
Sample Name:	16RW01-230717	**Units:**	µg/L
Lab Code:	E2300685-006	**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	**0.163**		0.100	0.0500	0.0250	1	7/25/23	7/26/23 12:30	423609	811888	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300685
Project:	HS23071165	**Date Collected:**	7/17/23 1130
Sample Matrix:	Ground Water	**Date Received:**	7/24/23
Sample Name:	16WW22-230717	**Units:**	µg/L
Lab Code:	E2300685-007	**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	**0.247**		0.100	0.0500	0.0250	1	7/25/23	7/26/23 12:36	423609	811888	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300685
Project:	HS23071165	**Date Collected:**	7/17/23 1210
Sample Matrix:	Ground Water	**Date Received:**	7/24/23
Sample Name:	16RW12-230717	**Units:**	µg/L
Lab Code:	E2300685-008	**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	**0.587**		0.100	0.0500	0.0250	1	7/25/23	7/26/23 12:41	423609	811888	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300685
Project:	HS23071165	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	EQ2300358-01	**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	7/25/23	7/26/23 10:34	423609	811888	

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: HS23071165
Sample Matrix: Ground Water

Service Request: E2300685
Date Analyzed: 7/26/23

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

Analytical Method: 6850
Prep Method: Method

Units: µg/L
Basis: NA

Extraction Lot: 423609

	Lab Control Sample EQ2300358-02			Duplicate Lab Control Sample EQ2300358-03					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	0.0931	0.100	93	0.0854	0.100	85	84 - 119	9	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:**	E2300685
Project:	HS23071165	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2300358-02	**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	**0.0931**	J	0.100	0.0500	0.0250	1	7/25/23	7/26/23 10:23	423609	811888	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2300685
Project:	HS23071165	**Date Collected:**	NA
Sample Matrix:	Ground Water	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2300358-03	**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	**0.0854**	J	0.100	0.0500	0.0250	1	7/25/23	7/26/23 10:28	423609	811888	

HS23071165-MSVOA-SW8260

ALS WO# HS23071165

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Form 1

Organic Analysis Data Sheet

Volatiles by EPA 8260

Workorder

HS23071165

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

ALS Environmental–Houston Laboratory
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www.alsglobal.com

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Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071165**

Volatiles by EPA 8260

HS23071165-01

16EW01-230717

Collected	Received	Matrix	Basis
07/17/23 07:20	07/18/23 09:25	Groundwater	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	10	U	3.0	10	10	10	07/24/23 20:08	VOA6_442149	X072428.D
1,1-Dichloroethene	ug/L	34		2.0	10	10	10	07/24/23 20:08	VOA6_442149	X072428.D
1,2-Dichloroethane	ug/L	17		2.0	10	10	10	07/24/23 20:08	VOA6_442149	X072428.D
cis-1,2-Dichloroethene	ug/L	9,200		20	100	100	100	07/24/23 20:29	VOA6_442149	X072429.D
Methylene chloride	ug/L	20	U	4.0	20	20	10	07/24/23 20:08	VOA6_442149	X072428.D
Trichloroethene	ug/L	4,900		20	100	100	100	07/24/23 20:29	VOA6_442149	X072429.D
Vinyl chloride	ug/L	1,400		2.0	10	10	10	07/24/23 20:08	VOA6_442149	X072428.D

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071165**

Volatiles by EPA 8260

HS23071165-02

16EW08-230717

Collected	Received	Matrix	Basis
07/17/23 08:00	07/18/23 09:25	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	07/24/23 17:04	VOA6_442149	X072419.D
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/24/23 17:04	VOA6_442149	X072419.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	07/24/23 17:04	VOA6_442149	X072419.D
cis-1,2-Dichloroethene	ug/L	6.0		0.20	1.0	1.0	1	07/24/23 17:04	VOA6_442149	X072419.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	07/24/23 17:04	VOA6_442149	X072419.D
Trichloroethene	ug/L	1.3		0.20	1.0	1.0	1	07/24/23 17:04	VOA6_442149	X072419.D
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	07/24/23 17:04	VOA6_442149	X072419.D

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Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071165**

Volatiles by EPA 8260

HS23071165-03

16EW04-230717

Collected	Received	Matrix	Basis
07/17/23 08:40	07/18/23 09:25	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	07/24/23 20:49	VOA6_442149	X072430.D
1,1-Dichloroethene	ug/L	100	U	20	100	100	100	07/24/23 20:49	VOA6_442149	X072430.D
1,2-Dichloroethane	ug/L	100	U	20	100	100	100	07/24/23 20:49	VOA6_442149	X072430.D
cis-1,2-Dichloroethene	ug/L	3,900		20	100	100	100	07/24/23 20:49	VOA6_442149	X072430.D
Methylene chloride	ug/L	200	U	40	200	200	100	07/24/23 20:49	VOA6_442149	X072430.D
Trichloroethene	ug/L	8,100		20	100	100	100	07/24/23 20:49	VOA6_442149	X072430.D
Vinyl chloride	ug/L	110		20	100	100	100	07/24/23 20:49	VOA6_442149	X072430.D

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Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071165**

Volatiles by EPA 8260

HS23071165-04

16RW04-230717

Collected	Received	Matrix	Basis
07/17/23 09:20	07/18/23 09:25	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	07/24/23 18:46	VOA6_442149	X072424.D
1,1-Dichloroethene	ug/L	4.0	J	1.0	5.0	5.0	5	07/24/23 18:46	VOA6_442149	X072424.D
1,2-Dichloroethane	ug/L	5.0	U	1.0	5.0	5.0	5	07/24/23 18:46	VOA6_442149	X072424.D
cis-1,2-Dichloroethene	ug/L	180		1.0	5.0	5.0	5	07/24/23 18:46	VOA6_442149	X072424.D
Methylene chloride	ug/L	10	U	2.0	10	10	5	07/24/23 18:46	VOA6_442149	X072424.D
Trichloroethene	ug/L	3,300		10	50	50	50	07/24/23 19:07	VOA6_442149	X072425.D
Vinyl chloride	ug/L	8.9		1.0	5.0	5.0	5	07/24/23 18:46	VOA6_442149	X072424.D

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Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071165**

Volatiles by EPA 8260

HS23071165-05

16RW05-230717

Collected	Received	Matrix	Basis
07/17/23 10:05	07/18/23 09:25	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	07/24/23 17:24	VOA6_442149	X072420.D
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/24/23 17:24	VOA6_442149	X072420.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	07/24/23 17:24	VOA6_442149	X072420.D
cis-1,2-Dichloroethene	ug/L	1.3		0.20	1.0	1.0	1	07/24/23 17:24	VOA6_442149	X072420.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	07/24/23 17:24	VOA6_442149	X072420.D
Trichloroethene	ug/L	1.5		0.20	1.0	1.0	1	07/24/23 17:24	VOA6_442149	X072420.D
Vinyl chloride	ug/L	0.72	J	0.20	1.0	1.0	1	07/24/23 17:24	VOA6_442149	X072420.D

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Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071165**

Volatiles by EPA 8260

HS23071165-06

16RW01-230717

Collected	Received	Matrix	Basis
07/17/23 10:45	07/18/23 09:25	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	07/24/23 19:27	VOA6_442149	X072426.D
1,1-Dichloroethene	ug/L	5.0	U	1.0	5.0	5.0	5	07/24/23 19:27	VOA6_442149	X072426.D
1,2-Dichloroethane	ug/L	5.0	U	1.0	5.0	5.0	5	07/24/23 19:27	VOA6_442149	X072426.D
cis-1,2-Dichloroethene	ug/L	88		1.0	5.0	5.0	5	07/24/23 19:27	VOA6_442149	X072426.D
Methylene chloride	ug/L	10	U	2.0	10	10	5	07/24/23 19:27	VOA6_442149	X072426.D
Trichloroethene	ug/L	2,100		10	50	50	50	07/24/23 19:48	VOA6_442149	X072427.D
Vinyl chloride	ug/L	4.3	J	1.0	5.0	5.0	5	07/24/23 19:27	VOA6_442149	X072426.D

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Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071165**

Volatiles by EPA 8260

HS23071165-07

16WW22-230717

Collected	Received	Matrix	Basis
07/17/23 11:30	07/18/23 09:25	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	07/24/23 17:45	VOA6_442149	X072421.D
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/24/23 17:45	VOA6_442149	X072421.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	07/24/23 17:45	VOA6_442149	X072421.D
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/24/23 17:45	VOA6_442149	X072421.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	07/24/23 17:45	VOA6_442149	X072421.D
Trichloroethene	ug/L	4.1		0.20	1.0	1.0	1	07/24/23 17:45	VOA6_442149	X072421.D
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	07/24/23 17:45	VOA6_442149	X072421.D

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071165**

Volatiles by EPA 8260

HS23071165-08

16RW12-230717

Collected	Received	Matrix	Basis
07/17/23 12:10	07/18/23 09:25	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	07/24/23 18:05	VOA6_442149	X072422.D
1,1-Dichloroethene	ug/L	0.89	J	0.20	1.0	1.0	1	07/24/23 18:05	VOA6_442149	X072422.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	07/24/23 18:05	VOA6_442149	X072422.D
cis-1,2-Dichloroethene	ug/L	43		0.20	1.0	1.0	1	07/24/23 18:05	VOA6_442149	X072422.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	07/24/23 18:05	VOA6_442149	X072422.D
Trichloroethene	ug/L	79		0.20	1.0	1.0	1	07/24/23 18:05	VOA6_442149	X072422.D
Vinyl chloride	ug/L	10		0.20	1.0	1.0	1	07/24/23 18:05	VOA6_442149	X072422.D

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071165**

Volatiles by EPA 8260

HS23071165-09

Trip Blank-230717

Collected	Received	Matrix	Basis
07/17/23 00:00	07/18/23 09:25	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	07/25/23 15:35	VOA6_442290	X072517.D
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/25/23 15:35	VOA6_442290	X072517.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	07/25/23 15:35	VOA6_442290	X072517.D
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/25/23 15:35	VOA6_442290	X072517.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	07/25/23 15:35	VOA6_442290	X072517.D
Trichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/25/23 15:35	VOA6_442290	X072517.D
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	07/25/23 15:35	VOA6_442290	X072517.D

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071165**

Volatiles by EPA 8260

VBLKW-230724	Collected	Received	Matrix	Basis
VBLKW-230724	NA	NA	Aqueous	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	07/24/23 12:58	VOA6_442149	X072407.D
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/24/23 12:58	VOA6_442149	X072407.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	07/24/23 12:58	VOA6_442149	X072407.D
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/24/23 12:58	VOA6_442149	X072407.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	07/24/23 12:58	VOA6_442149	X072407.D
Trichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/24/23 12:58	VOA6_442149	X072407.D
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	07/24/23 12:58	VOA6_442149	X072407.D

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071165**

Volatiles by EPA 8260

VBLKW-230725	Collected	Received	Matrix	Basis
VBLKW-230725	NA	NA	Aqueous	Wet

Analyte	Units	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	DataFile
1,1,2-Trichloroethane	ug/L	1.0	U	0.30	1.0	1.0	1	07/25/23 12:11	VOA6_442290	X072507.D
1,1-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/25/23 12:11	VOA6_442290	X072507.D
1,2-Dichloroethane	ug/L	1.0	U	0.20	1.0	1.0	1	07/25/23 12:11	VOA6_442290	X072507.D
cis-1,2-Dichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/25/23 12:11	VOA6_442290	X072507.D
Methylene chloride	ug/L	2.0	U	0.40	2.0	2.0	1	07/25/23 12:11	VOA6_442290	X072507.D
Trichloroethene	ug/L	1.0	U	0.20	1.0	1.0	1	07/25/23 12:11	VOA6_442290	X072507.D
Vinyl chloride	ug/L	1.0	U	0.20	1.0	1.0	1	07/25/23 12:11	VOA6_442290	X072507.D

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Form 2

System Monitoring Compound Recovery

Volatiles by EPA 8260

Workorder

HS23071165

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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Form 2 - System Monitoring Compound Recovery

Client: Aptim Environmental & Infrastucture, Inc.

Project: LHAAP 16 January 2023

Workorder: HS23071165

RunID: VOA6-442149

Volatiles by EPA 8260

CCB-CCB	Analyzed	Conc Units	Dilution
CCB	07/24/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	52.62	50	105		80-120
4-Bromofluorobenzene	47.75	50	95.5		80-120
Dibromofluoromethane	53.82	50	108		80-120
Toluene-d8	49.45	50	98.9		80-120

CCV-CCV	Analyzed	Conc Units	Dilution
CCV	07/24/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	52.84	50	106		80-120
4-Bromofluorobenzene	53.24	50	106		80-120
Dibromofluoromethane	53.46	50	107		80-120
Toluene-d8	46.94	50	93.9		80-120

HS23071113-02MS	Analyzed	Conc Units	Dilution
BatchQC	07/24/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	57.03	50	114		81-118
4-Bromofluorobenzene	55.08	50	110		85-114
Dibromofluoromethane	56.29	50	113		80-119
Toluene-d8	49.55	50	99.1		89-112

Form 2 - System Monitoring Compound Recovery

Client: Aptim Environmental & Infrastucture, Inc.

Project: LHAAP 16 January 2023

Workorder: HS23071165

RunID: VOA6-442149

Volatiles by EPA 8260

HS23071113-02MSD	Analyzed	Conc Units	Dilution
BatchQC	07/24/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	52.67	50	105		81-118
4-Bromofluorobenzene	49.03	50	98.1		85-114
Dibromofluoromethane	53.45	50	107		80-119
Toluene-d8	50.45	50	101		89-112

HS23071165-01	Analyzed	Conc Units	Dilution
16EW01-230717	07/24/23	%REC	10

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	550	500	110		81-118
4-Bromofluorobenzene	460	500	91.5		85-114
Dibromofluoromethane	540	500	109		80-119
Toluene-d8	500	500	100		89-112
1,2-Dichloroethane-d4	5400	5000	108		81-118
4-Bromofluorobenzene	4600	5000	92.1		85-114
Dibromofluoromethane	5400	5000	109		80-119
Toluene-d8	5000	5000	101		89-112

HS23071165-02	Analyzed	Conc Units	Dilution
16EW08-230717	07/24/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	55	50	111		81-118
4-Bromofluorobenzene	48	50	96.7		85-114
Dibromofluoromethane	54	50	109		80-119
Toluene-d8	51	50	102		89-112

Form 2 - System Monitoring Compound Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder HS23071165

RunID VOA6-442149

Volatiles by EPA 8260

HS23071165-03	Analyzed	Conc Units	Dilution
16EW04-230717	07/24/23	%REC	100

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	5400	5000	109		81-118
4-Bromofluorobenzene	4800	5000	95.1		85-114
Dibromofluoromethane	5200	5000	105		80-119
Toluene-d8	5000	5000	101		89-112

HS23071165-04	Analyzed	Conc Units	Dilution
16RW04-230717	07/24/23	%REC	5

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	280	250	112		81-118
4-Bromofluorobenzene	240	250	95.3		85-114
Dibromofluoromethane	280	250	110		80-119
Toluene-d8	270	250	108		89-112
1,2-Dichloroethane-d4	2800	2500	111		81-118
4-Bromofluorobenzene	2400	2500	95.5		85-114
Dibromofluoromethane	2800	2500	110		80-119
Toluene-d8	2600	2500	104		89-112

HS23071165-05	Analyzed	Conc Units	Dilution
16RW05-230717	07/24/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	52	50	105		81-118
4-Bromofluorobenzene	48	50	95.4		85-114
Dibromofluoromethane	53	50	106		80-119
Toluene-d8	50	50	100		89-112

Form 2 - System Monitoring Compound Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071165**

RunID VOA6-442149

Volatiles by EPA 8260

HS23071165-06	Analyzed	Conc Units	Dilution
16RW01-230717	07/24/23	%REC	5

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	290	250	115		81-118
4-Bromofluorobenzene	250	250	99.1		85-114
Dibromofluoromethane	270	250	108		80-119
Toluene-d8	250	250	101		89-112
1,2-Dichloroethane-d4	2800	2500	110		81-118
4-Bromofluorobenzene	2400	2500	95.6		85-114
Dibromofluoromethane	2700	2500	109		80-119
Toluene-d8	2600	2500	102		89-112

HS23071165-07	Analyzed	Conc Units	Dilution
16WW22-230717	07/24/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	54	50	108		81-118
4-Bromofluorobenzene	48	50	96.1		85-114
Dibromofluoromethane	54	50	108		80-119
Toluene-d8	50	50	101		89-112

HS23071165-08	Analyzed	Conc Units	Dilution
16RW12-230717	07/24/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	58	50	117		81-118
4-Bromofluorobenzene	47	50	93.6		85-114
Dibromofluoromethane	57	50	114		80-119
Toluene-d8	50	50	99.3		89-112

Form 2 - System Monitoring Compound Recovery

Client: Aptim Environmental & Infrastucture, Inc.

Project: LHAAP 16 January 2023

Workorder: HS23071165

RunID: VOA6-442149

Volatiles by EPA 8260

VBLKW-230724	Analyzed	Conc Units	Dilution
VBLKW-230724	07/24/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	53.08	50	106		81-118
4-Bromofluorobenzene	48.63	50	97.3		85-114
Dibromofluoromethane	53.58	50	107		80-119
Toluene-d8	50.63	50	101		89-112

VLCSW-230724	Analyzed	Conc Units	Dilution
VLCSW-230724	07/24/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	53.59	50	107		81-118
4-Bromofluorobenzene	52.76	50	106		85-114
Dibromofluoromethane	54.24	50	108		80-119
Toluene-d8	46.33	50	92.7		89-112

Form 2 - System Monitoring Compound Recovery

Client: Aptim Environmental & Infrastucture, Inc.

Project: LHAAP 16 January 2023

Workorder: HS23071165

RunID: VOA6-442290

Volatiles by EPA 8260

CCB-CCB	Analyzed	Conc Units	Dilution
CCB	07/25/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	56.9	50	114		80-120
4-Bromofluorobenzene	48.55	50	97.1		80-120
Dibromofluoromethane	54.52	50	109		80-120
Toluene-d8	52.11	50	104		80-120

CCV-CCV	Analyzed	Conc Units	Dilution
CCV	07/25/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	54.23	50	108		80-120
4-Bromofluorobenzene	51.8	50	104		80-120
Dibromofluoromethane	52.8	50	106		80-120
Toluene-d8	46.46	50	92.9		80-120

HS23071165-09	Analyzed	Conc Units	Dilution
Trip Blank-230717	07/25/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	58	50	115		81-118
4-Bromofluorobenzene	48	50	96.2		85-114
Dibromofluoromethane	54	50	109		80-119
Toluene-d8	52	50	103		89-112

Form 2 - System Monitoring Compound Recovery

Client: Aptim Environmental & Infrastucture, Inc.

Project: LHAAP 16 January 2023

Workorder: HS23071165

Volatiles by EPA 8260

RunID: VOA6-442290

HS23071289-11MS	Analyzed	Conc Units	Dilution
BatchQC	07/25/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	57.71	50	115		81-118
4-Bromofluorobenzene	49.33	50	98.7		85-114
Dibromofluoromethane	55.78	50	112		80-119
Toluene-d8	51.85	50	104		89-112

HS23071289-11MSD	Analyzed	Conc Units	Dilution
BatchQC	07/25/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	56.2	50	112		81-118
4-Bromofluorobenzene	49.71	50	99.4		85-114
Dibromofluoromethane	55.77	50	112		80-119
Toluene-d8	50.43	50	101		89-112

VBLKW-230725	Analyzed	Conc Units	Dilution
VBLKW-230725	07/25/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	56.45	50	113		81-118
4-Bromofluorobenzene	48.69	50	97.4		85-114
Dibromofluoromethane	54.56	50	109		80-119
Toluene-d8	51.27	50	103		89-112

Form 2 - System Monitoring Compound Recovery

Client	Aptim Environmental & Infrastucture, Inc.	Workorder	
Project	LHAAP 16 January 2023	**HS23071165**	

RunID

Volatiles by EPA 8260

VOA6-442290

VLCSW-230725	Analyzed	Conc Units	Dilution
VLCSW-230725	07/25/23	%REC	1

Surrogate	Result Conc	Spike Conc	%Recovery	Q	%Recovery Limits
1,2-Dichloroethane-d4	57.48	50	115		81-118
4-Bromofluorobenzene	53.97	50	108		85-114
Dibromofluoromethane	54.72	50	109		80-119
Toluene-d8	47.68	50	95.4		89-112

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Form 3A

Matrix Spike/Spike Duplicate Recovery

Volatiles by EPA 8260

Workorder

HS23071165

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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

Form 3A - Matrix Spike/Spike Duplicate Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071165**

RunID VOA6-442149

Volatiles by EPA 8260

BatchQC (HS23071113-02)				HS23071113-02MS				HS23071113-02MSD						
Sample Matrix: Aqueous			Run Date	07/24/23				07/24/23						
Result Units: ug/L			Run Time	14:20				14:40						
			Data File	X072411.D				X072412.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	22.63	20	113		22.23	20	111		20	1.79	
1,1-Dichloroethene	71-131	1	0	28.77	20	144		23.98	20	120		20	18.1	
1,2-Dichloroethane	73-128	1	0	23.06	20	115		22.16	20	111		20	3.99	
cis-1,2-Dichloroethene	78-123	1	5.204	29.65	20	122		27.61	20	112		20	7.14	
Methylene chloride	74-124	1	0	22.27	20	111		22.24	20	111		20	0.102	
Trichloroethene	79-123	1	48.41	73.78	20	127		71.29	20	114		20	3.44	
Vinyl chloride	58-137	1	0	31.25	20	156		25.38	20	127		20	20.7	

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 Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071165**

RunID VOA6-442290

Volatiles by EPA 8260

BatchQC (HS23071289-11)				HS23071289-11MS				HS23071289-11MSD						
Sample Matrix: Aqueous			Run Date	07/25/23				07/25/23						
Result Units: ug/L			Run Time	14:14				14:34						
			Data File	X072513.D				X072514.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	25.43	20	127		23.57	20	118		20	7.6	
1,1-Dichloroethene	71-131	1	0	25.87	20	129		23.56	20	118		20	9.33	
1,2-Dichloroethane	73-128	1	0	24.48	20	122		23.71	20	119		20	3.19	
cis-1,2-Dichloroethene	78-123	1	0	24.59	20	123		24.23	20	121		20	1.49	
Methylene chloride	74-124	1	0	23.28	20	116		22.56	20	113		20	3.14	
Trichloroethene	79-123	1	0	25.67	20	128		24.34	20	122		20	5.33	
Vinyl chloride	58-137	1	0	25.89	20	129		25.44	20	127		20	1.76	

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 8260

Workorder

HS23071165

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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

Form 3B - Laboratory Control Sample Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23071165

SAMPLENUM
VLCSW-230724

Volatiles by EPA 8260

VOA6_442149			VLCSW-230724			
Spike Matrix Aqueous		**Run Date**	07/24/23			
Result Units ug/L		**Run Time**	13:59			
		Data File	X072410.D			
Analyte	%Recovery Limits	Spike Added	LCS Result	%R	Q	
1,1,2-Trichloroethane	80-119	20	19.71	99		
1,1-Dichloroethene	71-131	20	19.62	98		
1,2-Dichloroethane	73-128	20	18.98	95		
cis-1,2-Dichloroethene	78-123	20	20.44	102		
Methylene chloride	74-124	20	18.3	92		
Trichloroethene	79-123	20	21.15	106		
Vinyl chloride	58-137	20	23.43	117		

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

Form 3B - Laboratory Control Sample Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23071165

SAMPLENUM
VLCSW-230725

Volatiles by EPA 8260

VOA6_442290			VLCSW-230725			
Spike Matrix Aqueous		**Run Date**	07/25/23			
Result Units ug/L		**Run Time**	11:30			
		Data File	X072505.D			
Analyte	%Recovery Limits	Spike Added	LCS Result	%R	Q	
1,1,2-Trichloroethane	80-119	20	20.79	104		
1,1-Dichloroethene	71-131	20	22.06	110		
1,2-Dichloroethane	73-128	20	20.6	103		
cis-1,2-Dichloroethene	78-123	20	22.06	110		
Methylene chloride	74-124	20	20.65	103		
Trichloroethene	79-123	20	20.12	101		
Vinyl chloride	58-137	20	24.03	120		

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

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Form 4

Method Blank Summary

Volatiles by EPA 8260

Workorder

HS23071165

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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

Form 4 - Method Blank Summary

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23071165

Volatiles by EPA 8260

Client Sample ID	Type	Lab Sample ID	File ID	Date Analyzed	Run ID
METHOD BLANK	MBLK	VBLKW-230724	X072407.D	07/24/23 12:58	VOA6_442149
VLCSW-230724	LCS	VLCSW-230724	X072410.D	07/24/23 13:59	VOA6_442149
BatchQC	MS	HS23071113-02MS	X072411.D	07/24/23 14:20	VOA6_442149
BatchQC	MSD	HS23071113-02MSD	X072412.D	07/24/23 14:40	VOA6_442149
16EW08-230717	SAMP	HS23071165-02	X072419.D	07/24/23 17:04	VOA6_442149
16RW05-230717	SAMP	HS23071165-05	X072420.D	07/24/23 17:24	VOA6_442149
16WW22-230717	SAMP	HS23071165-07	X072421.D	07/24/23 17:45	VOA6_442149
16RW12-230717	SAMP	HS23071165-08	X072422.D	07/24/23 18:05	VOA6_442149
16RW04-230717	SAMP	HS23071165-04	X072424.D	07/24/23 18:46	VOA6_442149
16RW04-230717	SAMP	HS23071165-04	X072425.D	07/24/23 19:07	VOA6_442149
16RW01-230717	SAMP	HS23071165-06	X072426.D	07/24/23 19:27	VOA6_442149
16RW01-230717	SAMP	HS23071165-06	X072427.D	07/24/23 19:48	VOA6_442149
16EW01-230717	SAMP	HS23071165-01	X072428.D	07/24/23 20:08	VOA6_442149
16EW01-230717	SAMP	HS23071165-01	X072429.D	07/24/23 20:29	VOA6_442149
16EW04-230717	SAMP	HS23071165-03	X072430.D	07/24/23 20:49	VOA6_442149

Form 4 - Method Blank Summary

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23071165

Volatiles by EPA 8260

Client Sample ID	Type	Lab Sample ID	File ID	Date Analyzed	Run ID
METHOD BLANK	MBLK	VBLKW-230725	X072507.D	07/25/23 12:11	VOA6_442290
VLCSW-230725	LCS	VLCSW-230725	X072505.D	07/25/23 11:30	VOA6_442290
BatchQC	MS	HS23071289-11MS	X072513.D	07/25/23 14:14	VOA6_442290
BatchQC	MSD	HS23071289-11MSD	X072514.D	07/25/23 14:34	VOA6_442290
Trip Blank-230717	SAMP	HS23071165-09	X072517.D	07/25/23 15:35	VOA6_442290

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Form 5

Instrument Performance Check

Volatiles by EPA 8260

Workorder

HS23071165

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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

Form 5 - Instrument Performance Check

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071165**

RunID VOA6-441456

Volatiles by EPA 8260

Tune File X071401.D 07/14/23 7/14/2023

m / e	Ion Abundance Criterion	%RA
50	15.0 - 40.0% of mass 95	25.9 (25.9)
75	30.0 - 60.0% of mass 95	52 (52)
95	Base peak, 100% RA	100 (100)
96	5.0 - 9.0% of mass 95	5.6 (5.63)
173	Less than 2.0% of mass 174	0.8 (0.926) 1
174	50.0 - 120.0% of mass 95	82.2 (82.2)
175	4.0 - 9.0% of mass 174	5.4 (6.56) 1
176	93.0 - 101.0% of mass 174	79.3 (96.5) 1
177	5.0 - 9.0% of mass 176	4.5 (5.64) 2

%RA - Percent Relative Abundance

This check applies to the following analyses

	Lab Samp ID	Type	Date Analyzed	Lab File ID	Sample ID
1	VSTD000.25	ICAL1	7/14/2023	X071402	VSTD000.25
2	VSTD000.5	ICAL2	7/14/2023	X071403	VSTD000.5
3	VSTD001	ICAL3	7/14/2023	X071404	VSTD001
4	VSTD002	ICAL4	7/14/2023	X071405	VSTD002
5	VSTD005	ICAL5	7/14/2023	X071406	VSTD005
6	VSTD020	ICAL6	7/14/2023	X071407	VSTD020
7	VSTD050	ICAL7	7/14/2023	X071408	VSTD050
8	VSTD100	ICAL8	7/14/2023	X071409	VSTD100
9	VSTD150	ICAL9	7/14/2023	X071410	VSTD150
10	VSTD200	ICAL	7/14/2023	X071411	VSTD200
11	CCV	ICV	7/14/2023	X071413	CCV

Form 5 - Instrument Performance Check

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071165**

RunID **VOA6-442149**

Volatiles by EPA 8260

Tune File X072401.D 07/24/23 7/24/2023

m / e	Ion Abundance Criterion	%RA
50	15.0 - 40.0% of mass 95	24.7 (24.7)
75	30.0 - 60.0% of mass 95	47.5 (47.5)
95	Base peak, 100% RA	100 (100)
96	5.0 - 9.0% of mass 95	6.6 (6.58)
173	Less than 2.0% of mass 174	1.2 (1.44) 1
174	50.0 - 120.0% of mass 95	82 (82)
175	4.0 - 9.0% of mass 174	7.3 (8.85) 1
176	93.0 - 101.0% of mass 174	81.1 (98.9) 1
177	5.0 - 9.0% of mass 176	5.5 (6.79) 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	7/24/2023	X072403	CCV
2	CCB	CCB	7/24/2023	X072404	CCB
3	VBLKW-	MBLK	7/24/2023	X072407	VBLKW-230724
4	VLCSW-	LCS	7/24/2023	X072410	VLCSW-230724
5	HS23071113-	MS	7/24/2023	X072411	ZZZZZZMS
6	HS23071113-	MSD	7/24/2023	X072412	ZZZZZZMSD
7	HS23071165-	SAMP	7/24/2023	X072419	16EW08-230717
8	HS23071165-	SAMP	7/24/2023	X072420	16RW05-230717
9	HS23071165-	SAMP	7/24/2023	X072421	16WW22-230717
10	HS23071165-	SAMP	7/24/2023	X072422	16RW12-230717
11	HS23071165-	SAMP	7/24/2023	X072424	16RW04-230717
12	HS23071165-	SAMP	7/24/2023	X072425	16RW04-230717
13	HS23071165-	SAMP	7/24/2023	X072426	16RW01-230717
14	HS23071165-	SAMP	7/24/2023	X072427	16RW01-230717
15	HS23071165-	SAMP	7/24/2023	X072428	16EW01-230717
16	HS23071165-	SAMP	7/24/2023	X072429	16EW01-230717
17	HS23071165-	SAMP	7/24/2023	X072430	16EW04-230717
18	CCV	CCV_EN	7/24/2023	X072432	CCV

Form 5 - Instrument Performance Check

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071165**

RunID VOA6-442290

Volatiles by EPA 8260

Tune File X072501.D 07/25/23 7/25/2023

m / e	Ion Abundance Criterion	%RA
50	15.0 - 40.0% of mass 95	29.1 (29.1)
75	30.0 - 60.0% of mass 95	47.2 (47.2)
95	Base peak, 100% RA	100 (100)
96	5.0 - 9.0% of mass 95	7.7 (7.68)
173	Less than 2.0% of mass 174	0.6 (0.86) 1
174	50.0 - 120.0% of mass 95	71.5 (71.5)
175	4.0 - 9.0% of mass 174	6 (8.42) 1
176	93.0 - 101.0% of mass 174	68.3 (95.5) 1
177	5.0 - 9.0% of mass 176	4.7 (6.92) 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	7/25/2023	X072502	CCV
2	CCB	CCB	7/25/2023	X072504	CCB
3	VLCSW-	LCS	7/25/2023	X072505	VLCSW-230725
4	VBLKW-	MBLK	7/25/2023	X072507	VBLKW-230725
5	HS23071289-	MS	7/25/2023	X072513	ZZZZZZMS
6	HS23071289-	MSD	7/25/2023	X072514	ZZZZZZMSD
7	HS23071165-	SAMP	7/25/2023	X072517	Trip Blank-230717
8	CCV-END	CCV_EN	7/25/2023	X072530	CCV-END

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right partner.

Form 6

Initial Calibration Data

Volatiles by EPA 8260

Workorder

HS23071165

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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

Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder HS23071165

RunID VOA6_441456

Volatiles by EPA 8260

Compound	50.00 Level 7 0.250 Level 1	100.00 Level 8 0.500 Level 2	150.00 Level 9 1.00 Level 3	200.00 Level 10 2.00 Level 4	5.00 Level 5	20.00 Level 6	Curve	b	m1	m2	%RSD or R2	Q
Dichlorodifluoromethane	NE 235300	1663 576963	3668 822037	9210 1105119	21541	94710	LINR	0.02191	0.52294		0.99807	
Chloromethane	NE 0.67753	0.84001 0.79824	0.66306 0.81227	0.83928 0.82447	0.68468	0.65730	AVRG		0.75520		10.80318	
Propionitrile	NE 0.09423	0.10390 0.10017	0.09941 0.10114	0.09874 0.09819	0.09448	0.10115	AVRG		0.09905		3.16658	
Vinyl Chloride	NE 0.60823	0.69203 0.70202	0.53140 0.67183	0.72188 0.65918	0.61204	0.62458	AVRG		0.64702		9.14675	
Bromomethane	NE 0.25218	0.27789 0.28534	0.24476 0.29658	0.27563 0.28725	0.25296	0.23720	AVRG		0.26775		7.93201	
Chloroethane	NE 0.34475	0.43063 0.37168	0.35796 0.36290	0.40526 0.34794	0.34800	0.35515	AVRG		0.36936		7.97570	
Trichlorofluoromethane	NE 0.60292	0.58636 0.75016	0.55773 0.71606	0.73670 0.70274	0.59809	0.65059	AVRG		0.65570		11.03396	
Acrolein	NE 19251	268 38657	510 60619	917 82636	2341	6957	LINR	0.02257	0.01915		0.99956	
Acetone	NE 210033	7150 413238	8098 616513	15631 806431	26152	92232	LINR	-0.09778	0.18861		0.99933	
1,1-Dichloroethene	NE 0.35132	0.34284 0.39971	0.33390 0.37449	0.40741 0.37144	0.35652	0.35911	AVRG		0.36630		6.73637	

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

Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.

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Volatiles by EPA 8260

ICAL Summary Page 2 / 12

Compound	50.00 Level 7 0.250 Level 1	100.00 Level 8 0.500 Level 2	150.00 Level 9 1.00 Level 3	200.00 Level 10 2.00 Level 4	5.00 Level 5	20.00 Level 6	Curve	b	m1	m2	%RSD or R2	Q
Isobutyl Alcohol	NE 0.09486	0.09915 0.10064	0.08022 0.09926	0.09038 0.09480	0.09479	0.09891	AVRG		0.09478		6.69321	
Acetonitrile	NE 0.06830	0.07163 0.06960	0.07422 0.07051	0.07419 0.06805	0.06612	0.06841	AVRG		0.07011		3.98876	
Allyl Chloride	NE 1.52604	1.95513 1.56199	1.82721 1.56589	1.62093 1.51692	1.61860	1.58159	AVRG		1.64159		9.09372	
Iodomethane	NE 473625	2897 1101288	4792 1666204	11682 2365259	29645	147770	QUAD	0.07604	2.04557	-0.05646	0.99916	
Acrylonitrile	NE 0.22535	0.30341 0.23200	0.22558 0.23458	0.25182 0.22663	0.25615	0.23734	AVRG		0.24365		10.26343	
Methylene Chloride	NE 228969	3115 461890	7389 679924	11880 893552	25734	93705	LINR	-0.02821	0.42039		0.99928	
Methyl tert-butyl ether	NE 1.28013	1.42757 1.32509	1.50562 1.32040	1.44539 1.27025	1.34304	1.34355	AVRG		1.36234		5.84889	
Carbon Disulfide	NE 1.09141	1.19715 1.22733	1.02400 1.19261	1.26579 1.18678	1.08532	1.09253	AVRG		1.15144		6.97191	
trans-1,2-Dichloroethene	NE 0.40397	0.50790 0.43050	0.34716 0.41204	0.45461 0.41226	0.43607	0.40889	AVRG		0.42371		10.21222	
Vinyl Acetate	NE 1.67574	1.80993 1.76700	1.71245 1.76631	1.79630 1.74491	1.73508	1.76334	AVRG		1.75234		2.35224	
1,1-Dichloroethane	NE 0.89937	1.04282 0.93166	0.87723 0.90417	1.03426 0.88702	0.90313	0.88859	AVRG		0.92980		6.83106	
Chloroprene	NE 0.19474	0.25663 0.23640	0.22753 0.23331	0.21787 0.23204	0.21758	0.20725	AVRG		0.22482		8.00705	

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Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder HS23071165

RunID VOA6_441456

Volatiles by EPA 8260

ICAL Summary Page 3 / 12

Compound	50.00 Level 7 0.250 Level 1	100.00 Level 8 0.500 Level 2	150.00 Level 9 1.00 Level 3	200.00 Level 10 2.00 Level 4	5.00 Level 5	20.00 Level 6	Curve	b	m1	m2	%RSD or R2	Q
2-Butanone	NE 0.25660	0.28077 0.28522	0.26281 0.27741	0.24974 0.28148	0.24863	0.25377	AVRG		0.26627		5.58805	
Methacrylonitrile	NE 0.62768	0.71944 0.66925	0.58681 0.67273	0.61854 0.65439	0.59811	0.66152	AVRG		0.64539		6.44560	
2,2-Dichloropropane	NE 357279	3703 797830	7001 1150093	15882 1535535	34523	136770	LINR	0.00416	0.72480		0.99899	
cis-1,2-Dichloroethene	NE 0.52561	0.58080 0.55258	0.55205 0.52870	0.55103 0.51702	0.52518	0.52498	AVRG		0.53977		3.81784	
Chloroform	NE 0.90021	1.12088 0.94131	0.94789 0.91371	1.04563 0.88871	0.89046	0.91369	AVRG		0.95139		8.37790	
Bromochloromethane	NE 0.28615	0.34105 0.29492	0.28436 0.28865	0.36073 0.28298	0.29741	0.28625	AVRG		0.30250		9.34540	
1,1,1-Trichloroethane	NE 0.70136	0.76811 0.80905	0.60604 0.78046	0.76445 0.77179	0.67544	0.71465	AVRG		0.73237		8.70697	
1,1-Dichloropropene	NE 0.37472	0.46667 0.45240	0.37410 0.42446	0.41961 0.42714	0.34598	0.38546	AVRG		0.40784		9.80634	
1,2-Dichloroethane	NE 0.52114	0.65388 0.55719	0.55646 0.54137	0.52020 0.54393	0.51464	0.54481	AVRG		0.55040		7.59848	
Carbon Tetrachloride	NE 0.35583	0.45034 0.44940	0.42963 0.42389	0.40208 0.42272	0.37338	0.39061	AVRG		0.41088		7.99245	
Benzene	NE 1.14556	1.30726 1.25702	1.13102 1.18986	1.22322 1.19963	1.12620	1.18395	AVRG		1.19597		5.00630	
Trichloroethene	NE 0.32325	0.36259 0.36148	0.29151 0.34333	0.38072 0.34832	0.30457	0.32879	AVRG		0.33829		8.55214	

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Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder HS23071165

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Volatiles by EPA 8260

ICAL Summary Page 4 / 12

Compound	50.00 Level 7 0.250 Level 1	100.00 Level 8 0.500 Level 2	150.00 Level 9 1.00 Level 3	200.00 Level 10 2.00 Level 4	5.00 Level 5	20.00 Level 6	Curve	b	m1	m2	%RSD or R2	Q
Bromodichloromethane	NE 0.43234	0.56576 0.45884	0.42748 0.45203	0.45204 0.46018	0.42979	0.44442	AVRG		0.45810		9.21563	
Methyl Methacrylate	NE 0.55557	0.64774 0.60054	0.67348 0.60150	0.61013 0.58254	0.58540	0.57437	AVRG		0.60347		6.09532	
2-Chloroethylvinyl ether	NE 0.13958	0.13748 0.15371	0.12812 0.14777	0.12943 0.15040	0.13129	0.14103	AVRG		0.13987		6.65248	
1,2-Dichloropropane	NE 0.37714	0.43289 0.40397	0.31618 0.38726	0.39071 0.39014	0.37483	0.38801	AVRG		0.38457		8.02856	
2-Nitropropane	NE 0.18456	0.23319 0.19499	0.19456 0.20657	0.22145 0.20342	0.16115	0.18784	AVRG		0.19864		10.60581	
Dibromomethane	NE 0.20339	0.24779 0.21844	0.21543 0.20650	0.23770 0.20862	0.20762	0.21371	AVRG		0.21769		6.96902	
4-Methyl-2-Pentanone	NE 0.46063	0.58655 0.48903	0.46075 0.48195	0.49135 0.48645	0.48596	0.48555	AVRG		0.49202		7.57687	
cis-1,3-Dichloropropene	NE 0.51175	0.61537 0.55605	0.45166 0.53397	0.53404 0.54067	0.47196	0.51998	AVRG		0.52616		8.99460	
Ethyl Methacrylate	NE 0.26930	0.34651 0.30905	0.35275 0.33292	0.35012 0.34232	0.32495	0.31920	AVRG		0.32746		8.05273	
Toluene	NE 1.35355	1.36539 1.44404	1.14100 1.39074	1.37686 1.39027	1.31689	1.33460	AVRG		1.34593		6.32428	
trans-1,3-Dichloropropene	NE 0.42358	0.49608 0.46734	0.38674 0.45302	0.44837 0.46834	0.41009	0.43827	AVRG		0.44354		7.48885	
2-Hexanone	NE 0.30067	0.30395 0.32110	0.33705 0.32372	0.32917 0.32526	0.33286	0.33513	AVRG		0.32321		4.01955	

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Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder HS23071165

RunID VOA6_441456

Volatiles by EPA 8260

ICAL Summary Page 5 / 12

Compound	50.00 Level 7 0.250 Level 1	100.00 Level 8 0.500 Level 2	150.00 Level 9 1.00 Level 3	200.00 Level 10 2.00 Level 4	5.00 Level 5	20.00 Level 6	Curve	b	m1	m2	%RSD or R2	Q
1,1,2-Trichloroethane	NE 0.27496	0.30232 0.28103	0.28933 0.27111	0.30515 0.27281	0.28408	0.28886	AVRG		0.28552		4.28271	
1,3-Dichloropropane	NE 0.56268	0.68555 0.57784	0.56076 0.55478	0.58546 0.55874	0.58510	0.57884	AVRG		0.58331		6.87413	
Dibromochloromethane	NE 0.40608	0.42594 0.43396	0.39216 0.42165	0.41047 0.42582	0.38971	0.40387	AVRG		0.41218		3.79175	
Tetrachloroethene	NE 0.26863	0.24343 0.31076	0.22414 0.29395	0.32780 0.29098	0.27159	0.27129	AVRG		0.27806		11.54647	
1,2-Dibromoethane	NE 0.30967	0.35535 0.31558	0.31873 0.30475	0.33131 0.31110	0.34997	0.33995	AVRG		0.32627		5.69357	
1-Chlorohexane	NE 0.33296	0.43114 0.42814	0.40883 0.40776	0.43814 0.41598	0.36414	0.38805	AVRG		0.40168		8.58201	
Chlorobenzene	NE 0.90189	1.07531 0.96048	0.86917 0.93481	0.96582 0.94343	0.89774	0.91892	AVRG		0.94084		6.30233	
1,1,1,2-Tetrachloroethane	NE 0.36189	0.40907 0.38531	0.32801 0.37705	0.36574 0.37837	0.34420	0.36531	AVRG		0.36833		6.36041	
Ethylbenzene	NE 0.45381	0.53160 0.50085	0.40783 0.48317	0.49648 0.48539	0.44109	0.44588	AVRG		0.47179		7.99221	
m,p-Xylenes	NE 0.58355	0.58138 0.63520	0.51291 0.61039	0.66213 0.61758	0.54279	0.58097	AVRG		0.59188		7.73323	
o-Xylene	NE 0.54985	0.60028 0.59157	0.50413 0.57426	0.58077 0.58210	0.50944	0.55204	AVRG		0.56049		6.17548	
Styrene	NE 0.97719	1.10605 1.02091	0.86982 0.99759	0.96217 1.01131	0.89239	0.96159	AVRG		0.97767		7.16726	

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Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder HS23071165

RunID VOA6_441456

Volatiles by EPA 8260

ICAL Summary Page 6 / 12

Compound	50.00 Level 7 0.250 Level 1	100.00 Level 8 0.500 Level 2	150.00 Level 9 1.00 Level 3	200.00 Level 10 2.00 Level 4	5.00 Level 5	20.00 Level 6	Curve	b	m1	m2	%RSD or R2	Q
Bromoform	NE 0.26395	0.26832 0.27994	0.21153 0.27771	0.29273 0.28394	0.24404	0.25796	AVRG		0.26446		9.32941	
Isopropylbenzene	NE 1.36958	1.45474 1.59321	1.15694 1.51601	1.62659 1.55523	1.31430	1.37984	AVRG		1.44071		10.47090	
1,1,2,2-Tetrachloroethane	NE 0.78472	0.94445 0.81779	0.83194 0.80619	0.90896 0.80829	0.84185	0.81425	AVRG		0.83983		6.25761	
1,2,3-Trichloropropane	NE 0.62245	0.70743 0.65589	0.66768 0.64581	0.66994 0.64574	0.70648	0.67647	AVRG		0.66643		4.21060	
trans-1,4-Dichloro-2-butene	NE 0.15148	0.15286 0.16770	0.12745 0.16789	0.14444 0.16922	0.13548	0.15209	AVRG		0.15207		9.66771	
n-Propylbenzene	NE 2.91361	2.94838 3.40683	2.53997 3.24372	3.16964 3.29645	2.67171	3.00288	AVRG		3.02147		9.55626	
Bromobenzene	NE 0.73926	0.82736 0.79512	0.75995 0.76647	0.82086 0.78754	0.76608	0.77520	AVRG		0.78198		3.67998	
1,3,5-Trimethylbenzene	NE 2.12204	2.47615 2.50410	1.87986 2.44372	2.39387 2.46514	1.97150	2.11509	AVRG		2.26350		10.68239	
2-Chlorotoluene	NE 1.91345	2.19364 2.08147	2.04515 2.01122	2.15846 2.03095	1.86416	2.04541	AVRG		2.03821		5.12320	
4-Chlorotoluene	NE 2.19714	2.25128 2.40271	1.82096 2.33521	2.37563 2.37480	2.11635	2.28352	AVRG		2.23973		8.15437	
tert-Butylbenzene	NE 1.75584	2.09594 2.12022	1.61179 2.04664	2.20774 2.05649	1.74066	1.83461	AVRG		1.94110		10.71222	
1,2,4-Trimethylbenzene	NE 2.11967	2.62916 2.46832	1.84573 2.41069	2.42858 2.45093	1.92871	2.14683	AVRG		2.26985		11.86510	

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Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder HS23071165

RunID VOA6_441456

Volatiles by EPA 8260

ICAL Summary Page 7 / 12

Compound	50.00 Level 7 0.250 Level 1	100.00 Level 8 0.500 Level 2	150.00 Level 9 1.00 Level 3	200.00 Level 10 2.00 Level 4	5.00 Level 5	20.00 Level 6	Curve	b	m1	m2	%RSD or R2	Q
sec-Butylbenzene	NE 2.38650	2.39008 2.98896	2.08647 2.87301	2.89395 2.88374	2.26832	2.51515	AVRG		2.58735		12.68595	
p-Isopropyltoluene	NE 2.17688	2.52552 2.69684	1.93671 2.58444	2.48463 2.61384	2.04517	2.20747	AVRG		2.36350		11.64663	
1,3-Dichlorobenzene	NE 1.28863	1.54565 1.44980	1.17676 1.41160	1.40461 1.40967	1.24164	1.33205	AVRG		1.36227		8.33210	
1,4-Dichlorobenzene	NE 1.38557	1.65292 1.53566	1.32318 1.45287	1.69562 1.48161	1.44532	1.46978	AVRG		1.49361		7.97047	
Benzyl Chloride	NE 558112	6245 1321247	10259 2041719	17851 2751633	45616	196200	LINR	0.04694	0.89268		0.99874	
n-Butylbenzene	NE 1.83535	1.84574 2.37633	1.70944 2.27255	1.96808 2.30080	1.70778	1.79924	AVRG		1.97948		13.42128	
1,2-Dichlorobenzene	NE 1.27471	1.35749 1.42525	1.25645 1.37391	1.38320 1.38665	1.26217	1.33374	AVRG		1.33929		4.58000	
1,2-Dibromo-3-Chloropropane	NE 51434	675 119154	831 181917	1953 242707	5268	19568	LINR	0.02176	0.14112		0.99931	
1,2,4-Trichlorobenzene	NE 0.80524	1.05947 0.97476	0.91279 0.95753	0.94981 0.97711	0.85502	0.78698	AVRG		0.91986		9.65852	
Hexachlorobutadiene	NE 139894	1357 382401	2109 564457	6844 760294	13714	52647	LINR	0.04709	0.44481		0.99698	
Naphthalene	NE 2.02307	2.67698 2.35582	2.32669 2.27389	2.26771 2.32875	2.16067	2.07687	AVRG		2.27672		8.35550	
1,2,3-Trichlorobenzene	NE 0.74794	0.99382 0.88744	0.89482 0.86237	0.93334 0.87314	0.76923	0.78029	AVRG		0.86027		9.42402	

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Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder HS23071165

RunID VOA6_441456

Volatiles by EPA 8260

Compound	50.00 Level 7 0.250 Level 1	100.00 Level 8 0.500 Level 2	150.00 Level 9 1.00 Level 3	200.00 Level 10 2.00 Level 4	5.00 Level 5	20.00 Level 6	Curve	b	m1	m2	%RSD or R2	Q
Ethyl Acetate	NE 0.70402	0.85233 0.73854	0.68267 0.71854	0.73966 0.71045	0.76533	0.77227	AVRG		0.74265		6.75864	
Methyl Acrylate	NE 0.62114	0.66840 0.77600	0.54731 0.78843	0.64052 0.76129	0.64695	0.66691	AVRG		0.67966		11.81743	
n-Butanol	NE 0.01560	0.01615 0.01818	0.01470 0.01945	0.01778 0.01980	0.01318	0.01496	AVRG		0.01664		13.67270	
Ethyl Acrylate	NE 1.56849	1.63514 1.70663	1.72358 1.77502	1.50263 1.75049	1.60242	1.64950	AVRG		1.65710		5.42882	
Cyclohexanone	NE 0.03949	0.05394 0.03979	0.05115 0.03982	0.04786 0.03661	0.04626	0.04568	AVRG		0.04451		13.30149	
1,4-Dioxane	0.00529 0.00540	0.00687 0.00595	0.00611 0.00600	0.00555 0.00602	0.00636	0.00586	AVRG		0.00594		7.82889	
n-Hexane	NE 244351	2320 700280	5000 NE	11984 NE	26276	106667	QUAD	-0.01727	2.41947	-0.68015	0.99837	
Freon TF	NE 154547	1274 422615	2818 NE	7195 NE	16656	67796	QUAD	-0.01499	3.77998	-1.58677	0.99832	
Methyl Acetate	NE 0.42203	0.46559 0.43221	0.47286 0.43028	0.45346 0.42016	0.45829	0.45001	AVRG		0.44499		4.35037	
Methylcyclohexane	NE 0.98734	1.14273 1.10411	0.96842 1.12748	0.95973 1.14019	1.03867	1.02958	AVRG		1.05536		7.08148	
Isopropyl alcohol	NE 0.03536	0.04517 0.03638	0.04439 0.03714	0.04149 0.03689	0.03687	0.03873	AVRG		0.03916		9.28018	
Amyl alcohol	NE 0.01277	0.01442 0.01513	0.01288 0.01573	0.01448 0.01580	0.01462	0.01358	AVRG		0.01438		7.75370	

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Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder HS23071165

RunID VOA6_441456

Volatiles by EPA 8260

ICAL Summary Page 9 / 12

Compound	50.00 Level 7 0.250 Level 1	100.00 Level 8 0.500 Level 2	150.00 Level 9 1.00 Level 3	200.00 Level 10 2.00 Level 4	5.00 Level 5	20.00 Level 6	Curve	b	m1	m2	%RSD or R2	Q
Allyl alcohol	NE 244351	2068 700280	5000 NE	14314 NE	26276	106667	QUAD	-0.39232	48.54112	-13.69022	0.99834	
4-Methyl-2-pentanol	NE 0.08687	0.12600 0.10145	0.10791 0.10473	0.11127 0.10925	0.11234	0.10455	AVRG		0.10715		9.67860	
Tert-butyl alcohol	NE 0.05636	0.07802 0.05963	0.06140 0.05977	0.06995 0.05928	0.06161	0.06194	AVRG		0.06311		10.61812	
Diethyl ether	NE 0.43908	0.51744 0.44851	0.49360 0.44689	0.51199 0.43020	0.45058	0.45793	AVRG		0.46625		6.99240	
1,3-Butadiene	NE 0.58528	0.63622 0.71010	0.57213 0.67222	0.73345 0.66543	0.59805	0.60945	AVRG		0.64248		8.80211	
Cyclohexane	NE 0.73558	0.85829 1.03245	0.72681 0.97434	0.92986 0.96744	0.75844	0.81693	AVRG		0.86668		13.16994	
Tetrahydrofuran	NE 0.12218	0.14083 0.12495	0.13332 0.12609	0.13514 0.12108	0.12274	0.13136	AVRG		0.12863		5.31484	
alpha-Methylstyrene	NE 1.02454	1.23006 1.16376	0.99517 1.14646	1.09377 1.14475	0.99115	1.02796	AVRG		1.09085		7.81543	
Diisopropyl ether	NE 1.95747	2.14800 2.03902	2.34506 2.05555	2.06794 1.95720	1.91324	2.06344	AVRG		2.06077		6.23686	
Dichlorofluoromethane	NE 0.76153	0.85332 0.78724	0.92289 0.78703	0.84028 0.76192	0.75366	0.78256	AVRG		0.80560		6.93852	
Propylene oxide	NE 0.05692	0.06108 0.05582	0.06673 0.05455	0.06684 0.04985	0.07410	0.06618	AVRG		0.06134		12.54653	
3-Methyl-1-butanol	NE 0.01195	0.01323 0.01394	0.01183 0.01419	0.00888 0.01408	0.01158	0.01110	AVRG		0.01231		14.14320	

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Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder HS23071165

RunID VOA6_441456

Volatiles by EPA 8260

ICAL Summary Page 10 / 12

Compound	50.00 Level 7 0.250 Level 1	100.00 Level 8 0.500 Level 2	150.00 Level 9 1.00 Level 3	200.00 Level 10 2.00 Level 4	5.00 Level 5	20.00 Level 6	Curve	b	m1	m2	%RSD or R2	Q
Butyl acrylate	NE 0.95529	0.92245 1.02517	0.88753 1.04707	0.86138 1.05297	0.86060	0.94857	AVRG		0.95123		7.98920	
Butyl methacrylate	NE 1.15197	1.22102 1.29239	1.20704 1.21819	1.20789 1.18934	1.13145	1.15942	AVRG		1.19763		3.97564	
Dicyclopentadiene	NE 2.75252	2.80389 2.95979	3.12078 3.02021	2.84202 2.97202	2.58546	2.86391	AVRG		2.88007		5.53053	
1,2,3-Trimethylbenzene	NE 2.26318	2.33141 2.44349	2.44039 2.48171	2.00963 2.47220	2.11668	2.24288	AVRG		2.31129		7.26158	
Ethanol	NE 72445	1082 150451	1613 220615	3219 291912	7997	30252	LINR	-0.37330	0.00686		0.99938	
tert-Butyl formate	NE 0.46269	0.60414 0.51460	0.54120 0.53820	0.56992 0.54329	0.53335	0.49959	AVRG		0.53411		7.55066	
3,3-Dimethyl-1-butanol	NE 0.04382	0.07070 0.04890	0.05527 0.05244	0.05594 0.05101	0.05364	0.05224	AVRG		0.05377		13.60012	
tert-Amyl methyl ether	NE 1.60911	1.86257 1.58140	1.86766 1.64949	1.49761 1.54826	1.62072	1.56664	AVRG		1.64483		8.04479	
tert-Butyl ethyl ether	NE 1.97744	2.48449 2.04789	2.24930 2.06704	2.05003 2.01150	2.12663	2.03642	AVRG		2.11675		7.49756	
tert-Amyl alcohol	NE 0.04627	0.06041 0.05146	0.05141 0.05382	0.06972 0.05433	0.05333	0.05084	AVRG		0.05462		12.42201	
Epichlorohydrin	NE 0.03559	0.03842 0.03914	0.03655 0.03819	0.03704 0.03863	0.03577	0.03679	AVRG		0.03735		3.45493	
Isoprene	NE 0.14969	0.16745 0.17829	0.14351 0.17017	0.16283 0.16423	0.17487	0.17231	AVRG		0.16482		6.98920	

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Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder HS23071165

RunID VOA6_441456

Volatiles by EPA 8260

Compound	50.00 Level 7 0.250 Level 1	100.00 Level 8 0.500 Level 2	150.00 Level 9 1.00 Level 3	200.00 Level 10 2.00 Level 4	5.00 Level 5	20.00 Level 6	Curve	b	m1	m2	%RSD or R2	Q
n-Amyl acetate	NE 0.81039	1.01275 0.90629	1.04196 0.91309	0.90756 0.92294	0.85545	0.87675	AVRG		0.91635		7.88906	
Isopropyl acetate	NE 1.19423	1.44350 1.30224	1.45714 1.26100	1.48440 1.24685	1.21182	1.26381	AVRG		1.31833		8.51827	
n-Butyl acetate	NE 0.73443	0.87010 0.79624	0.63987 0.80262	0.70296 0.81276	0.74526	0.79294	AVRG		0.76635		8.91130	
Acetaldehyde	NE 101552	NE 189053	5117 265471	8114 347350	20987	39093	LINR	-0.45320	0.04030		0.99713	
Methyl Amyl Ketone	NE 0.96318	1.20532 1.04745	0.94521 1.08877	0.97102 1.09326	1.04102	1.05023	AVRG		1.04505		7.72385	
Dimethyl Disulfide	NE 0.69887	0.66624 0.73618	0.61152 0.73656	0.60301 0.73622	0.60088	0.68043	AVRG		0.67444		8.55931	
Isobutylene	NE 0.07008	0.09932 0.08656	0.08288 0.08198	0.07903 0.07923	0.07898	0.08593	AVRG		0.08267		9.56800	
2-Ethylhexyl Acrylate	NE 1.36334	1.09488 1.47049	1.12671 1.45960	1.14640 1.46017	1.06053	1.31158	AVRG		1.27708		13.35344	
94 1,2-Dichloroethylene (total)	NE 0.46479	0.54435 0.49154	0.44960 0.47037	0.50282 0.46464	0.48062	0.46694	AVRG		0.48174		5.88171	
95 Xylenes (total)	NE 0.51459	0.53863 0.58017	0.47900 0.55693	0.57974 0.56971	0.47946	0.52696	AVRG		0.53613		7.35273	
30 Dibromofluoromethane	NE 227290	3536 502644	5859 719790	10131 959895	26145	100577	LINR	-0.01526	0.45137		0.99889	
35 1,2-Dichloroethane-d4	NE 282994	5342 615043	7805 911155	14667 1203985	31653	125030	LINR	-0.01246	0.56601		0.99932	

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Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder HS23071165

RunID VOA6_441456

Volatiles by EPA 8260

ICAL Summary Page 12 / 12

Compound	50.00 Level 7 0.250 Level 1	100.00 Level 8 0.500 Level 2	150.00 Level 9 1.00 Level 3	200.00 Level 10 2.00 Level 4	5.00 Level 5	20.00 Level 6	Curve	b	m1	m2	%RSD or R2	Q
48 Toluene-d8	NE 1.07891	1.41149 1.19952	1.42719 NE	1.38594 NE	1.29623	1.21214	AVRG		1.28735		10.10735	
69 4-Bromofluorobenzene	NE 355682	7819 767493	11517 1135204	17835 1538168	40007	153161	LINR	-0.00857	0.49361		0.99967	

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Form 6I

Initial Calibration Verification (ICV)

Volatiles by EPA 8260

Workorder

HS23071165

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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

Initial Calibration Verification (ICV)

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

Workorder HS23071165

RunID VOA6_441456

Volatiles by EPA 8260

Sample Matrix LIQUID
Lab Smp Id ICV
Level LOW
Fraction VOA
Client Smp ID ICV
Operator PC

Compound	Conc Added	Conc Recovered	% Recovered	Limits	Q
1,1,1,2-Tetrachloroethane	50.00	49.01	98.02	80-120	
1,1,1-Trichloroethane	50.00	46.46	92.93	80-120	
1,1,2,2-Tetrachloroethane	50.00	48.23	96.47	80-120	
Freon TF	50.00	50.73	101.47	80-120	
Methyl acetate	50.00	48.60	97.20	80-120	
Cyclohexane	50.00	43.28	86.57	80-120	
Methylcyclohexane	50.00	47.44	94.90	80-120	
Carbon Disulfide	100.00	92.54	92.54	80-120	
2-Hexanone	100.00	100.41	100.42	80-120	
1,1,2-Trichloroethane	50.00	48.51	97.03	80-120	
1,1-Dichloroethane	50.00	46.83	93.66	80-120	
1,1-Dichloroethene	50.00	45.26	90.53	80-120	
1,1-Dichloropropene	50.00	45.59	91.20	80-120	
1,2,3-Trichlorobenzene	50.00	43.05	86.12	80-120	
1,2,3-Trichloropropane	50.00	48.09	96.20	80-120	
1,2,4-Trichlorobenzene	50.00	43.35	86.72	80-120	
1,2,4-Trimethylbenzene	50.00	44.77	89.55	80-120	
1,2-Dibromo-3-Chloropropane	50.00	48.27	96.54	80-120	
1,2-Dibromoethane	50.00	47.85	95.71	80-120	
Acrolein	100.00	95.33	95.34	80-120	
Acrylonitrile	100.00	96.95	96.95	80-120	
1,2-Dichlorobenzene	50.00	47.75	95.52	80-120	
1,2-Dichloroethane	50.00	47.45	94.92	80-120	
1,2-Dichloropropane	50.00	49.01	98.02	80-120	
1,3,5-Trimethylbenzene	50.00	44.65	89.31	80-120	
1,3-Dichlorobenzene	50.00	46.44	92.88	80-120	
1,3-Dichloropropane	50.00	48.46	96.93	80-120	
1,4-Dichlorobenzene	50.00	45.87	91.75	80-120	
1-Chlorohexane	50.00	40.17	80.36	80-120	
2,2-Dichloropropane	50.00	47.06	94.14	80-120	
2-Butanone	100.00	105.06	105.06	80-120	
2-Chloroethylvinyl ether	100.00	103.48	103.49	80-120	
2-Chlorotoluene	50.00	45.07	90.16	80-120	
4-Chlorotoluene	50.00	47.10	94.21	80-120	

Initial Calibration Verification (ICV)

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

Workorder HS23071165

RunID VOA6_441456

Volatiles by EPA 8260

Sample Matrix LIQUID
Lab Smp Id ICV
Level LOW
Fraction VOA
Client Smp ID ICV
Operator PC

Compound	Conc Added	Conc Recovered	% Recovered	Limits	Q
p-Isopropyltoluene	50.00	42.46	84.92	80-120	
4-Methyl-2-Pentanone	100.00	96.77	96.78	80-120	
Acetone	100.00	109.68	109.69	80-120	
Acetonitrile	500.00	477.86	95.57	80-120	
Allyl Chloride	50.00	46.25	92.52	80-120	
Benzene	50.00	47.17	94.35	80-120	
Bromobenzene	50.00	47.14	94.28	80-120	
Bromochloromethane	50.00	47.57	95.15	80-120	
Bromodichloromethane	50.00	47.04	94.09	80-120	
Bromoform	50.00	50.48	100.97	80-120	
Bromomethane	50.00	52.69	105.40	80-120	
Carbon Tetrachloride	50.00	43.89	87.80	80-120	
Chlorobenzene	50.00	47.93	95.88	80-120	
Chloroethane	50.00	45.13	90.26	80-120	
Chloroform	50.00	45.97	91.96	80-120	
Chloromethane	50.00	46.75	93.50	80-120	
Chloroprene	50.00	45.07	90.15	80-120	
cis-1,2-Dichloroethene	50.00	47.65	95.31	80-120	
cis-1,3-Dichloropropene	50.00	49.60	99.21	80-120	
Dibromochloromethane	50.00	50.99	101.99	80-120	
Dibromomethane	50.00	47.45	94.92	80-120	
Dichlorodifluoromethane	50.00	44.13	88.28	80-120	
Ethylbenzene	50.00	46.22	92.44	80-120	
Ethyl Methacrylate	50.00	42.56	85.14	80-120	
Iodomethane	100.00	85.27	85.27	80-120	
Isobutyl Alcohol	1000.00	1037.79	103.78	70-130	
Propionitrile	500.00	495.72	99.15	70-130	
Hexachlorobutadiene	50.00	40.81	81.63	80-120	
Isopropylbenzene	50.00	44.80	89.60	80-120	
m,p-Xylenes	100.00	94.37	94.38	80-120	
Methyl tert-butyl ether	50.00	48.10	96.20	80-120	
Methylene Chloride	50.00	48.91	97.83	80-120	
Methacrylonitrile	50.00	51.28	102.56	80-120	
Methyl Methacrylate	50.00	48.63	97.28	80-120	

Initial Calibration Verification (ICV)

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

Workorder HS23071165

RunID VOA6_441456

Volatiles by EPA 8260

Sample Matrix LIQUID
Lab Smp Id ICV
Level LOW
Fraction VOA
Client Smp ID ICV
Operator PC

Compound	Conc Added	Conc Recovered	% Recovered	Limits	Q
n-Butylbenzene	50.00	43.07	86.14	80-120	
n-Propylbenzene	50.00	44.93	89.87	80-120	
Naphthalene	50.00	45.05	90.10	80-120	
o-Xylene	50.00	47.84	95.69	80-120	
sec-Butylbenzene	50.00	42.83	85.66	80-120	
Styrene	50.00	49.01	98.02	80-120	
tert-Butylbenzene	50.00	42.55	85.10	80-120	
Tetrachloroethene	50.00	47.18	94.38	80-120	
Toluene	50.00	48.91	97.82	80-120	
trans-1,2-Dichloroethene	50.00	45.43	90.87	80-120	
trans-1,3-Dichloropropene	50.00	49.09	98.19	80-120	
trans-1,4-Dichloro-2-butene	50.00	53.16	106.34	80-120	
Trichloroethene	50.00	46.63	93.27	80-120	
Trichlorofluoromethane	50.00	46.87	93.76	80-120	
Vinyl Acetate	100.00	100.31	100.31	80-120	
Vinyl Chloride	50.00	46.46	92.92	80-120	
1,2-Dichloroethylene (total)	100.00	93.08	93.09	80-120	
Xylenes (total)	150.00	142.22	94.81	80-120	
1,4-Dioxane	1000.00	988.21	98.82	80-120	
Dibromofluoromethane	50.00	52.53	105.08	71-125	
1,2-Dichloroethane-d4	50.00	52.09	104.19	70-125	
Toluene-d8	50.00	48.16	96.34	75-125	

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Form 7

Continuing Calibration Verification (CCV)

Volatiles by EPA 8260

Workorder

HS23071165

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

ALS Environmental–Houston Laboratory
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Phone (281) 530-5656 Fax (281) 530-5887
www.alsglobal.com

Continuing Calibration Verification (CCV)

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

Workorder HS23071165

RunID VOA6_442149

Volatiles by EPA 8260

Instrument ID VOA6.I
Lab File ID X072403.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date :36
ICAL Date(s) 14-JUL-2023 14-JUL-2023
ICAL Times :41 15:25
Quant Type ISTD

Compound	$\overline{RRF}$ / Conc	RF50 / Conc	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
30 Dibromofluoromethane	50.0	53.46245	0.48951	0.100	-6.92490	20.0	Linear	
35 1,2-Dichloroethane-d4	50.0	52.83887	0.60520	0.100	-5.67773	20.0	Linear	
48 Toluene-d8	1.28735	1.20858	1.20858	0.100	6.11859	20.0	Averaged	
Vinyl Chloride	0.64702	0.74019	0.74019	0.100	-14.39997	20.0	Averaged	
1,1-Dichloroethene	0.36630	0.39364	0.39364	0.100	-7.46153	20.0	Averaged	
Methylene Chloride	50.0	48.63168	0.42074	0.100	2.73665	20.0	Linear	
cis-1,2-Dichloroethene	0.53977	0.56794	0.56794	0.100	-5.21783	20.0	Averaged	
1,2-Dichloroethane	0.55040	0.54297	0.54297	0.100	1.35072	20.0	Averaged	
Trichloroethene	0.33829	0.32218	0.32218	0.200	4.76170	20.0	Averaged	
1,1,2-Trichloroethane	0.28552	0.28799	0.28799	0.100	-0.86492	20.0	Averaged	
trans-1,2-Dichloroethene	0.42371	0.38460	0.38460	0.100	9.22976	20.0	Averaged	

Continuing Calibration Verification (CCV)

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

Workorder HS23071165

RunID VOA6_442149

Volatiles by EPA 8260

Instrument ID VOA6.I
Lab File ID X072432.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date :30
ICAL Date(s) 14-JUL-2023 14-JUL-2023
ICAL Times :41 15:25
Quant Type ISTD

Compound	$\overline{RRF}$ / Conc	RF50 / Conc	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
30 Dibromofluoromethane	50.0	53.92149	0.49366	0.100	-7.84297	50.0	Linear	
35 1,2-Dichloroethane-d4	50.0	53.87164	0.61689	0.100	-7.74328	50.0	Linear	
48 Toluene-d8	1.28735	1.20400	1.20400	0.100	6.47432	50.0	Averaged	
Vinyl Chloride	0.64702	0.76140	0.76140	0.100	-17.67731	50.0	Averaged	
1,1-Dichloroethene	0.36630	0.35798	0.35798	0.100	2.27152	50.0	Averaged	
Methylene Chloride	50.0	58.25657	0.50167	0.100	-16.51314	50.0	Linear	
cis-1,2-Dichloroethene	0.53977	0.55782	0.55782	0.100	-3.34407	50.0	Averaged	
1,2-Dichloroethane	0.55040	0.54196	0.54196	0.100	1.53339	50.0	Averaged	
Trichloroethene	0.33829	0.33082	0.33082	0.200	2.20799	50.0	Averaged	
1,1,2-Trichloroethane	0.28552	0.28551	0.28551	0.100	0.00278	50.0	Averaged	
trans-1,2-Dichloroethene	0.42371	0.44904	0.44904	0.100	-5.97799	50.0	Averaged	

Continuing Calibration Verification (CCV)

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

Workorder HS23071165

RunID VOA6_442290

Volatiles by EPA 8260

Instrument ID VOA6.I
Lab File ID X072502.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date :28
ICAL Date(s) 14-JUL-2023 14-JUL-2023
ICAL Times :41 15:25
Quant Type ISTD

Compound	$\overline{RRF}$ / Conc	RF50 / Conc	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
1,4-Dioxane	0.00594	0.00595	0.00595	0.001	-0.20818	20.0	Averaged	
1,3-Butadiene	0.64248	0.74646	0.74646	0.100	-16.18386	20.0	Averaged	
Methacrylonitrile	0.64539	0.84690	0.84690	0.100	-31.22453	20.0	Averaged	*
Isobutyl Alcohol	0.09478	0.12106	0.12106	0.005	-27.73166	20.0	Averaged	*
Acetonitrile	0.07011	0.08475	0.08475	0.005	-20.87285	20.0	Averaged	*
Allyl Chloride	1.64159	2.05668	2.05668	0.100	-25.28603	20.0	Averaged	*
Propionitrile	0.09905	0.11698	0.11698	0.010	-18.10803	20.0	Averaged	
Dichlorodifluoromethane	50.0	43.04350	0.43873	0.100	13.91300	20.0	Linear	
Chloromethane	0.75520	0.67394	0.67394	0.100	10.76000	20.0	Averaged	
Vinyl Chloride	0.64702	0.66428	0.66428	0.100	-2.66781	20.0	Averaged	
Bromomethane	0.26775	0.21472	0.21472	0.100	19.80872	20.0	Averaged	
Chloroethane	0.36936	0.44002	0.44002	0.100	-19.12997	20.0	Averaged	
Trichlorofluoromethane	0.65570	0.68299	0.68299	0.100	-4.16157	20.0	Averaged	
Acrolein	100	156	0.02973	0.010	-56.36252	20.0	Linear	*
Acetone	100	128	0.25003	0.100	-27.67607	20.0	Linear	*
1,1-Dichloroethene	0.36630	0.37317	0.37317	0.100	-1.87291	20.0	Averaged	
Iodomethane	100	87.63567	0.41955	0.100	12.36433	20.0	Quadratic	
Acrylonitrile	0.24365	0.26870	0.26870	0.050	-10.28078	20.0	Averaged	
Methylene Chloride	50.0	50.60200	0.43731	0.100	-1.20400	20.0	Linear	
Methyl tert-butyl ether	1.36234	1.29349	1.29349	0.100	5.05367	20.0	Averaged	
Carbon Disulfide	1.15144	1.19836	1.19836	0.100	-4.07538	20.0	Averaged	
trans-1,2-Dichloroethene	0.42371	0.37088	0.37088	0.100	12.46967	20.0	Averaged	
Vinyl Acetate	1.75234	2.01326	2.01326	0.010	-14.88956	20.0	Averaged	
1,1-Dichloroethane	0.92980	0.87110	0.87110	0.200	6.31369	20.0	Averaged	
2-Butanone	0.26627	0.30527	0.30527	0.100	-14.64880	20.0	Averaged	
2,2-Dichloropropane	50.0	49.58021	0.71570	0.100	0.83958	20.0	Linear	
cis-1,2-Dichloroethene	0.53977	0.53914	0.53914	0.100	0.11655	20.0	Averaged	
Chloroform	0.95139	0.90224	0.90224	0.200	5.16593	20.0	Averaged	
Bromochloromethane	0.30250	0.28317	0.28317	0.100	6.38959	20.0	Averaged	
30 Dibromofluoromethane	50.0	52.80110	0.48354	0.100	-5.60219	20.0	Linear	
1,1,1-Trichloroethane	0.73237	0.71439	0.71439	0.100	2.45536	20.0	Averaged	
1,1-Dichloropropene	0.40784	0.37833	0.37833	0.100	7.23563	20.0	Averaged	
1,2-Dichloroethane	0.55040	0.55052	0.55052	0.100	-0.02229	20.0	Averaged	
Carbon Tetrachloride	0.41088	0.36726	0.36726	0.100	10.61508	20.0	Averaged	

Continuing Calibration Verification (CCV)

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

Workorder HS23071165

RunID VOA6_442290

Volatiles by EPA 8260

Instrument ID VOA6.I
Lab File ID X072502.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date :28
ICAL Date(s) 14-JUL-2023 14-JUL-2023
ICAL Times :41 15:25
Quant Type ISTD

Compound	$\overline{RRF}$ / Conc	RF50 / Conc	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
35 1,2-Dichloroethane-d4	50.0	54.22942	0.62094	0.100	-8.45884	20.0	Linear	
Benzene	1.19597	1.18872	1.18872	0.500	0.60643	20.0	Averaged	
Trichloroethene	0.33829	0.31658	0.31658	0.200	6.41624	20.0	Averaged	
Bromodichloromethane	0.45810	0.43519	0.43519	0.200	5.00094	20.0	Averaged	
2-Chloroethylvinyl ether	0.13987	0.13279	0.13279	0.001	5.06036	20.0	Averaged	
1,2-Dichloropropane	0.38457	0.41408	0.41408	0.100	-7.67431	20.0	Averaged	
Dibromomethane	0.21769	0.20678	0.20678	0.100	5.01298	20.0	Averaged	
4-Methyl-2-Pentanone	0.49202	0.56273	0.56273	0.100	-14.36950	20.0	Averaged	
cis-1,3-Dichloropropene	0.52616	0.50903	0.50903	0.200	3.25561	20.0	Averaged	
48 Toluene-d8	1.28735	1.19611	1.19611	0.100	7.08692	20.0	Averaged	
Toluene	1.34593	1.32106	1.32106	0.400	1.84790	20.0	Averaged	
trans-1,3-Dichloropropene	0.44354	0.42153	0.42153	0.100	4.96213	20.0	Averaged	
2-Hexanone	0.32321	0.37405	0.37405	0.100	-15.72892	20.0	Averaged	
1,1,2-Trichloroethane	0.28552	0.27429	0.27429	0.100	3.93109	20.0	Averaged	
1,3-Dichloropropane	0.58331	0.57160	0.57160	0.100	2.00743	20.0	Averaged	
Dibromochloromethane	0.41218	0.39342	0.39342	0.100	4.55255	20.0	Averaged	
Tetrachloroethene	0.27806	0.24643	0.24643	0.200	11.37776	20.0	Averaged	
1,2-Dibromoethane	0.32627	0.31304	0.31304	0.100	4.05511	20.0	Averaged	
1-Chlorohexane	0.40168	0.37587	0.37587	0.100	6.42756	20.0	Averaged	
Chlorobenzene	0.94084	0.89057	0.89057	0.500	5.34332	20.0	Averaged	
1,1,1,2-Tetrachloroethane	0.36833	0.34332	0.34332	0.100	6.79038	20.0	Averaged	
Ethylbenzene	0.47179	0.44215	0.44215	0.100	6.28253	20.0	Averaged	
m,p-Xylenes	0.59188	0.55281	0.55281	0.100	6.60110	20.0	Averaged	
o-Xylene	0.56049	0.53157	0.53157	0.300	5.16081	20.0	Averaged	
Styrene	0.97767	0.94792	0.94792	0.300	3.04274	20.0	Averaged	
Bromoform	0.26446	0.24709	0.24709	0.100	6.56598	20.0	Averaged	
Isopropylbenzene	1.44071	1.32024	1.32024	0.100	8.36204	20.0	Averaged	
1,1,2,2-Tetrachloroethane	0.83983	0.82262	0.82262	0.300	2.04873	20.0	Averaged	
1,2,3-Trichloropropane	0.66643	0.64449	0.64449	0.100	3.29226	20.0	Averaged	
n-Propylbenzene	3.02147	2.85563	2.85563	0.100	5.48869	20.0	Averaged	
Bromobenzene	0.78198	0.70976	0.70976	0.100	9.23595	20.0	Averaged	
1,3,5-Trimethylbenzene	2.26350	1.97127	1.97127	0.100	12.91027	20.0	Averaged	
2-Chlorotoluene	2.03821	1.81686	1.81686	0.100	10.86019	20.0	Averaged	
4-Chlorotoluene	2.23973	2.08769	2.08769	0.100	6.78861	20.0	Averaged	

Continuing Calibration Verification (CCV)

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

Workorder HS23071165

RunID VOA6_442290

Volatiles by EPA 8260

Instrument ID VOA6.I
Lab File ID X072502.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date :28
ICAL Date(s) 14-JUL-2023 14-JUL-2023
ICAL Times :41 15:25
Quant Type ISTD

Compound	$\overline{RRF}$ / Conc	RF50 / Conc	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
tert-Butylbenzene	1.94110	1.69661	1.69661	0.100	12.59546	20.0	Averaged	
1,2,4-Trimethylbenzene	2.26985	2.00626	2.00626	0.100	11.61238	20.0	Averaged	
sec-Butylbenzene	2.58735	2.39556	2.39556	0.100	7.41275	20.0	Averaged	
p-Isopropyltoluene	2.36350	2.10116	2.10116	0.100	11.09983	20.0	Averaged	
1,3-Dichlorobenzene	1.36227	1.21486	1.21486	0.600	10.82062	20.0	Averaged	
1,4-Dichlorobenzene	1.49361	1.29304	1.29304	0.400	13.42904	20.0	Averaged	
n-Butylbenzene	1.97948	1.87686	1.87686	0.500	5.18409	20.0	Averaged	
1,2-Dichlorobenzene	1.33929	1.21162	1.21162	0.400	9.53202	20.0	Averaged	
1,2-Dibromo-3-Chloropropane	50.0	43.16261	0.11875	0.040	13.67478	20.0	Linear	
1,2,4-Trichlorobenzene	0.91986	0.73979	0.73979	0.100	19.57610	20.0	Averaged	
Hexachlorobutadiene	50.0	41.14980	0.34513	0.100	17.70039	20.0	Linear	
Naphthalene	2.27672	1.94547	1.94547	0.200	14.54956	20.0	Averaged	
1,2,3-Trichlorobenzene	0.86027	0.69364	0.69364	0.010	19.36927	20.0	Averaged	
94 1,2-Dichloroethylene (total	0.48174	0.45501	0.45501	0.200	5.54909	20.0	Averaged	
95 Xylenes (total)	0.53613	0.49374	0.49374	0.100	7.90636	20.0	Averaged	
Cyclohexane	0.86668	0.92764	0.92764	0.100	-7.03350	20.0	Averaged	
Freon TF	50.0	55.79428	0.35085	0.100	-11.58857	20.0	Quadratic	
Methylcyclohexane	1.05536	1.14278	1.14278	0.100	-8.28320	20.0	Averaged	
Methyl Acetate	0.44499	0.56575	0.56575	0.100	-27.13837	20.0	Averaged	*
Tert-butyl alcohol	0.06311	0.06222	0.06222	0.005	1.41287	20.0	Averaged	
Isopropyl alcohol	0.03916	0.04776	0.04776	0.005	-21.96786	20.0	Averaged	*

Continuing Calibration Verification (CCV)

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

Workorder HS23071165

RunID VOA6_442290

Volatiles by EPA 8260

Instrument ID VOA6.I
Lab File ID X072530.D
Analysis Type WATER
Lab Sample ID CCV-END

Injection Date :02
ICAL Date(s) 14-JUL-2023 14-JUL-2023
ICAL Times :41 15:25
Quant Type ISTD

Compound	$\overline{RRF}$ / Conc	RF50 / Conc	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
1,4-Dioxane	0.00594	0.00607	0.00607	0.001	-2.18226	50.0	Averaged	
1,3-Butadiene	0.64248	0.82246	0.82246	0.100	-28.01265	50.0	Averaged	
Methacrylonitrile	0.64539	0.82365	0.82365	0.100	-27.62106	50.0	Averaged	
Isobutyl Alcohol	0.09478	0.11908	0.11908	0.005	-25.64462	50.0	Averaged	
Acetonitrile	0.07011	0.06060	0.06060	0.005	13.56833	50.0	Averaged	
Allyl Chloride	1.64159	1.45178	1.45178	0.100	11.56281	50.0	Averaged	
Propionitrile	0.09905	0.11706	0.11706	0.010	-18.18241	50.0	Averaged	
Dichlorodifluoromethane	50.0	47.81151	0.48859	0.100	4.37699	50.0	Linear	
Chloromethane	0.75520	0.79749	0.79749	0.100	-5.59967	50.0	Averaged	
Vinyl Chloride	0.64702	0.76857	0.76857	0.100	-18.78627	50.0	Averaged	
Bromomethane	0.26775	0.27486	0.27486	0.100	-2.65261	50.0	Averaged	
Chloroethane	0.36936	0.42795	0.42795	0.100	-15.86262	50.0	Averaged	
Trichlorofluoromethane	0.65570	0.75205	0.75205	0.100	-14.69333	50.0	Averaged	
Acrolein	100	121	0.02302	0.010	-21.34786	50.0	Linear	
Acetone	100	108	0.21232	0.100	-7.68385	50.0	Linear	
1,1-Dichloroethene	0.36630	0.33067	0.33067	0.100	9.72789	50.0	Averaged	
Iodomethane	100	77.00553	0.36523	0.100	22.99447	50.0	Quadratic	
Acrylonitrile	0.24365	0.22024	0.22024	0.050	9.60651	50.0	Averaged	
Methylene Chloride	50.0	39.63934	0.34514	0.100	20.72131	50.0	Linear	
Methyl tert-butyl ether	1.36234	1.06971	1.06971	0.100	21.47985	50.0	Averaged	
Carbon Disulfide	1.15144	0.89132	0.89132	0.100	22.59106	50.0	Averaged	
trans-1,2-Dichloroethene	0.42371	0.33450	0.33450	0.100	21.05447	50.0	Averaged	
Vinyl Acetate	1.75234	2.18471	2.18471	0.010	-24.67403	50.0	Averaged	
1,1-Dichloroethane	0.92980	0.99058	0.99058	0.200	-6.53669	50.0	Averaged	
2-Butanone	0.26627	0.30964	0.30964	0.100	-16.28673	50.0	Averaged	
2,2-Dichloropropane	50.0	49.47430	0.71416	0.100	1.05140	50.0	Linear	
cis-1,2-Dichloroethene	0.53977	0.56847	0.56847	0.100	-5.31675	50.0	Averaged	
Chloroform	0.95139	0.94966	0.94966	0.200	0.18111	50.0	Averaged	
Bromochloromethane	0.30250	0.29807	0.29807	0.100	1.46388	50.0	Averaged	
30 Dibromofluoromethane	50.0	54.17970	0.49599	0.100	-8.35940	50.0	Linear	
1,1,1-Trichloroethane	0.73237	0.80660	0.80660	0.100	-10.13462	50.0	Averaged	
1,1-Dichloropropene	0.40784	0.41336	0.41336	0.100	-1.35284	50.0	Averaged	
1,2-Dichloroethane	0.55040	0.57305	0.57305	0.100	-4.11505	50.0	Averaged	
Carbon Tetrachloride	0.41088	0.39574	0.39574	0.100	3.68425	50.0	Averaged	

Continuing Calibration Verification (CCV)

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

Workorder HS23071165

RunID VOA6_442290

Volatiles by EPA 8260

Instrument ID VOA6.I
Lab File ID X072530.D
Analysis Type WATER
Lab Sample ID CCV-END

Injection Date :02
ICAL Date(s) 14-JUL-2023 14-JUL-2023
ICAL Times :41 15:25
Quant Type ISTD

Compound	$\overline{RRF}$ / Conc	RF50 / Conc	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
35 1,2-Dichloroethane-d4	50.0	55.13708	0.63121	0.100	-10.27416	50.0	Linear	
Benzene	1.19597	1.20574	1.20574	0.500	-0.81706	50.0	Averaged	
Trichloroethene	0.33829	0.34656	0.34656	0.200	-2.44544	50.0	Averaged	
Bromodichloromethane	0.45810	0.43956	0.43956	0.200	4.04729	50.0	Averaged	
2-Chloroethylvinyl ether	0.13987	0.13385	0.13385	0.001	4.30391	50.0	Averaged	
1,2-Dichloropropane	0.38457	0.41481	0.41481	0.100	-7.86479	50.0	Averaged	
Dibromomethane	0.21769	0.20917	0.20917	0.100	3.91506	50.0	Averaged	
4-Methyl-2-Pentanone	0.49202	0.53314	0.53314	0.100	-8.35590	50.0	Averaged	
cis-1,3-Dichloropropene	0.52616	0.51296	0.51296	0.200	2.50836	50.0	Averaged	
48 Toluene-d8	1.28735	1.19209	1.19209	0.100	7.39933	50.0	Averaged	
Toluene	1.34593	1.37596	1.37596	0.400	-2.23130	50.0	Averaged	
trans-1,3-Dichloropropene	0.44354	0.42268	0.42268	0.100	4.70175	50.0	Averaged	
2-Hexanone	0.32321	0.36076	0.36076	0.100	-11.61699	50.0	Averaged	
1,1,2-Trichloroethane	0.28552	0.27323	0.27323	0.100	4.30176	50.0	Averaged	
1,3-Dichloropropane	0.58331	0.56479	0.56479	0.100	3.17350	50.0	Averaged	
Dibromochloromethane	0.41218	0.39691	0.39691	0.100	3.70556	50.0	Averaged	
Tetrachloroethene	0.27806	0.27920	0.27920	0.200	-0.41063	50.0	Averaged	
1,2-Dibromoethane	0.32627	0.30975	0.30975	0.100	5.06256	50.0	Averaged	
1-Chlorohexane	0.40168	0.42359	0.42359	0.100	-5.45343	50.0	Averaged	
Chlorobenzene	0.94084	0.93768	0.93768	0.500	0.33556	50.0	Averaged	
1,1,1,2-Tetrachloroethane	0.36833	0.35336	0.35336	0.100	4.06412	50.0	Averaged	
Ethylbenzene	0.47179	0.47017	0.47017	0.100	0.34432	50.0	Averaged	
m,p-Xylenes	0.59188	0.60368	0.60368	0.100	-1.99334	50.0	Averaged	
o-Xylene	0.56049	0.58012	0.58012	0.300	-3.50231	50.0	Averaged	
Styrene	0.97767	0.99495	0.99495	0.300	-1.76731	50.0	Averaged	
Bromoform	0.26446	0.24839	0.24839	0.100	6.07683	50.0	Averaged	
Isopropylbenzene	1.44071	1.48417	1.48417	0.100	-3.01655	50.0	Averaged	
1,1,2,2-Tetrachloroethane	0.83983	0.81901	0.81901	0.300	2.47873	50.0	Averaged	
1,2,3-Trichloropropane	0.66643	0.59667	0.59667	0.100	10.46810	50.0	Averaged	
n-Propylbenzene	3.02147	3.23400	3.23400	0.100	-7.03407	50.0	Averaged	
Bromobenzene	0.78198	0.77436	0.77436	0.100	0.97517	50.0	Averaged	
1,3,5-Trimethylbenzene	2.26350	2.28692	2.28692	0.100	-1.03488	50.0	Averaged	
2-Chlorotoluene	2.03821	2.04616	2.04616	0.100	-0.39004	50.0	Averaged	
4-Chlorotoluene	2.23973	2.33286	2.33286	0.100	-4.15777	50.0	Averaged	

Continuing Calibration Verification (CCV)

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

Workorder HS23071165

RunID VOA6_442290

Volatiles by EPA 8260

Instrument ID VOA6.I
Lab File ID X072530.D
Analysis Type WATER
Lab Sample ID CCV-END

Injection Date :02
ICAL Date(s) 14-JUL-2023 14-JUL-2023
ICAL Times :41 15:25
Quant Type ISTD

Compound	$\overline{RRF}$ / Conc	RF50 / Conc	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
tert-Butylbenzene	1.94110	2.02063	2.02063	0.100	-4.09707	50.0	Averaged	
1,2,4-Trimethylbenzene	2.26985	2.27888	2.27888	0.100	-0.39791	50.0	Averaged	
sec-Butylbenzene	2.58735	2.80048	2.80048	0.100	-8.23737	50.0	Averaged	
p-Isopropyltoluene	2.36350	2.39709	2.39709	0.100	-1.42112	50.0	Averaged	
1,3-Dichlorobenzene	1.36227	1.35473	1.35473	0.600	0.55300	50.0	Averaged	
1,4-Dichlorobenzene	1.49361	1.42468	1.42468	0.400	4.61547	50.0	Averaged	
n-Butylbenzene	1.97948	2.08561	2.08561	0.500	-5.36135	50.0	Averaged	
1,2-Dichlorobenzene	1.33929	1.35908	1.35908	0.400	-1.47804	50.0	Averaged	
1,2-Dibromo-3-Chloropropane	50.0	45.49540	0.12533	0.040	9.00921	50.0	Linear	
1,2,4-Trichlorobenzene	0.91986	0.79410	0.79410	0.100	13.67094	50.0	Averaged	
Hexachlorobutadiene	50.0	43.88737	0.36948	0.100	12.22525	50.0	Linear	
Naphthalene	2.27672	2.05057	2.05057	0.200	9.93322	50.0	Averaged	
1,2,3-Trichlorobenzene	0.86027	0.74472	0.74472	0.010	13.43190	50.0	Averaged	
94 1,2-Dichloroethylene (total	0.48174	0.45149	0.45149	0.200	6.28053	50.0	Averaged	
95 Xylenes (total)	0.53613	0.54688	0.54688	0.100	-2.00467	50.0	Averaged	
Cyclohexane	0.86668	1.08532	1.08532	0.100	-25.22746	50.0	Averaged	
Freon TF	50.0	53.21002	0.33168	0.100	-6.42004	50.0	Quadratic	
Methylcyclohexane	1.05536	1.02038	1.02038	0.100	3.31449	50.0	Averaged	
Methyl Acetate	0.44499	0.42445	0.42445	0.100	4.61541	50.0	Averaged	
Tert-butyl alcohol	0.06311	0.04987	0.04987	0.005	20.97428	50.0	Averaged	
Isopropyl alcohol	0.03916	0.03344	0.03344	0.005	14.59937	50.0	Averaged	

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Form 8

Internal Standard Area and RT Summary

Volatiles by EPA 8260

Workorder

HS23071165

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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

Form 8 - Internal Standard Area and RT Summary

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071165**

Volatiles by EPA 8260

VOA6_442149		Pentafluorobenzene				1,4-Difluorobenzene				Chlorobenzene				1,4-Dichlorobenze			
Sample ID	File ID	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
12-HOUR STD (CCV)	X072403.D	569251	#	4.17	#	922855	#	4.97	#	843367	#	7.67	#	457779	#	9.66	#
HS23071165-01	X072429.D	570458		4.18		867808		4.97		770734		7.67		381003		9.66	
HS23071165-01	X072428.D	570334		4.18		878420		4.97		780217		7.67		390323		9.66	
HS23071165-02	X072419.D	611672		4.18		956365		4.97		793162		7.67		416524		9.66	
HS23071165-03	X072430.D	585622		4.18		894590		4.97		796254		7.67		420685		9.66	
HS23071165-04	X072425.D	562879		4.18		862165		4.97		747114		7.67		381316		9.66	
HS23071165-04	X072424.D	610819		4.18		954129		4.97		783899		7.67		419658		9.66	
HS23071165-05	X072420.D	582200		4.18		878623		4.97		789876		7.67		398341		9.66	
HS23071165-06	X072427.D	553681		4.18		859447		4.97		753406		7.67		385442		9.66	
HS23071165-06	X072426.D	535561		4.18		837336		4.97		799037		7.67		429731		9.66	
HS23071165-07	X072421.D	576269		4.18		883872		4.97		788256		7.67		408933		9.66	
HS23071165-08	X072422.D	508733		4.18		798305		4.97		653411		7.67		337446		9.66	
VBLKW-230724	X072407.D	590206		4.18		901388		4.97		800368		7.67		428640		9.66	
VLCSW-230724	X072410.D	576980		4.18		921440		4.97		863162		7.67		466768		9.66	
MS-ZZZZZZMS	X072411.D	520372		4.18		816921		4.97		729742		7.67		440108		9.66	
ZZZZZZMSD	X072412.D	595747		4.18		922152		4.97		819904		7.67		447257		9.66	

AREA UPPER LIMIT = +100% of 12H STD IS Area
AREA LOWER LIMIT = - 50% of 12H STD IS Area
RT - Retention IS - Internal StandardTime

RT UPPER LIMIT = + 0.50 of 12H STD IS RT
RT LOWER LIMIT = - 0.50 of 12H STD IS RT
CCV - Continuing Calibration Verification

- Area or RT Limit Flag
* - Value Outside Area or RT limits
H - Hour STD - Standard

Form 8 - Internal Standard Area and RT Summary

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder **HS23071165**

Volatiles by EPA 8260

VOA6_442290		Pentafluorobenzene				1,4-Difluorobenzene				Chlorobenzene				1,4-Dichlorobenze			
Sample ID	File ID	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#	Area	#	RT	#
12-HOUR STD (CCV)	X072502.D	575260	#	4.18	#	936985	#	4.97	#	847733	#	7.67	#	466038	#	9.66	#
HS23071165-09	X072517.D	544751		4.18		833051		4.97		723805		7.67		359617		9.66	
VBLKW-230725	X072507.D	585803		4.18		919826		4.97		787286		7.67		400742		9.66	
VLCSW-230725	X072505.D	567256		4.18		942875		4.97		846696		7.67		455950		9.66	
MS-ZZZZZZMS	X072513.D	565124		4.18		894329		4.97		770201		7.67		403879		9.66	
ZZZZZZMSD	X072514.D	565484		4.18		894784		4.97		798127		7.67		431446		9.66	

AREA UPPER LIMIT = +100% of 12H STD IS Area
AREA LOWER LIMIT = - 50% of 12H STD IS Area
RT - Retention IS - Internal StandardTime

RT UPPER LIMIT = + 0.50 of 12H STD IS RT
RT LOWER LIMIT = - 0.50 of 12H STD IS RT
CCV - Continuing Calibration Verification

- Area or RT Limit Flag
* - Value Outside Area or RT limits
H - Hour STD - Standard

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Analysis Run Log

Volatiles by EPA 8260

Workorder

HS23071165

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

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www.alsglobal.com

Form 13 - Analysis Run Log

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23071165

RunID
VOA6-441456

Volatiles by EPA 8260

Run ID VOA6_441456 **Start Date** 07/14/23 **EndDate** 07/14/23

Inj. Time	Client Sample ID	Type	Lab Sample ID	File ID	Analysis Date	DF
11:20	BFB	TUNE	BFB	X071401.D	07/14/23	1
12:01	VSTD000.25	ICAL1	VSTD000.25	X071402.D	07/14/23	1
12:22	VSTD000.5	ICAL2	VSTD000.5	X071403.D	07/14/23	1
13:02	VSTD001	ICAL3	VSTD001	X071404.D	07/14/23	1
13:23	VSTD002	ICAL4	VSTD002	X071405.D	07/14/23	1
13:43	VSTD005	ICAL5	VSTD005	X071406.D	07/14/23	1
14:04	VSTD020	ICAL6	VSTD020	X071407.D	07/14/23	1
14:24	VSTD050	ICAL7	VSTD050	X071408.D	07/14/23	1
14:44	VSTD100	ICAL8	VSTD100	X071409.D	07/14/23	1
15:05	VSTD150	ICAL9	VSTD150	X071410.D	07/14/23	1
15:25	VSTD200	ICAL	VSTD200	X071411.D	07/14/23	1
16:06	CCV	ICV	CCV	X071413.D	07/14/23	1

Form 13 - Analysis Run Log

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23071165

RunID
VOA6-442149

Volatiles by EPA 8260

Run ID VOA6_442149 **Start Date** 07/24/23 **EndDate** 07/24/23

Inj. Time	Client Sample ID	Type	Lab Sample ID	File ID	Analysis Date	DF
10:55	BFB	TUNE	BFB	X072401.D	07/24/23	1
11:36	CCV	CCV	CCV	X072403.D	07/24/23	1
11:56	CCB	CCB	CCB	X072404.D	07/24/23	1
12:58	VBLKW-230724	MBLK	VBLKW-230724	X072407.D	07/24/23	1
13:18	HS23071113-02	SAMP	ZZZZZZZZZZ	X072408.D	07/24/23	1
13:39	HS23071113-04	SAMP	ZZZZZZZZZZ	X072409.D	07/24/23	1
13:59	VLCSW-230724	LCS	VLCSW-230724	X072410.D	07/24/23	1
14:20	HS23071113-02MS	MS	ZZZZZZMS	X072411.D	07/24/23	1
14:40	HS23071113-02MSD	MSD	ZZZZZZMSD	X072412.D	07/24/23	1
15:01	HS23071113-01	SAMP	ZZZZZZZZZZ	X072413.D	07/24/23	50
15:21	HS23071113-03	SAMP	ZZZZZZZZZZ	X072414.D	07/24/23	1
15:42	HS23071113-06	SAMP	ZZZZZZZZZZ	X072415.D	07/24/23	1
16:02	HS23071113-07	SAMP	ZZZZZZZZZZ	X072416.D	07/24/23	1
16:23	HS23071113-08	SAMP	ZZZZZZZZZZ	X072417.D	07/24/23	1
16:43	HS23071113-09	SAMP	ZZZZZZZZZZ	X072418.D	07/24/23	1
17:04	HS23071165-02	SAMP	16EW08-230717	X072419.D	07/24/23	1
17:24	HS23071165-05	SAMP	16RW05-230717	X072420.D	07/24/23	1
17:45	HS23071165-07	SAMP	16WW22-230717	X072421.D	07/24/23	1
18:05	HS23071165-08	SAMP	16RW12-230717	X072422.D	07/24/23	1
18:26	HS23071113-05	SAMP	ZZZZZZZZZZ	X072423.D	07/24/23	1
18:46	HS23071165-04	SAMP	16RW04-230717	X072424.D	07/24/23	5
19:07	HS23071165-04	SAMP	16RW04-230717	X072425.D	07/24/23	50
19:27	HS23071165-06	SAMP	16RW01-230717	X072426.D	07/24/23	5
19:48	HS23071165-06	SAMP	16RW01-230717	X072427.D	07/24/23	50
20:08	HS23071165-01	SAMP	16EW01-230717	X072428.D	07/24/23	10
20:29	HS23071165-01	SAMP	16EW01-230717	X072429.D	07/24/23	100
20:49	HS23071165-03	SAMP	16EW04-230717	X072430.D	07/24/23	100
21:30	CCV	CCV_END	CCV	X072432.D	07/24/23	1

Form 13 - Analysis Run Log

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 January 2023

Workorder
HS23071165

RunID
VOA6-442290

Volatiles by EPA 8260

Run ID VOA6_442290 **Start Date** 07/25/23 **EndDate** 07/25/23

Inj. Time	Client Sample ID	Type	Lab Sample ID	File ID	Analysis Date	DF
10:08	BFB	TUNE	BFB	X072501.D	07/25/23	1
10:28	CCV	CCV	CCV	X072502.D	07/25/23	1
11:09	CCB	CCB	CCB	X072504.D	07/25/23	1
11:30	VLCSW-230725	LCS	VLCSW-230725	X072505.D	07/25/23	1
12:11	VBLKW-230725	MBLK	VBLKW-230725	X072507.D	07/25/23	1
12:31	HS23071293-01	SAMP	ZZZZZZZZZZ	X072508.D	07/25/23	1
12:52	HS23071293-02	SAMP	ZZZZZZZZZZ	X072509.D	07/25/23	1
13:12	HS23071293-03	SAMP	ZZZZZZZZZZ	X072510.D	07/25/23	1
13:33	HS23071289-11	SAMP	ZZZZZZZZZZ	X072511.D	07/25/23	1
14:14	HS23071289-11MS	MS	ZZZZZZMS	X072513.D	07/25/23	1
14:34	HS23071289-11MSD	MSD	ZZZZZZMSD	X072514.D	07/25/23	1
14:54	HS23071113-04	SAMP	ZZZZZZZZZZ	X072515.D	07/25/23	25
15:15	HS23071113-05	SAMP	ZZZZZZZZZZ	X072516.D	07/25/23	5
15:35	HS23071165-09	SAMP	Trip Blank-230717	X072517.D	07/25/23	1
15:56	HS23071289-12	SAMP	ZZZZZZZZZZ	X072518.D	07/25/23	1
16:16	HS23071289-08	SAMP	ZZZZZZZZZZ	X072519.D	07/25/23	1
16:37	HS23071289-09	SAMP	ZZZZZZZZZZ	X072520.D	07/25/23	1
16:57	HS23071289-10	SAMP	ZZZZZZZZZZ	X072521.D	07/25/23	1
17:18	HS23071289-06	SAMP	ZZZZZZZZZZ	X072522.D	07/25/23	1
17:38	HS23071289-07	SAMP	ZZZZZZZZZZ	X072523.D	07/25/23	1
17:59	HS23071289-03	SAMP	ZZZZZZZZZZ	X072524.D	07/25/23	5
18:19	HS23071289-03	SAMP	ZZZZZZZZZZ	X072525.D	07/25/23	25
18:40	HS23071289-05	SAMP	ZZZZZZZZZZ	X072526.D	07/25/23	5
19:00	HS23071289-05	SAMP	ZZZZZZZZZZ	X072527.D	07/25/23	25
19:21	HS23071289-01	SAMP	ZZZZZZZZZZ	X072528.D	07/25/23	5
19:41	HS23071289-02	SAMP	ZZZZZZZZZZ	X072529.D	07/25/23	5
20:02	CCV-END	CCV_END	CCV-END	X072530.D	07/25/23	1

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Raw Data VOA6 441456

Volatiles by EPA 8260

Workorder

HS23071165

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 January 2023

07/27/2023

ALS Environmental–Houston Laboratory
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Phone (281) 530-5656 Fax (281) 530-5887
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Data File: \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071401.D Page 1
Report Date: 14-Jul-2023 12:16

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071401.D
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 14-JUL-2023 11:20
Operator : PC Inst ID: voa6.i
Smp Info : BFB;BFB;3;;BFB
Misc Info : V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\bfb.m
Meth Date : 14-Mar-2023 15:45 Linh.Pham Quant Type: ISTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: NAHSTW7051

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

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

					CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/l)		
RT	EXP RT	REL RT	MASS	RESPONSE			TARGET RANGE	RATIO
1 bfb							CAS #: 460-00-4	
8.687	8.889	(0.000)	95	75584			0.00- 100.00	100.00
8.687	8.889	(0.000)	50	19544			15.00- 40.00	25.86
8.687	8.889	(0.000)	75	39336			30.00- 60.00	52.04
8.687	8.889	(0.000)	96	4254			5.00- 9.00	5.63
8.687	8.889	(0.000)	173	575			0.00- 2.00	0.93
8.687	8.889	(0.000)	174	62120			50.00- 0.00	82.19
8.687	8.889	(0.000)	175	4074			5.00- 9.00	6.56
8.687	8.889	(0.000)	176	59920			95.00- 101.00	96.46
8.687	8.889	(0.000)	177	3382			5.00- 9.00	5.64

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	25.86
75	30.00 - 60.00% of mass 95	52.04
96	5.00 - 9.00% of mass 95	5.63
173	Less than 2.00% of mass 174	0.76 (0.93)
174	Greater than 50.00% of mass 95	82.19
175	5.00 - 9.00% of mass 174	5.39 (6.56)
176	95.00 - 101.00% of mass 174	79.28 (96.46)
177	5.00 - 9.00% of mass 176	4.47 (5.64)

Data File: X071401.D
Spectrum: Scan 2159 (8.68)
Location of Maximum: 95.10
Number of points: 86

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1001	59.90	684	88.00	3732	134.80	342
37.00	4000	61.00	4199	91.20	205	137.00	155
38.10	3490	62.10	4176	92.00	2613	140.00	79
39.20	1334	63.00	2135	93.00	3158	140.80	1031
39.90	3559	64.10	319	94.00	8834	142.20	140
40.70	64	67.00	413	95.10	75584	142.90	753
42.00	125	68.10	6971	96.00	4254	145.70	149
43.00	148	69.10	7538	97.30	71	147.80	317
44.10	2032	70.10	1203	104.00	361	148.70	68
45.10	1709	72.20	463	105.00	140	155.00	115
46.10	218	73.20	3048	105.90	261	156.90	305
47.00	2031	74.00	11989	107.00	78	158.60	77
47.80	299	75.00	39336	114.80	122	167.70	60
48.30	315	76.10	3185	115.70	131	169.70	59
49.00	4410	76.90	966	116.70	450	172.20	197
50.00	19544	78.10	384	118.00	134	173.00	575
51.00	6014	78.90	2349	118.90	176	174.00	62120
52.20	624	79.90	148	127.80	434	175.00	4074
55.10	243	80.80	1499	128.50	116	176.00	59920
55.90	1173	82.00	347	129.50	194	177.00	3382
57.00	2234	85.90	194	129.90	123		
57.80	62	87.00	3285	131.00	91		

Data File: \\nahstws005\target\chem\voa6.i\x230714.b\x071401.d Page 1

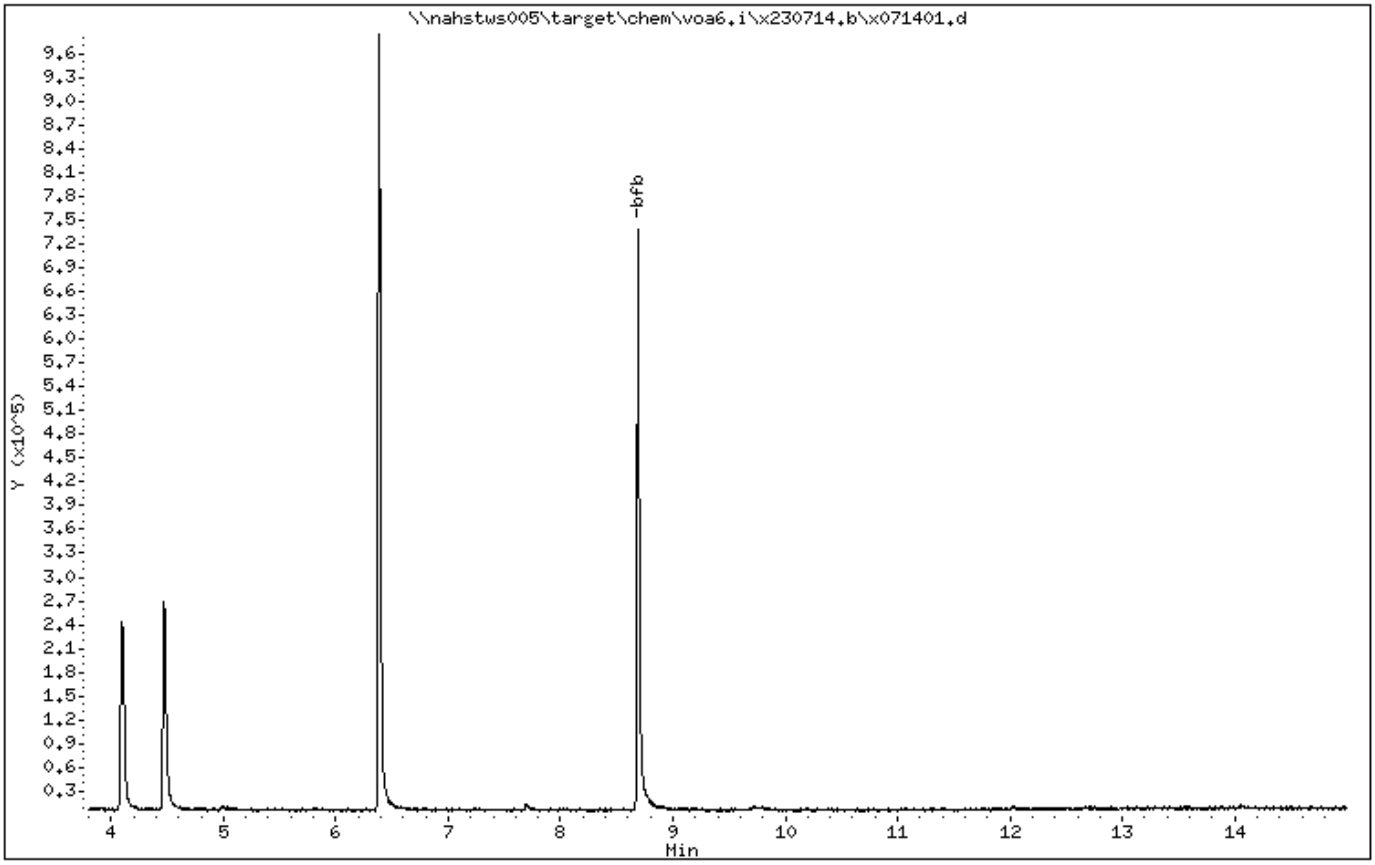
Date : 14-JUL-2023 11:20

Client ID: BFB Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0 Operator: PC

Column phase: DB624 Column diameter: 0.25



Data File : \\nahstws005\target\chem\voa6.i\x230714.b\x071401.d
Inj Date : 14-JUL-2023 11:20
InstruID : voa6.i
LabSampID : BFB

NO MANUAL INTEGRATIONS

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071402.D
Lab Smp Id: VSTD000.25 Client Smp ID: VSTD000.25
Inj Date : 14-JUL-2023 12:01
Operator : PC Inst ID: voa6.i
Smp Info : VSTD000.25;VSTD000.25;1;1;
Misc Info : V6;WATER;0;1;
Comment :
Method : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\8260W.m
Meth Date : 20-Jul-2023 15:04 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 14:24 Cal File: X071408.D
Als bottle: 3 Calibration Sample, Level: 1
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

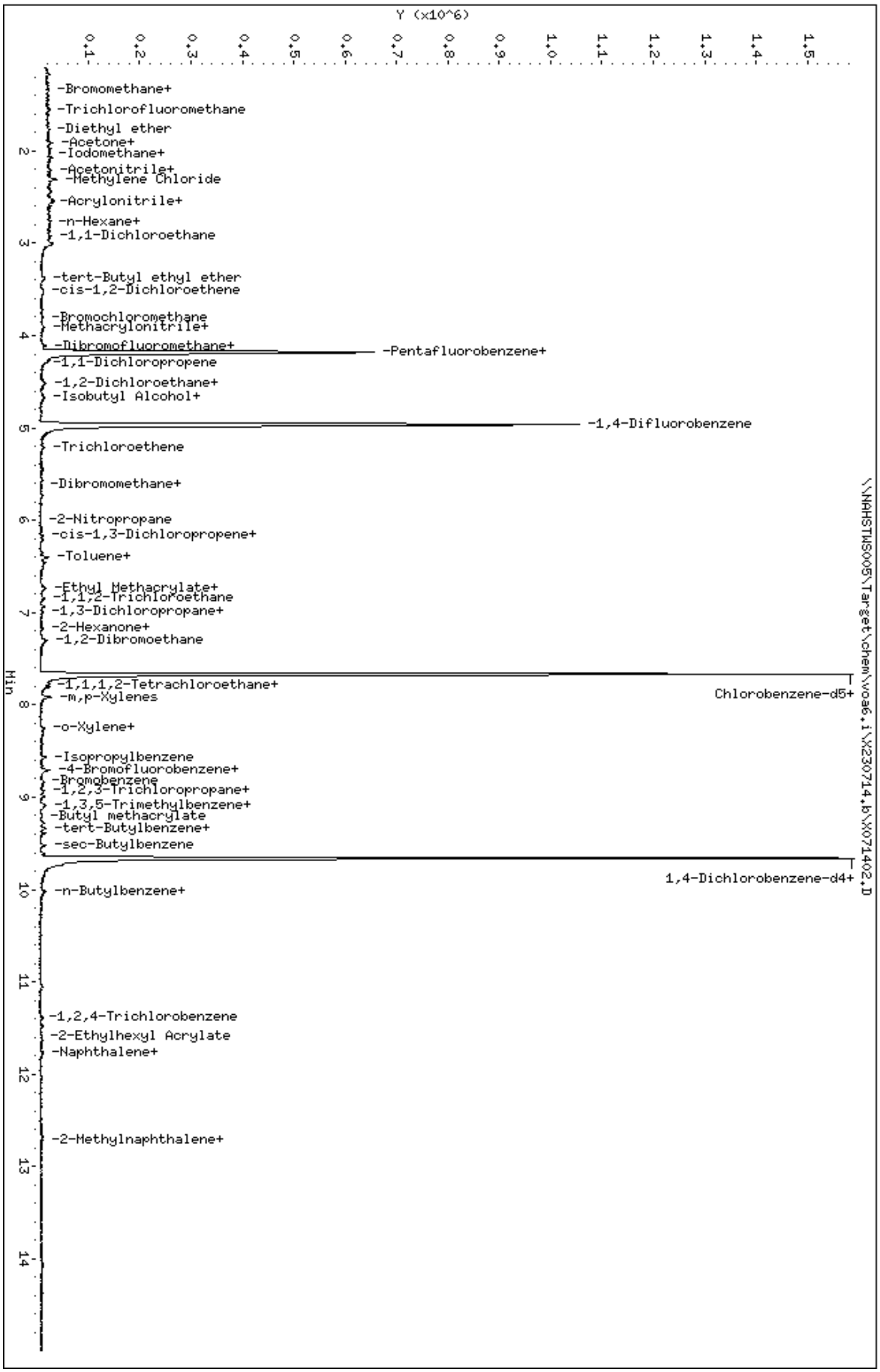
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
*	1 Pentafluorobenzene	168	4.177	4.177	(1.000)	513772	50.0000	
	2 Dichlorodifluoromethane	85	0.972	0.972	(0.233)	1327	0.25000	1.34
	6 Bromomethane	94	1.344	1.344	(0.322)	1426	0.25000	0.51
	7 Chloroethane	64	1.404	1.404	(0.336)	2235	0.25000	0.58
	13 Acetonitrile	39	2.206	2.206	(0.528)	1743	2.50000	2.41(a)
	15 Iodomethane	142	2.026	2.026	(0.485)	1361	0.50000	4.07(T)
	34 Carbon Tetrachloride	117	4.177	4.177	(0.841)	45277	0.25000	6.79
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	810653	50.0000	
	43 2-Nitropropane	43	5.992	5.992	(1.434)	882	0.25000	0.43(a)
	44 Dibromomethane	93	5.557	5.557	(1.119)	982	0.25000	0.27(a)
	46 cis-1,3-Dichloropropene	75	6.164	6.164	(1.242)	2135	0.25000	0.25(a)
*	47 Chlorobenzene-d5	117	7.667	7.667	(1.000)	750028	50.0000	
$	48 Toluene-d8	98	6.400	6.400	(0.835)	9790	0.25000	0.50(aM)
	49 Ethyl Methacrylate	69	6.738	6.738	(1.357)	1122	0.25000	0.21(a)
	50 Toluene	91	6.457	6.457	(0.842)	5493	0.25000	0.27(a)
	53 1,1,2-Trichloroethane	83	6.847	6.847	(0.893)	800	0.25000	0.18(a)
	54 1,3-Dichloropropane	76	6.993	6.993	(0.912)	2465	0.25000	0.28(a)
	55 Dibromochloromethane	129	7.180	7.180	(0.936)	1520	0.25000	0.24(a)
	56 Tetrachloroethene	164	6.940	6.940	(0.905)	1306	0.25000	0.31(a)
	57 1,2-Dibromoethane	107	7.285	7.285	(0.950)	1533	0.25000	0.31(a)

58 1-Chlorohexane	55	7.667	7.667 (1.544)	8221	0.25000	1.26(a)
59 Chlorobenzene	112	7.694	7.694 (1.003)	4381	0.25000	0.31(a)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
60	1,1,1,2-Tetrachloroethane	131	7.780	7.780	(1.015)	1432	0.25000	0.25(a)
61	Ethylbenzene	106	7.810	7.810	(1.019)	1916	0.25000	0.27(a)
62	m,p-Xylenes	106	7.915	7.915	(1.032)	4768	0.50000	0.53(a)
63	o-Xylene	106	8.252	8.252	(1.076)	2524	0.25000	0.30(a)
64	Styrene	104	8.316	8.316	(1.085)	2747	0.25000	0.18(a)
67	Isopropylbenzene	105	8.567	8.567	(1.117)	5899	0.25000	0.27(a)
$ 69	4-Bromofluorobenzene	95	8.710	8.710	(1.136)	5758	0.25000	0.34(a)
* 70	1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	386421	50.0000	
71	1,2,3-Trichloropropane	75	8.871	8.871	(0.918)	2014	0.25000	0.39(a)
73	n-Propylbenzene	91	8.927	8.927	(0.924)	5784	0.25000	0.24(a)
74	Bromobenzene	156	8.818	8.818	(0.913)	1741	0.25000	0.28(a)
75	1,3,5-Trimethylbenzene	105	9.081	9.081	(0.940)	5918	0.25000	0.33(a)
76	2-Chlorotoluene	91	8.991	8.991	(0.931)	3339	0.25000	0.21(a)
77	4-Chlorotoluene	91	9.114	9.114	(0.943)	4046	0.25000	0.23(a)
78	tert-Butylbenzene	119	9.339	9.339	(0.967)	4275	0.25000	0.28(a)
79	1,2,4-Trimethylbenzene	105	9.392	9.392	(0.972)	5781	0.25000	0.32(a)
81	sec-Butylbenzene	105	9.519	9.519	(0.985)	5830	0.25000	0.29(a)
82	p-Isopropyltoluene	119	9.654	9.654	(0.999)	5470	0.25000	0.29(a)
83	1,3-Dichlorobenzene	146	9.624	9.624	(0.996)	3790	0.25000	0.35(a)
84	1,4-Dichlorobenzene	146	9.684	9.684	(1.002)	4376	0.25000	0.37(a)
88	1,2-Dichlorobenzene	146	10.018	10.018	(1.037)	2842	0.25000	0.27(a)
93	1,2,3-Trichlorobenzene	180	11.780	11.780	(1.219)	1828	0.25000	0.27(a)
141	Cyclohexane	56	4.174	4.174	(0.999)	9736	0.25000	1.09(a)
135	1,4-Dioxane	88	5.621	5.621	(1.345)	272	5.00000	4.45(aM)
136	n-Hexane	57	2.772	2.772	(0.664)	1827	0.25000	(a)
139	Diethyl ether	59	1.760	1.760	(0.421)	1325	0.25000	0.27(a)
149	Isopropyl alcohol	45	2.097	2.097	(0.502)	2990	5.00000	7.43(T)
166	1,2,3-Trimethylbenzene	105	9.737	9.737	(1.008)	3283	0.25000	0.18(a)
174	tert-Amyl methyl ether	73	4.665	4.665	(1.117)	5098	0.25000	0.30(Ta)
175	tert-Butyl ethyl ether	59	3.379	3.379	(0.809)	5067	0.25000	0.23(a)
176	tert-Amyl alcohol	59	4.646	4.646	(1.112)	1684	5.00000	3.00(a)
151	4-Methyl-2-pentanol	45	6.734	6.734	(1.356)	10871	5.00000	6.25
180	1-Methylnaphthalene	142	12.672	12.672	(1.312)	2289	0.25000	(a)
140	1,3-Butadiene	54	1.171	1.171	(0.280)	1955	0.25000	0.29(a)
M 94	1,2-Dichloroethylene (total)	96				3006	0.50000	(a)
134	Cyclohexanone	55	8.653	8.653	(0.896)	2370	5.00000	6.88(a)
150	Allyl alcohol	57	2.772	2.772	(0.664)	1827	5.00000	(a)
200	Dimethyl Disulfide	94	6.202	6.202	(0.809)	2328	0.25000	0.23(a)

QC Flag Legend

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



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Purge Volume: 5.0
Column phase: DB624

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

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1,4-Dioxane ()

Reason Code:

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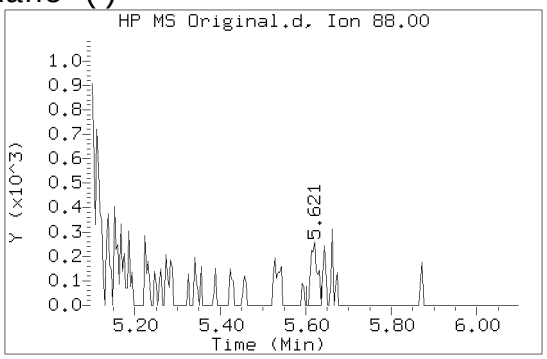

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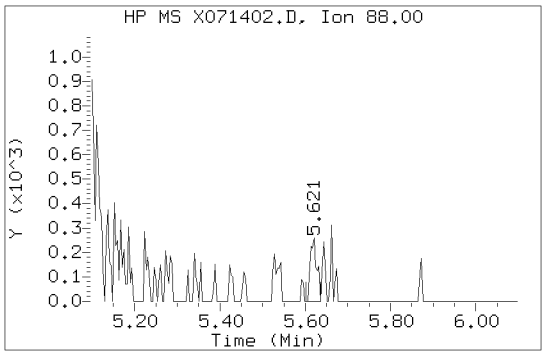

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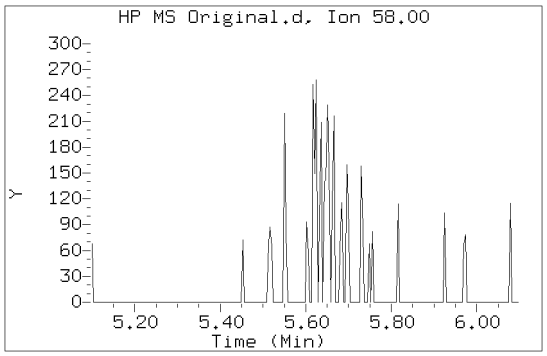

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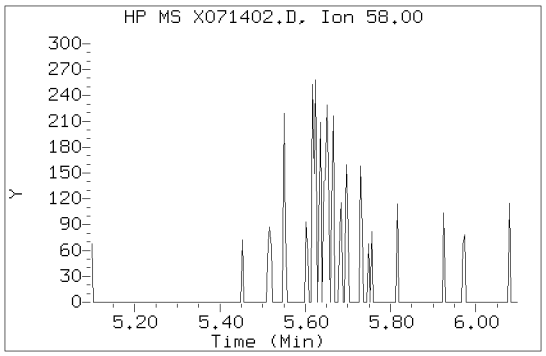

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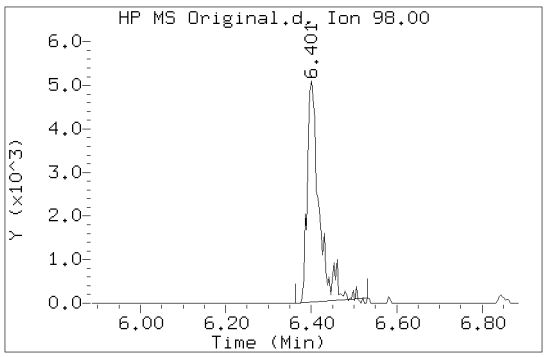

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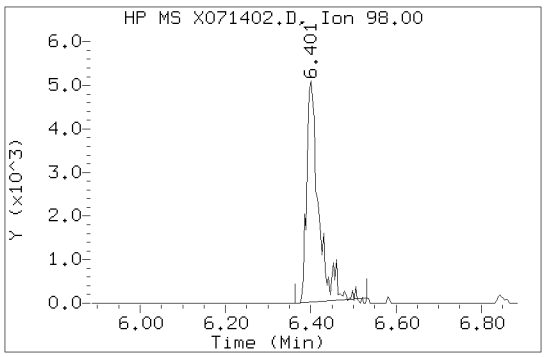

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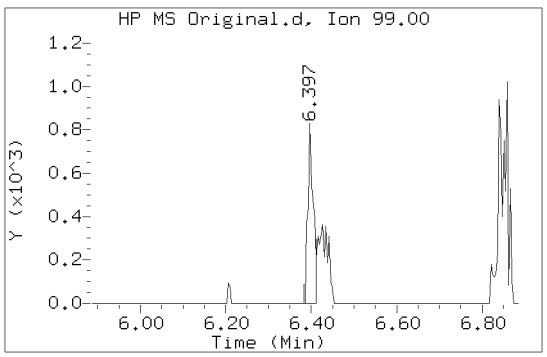

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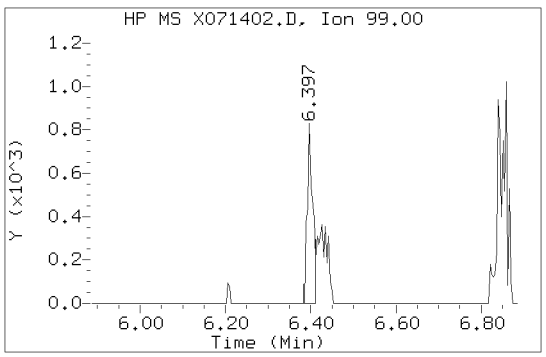

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InstruID : voa6.i
LabSampID : VSTD000.25

Toluene-d8 (2037-26-5)

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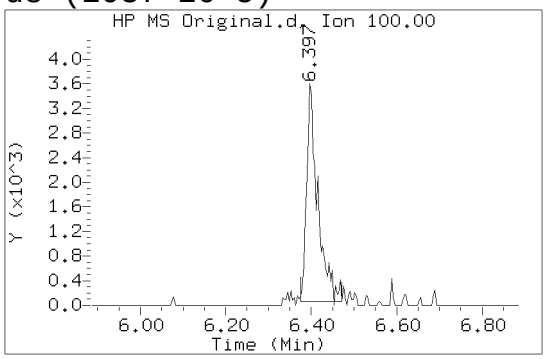

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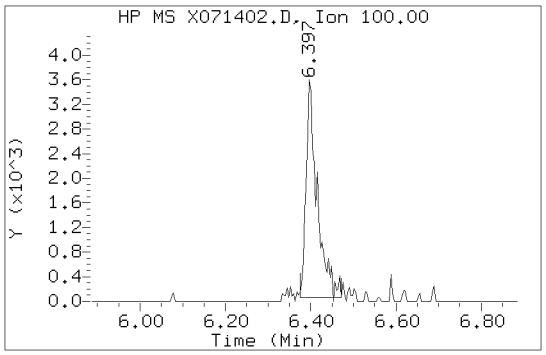

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Report Date: 20-Jul-2023 15:04

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
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Inj Date : 14-JUL-2023 12:22
Operator : PC Inst ID: voa6.i
Smp Info : VSTD000.5;VSTD000.5;1;2;
Misc Info : V6;WATER;0;1;
Comment   :
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Meth Date : 20-Jul-2023 15:04 voa6.i Quant Type: ISTD
Cal Date : 14-JUL-2023 12:01 Cal File: X071402.D
Als bottle: 3 Calibration Sample, Level: 2
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	4.181	4.181	(1.000)	503444	50.0000	
	2 Dichlorodifluoromethane	85	0.976	0.976	(0.234)	1663	0.50000	1.41
	3 Chloromethane	50	1.081	1.081	(0.259)	4229	0.50000	0.55
	4 Propionitrile	54	3.701	3.701	(0.885)	5231	5.00000	5.24(aM)
	5 Vinyl Chloride	62	1.145	1.145	(0.274)	3484	0.50000	0.53
	6 Bromomethane	94	1.340	1.340	(0.321)	1399	0.50000	0.51(M)
	7 Chloroethane	64	1.407	1.407	(0.337)	2168	0.50000	0.58(M)
	9 Acrolein	56	1.868	1.868	(0.447)	268	1.00000	2.51(aM)
	12 Isobutyl Alcohol	43	4.695	4.695	(1.123)	9983	10.0000	10.46(a)
	13 Acetonitrile	39	2.213	2.213	(0.529)	3606	5.00000	5.10(aM)
	14 Allyl Chloride	41	2.202	2.202	(0.527)	9843	0.50000	0.59(a)
	15 Iodomethane	142	2.026	2.026	(0.485)	2897	1.00000	4.39(TM)
	16 Acrylonitrile	53	2.539	2.539	(0.607)	3055	1.00000	1.24(M)
	18 Methyl tert-butyl ether	73	2.539	2.539	(0.607)	7187	0.50000	0.52(M)
	19 Carbon Disulfide	76	2.078	2.078	(0.497)	12054	1.00000	1.03
	20 trans-1,2-Dichloroethene	96	2.543	2.543	(0.608)	2557	0.50000	0.59
	21 Vinyl Acetate	43	3.019	3.019	(0.722)	18224	1.00000	1.03(M)
	22 1,1-Dichloroethane	63	2.929	2.929	(0.701)	5250	0.50000	0.56(TM)
	23 Chloroprene	53	1.786	1.786	(0.427)	1292	0.50000	0.57(aM)
	24 2-Butanone	43	3.675	3.675	(0.879)	2827	1.00000	1.05(M)

25 Methacrylonitrile	41	3.893	3.893 (0.931)	3622	0.50000	0.55(aM)
26 2,2-Dichloropropane	77	3.506	3.506 (0.839)	3703	0.50000	0.71(M)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
	27 cis-1,2-Dichloroethene	96	3.540	3.540	(0.847)	2924	0.50000	0.53(M)
	28 Chloroform	83	3.911	3.911	(0.935)	5643	0.50000	0.58(M)
	29 Bromochloromethane	128	3.810	3.810	(0.911)	1717	0.50000	0.56(M)
	31 1,1,1-Trichloroethane	97	4.080	4.080	(0.976)	3867	0.50000	0.52
	32 1,1-Dichloropropene	75	4.286	4.286	(0.863)	3744	0.50000	0.57(M)
	33 1,2-Dichloroethane	62	4.564	4.564	(0.919)	5246	0.50000	0.59(M)
	34 Carbon Tetrachloride	117	4.256	4.256	(0.857)	3613	0.50000	0.54(M)
*	36 1,4-Difluorobenzene	114	4.965	4.965	(1.000)	802287	50.0000	
	37 Benzene	78	4.526	4.526	(0.912)	10488	0.50000	0.54
	38 Trichloroethene	130	5.216	5.216	(1.051)	2909	0.50000	0.53(a)
	39 Bromodichloromethane	83	5.737	5.737	(1.156)	4539	0.50000	0.61(aM)
	40 Methyl Methacrylate	41	5.636	5.636	(1.348)	3261	0.50000	0.53(aM)
	41 2-Chloroethylvinyl ether	63	6.082	6.082	(1.225)	2206	1.00000	0.98(aM)
	42 1,2-Dichloropropane	63	5.448	5.448	(1.097)	3473	0.50000	0.56(aM)
	43 2-Nitropropane	43	5.984	5.984	(1.431)	1174	0.50000	0.58(aM)
	44 Dibromomethane	93	5.568	5.568	(1.122)	1988	0.50000	0.56(a)
	45 4-Methyl-2-Pentanone	43	6.348	6.348	(0.828)	8626	1.00000	1.19(a)
	46 cis-1,3-Dichloropropene	75	6.168	6.168	(1.242)	4937	0.50000	0.58(a)
*	47 Chlorobenzene-d5	117	7.667	7.667	(1.000)	735322	50.0000	
$	48 Toluene-d8	98	6.400	6.400	(0.835)	10379	0.50000	0.54(aM)
	49 Ethyl Methacrylate	69	6.727	6.727	(1.355)	2780	0.50000	0.52(aM)
	50 Toluene	91	6.453	6.453	(0.842)	10040	0.50000	0.50(a)
	51 trans-1,3-Dichloropropene	75	6.700	6.700	(1.350)	3980	0.50000	0.55(a)
	52 2-Hexanone	43	7.113	7.113	(0.928)	4470	1.00000	0.94(aM)
	53 1,1,2-Trichloroethane	83	6.843	6.843	(0.892)	2223	0.50000	0.52(aM)
	54 1,3-Dichloropropane	76	6.993	6.993	(0.912)	5041	0.50000	0.58(a)
	55 Dibromochloromethane	129	7.184	7.184	(0.937)	3132	0.50000	0.51(aM)
	56 Tetrachloroethene	164	6.933	6.933	(0.904)	1790	0.50000	0.43(a)
	57 1,2-Dibromoethane	107	7.270	7.270	(0.948)	2613	0.50000	0.54(a)
	58 1-Chlorohexane	55	7.701	7.701	(1.551)	3459	0.50000	0.53(aM)
	59 Chlorobenzene	112	7.694	7.694	(1.003)	7907	0.50000	0.57(aM)
	60 1,1,1,2-Tetrachloroethane	131	7.776	7.776	(1.014)	3008	0.50000	0.55(aM)
	61 Ethylbenzene	106	7.802	7.802	(1.018)	3909	0.50000	0.56(aM)
	62 m,p-Xylenes	106	7.907	7.907	(1.031)	8550	1.00000	0.98(a)
	63 o-Xylene	106	8.256	8.256	(1.077)	4414	0.50000	0.53(aM)
	64 Styrene	104	8.290	8.290	(1.081)	8133	0.50000	0.56(aM)
	66 Bromoform	173	8.417	8.417	(1.098)	1973	0.50000	0.50(Ta)
	67 Isopropylbenzene	105	8.563	8.563	(1.117)	10697	0.50000	0.50(a)
	68 1,1,2,2-Tetrachloroethane	83	8.848	8.848	(0.916)	3654	0.50000	0.56(aM)
$	69 4-Bromofluorobenzene	95	8.702	8.702	(1.135)	7819	0.50000	0.64(aM)
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	386891	50.0000	
	71 1,2,3-Trichloropropane	75	8.871	8.871	(0.918)	2737	0.50000	0.53(aM)
	72 trans-1,4-Dichloro-2-butene	53	8.927	8.927	(1.164)	1124	0.50000	0.50(aM)
	73 n-Propylbenzene	91	8.927	8.927	(0.924)	11407	0.50000	0.48(a)
	74 Bromobenzene	156	8.818	8.818	(0.913)	3201	0.50000	0.52(aM)
	75 1,3,5-Trimethylbenzene	105	9.077	9.077	(0.939)	9580	0.50000	0.54(a)
	76 2-Chlorotoluene	91	8.983	8.983	(0.930)	8487	0.50000	0.53(aM)
	77 4-Chlorotoluene	91	9.088	9.088	(0.941)	8710	0.50000	0.50(a)
	78 tert-Butylbenzene	119	9.339	9.339	(0.967)	8109	0.50000	0.53(a)
	79 1,2,4-Trimethylbenzene	105	9.392	9.392	(0.972)	10172	0.50000	0.57(aM)
	81 sec-Butylbenzene	105	9.523	9.523	(0.986)	9247	0.50000	0.46(aM)
	82 p-Isopropyltoluene	119	9.651	9.651	(0.999)	9771	0.50000	0.53(aM)

83 1,3-Dichlorobenzene	146	9.609	9.609 (0.995)	5980	0.50000	0.56(a)
84 1,4-Dichlorobenzene	146	9.681	9.681 (1.002)	6395	0.50000	0.55(a)

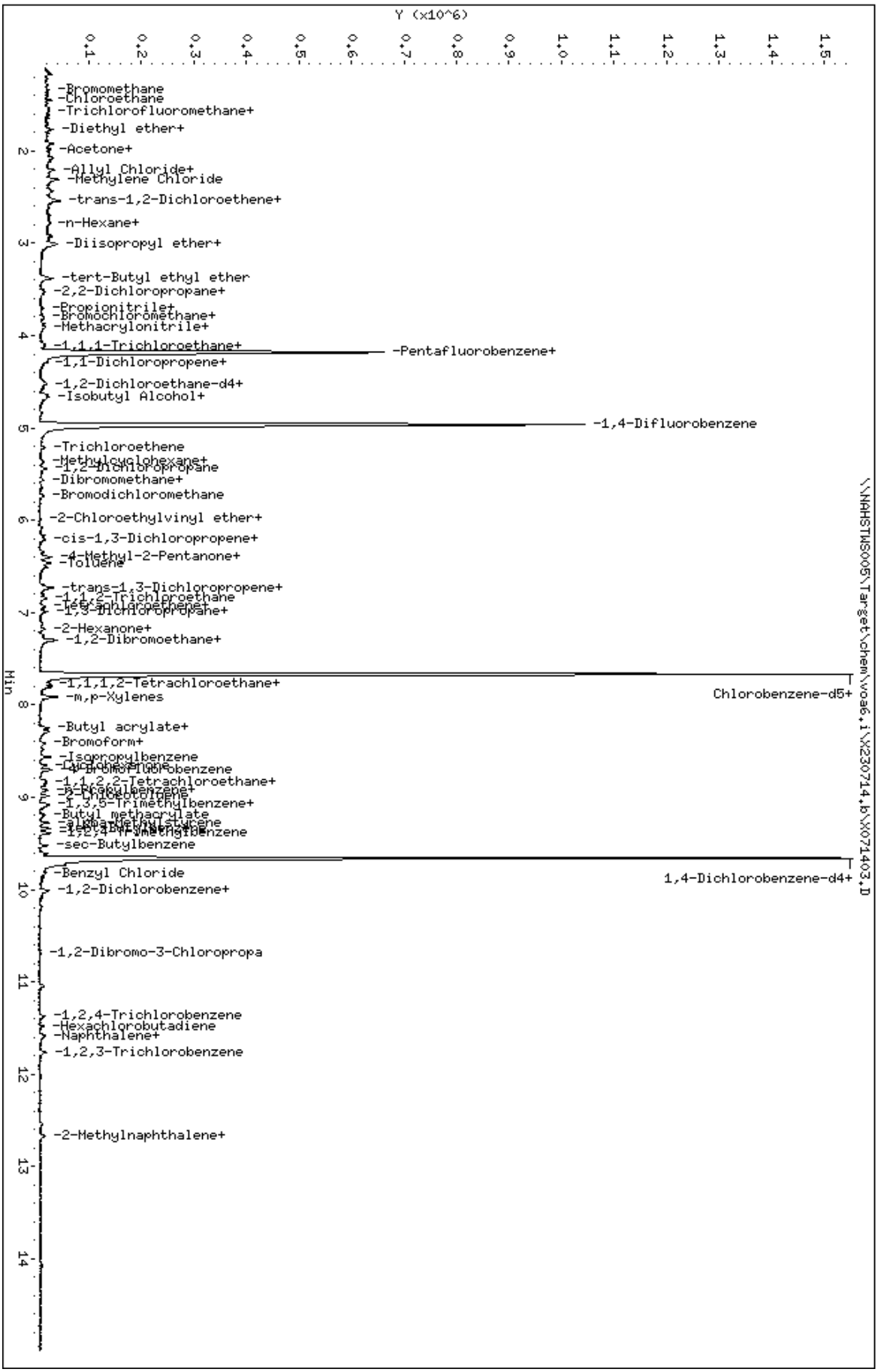
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
86	Benzyl Chloride	91	9.827	9.827	(1.282)	6245	0.50000	2.82(aM)
87	n-Butylbenzene	91	10.014	10.014	(1.036)	7141	0.50000	0.46(aM)
88	1,2-Dichlorobenzene	146	10.010	10.010	(1.036)	5252	0.50000	0.50(a)
89	1,2-Dibromo-3-Chloropropane	155	10.681	10.681	(1.106)	675	0.50000	1.70(aM)
90	1,2,4-Trichlorobenzene	180	11.371	11.371	(1.177)	4099	0.50000	0.57(aM)
91	Hexachlorobutadiene	225	11.484	11.484	(1.189)	1357	0.50000	2.74(aM)
92	Naphthalene	128	11.574	11.574	(1.198)	10357	0.50000	0.58(aM)
93	1,2,3-Trichlorobenzene	180	11.761	11.761	(1.217)	3845	0.50000	0.57(aM)
146	Methyl acetate	43	2.232	2.232	(0.534)	2344	0.50000	0.52(aM)
141	Cyclohexane	56	4.163	4.163	(0.996)	4321	0.50000	0.49(aM)
142	Tetrahydrofuran	42	3.870	3.870	(0.926)	1418	1.00000	1.09(aM)
147	Methylcyclohexane	55	5.366	5.366	(1.081)	9168	0.50000	0.54(aM)
135	1,4-Dioxane	88	5.624	5.624	(1.345)	692	10.0000	11.56(aM)
132	n-Butanol	56	5.355	5.355	(1.281)	1626	10.0000	9.70(aM)
131	Methyl Acrylate	55	3.750	3.750	(0.897)	3365	0.50000	0.49(aM)
133	Ethyl Acrylate	55	5.366	5.366	(1.283)	8232	0.50000	0.49(aM)
136	n-Hexane	57	2.787	2.787	(0.667)	2320	0.50000	(aM)
139	Diethyl ether	59	1.767	1.767	(0.423)	2605	0.50000	0.55(a)
148	Tert-butyl alcohol	59	2.442	2.442	(0.584)	7856	10.0000	12.36(M)
149	Isopropyl alcohol	45	2.105	2.105	(0.503)	4548	10.0000	11.53(T)
156	Diisopropyl ether	45	3.008	3.008	(0.719)	10814	0.50000	0.52(Ta)
166	1,2,3-Trimethylbenzene	105	9.737	9.737	(1.008)	9020	0.50000	0.50(a)
167	Ethanol	45	1.696	1.696	(0.406)	1082	10.0000	(aM)
172	tert-Butyl formate	59	4.646	4.646	(1.111)	6083	1.00000	1.13(aM)
173	3,3-Dimethyl-1-butanol	57	7.296	7.296	(0.952)	10397	10.0000	13.14(M)
174	tert-Amyl methyl ether	73	4.669	4.669	(1.117)	9377	0.50000	0.56(TaM)
175	tert-Butyl ethyl ether	59	3.390	3.390	(0.811)	12508	0.50000	0.58(a)
176	tert-Amyl alcohol	59	4.646	4.646	(1.111)	6083	10.0000	11.06(M)
151	4-Methyl-2-pentanol	45	6.723	6.723	(1.354)	20217	10.0000	11.75(M)
180	1-Methylnaphthalene	142	12.672	12.672	(1.312)	3667	0.50000	(a)
140	1,3-Butadiene	54	1.167	1.167	(0.279)	3203	0.50000	0.49(a)
152	Amyl alcohol	42	6.970	6.970	(0.909)	2120	10.0000	10.02(M)
158	Dichlorofluoromethane	67	1.538	1.538	(0.368)	4296	0.50000	0.52(M)
159	Propylene oxide	43	1.801	1.801	(0.431)	615	1.00000	0.99(aM)
161	3-Methyl-1-butanol	55	6.948	6.948	(0.906)	1945	10.0000	10.74(M)
162	Butyl acrylate	55	8.286	8.286	(1.081)	6783	0.50000	0.48(a)
163	Butyl methacrylate	41	9.182	9.182	(0.950)	4724	0.50000	0.50(aM)
182	Epichlorohydrin	57	6.127	6.127	(1.234)	1233	2.00000	2.05(aM)
M 94	1,2-Dichloroethylene (total)	96				5481	1.00000	(a)
130	Ethyl Acetate	43	3.690	3.690	(0.883)	4291	0.50000	0.57(aM)
134	Cyclohexanone	55	8.653	8.653	(0.896)	4174	10.0000	12.11(aM)
185	Isoprene	39	1.756	1.756	(0.420)	843	0.50000	0.50(aM)
188	Isopropyl acetate	43	4.695	4.695	(0.946)	11581	0.50000	0.54(a)
187	n-Amyl acetate	43	8.477	8.477	(1.106)	7447	0.50000	0.55(aM)
189	n-Butyl acetate	43	7.248	7.248	(0.945)	6398	0.50000	0.56(aM)
150	Allyl alcohol	57	2.787	2.787	(0.667)	2068	10.0000	(aM)
194	Acetaldehyde	44	1.212	1.212	(0.290)	32460	2.00000	57.33
195	Methyl Amyl Ketone	43	8.413	8.413	(1.097)	8863	0.50000	0.57(a)
200	Dimethyl Disulfide	94	6.213	6.213	(0.810)	4899	0.50000	0.49(a)

QC Flag Legend

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

QC Flag Legend

M - Compound response manually integrated.



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Client ID: VSTD000.5
Sample Info: VSTD000.5;VSTD000.5;1;2;
Purge Volume: 5.0
Column phase: DB624

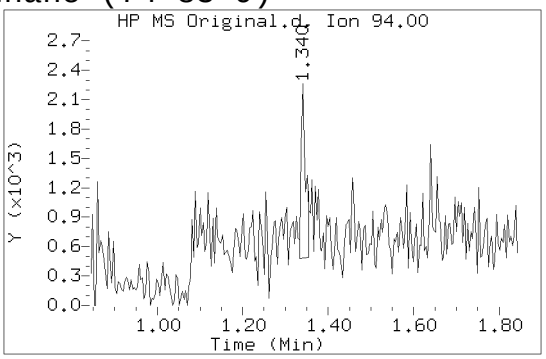
Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Bromomethane (74-83-9)

Reason Code:

BEFORE
MASS
94
AREA
1399
HEIGHT
1780
20-Jul-2023
15:04
linh
pham



AFTER
MASS
94
AREA
1399
HEIGHT
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20-Jul-2023
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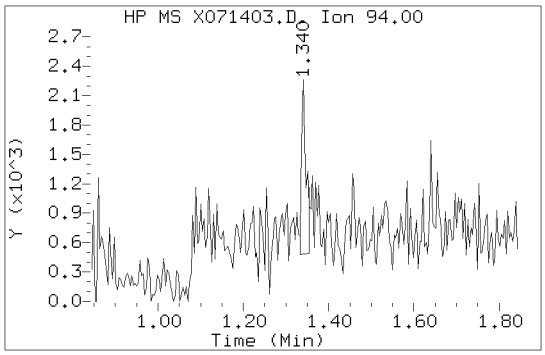
pham



BEFORE
MASS
96
AREA
1662
HEIGHT
1558
20-Jul-2023
15:04
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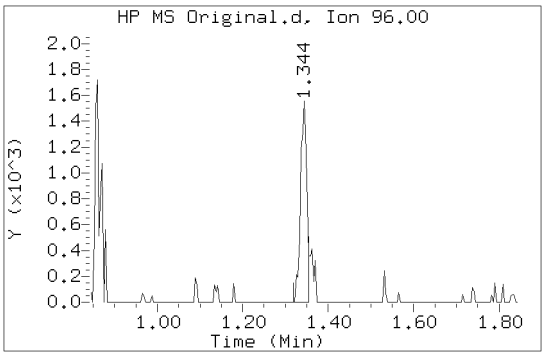
pham



AFTER
MASS
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AREA
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HEIGHT
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20-Jul-2023
15:04
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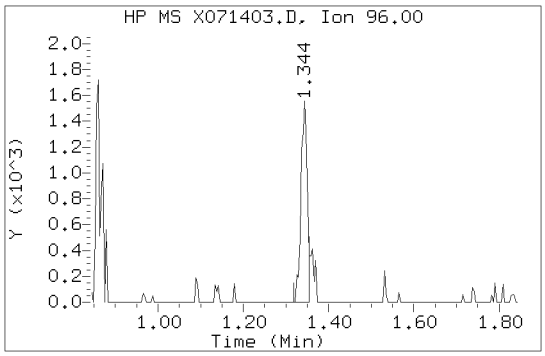
pham



Chloroethane (75-00-3)

Reason Code:

BEFORE
MASS
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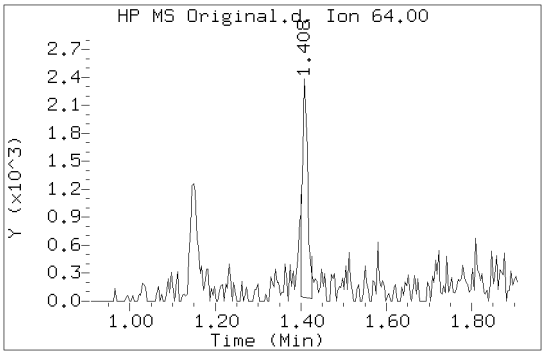
AREA
2168
HEIGHT
2339
20-Jul-2023
15:04
linh
pham



AFTER
MASS
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AREA
2168
HEIGHT
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20-Jul-2023
15:04
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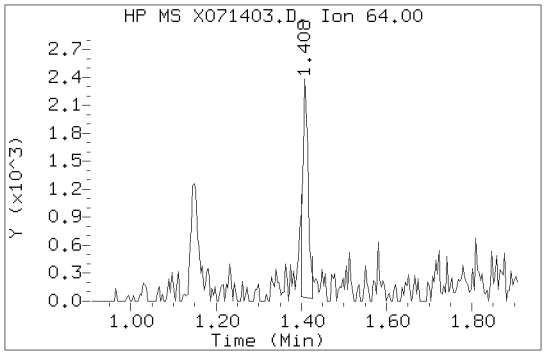
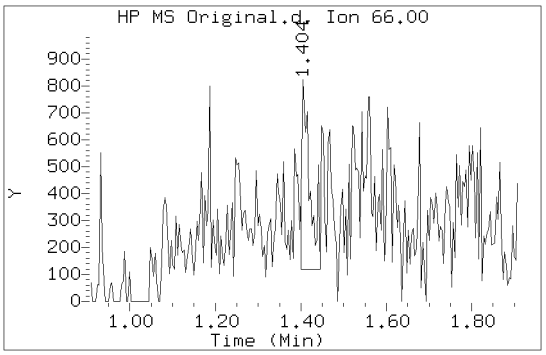
pham



BEFORE
MASS
66
AREA
934
HEIGHT
704
20-Jul-2023
15:04
linh
pham



AFTER
MASS
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AREA
934
HEIGHT
704
20-Jul-2023
15:04
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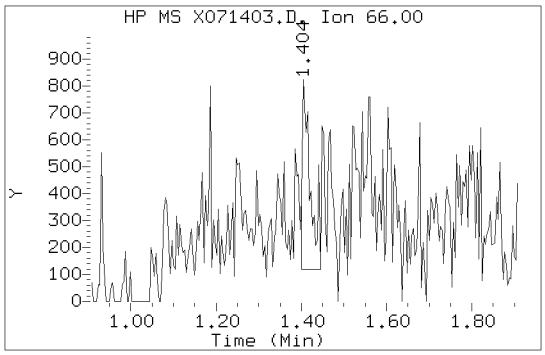
pham



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Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Iodomethane (74-88-4)

Reason Code:

BEFORE
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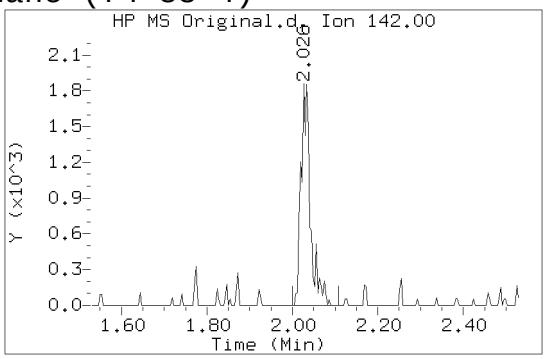
AREA
2897
HEIGHT
1860
20-Jul-2023
15:04
linh
pham



AFTER
MASS
142
AREA
2897
HEIGHT
1860
20-Jul-2023
15:04
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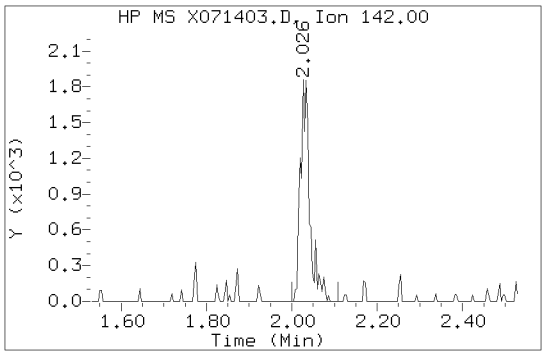
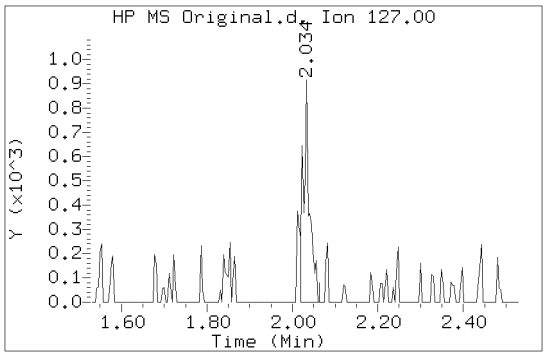


BEFORE
MASS
127
AREA
955
HEIGHT
916
20-Jul-2023
15:04
linh
pham



AFTER
MASS
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AREA
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HEIGHT
916
20-Jul-2023
15:04
linh
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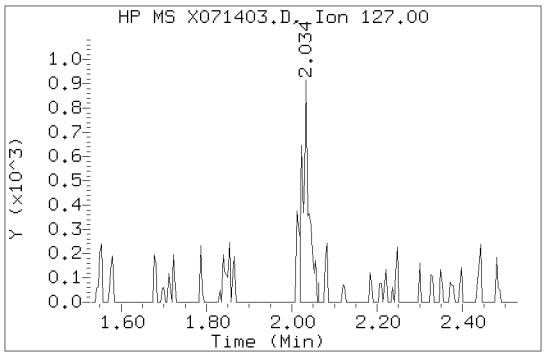

BEFORE
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20-Jul-2023
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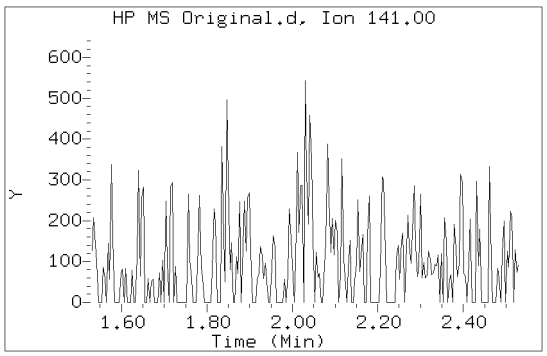

AFTER
MASS
141
AREA
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20-Jul-2023
15:04
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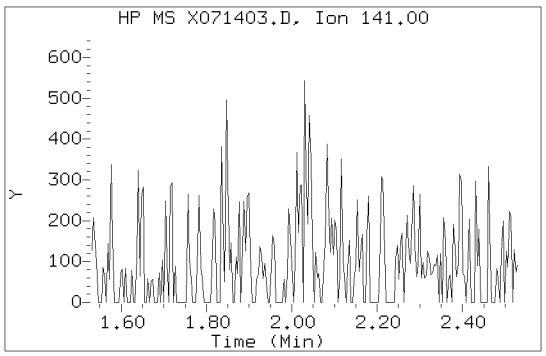
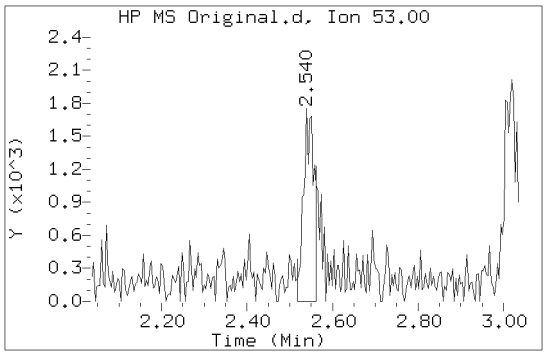


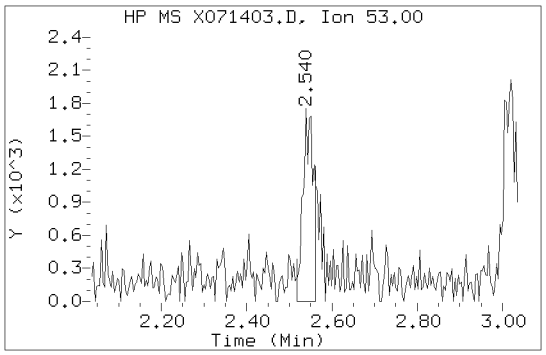
Acrylonitrile (107-13-1)

Reason Code:

BEFORE
MASS
53
AREA
3055
HEIGHT
1753
20-Jul-2023
15:04
linh
pham



AFTER
MASS
53
AREA
3055
HEIGHT
1753
20-Jul-2023
15:04
linh
pham



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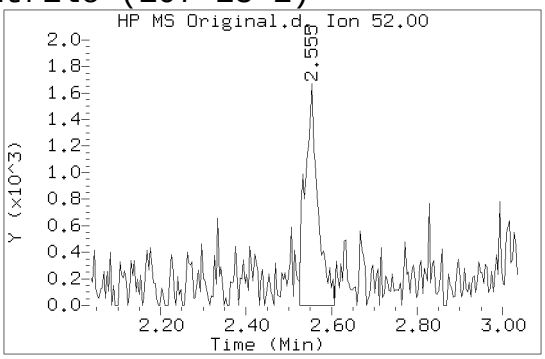
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Acrylonitrile (107-13-1)

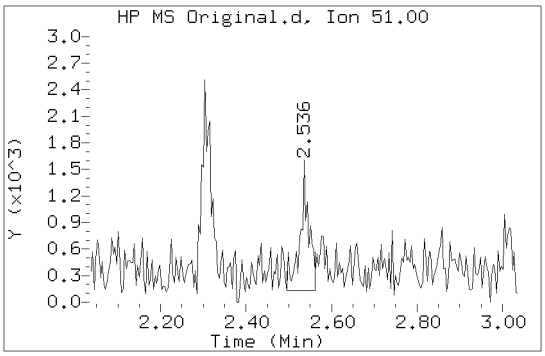
BEFORE

MASS
52
AREA
3501
HEIGHT
1670
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
51
AREA
2140
HEIGHT
1479
20-Jul-2023
15:04
linh
pham



Reason Code:

AFTER

MASS
52
AREA
3501
HEIGHT
1670
20-Jul-2023
15:04
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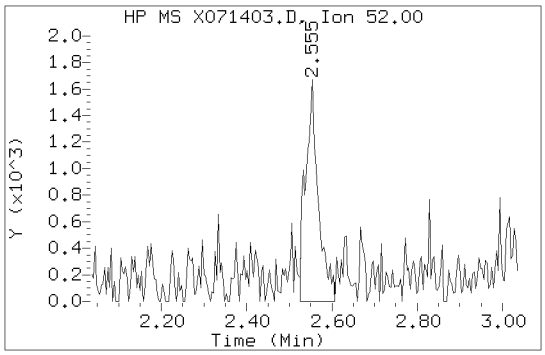

AFTER

MASS
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2140
HEIGHT
1479
20-Jul-2023
15:04
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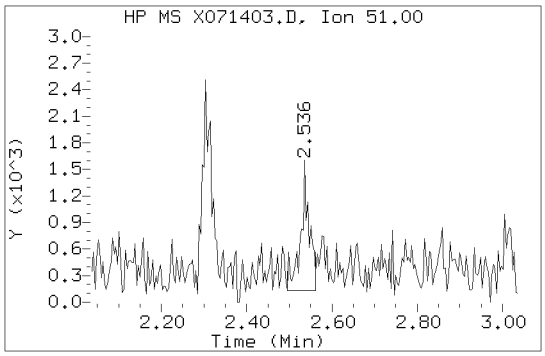
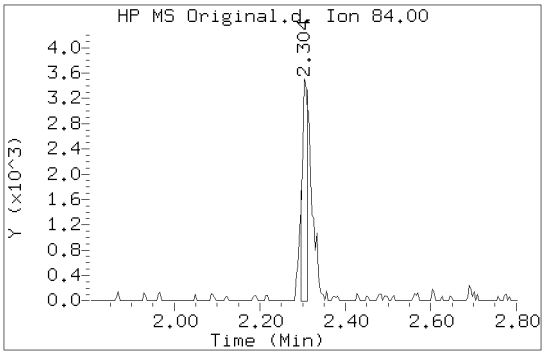
pham



Methylene Chloride (75-09-2)

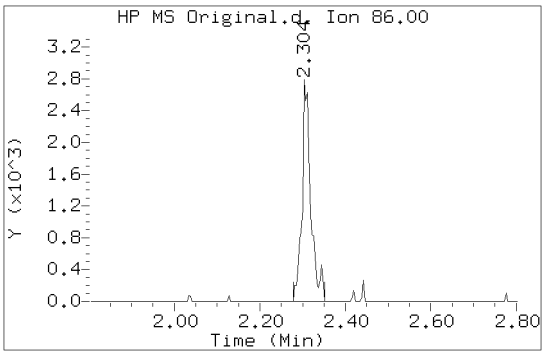
BEFORE

MASS
84
AREA
3115
HEIGHT
3513
20-Jul-2023
15:04
linh
pham



BEFORE

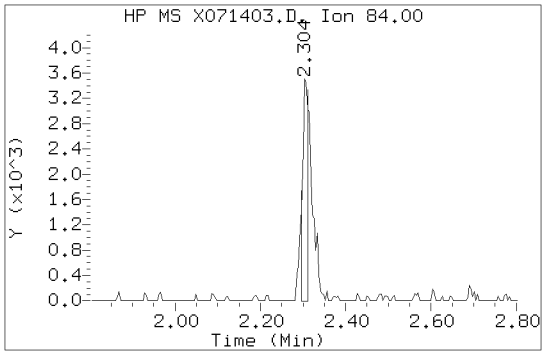
MASS
86
AREA
4061
HEIGHT
2789
20-Jul-2023
15:04
linh
pham



Reason Code:

AFTER

MASS
84
AREA
3115
HEIGHT
3513
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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AREA
4061
HEIGHT
2789
20-Jul-2023
15:04
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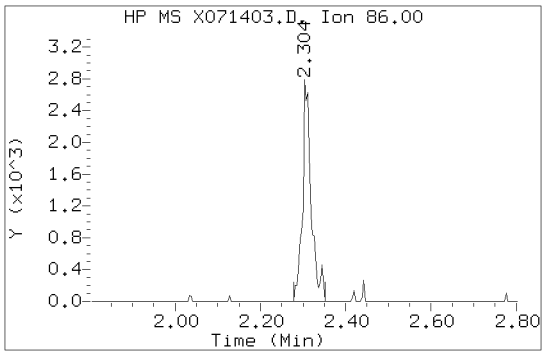
pham



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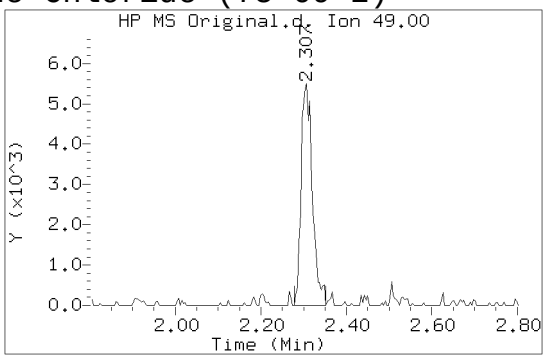
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Methylene Chloride (75-09-2)

Reason Code:

BEFORE

MASS
49
AREA
10268
HEIGHT
5500
20-Jul-2023
15:04
linh
pham



AFTER

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20-Jul-2023
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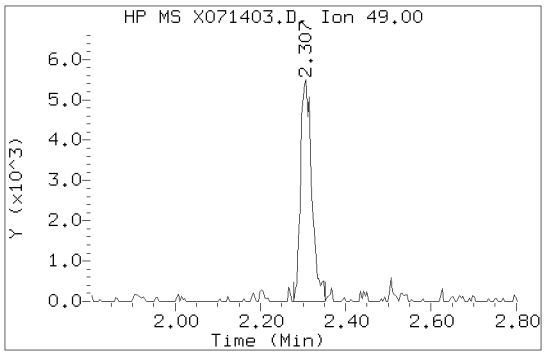
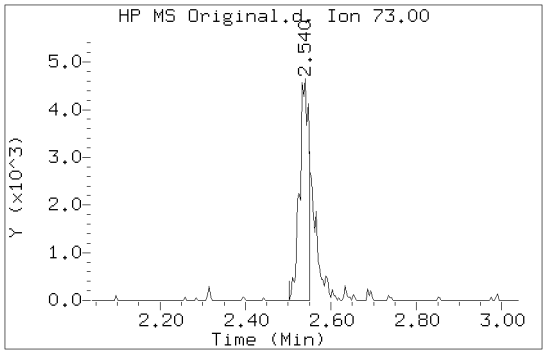


Methyl tert-butyl ether (1634-04-4)

Reason Code:

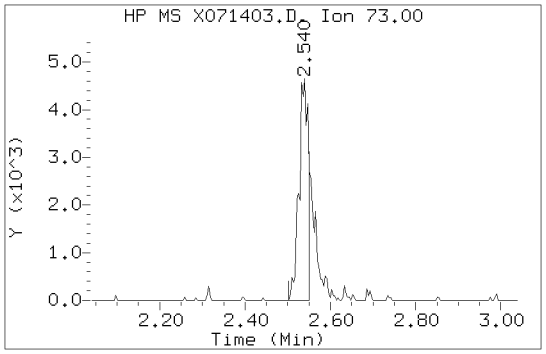
BEFORE

MASS
73
AREA
7187
HEIGHT
4650
20-Jul-2023
15:04
linh
pham



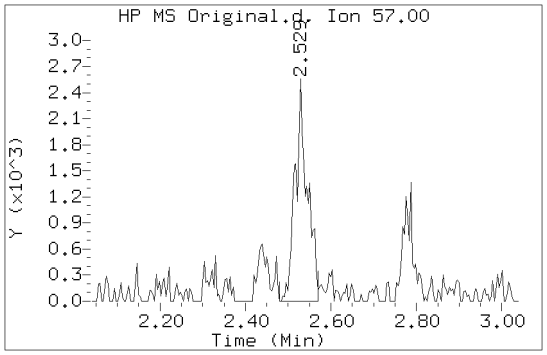
AFTER

MASS
73
AREA
7187
HEIGHT
4650
20-Jul-2023
15:04
linh
pham



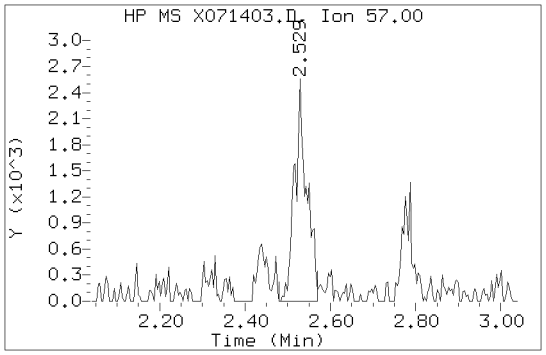
BEFORE

MASS
57
AREA
5084
HEIGHT
2558
20-Jul-2023
15:04
linh
pham



AFTER

MASS
57
AREA
5084
HEIGHT
2558
20-Jul-2023
15:04
linh
pham

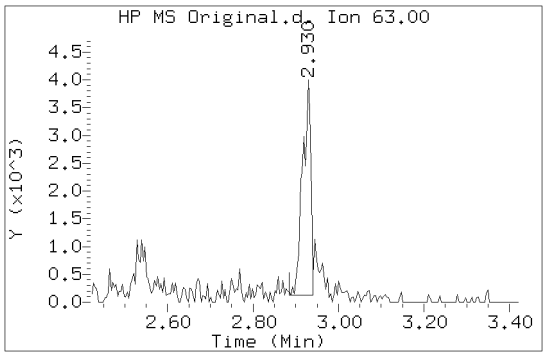


1,1-Dichloroethane (75-34-3)

Reason Code:

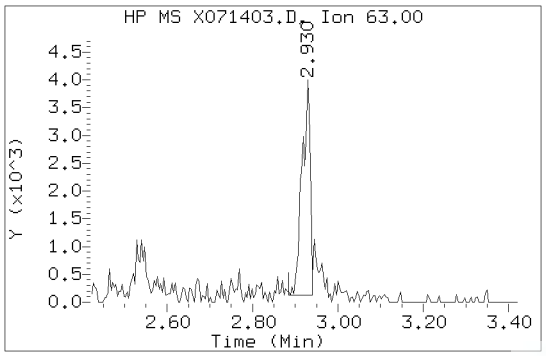
BEFORE

MASS
63
AREA
5250
HEIGHT
3871
20-Jul-2023
15:04
linh
pham



AFTER

MASS
63
AREA
5250
HEIGHT
3871
20-Jul-2023
15:04
linh
pham



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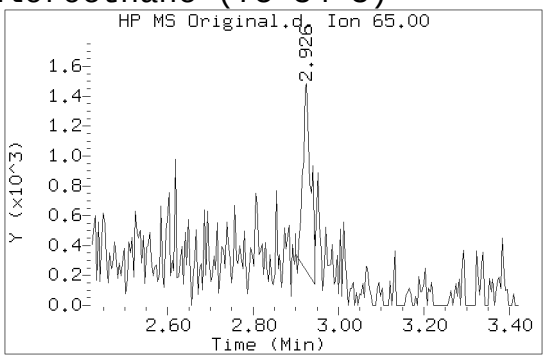
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

1,1-Dichloroethane (75-34-3)

Reason Code:

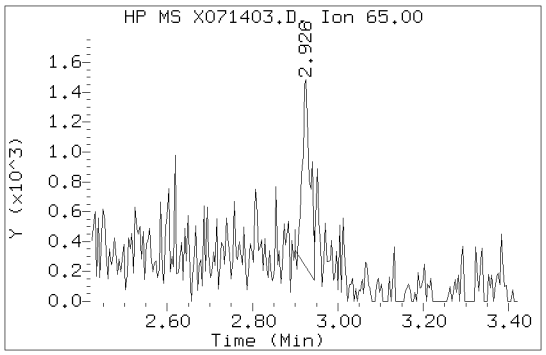
BEFORE

MASS
65
AREA
1602
HEIGHT
1258
20-Jul-2023
15:04
linh
pham



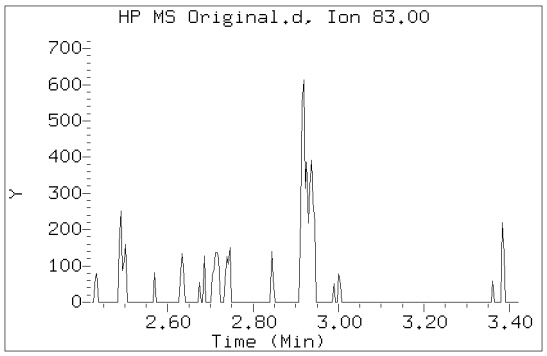
AFTER

MASS
65
AREA
1602
HEIGHT
1258
20-Jul-2023
15:04
linh
pham



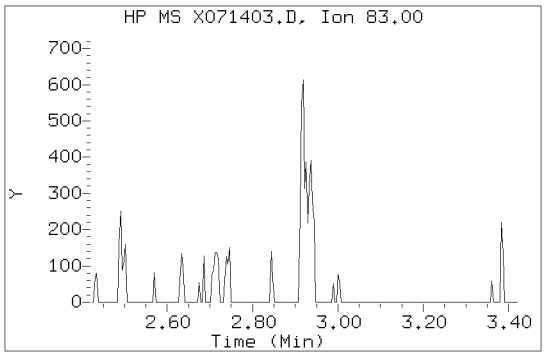
BEFORE

MASS
83
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
83
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

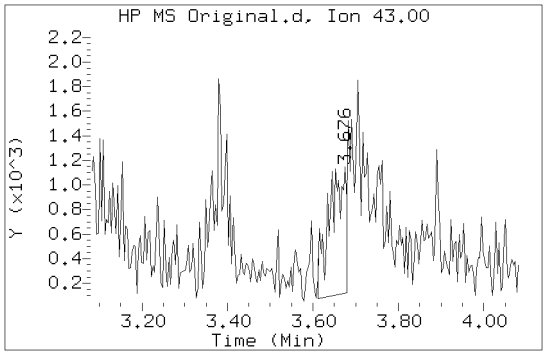


2-Butanone (78-93-3)

Reason Code:

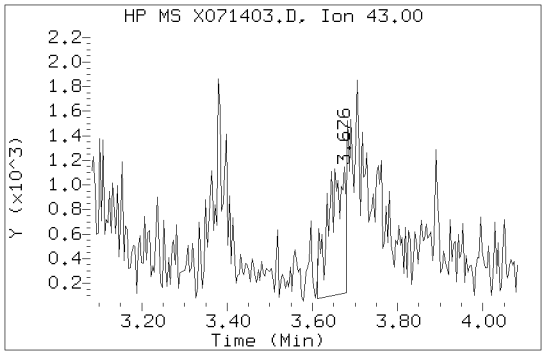
BEFORE

MASS
43
AREA
2827
HEIGHT
1024
20-Jul-2023
15:04
linh
pham



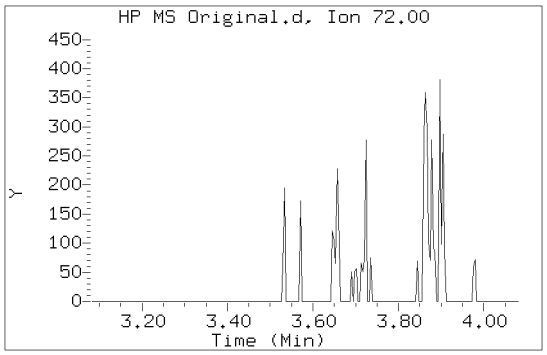
AFTER

MASS
43
AREA
2827
HEIGHT
1024
20-Jul-2023
15:04
linh
pham



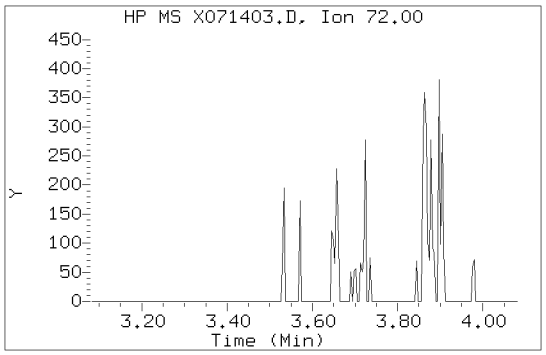
BEFORE

MASS
72
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
72
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

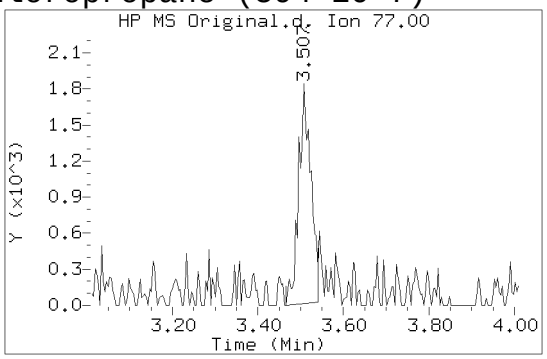


Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

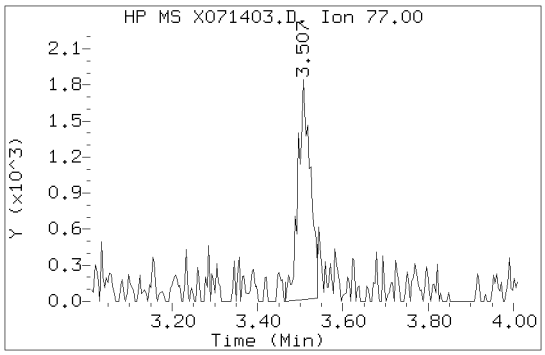
2,2-Dichloropropane (594-20-7)

Reason Code:

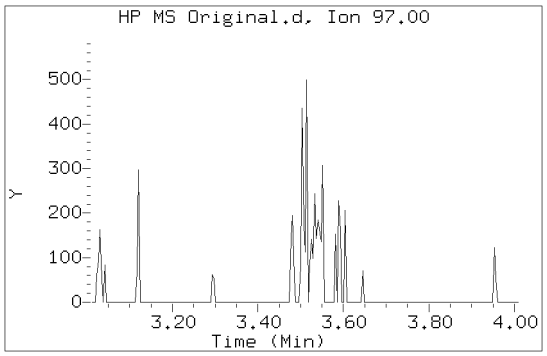
BEFORE
MASS
77
AREA
3703
HEIGHT
1829
20-Jul-2023
15:04
linh
pham



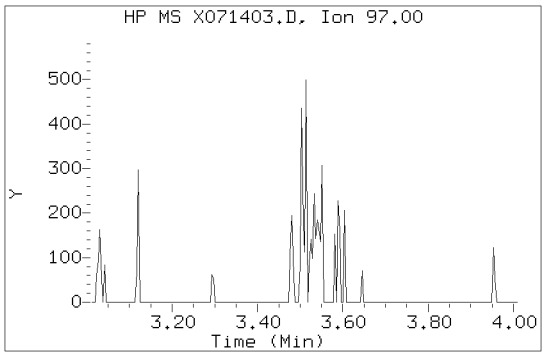
AFTER
MASS
77
AREA
3703
HEIGHT
1829
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
97
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



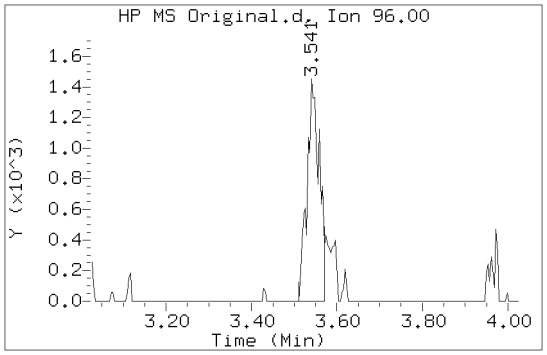
AFTER
MASS
97
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



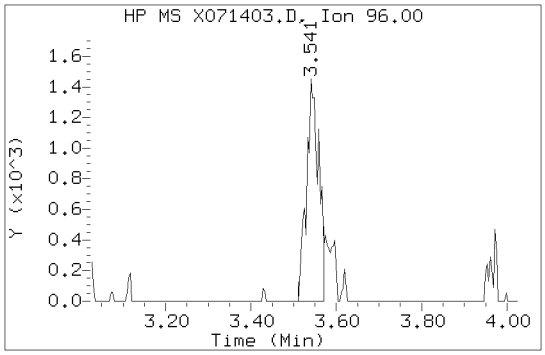
cis-1,2-Dichloroethene (156-59-2)

Reason Code:

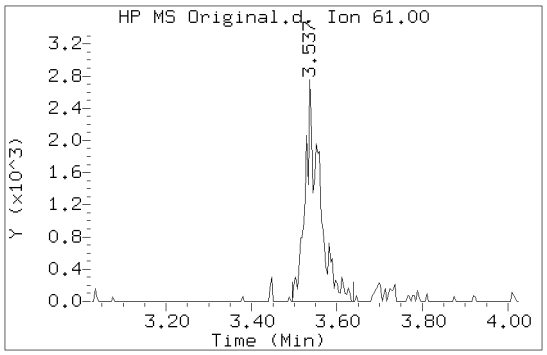
BEFORE
MASS
96
AREA
2924
HEIGHT
1452
20-Jul-2023
15:04
linh
pham



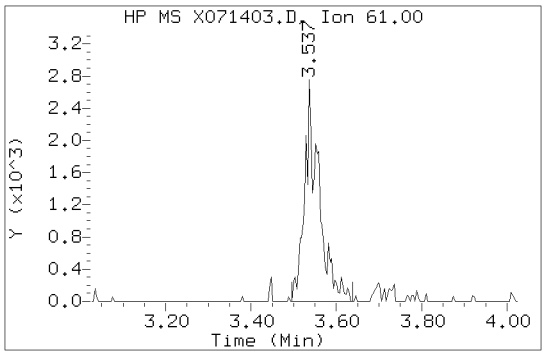
AFTER
MASS
96
AREA
2924
HEIGHT
1452
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
61
AREA
6464
HEIGHT
2755
20-Jul-2023
15:04
linh
pham



AFTER
MASS
61
AREA
6464
HEIGHT
2755
20-Jul-2023
15:04
linh
pham



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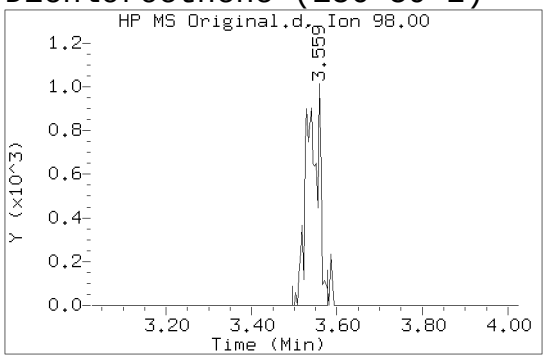
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

cis-1,2-Dichloroethene (156-59-2)

Reason Code:

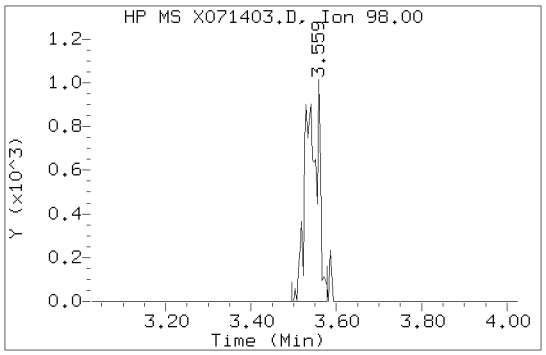
BEFORE

MASS
98
AREA
2118
HEIGHT
1014
20-Jul-2023
15:04
linh
pham



AFTER

MASS
98
AREA
2118
HEIGHT
1014
20-Jul-2023
15:04
linh
pham

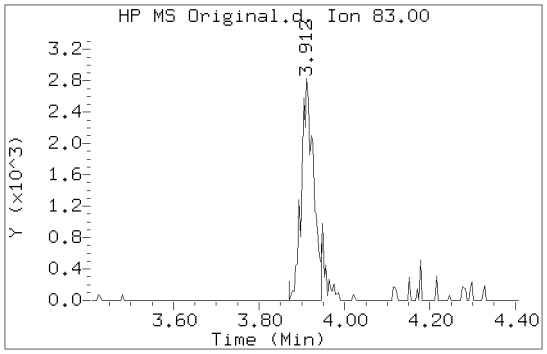


Chloroform (67-66-3)

Reason Code:

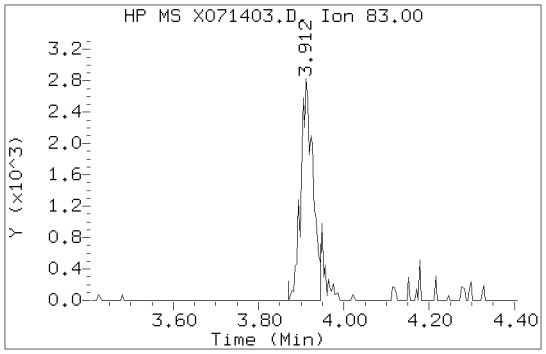
BEFORE

MASS
83
AREA
5643
HEIGHT
2826
20-Jul-2023
15:04
linh
pham



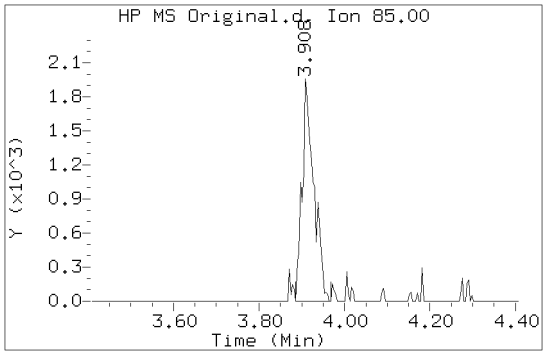
AFTER

MASS
83
AREA
5643
HEIGHT
2826
20-Jul-2023
15:04
linh
pham



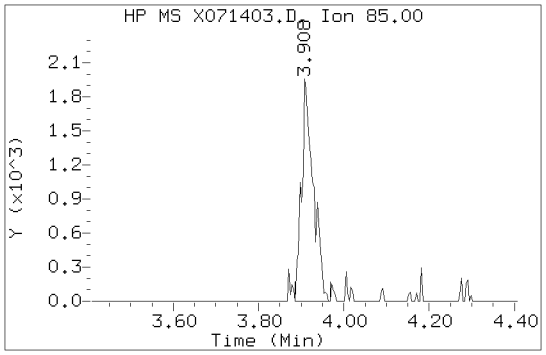
BEFORE

MASS
85
AREA
3815
HEIGHT
1958
20-Jul-2023
15:04
linh
pham



AFTER

MASS
85
AREA
3815
HEIGHT
1958
20-Jul-2023
15:04
linh
pham

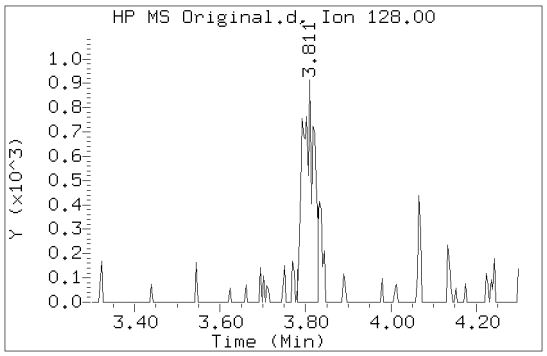


Bromochloromethane (74-97-5)

Reason Code:

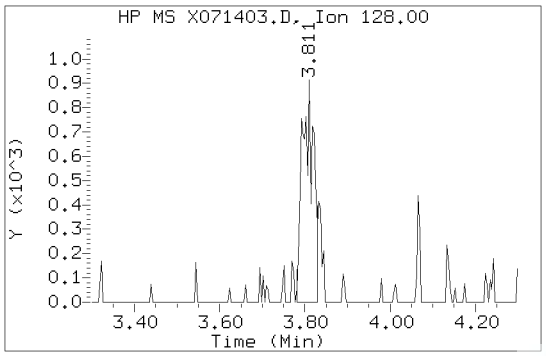
BEFORE

MASS
128
AREA
1717
HEIGHT
914
20-Jul-2023
15:04
linh
pham



AFTER

MASS
128
AREA
1717
HEIGHT
914
20-Jul-2023
15:04
linh
pham



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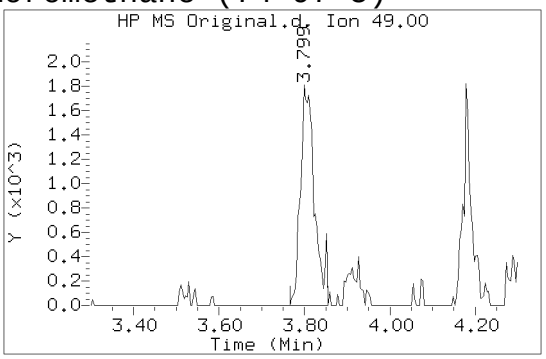
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

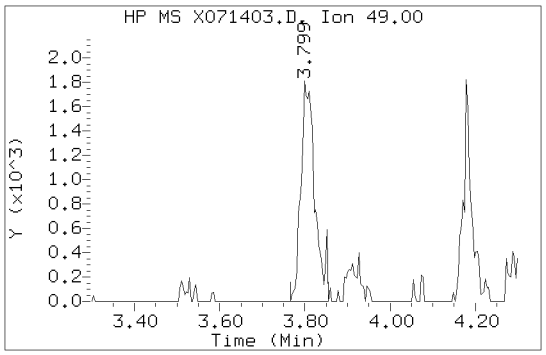
Bromochloromethane (74-97-5)

BEFORE
MASS
49
AREA
4173
HEIGHT
1811
20-Jul-2023
15:04
linh
pham

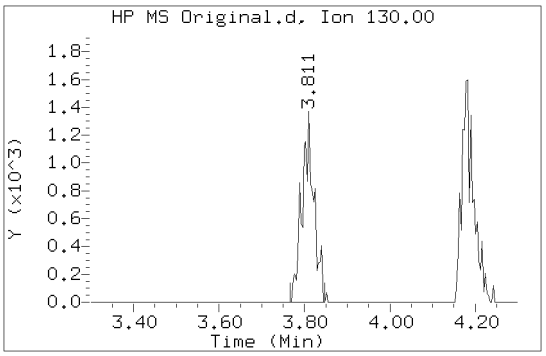


Reason Code:

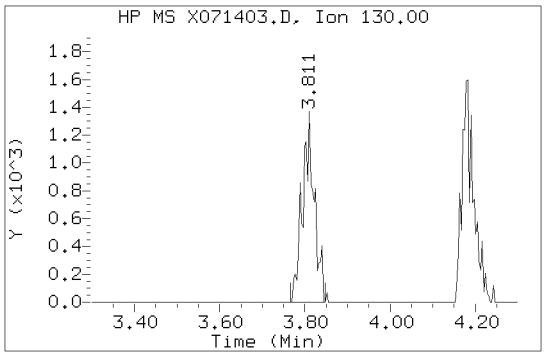
AFTER
MASS
49
AREA
4173
HEIGHT
1811
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
130
AREA
2643
HEIGHT
1372
20-Jul-2023
15:04
linh
pham



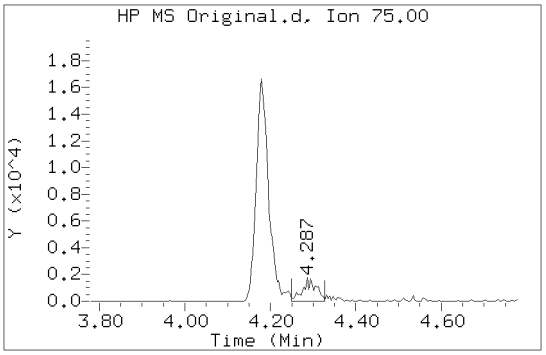
AFTER
MASS
130
AREA
2643
HEIGHT
1372
20-Jul-2023
15:04
linh
pham



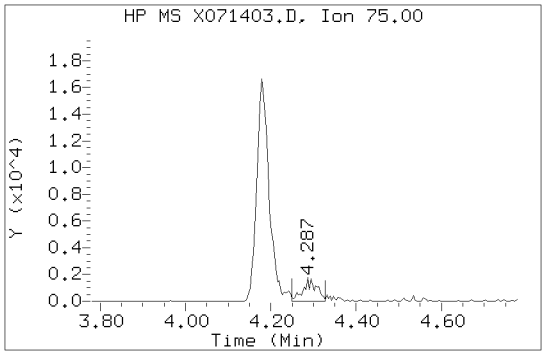
1,1-Dichloropropene (563-58-6)

Reason Code:

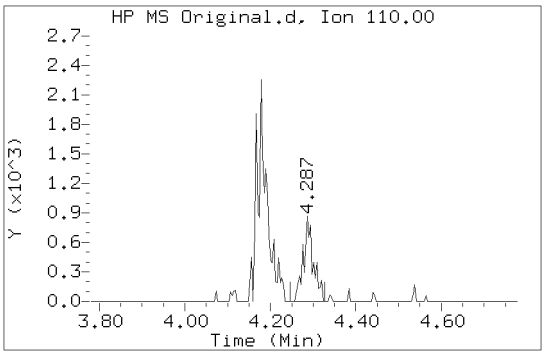
BEFORE
MASS
75
AREA
3744
HEIGHT
1770
20-Jul-2023
15:04
linh
pham



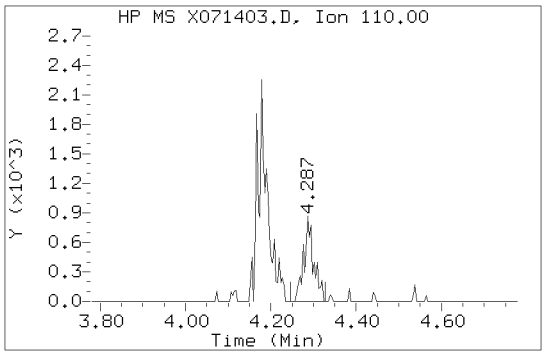
AFTER
MASS
75
AREA
3744
HEIGHT
1770
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
110
AREA
1389
HEIGHT
866
20-Jul-2023
15:04
linh
pham



AFTER
MASS
110
AREA
1389
HEIGHT
866
20-Jul-2023
15:04
linh
pham



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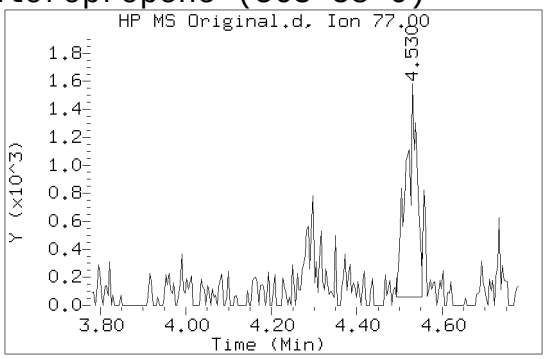
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

1,1-Dichloropropene (563-58-6)

Reason Code:

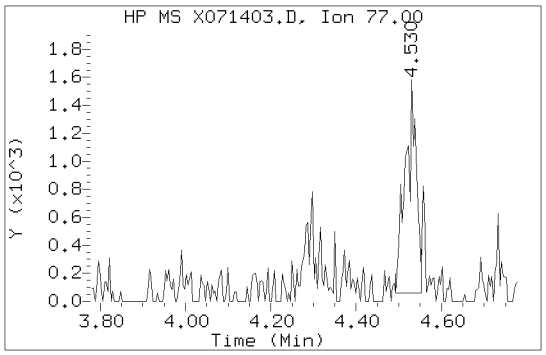
BEFORE

MASS
77
AREA
2714
HEIGHT
1524
20-Jul-2023
15:04
linh
pham



AFTER

MASS
77
AREA
2714
HEIGHT
1524
20-Jul-2023
15:04
linh
pham

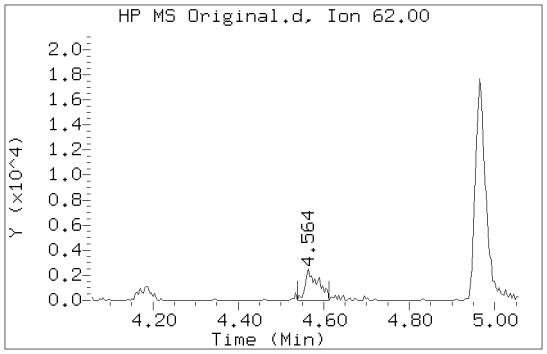


1,2-Dichloroethane (107-06-2)

Reason Code:

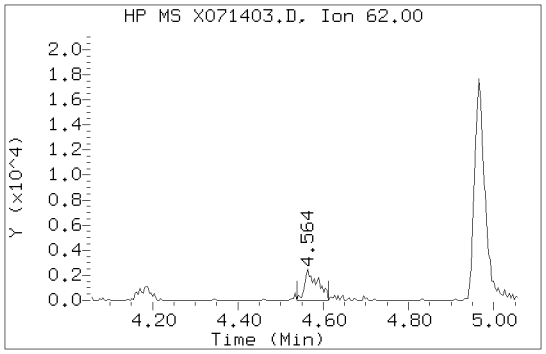
BEFORE

MASS
62
AREA
5246
HEIGHT
2498
20-Jul-2023
15:04
linh
pham



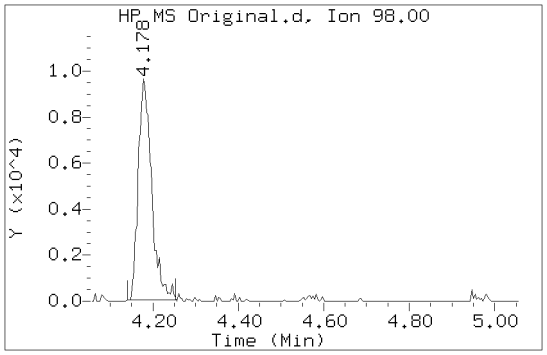
AFTER

MASS
62
AREA
5246
HEIGHT
2498
20-Jul-2023
15:04
linh
pham



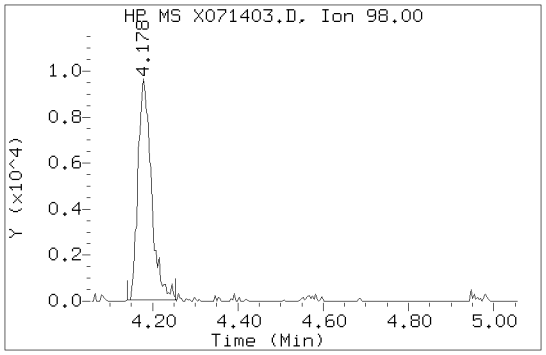
BEFORE

MASS
98
AREA
20890
HEIGHT
9608
20-Jul-2023
15:04
linh
pham



AFTER

MASS
98
AREA
20890
HEIGHT
9608
20-Jul-2023
15:04
linh
pham

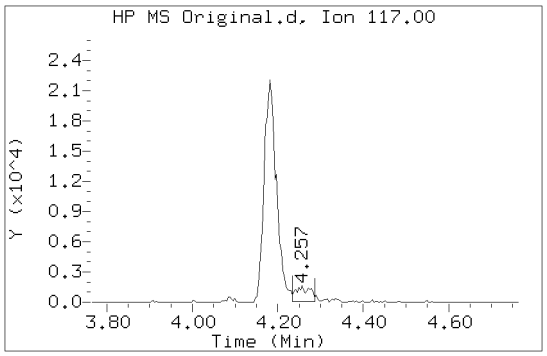


Carbon Tetrachloride (56-23-5)

Reason Code:

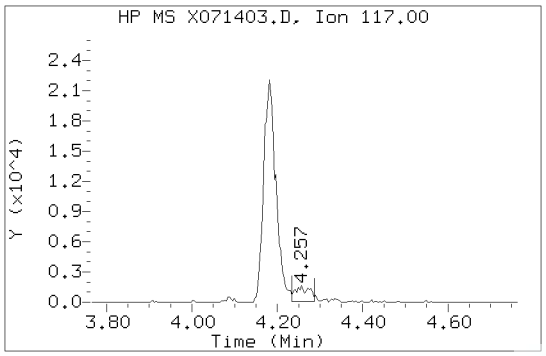
BEFORE

MASS
117
AREA
3613
HEIGHT
1577
20-Jul-2023
15:04
linh
pham



AFTER

MASS
117
AREA
3613
HEIGHT
1577
20-Jul-2023
15:04
linh
pham



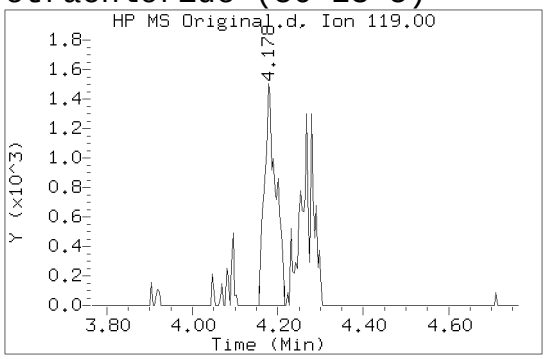
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Carbon Tetrachloride (56-23-5)

Reason Code:

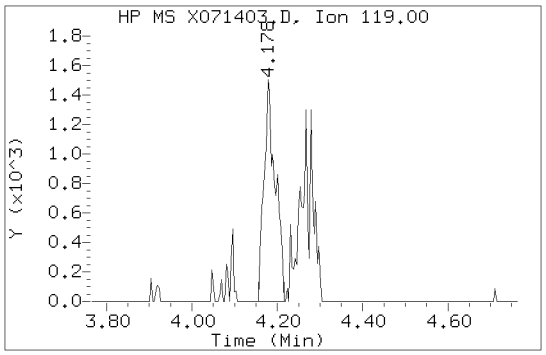
BEFORE

MASS
119
AREA
2769
HEIGHT
1504
20-Jul-2023
15:04
linh
pham



AFTER

MASS
119
AREA
2769
HEIGHT
1504
20-Jul-2023
15:04
linh
pham

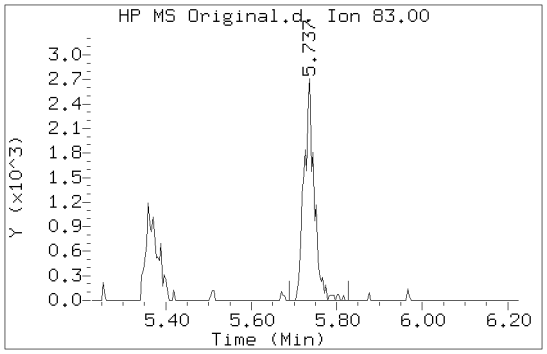


Bromodichloromethane (75-27-4)

Reason Code:

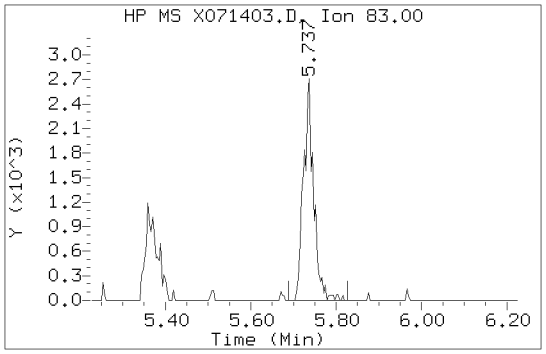
BEFORE

MASS
83
AREA
4539
HEIGHT
2709
20-Jul-2023
15:04
linh
pham



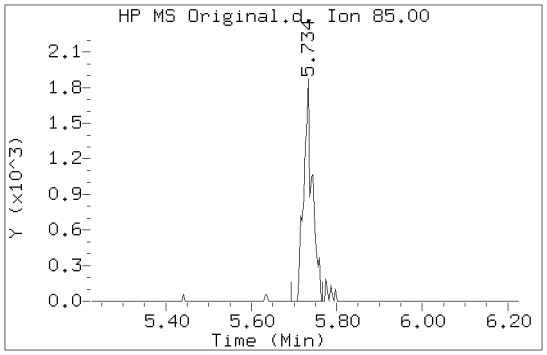
AFTER

MASS
83
AREA
4539
HEIGHT
2709
20-Jul-2023
15:04
linh
pham



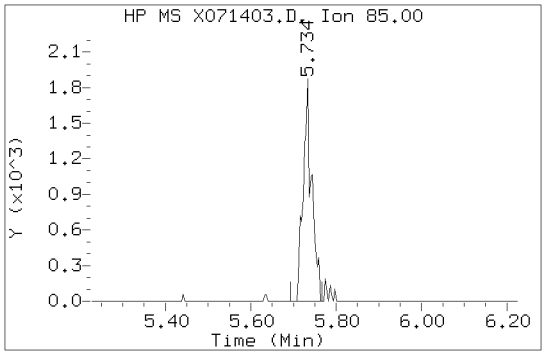
BEFORE

MASS
85
AREA
2648
HEIGHT
1873
20-Jul-2023
15:04
linh
pham



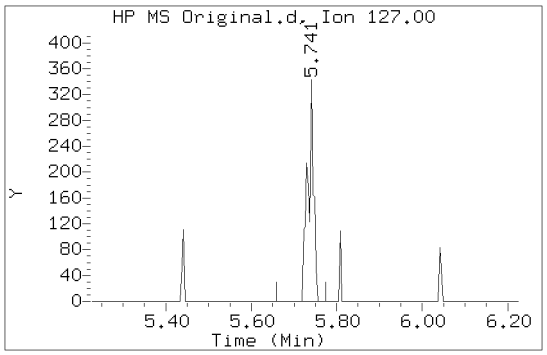
AFTER

MASS
85
AREA
2648
HEIGHT
1873
20-Jul-2023
15:04
linh
pham



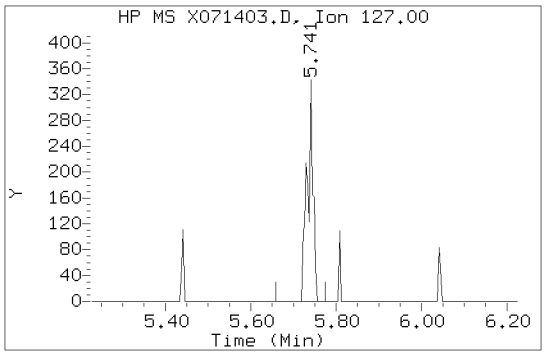
BEFORE

MASS
127
AREA
328
HEIGHT
343
20-Jul-2023
15:04
linh
pham



AFTER

MASS
127
AREA
328
HEIGHT
343
20-Jul-2023
15:04
linh
pham



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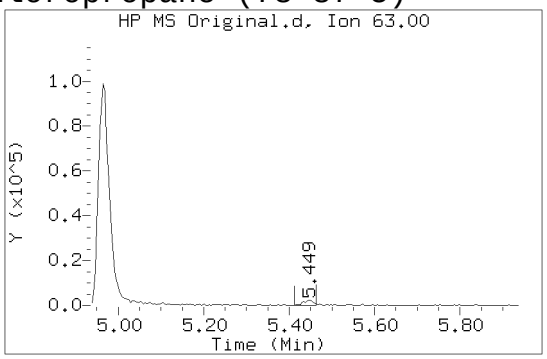
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

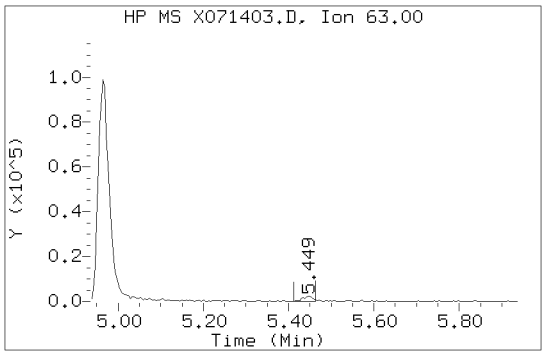
1,2-Dichloropropane (78-87-5)

Reason Code:

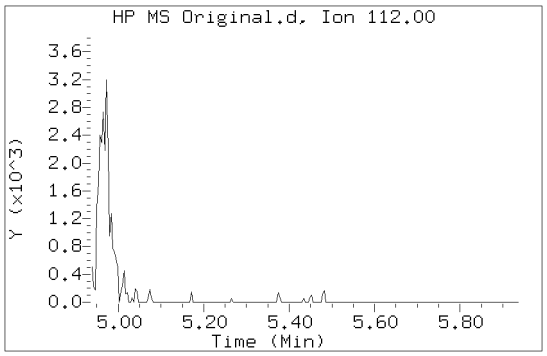
BEFORE
MASS
63
AREA
3473
HEIGHT
2209
20-Jul-2023
15:04
linh
pham



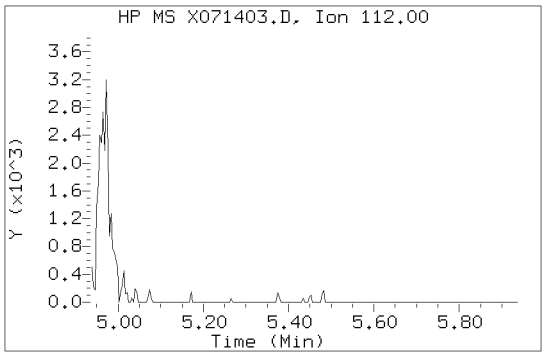
AFTER
MASS
63
AREA
3473
HEIGHT
2209
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
112
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



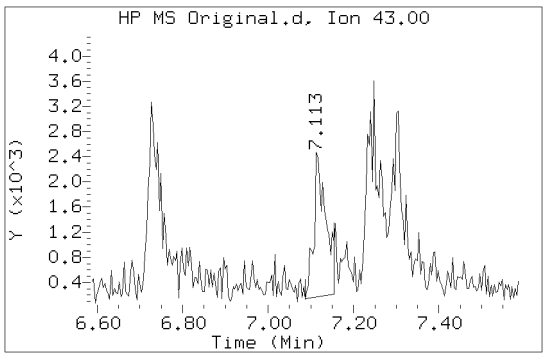
AFTER
MASS
112
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



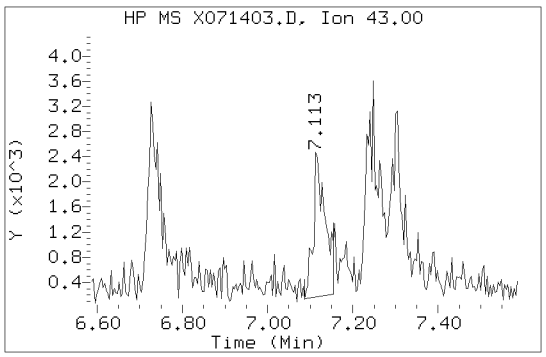
2-Hexanone (591-78-6)

Reason Code:

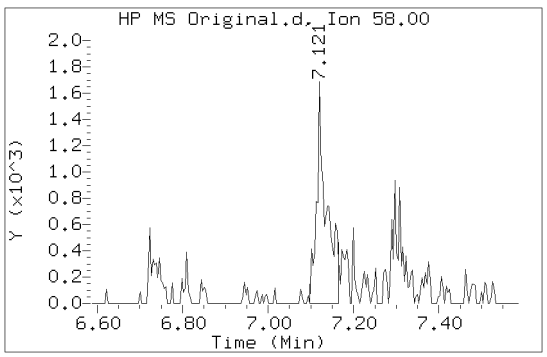
BEFORE
MASS
43
AREA
4470
HEIGHT
2301
20-Jul-2023
15:04
linh
pham



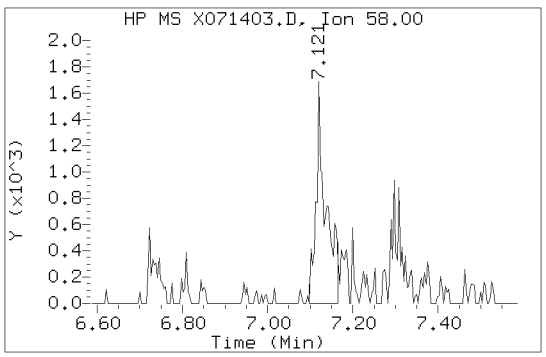
AFTER
MASS
43
AREA
4470
HEIGHT
2301
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
58
AREA
2664
HEIGHT
1687
20-Jul-2023
15:04
linh
pham



AFTER
MASS
58
AREA
2664
HEIGHT
1687
20-Jul-2023
15:04
linh
pham



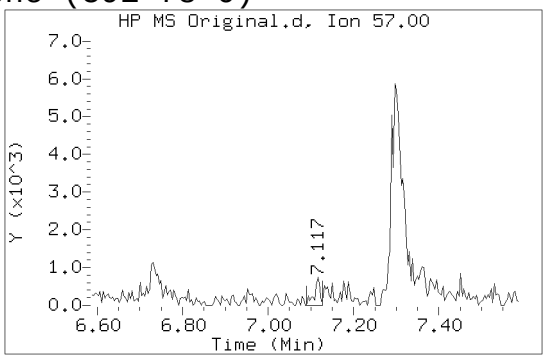
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

2-Hexanone (591-78-6)

Reason Code:

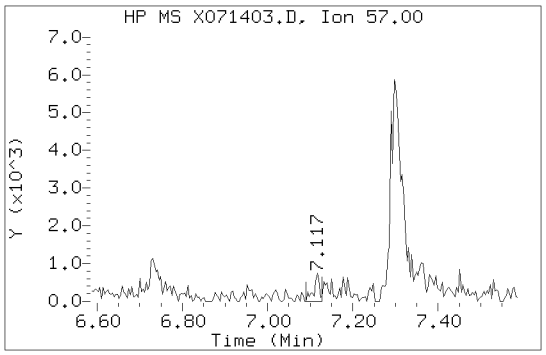
BEFORE

MASS
57
AREA
683
HEIGHT
740
20-Jul-2023
15:04
linh
pham



AFTER

MASS
57
AREA
683
HEIGHT
740
20-Jul-2023
15:04
linh
pham

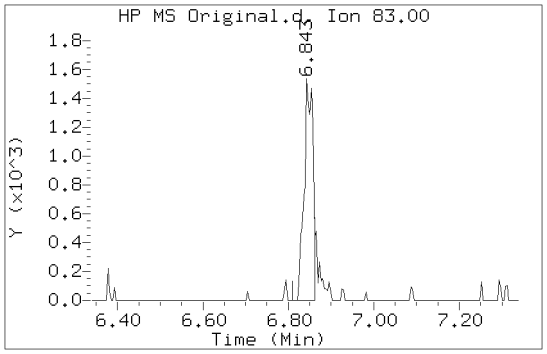


1,1,2-Trichloroethane (79-00-5)

Reason Code:

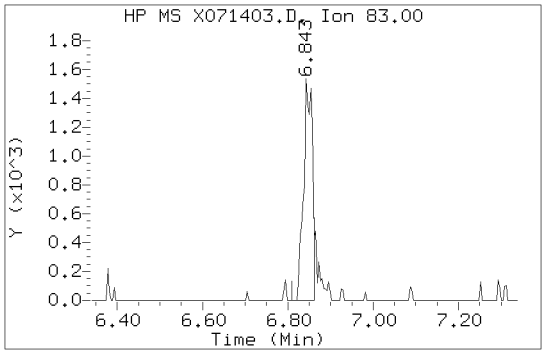
BEFORE

MASS
83
AREA
2223
HEIGHT
1536
20-Jul-2023
15:04
linh
pham



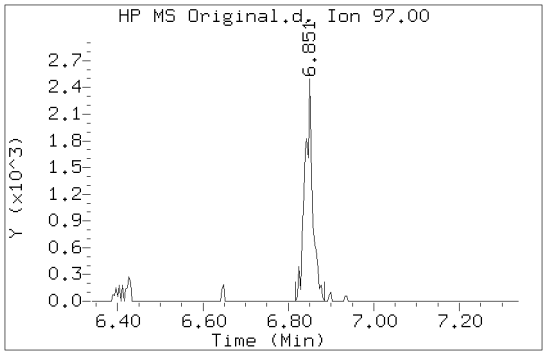
AFTER

MASS
83
AREA
2223
HEIGHT
1536
20-Jul-2023
15:04
linh
pham



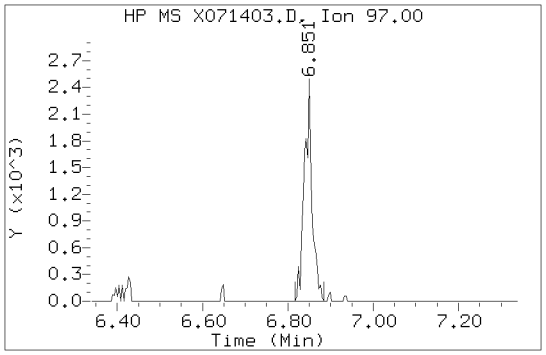
BEFORE

MASS
97
AREA
3209
HEIGHT
2495
20-Jul-2023
15:04
linh
pham



AFTER

MASS
97
AREA
3209
HEIGHT
2495
20-Jul-2023
15:04
linh
pham

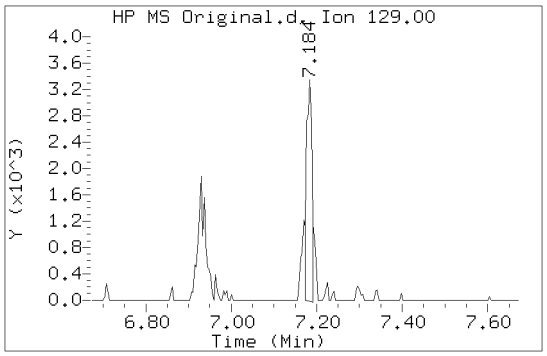


Dibromochloromethane (124-48-1)

Reason Code:

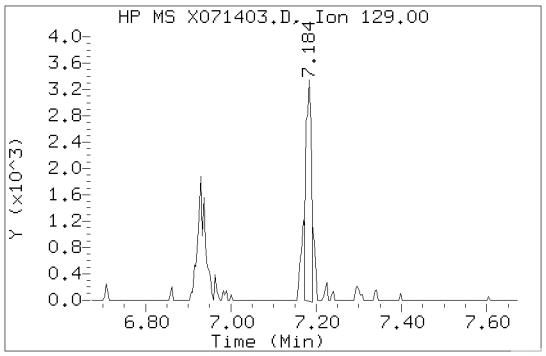
BEFORE

MASS
129
AREA
3132
HEIGHT
3366
20-Jul-2023
15:04
linh
pham



AFTER

MASS
129
AREA
3132
HEIGHT
3366
20-Jul-2023
15:04
linh
pham

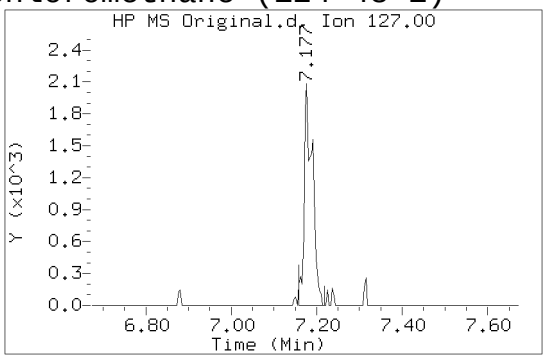


Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

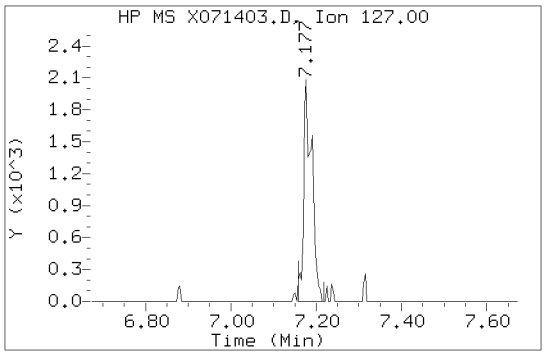
Dibromochloromethane (124-48-1)

Reason Code:

BEFORE
MASS
127
AREA
2854
HEIGHT
2083
20-Jul-2023
15:04
linh
pham



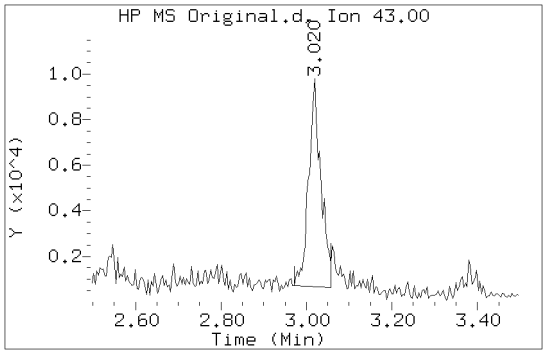
AFTER
MASS
127
AREA
2854
HEIGHT
2083
20-Jul-2023
15:04
linh
pham



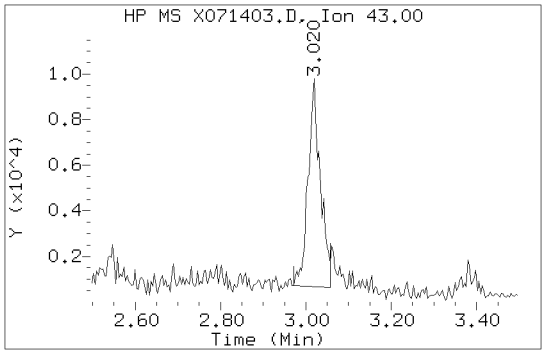
Vinyl Acetate (108-05-4)

Reason Code:

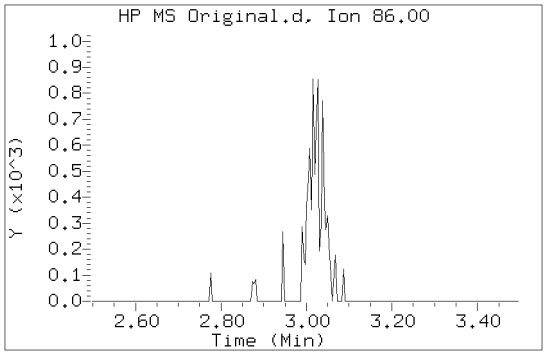
BEFORE
MASS
43
AREA
18224
HEIGHT
9126
20-Jul-2023
15:04
linh
pham



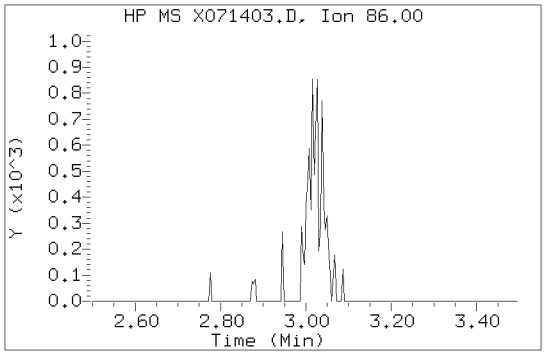
AFTER
MASS
43
AREA
18224
HEIGHT
9126
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
86
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



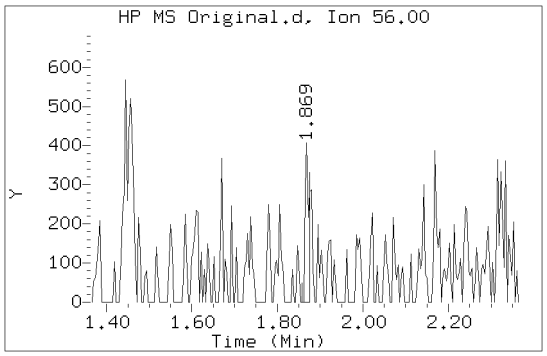
AFTER
MASS
86
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



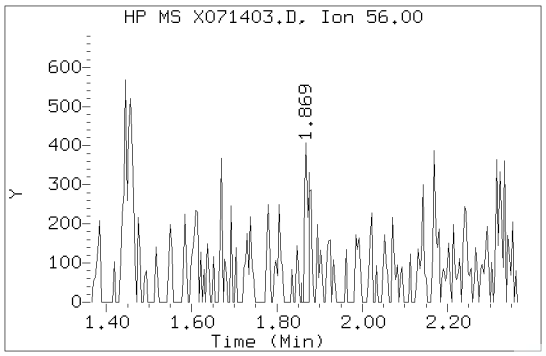
Acrolein (107-02-8)

Reason Code:

BEFORE
MASS
56
AREA
268
HEIGHT
407
20-Jul-2023
15:04
linh
pham



AFTER
MASS
56
AREA
268
HEIGHT
407
20-Jul-2023
15:04
linh
pham



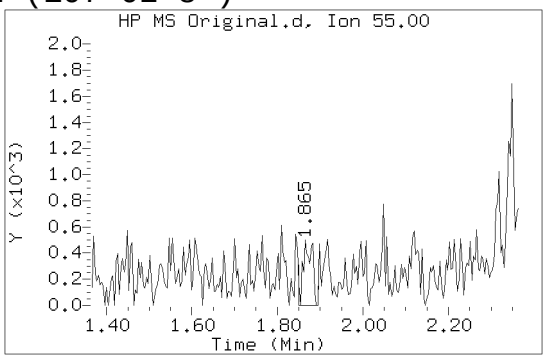
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Acrolein (107-02-8)

Reason Code:

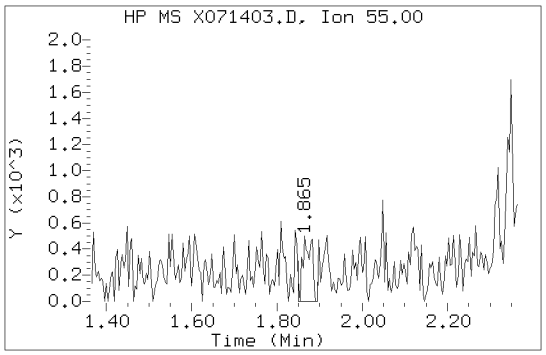
BEFORE

MASS
55
AREA
759
HEIGHT
500
20-Jul-2023
15:04
linh
pham



AFTER

MASS
55
AREA
759
HEIGHT
500
20-Jul-2023
15:04
linh
pham

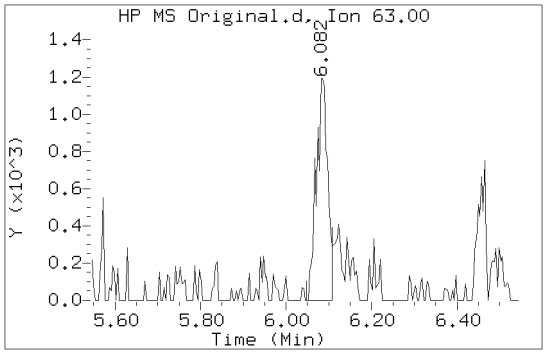


2-Chloroethylvinyl ether (110-75-8)

Reason Code:

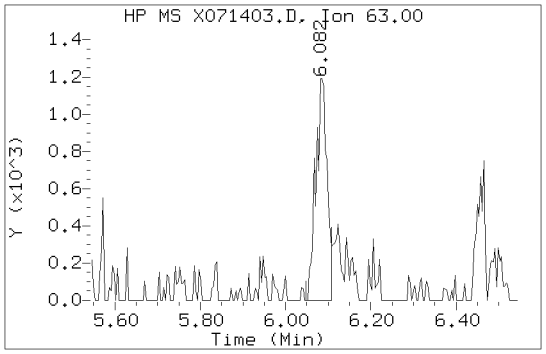
BEFORE

MASS
63
AREA
2206
HEIGHT
1191
20-Jul-2023
15:04
linh
pham



AFTER

MASS
63
AREA
2206
HEIGHT
1191
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
65
AREA
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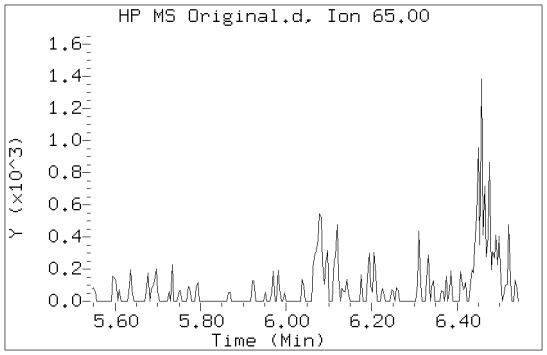
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

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HEIGHT
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20-Jul-2023
15:04
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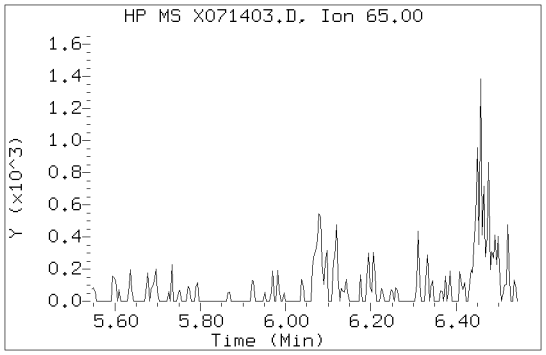

BEFORE

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106
AREA
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HEIGHT
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20-Jul-2023
15:04
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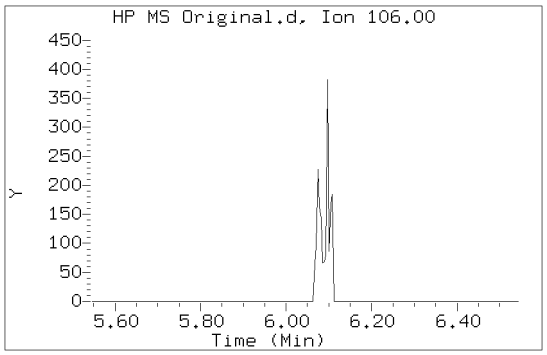

AFTER

MASS
106
AREA
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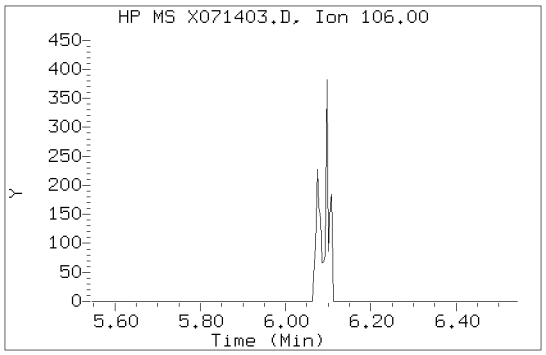
HEIGHT
0
20-Jul-2023
15:04
linh
pham



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Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

1-Chlorohexane (544-10-5)

Reason Code:

BEFORE

MASS
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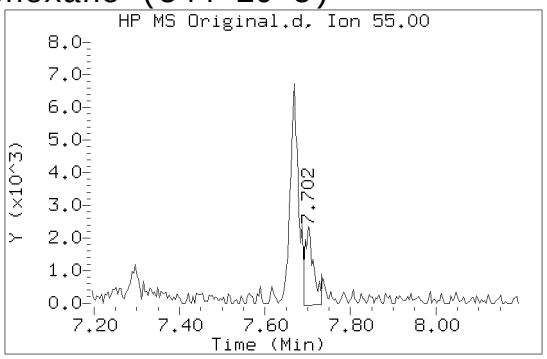
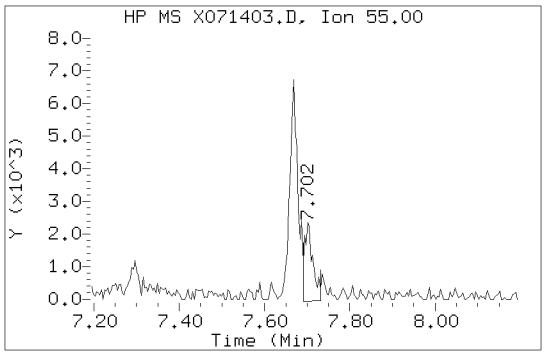
AREA
3459
HEIGHT
2414
20-Jul-2023
15:04
linh
pham



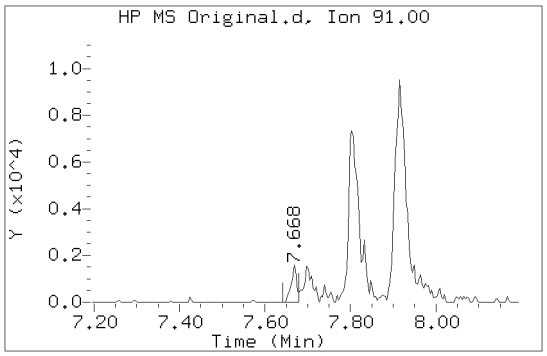
AFTER

MASS
55
AREA
3459
HEIGHT
2414
20-Jul-2023
15:04
linh
pham



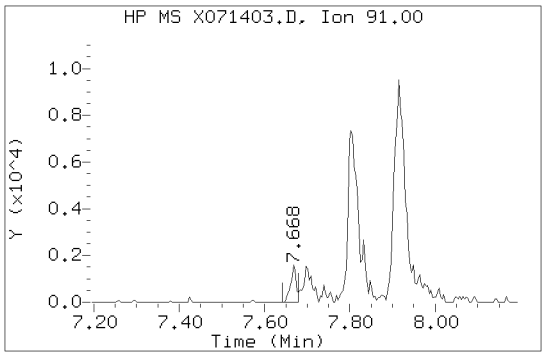
BEFORE

MASS
91
AREA
1435
HEIGHT
1592
20-Jul-2023
15:04
linh
pham



AFTER

MASS
91
AREA
1435
HEIGHT
1592
20-Jul-2023
15:04
linh
pham

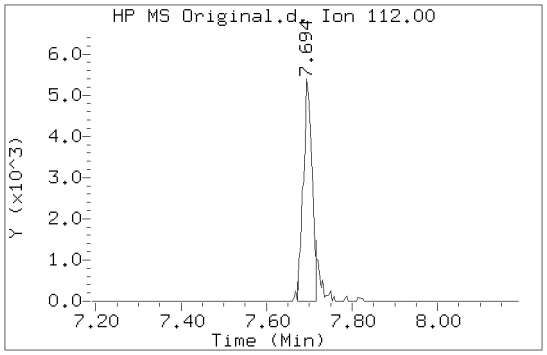


Chlorobenzene (108-90-7)

Reason Code:

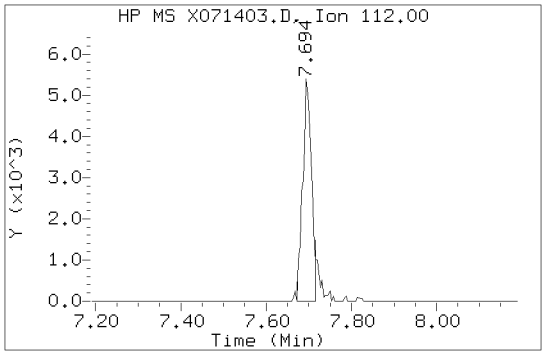
BEFORE

MASS
112
AREA
7907
HEIGHT
5398
20-Jul-2023
15:04
linh
pham



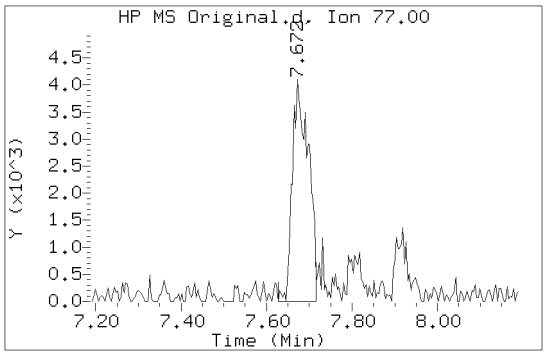
AFTER

MASS
112
AREA
7907
HEIGHT
5398
20-Jul-2023
15:04
linh
pham



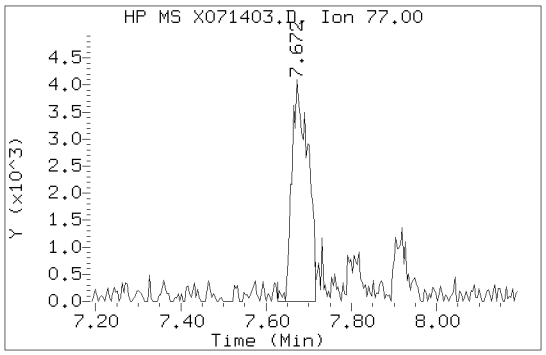
BEFORE

MASS
77
AREA
10872
HEIGHT
4098
20-Jul-2023
15:04
linh
pham



AFTER

MASS
77
AREA
10872
HEIGHT
4098
20-Jul-2023
15:04
linh
pham



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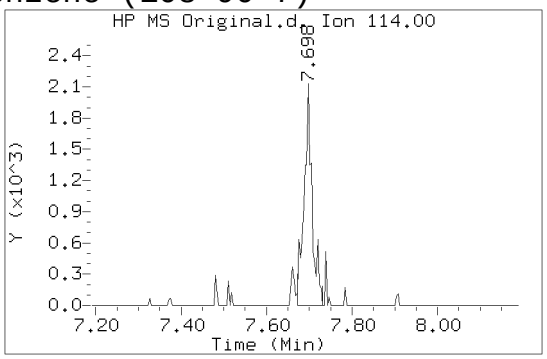
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Chlorobenzene (108-90-7)

Reason Code:

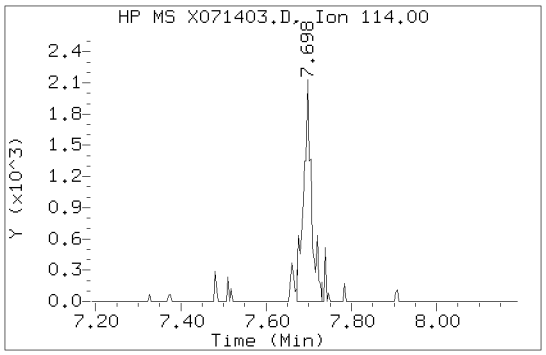
BEFORE

MASS
114
AREA
2819
HEIGHT
2130
20-Jul-2023
15:04
linh
pham



AFTER

MASS
114
AREA
2819
HEIGHT
2130
20-Jul-2023
15:04
linh
pham

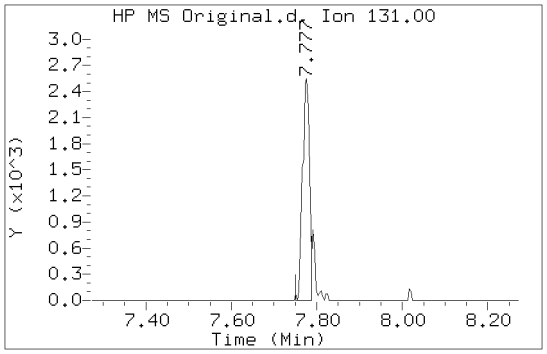


1,1,1,2-Tetrachloroethane (630-20-6)

Reason Code:

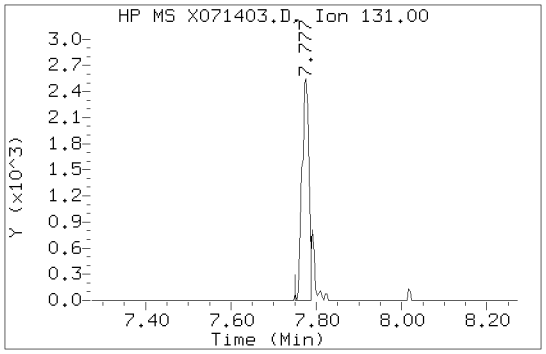
BEFORE

MASS
131
AREA
3008
HEIGHT
2547
20-Jul-2023
15:04
linh
pham



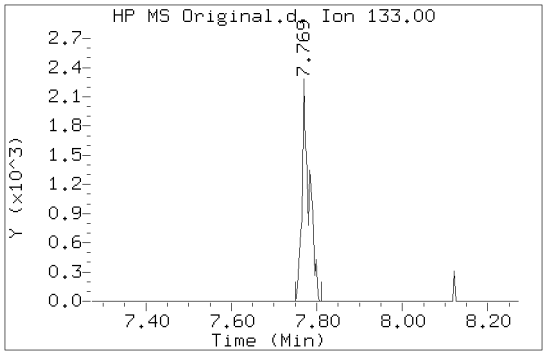
AFTER

MASS
131
AREA
3008
HEIGHT
2547
20-Jul-2023
15:04
linh
pham



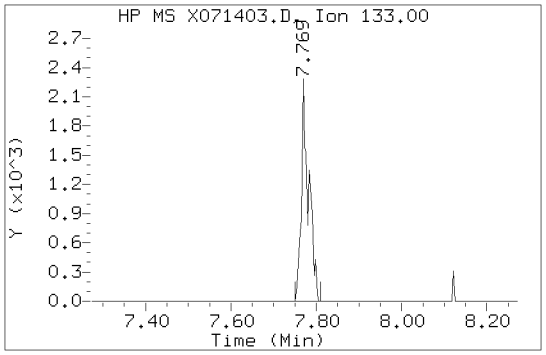
BEFORE

MASS
133
AREA
2774
HEIGHT
2284
20-Jul-2023
15:04
linh
pham



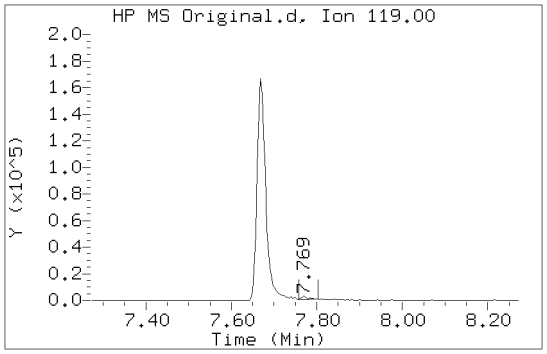
AFTER

MASS
133
AREA
2774
HEIGHT
2284
20-Jul-2023
15:04
linh
pham



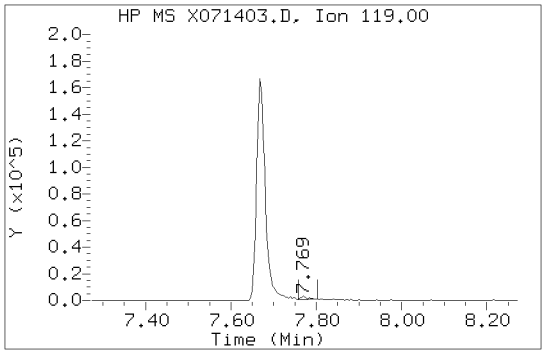
BEFORE

MASS
119
AREA
2799
HEIGHT
2519
20-Jul-2023
15:04
linh
pham



AFTER

MASS
119
AREA
2799
HEIGHT
2519
20-Jul-2023
15:04
linh
pham



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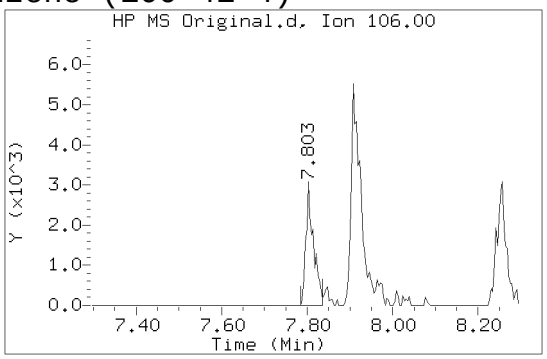
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Ethylbenzene (100-41-4)

Reason Code:

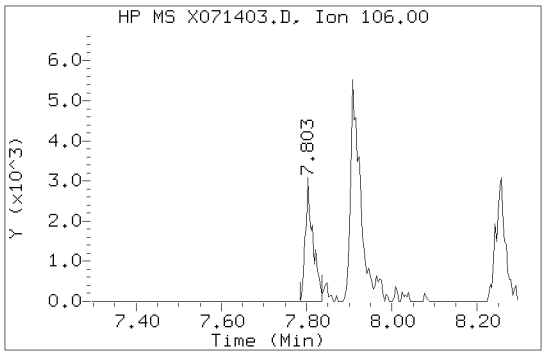
BEFORE

MASS
106
AREA
3909
HEIGHT
3078
20-Jul-2023
15:04
linh
pham



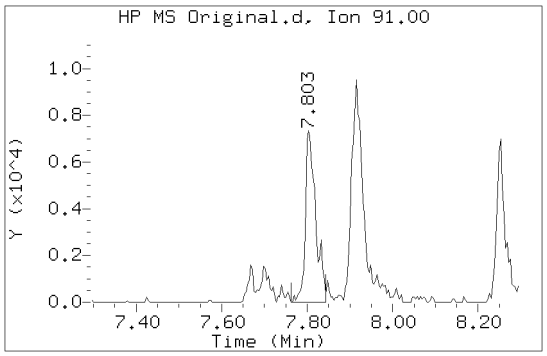
AFTER

MASS
106
AREA
3909
HEIGHT
3078
20-Jul-2023
15:04
linh
pham



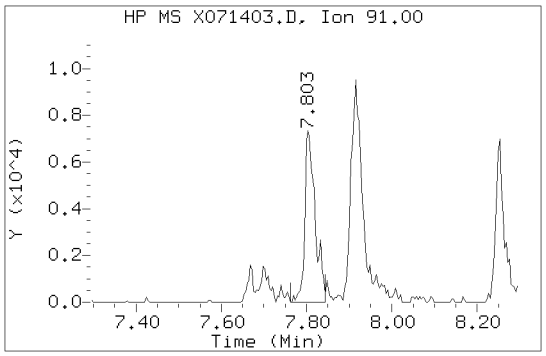
BEFORE

MASS
91
AREA
12659
HEIGHT
7347
20-Jul-2023
15:04
linh
pham



AFTER

MASS
91
AREA
12659
HEIGHT
7347
20-Jul-2023
15:04
linh
pham

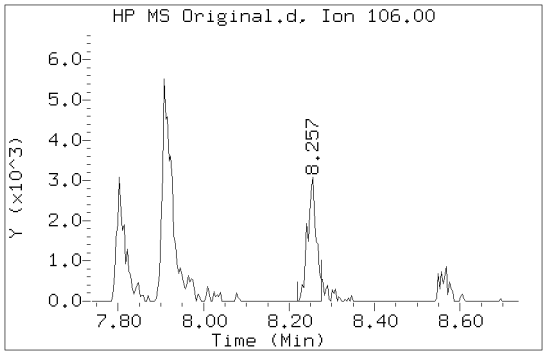


o-Xylene (95-47-6)

Reason Code:

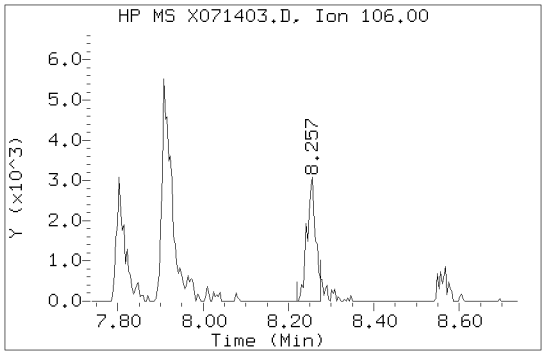
BEFORE

MASS
106
AREA
4414
HEIGHT
3089
20-Jul-2023
15:04
linh
pham



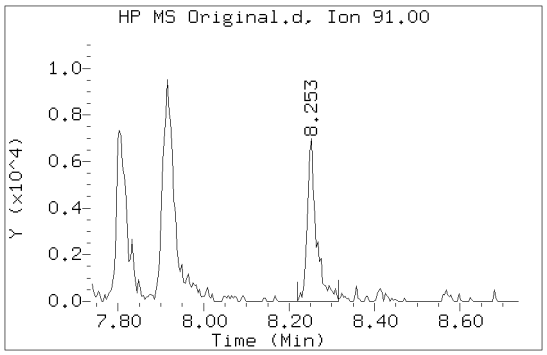
AFTER

MASS
106
AREA
4414
HEIGHT
3089
20-Jul-2023
15:04
linh
pham



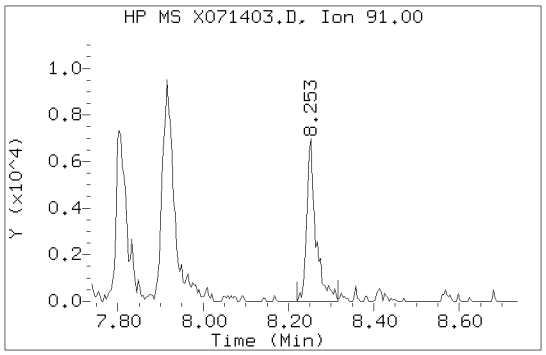
BEFORE

MASS
91
AREA
10415
HEIGHT
7000
20-Jul-2023
15:04
linh
pham



AFTER

MASS
91
AREA
10415
HEIGHT
7000
20-Jul-2023
15:04
linh
pham



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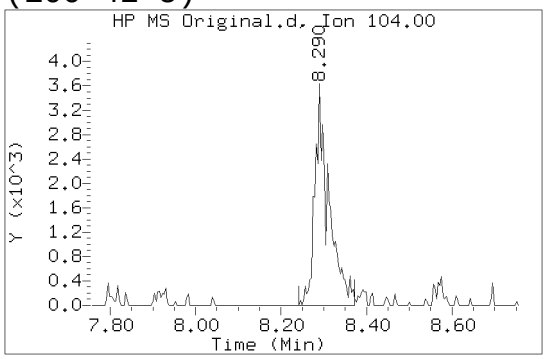
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

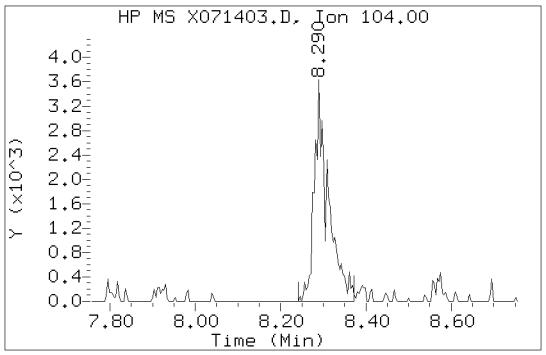
Styrene (100-42-5)

Reason Code:

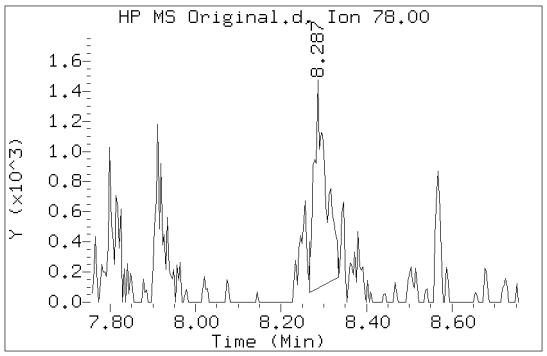
BEFORE
MASS
104
AREA
8133
HEIGHT
3635
20-Jul-2023
15:04
linh
pham



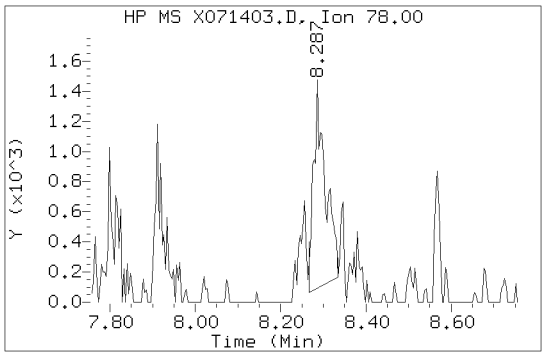
AFTER
MASS
104
AREA
8133
HEIGHT
3635
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
78
AREA
2633
HEIGHT
1381
20-Jul-2023
15:04
linh
pham



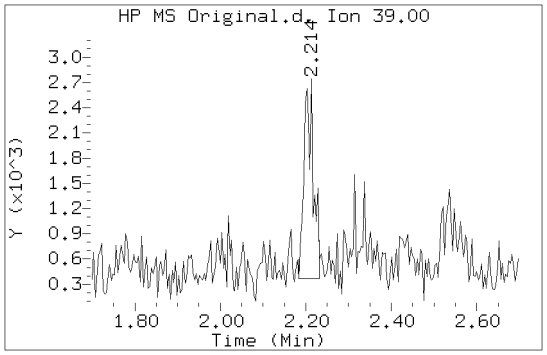
AFTER
MASS
78
AREA
2633
HEIGHT
1381
20-Jul-2023
15:04
linh
pham



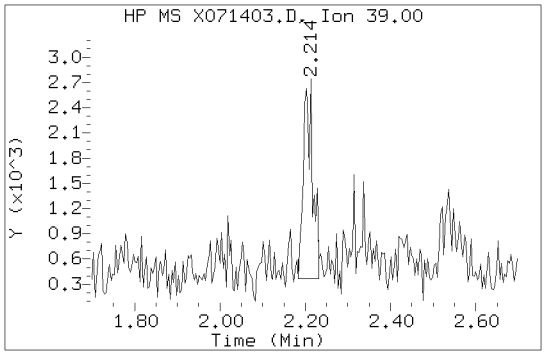
Acetonitrile (75-05-8)

Reason Code:

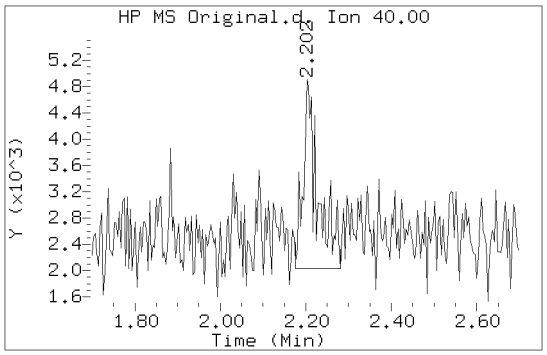
BEFORE
MASS
39
AREA
3606
HEIGHT
2378
20-Jul-2023
15:04
linh
pham



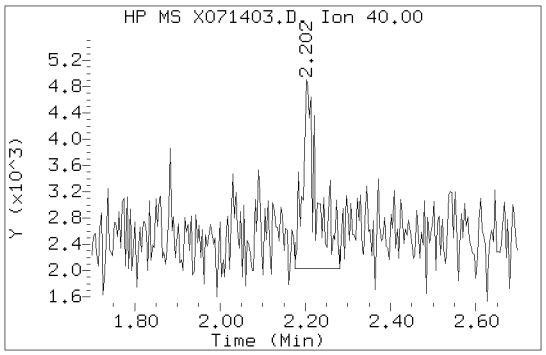
AFTER
MASS
39
AREA
3606
HEIGHT
2378
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
40
AREA
6842
HEIGHT
2874
20-Jul-2023
15:04
linh
pham



AFTER
MASS
40
AREA
6842
HEIGHT
2874
20-Jul-2023
15:04
linh
pham



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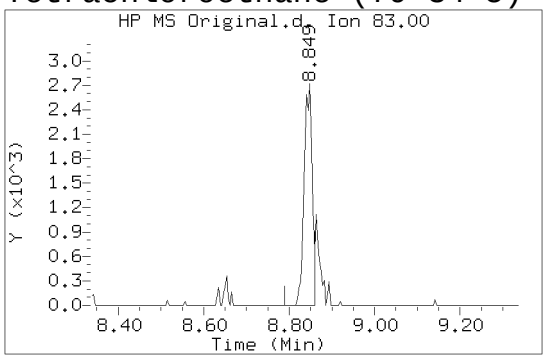
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

1,1,2,2-Tetrachloroethane (79-34-5)

Reason Code:

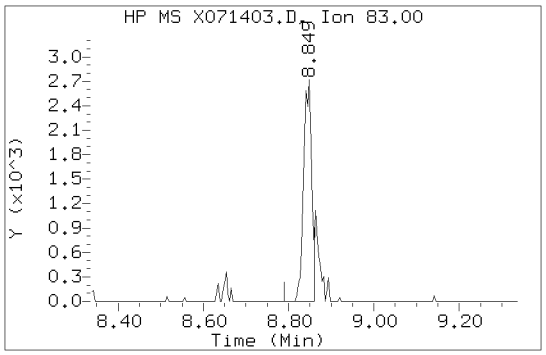
BEFORE

MASS
83
AREA
3654
HEIGHT
2720
20-Jul-2023
15:04
linh
pham



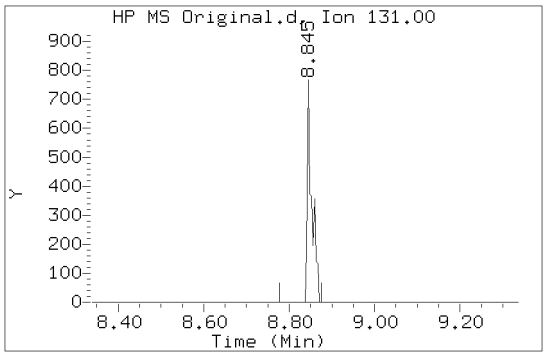
AFTER

MASS
83
AREA
3654
HEIGHT
2720
20-Jul-2023
15:04
linh
pham



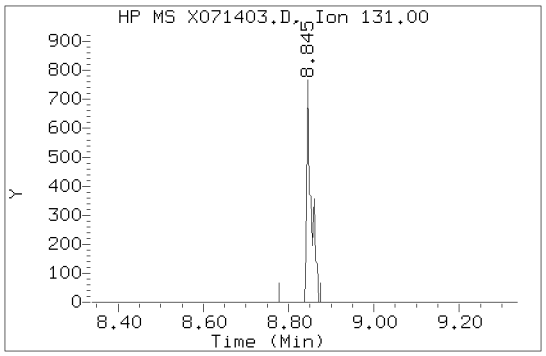
BEFORE

MASS
131
AREA
565
HEIGHT
767
20-Jul-2023
15:04
linh
pham



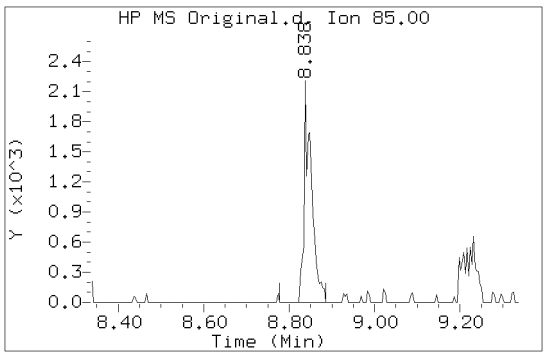
AFTER

MASS
131
AREA
565
HEIGHT
767
20-Jul-2023
15:04
linh
pham



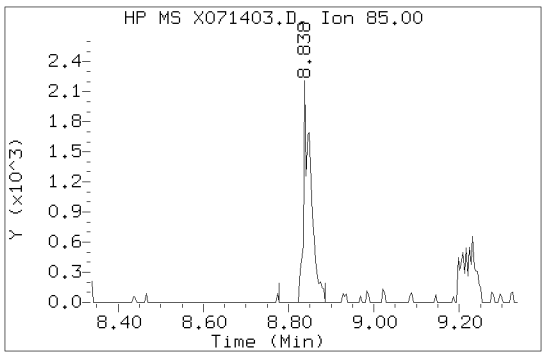
BEFORE

MASS
85
AREA
2735
HEIGHT
2209
20-Jul-2023
15:04
linh
pham



AFTER

MASS
85
AREA
2735
HEIGHT
2209
20-Jul-2023
15:04
linh
pham

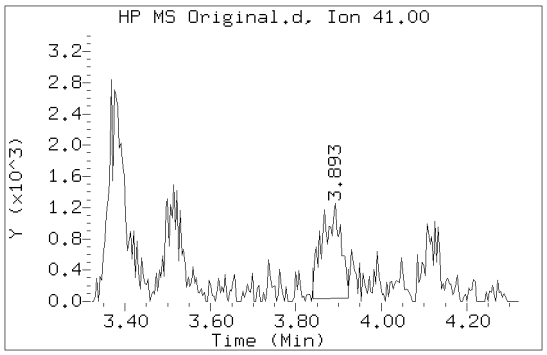


Methacrylonitrile (126-98-7)

Reason Code:

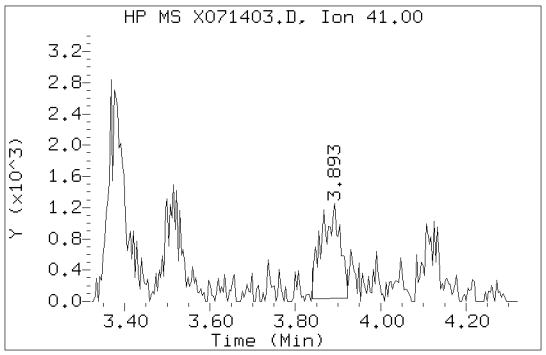
BEFORE

MASS
41
AREA
3622
HEIGHT
1212
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
3622
HEIGHT
1212
20-Jul-2023
15:04
linh
pham



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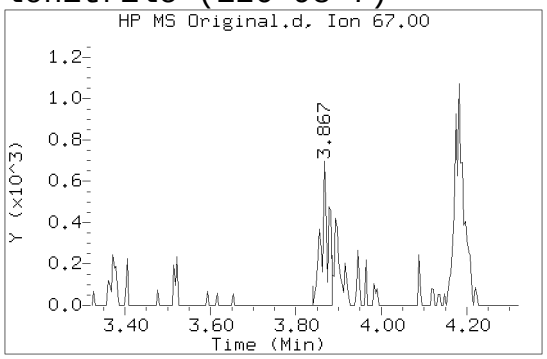
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

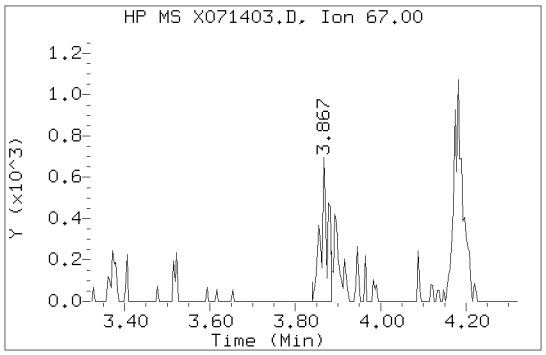
Methacrylonitrile (126-98-7)

Reason Code:

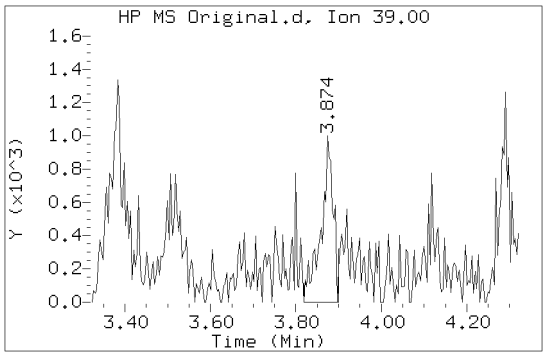
BEFORE
MASS
67
AREA
806
HEIGHT
697
20-Jul-2023
15:04
linh
pham



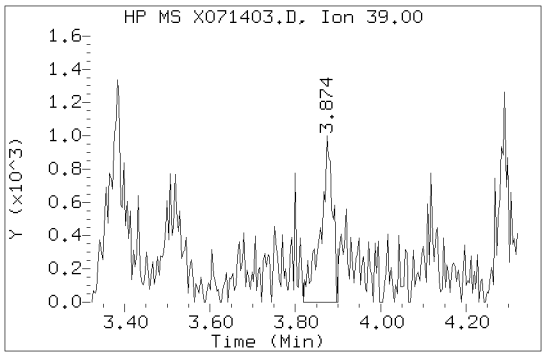
AFTER
MASS
67
AREA
806
HEIGHT
697
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
39
AREA
1986
HEIGHT
1000
20-Jul-2023
15:04
linh
pham



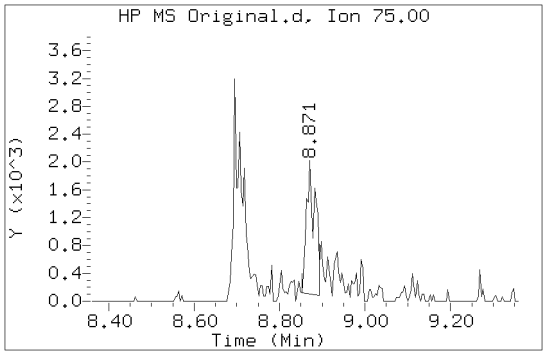
AFTER
MASS
39
AREA
1986
HEIGHT
1000
20-Jul-2023
15:04
linh
pham



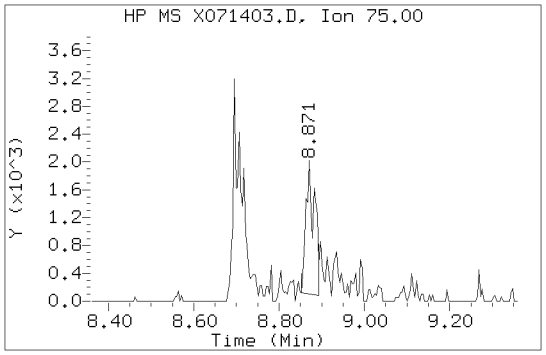
1,2,3-Trichloropropane (96-18-4)

Reason Code:

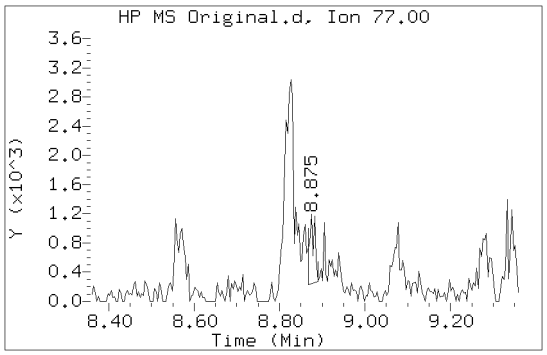
BEFORE
MASS
75
AREA
2737
HEIGHT
1922
20-Jul-2023
15:04
linh
pham



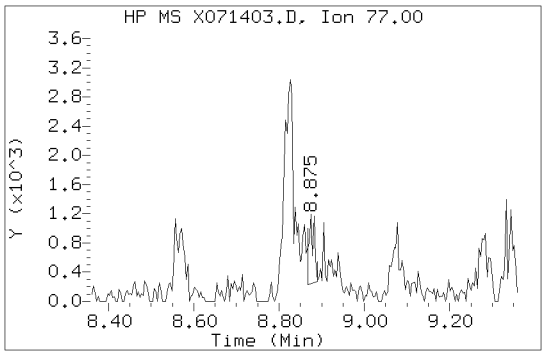
AFTER
MASS
75
AREA
2737
HEIGHT
1922
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
77
AREA
813
HEIGHT
948
20-Jul-2023
15:04
linh
pham



AFTER
MASS
77
AREA
813
HEIGHT
948
20-Jul-2023
15:04
linh
pham



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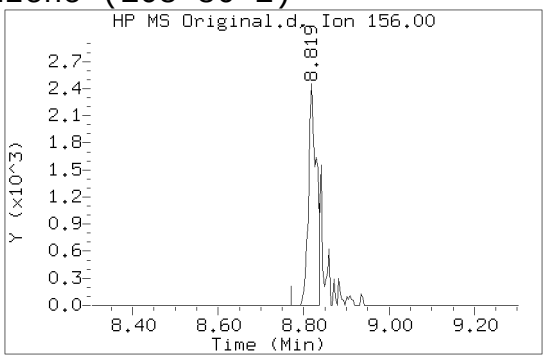
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

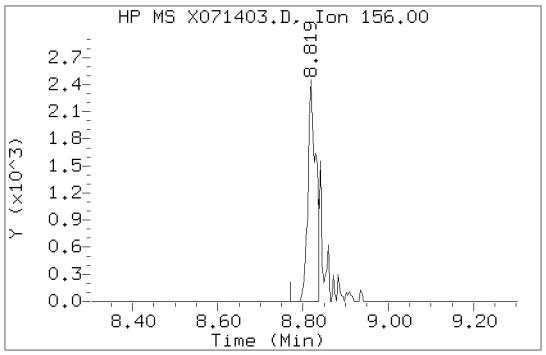
Bromobenzene (108-86-1)

Reason Code:

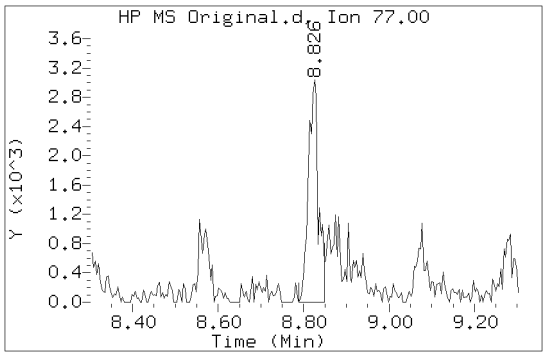
BEFORE
MASS
156
AREA
3201
HEIGHT
2455
20-Jul-2023
15:04
linh
pham



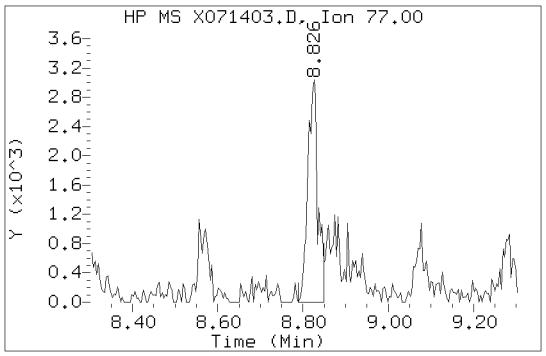
AFTER
MASS
156
AREA
3201
HEIGHT
2455
20-Jul-2023
15:04
linh
pham



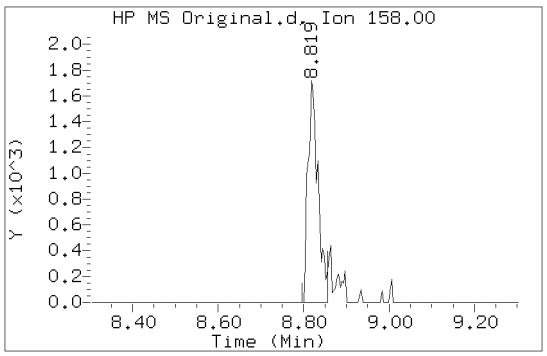
BEFORE
MASS
77
AREA
5003
HEIGHT
3037
20-Jul-2023
15:04
linh
pham



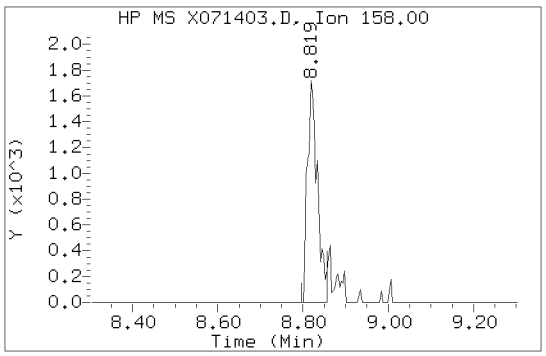
AFTER
MASS
77
AREA
5003
HEIGHT
3037
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
158
AREA
2823
HEIGHT
1718
20-Jul-2023
15:04
linh
pham



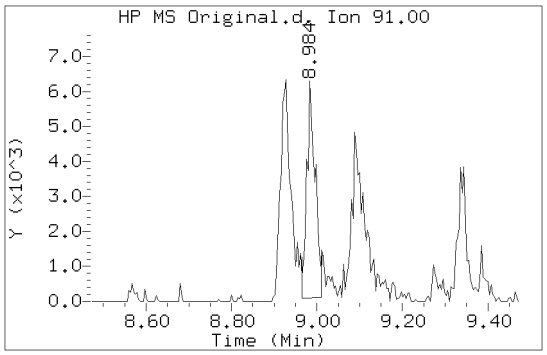
AFTER
MASS
158
AREA
2823
HEIGHT
1718
20-Jul-2023
15:04
linh
pham



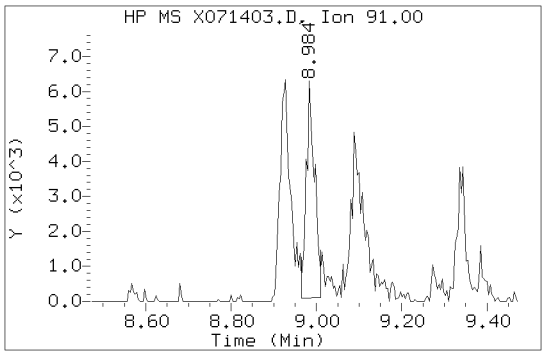
2-Chlorotoluene (95-49-8)

Reason Code:

BEFORE
MASS
91
AREA
8487
HEIGHT
6195
20-Jul-2023
15:04
linh
pham



AFTER
MASS
91
AREA
8487
HEIGHT
6195
20-Jul-2023
15:04
linh
pham



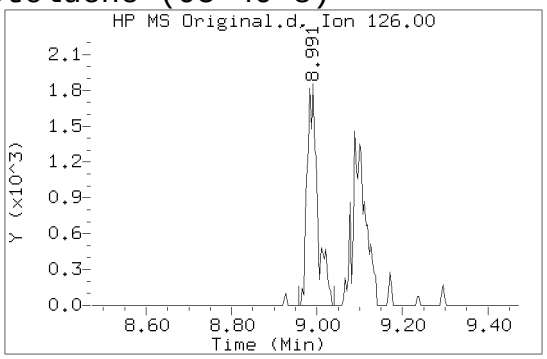
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

2-Chlorotoluene (95-49-8)

Reason Code:

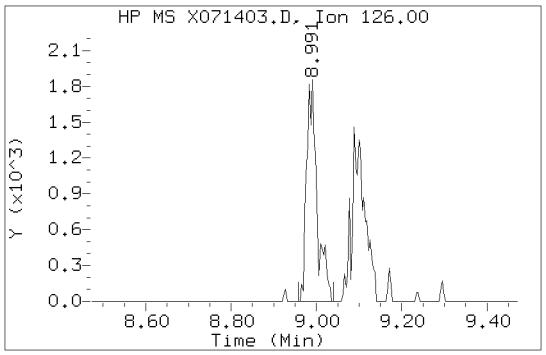
BEFORE

MASS
126
AREA
3192
HEIGHT
1856
20-Jul-2023
15:04
linh
pham



AFTER

MASS
126
AREA
3192
HEIGHT
1856
20-Jul-2023
15:04
linh
pham

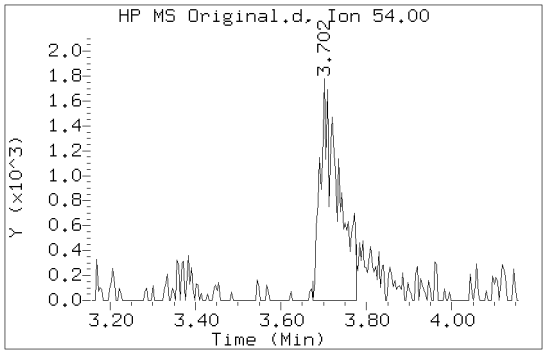


Propionitrile (107-12-0)

Reason Code:

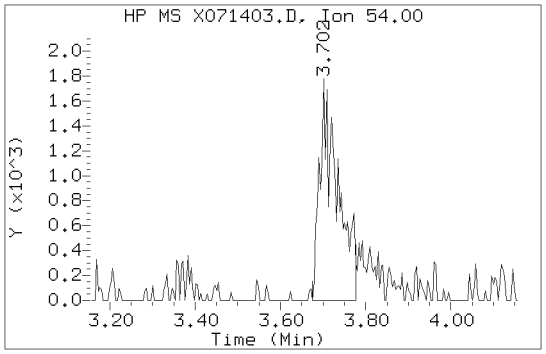
BEFORE

MASS
54
AREA
5231
HEIGHT
1779
20-Jul-2023
15:04
linh
pham



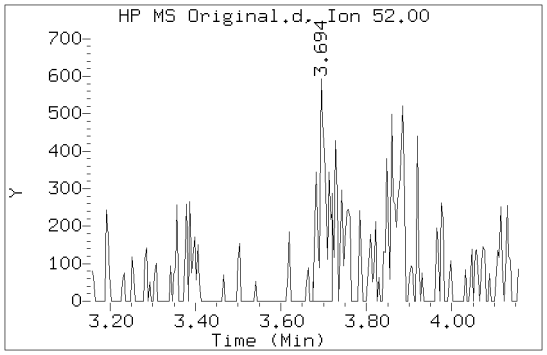
AFTER

MASS
54
AREA
5231
HEIGHT
1779
20-Jul-2023
15:04
linh
pham



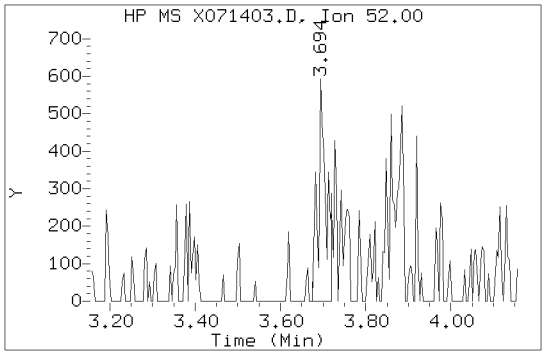
BEFORE

MASS
52
AREA
779
HEIGHT
593
20-Jul-2023
15:04
linh
pham



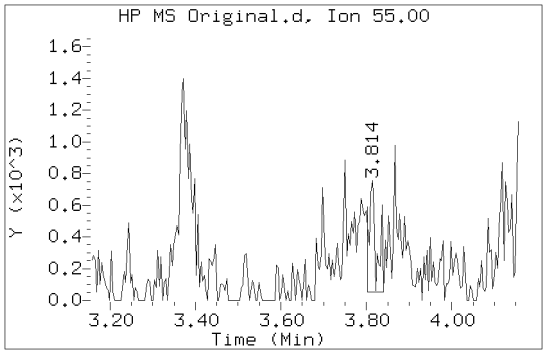
AFTER

MASS
52
AREA
779
HEIGHT
593
20-Jul-2023
15:04
linh
pham



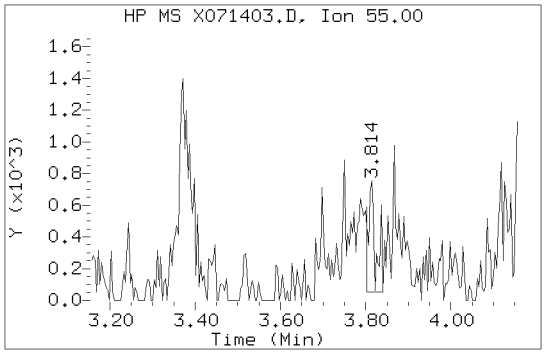
BEFORE

MASS
55
AREA
826
HEIGHT
704
20-Jul-2023
15:04
linh
pham



AFTER

MASS
55
AREA
826
HEIGHT
704
20-Jul-2023
15:04
linh
pham



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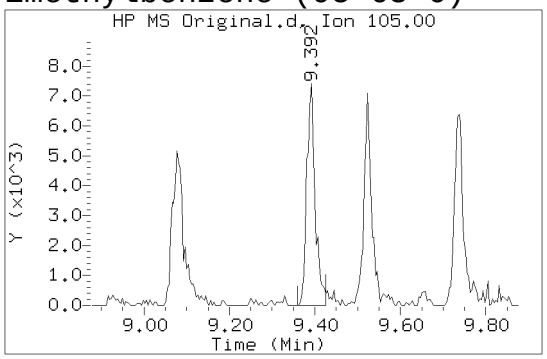
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

1,2,4-Trimethylbenzene (95-63-6)

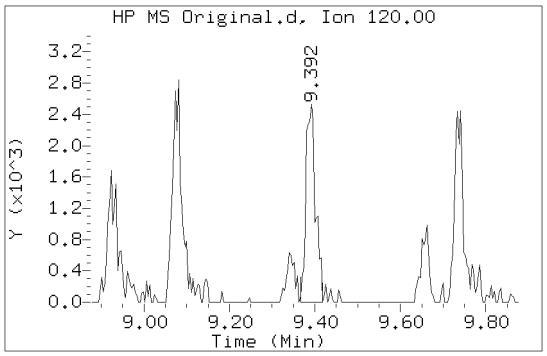
BEFORE

MASS
105
AREA
10172
HEIGHT
7414
20-Jul-2023
15:04
linh
pham



BEFORE

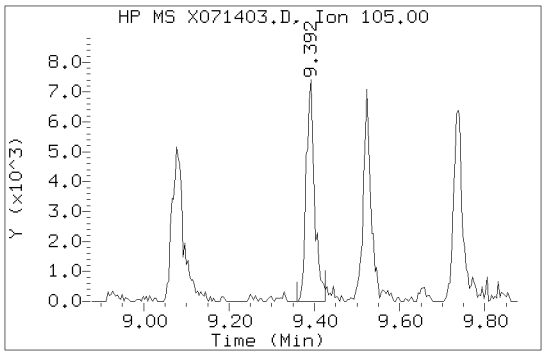
MASS
120
AREA
3980
HEIGHT
2527
20-Jul-2023
15:04
linh
pham



Reason Code:

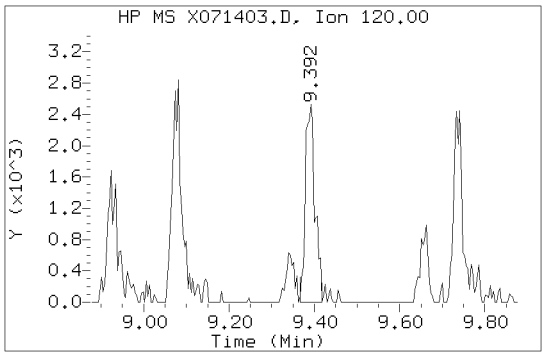
AFTER

MASS
105
AREA
10172
HEIGHT
7414
20-Jul-2023
15:04
linh
pham



AFTER

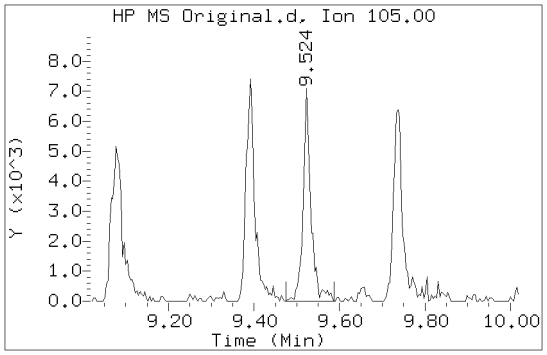
MASS
120
AREA
3980
HEIGHT
2527
20-Jul-2023
15:04
linh
pham



sec-Butylbenzene (135-98-8)

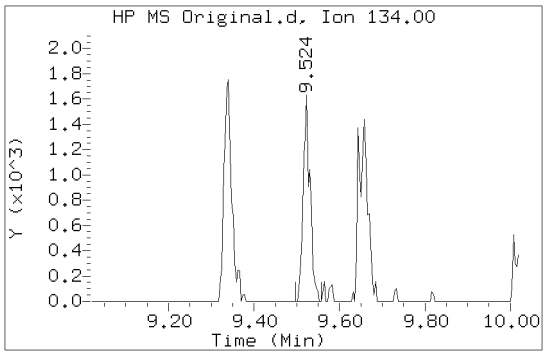
BEFORE

MASS
105
AREA
9247
HEIGHT
7103
20-Jul-2023
15:04
linh
pham



BEFORE

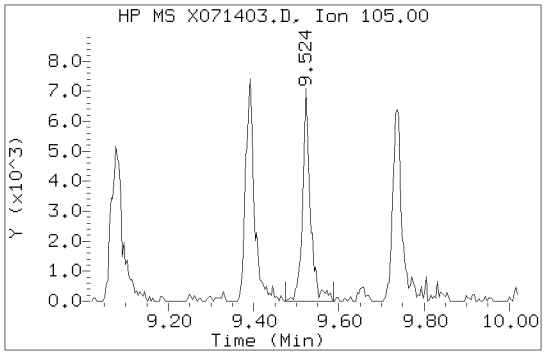
MASS
134
AREA
1861
HEIGHT
1631
20-Jul-2023
15:04
linh
pham



Reason Code:

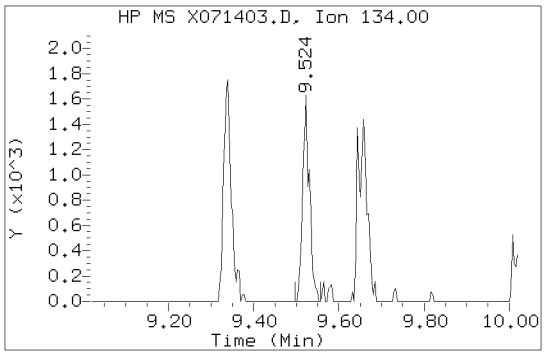
AFTER

MASS
105
AREA
9247
HEIGHT
7103
20-Jul-2023
15:04
linh
pham



AFTER

MASS
134
AREA
1861
HEIGHT
1631
20-Jul-2023
15:04
linh
pham



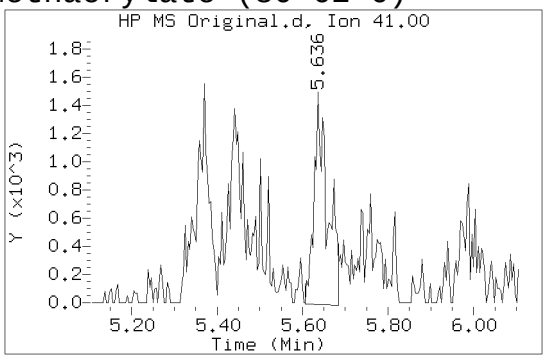
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Methyl Methacrylate (80-62-6)

Reason Code:

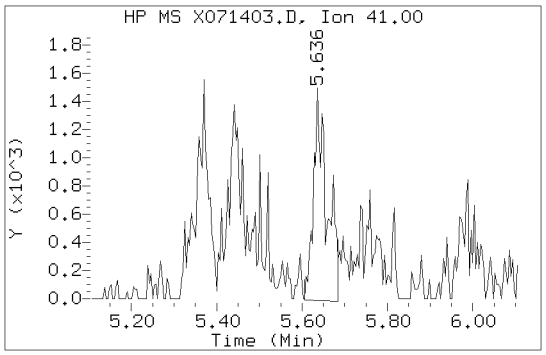
BEFORE

MASS
41
AREA
3261
HEIGHT
1505
20-Jul-2023
15:04
linh
pham



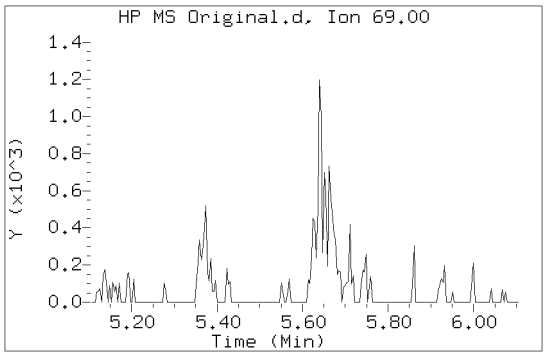
AFTER

MASS
41
AREA
3261
HEIGHT
1505
20-Jul-2023
15:04
linh
pham



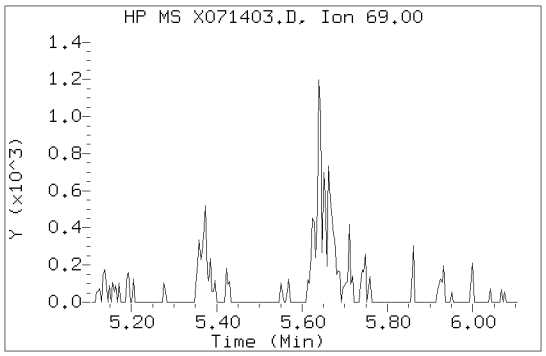
BEFORE

MASS
69
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



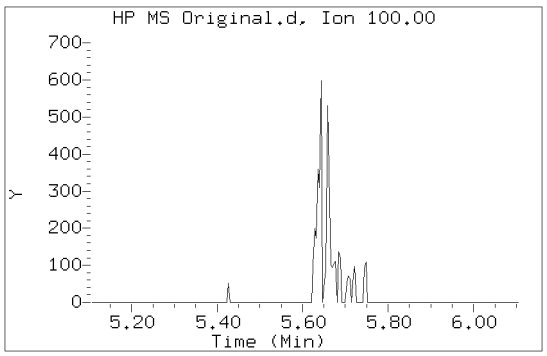
AFTER

MASS
69
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



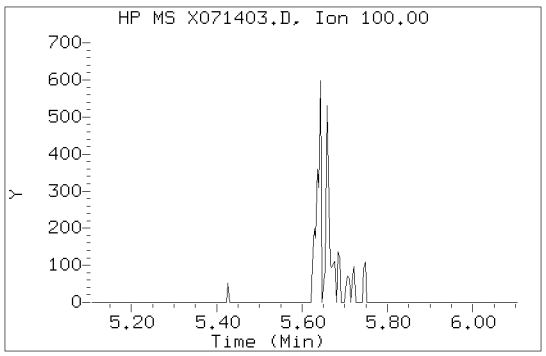
BEFORE

MASS
100
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
100
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

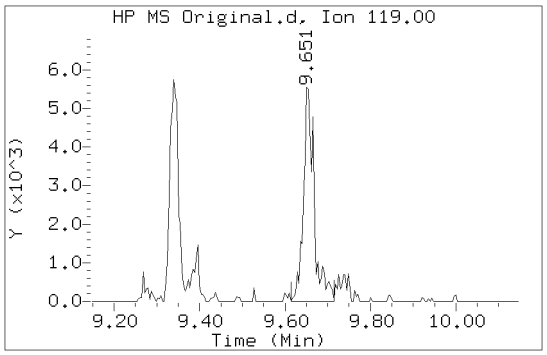


p-Isopropyltoluene (99-87-6)

Reason Code:

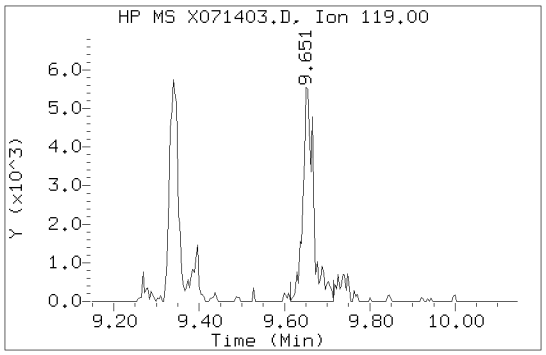
BEFORE

MASS
119
AREA
9771
HEIGHT
5556
20-Jul-2023
15:04
linh
pham



AFTER

MASS
119
AREA
9771
HEIGHT
5556
20-Jul-2023
15:04
linh
pham



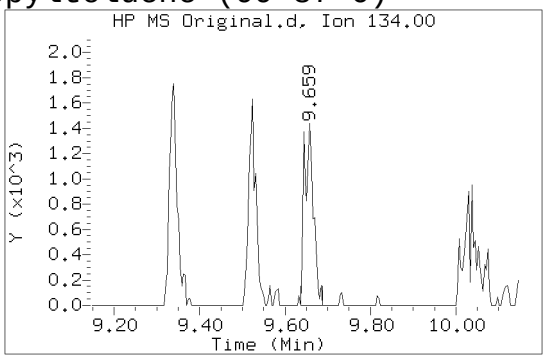
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

p-Isopropyltoluene (99-87-6)

Reason Code:

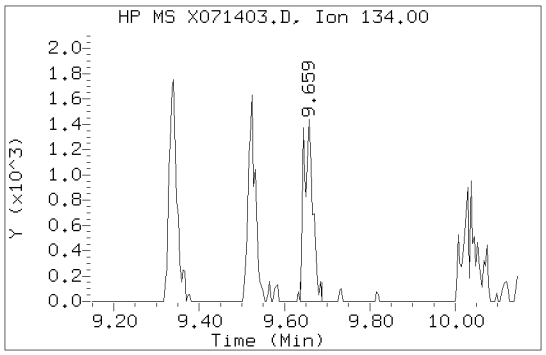
BEFORE

MASS
134
AREA
2131
HEIGHT
1438
20-Jul-2023
15:04
linh
pham



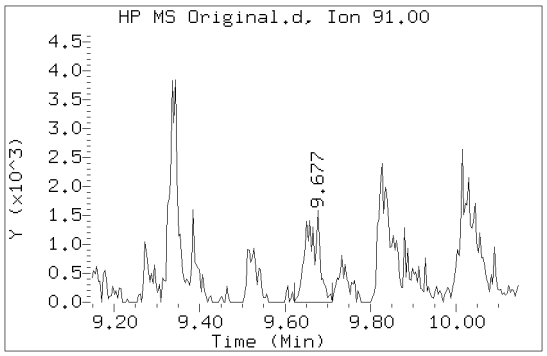
AFTER

MASS
134
AREA
2131
HEIGHT
1438
20-Jul-2023
15:04
linh
pham



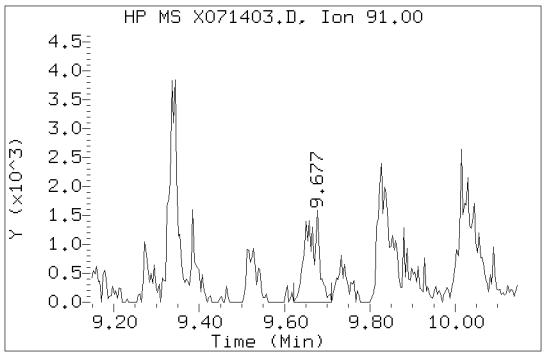
BEFORE

MASS
91
AREA
3352
HEIGHT
1591
20-Jul-2023
15:04
linh
pham



AFTER

MASS
91
AREA
3352
HEIGHT
1591
20-Jul-2023
15:04
linh
pham

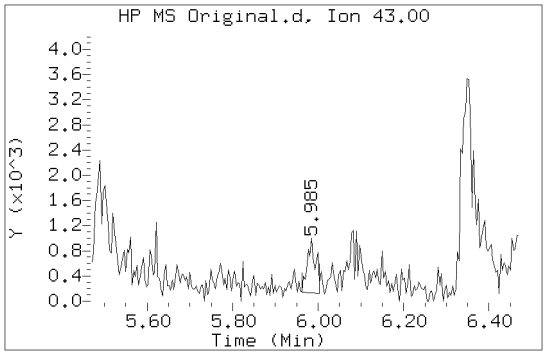


2-Nitropropane (79-46-9)

Reason Code:

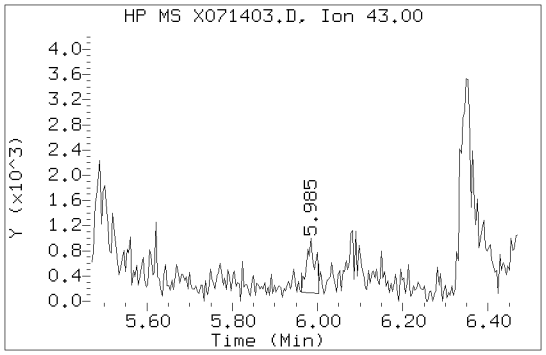
BEFORE

MASS
43
AREA
1174
HEIGHT
872
20-Jul-2023
15:04
linh
pham



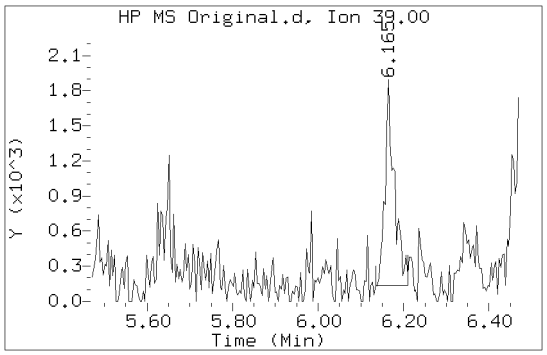
AFTER

MASS
43
AREA
1174
HEIGHT
872
20-Jul-2023
15:04
linh
pham



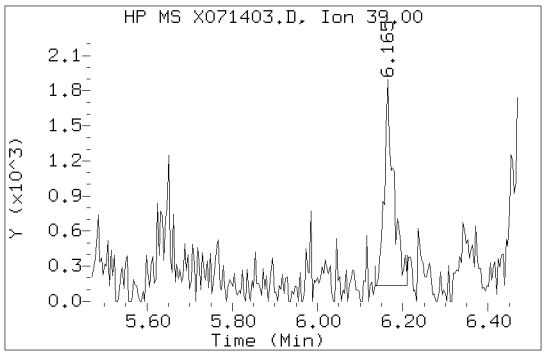
BEFORE

MASS
39
AREA
2649
HEIGHT
1759
20-Jul-2023
15:04
linh
pham



AFTER

MASS
39
AREA
2649
HEIGHT
1759
20-Jul-2023
15:04
linh
pham



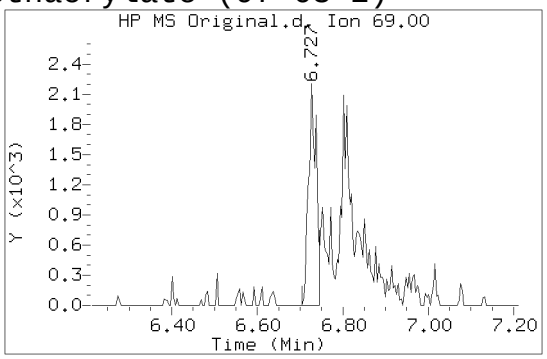
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Ethyl Methacrylate (97-63-2)

Reason Code:

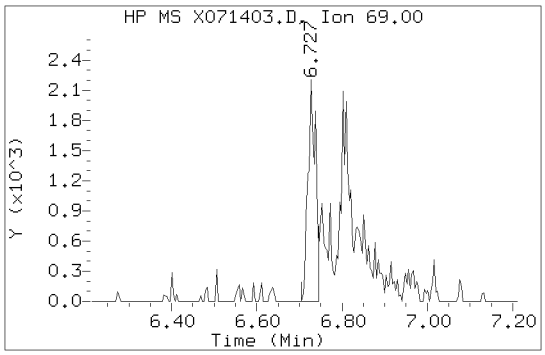
BEFORE

MASS
69
AREA
2780
HEIGHT
2206
20-Jul-2023
15:04
linh
pham



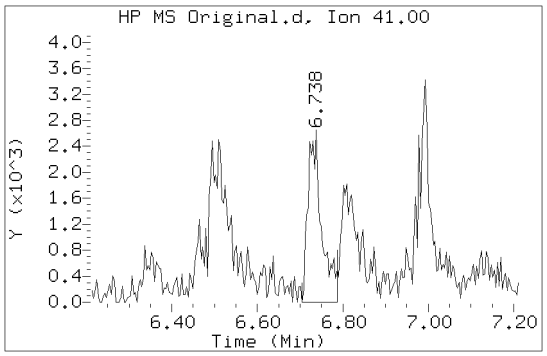
AFTER

MASS
69
AREA
2780
HEIGHT
2206
20-Jul-2023
15:04
linh
pham



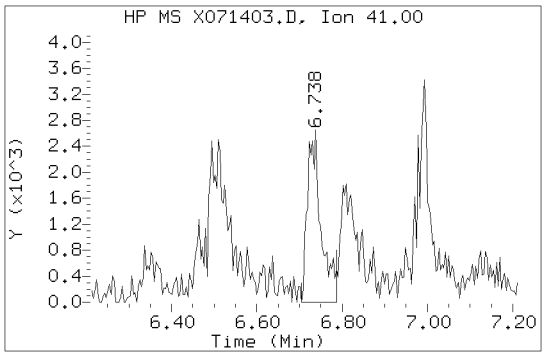
BEFORE

MASS
41
AREA
5900
HEIGHT
2651
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
5900
HEIGHT
2651
20-Jul-2023
15:04
linh
pham

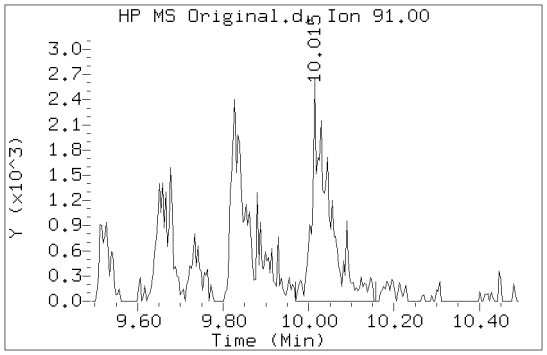


n-Butylbenzene (104-51-8)

Reason Code:

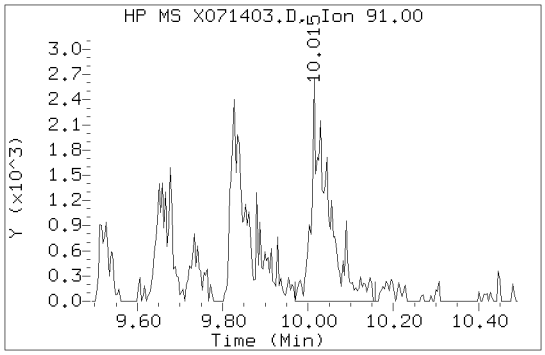
BEFORE

MASS
91
AREA
7141
HEIGHT
2647
20-Jul-2023
15:04
linh
pham



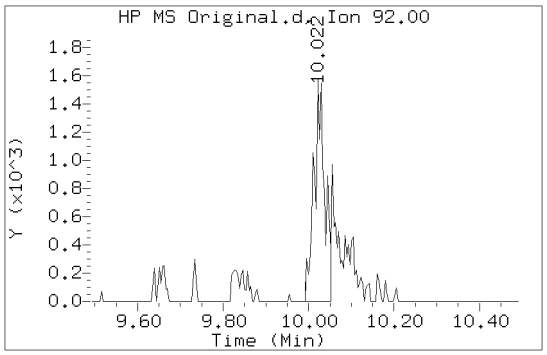
AFTER

MASS
91
AREA
7141
HEIGHT
2647
20-Jul-2023
15:04
linh
pham



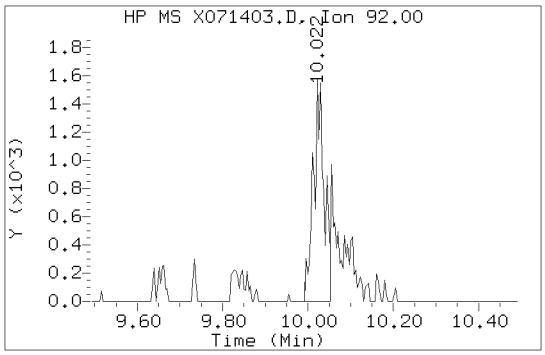
BEFORE

MASS
92
AREA
2733
HEIGHT
1571
20-Jul-2023
15:04
linh
pham



AFTER

MASS
92
AREA
2733
HEIGHT
1571
20-Jul-2023
15:04
linh
pham



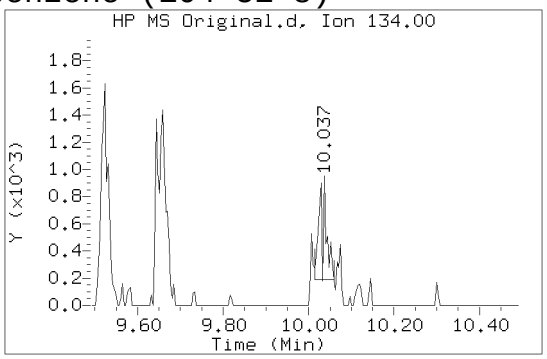
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

n-Butylbenzene (104-51-8)

Reason Code:

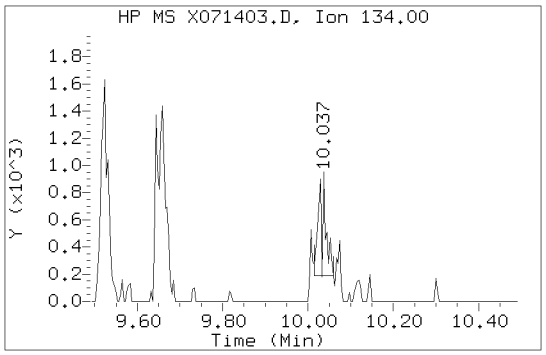
BEFORE

MASS
134
AREA
825
HEIGHT
766
20-Jul-2023
15:04
linh
pham



AFTER

MASS
134
AREA
825
HEIGHT
766
20-Jul-2023
15:04
linh
pham

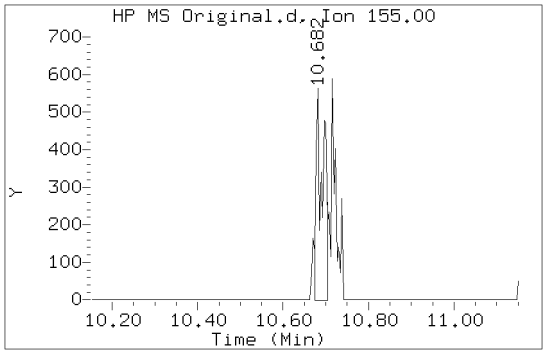


1,2-Dibromo-3-Chloropropane (96-12-8)

Reason Code:

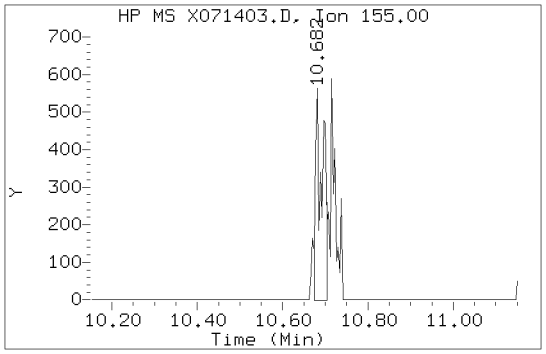
BEFORE

MASS
155
AREA
675
HEIGHT
564
20-Jul-2023
15:04
linh
pham



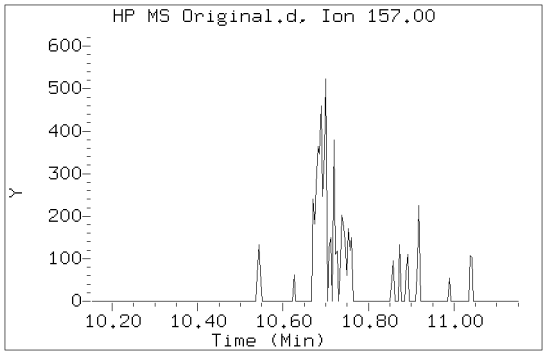
AFTER

MASS
155
AREA
675
HEIGHT
564
20-Jul-2023
15:04
linh
pham



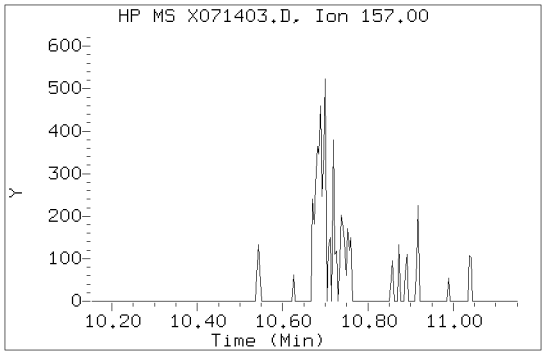
BEFORE

MASS
157
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



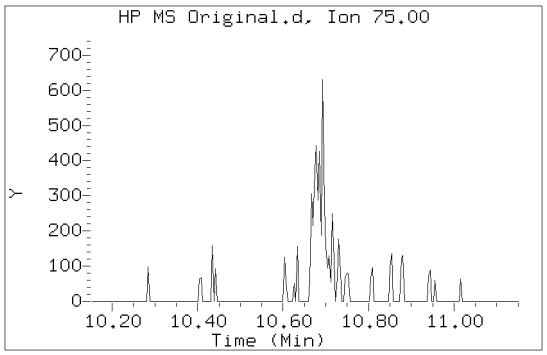
AFTER

MASS
157
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



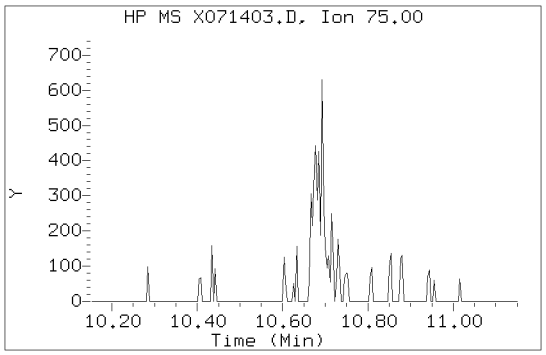
BEFORE

MASS
75
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
75
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



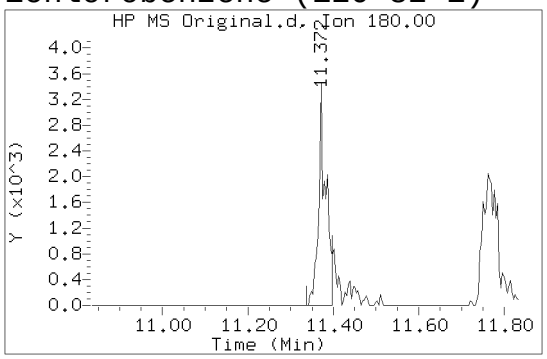
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

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

Reason Code:

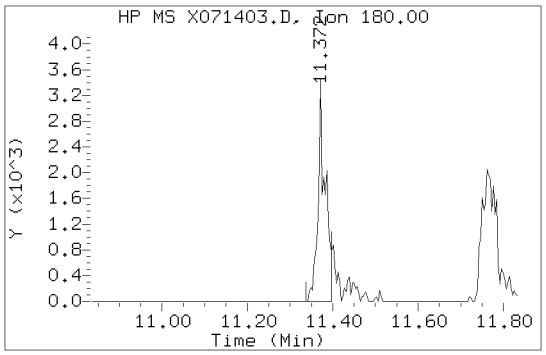
BEFORE

MASS
180
AREA
4099
HEIGHT
3445
20-Jul-2023
15:04
linh
pham



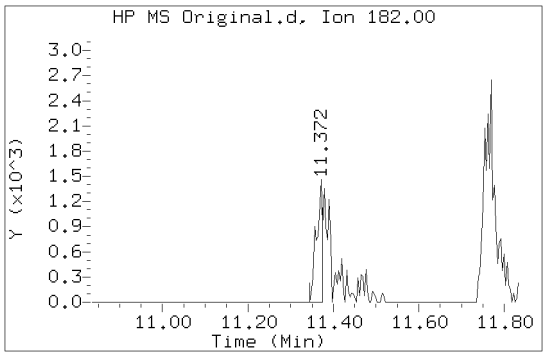
AFTER

MASS
180
AREA
4099
HEIGHT
3445
20-Jul-2023
15:04
linh
pham



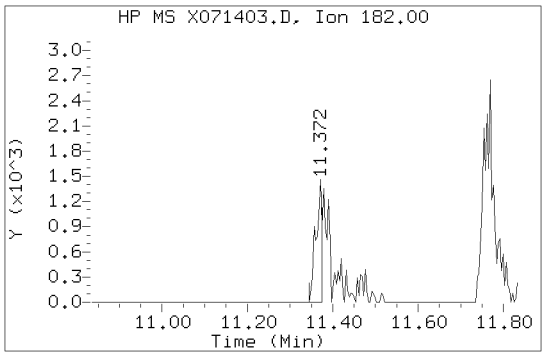
BEFORE

MASS
182
AREA
1413
HEIGHT
1466
20-Jul-2023
15:04
linh
pham



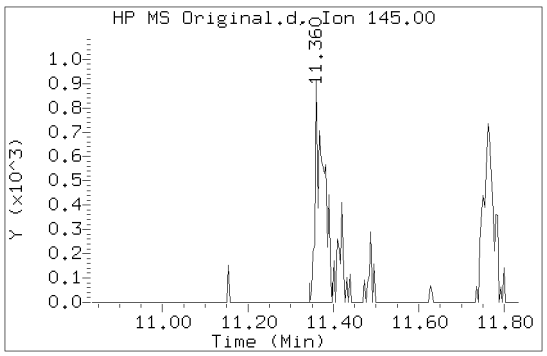
AFTER

MASS
182
AREA
1413
HEIGHT
1466
20-Jul-2023
15:04
linh
pham



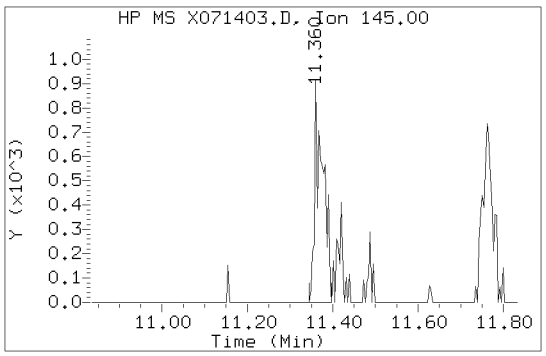
BEFORE

MASS
145
AREA
1239
HEIGHT
912
20-Jul-2023
15:04
linh
pham



AFTER

MASS
145
AREA
1239
HEIGHT
912
20-Jul-2023
15:04
linh
pham

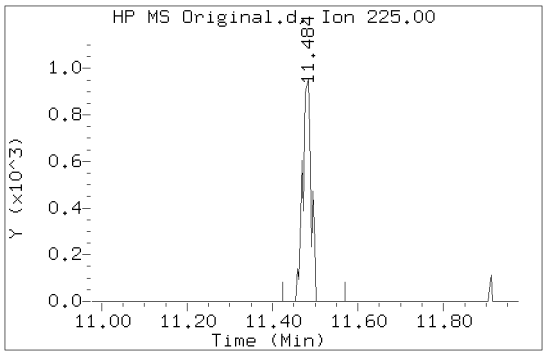


Hexachlorobutadiene (87-68-3)

Reason Code:

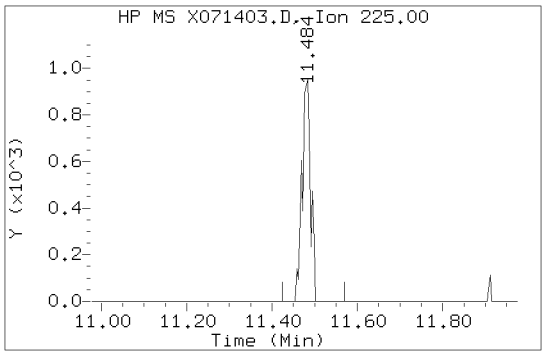
BEFORE

MASS
225
AREA
1357
HEIGHT
951
20-Jul-2023
15:04
linh
pham



AFTER

MASS
225
AREA
1357
HEIGHT
951
20-Jul-2023
15:04
linh
pham



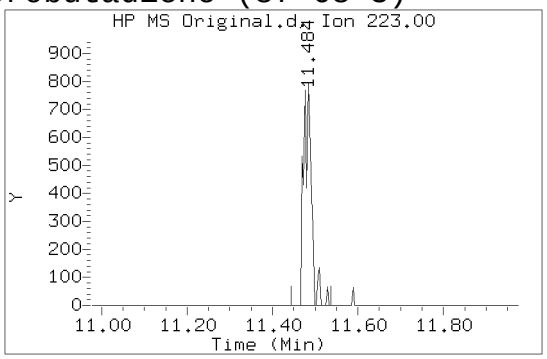
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Hexachlorobutadiene (87-68-3)

Reason Code:

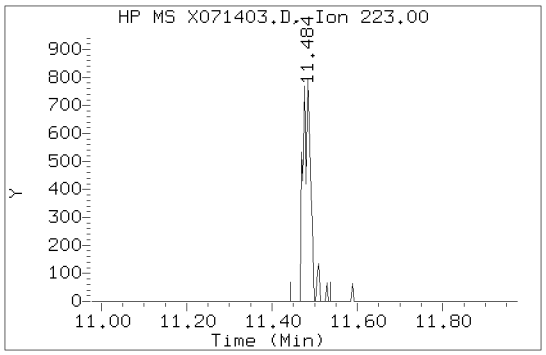
BEFORE

MASS
223
AREA
1025
HEIGHT
792
20-Jul-2023
15:04
linh
pham



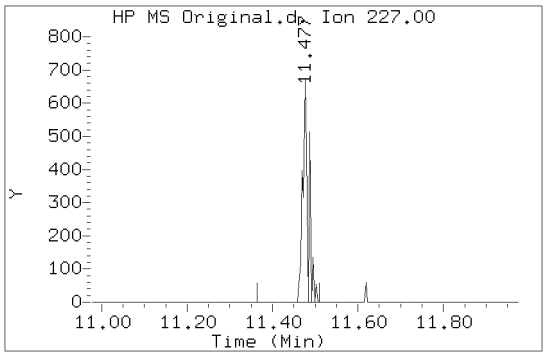
AFTER

MASS
223
AREA
1025
HEIGHT
792
20-Jul-2023
15:04
linh
pham



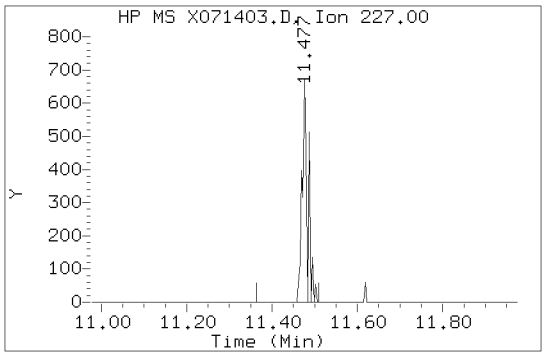
BEFORE

MASS
227
AREA
611
HEIGHT
670
20-Jul-2023
15:04
linh
pham



AFTER

MASS
227
AREA
611
HEIGHT
670
20-Jul-2023
15:04
linh
pham

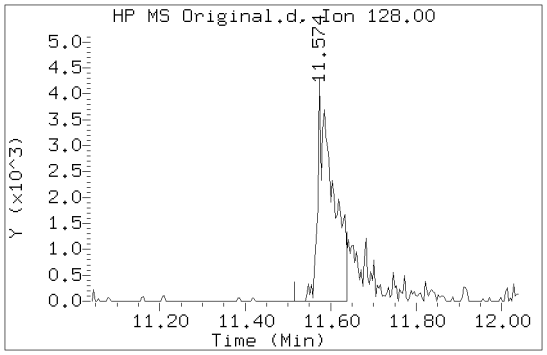


Naphthalene (91-20-3)

Reason Code:

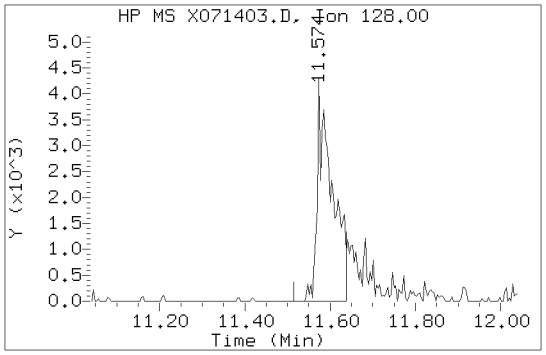
BEFORE

MASS
128
AREA
10357
HEIGHT
4289
20-Jul-2023
15:04
linh
pham



AFTER

MASS
128
AREA
10357
HEIGHT
4289
20-Jul-2023
15:04
linh
pham

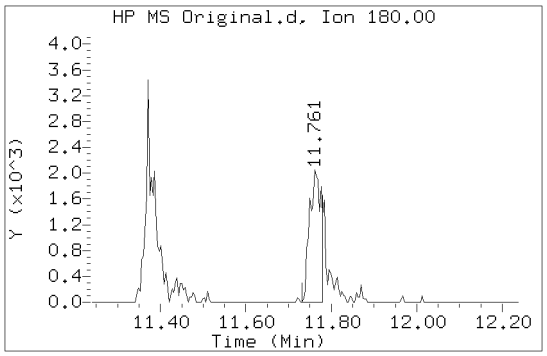


1,2,3-Trichlorobenzene (87-61-6)

Reason Code:

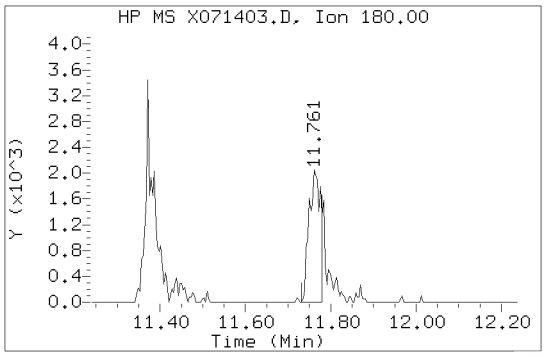
BEFORE

MASS
180
AREA
3845
HEIGHT
2053
20-Jul-2023
15:04
linh
pham



AFTER

MASS
180
AREA
3845
HEIGHT
2053
20-Jul-2023
15:04
linh
pham



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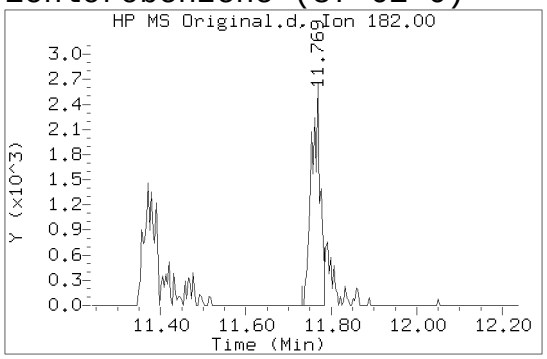
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

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

Reason Code:

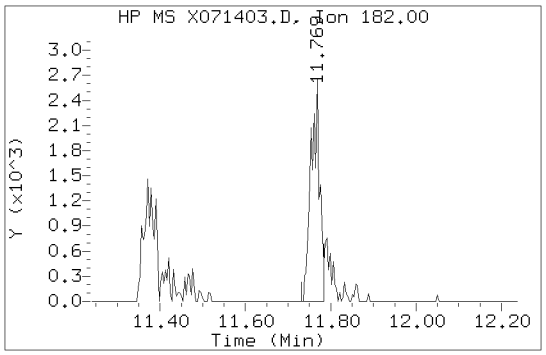
BEFORE

MASS
182
AREA
3757
HEIGHT
2648
20-Jul-2023
15:04
linh
pham



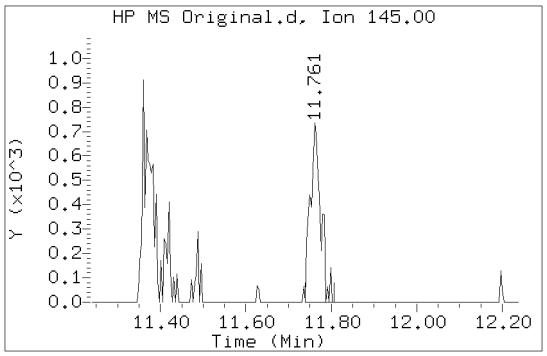
AFTER

MASS
182
AREA
3757
HEIGHT
2648
20-Jul-2023
15:04
linh
pham



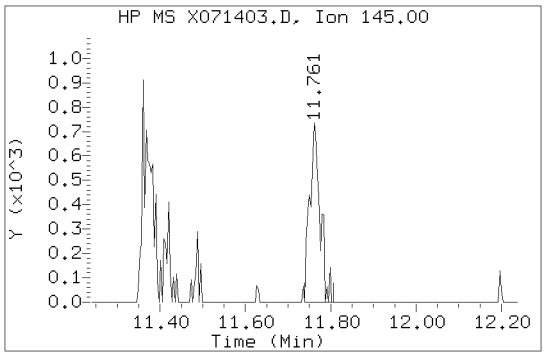
BEFORE

MASS
145
AREA
1239
HEIGHT
737
20-Jul-2023
15:04
linh
pham



AFTER

MASS
145
AREA
1239
HEIGHT
737
20-Jul-2023
15:04
linh
pham

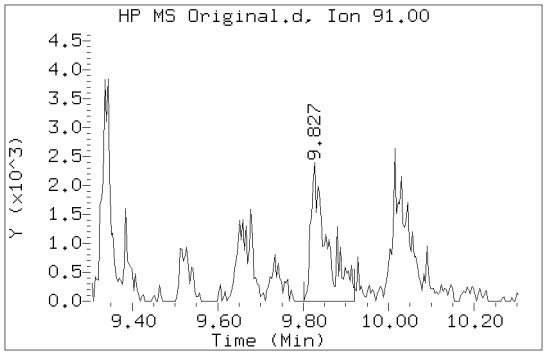


Benzyl Chloride (100-44-7)

Reason Code:

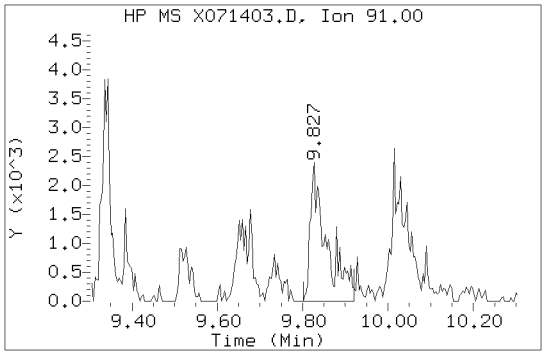
BEFORE

MASS
91
AREA
6245
HEIGHT
2401
20-Jul-2023
15:04
linh
pham



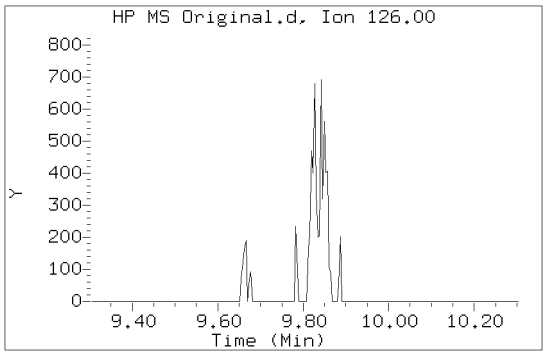
AFTER

MASS
91
AREA
6245
HEIGHT
2401
20-Jul-2023
15:04
linh
pham



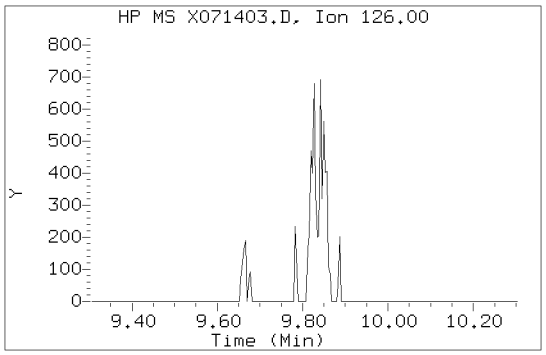
BEFORE

MASS
126
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
126
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



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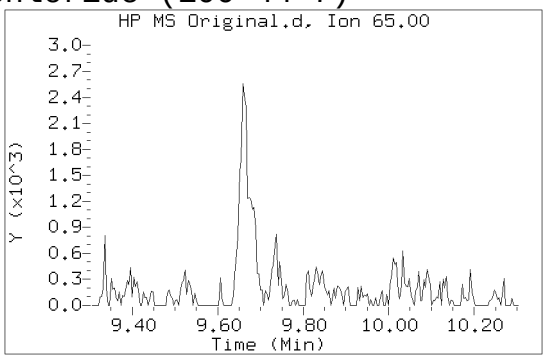
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Benzyl Chloride (100-44-7)

Reason Code:

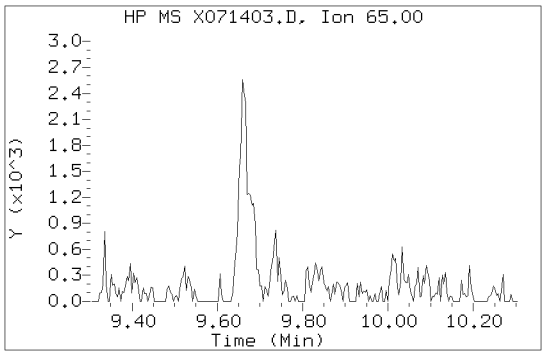
BEFORE

MASS
65
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
65
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

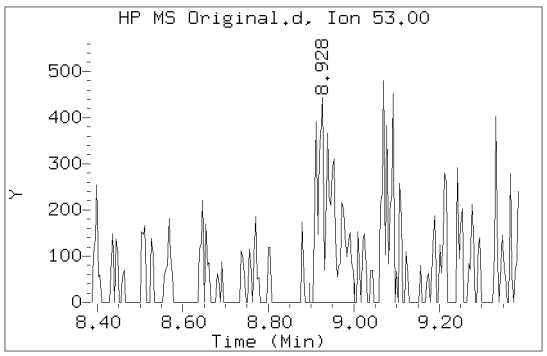


trans-1,4-Dichloro-2-butene (110-57-6)

Reason Code:

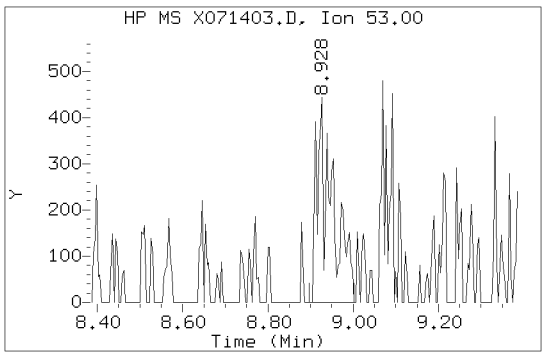
BEFORE

MASS
53
AREA
1124
HEIGHT
444
20-Jul-2023
15:04
linh
pham



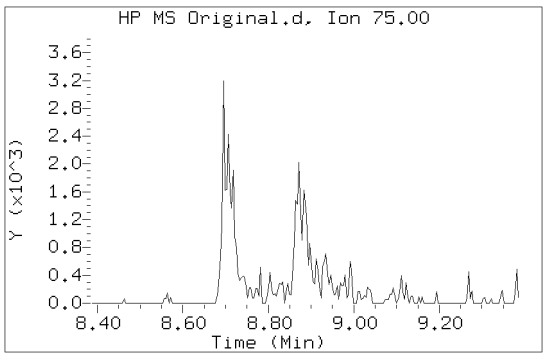
AFTER

MASS
53
AREA
1124
HEIGHT
444
20-Jul-2023
15:04
linh
pham



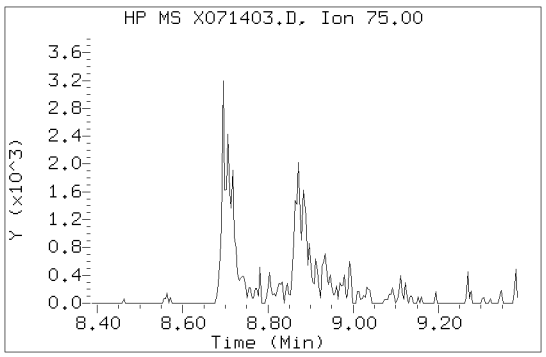
BEFORE

MASS
75
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
75
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

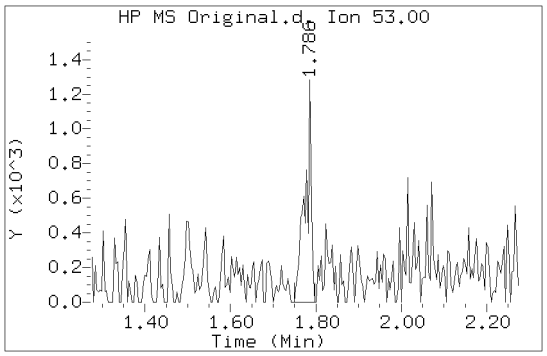


Chloroprene (126-99-8)

Reason Code:

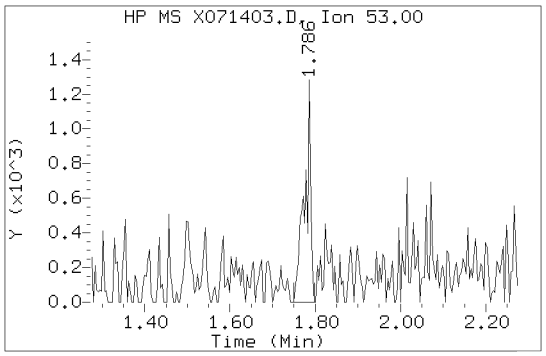
BEFORE

MASS
53
AREA
1292
HEIGHT
1283
20-Jul-2023
15:04
linh
pham



AFTER

MASS
53
AREA
1292
HEIGHT
1283
20-Jul-2023
15:04
linh
pham



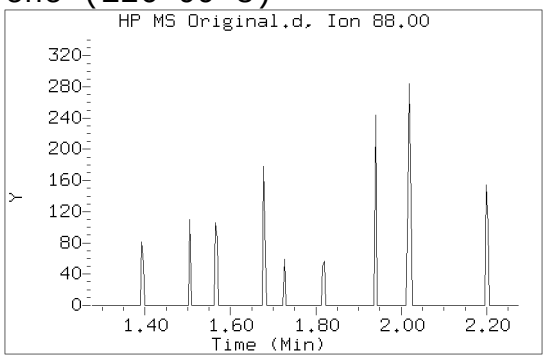
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Chloroprene (126-99-8)

Reason Code:

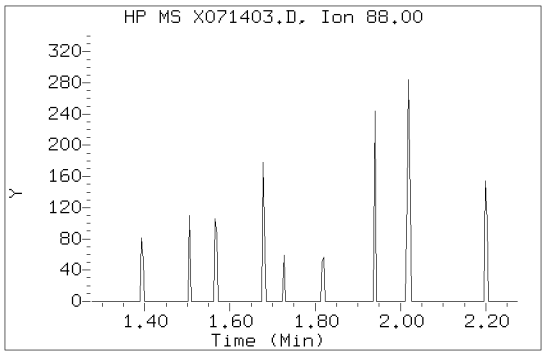
BEFORE

MASS
88
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
88
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

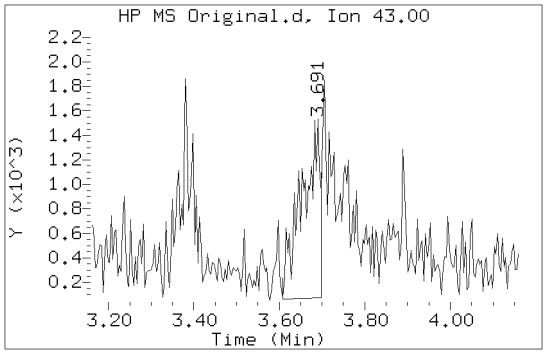


Ethyl Acetate (141-78-6)

Reason Code:

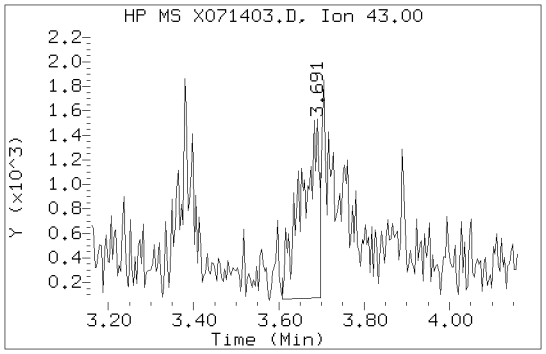
BEFORE

MASS
43
AREA
4291
HEIGHT
1463
20-Jul-2023
15:04
linh
pham



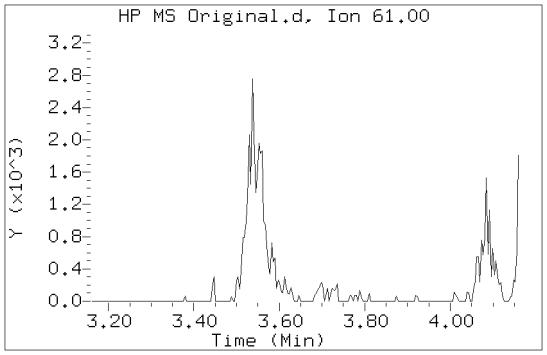
AFTER

MASS
43
AREA
4291
HEIGHT
1463
20-Jul-2023
15:04
linh
pham



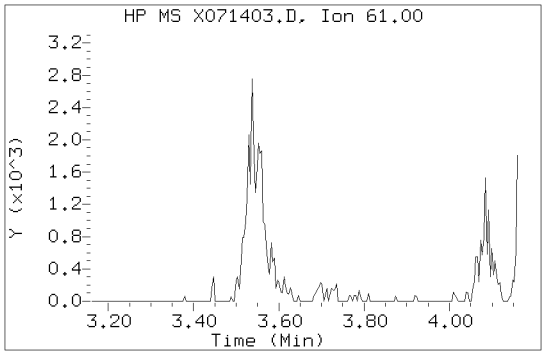
BEFORE

MASS
61
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



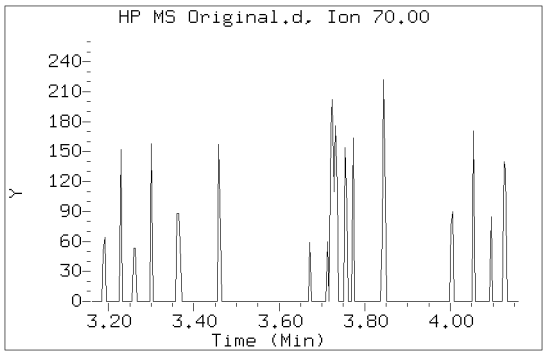
AFTER

MASS
61
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



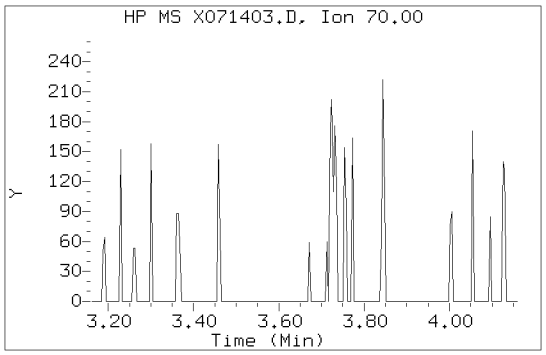
BEFORE

MASS
70
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
70
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

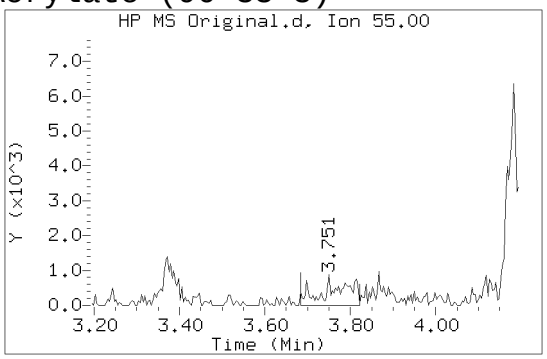


Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

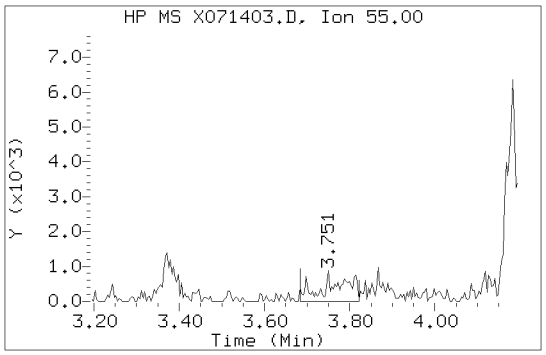
Methyl Acrylate (96-33-3)

Reason Code:

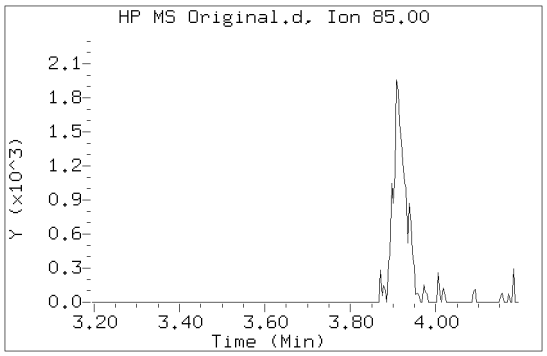
BEFORE
MASS
55
AREA
3365
HEIGHT
887
20-Jul-2023
15:04
linh
pham



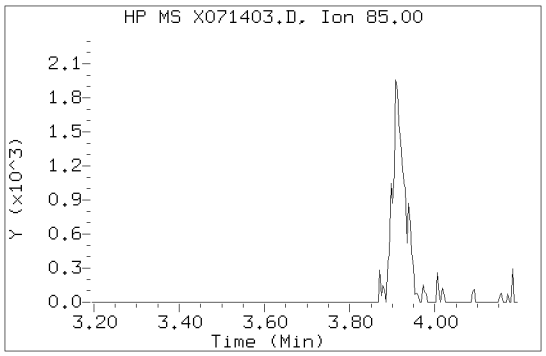
AFTER
MASS
55
AREA
3365
HEIGHT
887
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
85
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



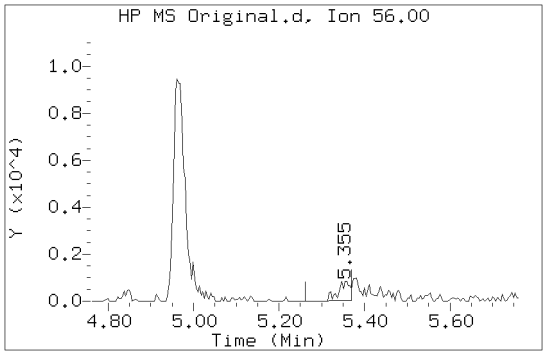
AFTER
MASS
85
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



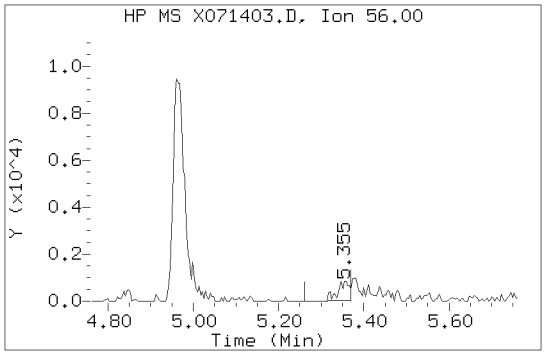
n-Butanol (71-36-3)

Reason Code:

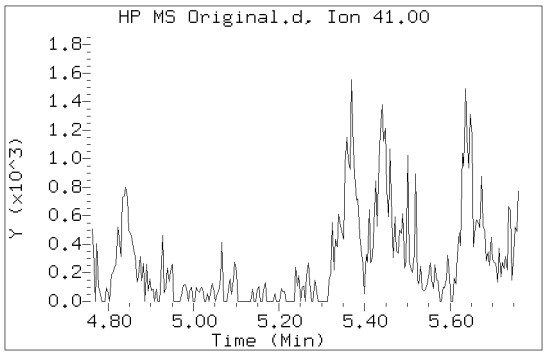
BEFORE
MASS
56
AREA
1626
HEIGHT
848
20-Jul-2023
15:04
linh
pham



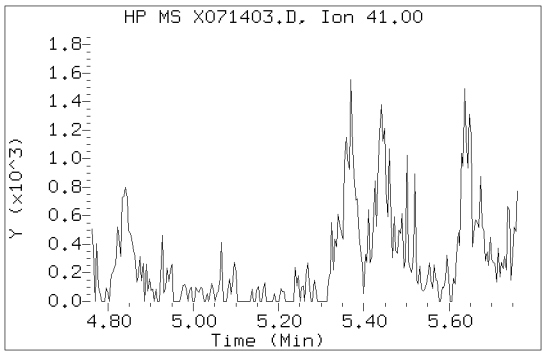
AFTER
MASS
56
AREA
1626
HEIGHT
848
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
41
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



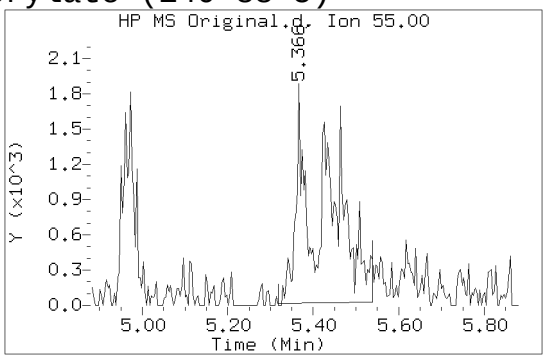
AFTER
MASS
41
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



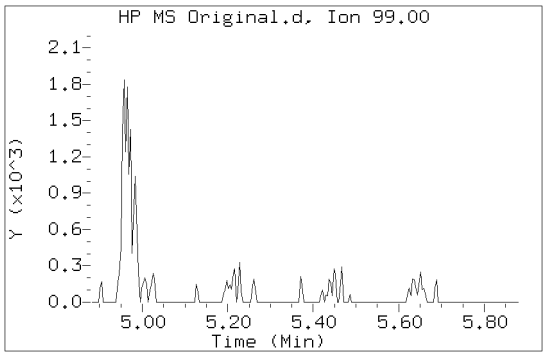
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Ethyl Acrylate (140-88-5)

BEFORE
MASS
55
AREA
8232
HEIGHT
1867
20-Jul-2023
15:04
linh
pham

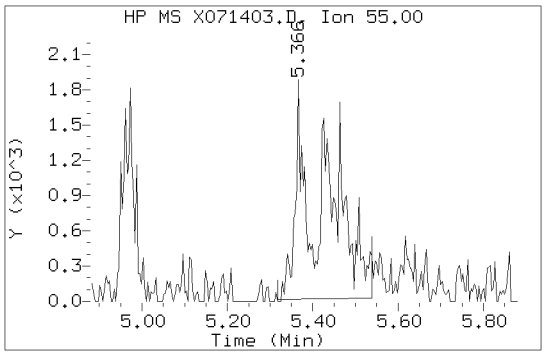


BEFORE
MASS
99
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

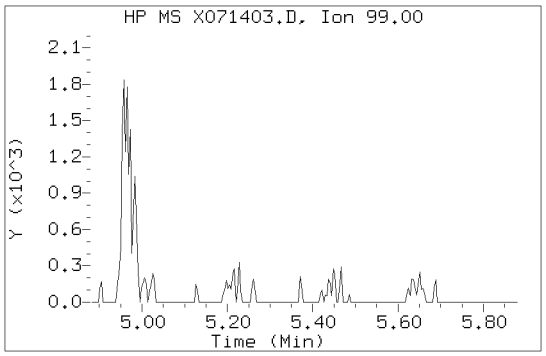


Reason Code:

AFTER
MASS
55
AREA
8232
HEIGHT
1867
20-Jul-2023
15:04
linh
pham

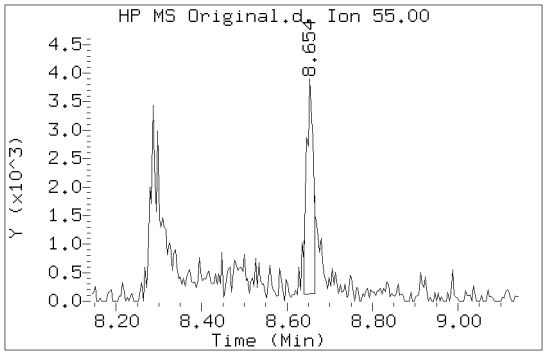


AFTER
MASS
99
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

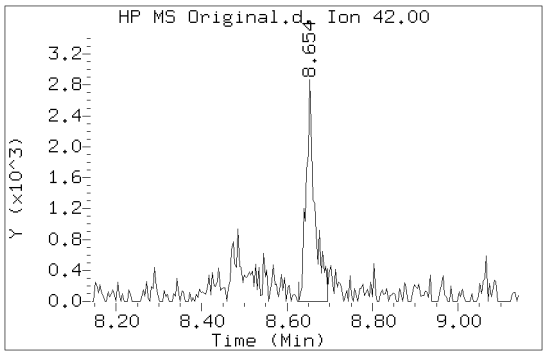


Cyclohexanone (108-94-1)

BEFORE
MASS
55
AREA
4174
HEIGHT
3766
20-Jul-2023
15:04
linh
pham

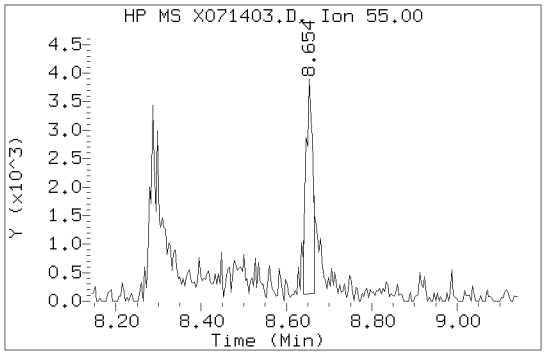


BEFORE
MASS
42
AREA
4022
HEIGHT
2868
20-Jul-2023
15:04
linh
pham

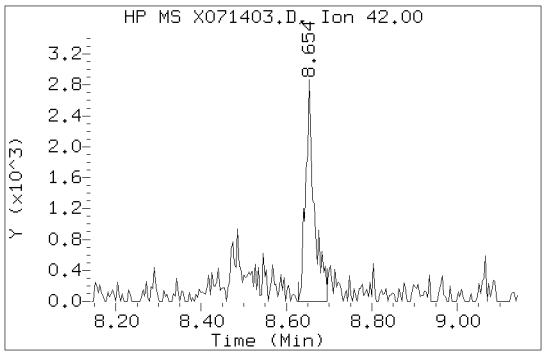


Reason Code:

AFTER
MASS
55
AREA
4174
HEIGHT
3766
20-Jul-2023
15:04
linh
pham



AFTER
MASS
42
AREA
4022
HEIGHT
2868
20-Jul-2023
15:04
linh
pham



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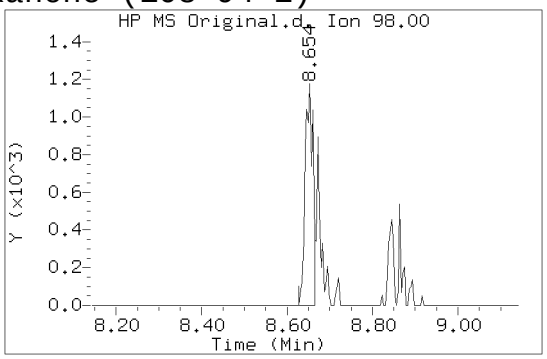
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Cyclohexanone (108-94-1)

Reason Code:

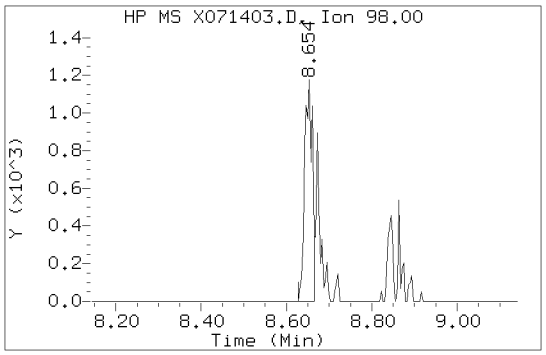
BEFORE

MASS
98
AREA
1506
HEIGHT
1177
20-Jul-2023
15:04
linh
pham



AFTER

MASS
98
AREA
1506
HEIGHT
1177
20-Jul-2023
15:04
linh
pham

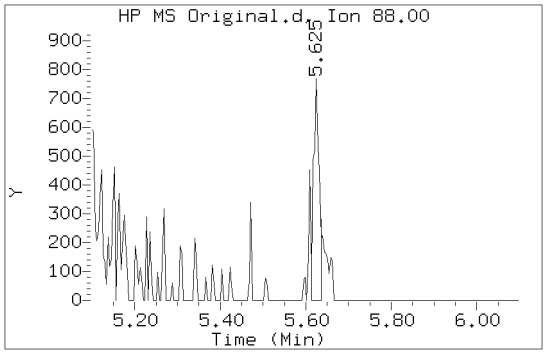


1,4-Dioxane ()

Reason Code:

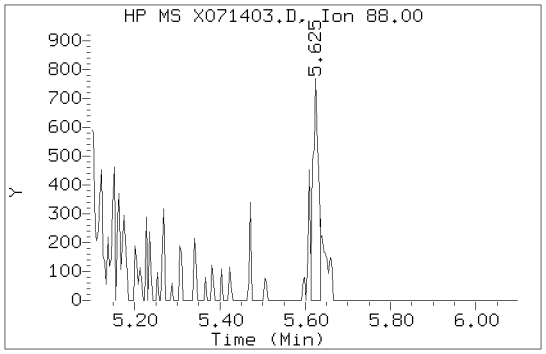
BEFORE

MASS
88
AREA
692
HEIGHT
769
20-Jul-2023
15:04
linh
pham



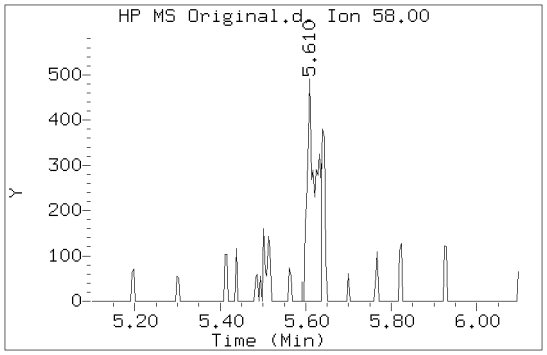
AFTER

MASS
88
AREA
692
HEIGHT
769
20-Jul-2023
15:04
linh
pham



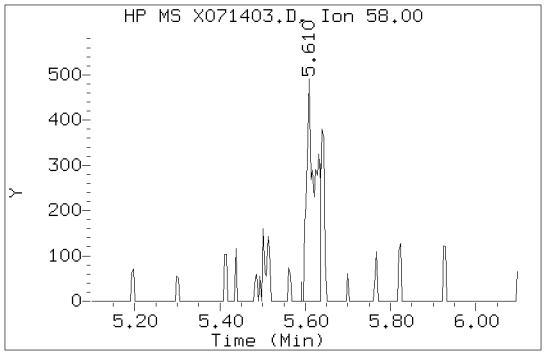
BEFORE

MASS
58
AREA
715
HEIGHT
491
20-Jul-2023
15:04
linh
pham



AFTER

MASS
58
AREA
715
HEIGHT
491
20-Jul-2023
15:04
linh
pham

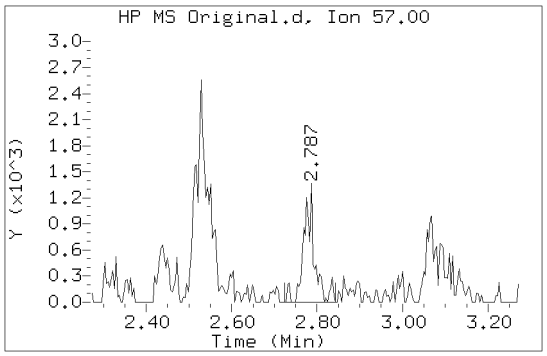


n-Hexane (110-54-3)

Reason Code:

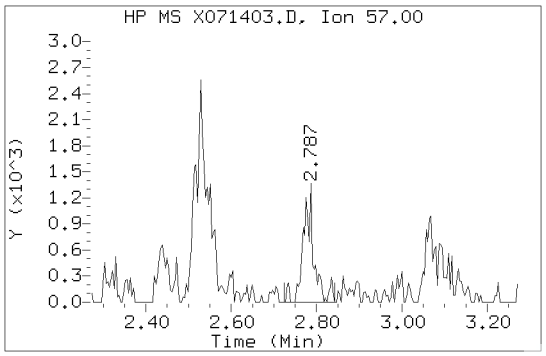
BEFORE

MASS
57
AREA
2320
HEIGHT
1372
20-Jul-2023
15:04
linh
pham



AFTER

MASS
57
AREA
2320
HEIGHT
1372
20-Jul-2023
15:04
linh
pham



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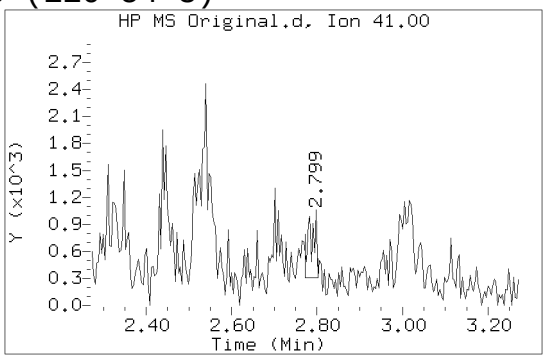
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

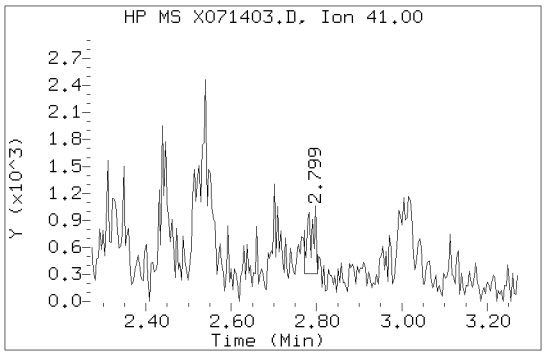
n-Hexane (110-54-3)

Reason Code:

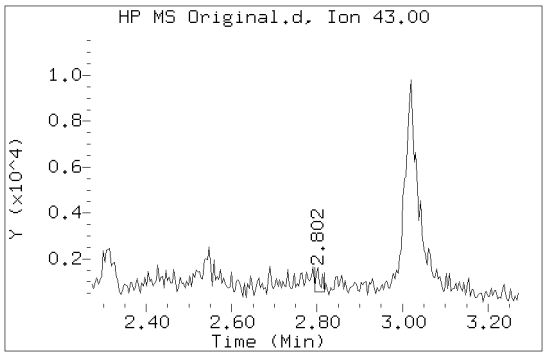
BEFORE
MASS
41
AREA
798
HEIGHT
755
20-Jul-2023
15:04
linh
pham



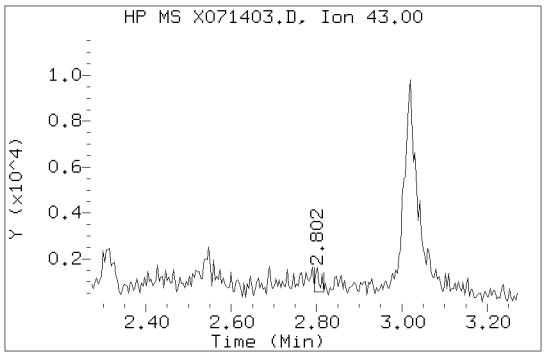
AFTER
MASS
41
AREA
798
HEIGHT
755
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
43
AREA
753
HEIGHT
1069
20-Jul-2023
15:04
linh
pham



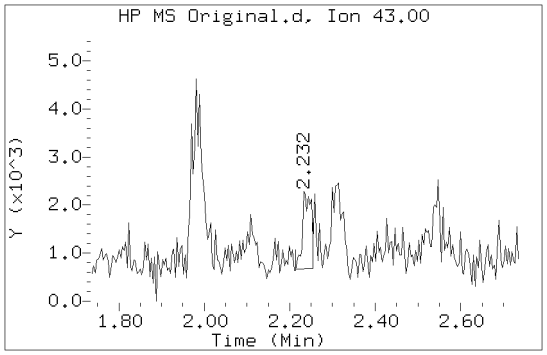
AFTER
MASS
43
AREA
753
HEIGHT
1069
20-Jul-2023
15:04
linh
pham



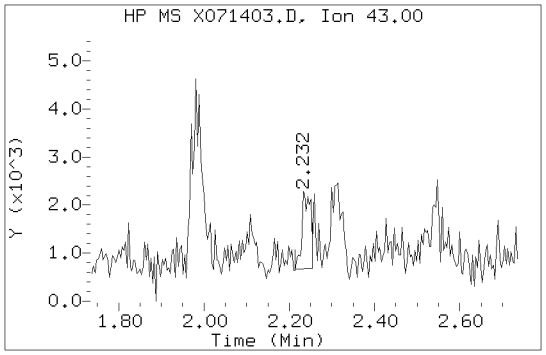
Methyl acetate (79-20-9)

Reason Code:

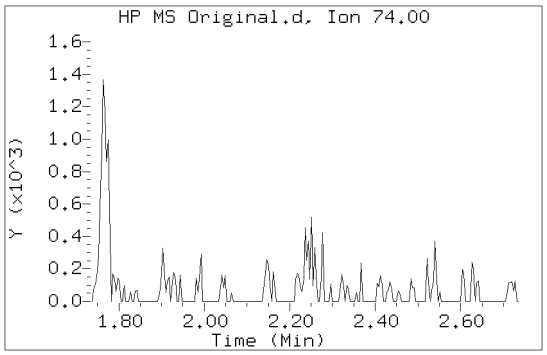
BEFORE
MASS
43
AREA
2344
HEIGHT
1617
20-Jul-2023
15:04
linh
pham



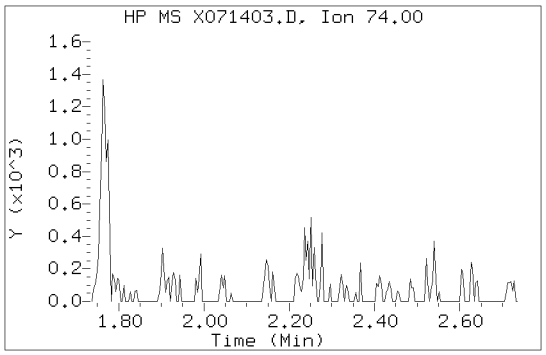
AFTER
MASS
43
AREA
2344
HEIGHT
1617
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
74
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER
MASS
74
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



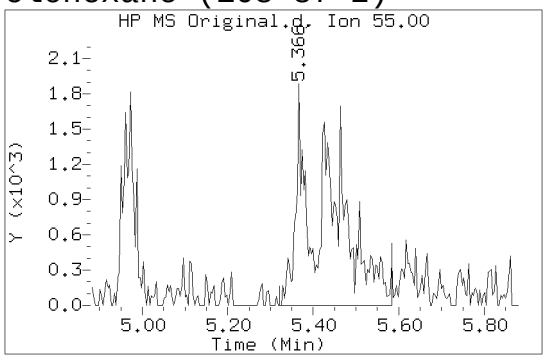
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Methylcyclohexane (108-87-2)

Reason Code:

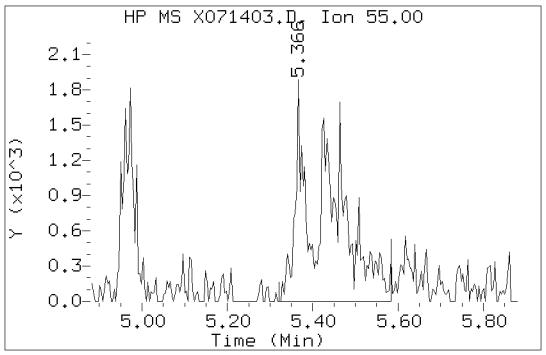
BEFORE

MASS
55
AREA
9168
HEIGHT
1886
20-Jul-2023
15:04
linh
pham



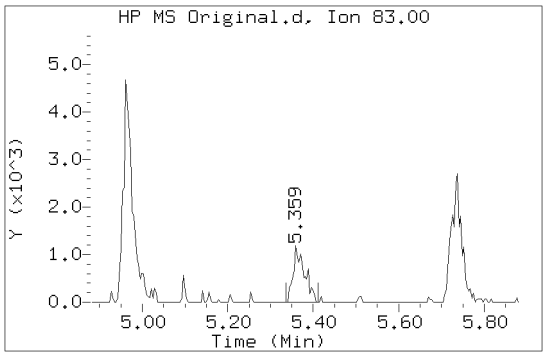
AFTER

MASS
55
AREA
9168
HEIGHT
1886
20-Jul-2023
15:04
linh
pham



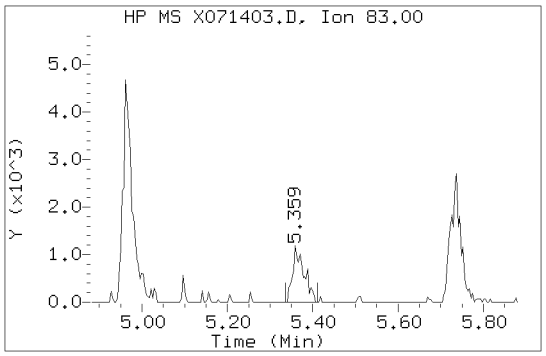
BEFORE

MASS
83
AREA
2193
HEIGHT
1189
20-Jul-2023
15:04
linh
pham



AFTER

MASS
83
AREA
2193
HEIGHT
1189
20-Jul-2023
15:04
linh
pham

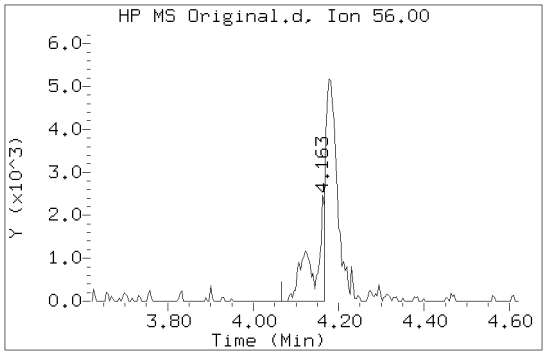


Cyclohexane (110-82-7)

Reason Code:

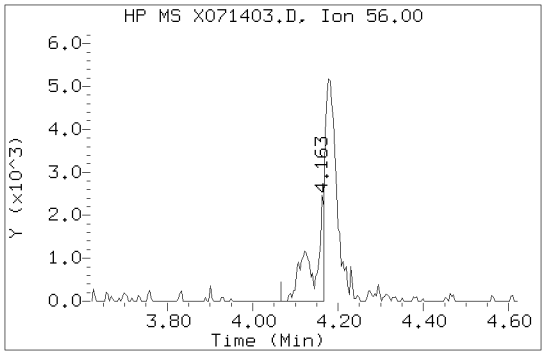
BEFORE

MASS
56
AREA
4321
HEIGHT
2474
20-Jul-2023
15:04
linh
pham



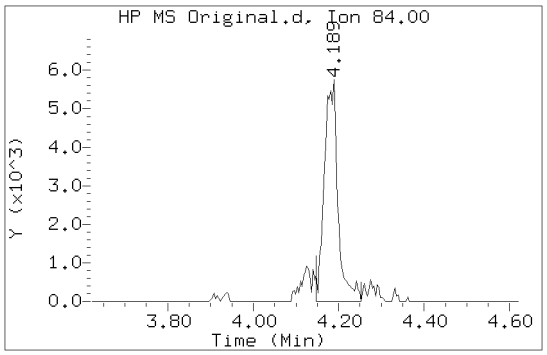
AFTER

MASS
56
AREA
4321
HEIGHT
2474
20-Jul-2023
15:04
linh
pham



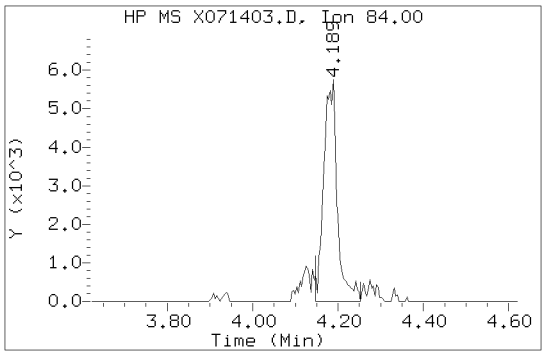
BEFORE

MASS
84
AREA
12654
HEIGHT
5754
20-Jul-2023
15:04
linh
pham



AFTER

MASS
84
AREA
12654
HEIGHT
5754
20-Jul-2023
15:04
linh
pham



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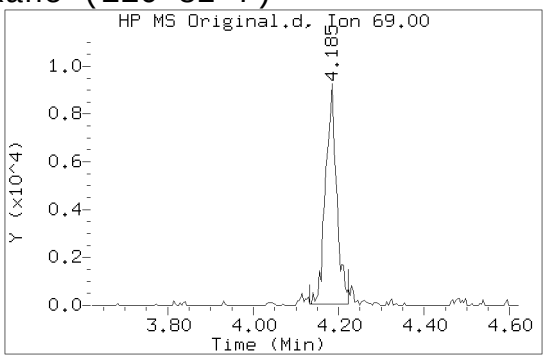
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Cyclohexane (110-82-7)

Reason Code:

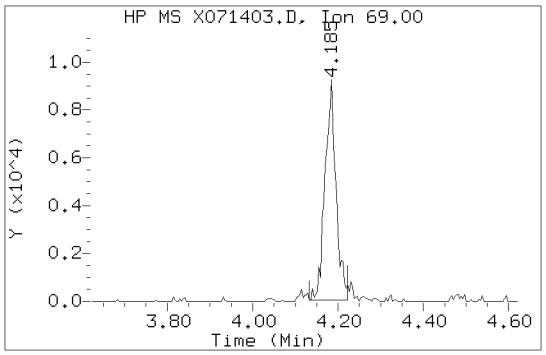
BEFORE

MASS
69
AREA
16448
HEIGHT
9203
20-Jul-2023
15:04
linh
pham



AFTER

MASS
69
AREA
16448
HEIGHT
9203
20-Jul-2023
15:04
linh
pham

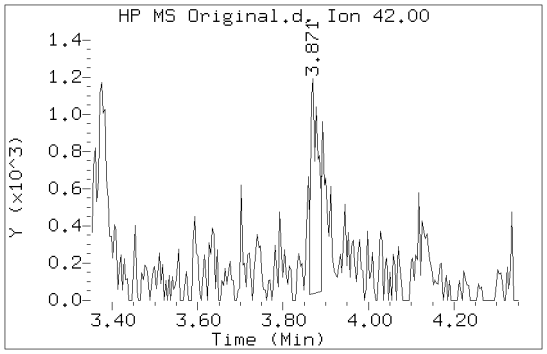


Tetrahydrofuran (109-99-9)

Reason Code:

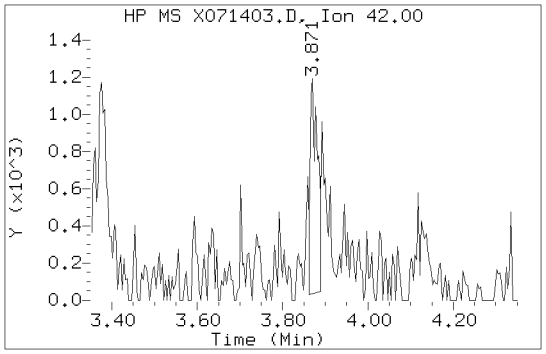
BEFORE

MASS
42
AREA
1418
HEIGHT
1157
20-Jul-2023
15:04
linh
pham



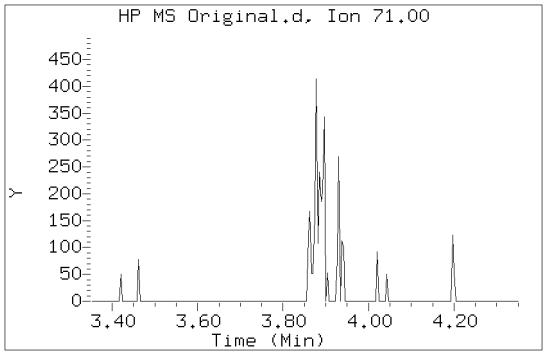
AFTER

MASS
42
AREA
1418
HEIGHT
1157
20-Jul-2023
15:04
linh
pham



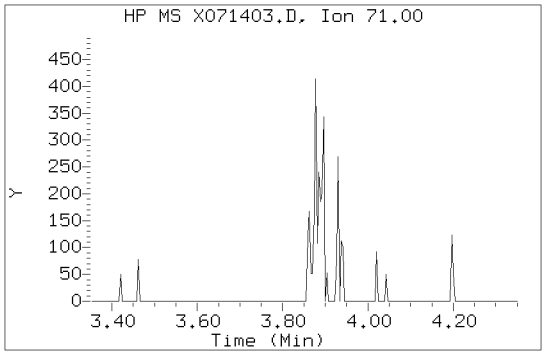
BEFORE

MASS
71
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
71
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham

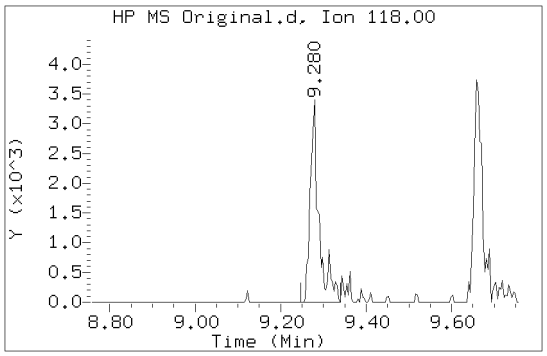


alpha-Methylstyrene (98-83-9)

Reason Code:

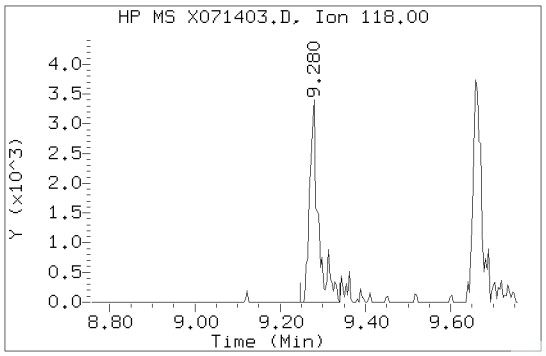
BEFORE

MASS
118
AREA
4759
HEIGHT
3401
20-Jul-2023
15:04
linh
pham



AFTER

MASS
118
AREA
4759
HEIGHT
3401
20-Jul-2023
15:04
linh
pham



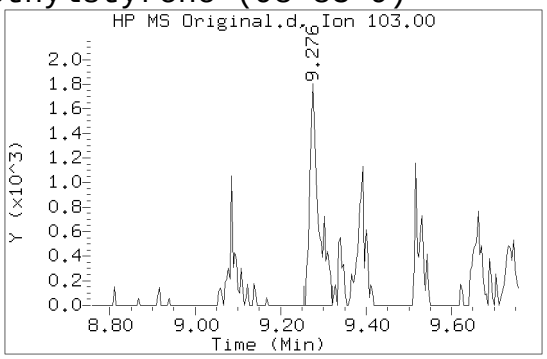
Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

alpha-Methylstyrene (98-83-9)

Reason Code:

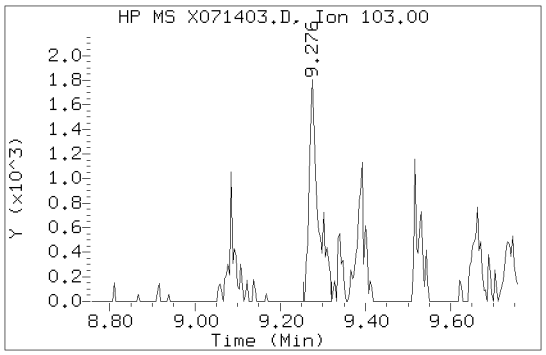
BEFORE

MASS
103
AREA
2652
HEIGHT
1804
20-Jul-2023
15:04
linh
pham



AFTER

MASS
103
AREA
2652
HEIGHT
1804
20-Jul-2023
15:04
linh
pham

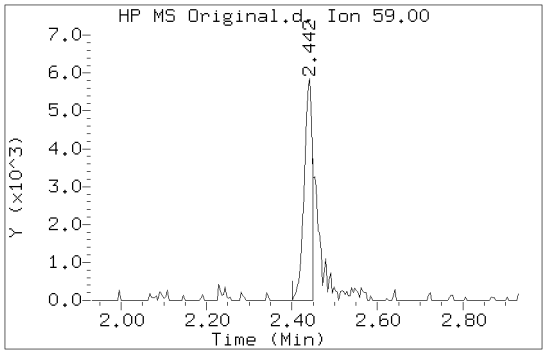


Tert-butyl alcohol (75-65-0)

Reason Code:

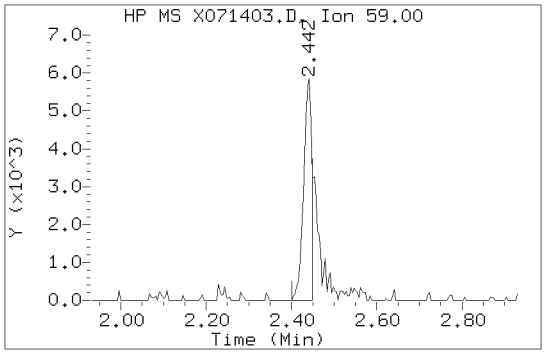
BEFORE

MASS
59
AREA
7856
HEIGHT
5851
20-Jul-2023
15:04
linh
pham



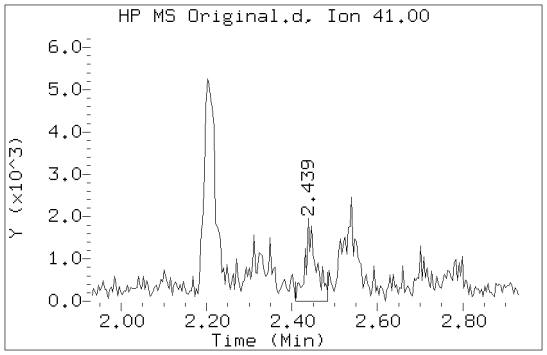
AFTER

MASS
59
AREA
7856
HEIGHT
5851
20-Jul-2023
15:04
linh
pham



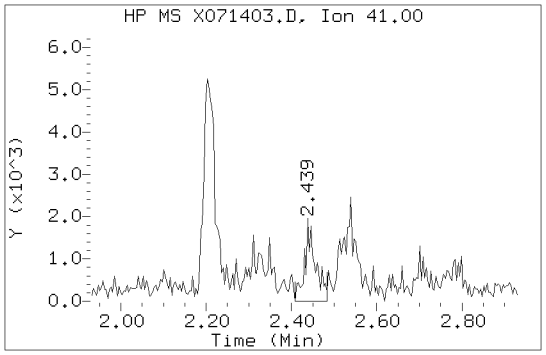
BEFORE

MASS
41
AREA
3380
HEIGHT
1954
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
3380
HEIGHT
1954
20-Jul-2023
15:04
linh
pham

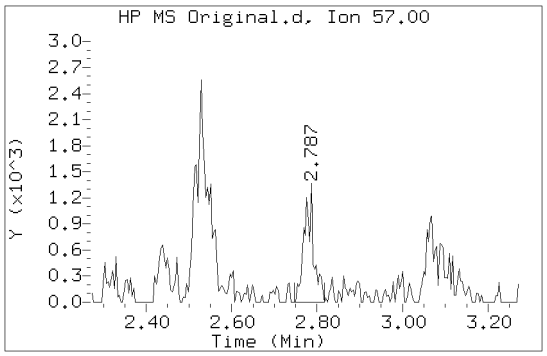


Allyl alcohol (107-18-6)

Reason Code:

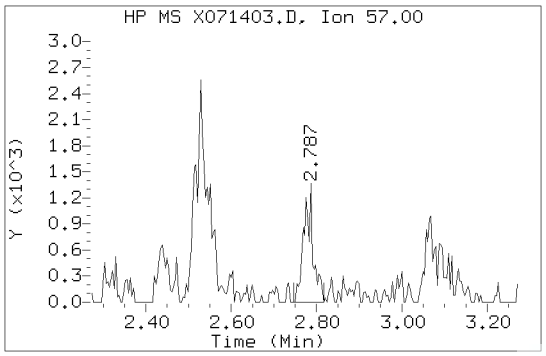
BEFORE

MASS
57
AREA
2068
HEIGHT
1372
20-Jul-2023
15:04
linh
pham



AFTER

MASS
57
AREA
2068
HEIGHT
1372
20-Jul-2023
15:04
linh
pham



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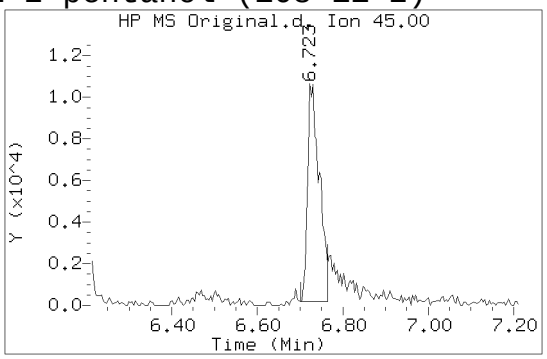
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

4-Methyl-2-pentanol (108-11-2)

Reason Code:

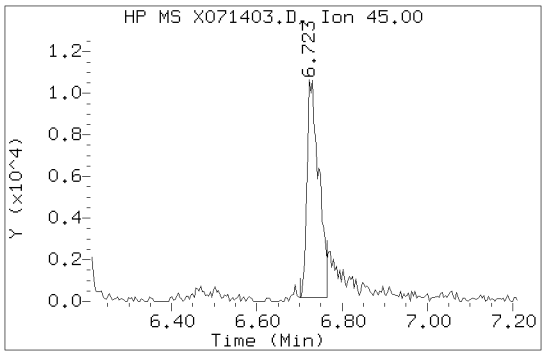
BEFORE

MASS
45
AREA
20217
HEIGHT
10478
20-Jul-2023
15:04
linh
pham



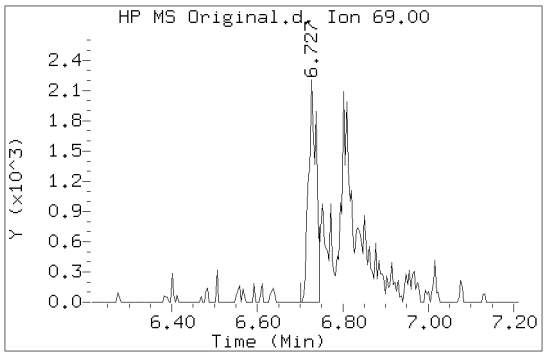
AFTER

MASS
45
AREA
20217
HEIGHT
10478
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
69
AREA
2780
HEIGHT
2206
20-Jul-2023
15:04
linh
pham



AFTER

MASS
69
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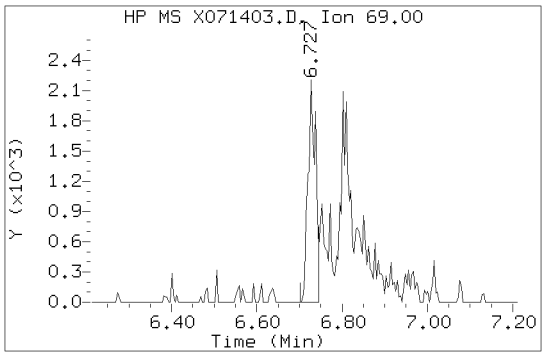
HEIGHT
2206
20-Jul-2023
15:04
linh
pham

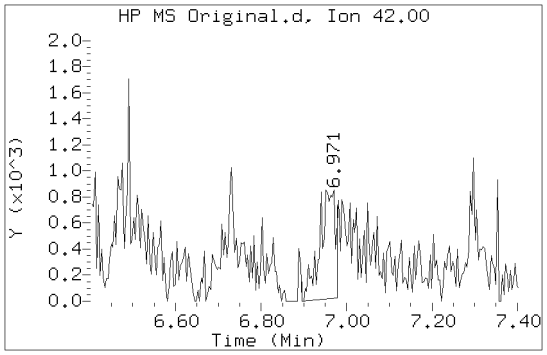


Amyl alcohol (71-41-0)

Reason Code:

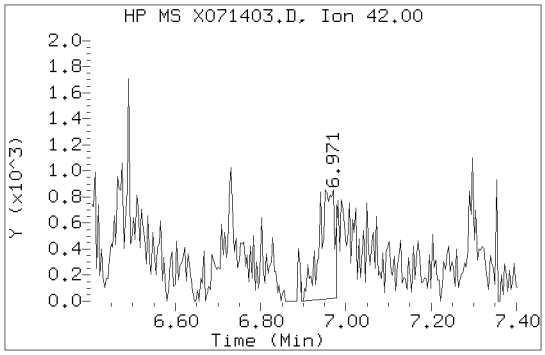
BEFORE

MASS
42
AREA
2120
HEIGHT
829
20-Jul-2023
15:04
linh
pham



AFTER

MASS
42
AREA
2120
HEIGHT
829
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
55
AREA
884
HEIGHT
854
20-Jul-2023
15:04
linh
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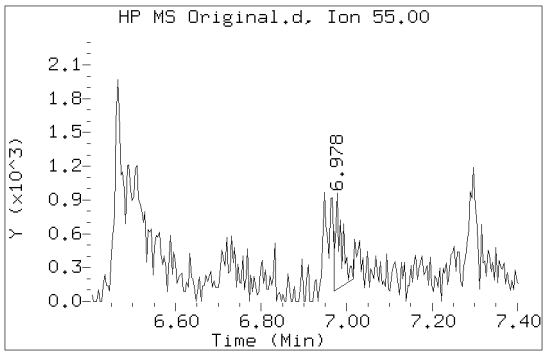
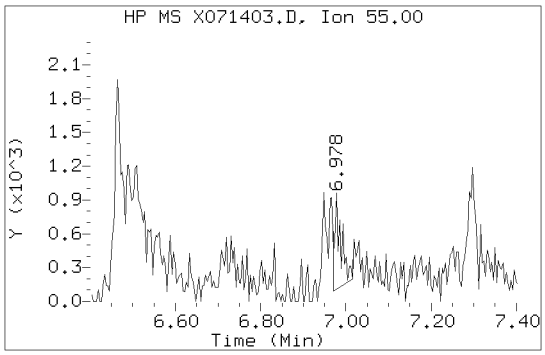


AFTER

MASS
55
AREA
884
HEIGHT
854
20-Jul-2023
15:04
linh
pham



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Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Amyl alcohol (71-41-0)

Reason Code:

BEFORE

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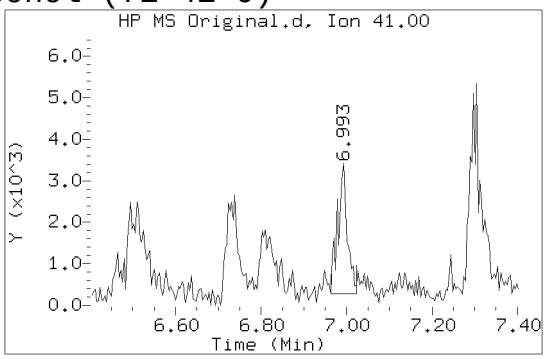
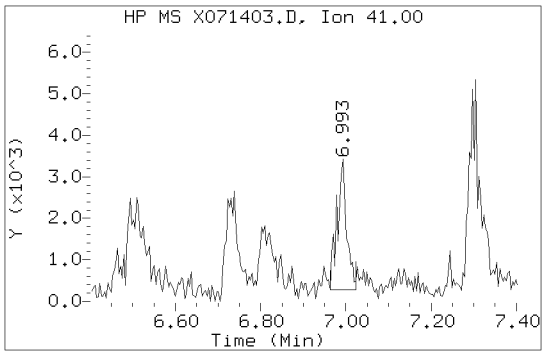
AREA
4891
HEIGHT
3144
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
4891
HEIGHT
3144
20-Jul-2023
15:04
linh
pham

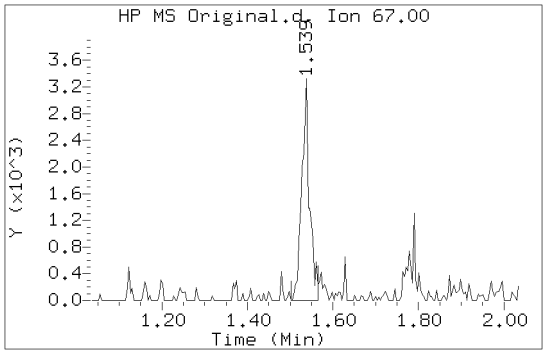


Dichlorofluoromethane (75-43-4)

Reason Code:

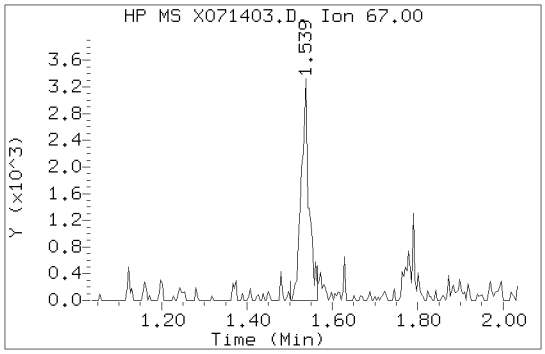
BEFORE

MASS
67
AREA
4296
HEIGHT
3324
20-Jul-2023
15:04
linh
pham



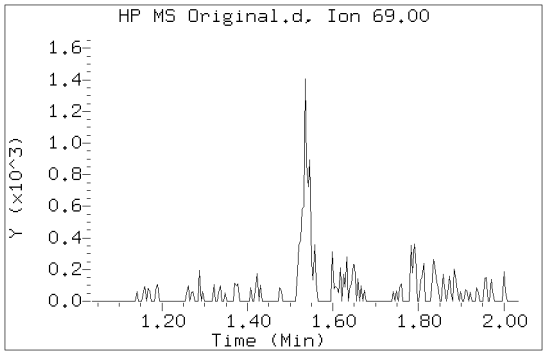
AFTER

MASS
67
AREA
4296
HEIGHT
3324
20-Jul-2023
15:04
linh
pham



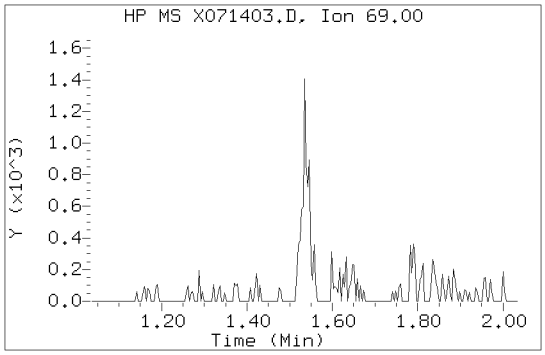
BEFORE

MASS
69
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
69
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
37
AREA
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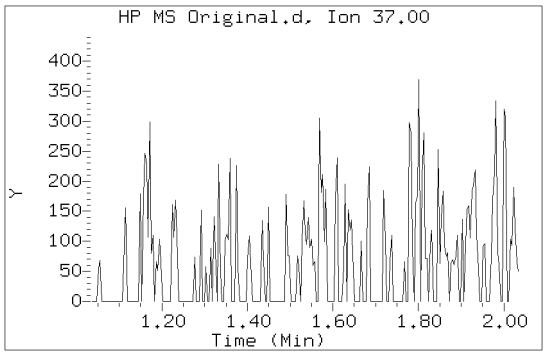
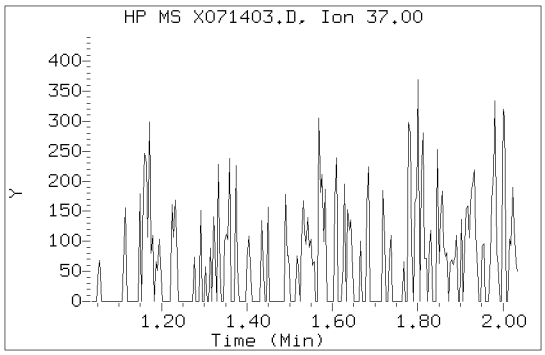
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
37
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



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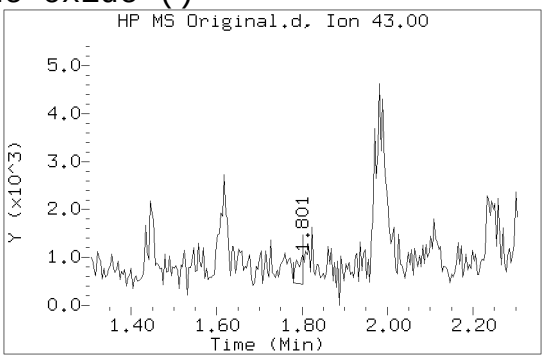
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Propylene oxide ()

Reason Code:

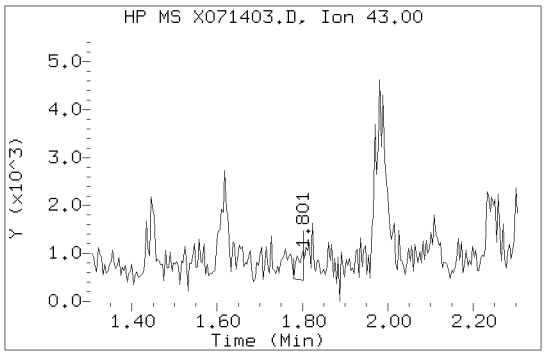
BEFORE

MASS
43
AREA
615
HEIGHT
640
20-Jul-2023
15:04
linh
pham



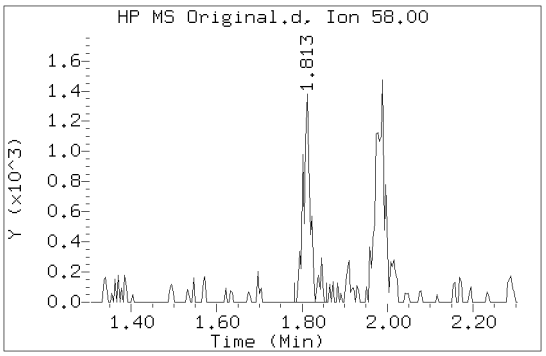
AFTER

MASS
43
AREA
615
HEIGHT
640
20-Jul-2023
15:04
linh
pham



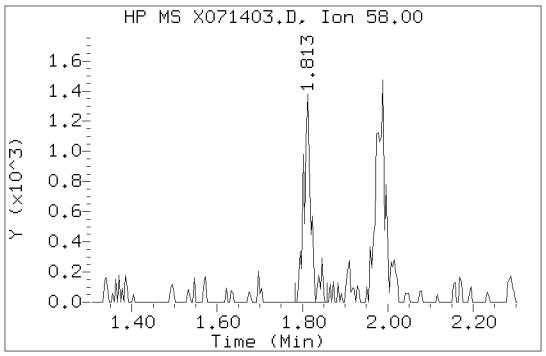
BEFORE

MASS
58
AREA
1675
HEIGHT
1380
20-Jul-2023
15:04
linh
pham



AFTER

MASS
58
AREA
1675
HEIGHT
1380
20-Jul-2023
15:04
linh
pham

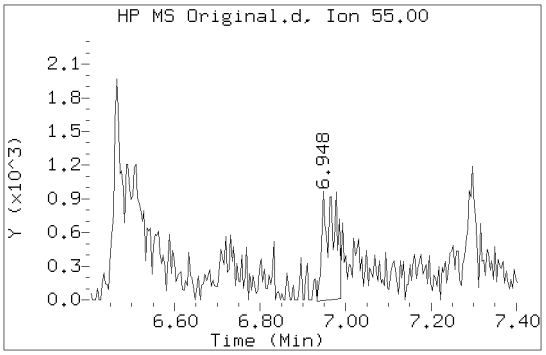


3-Methyl-1-butanol (123-51-3)

Reason Code:

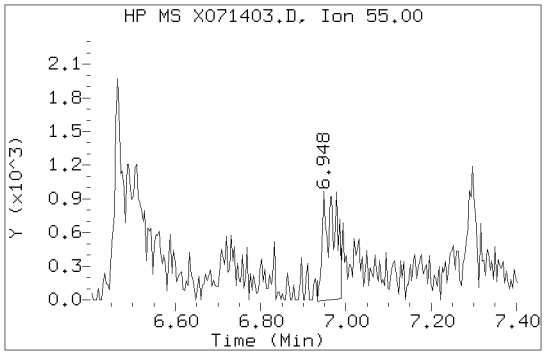
BEFORE

MASS
55
AREA
1945
HEIGHT
970
20-Jul-2023
15:04
linh
pham



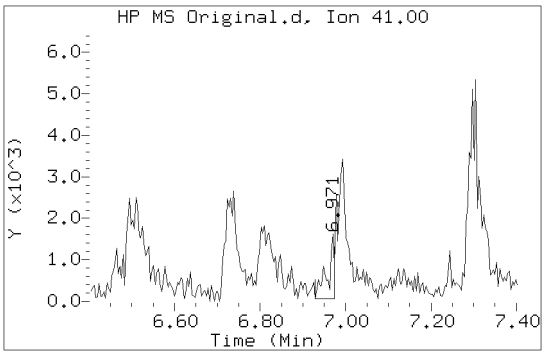
AFTER

MASS
55
AREA
1945
HEIGHT
970
20-Jul-2023
15:04
linh
pham



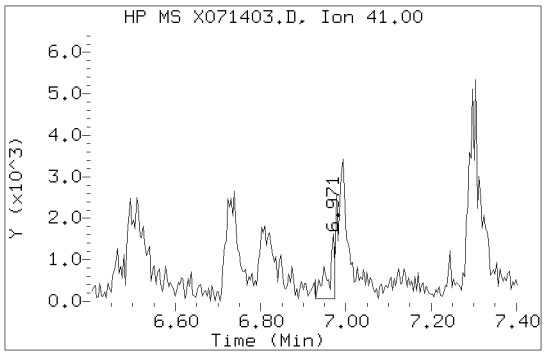
BEFORE

MASS
41
AREA
1621
HEIGHT
1554
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
1621
HEIGHT
1554
20-Jul-2023
15:04
linh
pham



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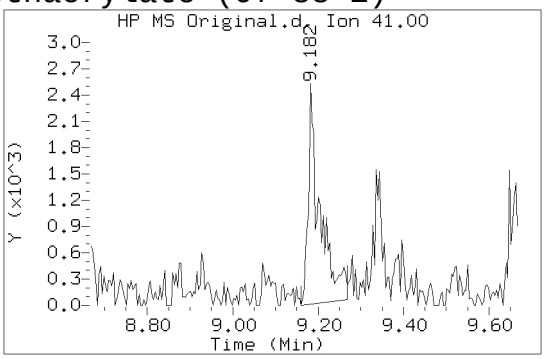
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Butyl methacrylate (97-88-1)

Reason Code:

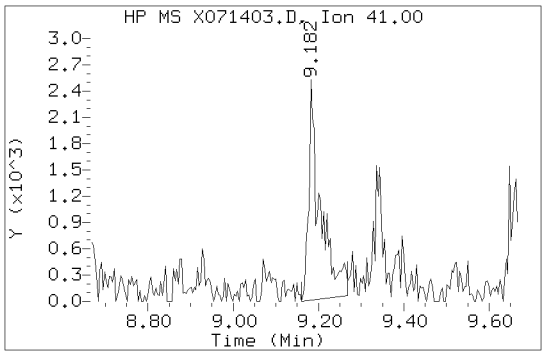
BEFORE

MASS
41
AREA
4724
HEIGHT
2516
20-Jul-2023
15:04
linh
pham



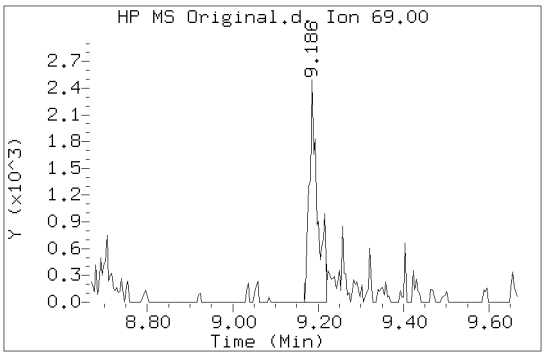
AFTER

MASS
41
AREA
4724
HEIGHT
2516
20-Jul-2023
15:04
linh
pham



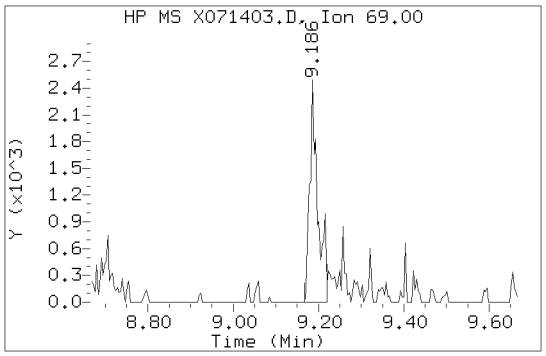
BEFORE

MASS
69
AREA
3258
HEIGHT
2492
20-Jul-2023
15:04
linh
pham



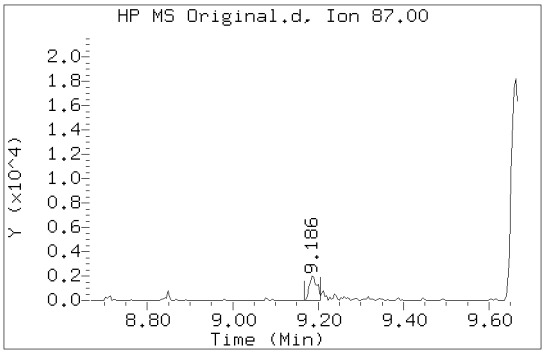
AFTER

MASS
69
AREA
3258
HEIGHT
2492
20-Jul-2023
15:04
linh
pham



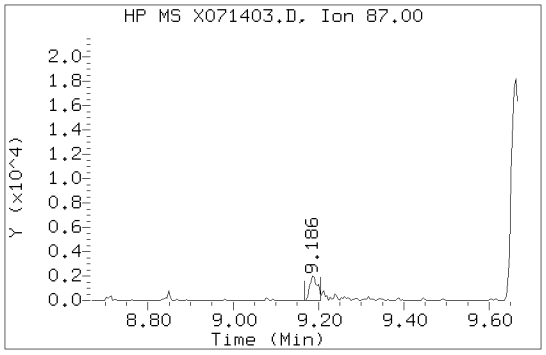
BEFORE

MASS
87
AREA
2479
HEIGHT
2026
20-Jul-2023
15:04
linh
pham



AFTER

MASS
87
AREA
2479
HEIGHT
2026
20-Jul-2023
15:04
linh
pham

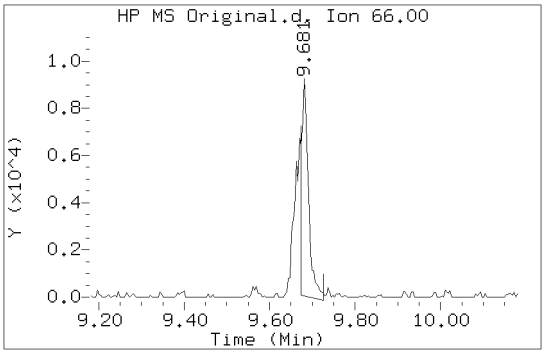


Dicyclopentadiene (77-73-6)

Reason Code:

BEFORE

MASS
66
AREA
10848
HEIGHT
9195
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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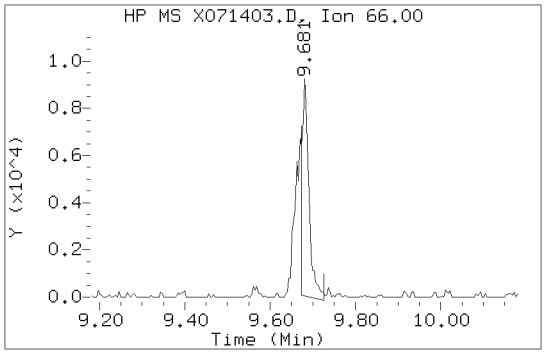
AREA
10848
HEIGHT
9195
20-Jul-2023
15:04
linh
pham



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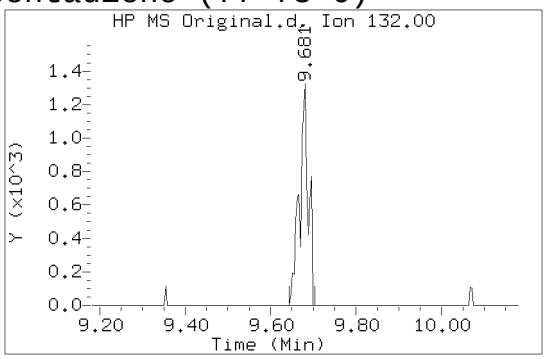
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Dicyclopentadiene (77-73-6)

Reason Code:

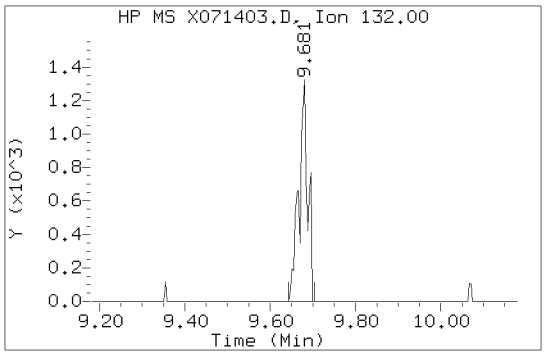
BEFORE

MASS
132
AREA
1955
HEIGHT
1325
20-Jul-2023
15:04
linh
pham



AFTER

MASS
132
AREA
1955
HEIGHT
1325
20-Jul-2023
15:04
linh
pham

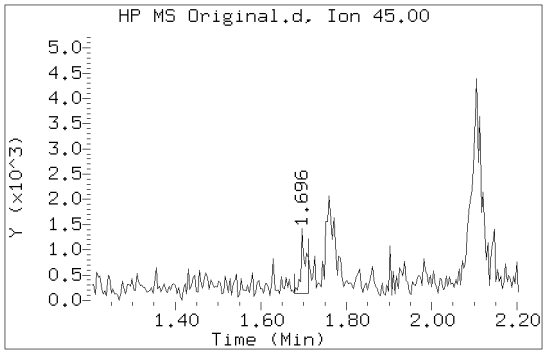


Ethanol (64-17-5)

Reason Code:

BEFORE

MASS
45
AREA
1082
HEIGHT
1281
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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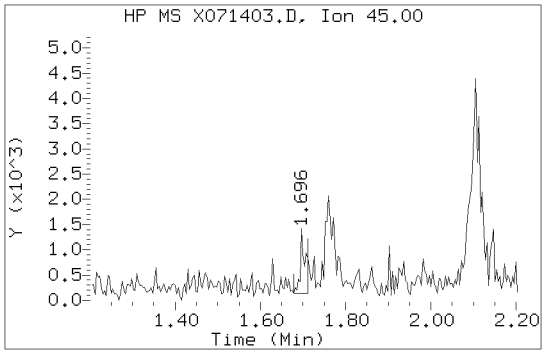
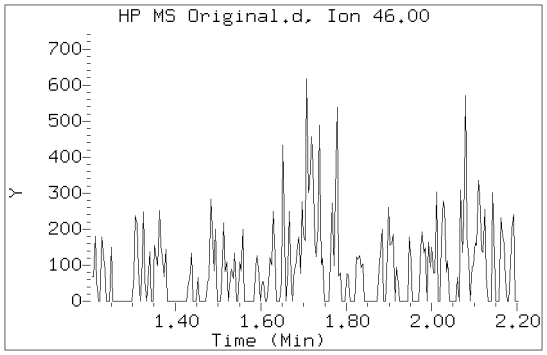
AREA
1082
HEIGHT
1281
20-Jul-2023
15:04
linh
pham



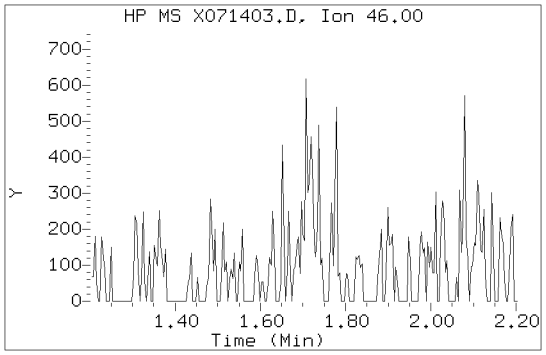
BEFORE

MASS
46
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
46
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
43
AREA
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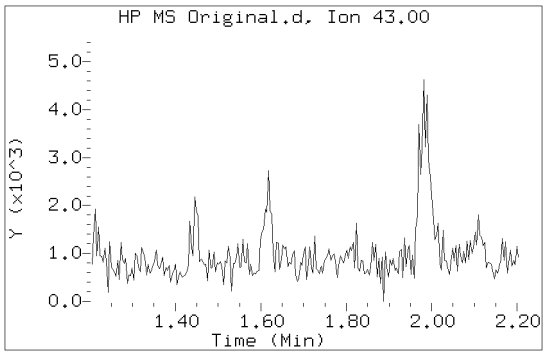
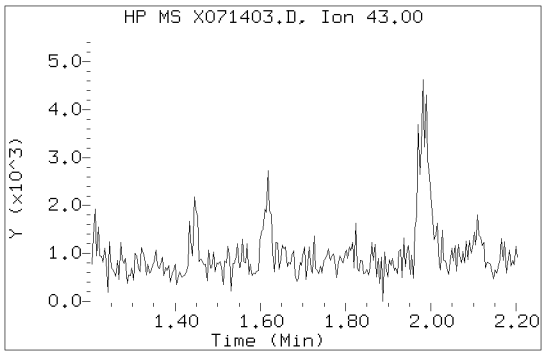
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
43
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



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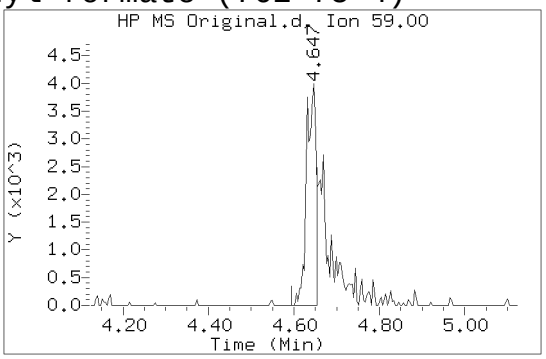
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

tert-Butyl formate (762-75-4)

Reason Code:

BEFORE
MASS
59
AREA
6083
HEIGHT
3995
20-Jul-2023
15:04
linh
pham



AFTER
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6083
HEIGHT
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20-Jul-2023
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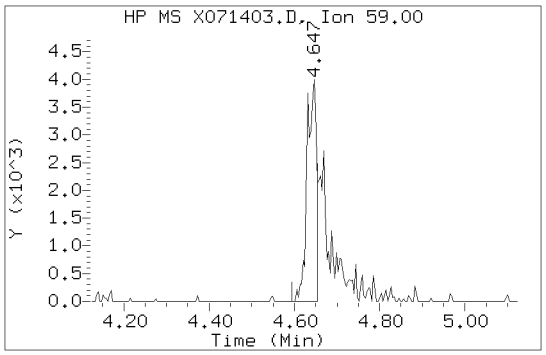

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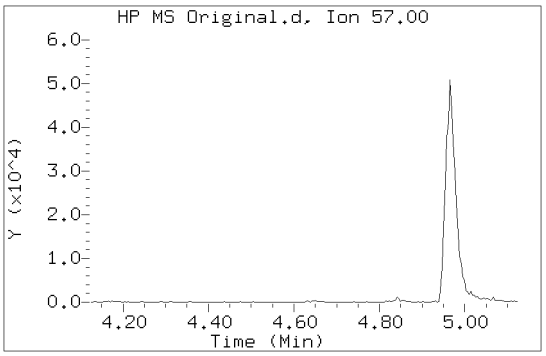

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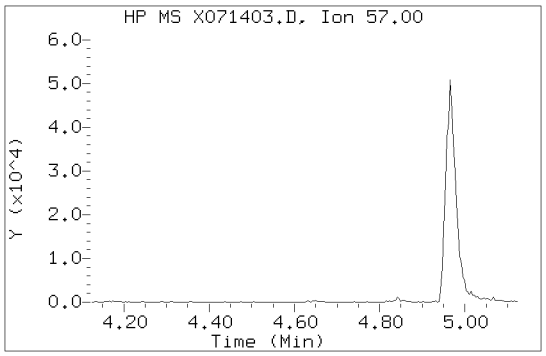

BEFORE
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41
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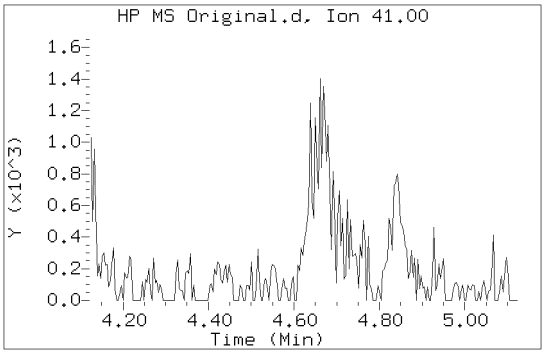

AFTER
MASS
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20-Jul-2023
15:04
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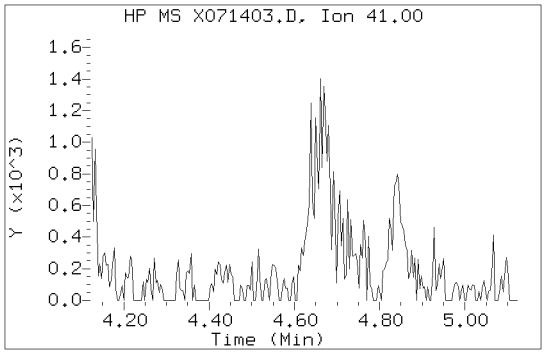

3,3-Dimethyl-1-butanol (624-95-3)

Reason Code:

BEFORE
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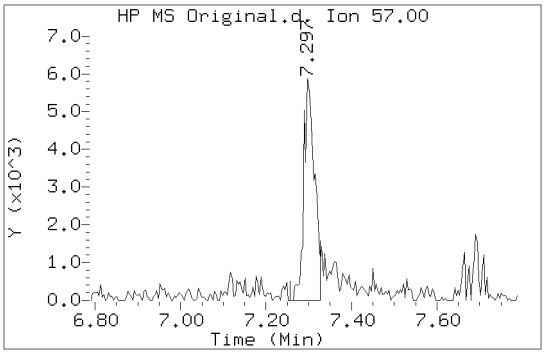
HEIGHT
5870
20-Jul-2023
15:04
linh
pham



AFTER
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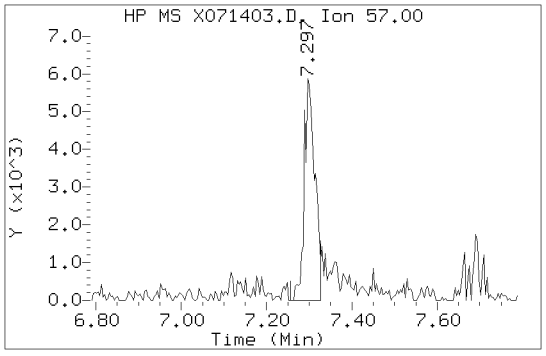
HEIGHT
5870
20-Jul-2023
15:04
linh
pham



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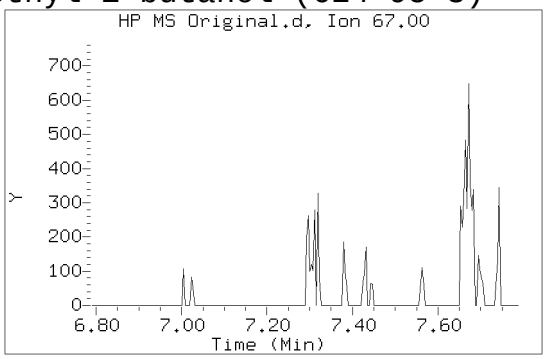
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

3,3-Dimethyl-1-butanol (624-95-3)

Reason Code:

BEFORE
MASS
67
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER
MASS
67
AREA
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HEIGHT
0
20-Jul-2023
15:04
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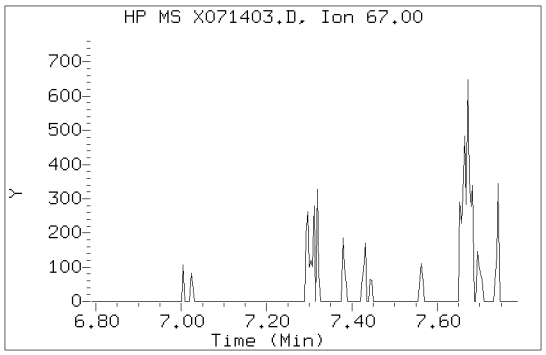

BEFORE
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20-Jul-2023
15:04
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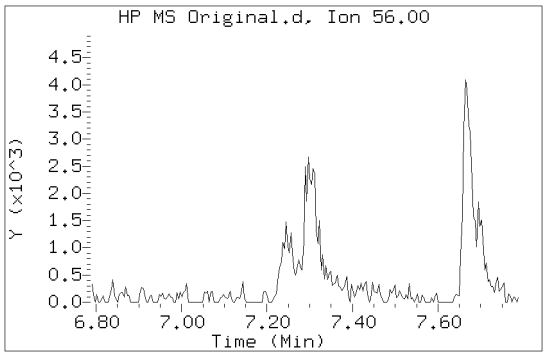

AFTER
MASS
56
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HEIGHT
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20-Jul-2023
15:04
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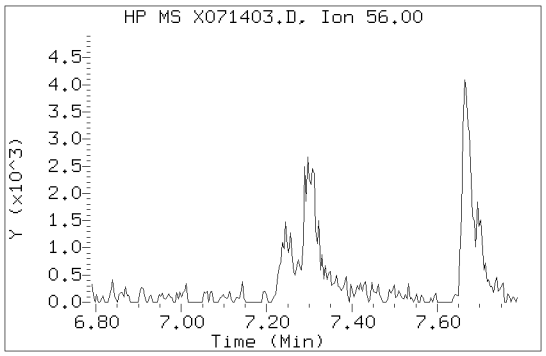
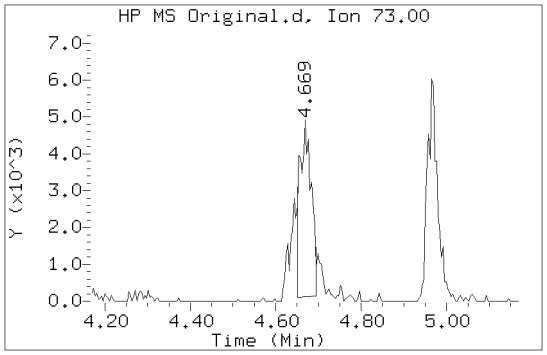
pham



tert-Amyl methyl ether (974-05-08)

Reason Code:

BEFORE
MASS
73
AREA
9377
HEIGHT
4800
20-Jul-2023
15:04
linh
pham



AFTER
MASS
73
AREA
9377
HEIGHT
4800
20-Jul-2023
15:04
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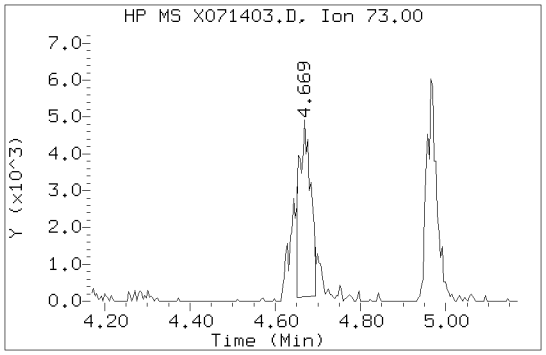
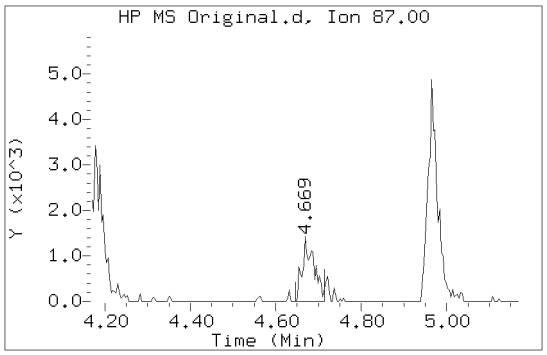
pham



BEFORE
MASS
87
AREA
2769
HEIGHT
1423
20-Jul-2023
15:04
linh
pham



AFTER
MASS
87
AREA
2769
HEIGHT
1423
20-Jul-2023
15:04
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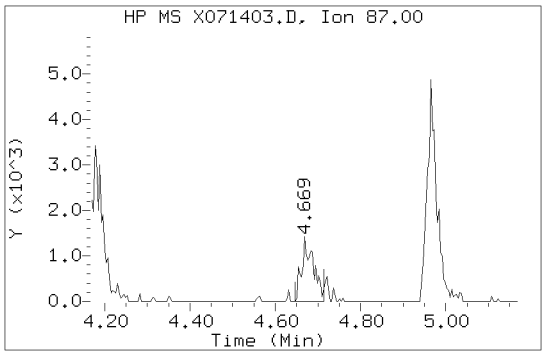
pham



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Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

tert-Amyl methyl ether (974-05-08)

Reason Code:

BEFORE

MASS
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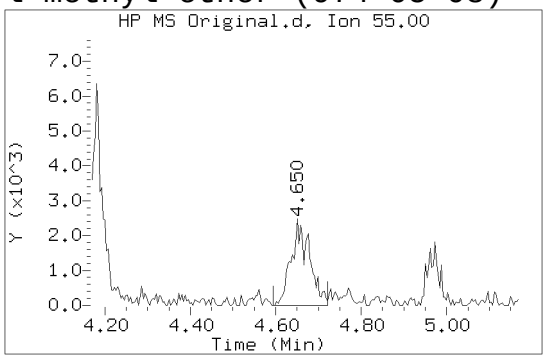
HEIGHT
2483
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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HEIGHT
2483
20-Jul-2023
15:04
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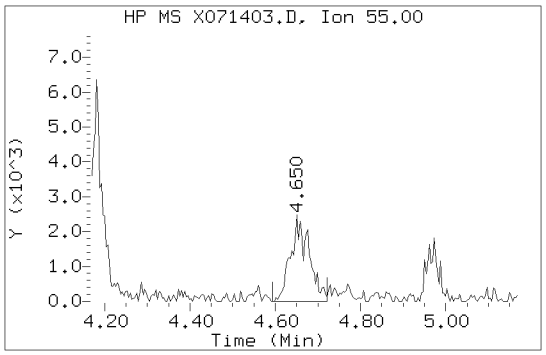
pham



tert-Amyl alcohol (75-85-4)

Reason Code:

BEFORE

MASS
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AREA
6083
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20-Jul-2023
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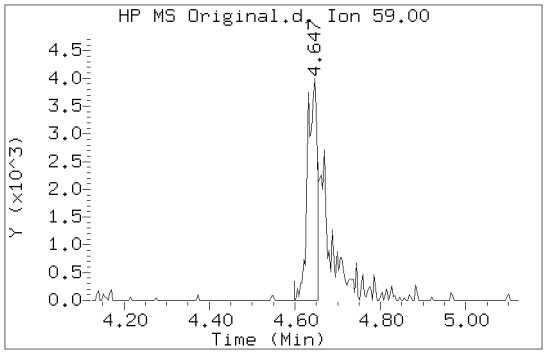

AFTER

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20-Jul-2023
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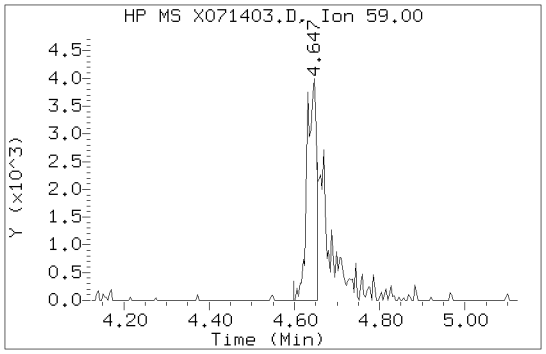
pham



BEFORE

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20-Jul-2023
15:04
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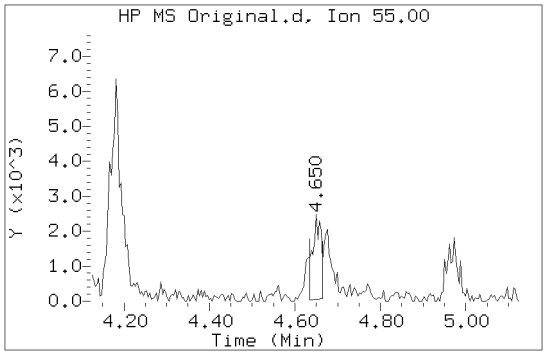

AFTER

MASS
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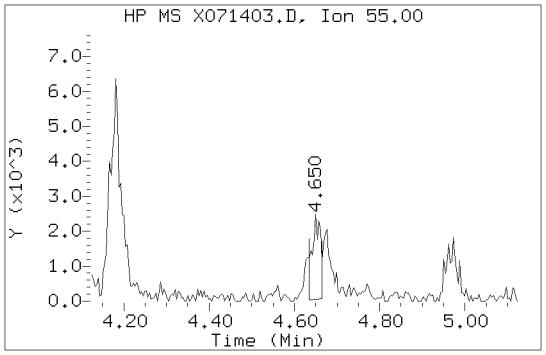
AREA
3364
HEIGHT
2424
20-Jul-2023
15:04
linh
pham



BEFORE

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4914
20-Jul-2023
15:04
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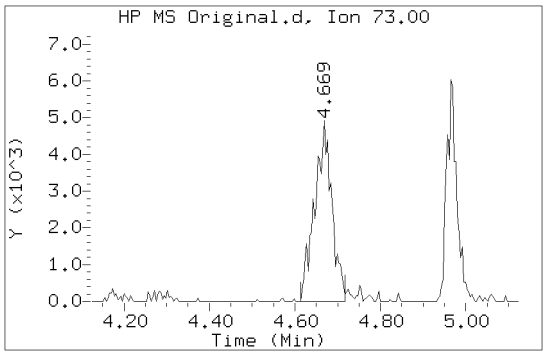

AFTER

MASS
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AREA
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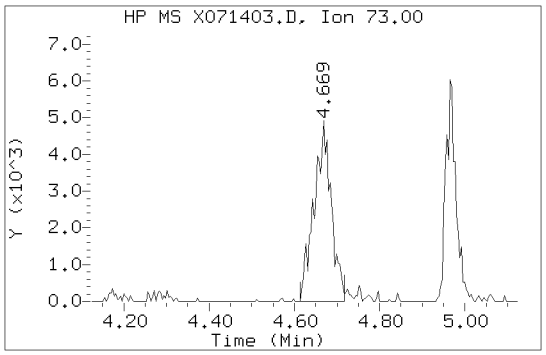
HEIGHT
4914
20-Jul-2023
15:04
linh
pham



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Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Epichlorohydrin (106-89-8)

Reason Code:

BEFORE
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AREA
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788
20-Jul-2023
15:04
linh
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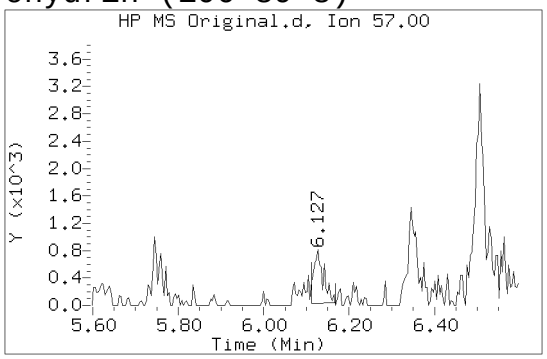

AFTER
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20-Jul-2023
15:04
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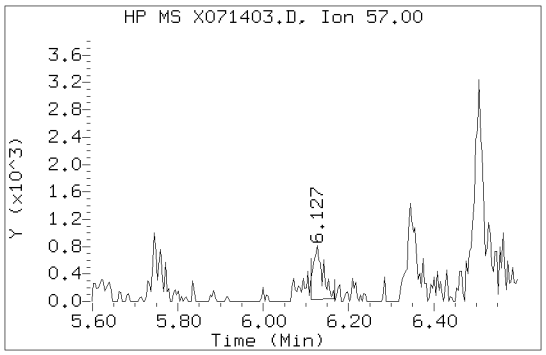

BEFORE
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981
20-Jul-2023
15:04
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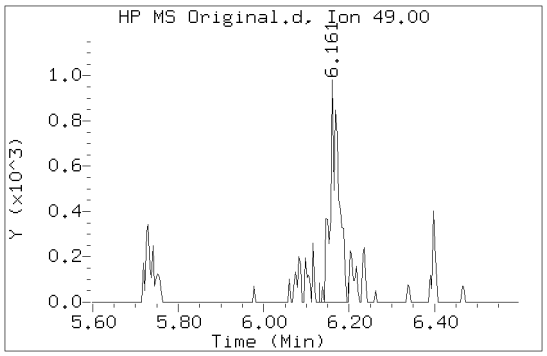

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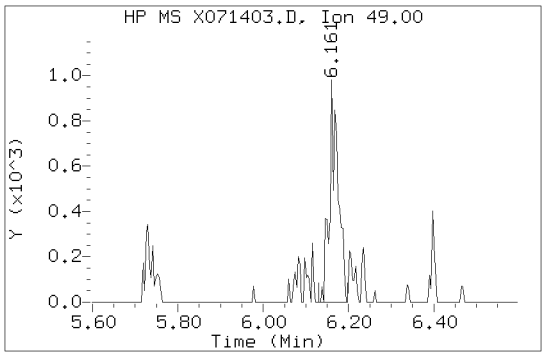

Isoprene (78-79-5)

Reason Code:

BEFORE
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39
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570
20-Jul-2023
15:04
linh
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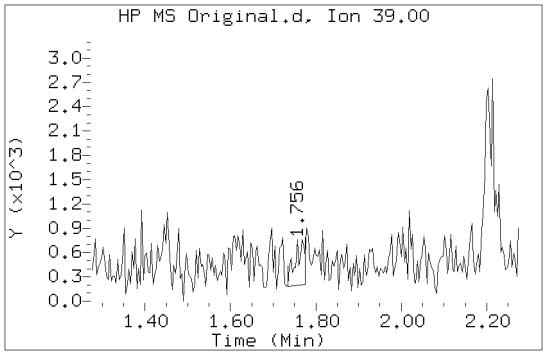

AFTER
MASS
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AREA
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570
20-Jul-2023
15:04
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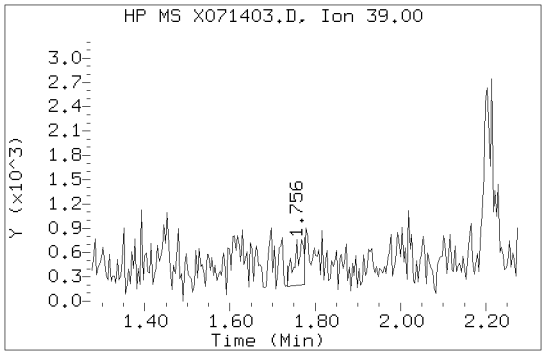
pham



BEFORE
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HEIGHT
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20-Jul-2023
15:04
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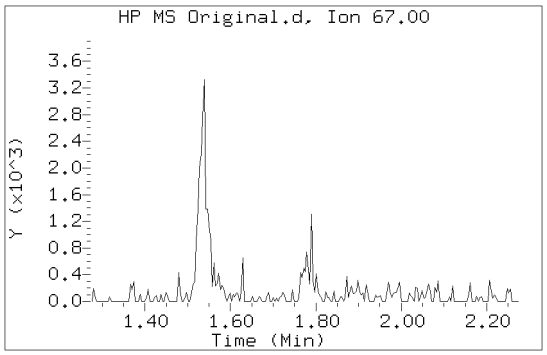

AFTER
MASS
67
AREA
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HEIGHT
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20-Jul-2023
15:04
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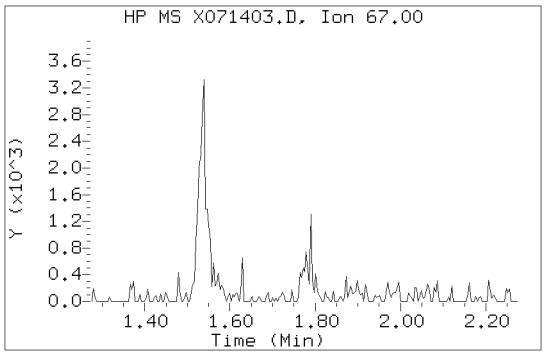

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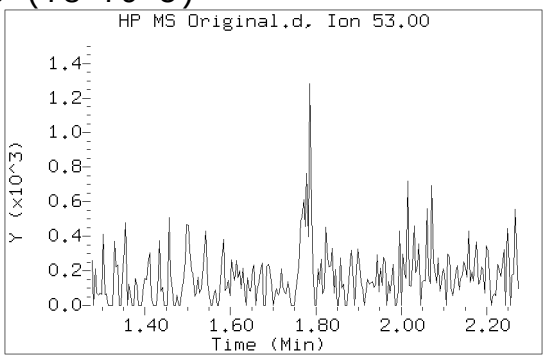
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Isoprene (78-79-5)

Reason Code:

BEFORE

MASS
53
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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AREA
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HEIGHT
0
20-Jul-2023
15:04
linh
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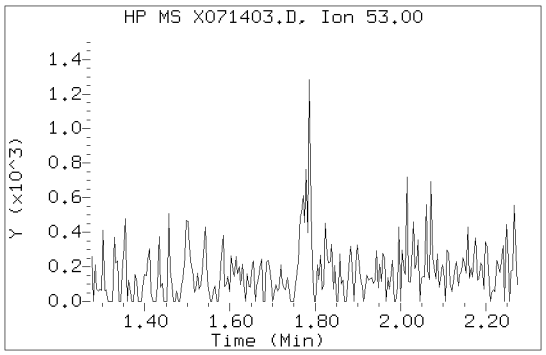
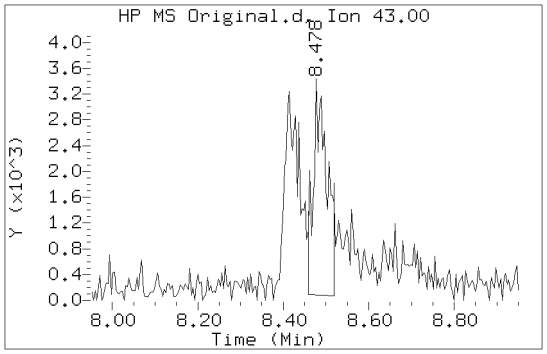


n-Amyl acetate (628-63-7)

Reason Code:

BEFORE

MASS
43
AREA
7447
HEIGHT
3352
20-Jul-2023
15:04
linh
pham



AFTER

MASS
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AREA
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HEIGHT
3352
20-Jul-2023
15:04
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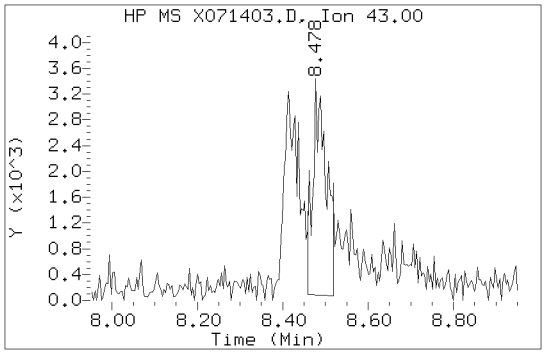

BEFORE

MASS
70
AREA
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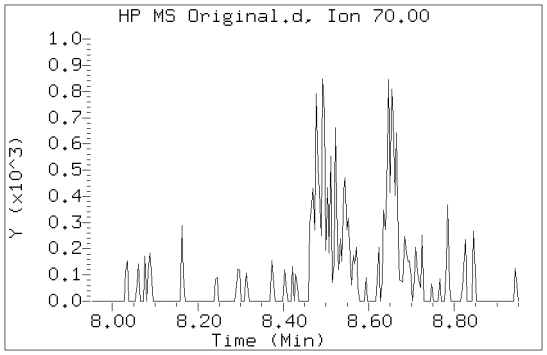
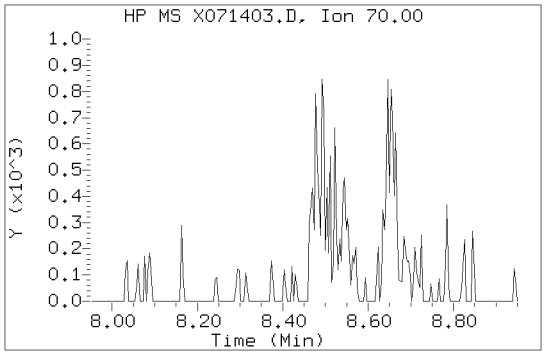
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
70
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
87
AREA
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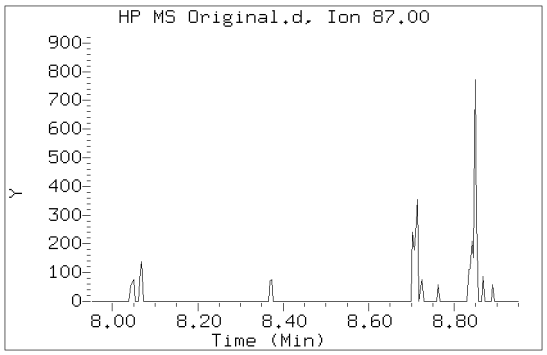
HEIGHT
0
20-Jul-2023
15:04
linh
pham



AFTER

MASS
87
AREA
0
HEIGHT
0
20-Jul-2023
15:04
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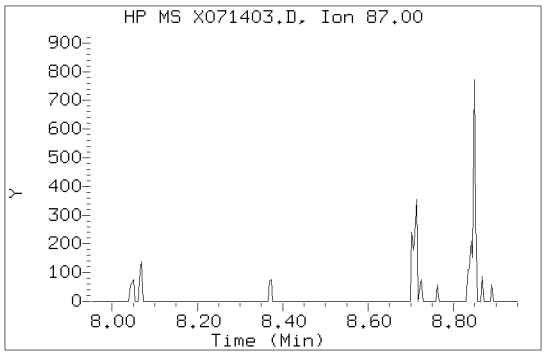

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Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

n-Butyl acetate (123-86-4)

Reason Code:

BEFORE

MASS
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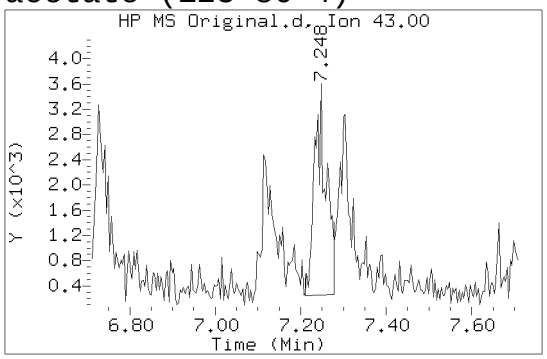
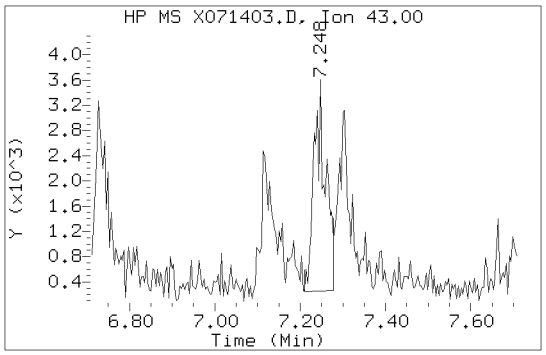
AREA
6398
HEIGHT
3352
20-Jul-2023
15:04
linh
pham



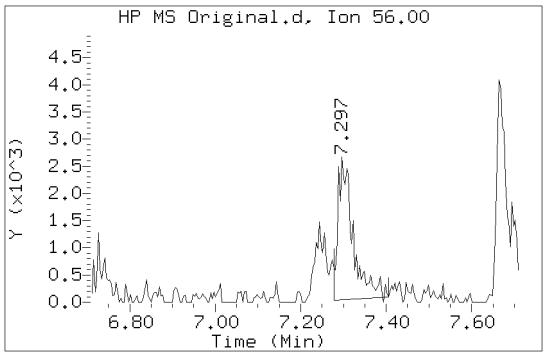
AFTER

MASS
43
AREA
6398
HEIGHT
3352
20-Jul-2023
15:04
linh
pham



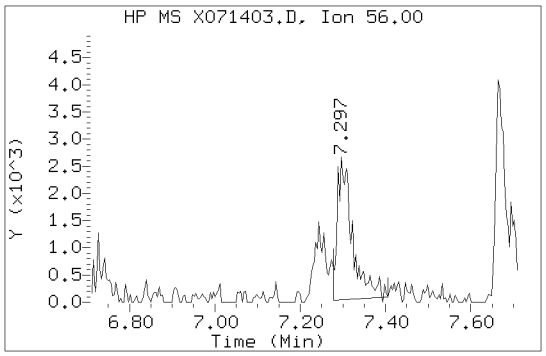
BEFORE

MASS
56
AREA
6426
HEIGHT
2636
20-Jul-2023
15:04
linh
pham



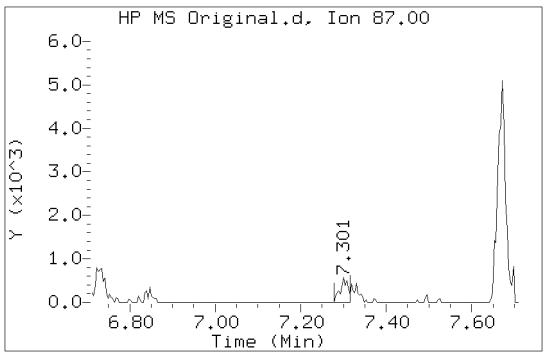
AFTER

MASS
56
AREA
6426
HEIGHT
2636
20-Jul-2023
15:04
linh
pham



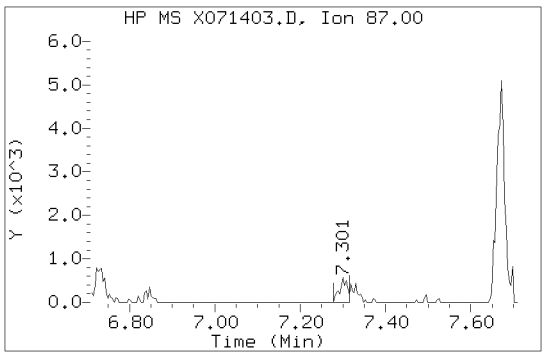
BEFORE

MASS
87
AREA
709
HEIGHT
572
20-Jul-2023
15:04
linh
pham



AFTER

MASS
87
AREA
709
HEIGHT
572
20-Jul-2023
15:04
linh
pham

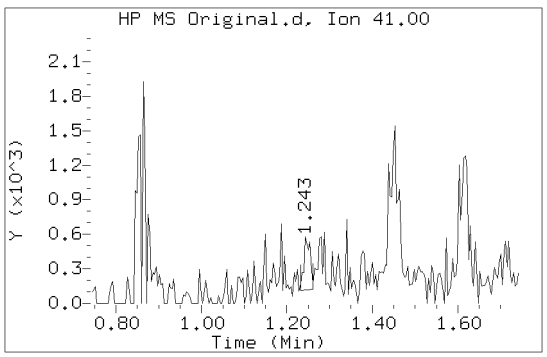


Isobutylene (115-11-7)

Reason Code:

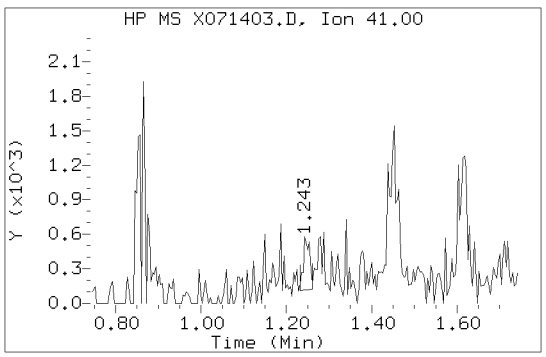
BEFORE

MASS
41
AREA
500
HEIGHT
462
20-Jul-2023
15:04
linh
pham



AFTER

MASS
41
AREA
500
HEIGHT
462
20-Jul-2023
15:04
linh
pham

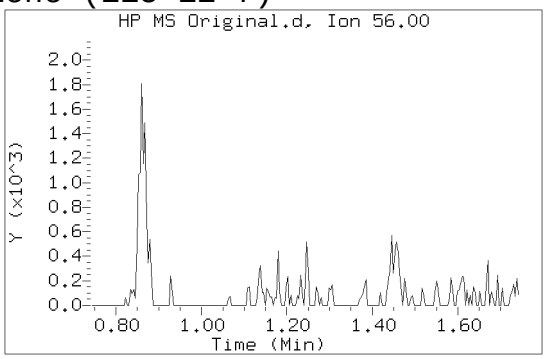


Data File : \\NAHSTWS005\Target\chem\voa6.i\X230714.b\X071403.D
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

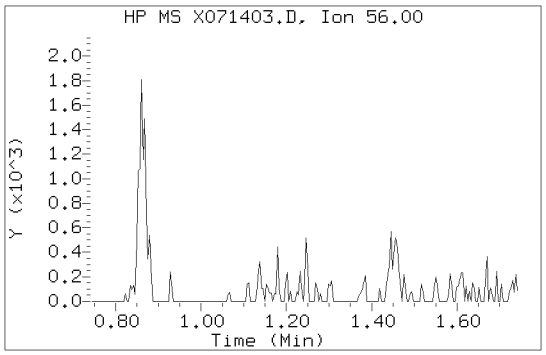
Isobutylene (115-11-7)

Reason Code:

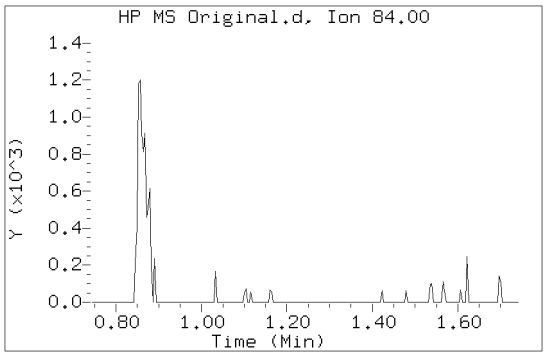
BEFORE
MASS
56
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



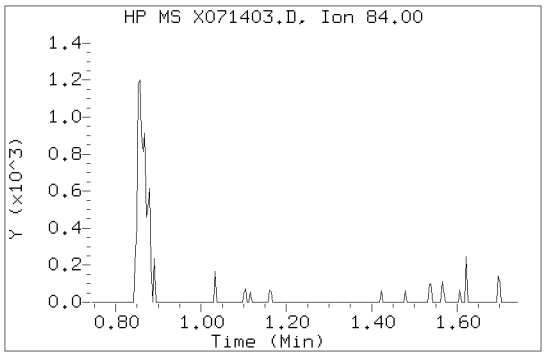
AFTER
MASS
56
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
84
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



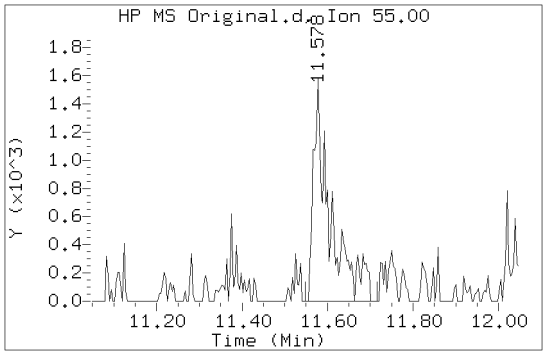
AFTER
MASS
84
AREA
0
HEIGHT
0
20-Jul-2023
15:04
linh
pham



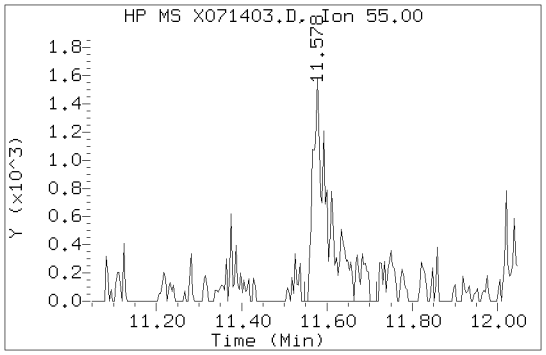
2-Ethylhexyl Acrylate (103-11-7)

Reason Code:

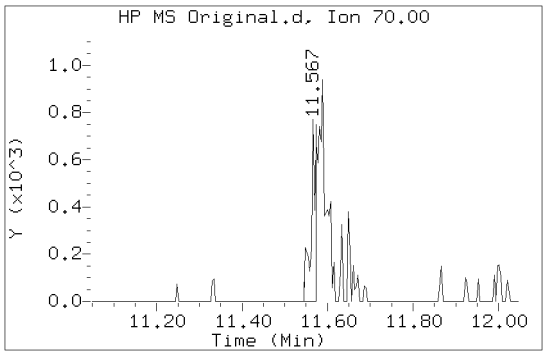
BEFORE
MASS
55
AREA
4236
HEIGHT
1577
20-Jul-2023
15:04
linh
pham



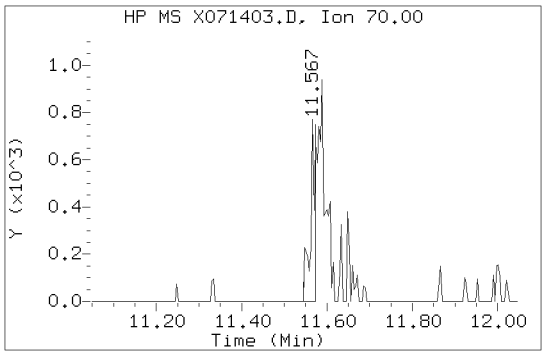
AFTER
MASS
55
AREA
4236
HEIGHT
1577
20-Jul-2023
15:04
linh
pham



BEFORE
MASS
70
AREA
631
HEIGHT
771
20-Jul-2023
15:04
linh
pham



AFTER
MASS
70
AREA
631
HEIGHT
771
20-Jul-2023
15:04
linh
pham



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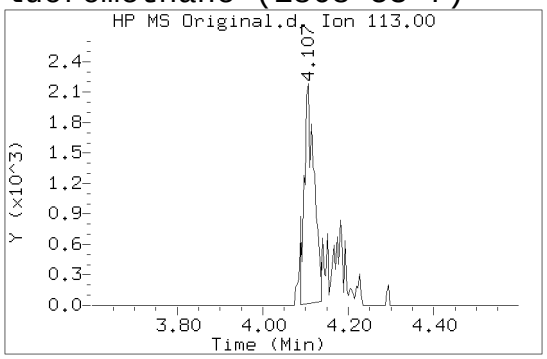
Inj Date : 14-JUL-2023 12:22
InstruID : voa6.i
LabSampID : VSTD000.5

Dibromofluoromethane (1868-53-7)

Reason Code:

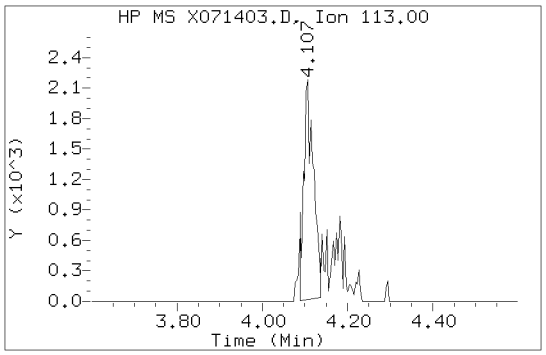
BEFORE

MASS
113
AREA
3536
HEIGHT
2165
20-Jul-2023
15:04
linh
pham



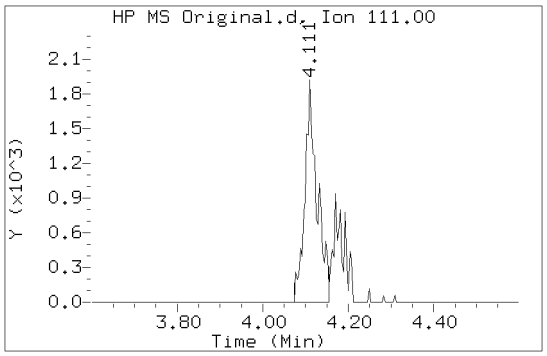
AFTER

MASS
113
AREA
3536
HEIGHT
2165
20-Jul-2023
15:04
linh
pham



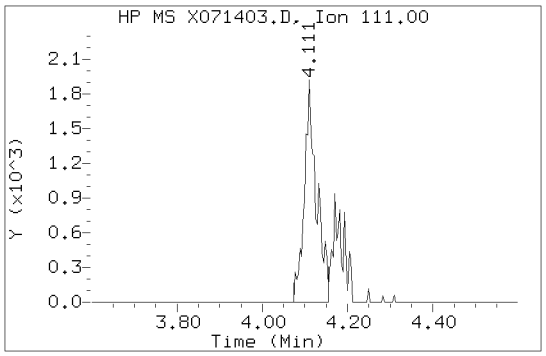
BEFORE

MASS
111
AREA
3831
HEIGHT
1919
20-Jul-2023
15:04
linh
pham



AFTER

MASS
111
AREA
3831
HEIGHT
1919
20-Jul-2023
15:04
linh
pham

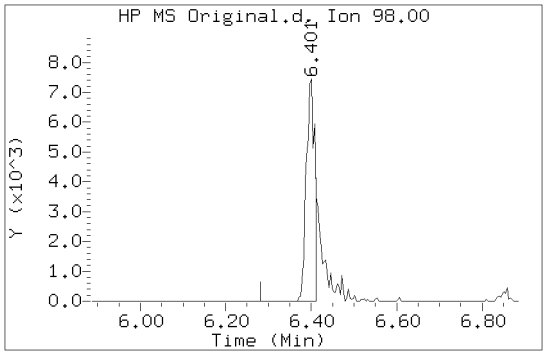


Toluene-d8 (2037-26-5)

Reason Code:

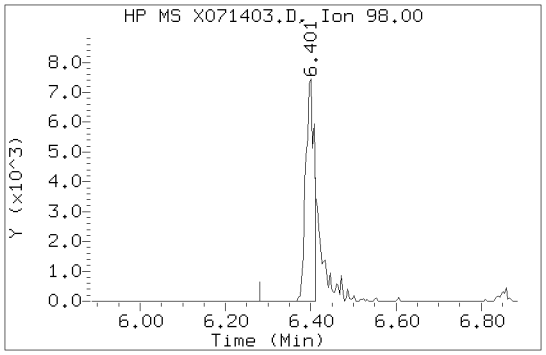
BEFORE

MASS
98
AREA
10379
HEIGHT
7449
20-Jul-2023
15:04
linh
pham



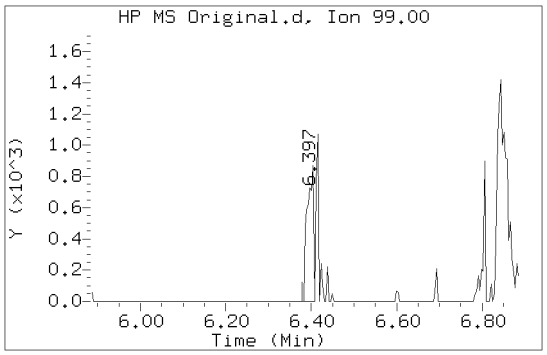
AFTER

MASS
98
AREA
10379
HEIGHT
7449
20-Jul-2023
15:04
linh
pham



BEFORE

MASS
99
AREA
897
HEIGHT
727
20-Jul-2023
15:04
linh
pham



AFTER

MASS
99
AREA
897
HEIGHT
727
20-Jul-2023
15:04
linh
pham